RICHMOND LAKESIDE TENANT IMPROVEMENT - PHASE 1

4114 Lakeside Drive
Richmond, CA 94806

ABBREVIATIONS

∠	ANGLE
℄	CENTER LINE
ACOUS.	ACOUSTICAL
AD.	AREA DRAIN
ADJ.	ADJACENT
A.F.F.	ABOVE FINISH FLOOR
ALUM.	ALUMINUM
APPROX.	APPROXIMATE
ARCH.	ARCHITECTURAL
ASB.	ASBESTOS
BD.	BOARD
BET.	BETWEEN
BITUM.	BITUMINOUS
BLDG.	BUILDING
BLK.	BLOCK
BLKG.	BLOCKING
BM.	BEAM
B.O.	BOTTOM OF
B.O.C.	BOTTOM OF CONCRETE
CAB.	CABINET
C.B.	CATCH BASIN
CEM.	CEMENT
CER.	CERAMIC
C.G.	CORNER GUARD
C.I.	CAST IRON
CTRL. JT.	CONTROL JOINT
CLG.	CEILING
CLKG.	CAULKING
CLNG.	CEILING
CLO.	CLOSET
CLR.	CLEAR
C.O.	CASED OPENING
COL.	COLUMN
CONT.	CONTINUOUS
CONST.	CONSTRUCTION
CORR.	CORRIDOR
DBL.	DOUBLE
DEPT.	DEPARTMENT
DET.	DETAIL
D.F.	DRINKING FOUNTAIN
DIA.	DIAMETER
DIAG.	DIAGONAL
DIM.	DIMENSION
DISP.	DISPENSER
D.O.	DOOR OPENING
DN.	DOWN
DR.	DOOR
D.S.	DOWNSPOUT
D.S.P.	DRY STANDPIPE
DTL.	DETAIL
DW	DISHWASHER
DWG.	DRAWING
DWR.	DRAWER
(E)	EXISTING
E	EAST
EA.	EACH
E.J.	EXPANSION JOINT
EL./ELEV.	ELEVATION
ELEC.	ELECTRICAL
ELVR.	ELEVATOR
EMER.	EMERGENCY
ENCL.	ENCLOSURE
E.P.	ELECTRICAL PANEL
EQ.	EQUAL
EQPT.	EQUIPMENT
EXP.	EXPANSION
EXPO.	EXPOSED
EXT.	EXTERIOR
F.A.	FIRE ALARM
F.B.	FLAT BAR
F.D.	FLOOR DRAIN
FDN.	FOUNDATION
F.E.	FIRE EXTINGUISHER
F.E.C.	FIRE EXTINGUISHER CABINET
F.H.C.	FIRE HOSE CABINET
FIN.	FINISH
FLR.	FLOOR
FLSH'G.	FLASHING
FLEX.	FLEXIBLE
FLUOR.	FLUORESCENT
F.O.C.	FACE OF CONCRETE
F.O.F.	FACE OF FINISH
F.O.S.	FACE OF STUD
F.P.	FIREPROOF
FT.	FOOT OR FEET
F.T.	FULL TILE
FTG.	FOOTING
FURR.	FURRING
FUT.	FUTURE
GA.	GAUGE
GALV.	GALVANIZED
G.B.	GRAB BAR
GL.	GLASS
GLAZ.	GLAZING
GND.	GROUND
GSF.	GROSS SQUARE FEET
G.S.M.	GALVANIZED SHEET METAL
GYP.	GYPSUM
H.B.	HOSE BIBB
H.C.	HOLLOW CORE
H/C	HANDICAPPED
HD.	HARD
HDWD.	HARDWOOD
HDWE.	HARDWARE
H.M.	HOLLOW METAL
HORIZ.	HORIZONTAL
HR.	HOUR
HT.	HEIGHT
I.D.	INSIDE DIAMETER
IN	INCH
INSUL.	INSULATION
INT.	INTERIOR
JAN.	JANITOR
JT.	JOINT
KIT.	KITCHEN
LAB.	LABORATORY
LAM.	LAMINATE
LAV.	LAVATORY
LTG.	LIGHT
MAX.	MAXIMUM
MECH.	MECHANICAL
MEMB.	MEMBRANE
MFR.	MANUFACTURER
MH.	MANHOLE
MIN.	MINIMUM
MIR.	MIRROR
MISC.	MISCELLANEOUS
M.O.	MASONRY OPENING
MTD.	MOUNTED
MTL.	METAL
MULL.	MULLION
(N)	NEW
N	NORTH
N/A	NOT APPLICABLE
N.I.C.	NOT IN CONTRACT
NO.	NUMBER
NOM.	NOMINAL
N.T.S.	NOT TO SCALE
O/	OVER
O.A.	OVERALL
OBS.	OBSCURE
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
OFF.	OFFICE
OPNG.	OPENING
OPP.	OPPOSITE
P.G.	PAINT GRADE
PL.	PLATE
P.LAM.	PLASTIC LAMINATE
PLAS.	PLASTER
PLUMB.	PLUMBING
PLYWD.	PLYWOOD
PR.	PAIR
PRCST.	PRE-CAST
PT.	POINT
PTD.	PAINTED
PTN.	PARTITION
Q.T.	QUARRY TILE
(R)	RELOCATED
R.	RISER
RAD.	RADIUS
R.D.	ROOF DRAIN
REF.	REFERENCE
REFR.	REFRIGERATOR
REINF.	REINFORCED
REQ'D	REQUIRED
RESIL.	RESILIENT
RM.	ROOM
R.O.	ROUGH OPENING
R.O.W.	RIGHT OF WAY
RSF	RENTABLE SQUARE FEET
R.W.L.	RAIN WATER LEADER
S.	SOUTH
S.A.D.	SEE ARCHITECTURAL DRAWING
S.C.	SOLID CORE
S.C.D.	SEE CIVIL DRAWING
SCHED	SCHEDULED
SECT.	SECTION
SF	SQUARE FOOT
SH.	SHELF
SHWR.	SHOWER
SHT.	SHEET
SIM.	SIMILAR
S.L.D.	SEE LANDSCAPE DRAWING
S.M.D.	SEE MECHANICAL DRAWING
S.P.D.	SEE PLUMBING DRAWING
SPEC.	SPECIFICATION
SQ.	SQUARE
S.S.	STAINLESS STEEL
S.S.D.	SEE STRUCTURAL DRAWINGS
S.SK.	SERVICE SINK
STA.	STATION
STD.	STANDARD
STL.	STEEL
STOR.	STORAGE
STRUCT.	STRUCTURAL
SUSP.	SUSPENDED
SVC.	SERVICE
SYM.	SYMMETRICAL
T	TREAD
TBD	TO BE DETERMINED
T.C.	TOP OF CURB
TEL.	TELEPHONE
TER.	TERRAZZO
T&G.	TONGUE & GROOVE
THK.	THICK
T.O.C.	TOP OF CONCRETE
T.O.M.	TOP OF MULLION
T.O.S.	TOP OF SLAB
T.P.	TOP OF PAVEMENT
T.S.	TUBE STEEL
TYP.	TYPICAL
U.O.N.	UNLESS OTHERWISE NOTED
USF	USABLE SQUARE FEET
VCT.	VINYL COMPOSITE TILE
VERT.	VERTICAL
VEST.	VESTIBULE
V.I.F.	VERIFY IN FIELD
W	WEST
W/	WITH
W/O	WITHOUT
W.C.	WATER CLOSET
WD.	WOOD
WDW.	WINDOW
WH	WATER HEATER
W.P.	WATERPROOF
WSCT.	WAINSCOT
WT.	WEIGHT

SYMBOLS

- COLUMN CENTERLINES
- DETAIL NUMBER
- DETAIL REFERENCE (XX/XA0.0)
- SHEET NUMBER
- INTERIOR ELEVATION (N / W (XX/XA0.0) E / S) — DIRECTIONAL ORIENTATION
- KEY NOTE REFERENCE (X)
- ISSUE NUMBER (X)
- REVISION (X)
- N.I.C. (BUILDING SHELL)
- N.I.C. (EXISTING OR UNIMPROVED TENANT SPACE)

NOTES TO PLAN CHECKER

A. SCOPE OF WORK:
THIS PROJECT INVOLVES MODIFICATION OF EXISTING TENANT IMPROVEMENTS TO INCLUDE SELECTIVE DEMOLITION AND CONSTRUCTION OF NON-LOAD BEARING PARTITIONS, NEW CEILING GRID & TILE, NEW LIGHT FIXTURES, NEW OFFICE DOORS & FRAMES, SALVAGE & REUSE OF EXISTING SELECTED MATERIALS IF PRACTICABLE, MILLWORK AND NEW FINISHES.

ALL WORK SHALL COMPLY WITH FEDERAL, STATE & LOCAL CODES INCLUDING CAC TITLE 24 AND FEDERAL ADA REGULATIONS, INCLUDING CAC TITLE 24 ENERGY REGULATIONS FOR NON-RESIDENTIAL BUILDINGS; SEE LIST OF APPLICABLE CODES ON THIS SHEET

B. OCCUPANCY:
THIS PROJECT DOES NOT CHANGE THE EXISTING OCCUPANCY, B-OFFICE.

C. NON-INFRINGEMENT STATEMENTS:
1. THIS IMPROVEMENT DOES NOT ALTER THE BUILDING'S PRIMARY VERTICAL OR LATERAL LOAD CARRYING STRUCTURAL ELEMENTS.
2. THE PROPOSED CONSTRUCTION DOES NOT INFRINGE UPON THE EXISTING LIFE SAFETY SYSTEM FOR THIS BUILDING.

D. LATERAL STABILIZATION: (SEISMIC CATEGORIES D, E & F)
THE ACOUSTICAL CEILING SYSTEM AND RELATED PARTITIONS, ELECTRICAL AND MECHANICAL BRACING SHALL BE IN COMPLIANCE WITH ASTM STANDARDS C635 & C636.

E. MECHANICAL, ELECTRICAL, PLUMBING DRAWINGS:
1. MECHANICAL, ELECTRICAL & PLUMBING DRAWINGS ARE ATTACHED. ALL OTHER REQUIRED DRAWINGS ARE DEFERRED SUBMITTALS BY DESIGN-BUILD CONTRACTORS.
2. THE SMOKE CONTROL SYSTEM IS NOT MODIFIED BY THIS SCOPE OF WORK.

F. ENERGY COMPLIANCE
ENERGY CALCULATIONS ARE PREPARED AND FILED BY ENGINEER AND ARE INCLUDED IN THE ENGINEER'S DRAWINGS.

G. ACCESSIBILITY COMPLIANCE: CBC 2016 CHAPTER 11B
THE PROPOSED CONSTRUCTION FULLY COMPLIES WITH DISABLED ACCESS REQUIREMENTS PER TITLE 24, CALIFORNIA CODE OF REGULATIONS.

PATH OF TRAVEL TO THE SUITE COMPLIES FULLY OR IS PROVIDED WITH APPROVED EQUIVALENT FACILITATION, INCLUDING NEW ACCESSIBLE STALLS, CURB CUT AND PATH FROM SIDEWALK AND VISUAL/AUDIBLE ALARMS TIED INTO THE BUILDING LIFE SAFETY SYSTEM. SEE ATTACHED BUILDING ARCHITECT'S SHEETS FOR REFERENCE.

ALL MOUNTING HEIGHTS AND CLEARANCES INCLUDING DOOR LEVER & MILLWORK IN BREAKROOM TO BE COMPLIANT.

H. LIFE SAFETY & SPRINKLER SYSTEM:
1. SPRINKLERS: SPRINKLER MODIFICATION PLANS SHALL BE PREPARED SHOWING ALL TENANT IMPROVEMENT SPRINKLER SYSTEM MODIFICATIONS. PLANS AND PLAN REVIEW FEES SHALL BE SUBMITTED SEPARATELY TO THE BUILDING DEPARTMENT PRIOR TO COMMENCEMENT OF WORK. A CALIFORNIA STATE LICENSED FIRE SPRINKLER CONTRACTOR WITH A C-16 LICENSE SHALL PERFORM ALL FIRE SPRINKLER TENANT IMPROVEMENT WORK.

2. ALARM SYSTEM: FIRE ALARM SYSTEM MODIFICATION PLANS SHALL BE PREPARED SHOWING ALL TENANT IMPROVEMENT FIRE ALARM SYSTEM MODIFICATIONS IN ACCORDANCE WITH THE FIRE DEPARTMENT ORDINANCES. PLANS AND PLAN REVIEW FEES SHALL BE SUBMITTED SEPARATELY TO THE BUILDING DEPARTMENT PRIOR TO COMMENCEMENT OF WORK. ALL FIRE ALARM SYSTEMS SHALL BE MONITORED BY CENTRAL STATION SERVICE.

J. EXITING:
1. THE SUITE HAS AN OCCUPANT LOAD GREATER THAN 50 PERSONS, REQUIRING TWO (2) EXITS. TWO (2) EXITS ARE PROVIDED, EACH WITH SELF-CLOSING DOORS SWINGING IN THE DIRECTION OF EGRESS; SEE EXITING DIAGRAM ON SHEET A0.3.

UNREASONABLE HARDSHIP FORM

Project Address: 4114 LAKESIDE DRIVE		**Application No.** BP19-00367	
Project Description/Location:	INTERIOR TENANT IMPROVEMENT	**Permit Valuation:** 700,000	
Type: ■ Alteration ☐ Structural Repair ☐ Addition		**Adjusted Cost of Proposed Construction:** 700,000	

PATH OF TRAVEL REQUIREMENTS FOR AREA OF ALTERATION, STRUCTURAL REPAIR, OR ADDITION

Accessible Features	Does existing feature meet accessibility standards of Chapter 11B of the current CBC?	Will this feature be replaced or altered to meet Chapter 11B of the current CBC?	If so, how much will be spent to make this feature accessible?
1. Accessible entrance	YES		
2. Accessible route to the altered area	NO	YES	$40,000
3. Accessible restroom for each sex or a unisex restroom serving the area	YES		
4. Accessible telephones	N/A		
5. Accessible drinking fountains	N/A		
6. Other (Any of the below)			
A. Accessible parking spaces		4 STALLS	$12,000
B. Signs		YES	$6,000
C. Alarms		YES	$15,000
D. Other:			
Cost of All Features Provided (A)	Summary of costs of Accessible Features Nos. 1-6 provided above.		$73,000
Total Cost on Same Path of Travel (B)*	Construction cost for all proposed work on this permit application **except** proposed and previous path of travel improvements.		$707,000
Percentage Upgrades Provided (A / B)	Cost of all Features Provided / Total Cost on Same Path of Travel.		10.3%

Description of Access Features Provided:
NEW ACCESSIBLE PATH OF TRAVEL FROM PUBLIC SIDEWALK TO FRONT DOOR. NEW ADA PARKING STALLS (4 STALLS).
ADA ACCESSIBLE COMPLIANT RESTROOMS WITH UPGADED FINISHES

Hardship Request:
N/A

Applicant Certification
I certify that the above information is true and correct to the best of my knowledge and belief.

Signature:		Date: / /	Company:	BRERETON ARCHITECTS	
Name: (print)	ASHLEY MILLER		Address:	909 MONTGOMERY, SUITE 260	
Title:	PRINCIPLE		City, State Zip:	SAN FRANCISCO, CA 94133	
	■ Architect ☐ Engineer , License # C-27238		Phone No.:	415-963-4609	

For Building Official Use Only

Approved by: | *Title:* | *Date:* / /

*If an area has been altered without providing an accessible path of travel to that area, and subsequent alterations of that area or a different area on the same path of travel are undertaken within three years of the original alteration, the total cost of alterations to the areas on that path of travel during the preceding three-year period shall be considered in determining whether the cost of making that path of travel accessible is disproportionate.

† Adjusted cost of construction does not include the cost of alterations to path of travel elements required to be upgraded outside the area of alteration, structural repair, or addition.

PROJECT DIRECTORY

TENANT:	BAAQMD 375 BEALE STREET, SUITE 600 SAN FRANCISCO, CA 94105	
PROJECT MANAGEMENT:	CUSHWAKE & WAKEFIELD 1350 BAYSHORE HIGHWAY, SUITE 900 BURLINGAME, CA 94010	
Project Manager:	CHI-WING WONG chiwing.wong@cushwake.com	(650) 931-2219
INTERIOR ARCHITECT:	BRERETON ARCHITECTS 909 MONTGOMERY, SUITE 260 SAN FRANCISCO, CA 94133	
Job Captain:	CHRISTOPHER J. HEPPEL cheppel@brereton.com	(415) 963-4609
Project Manager:	ASHLEY MILLER, AIA, IIDA, LEED AP amiller@brereton.com	(415) 963-4640

BUILDING INFORMATION

LOCATION:	4114 LAKESIDE DRIVE SUITE 118 SAN FRANCISCO, CA 94806
PARCEL:	405480004
YEAR OF CONSTRUCTION:	1985
CONSTRUCTION TYPE:	TYPE 3B
NO. OF STORIES: OCCUPANCY:	2 STORY BUILDING SLAB ON GRADE B, OFFICE
INTERIOR CONSTRUCTION:	NON-COMBUSTIBLE
RETURN AIR PLENUM:	FIRE-RATED NON-COMBUSTIBLE
FIRE SPRINKLERS:	ENTIRE BUILDING IS PROVIDED WITH FULLY AUTOMATIC AND MONITORED SPRINKLER SYSTEM IN ACCORDANCE WITH THE NFPA 13; MODIFIED AS NEEDED BY PROPOSED INTERIOR IMPROVEMENTS.
FIRE ALARM SYSTEM:	STROBE, HORNS AND SPEAKERS THROUGHOUT IN ACCORDANCE WITH NFPA 72.
AREAS OF:	CONSTRUCTION: 6,341 SQ.FT. FLOOR: 30,961 SQ.FT. BUILDING: 38,302 SQ.FT.

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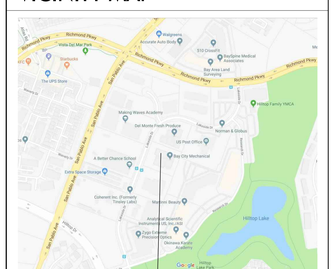
IPD1.0.1 1ST FLOOR - PLUMBING DEMOLITION PLAN
IP2.0.1 1ST FLOOR - PLUMBING FLOOR PLAN

APPLICABLE CODES

ALL WORK SHALL FULLY COMPLY BUT NOT BE LIMITED TO:

A. THE 2016 CALIFORNIA BUILDING CODE WITH RICHMOND CITY AMENDMENTS
B. THE 2016 CALIFORNIA ELECTRICAL CODE WITH RICHMOND CITY AMENDMENTS
C. THE 2016 CALIFORNIA MECHANICAL CODE WITH RICHMOND CITY AMENDMENTS
D. THE 2016 CALIFORNIA PLUMBING CODE WITH RICHMOND CITY AMENDMENTS
E. THE 2016 CALIFORNIA ENERGY CODE WITH RICHMOND CITY AMENDMENTS
F. THE 2016 CALIFORNIA FIRE CODE WITH CITY & COUNTY OF RICHMOND FIRE DEPARTMENT ORDINANCES
G. THE CALIFORNIA CODE OF REGULATIONS, TITLE 24, REFERRED TO AS THE CALIFORNIA BUILDING STANDARDS CODE
H. NFPA 13 SPRINKLER SYSTEMS
I. NFPA 72 NATIONAL FIRE ALARM CODE
K. CITY OF RICHMOND MUNICIPAL CODE

VICINITY MAP



RICHMOND LAKESIDE TENANT IMPROVEMENT

4114 Lakeside Drive
Richmond, CA 94806

brereton

909 Montgomery St., Suite 260
San Francisco, California 94133
T 415 546 1212 brereton.com

Stamp

LICENSED ARCHITECT — ASHLEY G. MILLER — NO. C-27238 — REN. 8/31/19 — STATE OF CALIFORNIA

Consultant

Issue/Revision:

No.	Proj. No. Date:	Description
1	32243.01	ISSUE FOR REVIEW 29MAR19
2	32243.01	ISSUE FOR PERMIT 22APR19
2.1	32243.01	PLAN CHECK RESPONSE 28MAY19 ADDENDUM #3

Copyright Statement:
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Approval Signature:

Co/ Title: Date:

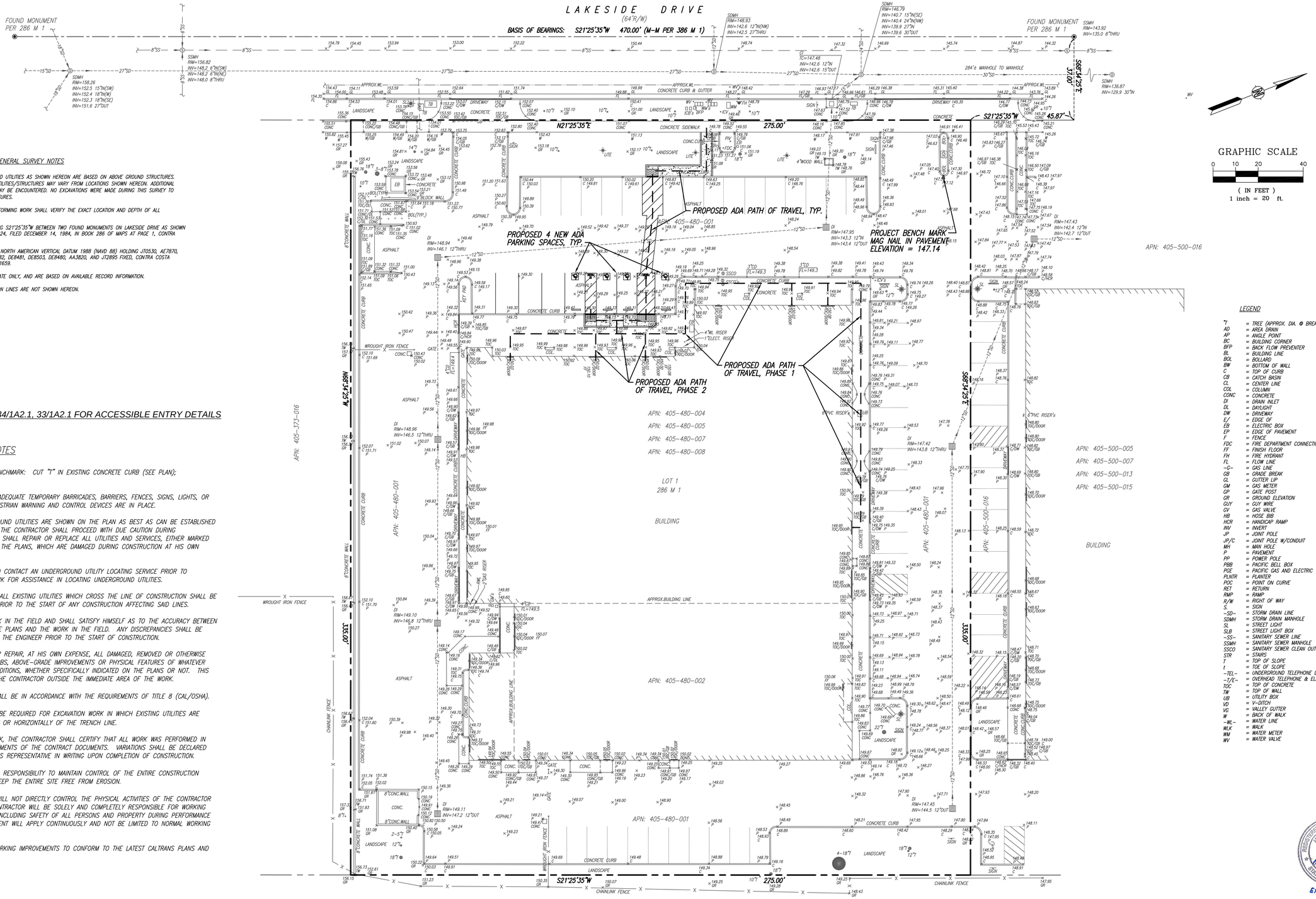
Cover Sheet

Scale: No Scale
Drawn By:
Sheet: 1 of 16

Issue Date: 24MAY19
Reviewed By: AM

A0.0

Plotted By: chappell
Mar 29, 2019 - 4:56pm
Drawing name: Z:\BLDG\BAAQMD 4114 Lakeside, Richmond\CD\A0.0.dwg



GENERAL SURVEY NOTES

1. THE LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN HEREON ARE BASED ON ABOVE GROUND STRUCTURES. LOCATIONS OF UNDERGROUND UTILITIES/STRUCTURES MAY VARY FROM LOCATIONS SHOWN HEREON. ADDITIONAL BURIED UTILITIES/STRUCTURES MAY BE ENCOUNTERED. NO EXCAVATIONS WERE MADE DURING THIS SURVEY TO LOCATE BURIED UTILITIES/STRUCTURES.
2. CONTRACTORS AND OTHERS PERFORMING WORK SHALL VERIFY THE EXACT LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES.
3. BASIS OF BEARINGS: THE BEARING S21°25'35"W BETWEEN TWO FOUND MONUMENTS ON LAKESIDE DRIVE AS SHOWN ON THE MAP OF SUBDIVISION 6524, FILED DECEMBER 14, 1984, IN BOOK 286 OF MAPS AT PAGE 1, CONTRA COSTA COUNTY RECORDS.
4. ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88) HOLDING JT0530, AE7870, DE9483, DE8484, DE8497, DE9482, DE8481, DE8503, DE8480, AA3820, AND JT2895 FIXED, CONTRA COSTA COUNTY CONTROL PROJECT, GPS1659.
5. BOUNDARY LINES ARE APPROXIMATE ONLY, AND ARE BASED ON AVAILABLE RECORD INFORMATION.
6. SPRINKLER HEADS AND IRRIGATION LINES ARE NOT SHOWN HEREON.

LEGEND

T	= TREE (APPROX. DIA. @ BREAST HEIGHT)
AD	= AREA DRAIN
AP	= ANGLE POINT
BC	= BUILDING CORNER
BFP	= BACK FLOW PREVENTER
BL	= BUILDING LINE
BOL	= BOLLARD
BW	= BOTTOM OF WALL
C	= TOP OF CURB
CB	= CATCH BASIN
CL	= CENTER LINE
COL	= COLUMN
CONC	= CONCRETE
DI	= DRAIN INLET
DL	= DAYLIGHT
DW	= DRIVEWAY
E/	= EDGE OF
EB	= ELECTRIC BOX
EP	= EDGE OF PAVEMENT
F	= FENCE
FDC	= FIRE DEPARTMENT CONNECTION
FF	= FINISH FLOOR
FH	= FIRE HYDRANT
FL	= FLOW LINE
-G-	= GAS LINE
GB	= GRADE BREAK
GL	= GUTTER LIP
GM	= GAS METER
GP	= GATE POST
GR	= GROUND ELEVATION
GUY	= GUY WIRE
GV	= GAS VALVE
HB	= HOSE BIB
HCR	= HANDICAP RAMP
INV	= INVERT
JP	= JOINT POLE
JP/C	= JOINT POLE W/CONDUIT
MH	= MAN HOLE
P	= PAVEMENT
PP	= POWER POLE
PBB	= PACIFIC BELL BOX
PGE	= PACIFIC GAS AND ELECTRIC
PLNTR	= PLANTER
POC	= POINT ON CURVE
RET	= RETURN
RMP	= RAMP
R/W	= RIGHT OF WAY
S	= SIGN
-SD-	= STORM DRAIN LINE
SDMH	= STORM DRAIN MANHOLE
SL	= STREET LIGHT
SLB	= STREET LIGHT BOX
-SS-	= SANITARY SEWER LINE
SSMH	= SANITARY SEWER MANHOLE
SSCO	= SANITARY SEWER CLEAN OUT
STR	= STAIRS
T	= TOP OF SLOPE
t	= TOE OF SLOPE
-TEL-	= UNDERGROUND TELEPHONE LINE
-T/E-	= OVERHEAD TELEPHONE & ELECTRIC
TOC	= TOP OF CONCRETE
TW	= TOP OF WALL
UB	= UTILITY BOX
VD	= V-DITCH
VG	= VALLEY GUTTER
W	= BACK OF WALK
-WL-	= WATER LINE
WLK	= WALK
WM	= WATER METER
WV	= WATER VALVE

NOTE: SEE 35/1A2.1, 34/1A2.1, 33/1A2.1 FOR ACCESSIBLE ENTRY DETAILS

PROJECT GENERAL NOTES

1. DATUM: NAVD88. PROJECT BENCHMARK: CUT "T" IN EXISTING CONCRETE CURB (SEE PLAN); ELEVATION=4.95.
2. WORK SHALL NOT BEGIN UNTIL ADEQUATE TEMPORARY BARRICADES, BARRIERS, FENCES, SIGNS, LIGHTS, OR OTHER SUCH TRAFFIC AND PEDESTRIAN WARNING AND CONTROL DEVICES ARE IN PLACE.
3. ALL KNOWN EXISTING UNDERGROUND UTILITIES ARE SHOWN ON THE PLAN AS BEST AS CAN BE ESTABLISHED FROM AVAILABLE INFORMATION. THE CONTRACTOR SHALL PROCEED WITH DUE CAUTION DURING UNDERGROUND OPERATIONS AND SHALL REPAIR OR REPLACE ALL UTILITIES AND SERVICES, EITHER MARKED IN THE FIELD OR INDICATED ON THE PLANS, WHICH ARE DAMAGED DURING CONSTRUCTION AT HIS OWN EXPENSE.
4. CONTRACTOR IS ENCOURAGED TO CONTACT AN UNDERGROUND UTILITY LOCATING SERVICE PRIOR TO BEGINNING ANY EXCAVATION WORK FOR ASSISTANCE IN LOCATING UNDERGROUND UTILITIES.
5. ELEVATIONS AND LOCATIONS OF ALL EXISTING UTILITIES WHICH CROSS THE LINE OF CONSTRUCTION SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF ANY CONSTRUCTION AFFECTING SAID LINES.
6. CONTRACTOR IS TO VERIFY WORK IN THE FIELD AND SHALL SATISFY HIMSELF AS TO THE ACCURACY BETWEEN THE WORK SET FORTH ON THESE PLANS AND THE WORK IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE START OF CONSTRUCTION.
7. CONTRACTOR SHALL REPLACE OR REPAIR, AT HIS OWN EXPENSE, ALL DAMAGED, REMOVED OR OTHERWISE DISTURBED WALLS, FENCES, CURBS, ABOVE-GRADE IMPROVEMENTS OR PHYSICAL FEATURES OF WHATEVER NATURE TO THEIR ORIGINAL CONDITIONS, WHETHER SPECIFICALLY INDICATED ON THE PLANS OR NOT. THIS NOTE APPLIES TO DAMAGE BY THE CONTRACTOR OUTSIDE THE IMMEDIATE AREA OF THE WORK.
8. ALL TRENCHING OPERATIONS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF TITLE 8 (CAL/OSHA).
9. HAND TUNNELING/DIGGING WILL BE REQUIRED FOR EXCAVATION WORK IN WHICH EXISTING UTILITIES ARE WITHIN 24" OR LESS VERTICALLY OR HORIZONTALLY OF THE TRENCH LINE.
10. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL CERTIFY THAT ALL WORK WAS PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. VARIATIONS SHALL BE DECLARED AND PRESENTED TO THE OWNERS REPRESENTATIVE IN WRITING UPON COMPLETION OF CONSTRUCTION.
11. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN CONTROL OF THE ENTIRE CONSTRUCTION OPERATION AND TO THIS END KEEP THE ENTIRE SITE FREE FROM EROSION.
12. THE OWNER'S REPRESENTATIVE WILL NOT DIRECTLY CONTROL THE PHYSICAL ACTIVITIES OF THE CONTRACTOR OR ANY SUBCONTRACTORS. CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR WORKING CONDITIONS ON THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
13. ALL ADA PATH OF TRAVEL & PARKING IMPROVEMENTS TO CONFORM TO THE LATEST CALTRANS PLANS AND SPECIFICATIONS.

REGISTERED PROFESSIONAL ENGINEER MATTHEW L. REI C 39863 CIVIL STATE OF CALIFORNIA
EXP. 12/31/19

C1.0

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NOTE: CONTOURS BY INTERPOLATION, APPROXIMATE ONLY.

REFERENCES
FIELD BOOK No.
FILE MAP:
TITLE CO.:
POLICY No.:
DATUM: NAVD 88
MISC. REF.:

REVISIONS

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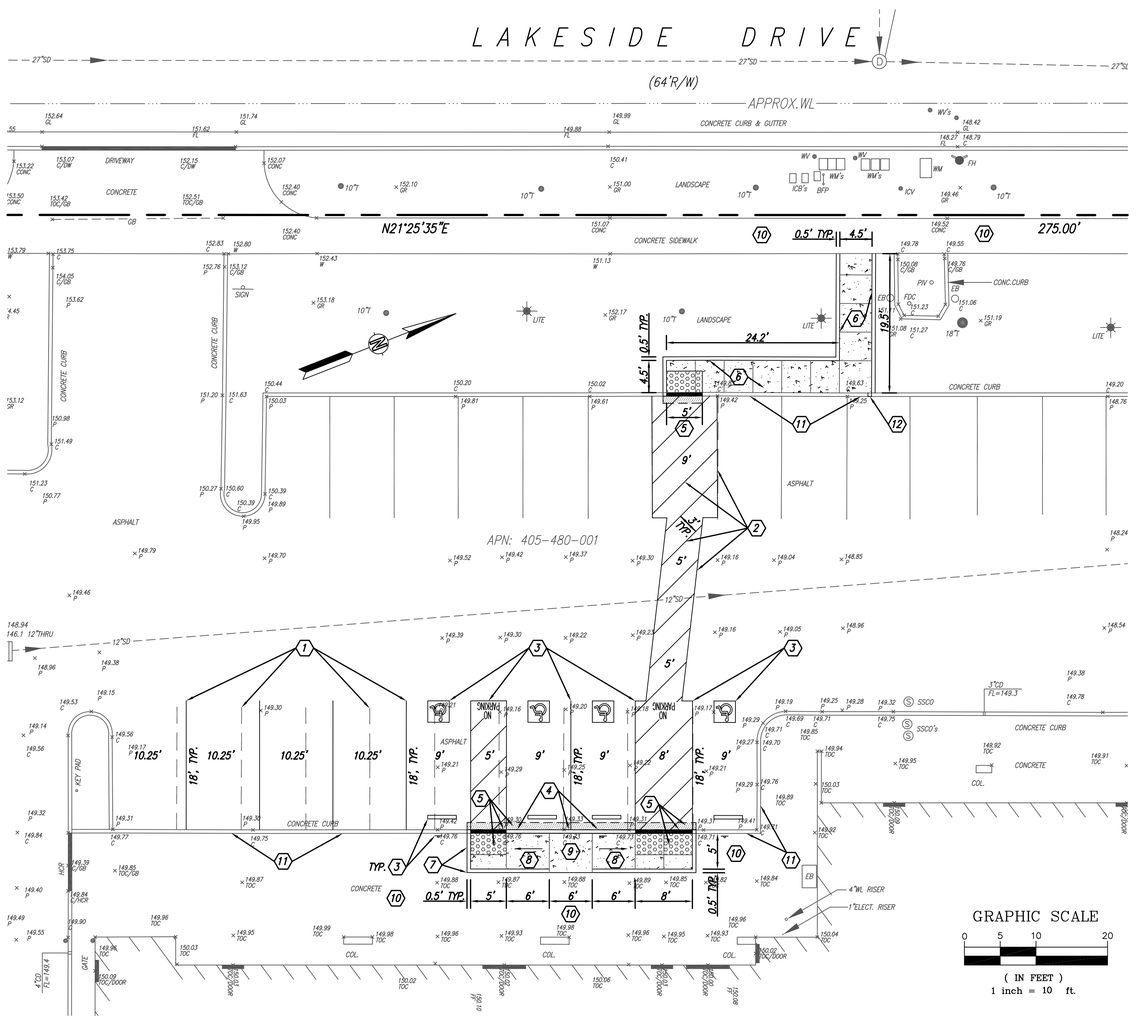
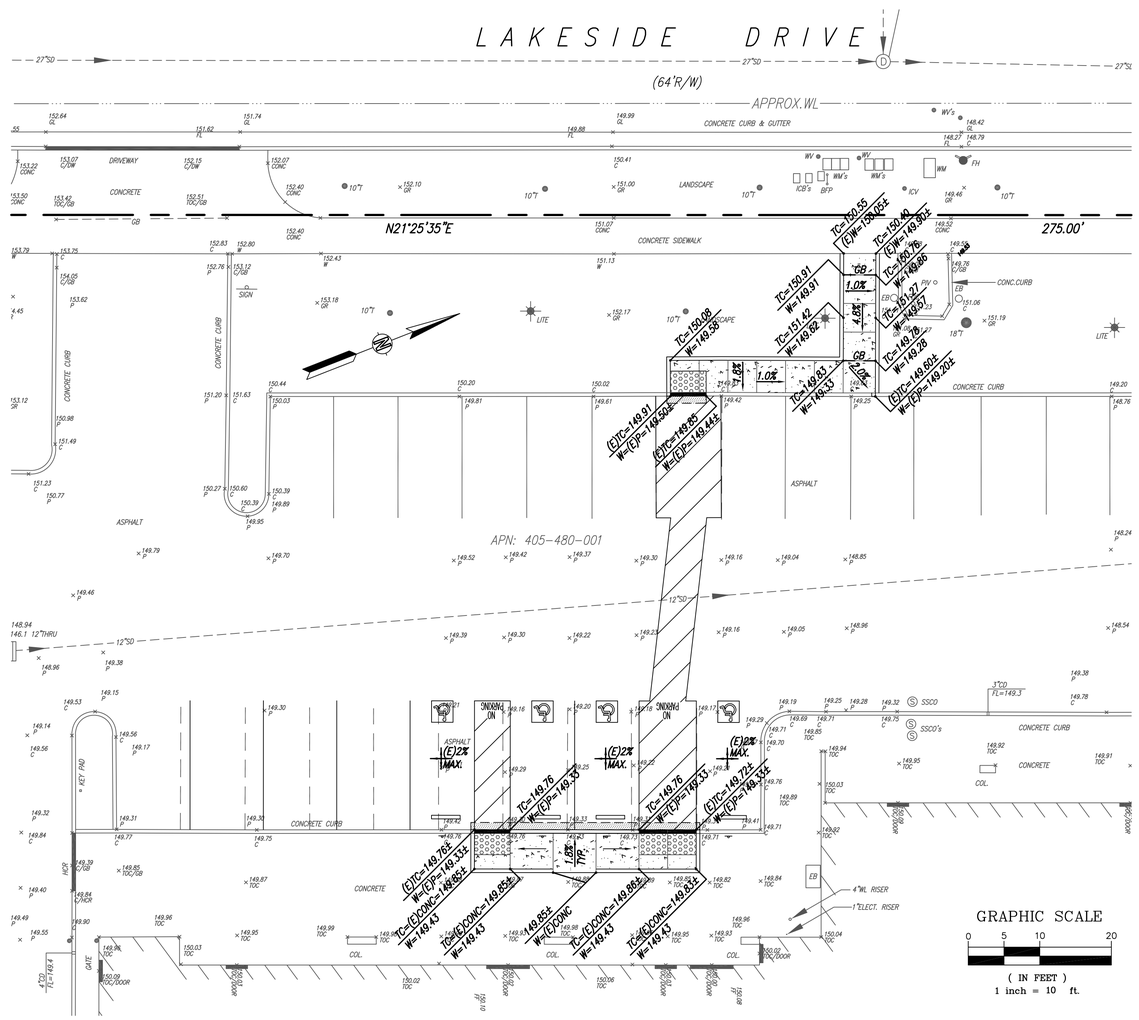
FOR: BAY AREA AIR QUALITY MANAGEMENT DISTRICT
SCALE: 1"=20' JOB No. 20023
DATE: APRIL 8, 2019 DWG No. X-4172

DESCRIPTION
CIVIL ENGINEERING SITE PLAN
ADA PARKING & PATH OF TRAVEL PLAN

RICHMOND, CALIFORNIA



DIMENSION, STRIPING & SIGNAGE PLAN
SCALE: 1"=10'



ELEVATION PLAN
SCALE: 1"=10'

NOTE: SEE 35/1A2.1, 34/1A2.1, 33/1A2.1 FOR ACCESSIBLE ENTRY DETAILS

CIVIL WORK LEGEND

1. EXISTING STANDARD PARKING STRIPING TO BE REMOVED. PAINT NEW 4" WHITE PARKING STRIPING PER DIMENSIONS SHOWN ON PLAN.
2. PAINT NEW 4" WHITE STRIPE.
3. EXISTING STANDARD PARKING STRIPING TO BE REMONED. PAINT NEW ADA PARKING STRIPING & INSTALL NEW CONCRETE WHEEL STOP & ADA PARKING SIGNAGE PER CALTRANS STANDARD DRAWING A90A.
4. SAWCUT & REMOVE EXISTING CONCRETE CURB IN CONFLICT WITH THE NEW IMPROVEMENTS. SAWCUT & REMOVE 12" WIDE ASPHALT CONCRETE PAVEMENT & BASE ROCK. INSTALL MONOLITHIC CONCRETE CURB & SIDEWALK/RAMP PER DETAIL ON SHEET C1.2. INSTALL 12" WIDE DEEP LIFT ASPHALT CONCRETE PAVEMENT (9" THICK, MIN.) ADJACENT TO NEW CURB.
5. INSTALL NEW CONCRETE FLUSH WITH ASPHALT CONCRETE PAVEMENT. SEE CIVIL WORK LEGEND NOTE #4 FOR ADDITIONAL DESIGN INFORMATION. INSTALL 3' WIDE DETECTABLE WARNING SURFACE THE FULL WIDTH OF NEW CURB OPENING PER CALTRANS STANDARD DRAWING A-88A.
6. INSTALL NEW REINFORCED CONCRETE WALKWAY WITH 6" CURBS. NOTE, CONTRACTOR TO VERIFY HEIGHT OF NEW CONCRETE CURBS TO MATCH EXISTING ADJACENT LANDSCAPING AND MAKE ADJUSTMENTS TO ELEVATIONS AS NECESSARY. SEE DETAIL ON SHEET C1.2.
7. SAWCUT & REMOVE EXISTING CONCRETE CURB & SIDEWALK IN CONFLICT WITH THE NEW WORK. INSTALL NEW CONCRETE CURBS FLUSH WITH EXISTING CONCRETE PAVEMENT TO REMAIN. DOWEL NEW CONCRETE INTO EXISTING CONCRETE. SEE DETAIL ON SHEET C1.2.
8. INSTALL NEW 6" THICK REINFORCED CONCRETE SIDEWALK RAMP.
9. INSTALL NEW 6" THICK REINFORCED CONCRETE SIDEWALK FLUSH WITH NEW CURB AND EXISTING CONCRETE PAVEMENT TO REMAIN.
10. EXISTING CONCRETE SIDEWALK TO REMAIN.
11. EXISTING CONCRETE CURB TO REMAIN.
12. SAWCUT & REMOVE A 6" SECTION OF EXISTING CONCRETE CURB. INSTALL NEW CONCRETE WALK FLUSH WITH EXISTING ASPHALT CONCRETE PAVEMENT TO PROVIDE STORMWATER RUNOFF FROM NEW CONCRETE WALK AT THIS LOCATION.

LEGEND

(E)	– EXISTING
GB	– GRADE BREAK
P	– A.C. PAVEMENT ELEVATION
TC	– TOP OF CURB ELEVATION
W	– CONCRETE WALK ELEVATION
– – – –	– SAWCUT LINE

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EXP. 12/31/19

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C1.1

NOTE: CONTOURS BY INTERPOLATION, APPROXIMATE ONLY.

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REVISIONS

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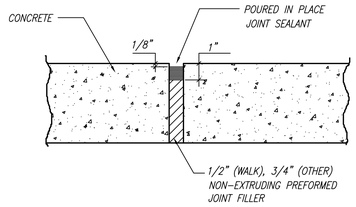
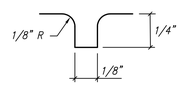
FOR: BAY AREA AIR QUALITY MANAGEMENT DISTRICT
SCALE: 1"=10' JOB No. 20023
DATE: APRIL 8, 2019 DWG No. X-4172

DESCRIPTION
CIVIL ENGINEERING 10 SCALE PLAN
ADA PARKING & PATH OF TRAVEL PLAN

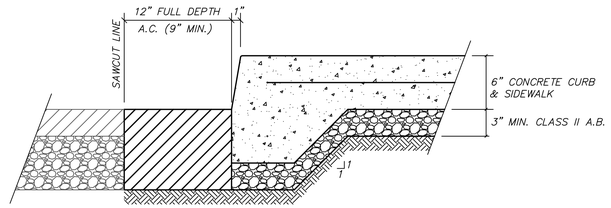
RICHMOND, CALIFORNIA



EXPANSION JOINT
NTS

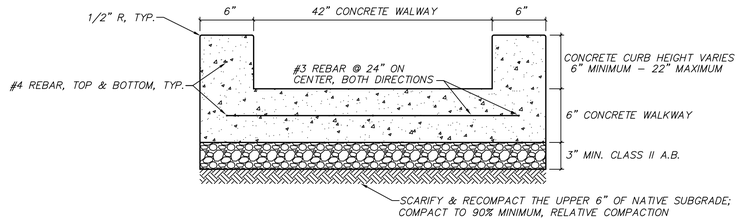


SCORE JOINT
NTS



REFER TO REINFORCED CONCRETE WALKWAY & CURB
DETAIL BELOW FOR NEW CONCRETE DESIGN INFORMATION

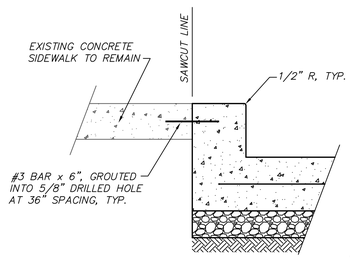
MONOLITHIC CONCRETE CURB & SIDEWALK/RAMP
NTS

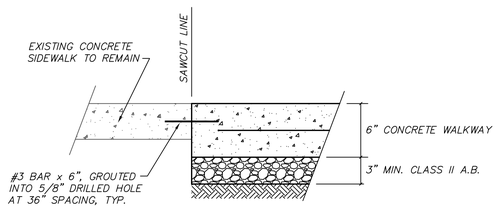


NOTES

1) PROVIDE SCORE JOINTS @ 4' INTERVALS OR AS DIMENSIONED ON SHEET C1.1.
2) CONCRETE TO BE 3,000 PSI MIN.
3) INSTALL EXPANSION JOINT AT EDGE OF NEW CONCRETE WALKWAY AND EXISTING CONCRETE CURB TO REMAIN.
4) CONTRACTOR TO MODIFY TOP OF NEW CONCRETE CURB ELEVATIONS, AS NECESSARY, TO MATCH EXISTING ADJACENT LANDSCAPING ELEVATION, TYPICAL.
5) END OF ALL CONCRETE CURBS TO BE ROUNDED WITH 6" RADIUS NOSE, TYPICAL.

REINFORCED CONCRETE WALKWAY & CURB
NTS





REFER TO REINFORCED CONCRETE WALKWAY & CURB
DETAIL ABOVE FOR NEW CONCRETE DESIGN INFORMATION

NEW CONCRETE WALK/RAMP CONNECTION TO EXISTING CONCRETE
NTS

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EXP. 12/31/19

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C1.2

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E-MAIL info@ksrinc.net

FOR: BAY AREA AIR QUALITY MANAGEMENT DISTRICT
SCALE: AS SHOWN
JOB No. 20023
DATE: APRIL 11, 2019
DWG No. X-4172

DESCRIPTION
CIVIL ENGINEERING DETAILS
ADA PARKING & PATH OF TRAVEL PLAN

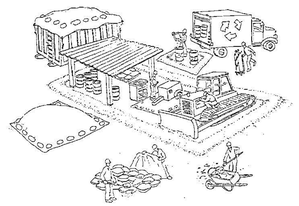
RICHMOND, CALIFORNIA

Contra Costa Clean Water Program

Program Participants: Antioch, Brentwood, Clayton, Concord, Danville, El Cerrito, Hercules, Lafayette, Martinez, Moraga, Orinda, Pinole, Pittsburg, Pleasant Hill, Richmond, San Pablo, San Ramon, Walnut Creek, Contra Costa County and Contra Costa County Flood Control and Water Conservation District

Pollution Prevention — It's Part of the Plan

Make sure your crews and subs do the job right!



Runoff from streets and other paved areas is a major source of pollution in San Francisco Bay and Delta. Construction activities can directly affect the health of the Bay unless contractors and crews plan ahead to keep dirt, debris, and other construction waste away from storm drains and local creeks. Following these guidelines will help ensure your compliance with local agency stormwater ordinance requirements.

Materials storage & spill cleanup

Non-hazardous materials management

- ✓ Sand, dirt, and similar materials must be stored at least 10 feet from catch basins, and covered with a tarp during wet weather or when rain is forecast.
- ✓ Use (but don't overuse) reclaimed water for dust control as needed.
- ✓ Sweep streets and other paved areas daily. Do not wash down streets or work areas with water!
- ✓ Recycle all asphalt, concrete, and aggregate base material from demolition activities.
- ✓ Check dumpsters regularly for leaks and to make sure they don't overflow. Repair or replace leaking dumpsters promptly. Cover dumpsters during wet weather.

Hazardous materials management

- ✓ Label all hazardous materials and wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with local agency, state, and federal regulations.
- ✓ Store hazardous materials and wastes in secondary containment and cover them during wet weather.
- ✓ Follow manufacturer's application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- ✓ Be sure to arrange for appropriate disposal of all hazardous wastes.

Spill prevention and control

- ✓ Keep a stockpile of spill cleanup materials (rags, absorbents, etc.) available at the construction site at all times.
- ✓ When spills or leaks occur, contain them immediately and be particularly careful to prevent leaks and spills from reaching the gutter, street, or storm drain. Never wash spilled material into a gutter, street, storm drain, or creek!
- ✓ Report any hazardous materials spills immediately!

Vehicle and equipment maintenance & cleaning

- ✓ Inspect vehicles and equipment for leaks frequently. Use drip pans to catch leaks until repairs are made; repair leaks promptly.
- ✓ Fuel and maintain vehicles on-site only in a bermed area or over a drip pan that is big enough to prevent runoff.
- ✓ If you must clean vehicles or equipment on-site, clean with water only in a bermed area that will not allow rinsewater to run into gutters, streets, storm drains, or creeks.
- ✓ Do not clean vehicles or equipment on-site using soaps, solvents, degreasers, steam cleaning equipment, etc.

Earthwork & contaminated soils

- ✓ Keep excavated soil on the site where it is least likely to collect in the street. Transfer to dump trucks should take place on the site, not in the street.
- ✓ Use straw bales, silt fences, or other control measures to minimize the flow of silt off the site.
- ✓ Avoid scheduling earth moving activities during the rainy season if possible. If grading activities during wet weather are allowed in your permit, be sure to implement all control measures necessary to prevent erosion.
- ✓ Mature vegetation is the best form of erosion control. Minimize disturbance to existing vegetation whenever possible.
- ✓ If you disturb a slope during construction, prevent erosion by securing the soil with erosion control fabric, seed with fast-growing grasses or other appropriate erosion control measures.
- ✓ If you suspect contamination (from site history, discoloration, odor, texture, abandoned underground tanks or pipes, or buried debris), call the local agency.

Dewatering operations

- ✓ Reuse water for dust control, irrigation, or another on-site purpose to the greatest extent possible.
- ✓ Be sure to call the local agency before discharging water to a street, gutter, or storm drain. Filtration or diversion through a basin, tank, or sediment trap may be required.
- ✓ In areas of known contamination, testing is required prior to reuse or discharge of groundwater. Consult with the local agency to determine what testing to do and to interpret results. Contaminated groundwater must be treated or hauled off-site for proper disposal.

Saw cutting

- ✓ Always completely cover or barricade storm drain inlets when saw cutting. Use filter fabric, straw bales, sand bags, or fine gravel dams to keep slurry out of the storm drain system.
- ✓ Shovel, absorb, or vacuum saw-cut slurry and pick up all waste as socn as you are finished in one location or at the end of each work day (whichever is sooner!).
- ✓ If saw cut slurry enters a catch basin, clean it up immediately.

Paving/asphalt work

- ✓ Do not pave during wet weather or when rain is forecast.
- ✓ Always cover storm drain inlets and manholes when paving or applying seal coat, tack coat, slurry seal, or fog seal.
- ✓ Place drip pans or absorbent material under paving equipment when not in use.
- ✓ Protect gutters, ditches, and drainage courses with straw bales, sand bags, or earthen berms.
- ✓ Do not sweep or wash down excess sand from sanding and sealing into gutters, storm drains, or creeks. Collect sand and return it to the stockpile, or dispose of it as trash.
- ✓ Do not use water to wash down fresh asphalt or concrete pavement.

Concrete, grout, and mortar storage & waste disposal

- ✓ Be sure to store concrete, grout, and mortar under cover and away from drainage areas. These materials must never reach a storm drain.
- ✓ Wash out concrete equipment/trucks off-site or designate an on-site area for washing where water will flow onto dirt or into a temporary pit in a dirt area. Let the water seep into the soil and dispose of hardened concrete with trash.

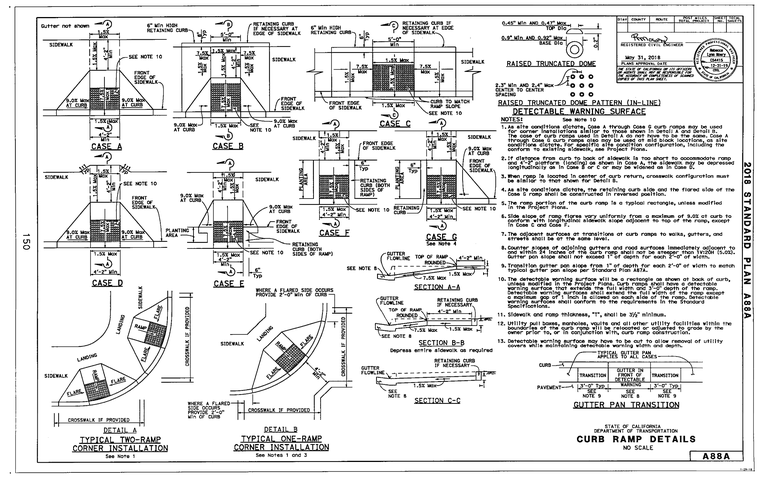
- ✓ If a suitable dirt area is not available, collect the wash water and remove it for appropriate disposal off-site.
- ✓ Divert water from washing exposed aggregate concrete to a dirt area where it will not run into a gutter, street, or storm drain. If a suitable dirt area is not available, filter the wash water before discharging to a storm drain.

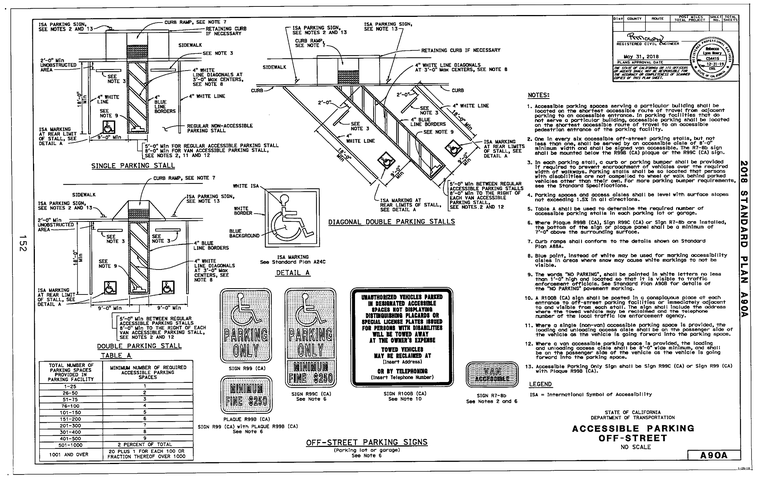
Painting

- ✓ Never rinse paint brushes or materials in a gutter or street!
- ✓ Paint out excess water-based paint before rinsing brushes, rollers, or containers in a sink. If you can't use a sink, direct wash water to a dirt area and spade it in.
- ✓ Paint out excess oil-based paint before cleaning brushes in thinner.
- ✓ Filter paint thinners and solvents for reuse whenever possible. Dispose of oil-based paint sludge and unusable thinner as hazardous waste.

Local Agencies: Antioch (925) 779-7035; Brentwood (925) 516-5420; Clayton (925) 673-7300; Concord (925) 671-3127; Danville (925) 314-3300; El Cerrito (510) 215-4382; Hercules (510) 799-8242; Lafayette (925) 284-1951; Martinez (925) 372-3515; Moraga (925) 376-2590; Oakley (925) 625-7003; Orinda (925) 253-4231; Pinole (510) 724-8949; Pittsburg (925) 252-4920; Pleasant Hill (925) 671-5264; Richmond (510) 307-8091; San Pablo (510) 215-3066; San Ramon (925) 973-2610; Walnut Creek (925) 943-5834; Contra Costa County (925) 313-2259 ; Contra Costa Clean Water Program (925) 313-2392

Storm drain polluters may be liable for fines of up to $10,000 per day plus $10 per gallon!





NOTE: SEE 35/1A2.1, 34/1A2.1, 33/1A2.1 FOR ACCESSIBLE ENTRY DETAILS

REGISTERED PROFESSIONAL ENGINEER
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CIVIL
STATE OF CALIFORNIA
EXP. 12/31/19

C1.3

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FOR: BAY AREA AIR QUALITY MANAGEMENT DISTRICT
SCALE: AS SHOWN
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DATE: APRIL 11, 2019
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DESCRIPTION
CIVIL ENGINEERING DETAILS
ADA PARKING & PATH OF TRAVEL PLAN
RICHMOND, CALIFORNIA

OCCUPANCY LOAD + EXIT CALCULATION

OCCUPANCY LOAD-4114 LAKESIDE

USE	SF	SF/OCC	NO. OF OCC.	
WAITING ROOM	161	SF/100	1.61	
RECEPTION	164	SF/100	1.64	2.1
MULTIPURPOSE ROOM	1,010	SF/15	67.33	
OFFICE	200	SF/100	6.00	
MEETING ROOM	200	SF/15	13.33	
COPY ROOM	100	SF/300	0.33	
IDF ROOM	127	SF/300	0.42	
STORAGE ROOM	144	SF/300	0.48	
PANTRY	82	SF/15	5.47	
REMAINING OFFICE AREA	3,753	SF/100	37.53	2.1
TOTAL	6,341		(134.13) 134	

EXITS REQUIRED: 2
EXITS PROVIDED: 2

RICHMOND LAKESIDE
TENANT IMPROVEMENT

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Richmond, CA 94806

brereton

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Stamp

LICENSED ARCHITECT
ASHLEY G. MILLER
NO. C-27238
REN. 8/31/19
STATE OF CALIFORNIA

Consultant

Issue/Revision:

No.	Proj. No. Date:	Description
1	32243.01 19MAR19	ISSUE FOR REVIEW
2	32243.01 22APR19	ISSUE FOR PERMIT
2.1	32243.01 28MAY19	PLAN CHECK RESPONSE ADDENDUM #3

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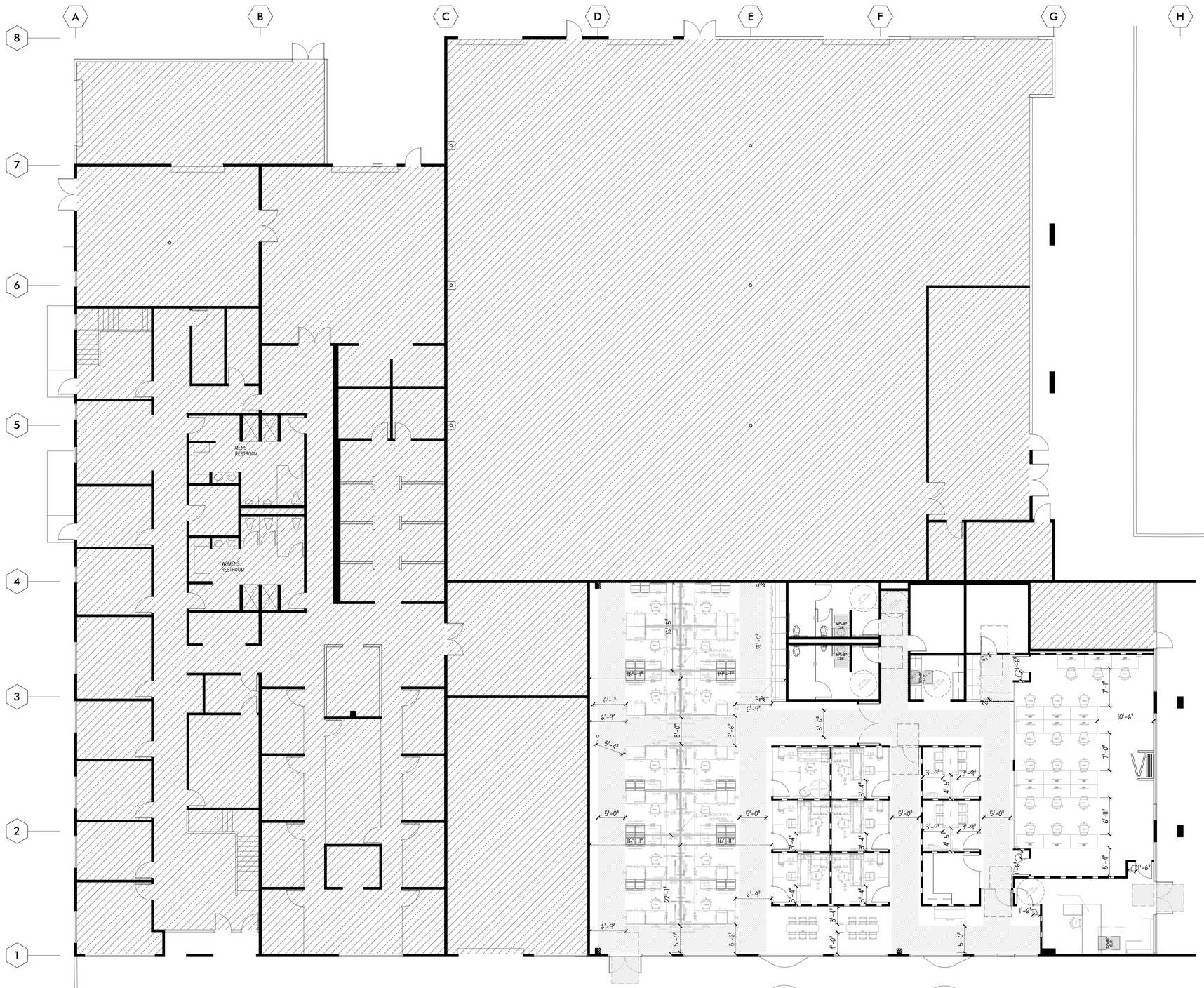
Approval Signature:

Co/ Title: Date:

Exiting Diagram & Occupancy Load Calcucations

Scale: No Scale
Drawn By:
Sheet: 1 of 16
Issue Date: 28MAY19
Reviewed By: AM

A0.3



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LICENSED ARCHITECT
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Consultant

Issue/Revision:

No.	Proj. No. Date:	Description
1	'32243.01	ISSUE FOR REVIEW '24MAR19 '
2	'32243.01	ISSUE FOR PERMIT '22APR19 '
2.1	'32243.01	'PLAN CHECK RESPONSE '28MAY19 'ADDENDUM #3

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Approval Signature:

Co/ Title: Date:

Interior Accessibility Plan

Scale: 1/8"=1'-0" Issue Date: 24MAY19
Drawn By: Reviewed By: AM
Sheet: X of 16

A0.4

Plotted by: cheppel

May 29, 2019 - 4:27pm

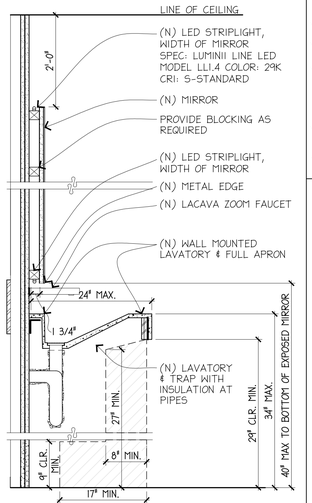
Drawing name: Z:\-BLDGS\BAAQMD 4124 Lakeside, Richmond\CD\A0-5.dwg

RESTROOM ACCESSORY SCHEDULE

SYMBOL	DESCRIPTION	MANUFACTURER	FINISH/COLOR
A	ELECTRONIC HAND DRYER	DYSON AIRBLADE	METALLIC SILVER SATIN S.S.
B	RECESSED TOILET SEAT AND TISSUE DISPENSOR (MEN'S)	BOBRICK, B-3474	
C	RECESSED TOILET SEAT AND TISSUE DISPENSER, SANITARY NAPKIN DISPOSAL (WOMEN'S)	BOBRICK, B-35745	SATIN S.S.
D	TOILET PARTITIONS: FLOOR MOUNTED, OVERHEAD BRACED	HADRIAN	BLACK FOX
E	SANITARY PRODUCT DISPENSER - SEMI-RECESSED	BOBRICK B-4706	SATIN S.S.
F	GRAB BARS: 36" REAR	BOBRICK B-5806x36	SATIN S.S.
G	GRAB BARS: 48" SIDE	BOBRICK B-5806x48	SATIN S.S.
H	PARTITION MOUNTED TOILET SEAT AND TISSUE DISPENSER AND SANITARY NAPKIN DISPOSAL (ONLY AT NON-ADA STALLS)	BOBRICK B-3571	SATIN S.S.
J	COAT HOOK/ DOOR BUMPER	BOBRICK B-211	S.S.
K	RECESSED WASTE RECEPTACLE	BOBRICK B-35643	SATIN S.S.

RESTROOM PLUMBING SCHEDULE

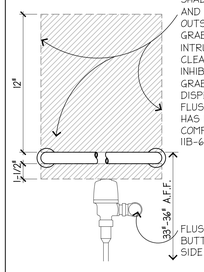
SYMBOL	DESCRIPTION	MANUFACTURER	FINISH/COLOR
L	VANITY MIRROR	3'-0X3'-8"	CLEAR MIRROR
M	MILLWORK VANITY SHROUD		PL-1
N	TOILET, WALL HUNG ELONGATED WITH DUAL FLUSH VITREOUS CHINA	TOTO, CT708U(G)	WHITE
O	TRAP INSULATION KIT	McGUIRE PW2125 SERIES OR EQUAL	WHITE
P	SENSOR ACTIVATED FLUSHOMETER	TOTO, CT708U(G)X	CHROME
R	SINK, WALL MOUNTED (ACCESSIBLE)	NEO-METRO, 36" SLAB, MODEL 9115-MC-FLR-RDC10-3676-CTR-H0	BIANCO/WHITE
S	WALL MOUNTED SENSOR FAUCET THERMAL MIXING	LA CAVA, ZOOM FAUCET #EX03A-CR-EX20A-AC	CHROME
T	SOAP DISPENSER, WALL MTD	LA CAVA, ZOOM FAUCET #EX01A-CR-AC	CHROME
U	ACCESSIBLE WALL MOUNTED URINAL WITH...	TOTO UT104E(V)	WHITE
V	SENSOR ACTIVATED FLUSHOMETER	TOTO ECOPOWER FLUSH VALVE, TEUILAX	CHROME
W	WALL MIRROR	3'-0" X 6'-0"	CLEAR MIRROR



SECTION AT ACCESSIBLE SINK & MIRROR 32

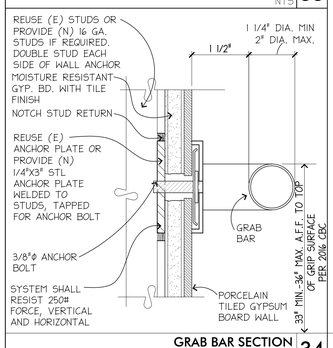
1" = 1'-0"

NOTE:
NO PROTRUDING OBJECT SHALL BE LOCATED WITHIN SHADED AREA, 12" ABOVE AND 1-1/2" BELOW THE OUTSIDE FACE OF THE GRAB BAR, CAUSING AN INTRUDING ON THE 1-1/2" CLEARANCE, AND THUS INHIBITING THE USE OF THE GRAB BAR, (UNLESS DISPENSER IS RECESSED FLUSH WITH WALL, AND HAS NO SHARP EDGES, TO COMPLY WITH SECT. 11B-609.3



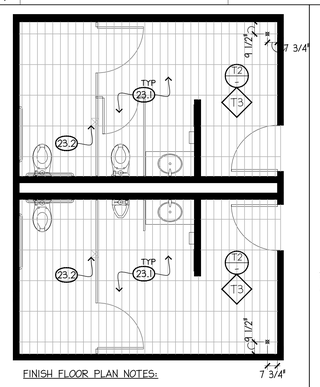
GRAB BAR/FLUSH VALVE CLEARANCE 33

NTS



GRAB BAR SECTION 34

6" = 1'-0"



FINISH FLOOR PLAN NOTES:

23.1 ALIGN FLOOR TILE GROUT LINES TO WALL TILE GROUT LINES, TYP.

23.2 ALIGN FLOOR DRAIN AT END OF TILE.

TILE NOTES:
1. USE 6"x12" STACKED BOND WALL TILE PATTERN.
2. 1/16" GROUT SHALL BE "CUSTOM" , SEALED SELECTED FROM MANUFACTURER ENTIRE RANGE; COLOR: #544 ROLLING FOG. FLOOR GROUT SHALL BE "CUSTOM" , SEALED SELECTED FROM MANUFACTURER ENTIRE RANGE; COLOR: #185 NEW TAUPE.
3. WALL FINISHES SHALL BE INSTALLED IN ACCORDANCE WITH TCNA METHOD W242-17.
4. FLOOR FINISHES SHALL BE INSTALLED IN ACCORDANCE WITH TCNA METHOD F12217 WITH WATERPROOF MEMBRANE. CONFIRM SLAB MEETS MAXIMUM ALLOWABLE VARIATIONS REQUIREMENT FOR SUBSTRATE PER TCNA F-122-17. PROVIDE TILE MOVEMENT JOINTS PER TCNA EJI71.
5. FLOOR TILE CO-EFFICIENT OF FRICTION MEETS ASTM# C1028

RESTROOM CEILING PAINT

P1 — MANUFACTURER: BENJAMIN MOORE
COLOR: SIMPLY WHITE 2143-70
FINISH: EGGSHELL LATEX ENAMEL

TOILET PARTITIONS
HADRIAN, POWDER COATED - BLACK FOX - FLOOR MOUNTED

URINAL PARTITIONS
HADRIAN, POWDER COATED - BLACK FOX - WALL MOUNTED

RESTROOM CERAMIC TILE

T2 — WALLS - MOSA - 36080, 6"X12"

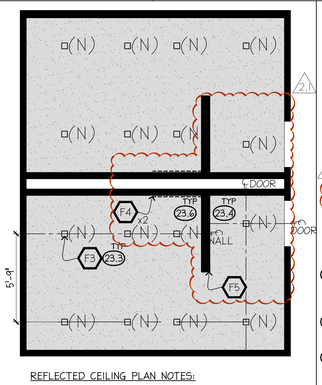
T3 — FLOORS - MOSA 204V 6"X24"

RESTROOM LAMINATE

PL-1 — VANITY SHROUD - FORMICA - 118-58 FINNISH OAK

FINISH FLOOR PLAN 29

1/4" = 1'-0"



REFLECTED CEILING PLAN NOTES:

23.1 PAINT GYP. BD. CEILING P2, SEMI-GLOSS.

23.2 REPLACE ALL HVAC SUPPLY AND RETURN AIR GRILLES WITH NEW BUILDING STANDARD GRILLES.

23.3 PROVIDE NEW SEMI-RECESSED LED DOWNLIGHTS AS SHOWN. SEE IA2.2 FOR SPECIFICATION.

23.4 PROVIDE NEW LED RECESSED LINEAR LIGHT FIXTURE AS SHOWN. REFRAME CEILING AS REQUIRED. SEE IA2.2 FOR SPECIFICATION.

23.5 PROVIDE EXHAUST FAN FOR EACH RESTROOM.

23.6 PROVIDE NEW LED STRIP LIGHT, TOP AND BOTTOM OF MIRROR. SEE DETAIL 32/- FOR MORE INFORMATION.

REFLECTED CEILING PLAN 23

1/4" = 1'-0"

CONSTRUCTION PLAN NOTES:

13.1 PROVIDE ALL NEW FINISHES AND FLOORING THROUGHOUT AS SHOWN. CERAMIC TILE FLOORING SHALL STRICTLY COMPLY WITH TCA METHOD FI13 WITH ANTI-CRACK ISOLATION & WATER PROOF MEMBRANE, PROVIDE SEALANT JOINT AT ENTIRE PERIMETER AND AS DETAILED. INSTALLATION AT WALLS SHALL STRICTLY COMPLY WITH TCA METHOD W243.

13.2 ENSURE FRAMING IS STRAIGHT AT ALL NEW WALL TILE LOCATIONS; REPAIR & RE-ALIGN AS NEEDED. INSTALL G.P. DENSHIELD TILE BACKER WATER RESISTANT BOARD PER MANUFACTURER'S INSTRUCTIONS. USE MESH TAPE ONLY AND USE SKIM COAT CORNER BEAD AT ALL DENSHIELD CORNERS.

13.3 INSTALL TRIM STOP AT ALL TILE CORNERS SO TILE EDGES ARE NOT EXPOSED. SCHLUTER JOLLY-AE, SATIN S.S., SEE 4B/-.

13.4 INSTALL MOISTURE RESISTANT GYP. BD. WALL AND CEILING ABOVE TILED WALL LOCATIONS.

13.5 INSTALL (N) WATER CLOSET WITHIN RANGE OF COMPLIANT DISTANCE FROM SIDE WALL. SEE DETAIL 14/- FOR ADDITIONAL INFORMATION (TYP.)

13.6 INSTALL NEW PARTITION, STILES, DOOR AND HARDWARE (TYP.). PROVIDE SHOP DRAWINGS FOR APPROVAL.

13.7 PROVIDE REAR & SIDE GRAB BARS TO COMPLIANT HEIGHT. SEE ELEVATIONS AND DETAIL 14 & 34/- FOR ADDITIONAL INFORMATION.

13.8 PROVIDE (N) COMPLIANT SANITARY NAPKIN DISPENSER.

13.9 PROVIDE (N) HAND DRYER.

13.10 PROVIDE NEW ADA COMPLIANT SINK, WALL MOUNTED FAUCET & SOAP DISPENSER (AC POWER) (TYP.)PROVIDE SHOP DRAWINGS FOR APPROVAL.

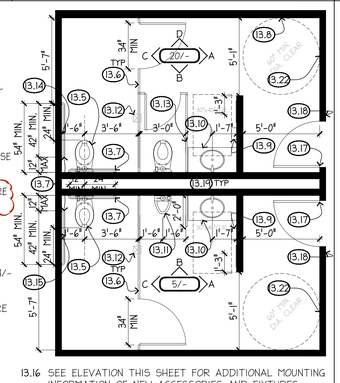
13.11 PROVIDE NEW URINAL WITHIN RANGE OF COMPLIANT DISTANCE FROM SIDE WALL. SEE ELEVATIONS THIS SHEET FOR ADDITIONAL INFORMATION.

13.12 PROVIDE NEW FLOOR DRAIN AT EXISTING LOCATION WITH TRAP PRIMER FED FROM NON-ACCESSIBLE STALL.

13.13 PROVIDE NEW PARTITION MOUNTED SEAT-COVER DISPENSER, SANITARY NAPKIN DISPOSAL, AND TOILET TISSUE DISPENSER.

13.14 PROVIDE NEW RECESSED SEAT-COVER DISPENSER, SANITARY NAPKIN DISPOSAL, AND TOILET TISSUE DISPENSER. (WOMEN'S ADA)

13.15 PROVIDE NEW RECESSED SEAT-COVER DISPENSER AND TOILET TISSUE DISPENSER. (MEN'S ADA)



13.16 SEE ELEVATION THIS SHEET FOR ADDITIONAL MOUNTING INFORMATION OF NEW ACCESSORIES AND FIXTURES.

13.17 PROVIDE NEW DOOR, FRAME AND HARDWARE. NEW CLOSER ADJUSTED TO 5lbs WITH SWEEP REQUIREMENTS OF SECTION 1133B.2.5.1.

13.18 PROVIDE NEW DOOR AND JAMB SIGNAGE; SEE ACCESSIBLE TOILET ROOM DOOR SIGNAGE DETAIL ON THIS SHEET.

13.19 PROVIDE WATER SHUT-OFF VALVE INSIDE WALL FOR EACH RESTROOM.

13.20 ALL ACCESS PANELS MOUNTED TO WALL TILE SHALL BE POWDER COATED TO MATCH ADJACENT WALL TILE.

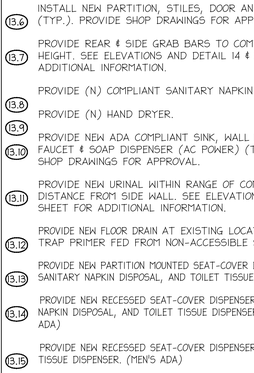
13.21 PROVIDE WATERPROOF FLOOR MEMBRANE BENEATH FLOOR AND WALL BASE TILE. WRAP MEMBRANE UP WALL 6" MIN.

13.22 PROVIDE 3'W x 6'H MIRROR, SIZE TO COURSE AND INSTALL FLUSH WITH TILE.

13.23 G.C. TO CONFIRM ALL PARTITIONS RECEIVING TILE IN RESTROOM ARE FRAMED WITH STUDS 1'-0" O.C. IF SPACING IS GREATER PROVIDE ADDITIONAL STUDS.

CONSTRUCTION PLAN 13

1/4" = 1'-0"

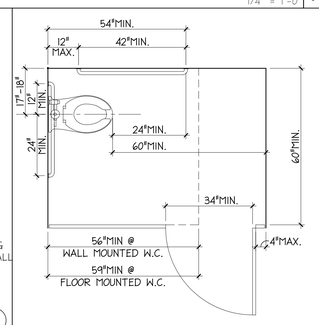


TYPICAL SINK/ ACCESSORY LAYOUT A

1" = 1'-0"

SINK PLAN & MOUNTING DETAILS 19

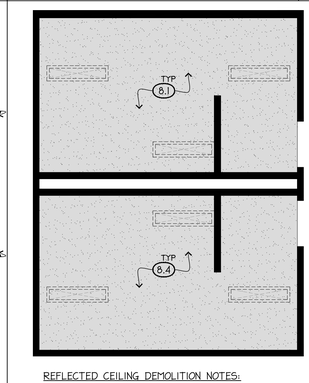
AS NOTED



TYPICAL ACCESSIBLE STALL LAYOUT 14

1/2" = 1'-0"

ACC-STALL_03



REFLECTED CEILING DEMOLITION NOTES:

8.1 REFER TO GENERAL NOTES SHEET A0.6 FOR ADDITIONAL DEMOLITION PLAN NOTES; ALL NOTES APPLY AS IF PRINTED IN FULL HERE.

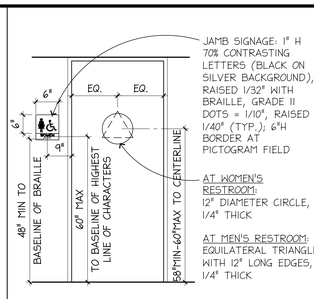
8.2 REVIEW ALL SALVAGEABLE MATERIAL WITH BUILDING ENGINEER. STORE MATERIAL TO BE SALVAGED AS DIRECTED. REMOVE ALL EXCESS MATERIALS AS REQUIRED. SALVAGE ONLY MATERIAL IN GOOD CONDITION TO REUSE.

8.3 CLEAN OR REPLACE STAINED OR MISSING HVAC SUPPLY/RETURN GRILLS AS REQUIRED.

8.4 LIGHT FIXTURES IN RESTROOMS TO BE DEMOLISHED. PREPARE GYP. BD. SURFACE BY SMOOTHING OUT TO LEVEL 4 FINISH SURFACE.

REFLECTED CEILING DEMOLITION PLAN 8

1/4" = 1'-0"



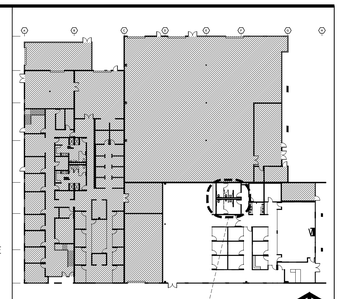
JAMB SIGNAGE: 1" H 70% CONTRASTING LETTERS (BLACK ON SILVER BACKGROUND), RAISED 1/32" WITH BRAILLE, GRADE II DOTS = 1/10", RAISED 1/40" (TYP.); 6"H BORDER AT PICTOGRAM FIELD

AT WOMEN'S RESTROOM: 12" DIAMETER CIRCLE, 1/4" THICK

AT MEN'S RESTROOM: EQUILATERAL TRIANGLE WITH 12" LONG EDGES, 1/4" THICK

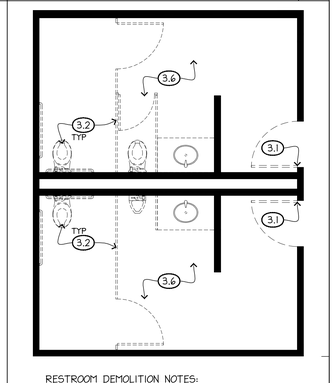
ACCESSIBLE TOILET ROOM DOOR SIGNAGE 6

NTS



KEY PLAN 1

NTS



RESTROOM DEMOLITION NOTES:

3.1 REMOVE AND SALVAGE DOORS AND FRAMES AND REMOVE PARTITIONS AS SHOWN.

3.2 REMOVE AND DISPOSE OF (E) TOILET PARTITIONS AND DOORS AT STALLS.

3.3 REMOVE AND COORDINATE SALVAGE ALL ACCESSIBLE PLUMBING FIXTURES WITH BUILDING ENGINEER. PROPERLY DISPOSE OF ALL ITEMS NOT TO BE REUSED.

3.4 REMOVE AND DISPOSE OF ALL ACCESSORIES AND FIXTURES. NOT TO BE REUSED.

3.5 REMOVE AND SALVAGE ALL ITEMS TO BE REUSED.

3.6 REMOVE ALL WALL TILE SUBSTRATE BACK TO STUDS.

3.7 REMOVE ALL EPOXY FLOORING DOWN TO SLAB.

3.8 DEMOLISH TOILET AND URINAL CARRIERS.

DEMOLITION PLAN 3

1/4" = 1'-0"

ACCESSORIES NOTES:

A NO ACCESSORY SHALL REQUIRE TWISTING, PINCHING OR GRABBING TO OPERATE.

B ALL DISPENSERS: OUTLETS, HIGHEST OPERABLE PARTS AND COIN SLOTS AT 3'-4" A.F.F. MAXIMUM.

NOTES TO PLANCHECKER

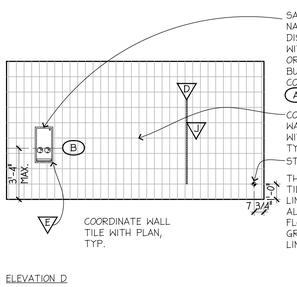
THE SCOPE OF THIS WORK INCLUDES MINOR ACCESSIBILITY UPGRADES TO THE RESTROOMS ON THE 1ST FLOOR.

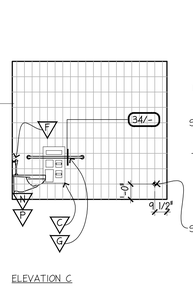
NOTES TO CONTRACTOR

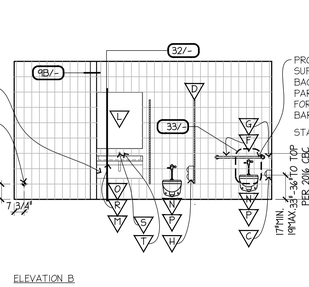
1. AS THE INFORMATION SHOWN IS BOTH FEDERAL AND STATE LAW, THE G.C. SHALL NOT DEVIATE FROM NEW DIMENSIONS, SHOWN UNLESS WITH WRITTEN APPROVAL OF ARCHITECT.
2. IF THE G.C. AND BUILDING INSPECTOR ACCEPT SOMETHING OTHER THAN FULL COMPLIANCE, THE G.C. MUST PROVIDE THE ARCHITECT WITH A WRITTEN ACCEPTANCE BY THE BUILDING DEPARTMENT IN THE FORM OF AN APPROVED HARDSHIP REQUEST.

