EL DORADO MIDDLE SCHOOL MULTI-PURPOSE BUILDING UPGRADES

1750 WEST ST. CONCORD, CA 94521

MT. DIABLO UNIFIED SCHOOL DISTRICT

GENERAL NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE CODES, REGULATIONS AND AGENCIES.
2. DO NOT SCALE DRAWINGS, WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALE. SHOULD ANY DISCREPANCIES OCCUR, NOTIFY ARCHITECT BEFORE PROCEEDING WITH WORK.
3. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS AT THE SITE AND SHALL REPORT ANY DISCREPANCIES IN WRITING TO THE ARCHITECT PRIOR TO SUBMITTALS.
4. SPECIFIC ITEMS NOTED TO BE VERIFIED OR FIELD VERIFIED ARE REQUIRED TO BE VERIFIED PRIOR TO ORDERING MATERIALS OR PROCEEDING WITH THE WORK.
5. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ASSURING THAT ALL NECESSARY PERMITS AND APPROVALS WITH THE CITY, COUNTY AND/OR OTHER AUTHORITIES WITH JURISDICTION ON THE PROJECT, ARE OBTAINED AND PAID FOR PRIOR TO BEGINNING WORK OR ORDERING MATERIALS.
6. ANY CONFLICT WITH THESE PLANS AND EXISTING CONDITIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT.
7. ALL WORK SHALL BE IN COMPLETE CONFORMANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS OR AS OTHERWISE OUTLINED IN THE SPECIFICATIONS.
8. CONTRACTOR SHALL COORDINATE WITH EQUIPMENT SUPPLIERS FOR POWER REQUIREMENTS, BLOCKING LOCATIONS, SUPPORT FOR EQUIPMENT, PLUMBING REQUIREMENTS AND ROUGH-IN LOCATIONS.
9. USE OF ANY NEW MATERIAL CONTAINING ASBESTOS IS PROHIBITED.
10. DETAILS, MATERIALS, AND FINISHES ARE TYPICAL FOR ALL SIMILAR CONDITIONS UNLESS NOTED OTHERWISE.
11. THE TERM "TYPICAL" (TYP) SHALL BE CONSTRUED TO MEAN APPLYING TO ALL LIKE OR SIMILAR CONDITIONS IN THE AREAS DESIGNATED FOR WORK SCOPE (I.E. WITHIN THE BOUNDARIES OF THIS PROJECT).
12. ALL PRODUCTS AND/OR MANUFACTURERS INDICATED ON DRAWINGS SHALL COMPLY WITH SPECIFICATIONS AND/OR BE APPROVED IN WRITING BY ARCHITECT PRIOR TO ORDERING OR INSTALLATION OF MATERIAL.
13. ALL DOORS NOT LOCATED BY DIMENSIONS ON PLANS OR DETAILS SHALL BE 4" FROM FINISH WALL TO DOOR BUCK.
14. ALL DIMENSIONS ARE GIVEN FROM FACE OF CONCRETE, BLOCK, STUD, OR CENTERLINE OF PARTITION UNLESS OTHERWISE NOTED.
15. THIS PROJECT WILL REQUIRE A CLASS 3 CERTIFIED INSPECTOR OF RECORD AS DEFINED BY THE DIVISION OF THE STATE ARCHITECT (DSA).
16. WORK SHOWN IN THESE DRAWINGS SHALL ALSO COMPLY WITH THE PROJECT SPECIFICATIONS. IN THE EVENT THERE IS A CONFLICT BETWEEN THESE DRAWINGS AND THE SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT SHALL TAKE PRECEDENCE.
17. FOOD HANDLING FACILITIES SHALL COMPLY WITH ALL LOCAL HEALTH REQUIREMENTS AND CALIFORNIA UNIFORM RETAIL FOOD FACILITIES LAW.
18. THE GENERAL CONTRACTOR IS RESPONSIBLE TO HAVE EMERGENCY SHUT-OFF PROCEDURES IN PLACE PRIOR TO START OF CONSTRUCTION. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH ALL SHUT-OFF VALVE LOCATIONS ON SITE AND HAVE PROPER TOOLS READILY AVAILABLE TO OPERATE VALVES.
19. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR.
20. A "DSA CERTIFIED" CLASS 3 PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DSA SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR.
21. A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTION FOR THE PROJECT.
22. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENT HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.
23. SAFETY DURING DEMOLITION AND CONSTRUCTION MUST COMPLY WITH CFC CHAPTER 33

SYMBOLS LIST

SEE INDIVIDUAL SHEETS FOR ADDITIONAL SHEET SPECIFIC SYMBOLS/ LEGENDS NOW INDICATED HERE

ROOM IDENTIFICATION — ROOM NAME 101 — ROOM NUMBER

COLUMN GRID — 1 / A

BUILDING SECTION — 1 / A400 — SECTION NUMBER / SHEET NUMBER

WALL SECTION — 1 / A410 — SECTION NUMBER / SHEET NUMBER

DETAIL — 1 / A101 — DETAIL NUMBER / SHEET NUMBER

INTERIOR ELEVATION — 1A / 1B / 1C / 1D, A550 — ELEVATION NUMBER / SHEET NUMBER

EXTERIOR BUILDING ELEVATION — 1A, A300 — ELEVATION NUMBER / SHEET NUMBER

OPENING INDICATION — 101 DOOR; W01 WINDOW; L01 LOUVER

DATUM WORK POINT OR CONTROL POINT

DIMENSION MARKS

REVISION — 1

NORTH INDICATION — N — TRUE NORTH

CEILING HEIGHTS — ROOM NAME 101, 10' - 0"

KEYNOTE — 1

WALL TYPE — 1i — WALL TYPE NUMBER

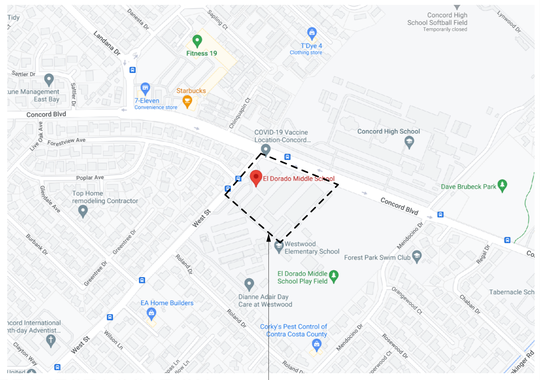
EQUIPMENT — U*

C.F.C.I.

O.F.C.I.

O.F.O.I.

VICINITY MAP



PROJECT LOCATION

CODE REFERENCES

ALL WORK SHALL CONFORM TO THE FOLLOWING AND ALL OTHER APPLICABLE CODES AND ORDINANCES.

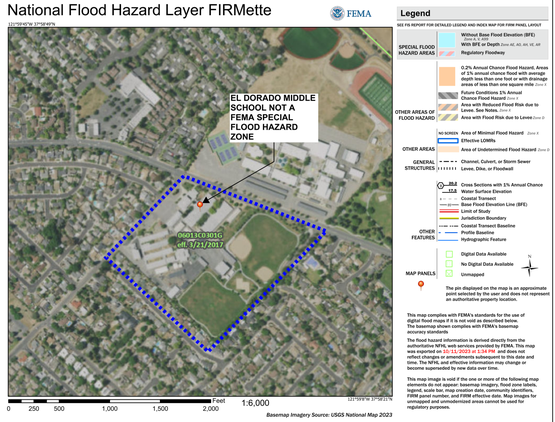
2022 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24, C.C.R.
2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24, C.C.R.
2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24, C.C.R.
2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24, C.C.R.
2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24, C.C.R.
2022 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24, C.C.R.
2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24, C.C.R.
2022 CALIFORNIA GREEN CODE, PART 11, TITLE 24, C.C.R.
2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24, C.C.R.
2022 CAL/OSHA ELEVATOR SAFETY ORDERS, TITLE 8, DIVISION 1, CHAPTER 4, SUBCHAPTER 6, TITLE 24, C.C.R.
2022 TITLE 19 C.C.R., PUBLIC SAFETY, DIVISION 1 STATE FIRE MARSHAL REGULATIONS
2022 NFPA 13, THE INSTALLATION OF AUTOMATIC SPRINKLER SYSTEMS, AS AMENDED
2019 NFPA 14, INSTALLATION OF STANDPIPE, PRIVATE HYDRANT, AND HOSE SYSTEMS
2019 NFPA 24, INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES
2013 (CA AMENDMENTS) NFPA 25, CALIFORNIA EDITION, INSPECTION, TESTING & MAINTENANCE OF WATER-BASED FIRE PROTECTION SYSTEMS
2022 NFPA 72, NATIONAL FIRE ALARM CODE, AS AMENDED

NOTE:

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. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NONCOMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS, A CONSTRUCTION CHANGE DOCUMENT, OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED REPAIR WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE REPAIR WORK.

FEMA INFORMATION

National Flood Hazard Layer FIRMette — FEMA



F.I.R.M. MAP #:	06013C0301G	SEISMIC - DESIGN CATEGORY -	
F.I.R.M. PANEL #:	065022	ALLOWABLE SOIL PRESSURE:	-
MAP DATE:	03/21/2017	WIND EXPOSURE:	C
FLOOD ZONE:	X	CLIMATE ZONE:	3

PROJECT DESCRIPTION

THIS PROJECT PROVIDES IMPROVEMENTS TO THE EXISTING MULTI-PURPOSE BUILDING WITH PARTICULAR EMPHASIS ON UPGRADES TO THE KITCHEN. GENERAL SCOPE OF WORK INCLUDES BUT IS NOT LIMITED TO:

1. UPGRADE THE EXISTING MULTI-PURPOSE BUILDING INCLUDING ALTERATIONS TO THE KITCHEN, ASSEMBLY AREA AND STAGE.
2. COMPLETE REPLACEMENT OF THE KITCHEN INCLUDING THE REPLACEMENT OF ALL FOOD SERVICE EQUIPMENT, EXHAUST HOODS, UTILITIES AND RECONFIGURATION OF THE KITCHEN TO BETTER RESPOND TO CURRENT NEEDS. KITCHEN TO RECEIVE NEW CODE COMPLIANT COOK LINE EXHAUST HOOD WITH FIRE SUPPRESSION SYSTEM AND WALK-IN FREEZER/REFRIGERATOR FOR KITCHEN STAFF USE ONLY.
3. UPGRADE TO KITCHEN LIGHTING, POWER AND PLUMBING UTLITIES TO MEET THE NEEDS OF NEW KITCHEN LAYOUT AND EQUIPMENT.
4. UPGRADE THE EXISTING ASSEMBLY AREA WITH NEW FINISHES, IMPROVED ACOUSTICS, REMOVAL OF EXISTING UNIT VENTILATORS AND OTHER IMPROVEMENTS AS NEEDED TO BETTER RESPOND TO CURRENT NEEDS.
5. PROVIDE NEW HVAC SYSTEMS THROUGHOUT THE BUILDING, INCLUDING THE KITCHEN.
6. EXPLORE THE CONDITION OF ANY EXISTING EMS SYSTEM AND MAKE IMPROVEMENTS AS REQUIRED TO CONNECT NEW WORK.
7. MODIFY THE EXISTING LOW VOLTAGE SYSTEMS, FIRE ALARM SYSTEM, VOICE-EVAC FUNCTION, CLOCK/BELL SYSTEM, PHONE SYSTEM, INTERCOM SYSTEM, AND DATA SYSTEM TO ACCOMMODATE NEW WORK.
8. RE-FINISH EXISTING CUSTODIAL ROOM TO INCLUDE PAINT, NEW PROTECTIVE WALL FINISH AND MISC. STORAGE SOLUTIONS.
9. EXTERIOR SITE WORK IMPROVEMENT INCLUDING NEW PATH OF TRAVEL, NEW ACCESSIBILITY DROP-OFF AREA, NEW ACCESSIBLE AND VAN PARKINGS, AND A NEW GREASE TRAP INTERCEPTOR
10. (N) TRASH ENCLOSURE
11. INSTALLATION OF (N) VOICE EVACUATION CONTROL PANEL
12. THE NEW PLYWOOD SHEAR WALL IN THE KITCHEN OF THE MULTI-PURPOSE BUILDING SERVES ONLY TO REDUCE THE ASPECT RATIO OF DIAPHRAGM OF THE LOW-ROOF OVER THE KITCHEN.
13. RESTROOMS UPGRADE

DEFFERED APPROVAL ITEMS

1. NONE

ABBREVIATIONS

&	AND		
@	AT	H.M.	HOLLOW METAL
DIA	DIAMETER	HORIZ.	HORIZONTAL
#	NUMBER		
(E)	EXISTING	I.D.	INSIDE DIAMETER
(N)	NEW	INSUL.	INSULATION
d	PENNY	INT.	INTERIOR
PL	PLATE		
		LAM.	LAMINATE
AC	ASPHALT CONCRETE	LAV.	LAVATORY
A.D.	AREA DRAIN		
A.F.F.	ABOVE FINISHED FLOOR	MAX.	MAXIMUM
AHJ	AUTHORITY HAVING JURISDICTION	MECH.	MECHANICAL
		MED.	MEDIUM
ALUM.	ALUMINUM	MEMB.	MEMBRANE
APPROX.	APPROXIMATE	MFR.	MANUFACTURER
ARCH.	ARCHITECTURAL	MIN.	MINIMUM
		MISC.	MISCELLANEOUS
BD.	BOARD	MTL.	METAL
BLDG.	BUILDING		
BLKG.	BLOCKING	N.I.C.	NOT INCLUDED IN CONTRACT
BM.	BEAM		
BOTT.	BOTTOM	NO.	NUMBER
		NOM.	NOMINAL
CEM.	CEMENT	N.T.S.	NOT TO SCALE
C.F.C.I.	CONTRACTOR FURNISHED CONTRACTOR INSTALLED		
		O.C.	ON CENTER
C.J.	CONSTRUCTION JOINT	O.D.	OUTSIDE DIAMETER
CLNG.	CEILING	OP. H.	OPPOSITE HANDED
CLR.	CLEAR	O.F.C.I.	OWNER FURNISHED CONTRACTOR INSTALLED
C.M.U.	CONCRETE MASONRY UNIT		
C.O.	CLEAN OUT	O.F.O.I.	OWNER FURNISHED OWNER INSTALLED
COL.	COLUMN		
CONC.	CONCRETE	OPNG.	OPENING
CONT.	CONTINUOUS	OPP.	OPPOSITE
DIM.	DIMENSION	PLAM.	PLASTIC LAMINATE
DN.	DOWN	PLYWD.	PLYWOOD
DS.	DOWNSPOUT		
DTL.	DETAIL	R.D.	ROOF DRAIN
DWG.	DRAWING	REINF.	REINFORCING
		REQ'D.	REQUIRED
EA.	EACH		
E.J.	EXPANSION JOINT	SHT.	SHEET
ELEC.	ELECTRICAL	SIM.	SIMILAR
E.O.	EDGE OF	S.M.S.	SHEET METAL SCREW
EQ.	EQUAL	S.S.	STAINLESS STEEL
EXP.	EXPOSED	STD.	STANDARD
EXT.	EXTERIOR	STL.	STEEL
		STOR.	STORAGE
F.D.	FLOOR DRAIN	STRUCT.	STRUCTURAL
FIN.	FINISH	SUSP.	SUSPENDED
F.O.	FACE OF		
F.O.F.	FACE OF FINISH	T.O.C.	TOP OF CURB
F.O.S.	FACE OF STUDS	TYP.	TYPICAL
GA.	GAUGE	UNF.	UNFINISHED
GALV.	GALVANIZED	U.N.O.	UNLESS NOTED OTHERWISE
G.I.	GALVANIZED IRON		
GL.	GLASS	VERT.	VERTICAL
GRD.	GRADE		
GYP.	GYPSUM	W/	WITH
		W/O	WITHOUT
		WD.	WOOD

DRAWING INDEX

GENERAL:
G000 COVER SHEET
G141 CODE ANALYSIS - EXITING

ARCHITECTURAL:
A100 OVERALL CAMPUS SITE PLAN
A101 PARTIAL SITE PLAN - DEMO
A102 PARTIAL SITE PLAN - PROPOSED
A103 ENLARGED GRADING PLANS
A111D DEMOLITION FLOOR PLAN
A111 FLOOR PLAN
A121D DEMOLITION ROOF PLAN
A121 ROOF PLAN
A211D DEMOLITION REFLECTED CEILING PLAN
A211 REFLECTED CEILING PLAN
A300 BUILDING ELEVATIONS
A301 BUILDING ELEVATIONS
A400 BUILDING SECTIONS
A500 ENLARGED SITE DETAILS
A520 ENLARGED RESTROOM PLANS AND ELEVATIONS
A550D DEMO INTERIOR ELEVATIONS
A550 INTERIOR ELEVATIONS
A551D DEMOLITION INTERIOR ELEVATION
A551 INTERIOR ELEVATIONS
A552 COLOR INTERIOR ELEVATIONS
A600 SITE DETAILS
A610 EXTERIOR DETAILS
A640 INTERIOR DETAILS
A650 CEILING DETAILS
A710 OPENING SCHEDULE AND DETAILS
A811 FINISH PLAN AND SCHEDULE

STRUCTURAL:
S001 GENERAL NOTES
S002 SYMBOLS AND ABBREVIATIONS
S003 TYPICAL FOUNDATION DETAILS
S004 TYPICAL WOOD FRAMING DETAILS
S005 TYPICAL RENOVATION DETAILS
S111 FOUNDATION PLAN
S121 ROOF FRAMING PLAN
S131 SHEAR WALL SECTIONS & PARTIAL CEILING FRMG PLAN
S400 DETAILS

FOOD SERVICE:
FS1.1 FOODSERVICE EQUIPMENT FLOOR PLAN
FS2.1 FOODSERVICE EQUIPMENT PLUMBING PLAN
FS3.1 FOODSERVICE EQUIPMENT ELECTRICAL PLAN
FS4.1 FOODSERVICE EQUIPMENT MECHANICAL PLAN
FS5.1 FOODSERVICE EQUIPMENT EXHAUST HOOD DETAILS
FS5.2 FOODSERVICE EQUIPMENT EXHAUST HOOD DETAILS
FS5.3 FOODSERVICE EQUIPMENT EXHAUST HOOD DETAILS
FS5.4 FOODSERVICE EQUIPMENT EXHAUST HOOD DETAILS
FS5.5 FOODSERVICE EQUIPMENT PATH OF EGRESS
FS6.1 FOODSERVICE EQUIPMENT WALK-IN DETAILS
FS7.1 FOODSERVICE EQUIPMENT REMOTE REFRIGERATION
FS8.1 FOODSERVICE EQUIPMENT ANCHORAGE DETAILS
FS8.2 FOODSERVICE EQUIPMENT ANCHORAGE DETAILS
FS8.3 FOODSERVICE EQUIPMENT ANCHORAGE DETAILS
FS9.1 FOODSERVICE EQUIPMENT ELEVATIONS
FS9.2 FOODSERVICE EQUIPMENT SERVING LINE
FS9.3 FOODSERVICE EQUIPMENT SERVING LINE
FS9.4 FOODSERVICE EQUIPMENT SERVING LINE
FS9.5 FOODSERVICE EQUIPMENT SERVING LINE
FS9.6 FOODSERVICE EQUIPMENT SERVING LINE

MECHANICAL:
M001 MECHANICAL LEGENDS AND NOTES
M002 MECHANICAL SCHEDULES
M111D MECHANICAL DEMOLITION FLOOR PLAN
M111 MECHANICAL FLOOR PLAN
M121D MECHANICAL DEMOLITION ROOF PLAN
M121 MECHANICAL ROOF PLAN
M401 MECHANICAL SECTIONS
M501 MECHANICAL DETAILS
M502 MECHANICAL DETAILS
M601 MECHANICAL CONTROLS
M701 MECHANICAL TITLE 24 DOCUMENTATION
M702 MECHANICAL TITLE 24 DOCUMENTATIONS

PLUMBING:
P001 PLUMBING LEGENDS AND NOTES
P002 PLUMBING SCHEDULES
P111D PLUMBING DEMOLITION FLOOR PLAN
P111 PLUMBING FOUNDATION PLAN
P112 PLUMBING FLOORF PLAN
P121 PLUMBING ROOF PLAN
P501 PLUMBING DETAILS

ELECTRICAL:
E001 ELECTRICAL COVER SHEET
E002 ELECTRICAL NOTES
E111 ELECTRICAL SITE PLAN
E112 ENLARGED ELECTRICAL PLAN
E121 SITE DIAGRAMS
E201D DEMOLITION ELECTRICAL FLOOR PLAN
E211 LIGHTING FLOOR PLAN
E212 ELECTRICAL FLOOR PLAN
E213 KITCHEN ELECTRICAL FLOOR PLAN
E214 SIGNAL FLOOR PLAN
E215 FIRE ALARM FLOOR PLAN
E301 ELECTRICAL DETAILS
E302 ELECTRICAL DETAILS
E303 ELECTRICAL DETAILS
E401 LIGHTING CONTROL DETAILS
E501 FIRE ALARM RISER DIAGRAM AND CALCULATIONS
E601 TITLE 24 FORMS

TOTAL SHEET COUNT : 93

PROJECT TEAM

OWNER:
MT. DIABLO UNIFIED SCHOOL DISTRICT
1480 GASOLINE ALLEY
CONCORD CA, 94520
PHONE: (925) 596-0446
CONTACT: MELANIE KOSLOW

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428 J STREET, SUITE 500
SACRAMENTO, CA 95814
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CONTACT: JASON SCANLAN

ARCHITECT:
NACHT LEWIS
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CONTACT: BRIAN MAYTUM

MECHANICAL ENGINEER:
CAPITAL ENGINEERING CONSULTANTS, INC.
11020 SUN CENTER DRIVE #100
RANCHO CORDOVA, CA 95670
PHONE: (916) 851-3531
CONTACT: RYAN CELAYA

FOOD SERVICE DESIGN:
AMD FOOD SERVICE DESIGN, INC.
P.O. BOX 163
GARDEN VALLEY, CA 95633
PHONE: (530) 333-4606
CONTACT: ART DAVIS

ELECTRICAL ENGINEER:
EDGE ELECTRICAL CONSULTING, INC.
1801 7TH STREET, SUITE 150
SACRAMENTO, CA 95811
PHONE: (916) 256-2460
CONTACT: DONNY LEE

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121540 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 3/28/2025

DSA # 01-121540

AGENCY APPROVAL

EL DORADO MIDDLE SCHOOL
MULTI-PURPOSE BUILDING UPGRADES
1750 WEST ST. CONCORD, CA 94521
MT. DIABLO UNIFIED SCHOOL DISTRICT

CONSULTANT

nacht&lewis
600 Q Street, Suite 100
Sacramento, CA 95811
www.nachtlewis.com
916.329.4000

LICENSED ARCHITECT BRIAN MAYTUM No. C26867 RENEWAL DATE: 10/31/27 STATE OF CALIFORNIA

ARCHITECT

DSA SUBMITTAL

REVISIONS

NO.	DESCRIPTION	DATE

DATE 03/08/2024

JOB NO. Y2326.00

SHEET TITLE

COVER SHEET

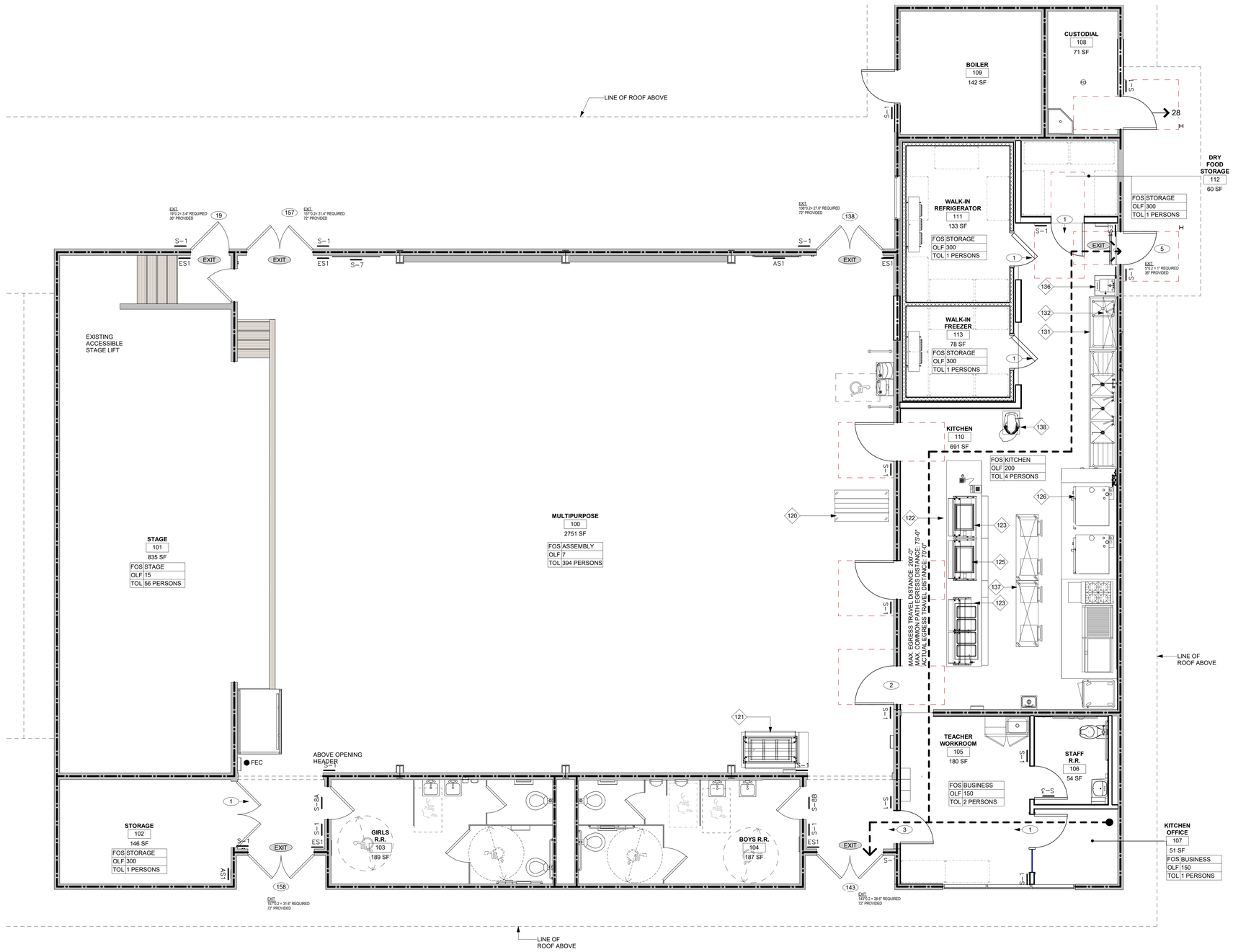
SHEET NO.

G000

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET

OCCUPANT LOAD CALCULATIONS

ROOM NO.	ROOM NAME	FLOOR AREA (SF UON)	Function of Space	Occupancy Load Factor	Total Occupant Load
100	MULTIPURPOSE	2751	ASSEMBLY	7	394
101	STAGE	835	STAGE	15	56
102	STORAGE	146	STORAGE	300	1
103	GIRLS R.R.	189	-		
103A	STORAGE	Not Placed	STORAGE	300	
104	BOYS R.R.	187	-		
104A	CUSTODIAL	Not Placed	STORAGE	300	
105	TEACHER WORKROOM	180	BUSINESS	150	2
106	STAFF R.R.	54	-		
107	KITCHEN OFFICE	51	BUSINESS	150	1
108	CUSTODIAL	71	STORAGE	300	1
109	BOILER	142	MECHANICAL	300	1
110	KITCHEN	691	KITCHEN	200	4
111	WALK-IN REFRIGERATOR	133	STORAGE	300	1
112	DRY FOOD STORAGE	60	STORAGE	300	1
113	WALK-IN FREEZER	78	STORAGE	300	1
		5568			463



1 CODE ANALYSIS PLAN

1/4" = 1'-0"

KEYNOTES:

◇ # THESE KEYNOTES APPLY TO THIS SHEET ONLY

120	MILK COOLER
121	SALAD BAR
122	PASS COU
123	HOT FOOD STATION
125	POS UNIT
126	DOUBLE STACK COMBI OVEN
131	PREPARATION SINK
132	WALL MOUNTED SHELF
136	SINK, HAND, WALL MOUNT
137	MOBILE WORK TABLE WITH UTENSILS DRAWERS
138	COUNTER TOP MIXER WITH STAND

CODE DATA:

ORIGINAL APP #17654
PREVIOUS MOD APP #01-105830

OCCUPANT CLASS: A-2

TYPE OF CONSTRUCTION: V-1HR

SPRINKERED: NO

(CBC 2022 TABLE 504.3)
ALLOWABLE BUILDING HEIGHT: 40 FT
ACTUAL BUILDING HEIGHT: 19 FT

(CBC 2022 TABLE 504.4)
ALLOWABLE NUMBER OF STORIES ABOVE GRADE: 1
ACTUAL NUMBER OF STORIES ABOVE GRADE: 1

(CBC 2022 TABLE 506.2)
ALLOWABLE AREA: 6,000 SF
ACTUAL BUILDING AREA: 5,826 SF

MEANS OF EGRESS AND TRAVEL SUMMARY

REFER TO PLAN FOR ACTUAL MEASURED DISTANCES.

COMMON PATH OF EGRESS TRAVEL (CBC 1006.2.1)
OCCUPANCY: E
SPRINKLERED: NO
MAX DISTANCE: 75 FT.

EXIT ACCESS TRAVEL DISTANCE (CBC TABLE 1017.2)
OCCUPANCY: E
SPRINKLERED: NO
MAX DISTANCE: 200 FT.

MIN. NUMBER OF EXITS FOR OCCUPANT LOAD (CBC TABLE 1006.3.2)

OCC LOAD 1-500: MINIMUM 2 EXITS PER STORY
OCC LOAD 501-1,000: MINIMUM 3 EXITS PER STORY
OCC LOAD >1,000: MINIMUM 4 EXITS PER STORY

DOORS SHALL SWING IN THE DIRECTION OF EGRESS TRAVEL HERE SERVING AN OCCUPANT LOAD OF 50 OF MORE PERSONS OR A GROUP H OCCUPANCY. (CBC 1010.1.2.1)

THE MINIMUM CLEAR WIDTH AND HEIGHT OF A DOOR SHALL NOT BE LESS THAN 32 INCHES AND 80 INCHES RESPECTIVELY. (CBC 1010.1.1)

ASSISTIVE LISTENING SYSTEM

MIN. NUMBER OF REQUIRED RECEIVERS
MULTIPURPOSE ROOM = 2709 SF / 7 SF = 387 "SEATS"
4% OF SEATS = **16 RECEIVERS**
4 RECEIVERS (25% MIN.) SHALL BE HEARING AID COMPATIBLE

RECEIVER REQUIREMENTS:
- RECEIVERS SHALL INCLUDE A 1/8" STANDARD MONO JACK.
- SIGNAL-TO-NOISE RATIO FOR INTERNALLY GENERATED NOISE IN ASSISTIVE LISTENING SYSTEMS SHALL BE 18dB MIN.
- PEAK CLIPPING SHALL NOT EXCEED 18dB OF CLIPPING RELATIVE TO THE PEAKS OF SPEECH
- ALS SHALL BE CAPABLE OF PROVIDING A SOUND PRESSURE LEVEL OF 110dB MIN. AND 118 dB MAX. WITH A DYNAMIC RANGE ON THE VOLUME CONTROL OF 50dB.
- HEARING AID COMPATIBLE RECEIVERS SHALL BE PROVIDED WITH EITHER NECKLOOPS OR HEADSETS THAT CAN BE WORK AS NECKLOOPS.

SIGNAGE LEGEND

S-1	ROOM IDENTIFICATION SIGN - SEE 25/A640
S-8A	GIRLS RR DOOR SIGNAGE - SEE 29/A640
S-8B	BOYS RR DOOR SIGNAGE - SEE 29/A640
S-3	UNISEX RESTROOM DOOR SIGNAGE- SEE 29/A640
E-S1	TACTILE EXIT SIGN - SEE 30/A640
S-7	MAXIMUM OCCUPANCY SIGN - SEE 14/A640
AS1	ASSISTIVE LISTENING SIGN - SEE 13/A640

LEGEND:

FOS CLASSROOM / OLF 20 / TOL 100 PERSONS	FUNCTION OF SPACE, OCCUPANT LOAD FACTOR, TOTAL OCCUPANT LOAD
- - - - -	EXIT ACCESS TRAVEL DISTANCE, LESS THAN CODE REQUIRED MAXIMUM DISTANCE.
(#)	NUMBER OF OCCUPANTS THROUGH EXIT OR EXIT DISCHARGE OPENING PER OCCUPANT LOAD CALCULATION.
● FEC	FIRE EXTINGUISHER CABINET
.....	EXIT ACCESS TRAVEL DISTANCE, LESS THAN CODE REQUIRED MAXIMUM DISTANCE.
EXIT	CEILING MOUNTED ILLUMINATED EXIT SIGN WITH DIRECTIONAL ARROWS AS SHOWN IN E211.
	EXISTING 1-HR FIRE RATED WALLS

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121540 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 3/28/2025

DSA # 01-121540

AGENCY APPROVAL

EL DORADO MIDDLE SCHOOL
MULTI-PURPOSE BUILDING UPGRADES
1750 WEST ST, CONCORD, CA 94521
MT. DIABLO UNIFIED SCHOOL DISTRICT

CONSULTANT
nacht&lewis
600 Q Street, Suite 100
Sacramento, CA 95811
www.nachtlewis.com
916.329.4000

REGISTERED ARCHITECT
BRIAN J. MAYTUM
No. C-26867
RENEWAL DATE: 1/31/27
STATE OF CALIFORNIA

ARCHITECT

DSA SUBMITTAL

REVISIONS

NO.	DESCRIPTION	DATE

DATE 03/08/2024
JOB NO. Y2119.00
SHEET TITLE

CODE ANALYSIS - EXITING

SHEET NO.

G141

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
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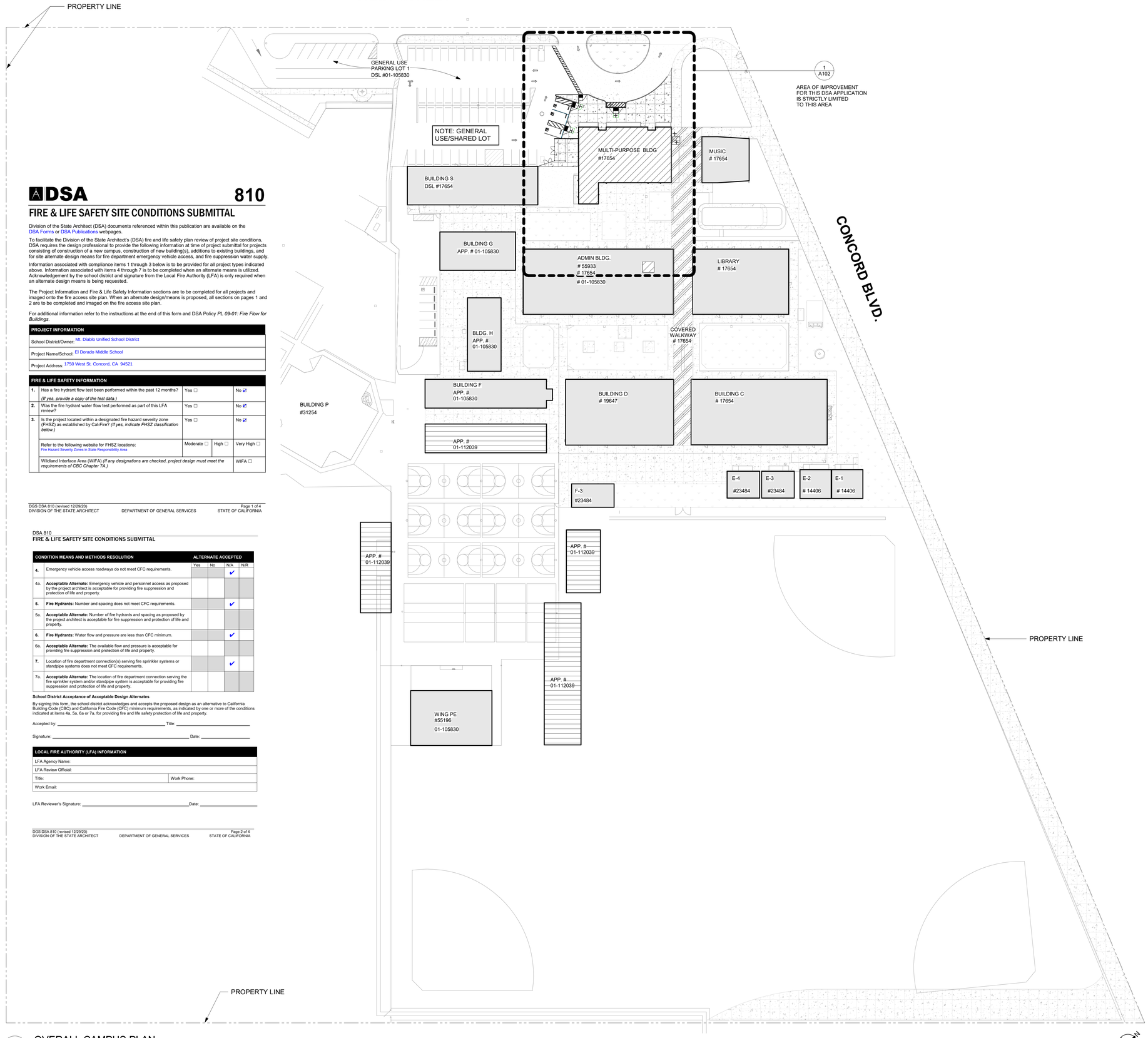

1 OVERALL CAMPUS PLAN
1" = 40'-0"

DSA 810

FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL

Division of the State Architect (DSA) documents referenced within this publication are available on the DSA Forms or DSA Publications webpages.

To facilitate the Division of the State Architect's (DSA) fire and life safety plan review of project site conditions, DSA requires the design professional to provide the following information at time of project submittal for projects consisting of construction of a new campus, construction of new building(s), additions to existing buildings, and for site alternate design means for fire department emergency vehicle access, and fire suppression water supply.

Information associated with compliance items 1 through 3 below is to be provided for all project types indicated above. Information associated with items 4 through 7 is to be completed when an alternate means is utilized. Acknowledgement by the school district and signature from the Local Fire Authority (LFA) is only required when an alternate design means is being requested.

The Project Information and Fire & Life Safety Information sections are to be completed for all projects and imaged onto the fire access site plan. When an alternate design/means is proposed, all sections on pages 1 and 2 are to be completed and imaged on the fire access site plan.

For additional information refer to the instructions at the end of this form and DSA Policy *PL 09-01: Fire Flow for Buildings*.

PROJECT INFORMATION
School District/Owner: Mt. Diablo Unified School District
Project Name/School: El Dorado Middle School
Project Address: 1750 West St. Concord, CA 94521

FIRE & LIFE SAFETY INFORMATION				
1.	Has a fire hydrant flow test been performed within the past 12 months? *(If yes, provide a copy of the test data.)*	Yes ☐		No ☑
2.	Was the fire hydrant water flow test performed as part of this LFA review?	Yes ☐		No ☑
3.	Is the project located within a designated fire hazard severity zone (FHSZ) as established by Cal-Fire? *(If yes, indicate FHSZ classification below.)*	Yes ☐		No ☑
	Refer to the following website for FHSZ locations: Fire Hazard Severity Zones in State Responsibility Area	Moderate ☐	High ☐	Very High ☐
	Wildland Interface Area (WIFA) *(If any designations are checked, project design must meet the requirements of CBC Chapter 7A.)*			WIFA ☐

CONDITION MEANS AND METHODS RESOLUTION		ALTERNATE ACCEPTED			
		Yes	No	N/A	N/R
4.	Emergency vehicle access roadways do not meet CFC requirements.			✔	
4a.	**Acceptable Alternate:** Emergency vehicle and personnel access as proposed by the project architect is acceptable for providing fire suppression and protection of life and property.				
5.	**Fire Hydrants:** Number and spacing does not meet CFC requirements.			✔	
5a.	**Acceptable Alternate:** Number of fire hydrants and spacing as proposed by the project architect is acceptable for fire suppression and protection of life and property.				
6.	**Fire Hydrants:** Water flow and pressure are less than CFC minimum.			✔	
6a.	**Acceptable Alternate:** The available flow and pressure is acceptable for providing fire suppression and protection of life and property.				
7.	Location of fire department connection(s) serving fire sprinkler systems or standpipe systems does not meet CFC requirements.			✔	
7a.	**Acceptable Alternate:** The location of fire department connection serving the fire sprinkler system and/or standpipe system is acceptable for providing fire suppression and protection of life and property.				

School District Acceptance of Acceptable Design Alternates

By signing this form, the school district acknowledges and accepts the proposed design as an alternative to California Building Code (CBC) and California Fire Code (CFC) minimum requirements, as indicated by one or more of the conditions indicated at items 4a, 5a, 6a or 7a, for providing fire and life safety protection of life and property.

Accepted by: _____ Title: _____

Signature: _____ Date: _____

LOCAL FIRE AUTHORITY (LFA) INFORMATION	
LFA Agency Name:	
LFA Review Official:	
Title:	Work Phone:
Work Email:	

LFA Reviewer's Signature: _____ Date: _____

SHEET NOTES:

THESE SHEET NOTES APPLY TO THIS SHEET ONLY

1. PHOTOS ARE INTENDED TO GIVE FURTHER CLARIFICATION OF THE GENERAL EXISTING CONTITIONS ON SITE. THESE PHOTOS ARE NOT INCLUSIVE OF EVERYTHING IN SCOPE.
2. FURNITURE AND EQUIPMENT SHOWN SHALL BE REMOVED/STORED BY DISTRICT PRIOR TO START OF CONSTRUCTION.

KEYNOTES:

◇ # THESE KEYNOTES APPLY TO THIS SHEET ONLY

PARKING LOT COUNT:

2022 CBC TABLE 11B-208.2

PARKING LOT 1 (DSA APP #17654, UPDATED PER APP# 01-105830)
GENERAL/SHARED PARKING LOT

TOTAL PARKING SPACES:	65
MIN. NO. OF REQUIRED ACCESSIBLE PARKING SPACES:	3
TOTAL NO. OF ACCESSIBLE PARKING SPACES:	3
NO. OF STANDARD ACCESSIBLE SPACES:	2
NO. OF VAN ACCESSIBLE SPACES:	1

LEGEND:

- BUILDING WITH PROJECT SCOPE
- EXISTING BUILDING
- ASPHALT DRIVE
- CONCRETE WALK
- LANDSCAPE
- EXISTING BUILDING WITH PV CANOPY
- EXISTING COVERED WALKWAY TO REMAIN

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LICENSED ARCHITECT
RYAN J. MAY
No. C-26867
RENEWAL DATE: 1/31/27
STATE OF CALIFORNIA

ARCHITECT

DSA SUBMITTAL

REVISIONS

NO.	DESCRIPTION	DATE

DATE 03/08/2024

JOB NO. Y2326.00

SHEET TITLE

OVERALL CAMPUS SITE PLAN

SHEET NO.

A100

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
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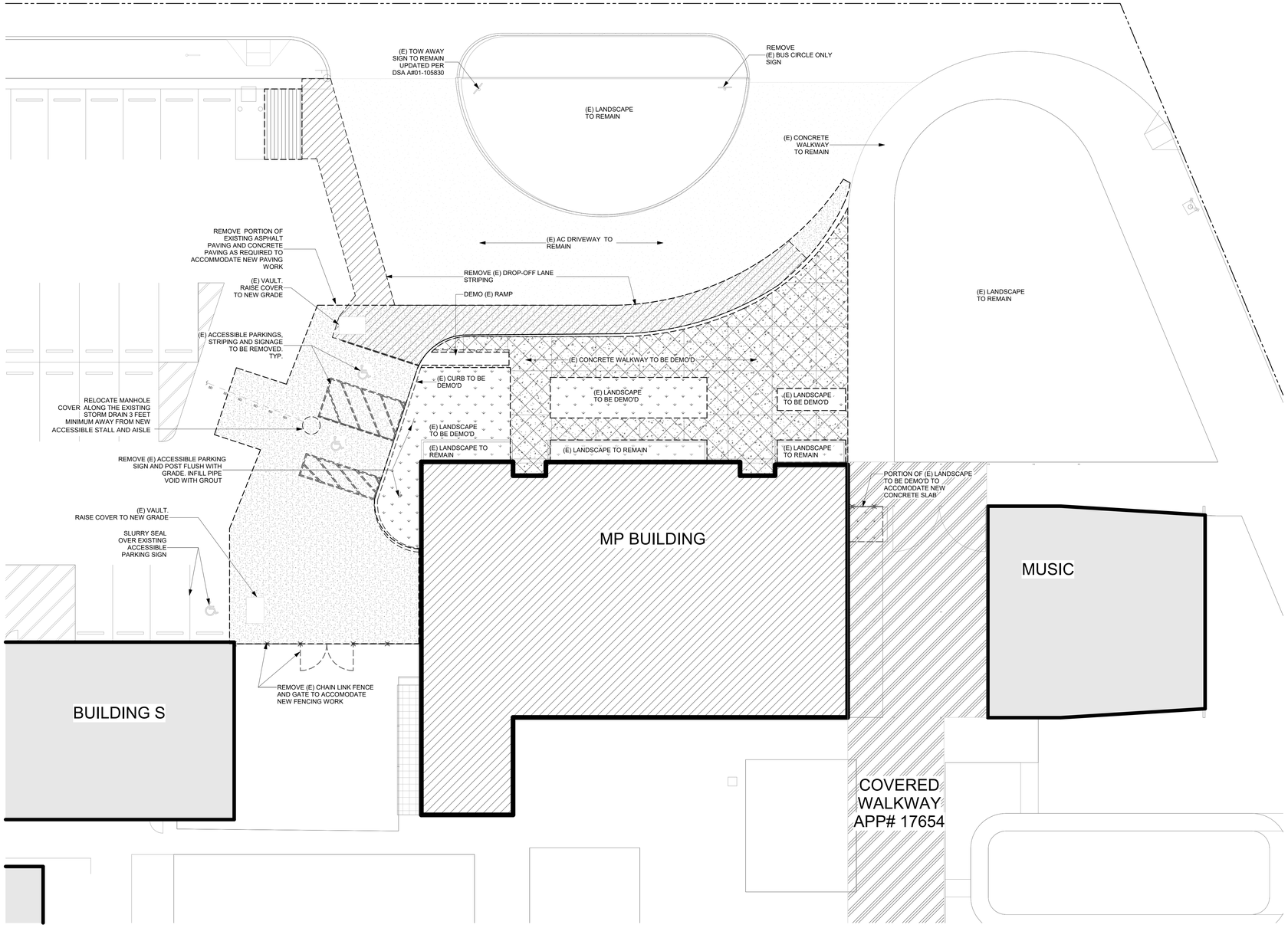

1 ENLARGED DROP OFF SITE PLAN

3/32" = 1'-0"

SHEET NOTES:

THESE SHEET NOTES APPLY TO THIS SHEET ONLY

1. REMOVE PORTION OF EXISTING ASPHALT PAVING AND CONCRETE PAVING AS REQUIRED TO ACCOMMODATE NEW PAVING WORK
2. SEE ALL DRAWINGS IN ADDITION TO ARCHITECTURAL SHEETS FOR ADDITIONAL WORK NOT SHOWN HERE

KEYNOTES:

THESE KEYNOTES APPLY TO THIS SHEET ONLY

LEGEND:

- (E) CONCRETE WALK TO BE REMOVED
- (E) ASPHALT TO BE REMOVED
- (E) LANDSCAPE TO BE REMOVED
- (E) PARKING TO BE REMOVED
- EXISTING COVERED WALKWAY TO REMAIN
- EXISTING STORM DRAIN LINE

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LICENSED ARCHITECT — No. C26867 — RENEWAL DATE: 10/31/27 — STATE OF CALIFORNIA

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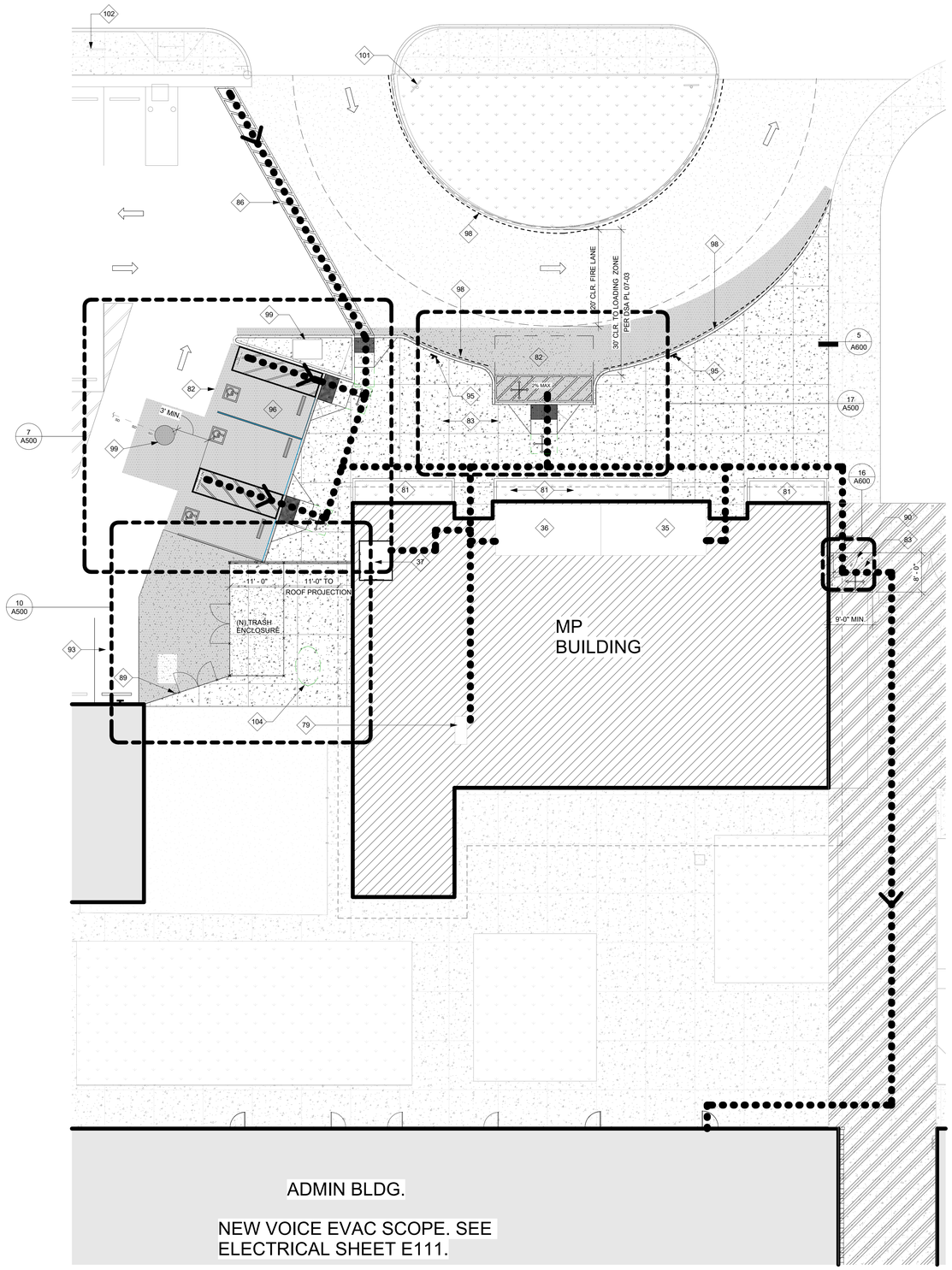
JOB NO. Y2326.00

SHEET TITLE

PARTIAL SITE PLAN - DEMO

SHEET NO.

A101



1 PARTIAL SITE PLAN - PROPOSED

3/32" = 1'-0"

ONE AND ONE-HALF INCH = ONE FOOT

ONE INCH = ONE FOOT

THREE-QUARTERS INCH = ONE FOOT

ONE-HALF INCH = ONE FOOT

ONE-QUARTER INCH = ONE FOOT

ONE-EIGHTH INCH = ONE FOOT

ONE-SIXTEENTH INCH = ONE FOOT

ONE INCH = TWENTY FEET

SHEET NOTES:

THESE SHEET NOTES APPLY TO THIS SHEET ONLY

1. SEE ENLARGED SITE DEMOLITION FOR ADDITIONAL WORK NOT SHOWN HERE
2. SEE ALL DRAWINGS IN ADDITION TO ARCHITECTURAL SHEETS FOR ADDITIONAL WORK NOT SHOWN HERE

KEYNOTES:

THESE KEYNOTES APPLY TO THIS SHEET ONLY

35	EXISTING ACCESSIBLE STUDENT GIRLS RESTROOM - APP. #01-105830.
36	EXISTING ACCESSIBLE STUDENT BOYS RESTROOM - APP. #01-105830.
37	NEW ACCESSIBLE STAFF RESTROOM - THIS APPLICATION.
79	NEW DRINKING FOUNTAIN AND BOTTLE FILLER EQ TO HAWS 1212S. ANCHOR TO WALL WITH 6 MIN. 1/4" LAG SCREWS WITH 2" MIN. EMBED AT EACH MANUFACTURER MOUNTING BRACKET LOCATION. ANCHOR TO WALL BLOCKING PER 2/A520 IF NEEDED. CENTER SCREWS OVER HEIGHT OF BLOCKING. MOUNT PER 1/A520.
81	EXISTING LANDSCAPE TO REMAIN
82	NEW AC PAVING AREA. TYPICAL
83	NEW CONCRETE SLAB
86	3" WIDE WHITE CROSS WALK STRIPING WITH STRIPES AT 36" O.C.
89	NEW SERVICE GATE SIGN. SEE 12/A600
90	GATE G1. SEE SCHEDULE
93	NEW SERVICE PARKING
95	NEW " NO PARKING" SIGN ON METAL POST, SEE DETAILS 4/A600 AND 10/A600
96	STALL AND AISLE SHALL SLOPE 2% MAXIMUM IN ANY DIRECTIONS
98	PAINT CURB RED WITH "NO PARKING FIRE LANE" IN 4" TALL WHITE LETTERING EVERY 30'-0" ON CENTER PER CFC 503.3 (SHOWN ALONG CURB DASHED)
99	NEW LOCATION OF MANHOLE COVER 3 FEET MINIMUM AWAY FROM NEW ACCESSIBLE STALL AND AISLE. RAISE TO NEW GRADE AND FLUSH EDGES ALONG ALL SIDES TO FINISHED FLOOR.
101	(E) TOW-AWAY SIGN TO REMAIN. SIGN UPDATED PER DSA A#01-105830.
102	(E) BUS STOP TO REMAIN
104	UNDERGROUND GREASE INTERCEPTOR

LEGEND:

- EXISTING BUILDING FOOT PRINT
- (N) AC PAVING
- LANDSCAPE
- ASPHALT DRIVE
- CONCRETE WALK
- PATH OF TRAVEL. PATH OF TRAVEL(P.O.T.) AS INDICATED, IS A COMMON BARRIER FREE ACCESS ROUTE WITHOUT ANY ABRUPT VERTICAL CHANGES EXCEEDING 1/2" BEVELED AT 1:2 MAXIMUM SLOPE, EXCEPT THAT LEVEL CHANGES DO NOT EXCEED 1/4" VERTICAL AND IS AT LEAST 48" WIDE. THE PATH SURFACE IS SLIP RESISTANT, STABLE, FIRM AND SMOOTH. PASSING SPACES (11B-403.5.3) AT LEAST 60"X60" ARE LOCATED NOT MORE THAN 200' APART. PARTS OF P.O.T. WITH CONTINUOUS GRADIENTS HAVE 60" LEVEL AREAS (11B-403.7) NOT MORE THAN 400' APART. THE CROSS-SLOPE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL AND IS LESS THAN 5% UNLESS OTHERWISE INDICATED. P.O.T. SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM (11B-307.2) AND PROTRUDING OBJECTS GREATER THAN 4" PROJECTION FROM WALL AND ABOVE 27" AND LESS THAN 80" (11B-307.2). OBJECTS PROTRUDING INTO THE P.O.T. SHALL NOT REDUCE THE CLEAR WIDTH OR MANEUVERING SPACES REQUIRED FOR ACCESSIBLE ROUTES (11B-307.5). THERE IS NO DROP-OFF OVER 4" AT THE EDGE OF WALK OR LANDING UNLESS IDENTIFIED BY A GUARD, A HANDRAIL, OR A WARNING CURB AT LEAST 6" IN HEIGHT ABOVE THE WALK (11B-303.5). ARCHITECT SHALL VERIFY THAT THERE ARE NO BARRIERS IN THE PATH OF TRAVEL.

DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT:

THE P.O.T. IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS IS COMPLIANT WITH THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE ACCESSIBILITY PROVISIONS FOR P.O.T. REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS. AS PART OF THE DESIGN OF THIS PROJECT. THE P.O.T. WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WERE DETERMINED TO BE 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 THE 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.

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AGENCY APPROVAL

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LICENSED ARCHITECT
ALAN J. MAYDON
No. C-26867
RENEWAL DATE: 1/31/27
STATE OF CALIFORNIA

ARCHITECT

DSA SUBMITTAL

REVISIONS

NO.	DESCRIPTION	DATE

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JOB NO. Y2326.00

SHEET TITLE

PARTIAL SITE PLAN - PROPOSED

SHEET NO.

A102

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
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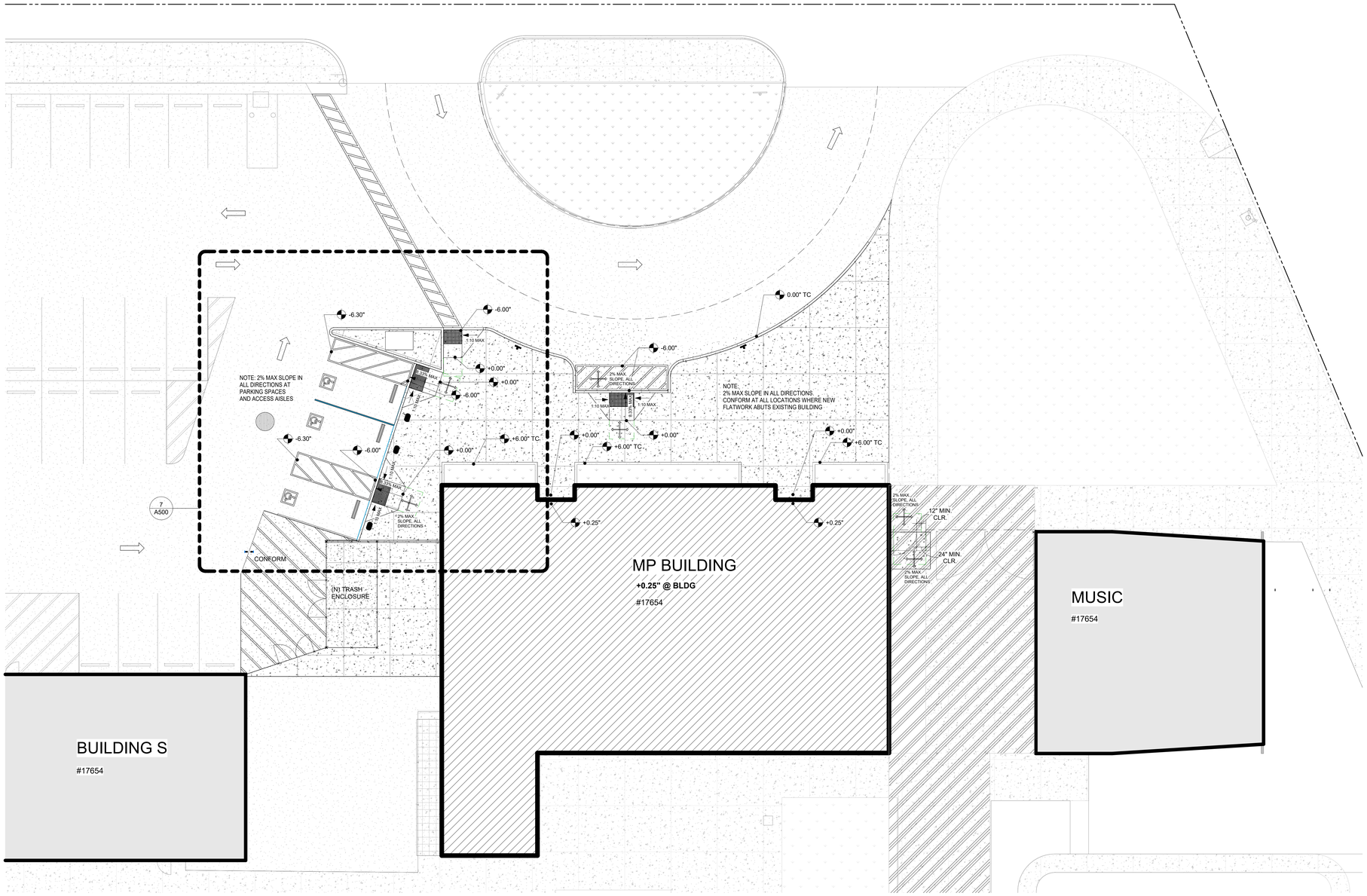

1 PARTIAL SITE PLAN - GRADING PLANS
1" = 10'-0"

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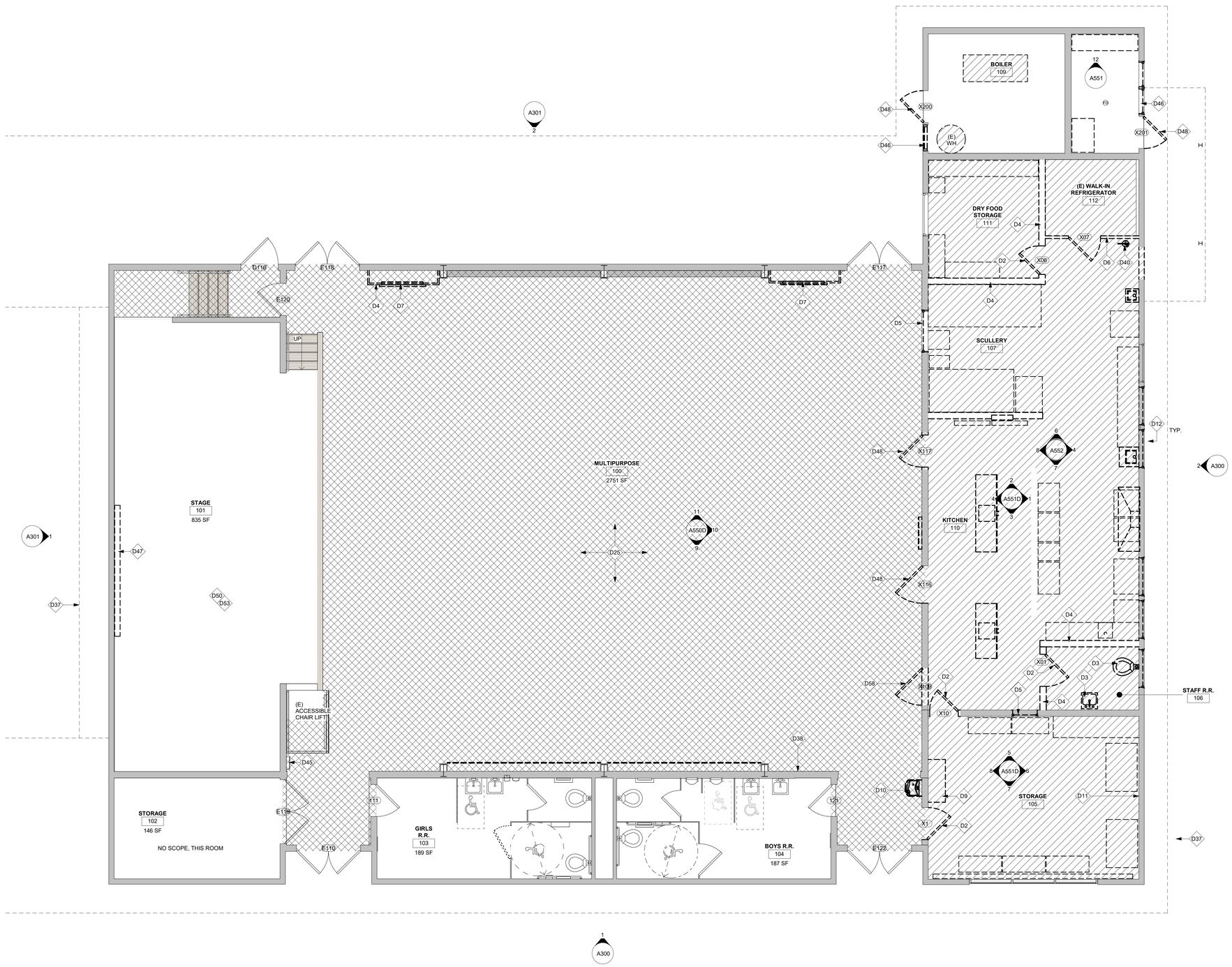
SHEET TITLE

ENLARGED GRADING PLANS

SHEET NO.

A103



1 DEMOLITION FLOOR PLAN

1/4" = 1'-0"

SHEET NOTES:

THESE SHEET NOTES APPLY TO THIS SHEET ONLY

1. SEE FOOD SERVICE DRAWINGS FOR KITCHEN EQUIPMENT DEMOLITION AND NEW EQUIPMENT.
2. SEE STRUCTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR ADDITIONAL DEMOLITION INFORMATION.
3. CLEAN, PRIME, AND PREPARE ALL SURFACES RECEIVING PAINT. REMOVE OR PROTECT WALL-MOUNTED EQUIPMENT IN PLACE.
4. WHERE NEW SIGNS ARE INDICATED ON PLANS TO BE PROVIDED, CONTRACTOR SHALL REMOVE ALL EXISTING ROOM ID SIGNS AND PROVIDE NEW AS INDICATED.
5. PRIOR TO START OF DEMOLITION, CONTRACTOR SHALL TAPE OFF ALL FLOOR DRAINS TO PREVENT DEBRIS FROM ENTERING SEWER SYSTEM. AFTER COMPLETION OF FINISH WORK, CONTRACTOR SHALL CAREFULLY CLEAN DRAIN BOXES AND REPLACE DRAIN GRATES WITH NEW.
6. CONTRACTOR SHALL COORDINATE THE REMOVAL AND REINSTALLATION OF ALL CEILING MOUNTED LIGHT FIXTURES, FIRE ALARM DEVICES, MOTION SENSORS, VENTS, GRILLES, HOODS, REGISTERS, ETC. WHERE ITEMS ARE NOTED TO BE REUSED.
7. CONTRACTOR SHALL PATCH WALL AND WALL FINISHES TO MATCH EXISTING WHERE WALL-MOUNTED EQUIPMENT AND ANCHORS ARE REMOVED.
8. COORDINATE WITH DISTRICT FOR SHELVES AND FURNITURE IN KITCHEN AND STORAGE ROOMS TO BE SALVAGED FOR RE-USE IN NEW KITCHEN.
9. CONTRACTOR SHALL COMPLY WITH CFC CHAPTER 33 - FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION.

KEYNOTES:

(#) THESE KEYNOTES APPLY TO THIS SHEET ONLY

D2	DEMOLISH (E) DOOR, FRAME AND ALL ASSOCIATED HARDWARE.
D3	DEMOLISH ALL RESTROOM FIXTURES AND ACCESSORIES.
D4	DEMOLISH ENTIRE (E) WALL AND ALL ASSOCIATED ATTACHMENTS. PATCH ADJACENT WALL AND CEILING AND FLOOR TO RECEIVE NEW FINISHES. SEE ELECTRICAL AND LOW VOLTAGE SHEETS FOR ANY WALL-MOUNTED CONDUIT OR EQUIPMENT THAT NEEDS TO BE RELOCATED.
D5	DEMO (E) ROLLING PASS-THRU WINDOW, SILL, TRIM, AND ALL ASSOCIATED CONTROLS.
D6	REMOVE (E) WALK-IN REFRIGERATOR AND ASSOCIATED EQUIPMENT AND SHELVING. PATCH ANY PENETRATIONS THROUGH EXTERIOR WALL OR ROOF.
D7	REMOVE (E) WALL MECHANICAL UNIT AND ALL ASSOCIATED ATTACHMENTS- SEE MECHANICAL DRAWINGS.
D9	DEMOLISH (E) CASEWORK.
D10	(E) DRINKING FOUNTAIN TO BE REMOVED.
D11	(E) WOOD PANEL WALL COVERING TO BE REMOVED AND REPLACED WITH NEW GYPSUM BOARD
D12	DEMOLISH (E) WINDOW, WINDOW FRAMING, PORTION OF EXTERIOR LOUVER AND ALL ASSOCIATED HARDWARE AND SILLS.
D25	DEMO (E) VCT AND RESILIENT BASE. SCRAPE CLEAN AND PREP FOR NEW TILE FLOORING.
D37	LINE OF ROOF ABOVE.
D38	DEMO (E) PLYWOOD WAINSCOT AND TRIM
D40	REMOVE (E) FIRE EXTINGUISHER.
D45	EXISTING FIRE ALARM TO REMAIN. PROTECT IN PLACE.
D46	DEMO (E) WALL SCREENS AND FRAMES. INFILL WALL OPENING PER DETAIL 4/A610 SIM.
D47	REMOVE (E) RADIATOR AND ALL ASSOCIATED ATTACHMENTS. CAP UTILITIES FLUSH WITH WALL. PATCH FLOOR AND WALL TO MATCH ADJACENT AFTER DEMO.
D48	DEMO (E) DOOR AND HARDWARE ONLY. EXISTING FRAME TO REMAIN IN PLACE. PATCH WALL AND FRAME WHERE HARDWARE IS REMOVED AND PREPARE FRAME FOR NEW DOOR AND HARDWARE.
D50	CLEAN AND STRIP (E) WOOD STAGE FLOOR AND STAIRS TO BE RE-SEALED.
D53	DEMO (E) RUBBER AND WOOD BASE AT ALL WALLS SURROUNDING STAGE.
D58	DEMO (E) DOOR AND FRAME

LEGEND:

- PORTION OF WALL TO BE DEMOLISHED
- PORTION OF CONCRETE FLOOR SLAB TO BE DEMOLISHED
- PORTION OF VCT AND BASE TO BE REMOVED.
- FURNITURE/EQUIPMENT TO BE REMOVED.

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JAN 1 MAY 31
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JOB NO. Y2119.00

SHEET TITLE

DEMOLITION FLOOR PLAN

SHEET NO.

A111D

ONE AND ONE-HALF INCH = ONE FOOT
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ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
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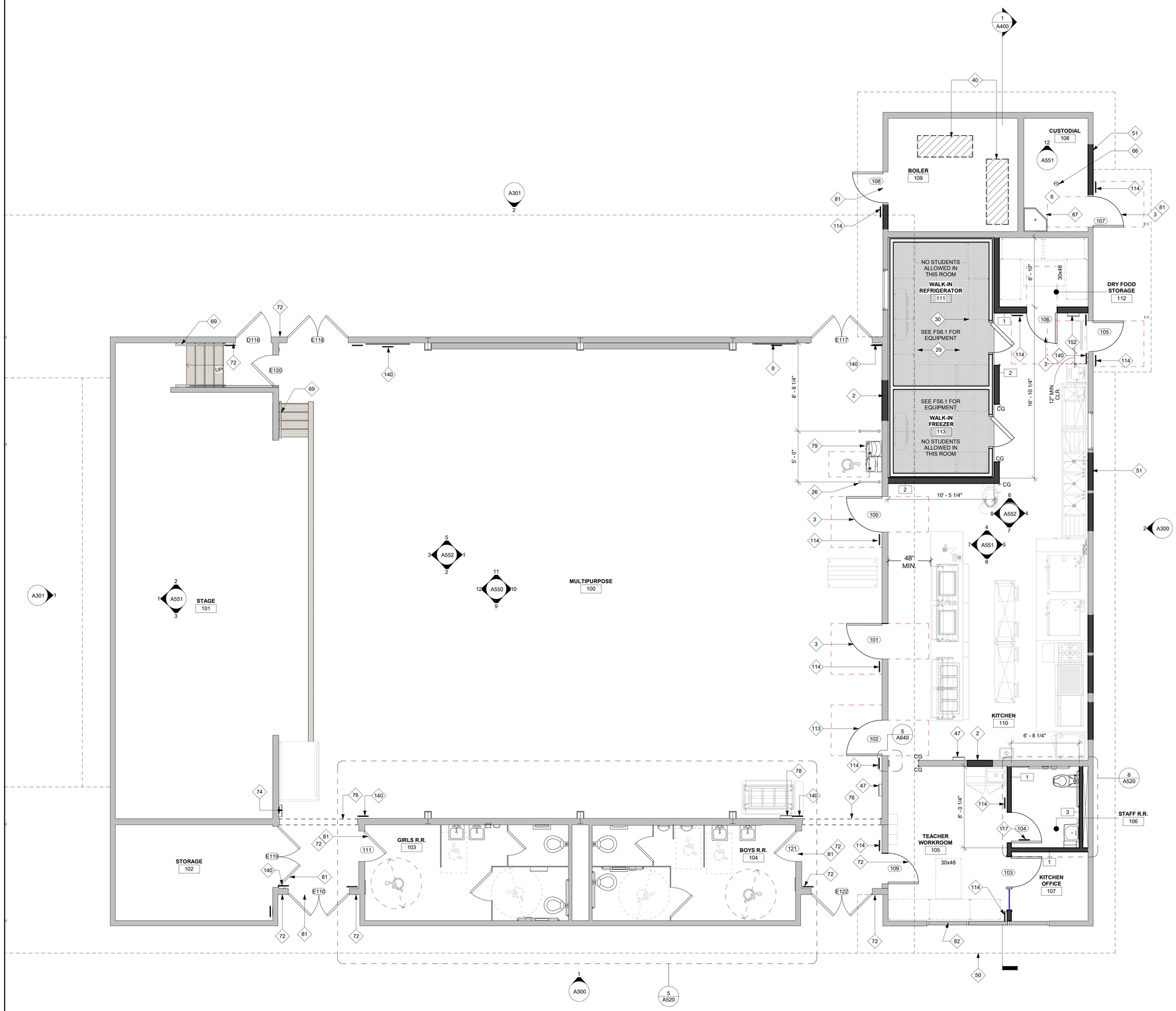

1 FLOOR PLAN
1/4" = 1'-0"

SHEET NOTES:

THESE SHEET NOTES APPLY TO THIS SHEET ONLY

1. FOR ALL MOUNTING HEIGHTS AND CLEARANCES OF ALL ACCESSORIES, SEE SHEET A520.
2. INTERIOR ELEVATIONS FOR ADDITIONAL FINISH WORK NOT SHOWN HERE.

KEYNOTES:

◇ # THESE KEYNOTES APPLY TO THIS SHEET ONLY

2	INFILL PASS-THRU WINDOW OPENING WITH NEW FRAMING AND FINISHES PER DETAIL 2/A640.
3	NEW DOOR AND HARDWARE - SEE DOOR SCHEDULE.
6	NEW EPOXY FLOORING AND COVED BASE.
8	PATCH WALL BEHIND DEMOLISHED UNIT VENTILATOR AND PREP FOR NEW FRL PER INTERIOR ELEVATIONS. INSTALL NEW MAGNETIC DRY ERASE BOARD PER INTERIOR ELEVATIONS.
26	NEW PAINTED GUARD RAIL BARRIERS EACH SIDE OF (E) DRINKING FOUNTAIN. SEE DETAIL 4/A520 FOR ANCHORAGE DETAILS.
29	NEW FREEZER/COOLER UNIT - SEE FOOD SERVICE DRAWINGS.
30	OPEN METAL STORAGE SHELVES - SEE FOOD SERVICE DRAWINGS.
40	INFILL CONCRETE FLOOR WHERE BOILER PAD WAS DEMOLISHED.
47	NEW 2A10BC FIRE EXTINGUISHER CABINET. SEE 22/A640 FOR PROTRUSION DIMENSIONS.
50	LINE OF ROOF ABOVE.
51	INFILL EXTERIOR WALL OPENING FROM REMOVED WINDOW WITH NEW FRAMING PER DETAIL 4/A610.
66	(E) FLOOR DRAIN TO REMAIN IN PLACE.
67	(N) MOP SINK - SEE PLUMBING DRAWINGS.
69	CLEAN, PRIME AND PAINT (E) HAND RAILS.
72	REMOVE EXISTING RESTROOM SIGNAGE ON DOOR AND WALL. PRIOR TO NEW PAINT SCOPE. PROVIDE AND INSTALL NEW SIGNAGE PER DOOR SCHEDULE.
74	PROVIDE AND INSTALL NEW ASSISTIVE LISTENING SIGN PER DETAIL 13/A640 AND MAX OCCUPANCY SIGN PER DETAIL 14/A640.
76	LINE OF CASED OPENING HEADER ABOVE.
78	NEW FIRE EXTINGUISHER CABINET PER DETAIL 22/A640 AND SPEC SECTION 10 44 16.
79	NEW DRINKING FOUNTAIN AND BOTTLE FILLER EQ TO HAWS 1212S. ANCHOR TO WALL WITH 6 MIN. 1/4" LAG SCREWS WITH 2" MIN. EMBED AT EACH MANUFACTURER MOUNTING BRACKET LOCATION. ANCHOR TO WALL BLOCKING PER 2/A520 IF NEEDED. CENTER SCREWS OVER HEIGHT OF BLOCKING. MOUNT PER 1/A520.
81	NEW THRESHOLD AT EXISTING DOOR. SEE DETAIL 1/A610
82	PAINT EXISTING WINDOW FRAME. TYPICAL
113	NEW DOOR, HARDWARE, AND FRAME - SEE DOOR SCHEDULE.
114	NEW ROOM SIGN. TYPE S-1. SEE 25/A640
117	NEW DOOR SIGN - UNISEX. TYPE S-3. SEE DETAIL 28/A640.
140	TACTILE EXIT SIGN PER CBC 1013.4. SEE 15/A640
152	NEW CLASS K FIRE EXTINGUISHER CABINET. 4" MAX PROTRUDING BEYOND THE WALL

LEGEND:

- EXISTING WALL
- NEW STUD WALL
- NEW FREEZER AND FRIDGE WALL
- 1i — WALL TAG - SEE DETAIL 16/A640 FOR WALL TYPES.
- 101 — DOOR TAG, SEE SHEET A710. SEE DOOR SCHEDULE FOR SIGNAGE AT NEW DOORS.
- CG — STAINLESS STEEL CORNER GUARD
- AREA OF DEPRESSED SLAB FOR FRIDGE AND FREEZER
- NEW FOOD SERVICE EQUIPMENT. SEE FOOD SERVICE DRAWINGS FOR MORE INFORMATION.

IDENTIFICATION STAMP
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APP: 01-121540 INC:
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DSA # 01-121540

AGENCY APPROVAL

EL DORADO MIDDLE SCHOOL
MULTI-PURPOSE BUILDING UPGRADES

1750 WEST ST, CONCORD, CA 94521

MT. DIABLO UNIFIED SCHOOL DISTRICT

CONSULTANT
nacht&lewis
600 Q Street, Suite 100
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www.nachtlewis.com
916.329.4000

LICENSED ARCHITECT
No. C-26867
RENEWAL DATE: 10/31/27
STATE OF CALIFORNIA

ARCHITECT

DSA SUBMITTAL

REVISIONS

NO.	DESCRIPTION	DATE

DATE 03/08/2024

JOB NO. Y2119.00

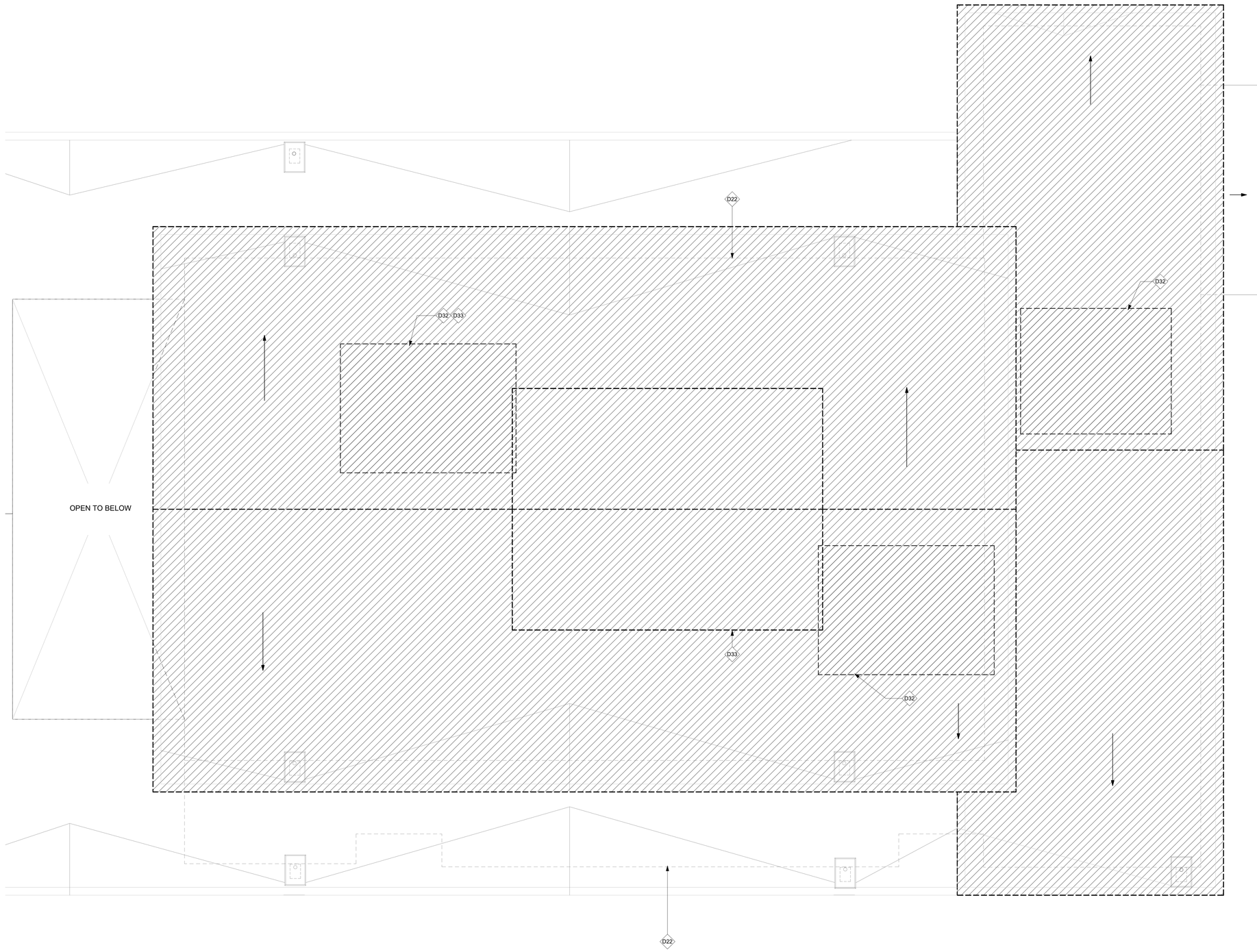
SHEET TITLE

FLOOR PLAN

SHEET NO.

A111

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET



1 DEMOLITION ROOF PLAN
1/4" = 1'-0"

KEYNOTES:

THESE KEYNOTES APPLY TO THIS SHEET ONLY

D22	LINE OF BUILDING BELOW.
D32	DEMO ROOF AREA AS NECESSARY TO INSTALL NEW MECHANICAL EQUIPMENT PER MECHANICAL DRAWINGS. SEE SHEETS S400 AND S121 FOR REQUIRED REINFORCEMENT
D33	DEMO EXISTING SKYLIGHT . INFILL AREA PER STRUCTURAL DRAWINGS

LEGEND:

AREA OF ROOF DEMOLITION. REMOVE EXISTING BUILT-UP ROOFING SYSTEM DOWN TO EXISTING STRUCTURAL SHEATHING . SEE MECHANICAL, PLUMBING, ELECTRICAL, FOODSERVICE AND STRUCTURAL DRAWINGS FOR ADDITIONAL DEMOLITION WORK NOT SHOWN HERE.

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LICENSED ARCHITECT
ALAN J. MAYHEW
No. C-26867
RENEWAL DATE: 1/31/27
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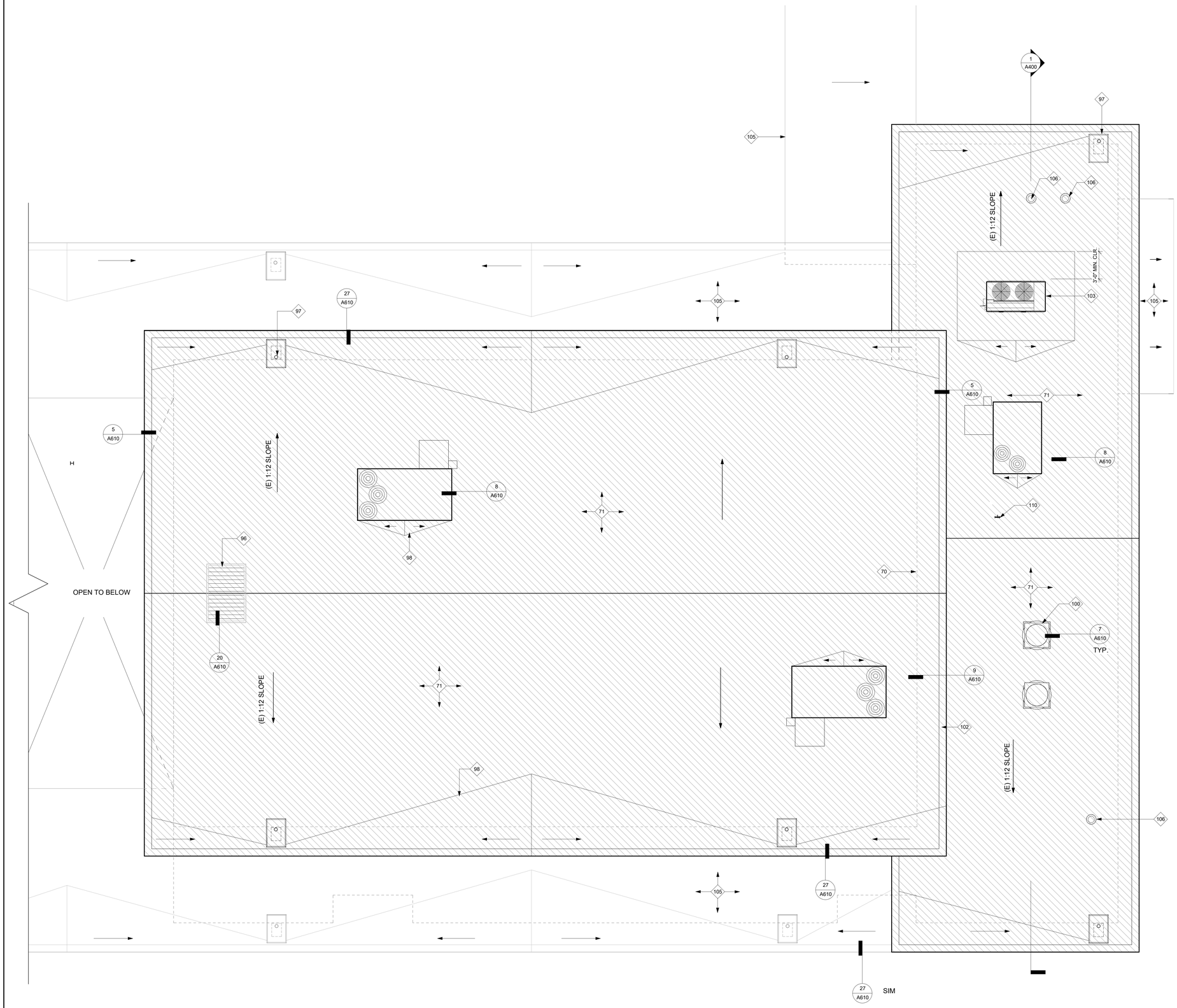
SHEET TITLE

DEMOLITION ROOF PLAN

SHEET NO.

A121D



1 ROOF PLAN

1/4" = 1'-0"

N

SHEET NOTES:

THESE SHEET NOTES APPLY TO THIS SHEET ONLY

1. LAP ALL EDGES OF NEW ROOF MEMBRANE OVER OLD MEBRANE BY 10" MIN.
2. PROVIDE CANT STRIPS AT ALL INTERSETIONS OF VERTICAL SURFACES.
3. NOT ALL REQUIRED WORK MAY BE SHOWN ON ARCHITECTURAL DRAWINGS. SEE STRUCTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR ADDITIONAL WORK.
4. WHERE REQUIRED TO INSTALL NEW WORK, REMOVED THE EXISTING ROOF SUBSTRATE ONLY TO THE EXTENT REQUIRED (OR AS OTHERWISE DETAILED ON THE STRUCTURAL DRAWINGS) AND REPLACE THE ROOF SUBSTRATE AS SHOWN ON THE STRUCTURAL DRAWINGS.
5. REPAIR ROOFING WHERE EXISTING EQUIPMENT IS BEING REMOVED FROM THE ROOF AND IS NOT BEING REPLACED. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR LOCATIONS. WHERE REQUIRED, REPLACE THE ROOF SUBSTRAITE AS SHOWN ON THE STRUCTURAL DRAWINGS.
6. PROVIDE NEW ROOFING CRICKETS AT NEW MECHANICAL CURBS AND SUPPORTS WIDER THAN 24" TO ALLOW CONTINUOUS WATERFLOW, TYP ALL. SEE SPECIFICATION SECTION 07 56 10.

KEYNOTES:

(#) THESE KEYNOTES APPLY TO THIS SHEET ONLY

70	LINE OF WALLS BELOW.
71	NEW BUILT-UP ROOFING SYSTEM PER DETAIL 21/A610 SIM.
96	EXISTING SMOKE VENT TO REMAIN. PROTECT IN PLACE
97	REMOVE EXISTING AND INSTALL NEW ROOF DRAIN. CONNECT TO EXISTING PIPING
98	NEW CRICKET, TYP.
100	NEW EXHAUST FANS, SEE MECHANICAL DRAWINGS
102	NEW SHAPED WOOD AT PERIMETER, SEE DETAIL 1/A610
103	NEW ROOF MOUNTED KITCHEN EQUIPMENT ON CURB, SEE KITCHEN DETAIL H/FS7.1
105	EXISTING ROOFING TO REMAIN
106	EXHAUST FAN ROOF CAP. ROOF AROUND EXISTING PENETRATIONS WHERE OCCURS, SEE DETAIL 9/A610
110	HOSE BIB. SEE PLUMBING DRAWINGS

LEGEND:

AREA OF NEW ROOFING SYSTEM

(N) ROOF TOP UNIT

EXHAUST FAN ROOF CAP

EXHAUST FAN. SEE MECH. DWGS

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LICENSED ARCHITECT
JULIAN J. MAYTORENA
No. C-26867
RENEWAL DATE: 1/31/27
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SHEET TITLE

ROOF PLAN

SHEET NO.

A121

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
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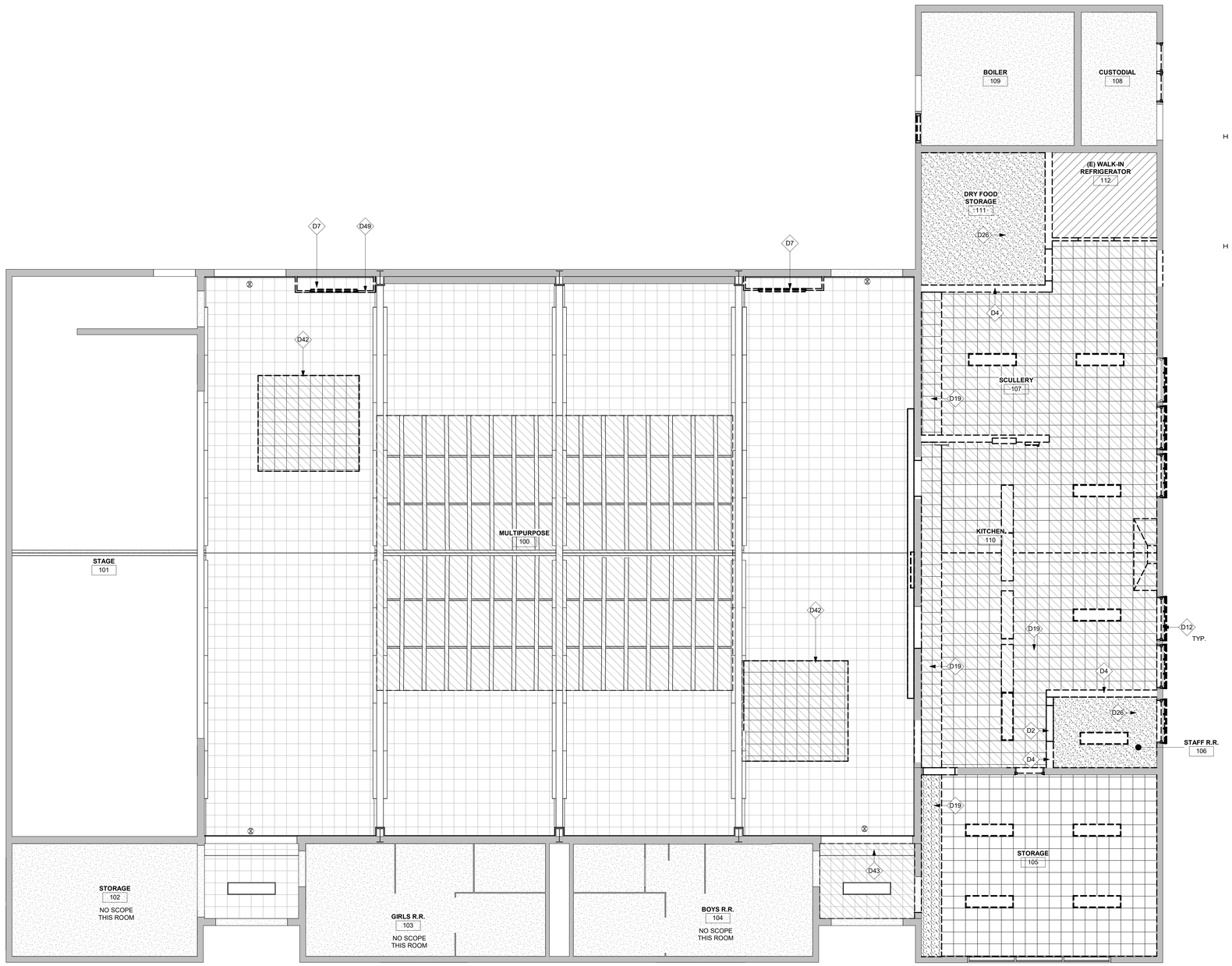

2 DEMOLITION REFLECTED CEILING PLAN

1/4" = 1'-0"

N

SHEET NOTES:

THESE SHEET NOTES APPLY TO THIS SHEET ONLY

1. SEE ELECTRICAL PLANS FOR ADDITIONAL DEMO NOTES.

KEYNOTES:

THESE KEYNOTES APPLY TO THIS SHEET ONLY

D2	DEMOLISH (E) DOOR, FRAME AND ALL ASSOCIATED HARDWARE.
D4	DEMOLISH ENTIRE (E) WALL AND ALL ASSOCIATED ATTACHMENTS. PATCH ADJACENT WALL AND CEILING AND FLOOR TO RECEIVE NEW FINISHES. SEE ELECTRICAL AND LOW VOLTAGE SHEETS FOR ANY WALL-MOUNTED CONDUIT OR EQUIPMENT THAT NEEDS TO BE RELOCATED.
D7	REMOVE (E) WALL MECHANICAL UNIT AND ALL ASSOCIATED ATTACHMENTS- SEE MECHANICAL DRAWINGS.
D12	DEMOLISH (E) WINDOW, WINDOW FRAMING, PORTION OF EXTERIOR LOUVER AND ALL ASSOCIATED HARDWARE AND SILLS.
D19	DEMO (E) WALL/CEILING APPLIED ACOUSTIC TILES.
D26	DEMO (E) GYPSUM CEILING TO STRUCTURE.
D42	REMOVE PORTION OF CEILING TILES AND SUBSTRATE AS REQUIRED FOR NEW STRUCTURAL AND HVAC INSTALLATION WORK.
D43	REMOVE DAMAGED AND WATER STAINED CEILING TILES. REMOVE ENOUGH SURROUNDING TILE AND LEAVE OPEN FOR DISTRICT TO DIAGNOSE IF THERE IS STILL A LEAK.
D49	DEMO (E) PAINTED WOOD LATTICE FRAMING AND ALL ANCHORAGE. PATCH WALL TO MATCH ADJACENT.

LEGEND:

EXISTING EXPOSED TO STRUCTURE.

EXISTING GYPSUM CEILING

DEMOLISHED EXISTING SUSPENDED CEILING

DEMOLISHED EXISTING GYPSUM BOARD CEILING/SOFFIT

DEMOLISHED 1x ACOUSTIC TILE

MECHANICAL

DEMOLISHED EXISTING SUPPLY GRILLE

DEMOLISHED EXISTING RETURN GRILLE

DEMOLISHED EXISTING EXHAUST GRILLE

ELECTRICAL

DEMOLISHED EXISTING LIGHTING FIXTURE

DEMOLISHED EXISTING LIGHTING FIXTURE

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AGENCY APPROVAL

EL DORADO MIDDLE SCHOOL
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REGISTERED ARCHITECT
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SHEET TITLE

DEMOLITION REFLECTED CEILING PLAN

SHEET NO.

A211D



1 REFLECTED CEILING PLAN

1/4" = 1'-0"

SHEET NOTES:

THESE SHEET NOTES APPLY TO THIS SHEET ONLY

1. REFER TO FINISH SCHEDULE FOR ADDITIONAL FINISH INFORMATION.
2. ALL CEILING GRIDS ARE CENTERED IN ROOMS, U.O.N.
3. SEE ELECTRICAL LIGHTING PLAN FOR LIGHTING DESIGNATIONS.
4. ALL CEILING HT. DIMENSIONS ARE TAKEN FROM THE FINISH FLOOR U.O.N.
5. SEE SHEET A650 FOR CEILING DETAILS.
6. ALLOW FOR THE REPLACEMENT OF (30) 12"X12" CEILING TILES AT MP ROOM, ENTRANCE ALCOVES AND STAGE AREA WHERE MISSING OR DAMAGED.
7. PATCH AND REPAIR ALL SURFACES AT REMOVAL OF EXISTING CONDUIT, PIPING, DEVICES, AND PENETRATIONS.

KEYNOTES:

THESE KEYNOTES APPLY TO THIS SHEET ONLY

11	NEW PAINT OVER (E) APPLIED ACOUSTIC WALL AND CEILING PANELS
22	PRIME AND PAINT NEW EXPOSED MECHANICAL DUCTS.
24	EXISTING METAL BEAM TO REMAIN. PROTECT IN PLACE. PRIME AND PAINT.
34	NEW CUSTOM GRAPHIC PRINT ACOUSTICAL BOARD - GRAPHIC TO BE SUPPLIED BY ARCHITECT.
50	LINE OF ROOF ABOVE
52	REPLACED WATER DAMAGED CEILING TILES PRIOR TO PAINT. LEAVE TILES OPEN LONG ENOUGH FOR STRUCTURAL IMPROVEMENT AND FOR DISTRICT TO DETERMINE IF THERE IS STILL A WATER LEAK.
60	NEW CEILING TILES WHERE REMOVED FOR STRUCTURAL IMPROVEMENT. PROVIDE ALLOWANCE FOR REPLACEMENT OF UP TO 10% ADDITIONAL TILES IN THIS ROOM WHERE NOT SHOWN.
62	(N) MECHANICAL EQUIPMENT. SEE MECHANICAL DRAWINGS.
64	PATCH AND FILL CRACKS AND PAINT ENTIRE PLASTER CEILING.
100	NEW EXHAUST FANS, SEE MECHANICAL DRAWINGS
155	NEW WATER HEATER, SEE PLUMBING DRAWINGS

LEGEND:

SUSPENDED CEILING W/ ACOUSTICAL LAY-IN PANELS - SEE DETAILS ON SHEET A650 AND SPEC SECTION 09 53 00 FOR SUSPENSION SYSTEM.

GYPSUM BOARD CEILING/SOFFIT (PAINTED).

EXISTING PLASTER CEILING.

EXISTING 1X1 ADHERED CEILING TILES.

NEW 1X1 ADHERED CEILING TILES.

REFRIGERATOR/FREEZER CEILING

NEW CEILING HEIGHT

MECHANICAL

SUPPLY GRILLE

RETURN GRILLE

EXHAUST GRILLE

ELECTRICAL

2'X4' SURFACE MOUNT LIGHT FIXTURE

1'X4' SURFACE MOUNT LIGHT FIXTURE

2'X4' LIGHT FIXTURE

ACCESS DOOR

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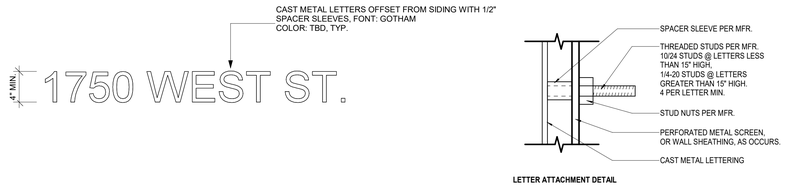
SHEET TITLE

REFLECTED CEILING PLAN

SHEET NO.

A211

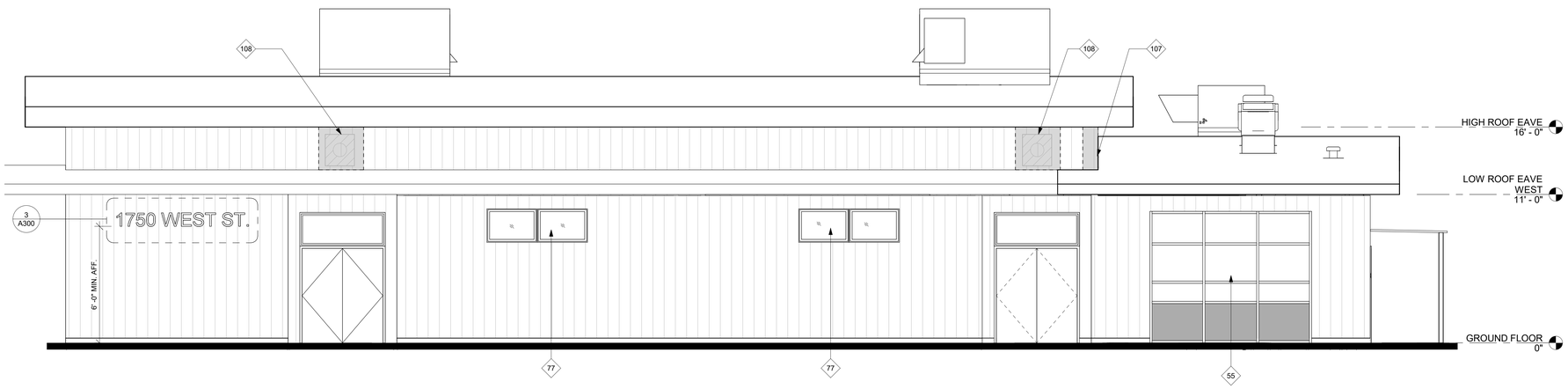
ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET



LETTER ATTACHMENT DETAIL

3 BUILDING SIGNAGE - DETAIL

1/2" = 1'-0"



1 BUILDING ELEVATION - WEST

1/4" = 1'-0"



2 BUILDING ELEVATION - SOUTH

1/4" = 1'-0"

SHEET NOTES:

THESE SHEET NOTES APPLY TO THIS SHEET ONLY

1. SEE ROOF PLAN, SHEET A121 FOR ROOF PATCH SCOPE.
2. EXIT TACTILE SIGNS SHALL BE MOUNTED PER DETAIL 30/A640

KEYNOTES:

◇ # THESE KEYNOTES APPLY TO THIS SHEET ONLY

3	NEW DOOR AND HARDWARE - SEE DOOR SCHEDULE.
51	INFILL EXTERIOR WALL OPENING FROM REMOVED WINDOW WITH NEW FRAMING PER DETAIL 4/A610.
53	PAINT ENTIRE EXTERIOR FACE, WINDOW TRIM, AND CONDUIT TO MATCH EXISTING.
55	EXISTING WINDOWS TO RECEIVE NEW GLAZING - 1/4" GLAZING PER SPEC SECTION 08 80 00.
77	EXISTING WINDOWS TO REMAIN.
107	PATCH AND REPAIR EXISTING SIDING AT CORNER AS REQUIRED TO INSTALL STRUCTURAL UPGRADE
108	EXISTING EXHAUST FAN OPENINGS TO BE INFILLED. (N) SIDING

LEGEND:

USED AT MULTIPLE SHEETS - NOT ALL FINISHES MAY APPLY.

BOARD AND BATTEN SIDING.

BOARD AND BATTEN WINDOW INFILL

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REGISTERED ARCHITECT RYAN T. MATTOX No. C-26867 RENEWAL DATE: 03/31/27 STATE OF CALIFORNIA

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JOB NO. Y2119.00

SHEET TITLE

BUILDING ELEVATIONS

SHEET NO.

A300

ONE AND ONE-HALF INCH = ONE FOOT

ONE INCH = ONE FOOT

THREE-QUARTERS INCH = ONE FOOT

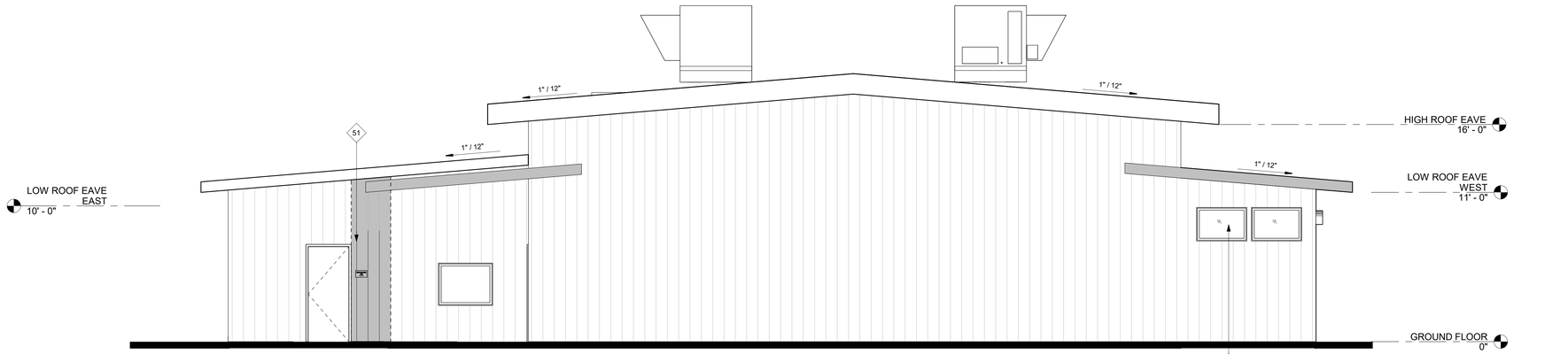
ONE-HALF INCH = ONE FOOT

ONE-QUARTER INCH = ONE FOOT

ONE-EIGHTH INCH = ONE FOOT

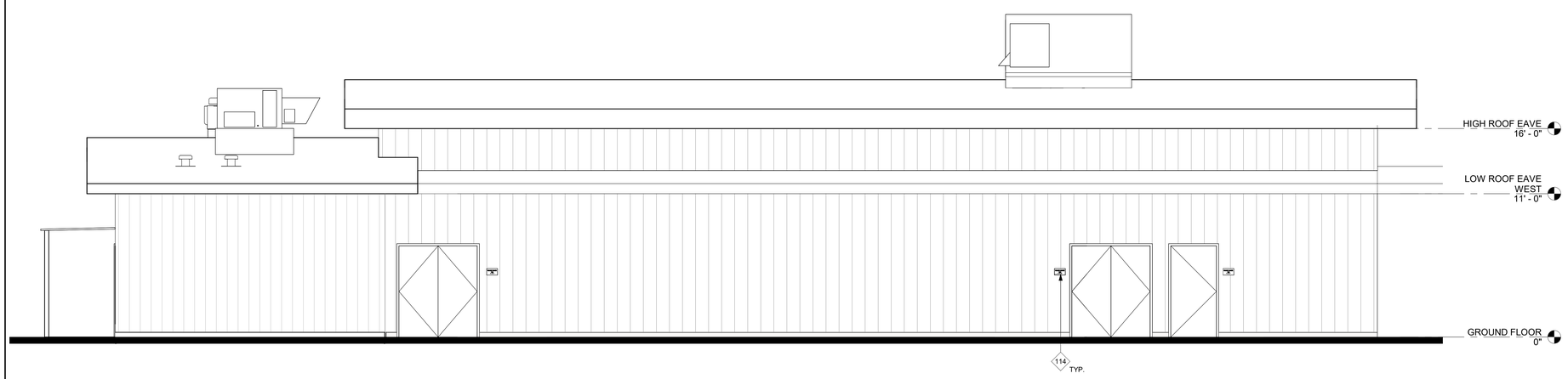
ONE-SIXTEENTH INCH = ONE FOOT

ONE INCH = TWENTY FEET



1 EXTERIOR ELEVATION - NORTH

1/4" = 1'-0"



2 EXTERIOR ELEVATION - EAST

1/4" = 1'-0"

SHEET NOTES:

THESE SHEET NOTES APPLY TO THIS SHEET ONLY

1. SEE ROOF PLAN, SHEET A121 FOR ROOF PATCH SCOPE.
2. EXIT TACTILE SIGNS SHALL BE MOUNTED PER DETAIL 30/A640

KEYNOTES:

THESE KEYNOTES APPLY TO THIS SHEET ONLY

51	INFILL EXTERIOR WALL OPENING FROM REMOVED WINDOW WITH NEW FRAMING PER DETAIL 4/A610.
77	EXISTING WINDOWS TO REMAIN.

LEGEND:

USED AT MULTIPLE SHEETS - NOT ALL FINISHES MAY APPLY.

BOARD AND BATTEN SIDING.

BOARD AND BATTEN WINDOW INFILL

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LICENSED ARCHITECT
JULIAN J. MAYTAN
No. C-26867
RENEWAL DATE: 1/31/27
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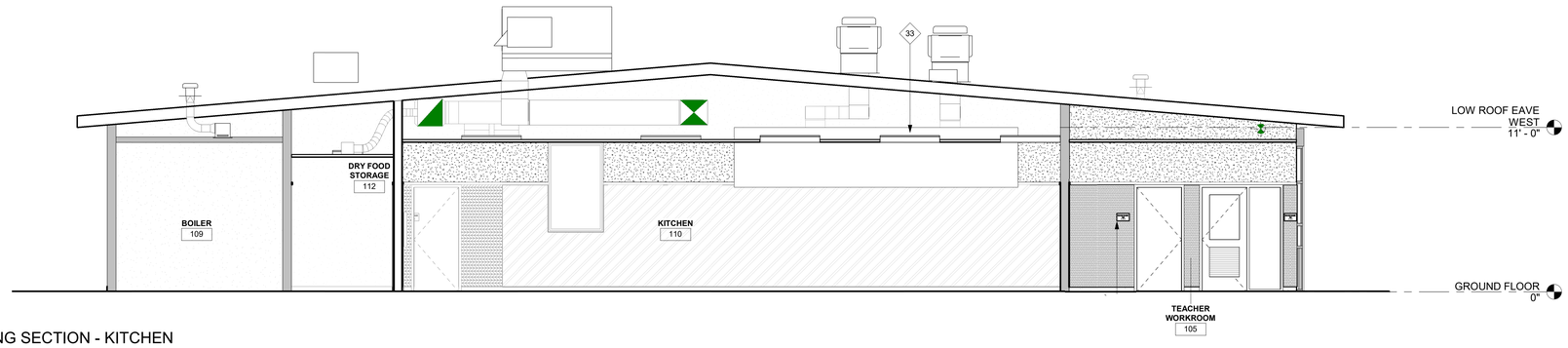
SHEET TITLE

BUILDING ELEVATIONS

SHEET NO.

A301



1 EAST-BUILDING SECTION - KITCHEN

1/4" = 1'-0"

SHEET NOTES:

THESE SHEET NOTES APPLY TO THIS SHEET ONLY

1. SEE INTERIOR ELEVATIONS AND FINISH PLAN FOR INFORMATION ON WALL FINISHES.

KEYNOTES:

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33	NEW FUME HOOD - SEE FOOD SERVICE DRAWINGS.

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SHEET TITLE

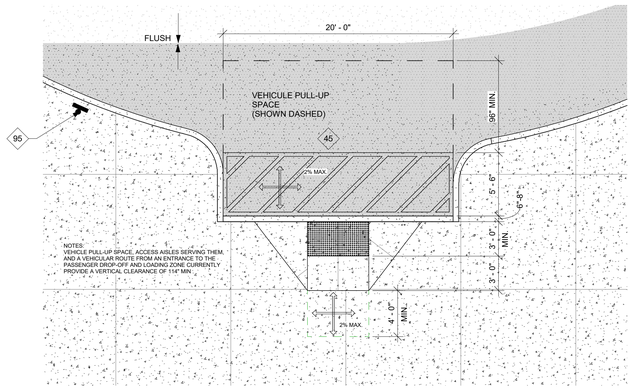
BUILDING SECTIONS

SHEET NO.

