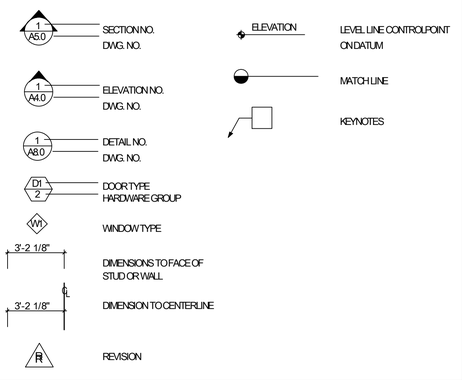
LifeMoves Maple Street Shelter

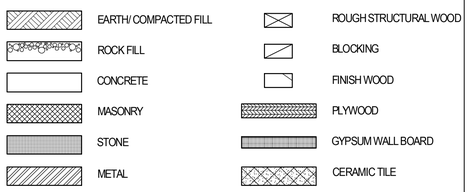
ABBREVIATIONS

ACCESS DOOR	AD.	EXPANSION	EXP.	PAINTED	PTD.
ACCESS PANEL	AP.	EXPANSION JOINT	EXP JT.	PANIC BAR	PB.
ACOUSTICAL	ACOUST.	EXTENSION	EX.	PARTITION	PTN.
ADHESIVE	ADH.	EXTERIOR	EXT.	PERFORATED	PERF.
ADJUSTABLE	ADJ.			PLASTER	PLAS.
AGGREGATE	AGGR.	FACE OF	FO.	PLASTIC	PLSTC.
AIR CONDITIONER	A/C	FIBER BOARD	FB.	PLYWOOD	PLY. WD.
ALUMINUM	AL.	FINISH	FIN.	POINT	PT.
ANCHOR BOLT	AB.	FIRE ALARM	FA.	POLISHED PLATE GLASS	PPGL.
AREA DRAIN	AD.	FIRE EXTINGUISHER	F.E.	POLYVINYL CHLORIDE	PVC.
ASBESTOS	ASB.	FIRE EXTINGUISHER CABINET	F.E.C.	POUNDS PER SQUARE FOOT	PSF.
ASBESTOS CEMENT PIPE	ACP.	FIRE TREATED	F.T.	POUNDS PER SQUARE INCH	PSI.
ASPHALT	ASPH.	FLASHING	FL.	PRE CAST CONCRETE	PC.
ASPHALTIC CONCRETE	AC.	FLAT BAR	FB.	PROPERTY	PROP.
		FLAT HEADED WOOD SCREW	FHWS.	PROPERTY LINE	PL.
BEGINNING OF VERTICAL CURVE	BVC.	FLOOR	FLR.		
BENCH MARK	BM.	FLOOR DRAIN	FD.	RADIUS	R.
BLOCKING	BLKG.	FLOORING	FLG.	REDWOOD	RWD.
BOARD	BD.	FLOW LINE	FL.	REFRIGERATOR	REF.
BOTTOM	BTM.	FLUORESCENT	FLUOR.	REINFORCED CONCRETE PIPE	RCP.
BUILDING	BLDG.	FOOTING	FTG.	REINFORCING	REINF.
		FOUNDATION	FDN.	REQUIRED	REQD.
CABINET	CAB.	GAGE OR GAUGE	GA.	RESILIENT	RESIL.
CARRIAGE BOLT	CB.	GALVANIZED	GALV.	RESISTANT	RES.
CAST-IN-PLACE	CIP.	GALVANIZED IRON	GI.	ROOF DRAIN	RD.
CAST-IRON	CI.	GLUE-LAM BEAM	GLB.	ROOM	RM.
CAST IRON PIPE	CIP.	GRADE	GR.	ROUND HEADED WOOD SCREW	RHWS.
CATCH BASIN	CB.	GROUND	GRND.	RIGHT OF WAY	R.O.W.
CEILING	CLG.	GYPSUM	GYP.		
CEMENT	CEM.			SCHEDULE	SCHED.
CENTER	CTR.	HANGER	HGR.	SECTION	SECT.
CENTER TO CENTER	C.T.O.C.	HARDBOARD	HDBD.	SELECT	SEL.
CERAMIC	CER.	HARDWARE	HDW.	SHEATHING	SHTHG.
CLEAN OUT TO FLOOR	CTF.	HARDWOOD	HDWD.	SIDING	SDG.
CLEAN OUT TO GRADE	CTG.	HEADER	HDR.	SIMILAR	SIM.
CLEAR	CLR.	HEATER	HTR.	SINGLE ACTING	SA.
CLOSET	CLO.	HEIGHT	HT.	SLOPE	S.