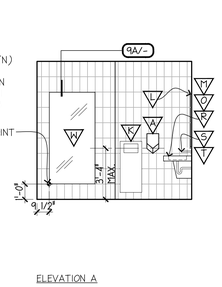
MIRROR EDGE FRAME & CORNER EDGE PROFILE 9

1/4" = 1'-0"



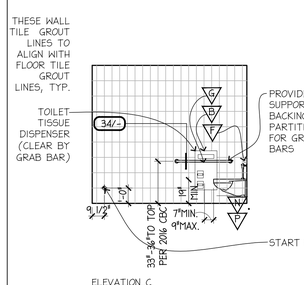


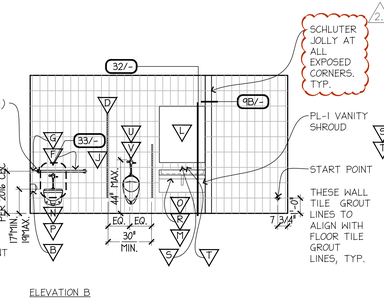


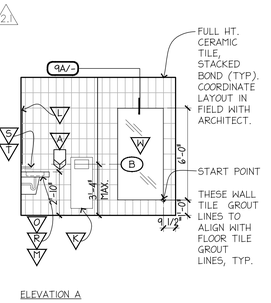


WOMEN'S RESTROOM 20

1/4" = 1'-0"







MEN'S RESTROOM 5

1/4" = 1'-0"

RICHMOND LAKESIDE TENANT IMPROVEMENT

4114 Lakeside Drive
Richmond, CA 94806

brereton

909 Montgomery St., Suite 260
San Francisco, California 94133
T 415 546 1212 brereton.com

Stamp

LICENSED ARCHITECT ASHLEY G. MILLER NO. C-27238 REN. 8/31/19 STATE OF CALIFORNIA

Consultant

NORTH

Issue/Revision:

No.	Proj. No. Date:	Description
1	32243.01	ISSUE FOR REVIEW
	24MAR19	
2	32243.01	ISSUE FOR PERMIT
	22APR19	
2.1	32243.01	PLAN CHECK RESPONSE
	28MAY19	ADDENDUM #3

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Approval Signature:

Co/ Title: Date:

Accessible Restrooms 1st Floor

Scale: As Shown Issue Date: 24MAY19
Drawn By: CJH Reviewed By: AH
Sheet: # of 16

A0.5

Plotted by: cheppel

May 29, 2019 - 4:27pm

Drawing name: Z:\-BLDGS\BAAQMD 4124 Lakeside, Richmond\CD\A0-6.dwg

CONSTRUCTION PLAN NOTES

1. REFER TO THE GENERAL CONSTRUCTION NOTES FOR ITEMS WHICH AFFECT AND SHALL APPLY TO ALL ASPECTS OF THIS PROJECT. COMPLY WITH THE CONSTRUCTION SPECIFICATIONS CONTAINED IN THE BUILDING'S SUMMARY **TENANT IMPROVEMENT STANDARDS MANUAL.**
2. MAINTAIN EXISTING FLOOR AND PARTITION FIRE PROTECTION ON ALL EXISTING EXITING, SHAFT AND CORE ELEMENTS AS REQUIRED BY CODE. REPAIR FIRE SEALANT AS REQUIRED.CUT AND FIT COMPONENTS OF EXISTING WORK AS REQUIRED TO INSTALL NEW WORK.
3. PROTECT FROM DAMAGE ALL MATERIALS NOT REQUIRED TO BE REMOVED OR DEMOLISHED. RESTORE SURFACES DISTURBED BY DEMOLITION TO ORIGINAL CONDITION. INSPECT ALL SURFACES WHICH EXIST AND ARE NOT NEW WORK WITHIN PROJECT AREA, FILL ALL HOLES, SCRATCHES, ETC. TO PREPARE TO RECEIVE NEW FINISH AS REQUIRED. PATCH SURFACES VISIBLE AFTER DEMOLITION TO MATCH ADJACENT FINISH CONDITION.
4. DETAILS ARE USUALLY KEYED AND NOTED TYPICAL ONLY ONCE WHEN THEY FIRST OCCUR AND ARE USUALLY REPRESENTATIVE OF SIMILAR CONDITIONS THROUGHOUT.
5. LAYOUT NEW PARTITIONS AS NOTED ON DRAWING. BEFORE PERFORMING ANY WORK, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS OF EXISTING AND NEW WORK AND SHALL BE RESPONSIBLE FOR THEIR ACCURACY. LAYOUT PARTITION DIMENSIONS IN FIELD AND RECEIVE ARCHITECTS APPROVAL PRIOR TO INITIATING CONSTRUCTION. ANY DISCREPANCY BETWEEN DIMENSIONS IN FIELD AND THOSE SHOWN SHALL BE REPORTED TO THE ARCHITECT FOR DIRECTION PRIOR TO CONSTRUCTION.
6. DIMENSIONING RULES: THE FOLLOWING RULES APPLY, UNLESS OTHERWISE NOTED.
   A. HORIZONTAL DIMENSIONS ARE SHOWN FROM FACE OF FINISHED SURFACE TO FACE OF FINISHED SURFACE.
   B. DIMENSIONS NOTED CLEAR OR CLR MUST BE PRECISELY MAINTAINED.
   C. DIMENSIONS ARE NOT ADJUSTABLE WITHOUT APPROVAL OF THE ARCHITECT, UNLESS NOTED (+/-).
   D. DIMENSIONS TO THE EXTERIOR OF THE BUILDING ARE TO THE INSIDE FACE OF EXTERIOR WALL.
   E. DIMENSIONS LOCATING DOORS ARE 4 INCHES TO INSIDE EDGE OF JAMBS, EXCEPT AT CORRIDORS.
   F. VERTICAL DIMENSIONS ARE FROM THE TOP OF FINISHED FLOOR.
   A. DIMENSIONS MARKED VERIFY, VERIFY IN FIELD OR V.I.F. SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND DISCUSSED WITH THE ARCHITECT PRIOR TO CONSTRUCTION.
   B. DO NOT SCALE DRAWINGS. IF ANY WORK CANNOT BE LOCATED, DISCUSS WITH ARCHITECT PRIOR TO CONSTRUCTION.
6. INSTALL NEW PARTITIONS PARALLEL OR PERPENDICULAR TO PERIMETER CORRIDOR OR CORE OF THE BUILDING UNLESS OTHERWISE NOTED. ALIGN PARTITIONS PERPENDICULAR TO CENTERLINE OF COLUMN OR WINDOW MULLIONS, UNLESS OTHERWISE NOTED.
7. USE ⅝", U.O.N. TYPE "X" GYP. BD. AS SHOWN ON DETAILS ON SHEET A9.1, EXCEPT WET LOCATIONS WHERE WATER RESISTANT GYPSUM BOARD SHALL BE REQUIRED.
8. ALL VERTICAL EXPOSED PIPES, CONDUITS, ETC. SHALL BE FURRED, WHETHER SHOWN ON DRAWINGS OR NOT, AS DIRECTED BY ARCHITECT IN FIELD.
9. BRACE ALL NEW PARTITIONS IN ACCORDANCE WITH LOCAL SEISMIC CODE REQUIREMENTS. REFER TO DETAILS.
10. STAGGER ALL JOINTS OF GYPSUM BOARD AT NEW ACOUSTICAL PARTITIONS.
11. REINFORCE NEW INTERIOR DOOR LATCH AND WINDOW JAMBS AND LONG WINDOW HEADS WITH SHEET METAL STUDS, AS DETAILED AND AS RECOMMENDED BY BOTH MANUFACTURERS. PROVIDE 20 GA STUDS AT ALL OPENINGS AS DETAILED AND LATERALLY BRACE ALL HEADERS AS DETAILED.
12. FRAME AROUND DUCTWORK, PIPES OR CONDUIT AT NEW PARTITION LOCATIONS AND BRACE WITH SHEET METAL STUDS AS REQUIRED FOR RIGID AND SEISMICALLY STABLE CONSTRUCTION.
13. INSTALL ANY NEW TEMPERED GLASS WITH THE MANUFACTURERS SEAL LOCATED AT THE LOWER CORNER OF THE GLAZED PANEL; CONCEAL TONG MARKS IN GLAZING SEALANT, IF ANY. CONTRACTOR SHALL PROVIDE MINIMUM GLASS THICKNESS AS REQUIRED BY CODE.
14. PROVIDE AN EXTRA STUD FOR NEW SWITCH AND POWER OUTLETS AS REQUIRED.
15. PROVIDE BLOCKING IN PARTITIONS AS REQUIRED FOR ALL NEW OVERHEAD, CANTILEVERED MILLWORK AND SIMILAR LOAD BEARING ITEMS ATTACHED TO PARTITIONS. USE 20 GAUGE SHEET METAL STUDS TO SUPPORT BLOCKING. SEE DETAILS. ALL WOOD BLOCKING AND FURRING SHALL BE FIRE-TREATED TO CONFORM TO THE BUILDING CODE.
16. TAKE SUITABLE MEASURES TO PREVENT INTERACTION BETWEEN DISSIMILAR METALS.
17. ALL NEW FINISHES ARE TO ALIGN FLUSH WITH EXISTING FINISHES WITHOUT EVIDENCE OF ADDITION. WHERE NEW GYPSUM BOARD MEETS THE SIDE OF EXISTING PLASTER, REMOVE THE METAL CORNERBEAD, ALIGN THE PARTITION STUD TO ALLOW GYPSUM BOARD TO FLUSH OUT WITH EXISTING FINISH.
18. PROVIDE FIRE DAMPERS AT ALL DUCT PENETRATIONS OF ALL FIRE RATED ASSEMBLIES IN ACCORD WITH CBC AND CMC.

GENERAL CONSTRUCTION NOTES

1. THE CONTRACT DOCUMENTS INCLUDE THE FOLLOWING:
   A. THE AGREEMENT BETWEEN THE OWNER AND THE CONTRACTOR.
   B. A.I.A. DOCUMENT 201, GENERAL CONDITIONS FOR THE PERFORMANCE OF A CONTRACT.
   C. BUILDING TENANT IMPROVEMENT STANDARDS AND CONSTRUCTION RULES REGULATIONS, AVAILABLE FROM THE BUILDING PROPERTY MANAGER.
   D. CONSTRUCTION DRAWINGS.
   E. MODIFICATIONS (ADDENDA AND BULLETINS, AS ISSUED.)
2. ALL WORK SHALL BE IN STRICT CONFORMANCE WITH THE LATEST FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES HAVING JURISDICTION INCLUDING THEIR MOST RECENT REVISIONS, ADDITIONS, AMENDMENTS AND INTERPRETATIONS. ALL WORK SHALL CONFORM WITH CCR TITLE 24 REGULATIONS AND FEDERAL ADA LAWS FOR ACCESS BY THE DISABLED. SEPARATE PERMITS ARE REQUIRED FOR ALL MAJOR SUB-TRADES: MECHANICAL, ELECTRICAL, LIFE SAFETY, PLUMBING AND SPRINKLER WORK.
3. ALL WORK SHALL BE IN STRICT CONFORMANCE WITH THE BUILDING RULES AND REGULATIONS PREPARED BY BUILDING MANAGER. VERIFY, DURING THE BID PERIOD, ACCESS TO THE JOB SITE, FREIGHT ELEVATOR USE SCHEDULE, FREIGHT ELEVATOR SIZE PROJECT, INCLUDING HEIGHT (IF APPLICABLE), DEPTH AND WIDTH, CLEARANCES INTO AND OUT OF THE BUILDING AND JOB SITE.
4. ALL WORK SHALL CONFORM WITH THE "TENANT STANDARD" CONSTRUCTION ESTABLISHED FOR THE BUILDING, MATCHING EXISTING, UNLESS OTHERWISE NOTED. THE CONTRACTOR IS REFERRED TO THE BUILDING SHELL CONSTRUCTION DRAWINGS TO WHICH THESE DRAWINGS ARE INTENDED TO BE COMPLIMENTARY. DISCREPANCIES AND INCONSISTENCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO CONSTRUCTION.
5. DO NOT SUBSTITUTE, REVISE, OR CHANGE THE WORK WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT OR OWNER. DO NOT PROCEED WITH WORK REQUIRING ADDITIONAL COMPENSATION UNTIL APPROVED IN WRITING. **CONTRACTOR TO COMPENSATE THE DESIGN TEAM FOR TIME TO REVIEW ANY SUBSTITUTION NOT PRESENTED AT THE BID AND NOT DIRECTED BY THE OWNER.**
6. WORK AREAS SHALL REMAIN SECURE AND LOCKABLE DURING CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH TENANT AND OWNER TO ENSURE SECURITY.
7. PROVIDE PROJECT INTERFACE AND COORDINATION OF ALL TRADES, CRAFTS, WORK "BY OTHERS" AND SUBCONTRACTORS TO COMPLETE THE WORK AND THE PROJECT AS REQUIRED BY THE CONSTRUCTION DRAWINGS WHETHER SPECIFICALLY SHOWN ON THE DRAWINGS OR NOT.
8. ALL WORK NOTED "BY OTHERS" IS TO BE ACCOMPLISHED BY A CONTRACTOR OTHER THAN THE GENERAL CONTRACTOR AND IS NOT TO BE PART OF THE CONSTRUCTION AGREEMENT. THE GENERAL CONTRACTOR IS TO COOPERATE AND COORDINATE WITH THE WORK OF THE "OTHER" CONTRACTORS AS REQUIRED. PROVISION AND INSTALLATION OF FURNITURE, FILE CABINETS, AND EQUIPMENT (UNLESS OTHERWISE NOTED) ARE NOT IN CONTRACT. A PARTIAL LIST OF WORK TO BE PERFORMED "BY OTHERS" IS AS FOLLOWS:
   A. TELEPHONE AND NETWORK COMMUNICATION EQUIPMENT AND CABLING DISCONNECTION, SUPPLY, INSTALLATION AND TERMINATION
   B. FURNITURE INSTALLATION
   C. SIGNAGE INSTALLATION, EXCEPT CCR TITLE 24 ACCESSIBLE SIGNAGE.
9. THE SCOPE OF WORK AND ADJACENT AREAS, INCLUDING THE PATH OF TRAVEL TO THE SUITE THROUGH THE LOBBY, ELEVATORS AND CORRIDOR, SHALL BE PROTECTED FROM ANY DAMAGE THAT OCCURS BECAUSE OF THIS WORK. PROTECT OUTSIDE CORNERS OF ALL PUBLIC AREAS IN PATH OF TRAVEL AND ELEVATOR JAMB EDGES. ANY DAMAGE THAT OCCURS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
10. THE CONTRACTOR SHALL EXAMINE, READ AND BECOME FAMILIAR WITH ALL THE CONTRACT DOCUMENTS, AS DEFINED IN THE CONSTRUCTION AGREEMENT GENERAL CONDITIONS. SHOULD THE CONTRACTOR FIND DISCREPANCIES IN OR OMISSIONS FROM THE DRAWINGS AND SPECIFICATIONS OR OTHER CONTRACT DOCUMENTS, OR SHOULD BE IN DOUBT AS TO THEIR INTENT OR MEANING, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY FOR CLARIFICATION OR INTERPRETATION.
11. INFORMATION GIVEN HEREIN AND ON THE DRAWINGS WAS OBTAINED FROM DATA AVAILABLE TO THE ARCHITECT AT THE TIME OF DESIGN, BUT ACCURACY CANNOT BE GUARANTEED. DRAWINGS AND SPECIFICATIONS ARE INTENDED FOR ASSISTANCE AND GUIDANCE, BUT EXACT DIMENSIONS AND ELEVATIONS SHALL BE GOVERNED BY ACTUAL CONDITIONS AT THE SITE AND SHALL BE FIELD CHECKED BY THE CONTRACTOR.
12. CONTRACT DRAWINGS ARE COMPLEMENTARY; WHAT IS SHOWN OR REFERENCED TO ON ANY SHALL BE PROVIDED AS THOUGH SHOWN ON ALL.
13. PRIOR TO SUBMITTING THE PROPOSAL, THE CONTRACTOR SHALL EXAMINE THE SITE, COMPARE IT WITH DRAWINGS AND SPECIFICATIONS AND BE SATISFIED WITH THE CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED. AT THAT TIME THE CONTRACTOR SHALL ASCERTAIN AND CHECK LOCATION OF EXISTING STRUCTURES OR EQUIPMENT WHICH MAY AFFECT THE WORK. THE CONTRACTOR SHALL BE ACQUAINTED WITH ALL CONDITIONS RELATING TO THE CONSTRUCTION AND COMPLETION OF THE PROJECT AND THE EMPLOYMENT OF LABOR THEREON. NO ALLOWANCES SHALL BE SUBSEQUENTLY MADE ON THE CONTRACTOR'S BEHALF FOR ANY EXPENSES DUE TO FAILURE OR NEGLECT ON THE CONTRACTOR'S PART TO MAKE SUCH AN EXAMINATION. FAILURE TO DO SO SHALL NOT RELIEVE THE CONTRACTOR OF THE OBLIGATIONS TO FURNISH ALL EQUIPMENT, MATERIALS, LABOR AND SERVICES NECESSARY TO CARRY OUT THE PROVISIONS OF THE CONTRACT.
14. CONFIRM DURING THE BID PERIOD, ON SITE DELIVERY DATES OF ALL MATERIALS SPECIFIED IN THE CONTRACT DOCUMENTS AND IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING OF POTENTIAL DELAYS TO THE COMPLETION DATE OF THE PROJECT.
15. WITHIN 5 DAYS OF NOTICE TO PROCEED WITH CONSTRUCTION, CONTRACTOR SHALL SUBMIT A DETAILED CONSTRUCTION SCHEDULE INDICATING EACH ACTIVITY, ITS DURATION, THE SUBMITTAL PERIOD AND THE TIME WHEN WORK "BY OTHERS" IS TO BE COMPLETED. CONTRACTOR SHALL INDICATE COORDINATION WITH AND DELIVERY OF ALL LONG LEAD TIME ITEMS: FINISHES, LIGHT FIXTURES, DOORS, HARDWARE, ETC.
16. SUBMIT, AS A MINIMUM, THE FOLLOWING CONTRACTOR SUPPLIED ITEMS:
   A. ALL REQUIRED CONSTRUCTION DOCUMENTS BY GOVERNING AGENCIES WITH SUBSTANTIATING COMPLIANCE REQUIREMENTS: CCR TITLE 24 DOCUMENTATION, **HVAC DISTRIBUTION PLANS, ELECTRICAL DESIGN AND DISTRIBUTION DRAWINGS, LIFE SAFETY ALARM DRAWINGS, SPRINKLER PLANS AND CALCULATIONS,** ETC.
   B. MILLWORK SHOP DRAWINGS.
   C. DOOR AND HARDWARE SCHEDULES
   D. LIGHT FIXTURE MANUFACTURER'S LITERATURE.
   E. SAMPLES OF EACH FINISH, PAINT SAMPLES TO BE 8 1/2" X 11" IN SIZE.
   F. PLUMBING, APPLIANCE AND EQUIPMENT MANUFACTURER'S LITERATURE.
   G. CARPET SEAMING DIAGRAM.
17. PROVIDE THE SCHEDULES, SHOP DRAWINGS, MOCKUPS, SAMPLES AND OTHER REQUIRED SUBMITTALS IN A TIMELY FASHION SO AS NOT TO DELAY THE CONSTRUCTION. ALLOW THE ARCHITECT SUFFICIENT TIME, A MINIMUM OF 5 WORKING DAYS, TO REVIEW AND COMMENT ON THE SUBMITTAL. WHERE SHOP DRAWINGS ARE REQUIRED, SUBMIT THREE (3) SETS OF PRINTS TO THE ARCHITECT FOR REVIEW PRIOR TO THE COMMENCEMENT OF FABRICATION OR PLACING ORDERS. ALONG WITH FINISH SAMPLES, CONTRACTOR SHALL INCLUDE MANUFACTURER'S LITERATURE PROVIDING EVIDENCE OF THEIR COMPLIANCE WITH FIRE AND BUILDING CODES AND REGULATIONS REGARDING FLAME SPREAD, SMOKE, DENSITY, ETC. AS REQUIRED.
18. SCHEDULE AND PERFORM THE WORK DURING NORMAL BUSINESS HOURS, EXCEPT AS SPECIFIED BELOW OR OTHERWISE APPROVED IN ADVANCE BY THE BUILDING PROPERTY MANAGER.
   A. SCHEDULE AND PERFORM THE WORK SO THAT OTHER TENANTS IN THE BUILDING WILL NOT BE DISTURBED AND DAMAGE TO EXISTING WORK OUTSIDE OF THE PROJECT AREA WILL NOT OCCUR. NO WORK IS TO BE DONE IN OTHER TENANT AREAS, UNLESS IT IS COMPLETE COMPLIANCE WITH BUILDING CONSTRUCTION RULES AND REGULATIONS.
   B. CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING WITH THE BUILDING PROPERTY MANAGER ACCESS INTO ADJACENT TENANT SPACE AS REQUIRED. CONTRACTOR SHALL INCLUDE IN HIS BASE BID OVERTIME CONSTRUCTION WORK IN ADJACENT OCCUPIED TENANT AREAS, UNLESS SPECIFICALLY APPROVED OTHERWISE IN WRITING BY OWNER.
   C. PROVIDE PROTECTION TO ALL EXISTING FINISHES IN BUILDING LOBBY ELEVATORS, PUBLIC CORRIDORS, ETC. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY THE CONTRACTOR OR SUBCONTRACTORS.
19. DEFINITIONS:
   A. "ALIGN" MEANS TO ACCURATELY LOCATE FINISH FACES IN THE SAME PLANE WITHOUT EVIDENCE OF ADDITION.
   B. "TYPICAL" MEANS IDENTICAL FOR ALL CONDITIONS, UNLESS OTHERWISE NOTED. NOTE THAT ITEMS NOTED "TYPICAL" ARE USUALLY KEYED ONLY ONCE, WHERE THEY FIRST OCCUR AND ARE REPRESENTATIVE OF SIMILAR CONDITIONS THROUGHOUT.
   C. "OR EQUAL" MEANS ANY PRODUCT, APPROVED IN WRITING, THAT COMPLIES WITH THE SPECIFICATIONS OF THE MATERIAL SPECIFIED IN DETAIL.
   D. "SIMILAR" MEANS COMPARABLE CHARACTERISTICS FOR THE CONDITIONS NOTED. VERIFY DIMENSIONS AND ORIENTATIONS.
   E. "FURNISH" MEANS "SUPPLY".
   F. "INSTALL" MEANS "CONNECT IN PLACE AND ADJUST FOR USE".
   G. "PROVIDE" MEANS "FURNISH AND INSTALL".
   H. "FINISHED FLOOR" MEANS "TOP OF FLOOR SLAB" AT CARPETED AREAS AND "TOP OF FLOOR FINISH" AT AREAS WITH WOOD FLOORING OR RESILIENT TILE.
   I. L.O.F. STANDS FOR "LIMIT OF FINISHES".
20. MAINTAIN STRICT CONTROL OF DUST AND DEBRIS EMANATING FROM THE PROJECT AREA. KEEP PROJECT AREA BROOM CLEAN AND CLEAR OF ANY DEBRIS DAILY. NO TOOLS AND MATERIALS SHALL BE LEFT UNATTENDED AT ANY TIME IN ANY PUBLIC LOBBY OR CORRIDOR.
21. INSTALL DUCT SEALS OVER FAN COIL AND VAV UNITS, RETURN AIR OPENINGS, ETC. AND INSTALL DUST PROTECTION ON ALL LIGHT FIXTURES AND CEILING MOUNTED DEVICES. REMOVE SEALS AND PROTECTION ONLY AFTER DUST GENERATION AND SANDING WORK HAS BEEN COMPLETED. THOROUGHLY CLEAN LIGHT FIXTURES AND CEILING MOUNTED DEVICES AT COMPLETION.
22. MAINTAIN ALL BUILDING SECURITY, FIRE ALARM AND FIRE PROTECTION SYSTEMS AT ALL TIMES AND MAINTAIN ALL UTILITIES TO ALL ADJACENT TENANT SPACES AT ALL TIMES, EXCEPT AS SCHEDULED WITH BUILDING ENGINEER.
23. **MECHANICAL SYSTEM:** DESIGN, DISTRIBUTION, BUILDING PERMIT AND INSTALLATION AND ITS COMPONENTS SHALL BE THE RESPONSIBILITY OF THE MECHANICAL **ENGINEER WHO SHALL** SUBMIT A MECHANICAL ZONING AND DUCT DISTRIBUTION PLAN TO THE PROPERTY MANAGER, BUILDING ENGINEER AND ARCHITECT FOR THEIR APPROVAL PRIOR TO CONSTRUCTION. INCLUDE ALL THERMOSTAT LOCATIONS. SHOW ALL SUPPLY AND RETURN AIR GRILLS AND HOW THEY RELATE TO SUSPENDED CEILING AND LIGHT FIXTURES AND CLEARANCES REQUIRED TO CLEAR THE SAME. NO ADDITIONAL EXPENSE WILL BE INCURRED BY THE OWNER OR TENANT FOR LACK OF COORDINATION IN THESE MATTERS. PROVIDE AIR BALANCING CERTIFICATION AND RECORD DRAWINGS TO BUILDING ENGINEER AT COMPLETION OF PROJECT.
24. **PLUMBING SYSTEM:** DESIGN, DISTRIBUTION, BUILDING PERMIT AND INSTALLATION SHALL BE THE RESPONSIBILITY OF THE PLUMBING **DESIGN-BUILD SUBCONTRACTOR**. COORDINATE A PLUMBING LAYOUT WITH THE BUILDING ENGINEER PRIOR TO CONSTRUCTION. STRICTLY ADHERE TO AND MAINTAIN ALL BUILDING CONTROL SYSTEMS. SUBMIT MANUFACTURER'S LITERATURE ON ALL NEW EQUIPMENT.
25. **POWER, TELEPHONE AND DATA OUTLETS:** DESIGN, DISTRIBUTION, BUILDING PERMIT AND INSTALLATION OF ALL SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL **ENGINEER WHO SHALL** SUBMIT LIGHT FIXTURE CATALOGUE CUTS TO BUILDING ENGINEER AND ARCHITECT FOR APPROVAL AS REQUIRED AND MAINTAIN RECORD DRAWINGS OF ALL WORK. MAINTAIN RECORDS AND LABELING OF ALL PANELS, SUBPANELS AND TRANSFORMERS. COORDINATE ALL ELECTRICAL WITH MILLWORK AND HARDWARE. PROVIDE RECORD DRAWINGS TO BUILDING ENGINEER.
26. **BUILDING LIFE-SAFTEY, AUDIBLE AND VISUAL WARNING SYSTEMS:** DESIGN, DISTRIBUTION, BUILDING PERMIT AND INSTALLATION OF ALL SHALL BE THE RESPONSIBILITY OF THE LIFE-SAFETY **ENGINEER WHO SHALL** SUBMIT A DISTRIBUTION AND DEVICE LOCATION PLAN TO THE PROPERTY MANAGER, BUILDING ENGINEER AND ARCHITECT TO REVIEW FOR APPROVAL PRIOR TO CONSTRUCTION. ALL SYSTEMS SHALL COMPLY WITH CCR TITLE 24, CBC AND NFPA. MAINTAIN RECORDS, LABEL ALL PANELS, COORDINATE WITH THE FIRE DEPARTMENT AS REQUIRED. PROVIDE RECORD DRAWINGS TO BUILDING ENGINEER AT THE COMPLETION OF THE PROJECT.
27. ERECT AND INSTALL ALL WORK LEVEL, PLUMB, SQUARE, TRUE, STRAIGHT, AND IN PROPER ALIGNMENT.
28. SEE **SHEET A9.3** FOR **MILLWORK CONSTRUCTION NOTES AND CABINET HARDWARE SPECS.**
29. PROVIDE ALL ADDITIONAL COMPONENTS, MISCELLANEOUS METAL, BRACING, BLOCKING, CLIPS, ETC. AS REQUIRED TO PROPERLY ANCHOR, FASTEN OR ATTACH MATERIALS, EQUIPMENT, APPLIANCES, HARDWARE, SYSTEMS AND ASSEMBLIES TO THE BUILDING STRUCTURE.
30. UPON COMPLETION OF THE WORK, NOTIFY THE PROPERTY MANAGER TO PREPARE A **"PUNCH LIST"** OF OUTSTANDING ITEMS, UNSATISFACTORY OR INCOMPLETE WORK REQUIRING CORRECTION OR REMEDY. FINAL PAYMENT WILL BE CONTINGENT UPON COMPLETION OF THESE ITEMS IN ACCORDANCE WITH THE OWNER-CONTRACTOR AGREEMENT.
31. CONTRACTOR SHALL PROVIDE TWO COMPLETE **CLOSE-OUT PACKAGES** INCLUDING "RECORD DRAWINGS" SETS FOR CONSTRUCTION HVAC, ELECTRICAL, FIRE PROTECTION, LIFE SAFETY, SPRINKLER AND PLUMBING WORK, TO THE BUILDING PROPERTY MANAGER WITHIN ONE MONTH AFTER COMPLETION. INCLUDE ALL MANUFACTURERS GUARANTEES, WARRANTIES, INSTRUCTIONS, MAINTENANCE PROCEDURES, ETC., OF ALL SPECIAL EQUIPMENT INSTALLED, I.E. FAN COIL UNITS, ETC..
32. PROVIDE ALL ITEMS NOT SPECIFIED BUT REQUIRED FOR A COMPLETE AND FINISHED PRODUCT.
33. TENANT WILL PROVIDE ITEMS OR WORK INDICATED AS "BY OTHERS" OR NOT IN CONTRACT (N.I.C.) UNDER SEPARATE CONTRACT. INCLUDE SCHEDULE REQUIREMENTS FOR WORK CONSIDERED "BY OTHERS" OR (N.I.C.) IN CONSTRUCTION PROGRESS SCHEDULE AND COORDINATE AS REQUIRED TO ASSURE ORDERLY SEQUENCE OF INSTALLATION.
34. CORRECT ANY DEFECTS FOUND IN THE EXISTING BUILDING CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO, UNEVEN SURFACES AND FINISHES AT CONCRETE, PLASTER OR GYPSUM BOARD AND FLOOR SLABS TO PROVIDE A SMOOTH SUBSTRATE FREE OF HOLES TO RECEIVE SPECIFIED FLOOR COVERINGS. PATCH AND REPAIR SURFACES TO MATCH ADJOINING ADJACENT SURFACES.
35. APPLY **FIREPROOFING PATCH** TO ALL AREAS WHERE FIREPROOFING HAS BEEN REMOVED FROM THE EXISTING STRUCTURAL MEMBERS. NEW PATCHING TO MATCH EXISTING FIREPROOFING BY TYPE AND BE COMPATIBLE WITH EXISTING. PRIOR TO THE APPLICATION OF THE FIREPROOFING INSPECT EXISTING CONDITIONS TO DETERMINE THAT ALL SURFACES ARE ACCEPTABLE TO RECEIVE FIREPROOFING PER MANUFACTURERS SPECIFICATIONS. CONTRACTOR TO PROVIDE FIREPROOFING TO ATTAIN A MINIMUM FIRE RATING BY AREA PER 2013 CBC PER BUILDING TYPE I-A (TABLE 601) AS FOLLOWS:
   A - THREE HOUR FOR ALL PRIMARY STRUCTURAL FRAMING
   B - TWO HOUR FOR ALL SECONDARY FLOOR CONSTRUCTION
   VERIFY THICKNESS OF FIREPROOFING WITH MANUFACTURERS SPECIFICATIONS FOR RATINGS. APPLICATION OF FIREPROOFING AND ANY BONDING AGENTS TO BE DONE IN STRICT ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS. PRIOR TO APPLICATION VERIFY WITH INSPECTOR IF SPECIAL INSPECTIONS OF FIREPROOFING PATCH WILL BE REQUIRED AND IF REQUIRED, COORDINATE WITH ARCHITECT/ OWNER.
36. ANY WORK WHICH CAUSES REMOVAL OR SPAWLING OF FIREPROOFING MATERIALS, GENERAL CONTRACTOR SHALL FULLY REPAIR TO MATCH EXISTING FIRE INTEGRITY AND AS DIRECTED BY FIRE INSPECTOR.

DEMOLITION PLAN NOTES

1. COMPLY WITH APPLICABLE LOCAL, STATE AND FEDERAL CODES, ORDINANCES AND REGULATIONS PERTAINING TO SAFETY OF PERSONS, PROPERTY, ENVIRONMENTAL PROTECTION AND RECYCLING ORDINANCES.
2. SCHEDULE THE WORK SO AS NOT TO INTERFERE WITH ANY TENANT DURING NORMAL BUSINESS HOURS AND TO ELIMINATE OBJECTIONABLE NOISE GENERATION AS DEFINED BY PROPERTY MANAGER. NOTIFY BUILDING ENGINEER, PROPERTY MANAGER AND TENANT IN ADVANCE OF UTILITY INTERRUPTIONS AND OBTAIN APPROVAL BEFORE INITIATING THIS WORK. LIFE SAFETY SYSTEM SHALL BE OPERATIONAL AT ALL TIMES. COORDINATE SEALS, REPROGRAMMING, DEMOLITION, ETC. AS REQUIRED WITH BUILDING ENGINEER AND LIFE-SAFETY SUBCONTRACTOR.
3. MAINTAIN FREE AND SAFE PASSAGE TO AND FROM CONSTRUCTION AREA AND ADJACENT BUILDING AREAS. DO NOT OBSTRUCT EXIT PASSAGES AT ANY TIME. PROVIDE AND MAINTAIN BARRICADES, GUARDRAILS AND LIGHTING AS REQUIRED TO PROTECT BUILDING OCCUPANTS, VISITORS AND WORKERS. PROVIDE AND USE PROTECTIVE DEVICES AS APPROPRIATE WHENEVER WORKING IN COMMON AREAS: LOBBIES, CORRIDORS, ELEVATORS, ETC., OTHER PERSONNEL, EQUIPMENT OR FURNITURE REMAINING IN ALL AREAS. PROVIDE OUTSIDE CORNER PROTECTION IN ALL COMMON AREAS THROUGHOUT THE PROJECT'S DURATION.
4. PRIOR TO BEGINNING DEMOLITION, CLOSE-OFF SUPPLY AND RETURN-AIR OPENINGS TO MAIN BUILDING SHAFTS OR DUCTWORK AND RETURN-AIR PLENUM. SEAL THESE OPENINGS WITH TAPED VISQUEEN AND REMOVE ONCE DUST IS NO LONGER BEING GENERATED. DRAW EXISTING BLINDS TO THE SIDE FULLY, WRAP AND SEAL IN AIRTIGHT BAGS. AT THE COMPLETION OF THE PROJECT, PROVIDE ALL NEW FILTERS FOR ALL MECHANICAL HVAC EQUIPMENT PRIOR TO THEIR START-UP, COORDINATE WITH BUILDING ENGINEER.
5. PER THE CITY AND COUNTY OF **SAN FRANCISCO ORDINANCE NO. 27-06**, REMOVE FROM SITE AND LEGALLY DISPOSE REGULARLY ALL REFUSE, DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM DEMOLITION OPERATIONS REGULARLY. IN OCCUPIED AREAS, CLEAN AND DISPOSE OF MATERIALS DAILY. REMOVE TOOLS AND EQUIPMENT FROM SITE UPON COMPLETION OF WORK. LEAVE AREAS AND SITE BROOM SWEPT, ORDERLY AND IN CONDITION ACCEPTABLE FOR CONSTRUCTION.
6. REMOVE DESIGNATED PARTITIONS, ASSOCIATED DOORS, SIDELIGHTS, FRAMES, LIGHT SWITCHES, POWER AND COMMUNICATIONS OUTLETS THROUGHOUT PROJECT AREA AS SHOWN. NO ABANDONED OR UNUSED MATERIALS SHALL BE LEFT IN PLENUM, INCLUDING ALL BRACES, DRAFT STOPS, ABANDONED MECHANICAL EQUIPMENT, DUCTWORK, ELECTRICAL AND PLUMBING LINES ETC. ALL UTILITIES SHALL BE REMOVED BACK TO THEIR LOCAL DISTRIBUTION BOX OR PRIMARY SOURCE AS DIRECTED BY BUILDING ENGINEER.
7. CONTRACTOR SHALL SAFE-OFF ALL ELECTRICAL TO SUPPORT DEMOLITION AS REQUIRED; PERFORM NECESSARY WORK IN FLOOR SUB-PANELS AS REQUIRED. SALVAGE ALL ABANDONED ELECTRICAL CIRCUITS FOR FUTURE USE. REMOVE FLOOR OUTLETS BACK TO SOURCE AND FLUSH PATCH FLOOR TO MAINTAIN FLOOR FIRE-RATING.
8. SEE DEMOLITION AND FINISH PLANS FOR EXTENT OF DEMO AT FLOOR FINISHES AND RESILIENT BASE. IF VINYL FLOOR TILE APPEARS TO BE OVER 15 YEARS OLD, VERIFY ITS REMOVAL WITH BUILDING ENGINEER OR LEAVE THE TILE IN PLACE AS DIRECTED.
9. INSPECT CORE AND PERIMETER GYPSUM BOARD SILL TO REMAIN. REMOVE ALL EXISTING FRAYED OR LOOSE WALL COVERING, HANGING DEVICES, SUPPORT BRACKETS, REMAINING SIGNAGE, ETC.
10. RESTORE SURFACES DISTURBED BY DEMOLITION BACK TO THEIR ORIGINAL CONDITION. DAMAGE OUTSIDE THE PROJECT AREA, CORRIDOR, LOBBIES, ELEVATORS, ETC. SHALL BE REPAIRED TO MATCH EXISTING AT NO COST TO THE TENANT OR OWNER.
11. PREVENT MOVEMENT OR SETTLEMENT OF SURROUNDING CONSTRUCTION. PROVIDE BRACING OR SHORING AND BE RESPONSIBLE FOR SAFETY AND SUPPORT OF STRUCTURE. ASSUME LIABILITY FOR SUCH MOVEMENT, SETTLEMENT, DAMAGE OR INJURY.
12. CAREFULLY SALVAGE MATERIALS AS NOTED. IF THESE MATERIALS ARE NOT TO BE REUSED FOR THIS PROJECT, ASK BUILDING ENGINEER IF HE WOULD LIKE THEM AND DELIVER TO STORAGE IN BUILDING AS DIRECTED. IF NOT, DISPOSE OF PROPERLY:
   A. LIGHT FIXTURES
   B. DOORS AND HARDWARE
   C. FIRE EXTINGUISHERS AND THEIR CABINETS
   D. THERMOSTATS, MOUNTING PLATES, AND COUPLERS
   E. VAV BOXES AND CONTROLS
13. THE DESIGNER IS NOT AWARE OF ANY ASBESTOS CONTAINING MATERIALS ON THIS FLOOR. THE CONTRACTOR SHALL DETERMINE THE EXTENT OF SUCH MATERIALS ON THE SITE AND TAKE PROPER MEASURES FOR ITS REMOVAL OR ENCAPSULATION. ALL VINYL TILE, IF APPLICABLE, SHALL BE ENCAPSULATED BY COVERING WITH CARPET OR NEW VINYL TILE. ALL WORK SHALL STRICTLY ADHERE TO BUILDING MANAGER'S ASBESTOS MANAGEMENT POLICIES, BAY AREA AIR QUALITY MANAGEMENT REGULATIONS, CAL/OSHA ASBESTOS REGULATIONS, CAL/OSHA RESPIRATORY PROTECTION REGULATIONS, ASSEMBLY BILL 2040 AND EPA NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS AND ASBESTOS REMOVAL REGULATIONS. ALL WORK SHALL BE UNDERTAKEN BY QUALIFIED AND APPROVED SUBCONTRACTORS UNDER THE SUPERVISION OF THE OWNER'S CONSULTANT. ONLY SPECIFICALLY TRAINED PERSONNEL MAY PERFORM WORK ON A "LIMITED PROCEDURES" BASIS AND ONLY WITH ADEQUATE SUPERVISION. CONTRACTORS SHALL THOROUGHLY COORDINATE ASBESTOS REMOVAL WORK WITH OTHER WORKERS AND PROPERTY MANAGER.
14. THE DESIGNER HAS NO INFORMATION TO CONFIRM OR NEGATE THE EXISTENCE OF PCB BALLAST IN THE FLUORESCENT LIGHT FIXTURES. PRIOR TO DISPOSAL OF ANY BALLAST, CONFIRM IF THE BALLAST CONTAIN PCBS AND DISPOSE OF IN STRICT ACCORDANCE WITH THE CODES AND REGULATIONS REFERENCED ABOVE.

REFLECTED CEILING PLAN NOTES

1. THIS LIGHTING DESIGN SHALL CONFORM TO THE STATE OF CALIFORNIA CODE OF REGULATIONS TITLE 24, CALIFORNIA ENERGY CONSERVATION LIGHTING STANDARDS FOR NEW NON-RESIDENTIAL BUILDINGS, SEE LIGHTING COMPLIANCE FORMS ON ELECTRICAL **ENGINEERED** DRAWINGS.
2. THE REFLECTED CEILING PLAN GOVERNS LOCATION OF GRID ALIGNMENT AND LIGHT FIXTURE LOCATION. ELECTRICAL ENGINEERING DRAWING GOVERNS SWITCHING, CIRCUITING, WIRING LAYOUT, SPECIFICATIONS, DETAILS AND ADDITIONAL INFORMATION RELATED TO ELECTRICAL WORK. ANY CONFLICTS BETWEEN DRAWINGS AND EXISTING CONDITIONS SHALL BE CLARIFIED WITH THE ARCHITECT PRIOR TO CONSTRUCTION.
3. ACOUSTICAL CEILING SUSPENSION SYSTEM, CEILING MOUNTED LIGHT FIXTURES, AND PARTITIONS CONNECTING TO SYSTEM SHALL BE LATERALLY STABILIZED AS REQUIRED BY ASTM STANDARDS C635 & C636. ALL LIGHT FIXTURES SHALL BE INDEPENDENTLY SUPPORTED AS REQUIRED BY CODE, SEE DETAILS. CONTRACTOR SHALL VERIFY IF EXISTING SUSPENDED CEILING AND LIGHT FIXTURES ARE STABILIZED AS REQUIRED. NO ADDITIONAL COSTS SHALL BE ALLOWED FOR FAILURE TO PROPERLY CONSIDER THIS DURING BID PERIOD.
4. THE BUILDING USES **AN EXISTING HEAVY DUTY** SUSPENDED CEILING GRID. WHERE EXISTING CEILINGS ARE TO REMAIN, ADJUST GRID AS REQUIRED TO A TOLERANCE OF 1/8" IN 10'-0". PATCH AND REPAIR ALL MAIN TEES. REPLACE SECTIONS OF MAIN TEE IF THERE ARE MORE THAN 10 HOLES IN 12'-0". REPLACE ALL CROSS TEES WITH HOLES, BENDS OR OTHER DISFIGUREMENT. INSTALL NEW PERIMETER CEILING ANGLE AT ALL THROUGH GRID PARTITIONS TIGHT TO PARTITION, FREE FROM CURVES, BREAKS OR IRREGULARITIES.
5. WHERE EXISTING CEILINGS ARE TO REMAIN, CONTRACTOR SHALL REMOVE AND REPLACE CEILING TILES TO REMAIN AS REQUIRED TO ACCOMMODATE THE INSTALLATION OR RELOCATION OF ELECTRICAL, MECHANICAL, DRYWALL AND OTHER WORK NECESSITATING PENETRATION OF EXISTING CEILING WITHIN OR ADJACENT TO PROJECT AREA. REUSE EXISTING CEILING TILE WHENEVER POSSIBLE, U.O.N. PROVIDE NEW MATCHING CEILING TILE AS REQUIRED AND REPLACE DEFECTIVE OR MISSING TILES. ALL TILE WITHIN A ROOM OR AREA SHALL HAVE A CONSISTENT TEXTURE AND APPEARANCE.
6. COORDINATE WITH ALL TRADES INVOLVED AND COMPARE COMPOSITE DRAWINGS TO ENSURE CLEARANCES FOR LIGHT FIXTURES, DUCTS, CEILINGS, ETC. AS NECESSARY TO MAINTAIN THE FINISH CEILING HEIGHT(S) ABOVE THE FINISH FLOOR SLAB AND CLEARANCES REQUIRED FOR LIGHT FIXTURES. CLARIFY CONFLICTS WITH ARCHITECT. MAINTAIN 9" CLEAR ABOVE SUSPENDED CEILING PLANE FOR LIGHT FIXTURES.
7. REVIEW LOCATION OF LIGHT FIXTURES AND SWITCHING IN THE FIELD WITH ARCHITECT PRIOR TO PLACEMENT. COORDINATE LIGHTING RELOCATION DUE TO FIELD CONDITIONS WITH ARCHITECT PRIOR TO INSTALLATION.
8. COORDINATE AND VERIFY ALL HVAC THERMOSTAT LOCATIONS WITH THE ARCHITECT AND TENANT PRIOR TO INSTALLATION.
9. COORDINATE HVAC SUCH THAT DO NOT CROSS TENANT DEMISING OR CORRIDOR PARTITIONS.
10. WHERE ACOUSTICAL TILES ARE REQUIRED TO BE CUT, CUT TILES TO MAINTAIN A SHARP AND NEAT EDGE. NOTCH TILES AS REQUIRED TO PROVIDE POSITIVE ATTACHMENT BUT CONCEAL GLAZING AND DOOR BRACING.
11. INSTALL ANY AND ALL DOWN LIGHT AND WALL-WASH LIGHT FIXTURES, SMOKE DETECTORS, SPEAKERS, EXIT SIGNS, ETC. IN THE CENTERS OF CEILING TILES, UNLESS OTHERWISE INDICATED. INSTALL ALL DOWN LIGHTS AS DIMENSIONED. ALL CEILING FIXTURES AND PENETRATIONS THAT OCCUR IN RELATIONSHIP OR PATTERN TO OTHERS SHOULD BE CHECKED AND CONFIRMED BUILDABLE BEFORE ANY RELATED ELEMENTS ARE CONSTRUCTED. REVIEW ALL CONFLICTS WITH ARCHITECT IN FIELD.
12. AT ANY EXISTING LIGHT FIXTURES WITH OPENINGS TO PLENUM ABOVE, SEAL FIXTURE PRIOR TO CONSTRUCTION WITH VISQUEEN AND REMOVABLE TAPE. DO NOT REMOVE VISQUEEN AND TAPE UNTIL CARPET HAS BEEN VACUUMED. REPLACE ALL DENTED, SCRATCHED OR CRACKED LENSES. FOR ANY PRISMATIC LIGHT FIXTURES, REMOVE AND CLEAN ALL PRISMATIC LENSES. WIPE DOWN FIXTURE INTERIOR AND EXTERIOR AFTER INSTALLATION OF CARPET.
13. PROVIDE NEW LIGHT FIXTURES, U.O.N. ON REFLECTECD CEILING PLAN. ALL DAMAGED, DENTED OR DEFECTIVE EQUIPMENT SHALL BE REPLACED. REPLACE NOISY OR DEFECTIVE BALLASTS. CHECK WITH BUILDING ENGINEER FOR STOCK OF ADDITIONAL FIXTURES. NOTIFY ARCHITECT OF ANY CHANGES REQUIRED DUE TO ENERGY CALCULATION.
14. RE-LAMP ALL EXISTING LIGHT FIXTURES WITH NEW LAMPS WITH THE SAME KELVIN RATING THROUGHOUT AS SPECIFIED BY BUILDING ENGINEER.
15. ALL LIGHT SWITCHING SHALL COMPLY WITH CCR TITLE 24. SWITCHES INDICATED ARE TO CONTROL LIGHTS IN ROOM WHERE LOCATED, UNLESS NOTED OTHERWISE. ALL LIGHT FIXTURES SHALL BE DUAL LEVEL SWITCHED. PROVIDE INDEPENDENT SWITCHING OF LIGHT FIXTURES WITHIN 15 FEET OF EXTERIOR WINDOWS. THE GENERAL CONTRACTOR SHALL VERIFY EXISTING FIELD CONDITIONS FOR SWITCH AND FIXTURE RELATIONSHIP. REPORT ALL DISCREPANCIES TO THE ARCHITECT.
16. GANG MULTIPLE SWITCHES AND PROVIDE A SINGLE COVER PLATE WHEN MORE THAN ONE SWITCH IS REQUIRED AT THE SAME LOCATION. PROVIDE SWITCHES FOR ALL EXHAUST FANS; GANG WITH OTHER ROOM SWITCHES. DESIGNATE FAN SWITCHES BY ROUTING THE WORD "FAN" ONTO COVER PLATE.
17. MOUNTING HEIGHTS AND LOCATION FOR LIGHT SWITCHES AND THERMOSTATS SHALL BE SHOWN ON DRAWINGS.
18. GENERAL CONTRACTOR SHALL COORDINATE WITH THE MECHANICAL CONTRACTORS, CEILING CONTRACTOR AND OTHERS AS REQUIRED FOR ACCESS TO MECHANICAL BOXES, FIRE DAMPERS, SMOKE AND DRAFT CONTROL DAMPERS, FANS, VALVES, ETC. PROVIDE A FULLY REMOVABLE 2' X 4' CEILING TILE FOR ACCESS TO SIDE OF ALL HVAC (VAV) BOX CONTROLS AND FILTERS. MARK CEILING TILE WITH ⅛" DIAMETER COLOR MAP PINS FOR ALL CONCEALED WORK.
   A. BLUE: HVAC EQUIPMENT
   B. RED: FIRE VALVES OR EQUIPMENT
   C. GREEN: ALL OTHER EQUIPMENT
19. ALL EXIT SIGNS SHALL BE REPLACED WITH NEW BUILDING STANDARD LED FIXTURES: COLOR WHITE HOUSING WITH GREEN LETTERING. EXIT SIGNS SHOWN ARE THE MINIMUM ONLY, PROVIDE ANY ADDITIONAL EXIT SIGNS AS REQUIRED BY BUILDING AND FIRE DEPARTMENTS.
20. PROVIDE EMERGENCY LIGHTING AS SHOWN AND AS REQUIRED BY CODE.
21. CONTRACTOR TO CONFIRM COMPATIBILITY OF LIGHT FIXTURES WITH SPECIFIED CEILING SUSPENSION SYSTEM.
22. NO LOOSE, EXPOSED BATT INSULATION SHALL BE ALLOWED IN CEILING PLENUM. WRAPPED BATT INSULATION SHALL BE FULLY ENCLOSED WITH SEWN EDGES.
23. ALL TENANT NETWORK AND COMMUNICATION CABLE RUN IN CEILING SHALL BE UL LISTED AND PLENUM-RATED SPECIFICALLY FOR THIS APPLICATION. ALL NON-PLENUM RATED CABLE SHALL BE REMOVED OR PLACED IN CONDUIT AT TENANT'S EXPENSE.

POWER AND SIGNAL PLAN NOTES

1. THIS LAYOUT IS FOR SCHEMATIC LAYOUT PURPOSES ONLY; REFER TO ELECTRICAL **DESIGN-BUILD** DRAWINGS FOR CIRCUITING, PANEL SCHEDULES, TYPICAL DETAILS, SPECIAL REQUIREMENTS ETC. ALL TELEPHONE, ELECTRICAL AND COMMUNICATION WORK SHALL BE PROVIDED AS SHOWN ON DRAWINGS AND SHALL BE IN ACCORDANCE WITH ALL APPLICABLE BUILDING CODES. REFER TO EQUIPMENT SCHEDULE IF APPLICABLE FOR SPECIFIC DETAIL.
2. TENANT IS RESPONSIBLE FOR INSPECTION AND CUTTING OF EXISTING CABLE NO LONGER REQUIRED WITHIN THE PROJECT SITE AND THE SUPPLY AND INSTALLATION OF CABLING, INCLUDING TERMINATION OF SAME AND INSTALLATION OF COVER PLATES FOR TELEPHONE AND DATA SYSTEMS. CONTRACTOR SHALL PROVIDE TENANT WITH SCHEDULE TO INSTALL THESE ITEMS. TENANT'S SUBCONTRACTOR SHALL BUNDLE LARGE CABLE GROUPINGS IN CEILING PLENUM, AND INDEPENDENTLY SUSPEND FROM CEILINGS, LIGHT FIXTURES, ETC. ALL CABLE SHALL BE UL LISTED AND PLENUM RATED SPECIFICALLY FOR THIS APPLICATION. ALL NON-PLENUM-RATED CABLE SHALL BE REMOVED OR PLACED IN CONDUIT AT TENANT'S EXPENSE.
3. COORDINATE WITH ALL OTHER SUBCONTRACTORS AS REQUIRED FOR INSTALLATION OF UNDER-SHELF LIGHTS, OUTLETS IN BACKSPLASH, MECHANICAL EQUIPMENT, EQUIPMENT SCHEDULE AND ALL ELECTRIFIED HARDWARE, ELECTROMAGNETIC HOLD OPEN DEVICES, AND KEYLESS ENTRIES AS REQUIRED, ALSO SEE HARDWARE SCHEDULE. UNDER-SHELF LIGHTS SHALL BE MOUNTED AT FRONT OF CABINET FACING BACK TOWARD SPLASH.
4. UNLESS SPECIFICALLY DIMENSIONED, ALL OUTLETS SHALL BE INSTALLED AT THE NEAREST STUD. MOUNT CENTER LINE OF RECEPTACLE AT 18 INCHES ABOVE FLOOR SLAB UNLESS OTHERWISE NOTED. ALL OTHER OUTLET DIMENSIONS ARE TO CENTER LINE OF OUTLET OR GROUP OF OUTLETS, UNLESS OTHERWISE NOTED. FURNITURE IS SHOWN FOR REFERENCE ONLY. FIELD VERIFY LOCATION OF ALL CORING FOR ALL FLOOR MONUMENTS AND FURNITURE SYSTEM BASE FEEDS. REVIEW LAYOUT OF ALL ELECTRICAL DISTRIBUTION SYSTEMS IN THE FIELD WITH THE ARCHITECT PRIOR TO INSTALLATION.
5. ALL BUILDING RECEPTACLES, SWITCHES, DEVICES, ETC. SHALL BE LEVITON STANDARD DEVICE SERIES; COLOR WHITE, U.O.N.
6. ALL **DEDICATED OUTLETS** SHALL BE **GRAY** RECEPTACLES WITH WHITE COVER PLATES FOR IDENTIFICATION. ALL FLOOR CORING SHALL BE COORDINATED AND SCHEDULED WITH THE BUILDING ENGINEER/MANAGER. ELECTRICAL CONTRACTOR SHALL PROVIDE PROPER POWER FOR ALL EQUIPMENT INDICATED ON PLAN, IN ACCORDANCE WITH MANUFACTURERS' INSTRUCTIONS AND OPERATING REQUIREMENTS AS PROVIDED BY THE TENANT.
7. PROVIDE SINGLE-GANG GYPSUM BOARD RING WITH A NYLON PULL STRING TO RETURN AIR PLENUM ABOVE FOR ALL WALL MOUNTED TELEPHONE, DATA AND VIDEO CABLE OUTLETS, UNLESS OTHERWISE NOTED. AT ALL WALL MOUNTED OUTLETS IN EITHER FIRE-RATED OR INSULATED PARTITIONS, PROVIDE A DOUBLE-GANG BOX, RING AND 1" DIAMETER CONDUIT WITH 90 DEGREE ANGLE ABOVE SUSPENDED CEILING THROUGH PARTITION INTO PLENUM ABOVE. CONFIRM DIAMETER WITH TENANT'S CONTRACTOR; LARGER CONDUIT SHALL BE ABOVE STANDARD.
8. IF ANY OUTLETS CANNOT BE INSTALLED AS NOTED OR SHOWN ON PLANS DUE TO CONFLICT WITH STRUCTURAL, MECHANICAL OR ELECTRICAL BUILDING ELEMENTS, CLARIFY WITH ARCHITECT BEFORE PROCEEDING.
9. SOUND SEAL WITH CAULKING PADS APPLIED TO BACK OF OUTLETS AROUND ALL OUTLETS IN ACOUSTICAL PARTITIONS; SEAL AIRTIGHT. STAGGER OUTLETS IN STUD CAVITY SERVING OPPOSITE ROOMS IN A COMMON WALL.
10. ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED TO COMPLY WITH THE SPECIFIC MANUFACTURERS' REQUIREMENTS.
11. SEE ELECTRICAL DRAWINGS FOR TYPES AND MANUFACTURERS' SPECIFICATIONS FOR ALL ELECTRICAL COMPONENTS: FIXTURES, PANEL BOXES, RISERS, CIRCUITING, ETC.
12. CONTRACTOR SHALL COORDINATE ANY ELECTRICAL WORK WHICH REQUIRES INTERRUPTION OF POWER TO ANY AREA NOT WITHIN THE SCOPE OF WORK FOR THIS PROJECT WITH THE BUILDING ENGINEER AND PROPERTY MANAGER PRIOR TO INTERRUPTION. NO POWER SHALL BE INTERRUPTED DURING NORMAL BUSINESS HOURS.
13. UNLESS OTHERWISE NOTED, PROVIDE 2" CONDUIT SLEEVES THROUGH ALL FIRE-RATED PARTITIONS FROM TELEPHONE BACKBOARD IN TENANTS SUITE TO FLOOR TELEPHONE RISER CLOSET FOR TENANT'S SUBCONTRACTOR TO PULL INTER-TIE PLENUM RATED CABLE.
14. SEE DETAILS FOR MOUNTING HEIGHTS OF THERMOSTATS, SWITCHES AND OUTLETS.
15. ALL FLOOR AND THROUGH PARTITION PENETRATIONS SHALL BE SEALED AS REQUIRED BY FIRE RATING OF FLOOR OR PARTITION AND ALL APPLICABLE CODE.
16. **COORDINATE WITH TENANT'S FURNITURE INSTALLER** THE CONFIGURATION OF POWER TO BE SUPPLIED TO TENANT'S SUPPLIED AND INSTALLED ELECTRIFIED FURNITURE SYSTEM. HARDWIRE ELECTRIFIED FURNITURE PANELS TO BUILDING SYSTEM AS REQUIRED DURING FURNITURE INSTALLATION.
17. COORDINATE ELECTRICAL SUCH THAT CIRCUITS ARE NOT SHARED OVER TENANT DEMISING OR CORRIDOR PARTITIONS.

FINISH PLAN NOTES

1. ALL FINISH MATERIALS AND THEIR APPLICATION SHALL CONFORM WITH CODE REQUIREMENTS FOR THEIR PARTICULAR LOCATION.
2. FINISH MATERIAL SPECIFICATIONS ARE SHOWN ON FINISH PLAN SHEET, SHEET A2.4. THIS DRAWING MAY SHOW FINISHES FOR OTHER TENANTS AND COMMON AREAS ON THIS FLOOR. FINISH NOTATIONS ARE PARTICULAR FOR THIS TENANT PROJECT ONLY AND DO NOT CORRESPOND TO IMPROVEMENTS FOR OTHER TENANTS OR PARTS OF THE BUILDING, U.O.N.
3. GENERAL CONTRACTOR SHALL CONFIRM AVAILABILITY AND DELIVERY DATES OF ALL FINISH MATERIALS. ANY PROBLEMS REGARDING AVAILABILITY OR DELIVERY SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT. SUBSTITUTIONS ARE GENERALLY NOT ACCEPTABLE; SEE GENERAL CONSTRUCTION NOTES FOR OPTIONS AND PROCEDURES REGARDING SUBSTITUTIONS.
4. GENERAL CONTRACTOR SHALL COORDINATE THE INSTALLATION TIME FOR ALL MATERIALS, INCLUDING THOSE SUPPLIED OR SUPPLIED AND INSTALLED BY "OTHERS". SEE GENERAL CONSTRUCTION NOTES.
5. ALL MATERIALS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURERS' INSTRUCTIONS. PROVIDE PROPER SUBSTRATE AND LEVELING AS REQUIRED FOR SMOOTH, UNIFORM APPEARANCE.
6. FINISHES SHALL BE CONSIDERED CONTINUOUS THROUGHOUT UNLESS OTHERWISE NOTED. CARPET SHALL BE INSTALLED CONTINUOUS THROUGHOUT, U.O.N. ALL SURFACES EXPOSED TO VIEW, FROM BOTH TENANT AND SHELL CONSTRUCTION, SHALL BE FINISHED. THIS INCLUDES VERTICAL SURFACES, COLUMNS, REVEALS, GYPSUM BOARD SOFFITS, GYPSUM BOARD SUSPENDED CEILINGS, ETC. REVIEW ALL FINISHES TO BE INSTALLED WITH ARCHITECT IN FIELD PRIOR TO APPLICATION.
7. PROVIDE FLOOR LEVELING COMPOUND AS REQUIRED SO THAT FINISH SURFACE OF DIFFERENT MATERIALS PROVIDES A SMOOTH TRANSITION FROM ONE SURFACE TO ANOTHER. FEATHER TRANSITIONS 1/8" PER 1'-0" MINIMUM WITH APPROPRIATE MATERIAL.
8. **FLOORING AND BASE:**
   A. VERIFY THAT SUBSURFACE IS SMOOTH, LEVEL AND FREE FROM DEFECTS WHICH WOULD AFFECT THE INSTALLATION. DO NOT PROCEED WITH WORK UNTIL DEFECTS HAVE BEEN CORRECTED. THOROUGHLY CLEAN SUB-FLOOR PRIOR TO INSTALLATION.
   B. VINYL TILE PATTERNS SHALL BE LAID OUT AS SHOWN ON FINISH PLAN. REVIEW IN FIELD WITH ARCHITECT IF THERE ARE QUESTIONS. ALIGN PARALLEL TO RESPECTIVE WALLS. NEATLY TRIM MATERIAL ABUTTING OTHER WORK TO FORM TRUE, CLEAN JOINTS. THE TILE PATTERN SHALL ALTERNATE DIRECTION, U.O.N.
   C. REPAIR BOTTOM OF PARTITIONS, EXISTING AND NEW, AS REQUIRED FOR PROPER, SMOOTH BASE INSTALLATION. BASE AT CARPET SHALL BE STRAIGHT; BASE AT VINYL TILE SHALL BE COVE.
   D. PROVIDE PROPER REDUCER STRIPS FOR SMOOTH TRANSITION BETWEEN CARPET AND VINYL FLOORING AS REQUIRED. COMPLY WITH CCR TITLE 24 TRANSITION REQUIREMENTS. COORDINATE COLOR OF TRANSITIONS MATERIAL WITH ARCHITECT. CHANGE FLOOR FINISHES AT CENTERLINE OF DOOR, TYPICALLY, U.O.N.
   E. INCLUDE TWO COPIES OF CARPET MANUFACTURER'S INSTRUCTIONS REGARDING CARE AND CLEANING OF INSTALLED PRODUCT WITH THE CLOSE-OUT PACKAGE, SEE GENERAL CONSTRUCTION NOTES.
9. **PAINTING:**
   A. NO PAINTING OR INTERIOR FINISHES SHALL BE APPLIED UNDER CONDITIONS WHICH JEOPARDIZE THE QUALITY OR APPEARANCE OF SUCH WORK.
   B. EXAMINE ALL PAINT GRADE SURFACES TO BE FINISHED UNDER THIS CONTRACT AND SEE THAT THE WORK OF OTHER TRADES HAS BEEN LEFT OR INSTALLED IN SATISFACTORY CONDITION TO RECEIVE PAINT, STAIN OR SPECIFIED FINISH. APPLICATION OF THE FIRST COAT SHALL INDICATE ACCEPTANCE OF THE SURFACE; ANY CORRECTIONS AFTER THIS COAT SHALL BE AT NO COST TO THE OWNER.
   C. ALL WOOD SURFACES SHALL BE IN PROPER CONDITION TO RECEIVE THE SPECIFIED FINISH. WOODWORK SHALL BE HAND SANDED AND DUSTED CLEAN. ALL KNOT HOLES, PITCH POCKETS OR SAPPY PORTIONS SHALL BE SCRAPED AND SHELLACKED OR SEALED WITH KNOT SEALER. NAIL HOLES, CRACKS OR DEFECTS SHALL BE CAREFULLY PUTTIED FLUSH AFTER FIRST COAT, WITH PUTTY MATCHING COLOR OF THE STAIN OR PAINT FINISH. REMOVE ANY OIL OR GREASE WITH MINERAL SPIRITS.
   D. PAINTING SHALL BE "TO COVER". AS A MINIMUM, ALL NEW GYPSUM BOARD SHALL RECEIVE THREE COATS, ONE PRIMER COAT AND TWO FINISH COATS. ALL OTHER AREAS SHALL BE PAINTED WITH A MINIMUM ONE FINISH COAT. ALL PAINT SHALL BE APPLIED IN MIL THICKNESS AS RECOMMENDED BY PAINT MANUFACTURER TO OBTAIN TRUE EVEN COLOR WITHOUT HOLIDAYS. PROVIDE ADDITIONAL COATS AS REQUIRED TO PROVIDE A UNIFORM FINISH APPEARANCE.
   E. **GYPSUM BOARD WITHOUT EXTERIOR DAYLIGHT SIDELIGHTING:** PROVIDE 1 COAT PVA SEALER, 1 COAT 550 SUPER LATEX WALL PAINT, FINISH COAT 1610 ACRY-PLEX LATEX, LOW SHEEN.
   F. **GYPSUM BOARD WITH EXTERIOR DAYLIGHT SIDELIGHTING:** PROVIDE 1 COAT 550 SUPER LATEX WALL PAINT; BEFORE NEXT COAT SAND ALL TAPE/PAPER JOINTS LIGHTLY; 1 COAT 550 SUPER LATEX WALL PAINT, FINISH COAT 1610 ACRY-PLEX LATEX, LOW SHEEN.
10. CLEANING AND RETOUCHING:
   A. AT COMPLETION OF PAINTING, ALL UNUSED AND SCRAP FINISH MATERIALS AND EQUIPMENT SHALL BE REMOVED. ALL PAINT SPOTS SHALL BE REMOVED AND ALL AREAS THOROUGHLY CLEANED. ANY DIRT OR DEBRIS CAUSED BY WORK SHALL BE CLEANED UP AS WORK PROGRESSES.
   B. RETOUCH AND REPAINT PAINTED SURFACES DAMAGED BY SUBSEQUENT WORK AS DIRECTED BY GENERAL CONTRACTOR. THE COST FOR SUCH WORK SHALL BE BORNE BY THE TRADE RESPONSIBLE FOR THE DAMAGE.
   C. CLEAN INSIDE OF ALL EXTERIOR WINDOWS AND BOTH SIDES ALL INTERIOR GLASS.
11. EXTERIOR BLINDS OR DRAPERIES SHALL BE WRAPPED AT THE START OF CONSTRUCTION IN VISQUEEN SEALED AIR TIGHT. MODIFY EXTERIOR BLINDS OR DRAPERIES AND TRACK SYSTEM AS REQUIRED BY NEW CONSTRUCTION. DUST AND WIPE CLEAN ALL BLINDS. MODIFY TRACK AND CONTROL MECHANISM AS REQUIRED BY NEW CONSTRUCTION LAYOUT. DAMAGED TRACK AS A RESULT OF CONSTRUCTION SHALL BE REPLACED AT NO COST TO OWNER.
12. ALL FIRE EXTINGUISHER CABINETS SHALL BE PREPARED, SANDED AND PAINTED TO MATCH ADJACENT WALLS IN SEMI-GLOSS ENAMEL PRIOR TO APPLICATION OF CONTRASTING COLOR IDENTIFICATION DECAL.
13. TEMPORARY PROTECTION SHALL BE PROVIDED FOR ALL FINISHES PRIOR TO MOVE-IN. ANY DAMAGES SHALL BE AT CONTRACTOR'S EXPENSE. CONFIRM ALL CORRECTIVE MEASURES WITH ARCHITECT PRIOR TO PROCEEDING.

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Issue/Revision:

No.	Proj. No. Date:	Description
1	32243.01 29MAR19	ISSUE FOR REVIEW
2	32243.01 22APR19	ISSUE FOR PERMIT
2.1	32243.01 28MAY19	PLAN CHECK RESPONSE ADDENDUM #3

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Approval Signature:

Co/ Title: Date:

General Notes

Scale: No Scale Issue Date: 24MAY19
Drawn By: Reviewed By: AM
Sheet: X of 16

A0.6

Plotted By: chappell

DEMO LEGEND

- EXISTING PARTITION TO REMAIN
- PARTITION TO BE DEMOLISHED AND REMOVED
- DOOR, FRAME AND HARDWARE TO BE REMOVED. REMOVE ADJACENT SIDELIGHT, IF APPLICABLE
- DEMO DUPLEX OUTLET
- DEMO FOURPLEX OUTLET
- DEMO TEL-DATA OUTLET
- DEMO POWER POLE
- DEMO CARD READER

} REMOVE ALL ELECTRICAL WIRING AND DATA CABLING BACK TO SOURCE.

- L.O.D. LIMIT OF DEMOLITION

SALVAGE FOR REUSE

COORDINATE WITH BUILDING ENGINEER FOR SALVAGE:

1. DOORS
2. SIDELIGHTS
3. FRAMES
4. LEVER SETS
5. HINGES
6. CLOSERS
7. TELEPHONE & ELECTRICAL FLOOR MONUMENTS
8. FIRE EXTINGUISHERS, BRACKETS AND CABINETS
9. THERMOSTATS
10. SERVER RACKS & HARDWARE

SHEET NOTES

1. REFER TO GENERAL NOTES SHEET A0.6 FOR ADDITIONAL DEMOLITION PLAN NOTES; ALL NOTES APPLY AS IF PRINTED IN FULL HERE.
2. REFER TO SHEET 1A2.2 (OR 12.0.2) FOR ADDITIONAL CEILING DEMOLITION INFORMATION.
3. REMOVE AND PATCH ALL SCREWS, MOLLY BOLTS, HOOKS, COAT HANGERS, NAME TAGS, HARDWARE, ETC.
4. COMMUNICATIONS SUBCONTRACTOR SHALL DISCONNECT ALL LOW VOLT TELEPHONE AND DATA CABLING TO BE REMOVED. THIS WILL INCLUDE REMOVAL OF ALL WALL AND FLOOR COMMUNICATIONS LOW VOLT CABLE. NEATLY STACK ALL MATERIALS TO BE REMOVED ON THE FLOOR AS DIRECTED BY THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHALL REMOVE ALL DISCONNECTED AND ABANDONED LOW-VOLT WIRING FROM THE SITE.
5. REMOVE ALL ELECTRICAL WIRING BACK TO SOURCE IN WALLS SCHEDULED FOR DEMOLITION (TYP.).
6. PATCH AND REPAIR SCARS LEFT AFTER REMOVAL OF PARTITIONS AND OUTLETS.

7. DEMOLISH EXISTING PARTITION RETURN TO WINDOW MULLION. CAREFULLY REMOVE RESIDUE AT WINDOW SILL AND FRAME. RESTORE SURFACE OF FRAME & GLAZING TO "LIKE-NEW" CONDITION.
8. CONTRACTOR TO REMOVE ALL EXISTING FLOOR ADHESIVE AND PREPARE SLAB TO "LIKE NEW" CONDITION. AS PER FLOORING MANUFACTURERS' REQUIREMENTS AND INSTALLATION GUIDELINES. CONTRACTOR TO FLOAT, FEATHER, OR CHIP FLOORING IN ORDER TO HAVE A SMOOTH LEVEL SLAB THROUGHOUT FLOOR. PROVIDE ALLOWANCE AS PART OF BID.
9. REMOVE EXISTING CARPET, LVT, AND BASE THROUGHOUT, U.O.N. CAREFULLY REMOVE ALL BASE ADHESIVE FROM PARTITIONS TO BE PRESERVED AND PREPARE SURFACES AS REQUIRED TO RECEIVE NEW FINISHES. REMOVE ALL EXISTING FLOOR ADHESIVE AND PREPARE SLAB TO CONDITION AS PER FLOORING MANUFACTURER'S REQUIREMENTS AND INSTALLATION GUIDELINES. SEE FINISH PLAN 1A2.4 FOR MORE INFORMATION.
10. DEMOLISH EXISTING MILLWORK, COUNTERTOP, SINK, PLUMBING, AND ASSOCIATED HARDWARE. CAP EXISTING WATER LINES FOR POTENTIAL REUSE AT NEW BREAK ROOM.
11. DEMOLISH FLOOR CORE, PATCH AND REPAIR SLAB.
12. DEMOLISH DOOR AND INFILL DEMISING WALL.
13. DEMOLISH PERIMETER BLINDS. RESTORE SURFACE OF FRAME & GLAZING TO "LIKE-NEW" CONDITION. REMOVE ALL FILM FROM EXTERIOR WINDOWS.
14. PREPARE SURFACE OF PARTITIONS TO REMAIN TO RECEIVE NEW FINISH TEXTURE TO A LEVEL 4 FINISH SKIMMING.
15. SALVAGE CABLING FROM DEMOLISHED POWER POLE. COIL AND SECURE FOR FUTURE USE.
16. DEMO DOOR AND INFILL WITH MATCHING STOREFRONT.
17. DEMOLISH EXTERIOR AWNING.

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Issue/Revision:

No.	Proj. No. Date:	Description
1	32243.01	ISSUE FOR REVIEW 24MAR19
2	32243.01	ISSUE FOR PERMIT 22APR19
2.1	32243.01	PLAN CHECK RESPONSE 28MAY19 * ADDENDUM #3

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Demolition Plan

1st Floor

Scale: 1/8=1'-0" Issue Date: 24MAY19
Drawn By: Reviewed By: AM
Sheet: X of 16

1A2.0.1

Drawing name: Z:\-BLDG\BIM\M2\2-424 Lakeside, Richmond\02-Arch-PLANS.dwg
May 29, 2019 - 4:07pm

DEMO RCP LEGEND

CEILING GRID & TILES TO DEMO:

2' x 2' CEILING GRID TO BE DEMOLISHED (SEE SHEET 1A2.2 RCP FOR ADDITIONAL INFORMATION)

GYP. BD. CEILING TO REMAIN

EXISTING 2'x4' FIXTURE TO REMAIN

EXISTING 2'x2' FIXTURE TO REMAIN

EXISTING EXIT SIGNS TO REMAIN

DEMOLISH 2'x4' FIXTURE

DEMOLISH EXIT SIGNS

(D) DEMOLISH

(R) RELOCATE

NOTE: FIXTURES WITHOUT ANY NOTATION SHALL BE CONSIDERED EXISTING.

SALVAGE FOR REUSE

COORDINATE WITH BUILDING ENGINEER FOR SALVAGE:

1. 2'x4' LIGHT FIXTURES
2. 2'x2' LIGHT FIXTURES
3. DOWNLIGHTS.
4. EXIT SIGNS.

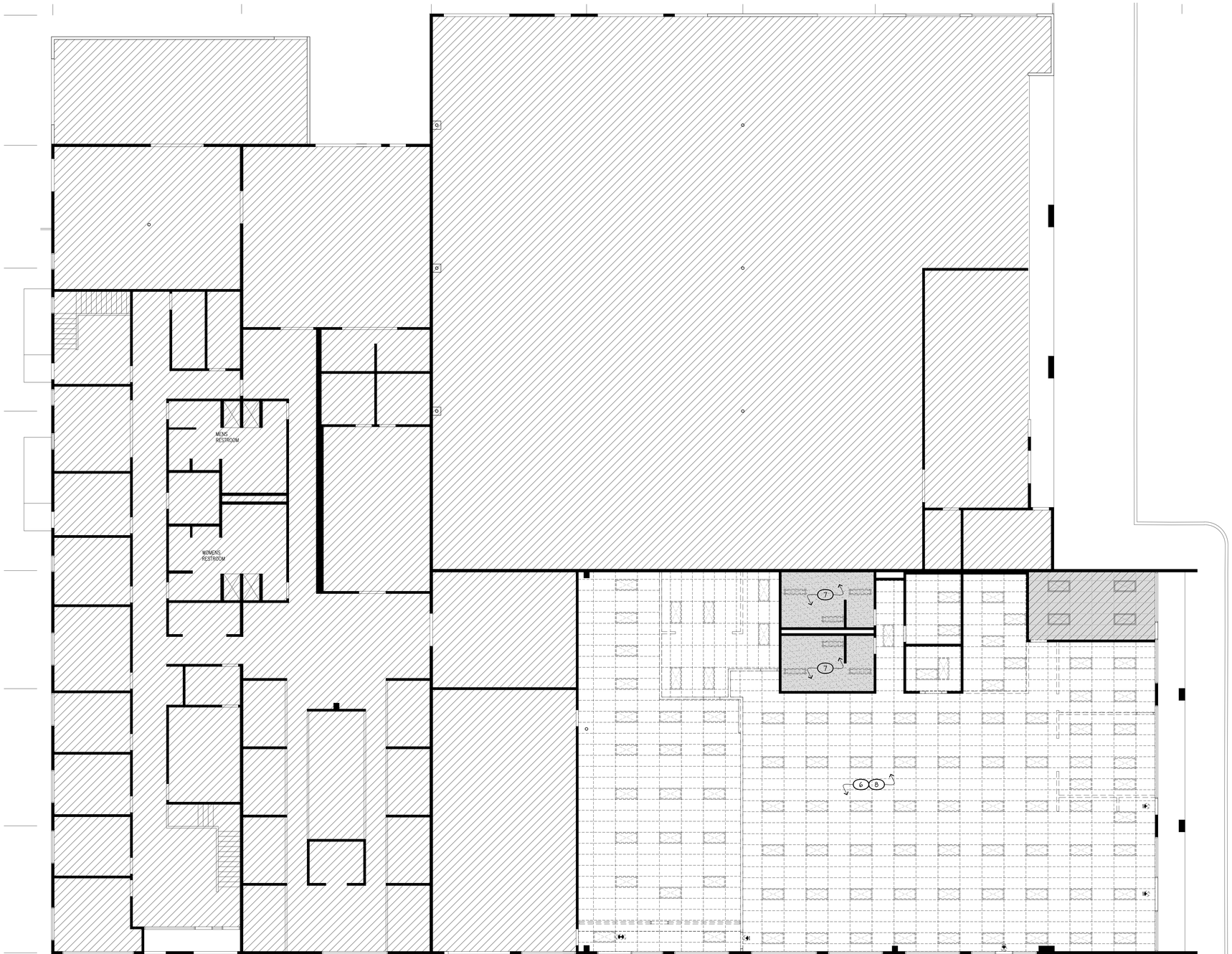
DEMO RCP SHEET NOTES

1. REFER TO GENERAL NOTES SHEET A0.0 FOR ADDITIONAL DEMOLITION PLAN NOTES; ALL NOTES APPLY AS IF PRINTED IN FULL HERE.
2. NOT USED.
3. REVIEW ALL SALVAGEABLE MATERIAL WITH BUILDING ENGINEER. STORE MATERIAL TO BE SALVAGED AS DIRECTED. REMOVE ALL EXCESS MATERIALS AS REQUIRED. SALVAGE ONLY MATERIAL IN GOOD CONDITION TO REUSE.
4. INSPECT CEILING FOR STAINED OR WATER-DAMAGED TILES. REMOVE & CHECK FOR LEAKS IN CEILING OR MECHANICAL EQUIPMENT. REPAIR LEAK SOURCE AS REQUIRED. REPLACE WITH NEW TILES TO MATCH EXISTING.
5. CLEAN OR REPLACE STAINED OR MISSING HVAC SUPPLY/RETURN GRILLS AS REQUIRED.

(6) CEILING GRID, TILES, AND LIGHT FIXTURES TO BE DEMOLISHED.

(7) LIGHT FIXTURES IN RESTROOMS TO BE DEMOLISHED. PREPARE GYP. BD. SURFACE BY SKIMMING OUT TO LEVEL 4 FINISH SURFACE.

(8) SALVAGE AND PROTECT ALL EXISTING SPRINKLER HEADS FOR FUTURE USE.



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Reflected Ceiling Demolition Plan

1st Floor

Scale: 1/8"=1'-0" Issue Date: 24MAY19
Drawn By: Reviewed By: AM
Sheet: X of 16

1A2.0.2

Plotted By: chappell
May 29, 2019 - 4:27pm
Drawing name: Z:\-BLDG\BMA270 4254 Lakeside, Richmond\CD\A2-PLANS.dwg

ENTRY KEY NOTES

APPLICABLE PRIMARY ENTRANCES TO BUILDINGS ARE TO BE ACCESSIBLE TO THE PHYSICALLY HANDICAPPED. PROVIDED INTERNATIONAL SYMBOL OF ACCESSIBILITY ON OR ADJACENT TO BUILDING ENTRANCE PER CBC 11B-703.7 AND 11B216.6. DURING PERIODS OF PARTIAL OR RESTRICTED USE OF A BUILDING OR FACILITY, THE ENTRANCES USED FOR PRIMARY ACCESS SHALL BE ACCESSIBLE TO AND USEABLE BY PHYSICALLY HANDICAPPED PERSONS.

ACCESS REQUIREMENTS - DOOR

35.1 TYPE OF LOCK OR LATCH; EXIT DOORS SHALL OPEN FROM THE INSIDE WITHOUT A KEY, OR ANY SPECIAL KNOWLEDGE OR EFFORT.

35.2 HAND ACTIVATED DOOR OPENING HARDWARE SHALL BE CENTERED BETWEEN 34 AND 44 INCHES ABOVE THE FLOOR. LATCHING AND LOCKING DOORS THAT ARE HAND ACTIVATED AND IN A PATH OF TRAVEL SHALL BE OPERABLE WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE, PANIC BARS, PUSH-PULL ACTIVATING BARS OR OTHER HARDWARE THAT PROVIDES PASSAGE WITHOUT GRASPING THE HARDWARE. LOCKED EXIT DOORS SHALL OPERATE IN EGRESS DIRECTION.

35.3 EXIT DOOR HARDWARE SHALL BE AN APPROVED TYPE AND TESTED IN ACCORDANCE WITH THE PROCEDURES ESTABLISHED BY STATE FIRE MARSHALL STANDARDS 552 AND 333.

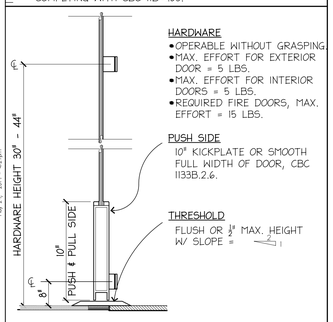
35.4 EFFORT TO OPERATE DOORS: MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 5 LBS., SUCH PUSH OR PULL EFFORT BEING APPLIED AT RIGHT ANGLES TO HINGED DOORS AND AT THE CENTER PLANE OR SLIDING OR FOLDING DOORS, COMPENSATING DEVICES.

35.5 CONSTRUCTION: THE BOTTOM 10 INCHES OF ALL DOORS, EXCEPT AUTOMATIC AND SLIDING DOORS, SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE TO ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRAP OR HAZARDOUS CONDITION.

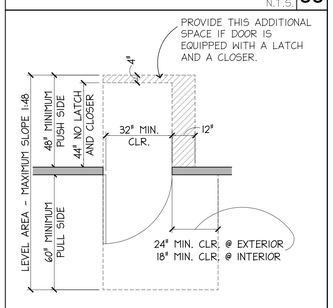
35.6 DOOR SIZE: EVERY REQUIRED EXIT DOORWAY SHALL BE OF A SIZE AS TO PERMIT THE INSTALLATION OF A DOOR NOT LESS THAN 3 FEET IN WIDTH AND NOT LESS THAN 6 FEET, 8 INCHES IN HEIGHT. ALL DOORS SHALL BE CAPABLE OF OPENING AT LEAST 90 DEGREES AND SHALL BE SO MOUNTED THAT THE CLEAR WIDTH OF THE EXIT WAY IS NOT LESS THAN 34 INCHES.