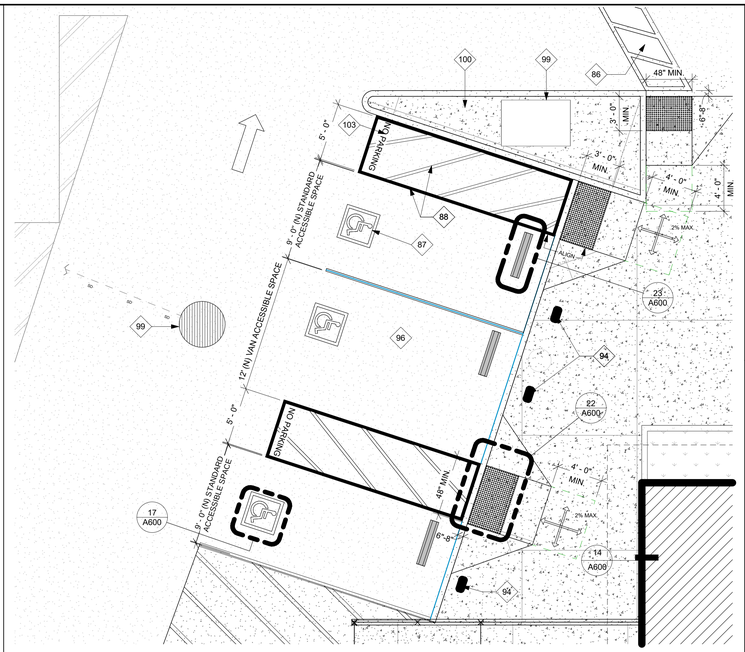
A400

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET

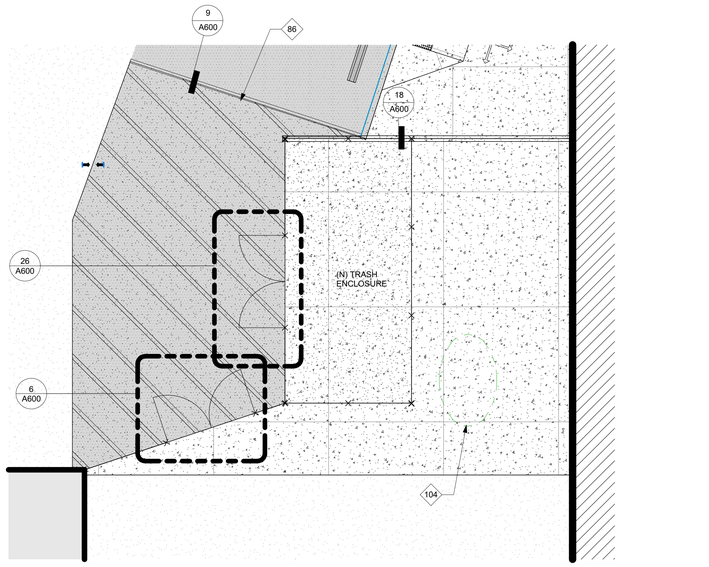
ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET



17 NEW ACCESSIBLE DROP-OFF AREA
3/16" = 1'-0"



7 NEW ACCESSIBLE PARKING
3/16" = 1'-0"



10 TRASH ENCLOSURE AREA
3/16" = 1'-0"

SHEET NOTES:

THESE SHEET NOTES APPLY TO THIS SHEET ONLY

1. SEE ENLARGED SITE DEMOLITION FOR ADDITIONAL WORK NOT SHOWN HERE
2. SEE ALL DRAWINGS IN ADDITION TO ARCHITECTURAL SHEETS FOR ADDITIONAL WORK NOT SHOWN HERE

KEYNOTES:

THESE KEYNOTES APPLY TO THIS SHEET ONLY

45	NEW ACCESSIBLE DROP OFF AND LOADING ZONE. 2% MAX SLOPE IN ALL DIRECTIONS
86	3" WIDE WHITE CROSS WALK STRIPING WITH STRIPES AT 36" O.C.
87	36"X36" ISA AT STALL, SEE 17/A600
88	4" WIDE BLUE PERIMETER AT ACCESS AISLE WITH 4" WIDE WHITE DIAGONAL STRIPING AT 36" O.C.
94	NEW ACCESSIBLE PARKING SIGN PER 3/A600, TYP
95	NEW " NO PARKING" SIGN ON METAL POST, SEE DETAILS 4/A600 AND 10/A600
96	STALL AND AISLE SHALL SLOPE 2% MAXIMUM IN ANY DIRECTIONS
99	NEW LOCATION OF MANHOLE COVER 3 FEET MINIMUM AWAY FROM NEW ACCESSIBLE STALL AND AISLE. RAISE TO NEW GRADE AND FLUSH EDGES ALONG ALL SIDES TO FINISHED FLOOR.
100	NEW CONCRETE ISLAND
103	WHITE LETTERING, 12" HIGH MIN. TYP
104	UNDERGROUND GREASE INTERCEPTOR

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LICENSED ARCHITECT
JEAN J. MAYTON
No. C-26867
RENEWAL DATE: 1/31/27
STATE OF CALIFORNIA

ARCHITECT

DSA SUBMITTAL

REVISIONS

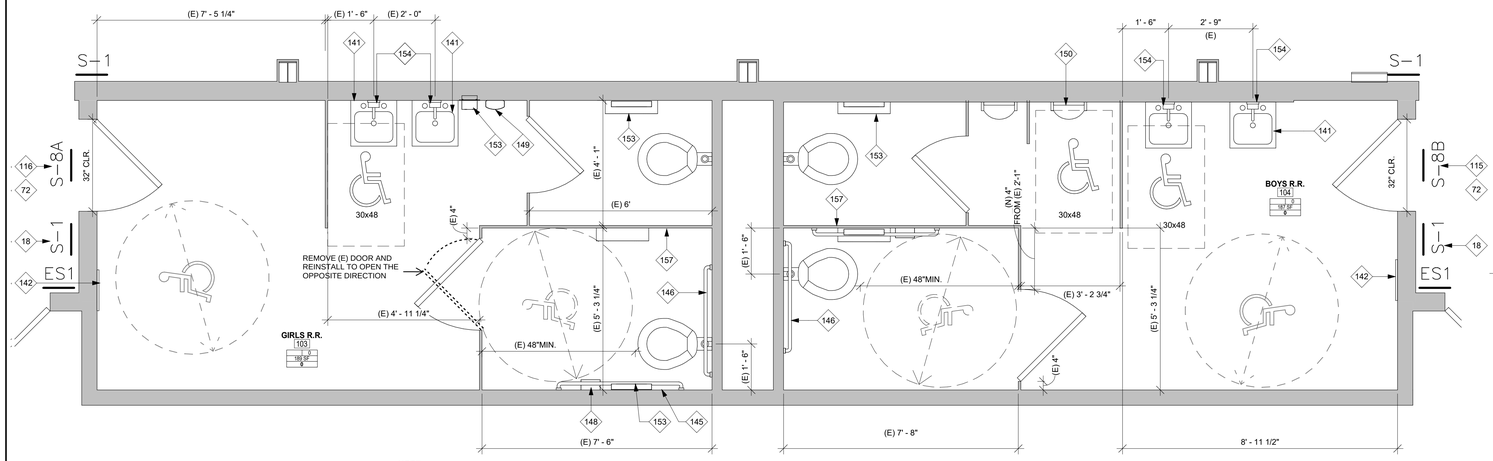
NO.	DESCRIPTION	DATE

DATE 03/08/2024
JOB NO. Y2326.00
SHEET TITLE

ENLARGED SITE DETAILS

SHEET NO.

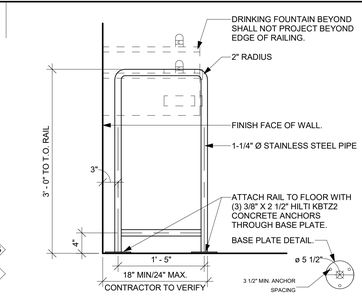
A500



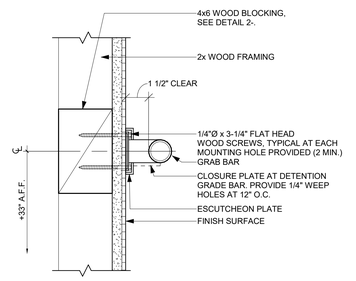
NOTE:
ARCHITECT HAS VERIFIED THAT ALL (E) FIXTURES COMPLY WITH DIMENSIONS AND DETAILS NOTED ON 1/A520

NOTE:
USE ADULT MOUNTING HEIGHTS FOR ALL RESTROOM FIXTURES AND ACCESSORIES. SEE DETAIL 1/A520 FOR MOUNTING HEIGHTS AND CLEARANCE REQUIREMENTS.

5 EXISTING RESTROOM PLANS
1/2" = 1'-0"



4 PIPE RAILING AT D.F.
1" = 1'-0"



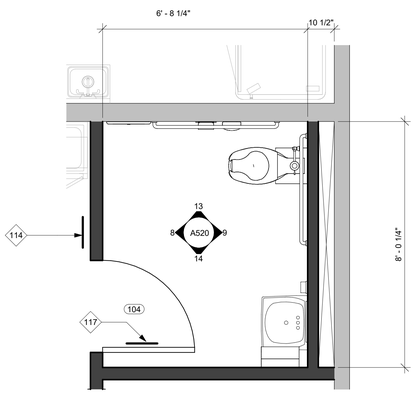
3 GRAB BAR MOUNTING (WD. STUDS)
3" = 1'-0"

SHEET NOTES:
THESE SHEET NOTES APPLY TO THIS SHEET ONLY

1. U.O.N. ALL NEW PLUMBING FIXTURES INCLUDING WATER CLOSETS, URINALS, LAVATORIES, ALL ASSOCIATED FAUCETS AND VALVES SHOWN SHALL BE FURNISHED AND INSTALLED BY CONTRACTOR. OWNER HAS SALVAGE RIGHTS TO REMOVED FLUSH VALVES, FAUCETS, AND FIXTURES. CONTRACTOR SHALL DISPOSE OF ALL EQUIPMENT NOT SALVAGED BY DISTRICT.
2. PRIOR TO START OF DEMOLITION, CONTRACTOR SHALL TAPE OFF ALL FLOOR DRAINS AND CLEANOUTS TO PREVENT DEBRIS FROM ENTERING SEWER SYSTEM. AFTER COMPLETION OF FINISH WORK, CONTRACTOR SHALL CAREFULLY CLEAN DRAIN BOX AND CLEANOUTS FROM ALL CONSTRUCTION RESIDUE. PROVIDE NEW CAPS AT ALL CLEANOUTS AND NEW GRATES AT ALL FLOOR DRAINS.
3. WHERE TOILET ACCESSORIES AND FIXUTURES ARE REMOVED, CONTRACTOR SHALL FILL ALL MOUNTING HOLES AND PATCH ALL WALL AND WALL FINISHES TO BEST MATCH EXISTING.
4. AT THE END OF EACH CONSTRUCTION PHASE AND IN THE PRESENCE OF INSPECTOR, CAMERA ALL SANITARY SEWER LINES TO A DISTANCE OF 100FT OR NEAREST EXTERIOR CLEANOUT, WHICHEVER IS FURTHER. IF DEBRIS IS FOUND, AUGER LINE AND RECAMERA.
5. AT ALL NEW OR RELOCATED RESTROOM ACCESSORIES, CONTRACTOR SHALL PROVIDE NEW 4X BACKING AT ATTACHMENT POINTS. CONTRACTOR SHALL PATCH AND REPAIR (E) WALL FINISH TO BEST MATCH EXISTING ADJACENT.

KEYNOTES:
(#) THESE KEYNOTES APPLY TO THIS SHEET ONLY

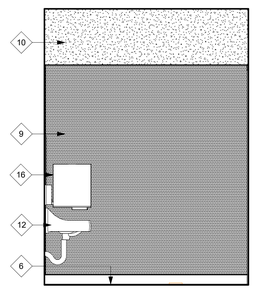
6	NEW EPOXY FLOORING AND COVED BASE.
9	FRL WALL PROTECTION.
10	PAINT NEW GYPSUM WALL BOARD.
12	NEW LAVATORY - SEE PLUMBING DRAWINGS.
13	NEW MIRROR PER SPEC SECTION 10 28 00. ANCHOR TO WALL BLOCKING WITH (4 MIN.) 1/4" X 1 1/2" LAG SCREWS.
15	NEW GRAB BARS. SEE 1/A520 FOR MOUNTING HEIGHT.
16	NEW PAPER TOWEL DISPENSER. SEE 1/A520 FOR MOUNTING HEIGHT.
17	NEW SOAP DISPENSER. SEE 1/A520 FOR MOUNTING HEIGHT.
18	NEW ACCESSIBLE TOILET ROOM IDENTIFICATION SIGNAGE
72	REMOVE EXISTING RESTROOM SIGNAGE ON DOOR AND WALL PRIOR TO NEW PAINT SCOPE. PROVIDE AND INSTALL NEW SIGNAGE PER DOOR SCHEDULE.
83	NEW TOILET TISSUE DISPENSER
84	NEW SANITARY NAPKIN DISPOSAL
114	NEW ROOM SIGN. TYPE S-1. SEE 25/A640
115	NEW DOOR SIGN - MENS. SEE DETAILS 19&28/A640
116	NEW DOOR SIGN - WOMENS. SEE DETAILS 19&28/A640
117	NEW DOOR SIGN - UNISEX. TYPE S-3. SEE DETAIL 28/A640.
139	NEW TOILET SEAT COVERS DISPENSER
141	(E) LAVATORY
142	(E) MIRROR TO REMAIN
145	(E) 42" GRAB BAR
146	(E) 36" GRAB BAR
148	(E) SANITARY NAPKIN DISPOSAL
149	(E) PAPER TOWEL DISPENSER
150	(E) ACCESSIBLE URINAL
153	(E) TOILET TISSUE DISPENSER
154	(E) SOAP DISPENSER
157	(E) PARTITION FLOOR CLEARANCE IS 9" CLEAR AT BOTTOM OF PARTITION



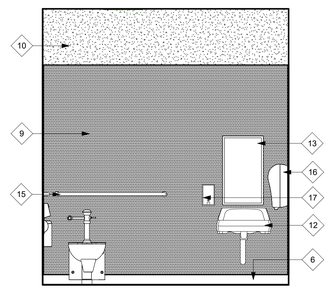
6 STAFF R.R.
1/2" = 1'-0"

LEGEND:
USED AT MULTIPLE SHEETS - NOT ALL FINISHES MAY APPLY.

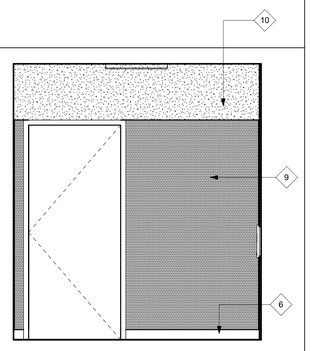
- CHAIN LINK FENCING
- (E) WALL-APPLIED GLUE-ON ACOUSTICAL TILES
- PAINTED GYP BOARD
- FRL
- (E) WOOD PANEL
- NEW ACOUSTIC ADHERED PANEL WITH GRAPHIC.



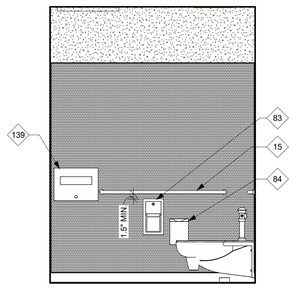
14 INT. ELEVATION - STAFF R.R.- WEST
1/2" = 1'-0"



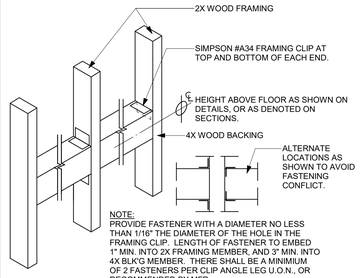
9 INT. ELEVATION - STAFF R.R.- SOUTH
1/2" = 1'-0"



8 INT. ELEVATION - STAFF R.R.- NORTH
1/2" = 1'-0"



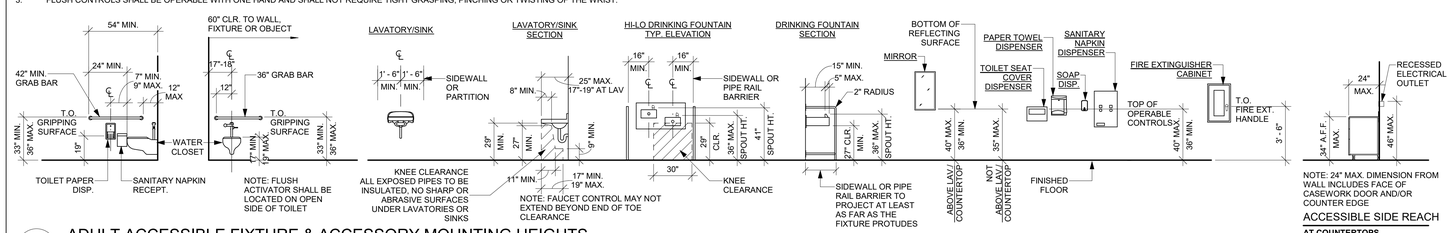
13 INT. ELEVATION - STAFF R.R.- EAST
1/2" = 1'-0"



NOTE:
PROVIDE FASTENER WITH A DIAMETER NO LESS THAN 1/16" THE DIAMETER OF THE HOLE IN THE FRAMING CLIP. LENGTH OF FASTENER TO EMBED 1" MIN. INTO 2X FRAMING MEMBER, AND 3" MIN. INTO 4X BLK'G MEMBER. THERE SHALL BE A MINIMUM OF 2 FASTENERS PER CLIP ANGLE LEG U.O.N., OR RECOMMENDED BY MFR.

2 BACKING PLATE
3" = 1'-0"

NOTES:
1. WHERE TOWELS, SANITARY NAPKINS, WASTE RECEPTACLES, DISPENSERS AND OTHER EQUIPMENT AND CONTROLS ARE PROVIDED, AT LEAST ONE OF EACH TYPE SHALL BE LOCATED ON AN ACCESSIBLE ROUTE, WITH ALL OPERABLE PARTS, INCLUDING COIN SLOTS, PLACED WITHIN THE HEIGHTS SHOWN IN THIS DETAIL.
2. PROVIDE BACKING FOR ALL WALL HUNG ACCESSORIES. FOR TYPICAL ANCHORAGE AT STUD WALLS - SEE DETAIL 2/A520.
3. FLUSH CONTROLS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST.



1 ADULT ACCESSIBLE FIXTURE & ACCESSORY MOUNTING HEIGHTS
1/4" = 1'-0"

(SEE ADDITIONAL PLANS, ELEVATIONS, AND DETAILS FOR FURTHER ACCESSIBILITY REQUIREMENTS)

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AGENCY APPROVAL

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916.329.4000

LICENSED ARCHITECT
JOAN J. MAYTAN
No. C-26867
RENEWAL DATE: 1/31/27
STATE OF CALIFORNIA

ARCHITECT

DSA SUBMITTAL

REVISIONS

NO.	DESCRIPTION	DATE

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JOB NO. Y2119.00

SHEET TITLE

ENLARGED RESTROOM PLANS AND ELEVATIONS

SHEET NO.

A520

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET

ONE AND ONE-HALF INCH = ONE FOOT

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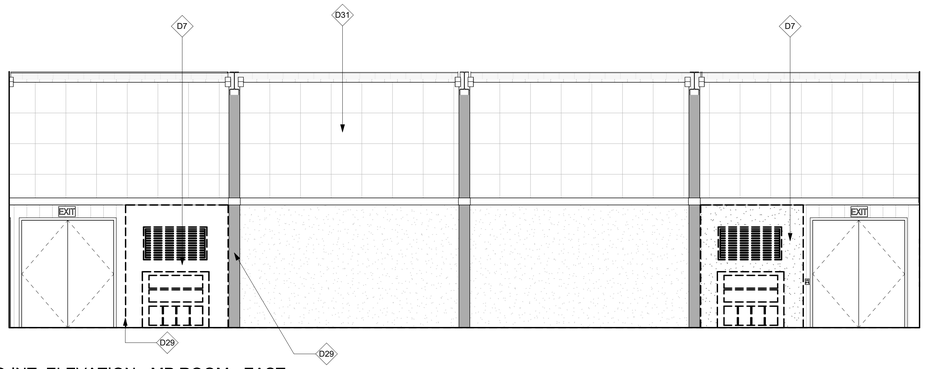
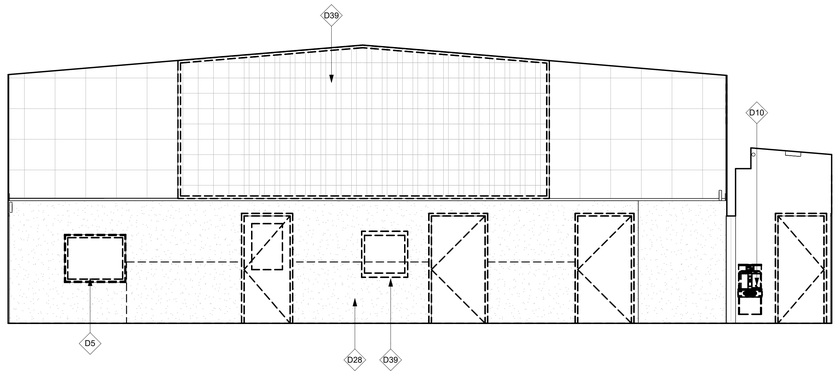


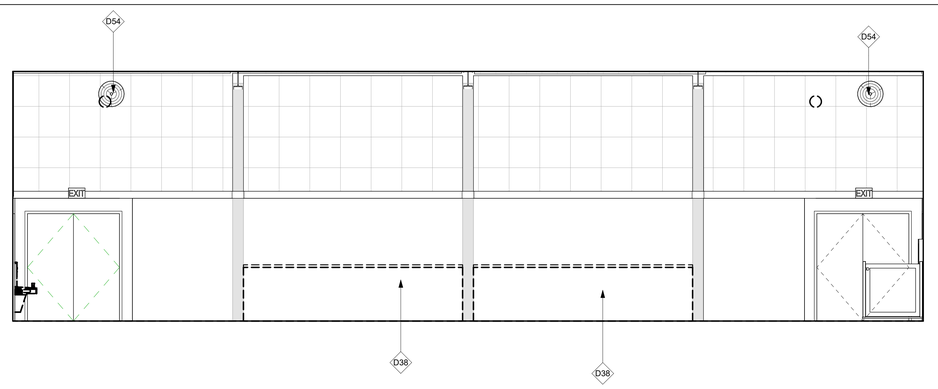
11 DEMO INT. ELEVATION - MP ROOM - EAST

1/4" = 1'-0"



10 DEMO INT. ELEVATION - MP ROOM - SOUTH

1/4" = 1'-0"



9 DEMO INT. ELEVATION - MP ROOM - WEST

1/4" = 1'-0"

SHEET NOTES:

THESE SHEET NOTES APPLY TO THIS SHEET ONLY

1. COORDINATE THE REMOVAL AND REINSTALLATION OF ALL WALL-MOUNTED LIGHTS, VENTS, ELECTRICAL EQUIPMENT, FIRE ALARMS, AND ALL OTHER EQUIPMENT PRIOR TO PAINTING.
2. THOROUGHLY CLEAN, PREPARE AND PRIME ALL WALLS, DOORS, FRAMES, WOODS, METAL, ETC. PRIOR TO PAINTING.
3. CLEAN APPLIED ACOUSTIC WALL TILES AND REPLACE ALL WATER-STAINED AND DAMAGED TILES. PRIME AND PAINT.
4. PROTECT EXISTING STAGE CURTAINS IN PLACE.
5. SEE PAINT SPEC FOR PAINT SHEENS AT ALL LOCATIONS.

KEYNOTES:

(#) THESE KEYNOTES APPLY TO THIS SHEET ONLY

D5	DEMO (E) ROLLING PASS-THRU WINDOW, SILL, TRIM, AND ALL ASSOCIATED CONTROLS.
D7	REMOVE (E) WALL MECHANICAL UNIT AND ALL ASSOCIATED ATTACHMENTS- SEE MECHANICAL DRAWINGS.
D10	(E) DRINKING FOUNTAIN TO BE REMOVED.
D28	DEMO (E) FRP WAINSCOT.
D29	DEMO WING WALLS SURROUNDING WALL MECHANICAL UNITS BACK TO INTERIOR FACE OF EXTERIOR WALLS. TYP.
D31	EXISTING ELECTRICAL CONDUIT OR RACEWAY TO BE REMOVED- SEE ELECTRICAL DRAWINGS FOR ADDITIONAL CONDUIT OR RACEWAY TO BE REMOVED.
D38	DEMO (E) PLYWOOD WAINSCOT AND TRIM
D39	DEMO (E) FIRE EXTINGUISHER CABINET. PATCH WALL AND PREP FOR NEW WALL COVERING.
D54	REMOVE EXHAUST FAN.

LEGEND:

USED AT MULTIPLE SHEETS - NOT ALL FINISHES MAY APPLY.

- DEMO (E) WALL-APPLIED GLUE-ON ACOUSTICAL TILES
- (E) PAINTED GYP BOARD
- FRL
- WOOD PANEL
- STAINLESS STEEL PANELS

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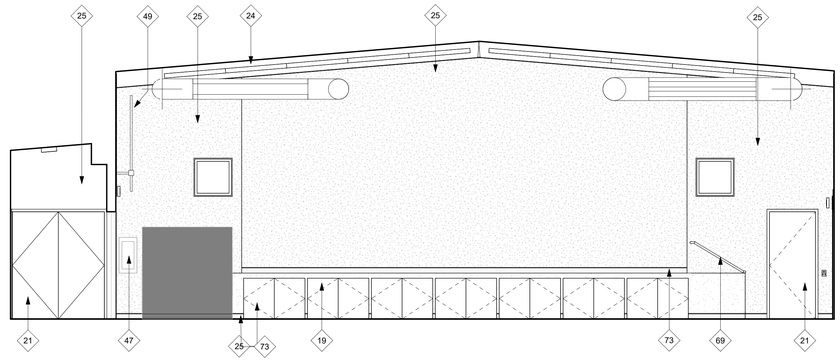
SHEET TITLE

DEMO INTERIOR ELEVATIONS

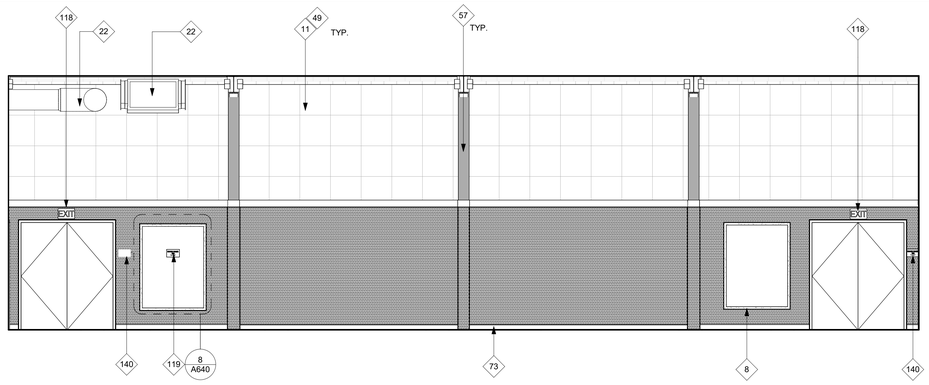
SHEET NO.

A550D



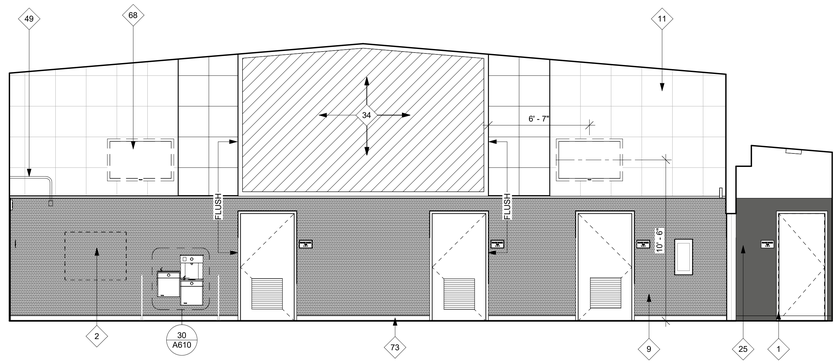
12 INT ELEVATION - MP ROOM - NORTH

1/4" = 1'-0"



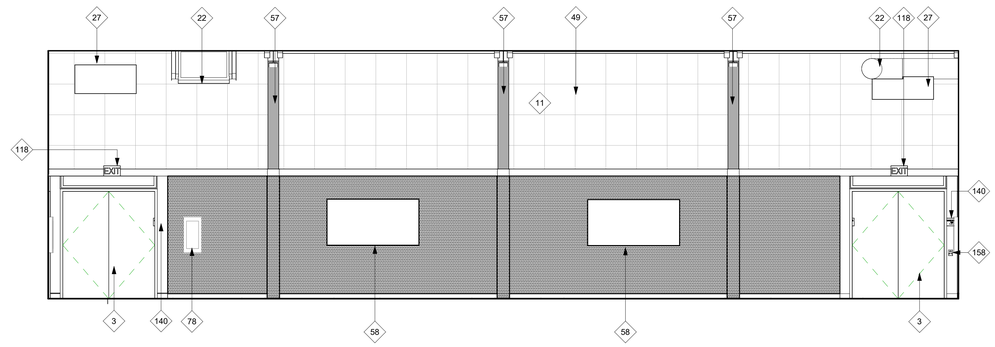
11 INT ELEVATION - MP ROOM - EAST

1/4" = 1'-0"



10 INT ELEVATION - MP ROOM - SOUTH

1/4" = 1'-0"



9 INT ELEVATION - MP ROOM - WEST

1/4" = 1'-0"

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1. COORDINATE THE REMOVAL AND REINSTALLATION OF ALL WALL-MOUNTED LIGHTS, VENTS, ELECTRICAL EQUIPMENT, FIRE ALARMS, AND ALL OTHER EQUIPMENT PRIOR TO PAINTING.
2. THOROUGHLY CLEAN, PREPARE AND PRIME ALL WALLS, DOORS, FRAMES, WOODS, METAL, ETC. PRIOR TO PAINTING.
3. CLEAN APPLIED ACOUSTIC WALL TILES AND REPLACE ALL WATER-STAINED AND DAMAGED TILES. PRIME AND PAINT.
4. PROTECT EXISTING STAGE CURTAINS IN PLACE.
5. SEE PAINT SPEC FOR PAINT SHEENS AT ALL LOCATIONS.

KEYNOTES:

◇ # THESE KEYNOTES APPLY TO THIS SHEET ONLY

1	INFILL DOOR OPENING WITH NEW FRAMING AND FINISHES PER DETAIL 4/A640 AND 2/A640 SIM.
2	INFILL PASS-THRU WINDOW OPENING WITH NEW FRAMING AND FINISHES PER DETAIL 2/A640.
3	NEW DOOR AND HARDWARE - SEE DOOR SCHEDULE.
8	PATCH WALL BEHIND DEMOLISHED UNIT VENTILATOR AND PREP FOR NEW FRL PER INTERIOR ELEVATIONS. INSTALL NEW MAGNETIC DRY ERASE BOARD PER INTERIOR ELEVATIONS.
9	FRL WALL PROTECTION.
11	NEW PAINT OVER (E) APPLIED ACOUSTIC WALL AND CEILING PANELS
19	THOROUGHLY CLEAN EXISTING WOOD DOORS. TAPE OFF ALL HARDWARE AND SAND ALL FLAKING EDGES AND PRIME AND PAINT. REPLACE ALL BROKEN AND DAMAGED HARDWARE WITH NEW.
21	EXISTING PAINTED DOOR TO REMAIN. CLEAN AND SCRAPE ANY EXISTING FLAKING PAINT. PRIME AND REPAINT.
22	PRIME AND PAINT NEW EXPOSED MECHANICAL DUCTS.
24	EXISTING METAL BEAM TO REMAIN. PROTECT IN PLACE. PRIME AND PAINT.
25	PAINT ALL EXISTING WALLS AND VERTICAL FACES OF SOFFITS. REMOVE ALL WALL-MOUNTED EQUIPMENT AND REINSTALL.
27	NEW MECHANICAL LOUVER SCREEN.
34	NEW CUSTOM GRAPHIC PRINT ACOUSTICAL BOARD - GRAPHIC TO BE SUPPLIED BY ARCHITECT.
47	NEW 2A10BC FIRE EXTINGUISHER CABINET. SEE 22/A640 FOR PROTRUSION DIMENSIONS.
49	PAINT METAL CONDUIT TO MATCH WALL OR SURFACE TO WHICH IT IS ATTACHED.
57	PAINT (E) COLUMN.
58	REINSTALL (E) TACK BOARD.
68	NEW WALL MOUNTED TELEVISION PER DETAIL10/A640. PROVIDE ELECTRICAL SERVICE TO LOCATION. SEE ELECTRICAL DRAWINGS.
69	CLEAN, PRIME AND PAINT (E) HAND RAILS.
73	INSTALL NEW 4" TOPSET RUBBER BASE. TYPICAL
78	NEW FIRE EXTINGUISHER CABINET PER DETAIL 22/A640 AND SPEC SECTION 10 44 16.
118	TYPE S-2 EXIT SIGN
119	MAXIMUM OCCUPANCY SIGN. TYPE S-7. SEE 14/A640
140	TACTILE EXIT SIGN PER CBC 1013.4. SEE 15/A640
158	EXISTING FIRE ALARM PULL STATION

LEGEND:

USED AT MULTIPLE SHEETS - NOT ALL FINISHES MAY APPLY.

- CHAIN LINK FENCING
- (E) WALL-APPLIED GLUE-ON ACOUSTICAL TILES
- PAINTED GYP BOARD
- FRL
- (E) WOOD PANEL
- NEW ACOUSTIC ADHERED PANEL WITH GRAPHIC.

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ARCHITECT

DSA SUBMITTAL

REVISIONS

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SHEET TITLE

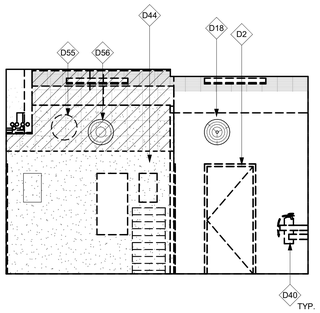
INTERIOR ELEVATIONS

SHEET NO.

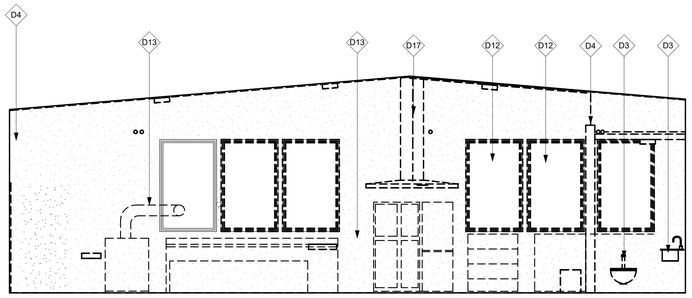
A550

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET

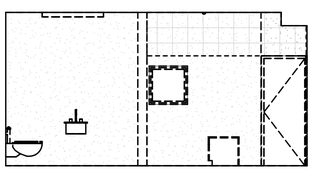
ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET



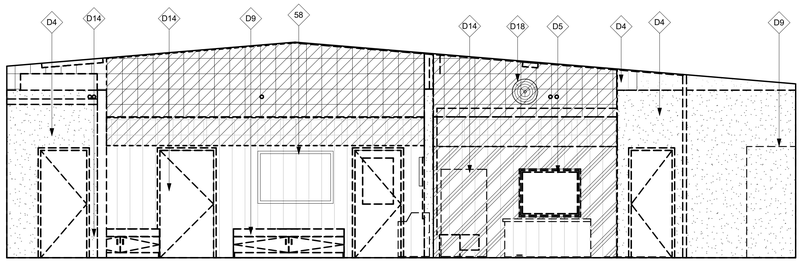
2 DEMO. INT. ELEV - KITCHEN - EAST
1/4" = 1'-0"



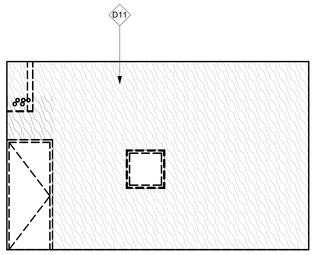
1 DEMO. INT. ELEV - KITCHEN - SOUTH
1/4" = 1'-0"



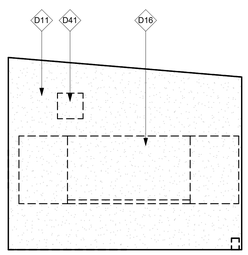
3 DEMO. INT. ELEV - KITCHEN - WEST
1/4" = 1'-0"



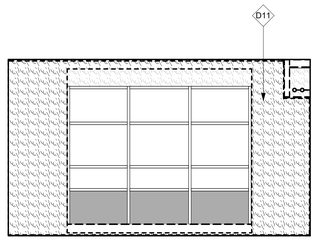
4 DEMO. INT. ELEV - KITCHEN - NORTH
1/4" = 1'-0"



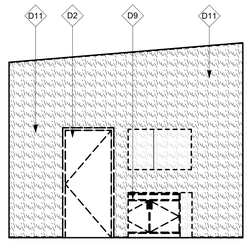
5 DEMO - BREAK ROOM - EAST
1/4" = 1'-0"



6 DEMO - BREAK ROOM - SOUTH
1/4" = 1'-0"



7 DEMO - BREAK ROOM - WEST
1/4" = 1'-0"



8 DEMO - BREAK ROOM - NORTH
1/4" = 1'-0"

SHEET NOTES:

THESE SHEET NOTES APPLY TO THIS SHEET ONLY

1. COORDINATE THE REMOVAL AND REINSTALLATION OF ALL WALL-MOUNTED LIGHTS, VENTS, ELECTRICAL EQUIPMENT, FIRE ALARMS, AND ALL OTHER EQUIPMENT PRIOR TO PAINTING.
2. THOROUGHLY CLEAN, PREPARE AND PRIME ALL WALLS, DOORS, FRAMES, WOODS, METAL, ETC. PRIOR TO PAINTING.
3. CLEAN APPLIED ACOUSTIC WALL TILES AND REPLACE ALL WATER-STAINED AND DAMAGED TILES. PRIME AND PAINT.
4. PROTECT EXISTING STAGE CURTAINS IN PLACE.
5. SEE PAINT SPEC FOR PAINT SHEENS AT ALL LOCATIONS.

KEYNOTES:

◇ # THESE KEYNOTES APPLY TO THIS SHEET ONLY

58	REINSTALL (E) TACK BOARD.
D2	DEMOLISH (E) DOOR, FRAME AND ALL ASSOCIATED HARDWARE.
D3	DEMOLISH ALL RESTROOM FIXTURES AND ACCESSORIES.
D4	DEMOLISH ENTIRE (E) WALL AND ALL ASSOCIATED ATTACHMENTS. PATCH ADJACENT WALL AND CEILING AND FLOOR TO RECEIVE NEW FINISHES. SEE ELECTRICAL AND LOW VOLTAGE SHEETS FOR ANY WALL-MOUNTED CONDUIT OR EQUIPMENT THAT NEEDS TO BE RELOCATED.
D5	DEMO (E) ROLLING PASS-THRU WINDOW, SILL, TRIM, AND ALL ASSOCIATED CONTROLS.
D9	DEMOLISH (E) CASEWORK.
D11	(E) WOOD PANEL WALL COVERING TO BE REMOVED AND REPLACED WITH NEW GYPSUM BOARD
D12	DEMOLISH (E) WINDOW, WINDOW FRAMING, PORTION OF EXTERIOR LOUVER AND ALL ASSOCIATED HARDWARE AND SILLS.
D13	DEMOLISH (E) METAL FOOD SERVICE CASEWORK - SEE MECHANICAL AND PLUMBING DRAWINGS FOR ANY UTILITY SAFE-OFF INSTRUCTIONS.
D14	DEMOLISH (E) FOOD SERVICE EQUIPMENT. SEE MECHANICAL AND PLUMBING DRAWINGS FOR UTILITY SAFE-OFF INFORMATION.
D16	DEMO (E) CHALK BOARD.
D17	DEMO (E) RANGE HOOD.
D18	REMOVE (E) WALL-MOUNTED FAN. SALVAGE BACK TO DISTRICT.
D40	REMOVE (E) FIRE EXTINGUISHER.
D41	DEMO (E) WALL UNIT, PATCH HOLE IN WALL AND INFILL CAVITY WITH BATT INSULATION.
D44	RELOCATE ELECTRICAL PANEL AND FIRE PANEL TO REMAIN - SEE ELECTRICAL AND FIRE ALARM SHEETS.
D55	REMOVE (E) CLOCK
D56	REMOVE (E) SPEAKER

LEGEND:

USED AT MULTIPLE SHEETS - NOT ALL FINISHES MAY APPLY.

- DEMO (E) WALL-APPLIED GLUE-ON ACOUSTICAL TILES
- (E) PAINTED GYP BOARD
- FRL
- WOOD PANEL
- STAINLESS STEEL PANELS

IDENTIFICATION STAMP
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APP: 01-121540 INC:
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SS ☑ FLS ☑ ACS ☑
DATE: 3/28/2025

DSA # 01-121540

AGENCY APPROVAL

EL DORADO MIDDLE SCHOOL
MULTI-PURPOSE BUILDING UPGRADES
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CONSULTANT
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916.329.4000

LICENSED ARCHITECT
EVAN J. MAYTON
No. C-26867
RENEWAL DATE: 1/31/27
STATE OF CALIFORNIA

ARCHITECT

DSA SUBMITTAL

REVISIONS

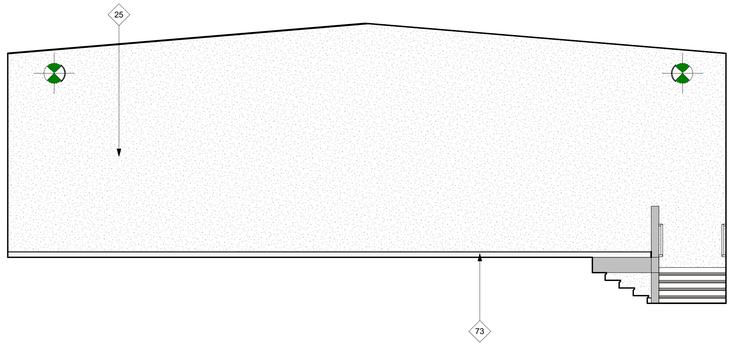
NO.	DESCRIPTION	DATE

DATE 03/08/2024
JOB NO. Y2119.00
SHEET TITLE

DEMOLITION INTERIOR ELEVATION

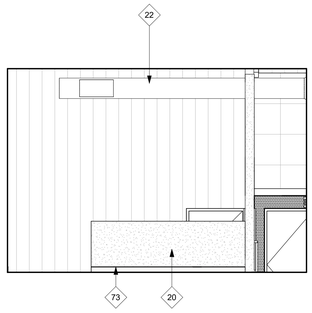
SHEET NO.

A551D



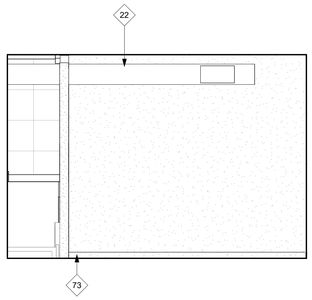
1 INT. ELEV - STAGE - NORTH

1/4" = 1'-0"



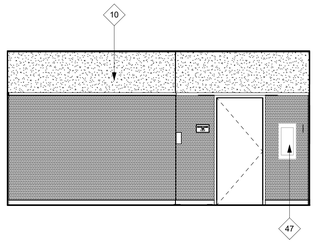
2 INT. ELEV - STAGE - EAST

1/4" = 1'-0"



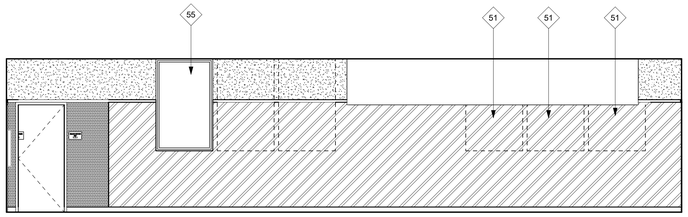
3 INT. ELEV - STAGE - WEST

1/4" = 1'-0"



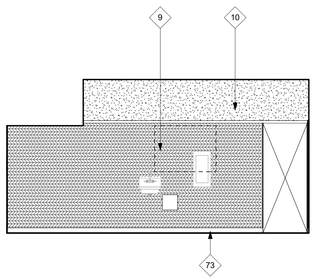
4 INT. ELEV - KITCHEN - EAST

1/4" = 1'-0"



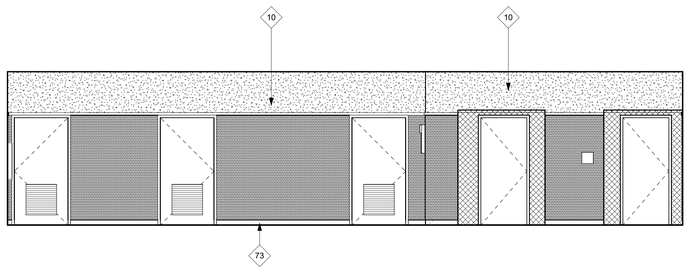
5 INT. ELEV - KITCHEN - SOUTH

1/4" = 1'-0"



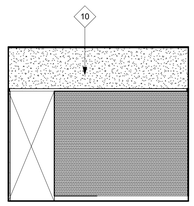
6 INT. ELEV - KITCHEN - WEST

1/4" = 1'-0"



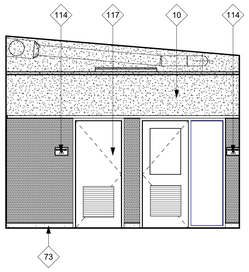
7 INT. ELEV - KITCHEN - NORTH

1/4" = 1'-0"



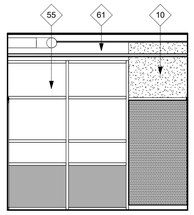
8 TEACHER WORKROOM - EAST

1/4" = 1'-0"



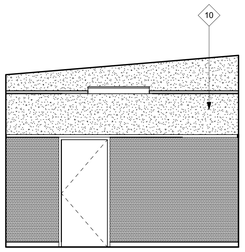
9 TEACHER WORKROOM- SOUTH

1/4" = 1'-0"



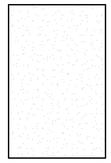
10 TEACHER WORKROOM - WEST

1/4" = 1'-0"



11 TEACHER WORKROOM - NORTH

1/4" = 1'-0"



12 CUSTODIAL - EAST

1/4" = 1'-0"

ONE AND ONE-HALF INCH = ONE FOOT

ONE INCH = ONE FOOT

THREE-QUARTERS INCH = ONE FOOT

ONE-HALF INCH = ONE FOOT

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4. PROTECT EXISTING STAGE CURTAINS IN PLACE.
5. SEE PAINT SPEC FOR PAINT SHEENS AT ALL LOCATIONS.

KEYNOTES:

(#) THESE KEYNOTES APPLY TO THIS SHEET ONLY

9	FRL WALL PROTECTION.
10	PAINT NEW GYPSUM WALL BOARD.
20	PAINT EXISTING WHEELCHAIR LIFT AND STAIR PONY WALLS.
22	PRIME AND PAINT NEW EXPOSED MECHANICAL DUCTS.
25	PAINT ALL EXISTING WALLS AND VERTICAL FACES OF SOFFITS. REMOVE ALL WALL-MOUNTED EQUIPMENT AND REINSTALL.
47	NEW 2A10BC FIRE EXTINGUISHER CABINET. SEE 22/A640 FOR PROTRUSION DIMENSIONS.
51	INFILL EXTERIOR WALL OPENING FROM REMOVED WINDOW WITH NEW FRAMING PER DETAIL 4/A610.
55	EXISTING WINDOWS TO RECEIVE NEW GLAZING - 1/4" GLAZING PER SPEC SECTION 08 80 00.
61	(E) WOOD PANEL WALL COVERING TO REMAIN. FILL NAIL AND SCREW HOLES AND SAND SMOOTH.
73	INSTALL NEW 4" TOPSET RUBBER BASE. TYPICAL
114	NEW ROOM SIGN. TYPE S-1. SEE 25/A540
117	NEW DOOR SIGN - UNISEX. TYPE S-3. SEE DETAIL 28/A640.

LEGEND:

USED AT MULTIPLE SHEETS - NOT ALL FINISHES MAY APPLY.

- CHAIN LINK FENCING
- (E) WALL-APPLIED GLUE-ON ACOUSTICAL TILES
- PAINTED GYP BOARD
- FRL
- (E) WOOD PANEL
- NEW ACOUSTIC ADHERED PANEL WITH GRAPHIC.

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CONSULTANT
nacht&lewis
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www.nachtlewis.com
916.329.4000

LICENSED ARCHITECT
BRIAN J. MAYNARD
No. C-26867
RENEWAL DATE: 1/31/27
STATE OF CALIFORNIA

ARCHITECT

DSA SUBMITTAL

REVISIONS

NO.	DESCRIPTION	DATE

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JOB NO. Y2119.00

SHEET TITLE

INTERIOR ELEVATIONS

SHEET NO.

A551

ONE AND ONE-HALF INCH = ONE FOOT

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ONE-HALF INCH = ONE FOOT

ONE-QUARTER INCH = ONE FOOT

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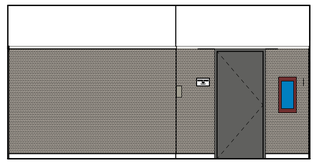
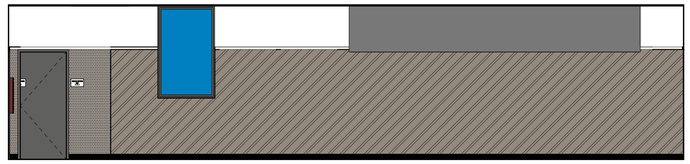
ONE INCH = TWENTY FEET



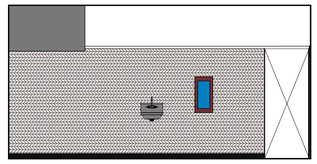
6 COLOR INT. ELEV - KITCHEN - EAST

1/4" = 1'-0"



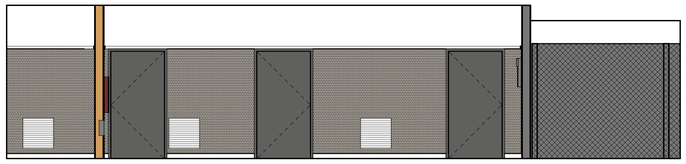
4 COLOR INT. ELEV - KITCHEN - SOUTH

1/4" = 1'-0"



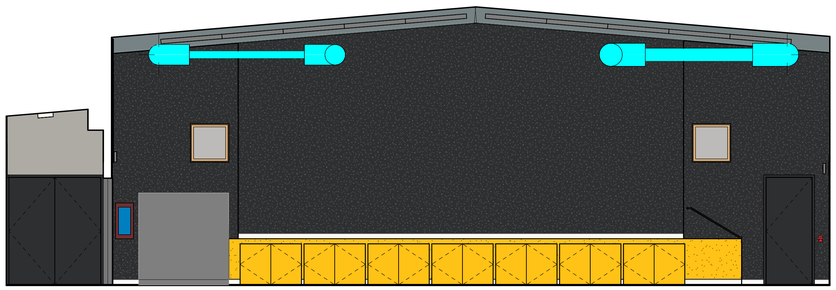
7 COLOR INT. ELEV - KITCHEN - WEST

1/4" = 1'-0"



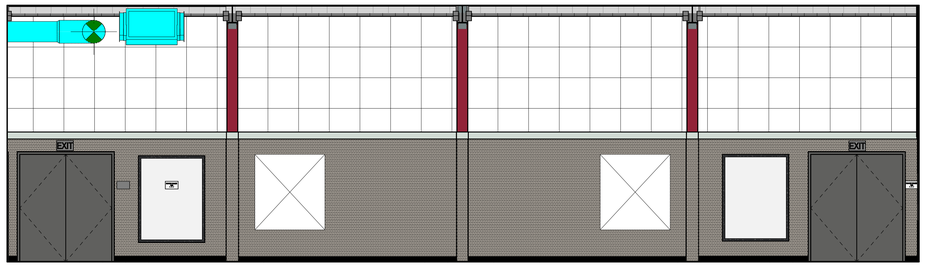
8 COLOR INT. ELEV - KITCHEN - NORTH

1/4" = 1'-0"



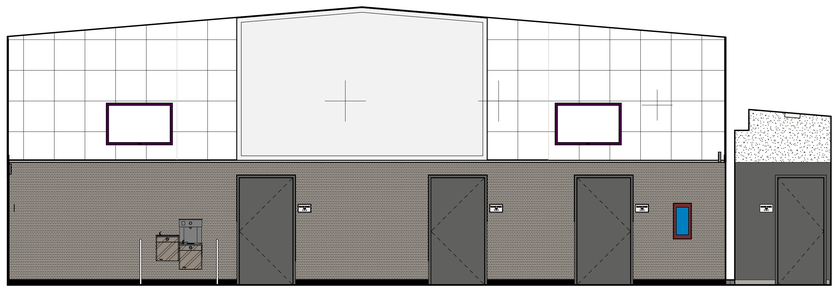
3 COLOR INTERIOR ELEVATION - MP ROOM - NORTH

1/4" = 1'-0"



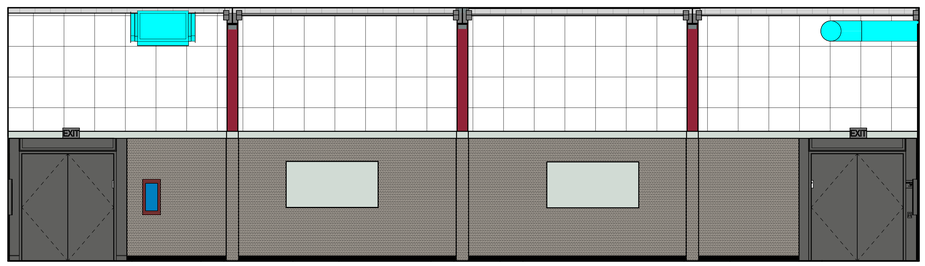
5 COLOR INTERIOR ELEVATION - MP ROOM - EAST

1/4" = 1'-0"



1 INTERIOR ELEVATION - MP ROOM - SOUTH

1/4" = 1'-0"



2 COLOR INTERIOR ELEVATION - MP ROOM - WEST

1/4" = 1'-0"

SHEET NOTES:

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4. PROTECT EXISTING STAGE CURTAINS IN PLACE.
5. SEE PAINT SPEC FOR PAINT SHEENS AT ALL LOCATIONS.

LEGEND:

PT1 -

PT2 -

PT3 -

FRL1

PT4 -

PT1 OVER APPLIED ACOUSTIC TILE

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JOAN J. MAYTAN
No. C-26867
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ARCHITECT

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REVISIONS

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JOB NO. Y2119.00

SHEET TITLE

COLOR INTERIOR ELEVATIONS

SHEET NO.

A552

ONE AND ONE-HALF INCH = ONE FOOT
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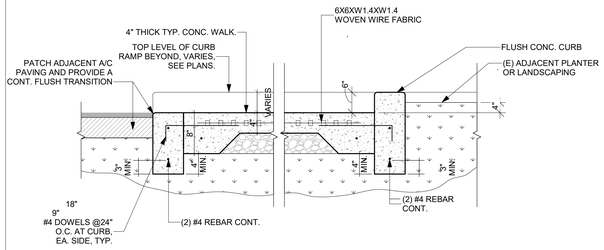
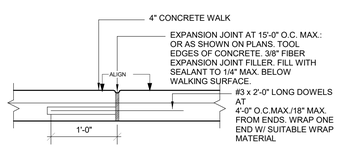
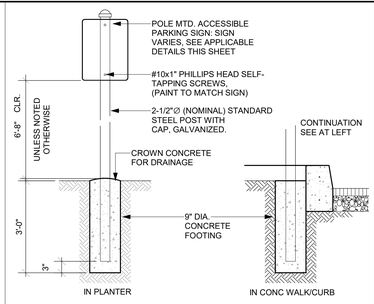


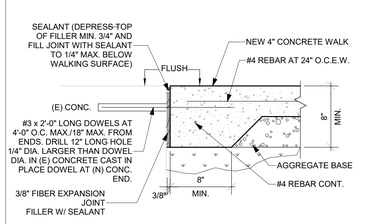
25 NEW CONCRETE WALK W/ CURB
1" = 1'-0"



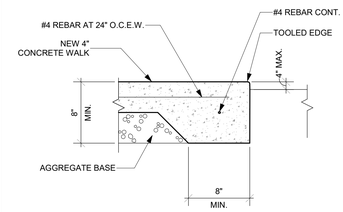
15 EXPANSION JOINT AT CONC. WALK
1 1/2" = 1'-0"



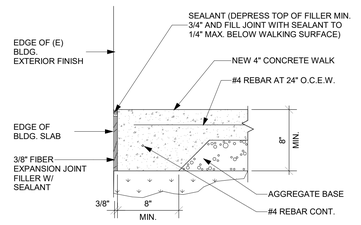
10 SIGN POST
3/4" = 1'-0"



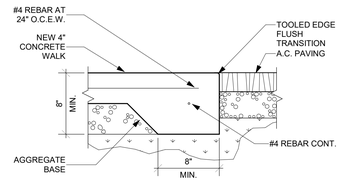
5 NEW TO EXISTING CONC. SLAB
1 1/2" = 1'-0"



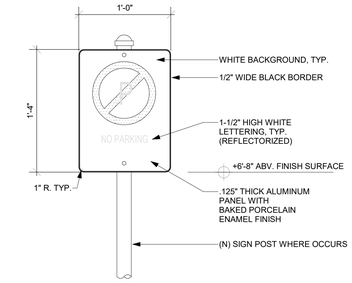
19 CONC. WALK AT PLANTER/TURF
1 1/2" = 1'-0"



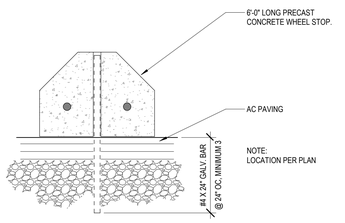
14 NEW CONCRETE TO EXISTING BLDG.
1 1/2" = 1'-0"



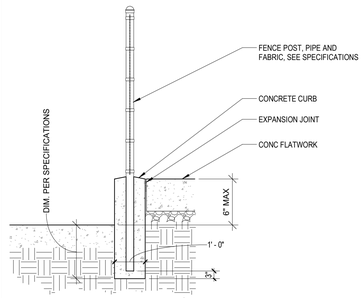
9 CONCRETE TO AC PAVING TRANSITION
1 1/2" = 1'-0"



4 NO PARKING SIGN
3/4" = 1'-0"



23 WHEEL STOP
3" = 1'-0"

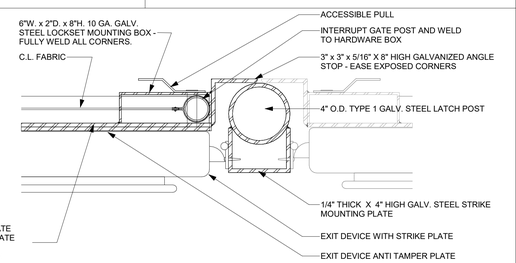


18 FENCE POST TO NEW CONCRETE
1/2" = 1'-0"

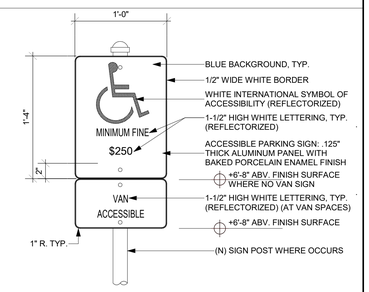
NOTES:
1. SEE SPEC. SECTION 32 31 13 FOR CHAIN LINK FENCE COMPONENTS NOT INDICATED HERE.
2. SEE SPEC. SECTION 05 50 00 FOR METAL FABRICATION REQUIREMENTS.
3. SEE SPEC. SECTION 08 71 00 FOR HARDWARE COMPONENTS NOT INDICATED HERE.
4. ALL PLATE STEEL SHALL BE HOT DIPPED GALVANIZED.
5. ALL WELDS TO BE

NOTE: GATE G01 IS A PAIR, GATE G02 IS A SINGLE GATE.

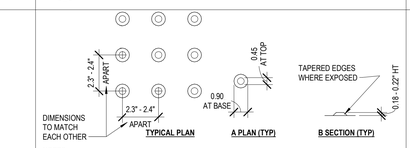
GALV. STEEL BACKER PLATE 1/4"x8"HIGH x WIDTH OF GATE AT EXIT DEVICE - TO BE WELDED TO GATE FRAME



13 ACCESSIBLE GATE LATCH W/ PANIC HARDWARE
3" = 1'-0"

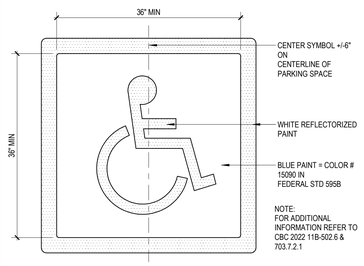


3 NEW ACCESSIBLE PARKING SIGN
3/4" = 1'-0"

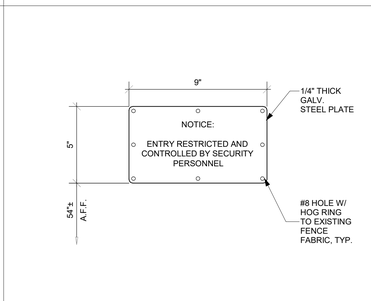


NOTES:
1. USE ONLY APPROVED DSA/AC DETECTABLE WARNING PRODUCTS THAT COMPLY WITH CBC 11B-705
2. IF A WALK CROSSES OR ADJOINS A VEHICULAR WAY, AND THE WALKING SURFACES ARE NOT SEPARATED BY CURBS, RAILINGS, OR OTHER ELEMENTS BETWEEN THE PEDESTRIAN AREAS AND THE VEHICULAR AREAS, THE BOUNDARY BETWEEN THE AREAS SHALL BE DEFINED BY A CONTINUOUS DETECTABLE WARNING WHICH IS A MINIMUM OF 3'-0" WIDE.
3. DSA WILL PROVISIONALLY ACCEPT A WRITTEN FIVE (5) YEAR PRODUCT WARRANTY PROVIDED THE MANUFACTURER OF THE DETECTABLE WARNINGS AND DIRECTION SURFACE PRODUCT APPROVAL PROGRAM. SUCH WARRANTY SHALL INDICATE THE COMPLIANCE WITH ARCHTECTUAL STANDARDS AS PUBLISHED IN THE CURRENT EDITION OF THE CALIFORNIA BUILDING STANDARDS CODE, AND ALSO INCLUDE DURABILITY CRITERIA WHICH INDICATES THAT THE SHAPE, COLOR FASTNESS, CONFIRMATION, SOUND-ON-CANE ACOUSTIC QUALITY, RESILIENCE AND ATTACHEMENT WILL NOT DEGRADE SIGNIFICANTLY FOR AT LEAST FIVE (5) YEARS AFTER INITAL INSTALLATION.
4. DETECTABLE WARNING SURFACE TO BE YELLOW AND APPROXIMATE OF 33538 SAE AMS-STD-595A

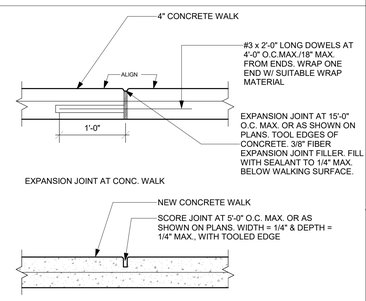
22 DETECTABLE WARNING SURFACE
3" = 1'-0"



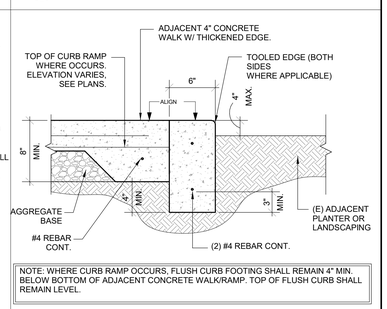
17 SYMBOL OF ACCESSIBILITY
1" = 1'-0"



12 NEW SERVICE GATE SIGN
3" = 1'-0"



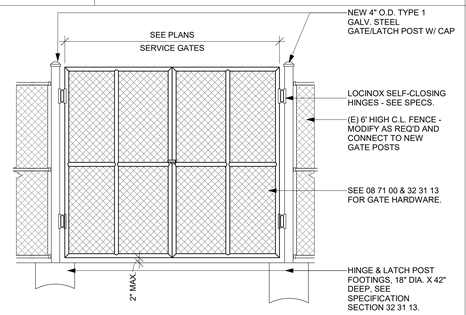
7 CONTROL JOINT AT CONC. WALK
1 1/2" = 1'-0"



NOTE: WHERE CURB RAMP OCCURS, FLUSH CURB FOOTING SHALL REMAIN 4" MIN. BELOW BOTTOM OF ADJACENT CONCRETE WALK/RAMP. TOP OF FLUSH CURB SHALL REMAIN LEVEL.

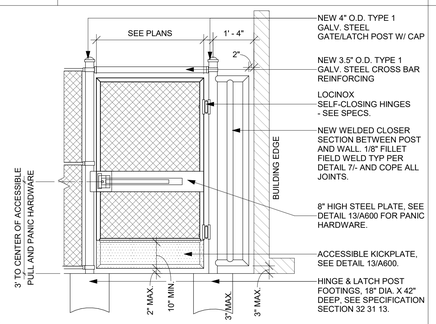
2 FLUSH CONC. CURB
1 1/2" = 1'-0"

NOTES:
1. SEE SPECIFICATION SECTION 32 31 13 FOR FENCING COMPONENTS, FOOTINGS, HINGES AND GATE FRAME REQUIREMENTS.
2. GATE FRAMES SHALL BE MITERED AND FULLY WELDED ALL AROUND, GROUND SMOOTH WITH NO SHARP EDGES.



26 SERVICE GATE
1/2" = 1'-0"

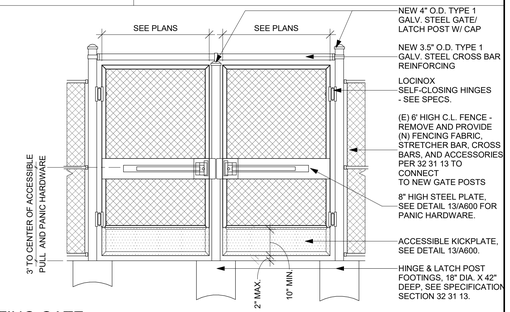
NOTES:
1. SEE SPECIFICATION SECTION 32 31 13 FOR FENCING COMPONENTS, FOOTINGS, HINGES AND GATE FRAME REQUIREMENTS.
2. GATE FRAMES SHALL BE MITERED AND FULLY WELDED ALL AROUND, GROUND SMOOTH WITH NO SHARP EDGES.
3. 5 LB. MAXIMUM PUSH/ PULL FORCE.



16 ACCESSIBLE SITE ENTRY GATE
1/2" = 1'-0"

NOTES:
1. SEE SPECIFICATION SECTION 32 31 13 FOR FENCING COMPONENTS, FOOTINGS, HINGES AND GATE FRAME REQUIREMENTS.
2. GATE FRAMES SHALL BE MITERED AND FULLY WELDED ALL AROUND, GROUND SMOOTH WITH NO SHARP EDGES.
3. 5 LB. MAXIMUM PUSH/ PULL FORCE.

NOTE: GATE G02 SIMILAR BUT SINGLE LEAF GATE.



6 ACCESSIBLE SITE EXITING GATE
1/2" = 1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121540 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 3/28/2025

DSA # 01-121540

AGENCY APPROVAL

EL DORADO MIDDLE SCHOOL
MULTI-PURPOSE BUILDING UPGRADES

1750 WEST ST. CONCORD, CA 94521

MT. DIABLO UNIFIED SCHOOL DISTRICT

CONSULTANT
nacht&lewis
600 Q Street, Suite 100
Sacramento, CA 95811
www.nachtlewis.com
916.329.4000

REGISTERED ARCHITECT
BRIAN J. MAYNARD
No. C-26867
RENEWAL DATE: 1/31/27
STATE OF CALIFORNIA

ARCHITECT

DSA SUBMITTAL

REVISIONS

NO.	DESCRIPTION	DATE

DATE 03/08/2024

JOB NO. Y2326.00

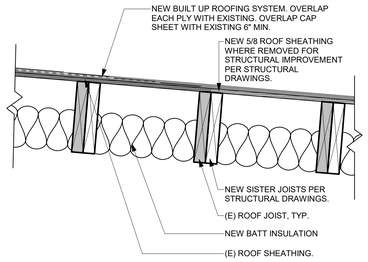
SHEET TITLE

SITE DETAILS

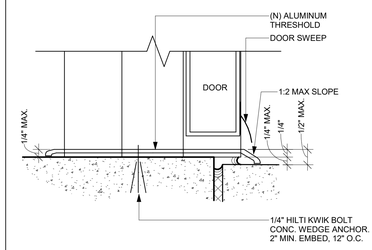
SHEET NO.

A600

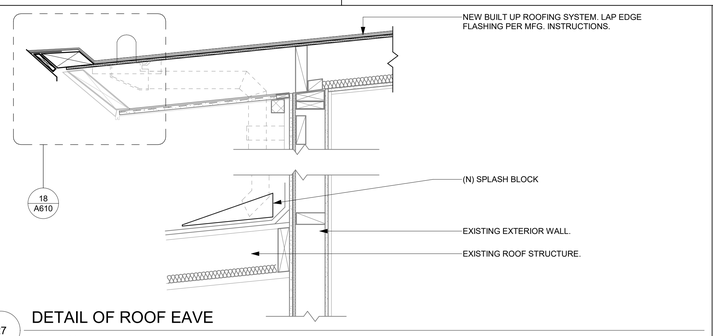
ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET



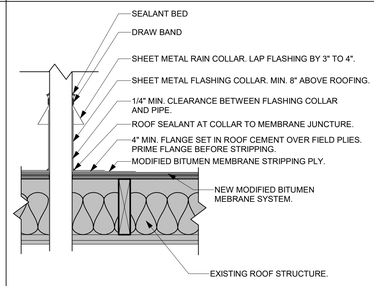
21 ROOF DETAIL
1 1/2" = 1'-0"



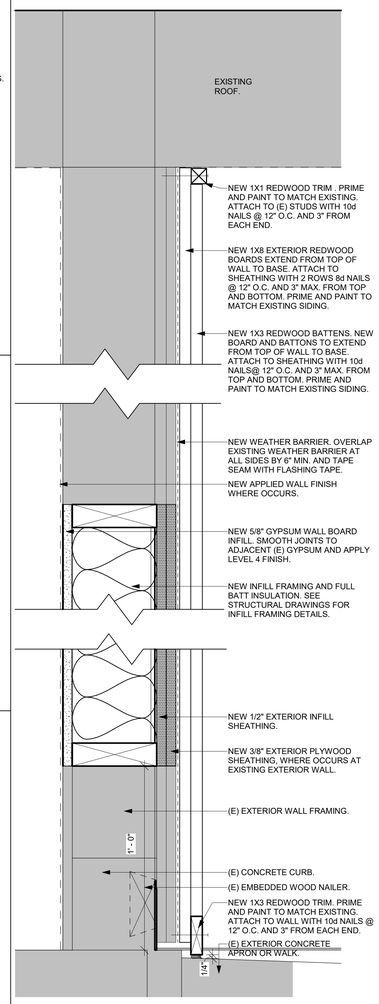
1 EXT. DOOR NEW THRESHOLD
6" = 1'-0"



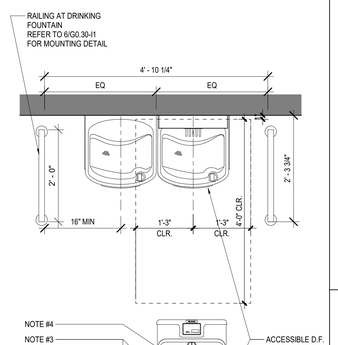
27 DETAIL OF ROOF EAVE
1" = 1'-0"



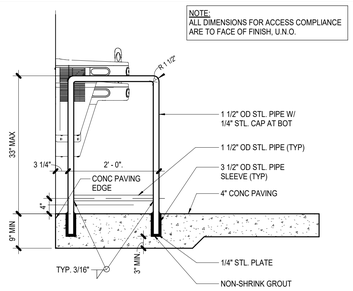
7 ROOF PIPE PENETRATION DETAIL
1 1/2" = 1'-0"



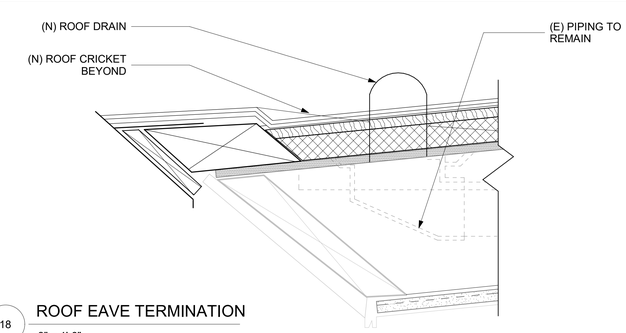
4 EXTERIOR OPENING INFILL DETAIL
3" = 1'-0"



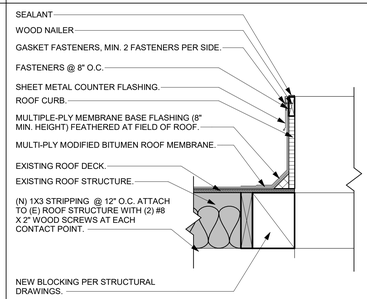
30 ACCESSIBLE DRINKING FOUNTAIN
3/4" = 1'-0"



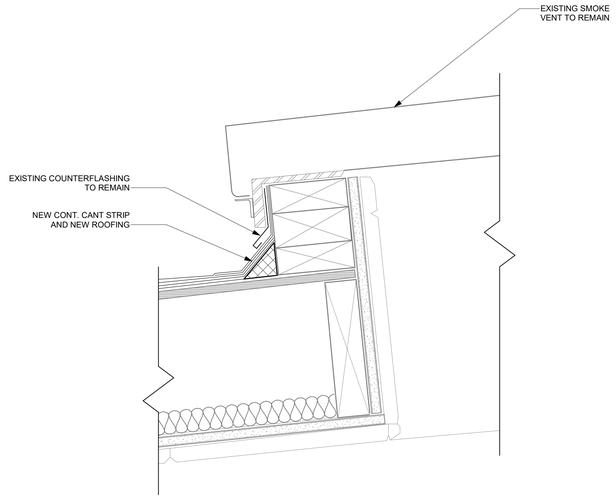
23 FOUNTAIN CANE RAIL MOUNTING
3/4" = 1'-0"



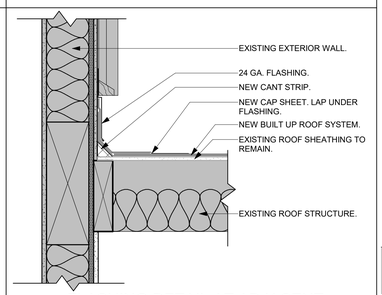
18 ROOF EAVE TERMINATION
3" = 1'-0"



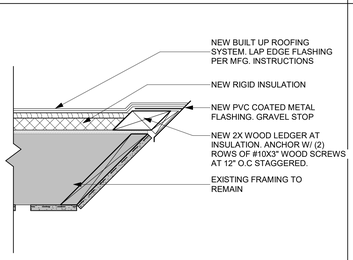
8 ROOF CURB DETAIL @ HVAC UNIT
1 1/2" = 1'-0"



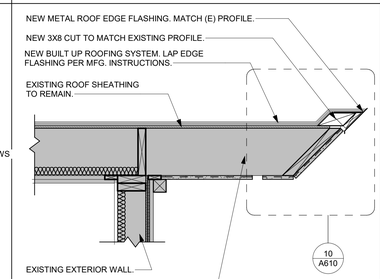
20 SMOKE VENT DETAIL
3" = 1'-0"



9 FLASHING DETAIL AT ADJACENT WALL
1 1/2" = 1'-0"



10 ROOF FASCIA DETAIL
1 1/2" = 1'-0"



5 DETAIL OF RAKE
1" = 1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
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DSA # 01-121540

AGENCY APPROVAL

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MT. DIABLO UNIFIED SCHOOL DISTRICT

CONSULTANT
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600 Q Street, Suite 100
Sacramento, CA 95811
www.nachtlewis.com
916.329.4000

LICENSED ARCHITECT
BRIAN J. MAYNOR
No. C26867
RENEWAL DATE: 1/31/27
STATE OF CALIFORNIA

ARCHITECT

DSA SUBMITTAL

REVISIONS

NO.	DESCRIPTION	DATE

DATE 03/08/2024

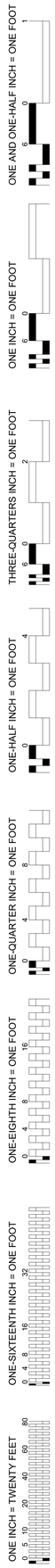
JOB NO. Y2119.00

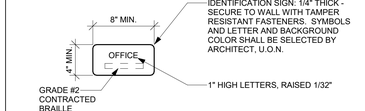
SHEET TITLE

EXTERIOR DETAILS

SHEET NO.

A610

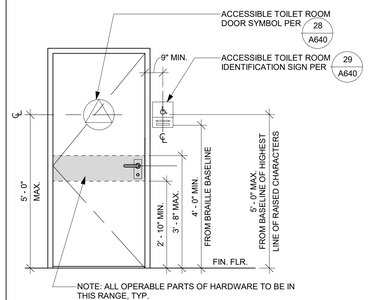


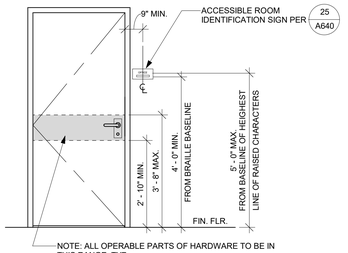


NOTE:
1. ALL SIGNAGE TO HAVE NON-GLARE FINISH, SANS SERIF UPPERCASE LETTERS.
2. BRAILLE PLACEMENT TO BE 3/8" TO 1/2" DIRECTLY BELOW TACTILE CHARACTERS AND FLUSH LEFT OR CENTERED.
3. REFER TO SPECIFICATIONS AND CBC 11B-703. WHERE SIGNAGE IS TO BE MOUNTED TO GLASS, PROVIDE COLORED VINYL BACKER. COLOR TO BE SELECTED BY ARCHITECT, SEE DETAIL
4. REFER TO DETAIL 19/A640 FOR MOUNTING HEIGHTS AT DOORS.

SIGN TYPE: S-1
PER SPECIFICATION SECTION 10 14 00

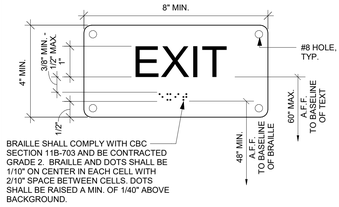
25 ROOM IDENTIFICATION SIGNAGE
1 1/2" = 1'-0"





NOTE: AT ALL EXTERIOR LOCATIONS AND AT LOCATIONS WHERE NO SPACE IS PERMITTED ADJACENT TO LATCH SIDE OF DOOR, PROVIDE SIGNAGE LOCATION PER PLAN.

19 DOOR SIGN MOUNTING HEIGHTS
1/2" = 1'-0"



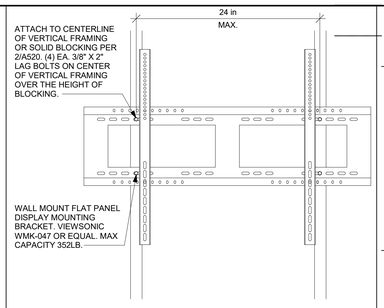
BRAILLE SHALL COMPLY WITH CBC SECTION 11B-703 AND BE CONTRACTED GRADE 2. BRAILLE AND DOTS SHALL BE 1/10" ON CENTER IN EACH CELL WITH 2/10" SPACE BETWEEN CELLS. DOTS SHALL BE RAISED A MIN. OF 1/40" ABOVE BACKGROUND.

NOTE:
1/4" THICK ACRYLIC PLASTIC PLAQUE. SECURE TO SURFACE WITH TAMPER RESISTANT FASTENERS. BACKGROUND COLOR SHALL CONTRAST WITH DOOR COLOR.

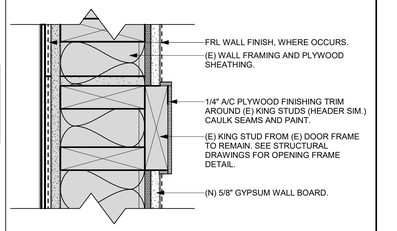
MOUNT SIGN ADJACENT TO EXIT DOOR SIMILAR TO DETAIL 19 A640

SIGN TYPE: S-2
SIGN TYPE: S-2A = "EXIT ROUTE"
PER SPECIFICATION SECTION 10 14 00

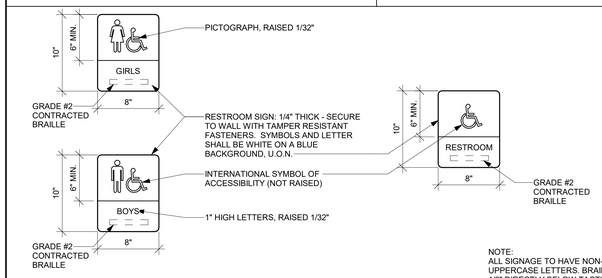
15 EXIT SIGN
6" = 1'-0"



10 TV WALL MOUNT BRACKET DETAIL
1 1/2" = 1'-0"



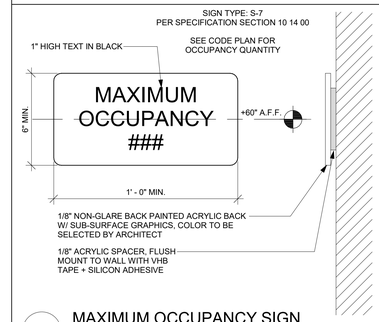
5 OPENING FRAME DETAIL @ DRY GOODS STORAGE
3" = 1'-0"



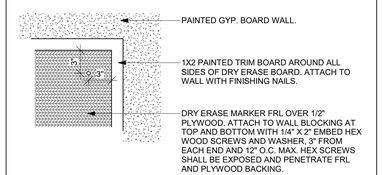
SIGN TYPE: S-3
PER SPECIFICATION SECTION 10 14 00

NOTE:
ALL SIGNAGE TO HAVE NON-GLARE FINISH, SANS SERIF UPPERCASE LETTERS. BRAILLE PLACEMENT TO BE 3/8" TO 1/2" DIRECTLY BELOW TACTILE CHARACTERS AND FLUSH LEFT OR CENTERED. REFER TO SPECIFICATIONS.

29 TOILET ROOM WALL MOUNTED IDENTIFICATION SIGNS
1 1/2" = 1'-0"



14 MAXIMUM OCCUPANCY SIGN
3" = 1'-0"



9 FRL DRY ERASE BOARD DETAIL
1 1/2" = 1'-0"

4 NOT USED
NOT TO SCALE

SIGN TYPE: S-3
PER SPECIFICATION SECTION 10 14 00

NOTE:
ALL SIGNAGE TO HAVE NON-GLARE FINISH, SANS SERIF UPPERCASE LETTERS. BRAILLE PLACEMENT TO BE 3/8" TO 1/2" DIRECTLY BELOW TACTILE CHARACTERS AND FLUSH LEFT OR CENTERED. REFER TO SPECIFICATIONS.

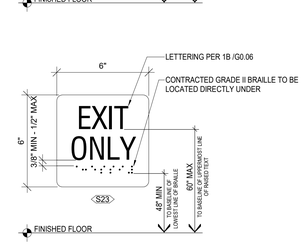
28 TOILET ROOM DOOR MOUNTED SIGNS
1 1/2" = 1'-0"

SIGN TYPE: S-6
PER SPECIFICATION SECTION 10 14 00

13 ASSISTIVE LISTENING DEVICE SIGN
1 1/2" = 1'-0"

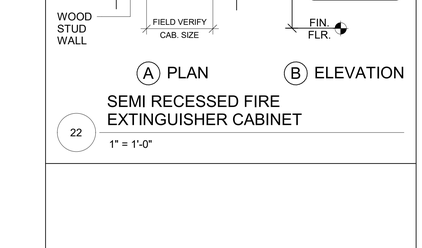
SEE DETAIL 9- FOR TRIM DETAIL.

8 FRL DRY ERASE BOARD SECTION
6" = 1'-0"

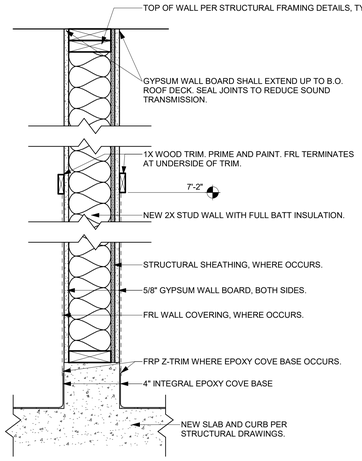


NOTES:
1. SIGN MATERIAL SHALL BE 1/4" THICK ACRYLIC PLASTIC WITH EASED EDGES AND 1/32" RAISED BORDER, GRAPHIC AND LETTERS. PROVIDE MECHANICAL MOUNTING WITH VANDAL RESISTANT FASTENERS.
2. SEE FLOOR PLANS FOR LOCATION.
3. LOCATE SIGN PER DETAIL
4. COLOR OF LETTERS TO CONTRAST w/ BACKGROUND
5. SIGN COLOR TO CONTRAST w/ BACKGROUND COLOR OF WALL SURFACE
6. VERIFY ROOM NAME BEFORE FABRICATION
7. FASTENERS TO BE RECESSED FLUSH HEAD TAMPER-PROOF SCREWS (MIN 4)
8. EACH GRADE - LEVEL EXTERIOR EXIT DOOR SHALL BE IDENTIFIED BY "EXIT"
9. EACH DOOR AT STAIRWAYS LEADING TO GRADE- LEVEL EXTERIOR EXIT SHALL BE IDENTIFIED BY "EXIT STAIR DOWN"
10. EXIT DOORS LEADING TO EXIT BY MEANS OF AN EXIT ENCLOSURE, EXIT PASSAGEWAY, OR EXTERIOR BALCONY SHALL BE LABELED BY "EXIT ROUTE"
11. EACH EXIT DOOR THROUGH A HORIZONTAL EXIT SHALL BE IDENTIFIED BY "TO EXIT"
12. INCREASE SIZE OF SIGN TO ACCOMMODATE ADDITIONAL TEXT AS NEEDED.

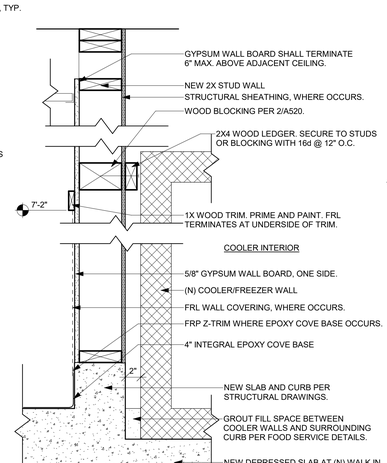
30 EXIT TACTILE SIGN
3" = 1'-0"



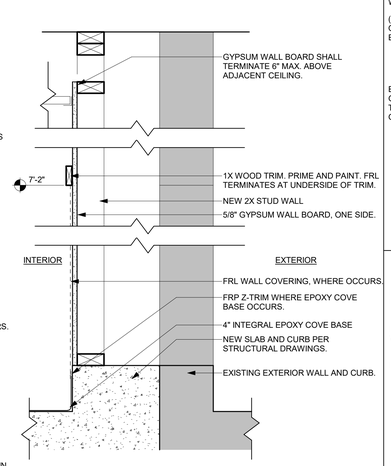
22 SEMI RECESSED FIRE EXTINGUISHER CABINET
1" = 1'-0"



1 2X INTERIOR STUD WALL
2X4 TYP. U.O.N.

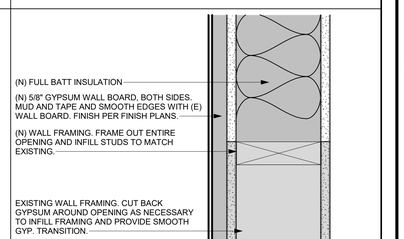


2 2X INTERIOR CHASE WALL AT NEW FREEZER
2X6 TYP. U.O.N

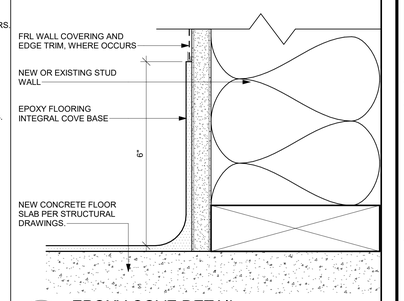


3 2X INTERIOR PLUMBING CHASE WALL
2X4 TYP.

16 NEW WALL TYPES
1 1/2" = 1'-0"



2 INTERIOR OPENING INFILL DETAIL
3" = 1'-0"



1 EPOXY COVE DETAIL
6" = 1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121540 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 3/28/2025

DSA # 01-121540

AGENCY APPROVAL

EL DORADO MIDDLE SCHOOL
MULTI-PURPOSE BUILDING UPGRADES
1750 WEST ST., CONCORD, CA 94521
MT. DIABLO UNIFIED SCHOOL DISTRICT

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www.nachtlewis.com
916.329.4000

LICENSED ARCHITECT
RYAN J. MAYTUM
No. C-26867
RENEWAL DATE: 1/31/27
STATE OF CALIFORNIA

ARCHITECT

DSA SUBMITTAL

REVISIONS

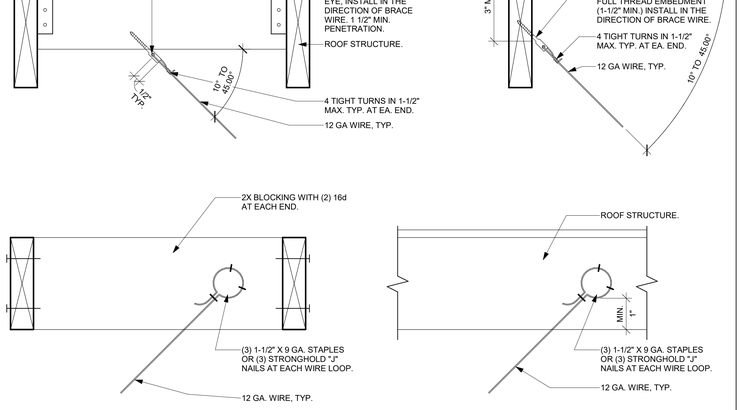
NO.	DESCRIPTION	DATE

DATE 03/08/2024
JOB NO. Y2119.00
SHEET TITLE

INTERIOR DETAILS

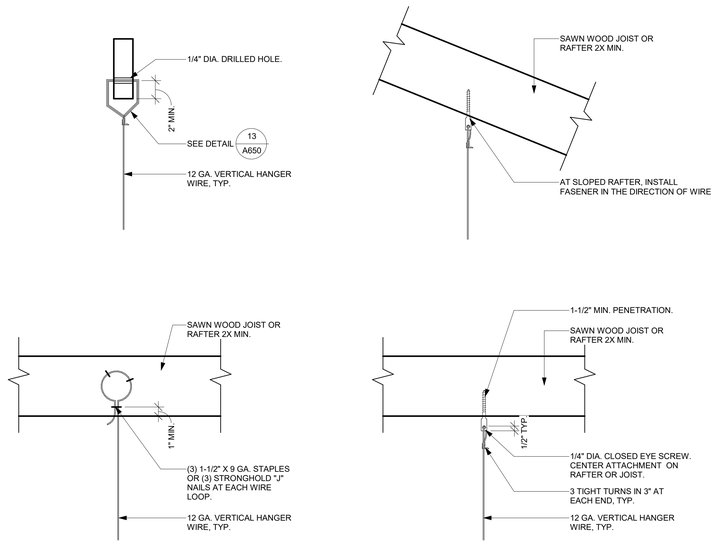
SHEET NO.
A640

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET



29 BRACING WIRE ATTACHMENT AT WOOD FRAMING

3" = 1'-0"



14 VERTICAL HANGING WIRE ATTACHMENT AT WOOD FRAMING

3" = 1'-0"

CHANNEL COMPRESSION	MAXIMUM LENGTH
250S125-33	5'-0"
250S137-33	6'-10"
362S137-33	8'-0"
250S137-43	8'-10"
400S137-43	10'-10"

NOTE: INSTALLATION SHALL BE IN ACCORDANCE WITH C.B.C.

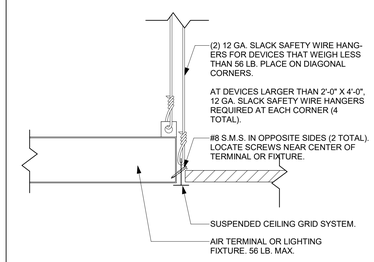
PROVIDE TRAPEZE OR EQUIVALENT SUPPORT AT OBSTRUCTIONS TO MAIN RUNNER VERTICAL HANGERS. PROVIDE ADDITIONAL HANGERS, STRUTS, OR BRACES AS REQUIRED AT ALL CEILING BREAKS, SOFFITS OR DISCONTINUOUS AREAS.

SEPARATE ALL CEILING HANGING AND BRACING WIRES AT LEAST 6" FROM ALL PIPES, DUCTS, CONDUITS ETC.

INSTALL COMPRESSION STRUT PER MANUFACTURER'S RECOMMENDATIONS. STEEL SECTION WITH L/R RATIO OF 200 MAX.

5 COMPRESSION STRUT TABLES

N.T.S.



4 AIR TERMINAL/LIGHT FIXTURE SUPPORT

3" = 1'-0"

GENERAL CEILING NOTES:

1. CEILING SYSTEM GENERAL NOTES

1.01 Ceiling system components shall comply with ASTM C635 and Section 5.1 of ASTM E580.
1.02 The ceiling grid system must be rated heavy duty as defined by ASTM C635.
1.03 Ceiling systems shall be per spec section 09 53 00.
1.04 Ceiling panels shall not support any luminaires, air terminals ordevices..
1.05 For ceiling installations utilizing acoustical tile panels of mineral or glass fiber, it is not mandatory to provide ¾" clearance between the acoustical tile panels and the wall on the sides of the ceiling which are free to slip. For all other ceiling panel types, provide ¾" clearance between the ceiling panel and the wall on the sides of the ceiling free to slip. Clearance between ceiling grid runners/members and walls shall comply with the details on these drawings regardless of ceiling tile material.

2. MATERIALS

2.01 Ceiling wire shall be Class 1 zinc coated (galvanized) carbon steel conforming toASTM A641. Wire shall be #12 gauge (0.106" diameter) with soft temper and minimum ultimate tensile strength = 70 ksi.
2.02 Galvanized sheet steel (including that used for metal stud and track compression struts/post) shall conform to ASTM A653, or other equivalent sheet steel listed in Section A3.1 of the North American Specification for the Design of Cold-Formed Steel Structural Members, (AISI S100). Material 43 mil (18 gauge) and lighter shall have minimum yield strength of 33 ksi. Material 54 mil (16 gauge) and heavier shall have a minimum yield strength of 50ksi.
2.03 Electrical metallic tube (EMT) shall be ANSI C80.3/UL 797 carbon steel with G90 galvanizing. EMT shall have minimum yield strength (FY) of 30 ksi and minimum ultimate strength (FU) of 48 ksi.

3. ATTACHMENT OF HANGER AND BRACING WIRES

3.01 Separate all ceiling hanger and bracing wires at least 6 inches from all unbraced ducts, pipes, conduit, etc.
3.02 Hanger and bracing wires shall not attach to or bend around obstructions including but not limited to piping, ductwork, conduit and equipment.
3.03 Hanger wires that are more than one (horizontal) in six (vertical) out of plumb shall have counter-sloping wires.
3.04 Slack safety wires shall be considered hanger wires for installation and testing requirements.
3.05 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

4.01 Sheet metal screws shall comply with ASTM C1513 and ASME B18.6.3. Penetration of screws through joined material shall not be less than three exposed threads.
4.02 Welding shall be in accordance with AWS D1.3 using E60XX series electrodes.

5. TESTING

5.01 All field testing must be performed in the presence of the project inspector.
5.02 Post-installed anchors in concrete used to support hanger wires shall be tested at a frequency of 10 percent. Power-actuated fasteners in concrete shall be field tested for 200 pounds in tension. All other post-installed anchors in concrete shall be tested in accordance with CBC Section 1910A.5.
5.03 Post-installed anchors in concrete used to attach bracing wires shall be tested at a frequency of 50 percent in accordance with CBC Section 1910A.5.

6. LUMINAIRES

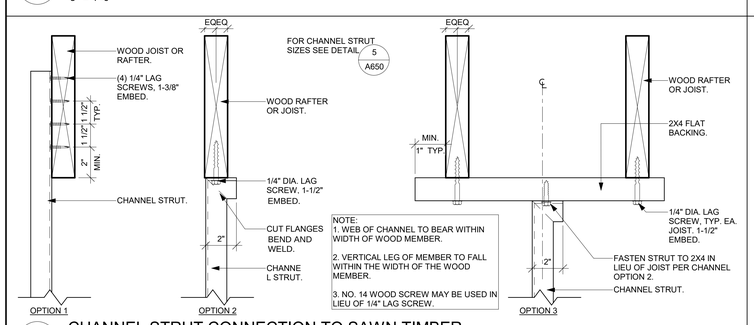
6.01 All luminaires shall be positively attached to the ceiling suspension systems by mechanical means to resist a horizontal force equal to the weight of the luminaire. A minimum of two screws or approved fasteners are required at each luminaire, per ASTM E580 Section 5.3.1.
6.02 Surface-mounted luminaires 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 gauge. Rotational spring catches do not comply. A #12 gauge slack safety wire shall be connected from each clamping device to the structure above. Provide additional supports when a luminaire is 8 feet or longer or exceeds 56 pounds. Maximum spacing between supports shall not exceed 8 feet.
6.03 Luminaires weighing less than or equal to 10 pounds may besupported directly on the ceiling runners, shall have a minimum of one #12 gauge slack safety wire connected from the fixture housing to the structure above.
6.04 Luminaires weighing greater than 10 pounds but less than or equal to 56 pounds may be supported directly on the ceiling runners, but they shall have a minimum of two #12 gauge slack safety wires connected from the fixture housing at diagonal corners to the structure above.
Exception: All luminaires greater than two by four feet weighing less than 56 pounds shall have a #12 gauge slack safety wire at each corner.
6.05 All luminaires weighing greater than 56 pounds shall be independently supported by not less than four taut #12 gauge hanger wires (one at each corner) attached from the fixture housing to the structure above or other approved hangers.

7. SERVICES WITHIN THE CEILING

7.01 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 required at each component.
7.02 Ceiling-mounted air terminals or other services weighing less than or equal to 20 pounds shall have one #12 gauge slack safety wire attached from the terminal or service to the structure above.
7.03 Flexible sprinkler hose fittings, ceiling-mounted air terminals or other services weighing more than 20 pounds but less than or equal to 56 pounds shall have two #12 gauge slack safety wires (at diagonal corners) connected from the terminal or service to the structure above.
7.04 Flexible sprinkler hose fittings, ceiling-mounted air terminals or other services weighing more than 56 pounds shall be supported directly from the structure above by not less than four taut #12 gauge hanger wires attached from the terminal or service to the structure above or other approved hangers.

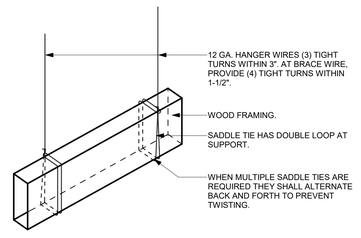
8. OTHER DEVICES WITHIN THE CEILING

8.01 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 pounds shall have a #12 gauge slack safety wire anchored to the structure above.



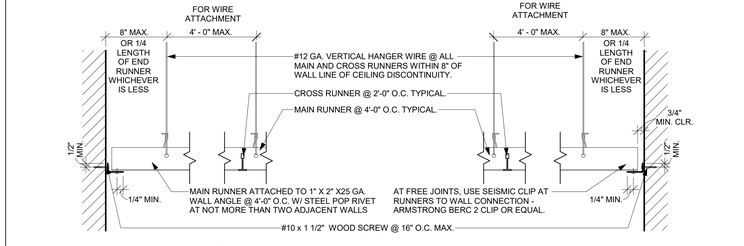
28 CHANNEL STRUT CONNECTION TO SAWN TIMBER

3" = 1'-0"



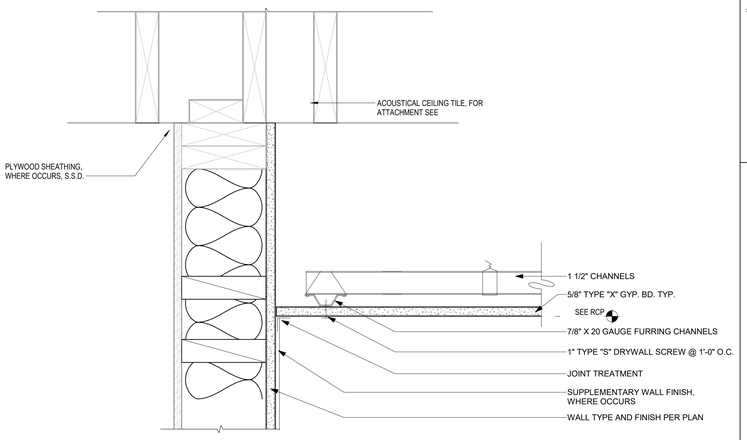
13 SADDLE TIE DETAIL

1 1/2" = 1'-0"



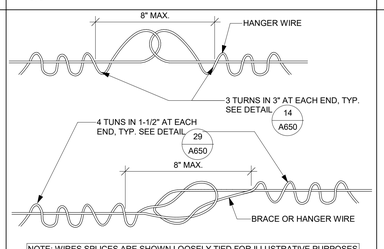
8 CEILING GRID AT WALL

1 1/2" = 1'-0"



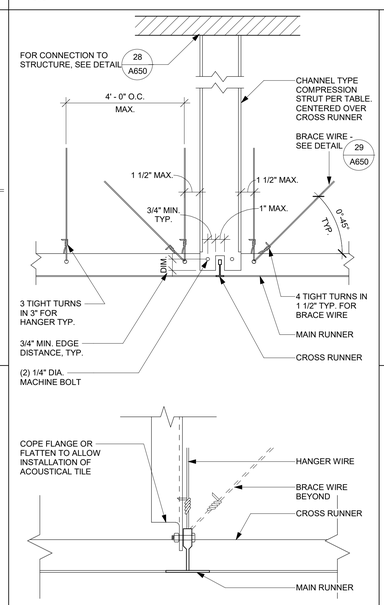
3 GYP BD/ACOUSTIC CEILING

3" = 1'-0"



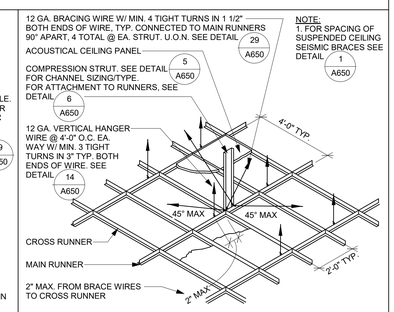
12 CEILING WIRE SPLICE DETAILS

6" = 1'-0"



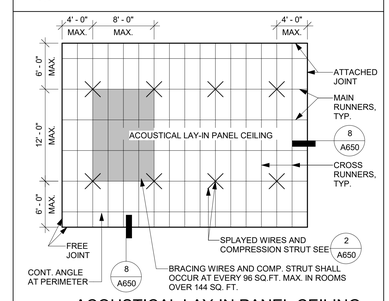
6 CHANNEL COMPRESSION STRUT AT T-BAR

3" = 1'-0"



2 T-BAR CEILING BRACING

N.T.S.



1 ACOUSTICAL LAY-IN PANEL CEILING SUSPENSION SYSTEM

1/8" = 1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121540 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 3/28/2025

DSA # 01-121540

AGENCY APPROVAL

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MT. DIABLO UNIFIED SCHOOL DISTRICT

CONSULTANT

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Sacramento, CA 95811
www.nachtlewis.com
916.329.4000

REGISTERED ARCHITECT
ADAM J. MAY
No. C-26867
RENEWAL DATE: 1/31/27
STATE OF CALIFORNIA

ARCHITECT

DSA SUBMITTAL

REVISIONS

NO.	DESCRIPTION	DATE

DATE 03/08/2024

JOB NO. Y2119.00

SHEET TITLE

CEILING DETAILS

SHEET NO.

A650

ONE AND ONE-HALF INCH = ONE FOOT

ONE INCH = ONE FOOT

THREE-QUARTERS INCH = ONE FOOT

ONE-HALF INCH = ONE FOOT

ONE-QUARTER INCH = ONE FOOT

ONE-EIGHTH INCH = ONE FOOT

ONE-SIXTEENTH INCH = ONE FOOT

ONE INCH = TWENTY FEET

DOOR, FRAME & HARDWARE SCHEDULE (INDIVIDUAL HARDWARE)

DOOR NO.	ROOM NAME/LOCATION	DOOR OPENING		DOOR PANEL				DOOR FRAME			ASSEMBLY		DETAILS (REF. A710)			HARDWARE GROUP	Signage Type
		WIDTH	HEIGHT	TYPE	MAT.	FINISH	GLASS TYPE	TYPE	MAT.	FINISH	STC	FIRE RATING	HEAD	JAMB	SILL		
111	GIRLS R.R.	3' - 0"	7' - 0"	A	HM	PT 2		1	(E) HM	PT 2			(E)	(E)	(E)	108	
121	BOYS R.R.	3' - 0"	7' - 0"	A	HM	PT 2		1	(E) HM	PT 2			(E)	(E)	(E)	108	
E120	MULTIPURPOSE	3' - 0"	7' - 0"	A	HM	PT		1	(E) HM	PT							S-2
E110	MULTIPURPOSE	6' - 0"	7' - 0"	B	HM	PT 2		2	HM	PT 2							S-2
E119	MULTIPURPOSE	6' - 0"	7' - 0"	FF	WD	PT		2	HM	PT							S-2
104	STAFF R.R.	3' - 0"	7' - 0"	A	HM	PT 2	-	1	(E) HM	PT 2			1	1	FLUSH	103	S-3
E122	MULTIPURPOSE	6' - 0"	7' - 0"	B	HM	PT 2		2	HM	PT 2							S-2
D	WALK-IN REFRIGERATOR	3' - 0"	7' - 0"	S	WD	PT 2		1	HM	PT 2							
D1	WALK-IN FREEZER	3' - 0"	7' - 0"	S	WD	PT 2		1	HM	PT 2							
103	KITCHEN OFFICE	3' - 0"	7' - 0"	Z	HM	PT 2	1/4CL	2	HM	PT 2			1	1	FLUSH	102	S-1
106	DRY FOOD STORAGE	3' - 0"	7' - 0"	16/A601		PT 2	-			PT 2			1	1	FLUSH	105	S-1
100	KITCHEN	3' - 6"	7' - 0"	J	WD	PT 2	-	1	(E) HM	PT 2			(E)	(E)	(E)	100	S-1, S-2A
101	KITCHEN	3' - 6"	7' - 0"	J	WD	PT 2	-	1	(E) HM	PT 2			(E)	(E)	(E)	100	S-1, S-2A
108	BOILER	3' - 0"	7' - 0"	A	HM	PT 2	-	1	(E) HM	PT 2			(E)	(E)	FLUSH	107	S-1
107	CUSTODIAL	3' - 0"	7' - 0"	A	HM	PT 2	-	1	(E) HM	PT 2			(E)	(E)	FLUSH	106	S-1
102	KITCHEN	3' - 6"	7' - 0"	J	WD	PT 2	-	1	HM	PT 2			1	1	FLUSH	101	S-1, S-2A
105	KITCHEN	3' - 0"	7' - 0"	DD	HM	PT 2		1	(E) HM	PT 2			(E)	(E)	(E)	104	S-1, S-2
109	TEACHER WORKROOM	3' - 0"	7' - 0"	A	HM	PT 2	-	1	(E) HM	PT 2			(E)	(E)	(E)	105	S-1, S-2A
E112	BOYS R.R.	3' - 0"	5' - 7"	Q	WD	Door - Panel		1	HM	PT 2							
E113	BOYS R.R.	2' - 6"	5' - 7"	R	WD	Door - Panel		1	HM	PT 2							
E114	GIRLS R.R.	3' - 0"	5' - 7"	Q	WD	Door - Panel		1	HM	PT 2							
D116	STAGE	3' - 6"	7' - 0"	J	WD	PT3		1	(E) HM	PT6							
E117	MULTIPURPOSE	6' - 0"	7' - 0"	B	HM	PT 2		2	HM	PT 2							S-2
E118	MULTIPURPOSE	6' - 0"	7' - 0"	FF	WD	PT 2		2	HM	PT 2							S-2
E123	GIRLS R.R.	2' - 6"	5' - 7"	R	WD	Door - Panel		1	HM	PT 2							
G3		8' - 0"	6' - 0"	26/A600													
G1		3' - 6"	6' - 0"	16/A600													
G2		8' - 0"	6' - 0"	26/A600													

HARDWARE GROUPS:

Hardware Group 100
EXISTING SERVICE LINE WOOD DOOR – NEW DOOR IN EXISTING HM FRAME

1	CONT. HINGE	CFM FM SLF HD1	PEMKO	C
1	CLASSRM LOCKSET	ND70PD RHO	SCHLAGE	626
1	CYLINDER	IC AS REQUIRED	SCHLAGE	626
1	CLOSER	4111-689XSNB	LCN	652
1	KICKPLATE	K0050 10"X2" LDW	TRIMCO	630
1	FLOOR STOP/HOLD	1209HO	TRIMCO	626
1	THRESHOLD	2748	TRIMCO	A

Hardware Group 101
EXISTING SERVICE LINE WOOD DOOR – NEW FLIPPED DOOR IN NEW HM FRAME

1	CONT. HINGE	CFM FM SLF HD1	PEMKO	C
1	CLASSRM LOCKSET	ND70PD RHO	SCHLAGE	626
1	CYLINDER	IC AS REQUIRED	SCHLAGE	626
1	CLOSER	4111-689XSNB	LCN	652
1	KICKPLATE	K0050 10"X2" LDW	TRIMCO	630
1	FLOOR STOP/HOLD	1209HO	TRIMCO	626
1	THRESHOLD	2748	TRIMCO	A

Hardware Group 102
NEW 3'x7' INTERIOR WOOD KITCHEN OFFICE DOOR IN HM FRAME

Quantity	Item	Model No.	Mfr.	Finish
3	HINGE	BB1279 4.5 X 4.5	HAGER	652
1	OFFICE LOCKSET	ND50PD RHO	SCHLAGE	626
1	CYLINDER	IC AS REQUIRED	SCHLAGE	626
1	KICKPLATE	K0050 10"X2"LDW	TRIMCO	630
1 SET	SOUND SEAL	319N	TRIMCO	A
1	FLOOR STOP	1214	TRIMCO	626

Hardware Group 103
NEW 3'x7' INTERIOR WOOD STAFF RESTROOM DOOR IN HM FRAME

Quantity	Item	Model No.	Mfr.	Finish
3	HINGE	BB1279 4.5 X 4.5	HAGER	652
1	LOCKSET	LV9486XL283-722 OCC. INDICATOR W/ ADA TURN 09-509 X L583-363	SCHLAGE	626
1	CYLINDER	AS REQUIRED	SCHLAGE	626
1	KICKPLATE	K0050 10"X2"LDW	TRIMCO	630
1 SET	SOUND SEAL	319N	TRIMCO	A
1	FLOOR STOP	1214	TRIMCO	626

Hardware Group 104
NEW 3'x7' EXTERIOR HOLLOW METAL KITCHEN DOOR IN EXISTING HM FRAME

Quantity	Item	Model No.	Mfr.	Finish
1	CONT. HINGE	WT-FM-HD1	PEMKO	C
1	CLASSRM LOCKSET	ND70PD RHO	SCHLAGE	626
1	CYLINDER	IC AS REQUIRED	SCHLAGE	626
1	CLOSER	4111-689XSNB	LCN	652
1	KICKPLATE	K0050 10"X2" LDW	TRIMCO	630
1	FLOOR STOP/HOLD	1209HO	TRIMCO	626
1	BOTTOM SWEEP	345PK	TRIMCO	A
1 SET	WEATHERSTRIP	319N	TRIMCO	A
1	VISION HOLE	976 X 200 DEGREE	SCHLAGE	626
1	THRESHOLD	2727	TRIMCO	A

NOTE: CONFIM WIDE THROW CONTINUOUS HINGE IS REQUIRED TO CLEAR EXISTING EXTERIOR BATTEN SIDING. IF NOT REQUIRED IT IS ACCEPTABLE TO USE PEMKO CFM-FM-SLF-HD1 STANDARD THROW HINGE.