SITE ACCESSIBILITY

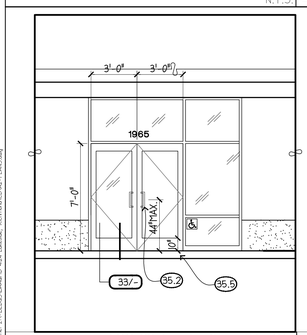
WALKWAYS AND SIDEWALKS ALONG ACCESSIBLE PATHS OF TRAVEL ARE TO BE CONTINUOUSLY ACCESSIBLE A MINIMUM 48" IN WIDTH, HAVE MAXIMUM ½" CHANGES IN ELEVATION AND A MAXIMUM 2% CROSS SLOPE. WHERE SLOPES EXCEED 5% (1:20), PROVIDE CURB RAMPS COMPLYING WITH CBC 11B-406 OR PEDESTRIAN RAMPS COMPLYING WITH CBC 11B-405.



SECTION AT DOOR/THRESHOLD 33
N.T.S.



DOOR CLEARANCES 34
N.T.S.



ACCESSIBLE ENTRY ELEVATION 35
1/4" = 1'-0"

SYMBOL LEGEND

- ROOM NAME / ROOM NUMBER
- DOOR SYMBOL: SEE SHEET A9.2 FOR DOOR AND HARDWARE SPECIFICATIONS.
- KEYED SHEET NOTE
- WALL TYPE
- ELEVATION TAGS
- OVERHEAD
- TACTILE EXIT SIGNAGE
- FIRE EXTINGUISHER
- FIRE EXTINGUISHER CABINET
- NEW MILLWORK

PARTITION LEGEND

- TYPE A1: NON- COMBUSTIBLE FIBER INSULATION PARTITION. SEE DETAIL A1/A9.1
- TYPE A: NON-COMBUSTIBLE PARTITION. SEE DETAIL A/A9.1
- TYPE B: NON-COMBUSTIBLE FULL HT ACOUSTICAL OR DEMISING PARTITION. SEE DETAIL B/A9.1
- TYPE B2: NON-COMBUSTIBLE ACOUSTICAL PARTITION. SEE DETAIL B2/A9.1
- EXISTING PARTITION

SHEET NOTES

1. REFER TO GENERAL NOTES SHEET A0.6 FOR ADDITIONAL CONSTRUCTION PLAN NOTES; ALL NOTES APPLY AS IF PRINTED IN FULL HERE.
2. FIRE SEAL ALL PENETRATIONS THROUGH FIRE RATED WALLS, FLOORS AND CEILINGS WITH APPROVED FIRE RATED PRODUCTS IN ACCORDANCE WITH THEIR FIRE RATING. PROVIDE FIRE DAMPERS IN ALL DUCTWORK THAT PENETRATES FIRE RATED PARTITIONS, AS REQUIRED.
3. PATCH WALLS TO PREPARE FOR NEW PAINT WHERE DEMOLITION SCARS OCCUR, INCLUDING AREAS WHERE OTHER WALL FINISHES, DECORATIONS, AND/OR OUTLETS/SWITCHES ABOVE 18" HAVE BEEN REMOVED.
4. PREPARE FLOOR AND BOTTOM OF ALL PARTITIONS TO RECEIVE NEW FINISHES, PARTICULARLY WHERE BASE HAS BEEN REMOVED. REMOVE EXCESS RESIDUE/ ADHESIVE.
5. INSPECT FOR HOLES OR OTHER DAMAGE AT ALL CORE WALLS, BASE BUILDING COLUMNS AND CORRIDOR WALLS TO REMAIN. REPAIR OR PATCH AS REQUIRED TO MAINTAIN RATING. TO PREPARE FOR NEW PAINT.
6. ALL PARTITIONS ARE TO BE NON-COMBUSTIBLE; REFERENCE PARTITION SCHEDULE ON SHEET A9.1 FOR FIRE RATING.
7. PROVIDE TACTILE SIGNAGE AT EXIT DOORS AS REQUIRED BY CODE. REFER TO DETAIL 31/A9.3 FOR ADDITIONAL INFORMATION. COORDINATE WITH LANDLORD FOR BUILDING STANDARD SPECIFICATIONS AS NEEDED.
8. PROVIDE SEMI RECESSED FIRE EXTINGUISHER CABINET, QUANTITY AND LOCATION(S) AS REQUIRED BY CODE AND IN COMPLIANCE WITH TITLE 24.
9. SEE A0.5 FOR RESTROOM SCOPE
10. PROVIDE BACKING FOR TENANT PROVIDED TV AND/OR GLASS WRITING BOARDS. VERIFY LOCATION AND SIZE OF TV WITH OWNER. SEE DETAIL 16/A9.3 FOR MORE INFORMATION.
11. PROVIDE NEW SINK, FAUCET, MILLWORK, DISHWASHER & ASSOCIATED HARDWARE. APPLIANCE SCHEDULE ON 1A2.5 AND FIXTURE SCHEDULE ON 3/A9.3 FOR MORE INFORMATION.
12. PROVIDE COPPER WATERLINES FOR THE FOLLOWING APPLIANCES:
    (1) DISHWASHER
    (1) WATER DISPENSER
    (1) TENANT PROVIDED COFFEE MAKER
    (1) TENANT PROVIDED REFRIGERATOR
    COORDINATE REQUIREMENTS WITH ARCHITECT
13. USE CEMENTITIOUS BACKER BOARD ('DUROCK') OR EQUAL AT PARTITIONS SCHEDULED TO RECEIVE CERAMIC TILE (U.O.N.) SEE FINISH PLANS 1A2.4 AND ELEVATIONS A9.3 FOR ADDITIONAL INFORMATION.
14. APPLY FILM ON ALL INTERIOR GLAZING. REFER TO DOOR SCHEDULE A9.2 FOR ADDITIONAL INFORMATION.
15. PROVIDE NEW MECHOSHADES AT EXTERIOR GLAZING.
16. NOT USED.
17. PROVIDE BACKING FOR WALL MOUNTED FURNITURE. SEE DETAIL 7/A9.3 FOR MORE INFORMATION.
18. ACOUSTIC PARTITION WITH SEPARATE FRAMING. RETURN GYP. BD. TO CORNER OF EXISTING WALL. SEAL TOP AND BOTTOM OF WALL WITH CAULK.
19. INFILL DOOR.
20. INFILL EXTERIOR DOOR WITH MATCHING STOREFRONT SYSTEM. MATCH ADJACENT STOREFRONT SYSTEM FOR WATERPROOFING APPLICATION.

2.1
21. ALUMINUM FRAMES BY C.R. LAURENCE, SELF-MORTISING AND REVERSIBLE. SATIN ALUMINUM FINISH.
22. OPERABLE PARTITION, OWNER FURNISHED, CONTRACTOR INSTALLED; G.C. TO VERIFY DIMENSIONS IN FIELD.
23. CONFIRM EXISTING FRAMING IN RESTROOMS MEETS MINIMUM REQUIREMENTS FOR SIZE AND SPACING OF STUDS PER TCNA W242-17. PROVIDE REMEDIAL FRAMING IF REQUIRED.

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REN. 8/31/19
STATE OF CALIFORNIA

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Co/ Title: Date:

Construction Plan

1st Floor

Scale: 1/8"=1'-0" Issue Date: 24MAY19
Drawn By: Reviewed By: AM
Sheet: X of 16

1A2.1

Plotted By: rhassell
Nov 29, 2019 - 4:29pm
Drawing name: Z:\+BLDG\BMAP\1 4114 Lakeside, Richmond\CD\A2-1PLANS.dwg

SYMBOL LEGEND

NEW BUILDING STANDARD 2' x 2' CEILING SYSTEM, SUSPENSION AND LATERAL STABILIZATION. SEE SHEET A9.2 FOR MORE INFORMATION.
SPEC: ARMSTRONG 584 2'x2' CIRRUS BEVELED TEGULAR HUMIGARD PLUS. GRID: DONN FINELINE. GRID: SUPRAFINE XL, WHITE

EXISTING DRYWALL CEILING OR SOFFIT.

NEW DRYWALL CEILING OR SOFFIT. SEE SHEET A9.2 FOR MORE INFORMATION.

CEILING HEIGHT INDICATOR TAG

ENCAPSULATED SOUND ATTENUATION BATT INSULATION, 4'W, CENTERED OVER PARTITION

CEILING GRID START POINT

SEE BUILDING'S TENANT IMPROVEMENT STANDARDS FOR LIGHT FIXTURE SPECIFICATIONS

BUILDING STANDARD 2'x4' RECESSED LIGHT FIXTURE

BUILDING STANDARD 2'x2' RECESSED LIGHT FIXTURE

RECESSED DOWN LIGHT

WALL-MOUNTED EXIT SIGN

CEILING-MOUNTED EXIT SIGNAGE

WALL-MOUNTED MOTION SENSOR

CEILING-MOUNTED MOTION SENSOR

SINGLE SWITCH

DOUBLE SWITCH

UNDER-CABINET LIGHTING

RECESSED LINEAR COVE LIGHT

LINEAR PENDANT LIGHT

(E) RELOCATED ITEM

(N) NEW ITEM

FI FIXTURE TYPE IDENTIFIER

SHEET NOTES

1. REFER TO GENERAL NOTES SHEET A0.6 FOR ADDITIONAL REFLECTED CEILING PLAN NOTES; ALL NOTES APPLY AS IF PRINTED IN FULL HERE.
2. THIS PLAN IS PROVIDED TO SHOW LOCATION OF ALL PRIMARY CEILING FIXTURES AND ARCHITECTURAL ELEMENTS ONLY. FOR DETAILED ELECTRICAL AND MECHANICAL REQUIREMENTS, SEE ENGINEERING DRAWINGS. IN THE EVENT OF A CONFLICT ARCHITECTURAL DRAWINGS SHALL DETERMINE LIGHT LOCATION, ELECTRICAL DRAWINGS SHALL DETERMINE SWITCHING.
3. NO EQUIPMENT OVER 400 POUNDS SHALL BE MOUNTED ON ROOF, CEILING OR FLOOR STRUCTURE. NO FIXTURES WITH WEIGHT MORE THAN 20 lbs WILL BE SUSPENDED FROM ROOF/ CEILING/ WALL STRUCTURE, (TYP.)
4. CLEAN AND RELAMP ALL LIGHT FIXTURES TO REMAIN, TYP. THROUGHOUT.
5. RE-SWITCH ALL NEW, EXISTING AND/OR RELOCATED LIGHTS TO CORRESPOND WITH NEW LIGHTING LAYOUT AND AS INDICATED IN THE PLAN BELOW. ALL NEW SWITCHES TO MATCH EXISTING BUT MUST COMPLY WITH TITLE 24.
6. ALL EXIT SIGNS SHALL BE INTERNALLY ILLUMINATED WITH AN INTENSITY OF NOT LESS THAN 5 FOOTCANDLES.
7. MEANS OF EGRESS ILLUMINATION LEVEL SHALL NOT BE LESS THAN 1 FOOT CANDLE AT WALKING SURFACE LEVEL; EMERGENCY POWER SYSTEM SHALL PROVIDE POWER FOR DURATION OF NOT LESS THAN 90 MINUTES; EMERGENCY LIGHTING FACILITIES SHALL BE ARRANGED TO PROVIDE INITIAL ILLUMINATION THAT IS AT LEAST AN AVERAGE OF 1 FOOT CANDLE AND A MINIMUM AT ANY POINT OF 0.1 FOOT CANDLE.
8. FOR EMERGENCY LIGHTING, CONNECT TO EMERGENCY POWER CIRCUIT OR PROVIDE SWITCHED EMERGENCY BALLAST, SEE ALSO ELECTRICAL PLANS.
9. PROVIDE MEP PLANS FOR TENANT TO REVIEW PRIOR TO CONSTRUCTION.
10. ADJUST AIR BALANCE THROUGHOUT SUITE AS REQUIRED BY DEMOLITION AND CONSTRUCTION OF PARTITIONS. RELOCATE SUPPLY AND RETURN AIR GRILLES OR PROVIDE NEW AS NECESSARY.
11. CENTER ALL EXIT SIGNS ON CEILING TILE, U.O.N.
12. FOR EXIT SIGNS OVER DOORS, CENTER EXIT SIGN AT DOOR.
13. PROVIDE 24/7 COOLING EQUIPMENT AS NEEDED IN SERVER ROOM. SEE MECHANICAL ENGINEER'S DRAWINGS FOR MORE INFORMATION.
14. PROVIDE NEW CEILING MOUNTED EXIT SIGN AND HARDWARE AS SHOWN. CONNECT TO EMERGENCY CIRCUIT AS REQUIRED.
15. PROVIDE NEW CEILING TILES AND GRID AS SHOWN. SEE SHEET A9.2 FOR MORE INFORMATION, (TYP.)
16. CEILING GRID STARTING POINT, FULL TILE AT CL OF ROOM.
17. CENTER CEILING GRID AND TILE IN ROOM.
18. SEE IA0.5 FOR RESTROOM SCOPE
19. MINIMUM 1.5" CONDUIT INSIDE WALL TO 6" ABOVE CEILING
20. 4K RATED WIRING AND HARDWARE TO PROJECTOR.
21. NOT USED.
22. 2"PERIMETER CEILING GRID TRIM, TYP.
23. PERIMETER POCKET FLANGE FOR RECESSED MECHO SHADES, ARMSTRONG AXP3555.
24. NOT USED.
25. NOT USED.
26. PROVIDE ADDITIONAL BATT INSULATION EXTENDING 4'-0" PAST EACH SIDE OF PARTITION ABOVE SUSPENDED CEILING THE ENTIRE LINEAR FOOTAGE, SEE LEGEND.
27. LINEAR PENDANTS TO BE MOUNTED 9'-0" A.F.F.
28. SECURITY CAMERAS PROVIDED AND INSTALLED BY OWNER.
29. LIGHT FIXTURES AND LIGHTING CONTROLS PROVIDED BY OWNER, INSTALLED BY CONTRACTOR.
30. POWER AND AV OUTLET IN CEILING FOR PROJECTORS. CONNECTS TO FLOOR AV MONUMENTS.
31. 8' MOTORIZED RECESSED ROLL DOWN PROJECTOR SCREEN

LIGHT FIXTURE SCHEDULE

TAG	SYMBOL	QUANTITY	MANUFACTURER	DESCRIPTION	SPECIFICATION
F1		SEE PLAN	LITHONIA	2'X4' AVANTE RECESSED LED LIGHT	2AVL-4-30L-MDR-EZ1-LP835
F2		SEE PLAN	LITHONIA	2'X2' AVANTE RECESSED LED LIGHT	2AVL-2-30L-MDR-EZ1-LP835
F3		SEE PLAN	INFINIUM	LED DOWNLIGHT, 4" SQUARE	SGE4SQLEDOS
F4		SEE PLAN	KELVIX	UNDER-COUNTER LIGHTING	PQ35K-24V
F5		SEE PLAN	FINELITE	RECESSED LINEAR	HP-4 R-4FT-H-835-F-277V-SC-SF
F6		SEE PLAN	FINELITE	LED LINEAR PENDANT (18', 24', 32' LENGTHS)	HP-4 ID-X-S-S-835-WSO-F-277V-H-835-F-277V-FM-SC-C1-OBD

LIGHTING CONTROL SYSTEM

ALL LIGHTING SHALL BE CONTROLLED VIA NEW LIGHTING CONTROL SYSTEM:

A. PROVIDE NEW WALL MOUNTED LIGHTING CONTROL PANEL WITH RELAYS AND INTEGRAL ASTRONOMICAL TIMECLOCK IN THE ELECTRICAL ROOM TO CONTROL LIGHTING.

B. PROVIDE 0-10V DIMMING SPACE CONTROLLER WITH RELAYS AS REQUIRED FOR ALL AREAS.

C. PROVIDE CEILING MOUNTED OCCUPANCY SENSORS FOR CODE REQUIRED AUTOMATIC SHUT-OFF OF ALL LIGHTING.

D. PROVIDE WALL DIMMERS FOR CONTROL OF ALL LIGHTS IN ALL ENCLOSED SPACES. PROVIDE COMPATIBLE DIMMABLE BALLASTS/DRIVERS FOR ALL FIXTURES AS REQUIRED.

E. FOR PERIMETER AREAS ADJACENT TO WINDOWS PROVIDE CEILING MOUNTED DAYLIGHT SENSOR AND CONNECT TO AREA CONTROLLER FOR AUTOMATIC DAYLIGHT DIMMING OF PRIMARY DAYLIGHT ZONE FIXTURES AS REQUIRED BY CODE. PROVIDE WALL DIMMER FOR MANUAL CONTROL OF DAYLIGHT ZONE FIXTURES.

F. FOR EVERY ROOM CONTROLLER, PROVIDE ONE NETWORK BRIDGE AND ALL ASSOCIATED INTERCONNECTION WIRING. PROVIDE ONE SEGMENT MANAGER AND CONNECT TO NETWORK BRIDGES FOR LOAD SHEDDING CAPABILITY FROM OUTSIDE SIGNAL (BUILDING MANAGEMENT SYSTEM).

G. PROVIDE ALL LOW VOLTAGE CAT5E AND SEGMENT NETWORK INTERCONNECTION WIRING BETWEEN ALL CONTROLLERS, SENSORS, WALL SWITCHES, NETWORK BRIDGES, AND SEGMENT MANAGER FOR COMPLETE WORKING SYSTEM PER MANUFACTURER'S RECOMMENDATIONS.

H. INTERCONNECT ALL ROOM CONTROLLER NETWORK BRIDGES TO SEGMENT MANAGER. CONNECT SEGMENT MANAGER TO BUILDING NETWORK/BMS FOR 'LOAD SHEDDING' CAPABILITY. WALL MOUNT SEGMENT MANAGER IN TELECOM OR ELECTRICAL ROOM. FIELD COORDINATE EXACT LOCATION WITH ALL OTHER EQUIPMENT PRIOR TO ROUGH-IN. PROVIDE DEDICATED 20A/120V CIRCUIT RECEPTACLE POWER FOR EQUIPMENT.

COMMISSIONING & TESTING

A. ELECTRICAL

I. CALIFORNIA ENERGY CODE TITLE-24 COMPLIANCE AND ACCEPTANCE TESTS

ELECTRICAL CONTRACTOR SHALL PERFORM ALL REQUIRED FUNCTIONAL TESTING OF LIGHTING CONTROLS AS REQUIRED ON T24 DOCUMENTATION FORMS, AND PROVIDE ALL REQUIRED SIGNATURES ON INSTALLATION AND ACCEPTANCE FORMS. ALSO, COMPLETE ALL ACCEPTANCE FORMS.

II. FUNCTIONAL TESTING COMMISSIONING & TRAINING

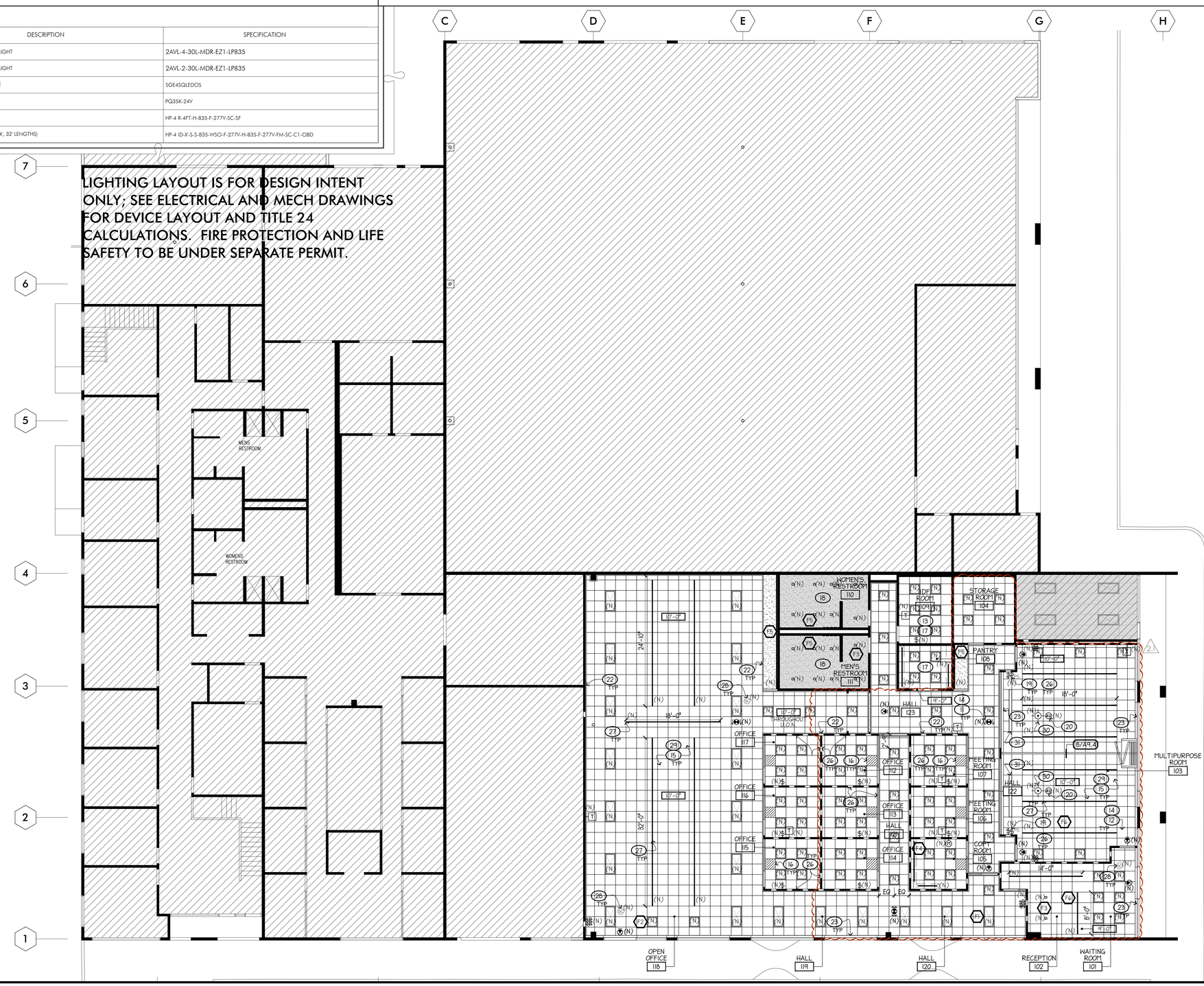
THE ENTIRE LIGHTING CONTROL/PLUG LOAD CONTROL SYSTEM (INCLUDING ALL DAYLIGHT SENSORS, CONTROLLERS, SWITCHES, RELAYS, CONTROLLED OUTLETS, OCCUPANCY SENSORS, ETC.) SHALL BE FUNCTIONALLY TESTED AND COMMISSIONED TO THE SATISFACTION OF THE CHIEF BUILDING ENGINEER, BY ELECTRICAL CONTRACTOR/CONTRACTOR'S AGENT, INCLUDING ALL RELEVANT DEVICE CALIBRATION AND CONFIGURATION AS REQUIRED. FOLLOW MANUFACTURER'S GUIDELINES AND PROVIDE ADDITIONAL DEVICES, SENSORS, ETC. AS REQUIRED.

CONTRACTOR/CONTRACTOR'S AGENT SHALL PROVIDE ADEQUATE TRAINING TO THE BUILDING'S ENGINEERING STAFF. FACTORY AUTHORIZED TECHNICIAN AND THE CONTRACTOR SHALL INCLUDE A MINIMUM OF 8 HOURS OF THOROUGH AND DETAILED TRAINING. THIS TIME IS IN ADDITION TO THE STARTUP AND FUNCTIONALITY COMMISSIONING.

B. MECHANICAL

I. COMPLETE ALL TITLE 24 REQUIRED COMMISSIONING SERVICES (VIA 3RD PARTY). PROVIDE ADDITIONAL LABOR/MATERIAL AS REQUIRED.

II. CONTRACTOR TO PROVIDE ALL LABOR AND MATERIAL REQUIRED TO COMPLETE AND PERFORM ALL ACCEPTANCE TESTS AS REQUIRED BY 2016 TITLE 24. THE PROJECT-SPECIFIC ACCEPTANCE TESTS FORMS SHALL BE INCLUDED IN THE TITLE 24 DOCUMENTS THAT ARE SUBMITTED TO THE CITY FOR PERMITTING. REVIEW ALL FORMS AND PROVIDE COST FOR ALL ACCEPTANCE TESTS IN THE BASE BID.



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LICENSED ARCHITECT ASHLEY G. MILLER NO. C-27238 REN. 8/31/19 STATE OF CALIFORNIA

Consultant

Issue/Revision:

No.	Proj. No. Date:	Description
1	32243.01	29MAR19 ISSUE FOR REVIEW
2	32243.01	22APR19 ISSUE FOR PERMIT
2.1	32243.01	28MAY19 PLAN CHECK RESPONSE / ADDENDUM #3

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Approval Signature:

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Reflected Ceiling Plan

1st Floor

Scale: 1/8"=1'-0" Issue Date: 24MAY19
Drawn By: Reviewed By: AM
Sheet: X of 16

1A2.2

Plotted By: chasez
Mar 29, 2019 - 4:07pm
Drawing name: Z:\-BLDG\BRAND 424 Lakeside, Richmond\CAD\A2-FLANS.dwg

Plotted by: cregan

Thu, 24 ... 2019 - 4:27pm

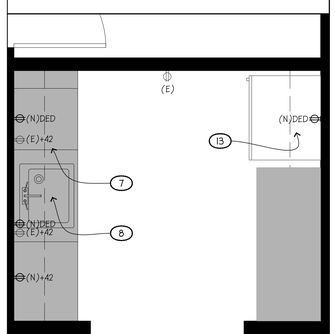
Drawing name: Z:\BLDGS\BRAZED 4114 Lakeside, Richmond\CD\A2-PLANS.dwg

SYMBOL LEGEND

- DUPLEX POWER OUTLET
- FOURPLEX POWER OUTLET
- DED — DEDICATED DUPLEX POWER OUTLET
- GFI — GROUND FAULT INTERCEPTOR DUPLEX POWER OUTLET PROTECTION
- NEMA — SPECIAL PURPOSE POWER OUTLET
- COMBINATION FLOOR-MOUNTED TELEPHONE/DATA/ DUPLEX POWER OUTLET
- WALL MOUNTED COMBINATION TELEPHONE/DATA OUTLET, NUMBER INDICATES PORTS, TYP.
- CR — CARD READER (N.I.C.) COORDINATE REQUIREMENTS WITH TENANTS' SECURITY VENDOR
- AV — WALL MOUNTED AUDIO/VISUAL EQUIPMENT (NIC), COORDINATE WITH TENANTS' A/V CONSULTANT
- PP — ELECTRIFIED FURNITURE BASE FEED, POWER POLE
- (X) — EQUIPMENT TYPE IDENTIFIER
- (E) — EXISTING ITEM
- (N) — NEW ITEM

SHEET NOTES

1. REFER TO GENERAL NOTES SHEET **A0.6** FOR ADDITIONAL POWER & SIGNAL PLAN NOTES; ALL NOTES APPLY AS IF PRINTED IN FULL HERE.
2. THIS DRAWING IS PROVIDED FOR PLACEMENT OF ELECTRICAL ONLY. FOR POWER REQUIREMENT AND CIRCUITING, SEE ELECTRICAL DRAWINGS.
3. COORDINATE ELECTRICAL SUCH THAT CIRCUITS ARE NOT SHARED OVER DEMISING OR CORRIDOR PARTITIONS.
4. OUTLETS SHOWN FOR REFERENCE ONLY. COORDINATE WITH ELECTRICAL, MECHANICAL ENGINEER FOR ELECTRICAL SPECIFICATIONS AND PRICING.
5. U.O.N. PROVIDE AND INSTALL NEW WHITE BUILDING STANDARD COVER PLATE AT ALL NEW AND EXISTING OUTLETS.
6. SEE A0.5 FOR RESTROOM SCOPE.
7. PROVIDE DEDICATED OUTLET FOR POINT-OF-USE ELECTRIC WATER HEATER. SEE ELECTRICAL ENGINEER'S DRAWINGS FOR ADDITIONAL INFORMATION.
8. PROVIDE DEDICATED OUTLET FOR DISHWASHER. SEE ELECTRICAL ENGINEER'S DRAWINGS FOR ADDITIONAL INFORMATION.
9. CENTER OUTLET ON WALL.
10. WALL MOUNTED AUDIO/VISUAL EQUIPMENT, COORDINATE WITH TENANTS' A/V CONSULTANT. PROVIDE 1.5" CONDUIT FROM FLOOR BOX TO WALL BOX FOR POWER AND AV.
11. PROVIDE (N.) LEGRAND FLUSH FLOOR CORE. VERIFY LOCATIONS AND SPECIFICATION WITH TENANT AND FURNITURE VENDOR.
12. POWER POLE, PROVIDED BY FURNITURE VENDOR.
13. PROVIDE DEDICATED OUTLET FOR REFRIGERATOR. SEE ELECTRICAL ENGINEER'S DRAWINGS FOR ADDITIONAL INFORMATION.
13. PROVIDE DEDICATED OUTLET FOR MICROWAVE. SEE ELECTRICAL ENGINEER'S DRAWINGS FOR ADDITIONAL INFORMATION.
2.1 14. REFERENCE REQUEST FOR PROPOSAL "ATTACHMENT C" FOR TELE/DATA CABLE COUNTS.



ENLARGED POWER & SIGNAL PLAN - PANTRY 35
1/2" = 1'-0"

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Co/ Title: Date:

Power & Signal Plan

1st Floor

Scale: 1/8"=1'-0" Issue Date: 24MAY19
Drawn By: Reviewed By: AM
Sheet: X of 16

1A2.3

SYMBOL LEGEND

- X — FLOOR FINISH MATERIAL
- X — CHANGE FLOOR FINISH
- X / TS — CHANGE FLOOR FINISH WITH TRANSITION STRIP
- X / SS — CHANGE FLOOR FINISH WITH SCHLUTER STRIP
- X / X — PAINT BASE
- X / X — MILLWORK: COUNTERTOP; EXPOSED DOORS, DRAWERS AND FACES
- X — PAINTED DOOR FINISH: SEE SHEET A9.2 FOR DOOR AND HARDWARE SPECIFICATIONS.
- X — WINDOW TREATMENT

FINISHES

C1 — CARPET - FIELD
MANUFACTURER: SHAW
STYLE: OVERLAY TILE 59598
COLOR: REVEAL 95485
PATTERN: ASHLAR
INSTALLATION: GLUE DOWN

C2 — CARPET - ACCENT
MANUFACTURER: SHAW
STYLE: SQUARE TILE 5T244
COLOR: GLASS LIGHT 86411
PATTERN ASHLAR
INSTALLATION: GLUE DOWN

RBT — RUBBER FLOOR TILE - IDF/STORAGE ROOM
MANUFACTURER: NORA SYSTEMS INC.
STYLE: NORAPLAN UNITA 6445
COLOR: KILIMANJARO
~~PATTERN: 600 CHECKERBOARD~~

2.1 **LVT — LUXURY VINYL TILE - PANTRY**
MANUFACTURER: SHAW
STYLE: UNITE
COLOR: SILT 27504
PATTERN: ASHLAR

B1 — WALL BASE
MANUFACTURER: JOHNSONITE
COLOR: TA6 BEDROCK CG
HEIGHT: 4" H
TYPE/STYLE: STRAIGHT AT CARPET/ COVE AT TILE

P1 — PAINT
MANUFACTURER: BENJAMIN MOORE
STYLE: EGGSHELL
COLOR: SIMPLY WHITE 2143-70

P2 — PAINT
MANUFACTURER: BENJAMIN MOORE
STYLE: EGGSHELL
COLOR: COLORADO GRAY 2136-50

P3 — PAINT
MANUFACTURER: BENJAMIN MOORE
STYLE: EGGSHELL
COLOR: PAN FOR GOLD 181

P4 — PAINT
MANUFACTURER: BENJAMIN MOORE
STYLE: SEMI-GLOSS
COLOR: SEASIDE BLUE 2054-50

2.1 **PE — PAINT - EXPOSED CEILING**
MANUFACTURER: BENJAMIN MOORE
STYLE: FLAT
COLOR: JET BLACK - 2120-10

T1 — TILE - BACKSPLASH
MANUFACTURER: MOSA
STYLE: KHO LIANG LE COLLECTION
COLOR: 16902

ST1 — SOLID SURFACE - COUNTERTOP
MANUFACTURER: LG HAUSYS
STYLE: VIATERA STERLING GREY

PL1 — PLASTIC LAMINATE - VERT. & HORIZ. SURFACES
MANUFACTURER: FORMICA
STYLE: 118-58 FINNISH OAK

UPH1 — UPHOLSTERED WALL PANELS
MANUFACTURER: MAHARAM
STYLE: REPLY 901880 001 CANVAS
COLOR: 001 CANVAS

UPH2 — OPERABLE PARTITION
MANUFACTURER: T.B.D.
STYLE: T.B.D.
COLOR: T.B.D.

D1 — DOOR FINISH-WOOD
GRADE: RIFT WHITE OAK
STAIN: NATURAL

2.1 **W1 — WINDOW TREATMENT**
MANUFACTURER: MECHOSHADE
STYLE: THERMOVEIL, 1000 SERIES
COLOR: LIGHT GREY / 1010, 2-3%

W2 — WINDOW TREATMENT
MANUFACTURER: MECHOSHADE
STYLE: DISTINCTIVE BLACKOUT
COLOR: WHITE / 0801

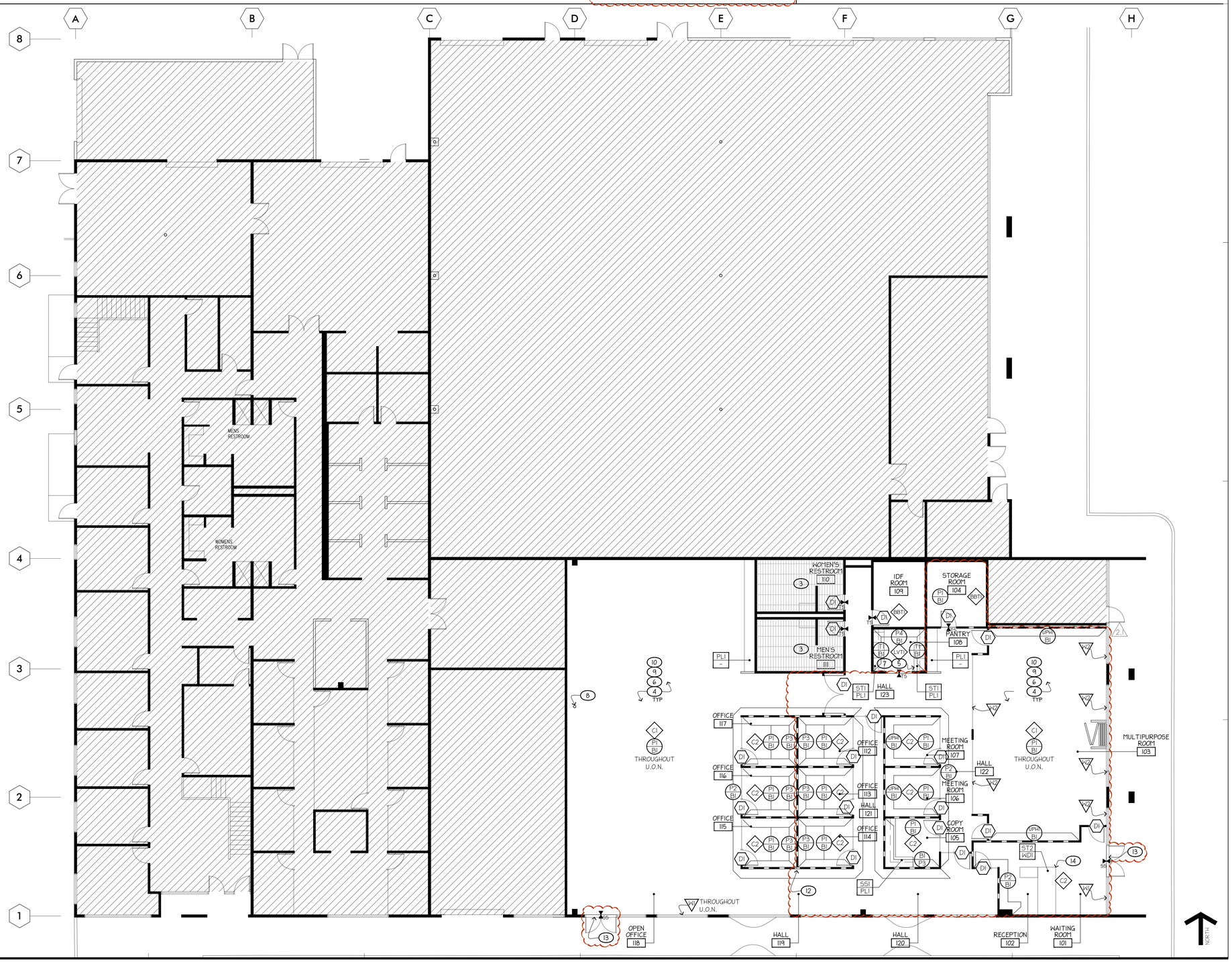
ST2 — CONCRETE SLAB - RECEPTION DESK
MANUFACTURER: CONCRETE COLLABORATIVE
STYLE: VENICE - LARGE MARBLE CHIP
COLOR: ALABASTER

WD1 — WOOD VENEER - RECEPTION DESK
MANUFACTURER: NATURE'S PALETTE
STYLE: WHITE OAK FLAT CUT NP0611

PL2 — ALT - PLASTIC LAMINATE - RECEPTION DESK INT.
MANUFACTURER: WILSONART
STYLE: BLACK VELVET 15505-31

SHEET NOTES

1. REFER TO GENERAL NOTES SHEET A0.6 FOR ADDITIONAL FINISH PLAN NOTES; ALL NOTES APPLY AS IF PRINTED IN FULL HERE.
2. V.I.F. EXTERIOR WINDOWCOVERINGS AND INTERIOR BLINDS ARE IN WORKING ORDER AND ARE NOT DAMAGED. REPLACE OR REPAIR AS REQUIRED THROUGHOUT SUITE TYPICAL (U.O.N.)
3. SEE A0.5 FOR RESTROOM SCOPE
4. PATCH AND REPAIR WALLS AS NEEDED PER CONSTRUCTION AND DEMOLITION.
5. PROVIDE PLASTIC LAMINATE BASE AT MILLWORK, INTERIOR OF SINK CABINET, INCLUDING WALL SURFACE, TO RECEIVE RUBBER BASE AS SCHEDULED.
6. SHAW ECOLOGIX BACKING SYSTEM TO BE INSTALLED ON ALL CARPET TILES THROUGHOUT FLOOR WHERE CARPET IS TO BE INSTALLED.
7. CONTINUE FLOORING PATTERN TO UNDERSIDE OF SINK.
8. PAINT COLUMN P1.
9. PROVIDE MOISTURE TESTING AT SLABS, CONFIRM CONDITIONS MEET MANUFACTURERS ENVIRONMENTAL STANDARDS FOR FLOORING INSTALLATION.
10. PROVIDE LINE ITEM PRICING TO SEAL SLAB WITH VAPOR BARRIER.
2.1 11. NOT USED.
12. **PRICE AS ALTERNATE:** NORDGRONA ACOUSTIC MOSS TILES, CONVEX CIRCLE. COLORS: HONEY, ORANGE, COPPER, AZURE, LAVENDER & GRANITE. COORDINATE LAYOUT IN FIELD WITH ARCHITECT. SEE ELEVATION 23/A9.3 FOR MORE INFORMATION.
2.1 13. EXTERIOR DOOR THRESHOLDS TO BE ADA COMPLIANT, NOT TO EXCEED 1/4" HEIGHT, 1 TO 2 SLOPE.
14. MILLWORK RECEPTION DESK, SEE A9.4 FOR MORE INFORMATION.



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LICENSED ARCHITECT ASHLEY G. MILLER NO. C-27238 REN. 8/31/19 STATE OF CALIFORNIA

Consultant

Issue/Revision:

No.	Proj. No. Date:	Description
1	32243.01	ISSUE FOR REVIEW 24MAR19
2	32243.01	ISSUE FOR PERMIT 22APR19
2.1	32243.01	PLAN CHECK RESPONSE 28MAY19 * ADDENDUM #3

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Approval Signature:

Co/ Title: Date:

Finish Plan

1st Floor

Scale: 1/8=1'-0" Issue Date: 24MAY19
Drawn By: Reviewed By: AM
Sheet: X of 16

1A2.4

Plotted By: chasep
May 29, 2019 - 4:27pm
Drawing name: J:\-BLOCKBAM\PD 424 Lakeside, Richmond\CD\A1-PLANS.dwg

EQUIPMENT SCHEDULE

TAG	ITEM/DESCRIPTION	SIZE (LxWxH)	MANUFACTURER	PART NUMBER	REMARKS
1	REFRIGERATOR	27.5"X31"X67.5"	FISHER PAYKEL	RF170WDLUX5_N	BY G.C
2	DISHWASHER	22"X24"X32.75"	ASKO	DBI66315	BY G.C
3	MICROWAVE	16 3/8" X 23 3/8" X 23 3/8"	BOSCH	HMD8451UC	BY G.C
4	PRINTER/COPIER/ SCANNER		BY OWNER		
5	SERVER		BY OWNER		
6	MOTORIZED PROJECTION SCREEN	8' WIDTH			4K ULTRA HD COMPATIBLE, BY G.C.
7	PROJECTOR				3840X2160, 4KHD, 5000 LUMENS, BY G.C.

SHEET NOTES

1. REFER TO GENERAL NOTES SHEET A0.6 FOR ADDITIONAL INFORMATION; ALL NOTES APPLY AS IF PRINTED IN FULL HERE.
2. FURNITURE INSTALLER TO PROVIDE 44" MIN. CLEARANCE AT AISLE SPACE SERVING MORE THAN 1 OCCUPANT AND 36" MIN. SERVING 1 OCCUPANT, TYP.
3. FURNITURE VENDOR TO COORDINATE FURNITURE DELIVERY HOURS WITH BUILDING MANAGEMENT. FURNITURE VENDOR TO SUPPLY INSURANCE AND PROTECTION OF THE BUILDING ENTRY.
4. FURNITURE VENDOR TO PROVIDE WALL MOUNTED CLARUS FLOAT BOARDS, G.C. TO INSTALL.
5. LATERAL SHELVING SYSTEM TO BE PROVIDED BY FURNITURE VENDOR. LAMINATE COUNTERTOP TO BE PROVIDED BY G.C.
6. CUSTOM MILLWORK RECEPTION DESK. SEE **SHEET A9.4 FOR DETAILS.**

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ASHLEY G. MILLER
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Consultant

Issue/Revision:

No.	Proj. No. Date:	Description
1	'32243.01	ISSUE FOR REVIEW '24MAR19
2	'32243.01	ISSUE FOR PERMIT '22APR19
2.1	'32243.01	PLAN CHECK RESPONSE '28MAY19 ADDENDUM #3

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Approval Signature:

Co/ Title: Date:

Furniture and Equipment Plan

1st Floor

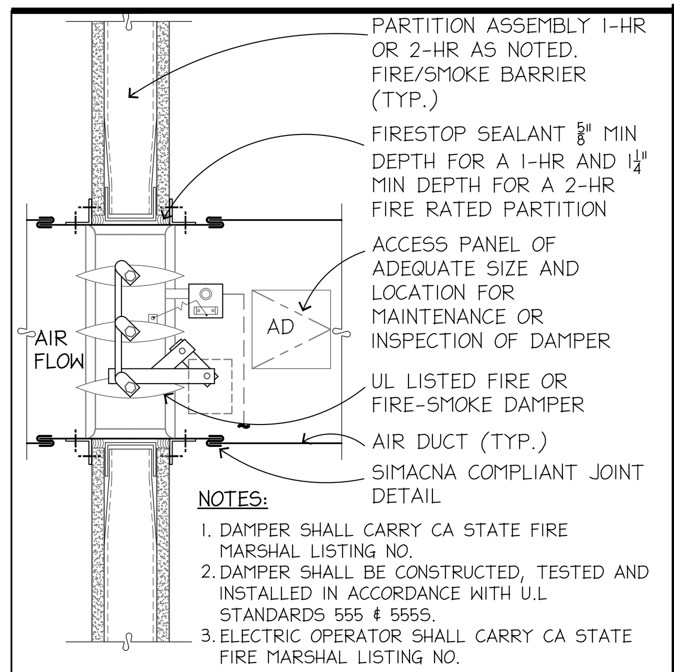
Scale: 1/8=1'-0" Issue Date: 24MAY19
Drawn By: Reviewed By: AM
Sheet: X of 16

1A2.5

Plotted by: cregan
May 24, 2019 - 4:27pm
Drawing name: Z:\BLDGS\BRADFD 4114 Lakeside, Richmond\CD\A2-PLANS.dwg

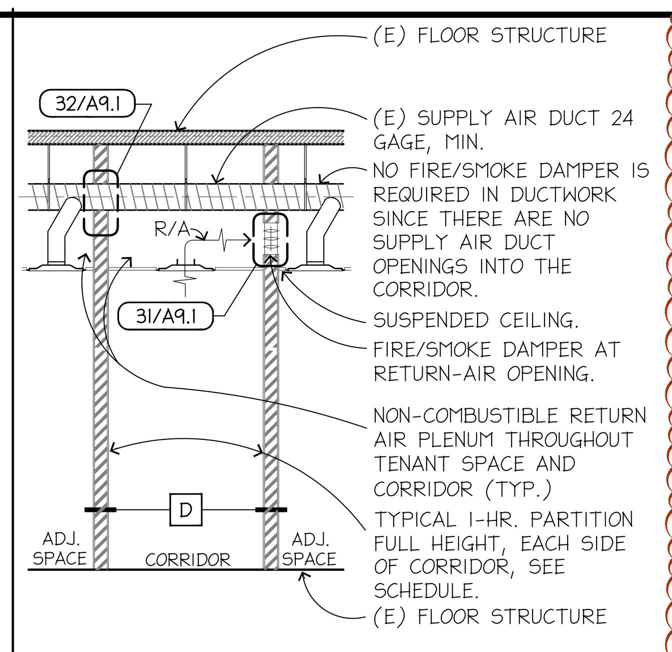
Plotted by: cheppel
May 29, 2019 - 4:28pm
Drawing name: Z:\-BLDGS\BAAQMD 4124 Lakeside, Richmond\CD\A9-1.dwg

2.1

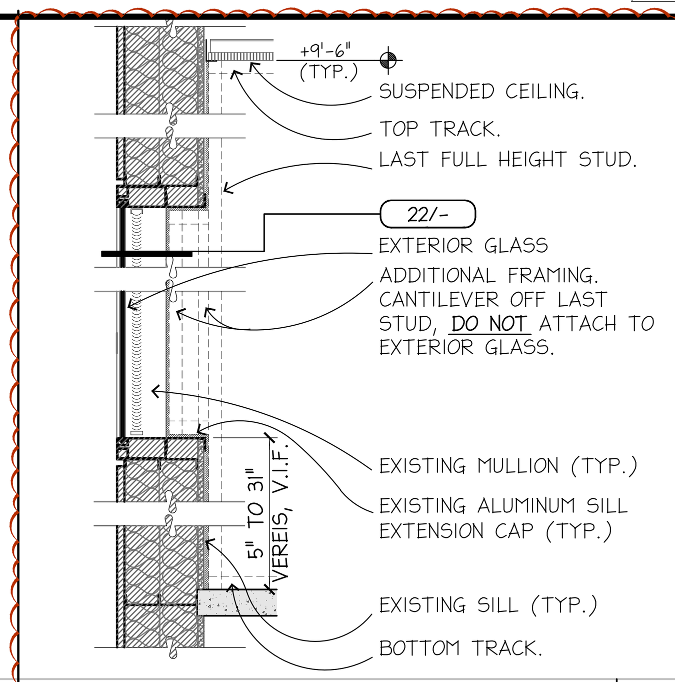


NOTES:
1. DAMPER SHALL CARRY CA STATE FIRE MARSHAL LISTING NO.
2. DAMPER SHALL BE CONSTRUCTED, TESTED AND INSTALLED IN ACCORDANCE WITH U.L STANDARDS 555 & 555S.
3. ELECTRIC OPERATOR SHALL CARRY CA STATE FIRE MARSHAL LISTING NO.

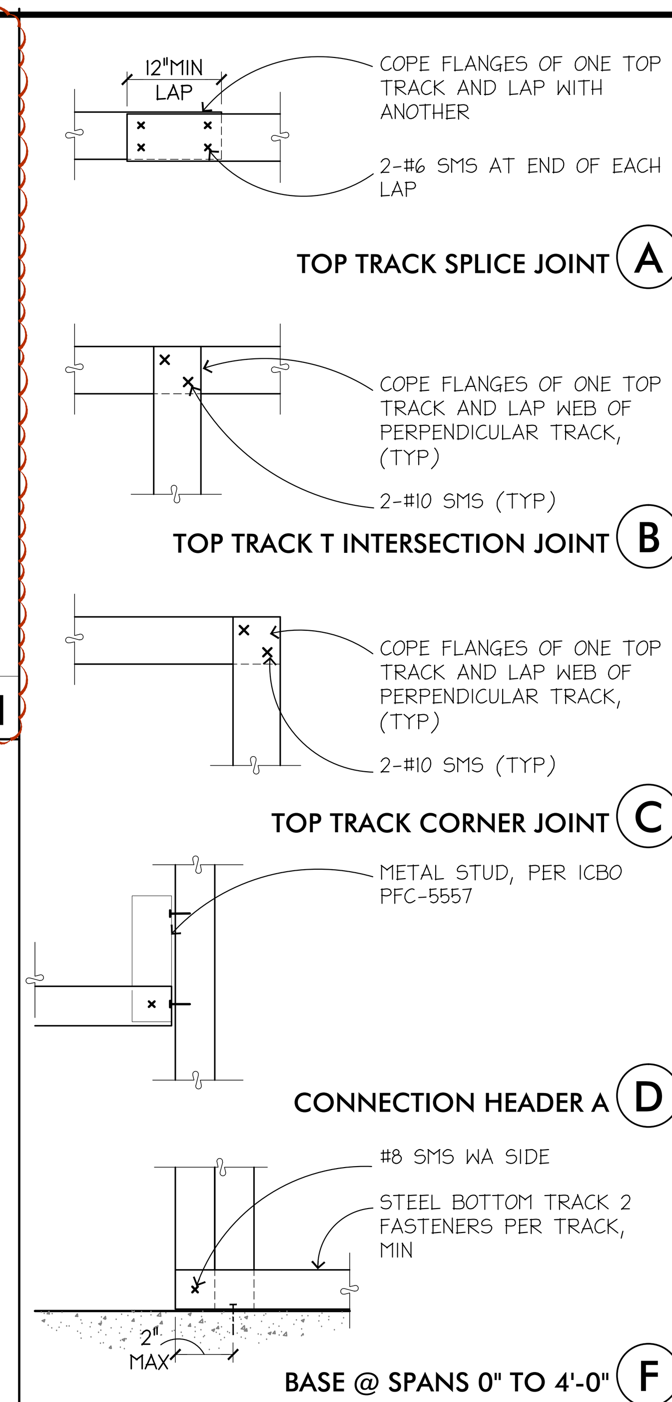
PART-0251 **FIRE/SMOKE DAMPER DETAIL** N.T.S. **33**



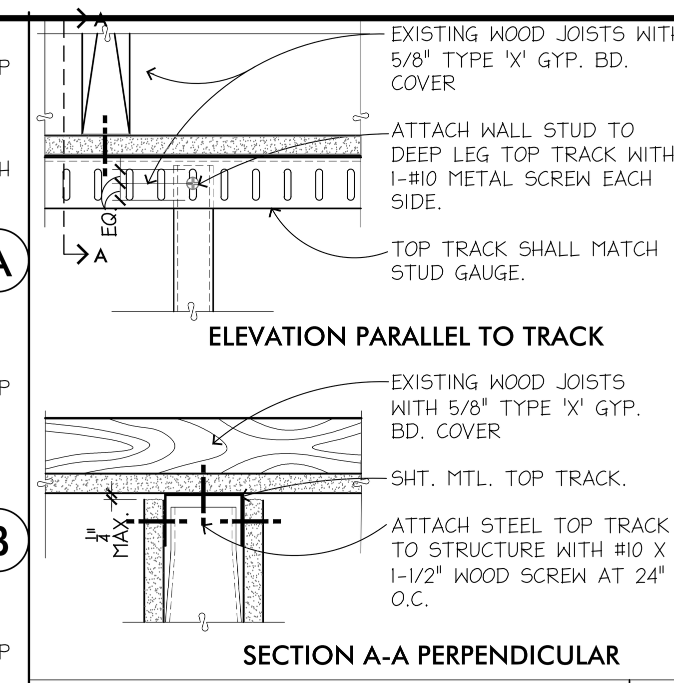
PART-0001-WD **1-HOUR CORRIDOR CONSTRUCTION (TYPICAL)** 1/4"=1'-0" **26**



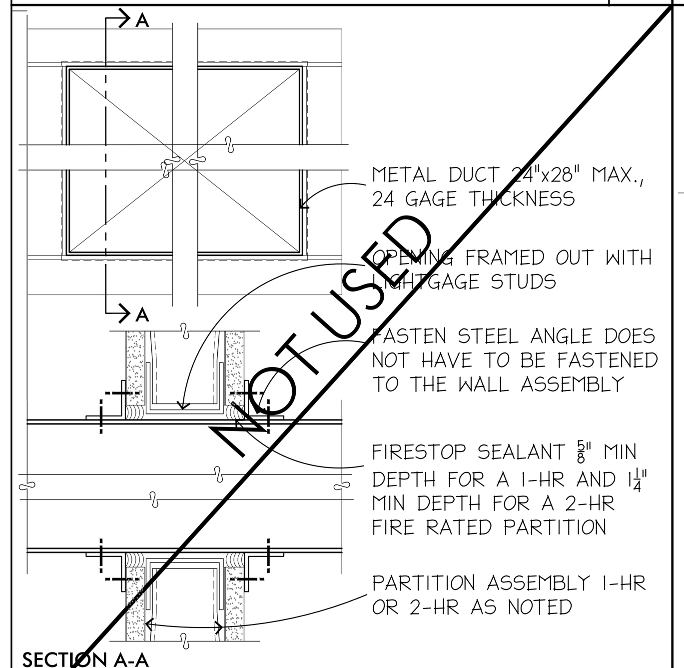
FRMG-0101-WD **PARTITION AT EXTERIOR GLASS** 1"=1'-0" **21**



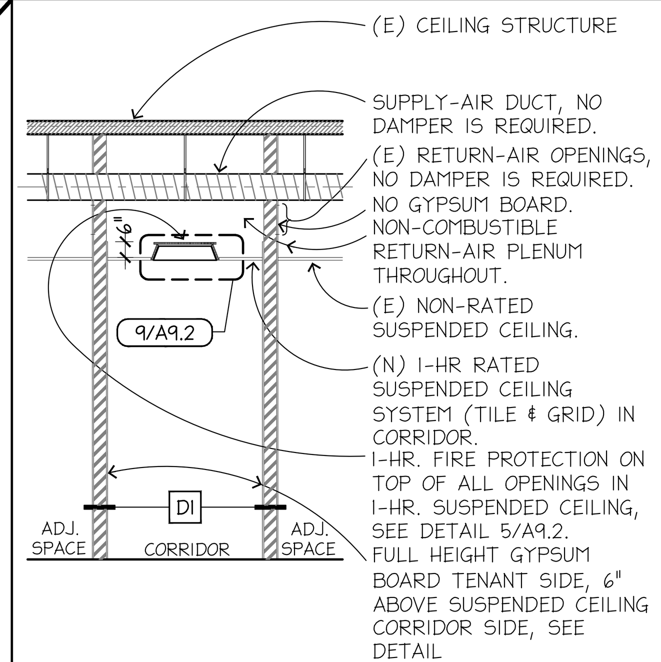
TRCK-0102 **HEADER, SILL, & BASE CONNECTIONS TO JAMB STUDS** NO SCALE **17**



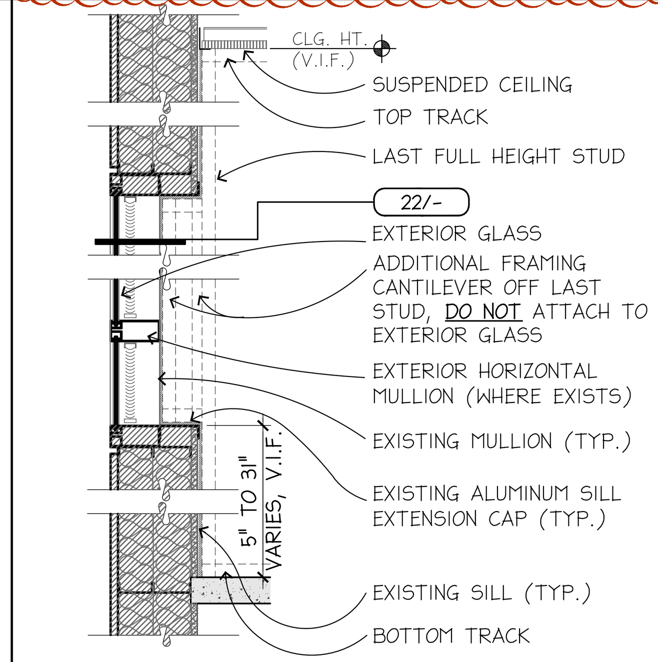
HD-0103 **TOP TRACK DETAIL FOR NON-RATED AND FIRE-RATED PARTITION** 3"=1'-0"



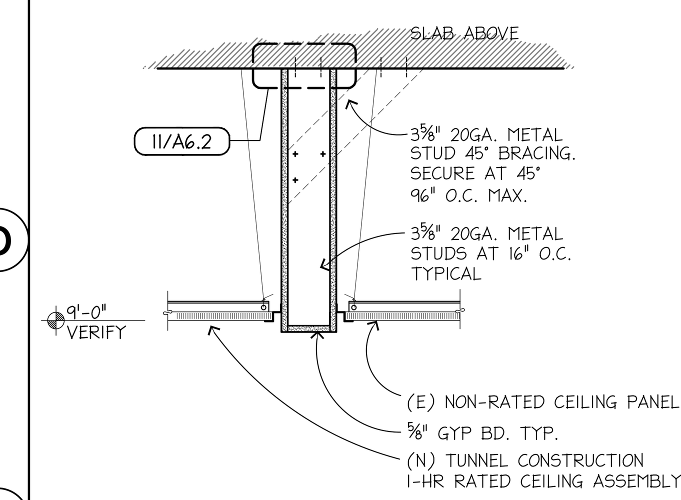
PART-0250 **METAL DUCT THROUGH 1-HR OR 2-HR GYPSUM WALL ASSSEMBLY** 3"=1'-0" **32**



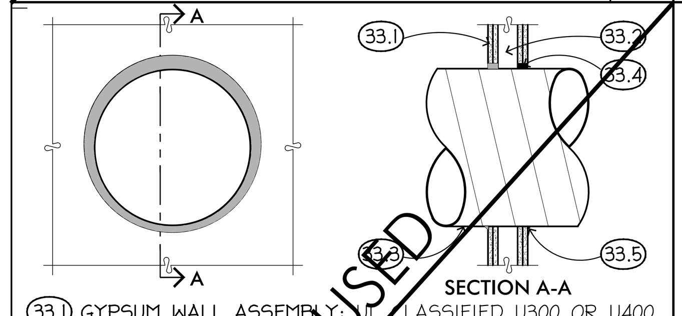
PART-0001-WD **1-HOUR CORRIDOR-TUNNEL CONSTRUCTION** 1/4"=1'-0" **27**



FRMG-0101 **PARTITION AT EXTERIOR GLASS** N.T.S. **22**



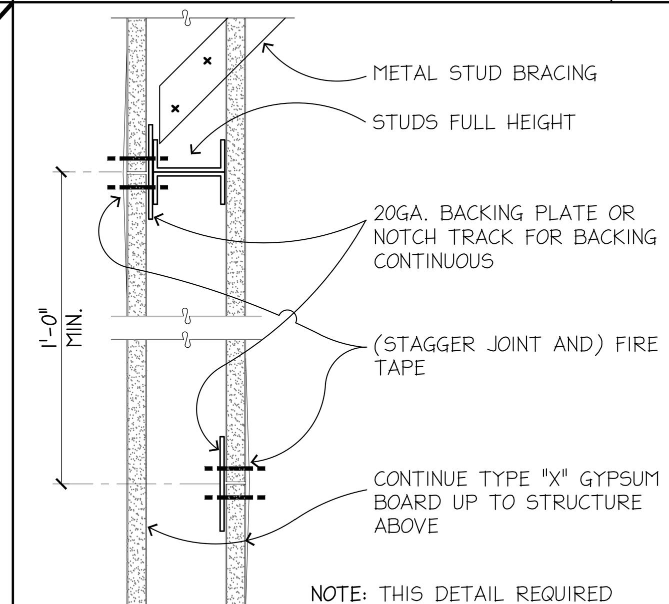
SOFFIT DETAIL 1"=1'-0"



(33.1) GYPSUM WALL ASSEMBLY: UL CLASSIFIED U300 OR U400 SERIES:
(33.2) STUDS: STEEL STUDS TO BE 2 1/2" MIN.
(33.3) PENETRATING:
A) 20"MAX SPIRAL SHEET METAL DUCT 24GA MIN.
B) 12"MAX DIA SHEET METAL DUCT 28GA MIN. (1-HR RATED)
(33.4) FIRESTOP SEALANT:
A) 5/8" DEPTH, FOR A 1-HR FIRE-RATED
B) 1 1/4" DEPTH, FOR A 2-HR FIRE-RATED
(33.5) FIRESTOP SEALANT: 1/2"MIN DEAD HIGH PERFORMANCE INTUMESCENT FIRESTOP SEALANT

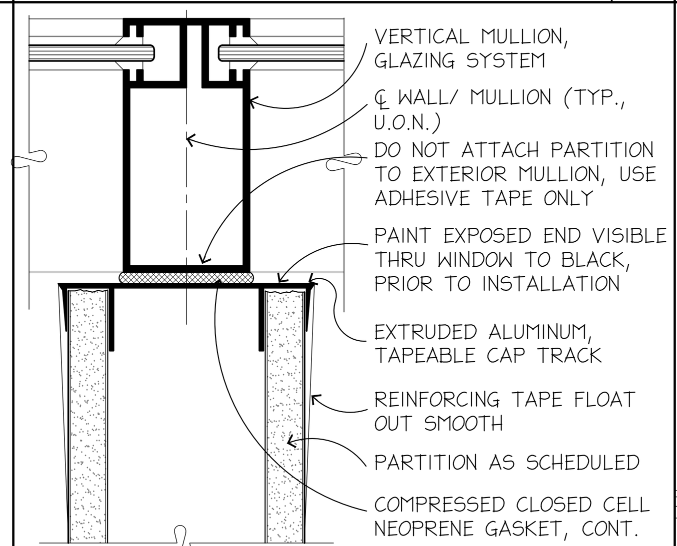
NOTE: 21 1/2"ϕDIA MAX OPENING AND 1 1/2"MAX SPACE

PART-0275 **SPIRAL DUCT THROUGH 1-HR OR 2-HR GYPSUM WALL ASSEMBLY** 3/4"=1'-0" **33**



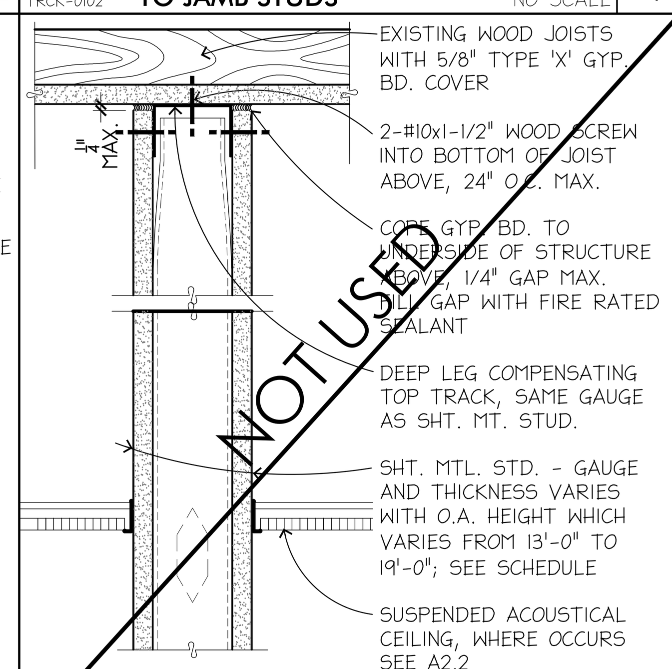
NOTE: THIS DETAIL REQUIRED WHEN FULL HEIGHT GYPSUM BOARD CAN NOT BE PROVIDED

A6.01_33 **JOINT w/OUT STUD SUPPORT IN FIRE RATED PARTITION** 3"=1'-0" **28**

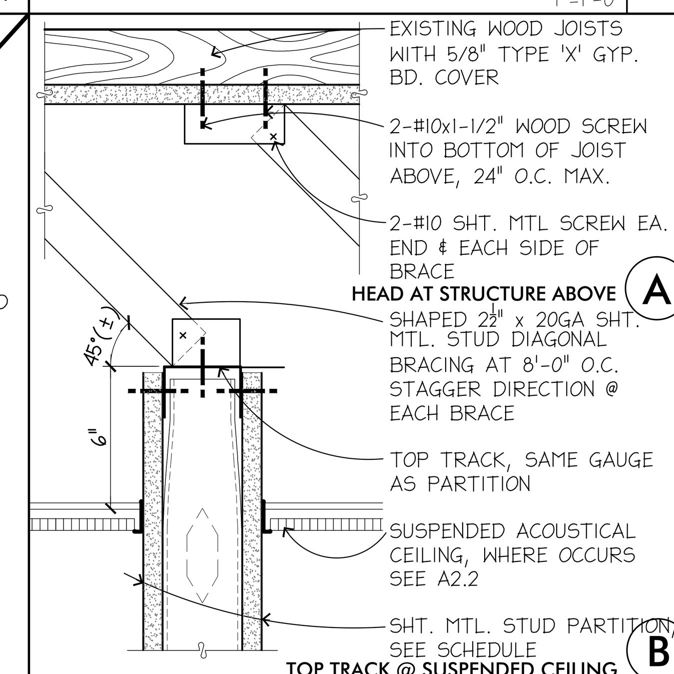


NOTE: MAINTAIN NEOPRENE VERICALLY AT ALL CONDITIONS WHERE PARTITION MEETS ALUMINUM WINDOW SYSTEM JOINT COMPOUND ALL GYPSUM BOARD TO GYPSUM BOARD CONDITIONS

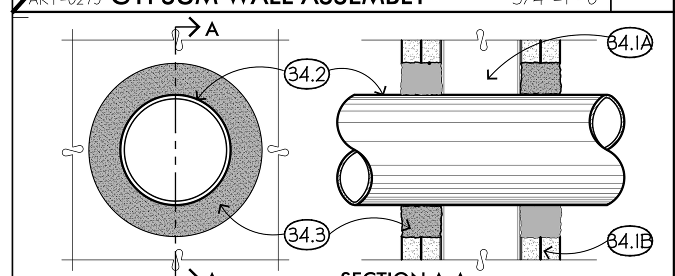
GLZG-0101 **PARTITION AT EXTERIOR MULLION** 6"=1'-0" **23**



HD-0125 **HEAD 1-HOUR FIRE RATED PARTITION** 3"=1'-0" **18**



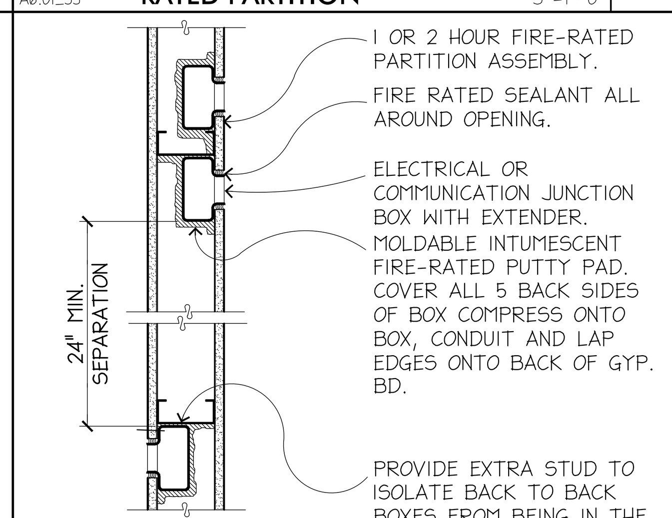
A6.01_03 **HEAD DETAIL FOR 6" ABOVE CEILING PARTITION** 3"=1'-0" **13**



(34.1) WALL ASSEMBLY:
A) STUDS: FRAME ALL SIDES SEE PLAN FOR TYPE, PER ICC ER-5050 AND ER-1632.
B) WALLBOARD, GYPSUM: MAXIMUM DIAMETER OF OPENING IS 10"ϕ.
(34.2) THROUGH - PENETRATE:
THE ANNULAR SPACE SHALL BE 0" MIN TO 1 1/2" MAX.
A) STEEL PIPE OR CONDUIT: 4"ϕ DIA MAX.
B) COPPER TUBING OR COPPER PIPE: 3"ϕ DIA MAX.
C) STEEL PIPE: 8"ϕ DIA MAX.
(34.3) FILL, VOID OR CAVITY MATERIAL - SEALANT:
5/8"MIN OR 1 1/4"MAX THICKNESS OF FILL MATERIAL INSULATION PRIOR TO INSTALLATION PER CBC SECTION 709.6, 709.7, 714, AND 712.3.1.2.

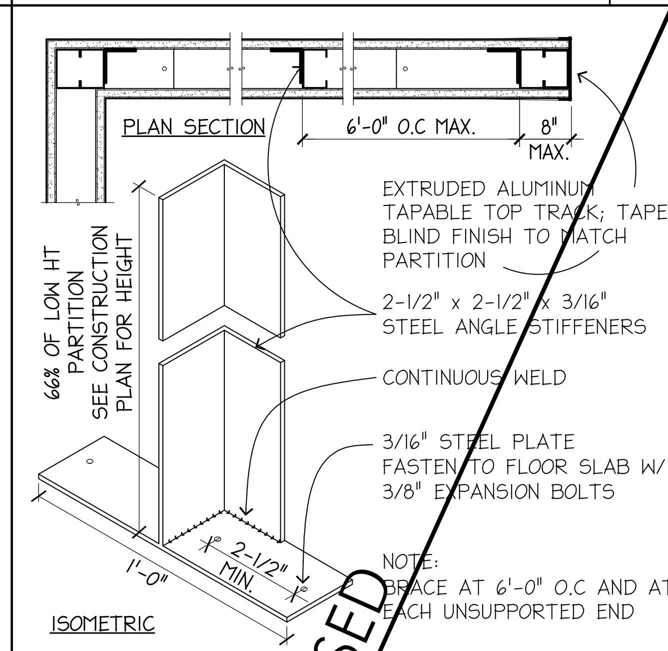
NOTE: FIRESTOP PER ASTM E-814 OR UL 1479

PART-0101 **SLEEVE PENETRATION OF RTD./ ACOUSTICAL PARTITION** 3"=1'-0" **34**

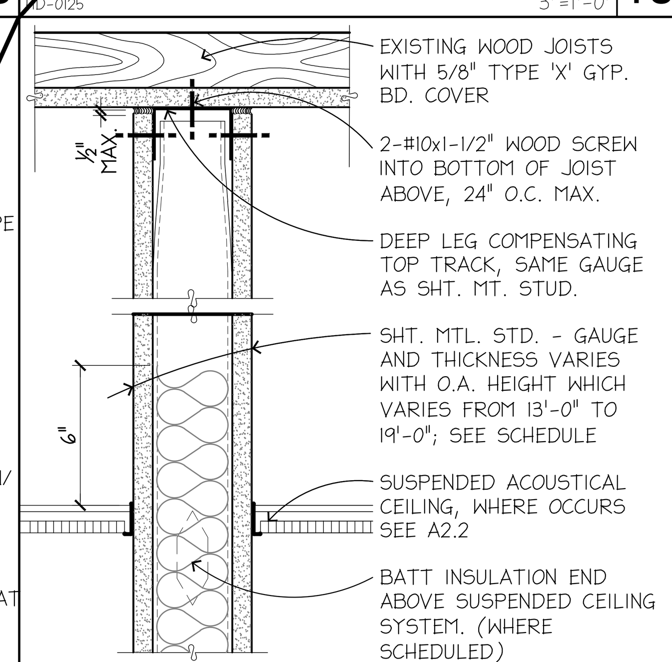


NOTE:
OPENINGS FOR ELECTRICAL OUTLET BOXES SHALL BE NO MORE THAN 16 SQ.IN. AND THE AGGREGATE AREA OF ALL BOXES SHALL NOT EXCEED 100 SQ.IN. FOR ANY 100 SQ.FT. ALL COMMUNICATION OUTLETS SHALL BE PROVIDE WITH ELECTRICAL BOXES AND CONDUIT.

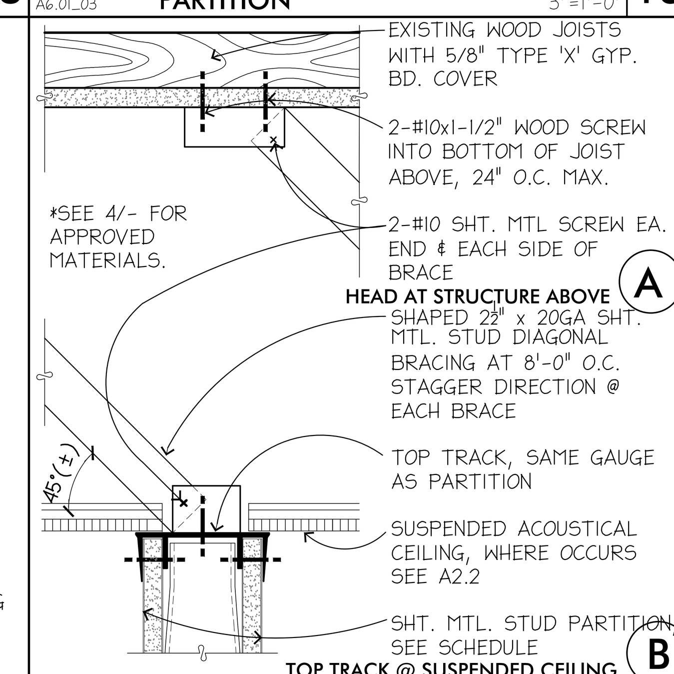
A6.01_34 **DEVICE BOX IN FIRE RATED PART. PLAN SECTION** 1-1/2"=1'-0" **29**



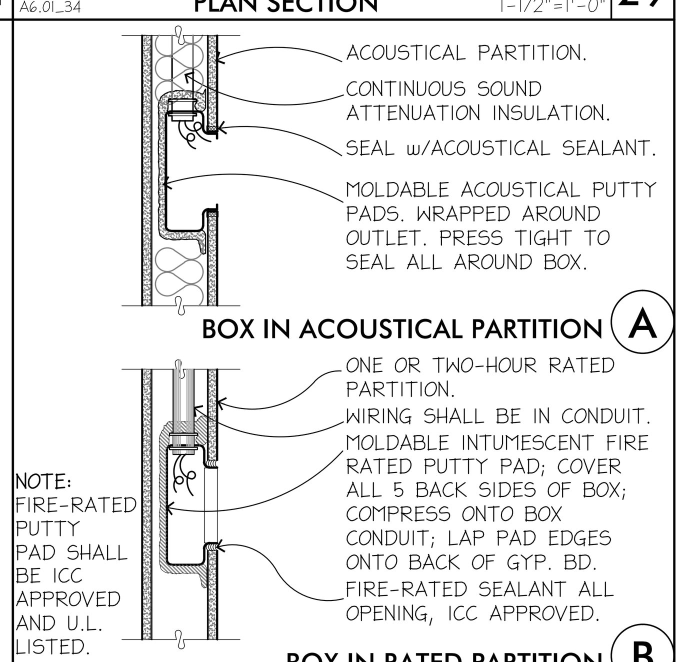
REINFORCEMENT 1-1/2"=1'-0" **C**



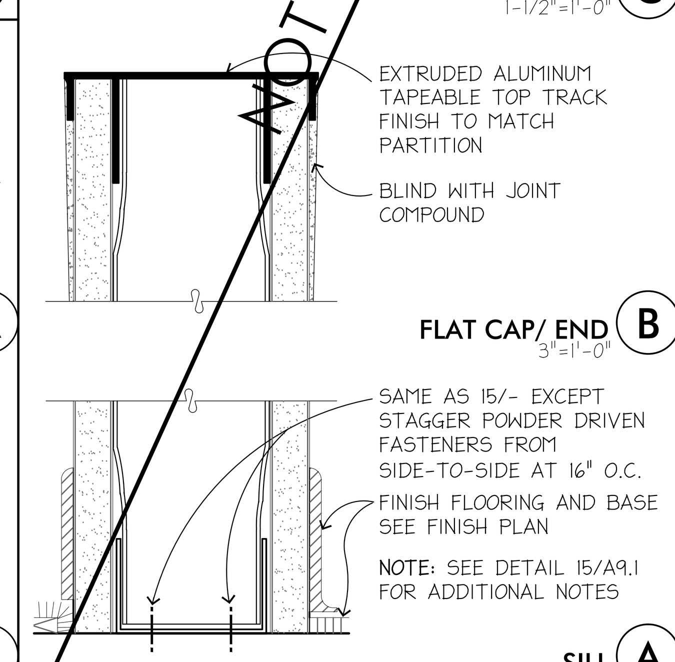
HEAD ACOUSTICAL PARTITION 3"=1'-0" **19**



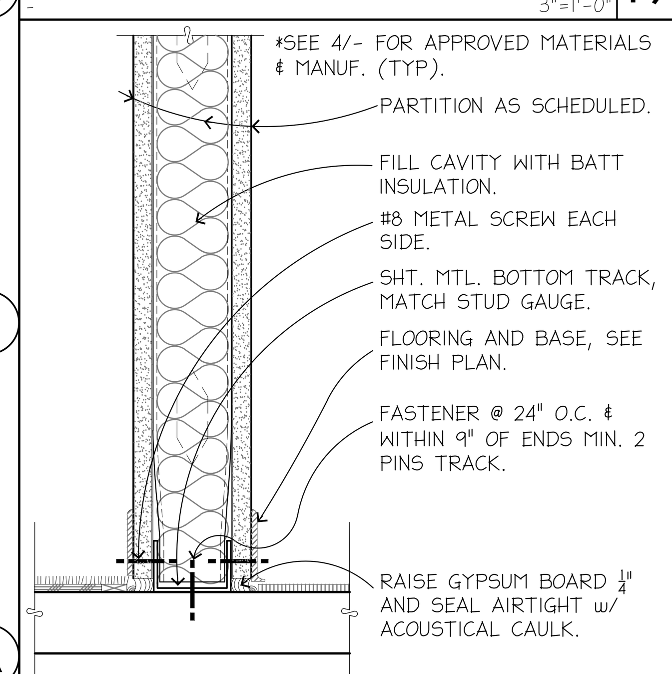
A6.01_02 **HEAD DETAIL FOR GRID HEIGHT PARTITION** 3"=1'-0" **14**



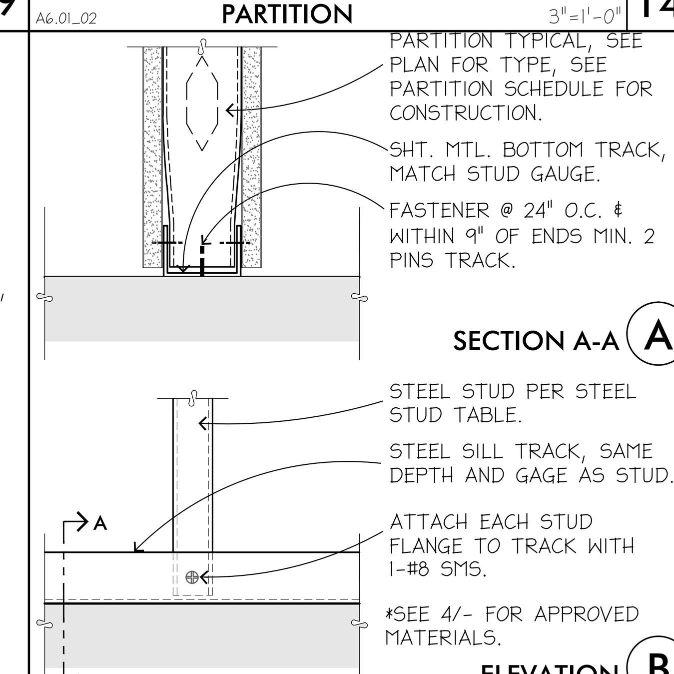
PART-0004 **DEVICE BOX IN ACOUSTICAL AND FIRE-RATED PARTITION** 1-1/2"=1'-0" **30**



FRMG-003 **PARTIAL HEIGHT PARTITION** 3"=1'-0" **25**



SILL-0101 **ACOUSTICAL PARTITION SILL DETAIL** 3"=1'-0" **20**



BOTTOM TRACK DETAIL FOR NON-RATED AND-FIRE RATED STUD 3"=1'-0" **15**

PARTITION SCHEDULE

(SEE PARTITION HT. LIMIT TABLE 2/- BELOW FOR STUD SIZING & ADDT'L NOTES)

B2 — TWO LAYERS 5/8" TYPE 'X' GYPSUM BOARD APPLIED PARALLEL TO ONE SIDE, GLASS FIBER BATT INSULATION, **MINIMUM 2" AIR SPACE**, GLASS FIBER BATT INSULATION, ONE LAYER ON THE OTHER SIDE; **3-5/8"** SHEET METAL STUDS @ 24"O.C.; 1" TYPE 'S' NO. 8 DRYWALL SCREWS 8"O.C. @ VERTICAL JOINTS, 12"O.C. TOP/ BOTTOM RUNNERS & FIELD STUDS; CAVITY: GLASS FIBER BATT INSULATION
HEAD: 13/- **SILL:** 20/- **GA-WP1070-GENERIC**
JOINTS STAGGERED 24" ON OPPOSITE SIDES.
TYPE 'B-2' - SLAB HEIGHT NON-COMBUSTIBLE / NON-BEARING

A (NOT USED) — ONE LAYER 5/8" TYPE 'X' GYPSUM BOARD APPLIED PARALLEL TO EACH SIDE **2-1/2"** SHEET METAL STUDS @ 24"O.C. 1" TYPE 'S' NO. 6 DRYWALL SCREWS 8"O.C. @ VERTICAL JOINTS, 12"O.C. TOP/ BOTTOM RUNNERS & FIELD STUDS CAVITY: VOID
HEAD: 14/- **SILL:** 15/- **GA-WP1070-GENERIC**
JOINTS STAGGERED 24" ON OPPOSITE SIDES.
TYPE 'A' - GRID HIGH NON-COMBUSTIBLE / NON-BEARING

D (NOT USED) — ONE LAYER 5/8" TYPE 'X' GYPSUM BOARD APPLIED PARALLEL TO EACH SIDE **3-5/8" x 20GA.** SHEET METAL STUDS @ 24"O.C. 1" TYPE 'S' NO. 8 DRYWALL SCREWS 8"O.C. @ VERTICAL JOINTS, 12"O.C. TOP/ BOTTOM RUNNERS & FIELD STUDS CAVITY: GLASS FIBER BATT INSULATION
HEAD: 18/- OR 23/- **SILL:** 15/- (SIM.) **GA-WP1070-GENERIC**
JOINTS STAGGERED 24" ON OPPOSITE SIDES.
TYPE 'D' - SLAB HIGH ONE-HOUR/ NON-BEARING

A1 — ONE LAYER 5/8" TYPE 'X' GYPSUM BOARD APPLIED PARALLEL TO EACH SIDE **2-1/2"** SHEET METAL STUDS @ 24"O.C. 1" TYPE 'S' NO. 8 DRYWALL SCREWS 8"O.C. @ VERTICAL JOINTS, 12"O.C. TOP/ BOTTOM RUNNERS & FIELD STUDS CAVITY: GLASS FIBER BATT INSULATION
HEAD: 13/- **SILL:** 15/- **GA-WP1070-GENERIC**
JOINTS STAGGERED 24" ON OPPOSITE SIDES.
TYPE 'A-1' - GRID HIGH NON-COMBUSTIBLE / NON-BEARING

F (NOT USED) — ONE LAYER 5/8" GYPSUM BOARD APPLIED PARALLEL TO EXPOSED SIDE **2-1/2" x 20GA** SHEET METAL STUDS @ 24"O.C. 1" TYPE 'S' DRYWALL SCREWS 8"O.C. @ EDGES & 12"O.C. @ INTERMEDIATE STUDS; BRACE @ EA. UNSUPPORTED END & @ 6'-0" O.C. CAVITY: VOID
HEAD: 14/- **SILL:** 15/-
TYPE 'F' - FURRING PARTITION NON-COMBUSTIBLE / NON-BEARING

B — ONE LAYER 5/8" TYPE 'X' GYPSUM BOARD APPLIED PARALLEL TO EACH SIDE **3-5/8"** SHEET METAL STUDS @ 24"O.C. 1" TYPE 'S' NO. 8 DRYWALL SCREWS 8"O.C. @ VERTICAL JOINTS, 12"O.C. TOP/ BOTTOM RUNNERS & FIELD STUDS CAVITY: GLASS FIBER BATT INSULATION
HEAD: 19/- **SILL:** 20/- **GA-WP1070-GENERIC**
JOINTS STAGGERED 24" ON OPPOSITE SIDES.
DEMISING PARTITION TYPE 'B' - SLAB HEIGHT NON-COMBUSTIBLE / NON-BEARING

B1 (NOT USED) — ONE LAYER 5/8" TYPE 'X' GYPSUM BOARD APPLIED PARALLEL TO EACH SIDE **2-1/2"** SHEET METAL STUDS @ 24"O.C. 1" TYPE 'S' NO. 8 DRYWALL SCREWS 8"O.C. @ VERTICAL JOINTS, 12"O.C. TOP/ BOTTOM RUNNERS & FIELD STUDS CAVITY: GLASS FIBER BATT INSULATION
HEAD: 13/- **SILL:** 20/- **GA-WP1070-GENERIC**
JOINTS STAGGERED 24" ON OPPOSITE SIDES.
TYPE 'B-1' - 6" ABOVE SUSPENDED CEILING NON-COMBUSTIBLE / NON-BEARING

PARTITION HEIGHT LIMIT TABLE - INTERIOR NON-LOAD BEARING

STUD WIDTH	STUD GAUGE	REF. NO.	SPACING	DEFLECTION LIMIT	MAXIMUM HEIGHT
1 5/8"	25	162S125	24" O.C.	1/120	9'-9"
2 1/2"	25	250S125	24" O.C.	1/120	11'-10"
	20	250S125	24" O.C.	1/120	14'-0"
3 1/2" OR 3 5/8"	25	362S125	24" O.C.	1/120	13'-9"
	20	362S125	24" O.C.	1/120	17'-10"
4"	20	400S125	24" O.C.	1/360	14'-5"

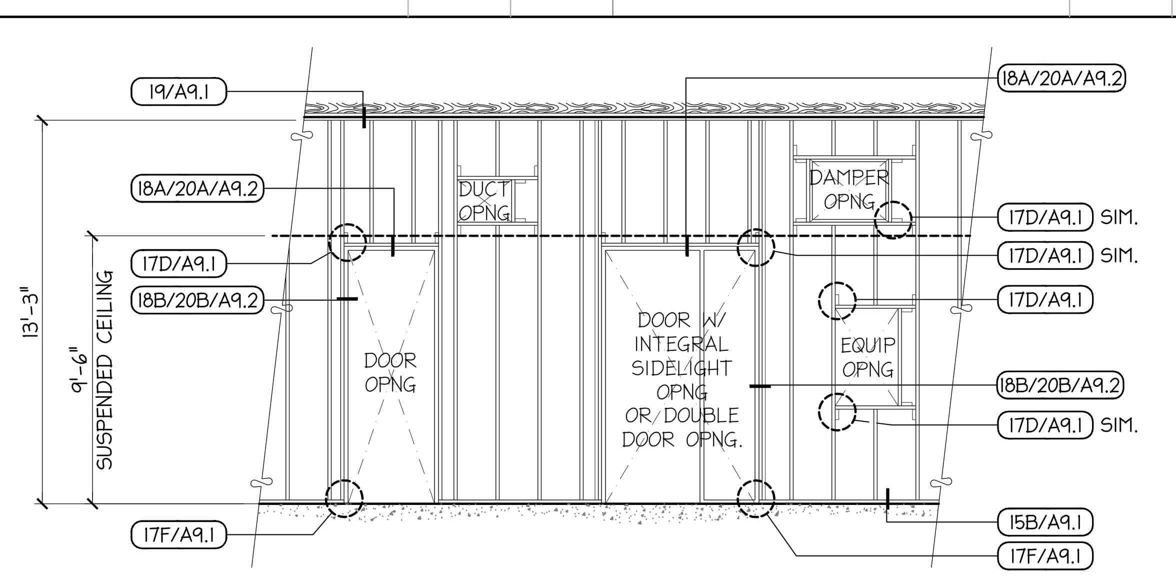
1. TABLE IS BASED ON 5 PSF LATERAL PRESSURE.
2. DEFLECTION LIMIT 1/120 FOR GYPSUM BOARD FINISH. DEFLECTION LIMIT 1/240 FOR HIGH STRENGTH GYPSUM FINISH DEFLECTION LIMIT 1/360 FOR CERAMIC TILE FINISH.
3. STEEL STUD INDUSTRY DESIGNATOR: (EXAMPLE 250S125)
350 = MEMBER WEB DEPTH IN 100THS OF AN INCH, 250=2.5 INCHES (88.9mm)
S = TYPE OF MEMBER, S=STUD
125 = MEMBER FLANGE WIDTH IN 100THS OF AN INCH, 125=1.25 INCHES (32mm)
20 GAUGE = MEMBER BASE METAL THICKNESS IN MILLS, 33=0.0312 INCHES
25 GAUGE = MEMBER BASE METAL THICKNESS IN MILLS, 18=0.0455 INCHES

1. INFORMATION CONTAINED HERE-IN IS BASED UPON STRUCTURAL VALUES OBTAINED FROM CBC, STEEL STUD MANUFACTURER'S ASSOCIATION "PRODUCT TECHNICAL INFORMATION" CATALOGUE THE GYPSUM ASSOCIATION'S "FIRE RESISTANCE DESIGN MANUAL, GA-600" TABLES VI & VII AND INDIVIDUAL PRODUCT MANUFACTURERS, CALLED OUT BY NAME, IN THESE DRAWINGS. THE MOST LIMITING STRUCTURAL DESIGN CRITERIA IS SHOWN. ALL LIGHT GAUGE FRAMING SHALL CONFORM WITH REPORT, METAL STUD MANUFACTURERS ASSOCIATION (MSMA), GYPSUM ASSOCIATION (G.A.), AND INDIVIDUAL PRODUCT MFGRS. SPECIFICATIONS & RECOMMENDATIONS.
2. EQUIVALENT PRODUCTS OF MANUFACTURERS MAY BE SUBMITTED TO THE ARCHITECT/ENGINEER FOR SUBSTITUTION APPROVAL. SUBMITTALS MUST BE ACCOMPANIED WITH THE INDIVIDUAL PRODUCT ICC EVALUATION REPORT, APPROPRIATE DOCUMENTATION AND STRUCTURAL CALCULATIONS TO DEMONSTRATE COMPLIANCE WITH SEISMIC ZONE 4 DESIGN CRITERIA.
3. PARTITIONS TYPES ARE SHOWN ON THE CONSTRUCTION PLAN A2.1. STUD WIDTH AND GAUGE DEPEND UPON THE DEFLECTION AND HEIGHT LIMITATIONS SHOWN IN THE TABLE ABOVE. LIMITING HEIGHTS MAY BE OBTAINED BY USING DEEPER STUDS OR BY USING HEAVIER GAUGE STUDS. WHEREVER POSSIBLE, USE 2 1/2" WIDE SHEET METAL STUDS, U.O.N.
4. AT **RATED** AND **PLUMBING** PARTITIONS, USE **3-5/8"** STUDS, MIN.
5. ALL GRID HIGH AND SLAB HIGH PARTITIONS, SHALL BE CONSTRUCTED AS REQUIRED FOR 1-HOUR FIRE RATING.
6. ALL PARTITIONS SHALL HAVE GYPSUM BOARD ON BOTH SIDES, U.O.N.
7. TOP TRACKS SHALL BE DEEP LEG TRACKS, 1-1/2" MINIMUM FLANGES, SAME GAUGE AND WIDTH AS STUDS, U.O.N.
8. BOTTOM TRACKS SHALL BE SAME GAUGE AND DEPTH AS THE STUDS.
9. UP-SIZED STUDS MAY BE SUBSTITUTED FOR LOWER VALUE STUDS, U.O.N.

APPROVED MATERIALS AND MANUFACTURERS **4**

CSI NO. ITEM	ICC ER#	DATE
STUDS - STEEL STEEL STUD MANUFACTURERS ASSOCIATION CEMCO, DIETRICH AND 12 OTHER MANUFACTURERS CONSULT ES REPORT FOR ALL MFGRS.	**ER-4943P**	09-01-10
TOP TRACK DEEP-LEG SLOTTED STEEL SLP-TRK BY SLIPTRACK SYSTEMS	**ESR-1042**	02-01-10
FASTENERS - LOW/VELOCITY POWDER ACTUATED & PNEUMATICALLY DRIVEN BLUE POINT POWDER-ACTUATED FASTENERS (0.145" DIAMETER)	**ESR-1530**	07-01-07
ANCHORS - DRILLED SIMPSON STRONG TIE STRONG BOLT WEDGE ANCHOR	**ESR-1771**	08-01-08
POWERS WEDGE BOLT AND SCREW ANCHOR	**ESR-2526**	06-01-10

CSI NO.	ICC ER#	DATE
INSULATION - FIRE RESISTIVE OWENS CORNING - INSULATION FR ASSEMBLIES	**ESR-1061**	05-01-10
FIRE SEALANT & SAFING INSULATION		
SPECIFIED TECHNOLOGIES, INC.- SPECSEAL FIRE STOP	**ER-4976**	11-01-99
PASSIVE FIRE PROTECTION PARTNERS- THROUGH-PENETRATION FIRESTOP SYSTEMS AND FIRERESISTIVE JOINT SYSTEMS	**ESR-2996**	12-01-09
WR GRACE -MONOKUTE -INSULATION, FIRE PROOFING	**ESR-1186**	07-01-08
OWENS CORNING - THERMAPINK	**ESR-2801**	02-01-10



NOTE: FOR DOORS OR DOOR-SIDELIGHT COMBINATIONS OVER 4'-0" WIDE, DOUBLE DOORS AND HEAVY DOOR, SUCH AS X-RAY DOORS, TWO JAMB STUDS ARE REQUIRED.

FRMG-010 **ACOUSTIC/FIRE-RATED PARTITION FRAMING @ OPENINGS** 1/4"=1'-0" **5**

RICHMOND LAKESIDE
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Stamp

LICENSED ARCHITECT ASHLEY G. MILLER NO. C-27238 REN. 8/31/19 STATE OF CALIFORNIA

Consultant

Issue/Revision:

No.	Proj. No. Date:	Description
1	32243.01 29MAR19	ISSUE FOR REVIEW
2	32243.01 22APR19	ISSUE FOR PERMIT
2.1	32243.01 28MAY19	PLAN CHECK RESPONSE ADDENDUM #3

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Approval Signature:

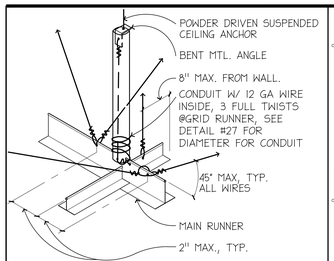
Co/ Title: Date:

Framing Details

Scale: As Noted Issue Date: 24MAY19
Drawn By: Reviewed By: AM
Sheet: XX of 16

A9.1

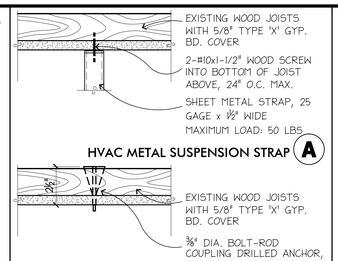
Plotted by: cheppel
May 29, 2019 - 4:28pm
Drawing name: Z:\-BLDGS\BAAQMD 4124 Lakeside, Richmond\CD\A9-2.dwg



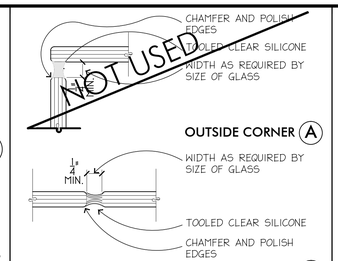
NOTE: GRID BRACING ASSEMBLY 12'-0" X 12'-0" MAX. EACH DIRECTION. USE 12 GA. WIRES W/MIN. 4 TURNS EACH END FOR BRACING, (TYP.)

REFERENCE 26A/- FOR DIAGONAL BRACING & 26B/- FOR VERTICAL BRACING

STANDARD COMPRESSION STRUT 31
CLNG-009 3/8"=1'-0"

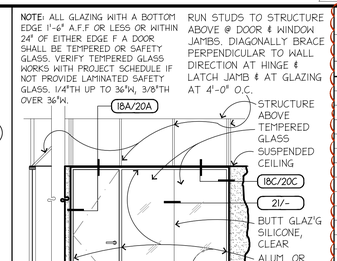


SUSPENSION STRAP & DRILLED ANCHOR DETAIL 26
3"=1'-0"

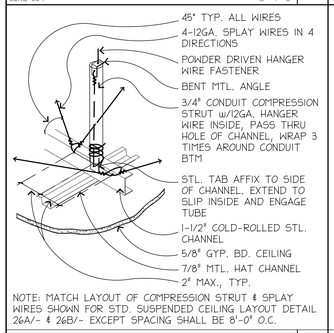


GLASS THICKNESS AS REQUIRED: ¼" FOR 3'-0" WIDTH, TYPICAL; ⅜" FOR FULL HEIGHT + OVER 3'-0" WIDTH TYPICAL

GLAZING, JOINTS w/SILICONE 21
FULL SIZE



CEILING HT DOOR/ SIDELIGHT FRAMES 16
door-clght-elev 1/4"=1'-0"

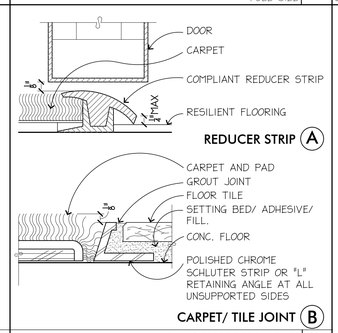


NOTE: MATCH LAYOUT OF COMPRESSION STRUT & SPLAY WIRES SHOWN FOR STD. SUSPENDED CEILING LAYOUT DETAIL 26A/- & 26B/- EXCEPT SPACING SHALL BE 8'-0" O.C.

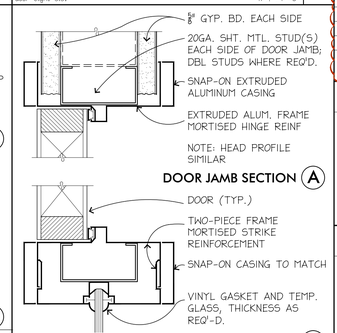
LATERAL STABILIZATION OF GYP. BD. CEILING 32
CLNG-010 3/4"=1'-0"

DIA.	HEIGHT IN FEET RIGID CONDUIT	THIN WALL CONDUIT HEIGHT IN FEET
1/2"	4.36'	3.92'
3/4"	5.83'	5.15'
1"	7.50'	6.53'
1-1/4"	9.17	8.52'
1-1/2"	10.8	9.90'

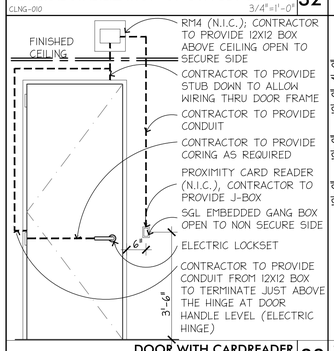
COMPRESSION STRUT SCHEDULE 27
NO SCALE



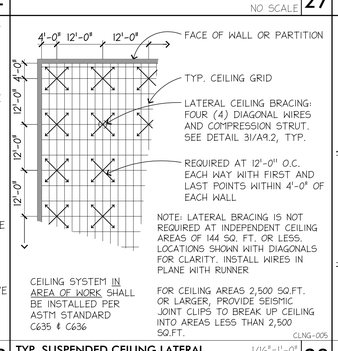
THRESHOLD DETAILS 22
FULL SIZE



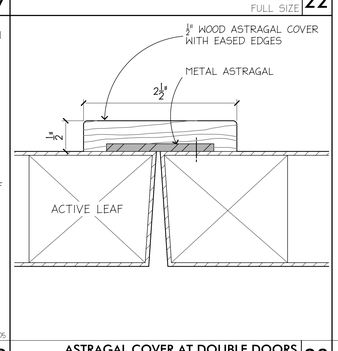
ALUMINUM FRAME DETAILS 18
door-al_fr-01 6"=1'-0"



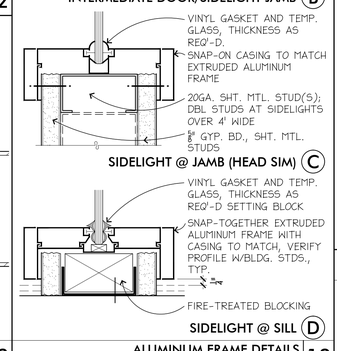
DOOR WITH CARDREADER 33
CARDREADER NTS



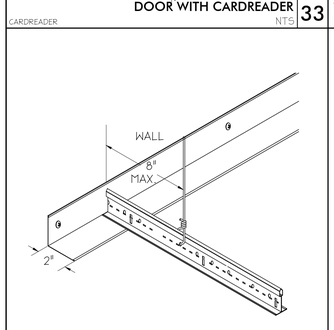
TYP. SUSPENDED CEILING LATERAL BRACING/COMPRESSION STRUT LAYOUT 28
CLNG-005 1/16"=1'-0"



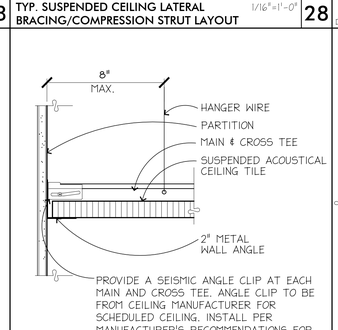
DOOR-001A FULL SCALE



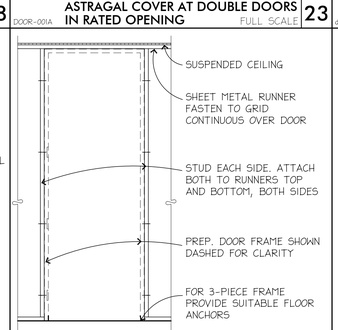
3"=1'-0" 20



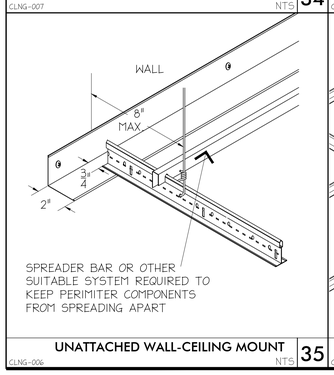
WALL-CEILING MOUNT 34
CLNG-007 NTS



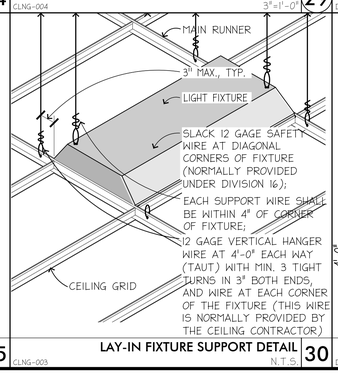
ACOUSTICAL CEILING WALL/COLUMN 29
CLNG-004 3"=1'-0"



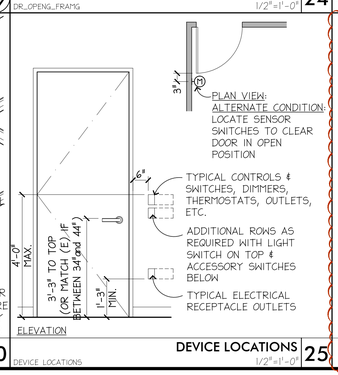
DOOR OPENING FRAMING (TYP.) 24
DR_OPENG_FRAMG 1/2"=1'-0"



UNATTACHED WALL-CEILING MOUNT 35
CLNG-006 NTS



LAY-IN FIXTURE SUPPORT DETAIL 30
CLNG-003 N.T.S.



DEVICE LOCATIONS 25
DEVICE LOCATIONS 1/2"=1'-0"

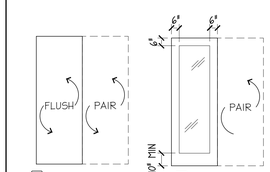
DOOR SCHEDULE

DOOR NO.	DESIGNATION LOCATION	OPENING WIDTH	HEIGHT	RATING	DOOR TYPE	CORE	FINISH	FRAME MATL	TYPE	DETAIL	FINISH	HARD WARE GRP.	REMARKS
101	WAITING ROOM	3'-0"	9'-0"	-	A	SC	TS	ALUM	1	20/-	CA	F	
103A	MULTIPURPOSE	3'-0"	9'-0"	-	A	SC	TS	ALUM	1	20/-	CA	G	(17) (19)
103B	MULTIPURPOSE	3'-0"	9'-0"	-	A	SC	TS	ALUM	1	20/-	CA	C	(17)
103C	MULTIPURPOSE	3'-0"	9'-0"	-	A	SC	TS	ALUM	1	20/-	CA	C	(17)
104	STORAGE ROOM	3'-0"	9'-0"	-	A	SC	TS	ALUM	1	20/-	CA	D	
105	COPY ROOM	3'-0"	9'-0"	-	B	SC	TS	ALUM	2	20/-	CA	B	
106	MEETING ROOM	3'-0"	9'-0"	-	B	SC	TS	ALUM	1	20/-	CA	B	
107	MEETING ROOM	3'-0"	9'-0"	-	B	SC	TS	ALUM	1	20/-	CA	B	
109	IDF ROOM	3'-0"	9'-0"	-	A	SC	TS	ALUM	1	20/-	CA	E	SEE DETAIL 33/-;
110	WOMEN'S R.R.	3'-0"	9'-0"	-	A	SC	TS	ALUM	1	20/-	CA	B	
111	MEN'S R.R.	3'-0"	9'-0"	-	A	SC	TS	ALUM	1	20/-	CA	B	
112	OFFICE	3'-0"	9'-0"	-	B	SC	TS	ALUM	3	20/-	CA	A	
113	OFFICE	3'-0"	9'-0"	-	B	SC	TS	ALUM	3	20/-	CA	A	
114	OFFICE	3'-0"	9'-0"	-	B	SC	TS	ALUM	3	20/-	CA	A	
115	OFFICE	3'-0"	9'-0"	-	B	SC	TS	ALUM	3	20/-	CA	A	
116	OFFICE	3'-0"	9'-0"	-	B	SC	TS	ALUM	3	20/-	CA	A	
117	OFFICE	3'-0"	9'-0"	-	B	SC	TS	ALUM	3	20/-	CA	A	
121	HALL	3'-0"	9'-0"	-	B	SC	TS	ALUM	2	20/-	CA	F	
122	HALL	3'-0"	9'-0"	-	B	SC	TS	ALUM	2	20/-	CA	G	(17) (19)
123	HALL	7'-6"	9'-0"	-	BB	SC	TS	ALUM	1	20/-	CA	H	(17) (19)
198	EXTERIOR DOOR	6'-0"	8'-0"	-	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(16) (17) SEE DETAIL 23/-;
199	EXTERIOR DOOR	6'-0"	8'-0"	-	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(16) (17) SEE DETAIL 23/-;

ABBREVIATIONS

ALUM	ALUMINUM, EXTRUDED	MC	MINERAL CORE	TG	TEMPERED GLASS
BS	BUILDING STANDARD	MFA	MILL FINISH ALUMINUM	TS	TRANSPARENT STAIN
CA	CLEAR ANODIZED	P-LAM	PLASTIC LAMINATE	TM	TIMELY FRAME
DBBA	DARK BRONZE ANODIZED ALUMINUM	PG	PAINT GRADE	WA	EXTRUDED ALUM, WHITE ANODIZED
HC	HOLLOW CORE	SC	SOLID CORE	WCF	WATERBASED CLEAR FINISH
HCB	HONEYCOMB	SGE	SEMI-GLOSS ENAMEL	WG	WIRE GLASS
HM	HOLLOW METAL	SL	SPRAYED LACQUER		

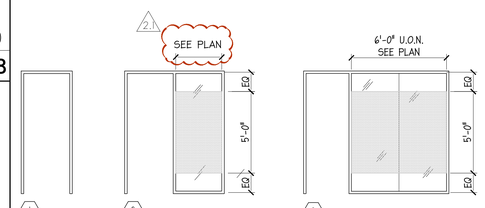
DOOR TYPES



SOLID CORE, 1-3/4" THK. FLUSH PANEL DOORS

SOLID CORE 1-3/4" THK, RIFT WHITE OAK. FULL LITE FLUSH PANEL DOOR. PROVIDE 3/8" THK. TEMPERED GLASS PANEL.

FRAME TYPES



THREE-SIDED BLDG. STD. CLEAR ANODIZED ALUMINUM FRAME

THREE-SIDED BLDG. STD. CLEAR ANODIZED ALUMINUM FRAME WITH INTEGRAL 1/4" THK. CLEAR TEMPERED SIDELIGHT

WITH "3M" "DUSTED CRYSTAL" VINYL WINDOW FILM, W/CUSTOM DESIGN CUTOUT, DESIGN T.B.D.

THREE-SIDED BLDG. STD. CLEAR ANODIZED ALUMINUM FRAME WITH INTEGRAL 3/8" THK. CLEAR TEMPERED BUTT-GLAZED SIDELIGHT W/CLEAR SILICON JOINT

WITH "3M" "DUSTED CRYSTAL" VINYL WINDOW FILM, W/CUSTOM DESIGN CUTOUT, DESIGN T.B.D.

DOOR & HARDWARE NOTES

1. THIS HARDWARE SCHEDULE IS PROVIDED FOR GUIDANCE ONLY. CONTRACTOR IS TO SUBMIT COMPLETE HARDWARE SCHEDULE FOR ARCHITECT'S REVIEW.
2. ALL EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF KEYS OR ANY SPECIAL KNOWLEDGE OR EFFORT. AS A MINIMUM, ALL EXIT DOORS AND FRAMES SHALL BE 20-MINUTE RATED AND EQUIPPED WITH CLOSERS UNLESS OTHERWISE NOTED. ALL CLOSERS SHALL CONFORM TO **ADA AND STATE TITLE 24 REQUIREMENTS.**
3. THE MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED FIVE POUNDS (5 LBS.) FOR INTERIOR AND EXTERIOR DOORS AND FIFTEEN POUNDS (15 LBS.) FOR FIRE RATED DOORS.
4. ALL DOORS DESIGNATED TO BE FIRE RATED SHALL BE LABELED AS REQUIRED BY CODE. VERIFY ALL EXISTING RATED DOOR HAVE PROPER RATING (AS NOTED) FOR DOOR, FRAME AND HARDWARE.
5. ALL DOORS, INCLUDING FIRE RATED DOORS, SHALL BE INSTALLED WITH MINIMUM CLEARANCE ABOVE THRESHOLD OR ABOVE FINISH FLOOR (1/4" MAXIMUM).
6. ALL DOOR AND THEIR FRAMES OPENING INTO A ONE-HOUR CORRIDOR SHALL BE S-LABELED 20-MINUTE ASSEMBLIES WITH TIGHT FITTING SMOKE AND DRAFT CONTROL ASSEMBLIES WITH SELF OR AUTOMATIC CLOSERS.
7. INSTALL DOORS WITH ALL HARDWARE FITTINGS, ACCESSORIES AND PARTITION REINFORCEMENT AS REQUIRED FOR THE SPECIFIC INSTALLATION. PROVIDE ANY SPECIAL ITEMS REQUIRED FOR CODE COMPLIANCE OR OPERATION AT SPECIAL DOOR LOCATIONS.
8. ALL HARDWARE LOCKSETS AND LATCH SETS SHALL BE LEVER STYLE TO COMPLY WITH **TITLE 24.**
9. ALL DOORS MARKED (E) ARE EXISTING DOORS.
10. ALL DOOR CLOSERS SHALL BE MOUNTED INSIDE ROOM WITH PARALLEL ARM SO IT IS NOT VISIBLE FROM OUTSIDE.
11. HARDWARE FINISHES SHALL BE BUILDING STANDARD EXCEPT COORDINATOR; SPRAY TO MATCH DOOR FRAME.
12. LOCKSET KEYWAY - COORDINATE W/BLDG. ENGINEER.
13. ALL LOCKSETS TO BE KEYED SEPARATELY TO ONE TENANT MASTER. LOCK PINNING TO BE COMPLETED BY IN-HOUSE ENGINEERING STAFF.
14. WIPE DOWN ALL DOORS & FRAMES THROUGHOUT.
15. SEE DETAIL 25/- FOR DEVICE LOCATIONS.

(16) GC TO CONFIRM ALL HARDWARE ON EXISTING DOORS IS IN FUNCTIONING CONDITION

(17) PANIC HARDWARE TO BE INSTALLED.

(18) NOT USED.

(19) PUSH BUTTON OVERRIDE TO BE INSTALLED, **PER CBC 2016, SECTION: 1010.1.9.9 ELECTROMAGNETICALLY LOCKED EGRESS DOORS.**
DOORS IN THE MEANS OF EGRESS IN BUILDINGS WITH AN OCCUPANCY IN GROUP A, B,E, I-1, I-2, I-4, M, R-1 OR R-2 AND DOORS TO TENANT SPACES IN GROUP A, B,E, I-1, I-2, I-4, M, R-1 OR R-2 SHALL BE PERMITTED TO BE LOCKED WITH AN ELECTROMAGNETIC LOCKING SYSTEM WHERE EQUIPPED WITH HARDWARE THAT INCORPORATES A BUILT-IN SWITCH AND WHERE INSTALLED AND OPERATED IN ACCORDANCE WITH ALL THE FOLLOWING:
   1. THAT HARDWARE THAT IS AFFIXED TO THE DOOR LEAF HAS AN OBVIOUS METHOD OF OPERATION THAT IS READILY OPERATED UNDER ALL LIGHTING CONDITIONS.
   2. THE HARDWARE IS CAPABLE OF BEING OPERATED WITH ONE HAND.
   3. OPERATION OF THE HARDWARE DIRECLTY INTERRUPTS THE POWER TO THE ELECTROMAGNETIC LOCK AND UNLOCKS THE DOOR IMMEADIATELY.
   4. LOSS OF POWER TO THE LOCKING SYSTEM AUTOMATICALLY UNLOCKS THE DOOR.
   5. WHERE PANIC OR FIRE EXIT HARDWARE IS REQUIRED BY SECTION 1010.0.10, OPERATION OF THE PANIC OR FIRE EXIT HARDWARE ALSO RELEASE THE ELECTROMAGNETIC LOCK.
   6. **THE LOCKING SYSTEM UNITS SHALL BE LISTED IN ACCORDANCE WITH UL 294.**

HARDWARE GROUPS

GROUP	NUMBER	MANUFACTURER
NOTE: HARDWARE FINISH: SATIN STAINLESS STEEL 630		
GROUP A:	STANDARD SINGLE DOOR OFFICE LOCKSET	
2 PAIR BUTTS	4-1/2"x4-1/2"	HAGER
1 LOCKSET	L-SERIES 03A LEVER	SCHLAGE
1 STOP	331 ES x RISER 3/4"	QUALITY OR EQUAL
SEAL	WOOL PILE	BY FRAME MANUF.
GROUP B:	STANDARD SINGLE DOOR PASSAGE LATCHSET	
2 PAIR BUTTS	4-1/2"x4-1/2"	HAGER
1 LATCHSET	L9010 W/ 03A LEVER	SCHLAGE
1 STOP	331 ES x RISER 3/4"	QUALITY OR EQUAL
SEAL	WOOL PILE	BY FRAME MANUF.
GROUP C:	STANDARD SINGLE DOOR PASSAGE WITH CLOSER AND PANIC BAR	
2 PAIR BUTTS	4-1/2"x4-1/2"	HAGER
1 PULL	HANDLE JS	BLUMCRAFT
1 STOP	331 ES x RISER 3/4"	QUALITY OR EQUAL
SEAL	WOOL PILE	BY FRAME MANUF.
CLOSER	4040 SERIES	LCN
PUSH BAR	H-100	BLUMCRAFT
GROUP D:	STANDARD SINGLE STORAGE DOOR WITH LOCKSET	
2 PAIR BUTTS	4-1/2"x4-1/2"	HAGER
1 STOP	331 ES x RISER 3/4"	QUALITY OR EQUAL
1 LOCKSET	L SERIES, 03A LEVER	SCHLAGE
3 SILENCERS	GJ-64	GLYNN JOHNSON
GROUP E:	STANDARD SINGLE DOOR STORAGE LOCKSET W/CARD READER	
1 1/2 PAIR BUTTS	TCA 2714, 4-1/2" X 4-1/2"	HAGER
1/2 PAIR BUTTS	ELEC. HING (6 WIRE; 3 CIRCUITS	HAGER
1 LOCKSET	L SERIES, 03A LEVER	SCHLAGE
1 STOP	SP436	IVES
3 SILENCERS	GJ-64	GLYNN JOHNSON
1 CARD READER		
GROUP F:	STANDARD CLASSROOM DOOR WITH CLOSER, ELECTRIC LOCKSET AND CARD READER	
1 1/2 PAIR BUTTS	TCA 2714, 4-1/2" X 4-1/2"	HAGER
1/2 PAIR BUTTS	ELEC. HING (6 WIRE; 3 CIRCUITS	HAGER
1 LOCKSET	L9070 SERIES, 03A LEVER	SCHLAGE
1 LOCKSET	L SERIES, 03A LEVER	SCHLAGE
1 STOP	SP436	IVES
CLOSER	4040 SERIES	LCN
1 MOTION SENSOR RELEASE, NON-CARD READER SIDE		
GROUP G:	STANDARD CLASSROOM DOOR WITH ELECTRIC LOCKSET, CARD READER (FAIL-SAFE), PANIC BARS & DOOR RELEASE	
1 1/2 PAIR BUTTS	TCA 2714, 4-1/2" X 4-1/2"	HAGER
1/2 PAIR BUTTS	ELEC. HING (6 WIRE; 3 CIRCUITS	HAGER
1 TOP STRIKE	ESK1B5	BLUMCRAFT
1 PULL	JS HANDLE	BLUMCRAFT
1 STOP	SP436	IVES
CLOSER	4040 SERIES	LCN
PUSH BAR	H-100	BLUMCRAFT
1 CARD READER		
1 EMERGENCY PUSH BUTTON DOOR RELEASE W/ALARM AND ASSOCIATED SIGNAGE		
1 MOTION SENSOR RELEASE, NON-CARD READER SIDE		
GROUP H:	DOUBLE EGRESS DOORS WITH ELECTRIC LOCKSET, CARD READER (FAIL-SAFE), PANIC BARS & DOOR RELEASE	
3 1/2 PAIR BUTTS	TCA 2714, 4-1/2" X 4-1/2"	HAGER
1/2 PAIR BUTTS	ELEC. HING (6 WIRE; 3 CIRCUITS	HAGER
2 PULLS	JS HANDLE	BLUMCRAFT
2 CLOSERS	4040 SERIES (PUSH SIDE)	LCN
TOP STRIKE	ESK2BS	BLUMCRAFT
2 STOPS	SP436	IVES
2 PUSH BARS	H-100	BLUMCRAFT
1 CARD READER		
1 ASTRAGAL		
1 COORDINATOR		
1 EMERGENCY PUSH BUTTON DOOR RELEASE W/ALARM AND ASSOCIATED SIGNAGE		
1 MOTION SENSOR RELEASE, NON-CARD READER SIDE		

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LICENSED ARCHITECT ASHLEY G. MILLER NO. C-27238 REN. 8/31/19 STATE OF CALIFORNIA

Consultant

Issue/Revision:

No.	Proj. No. Date:	Description
1	32243.01	19ISSUE FOR REVIEW 29MAR19
2	32243.01	19ISSUE FOR PERMIT 22APR19
2.1	32243.01	PLAN CHECK RESPONSE 28MAY19 ADDENDUM #3

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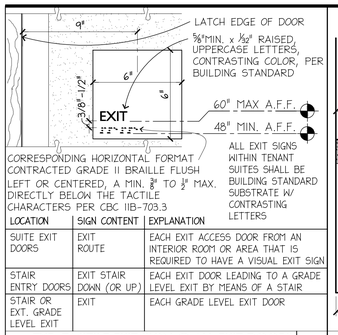
Approval Signature:

Co/ Title: Date:

Ceiling Details, Door Schedule and Hardware Groups

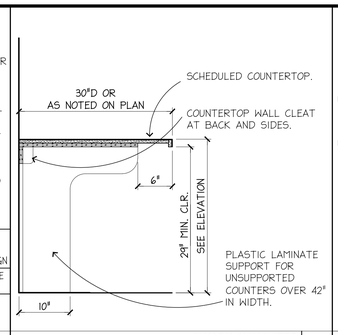
Scale: As Noted Issue Date: 24MAY19
Drawn By: Reviewed By: AM
Sheet: X of 16

A9.2



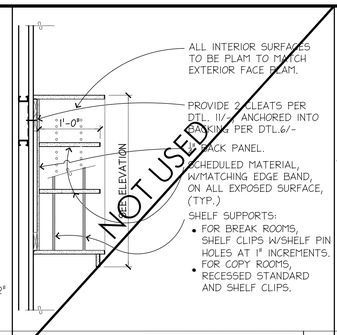
LOCATION	SIGN CONTENT	EXPLANATION
SUITE EXIT DOORS	EXIT ROUTE	EACH EXIT ACCESS DOOR FROM AN INTERIOR ROOM OR AREA THAT IS REQUIRED TO HAVE A VISUAL EXIT SIGN
STAIR ENTRY DOORS	EXIT STAIR DOWN (OR UP)	EACH EXIT DOOR LEADING TO A GRADE LEVEL EXIT BY MEANS OF A STAIR
STAIR OR EXT. GRADE LEVEL EXIT	EXIT	EACH GRADE LEVEL EXIT DOOR

TYP. TACTILE EXIT SIGN @ ALL EXIT DOORS 31
N.T.S.



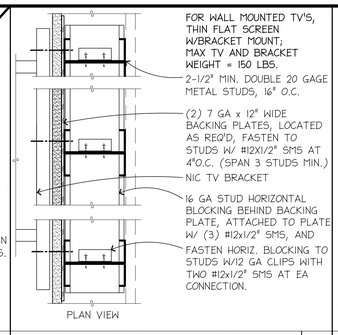
CAB-1008

WORK COUNTER 26
1"=1'-0"



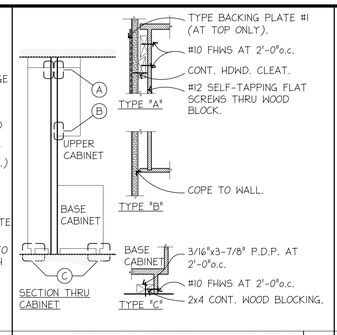
CAB-1011

UPPER CABINET SECTION 21
1"=1'-0"



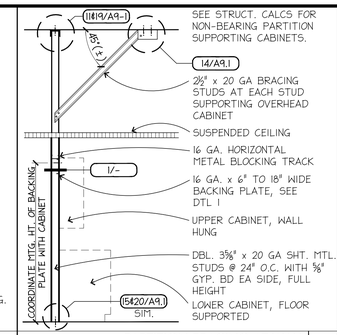
PART-1001-TV

PLAN AT WALL MTD. BACKING AND BLOCKING AT STUD PARTITION FOR TV 16
3"=1'-0"



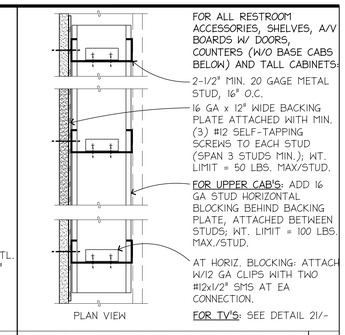
CAB-0102

TYPICAL CASEWORK ANCHORAGE AT STUD PARTITION 11
N.T.S.



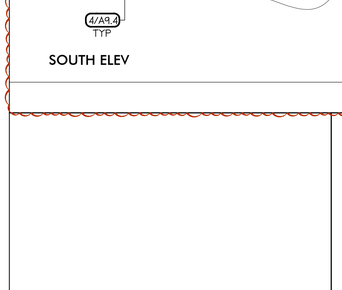
CAB-0101

PARTITION BRACING AT WALL MOUNTED EQUIPMENT 6
N.T.S.

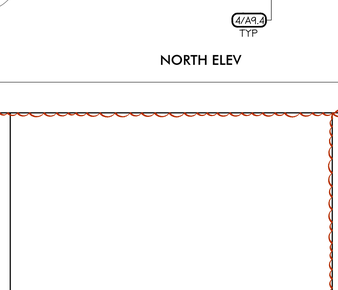


PART-1001REV

PLAN AT WALL MTD. BACKING AND BLOCKING AT STUD PARTITION 1
3"=1'-0"

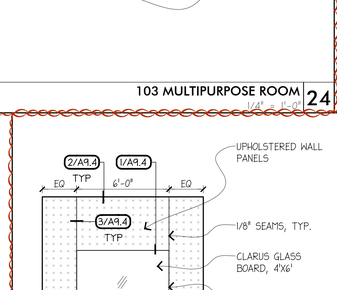


UNDERCOUNTER MICROWAVE 32
1"=1'-0"



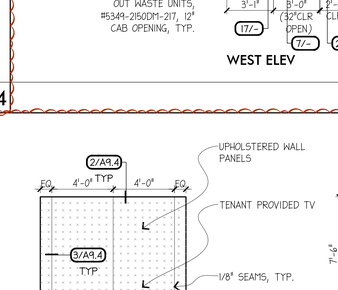
CAB-1003

BASE CABINET WITH DRAWER 27
1"=1'-0"



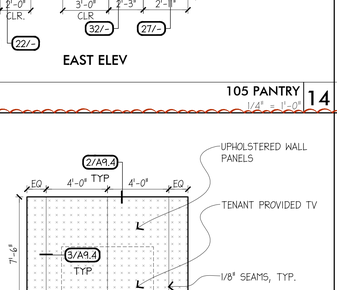
CAB-1006

BASE CABINET FOR APPLIANCE 22
1"=1'-0"



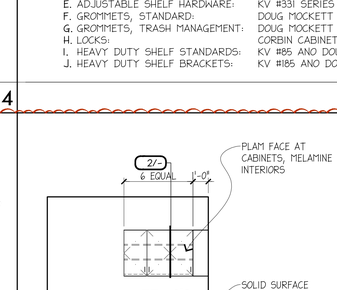
CAB-TD03

PULL OUT TRASH BASE CABINET 17
1"=1'-0"



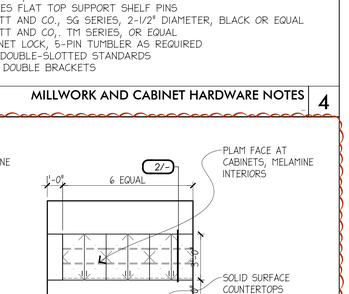
CAB-1005

LOWER BASE CABINET ADJUSTABLE SHELVING ONLY 12
1"=1'-0"



CAB-1004-Stone

UNDER-MOUNT SINK CABINET SECTION 7
1"=1'-0"



CAB-1002

UPPER CABINET SECTION 2
1"=1'-0"

OPEN OFFICE 23
1/4" = 1'-0"

OPEN OFFICE 13
1/4" = 1'-0"

ITEM	MANUFACTURER	DESCRIPTION
UNDER MOUNT SINK	ELKAY S.S. SINGLE BOWL	ELKAY ECTSRAD25226TBG 25"x22"X6"D
FAUCET	DELTA	DELTA 9159-DST, BLACK FINISH
WATER HEATER	INSTA-HOT	220V, U.O.N.; MOUNT INSIDE BASE CABINET, OUTSIDE OF REQUIRED KNEE SPACE CLEARANCE
GARBAGE DISPOSAL	IN-SINK-ERATOR	EVOLUTION (OR BLDG STD)

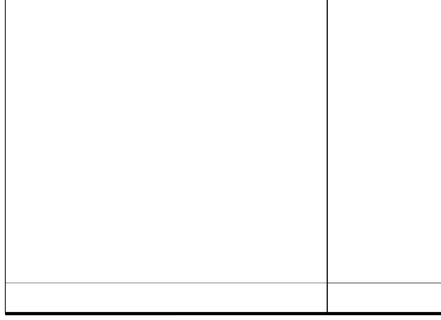
BREAK ROOM FIXTURE SCHEDULE 3
-

1. ALL CABINETS SHALL BE SEMI-MOLDULAR BUILDING STANDARD PLASTIC LAMINATE, WITH FLUSH OVERLAY CONSTRUCTION UNLESS SHOWN OR OTHERWISE NOTED. ALL PLASTIC LAMINATE SUBSTRATE SHALL BE INDUSTRIAL GRADE PARTICLE BOARD, U.O.N.
   A. ALL CABINETS SHALL BE SECURELY FASTENED TOGETHER. ALL EXPOSED AND SEMI-EXPOSED JOINTS SHALL BE TIGHT AND TRUE.
   B. ALL ADJUSTABLE SHELVES IN STORAGE OR COPY ROOM CABINETS SHALL BE SUPPORTED ON METAL SHELF CLIPS MOUNTED TO FLUSH METAL STANDARDS. ALL OTHER SHELVES MAY BE SUPPORTED ON CLIPS IN HOLES LOCATED AT 32MM ON CENTER.
   C. ALL EXPOSED SURFACES SHALL BE PLASTIC LAMINATE VENEER UNLESS OTHER WISE NOTED.
   D. ALL SEMI-EXPOSED SURFACES SHALL BE PLASTIC LAMINATE. ALL FACE FRAMES, BOX EDGES, AND SHELF EDGES SHALL BE EDGE BANDED IN PLASTIC LAMINATE.
   E. ALL INTERIOR SURFACES OF COPY ROOM CABINETS SHALL BE WHITE MELAMINE, PANTRY CABINETS SHALL BE BLACK MELAMINE.
   F. DRAWER BOXES SHALL BE WHITE MELAMINE.
   G. FINISH ENDS OF DRAWER BOXES SHALL BE PLANT-ON PLASTIC LAMINATE FACED PANELS. FRONT EDGE SHALL ALIGN WITH ADJACENT DOOR OR DRAWER.
   H. ALL GAPS BETWEEN ADJACENT DOORS AND OR DRAWERS SHALL BE 1/8".
   I. ADJUSTABLE WALL SHELVING SUBSTRATE WITH SUPPORTS SPACED UNDER THREE FEET IN WIDTH MAY BE 3/4" INDUSTRIAL GRADE PARTICLE BOARD. ALL SHELVING WITH SUPPORTS SPACED OVER THREE FEET SHALL BE 3/4" PLYWOOD. ALL SHELVING SHALL BE EDGE BANDED.
   J. FIELD VERIFY ALL DIMENSIONS AND COORDINATE WITH ALL TENANT EQUIPMENT. SUBMIT MILLWORK SHOP DRAWINGS TO THE ARCHITECT FOR HIS APPROVAL PRIOR TO CONSTRUCTION.
   K. COORDINATE CASEWORK WITH ALL OUTLETS AND EQUIPMENT SPECIFIED OR SHOWN ON THE CONSTRUCTION DRAWINGS. NO ADDITIONAL EXPENSE WILL BE INCURRED BY THE OWNER OR TENANT FOR LACK OF COORDINATION IN THESE MATTERS.

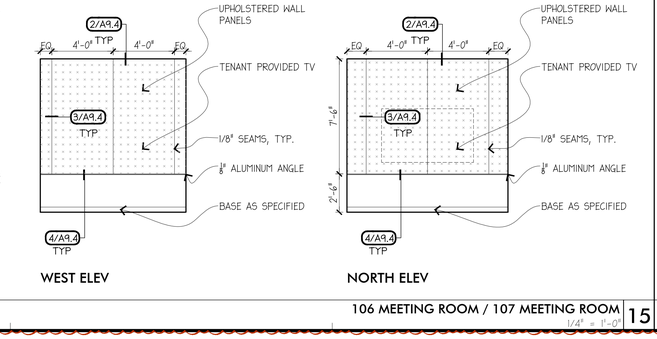
2. ALL CABINET HARDWARE SHALL BE AS SPECIFIED BELOW. HARDWARE FINISH SHALL BE SATIN NICKEL OR BRUSHED STAINLESS FOR ALL EXPOSED HARDWARE, EXCEPT WHERE NEW HARDWARE IS TO MATCH EXISTING. ALL SEMI-EXPOSED OR INTERIOR HARDWARE SHALL BE NICKEL FINISH.

A. HINGES/PIVOTS:	BLUM BLUMOTION CLIP TOP 90, SELF-CLOSING, OR EQUAL
B. PULLS:	TYDIX: ¼" DIAMETER, 3" LENGTH, STYLE B4/SRO, SATIN BLACK/US19
C. DRAWER GLIDES, STANDARD:	ACCURIDE 3832 EC- EASY CLOSE
D. DRAWER GLIDES, FILE:	ACCURIDE C4005A, I 1/2" OVER-TRAVEL
E. ADJUSTABLE SHELF HARDWARE:	KV #331 SERIES FLAT TOP SUPPORT SHELF PINS
F. GROMMETS, STANDARD:	DOUG MOCKETT AND CO., SG SERIES, 2-1/2" DIAMETER, BLACK OR EQUAL
G. GROMMETS, TRASH MANAGEMENT:	DOUG MOCKETT AND CO., TM SERIES, OR EQUAL
H. LOCKS:	CORBIN CABINET LOCK, 5-PIN TUMBLER AS REQUIRED
I. HEAVY DUTY SHELF STANDARDS:	KV #85 AND DOUBLE-SLOTTED STANDARDS
J. HEAVY DUTY SHELF BRACKETS:	KV #185 AND DOUBLE BRACKETS

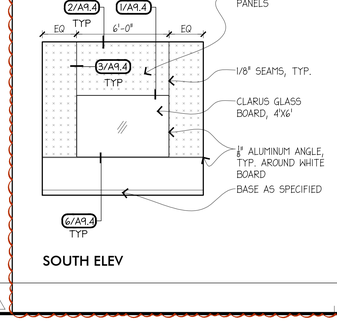
MILLWORK AND CABINET HARDWARE NOTES 4



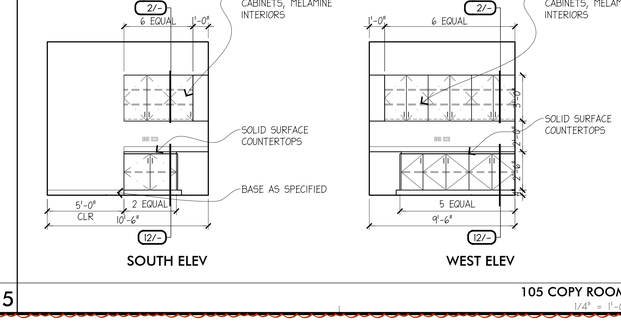
103 MULTIPURPOSE ROOM 24
1/4" = 1'-0"



105 PANTRY 14
1/4" = 1'-0"



106 MEETING ROOM / 107 MEETING ROOM 15
1/4" = 1'-0"



105 COPY ROOM 5
1/4" = 1'-0"

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Consultant

Issue/Revision:

No.	Proj. No. Date:	Description
1	32243.01 29MAR19	ISSUE FOR REVIEW
2	32243.01 22APR19	ISSUE FOR PERMIT
2.1	32243.01 28MAY19	PLAN CHECK RESPONSE ADDENDUM #3

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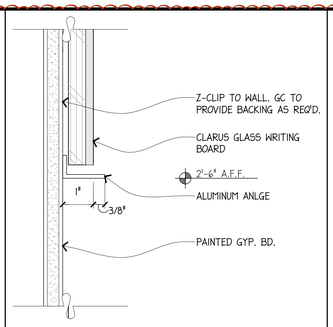
Co/ Title: Date:

Millwork Details and Interior Elevations

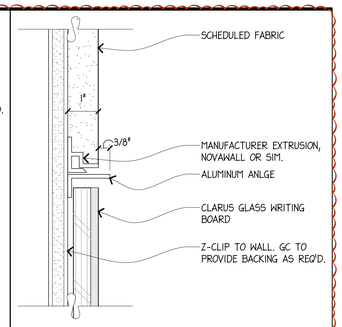
Scale: As Noted Issue Date: 24MAY19
Drawn By: Reviewed By: AM
Sheet: XX of 16

A9.3

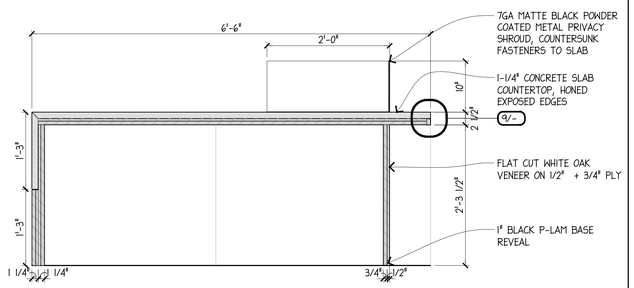
Plotted by: cheppel
May 29, 2019 - 4:28pm
Drawing name: Z:\-BLDGS\BAAQMD 4124 Lakeside, Richmond\CD\A9-3.dwg



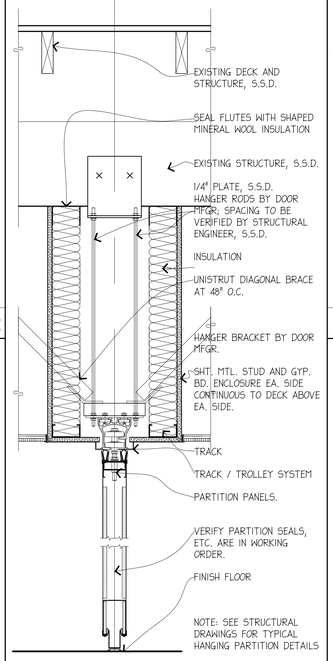
SECTION @ WHITE BOARD BASE TRIM 6 — 6"=1'-0"



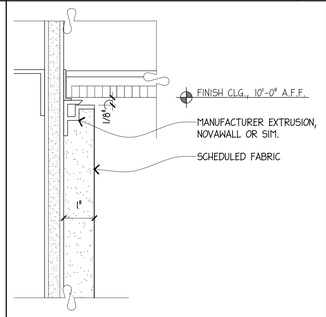
SECTION @ WHITE BOARD 1 — 6"=1'-0"



RECEPTION DESK DETAIL LONG SECTION 12 — 1"=1'-0"

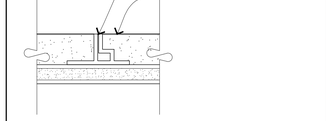


SECTION THROUGH MOVABLE PARTITION 8 — 1-1/2"=1'-0"

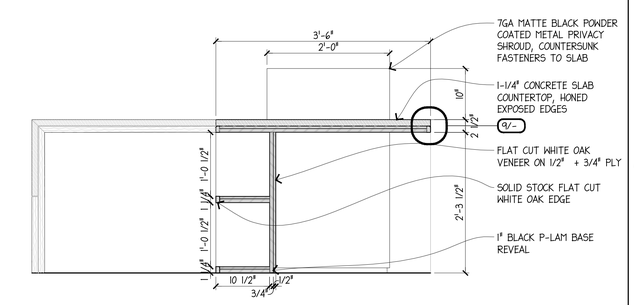


FABRIC PANEL SECTION @ CEILING 2 — 6"=1'-0"

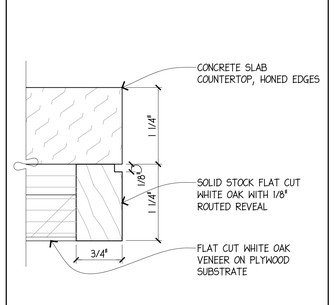
RECEPTION DESK DETAIL MIDSECTION 13 — 1"=1'-0"



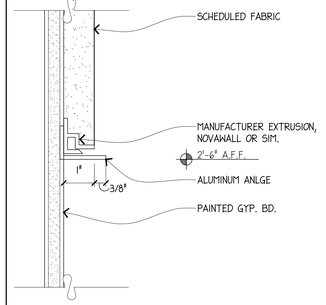
FABRIC PANEL TYP @ SEAM 3 — 6"=1'-0"



RECEPTION DESK DETAIL SHELF 14 — 1"=1'-0"

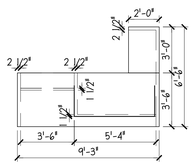


RECEPTION DESK EDGE DETAIL 9 — 12"=1'-0"

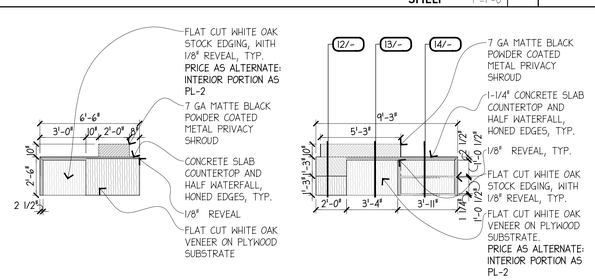


FABRIC PANEL SECTION @ BASE TRIM 4 — 6"=1'-0"

RECEPTION DESK 3D VIEW 30 — 1/4"=1'-0"



RECEPTION DESK PLAN 25 — 1/4"=1'-0"



NORTH ELEVATION — EAST ELEVATION — SOUTH ELEVATION — WEST ELEVATION

RECEPTION DESK ELEVATIONS 5 — 1/4"=1'-0"

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TENANT IMPROVEMENT

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REN. 8/31/19
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Issue/Revision:

No.	Proj. No. Date:	Description
1	32243.01 29MAR19	ISSUE FOR REVIEW
2	32243.01 22APR19	ISSUE FOR PERMIT
2.1	32243.01 28MAY19	PLAN CHECK RESPONSE ADDENDUM #3

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Approval Signature:

Co/ Title: Date:

Millwork Elevations and Interior Details

Scale: As Noted
Drawn By:
Sheet: XX of 16

Issue Date: 24MAY19
Reviewed By: AM

A9.4

Drawing name: J:\32243.01\CAD\Arch\Sheets\32243.01_A9.4.dwg
Plot Date: May 29, 2019 - 4:28pm

GENERAL NOTES

I. GENERAL

A. ALL WORK SHOWN IS NEW UNLESS NOTED AS EXISTING (E).

B. FOR MORE DETAILED INFORMATION, SEE PROJECT SPECIFICATIONS. THE SPECIFICATIONS SHALL TAKE PRECEDENCE OVER THESE DRAWINGS AND NOTES.

C. EXISTING CONDITIONS AND DIMENSIONS SHOWN ON THE DRAWINGS ARE BASED ON INCOMPLETE ORIGINAL STRUCTURAL DRAWINGS SUBSEQUENT SITE VISITS AND FIELD OBSERVATIONS. ACTUAL AS-BUILT CONDITIONS MAY VARY FROM THOSE IN THE RECORD DRAWINGS. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AT THE JOB SITE PRIOR TO INSTALLING NEW WORK. WHERE ACTUAL CONDITIONS CONFLICT WITH THE DRAWINGS, THE CONDITION SHALL BE REPORTED TO THE ARCHITECT SO THAT THE PROPER REVISIONS CAN BE MADE. MODIFICATION OF CONSTRUCTION DETAILS SHALL NOT BE MADE WITHOUT WRITTEN DIRECTION OF THE ARCHITECT AND STRUCTURAL ENGINEER.

D. OMISSIONS OR CONFLICTS BETWEEN VARIOUS ELEMENTS OF THE DRAWINGS, NOTES, AND DETAILS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND STRUCTURAL ENGINEER AND RESOLVED BEFORE PROCEEDING WITH THE WORK.

E. DO NOT USE SCALED DIMENSIONS. USE WRITTEN DIMENSIONS OR WHERE NO DIMENSION IS PROVIDED, CONSULT WITH THE ARCHITECT FOR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.

F. DO NOT DRILL OR CUT EXISTING SLABS, BEAMS, COLUMNS, WALLS OR OTHER STRUCTURAL ELEMENTS UNLESS SPECIFICALLY INDICATED. BEFORE DRILLING INTO CONCRETE, LOCATE AND MARK (E) REINF. AND EMBEDDED UTILITIES BY RELIABLE NON-DESTRUCTIVE MEANS. ENSURE THAT (E) REINF. AND EMBEDDED UTILITIES ARE NOT CUT OR DAMAGED BY THE DRILLING.

G. CONTRACTOR SHALL PROTECT FROM DAMAGE ALL MATERIALS, CONSTRUCTION, FINISHES, UTILITIES AND OTHER APPURTENANCES NOT DESIGNATED FOR DEMOLITION OR RETROFIT WITHIN OR OUTSIDE THE BUILDING. DAMAGED ITEMS SCHEDULED TO REMAIN AND/OR BE REUSED SHALL BE REPAIRED OR REPLACED TO MATCH ORIGINAL FINISH AT NO ADDITIONAL COST TO THE OWNER.

H. GENERAL NOTES, ABBREVIATIONS, LEGEND AND TYPICAL DETAILS SHALL BE INCORPORATED INTO THE PROJECT AT ALL APPROPRIATE LOCATIONS WHETHER SPECIFICALLY CALLED OUT OR NOT.

II. DEMOLITION AND SHORING

A. WHERE STRUCTURAL DEMOLITION IS INDICATED ON ARCHITECTURAL DRAWINGS, CONTRACTOR SHALL ASSESS THE NEED FOR, AND PROVIDE TEMPORARY BRACING AND SHORING AS REQUIRED PRIOR TO COMMENCING DEMOLITION. NOTES REFERRING TO BRACING AND SHORING ON DRAWINGS DO NOT INCLUDE ALL SHORING NECESSARY TO COMPLETE THE WORK.

B. SAFETY OF PERSONNEL AND PROPERTY DURING THE DEMOLITION AND SHORING WORK IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. BEFORE DEMOLITION AND SHORING, THE CONTRACTOR SHALL INSPECT EXISTING CONSTRUCTION TO IDENTIFY DEFECTS AND STRUCTURAL WEAKNESSES WHICH MAY AFFECT THE SAFETY OF HIS WORK. CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO ASSURE THAT THESE DEFECTS AND WEAKNESSES ARE REMEDIED PRIOR TO PROCEEDING WITH THE WORK.

C. A PLAN FOR BRACING AND SHORING THE STRUCTURE SHALL BE DESIGNED, DEVELOPED, AND ITS IMPLEMENTATION MONITORED BY A LICENSED CALIFORNIA STRUCTURAL ENGINEER.

D. ALL ITEMS INDICATED IN THE DRAWINGS TO BE REINSTALLED SHALL BE CAREFULLY REMOVED, CATALOGUED AND STORED. CONTRACTOR IS TO DOCUMENT ORIGINAL LOCATIONS, INSTALLATION CONDITIONS, MOUNTING HEIGHTS, ETC. PRIOR TO REMOVAL. DOCUMENTATION SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW AND APPROVAL. CONTRACTOR SHALL REINSTALL TO LIKE CONDITION AND LOCATION UNLESS OTHERWISE NOTED IN THE DRAWINGS.

III. HAZARDOUS MATERIALS ON SITE: RUTHERFORD + CHEKENE ASSUMES NO RESPONSIBILITY FOR THE MANAGEMENT OF HAZARDOUS MATERIALS THAT MAY BE ON THIS SITE.

A. RUTHERFORD + CHEKENE HAS NOT PERFORMED INVESTIGATIONS TO DETERMINE THE PRESENCE OF HAZARDOUS MATERIALS. THE OWNER WILL PROVIDE THE RESULTS OF SUCH INVESTIGATIONS, IF THEY HAVE BEEN PERFORMED.

B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT PERSONNEL WITHIN THE WORK AREA ARE PROTECTED FROM EXPOSURE TO HAZARDOUS MATERIALS. IF HAZARDOUS MATERIALS ARE DISCOVERED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND CEASE WORK UNTIL CONDITIONS CAN BE MAINTAINED IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS.

IV. DESIGN CRITERIA

A. APPLICABLE CODE: CALIFORNIA BUILDING CODE, 2016 AND CALIFORNIA EXISTING BUILDING CODE 2016

B. LIVE LOADS:

1. ROOF: 20 PSF

STRUCTURAL MATERIALS

I. WOOD

A. ALL ROUGH CARPENTRY LUMBER SHALL BE DOUGLAS FIR WITH GRADES CONFORMING TO WCLIB'S "STANDARD GRADING RULES FOR WEST COAST LUMBER, NO. 16".

B. JOISTS & PLATES: NO.1 (APPEARANCE GRADE WHERE EXPOSED).

C. PLYWOOD:

-ROOFS: 1/2" STRUCTURAL I, APA RATED, EXPOSURE 1.

D. NAILS: ALL NAILS SHALL BE COMMON WIRE NAILS UNLESS OTHERWISE SHOWN. NAILS SHALL NOT BE DRIVEN CLOSER TOGETHER THAN 1/2 OF THEIR LENGTH NOR CLOSER TO THE EDGE OF THE MEMBER THAN 1/2 OF THEIR LENGTH, AND SHALL BE PREDRILLED WHERE WOOD TENDS TO SPLIT. THE PENETRATION OF NAILS INTO THE PIECE RECEIVING THE POINT SHALL NOT BE LESS THAN 1/2 THE NAIL LENGTH.

E. METAL CONNECTORS: ALL JOIST HANGERS AND FRAMING HARDWARE SHALL BE AS MANUFACTURED BY SIMPSON COMPANY OR APPROVED EQUAL. INSTALLATION SHALL BE ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

F. RETIGHTEN BOLTS BEFORE COVERING STRUCTURAL MEMBERS WITH FINISH MATERIALS.

G. ALL WOOD WHICH WILL BE EXPOSED TO VIEW SHALL BE PROTECTED THROUGHOUT THE CONSTRUCTION PROCESS FROM DAMAGE BY THE ENVIRONMENT AND CONSTRUCTION.

Drawing List	
	Sheet Name
1S001	GENERAL NOTES
1S601	SECTIONS AND DETAILS

ABBREVIATIONS

(MAY BE USED WITH OR WITHOUT PERIOD)

&	AND
(E)	EXISTING
(N)	NEW
@	AT
WH	POUND OR NUMBER
Φ	DIAMETER OR ROUND
A.B.	ANCHOR BOLT
ADD'L	ADDITIONAL
ADJ.	ADJACENT
AESS	ARCHITECTURAL EXPOSED STRUCTURAL STEEL
APPROX.	APPROXIMATE
ARCH.	ARCHITECTURAL
B.O.	BLOCK OUT
B.O.F.	BOTTOM OF FOOTING
B.U.	BACK-UP
BLDG.	BUILDING
BM	BEAM
BOT.	BOTTOM
BRB.	BUCKLING-RESTRAINED BRACE
BTWN.	BETWEEN
C.I.P.	CAST-IN-PLACE
C.J.	CONSTRUCTION JOINT
C.M.U.	CONCRETE MASONRY UNIT
C.P.	COMPLETE PENETRATION
CANT.	CANTILEVER
CL	CENTERLINE
CLG.	CEILING
CLR.	CLEAR
COL.	COLUMN
CONC.	CONCRETE
CONN.	CONNECTION
CONSTR.	CONSTRUCTION
CONT.	CONTINUOUS
CTR.	CENTER
D.C.W.	DEMAND CRITICAL WELD
DBA.	DEFORMED BAR ANCHOR
DBL.	DOUBLE
DET.	DETAIL
DIA.	DIAMETER
DIM.	DIMENSION
DN.	DOWN
DO.	DITTO
DWG.	DRAWING
E.F.	EACH FACE OR FINISHED FLOOR
E.J.	EXPENSION JOINT
E.O.D.	EDGE OF DECK
E.P.S.	EXPANDED POLYSTYRENE
E.S.	EACH SIDE
E.W.	EACH WAY
EA.	EACH
EL.	ELEVATION
ELEC.	ELECTRICAL
EMBED.	EMBEDMENT
EQ.	EQUAL
EQPT.	EQUIPMENT
EXT.	EXTERIOR
F.D.P.P.	FULL DEPTH PARTICAL PENETRATION
F.F.	FAR FACE
F.O.C.	FACE OF CONCRETE
F.O.S.	FACE OF STUD
F.O.W.	FACE OF WALL
F.S.	FAR SIDE
FDN.	FOUNDATION
FIN.	FINISH
FL.	FLOOR
FPRF.	FIREPROOF
FT.	FOOT OR FEET
FTG.	FOOTING
FUT.	FUTURE
G.B.	GRADE BEAM
GA.	GAUGE
GALV.	GALVANIZED
GR.	GRADE
H.S.B.	HIGH STRENGTH BOLT
H.S.S.	HOLLOW STRUCTURAL SECTION
HGR.	HANGER
HK.	HOOK
HORIZ.	HORIZONTAL
HT.	HEIGHT
I.D.	INSIDE DIAMETER
I.F.	INSIDE FACE
INSUL.	INSULATION
INT.	INTERIOR
JT.	JOINT
LB.	POUND
LLH.	LONG LEG HORIZONTAL
LLV.	LONG LEG VERTICAL
M.B.	MACHINE BOLT
MAX.	MAXIMUM
MECH.	MECHANICAL
MFR.	MANUFACTURER
MIN.	MINIMUM
MISC.	MISCELLANEOUS
N.	NORTH
N.F.	NEAR FACE
N.I.C.	NO IN CONTRACT
N.S.	NEAR SIDE
N.T.S.	NOT TO SCALE
NO.	NOMBER
NOM.	NOMINAL
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
O.F.	OUTSIDE FACE
OH.	OPPOSITE HAND
OPNG.	OPENING
OPP.	OPPOSITE
P.P.	PARTIAL PENETRATION
P.Q.R.	PROCEDURE QULIFICATION RECORD
P.S.F.	POUNDS PER SQUARE FOOT
P.S.I.	POUNDS PER SQUARE INCH
PH.	PENTHOUSE
PT.	POINT
PTN.	PARTITION
R.O.	ROUGH OPENING
RAD.	RADIUS
REFE.	REFERENCE
REINF.	REINFORCING
REQ.	REQUIRED
S.A.	SOIL ANCHOR
S.A.D.	SEE ARCH. DRAWINGS
S.C.	SLIP CRITICAL
S.C.D.	SEE CIVIL DRAWINGS
S.D.C.	SEISMIC DESIGN CATEGORY
S.F.R.S.	SEISMIC FORCE RESISTING SYSTEM
S.J.	SAWCUT JOINT
S.L.D.	SEE LANDSCAPE DRAWINGS
S.L.R.S.	SEISMIC LOAD RESISTING SYSTEM
S.M.D.	SEE MECH. DRAWINGS
S.O.G.	SLAB ON GRADE
S.S.	STAINLESS STEEL
S.W.	SEISMIC WELD
SCHED.	SCHEDULE
SECT.	SECTION
SHT.	SHEET
SIM.	SIMILAR
SPEC.	SPECIFICATION
SQ.	SQUARE
STD.	STANDARD
STIRR.	STIRRUP
STL.	STEEL
STRL.	STRUCTURAL
SUSP.	SUSPENDED
SYM.	SYMMETRICAL
T&B.	TOP AND BOTTOM
T.O.C.	TOP OF CONCRETE
T.O.F.	TOP OF FOOTING
T.O.S.	TOP OF STEEL
T.O.W.	TOP OF WALL
TB	TIE BEAM
THK.	THICK
TYP.	TYPICAL
U.O.N.	UNLESS OTHERWISE NOTED
U.T.	ULTRASONIC TESTING
V.I.F.	VERIFY IN FIELD
VERT.	VERTICAL
181	
W.P.	WORK POINT
W.P.S.	WELDING PROCEDURE SPECIFICATION
W.W.F.	WELDED WIRE FABRIC
W/	WITH
W/O	WITHOUT
WA.	WEDGE ANCHOR
WP.	WATERPROOFING
WT.	WEIGHT
XS	EXTRA STRONG

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3	28MAY19	PLAN CHECK RESPONSE ADDENDUM #3

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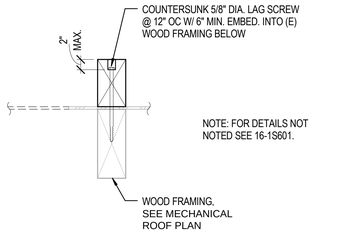
GENERAL NOTES

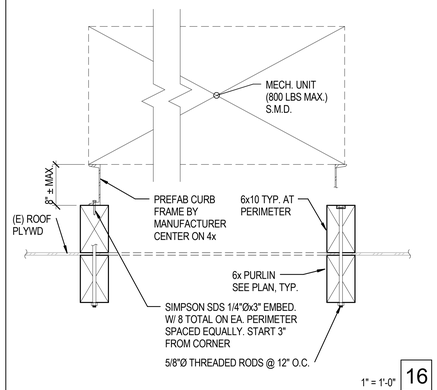
Scale: AS NOTED Issue Date: 24MAY19
Drawn By: NC Reviewed By: WAL
Sheet: X of X

3 1S001



ALTERNATE DETAIL AT ROOF FRAMING TOO DEEP FOR THRU-BOLTING

1" = 1'-0" 20



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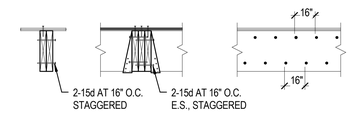
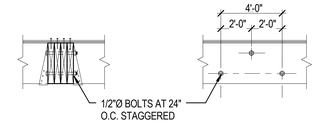
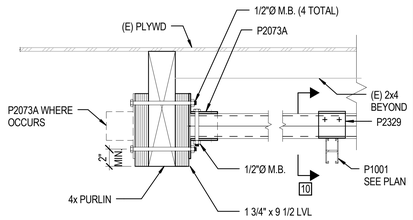


2-2x OR 3-2x MEMBERS ELEVATION

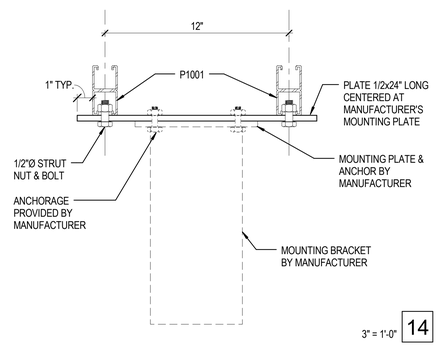


4 OR MORE 2x MEMBERS ELEVATION

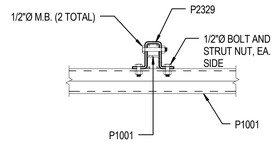
BUILT-UP MEMBERS 3



1 1/2" = 1'-0" 18



3" = 1'-0" 14



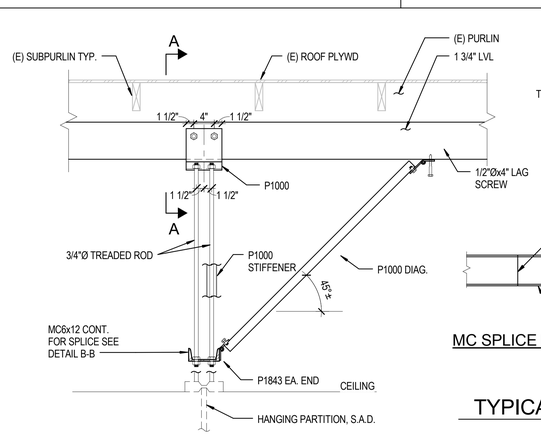
1 1/2" = 1'-0" 10

	SIMPSON DESIGNATIONS	
SIZE	TOP FLANGE	FACE MOUNTED
2xd	HUd2d-TF	LUS2d
2-2xd	HUd2d-2TF	LUS2d-2
4xd	BA4d	LUS4d
6xd	HU6dTF	U6d

NOTES:

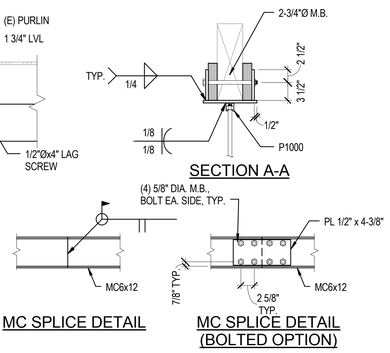
1. INSTALL PER MANUFACTURER'S INSTRUCTIONS. FILL ALL HOLES WITH FASTENERS SPECIFIED FOR MAXIMUM LOADS.
2. 'd' IS MEMBER DEPTH.
3. USE SKEWED OR SLOPED HANGERS AS REQUIRED.
4. HANGERS ARE TYPICAL U.N.O. IN DRAWINGS.

HANGER SCHEDULE-SOLID SAWN 2



SECTION B-B

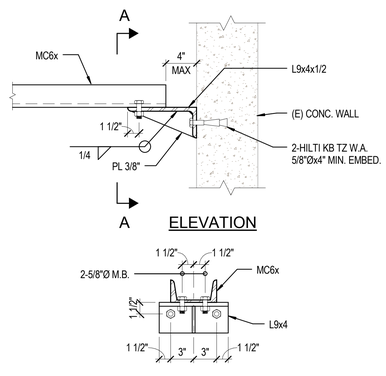
TYPICAL HANGING PARTITION DETAIL 1" = 1'-0" 13



SECTION A-A

MC SPLICE DETAIL

MC SPLICE DETAIL (BOLTED OPTION)



ELEVATION

SECTION A-A

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

CONNECTORS AND CONNECTIONS

1. NAILS: ALL NAILS SHALL BE COMMON WIRE NAILS UNLESS SHOWN OTHERWISE ON THE DRAWINGS. NAILS SHALL NOT BE DRIVEN CLOSER TOGETHER THAN 1/2 OF THEIR LENGTH NOR CLOSER TO THE EDGE OF THE MEMBER THAN 1/4 OF THEIR LENGTH. PREDRILL HOLES WHERE WOOD TENDS TO SPLIT. THE PENETRATION OF THE NAIL INTO THE PIECE RECEIVING THE POINT SHALL NOT BE LESS THAN 1/2 THE NAIL LENGTH. REFER TO DET. 2 FOR TYPICAL WOOD FRAMING NAILING SCHED.
2. BOLTS: ALL BOLTS IN TIMBER CONNECTIONS SHALL BE MACHINE BOLTS WITH STANDARD PLATE WASHERS UNDER HEADS AND NUTS, BEARING ON WOOD UNLESS NOTED OTHERWISE ON THE DRAWINGS. ALL WASHERS EXPOSED TO VIEW SHALL BE MALLEABLE IRON WASHERS UNLESS NOTED OTHERWISE. REFER TO SPECIFICATION FOR MINIMUM SIZES OF PLATE WASHERS.
3. HOLES FOR BOLTED CONNECTIONS:
   HOLES IN TIMBER SHALL BE NEATLY DRILLED A MINIMUM OF 1/32" TO A MAXIMUM OF 1/16" LARGER THAN THE BOLT DIAMETER.
4. JOIST HANGERS AND FRAMING HARDWARE:
   REFER TO PRODUCT MANUFACTURED BY THE SIMPSON CO. APPROVED ALTERNATES OF EQUAL QUALITY AND STRENGTH CAN BE USED.
5. LAG BOLTS: LAG BOLTS SHALL BE INSTALLED IN PREDRILLED HOLES
   HOLE DIAMETER @ THREADED END SHALL BE EQUAL TO THE SHANK DIAMETER AT THREADED END. HOLE DIAMETER @ UNTHREADED END SHALL BE 1/16" LARGER THAN SHANK DIAMETER AT UNTHREADED END. SCREW LAG BOLTS INTO PLACE. DO NOT HAMMER. PROVIDE WASHER UNDER HEAD.
6. SLOTTED HOLES IN PLYWOOD FOR METAL STRAPS.
   SLOTTED HOLES IN PLYWOOD FOR STEEL STRAPS SHALL BE CUT NEAT (NO OVERCUTS @ CORNERS OF SLOTS). MAX. SIZE OF SLOTTED HOLE = STRAP THICKNESS + 1/4" x STRAP WIDTH + 1/4"

TYPICAL CONNECTORS, NAILS, BOLTS, WASHERS AND JOIST HANGERS 1

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SECTIONS AND DETAILS

Scale: AS NOTED Issue Date: 24MAY19
Drawn By: NC Reviewed By: WAL
Sheet: X of X

3 1S601

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LEGEND

SYMBOL	ABBR	DESCRIPTION
VAV 3-1		EQUIPMENT IDENTIFICATION EQUIPMENT NUMBER (FLOOR NUMBER – UNIT SEQUENCE)
	CSD1	CEILING SUPPLY AIR DIFFUSER
	CRG1	CEILING RETURN AIR GRILLE
	CEG1	CEILING EXHAUST AIR GRILLE
		CEILING ACCESS PANEL
CODE / X CFM		AIR OUTLET DESIGNATION CODE AND CFM INLET NECK SIZE
CODE / CFM		EXHAUST AIR OUTLET DESIGNATION CODE CFM
OR		(E) DUCTWORK, PIPING OR EQUIPMENT TO REMAIN
OR		(E) DUCTWORK, PIPING OR EQUIPMENT TO BE REMOVED
OR		(N) OR (R) DUCTWORK, PIPING OR EQUIPMENT
OR	AL	ACOUSTICAL LINING (1" FIBER FREE, UON)
OR		SQUARE TO ROUND DUCT
OR		REDUCING TRANSITION
	VD	VOLUME DAMPER
		VOLUME DAMPER WITH REMOTE REGULATOR
		FLEX CONNECTION
	FD, FSD	FIRE DAMPER, COMBINATION FIRE/SMOKE DAMPER
R	R, D	DUCT RISE, DUCT DROP
		FLEXIBLE DUCT
	CFF	CAPPED FOR FUTURE
		DUCT DOWN
		DIRECTION OF AIRFLOW
T		THERMOSTAT
S		SWITCH
SD		DUCT SMOKE DETECTOR
	CTE	CONNECT TO EXISTING
	(E)	EXISTING
	(N)	NEW
	(R)	RELOCATED
	OSA	OUTSIDE AIR
	RA	RETURN AIR
	EA	EXHAUST AIR
	ACV	AUTOMATIC CONTROL VALVE
	BMS	BUILDING MANAGEMENT SYSTEM
	BDD	BACKDRAFT DAMPER
	UON	UNLESS OTHERWISE NOTED
	AFF	ABOVE FINISHED FLOOR
	CD	CONDENSATE DRAIN
	N/A	NOT APPLICABLE
	EF	EXHAUST FAN
	SAD	SEE ARCHITECTURAL DRAWINGS

GENERAL NOTES

1. CONTRACTOR SHALL CONFIRM ALL EXISTING CONDITIONS SHOWN ON THE DRAWINGS BEFORE START OF THIS WORK. DISCREPANCIES, IF ANY, MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IMMEDIATELY.
2. CONTRACTOR SHALL FOLLOW LATEST VERSION BUILDING TENANT CONSTRUCTION STANDARDS.
3. ALL BRANCH DUCTS CONNECTING TO DIFFUSERS TO BE OF SAME SIZE AS DIFFUSER NECK. (EXAMPLE: FOR DIFFUSER NECK SIZE 10" X 10". USE 10" ROUND DUCT).
4. USE ROUND TO SQUARE TRANSITION AT THE DIFFUSER NECK.
5. ALL BRANCH DUCTS CONNECTING TO VAV BOXES TO BE OF SAME SIZE AS VAV BOX INLET, UON. SEE VAV BOX SCHEDULE FOR VAV BOX INLET SIZE.
6. PROVIDE CONICAL TAKE–OFF FOR ALL NEW VAV BRANCH DUCTS CONNECTING TO EXISTING MAIN SUPPLY AIR LOOP.
7. SEAL ALL PIPE AND DUCT OPENINGS THROUGH FIRE RATED PARTITIONS USING FIRE SAFING FOAM.
8. RELOCATE EXISTING PIPES, DUCTWORK, ELECTRICAL CONDUITS, ETC. TO ACCOMMODATE NEW WORK.
9. PROVIDE AIR/WATER BALANCING FOR ALL SYSTEMS SHOWN ON THE DRAWING. (AIR OUTLETS, VRF, FAN COIL UNITS, AC UNITS, EF, ETC.) BALANCING SHALL BE PERFORMED BY AABC CERTIFIED INDEPENDENT FIRM AS PER BUILDING STANDARDS. MEASURE AND DOCUMENT SUPPLY AIR TEMPERATURE AT FULL HEATING AND FULL COOLING MODES.
10. MAINTAIN MINIMUM 2 FEET CLEARANCE IN FRONT OF THE VAV BOX CONTROLLER.
11. INSTALL EQUIPMENT AS HIGH AS POSSIBLE.
12. LOCATE THERMOSTATS SERVING FAN COILS/AC UNIT PER MECHANICAL FLOOR PLANS. COORDINATE EXACT LOCATION IN THE FIELD WITH ARCHITECT AND FURNITURE. FURNITURE SHALL NOT OBSTRUCT THERMOSTAT. TOP OF THE THERMOSTAT SHALL BE INSTALLED 48" AFF.
13. CEILING AND PLENUM SPACE FOR THIS PROJECT IS VERY LIMITED. VERY CLOSE COORDINATION BETWEEN THIS CONTRACTOR, ELECTRICAL, FIRE PROTECTION CONTRACTOR, PLUMBING CONTRACTOR, DATA AND SECURITY CONTRACTORS IS MANDATORY. MECHANICAL CONTRACTOR SHALL NOT START DUCTWORK FABRICATION UNTIL ALL AREAS OF THE PLENUM SPACE ARE FULLY COORDINATED AT ALL LOCATIONS. ADJUST AND PROVIDE DUCT SLICE FITTINGS, DUCT SIZES, SEAM SPACING, ETC. AS REQUIRED. PRODUCE SHOP DRAWINGS AND COORDINATE LAYOUT WITH ALL TRADES.
14. ALL PIPING, DUCTWORK, CONDUITS, WIRING, ETC. SHALL BE INSTALLED PARALLEL AND PERPENDICULAR TO BUILDING LINES.
15. LIFE SAFETY WORK/ INTERFACE (INCLUDING DUCT SMOKE DETECTORS) SHALL BE PROVIDED BY THE BUILDING'S LIFE SAFETY CONTRACTOR.
16. PROVIDE BUILDING STANDARD DUCT SMOKE DETECTOR AT NEW FC/AC UNITS AND WHERE SHOWN. DUCT DETECTOR SHALL BE FURNISHED AND INSTALLED BY DIV. 15. ELECTRICAL WIRING SHALL BE BY DIV. 16. LIFE SAFETY WIRING AND INTERFACING WITH BUILDING'S LIFE SAFETY SYSTEM SHALL BE BY THE BUILDING'S LIFE SAFETY SYSTEM PROVIDER. UPON SMOKE DETECTION ASSOCIATED FAN COIL/AC UNIT SHALL STOP OPERATION.