Hardware Group 105
NEW 3'x7' INTERIOR WOOD STOREROOM DOOR IN HOLLOW METAL FRAME

Quantity	Item	Model No.	Mfr.	Finish
3	HINGE	BB1279 4.5 X 4.5	HAGER	652
1	CLASSRM LOCKSET	ND70PD RHO	SCHLAGE	626
1	CYLINDER	IC AS REQUIRED	SCHLAGE	626
1	KICKPLATE	K0050 10"X2"LDW	TRIMCO	630
1	FLOOR STOP	1214	TRIMCO	626

Hardware Group 106
NEW 3'x7' EXTERIOR HOLLOW METAL CUSTODIAN DOOR IN EXISTING HM FRAME

Quantity	Item	Model No.	Mfr.	Finish
1	CONT. HINGE	WT-FM-HD1	PEMKO	C
1	CLASSRM LOCKSET	ND70PD RHO	SCHLAGE	626
1	CYLINDER	IC AS REQUIRED	SCHLAGE	626
1	CLOSER	4111-689XSNB	LCN	652
1	KICKPLATE	K0050 10"X2" LDW	TRIMCO	630
1	FLOOR STOP/HOLD	1209HO	TRIMCO	626
1	BOTTOM SWEEP	345PK	TRIMCO	A
1 SET	WEATHERSTRIP	319N	TRIMCO	A

NOTE: CONFIM WIDE THROW CONTINUOUS HINGE IS REQUIRED TO CLEAR EXISTING EXTERIOR BATTEN SIDING. IF NOT REQUIRED IT IS ACCEPTABLE TO USE PEMKO CFM-FM-SLF-HD1 STANDARD THROW HINGE.

Hardware Group 107
NEW 3'x7' EXTERIOR HOLLOW METAL BOILER ROOM DOOR IN EXISTING HM FRAME

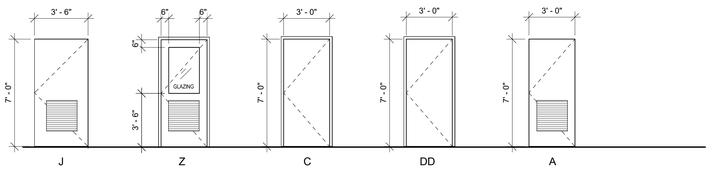
Quantity	Item	Model No.	Mfr.	Finish
1	CONT. HINGE	WT-FM-HD1	PEMKO	C
1	CLASSRM LOCKSET	ND70PD RHO	SCHLAGE	626
1	CYLINDER	IC AS REQUIRED	SCHLAGE	626
1	CLOSER	4111-689XSNB	LCN	652
1	KICKPLATE	K0050 10"X2" LDW	TRIMCO	630
1	FLOOR STOP/HOLD	1209HO	TRIMCO	626
1	BOTTOM SWEEP	345PK	TRIMCO	A
1 SET	WEATHERSTRIP	319N	TRIMCO	A

NOTE: CONFIM WIDE THROW CONTINUOUS HINGE IS REQUIRED TO CLEAR EXISTING EXTERIOR BATTEN SIDING. IF NOT REQUIRED IT IS ACCEPTABLE TO USE PEMKO CFM-FM-SLF-HD1 STANDARD THROW HINGE.

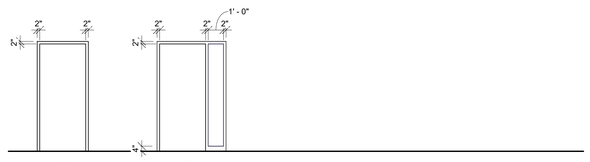
Hardware Group 108
EXISTING WOOD STUDENTS' RESTROOM DOOR IN HM FRAME

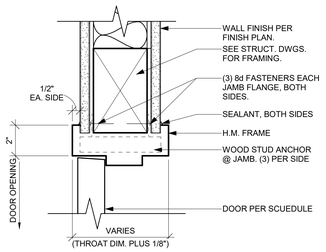
Quantity	Item	Model No.	Mfr.	Finish
1	THRESHOLD	2715 Series	TRIMCO	A

DOOR TYPES:



DOOR FRAME TYPES:





1 INT. H.M. DOOR JAMB AT WD STUD PARTITION - HEAD SIM.
3" = 1'-0"

GLAZING TYPES:

1/4CL	1/4" CLEAR LAMINATED SAFETY GLASS
1/4CL FROST	1/4" CLEAR LAMINATED SAFETY GLASS WITH FROSTED INTERLAYER

DOOR MATERIALS:

WD	WOOD
HM	HOLLOW METAL

OTHER ABBREVIATIONS:

PT	PAINT - PER SPEC
PT2	PAINT - PER SPEC
PT6	PAINT - PER SPEC

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121540 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 3/28/2025

DSA # 01-121540

AGENCY APPROVAL

EL DORADO MIDDLE SCHOOL
MULTI-PURPOSE BUILDING UPGRADES
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MT. DIABLO UNIFIED SCHOOL DISTRICT

CONSULTANT

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LICENSED ARCHITECT
EVAN J. MAYTON
No. C-26867
RENEWAL DATE: 1/31/27
STATE OF CALIFORNIA

ARCHITECT

DSA SUBMITTAL

REVISIONS

NO.	DESCRIPTION	DATE

DATE 03/08/2024

JOB NO. Y2119.00

SHEET TITLE

OPENING SCHEDULE AND DETAILS

SHEET NO.

A710

FINISH LEGEND

BASE				
SYMB	PRODUCT	MFRG	STYLE	COLOR
EPOX	COVED BASE EPOXY	SEE SPEC	SEE SPEC	TBD
RB1	RUBBER WALL BASE	JOHNSONITE	TRADITIONAL	CHARCOAL WG

CEILING				
SYMB	PRODUCT	MFRG	STYLE	COLOR
ACT1	LAY-IN CEILING TILES	ARMSTRONG INDUSTRIES	CLEAN ROOM VL	WHITE
ACT2	APPLIED REPLACEMENT ACOUSTIC TILES	ARMSTRONG INDUSTRIES	SEE SPECS	MATCH EXISTING

FLOOR				
SYMB	PRODUCT	MFRG	STYLE	COLOR
EPOX	EPOXY FLOORING	DEXOTEX	TERRACOLOR	TBD
LVT1	LUXURY VINYL TILE	ARMSTRONG FLOORING	UNIFY 18"x18"	J7203 DOBBY
LVT2	LUXURY VINYL TILE	ARMSTRONG FLOORING	UNIFY 18"x18"	J7204 EKELUND
LVT3	LUXURY VINYL TILE	ARMSTRONG FLOORING	EXCHANGE 6"x36"	ST903 STATIC RELAY RED
PT4	FLOOR PAINT	DUNN EDWARDS	DEA002	BLACK

WALL				
SYMB	PRODUCT	MFRG	STYLE	COLOR
FRL1	FIBER REINFORCED LAMINATE	NEVAMAR	S-6023 TEXTURED	PLATINUM GRAY
PT1	WALL PAINT	DUNN-EDWARDS	SEE FINISH PLAN FOR SHEEN	DE6226 FOGGY DAY
PT2	ACCENT PAINT	DUNN-EDWARDS	SEE FINISH PLAN FOR SHEEN	DE6370 CHARCOAL SMUDGE
PT3	ACCENT PAINT	DUNN-EDWARDS	SEE FINISH PLAN FOR SHEEN	DET424 BARN RED
PT4	FLOOR PAINT	DUNN-EDWARDS	DEA002	BLACK



1 FLOOR PLAN

1/4" = 1'-0"

N

SHEET NOTES:

1. SEE ADDITIONAL INFORMATION ON FLOORPLANS, SPECIFICATIONS, AND INTERIOR ELEVATIONS.

LEGEND:

- LVT1
- LVT2
- LVT3
- EPOX
- EXISTING STAGE FLOORING - THOUROUGLY CLEAN AND RESEAL EXISTING WOOD FINISH. PAINT EXISTING WOOD BASE PT4
- EXISTING CONCRETE TO REMAIN
- PT1 — PAINT LOCATION (PT1)
- PT2 — ACCENT PAINT LOCATION (PT2)
- PT3 — ACCENT PAINT LOCATION (PT3)
- PT4 — ACCENT PAINT LOCATION (PT4)
- FRL1 — FRL 1

SHEEN
F- FLATT
E- EGGSHELL
S- SEMI-GLOSS

ROOM NAME
101
Ceiling
Wall
WP
Base
Floor

- CEILING FINISH (WHERE OCCURS). SEE REFLECTED CEILING PLANS ON A211 FOR ADDITIONAL INFO.
- DOMINANT WALL FINISH (SEE PLAN FOR ACCENT FINISH LOCATIONS)
- WALL PROTECTION/WAINSCOT (WHERE OCCURS). SEE FINISH PLAN FOR ADDITIONAL INFO.
- BASE FINISH
- DOMINANT FLOOR FINISH (SEE PLAN FOR ACCENT FINISH LOCATIONS)

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LICENSED ARCHITECT
No. C-26867
RENEWAL DATE: 1/31/27
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NO.	DESCRIPTION	DATE

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JOB NO. Y2119.00

SHEET TITLE

FINISH PLAN AND SCHEDULE

SHEET NO.

A811

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET

GENERAL NOTES:

I. GENERAL

1. MATERIALS AND WORKMANSHIP TO CONFORM WITH THE 2022 EDITION OF THE CALIFORNIA BUILDING CODE, WITH DSA AMENDMENTS AND THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
2. THESE GENERAL NOTES SUPPLEMENT THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS. IN CASE OF CONFLICT BETWEEN THE PLANS AND SPECIFICATIONS, CONTACT THE ARCHITECT AND SEOR.
3. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, USE SIMILAR DETAILS OF CONSTRUCTION, SUBJECT TO REVIEW BY THE ARCHITECT AND SEOR.
4. DETAILS ON SHEETS TITLED "TYPICAL DETAILS" APPLY TO SITUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY REFERENCED. SUCH DETAILS ARE NOT NOTED AT EACH LOCATION THAT THEY OCCUR.
5. DO NOT SCALE THE DRAWINGS.
6. PROVIDE MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES INCLUDE, BUT MAY NOT BE LIMITED TO, BRACING AND SHORING FOR LOADS DURING CONSTRUCTION. RETAIN A REGISTERED CIVIL ENGINEER WHO IS PROPERLY QUALIFIED TO DESIGN BRACING, SHORING, ETC. VISITS TO THE SITE BY THE ARCHITECT AND SEOR WILL NOT INCLUDE OBSERVATION OF THE ABOVE NOTED ITEMS.
7. INFORMATION SHOWN ON THE DRAWINGS RELATED TO EXISTING CONDITIONS REPRESENTS THE PRESENT KNOWLEDGE, BUT WITHOUT GUARANTEE OF ACCURACY. REPORT CONDITIONS THAT CONFLICT WITH THE CONTRACT DOCUMENTS TO THE ARCHITECT AND SEOR. DO NOT DEVIATE FROM THE CONTRACT DOCUMENTS WITHOUT WRITTEN DIRECTION FROM THE ARCHITECT AND SEOR.
8. REFER TO ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF FLOOR, ROOF AND WALL OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS. COORDINATE THE SIZE AND LOCATION OF OPENINGS ASSOCIATED WITH, BUT NOT LIMITED TO, ELECTRICAL, MECHANICAL AND PLUMBING TRADES. SUBMIT FINAL SIZING AND LOCATION REQUIREMENTS OF OPENINGS TO THE ARCHITECT FOR REVIEW.
9. REFERENCE DATUM FOR THE ELEVATIONS IS FINISH FIRST FLOOR.

II. FOUNDATION AND SITE WORK

1. THE DESIGN OF THE FOUNDATION SYSTEM IS BASED UPON THE CRITERIA AND RECOMMENDATIONS CONTAINED IN THE 2022 EDITION OF THE CALIFORNIA BUILDING CODE, WITH DSA AMENDMENTS.
2. LOCATE AND PROTECT EXISTING UTILITIES TO REMAIN DURING AND/OR AFTER CONSTRUCTION.
3. REMOVE ABANDONED FOOTINGS, UTILITIES, ETC. WHICH INTERFERE WITH NEW CONSTRUCTION, UNLESS OTHERWISE INDICATED.
4. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXCAVATION PROCEDURES INCLUDING LAGGING, SHORING, UNDERPINNING AND PROTECTION OF EXISTING CONSTRUCTION.
5. EXCAVATIONS FOR FOUNDATIONS MUST BE ACCEPTED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING REINFORCING AND CONCRETE. NOTIFY THE GEOTECHNICAL ENGINEER WHEN EXCAVATIONS ARE READY FOR INSPECTION.
6. PLACE BACKFILL BEHIND RETAINING WALLS AFTER CONCRETE OR MASONRY HAS ATTAINED FULL DESIGN STRENGTH. BRACE BUILDING AND PT WALLS BELOW GRADE FROM LATERAL LOADS UNTIL ATTACHED FLOORS AND SLABS ON GRADE ARE COMPLETE AND HAVE ATTAINED FULL DESIGN STRENGTH.
7. MECHANICALLY COMPACT EXCAVATION BACKFILLS IN LAYERS. PROVIDE THE FOLLOWING MINIMUM COMPACTION IN ACCORDANCE WITH THE ASTM D1557 TEST METHOD OR AS OTHERWISE NOTED IN GEOTECHNICAL RECOMMENDATIONS.:

LOCATION	MAXIMUM DRY DENSITY
TRENCH AND WALL BACKFILL	90%
UPPER 6" OF SOIL BENEATH FILL	90%
FILL BENEATH SLAB ON GRADE	90%
FILL BENEATH FOOTINGS	95%
OTHER	90%

III. REINFORCING STEEL

1. REINFORCING TO CONFORM TO THE FOLLOWING, UNLESS OTHERWISE NOTED:

REINFORCING STEEL	TYPE
#5 AND SMALLER	ASTM A615, 60 KSI
#6 AND LARGER & BARS TO BE WELDED	ASTM A706, 60 KSI
HIGH STRENGTH REINF WHERE NOTED ON DWGS	ASTM A615, 75 KSI
1/2 INCH DIAMETER LOW RELAXATION SEVEN-WIRE POST-TENSIONING STRAND	ASTM A416, 270 KSI
WELDED STEEL WIRE FABRIC	ASTM A185, 70 KSI
SMOOTH DOWELS IN SLAB ON GRADE	ASTM A36, 36 KSI

2. MECHANICAL COUPLERS: TYPE 2 PER ACI-318, UNLESS OTHERWISE NOTED.
3. TERMINATE REINFORCING STEEL IN STANDARD HOOKS, UNLESS OTHERWISE SHOWN.

IV. CAST-IN-PLACE CONCRETE

1. CONCRETE IS REINFORCED AND CAST-IN-PLACE UNLESS OTHERWISE NOTED. WHERE REINFORCING IS NOT SPECIFICALLY SHOWN OR WHERE DETAILS ARE NOT GIVEN, PROVIDE REINFORCING SIMILAR TO THAT SHOWN FOR SIMILAR CONDITIONS, SUBJECT TO REVIEW BY THE OWNER'S REPRESENTATIVE.
2. ROUGHEN CONCRETE SURFACES OF CONSTRUCTION JOINTS TO 1/4 INCH AMPLITUDE AND CLEAN OF LAITANCE, FOREIGN MATTER, AND LOOSE PARTICLES AT THE FOLLOWING LOCATIONS: WHERE CAST AGAINST EXISTING CONCRETE.
3. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATIONS OF ADDITIONAL CONCRETE CURBS AND HOUSEKEEPING PADS NOT SHOWN.
4. CONCRETE CLEAR COVER TO REINFORCING BARS IS AS FOLLOWS, UNLESS OTHERWISE NOTED:

LOCATION	CLEAR COVER
CONCRETE PLACED AGAINST EARTH	3 INCHES
FORMED SURFACES EXPOSED TO WEATHER OR IN CONTACT WITH EARTH:	
#6 BARS AND LARGER	2 INCHES
#5 BARS AND SMALLER	1 1/2 INCHES
SLABS ON GRADE (TOP CLEARANCE)	1 1/2 INCHES
BEAMS, GIRDERS AND COLUMNS NOT EXPOSED TO WEATHER OR EARTH:	1 1/2 INCHES
WALL OR SLAB SURFACES NOT EXPOSED TO WEATHER OR EARTH:	
#5 & SMALLER	3/4 INCH
#6 & #7	1 INCH
#8, #9, #10 & #11	1 1/2 INCHES
#14 & #18	2 1/2 INCHES

5. CONCRETE TYPES:
   CLASS A:
   A. FOUNDATIONS, MISC CURBS, HOUSEKEEPING PADS, ETC:
      a. 28-DAY STRENGTH: F'C = 3500 PSI
      b. TYPE: NORMAL WEIGHT
      c. MAX W/C RATIO = 0.55
      d. MAX AGG. SIZE = 1 1/2"
      e. SLUMP = 3.5" +/- 1"
   CLASS C:
   A. SLAB ON GRADE:
      a. 28-DAY STRENGTH: F'C = 4000 PSI
      b. TYPE: NORMAL WEIGHT
      c. MAX W/C RATIO = 0.45
      d. MAX AGG. SIZE = 1"
      e. SLUMP = 4" +/- 1"
1. CONCRETE FILL THICKNESS SHOWN ON THE FRAMING PLANS ARE MINIMAL THICKNESSES. NO ALLOWANCES HAVE BEEN SHOWN FOR ADDITIONAL CONCRETE FILL REQUIRED TO COMPENSATE FOR FRAME, DECK, OR FORMWORK DEFLECTIONS TO MAINTAIN SURFACE TOLERANCES SPECIFIED.
2. NON-SHRINK GROUT: ASTM C1107, WITH MINIMUM COMPRESSIVE STRENGTH OF 7,000 PSI.

V. NAILING NOTES

1. ALL NAILS FOR STRUCTURAL WORK SHALL BE COMMON WIRE NAILS UNLESS NOTED OTHERWISE.
2. NAILS SHALL BE SPACED NOT LESS THAN 11 DIAMETERS ON CENTER, EDGE OR END DISTANCES SHALL NOT BE LESS THAN 6 DIAMETERS. NAIL HOLES SHALL BE SUB-DRILLED WHERE NECESSARY TO PREVENT SPLITTING OF WOOD. SUB-DRILL NOT TO EXCEED 3/4 OF THE SHANK DIAMETER.
3. WHERE PLASTER OR GYP. BD. CEILINGS OCCUR, CEILING STRIPPING NAILS SHALL BE ANNULAR GROOVED SHANKS, "STRONGHOLD" OR APPROVED EQUAL. USE (2)-16D MIN AT EACH CONTACT
4. NAILING NOT NOTED ON THIS SHEET OR ON DETAILS ELSEWHERE, SHALL BE A MINIMUM OF (2) NAILS AT EACH CONTACT USING 8D NAILS THRU 1'X'S AND 16D THRU 2X'S.
5. MINIMUM NAILING SHALL BE:
   A. STUDS AND POSTS @ TOP AND BOTTOM TO BEARING:
      2X6 & SMALLER ..... (2)-8D TN, EA SIDE OR (3)-16D END NAILS
      2X8 ..... (3)-8D TN, EA SIDE OR (4)-16D END NAILS
      2X10 & LARGER ..... (4)-8D TN, EA SIDE OR (5)-16D END NAILS
      3X6 (SUB-DRILL) ..... (3)-8D TN, EA SIDE OR (4)-20D END NAILS
      3X8 & LARGER (SUB-DRILL) ..... (4)-8D TN, EA SIDE OR (5)-20D END NAILS
   B. JOISTS OR RAFTERS:
      TO SIDE OF STUD UP TO 8" ..... (3)-16D
      EACH ADDITIONAL 4" ..... (1)-16D ADDITIONAL
      TO BEARING ..... (2)-10D TN, EA SIDE
      AT LAPS (12" MINIMUM) ..... (4)-16D
   C. BLOCKING:
      TO JOISTS, RAFTERS OR BLKG ..... (2)-10D TN, EA SIDE, EA END
      TO BEARINGS ..... (2)-10D TN, EA SIDE, EA END, STAGGERED
      TO STUDS ..... (2)-10D TN OR (2)-16D EA END
   D. SHEATHING;
      FLOOR -3/4" PLYWOOD ..... 10D AT 6" OC AT EDGES OF SHEETS AND OVER ALL WALLS (SPPN),10D AT 10" OC AT ALL INTERIOR CONTACTS (SPIN)
      WALL -1/2" PLYWOOD ..... 10D AT 6" OC AT EDGES OF SHEETS AND HOLDOWN STUDS (SPPN), 10D AT 12" OC AT INTERIOR CONTACTS (SPIN)
      ROOF -1/2" OR 5/8" PLYWOOD ..... 10D AT 6" OC AT EDGES OF SHEETS AND OVER ALL WALLS (SPPN) 10D AT 12" OC AT ALL INTERIOR CONTACTS (SPIN)
   E. RIBBONS AND LEDGERS TO STUDS:
      1X RIBBONS ..... (2)-8D EA STUD
      2X RIBBONS ..... (2)-16D EA STUD
      2X LEDGERS ..... (2)-16D EA STUD
      3X LEDGERS ..... (2)-40D EA STUD
   F. DOUBLE TOP PLATES:
      UPPER PLATE TO LOWER PLATE ..... 16D AT 16" OC STAGGERED
      CORNER OR INTERSECTION ..... (3)-16D
   G. MINIMUM PLATE LAPS:
      4'-0" ..... (12)-16D EA SIDE
   H. MULTIPLE STUDS:
      STAGR FOR OVER 4" WIDTHS ..... 16D @ 12" OC
   I. BUILT-UP BEAMS:
      10" OR LESS ..... 16D AT 12"CC STAGR (2X)
      MORE THAN 10" ..... 1/2" DIA BOLTS AT 24" OC
   J. DOUBLE JOISTS:
      NOT BLOCKED APART ..... 16D AT 12" OC STAGR BLOCKED APART WITH 2X
      BLOCKING AT 24" OC ..... (2)-20D EA END, EA BLOCK
   K. T&G DECKING:
      NAIL EACH 2X T&G BOARD TO EACH BEARING CONTACT WITH (1)-16D STRAIGHT NAIL AND (1)-16D SLANT NAIL THRU TONGUE.
6. AT METAL STRAP TIES, FILL ALL HOLES WITH NAILS UNO. USE NAIL SIZE & TYPE AS SPECIFIED IN ALLOWABLE LOAD TABLE IN THE MOST CURRENT SIMPSON CATALOG. WHERE TWO SIZES ARE GIVEN, USE LARGER SIZE. ALL NAILS EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED.
7. ALL NAILS DRIVEN INTO PRESSURE TREATED WOOD SHALL BE HOT DIPPED GALVANIZED.

VI. MECHANICAL ANCHORS

1. EXPANSION OR WEDGE ANCHORS INTO CONCRETE: HILTI KB-TZ2 (ICC-ESR-4266), SIMPSON STRONG-BOLT 2 (ICC-ESR-3037) OR DEWALT POWER-STUD+ SD2 (ICC-ESR-2502), UNLESS SPECIFICALLY NOTED OTHERWISE.
2. ALL EMBEDMENT DEPTHS NOTED ON DRAWINGS ARE EFFECTIVE EMBEDMENT PER MANUFACTURER.
3. INSTALL ANCHORS IN ACCORDANCE WITH LATEST ICC-ESR REPORT AND MANUFACTURER INSTRUCTIONS.
4. PROVIDE STAINLESS STEEL FASTENERS FOR ALL APPLICATIONS.
5. IF REINFORCEMENT IS ENCOUNTERED DURING DRILLING, ABANDON AND SHIFT THE HOLE LOCATION TO AVOID THE REINFORCEMENT. PROVIDE A MINIMUM OF 2 ANCHOR DIAMETERS OR 1 INCH, WHICHEVER IS LARGER, OF SOUND CONCRETE BETWEEN THE ANCHOR AND THE ABANDONED HOLE. FILL THE ABANDONED HOLE WITH NON-SHRINK GROUT. IF THE ANCHOR MAY NOT BE SHIFTED AS NOTED ABOVE, THE ENGINEER WILL DETERMINE A NEW LOCATION.
6. LOCATE REINFORCEMENT AND CONFIRM FINAL ANCHOR LOCATIONS PRIOR TO FABRICATING PLATES, MEMBERS, OR OTHER STEEL ASSEMBLIES ATTACHED WITH MECHANICAL ANCHORS.
7. ALL ANCHORS REQUIRE SPECIAL INSPECTION BY OWNER'S TESTING AND INSPECTION AGENCY IN ACCORDANCE WITH THE ICC REPORTS AND THE CODE.
8. TEST 100% OF ANCHORS TO THE TORQUE PROOF LOADS:

	HILTI KB-TZ2 (ICC ESR-4266)		SIMPSON STRONG-BOLT 2 (ICC ESR-3037)		DEWALT POWER-STUD+ SD2 (ICC ESR-2502)	
ANCHOR DIA (IN.)	MIN NOMINAL EMBED (IN.)	TORQUE PROOF LOAD (FT-LB)	MIN NOMINAL EMBED (IN.)	TORQUE PROOF LOAD (FT-LB)	MIN NOMINAL EMBED (IN.)	TORQUE PROOF LOAD (FT-LB)
3/8	3	30	2 7/8	30	2 3/8	25
1/2	3 3/4	50	3 7/8	65	3 3/4	40
5/8	4 1/2	60	5 1/8	90	4 7/8	60
3/4	5 1/2	125	5 3/4	150	5 3/4	110

VII. ADHESIVE ANCHORS AND DOWELS

1. ANCHORS AND DOWELS INSTALLED INTO CONCRETE: HILTI HIT-RE-500-V3 (ICC-ESR-3814), SIMPSON STRONG-TIE SET-3G (ICC-ESR-4057) OR DEWALT PURE 110+ (ICC ESR 3298). ALL EMBEDMENT DEPTHS NOTED ON DRAWINGS ARE EFFECTIVE EMBEDMENT PER MANUFACTURER.
2. THE TESTING LABORATORY IS TO PERFORM TENSION TESTS ON 100% OF ANCHORS AND DOWELS INSTALLED INTO CONCRETE USED IN STRUCTURAL APPLICATIONS, AND 50% OF ALL ANCHORS USED IN NON-STRUCTURAL APPLICATIONS, UON. IF ANY ANCHOR FAILS THE TEST, ALL ANCHORS OF THE SAME TYPE NOT PREVIOUSLY TESTED SHALL BE TESTED UNTIL 20 CONSECUTIVE ANCHORS PASS, THEN RESUME INITIAL TESTING FREQUENCY.
3. ANCHORS: ASTM A36 THREADED RODS WITH ASTM A563 GRADE A NUTS AND ANSI B18.22.1 TYPE A WASHERS, UNLESS OTHERWISE NOTED. ANCHORS DESIGNATED AS ASTM A193 GRADE B7 THREADED RODS TO USE ASTM A563 GRADE DH HEAVY HEX NUTS AND ASTM F436 WASHERS.
4. REBAR DOWELS: ASTM A615 GRADE 60 REINFORCING STEEL.
5. INSTALL ANCHORS IN ACCORDANCE WITH LATEST ICC-ESR REPORT AND MANUFACTURER INSTRUCTIONS.
6. IF REINFORCEMENT IS ENCOUNTERED DURING DRILLING, ABANDON AND SHIFT THE HOLE LOCATION TO AVOID THE REINFORCEMENT. PROVIDE A MINIMUM OF 2 ANCHOR DIAMETERS OR 1 INCH, WHICHEVER IS LARGER, OF SOUND CONCRETE BETWEEN THE DOWEL AND THE ABANDONED HOLE. FILL THE ABANDONED HOLE WITH NON-SHRINK GROUT. IF THE ANCHOR OR DOWEL MAY NOT BE SHIFTED AS NOTED ABOVE, THE ENGINEER WILL DETERMINE A NEW LOCATION.
7. LOCATE REINFORCEMENT AND CONFIRM FINAL ANCHOR LOCATIONS PRIOR TO FABRICATING PLATES, MEMBERS, OR OTHER STEEL ASSEMBLIES ATTACHED WITH ADHESIVE ANCHORS.
8. CONTACT STRUCTURAL ENGINEER FOR ADHESIVE ANCHOR TEST VALUES AND PROCEDURES UNLESS NOTED ON PLANS.
9. TEST PROOF LOADS FOR REPAIR CONDTIONS ARE NOT PART OF THESE DOCUMENTS AND WILL REQUIRE A SEPARATE APPROVAL BY THE SEOR AND DSA.

VIII. ROUGH CARPENTRY

1. FRAMING LUMBER: DOUGLAS FIR (COAST REGION) GRADED AND MARKED IN ACCORDANCE WITH THE STANDARD GRADING RULES NO. 17 OF THE WEST COAST LUMBER INSPECTION BUREAU (W.C.L.I.B.) OR WESTERN LUMBER GRADING RULES, OF THE WESTERN WOOD PRODUCTS ASSOCIATION (W.W.P.A.). USE LUMBER OF THE FOLLOWING GRADES:

MEMBER	MOISTURE CONTENT	WOOD/GRADE
SILLS	19%	DF #1 PRESSURE OR PRESERVATIVE TREATED OR FOUNDATION GRADE REDWOOD
STUDS	19%	DF #2
JOISTS, PLANKS AND PLATES	15%	DF #1
BEAMS, 5" & WIDER	GREEN	DF SELECT STRUCTURAL
BEAMS, 4" & NARROWER	GREEN	DF #1
POSTS, 6X6 & LARGER	GREEN	DF SELECT STRUCTURAL
POSTS, 4X6 & SMALLER	19%	DF #1
SLEEPER	19%	DF #1 PRESSURE OR PRESERVATIVE TREATED
BLOCKING & BRIDGING	15%	DF #2
PLYWOOD BLOCKING	19%	DF #1
BACKING, STRIPPING AND FURRING	19%	CONSTRUCTION

2. WOOD FRAMING SIZES ON DRAWINGS ARE STATED IN TERMS OF STANDARD NOMINAL SIZES
3. PANEL SHEATHING: PROVIDE WOOD STRUCTURAL PANELS WITH THE APPROPRIATETRADEMARK OF APA-THE ENGINEERED WOOD ASSOCIATION AND MEET THE REQUIREMENTS OF THE VOLUNTARY PRODUCT STANDARD PS-1 OR PS-2 AND APA PRP-108 PERFORMANCE STANDARD, AND THE FOLLOWING UNLESS OTHERWISE NOTED:
   A. EXPOSURE 1.
   B. GRADE: STRUCT 1.
   C. ROOF/FLOOR SPAN RATING: 32/16 MINIMUM.
   D. PLYWOOD PANELS TO BE 5-PLY MINIMUM, EXCEPT 3/8" PANELS TO BE 3-PLY MINIMUM.
   E. PLYWOOD TO BE CC GRADE WHERE EXPOSED TO WEATHER; CD GRADE ELSEWHERE.
4. ROUGH HARDWARE:
   A. NAILS: COMMON WIRE NAILS, STANDARD LENGTHS UON. USE HOT-DIPPED ZINC-COATED GALVANIZED NAILS FOR EXTERIOR INSTALLATIONS AND WHEN PENETRATING PRESSURE TREATED OR FIRE-RETARDANT LUMBER.
   B. BOLTS AND THREADED RODS: ASTM A307, SQUARE OR HEXAGONAL HEAD MACHINE BOLTS WITH ASTM A563 NUTS. USE [MALLEABLE IRON WASHERS; ASTM F844 WASHERS] UNDER HEAD AND NUT WHEN IN CONTACT WITH WOOD. AT SILL PLATES USE 3"X3"X1/4" MINIMUM PLATE WASHERS.
   C. LAG SCREWS: ASTM A307. USE ASTM F844 WASHERS UNDER HEAD WHEN IN CONTACT WITH WOOD.
   D. SCREWS: ASTM A307, ANSI/ASME STANDARD B18.6.1. USE CADMIUM-PLATED PAN OR ROUND HEADED WOOD SCREWS AT STEEL TO WOOD AND WOOD TO WOOD CONNECTIONS.
   E. MISCELLANEOUS STEEL: ASTM A36.
   F. BOLTS, NUTS, WASHERS, STRAPS AND OTHER HARDWARE EXPOSED TO THE WEATHER TO BE HOT-DIPPED GALVANIZED OR STAINLESS STEEL.
   G. FRAMING CLIPS, SHEET METAL STRAPS, ETC.: SIMPSON STRONG-TIE. PROVIDE Z-MAX COATING WHERE ATTACHED TO PRESERVATIVE TREATED LUMBER.
5. NAILING:
   A. PANEL SHEATHING:
      a. AT FLOOR AND ROOF SHEATHING, USE RING SHANK NAILS WITH SHANK DIAMETER EQUAL TO SPECIFIED COMMON NAIL DIAMETER. USE SMOOTH SHANK NAILS AT WALLS.
      b. GLUE FLOOR SHEATHING AT ALL POINTS OF CONTACT.
   B. PROVIDE MINIMUM NAILING PER TABLE 2304.10.1 OF THE [CBC, IBC] U.O.N.
6. INSTALL SOLID BLOCKING BETWEEN JOISTS AT ENDS AND OVER SUPPORTS. PROVIDE 2 INCH BY 3 INCH CROSS BRIDGING, METAL BRIDGING, OR SOLID BLOCKING BETWEEN JOISTS IN SPANS EQUALLY SPACED 8 FEET ON CENTER MAXIMUM AND WHERE INDICATED.

IX. STRUCTURAL TESTS, INSPECTIONS, AND OBSERVATIONS

A. AN INDEPENDENT TESTING AGENCY AND SPECIAL INSPECTORS WILL BE RETAINED BY THE OWNER TO PERFORM TESTS AND INSPECTION.

B. THE FOLLOWING ITEMS REQUIRE TESTS AND INSPECTIONS IN ACCORDANCE WITH THE REQUIREMENTS OF THE CHAPTER "STRUCTURAL TESTS AND INSPECTIONS" OF THE APPLICABLE CODE. REQUIREMENTS FOR TESTS AND INSPECTIONS ARE IDENTIFIED IN THE SPECIFICATIONS AND DSA 103 FORM .
   A. SOILS AND EXCAVATIONS
   B. REINFORCING STEEL
   C. CAST-IN-PLACE CONCRETE
   D. POST-INSTALLED ANCHORS
   E. ROUGH CARPENTRY

C. NOTIFY THE ENGINEER AT SIGNIFICANT CONSTRUCTION STAGES 72 HOURS IN ADVANCE AND PROVIDE ACCESS FOR THE FOLLOWING STRUCTURAL OBSERVATIONS:
   A. FOUNDATIONS
      a. REINFORCEMENT
   B. WOOD FRAMING
      a. FRAMING – BEAMS AND COLUMNS
      b. SHEAR WALLS AND HOLD-DOWNS
      c. DIAPHRAGMS AND COLLECTORS

X. REMODELING AND ADDITION NOTES:

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE HIMSELF FAMILIAR WITH ALL EXISTING CONDITIONS, ANY EXISTING BUILDING PLANS, AND ALL SITE CONDITIONS WHICH MAY AFFECT HIS WORK. HE SHALL ASCERTAIN THE EXTENT OF DEMOLITION WORK REQUIRED TO COMPLETE THE STRUCTURE PER NEW PLANS AND BE RESPONSIBLE FOR ITS SAFE COMPLETION.
2. WHEN EXISTING BUILDING PLANS ARE AVAILABLE, THE CONTRACTOR SHALL KEEP A FULL SET OF SUCH PLANS AT THE JOB SITE DURING CONSTRUCTION. IF ANY EXISTING CONDITIONS ARE DISCOVERED WHICH DEVIATE FROM THESE PLANS OR FROM THE NEW PLANS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER FOR INSTRUCTION PRIOR TO PROCEEDING WITH WORK IN THE AFFECTED AREA.
3. THE CONTRACTOR SHALL MATCH EXISTING HEIGHTS, LINES, MATERIALS, AND CONDITIONS UNLESS NOTED OTHERWISE ON NEW PLANS.
4. 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. SHOULD ANY EXISTING CONDITIONS BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24 CALIFORNIA CODE OF REGULATIONS, A CONSTRUCTION CHANGE DOCUMENT, OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED REPAIR WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE REPAIR WORK.

XI. INSPECTION NOTES:

1. GENERAL: IN ADDITION TO THE INSPECTIONS REQUIRED BY THE CURRENT CBC THE OWNER SHALL EMPLOY A SPECIAL INSPECTOR DURING CONSTRUCTION OF THE FOLLOWING TYPES OF WORK. ALL SPECIAL INSPECTIONS SHALL BE PERFORMED IN ACCORDANCE TO CHAPTER 17A OF THE CURRENT CBC. SUBMIT THE NAME OF ALL SPECIAL INSPECTORS TO THE DIVISION OF THE STATE ARCHITECT FOR APPROVAL PRIOR TO STARTING WORK REQUIRING SPECIAL INSPECTION.
2. REFER TO CHAPTER 17A FOR ADDITIONAL REQUIREMENTS OF THE SPECIAL INSPECTOR.
3. SPECIAL INSPECTOR: ALL SPECIAL INSPECTORS SHALL HAVE A MINIMUM OF 3 YEARS EXPERIENCE IN THE SPECIFIC MATERIAL / TRADE BEING INSPECTED.
4. SPECIFIC MATERIALS / TRADES REQUIRING SPECIAL INSPECTION: SEE 'STRUCTURAL TESTS AND INSPECTIONS' SHEET AND ALL APPLICABLE SECTIONS OF THE PROJECT SPECIFICATIONS.
   A. CONCRETE - DURING THE PLACING OF REINFORCING STEEL AND INSERTS, DURING THE TAKING OF TEST SPECIMENS, AND DURING THE PLACING OF ALL REINFORCED CONCRETE INCLUDING BATCH PLANT INSPECTION.

XII. DESIGN CRITERIA

1. APPLICABLE CODE: 2022 CALIFORNIA [BUILDING CODE
2. FOUNDATIONS HAVE BEEN DESIGNED WITH THE FOLLOWING CRITERIA:
   A. INDIVIDUAL SPREAD FOOTINGS:
      a. ALLOWABLE SOIL PRESSURE FOR DL + LL = 1,500 PSF
      b. ALLOWABLE SOIL PRESSURE FOR DL + LL + EQ = 2,000 PSF
3. GRAVITY LOADS:
   A. DEAD LOADS - VARY BASED ON ACTUAL BUILDING AND EQUIP OPERATING WEIGHTS
   B. LIVE LOADS:
      a. ROOF 20 PSF (REDUCIBLE)
4. LATERAL/SEISMIC FORCE RESISTING SYSTEM (SFRS): WOOD SHEAR WALLS
5. SEISMIC DESIGN:
   A. SEISMIC RESPONSE COEFFICIENT: Cs= 0.270 (ASD)
   B. DESIGN BASE SHEAR (ASD):
      V = C(S) * RHO * W = 0.385W
      WHERE: R= 6.5 FOR WOOD - LIGHT-FRAMED WALLS WITH STRUCTURAL PANEL
      SS= 1.925
      S1= 0.600
      SDS= 1.540
      SEISMIC IMPORTANCE FACTOR (IE): 1.25
      RISK CATEGORY: III
      SITE CLASS: D
      SEISMIC DESIGN CATEGORY: D
      RHO= 1.3 (NORTH-SOUTH), 1.3 (EAST-WEST)
   C. ANALYSIS PROCEDURE: FLEXIBLE DIAPH ANALYSIS
   D. BASE LEVEL USED IN ANALYSIS: GROUND
   E. STRUCTURAL IRREGULARITIES: RE-ENTRANT CORNER
6. WIND DESIGN:
   A. BASIC WIND SPEED V (ULTIMATE): 99 MPH
   B. WIND EXPOSURE: C
   C. RISK CATEGORY: III
   D. INTERNAL PRESSURE COEFFICIENT: GCPI = +/- 0.18
7. DESIGN TEAM

JASON SCANLAN	PROJECT PRINCIPAL
KIM BOCANEGRA	LEAD ENGINEER
ALEX ORLANDO	DESIGNER
GEORGE GUEVARRA	PROJECT CAD/BIM SPECIALIST

XIII. VOLUNTARY SEISMIC UPGRADES

1. THE FOLLOWING ITEMS HAVE BEEN SELECTED TO BE STRENGTHENED TO MEET THE REQUIREMENTS OF ASCE 7-16 ON A VOLUNTARY BASIS TO :
   A. NEW SHEAR WALL AT KITCHEN
   B. STRENGTHENING OF COLLECTORS AT THE NORTH AND SOUTH WALLS AT THE KITCHEN LOW ROOF

ONE-HALF INCH = ONE FOOT 0 6 1
ONE AND ONE-HALF INCH = ONE FOOT 0 6 1
ONE INCH = ONE FOOT 0 6 1
THREE-QUARTERS INCH = ONE FOOT 0 6 2
ONE-EIGHTH INCH = ONE FOOT 0 4 8 16
ONE-QUARTER INCH = ONE FOOT 0 4 8 16
ONE-SIXTEENTH INCH = ONE FOOT 0 4 8 16 32
ONE INCH = TWENTY FEET 0 5 10 20 40 60 80

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121540 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 3/28/2025

AGENCY APPROVAL

EL DORADO MIDDLE SCHOOL
MULTI-PURPOSE BUILDING UPGRADES
1750 WEST ST., CONCORD, CA 94521

MT. DIABLO UNIFIED SCHOOL DISTRICT

REGISTERED STRUCTURAL ENGINEER
JASON THOMAS SCANLAN
No. 5393
STATE OF CALIFORNIA
3/13/25

Degenkolb
DEGENKOLB ENGINEERS
375 Beale Street, Suite 500
San Francisco, CA 94105
415.392.6952 PHONE
www.degenkolb.com
DE Job Number: C3A85007.00

CONSULTANT
nacht&lewis
600 Q Street, Suite 100
Sacramento, CA 95811
www.nachtlewis.com
916.329.4000

ARCHITECT

DSA SUBMITTAL

REVISIONS

NO.	DESCRIPTION	DATE

DATE 03/14/2025
JOB NO. Y2119.00
SHEET TITLE
GENERAL NOTES
SHEET NO.
S001

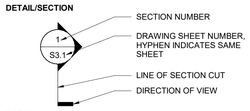
ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET

ABBREVIATIONS

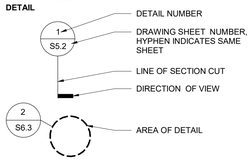
255			
(E)	EXISTING	JH	JOIST HANGER
#	NUMBER	JST,JSTS	JOIST, JOISTS
&	AND	JT	JOINT
@	AT		
Ø	DIAMETER OR ROUND	KO	KNOCK-OUT
fd	DEVELOPMENT LENGTH		
fdh	HOOK DEVELOPMENT LENGTH	L	ANGLE
fs	LAP SPLICE LENGTH	LEV	LEVEL
		LLH	LONG LEG HORIZONTAL
AA	ADHESIVE ANCHOR	LLV	LONG LEG VERTICAL
AB	ANCHOR BOLT	LOC	LOCATION
ABV	ABOVE	LONGIT	LONGITUDINAL
AC	ASPHALT CONCRETE	LP	LOW POINT
ADDL	ADDITIONAL	LT	LIGHT
ADJ	ADJACENT	LWC	LIGHTWEIGHT CONCRETE
AGGR	AGGREGATE		
ALT	ALTERNATE	MAX	MAXIMUM
ALUM	ALUMINUM	MB	MACHINE BOLT
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	MECH	MECHANICAL
APPROX	APPROXIMATE	MEP	MECHANICAL, ELECTRICAL, PLUMBING DOCUMENTS
AR	ANCHOR ROD	MEZZ	MEZZANINE
ARCH	ARCHITECTURAL / ARCHITECT	MF	MOMENT FRAME
ASPH	ASPHALT	MFR	MANUFACTURER
ASTM	AMERICAN SOCIETY for TESTING and MATERIALS	MIN	MINIMUM
AWG	AMERICAN WIRE GAUGE	MISC	MISCELLANEOUS
		MTD	MOUNTED
B. O.	BOTTOM OF	MTL	METAL
BF	BOTH FACES		
BF	BRACED FRAME	NF	NEAR FACE
BLDG	BUILDING	NIC	NOT IN CONTRACT
BLK, BLKG	BLOCK OR BLOCKING	NOM	NOMINAL (DIAMETER)
BLW	BELOW	NS	NEAR SIDE
BM, BMS	BEAM, BEAMS	NTS	NOT TO SCALE
BN	BOUNDARY NAILING	NWC	NORMAL WEIGHT CONCRETE
BOF	BOTTOM OF FOOTING		
BOT	BOTTOM	OBF	ORDINARY BRACED FRAMES
BRBF	BUCKLING RESTRAINED BRACE FRAME	OC	ON CENTER
BRG	BEARING	OD	OUTSIDE DIAMETER
BS	BOTH SIDES	OPH	OPPOSITE HAND
BSMT	BASEMENT	OPNG	OPENING
BTWN	BETWEEN	OPP	OPPOSITE
BW	BOTH WAYS		
		P-T	POST-TENSION
C	CHANNEL	PC, PCS	PIECE, PIECES
CIP	CAST IN PLACE	PCC	PRECAST CONCRETE
CJ	CONSTRUCTION JOINT	PERP	PERPENDICULAR
CJP	COMPLETE JOINT PENETRATION	PJP	PARTIAL JOINT PENETRATION
CL	CENTERLINE	PL	PLATE
CLG	CEILING	PLYWD	PLYWOOD
CLR	CLEAR	PT	PRESSURE TREATED
CMU	CONCRETE MASONRY UNIT	PTN	PARTITION
COL	COLUMN		
CONC	CONCRETE	R	RADIUS
CONN	CONNECTION	REBAR	REINFORCING BAR
CONSTR	CONSTRUCTION	REF	REFERENCE
CONT	CONTINUOUS	REINF	REINFORCING
CSK	COUNTERSINK	REQD	REQUIRED
CTR	CENTER	REV	REVISION
		RFG	ROOFING
d	PENNY (NAIL SIZE)	RO	ROUGH OPENING
DBA	DEFORMED BAR ANCHOR	RSJ	ROLLED STEEL JOIST
DBL	DOUBLE		
DEMO	DEMOLITION	S.A.D.	SEE ARCHITECTURAL DOCUMENTS/DRAWINGS
DET, DETS	DETAIL, DETAILS	S.M.D.	SEE MECHANIAL DRAWINGS
DIA, DIAM	DIAMETER	SCHED	SCHEDULE
DIAG	DIAGONAL	SECT	SECTION
DIM, DIMS	DIMENSION, DIMENSIONS	SEOR	STRUCTURAL ENGINEER OF RECORD
DIST	DISTANCE	SFRS	SEISMIC FORCE RESISTING SYSTEM
DK, DKG	DECK OR DECKING	SHT	SHEET
DN	DOWN	SHTG	SHEATHING
DO	DITTO	SIM	SIMILAR
DP	DEEP	SL	SLOPE
DS	DIAGONAL SHEATHING	SMF	SPECIAL MOMENT FRAME
DSA	DIVISION OF THE STATE ARCHITECT	SMS	SHEET METAL SCREW
DWG, DWGS	DRAWING, DRAWINGS	SOG	SLAB ON GRADE
DWL, DWLS	DOWEL, DOWELS	SP	STRUCTURAL PLYWOOD
		SPEC, SPECS	SPECIFICATION, SPECIFICATIONS
EA	EACH	SPSW	SPECIAL PLATE SHEAR WALL
EBF	ECCENTRIC BRACE FRAME	SQ	SQUARE
EF	EACH FACE	SS	STAINLESS STEEL
EJ	EXPENSION JOINT	STAG	STAGGER or STAGGERED
EL	ELEVATION	STD	STANDARD
ELEC	ELECTRICAL	STIF	STIFFENER
ELEV	ELEVATOR	STIR	STIRRUP OR STIRRUPS
EMBED	EMBEDMENT	STL	STEEL
EN	EDGE NAILING	STRUCT	STRUCTURAL
EOS	EDGE OF SLAB	SUB	SUBSTITUTE
EQ	EQUAL	SUSP	SUSPENDED
EQUIP	EQUIPMENT	SYMM	SYMMETRICAL
ES	EACH SIDE		
EW	EACH WAY	T&B	TOP AND BOTTOM
EXCAV	EXCAVATION	T&G	TONGUE and GROOVE
EXP	EXPANSION	T.O.	TOP OF
EXT	EXTERIOR	THK	THICK
		THRD	THREADED
FDN	FOUNDATION	THRU	THROUGH
FF	FAR FACE	TN	TOE NAIL
FIN	FINISH	TOC	TOP OF CONCRETE
FLG	FLANGE	TOF	TOP OF FOOTING
FLR, FLRS	FLOOR, FLOORS	TOS	TOP OF STEEL
FN	FIELD NAILING	TOW	TOP OF WALL
FO	FACE OF	TR	TREAD
FOC	FACE OF CONCRETE	TYP	TYPICAL
FOS	FACE OF STUD		
FP	FIREPROOF	UON	UNLESS OTHERWISE NOTED
FRMG	FRAMING	URM	UNREINFORCED MASONRY
FS	FAR SIDE		
FT	FOOT OR FEET	VENT	VENTILATE
FTG, FTGS	FOOTING, FOOTINGS	VERT, (V)	VERTICAL
		VIF	VERIFY IN FIELD
GA	GAUGE		
GALV	GALVANIZED	W or WF	WIDE FLANGE
GL	GLU-LAM	W/	WITH
GLB	GLU-LAM BEAM	W/O	WITHOUT
GR	GRADE	WD	WOOD
GRND	GROUND	WP	WORK POINT
GYP	GYPSUM	WS	WOOD SCREW
		WT	WEIGHT/TEE SECTION
HDG	HOT DIPPED GALVANIZED	WWM	WELDED WIRE MESH
HDR	HEADER		
HK, HKS	HOOK, HOOKS	X HVY	EXTRA HEAVY
HORIZ, (H)	HORIZONTAL	X STR	EXTRA STRONG
HP	HIGH POINT	XX HVY	DOUBLE EXTRA HEAVY
HSB	HIGH STRENGTH BOLTS	XX STR	DOUBLE EXTRA STRONG
HSS	HOLLOW STRUCTURAL SECTION		
HT	HEIGHT		
ID	INSIDE DIAMETER/DIMENSION		
INFO	INFORMATION		

REFERENCE SYMBOLS

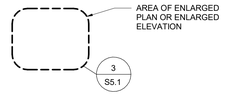
DETAIL/SECTION



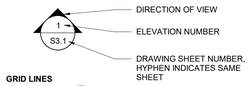
DETAIL



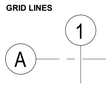
DETAIL PLAN OR ELEVATION



SINGLE ELEVATION



GRID LINES



LEVEL LINE



WORK POINT



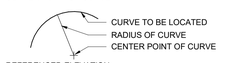
REVISION



KEY NOTE



CENTER POINT OF CURVE



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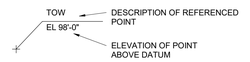
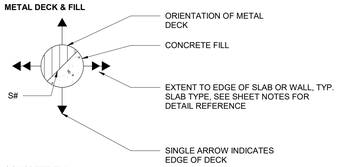
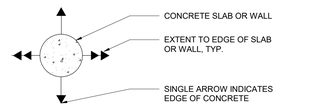


PLAN SYMBOLS

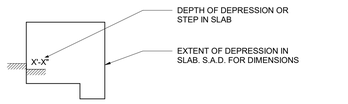
METAL DECK & FILL



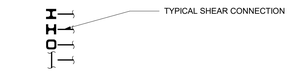
CONCRETE FILL



FLOOR DEPRESSIONS



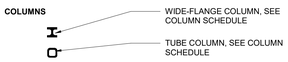
SHEAR CONNECTIONS



MOMENT CONNECTIONS



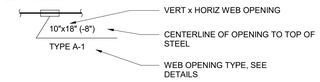
COLUMNS



BEAM-BEAM MOMENT CONNECTION



BEAM PENETRATIONS



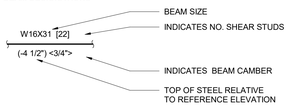
SLAB OPENING



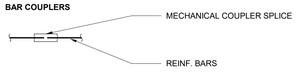
BRACED FRAME OR DIAGONAL BRACE



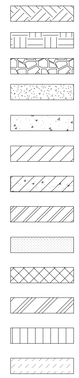
BEAM DESIGNATIONS



BAR COUPLERS



MATERIAL SYMBOLS



S002_01 Drawing List	
Sheet Number	Sheet Name
S001	GENERAL NOTES
S002	SYMBOLS AND ABBREVIATIONS
S003	TYPICAL FOUNDATION DETAILS
S004	TYPICAL WOOD FRAMING DETAILS
S005	TYPICAL RENOVATION DETAILS
S111	FOUNDATION PLAN
S121	ROOF FRAMING PLAN
S131	SHEAR WALL SECTIONS & PARTIAL CEILING FRAMING PLAN
S400	DETAILS

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APP: 01-121540 INC:
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SS ☑ FLS ☑ ACS ☑
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NO.	DESCRIPTION	DATE

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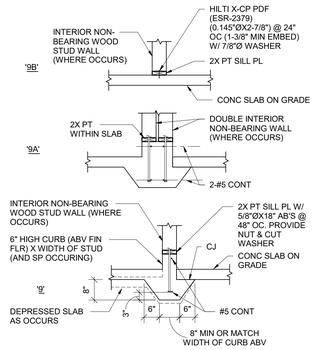
SHEET TITLE

SYMBOLS AND ABBREVIATIONS

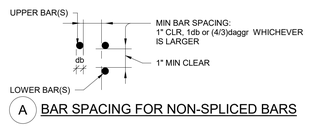
SHEET NO.

S002

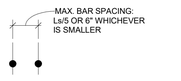
ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET



9 NON-STRUCTURAL SILL PLATE
1/2" = 1'-0"



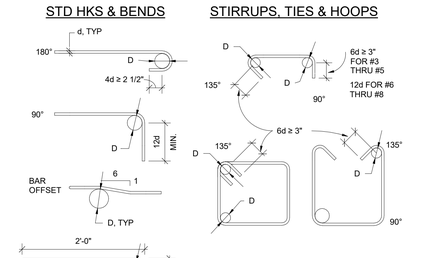
A BAR SPACING FOR NON-SPLICED BARS



NOTE: PROVIDE LOCATIONS OF NON-CONTACT SPLICES TO SEOR FOR APPROVAL

B BAR SPACING FOR BARS SPLICED WITH A NON-CONTACT LAP

5 SPACING IN CONCRETE
1" = 1'-0"



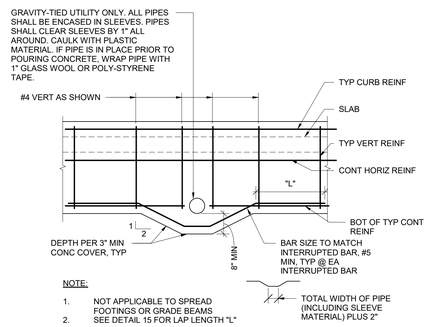
NOTE:
1. DO NOT FIELD BEND REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE.

BEND DIAMETER, D

BAR SIZE	STD HKS & BENDS	STIRRUPS, TIES & HOOPS
#3 THRU #5	6d	4d
#6 THRU #8	6d	6d
#9 THRU #11	8d	NA
#14 THRU #18	10d	NA

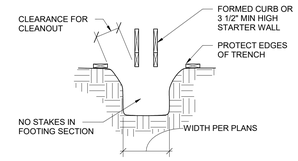
1 HOOKS & BENDS
1" = 1'-0"

10 NOT USED
1" = 1'-0"

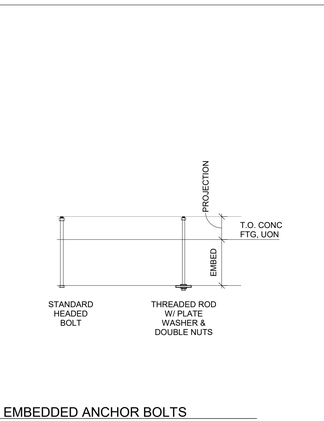


NOTE:
1. NOT APPLICABLE TO SPREAD FOOTINGS OR GRADE BEAMS
2. SEE DETAIL 15 FOR LAP LENGTH "L"

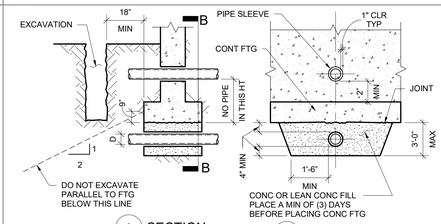
6 GRAVITY TIED UTILITY THRU FOOTING
1/2" = 1'-0"



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



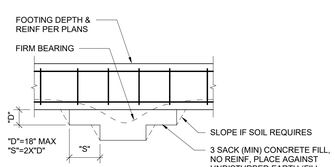
11 EMBEDDED ANCHOR BOLTS
3/4" = 1'-0"



A SECTION B ELEVATION

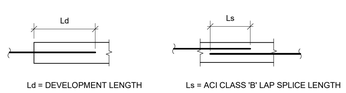
NOTES:
1. REINFORCE OPENINGS FOR SLEEVES OR GROUPS OF SLEEVES LARGER THAN 10" PER THE TYP WALL OPNG DET "GROUPS" OF SLEEVES INCLUDES ALL SLEEVES SPACED CLOSER THAN ONE DIAMETER CLR
2. SEE MECH & CIVIL DWGS FOR ADDL REQUIREMENTS AT SLEEVES.
3. DEPTH OF FOOTING MAY BE DETERMINED BY LOCATION OF PIPES. CONSULT WITH MECH CONTRATOR TO DETERMINE EXACT DEPTH.
4. SLEEVE @ PIPE ONLY, CONDUIT MAY BE CAST DIRECTLY INTO CONCRETE.
5. PIPES AND CONDUIT MUST BE ALIGNED PERPENDICULAR TO FOOTINGS
6. NO PIPES OR CONDUIT ALLOWED THRU OR UNDER SPREAD FOOTINGS.
7. 4" < D < 3'-0". IF D > 3'-0", STEEL PIPE / CONDUIT OK IN TRENCH W/ COMPACTED BACKFILL UNDER TYP FTG. IF PLASTIC, PROVIDE 10'-0" LONG STEEL PIPE SLEEVE CENTERED UNDER FOOTING.
8. WHERE GRAVITY TIED LINE INTERRUPTS BOT CONT HORIZ BAR OF TYP LINE FTG, SEE 6/S003
9. 3 DIAMETER MINIMUM CENTER-TO-CENTER SPACING BETWEEN ADJACENT PIPES (CONDUITS).
10. PIPES MUST BE LOCATED ENTIRELY WITHIN SUBGRADE.

7 PIPE & TRENCH PENETRATIONS AT WALL FOOTING
1" = 1'-0"



3 FOOTING AT SOFT POCKET & AT ADJACENT UTILITIES
1/2" = 1'-0"

BAR SIZE	ℓd OR ℓs	f'c = 3000 psi (NWC)				f'c = 4000 psi (NWC)			
		TOP BARS		OTHER BARS		TOP BARS		OTHER BARS	
		CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2	CASE 1	CASE 2
#3	ℓd	23	33	17	25	20	29	15	22
	ℓs	30	43	23	33	26	38	20	29
#4	ℓd	29	43	22	33	25	38	19	29
	ℓs	38	56	29	43	33	50	25	38
#5	ℓd	37	55	28	42	32	47	24	36
	ℓs	49	72	37	55	42	62	32	47
#6	ℓd	43	65	33	50	38	56	29	43
	ℓs	56	85	43	65	50	73	38	56



Ld = DEVELOPMENT LENGTH

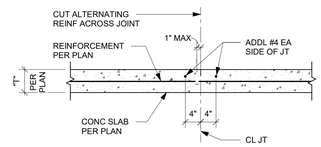
Ls = ACI CLASS 'B' LAP SPLICE LENGTH

NOTES:
1. TABULATED VALUES ARE BASED ON GRADE 60 REINFORCING BARS. FOR GRADE 75 REINFORCING BARS, MULTIPLY THE ABOVE LENGTHS BY 1.25.
2. CASES 1 AND 2 DEPEND ON THE TYPE OF STRUCTURAL MEMBER, CONCRETE COVER, AND CENTER-TO-CENTER SPACING OF THE BARS. THEY ARE DEFINED IN THE FOLLOWING TABLE, WHERE "db" IS BAR DIAMETER:

BEAMS, COLUMNS, GRADE BEAMS	CASE 1	CONCRETE COVER AT LEAST 1.0db AND CENTER LINE TO CENTER LINE SPACING AT LEAST 2.0db.
	CASE 2	CONCRETE COVER LESS THAN 1.0db OR CENTER LINE TO CENTER LINE SPACING LESS THAN 2.0db.
ALL OTHERS	CASE 1	CONCRETE COVER AT LEAST 1.0db AND CENTER LINE TO CENTER LINE SPACING AT LEAST 3.0db.
	CASE 2	CONCRETE COVER LESS THAN 1.0db OR CENTER LINE TO CENTER LINE SPACING LESS THAN 3.0db.

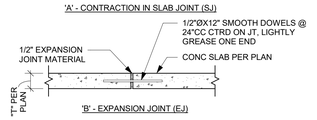
3. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12 INCHES OF CONCRETE CAST BELOW THE BARS.
4. TENSION LAP SPLICES NOT ALLOWED FOR #14 AND #18 BARS.
5. MULTIPLY THE ABOVE LENGTHS BY 1.5 FOR EPOXY COATED REINFORCEMENT.
6. FOR LIGHTWEIGHT AGGREGATE CONCRETE, MULTIPLY THE TABULATED VALUES BY 1.33.
7. Ld = DEVELOPMENT LENGTH.
8. WHEN SPLICING BARS OF DIFFERENT SIZES, USE THE GREATER OF Ld OF THE LARGER BAR AND Ls OF THE SMALLER BAR.

15 REINFORCEMENT DEVELOPMENT & SPLICE LENGTHS
N.T.S.



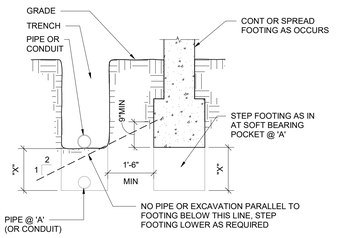
1. FORM WEAKENED-PLANE CONTRACTION JOINTS, SECTIONING CONCRETE INTO AREAS AS INDICATED (SEE SPECIFICATIONS FOR AREA LIMITATIONS).
2. CONSTRUCT CONTRACTION JOINTS FOR A DEPTH EQUAL TO AT LEAST ONE-FOURTH OF CONCRETE THICKNESS (ONE-INCH MIN). FORM CONTRACTION JOINTS WITH POWER SAWS EQUIPPED WITH SHATTERPROOF ABRASIVE OR DIAMOND-RIMMED BLADES. CUT 1/8-INCH WIDE JOINTS INTO CONCRETE WHEN CUTTING ACTION WILL NOT TEAR, ABRADE, OR OTHERWISE DAMAGE SURFACE AND BEFORE CONCRETE DEVELOPES RANDOM CONTRACTION CRACKS: TIME FRAME: ONE TO FOUR HOURS AFTER LAST TROWEL IS PULLED OFF. CONTRACTOR SHALL SCHEDULE CONCRETE PLACEMENT SO THAT CUTS ARE MADE THE SAME DAY. NO SAW CUTTING IS PERMITTED FOR SLABS THAT HAVE BEEN ALLOWED TO SIT OVERNIGHT. WHEN SAW CUTTING SLABS WITHIN THE REQUIRED TIME FRAME WILL NOT BE POSSIBLE, SLAB JOINTS WITH 26GA (MIN THICKNESS) TONGUE AND GROOVE STEEL SHAPE SHALL BE PROVIDED.

'A' - CONTRACTION IN SLAB JOINT (SJ)



'B' - EXPANSION JOINT (EJ)

8 SLAB JOINTS
3/4" = 1'-0"



NOTE:

"X" = DIMENSION FOOTING IS TO BE LOWERED FOR UTILITY TO BE ABOVE THE ZONE OF INFLUENCE.

4A .4 TRENCH PARALLEL TO FOOTING
1/2" = 1'-0"

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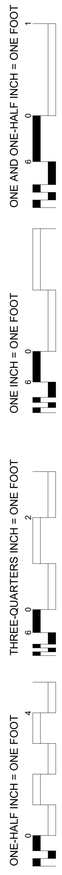
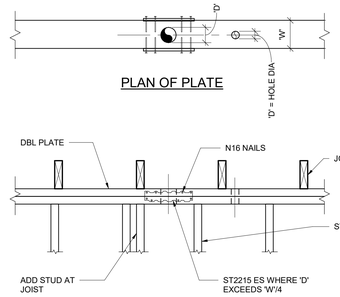
SHEET TITLE

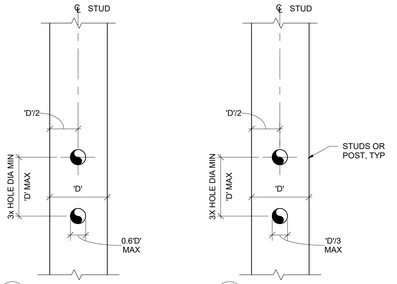
TYPICAL FOUNDATION DETAILS

SHEET NO.
S003



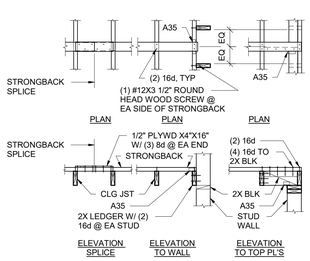


17 TOP PLATE HOLE
1" = 1'-0"



NOTES:
1. NOTCHING OF MEMBER IS NOT PERMITTED.
2. DO NOT PLACE HOLES IN MEMBERS WITH HOLDOWN ANCHORS.

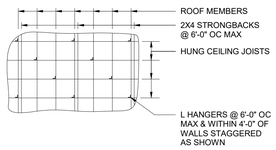
18 HOLES AND NOTCHES IN STUDS OR POSTS
1" = 1'-0"



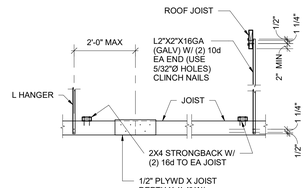
NOTE:

PROVIDE 2X4 STRONGBACKS AT 6'-0" OC MAX, TYP @ ALL CLGS UON

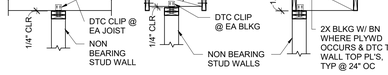
19 STRONGBACK CONNECTIONS
1/2" = 1'-0"



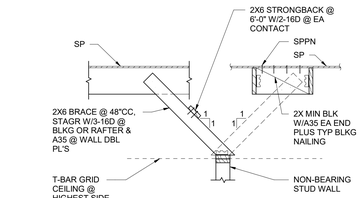
20 ANGLE HANGER LAYOUT
1/2" = 1'-0"



21 ANGLE CEILING JOIST HANGERS
1/2" = 1'-0"



13 NON-BEARING WALL TO JOISTS
1/2" = 1'-0"

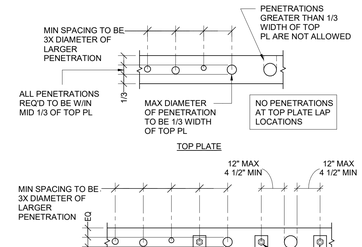


14 PARTIAL HEIGHT STUD WALL @ T-BAR CEILING
1/2" = 1'-0"

JOIST SIZE	HANGER
2x4	LUS24
2x6, 8	LUS26
2x10,12,14	LUS210
3x8	HU38
3x10	HU310
3x12	HU312
4x6	HUS46
4x8	HUS48
4x10	HUS410
4x12	HUS412
6x8	HU68 MAX
6x10	HU610 MAX
6x12	HU612 MAX

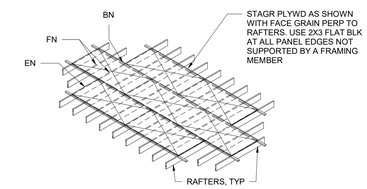
NOTES:
1. FILL ALL HOLES IN HANGER WITH NAILS, UNO. USE NAIL SIZE & TYPE AS SPECIFIED IN CATALOG.
2. USE SIMPSON HANGERS, OR APPROVED EQUAL.
3. WHERE DOUBLE JOISTS OCCUR, USE SIMILAR "LUS", "HU" OR "HUS" HANGER.
4. AT ANGLED CONNECTIONS, USE SKEWED JOIST HANGERS CONFORMING WITH TABLE, TYP UNO.

15 JOIST HANGER SCHEDULE
1/2" = 1'-0"



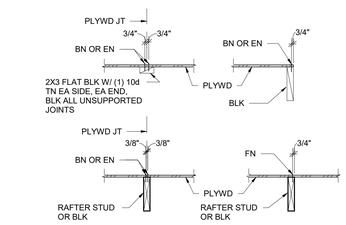
NOTES:
1. BORED HOLES IN STUDS & WALL PL'S NOT EXCEEDING ONE THIRD OF THE STUD OR PL WIDTH SHALL BE LOCATED ON THE CENTER-LINE OF THE MEMBER BEING PENETRATED & AT A MINIMUM SPACING OF 12" & 12" FROM END OF STUD OR WALL PL. BORED HOLES AT STUDS TO OCCUR @ 3 MAX CONSECUTIVE STUDS. ANY OTHER CONDITIONS REQUIRING HOLES MUST BE SPECIFICALLY DETAILED ON THE CONTRACT DOCUMENTS. CONTACT THE SEOR. IF DETAIL IS REQUIRED & PROVIDE SKETCH OF PROPOSED PENETRATION INDICATING SIZE AND LOCATION OF HOLE.
2. NOTCHES IN STRUCTURAL MEMBERS ARE NOT ALLOWED.

16 HOLES THRU STRUCTURAL MEMBERS
1/2" = 1'-0"

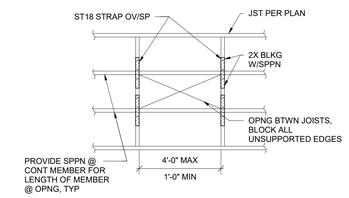


NOTES:
1. ALL ROOF SHTG TO BE STRUCT 1 CDX; 5 PLY MIN PANEL INDEX 32/16, USE 5/8" THK PLYWD TYP, UON. AT SLOPED WOOD FRAMED ROOFS WHERE ARCH METAL ROOFING OCCURS, USE 5/8" THK PLYWD.
2. USE BN OF 10d @ 6" OC OR AS OTHERWISE INDICATED ON PLANS AT ALL PANEL EDGES, SHEAR WALLS, TIES & BLKG. FN TO ALL INTERIOR BEARINGS W/ 10d @ 12" OC. DO NOT BREAK ANY FACE PLYS W/ NAIL HEADS. THE MIN EDGE DISTANCE FOR NAILS SHALL BE 3/8" IN THE PLYWD & IN THE RECEIVING MEMBER.
3. MINIMUM DIMENSION OF ROOF SHEATHING IN ANY DIRECTION SHALL BE 24".

8 CONVENTIONAL ROOF / FLOOR SHEATHING LAYOUT
1/2" = 1'-0"

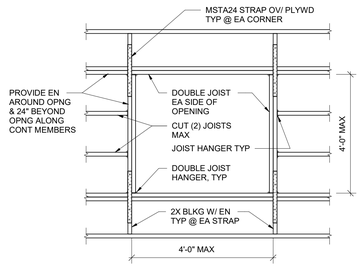


9 PLYWOOD NAILING
1/2" = 1'-0"



(FOR OPENINGS LESS THAN 1'-0", STRAPS NOT REQUIRED)

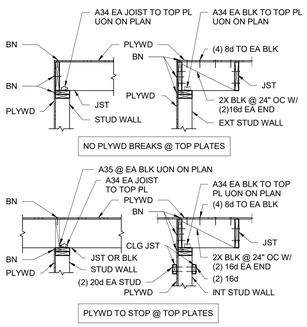
10 ROOF OPENING
1/2" = 1'-0"



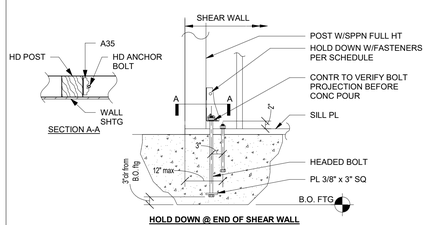
NOTE:

STRAPS ARE REQ'D FOR ANY OPNG GREATER THAN 20" SQ

11 ROOF/CEILING OPENINGS
1/2" = 1'-0"



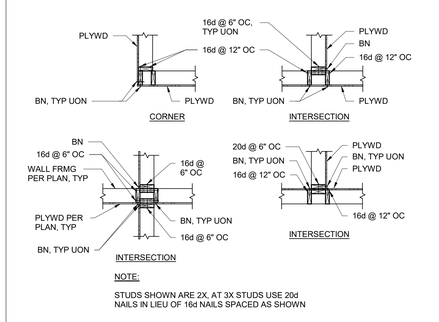
12 SHEAR WALL FRAMING TO JOISTS
1/2" = 1'-0"



SIMPSON HD NO	FASTENER (NO. & TYPE)	HOLDOWN BOLT (DIA)	MIN POST REQD, UNO (MATCH STUD WIDTH)
HDU8	(20)-¼x2½ SDS	7/8"ø	6x

NOTE
1. HD'S DO NOT SUBSTITUTE FOR SILL BOLTS.
2. INSTALL HDS PER SIMPSON'S CATALOG EXCEPT ABOVE DETAILED ANCHOR BOLTS AS REQD.
3. FOR SHEAR WALL NAILING, SEE SHEAR WALL SCHEDULE

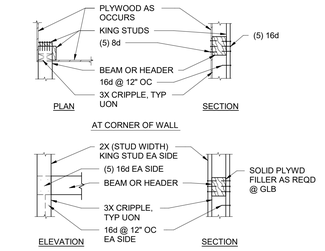
5 HOLDOWN SCHEDULE
3/4" = 1'-0"



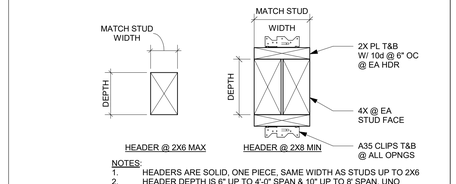
NOTE:

STUDS SHOWN ARE 2X, AT 3X STUDS USE 20d NAILS IN LIEU OF 16d NAILS SPACED AS SHOWN

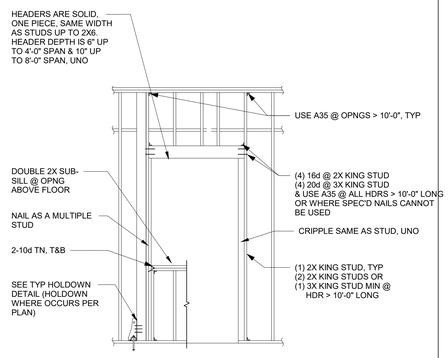
6 SHEATHED STUD WALL FRAMING DETAILS
1/2" = 1'-0"



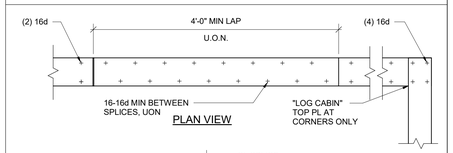
7 BEAM OR HEADER TO WALL
1/2" = 1'-0"



NOTES:
1. HEADERS ARE SOLID, ONE PIECE, SAME WIDTH AS STUDS UP TO 2X6
2. HEADER DEPTH IS 6" UP TO 4'-0" SPAN & 10" UP TO 8' SPAN, UNO

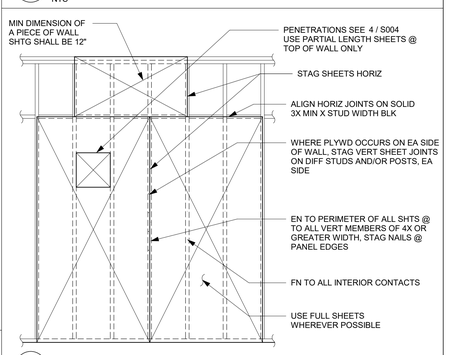


1 FRAMED INTERIOR WALL OPENINGS
NTS

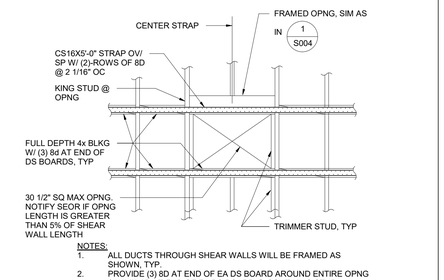


NOTES:
1. SEE PLAN FOR LOCATION.
2. SPLICES TO OCCUR ONLY OVER CENTER LINE OF STUD.
3. WHEN UPPER PL IS A 3X OR GREATER, NAIL UPWARD THRU BOTTOM 2X PL
4. NOTCHING OR DRILLING OF HEAVY TOP PLATES NOT PERMITTED WITHOUT PERMISSION OF ENGINEER.
5. (8) 16d BOX NAILS MIN EACH SIDE OF SPLICE, UON ON PLAN.

2 WALL PLATE SPLICE
NTS



3 SHEAR WALL SHEATHING
NTS



NOTES:
1. ALL DUCTS THROUGH SHEAR WALLS WILL BE FRAMED AS SHOWN, TYP.
2. PROVIDE (3) 8D AT END OF EA DS BOARD AROUND ENTIRE OPNG & W/ (3) 8D AT END OF EA DS BOARD @ CONT KING STUD.
3. BLOCKING & STRAPPING NOT REQUIRED @ HOLES THAT ARE CONTAINED W/IN ONE STUD BAY, NO BIGGER THAN 36 IN^2.
4. OPENINGS ON SHEAR WALLS NOT SHOWN ON THESE PLANS SHALL BE APPROVED BY SEOR AND DSA.

4 SHEAR WALL OPENING
1/2" = 1'-0"

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ARCHITECT
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REVISIONS

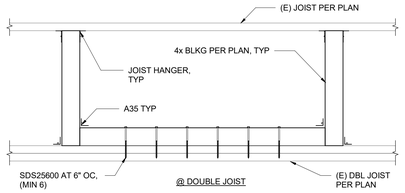
NO.	DESCRIPTION	DATE

DATE 03/14/2025
JOB NO. Y2119.00
SHEET TITLE

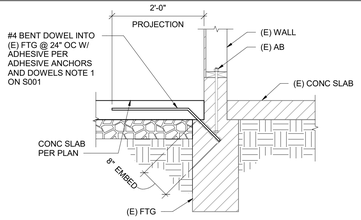
TYPICAL WOOD FRAMING DETAILS

SHEET NO.
S004

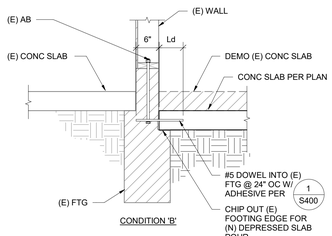
ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET



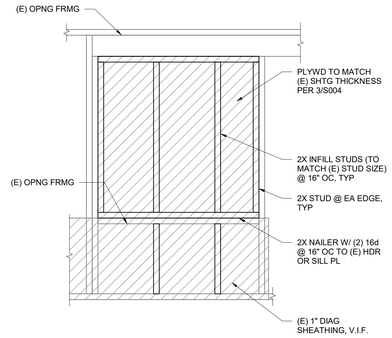
13 ALTERNATE BLKG CONNECTION AT (E) DBL JOIST
1" = 1'-0"



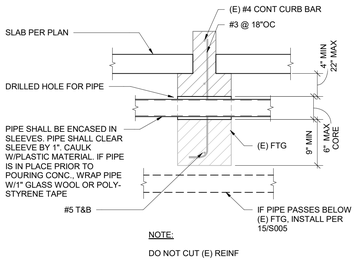
NOTE:
TYPICAL FOOTING & SLAB REINFORCEMENT NOT SHOWN FOR CLARITY



9 SLAB TO (E) FOOTING
3/4" = 1'-0"

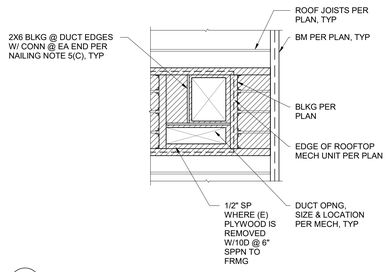


5 INFILL FRAMING AT (E) WINDOW
3/4" = 1'-0"

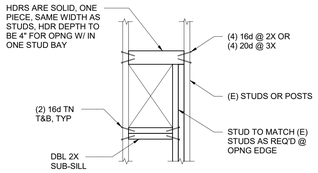


NOTE:
DO NOT CUT (E) REINF

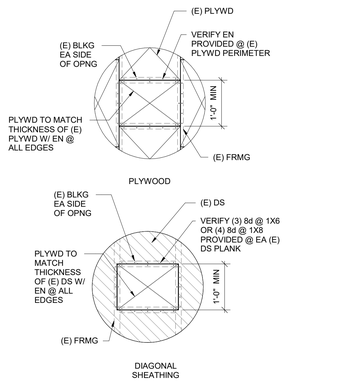
1 UTILITY THRU (E) FOOTING
3/4" = 1'-0"



14 PLYWOOD INFILL AT DUCT DROPS
1/4" = 1'-0"

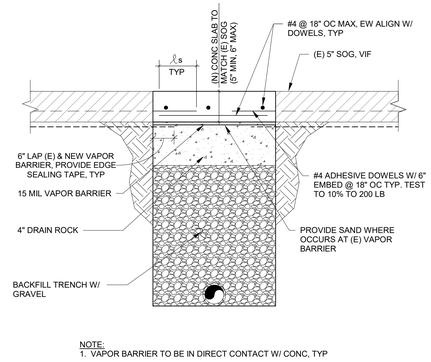


10 FRAMED WALL OPNG W/IN ONE (E) STUD BAY
3/4" = 1'-0"



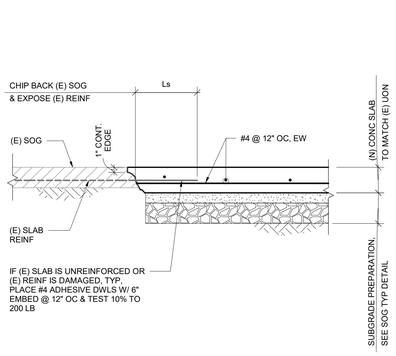
6 PLYWD INFILL @ (E) OPNG
3/4" = 1'-0"

2 NOT USED
1/2" = 1'-0"

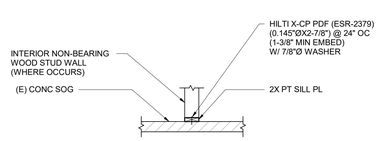


NOTE:
1. VAPOR BARRIER TO BE IN DIRECT CONTACT W/ CONC, TYP

15 TRENCH & SUBGRADE PREP
N.T.S.

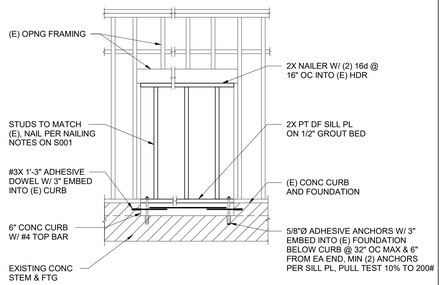


11 NEW SLAB ON GRADE TO EXISTING SLAB ON GRADE
1" = 1'-0"

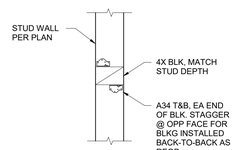


7 NON-STRUCTURAL SILL PLATE
1/2" = 1'-0"

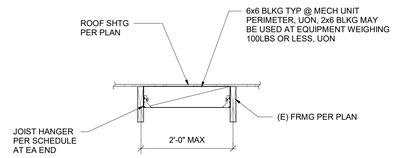
THIS DETAIL IS DESIGNED IN ACCORDANCE WITH CBC 1910A.5.3, EXEMPTION 2, WITH POST INSTALLED ANCHORS WHICH RESIST NO MORE THAN 100 LBS TENSION.



3 INFILL FRAMING WITH CURB
1/2" = 1'-0"

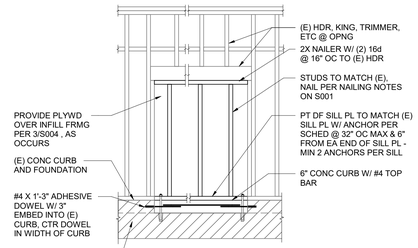


16 WALL BLOCKING AT STUDS
1" = 1'-0"



12 BLOCKING AT MEP
3/4" = 1'-0"

8 NOT USED
1/2" = 1'-0"



ANCHOR SCHEDULE		
LOCATION	ANCHOR	NOTES
EXT WALL OR INT STRUCT WALL	5/8"Ø EXPANSION ANCHOR PER S001	TORQUE TEST PER SCHED ON S001

4 INFILL FRAMING WITH CURB - SHEATHED WALL
1/2" = 1'-0"

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ARCHITECT
DSA SUBMITTAL

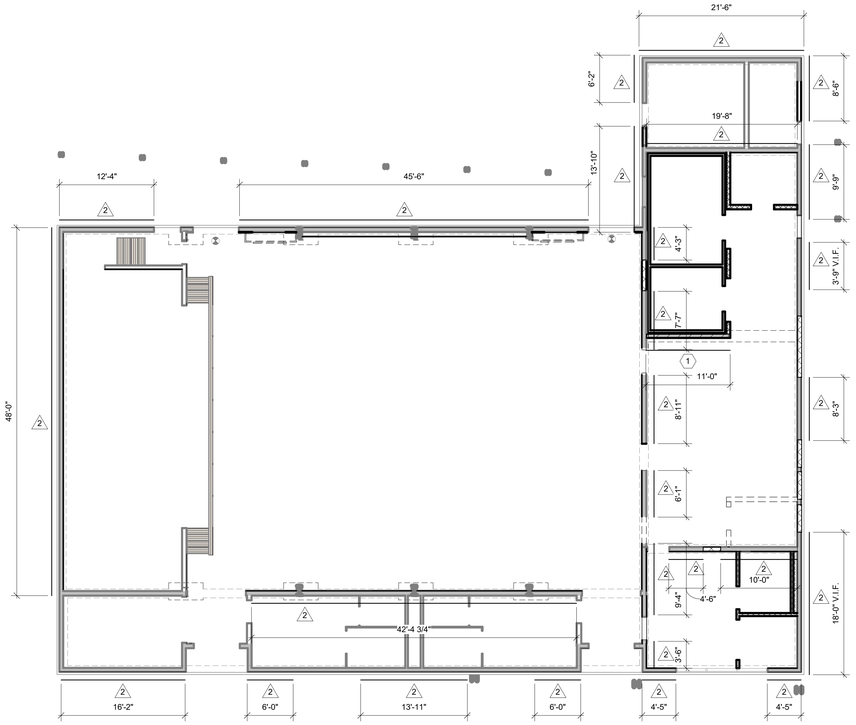
REVISIONS

NO.	DESCRIPTION	DATE

DATE 03/14/2025
JOB NO. Y2119.00
SHEET TITLE

TYPICAL RENOVATION DETAILS

SHEET NO.
S005



A SHEAR WALL DIAGRAM
1/8" = 1'-0"

SHEAR WALL LEGEND & NOTES

NOTES:

1. SHEAR WALLS WITHOUT ANY INDICATED EN SHALL BE 10d @ 6" OC.
2. WHERE PLYWD IS APPLIED ON BOTH SIDES OF WALL OR EN IS 3" OC OR LESS, PROVIDE 3X STUDS, 3X BLKG (4X BLKG @ HORIZ.JOINTS OF PLYWD WHERE PLYWD IS ON BOTH SIDES OF WALL), 3X TOP PLS AND 3X SILL PLS.
3. NAILS SHALL BE STAGGERED EA SIDE OF PLYWD JOINTS.
4. WHERE BOLT SPACING IS NOT SPECIFIED, USE 4'-0" OC.
5. SILL PL ANCHOR BOLTS SHALL BE 5/8"Ø X 12" LONG TYPICAL AND SHALL BE 5/8"Ø X 24" LONG @ RAISED CURBS, UON.
6. UPSET (ROLLED) THREADS ARE NOT PERMITTED.
7. AT 2X10 OR WIDER SILLS, STAGGER ANCHOR BOLTS.
8. WHERE PLYWD IS APPLIED ON BOTH FACES OF WALL, NAILS SHALL BE STAGGERED FROM EACH SIDE OF THE WALL.
9. AT 2X6 SILL PL, PROVIDE 3"X4 1/2"X0.229" STEEL PL WASHER AT EACH ANCHOR BOLT. AT 2X8 SILL PL PROVIDE 3"X6 1/2"X0.229" STEEL PL WASHER AT EACH ANCHOR BOLT. AT 2X10 OR WIDER SILL PL, USE SAME PL WASHER AS 2X6 SILL ON STAGGERED ABS. THE HOLE IN PL WASHER MAY BE DIAGONALLY SLOTTED WITH A WIDTH OF UP TO 3/16" LARGER THAN BOLT DIAMETER AND A SLOT LENGTH NOT TO EXCEED 1 3/4". WHEN USING SLOT, APPLY STANDARD CUT WASHER BETWEEN NUT AND PL WASHER.
10. PL WASHERS SHALL EXTEND TO WITHIN 1/2" OF THE EDGE OF THE SILL PL ON THE PLYWD SIDE.
11. DIMENSIONS SHOWN FOR EXISTING WALL PANELS ARE APPROXIMATE AND DIMENSIONS SHOWN FOR NEW WALL PANELS ARE MINIMUM.

SHEAR PANEL SCHEDULE

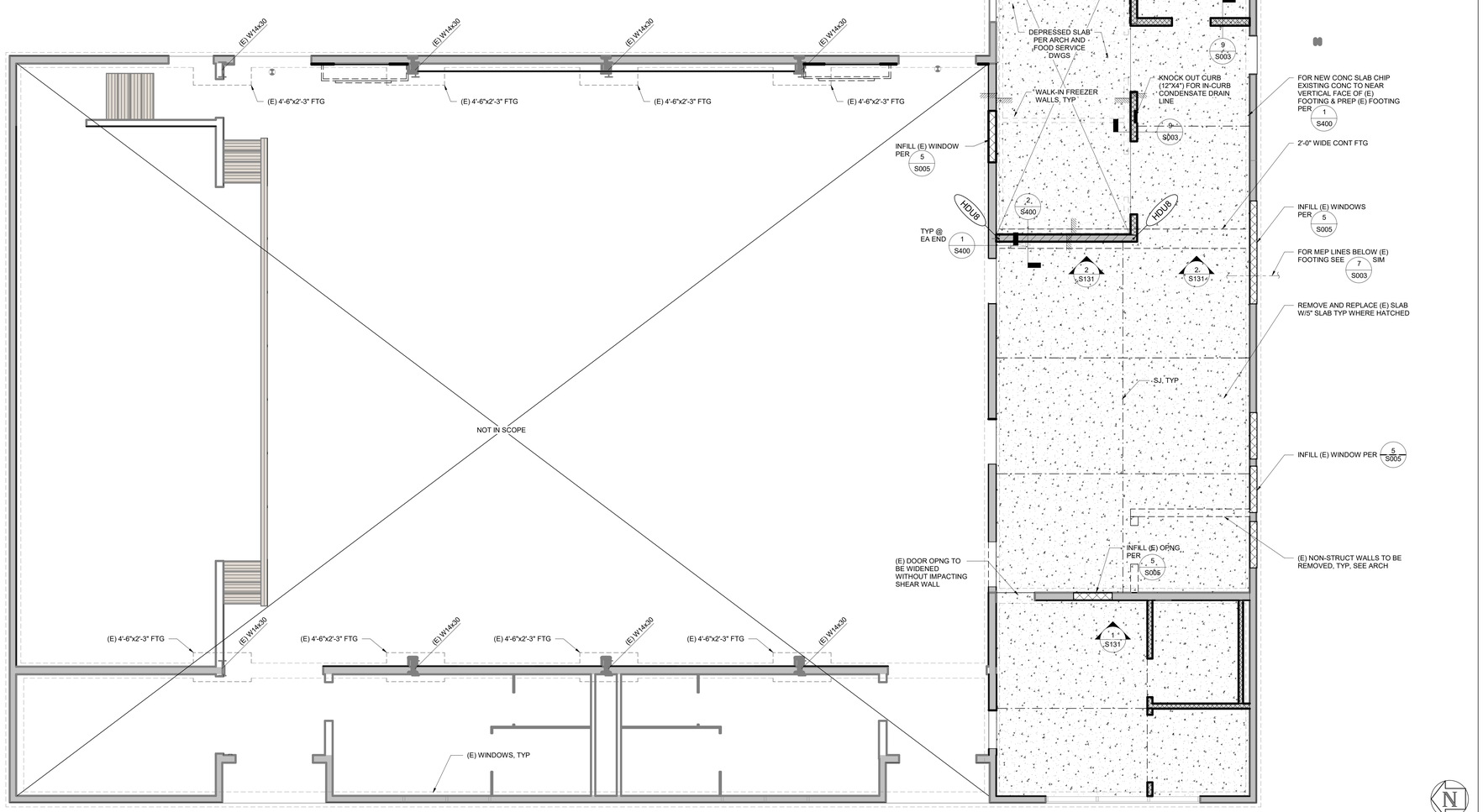
PANEL TYPE	SHEATHING	STITCH NAILING	EDGE NAIL	FIELD NAIL	SILL BOLT	FRAMING CLIPS
1	1/2" STRUCT 1	16d @ 4" OC	10d @ 4"	10d @ 12"	5/8"Ø @ 32" OC	HGA10KT W/4-1/4"X3" SDS @ 16"OC
2	(E) 1" DS SHEAR WALL PER DSA APP. #17654, SHEET S2	16d @ 12" OC	8d @ 6" 8d @ 4" @ SILL	8d @ 12"	5/8"Ø @ 48" OC	-

FOUNDATION PLAN LEGEND:

- (E) STRUCTURAL WALL ON CURB & LINE FTG
- STRUCTURAL WALL ON CURB & LINE FTG
- INFILL WALL FRAMING
- NON-STRUCTURAL WALL ON 6" CONC CURB
- NON-STRUCTURAL WALL W/O CURB
- (E) NON-STRUCTURAL WALL W/O CURB
- SLAB JOINT

FOUNDATION PLAN NOTES:

1. ALL EXISTING SLABS ARE 4" CONC W/#3 @ 18" OC EA WAY OVER 2" SAND AND 4" GRAVEL. ALL NEW INTERIOR SLABS TO BE 5" CONC W/ #4 @ 18" OC, EW OVER 15 MIL VAPOR BARRIER & 6" GRAVEL BASE.
2. SEE ARCH FOR SPECIAL DETAILS @ THRESHOLDS, METAL FRAMES, DEPRESSED SLABS, SLOPED SLABS, FLOOR DRAINS, ETC.
3. NEW STUD FRAMING SHALL BE: 2x6 @ 16" OC TO MATCH EXISTING UON.
4. EXTENT OF SLAB DEMOLITION IS DIAGRAMATIC IN NATURE AND SHALL BE COORDINATED WITH ARCH, MECH, ELET, PLUMB DRAWINGS.
5. ALL UTILITIES THAT IMPACT FOUNDATIONS MUST CONFORM TO THE STEPPED FOOTING DETAILS ON SHEET S003.
6. DEMOLITION SHALL NOT BEGIN UNTIL THE CONSTRUCTION DOCUMENTS HAVE BEEN APPROVED BY DSA.
7. REFER TO ORIGINAL CONSTRUCTION DRAWINGS [DSA APP NO.22980] FOR ADDITIONAL INFORMATION.
8. REFER TO SHEAR WALL DIAGRAM FOR LOCATIONS OF EXISTING AND NEW SHEARWALLS.



1 FOUNDATION PLAN
1/4" = 1'-0"

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FOUNDATION PLAN

SHEET NO.

S111

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET

ONE AND ONE-HALF INCH = ONE FOOT

ONE INCH = ONE FOOT

THREE-QUARTERS INCH = ONE FOOT

ONE-HALF INCH = ONE FOOT

ONE-QUARTER INCH = ONE FOOT

ONE-EIGHTH INCH = ONE FOOT

ONE-SIXTEENTH INCH = ONE FOOT

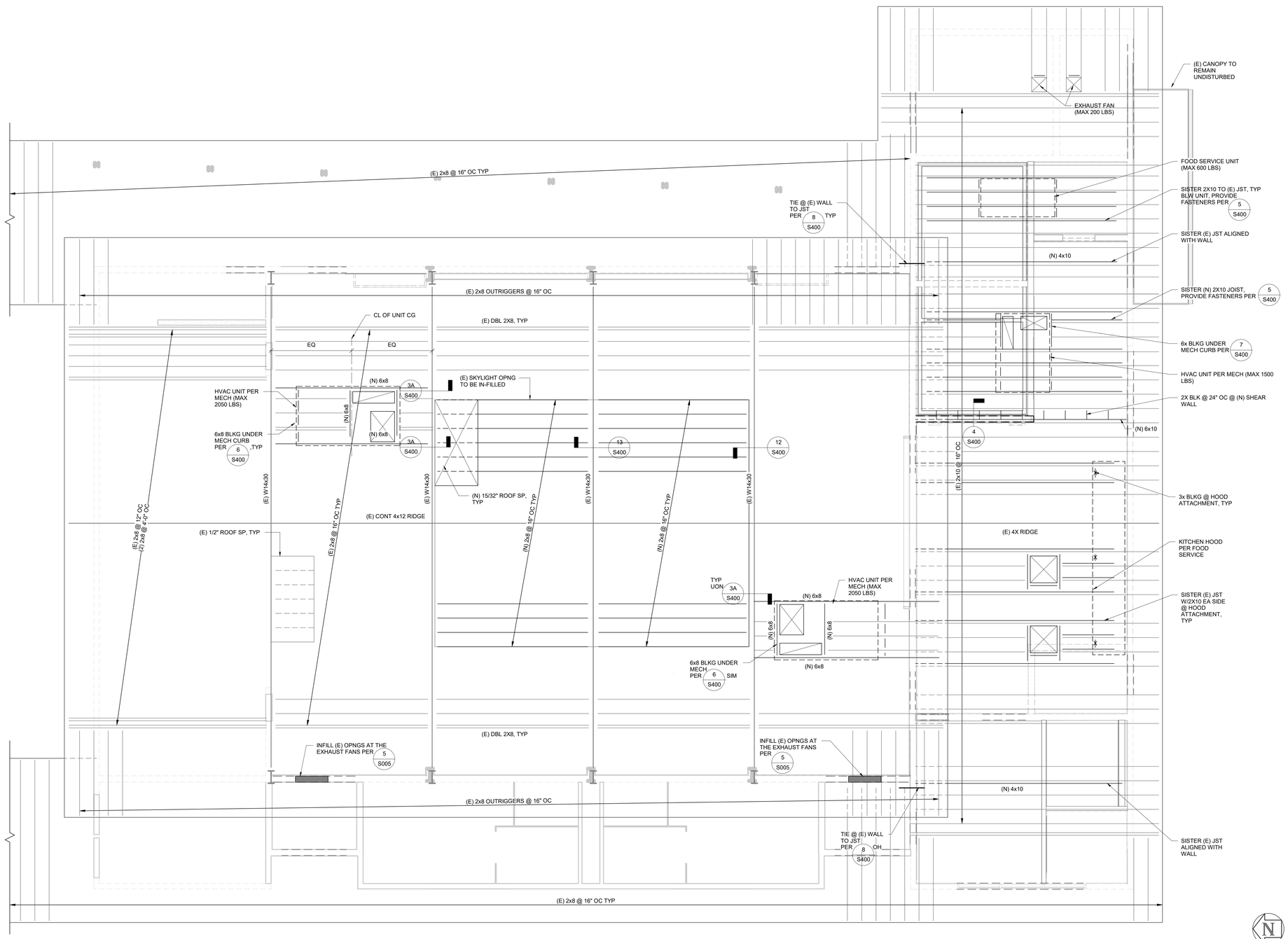
ONE INCH = TWENTY FEET

ROOF FRAMING PLAN LEGEND:

- (E) STRUCTURAL WALL EXTENDING TO ROOF LEVEL
- STRUCTURAL WALL EXTENDING TO ROOF LEVEL
- NON-STRUCTURAL WALL
- (E) JOIST OR BEAM
- JOIST OR BEAM
- (E) HEADER OR BEAM BELOW

ROOF FRAMING PLAN NOTES:

1. VERIFY AND COORDINATE ALL DIMENSIONS AND ELEVATIONS WITH ARCH DRAWINGS.
2. SEE MECHANICAL DRAWINGS FOR EXACT EQUIPTMENT LOCATIONS.
3. FOR ATTACHMENT OF NEW SISTER FRAMING TO EXISTING FRAMING SEE S/S400. ALL EXISTING FRAMING RECEIVING NEW SISTERED MATERIAL SHALL BE JACKED 1/2" AT MIDSPAN FROM ITS CURRENT DEFLECTED POSITION, UNLESS OTHERWISE NOTED ON PLANS. SISTER FRAMING SHALL BE INSTALLED AFTER REMOVING ALL ROOFIING MMATERIALS AND EQUIPMENT, AND PRIOR TO INSTALLING NEW ROOFING MATERIAL AND EQUIPMENT.
4. FRAMING HARDWARE IS FROM SIMPSON CATALOG C2024.
5. ALL NEW JOISTS, BEAMS, ETC. ARE TO HAVE FULL BEARING IN ALL HARDWARE.
6. REFER TO ORIGINAL CONSTRUCTION DRAWINGS [DSA APP NO. 17654] FOR ADDITIONAL INFORMATION.
7. NEW PLYWOOD TO BE INSTALLED PER 8 & 9/S004.



1 ROOF FRAMING PLAN
1/4" = 1'-0"

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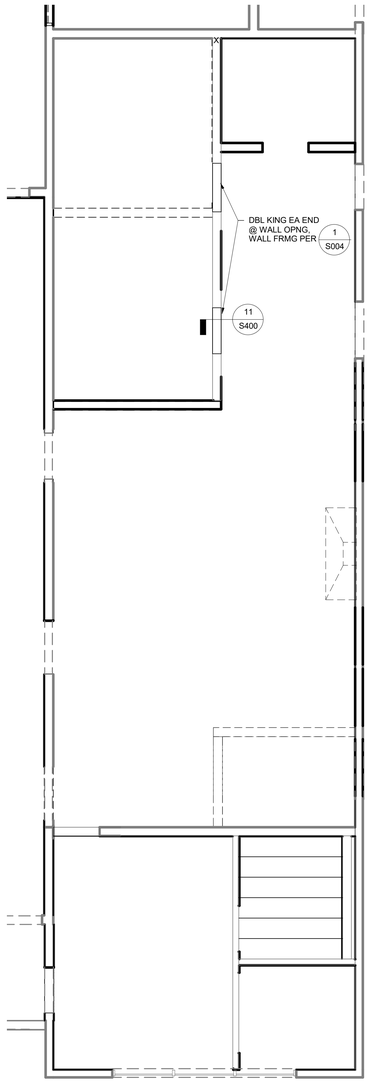
SHEET TITLE

ROOF FRAMING PLAN

SHEET NO.

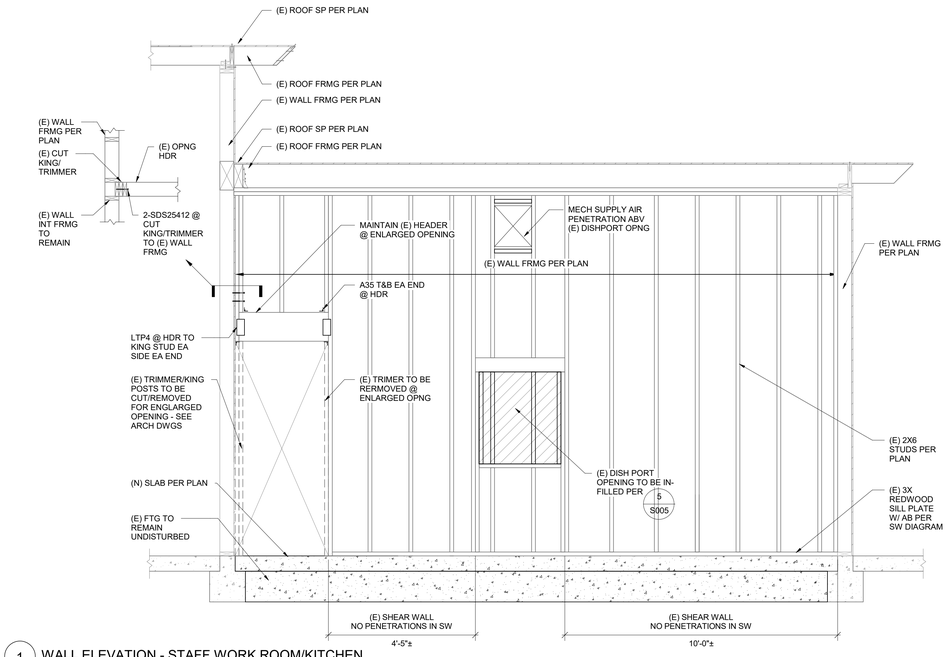
S121



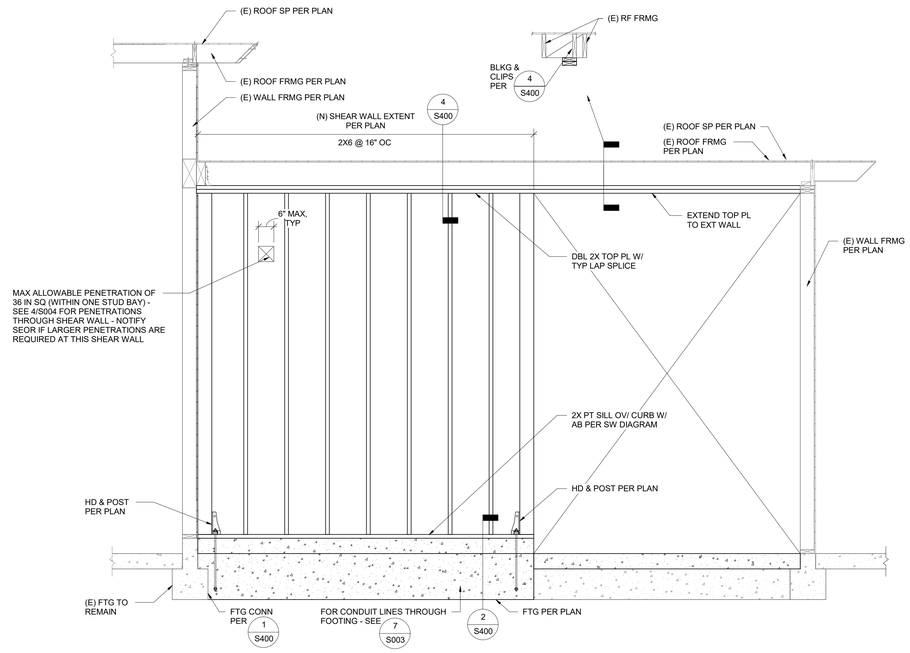
A PARTIAL CEILING FRAMING PLAN & NOTES
1/4" = 1'-0"

CEILING FRAMING PLAN NOTES:

1. ALL CEILING FRAMING SHALL BE 2X6 @ 24" OC TYPICAL, UNO.
2. ONLY FRAMED CEILINGS SUPPORTED BY WALLS OR HANGERS ARE SHOWN. FOR T-BAR CEILINGS OR CEILINGS ATTACHED DIRECTLY TO FRAMING, SEE ARCH DWGS.
3. NOT ALL CEILING OPENINGS ARE SHOWN. SEE ARCH DWGS, MECH DWGS, AND ELEC DWGS FOR LOCATIONS. FRAME CEILING OPENINGS PER 11/S004.
4. PARTIAL HEIGHT PARTITIONS AT T-BAR CEILINGS TO BE BRACED PER 14/S004.
5. PROVIDE STRONGBACKS @ 6'-0" OC MAX PER 14/S004 AT ALL FRAMED CEILINGS.
6. SEE ARCH DWGS FOR SOFFIT FRAMING DETAILS.



1 WALL ELEVATION - STAFF WORK ROOM/KITCHEN
1/2" = 1'-0"



2 WALL FRAMING ELEVATION - KITCHEN
1/2" = 1'-0"

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET

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AGENCY APPROVAL

EL DORADO MIDDLE SCHOOL
MULTI-PURPOSE BUILDING UPGRADES

1750 WEST ST, CONCORD, CA 94521

MT. DIABLO UNIFIED SCHOOL DISTRICT

JASON THOMAS SEAVEY
No. 5393
REGISTERED STRUCTURAL ENGINEER
STATE OF CALIFORNIA
3/13/25

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ARCHITECT

DSA SUBMITTAL

REVISIONS

NO.	DESCRIPTION	DATE

DATE 03/14/2025

JOB NO. Y2119.00

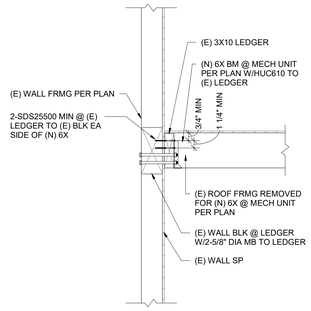
SHEET TITLE

SHEAR WALL SECTIONS & PARTIAL CEILING FRAMING PLAN

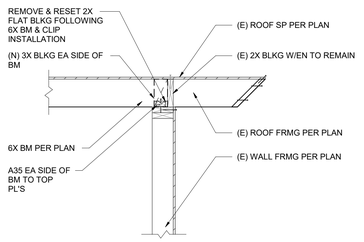
SHEET NO.