CONTROLS

17. PROVIDE STANDALONE CONTROLS BY VRV SYSTEM MANUFACTURER.
18. SET THERMOSTATS TO THE FOLLOWING, UON.:
    - FAN COIL UNITS (FC 1–1, 1–3, FC 1–4) – 74°F(COOLING), 70°F(HEATING) – ADJUSTABLE
    - FAN COIL UNIT (FC 1–2, –5) – 70°F(COOLING) – ADJUSTABLE
    - ROOF TOP UNIT (E)AC–1 74°F(COOLING), 70°F(HEATING) – ADJUSTABLE
19. ALL CONTROL WIRING SHALL BE NEATLY TIED TO THE BUILDING STRUCTURE.

SCOPE OF WORK

- NEW AIR DISTRIBUTION DUCTWORK AND AIR OUTLETS ARE BEING PROVIDED.
- (5) NEW FAN COIL UNITS (VRV SYSTEM) ARE BEING ADDED.
- (1) NEW CONDENSING UNIT (VRV SYSTEM) IS BEING ADDED.
- (1) NEW ROOF MOUNTED EXHAUST FAN IS BEING ADDED.
- NO NEW FSD IS BEING ADDED.

CALGREEN COMPLIANCE REQUIREMENTS

COMPLY WITH THE REQUIREMENTS OF THE LATEST EDITION OF THE CALIFORNIA GREEN CODE REQUIREMENTS WITH LOCAL AMENDMENTS INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

- PROVIDE EQUIPMENTS AND CONTROLS TO COMPLY WITH THE T–24 ENERGY EFFICIENCY REQUIREMENTS.
- PLUMBING TRADE WORK TO PROVIDE WATER–EFFICIENT PLUMBING FIXTURES AND FAUCETS TO COMPLY WITH THE WATER EFFICIENCY REQUIREMENTS.
- PROVIDE EQUIPMENTS THAT DO NOT USE ENVIRONMENTALLY HARMFUL REFRIGERANTS SUCH AS CFCs, HCFCs, AND HALONS. NO NEW REFRIGERANT USING HVAC EQUIPMENT SPECIFIED FOR THE REMODELED SPACE.
- WHEN INSTALLING DUCTWORK, PIPING AND EQUIPMENTS, KEEP THE OPENINGS COVERED WITH SHEETMETAL CAPS TO ENSURE THAT CONSTRUCTION DUST AND POLLUTANTS DO NOT ENTER THE SYSTEM. PROTECT THE RETURN AIR SYSTEM DUCT OPENINGS WITH MERV 8 CONSTRUCTION FILTERS. REMOVE THE FILTERS AFTER THE CONSTRUCTION WORK IS COMPLETED.
- COMPLY WITH THE T–24 MANDATED TESTING, START–UP, COMMISSIONING, CERTIFICATION REQUIREMENTS INCLUDING HERS TESTING. PROVIDE OUTSIDE AIR CERTIFICATION EACH ZONES.
- PROVIDE THERMAL AND ACOUSTICAL INSULATION FOR THE HVAC AND PLUMBING SYSTEM TO SATISFY T–24 ENERGY EFFICIENCY REQUIREMENTS.
- COMPLY WITH ALL OTHER REQUIREMENTS LISTED IN THE CAL–GREEN CODE (CGC) CHECKLIST AND THE LOCAL CITY REQUIREMENTS FOR THE PROJECT.
- HVAC WORK SHALL BE PERFORMED BY A LICENSED MECHANICAL CONTRACTOR WHO IS TRAINED AND CERTIFIED IN THE PROPER INSTALLATION OF THE HVAC SYSTEMS, EQUIPMENTS, CONTROLS AND HAS AT LEAST 10 YEARS OF EXPERIENCE IN UNDERTAKING AND COMPLETING WORK SIMILAR TO THIS PROJECT IN SIZE, TYPE AND COMPLEXITY. PLUMBING CONTRACTOR SHALL BE QUALIFIED WITH MIN 7 YEARS OF EXPERIENCE IN PROJECTS OF SIMILAR TYPE AND COMPLEXITY.
- PREPARE AND SUBMIT OPERATING AND MAINTENANCE MANUALS FOR EACH SYSTEM OR EQUIPMENT (MECHANICAL, PLUMBING, ELECTRICAL AND CONTROL SYSTEMS) INSTALLED OR MODIFIED UNDER THIS CONTRACT, ALONG WITH SERVICE AND MAINTENANCE INSTRUCTIONS, AS–BUILT PLANS, GAURANTY/WARRANTY INFORMATION PRIOR TO FINAL INSPECTION IN ACCORDANCE WITH CBC5.410.5. SUBMIT COPIES OF ALL INSPECTION VERIFICATIONS AND REPORTS, T–24 FORMS REQUIRED BY THE ENFORCING AGENCY.
- ALL ADHESIVES, SEALANTS AND CAULKS USED ON THE PROJECT SHALL MEET THE REQUIREMENTS OF THE CGC 5.504.4.1 STANDARDS.
- PLUMBING FIXTURES AND FITTINGS SHALL MEET THE APPLICABLE STANDARDS REFERENCED IN TABLE 1401.1 OF 2016 CALIFORNIA PLUMBING CODE AND IN CHAPTER 6 OF CGC.
- GREEN BUILDING CHECKLIST IS IN THE ARCHITECTURAL SET.

ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH APPLICABLE CODES FOR CITY OF RICHMOND

2016 CALIFORNIA BUILDING CODE

2016 CALIFORNIA MECHANICAL CODE

2016 CALIFORNIA ELECTRICAL CODE

2016 CALIFORNIA PLUMBING CODE

2016 CALIFORNIA FIRE CODE

2016 CALIFORNIA ENERGY COMMISSION BUILDING ENERGY EFFICIENCY STANDARDS

2016 CALIFORNIA GREEN BUILDING STANDARDS CODE (CAL–GREEN)

(ALL APPLICABLE CODES WITH ALL RICHMOND AMENDMENTS)

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GENERAL NOTES, LEGEND & DRAWING INDEX

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Drawn By: PT Reviewed By: AW
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1M0.0.1

VRV SYSTEM SCHEDULE

MFR: DAIKIN

FAN COIL UNIT

CODE	MODEL	SYSTEM COOLING CAPACITY (NOMINAL)	SEER	FAN CFM	FAN ESP	O.A. CFM	2-PIPE REFRIGERANT PIPE CONNECTION	WEIGHT	ELECTRICAL VOLT	PH	Hz	MCA	MOCP
FC 1-1	FXMQ48PBVJU	4.0 TONS	–	1375	0.4	255	PER MANUFACTURER'S RECOMMENDATIONS	105 LBS.	230	1	60	3.5	15
FC 1-2	FXAQ24PVJU	2.0 TONS	–	635	0.4	–	PER MANUFACTURER'S RECOMMENDATIONS	35 LBS.	230	1	60	0.6	15
FC 1-3	FXMQ48PBVJU	4.0 TONS	–	1375	0.4	150	PER MANUFACTURER'S RECOMMENDATIONS	105 LBS.	230	1	60	3.5	15
FC 1-4	FXMQ24PBVJU	2.0 TONS	–	685	0.4	150	PER MANUFACTURER'S RECOMMENDATIONS	80 LBS.	230	1	60	1.8	15
FC 1-5	FXAQ24PVJU	2.0 TONS	–	635	0.4	–	PER MANUFACTURER'S RECOMMENDATIONS	35 LBS.	230	1	60	0.6	15
FC 1-6	FXMQ36PBVJU	3.0 TONS	–	1090	0.4	225	PER MANUFACTURER'S RECOMMENDATIONS	105 LBS.	230	1	60	2.9	15

BRANCH SELECTOR

CODE	PORT CONFIGURATION	MODEL NO.	3-PIPE REFRIGERANT PIPE CONNECTION	WEIGHT	ELECTRICAL VOLT	PH	Hz	MCA	MOCP
BS 1-A1	MULTI-PORT	BS8Q54TVJ	PER MANUFACTURER'S RECOMMENDATIONS	75 LBS	208	1	60	0.8	15

REMARKS

1. PROVIDE PROGRAMMABLE ROOM THERMOSTAT. THERMOSTAT SHALL MEET TITLE 24 REQUIREMENTS.
2. ALL REFRIGERANT PIPE SIZES SHALL BE PER MANUFACTURER'S RECOMMENDATIONS.
3. PROVIDE WRITTEN DOCUMENTATION FROM THE MANUFACTURER INDICATING THE REQUIRED PIPE SIZES FOR EACH UNIT AND THE MAIN/ BRANCH LINES.
4. ALL REFRIGERANT PIPE SHALL BE INSULATED.
5. CONTRACTOR TO RUN LOW/ HIGH VOLTAGE CONTROL WIRING IN CONDUIT BETWEEN CONDENSING UNIT, FAN COIL UNIT AND BRANCH SELECTOR AS REQUIRED.
6. PROVIDE NECESSARY WIRING PER MANUFACTURER'S RECOMMENDATION BETWEEN BETWEEN CONDENSING UNIT, FAN COIL UNIT AND BRANCH SELECTOR AS REQUIRED.
7. PROVIDE ALL REQUIRED ACCESSORIES FOR LONG REFRIGERANT LINE APPLICATION.
8. PROVIDE NECESSARY LOW VOLTAGE TRANSFORMER AS REQUIRED.
9. IF REQUIRED, PROVIDE ADDITIONAL REFRIGERANT CHARGE PER MANUFACTURER'S RECOMMENDATIONS.
10. ALL FAN COIL UNITS ARE HEATING/ COOLING UNITS. FC 1-2 & -5 SHALL BE COOLING ONLY.
11. PROVIDE OPTIONAL IN-BUILT CONDENSATE PUMP.
12. REFRIGERANT SHALL BE R-410A.
13. PROVIDE LONG LIFE FILTER. MERV 13.
14. PROVIDE DAIKIN VRV I TOUCH SYSTEM CONTROLLER.
15. PROVIDE FACTORY SHOP DRAWINGS SHOWING THE ENTIRE VRV SYSTEM LAYOUT (FCUs, BRANCH SELECTOR, CU, PIPING, ETC.) DRAWN TO ACTUAL SCALE.
16. PROVIDE SPEED CONTROLLER FOR FC.
17. EXTERIOR AIR COOLED CONDENSER UNITS SHALL SHALL BE INSTALLED ON THE ROOF.
18. REFRIGERANT GAS QUANTITY IS 50.8 LBS.
19. EER: NON-DUCTED=11.6, DUCTED=11.2
20. IEER: NON-DUCTED=22.0, DUCTED=20.7
21. HEATING COP: DUCTED=3.2
22. PROVIDE MINIMUM 8 PORT BRANCH SELECTOR. ALL PORTS (INCLUDING SPARE) SHALL BE PROVIDED WITH MUELLER CYCLEMASTER BALL VALVES AND REFNET JOINT OUTLET CONNECTION.
23. MFR: DAIKIN OR APPROVED EQUAL.

REFRIGERANT LINES NOTES

1. THIS PROJECT ENTAILS LONG REFRIGERANT LINES. PROVIDE ALL ACCESSORIES REQUIRED FOR LONG REFRIGERANT LINE APPLICATION. THESE SHOULD INCLUDE, BUT NOT LIMITED TO:
   a. ADDITIONAL REFRIGERANT CHARGE AS NEEDED
   b. ADDITIONAL OIL AS NEEDED
   c. PROVIDE VIBRATION ELIMINATING DEVICES

   COORDINATE WITH THE MANUFACTURER AND PROVIDE ALL THE REQUIRED ACCESSORIES.
3. STRICTLY FOLLOW MANUFACTURER'S INSTALLATION GUIDELINES.
4. USE CONTINUOUS COPPER TUBING WITHOUT BREAKS AND LONG-RADIUS ELBOWS. DO NOT USE SHORT PIPE SECTIONS WITH BRAZED JOINTS. LIMIT ELBOWS, TURNS AND FITTINGS TO ABSOLUTE MINIMUM. RUN IN STRAIGHT LINE.
5. PITCH ALL HORIZONTAL RUNS ½" PER 10 FEET IN THE DIRECTION OF FLOW.
6. REFRIGERANT LINE SIZES SHALL BE STRICTLY PER MANUFACTURERS RECOMMENDATIONS.

CONDENSER UNIT

CODE	MODEL NO.	UNIT TYPE	SYSTEM TONAGE	SYSTEM (COOLING BTU)	WEIGHT (EACH MODULE)	ELECTRICAL VOLT	PH	Hz	MCA	MOCP
CU 1-1	REYQ168TAYDU	EXTERIOR AIR COOLED	14 TONS	144,000	800 LBS	460	3	60	36.1	40

COMPLIANCE WITH CMC TABLE 1102.2
REFRIGERANT ALLOWABLE QUANTITIES CALCULATION

1ST FLOOR VRV SYSTEM

ROOM/AREA	AREA (sq.sf)	HEIGHT (ft.)	VOLUME (cu.ft)	MAXIMUM ALLOWABLE QUANTITY (lbs.)	ACTUAL REFRIGERANT AMOUNT (lbs.)	REQUIRED ROOM OPEN FOR CALCULATION COMPLIANCE	TOTAL VOLUME (cu.ft.) WITH OPENING	MAXIMUM ALLOWABLE QUANTITY (lbs.) IN COMBINED SPACE	ROOM VOLUME COMPLIES	REMARKS
IDF ROOM 109	140	17	2380	62	50.8	N/A	N/A	N/A	YES	62 >50.8
STORAGE ROOM 104	155	17	2635	69	50.8	N/A	N/A	N/A	YES	69 >50.8
(E)ELECTRICAL ROOM	295	17	5015	130	50.8	N/A	N/A	N/A	YES	130 > 50.8
OPEN OFFICE	6730	17	114410	2975	50.8	N/A	N/A	N/A	YES	2975 > 50.8

PER 2016 CMC, TABLE1102.2 "REFRIGERANT GROUPS, PROPERTIES, AND ALLOWABLE QUANTITIES":

- R-410A: ALLOWABLE IS 26LBS PER 1000 CUBIC FEET OF SPACE.
- MAXIMUM ALLOWABLE QUANTITY FORMULA: (ROOM) cu.ft x 26LBS/ 1000 cu.ft = (REFRIGERANT AMOUNT) LBS
- AMOUNT OF REFRIGERANT USED FOR VRV SYSTEM IS 50.8 LBS.

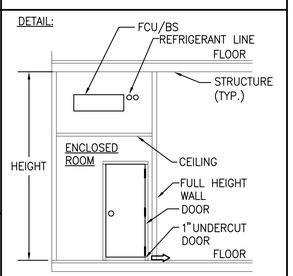
GENERAL NOTES:

1. ROOMS AND AREA INDICATE THE LOCATION OF FCU LOCATIONS AND THE AREA WHERE THE REFRIGERANT PIPING IS ROUTED.
2. VOLUME IS CALCULATED USING FLOOR-TO-CEILING HEIGHT PER 2016 CMC 1104.2.3.2 PLENUM DUE TO EXISTING WOOD STRUCTURE. PLENUMS ARE NOT PART OF THE AIR SUPPLY OR RETURN SYSTEM.
3. MAXIMUM ALLOWABLE QUANTITY CALCULATIONS HAVE BEEN DONE FOR COMMON AREA AND EACH ENCLOSED ROOM WHERE A FAN COIL UNIT IS LOCATED. ROOM NUMBERS INDICATED IN TABLE.
4. HALLWAY/COMMON AREA SQUARE FOOTAGE NOTED IN TABLE INDICATES THE SUMMATION OF ALL ADJACENT CONTIGUOUS OPEN COMMON AREAS' SQUARE FOOTAGE. THE COMMON AREAS' VOLUME SHALL BE USED TO DISSIPATE REFRIGERANT GAS IF A LEAK OCCURS.

TABLE NOTES:

A. PROVIDE 1" UNDERCUT FOR ENTRY DOOR OF ALL ENCLOSED ROOMS THAT HAS FAN COIL UNITS, BRANCH CONTROLLER AND REFRIGERANT PIPING TO ALLOW ANY REFRIGERANT WITHIN ROOM TO SPILL OUT AND DILUTE INTO THE COMMON AREAS. SEE MECHANICAL PIPING PLAN DRAWING 1M2.0.2.

DETAIL:



ECONOMIZER EXCEPTION CALCULATIONS

A. ECONOMIZER EXCEPTION 4 TO SECTION 140.4(e)1.

B. PER TABLE 110.2-H: ELECTRICALLY OPERATED VRF AIR CONDITIONERS MINIMUM EFFICIENCY REQUIREMENTS.
   1. AIR COOLED VRF AIR CONDITIONERS SIZED ≤ 240,000 BTU/H : 11.6 IEER.

C. PER TABLE 140.4-A ECONOMIZER TRADE-OFF TABLE FOR COOLING SYSTEMS.
   1. FOR CLIMATE ZONE 3: EFFICIENCY IMPROVEMENT IS 65%.
   2. 65% EFFICIENCY IMPROVEMENT OF 11.6 IEER IS 17.8 IEER.

D. IEER FOR DUCTED FCUs IS 20.7, NON-DUCTED FCUs IS 22.0.
   1. IEER FOR DESIGNED SYSTEM IS 22.05 IEER.
   2. 20.0 IEER IS GREATER THAN REQUIRED 17.8 IEER. FAN COIL UNITS LARGER THAN 54,000 BTU/H ARE EXEMPTED FROM ECONOMIZER REQUIREMENTS.

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2.1	32243.01	PLAN CHECK RESPONSE 24MAY19 ADDENDUM #3

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MECHANICAL SCHEDULES

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1M0.0.2

AIR OUTLET SCHEDULE

MFR: TITUS OR APPROVED EQUAL

CODE	MODEL	DESCRIPTION
CSD1	PMC	PERFORATED FACE CEILING SUPPLY DIFFUSER WITH 24" x 24" FACE. MODULAR CORE WITH ADJUSTABLE DISCHARGE PATTERNS. SEE PLAN FOR ROUND NECK SIZE AND THROW PATTERN.
CRG1	PAR	PERFORATED FACE CEILING RETURN GRILLE WITH 24" x 24" FACE AND 22" x 22" NECK. (ALL RETURN AIR GRILLES)
CEG1	PAR	PERFORATED FACE CEILING RETURN GRILLE WITH 24 x 24" FACE AND 22" x 22" NECK. (ALL RETURN AIR GRILLES)
CEG2	355ZFL	CEILING MOUNTED GRILLE. 1/2" FIXED BLADE, 0° DEFLECTION. ALUMINUM CONSTRUCTION. SEE PLAN FOR SIZE. PROVIDE SHEET METAL TRANSITION TO CONNECT TO DUCTWORK.

NOTE:
1. COORDINATE BORDER/FACE TYPE WITH THE ARCHITECT AND CEILING TYPE. UON.
2. PROVIDE ALL HARDWARE AS REQUIRED FOR MOUNTING AIR–OUTLETS ON VARIOUS CEILING TYPES. COORDINATE WITH CEILING PROVIDER.
3. VARIOUS CEILING TYPES ARE BEING USED ON THE FLOOR. IT IS MANDATORY TO CHECK COMPATIBILITY OF AIR OUTLET BORDER WITH CEILING TYPE PRIOR TO PLACING ORDER.

VIBRATION ISOLATOR SCHEDULE

MFR: MASON OR APPROVED EQUAL

EQUIPMENT	ISOLATOR		SEISMIC RESTRAINT	REMARKS
	TYPE	S.D.		
FAN COIL UNITS(FC 1–1, –3, –4)	30N	1"	SEISMIC BRACE CABLE	①②
BRANCH SELECTOR	30N	1"	SEISMIC BRACE CABLE	①②
CU1–1	SLR	1"	IN–BUILT IN SLR	①②

NOTES:
① FOR NUMBER OF MOUNTS, DIMENSION, ETC. COORDINATE WITH EQUIPMENT MANUFACTURER.
② PROVIDE HEIGHT SAVING BRACKETS.

EXHAUST FAN SCHEDULE

MFR: GREENHECK OR APPROVED EQUAL

CODE	TYPE AND SIZE	CFM	ESP "W.G.	MTR. WATTS	VOLTS PHASE	SERVICE	LOCATION	REMARKS
EF 1–1	ROOF CENTRIFUGAL, G–123–VG	950	0.6	½HP 2.1	120V/1ø	RESTROOMS/COPY/PANTRY	ROOF	

NOTES:
1. INSTALL EXHAUST FAN ON FACTORY ROOF CURB.
2. PROVIDE BACKDRAFT DAMPER.
3. FAN SHALL BE UL LISTED. PROVIDE VARI–GREEN EC MOTOR WITH POTENTIOMETER DIAL. POTENTIOMETER DIAL SHALL BE ACCESSIBLE.
4. MECHANICAL CONTRACTOR TO PROVIDE 7–DAY TIME CLOCK FOR START/ STOP. WIRING BY ELECTRICAL CONTRACTOR.

EXISTING PACKAGED ROOFTOP AIR CONDITIONING UNIT SCHEDULE

CODE	SERVICE	LOCATION	MANUFACTURER	MODEL	CFM	ESP (IN.WC)	COOLING CAPACITY			HEATING CAPACITY					UNIT ELECTRICAL			MOTOR (BHP)	SEER (EER)	MINIMUM OUTSIDE AIR (CFM)	OPER. WEIGHT LBS.	REMARKS
							TONS	SENS MBH	TOTAL MBH	INPUT MBH	OUTPUT MBH	FUEL	EAT (°F)	LAT (°F)	MCA	MOCP	V/ø/Hz					
(E)AC–1	FIRST FLOOR	ROOF	TRANE	YCD180B4L0EA	5500 2.1	(E)	15	(E)	(E)	(E)	(E)	NATURAL GAS	(E)	(E)	(E)	(E)	(E)	(E)	(E)	750	(E)	SEE NOTE 3

NOTES:
1. BALANCE AIR FLOW TO CFM QUANTITIES INDICATED. RECOMMISSION THE UNIT.
2. PROVIDE NEW MERV 13 FILTERS.
3. PROVIDE CERTIFIED STARTUP REPORT VALIDATING THE PERFORMANCE OF THE UNIT. PROVIDE POINT–BYPOINT INSPECTION BY A FACTORY AUTHORIZED TECHNICIAN.
4. THE UNIT SHALL BE TESTED THROUGH THEIR ENTIRE RANGE OF OPERATION FROM FULL COOLING TO FULL HEATING. DOCUMENT SUPPLY, RETURN AND OA TEMPERATURES AT FULL COOLING AND FULL HEATING.
5. ENTIRE ELECTRIC/GAS UNIT SECTIONS BE RECOMMISSIONED, REFURBISHED AND RECHARGED IN ORDER TO ACHIEVE TO THEIR ORIGINAL FACTORY PERFORMANCE. ALL WORK SHALL BE DONE BY FACTORY AUTHORIZED TECHNICIAN. PROVIDE ALL LABOR AND MATERIAL REQUIRED TO BRING THE UNITS TO PERFORM AT THEIR INTENDED DESIGN.
6. RE–CALIBRATE CONTROLS AND SETTINGS.
7. PROVIDE NEW THERMOSTAT.

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MECHANICAL SCHEDULES

Scale: NONE Issue Date: 22APR19
Drawn By: PT Reviewed By: AW
Sheet: 3 of 15

1M0.0.3

SPECIFICATIONS - DIVISION 15

1 - GENERAL

1.1 Provide all labor, equipment and materials that are required, to provide a complete, properly operating and safe mechanical installation. The extent of the work is indicated on the drawings and as described in these specifications, shall include all that may be reasonably inferred to be required for proper execution of installation work and/or systems' operation.

1.2 Provide cutting and patching as required for execution of work performed under this Section unless specifically provided for, under other Sections.

1.3 Repair or replace, to the satisfaction of the Owner, any damage to work of this Section, damage caused by leaks or breaks in systems of this Section, and damage caused by work of this Section.

1.4 Coordinate with work performed by other Sections, in order to accommodate the requirements of this Section, and to assure adequate space and proper location for all necessary work of this project whether or not work is under this Section.

1.5 Provide all necessary rigging equipment and manpower to set new equipment and materials in place.

1.6 Provide all seismic restraints required by code, or this specification, for all equipment, duct, pipe, and materials furnished under this Section. This Contractor is responsible for the design of the restraints and for proof of adequacy of the restraints. Equipment, ductwork, and piping shall be restrained in all directions.

1.7 Provide all labor and material required to set and adjust the installation so that it performs in accordance with the design intent included in the drawings and these specifications.

1.8 The work installed under this Section shall conform to all applicable federal, state and local codes, regulations, and standards.

1.9 Reasonable effort has been made to coordinate the location of equipment and materials with the structure and other trades, it is the responsibility of this Contractor to coordinate exact requirements and locations as governed by actual job conditions, manufacturer's recommendations etc. Check all information and report any discrepancies to the Architect before fabrication or purchasing any equipment and in time to avoid unnecessary work.

1.10 Provide, procure, and pay for all permits, services, meters, licenses, fees, etc., required for performance of work of this Section.

1.11 Install equipment and materials with all working parts readily accessible for inspection, repair, and renewal.

1.12 Confer with the Owner/Architect to establish exact locations, mounting heights, and arrangements of all the finish work prior to roughing in.

1.13 Workmanship shall be first class throughout and performed only by competent and experienced workmen in a manner satisfactory to the Owner. Constant supervision of the work, either by the Contractor or his competent representative, shall be maintained.

1.14 Include all cutting and repairing necessary and required for this installation that is not covered by other trades. Structural members shall not be cut except with the written approval of the Architect. Repairing shall be performed by workmen skilled in the trades involved in a manner satisfactory to the Architect.

1.15 Submit for approval shop drawings/and Equipment submittals (including controls).

1.16 Refer to and follow Building Tenant Construction Standards. If discrepancies are found, follow the more stringent requirement.

1.17 All equipment piping, ductwork, etc. shall be braced and anchored to resist horizontal forces acting in any direction in accordance with the latest California/ City of Richmond Codes.

1.18 Install all piping and ductwork to best suit field conditions and coordinate with the installation work of other trades. The drawings are diagrammatic and shall not be scaled to determine exact locations of piping or ductwork.

1.19 Coordinate ductwork, piping with structural drawings, electrical including lighting, audio visual and sprinkler system. Provide transitions as required.

1.20 Contractor shall coordinate with architect ceiling access panels for all required fire, smoke, volume dampers and Mechanical equipment in inaccessible ceiling as required.

1.21 Provide all miscellaneous steel, special supports and anchoring for all Mechanical equipment requiring such.

1.22 Seal all fire rated penetrations with fire retardant material as required per NFPA and CBC.

1.23 Ducts stored on the construction site shall be protected and isolated from dust contamination.

1.24 Not all existing pipes, conduits, ducts, etc. are shown on these drawings. Where existing pipes, conduits and/or ducts which are to remain prevent installation of new work, relocate, or arrange for relocation of existing pipes, conduits and/or ducts, to facilitate new work.

1.25 All materials and workmanship are subject to review and approval by the architect. Any portion of the work found to be defective shall be replaced by the contractor as part of this contract at no additional cost to the owner.

1.26 Not all duct and piping transitions and/or offsets are shown. Provide transitions and/or offsets at no additional cost to owner.

1.27 Provide all required miscellaneous steel for complete installation of systems and for support of ductwork, piping, etc.

1.28 Drawing are diagrammatic in nature and all conditions shall be contractor coordinated and verified for exact location and sizes. The contractor is responsible to thoroughly verify all existing field conditions before submitting his/her bid.

1.29 Contractor shall provide dust covers as required to contain dust and debris within construction area and keep dust to a minimum.

1.30 Absolute accuracy of the drawings can not be guaranteed. While every effort has been made to coordinate the location of existing equipment, piping, etc., it is the responsibility of the contractor to coordinate the exact requirements governed by actual job conditions.

1.31 The submission of bid proposal shall be considered as conclusive evidence that the contractor is thoroughly familiar with the intent of the contract documents and scope of work. The contractor, prior to bidding, shall visit the job site, check existing installations and systems related to his/her work and shall, in the bid proposal, include all labor and material required to complete the system.

1.32 Contractor shall complete the work with minimum interference with existing systems. Any shutdown of the existing system shall be coordinated with the general contractor and the owner's representative three weeks in advance.

1.33 All work shall be in compliance with all applicable federal, state and local codes, regulations and standards.

1.34 Contractor shall protect the equipment, duct openings, pipes, etc. to prevent dust & debris from entering during construction. The existing air handling system return air openings shall be protected with minimum MERV 8 rated construction filters until, the construction activity is completed and ready for balancing in accordance with CAL-Green requirements.

2 - MATERIALS

2.1 Fabricate ductwork of galvanized sheet metal in accordance with latest edition of the SMACNA duct manual and ASHRAE guide. Seal and tape all duct joints airtight.

2.2 Acoustical Lining: Acoustical lining shall be 1" thick, fiber-free duct liner and shall meet UL-181 requirements. Install per manufacturer's recommendations.

2.3 Flexible Round Ducts: UL Class I air ducts with helical support wire, scrim cloth inner liner, R-4 insulation and outer plastic liner. Cody/West or equal. Use only to make final connections to the air-outlets. Maximum length allowed is 5 feet.

2.4 Fan Coil Units Supply/ Return ductwork for 2" pressure rating, seal Class A.

2.5 Transfer/ Return/Outside Air Ducts: 2" static pressure rating; 2,000 FPM maximum, seal Class A.

2.6 Insulate all condensate drain lines with $\frac{1}{2}$" thick jacketed Owens Corning fiberglass SSL-II insulation. Provide vapor barrier.

2.7 All ductwork shall be spiral round as shown with no flanged joints. Ductwork shall be neatly supported and braced seismically.

2.8 All insulation material shall meet flame spread rating of 25 and smoke developed rating of 50.

2.9 Refrigerant lines shall be copper Type K (Domestically manufactured in the USA) and silver brazed. Working pressure rating for the entire refrigerant assembly shall be 1.5X the system pressure.

2.10 All drain lines shall be copper Type M, 95/ 5 solder. Domestically manufactured in the USA.

2.11 Insulate entire length of refrigerant lines. Provide hard aluminum jacket to protect piping and insulation routed outside. Interior piping insulation shall incorporate soft jacket to protect insulation. Provide vapor barrier. Insulation thickness and density shall meet Title 24 requirements.

2.12 Insulate all condensate drain lines with $\frac{1}{2}$" thick jacketed Owens Corning fiberglass SSL-II insulation.

2.13 All insulation material shall meet flame spread rating of 25 and smoke developed rating of 50.

2.14 Duct insulation shall be by Owens Corning, $1\frac{1}{2}$" thick and minimum density of 1 PCF. Insulation shall incorporate protective aluminum foil jacket.

2.15 All material in the ceiling plenum shall be plenum rated.

2.16 Provide dielectric union when connecting dissimilar metals.

3 - EXECUTION

3.1 Supports and Hangers: Use Super Strut, Unistrut, B-Line, Elcen or Grinnell hangers and structural attachments to properly support equipment, ductwork, and piping systems according to good standard practice and according to the manufacturer's recommendations. Minimum safety factor of 5.0. Support system shall meet all local codes.

3.2 No piping shall have direct contact with the hanging and support system or the structure. On pipes that are insulated, run the insulation continuous through the hanger and provide sheet metal shields of proper length and gages under the insulation to prevent crushing. On uninsulated copper piping, use Stoneman "trisolator" or similar Unistrut or Super-Strut device at each hanger or support point.

3.3 Design seismic restraints per SMACNA/PPIC "Guidelines for Seismic Restraints of Mechanical Systems and Piping Systems", for equipment, ducts, and piping.

3.4 Provide Access door and panels whenever a piece of equipment or valve and operator is inaccessible and requires access for maintenance, repair or adjustment.

3.5 Provide equipment (FC, etc.) and piping identification labeling. ¾" lettering on pipes and 1-1/2" lettering on equipment. Include directional arrows on piping. Coordinate style/ color with the Chief Building Engineer.

3.6 Fire/Smoke dampers shall be installed according to state and local codes and exactly as tested by UL to develop fire ratings.

3.7 Provide 18" x 12" minimum access doors in ductwork and furring to provide easy access to each fire damper. Use insulated access doors in insulated ducts.

3.8 The installation of all ductwork, louvers, dampers, etc., shall be according to the SMACNA standards.

3.9 Ducts shall be hung with galvanized 1" x 18 gauge duct straps with spacing as recommended by SMACNA or as required by local codes, whichever is most stringent. Provide sway bracing on all ductwork in accordance with the local codes.

3.10 Throughout the progress of the work, protect all pipe, conduit, ducts, fixtures, and equipment from intrusion by rain, dirt, and foreign matter, and from damage of any kind. Thoroughly clean all metallic, plastic, and painted surfaces of equipment prior to final inspection.

3.11 Flush pipes and ducts free from foreign substances before installing valves, stops, or making final connections.

3.12 After all other work has been accomplished, clean all air outlet faces. Remove all debris of work of this Section from site.

3.13 All materials, parts, equipment, modifications made, and workmanship shall be guaranteed for a period of one year from date of acceptance of the work. This guarantee is contingent upon the system being properly maintained by a qualified mechanic familiar with this equipment and that the equipment is not abused. Excluded is normal wear and tear, replacement of filters and belts, and acts of God. If the manufacturer provides for a longer guarantee period, it shall also be submitted.

3.14 Develop and provide final as-built, reproducible drawings and all O&M manuals prior to final acceptance.

3.15 Start, operate and commission all systems. Provide the services of factory trained technicians for start-up of major equipment and all systems including but not limited to temperature controls, VRV system.

3.16 Air balancing shall be performed by AABC certified independent balancing contractor per AABC format.

3.17 Insulate all unexposed Supply and Return air ductwork.

3.18 All new filters shall be minimum MERV 13.

3.19 All equipment, ductwork and piping shall be supported using drilled anchors. Do not use powder driven inserts.

3.20 No CFC equipment shall be added.

3.21 Contractor to provide all labor and material required to complete and perform all acceptance tests as required by 2016 Title 24. Acceptance tests forms are included under Title 24 sheets. Contractor to provide additional forms as required. Review all forms and provide cost for all acceptance tests in the base bid.

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1	32243.01 22APR19	ISSUE FOR PERMIT
2	32243.01 24MAY19	ISSUE FOR REVIEW
2.1	32243.01 24MAY19	PLAN CHECK RESPONSE ADDENDUM #3

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MECHANICAL SPECIFICATIOS

Scale: NONE Issue Date: 22APR19
Drawn By: PT Reviewed By: AW
Sheet: 4 of 15

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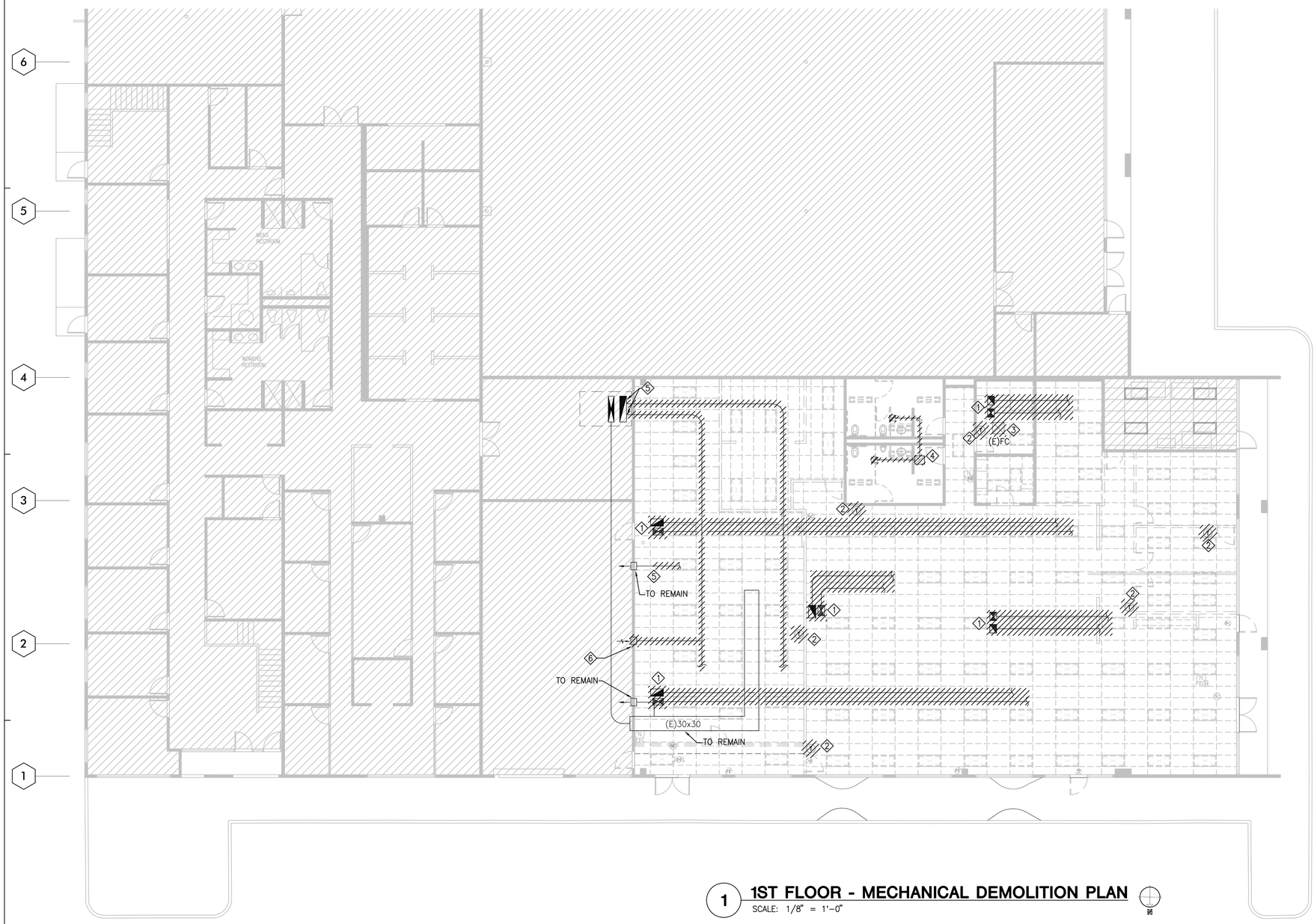

DEMOLITION SHEET NOTES:

1. U.O.N., REMOVE EXISTING BRANCH DUCTWORK, DIFFUSERS, SUPPLY & RETURN AIR PLENUM & SUPPORTS DOWNSTREAM OF ROOFTOP AC UNIT.
2. EXISTING THERMOSTAT & WIRING TO BE REMOVED.
3. REMOVE EXISTING CEILING AC UNIT & ASSOCIATED PIPING, THERMOSTAT AND CONTROL. REMOVE ASSOCIATED SUPPORTS.
4. REMOVE EXISTING EXHAUST DUCT AND ASSOCIATED DUCTWORK, GRILLES, SUPPORTS.
5. DEMO UP TO THIS POINT.
6. REMOVE GRILLE AND PATCH & SEAL WALL OPENING TO MATCH EXISTING. SEAL OPENING AIR TIGHT.

1 1ST FLOOR - MECHANICAL DEMOLITION PLAN

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

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2	32243.01	ISSUE FOR PERMIT 22APR19
2.1	32243.01	PLAN CHECK RESPONSE 24MAY19 ADDENDUM #3

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Sheet: 5 of 15

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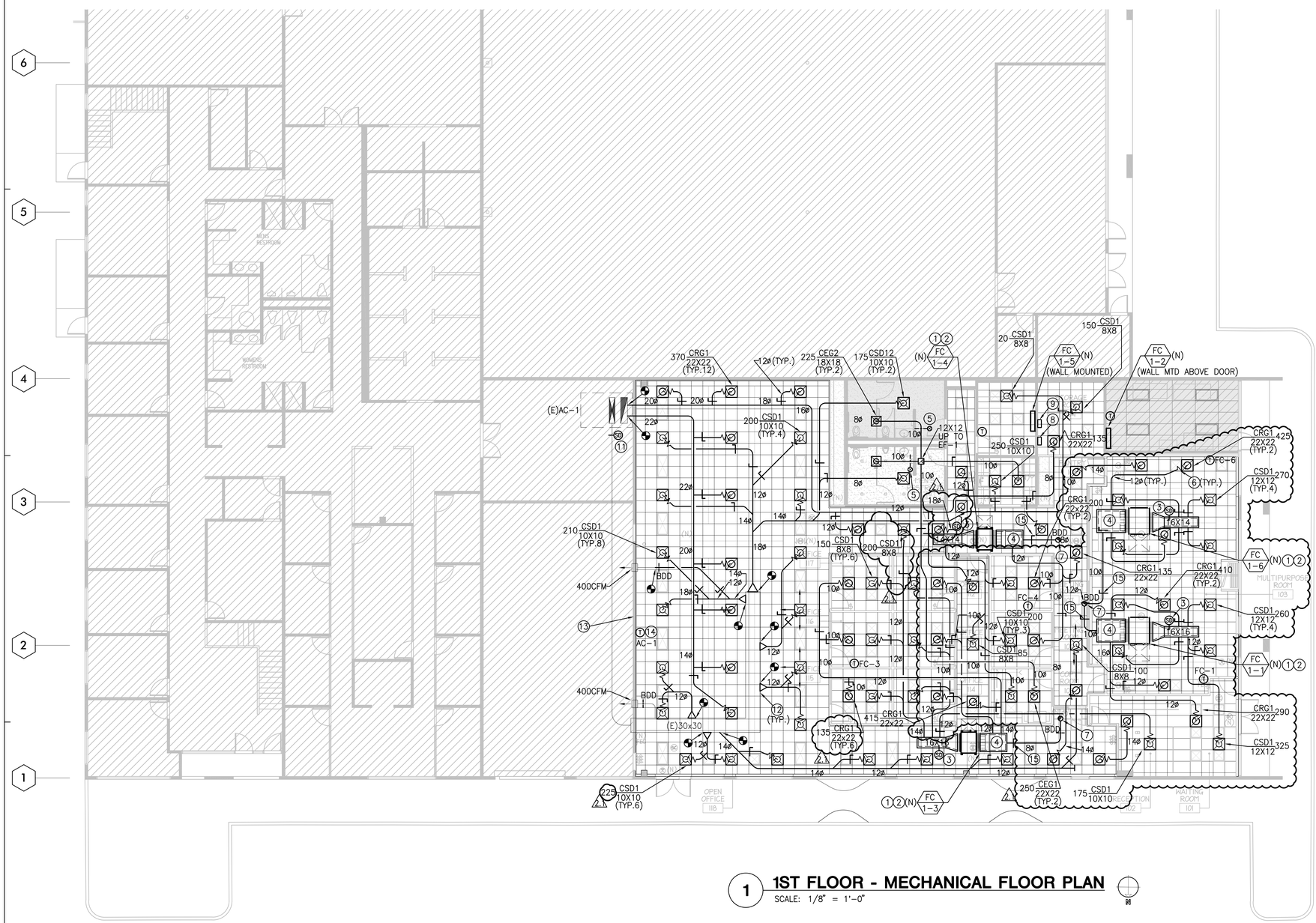

1 1ST FLOOR - MECHANICAL FLOOR PLAN

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

GENERAL NOTES:

1. OFFSET FULL HEIGHT WALL(S) ABOVE CEILING TO AVOID CONFLICT WITH THE DUCTWORK/ PIPING.
2. COORDINATE THERMOSTAT LOCATION/HEIGHT WITH THE ARCHITECT AND FURNITURE LAYOUT. FURNITURE SHALL NOT OBSTRUCT THERMOSTAT. CENTER THERMOSTAT ON COLUMNS IN OPEN OFFICE AREAS. TOP OF THERMOSTATS SHALL BE INSTALLED AT 48" ABOVE FINISHED FLOOR.
3. INSTALL ALL PIPING AS HIGH AS POSSIBLE TO THE STRUCTURE TO AVOID CONFLICT WITH DUCTWORK AND HVAC EQUIPMENT. PROVIDE TRANSITIONS AS REQUIRED TO CROSS ABOVE DUCTWORK AND HVAC EQUIPMENT. ALLOW ROOM FOR ONLY FIRE PROOFING AND PIPE INSULATION. COORDINATE WITH CHIEF BUILDING ENGINEER.
4. VERIFY ALL NEW DUCT ROUTING WITH EXISTING BEAMS, DUCTWORK, PIPING, CONDUITS, ETC. PRIOR TO DUCT FABRICATION.
5. PRIOR TO FABRICATION AND INSTALLATION COORDINATE DUCT/ PIPE ROUTING AND EQUIPMENT PLACEMENT WITH ALL OTHER CEILING ELEMENTS SUCH AS BEAMS, SPRINKLER LINES, LIGHT FIXTURES, PLUMBING LINES, CONDUITS, ETC. MARK AND DRAFT ON THE FLOOR ENTIRE LAYOUT SHOWING THE COMPLETE SYSTEM (MAIN LOOP, FAN COIL UNITS, DUCT DISTRIBUTION, AIR OUTLETS, ETC.), INCLUDING HEIGHTS/ ELEVATIONS, FOR ARCHITECT'S REVIEW AND APPROVAL. PROVIDE TRANSITIONAL FITTINGS, ADJUSTMENTS AS PER ARCHITECT'S DIRECTION. DO NOT FABRICATE/ INSTALL WITHOUT THIS EXERCISE AND ARCHITECT'S APPROVAL.
6. PROVIDE CONDUIT FOR CONTROL WIRING FOR THERMOSTATS LOCATED ON NON-FURRED COLUMN AND WALLS.
7. PROVIDE DUCT/ PIPE TRANSITIONS AS REQUIRED TO CLEAR FLOATING CEILING, BEAMS, SPRINKLER LINES, ETC.
8. ROUTE CONDUIT ALONG SIDE REFRIGERANT LINES FOR CONTROL WIRING.
9. PROVIDE TURNING VANES FOR ALL RECTANGULAR DUCT ELBOW FITTINGS.
10. DRAWINGS ARE ONLY DIAGRAMMATIC. PROVIDE DUCT/ PIPE TRANSITIONS, OFFSETS, FITTINGS AS REQUIRED TO CLEAR BEAMS, HIGH CEILINGS AND OTHER CEILING CONSTRAINTS. ALL TRANSITIONS, FITTINGS, ETC. NEEDED ARE NOT SHOWN. EXTREMELY TIGHT FIT IN CEILING PLENUM DUE TO HIGH CEILING HEIGHT. REFER TO ARCHITECTURAL DRAWINGS (CEILING HEIGHT, ELEVATION SECTIONS, ETC.) TO UNDERSTAND AND TAKE INTO ACCOUNT THE UNIQUE NATURE OF THIS PROJECT AND THE NEED FOR ADDITIONAL OFFSETS, TRANSITIONS, ETC. PRIOR TO BIDDING.
11. CEILING ACCESS PANEL SHALL BE 24"x24". CEILING ACCESS PANEL SHALL BE LOCATED TO ALLOW FULL ACCESS FOR MAINTENANCE OF HVAC EQUIPMENT (FIRE/SMOKE DAMPER(S), SHUT-OFF VALVE(S), ETC.).

SHEET NOTES:

1. RELOCATE EXISTING SPRINKLER LINES, J-BOXES, CONDUITS, PIPING, ETC. TO ACCOMMODATE NEW EQUIPMENT, DUCTWORK AND PIPING. PROVIDE CLEARANCES AND ADEQUATE MAINTENANCE ACCESS.
2. SECONDARY DRAIN PAN UNDER THE UNIT. DRAIN PAN SHALL HAVE CROSS-SECTIONAL AREA BIG ENOUGH TO COVER THE ENTIRE UNIT AS WELL AS PIPE CONNECTIONS AT THE UNIT. CONDENSATE LINE FROM THE PAN SHALL DISCHARGE THROUGH THE CEILING TILE 1/2" BELOW THE CEILING. COORDINATE EXACT LOCATION WITH THE ARCHITECT.
3. PROVIDE DUCT SMOKE DETECTOR AT UNIT DISCHARGE.(TYP.)
4. PROVIDE ACOUSTICALLY LINED RETURN AIR PLENUM. PLENUM SHALL BE FULL SIZE OF UNIT'S RETURN AIR OPENING x 48" LONG. CONNECT OA DUCT TO THE PLENUM AS SHOWN. BALANCE OUTSIDE AIR TO THE CFM SHOWN ON THE FC UNIT SCHEDULE.
5. REMOTE VOLUME DAMPER. PROVIDE ADDITIONAL HARDWARE AS REQUIRED.
6. FLEX DUCT CONNECTED TO CRG1. 5 FT MAXIMUM LENGTH.(TYP.)
7. OUTSIDE AIR DUCT UP THRU ROOF.
8. 7-DAY TIME CLOCK FOR EF 1-1.
9. VRV SYSTEM CONTROLLER.
10. 12x12 UP TO EF-1 ON ROOF.
11. PROVIDE NEW DUCT SMOKE DETECTOR FOR (E)AC-1 IF NONE EXIST. DUCT DETECTOR TO SHUT UNIT OFF UPON SMOKE DETECTION. PROVIDE SEPERATE COST FOR THIS LINE ITEM.
12. PROVIDE CONICAL CONNECTION.(TYP.)
13. SEAL ALL OPENINGS IN THE WALL AIRTIGHT.
14. PROVIDE NEW PROGRAMMABLE THERMOSTAT FOR (E)AC-1 BEING REUSED.
15. BALANCE OSA TO CFM NOTED IN THE VRV SCHEDULE.

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2	32243.01 22APR19	ISSUE FOR PERMIT
2.1	32243.01 24MAY19	PLAN CHECK RESPONSE ADDENDUM #3

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1ST FLOOR - MECHANICAL FLOOR PLAN

Scale: 1/8"=1'-0" Issue Date: 22APR19
Drawn By: PT Reviewed By: AW
Sheet: 6 of 15

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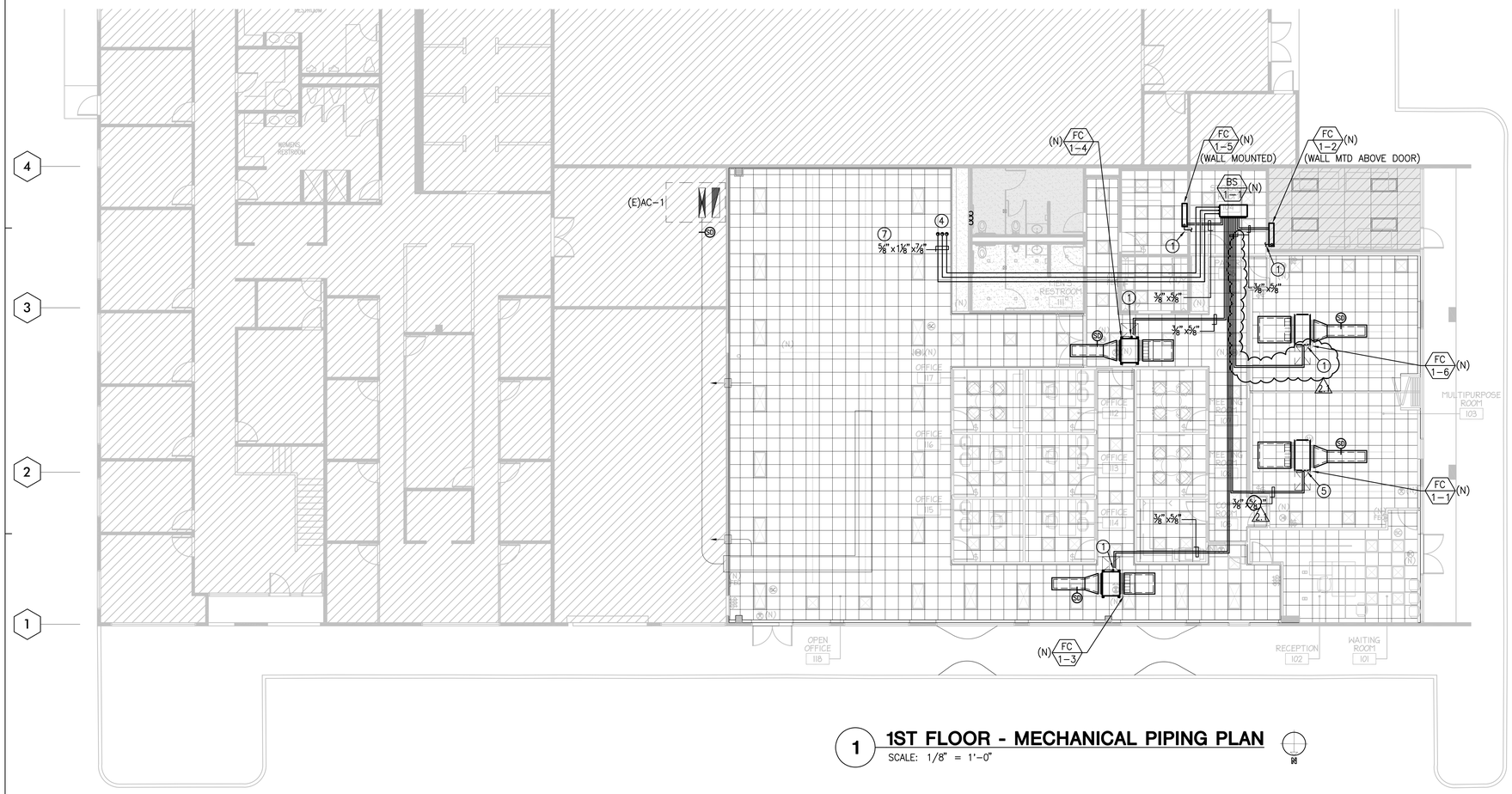


1 1ST FLOOR - MECHANICAL PIPING PLAN

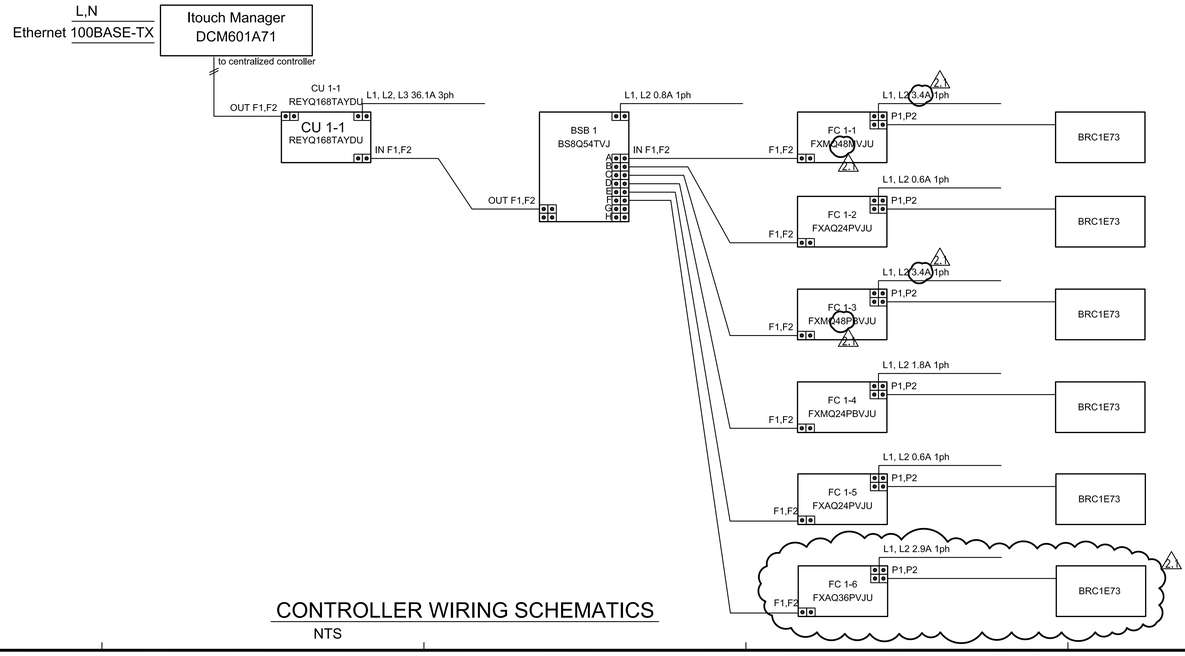
SCALE: 1/8" = 1'-0"

GENERAL NOTES:

1. INSTALL ALL PIPING AS HIGH AS POSSIBLE TO THE STRUCTURE TO AVOID CONFLICT WITH DUCTWORK AND HVAC EQUIPMENT. PROVIDE OFFSETS AS REQUIRED TO CROSS ABOVE DUCTWORK AND HVAC EQUIPMENT.
2. PRIOR TO FABRICATION AND INSTALLATION COORDINATE DUCT/ PIPE ROUTING AND EQUIPMENT PLACEMENT WITH ALL OTHER CEILING ELEMENTS SUCH AS BEAMS, SPRINKLER LINES, LIGHT FIXTURES, PLUMBING LINES, CONDUITS, ETC. MARK AND DRAFT ON THE FLOOR ENTIRE LAYOUT SHOWING THE COMPLETE SYSTEM (MAIN LOOP, FAN COIL UNITS, DUCT DISTRIBUTION, AIR OUTLETS, ETC.), INCLUDING HEIGHTS/ ELEVATIONS, FOR ARCHITECT'S REVIEW AND APPROVAL. PROVIDE TRANSITIONAL FITTINGS, ADJUSTMENTS AS PER ARCHITECT'S DIRECTION. DO NOT FABRICATE/ INSTALL WITHOUT THIS EXERCISE AND ARCHITECT'S APPROVAL.
3. ALL CONTROL WIRING SHALL BE ROUTED WITHIN METAL CONDUIT OR SECURED ON TOP OF DUCTWORK. ALL CONTROL WIRING SHALL BE UN-SEEN AND SECURED.
4. PROVIDE DUCT/ PIPE TRANSITIONS AS REQUIRED TO CLEAR CEILING, BEAMS, SPRINKLER LINES, ETC.
5. ROUTE CONDUIT ALONG SIDE REFRIGERANT LINES FOR CONTROL WIRING.
6. DRAWINGS ARE ONLY DIAGRAMMATIC. PROVIDE DUCT/ PIPE TRANSITIONS, OFFSETS, FITTINGS AS REQUIRED TO CLEAR BEAMS, HIGH CEILINGS AND OTHER CEILING CONSTRAINTS. ALL TRANSITIONS, FITTINGS, ETC. NEEDED ARE NOT SHOWN. EXTREMELY TIGHT FIT IN CEILING PLENUM DUE TO HIGH CEILING HEIGHT. REFER TO ARCHITECTURAL DRAWINGS (CEILING HEIGHT, ELEVATION SECTIONS, ETC.) TO UNDERSTAND AND TAKE INTO ACCOUNT THE UNIQUE NATURE OF THIS PROJECT AND THE NEED FOR ADDITIONAL OFFSETS, TRANSITIONS, ETC. PRIOR TO BIDDING.
7. SYSTEM DESIGNED USING VRF MANUFACTURED BY DAIKIN. IF CONTRACTOR CHOOSES TO USE A DIFFERENT APPROVED EQUAL, THE SYSTEM DESIGN CHANGE FOR BRANCH SELECTOR, PIPING, FCUs, ETC. SHALL BE PROVIDED BY THE CONTRACTOR. CONTRACTOR SHALL PROVIDE NEW DESIGN DRAWINGS SHOWING ALL THE COMPONENTS OF THE NEW SYSTEM INCLUDING PIPE SIZES FOR REVIEW AND APPROVAL.

SHEET NOTES:

1. 3/4" CONDENSATE DRAIN. SEE PLUMBING DRAWINGS FOR CONDENSATE DRAIN LINE TERMINATION.
2. PROVIDE PENETRATION WITH WALL PENETRATION SLEEVE. SEAL PENETRATION WATER-TIGHT.
3. PROVIDE OVERHEAD UNISTRUT /FRAME TO SUPPORT THE REFRIGERANT LINES AND CONTROL WIRING.
4. REFRIGERANT LINES & CONTROL WIRING UP TO CONDENSER ON ROOF.
5. 3/4" CONDENSATE DRAIN. SEE PLUMBING DRAWINGS FOR CONDENSATE DRAIN LINE TERMINATION. (2.1)
6. NOT USED (2.1)
7. EXACT SIZING SHALL BE BY VRV MANUFACTURER GUILDLINE AND INSTRUCTIONS.(TYP.)



CONTROLLER WIRING SCHEMATICS

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1ST FLOOR - MECHANICAL PIPING PLAN

Scale: 1/8"=1'-0" Issue Date: 22APR19
Drawn By: PT Reviewed By: AW
Sheet: 7 of 15

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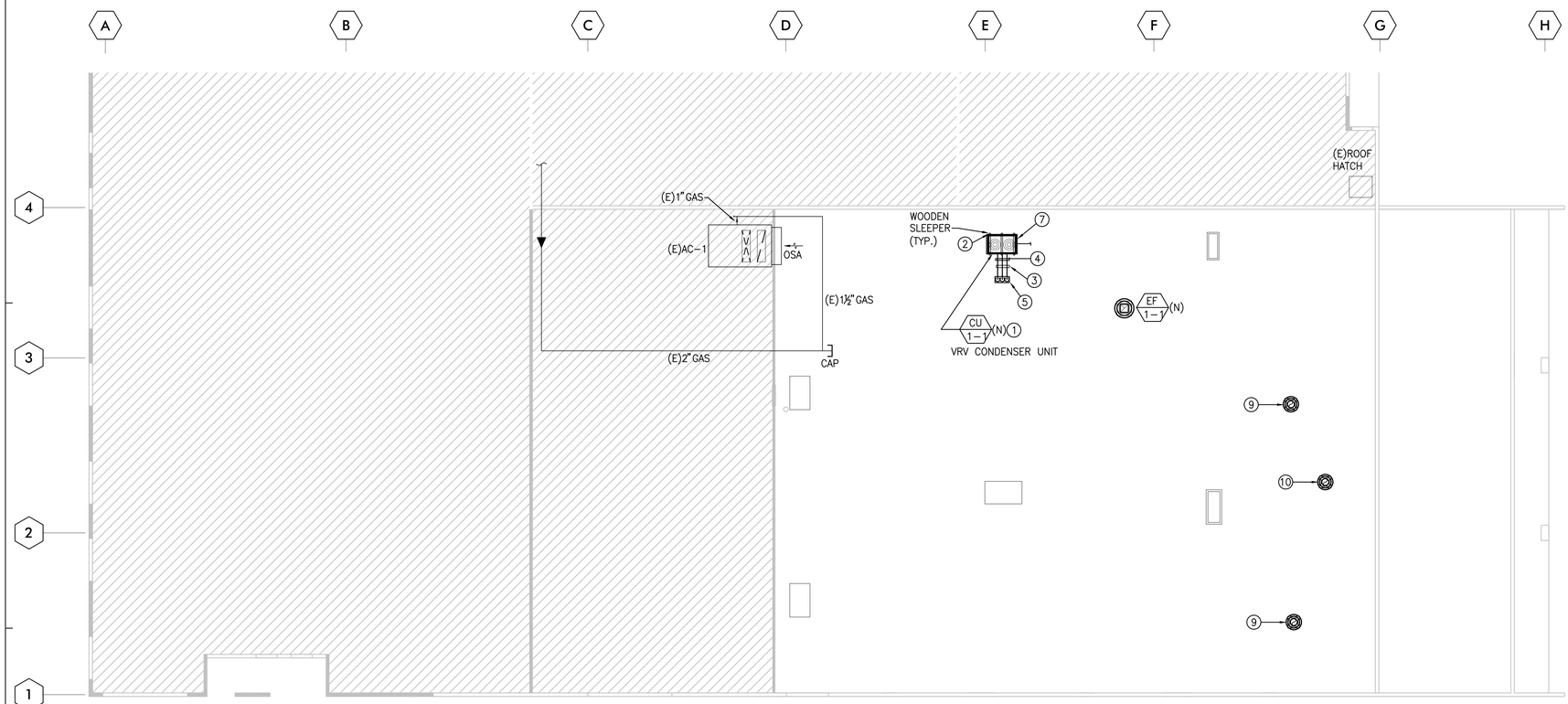


1 MECHANICAL ROOF PLAN

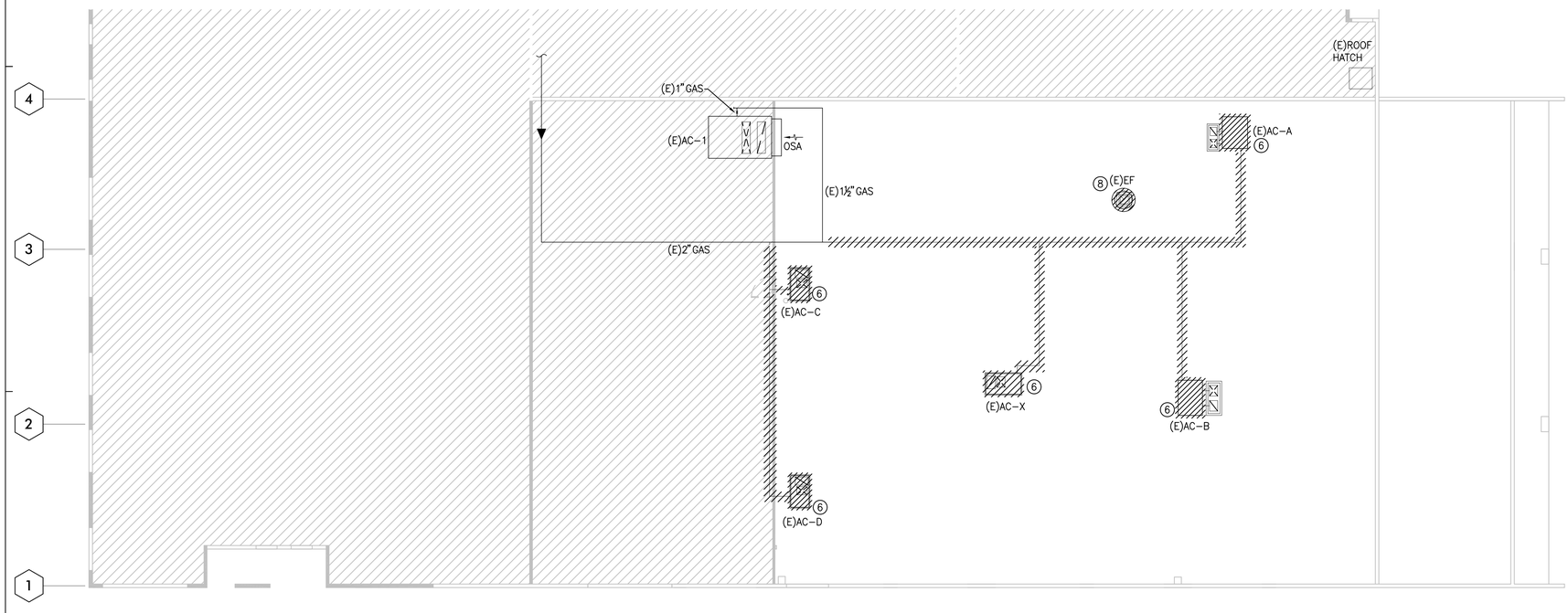
SCALE: 1/8" = 1'-0"

RECOMMISSIONING OF AC-1 UNIT:

1. PROVIDE CERTIFIED STARTUP REPORT VALIDATING THE PERFORMANCE OF THE UNIT. PROVIDE POINT-BYPOINT INSPECTION BY A FACTORY AUTHORIZED TECHNICIAN.
2. THE UNIT SHALL BE TESTED THROUGH THEIR ENTIRE RANGE OF OPERATION FROM FULL COOLING TO FULL HEATING. DOCUMENT SUPPLY, RETURN AND OA TEMPERATURES AT FULL COOLING AND FULL HEATING.
3. ENTIRE ELECTRIC/GAS UNIT SHALL BE RECOMMISSIONED, REFURBISHED AND RECHARGED IN ORDER TO ACHIEVE TO THEIR ORIGINAL FACTORY PERFORMANCE. ALL WORK SHALL BE DONE BY FACTORY AUTHORIZED TECHNICIAN. PROVIDE ALL LABOR AND MATERIAL REQUIRED TO BRING THE UNITS TO PERFORM AT THEIR INTENDED DESIGN.
4. RE-CALIBRATE CONTROLS.
5. PROVIDE NEW FILTERS.

SHEET NOTES:

1. REFRIGERANT LINES & CONTROL WIRING DOWN TO FAN COIL UNITS. PROVIDE EMT CONDUIT TO RUN CONTROL WIRING BETWEEN FAN COIL UNITS AND CONDENSER UNIT. RUN CONDUITS ADJACENT TO REFRIGERANT LINES.
2. CONDENSER UNIT SHALL BE SECURED TO WOODEN SLEEPERS WITH BOLTS AND ANGLE IRONS. COORDINATE MOUNTED POINTS WITH MANUFACTURER. PROVIDE MASON SLR SPRING ISOLATORS WITH 1" DEFLECTION. EXACT LOCATION OF UNIT SHALL BE FIELD VERIFIED AND COORDINATED WITH OTHER TRADES. SEE DETAIL 3/1M3.0.2 FOR WOODEN SLEEPER MOUNTING DETAIL.
3. PROVIDE DURA BLOCK SUPPORTS FOR REFRIGERANT PIPING, & CONDUITS. NUMBER AND EXACT LOCATION OF SUPPORTS SHALL BE COORDINATED IN FIELD.
4. PROVIDE INSULATION FOR ENTIRE LENGTH OF REFRIGERANT LINES. PROVIDE ALUMINUM JACKET AROUND REFRIGERANT LINES AND INSULATION TO PROTECT EXTERIOR PIPING.
5. SEAL ROOF PENETRATION WATER-TIGHT.
6. REMOVE EXISTING AC UNIT AND ASSOCIATED GAS LINE & DRAIN PIPE. PATCH ROOF OPENINGS. CAP EXISTING ROOF CURB WATER & AIR TIGHT WITH 20 GAUGE SHEET METAL CAP.
7. PROVIDE 2" DEEP GALVANIZED SHEET METAL DRAIN PAN WITH 1" DRAIN. PIPE DRAIN LINE TO THE NEAREST ROOF RECEPTOR.
8. REMOVE EXISTING EXHAUST FAN & CAP EXISTING ROOF CURB OPENING.
9. 10ø OUTSIDE AIR INTAKE GREENHECK MODEL GRS-10 WITH BUILT-IN ROOF CAP. PROVIDE MATCHING ROOF CURB. PROVIDE FLASHING AND COUNTERFLASHING TO MAKE THE ENTIRE ASSEMBLY WATER PROOF.
10. 12ø OUTSIDE AIR INTAKE GREENHECK MODEL GRS-12 WITH BUILT-IN ROOF CAP. PROVIDE MATCHING ROOF CURB. PROVIDE FLASHING AND COUNTERFLASHING TO MAKE THE ENTIRE ASSEMBLY WATER PROOF.



2 MECHANICAL DEMOLITION PLAN

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

RICHMOND LAKESIDE
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909 Montgomery St., Suite 260
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T 415 546 1212 brereton.com

Stamp

REGISTERED PROFESSIONAL ENGINEER
AMIT WADHWA
M30894
EXP. 12/31/20
MECHANICAL
STATE OF CALIFORNIA

Consultant

Amit Wadhwa & Associates
Engineers
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19036

Issue/Revision:

No.	Proj. No. Date:	Description
1	32243.01 29MAR19	ISSUE FOR REVIEW
2	32243.01 22APR19	ISSUE FOR PERMIT
2.1	32243.01 24MAY19	PLAN CHECK RESPONSE ADDENDUM #3

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All drawings and written material appearing herein constitute original and unpublished original work of the architect and may not be duplicated, used, or disclosed without prior written consent of the architect.

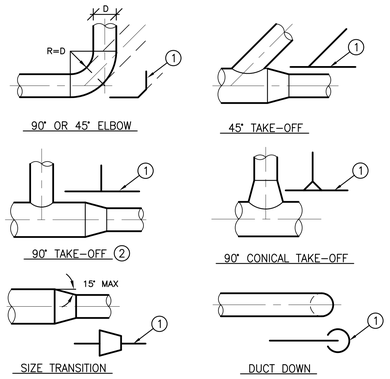
Approval Signature:

Co/ Title: Date:

MECHANICAL ROOF PLAN

Scale: 1/8"=1'-0" Issue Date: 22APR19
Drawn By: PT Reviewed By: AW
Sheet: 8 of X

1M2.1.1

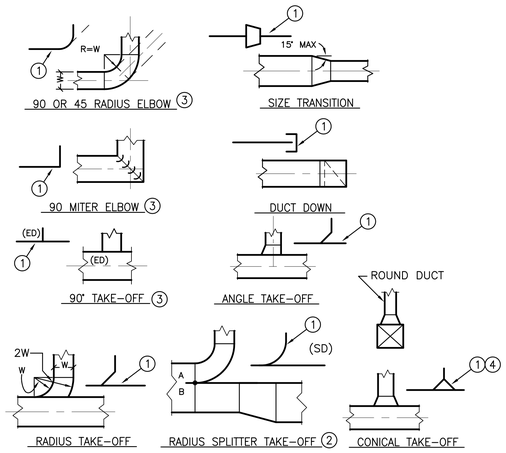


NOTES:

1. SINGLE-LINE ILLUSTRATIONS ARE SYMBOLS USED ON DRAWINGS.
2. FOR LOW PRESSURE SYSTEM ONLY.

1 ROUND DUCT DETAILS

SCALE: NONE

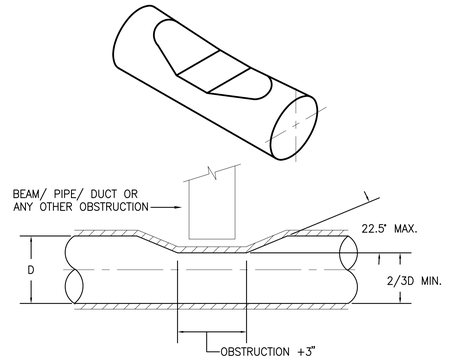


NOTES:

1. SINGLE-LINE ILLUSTRATIONS ARE SYMBOLS USED ON DRAWINGS.
2. SIZE A & B DIMENSIONS IN PROPORTION TO AIR QUANTITIES IN EACH LEG SPLIT.
3.
4. FOR LOW PRESSURE SYSTEM ONLY. CONICAL CONNECTION SHALL INCORPORATE SIDE FLARE THAT IS 3" LARGER THAN THE DUCT WIDTH/ DIAMETER ON EITHER SIDE.

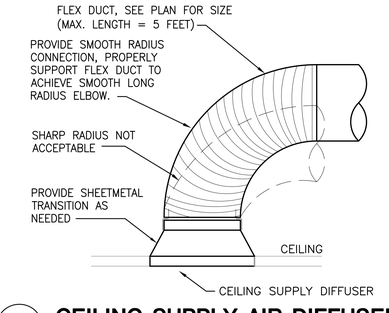
2 RECTANGULAR DUCT DETAILS

SCALE: NONE



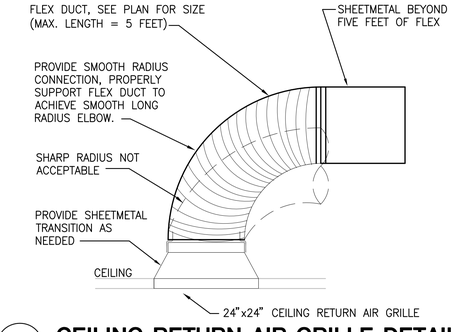
3 DUCT SLICE FITTING DETAIL

SCALE: NONE



4 CEILING SUPPLY AIR DIFFUSER DETAIL

SCALE: NONE



5 CEILING RETURN AIR GRILLE DETAIL

SCALE: NONE

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Issue/Revision:

No.	Proj. No. Date:	Description
1	32243.01	ISSUE FOR REVIEW 29MAR19
2	32243.01	ISSUE FOR PERMIT 22APR19
2.1	32243.01	PLAN CHECK RESPONSE 24MAY19 ADDENDUM #3

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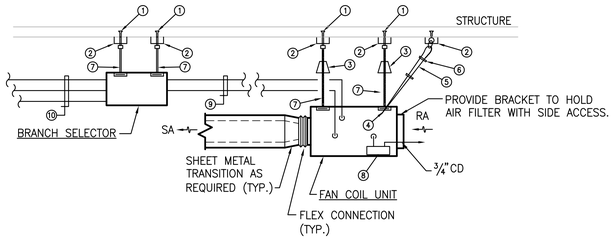
Approval Signature:

Co/ Title: Date:

MECHANICAL DETAILS

Scale: NONE Issue Date: 22APR19
Drawn By: PT Reviewed By: AW
Sheet: 9 of 15

1M3.0.1



NOTE:

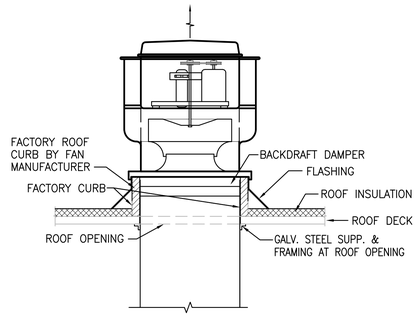
1. ALL SUPPORT COMPONENT SIZES AND MINIMUM BOLT EMBEDMENT SHALL BE BY MANUFACTURE'S INSTRUCTIONS OR CALCULATED BY A REGISTERED STRUCTURAL ENGINEER BASED ON UNIT WEIGHT.
2. INSTALL BRANCH SELECTOR AND FAN COIL UNIT PER MANUFACTURE'S INSTRUCTION.
3. FAN COIL UNIT MAINTENANCE ACCESS IS AT THE BOTTOM OF THE UNIT. FOR UNITS INSTALL ABOVE CEILING STRUCTURE PROVIDE SHUT–OFF VALVES AND UNION FITTINGS TO DISCONNECT REFRIGERANT LINES TO LIFT UP UNIT. ALSO PROVIDE DUCT CONNECTION AT FLEXIBLE DUCT TO ALLOW FOR DISCONNECTION.

DETAIL NOTES:

① STRUCTURAL ENGINEER HIRED BY THE CONTRACTOR TO ESTABLISH CONNECTION TYPE.
② UNISTRUT OR "L" ANGLE IRON
③ MASON VIBRATION ISOLATORS
④ "Z" SHAPED BRACKET
⑤ SEISMIC BRACE CABLE (TENSION CABLE ONLY TO REMOVE SLACK)(TYPICAL OF 4)
⑥ U–BOLT CLIPS
⑦ THREADED ROD (TYPICAL OF 4)
⑧ CONDENSATE PUMP(LIMITED HEAD, ONLY TO RAISE DRAIN LINE TO MEET SLOPE)
⑨ 2–PIPE (LIQUID, GAS) BETWEEN BRANCH SELECTOR AND FAN COIL UNIT. PIPE SIZE AND REQUIRED ACCESSORIES PER MANUFACTURER'S RECOMMENDATIONS.
⑩ 3–PIPE (LIQUID, SUCTION GAS, DISCHARGE GAS) BETWEEN CONDENSING UNIT AND BRANCH SELECTOR. PIPE SIZE AND REQUIRED ACCESSORIES PER MANUFACTURER'S RECOMMENDATIONS.
⑪ PROVIDE SHUT–OFF VALVES FOR EACH FAN COIL UNITS LOCATED ABOVE AND SUPPORTED BY CEILING STRUCTURE.
⑫ PROVIDE UNION FITTINGS FOR EACH FAN COIL UNITS LOCATED ABOVE AND SUPPORTED BY CEILING STRUCTURE.

1 FAN COIL UNIT (FC) AND BRANCH SELECTOR INSTALLATION DETAIL

SCALE: NONE

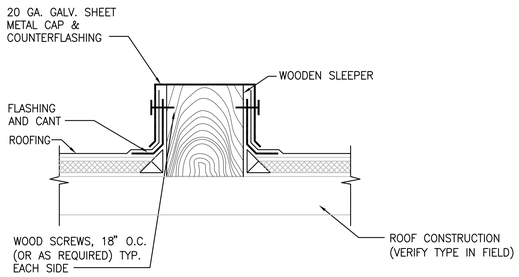


NOTES:

1. INTENT ONLY IS DEPICTED HERE. ACTUAL ROOF/ ROOFING CONDITION MAY VARY. COORDINATE IN FIELD AND PROVIDE COMPATIBLE ASSEMBLY.

2 ROOF EXHAUST FAN INSTALLATION DETAIL

SCALE: NONE

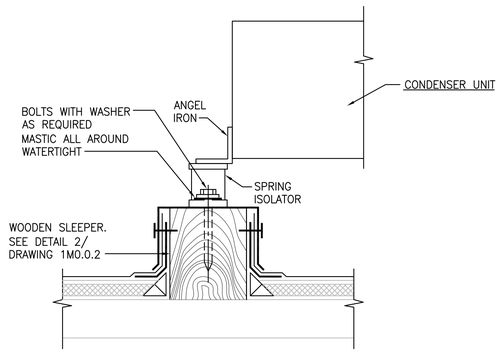


NOTES:

1. ROOF SLOPES. PROVIDE ADDITIONAL HARDWARE AS REQUIRED FOR FULLY HORIZONTAL INSTALLATION.
2. INTERFACING WITH EXISTING ROOFING SHALL BE FIELD COORDINATED. HIRE ROOFING CONTRACTOR FOR ASSOCIATED ROOFING WORK. ASSEMBLY SHALL BE TOTALLY WATER PROOF.
3. INTENT ONLY IS DEPICTED HERE. ACTUAL ROOF / ROOFING CONDITION MAY VARY. COORDINATE IN FIELD AND PROVIDE COMPATIBLE ASSEMBLY.

3 WOODEN SLEEPER MOUNTING DETAIL

SCALE: N.T.S.

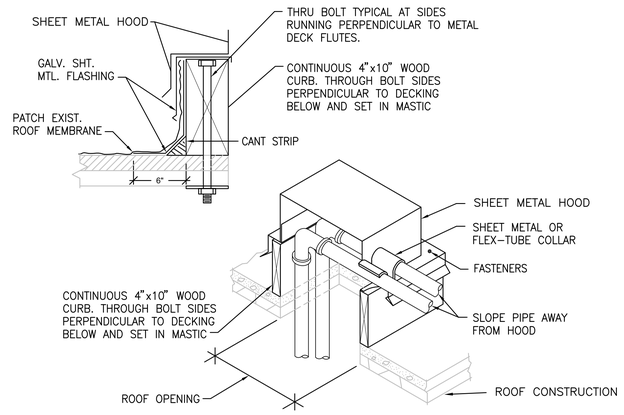


NOTES:

1. FOR NUMBER AND PLACEMENT OF UNIT'S MOUNTING LUGS COORDINATE WITH UNIT MANUFACTURER.
2. ROOF SLOPES. PROVIDE ADDITIONAL HARDWARE AS REQUIRED FOR FULLY HORIZONTAL INSTALLATION.
3. INTERFACING WITH EXISTING ROOFING SHALL BE FIELD COORDINATED. HIRE ROOFING CONTRACTOR FOR ASSOCIATED ROOFING WORK. ASSEMBLY SHALL BE TOTALLY WATER PROOF.
4. INTENT ONLY IS DEPICTED HERE. ACTUAL ROOF / ROOFING CONDITION MAY VARY. COORDINATE IN FIELD AND PROVIDE COMPATIBLE ASSEMBLY.

4 CONDENSER UNIT MOUNTING DETAIL

SCALE: NONE



NOTES:

1. ROOF SLOPES. PROVIDE ADDITIONAL HARDWARE AS REQUIRED FOR FULLY HORIZONTAL INSTALLATION.

5 PIPE ROOF PENERATION

SCALE: NONE

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Issue/Revision:

No.	Proj. No. Date:	Description
1	32243.01 29MAR19	ISSUE FOR REVIEW
2	32243.01 22APR19	ISSUE FOR PERMIT
2.1	32243.01 24MAY19	PLAN CHECK RESPONSE ADDENDUM #3

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Approval Signature:

Co/ Title: Date:

MECHANICAL DETAILS

Scale: NONE Issue Date: 22APR19
Drawn By: PT Reviewed By: AW
Sheet: 10 of 15

1M3.0.2

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

CERTIFICATE OF COMPLIANCE	NRCC-MCH-01-E
Mechanical Systems	Page 1 of 4
Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT	Date Prepared: 4/15/19

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

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

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

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

CERTIFICATE OF COMPLIANCE	NRCC-MCH-01-E
Mechanical Systems	Page 2 of 4
Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT	Date Prepared: 4/15/19

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

Test Performed By:

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

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

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

Test Description		MCH-02-A	MCH-03-A	MCH-04-A	MCH-05-A	MCH-06-A	MCH-07-A	MCH-08-A	MCH-09-A	MCH-10-A	MCH-11-A
Equipment Requiring Testing or Verification	# of Units	Outdoor Air	Single Zone Unitary	Air Distribution Ducts	Economizer Controls	Demand Controlled Ventilation (DCV)	Supply Fan VAV	Valve Leakage Test	Supply Water Temp. Reset	Hydronic System Variable Flow Control	Automatic Demand Shed Control
FAN COIL UNITS	6 (1)	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐

Add Row | Remove Last

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

CERTIFICATE OF COMPLIANCE	NRCC-MCH-01-E
Mechanical Systems	Page 3 of 4
Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT	Date Prepared: 4/15/19

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

Test Performed By:

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

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

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

Test Description		MCH-12-A	MCH-13-A	MCH-14-A	MCH-15-A	MCH-16-A	MCH-17-A	MCH-18-A
Equipment Requiring Testing or Verification	# of Units	Fault Detection & Diagnostics for DX Units	Automatic Fault Detection & Diagnostics for Air & Zone	Distributed Energy Storage DX AC Systems	Thermal Energy Storage (TES) Systems	Supply Air Temperature Reset Controls	Condenser Water Reset Controls	ECMS
		☐	☐	☐	☐	☐	☐	☐

Add Row | Remove Last

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

CERTIFICATE OF COMPLIANCE	NRCC-MCH-01-E
Mechanical Systems	Page 4 of 4
Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT	Date Prepared: 4/15/19

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: AMIT WADHWA	Documentation Author Signature:
Company: AMIT WADHWA & ASSOCIATES	Signature Date:
Address: 870 MARKET STREET, SUITE 846	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: SAN FRANCISCO, CA 94102	Phone: (415) 788-9999

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: AMIT WADHWA	Responsible Designer Signature:
Company: AMIT WADHWA & ASSOCIATES	Date Signed:
Address: 870 MARKET STREET, SUITE 846	License: M30894
City/State/Zip: SAN FRANCISCO, CA 94102	Phone: (415) 788-9999

STATE OF CALIFORNIA
HVAC DRY & WET SYSTEM REQUIREMENTS
CEC-NRCC-MCH-02-E (Revised 01/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-02-E
HVAC Dry System Requirements	(Page 1 of 3)
Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT	Date Prepared: 4/15/19

A. Equipment Tags and System Description[1]- Dry Systems

MANDATORY MEASURES	*T-24 Sections*	FC 1-1 & 6 (2)	FC 1-2	FC 1-3
		Reference to the Requirements in the Contract Documents[2]		
Heating Equipment Efficiency[3]	110.1 or 110.2(a)	1M0.0.2	N/A	1M0.0.2
Cooling Equipment Efficiency[3]	110.1 or 110.2(a)	1M0.0.2	1M0.0.2	1M0.0.2
HVAC or Heat Pump Thermostats	110.2(b), 110.2(c)	PROGRAMMABLE	PROGRAMMABLE	PROGRAMMABLE
Furnace Standby Loss Control	110.2(d)	N/A	N/A	N/A
Low Leakage AHUs	110.2(f)	N/A	N/A	N/A
Ventilation[4]	120.1(b)	1M0.0.2	1M0.0.2	1M0.0.2
Demand Control Ventilation[5]	120.1(c)4	N/A	N/A	N/A
Occupant Sensor Ventilation Control[6]	120.1(c)5, 120.2(e)3	N/A	N/A	N/A
Shutoff and Reset Controls[7]	120.2(e)	N/A	N/A	N/A
Outdoor Air and Exhaust Damper Control	120.2(f)	1M2.0.1	N/A	1M2.0.1
Isolation Zones	120.2(g)	N/A	N/A	N/A
Automatic Demand Shed Controls	120.2(h)	N/A	N/A	N/A
Economizer FDD	120.2(i)	N/A	N/A	N/A
Duct Insulation	120.4	1M0.0.4	N/A	1M0.0.4
PRESCRIPTIVE MEASURES				
Equipment is sized in conformance with 140.4 (a & b)	140.4(a & b)	◉ Yes ○ No	◉ Yes ○ No	◉ Yes ○ No
Supply Fan Pressure Control	140.4(c)	N/A	N/A	N/A
Simultaneous Heat/Cool[8]	140.4(d)	N/A	N/A	N/A
Economizer	140.4(e)	N/A	N/A	N/A
Heat and Cool Air Supply Reset	140.4(f)	N/A	N/A	N/A
Electric Resistance Heating[9]	140.4(g)	N/A	N/A	N/A
Duct Leakage Sealing and Testing:[10]	140.4(l)	N/A	N/A	N/A

Notes:
1. *Provide equipment tags (e.g. AHU 1 to 10) and system description (e.g. Single Duct VAV reheat) as appropriate. Multiple units with common requirements can be grouped together.*
2. *Provide references to plans (i.e. Drawing Sheet Numbers) and/or specifications (including Section name/number and relevant paragraphs) where each requirement is specified. Enter "N/A" if the requirement is not applicable to this system.*
3. *The referenced plans and specifications must include all of the following information: equipment tag, equipment nominal capacity, Title 24 minimum efficiency requirements, and actual rated equipment efficiencies. Where multiple efficiency requirements are applicable (e.g. full- and part-load) include all. Where appliance standards apply (110.1), identify where equipment is required to be listed per Title 20 1601 et seq.*
4. *Identify where the ventilation requirements are documented for each central HVAC system. Include references to both central unit schedules and sequences of operation. If one or more spaces is naturally ventilated identify where this is documented in the plans and specifications. Multiple zone central air systems must also provide a MCH-03-E compliance document.*
5. *If one or more spaces has demand controlled ventilation identify where it is specified including the sensor specifications and the sequence of operation.*
6. *If one or more space has occupant sensor ventilation control identify where it is specified including the sensor specifications and the sequence of operation*
7. *If the system is DDC identify the sequences for the system start/stop, optimal start, setback (if required) and setup (if required). For all systems identify the specification for the thermostats and time clocks (if applicable).*
8. *Identify where the heating, cooling and deadband airflows are scheduled for this system. Include a reference to the specification of the zone controls. Provide a MCH-03-E compliance document.*
9. *Enter N/A if there is no electric heating. If the system has electric heating indicate which exception to 140.4(g) applies.*
10. *If duct leakage sealing and testing is required, a MCH-04-A compliance document must be submitted.*

STATE OF CALIFORNIA
HVAC DRY & WET SYSTEM REQUIREMENTS
CEC-NRCC-MCH-02-E (Revised 01/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-02-E
HVAC Dry System Requirements	(Page 1 of 3)
Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT	Date Prepared: 4/15/19

A. Equipment Tags and System Description[1]- Dry Systems

MANDATORY MEASURES	*T-24 Sections*	FC 1-4	FC 1-5	(E)AC-1
		Reference to the Requirements in the Contract Documents[2]		
Heating Equipment Efficiency[3]	110.1 or 110.2(a)	1M0.0.2	N/A	N/A
Cooling Equipment Efficiency[3]	110.1 or 110.2(a)	1M0.0.2	1M0.0.2	N/A
HVAC or Heat Pump Thermostats	110.2(b), 110.2(c)	PROGRAMMABLE	PROGRAMMABLE	PROGRAMMABLE
Furnace Standby Loss Control	110.2(d)	N/A	N/A	N/A
Low Leakage AHUs	110.2(f)	N/A	N/A	N/A
Ventilation[4]	120.1(b)	1M0.0.2	1M0.0.2	1M0.0.2
Demand Control Ventilation[5]	120.1(c)4	N/A	N/A	N/A
Occupant Sensor Ventilation Control[6]	120.1(c)5, 120.2(e)3	N/A	N/A	N/A
Shutoff and Reset Controls[7]	120.2(e)	N/A	N/A	N/A
Outdoor Air and Exhaust Damper Control	120.2(f)	1M2.0.1	N/A	EXISTING
Isolation Zones	120.2(g)	N/A	N/A	N/A
Automatic Demand Shed Controls	120.2(h)	N/A	N/A	N/A
Economizer FDD	120.2(i)	N/A	N/A	N/A
Duct Insulation	120.4	1M0.0.4	N/A	1M0.0.4
PRESCRIPTIVE MEASURES				
Equipment is sized in conformance with 140.4 (a & b)	140.4(a & b)	◉ Yes ○ No	◉ Yes ○ No	○ Yes ◉ No
Supply Fan Pressure Control	140.4(c)	N/A	N/A	N/A
Simultaneous Heat/Cool[8]	140.4(d)	N/A	N/A	N/A
Economizer	140.4(e)	N/A	N/A	N/A
Heat and Cool Air Supply Reset	140.4(f)	N/A	N/A	N/A
Electric Resistance Heating[9]	140.4(g)	N/A	N/A	N/A
Duct Leakage Sealing and Testing:[10]	140.4(l)	N/A	N/A	N/A

Notes:
1. *Provide equipment tags (e.g. AHU 1 to 10) and system description (e.g. Single Duct VAV reheat) as appropriate. Multiple units with common requirements can be grouped together.*
2. *Provide references to plans (i.e. Drawing Sheet Numbers) and/or specifications (including Section name/number and relevant paragraphs) where each requirement is specified. Enter "N/A" if the requirement is not applicable to this system.*
3. *The referenced plans and specifications must include all of the following information: equipment tag, equipment nominal capacity, Title 24 minimum efficiency requirements, and actual rated equipment efficiencies. Where multiple efficiency requirements are applicable (e.g. full- and part-load) include all. Where appliance standards apply (110.1), identify where equipment is required to be listed per Title 20 1601 et seq.*
4. *Identify where the ventilation requirements are documented for each central HVAC system. Include references to both central unit schedules and sequences of operation. If one or more spaces is naturally ventilated identify where this is documented in the plans and specifications. Multiple zone central air systems must also provide a MCH-03-E compliance document.*
5. *If one or more spaces has demand controlled ventilation identify where it is specified including the sensor specifications and the sequence of operation.*
6. *If one or more space has occupant sensor ventilation control identify where it is specified including the sensor specifications and the sequence of operation*
7. *If the system is DDC identify the sequences for the system start/stop, optimal start, setback (if required) and setup (if required). For all systems identify the specification for the thermostats and time clocks (if applicable).*
8. *Identify where the heating, cooling and deadband airflows are scheduled for this system. Include a reference to the specification of the zone controls. Provide a MCH-03-E compliance document.*
9. *Enter N/A if there is no electric heating. If the system has electric heating indicate which exception to 140.4(g) applies.*
10. *If duct leakage sealing and testing is required, a MCH-04-A compliance document must be submitted.*

STATE OF CALIFORNIA
HVAC DRY & WET SYSTEM REQUIREMENTS
CEC-NRCC-MCH-02-E (Revised 01/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-02-E
HVAC Dry & Wet System Requirements	(Page 2 of 3)
Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT	Date Prepared: 4/15/19

B. Equipment Tags and System Description[1]- Wet Systems

MANDATORY MEASURES	*T-24 Sections*	N/A		
		Reference to the Requirements in the Contract Documents[2]		
Heating Hot Water Equipment Efficiency[3]	110.1			
Cooling Chilled and Condenser Water Equipment Efficiency[3]	110.1, 140.4(i)			
Open and Closed Circuit Cooling Towers conductivity or flow-based controls	110.2(e) 1			
Open and Closed Circuit Cooling Towers Maximum Achievable Cycles of Concentration (LSI)[4]	110.2(e) 2			
Open and Closed Circuit Cooling Towers Flow Meter with analog output	110.2(e) 3			
Open and Closed Circuit Cooling Towers Overflow Alarm	110.2(e) 4			
Open and Closed Circuit Cooling Towers Efficient Drift Eliminators	110.2(e) 5			
Pipe Insulation	120.3			
PRESCRIPTIVE MEASURES				
Cooling Tower Fan Controls	140.4(h)2, 140.4(h)5	○ Yes ◉ No	○ Yes ○ No	○ Yes ○ No
Cooling Tower Flow Controls	140.4(h)3			
Centrifugal Fan Cooling Towers[4]	140.4(h)4			
Air-Cooled Chiller Limitation[5]	140.4(j)			
Variable Flow System Design	140.4(k)			
Chiller and Boiler Isolation	140.4(k)			
CHW and HHW Reset Controls	140.4(k)			
W.LHP Isolation Valves	140.4(k)			
VSD on CHW, CW & WLHP Pumps >5HP	140.4(k)			
DP Sensor Location	140.4(k)			

Notes:
1. *Provide equipment tags (e.g. CH 1 to 3) or system description (e.g. CHW loop) as appropriate. Multiple units with common requirements can be grouped together.*
2. *Provide references to plans (i.e. Drawing Sheet Numbers) and/or specifications (including Section name/number and relevant paragraphs) where each requirement is specified. Enter "N/A" if the requirement is not applicable to this system.*
3. *The referenced plans and specifications must include all of the following information: equipment tag, equipment nominal capacity, Title 24 minimum efficiency requirements, and actual rated equipment efficiencies. Where multiple efficiency requirements are applicable (e.g. full- and part-load) include all. For chillers operating at non-standard efficiencies provide the Kadj values. For chillers also note whether the efficiencies are Path A or Path B.*
4. *Identify if cooling towers have propeller fans. If towers use centrifugal fans document which exception is used.*
5. *If air-cooled chillers are used, document which exceptions have been used to comply with 140.4(j) and the total installed design capacity of the air-cooled chillers in the chilled water plant.*
6. *Identify the existence of a completed MCH-06-E when open or closed circuit cooling towers are specified to be installed, otherwise enter "N/A".*

STATE OF CALIFORNIA
HVAC SYSTEM REQUIREMENTS
CEC-NRCC-MCH-02-E (Revised 01/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-02-E
HVAC Wet System Requirements	(Page 3 of 3)
Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT	Date Prepared: 4/15/19

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: AMIT WADHWA	Documentation Author Signature:
Company: AMIT WADHWA & ASSOCIATES	Signature Date:
Address: 870 MARKET STREET, SUITE 846	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: SAN FRANCISCO, CA 94102	Phone: (415) 788-9999

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: AMIT WADHWA	Responsible Designer Signature:
Company: AMIT WADHWA & ASSOCIATES	Date Signed:
Address: 870 MARKET STREET, SUITE 846	License: M30894
City/State/Zip: SAN FRANCISCO, CA 94102	Phone: (415) 788-9999

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TENANT IMPROVEMENT

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REGISTERED PROFESSIONAL ENGINEER
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M30894
EXP. 12/31/20
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Issue/Revision:

No.	Proj. No. Date:	Description
1	32243.01	ISSUE FOR REVIEW
	29MAR19	
2	32243.01	ISSUE FOR PERMIT
	22APR19	
2.1	32243.01	PLAN CHECK RESPONSE
	24MAY19	ADDENDUM #3

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Approval Signature:

Co./ Title: Date:

MECHANICAL
TITLE 24

Scale: NONE Issue Date: 22APR19
Drawn By: PT Reviewed By: AW
Sheet: 11 of 15

1TM4.0.1

STATE OF CALIFORNIA
MECHANICAL VENTILATION AND REHEAT
CEC-NRCC-MCH-03-E (Revised 05/18)

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — **NRCC-MCH-03-E**

MECHANICAL VENTILATION AND REHEAT — Page 1 of 2

PROJECT NAME: RICHMOND LAKESIDE TENANT IMPROVEMENT — DATE PREPARED: 4/15/19

A. MECHANICAL VENTILATION AND REHEAT

In lieu of this compliance document,the required outdoor ventilation rates and airflow s may be show n on the plans or the calculations can be presented in a spreadsheet.Mechanical Ventilation and Reheat w orksheet available on the Energy Commission's w ebsite at: http://w w w. energy. ca. gov/title24/2016standards/.

Note: In all of the calculations that compare a supply quantity to the REQ'D V A. quantity,the actual percentage of outdoor air in the supply is ignored.

Areas in buildings for w hich natural ventilation is used should be clearly designated. Specifications must require that building operating instructions include explanations of the natural ventilation system.

ACTUAL DESIGN INFO (FROM EQUIPMENT SCHEDULES, ETC.)						AREA BASIS			OCCUPANCY BASIS			ROOM BASIS	MINIMUM		VAV Reheated Primary Air CFM			VAV Deadband Primary Air CFM		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
ZONE/SYSTEM/VAV BOX TAG	DESIGN PRIMARY COOLING AIRFLOW (CFM)	DESIGN PRIMARY DEADBAND AIRFLOW (CFM)	DESIGN PRIMARY HEATING AIRFLOW (CFM)	CONTROL TYPE DDC (Y/N)	TRANSFER AIRFLOW (CFM)	CONDITIONED AREA (ft²)	MIN CFM PER AREA (CFM/ ft²)	MIN CFM BY AREA (CFM)	NUM. OF PEOPLE	CFM PER PERSON	MIN CFM BY OCCUPANT (CFM)	MIN CFM BY ROOM (CFM)	REQ'D VENTILATION AIRFLOW (CFM)	COMPLIES?	BASED DESIGN PRIMARY COOLING AIR	MAXIMUM REHEAT (CFM)	COMPLIES?	PRIMARY COOLING AIR	AIRFLOW	COMPLIES?
FC 1-1	1,375	1,375	1,375	DDC	0	690	0.15	104	17	15	255	N/A	255	Y	688	688	N	275	275	Y
FC 1-2	635	635	635	DDC	0	295	0.15	44	1	15	15	N/A	44	Y	318	318	N	127	127	Y
FC 1-3	1,080	1,080	1,080	DDC	0	654	0.15	98	6	15	90	N/A	98	Y	540	540	N	216	216	Y
FC 1-4	685	685	685	DDC	0	495	0.15	74	10	15	150	N/A	150	Y	343	343	N	137	150	Y
FC 1-5	635	635	635	DDC	0	140	0.15	21	1	15	15	N/A	21	Y	318	318	N	127	127	Y
FC 1-6	1,090	1,090	1,090	DDC	0	550	0.15	83	15	15	225	N/A	225	Y	545	545	N	218	225	Y
AC-1	5,500	5,415	5,415	DDC	0	3,165	0.15	475	28	15	420	N/A	478	Y	2,750	2,750	N	1,100	1,100	Y

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance — May 2016

NOTE:

1. EXISTING AC−1 & NEW FC 1−1 THRU −6 ARE A CONSTANT VOLUME SYSTEM.
2. CALCULATIONS ARE FOR VENTILATION AIR ONLY. REHEAT CALCULATIONS DOES NOT APPLY.

STATE OF CALIFORNIA
MECHANICAL VENTILATION AND REHEAT
CEC-NRCC-MCH-03-E (Revised 05/18) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — NRCC-MCH-03-E

Mechanical Ventilation & Reheat — Page 2 of 2

Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT — Date Prepared: 4/15/19

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: AMIT WADHWA — Documentation Author Signature:

Company: AMIT WADHWA & ASSOCIATES — Signature Date:

Address: 870 MARKET STREET, SUITE 846 — CEA/ HERS Certification Identification (if applicable):

City/State/Zip: SAN FRANCISCO, CA 94102 — Phone: (415) 788-9999

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: AMIT WADHWA — Responsible Designer Signature:

Company: AMIT WADHWA & ASSOCIATES — Date Signed:

Address: 870 MARKET STREET, SUITE 846 — License: M30894

City/State/Zip: SAN FRANCISCO, CA 94102 — Phone: (415) 788-9999

CA Building Energy Efficiency Standards - 2013 Nonresidential Compliance — May 2016

STATE OF CALIFORNIA
OUTDOOR AIR ACCEPTANCE
CEC-NRCA-MCH-02-A (Revised 07/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF ACCEPTANCE — NRCA-MCH-02-A

Outdoor Air Acceptance — (Page 1 of 3)

Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT — Enforcement Agency: — Permit Number:

Project Address: 4114 LAKESIDE DRIVE — City: RICHMOND — Zip Code: 94806

System Name or Identification/Tag: FC — System Location or Area Served: 1ST FLOOR

Note: Submit one Certificate of Acceptance for each system that mass demonstrate compliance. — Enforcement Agency Use: Checked by/Date

Intent: *Verify measured outside airflow reading is within 10% of the total required outside airflow. Required for all newly installed HVAC units. Reference MCH-03 (Column 14) or Mechanical Equipment Schedules.*

A. Construction Inspection

Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap.

1. Supporting documentation needed to perform test includes:
   a. As-built and/or design documents (for example, Mechanical Equipment Schedules, Equipment Start-Up Sheets or Balancing Reports).
   b. 2016 Building Energy Efficiency Standards Nonresidential Compliance Manual *(NA7.5.1.1 Ventilation Systems: Variable Air Systems At-A-Glance and NA7.5.1.2 Constant Volume Systems Outdoor Air Acceptance At-A-Glance).*
   c. 2016 Building Energy Efficiency Standards.
2. Instrumentation needed to perform test includes:
   a. Watch
   b. Calibrated means to measure airflow (i.e. hot-wire anemometer, velocity pressure probe, etc.).
      i. Method and equipment used:_____
      ii. Equipment calibration date (must be within one year):_____
3. System type (check either VAV or CAV): ☐ VAV ☐ CAV
   a. Check if Variable Air Volume (VAV) and complete the following:
      i. Outside airflow is either factory calibrated or field calibrated.
         ☐ Check if factory calibrated and attach calibration certification.
         ☐ Check if field calibrated and attach calibration results.
      ii. Damper Control (must be checked):
         ☐ Dynamic damper control is being used to control outside air. (This is NOT a fixed minimum position).
      iii. One of the following dynamic controls is being utilized to control outside air (check method used)
         ☐ Outdoor Air CFM Compensation
         ☐ Energy Balance Method
         ☐ Demand Control Ventilation
         ☐ Return Fan Tracking
         ☐ Injection Fan Method
         ☐ Dedicated Minimum Ventilation Damper with Pressure Control
         ☐ Other Active Control, Describe: _____
   b. Check if Constant Air Volume (CAV) and verify the following:
      ☐ System is designed to provide a fixed minimum OSA when the unit is on.
4. Method of delivering outside air to the unit (check one of the following):
   ☐ Outside air is ducted to the return air plenum. Confirm that outside air is ducted to within (check one of the following):
      ☐ 5 ft. of the unit.
      ☐ 15 ft. of the unit, with the air directed substantially toward the unit.
   ☐ Return air plenum is NOT used to distribute outside air to the unit. (i.e. outside air is ducted directly to the unit; outside air is provided independent of the unit, or economizer)
5. Pre-occupancy purge has been programmed for the 1-hour period immediately before the building is normally occupied to provide (one of the following methods must be verified and checked):
   ☐ The conditioned floor area times the ventilation rate from the 2016 Building Energy Efficiency Standards TABLE 120.1-A, or 15 cfm per person times the expected number of occupants, whichever is greater.
   ☐ Complete air changes to the zone served by the air handler.

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance — July 2016

STATE OF CALIFORNIA
OUTDOOR AIR ACCEPTANCE
CEC-NRCA-MCH-02-A (Revised 07/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF ACCEPTANCE — NRCA-MCH-02-A

Outdoor Air Acceptance — (Page 2 of 3)

Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT — Enforcement Agency: — Permit Number:

Project Address: 4114 LAKESIDE DRIVE — City: RICHMOND — Zip Code: 94806

System Name or Identification/Tag: FC — System Location or Area Served: 1ST FLOOR

B. NA7.5.1.1 Outdoor Air Acceptance Functional Testing

		CAV	VAV
Step 1: Disable demand control ventilation (if applicable)		☐	☐
Step 2: Verify unit is not in economizer mode during test (economizer disabled)		☐	☐
Note: Shaded boxes do not apply for CAV systems			
Step 3: CAV and VAV testing at full supply airflow			
a.	Adjust supply air to achieve design airflow or maximum airflow at full cooling. Record VFD speed (Hz).		Hz
b.	Measured outdoor airflow reading (cfm)	cfm	cfm
c.	Required outdoor airflow (cfm) *(from MCH-03, Column 14, or Mechanical Equipment Schedules).*	cfm	cfm
d.	Time for outside air damper to stabilize after full supply airflow is achieved (minutes):		min
Step 4: VAV testing at reduced supply airflow		**CAV**	**VAV**
a.	Adjust supply airflow to either the sum of the minimum zone airflows, full heating, or 30% of the total design airflow. Record VFD speed (Hz).		Hz
b.	Measured outdoor airflow reading (cfm).		cfm
c.	Required outdoor airflow (cfm) *(from MCH-03, Column 14, or Mechanical Equipment Schedules).*		cfm
d.	Time for outside air damper to stabilize after reduced supply airflow is achieved (minutes):		min
Step 5: Return to initial conditions (check)		☐	☐

C. Testing Calculations & Results

Determine Percent Outside Air at full supply airflow ($\%OA_{Ps}$) for Step 3.

a.	$\%OA_{Ps}$ = Measured outdoor airflow reading /Required outdoor airflow. (Step3b/Step3c)	%	%
b.	$\%OA_{Ps}$ is within 10% of design Outside Air. (90% ≤ $\%OA_{Ps}$ ≤ 110%)	Yes ○ No ○	Yes ○ No ○
c.	Outside air damper position stabilizes within 5 minutes. (Step 3d < 5 minutes)		Yes ○ No ●

Determine Percent Outside Air at reduced supply airflow ($\%OA_{Pv}$) for Step 4. (VAV only)

a.	$\%OA_{Pv}$ = Measured outdoor airflow reading /Required outdoor airflow reading. (Step4b/Step4c)		%
b.	$\%OA_{Pv}$ is within 10% of design Outside Air. (90% ≤ $\%OA_{Pv}$ ≤ 110%)		Yes ○ No ○
c.	Outside air damper position stabilizes within 5 minutes. (Step 4d < 5 minutes)		Yes ○ No ○

Note: The intent of this test is to ensure that 1) all air handlers provide the minimum amount of OSA and 2) VAV air handlers use dynamic controls to avoid over ventilation.

D. Evaluation

☐ PASS: All Construction Inspection responses are complete and Testing Calculations & Results responses are positive.

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance — July 2016

STATE OF CALIFORNIA
OUTDOOR AIR ACCEPTANCE
CEC-NRCA-MCH-02-A (Revised 07/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF ACCEPTANCE — NRCA-MCH-02-A

Outdoor Air Acceptance — (Page 3 of 3)

Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT — Enforcement Agency: — Permit Number:

Project Address: 4114 LAKESIDE DRIVE — City: RICHMOND — Zip Code: 94806

System Name or Identification/Tag: FC — System Location or Area Served: 1ST FLOOR

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: AMIT WADHWA — Documentation Author Signature:

Documentation Author Company Name: AMIT WADHWA & ASSOCIATES — Date Signed:

Address: 870 MARKET STREET, SUITE 846 — ATT Certification Identification (if applicable):

City/State/Zip: SAN FRANCISCO, CA 94102 — Phone: (415) 788-9999

FIELD TECHNICIAN'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 Acceptance is true and correct.
2. I am the person who performed the acceptance verification reported on this Certificate of Acceptance (Field Technician).
3. The construction or installation identified on this Certificate of Acceptance complies with the applicable acceptance requirements indicated in the plans and specifications approved by the enforcement agency, and conforms to the applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7.
4. I have confirmed that the Certificate(s) of Installation for the construction or installation identified on this Certificate of Acceptance has been completed and signed by the responsible builder/installer and has been posted or made available with the building permit(s) issued for the building.

Field Technician Name: — Field Technician Signature:

Field Technician Company Name: — Position with Company (Title):

Address: — ATT Certification Identification (if applicable):

City/State/Zip: — Phone: — Date Signed:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. I am the Field Technician, or the Field Technician is acting on my behalf as my employee or my agent and I have reviewed the information provided on this Certificate of Acceptance.
2. I am eligible under Division 3 of the Business and Professions Code in the applicable classification to accept responsibility for the system design, construction or installation of features, materials, components, or manufactured devices for the scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement (responsible acceptance person).
3. The information provided on this Certificate of Acceptance substantiates that the construction or installation identified on this Certificate of Acceptance complies with the acceptance requirements indicated in the plans and specifications approved by the enforcement agency, and conforms to the applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7.
4. I have confirmed that the Certificate(s) of Installation for the construction or installation identified on this Certificate of Acceptance has been completed and is posted or made available with the building permit(s) issued for the building.
5. I will ensure that a completed, signed copy of this Certificate of Acceptance shall be posted, or 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 signed copy of this Certificate of Acceptance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Acceptance Person Name: — Responsible Acceptance Person Signature:

Responsible Acceptance Person Company Name: — Position with Company (Title):

Address: — CSLB License:

City/State/Zip: — Phone: — Date Signed:

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance — July 2016

RICHMOND LAKESIDE
TENANT IMPROVEMENT

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REGISTERED PROFESSIONAL ENGINEER — AMIT WADHWA — M30894 EXP. 12/31/20 — MECHANICAL — STATE OF CALIFORNIA

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Issue/Revision:

No.	Proj. No. Date:	Description
1	32243.01	ISSUE FOR REVIEW 29MAR19
2	32243.01	ISSUE FOR PERMIT 22APR19
2.1	32243.01	PLAN CHECK RESPONSE 24MAY19 ADDENDUM #3

Copyright Statement:
All drawings and written material appearing herein constitute original and unpublished original work of the architect and may not be duplicated, used, or disclosed without prior written consent of the architect.

Approval Signature:

Co/ Title: Date:

MECHANICAL
TITLE 24

Scale: NONE Issue Date: 22APR19
Drawn By: PT Reviewed By: AW
Sheet: 12 of 15

1TM4.0.2

STATE OF CALIFORNIA
CONSTANT VOLUME, SINGLE ZONE, UNITARY (PACKAGED AND SPLIT) AIR CONDITIONER AND HEAT PUMP SYSTEMS
CEC-NRCA-MCH-03-A (Revised 07/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF ACCEPTANCE		NRCA-MCH-03-A
Constant Volume, Single Zone, Unitary (Packaged and Split) Air Conditioner and Heat Pump Systems		Page 1 of 3
Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT	Enforcement Agency:	Permit Number:
Project Address: 4114 LAKESIDE DRIVE	City: RICHMOND	Zip Code: 94806
System Name or Identifier(s)/Tag: VRV SYSTEM	System Location or Area Served: 1ST FLOOR	

Note: Submit one Certificate of Acceptance for each system that must demonstrate compliance. | Enforcement Agency Use: Checked by/Date

A. Construction Inspection

1. Supporting documentation needed to perform test includes, but not limited to:
   a. 2016 Building Energy Efficiency Standards Nonresidential Compliance Manual *(NA7.5.2 Constant Volume, Single-zone, Unitary Air Conditioner and Heat Pumps Systems Acceptance At-A-Glance)*.
   b. 2016 Building Energy Efficiency Standards Manual.
2. Instrumentation to perform test may include:
   a. Temperature Meter
   b. Amp Meter
3. Installation (check if applies):
   ☐ Thermostat is located within the space-conditioning zone that is served by the HVAC system.
4. Programming (check all those that apply):
   ☐ Thermostat meets the temperature adjustment and dead band requirements of 2016 Building Energy Efficiency Standards Manual Section 120.2(b).
   Minimum heating setpoint: _____°F. Maximum cooling setpoint _____°F. Deadband: _____°F.
   ☐ Occupied, unoccupied, and holiday schedules have been programmed per the schedule provided.
   ☐ Pre-occupancy purge has been programmed to meet the requirements of 2016 Building Energy Efficiency Standards Manual Section 120.1(c)2.
   1.. Check method used to determine pre-occupancy purge:
      ☐ Lesser of: conditioned floor area times ventilation rate from 2016 Building Energy Efficiency Standards TABLE 120.1-A or 15cfm per person times the expected number of occupants.
      ☐ 3 complete air changes.

Notes:

STATE OF CALIFORNIA
CONSTANT VOLUME, SINGLE ZONE, UNITARY (PACKAGED AND SPLIT) AIR CONDITIONER AND HEAT PUMP SYSTEMS
CEC-NRCA-MCH-03-A (Revised 07/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF ACCEPTANCE		NRCA-MCH-03-A
Constant Volume, Single Zone, Unitary (Packaged and Split) Air Conditioner and Heat Pump Systems		Page 2 of 3
Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT	Enforcement Agency:	Permit Number:
Project Address: 4114 LAKESIDE DRIVE	City: RICHMOND	Zip Code: 94806
System Name or Identifier(s)/Tag: VRV SYSTEM	System Location or Area Served: 1ST FLOOR	

B. Functional Testing Requirements

Operating Modes	8	7	6	5	4	3	2
Step 1: Disable economizer control and demand-controlled ventilation (if applicable) to prevent unexpected interactions.							
Occupied Mode							
Step 2: Heating load during occupied condition							
Step 3: No-load during occupied condition							
Step 4: Cooling load during occupied condition							
Unoccupied Mode							
Step 5: No-load during unoccupied condition							
Step 6: Heating load during unoccupied condition							
Step 7: Cooling load during unoccupied condition							
Step 8: Manual override							
Step 2 – 8: Check and verify the following for each simulation mode required							
a. Supply fan operates continually							
b. Supply fan turns off							
c. Supply fan cycles on and off							
d. System reverts to "occupied" mode to satisfy any condition							
e. System turns off when manual override time period expires							
f. Gas-fired furnace, heat pump, or electric heater stages on							
g. No heating is provided by the unit							
h. No cooling is provided by the unit							
i. Compressor stages on							
j. Outside air damper is open to minimum position							
k. Outside air damper closes completely							
Step 9: System returned to initial operating conditions after all tests have been completed:	Yes ○		No ○				

C. Testing Results

Indicate if Passed (P), Failed (F), or N/A (X), fill in appropriate letter	8	7	6	5	4	3	2

D. Evaluation

☐ PASS: **All Construction Inspection** responses are complete and all applicable **Testing Results** responses are "Pass" (P).

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance July 2016

STATE OF CALIFORNIA
CONSTANT VOLUME, SINGLE ZONE, UNITARY (PACKAGED AND SPLIT) AIR CONDITIONER AND HEAT PUMP SYSTEMS
CEC-NRCA-MCH-03-A (Revised 07/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF ACCEPTANCE		NRCA-MCH-03-A
Constant Volume, Single Zone, Unitary (Packaged and Split) Air Conditioner and Heat Pump Systems		Page 3 of 3
Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT	Enforcement Agency:	Permit Number:
Project Address: 4114 LAKESIDE DRIVE	City: RICHMOND	Zip Code: 94806
System Name or Identifier(s)/Tag: VRV SYSTEM	System Location or Area Served: 1ST FLOOR	

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: AMIT WADHWA	Documentation Author Signature:
Documentation Author Company Name: AMIT WADHWA & ASSOCIATES	Date Signed:
Address: 870 MARKET STREET, SUITE 846	ATT Certification Identification (If applicable):
City/State/Zip: SAN FRANCISCO, CA 94102	Phone: (415) 788-9999

FIELD TECHNICIAN'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 Acceptance is true and correct.
2. I am the person who performed the acceptance verification reported on this Certificate of Acceptance (Field Technician).
3. The construction or installation identified on this Certificate of Acceptance complies with the applicable acceptance requirements indicated in the plans and specifications approved by the enforcement agency, and conforms to the applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7.
4. I have confirmed that the Certificate(s) of Installation for the construction or installation identified on this Certificate of Acceptance has been completed and signed by the responsible builder/installer and has been posted or made available with the building permit(s) issued for the building.

Field Technician Name:	Field Technician Signature:	
Field Technician Company Name:	Position with Company (Title):	
Address:	ATT Certification Identification (If applicable):	
City/State/Zip:	Phone:	Date Signed:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:
1. I am the Field Technician, or the Field Technician is acting on my behalf as my employee or my agent and I have reviewed the information provided on this Certificate of Acceptance.
2. I am eligible under Division 3 of the Business and Professions Code in the applicable classification to accept responsibility for the system design, construction or installation of features, materials, components, or manufactured devices for the scope of work identified on this Certificate of Acceptance and attest to the declarations in this statement (responsible acceptance person).
3. The information provided on this Certificate of Acceptance substantiates that the construction or installation identified on this Certificate of Acceptance complies with the acceptance requirements indicated in the plans and specifications approved by the enforcement agency, and conforms to the applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7.
4. I have confirmed that the Certificate(s) of Installation for the construction or installation identified on this Certificate of Acceptance has been completed and is posted or made available with the building permit(s) issued for the building.
5. I will ensure that a completed, signed copy of this Certificate of Acceptance shall be posted, or 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 signed copy of this Certificate of Acceptance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Acceptance Person Name:	Responsible Acceptance Person Signature:	
Responsible Acceptance Person Company Name:	Position with Company (Title):	
Address:	CSLB License:	
City/State/Zip:	Phone:	Date Signed:

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance July 2016

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

CERTIFICATE OF INSTALLATION		NRCI-MCH-01-E
Mechanical		Page 1 of 2
Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT	Enforcement Agency:	Permit Number:
Project Address: 4114 LAKESIDE DRIVE	City: RICHMOND	Zip Code: 94806

A. GENERAL INFORMATION

DATE OF PERMIT:			
BUILDING TYPE:	☑ Nonresidential	☐ High-Rise Residential	☐ Hotel/Motel
PHASE OF CONSTRUCTION:	☐ New Construction	☐ Addition	☑ Alteration

B. SCOPE OF RESPONSIBILITY

Enter the date of approval by enforcement agency of the Certificate of Compliance that provides the specifications for the energy efficiency measures for the scope of responsibility for this Installation Certificate. Date:

In the table below identify all applicable construction documents that specify the features, materials, components, manufactured devices, or system performance diagnostic results required for the scope of responsibility for this Installation Certificate (continued).

Document Title or Description	Applicable Sheets or Pages, Tables, Schedules, etc.	Date Approved by Enforcement Agency

Add Row | Remove Last

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

CERTIFICATE OF INSTALLATION		NRCI-MCH-01-E
Mechanical		Page 2 of 2
Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT	Enforcement Agency:	Permit Number:
Project Address: 4114 LAKESIDE DRIVE	City: RICHMOND	Zip Code: 94806

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: AMIT WADHWA	Documentation Author Signature:
Documentation Author Company Name: AMIT WADHWA & ASSOCIATES	Date Signed:
Address: 870 MARKET STREET, SUITE 846	CEA Certification Identification (If applicable):
City/State/Zip: SAN FRANCISCO, CA 94102	Phone: (415) 788-9999

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 Installation is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code in the applicable classification to accept responsibility for the system design, construction, or installation of features, materials, components, or manufactured devices for the scope of work identified on this Certificate of Installation and attest to the declarations in this statement (responsible builder/installer), otherwise I am an authorized representative of the responsible builder/installer.
3. The constructed or installed features, materials, components or manufactured devices (the installation) identified on this Certificate of Installation conforms to all applicable codes and regulations, and the installation conforms to the requirements given on the plans and specifications approved by the enforcement agency.
4. I reviewed a copy of the Certificate of Compliance approved by the enforcement agency that identifies the specific requirements for the scope of construction or installation identified on this Certificate of Installation, and I have ensured that the requirements that apply to the construction or installation have been met.
5. I will ensure that a completed signed copy of this Certificate of Installation shall be posted, or 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 Installation is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Builder/Installer Name:	Responsible Builder/Installer Signature:	
Company Name: (Installing Subcontractor or General Contractor or Builder/Owner)	Position With Company (Title):	
Address:	CSLB License:	
City/State/Zip:	Phone:	Date Signed:

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance January 2016

RICHMOND LAKESIDE
TENANT IMPROVEMENT

4114 Lakeside Drive
Richmond, CA 94806

brereton

909 Montgomery St., Suite 260
San Francisco, California 94133
T 415 546 1212 brereton.com

Stamp

REGISTERED PROFESSIONAL ENGINEER AMIT WADHWA M30894 EXP. 12/31/20 MECHANICAL STATE OF CALIFORNIA

Consultant

Amit Wadhwa & Associates Engineers
870 Market Street
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415.617.0076 fax
19036

Issue/Revision:

No.	Proj. No. Date:	Description
1	32243.01 29MAR19	ISSUE FOR REVIEW
2	32243.01 22APR19	ISSUE FOR PERMIT
2	32243.01 24MAY19	PLAN CHECK RESPONSE ADDENDUM #3

Copyright Statement:
All drawings and written material appearing herein constitute original and unpublished original work of the architect and may not be duplicated, used, or disclosed without prior written consent of the architect.

Approval Signature:

Co/ Title: Date:

MECHANICAL
TITLE 24

Scale: NONE Issue Date: 22APR19
Drawn By: PT Reviewed By: AW
Sheet: 13 of 15

1TM4.0.3

STATE OF CALIFORNIA
PROCESS COMPLIANCE FORMS AND WORKSHEETS
CEC-NRCC-PRC-01-E (Revised 01/19) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-PRC-01-E
Process Compliance Forms & Checklists	(Page 1 of 3)
Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT	Date Prepared: 4/15/19

A. PROCESS COMPLIANCE DOCUMENTS & WORKSHEETS

Check box if worksheet is included.

For detailed instructions on the use of this and all Energy Standards compliance documents, refer to the 2016 Nonresidential Manual.

Note: The Enforcement Agency may require all forms to be incorporated onto the building plans.

YES	NO	Doc/Worksheet #	Title
☒	☐	PRC-01-E (1 of 2)	Covered Process Certificate of Compliance. Required on plans for all submittals with covered processes.
☒	☐	PRC-01-E (2 of 2)	Certificate of Compliance, Required Acceptance Tests (PRC-02-A to PRC-08-A). Required on plans for all submittals.
☐	☒	PRC-02-E	Certificate of Compliance for Enclosed Parking Garage Exhaust Fans
☐	☒	PRC-03-E	Certificate of Compliance for Commercial Kitchens
☒	☐	PRC-04-E	Certificate of Compliance for Computer Rooms
☐	☒	PRC-05-E	Certificate of Compliance for Commercial Refrigeration
☐	☒	PRC-06-E	Certificate of Compliance for **ALL** Refrigerated Warehouses
☐	☒	PRC-07-E	Certificate of Compliance for Refrigerated Warehouse > 3,000 ft^2
☐	☒	PRC-08-E	Certificate of Compliance for Refrigerated Warehouse Where **Multiple** Spaces that (i) comprise a total of 3,000ft^2 or more; and (ii) are collectively served by the same refrigeration system compressor(s) and condenser(s) (central systems).
☐	☒	PRC-09-E	Certificate of Compliance for Laboratory Exhaust
☐	☒	PRC-10-E	Certificate of Compliance for Compressed Air Systems
☐	☒	PRC-11-E	Certificate of Compliance for Process Boilers
☐	☒	PRC-12-E	Certificate of Compliance for Elevator Lighting and Ventilation Controls
☐	☒	PRC-13-E	Certificate of Compliance for Escalators and Moving Walkways Speed Controls

STATE OF CALIFORNIA
PROCESS COMPLIANCE FORMS AND WORKSHEETS
CEC-NRCC-PRC-01-E (Revised 01/19) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-PRC-01-E
Process Compliance Forms & Checklists	(Page 2 of 3)
Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT	Date Prepared: 4/15/19

B. PROCESS ACCEPTANCE DOCUMENTS

Check box for required compliance documents.

Designer:

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

Installing Contractor:

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

Enforcement Agency:

Plancheck – The NRCC-PRC-01-E compliance document is not considered a completed document and is not to be accepted by the building department unless the correct boxes are checked.

Inspector - Before occupancy permit is granted all newly installed process systems must be tested to ensure proper operations.

Test Description		PRC-01-A	PRC-02-A	PRC-03-A	PRC-04-A	PRC-05-A	PRC-06-A	PRC-07-A	PRC-08-A	PRC-12-A	PRC-13-A
Equipment Requiring Testing or Verification	# of Units	Compressed Air Systems	Garage Exhaust	Kitchen Exhaust	R/W Evap Fan Motor Controls	R/W Evap Condenser Controls	R/W Air-Cooled Condenser Controls	R/W Variable Speed Compressors	R/W Elect. Underslab Heating	Elevator Lighting and Ventilation Controls	Escalators and Moving Walkways Speed Controls
FC 1-2	1	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
FC 1-5	1	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
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STATE OF CALIFORNIA
PROCESS COMPLIANCE FORMS AND WORKSHEETS
CEC-NRCC-PRC-01-E (Revised 01/19) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-PRC-01-E
Process Compliance Forms & Checklists	(Page 3 of 3)
Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT	Date Prepared: 4/15/19

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: AMIT WADHWA	Documentation Author Signature:
Company: AMIT WADHWA & ASSOCIATES	Signature Date:
Address: 870 MARKET STREET, SUITE 846	CEA/HERS Certification Identification (if applicable):
City/State/Zip: SAN FRANCISCO, CA 94102	Phone: (415) 788-9999

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: AMIT WADHWA	Responsible Designer Signature:
Company: AMIT WADHWA & ASSOCIATES	Date Signed:
Address: 870 MARKET STREET, SUITE 846	License: M30894
City/State/Zip: SAN FRANCISCO, CA 94102	Phone: (415) 788-9999

STATE OF CALIFORNIA
COMPUTER ROOM REQUIREMENTS
CEC-NRCC-PRC-04-E (Revised 01/19) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-PRC-04-F
Computer Room Requirements	(Page 1 of 2)
Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT	Date Prepared: 4/15/2019

TOTAL INSTALLED COOLING CAPACITY (TONS)[1]: 2 TON

Equipment Tags and System Description[2]		FC1-1		
PRESCRIPTIVE MEASURES	***T-24 Sections***	***Reference to the Requirements in the Contract Documents[3]***		
Economizers	140.9(a)1	N/A, SEE EXCEPTION 1		
Reheat	140.9(a)2	COOLING ONLY UNIT		
Humidification	140.9(a)3	N/A		
Fan Power	140.9(a)4	UNDER 27W/KBTU		
Fan Control	140.9(a)5	N/A, UNDER 60000BTU/h		
Containment	140.9(a)6	N/A, SEE EXCEPTION 2		

Notes:

1. Enter the total installed cooling capacity for all computer rooms under this permit
2. Provide equipment tags (e.g. CRAC-1 to 10, AHU 1 to 5 and CH 1 to 3) for all cooling systems that are covered by these requirements. Groups of equipment that are similar can be combined into one column.
3. Provide references to plans (i.e. Drawing Sheet Numbers) and/or specifications (including Section name/number and relevant paragraphs) where each requirement is specified. Enter "N/A" if the requirement is not applicable to this system. Explicitly list any exceptions used to avoid a requirement.

STATE OF CALIFORNIA
COMPUTER ROOM REQUIREMENTS
CEC-NRCC-PRC-04-E (Revised 01/19) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-PRC-04-F
Computer Room Requirements	(Page 2 of 2)
Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT	Date Prepared: 4/15/2019

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: AMIT WADHWA	Documentation Author Signature:
Company: AMIT WADHWA	Signature Date:
Address: 870 MARKET STREET, SUITE 846	CEA/ HERS Certification Identification (if applicable): N/A
City/State/Zip: SAN FRANCISCO, CA 94102	Phone: (415) 738-9829

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: AMIT WADHWA	Responsible Designer Signature:
Company: AMIT WADHWA	Date Signed:
Address: 870 MARKET STREET, SUITE 846	License: M30894
City/State/Zip: SAN FRANCISCO, CA 94102	Phone: (415) 738-9829

RICHMOND LAKESIDE
TENANT IMPROVEMENT

4114 Lakeside Drive
Richmond, CA 94806

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909 Montgomery St., Suite 260
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T 415 546 1212 brereton.com

Stamp

REGISTERED PROFESSIONAL ENGINEER
AMIT WADHWA
M30894
EXP. 12/31/20
MECHANICAL
STATE OF CALIFORNIA

Consultant

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870 Market Street
(Floor 8th) Suite 846
San Francisco, CA 94102
415.788.9999 tel
415.617.0076 fax
19036

Issue/Revision:

No.	Proj. No. Date:	Description
1	32243.01 29MAR19	ISSUE FOR REVIEW
2	32243.01 22APR19	ISSUE FOR PERMIT
2.1	32243.01 24MAY19	PLAN CHECK RESPONSE ADDENDUM #3

Copyright Statement:
All drawings and written material appearing herein constitute original and unpublished original work of the architect and may not be duplicated, used, or disclosed without prior written consent of the architect.

Approval Signature:

Co/ Title: Date:

MECHANICAL
TITLE 24

Scale: NONE Issue Date: 22APR19
Drawn By: PT Reviewed By: AW
Sheet: 14 of 15

1TM4.0.4

STATE OF CALIFORNIA
WATER HEATING SYSTEM GENERAL INFORMATION
CEC-NRCC-PLB-01-E (Revised 01/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-PLB-01-E
Water Heating System General Information	(Page 1 of 2)
Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT	Date Prepared: 4/15/19

A. GENERAL INFORMATION/SYSTEM INFORMATION		
01	Water Heater System Name:	IWH 1-1
02	Water Heater System Configuration:	Single Dwelling Unit
03	Water Heater System Type:	Domestic Hot Water
04	Building Type:	Nonresidential
05	Total Number of Water Heaters in Systems:	1
06	Central DHW Distribution Type:	N/A
07	Dwelling Unit DHW Distribution Type:	Standard Distribution System (STD)

B. WATER HEATER INFORMATION Each water heater type requires a separate compliance document.		
01	Water Heater Type:	Instantaneous Small - Electric
02	Fuel Type:	Electricity
03	Manufacture Name:	CHRONOMITE
04	Model Number:	E-46LLP
05	Number of Identical Water Heaters:	1
06	Installed Water Heater System Efficiency:	99%
07	Required Minimum Efficiency:	-
08	Standby Loss Percent or Standby Loss Total:	N/A
09	Rated Input:	4.6 KW
10	Pilot Energy:	N/A
11	Water Heater Tank Storage Volume:	N/A
12	Exterior Insulation on Water Heater:	N/A
13	Volume of Supplemental Storage:	N/A
14	Internal Insulation on Supplemental Storage:	N/A
15	Exterior Insulation on Supplemental Storage:	N/A

C. PLUMBING COMPLIANCE FORMS & WORKSHEETS
Check box if worksheet is included.
For detailed instructions on the use of this and all Energy Standards compliance documents, refer to the 2016 Nonresidential Manual
Note: The Enforcement Agency may require all compliance documents to be incorporated onto the building plans.

YES	NO	Doc/Worksheet #	Title
⦿	○	NRCC-PLB-01-E	Certificate of Compliance, Declaration. Required on plans for all submittals.
⦿	○	NRCI-PLB-01-E	Certificate of Installation. Required on plans for all submittals.
○	○	NRCI-PLB-02-E	Certificate of Installation, required on central systems in high-rise residential, hotel/motel application.
○	○	NRCI-PLB-03-E	Certificate of Installation, required on single dwelling unit systems in high-rise residential, hotel/motel application.
○	○	NRCI-PLB-21-H	Certificate of Installation, required on HERS verified central systems in high-rise residential, hotel/motel application.
○	○	NRCI-PLB-22-H	Certificate of Installation, required on HERS verified single dwelling unit systems in high-rise residential, hotel/motel application.
○	○	NRCI-STH-01-E	Certificate of Installation, required on any solar water heating

STATE OF CALIFORNIA
WATER HEATING SYSTEM GENERAL INFORMATION
CEC-NRCC-PLB-01-E (Revised 01/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-PLB-01-E
Water Heating System General Information	(Page 1 of 2)
Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT	Date Prepared: 4/15/19

A. GENERAL INFORMATION/SYSTEM INFORMATION		
01	Water Heater System Name:	IWH 1-2
02	Water Heater System Configuration:	Single Dwelling Unit
03	Water Heater System Type:	Domestic Hot Water
04	Building Type:	Nonresidential
05	Total Number of Water Heaters in Systems:	1
06	Central DHW Distribution Type:	N/A
07	Dwelling Unit DHW Distribution Type:	Standard Distribution System (STD)

B. WATER HEATER INFORMATION Each water heater type requires a separate compliance document.		
01	Water Heater Type:	Instantaneous Small - Electric
02	Fuel Type:	Electricity
03	Manufacture Name:	CHRONOMITE
04	Model Number:	E-70ELP
05	Number of Identical Water Heaters:	1
06	Installed Water Heater System Efficiency:	99%
07	Required Minimum Efficiency:	-
08	Standby Loss Percent or Standby Loss Total:	N/A
09	Rated Input:	7.0 KW
10	Pilot Energy:	N/A
11	Water Heater Tank Storage Volume:	N/A
12	Exterior Insulation on Water Heater:	N/A
13	Volume of Supplemental Storage:	N/A
14	Internal Insulation on Supplemental Storage:	N/A
15	Exterior Insulation on Supplemental Storage:	N/A

C. PLUMBING COMPLIANCE FORMS & WORKSHEETS
Check box if worksheet is included.
For detailed instructions on the use of this and all Energy Standards compliance documents, refer to the 2016 Nonresidential Manual
Note: The Enforcement Agency may require all compliance documents to be incorporated onto the building plans.

YES	NO	Doc/Worksheet #	Title
⦿	○	NRCC-PLB-01-E	Certificate of Compliance, Declaration. Required on plans for all submittals.
⦿	○	NRCI-PLB-01-E	Certificate of Installation. Required on plans for all submittals.
○	○	NRCI-PLB-02-E	Certificate of Installation, required on central systems in high-rise residential, hotel/motel application.
○	○	NRCI-PLB-03-E	Certificate of Installation, required on single dwelling unit systems in high-rise residential, hotel/motel application.
○	○	NRCI-PLB-21-H	Certificate of Installation, required on HERS verified central systems in high-rise residential, hotel/motel application.
○	○	NRCI-PLB-22-H	Certificate of Installation, required on HERS verified single dwelling unit systems in high-rise residential, hotel/motel application.
○	○	NRCI-STH-01-E	Certificate of Installation, required on any solar water heating

STATE OF CALIFORNIA
WATER HEATING SYSTEM GENERAL INFORMATION
CEC-NRCC-PLB-01-E (Revised 01/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-PLB-01-E
Water Heating System General Information	(Page 2 of 2)
Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT	Date Prepared: 4/15/19

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: AMIT WADHWA	Documentation Author Signature:
Company: AMIT WADHWA & ASSOCIATES	Signature Date:
Address: 870 MARKET STREET, SUITE 846	CEA/HERS Certification Identification (if applicable):
City/State/Zip: SAN FRANCISCO, CA 94102	Phone: (415) 788-9999

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: AMIT WADHWA	Responsible Designer Signature:
Company: AMIT WADHWA & ASSOCIATES	Date Signed:
Address: 870 MARKET STREET, SUITE 846	License: M30894
City/State/Zip: SAN FRANCISCO, CA 94102	Phone: (415) 788-9999

STATE OF CALIFORNIA
PLUMBING
CEC-NRCI-PLB-01-E (Revised 01/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF INSTALLATION	NRCI-PLB-01-E
Plumbing	Page 1 of 4

Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT	Enforcement Agency:	Permit Number:
Project Address: 4114 LAKESIDE DRIVE	City: RICHMOND	Zip Code: 94806

A. GENERAL INFORMATION

DATE OF PERMIT:			
BUILDING TYPE:	☑ Nonresidential	☐ High-Rise Residential	☐ Hotel/Motel
PHASE OF CONSTRUCTION:	☐ New Construction	☐ Addition	☑ Alteration

If more than one person has responsibility for building construction, each person shall prepare and sign an Installation Certificate document applicable to the portion of construction for which they are responsible; alternatively, the person with chief responsibility for construction shall prepare and sign the Installation Certificate document(s) for the entire construction.

B. SCOPE OF RESPONSIBILITY
Enter the date of approval by enforcement agency of the Certificate of Compliance that provides the specifications for the energy efficiency measures for the scope of responsibility for this Installation Certificate. Date:
In the table below identify all applicable construction documents that specify the features, materials, components, manufactured devices, or system performance diagnostic results required for the scope of responsibility for this Installation Certificate (continued).

Document Title or Description	Applicable Sheets or Pages, Tables, Schedules, etc.	Date Approved by Enforcement Agency

Add Row Remove Last

STATE OF CALIFORNIA
PLUMBING
CEC-NRCI-PLB-01-E (Revised 01/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF INSTALLATION	NRCI-PLB-01-E
Plumbing	Page 2 of 4

Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT	Enforcement Agency:	Permit Number:
Project Address: 4114 LAKESIDE DRIVE	City: RICHMOND	Zip Code: 94806

C. MANDATORY REQUIREMENTS FOR ALL CENTRAL DOMESTIC HOT WATER RECIRCULATION SYSTEMS

01	On systems that have a total capacity greater than 167,000 Btu/hr, outlets that require higher than service water temperatures as listed in the ASHRAE Handbook have separate remote heaters, heat exchangers, or boosters to supply the outlet with the higher temperature. (Section 110.3 (c)1)
02	Systems with circulating pumps or with electrical heat trace systems shall be capable of automatically turning off the system. (Section 110.3(c)2).
03	For public lavatories, the control system shall limit the outlet temperature to 110° F. (Section 110.3(c)3).
04	Unfired storage tanks are insulated with an external R-12 or combination of R-16 internal and external insulation. Alternatively, the heat loss of the tank surface based on an 80° F water-air temperature difference shall be less than 6.5 Btu per hour per square foot. (Section 110.3(c)4).
05	All sections of the recirculation loop, and the first 5 feet of all branches off the loop are insulated, to the thicknesses required by Table 120.3A, except for the following: (RA4.4.1) • Piping installed in interior or exterior walls that is surrounded on all sides by at least 1inch of insulation. • Piping installed in attics with a minimum of 4 inches (10 cm) of attic insulation on top • Piping that penetrates framing members shall not be required to have pipe insulation for the distance of the framing penetration. Metal piping that penetrates metal framing shall use grommets, plugs, wrapping or other insulating material to assure that no contact is made with the metal framing. Insulation shall butt securely against all framing members. • Insulation is not required on the cold water line when it is used as the return
06	Hot water pipes that are buried below grade are installed in a water proof and non-crushable casing or sleeve that allows for installation, removal, and replacement of the enclosed pipe and insulation. (RA4.4.1)
07	Insulation outside conditioned space is protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. (RA4.4.1)
08	Pipe insulation fits tightly to the pipe. (RA4.4.1)
09	On insulated sections of pipe, no piping is visible due to insulation voids, and all elbows and tees are fully insulated.. (RA4.4.1)
10	The recirculation pump is mounted on a vertical section of the return line, OR an automatic air release valve is installed on a riser at least 12 inches in length, on the inlet side of the recirculation pump, no more than 4 feet from the pump. (Section 110.3(c)5A).
11	A check valve is located between the recirculation pump and the water heater. (Section 110.3(c)5B).
12	A hose bibb is installed between the pump and the water heating equipment with an isolation valve between the hose bibb and the water heating equipment. (Section 110.3(c)5C).
13	Isolation valves are installed on both sides of the pump. One of the isolation valves may be the same isolation valve as in item 12 above. (Section 110.3(c)5D).
14	The cold water supply piping and the recirculation loop piping is not connected to the hot water storage tank drain port. (Section 110.3(c)5E).
15	A check valve is installed on the cold water supply line between the hot water system and the next closest tee on the cold water supply. (Section 110.3(c)5F).
16	The hot water distribution system piping from the water heater(s) to the fixtures and appliances takes the most direct path. (RA 4.4.7.1)
17	Installation and operation instructions that provide details of the operation of the pump and controls are available at the jobsite for inspection. (RA 4.4.7.1)
18	More than one circulation loop may be installed. Each loop shall have its own pump and controls. (RA4.4.8, RA 4.4.9, RA 4.4.10)

The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.

STATE OF CALIFORNIA
PLUMBING
CEC-NRCI-PLB-01-E (Revised 01/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF INSTALLATION	NRCI-PLB-01-E
Plumbing	Page 3 of 4

Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT	Enforcement Agency:	Permit Number:
Project Address: 4114 LAKESIDE DRIVE	City: RICHMOND	Zip Code: 94806

D. MANDATORY MEASURES FOR ALL SINGLE DWELLING HOT WATER DISTRIBUTION SYSTEMS

01	Equipment shall meet the applicable requirements of the Appliance Efficiency Regulations (Section 110.3(b)11).
02	Unfired Storage Tanks are insulated with an external R-12 or combination of R-16 internal and external Insulation. (Section 110.3(c)4).
03	The following pipes are insulated, to the thicknesses required by Table 120.3A, except for those sections of pipe that are subject to one of the exceptions below: (RA4.4.1) • The first 5 feet (1.5 meters) of hot and cold water pipes from the storage tank. • All piping with a nominal diameter of 3/4 inch (19 millimeter) or larger. • All piping associated with a domestic hot water recirculation system regardless of the pipe diameter, except when cold water return is used in a demand system. • Piping from the heating source to storage tank or between tanks. • Piping buried below grade. • All hot water pipes from the heating source to the kitchen fixtures. The following sections of pipe do not have to be insulated: (RA4.4.1) • Piping installed in interior or exterior walls that is surrounded on all sides by at least 1 inch of insulation. • Piping installed in attics with a minimum of 4 inches (10 cm) of attic insulation on top • Piping that penetrates framing members shall not be required to have pipe insulation for the distance of the framing penetration. Metal piping that penetrates metal framing shall use grommets, plugs, wrapping or other insulating material to assure that no contact is made with the metal framing. Insulation shall butt securely against all framing members.
04	Piping buried below grade must be installed in a water proof and non-crushable casing or sleeve that allows for installation, removal, and replacement of the enclosed pipe and insulation. (Section 150.0(j))
05	All elbows and tees shall be fully insulated. (RA4.4.1)
06	Where insulation is required, no piping shall be visible due to insulation voids, and all insulation shall fit tightly to the pipe. (RA4.4.1)
07	**For Gas or Propane Water Heaters:** Ensure the following are installed (Section 150.0(n)) 1. A 120V electrical receptacle is within 3 feet from the water heater and accessible with no obstructions 2. A Category III or IV vent, or a Type B vent with straight pipe between outside and water heater 3. A condensate drain no more than 2 inches higher than the base on water heater for natural draining 4. A gas supply line with capacity of at least 200,000 Btu/hr

The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.

STATE OF CALIFORNIA
PLUMBING
CEC-NRCI-PLB-01-E (Revised 01/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF INSTALLATION	NRCI-PLB-01-E
Plumbing	Page 4 of 4

Project Name: RICHMOND LAKESIDE TENANT IMPROVEMENT	Enforcement Agency:	Permit Number:
Project Address: 4114 LAKESIDE DRIVE	City: RICHMOND	Zip Code: 94806

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
1. I certify that this Certificate of Installation documentation is accurate and complete.

Documentation Author Name: AMIT WADHWA	Documentation Author Signature:
Documentation Author Company Name: AMIT WADHWA & ASSOCIATES	Date Signed:
Address: 870 MARKET STREET, SUITE 846	CEA Certification Identification (if applicable):
City/State/Zip: SAN FRANCISCO, CA 94102	Phone: (415) 788-9999

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 Installation is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code in the applicable classification to accept responsibility for the system design, construction, or installation of features, materials, components, or manufactured devices for the scope of work identified on this Certificate of Installation and attest to the declarations in this statement (responsible builder/installer), otherwise I am an authorized representative of the responsible builder/installer.
3. The constructed or installed features, materials, components or manufactured devices (the installation) identified on this Certificate of Installation conforms to all applicable codes and regulations, and the installation conforms to the requirements given on the plans and specifications approved by the enforcement agency.
4. I reviewed a copy of the Certificate of Compliance approved by the enforcement agency that identifies the specific requirements for the scope of construction or installation identified on this Certificate of Installation, and I have ensured that the requirements that apply to the construction or installation have been met.
5. I will ensure that a completed signed copy of this Certificate of Installation shall be posted, or 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 Installation is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Builder/Installer Name:	Responsible Builder/Installer Signature:	
Company Name: (Installing Subcontractor or General Contractor or Builder/Owner)	Position With Company (Title):	
Address:	CSLB License:	
City/State/Zip:	Phone:	Date Signed:

RICHMOND LAKESIDE
TENANT IMPROVEMENT

4114 Lakeside Drive
Richmond, CA 94806

brereton
909 Montgomery St., Suite 260
San Francisco, California 94133
T 415 546 1212 brereton.com

Stamp

REGISTERED PROFESSIONAL ENGINEER AMIT WADHWA M30894 EXP. 12/31/20 MECHANICAL STATE OF CALIFORNIA

Consultant

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(Floor 885) Suite 846
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19036

Issue/Revision:

No.	Proj. No. Date:	Description
1	32243.01	ISSUE FOR REVIEW 29MAR19
2	32243.01	ISSUE FOR PERMIT 22APR19
2.1	32243.01	PLAN CHECK RESPONSE 24MAY19 ADDENDUM #3

Copyright Statement:
All drawings and written material appearing herein constitute original and unpublished original work of the architect and may not be duplicated, used, or disclosed without prior written consent of the architect.

Approval Signature:

Co/ Title: Date:

MECHANICAL
TITLE 24

Scale: NONE Issue Date: 22APR19
Drawn By: PT Reviewed By: AW
Sheet: 15 of 15

1TM4.0.5

LIGHTING CONTROL PROGRAMMING:

A. THE ACTUAL PROGRAMMING FOR EACH SCENE, THE NUMBER OF SCENES, THE ASSOCIATED CONTROLLED LUMINAIRE/S AND ROOM DARKENING SHADES SHALL BE DETERMINED BY LIGHTING DESIGNER OR ARCHITECT. COORDINATE WITH ARCHITECT.

B. PROVIDE ENGRAVED WALL MOUNTED PRESET SCENE CONTROL STATIONS SEPARATE FROM INDIVIDUAL LOCAL DIMMER CONTROL STATIONS.

C. PROVIDE MULTI-SCENE CONTROLS WHERE REQUIRED TYPICAL AS FOLLOWS: BUTTON 1 = ALL ON; BUTTON 2 = ALL OFF; BUTTON 3 = ALL 50% DIMMED

D. IN ALL CONFERENCE ROOMS AND WHERE REQUIRED, PROVIDE LIGHTING CONTROLLER SERIAL DATA INTERFACE RS-232 FOR CONNECTION TO THE AV SYSTEM. IN ADDITION TO THE MANUAL AND AUTOMATIC DAYLIGHT DIMMING CONTROLS, LIGHTS SHALL BE CONTROLLABLE/DIMMABLE VIA THE AV CONTROLLER. COORDINATE WITH THE AV VENDOR. PROVIDE ALL SYSTEM COMPONENTS COMPLETE TO INTERFACE WITH WATTSTOPPER DLM DIGITAL LIGHTING CONTROL SYSTEM. AV CONTROLLERS SHALL BE PROVIDED IN ADDITION TO DIMMER, OCCUPANCY SENSOR, DAY LIGHT SENSOR SWITCHES, MOTORIZED PARTITION AND SHADE/SOLAR CONTROLLERS IF APPLICABLE. PROVIDE ALL HARDWARE, ACCESSORIES, PROGRAMMING, ETC AS REQUIRED FOR A COMPLETE INTERFACE.

LIGHTING CONTROL SYSTEM:

WATTSTOPPER DLM OR APPROVED EQUAL

NOTE: LIGHTING CONTROLS BY OWNER; G.C. TO INSTALL.

BUILDING LIGHTING CONTROL SYSTEM

STANDARD SEQUENCE OF OPERATION

	OCC SENSOR						PHOTOCELL			DIMMING			TIME CLOCK			SWITCHES			SYSTEM							
	AUTO ON	MANUAL ON	AUTO OFF	PARTIAL OFF AT NORMAL HOURS	AUTO OFF AT AFTER HOURS	AUTO OFF @ TARGET FC	AUTO OFF @ TARGET FC	AUTO DIM @ TARGET FC	SET LEVEL TO 50 FC	CONTINUOUS	STEP	MULTIZONE	TIME ON	TIME OFF	ASTRONOMICAL TIME CLOCK	WALL SWITCH	DIMMER SWITCH	SCENE CONTROL	PLUG LOAD	NETWORK	STAND-ALONE	CURRENT MONITORING	AUXILIARY RELAY	REMOTE SIGNAL CONTROL	DEMAND RESPONSE	
ROOM TYPE																										REMARKS
COMMERCIAL BLDG (>10,000 sq ft)																										DEMAND RESPONSE IS NOT REQUIRED IF RESULTING LIGHTING POWER, COMPARED TO LIGHTING POWER ALLOWANCE SPECIFIED IN 140.6.c.2 AREA CATEGORY METHOD IS EQUAL TO OR LESS THAN 85% OF LIGHTING POWER ALLOWANCE.
AREA W/ 1-2 LAMP SINGLE LUMINAIRE (<100 sq ft)	100%		20 MIN														X									SPACES WITH MORE THAN 100 SQ.FT WILL REQUIRE EITHER CONTINUOUS DIMMING OR 4 LEVELS OF STEP DIMMING, DEPENDING ON LIGHTING TYPE
SMALL OFFICE (≤250 sq ft)		X	20 MIN					X		X							X				X					
LARGE OFFICE (>250 sq ft)		X	20 MIN					X		X		X	7AM	7PM			X				X					
OPEN OFFICE AREA		X	20 MIN					X		X		X	7AM	7PM			X				X	X				
LARGE CONFERENCE ROOM		X	30 MIN				X	X		X		X					X	X								
COPY ROOM		X	20 MIN							X							X				X					
ELECTRICAL ROOM (<100 SQ FT)																										
JANITOR CLOSET																										
RESTROOM (<100 sq ft)	100%		20 MIN							X							X				X					
OFFICE KITCHENS (≥ 100 sq ft)		X	20 MIN							X							X				X					
CORRIDOR	100%			50% 10 MIN	10 MIN					X							X				X					
LOBBY																										
STORAGE ROOM (< 100 sq ft)	100%		20 MIN														X									

NOTES:

1 Continuous dimming and step dimming are chosen based on light source type per Title 24 130.1A.
If continuous dimming is not necessary per lighting source, then 50% for step dimming is required.
2 Multizone is shown chosen due to typical rooms. For example, if there is a primary daylight zone and a non-daylighting zone, then these zones must be separated. Therefore, an open office will need separated zones.
3 There are no Title 24 requirements for manual on and auto on. There are only requirements for partial off NH and auto off AH.
4 Daylighting is not necessary when areas do not include skylights or glazing < 24 sq ft or skylit+primary sidelit zone is less than 120W. Luminaires in or at least 50% within daylighting zones must be controlled.
5 Timeclock settings can be changed to have different time on/off settings. Typical schedules were added in chart above.
6 Scene control is not necessary per Title 24 as long as dimming provided is per lighting source standards. Scene control can be checked off by end user if needed.

PANELBOARD NOTES

1. ALL MULTIWIRE BRANCH CIRCUITS SHALL BE PROVIDED WITH A MEANS THAT WILL DISCONNECT ALL UNGROUNDED CONDUCTORS AT THE POINT WHERE THE BRANCH CIRCUIT ORIGINATES, PER NEC 2014/CEC 2016 SECTION 210.4(B), WHETHER SHOWN ON PANEL SCHEDULES OR NOT. FOR SINGLE PHASE MULTIWIRE BRANCH CIRCUITS, PROVIDE AND INSTALL TWO SINGLE-POLE CIRCUIT BREAKERS WITH A LISTED AND FACTORY-SUPPLIED HANDLE-TIE, OR A 2-POLE SWITCH OR CIRCUIT BREAKER. FOR A 3-PHASE INSTALLATION, PROVIDE AND INSTALL A 3-POLE CIRCUIT BREAKER, SEE FLOOR PLANS FOR LOCATIONS AND CIRCUIT NUMBERS OF ALL MULTIWIRE BRANCH CIRCUIT HOMERUNS.

ELECTRICAL LEGEND

THIS IS A STANDARD LEGEND SHEET. SOME SYMBOLS AND/OR ABBREVIATIONS MAY APPEAR ON THIS SHEET, BUT NOT ON PROJECT PLANS.

- F — FIRE ALARM MANUAL PULL STATION – MH+46"
- FIRE ALARM COMBINATION CEILING MOUNTED HORN/STROBE
- FIRE ALARM WALL MOUNTED HORN WITH STROBE LIGHT MH +80" A.F.F.
- CEILING MOUNTED FIRE ALARM HORN
- H — FIRE ALARM WALL MOUNTED HORN MH +80" A.F.F.
- FIRE ALARM CEILING MOUNTED STROBE LIGHT – MH +80" A.F.F.
- FIRE ALARM WALL MOUNTED STROBE LIGHT – MH +80" A.F.F.
- H — MAGNETIC DOOR HOLDER – COORDINATE WITH HARDWARE FOR VOLTAGE AND PROVIDE 20A/1P CIRCUIT
- D — FIRE ALARM DUCT DETECTOR
- FSD — FIRE SMOKE DAMPER BY DIV15. PROVIDE 120V POWER AND CONNECT TO BLDG. FIRE ALARM
- SD — SMOKE DAMPER BY DIV15. PROVIDE 120V POWER AND CONNECT TO BLDG. FIRE ALARM
- NON-FUSED DISCONNECT SWITCH
- FUSED DISCONNECT SWITCH (FUSES AS SHOWN ON PLAN)
- FBO — MOTOR CONTROLLER FURNISHED BY OTHERS
- COMBINATION TYPE MAGNETIC MOTOR STARTER WITH HOA SWITCH AND CONTROL TRANSFORMER (OR TWO (2) SPEED MOTOR STARTER AS REQUIRED)
- $T — MANUAL MOTOR STARTER WITH THERMAL OVERLOAD
- $P — FAN SWITCH WITH PILOT LIGHT. MH +46"
- $SC — COMBINATION FAN SPEED CONTROLLER – MOUNTED ON FAN (FURNISHED BY MECHANICAL, INSTALLED BY ELECT.)
- T — THERMOSTAT OR TIME CLOCK
- VFD — VARIABLE SPEED DRIVE. VFD WITH DISCONNECT IS PROVIDED BY MECHANICAL. VERIFY VFD HAS INTERNAL DISCONNECT. IF NOT, PROVIDE DISCONNECT WITH INLINE WIRING.
- M — MOTOR OUTLET (PROVIDED BY MECH. WIRED BY ELECT.)
- DR — PUSH BUTTON DOOR RELEASE PROVIDE 1/2"CO TO ACCESSIBLE CEILING SPACE
- CR — CARD READER PROVIDE 1/2"CO TO ACCESSIBLE CEILING SPACE.
- AV — FLUSH FLOOR MOUNTED 2-GANG POKE-THRU AUDIO VISUAL BOX, PROVIDE 2-1"CO AV. RUN UNDERSLAB TO NEAREST WALL/COLUMN AND UP TO TELECOMM CABLE TRAY.
- AV — IN-WALL ENCLOSURE FOR AV BY OTHERS. PROVIDE DUPLEX RECEPTACLE AS SHOWN ON PLAN AND 2-1"CO STUB 6" ABOVE CEILING
- AP — WIRELESS ACCESS POINT: RING AND COVERPLATE ONLY ON CEILING
- J — JUNCTION BOX
- PANELBOARD – 120/208 VOLTS
- PANELBOARD – 277/480 VOLTS
- M — THERMOSTAT (PROVIDE 120V POWER IF REQUIRED) –MH46".
- T J — J-BOX TO SUPPLY POWER AND TELECOMM FOR ELECTRIFIED FURNITURE SYSTEM – MOUNT +18"AFF
- EPO — EMERGENCY POWER OFF SWITCH–MH +46" FROM THE TOP OF OUTLET BOX U.O.N. MANUFACTURER: APC
- SURFACE MOUNTED RACEWAY (AS NOTED)
- GROUND ROD
- CONDUIT UP
- CONDUIT DOWN
- CONDUIT CONCEALED IN CEILING OR WALL
- CONDUIT UNDERFLOOR 1"C MIN (UON) FOR BUILDING TRENCH SYSTEM: HOMERUN TO PANEL IN TRENCH
- HOMERUN TO PANEL WITH TICKMARKS– 3/4"C – 2#12 MIN. + 1#12 GROUND, UON. PROVIDE #10 OVERSIZE NEUTRAL FOR MULTIPLE CIRCUITS. TICKMARKS ARE ON HOMERUNS ONLY AND TICK MARK FOR GROUND WIRE IS TYPICALLY NOT SHOWN.
- CIRCUIT BREAKER
- FUSE
- DISCONNECT SWITCH
- ST — SHUNT TRIP
- M — TENANT METERING WITH POTENTIAL AND CURRENT TRANSFORMERS
- L1 F1 — LUMINAIRE IDENTIFICATION TAG

- CEILING-MOUNTED SELF ILLUMINATED EXIT SIGN ARROW INDICATES DIRECTION. SHADING INDICATES LIGHTED FACE. ON EMERGENCY LED BATTERY DRIVER
- WALL-MOUNTED SELF ILLUMINATED EXIT SIGN ARROW INDICATES DIRECTION. SHADING INDICATES LIGHTED FACE. ON EMERGENCY LED BATTERY DRIVER
- EM — 2X2 LUMINAIRE ON EMERGENCY LED BATTERY DRIVER
- EM — 2X4 LUMINAIRE ON EMERGENCY LED BATTERY DRIVER
- PENDANT OR RECESSED LUMINAIRE ON EMERGENCY LED BATTERY DRIVER
- EM — DOWNLIGHT LUMINAIRE ON EMERGENCY LED BATTERY DRIVER
- DUAL-HEAD LED EMERGENCY LIGHTING FIXTURE WITH 90 MINUTE EMERGENCY BATTERY DRIVER
- $ — SINGLE POLE SWITCH – MH +46"
- $PS — PROJECTION SCREEN CONTROLLER – MH +46"
- OS — DAYLIGHT SENSOR – CEILING MOUNTED
- D a abc — DIMMER SWITCH – MH +46" "a" DENOTES SINGLE ZONE OF CONTROL "abc" DENOTES THREE INDIVIDUAL ZONES OF CONTROL
- D m — MASTER DIMMER SWITCH – MH +46" "M" DENOTES MASTER ON/OFF SWITCH
- D 3 — THREE WAY DIMMER SWITCH – MH +46"
- D a — OCCUPANCY SENSOR WALL MOUNTED +46"AFF "a" DENOTES CONTROLLED LUMINAIRE "D" DENOTES COMBO-DIMMER/OCCUPANCY SENSOR SWITCH TYPE
- a — OCCUPANCY SENSOR CEILING MOUNTED "a" DENOTES CONTROLLED LUMINAIRE
- RC — SINGLE OR MULTI-RELAY LIGHTING CONTROLLER, DIMMING AND OR SWITCHING INCLUDING OCCUPANCY SENSOR SWITCH
- SM — WATTSTOPPER SEGMENT MANAGER
- LM — LIGHTING MANAGEMENT ZONE CONTROLLER (TIME CLOCK) WATTSTOPPER
- TELECOMM OUTLET DRYWALL RING AND STRING ONLY TO CEILING SPACE. +18"AFF
- FLOOR MOUNTED POKE-THRU AND 1"CONDUIT ONLY. RUN UNDERSLAB TO NEAREST WALL/COLUMN AND STUB-UP ABOVE CEILING.
- EM — EMERGENCY TELEPHONE COMMUNICATIONS SYSTEM
- DUPLEX RECEPTACLE RECESSED WALL MOUNTED +18"AFF
- FOURPLEX RECEPTACLE RECESSED WALL MOUNTED +18"AFF
- DUPLEX RECEPTACLE RECESSED POKE-THRU FLOOR MOUNTED
- FOURPLEX RECEPTACLE RECESSED POKE-THRU FLOOR MOUNTED
- DUPLEX RECEPTACLE RECESSED CEILING MOUNTED
- A — DUPLEX RECEPTACLE NEMA 5-15 (UON) RECESSED WALL MOUNTED +18"AFF. IF DUPLEX RECEPTACLE IS SHOWN ON DEDICATED CIRCUIT, PROVIDE NEMA 5-20 "A" = NEMA L6-20 "B" = NEMA L6-30
- SPECIALTY RECEPTACLE WALL MOUNTED +18"AFF UON. SEE PLAN FOR NEMA CONFIGURATION
- SPECIALTY RECEPTACLE FLOOR MOUNTED. SEE PLAN FOR NEMA CONFIGURATION
- RECESSED POKE-THRU ASSEMBLIES FOR POWER WITH HARDWIRE CONNECTION
- SHEET NOTE IDENTIFICATION TAG

GENERAL SHEET NOTES

AS PER CALIFORNIA BUILDING CODE SECTION 11B-308, ELECTRICAL RECEPTACLES, CONTROLS OR SWITCHES SHALL BE MOUNTED AS FOLLOWS:

A. 48 INCHES MAXIMUM TO TOP OF THE OUTLET BOX MEASURED FROM THE FINISH FLOOR.
B. 15 INCHES MINIMUM TO BOTTOM OF THE OUTLET BOX MEASURED FROM THE FINISH FLOOR.