S131

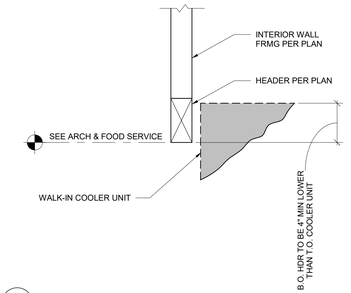
ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET



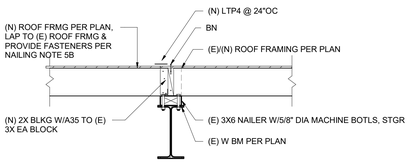
9 DETAIL
3/4" = 1'-0"



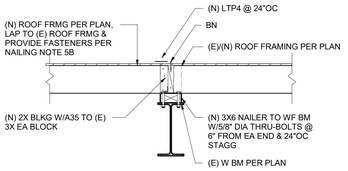
10 DETAIL
3/4" = 1'-0"



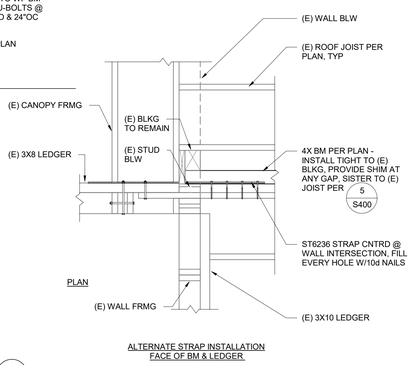
11 DETAIL
3/4" = 1'-0"



12 DETAIL
3/4" = 1'-0"

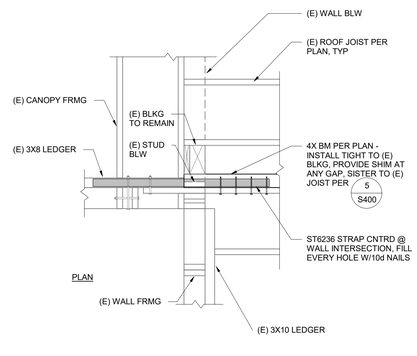


13 DETAIL
3/4" = 1'-0"

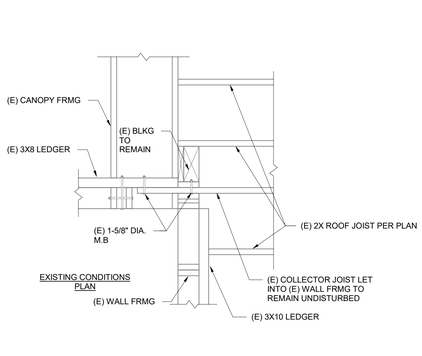


ALTERNATE STRAP INSTALLATION
FACE OF BM & LEDGER

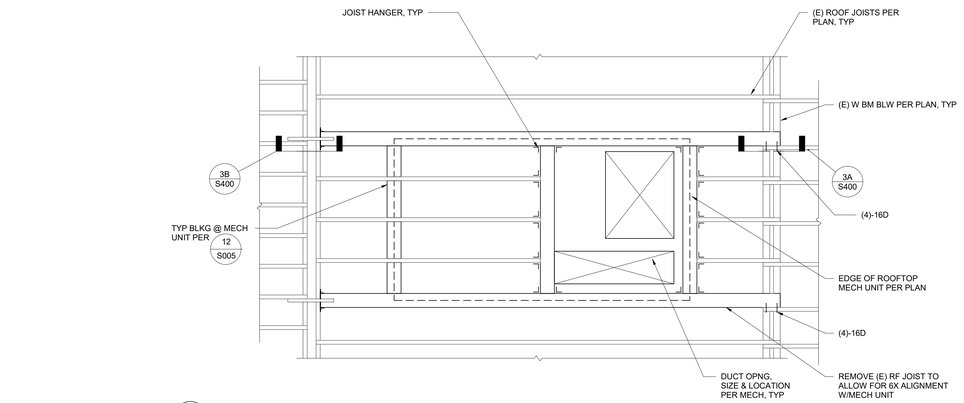
8 DETAIL
3/4" = 1'-0"



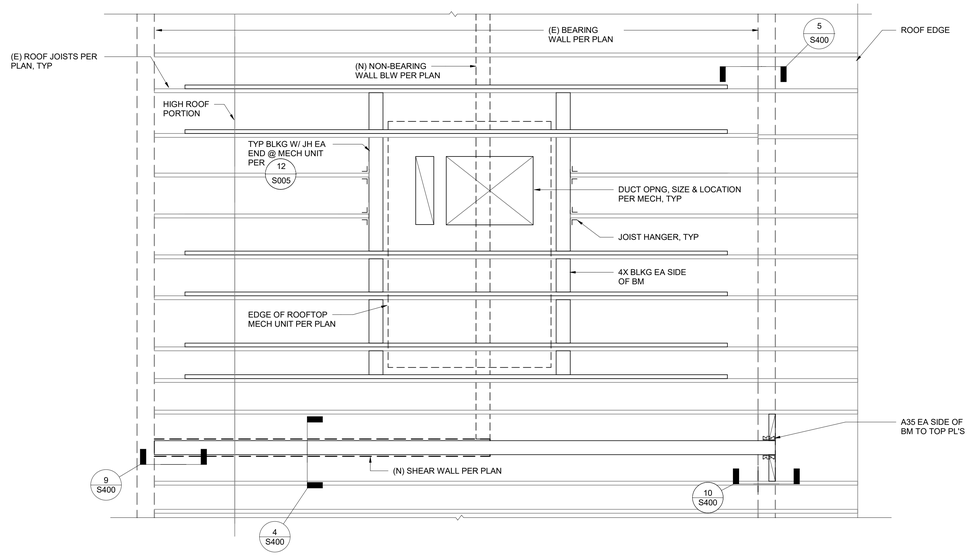
7 HVAC MINI PLAN
1/2" = 1'-0"



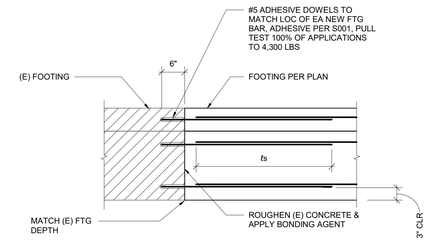
5 SISTERED JOIST TO (E) JOIST
1 1/2" = 1'-0"



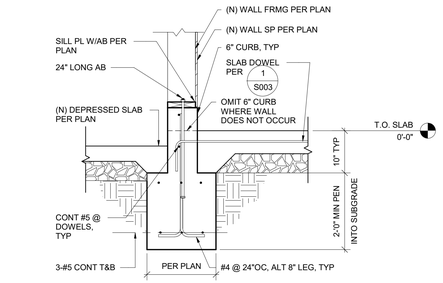
6 HVAC MINI PLAN
1/2" = 1'-0"



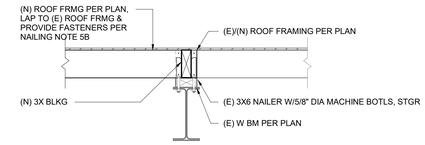
1 FOOTING TO (E) FOOTING
3/4" = 1'-0"



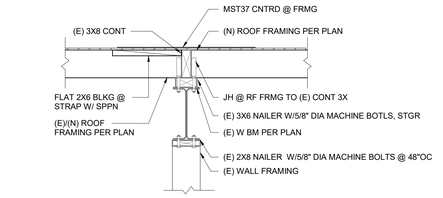
2 DETAIL
3/4" = 1'-0"



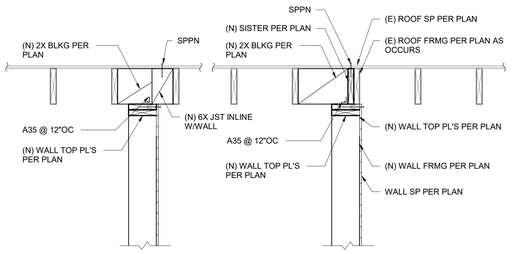
CONDITION 'A'



CONDITION 'B'

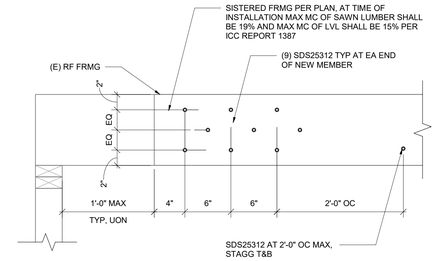


3A 3B DETAIL
3/4" = 1'-0"



@ (E) JOIST NOT OV/WALL
@ (E) JOIST OV/WALL

4 DETAIL
3/4" = 1'-0"



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No. 5393
STATE OF CALIFORNIA
3/13/25

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ARCHITECT

DSA SUBMITTAL

REVISIONS

NO.	DESCRIPTION	DATE

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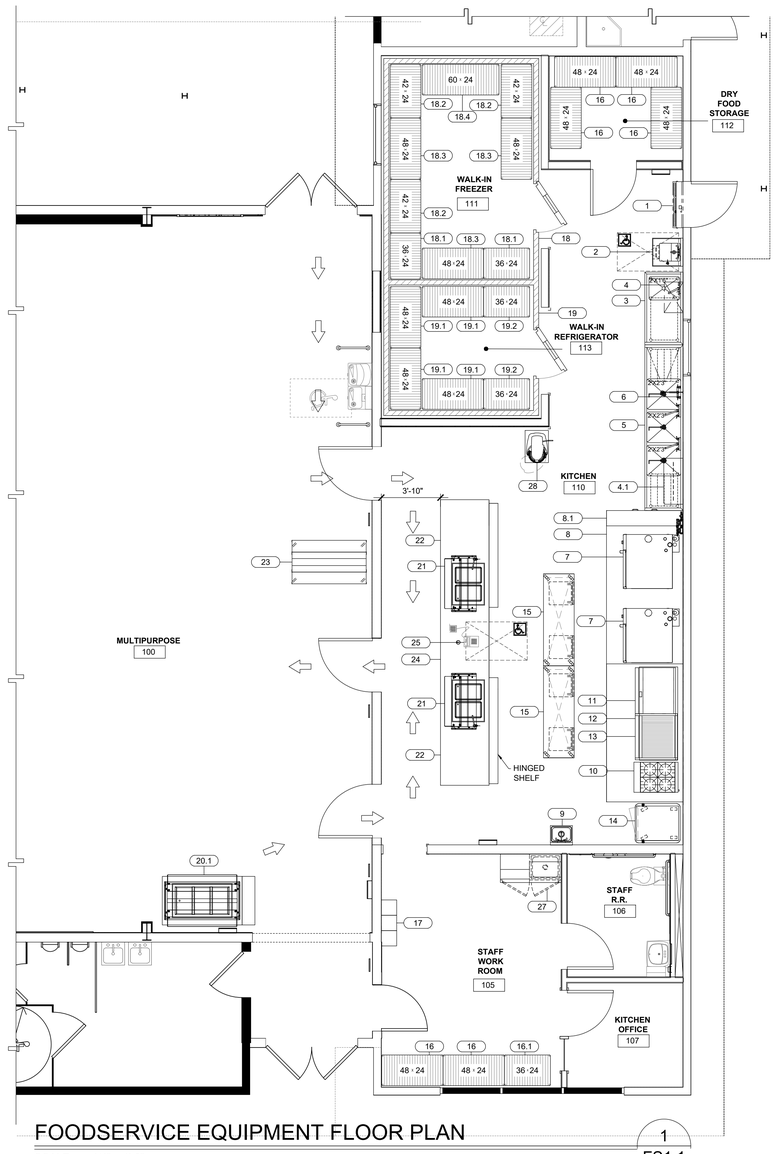
SHEET TITLE

DETAILS

SHEET NO.

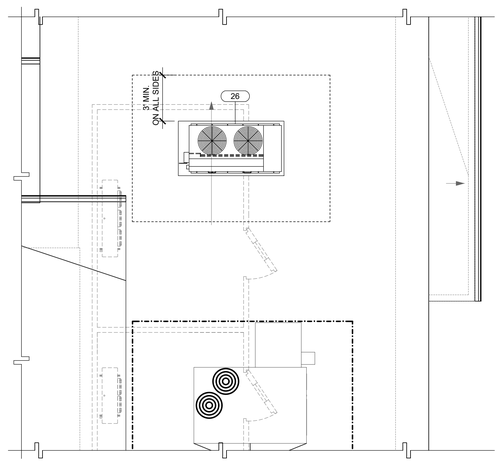
S400



FOODSERVICE EQUIPMENT FLOOR PLAN

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

1 FS1.1



FOODSERVICE EQUIPMENT ROOF PLAN

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

2 FS1.1

EQUIPMENT SCHEDULE

ITEM NO	QTY	OFCI ITEMS	EQUIPMENT CATEGORY	MANUFACTURER	MODEL NUMBER	EQUIPMENT REMARKS	EQUIPMENT WT. LBS	ANCHORAGE DETAILS
1	1	X	AIR CURTAIN, UNHEATED	BERNER	SLC07-1036A		45	K/FS8.1
2	1	X	SINK, HAND, WALL MOUNT	EAGLE GROUP/METAL MASTERS	HSAP-14-ADA-FW		55	C/FS8.2
3	1	X	PREPERATION SINK	CUSTOM	FABRICATED ITEM		260	B/FS8.1
4	1	X	WALL MOUNTED SHELF	CUSTOM	FABRICATED ITEM		40	G/FS8.1
4.1	1	X	WALL MOUNTED SHLEF WITH POT RACK	ADVANCED TABCO	PS-15-36		75	G/FS8.1
5	1	X	THREE COMP. SINK	CUSTOM	FABRICATED ITEM		390	A/FS8.1
6	1	X	PRE-RINSE FAUCET, BACKSPLASH MOUNT	FISHER	13390		12.4	
7	2	X	DOUBLE STACK COMBI OVEN	RATIONAL USA	ICP 6-FULL/ 6-FULL G 208/240V 1 PHASE	VERIFY GAS TYPE	982	C/FS8.3
8	1		EXHAUST HOOD W/ STAINLESS STEEL WALL LINING	CAPTIVE AIRE / CUSTOM	6024ND-2-PSP-F		1143	K/FS8.2
8.1	1		FIRE SYSTEM	CAPTIVE AIRE/ANSUL	R-102			
9	1	X	HAND SINK, WALL MOUNT	ADVANCE TABCO	7-PS-68		13	C/FS8.2
10	1	X	GAS RESTAURANT RANGE	GARLAND	GFE24-4L		302	A/FS8.3
11	1	X	BROILER, UNDER-FIRED, GAS, COUNTER	VULCAN	VACB36		377	B/FS8.3
12	1	X	STAND, EQUIPMENT	VULCAN	STAND/C-72		128	D/FS8.3
13	1	X	GRIDDLE, GAS	VULCAN	MSA36		407	B/FS8.3
14	1	X	MOBILE WARMING & HOLDING CABINET	CRES COR	H137SUA12D		360	L/FS8.1
15	2	X	MOBILE WORK TABLE WITH UTENSIL DRAWERS	CUSTOM	FABRICATED ITEM		340	MOBILE
16	7	X	DRY STORAGE SHELVING	METRO	A2448NC		2000	D/FS8.2
16.1	1	X	DRY STORAGE SHELVING	METRO	A2436NC		2000	D/FS8.2
17	1	X	LOCKERS		SEE ARCH. SECTION			
18	1		WALK-IN FREEZER	RMI	FABRICATED ITEM	14'2"x9'5" I.D.	(1)	A/FS6.1
18.1	2	X	COLD STORAGE SHELVING	METRO	A2436NK3		2000	G/FS8.2
18.2	3	X	COLD STORAGE SHELVING	METRO	A2442NK3		2000	G/FS8.2
18.3	3	X	COLD STORAGE SHELVING	METRO	A2448NK3		2000	G/FS8.2
18.4	1	X	COLD STORAGE SHELVING	METRO	A2460NK3		2000	G/FS8.2
19	1		WALK-IN REFRIGERATOR	RMI	FABRICATED ITEM	8'3"x9'5" I.D.	(1)	A/FS6.1
19.1	4	X	COLD STORAGE SHELVING	METRO	A2448NK3		2000	G/FS8.2
19.2	2	X	COLD STORAGE SHELVING	METRO	A2436NK3		2000	G/FS8.2
20			SPARE					
20.1	1		SALAD BAR	DUKE	XP60ST	W/ SHELF ON ONE SIDE	425	MOBILE
21	2		HOT FOOD STATION	DUKE	XP74ST	W/ SHELF ON ONE STAFF SIDE	525	B/FS8.2
22	3		PASS COUNTER	DUKE	XP18ST		315	B/FS8.2
23	1	X	MILK COOLER	BEVERAGE-AIR	STF58HC-1-S		458	MOBILE
24	1		POS COUNTER	DUKE	XP3DCS		130	MOBILE
25	1	X	POS UNIT			PROVIDED BY DISTRICT		
26	1		REMOTE REFRIGERATION	COLD ZONE	MPL-2		584	H/FS7.1
27	1	X	DOUBLE-WIDTH MOP SINK STORAGE CABINET	EAGLE GROUP	F1916-VSCS-DR		55	
28	1	X	COUNTER TOP MIXER W/ STAND	HOBART	HL120-1STD		204	MOBILE

NOTE:

(1) WALK-IN 8.5LBS PER SQFT. FOR 4" PANEL FOR WALLS, ROOF AND FLOOR

KITCHEN EQUIPMENT BRACING NOTE

ALL KITCHEN EQUIPMENT 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 2022 CBC, SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTER 13, 26 AND 30.

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (e.g. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY" ATTACHED SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
3. MOVABLE EQUIPMENT WHICH IS STATIONED IN ONE PLACE FOR MORE THAN 8 HOURS AND HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT ARE REQUIRED TO BE ANCHORED WITH TEMPORARY ATTACHMENTS.

THE FOLLOWING KITCHEN EQUIPMENT SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE. BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

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 WEIGHTING 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.

THE ANCHORAGE OF AL KITCHEN EQUIPMENT SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.

KITCHEN EQUIPMENT HOOD AND FIRE SYSTEM

1. THE KITCHEN HOOD FIRE SUPPRESSION SYSTEM SHALL CONFORM TO THE REQUIREMENTS OF THE 2017 EDITION OF THE NFPA 17A (UL 300 SYSTEM)
2. INSTALLATION OF THE FIRE SUPPRESSION SYSTEM SHALL NOT BE STARTED UNTIL COMPLETE PLANS AND SPECIFICATIONS HAVE BEEN APPROVED BY DEPT. OF STATE ARCHITECT.
3. UPON COMPLETION OF THE SYSTEM IT SHALL BE TESTED IN THE PRESENCE OF THE STATE FIRE MARSHAL.

KITCHEN EQUIPMENT ANCHORAGE NOTE

1. ALL "HARDWIRE AND GAS" KITCHEN EQUIPMENT SHALL BE INSTALLED WITH SEISMIC RESTRAINTS PER GUIDELINES FOR SEISMIC RESTRAINTS OF KITCHEN EQUIPMENT AS PUBLISHED BY SMACNA AND THE DSA FIELD ENGINEER.
2. WHERE ANCHORAGE DETAILS ARE NOT SHOWN ON DRAWINGS OR IN GUIDELINES,THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT AND THE DSA FIELD ENGINEER.
3. A COPY OF THE "GUIDELINES" SHALL BE PROVIDED BY THE CONTRACTOR AND KEPT ON THE JOB SITE AT ALL TIMES.

HEALTH DEPARTMENT NOTES:

1. PROVIDE THERMOMETER IN ALL REFRIGERATION UNITS CONTAINING PERISHABLE FOODS.
2. PROVIDE PROBE THERMOMETER FOR CHECKING HOT AND COLD FOODS.
3. FOOD STORAGE SHELVES SHALL BE MINIMUM SIZE (6) INCHES ABOVE FLOOR.
4. ALL EQUIPMENT SHALL MEET OR BE EQUIVALENT TO "NSF" STANDARDS.
5. PROVIDE GARMENT STORAGE AREA: LOCKER, CABINET OR HANGERS FOR EMPLOYEE GARMENTS.
6. RODENT AND INSECT-PROOF ALL EXTERIOR DOORS AND WINDOWS. PROVIDE HEAVY-DUTY SELF-CLOSERS ON ALL EXTERIOR DOORS AND RESTROOM DOORS. SEAL ALL HOLES OR GAPS AROUND PIPES ENTERING BUILDING.
7. EXTERIOR DOORS SHALL BE RODENT PROOF WITH NO OPENINGS GREATER THAN 1/4 INCH.
8. PROVIDE HARDWOOD, METAL, FORMICA OR OTHER APPROVED MATERIALS, SMOOTH WITH SEALER ON ALL TABLE, COUNTERS, SHELVES, AND OTHER FOOD CONTACT SURFACES.
9. PROVIDE HAZARDOUS SUBSTANCE LOCATION: SEPARATE CABINET, ROOM OR DESIGNATED AREA FOR STORAGE OF PESTICIDE AND CLEANING COMPOUNDS.
10. INSTALL EQUIPMENT TO FACILITATE CLEANING. PLACE FLOOR MOUNTED UNITS ON CASTERS, MINIMUM SIX (6) INCHES HIGH, ROUND, METAL LEGS, OR SEAL IN POSITION ON MINIMUM FOUR (4) INCH CURB.
11. UNPACKAGED PROCESSED FOODS ON DISPLAY SHALL BE EFFECTIVELY SHIELDED OR COVERED.
12. PROVIDE SOAP AND TOWEL DISPENSERS AT ALL HAND WASHING SINKS.
13. FLOOR SINKS SHALL BE INSTALLED FLUSH WITH FLOOR AND READILY ACCESSIBLE FOR CLEANING.
14. GREASE INTERCEPTORS SHALL BE INSTALLED READILY ACCESSIBLE FOR CLEANING.
15. PROVIDE PROTECTIVE COVERS ON ALL LIGHTS IN FOOD PREPARATION, OPENED FOOD STORAGE ROOM(S), UTENSIL WASH AREAS, OR USE SHATTERPROOF BULBS.
16. LIGHTING REQUIREMENTS:
    -MINIMUM 50FT. CANDLES REQUIRED IN FOOD PREP AREA
    -MINIMUM 20FT. CANDLES REQUIRED IN RESTROOMS AND BARS
    -MINIMUM 10FT. CANDLES REQUIRED IN REFRIGERATORS
    -MINIMUM 10FT. CANDLES REQUIRED IN STORAGE AREAS
    -LIGHTING SHALL BE SHATTERPROOF OR SHIELDED
17. EXISTING FIXTURES, FINISHES, AND EQUIPMENT SHALL BE IN OPERABLE CONDITION AND SUBJECT TO FIELD APPROVAL.
18. WALLS & CEILING IN THE RESTROOMS, PREPARATION, STORAGE, AND JANITORIAL AREAS SHALL BE CONSTRUCTED OF APPROVED MATERIALS SO AS TO BE SMOOTH, WASHABLE, AND EASY TO CLEAN.

FOODSERVICE DRAWINGS INDEX

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FS3.1 - FOODSERVICE EQUIPMENT ELECTRICAL PLAN
FS4.1 - FOODSERVICE EQUIPMENT MECHANICAL PLAN
FS5.1 - FOODSERVICE EQUIPMENT EXHAUST HOOD DETAILS
FS5.2 - FOODSERVICE EQUIPMENT EXHAUST HOOD DETAILS
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FS5.5 - FOODSERVICE EQUIPMENT PATH OF EGRESS PLAN
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FS7.1 - FOODSERVICE EQUIPMENT REMOTE REFRIGERATION
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FS9.1 - FOODSERVICE EQUIPMENT ELEVATIONS
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FS9.5 - FOODSERVICE EQUIPMENT SERVING LINE
FS9.6 - FOODSERVICE EQUIPMENT SERVING LINE

SHEET NOTES

1. REFER TO ARCH. DRAWINGS FOR FIRE EXTINGUISHER LOCATIONS. FIRE EXTINGUISHER FOR KITCHENS TO BY TYPE K
2. "ALL WORK SHALL CONFORM TO THE CALIFORNIA BUILDING CODE, CALIFORNIA ELECTRICAL CODE, CALIFORNIA MECHANICAL AND PLUMBING CODES, CALIFORNIA HEALTH AND SAFETY CODE. ALL FOOD SERVICES EQUIPMENT SHALL MEET AND BE INSTALLED PER THE REQUIREMENTS OF THE CALIFORNIA HEALTH AND SAFETY CODE DIVISION 22 AND ALL LOCAL CODES AND ORDINANCES."

SHEET NOTES

1. CONTRACTOR IS RESPONSIBLE TO VERIFY, COORDINATE AND PROVIDE ALL UTILITY, ASSEMBLY, INSTALLATION AND ANCHORAGE OF OWNER SUPPLIED EQUIPMENT AND DSA APPROVED DOCUMENTS.

FLOOR LEGEND

SYMBOL/ABBREVIATION	DESCRIPTION
OFCI	OWNER FURNISH / CONTRACTOR INSTALLED
OFOI	OWNER FURNISH / OWNER INSTALLED
FSEC	FOODSERVICE EQUIPMENT CONTRACTOR
VFVI	VENDER FURNISH / VENDER INSTALLED
(E), EXIST	EXISTING FOODSERVICE EQUIPMENT
(F)	FUTURE FOODSERVICE EQUIPMENT
	BUILDING WALLS (SEE ARCH. DWGS.)
	WALK-IN COOLER/ FREEZER INSULATED WALLS
1 / 1	KEY / SHEET NOTE
1	ITEM NUMBER SYMBOL (SEE EQUIPMENT SCHEDULE FOR DESCRIPTION)
KITCHEN 1	ROOM/ AREA NAME AND ROOM NUMBER
C	COLUMN GRIDS WITH COLUMN INDICATORS
48x81x18	STORAGE SHELVING SIZES (Width x Length)

SYMBOL	DESCRIPTION
30" CLR. / 48" CLR.	ACCESSIBLE CLEARANCES AND SYMBOL 30"x48" MIN CLEARANCE
	OUTLINE OF FOODSERVICE EQUIPMENT
	FOODSERVICE EQUIPMENT BELOW EQUIPMENT TOP
	FOODSERVICE EQUIPMENT ABOVE EQUIPMENT TOP
	MOBILE FOODSERVICE EQUIPMENT
F.E.	FIRE EXTINGUISHER & CABINET REFER TO ARCH. DRAWINGS FOR FIRE EXTINGUISHER LOCATIONS
FS.1	SHEET NUMBER
W.H.	WATER HEATER (SEE PLUMBING ENG. DWG.)
A FS0.1 B	ELEVATION INDICATOR SYMBOL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121540 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 3/28/2025

AGENCY APPROVAL

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LICENSED ARCHITECT
ALAN J. MAYNE
No. C-26867
RENEWAL DATE: 1/31/27
STATE OF CALIFORNIA

ARCHITECT

DSA SUBMITTAL

REVISIONS

NO.	DESCRIPTION	DATE
1	DISTRICT REVISIONS	4/6/23

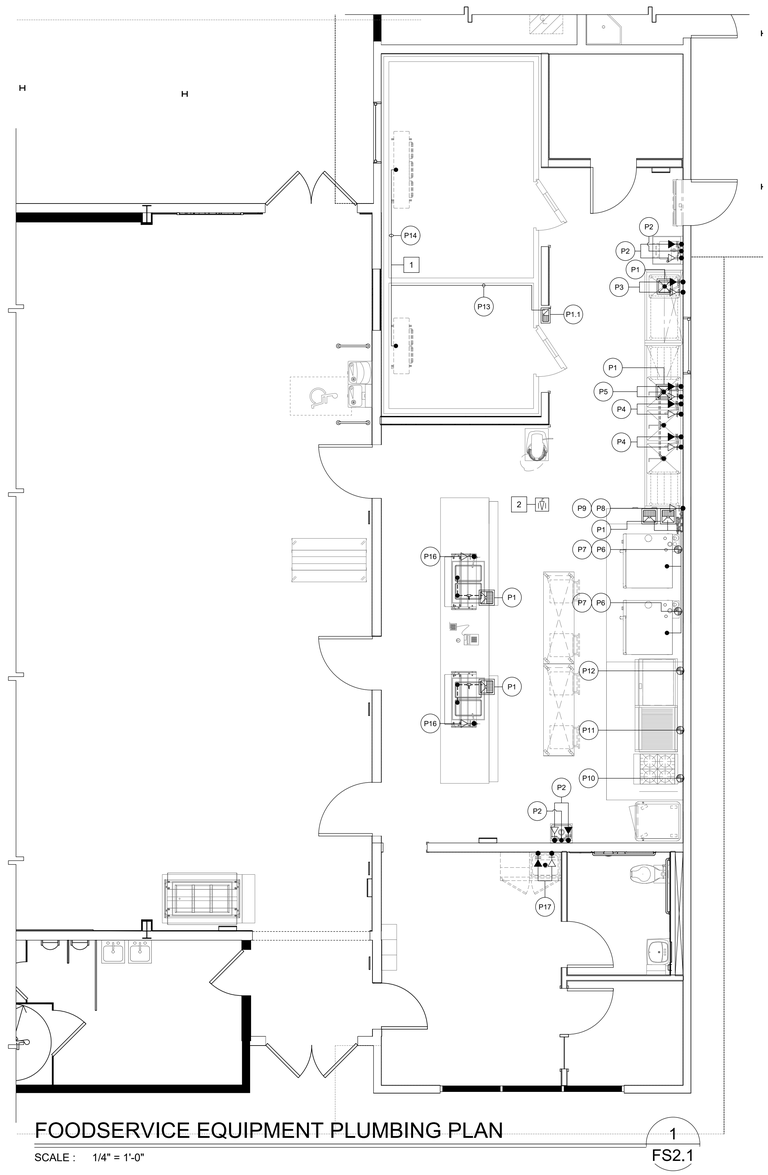
DATE 02/28/2025
JOB NO. Y2326.00
SHEET TITLE

FOODSERVICE EQUIPMENT FLOOR PLAN

SHEET NO.

FS1.1

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET



FOODSERVICE EQUIPMENT PLUMBING PLAN

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

1 FS2.1

PLUMBING SCHEDULE

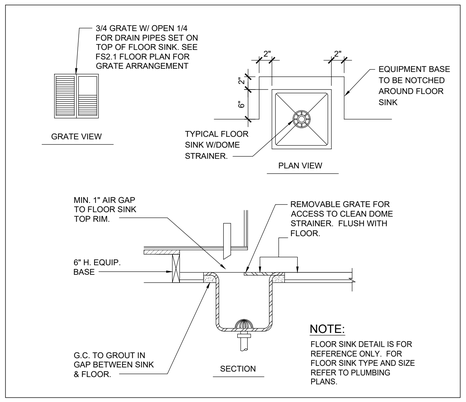
PLUM. NO.	ITEM. NO.	DESCRIPTION	QTY.	WATER CONN. SIZE C.W.	WATER CONN. SIZE H.W.	WATER HGT.@ WALL	WASTE CONN. SIZE DIR.	WASTE CONN. SIZE INDIR.	WASTE HGT.@ WALL	GAS BTU/HR (x1,000)	GAS CONN. SIZE	GAS HGT. @ WALL	REMARKS	NOTE(S)
P1	-	FLOOR SINK	6EA.	-	-	-	-	-	0"	-	-	-	INSTALL FLUSH WITH FINISH FLOOR, PROVIDE GRATE COVER W/ DOME STRAINER, REFER TO PLUMBING PLANS FOR TYPE AND SIZE.	
P1.1	-	FLOOR SINK 1/2 SIZE	1EA.	-	-	-	-	-	0"	-	-	-	INSTALL FLUSH WITH FINISH FLOOR, PROVIDE GRATE COVER W/ DOME STRAINER, REFER TO PLUMBING PLANS FOR TYPE AND SIZE.	3
P2	2,9	WALL MOUNTED HAND SINK FAUCET W/ 1/2" INLET 4" CENTER	2EA.	1/2"	1/2"	18"	1 1/2"	-	24"	-	-	-	PROVIDE S.O.V., RUN PIPING TO UNIT CONNECTION. RUN DIRECT WASTE WITH P-TRAP.	3
P3	3	PREP SINK PLASH MOUNT FAUCET W/ 1/2" INLET 8" CENTER	1EA.	1/2"	1/2"	16"	"	2"	-	-	-	-	PROVIDE S.O.V., RUN PIPING TO UNIT CONNECTION. PROVIDE 2" INDIRECT DRAIN TO F.S. P1. (CHROME OR PAINT SILVER)	
P4	5	POTWASH SINK FAUCET W/ 3/4" INLET 8" CENTER	2EA.	3/4"	3/4"	16"	-	2"	-	-	-	-	PROVIDE S.O.V., RUN PIPING TO UNIT CONNECTION. PROVIDE 2" INDIRECT DRAIN TO F.S. P1. (CHROME OR PAINT SILVER)	
P5	6	PRE-RINSE FAUCET, SPLASH MOUNT FAUCET W/ 1/2" INLET 8" CENTER	1EA.	1/2"	1/2"	16"	-	-	-	-	-	-	PROVIDE S.O.V., RUN PIPING TO UNIT CONNECTION.	
P6	7	COMBI OVEN GAS CONNECTION(BOTTOM UNIT)	2EA.	-	-		-	2"	-	107	3/4	+18"	PROVIDE S.O.V., RUN PIPING TO UNIT CONNECTION. PROVIDE 1" INDIRECT DRAIN TO F.S. P1.	1 3
P7	7	COMBI OVEN GAS CONNECTION (TOP UNIT)	2EA.	-	-		-	2"	-	107	3/4	+49"	PROVIDE S.O.V., RUN PIPING TO UNIT CONNECTION. PROVIDE 1" INDIRECT DRAIN TO F.S. P1.	1 3
P8	7	WATER FILTER (BOTTOM UNIT)	1EA.	3/4"	-	+36"	-	-	-	-	-	-	PROVIDE S.O.V., RUN PIPING TO UNIT CONNECTION.	1 2 3
P9	7	WATER FILTER (TOP UNIT)	1EA.	3/4"	-	+60"	-	-	-	-	-	-	PROVIDE S.O.V., RUN PIPING TO UNIT CONNECTION.	1 2 3
P10	10	RANGE W/OVEN BASE	1EA.	-	-	-	-	-	-	136	3/4"	+18"	PROVIDE S.O.V., RUN PIPING TO UNIT CONNECTION.	3
P11	11	BROILER	1EA.	-	-	-	-	-	-	102	3/4"	+34"	PROVIDE S.O.V., RUN PIPING TO UNIT CONNECTION.	3
P12	13	GRIDDLE	1EA.	-	-	-	-	-	-	81	3/4"	+34"	PROVIDE S.O.V., RUN PIPING TO UNIT CONNECTION.	3
P13	19	WALK-IN REFRIGERATOR CONN. DRAIN FROM COIL CONN. + 70"	1EA.	-	-	-	-	1"	-	-	-	-	1" INDIRECT DRAIN TO F.S. P1. SLOPE 1/2" PER FOOT. PROVIDE 1" MIN AIR GAP AT F.S. WITH 'P' TRAP.	
P14	19	WALK-IN FREEZER CONN. DRAIN FROM COIL CONN. + 70"	1EA.	-	-	-	-	1"	-	-	-	-	1" INDIRECT DRAIN TO F.S. P1. SLOPE 1/2" PER FOOT. PROVIDE 1" MIN AIR GAP AT F.S. WITH 'P' TRAP.	
P15		SPARE												
P16	21	HOT FOOD WELLS	2EA.	1/2"		-	-	1"	-	-	-	-	PROVIDE S.O.V., RUN PIPING TO UNIT CONNECTION. PROVIDE 1" INDIRECT DRAIN TO F.S. P1.	
P17	27	MOP SINK CABINET	1EA.	1/2"	1/2"	48"	2"	-	0"	-	-	-	PROVIDE S.O.V., RUN PIPING TO UNIT CONNECTION. PROVIDE 2" DIRECT DRAIN TO F.S. P1.	

PLUMBING KEY NOTE(S):

1. VERIFY WATER QUALITY AND PRESSURE MEETS MANUFACTURERS STANDARD MINIMUM REQUIREMENTS
2. CONNECT OUTLET FROM WATER FILTER TO WATER INLET CONNECTION ON ITEM 7
3. OWNER FURNISHED CONTRACTOR INSTALLED EQUIPMENT CONTRACTOR TO VERIFY REQUIREMENTS

FIRE SYSTEM NOTE:

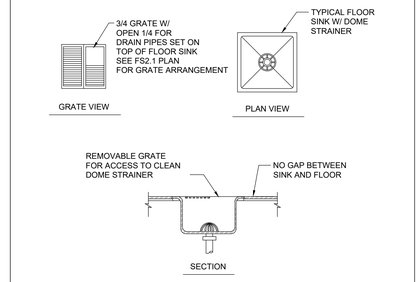
1. FURNISH AUTOMATIC GAS SHUT-OFF VALVE INCLUDING ANY NECESSARY ACCESS PANEL. CONTRACTOR SHALL INSTALL THE AUTOMATIC SHUT-OFF VALVE IN AN ACCESSIBLE LOCATION. REFER TO PLUMBING DRAWINGS FOR GAS VALVE LOCATION.



FLUSH FLOOR SINK DETAIL

SCALE : NONE LOCATED UNDER WORK COUNTERS

2 FS2.1



FLUSH FLOOR SINK DETAIL

SCALE : NONE

3 FS2.1

FLOOR SINK AND UTILITY NOTES

CONTRACTOR TO VERIFY AND COORDINATE FLOOR SINK LOCATIONS WITH ON SITE CONDITIONS, DRAWING AND EQUIPMENT LOCATIONS.

PLUMBING NOTES

(MINIMUM REQUIREMENTS UNLESS NOTED OTHERWISE)

1. PLUMBING CONTRACTOR TO VERIFY ALL INCOMING SERVICE AND MAKE FINAL HOOK-UPS TO ALL APPLICABLE EQUIPMENT AND TO PROVIDE ALL PIPING, TEES, ELLS, TRAPS, FILTERS, REGULATORS, FAUCETS, ETC., UNLESS SPECIFICALLY STATED OTHERWISE.
2. ALL HORIZONTAL DIMENSIONS SHOWN ON PLAN ARE FROM FINISHED FACE OF WALL TO CENTERLINE OF STUB-OUT OR FROM CENTERLINE OF STUB-OUT TO CENTERLINE OF STUB-OUT, UNLESS NOTED OTHERWISE ON PLAN OR DETAILS. (VERIFY ALL DIMENSIONS)
3. SYMBOLS NOTED +24", +48", ETC., INDICATES TO STUB-OUT OF WALL AT HEIGHT INDICATED. HEIGHT IS GIVEN FROM FINISHED FLOOR (NOT FINISHED CURB) TO CENTERLINE OF STUB-OUT. SYMBOLS INDICATED "STUB-UP" AND "STUB-DOWN" ARE TO EXTEND ABOVE FINISHED FLOOR AND/OR BELOW FINISHED CEILING AT LOCATION SHOWN.
4. PLUMBING STUBS AND CONNECTIONS SHOWN ON PLANS ARE FOR EQUIPMENT FURNISHED BY THE FOOD SERVICE EQUIPMENT CONTRACTOR.
5. FLOOR SINKS SHOWN ARE TO BE SET FLUSHED WITH TOP OF FINISHED FLOOR. FLOOR SINKS INDICATED HALF-IN AND HALF-OUT OF EQUIPMENT TO BE SET FLUSHED WITH TOP OF FINISHED FLOOR. FLOOR SINKS LOCATED COMPLETELY WITHIN EQUIPMENT AREA TO BE SET FLUSHED WITH TOP OF FINISHED FLOOR.
6. PLUMBING CONTRACTOR TO PROVIDE AND INSTALL REMOVABLE COVERS OR GRATES FOR ALL FULLY OR PARTIALLY EXPOSED FLOOR SINKS. GRATES TO HAVE 1/2" MAX OPEN'GS WHERE DRAIN IS EXPOSED TO P.O.T OR TO PEDESTRIAN WAYS TYP.
7. PLUMBING CONTRACTOR SHALL SEAL ALL PLUMBING PENETRATIONS THROUGH WALLS, FLOORS, AND CEILINGS. WATERTIGHT AND VERMIN-PROOF.
8. PLUMBING CONTRACTOR TO PROVIDE AND INSTALL SHUT-OFF VALVES ON ALL WATER AND GAS LINES, INCLUDING VALVES IN FIXTURES, LOCATED IN SUCH A WAY AS TO BE ACCESSIBLE WITHOUT USE OF TOOLS.
9. PLUMBING CONTRACTOR TO PROVIDE AND INSTALL FOR ALL APPLICABLE EQUIPMENT, A TRAPPED FLOOR SINK WITH A LEGAL AIR GAP DRAIN LINE (INDIRECT WASTE) TO FLOOR SINK. INSULATE ALL DRAIN LINES FROM ICE BINS, ICE MACHINES, REFRIG. EQUIP., ETC..

FOODSERVICE PLUMBING LEGEND

ABREV./SYMB.	DESCRIPTION
C.W.	COLD WATER
H.W.	HOT WATER
DIR.	WASTE (DIRECT CONNECTION)
INDIR.	INDIRECT WASTE (AIR GAP)
LAV.	LAVATORY
W.C.	WATER CLOSET
F.S.	FLOOR SINK
P.C.	PLUMBING CONTRACTOR
G.C.	GENERAL CONTRACTOR
K.E.C.	KITCHEN EQUIPMENT CONTRACTOR
S.O.V.	SHUT OFF VALVE
GPH	GALLONS PER HOUR
PSI	POUNDS PER SQUARE INCH
(F)	DEGREES FAHRENHEIT
CONN.	CONNECT
LOC.	LOCATE

SYMBOL	DESCRIPTION
P1	PLUMBING SCHEDULE REFERENCE, REFER TO FS2.1 FOR SCHEDULE
1	SHEET AND/OR KEY NOTE
	COLD WATER INLET
	HOT WATER INLET
	WATER CONNECTION TO EQUIPMENT
	SHUT OFF VALVE (S.O.V.)
	COLD WATER SHUT OFF VALVE
	GAS SHUT-OFF VALVE
	FLOOR SINK
	FLOOR DRAIN
	WASTE DOWN
	GAS INLET
	WALK-IN DRAIN LINE
	I.D. DRAIN LINE

PLUMBING PLAN SHEET NOTES

1. CONDENSATE DRAINS FROM COILS TO BE FURNISHED AND INSTALLED BY PLUMBING CONTRACTOR PROVIDE HEAT TRACE W/ INSULATION FROM COIL TO DRAIN (FREEZER)
2. ELECTRIC GAS SHUT-OFF VALVE FOR EXHAUST HOOD FIRE SYSTEM WITH ACCESS DOOR. REFER TO PLUMBING PLANS FOR LOCATION. INTERCONNECT WITH FIRE SYSTEM.

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LICENSED ARCHITECT BRIAN J. MAYNOR No. C26867 RENEWAL DATE: 1/31/27 STATE OF CALIFORNIA

ARCHITECT

DSA SUBMITTAL

REVISIONS

NO.	DESCRIPTION	DATE

DATE 02/28/2025

JOB NO. Y2326.00

SHEET TITLE

FOODSERVICE EQUIPMENT PLUMBING PLAN

SHEET NO.

FS2.1

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET

ONE AND ONE-HALF INCH = ONE FOOT

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THREE-QUARTERS INCH = ONE FOOT

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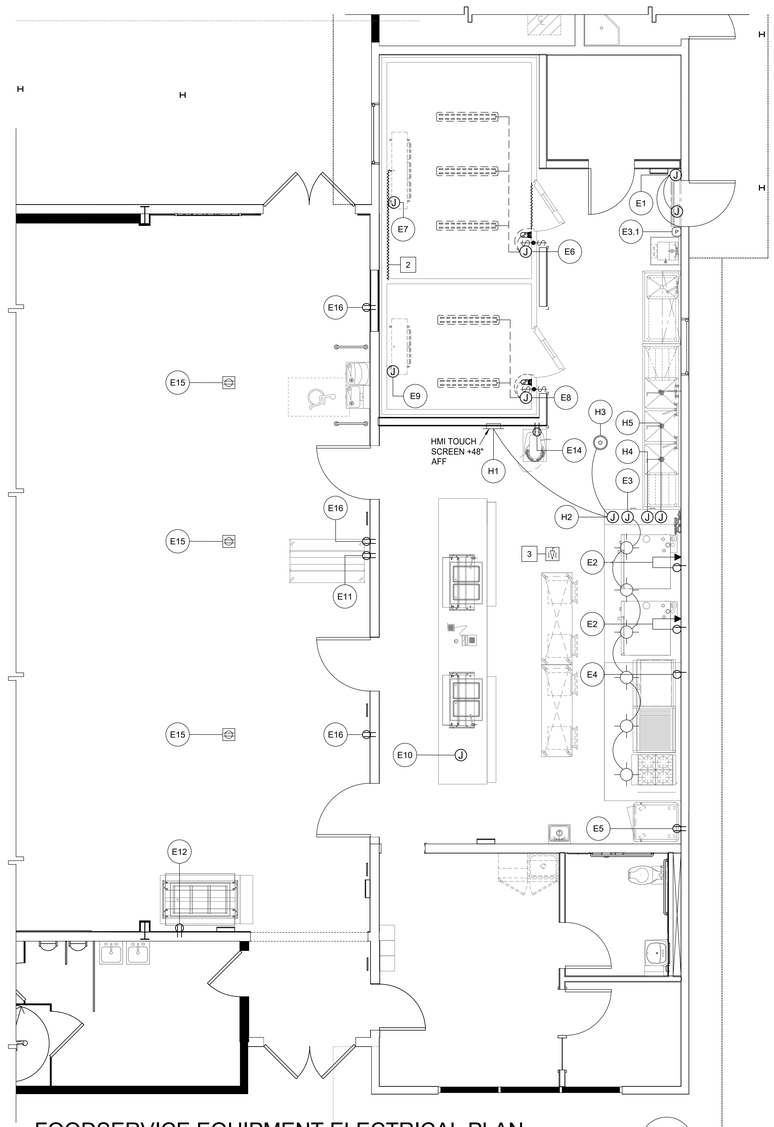
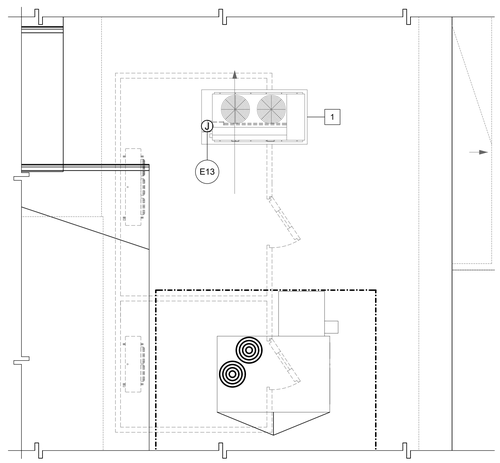


FOODSERVICE EQUIPMENT ELECTRICAL PLAN

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

1 FS3.1



FOODSERVICE EQUIPMENT ELECTRICAL ROOF PLAN

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

2 FS3.1

ELECTRICAL SCHEDULE

ELEC. NO.	ITEM NO.	DESCRIPTION	QTY.	VOLT.	PH	DIRECT	PLUG	NEMA	LOAD WATT	LOAD AMPS. DRAW	LOAD HP	OUTLET HEIGHT	REMARKS	NOTE(S)
E1	1	AIR CURTAIN	1EA.	120	1	X	-	-	-	3.4	1/2	+86"	PROVIDE J-BOX IN WALL INSTALL DOOR LIMIT SWITCH FOR INSTANT ON/OFF SWITCH BY F.S.E.C SEE DETAIL K/FS8.1	
E2	7	DOUBLE STACK COMBI OVEN (POWER AND DATA)	2EA.	208/240	1	-	X	6-15P	-	15	-	+18"/+50"	PROVIDE SIMPLEX RECEPTACLE IN WALL UNIT PROVIDED WITH CORD AND PLUG SET	4 5 6
E3	8.1	FIRE SYSTEM AT ANSUL CONTROL AUTOMAN PANEL	1EA.	120	1	X	-	-	-	20	-	+104"	120V/1-20AMP @ ANSUL CONTROL	
E3.1	8.1	FIRE SYSTEM (REMOTE PULL STATION)	1EA.	-	-	X	-	-	-	-	-	+48"	EMPTY FLUSH MT'D. OCTAGONAL BOX (REMOTE PULL) SEE DETAIL 1&2/FS5.4	3
E4	10	RANGE	1EA.	115	1	-	X	5-15P	-	1	-	+18"	PROVIDE DUPLEX RECEPTACLE IN WALL UNIT PROVIDED WITH CORD AND PLUG SET	4 6
E5	14	MOBILE WARMING HOLDING CABINET	1EA.	120	1	-	X	5-15P	-	14.1	-	+48"	PROVIDE DUPLEX RECEPTACLE IN WALL UNIT PROVIDED WITH CORD AND PLUG SET	6
E6	18	WALK-IN FREEZER (BOX)	1EA.	120	1	X	-	-	-	1.6	-	+88"	(3) 39W LED CLG. MT'D. LIGHT FIXTURES (1) 11.5W LED LIGHT FIXTURE AT DOOR. 250W DOOR HEATER, 20W P.R.P, 100W WINDOW HEATER EC. TO PROVIDE ALL INTERCONNECTIONS.	
E7	18	WALK-IN FREEZER (COIL)	1EA.	208	1	X	-	-	-	14.3	-	+74"	CONNECT TO UNIT ELECTRICAL CONNECTION AT COIL INSIDE WALK-IN FREEZER. SEE DETAIL C/FS7.1	1 2
E8	19	WALK-IN REFRIGERATOR (BOX)	1EA.	120	1	X	-	-	-	1.5	-	+88"	(2) 39W LED CLG. MT'D. LIGHT FIXTURES (1) 11.5W LED LIGHT FIXTURE AT DOOR. CONTRACTOR TO PROVIDE ALL INTERCONNECTIONS.	
E9	19	WALK-IN REFRIGERATOR (COIL)	1EA.	115	1	X	-	-	-	1.6	-	+74"	CONNECT TO UNIT ELECTRICAL CONNECTION AT COIL INSIDE WALK-IN REFRIGERATOR. SEE DETAIL C/FS7.1	1
E10	20	LOAD CENTER	1EA.	120/208	1	X	-	-	9288	44.65	-	+8"	PROVIDE J-BOX AT FLOOR CONNECT TO COUNTER LOAD CENTER- SERVING COUNTER TO BE FULLY WIRED AT FACTORY	
E11	23	MILK COOLER	1EA.	120	1	-	X	5-15P	-	3.3	-	+18"	PROVIDE DUPLEX RECEPTACLE IN WALL UNIT PROVIDED WITH CORD AND PLUG SET	6
E12	20.1	SALAD BAR	1EA.	120/208	1	-	X	5-15P	-	5.50	-	+18"	PROVIDE DUPLEX RECEPTACLE IN WALL UNIT PROVIDED WITH CORD AND PLUG SET	6
E13	26	REMOTE REFRIGERATION	1EA.	208	3	X	-	-	-	24	-	+18"	CONNECT TO DISCONNECT LOCATED ON REFRIGERATION RACK REFER TO FS7.1 REMOTE REFRIGERATION LOCATED ON BUILDING ROOF	
E14	28	MIXER AND STAND	1EA.	120	1	-	X	5-15P	-	8	-	+36"	PROVIDE DUPLEX RECEPTACLE IN WALL UNIT PROVIDED WITH CORD AND PLUG SET	6
E15	25	CASHIER STATION (POWER) VERIFY W/ DISTRICT FURNISHED POS UNIT	3EA.	120	1	X	-	-	-	20	-	+18"	PROVIDE (2) LOW PROFILE ELECTRICAL OUTLETS (VERIFY W/ DISTRICT POS REQ.)	6
E16	25	CASHIER STATION (POWER) (ALT LOCATION) VERIFY W/ DISTRICT FURNISHED POS UNIT	3EA.	120	1	X	-	-	-	20	-	+18"	PROVIDE (2) DUPLEX ELECTRICAL OUTLETS (VERIFY W/ DISTRICT POS REQ.)	6

WALK-IN REFRIGERATION ELECTRICAL (MINIMUM REQUIREMENTS UNLESS NOTED OTHERWISE)

1. - THE ELECTRICAL CONTRACTOR SHALL INSTALL AND INTER WIRE LIGHT SWITCHES AND FIXTURES REQUIRED FOR THE FOOD SERVICE EQUIPMENT AND MAKE FINAL CONNECTIONS.
2. - THE FOOD SERVICE EQUIPMENT CONTRACTOR SHALL INSTALL THE PRESSURE RELIEF PORT, DOOR HEATERS, DRAIN LINE HEATERS AND TEMPETURE ALARM SYSTEM. INTER WIRING AND FINAL CONNECTIONS BY THE ELECTRICAL CONTRACTOR.
3. - THE ELECTRICAL CONTRACTOR SHALL INTER WIRE THE TIME CLOCK ON THE CONDENSING UNIT TO THE DEFROST RELAY ON THE UNIT EVAPORATOR LOCATED IN THE FREEZER COMPARTMENT.
4. - THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CONDUIT AND WIRING NECESSARY FOR A COMPLETE AND OPERABLE SYSTEM WITH ALL CONDUIT IN SO FAR AS POSSIBLE MOUNTED ON THE EXTERIOR CEILING OF THE WALK-IN ASSEMBLY. PENETRATIONS AND ESCUTCHEON PLATES SHALL BE FURNISHED AND INSTALLED BY THE FOOD SERVICE CONTRACTOR. FOOD SERVICE EQUIPMENT CONTRACTOR IS RESPONSIBLE FOR SEALING THE INSIDE OF CONDUITS WHICH PENETRATE THE CEILING OR WALL.

ELECTRICAL KEYNOTES:

1. E.C. TO INTERCONNECT FROM REMOTE REFRIGERATION SYSTEM ITEM NO. 26
2. DRAIN LINE HEATER CONNECTED TO COIL. F.S.E.C TO PROVIDE HEATER E.C TO WIRE TO COIL
3. ELECTRICAL CONTRACTOR TO PROVIDE EMPTY FLUSH MT'D. OCTAGONAL BOX @ +48" AFF. W/ EMPTY CONDUIT TO +2" ABOVE CEILING.
4. ELECTRICAL CONTRACTOR TO PROVIDE INTERLOCK WIRING FROM FIRE PROTECTION SYSTEMS TO ELEC. SHUNT TRIP BREAKERS.
5. UTILITY REQUIREMENTS ARE 1 PER DECK (4 TOTAL CONNECTIONS)
6. OWNER FURNISHED CONTRACTOR INSTALLED EQUIPMENT CONTRACTOR TO VERIFY REQUIREMENTS

EXHAUST HOOD ELECTRICAL SCHEDULE

ELEC. NO.	ITEM NO.	DESCRIPTION	QTY.	VOLT.	PH	DIRECT	PLUG	NEMA	LOAD WATT	LOAD AMPS. DRAW	LOAD HP	OUTLET HEIGHT	REMARKS	NOTE(S)
H1	8	TOUCH SCREEN USER INTERFACE MOUNT +48" AFF. RECESSED IN WALL	1EA.	-	-	-	-	-	-	-	-	-	CONNECT TO ENERGY MANAGEMENT SYSTEM IN UTILITY CABINET AT END OF HOOD ITEM 8 WITH CAT-5 CABLE (NO POWER REQUIRED AT THIS LOCATION)	1 2 5
H2	8	EXHAUST HOOD (LIGHTS) & SMART CONTROLS SC-320110MA	1EA.	120	1	X	-	-	-	20	-	+104"	EC TO PROVIDE CONNECTION	4 5 6
H3	8	ENERGY MANGEMNT SYSTEM SC-320110MA (ROOM SENSOR)	-	-	-	-	-	-	-	-	-	-	CONNECT TO ENERGY MANAGEMENT SYSTEM IN UTILITY CABINET AT END OF HOOD ITEM 13 LOW VOLTAGE WIRING (ROOM TEMPERATURE SENSOR CLG. MOUNTED)	5
H4	8	EXHAUST HOOD (EXHAUST FANS) & SMART CONTROLS SC-320110MA	1EA.	208	3	X	-	-	-	6	-	+104"	EC TO PROVIDE CONNECTION	6
H5	8	EXHAUST HOOD (EXHAUST FANS) & SMART CONTROLS SC-320110MA	1EA.	208	3	X	-	-	-	6	-	+104"	EC TO PROVIDE CONNECTION	6

ELECTRICAL KEYNOTES:

1. E.C. TO INTERCONNECT SC-320110MA TO MECHANICAL EQUIPMENT ON ROOF (REFER TO MECHANICAL DRAWINGS)
2. E.C. TO INTERCONNECT POWER FROM HOOD TOUCH SCREEN USER INTERFACE LOCATED ON WALL WITH SC-320110MA SMART CONTROLS
4. 120V/1 PHASE FOR LIGHTS TO ONE PRE-WIRED CONN. POINT ON HOOD FOR LIGHTS PRE-WIRED BY FACTORY.
5. REFER TO HOOD DRAWING FS5.3 FOR ELECTRICAL SCHEMATIC
6. SC-320110MA SEE FS5.3 FOR SCHEMATIC

EXHAUST HOOD ELECTRICAL NOTES

1. - ELECTRICAL CONTRACTOR TO PROVIDE ALL HIGH/LOW VOLTAGE CONNECTIONS REQUIRED BY EXHAUST HOOD MANUFACTURER. SEE FOODSERVICE EXHAUST HOOD MANUFACTURER SHEETS FOR DETAILS.
2. - ALL ELECTRICAL CONDUIT THAT IS PROVIDED BY E.C. TO BE RECESSED IN WALL (NO SURFACE MOUNT CONDUIT)
3. - VERIFY ALL EXHAUST HOOD AND EXHAUST HOOD COMPONENTS ELECTRICAL REQUIREMENTS WITH MANUFACTURER DRAWINGS.

ELECTRICAL NOTES

1. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL ROUGH-INS, FINAL CONNECTIONS AND INTER- CONNECTIONS TO THE FOOD SERVICE EQUIPMENT
2. CONNECTIONS SHOWN ARE FOR THE FOOD SERVICE EQUIPMENT ONLY. REFER TO ELECTRICAL DRAWINGS FOR CONVENIENCE OUTLETS AND ADDITIONAL REQUIREMENTS.
3. RECEPTACLES, JUNCTION/HANDY BOXES INDICATED AT WALLS SHALL BE CONCEALED IN THE WALL AND STUBBED OUT OF THE WALL AT THE HEIGHT INDICATED.
4. RECEPTACLES, JUNCTION/HANDY BOXES INDICATED AT WALLS SHALL BE CONCEALED IN THE WALL AT THE HEIGHT INDICATED.
5. VERTICAL DIMENSIONS ARE GIVEN FROM FINISHED FLOOR TO CENTER LINE OF ROUGH-IN LOCATION.
6. UTILITIES WHEREVER POSSIBLE SHALL BE BROUGHT IN FROM ABOVE,
7. VERIFY THE UTILITY REQUIREMENTS OF OWNER FURNISHED AND/OR EXISTING EQUIPMENT.
8. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND/OR INSTALL ALL JUNCTION/HANDY BOXES, EXTENSION RINGS, DISCONNECT SWITCHES AS SHOWN, CONVENIENCE OUTLETS WITH STAINLESS STEEL COVERS, SWITCHES, CONNECTORS, CONTROLS AND OTHER ACCESSORIES THAT ARE NOT AN INTEGRAL PART OF THE FOOD SERVICE EQUIPMENT AS REQUIRED TO MAKE FINAL CONNECTIONS TO THE EQUIPMENT FOR A COMPLETE AND OPERABLE OPERATION MEETING ALL APPLICABLE CODES AND ORDINANCES.
9. JUNCTION/HANDY BOXES, CONVENIENCE OUTLETS AND SPECIAL PURPOSE OUTLETS SHOWN IN FABRICATED WORK TABLES AND COUNTERS SHALL BE FURNISHED BY FABRICATOR. ELECTRICAL CONTRACTOR TO PROVED ALL WIRING & RECEPTACLES.

ELECTRICAL CONNECTION ACCESS

1. - WHERE ITEMS CONNECT TO UTILITY UNDER COUNTER, CONTRACTOR TO VERIFY THAT A GROMMET HOLE IS PROVIDED FOR NECESSARY ACCESS TO CONNECT EQUIPMENT TO UTILITY.

ELECTRICAL PLAN LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
AFF	ABOVE FINISHED FLOOR	J	JUNCTION BOX
CLG.	CEILING	▲	DATA OUTLET
CONN.	CONNECT	P	EMPTY OCTAGONAL BOX W/ CONDUIT TO +2" ABOVE CEILING BY E.C
E.C.	ELECTRICAL CONTRACTOR		
FSEC	FOOD SERVICE EQUIPMENT CONTRACTOR		
G.C.	GENERAL CONTRACTOR		VAPOR-PROOF LIGHT FIXTURE AT EXHAUST HOOD (PROVIDED BY F.S.E.C. INSTALLED BY E.C.)
P.R.P.	PRESSURE RELIEF PORT		
S.F.	STAINLESS STEEL FABRICATOR	J	STUBBED-UP JUNCTION BOX
M.C.	MECHANICAL CONTRACTOR		STUBBED-UP CONVENIENCE OUTLET
LOC.	LOCATE		
E1	ELECTRICAL SCHEDULE REFERENCE, REFER TO FS3.1 FOR SCHEDULE		STUBBED-UP SIMPLEX OUTLET
1 1	SHEET AND/OR KEY NOTE	▲	STUBBED-UP DATA OUTLET
	DUPLEX CONVENIENCE OUTLET 115V/1Ø UNLESS OTHERWISE NOTED	$	WALL MOUNTED SWITCH BY E.C
	SIMPLEX OUTLET SEE SCHEDULE FOR VOLTAGE		VAPOR-PROOF FLUORESCENT FIXTURE PROVIDED BY F.S.E.C. INSTALLED BY E.C.)
	CEILING MOUNTED, VAPOR-PROOF LIGHT FIXTURE W/ JUNCTION BOX, 115V/1Ø UNLESS OTHERWISE NOTED (WALK-IN REFRIGERATOR)		VAPOR-PROOF LIGHT FIXTURE AT WALK-IN PROVIDED BY F.S.E.C. INSTALLED BY E.C.)
	ROOM TEMPERTURE SENSOR		

ELECTRICAL SHEET NOTES

1. REMOTE REFRIGERATION RACK SYSTEM ITEM NO. 26 REFER TO FS7.1 FOR DETAILS LOCATED ON BUILDING ROOF
2. ELECTRIC HEAT TRACE SPIRALED TAPED AND INSULATED CONNECTED AT COIL BY F.S.E.C REFER K/FS8.3
3. ELECTRICAL GAS SHUT-OFF VALVE

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LICENSED ARCHITECT
BRIAN J. MAYNARD
No. C26867
RENEWAL DATE: 1/31/27
STATE OF CALIFORNIA

ARCHITECT

DSA SUBMITTAL

REVISIONS

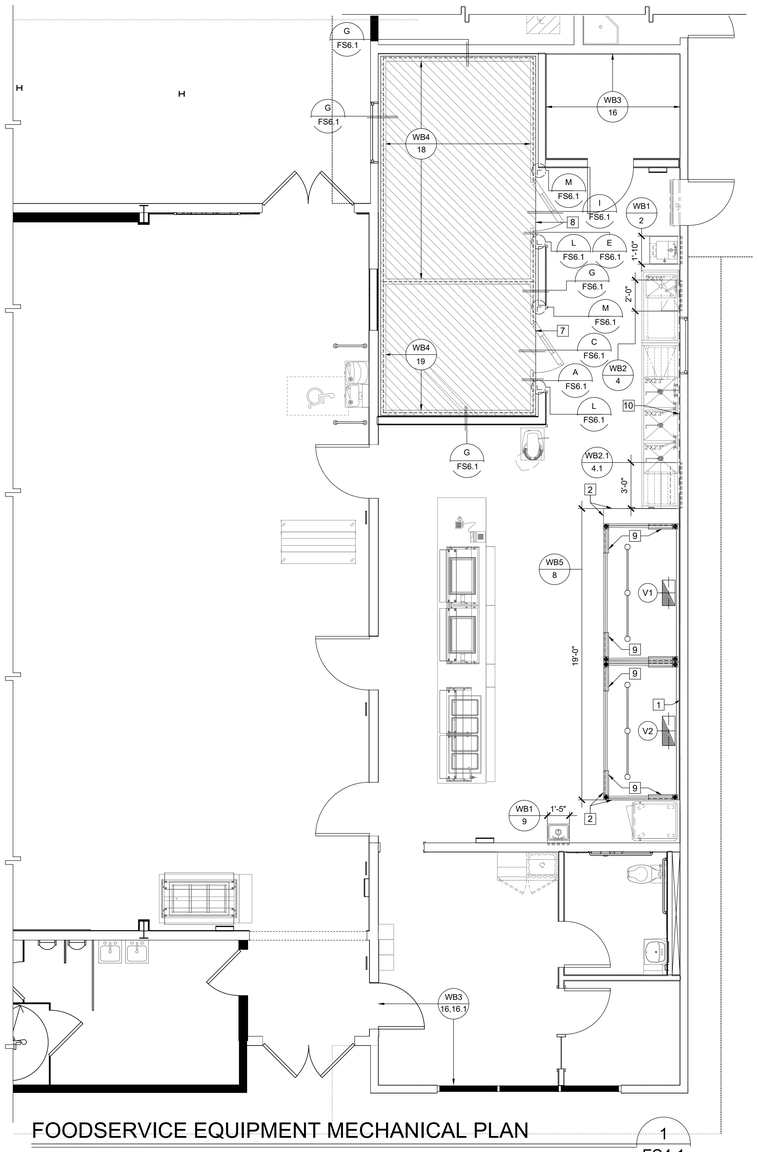
NO.	DESCRIPTION	DATE

DATE 02/28/2025
JOB NO. Y2326.00
SHEET TITLE

FOODSERVICE EQUIPMENT ELECTRICAL PLAN

SHEET NO.

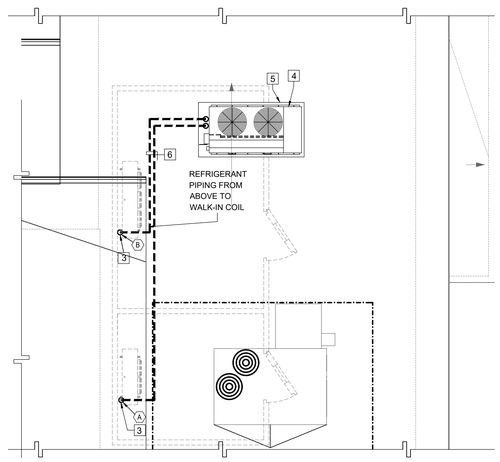
FS3.1



FOODSERVICE EQUIPMENT MECHANICAL PLAN

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

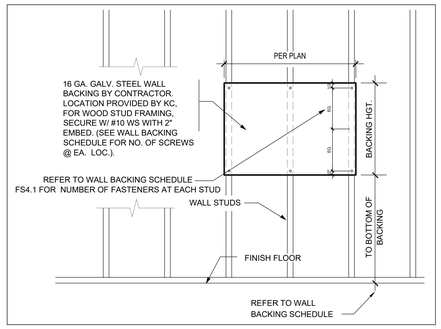
1 FS4.1



FOODSERVICE EQUIP. MECHANICAL ROOF PLAN

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

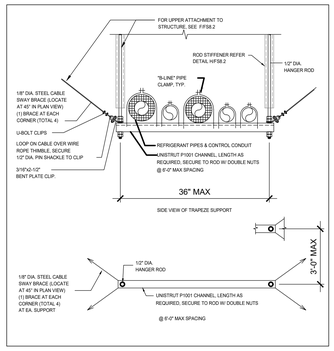
2 FS4.1



WALL BACKING DETAIL

SCALE : NONE

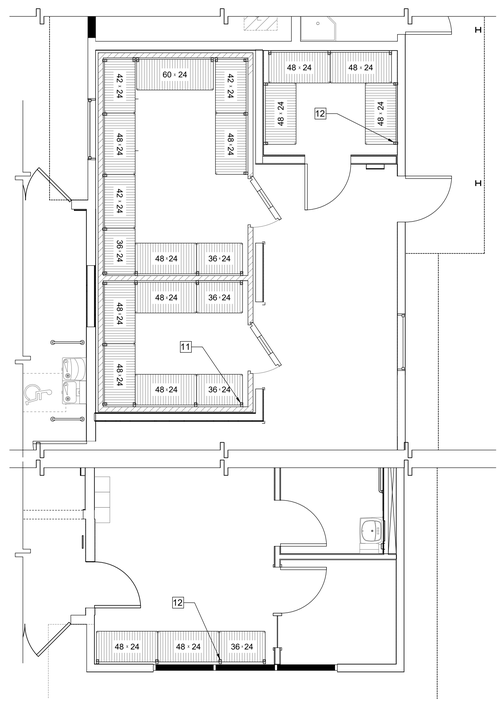
3 FS4.1



TYPICAL TRAPEZE SUPPORT

SCALE : NONE

4 FS4.1



FOODSERVICE EQUIP. SHELVING ANCHORAGE PLAN

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

5 FS4.1

VENTILATING REQUIREMENTS

DUCT NO.	ITEM NO.	DESCRIPTION	ITEM QTY.	RISER SIZE HEIGHT	RISER SIZE WIDTH	RISER SIZE LENG.	CFM	S.P.-WC"	OUTLET HEIGHT	REMARKS
V1	8	EXHAUST DUCT EXHAUST HOOD	1EA.	4"	10"	20"	2160	-0.732"	108"	REFER TO FS5.1 FOR EXHAUST HOOD DETAILS MAKE DUCT CONNECTION AT HOOD COLLAR
V2	8	EXHAUST HOOD EXHAUST DUCT	1EA.	4"	10"	23"	2475	-0.815"	108"	REFER TO FS5.1 FOR EXHAUST HOOD DETAILS MAKE DUCT CONNECTION AT HOOD COLLAR

COOKING EXHAUST HOOD NOTES

1. - EACH AREA CONTAINING COOKING EXHAUST HOOD(S) WILL HAVE 80% MECHANICAL MAKE-UP AIR PROVIDED IN THE VOLUME OF THE AIR BEING EXHAUSTED.
2. - MAKE-UP AIR SHALL BE DELIVERED IN THE PROXIMITY OF THE EXHAUST HOOD(S) IN A MANNER NOT TO CREATE UNDUE AIR TURBULENCE IN THE WORKING AREAS.
3. - COOKING HOOD(S) EXHAUST AND MAKE-UP AIR SYSTEM(S) WILL BE CONNECTED BY AN ELECTRICAL INTER-LOCKING SWITCH.
4. - MAKE-UP AIR INTAKE MUST CLEAR AIR EXHAUST DISCHARGE BY A MINIMUM OF TEN (10) FEET, OR AS REQUIRED BY CODE(S).
5. - LOCATION OF COOKING HOOD EXHAUST DUCT(S) AND MAKE-UP AIR SYSTEM DUCT(S) ARE TO BE VERIFIED AT THE JOB SITE.
6. - IF REQUIRED BY LOCAL CODE(S), MAKE-UP AIR SYSTEM(S) SHALL BE CAPABLE OF DELIVERING TEMPERED AIR AT 70 DEGREES F.
7. - CONNECTING DUCTS FROM THE EXHAUST VENTILATORS TO THE EXHAUST AND/OR MAKE-UP AIR FANS SHALL BE SUPPLIED AND INSTALLED WITH ALL FINAL CONNECTIONS.
8. - PERFORMANCE TESTING FOR THE OPERATION OF THE TYPE 1 EXHAUST HOOD PER U.M.C. IS REQUIRED
9. - EXTRACTOR HOODS SHALL COMPLY TO THE C.M.C 2022, NFPA-96, U.L, N.S.F, AND ALL LOCAL CODES AN ORDINANCES.

WALL BACKING NOTES

1. - WALL BACKING TO BE 16 GAUGE GALV. STEEL IN LENGTH AND HEIGHT AS SHOWN ON DRAWINGS.
2. - ALL WALL BACKING TO BE IN FURNISHED AND INSTALLED BY CONTRACTOR
3. - FOOD SERVICE EQUIPMENT CONTRACTOR IS TO FURNISH CONTRACTOR WITH DETAILED DRAWINGS SHOWING ALL WALL BACKING LOCATION AND SIZE.
4. - WALL BACKING AS SHOWN IS MINIMUM, EXTEND BACKING TO NEXT STUD EACH DIRECTION AS NECESSARY

WALL BACKING SCHEDULE

	APPLICATION	BOTTOM OF BACKING	BACKING HGT.	FASTENERS PER STUD	ANCHORAGE DETAIL
WB1 2,9	HAND SINK	+16" AFF	26" HIGH	4	C/FS8.2
WB2 4	WALL SHELF	+60"AFF	20" HIGH	2	G/FS8.1
WB2.1 4.1	WALL SHELF W/ POT RACK	+66"AFF	20" HIGH	2	G/FS8.1
WB3 16,16.1	DRY STO. SHELVING	+69"AFF	12" HIGH	2	D/FS8.2
WB4 18,19	COLD STO. SHELVING	+69"AFF / +16"AFF	12" HIGH	2 PER POST BRACKET	G/FS8.2
WB5 8	WALL LINING	+76"AFF +53"AFF +29"AFF +6"AFF	4" HIGH	2	I/FS8.1

NOTES:
1. BACKING TO BE 16 GA. G.I. or C.R.S.
2. REFER TO 1/FS4.1 FOR WALL BACKING LOCATIONS
3. DRY STO. SHELVING, FASTEN SHELVING TO BACKING WITH #14 SMS.
4. COLD STO. SHELVING, 18GA G.I. STRAP FOAMED IN WALL BY MANUFACTURER. FASTEN SHELVING TO STRAP WITH #14 SMS.

REFRIGERATION LINE NOTES

CONTRACTOR TO VERIFY REMOTE REFRIGERATION LINE RUN LENGTH IF LINES EXCEED 150FT THEN OIL SEPARATORS TO BE BE ADDED PER MANUFACTURER RECOMMENDATIONS

MECHANICAL SHEET NOTES

1. 18 GA. STAINLESS STEEL WALL LINING PANELS (MINIMUM WIDTH TO BE 36") WITH 1" MINERAL WOOL BLANKET AND WIRE MESH BACKING OR CERAMIC FIBER BLANKET AND WIRE MESH BACKING SPACES OUT 1" ON NON-COMBUSTIBLE SPACERS WALL LINING TO MEET THE REQUIREMENTS OF NFPA-96 AND LOCAL CODES. WALL LINING SHALL BE FABRICATED WITH VERTICAL FLUTES EVERY 6" AS SHOWN, AND THE WIDTH OF THE EXHAUST HOOD INCLUDING FIRE SYSTEM CABINET
2. PROVIDE STAINLESS STEEL CLOSURE SKIRTING, REFER TO E/FS8.3
3. REFRIGERATION LINES STUB-DOWN FROM ABOVE, PENETRATE CEILING OF WALK-IN TO EVAP COIL SEE DETAIL D/FS7.1
4. REMOTE REFRIGERATION SYSTEM REFER TO A/FS7.1
5. REMOTE REFRIGERATION SYSTEM PLATFORM REFER B/FS7.1
6. REFRIGERATION LINES RUN ABOVE CEILING LINE (UNISTRUT TRAPEZE, REFER TO 4/FS4.1 EXTEND FROM REFRIGERATION RACK TO DROP-DOWN POINT ABOVE WALK-IN REFRIGERATOR / FREEZER COIL (REFRIG. LINE RUN ROUTES SHOWN ARE SCHEMATIC ONLY) REFRIGERATION LINE ROUTES WILL BE FIELD VERIFIED
7. DEPRESS SLAB THIS AREA 4" BELOW FINISH FLOOR REFER TO DETAIL A/FS6.1
8. PROVIDE STAINLESS STEEL CLOSER TRIM REFER TO DETAIL E/FS6.1
9. TRANSVERSE BRACING REFER TO K/FS8.2
10. STAINLESS STEEL WALL SPLASH J/FS8.1
11. COLD STORAGE SHELVING ATTACHMENT DETAIL G/FS8.2
12. DRY STORAGE SHELVING ATTACHMENT DETAIL D/FS8.2

FOODSERVICE MECHANICAL LEGEND

ABREV./SYMB.	DESCRIPTION	ABREV./SYMB.	DESCRIPTION
F.S.E.C	FOODSERVICE EQUIPMENT CONTRACTOR	1	KEYNOTE SYMBOL (SEE SHEET NOTES FS4.1)
M.C.	MECHANICAL CONTRACTOR		
S.F.	STAINLESS STEEL FABRICATOR		CONCRETE DEPRESSION
G.C.	GENERAL CONTRACTOR		
E.C.	ELECTRICAL CONTRACTOR	# TYPE / # ITEM	BLOCKING TYPE REFER TO FS4.1
CFM	CUBIC FEET PER MINUTE		
SP	STATIC PRESSURE		FOAMED-IN WALL BACKING BY WALK-IN MANUFACTURER
	EXHAUST DUCT CONNECTION		
	SUPPLY DUCT CONNECTION		INSULATED S/S WALL LINING 1/FS4.1 FOR LOC.
V#	VENTILATING SCHEDULE REFERENCE REFER TO FS4.1 FOR SCHEDULE		HOOD HANGER ROD AND TRANSVERSE BRACING
	VENT TO ROOF		HOOD HANGER ROD
	SHELVING ANCHORAGE BRACKET LOCATION SEE G,D/FS8.2		S/S WALL SPLASH REFER TO J/FS8.1

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LICENSED ARCHITECT BRIAN J. MAYOR No. C26867 RENEWAL DATE: 1/31/27 STATE OF CALIFORNIA

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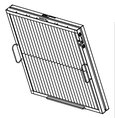
SHEET NO.

FS4.1

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET

CAPTRATE SOLO FILTERS



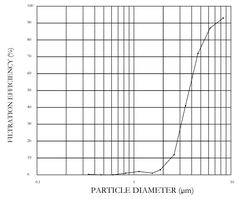


CAPTRATE FILTERS ARE BUILT IN COMPLIANCE WITH

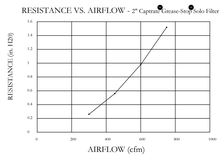
NFPA #96
NSF STANDARD #2
UL STANDARD #1046
INT. MECH. CODE (IMC)

FILTER COLLECTION EFFICIENCY

2" Captrate Grease-Stop Solo Filter



RESISTANCE VS. AIRFLOW - 2" Captrate Grease-Stop Solo Filter



SPECIFICATION: CAPTRATE GREASE-STOP SOLO FILTER

THE CAPTRATE GREASE-STOP SOLO FILTER IS A SINGLE-STAGE FILTER FEATURING A UNIQUE S-BAFFLE DESIGN IN CONJUNCTION WITH A SLOTTED REAR BAFFLE DESIGN, TO DELIVER EXCEPTIONAL FILTRATION EFFICIENCY.

FILTER IS CONSTRUCTED OF 430 STAINLESS STEEL, AND SIZED TO FIT INTO STANDARD 2-INCH DEEP HOOD CHANNEL(S).

UNITS SHALL INCLUDE STAINLESS STEEL HANDLES AND A FASTENING DEVICE TO SECURE THE TWO COMPONENTS WHEN ASSEMBLED.

***GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 75% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 90% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE.

FILTER INFORMATION – CAPTRATE GREASE-STOP SOLO

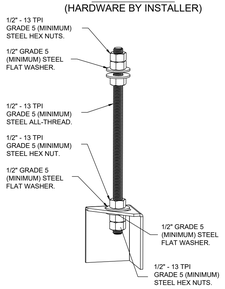
NOMINAL SIZE (H x W)	ACTUAL DIMENSIONS (H x W x D)	FREE AREA (SQ. FEET)	WEIGHT (POUNDS)	VELOCITY (FEET PER MINUTE)	STATIC PRESSURE (WATER GAUGE)
20 x 20	19-5/8" x 19-5/8" x 1-7/8"	2.28	11	100	0.25
20 x 16	19-5/8" x 15-5/8" x 1-7/8"	1.78	8.9	125	0.35
16 x 20	15-5/8" x 19-5/8" x 1-7/8"	1.78	9.1	150	0.45
16 x 16	15-5/8" x 15-5/8" x 1-7/8"	1.39	7.4	175	0.75
12 x 20	11-5/8" x 19-5/8" x 1-7/8"	1.23	6.8	200	0.90
12 x 16	11-5/8" x 15-5/8" x 1-7/8"	0.96	5.6	225	1.00
10 x 20	9-5/8" x 19-5/8" x 1-7/8"	1.00	5.6	250	1.30
10 x 16	9-5/8" x 15-5/8" x 1-7/8"	0.78	4.6	275	1.50

CAPTIVE–AIRE HOODS ARE BUILT IN COMPLIANCE WITH:

- NFPA #96
- NSF
- ETL Listed
- CALIFORNIA MECHANICAL CODE
- INTERNATIONAL MECHANCIAL CODE

BUILDING CODES

HOOD CORNER HANGING ANGLE (HARDWARE BY INSTALLER)



ASSEMBLY INSTRUCTIONS

HANGING ANGLE MUST BE SUPPORTED WITH 1/2" - 13 TPI GRADE 5 (MINIMUM) ALL-THREAD. SANDWICH HANGING ANGLES AND CEILING ANCHOR POINTS WITH 1/2" GRADE 5 (MINIMUM) STEEL FLAT WASHERS AND 1/2" - 13 TPI GRADE 5 (MINIMUM) HEX NUTS AS SHOWN. MUST USE DOUBLED HEX NUT CONFIGURATION BENEATH HOOD HANGING ANGLES AND ABOVE CEILING ANCHORS. MAINTAIN 1/4" OF EXPOSED THREADS BENEATH BOTTOM HEX NUT. TORQUE ALL HEX NUTS TO 57 FT-LBS.

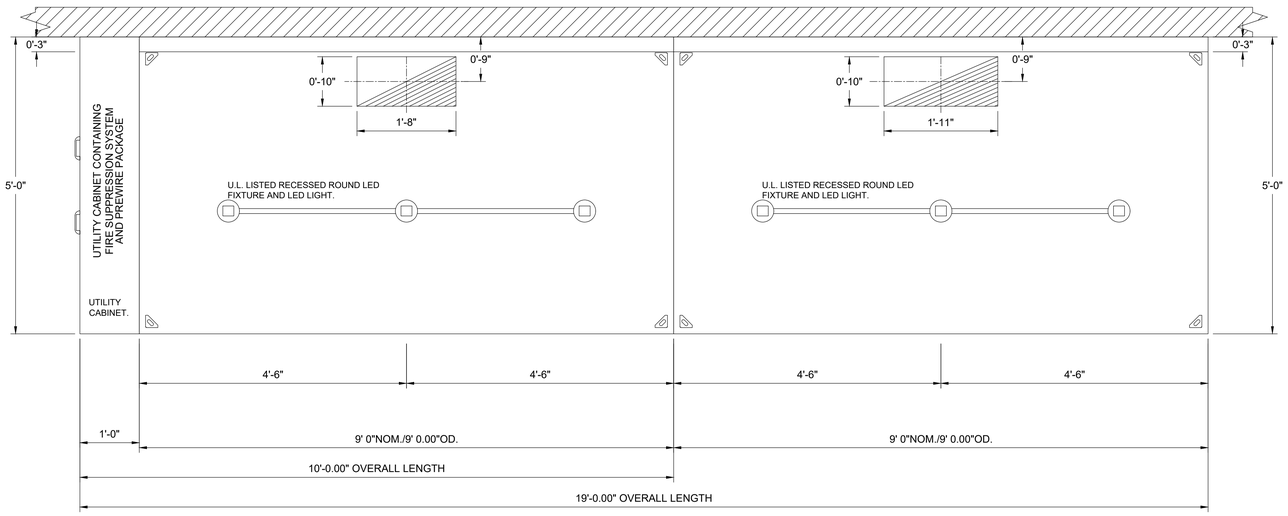
ND–2 HANGING ANGLE DETAIL

HANGING ANGLES WILL BE LOCATED IN THE FOLLOWING LOCATIONS FOR WALL CANOPIES

HOOD STYLE	DIM FROM REAR	DIM FROM FRONT (24" High Hood)	DIM FROM SIDES (24" High Hood)
ND-2 (-WI) Exhaust only	4.125"	2.25"	2.25"
VHB (-B)	2.25"	2.25"	2.25"

ALL OTHER HOOD MODELS CONTACT CAPTIVE AIRE FOR HANGING ANGLE LOCATIONS

HANGING ANGLE LOCATIONS

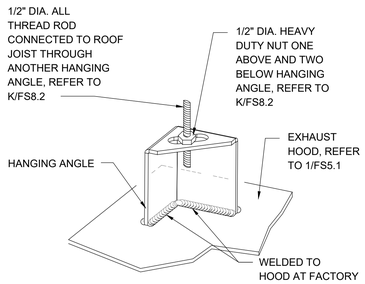


PLAN VIEW – HOOD #1 (Item 8)
9' 0.00" LONG 6024ND–2

PLAN VIEW – HOOD #2 (Item 8)
9' 0.00" LONG 6024ND–2

HOOD PLAN VIEW

1 FS5.1



* ROD AND NUTS TO BE SUPPLIED BY INSTALLING CONTRACTOR HANGING ANGLE IS PRE-PUNCHED AT FACTORY

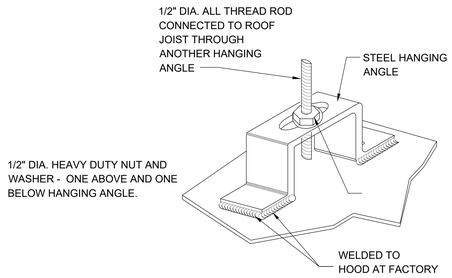
HANGING ANGLES WILL BE LOCATED IN THE FOLLOWING LOCATIONS FOR WALL CANOPIES			
HOOD STYLE	DIM FROM REAR	DIM FROM FRONT (24" High Hood)	DIM FROM SIDES (24" High Hood)
ND-2 (-WI) Exhaust only	4.125"	2.25"	2.25"

HANGING ANGLE LOCATIONS

ND-2 HANGING ANGLE DETAIL

REFERNCE ONLY – NOT TO SCALE

2 FS5.1



NOTE: ROD AND NUTS TO BE SUPPLIED BY INSTALLING CONTRACTOR. HANGING ANGLE IS PRE-PUNCHED AT FACTORY

HANGING ANGLE

REFERNCE ONLY – NOT TO SCALE

3 FS5.1

HOOD INFORMATION – JOB#5355347

HOOD NO	TAG	MODEL	MANUFACTURER	LENGTH	MAX COOKING TEMP	TYPE	APPLIANCE DUTY	DESIGN CFM/FT	TOTAL EXH CFM	EXHAUST PLENUM RISER(S)							HOOD CONSTRUCTION	HOOD CONFIG	
										WIDTH	LENG	HEIGHT	DIA	CFM	VEL	SP		END TO END	ROW
1	Item 8	6024 ND-2	CAPTIVEAIRE	9' 0"	600 DEG	I	HEAVY	240	2160	10"	20"	4"		2160	1555	-0.732"	304 SS 100%	LEFT	ALONE
2	Item 8	6024 ND-2	CAPTIVEAIRE	9' 0"	600 DEG	I	HEAVY	275	2475	10"	23"	4"		2475	1550	-0.815"	304 SS 100%	RIGHT	ALONE

SHEET NOTES

1. CONTRACTOR IS RESPONSIBLE TO COORDINATE AND PROVIDE ALL CONNECTIONS TO AND FROM FIRE SYSTEM, HOODS CONTROLS, MECHANICAL UNITS AND ANY SYSTEMS REQUIRED FOR OPERATION OF EXHAUST HOOD.

HOOD INFORMATION

HOOD NO	TAG	FILTER(S)					LIGHT(S)			UTILITY CABINET(S)					FIRE SYSTEM PIPING	HOOD HANGING WEIGHT
		TYPE	QTY	HEIGHT	LENGTH	EFFICIENCY @ 7 MICRONS	QTY	TYPE	WIRE GUARD	LOCATION	SIZE	FIRE SYSTEM TYPE	FIRE SYSTEM SIZE	ELECTRICAL MODEL #	SWITCHES QUANTITY		
1	Item 8	CAPTRATE SOLO FILTER	6	20"	16"	85% SEE FILTER SPEC	3	RECESSED ROUND	NO	LEFT	12"x60"x24"	ANSUL R-102	3.0	SC-320110MA	1 LIGHT 1 FAN	YES	527 LBS
2	Item 8	CAPTRATE SOLO FILTER	6	20"	16"	85% SEE FILTER SPEC	3	RECESSED ROUND	NO							YES	393 LBS

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AGENCY APPROVAL

EL DORADO MIDDLE SCHOOL
MULTI-PURPOSE BUILDING UPGRADES

1750 WEST ST, CONCORD, CA 94521

MT. DIABLO UNIFIED SCHOOL DISTRICT

AMD FOODSERVICE DESIGN
P.O BOX 163
GARDEN VALLEY, CA
95633
p. 530-333-4606
www.amdfoodservicedesign.com

CONSULTANT
nacht&lewis
600 Q Street, Suite 100
Sacramento, CA 95811
www.nachtlewis.com
916.329.4000

REGISTERED ARCHITECT
JEAN J. MAYSON
No. C-26867
RENEWAL DATE: 1/31/27
STATE OF CALIFORNIA

ARCHITECT

DSA SUBMITTAL

REVISIONS

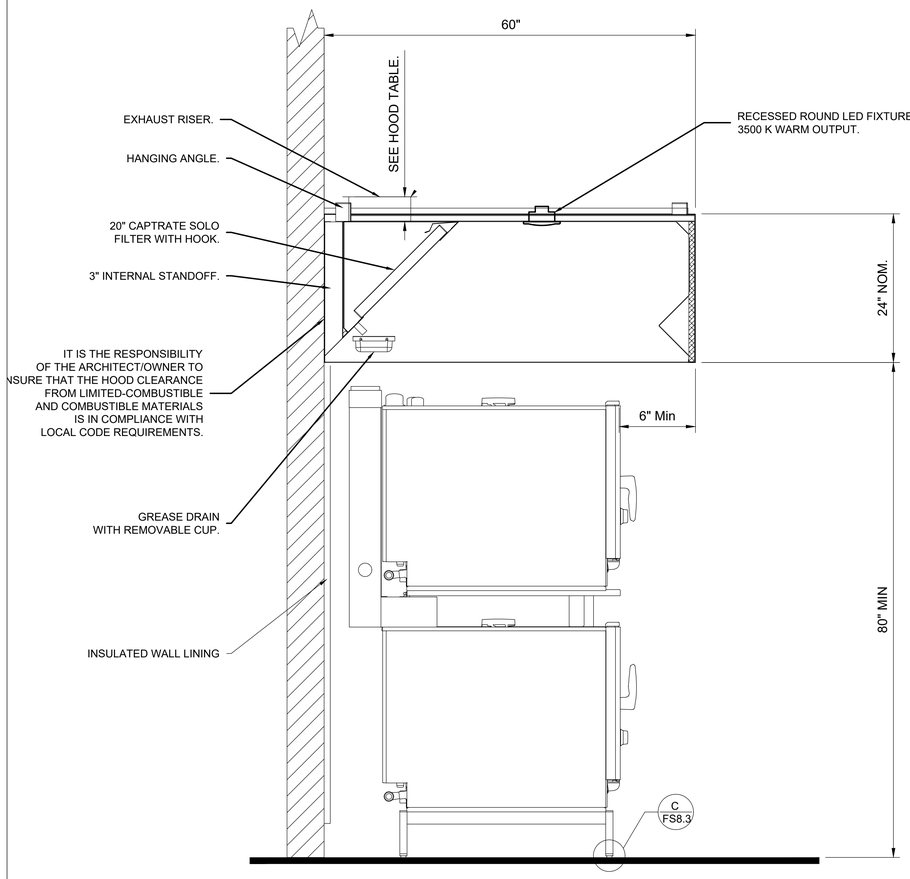
NO.	DESCRIPTION	DATE

DATE 02/28/2025
JOB NO. Y2326.00
SHEET TITLE

FOODSERVICE EQUIPMENT EXHAUST HOOD DETAILS

SHEET NO.

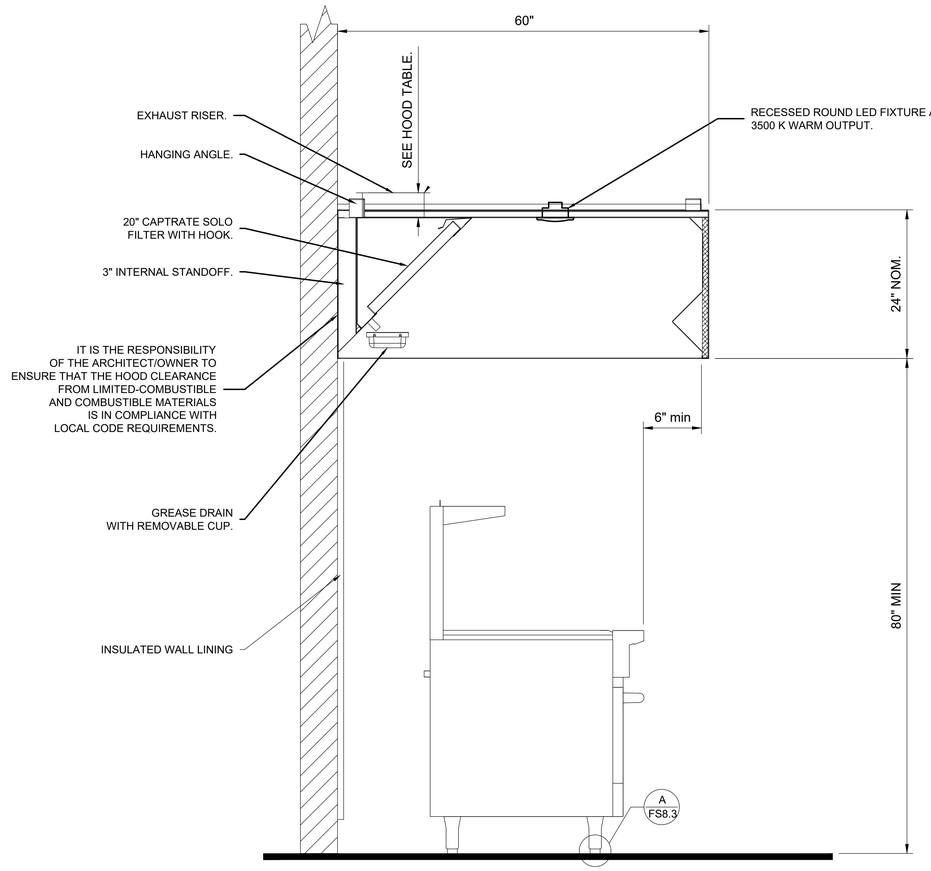
FS5.1



SECTION VIEW – MODEL 6024ND-2
HOOD – #1 (Item 8)

EXHAUST HOOD SECTION VEIW

1
FS5.2



SECTION VIEW – MODEL 6024ND-2
HOOD – #2 (Item 8)

EXHAUST HOOD SECTION VEIW

2
FS5.2

CAPTIVE AIRE
REGOFFICE
www.captiveaire.com

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ONE AND ONE-HALF INCH = ONE FOOT
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ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET

ELECTRICAL PACKAGE – JOB#5355347

NO	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED				
				LOCATION	QUANTITY		TYPE	ϕ	HP	VOLT	FLA
1		SC-320110MA	UTILITY CABINET LEFT	08 - SHIP LOOSE W/ PREWIRE	1 LIGHT 1 FAN	SMART CONTROLS THERMOSTATIC CONTROL W/ RELAY ON/OFF WITH SUPPLY	EXHAUST	3	2.000	208	6.0
							EXHAUST	3	2.000	208	6.0

SHEET NOTES

1. CONTRACTOR IS RESPONSIBLE TO COORDINATE AND PROVIDE ALL CONNECTIONS TO AND FROM FIRE SYSTEM, HOODS CONTROLS, MECHANICAL UNITS AND ANY SYSTEMS REQUIRED FOR OPERATION OF EXHAUST HOOD.

JOB NO	MODEL NUMBER	DRAWN BY	SCHEMATIC TYPE
5355347	SC-320110MA		INSTALL
	JOB NAME: Valley View School	DATE: 8/22/2022	DWG NO: ECP #1-1

DESCRIPTION OF OPERATION:
3 Phase w/ control for 2 Exhaust Fans, Exhaust on in Fire, Lights out in Fire, Relay On/Off with Supply Fan, Fan(s) On/Off Thermostatically Controlled. Room temperature sensor shipped loose for field installation. INVERTER DUTY 3 PHASE MOTOR REQUIRED FOR USE WITH VFD.

BREAKER PANEL TO PRIMARY CONTROL PANEL
Responsibility: Electrician
BREAKER SIZE SHOWN IS THE MAXIMUM ALLOWED

BREAKER PANEL: BREAKER 1PH 120 V 15 A — Hot, Neutral, Ground — CONTROL POWER. DO NOT WIRE TO GFCI OR SHUNT TRIP BREAKER. 1ST HOOD LIGHT BREAKER SHARED W/ CONTROL POWER. SWITCH #1
BREAKER 3PH 208 V MCA: 13.5 A MOCP: 15 A — L1, L2, L3, Ground — EXH-1 &EXH-2
PRIMARY CONTROL PANEL: H1, N1, GND; L1, L2, L3, GND

CONTROL PANEL TO FANS
Responsibility: Electrician

PRIMARY PANEL: ST-1 — T1, T2, T3, GND — WIRE DIRECT TO STARTER
ST-2 — T1, T2, T3, GND — WIRE DIRECT TO STARTER
FANS: FAN: 01 EXH-1 (FLA: 6.0 HP: 2.000 VOLT: 208 V) — WIRE TO DISCONNECT
FAN: 02 EXH-2 (FLA: 6.0 HP: 2.000 VOLT: 208 V) — WIRE TO DISCONNECT

CONTROL PANEL TO ACCESSORY ITEMS
Responsibility: Electrician

CONTROL PANEL: CONTROL PANEL TO FIRE SYSTEM MICROSWITCH — C1, AR1 — WIRE CT TO COMMON (1) WIRE AR1 TO NORMALLY CLOSED (2). C1 TO AR1 SHOULD HAVE CONTINUITY WHEN ARMED.
IF MORE THAN ONE FIRE SYSTEM, WIRE IN SERIES AS SHOWN — C1, MS-1, MS-2, AR1
COMPONENT: MICROSWITCH 1 — C, NO, NC (CAP OFF)

CONTROL PANEL		COMPONENT
CONTROL PANEL TO REMOTE MOUNTED SWITCHES	J4	WIRE DIRECTLY TO CONTROL BOARD CAT-5 CONNECTION. PLACE END OF LINE PLUG IN EMPTY JACK. PN: EOL120A
CONTROL PANEL TO HOOD LIGHTS 1400 W MAX	B1, W1, GND	BLACK, WHITE, GREEN — WIRE TO J-BOX ON TOP OF HOOD — HOOD LIGHTS 1
CONTROL PANEL TO KITCHEN TEMP SENSOR	T1A, T1B	WIRE TO CONTROL BOARD. INSTALL SENSOR IN ROOM AWAY FROM HEAT SOURCES. DO NOT INSTALL SENSOR ON THE CEILING GRID, SEE MANUAL. — ROOM TEMP
CONTROL PANEL TO DUCT SENSOR	T2A, T2B	FACTORY WIRED TEMPERATURE SENSOR. MOUNTED IN EXHAUST DUCT — HOOD 1 RISER 1
CONTROL PANEL TO DUCT SENSOR	T3A, T3B	WIRE TO CONTROL BOARD. SENSOR MOUNTED IN EXHAUST DUCT — HOOD 2 RISER 1
		THE FOLLOWING CONNECTIONS MAY OR MAY NOT BE REQUIRED BASED ON JOBSITE SPECIFICATIONS
CONTROL PANEL SIGNAL FOR EXTERNAL SHUNT TRIP	ST, N1	HOT TO SHUNT COIL, NEUTRAL FROM SHUNT COIL — ST TERMINAL IS ENERGIZED IN FIRE CONDITION. — SHUNT COIL
CONTROL PANEL SIGNAL FOR EXTERNAL CONTACTOR COIL	KS, N1	HOT TO CONTACTOR COIL, NEUTRAL TO CONTACTOR COIL — KS TERMINAL IS DE-ENERGIZED IN FIRE CONDITION. — CONTACTOR COIL
SPARE FIRE SYSTEM DRY CONTACT	C2, AR2	COMMON, NORMALLY OPEN — SPARE CONTACTS WILL MAKE C2 TO AR2 WHEN SYSTEM IS ARMED. THEY ARE USED TO DISABLE EQUIPMENT OR PROVIDE SIGNALS. (NOT FOR BUILDING FIRE ALARM WHICH MUST BE WIRED DIRECTLY TO THE ANSUL ALARM INITIATING SWITCH LOCATED IN ANSUL AUTOMAN)
CONTROL PANEL DRY CONTACT ON/OFF WITH SUPPLY FAN GROUP 1	SPO1, SPO1	COMMON, NORMALLY OPEN
	SPO2, SPO2	COMMON, NORMALLY OPEN — SPARE CONTACTS WILL MAKE COMMON TO NORMALLY OPEN WHEN SUPPLY FAN IS ON.

CONTROL PANEL TO EXTERNAL SWITCH: H1, IO1 — SIGNAL SWITCH THROUGH BMS WILL ACTIVATE ZONE1 FANS AND LIGHTS — BMS SWITCH NO

UNLESS SPECIFIED OTHERWISE, ALL FACTORY AC WIRING 16 AWG. ALL FACTORY DC WIRING 18 AWG.

J9 120V: N1, AR1, GAS, KS, ST, PO1, H1 — PANEL LID — WH, BK, GR
CONTROL INPUT 120V H1=LINE, N1=NEUTRAL, 15A BREAKER. DO NOT CONNECT TO SHUNT TRIP BREAKER. SEE INSTALLATION SCHEMATIC FOR ADDITIONAL REQ. TERMINAL GAS USED FOR 120V POWERED GAS VALVES ONLY
PS-01: WH/BL, BL, BK, 24V DC, GND, AC, N1, H1
J6: GRY/BK, GND, WH/BL, DO; 24V; 8 9 10 11 12 13 14 / 1 2 3 4 5 6 7; DC+ BL, DO1 PR

J7 120V: IO1, B1, EF1, EF2, OV1 — BK 14AWG, RD-1, HOOD LIGHTS, JUMPER, WH, H1, N1
CR-1 98 95 97, CR-2 98 95 97 — ST-1, ST-2
DC+ BL, RC-1 8 7, PR, RO1
AR1 BK, SF1 BK — RC-1 7 18, RC-2 7 18 — WH, N1

MAKE UP AIR INTERLOCK. JUMPER JUMPER — J10 ECPM03, J10 ECPM03

MOTOR POWER CIRCUIT

3 PH 208 V 15 A — 14 AWG — ST-1 T1 T2 T3 — OL-1 T1 T2 T3 — MTR: EXH-1, CONT: 100-K09D10, OVLD: 193-KB63, FLA: 6.0, HP: 2.000
14 AWG — BK, BK, BK — ST-2 T1 T2 T3 — OL-2 T1 T2 T3 — MTR: EXH-2, CONT: 100-K09D10, OVLD: 193-KB63, FLA: 6.0, HP: 2.000

DRY CONTACTS (SHOWN DE-ENERGIZED)

14 AWG — RA-1-1 — NO, C, NC — ON/OFF WITH FIRE
14 AWG — RA-2-1 — NO, C, NC — ON/OFF WITH SUP
14 AWG — RA-2-2 — NO, C, NC

14 x 18 x 6 Box

FACTORY WIRING SCHEMATIC CIRCUIT BOARDS
DCV Rev. 2.14.00
HMI Rev. 2.14.00

RA-x 120VAC RELAY: NO 4 3, NC 2 1, COIL 8 7, COM 6 5
RD-x 24 VDC RELAY: NO 4 3, NC 2 1, COIL 8 7, COM 6 5

COMPONENT LIST

LABEL	DESCRIPTION
ST-X	Starter varies
OL-X	Overload varies
C-X	Contactor varies
PS-1	Power Sup, 24VDC MDP15.0AA-1C
RA-x	120V Relay DPDT 34.102.0184.0
RD-x	24VDC Light Relay 34.102.0188.0
TS-x	Duct Thermostat AOF-PO-T4T-EXPL

LEGEND
FIELDWIRING
FACTORY WIRING

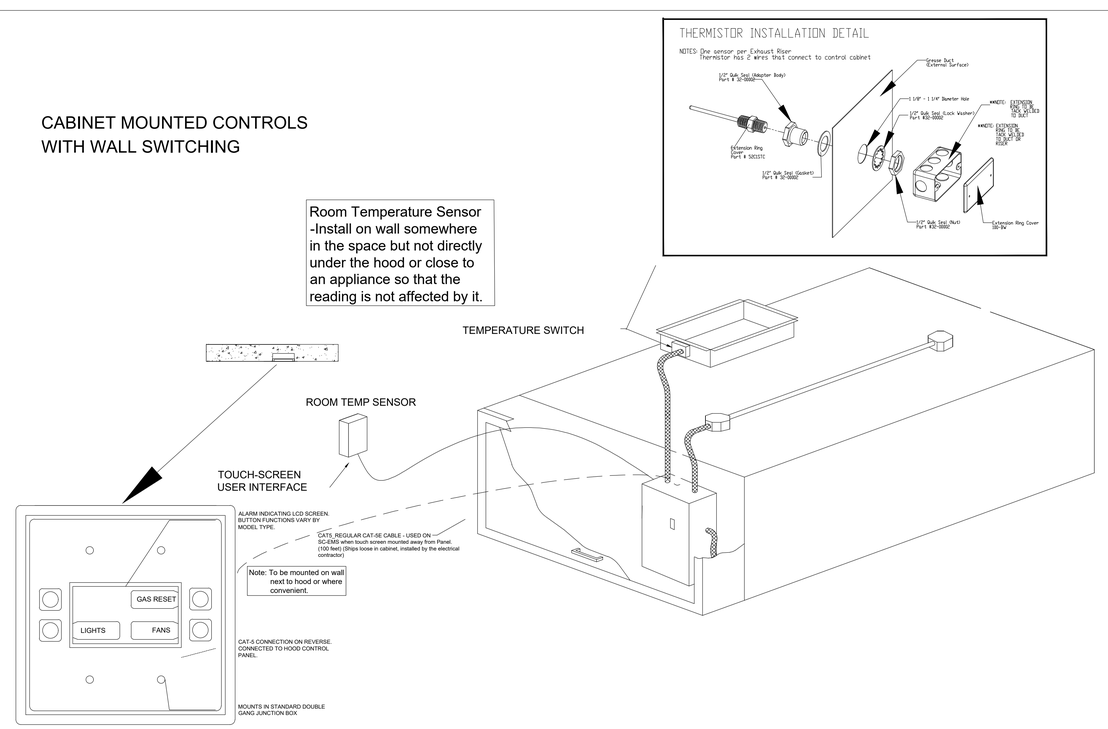
BK- BLACK, BL- BLUE, BR- BROWN, OR- ORANGE, WH- WHITE, ORBL- ORBL STRIPE, BLRD- BLRD STRIPE, RDGR- RDGN STRIPE, WHBL- WHBL STRIPE
YW- YELLOW, GY- GREY, PR- PURPLE, RD- RED, GR- GREEN

JOB NAME: Valley View Scho...
DRAWING TITLE: SC-320110MA
DESCRIPTION OF OPERATION: 3 Phase w/ control for 2 Exhaust Fans, Exhaust on in Fire, Lights out in Fire, Relay On/Off with Supply Fan, Fan(s) On/Off Thermostatically Controlled. Room temperature sensor shipped loose for field installation. INVERTER DUTY 3 PHASE MOTOR REQUIRED FOR USE WITH VFD.

JOB NO	DRAWN BY
5355347	
TYPE: FACTORY	DATE: 8/22/2022
DWG NO: ECP #1-2	

CABINET MOUNTED CONTROLS WITH WALL SWITCHING

Room Temperature Sensor -Install on wall somewhere in the space but not directly under the hood or close to an appliance so that the reading is not affected by it.



THERMISTOR INSTALLATION DETAIL

NOTES: One sensor per Exhaust Riser. Thermistor has 2 wires that connect to control cabinet

FAN CONTROL SYSTEM

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LICENSED ARCHITECT — JEAN J. MATSON — No. C-26867 — RENEWAL DATE: 1/31/27 — STATE OF CALIFORNIA

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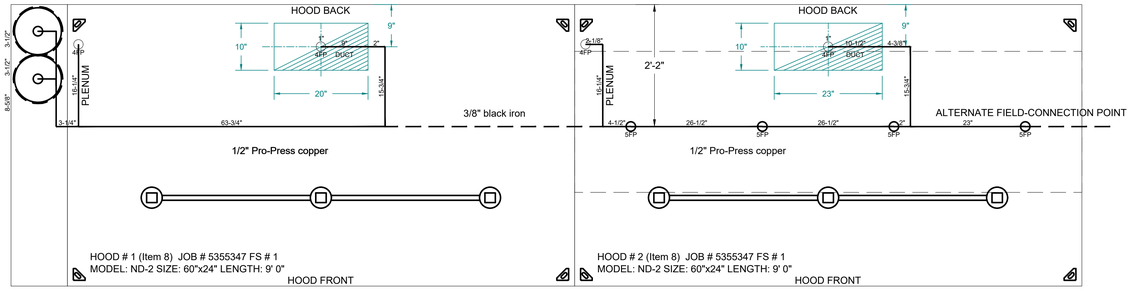
- SYSTEM REQUIRES A MINIMUM OF 7 FT OF EQUIVALENT PIPE LENGTH BETWEEN TANK AND NEAREST APPLIANCE NOZZLE FOR MOST APPLIANCES. EACH 90 DEGREE ELBOW ADDS 1.3 FT OF EQUIVALENT LENGTH. SEE MANUAL FOR DETAILS



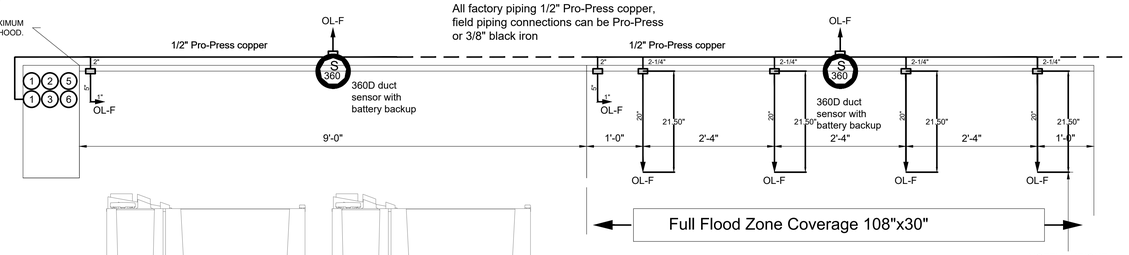
FIRE SYSTEM PLAN VIEW

1 FS5.4

EGV1-1/2

FACTORY PIPING EXTENDS A MAXIMUM OF 6" ABOVE THE TOP OF THE HOOD.

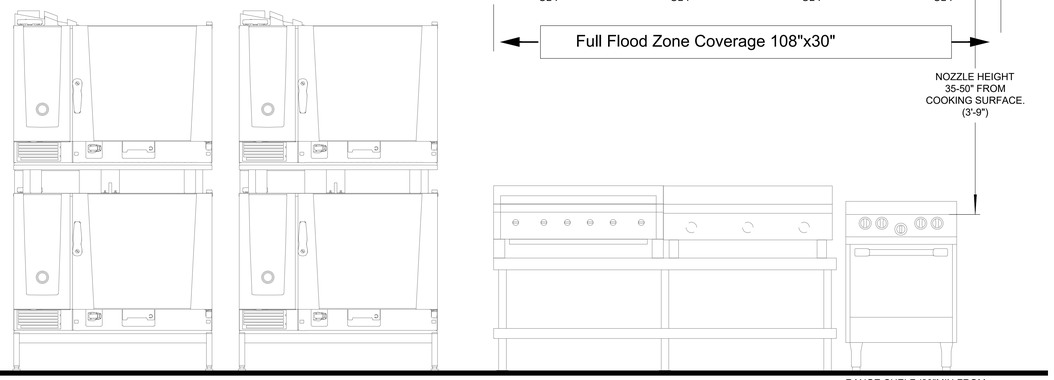
All factory piping 1/2" Pro-Press copper, field piping connections can be Pro-Press or 3/8" black iron



NOZZLE HEIGHT 35-50" FROM COOKING SURFACE. (3'-9")

Electric push station with battery backup, 48" AFF, 10'-20' from hazard, in the path of egress

7



FIRE SYSTEM ELEVATION

2 FS5.4

Appliance Coverage

Table 3 illustrates the maximum permitted cooking surface dimensions of each appliance that can be protected within a single overlapping zone. It is important to note that the cooking surface (area requiring protection) is different than the total appliance size.

Table 3 - Standard Overlapping Protection 5 nozzles per tank (20 flow points), 36" nozzle spacing

Hazard	Fuel Source	Maximum Depth of Cooking Surfaces	Maximum Length of Cooking Surfaces	Maximum Height of Fuel
Multi Vat Fryer [3] (with or w/o Drip-board)	Gas or Electric	30" deep	Unlimited	N/A
Split Vat Fryer, [3] (with or w/o Drip-board)	Gas or Electric	30" deep	Unlimited	N/A
Tilt Skillet	Gas or Electric	30" deep	Unlimited	N/A
Griddle	Gas or Electric	30" deep	Unlimited	N/A
Gas/Electric Radiant Charbroiler	Gas or Electric	30" deep	Unlimited	N/A
Upright Charbroiler/ Salamander, Chain*	Gas or Electric	30" deep	Unlimited	N/A
Appliance w/o Shelf/Obstruction*	Gas or Electric	30" deep	Unlimited	N/A
Wok	Gas or Electric	11-24" diameter	11-24" diameter	6-3/4" deep

NOZZLE CHART			
20FP PER TANK X 2 TANKS = 40FP			
NOZZLE	FP	QTY	TTL FP
OL-F (4FP)	= 4FP	4	16FP OUT OF 40FP
OL-F (5FP)	= 5FP	4	20FP OUT OF 40FP
Total			36FP OUT OF 40FP

System Designed by
Matt Eidson
Tank Certified Designer
12/14/21 Certificate

Table 4 - Overlapping Protection 4 nozzles per tank (20 flow points), 30" nozzle spacing

Hazard	Fuel Source	Maximum Depth of Cooking Surfaces	Maximum Length of Cooking Surfaces	Maximum Height of Fuel
Deep Fat/Industrial Fryers (with or w/o Drip-board)	Gas or Electric	34" deep	Unlimited	N/A
Pressure Fryers*	Gas or Electric	34" deep	Unlimited	N/A
Tilt Skillet	Gas or Electric	34" deep	Unlimited	N/A
Wok	Gas or Electric	Greater than 24", up to 30" diameter	30 inch diameter	9-1/2" deep

Deep Fat, Industrial, Pressure Fryers, and Skillets over 14" wide and up to 34" max depth will be overlapping with 4 nozzles per tank, 30" spacing. Max oil capacity: 24.75 gallons.

* Henny Penny fryer models 690, 691, and 692 are allowed with standard 30" nozzle spacing as long as the nozzle flow pattern is not obstructed by the lid while in the fully open position. A nozzle is required on both sides of the lid.

NOTES
- FIELD PIPE DROPS AS SHOWN
  PIPING, ELBOWS, TEES, AND NOZZLES SUPPLIED BY CAS.
- FIELD INSTALLED DROP: FACTORY WILL PROVIDE QTY 2 60IN LONG PIECES OF CHROME PLATED PIPING SHIPPED LOOSE TO BE FIELD-INSTALLED.
- SHIP LOOSE DROP: FACTORY WILL PROVIDE THE EXACT CHROME PIPE LENGTH NEEDED SHIPPED LOOSE TO BE FIELD-INSTALLED.
- RELOCATE NOZZLES IF FLOW PATTERN IS BLOCKED BY SHELVING, SALAMANDERS, ETC.
- OVERLAPPING COVERAGE SHALL NOT BE USED ON ANY APPLIANCE WITH AN OBSTRUCTION.
- IF APPLICABLE, EXTENDED PRE-PIPED DROPS ARE SHIPPED LOOSE.
- FACTORY PIPING EXTENDS A MAXIMUM OF 6" ABOVE THE TOP OF THE HOOD.

- APPLIANCE DIMENSIONS LISTED REPRESENT THE COOKING SURFACE SIZE, NOT THE OVERALL APPLIANCE SIZE.

- THIS FIRE SYSTEM COMPLIES WITH U.L. 300 REQUIREMENTS.

- OL-F NOZZLE PART NUMBER REPLACES 3070-3/8H-10-SS

JOB #: 5355347.
JOB NAME: VALLEY VIEW SCHOOL.

SYSTEM SIZE: TANK-SP-2 TOTAL FP REQUIRED: 36.
HOOD # 1 9' 0.00" LONG x 60" WIDE x 24" HIGH.
RISER # 1 SIZE: 10" x 20".
HOOD # 1 METAL BLOW-OFF CAPS INCLUDED.
HOOD # 2 9' 0.00" LONG x 60" WIDE x 24" HIGH.
RISER # 1 SIZE: 10" x 23".
HOOD # 2 METAL BLOW-OFF CAPS INCLUDED.

- HEAVY-DUTY APPLIANCES (RATED 600°F) WILL REQUIRE AN ADDITIONAL DOWNSTREAM FIRESTAT IN THE EVENT THAT THE DUCTWORK CONTAINS ANY HORIZONTAL RUNS OVER 25 FT IN LENGTH.
- MEDIUM TO LIGHT-DUTY APPLIANCES (RATED 450°F) WILL NOT REQUIRE ANY ADDITIONAL DOWNSTREAM DETECTION.

LEGEND – FIRE CABINET TANK SYSTEM

1 4 GALLON TANK.
2 PRIMARY ACTUATOR RELEASE.
3 SECONDARY ACTUATOR RELEASE.
4 PRESSURE SUPERVISION SWITCH.
5 PRIMARY HOSE ASSEMBLY.
6 SECONDARY HOSE ASSEMBLY.
7 REMOTE MANUAL ACTUATION DEVICE.

General Notes:

1: All Installation procedures are in compliance with manufacturer's specifications and in accordance with NFPA17A (2016) and NFPA96 (2016) standards.

2: Remote pull station is mounted no higher than 48" from finished floor and in path of egress

3: The hood extinguishing system must be interconnected to the building alarm system

4: Automatic fuel shut down device(s) shall shut down all sources of fuel under the hood.

5: All electrical under the hood shall shut down upon activation

6: Exhaust fan is to stay on and make up air must shut down upon system activation

7: A K Class rated fire extinguisher accessible within 30 foot unobstructed path from cooking equipment is required

8: System to be test fired and witnessed by local fire authorities upon completion.

Firestat (Heat) Detector

The Firestat (Fenwal Detect-a-Fire) is a listed electric thermal detector available in a variety of temperature settings and used to actuate the TANK Fire Suppression extinguishing system automatically. When a Firestat senses a temperature higher than its setpoint, the Firestat contacts will close and energize the TANK Fire Suppression system via the control panel.

Figure 10 - Firestat

FIRE SYSTEM NOTES

GENERAL
CUSTOMER RESPONSIBLE FOR ADDITIONAL LABOR AND PARTS CHANGES AS A RESULT OF COOKING EQUIPMENT LAYOUT CHANGES OR MISINFORMATION AFTER RELEASE OF ORDER.

CUSTOMER RESPONSIBLE FOR ADDITIONAL TRIPS BY FIRE SYSTEM DISTRIBUTOR DUE TO JOB SITE DELAYS.

UNION LABOR CHARGES, IF REQUIRED, ARE EXTRA.

GAS VALVE
ELECTRICAL GAS VALVE IS TO BE INSTALLED BY PLUMBING CONTRACTOR. PLUMBING PERMIT REQUIRED FOR GAS VALVE INSTALLATION.

ELECTRIC SHUT OFF
ELECTRICAL COOKING EQUIPMENT MUST BE SHUT OFF WHEN FIRE SYSTEM IS ACTIVATED. ELECTRICAL CONTRACTOR IS TO PROVIDE SHUT OFF CONTACTS OR SHUNT TRIP BREAKERS. THE DESIGN OF THE FIRE SYSTEM SHALL COMPLY WITH S.M.A.C.N.A. GUIDELINES FOR SEISMIC RESTAINTS OF MECHANICAL SYSTEMS. O.S.H.P.D. APPROVED ANCHORAGE R-0010 SUPPORTS AND BRACING OF PIPE & CONDUIT.

IF APPLICABLE TO LOCAL CODE
EXISTING FIRE ALARM SYSTEM MUST BE INTERCONNECTED TO THE FIRE SYSTEM. SYSTEM HAS AN ALARM POINT AND TROUBLE.

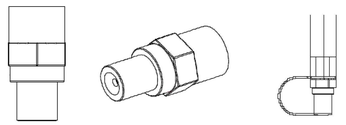
FIRE SUPPRESSION SYSTEM TEST
THE TEST WILL BE CONDUCTED IN FRONT OF A SYSTEM INSPECTOR WITH A NITROGEN CARTRIDGE WITH BALLOONS COVERING THE SYSTEM NOZZLES. THE TEST WILL BE CONDUCTED SIMULATING THE REMOTE AND AUTOMATIC ACTUATION.

REMOTE PULL STATION
DEEP SINGLE GANG BOX WITH 1/2 EMT RUN BACK TO HOOD CONTROLS 48" ABOVE FINISHED FLOOR.

Nozzles

The nozzle (p/n 3070-3/8H-SS10) is a 4 flow nozzle and is used for plenum, duct, and dedicated appliance coverage (e.g., salamanders, upright broilers, chain broilers, and appliance with upright obstructions). The nozzles include a cap (p/n 3074-1-1). The cap prevents contamination from entering the pipe network and is designed to pop-off upon system discharge, allowing the agent to flow to the protected hazard area. Refer to "Duct and Plenum Protection" on page 14.

Figure 6 - Fire System Nozzle



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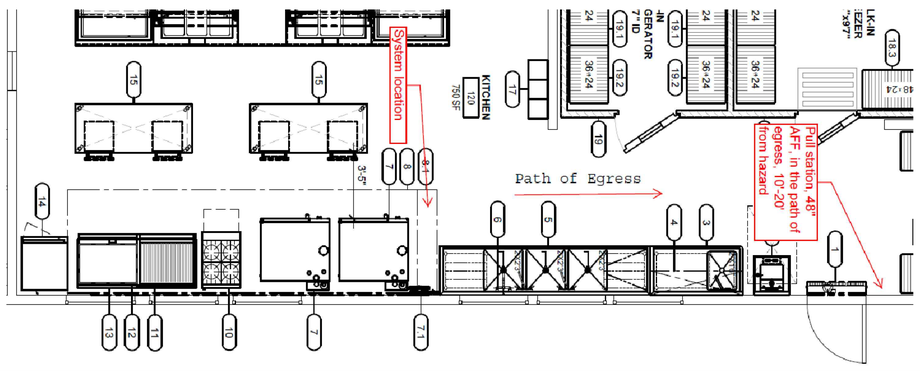

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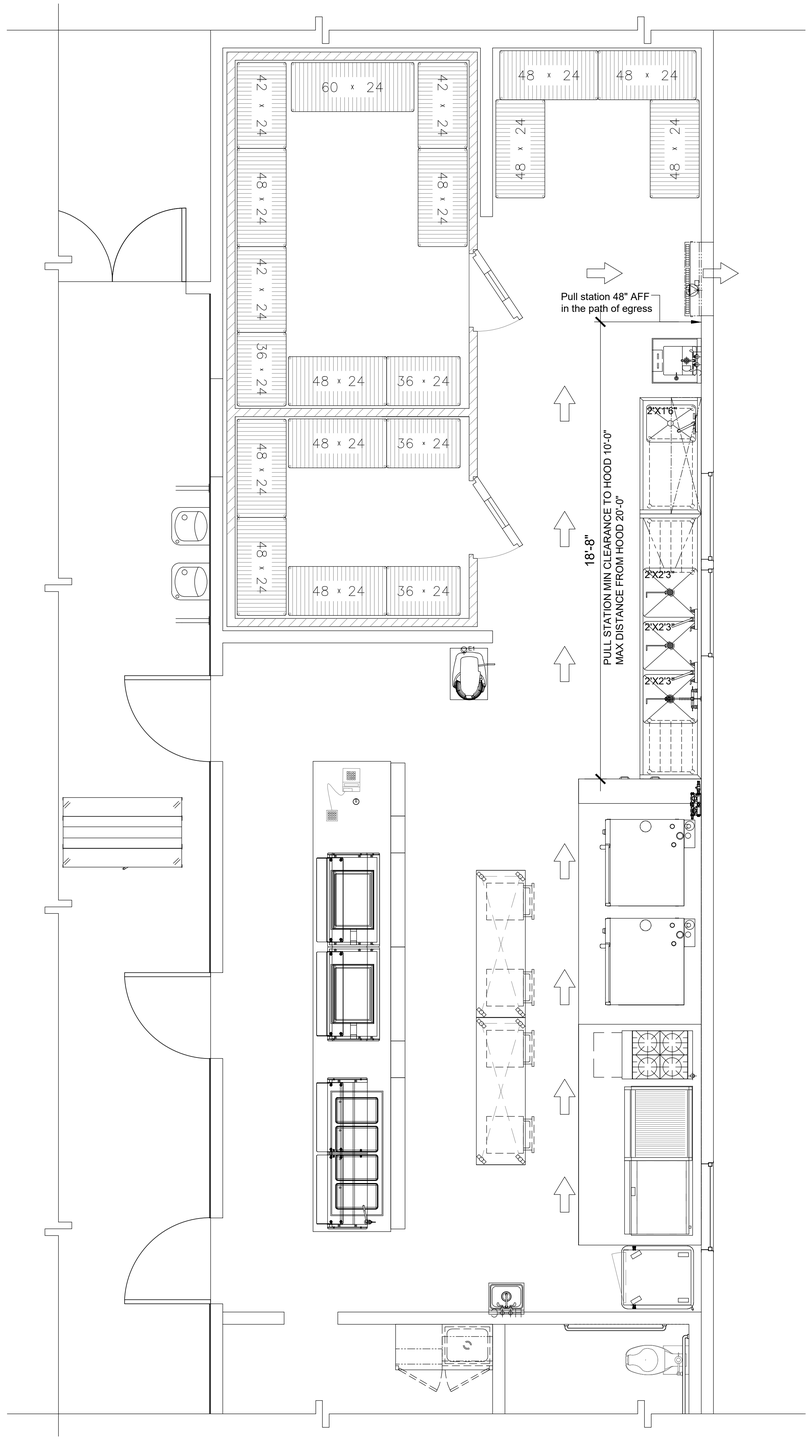

PATH OF EGRESS

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THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121540 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 3/28/2025

AGENCY APPROVAL

EL DORADO MIDDLE SCHOOL
MULTI-PURPOSE BUILDING UPGRADES

1750 WEST ST, CONCORD, CA 94521

MT. DIABLO UNIFIED SCHOOL DISTRICT

AMD FOODSERVICE DESIGN
P.O BOX 163
GARDEN VALLEY, CA
95633
p. 530-333-4606
www.amdfoodservicedesign.com

CONSULTANT

nacht&lewis
600 Q Street, Suite 100
Sacramento, CA 95811
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916.329.4000

LICENSED ARCHITECT
BRIAN J. MAYNARD
No. C26867
RENEWAL DATE: 1/31/27
STATE OF CALIFORNIA

ARCHITECT

DSA SUBMITTAL

REVISIONS

NO.	DESCRIPTION	DATE

DATE 02/28/2025

JOB NO. Y2326.00

SHEET TITLE

FOODSERVICE
EQUIPMENT PATH
OF EGRESS

SHEET NO.

FS5.5

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
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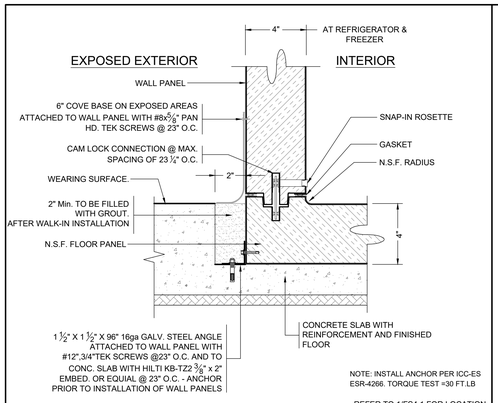
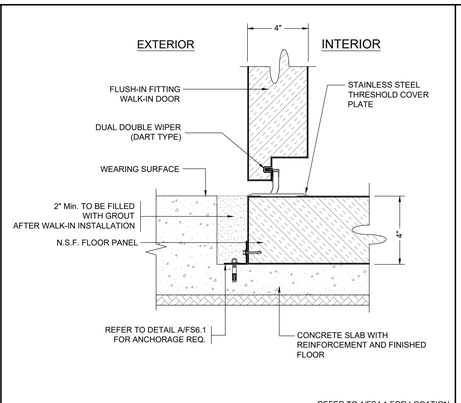


REFER TO 1/FS4.1 FOR LOCATION

A WALL PANEL TO RECESSED PRE-FAB FLOOR

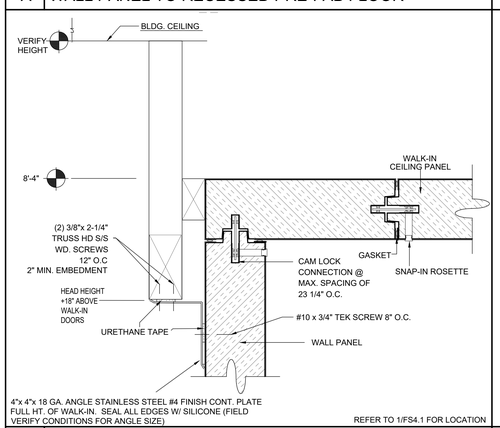
SPARE

B SPARE



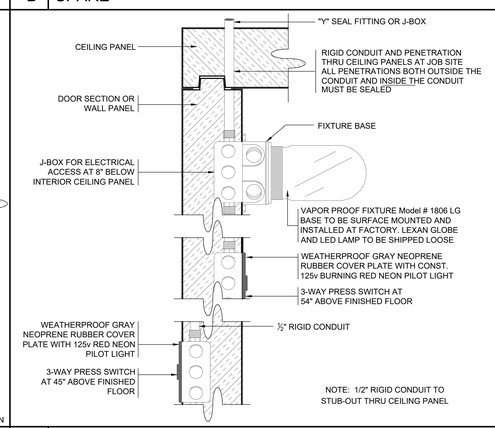
REFER TO 1/FS4.1 FOR LOCATION

C THRESHOLD DETAIL FOR REFRIGERATOR DOOR

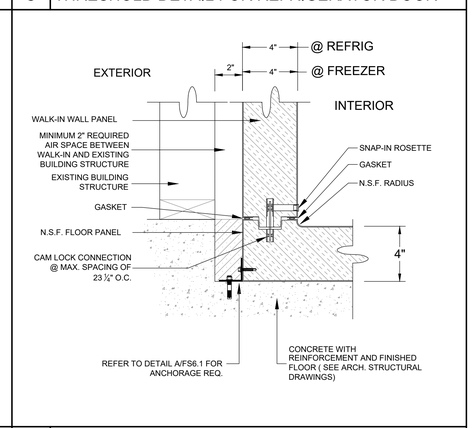


REFER TO 1/FS4.1 FOR LOCATION

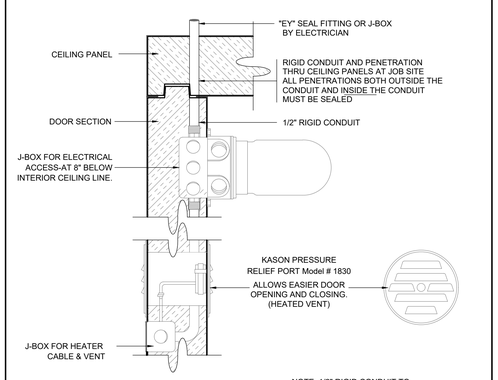
E SUPPLEMENTAL LATERAL BRACING TO CEILING PANEL



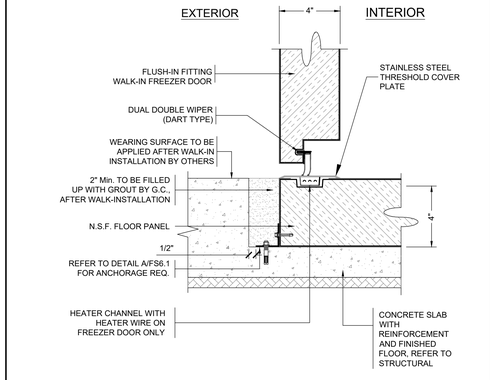
F 3 -WAY INTERIOR & EXTERIOR PRESS SWITCH



G WALL PANEL AT BUILDING WALL

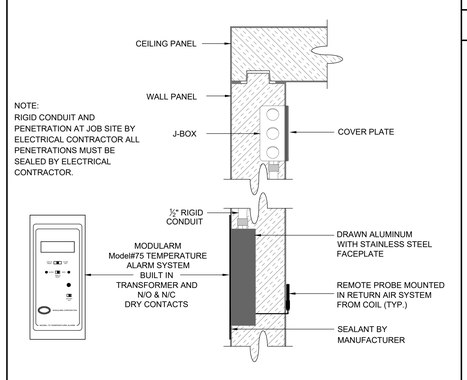


H PRESSURE RELIEF PORT MODEL # 1830 DETAIL



REFER TO 1/FS4.1 FOR LOCATION

I THRESHOLD DETAIL FOR FREEZER DOOR



J MODULARM CORP. MODEL 75 DETAIL

WALK-IN COOLER/FREEZER ANCHORAGE NOTE:

WALK-IN'S SHALL HAVE SUPPLEMENTAL LATERAL BRACING ON THE DOOR SIDE, SEE E/FS6.1

WALK-IN COOLER/FREEZER TYPICAL NOTES:

APPLICATION - WALK-IN COOLER/FREEZER COMBO
4" HARD NOSE TONGUE & GROOVE HIGH DENSITY URETHANE PERIMETER (CFC FREE) W/ SHT. MTL. FACING FLANGED 1/2" TO 3/4" PERIMETER OF EACH SHEET. CORNERS & T-PANELS ONE-PIECE CONSTRUCTION W/ 1/2" RADIUS AT ALL INSIDE VERTICAL CORNERS. JOINTS SEALED W/ PVC GASKET AT INT. & EXT. PERIMETER OF PANELS. PANELS RIGID CONNECTION W/ CAM-LOCK FASTENERS (WALL TO WALL: 48" O.C MAX: WALL TO CEILING: 24" O.C. MAX: WALL TO FLOOR: 24" O.C. MAX: CEILING TO CEILING: 24" O.C. MAX , IF APPLY)

INSULATION - 4" THICK FOAMED IN PLACE HIGH DENSITY URETHANE (CFC FREE) FILLED, OVER 90 PERCENT CLOSED CELL CONTENT. LESS THAN 25 FLAME SPREAD IN ACCORD W/ UBC STD. 42-1 (BASED ON UL 723 WHICH IS SIMILAR TO ASTM E84 THE STEINER TUNNEL TEST) AND CLASS 'A' INTERIOR FINISH IN ACCORDANCE W/ NFPA 101, SECTION 6-2, AND NFPA 255. K-FACTOR NOT TO EXCEED 0.14 BTU/HOUR/SQ. FT./°F PER INCH THICKNESS IN ACCORDANCE W/ ASTM C177 AT 75 F MEAN TEMPERATURE. UL REPORT (BLBT.R13780) FOR: SURFACE BURNING CHARACTERISTICS

FLOOR - 4" THICK FOAMED IN PLACE HIGH DENSITY URETHANE (CFC FREE) FILLED, OVER 90 PERCENT CLOSED CELL CONTENT. LESS THAN 25 FLAME SPREAD IN ACCORD W/ UBC STD. 42-1 (BASED ON UL 723 WHICH IS INTERIOR FINISH IN ACCORDANCE W/ NFPA 101, 0.14 BTU/HOUR/SQ. FT./ F PER INCH THICKNESS IN ACCORDANCE W/ ASTM C177 AT 75 F MEAN TEMPERATURE, RESULTS: FLAME SPREAD INDEX 25, SMOKE DEVELOPED INDEX: 400. FLOOR TO BE HEAVY DUTY WITH 500LBS POINT LOAD FOR CARTS AND PALLET JACKS.

FINISH -

WALL INTERIOR -	.040 STUCCO EMBOSSED ALUMINUM WHITE FINISH
WALL EXTERIOR (EXPOSED TO KITCHEN)	- 22GA. STAINLESS STEEL - TYPE 304, #4 FINISH
WALL EXTERIOR (UNEXPOSED) -	26GA. STUCCO EMBOSSED GALVANIZED STEEL
CEILING INTERIOR -	.040 STUCCO EMBOSSED ALUMINUM WHITE FINISH
FLOOR INTERIOR -	WEARING SURFACE TO BE .1875 ALUM. SMOOTH W/ MIN. 1/2" RADIUS COVED UP ALL INTERIOR WALLS TO A HT. OF 6"

DOOR(S) -

1EA.	42" X 80"	COOLER, FLUSH IN-FITTING DOOR W/ MAGNETIC GASKET
	INTERIOR -	22GA. STAINLESS STEEL - TYPE 304, #4 FINISH
	EXTERIOR -	22GA. STAINLESS STEEL - TYPE 304, #4 FINISH
	DEAD BOLT -	NONE
	HANDLE -	K27 W/ INSIDE SAFETY RELEASE & DEAD BOLT LATCH
	HINGES -	(2) K1245 (1) K1248 -SPRING LOADED
	CLOSER -	RACK & PINION
	HEATER CABLE -	NONE
	VISION PANEL -	14" x 24" (NON-HEATED)
	INT KICKPLATES -	42" HIGH, DIAMOND TREAD PLATE ALUMINUM
	EXT KICKPLATES -	42" HIGH, DIAMOND TREAD PLATE ALUMINUM
	JAMB GUARDS -	INT., 48" HIGH, DIAMOND TREAD PLATE ALUMINUM
1EA.	42" x 80"	FREEZER, FLUSH IN-FITTING DOOR W/ MAGNETIC GASKET
	INTERIOR -	22GA. STAINLESS STEEL - TYPE 304, #4 FINISH
	EXTERIOR -	22GA. STAINLESS STEEL - TYPE 304, #4 FINISH
	DEAD BOLT -	NONE
	HANDLE -	K27 W/ INSIDE SAFETY RELEASE & DEAD BOLT LATCH
	HINGES -	(2) K1245 (1) K1248 -SPRING LOADED
	CLOSER -	RACK & PINION
	HEATER CABLE -	(4) SIDES OF DOOR OPENING
	VISION PANEL -	14" x 24" (HEATED)
	INT KICKPLATES -	42" HIGH, DIAMOND TREAD PLATE ALUMINUM
	EXT KICKPLATES -	42" HIGH, DIAMOND TREAD PLATE ALUMINUM
	JAMB GUARDS -	INT., 48" HIGH, DIAMOND TREAD PLATE ALUMINUM
	THRESHOLD -	THRESHOLD COVER OVER HEATER WIRE

ACCESSORIES -

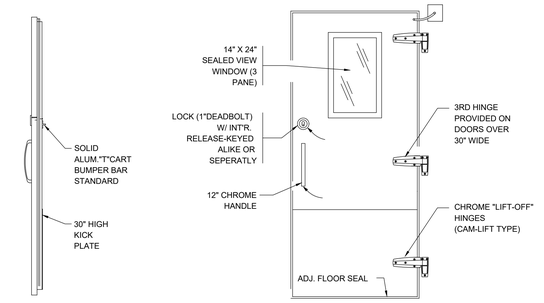
4 EA.	INT, EXT 3-WAY PRESS SWITCH MOTION SENSOR LIGHT SWITCH, WITH EXT. INDICATING RED LIGHT-FLUSH MTD
2 EA.	MULTI-MONITOR & AUTOMATIC MODULARM #75LC HI/LO DIGITAL TEMP ALARM W/BATTERY LIGHT CONTROL BACK-UP, REMOTE NOTIFICATION DRY CONTACTS, AUTO LIGHT CONTROL INCLUDING INSIDE ILLUMINATED SWITCH W/PANIC ALARM FEATURE & SENOR LINE (120V, 30MA) ON WALL FACING KITCHEN, PROVIDE SIGN AT EACH FOR COOLER AND FREEZER
2 EA.	VAPOR PROOF LIGHT FIXTURE KASON #1806 - SHIPPED LOOSE
4 EA.	LED LIGHT FIXTURE KASON #1810L 48" LONG VAPORPROOF LED FIXTURE WITH TWO 5000K COLOR TEMP. 18W LED LAMPS (120V, 36W)
1 EA.	HEATED AIR VENT (FREEZER ONLY) - KASON #1832 HI-FLOW 2-WAY HEATED VALVE (120VAC)
2 EA.	VINYL STRIP CURTAINS SHALL BE OF THE NSF APPROVED KASON EASY-MOUNT SYSTEM SERIES #401SA606 #401SA606 WITH SINGLE PIECE EXTRUSION CHANNEL.
1 EA.	ROW OF ALUMINUM HAT STYLE BUMPER RAILS ON EXPOSED EXTERIOR (SHIPPED LOOSE)

CLOSURES -

1 LOT	INT. COVED BASE - (TO MATCH INT. WALL PANEL FINISH)
1 LOT	EXPOSED EXT. COVED BASE - (TO MATCH EXT. WALL PANEL FINISH)
1 LOT	WALL CLOSURES - (TO MATCH EXT. WALL PANEL FINISH)
1 LOT	CEILING ENCLOSURES - (TO MATCH EXT. WALL PANEL FINISH)

WALK-IN REFRIG/FREEZER WT=8.5LBS PER SQ.FT. FOR 4" PANELS OVERALL DIMENSIONS

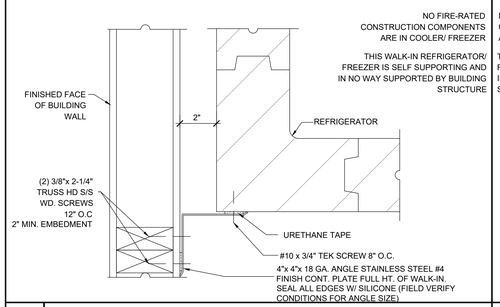
D TYPICAL SPECIFICATIONS



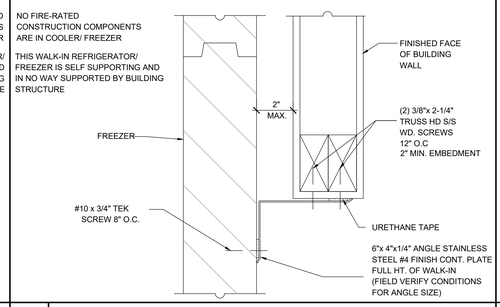
WALK-IN DOOR DETAIL FLUSH TYPE

NOTE: FREEZER DOORS HAVE 115V. HEATED VISION PANELS AND ENTIRE EXTERIOR FACE OF DOOR

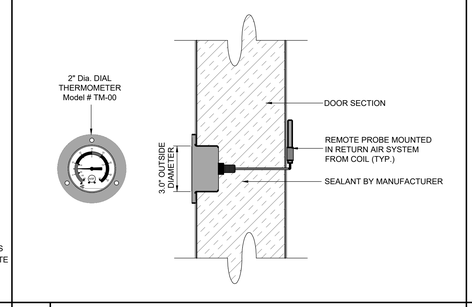
K DOOR DETAIL



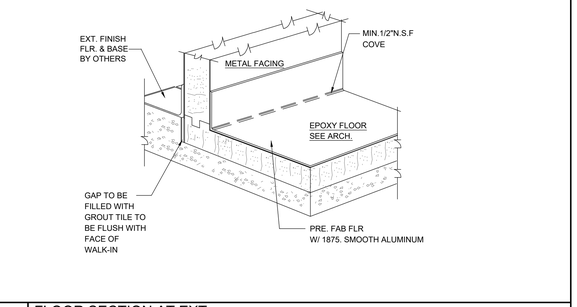
L CLOSURE TRIM



M CLOSURE TRIM



N 2" DIA. DIAL THERMOMETER



O FLOOR SECTION AT EXT. AND INT. OF REF/FREEZER

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LICENSED ARCHITECT JOAN J. MAYTON No. C-26867 RENEWAL DATE: 1/31/27 STATE OF CALIFORNIA

ARCHITECT

DSA SUBMITTAL

REVISIONS

NO.	DESCRIPTION	DATE

DATE 02/28/2025
JOB NO. Y2326.00
SHEET TITLE

FOODSERVICE EQUIPMENT WALK-IN DETAILS

SHEET NO.

FS6.1

REFRIGERATION RACK OUTLINE DRAWING (A / FS7.1)

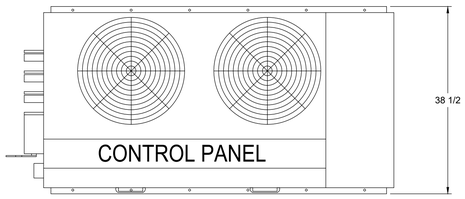
MINI-PAK MODEL: MPL-2

NOTES:

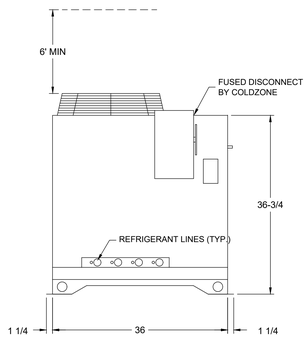
1. UNIT WEIGHT 584 LBS.
2. INSTALLATION CLEARANCE REQUIRES 3 FT. ON ALL SIDES.

REFRIGERANT LINE SEQUENCE FACING UNIT

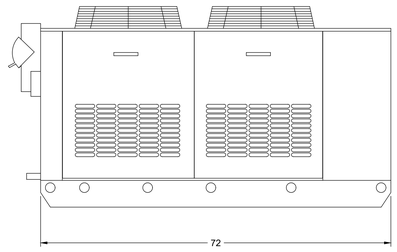
A	B



TOP VIEW



LEFT SIDE VIEW



FRONT VIEW

COLDZONE ENGINEERING SUMMARY

POWER SUPPLY: 208-230V/3PH/60HZ FUSE SIZE: 35 AMPS

CONNECTED LOAD= 24.0 AMPS MINIMUM AMPACITY= 26.7 AMPS

IDENT SYSTEM	IDENT ITEM	FIXTURES DESCRIPTION	FIXT.°F FIXTURE	FIXT.°F SUCTION	COMPRESSORS REFRIG. R-	COMPRESSORS MODEL NO.	COMPRESSORS H.P.	ELECTRICAL CHARACTERISTIC AT 60 HZ RLA	V	PH	MBH AT 95°F	EVAPORATOR COILS DEFROST *	QUANTITY	MODEL NO.	MFR. REMARKS	FAN 1PH AMP	FAN 1PH V	HEATER AMP	HEATER V	HEATER PH	TOTAL UNIT AMP [RLA]
A	19	WALK-IN COOLER	35	25	448A	ZB07KAE	1.0	4.7	208	3	8.3	T	1	CL6A094ADARE	COLDZONE	1.6	115				4.7
B	18	WALK-IN FREEZER	-10	-20	448A	ZF11K4E	3.5	10.9	208	3	11.9	E	1	CL6E121DDARE	COLDZONE	1.5	208	14.3	208	1	10.9
MINI-PAK RACK		(2) CONDENSER FAN MOTOR					0.75	3.4	208	3											6.8

LINE SIZES ** ROUTE +	SUCTION	RISER	LIQUID	DISCHARGE	DRAIN	ACCESSORIES DEFROST OPTION NO.	CRANKCASE HEATER	HEAD PRESSURE CONTROL	COLDSAVER	FURNISHED BY (SEE CODE) TSTAT	SOLENOID	EEV/TXV
S	7/8		3/8			ECONET	FI	FI				FI
S	1 1/8		3/8			ECONET	FI	FI				FI

RACK NO. –

LEGEND: * T-AIR DEFROST G-GRAVITY(W/TIMER); E- ELECTRIC DEFROST E^-DEFROST CLOCK BY FIXTURE MFR. + S-SINGLE M-MAIN B-BRANCH ** VERIFY LINE SIZES WITH JOB SITE CONDITIONS

MFR- FURNISH WITH FIXTURE
FL- CZ TO FURNISH AND SHIP LOOSE
FI- CZ TO FURNISH AND INSTALL ON UNIT
RC- FURNISH AND INSTALL BY REF. CONTRACTOR

NOTES:

- EACH COMPRESSOR SYSTEM IS SUPPLIED WITH A CRANKCASE HEATER AND HEAD PRESSURE CONTROL
- REFRIGERATION SYSTEM INCLUDES A MAIN–FUSED DISCONNECT SWITCH
- ALL EVAPORATOR COILS WILL REQUIRE POWER FROM A HOUSE CIRCUIT
- EVAPORATOR FAN MOTORS ARE PROVIDED WITH HIGH EFFICIENCY EC MOTORS
- EACH SYSTEM SUPPLIED WITH SUCTION LINE KIT INCLUDING A SUCTION LINE FILTER
- LIQUID LINE KIT WITH SEALED FILTER/DRIER AND SIGHT GLASS WITH MOISTURE INDICATOR
- ALL COMPRESSORS AND CONDENSER CIRCUITS ARE SIZED TO OPERATE AT 95°F AMBIENT
- PIPE SIZES ARE BASED ON A MAXIMUM LINE RUN OF 100 EQUIVALENT FEET (INCLUDES 45 FT. RISER)

REFRIGERATION SYSTEM ELECTRICAL SCHEDULE / POWER SUPPLIED BY ELECTRICAL CONTRACTOR

ITEM NO.	QTY.	DESCRIPTION	VOLTAGE/PH	AMPS	MCA	MOPD
	1	COLDZONE REFRIGERATION RACK	208V/3PH	24.0	26.7	35.0
19	1	W/I COOLER #1 COLDZONE EVAPORATOR COIL	115V/1PH	1.6	15.0	20.0
18	1	W/I FREEZER #1 COLDZONE EVAPORATOR COIL	208V/1PH	14.3	15.0	20.0

*EC TO BRING POWER TO EACH OF THE COLDZONE ITEMS LISTED IN ELECTRICAL SCHEDULE

ENGINEERING GUIDE TO SPECIFICATION
FOR REMOTE REFRIGERATION PACKAGE
MINI–PAK REFRIGERATION SYSTEM

THE REFRIGERATION PACKAGE SHALL BE A PRE–ENGINEERED AND FACTORY ASSEMBLED UNIT, TRADE NAME "MINI–PAK", AS MANUFACTURED BY COLDZONE, A DIVISION OF HEAT TRANSFER PRODUCTS GROUP, 1933 VINEYARD AVE. ONTARIO, CA 91761. PHONE: (909) 786–3656, FAX: (714) 529–8503.

CONTRACTOR SHALL FURNISH AND INSTALL, WHERE SHOWN ON PLANS, (1) COLDZONE U.L. APPROVED "MINI–PAK".

1. MINI–PAK REFRIGERATION SYSTEM
THE ENTIRE UNIT IS TO BE WEATHER–PROOFED AND MINIMUM OF TWO COATS OF PAINT SHALL BE APPLIED TO MAKE THE UNIT RUST–PROOF. THE UNIT SHALL BE PROVIDED WITH MULTI–CIRCUITED AIR–COOLED CONDENSER FOR COOLER, FREEZER AND ICE MACHINES. SUCTION LINE FOR LOW TEMPERATURE UNIT MUST BE INSULATED WITH ARMAFLEX.

2. REFRIGERATION UNITS
A. CRANKCASE HEATER SHALL BE PROVIDED WITH EVERY COMPRESSOR.
B. AIR–COOLED CONDENSING UNITS SHALL BE SEMI–HERMETIC, HERMETIC OR GLACIER SCROLL TYPE (COPELAND). EACH UNIT SHALL BE EQUIPPED WITH HIGH–LOW PRESSURE CONTROL, LIQUID LINE DRIER, SIGHT GLASS, SUCTION AND DISCHARGE VIBRATION ELIMINATOR, AND HEAD PRESSURE CONTROL.
C. ALL COMPRESSOR UNITS SHALL BE NEW AND FACTORY ASSEMBLED TO OPERATE WITH THE REFRIGERANT SPECIFIED IN THE ENGINEERING SUMMARY SHEET.

3. PRE–PIPING
A. ALL COPPER TUBING TO BE REFRIGERANT GRADE A.C.R. OR TYPE "L".
B. ALL TUBING SHALL BE SECURELY SUPPORTED AND ANCHORED WITH CLAMPS.
C. ALL REFRIGERANT LINES SHALL BE EXTENDED TO ONE SIDE OF THE PACKAGE IN A NEAT AND ORDERLY MANNER.
D. SILVER SOLDER AND/OR SIL–FOS SHALL BE USED FOR ALL REFRIGERANT PIPING. SOFT SOLDER IS NOT ACCEPTABLE.
E. ALL PIPING TO BE PRESSURE TESTED WITH NITROGEN AT 300 PSI. AFTER THE CONDENSING UNIT AND COIL HAVE BEEN CONNECTED, THE BALANCE OF THE SYSTEM SHALL BE LEAK TESTED WITH ALL VALVES OPEN.

4. CONTROL PANEL
A. THE PACKAGE SHALL HAVE FACTORY MOUNTED AND PRE–WIRED CONTROL PANEL COMPLETE WITH INTERLOCKED MAIN FUSED DISCONNECT, COMPRESSOR CIRCUIT BREAKERS, CONTACTORS AND TIME CLOCKS WIRED FOR SINGLE POINT POWER CONNECTION.
B. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL MAIN POWER LINES TO PANEL, AND USE WIRE HARNESS WIRING FOR CONTROL AND DEFROST HEATER BETWEEN THE DEFROST CLOCK AND THE REFRIGERATION FIXTURES, ALL IN ACCORDANCE WITH THE WIRING DIAGRAM AND LOCAL CODES.

GENERAL NOTES

1. GENERAL CONTRACTOR
A. CONTRACTORS SHALL VERIFY ALL DIMENSIONS AND COORDINATE WITH OTHER TRADES.
B. GENERAL CONTRACTOR SHALL PREPARE AND WEATHERPROOFING THE PLATFORM AND CURBED OPENINGS.

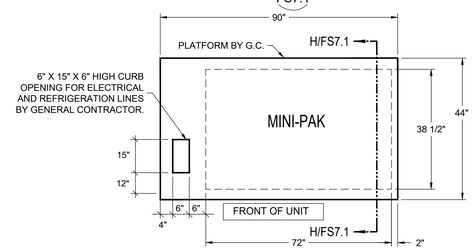
2. REFRIGERATION CONTRACTOR
A. THE COMPLETE SYSTEM SHALL BE EVACUATED WITH VACUUM PUMP.
B. ALL COPPER TUBING TO BE REFRIGERANT GRADE A.C.R. OR TYPE "L".
C. CHARGE, TEST, AND ADJUST EACH UNIT TO BE IN AN OPERATIONAL SYSTEM.
D. SILVER SOLDER AND/OR SIL–FOS SHALL BE USED FOR ALL REFRIGERANT PIPING. SOFT SOLDER IS NOT
E. ALL PIPING TO BE PRESSURE TESTED WITH NITROGEN AT 300 PSI. AFTER THE CONDENSING UNIT AND COIL HAVE BEEN CONNECTED, THE BALANCE OF THE SYSTEM SHALL BE LEAK TESTED WITH ALL VALVES OPEN.
F. REFRIGERATION CONTRACTOR TO PROVIDE AND INSTALL DRAIN LINE HEATER IN FREEZER TO BE CONNECTED BY ELECTRICAL CONTRACTOR

3. ELECTRICAL CONTRACTOR
A. ELECTRICAL CONTRACTOR TO PROVIDE POWER FROM REFRIGERATION PACKAGE AND CONNECT CONTROL AND DEFROST SYSTEM AS CALLED FOR IN THE WIRING DIAGRAM.
B. ALL ELECTRICAL WIRING AND INSTALLATION SHALL BE IN ACCORDANCE WITH THE WIRING DIAGRAM AND LOCAL CODES.

4. PLUMBING CONTRACTOR
A. PLUMBING CONTRACTOR TO PROVIDE HARD A.C.R. OR TYPE "L" COPPER DRAIN LINES FOR WALK–IN REFRIGERATOR AND FREEZER, PITCHED 1/4" PER FOOT OF RUN. IN FREEZER, UNHEATED DRAIN LINE MUST BE OUTSIDE OF FREEZER WALL TO PREVENT FREEZING. TRAP DRAIN LINE OUTSIDE OF REFRIGERATED SPACE TO AVOID ENTRANCE OF WARM AND MOIST AIR.
B. PLUMBING CONTRACTOR TO PROVIDE INDIVIDUAL DRAIN LINE FOR EACH EVAPORATOR UNLESS OTHERWISE CALLED FOR.
C. ALL PLUMBING INSTALLATION SHALL BE IN ACCORDANCE WITH LOCAL CODES.

master dwg revised 18AUG17 (RG)

SUGGESTED ROOF PAD DETAIL (B / FS7.1)

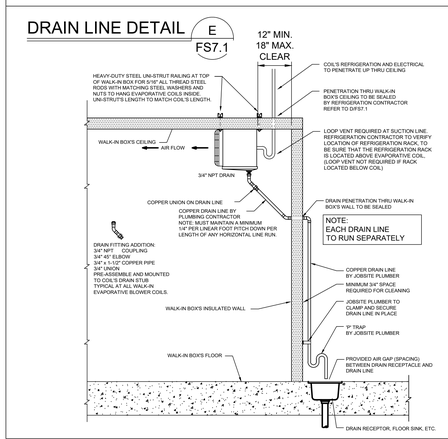


G.C. NOTES

1-PLATFORM TO BE INSTALLED LEVEL.
2-PROVIDE SHEETMETAL HAT SECTION WITH WATER TIGHT SOLDERED JOINTS.
3-BACK FILL OPENING WITH HOT PITCH AFTER INSTALLATION.

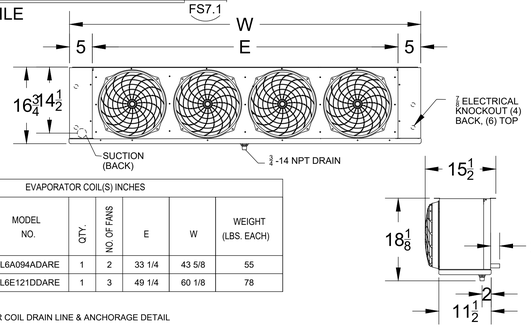
REFER TO H/ FS7.1 FOR REMOTE REFRIGERATION PLATFORM ANCHORAGE

DRAIN LINE DETAIL (E / FS7.1)



COLDZONE EVAPORATOR COILS (C / FS7.1)

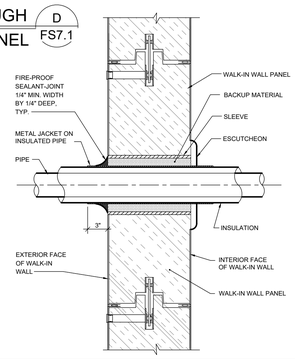
LOW PROFILE



EVAPORATOR COIL(S) INCHES SYSTEM	ITEM NO.	MODEL NO.	QTY.	NO. OF FANS	E	W	WEIGHT (LBS. EACH)
A	19	CL6A094ADARE	1	2	33 1/4	43 5/8	55
B	18	CL6E121DDARE	1	3	49 1/4	60 1/8	78

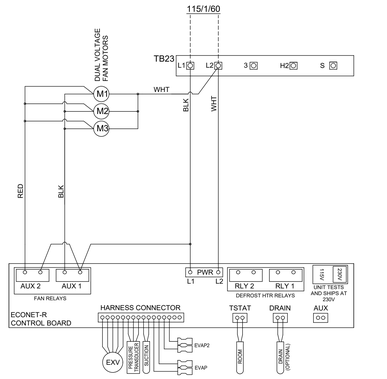
REFER TO K/ FS8.3 FOR COIL DRAIN LINE & ANCHORAGE DETAIL

PIPE THROUGH WALK-IN PANEL (D / FS7.1)



ELECTRIC DEFROST WIRING DIAGRAM (F / FS7.1)

ECONET



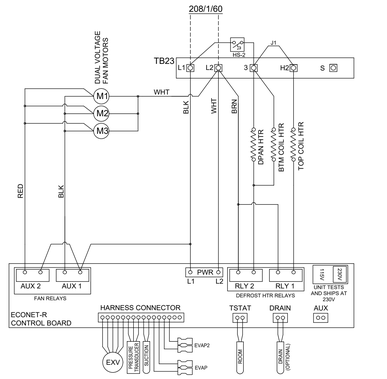
NOTES:
1. USE COPPER CONDUCTORS ONLY
2. UNIT MUST BE GROUNDED
3. FOR MOTOR AND HEATER AMPS SEE RATING STICKER ON OUTSIDE OF UNIT
4. JUMPERS ARE 16 GA. UNLESS OTHERWISE SPECIFIED.

LEGEND:
TB - TERMINAL BOARD
HTR - HEATER
FS - FREEZE SAFETY
M1 - MOTOR #1, ETC.
EXV - ELECTRONIC EXPANSION VALVE
R1 - RELAY

FACTORY WIRING
FIELD WIRING

ELECTRIC DEFROST WIRING DIAGRAM (G / FS7.1)

ECONET



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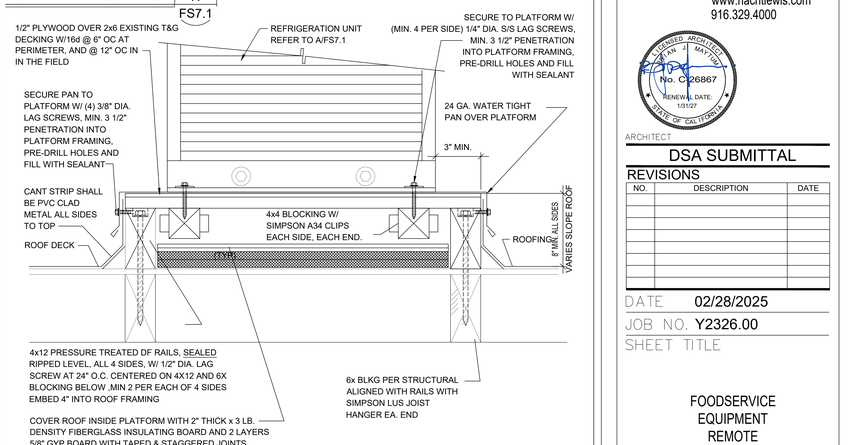
M1 - MOTOR #1, ETC.
EXV - ELECTRONIC EXPANSION VALVE
R1 - RELAY

FACTORY WIRING
FIELD WIRING

PLATFORM DETAIL (H / FS7.1)



REFER TO B/ FS7.1 FOR REMOTE REFRIGERATION PLATFORM SIZE AND CLEARANCES

IDENTIFICATION STAMP
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LICENSED ARCHITECT JAMES M. MATSON No. C-26867 RENEWAL DATE 10/31/27 STATE OF CALIFORNIA

ARCHITECT

DSA SUBMITTAL

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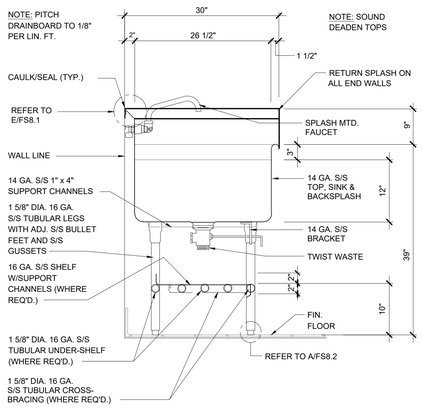
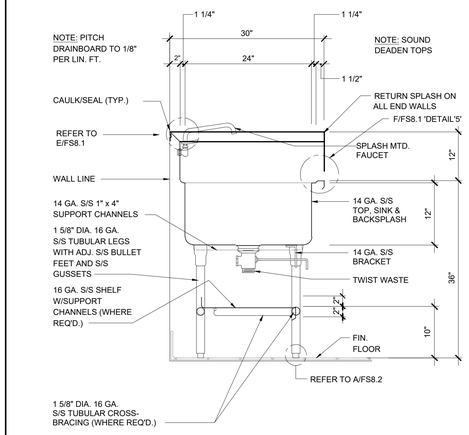
FOODSERVICE EQUIPMENT REMOTE REFRIGERATION

SHEET NO.

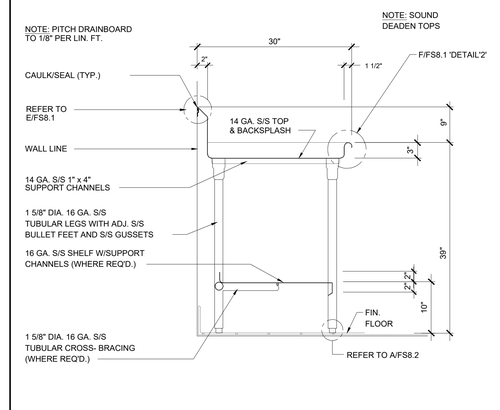
FS7.1



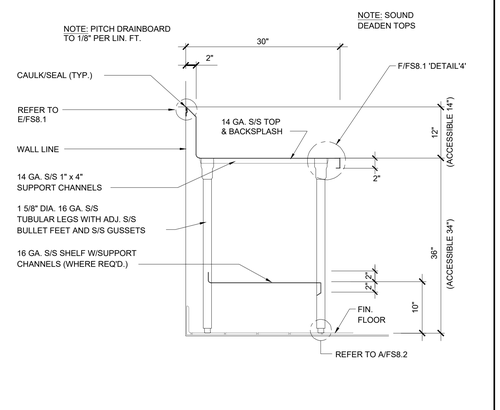
A SECTION AT POT SINK (INTEGRAL) NTS



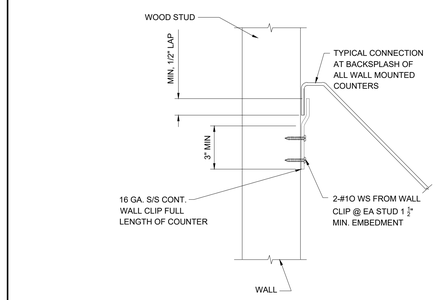
B SECTION AT PREP SINK NTS



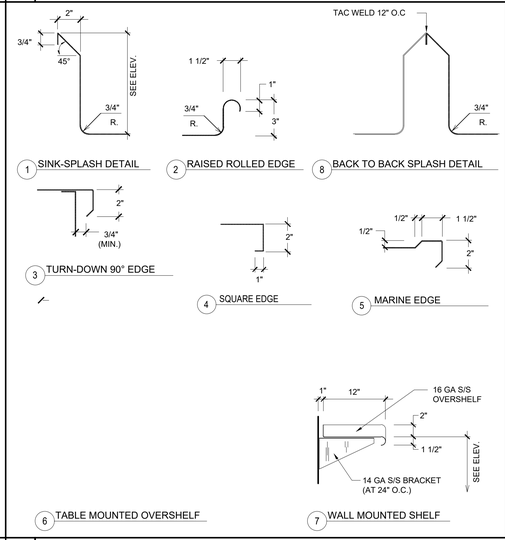
C SECTION AT DISHTABLE NTS



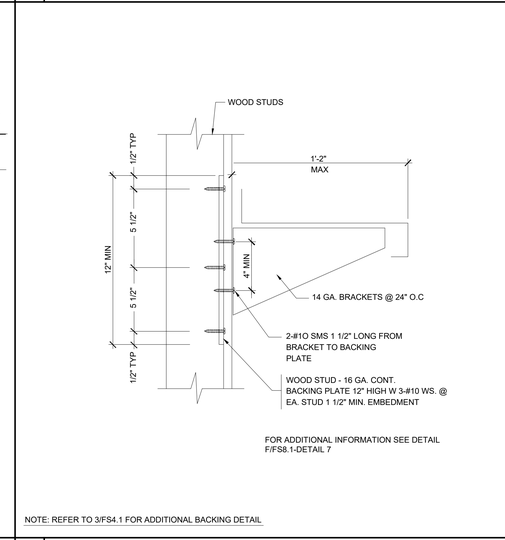
D SECTION AT WORKCOUNTER NTS



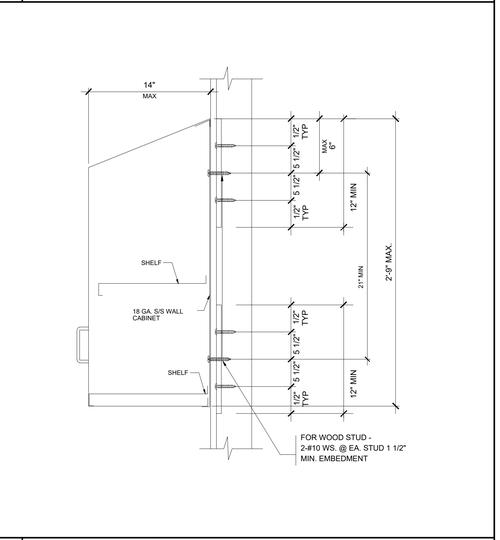
E ANCHORAGE AT BACKSPLASH NTS



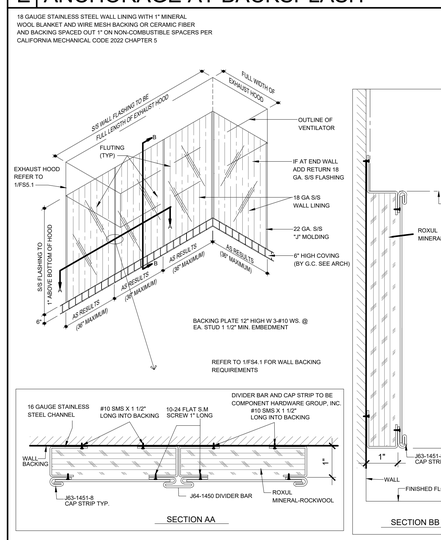
F EDGE/SPLASH/SHELF DETAILS NTS



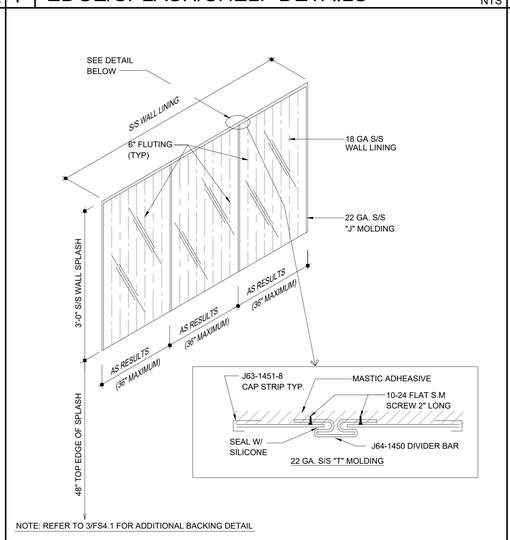
G WALL MOUNTED SHELF NTS



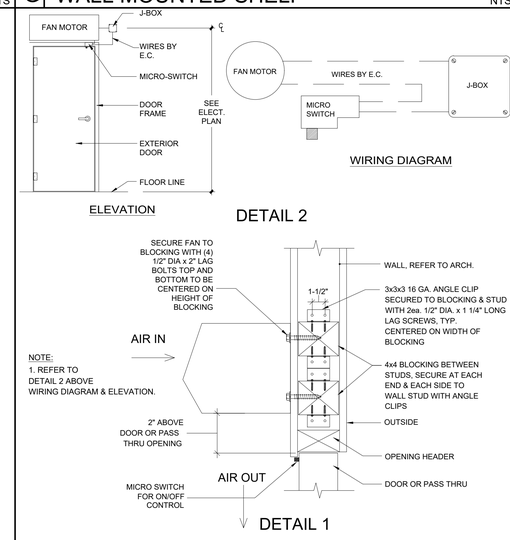
H WALL MOUNTED CABINET NTS



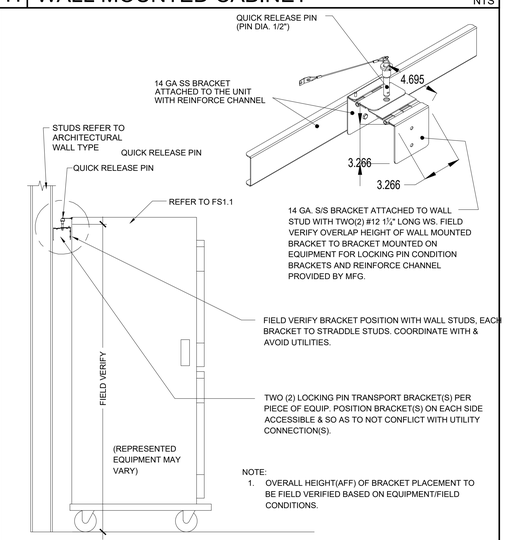
I S/S INSULATED WALL LINING DETAIL NTS



J WALL SPLASH NTS



K AIR CURTAIN MTG & MICRO SWITCH DTL NTS



L MOBILE EQUIP. ANCHORAGE BRACKET NTS

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LICENSED ARCHITECT
JULIAN J. MAYNARD
No. C-26867
RENEWAL DATE: 1/31/27
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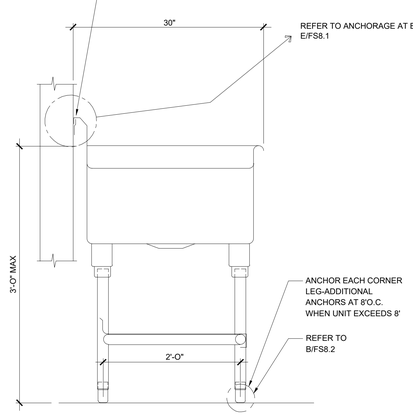
FS8.1

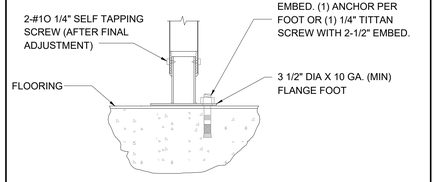
ONE INCH = TWENTY FEET
ONE-SIXTEENTH INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE INCH = ONE FOOT
ONE AND ONE-HALF INCH = ONE FOOT



NOTE:
WALL ATTACHMENT NON-STRUCTURAL NOT REQUIRED FOR STABILITY



A FLOOR MOUNTED SINK @ WALL NTS



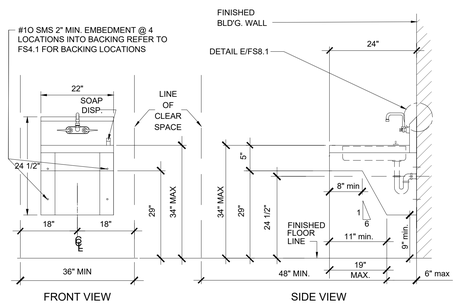
(FLANGED FOOT) SHEAR & UPLIFT

NOTE: INSTALL ANCHOR PER ICC-ES ESR-4266. TORQUE TEST =50 FT.LB

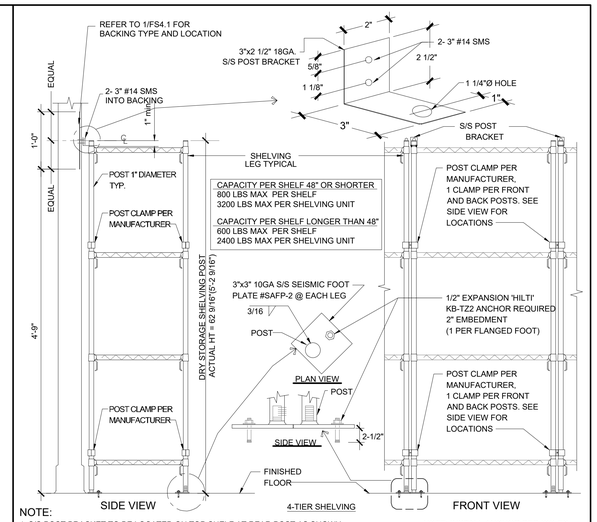
B FOOT ANCHORAGE DETAIL NTS

ACCESSIBLE HAND SINK REQUIREMENT NOTES

1. HOT WATER AND DRAIN PIPES UNDER ACCESSIBLE HAND SINKS SHALL BE INSULATED OR OTHERWISE COVERED. THERE SHALL BE NO SHARP OR ABRASIVE OBJECTS OR SURFACES UNDER HAND SINKS.
2. FAUCET CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 LBF. LEVER-OPERATED, PUSH-TYPE AND MECHANISMS ARE EXAMPLES OF ACCEPTABLE DESIGNS.
3. WHERE TOWEL, SANITARY NAPKINS, WASTE RECEPTACLES, SOAP DISPENSER AND OTHER SIMILAR DISPENSING AND DISPOSAL FIXTURES ARE PROVIDED, AT LEAST ONE OF EACH TYPE SHALL BE LOCATED WITH ALL OPERABLE PARTS WITHIN 40 INCHES FROM THE FINISHED FLOOR.
4. ALL DIMENSIONS SHOWN ARE MINIMUM CLEARANCES, UNLESS NOTED.
5. AREA BELOW HAND SINKS SHALL BE ACCESSIBLE AND CLEAR.



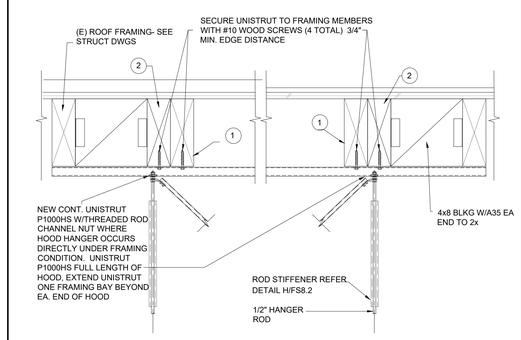
C ACCESSIBLE HAND SINK DETAILS NTS



NOTE:
1. S/S POST BRACKET TO BE LOCATED ON TOP SHELF AT REAR POST AS SHOWN.
2. FOR SIZE AND LOCATION OF DRY STORAGE SHELVING, SEE 1/FS1.1

NOTE: INSTALL ANCHOR PER ICC-ES ESR-4266. TORQUE TEST =50 FT.LB

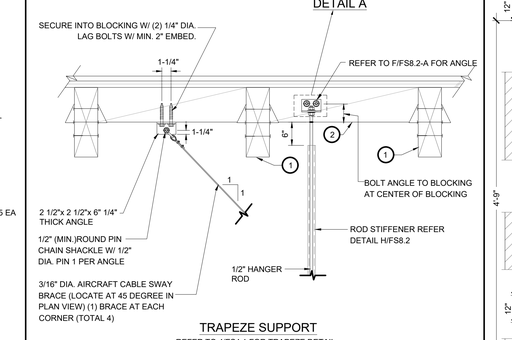
D DRY STORAGE SHELVING ATTACHMENT NTS



HOOD HANGER SUPPORT
REFER TO K/FS8.2 FOR HOOD DETAIL

1. EXISTING 2X ROOF JOIST @ 16" O.C
2. (N) SISTER 2X ROOF JOIST REFER TO 1/S121

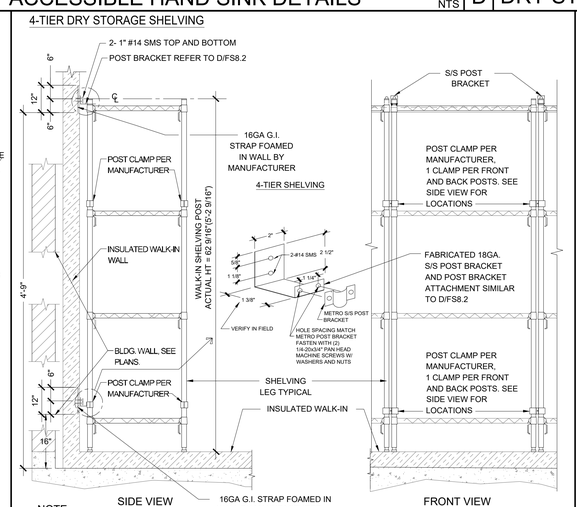
E TYP. UPPER ATTACHMENT NTS



TRAPEZE SUPPORT
REFER TO 4/FS4.1 FOR TRAPEZE DETAIL

1. EXISTING 2X BEAM
2. 4x8 BLOCKING W/ SIMPSON U46 HANGER EACH END TYP

F TYP. UPPER ATTACHMENT NTS

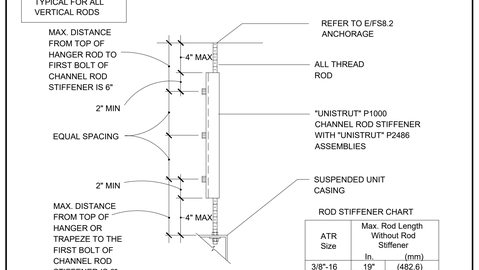


NOTE:
1. S/S POST BRACKET TO BE LOCATED ON TOP SHELF AT REAR POST AS SHOWN.
2. FOR SIZE AND LOCATION OF WALK-IN COOLER/FREEZER SHELVING, SEE 1/FS1.1

16GA G.I. STRAP FOAMED IN WALL BY MANUFACTURER

G COLD STORAGE SHELVING ATTACHMENT NTS

NOTE:
TYPICAL FOR ALL VERTICAL RODS



ROD STIFFENER CHART

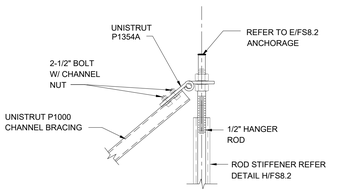
ATR Size	Max. Rod Length Without Rod Stiffener In.	(mm)
3/8"-16	19"	(482.6)
1/2"-13	25"	(635.0)
5/8"-11	31"	(787.4)
3/4"-10	37"	(939.8)
7/8"-9	43"	(1092.2)

Note: Minimum of (2)-P2486

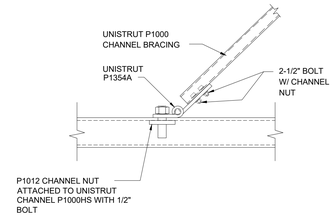
FOR 3/8" THRU 5/8" ROD
(FOR 3/4" & 7/8" ROD USE SC-UB)

NOTE: DETAIL FROM UNISTRUT SEIMIC RESTRAINTS SYSTEM, OSHPD PRE-APPROVAL OPM-0295 -13 PAGE 6D.1

H ROD STIFFENER DETAIL

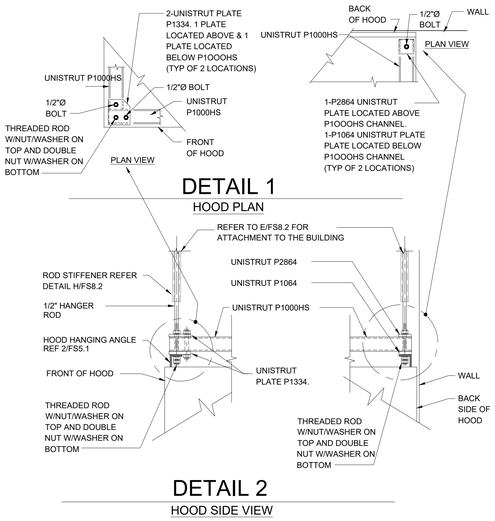


DETAIL 1
BRACING CONNECTION @ ALL-THREAD



DETAIL 2
BRACING CONNECTION @ P1000HS

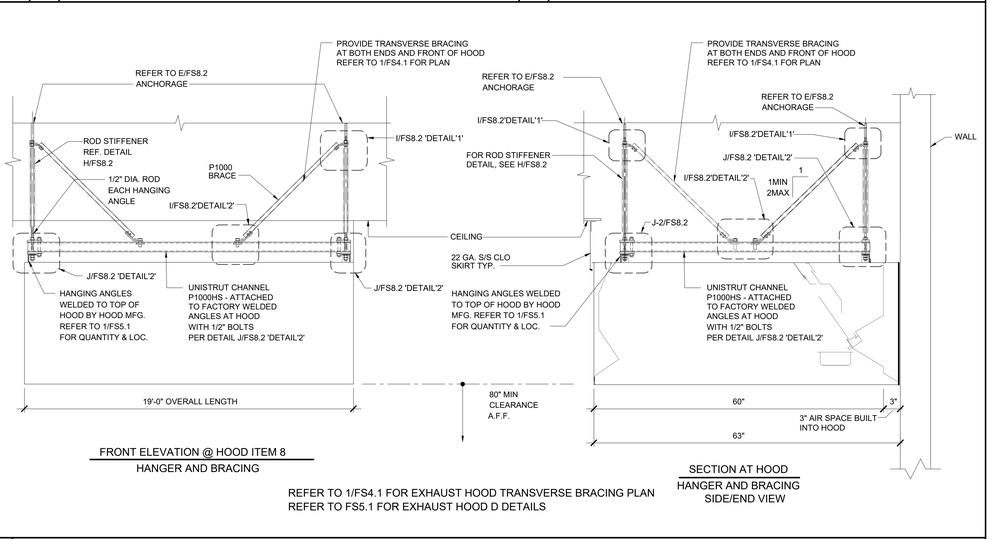
I DIAGONAL HOOD BRACING NTS



DETAIL 1
HOOD PLAN

DETAIL 2
HOOD SIDE VIEW

J HOOD HANGING SUPPORT NTS



FRONT ELEVATION @ HOOD ITEM 8
HANGER AND BRACING

SECTION AT HOOD
HANGER AND BRACING SIDE/END VIEW

REFER TO 1/FS4.1 FOR EXHAUST HOOD TRANSVERSE BRACING PLAN
REFER TO FS5.1 FOR EXHAUST HOOD D DETAILS

K EXHAUST HOOD ATTACHMENT DETAIL NTS

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No. C-26867
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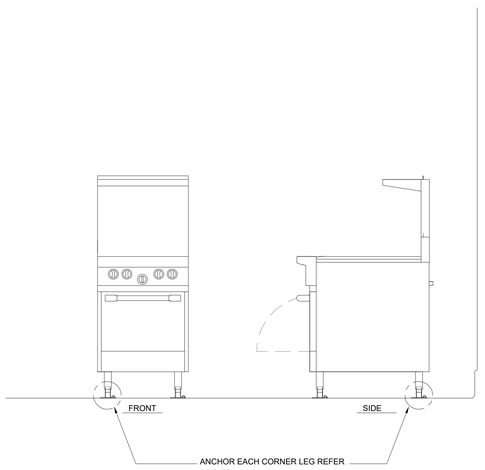
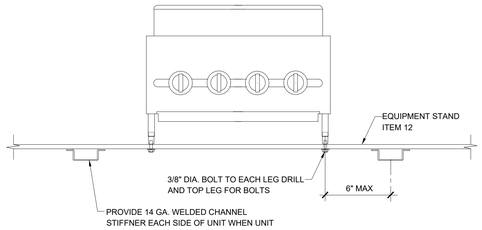
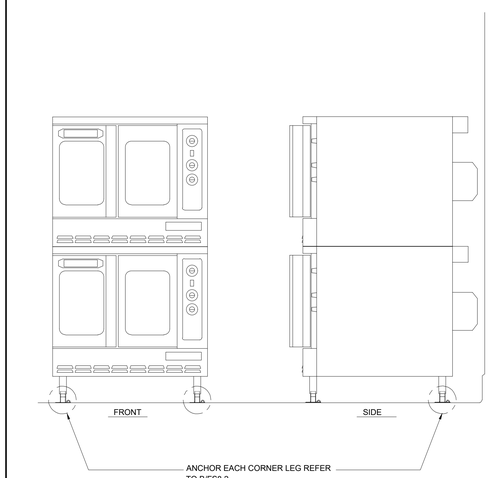
FS8.2



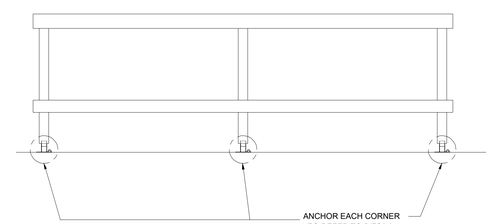
A | RANGE NTS



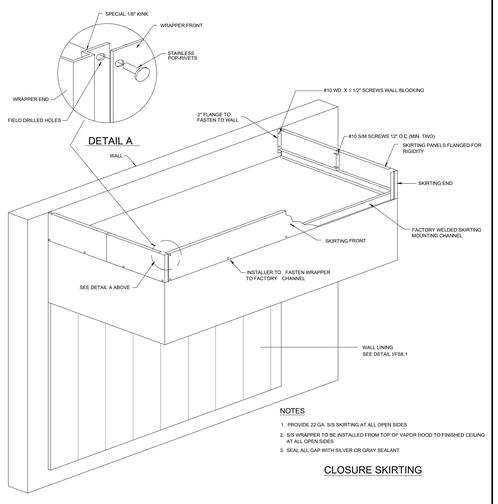
B | COUNTER TOP EQUIPMENT NTS



C | DOUBLE STACK CONVECTION OVEN NTS



D | EQUIPMENT STAND NTS



E | CLOSURE SKIRTING AT HOOD

F | SPARE

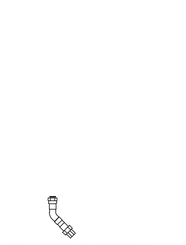
G | SPARE

H | SPARE

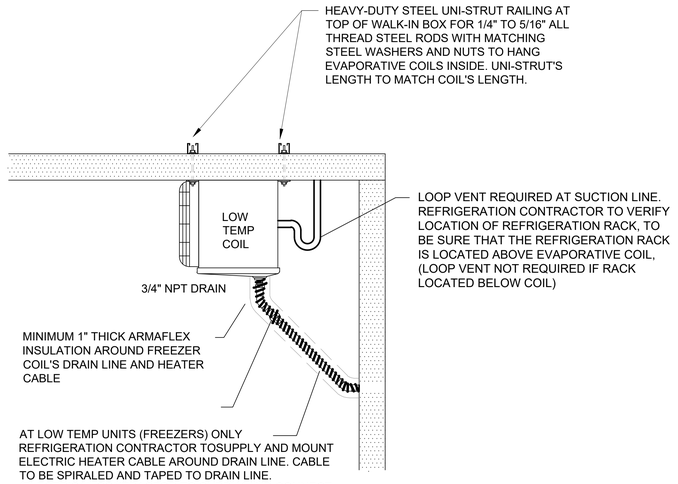
I | SPARE

J | SPARE

K | COIL DRAIN LINE DETAIL & ANCHORAGE DETAIL



DRAIN FITTING ADDITION:
3/4" NPT COUPLING
3/4" 45° ELBOW
3/4" x 1-1/2" COPPER PIPE
3/4" UNION
PRE-ASSEMBLE AND MOUNTED
TO COIL'S DRAIN STUB
TYPICAL AT ALL WALK-IN
EVAPORATIVE BLOWER COILS.



IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121540 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 3/28/2025

AGENCY APPROVAL

EL DORADO MIDDLE SCHOOL
MULTI-PURPOSE BUILDING UPGRADES
1750 WEST ST, CONCORD, CA 94521
MT. DIABLO UNIFIED SCHOOL DISTRICT

AMD FOODSERVICE DESIGN
P.O BOX 163
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www.amdfoodservicedesign.com

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LICENSED ARCHITECT
No. C-26867
RENEWAL DATE:
10/1/27
STATE OF CALIFORNIA

ARCHITECT

DSA SUBMITTAL

REVISIONS

NO.	DESCRIPTION	DATE

DATE 02/28/2025
JOB NO. Y2326.00
SHEET TITLE

FOODSERVICE
EQUIPMENT
ANCHORAGE
DETAILS

SHEET NO.

FS8.3

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
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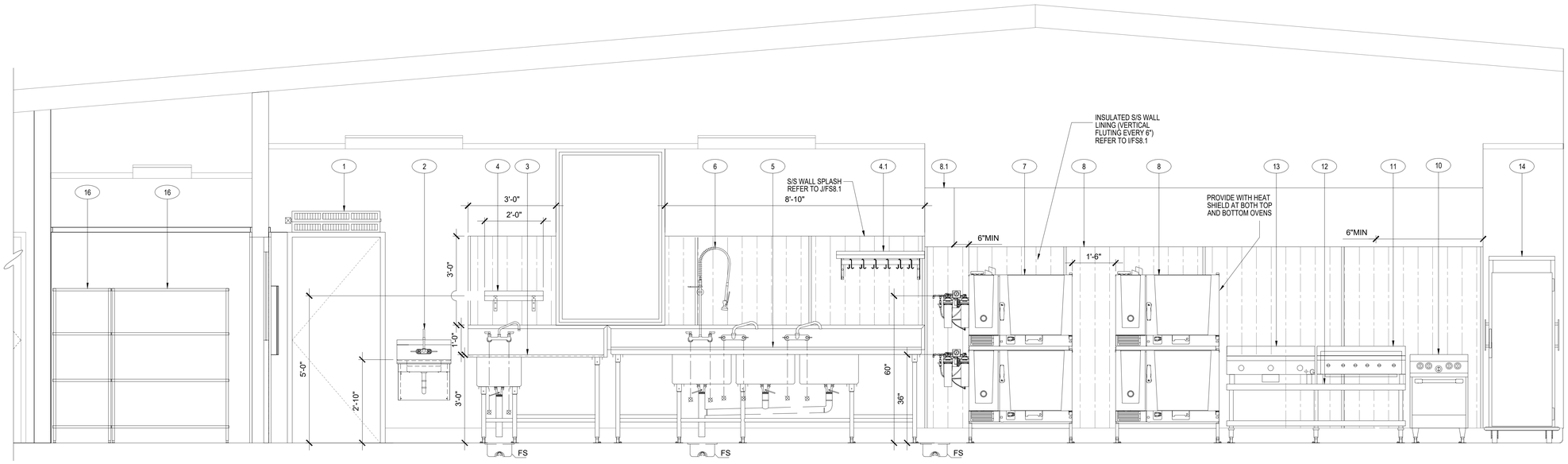
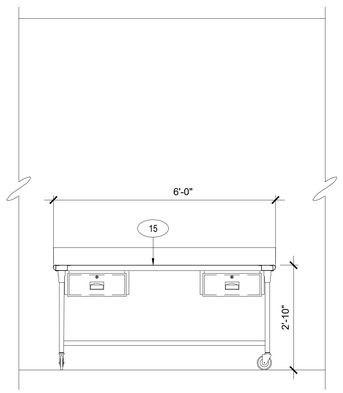
ONE INCH = TWENTY FEET



ELEVATION

SCALE : NTS

A
FS9.1



ELEVATION

SCALE : NTS

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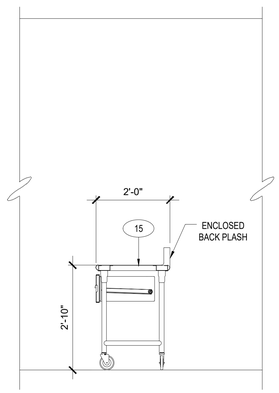
FS9.1



ELEVATION

SCALE : NTS

2
FS9.1

EQUIPMENT SCHEDULE

ITEM NO	EQUIPMENT CATEGORY	ITEM NO	EQUIPMENT CATEGORY
1	AIR CURTAIN, UNHEATED	9	HAND SINK, WALL MOUNT
2	SINK, HAND, WALL MOUNT	10	GAS RESTAURANT RANGE
3	PREPERATION SINK	11	BROILER, UNDER-FIRED, GAS, COUNTER
4	WALL MOUNTED SHELF	12	STAND, EQUIPMENT
4.1	WALL MOUNTED SHELF W/ POT RACK	13	GRIDDLE, GAS
5	THREE COMP. SINK	14	MOBILE WARMING & HOLDING CABINET
6	PRE-RINSE FAUCET, BACKSPLASH MOUNT	15	MOBILE WORK TABLE
7	DOUBLE STACK COMBI OVEN	16	DRY STORAGE SHELVING
8	EXHAUST HOOD	16.1	DRY STORAGE SHELVING
8.1	FIRE SYSTEM		

ELEVATION LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
#	ITEM NUMBER REFER TO FS1.1 FOR LOCATION		FLANGE FOOT ANCORAGE REFER TO B/FS8.2 FOR DETAIL
	WALL MOUNTED SHELF BRACKET REFER TO G/FS8.1 FOR DETAIL	FS	FLOOR SINK REFER TO FS2.1 FOR LOCATION

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LICENSED ARCHITECT
JOHN J. MAYTON
No. C-26867
RENEWAL DATE: 1/31/27
STATE OF CALIFORNIA

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FOODSERVICE
EQUIPMENT
ELEVATIONS

SHEET NO.

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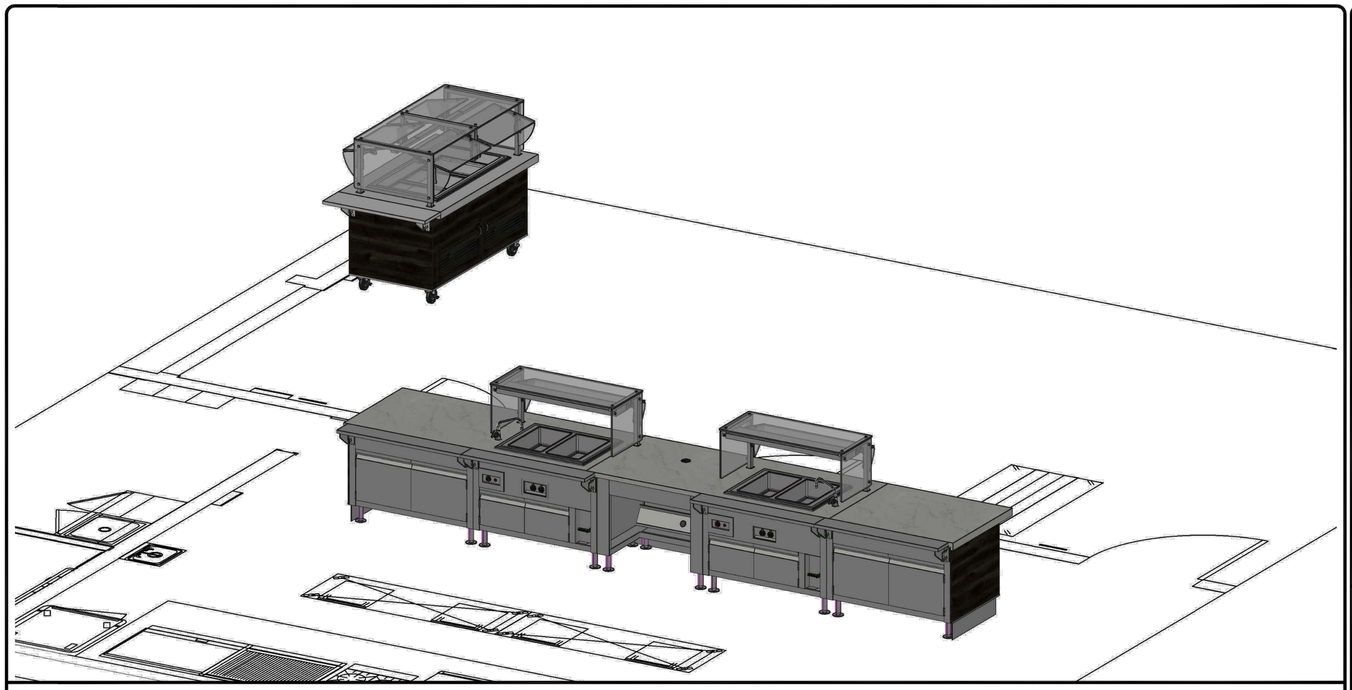

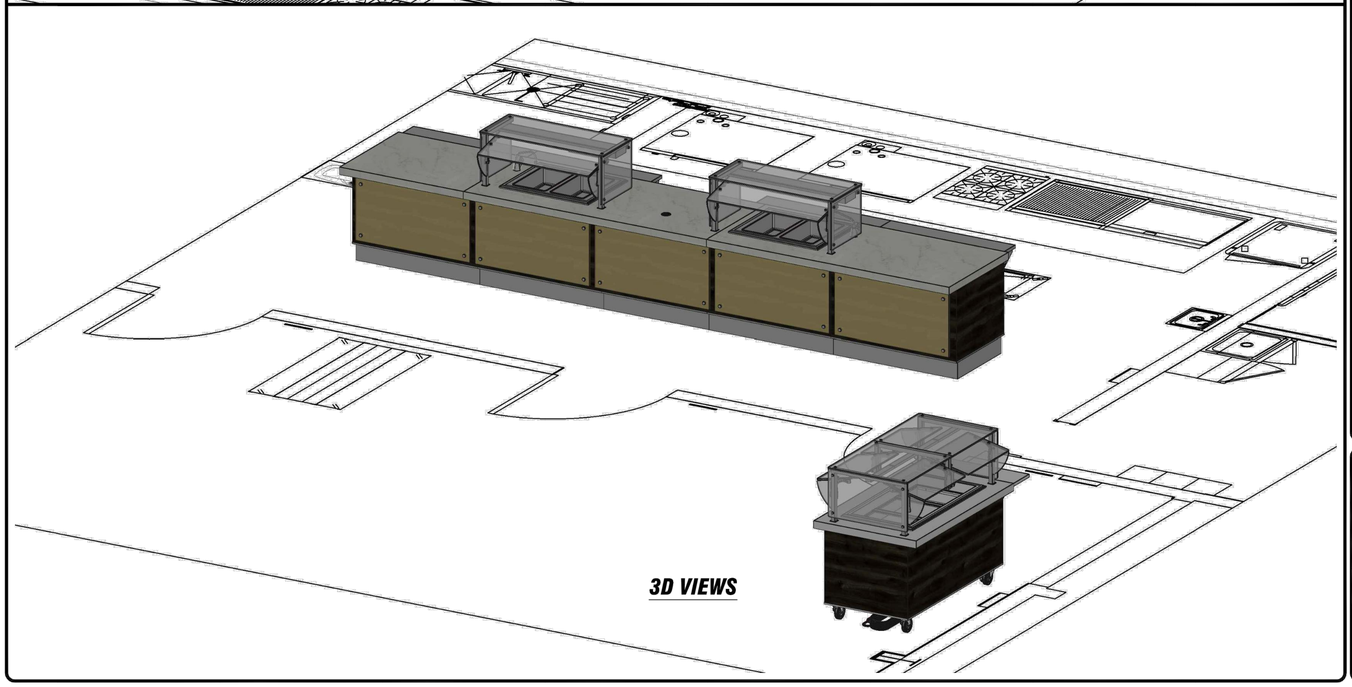

3D VIEWS

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STANDARD SERVING SYSTEM PRACTICES

SOLID SURFACE TOPS AND TRAY SLIDES

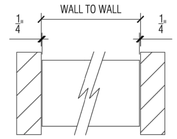
- ALL SOLID SURFACE TOPS AND TRAY SLIDES, WITH FIELD SEAMS, ***WILL SHIP LOOSE***, WHEN SPANNING MORE THAN ONE UNIT.
- SOLID SURFACE TOPS AND TRAY SLIDES SPECIFIC TO SINGLE UNIT WILL SHIP INSTALLED.
- SOLID SURFACE TOPS AND TRAY SLIDES REQUIRE A ***CERTIFIED*** INSTALLER, SPECIFIC TO THE BRAND, TO SEAM THE UNITS IN THE FIELD DURING PRODUCT INSTALLATION.

STAINLESS STEEL TOPS AND TRAY SLIDES

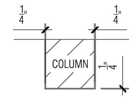
- THE MAXIMUM CONTINUOUS STAINLESS STEEL TOP LENGTH IS 144" [12'-0"], BEFORE REQUIRING A BOLTED OR WELDED FIELD JOINT.
- THE MAXIMUM CONTINUOUS STAINLESS STEEL TRAY SLIDE LENGTH IS 144" [12'-0"], BEFORE REQUIRING A BOLTED OR WELDED FIELD JOINT.
- BOLTED OR WELDED FIELD JOINTS ARE REQUIRED, AT ALL MITERED TRAY SLIDE CORNERS.

ALLOWANCE FOR FIELD CONDITIONS

- FACTORY TO ALLOW ¼" AT ALL WALLS, COLUMNS, AND PASS THROUGH WINDOWS FOR FIT. ***(SEE WALL TO WALL AND COLUMN EXAMPLES)***



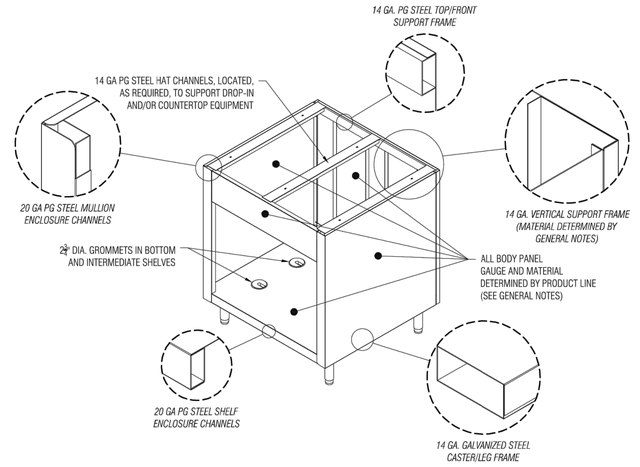
WALL TO WALL EXAMPLE



COLUMN EXAMPLE

ELECTRICAL

- ALL 15 AMP (NEMA #5-15R) AND 20 AMP (NEMA #5-20R) RECEPTACLES SHALL BE GFCI (GROUND FAULT CIRCUIT INTERRUPTER) TYPE RECEPTACLES PER DUKE MANUFACTURING STANDARD. ***UNLESS SPECIFICALLY NOTED OTHERWISE*** ON THE DRAWING. ***(SEE SYMBOL LEGEND)***



STANDARD CHANNEL BODY CONSTRUCTION

SYMBOL LEGEND

DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL
SIMPLEX RECEPTACLE		DUPLEX GFCI RECEPTACLE (NEMA 5-15R & 5-20R ONLY)		ELEC. CORD AND PLUG	
KICKPLATE LOCATION	K	3 FORM PANEL LOCATION	3F	DECOR PANEL LOCATION	DP
EQUIPMENT TAG	#	FIELD JOINT LOCATION	FJ	2" GROMMET LOCATION	
VIEW TAG	VIEW NUMBER / PAGE NUMBER — 1 PLAN / X SCALE — VIEW NAME / VIEW SCALE				
VIEW ARROWS	X X	X X	X X	X X — VIEW NUMBER / PAGE NUMBER	COMPRESSOR WITH REMOVABLE GRILLE

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REVISE AND RESUBMIT FOR CONSTRUCTION
DATE
BY
AUTHORIZED SIGNATURE

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A	10/18/2024	DTM

DESIGNED FOR: EL DORADO MIDDLE SCHOOL
DESIGNED BY: INFORM MARKETING GROUP

DRAWN BY: MAC
ESTIMATOR: R. TROUTT
PURCHASE ORDER #: N/A
SALES ORDER: N/A
DATE: 1/11/2024
DRAWING NO. : SD-147549
SHEET: OF: 5 1

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ARCHITECT

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REVISIONS

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DATE 02/28/2025
JOB NO. Y2326.00
SHEET TITLE

FOODSERVICE EQUIPMENT SERVING LINE

SHEET NO.

FS9.2

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ONE AND ONE-HALF INCH = ONE FOOT
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GENERAL NOTES

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THE FOLLOWING MUST BE VERIFIED PRIOR TO CONSTRUCTION

- ANY DECOR COLOR CHOICES INCLUDING LAMINATE, PAINT COLOR, OR CUSTOM DECOR FEATURES, IF APPLICABLE
- ALL ELECTRICAL VOLTAGE AND PHASE OF DUKE HOT FOOD UNITS AND BUYOUT EQUIPMENT IF APPLICABLE
- ALL CRITICAL FIELD DIMENSION IF ANY AS INDICATED IN PLAN VIEW.

EXPRESSIONS SERVING SYSTEMS

TOPS

EXTENDED 2CM QUARTZ TOPS ON 3/4" EXTERIOR GRADE WOOD BACKER WITH CONTINUOUS TOPS

* QUARTZ BRAND : .....CAMBRIA

* QUARTZ COLOR NAME : .....COLTON

* QUARTZ COLOR NUMBER: .....MATTE

ALL DROP-INS TO INCLUDE 16GA. STAINLESS STEEL TRIM RING

BODIES & INTERIORS

14 GA. FRAME/SUPPORTS W/ 18 GA. STAINLESS STEEL ENCLOSURE CHANNELS, BODY PANELS AND INTERIOR SHELVES.

LAMINATED DECOR PANELS

REMOVABLE VERTICAL FRONT/END PANELS SHALL BE ¾" PLYWOOD BACKER COVERED WITH PLASTIC LAMINATE. TO INCLUDE STAINLESS STEEL TRIM
*****LAMINATE GRAIN (IF ANY) RUNS HORIZONTAL*****

*LAMINATE TO BE : .....WILSONART

*LAMINATE ID NUMBER : Y0761K-16

*LAMINATE COLOR NAME : .....CHARRED MAPLE

ACRYLIC 3FORM DECOR PANELS

3-FORM DESIGN TO BE:

*TYPE:.....3/8" THICK

*TEXTURE:.....STRUCK

*STYLE:.....CHAMOMILE

*FINISH:.....SANDSTONE

CASTERS - ITEM 20.1

5"Ø CASTERS WITH GRAY POLYURETHANE TIRES. ALL SWIVEL WITH BRAKES.

LEGS

6" HIGH, 1 5/8"Ø STAINLESS STEEL TUBULAR LEGS WITH ADJUSTABLE FLANGED FEET.

KICKPLATES

HEAVY GAUGE STAINLESS STEEL KICK PLATES LOCATED/INDICATED BY DRAWING;

HOT FOOD DRAINS

DRAINS MANIFOLDED w/ COPPER TUBING TO BRASS MASTER VALVE W/TWIST HANDLE. EXTEND MASTER VALVE FORWARD.
TO INCLUDE HOSE BIB CONNECTION & 48" OF ¾" DIA. HOSE.

NSF-7 COLD PANS

NSF STANDARD #7 COLD PAN TO HOLD FOOD PANS RECESSED 3" BELOW TOP ON S.S. REMOVABLE BRACKETS & ADAPTER BARS

BREATHGUARDS - BGA SERIES

1-1/4" SQUARE STAINLESS STEEL TUBING POSTS, MOUNTED THROUGH TOP WITH ¾", TEMPERED, CLEAR GLASS SHELVES, AND PROTECTORS.
WITH #4 BRUSHED GRAIN FINISH WITH HIGH POLISH, HIGHLIGHTED EDGES

DUKE EQUIPMENT

Item Tag	Quantity	Model Number	Description	Voltage	Phase	Watts	Amps	NEMA #'S Intl. Conn. / Final Conn.	Cord length	Gas Type
20.1	1	XP60ST	SOLID TOP UNIT ICB-A	120	1	1523	12.69	NEMA# / 5-15P	Cord / 6'	Gas Type / -
20.1.1	1	ADI-3MD-N7	COLD FOOD DROP-IN UNIT 10" DEEP PAN W/ CONDENSATE EVAPORATOR	120	1	1113.6	9.28	NEMA# / 5-15P	Cord / 6'	Gas Type / -
20.1a	1	BGA1-60-DS	DUAL SIDED ADJUSTABLE GLASS SNEEZE GUARD SINGLE OVERSHELF WITH LED LIGHTS	120	1	30	0.25	NEMA# / 5-15P	Cord / 6'	Gas Type / -
21A	1	XP46ST	SOLID TOP UNIT	-	-	-	-	NEMA# / -	Cord / -	Gas Type / -
21A.1	1	ADI-2E-SW	HOT FOOD DROP-IN UNIT SEALED WELLS WITH DRAINS	208	1	1800	8.65	NEMA# / 6-20P	Cord / 6'	Gas Type / -
21Aa	1	BGA1-46	ADJUSTABLE GLASS SNEEZE GUARD SINGLE OVERSHELF WITH LED LIGHTS & HEAT	120	1	480	4.0	NEMA# / 5-15P	Cord / 6'	Gas Type / -
21B	1	XP46ST	SOLID TOP UNIT	-	-	-	-	NEMA# / -	Cord / -	Gas Type / -
21B.1	1	ADI-2E-SW	HOT FOOD DROP-IN UNIT SEALED WELLS WITH DRAINS	208	1	1800	8.65	NEMA# / 6-20P	Cord / 6'	Gas Type / -
21Aa	1	BGA1-46	ADJUSTABLE GLASS SNEEZE GUARD SINGLE OVERSHELF WITH LED LIGHTS & HEAT	120	1	480	4.0	NEMA# / 5-15P	Cord / 6'	Gas Type / -
22B	1	XP46ST	SOLID TOP UNIT	-	-	-	-	NEMA# / -	Cord / -	Gas Type / -
22A	1	XP46ST	SOLID TOP UNIT **LOAD CENTER - A**	120/208	1	6360	30.58	NEMA# / -	Cord / -	Gas Type / -
24	1	XP46ST	SOLID TOP UNIT CASHIER STATION	120	1	1800	15.0	NEMA# / -	Cord / -	Gas Type / -

DUKE EQUIPMENT

Item Tag	Quantity	Model Number	Description	Voltage	Phase	Watts	Amps	NEMA #'S Intl. Conn. / Final Conn.	Cord Length

BUY-OUT EQUIPMENT

Item Tag	Quantity	Model Number	Description	Voltage	Phase	Watts	Amps

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AGENCY APPROVAL

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DESIGNED BY: INFORM MARKETING GROUP

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ESTIMATOR: R. TROUTT
PURCHASE ORDER #: N/A
SALES ORDER: N/A
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SHEET: 2
OF: 5

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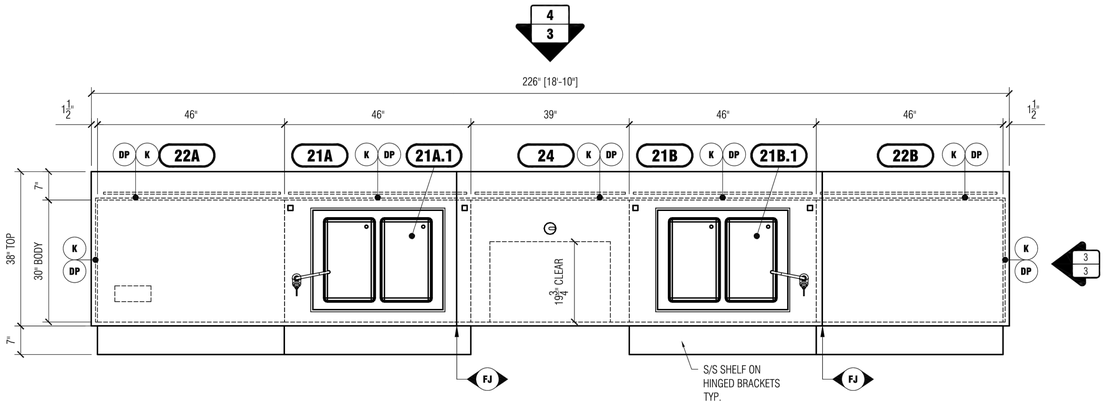
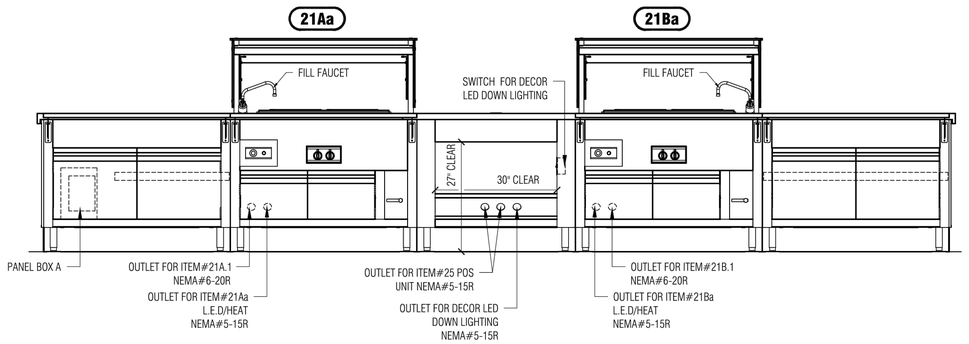
FS9.3



1 / 3 PLAN VIEW
3/8" = 1'-0"



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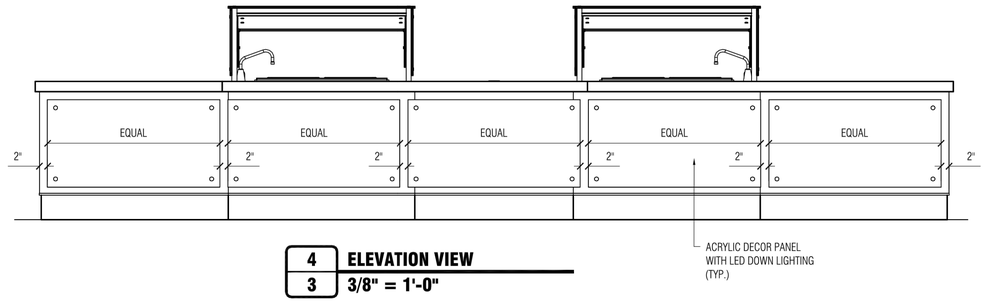

4 / 3 ELEVATION VIEW
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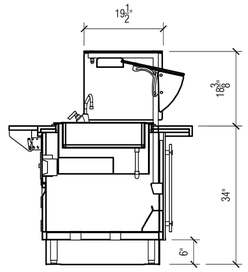

3 / 3 END VIEW
3/8" = 1'-0"

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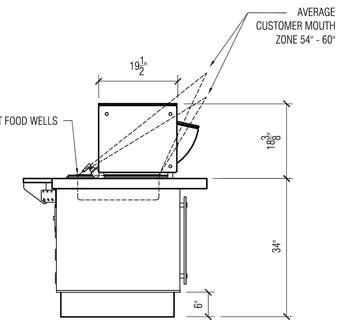

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DATE: 3/28/2025

AGENCY APPROVAL

EL DORADO MIDDLE SCHOOL
MULTI-PURPOSE BUILDING UPGRADES
1750 WEST ST, CONCORD, CA 94521
MT. DIABLO UNIFIED SCHOOL DISTRICT

AMD FOODSERVICE DESIGN
P.O BOX 163
GARDEN VALLEY, CA
95633
p. 530-333-4606
www.amdfoodservicedesign.com

CONSULTANT
nacht&lewis
600 Q Street, Suite 100
Sacramento, CA 95811
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916.329.4000

REGISTERED ARCHITECT
No. C026867
RENEWAL DATE: 03/31/27
STATE OF CALIFORNIA

ARCHITECT

DSA SUBMITTAL

REVISIONS

NO.	DESCRIPTION	DATE

DATE 02/28/2025
JOB NO. Y2326.00
SHEET TITLE

FOODSERVICE
EQUIPMENT
SERVING LINE

SHEET NO.

FS9.4

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET

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ONE AND ONE-HALF INCH = ONE FOOT
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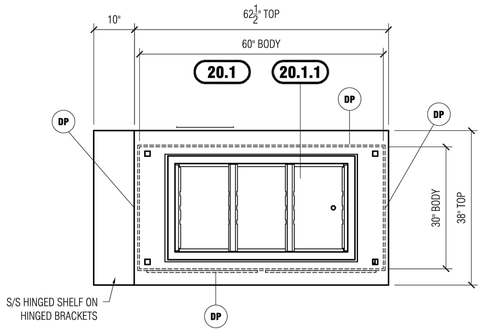
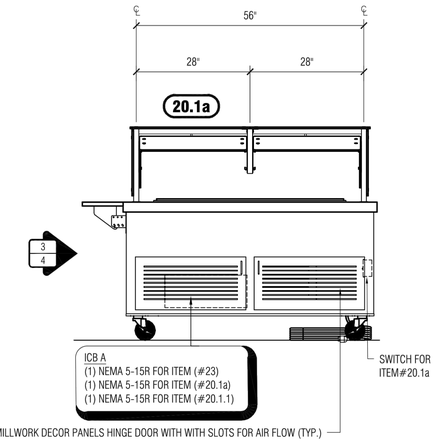
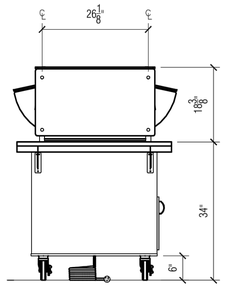
NOTE:
SNEEZE GUARDS NOT SHOWN IN PLAN VIEW



1/4 PLAN VIEW
3/8" = 1'-0"

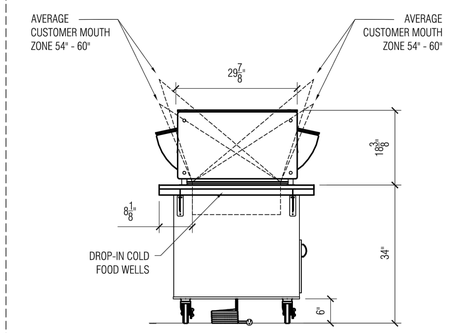


2/4 ELEVATION VIEW
3/8" = 1'-0"



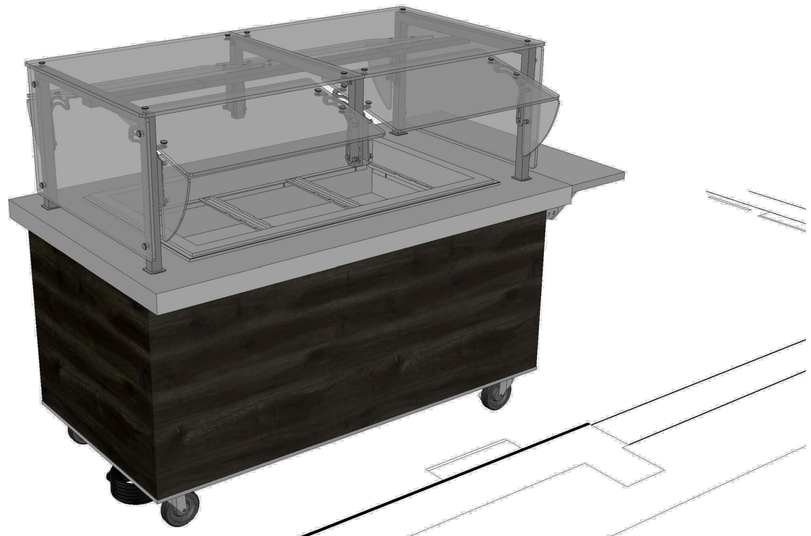
3/4 CUSTOMER ELEVATION
3/8" = 1'-0"

CUSTOMER REFERENCE ONLY





4/4 3D - PERSPECTIVE
NOT TO SCALE



5/4 3D - PERSPECTIVE
NOT TO SCALE

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DUKE MANUFACTURING COMPANY
2305 North Broadway
St. Louis, MO 63102
Ph (314) 231-1130
Fax (314) 231-5074

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ALL RIGHTS RESERVED

REV.	DATE	BY
A	10/18/2024	DTM

DESIGNED FOR: EL DORADO MIDDLE SCHOOL
DESIGNED BY: INFORM MARKETING GROUP

DRAWN BY: MAC
ESTIMATOR: R. TROUTT
PURCHASE ORDER #: N/A
SALES ORDER: N/A
DATE: 1/11/2024
DRAWING NO. : SD-147549
SHEET: OF: 5 4

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121540 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 3/28/2025

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LICENSED ARCHITECT
BRIAN J. MAYNOR
No. C-26867
RENEWAL DATE: 1/31/27
STATE OF CALIFORNIA

ARCHITECT
DSA SUBMITTAL

REVISIONS

NO.	DESCRIPTION	DATE

DATE 02/28/2025
JOB NO. Y2326.00
SHEET TITLE

FOODSERVICE EQUIPMENT SERVING LINE

SHEET NO.
FS9.5

El Dorado Middle School

Electric & Plumbing Schedule — Serving Counters

Item	Qty	Station	Make	Model	Description	voltage	phase	watts	amps each	N.E.M.A.	electric connection	H	C	waste
21A.1	1	main servery	Duke Mfg.	ADI-2E-SW	Hot food well drop-in	208	1	1800	8.65	6-20P	6ft cord set			3/4"
21Aa	1	main servery	Duke Mfg.	BGA-46	Food guard with heater & LED light	120	1	480	4.00	5-15P	6ft cord set			
21B.1	1	main servery	Duke Mfg.	ADI-2E-SW	Hot food well drop-in	208	1	1800	8.65	6-20P	6ft cord set			3/4"
21Ba	1	main servery	Duke Mfg.	BGA-46	Food guard with heater & LED light	120	1	480	4.00	5-15P	6ft cord set			
24	1	main servery	Duke Mfg.	XP46ST	Outlet for POS unit	120	1	1800	15.00	5-15P	6ft cord set			
22A	1	main servery	Duke Mfg.	XP46ST	**Load Center "A"**	120/208	1	6360	30.58		Direct			

El Dorado Middle School

Electric & Plumbing Schedule — Serving Counters

Item	Qty	Station	Make	Model	Description	voltage	phase	watts	amps each	N.E.M.A.	electric connection	H	C	waste
20.1.1	1	Salad Bar	Duke Mfg.	ADI-3MD-N7	Cold food drop in	120	1	1113.6	9.28	5-15P	6ft cord set			
20.1a	1	Salad Bar	Duke Mfg.	BGA-60	food guard with LED light	120	1	30	0.25	5-15P	6ft cord set			
20.1	1	Salad Bar	Duke Mfg.	XP74ST	**ICB "A"**	120/208	1	1143.6	5.50	5-15P	6ft cord set			

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SUBMITTAL

APPROVED FOR FABRICATION
APPROVED AS NOTED
FURTHER SUBMITTAL REQUIRED
APPROVED FOR CONSTRUCTION
FURTHER SUBMITTAL REQUIRED
APPROVED AS NOTED FOR CONSTRUCTION
DATE
DUKE AUTHORIZED SIGNATURE

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REV.	DATE	BY
A	10/18/2024	DTM

DESIGNED FOR: EL DORADO MIDDLE SCHOOL
DESIGNED BY: INFORM MARKETING GROUP

DRAWN BY: MAC
ESTIMATOR: R. TROUTT
PURCHASE ORDER #: N/A
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SHEET NO.

FS9.6

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MECHANICAL GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH ALL APPLICABLE CODES, SPECIFICATIONS, LOCAL ORDINANCES, AND INDUSTRY STANDARDS.
2. VERIFY EXACT LOCATION OF ALL (E) EQUIPMENT, DUCTWORK, DIFFUSERS, REGISTERS, AND GRILLES. NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES BETWEEN (E) SYSTEMS AND DRAWINGS.
3. COORDINATE EXACT LOCATION OF EQUIPMENT AND ALL PENETRATIONS THROUGH ROOF, FLOORS, AND WALLS WITH ARCHITECTURAL STRUCTURAL SYSTEMS PRIOR TO COMMENCING WORK.
4. COORDINATE EXACT SIZE AND ROUTING OF DUCTWORK WITH ARCHITECTURAL PLANS, STRUCTURE, AND EQUIPMENT PRIOR TO COMMENCING WORK.
5. SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF ALL CEILING DIFFUSERS, REGISTERS, AND GRILLES.
6. FURNISH AND INSTALL MANUAL AIR DAMPERS AT ALL DUCT BRANCH TAKEOFFS TO A SINGLE SUPPLY DIFFUSER.
7. FLEXIBLE DUCTWORK CONNECTIONS TO CEILING DIFFUSERS ARE LIMITED TO 5' MAXIMUM LENGTH.
8. ALL DUCTWORK, CEILING DIFFUSERS/REGISTERS/GRILLES, EQUIPMENT, PIPING, ETC. ARE NEW U.O.N. (SHOWN HEAVY). (E) DUCTWORK, PIPING, ETC. IS SHOWN LIGHT. SEE LEGEND.
9. (E) DUCTWORK AND ITEMS TO BE REMOVED ARE SHOWN CROSSED ("X") OUT, SEE LEGEND. COORDINATE CLOSELY WITH (N) DUCTWORK AND P.O.C.'S SHOWN. ALL OTHER (E) DUCTWORK, ETC. TO REMAIN.
10. WHERE INLET DUCT DIAMETER AND DIFFUSER NECK SIZE ARE THE SAME (I.E. 9"ø AND 9x9) CONTRACTOR SHALL OVERSIZE THE SHEET METAL PLENUM TO ACCOMODATE THE ROUND DUCT CONNECTION.

MEP COMPONENT ANCHORAGE NOTE

ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA-APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26, AND 30:

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G., HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

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 DISTRIBUTION SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.

PIPING, DUCTWORK, & ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8; AND 2022 CBC, SECTIONS 1617A.1.24, 1617A.1.25, AND 1617A.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 PREPAPPROVED INSTALLATION GUIDE (E.G., HCAI OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

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

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

MP ☐ MD ☒ PP ☐ E ☐ OPTION 2: SHALL COMPLY WITH HCAI (OSHPD) PREAPROVAL (OPM #) # .0043-13 PAGES D4.12, D6.12, M4.10, AND N4.10 AS INCLUDED IN THESE DRAWINGS WITH PROJECT-SPECIFIC NOTES AND DETAILS. SEE SHEET M502.

CALIFORNIA ENERGY CODE - ACCEPTANCE TESTING

1. THE CALIFORNIA ENERGY CODE SECTION 10-103 REQUIRES ACCEPTANCE TESTING ON ALL NEWLY INSTALLED LIGHTING CONTROLS, MECHANICAL SYSTEMS, ENVELOPES, AND PROCESS EQUIPMENT AFTER INSTALLATION AND BEFORE PROJECT COMPLETION. AN ACCEPTANCE TEST IS A FUNCTIONAL PERFORMANCE TEST TO HELP ENSURE THAT NEWLY INSTALLED EQUIPMENT IS OPERATING AND IN COMPLIANCE WITH THE ENERGY CODE.

   LIGHTING CONTROLS ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED LIGHTING CONTROLS ACCEPTANCE TEST TECHNICIAN (ATT).

   MECHANICAL SYSTEM ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED MECHANICAL ATT FOR PROJECTS SUBMITTED ON OR AFTER OCTOBER 1, 2021.

   ENVELOPE AND PROCESS EQUIPMENT ACCEPTANCE TESTS SHALL BE PERFORMED BY THE INSTALLING CONTRACTOR, ENGINEER/ ARCHITECT OF RECORD OR THE OWNER'S AGENT.