ABBREVIATIONS

A	AMPS OR AMPERES
AFF	ABOVE FINISHED FLOOR
CKT	CIRCUIT
C	CONDUIT
C.O.	CONDUIT ONLY (EMPTY CONDUIT)
CU	COPPER
(D)	DEMOLISH
(E)	EXISTING
EM	EMERGENCY
FATC	FIRE ALARM TERMINAL CABINET
FSD	FIRE SMOKE DAMPER
FBO	FURNISHED BY OTHERS
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
HT	HEAT TRACE
IPS	INTERRUPTIBLE POWER SUPPLY
JB	JUNCTION BOX
MIN/MAX	MINIMUM/MAXIMUM
MTD	MOUNTED
MH	MOUNTING HEIGHT
(N) N	NEW
NC	NORMALLY CLOSED
NTS	NOT TO SCALE
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
OC	ON CENTER
PH, ø	PHASE
PNL	PANEL
(RL) (R)	RELOCATED
(RR)	REMOVED AND RELOCATED
(RN)	RENAME
(RE)	REMOVE
SAD	SEE ARCHITECTURAL DRAWINGS
SMD	SEE MECHANICAL DRAWINGS
SPD	SEE PLUMBING DRAWINGS
SD	SMOKE DAMPER
TTB	TELEPHONE TERMINAL BOARD
XFMR	TRANSFORMER
TYP	TYPICAL
UON, U.O.N.	UNLESS OTHERWISE NOTED
V	VOLTS
VIF	VERIFY IN FIELD
W	WIRE
WP	WEATHERPROOF

DRAWING INDEX

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4	1E1.4	ELECTRICAL DETAILS AND PANEL SCHEDULES
5	1E2.1	1ST FLOOR – LIGHTING PLAN
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11	1ET.3	TITLE 24 FORMS

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Approval Signature:

Co/ Title: Date:

ELECTRICAL LEGEND AND DRAWING INDEX

Scale: NONE Issue Date: 22APR19
Drawn By: PL Reviewed By: LA
Sheet: 1 of X

1E1.1

FIRE ALARM GENERAL NOTES

1. FIRE ALARM SYSTEM AND INSTALLATION SHALL BE PER STATE OF CALIFORNIA FIRE MARSHAL AND THE CITY PLANNING DEPARTMENT COMPLYING WITH 2016 NFPA 72.
2. FIRE ALARM DRAWINGS ARE PROVIDED UNDER DEFERRED PERMIT.
3. SUBMIT FIRE ALARM DRAWINGS TO THE BUILDING MANAGEMENT FOR THEIR REVIEW AND APPROVAL.
4. LOCATION OF FIRE ALARM DEVICES IS SCHEMATIC. NUMBER OF DEVICES SHOWN ON DRAWINGS ARE MINIMUM REQUIREMENTS, PROVIDE ADDITIONAL DEVICES ESPECIALLY SPEAKER/STROBE OR HORN/STROBE, AS REQUIRED BY THE FIRE MARSHAL. EXACT LOCATIONS SHALL MEET ALL CODES, AND AS SHOWN ON FIRE ALARM SHOP DRAWINGS. PROVIDE SYNCHRONIZED DEVICES.
5. FIRE SMOKE DAMPERS SERVING CORRIDORS SHALL BE ACTUATED BY CORRIDOR SMOKE DETECTORS AND A RELAY IN FACP. ALL OTHERS PROVIDE DUCT TYPE SMOKE DETECTOR LOCATED WITHIN 3' TO 5' TO CONTROL DAMPERS.
6. COORDINATE WITH FIRE PROTECTION CONTRACTOR FOR LOCATION AND QUANTITY OF SPRINKLER VALVES, FLOW AND TAMPER SWITCHES, PROVIDE WIRING, CONDUITS, CONNECTION AND ANNUNCIATION AS REQUIRED BY CODE. PROVIDE FLOW AND TAMPER SWITCHES PER FLOOR.
7. UPON COMPLETION OF SYSTEM INSTALLATION, SYSTEM SHALL BE TESTED IN PRESENCE OF AND IN A MANNER ACCEPTABLE TO CITY FIRE DEPARTMENT. CONTRACTOR SHALL SUPPLY NECESSARY EQUIPMENT INCLUDING A "DECIMETER" TO CHECK ACCEPTABLE SOUND LEVELS OF DEVICES. TEST RESULTS SHALL BE PROVIDED PER NFPA 72 TO ARCHITECT, OWNER, CITY FIRE DEPARTMENT, AND THE STATE FIRE MARSHALL. PROVIDE ADDITIONAL DEVICES INCLUDING SPEAKERS AS REQUIRED BY FIRE DEPARTMENT.
8. VERIFY WITH FIRE MARSHALL THAT CEILING MOUNTED STROBES AND STROBE/SPEAKERS OR HORN/STROBE ARE ALLOWED PRIOR TO INSTALLATION.
9. ALL FIRE ALARM CABLING MUST BE RUN IN EMT CONDUIT (RED CONDUITS) ABOVE CEILING. ALL CONDUITS SHALL BE RED IN COLOR.
10. PROVIDE FIRE ALARM POWER SUPPLY IF REQUIRED. PROVIDE 120V POWER TO POWER SUPPLY.
11. THE ELEVATOR LOBBY DOORS SHALL UNLOCK (BUT STAY LATCHED) IMMEDIATELY AND AUTOMATICALLY ON ANY OF THE FOLLOWING CONDITIONS:
    - A. ACTIVATION OF THE RELEASING DEVICE
    - B. LOSS OF POWER TO THE LOCK CIRCUIT, OR ACCESS CONTROL SYSTEM
    - C. ACTIVATION OF THE SMOKE DETECTOR WITHIN 5 FEET OF THE DOOR
    - D. ACTIVATION OF ANY FIRE ALARM INITIATING DEVICE SUCH AS SMOKE DETECTOR, SPRINKLER WATER-FLOW DETECTOR, MANUAL PULL STATION, ETC. ON THE FLOOR.
    - E. ACTIVATION OF ANY FIRE ALARM NOTIFICATION APPLIANCES SUCH AS HORNS, BELLS, STROBES, VOICE ALARM, ETC., ON THE FLOOR.
    - F. LOSS OF POWER OF THE SMOKE DETECTOR SYSTEM.

BUILDING STANDARDS & FINISHES

1. ALL ELECTRICAL, COMMUNICATION AND FIRE ALARM DEVICES INCLUDING WIRING METHODS, REQUIRED MANUFACTURER, STYLE, COLOR AND ALL OTHER FINISHES SHALL BE PER BUILDING STANDARDS, NO SUBSTITUTION.
2. LABEL PANEL & CIRCUIT NUMBER ON ALL OUTLETS. USE 3-LAYER LAMINATED PLASTIC WITH WHITE LETTERS ON BLACK BACKGROUNDS AND GLUE TO FACE PLATE.
3. UPDATE PANELBOARD SCHEDULES (TYPEWRITTEN) AT COMPLETION OF WORK. ALL EXISTING AND NEW CIRCUITS IN THE AREA OF WORK SHALL BE LABELED.
4. SHOULD A CONFLICT ARISE BETWEEN THE BUILDING STANDARD SPECIFICATIONS AND THE TENANT IMPROVEMENT SPECIFICATIONS, IT SHALL BE BROUGHT TO THE ATTENTION OF THE APPROPRIATE PARTIES IN THE PROJECT TO CONSIDER WHAT IS THE APPROPRIATE COURSE OF ACTION PRIOR TO THAT WORK OCCURRING.
5. ALL LOW VOLTAGE CABLING FOR TELECOM, DATA, AND OTHER TECHNOLOGY USES, SHALL COMPLY WITH THE BUILDING CODES, BUILDING RULES AND SPECIFICATIONS. FIRE STOPPING IS REQUIRED.
6. ALL DATA CABLING BACK TO THE RISER MUST BE COORDINATED THROUGH THE BUILDING RISER MANAGEMENT COMPANY.
7. LUMINAIRES THAT ARE SERVED BY MORE THAN ONE POWER SOURCE, OR STRUCTURED TO FAIL TO EMERGENCY AUTOMATICALLY SHALL BE IDENTIFIED AND LABELED IN THE BALLAST PAN, AND AT THE SWITCH, SO AS TO PREVENT ELECTRIC SHOCK WHEN SERVICING TAKES PLACE. INSTALLATION OF A RELAY FOR EMERGENCY LIGHTING SHALL INCLUDE NOTATION TO SUFFICIENTLY LABEL THE SWITCH PLATE AND BALLAST PAN FOR EACH LUMINAIRE WHERE THE LUMINAIRE CAN BE SERVED FROM MORE THAN ONE SOURCE. THIS IS AN ELECTRICAL SAFETY CODE AND SAFETY NOTATION AND LABELING TO ASSURE THAT SOMEONE SERVICING THE LUMINAIRE IS AWARE OF THE MULTIPLE SOURCES AND RELATED ELECTRIC SHOCK HAZARD.
8. LABEL PANEL & CIRCUIT NUMBER ON ALL OUTLETS. USE 3-LAYER LAMINATED PLASTIC WITH WHITE LETTERS ON BLACK BACKGROUNDS AND GLUE TO FACE PLATE.
9. UPDATE PANELBOARD SCHEDULES (TYPEWRITTEN) AT COMPLETION OF WORK. ALL EXISTING AND NEW CIRCUITS IN THE AREA OF WORK SHALL BE LABELED.
10. ALL ELECTRICAL DEVICES AT HARD LID CEILING MUST BE ACCESSIBLE FOR MAINTENANCE AND AS REQUIRED BY CODE.

LUMINAIRE SCHEDULE NOTES

1. LUMINAIRE SCHEDULE LISTED IS FOR SIZING/ASSIGNING CIRCUITS ONLY. DO NOT USE THIS SCHEDULE TO ORDER FIXTURES. USE LIGHT FIXTURE SCHEDULE SHOWN ON ARCHITECTURAL DRAWINGS/SPECIFICATIONS FOR PRICING, BIDDING AND ORDERING.
2. SUBMIT CUTSHEETS TO ARCHITECT FOR REVIEW.
3. PROVIDE DIMMING DRIVERS.
4. THE CONTRACTOR SHALL VERIFY ALL CEILING TYPES BEFORE ORDERING OF FIXTURES. ALSO VERIFY THAT ALL FEATURES CALLED FOR IN FIXTURE DESCRIPTIONS ON THE FIXTURE SCHEDULE ARE INCLUDED WITH CATALOG NUMBERS LISTED ON THE LIGHTING SUBMITTALS FOR THIS PROJECT.
5. DIMMING DRIVERS SHALL BE COMPATIBLE WITH LIGHTING CONTROL SYSTEM.
6. REFER TO LIGHTING PLAN FOR LUMINAIRE SCHEDULE. CONTRACTOR SHALL SUBMIT LUMINAIRE SUBMITTAL TO ARCHITECT AND ENGINEER FOR REVIEW.
7. LUMINAIRES SPECIFIED BY ARCHITECT. ALL FIXTURE COLORS AND FINISHES BY ARCHITECT. COORDINATE WITH ARCHITECT FOR UPDATED FIXTURE SCHEDULE AND FIXTURE CUT SHEETS.

SPECIFICATIONS - ELECTRICAL

1. THIS IS A STANDARD LEGEND SHEET. SOME SYMBOLS AND/OR ABBREVIATIONS MAY APPEAR ON THIS SHEET, BUT NOT ON PROJECT PLANS.
2. THIS PROJECT SHALL COMPLY WITH THE 2014 NATIONAL ELECTRICAL CODE AS AMENDED BY THE 2016 CALIFORNIA ELECTRICAL CODE AS WELL AS ANY APPLICABLE LOCAL CODES AND REQUIREMENTS, INCLUDING CA TITLE 24 2016 AND 2016 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS.
3. ALL EQUIPMENT SHALL BE LISTED BY A NATIONALLY RECOGNIZED TESTING LABORATORY AND PROPERLY LABELED, PER C.E.C. SECTION 110.2.
4. ALL EXIT SIGNS SHALL BE ILLUMINATED AT ALL TIMES, AND COMPLY WITH C.B.C. 2016 SECTION 1011.1
5. PRIOR TO BID, CONTRACTOR SHALL VISIT THE SITE TO ADEQUATELY DETERMINE ALL PRE-EXISTING CONDITIONS. BY THE ACT OF SUBMITTING A BID, THE CONTRACTOR WILL BE DEEMED TO HAVE COMPLIED WITH THE FOREGOING, TO HAVE ACCEPTED SUCH CONDITIONS, AND TO HAVE MADE ALLOWANCES THEREFORE IN PREPARING HIS BID.
6. ALL ELECTRICAL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE LATEST EDITION OF THE N.E.C., AS WELL AS STATE, AND LOCAL CODES AND REQUIREMENTS.
7. UNLESS OTHERWISE NOTED, ALL WORK SHOWN ON DRAWINGS IS NEW AND TO BE PROVIDED AND INSTALLED UNDER THIS CONTRACT.
8. ALL GROUNDING SHALL CONFORM TO ART.250 OF CALIFORNIA ELECTRICAL CODE, LATEST APPLICABLE EDITION. PROVIDE SEPARATE GROUND WIRE IN ALL POWER/LIGHTING CONDUIT.
9. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS, ELEVATIONS, AND DETAILS FOR EXACT LOCATION OF ALL LIGHTING FIXTURES. COORDINATE LOCATIONS OF ALL LIGHTING FIXTURES, OUTLETS AND JUNCTION BOXES WITH DIVISION 15 PRIOR TO ROUGH-IN.
10. VERIFY EXACT CONNECTION REQUIREMENTS, OUTLET TYPE, HEIGHT, AND LOCATION OF ALL OWNER SUPPLIED EQUIPMENT OR EQUIPMENT PROVIDED UNDER OTHER SECTIONS OF THE SPECIFICATIONS PRIOR TO ROUGH-IN. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR EQUIPMENT LOCATIONS.
11. ALL PIPES, CONDUITS, ETC. PASSING THROUGH FIRE RATED WALLS OR FLOORS SHALL HAVE A U.L. RATED ASSEMBLY, WITH 3M FIRE STOP SEALS, WITH PIPE CONDUIT SUPPORTED PER U.L. REQUIREMENTS ON BOTH SIDES OF PENETRATION.
12. OUTLET AND DEVICES IN FIRE RATED WALL SHALL BE SEPARATED BY MINIMUM OF 24" IN ADJACENT STUDS. IF NOT POSSIBLE, PROVIDE WRAP AND BOXES WITH FIRE RATED PUTTY PER FIRE MARSHAL APPROVAL.
13. MAINTAIN "AS-BUILT" RECORDS AT ALL TIMES, SHOWING EXACT LOCATION OF ALL UNDERGROUND AND/OR CONCEALED CONDUITS AND SERVICES INSTALLED UNDER THIS CONTRACT, INCLUDING CIRCUIT IDENTIFICATION WHERE APPLICABLE. PROVIDE OWNER WITH "AS-BUILT" DOCUMENTS AS INDICATED IN THE PROJECT MANUAL.
14. DRAWINGS INDICATE THE LOCATION OF DEVICES, FIXTURES AND EQUIPMENT AND THE CIRCUIT NUMBER AND PANEL DESIGNATION WHICH SUPPLIES THEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETELY CONNECTING ALL ELECTRICAL DEVICES TO CIRCUITS INDICATED ON THE DRAWINGS.
15. ALL EQUIPMENT GROUNDING SHALL CONFORM TO ARTICLE 250 OF THE CALIFORNIA ELECTRIC CODE, LATEST EDITION.
16. ALL CONDUIT SHALL BE CONCEALED, UNLESS OTHERWISE NOTED.
17. EQUIPMENT OVERLOADS AND FUSES SHALL BE PROVIDED AND INSTALLED AS PER NAME PLATE ON THE EQUIPMENT TO BE INSTALLED.
18. TELEPHONE AND COMMUNICATION OUTLETS SHALL BE FURNISHED WITH BOX AND PLASTER RING AND 3/4" CONDUIT TO ACCESSIBLE CEILING.
19. FLOOR MOUNTED TELEPHONE AND COMMUNICATION OUTLETS SHALL BE FURNISHED WITH CONDUIT INTO ACCESSIBLE CEILING.
20. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS WITH THE ARCHITECTURAL DRAWINGS PRIOR TO ROUGH-IN.
21. ALL DIVISION 23 EQUIPMENT LOW VOLTAGE CONTROL WIRING AND RACEWAY REQUIREMENTS SHALL BE PROVIDED BY DIVISION 23 U.O.N.
22. COORDINATE INSTALLATION OF ALL RECESSED LIGHT FIXTURES WITH DIVISION 23 PRIOR TO INSTALLATION OF HVAC DUCTS AND SPRINKLER HEADS. ENSURE AFTER INSTALLATION OF FIXTURES THAT THERE IS NO CONTACT BETWEEN DUCTS AND FIXTURES TO AVOID VIBRATION IN FIXTURES.
23. EXISTING ELECTRICAL INSTALLATION IS TO BE ALTERED IN THE AREA INDICATED. RELOCATE EXISTING OUTLETS, SWITCHES, RECEPTACLES AND LIGHT FIXTURES WHERE REQUIRED TO ACCOMMODATE WORK UNDER THIS PROJECT. WHERE WORK OF THIS TRADE OR WORK OF OTHERS TRADES INTERRUPTS EXISTING ELECTRICAL CIRCUITS, ALL SUCH SERVICES SHALL BE REESTABLISHED AND CONTROL TO ALL OUTLETS WHICH ARE TO REMAIN IN SERVICE.
24. COPPER CONDUCTORS SHALL BE USED THROUGHOUT THE JOB. SIZE NO. 8 AND SMALLER SHALL BE TYPE THWN OR THHN AND SIZE NO. 6 AND LARGER SHALL BE TYPE THHN OR XHHW.
25. PERMANENTLY AND EFFECTIVELY GROUND RACEWAYS, CONTROL EQUIPMENT AND UTILIZATION EQUIPMENT IN ACCORDANCE WITH REQUIREMENTS OF APPLICABLE CODES.
26. ELECTRICAL METALLIC TUBING (EMT) SHALL BE USED UP TO THE PANELBOARD AND FROM PANELBOARD TO J-BOXES AND INSIDE ALL WALLS. EMT SHALL BE USED IN INTERIOR SPACES BETWEEN ELECTRICAL DEVICES EXCEPT MC CABLE MAY BE USED NO MORE THAN 15 FT. LF FROM J-BOX TO ADJACENT ELECTRICAL DEVICES. MC CABLE SHALL NOT BE USED FROM ONE DEVICE (LIGHT FIXTURES, OUTLETS, ETC.) TO ANOTHER. MC CABLE MAY ONLY BE USED FROM J-BOX TO DEVICE. PROVIDE MULTIPLE J-BOXES AS REQUIRED TO LIMIT MC CABLE LENGTH TO 15 FEET FROM ANY J-BOX. FLEXIBLE LIQUID TIGHT SHALL BE USED FOR FINAL MOTOR CONNECTIONS REGARDLESS OF LOCATION. RIGID METAL CONDUIT SHALL BE USED IN WET LOCATIONS, IN CONCRETE SLABS ON GRADE AND IN SLABS EXPOSED TO WEATHER, ONLY EMT SHALL BE USED IN THE CEILING OF FLOOR BELOW FOR FLOOR ELECTRICAL OUTLETS. ALSO IN OPEN CEILING AREAS USE ONLY EMT CONDUIT.
27. RIGID METAL CONDUITS JOINTS, FITTINGS, COUPLINGS AND TERMINATIONS SHALL BE THREADED TYPE. REAM CONDUIT AFTER THREADS ARE CUT. EMT COUPLING AND CONNECTORS SIZED 3/4" AND LESS SHALL BE SET SCREW OR COMPRESSION TYPE 1" AND LARGER SHALL BE COMPRESSION TYPE. CONNECTORS MUST HAVE INSULATED THROATS.
28. OUTLET BOXES:
    A. INTERIOR: GALVANIZED OR SHERARDIZED, ONE PIECE PRESSED STEEL, KNOCK OUT TYPE, STANDARD SIZE SUITABLE FOR USE AS INTENDED.
    B. MANUFACTURERS: APPLETTON, BRYANT, STEEL CITY, OR APPROVED EQUAL.
    C. ALL WIRING DEVICES SHALL BE SPECIFICATION GRADE AS MANUFACTURED BY LEVITON, HUBBELL OR SIERRA.
29. LIGHTING: ALL LUMINAIRE SHALL HAVE BE LED. MOUNTING HARDWARE SHALL BE COMPATIBLE WITH FIXTURE TYPE, CEILING CONSTRUCTION AND MOUNTING POSITION PER CODE SPECIFIED SEISMIC CONSTRAINT REQUIREMENTS.
30. WHERE OUTLETS ARE SHOWN BACK-TO-BACK, INSTALL THE OUTLETS WITH 24" SEPARATION IN FIRE RATED WALLS. ALL OTHER WALLS INSTALL OUTLETS WITH A STUD IN BETWEEN.
31. CONTRACTOR SHALL REVIEW BUILDING STANDARDS AND VERIFY THAT ALL EQUIPMENT AND WIRING METHODS MEET THE REQUIREMENTS.
32. PROVIDE NEMA 5-15R FOR RECEPTACLES EXCEPT 5-20R FOR DEDICATED RECEPTACLES PER CODE.
33. ALL PANELBOARD SHALL BE BOLT ON TYPE COPPER MAIN BUS AND COPPER GROUND BAR (DOUBLE SIZE NEUTRAL REQUIRED FOR K-13 TRANSFORMER AIC TO MATCH EXISTING U.O.N. DISTRIBUTION EQUIPMENT SHALL BE SQUARE D, CUTLER HAMMER, GE OR SIEMENS. ALL PANELBOARD SHALL BE PROVIDED WITH AN ENGRAVED PLASTIC NAMEPLATE INDICATED PANEL NAME AND VOLTAGE ON THE EXTERIOR OF ENCLOSURE. DOOR WITH IN DOOR HINGE TYPE.
34. ALL ELECTRICAL AND VOICE/DATA WIRING LOCATION IN RATED FIRE WALLS SHOULD BE INSTALLED IN METAL CONDUIT, AND ASSEMBLIES SHALL COMPLY WITH BUILDING CODE.
35. ALL NEW TRANSFORMER SHALL BE K-13 WITH FLUKE FLK-075-CLV-INFRARED WINDOW. SQUARE D, CUTLER HAMMER, GE, SIEMENS, OR POWERSMITH.
36. PROVIDE PULL STRING IN ALL TEL/DATA/AV CONDUITS INCLUDING CONDUITS PROVIDED FROM TEL/DATA/AV OUTLETS (IN FLOOR AND WALL) TO ACCESSIBLE CEILING.
37. TELE/DATA/AV VENDOR NEEDS TO PROVIDE DRAWINGS, APPLY AND OBTAIN PERMITS FOR ALL THEIR WORK.
38. 3D GPR SCAN/XRAY SLAB IS REQUIRED AT ALL FLOOR ANCHORS, FLOOR BOLTS, AND CONCRETE CORE LOCATIONS; CORING MUST BE PERFORMED AFTER HOURS. ALL CORE LOCATIONS SHALL BE APPROVED BY BUILDING MANAGEMENT PRIOR TO CORING.
39. PROVIDE PANELBOARD SCHEDULES (TYPEWRITTEN) AT COMPLETION OF WORK. ALL EXISTING AND NEW CIRCUITS IN THE AREA OF WORK SHALL BE DOCUMENTED.
40. ALL COMMUNICATION WIRING SHALL BE PLENUM-RATED AND SHALL BE INDEPENDENTLY SUPPORTED FROM THE SLAB ABOVE AND NOT FROM CEILING WIRES.
41. CIRCUIT NUMBER SHOWN ARE FOR REFERENCE ONLY, VERIFY IN FIELD FOR ACTUAL CIRCUITS.
42. LABEL ALL J-BOXES WITH VOLTAGE, PANEL AND CIRCUIT NUMBERS.
43. ALL OUTLETS MUST BE LABELED, (P-TOUCH) (PNL9A CTI).
44. EACH MULTIWIRE BRANCH CIRCUIT SHALL BE PROVIDED WITH A MEANS THAT WILL SIMULTANEOUSLY DISCONNECT ALL UNGROUNDED CONDUCTORS AT THE POINT WHERE THE BRANCH CIRCUIT ORIGINATES, PER 2016 CEC SECTION 210.4(B).
45. ALL SUPPORTS/J-BOXES MUST BE DRILLED AND ANCHORED AND NOT POWER ACTUATED SHOTS.
46. PER 2016 CEC TABLE 310.15(B)(3)(A), WIRE AMPACITY SHALL BE DERATED BASED UPON THE NUMBER OF CURRENT CARRYING CONDUCTORS (CCC) IN A COMMON RACEWAY. DERATED AMPACITY SHALL BE GREATER THAN OR EQUAL TO UPSTREAM CIRCUIT BREAKER. PROVIDE #12AWG FOR COMMON RACEWAYS CONTAINING BETWEEN 2-6 CCC'S. PROVIDE #10AWG FOR COMMON RACEWAYS CONTAINING 7-9 CCC'S. PROVIDE #8AWG FOR COMMON RACEWAYS ENCLOSING BETWEEN 10-20 CCCS.
47. FOR BUILDING WITH TRENCH SYSTEM, USE TRENCH SYSTEM FOR WIRES FROM SINGLE SOURCE (TRANSFORMER, ETC.). DO NOT RUN WIRES FROM 2 DIFFERENT SOURCES IN A COMMON TRENCH.
48. CONTRACTOR SHALL XRAY SLAB PRIOR TO ANY CORE DRILLING. THIS IS TO VERIFY THAT THE CORE WILL NOT HIT ANY STRUCTURAL MEMBERS OR EXISTING CONDUCTORS. THIS PRICE SHALL BE INCLUDED IN THE BID.
49. ALL ELECTRICAL EQUIPMENT AND DEVICES AT HARD LID (OR DRYWALL) AND SUSPENDED CEILINGS MUST BE ACCESSIBLE FOR MAINTENANCE AND AS REQUIRED BY CODE.
50. REPLACEMENT OF LAMPS, DRIVERS, AND OTHER LIGHTING MAINTENANCE ITEMS WHICH ARE NOT BUILDING STANDARD ARE SUBJECT TO TENANT BILL-BACK CHARGES.
51. THE WIRING OF LUMINAIRES, WIRING DEVICES AND CONTROL DEVICES, WITHIN EACH INTENDED CONTROL SCHEME, SHALL BE FULLY IMPLEMENTED USING THE PROPER TYPE AND NUMBER OF WIRES WITH CONNECTIONS AS REQUIRED.
52. ALL NEW CIRCUITRY SHOWN ON THESE DOCUMENTS IS DONE PER THE "ROUNDHOUSE" METHOD. SIZE COMMON NEUTRAL TO 150% OF PHASE WIRES IN ALL RECEPTACLE CIRCUITS.
53. PROVIDE SIX SETS OF PRODUCT SUBMITTALS EACH IN A THREE-RING BINDER FOR REVIEW AS FOLLOWS:
    - A. LIFE SAFETY SYSTEMS
    - a. LIFE SAFETY STROBE UNITS
    - b. LIFE SAFETY SPEAKER/STROBE UNITS
    - c. LIFE SAFETY SPEAKER UNITS
    - d. LIFE SAFETY PULL STATIONS
    - e. SMOKE DETECTORS
    - B. LUMINAIRES
    - C. DIGITAL LIGHTING CONTROL SYSTEMS
    - D. DEVICES: RECEPTACLES, SWITCHES, TELECOMM DEVICES, ETC.
    - E. COVERPLATES: RECEPTACLES, SWITCHES, TELECOMM DEVICES, ETC
    - F. RECESSED POKE-THRU ASSEMBLIES
    - G. PANELBOARDS
    - H. DIGITAL METERING SYSTEM
    - I. OTHER DEVICES LISTED ON PLANS AND SPECS.
54. AIC BRACING/SCCR/INTERRUPTING RATING OF NEW PANELS AND CIRCUIT BREAKERS SHALL EXCEED MAXIMUM FAULT CURRENT AT PANEL LOCATION. VERIFY WITH BASE BUILDING SHORT CIRCUIT AND COORDINATION STUDY.
55. A COMPLETE CLOSE-OUT PACKAGE AS DETAILED IN TENANT IMPROVEMENT MANUAL, INCLUDING (2) HARD COPIES ON STANDARD 30X42 PLAN SHEET AND (1) AUTOCAD VERSION OF ARCHITECTURAL RECORD AND MEP AS-BUILT DRAWINGS MUST BE SUBMITTED TO LANDLORD WITHIN THIRTY DAYS OF PROJECT COMPLETION.
56. ALL WORK MUST BE PERFORMED IN ACCORDANCE WITH THE TENANT IMPROVEMENT MANUAL.

DEMOLITION NOTES

1. EXISTING ELECTRICAL INSTALLATION IS TO BE ALTERED IN THE AREA INDICATED. RELOCATE EXISTING OUTLETS, SWITCHES, RECEPTACLES AND LUMINAIRES WHERE REQUIRED TO ACCOMMODATE WORK UNDER THIS PROJECT. WHERE WORK OF THIS TRADE OR WORK OF OTHER TRADES INTERRUPTS EXISTING ELECTRICAL CIRCUITS, ALL SUCH SERVICES SHALL BE REESTABLISHED AND CONTROL TO ALL OUTLETS WHICH ARE TO REMAIN IN SERVICE.
2. SCOPE OF DEMOLITION SHALL BE PER ARCHITECTURAL DRAWING.
3. DEMOLISH ALL UNUSED EXISTING ELECTRICAL AND TELEPHONE RECEPTACLES. REMOVE UNUSED CONDUCTORS FROM EXISTING RACEWAYS. INCLUDING FLOOR ELECTRICAL TRENCH (IF APPLICABLE), CUT AND CAP ABANDONED FLOOR RACEWAYS FLUSH WITH CONCRETE FLOOR OR BEHIND WALLS AND CEILINGS. ALL ABANDONED FLOOR PENETRATIONS AND CORES MUST BE BACK FILLED WITH CONCRETE AND BROUGHT BACK TO THE ORIGINAL FIRE RATING.
4. RE-USE POWER OUTLETS/JACKS WHERE POSSIBLE; INSTALL COVER PLATE ON ALL ABANDONED POWER OUTLETS/JACKS WHICH WILL BE COVERED BY FURNITURE; ALL OTHER ABANDONED OUTLETS VISIBLE TO THE PUBLIC TO BE REMOVED, PATCH GWB AND PAINT TYPICAL
5. ALL EXISTING UNUSED/ABANDONED CONDUIT AND CABLES SHALL BE REMOVED BACK TO SOURCE.
6. TRACE ALL UNUSED/DEMOLISHED CIRCUITS BACK TO THE PANEL. ALL UNUSED/DEMOLISHED CIRCUITS SHALL BE MADE AVAILABLE FOR USE ON THIS PROJECT.
7. COORDINATE WITH BUILDING ENGINEER, PRIOR TO SHUTTING OFF EMERGENCY CIRCUIT.

FUNCTIONAL TESTING, COMMISSIONING AND TRAINING

THE ENTIRE LIGHTING CONTROL SYSTEM (INCLUDING ALL CONTROLLERS, SWITCHES, RELAYS, CONTROLLED RECEPTACLES, OCCUPANCY SENSORS, ETC) SHALL BE FUNCTIONALLY TESTED AND COMMISSIONED TO THE SATISFACTION OF THE CHIEF BUILDING ENGINEER BY ELECTRICAL CONTRACTOR/CONTRACTOR'S AGENT, INCLUDING ALL RELEVANT DEVICE CALIBRATION AND CONFIGURATION AS REQUIRED. FOLLOW MANUFACTURERS' GUIDELINES AND AND PROVIDE ADDITIONAL DEVICES, SENSORS, ETC AS REQUIRED.

CONTRACTOR/CONTRACTOR'S AGENT SHALL PROVIDE ADEQUATE TRAINING TO THE BUILDING'S ENGINEERING STAFF. FACTORY AUTHORIZED TECHNICIAN AND THE CONTRACTOR SHALL INCLUDE A MINIMUM OF 8 HOURS OF THOROUGH AND DETAILED TRAINING. THIS TRAINING TIME IS IN addition TO THE STARTUP AND FUNCTIONALITY COMMISSIONING.

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Consultant

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Issue/Revision:

No.	Proj. No. Date:	Description
1	32243.01 29MAR19	ISSUE FOR REVIEW
2	32243.01 22APR19	ISSUE FOR PERMIT
2.1	32243.01 24MAY19	PLAN CHECK RESPONSE ADDENDUM #3

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Approval Signature:

Co/ Title: Date:

SPECIFICATIONS

Scale: NONE Issue Date: 22APR19
Drawn By: PL Reviewed By: LA
Sheet: 1 of X

1E1.2

(E) PANEL-DPR

ENCL NEMA: 1

SERVICE: 277 /480V,3ø,4W
MAIN BREAKER: NONE
LOCATION: ELECTRICAL ROOM
MOUNTING: SURFACE
MAIN BUS: 225A
FEEDER: 200A/3P 4W FROM MSB-B

DESCRIPTION	TYPE	VA A	VA B	VA C	CIR#	BRK	SN	BRK	CIR#	VA A	VA B	VA C	TYPE	DESCRIPTION
					1	20/1	*		2	7990			H	
					3	20/1	*	40/3	4		7990		H	CU 1-1
					5	20/1	*		6			7990	H	
					7	20/1	*	20/1	8					
					9	20/1	*	20/1	10					
					11	20/1	*	20/1	12					
					13	20/1	*	20/1	14					
					15	20/1	*	20/1	16					
					17	20/1	*	20/1	18					
					19	20/1	*	20/1	20					
					21	20/1	*	20/1	22					
					23	20/1	*	20/1	24					
					25	20/1	*		26	8000			H	
					27	20/1	*	70/3	28		8000		H	(E) AC-1
					29	20/1	*		30			8000	H	
					31	20/1	*	20/1	32					
					33	20/1	*	20/1	34					
					35	20/1	*	20/1	36					
					37	20/1	*	20/1	38					
					39	20/1	*	20/1	40					
					41	20/1	*	20/1	42					
TOTAL PHASE A							15,990 VA			15990				
TOTAL PHASE B							15,990 VA				15990			
TOTAL PHASE C							15,990 VA					15990		
TOTAL CONNECTED LOAD							47,970 VA							

DEMAND LOAD SUMMARY	CONN. VA	DEMAND FACTOR	DEMAND VA	DEMAND AMP
TYPE "M": NON-CONTINUOUS / MISC. LOADS		100%		
TYPE "L": LIGHTING / CONTINUOUS LOADS		125%		
TYPE "R": RECEPTACLES (FIRST 10KVA)		100%		
TYPE "R": RECEPTACLES (OVER 10KVA)		50%		
TYPE "H": HVAC / MECHANICAL LOADS	47,970	100%	47,970	
TYPE "K": KITCHEN EQUIPMENT LOADS		65%		
	47,970		47,970	58

(E) PANEL- LT

ENCL NEMA: 1

SERVICE: 277 /480V,3ø,4W
MAIN BREAKER: NONE
LOCATION: ELECTRICAL ROOM
MOUNTING: SURFACE
MAIN BUS: 225A
FEEDER: EXISTING

DESCRIPTION	TYPE	VA A	VA B	VA C	CIR#	BRK	SN	BRK	CIR#	VA A	VA B	TYPE	DESCRIPTION
WH 1-1	H	4600			1	20/1	*	20/1	2	2000		L	(E) LIGHTS
WH 1-2	H		4600		3	20/1	*	20/1	4		2000	L	(E) LIGHTS
SPARE					5	20/1	*	20/1	6		2000	L	(E) LIGHTS
SPARE					7		*	20/1	8	2000		L	(E) LIGHTS
SPARE					9	20/3	*	20/1	10		2000	L	(N) LIGHTS
SPARE					11			20/1	12			I	(N) LIGHTS
TOTAL PHASE A		4600					8,600 VA			4000			
TOTAL PHASE B			4600				8,600 VA				4000		
TOTAL PHASE C							4,000 VA					4000	
TOTAL CONNECTED LOAD							21,200 VA						

DEMAND LOAD SUMMARY	CONN. VA	DEMAND FACTOR	DEMAND VA	DEMAND AMP
TYPE "M": NON-CONTINUOUS / MISC. LOADS		100%		
TYPE "L": LIGHTING / CONTINUOUS LOADS	12,000	125%	15,000	
TYPE "R": RECEPTACLES (FIRST 10KVA)		100%		
TYPE "R": RECEPTACLES (OVER 10KVA)		50%		
TYPE "H": HVAC / MECHANICAL LOADS	9,200	100%	9,200	
TYPE "K": KITCHEN EQUIPMENT LOADS		65%		
	21,200		24,200	29

(E) PANEL-B6

ENCL NEMA: 1

SERVICE: 120 /208V,3ø,4W
MAIN BREAKER: NONE
LOCATION: ELECTRICAL ROOM
MOUNTING: SURFACE
MAIN BUS: 225A
FEEDER: EXISTING

DESCRIPTION	TYPE	VA A	VA B	VA C	CIR#	BRK	SN	BRK	CIR#	VA A	VA B	VA C	TYPE	DESCRIPTION
FCU 1-1	H	364			1	15/2	*	20/1	2	900			M	(E) SERVER RM
	H		364		3		*	20/1	4		900		M	(E) SERVER RM
FCU 1-2	H			62	5	15/2		15/2	6			83	H	BS 1-1
	H	62			7		*		8	83			H	
FCU 1-3	H		364		9	15/2	*	20/1	10					SPARE
	H			364	11		*	20/1	12					SPARE
FCU 1-4	H	187			13	15/2	*	20/1	14	200			R	DD
	H		187		15		*	20/1	16		180		R	(E) ROOF RECEP.
FCU 1-5	H			62	17	15/2	*	20/1	18			1000	H	(E) BOILER (ROOF)
	H	62			19		*	20/1	20					SPARE
CONDU. PUMP	H		1000		21	20/1	*	20/1	22					SPARE
CU 1-6	H			62	23	15/2	*	20/1	24					SPARE
	H	62			25		*	20/1	26					SPARE
SPARE					27	20/1	*	20/1	28					SPARE
SPARE					29	20/1	*	20/1	30					SPARE
SPARE					31	20/1	*	20/1	32	900			M	(E) SERVER RM
SPARE					33	20/1	*	20/1	34		900		M	(E) SERVER RM
SPARE					35	20/1	*	20/1	36			900	M	(E) SERVER RM
SPARE					37	20/1	*	20/1	38					SPARE
SPARE					39	20/1	*	20/1	40		500		M	(E) FA CABINET
SPARE					41	20/1		20/1	42					SPARE
TOTAL PHASE A		737					2,820 VA			2083				
TOTAL PHASE B			1915				4,395 VA				2480			
TOTAL PHASE C				550			2,533 VA					1983		
TOTAL CONNECTED LOAD							9,748 VA							

DEMAND LOAD SUMMARY	CONN. VA	DEMAND FACTOR	DEMAND VA	DEMAND AMP
TYPE "M": NON-CONTINUOUS / MISC. LOADS	5,000	100%	5,000	
TYPE "L": LIGHTING / CONTINUOUS LOADS		125%		
TYPE "R": RECEPTACLES (FIRST 10KVA)	380	100%	380	
TYPE "R": RECEPTACLES (OVER 10KVA)		50%		
TYPE "H": HVAC / MECHANICAL LOADS	4,368	100%	4,368	
TYPE "K": KITCHEN EQUIPMENT LOADS		65%		
	9,748		9,748	27

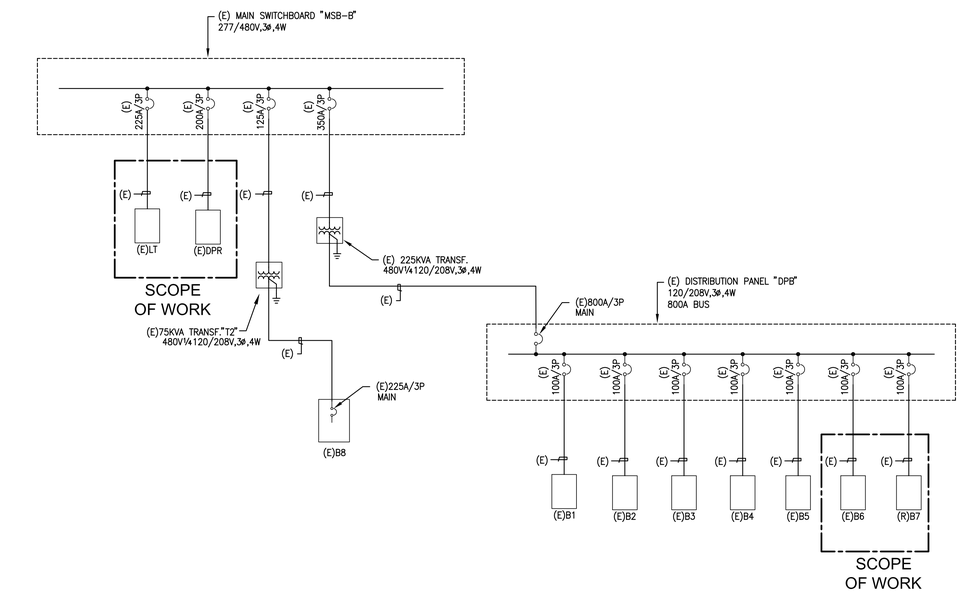
(R) PANEL-B7

ENCL NEMA: 1

SERVICE: 120 /208V,3ø,4W
MAIN BREAKER: NONE
LOCATION: IDF ROOM
MOUNTING: SURFACE
MAIN BUS: 225A
FEEDER: 100A/3P,4W EXTEND CONDUIT AND WIRES

DESCRIPTION	TYPE	VA A	VA B	VA C	CIR#	BRK	SN	BRK	CIR#	VA A	VA B	VA C	TYPE	DESCRIPTION
(E) LOAD	R	540			1	20/1	*	20/1	2	720			R	PROJECTION SCREEN
OFFICE	L		120		3	20/1	*	20/1	4		360		R	REC-PANTRY
ELECTRIFIED FURNITURE	R			720	5	20/1	*	20/1	6			900	K	REC-PANTRY
ELECTRIFIED FURNITURE	R	720			7	20/1	*	20/1	8	720			R	REC-MULTI P. ROOM
ELECTRIFIED FURNITURE	R		720		9	20/1	*	20/1	10		720		R	REC-MULTI P. ROOM
ELECTRIFIED FURNITURE	R			720	11	20/1	*	20/1	12			720	R	REC-MULTI P. ROOM
ELECTRIFIED FURNITURE	R	720			13	20/1	*	20/1	14	720			R	REC-MULTI P. ROOM
ELECTRIFIED FURNITURE	R		720		15	20/1	*	20/1	16		360		R	REC-PANTRY
ELECTRIFIED FURNITURE	R			720	17	20/1	*	20/1	18			900	K	REC-PANTRY
REC-OFFICE	R	540			19	20/1	*	20/1	20	900			K	REC-PANTRY
REC-OFFICE	R		720		21	20/1	*	20/1	22		900		K	REC-PANTRY
REC-OFFICE	R			180	23	20/1	*	20/1	24			720	R	REC-OFFICE
REC-OFFICE	R	720			25	20/1	*	20/1	26	720			R	REC-OFFICE
REC-OFFICE	R		720		27	20/1	*	20/1	28		720		R	REC-OFFICE
REC-OFFICE	R			720	29	20/1	*	20/1	30			720	R	REC-OFFICE
REC-OFFICE	R	900			31	20/1	*	20/1	32	1080			R	REC-OFFICE
REC-OFFICE	R		360		33	20/1	*	20/1	34		1080		R	REC-OFFICE
REC-OFFICE	R			720	35	20/1	*	20/1	36			720	R	REC-OFFICE
REC-MULTI P. ROOM	R	720			37	20/1	*	20/1	38	400			H	DD/WV
REC-MULTI P. ROOM	R		720		39	20/1	*	20/1	40		670		H	EF 1-1
SPARE					41	20/1		20/1	42					SPARE
TOTAL PHASE A		4260					10,120 VA			5260				
TOTAL PHASE B			4620				10,510 VA				5890			
TOTAL PHASE C				3780			8,460 VA					4680		
TOTAL CONNECTED LOAD							29,090 VA							

DEMAND LOAD SUMMARY	CONN. VA	DEMAND FACTOR	DEMAND VA	DEMAND AMP
TYPE "M": NON-CONTINUOUS / MISC. LOADS		100%		
TYPE "L": LIGHTING / CONTINUOUS LOADS	120	125%	150	
TYPE "R": RECEPTACLES (FIRST 10KVA)	10,000	100%	10,000	
TYPE "R": RECEPTACLES (OVER 10KVA)	12,500	50%	6,250	
TYPE "H": HVAC / MECHANICAL LOADS	1,070	100%	1,070	
TYPE "K": KITCHEN EQUIPMENT LOADS	5,400	65%	3,510	
	29,090		20,980	58



PARTIAL ELECTRIC SINGLE LINE DIAGRAM — 1 / E-1.3
NOT TO SCALE

PANELBOARD NOTES

1. ALL MULTIWIRE BRANCH CIRCUITS SHALL BE PROVIDED WITH A MEANS THAT WILL DISCONNECT ALL UNGROUNDED CONDUCTORS AT THE POINT WHERE THE BRANCH CIRCUIT ORIGINATES, PER NEC 2014/CEC 2016 SECTION 210.4(B), WHETHER SHOWN ON PANEL SCHEDULES OR NOT. FOR SINGLE PHASE MULTIWIRE BRANCH CIRCUITS, PROVIDE AND INSTALL TWO SINGLE-POLE CIRCUIT BREAKERS WITH A LISTED AND FACTORY-SUPPLIED HANDLE-TIE, OR A 2-POLE SWITCH OR CIRCUIT BREAKER. FOR A 3-PHASE INSTALLATION, PROVIDE AND INSTALL A 3-POLE CIRCUIT BREAKER, SEE FLOOR PLANS FOR LOCATIONS AND CIRCUIT NUMBERS OF ALL MULTIWIRE BRANCH CIRCUIT HOMERUNS.

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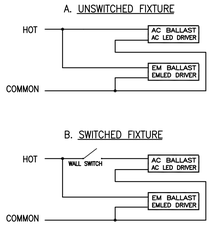
SINGLE LINE DIAGRAM AND PANEL SCHEDULES

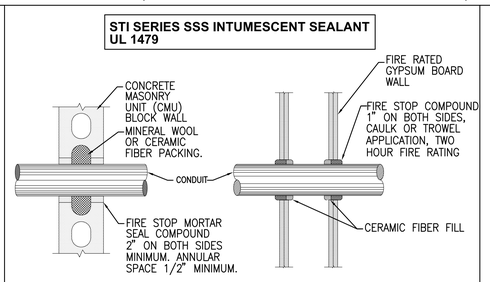
Scale: NONE Issue Date: 22APR19
Drawn By: PL Reviewed By: LA
Sheet: 1 of X

1E1.3



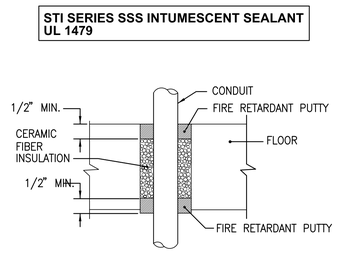
EMERGENCY BALLAST WIRING DIAGRAM — 1 / -

NOT TO SCALE



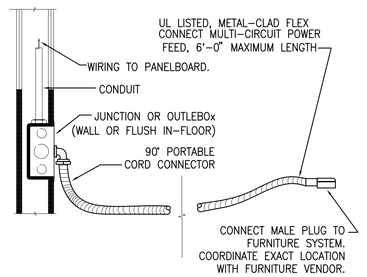
CONDUIT PENETRATION DETAIL
FIRE RATED WALL — 2 / -

NOT TO SCALE



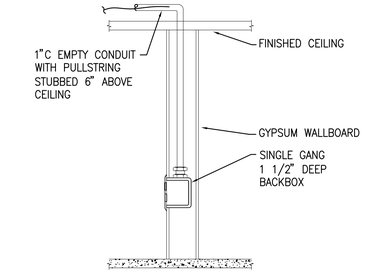
FLOOR PENETRATION DETAIL — 3 / -

NOT TO SCALE



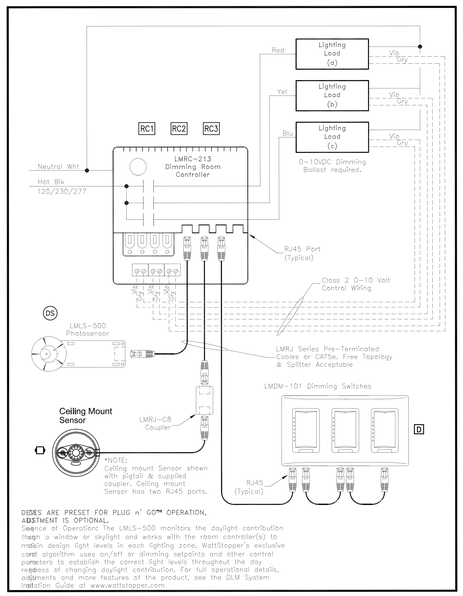
ELECTRICAL CONNECTION DETAIL
TYPICAL FURNITURE SYSTEM — 4 / -

NOT TO SCALE



CONDUIT STUB-UP FOR TELECOM WALL BOX — 8 / -

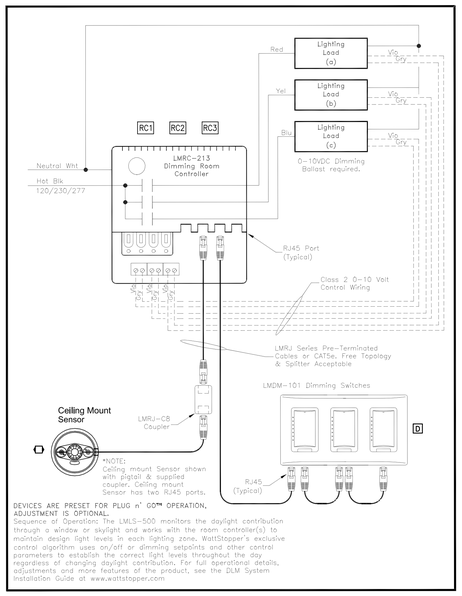
NOT TO SCALE



DEVICES ARE PRESET FOR PLUG n' GO™ OPERATION, ADJUSTMENT IS OPTIONAL.
Sequence of Operations: The LMLS-500 monitors the daylight contribution through a window or skylight and works with the room controller(s) to maintain design light levels in each lighting zone. WattStopper's exclusive control algorithm uses on/off or dimming setpoints and other control parameters to establish the correct light levels throughout the day, regardless of changing daylight contribution. For full operational details, adjustments and more features of the product, see the DLM System Installation Guide at www.wattstopper.com.

WATTSTOPPER DLM TYPICAL OPEN LOOP PHOTOSENSOR WIRING DIAGRAM — 9 / -

NOT TO SCALE



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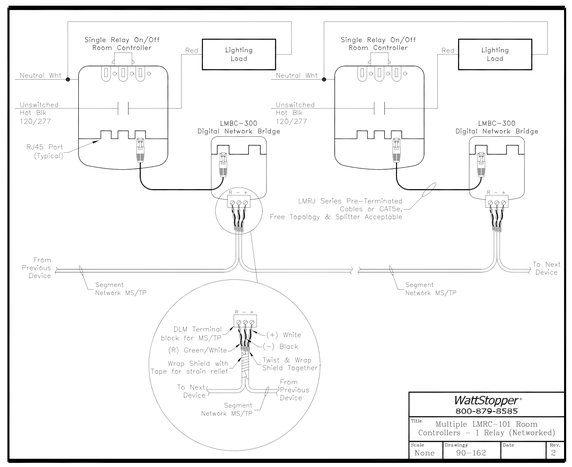
WATTSTOPPER DLM TYPICAL OPEN LOOP WIRING DIAGRAM — 10 / -

NOT TO SCALE



WATTSTOPPER DLM TYPICAL NETWORK BRIDGE CONNECTION DIAGRAM — 11 / -

NOT TO SCALE

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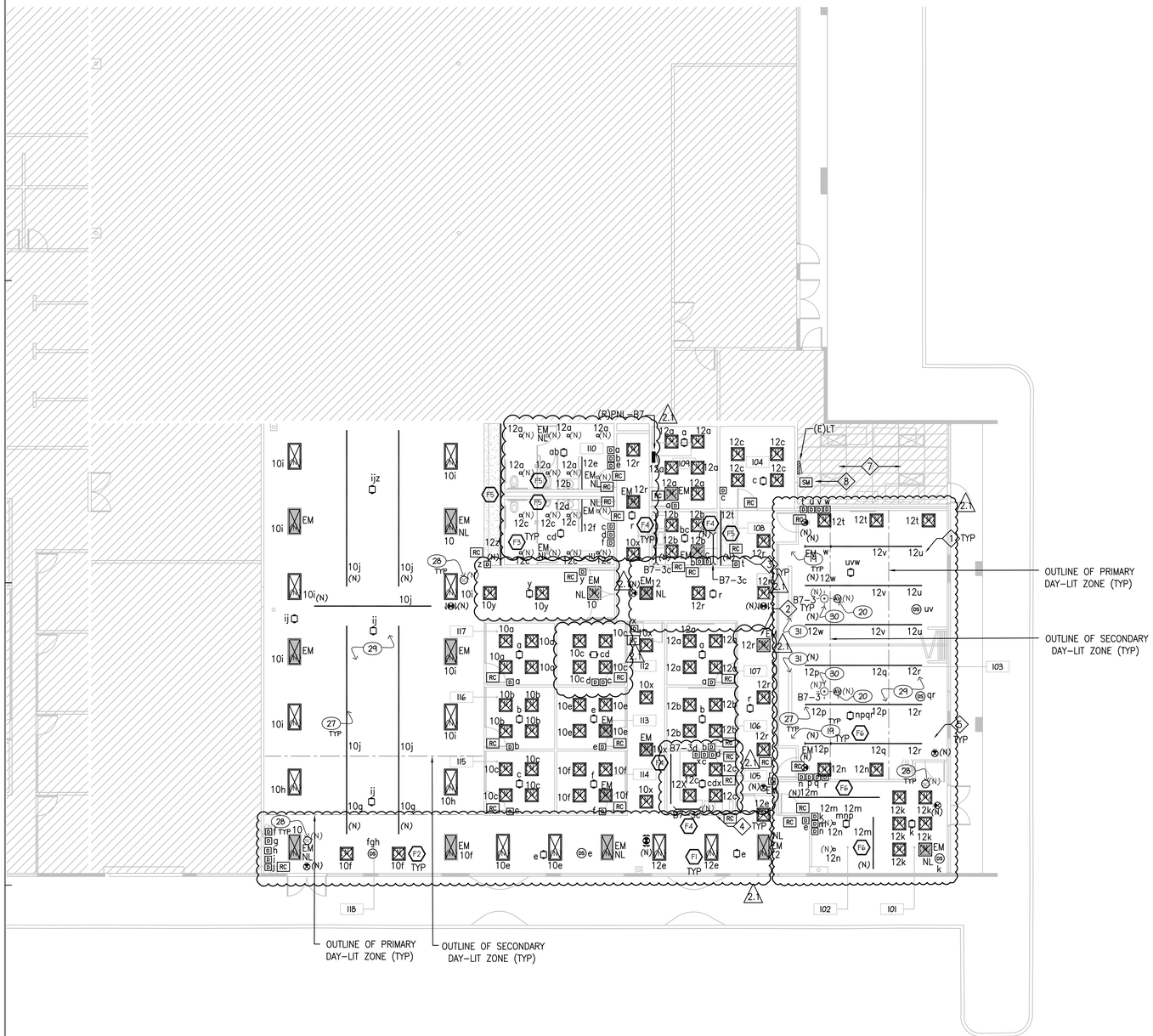
ELECTRICAL DETAILS AND PANEL SCHEDULES

Scale: NONE
Drawn By: PL
Sheet: 1 of X
Issue Date: 22APR19
Reviewed By: LA

1E1.4

LIGHT FIXTURE SCHEDULE

TAG	SYMBOL	QUANTITY	MANUFACTURER	DESCRIPTION	SPECIFICATION	
6 F1		SEE PLAN	LITHONIA	2X4 RECESSED DIRECT/INDIRECT FIXTURE	2TL2-40L-FW-MWS-BLANK-EZ1-LP835-N80	32W LED 277V
6 F2		SEE PLAN	LITHONIA	2X2 RECESSED DIRECT/INDIRECT FIXTURE	2TL4-40L-FW-MWS-BLANK-EZ1-LP835-N80	35W LED 277V
6 F3		SEE PLAN	INFINIUM	LED DOWNLIGHT, 4" SQUARE	SGE4SQLEDOS	13W LED 277V
F4		SEE PLAN	KELVIX	UNDER-COUNTER LIGHTING	PQ35K-24V	5W/FT LED 120V
F5		SEE PLAN	FINELITE	RECESSED LINEAR	HP-4 R-4FT-H-835-F-277V-SC-SF	3.6W/FT LED 277V
6 F6		SEE PLAN	FINELITE	LED LINEAR PENDANT (18', 24', 32' LENGTHS)	HP-4 D-X'-S-835-F-277V-H-835-F-277V-FM-SC-C1-OBD	3.6W/FT LED 277V



1 **1ST FLOOR - LIGHTING PLAN**
SCALE: 1/8"=1'-0"

SHEET NOTES

1. ALL NEW LUMINAIRES SHALL BE CIRCUITED TO (E) PANEL-LT UON.
2. EMERGENCY FIXTURE WITH 90 MINUTE EMERGENCY BATTERY PACK/EMERGENCY LED DRIVER HIGH-LUMEN EMERGENCY BATTERY PACK/LED DRIVER.
3. ROOM CONTROLLER SHALL BE LOCATED IN CEILING DIRECTLY ABOVE DIMMER/SWITCH AND ABOVE ACCESSIBLE CEILING OR IN NON-PUBLIC/ LEAST VISIBLE AREAS. PROVIDE ADDITIONAL WIRING TO ACCOMPLISH THIS AS REQUIRED. FIELD COORDINATE EXACT LOCATION PRIOR TO INSTALLATION. PROVIDE SEPARATE ROOM CONTROLLERS FOR LUMINAIRES OF DIFFERENT CIRCUITS, DIFFERENT SYSTEM VOLTAGES AND LAMP SOURCE BUT CONTROLLED BY COMMON SWITCH, DIMMER, OCCUPANCY SENSOR SWITCH AND DAY LIGHT SENSOR.
4. ALL LOCATION OF WALL DIMMERS, WALL SWITCHES, CEILING DAY LIGHT SENSORS AND CEILING OCCUPANCY SENSORS SHALL BE COORDINATED WITH ARCHITECT.
5. ALL EXIT SIGN "EM" FIXTURE WITH 90 MINUTE EMERGENCY BATTERY PACK/EMERGENCY LED DRIVER HIGH-LUMEN EMERGENCY BATTERY PACK/LED DRIVER.
6. PROVIDE INTEGRAL OR REMOTE EMERGENCY LED DRIVER FOR ALL EMERGENCY FIXTURES AS REQUIRED. REMOTE EMERGENCY LED DRIVER SHALL MOUNTED IN ACCESSIBLE CEILING SPACE. PROVIDE EXTRA LED DRIVER FOR EMERGENCY SECTION.
7. EXISTING LIGHTING FIXTURE AND EXISTING SWITCHING TO REMAIN.
8. WATTSTOPPER SEGMENT MANAGER WITH BMS INTEGRATION.

KEY NOTES

2.1
- 19 MINIMUM 1.5" CONDUIT INSIDE WALL TO 6" ABOVE WALL.
- 20 4K RATED WIRING AND HARDWARE TO PROJECTOR.
- 27 LINEAR PENDANTS TO BE MOUNTED 9'-0" A.F.F.
- 28 SECURITY CAMERAS PROVIDED AND INSTALLED BY OWNER.
- 29 LIGHT FIXTURES AND LIGHTING CONTROLS PROVIDED BY OWNER, INSTALLED BY CONTRACTOR.

2.1
- 30 POWER AND AV OUTLET IN CEILING FOR PROJECTORS.
- 31 RECESSED ROLL DOWN PROJECTOR SCREEN.

GENERAL SHEET NOTES

1. ALL SHOWN IS NEW, UON.
2. WHERE SWITCHES ARE SHOWN ADJACENT TO EACH OTHER, THEY SHALL BE GANGED AND COVERED BY A SINGLE PLATE. SWITCH COVER PLATES TO BE WHITE.
3. PROVIDE SEISMIC BRACING FOR ALL LUMINAIRES AS REQUIRED.
4. THE DIMMING DRIVERS SHALL BE COMPATIBLE WITH DIMMER/ LIGHTING CONTROL SYSTEM.
5. IF LUMINAIRES ARE SHOWN ON THE PLAN CONTROLLED BY DIMMERS, PROVIDE COMPATIBLE DIMMING BALLAST/ DRIVERS,/ POWER SUPPLIES WHETHER THE EXACT LUMINAIRE SPECIFICATION NUMBER INCLUDES DIMMING PROVISION OR NOT.
6. PROVIDE AUTOMATIC DAYLIGHT DIMMING (PRIMARY/SECONDARY) FOR ALL PERIMETER LIGHTING ADJACENT TO WINDOWS.
7. DISTANCE OF THE DAY LIGHT SENSORS FROM THE WINDOW SHALL BE PER MANUFACTURER'S RECOMMENDATIONS BASED ON THE WINDOW AND CEILING HEIGHT.
8. PROVIDE ALL LOW VOLTAGE INTERCONNECTION WIRING BETWEEN ALL ROOM CONTROLLERS, SENSORS, WALL SWITCHES, AND NETWORK HUBS FOR COMPLETE WORKING SYSTEM. REFER TO EQUIPMENT INSTALLATION MANUALS FOR DETAILED INFORMATION.
9. PROVIDE 0-10V DIMMABLE DRIVER FOR ALL LED FIXTURE. PROVIDE DIMMABLE DRIVER OR DIMMING BALLAST EVEN IF LUMINAIRE SCHEDULE SPECIFICATION NUMBER INCLUDES DIMMING PROVISION OR NOT.
10. FOR ALL DEVICE MOUNTING HEIGHTS, SAD.
11. LOCATION OF ALL DEVICES (SWITCHES, DIMMERS, RECEPTACLES, THERMOSTATS, STROBES, ETC) SHALL BE COORDINATED WITH AND APPROVED IN THE FIELD BY THE ARCHITECT. DO NOT INSTALL/ ROUGH-IN WITHOUT ARCHITECT'S REVIEW AND APPROVAL. NO EXCEPTION.
12. ALL SENSORS TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. LOCATIONS SHOWN ON PLANS FOR REFERENCE ONLY. COORDINATE PRE-INSTALLATION MEETING WITH MANUFACTURER'S REPRESENTATIVE TO VERIFY EXACT DEVICE LOCATIONS PRIOR TO ROUGH-IN.
13. WHERE NO SUSPENDED CEILING IS SHOWN, PROVIDE PENDANT MOUNTED, USING THREADED ROD AND SMALL J-BOX, OCCUPANCY SENSOR SWITCHES, AND DAY-LIGHT SENSOR SWITCHES. PAINT THE ENTIRE ASSEMBLY PER ARCHITECT'S DIRECTION. MOUNTING HEIGHT OF DEVICES PER MANUFACTURER'S RECOMMENDATIONS.
14. ALL CONDUITS, DISCONNECT SWITCHES, ROOM CONTROLLERS, ETC IN ALL EXPOSED CEILING AREA SHALL BE PAINTED AS DIRECTED BY ARCHITECT.
15. PROVIDE DEDICATED 20A/120V CONTROL CIRCUIT POWER FOR EQUIPMENT. PROVIDE GROUNDING VIA 3/4"C, 1#6 G TO NEAREST BUILDING GROUND SYSTEM. LIGHTING CONTROL SYSTEM HUB SHALL INTERFACE-READY WITH THE BUILDING BMS FOR FULL REMOTE OPERATION.

NOTE: LIGHTING CONTROLS BY OWNER; G.C. TO INSTALL.

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1	32243.01 29MAR19	ISSUE FOR REVIEW
2	32243.01 22APR19	ISSUE FOR PERMIT
2.1	32243.01 24MAY19	PLAN CHECK RESPONSE ADDENDUM #3

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1ST FLOOR - LIGHTING PLAN

Scale: 1/8"=1'-0" Issue Date: 22APR19
Drawn By: PL Reviewed By: LA
Sheet: 1 of X

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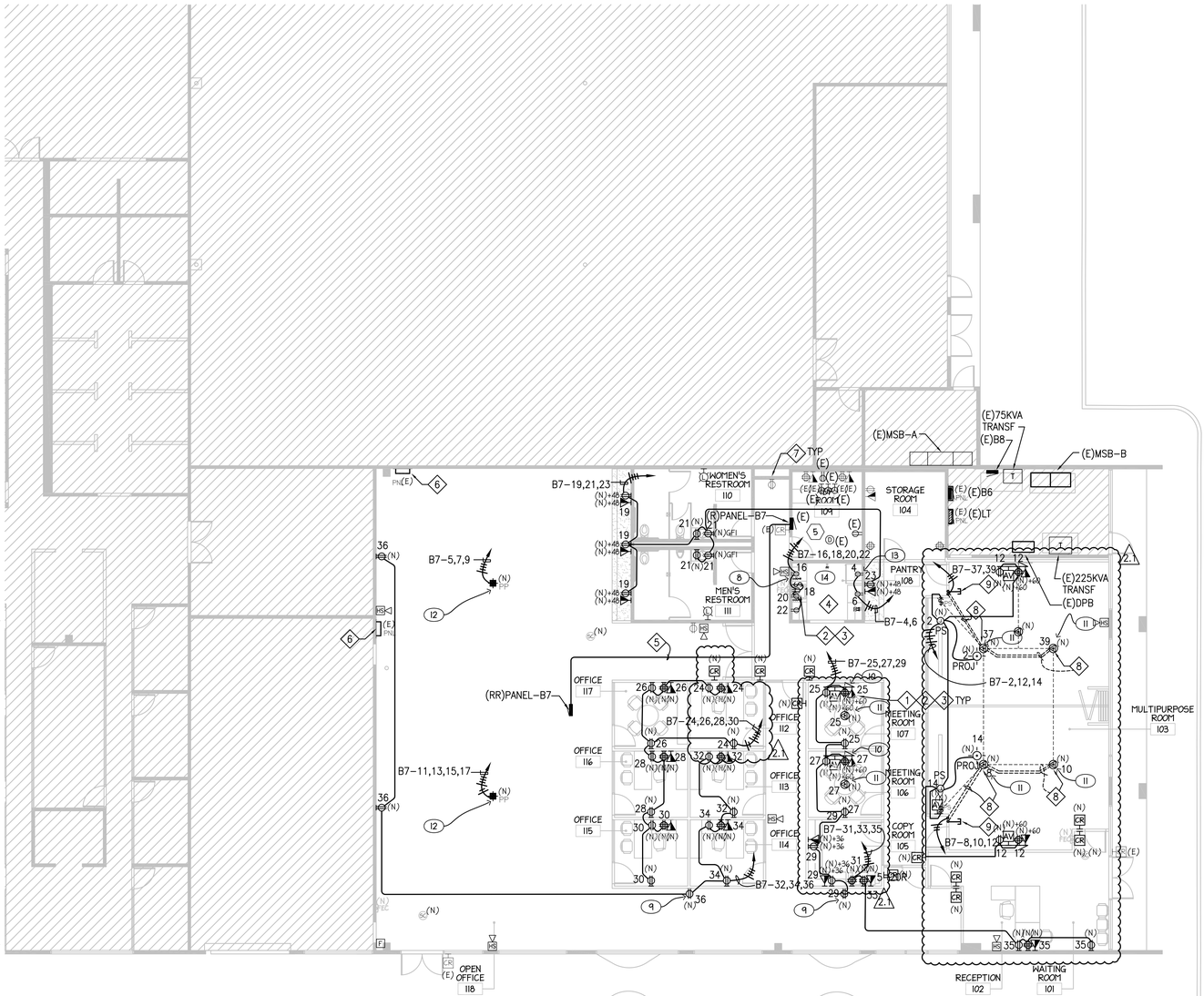
SYMBOL LEGEND

- DUPLEX POWER OUTLET
- FOURPLEX POWER OUTLET
- DED DEDICATED DUPLEX POWER OUTLET
- GFI GROUND FAULT INTERCEPTOR DUPLEX POWER OUTLET PROTECTION
- NEMA SPECIAL PURPOSE POWER OUTLET
- COMBINATION FLOOR-MOUNTED TELEPHONE/DATA/ DUPLEX POWER OUTLET
- WALL MOUNTED COMBINATION TELEPHONE/DATA OUTLET, NUMBER INDICATES PORTS, TYP.
- CR CARD READER (N.I.C.) COORDINATE REQUIREMENTS WITH TENANTS' SECURITY VENDOR
- AV WALL MOUNTED AUDIO/VISUAL EQUIPMENT (NIC), COORDINATE WITH TENANTS' A/V CONSULTANT
- PP ELECTRIFIED FURNITURE BASE FEED, POWER POLE
- X EQUIPMENT TYPE IDENTIFIER
- (E) EXISTING ITEM
- (N) NEW ITEM
- SC SECURITY CAMERAS PROVIDED AND INSTALLED BY OWNER.

KEY NOTES

8. PROVIDE DEDICATED OUTLET FOR DISHWASHER.
9. CENTER OUTLET ON WALL.
10. WALL MOUNTED AUDIO/VISUAL EQUIPMENT, COORDINATE WITH TENANTS' A/V CONSULTANT.
11. PROVIDE (N) LEGRAND FLUSH FLOOR CORE. VERIFY LOCATIONS AND SPECIFICATION WITH TENANT AND FURNITURE VENDOR. IS TRENCHING REQUIRED.
12. POWER POLE, PROVIDED BY FURNITURE VENDOR.
13. PROVIDE DEDICATED OUTLET FOR REFRIGERATOR.
14. PROVIDE DEDICATED OUTLET FOR MICROWAVE.
5. SERVER BY TENANT.



1 1ST FLOOR - POWER & SIGNAL PLAN

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

SHEET NOTES

1. PROVIDE 1"CONDUIT SYSTEM AND 120V CONTROL CIRCUIT FOR ALL COMPONENTS OF ACCESS/CAMERA/SECURITY CONTROL SYSTEMS. FOR EXACT REQUIREMENTS, COORDINATE WITH SECURITY VENDOR FOR EXACT REQUIREMENTS PRIOR TO COMMENCEMENT FOR WORK.
2. FOR WATER LEAK DETECTOR CONTROLLER (SPD). CONNECT TO NEAREST GENERAL PURPOSE RECEPTACLE CIRCUIT.
3. HALF-SWITCHED RECEPTACLE FOR GARBAGE DISPOSAL. PROVIDE WALL SWITCH.
4. PROVIDE GFI RECEPTACLE FOR ALL COUNTERTOP RECEPTACLES.
5. RELOCATE EXISTING FLUSH MOUNTED ELECTRICAL PANEL. EXTEND CONDUIT AND WIRES AS REQUIRED.
6. REMOVE EXISTING DIST. CONNECT SWITCH AND SPECIAL RECEPTACLE. REMOVE CONDUIT AND WIRES BACK TO SOURCE.
7. ALL EXISTING TO REMAIN RECEPTACLES SHALL BE KEPT EMERGIZED. EXTEND CIRCUITING TO RELOCATD PANEL-B7. (TYP. FOR ALL EXISTING TO REMAIN OUTLETS SHOWN).

2.1

8. SAW CUT EXISTING CONCRETE FOR FLUSH FLOOR ELECT. /DATA BOX. PROVIDE RIGID CONDUIT AND CONCRETE FLUSH ELECTRICAL BOX. PATCH EXISTING CONCRETE TO MATCH EXISTING.
9. PROVIDE 1 1/4"C. FOR DATA. STUB INTO ACCESSIBLE CEILING SPACE.

GENERAL SHEET NOTES

1. ALL SHOWN IS NEW (OR NOTED WITH "N"), UON.
2. FOR ADDITIONAL GENERAL AND SHEET NOTES, SAD.
3. EXTEND CONDUIT AND WIRES TO ALL EXISTING TO REMAIN RECEPTACLES TO MAINTAIN CONTINUOUS CIRCUITRY.
4. ALL TELECOMMUNICATION CABLING / LOW VOLTAGE POWER CABLING TO BE PLENUM-RATED.
5. ALL TELECOMMUNICATION CABLING SHALL BE IN EMT CONDUIT (UON) IN WALLS AND STUBBED ABOVE CEILING.
6. CONTRACTOR TO COORDINATE WITH ARCHITECT FINAL LOCATION OF CORE DRILLS FOR X-RAYING AND DRILLING.
7. ALL POWER, DATA, PHONE COVERS AND SWITCH PLATES TO BE WHITE.
8. PROVIDE NEW FIRE ALARM NOTIFICATION AND DETECTION DEVICES AS INDICATED. TIE NEW DEVICES INTO EXISTING BASE BUILDING SYSTEM. PROVIDE ADDITIONAL BOOSTER PANELS/POWER SUPPLIES AS REQUIRED. COORDINATE WITH APPROVED VENDOR SHOP DRAWINGS.
9. ALL CONDUIT PENETRATION THRU RATED WALL AND FLOOR SHALL BE FIRE SEALED TO MAINTAIN RATING.
10. ALL RECEPTACLES SHALL BE LABELED WITH ASSOCIATED PANEL NAME AND CIRCUIT NUMBER.
11. WHERE CONDUITS CROSS BUILDING EXPANSION JOINTS, PROVIDE FLEX CONDUIT SYSTEM FOR 2"MOVEMENT ON EITHER SIDE.
12. ALTHOUGH THESE PLANS ARE BASED ON RECENT CURSORY FIELD SURVEY, THE ACCURACY OF THE CIRCUITS USED FOR THIS ALTERATION IS NOT GUARANTEED. THE ELECTRICAL CONTRACTOR IS REQUIRED TO AT ONCE CONTACT THE ELECTRICAL ENGINEER OR ARCHITECT FOR SOLUTIONS IF ACTUAL FIELD CONDITIONS DEVIATE FROM THE CONTRACT DOCUMENTS THAT GREATLY AFFECT ELECTRICAL DESIGN. THE ELECTRICAL CONTRACTOR AT HIS OPTION IS ALLOWED TO REARRANGE CIRCUITING TO MATCH FIELD CONDITIONS.
13. FOR ALL DEVICE MOUNTING HEIGHTS AND OTHER SPECIFIC REQUIREMENTS (GFCI, ETC), SAD.
14. ALL CONDUITS, DISCONNECT SWITCHES, ESNs, ETC IN ALL EXPOSED CEILING AREA SHALL BE PAINTED AS DIRECTED BY ARCHITECT.
15. (E) RECEPTACLE OR TELECOMM BOXES THAT WILL BECOME PERMANENTLY COVERED BY NEW WALL, MILLWORK OR BASE CABINETS SHALL BE DEMOLISHED (PROVIDE BLANKING COVER) OR RELOCATED. VIF. ALL OTHER EXISTING RECEPTACLES SHALL REMAIN. EXISTING CIRCUIT/S TO THOSE SHALL REMAIN.
16. ALL RECEPTACLES ABOVE COUNTER WITHIN 6FT OF ANY SINK SHALL BE GFCI PROTECTED.

TITLE 24 COMPLIANCE STATEMENT:

AS PER 2016 TITLE 24 130.5, THIS ALTERATION DOES NOT REQUIRE AN ENTIRELY NEW OR COMPLETE REPLACEMENTS OF THE ELECTRICAL POWER DISTRIBUTION SYSTEMS. THEREFORE, CONTROLLED RECEPTACLES ARE NOT REQUIRED.

ELECTRIFIED FURNITURE NOTES

1. ELECTRIFIED FURNITURE SYSTEM:
   FOR 2-CIRCUIT HOMERUN, PROVIDE 2#12 HOT, 1#10 NEUTRAL AND 1#12 GROUND IN 1"C; FOR 3-CIRCUIT HOMERUN, PROVIDE 3#12 HOT, 2#10 NEUTRAL AND 2#12 GROUND IN 1"C; FOR 4-CIRCUIT HOMERUN, PROVIDE 4#12 HOT, 2#10 NEUTRAL AND 2#12 GROUND IN 1"C, IS ASSUMED (4-CIRCUIT 8-WIRE, 3+1CONFIGURATION). CONTRACTOR SHALL COORDINATE EXACT WIRING REQUIREMENTS WITH FURNITURE VENDOR, AND PROVIDE WIRING AS REQUIRED. COORDINATE EXACT WIRING SYSTEM (INTERNAL TELEDATA AND POWER DISTRIBUTION) WITH THE FURNITURE VENDOR. FURNITURE VENDOR SHALL PROVIDE RECEPTACLE LAYOUT IN ELECTRIFIED FURNITURE PARTITIONS).

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1	32243.01	ISSUE FOR REVIEW 29MAR19
2	32243.01	ISSUE FOR PERMIT 22APR19
2.1	32243.01	PLAN CHECK RESPONSE 24MAY19 ADDENDUM #3

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1ST FLOOR - POWER AND SIGNAL PLAN

Scale: 1/8"=1'-0" Issue Date: 22APR19
Drawn By: PL Reviewed By: LA
Sheet: 1 of X

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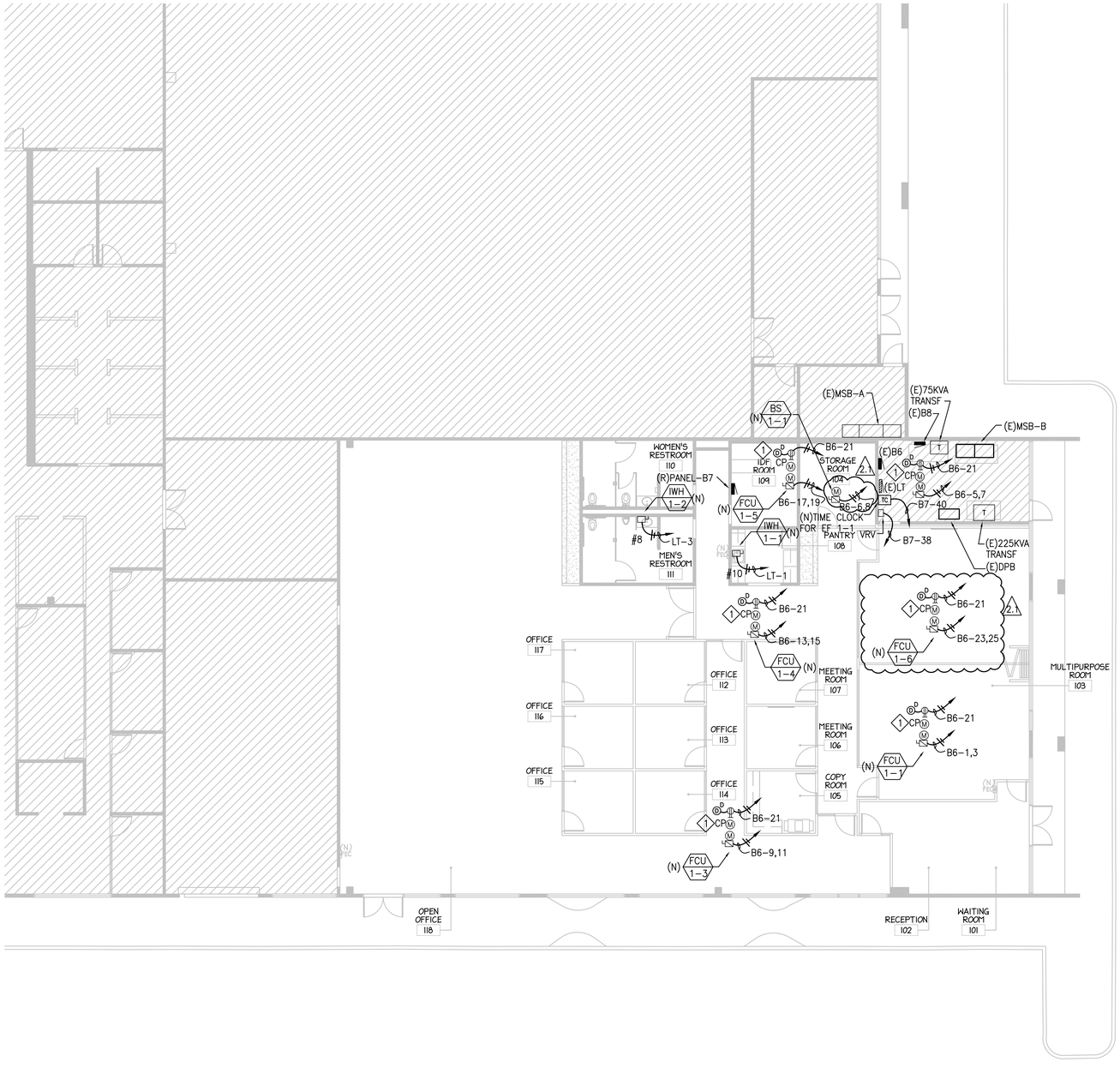

1 1ST FLOOR - MECHANICAL POWER PLAN

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

SHEET NOTES

1. PROVIDE RECEPTACLE FOR PLUG-IN TYPE CONDENSATE PUMP. PROVIDE MANUAL MOTOR STARTER FOR HARD WIRE TYPE CONDENSATE PUMP. CONDENSATE PUMP PROVIDED BY MECHANICAL.