   A LISTING OF CERTIFIED ATT CAN BE FOUND AT HTTPS://WWW.ENERGY.CA.GOV/PROGRAMS-AND-TOPICS/PROGRAMS/ACCEPTANCE-TEST-TECHNICIAN-CERTIFICATION-PROVIDER-PROGRAM/ACCEPTANCE

   THE ACCEPTANCE TESTING PROCEDURES MUST BE REPEATED, AND DEFICIENCIES MUST BE CORRECTED BY THE BUILDER OR INSTALLING CONTRACTOR UNTIL THE CONSTRUCTION/INSTALLATION OF THE SPECIFIED SYSTEMS CONFORM AND PASS THE REQUIRED ACCEPTANCE CRITERIA.

   PROJECT INSPECTORS WILL COLLECT THE FORMS TO CONFIRM THAT THE REQUIRED ACCEPTANCE TESTS HAVE BEEN COMPLETED.

HVAC ABBREVIATIONS

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
ABC	ABOVE CEILING	KEF	KITCHEN EXHAUST FAN
ABV	ABOVE	KW	KILOWATTS
ACC DR	ACCESS DOOR		
ACC P	ACCESS PANEL	LAV	LAVATORY
ACU	AIR CONDITIONING UNIT	LAT	LEAVING AIR TEMPERATURE
AFF	ABOVE FINISHED FLOOR	LBS	POUNDS
APD	AIR PRESSURE DROP, INCHES WATER COLUMN	LD	LOUVERED DOOR
APPROX	APPROXIMATE	LDB	LEAVING DRY BULB
ARCH	ARCHITECTURAL	LRA	LOCKED ROTOR AMPS
ATTEN	ATTENUATORS	LTCP	LOCAL TEMPERATURE CONTROL PANEL
ATV	ACOUSTIC TURNING VANE	LVR	LOUVER
		LWB	LEAVING WET BULB
BD	BALANCE DAMPER	LWT	LEAVING WATER TEMPERATURE
BDD	BACK DRAFT DAMPER		
BHP	BRAKE HORSE POWER	MAT	MIXED AIR TEMPERATURE
BLDG	BUILDING	MAU	MAKE-UP AIR UNIT
BOD	BOTTOM OF DUCT	MAV	MANUAL AIR VENT
BOR	BOTTOM OF REGISTER	MAX	MAXIMUM
BTUH	BRITISH THERMAL UNITS PER HOUR	MBH	THOUSAND BTUs PER HOUR
		MCA	MINIMUM CIRCUIT AMPACITY
CAP	CAPACITY	MCC	MOTOR CONTROL CENTER
CD	CONDENSATE DRAIN	MD	MOTORIZED
CEF	CEILING EXHAUST FAN	MECH	MECHANICAL
CFH	CUBIC FEET OF GAS PER HOUR	MFR	MANUFACTURER
CFM	CUBIC FEET OF AIR FLOW PER MINUTE	MIN	MINIMUM
CHV	CHECK VALVE	MOCP	MAXIMUM OVERCURRENT PROTECTION
CLG	CEILING		
CLR	CLEAR	OA	OUTSIDE AIR
CONC	CONCRETE	OAD	OUTSIDE AIR DAMPER
COND	CONDENSER	OC	ON CENTER
CONN	CONNECT/CONNECTION	OD	OUTSIDE DIAMETER
CONT	CONTINUATION	OH	OVERHEAD
CONTR	CONTRACTOR	OV	OUTLET VELOCITY
D	DAMPER	PD	PRESSURE DROP
DIA	DIAMETER	PRV	PRESSURE REDUCING VALVE/ PRESSURE REGULATING VALVE
DL	DOOR LOUVER		
DN	DOWN	PSI (G) (A)	POUNDS PER SQUARE INCH (GAUGE) (ABSOLUTE)
DSP	DRY STAND PIPE		
DB	DRY BULB	RA	RETURN AIR
DTR	DOWN THROUGH ROOF	RAD	RETURN AIR DAMPER
DWG	DRAWING	REF	ROOF EXHAUST FAN
		RF	RETURN FAN
EA	EXHAUST AIR	RPM	REVOLUTIONS PER MINUTE
EAD	EXHAUST AIR DAMPER	RLA	RATED LOAD AMPS
EDB	ENTERING DRY BULB	RV	RELIEF VENTILATOR
EER	ENERGY EFFICIENCY RATING		
EF	EXHAUST FAN	S & R	SUPPLY AND RETURN
EFF	EFFICIENCY	SA	SUPPLY AIR
EH	EXHAUST HOOD	SAD	SEE ARCHITECTURAL DRAWINGS
EL	ELEVATION	SD	SPLITTER DAMPER
ELEC	ELECTRIC/ELECTRICAL	SEER	SEASONAL ENERGY EFFICIENCY RATING
ENT	ENTERING	SF	SUPPLY FAN
EQUIP	EQUIPMENT		
ESP	EXTERNAL STATIC PRESSURE	SM	SHEET METAL
EVAP	EVAPORATOR	SOV	SHUT OFF VALVE
EWB	ENTERING WET BULB	SP	STATIC PRESSURE
EWC	ELECTRIC WATER COOLER	SPD	STATIC PRESSURE DROP
EWT	ENTERING WATER TEMPERATURE	SQ FT	SQUARE FEET
EXH	EXHAUST	SQ IN	SQUARE INCHES
EXT	EXPANSION TANK	SS	STAINLESS STEEL
		STR	STRAINER
f	CUBIC FEET OF AIR FLOW PER MINUTE	STRUC	STRUCTURAL
F	DEGREES FAHRENHEIT		
FA	FROM ABOVE	TA	TO ABOVE
FB	FROM BELOW	TB	TO BELOW
FC	FLEXIBLE CONNECTION	TCP	TEMPERATURE CONTROL PANEL
FCV	FLOW CONTROL VALVE	TEMP	TEMPERATURE
FD	FIRE DAMPER	THK	THICK
FF	FLY FAN	TP	TOTAL PRESSURE
FIN	FINISH	TSP	TOTAL STATIC PRESSURE
FLA	FULL LOAD AMPS	TYP	TYPICAL
FLR	FLOOR		
FPM	FEET PER MINUTE	UCD	UNDERCUT DOOR
FSD	FIRE AND SMOKE DAMPER	UF	UNDERFLOOR
FT (')	FOOT OR FEET	UG	UNDERGROUND
FT^2	SQUARE FEET	UON	UNLESS OTHERWISE NOTED
FV	FACE VELOCITY	UTR	UP THROUGH ROOF
GA	GAUGE	VD	VOLUME DAMPER
GALV	GALVANIZED	VF	VENTILATION FAN
GI	GALVANIZED IRON	VFC	VARIABLE FREQUENCY CONTROLLER
GPH	GALLONS PER HOUR	VLV	VALVE
GPM	GALLONS PER MINUTE	VRF	VARIABLE REFRIGERANT FLOW
		VSD	VARIABLE SPEED DRIVE
HC	HEATING COIL	VV	VARIABLE AIR VOLUME CONTROLLER
HDG	HEAVY DUTY GRILLE	VVRH	VARIABLE AIR VOLUME CONTROLLER WITH REHEAT COIL
HP	HORSE POWER		
HTG	HEATING	W	WATTS
HV	HAND VALVE	WALL MTD (R)	WALL MOUNTED (RECESSED)
HW	HOT WATER	WB	WET BULB
HWR	HOT WATER RETURN	WMS	WIRE MESH SCREEN
HWS	HOT WATER SUPPLY	WP	WORKING PRESSURE
		WPD	WATER PRESSURE DROP FEET OF WATER COLUMN
ICF	INSTANTENEOUS CURRENT FLOW	WT	WEIGHT
IE	INVERT ELEVATION		
IN (")	INCH		
IN^2	SQUARE INCHES		

DUCT LEGEND

SINGLE LINE SYMBOL	DOUBLE LINE SYMBOL	DESCRIPTION
24x12	24x12	RECTANGULAR DUCT: WIDTH x DEPTH (PLAN VIEW) DEPTH x WIDTH (SECTION VIEW)
26x14L	26x14L	ACOUSTICALLY LINED RECTANGULAR DUCT - DIMENSIONS ARE OUTSIDE
		MANUAL AIR DAMPER
R or D	R or D	RISE OR DROP DUCT IN DIRECTION OF AIR FLOW
OR		RECTANGULAR TO RECTANGULAR TRANSISTION OR ROUND TO ROUND TRANSITION, MAX. SLOPE OF 1:3
		RECTANGULAR TO ROUND TRANSITION, MAX. SLOPE OF 1:3
	W, R, R/W = 1.5	ELBOW, RECTANGULAR, SMOOTH RADIUS, WITHOUT TURNING VANES
		SQUARE/RECTANGULAR DUCT ELBOW WITH TURNING VANES
		CONVERGING OR DIVERGING TEE, 45° ENTRY, RECTANGULAR MAIN AND BRANCH. WHEN REDUCING MAIN, SIDE OF TAKE OFF OR ENTRY BRANCH TO BE FLAT, OTHER SIDES MAX. SLOPE OF 1:3
ROUND DUCT		ROUND DUCT TAKE OFF FROM RECTANGULAR VIA SMOOTH CONVERGING BELL MOUTH
		RECTANGULAR DUCT TEE. MAD'S ON THE 2 BRANCHES, THROAT SIZED FOR EQUAL PRESSURE DROP
		RECTANGULAR DUCT SPLIT MAD'S, THROAT SIZED FOR EQUAL PRESSURE DROP
		3-WAY RECTANGULAR SPLIT WITH TWO TRANSITIONAL ELBOWS AND TRANSITIONING MAIN. DOWNSTREAM MAD'S OF THE TREE BRANCHES. THROATS SIZED FOR EQUAL PRESSURE DROP.
		FOR CONCEALED DUCT: DROP TO DIFFUSER SHALL BE FULL SIZE OF DIFFUSER NECK. IOR EXPOSED DUCT: DROP SHALL BE FULL SIZE OF OD DIFFUSER FRAME. FLANGE FOR MOUNTING DIFFUSER TURNED IN. AIR EXTRACTOR AND EQUALIZER GRID AT CONNECTION TO MAIN.
		SUPPLY AIR, SUPPLY DROP/RISE
		RETURN AIR, RETURN AIR DROP/RISE
		EXHAUST AIR, EXHAUST AIR DROP/RISE
		NEW - FLEXIBLE DUCT (ROUND)
OR		EXISTING - FLEXIBLE DUCT (ROUND)
10"Ø, 18"Ø, 12"Ø	10"Ø, 18"Ø, 12"Ø	45° REDUCING LATERAL FITTING
18"Ø, 10"Ø, 12"Ø	18"Ø, 10"Ø, 12"Ø	90° REDUCING TEE FITTING

SYMBOLS LEGEND

SYMBOL	ABBREVIATION	DESCRIPTION
	---	ANCHOR
	---	AUTOMATIC AIR VENT
	BFP, BP, DCW	BACKFLOW PREVENTER, REDUCE PRESSURE, DOUBLE CHECKVALVE
	---	BALL VALVE
	---	BOTTOM CONNECTION
	---	BUTTERFLY VALVE
BPT	BPT	BYPASS TIMER
	CBV	CALIBRATED BALANCE VALVE
	---	CHECK VALVE
	---	CIRCUIT SETTER VALVE
	CP	CIRCULATING PUMP
DS	DS	DYNAMIC SENSOR
	---	ECCENTRIC REDUCER
	EJ	EXPANSION JOINT
F	FD	FIRE DAMPER
FS	FS	FIRE/SMOKE DAMPER
	---	FLEXIBLE CONNECTOR
	---	FLOW ARROW
FE	---	FLOW ELEMENT
FS	FS	FLOW SWITCH
	GCK	GAGE COCK
	---	GATE VALVE
	---	GLOBE VALVE
H X	H	HUMIDISTAT
	---	LIMIT OF DEMOLITION
	---	MANUAL AIR VENT
	---	PIPE BREAK
	---	PIPE CAP
	---	PIPE DOWN
	---	PIPE GUIDE
	---	PIPE UP
	---	POINT OF CONNECTION
	---	REDUCER
SD	SD	SMOKE DAMPER
SD	SKD	SMOKE DETECTOR
	---	SOLENOID VALVE
	---	STRAINER
TS X	TS	TEMPERATURE SENSOR
T X	T	THERMOSTAT
	---	UNION
	---	VALVE IN RISER/DROP
	VB	VALVE IN VALVE BOX

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SHEET TITLE

MECHANICAL LEGENDS AND NOTES

SHEET NO.

M001

ONE AND ONE-HALF INCH = ONE FOOT

ONE INCH = ONE FOOT

THREE-QUARTERS INCH = ONE FOOT

ONE-HALF INCH = ONE FOOT

ONE-QUARTER INCH = ONE FOOT

ONE-EIGHTH INCH = ONE FOOT

ONE-SIXTEENTH INCH = ONE FOOT

ONE INCH = TWENTY FEET

AIR CONDITIONING UNIT SCHEDULE

EQUIPMENT TAG	MFR	MODEL NO	LOCATION	CFM	MIN. OA (CFM)		LOW CFM (66%)	ESP (IN WG)	SENS. COOLING CAP (MBH)	TOTAL COOLING CAP (MBH)	EVAP		GAS HEATING						ELECTRICAL DATA												POWER EXHAUST					EER	MOUNTING DETAIL	CONTROL DIAGRAM	OPER WT (LBS)	REMARKS
					UPPER	LOWER					EDB (F)	EWB (F)	INPUT (MBH)		OUTPUT (MBH)		HTG EDB (F)	AFUE (%)	SUPPLY FAN		COMPR #1		COMPR #2		VOLT	PHASE	MCA	MOCP (AMPS)	CONDENSER FAN		COMB FAN FLA	CFM	SP	FLA	MCA	MOCP (AMPS)					
													LOW	HIGH	LOW	HIGH			BHP	FLA	RLA	LRA	RLA	LRA					QTY	FLA (EACH)										
AC-1	CARRIER	48GCEM14	MUTLIPURPOSE 100	5200	1800	350	3430	0.8	121.36	139.71	82	66	180	224	146	181	6.2	81	2.36	7.5	25	164	15.9	110	208	3	60	80	3	1.5	0.48	0	0	6.2	7.75	15	12.0	1/M501	2/M601	2024	1, 2, 3, 4, 5, 6, 8
AC-2	CARRIER	48GCEM14	MUTLIPURPOSE 100	5200	1800	350	3430	0.8	129.43	139.93	82	66	180	224	146	181	59.7	81	2.36	7.5	25	164	15.9	110	208	3	60	80	3	1.5	0.48	0	0	6.2	7.75	15	12.0	1/M501	3/M601	2024	1, 2, 3, 4, 5, 6, 8
AC-3	CARRIER	48GCDM08	KITCHEN 110	2500	1000	145	1650	0.8	63.81	84.15	77	64	99	125	66	102.5	68.0	82	1.61	6.4	15.9	110	9	71	208	3	39	50	2	1.5	0.48	0	0	5	6.25	11.25	12.0	1/M501	4/M601	1445	1, 2, 3, 4, 5, 7, 8

1. UNITS SELECTED AT 102 DEG. F DB / 70 DEG. F WB SUMMER AMBIENT, 32 DG. F DB WINTER AMBIENT AIR TEMPERATURES. COOLING CAPACITIES SCHEDULED ARE NET SENSIBLE AND NET TOTAL CAPACITIES.
2. PROVIDE UNIT WITH 2" MERV 13 DISPOSABLE PLEATED MEDIA FILTER(S), THROUGH THE BASE GAS / ELECTRICAL CONECTION KIT, AND EXPANDED METAL CONDENSER COIL GUARDS.
3. PROVIDE UNIT WITH "CANFAB" 100% MODULATING POWER EXHAUST ECONOMIZER WITH VFD, STATIC PRESSURE TRANSMITTER, "HONEYWELL" ACTUATORS,AND LOW VOLTAGE INTERFACE STRIP FOR DDC TIE-IN. NOTE THAT SEPARATE POWER CONNECTIONS ARE REQUIRED TO THE AC UNIT AND THE MODULATING POWER EXHAUST ECONOMIZER. ELECTRICAL LOADS OF EACH DEVICE ARE SCHEDULED, ELECTRICAL ENGINEER SHALL PROVIDE SEPARATE POWER CONECTIONS, APPROPRIATE CIRCUIT BREAKER(S), FEEDER(S), AND DISCONNECTS(S) AS REQUIRED BY CODE.
4. PROVIDE "CANFAB" STRUCTURALLY CALC'D 14" TALL STANDARD ROOF CURB.
5. FOR UNITS WITH NOMINAL COOLING CAPACITY OF 6 TONS AND LARGER, PROVIDE UNIT WITH FACTORY INSTALLED VFD ON SUPPLY FAN AND MINIMUM 2-STAGES OF MECHANICAL COOLING CAPACITY. SEE SCHEDULE FOR LOW SUPPLY AIRFLOW CFM (66%). SEE CONTROLS FOR SEQUENCE OF OPERATION.
6. LOWER OUTSIDE AIR POSITION INDICATED IS BASED ON 0.15 CFM/SQ.FT., ALLOWABLE FOR CO2 DEMAND CONTROLLED SYSTEMS AT MINIMUM OCCUPANCY. UPPER OUTSIDE AIR POSITION INDICATED IS BASED ON 15 CFM/OCCUPANT WHEN SPACE IS AT MAXIMUM OCCUPANCY, UNLESS SYSTEM IS IN ECONOMIZER MODE. SEE CONTROLS FOR SEQUENCE OF OPERATION. FOR THESE UNITS WITH CO2 CONTROL, ENTERING TEMPERATURES SCHEDULED REPRESENT CONDITIONS AT UPPER OSA POSITION.
7. LOWER OUTSIDE AIR POSITION INDICATED IS BASED ON MIN. VENTILATION RATE REQUIRED BY OCCUPANCY TYPE. UPPER OUTSIDE AIR POSITION INDICATED FOR KITCHEN HOOD EXHAUST MAKE-UP AIR SETTING. SEE CONTROLS FOR SEQUENCE OF OPERATION. FOR THESE UNITS WITH KITCHEN HOOD EXHAUST MAKE-UP AIR SETTING, ENTERING TEMPERATURES SCHEDULED REPRESENT CONDITIONS AT UPPER OSA POSITION.
8. INSTALL DUCT SMOKE DETECTOR IN SUPPLY AIR DUCT FOR AUTOMATIC SHUTDOWN OF HVAC SYSTEM UPON SENSING SMOKE. PROVIDED, POWERED, AND INTERLOCKED WITH FIRE ALARM SYSTEM BY FIRE ALARM CONTRACTOR. INSTALLED AND CONNECTED TO AC UNIT BY DIV. 23. COORDINATE WITH FIRE ALARM DRAWINGS.

EXHAUST FAN SCHEDULE

EQUIPMENT TAG	MFR	MODEL NO	AREA SERVED	CFM	ESP (IN. W.G.)	TYPE	HP (WATTS)	VOLT	PHASE	RPM	MOUNTING DETAIL	CONTROL DIAGRAM	OPER WT (LBS)	REMARKS
CEF-1	GREENHECK	SP-A200	STAFF RR 106	125	0.375	CE	56	110	1	900	5/M501	6/M601	25	2, 4, 6, 7, 8
CEF-2	GREENHECK	SP-A250	CUSTODIAL 108	200	0.375	CE	67	110	1	1050	5/M501	6/M601	25	2, 4, 6, 7, 8
CEF-3	GREENHECK	SP-A390	BOILER 109	345	0.375	CE	135	110	1	1350	5/M501	7/M601	25	2, 5, 6, 7, 8
KEF-1	GREENHECK	CUE-180HP-VG	KITCHEN HOOD (TYPE 1)	2160	1.750	REU	2	208	3	1335	3/M501	5/M601	200	1, 2, 3
KEF-2	GREENHECK	CUE-180HP-VG	KITCHEN HOOD (TYPE 1)	2475	1.750	REU	2	208	3	1430	3/M501	5/M601	200	1, 2, 3

1. PROVIDE MANUFACTURER'S FACTORY VENTED CURB EXTENSION, GREASE TRAP W/ DRAIN CONNECTION, AND HINGED CURB CAP.
2. PROVIDE WITH THERMAL OVERLOAD PROTECTED MOTOR AND SPEED CONTROLLER.
3. CONTROL FAN W/ SWITCH MOUNTED ON HOOD, REFER TO FOOD SERVICE DRAWINGS. INTERLOCK FAN TO RUN WITH AC UNIT INDICATED ON CONTROL DIAGRAMS, BY DIV. 23.
4. CONTROL FAN WITH OCCUPANCY SENSOR, BY DIV. 26.
5. CONTROL FAN WITH MANUFACTURER'S LINE VOLTAGE THERMOSTAT SET TO SIGNAL FAN TO COME ON AT 85 DEG. F (ADJ.).
6. PROVIDE WITH MANUFACTURER'S SPEED CONTROL MOUNTED ON FAN HOUSING.
7. PROVIDE BACKDRAFT DAMPER AND OPTIONAL ALUMINUM GRILLE WITH WHITE ENAMEL FINISH.
8. PROVIDE W/ "GREENHECK" RCC-7 CURB CAP WITH MANUFACTURER'S ROOF CURB.

AIR TERMINALS SCHEDULE

SYMBOL	DESCRIPTION	TITUS	TUTTLE & BAILEY	METALAIRE	KRUEGER	NAILOR	REMARKS
CDL	MODULAR CORE LAY-IN CEILING DIFFUSER FOR T-BAR CEILING 24X24 PANEL	MCD - BORDER TYPE 3	SQD-LT	9000-6P	1240 FRAME 23	7500-L	
CRL	CEILING RETURN WITH 1/2" EGG CRATE CORE IN 24X24 PANEL FOR T-BAR CEILING	MODEL 50 F BORDER TYPE 3	CRE500-LT	CC5S-6	EGC-5 FRAME S22	61 EC-L	
RH	HEAVY DUTY RETURN GRILLE WITH 35° OR 45° HORIZONTAL BARS	33 RL	T 115H-38	-	S 480 H	6145 HD	
SDS	SPIRAL DUCT SUPPLY GRILLE	S300 FS	-	-	-	-	

1. ALL SYMBOLS MAY NOT BE USED. REFER TO PLANS FOR SIZE AND QUANTITY.
2. ALL SUPPLY AIR DIFFUSERS ARE 4-WAY BLOW UNLESS SHOWN OTHERWISE.
3. FURNISH ALL PRODUCTS OF A SINGLE MANUFACTURER.
4. COORDINATE DIFFUSER, REGISTER, OR GRILLE TYPE WITH REFLECTED CEILING PLAN.
5. OPPOSED BLADE DAMPERS ARE NOT REQUIRED AT DIFFUSERS, REGISTERS, OR GRILLES.
6. PROVIDE MANUAL AIR DAMPERS AT EACH BRANCH DUCT TO A SINGLE DIFFUSER, REGISTER, OR GRILLE.
7. PROVIDE ALUMINUM DIFFUSERS, REGISTERS, OR GRILLES FOR SHOWERS AND DAMP AREAS.

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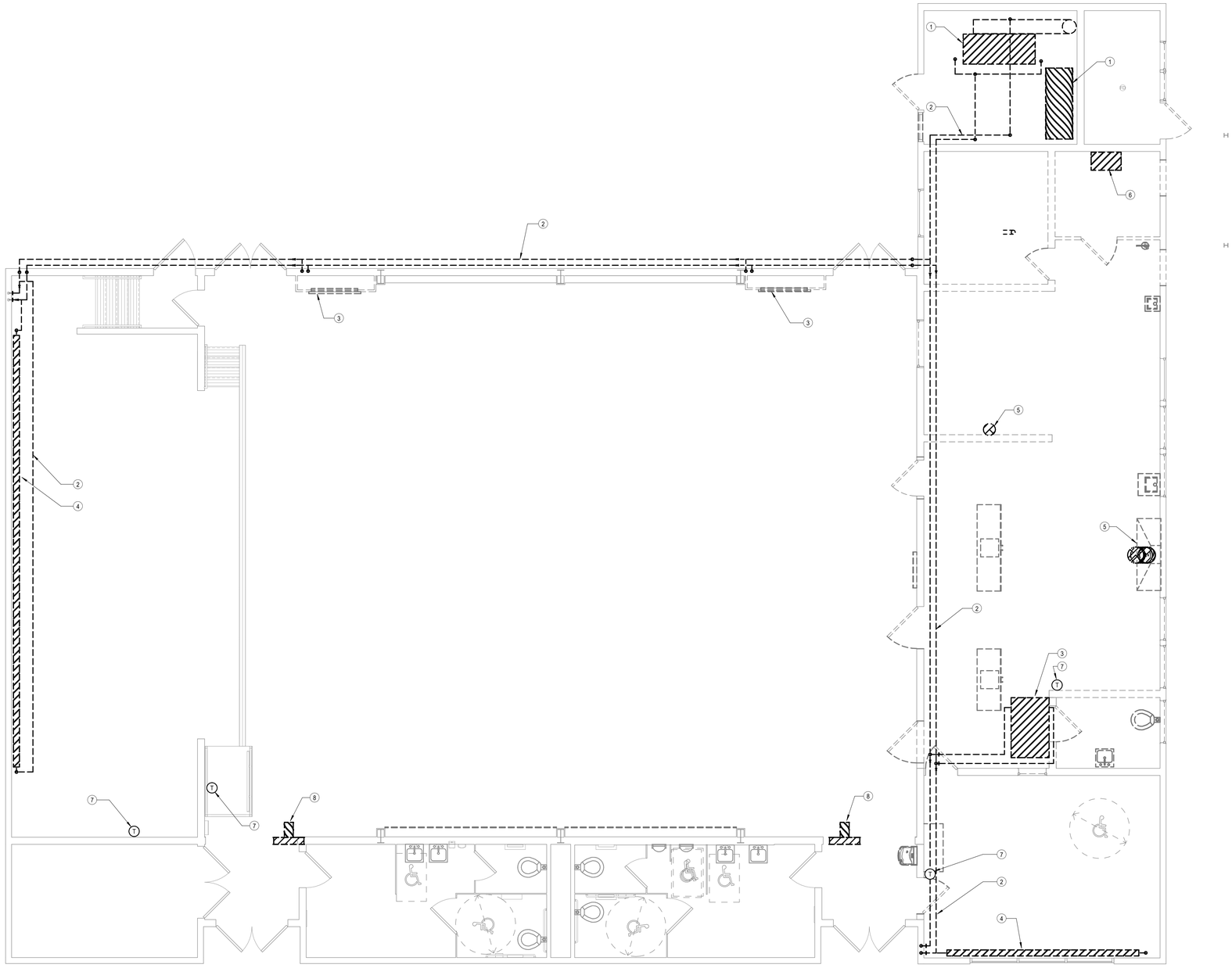
SHEET TITLE

MECHANICAL SCHEDULES

SHEET NO.

M002



1 M111D MECHANICAL DEMOLITION FLOOR PLAN
SCALE: 1/4" = 1'-0"

GENERAL SHEET NOTES

1. THE MECHANICAL DESIGN HAS BEEN BASED ON RECORD DRAWINGS AND SITE OBSERVATIONS. CONTRACTOR SHALL PERFORM INVESTIGATION OF THE EXISTING CONDITIONS PRIOR TO INSTALLATION OF NEW WORK. CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF EXISTING CONDITIONS THAT MAY NOT ALLOW INSTALLATION OF NEW WORK AS SHOWN.
2. EXISTING EQUIPMENT, DUCTWORK, PIPING, COMPONENTS, ETC. ARE SHOWN DIAGRAMMATICALLY AND ARE NOT EXACTLY AS SHOWN ON PLANS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO START OF WORK. RECORD THE EXISTING CONDITIONS IN "COORDINATED LAYOUTS" REQUIRED BY SPECIFICATION SECTION 238000, AND MAKE ANY ADJUSTMENTS NECESSARY TO COMPLETE THE SCOPE OF WORK. CONTRACTOR SHALL MAKE ALLOWANCE IN BID FOR THIS REQUIREMENT.

KEYNOTES

1 REMOVE BOILER, PUMPS, EXPANSION TANK, AND ALL SYSTEMS RELATED TO THE HEATING HOT WATER SYSTEM.
2 REMOVE HEATING HOT WATER PIPING AND SUPPORTS. CAP PIPING WHERE INDICATED.
3 REMOVE HEATING & VENTILATING UNIT, DUCTWORK, LOUVER, PIPING, AND CONTROLS.
4 REMOVE WALL CONVECTOR, PIPING, AND SUPPORTS.
5 REMOVE KITCHEN HOOD, EXHAUST FAN ON ROOF, DUCTWORK, CONTROLS, AND SUPPORTS
6 REMOVE SPLIT-SYSTEM COOLING UNIT AND ALL ASSOCIATED COMPONENTS SERVING THE WALK-IN FREEZER.
7 REMOVE THERMOSTAT AND CONTROL WIRING.
8 REMOVE EXHAUST FAN AND LOUVER. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.

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MECHANICAL DEMOLITION FLOOR PLAN

SHEET NO.

M111D

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
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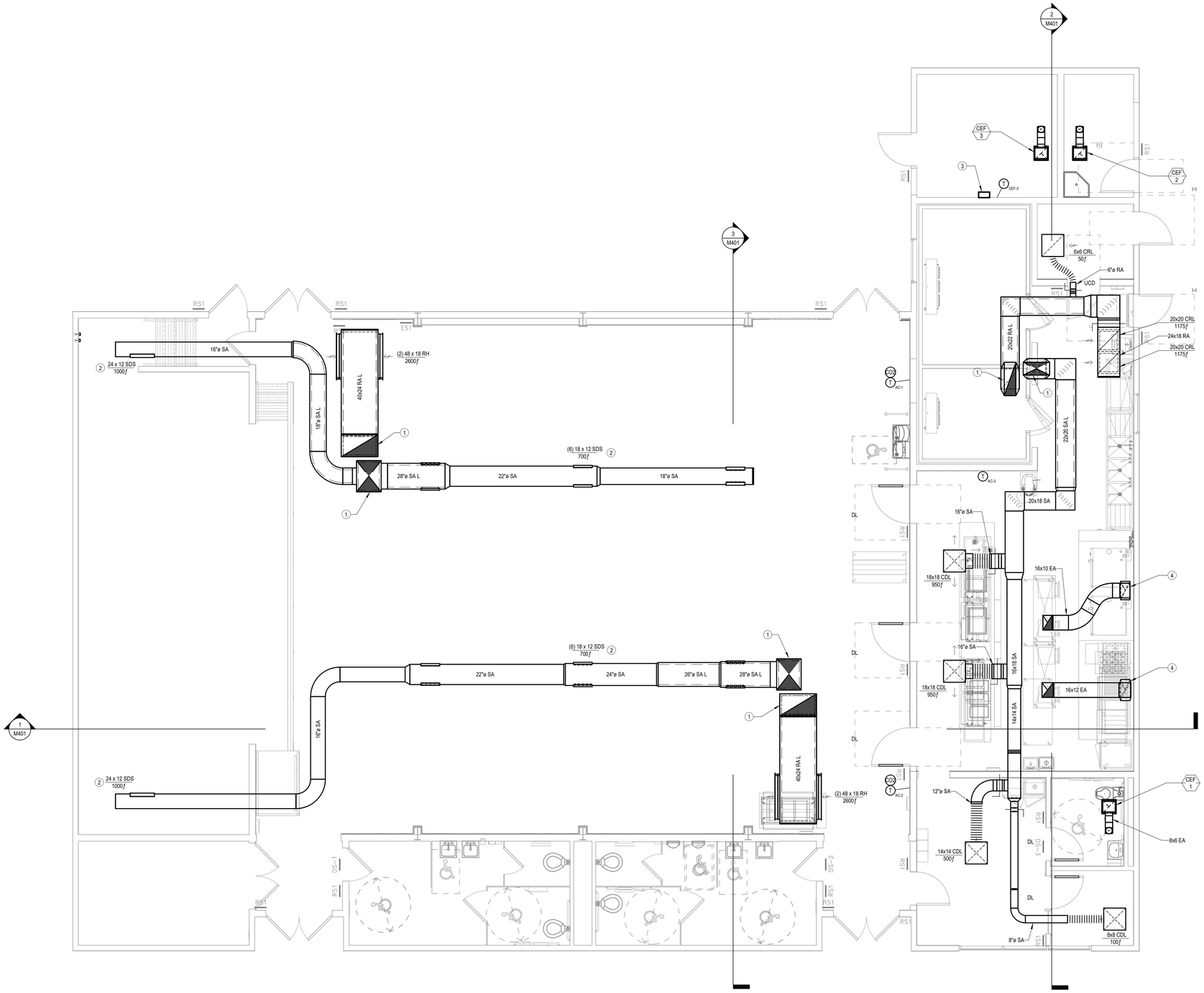

GENERAL SHEET NOTES

1. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF CEILING DIFFUSERS, GRILLES, FANS, ACCESS PANELS, ETC.
2. WHERE NOTED WITH "UCD", PROVIDE MIN. 1/2" DOOR UNDERCUT FOR TRANSFER / MAKEUP AIR. REFER TO ARCHITECTURAL DOOR SCHEDULE FOR DETAILS.
3. ALL GREASE EXHAUST DUCTS SHALL COMPLY WITH THE REQUIREMENTS OF CMC SECTION 510. THE ENTIRE LENGTH OF THE GREASE EXHAUST DUCT SHALL BE ENCLOSED IN FIREWRAP, REFER TO DETAIL 4/M501.
4. FOR TYPICAL CONCEALED DUCT SUPPORT, REFER TO DETAIL 7/M501.
5. FOR TYPICAL EXPOSED DUCT SUPPORT, REFER TO DETAIL 8/M501.

KEYNOTES

1 1" LINED SUPPLY/RETURN DUCTS UP TO ROOFTOP UNIT, FULL SIZE OF UNIT CONNECTION.
2 RADIUSED FACED DIFFUSER MOUNTED AT 60 DEGREES, REFER TO DETAIL 6/M501, TYP.
3 PELICAN WIRELESS GATEWAY, REFER TO CONTROL DIAGRAM 1/M601. COORDINATE EXACT LOCATION W/ DIV. 26.
4 CONNECT GREASE EXHAUST AIR DUCT TO TYPE 1 KITCHEN HOOD CONNECTION COLLAR. REFER TO SHEET FS5.1 FOR ADDITIONAL INFORMATION.

1 M111 MECHANICAL FLOOR PLAN
SCALE: 1/4" = 1'-0"

N

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MECHANICAL FLOOR PLAN
SHEET NO.
M111

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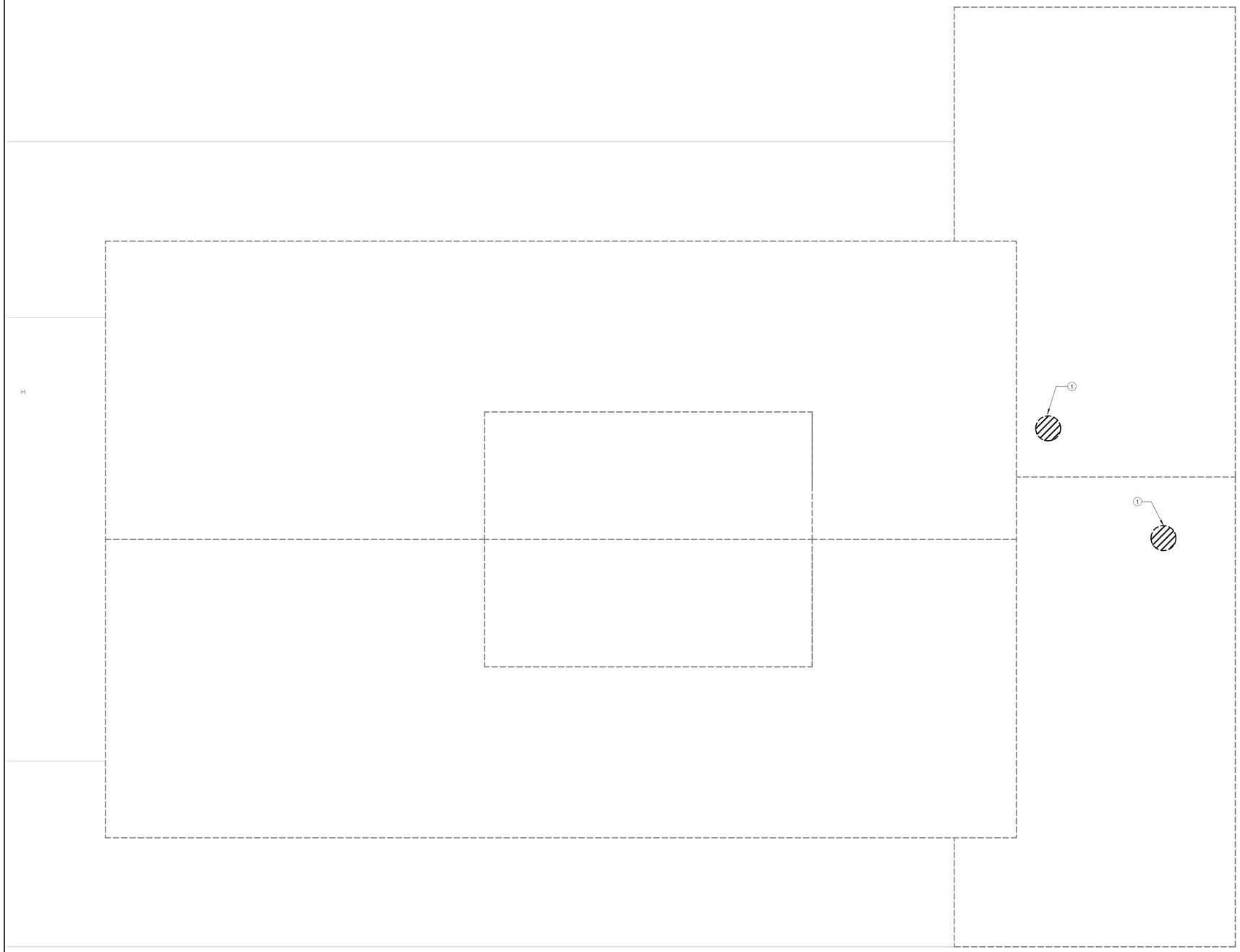

1 M121D MECHANICAL DEMOLITION ROOF PLAN
SCALE: 1/4" = 1'-0"

N

GENERAL SHEET NOTES

1. THE MECHANICAL DESIGN HAS BEEN BASED ON RECORD DRAWINGS AND SITE OBSERVATIONS. CONTRACTOR SHALL PERFORM INVESTIGATION OF THE EXISTING CONDITIONS PRIOR TO INSTALLATION OF NEW WORK. CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF EXISTING CONDITIONS THAT MAY NOT ALLOW INSTALLATION OF NEW WORK AS SHOWN.
2. EXISTING EQUIPMENT, DUCTWORK, PIPING, COMPONENTS, ETC. ARE SHOWN DIAGRAMMATICALLY AND ARE NOT EXACTLY AS SHOWN ON PLANS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO START OF WORK. RECORD THE EXISTING CONDITIONS IN "COORDINATED LAYOUTS" REQUIRED BY SPECIFICATION SECTION 238000, AND MAKE ANY ADJUSTMENTS NECESSARY TO COMPLETE THE SCOPE OF WORK. CONTRACTOR SHALL MAKE ALLOWANCE IN BID FOR THIS REQUIREMENT.

KEYNOTES

1 REMOVE KITCHEN HOOD, EXHAUST FAN ON ROOF, DUCTWORK, CONTROLS, AND SUPPORTS

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SHEET TITLE

MECHANICAL
DEMOLITION ROOF
PLAN

SHEET NO.

M121D

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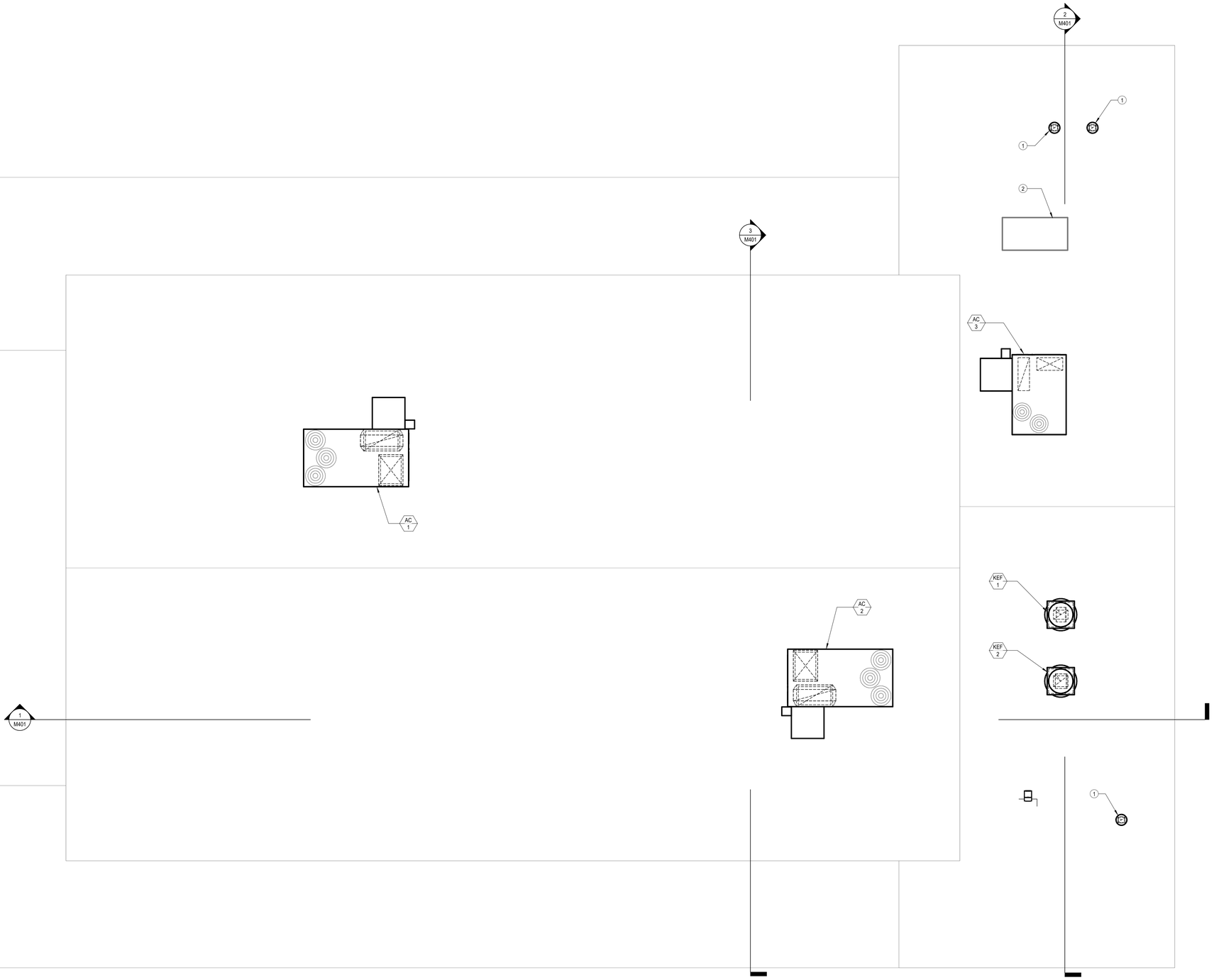

1 MECHANICAL ROOF PLAN
M121
SCALE: 1/4" = 1'-0"

N

GENERAL SHEET NOTES

1. COORDINATE OUTSIDE AIR INTAKE LOCATIONS WITH PLUMBING VENT(S) THROUGH ROOF, EXHAUST FAN DISCHARGE(S), ETC. TO MAINTAIN A MIN. 10'-0" CLEARANCE, TYP.
2. MECHANICAL EQUIPMENT SHALL BE INSTALLED A MIN. DISTANCE OF 10'-0" FROM UNIT CABINET TO EDGE OF ROOF, TYP.

KEYNOTES

1 EXHAUST FAN ROOF CAP AND CURB, SEE EXHAUST FAN SCHEDULE.
2 REMOTE REFRIGERATION CONDENSING UNIT. REFER TO FOOD SERVICE PLANS. COORDINATE EXACT LOCATION TO MAINTAIN ALL REQUIRED CLEARANCES.

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RANCHO CORDOVA, CALIFORNIA

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230602.00 — PROJECT NO.

CONSULTANT

nacht&lewis
600 Q Street, Suite 100
Sacramento, CA 95811
www.nachtlewis.com
916.329.4000

ARCHITECT

DSA SUBMITTAL

REVISIONS

NO.	DESCRIPTION	DATE

DATE 02/28/2025

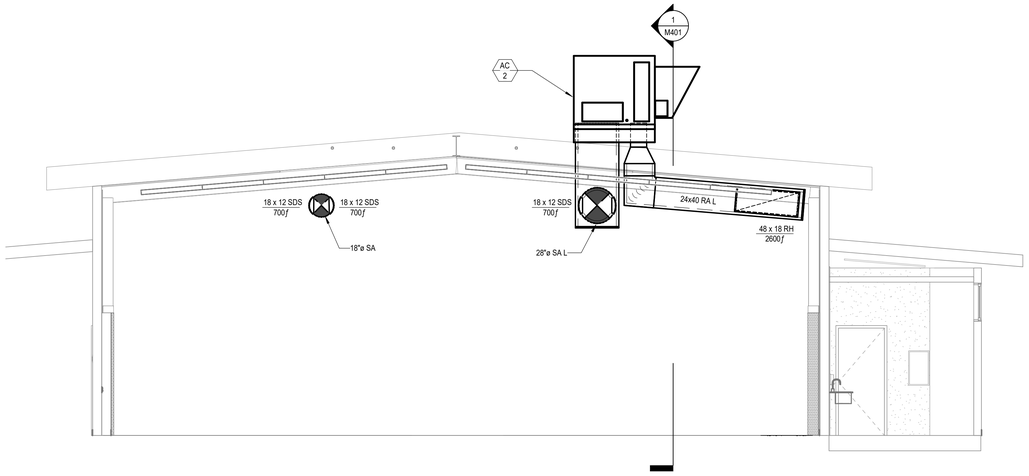
JOB NO. Y2119.00

SHEET TITLE

MECHANICAL ROOF PLAN

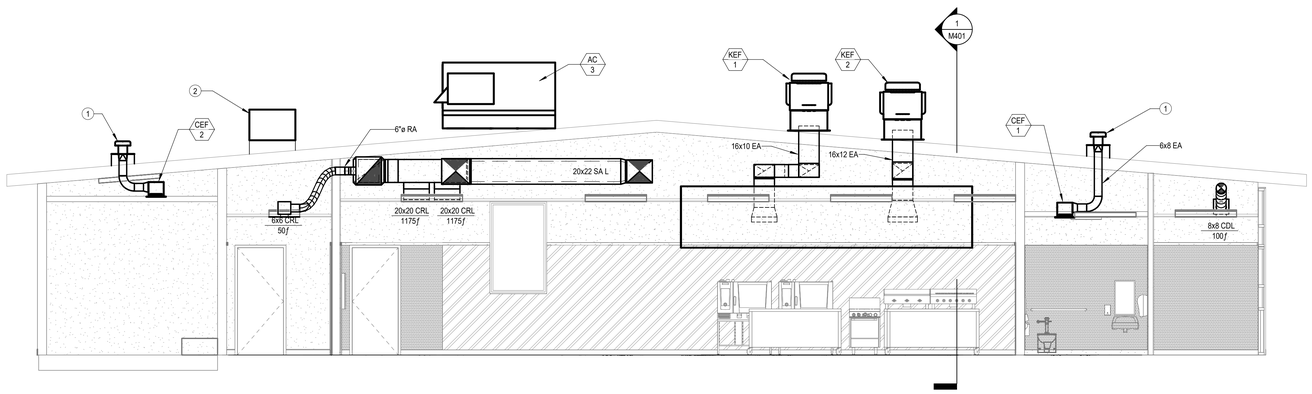
SHEET NO.

M121



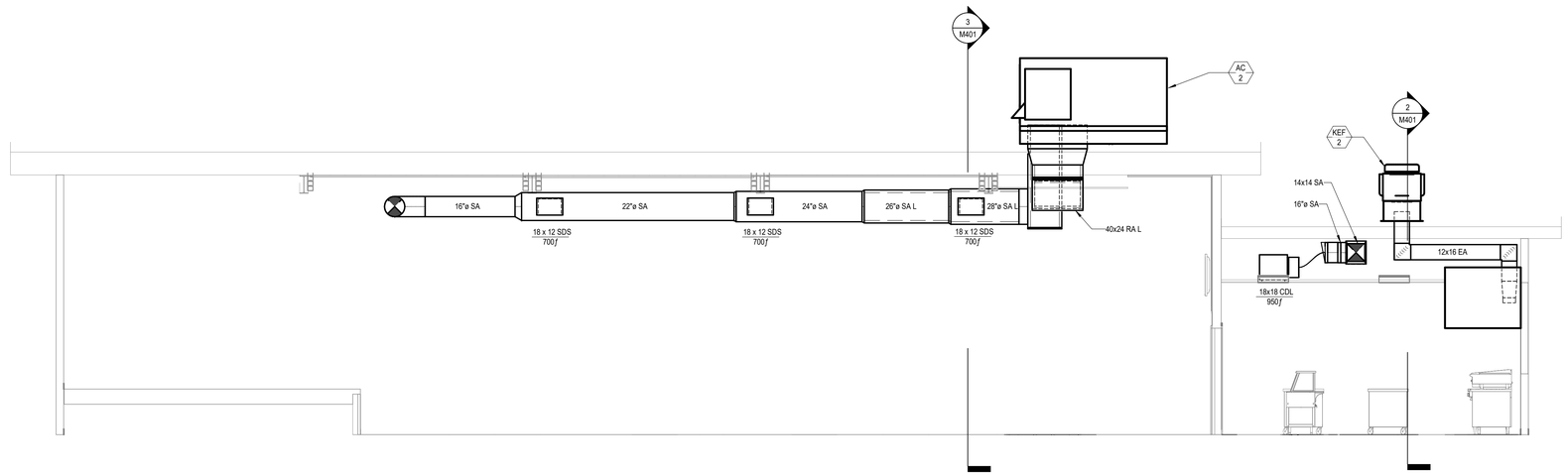
3 M401 MECHANICAL SECTION 3

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



2 M401 MECHANICAL SECTION 2

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



1 M401 MECHANICAL SECTION 1

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

KEYNOTES

1 EXHAUST FAN MANUFACTURER'S ROOF JACK.

2 REMOTE REFRIGERATION CONDENSING UNIT, REFER TO FOOD SERVICE PLANS. COORDINATE EXACT LOCATION TO MAINTAIN ALL REQUIRED CLEARANCES.

IDENTIFICATION STAMP
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APP: 01-121540 INC:
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SS ☑ FLS ☑ ACS ☑
DATE: 3/28/2025

AGENCY APPROVAL

EL DORADO MIDDLE SCHOOL
MULTI-PURPOSE BUILDING UPGRADES

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MT. DIABLO UNIFIED SCHOOL DISTRICT

REGISTERED PROFESSIONAL ENGINEER
M 34224
EXPIRES 12/31/24
MECHANICAL
STATE OF CALIFORNIA

DATE SIGNED: 02/28/2025

capital engineering
RANCHO CORDOVA, CALIFORNIA

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SHEET TITLE

MECHANICAL SECTIONS

SHEET NO.

M401

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
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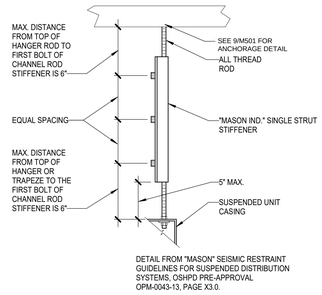
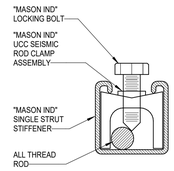
ONE INCH = TWENTY FEET



DETAIL FROM "MASON" SEISMIC RESTRAINT GUIDELINES FOR SUSPENDED DISTRIBUTION SYSTEMS, OSHPD PRE-APPROVAL OPM-0043-13, PAGE X3.0.

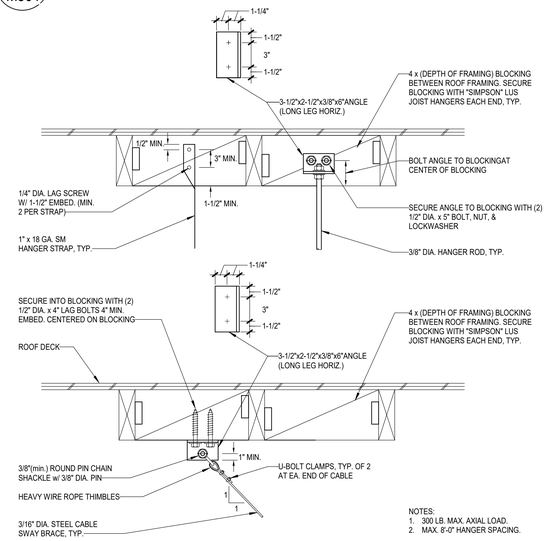


ROD STIFFENER CHART

ATR Size	Max. Rod Length Without Rod Stiffener	
	In.	(mm)
3/8"	18"	(457.2)
1/2"	25"	(635.0)
5/8"	31"	(787.4)
3/4"	37"	(939.8)

10/M501 ROD STIFFENER

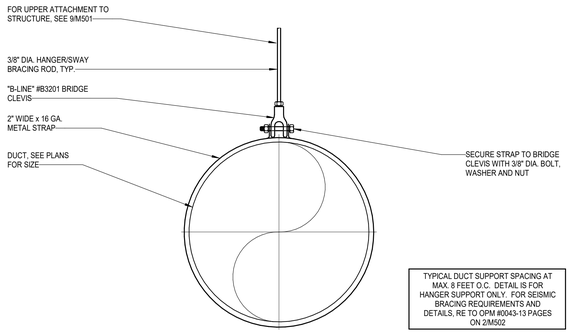
SCALE: NONE



NOTES:
1. 300 LB. MAX. AXIAL LOAD.
2. MAX. 8'-0" HANGER SPACING.

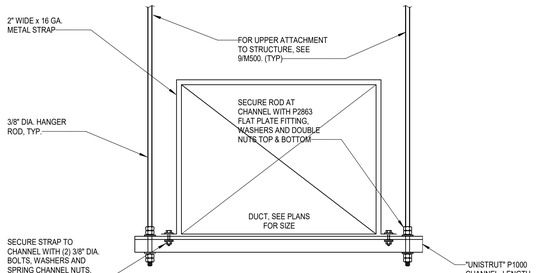
9/M501 UPPER ATTACHMENT AT WOOD DECK

SCALE: NONE



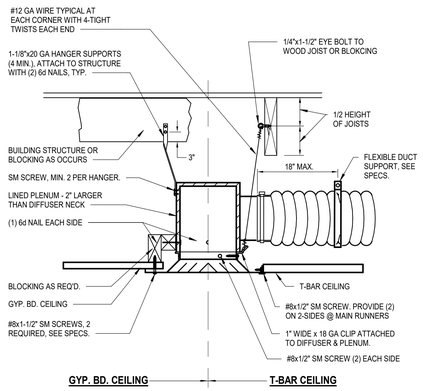
TYPICAL DUCT SUPPORT SPACING AT MAX. 8 FEET O.C. DETAIL IS FOR HANGER SUPPORT ONLY. FOR SEISMIC BRACING REQUIREMENTS AND DETAILS, RE TO OPM #0043-13 PAGES ON 2/M502

ROUND DUCTWORK (UP TO 26" DIA.)



RECTANGULAR DUCTWORK (< 6 SQ FT CROSS SECTIONAL AREA, MAX. 48" WIDTH)

NOTES:
1. REFER TO DETAIL 10/M501 FOR ROD STIFFENER REQUIREMENTS.

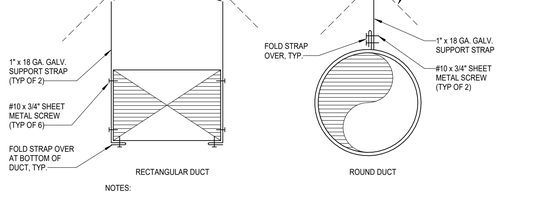


11/M501 DIFFUSER MOUNTING

SCALE: NONE

8/M501 TYPICAL EXPOSED DUCT SUPPORT

SCALE: NONE

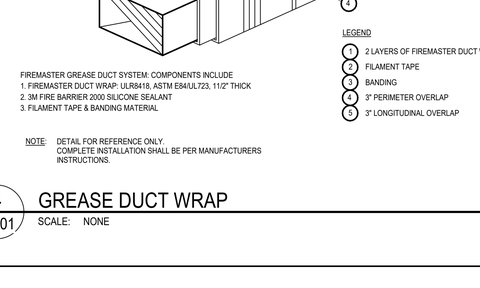


NOTES:

1. SUPPORT STRAP SPACING SHALL BE MAX. 8'-0" O.C. APPLIES TO RECTANGULAR DUCTWORK LESS THAN 6 SQFT CROSS SECTIONAL AREA, AND ROUND DUCTWORK UP TO 26" DIA. AND WEIGH 20 PLF OR LESS. NO SEISMIC BRACING REQUIRED.
2. PROVIDE HANGERS/SUPPORTS IN COMPLIANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS". REFER TO SPEC SECTION 238000 FOR ADDITIONAL REQUIREMENTS.

7/M501 TYPICAL CONCEALED DUCT SUPPORT

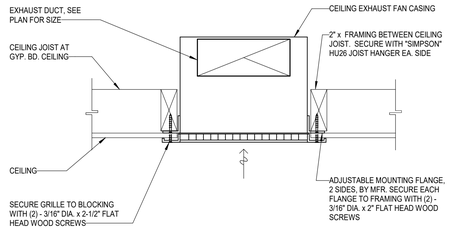
SCALE: 1" = 1'-0"



NOTES:
1. REFER TO PLANS FOR INDICATION IF DIFFUSER SHALL BE MOUNTED HORIZONTALLY OR AT 60 DEGREE ANGLE.

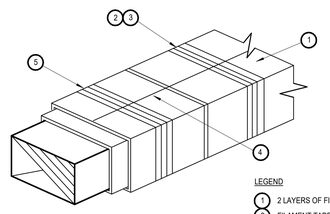
6/M501 RADIUSED FACE DIFFUSER MOUNTING

SCALE: NONE



5/M501 CEF MOUNTING

SCALE: NONE



LEGEND

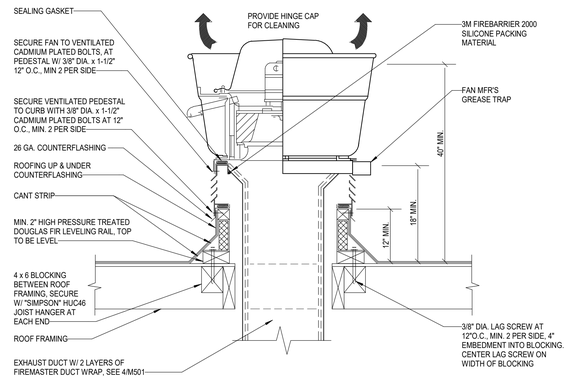
1. 2 LAYERS OF FIREMASTER DUCT WRAP
2. FILAMENT TAPE
3. BANDING
4. 3" PERIMETER OVERLAP
5. 3" LONGITUDINAL OVERLAP

FIREMASTER GREASE DUCT SYSTEM: COMPONENTS INCLUDE
1. FIREMASTER DUCT WRAP: ULR8418, ASTM E84/UL723, 11/2" THICK
2. 3M FIRE BARRIER 2000 SILICONE SEALANT
3. FILAMENT TAPE & BANDING MATERIAL

NOTE: DETAIL FOR REFERENCE ONLY. COMPLETE INSTALLATION SHALL BE PER MANUFACTURERS INSTRUCTIONS.

4/M501 GREASE DUCT WRAP

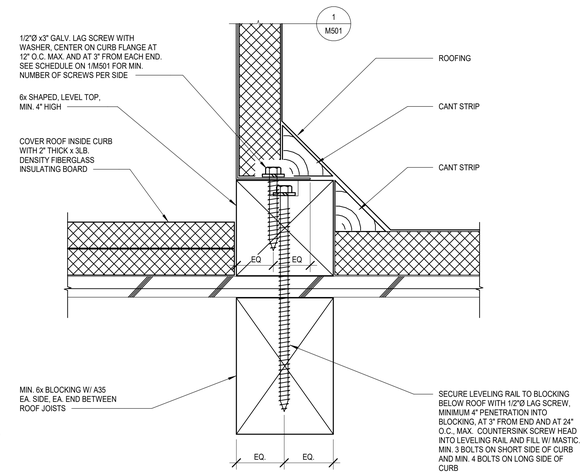
SCALE: NONE



NOTE:
FIREMASTER WRAP SHALL EXTEND A MIN. OF 18" ABOVE/PAST COMBUSTIBLE MATERIALS, ROOF FRAMING, DECKING, ETC.

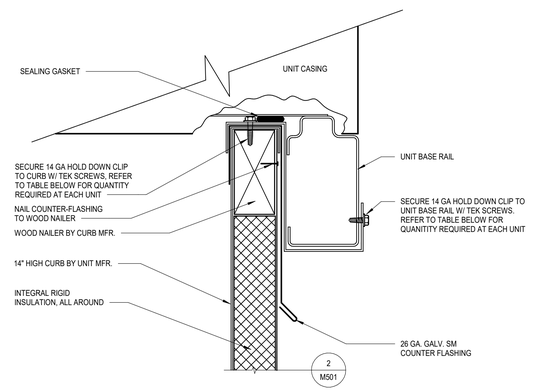
3/M501 KEF MOUNTING

SCALE: NONE



2/M501 CURB TO STRUCTURE MOUNTING

SCALE: NONE



UNIT HOLD DOWN SCHEDULE

UNIT	MAX. UNIT WEIGHT (LBS)	NUMBER OF HOLD DOWN REQUIRED		TEK SCREWS REQUIRED FOR ATTACHMENT OF EACH HOLD DOWN TO ROOF CURB	TEK SCREWS REQUIRED FOR ATTACHMENT OF EACH HOLD DOWN TO UNIT BASE RAIL	NUMBER OF LAG SCREWS REQIRED FOR ATTACHMENT OF CURB TO LEVELING RAIL	
		AT EACH LONG SIDE	AT EACH SHORT SIDE			AT EACH LONG SIDE	AT EACH SHORT SIDE
AC-1	2024	6	0	(4) #12	(8) #12	17	11
AC-2	2024	6	0	(4) #12	(8) #12	17	11
AC-3	1445	5	0	(4) #12	(8) #12	9	6

1/M501 AC UNIT TO CURB MOUNTING

SCALE: NONE

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1750 WEST ST., CONCORD, CA 94521

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REGISTERED PROFESSIONAL ENGINEER
BRANDON C. EZZELL
M 34231
EXPIRES 12/31/24
MECHANICAL
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capital engineering
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MECHANICAL DETAILS

SHEET NO.

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ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
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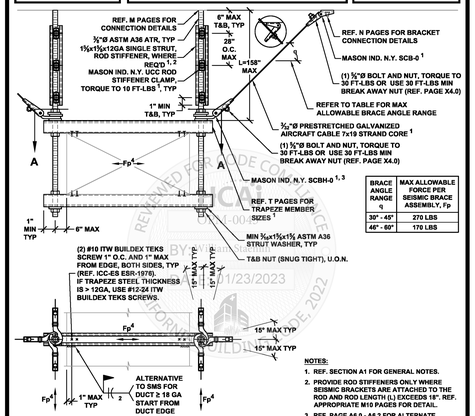
HANGER ROD DIAMETER = ⅜"	RECTANGULAR DUCT ALL-DIRECTIONAL SEISMIC CABLE BRACING SYSTEM 30 PLF MAX	KIT OPTIONS TC0A



BRACE ANGLE RANGE q	MAX ALLOWABLE FORCE PER SEISMIC BRACE ASSEMBLY, Fp
30° - 45°	270 LBS
46° - 60°	170 LBS

VIEW A-A

NOTES:
1. REF. SECTION A1 FOR GENERAL NOTES.
2. PROVIDE ROD STIFFENERS ONLY WHERE SEISMIC BRACKETS ARE ATTACHED TO THE ROD AND ROD LENGTH (L) EXCEEDS 18". REF. APPROPRIATE M10 PAGES FOR DETAIL.
3. REF. PAGE A6.0 - A6.2 FOR ALTERNATE ARRANGEMENTS OF SEISMIC BRACES AND ANGLE OR HSS MEMBER AS TRAPEZE.
4. DESIGN PROFESSIONAL SHALL CONSIDER ECCENTRIC LOAD DISTRIBUTION WHEN DETERMINING THE Fp VALUE USED IN DESIGN.

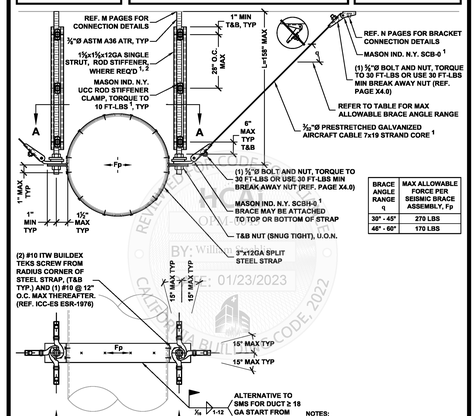
MASON WEST
1601 E. Miraloma Ave. Placentia, CA 92870
TEL (714) 630 - 0701, www.masonwest.com

Jiefu "Jeff" Zhang, SE
California SE No. S5270

PAGE **D4.12**

1/23/2023 OPM-0043: Reviewed for Code Compliance by William Staehlin 313 of 792

HANGER ROD DIAMETER = ⅜"	ROUND DUCT ALL-DIRECTIONAL SEISMIC CABLE BRACING SYSTEM 30 PLF MAX	KIT OPTIONS TC0A



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VIEW A-A

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PAGE **D6.12**

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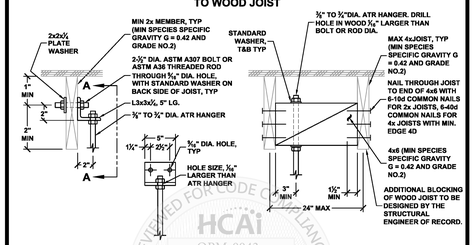
HANGER ATTACHMENT TO WOOD JOIST



VIEW A-A

AT JOIST **IN-BETWEEN JOISTS**

HANGER ATTACHMENT TYPE	ALLOWABLE VERTICAL LOAD LBS	ATR HANGER DIA. INCH
38A TO 38E	420	⅜
50A TO 50E	420	½
63A TO 63E	420	⅝
75A TO 75E	420	¾

SEE DETAIL M0.00 FOR SECTION NOTES

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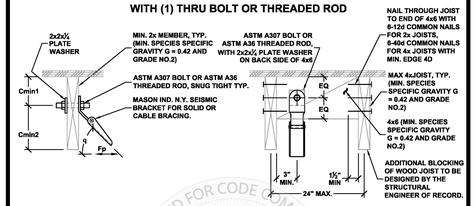
SEISMIC BRACKET ATTACHMENT TO STRUCTURAL TIMBER WITH (1) THRU BOLT OR THREADED ROD



SEISMIC BRACE BRACKET PERPENDICULAR TO JOIST **SEISMIC BRACE BRACKET PARALLEL TO JOIST**

BRACE BRACKET ATTACHMENT TYPE	ALLOWABLE LATERAL LOAD Fp' LBS	MAX BRACE RANGE q	ASTM A307 BOLTS OR ASTM A36 THREADED ROD DIA. da INCH	MIN. EDGE Cmin1 INCH	MIN. EDGE Cmin2 INCH
38A TO 38D	250	30°- 45°	⅜	1⅝	1½
38A TO 38B	150	46°- 60°	⅜	1⅝	1½
50A TO 50D	300	30°- 45°	½	1⅝	2
50A TO 50B	170	46°- 60°	½	1⅝	2
63A TO 63D	340	30°- 45°	⅝	1⅝	2½
63A TO 63C	200	46°- 90°	⅝	1⅝	2½

SEE DETAIL N0.00 FOR SECTION NOTES

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1 M502 OPM DETAILS
SCALE: NONE

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RANCHO CORDOVA, CALIFORNIA

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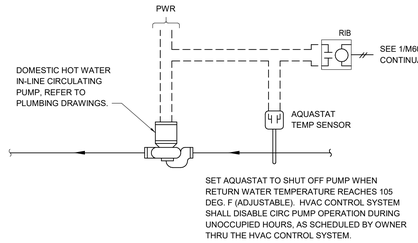
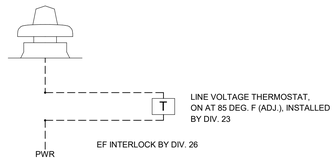


8 M601 DHW CIRC PUMP CONTROL DIAGRAM

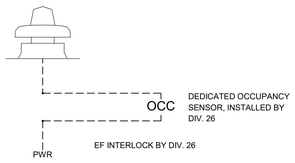
SCALE: NONE



EF CONTROL W/ LINE VOLTAGE THERMOSTAT

7 M601 EF W/ THERMOSTAT

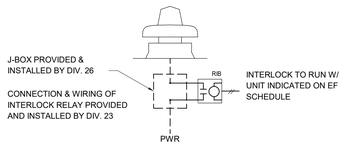
SCALE: NONE



EF CONTROL W/ OCCUPANCY SENSOR

6 M601 EF W/ OCCUPANCY SENSOR

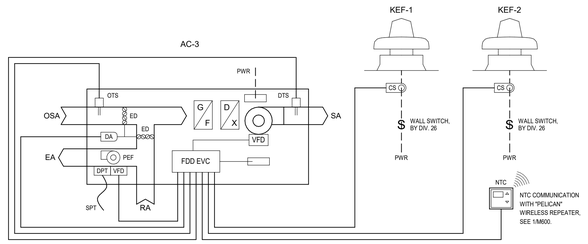
SCALE: NONE



EF INTERLOCK

5 M601 KEF CONTROL DIAGRAM

SCALE: NONE



SEQUENCE OF OPERATION

GENERAL:
THE NETWORK THERMOSTAT SHALL BE PROGRAMMED AS DIRECTED BY THE DISTRICT FOR OCCUPIED PERIODS, UNOCCUPIED PERIODS, AND HOLIDAYS. THE NETWORK THERMOSTAT SHALL BE CAPABLE OF RECEIVING A UTILITY COMPANY 'AUTOMATED DEMAND RESPONSE' (ADR) SIGNAL, VIA WIRELESS SIGNAL FROM INTERNET CONNECTED WIRELESS GATEWAY. THE AC UNIT SHALL PROVIDE MINIMUM OUTSIDE AIR VENTILATION FOR 1 HOUR PRIOR TO SCHEDULED OCCUPANCY. DURING PERIODS OF OCCUPANCY, OR IF THE NETWORK THERMOSTAT OVERRIDE BUTTON IS PUSHED, THE SUPPLY FAN VFD SHALL BE ENABLED AND STAGED HEATING OR COOLING SHALL BE PROVIDED TO MAINTAIN ROOM TEMPERATURE SETPOINT. TCC SHALL INSTALL IN EACH AC UNIT THE 'FAULT DETECTION & DIAGNOSTICS' (FDD) ECONOMIZER/VENTILATION CONTROLLER AND TEMPERATURE SENSORS. THE POWER EXHAUST FAN VFD SHALL BE ENABLED WHENEVER THE AC UNIT SUPPLY FAN IS RUNNING. THE POWER EXHAUST DIFFERENTIAL PRESSURE TRANSDUCER SHALL AUTOMATICALLY MODULATE THE POWER EXHAUST FAN VFD TO MAINTAIN A SLIGHT POSITIVE PRESSURE IN THE ROOMS SERVED. CONTRACTOR SHALL COMMISSION THE POWER EXHAUST SYSTEM TO MAINTAIN ROOM PRESSURE BETWEEN 0.01" AND 0.03" POSITIVE UNDER ALL OPERATING CONDITIONS. THE OUTSIDE AIR DAMPER SHALL MODULATE FULLY CLOSED WHENEVER THE AC UNIT IS DISABLED.

COOLING:
ON A CALL FOR COOLING, IF THE OUTSIDE AIR TEMPERATURE IS BELOW THE ECONOMIZER LOCKOUT TEMPERATURE SET AT 75 DEG F (ADJUSTABLE), THE ECONOMIZER DAMPERS SHALL MODULATE AND THE SUPPLY FAN VFD SHALL ADJUST AS NEEDED TO OPERATE AS THE FIRST STAGE OF COOLING. ON AN ADDITIONAL CALL FOR COOLING, IF THE OUTSIDE AIR TEMPERATURE IS ABOVE THE COOLING LOCKOUT TEMPERATURE SET AT 60 DEG F (ADJUSTABLE), STAGES OF DX COOLING SHALL BE ENABLED IN CONJUNCTION WITH THE ECONOMIZER TO MAINTAIN ROOM COOLING SETPOINT (INTEGRATED ECONOMIZER OPERATION). IF ROOM SETPOINT STILL CANNOT BE MAINTAINED, OR IF THE OUTSIDE AIR TEMPERATURE RISES ABOVE THE ECONOMIZER LOCKOUT TEMPERATURE, THE ECONOMIZER DAMPERS SHALL MODULATE TO 'LOWER MINIMUM' POSITION, STAGES OF DX COOLING SHALL BE ENABLED, AND SUPPLY FAN VFD SHALL ADJUST AS NEEDED TO MAINTAIN ROOM COOLING SETPOINT. SUPPLY FAN AIRFLOW SHALL NEVER BE LESS THAN 66% OF FULL AIRFLOW, AS SHOWN IN AC UNIT SCHEDULE ON SHEET M002.

HEATING:
ON A CALL FOR HEATING, IF THE OUTSIDE AIR TEMPERATURE IS BELOW THE HEATING LOCKOUT TEMPERATURE SET AT 65 DEG F (ADJUSTABLE), THE ECONOMIZER DAMPERS SHALL MODULATE TO 'LOWER MINIMUM' POSITION, STAGES OF HEATING SHALL BE ENABLED, AND THE SUPPLY FAN VFD SHALL ADJUST AS NEEDED TO MAINTAIN ROOM HEATING SETPOINT. SUPPLY FAN AIRFLOW SHALL NEVER BE LESS THAN 66% OF FULL AIRFLOW, AS SHOWN IN AC UNIT SCHEDULE ON SHEET M002.

KITCHEN EXHAUST AIR MAKE-UP:
FDD EVC SHALL RESET THE ECONOMIZER OSA DAMPER POSITION TO PROVIDE REQUIRED MAKE-UP AIR WHEN THE KITCHEN EXHAUST HOOD IS SWITCHED "ON", AS SEEN BY A CURRENT SWITCH CONTACT CLOSURE. WHENEVER EITHER KITCHEN EXHAUST HOOD IS SWITCHED "ON", THE AC UNIT SHALL BE AUTOMATICALLY ENABLED, IF NOT ALREADY RUNNING, TO PROVIDE MAKE-UP AIR. OUTSIDE AIR DAMPER SHALL BE SET TO THE "UPPER MIN." POSITION AS SCHEDULED ON M002.

4 M601 AC-3 CONTROL DIAGRAM

SCALE: NONE

CONTROLS LEGEND

SYMBOL	DESCRIPTION
NT	"PELICAN" #TC-1 NETWORK THERMOSTAT WITH OVERRIDE BUTTON
NTC	"PELICAN" #TC-3 NETWORK THERMOSTAT WITH INTEGRAL CO2 SENSOR AND OVERRIDE BUTTON
FDD EVC	"PELICAN" PEARL FAULT DETECTION & DIAGNOSTICS ECONOMIZER/VENTILATION CONTROLLER
GW	"PELICAN" #GW400 WIRELESS GATEWAY MODULE
WR	"PELICAN" #WR400 EXTENDED RANGE WIRELESS REPEATER
PCM	"PELICAN" #PM5-230 WIRELESS POWER CONTROL MODULE
DS	"PELICAN" #PRX1 WIRELESS DOOR SENSOR
RT	"PELICAN" #RT1-AC WIRELESS REMOTE THERMOSTAT (TEMPERATURE ONLY MODE)
TAS	"PELICAN" #TA1 TEMPERATURE/ALARM SENSOR (INSTALLED NEXT TO OCCUPANCY SENSOR)
OCS	"LUTRON" #LOS-CDT-500R-WH (OR EQUAL) OCCUPANCY SENSOR
DCV	DEMAND CONTROLLED VENTILATION
ADR	AUTOMATED DEMAND RESPONSE
DTS	DISCHARGE TEMPERATURE SENSOR
OTS	OUTSIDE AIR TEMPERATURE SENSOR
DA	DAMPER ACTUATOR
ED	ECONOMIZER DAMPER
PEF	POWER EXHAUST FAN
VFD	VARIABLE FREQUENCY DRIVE
DPT	POWER EXHAUST DIFFERENTIAL PRESSURE TRANSDUCER
SPT	SPACE STATIC PRESSURE TUBING (INSTALLED BY TCC)
DSD	DUCT SMOKE DETECTOR BY DIV. 26
RIB	RELAY IN BOX
J-BOX	JUNCTION BOX
PWR	POWER WIRING BY DIV. 16
FA/PWR	FIRE ALARM WIRING AND POWER WIRING BY DIV. 16
RA	RETURN AIR
OSA	OUTSIDE AIR
EA	EXHAUST AIR
SA	SUPPLY AIR
TCC	TEMPERATURE CONTROLS CONTRACTOR
EC	ELECTRICAL CONTRACTOR

WIRING BY TEMPERATURE CONTROL CONTRACTOR (TCC)

WIRING BY ELECTRICAL CONTRACTOR (EC)

THESE CONTROL DIAGRAMS ARE DIAGRAMMATIC AND DO NOT DEPICT ALL CONTROL WIRES, RELAYS OR COMPONENTS OF A COMPLETE SYSTEM. IT IS THE RESPONSIBILITY OF THE TEMPERATURE CONTROLS CONTRACTOR TO PROVIDE A COMPLETE AND FUNCTIONAL CONTROL SYSTEM AT NO ADDITIONAL COST TO THE OWNER.

NOTE: ALL CONTROL WIRING SHALL BE RUN IN CONDUIT.

SEQUENCE OF OPERATION

GENERAL:
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DEMAND CONTROL VENTILATION:
DEMAND CONTROL VENTILATION EMS UNITARY CONTROLLER WILL BE CONNECTED TO A WALL MOUNTED CO2 SENSOR TO MONITOR ZONE CO2 CONCENTRATION. WHEN THE CO2 LEVEL IN THE SPACE IS BELOW 1000 PPM (ADJ.), OUTSIDE AIR DAMPER SHALL BE SET TO THE "LOWER MIN." POSITION AS SCHEDULED ON SHEET M001. WHEN THE CO2 LEVEL IN THE SPACE IS ABOVE 1000 PPM (ADJ.), OUTSIDE AIR DAMPER SHALL BE SET TO THE "UPPER MIN." POSITION AS SCHEDULED. OUTSIDE DAMPER SHALL REMAIN AT THE "UPPER MIN." POSITION UNTIL CO2 LEVEL HAS DROPPED BELOW 1000 PPM (ADJ.), AND WILL THEN RETURN TO THE "LOWER MIN." POSITION.

KITCHEN EXHAUST AIR MAKE-UP:
FDD EVC SHALL RESET THE ECONOMIZER OSA DAMPER POSITION TO PROVIDE REQUIRED MAKE-UP AIR WHEN THE KITCHEN EXHAUST HOOD IS SWITCHED "ON", AS SEEN BY A CURRENT SWITCH CONTACT CLOSURE. SEE OSA DAMPER RESET SCHEDULE BELOW. WHENEVER THE KITCHEN EXHAUST HOOD IS SWITCHED "ON", THE AC UNIT SHALL BE AUTOMATICALLY ENABLED, IF NOT ALREADY RUNNING, TO PROVIDE MAKE-UP AIR.

AC UNIT	MIN. OSA CFM KEF-2 OFF	MIN. OSA CFM KEF-2 ON	MIN. OSA CFM KEF-1 & 2 ON	MIN. OSA CFM DEMAND CONTROL VENTILATION
AC-2	350	1400	1800	1800

3 M601 AC-2 CONTROL DIAGRAM

SCALE: 12" = 1'-0"

SEQUENCE OF OPERATION

GENERAL:
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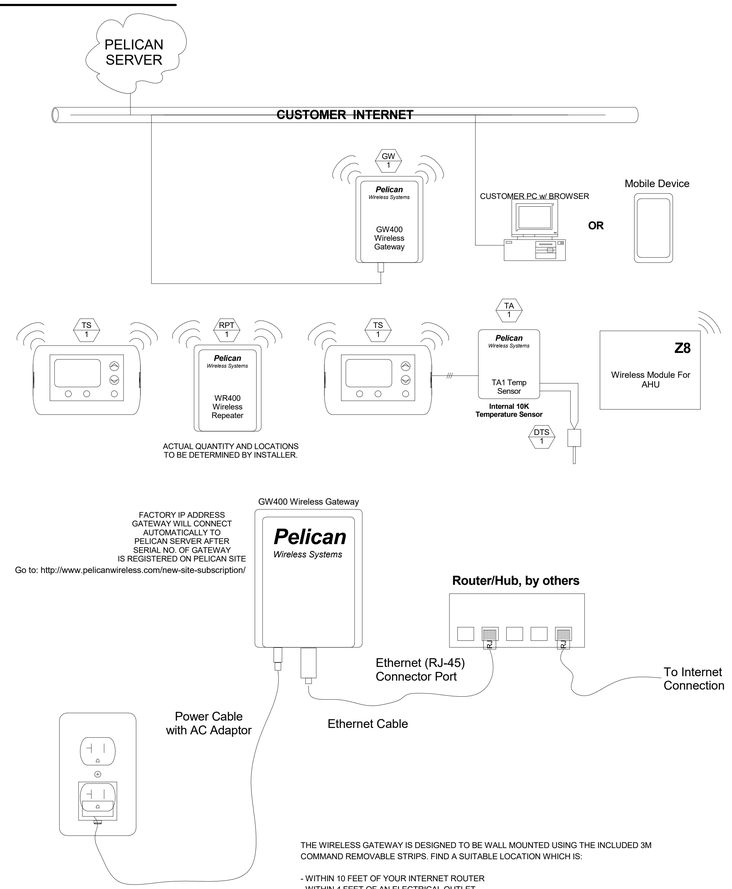
AC UNIT	MIN. OSA CFM KEF-1 OFF	MIN. OSA CFM KEF-1 ON	MIN. OSA CFM KEF-1 & 2 ON	MIN. OSA CFM DEMAND CONTROL VENTILATION
AC-1	350	1100	1800	1800

2 M601 AC-1 CONTROL DIAGRAM

SCALE: 12" = 1'-0"



1 M601 PELICAN WIRELESS LAN LAYOUT

SCALE: NONE

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121540 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 3/28/2025

AGENCY APPROVAL

EL DORADO MIDDLE SCHOOL MULTI-PURPOSE BUILDING UPGRADES

1750 WEST ST., CONCORD, CA 94521

MT. DIABLO UNIFIED SCHOOL DISTRICT

REGISTERED PROFESSIONAL ENGINEER — JOHN C. E. LEWIS — M 34234 — EXPIRES 12/31/24 — MECHANICAL — STATE OF CALIFORNIA

DATE SIGNED: 02/28/2025

capital engineering
RANCHO CORDOVA, CALIFORNIA

MCM - BV — PM - DESIGN TEAM
230602.00 — PROJECT NO.

CONSULTANT

nacht&lewis
600 Q Street, Suite 100
Sacramento, CA 95811
www.nachtlewis.com
916.329.4000

ARCHITECT

DSA SUBMITTAL

REVISIONS

NO.	DESCRIPTION	DATE

DATE 02/28/2025

JOB NO. Y2119.00

SHEET TITLE

MECHANICAL CONTROLS

SHEET NO.

M601

ONE INCH = TWENTY FEET 0 10 20 40 60 80
ONE-SIXTEENTH INCH = ONE FOOT 0 4 8 16 32
ONE-EIGHTH INCH = ONE FOOT 0 4 8 16
ONE-QUARTER INCH = ONE FOOT 0 4 8
THREE-QUARTERS INCH = ONE FOOT 0 6 2
ONE INCH = ONE FOOT 0 6
ONE AND ONE-HALF INCH = ONE FOOT 0 6 1
ONE-HALF INCH = ONE FOOT 0 4

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
This document is used to demonstrate compliance for mechanical systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.4, or 141.0(b)2 for alterations.		
Project Name: El Dorado M5 Multi-Purpose Building Upgrades	**Report Page:**	**(Page 1 of 11)**
Project Address:	**Date Prepared:**	2024-02-01T18:05:19-05:00

A. GENERAL INFORMATION

01	Project Location (city)	Concord	04	Total Conditioned Floor Area	5400
02	Climate Zone	12	05	Total Unconditioned Floor Area	0
03	Occupancy Types Within Project:		06	# of Stories (Habitable Above Grade)	1
• School or Classroom					

B. PROJECT SCOPE

This table includes mechanical systems or components that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.4, 170.2(b) or 141.0(b)2 and 180.2(b)2 for alterations.

01		02		03	
Air System(s)		Wet System Components		Dry System Components	
☒	Heating Air System	☐	Water Economizer	☒	Air Economizer
☒	Cooling Air System	☐	Pumps	☐	Electric Resistance Heat
	Mechanical Controls	☐	System Piping	☒	Fan Systems
☒	Mechanical Controls (existing to remain, altered or new)	☐	Cooling Towers	☒	Ductwork (existing to remain, altered or new)
		☐	Chillers	☒	Ventilation
		☐	Boilers	☐	Zonal Systems/ Terminal Boxes

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name: El Dorado M5 Multi-Purpose Building Upgrades	**Report Page:**	**(Page 2 of 11)**
	Date Prepared:	2024-02-01T18:05:19-05:00

C. COMPLIANCE RESULTS

Table C will indicate if the project data input into the compliance document is compliant with mechanical requirements. This table is not editable by the user. If this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D., or the table indicated as not compliant for guidance.

01		02		03		04		05		06		07		08	09
System Summary 110.1, 110.2, 140.4, 170.2(c)	AND	Pumps 140.4(k), 170.2(c)4i	AND	Fans/ Economizers 140.4(c), 140.4(e), 170.2(c)	AND	System Controls 110.2, 120.2, 140.4(f), 170.2(c)	AND	Ventilation 120.1, 160.2	AND	Terminal Box Controls 140.4(d), 170.2(c)4B	AND	Distribution 120.3, 140.4(l), 160.2, 160.3	AND	Cooling Towers 110.2(e)2	*Compliance Results*
[See Table F]		[See Table G]		[See Table H]		[See Table I]		[See Table J]		[See Table K]		[See Table L]		[See Table M]	
Yes	AND		AND	Yes	AND	Yes	AND	Yes	AND		AND	Yes	AND		COMPLIES with Exceptional Conditions
Mandatory Measures Compliance (See Table C) for Details)												COMPLIES			

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.
The permit applicant has indicated on Table J that ventilation calculations have been attached or included elsewhere on the plans.
Selections made in the Certificates of Acceptance Table have been changed by the permit applicant. See Table E. Additional Remarks for permit applicant's explanation.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.
(NRCA-MCH-03-A Explanation) Not automatically turned to Yes but is required.

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name: El Dorado M5 Multi-Purpose Building Upgrades	**Report Page:**	**(Page 3 of 11)**
	Date Prepared:	2024-02-01T18:05:19-05:00

F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)

Space Conditioning System Information

01	02	03	04	05	06
System Name	Quantity	System Serving	System Status	Space Type	Utilizing Recovered Heat
AC-1 & AC-2	2	Single zone	New/ Addition	School or Classroom	☐
AC-3	1	Single zone	New/ Addition	School or Classroom	☐

Dry System Equipment Sizing (includes air conditioners, condensers, heat pumps, VRF, furnaces and unit heaters and DOAS systems)

01	02	03	04	05	06	07	08	09	10	11
Name or Item Tag	Equipment Category per Tables 110.2, 140.4(a)2 and 170.2(c)3aii	Equipment Type per Tables 110.2 and Title 20	Smallest Size Available[1] 140.4(a) and 170.2(c)1	Equipment Sizing per Mechanical Schedule (kBtu/h) 140.4(a&b), 170.2(c)1 & 170.2(c)2						
				Heating Output[2,3]			Cooling Output[2,3]		Load Calculations[3,4]	
				Per Design (kBtu/h)	Rated (kBtu/h)	Supp. Heating Output (kBtu/h)	Sensible Per Design (kBtu/h)	Rated (kBtu/h)	Total Heating Load (kBtu/h)	Total Sensible Cooling Load (kBtu/h)
AC-1 & AC-2	Unitary AC/ Cond. (no elec. resistance)	AC, air-cooled pkg (3 phase)	Yes				121	150		121
AC-3	Unitary AC/ Cond. (no elec. resistance)	AC, air-cooled pkg (3 phase)	Yes				63.8	90		63.8

[1] FOOTNOTES: Equipment shall be the smallest size, within the available options of the desired equipment line, necessary to meet the design heating and cooling loads of the building per 140.4(a) and 170.2(c)1. Heathcare facilities are excepted.
[2] It is common practice to show rated output capacity on the equipment schedule. Sensible cooling output comes from specification sheet tables.
[3] If equipment is heating only, leave cooling output and load blank. If equipment is cooling only, leave heating output and load blank.
[4] Authority Having Jurisdiction may ask for load calculations used for compliance per 140.4(b) and 170.2(c).

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name: El Dorado M5 Multi-Purpose Building Upgrades	**Report Page:**	**(Page 4 of 11)**
	Date Prepared:	2024-02-01T18:05:19-05:00

F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)

Dry System Equipment Efficiency (other than Package Terminal Air Conditioners (PTAC) and Package Terminal Heat Pumps (PTHP), DX-DOAS and Dual Fuel Heat Pumps)

01	02	03	04	05	06	07	08	09
Name or Item Tag	Size Category (Btu/h)	Heating Mode				Cooling Mode		
		Rating Condition (°F)	Efficiency Unit	Minimum Efficiency Required per Tables 110.2 / Title 20	Design Efficiency	Efficiency Unit	Minimum Efficiency Required per Tables 110.2 / Title 20	Design Efficiency
AC-1 & AC-2	>=135,000 and <240,000					EER	10.8	12
						IEER	14	14
AC-3	>=65,000 and <135,000					EER	11	12
						IEER	14.6	14.6

G. PUMPS

This section does not apply to this project.

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name: El Dorado M5 Multi-Purpose Building Upgrades	**Report Page:**	**(Page 5 of 11)**
	Date Prepared:	2024-02-01T18:05:19-05:00

H. FAN SYSTEMS & AIR ECONOMIZERS

This table is used to demonstrate compliance with prescriptive requirements found in 140.4(c), 140.4(e), 140.4(m), 170.2(c)3, and 170.2(c)4A for fan systems. Fan systems serving only process loads are exempt from these requirements and do not need to be included in Table H.

System Name	AC-1 & AC-2 SF	Quantity	2	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	5,200	Site Elevation	1	Economizer	Differential Temperature
01	02	03	04			05		06	07	08	09			10	11

Fan Name or Item Tag	Fan Type	Qty	Component	Airflow through Component (%)	Allowance: Water Gauge (w.g)	Allowance: Component Allowance	Allowance: Fan Allowance (watt/cfm)[1]	Design: Design Electrical Input Power Method	Design: Motor Nameplate Horsepower	Design: Design Electrical Input Power (kW)
SF	Supply	1	Hydronic/DX cooling coil or heat pump coil	100		0.12	0.22	Manufacturer provided		1.76
			Economizer Return Damper	100		0.04				
			Gas heat	100		0.06				
Supply Fan Base Allowance (kW)		0.256	Exhaust/Return/Relief/*Transfer* Fan Base Allowance(kW)		0	Fan System Allowance (kW)[2]		2.47	Fan System Electrical Output (kW)	1.76

STATE OF CALIFORNIA
Mechanical Systems
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-MCH-E
Project Name: El Dorado M5 Multi-Purpose Building Upgrades	**Report Page:**	**(Page 6 of 11)**
	Date Prepared:	2024-02-01T18:05:19-05:00

H. FAN SYSTEMS & AIR ECONOMIZERS

System Name	AC-3 SF	Quantity	1	Fan System Status	New	System Zoning	all other systems	Serving Dwelling Units	Not Serving Dwelling Units	Fan System Airflow (cfm)	2,500	Site Elevation	1	Economizer	Differential Temperature
01	02	03	04			05		06	07	08	09			10	11

Fan Name or Item Tag	Fan Type	Qty	Component	Airflow through Component (%)	Allowance: Water Gauge (w.g)	Allowance: Component Allowance	Allowance: Fan Allowance (watt/cfm)[1]	Design: Design Electrical Input Power Method	Design: Motor Nameplate Horsepower	Design: Design Electrical Input Power (kW)
AC-3 SF	Supply	1	Hydronic/DX cooling coil or heat pump coil	100		0.13	0.382	Manufacturer provided		1.2
			Gas heat	100		0.05				
			Economizer Return Damper	100		0.04				
			MERV 13-16 Filter upstream of thermal conditioning equipment	100		0.13				
Supply Fan Base Allowance (kW)		0.232	Exhaust/Return/Relief/*Transfer* Fan Base Allowance(kW)		0	Fan System Allowance (kW)[2]		1.53	Fan System Electrical Output (kW)	1.2

[1] FOOTNOTES: Fans serving spaces with design background noise goals below NC35
[2] Low-turndown single-zone VAV fan system must be capable of and configured to reduce airflow to 50 percent of design airflow and use no more than 30 percent of the design wattage at that airflow. No more than 10 percent of the design load served by the equipment shall have fixed loads.
[3] Fan system allowance includes fan system base allowance.
[4] Filter pressure loss can only be counted once per fan system.
[5] Complex Fan System means a fan system that combines a single cabinet fan system with other supply fans, exhaust fans, or both.
[6] Computer room economizers must meet requirements of 140.9(a) and will be documented on the NRCC-PRC-E document..

H. EXHAUST AIR HEAT RECOVERY 140.4(q), 170.2(c)4O

01	02	03	04	05	06	07	08	09	10	11

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H. EXHAUST AIR HEAT RECOVERY 140.4(q), 170.2(c)4O

Fan System Name	Qty	Hours of Operation per Year	Design Supply Airflow Rate	Outdoor Airflow	% Outdoor Air at Full Design Airflow	Exemptions to Exhaust Air Heat Recovery Requirement per 140.4(q) & 170.2(c)4O	Exhaust Air Heat Recovery 140.4(q) & 170.2(c)4O	Type Of Heat Recovery Rating	Required Recovery Ratio	Energy Recovery Bypass
AC-1 & AC-2 SF	2	< 8,000	5,200	1,800	0.35	No Exemptions Apply	Not Required			
AC-3 SF	1	< 8,000	2,300	1,000	0.43	No Exemptions Apply	Not Required			

Fan Energy Index (FEI)

01	02	03
Name or Item Tag	FEI Exception	FEI
AC-1 & AC-2	Embedded Fan <5HP or <4.1kW	
AC-3	Embedded Fan <5HP or <4.1kW	

I. SYSTEM CONTROLS

This table is used to demonstrate compliance with mandatory controls in 110.2 and 120.2 and prescriptive controls in 140.4(f) and (n), 170.2(c)4D 170.2(c)4I, or requirements in 141.0(b)2E 180.2(b)2 for altered space conditioning systems.

01	02	03	04	05	06	07	08	09
System Name	System Zoning	Conditioned Floor Area Being Served (ft²)	Thermostats 110.2(b) & (c)[1], 120.2(a) 160.3(a)2A or 141.0(b)2E & 180.2(b)2	Shut-Off Controls 120.2(e) & 160.3(a)2D	Isolation Zone Controls 120.2(g) & 160.3(a)2F	Demand Response 110.12 120.2(b) & 160.3(a)2B	Supply Air Temp. Reset 140.4(f) & 170.2(c)4D	Window Interlocks per 140.4(n) & 170.2(c)4O
All HVAC Systems	Single zone	<= 25,000 ft²	EMCS	EMCS	NA: Serves < 25k ft²	EMCS	NA: Single Zone	NA: Alteration Project

[1] FOOTNOTES: Gravity gas wall heaters, gravity floor heaters, gravity room heaters, non-central electric heaters, fireplaces or decorative gas appliances, wood stoves are not required to have setback thermostats.

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J. VENTILATION AND INDOOR AIR QUALITY

This table is used to demonstrate compliance with mandatory ventilation requirements in 120.1 120.2(c)3B 140.4(p) and 140.4(q) for all nonresidential and hotel/motel and d124refnolink/1160.2, 160.3(a)3D, 170.2(a)4N, 170.2(a)4O for high-rise residential occupancies. For alterations, only ventilation systems being altered within the scope of the permit application need to be documented in this table. In lieu of this table, the required outdoor ventilation rates and airflows may be shown on the plans or the calculations can be presented in a spreadsheet.

01	☒	Check the box if the project is showing ventilation calculations on the plans, or attaching the calculations instead of completing this table.
02	☐	Check this box if the project included Nonresidential, Hotel/Motel Spaces or Multifamily Common Use Spaces
03	☐	Check the box if the project is using natural ventilation in any nonresidential or hotel/motel spaces to meet required ventilation rates per 120.1(c)2.

K. TERMINAL BOX CONTROLS

This section does not apply to this project.

L. DISTRIBUTION (DUCTWORK and PIPING)

This table is used to show compliance with mandatory pipe insulation requirements found in 120.3 and mandatory requirements found in 120.4(g) for duct sealing.

01	☐	Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather shall be installed with a cover suitable for outdoor service. Insulation covering chilled water piping and refrigerant suction piping located outside the conditioned space shall have a Class I or Class II vapor retarder. All penetrations and joints of which shall be sealed.

Duct Leakage Testing

The answers to the questions below apply to the following duct systems: All HVAC Duct(s)

NR/ Common Use: Duct leakage testing shall not exceed 6% per NA7.5.3 required for these systems?	No

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L. DISTRIBUTION (DUCTWORK and PIPING)

		Dwelling Units: Total duct leakage of duct system shall not exceed 12% or duct system to outside shall not exceed 6% per RA3.1.4 required for systems?	---
		Duct leakage testing per CMC Section 603.10.1 required for these systems?	Yes

11	No	The scope of the project includes only duct systems serving healthcare facilities
12	Yes	Duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system.
13	Yes	The space conditioning system serves less than 5,000 ft² of conditioned floor area.
14	No	The combined surface area of the ducts is more than 25% of the total surface area of the entire duct system:
15	No	The scope of the project includes extending an existing duct system, which is constructed, insulated or sealed with asbestos.
16	No	The scope of the project includes an existing duct system that is documented to have been previously sealed as confirmed through field verification and diagnostic testing in accordance with procedures in the Reference Nonresidential Appendix NA2.
17	Yes	All Ductwork and plenums with pressure class ratings shall be constructed to Seal Class A
18	No	All ductwork is an extension of an existing duct system
19	No	Ductwork serving individual dwelling unit
20		< 25 ft of new or replacement space conditioning ducts installed
21	R-4.2	Duct Insulation R-value
22	No	Ductwork Existing To Remain
23	No	Duct System Connected To Altered Space Conditioning System

M. COOLING TOWERS

This section does not apply to this project.

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N. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency-4

Form/Title
NRCI-MCH-01-E - Must be submitted for all buildings

O. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://www.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCA/

Form/Title	Systems/Spaces To Be Field Verified
NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap.	
NRCA-MCH-03-A - Constant Volume Single Zone HVAC NOTE: This form does not automatically move to "Yes". If Constant Volume Single Zone HVAC systems are included in the scope, permit applicant should move this form to "Yes".	AC-1 & AC-2; AC-3
NRCA-MCH-05-A - Air Economizer Controls	AC-1 & AC-2 SF, AC-3 SF
NRCA-MCH-18-A Energy Management Control Systems	All HVAC Systems

P. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

There are no NRCV forms required for this project.

Q. MANDATORY MEASURES DOCUMENTATION LOCATION

This table is used to indicate where mandatory measures are documented in the plan set or construction documentation.

01		02
Compliance with Mandatory Measures documented through MCH Mandatory Measures Note Block	Yes	Plan sheet or construction document location: M002

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DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name:	Documentation Author Signature:
Aaron Wintersmith	
Company: Capital Engineering	Signature Date: 02/01/2024
Address:	CEA/ HERS Certification Identification (if applicable):
City/State/Zip:	Phone:

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: Ryan Celaya	Responsible Designer Signature:
Company: Capital Engineering	Date Signed: 02/01/2024
Address: 11020 Sun Center DR #100	License: M34234
City/State/Zip: Rancho Cordova CA 95670	Phone: 916-851-3500

Space Conditioning Mandatory Measures:

110.2 CERTIFICATION BY MANUFACTURERS
ANY SPACE CONDITIONING EQUIPMENT LISTED IN §110.2 SHALL ONLY BE INSTALLED IF CERTIFIED TO THE ENERGY COMMISSION TO MEET ALL APPLICABLE §110.2 REQUIREMENTS.

110.2(a) SPACE CONDITIONING EQUIPMENT EFFICIENCY
EQUIPMENT SHALL MEET APPLICABLE EFFICIENCY REQUIREMENTS IN TABLE 110.2-A THROUGH TABLE 110.2-N.

110.5 PILOT LIGHTS PROHIBITED FOR NATURAL GAS EQUIPMENT
PILOT LIGHTS ARE PROHIBITED ON NATURAL GAS FAN-TYPE CENTRAL FURNACES, POOL HEATERS, SPA HEATERS, AND FIREPLACES.

110.8(a) INSULATION CERTIFICATION
INSTALLED INSULATION SHALL BE CERTIFIED BY THE DEPARTMENT OF CONSUMER AFFAIRS PER TITLE 24, PART 12, CHAPTERS 12-13, ARTICLE 3 "STANDARDS FOR INSULATING MATERIAL."

110.8(b) UREA FORMALDEHYDE INSULATION
UREA FORMALDEHYDE INSULATION SHALL NOT BE INSTALLED UNLESS IN EXTERIOR SIDE WALLS WITH A FOUR-MIL-THICK PLASTIC POLYETHYLENE VAPOR RETARDER OR EQUIVALENT PLASTIC SHEATHING VAPOR RETARDER INSTALLED BETWEEN THE UREA FORMALDEHYDE FOAM INSULATION AND THE INTERIOR SPACE.

110.8(c) INSULATING MATERIAL
ALL INSULATING MATERIALS SHALL BE INSTALLED IN COMPLIANCE WITH THE FLAME SPREAD RATING AND SMOKE DENSITY REQUIREMENTS OF THE CALIFORNIA BUILDING CODE.

110.8(d) DUCTS
IF INSULATION IS INSTALLED ON AN EXISTING SPACE-CONDITIONING DUCT, IT SHALL COMPLY WITH SECTION 604.0 OF THE CMC.

120.1(a) GENERAL VENTILATION AND INDOOR AIR QUALITY REQUIREMENTS
ALL OCCUPIABLE SPACES IN HOTEL/MOTEL AND NONRESIDENTIAL BUILDINGS OTHER THAN HEALTHCARE SHALL COMPLY WITH APPLICABLE REQUIREMENTS OF §120.1(a) THROUGH (g). THE REQUIRED OUTDOOR AIR VENTILATION RATE AND AIR-DISTRIBUTION SYSTEM DESIGN SHALL BE CLEARLY IDENTIFIED ON THE PLANS.

120.1(c)2 NATURAL VENTILATION
NATURALLY VENTILATED SPACES SHALL BE DESIGNED IN ACCORDANCE WITH 120.1(c)2A THROUGH 120.1(c)2C AND INCLUDE A MECHANICAL VENTILATION SYSTEMS DESIGNED IN ACCORDANCE WITH 120.1(c)3.

120.1(c)3 MECHANICAL VENTILATION
OCCUPIABLE SPACES SHALL BE VENTILATED WITH A MECHANICAL VENTILATION SYSTEM CAPABLE OF PROVIDING AN OUTDOOR AIRFLOW RATE (V_{ot}) TO THE ZONE NO LESS THAN EQUATION 120.1-F.

120.1(d) TIMES OF OCCUPANCY
MINIMUM OUTDOOR AIR RATE SHALL BE MET AT TIMES WHEN THE SPACE IS USUALLY OCCUPIED IN ACCORDANCE WITH 120.1(c).

120.1(d)2 PRE-OCCUPANCY
THE LESSER OF THE MINIMUM RATE OF OUTDOOR AIR REQUIRED BY SECTION 120.1(c) OR THREE COMPLETE AIR CHANGES SHALL BE SUPPLIED TO THE ENTIRE BUILDING DURING THE 1-HOUR PERIOD IMMEDIATELY BEFORE THE BUILDING IS NORMALLY OCCUPIED.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121540 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 3/28/2025

AGENCY APPROVAL

EL DORADO MIDDLE SCHOOL
MULTI-PURPOSE BUILDING UPGRADES
1750 WEST ST., CONCORD, CA 94521
MT. DIABLO UNIFIED SCHOOL DISTRICT

REGISTERED PROFESSIONAL ENGINEER
RYAN CELAYA
M 34234
EXPIRES 12/31/24
MECHANICAL
STATE OF CALIFORNIA

DATE SIGNED: 02/28/2025

capital engineering
RANCHO CORDOVA, CALIFORNIA

MCM - BV	230602.00
PM - DESIGN TEAM	PROJECT NO.

CONSULTANT
nacht&lewis
600 Q Street, Suite 100
Sacramento, CA 95811
www.nachtlewis.com
916.329.4000

ARCHITECT
DSA SUBMITTAL

REVISIONS

NO.	DESCRIPTION	DATE

DATE 02/28/2025
JOB NO. Y2119.00
SHEET TITLE

MECHANICAL TITLE 24 DOCUMENTATION

SHEET NO.
M701

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET

Space Conditioning Mandatory Measures:

120.1(d)3 REQUIRED DEMAND CONTROL VENTILATION
DCV CONTROLS ARE REQUIRED FOR A SPACE WITH A DESIGN OCCUPANCY DENSITY >= 25 PEOPLE/1,000 FT2 IF THE SYSTEM SERVING THE SPACE HAS ONE OR MORE OF THE FOLLOWING
- AN AIR ECONOMIZER
- MODULATING OUTSIDE AIR CONTROL
- DESIGN OUTDOOR AIRFLOW RATE > 3,000 CFM

120.1(f) DESIGN AND CONTROL REQUIREMENTS FOR QUANTITIES OF OUTDOOR AIR
120.1(f1) ALL MECHANICAL VENTILATION AND SPACE-CONDITIONING SYSTEMS SHALL BE DESIGNED WITH AND HAVE INSTALLED DUCTWORK, DAMPERS, AND CONTROLS TO ALLOW OA RATES TO BE OPERATED AT NO LESS THAN THE LARGER OF: 120.1(c)3 MINIMUMS OR THE RATE REQUIRED FOR MAKE-UP OF EXHAUST SYSTEMS FOR AN EXEMPT OR COVERED PROCESS, CONTROL OF ODORS, OR CONTAMINANT REMOVAL IN A SPACE.
120.1(f)3 MEASURED OA RATES OF CONSTANT VOLUME SYSTEMS SHALL BE TESTED TO CONFIRM THEIR ABILITY TO OPERATE WITHIN 10% OF THE DESIGN MINIMUM OUTSIDE AIR RATE.

120.1(g) AIR CLASSIFICATION AND RECIRCULATION LIMITATIONS
AIR CLASSIFICATION AND RECIRCULATION LIMITATIONS OF AIR SHALL BE BASED ON TABLE 120.1-A OR TABLE 120.1-C, AND IN ACCORDANCE WITH 120.1(g)1 THROUGH 4.

120.2(a) THERMOSTAT CONTROLS
HEATING AND COOLING SUPPLY TO EACH SPACE-CONDITIONING ZONE OR DWELLING UNIT SHALL BE CONTROLLED BY AN INDIVIDUAL THERMOSTATIC CONTROL THAT RESPONDS TO TEMPERATURE IN THE ZONE AND MEETS 120.2(b) REQUIREMENTS.

120.2(b) ZONAL THERMOSTAT CONTROLS
120.2(b)4 THERMOSTATIC CONTROLS FOR ALL SINGLE ZONE AIR CONDITIONERS AND HEAT PUMPS SHALL COMPLY WITH THE REQUIREMENTS OF 110.2(c) AND 110.12(a) AND, IF EQUIPPED WITH DDC TO THE ZONE LEVEL WITH THE AUTOMATIC DEMAND SHED CONTROLS OF 110.12(b).

120.2(e)1 AUTOMATIC SHUT-OFF FOR SPACE-CONDITIONING SYSTEMS
EACH SPACE-CONDITIONING SYSTEM SHALL BE INSTALLED WITH ONE OF THE FOLLOWING CONTROLS CAPABLE OF AUTOMATICALLY SHUTTING OFF THE SYSTEM DURING PERIODS OF NONUSE:
- AUTOMATIC TIME SWITCH CONTROL PER 110.9, WITH ACCESSIBLE MANUAL OVERRIDE ALLOWING SYSTEM OPERATION FOR UP TO 4 HOURS, OR
- AN OCCUPANCY SENSOR, OR
- A 4-HOUR TIMER THAT CAN BE MANUALLY OPERATED.

120.2(e)2 AUTOMATIC RESTART FOR SPACE-CONDITIONING SYSTEMS
EACH SPACE-CONDITIONING SYSTEM SHALL BE INSTALLED WITH CONTROLS THAT SHALL AUTOMATICALLY RESTART AND TEMPORARILY OPERATE THE SYSTEM AS REQUIRED TO MAINTAIN:
- 120.2(e)2A A SETBACK HEATING THERMOSTAT SETPOINT IF THE SYSTEM PROVIDES MECHANICAL HEATING, AND
- 120.2(e)2B A SETUP COOLING THERMOSTAT SETPOINT IF THE SYSTEM PROVIDES MECHANICAL COOLING.

120.2(f) DAMPERS FOR AIR SUPPLY AND EXHAUST EQUIPMENT
OUTDOOR AIR SUPPLY AND EXHAUST EQUIPMENT SHALL BE INSTALLED WITH DAMPERS THAT AUTOMATICALLY CLOSE UPON FAN SHUTDOWN.

Space Conditioning Mandatory Measures:

120.2(h) AUTOMATIC DEMAND SHED CONTROLS
SHALL MEET REQUIREMENTS IN 110.12
110.12(a) DEMAND RESPONSIVE (DR) CONTROL REQUIREMENTS:
1. EITHER CERTIFIED OPENADR 2.0a, OPENADR 2.0b VIRTUAL END NODE (VEN); OR CERTIFIED BY THE MANUFACTURER AS BEING CAPABLE OF RESPONDING TO A DR SIGNAL FROM A CERTIFIED OPENADR 2.0b VIRTUAL END NODE BY AUTOMATICALLY IMPLEMENTING THE CONTROL FUNCTIONS REQUESTED BY THE VIRTUAL END NODE FOR THE EQUIPMENT IT CONTROLS.
2. CAPABLE OF COMMUNICATING USING WI-FI, ZIGBEE, BACNET, ETHERNET, AND/OR HARD-WIRING.
3. MAY INCORPORATE AND USE ADDITIONAL PROTOCOLS BEYOND THOSE SPECIFIED IN 110.12(a)1 AND 2.
4. SHALL CONTINUE TO PERFORM ALL OTHER CONTROL FUNCTIONS PROVIDED BY THE CONTROL WHEN COMMUNICATIONS ARE DISABLED.
5. THERMOSTATS SHALL COMPLY WITH REFERENCE JOINT APPENDIX 5 (JA5)

110.12(b) NONRESIDENTIAL HVAC SYSTEMS WITH DDC TO THE ZONE LEVEL SHALL BE PROGRAMMED TO ALLOW CENTRALIZED DEMAND SHED FOR NON-CRITICAL ZONES. CONTROLS SHALL BE CAPABLE OF:
1. REMOTELY INCREASING THE OPERATING COOLING TEMPERATURE SETPOINTS BY 4 DEGREES OR MORE IN ALL NON-CRITICAL ZONES ON SIGNAL FROM A CENTRALIZED CONTACT OR SOFTWARE POINT WITHIN AN EMCS
2. REMOTELY DECREASING THE OPERATING HEATING TEMPERATURE SETPOINTS BY 4 DEGREES OR MORE IN ALL NON-CRITICAL ZONES ON SIGNAL FROM A CENTRALIZED CONTACT OR SOFTWARE POINT WITHIN AN EMCS
3. REMOTELY RESETTING THE TEMPERATURES IN ALL NON-CRITICAL ZONES TO ORIGINAL OPERATING LEVELS ON SIGNAL FROM A CENTRALIZED CONTACT OR SOFTWARE POINT WITHIN AN EMCS
4. PROVIDING AN ADJUSTABLE RATE OF CHANGE FOR THE TEMPERATURE INCREASE, DECREASE, AND RESET
5. THE FOLLOWING FEATURES:
   A. DISABLED BY AUTHORIZED FACILITY OPERATORS
   B. MANUAL CONTROL BY AUTHORIZED FACILITY OPERATORS
   C. UPON RECEIPT OF A DR SIGNAL, SPACE-CONDITIONING SYSTEMS SHALL CONDUCT A CENTRALIZED DEMAND SHED, AS SPECIFIED IN 110.12(b)1 AND 110.12(b)2, FOR NON-CRITICAL ZONES DURING THE DR PERIOD

Space Conditioning Mandatory Measures:

120.2(i) ECONOMIZER FAULT DETECTION AND DIAGNOSTICS (FDD)
ALL NEWLY INSTALLED AIR-COOLED PACKAGED DIRECT-EXPANSION UNITS, WITH AN AIR HANDLER MECHANICAL COOLING CAPACITY GREATER THAN 33,000 BTU/HR AND AN INSTALLED AIR ECONOMIZER SHALL INCLUDE A STAND-ALONE OR INTEGRATED FDD SYSTEM IN ACCORDANCE WITH THE FOLLOWING:
1. TEMPERATURE SENSORS SHALL BE PERMANENTLY INSTALLED TO MONITOR SYSTEM OPERATION: OUTSIDE AIR, SUPPLY AIR, AND WHEN REQUIRED FOR DIFFERENTIAL ECONOMIZER OPERATION, A RETURN AIR SENSOR.
2. TEMPERATURE SENSORS SHALL HAVE AN ACCURACY OF +/- 2 °F OVER THE RANGE OF 40 °F TO 80 °F.
3. CONTROLLER SHALL HAVE THE CAPABILITY OF DISPLAYING THE VALUE OF EACH SENSOR AND
4. PROVIDE SYSTEM STATUS BY INDICATING: FREE COOLING AVAILABLE, ECONOMIZER ENABLED, COMPRESSOR ENABLED, HEATING ENABLED (IF AVAILABLE), MIXED AIR LOW LIMIT CYCLE ACTIVE.
5. CONTROLLER SHALL ALLOW MANUAL INITIATION OF EACH OPERATING MODE SO THAT THE OPERATION OF COOLING SYSTEMS, ECONOMIZERS, FANS, AND HEATING SYSTEMS CAN BE INDEPENDENTLY TESTED AND VERIFIED.
6. FAULTS SHALL BE REPORTED IN ONE OF THE FOLLOWING WAYS:
   - REPORTED TO AN EMCS REGULARLY MONITORED BY FACILITY STAFF.
   - ANNUNCIATED LOCALLY ON ONE OR MORE ZONE THERMOSTATS, OR A DEVICE WITHIN 5 FT OF ZONE THERMOSTAT(S), CLEARLY VISIBLE, AT EYE LEVEL, AND WITH INSTRUCTIONS TO CONTACT APPROPRIATE BUILDING STAFF OR AN HVAC TECHNICIAN. IN BUILDINGS WITH MULTIPLE TENANTS, ANNUNCIATION SHALL EITHER BE WITHIN PROPERTY MANAGEMENT OFFICES OR IN A COMMON SPACE ACCESSIBLE BY THE PROPERTY OR BUILDING MANAGER
   - REPORTED TO A FAULT MANAGEMENT APPLICATION WHICH AUTOMATICALLY PROVIDES NOTIFICATION OF THE FAULT TO REMOTE HVAC SERVICE PROVIDER.
7. THE FDD SHALL DETECT: AIR TEMPERATURE SENSOR FAILURE/FAULT, FAILURE TO ECONOMIZE, ECONOMIZING WHEN NOT ADVISED, DAMPER NOT MODULATING, AND EXCESSIVE OUTDOOR AIR.
8. THE FDD SYSTEM SHALL BE CERTIFIED BY THE ENERGY COMMISSION AS MEETING REQUIREMENTS OF 120.2(i)1 THROUGH 120.2(i)7 IN ACCORDANCE WITH 110.0 AND JOINT APPENDIX JA6.3

120.2(j) DIRECT DIGITAL CONTROLS (DDC)
DDC TO THE ZONE SHALL BE PROVIDED AS SPECIFIED BY TABLE 120.2-A. THE DDC SYSTEM SHALL MEET CONTROL LOGIC REQUIREMENTS OF 120.1(D), 110.12(a) AND 110.12(b) AND BE CAPABLE OF ALL OF THE FOLLOWING:
1. MONITORING ZONE AND SYSTEM DEMAND FOR FAN PRESSURE, PUMP PRESSURE, HEATING AND COOLING
2. TRANSFERRING ZONE AND SYSTEM DEMAND INFORMATION FROM ZONES TO AIR DISTRIBUTION SYSTEM CONTROLLERS AND FROM AIR DISTRIBUTION SYSTEMS TO HEATING AND COOLING PLANT CONTROLLERS
3. AUTOMATICALLY DETECTING THE ZONES AND SYSTEMS THAT MAY BE EXCESSIVELY DRIVING THE RESET LOGIC AND GENERATE AN ALARM OR OTHER INDICATION TO THE SYSTEM OPERATOR
4. READILY ALLOW OPERATOR REMOVAL OF ZONE(S) FROM THE RESET ALGORITHM
5. FOR NEW BUILDINGS, TRENDING AND GRAPHICALLY DISPLAYING INPUT AND OUTPUT POINTS
6. RESETTING HEATING AND COOLING SETPOINTS IN ALL NON-CRITICAL ZONES UPON RECEIPT OF A SIGNAL FROM A CENTRALIZED CONTACT OR SOFTWARE POINT AS DESCRIBED IN 110.12(b).

Space Conditioning Mandatory Measures:

120.2(b) OPTIMUM START/STOP CONTROLS
SPACE-CONDITIONING SYSTEMS WITH DDC TO THE ZONE SHALL HAVE OPTIMUM START/STOP CONTROLS. CONTROL ALGORITHM SHALL, AS A MINIMUM, BE A FUNCTION OF THE DIFFERENCE BETWEEN SPACE TEMPERATURE AND OCCUPIED SETPOINT, OUTDOOR AIR TEMP, AND AMOUNT OF TIME PRIOR TO SCHEDULED OCCUPANCY.

MASS RADIANT FLOOR SLAB SYSTEMS SHALL INCORPORATE FLOOR TEMPERATURE ONTO THE OPTIMUM START ALGORITHM.

120.4 AIR DISTRIBUTION SYSTEM DUCTS AND PLENUMS
PORTIONS OF SUPPLY- AND RETURN-AIR DUCTS CONVEYING HEATED OR COOLED AIR LOCATED IN ONE OR MORE OF THE FOLLOWING SPACES SHALL BE INSULATED TO A MINIMUM INSTALLED LEVEL OF R-8:
- OUTDOORS
- IN A SPACE BETWEEN THE ROOF AND AN INSULATING CEILING
- IN A SPACE DIRECTLY UNDER A ROOF WITH FIXED VENTS OR OPENINGS TO THE OUTSIDE OR UNCONDITIONED SPACES
- UNCONDITIONED SPACES, SUCH AS UNCONDITIONED CRAWLSPACE

PORTIONS OF SUPPLY-AIR DUCTS THAT ARE NOT IN ONE OF THESE SPACES, INCLUDING DUCTS BURIED IN CONCRETE SLAB, SHALL BE INSULATED TO A MINIMUM INSTALLED LEVEL OF R-4.2 (OR ANY HIGHER LEVEL REQUIRED BY CMC 605.0), OR BE ENCLOSED IN DIRECTLY CONDITIONED SPACE.

Space Conditioning Mandatory Measures:

120.4(b) DUCT AND PLENUM MATERIALS
120.4(b) FACTORY-FABRICATED DUCT SYSTEMS MUST:
- COMPLY WITH UL 181 FOR DUCTS AND CLOSURE SYSTEMS AND BE LABELED AS COMPLYING WITH UL 181
- ALL PRESSURE SENSITIVE TAPES, HEAT ACTIVATED TAPES, AND MASTICS USED IN MANUFACTURE OF RIGID FIBERGLASS DUCTS SHALL COMPLY WITH UL 181 AND UL 181A.
- ALL PRESSURE SENSITIVE TAPES, AND MASTICS USED IN MANUFACTURE OF FLEXIBLE DUCTS SHALL COMPLY WITH UL 181 AND L 181B
- JOINTS AND SEAMS SHALL NOT BE SEALED WITH CLOTH BACK RUBBER ADHESIVE DUCT TAPES UNLESS COMBINED WITH MASTICS AND DRAWBANDS.

FIELD-FABRICATED DUCT SYSTEMS:
- FACTORY-MADE RIGID FIBERGLASS AND FLEXIBLE DUCTS FOR FIELD-FABRICATED DUCT SYSTEMS SHALL COMPLY WITH UL 181. ALL CLOSURE SYSTEMS, INCLUDING PRESSURE SENSITIVE TAPES, MASTICS, AND AEROSOL SEALANTS, SHALL MEET THE APPLICABLE REQUIREMENTS OF UL 181, UL 181A AND UL 181B.
- MASTIC SEALANTS SHALL:
  - COMPLY WITH APPLICABLE REQUIREMENTS OF UL 181, UL 181A, AND UL 181B AND BE NONTOXIC AND WATER RESISTANT.
  - PASS ASTM C731 AND D2202, IF USED IN BUILDING INTERIOR,
  - PASS ASTM C731, C732, AND D2202, IF USED ON EXTERIOR.
  - SEALANTS AND MESHES SHALL BE RATED FOR EXTERIOR USE.
- PRESSURE SENSITIVE TAPES SHALL COMPLY WITH APPLICABLE REQUIREMENTS IN UL 181, UL 181A, AND UL 181B.
- JOINTS AND SEAMS SHALL NOT BE SEALED WITH CLOTH BACK RUBBER ADHESIVE DUCT TAPES UNLESS COMBINED WITH MASTICS AND DRAWBANDS.
- DRAWBANDS USED WITH FLEXIBLE DUCTS SHALL:
  - BE EITHER STAINLESS STEEL WORM-DRIVE HOSE CLAMPS OR UV-RESISTANT NYLON DUCT TIES
  - HAVE A MINIMUM TENSILE STRENGTH RATING OF 150 LBS.
  - BE TIGHTENED AS RECOMMENDED BY THE MANUFACTURER
- AEROSOL SEALANT CLOSURES SHALL:
  - MEET REQUIREMENTS OF UL 723 AND BE APPLIED ACCORDING TO MANUFACTURER SPECIFICATIONS
  - TAPES OR MASTICS USED IN COMBINATION WITH AEROSOL SEALING SHALL COMPLY WITH APPLICABLE REQUIREMENTS OF UL 181, UL 181A, AND UL 181B, ASTM C731, C732 AND D2202.

120.4(c)
ALL DUCT INSULATION PRODUCT R-VALUES SHALL BE BASED ON INSULATION ONLY AND TESTED IN ACCORDANCE WITH ASTM C518 OR ASTM C177 AND CERTIFIED PER §1108.

120.4(d)
INSTALLED THICKNESS OF DUCT INSULATION USED TO DETERMINE ITS R-VALUE SHALL BE DETERMINED AS FOLLOWS:
- DUCT BOARD, LINER, AND FACTORY-MADE RIGIDS: USE NOMINAL INSULATION THICKNESS
- DUCT WRAP: USE 75% (25% COMPRESSION) OF NOMINAL THICKNESS
- FACTORY-MADE FLEXIBLE AIR DUCTS: DIVIDE THE DIFFERENCE BETWEEN THE ACTUAL OUTSIDE DIAMETER AND NOMINAL INSIDE DIAMETER BY TWO.

120.4(e)
INSULATED FLEXIBLE DUCT PRODUCTS INSTALLED TO MEET THIS REQUIREMENT MUST INCLUDE LABELS (MAX INTERVALS OF 3 FT) SHOWING THERMAL RESISTANCE PERFORMANCE R-VALUE FOR THE DUCT INSULATION ITSELF BASED ON TESTS IN 120.4(c). AND INSTALLED THICKNESS DETERMINED BY 120.4(d)3.

Space Conditioning Mandatory Measures:

120.4(f) PROTECTION OF INSULATION
INSULATION SHALL BE PROTECTED FROM DAMAGE BY SUNLIGHT, MOISTURE, EQUIPMENT MAINTENANCE AND WIND. CELLULAR FOAM INSULATION SHALL BE PROTECTED, OR BE PAINTED WITH A WATER RETARDANT COATING THAT PROVIDES SHIELDING FROM SOLAR RADIATION.

STATE OF CALIFORNIA
Domestic Water Heating System CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-PLB-E
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This document is used to demonstrate compliance for nonresidential occupancies with requirements in 110.1, 110.3, 120.3, and 140.5, and with requirements in 141.0 for additions and alterations, for domestic water heating scopes using the prescriptive path. For high-rise residential and hotel/motel occupancies compliance is demonstrated with requirements in 110.1, 110.3, 160.4 and 170.2(d), and with requirements 180.1 for additions and 180.2 for alterations.

A. GENERAL INFORMATION

01	Project Location (city)	Concord	02	Climate Zone	12
03	Occupancy Types Within Project (select all that apply):				

● School or Classroom

B. PROJECT SCOPE
This table includes domestic water heating systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive paths outlined in 140./170.2(d) and 141.0(a)/ 180.1, or 141.0(b)2N / 180.2 for additions or alterations. Solar water heating systems are documented on the NRCC-SAB compliance document. Combined hydronic water heating systems are documented on the NRCC-MCH compliance document.

01	02	03	
My project consists of (check all that apply):	System Type[1,2]	System Components	
☐ New system (DHW system being installed for the first time)		☐ Equipment	☐ Distribution ☐ Controls
☒ System Alteration (equipment, distribution or controls)	Central System (serving nonresidential spaces)	☒ Equipment	☒ Distribution ☐ Controls

[1]FOOTNOTES: Point of use water heaters, or other non-central systems used to serve nonresidential spaces, are considered individual systems.
[2] Dwelling units refers to hotel/motel guest rooms and units in a multifamily residential occupancy.
[3] DHW systems serving 2 or more dwelling units are considered "Central Systems" for multifamily occupancies

C. COMPLIANCE RESULTS
Table C will indicate if the project data input into the compliance document is compliant with water heating requirements. If this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D, or the table indicated as not compliant for guidance.

01	02	03	04
Domestic Hot Water Equipment	Distribution Systems	Controls	Compliance Results
Table F	Table G	Table H	
Yes	Yes		COMPLIES

D. EXCEPTIONAL CONDITIONS
This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

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E. ADDITIONAL REMARKS
This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

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F. DOMESTIC HOT WATER EQUIPMENT
This table is used to demonstrate compliance with mandatory equipment requirements in 110.1 and 110.3. Compliance with prescriptive requirements in 140.5(c) / 170.2(d) must also be demonstrated and with 141.0 / 180.1/ 180.2 for addition and alteration scopes.

Equipment Schedule: Water Heating Efficiency and Standby Loss

03	04			05		06	
System Name	GWH-1	Exception to 140.5(c)/ 170.2(d)3	Exceptions Do Not Apply	☐	Gas Service Water Heating System >= 1MMBtu/h[1]	Capacity-weighted Average Efficiency %	

07	08	09	10		11	12	13	14	15
Name or Item Tag	Equipment Type	Volume (gal)	Rated Input Capacity (Btu/h)	Max GPM/ First Hour Rating (FHR)	Rated Efficiency	Minimum Efficiency Required	Efficiency Unit	Designed Standby Loss	Maximum Standby Loss
GWH-1	Commercial Gas Storage Water Heater	99	125,000		0.8	0.8	TE	5,601	5,601.25

[1]FOOTNOTE: In systems >= 1MMBtu/h with multiple units, gas water heaters with input capacity > 100,000 Btu/h may meet 90% Et requirements via an input capacity-weighted average.
[2]FOOTNOTE: Compliant equipment may be found in the Modernized Appliance Efficiency Database System (MAEDBS) on the Energy Commission website: https://cacertappliances.energy.ca.gov/Pages/Search/AdvancedSearch.aspx

Water Heating Equipment All Occupancies

	Yes	No	Not Applicable	Requirement
18	☐	☐	☒	Unfired storage tank insulation shall have Internal + External >=R-16 OR External >=R-3.5. Label required per 110.3(c)3
19	☐	☐	☒	New state buildings 60% of energy for service water heating from site solar energy or recovered energy per 110.3(c)5
20	☐	☐	☒	Isolation valves for instantaneous water heater with input rating >6.8 kBTUH or 2 kW has been specified per 110.3(c)6
21	☐	☒	☐	School buildings < 25,000 ft² and < 4 stories must install a heat pump water heating system per 140.5(a)1. Water heating systems serving an individual bathroom space may be an instantaneous electric water heater.

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G. DOMESTIC HOT WATER DISTRIBUTION SYSTEM
This section does not apply to this project.

I. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION
Selections have been made based on information provided in this document. If any selection have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

Form/Title
NRCI-PLB-E - Must be submitted for all buildings

J. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE
There are no forms required for this project.

K. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION
There are no forms required for this project.

STATE OF CALIFORNIA
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DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Aaron Wintersmith	Documentation Author Signature:
Company: Capital Engineering	Signature Date: 02/01/2024
Address:	CEA/ HERS Certification Identification (if applicable):
City/State/Zip:	Phone:

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: Ryan Celaya	Responsible Designer Signature:
Company: Capital Engineering	Date Signed: 02/01/2024
Address: 11020 Sun Center DR #100	License: M34234
City/State/Zip: Rancho Cordova, CA 95670	Phone: 916-851-3500

Service Water Heating Mandatory Measures:

110.3(a) CERTIFICATION BY MANUFACTURERS
ANY SERVICE WATER HEATING SYSTEM OR EQUIPMENT MAY BE INSTALLED ONLY IF CERTIFIED TO THE ENERGY COMMISSION TO MEET ALL APPLICABLE 110.3 REQUIREMENTS

110.3(b) EFFICIENCY
EQUIPMENT SHALL MEET THE APPLICABLE REQUIREMENTS OF THE APPLIANCE EFFICIENCY REGULATIONS AS REQUIRED BY 110.1.

110.3(c)4 WATER HEATER RECIRCULATION LOOPS
WATER HEATING RECIRCULATION LOOPS SERVING MULTIPLE DWELLING UNITS, HIGH-RISE RESIDENTIAL, HOTEL/MOTEL AND NONRESIDENTIAL OCCUPANCIES SHALL HAVE:
- A. AIR RELEASE VALVE OR VERTICAL PUMP INSTALLATION
- B. RECIRCULATION LOOP BACKFLOW PREVENTION
- C. EQUIPMENT FOR PUMP PRIMING
- D. PUMP ISOLATION VALVES
- E. COLD WATER SUPPLY AND RECIRCULATION LOOP CONNECTION TO HOT WATER STORAGE TANK
- F. COLD WATER SUPPLY BACKFLOW PREVENTION

110.8(a) INSULATION CERTIFICATION
INSTALLED INSULATION SHALL BE CERTIFIED BY THE DEPARTMENT OF CONSUMER AFFAIRS PER TITLE 24, PART 12, CHAPTERS 12-13, ARTICLE 3 "STANDARDS FOR INSULATING MATERIAL."

110.8(b) UREA FORMALDEHYDE INSULATION
UREA FORMALDEHYDE INSULATION SHALL NOT BE INSTALLED UNLESS IN EXTERIOR SIDE WALLS WITH A FOUR-MIL-THICK PLASTIC POLYETHYLENE VAPOR RETARDER OR EQUIVALENT PLASTIC SHEATHING VAPOR RETARDER IS INSTALLED BETWEEN THE UREA FORMALDEHYDE FOAM INSULATION AND THE INTERIOR SPACE.

110.8(c) INSULATING MATERIAL
ALL INSULATING MATERIALS SHALL BE INSTALLED IN COMPLIANCE WITH THE FLAME SPREAD RATING AND SMOKE DENSITY REQUIREMENTS OF THE CALIFORNIA BUILDING CODE.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121540 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 3/28/2025

AGENCY APPROVAL

EL DORADO MIDDLE SCHOOL
MULTI-PURPOSE BUILDING UPGRADES
1750 WEST ST., CONCORD, CA 94521
MT. DIABLO UNIFIED SCHOOL DISTRICT

PROFESSIONAL ENGINEER — RYAN CELAYA — M 34234 — EXPIRES 12/31/24 — MECHANICAL — STATE OF CALIFORNIA
DATE SIGNED: 02/28/2025

capital engineering
RANCHO CORDOVA, CALIFORNIA
MCM - BV — PM - DESIGN TEAM
230602.00 — PROJECT NO.

CONSULTANT
nacht&lewis
600 Q Street, Suite 100
Sacramento, CA 95811
www.nachtlewis.com
916.329.4000

ARCHITECT
DSA SUBMITTAL

REVISIONS

NO.	DESCRIPTION	DATE

DATE 02/28/2025
JOB NO. Y2119.00
SHEET TITLE

MECHANICAL TITLE 24 DOCUMENTATION

SHEET NO.
M702

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET

ONE AND ONE-HALF INCH = ONE FOOT

ONE INCH = ONE FOOT

THREE-QUARTERS INCH = ONE FOOT

ONE-HALF INCH = ONE FOOT

ONE-QUARTER INCH = ONE FOOT

ONE-EIGHTH INCH = ONE FOOT

ONE-SIXTEENTH INCH = ONE FOOT

ONE INCH = TWENTY FEET

PLUMBING GENERAL NOTES

1. ACCESS PANELS SHALL BE PROVIDED AS NECESSARY TO PROPERLY ACCESS THE PLUMBING SYSTEM INCLUDING VALVES, REFER TO SPECIFICATION SECTION 08310.
2. OFFSET VENT THROUGH ROOFS 10'-0" MINIMUM FROM AIR INTAKES AND 4'-0" FROM OUTSIDE WALLS.
3. HVAC EQUIPMENT IS SHOWN FOR THE COORDINATION OF UTILITIES ONLY. REFER TO 'M' SHEETS FOR MORE INFORMATION.
4. THE CONNECTION OF NATURAL GAS LINES TO EQUIPMENT SHALL INCLUDE A LINE SIZE SHUT-OFF VALVE, UNION AND A MINIMUM 6" LONG DIRT LEG WITH ACCESSIBLE END CAP.
5. THE CONNECTION OF CONDENSATE DRAIN LINES TO HVAC EQUIPMENT SHALL INCLUDE A MINIMUM 4" DEEP "P"-TRAP AND PLUGGED TEE AT ALL OFFSETS.
6. PROVIDE WATER HAMMER ARRESTORS (WHA) AS INDICATED ON PLUMBING PLANS AND/OR AS DESCRIBED WITHIN DIVISION 22 SPECIFICATIONS. SIZING SHALL BE IN ACCORDANCE WITH PDI STANDARD WH-201.
7. FOR PIPES PASSING THROUGH, UNDER OR PARALLEL TO BUILDING FOOTINGS, RETAINING WALLS ETC. REFER TO STRUCTURAL DETAILS, 'S' SHEETS, FOR TYPICAL ARRANGEMENT.
8. CONTRACTOR SHALL FIELD VERIFY ALL POINTS OF CONNECTION TO SITE PIPING (LOCATIONS AND INVERT) PRIOR TO EXCAVATION, FABRICATION AND INSTALLATION OF ASSOCIATED PIPING RUNS. NOTIFY ARCHITECT AND OR ENGINEER IMMEDIATELY IF POINTS OF CONNECTION OR INVERTS ARE DIFFERENT THAN REPRESENTED ON THE DRAWINGS.
9. OFFSET ALL RISERS AND DROPS TO AVOID PENETRATIONS AT TOP PLATES.
10. PENETRATION OF PIPES, CONDUIT, ETC., IN WALLS AND/OR FLOORS REQUIRING PROTECTED OPENINGS SHALL BE FIRE STOPPED. MATERIAL SHALL BE A TESTED ASSEMBLY APPROVED BY THE STATE FIRE MARSHAL.
11. SEAL ALL PIPE PENETRATIONS THRU FLOORS WATERTIGHT.
12. DRAWINGS SHALL BE CONSIDERED DIAGRAMMATIC ONLY. CONTRACTOR SHALL FIELD VERIFY WHERE POSSIBLE, EXACT LOCATIONS, SIZES, AND ELEVATIONS OF ALL ITEMS SHOWN PRIOR TO THE INSTALLATION OF ANY NEW WORK.
13. THE DRAWINGS ARE NOT INTENDED TO SHOW EVERY OFFSET OR FITTING OR EVERY STRUCTURAL DIFFICULTY THAT MAY BE ENCOUNTERED DURING INSTALLATION OF THE WORK. LOCATION OF ALL ITEMS NOT DEFINITELY FIXED BY DIMENSIONS ARE APPROXIMATE ONLY. EXACT LOCATIONS NECESSARY TO SECURE BEST CONDITIONS AND RESULTS MUST BE DETERMINED AT THE JOB SITE AND SHALL HAVE THE APPROVAL OF THE ARCHITECT BEFORE BEING INSTALLED.
14. ALL VALVES SHOWN SHALL BE FULL LINE SIZE UNLESS OTHERWISE NOTED.
15. CLOSELY COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO TRENCHING OR INSTALLATION OF NEW. IDENTIFY SIZE AND LOCATIONS OF ALL PENETRATIONS THROUGH FOUNDATIONS, WALLS OR ROOFS PRIOR TO FABRICATION OF ANY SYSTEMS OR ORDERING MATERIALS AFFECTED BY POSSIBLE COORDINATION CONFLICTS.
16. CONCRETE ANCHORS SHALL BE HILTI, KWIK BOLT TZ 3/8" WITH EMBEDMENT AS PER STRUCTURAL PLANS. ANCHORS SHALL BE TESTED PER IR 19-1, INTERPRETIVE REGULATION FOR EXPANSION ANCHORS IN HARDENED CONCRETE. ANCHOR TEST SHALL BE 968 LBS. TENSION.
17. PIPING SHALL BE SUPPORTED AND BRACED IN STRICT COMPLIANCE WITH DIVISION 22 SPECIFICATIONS.
18. PENETRATION OF PIPES, CONDUITS, ETC., IN WALLS AND/OR FLOORS REQUIRING PROTECTED OPENINGS SHALL BE FIRE STOPPED. MATERIAL SHALL BE A TESTED ASSEMBLY APPROVED BY THE STATE FIRE MARSHAL.
19. ALL NEW SANITARY WASTE PIPING SHOWN SHALL BE SLOPED AT 1/4" PER FOOT MINIMUM UNLESS OTHERWISE NOTED ON PLANS. WHERE SLOPES LESS THAN 1/4" PER FOOT ARE INDICATED, CONTRACTOR SHALL SLOPE NEW PIPING UNIFORMLY BETWEEN UPPER TERMINAL OF PIPE AND THE POINT OF CONNECTION TO THE SITE PIPING (AS INDICATED ON THE CIVIL PLANS) TO ACHIEVE MAXIMUM SLOPE POSSIBLE AND IN NO CASE SHALL THE PIPING BE SLOPED LESS THAN THE MINIMUM INDICATED.
20. CONCEAL ALL PIPING IN WALL FURRING, PARTITIONS, ETC., EXCEPT AT MECHANICAL ROOMS.
21. REFER TO ARCHITECTURAL DRAWINGS FOR BUILDING DIMENSIONS AND EXACT LOCATIONS OF PLUMBING FIXTURES.

MEP COMPONENT ANCHORAGE NOTE

ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA-APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26, AND 30:

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G., HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

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 DISTRIBUTION SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.

PIPING, DUCTWORK, & ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8; AND 2022 CBC, SECTIONS 1617A.1.24, 1617A.1.25, AND 1617A.126.

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 PREPAPPROVED INSTALLATION GUIDE (E.G., HCAI OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

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

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

MP ☐ MD ☐ PP ☐ E ☐ OPTION 2: SHALL COMPLY WITH HCAI (OSHPD) PREAPPROVAL (OPM #) #_____, AS INCLUDED IN THESE DRAWINGS WITH PROJECT-SPECIFIC NOTES AND DETAILS.

PLUMBING ABBREVIATIONS

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
ABC	ABOVE CEILING	LV	LAVATORY
ACC DR	ACCESS DOOR		
ACC P	ACCESS PANEL	MC	MOTOR CONTROLLER
AFF	ABOVE FINISHED FLOOR	MECH	MECHANICAL
AFG	ABOVE FINISHED GRADE	MTD	MOUNTED
BEL	BELOW	(N)	NEW
BFF	BELOW FINISHED FLOOR	NC	NORMALLY CLOSED
BFG	BELOW FINISHED GRADE	NO	NORMALLY OPEN
BFP	BACKFLOW PREVENTER	NTS	NOT TO SCALE
BLDG	BUILDING		
		OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
CFF	CAPPED FOR FUTURE	OFOI	OWNER FURNISHED, OWNER INSTALLED
CLG	CEILING	OH	OVERHEAD
COL	COLUMN	OS & Y	OUTSIDE SCREW AND YOKE
CONN	CONNECT/CONNECTION		
CONT	CONTINUATION	PH	PHASE
CWH	COLD WATER HEADER	PLBG	PLUMBING
		PLD	PLANTER DRAIN
(D)	DROP	PO	PLUGGED OUTLET
DF	DRINKING FOUNTAIN	PRS	PRE-RINSE SINK
DIA	DIAMETER	PS	POT SINK
DN	DOWN	PT	PLASTER TRAP
DW	DRY WELL		
DW	DISHWASHER	(R)	RISER
DWG	DRAWING	REC	RECESSED
		REQD	REQUIRED
(E)	EXISTING	REV	REVISION
EL	ELEVATION	RM	ROOM
ELEC	ELECTRICAL	RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
EQUIP	EQUIPMENT	RWL	RAIN WATER LEADER
EW	EYE WASH		
EWC	ELECTRIC WATER COOLER	SD	STORM DRAIN
		SH	SHOWER
FA	FROM ABOVE	SPEC	SPECIFICATION
FB	FROM BELOW	SS	STAINLESS STEEL/SERVICE SINK
FD	FLOOR DRAIN	STD	STANDARD
FFE	FINISHED FLOOR ELEVATION	STRUC	STRUCTURAL
FF	FINISHED FLOOR		
FLR	FLOOR	(TA)	TO ABOVE
FSR	FIRE SPRINKLER RISER	(TB)	TO BELOW
/FT	PER FOOT	TD	TRENCH DRAIN
FTK	FLUSH TANK	TEMP	TEMPERATURE
FU	FIXTURE UNIT	TOC	TOP OF CONCRETE
FV	FLUSH VALVE	TS	TAMPER SWITCH
		TYP	TYPICAL
GAL	GALLONS		
		UF	UNDER FLOOR
HC	HANDICAPPED	UG	UNDERGROUND
HR	HOUR	UL	UNDERWRITERS' LABORATORIES
HS	HAND SINK	UR	URINAL
HT	HEIGHT	US	UNDER SLAB
HTR	HEATER	V	VENT
HWH	HOT WATER HEATER	VTR	VENT THRU ROOF
		VO	VALVED OUTLET
IE	INVERT ELEVATION		
		W/	WITH
KEC	KITCHEN EQUIPMENT CONTRACTOR	W/O	WITHOUT
KS	KITCHEN SINK	W	WASTE
		WC	WATER CLOSET

SYMBOLS LEGEND

SYMBOL	ABBREVIATION	DESCRIPTION
	---	ANCHOR
	AQ	AQUASTAT
	AD	AREA DRAIN
	---	AUTOMATIC AIR VENT
	BFP, BP, DCW	BACKFLOW PREVENTER, REDUCE PRESSURE, DOUBLE CHECKVALVE
	---	BALL VALVE
	---	BOTTOM CONNECTION
	---	BUTTERFLY VALVE
	CBV	CALIBRATED BALANCE VALVE
	CB, RD	CATCH BASIN, ROOF DRAIN
	---	CHECK VALVE
	CP	CIRCULATING PUMP
	CO	CLEANOUT
	---	ECCENTRIC REDUCER
	EJ	EXPANSION JOINT
	---	FLEXIBLE CONNECTOR
	FD	FLOOR DRAIN
	FS	FLOOR SINK
	---	FLOW ARROW
	GCK	GAGE COCK
	GSCK, PC	GAS COCK, PLUG COCK
	---	GATE VALVE
	---	GLOBE VALVE
	HB	HOSE BIBB
	---	LIMIT OF DEMOLITION
	---	PIPE BREAK
	---	PIPE CAP
	---	PIPE DOWN
	---	PIPE GUIDE
	---	PIPE UP
	---	POINT OF CONNECTION
	---	PRESSURE RELIEF VALVE
	---	REDUCER
	---	SOLENOID VALVE
	---	STRAINER
	---	THERMOMETER
	TP	TRAP PRIMER
	---	UNION
	---	VALVE IN RISER/DROP
	VB	VALVE IN VALVE BOX
	---	WALL CLEANOUT
	WHA	WATER HAMMER ARRESTOR

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NO.	DESCRIPTION	DATE

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SHEET TITLE

PLUMBING LEGENDS AND NOTES

SHEET NO.

P001

ONE AND ONE-HALF INCH = ONE FOOT

ONE INCH = ONE FOOT

THREE-QUARTERS INCH = ONE FOOT

ONE-HALF INCH = ONE FOOT

ONE-QUARTER INCH = ONE FOOT

ONE-EIGHTH INCH = ONE FOOT

ONE-SIXTEENTH INCH = ONE FOOT

ONE INCH = TWENTY FEET

PLUMBING FIXTURE SCHEDULE

EQUIPMENT TAG	♿	DESCRIPTION	FIXTURE MANUFACTURER AND MODEL NO.	FAUCET OR VALVE MANUFACTURER AND MODEL NO.	TRIM MANUFACTURER AND MODEL NO.	VENT	WASTE	WASTE	COLD WATER	COLD WATER	HOT WATER	HOT WATER	REMARKS
							BRANCH	OUTLET	BRANCH	OUTLET	BRANCH	OUTLET	
DF-1-	YES	DRINKING FOUNTAIN WALL MOUNTED STD/ACCESSIBLE DUAL HEIGHT W/ BOTTLE FILLER	"ELKAY MODEL LZSTL8WSLK, BI-LEVEL ADA COOLER WITH BOTTLE FILLING STATION, FILTERED, REFRIGERATED, LIGHT GRAY. WITH GREEN TICKER, FILTERED, ANTIMICROBIAL, HANDS FREE, LAMINAR FLOW, REAL DRAIN, VISUAL FILTER MONITOR. FURNISHED WITH FLEXI-GUARD SAFETY BUBBLER. ELECTRONIC BOTTLE FILLER SENSOR WITH ELECTRONIC FRONT AND SIDE BUBBLER PUSHBAR ACTIVATION.	INTEGRAL	PROVIDE WITH MANUFACTURER'S IN-WALL CARRIER FOR BI-LEVEL ON-WALL BOTTLE FILLERS COOLERS AND FOUNTAINS. WITH P-TRAP.	1-1/2"	2"	1-1/2"	3/4"	1/2"	-	-	MOUNT AT HEIGHT INDICATED ON ARCHITECTURAL DRAWINGS.
FD-		FLOOR DRAIN	GENERAL SERVICE FD: "ZURN" MODEL Z-415 OR EQUAL, WITH TYPE "B" STRAINER FOR EXPOSED CONCRETE AND TYPE "C" STRAINER FOR TILE FLOOR. PROVIDE BRONZE TRIM. FD IN COMPOSITION TYPE FLOOR: "ZURN" MODEL Z-415, OR EQUAL, WITH TYPE SL STRAINER. FD IN RESINOUS/EPOXY TYPE FLOOR: "ZURN" MODEL Z-415BL, OR EQUAL, NICKEL BRONZE WITH ADJUSTABLE STRAINER. FD IN MECHANICAL SERVICE AREAS: "ZURN" MODEL Z-541, OR EQUAL, 12 INCH DIAMETER HEAVY DUTY DRAIN. OTHER APPROVED EQUAL MANUFACTURERS INCLUDE: JAY R. SMITH, WATTS, MIFAB.			2"	2"	2"	-	-	-	-	
FS (2")-		FLOOR SINK	KITCHEN: "ZURN" MODEL Z-1751-KC, OR EQUAL, 12 INCH x 12 INCH x 8 INCH DEEP, 14 GA. TYPE 304 STAINLESS STEEL WITH HALF GRATE, SEDIMENT BUCKET, PROFIDE FUSION JOINT P-TRAP TO MATCH PIPING SYSTEM. OTHER APPROVED EQUAL MANUFACTURERS INCLUDE: JAY R. SMITH, WATTS, MIFAB.		PROVIDE SEEPAGE PAN AND CLAMPING COLLAR.	2"	2"	2"	-	-	-	-	COORDINATE AND PROVIDE GRATES AS REQUIRED PER KITCHEN DRAWINGS.
FS (4")-		FLOOR SINK	KITCHEN: "ZURN" MODEL Z-1751-KC, OR EQUAL, 12 INCH x 12 INCH x 8 INCH DEEP, 14 GA. TYPE 304 STAINLESS STEEL WITH HALF GRATE, SEDIMENT BUCKET, PROFIDE FUSION JOINT P-TRAP TO MATCH PIPING SYSTEM. OTHER APPROVED EQUAL MANUFACTURERS INCLUDE: JAY R. SMITH, WATTS, MIFAB.		PROVIDE SEEPAGE PAN AND CLAMPING COLLAR.	3"	4"	4"	-	-	-	-	COORDINATE AND PROVIDE GRATES AS REQUIRED PER KITCHEN DRAWINGS.
HB-		HOSE BIBB	EXTERIOR WALL MOUNTED: "ACORN" MODEL 8120CR-LF OR "WOODFORD" MODEL 24CH, OR EQUAL. ROOF MOUNTED: "WOODFORD" MODEL RHMC-MS, OR EQUAL. ROOF MOUNTED ON PARAPET OR SIDE OF AC UNIT: "ACORN" MODEL 8121CR-LF OR "WOODFORD" MODEL 24CH, OR EQUAL. INTERIOR WALL MOUNTED: "ACORN" MODEL 8121CP-LF, "WOODFORD" MODEL 24PC, OR EQUAL. EXTERIOR WALL MOUNT NON-FREEZE: "J.R. SMITH" 5609QT OR "WOODFORD" MODEL 27, OR EQUAL.	WITH INTEGRAL VACUUM BREAKER PROTECTED, CARTRIDGE OPERATED HOSE VALVE WITH LOCK SHIELD BONNET AND REMOVABLE KEY HANDLE.		-	-	-	-	3/4"	3/4"	-	-	SET HEIGHT AT 18" ABOVE FINISHED FLOOR.
HFS-		HALF FLOOR SINK	KITCHEN: "ZURN" MODEL Z-1930-P, OR EQUAL, 8 INCH x 4 INCH x 4 INCH DEEP, CAST IRON BODY W/ EPOXY TOP.		PROVIDE SEEPAGE PAN AND CLAMPING COLLAR.	2"	2"	2"	-	-	-	-	COORDINATE AND PROVIDE GRATES AS REQUIRED PER KITCHEN DRAWINGS.
L-1-	YES	LAVATORY WALL MOUNTED HOT AND COLD WATER STD/ACCESSIBLE	"KOHLER" KINGSTON NO. K-2005, WALL HUNG, VITREOUS CHINA WITH CONTOURED BACK AND SIDE SPLASH SHIELDS, FRONT OVERFLOW, CONCEALED ARM RECESS, 4" CENTERS, 21-1/4"x18-1/8" D SHAPED BOWL.	"CHICAGO" 3600-E2805AB FAUCET, PUSH LEVER WITH AERATOR WITH 0.5 GPM FLOW RATE. WITH VANDAL RESISTANT ECONO-FLO SPRAY OUTLET. WITH IPS CONNECTIONS, ADA COMPLIANT. PROVIDE THERMOSTATIC MIXING VALVE. SEE DETAIL XXXX. SET OUTLET TEMP TO 105F.	ADA COMPLIANT. LAVATORY GRID DRAIN WITH 1-1/4" OFFSET TAILPIECE. INTEGRAL PERFORATED GRID NO. 7723.018, CHROME FINISH. MOUNT P-TRAP FLUSH TO WALL. CARRIER: "JAY R. SMITH" 0700 OR "ZURN" Z1231	1-1/2"	2"	1-1/2"	3/4"	1/2"	3/4"	1/2"	MOUNT AT HEIGHT INDICATED ON ARCHITECTURAL DRAWINGS. PROVIDE CONCEALED ARMS AND FLOOR SUPPORT, WITH FEET OF SUPPORT SECURELY ANCHORED TO FLOOR.
SS-1-		SERVICE SINK FLOOR MOUNTED HOT AND COLD WATER JANITORS	"ACORN" TNC-24-SH-SSC, TERRAZZO-WARE, 24"x24"x12" DEEP FLOOR MOUNTED, TERRAZZO, WITH STAINLESS STEEL CAP. UNIT SHALL INCLUDE MODEL KH36 HOSE WITH WALL HANGER, KMH MOP HANGER WITH 3 SPRING LOADED GRIPS ON A STAINLESS STEEL BRACKET.	"CHICAGO" MODEL 897-CP WALL MOUNTED POLISHED CHROME FAUCET WITH VACUUM BREAKER, ADJUSTABLE TOP BRACE, AND 3/4" MALE THREADED HOSE OUTLET.		2"	3"	3"	3/4"	3/4"	3/4"	3/4"	AS PART OF ROUGH-IN FOR FAUCET, PROVIDE SUITABLE BLOCKING FOR TOP BRACE. PROVIDE CAP WITH FLANGE ON SIDES ADJACENT TO WALLS.
TP-		TRAP PRIMER	"PRECISION PLUMBING PRODUCTS" PRIME TIME TRAP PRIMING ASSEMBLY MODEL PT-6. WITH ATMOSPHERIC VACUUM BREAKER, ADJUSTABLE 24-HOUR TIMER, MANUAL OVERRIDE SWITCH, 3/4" DNPT INLET, 1/2" OUTLETS, FLUSH MOUNTED CABINET, STAINLESS STEEL ACCESS DOOR.			-	-	-	-	3/4"	3/4"	-	120V, 6 WATTS, 16 VA HOLDING, 34 VA IN-RUSH
WC-1-	YES	WATER CLOSET FLOOR MOUNTED FLUSH VALVE ACCESSIBLE	"KOHLER"HIGHCLIFF NO. K-96057-SS, FLOOR MOUNTED, ELONGATED, SIPHON JET ACTION, 1-1/2" TOP SPUD, 16-7/8" RIM HEIGHT, 1.28 GPF, ANTIMICROBIAL.	"SLOAN" ROYAL 111 HET 1.28, ADA COMPLIANT, 1.28 GPF (MANUAL)	SEAT: "CHURCH" MODEL 295SSCT OR "BEMIS" MODEL 1955SSCT. PROVIDE WITH SELF-SUSTAINING CONCEALED CHECK HINGES, ONE PIECE STAINLESS STEEL POST HINGES, WHITE COLOR.	2"	4"	4"	1-1/4"	1"	-	-	WHERE USED FOR CBC ACCESSIBLE WATER CLOSETS, THE FLUSH VALVE HANDLE SHALL BE MOUNTED ON THE WIDE SIDE OF THE WATER CLOSET ENCLOSURE.

GENERAL NOTES:

1. WATER SUPPLIES AND STOPS.
   a. PROVIDE 85 PERCENT IPS RED BRASS PIPE, SECURELY ANCHORED TO BUILDING CONSTRUCTION, FOR EACH CONNECTION TO FAUCETS, STOPS, HOSE BIBBS, ETC. EACH FIXTURE, EXCEPT HOSE BIBBS, SHALL HAVE A STOP VALVE INSTALLED ON WATER SUPPLY LINES TO PERMIT REPAIRS WITHOUT SHUTTING OFF WATER MAINS.
   b. PROVIDE ALL WATER SUPPLIES TO FIXTURES WITH COMPRESSION SHUT-OFF STOPS WITH IPS INLETS WITH THREADED BRASS NIPPLES AT PIPE CONNECTION AND LOCK SHIELD LOOSE KEY. PROVIDE COMBINATION FIXTURES WITH COMPRESSION STOP AND IPS INLET ON EACH WATER SUPPLY FITTING. PROVIDE LOOSE KEY HANDLE FOR EACH STOP.
   c. PROVIDE 1/2 INCH RISER TUBES WITH REDUCING COUPLING FOR ALL FIXTURES, UNLESS OTHERWISE NOTED. REFER TO SPECIFICATION SECTION 22 40 00.
2. PIPE, PLUMBING FITTINGS, FIXTURES, SOLDER, AND FLUX SHALL COMPLY WITH LEAD FREE REQUIREMENTS OF THE CALIFORNIA HEALTH AND SAFETY CODE SECTION 116875. PROVIDE PRODUCTS LISTED AND LABELED AS COMPLYING WITH NSF 61, ANNEX G, OR PROVIDE OTHER EVIDENCE OF COMPLIANCE WITH THE CALIFORNIA HEALTH AND SAFETY CODE SECTION 116875. PROVIDE PRODUCT SUBMITTAL INFORMATION PROVING COMPLIANCE WITH LEAD FREE REQUIREMENTS. ALSO SEE GENERAL NOTES ON SHEET P0.1 AND SPECIFICATION SECTIONS 22 00 50, 22 10 00, AND 22 40 00.

GREASE INTERCEPTOR SCHEDULE

EQUIPMENT TAG	MFR	MODEL NO	AREA SERVED	CAPACITY (CU FT/HR)	LENGTH	HEIGHT	WIDTH	MOUNTING DETAIL	OPER WT (LBS)	REMARKS
GI-1	ZURN	GMC 500 UPC	KITCHEN 110	100	8' - 0"	4' - 7"	5' - 2"	9/P501	4750	

GAS FIRED WATER HEATER SCHEDULE

EQUIPMENT TAG	MFR	MODEL NO	LOCATION	STORAGE CAPACITY (GAL)	RECOVERY @ 100F RISE (GAL/HR)	FUEL		ELECTRICAL DATA		MOUNTING DETAIL	PIPING DIAGRAM	OPER WT (LBS)	REMARKS
						GAS CONN	INPUT (BTUH)	VOLT	PHASE				
GWH-1	BOCK	OT125N	BOILER RM 109	99	144	3/4"	1250000	120	1	1/P501	2/P501	1500	

EXPANSION TANK SCHEDULE

EQUIPMENT TAG	MFR	MODEL NO	LOCATION	MIN VOLUME TANK (GAL)	MIN ACCEPTANCE VOLUME (GAL)	MOUNTING DETAIL	OPER WT (LBS)	REMARKS
ET-1	WATTS	PLT-20	BOILER RM 109	8.5	5.882	6/P501	15	

CIRCULATING PUMP SCHEDULE

EQUIPMENT TAG	MFR	MODEL NO	LOCATION	FLOW (GPM)	HEAD (FT)	ELECTRICAL DATA			CONTROL DIAGRAM	OPER WT (LBS)	REMARKS
						WATTS	VOLT	PHASE			
CP-1	B&G	NBF-8	BOILER RM 109	1	7	39	115	1	8/M601	9	

HEAT TRACE CABLE SCHEDULE

EQUIPMENT TAG	MFR	MODEL NO	LOCATION	SETPOINT TEMP (F)	VOLT	PHASE	AMPS/FT	MOCP (AMPS)	REMARKS
HTC-1	RAYCHEM	XL-TRACE	KITCHEN 110	40	120	1	0.104	15	

WATER HAMMER ARRESTOR

PDI-WH201

P.D.I. UNITS	A	B	C	D	E	F
FIXTURE UNITS	1-11	12-32	33-60	61-113	114-154	155-330
"JOSAM"	75001A	75002B	75003C	75004D	75005E	75006F
"JR SMITH"	5005	5010	5020	5030	5040	5050

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REGISTERED PROFESSIONAL ENGINEER
BRIAN C. VAN DEUSEN
M 34234
EXPIRES 12/31/24
MECHANICAL
STATE OF CALIFORNIA

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capital engineering
RANCHO CORDOVA, CALIFORNIA

MCM - BV (PM - DESIGN TEAM) 230602.00 (PROJECT NO.)

CONSULTANT

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ARCHITECT

DSA SUBMITTAL

REVISIONS

NO.	DESCRIPTION	DATE

DATE 02/28/2025

JOB NO. Y2119.00

SHEET TITLE

PLUMBING SCHEDULES

SHEET NO.

P002

ONE AND ONE-HALF INCH = ONE FOOT
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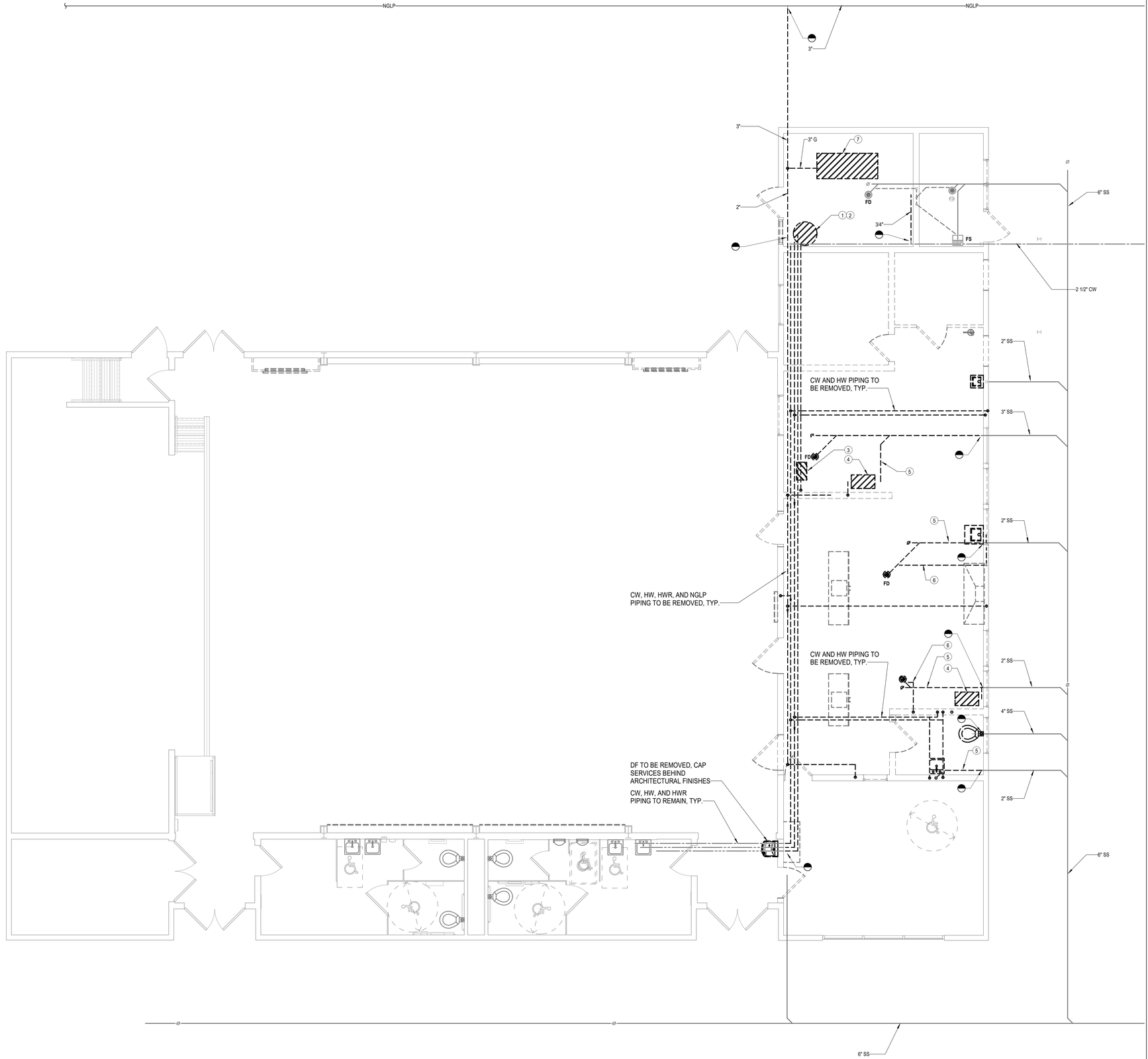

1 P111D PLUMBING DEMOLITION FLOOR PLAN

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

GENERAL SHEET NOTES

1. THE PLUMBING DESIGN HAS BEEN BASED ON RECORD DRAWINGS AND SITE OBSERVATIONS. CONTRACTOR SHALL PERFORM INVESTIGATION OF THE EXISTING CONDITIONS PRIOR TO INSTALLATION OF NEW WORK. CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF EXISTING CONDITIONS THAT MAY NOT ALLOW INSTALLATION OF NEW WORK AS SHOWN.
2. EXISTING EQUIPMENT, FIXTURES, PIPING, COMPONENTS, ETC. ARE SHOWN DIAGRAMMATICALLY AND ARE NOT EXACTLY AS SHOWN ON PLANS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO START OF WORK. RECORD THE EXISTING CONDITIONS IN "COORDINATED LAYOUTS" REQUIRED BY SPECIFICATION SECTION 220050, AND MAKE ANY ADJUSTMENTS NECESSARY TO COMPLETE THE SCOPE OF WORK. CONTRACTOR SHALL MAKE ALLOWANCE IN BID FOR THIS REQUIREMENT.

KEYNOTES

1 GAS WATER HEATER TO BE REMOVED, SALVAGED, AND RETURNED TO DISTRICT.
2 EXPANSION TANK TO BE REMOVED, SALVAGED, AND RETURNED TO DISTRICT.
3 BOOSTER WATER HEATER AND ASSOCIATED PIPING AND SUPPORTS TO BE REMOVED.
4 GREASE INTERCEPTER TO BE REMOVED.
5 BELOW SLAB WASTE PIPING TO BE REMOVED.
6 BELOW SLAB VENT PIPING TO BE REMOVED.
7 BOILER TO BE REMOVED. DISCONNECT ALL GAS AND WATER CONNECTIONS AND DEMOLISH BACK TO MAIN PIPE BRANCHES.

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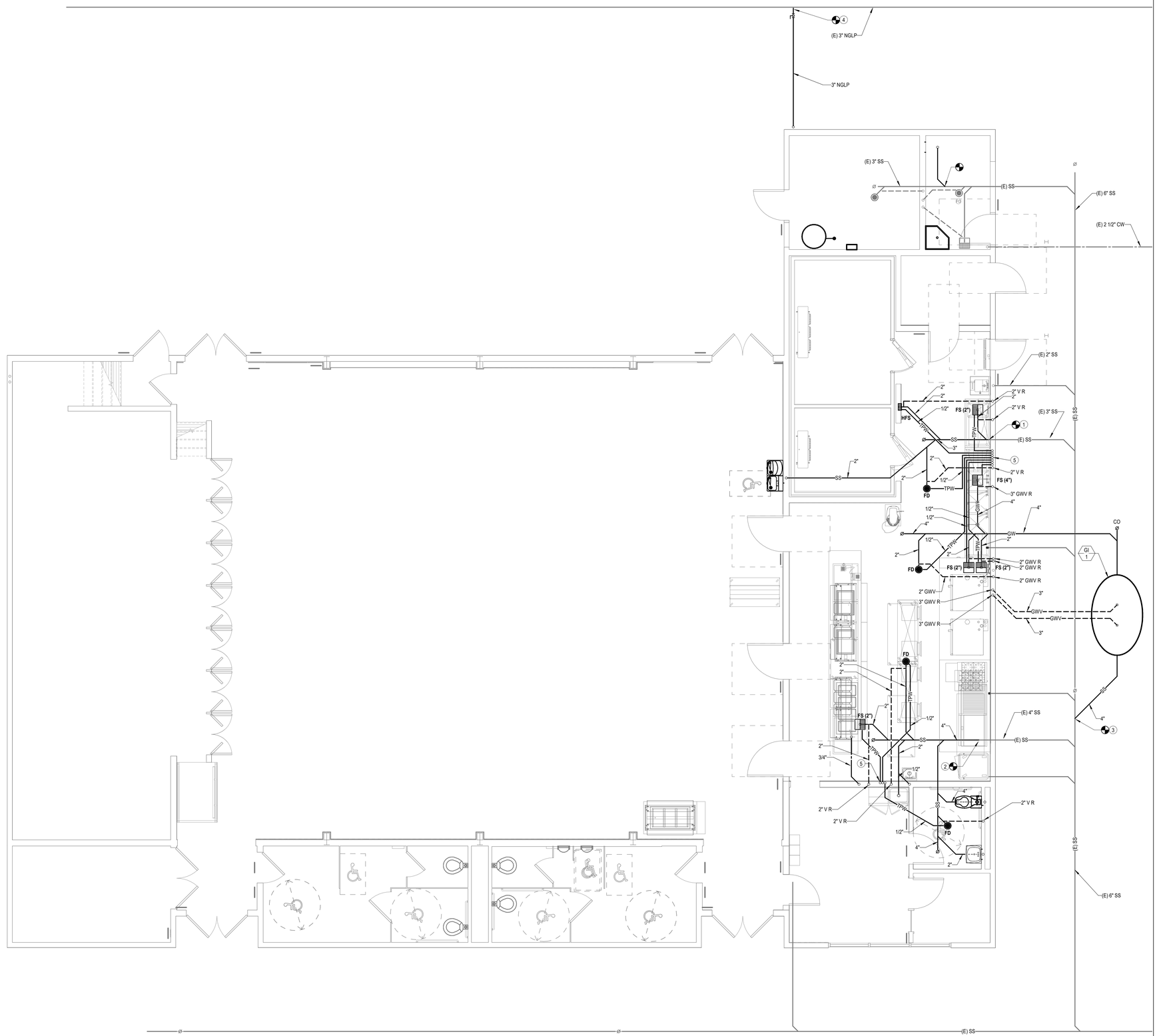
SHEET TITLE

PLUMBING DEMOLITION
FLOOR PLAN

SHEET NO.
P111D



1 P111 PLUMBING FOUNDATION PLAN

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

GENERAL SHEET NOTES

1. THE PLUMBING DESIGN HAS BEEN BASED ON RECORD DRAWINGS AND SITE OBSERVATIONS. CONTRACTOR SHALL PERFORM INVESTIGATION OF THE EXISTING CONDITIONS PRIOR TO INSTALLATION OF NEW WORK. CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF EXISTING CONDITIONS THAT MAY NOT ALLOW INSTALLATION OF NEW WORK AS SHOWN.
2. EXISTING EQUIPMENT, FIXTURES, PIPING, COMPONENTS, ETC. ARE SHOWN DIAGRAMMATICALLY AND ARE NOT EXACTLY AS SHOWN ON PLANS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO START OF WORK. RECORD THE EXISTING CONDITIONS IN "COORDINATED LAYOUTS" REQUIRED BY SPECIFICATION SECTION 220050, AND MAKE ANY ADJUSTMENTS NECESSARY TO COMPLETE THE SCOPE OF WORK. CONTRACTOR SHALL MAKE ALLOWANCE IN BID FOR THIS REQUIREMENT.
3. ALL NEW GAS PIPING SHALL BE GROUNDED PER 2022 CPC.
4. FOR PIPE PENETRATIONS AT SILL PLATE SEE STRUCTURAL DETAIL 16/S004.

KEYNOTES

1 CONNECT 3" SS TO (E) 3" SS.
2 CONNECT 4" SS TO (E) 4" SS.
3 CONNECT 4" SS TO (E) 6" SS.
4 CONNECT 3" GAS LINE TO (E) 3" WITH SOV IN VALVE BOX.
5 1/2" TPW DROP FROM TRAP PRIMER MANIFOLD TO BELOW FLOOR, TYP.

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SHEET TITLE

PLUMBING
FOUNDATION PLAN

SHEET NO.

P111

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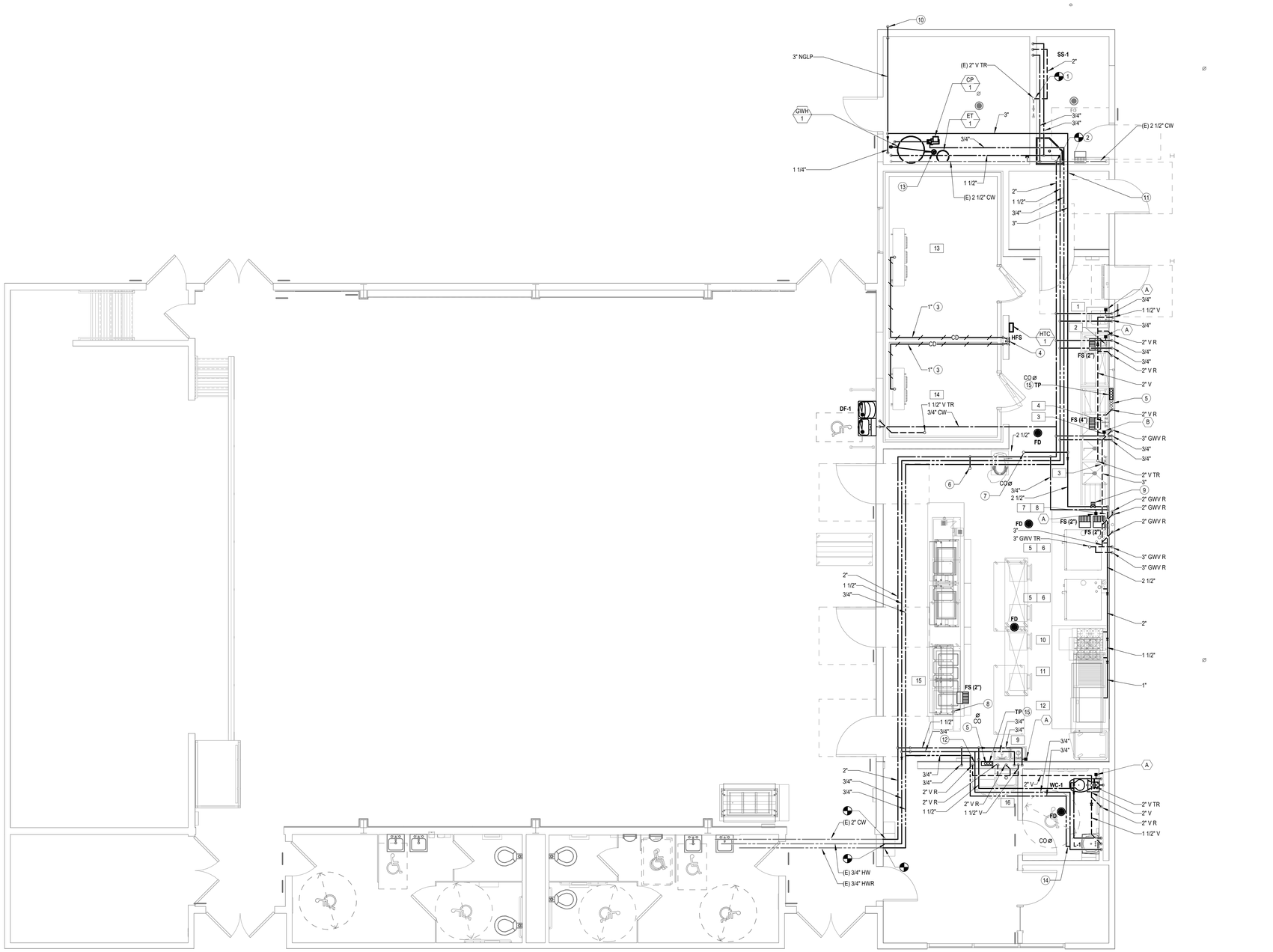

1 P112 PLUMBING FLOOR PLAN
SCALE: 1/4" = 1'-0"

N

GENERAL SHEET NOTES

1. THE PLUMBING DESIGN HAS BEEN BASED ON RECORD DRAWINGS AND SITE OBSERVATIONS. CONTRACTOR SHALL PERFORM INVESTIGATION OF THE EXISTING CONDITIONS PRIOR TO INSTALLATION OF NEW WORK. CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF EXISTING CONDITIONS THAT MAY NOT ALLOW INSTALLATION OF NEW WORK AS SHOWN.
2. EXISTING EQUIPMENT, FIXTURES, PIPING, COMPONENTS, ETC. ARE SHOWN DIAGRAMMATICALLY AND ARE NOT EXACTLY AS SHOWN ON PLANS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO START OF WORK. RECORD THE EXISTING CONDITIONS IN "COORDINATED LAYOUTS" REQUIRED BY SPECIFICATION SECTION 220050, AND MAKE ANY ADJUSTMENTS NECESSARY TO COMPLETE THE SCOPE OF WORK. CONTRACTOR SHALL MAKE ALLOWANCE IN BID FOR THIS REQUIREMENT.
3. ALL NEW GAS PIPING SHALL BE GROUNDED PER 2022 CPC.
4. FOR PIPE PENETRATIONS AT SILL PLATE SEE STRUCTURAL DETAIL 16/S004.

KEYNOTES

1 CONNECT 2" V TO (E) 2" VTR.
2 CONNECT 2" CW TO (E) 2-1/2" CW.
3 REFRIGERATOR / FREEZER CONDENSATE LINE WITH HEAT TRACE TAPE AND INSULATION.
4 TERMINATE CONDENSATE LINE OVER FLOOR SINK WITH P-TRAP PER DETAIL E/FS7.1 OF FOOD SERVICE DRAWINGS AND 1" AIR GAP.
5 1/2" TPW DROP FROM TRAP PRIMER MANIFOLD TO BELOW FLOOR, TYP.
6 3/4" CW UP THROUGH ROOF.
7 2-1/2" GAS UP THROUGH ROOF.
8 3/4" CW FROM BELOW FLOOR. COORDINATE TERMINATION WITH HOT WELL REQUIREMENTS IN FOOD SERVICE DRAWINGS.
9 2-1/2" GAS SOLENOID SHUT-OFF VALVE PROVIDED BY FOOD SERVICE EQUIPMENT CONTRACTOR, INTERCONNECTED WITH HOOD SUPPRESSION SYSTEM, AND POWERED BY DIVISION 26. SEE FOOD SERVICE DRAWINGS FOR DETAILS.
10 GAS RISER WITH BUILDING GAS SHUTOFF VALVE AND SIGN, SEE DETAIL 13/P501.
11 PIPE PENETRATIONS THROUGH (E) SHEAR WALL BETWEEN DRY FOOD STORAGE AND CUSTODIAL TO BE GROUPED SUCH THAT THEY OCCUR IN A SINGLE OPENING IN A SINGLE STUD BAY.
12 PIPE PENETRATIONS THROUGH (E) SHEAR WALL BETWEEN KITCHEN AND TEACHER WORKROOM TO BE GROUPED SUCH THAT THEY OCCUR IN A SINGLE OPENING IN A SINGLE STUD BAY ABOVE THE INFILLED (E) PASS-THROUGH. SEE A111 AND 1/S131.
13 COMBUSTION AIR INTAKE/EXHAUST VENT PIPING THROUGH ROOF, SEE DETAIL 4/P501.
14 HOT WATER RETURN PIPING, SEE DETAIL 5/P501.
15 TRAP PRIMER IN FLUSH MOUNTED CABINET. SEE P111 FOR BELOW SLAB TRAP PRIMER WATER PIPING. SEE DETAIL 3/P501 FOR ADDITIONAL INFORMATION.

KITCHEN EQUIPMENT SCHEDULE

ITEM	DESCRIPTION	WATER		WASTE		GAS	
		CW	HW	DIR.	INDIR.	MBH	CONN.
1	HAND SINK	1/2"	1/2"	1-1/2"	-	-	-
2	PREP SINK FAUCET	1/2"	1/2"	-	2"	-	-
3	POTWASH SINK FAUCET	3/4"	3/4"	-	2"	-	-
4	PRE-RINSE FAUCET	1/2"	1/2"	-	-	-	-
5	COMBI OVEN (BOTTOM UNIT)	-	-	-	-	107	3/4"
6	COMBI OVEN (TOP UNIT)	-	-	-	-	107	3/4"
7	WATER FILTER (BOTTOM UNIT)	3/4"	-	-	-	-	-
8	WATER FILTER (TOP UNIT)	3/4"	-	-	-	-	-
9	HAND SINK	1/2"	1/2"	1-1/2"	-	-	-
10	RANGE W/ OVEN BASE	-	-	-	-	136	3/4"
11	BROILER	-	-	-	-	102	3/4"
12	GRIDDLE	-	-	-	-	81	3/4"
13	WALK-IN REFRIGERATOR CD	-	-	-	1"	-	-
14	WALK-IN FREEZER CD	-	-	-	1"	-	-
15	HOT FOOR WELLS	1/2"	-	-	1"	-	-
16	MOP SINK CABINET	1/2"	1/2"	2"	-	-	-

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AGENCY APPROVAL

EL DORADO MIDDLE SCHOOL
MULTI-PURPOSE BUILDING UPGRADES
1750 WEST ST, CONCORD, CA 94521

MT. DIABLO UNIFIED SCHOOL DISTRICT

REGISTERED PROFESSIONAL ENGINEER
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EXPIRES 12/31/24
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STATE OF CALIFORNIA

DATE SIGNED: 02/28/2025

capital engineering
RANCHO CORDOVA, CALIFORNIA
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230602.00 PROJECT NO.

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ARCHITECT

DSA SUBMITTAL

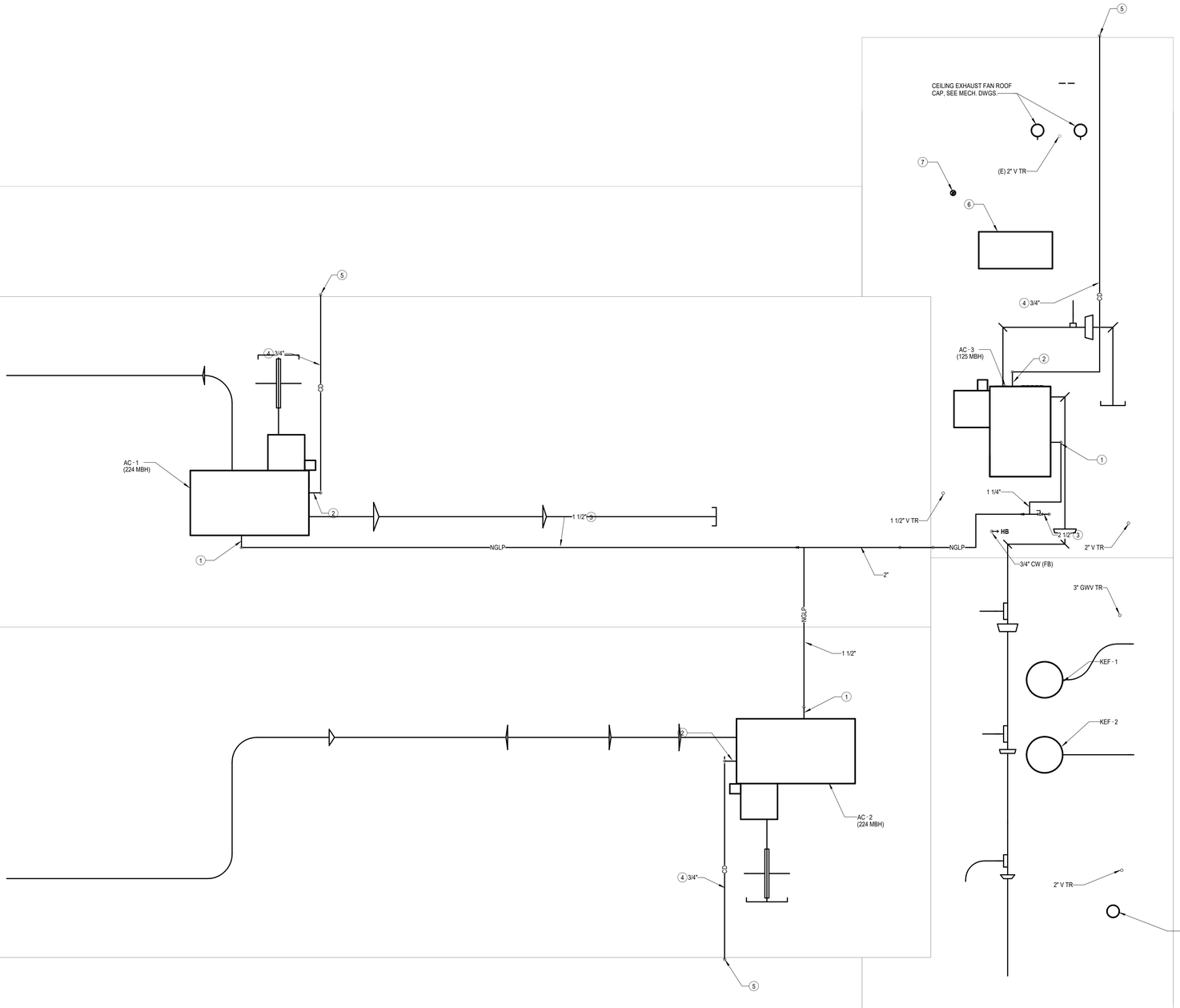
REVISIONS

NO.	DESCRIPTION	DATE

DATE 02/28/2025
JOB NO. Y2119.00
SHEET TITLE

PLUMBING FLOOR PLAN

SHEET NO.
P112



1 PLUMBING ROOF PLAN
P121
SCALE: 1/4" = 1'-0"

N

GENERAL SHEET NOTES

1. THE PLUMBING DESIGN HAS BEEN BASED ON RECORD DRAWINGS AND SITE OBSERVATIONS. CONTRACTOR SHALL PERFORM INVESTIGATION OF THE EXISTING CONDITIONS PRIOR TO INSTALLATION OF NEW WORK. CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF EXISTING CONDITIONS THAT MAY NOT ALLOW INSTALLATION OF NEW WORK AS SHOWN.
2. EXISTING EQUIPMENT, FIXTURES, PIPING, COMPONENTS, ETC. ARE SHOWN DIAGRAMMATICALLY AND ARE NOT EXACTLY AS SHOWN ON PLANS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO START OF WORK. RECORD THE EXISTING CONDITIONS IN "COORDINATED LAYOUTS" REQUIRED BY SPECIFICATION SECTION 220050, AND MAKE ANY ADJUSTMENTS NECESSARY TO COMPLETE THE SCOPE OF WORK. CONTRACTOR SHALL MAKE ALLOWANCE IN BID FOR THIS REQUIREMENT.

KEYNOTES

1 CONNECT GAS LINE TO AC UNIT WITH GAS SHUT-OFF VALVE, LINE SIZE 6" DIRT LEG, AND UNION, SEE DETAIL 10/P501.
2 CONNECT CONDENSATE DRAIN LINE TO AC UNIT WITH P-TRAP, SEE DETAIL 10/P501.
3 FOR GAS PIPE SUPPORT ON ROOF SEE DETAIL 8/P501, TYP.
4 FOR CONDENSATE DRAIN PIPE SUPPORT ON ROOF SEE DETAIL 7/P501, TYP.
5 TERMINATE CONDENSATE DRAIN LINE OVER GUTTER WITH ELBOW DOWN AND 2" AIR GAP.
6 REMOTE REFRIGERATION CONDENSING UNIT, REFER TO FOOD SERVICE PLANS. COORDINATE EXACT LOCATION TO MAINTAIN ALL REQUIRED CLEARANCES.
7 COMBUSTION AIR INTAKE/EXHAUST VENT PIPING THROUGH ROOF, SEE DETAIL 4/P501.

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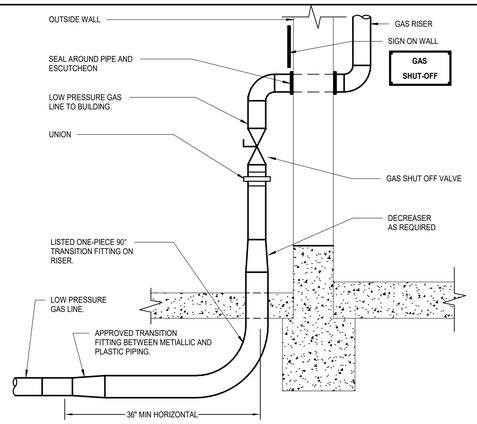
PLUMBING ROOF PLAN

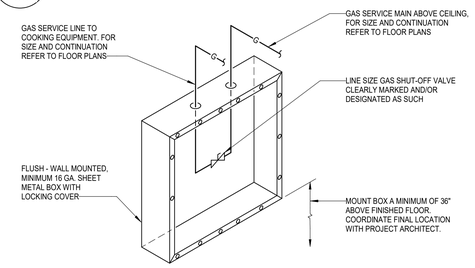
SHEET NO.
P121

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET



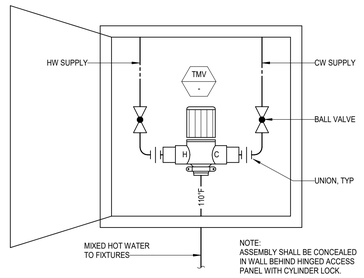
13 P501 GAS SHUT OFF VALVE

SCALE: NONE



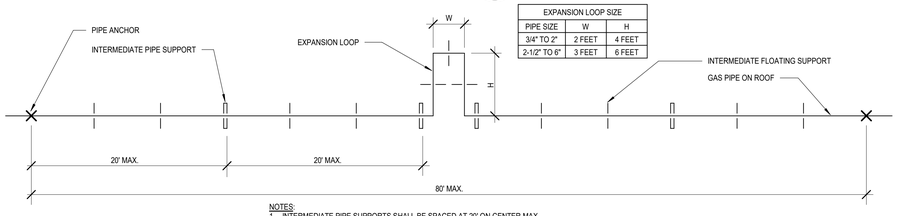
12 P501 GAS SOV IN WALL BOX

SCALE: 1" = 1'-0"



11 P501 THERMOSTATIC MIXING VALVE

SCALE: NONE



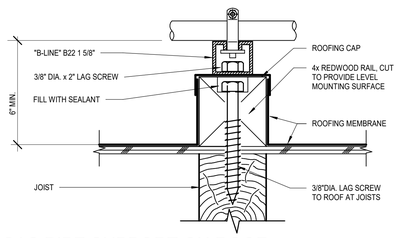
EXPANSION LOOP SIZE		
PIPE SIZE	W	H
3/4" TO 2"	2 FEET	4 FEET
2-1/2" TO 6"	3 FEET	6 FEET

NOTES:

1. INTERMEDIATE PIPE SUPPORTS SHALL BE SPACED AT 20' ON CENTER MAX.
2. INTERMEDIATE FLOATING SUPPORTS SHALL BE SPACED BETWEEN INTERMEDIATE PIPE SUPPORTS WITH SPACING AS REQUIRED TO MEET THE MAXIMUM PIPE SPACING REQUIREMENTS OF SPECIFICATIONS ECTION 22 00 50.
3. INTERMEDIATE SUPPORTS AND INTERMEDIATE FLOATING SUPPORTS SHALL HAVE PIPE CLAMPS INSTALLED LOOSE AROUND PIPE TO ALLOW LONGITUDINAL MOVEMENT OF THE PIPE. PIPE ANCHORS SHALL HAVE PIPE CLAMPS INSTALLED TIGHT AROUND PIPE TO PROVIDE SECURE ANCHORAGE.
4. "METRAFLEX" METRALOOP MAY BE USTED IN LIEU OF THE PIPED EXPANSION LOOP.
5. PROVIDE "Z" BENDS WHERE APPLICABLE.

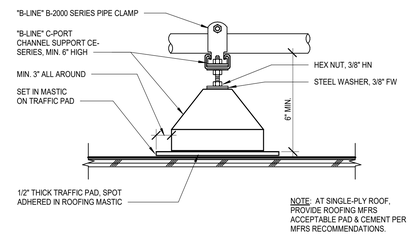
9 P501 GREASE INTERCEPTOR

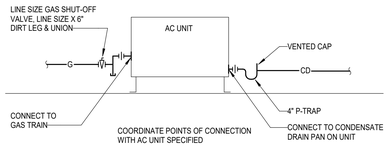
SCALE: NONE



8 P501 GAS PIPE SUPPORT ON ROOF

SCALE: NONE





10 P501 AC UNIT PIPING

SCALE: NONE

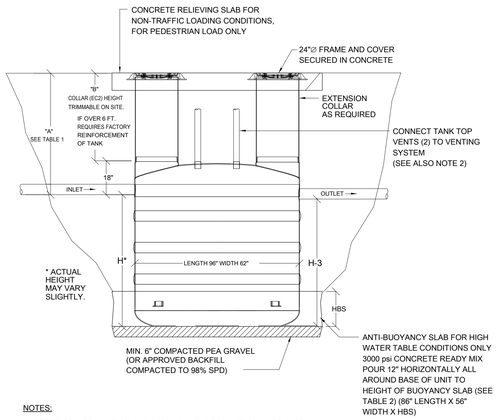
TABLE 1

BURIAL DEPTH	A	B
Max.	7'-6"	6 ft.
Min.with Traffic	36"	18"
Min. no Traffic	24"	** 10"

** MAY VARY DEPENDING ON VENT PIPING AND FLOOR SLAB

TABLE 2

PROCEPTOR SEPARATOR MODEL	INLET INVERT TO TANK BOTTOM (H*)	HEIGHT OF BUOYANCY SLAB (HBS)	DRY WEIGHT OF TANK
GMC 500 UPC	33"	18"	565 lbs



NOTES:

1. REFER TO INSTALLATION PROCEDURE AND INSTALLATION CHECKLIST.
2. PROCEPTOR SEPARATORS MUST BE INSTALLED IN ACCORDANCE WITH ALL RELEVANT FEDERAL, PROVINCIAL/STATE, AND LOCAL CODES INCLUDING LOCAL PLUMBING CODE.
3. US PATENT # 5,746,912; CDN PATENT # 2,195,822

NOTE: TOTAL PIPE WIEGHT LIMIT OF 40# MAX. AT EA. SUPPORT.

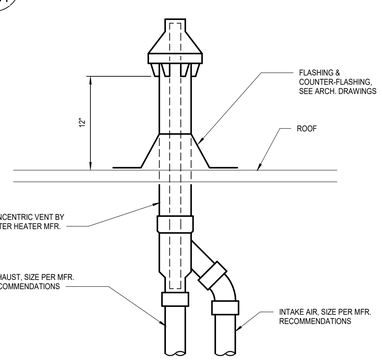
CONDENSATE SUPPORT

2022 CPC TABLE 1210.2.4.1 SUPPORT OF PIPPING

STEEL PIPE, NOMINAL SIZE OF PIPE (IN.)	SPACING OF SUPPORTS (FT.)	NOMINAL SIZE OF TUBING SMOOTH-WALL (IN.)	SPACING OF SUPPORTS (FT.)
1/2	6	1/2	4
3/4 OR 1	8	5/8 OR 3/4	6
1-1/4 OR LARGER (HORIZ.)	10	7/8 OR 1 (HORIZ.)	8
1-1/4 OR LARGER (VERT.)	EVERY FLOOR LEVEL	1 OR LARGER (VERT.)	EVERY FLOOR LEVEL

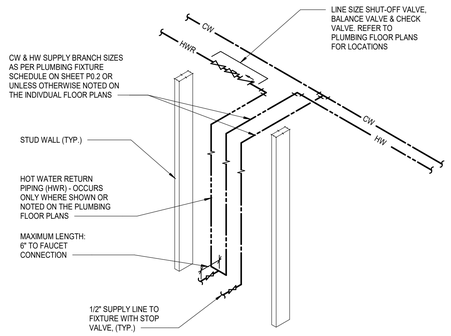
7 P501 CD PIPE SUPPORT ON ROOF

SCALE: NONE



6 P501 EXPANSION TANK MOUNTING

SCALE: NONE

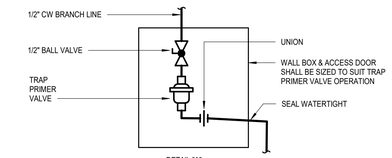


5 P501 HOT WATER RETURN PIPE

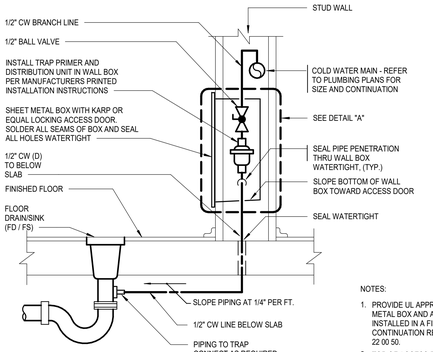
SCALE: NONE

4 P501 INTAKE EXHAUST PIPING THRU ROOF

SCALE: NONE



DETAIL "A"



NOTES:

1. PROVIDE UL APPROVED FIRE WRAP AROUND SHEET METAL BOX AND A FIRE RATED ACCESS DOOR WHEN INSTALLED IN A FIRE RATED ASSEMBLY. FOR CONTINUATION REFER TO SPECIFICATIONS SECTION 22 00 50.
2. TOP OF ACCESS DOOR SHALL BE A MAXIMUM OF 28" ABOVE FINISHED FLOOR.
3. CONTRACTOR SHALL CONFIRM FINAL LOCATION OF TRAP PRIMER/ACCESS DOOR WITH THE PROJECT ARCHITECT AND PROVIDE ELEVATION PLANS INDICATING ACCESS DOOR LOCATIONS WITH THEIR FINAL AS-BUILT/SHOP DRAWING SUBMITTAL.

3 P501 TRAP PRIMER TO FLOOR DRAIN

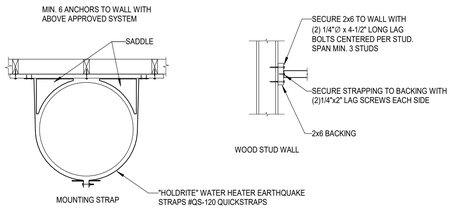
SCALE: NONE

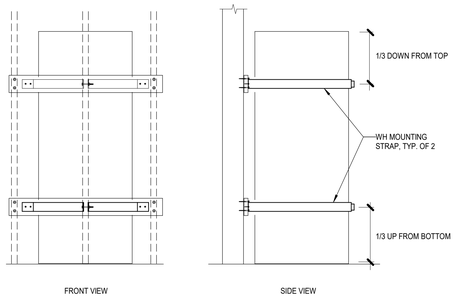
NOTES:

1. PER SECTION 110.3(C) OF TITLE 24 PART 6 ENERGY EFFICIENCY STANDARDS, INSTALL HOSE BIBB W/ SOV, AIR RELEASE VALVE, AND CHECK VALVE. INSTALL AIR RELEASE VALVE, AND CHECK VALVE. INSTALL AIR RELEASE VALVE (LEAD FREE) ON THE INLET SIDE OF THE RECIRCULATION PUMP. NO MORE THAN 4 FT FROM THE INLET SIDE OF THE PUMP AND ON TOP OF VERTICAL RISER AT LEAST 12 INCHES IN LENGTH, OR ALTERNATIVELY INSTALL THE RECIRCULATION PUMP IN VERTICAL SECTION OF HWR LINE.
2. SEE PRODUCT SHEETS AND INSTALLATION INSTRUCTIONS FOR EXACT DIMENSIONS AND INLET/OUTLET LOCATIONS.
3. PIPE SIZE SHALL TRANSITION TO EQUIPMENT INLET/OUTLET SIZE WITHIN 3 DIAMETERS AWAY FROM CONNECTION POINT.
4. P&TRV DISCHARGE ROUTE TO FS. SEE P111 FOR FLOOR SINK LOCATION.
5. DRAIN PAN DRAIN LINE TO TERMINATE OVER FLOOR SINK WITH ELBOW DOWN. SEE P111 FOR FLOOR SINK LOCATION.
6. PROVIDE CONDENSATE NEUTRALIZATION KIT.

2 P501 GAS WATER HEATER PIPING

SCALE: NONE





1 P501 WATER HEATER SUPPORT

SCALE: NONE

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PLUMBING DETAILS

SHEET NO.

P501

ONE INCH = TWENTY FEET
ONE-SIXTEENTH INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE INCH = ONE FOOT
ONE AND ONE-HALF INCH = ONE FOOT

ONE AND ONE-HALF INCH = ONE FOOT

ONE INCH = ONE FOOT

THREE-QUARTERS INCH = ONE FOOT

ONE-HALF INCH = ONE FOOT

ONE-QUARTER INCH = ONE FOOT

ONE-EIGHTH INCH = ONE FOOT

ONE-SIXTEENTH INCH = ONE FOOT

ONE INCH = TWENTY FEET

SIGNAL SYSTEMS SYMBOLS

SYMBOL	DESCRIPTION
ID	INTRUSION ALARM MOTION DETECTOR.
IP	INTRUSION ALARM POPIT MODULE.
IDS	INTRUSION ALARM DOOR SWITCH.
IB	INTRUSION ALARM BELL.
IK	INTRUSION ALARM KEYPAD.
SUBSCRIPTS: LR RA RU CLG	DEVICE SUBSCRIPTS DESIGNATE THE FOLLOWING: = LONG RANGE = ROOF ACCESS = ROLL UP DOOR = CEILING MOUNTED
C	CLOCK.
MC	COMBINATION CLOCK/SPEAKER.
EIS	EXTERIOR INTERCOM SPEAKER.
IIS	INTERIOR INTERCOM SPEAKER.
ES	EMERGENCY/CHECK-IN CALL SWITCH.
SUBSCRIPTS: CLG	DEVICE SUBSCRIPTS DESIGNATE THE FOLLOWING: = CEILING MOUNTED
TGB	TELECOMMUNICATIONS GROUNDING BUSBAR.
TMGB	TELECOMMUNICATIONS MAIN GROUNDING BUSBAR.
DATA	DATA OUTLET. NUMBER INDICATES QUANTITY OF ACTIVE NETWORK PORTS/DROPS CHARACTER OUTSIDE DENOTES THE FOLLOWING: C = MOUNTED ABOVE COUNTER. CAM = LOCATE FOR CAMERA, VERIFY LOCATION AND REQUIREMENTS WITH OWNER. WAP = LOCATE FOR WIRELESS ACCESS POINT AT CEILING, INSTALL OWNER FURNISHED WAP. TV = LOCATE FOR TV, VERIFY LOCATION AND REQUIREMENTS WITH OWNER. P = LOCATE FOR PROJECTOR, VERIFY LOCATION AND REQUIREMENTS WITH OWNER.

FIRE ALARM SYMBOLS

SYMBOL	DESCRIPTION
EOL	FIRE ALARM END OF LINE RESISTOR.
FM	FIRE ALARM CONTROL MODULE.
MM	FIRE ALARM MONITOR MODULE.
SA	FIRE ALARM SYNC ADAPTER MODULE.
FSD	FIRE/SMOKE DAMPER, N.I.E.S. DIVISION 26 CONTRACTOR SHALL PROVIDE DISCONNECT SWITCH WITH INTERNAL PILOT LIGHT AND CONNECT AS REQUIRED TO FIRE/SMOKE DAMPER.
F	FIRE ALARM MANUAL PULL STATION.
P	FIRE ALARM PHOTO ELECTRIC SMOKE DETECTOR.
H	FIRE ALARM RATE OF RISE OR FIXED TEMPERATURE DETECTOR.
D	FIRE ALARM DUCT SMOKE DETECTOR.
S	FIRE ALARM SPEAKER.
S	FIRE ALARM SPEAKER / STROBE COMBINATION.
	FIRE ALARM CEILING MOUNTED STROBE LIGHT.
	FIRE ALARM WALL MOUNTED STROBE LIGHT.
SUBSCRIPTS: AC C cd WG WP	FIRE ALARM DEVICE SUBSCRIPTS DESIGNATE THE FOLLOWING: = ABOVE CEILING MOUNTED DEVICE = CEILING MOUNTED DEVICE = CANDELA = WIREGUARD = WEATHERPROOF

WIRING DEVICE SYMBOLS

SYMBOL	DESCRIPTION
	20 AMP 125V 3W DUPLEX CONVENIENCE RECEPTACLE.
	20 AMP 125V 3W DOUBLE DUPLEX CONVENIENCE RECEPTACLE.
	20 AMP 125V 3W DUPLEX CONVENIENCE RECEPTACLE W/ GROUND FAULT INTERRUPTER.
	20 AMP 125V 3W DOUBLE DUPLEX CONVENIENCE RECEPTACLE W/ GROUND FAULT INTERRUPTER.
	20 AMP 125V 3W SINGLE CONVENIENCE RECEPTACLE.
J	JUNCTION BOX, SIZE AND TYPE AS INDICATED OR REQUIRED.
	SPECIAL RECEPTACLE. COORDINATE TYPE WITH SPECIFIC EQUIPMENT TO BE SERVED.
ATRD QTY	RECESSED FLOOR BOX, 4-COMPARTMENT. REFER TO PLANS FOR ACTUAL DEVICE TYPES AND QUANTITIES.
SUBSCRIPTS: C TV WP IG TP USB CR D CLG	DEVICE SUBSCRIPTS DESIGNATE THE FOLLOWING: = ABOVE COUNTER MOUNTED AT +42" TO CENTER OF BOX = MOUNTED AT +82" AFF TO CENTER OF BOX TO POWER TV/MONITOR = WEATHERPROOF = ISOLATED GROUND = TAMPERPROOF = PROVIDE RECEPTACLE W/ DUAL USB CHARGING = CEILING MOUNTED CORD REEL = DEDICATED = CEILING MOUNTED, PROVIDE SUPPORT TO STRUCTURAL CEILING

LIGHTING SYMBOLS

SYMBOL	DESCRIPTION
	SURFACE MOUNTED LUMINAIRE.
	SUSPENDED LUMINAIRE.
	RECESSED MOUNTED LUMINAIRE.
	WALL MOUNTED LUMINAIRE.
	SURFACE MOUNTED LUMINAIRE.
	WALL MOUNTED LUMINAIRE.
	RECESSED DOWNLIGHT LUMINAIRE.
	CEILING OR WALL MOUNTED ILLUMINATED EXIT SIGN W/ DIRECTIONAL ARROWS NOTED ON PLANS. WORD 'EXIT' TO BE LOCATED IN SHADED FACE(S).
	WALL MOUNTED BUG-EYE LUMINAIRE CONNECTED TO 90 MINUTE BATTERY PACK.
	LUMINAIRE SHADING INDICATES LUMINAIRE CONNECTED TO EMERGENCY OR BATTERY POWER SOURCE.
B	LUMINAIRE TAG, LETTER INDICATES TYPE, SEE LUMINAIRE SCHEDULE.

LIGHTING CONTROLS SYMBOLS

SYMBOL	DESCRIPTION
S	SINGLE POLE TOGGLE SWITCH. SEE FLOOR PLANS AND DEVICE MOUNTING DETAIL ON DETAIL SHEET FOR ADDITIONAL MOUNTING HEIGHT REQUIREMENT.
	ARROW ADJACENT TO FIXTURE INDICATES OPTIC AIMING DIRECTION.
PL	PLUG LOAD ROOM CONTROLLER.
DB	DIGITAL NETWORK BRIDGE
OSH	AUTOMATIC "ON/OFF" DUAL TECHNOLOGY OCCUPANCY SENSOR, WALL MOUNTED +48" AFF TO TOP OF BOX.
DH	DIMMING CONTROL, WALL MOUNTED +48" AFF TO TOP OF BOX.
OSH	AUTOMATIC "ON/OFF" DUAL TECHNOLOGY SENSOR W/ DIMMING CONTROL, WALL MOUNTED +48" AFF TO TOP OF BOX.
R1	LIGHTING ROOM CONTROLLER ATTACHED TO JUNCTION BOX ABOVE CEILING, 1 RELAY CONTROLLER W/ 0-10V DIMMING.
R2	LIGHTING ROOM CONTROLLER ATTACHED TO JUNCTION BOX ABOVE CEILING, 2 RELAY CONTROLLER W/ 0-10V DIMMING.
R3	LIGHTING ROOM CONTROLLER ATTACHED TO JUNCTION BOX ABOVE CEILING, 3 RELAY CONTROLLER W/ 0-10V DIMMING.
SUBSCRIPTS 3W a,b,c K M MC WG WP	DEVICE SUBSCRIPTS DESIGNATE THE FOLLOWING: 3-WAY SWITCH LIGHTING/DEVICE CONTROL KEYED MASTER DIMMER MOMENTARY CONTACT WIREGUARD WEATHERPROOF

STANDARD ELECTRICAL SYMBOLS

SYMBOL	DESCRIPTION
XXXX	FEEDER TAG, SEE FEEDER SCHEDULE.
- -	EQUIPMENT DESIGNATION.
XX	NUMBERED NOTE.
- -	ENLARGED PLAN OR DETAIL CALL-OUT.
T	TRANSFORMER.
M	UTILITY METER.
	CIRCUIT BREAKER.

RACEWAY SYMBOLS

SYMBOL	DESCRIPTION
	RACEWAY INSTALLED IN CEILING OR WALL. ROUTE EXPOSED IN ALL UNFINISHED AREAS.
	RACEWAY INSTALLED BELOW FINISHED FLOOR OR GRADE.
x	EXISTING CONDUIT RUN TO BE ABANDONED. CONDUIT ABOVE THE FLOOR AND BELOW THE STRUCTURE ABOVE SHALL BE REMOVED. CONDUCTORS SHALL BE REMOVED.
	EXISTING CONDUIT RUN, VERIFY ROUTING ON THE JOB.
	ARROW AT END OF RACEWAY INDICATES HOME RUN TO RESPECTIVE PANELBOARD OR SWITCHBOARD.
	BRANCH CIRCUIT WITHOUT FURTHER DESIGNATION INDICATES A 2 #12 AWG CIRCUIT WITH 1 #12 AWG GROUND.
	STRAIGHT CROSS-LINES IN BRANCH CIRCUIT RACEWAY INDICATE NUMBER OF #12 AWG WIRES IN A CIRCUIT. SHORT LINES INDICATE UNGROUNDED CONDUCTORS. LONG LINES INDICATE NEUTRAL CONDUCTORS. WIRES SHOWN ARE IN ADDITION TO 1 #12 AWG GROUNDING CONDUCTOR.
#10	BRANCH CIRCUIT WITH GROUNDING WIRE LARGER THAN #12 AWG. NUMBER ADJACENT TO CURVED CROSS-LINE INDICATES WIRE SIZE.
#10	BRANCH CIRCUIT RACEWAY WITH WIRE OTHER THAN #12 AWG. NUMBER ADJACENT TO STRAIGHT OR CURVED CROSS-LINES INDICATES WIRE SIZE. UNGROUNDED AND NEUTRAL CONDUCTORS SHALL BE THE SAME SIZE UNLESS OTHERWISE NOTED.
	FLEX CONDUIT.
	INDICATES RACEWAY STUB, TERMINATE W/ BUSHING OR CAP IF UNDERGROUND.

POWER DISTRIBUTION SYMBOLS

SYMBOL	DESCRIPTION
X	NON FUSED DISCONNECT SWITCH. NUMBER ADJACENT INDICATES AMPERE RATING OF SWITCH. MOUNT AT +48" AFF TO TOP OF DISCONNECT.
XXA/XP/XXF	FUSED DISCONNECT SWITCH W/ CLASS 'R' DUAL ELEMENT FUSES, SIZED PER EQUIPMENT NAME PLATE RATING. NUMBER ADJACENT INDICATES AMPERE RATING OF SWITCH / POLES / FUSE RATING. REFER TO PLANS FOR ACTUAL RATINGS. FUSE SIZE INDICATED ON PLANS IS USED AS THE BASIS OF DESIGN. FINAL FUSE SIZE INSTALLED SHALL BE CONFIRMED ON THE FIELD AGAINST EQUIPMENT NAMEPLATE RATING. MOUNT AT +48" AFF TO TOP OF DISCONNECT.
XXA/XP/XXT	ENCLOSED THERMAL MAGNETIC CIRCUIT BREAKER DISCONNECT. NUMBER ADJACENT INDICATES AMPERE RATING OF SWITCH / POLES / TRIP RATING. REFER TO PLANS FOR ACTUAL RATINGS. MOUNT AT +48" AFF TO TOP OF DISCONNECT.
$ XXA	1-POLE 1-PHASE MOTOR RATED DISCONNECT SWITCH. AMPERAGE ADJACENT INDICATES AMPERE RATING OF SWITCH. SWITCH SHALL BE RATED 600V MAXIMUM FOR ALL SYSTEMS. MOUNT AT +48" AFF TO TOP OF BOX.
$ XXA	2-POLE 1-PHASE MOTOR RATED DISCONNECT SWITCH. AMPERAGE ADJACENT INDICATES AMPERE RATING OF SWITCH. SWITCH SHALL BE 600V RATED SWITCH FOR ALL SYSTEMS. MOUNT AT +48" AFF TO TOP OF BOX.
$ XXA	3-POLE 3-PHASE MOTOR RATED DISCONNECT SWITCH. AMPERAGE ADJACENT INDICATES AMPERE RATING OF SWITCH. SWITCH SHALL BE 600V RATED SWITCH FOR ALL SYSTEMS. MOUNT AT +48" AFF TO TOP OF BOX.
	DISTRIBUTION PANEL/MOTOR CONTROL CENTER.
	BRANCH CIRCUIT PANELBOARD, SURFACE MOUNTED.
	BRANCH CIRCUIT PANELBOARD, FLUSH MOUNTED.
	TERMINAL CABINET, SURFACE MOUNTED, SIZE AND TYPE AS INDICATED.
	TERMINAL CABINET, FLUSH MOUNTED, SIZE AND TYPE AS INDICATED.
X##	PULLBOX. REFER TO PULLBOX SCHEDULE & PULLBOX DETAIL.

ABBREVIATIONS

1PH, 3PH	1 PHASE, 3 PHASE
1P, 2P, 3P	1 POLE, 2 POLE, 3 POLE
3W, 4W	3 WIRE, 4 WIRE
(D)	DEMO, DEMOLISH
(E)	EXISTING
(ER)	EXISTING RELOCATED
(N)	NEW
(R)	RELOCATE
	-A-
A, AMPS	AMPERES
AC	ALTERNATING CURRENT
AF	FRAME RATING IN AMPERES
AFF	ABOVE FINISHED FLOOR
AIC	AMPERES INTERRUPTING CAPACITY
AL, ALUM	ALUMINUM
ATS	AUTO TRANSFER SWITCH
AT	TRIP RATING IN AMPERES
AWG	AMERICAN WIRE GAUGE
	-B-
BTR	BUILDING TELECOM ROOM
	-C-
C	CONDUIT
CB,C/B	CIRCUIT BREAKER
CEC	CALIFORNIA ELECTRICAL CODE
CT	CURRENT TRANSFORMER
CU	COPPER
	-D-
DC	DIRECT CURRENT
	-E-
EA	EACH
ELEC	ELECTRICAL
EMT	ELECTRICAL METALLIC TUBING
	-F-
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
FLA	FULL LOAD AMPS
FT	FOOT OR FEET
	-G-
G, GND	GROUND
GA	GAUGE
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFI	GROUND FAULT INTERRUPTER
	-H-
HOA	HAND-OFF-AUTO
HP	HORSE POWER
	-J-
J-BOX	JUNCTION BOX
	-K-
KVA	ONE THOUSAND VOLT-AMPS
KW	ONE THOUSAND WATTS
	-L-
LCP	LIGHTING CONTROL PANEL
LTG	LIGHTING
	-M-
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MLO	MAIN LUGS ONLY
MOCP	MAXIMUM OVER-CURRENT PROTECTION
MT	EMPTY CONDUIT W/ PULL-LINE
	-N-
NC	NORMALLY CLOSED
NCTC	NURSE CALL TERMINAL CABINET
NEC	NATIONAL ELECTRIC CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURER ASSOCIATION
NIES	NOT INCLUDED IN ELECTRICAL SCOPE
NL	NIGHT LIGHT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
	-O-
OCP	OVER-CURRENT PROTECTION
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED OWNER INSTALLED
	-P-
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE CONDUIT
	-R-
RLA	RUNNING LOAD AMP
RSC	RIGID STEEL CONDUIT
	-S-
SPD	SURGE PROTECTION DEVICE
SPDT	SINGLE POLE DOUBLE THROW
SPST	SINGLE POLE SINGLE THROW
SST	SOLID STATE TRIP
	-T-
TER	TELECOM EQUIPMENT ROOM
TR	TELECOM ROOM
TM	THERMAL MAGNETIC
TTB	TERMINAL BACKBOARD
	-U-
UG	UNDERGROUND
UL	UNDERWRITERS LAB.
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY
	-V-
V	VOLTS
VA	VOLT-AMPS
VAC	VOLTS ALTERNATE CURRENT
	-W-
W	WATTS
WCR	WITHSTAND & CLOSING RATING
WP	WEATHERPROOF
	-X-
XFMR	TRANSFORMER
XFER	TRANSFER SWITCH

SHEET INDEX

SHEET	DESCRIPTION
E001	ELECTRICAL COVER SHEET
E002	ELECTRICAL NOTES
E111	ELECTRICAL SITE PLAN
E112	ENLARGED ELECTRICAL PLAN
E121	SITE DIAGRAMS
E201D	DEMOLITION ELECTRICAL FLOOR PLAN
E211	LIGHTING FLOOR PLAN
E212	ELECTRICAL FLOOR PLAN
E213	KITCHEN ELECTRICAL FLOOR PLAN
E214	SIGNAL FLOOR PLAN
E215	FIRE ALARM FLOOR PLAN
E301	ELECTRICAL DETAILS
E302	ELECTRICAL DETAILS
E303	ELECTRICAL DETAILS
E401	LIGHTING CONTROL DETAILS
E501	FIRE ALARM RISER DIAGRAM AND CALCULATIONS
E601	TITLE 24 FORMS

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	DESCRIPTION

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SHEET TITLE

ELECTRICAL COVER SHEET

SHEET NO.

E001

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET

WIRE SCHEDULE

TYPE	DESCRIPTION
A	SUPERIOR ESSEX 54-246-3A OR SUPERIOR ESSEX 04-001-68 FOR UNDERGROUND LOCATIONS (TELEPHONE HANDSET CABLE)
B	WEST PENN 293 (SPEAKER CABLE)
BX	WEST PENN AQC293 (SPEAKER TRUNK)
C	WEST PENN 238 (CLOCK SYSTEM CABLE)
CX	3#10 THWN (CLOCK SYSTEM TRUNK)
D	REFER TO SPECIFICATIONS (DATA CABLE)
E	WEST PENN 292 (EXTERIOR SPEAKER CABLE)
EX	WEST PENN AQC292 (EXTERIOR SPEAKER TRUNK)
F	REFER TO SPECIFICATIONS (FIBER OPTIC CABLE)
G	WEST PENN 3244 (INTRUSION ALARM SYSTEM WIRING)
GX	WEST PENN AQ3245 (INTRUSION ALARM SYSTEM TRUNK)
H	2 #14 THHN/THWN (RED, BLACK) (FIRE ALARM CONVENTIONAL INITIATION WIRING)
HX	2 #12 THHN/THWN (RED, BLACK) (FIRE ALARM CONVENTIONAL INITIATION TRUNK)
I	WEST PENN D980 (FIRE ALARM ADDRESSABLE CABLE)
IX	WEST PENN AQ293 (FIRE ALARM ADDRESSABLE TRUNK)
J	REFER TO SPECIFICATIONS (TV COAX CABLE)
JX	REFER TO SPECIFICATIONS (TV COAX TRUNK)
K	SUPERIOR ESSEX SEALPIC-FSF, 12 PR, 24 AWG (TELEPHONE TRUNK - 12 PAIR)
L	SUPERIOR ESSEX SEALPIC-FSF, 25 PR, 24 AWG (TELEPHONE TRUNK - 25 PAIR)
M	SUPERIOR ESSEX SEALPIC-FSF, 50 PR, 24 AWG (TELEPHONE TRUNK - 50 PAIR)
N	2#12 THHN/THWN (FIRE ALARM NOTIFICATION WIRING)
NX	2#10 THWN (FIRE ALARM NOTIFICATION TRUNK)
P	2 #14 THHN/THWN (RED, BLACK) (CARBON MONOXIDE DETECTOR POWER WIRING)
PX	2 #12 THHN/THWN (RED, BLACK) (CARBON MONOXIDE DETECTOR POWER TRUNK)
S	2#12 THHN/THWN (VOICE EVACUATION SPEAKER CABLE)
SX	2#10 THWN (VOICE EVACUATION SPEAKER TRUNK)
T	(2) WEST PENN D980 (VOICE EVACUATION BOOSTER CABLE)
TX	(2) WEST PENN AQ293 (VOICE EVACUATION BOOSTER TRUNK)

NOTES:

1. VERIFY ALL WIRING TYPES AND QUANTITY WITH SYSTEM VENDOR REQUIREMENTS.
2. PROVIDE SPARE CABLES WHERE SHOWN.

FIRE ALARM RECORD DOCUMENTS CABINET

1. THE FIRE ALARM SYSTEM WORK SHALL INCLUDE A DOCUMENTATION CABINET, INSTALLED AT THE SYSTEM CONTROL PANEL OR OTHER APPROVED LOCATION PER NFPA 72, 7.7.2.
2. THE DOCUMENTATION CABINET SHALL BE RED WITH A HINGED, LOCKING DOOR AND SHALL BE PROMINENTLY LABELED "SYSTEM RECORD DOCUMENTS".
3. ALL RECORD AND TESTING DOCUMENTATION SHALL BE STORED INSIDE THE CABINET.
4. CONTENTS SHALL BE ACCESSIBLE BY AUTHORIZED PERSONNEL ONLY.
5. WHERE CABINET IS INSTALLED IN A LOCATION OTHER THAN THE SYSTEM CONTROL UNIT, ITS LOCATION SHALL BE IDENTIFIED AT THE SYSTEM CONTROL UNIT.
6. PROVIDE SYSTEM DOCUMENTS AS APPLICABLE:
   a. RECORD DRAWINGS/AS-BUILTS
   b. EQUIPMENT CUT SHEETS AND CA SFM LISTINGS
   c. ALTERNATIVE MEANS AND METHODS
   d. PERFORMANCE BASED DESIGN DOCUMENTATION (NFPA 72, 7.3.7)
   e. SYSTEM RECORD OF COMPLETION AND ANY SUPPLEMENTAL INSPECTION AND TESTING DOCUMENTATION (NFPA 72, 7.8.2)
   f. EMERGENCY RESPONSE PLAN (NFPA 72, 7.3.8)
   g. EVALUATION DOCUMENTATION (NFPA 72, 7.3.9)
   h. RISK ANALYSIS DOCUMENTATION (NFPA 72, 7.3.6)
   i. SOFTWARE AND FIRMWARE CONTROL DOCUMENTATION (NFPA 72, 23.2.2)

FIRE ALARM GENERAL NOTES

1. FURNISH AND INSTALL MODIFICATIONS TO THE EXISTING FIRE ALARM SYSTEM INCLUDING ALL WIRING AND CONNECTIONS AND OTHER MATERIALS AS SHOWN ON PLANS AND SPECIFIED HEREIN. IT IS THE INTENT THAT A COMPLETE OPERATING SYSTEM CONFORMING TO ALL APPLICABLE CODES BE INSTALLED AND THAT ANY POWER SUPPLIES, RELAYS, RESISTORS, CARDS, MODULES, PROGRAMMING, OR OTHER ITEMS REQUIRED TO ACHIEVE THIS END RESULT SHALL BE FURNISHED WHETHER OR NOT SUCH ITEM OR ITEMS ARE SHOWN OR SPECIFIED.
2. THE CONTRACT DRAWINGS AND SPECIFICATIONS INDICATE THE GENERAL SCOPE OF THE FIRE ALARM SYSTEM. THE FIRE ALARM SYSTEM CONTRACTOR SHALL LAYOUT ALL DEVICES, EQUIPMENT, CONDUIT, WIRING, ETC. AND SUBMIT DRAWINGS AS REQUIRED BY THE SPECIFICATIONS. ALL LOCATIONS AND SPACINGS SHALL CONFORM TO APPLICABLE CODES. ANY ADDITIONAL DETECTION AND SIGNALING DEVICES REQUIRED BY CODES AND THE ENFORCING AUTHORITY SHALL BE PROVIDED AS PART OF THIS CONTRACT.
3. THE SYSTEM SHALL BE FULLY AUTOMATIC WITH MANUAL STATIONS AT MAIN OFFICE AND IN ASSEMBLY AREAS.
4. THE SYSTEM SHALL BE ADDRESSABLE WITH CLASS B SIGNALING CIRCUITS (NAC'S) AND CLASS B WIRING FOR NON-ADDRESSABLE PORTIONS OF INITIATION CIRCUITS.
5. INSTALLATION OF THE FIRE ALARM SYSTEM EQUIPMENT SHALL NOT BE STARTED UNTIL SUBMITTAL HAS BEEN APPROVED BY ARCHITECT.
6. THE FIRE ALARM SYSTEM SHALL CONFORM TO THE FOLLOWING CODES:
   CALIFORNIA BUILDING CODE (CBC)
   CALIFORNIA ELECTRICAL CODE (CEC)
   CALIFORNIA FIRE CODE (CFC)
   NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) NFPA 72 WITH CALIFORNIA AMENDMENTS
7. IF FIRE ALARM TESTING RESULTS DETERMINE ALARM AUDIBILITY DOES NOT REACH 15db OVER AMBIENT NOISE LEVELS, ADDITIONAL SIGNALING DEVICES SHALL BE REQUIRED. AUDIBLE DEVICES SHALL PROVIDE A SOUND LEVEL OF NOT LESS THAN 75db AT 10 FT. OR MORE THAN 110db MAXIMUM.
8. AUDIBLE DEVICES SHALL PROVIDE THE CALIFORNIA UNIFORM FIRE ALARM SIGNAL IN TEMPORAL MODE.
9. VISUAL DEVICES SHALL NOT EXCEED 2 FLASHES PER SECOND AND SHALL NOT BE SLOWER THAN 1 FLASH PER SECOND. ALL DEVICES WITHIN THE NORMAL VIEW RANGE SHALL BE SYNCHRONIZED.
10. REFER TO DETAIL FOR DEVICE MOUNTING HEIGHTS.
11. UPON COMPLETION OF THE INSTALLATION OF THE FIRE PROTECTIVE SIGNALING EQUIPMENT, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF THE PROJECT INSPECTOR/DSA.
12. POWER SERVICE FOR FIRE ALARM CONTROL PANELS AND/OR REMOTE POWER SUPPLIES SHALL BE ON DEDICATED CIRCUITS. CIRCUIT BREAKER HANDLES FOR SUCH DEDICATED CIRCUITS SHALL BE PAINTED RED AND IDENTIFIED IN DIRECTORY AS "FIRE ALARM CIRCUIT". CIRCUIT BREAKER(S) SERVING CONTROL PANELS AND POWER SUPPLIES SHALL BE EQUIPPED WITH HANDLE LOCKS TO PREVENT BREAKERS FROM BEING OPENED BY UNAUTHORIZED PERSONS.
13. THE LOCATION OF THE DEDICATED CIRCUIT BREAKER SERVING CONTROL PANELS AND POWER SUPPLIES SHALL BE PERMANENTLY IDENTIFIED AT THE CONTROL PANELS AND POWER SUPPLIES. PROVIDE ADHESIVE BACKED NAMEPLATE TO READ "DEDICATED 120V CIRCUIT FROM _____" WITH CIRCUIT NUMBER INCLUDED IN TEXT. ATTACH TO INSIDE OF DOOR.
14. FINAL FIRE TEST SHALL BE MADE WITH PROJECT INSPECTOR AS A MINIMUM. LOCAL FIRE AUTHORITY SHALL BE NOTIFIED OF DATE AND TIME OF FINAL FIRE ALARM TESTING AND SHALL ASSIST/WITNESS SUCH TESTING WHEN ABLE.
15. FIRE ALARM CONTRACTOR SHALL PROVIDE A "RECORD OF COMPLETION" TO THE PROJECT INSPECTOR/ DSA AFTER COMPLETION OF THE OPERATIONAL ACCEPTANCE TESTS. THE RECORD OF COMPLETION MUST BE SIGNED BY CONTRACTOR.