EXHAUST FAN SCHEDULE

CODE	ELECTRICAL				
	VOLT	PH	Hz	HP	
EF 1-1	120	1	60	1/2	

WATER HEATER SCHEDULE

CODE	REMARKS	LOCATION	ELECTRIC INPUT
		ROOM NO.	V/KW/PH
IWH 1-1	CHRONNMITE TANKLESS	UNDER COUNTER PANTRY 105	277V/4.6KW/1PH
IWH 1-2	CHRONNMITE TANKLESS	UNDER COUNTER MEN'S 108	277V/4.6KW/1PH

FAN COIL UNIT SCHEDULE

CODE	SERVICE	MOTOR DATA		
		VOLT/ø	MCA	MOCP
FCU 1-1	MULTIPURPOSE ROOM 103	230	3.5	15
FCU 1-2	ELECTRICAL ROOM	230	0.6	15
FCU 1-3	CORRIDOR	230	3.5	15
FCU 1-4	CORRIDOR	230	1.8	15
FCU 1-5	IDF ROOM 106	230	0.6	15
FCU 1-6	MULTIPURPOSE ROOM 103	230	2.9	15

BRANCH SELECTOR

CODE	ELECTRICAL				
	VOLT	PH	Hz	MCA	MOCP
BS 1-1	208	1	60	0.8	15

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1ST FLOOR - MECHANICAL POWER PLAN

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Drawn By: PL Reviewed By: LA
Sheet: 1 of X

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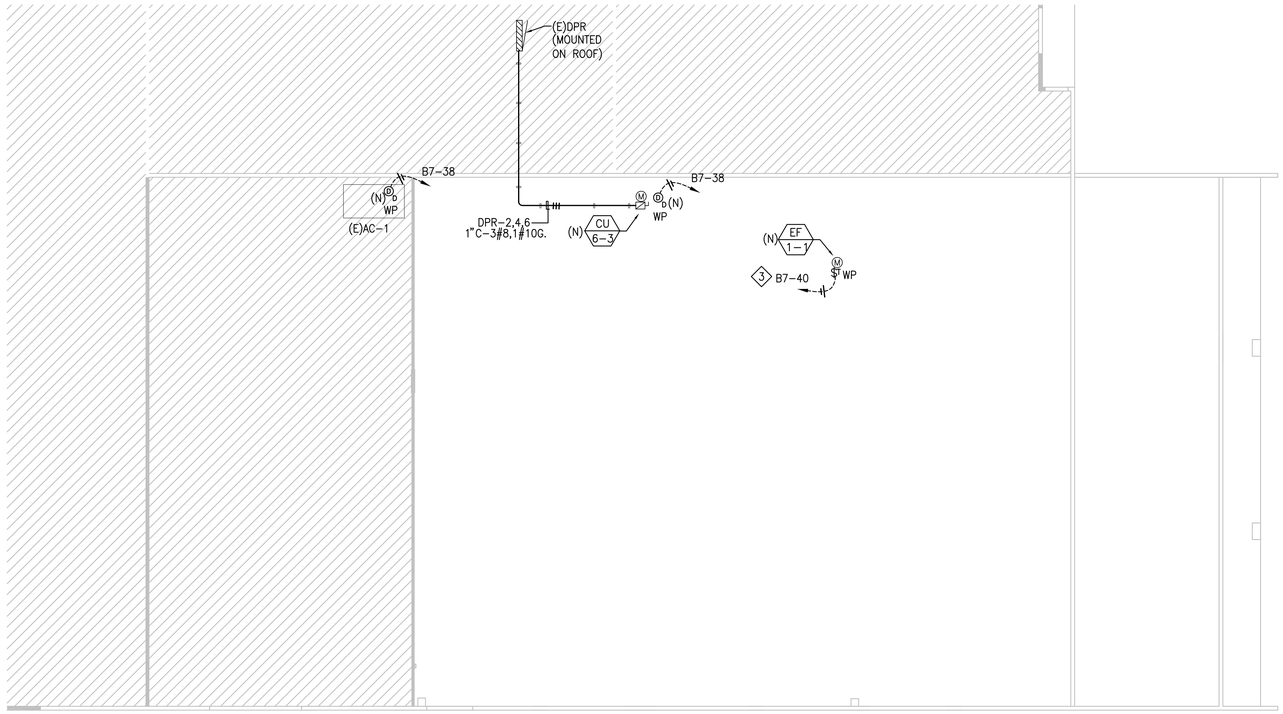
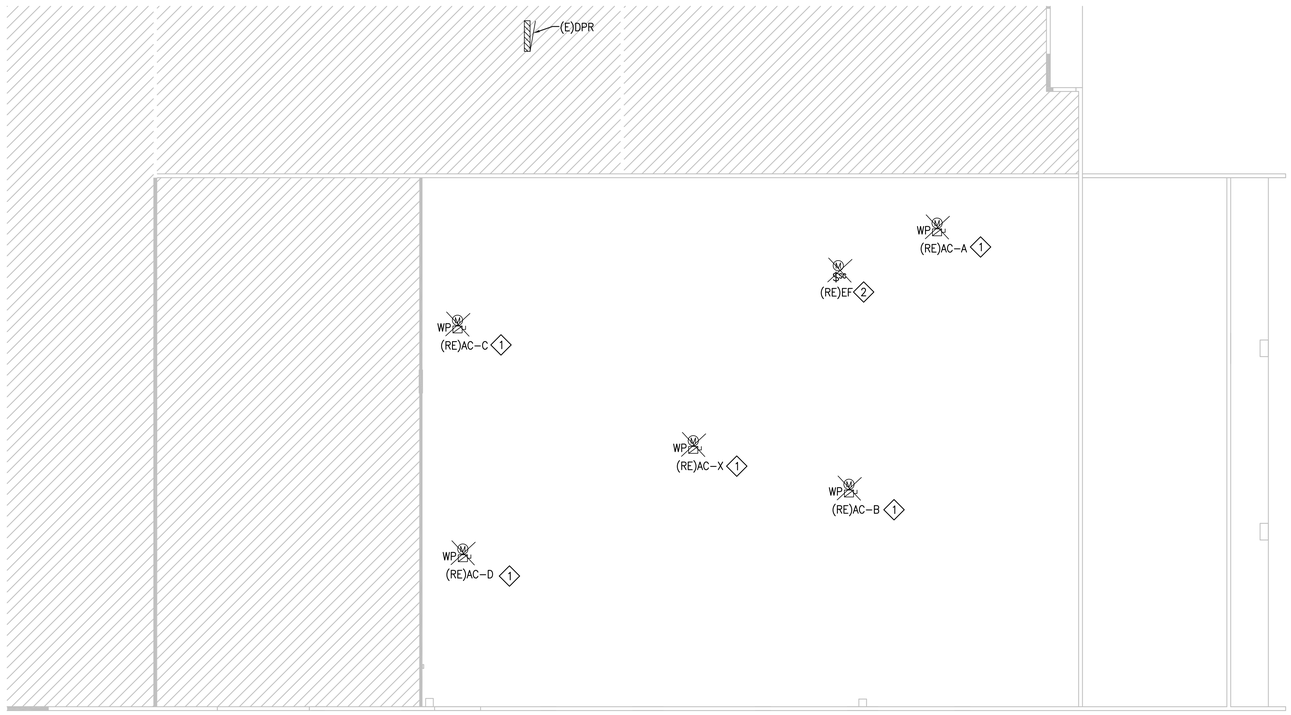


1 ROOF ELECTRICAL PLAN

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



2 ROOF ELECTRICAL DEMOLITION PLAN

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

SHEET NOTES

1. EXTENT OF DEMOLITION IS TO SAFE-OFF ONLY. ALL DEMOLITION OF HP, CONTROLS AND ASSOC. DUCT DETECTOR IS BY OTHERS.
2. EXTENT OF DEMOLITION IS TO SAFE-OFF ONLY. ALL DEMOLITION OF FAN AND ASSOC. CONTROLS IS BY OTHERS.
3. ROUTE TO PANEL VIA (N) TIME SWITCH IN ELECTRICAL ROOM.

EXHAUST FAN SCHEDULE

CODE	MTR. WATTS	VOLTS PHASE	SERVICE
EF 1-1	1/2HP	120V/1ø	RESTROOM/COPY/PANITRY

2.1

CONDENSER UNIT

CODE	ELECTRICAL(EACH MODULE)				
	VOLT	PH	Hz	MCA	MOCP
CU 1-1	460	3	60	36.1	40

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ROOF ELECTRICAL PLAN

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STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/19) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 1 of 6)
Project Name: BAAQMD	Date Prepared: 04/01/19

A. General Information

Climate Zone: 3	Conditioned Floor Area: 6785 SF Unconditioned Floor Area:						
Building Type:		☑	Nonresidential	☐	High-Rise Residential	☐	Hotel/Motel
☐ Schools		☐	Relocatable Public Schools	☑	Conditioned Spaces	☐	Unconditioned Spaces
Phase of Construction:		☐	New Construction	☐	Addition	☑	Alteration
Method of Compliance:		☐	Complete Building	☑	Area Category	☐	Tailored
Project Address: 4124 LAKESIDE DRIVE, SUITE 118, RICHMOND, CA							

B. Lighting Compliance Documents (select yes for each document included)

For detailed instructions on the use of this and all Energy Efficiency Standards compliance documents, refer to the Nonresidential Manual published by the California Energy Commission.

YES	NO	COMP. DOC.	TITLE
⦿	○	NRCC-LTI-01-E	Certificate of Compliance. All Pages required on plans for all submittals.
⦿	○	NRCC-LTI-02-E	Lighting Controls, Certificate of Compliance, and PAF Calculation. All Pages required on plans for all submittals.
⦿	○	NRCC-LTI-03-E	Indoor Lighting Power Allowance
○	⦿	NRCC-LTI-04-E	Tailored Method Worksheets
○	⦿	NRCC-LTI-05-E	Line Voltage Track Lighting Worksheets
○	○	NRCC-LTI-06-E	Indoor Lighting Existing Conditions

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/19) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 2 of 6)
Project Name: BAAQMD	Date Prepared: 04/01/19

C. Summary of Allowed Lighting Power

Conditioned and Unconditioned space Lighting must not be combined for compliance

	Indoor Lighting Power for Conditioned Spaces		Watts		Indoor Lighting Power for Unconditioned Spaces		Watts
01	**Installed** Lighting NRCC-LTI-01-E, Table H, page 5	+	5088	2.1	**Installed** Lighting NRCC-LTI-01-E, Table H, page 5	+	
02	Portable Only for Offices NRCC-LTI-01-E, Table G, page 4	+					
03	Minus Lighting Control Credits NRCC-LTI-02-E, page 2	-			Minus Lighting Control Credits NRCC-LTI-02-E, page 2	-	
04	Adjusted **Installed** Lighting Power (row 1 plus row 2 minus row 3)	=	5088		Adjusted **Installed** Lighting Power (row 1 minus row 3)	=	0
	Complies ONLY if **Installed** ≤ **Allowed** (Box 04 < Box 05)				Complies ONLY if **Installed** ≤ **Allowed** (Box 04 < Box 05)		
05	**Allowed** Lighting Power Conditioned NRCC-LTI-03-E, page 1 Alterations with replacement luminaires that have at least 50/35%lower power compared to the original existing luminaires, may instead use the allowed wattage from NRCC-LTI-06, page 2		5515		**Allowed** Lighting Power Unconditioned NRCC-LTI-03-E, page 1 Alterations with replacement luminaires that have at least 50/35% lower power compared to the original existing luminaires, may instead use the allowed wattage from NRCC-LTI-06, page 2		

D. Declaration of Required Certificates of Installation

Declare by selecting yes for all of the Certificates that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	Form/Title	
⦿	○	NRCI-LTI-01-E - Must be submitted for all buildings	☐ Field Inspector
⦿	○	NRCI-LTI-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.	☐ Field Inspector
○	⦿	NRCI-LTI-03-E - Must be submitted for a line-voltage track lighting integral current limiter, or for a supplementary overcurrent protection panel used to energize only line-voltage track lighting, to be recognized for compliance.	☐ Field Inspector
○	⦿	NRCI-LTI-04-E - Must be submitted for two interlocked systems serving an auditorium, a convention center, a conference room, a multipurpose room, or a theater to be recognized for compliance.	☐ Field Inspector
○	⦿	NRCI-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.	☐ Field Inspector
○	⦿	NRCI-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.	☐ Field Inspector

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/19) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 3 of 6)
Project Name: BAAQMD	Date Prepared: 04/01/19

E. Declaration of Required Certificates of Acceptance

Declare by selecting yes for all of the Certificates of Acceptance that will be submitted. (Retain copies and verify forms are completed and signed.)

YES	NO	FORM/TITLE	
⦿	○	NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	☐ Field Inspector
⦿	○	NRCA-LTI-03-A - Must be submitted for automatic daylight controls.	☐ Field Inspector
○	⦿	NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.	☐ Field Inspector
○	⦿	NRCA-LTI-05-A - Must be submitted for institutional tuning power adjustment factor (PAF).	

A Separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for: ☑ **CONDITIONED SPACE** ☐ **UNCONDITIONED SPACE**

F. Indoor Lighting Schedule and Field Inspection Energy Checklist

- ☑ The actual indoor lighting power listed on the next 2 pages includes all installed permanent and planned portable lighting systems.
- ☐ When Complete Building Method is used for compliance, list each different type of luminaire on separate lines.
- ☑ When Area Category Method or Tailored Method is used for compliance, list each different type of luminaire by each different function area on separate lines
- ☐ Also include track lighting in schedule, and submit the track lighting compliance document (NRCC-LTI-05-E) when line-voltage track lighting is installed.

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/19) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 4 of 6)
Project Name: BAAQMD	Date Prepared: 04/01/19

G. Installed Portable Luminaires in Offices – Exception to Section 140.6(a)

- This section shall be filled out ONLY for portable luminaires in offices (As defined in §100.1). All other planned portable luminaires shall be documented on next page of this compliance document.
- This section is used to determine if greater than 0.3 watts of portable lighting is planned for any office
- Fill out a separate line for each different office. Small offices that are typical (having the same general and portable lighting) may be grouped together. This allowance shall not be traded between offices having different lighting systems.

Office Portable Luminaire Schedule	Office Installed Portable Luminaire W/ft²								Office Location	Field Inspector	
01	02	03	04	05	06	07		08	09	10	
Complete Luminaire Description (i.e., LED, under cabinet, furniture mounted direct/indirect)	Watts per Luminaire	Number of luminaires	Installed portable luminaire watts in this office (G02 x G03)	Square feet of this office	Watts per square foot (G04 / G05)	If G06 ≤ 0.3, enter zero; If G06 > 0.3, (G06-0.3)		(G05 x G07)	Identify Office area in which these portable luminaires are installed	Pass	Fail
			0					0		○	○
			0					0		○	○
			0					0		○	○
			0					0		○	○
			0					0		○	○
Total installed portable luminaire watts that are greater than 0.3 W/ft² per office:									Enter sum total of all pages into NRCC-LTI-01-E; Page 2		

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/19) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 5 of 6)
Project Name: BAAQMD	Date Prepared: 04/01/19

A Separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for: ☑ **CONDITIONED SPACE** ☐ **UNCONDITIONED SPACE**

H. Indoor Lighting Schedule and Field Inspection Energy Checklist

Luminaire Schedule		Installed Watts					Location	Field Inspector [1]	
01	02	03	04		05	06	07	08	
Name or Item Tag	Complete Luminaire Description (i.e., 3 lamp fluorescent troffer, F32T8, one dimmable electronic ballast)	Watts per Luminaire	How wattage was determined: CEC Default from NA8	How wattage was determined: According to §130(c)i	Number Luminaires	Total installed watts in this area (03 x05)	Primary Function area in which these luminaires are installed	Pass	Fail
F1	2X4 RECESSED DIRECT/INDIRECT FIXTURE LED 0–10V	32W	☑	☐	20	640	OPEN OFFICE	○	○
F2	2X2 RECESSED DIRECT/INDIRECT FIXTURE LED 0–10V	35W	☑	☐	84	2940	OFFICE/CORRIDORS/IDF/STORAGE	○	○
F3	4"SQUARE DOWNLIGHT LED 0–10V	13W	☑	☐	18	234	RESTROOMS	○	○
F4	(2)4' +(1)8' UNDER COUNTER LED SW/FIT 0–10V	80W	☑	☐	1	80	PANTRY/COPY	○	○
F5	18' RECESSED LINEAR LED 3.6W/FT 0–10V	64.8W	☑	☐	1	64.8	OPEN OFFICE/REST	○	○
F5	22' RECESSED LINEAR LED 3.6W/FT 0–10V	79.2W	☑	☐	2	158.4	OPEN OFFICE	○	○
F6	18' LINEAR PENDANT LED 3.6W/FT 0–10V	64.8W	☑	☐	8	518.4	OPEN OFFICE	○	○
F6	24' LINEAR PENDANT LED 3.6W/FT 0–10V	86.4W	☑	☐	2	172.8	OPEN OFFICE	○	○
F6	32' LINEAR PENDANT LED 3.6W/FT 0–10V	115.2W	☑	☐	2	230.4	OPEN OFFICE	○	○
	INSTALLED WATTS PAGE TOTAL:					5038.8	Enter sum total of all pages into NRCC-LTI-01-E; Page 2		

2.1

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/19) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 5 of 6)
Project Name: BAAQMD	Date Prepared: 04/01/19

A Separate Lighting Schedule Must Be Filled Out for Conditioned and Unconditioned Spaces. Installed Lighting Power listed on this Lighting Schedule is only for: ☑ **CONDITIONED SPACE** ☐ **UNCONDITIONED SPACE**

H. Indoor Lighting Schedule and Field Inspection Energy Checklist

Luminaire Schedule		Installed Watts					Location	Field Inspector [1]	
01	02	03	04		05	06	07	08	
Name or Item Tag	Complete Luminaire Description (i.e., 3 lamp fluorescent troffer, F32T8, one dimmable electronic ballast)	Watts per Luminaire	How wattage was determined: CEC Default from NA8	How wattage was determined: According to §130(c)i	Number Luminaires	Total installed watts in this area (03 x05)	Primary Function area in which these luminaires are installed	Pass	Fail
F5	1' LINEAR HIGHBAY LED 3.6W/FT 0–10V	10.8	☑	☐	2	21.6	RESTROOM	○	○
FG	8' LINEAR PENDANT 3.6W/FT	28.8	☑	☐	1	28.8	RECEPTION	○	○
			☐	☐		0		○	○
			☐	☐		0		○	○
			☐	☐		0		○	○
			☐	☐		0		○	○
			☐	☐		0		○	○
			☐	☐		0		○	○
	LAST PAGE TOTAL	5038W	☐	☐	1	5038		○	○
	INSTALLED WATTS PAGE TOTAL:					5088.4	Enter sum total of all pages into NRCC-LTI-01-E; Page 2		

2.1 2.1

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 04/19) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 6 of 6)
Project Name: BAAQMD	Date Prepared: 04/01/19

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Levi Abarte	Documentation Author Signature:
Company: Amit Wadhwa & Assoc.	Signature Date: 04/01/19
Address: 870 Market St Suite 846	CEA Certification Identification (if applicable):
City/State/Zip: San Francisco, CA 94102	Phone: 415-596-9344

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: Levi Abarte	Responsible Designer Signature:
Company: Amit Wadhwa & Assoc.	Date Signed: 04/01/19
Address: 870 Market St Suite 846	License: E-17622
City/State/Zip: San Francisco, CA 94102	Phone: 415-596-9344

TITLE 24 NOTES:

A. INSTALLING CONTRACTOR SHALL PROVIDE AS FOLLOWS:

1. PERFORM AND SUBMIT ALL REQUIRED FUNCTIONAL TESTING OF LIGHTING CONTROLS AS REQUIRED ON TITLE 24 DOCUMENTATION FORMS.
2. PERFORM AND SUBMIT ALL ACCEPTANCE FORMS.
3. PERFORM AND SUBMIT ALL INSTALLATION FORMS.
4. PERFORM AND SUBMIT ALL VERIFICATION FORMS.

B. 1. TITLE 24 COMPLIANCE STATEMENT:

AS PER 2016 TITLE 24 130.5, THIS ALTERATION DOES NOT REQUIRE AN ENTIRELY NEW OR COMPLETE REPLACEMENTS OF THE ELECTRICAL POWER DISTRIBUTION SYSTEMS. THEREFORE, CONTROLLED RECEPTACLES ARE NOT REQUIRED.

RICHMOND LAKESIDE
TENANT IMPROVEMENT

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Richmond, CA 94806

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T 415 546 1212 brereton.com

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REGISTERED PROFESSIONAL ENGINEER
LEVI G. ABARTE
No. E-17622
Exp. 09/30/19
ELECTRICAL
STATE OF CALIFORNIA

Consultant

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415.617.0076 fax
19036

Issue/Revision:

No.	Proj. No. Date:	Description
1	32243.01 24MAR19	ISSUE FOR REVIEW
2	32243.01 22APR19	ISSUE FOR PERMIT
2.1	32243.01 24MAY19	PLAN CHECK RESPONSE ADDENDUM #3

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All drawings and written material appearing herein constitute original and unpublished original work of the architect and may not be duplicated, used, or disclosed without prior written consent of the architect.

Approval Signature:

Co./ Title: Date:

TITLE 24 FORMS

Scale: NONE Issue Date: 22APR19
Drawn By: PL Reviewed By: LA
Sheet: 1 of X

1ET.1

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-02-E (Revised 01/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-02-E
Indoor Lighting - Lighting Controls	(Page 1 of 3)
Project Name: BAAQMD	Date Prepared: 04/01/19

A. Mandatory Lighting Control Declaration Statements (Indicate if the measure applies by checking yes or no below.)

YES	NO	Control Requirements
◉	○	Lighting shall be controlled by self-contained lighting control devices which are certified to the Energy Commission according to the Title 20 Appliance Efficiency Regulations in accordance with Section 110.9.
◉	○	Lighting shall be controlled by a lighting control system or energy management control system in accordance with §110.9. An Installation Certificate shall be submitted in accordance with Section 130.4(b).
○	◉	One or more Track Lighting Integral Current Limiters shall be installed which have been certified to the Energy Commission in accordance with §110.9 and §130.0. Additionally, an Installation Certificate shall be submitted in accordance with Section 130.4(b).
○	◉	A Track Lighting Supplementary Overcurrent Protection Panel shall be installed in accordance with Section 110.9 and Section 130.0. Additionally, an Installation Certificate shall be installed in accordance with Section 130.4(b).
◉	○	All lighting controls and equipment shall comply with the applicable requirements in §110.9 and shall be installed in accordance with the manufacturer's instructions in accordance with Section 130.1.
◉	○	All luminaires shall be functionally controlled with manual ON and OFF lighting controls in accordance with Section 130.1(a).
◉	○	General lighting shall be separately controlled from all other lighting systems in an area. Floor and wall display, window display, case display, ornamental, and special effects lighting shall each be separately controlled on circuits that are 20 amps or less. When track lighting is used, general, display, ornamental, and special effects lighting shall each be separately controlled; in accordance with Section 130.1(a)4.
◉	○	The general lighting of any enclosed area 100 square feet or larger, with a connected lighting load that exceeds 0.5 watts per square foot shall meet the multi-level lighting control requirements in accordance with Section 130.1(b).
◉	○	All installed indoor lighting shall be equipped with controls that meet the applicable Shut-OFF control requirements in Section 130.1(c).
◉	○	Lighting in all Daylit Zones shall be controlled in accordance with the requirements in Section 130.1(d) and daylit zones are shown on the plans.
○	◉	Lighting power in buildings larger than 10,000 square feet shall be capable of being automatically reduced in response to a Demand Responsive Signal in accordance with Section 130.1(e).
◉	○	Before an occupancy permit is granted for a newly constructed building or area, or a new lighting system serving a building, area, or site is operated for normal use, indoor lighting controls serving the building, area, or site shall be certified as meeting the Acceptance Requirements for Code Compliance in accordance with Section 130.4.(a). The controls required to meet the Acceptance Requirements include automatic daylight controls, automatic shut-OFF controls, and demand responsive controls.

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-02-E (Revised 01/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-02-E
Indoor Lighting - Lighting Controls	(Page 2 of 3)
Project Name: BAAQMD	Date Prepared: 04/01/19

A separate document must be filled out for Conditioned and Unconditioned Spaces. This page is used only for the following:
☑ CONDITIONED SPACES ☐ UNCONDITIONED SPACES

B. Mandatory and Prescriptive Indoor Lighting Control Schedule, PAF Calculation, and Field Inspection Checklist

Lighting Control Schedule			Standards Complying With [1] (✓ all that apply, or leave empty if Exempted)							PAF Credit Calculation [2]			✓ if Acceptance Test Required	Field Inspector	
										Watts of Controlled Lighting	PAF	Control Credit (11 x 12)			
01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	
Location in Building	Type/ Description of Lighting Control (i.e.: occupancy sensor, automatic time switch, dimmer, automatic daylight, etc...)	# of Units	§130.1(a)	§130.0(b)	§130.1(c)	§130.1(d)	§130.1(e)	§140.6(a)2	§140.6(d)					Pass	Fail
												0	☐	○	○
PERIMETER OPEN OFFICES/CONF	DAY LIGHT SWITCH	SEE PLAN				•						0	☐	○	○
ALL	DIMMERS	SEE PLAN	•	•								0	☐	○	○
ALL	OCCUPANCY SENSORS	SEE PLAN			•							0	☐	○	○
												0	☐	○	○
												0	☐	○	○
												0	☐	○	○
Control Credit PAGE TOTAL (Sum of Column 13):												0			
IF MULTIPLE PAGES ARE USED, ENTER SUM TOTAL OF Control Credit for all pages HERE (Sum of all Column 13):															
												Enter Control Credit total into NRCC-LTI-01-E; Page 1.			

1. §130.1(a) = Manual area controls; §130.0(b) = Multi Level; §130.1(c) = Auto Shut-Off; §130.1(d) = Mandatory Daylight; §130.1(e) = Demand Responsive; §140.6(d) = Additional lighting controls installed to earn a PAF; §140.6(d) = Prescriptive Secondary Sidelit Daylight Controls.
2. Check Table 140.6-A for correct Factor. PAFs shall not be traded between conditioned and unconditioned spaces. As a condition to earn a PAF, an Installation Certificate is also required to be filled out, signed, and submitted.

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-02-E (Revised 01/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-02-E
Indoor Lighting - Lighting Controls	(Page 3 of 3)
Project Name: BAAQMD	Date Prepared: 04/01/19

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Levi Abarte	Documentation Author Signature:
Company: Amit Wadhwa & Assoc.	Signature Date: 04/01/19
Address: 870 Market St Suite 846	CEA Certification Identification (if applicable):
City/State/Zip: San Francisco, CA 94102	Phone: 415-596-9344

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: Levi Abarte	Responsible Designer Signature:
Company: Amit Wadhwa & Assoc.	Date Signed: 04/01/19
Address: 870 Market St Suite 846	License: E-17622
City/State/Zip: San Francisco, CA 94102	Phone: 415-596-9344

STATE OF CALIFORNIA
INDOOR LIGHTING POWER ALLOWANCE
CEC-NRCC-LTI-03-E (Revised 04/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-03-E
Certificate of Compliance - Indoor Lighting Power Allowance	(Page 1 of 4)
Project Name: BAAQMD	Date Prepared: 04/01/19

A separate page must be filled out for Conditioned and Unconditioned Spaces. This page is only for:
☑ CONDITIONED spaces ☐ UNCONDITIONED spaces

A. SUMMARY TOTALS OF LIGHTING POWER ALLOWANCES
If using Complete Building Method for compliance, use only the total in column (a) as total allowed building watts.
If using Area Category Method, Tailored Method, or a combination of Area Category and Tailored Method for compliance, use only the total in column (b) as the total allowed building watts

	(a)	(b)
01 Complete Building Method Allowed Watts. Documented in section B of NRCC-LTI-03-E (below on this page)	0	
02 Area Category Method Allowed Watts. Documented in section C-1 of NRCC-LTI-03-E (below on this page)		5515
03 Tailored Method Allowed Watts. Documented in section A of NRCC-LTI-04-E		
TOTAL ALLOWED BUILDING WATTS. Enter number into correct cell on NRCC-LTI-01, Page 2, Row 1	0	5515

☐ Check here if building contains both conditioned and unconditioned areas.

B. COMPLETE BUILDING METHOD LIGHTING POWER ALLOWANCE

01	02		03		04
TYPE OF BUILDING (From §140.6 Table 140.6-B)	WATTS PER ft^2	X	COMPLETE BLDG. AREA	=	ALLOWED WATTS
					0
Total Area:					
Total Watts. Enter Total Watts into section A, row 1 (Above on this page)					0

C-1 AREA CATEGORY METHOD TOTAL LIGHTING POWER ALLOWANCES	Watts
Total from section C-2.	5515
Total from section C-3.	
Total Watts. Enter Total Watts into section A, row 2 (Above on this page).	5515
For Alterations Only – Reduced lighting power option (Total Allowed Watts x 0.85). Enter this value into section A, row 2 if using this option.	

STATE OF CALIFORNIA
INDOOR LIGHTING POWER ALLOWANCE
CEC-NRCC-LTI-03-E (Revised 04/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-03-E
Certificate of Compliance - Indoor Lighting Power Allowance	(Page 3 of 4)
Project Name: BAAQMD	Date Prepared: 04/01/19

A separate page must be filled out for Conditioned and Unconditioned Spaces. This page is only for:
☐ CONDITIONED spaces ☐ UNCONDITIONED spaces

C-3 AREA CATEGORY METHOD ADDITIONAL LIGHTING WATTAGE ALLOWANCE (from Table 140.6-C Footnotes)

01	02	03 [2]	04	05	06	07
Primary Function	Sq Ft or Linear ft [1]	Additional Watts Allowed	Wattage Allowance (02 x 03)	Description(s) and Quantity of Special Luminaire Types in each Primary Function Area	Total Design Watts [3]	ALLOWED WATTS Smaller of 04 or 06
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
			0			
TOTALS – Enter into TOTAL AREA CATEGORY METHOD ADDITIONAL ALLOWANCES – Section C-1						

1. Use linear feet only for additional allowance for white board or chalk board. All other additional Area Category allowances shall use watts per square foot.
2. Additional watts are available only when allowed according to the footnotes on bottom of Table 140.6-C, which include: Specialized task work; Ornamental lighting; Precision commercial and industrial work; Per linear foot of white board or chalk board; Accent, display and feature lighting; and Videoconferencing studio lighting..
3. Luminaire classification and wattage shall be determined in accordance with §130.0(c) of the Standards.

STATE OF CALIFORNIA
INDOOR LIGHTING POWER ALLOWANCE
CEC-NRCC-LTI-03-E (Revised 04/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-03-E
Certificate of Compliance - Indoor Lighting Power Allowance	(Page 2 of 4)
Project Name: BAAQMD	Date Prepared: 04/01/19

A separate page must be filled out for Conditioned and Unconditioned Spaces. This page is only for:
☑ CONDITIONED spaces ☐ UNCONDITIONED spaces

C-2 AREA CATEGORY METHOD GENERAL LIGHTING POWER ALLOWANCE
- Do not include portable lighting for offices. Portable lighting for offices shall be documented only in Section G of NRCC-LTI-01-E.
- Separately list lighting for each primary function area as defined in §100.1 of the Standards.

01		02		03		04
AREA CATEGORY (From §140.6 Table 140.6-C)		WATTS				ALLOWED
Location in Building	Primary Function Area per Table 140.6-C	PER ft^2	X	AREA (ft^2)	=	WATTS
PRIVATE OFFICE	OFFICES <250	1.00		655		655
OPEN OFFICE	OFFICES >250	0.75		2400		1800
TRANSITION/RESTROOM/COPY/STORAGE	SUPPORT	0.60		1960		1176
BREAKROOM	LOUNGE	0.90		80		72
IDF	IDF	0.55		130		71.5
CONFERENCE	CONFERENCE	1.20		210		252
RECEPTION	RECEPTION	0.80		330		264
MULTIPURPOSE	MULTIPURPOSE	1.20		1020		1224
						0
						0
						0
						0
						0
						0
						0
						0
		TOTALS		6785		
Enter sum total Area Category allowed watts into section C-1 of NRCC-LTI-03-E (this compliance document)						5514.5
						WATTS

STATE OF CALIFORNIA
INDOOR LIGHTING POWER ALLOWANCE
CEC-NRCC-LTI-03-E (Revised 04/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-03-E
Certificate of Compliance - Indoor Lighting Power Allowance	(Page 4 of 4)
Project Name: BAAQMD	Date Prepared: 04/01/19

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Levi Abarte	Documentation Author Signature:
Company: Amit Wadhwa & Assoc.	Signature Date: 04/01/19
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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.
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Responsible Designer Name: Levi Abarte	Responsible Designer Signature:
Company: Amit Wadhwa & Assoc.	Date Signed: 04/01/19
Address: 870 Market St Suite 846	License: E-17622
City/State/Zip: San Francisco, CA 94102	Phone: 415-596-9344

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REGISTERED PROFESSIONAL ENGINEER
LEVI G. ABARTE
No. E-17622
Exp. 09/30/19
ELECTRICAL
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Issue/Revision:

No.	Proj. No. Date:	Description
1	32243.01 29MAR19	ISSUE FOR REVIEW
2	32243.01 22APR19	ISSUE FOR PERMIT
2.1	32243.01 24MAY19	PLAN CHECK RESPONSE ADDENDUM #3

Copyright Statement:
All drawings and written material appearing herein constitute original and unpublished original work of the architect and may not be duplicated, used, or disclosed without prior written consent of the architect.
Approval Signature:

Co/ Title: Date:

TITLE 24 FORMS

Scale: NONE Issue Date: 22APR19
Drawn By: PL Reviewed By: LA
Sheet: 1 of X

1ET.2

STATE OF CALIFORNIA
Electrical Power Distribution
CEC-NRCC-ELC-01-E (Revised 01/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-ELC-01-E
Electrical Power Distribution	Page 1 of 4
Project Name: BAAQMD	Date Prepared: 04/01/19

General Information

Project Address: 4124 LAKESIDE DRIVE, SUITE 118, RICHMOND, CA	Climate Zone: 3	Conditioned Floor Area : 6785 SF Unconditioned Floor Area :

Building Type: ☑ Nonresidential ☐ High-Rise Residential ☐ Hotel/Motel ☐ Schools ☐ Relocatable Public Schools ☑ Conditioned Spaces ☐ Unconditioned Spaces

Phase of Construction: ☐ New Construction ☐ Addition ☑ Alteration

In the table below identify all applicable construction documents that specify the requirements for the scope of responsibility reported by this certificate. Use additional pages as needed to list all construction documents related to compliance of Section 130.5.

Document Number	Document Title/Descriptions (include description information for Table or Schedule if it contains compliance information)	Document Sheet # or Page #	Indicate which subsection of Section 130.5 is related to the document (e.g. 130.5(a) for service electrical metering)
THIS PLAN	VOLTAGE DROP CALCS	THIS PLAN	130.5(c)

Add Row | Remove Last

A. Service Electrical Metering

Check one of the three boxes below if the electrical power distribution system is in compliance with Section 130.5(a).

☐ For newly installed electrical service in newly constructed buildings, Service Electrical Metering is required according to Section 130.5(a). *Fill out Column 1 through 6 of table below.*

☐ For new or replacement electrical service equipment in existing buildings, Service Electrical Metering is required according to Section 141.0(b)2Pi. *Fill out Column 1 through 6 of table below.*

☐ EXCEPTION to Electrical Service Metering: Service or feeder for which the utility company provides a metering system that indicates instantaneous kW demand and kWh for a utility-defined period. *Fill out Column 1, 2 and 6 of table below with the compliance information.*

Fill out a separate line for each electrical service that is connected to the building.

Electrical Service Schedule	Electrical Service Rating	Metering Capabilities (check all that are present)				Exception to 130.5 (a)	Field Inspector
01	02	03	04	05	06	07	08
Electrical Service Designation/ Location/Description	kVA	Instantaneous (at the time) kW	Historical peak (kW)	Tracking kWh for a user-definable period	kWh per rate period	Utility metering system	Check that the metering complies
		☐	☐	☐	☐	☐	☐

Add Row | Remove Last

STATE OF CALIFORNIA
Electrical Power Distribution
CEC-NRCC-ELC-01-E (Revised 01/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-ELC-01-E
Electrical Power Distribution	Page 2 of 4
Project Name: BAAQMD	Date Prepared: 04/01/19

B. Separation of Electrical Circuits for Electrical Energy Monitoring

Check all boxes below if the electrical power distribution system is in compliance with Section 130.5(b).

☐ The electrical power distribution system meets the separation of electrical circuits for electrical energy monitoring requirement of Section 130.5(b). The electrical power distribution systems is designed so that measurement devices can monitor the electrical energy usage of load types according to TABLE 130.5-B.

☐ Describe the electrical power distribution system installed and the compliance method chosen in meeting the requirement of Section 130.5(b). Use the space below to include the information. Examples of compliance methods are detailed in Nonresidential Compliance Manual Chapter 8.

Fill out Column 1 thru 3 with the compliance information.

General Information	Electrical Power Distribution System information and Method of compliance	Electrical Service Rating	Enforcement Agency
01	02	03	04
Electrical Service Designation/Location/Description	Describe the electrical power distribution system installed and the compliance method used	kVA	Check that the system complies
			☐

Field Inspector Notes:

STATE OF CALIFORNIA
Electrical Power Distribution
CEC-NRCC-ELC-01-E (Revised 01/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-ELC-01-E
Electrical Power Distribution	Page 3 of 4
Project Name: BAAQMD	Date Prepared: 04/01/19

C. Voltage Drop

Check all boxes below if he electrical power distribution system is in compliance with Section 130.5(c).

	Enforcement Agency Check that the system complies
☑ The electrical power distribution system meets the voltage drop requirement of Section 130.5(c). The maximum combined voltage drop on feeder conductors and branch circuit conductors to the farthest connected load or outlet, do not exceed 5%.	☐
☑ Voltage drop calculation documents showing compliance to Section 130.5(c) are submitted as part of the compliance document submittal.	☐

D. Circuit Controls for 120-Volt Receptacles and Controlled Receptacles

Check one or more boxes below for applicable requirements of Section 130.5(d) for the electrical power distribution system.

	Field Inspector Check that the system complies
☐ The control is capable of automatically shutting OFF the controlled receptacles when the space is typically unoccupied, either at the receptacle or circuit level. For the automatic time switch control, it incorporates an override control that allows the controlled receptacle to remain ON for no more than 2 hours when an override is initiated and an automatic holiday "shut-OFF" feature that turns OFF all loads for at least 24 hours and then resumes the normally scheduled operation. Countdown timer switches are not be used to comply with the automatic time switch control requirements. The controls meet the requirement of Section 130.5(d)1.	☐
☐ There is at least one controlled receptacle within 6 ft from each uncontrolled receptacle. Where receptacles are installed in modular furniture in open office area, at least one controlled receptacle is installed at each workstation. The receptacles meet the requirement of Section 130.5(d)2.	☐
☐ There are installed split wired receptacles with at least one controlled and one uncontrolled receptacle. Where receptacles are installed in modular furniture in open office area, at least one controlled receptacle is installed at each workstation. The receptacles meet the requirement of Section 130.5(d)2.	☐
☐ Permanent and durable marking for controlled receptacles or circuits to differentiate them from uncontrolled receptacles or circuits is provided. The markings meet the requirement of Section 130.5(d)3.	☐
☐ For hotel and motel guest rooms, there are controlled receptacles for at least one-half of the 120-volt receptacles in each guest room. Electric circuits serving controlled receptacles in guestrooms are installed to have captive key controls, occupancy sensing controls, or automatic controls so the power is switched off no longer than 30 minutes after the guest room has been vacated. The receptacles meet the requirement of Section 130.5(d)4.	☐
☐ Receptacles that are only for the following purposes are excepted from Section 130.5(d): - Receptacles specifically for refrigerators and water dispensers in kitchenareas. - Receptacles located a minimum of six ft above the floor that are specifically for clocks. - Receptacles for network copiers, fax machines, A/V and data equipment other than personal computers in copy rooms. - Receptacles on circuits rated more than 20 amperes. - Receptacles connected to an uninterruptible power supply (UPS) that are intended to be in continuous use, 24 hours per day/365 days per year, and are marked to differentiate them from other uncontrolled receptacles or circuits.	☐

STATE OF CALIFORNIA
Electrical Power Distribution
CEC-NRCC-ELC-01-E (Revised 01/16) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-ELC-01-E
Electrical Power Distribution	Page 4 of 4
Project Name: BAAQMD	Date Prepared: 04/01/19

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Levi Abarte	Documentation Author Signature:
Company: Amit Wadhwa & Assoc.	Signature Date: 04/01/19
Address: 870 Market St Suite 846	CEA/HERS Certification Identification (If applicable):
City/State/Zip: San Francisco, CA 94102	Phone: 415-596-9344

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: Levi Abarte	Responsible Designer Signature:
Company: Amit Wadhwa & Assoc.	Date Signed: 04/01/19
Address: 870 Market St Suite 846	License: E-17622
City/State/Zip: San Francisco, CA 94102	Phone: 415-596-9344

Data Entry Window

Printable View: No

1	120	Select voltage
2	3%	Select the max desired voltage drop (0%-5%)
3	Single Phase	Select phase type
4	Stranded Copper Uncoated	Select the type of w ire
5	AWG 10 *	Select the size of w ire if know n
6	120 *	Enter the length of w ire (0-5000') if know n
7	9 *	Enter Amps (0-6000) if know n
8	1	Select the number of parallel w ires (1 is non-parallel) or 2-25 pairs

Note: If only one of cells 5,6 and 7 is left blank, then a calculated value w ill appear to the left of the cell.

If the w ire is smaller than AWG 1/0 then parallel w ires are not allow ed except per 310.4 exceptions.

Results Window

9	3.6	Maximum voltage drop allow ed	7	2.68 volts (ok) Actual voltage drop
10	116.40	Minimum voltage allow ed at load	18	117.32 volts (ok) Actual voltage w ith load
11	2	Multiplier	19	0.92 volts (ok) Voltage difference
12	1.24	Resistance/1000' of w ire	20	0.0012400 ohms Total resistance per foot
13	AWG 10	Wire Size	21	AWG 10 Minimum w ire size for voltage drop
14	120.00	Distance	22	161 feet Maximum distance w ith this load
15	9	Maximum Amps	23	30 amps@60°F Max ampacity of the w ire in Cell 13 per Table 310.16 of the 2011 NEC
16	1	Minimum number of parallel w ires	24	21.00 amps (ok) Ampacity above or below load

VOLTAGE DROP CALCULATION NOTES:

A. VOLTAGE DROP CALCULATIONS ABOVE APPLY TO CIRCUITS BEYOND 80FT FROM ELECTRIC CLOSET. THESE CIRCUITS ALL USE #10 WIRES. ALL OTHER RECEPTACLE CIRCUITS ARE WITHIN 80 FEET OF SOURCE PANELBOARD/S, USE #12 WIRES AND ARE WITHIN 3%VD.

B. ALL OTHER BRANCH CIRCUITS INCLUDING 120/208V-480V MECHANICAL ARE WITHIN 3% VD.

C. (E) FEEDER FOR ALL PANELS USED ON THESE RENOVATION ARE ESTIMATED TO BE WITHIN 2%VD OR LESS.

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REGISTERED PROFESSIONAL ENGINEER — LEVI G. ABARTE — No. E-17622 Exp. 09/30/19 — ELECTRICAL — STATE OF CALIFORNIA

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Issue/Revision:

No.	Proj. No. Date:	Description
1	32243.01	ISSUE FOR REVIEW 29MAR19
2	32243.01	ISSUE FOR PERMIT 22APR19
3	32243.01	PLAN CHECK RESPONSE 24MAY19 ADDENDUM #3

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Approval Signature:

Co/ Title: Date:

TITLE 24 FORMS

Scale: NONE Issue Date: 22APR19
Drawn By: PL Reviewed By: LA
Sheet: 1 of X

1ET.3

LEGEND

SYMBOL	ABBR.	DESCRIPTION
EWH 1		EQUIPMENT IDENTIFICATION / EQUIPMENT NUMBER
2 / –		DETAIL NUMBER / DRAWING NUMBER
X		SHEET NOTE NO.
	POC	POINT OF CONNECTION
		BEAM PENETRATION
		EXISTING PIPING TO BE REMOVED
1/8"		SANITARY WASTE SLOPE AT 1/8" PER FOOT
	W	WASTE PIPING BELOW FLOOR
	V	VENT PIPING
	CW	COLD WATER PIPING
	HW	HOT WATER PIPING
CD	CD	CONDENSATE DRAIN PIPING
TPW	TPW	TRAP PRIMER WATER PIPING
	DN	PIPE DOWN
	UP	PIPE UP
	CO	CLEAN OUT
		LINE CONTINUED
	CV	CHECK VALVE
	BV	BALL VALVE
		UNION

ABBREVIATIONS

ABBR.	DESCRIPTION
ADA	AMERICAN WITH DISABILITY ACT
CW	COLD WATER
CD	CONDENSATE DRAIN
CISPI	CAST IRON SOIL PIPE INSTITUTE
CO	CLEAN OUT
CPC	CALIFORNIA PLUMBING CODE
CTE	CONNECT TO EXISTING
DN	DOWN
DW	DISHWASHER
(E)	EXISTING PIPING
FT	FEET
GAL	GALLONS
GD	GARBAGE DISPOSAL
GPF	GALLON PER FLUSH
GPH	GALLON PER HOUR
GPM	GALLON PER MINUTE
HP	HORSEPOWER OR HEAT PUMP
KW	KILOWATT
LBS.	POUNDS
MAX	MAXIMUM
MFR.	MANUFACTURER
MIN	MINIMUM
(N)	NEW PIPING
NTS	NOT TO SCALE
PSI	POUNDS PER SQUARE INCH
PW	PUMPED WASTE
RCW	RECLAIMED WATER
REF	REFRIGERATOR
SAD	SEE ARCHITECTURAL DRAWING
SMD	SEE MECHANICAL DRAWING
SK	KITCHEN SINK
SSK	SERVICE SINK
TEMP.	TEMPERATURE
V	SANITARY VENT OR ELECTRIC VOLT
W	SANITARY WASTE
WC	WATER CLOSET
W/	WITH

PLUMBING GENERAL NOTES

1. PROVIDE PLUMBING SYSTEM CONFORMING TO BUILDING STANDARDS.
2. ORDINANCES AND REGULATIONS: ALL SYSTEMS SHALL BE INSTALLED WITH STRICT ACCORDANCE WITH ALL APPLICABLE 2016 CALIFORNIA PLUMBING CODES, 2016 CALGREEN, AND LOCAL AMENDMENTS OR ORDINANCES, AND SHALL MEET OTHER AUTHORITIES HAVING JURISDICTION.
3. THIS CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS BEFORE START OF THIS WORK. DISCREPANCIES, IF ANY MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IMMEDIATELY. CONTRACTOR SHALL VISIT SITE AND BE FULLY COGNIZANT OF ALL CONDITIONS PRIOR TO SUBMISSION OF BID.
4. THIS CONTRACTOR SHALL SET PLUMBING FIXTURES TO ELEVATIONS AND LOCATIONS SHOWN ON ARCHITECTURAL PLANS.
5. THIS CONTRACTOR SHALL COORDINATE WITH ALL OTHER TRADES FOR CLEARANCES AND WORK INCLUDED PRIOR TO START OF WORK.
6. ALL FIXTURES SHALL BE PROTECTED DURING CONSTRUCTION FROM ANY DAMAGES. REFINISHED FIXTURES WILL NOT BE ACCEPTABLE UNDER ANY CONDITIONS.
7. SAD FOR DETAILS AND LOCATIONS OF THE HANDICAPPED USE PLUMBING FIXTURES AND MUST BE MOUNTED AS SHOWN TO ADA MEET REQUIREMENT.
8. ALL PLUMBING EQUIPMENT SHALL BE BRACED OR ANCHORED TO RESIST HORIZONTAL FORCES ACTING IN ANY DIRECTION IN ACCORDANCE WITH THE LATEST CALIFORNIA/CITY OF RICHMOND CODES.
9. CONNECTION BETWEEN COPPER AND IRON AND STEEL PIPE SHALL BE MADE WITH DIELECTRIC ISOLATING UNIONS.
10. SUBMITTALS: ALL PLUMBING EQUIPMENT, PLUMBING FIXTURES AND CONTROLS SHALL BE SUBMITTED TO THE ARCHITECT. SAD, PLUMBING FIXTURES SCHEDULES FOR SPECIFICATIONS.
11. PLUMBING CONTRACTOR SHALL PROVIDE PLUMBING PIPING MATERIALS AS FOLLOWS:
    A. DOMESTIC WATER HOT AND COLD: TYPE "L" HARD DRAWN COPPER ASTM A88; JOINTS: ASTM B32 ALLOY GRADE, 95/5 SOLDER, LEAD FREE; FITTINGS: ANSI B16.22 WROUGHT COPPER. 300 PSI.
    B. SOIL, WASTE AND VENT ABOVEGROUND: ANSI A112.5.1 CAST IRON SOIL, PLAIN END (HUBLESS) SERVICE WEIGHT WITH NEOPRENE SLEEVE AND STAINLESS STEEL SHIELD JOINTS, CISPI 301 AND ASTM C-564. CONTRACTOR'S OPTION: COPPER DWV DRAINAGE TYPE MAY BE USED FOR PIPE SIZES 2" AND SMALLER.
    C. CONDENSATE DRAIN: TYPE "M" HARD DRAWN COPPER; JOINTS: ASTM B32 ALLOY GRADE, 95/5 SOLDER; FITTINGS ANSI B16.22, WROGHT COPPER.
    D. AIR CHAMBERS: PROVIDE ON ALL COLD AND HOT WATER CONNECTIONS ARRESTOR, 18" HIGH AND DIAMETER SAME SIZE AS SUPPLY. NIBCO MODEL 620L.
    E. FIXTURE SUPPLIES AND STOPS:

       SINKS – SPEEDWAY CRSST-1912-K OR APPROVED SUBSTITUTE.
    F. KITCHEN SINK TRAP: 17 GAUGE ADJUSTABLE "P" TRAPS, TUBING TO WALL. POLISHED CHROME PLATED. PROVIDE CHROME PLATED ESCUTCHEON TO WASTE LINE AND WATER LINE GOING THROUGH WALL.
    G. BALL VALVES: NIBCO S-585-80-LF, LEAD FREE, PTFE SEAT, NSF APPROVE 600 PSI RATING AT NON-SHOCK COLD WATER PRESSURE; 100 PSI @ 300°F.
    H. PIPING SUPPORTS/HANGERS: USE SUPER STRUT, UNISTRUT, B-LINE, ELCEN OR GRINNELL HANGERS AND ATTACHMENT TO PROPERLY SUPPORT THE PIPING SYSTEM ACCORDING TO GOOD STANDARD PRACTICE AND ACCORDING TO MANUFATURER'S RECOMMENDATIONS. MINIMUM SAFETY FACTOR OF 5.0. NO WATER PIPING SHALL HAVE DIRECT CONTACT WITH THE HANGING AND SUPPORT SYSTEM OR THE STRUCTURE. ON PIPES THAT ARE INSULATED, RUN THE INSULATION CONTINUOUS THROUGH THE HANGER AND PROVIDE SHEET METAL SHIELDS OF PROPER LENGTH AND GAGES. ON UNINSULATED COPPER PIPING, USE STONEMAN "TRISOLATOR" OR SIMILAR DEVICE AT EACH HANGER OR SUPPORT POINT.
    I. INSULATION: PROVIDE TO ALL HOT WATER PIPING 1.5" PRE-MOLDED FIBERGLASS WITH ASJ, R-4 MINIMUM. MANUFACTURER: OWENS-CORNING FIBERGLASS, ARMSTRONG, MANVILLE OR CERTAIN-TEED.
    J. ALL OTHER MATERIALS NOT SPECIFICALLY DESCRIBED BUT REQUIRED FOR A COMPLETE AND PROPER INSTALLATION SHALL BE NEW, FIRST QUALITY OF THEIR RESPECTIVE KINDS, AND SUBJECT TO THE APPROVAL OF THE ARCHITECT.
    K. ALL DESIGNATED FIXTURES FOR HANDICAPPED SHALL BE INSTALLED PER CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2, HANDICAPPED REQUIREMENTS. WRAP P-TRAP, COLD AND HOT WATER TUBING AND STOPS WITH SKAL+GARD MODELS SG 101 AND SG 102 , OR APPROVED EQUAL, TO PROTECT AGAINST SCALDING AND SCRAPING.
12. STERILIZATION OF DOMESTIC COLD WATER PIPES: AFTER PRELIMINARY PURGING, CLEANING, AND FLUSHING OF THE SYSTEM, CHLORINATE THE ENTIRE POTABLE DOMESTIC WATER SYSTEM IN ACCORDANCE WITH THE CURRENT RECOMMENDATIONS OF THE AMERICAN WATER WORKS ASSOCIATION AND IN ACCORDANCE WITH ALL PERTINENT STATE AND LOCAL HEALTH CODES AND REGULATIONS. CHLORINATE ONLY WHEN PRESCHEDULED AND PROVIDE PROPER WARNING SIGNS AT OUTLETS. UPON COMPLETION OF THE STERILIZATION, THOROUGHLY FLUSH THE ENTIRE POTABLE WATER SYSTEM AND IMMEDIATELY FILL THE SYSTEM. WHEN STERILIZATION AND FLUSHING ARE COMPLETE, ARRANGE WITH PERTINENT AGENCIES FOR ALL REQUIRED TESTS ON SYSTEMS.
13. CONNECTIONS TO ALL APPLIANCES, FIXTURES, ETC. SHALL BE MADE USING COPPER TUBING WITH ADEQUATE SLACK OR STAINLESS STEEL FLEXIBLE HOSE RATED AT MINIMUM 200 PSI. PLASTIC TUBING IS NOT ALLOWED.
14. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL REQUIRED PLUMBING FIXTURES, SINK, LAVS, FLUSH VALVES, FAUCETS AND ASSOCIATED ACCESSORIES INDICATED OR IMPLIED ON THE ARCHITECTURAL AND PLUMBING PLANS INCLUDING ALL REQUIRED UTILITY CONNECTIONS, SUPPORTS, CARRIERS, ETC. REFER TO ARCHITECTURAL PLANS FOR THE PLUMBING FIXTURE SCHEDULES.
15. ALL POTABLE WATER PIPING, FITTING, FAUCETS, VALVES, ETC. THAT COME IN CONTACT WITH POTABLE WATER SHALL BE MADE OF LEAD-FREE MATERIAL AND AB 1953 LISTED.

FIRE PROTECTION DESIGN CRITERIA

1. SCOPE: DESIGN, FURNISH AND INSTALL ALL REQUIRED LABOR, MATERIALS, EQUIPMENT, TESTING, AND CONTRACTOR SERVICES NECESSARY FOR COMPLETE SPRINKLER SYSTEM FOR SCOPE OF WORK. ADD NEW HEADS, SPRINKLER LINES, ETC.; DESIGN AND LAYOUT PIPING AS REQUIRED. ALL SPRINKLER HEADS MUST BE INSTALLED PER CODE; FINAL SPRINKLER HEAD LOCATIONS SUBJECT TO APPROVAL BY ARCHITECT AND FIRE MARSHALL. REFER TO ARCHITECTURAL DRAWINGS FOR AREA OF WORK.
2. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST APPLICABLE NFPA 13, CALIFORNIA FIRE CODE, CALIFORNIA BUILDING CODE AND CITY OF RICHMOND FIRE DEPARTMENT ORDINANCES, LAWS AND REGULATIONS.
3. CONTRACTOR SHALL DETERMINE SIZE AND LOCATION OF EXISTING PIPING/ RISER AND PROPER SIZING OF NEW PIPING. HYDRAULIC CALCULATIONS ARE REQUIRED FOR ALL FIRE PROTECTION WORK WITH SPRINKLER ADDITIONS.
4. CONTRACTOR SHALL SIZE PIPING BASED ON THE HYDRAULIC CALCULATIONS AND SHALL INCLUDE IN THE BID, ALL COSTS FOR THE UPSIZING OF EXISTING PIPING TO MEET CODE. CALCULATION SHALL BE BASED ON SUPPLY FROM REMOTE RISER PER CITY OF RICHMOND FIRE CODE. THESE REQUIREMENTS MAY BE IN ADDITION TO THAT REQUIRED BY THE CITY OF RICHMOND FIRE DEPARTMENT.
5. ALL PERMITS, APPROVALS, INSPECTIONS, EXAMINATIONS, AND TESTS REQUIRED BY THE AUTHORITIES AND/ OR AGENCIES SHALL BE ARRANGED AND PAID FOR BY THE SPRINKLER CONTRACTOR AS NECESSARY TO OBTAIN COMPLETE AND FINAL ACCEPTANCE OF THE FIRE PROTECTION SYSTEM.
6. THE FIRE PROTECTION CONTRACTOR SHALL BE C-16 LICENSED CONTRACTOR AND SHALL BE THE ENGINEER OF RECORD FOR THE AUTOMATIC SPRINKLER SYSTEM.
7. CONTRACTOR SHALL VISIT JOB SITE PRIOR TO SUBMISSION OF BID AND SHALL EXAMINE ALL CONDITIONS AND CONTACT BUILDING CHIEF ENGINEER. CONTRACTOR TO CHECK THE FIT OF ALL NEW WORK AND SHALL SO STATE IN HIS BID. GENERAL OR SPECIFIC EXCLUSIONS ARE NOT ACCEPTABLE. NO EXTRAS WILL BE APPROVED DURING CONSTRUCTION BASED ON PIPING AND SPRINKLER HEAD FITTING PROBLEMS.
8. ALL PIPING SHALL BE SCHEDULE 40 BLACK STEEL.
9. SPRINKLER HEADS SHALL BE PER BUILDING STANDARDS. PROVIDE ALL NEW SPRINKLER HEADS.
10. ROUTE NEW SPRINKLER LINES TO CLEAR ALL DUCTWORK, PIPING, LIGHT FIXTURES, EQUIPMENT, AIR OUTLETS, ETC.
11. CENTER ALL SPRINKLER HEADS IN ACOUSTICAL TILE.
12. FOLLOW BUILDING CONSTRUCTION STANDARDS.
13. RE-ROUTE/RELOCATE EXISTING SPRINKLER LINES (MAIN AND BRANCH) AND HEADS TO FACILITATE INSTALLATION OF NEW AND RELOCATED HVAC EQUIPMENT (VAV BOXES, HEAT PUMP(S), AND ASSOCIATED DUCTWORK AND PIPING) IN CEILING AND TO ACCOMMODATE NEW CEILING HEIGHTS. REFER TO MECHANICAL DRAWINGS FOR LOCATION OF ALL EQUIPMENT, SPRINKLER CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR REGARDING THESE EQUIPMENT.
14. PROVIDE CODE REQUIRED END OF THE LINE SEISMIC RESTRAINTS THROUGHOUT.

DRAWING INDEX

DWG. NO.	DESCRIPTION
1P0.0.1	1ST FLOOR – GENERAL NOTES, LEGEND, AND DRAWING INDEX
1P1.0.1	1ST FLOOR – PLUMBING RISER DIAGRAMS, DETAIL AND SCHEDULES
1PD1.0.1	1ST FLOOR – PLUMBING DEMOLITION PLAN
1P2.0.1	1ST FLOOR – PLUMBING FLOOR PLAN

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Issue/Revision:

No.	Proj. No. Date:	Description
1	32243.01 24MAR19	ISSUE FOR REVIEW
2	32243.01 22APR19	ISSUE FOR PERMIT
2.1	32243.01 24MAY19	PLAN CHECK RESPONSE ADDENDUM #3

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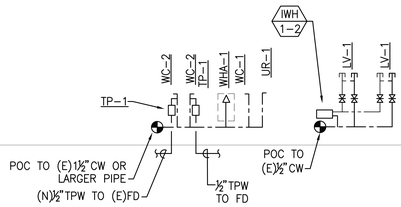
Approval Signature:

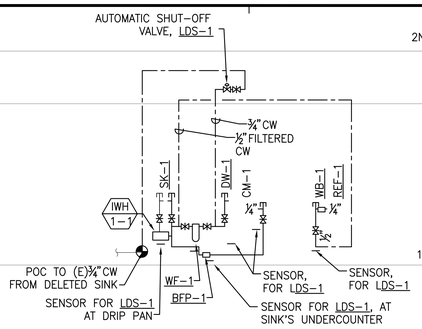
Co/ Title: Date:

1ST FLOOR - GENERAL NOTES, LEGEND AND DRAWING INDEX

Scale: NONE Issue Date: 22APR19
Drawn By: PT Reviewed By: AW
Sheet: 1 of 4

1P0.0.1



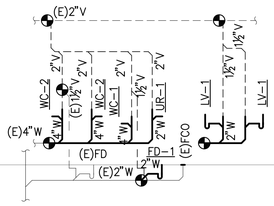


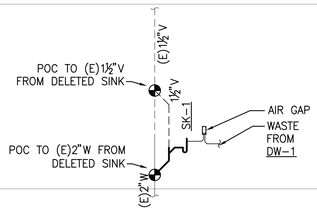
NOTES:

1. FIELD VERIFY ALL POINT OF CONNECTIONS.
2. SET HW OUTLET FOR WATER HEATER AT 110°F.
3. PROVIDE DRIP PAN AT WATER HEATER.

1 DOMESTIC COLD/HOT WATER RISER DIAGRAM

SCALE: NOT TO SCALE

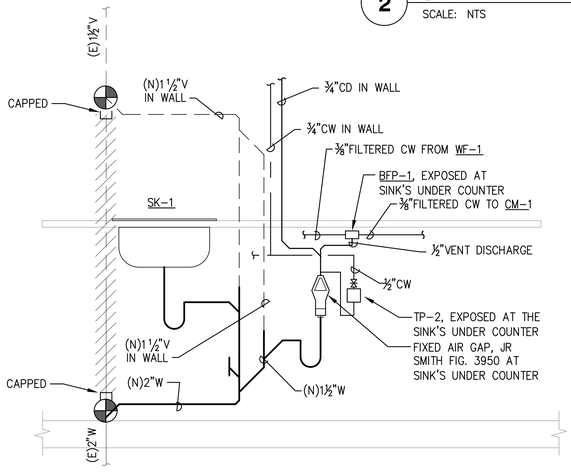




1. FIELD VERIFY ALL POINT OF CONNECTIONS.
2. PROVIDE CODE REQUIRED SLOPE FOR ALL NEW WASTE LINES.

2 SANITARY WASTE/VENT RISER DIAGRAM

SCALE: NTS



3 INDIRECT DRAIN TERMINATION DETAIL

SCALE: NONE

WATER HEATER SCHEDULE

CODE	MFR	MODEL	LOCATION ROOM NO.	ELECTRIC INPUT V/KW/PH	GPH	TEMP. RISE	WORKING PRESS. (MIN.)	WEIGHT WITH WATER (LBS.)	REMARKS
IWH 1–1	CHORNOMITE	E–46LLP	PANTRY 105	277V/4.6KW/1PH	–	42°F AT 0.75 GPM	42 PSI	8	TANKLESS TYPE
IWH 1–2	CHORNOMITE	E–70LLP	MEN'S ROOM 108	277V/7.0KW/1PH	–	64°F AT 0.75 GPM	42 PSI	8	TANKLESS TYPE

NOTE:

1. WATER HEATER SHALL MEET ALL EFFICIENCY REQUIREMENTS OF TITLE 24 AND AS LISTED IN THE APPLIANCE EFFICIENCY REGULATIONS.
2. PROVIDE DRIP PAN UNDER WATER HEATER WITH LDS–1 SENSOR AT PANTRY ROOM
3. PROVIDE SENSOR AT THE DRIP PAN

PLUMBING FIXTURE CONNECTION SCHEDULE

CODE	DESCRIPTION	SOIL–WASTE	TRAP	VENT	CW	HW	REMARKS
WC–1	WATER CLOSET	4"	–	2"	1½"	–	①
WC–2	WATER CLOSET (ADA)	4"	–	2"	1½"	–	①
UR–1	URINAL (ADA)	2"	–	2"	¾"	–	②
LV–1	LAVATORY (ADA)	2	1¼"X1½"	1½"	½"	½"	③
SK–1	KITCHEN SINK	2	1¼"X1½"	1½"	½"	½"	④
CM–1	COFFEE MAKER	–	–	–	⅜"	–	⑤
DW–1	DISHWASHER	–	–	–	½"	–	⑥
REF–1	REFRIGERATOR	–	–	–	¼"	–	⑦
WB–1	WATER BOX	–	–	–	½"	–	⑧
WF–1	WATER FILTER	–	–	–	¾"	–	⑨

NOTE:

① SAD FOR SPECIFICATION TO FIXTURE COMPLETE WITH SENSOR FLUSH VALVE AND TOTO SC534 OPEN FRONTLESS SEAT, FLOW RATE TO CONFORM TO CAL–GREEN REQUIREMENT OF 1.28 GPF OR LESS, SEAT TO BE FRONT LESS. SAD FOR MOUNTING HEIGHT OF ADA COMPLIANT WATER CLOSET.

② SAD FOR SPECIFICATION TO FIXTURE AND FLUSH VALVE, FLOW RATE TO CONFORM TO CAL–GREEN REQUIREMENT OF 0.125 GPF OR LESS. SAD FOR MOUNTING HEIGHT OF ADA COMPLIANT URINAL.

③ SAD FOR SPECIFICATION OF FIXTURE AND FAUCET, FLOW RATE TO CONFORM TO CAL–GREEN REQUIREMENT OF 0.5 GPM OR LESS. PROVIDE AERATOR IF REQUIRED TO MINIMIZE FLOW RATE.

④ SAD FOR SINK AND FAUCET SPECIFICATION. FAUCET SPECIFIED FLOW RATE IS 1.8 GPM, PASS CAL–GREEN REQUIREMENT FOR KITCHEN FAUCET.

⑤ SAD FOR SPECIFICATION, PROVIDED BY OTHERS. CONTRACTOR TO PROVIDE ⅜"FILTERED CW CONNECTION WITH VALVE AND BFP–1.

⑥ SAD FOR SPECIFICATION OF DISHWASHER. DISHWASHER TO BE THE TYPE THAT CAN RUN ON COLD WATER AND HAS AN INTERNAL HEATER. PROVIDE COLD WATER SUPPLY AND TERMINATE DRAIN TO SINK'S TAILPIECE WITH APPROVE AIR GAP.

⑦ SAD FOR SPECIFICATION. PROVIDE ¼"FILTERED COLD WATER FROM WB–1.

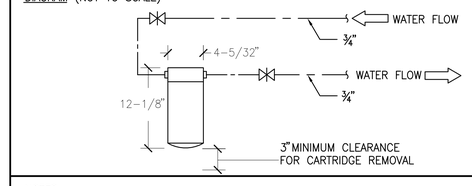
⑧ PROVIDE GUY GRAY MODEL BIM 875

⑨ SEE WATER FILTER SCHEDULE

WATER FILTER SCHEDULE

CODE	MFR	PART NUMBER	MODEL NUMBER	WORKING PRESS. (PSI)	MAX FLOW (GPM)	CONNECTIONS	LOCATION ROOM NO.	NOTES
WF–1	3M AQUAPURE	55920–01	SST1HA	300	8	¾" HORIZONTAL	UNDER COUNTER PANTRY 105	SEE NOTES

DIAGRAM (NOT TO SCALE)



NOTES:

1. PROVIDE SUPPLEMENTAL SUPPORTS AS REQUIRED TO INSTALL IN UNDER COUNTER CABINET.
2. INSTALL IN VERTICAL POSITION.
3. INSTALL AND FLUSH CARTRIDGES PER MANUFACTURER'S RECOMMENDATIONS.
4. AREA UNDER FILTER ASSEMBLY SHALL BE FREE OF ELECTRICAL DEVICES/ EQUIPMENT.
5. 316 STAINLESS STEEL HEAD.
6. 304 STAINLESS HOUSING.

PLUMBING EQUIPMENT

CODE	DESCRIPTION – FLOOR FINISH	MANUFACTURER	CONN.	REMARKS
BFP–1	BACKFLOW PREVENTER	WATTS MODEL SD–3	1/4"	PROVIDE WITH STRAINER
LDS–1	LEAK DETECTION SYSTEM	FIRST SMART SENSOR INC.; OR APPROVED EQUAL	3/4"	FULLY AUTOMATED WATER LEAK DETECTION AND CONTROL SYSTEM, CONSISTING OF AUTOMATIC SHUT OFF VALVE (SOENOID), SENSORS AND CONTROL WITH ALARM. SYSTEM SHALL MEET CA AND SF PLUMBING CODES. ENTIRE SYSTEM SHALL BE LEAD FREE. PROVIDE ADAPTER FOR 120V SOURCE
WHA–1	WATER HAMMER ARRESTOR	J.R. SMITH 5010	1	PROVIDE WITH 8"X8" ACCESS PANEL

DRAIN, CLEANOUT, TRAP PRIMER, ETC. SCHEDULE

CODE	DESCRIPTION	MANUFACTURER MODEL NUMBER	CONN.	TOP GRATE MATERIAL	GRATE SIZE	REMARKS
WCO–1	WALL CLEANOUT	JR SMITH 4452C	2"–4"	–	–	W/ S/S COVER
FD–1	FLOOR DRAIN	MIFAB F1000–7	2"			WITH 1/2" TRAP PRIMER CONNECTION
TP–1	TRAP PRIMER	SLOAN VBF–72–A OR APPROVED EQUAL	1/2"	–	–	ATTACHED TO FLUSH VALVE, CONTRACTOR TO PROVIDE SAME MANUFACTURER WITH FLUSH VALVE
TP–2	TRAP PRIMER	MIFAB MR–500	1/2"			3 PSI ACTIVATION
FCO–1	FLOOR CLEANOUT	JR SMITH 4023S	2"–4"	–	–	ROUND NICKEL, ADJUSTABLE TOP

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1	32243.01 24MAR19	ISSUE FOR REVIEW
2	32243.01 22APR19	ISSUE FOR PERMIT
2.1	32243.01 24MAY19	PLAN CHECK RESPONSE ADDENDUM #3

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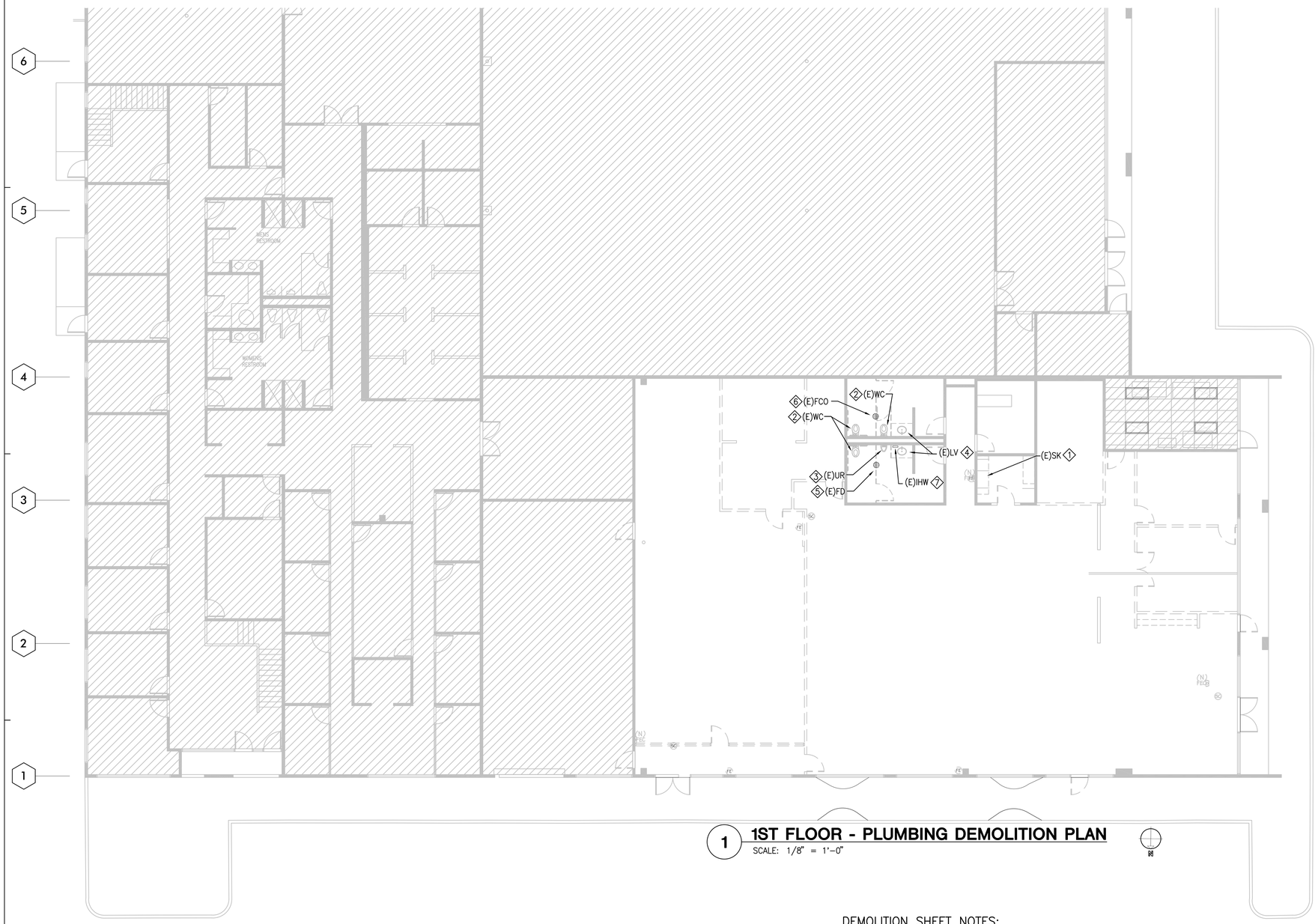
1ST FLOOR - PLUMBING RISER, DIAGRAMS, DETAIL, AND SCHEDULES

Scale: NONE Issue Date: 22APR19
Drawn By: PT Reviewed By: AW
Sheet: 2 of 4

1P1.0.1



1 1ST FLOOR - PLUMBING DEMOLITION PLAN

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

GENERAL NOTES:

1. SAD FOR OTHER DEMOLITION NOTES.

DEMOLITION SHEET NOTES:

1. THIS FIXTURE TO BE DEMOLISHED/REMOVED, INCLUDING ALL THE PIPING CONNECTED TO THIS FIXTURE. COORDINATE WITH BUILDING ENGINEER FOR PROPER DISPOSAL OF (E)FIXTURE AND EQUIPMENT. CAP EXISTING VENT, COLD WATER AND WASTE PIPING INSIDE THE WALL FOR FUTURE USE.
2. (E)WATER CLOSET TO BE REMOVED, PIPING CONNECTED TO THIS FIXTURE SHALL BE CAPPED INSIDE THE CAVITY/WALL, CARRIER/SUPPORT TO BE REMOVED.
3. (E)URINAL TO BE REMOVED, INCLUDING BACKING SUPPORT, ETC.; PIPING CONNECTED TO THIS FIXTURE SHALL BE CAPPED INSIDE THE CAVITY/WALL.
4. (E)LAVATORY TO BE REMOVED. HOT AND COLD WATER PIPING; WASTE AND VENT CONNECTED TO THIS FIXTURE SHALL BE CAPPED INSIDE THE CAVITY/WALL.
5. (E)FIXTURE TO REMAIN, INCLUDING ALL THE PIPING, VENT AND TRAP PRIMER, CONNECTED TO THIS FIXTURE. CONTRACTOR TO TEST IF TRAP PRIMER IS WORKING PROPERLY, REPLACE TRAP PRIMER AS REQUIRED.
6. (E)FCO TO REMAIN.
7. (E)IWH, INSTANTANEOUS WATER HEATER, TO BE REMOVED, INCLUDING ALL THE PIPING CONNECTED TO THIS EQUIPMENT. COORDINATE WITH BUILDING ENGINEER FOR PROPER DISPOSAL OF THIS EQUIPMENT.

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1ST FLOOR - PLUMBING DEMOLITION PLAN

Scale: 1/8"=1'-0" Issue Date: 22APR19
Drawn By: PT Reviewed By: AH
Sheet: 3 of 4

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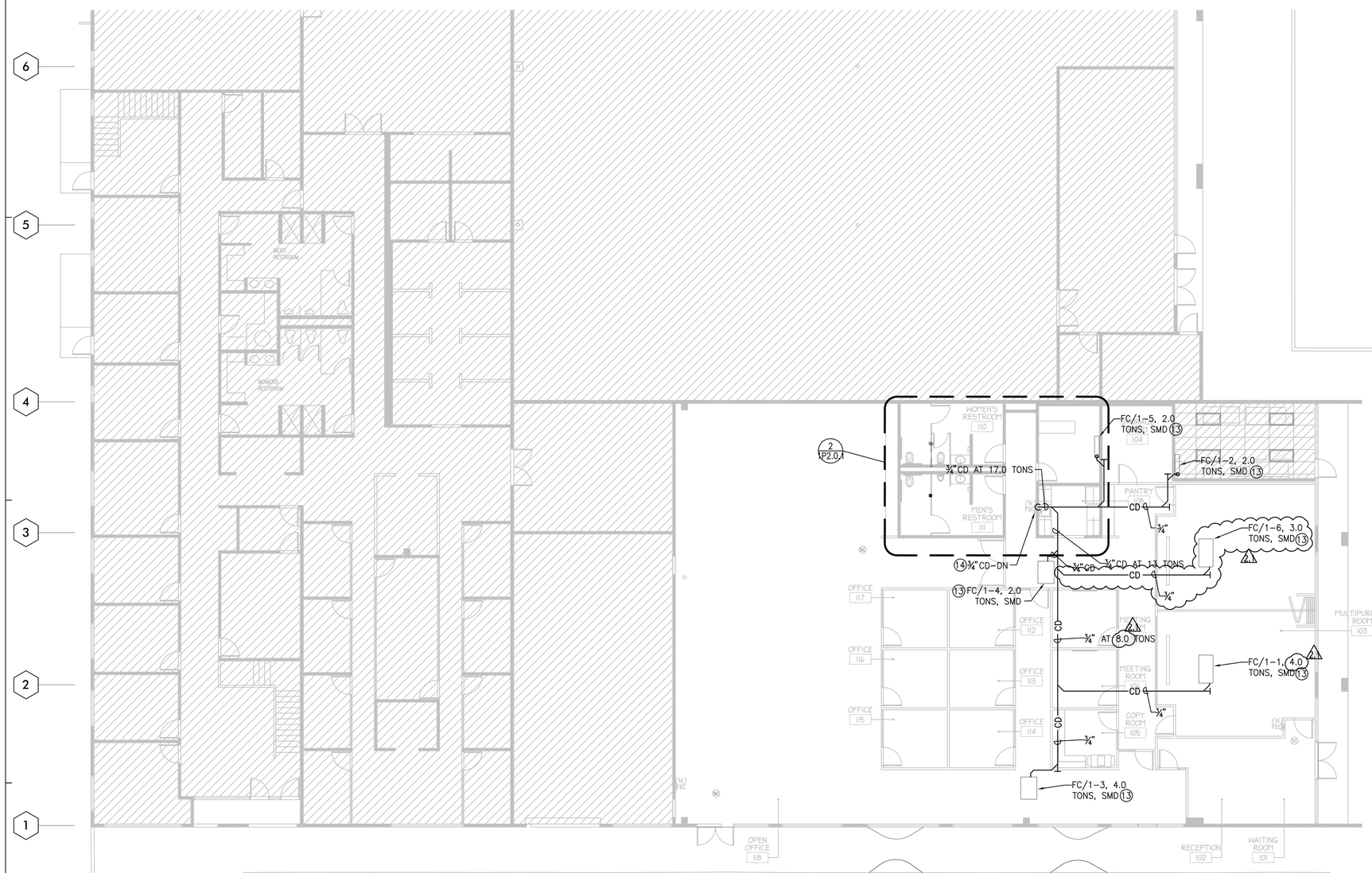
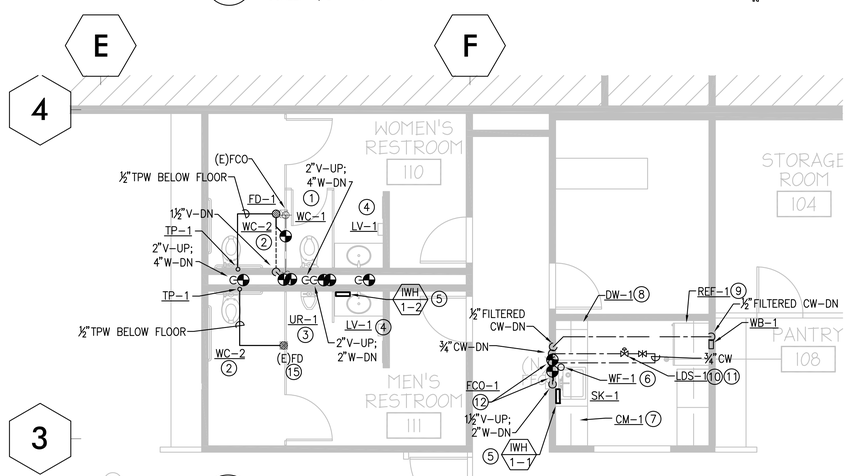


1 1ST FLOOR - PLUMBING FLOOR PLAN

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



2 ENLARGED PLUMBING PLAN

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

PLUMBING GENERAL NOTES:

1. FIELD VERIFY ALL POINTS OF CONNECTION.
2. SEE PLUMBING DIAGRAMS FOR PIPE SIZES.
3. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF PLUMBING FIXTURES.
4. ALL NEW COLD WATER SUPPLY LINE SHALL BE COPPER.
5. PROVIDE CODE REQUIRED SLOPE FOR ALL NEW WASTE LINES.
6. COORDINATE WITH ARCHITECT ALL ACCESS PANEL THAT IS REQUIRED.

PLUMBING SHEET NOTES:

1. (N)WATER CLOSET, PROVIDE 1½"CW, 2"V & 4"W CONNECTION FROM (E) UTILITIES IN THE WALL, PROVIDE WHA-1 BEFORE CONNECTING TO THE LAST WATER CLOSET. PROVIDE (N)CARRIER/SUPPORT.
2. SAD FOR ADA WATER CLOSET AND MOUNTING HEIGHT. PROVIDE (N)CARRIER/SUPPORT.
3. (N)URINAL, PROVIDE ¾"CW, 2"V & 2"W CONNECTION FROM (E)UTILITIES IN THE WALL, SAD FOR ADA URINAL AND MOUNTING HEIGHT. PROVIDE (N)BACKING SUPPORT.
4. (N)LAVATORY, PROVIDE ½"HW, ½"CW, 1½"V & 2"W FROM (E) UTILITIES IN THE WALL, LIMIT HW OUTLET TO ADA LAVATORY AT 110°F, PROVIDE THERMOSTATIC MIXING VALVE AS REQUIRED.
5. PROVIDE INSTANTANEOUS TYPE WATER HEATER UNDER THE COUNTER. PROVIDE VALVED COPPER LINE ½"CW CONNECTION TO THE HEATER. PROVIDE SHEETMETAL DRIP PAN WITH 2" LIP UNDER THE WATER HEATER.
6. PROVIDE UNDER THE COUNTER, SEE RISER DIAGRAM AND SCHEDULE FOR DETAIL. PROVIDE ¾"CW CONNECTION WITH VALVE.
7. COFFEE MAKER, COORDINATE EXACT LOCATION WITH ARCHITECT, CONTRACTOR TO PROVIDE ¼"FILTERED WATER COPPER CONNECTION WITH VALVE AND BFP-1
8. DISHWASHER, SAD FOR SPECIFICATION. PLUMBING CONTRACTOR TO PROVIDE ½"CW CONNECTION AND PROVIDE APPROVE DIRECT CONNECTION TO THE WASTE PER REQUIREMENT OF THE PLUMBING CODE. DISHWASHER TYPE, CAN RUN ON COLD WATER SUPPLY ONLY WITH INTERNAL HEATER.
9. REFRIGERATOR, PROVIDE ¼"FILTERED CW FROM WB-1.
10. AUTOMATIC SHUT OFF VALVE OR SOLENOID VALVE FROM LDS-1, PROVIDE COMPLETE OPERATING FLOOD STOPPER SYSTEM, HARD WIRED. SYSTEM SHALL BE A FULLY AUTOMATED WATER LEAK DETECTION AND CONTROL SYSTEM. SYSTEM SHALL MEET CA AND SF PLUMBING CODES. ENTIRE SYSTEM SHALL BE LEAD FREE. PROVIDE AUDIBLE ALARM. SOLENOID VALVE SHALL INCORPORATE AUTOMATIC RESET. ALL COMPONENTS SHALL BE HARD-WIRED AND NOT BATTERY OPERATED.
11. PLACE SENSORS ON THE FLOOR UNDER THE SINK CABINET, DISHWASHER, ETC. (UNDER ALL APPLIANCES) AND DRAIN PAN OF WATER HEATER. UPON WATER LEAK DETECTION, THE CONTROL PANEL SHALL SHUT OFF THE WATER SUPPLY TO ALL WET AREAS VIA AN AUTOMATIC SOLENOID VALVE.
12. FIELD VERIFY LOCATION OF (E)VENT AND WASTE FROM DELETED SINK; PROVIDE CONNECTION AS SHOWN.
13. MECHANICAL UNITS WITH CD PUMP, SMD FOR SPECIFICATION.
14. TERMINATE WITH AIR GAP FITTINGS, SEE 3/1P1.0.1
15. PROVIDE (N)½"TRAP PRIMER AT EXISTING FLOOR DRAIN, IF NONE EXISTS AT PRESENT. TRENCHING WILL BE REQUIRED.

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1ST FLOOR - PLUMBING FLOOR PLAN

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Drawn By: PT Reviewed By: AH
Sheet: 4 of 4

1P2.0.1