FIRE ALARM MONITORING NOTE

AUTOMATIC FIRE ALARM SYSTEMS SHALL TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION AS REQUIRED BY NFPA 72. THE SUPERVISING STATION SHALL BE LISTED AS EITHER UUFX OR UUJS BY UNDERWRITERS LABORATORY OR SHALL MEET THE REQUIREMENTS OF FACTORY MUTUAL RESEARCH APPROVAL STANDARD 3011. SUPERVISION OF SYSTEM AND LEASED TELEPHONE LINES SHALL BE ARRANGED BY OWNER.

MEP COMPONENT ANCHORAGE NOTES

ALL MECHANICAL, PLUMBING AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC, SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26 AND 30.

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/120 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MATTER APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORTS 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.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL, AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.

PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTION 13.6.5, 13.6.6, 13.6.7, 13.6.8, AND 2022 CBC, SECTIONS 1617A.1.24; 1617A.1.25 AND 1617A.1.26.

THE METHOD SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G. HCAi OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

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

MP□ MD□ PP□ E■ OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

MP□ MD□ PP□ E□ OPTION 2: SHALL COMPLY WITH HCAi (OSHPD) PRE-APPROVAL (OPM #) #0052-13.

ELECTRICAL SCOPE NOTE

THESE ELECTRICAL DRAWINGS INDICATE THE GENERAL SCOPE OF THE PROJECT IN TERMS OF ELECTRICAL DESIGN CONCEPT, MAJOR ELECTRICAL ELEMENTS, AND THE TYPE OF ELECTRICAL SYSTEMS. AS SCOPE DOCUMENTS, THESE DRAWINGS DO NOT NECESSARILY INDICATE OR DESCRIBE ALL WORK REQUIRED FOR FULL PERFORMANCE AND COMPLETION OF THE REQUIREMENTS. ON THE BASIS OF THE GENERAL SCOPE INDICATED OR DESCRIBED, THE CONTRACTOR SHALL FURNISH ALL ITEMS REQUIRED FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK.

GENERAL NOTES

1. ALL WORK SHOWN IS NEW UNLESS NOTED AS EXISTING.
2. EXISTING UNDERGROUND UTILITIES ARE PRESENT, BUT THEIR EXACT LOCATIONS ARE NOT KNOWN. CONTRACTOR SHALL LOCATE AND PROTECT BEFORE TRENCHING OR EXCAVATING IN ANY AREA. CONSULT UTILITY COMPANIES, "AS-BUILT" DRAWINGS, AND SCHOOL MAINTENANCE PERSONNEL FOR LOCATION OF EXISTING UNDERGROUND WORK. IF EXISTING PIPING OR UTILITIES ARE DAMAGED DURING CONSTRUCTION, CONTRACTOR SHALL REPAIR IMMEDIATELY AT OWN EXPENSE. NEW UNDERGROUND SHALL BE MODIFIED AS NECESSARY TO CONFORM TO EXISTING CONDITIONS.
3. INFORMATION GIVEN, CONCERNING EXISTING ELECTRICAL INSTALLATION IS AS EXACT AS COULD BE SECURED, BUT EXTREME ACCURACY IS NOT GUARANTEED. CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO BIDS AND SATISFY HIMSELF AS TO THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED.
4. EXISTING CIRCUITS AND SERVICES SHALL NOT BE INTERRUPTED EXCEPT BY SPECIFIC APPROVAL OF THE SCHOOL. ALL SHUTDOWNS SHALL BE SCHEDULED WITH THE SCHOOL.
5. ALL INTERIOR CONDUIT SHALL BE RUN CONCEALED. FISH FLEX IN EXISTING WALLS AND USE CUT-IN BOXES, UNLESS NOT POSSIBLE. WHERE CONDUIT MUST RUN EXPOSED, PROVIDE WIREMOLD SURFACE NONMETALLIC RACEWAY, SIZE AS REQUIRED (800 SERIES MINIMUM SIZE). ROUTE AS INCONSPICUOUS AS POSSIBLE. MAKE ANGLES CUTS AS REQUIRED. ATTACH TO WALL WITH SCREWS SPACED 48" MAX. SCREWS MUST PENETRATE STRUCTURAL MEMBERS WITH 1" PENETRATION. COORDINATE ROUTING WITH ARCHITECT PRIOR TO INSTALLATION.
6. CONTRACTOR SHALL VISIT SITE PRIOR TO BIDDING AND WALK ROUTES OF NEW UNDERGROUND CONDUITS. NOTE AREAS OF CONCRETE AND ASPHALT BEING CROSSED AND INCLUDE IN BID ALL COSTS FOR CUTTING AND PATCHING AS SHOWN ON DETAILS.
7. PROVIDE TRAFFIC RATED (H/20 LOAD) COVER AND BOXES FOR ALL PULLBOXES UNLESS SPECIFICALLY NOTED OTHERWISE.
8. REFER TO DETAILS ON STRUCTURAL DRAWINGS FOR PENETRATION REQUIREMENTS THROUGH FRAMING TOP PLATES, SILL PLATES, BEAMS, JOIST, RAFTERS, ETC. PROVIDE NOTCHING BORING, DRILLING, ANCHOR BOLTS AND OTHER WORK IN STRICTEST CONFORMANCE TO STRUCTURAL DETAILS.
9. COORDINATE THE EXACT LOCATIONS OF FLOOR OUTLETS/BOXES WITH OWNER AND INSPECTOR PRIOR TO ROUGH-IN.
10. PROVIDE GROUND ROD AND GROUND BOX AT EACH RELOCATABLE CLASSROOM AND CONNECT TO (E) PANEL, METAL WATER PIPING, AND BUILDING STEEL FRAME. SEE "GROUNDING DETAIL".
11. PORTABLE BUILDINGS HAVING NON-PINNED SLIDING FOUNDATIONS SHALL BE CONNECTED USING 10. FLEXIBLE CONDUIT PER DETAILS. PORTABLE BUILDINGS WITH NON-SLIDING PINNED FOUNDATIONS SHALL BE CONNECTED WITH RIGID CONDUIT, TIGHT TO BUILDING (FLEX CONNECTIONS WILL NOT BE ACCEPTABLE). VERIFY FOUNDATION TYPE WITH INSPECTOR OF RECORD OR DISTRICT PRIOR TO INSTALLATION OF ANY CONDUIT ON BACK OF BUILDING.
12. ALL CONDUIT RUNS PASSING DIRECTLY FROM ONE PORTABLE BUILDING TO ANOTHER SHALL SPAN THE SPACE BETWEEN BUILDINGS WITH SEALTITE FLEX. THIS REQUIREMENT IS INDEPENDENT OF FOUNDATION TYPE.

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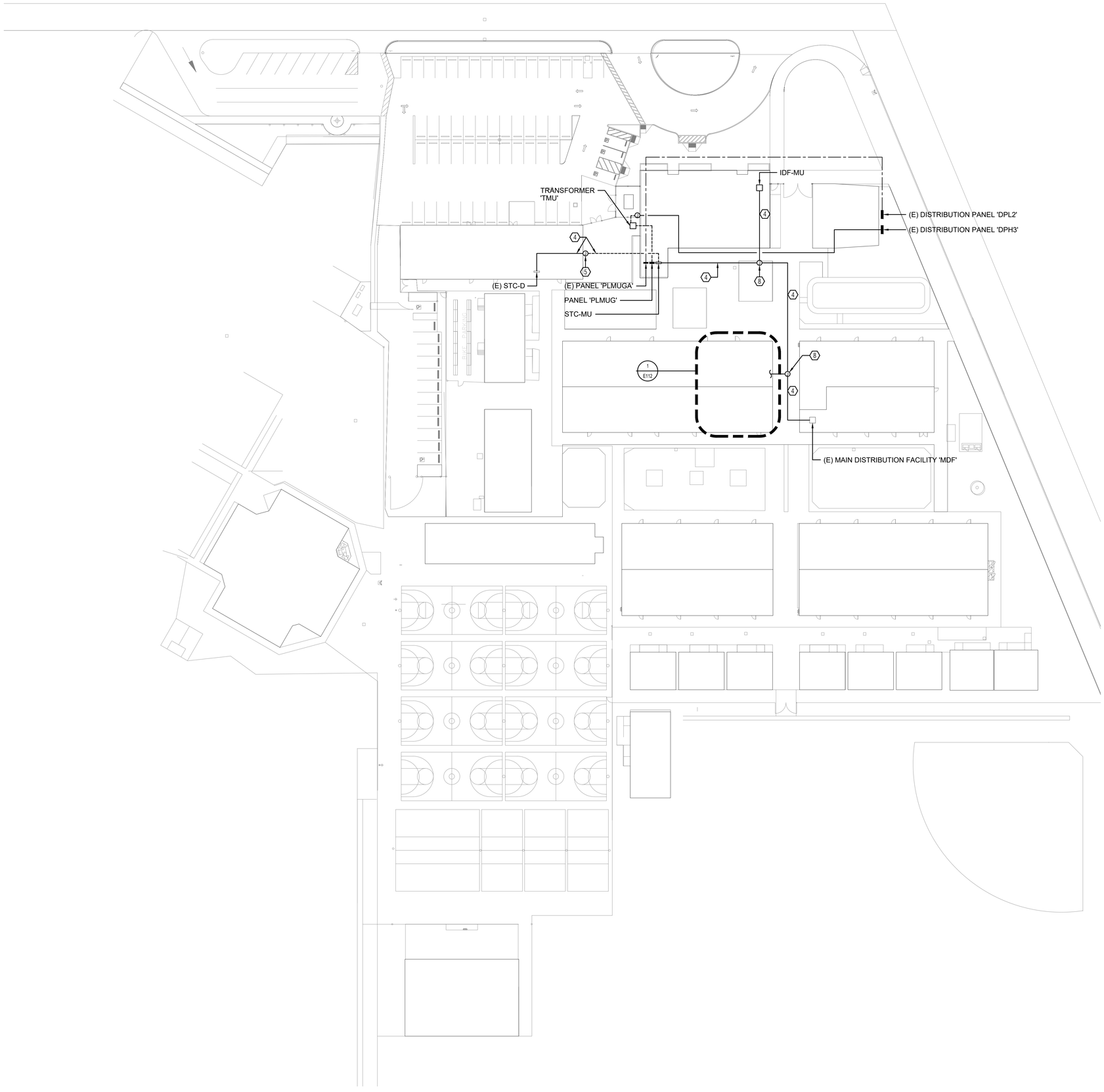
ONE INCH = TWENTY FEET



1 ELECTRICAL SITE PLAN
1" = 30'-0"

NORTH

NUMBERED NOTES

1. NOT USED.
2. NOT USED.
3. NOT USED.
4. (N) SIGNAL FEEDERS, REFER TO DIAGRAM.
5. RISE ON BUILDING EXTERIOR UP TO A 24" x 24" x 6" NEMA 3R JUNCTION BOX HIGH ON THE WALL.
6. ENTER BUILDING UNDER (E) FOOTING. FIELD VERIFY EXACT REQUIREMENTS.
7. INSTALL ON ROOF/CANOPY.
8. NEMA 4X BOX ON CANOPY.

IDENTIFICATION STAMP
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APP: 01-121540 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 3/28/2025

AGENCY APPROVAL

EL DORADO MIDDLE SCHOOL
MULTI-PURPOSE BUILDING UPGRADES

1750 WEST ST, CONCORD, CA 94521

MT. DIABLO UNIFIED SCHOOL DISTRICT

EDGE
Project Number K266
Contact Chris
1151 Harbor Bay Pkwy, Ste 123A
Alameda, CA 94502
510.634.7200
Sacramento | Alameda | Irvine

REGISTERED PROFESSIONAL ENGINEER
No. E 017376
ELECTRICAL
STATE OF CALIFORNIA
02/26/2025

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ARCHITECT

DSA SUBMITTAL

REVISIONS

	DESCRIPTION

DATE 02/28/2025

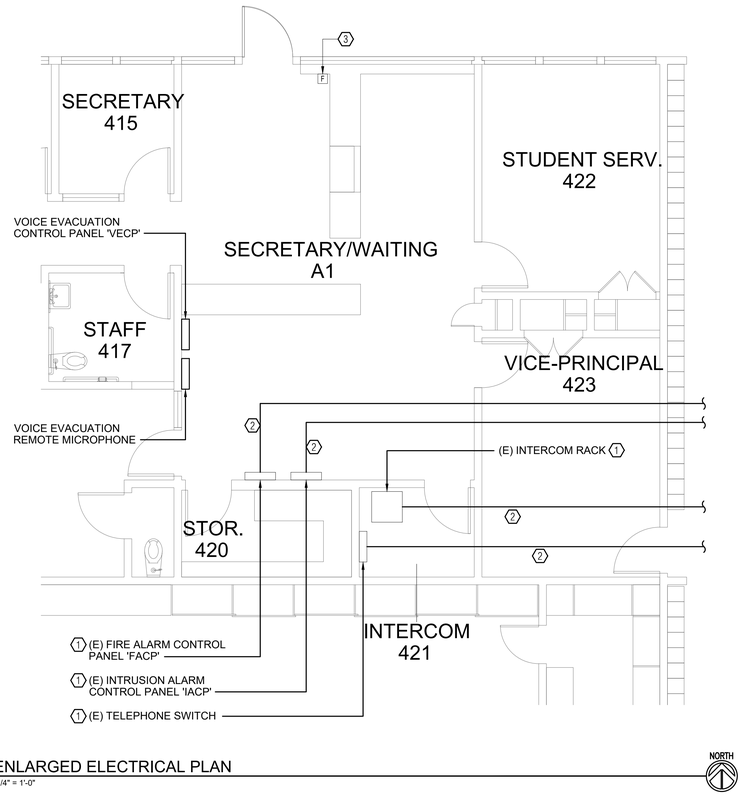
JOB NO. Y2119.00

SHEET TITLE

ELECTRICAL SITE PLAN

SHEET NO.

E111



1 ENLARGED ELECTRICAL PLAN
1/4" = 1'-0"

NORTH

NUMBERED NOTES

1. PROVIDE ALL PARTS, CARDS, PROGRAMMING, ETC. AS REQUIRED.
2. REFER TO SITE DIAGRAM FOR CONDUIT AND WIRE REQUIREMENTS.
3. (E) MANUAL PULL STATION SHOWN FOR REFERENCE.

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ARCHITECT

DSA SUBMITTAL

REVISIONS

	DESCRIPTION

DATE 02/28/2025
JOB NO. Y2119.00
SHEET TITLE

ENLARGED ELECTRICAL PLAN

SHEET NO.
E112

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET

PANEL PLMUG

SECTION	1 OF 1	BUS RATING:	400 AMP
SERVING	NORMAL	X MAIN BREAKER:	
LOCATION:	RM	MOUNTING:	FLUSH
			MAIN LUGS ONLY
PANEL A.I.C.	42,000	X	SURFACE
			FED-THRU LUGS

THREE PHASE: 4-WIRE — VOLTAGE: 208/120Y

LOAD DESCRIPTION	KVA LOAD CONT.	RECP.	MOTOR	NON	C. B. AMP	POLE	CKT #	PH	CKT #	C. B. POLE	C. B. AMP	KVA LOAD CONT.	RECP.	MOTOR	NON	LOAD DESCRIPTION
AIR CURTAIN - E1			0.41		20	1	1	A	2	2	20				1.80	COMBI OVEN - E2
FIRE SYSTEM - E3				0.60	20	1	3	B	4	-	-				1.80	-
SPARE					20	1	5	C	6							(shunt trip)
MOBILE WARMING CABINET - E5				1.70	20	1	7	A	8	2	20				1.80	COMBI OVEN - E2
SPARE					20	1	9	B	10	-	-				1.80	-
MILK COOLER/COLD WELL - E11/E12				0.40	20	1	11	C	12							(shunt trip)
MILK COOLER/COLD WELL - E11/E12				0.40	20	1	13	A	14	2	20				1.80	COMBI OVEN - E2
RANGE - E4				0.12	20	1	15	B	16	-	-				1.80	-
(shunt trip)							17	C	18							(shunt trip)
LOAD CENTER - E10				5.60	60	3	19	A	20	2	20				1.80	COMBI OVEN - E2
-				5.60	-	-	21	B	22	-	-				1.80	-
-				5.60	-	-	23	C	24							(shunt trip)
RECEPTACLES					20	1	25	A	26	1	20					EM LIGHTING
RECEPTACLES					20	1	27	B	28	1	PFB					SPACE
RECEPTACLES					20	1	29	C	30	1	PFB					SPACE
RECEPTACLES					20	1	31	A	32	1	PFB					SPACE
MIXER - E14			0.96		20	1	33	B	34	1	15				0.20	WALK-IN FREEZER BOX - E6
CASHIER STATION - E15		0.36			20	1	35	C	36	1	PFB					SPACE
LIGHTING					20	1	37	A	38	1	PFB					SPACE
FAPS-MU/VAB-MU					20	1	39	B	40	2	15				1.80	WALK-IN FREEZER COIL - E7
SPARE					20	1	41	C	42	-					1.80	-
AC-100A			10.74			3	43	A	44	1	15				0.20	WALK-IN REF. BOX - E8
-			10.74				45	B	46	1	PFB					SPACE
-			10.74				47	C	48	1	PFB					SPACE
AC-100B			10.74			3	49	A	50	1	20				0.20	WALK-IN REF. COIL - E9
-			10.74				51	B	52	3	40			2.90		REMOTE REFRIGERATION - E13
-			10.74				53	C	54	-				2.90		-
AC-110			5.09			3	55	A	56	-				2.90		-
-			5.09				57	B	58	1	15					HTC-1
-			5.09				59	C	60	1	20					FA PANELS
ROOF RECEPTACLES		0.36			20	1	61	A	62	1	15					EXHAUST HOOD - H2
ROOF RECEPTACLES		0.36			20	1	63	B	64	1	20		0.18			RECEPTACLE
RECEPTACLES		0.36			20	1	65	C	66	1	20					SPARE
IDF RECEPTACLE		0.36			20	1	67	A	68	1	20					SPARE
SPACE					PFB	1	69	B	70	1	20					SPARE
SPACE					PFB	1	71	C	72	1	20					SPARE
SPACE					PFB	1	73	A	74	1	20					SPARE
SPACE					PFB	1	75	B	76	1	20					SPARE
SPACE					PFB	1	77	C	78	1	20					SPARE
SPACE					PFB	1	79	A	80	1	20					SPARE
SPACE					PFB	1	81	B	82	1	20					SPARE
SPACE					PFB	1	83	C	84	1	20					SPARE
TOTALS ——>	0.00	1.80	81.08	20.02								0.00	0.18	8.70	18.60	<—— TOTALS

TOTAL CONTINUOUS LOAD @ 125%:	0.00 KVA
TOTAL RECEPTACLE LOAD, 100% FOR FIRST 10KVA, & 50% FOR REMAINDER:	1.98 KVA
TOTAL NONCONTINUOUS LOAD:	38.62 KVA
TOTAL MOTOR LOAD:	89.78 KVA
LARGEST MOTOR @ 25%: 0 KVA	0.00 KVA

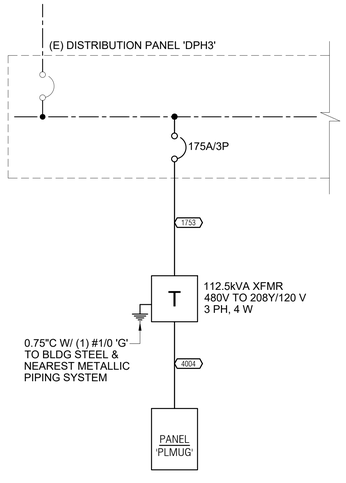
			A	B	C			
TOTAL DEMAND LOAD:	130.38 KVA	CONNECTED KVA TOTAL/PHASE	45.90	46.49	37.99	MINIMUM FEEDER CAPACITY	130.38 KVA	361.90 AMP

COPPER FEEDER SCHEDULE

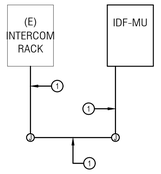
FEEDER TAG	FEEDER DESCRIPTION	CONDUIT	CONDUCTORS PHASE/NEUTRAL	CONDUCTORS GROUND	NOTES
4004	400 AMP, 3 PHASE, 4 WIRE	2-2.50"	2 SETS OF 4 #4/0 AWG	1 #2 AWG PER SET	PVC-SCH80 OK
1753	175 AMP, 3 PHASE, 3 WIRE	1-2.00"	3 #2/0 AWG	1 #6 AWG	PVC-SCH80 OK

FEEDER SCHEDULE GENERAL NOTES:

1. CONDUCTORS AND CONDUITS SHOWN IN THIS SCHEDULE ARE BASED ON COPPER CONDUCTORS WITH THHN/THWN-2 INSULATION.
2. FEEDERS CONSISTING OF MULTIPLE SETS OF CONDUCTORS AND CONDUITS ARE TO BE PROVIDED WITH THE INDICATED SIZE GROUND CONDUCTOR IN EACH CONDUIT.
3. DO NOT PROVIDE GROUNDED CONDUCTOR FOR SERVICE ENTRANCE FEEDERS.

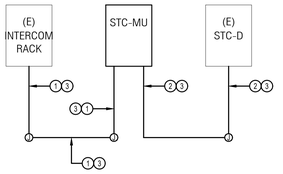


6 ONE-LINE DIAGRAM
SCALE: NONE



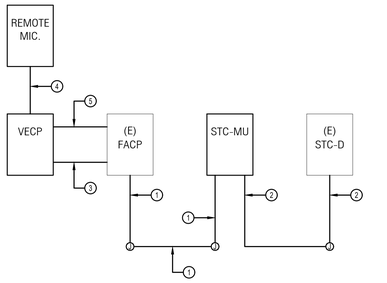
1 3.00"C-1F.

5 SITE DATA COMMUNICATIONS DIAGRAM
SCALE: NONE



1 2.00"C-24BX,2CX,6EX. 3 2.00"MT.
2 2.00"C-12BX,1CX,3EX.

3 SITE SIGNAL DIAGRAM
SCALE: NONE



1 2.00"C-1IX,1TX. 3 2.00"C-1IX,1TX. 5 0.75"C-2#12, 1#12G. (120V CKT)
2 2.00"C-1IX,2NX. 4 2.00"C-1IX,1SX.

1 SITE FIRE ALARM DIAGRAM
SCALE: NONE

1 2.00"C-2L.
2 2.00"C-1L.

4 SITE TELEPHONE DIAGRAM
SCALE: NONE

1 2.00"C-4GX.
2 2.00"C-2GX.

2 SITE INTRUSION ALARM DIAGRAM
SCALE: NONE

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AGENCY APPROVAL

EL DORADO MIDDLE SCHOOL
MULTI-PURPOSE BUILDING UPGRADES
1750 WEST ST, CONCORD, CA 94521
MT. DIABLO UNIFIED SCHOOL DISTRICT

EDGE
Project Number K266
Contact Chris
1151 Harbor Bay Pkwy, Ste 123A
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REGISTERED PROFESSIONAL ENGINEER — CHRISTOPHER M. HONG — No. E 017376 — ELECTRICAL — STATE OF CALIFORNIA
02/26/2025

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ARCHITECT

DSA SUBMITTAL

REVISIONS

	DESCRIPTION

DATE 02/28/2025
JOB NO. Y2119.00
SHEET TITLE

SITE DIAGRAMS

SHEET NO.
E121

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
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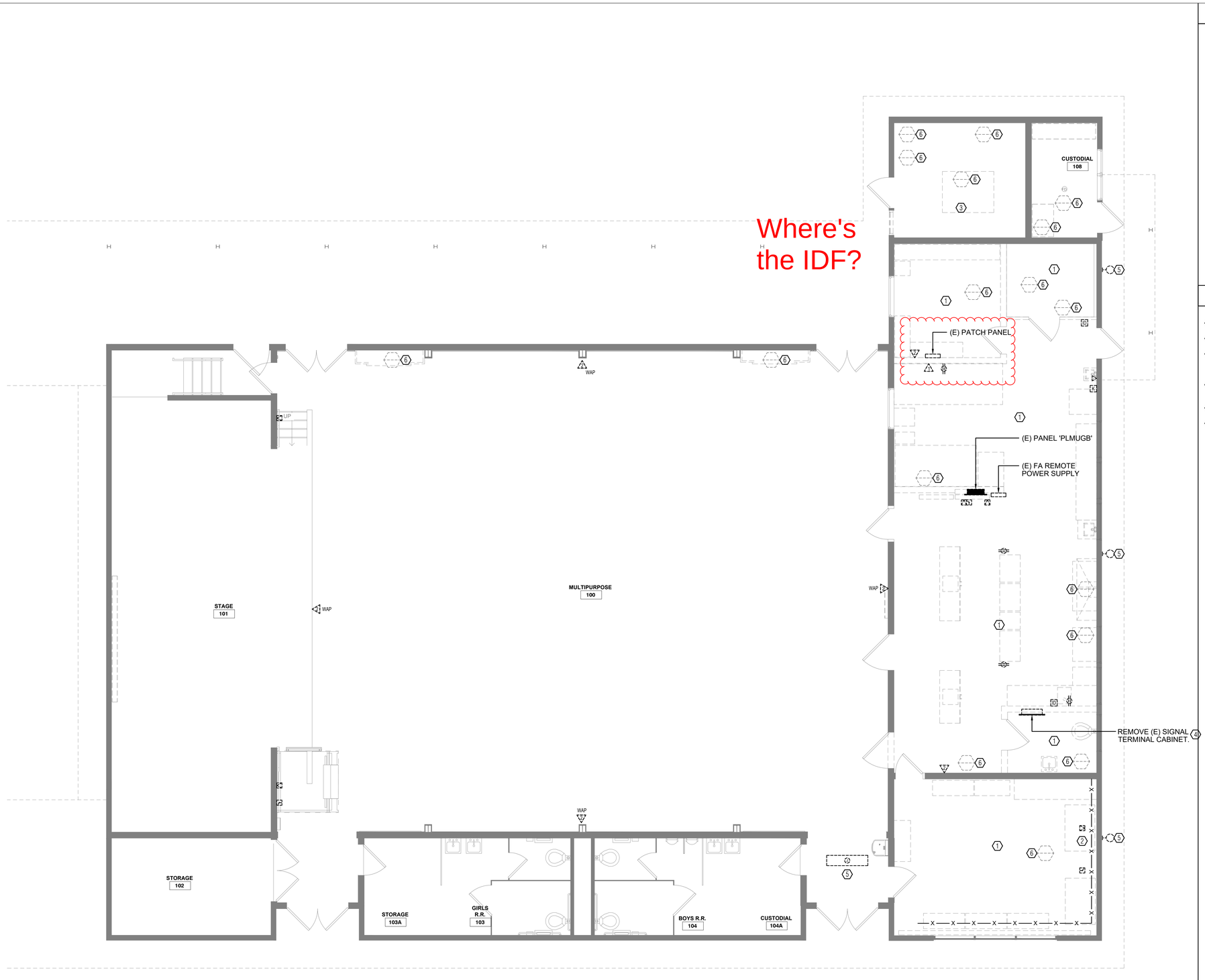
ONE INCH = TWENTY FEET



1 DEMOLITION ELECTRICAL FLOOR PLAN
1/4" = 1'-0"

NORTH

SHEET NOTES

1. IN AREAS OF NEW WORK, REMOVE ALL ABANDONED OUTLETS, WIRING, EXPOSED RACEWAYS, ETC.
2. WHERE (E) WALL/CEILING FINISHES ARE BEING REMOVED, RELOCATE ANY SURFACE RACEWAY, BOXES, WIRING, ETC. TO BE CONCEALED WITHIN WALL/CEILING.
3. REMOVE ALL ITEMS SHOWN, UNLESS NOTED TO REMAIN.
4. WHERE AN ITEM IS REMOVED, REMOVE ALL RACEWAY, WIRING, BOXES, SUPPORTS, ETC., UNLESS NOTED TO REMAIN.
5. MAKE ANY RECONNECTIONS REQUIRED TO MAINTAIN CIRCUITS TO (E) ITEMS THAT ARE TO REMAIN.
6. NOT ALL DEMO WORK IS SHOWN. CONTRACTOR SHALL FIELD VERIFY ALL REQUIREMENTS AND EXTEND OF DEMO SCOPE.

NUMBERED NOTES

1. REMOVE (E) LIGHTING.
2. REMOVE (E) SURFACE RACEWAY.
3. DISCONNECT ELECTRICAL FROM ALL EQUIPMENT THAT IS BEING REMOVED. REMOVE WIRING BACK TO SOURCE. REMOVE RACEWAYS, BOXES, SUPPORTS, ETC.
4. CUT CONDUITS BELOW SLAB. FILL WITH GROUT TO BE FLUSH WITH SLAB.
5. REMOVE (E) LIGHT FIXTURE. PROTECT (E) CIRCUIT.
6. (E) EQUIPMENT TO BE REMOVED. REFER TO ARCHITECTURAL, MECHANICAL AND PLUMBING DEMO PLANS. DISCONNECT ALL (E) ELECTRICAL.

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DATE 02/28/2025
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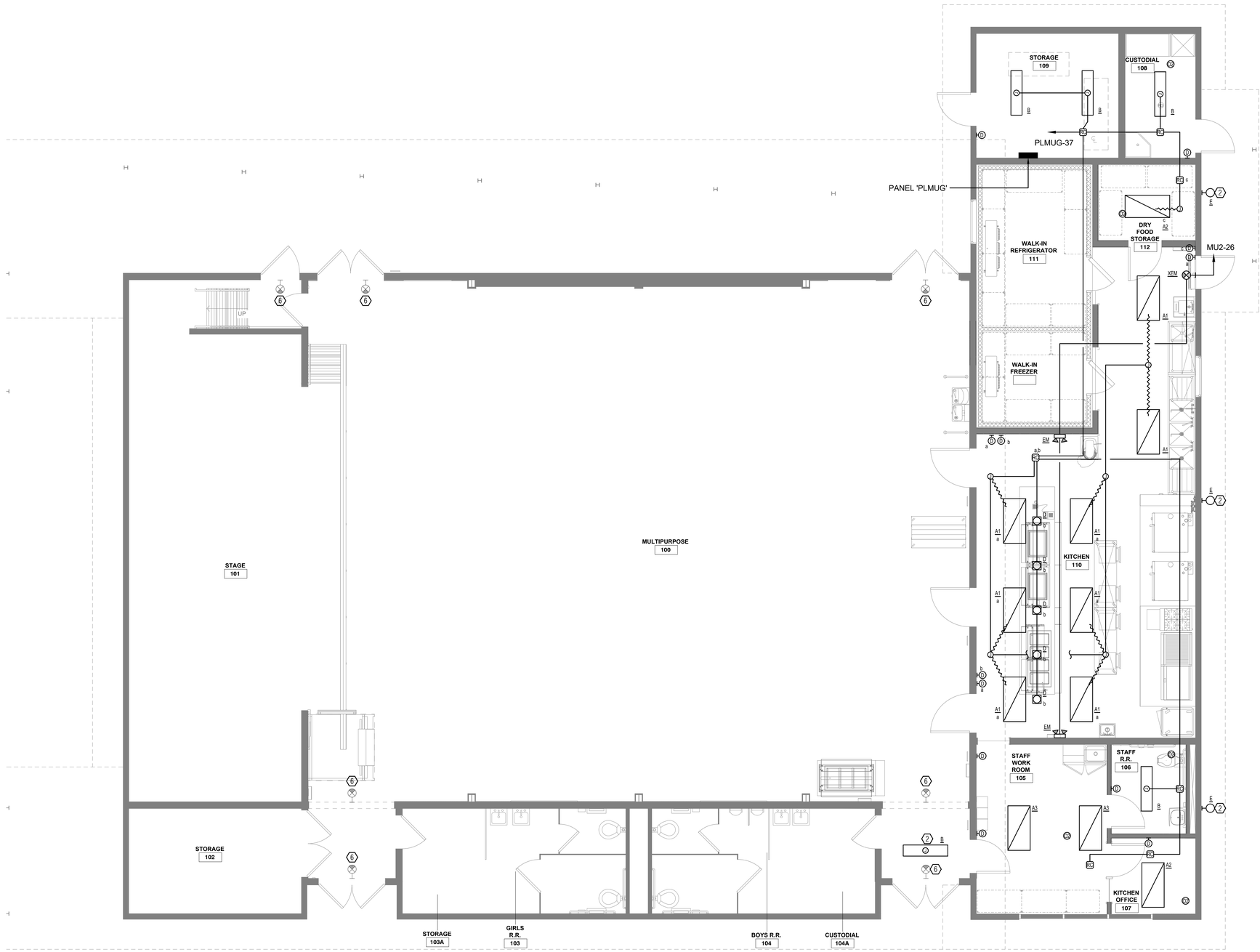
SHEET TITLE

DEMOLITION ELECTRICAL FLOOR PLAN

SHEET NO.
E201D



1 LIGHTING FLOOR PLAN
1/4" = 1'-0"

NORTH

NUMBERED NOTES

1. PROVIDE (N) BREAKERS:
   20/3 - KEF-110A
   20/3 - KEF-110B
   15/1 - CEF-106
   15/1 - GWH-1/CP-1
2. CONNECT TO (E) CIRCUIT.
3. VIA EXHAUST HOOD CONTROLLER.
4. 1"C-3#4, 1#10G.
5. EXHAUST FAN TO BE CONTROLLED BY OCCUPANCY SENSOR, REFER TO DIAGRAM.
6. (E) ILLUMINATED EXIT SIGN.

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CHRISTOPHER MING-GUNN LEE
No. E 011376
ELECTRICAL
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DESCRIPTION

DATE 02/28/2025
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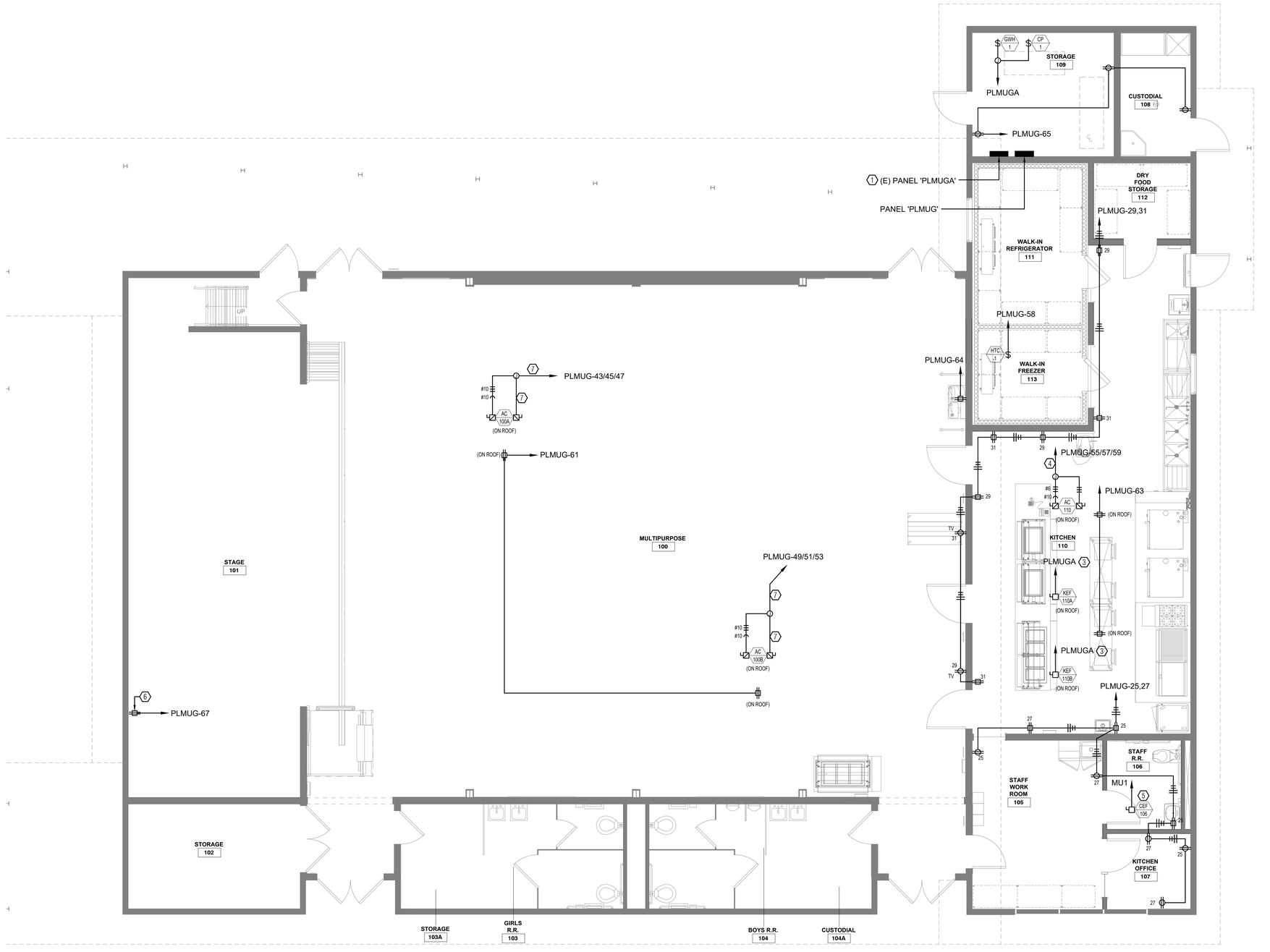
SHEET TITLE

LIGHTING FLOOR PLAN

SHEET NO.

E211

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET



1 ELECTRICAL FLOOR PLAN
1/4" = 1'-0"

NORTH

NUMBERED NOTES

1. PROVIDE (N) BREAKERS:
   20/3 - KEF-110A
   20/3 - KEF-110B
   15/1 - CEF-106
   15/1 - GWH-1/CP-1
2. CONNECT TO (E) CIRCUIT.
3. VIA EXHAUST HOOD CONTROLLER.
4. 1"C-3#4, 1#10G.
5. EXHAUST FAN TO BE CONTROLLED BY OCCUPANCY SENSOR, REFER TO DIAGRAM.
6. LOCATE FOR THE IDF.
7. 1.5"C-3#2, 1#8G.

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SHEET TITLE

ELECTRICAL FLOOR PLAN

SHEET NO.

E212

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET

FOOD SERVICE EQUIPMENT SCHEDULE

ITEM NO.	DESCRIPTION	QTY	VOLT	PH	DIRECT	PLUG	NEMA	WATTS	AMPS	HP	HEIGHT	REMARKS	NOTES
E1	AIR CURTAIN	1 EA	120	1	X	-	-	-	3.4	1/2	+86"	(3) 39W LED GLG. MTD. LIGHT FIXTURES (1) 11.5W LED LIGHT FIXTURE AT DOOR. 250W DOOR HEATER, 20W P.R.P., 100W WINDOW HEATER EC. TO PROVIDE ALL INTERCONNECTIONS	
E2	DOUBLE STACK COMBI OVEN (POWER AND DATA)	2 EA	208/240	1	-	X	6-15P	-	15	-	+18"/+50"	PROVIDE SIMPLEX RECEPTACLE IN WALL UNIT PROVIDED WITH CORD AND PLUG SET	4 5 6
E3	FIRE SYSTEM AT ANSUL CONTROL AUTOMAN PANEL	1 EA	120	1	X	-	-	-	20	-	+104"	120V/1-20AMP @ ANSUL CONTROL	
E3.1	FIRE SYSTEM (REMOTE PULL STATION)	1 EA	-	-	X	-	-	-	-	-	+48"	EMPTY FLUSH MT'D. OCTAGONAL BOX (REMOTE PULL) SEE DETAIL 1&2 FS5.4	3
E4	RANGE	1 EA	115	1	-	X	5-15P	-	1	-	+18"	PROVIDE DUPLEX RECEPTACLE IN WALL UNIT PROVIDED WITH CORD AND PLUG SET	4 6
E5	MOBILE WARMING HOLDING CABINET	1 EA	120	1	-	X	5-15P	-	14.1	-	+48"	PROVIDE DUPLEX RECEPTACLE IN WALL UNIT PROVIDED WITH CORD AND PLUG SET	6
E6	WALK-IN FREEZER (BOX)	1 EA	120	1	X	-	-	-	1.6	-	+88"	(3) 39W LED CLG MT'D. LIGHT FIXTURES (1) 11.5W LED LIGHT FIXTURE AT DOOR. 250W DOOR HEATER. 20W P.R.P, 100W HEATER EC. TO PROVIDE ALL INTERCONNECTIONS.	
E7	WALK-IN FREEZER (COIL)	1 EA	208	1	X	-	-	-	14.3	-	+74"	CONNECT TO UNIT ELECTRICAL CONNECTION AT COIL INSIDE WALK-IN REFRIGERATOR. SEE DETAIL C/FS7.1	1 2
E8	WALK -REFRIGERATOR (BOX)	1 EA	120	1	X	-	-	-	1.5	-	+88"	(2) 39W LED CLG MT'D. LIGHT FIXTURES (1) 11.5W LED LIGHT FIXTURE AT DOOR. CONTRACTOR TO PROVIDE ALL INTERCONNECTIONS	
E9	WALK-IN REFRIGERATOR (COIL)	1 EA	115	1	X	-	-	-	1.6	-	+74"	CONNECT TO UNIT ELECTRICAL CONNECTION AT COIL INSIDE WALK-IN FREEZER. SEE DETAIL C/FS7.1	1
E10	LOAD CENTER	1 EA	208/240	1	X	-	-	9288	44.65	-	+8"	PROVIDE J-BOX AT FLOOR CONNECT TO COUNTER LOAD CENTER- SERVING COUNTER TO BE FULLY WIRED AT FACTORY	6
E11	MILK COOLER	1 EA	120	1	-	X	5-15P	-	3.3	-	+18"	PROVIDE DUPLEX RECEPTACLE IN WALL UNIT PROVIDED WITH CORD AND PLUG SET.	6
E12	SALAD BAR	1 EA	208/240	1	-	X	5-15P	-	5.50	-	+18"	PROVIDE DUPLEX RECEPTACLE IN WALL UNIT PROVIDED WITH CORD AND PLUG SET.	6
E13	REMOTE REFRIGERATION	1 EA	208	3	X	-	-	-	24	-	+18"	CONNECT TO DISCONNECT LOCATED ON REFRIGERATION RACK REFER TO FS7.1 REMOTE REFRIGERATION LOCATED ON BUILDING ROOF	
E14	MIXER AND STAND	1 EA	120	1	-	X	5-15P	-	8	-	+36"	PROVIDE DUPLEX RECEPTACLE IN WALL UNIT PROVIDED WITH CORD AND PLUG SET.	6
E15	CASHIER STATION (POWER) VERIFY W/ DISTRICT FURNISHED POS UNIT	3 EA	120	1	X	-	-	-	20	-	+18"	PROVIDE (2) DUPLEX OUTLETS (VERIFY W/ DISTRICT POS REQ.)	6
E16	CASHIER STATION (POWER) ALT LOCATION VERIFY W/ DISTRICT FURNISHED POS UNIT	3 EA	120	1	X	-	-	-	20	-	+18"	PROVIDE (2) DUPLEX OUTLETS (VERIFY W/ DISTRICT POS REQ.)	6

WALK-IN REFRIGERATION ELECTRICAL (MINIMUM REQUIREMENTS UNLESS NOTED OTHERWISE)

1.- THE ELECTRICAL CONTRACTOR SHALL INSTALL AND INTER WIRE LIGHT SWITCHES AND FIXTURES REQUIRED FOR THE FOOD SERVICE EQUIPMENT AND MAKE FINAL CONNECTIONS.

2.- THE FOOD SERVICE EQUIPMENT CONTRACTOR SHALL INSTALL THE PRESSURE RELIEF PORT, DOOR HEATERS, DRAIN LINE HEATERS AND TEMPERATURE ALARM SYSTEM. INTER WIRING AND FINAL CONNECTIONS BY THE ELECTRICAL CONTRACTOR.

3.- THE ELECTRICAL CONTRACTOR SHALL INTER WIRE THE TIME CLOCK ON THE CONDENSING UNIT TO THE DEFROST RELAY ON THE UNIT EVAPORATOR LOCATED IN THE FREEZER COMPARTMENT.

4.- THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CONDUIT AND WIRING NECESSARY FOR COMPLETE AND OPERABLE SYSTEM WITH ALL CONDUIT IN SO FAR AS POSSIBLE MOUNTED ON THE EXTERIOR CEILING OF THE WALK-IN ASSEMBLY. PENETRATIONS AND ESCUTCHENON PLATES SHALL BE FURNISHED AND INSTALLED BY THE FOOD SERVICE CONTRACTOR. FOOD SERVICE EQUIPMENT CONTRACTOR IS RESPONSIBLE FOR SEALING THE INSIDE OF CONDUITS WHICH PENETRATE THE CEILING OR WALL

ELECTRICAL KEYNOTES:

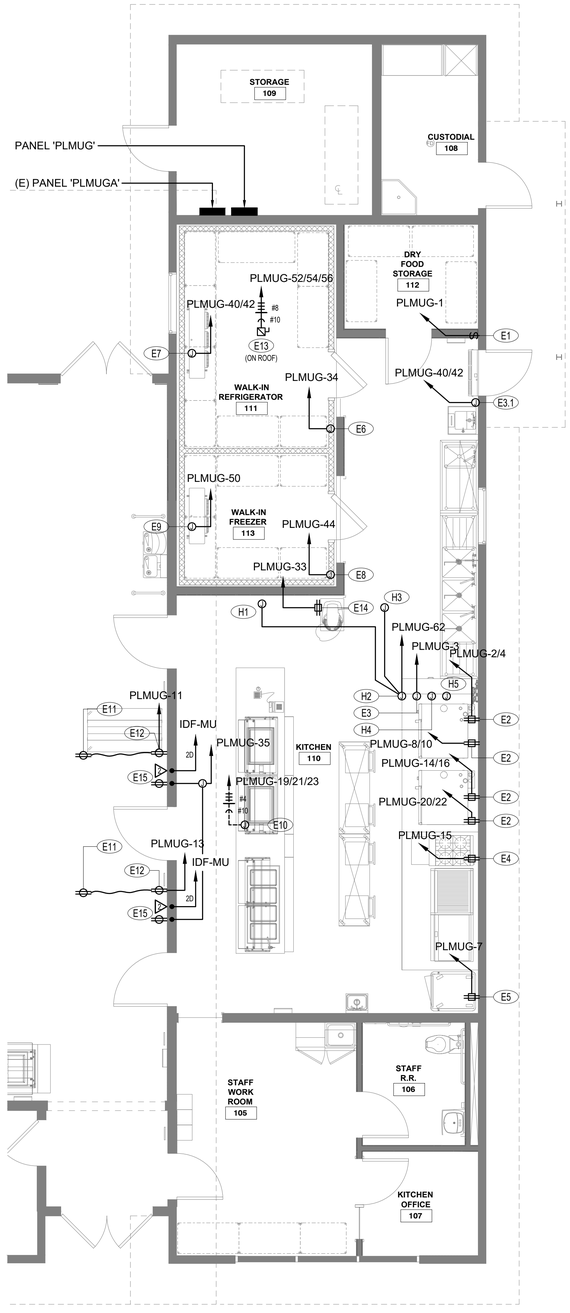
1. E.C. TO INTERCONNECT FROM REMOTE REFRIGERATION SYSTEM ITEM NO.26
2. DRAIN LINE HEATER CONNECTED TO COIL. F.S.E.C TO PROVIDE HEATER E.C TO WIRE TO COIL
3. ELECTRICAL CONTRACTOR TO PROVIDE EMPTY FLUSH MT'D. OCTAGONAL BOX @ 48" AFF. W/ EMPTY CONDUIT TO +2" ABOVE CEILING.
4. ELECTRICAL CONTRACTOR TO PROVIDE INTERLOCK WIRING FROM FIRE PROTECTION SYSTEMS TO ELEC. SHUNT TRIP BREAKERS.
5. UTILITY REQUIREMENTS ARE 1 PER DECK (4 TOTAL CONNECTIONS)
6. OWNER FURNISHED CONTRACTOR INSTALLED EQUIPMENT CONTRACTOR TO VERIFY REQUIREMENTS

EXHAUST HOOD SCHEDULE

ITEM NO.	DESCRIPTION	QTY	VOLT	PH	DIRECT	PLUG	NEMA	WATTS	AMPS	HP	HEIGHT	REMARKS	NOTES
H1	TOUCH SCREEN USER INTERFACE MOUNT +48" AFF. RECESSED IN WALL	1 EA	-	-	-	-	-	-	-	-	-	CONNECT TO ENERGY MANAGEMENT SYSTEM IN UTILITY CABINET AT END OF HOOD ITEM 8 WITH CAT-5 CABLE (NO POWER REQUIRED AT THIS LOCATION)	1 2 5
H2	EXHAUST HOOD (LIGHTS) & SMART CONTROLS SC-320110MA	1 EA	120	1	X	-	-	-	20	-	+104"	EC TO PROVIDE CONNECTION	4 5 6
H3	ENERGY MANAGEMENT SYSTEM SC-320110MA (ROOM SENSOR)	-	-	-	-	-	-	-	-	-	-	CONNECT TO ENERGY MANAGEMENT SYSTEM IN UTILITY CABINET AT END OF HOOD ITEM 13 LOW VOLTAGE WIRING (ROOM TEMPERATURE SENSOR CLG. MOUNTED)	5
H4	EXHAUST HOOD (EXHAUST FANS) & SMART CONTROLS SC-320110MA	1 EA	208	3	X	-	-	-	6	-	+104"	EC TO PROVIDE CONNECTION	6
H5	EXHAUST HOOD (EXHAUST FANS) & SMART CONTROLS SC-320110MA	1 EA	208	3	X	-	-	-	6	-	+104"	EC TO PROVIDE CONNECTION	6

ELECTRICAL KEYNOTES:

1. E.C TO INTERCONNECT SC-320110MA TO MECHANICAL EQUIPMENT ON ROOF (REFER TO MECHANICAL DRAWINGS)
2. E.C TO INTERCONNECT POWER FROM HOOD TOUCH SCREEN USER INTERFACE LOCATED ON WALL WITH SC-320110MA SMART CONTROLS
3. 120V/1 PHASE FOR LIGHTS TO ONE PRE-WIRED CONN. POINT ON HOOD FOR LIGHTS PRE-WIRED BY FACTORY.
4. REFER TO HOOD DRAWING FS5.3 FOR ELECTRICAL SCHEMATIC
5. SC-320110MA SEE FS5.3 FOR SCHEMATIC



1 KITCHEN ELECTRICAL FLOOR PLAN
1/4" = 1'-0"

NORTH

SHEET NOTES

1. REFER TO FOOD SERVICE DRAWINGS AND MECHANICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.

ELECTRICAL NOTES

1. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL ROUGH-INS, FINAL CONNECTIONS AND INTER-CONNECTIONS TO THE FOOD SERVICE EQUIPMENT
2. CONNECTIONS SHOWN ARE FOR THE FOOD SERVICE EQUIPMENT ONLY. REFER TO ELECTRICAL DRAWINGS FOR CONVENIENCE OUTLETS AND ADDITIONAL REQUIREMENTS.
3. RECEPTACLES, JUNCTION.HANDY BOXES INDICATED AT WALLS SHALL BE CONCEALED IN THE WALL AND STUBBED OUT OF THE WALL AT HEIGHT INDICATED.
4. RECEPTACLES, JUNCTION/HANDY BOXES INDICATED AT WALLS SHALL BE CONCEALED IN THE WALL AT THE HEIGHT INDICATED.
5. VERTICAL DIMENSIONS ARE GIVEN FROM FINISHED FLOOR TO CENTER LINE OF ROUGH-IN LOCATION.
6. UTILITIES WHEREVER POSSIBLE SHALL BE BROUGHT IN FROM ABOVE.
7. VERIFY THE UTILITY REQUIREMENTS OF OWNER FURNISHED AND/OR EXISTING EQUIPMENT.
8. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND/OR INSTALL ALL JUNCTION/HANDY BOXES, EXTENSION RINGS, DISCONNECT SWITCHES AS SHOWN, CONVENIENCE OUTLETS WITH STAINLESS STEEL COVERS SWITCHES, CONNECTORS CONTROLS AND OTHER ACCESSORIES THAT ARE NOT AN INTEGRAL PART OF THE FOOD SERVICE EQUIPMENT AS REQUIRED TO MAKE FINAL CONNECTIONS TO THE EQUIPMENT AS REQUIRED TO MAKE FINAL CONNECTIONS TO THE EQUIPMENT FOR A COMPLETE AND OPERABLE OPERATION MEETING ALL APPLICABLE CODES AND ORDINANCES.
9. JUNCTION/HANDY BOXES, CONVENIENCE OUTLETS AND SPECIAL PURPOSE OUTLETS SHOWN IN FABRICATED WORK TABLES AND COUNTERS SHALL BE FURNISHED BY FABRICATOR ELECTRICAL CONTRACTOR TO PROVIDE ALL WIRING & RECEPTACLES.

EXHAUST HOOD NOTES

1. ELECTRICAL CONTRACTOR TO PROVIDE ALL HIGH/LOW VOLTAGE CONNECTIONS REQUIRED BY EXHAUST HOOD MANUFACTURER. SEE FOOD SERVICE EXHAUST HOOD MANUFACTURER SHEETS FOR DETAILS.
2. ALL ELECTRICAL CONDUIT THAT IS PROVIDED BY E.C. TO BE RECESSED IN WALL (NO SURFACE MOUNT CONDUIT)
3. VERIFY ALL EXHAUST HOOD AND EXHAUST HOOD COMPONENTS ELECTRICAL REQUIREMENTS WITH MANUFACTURER DRAWINGS.

CONNECTION ACCESS

1. WHERE ITEMS CONNECT TO UTILITY UNDER COUNTER. CONTRACTOR TO VERIFY THAT A GROMMET HOLE IS PROVIDED FOR NECESSARY ACCESS TO CONNECT EQUIPMENT TO UTILITY.

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AGENCY APPROVAL

EL DORADO MIDDLE SCHOOL
MULTI-PURPOSE BUILDING UPGRADES
1750 WEST ST, CONCORD, CA 94521
MT. DIABLO UNIFIED SCHOOL DISTRICT

EDGE
Project Number K266
Contact Chris
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REGISTERED PROFESSIONAL ENGINEER
JOSEPH MICHAEL GONDA JR.
No. E 011376
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02/26/2025

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ARCHITECT
DSA SUBMITTAL

REVISIONS

	DESCRIPTION

DATE 02/28/2025
JOB NO. Y2119.00
SHEET TITLE

KITCHEN ELECTRICAL FLOOR PLAN

SHEET NO.
E213

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
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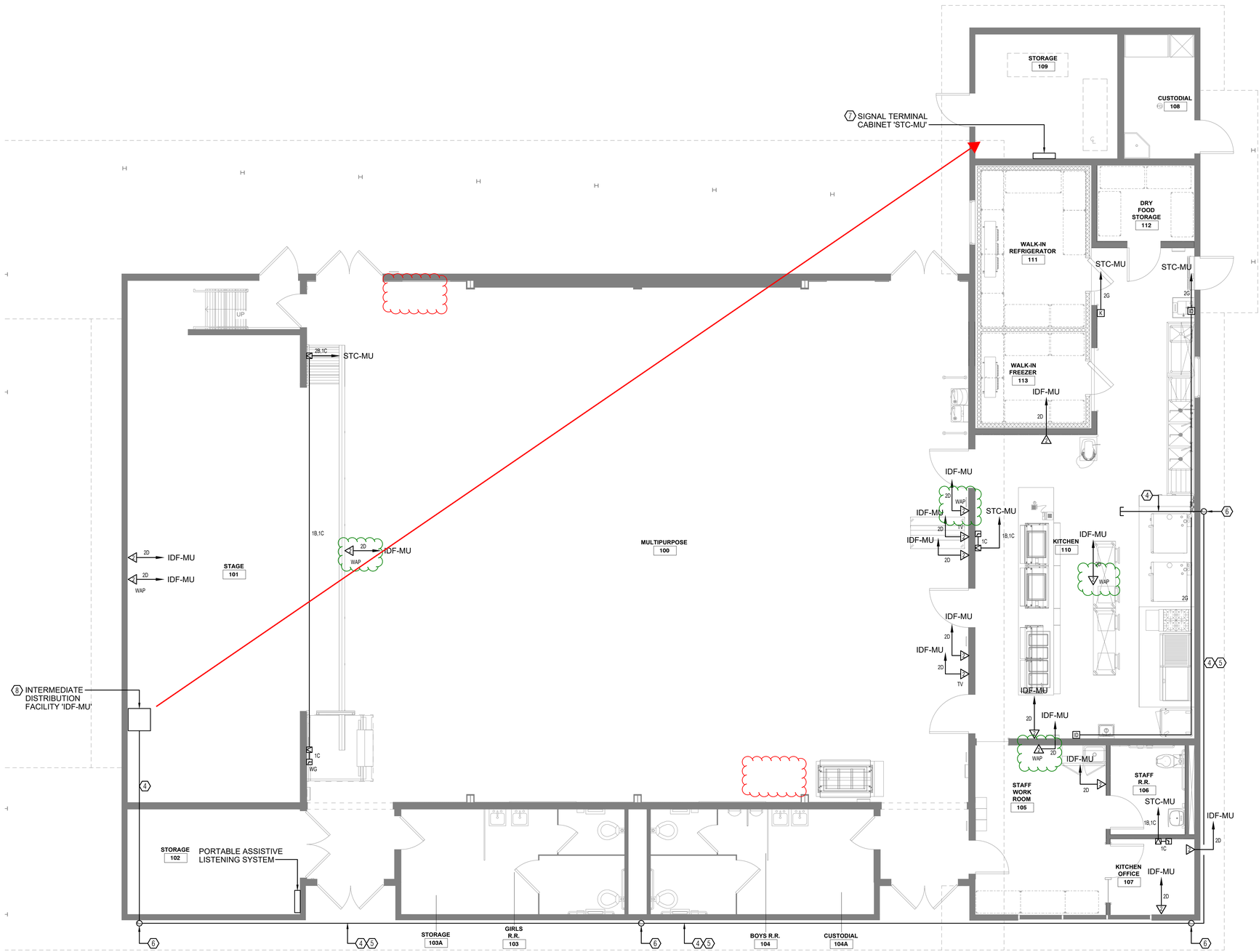

1 SIGNAL FLOOR PLAN
1/4" = 1'-0"

NORTH

NUMBERED NOTES

1. 3" CONDUIT FOR DATA CABLES; 3" MT. ROUTING TBD.
2. STUB ABOVE CEILING.
3. VIA CONDUITS ON BUILDING EXTERIOR.
4. (3) 3"C FOR DATA CABLES.
5. ROUTE ON BUILDING EXTERIOR. VERIFY EXACT ROUTING IN FIELD WITH OWNER.
6. 24"x24"x8" NEMA 3R BOX.
7. 36"x24"x12" NEMA 1 CABINET WITH A HINGED LOCKING COVER.
8. INSTALL WITH BOTTOM OF CABINET AT +7'-6" AFF. REFER TO 1/E302 FOR MOUNTING.

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ARCHITECT

DSA SUBMITTAL

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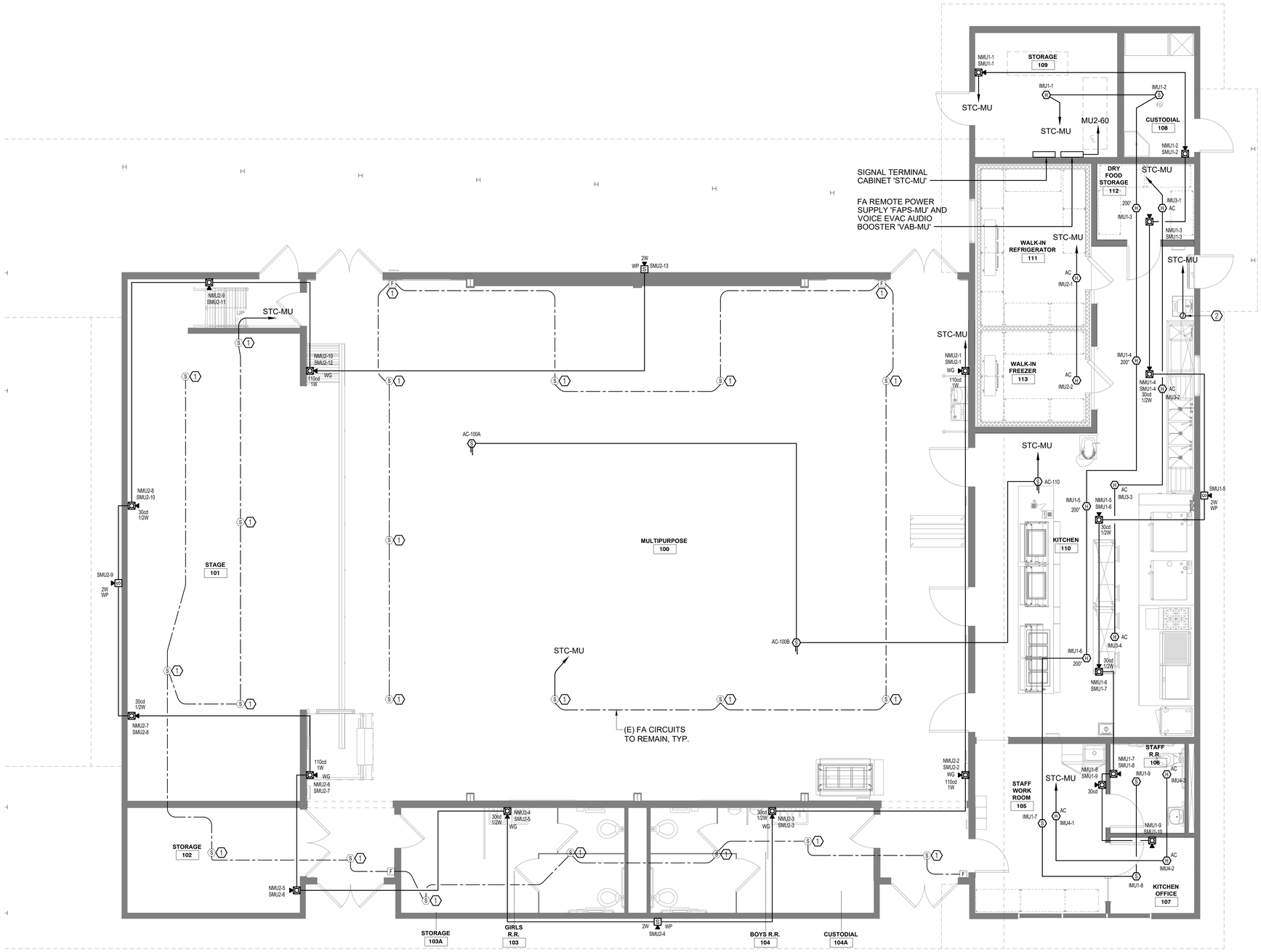
DESCRIPTION

DATE 02/28/2025
JOB NO. Y2119.00
SHEET TITLE

SIGNAL FLOOR PLAN

SHEET NO.

E214



1 FIRE ALARM FLOOR PLAN
1/4" = 1'-0"

NORTH

NUMBERED NOTES

1. (E) DEVICE TO REMAIN. INSURE THE CONNECTION IS MAINTAINED. PROVIDE (N) CONDUIT/WIRING AS NECESSARY.
2. CONNECT TO ANSUL SYSTEM.

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CHRISTOPHER MANN GUNDEL
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ARCHITECT

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REVISIONS

	DESCRIPTION

DATE 02/28/2025
JOB NO. Y2119.00
SHEET TITLE

FIRE ALARM FLOOR PLAN

SHEET NO.
E215

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
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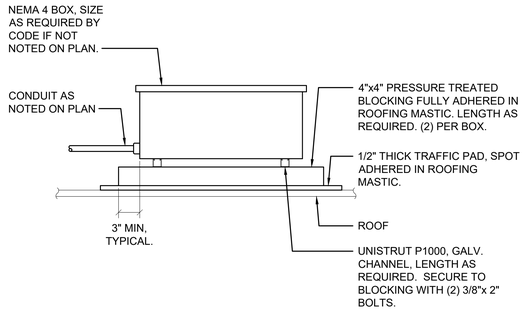
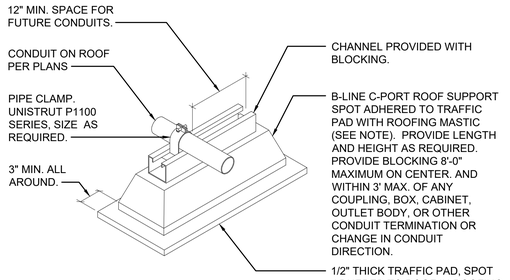
ONE INCH = TWENTY FEET



4 ROOF MOUNTED J-BOX DETAIL

NO SCALE

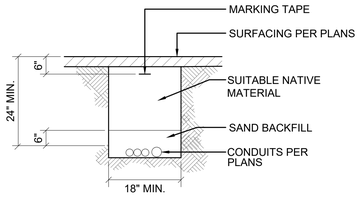


NOTES:

1. AT SINGLE-PLY ROOFS. PROVIDE ROOFING MANUFACTURER'S ACCEPTABLE PAD AND CEMENT PER MANUFACTURER'S RECOMMENDATIONS.
2. CONDUIT SHALL BE RIGID STEEL OR IMC.
3. CONDUITS LIMITED TO 5 LBS/LF.

5 ROOF CONDUIT SUPPORT DETAIL

NO SCALE

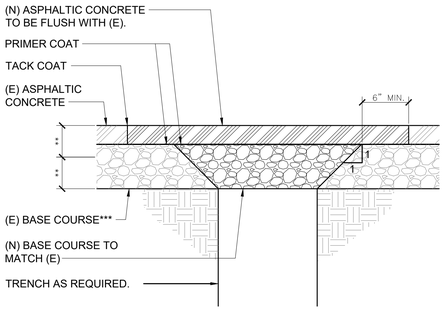


NOTES:

1. BOTTOM OF TRENCH SHALL BE SQUARE AND CLEAN.
2. REFER TO PLANS FOR QUANTITY AND SIZES OF CONDUITS.
3. NATIVE MATERIALS SHALL BE NATIVE TO THE PROJECT SITE, FREE OF WOOD, ORGANICS, AND OTHER DELETERIOUS SUBSTANCES. ROCKS SHALL NOT BE GREATER THAN 3" INCHES.
4. SAND SHALL BE FINE GRANULAR MATERIAL, FREE OF ORGANIC MATTER, MICA, LOAM OR CLAY.

1 UTILITY TRENCH DETAIL

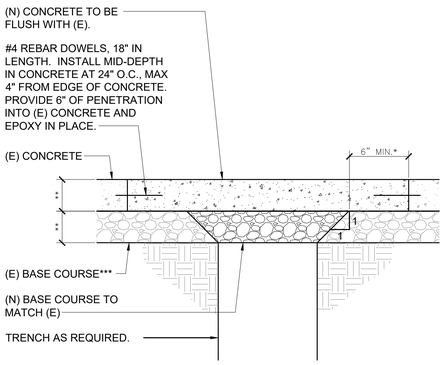
NO SCALE



NOTE: PROVIDE SEAL COAT OVER NEW WORK AND EXTEND A MINIMUM OF 12" OVER EXISTING ASPHALT.

2 ASPHALTIC CONCRETE REPAIR DETAIL

NO SCALE



* WHERE JOINT EXISTS WITHIN 18" OF CUT, REMOVE CONCRETE TO (E) JOINT.

** TO MATCH (E).

*** (E) BASE COURSE TO BE PROTECTED AND TO REMAIN UNDISTURBED TO PREVENT LOSS OF DENSITY AND SUPPORT UNDER (E) CONCRETE.

NOTE: THIS DETAILS APPLIES TO SITE WORK. FOR WORK WITHIN THE BUILDING, REFER TO DETAIL 11/S005.

3 CONCRETE REPAIR DETAIL

NO SCALE

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02/26/2025

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ARCHITECT

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REVISIONS

	DESCRIPTION

DATE 02/28/2025

JOB NO. Y2119.00

SHEET TITLE

ELECTRICAL DETAILS

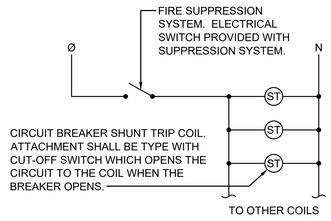
SHEET NO.

E301

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET

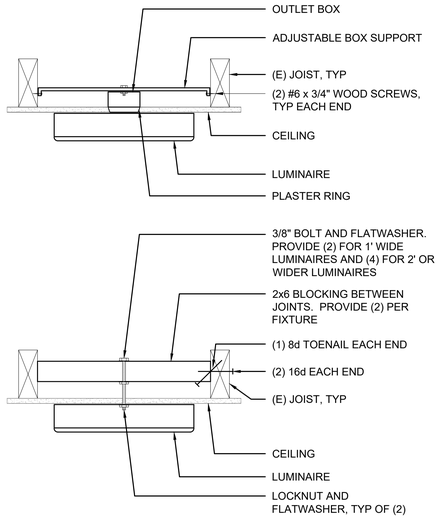
KITCHEN EQUIPMENT NOTES

1. CONTRACTOR SHALL VERIFY EQUIPMENT LOADS PRIOR TO CIRCUITING. MODIFY CIRCUITS AS REQUIRED.
2. CONTRACTOR SHALL VERIFY TYPE OF CONNECTION REQUIRED. J-BOX AND FLEX OR RECEPTACLE. PROVIDE THE APPROPRIATE TYPE CONNECTION REQUIRED.
3. WHERE J-BOX AND FLEX CONNECTION IS REQUIRED, CONTRACTOR SHALL MAKE CONNECTION TO EQUIPMENT.
4. WHERE RECEPTACLES ARE REQUIRED, CONTRACTOR SHALL VERIFY RECEPTACLE CONFIGURATIONS AND INSTALL APPROPRIATE RECEPTACLE.
5. CONTRACTOR SHALL VERIFY OUTLET HEIGHT AND LOCATION PRIOR TO ROUGH-IN.
6. REFER TO FOOD SERVICE DRAWINGS FOR ADDITIONAL WORK REQUIRED BY ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL MATERIAL, AND LABOR TO COMPLETE THE WORK INDICATED TO BE DONE BY ELECTRICAL CONTRACTOR.



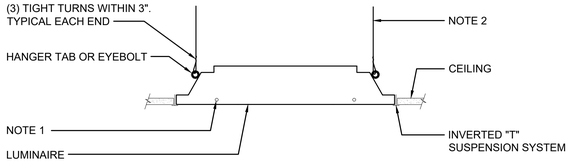
5 KITCHEN POWER SHUTDOWN DIAGRAM

NO SCALE



3 CEILING SURFACE MOUNTED LUMINAIRE

NO SCALE

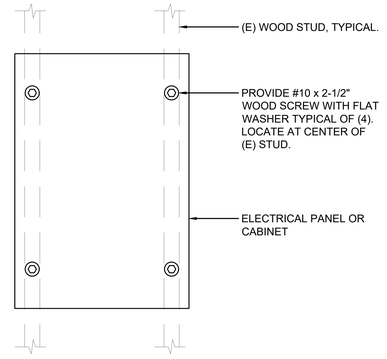


NOTES:

1. SECURE FIXTURES TO T-BAR SYSTEM WITH (2) 1/8" DIAMETER ZINC PLATED SELF TAPPING "TEK" SCREWS AT EACH END. POINTED SHEET METAL SCREWS ARE NOT ACCEPTABLE. DRILL FIXTURES AND T-BAR RUNNER AS REQUIRED. LOCATE SUCH THAT SCREWS DO DO NOT INTERFERE WITH DOOR OPERATION.
2. REFER TO DETAIL 4/A650

4 LAY-IN LUMINAIRE

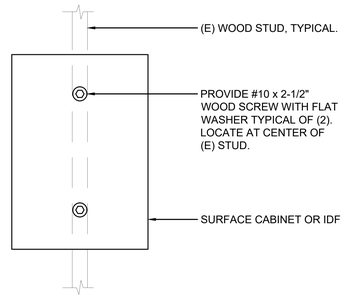
NO SCALE



NOTE: INSTALL PANELS AND CABINETS WITH THE TOP OF THE ENCLOSURE AT +6'-0" AFF. REFER TO FLOOR PLAN FOR ELEVATION OF IDF.

1 SURFACE PANEL OR CABINET MOUNTING DETAIL

NO SCALE



NOTES:

1. THIS DETAIL APPLIES TO EQUIPMENT THAT IS LESS THAN 16" WIDE.
2. INSTALL PANELS AND CABINETS WITH THE TOP OF THE ENCLOSURE AT +6'-0" AFF.

2 SURFACE CABINET MOUNTING DETAIL

NO SCALE

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ARCHITECT

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REVISIONS

	DESCRIPTION

DATE 02/28/2025
JOB NO. Y2119.00
SHEET TITLE

ELECTRICAL DETAILS

SHEET NO.

E302

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
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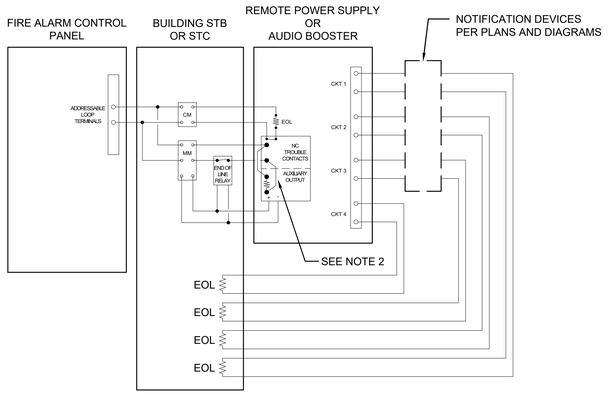


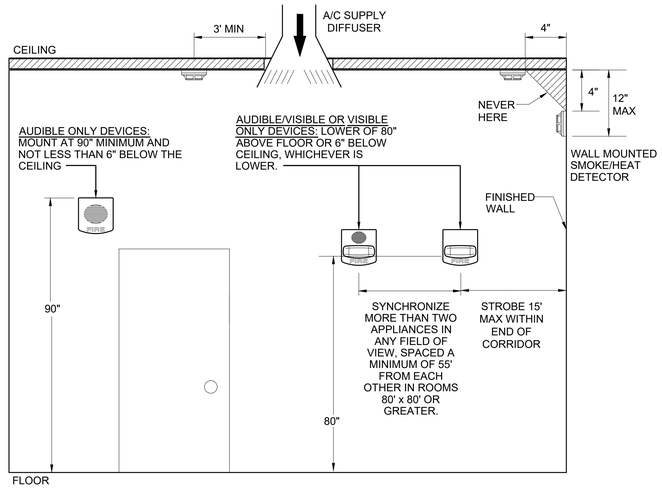
NOTES:
1. CONNECTIONS SHOWN ON THIS DIAGRAM ARE GENERAL IN NATURE. CONTRACTOR SHALL MAKE CONNECTIONS AT EACH DEVICE PER MANUFACTURER'S INSTRUCTIONS AND WIRING DIAGRAMS.
2. PROVIDE JUMPERS BETWEEN INPUT 1 AND INPUT 2 PER MANUFACTURER'S DIAGRAMS SUCH THAT ALL FOUR OUTPUTS OPERATE SIMULTANEOUSLY (CONNECT TO DEACTIVATE AUDIBLE SILENCE FEATURE).
3. PROVIDE MONITOR MODULE, CONTROL MODULE AND END OF LINE RELAY AT EACH FA POWER SUPPLY.

2 FA POWER SUPPLY/AUDIO BOOSTER WIRING DIAGRAM

NO SCALE

FIRE ALARM SYSTEM SEQUENCE OF OPERATION

		ALARM							TROUBLE				SUPERVISORY				
X = REQUIRED ACTION BLANK MEANS NOT APPLICABLE		EFFECT	ALARM AT FACP	ALARM AT OFF-SITE REPORTING	ACTIVATE AUDIBLE/VISUAL ALARMS	LOCAL ALARM (TEMPORAL SOUNDER BASE)				TROUBLE AT FACP	TROUBLE AT OFF-SITE REPORTING			SUPERVISORY CONDITION AT FACP	SUPERVISORY CONDITION AT OFF-SITE REPORTING			
	CAUSE																	REMARKS
1	SMOKE DETECTOR		X	X	X													
2	HEAT DETECTOR		X	X	X													
3	CARBON MONOXIDE DETECTOR					X				X								
4	MANUAL PULL STATION		X	X	X													
5	DUCT DETECTOR		X	X	X													SHUTDOWN ASSOCIATED MECHANICAL UNIT (BY MECHANICAL)
6	POWER FAILURE									X	X							
7	TAMPER SWITCH AT POST INDICATOR VALVE													X	X			
8	TAMPER SWITCH AT FIRE SPRINKLER RISER													X	X			
9	FLOW SWITCH AT FIRE SPRINKLER RISER		X	X	X													
10	FIRE ALARM TROUBLE (OPEN, SHORTS OR GROUNDS ON INITIATION, NOTIFICATION OR SIGNALING LINE CIRCUITS)									X	X							



1 FIRE ALARM DEVICE ELEVATIONS

NO SCALE

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121540 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 3/28/2025

AGENCY APPROVAL

EL DORADO MIDDLE SCHOOL
MULTI-PURPOSE BUILDING UPGRADES

1750 WEST ST, CONCORD, CA 94521

MT. DIABLO UNIFIED SCHOOL DISTRICT

EDGE
Project Number K266
Contact Chris
1151 Harbor Bay Pkwy, Ste 123A
Alameda, CA 94502
510.634.7200
Sacramento | Alameda | Irvine

REGISTERED PROFESSIONAL ENGINEER
No. E 017376
ELECTRICAL
STATE OF CALIFORNIA
02/26/2025

CONSULTANT

nacht&lewis
600 Q Street, Suite 100
Sacramento, CA 95811
www.nachtlewis.com
916.329.4000

ARCHITECT

DSA SUBMITTAL

REVISIONS

	DESCRIPTION

DATE 02/28/2025

JOB NO. Y2119.00

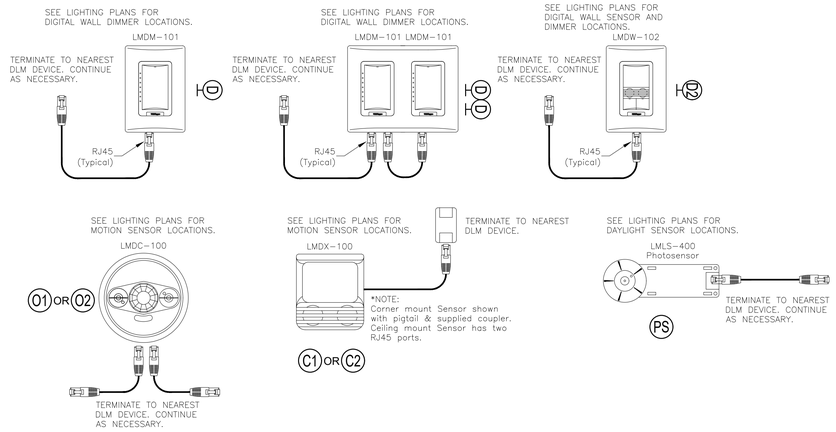
SHEET TITLE

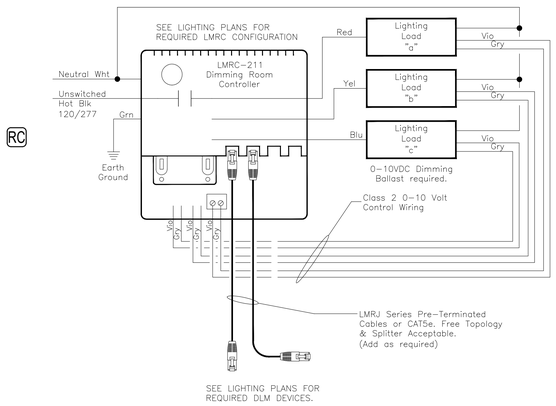
ELECTRICAL DETAILS

SHEET NO.

E303

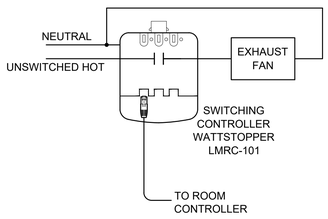
ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET





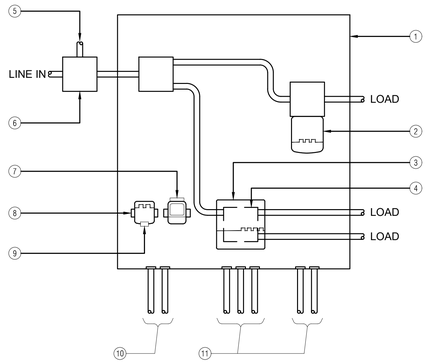
2 TYPICAL WIRING DIAGRAM FOR WATTSTOPPER DLM ROOM CONTROLLER W/ DLM CONTROL DEVICE

NO SCALE



3 EXHAUST FANCONTROLLED BY OCCUPANCY SENSOR

NO SCALE



1. LIGHTING CONTROL ENCLOSURE "LC": NEMA 1 ENCLOSURE WITH A HINGED, LATCHING COVER, SIZE AS REQUIRED. PROVIDE NAME PLATE ON COVER TO READ "LIGHTING CONTROL ENCLOSURE - ROOM # (PROVIDE ACTUAL ROOM NUMBER). WHEN INSTALLED ABOVE THE CEILING, PROVIDE A SURFACE ENCLOSURE. WHEN INSTALLED BELOW THE CEILING, PROVIDE A FLUSH ENCLOSURE. PROVIDE A 5/8" PLYWOOD BACKBOARD.
2. SWITCHING CONTROLLER.
3. DIMMING CONTROLLER.
4. JUNCTION BOX BEHIND DIMMING CONTROLLER.
5. LINE OUT TO OTHER LIGHTING CONTROLLERS.
6. JUNCTION BOX, TYPICAL.
7. PHOTOCELL INPUT MODULE.
8. DIN RAIL, FIELD INSTALL. TYPICAL.
9. NETWORK BRIDGE.
10. CONDUIT FOR SEGMENT NETWORK CABLES.
11. CONDUITS FOR SWITCH/SENSOR, CONTROL WIRING, ETC.

NOTES:

1. REFER TO FLOOR PLANS AND WIRING DIAGRAM FOR EACH ROOM FOR DEVICE QUANTITIES.
2. LOW VOLTAGE WIRING IS NOT SHOWN. LOW VOLTAGE WIRING SHALL BE INSTALLED WITHOUT CONDUIT WITHIN THE LIGHTING CONTROL ENCLOSURE. LOW VOLTAGE WIRING SHALL BE INSTALLED NEATLY AND SHALL BE LACED EVERY 6".

1 LIGHTING CONTROL ENCLOSURE

NO SCALE

LIGHTING CONTROL NOTES

1. THE CONTRACTOR SHALL SUBMIT MANUFACTURER'S CATALOG DATA AND SCALED SHOP DRAWINGS AS PART OF THE EQUIPMENT SUBMITTALS. SHOP DRAWINGS SHALL INCLUDE FLOOR PLANS AND WIRING DIAGRAMS. THE FLOOR PLANS SHALL SHOW QUANTITIES AND LOCATIONS OF ALL SYSTEM COMPONENTS AND ACCESSORIES. THE WIRING DIAGRAMS SHALL BE JOB SPECIFIC AND SHALL INCLUDE ALL SYSTEM COMPONENTS. THE CONTRACTOR SHALL PROVIDE SYSTEM MANUFACTURER WITH ARCHITECTURAL DRAWINGS, SECTIONS, ELEVATIONS, REFLECTED CEILING PLANS, ETC SO THAT DEVICE LOCATIONS CAN BE COORDINATED WITH BUILDING ELEMENTS.
2. THE DIAGRAMS SHOW THE GENERAL CONNECTIONS, REFER TO PLANS FOR ADDITIONAL REQUIREMENTS. ALL DEVICES, EQUIPMENT AND WIRING SHALL BE INSTALLED PER THE MANUFACTURER'S JOB SPECIFIC SHOP DRAWINGS.
3. ABOVE ACCESSIBLE CEILINGS, THE LMRJ CABLES AND THE SEGMENT NETWORK CABLES MAY BE ROUTED THROUGH J-HOOKS. ABOVE NON-ACCESSIBLE CEILINGS, PLUG AND PLAY WIRING SHALL BE INSTALLED IN CONDUIT, 3/4" MINIMUM.
4. OCCUPANCY SENSOR AND DAYLIGHT PHOTOSENSOR SYMBOLS ON DRAWINGS INDICATE ROOMS REQUIRING SENSING, NOT SENSOR LOCATIONS OR QUANTITIES.
5. CONTRACTOR SHALL INSTALL OCCUPANCY SENSORS, PHOTOSENSORS AND PHOTOCELLS PER LAYOUT PREPARED BY SENSOR MANUFACTURER. LAYOUT SHALL INDICATE SENSOR LOCATIONS, AIMING, AND QUANTITIES REQUIRED FOR ALL ROOMS.
6. ADJUST OCCUPANCY SENSOR SENSITIVITY SETTINGS FOR MAXIMUM AND TIME DELAY SETTINGS FOR MAXIMUM.
7. SENSOR AND DIMMER SETTINGS ARE TO BE CALIBRATED AFTER FURNITURE AND FINAL FINISHES HAVE BEEN INSTALLED AND AFTER ALL LIGHTING EQUIPMENT IS INSTALLED AND OPERATIONAL.

IDENTIFICATION STAMP
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ARCHITECT

DSA SUBMITTAL

REVISIONS

	DESCRIPTION

DATE 02/28/2025
JOB NO. Y2119.00
SHEET TITLE

LIGHTING CONTROL DETAILS

SHEET NO.
E401

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
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ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET

Manufacturer	Model Number	Description	CSFM Listing
FIRE-LITE	FCPS-24FS6	REMOTE POWER SUPPLY	7315-0075:0206
WHEELOCK	SP405	VOICE EVACUATION PANEL	6911-0785:0157
WHEELOCK	SPB-320	VOICE EVAC AUDIO BOOSTER/AMPLIFIER	6911-0785:0157
WHEELOCK	SPRM	VOICE EVAC REMOTE MICROPHONE	6911-0785:0157
EST	SIGA-PD	SMOKE DETECTOR	7272-1657:0331
EST	SIGA-HRD	HEAT DETECTOR	7270-1657:0333
FIRE DET. DEVICES	CF200W w/ Monitor Mod.	HEAT DETECTOR, 200 DEGREE	7270-1110:0100
THERMOTECH	302-194 w/ AP-P	HEAT DETECTOR, ABOVE CEILING	7270-0021:0001
EST	MRM1	MONITOR MODULE	7300-1657:0210
EST	SIGA-CR	CONTROL MODULE	7300-1657:0121
	ET1010	SPEAKER, EXTERIOR	7320-0785:0105
WHEELOCK	WBB-R	OUTDOOR BACKBOX	7300-0785:0177
WHEELOCK	ELSPSTC	SPEAKER/STROBE, CEILING	7320-0785:0505
WHEELOCK	ELSPST	SPEAKER/STROBE, WALL	7320-0785:0505
WHEELOCK	DSM-12/24-R	SYNC MODULE	7320-0785:0132

Control Panel Designation: FAPS

Battery Calculation Standby: 24 hr.
and Alarm: 15 min.

(E) / (N)	Model #	Description		Standby Current	Alarm Current	Qty.	Total Standby Current	Total Alarm Current
Control Panel Modules								
(N)	FCPS-24FS6	Remote Power Supply		0.065	0.145	1	0.065	0.145
			Control Panel Modules Totals				**0.065**	**0.145**
Notification Appliance Circuits								
	Spare	Notification Circuit	NMU1	0.000	0.230	1	0.000	0.230
	Spare	Notification Circuit	NMU2	0.000	0.000	1	0.000	0.000
	Spare	Notification Circuit	-	0.000	0.000	1	0.000	0.000
	Spare	Notification Circuit	-	0.000	0.000	1	0.000	0.000
			Notification Appliance Circuit Totals				**0.000**	**0.230**
			Overall Totals				0.065	0.375

Summary:

Standby Amps x 24 hrs. = Amp hrs.	1.560
Alarm Current x 0.25 hrs = Amp hrs.	0.094
Total Amp Hour Current	1.654
20% Safety Factor	0.331
TOTAL AMP HOUR BATTERY REQUIRED	**1.985**
AH BATTERY PROVIDED	**7.0**

Appliance Circuit Voltage Drop: NMU1

This calculator provided voltage drop calculations in a Point-to-Point format.
Resistance Value: 18=8.08, 16=5.08, 14=3.19, 12=2.01, 10=1.26
18-10 Awg = Solid Conductors — Resistance for copper wire based on NEC Chapter 9, Table 8.
Nominal System Voltage: 24 V — Wire Gauge: Ohm's Per 1000
Minimum Device Voltage: 16 V
Value is in Amps. eg.: .100 = 100 mA
Distance is measured in feet.

Model Number	Device Description	Device Number	Device Current	Distance from previous device	Wire Gauge	Ohm's Per 1000	Voltage: At Device	Voltage: Drop from source	Voltage: Percent Drop
ELSPSTR (15cd)	Speaker/Strobe, Wall, 15cd	NMU1 -1	0.022	25	12	2.01	23.98	0.023	0.10%
ELSPSTR (15cd)	Speaker/Strobe, Wall, 15cd	NMU1 -2	0.022	30	12	2.01	23.95	0.048	0.20%
ELSPSTRC (15cd)	Speaker/Strobe, Ceiling, 15cd	NMU1 -3	0.022	15	12	2.01	23.94	0.059	0.25%
ELSPSTRC (30cd)	Speaker/Strobe, Ceiling, 30cd	NMU1 -4	0.03	20	12	2.01	23.93	0.073	0.30%
ELSPSTRC (30cd)	Speaker/Strobe, Ceiling, 30cd	NMU1 -5	0.03	45	12	2.01	23.90	0.097	0.40%
ELSPSTRC (30cd)	Speaker/Strobe, Ceiling, 30cd	NMU1 -6	0.03	20	12	2.01	23.89	0.105	0.44%
ELSPSTR (15cd)	Speaker/Strobe, Wall, 15cd	NMU1 -7	0.022	15	12	2.01	23.89	0.110	0.46%
ELSPSTR (30cd)	Speaker/Strobe, Wall, 30cd	NMU1 -8	0.03	10	12	2.01	23.89	0.112	0.47%
ELSPSTR (15cd)	Speaker/Strobe, Wall, 15cd	NMU1 -9	0.022	15	12	2.01	23.89	0.113	0.47%
		Total	**0.230**	**195**			**23.89**	**0.113**	**0.47%**

Summary:

Available Amp on Circuit	6 A	End of Line Voltage	23.89 V
Remaining Amp on Circuit	5.770 A	Total Voltage Drop	0.113 V
Remaining Amp % on Circuit	96.17%	Voltage Drop %	0.55%

Appliance Circuit Voltage Drop: NMU2

This calculator provided voltage drop calculations in a Point-to-Point format.
Resistance Value: 18=8.08, 16=5.08, 14=3.19, 12=2.01, 10=1.26
18-10 Awg = Solid Conductors — Resistance for copper wire based on NEC Chapter 9, Table 8.
Nominal System Voltage: 24 V — Wire Gauge: Ohm's Per 1000
Minimum Device Voltage: 16 V
Value is in Amps. eg.: .100 = 100 mA
Distance is measured in feet.

Model Number	Device Description	Device Number	Device Current	Distance from previous device	Wire Gauge	Ohm's Per 1000	Voltage: At Device	Voltage: Drop from source	Voltage: Percent Drop
ELSPSTR (185cd)	Speaker/Strobe, Wall, 185cd	NMU2 -1	0.185	35	12	2.01	23.87	0.127	0.53%
ELSPSTR (185cd)	Speaker/Strobe, Wall, 185cd	NMU2 -2	0.185	45	12	2.01	23.74	0.257	1.07%
ELSPSTR (30cd)	Speaker/Strobe, Wall, 30cd	NMU2 -3	0.03	25	12	2.01	23.69	0.311	1.30%
ELSPSTR (30cd)	Speaker/Strobe, Wall, 30cd	NMU2 -4	0.03	55	12	2.01	23.58	0.422	1.76%
ELSPSTR (15cd)	Speaker/Strobe, Wall, 15cd	NMU2 -5	0.022	30	12	2.01	23.52	0.480	2.00%
ELSPSTR (185cd)	Speaker/Strobe, Wall, 185cd	NMU2 -6	0.185	20	12	2.01	23.48	0.516	2.15%
ELSPSTR (30cd)	Speaker/Strobe, Wall, 30cd	NMU2 -7	0.03	25	12	2.01	23.46	0.543	2.26%
ELSPSTR (30cd)	Speaker/Strobe, Wall, 30cd	NMU2 -8	0.03	35	12	2.01	23.42	0.576	2.40%
ELSPSTR (15cd)	Speaker/Strobe, Wall, 15cd	NMU2 -9	0.022	35	12	2.01	23.39	0.605	2.52%
ELSPSTR (185cd)	Speaker/Strobe, Wall, 185cd	NMU2 -10	0.185	25	12	2.01	23.38	0.624	2.60%
		Total	**0.904**	**330**			**23.38**	**0.624**	**2.60%**

Summary:

Available Amp on Circuit	6 A	End of Line Voltage	23.38 V
Remaining Amp on Circuit	5.096 A	Total Voltage Drop	0.624 V
Remaining Amp % on Circuit	84.93%	Voltage Drop %	3.06%

Control Panel Designation: VAB-MU

Battery Calculation Standby: 24 hr.
and Alarm: 15 min.

(E) / (N)	Model #	Description		Standby Current	Alarm Current	Qty.	Total Standby Current	Total Alarm Current
Control Panel Modules								
(N)	SPB-320	Voice Evac Audio Booster/Amplifier		0.130	0.130	1	0.130	0.130
			Control Panel Modules Totals				**0.130**	**0.130**
Notification Appliance Circuits								
		Speaker Circuit	SMU1	0.000	0.200	1	0.000	0.200
		Speaker Circuit	SMU2	0.000	0.000	1	0.000	0.000
	Spare	Speaker Circuit	-	0.000	0.000	1	0.000	0.000
	Spare	Speaker Circuit	-	0.000	0.000	1	0.000	0.000
			Notification Appliance Circuit Totals				**0.000**	**0.200**
			Overall Totals				0.130	0.330

Summary:

Standby Amps x 24 hrs. = Amp hrs.	3.120
Alarm Current x 0.25 hrs = Amp hrs.	0.083
Total Amp Hour Current	3.203
20% Safety Factor	0.641
TOTAL AMP HOUR BATTERY REQUIRED	**3.843**
AH BATTERY PROVIDED	**12.0**

Wattage Summary:

Amplifier Watts:	50.0
Watts Used:	5.0
Spare Watts:	45.0

Appliance Circuit Voltage Drop: SMU1

This calculator provided voltage drop calculations in a Point-to-Point format.
Resistance Value: 18=8.08, 16=5.08, 14=3.19, 12=2.01, 10=1.26
18-10 Awg = Solid Conductors — Resistance for copper wire based on NEC Chapter 9, Table 8.
Nominal System Voltage: 24 V — Wire Gauge: Ohm's Per 1000
Minimum Device Voltage: 16 V
Value is in Amps. eg.: .100 = 100 mA
Distance is measured in feet.

Model Number	Device Description	Device Number	Device Current	Distance from previous device	Wire Gauge	Ohm's Per 1000	Voltage: At Device	Voltage: Drop from source	Voltage: Percent Drop
ELSPSTR (1/4W)	Speaker/Strobe, Wall, 1/4W	SMU1 -1	0.01	25	12	2.01	23.98	0.020	0.08%
ELSPSTR (1/4W)	Speaker/Strobe, Wall, 1/4W	SMU1 -2	0.01	30	12	2.01	23.96	0.043	0.18%
ELSPSTRC (1/4W)	Speaker/Strobe, Ceiling, 1/4W	SMU1 -3	0.01	15	12	2.01	23.95	0.054	0.22%
ELSPSTRC (1/2W)	Speaker/Strobe, Ceiling, 1/2W	SMU1 -4	0.02	20	12	2.01	23.93	0.068	0.28%
ET-1010-R (2W)	Speaker, Exterior, 2W	SMU1 -5	0.08	25	12	2.01	23.92	0.083	0.34%
ELSPSTRC (1/2W)	Speaker/Strobe, Ceiling, 1/2W	SMU1 -6	0.02	20	12	2.01	23.91	0.088	0.37%
ELSPSTRC (1/2W)	Speaker/Strobe, Ceiling, 1/2W	SMU1 -7	0.02	20	12	2.01	23.91	0.092	0.38%
ELSPSTR (1/4W)	Speaker/Strobe, Wall, 1/4W	SMU1 -8	0.01	15	12	2.01	23.91	0.094	0.39%
ELSPSTR (1/4W)	Speaker/Strobe, Wall, 1/4W	SMU1 -9	0.01	10	12	2.01	23.91	0.095	0.40%
ELSPSTR (1/4W)	Speaker/Strobe, Wall, 1/4W	SMU1 -10	0.01	15	12	2.01	23.90	0.095	0.40%
		Total	**0.200**	**195**			**23.90**	**0.095**	**0.40%**

Summary:

Available Amp on Circuit	6 A	End of Line Voltage	23.90 V
Remaining Amp on Circuit	5.800 A	Total Voltage Drop	0.095 V
Remaining Amp % on Circuit	96.67%	Voltage Drop %	0.47%

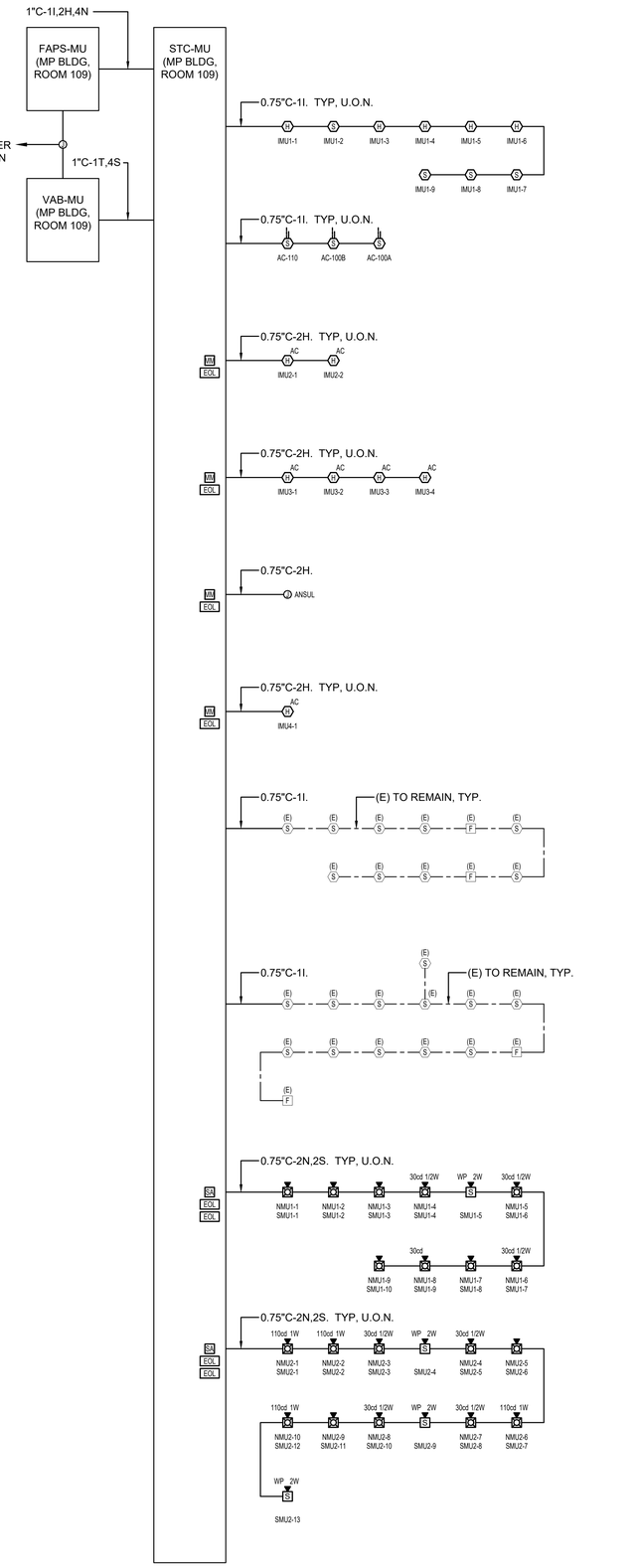
Appliance Circuit Voltage Drop: SMU2

This calculator provided voltage drop calculations in a Point-to-Point format.
Resistance Value: 18=8.08, 16=5.08, 14=3.19, 12=2.01, 10=1.26
18-10 Awg = Solid Conductors — Resistance for copper wire based on NEC Chapter 9, Table 8.
Nominal System Voltage: 24 V — Wire Gauge: Ohm's Per 1000
Minimum Device Voltage: 16 V
Value is in Amps. eg.: .100 = 100 mA
Distance is measured in feet.

Model Number	Device Description	Device Number	Device Current	Distance from previous device	Wire Gauge	Ohm's Per 1000	Voltage: At Device	Voltage: Drop from source	Voltage: Percent Drop
ELSPSTR (1W)	Speaker/Strobe, Wall, 1W	SMU2 -1	0.04	35	12	2.01	23.93	0.070	0.29%
ELSPSTR (1W)	Speaker/Strobe, Wall, 1W	SMU2 -2	0.04	45	12	2.01	23.85	0.154	0.64%
ELSPSTR (1/2W)	Speaker/Strobe, Wall, 1/2W	SMU2 -3	0.02	25	12	2.01	23.80	0.196	0.82%
ET-1010-R (2W)	Speaker, Exterior, 2W	SMU2 -4	0.08	25	12	2.01	23.76	0.236	0.98%
ELSPSTR (1/2W)	Speaker/Strobe, Wall, 1/2W	SMU2 -5	0.02	30	12	2.01	23.73	0.275	1.14%
ELSPSTR (1/4W)	Speaker/Strobe, Wall, 1/4W	SMU2 -6	0.01	30	12	2.01	23.69	0.311	1.29%
ELSPSTR (1W)	Speaker/Strobe, Wall, 1W	SMU2 -7	0.04	20	12	2.01	23.67	0.334	1.39%
ELSPSTR (1/2W)	Speaker/Strobe, Wall, 1/2W	SMU2 -8	0.02	25	12	2.01	23.64	0.359	1.50%
ET-1010-R (2W)	Speaker, Exterior, 2W	SMU2 -9	0.08	20	12	2.01	23.62	0.378	1.57%
ELSPSTR (1/2W)	Speaker/Strobe, Wall, 1/2W	SMU2 -10	0.02	15	12	2.01	23.61	0.387	1.61%
ELSPSTR (1/4W)	Speaker/Strobe, Wall, 1/4W	SMU2 -11	0.01	35	12	2.01	23.59	0.405	1.69%
ELSPSTR (1W)	Speaker/Strobe, Wall, 1W	SMU2 -12	0.04	25	12	2.01	23.58	0.417	1.74%
ET-1010-R (2W)	Speaker, Exterior, 2W	SMU2 -13	0.08	45	12	2.01	23.57	0.432	1.80%
		Total	**0.500**	**375**			**23.57**	**0.432**	**1.80%**

Summary:

Available Amp on Circuit	6 A	End of Line Voltage	23.57 V
Remaining Amp on Circuit	5.500 A	Total Voltage Drop	0.432 V
Remaining Amp % on Circuit	91.67%	Voltage Drop %	2.12%



1 FIRE ALARM RISER DIAGRAM
NO SCALE

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ARCHITECT

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REVISIONS

	DESCRIPTION

DATE 02/28/2025
JOB NO. Y2119.00
SHEET TITLE

FIRE ALARM RISER DIAGRAM AND CALCULATIONS

SHEET NO.
E501

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
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STATE OF CALIFORNIA
Indoor Lighting
NRCC-LTI-E (Created 01/20) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
This document is used to demonstrate compliance with requirements in §110.9, §110.12(c), §130.0, §130.1, §140.6, and §141.0(b)2 for indoor lighting scopes using the prescriptive path.		
Project Name: EL DORADO MS - MP UPGRADES	Report Page:	Page 1 of 6
Project Address: 1480 CASOLINE ALLEY	Date Prepared:	2/12/24

A. GENERAL INFORMATION

01	Project Location (city)	CONCORD	04	Total Conditioned Floor Area (ft²)	1,155
02	Climate Zone		05	Total Unconditioned Floor Area (ft²)	
03	Occupancy Types Within Project (select all that apply):		06	# of Stories (Habitable Above Grade)	

☐ Office ☐ Retail ☐ Warehouse ☐ Hotel/Motel ☑ School ☐ Support Areas
☐ Parking Garage ☐ High-Rise Residential ☐ Relocatable ☐ Healthcare ☑ Other (write in): KITCHEN

B. PROJECT SCOPE

Table Instructions: Include any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in §140.6 or §141.0(b)2 for alterations. WARNING: Changing the Calculation Method in this table will result in the deletion of data previously input. If you need to change the calculation method, please open a new form or use "Save As".

Scope of Work	Conditioned Spaces		Unconditioned Spaces	
01	02	03	04	05
My Project Consists of (check all that apply):	Calculation Method	Area (ft²)	Calculation Method	Area (ft²)
☑ New Lighting System	Area Category	1,155		
☐ Altered Lighting System				
Total Area of Work (ft²):	**1,155**			

C. COMPLIANCE RESULTS

Table Instructions: If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance.

Lighting in conditioned and unconditioned spaces must not be combined for compliance per §140.6(b)1.	Allowed Lighting Power per §140.6(b) (Watts)						Adjusted Lighting Power per §140.6(a) (Watts)					Compliance Results
	01	02	03	04		05		06	07		08	09
	Complete Building §140.6(c)1	Area Category §140.6(c)2	Area Category Additional §140.6(c)2G (+)	Tailored §140.6(c)3 (+)	=	Total Allowed (Watts)	≥	Total Designed (Watts)	Adjustments PAF Control Credits §140.6(a)2 (-)	=	Total Adjusted (Watts) *Includes Adjustments	05 Must be ≥ 08 §140.6
	(See Table I)	(See Table I)	(See Table J)	(See Table K)				(See Table F)	(See Table P)			
Conditioned:		1,097.25			=	**1,097.25**	≥	903		=	**903**	**COMPLIES**
Unconditioned:					=		≥			=		

Table Continued

Controls Compliance (See Table H for Details):	
Rated Power Reduction Compliance (See Table Q for Details):	**Not Applicable**

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

Selections made in Table T have been changed by the permit applicant. See Table E. Additional Remarks for permit applicant's explanation.

Selections made in Table U have been changed by the permit applicant. See Table E. Additional Remarks for permit applicant's explanation.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. INDOOR LIGHTING FIXTURE SCHEDULE

Table Instructions: Include all permanent designed lighting and all portable lighting in offices.

Designed Wattage: Conditioned Spaces

01	02	03	04	05	06	07	08	09	10
Name or Item Tag	Complete Luminaire Description	Modular (Track) Fixture	Small Aperture & Color Change[1]	Watts per luminaire[1]	How Wattage is determined	Total number luminaires	Exempt per §140.6(a)3	Design Watts	Field Inspector Pass
A	LAY-IN 2x4	☐	☐	72	Mfr. Spec[2]	7	☐	504	☐
B	SURFACE WRAP	☐	☐	36	Mfr. Spec[2]	6	☐	216	☐
C	SURFACE 2x4	☐	☐	63	Mfr. Spec[2]	1	☐	63	☐
D	RECESSED DOWNLIGHT	☐	☐	24	Mfr. Spec[2]	5	☐	120	☐
					Total Designed Watts CONDITIONED SPACES:			**903**	

[1] FOOTNOTE: Design Watts for small aperture and color changing luminaires which qualify per §140.6(a)4B is adjusted to be 75% of their rated wattage. Table F automatically makes this adjustment, the permit applicant should enter full rated wattage in column 05.
[2] Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per §130.0(c) Wattage used must be the maximum rated for the luminaire, not the lamp.

G. MODULAR LIGHTING SYSTEMS

This Section Does Not Apply

H. INDOOR LIGHTING CONTROLS (Not Including PAFs)

This Section Does Not Apply

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS

Table Instructions: Complete the table for each area complying using the Complete Building or Area Category Methods per §140.6(b). Indicate if additional lighting power allowances per §140.6(c) or adjustments per §140.6(a) are being used.

Conditioned Spaces

01	02	03	04	05	06	
Area Description	Complete Building or Area Category Primary Function Area	Allowed Density (W/ft²)	Area (ft²)	Allowed Wattage (Watts)	Additional Allowances / Adjustment: Area Category	PAF
	Kitchen, Food Preparation	0.95	1,155	1,097.25	☐	☐
			TOTAL:	**1,097.25**	See Tables J or P for detail	

J. ADDITIONAL LIGHTING ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM

This Section Does Not Apply

K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE

This Section Does Not Apply

L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY

This Section Does Not Apply

M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING

This Section Does Not Apply

N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED ORNAMENTAL/SPECIAL EFFECTS

This Section Does Not Apply

O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE

This Section Does Not Apply

P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF))

This Section Does Not Apply

Q. RATED POWER REDUCTION COMPLIANCE FOR ALTERATIONS

This Section Does Not Apply

R. 80% LIGHTING POWER FOR ALTERATIONS - CONTROLS EXCEPTIONS

This Section Does Not Apply

S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)

This Section Does Not Apply

T. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://ww2.energy.ca.gov/title24/2019standards/2019_compliance_documents/Nonresidential_Documents/NRCI/

YES	NO	Form/Title	Field Inspector Pass	Fail
◉	○	NRCI-LTI-01-E - Must be submitted for all buildings	☐	☐
◉	○	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.	☐	☐
○	◉	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.	☐	☐
○	◉	NRCI-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.	☐	☐
○	◉	NRCI-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.	☐	☐

U. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and any with "-A" in the form name must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: http://www.energy.ca.gov/title24/attcp/providers.html

YES	NO	Form/Title	Field Inspector Pass	Fail
◉	○	NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	☐	☐
○	◉	NRCA-LTI-03-A - Must be submitted for automatic daylight controls.	☐	☐
○	◉	NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.	☐	☐
○	◉	NRCA-LTI-05-A - Must be submitted for institutional tuning power adjustment factor (PAF).	☐	☐
○	◉	NRCA-ENV-03-F - Must be submitted for daylighting design power adjustment factors (PAF).	☐	☐

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name:	CHRIS JOHANSON	Documentation Author Signature:	
Company:	EDGE ELECTRICAL	Signature Date:	2/12/24
Address:	1801 7TH ST	CEA/ HERS Certification Identification (if applicable):	
City/State/Zip:	SACRAMENTO/CA/96811	Phone:	916-256-2460

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:	DONNY LEE	Responsible Designer Signature:	
Company :	EDGE ELECTRICAL	Date Signed:	2/12/24
Address:	1801 7TH ST	License:	E017376
City/State/Zip:	SACRAMENTO/CA/95811	Phone:	916-256-2460

ONE AND ONE-HALF INCH = ONE FOOT
ONE INCH = ONE FOOT
THREE-QUARTERS INCH = ONE FOOT
ONE-HALF INCH = ONE FOOT
ONE-QUARTER INCH = ONE FOOT
ONE-EIGHTH INCH = ONE FOOT
ONE-SIXTEENTH INCH = ONE FOOT
ONE INCH = TWENTY FEET

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121540 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 3/28/2025

AGENCY APPROVAL

EL DORADO MIDDLE SCHOOL
MULTI-PURPOSE BUILDING UPGRADES

1750 WEST ST, CONCORD, CA 94521

MT. DIABLO UNIFIED SCHOOL DISTRICT

EDGE ELECTRICAL CONSULTANTS
Project Number K266
Contact Chris
1151 Harbor Bay Pkwy, Ste 123A
Alameda, CA 94502
510.634.7220
Sacramento | Alameda | Irvine

REGISTERED PROFESSIONAL ENGINEER
DONNY LEE
No. E 017376
ELECTRICAL
STATE OF CALIFORNIA
02/26/2025

CONSULTANT

nacht&lewis
600 Q Street, Suite 100
Sacramento, CA 95811
www.nachtlewis.com
916.329.4000

ARCHITECT

DSA SUBMITTAL

REVISIONS

	DESCRIPTION

DATE 02/28/2025
JOB NO. Y2119.00
SHEET TITLE

TITLE 24 FORMS

SHEET NO.

E601