COLUMN	COL.	HIGH STRENGTH BOLT	HSB.	SOLID CORE	SC.
CONCRETE	CONC.	HOLLOW CORE	HC.	SPACE	SP.
CONCRETE PIPE, UNREINFORCED	CP.	HORIZONTAL	HOR.	SQUARE	SQ.
CONSTRUCTION	CONST.	HOSE BIB	HB.	STAINLESS STEEL	S.S.
CONSTRUCTION JOINT	CJ.	HOUR	HR.	STANDARD	STD.
CONTINUOUS	CONT.			STEEL	STL.
CORRUGATED METAL PIPE	CMP.	INSIDE DIAMETER	ID.	STORAGE	STG.
COUNTER	CTR	INSULATION	INS.	STRUCTURAL	STR.
COUNTERSINK	CSK.	INTERIOR	INT.	SUSPENDED	SUSP.
CUBIC YARD	CY.	INVERT	INV.	SYMBOL	SYMB.
CURB INLET	CI.	INVERT ELEVATION	IE.	SYMMETRICAL	SYMM.
DETAIL	DET.	JOINT	JT.	TELEPHONE	TEL.
DIAMETER	DIA.			TEMPERED	TEMPD.
DIMENSION	DIM.	LAMINATE(D)	LAM.	TERRAZZO	TER.
DISPENSER	DISP.	LAVATORY	LAV.	TIE DOWN	TD.
DOOR	DR.			TONGUE AND GROOVE	T&G.
DOUBLE	DBL.	MACHINE	MACH.	TOP OF CURB	TC.
DOUBLE-ACTING	DA.	MACHINE BOLT	MB.	TOP OF RAIL	TR.
DOUGLAS FIR	DF.	MANHOLE	MH.	TYPICAL	TYP.
DOWN	DN.	MANUFACTURE(R)	MFR.		
DOWN SPOUT	DS.	MANUFACTURING	MFG.	UNDERGROUND	UG.
DRAIN	DR.	MAXIMUM	MAX.	UNLESS OTHERWISE NOTED	U.O.N.
DRINKING FOUNTAIN	DF.	MECHANICAL	MECH.	URINAL	UR.
DRAWING	DWG.	METAL	MTL.		
DUCTILE IRON PIPE	DIP.	MINIMUM	MIN.	VENT THROUGH ROOF	VTR.
		MOUNTING	MTG.	VERTICAL	VERT.
EACH	EA.			VERTICAL CURVE	VC.
EACH FACE	EF.	NEW	(N)	VERTICAL GRAIN	VG.
EACH WAY	EW.	NOMINAL	NOM.	VINYL ASBESTOS TILE	VAT.
EDGE OF PAVEMENT	EP.	NOT IN CONTRACT	N.I.C.	VITREOUS CLAY PIPE	VCP.
ELECTRIC	ELEC.				
ELECTRIC WATER COOLER	EWC.	OBSCURE	OB.	WAREHOUSE	WHSE.
ELEVATION	EL.	ON CENTER	OC.	WATER CLOSET	W.C.
ELEVATOR	ELEV.	OPENING	OPNG.	WATER HEATER	WH.
EQUAL	EQ.	OPPOSITE	OPP.	WATERPROOF	W.P.
EQUIPMENT	EQUIP.	OUTSIDE DIAMETER	OD.	WEAKENED PLANE JOINT	W.P.J.
EXISTING	(E)	OUTSIDE FACE OF STUD	OFS.	WINDOW	W.DW.
		OVAL HEADED WOOD SCREW	OHWS.	WITH	W/.
				WITHOUT	W.O.
				WOOD	WD.

SYMBOLS LEGEND



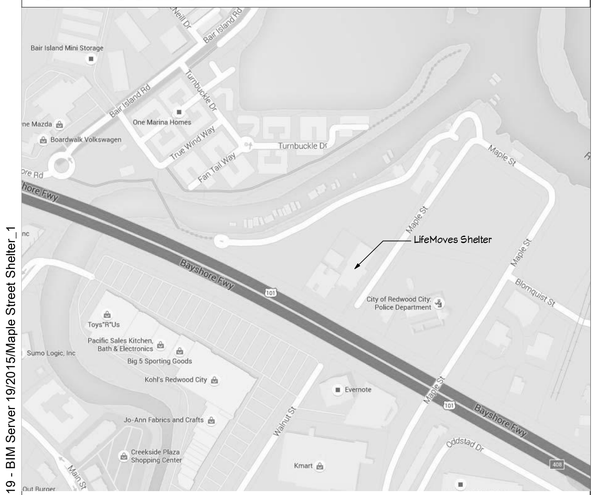
MATERIALS LEGEND



PROJECT DATA

CJW Job No.	2015-2801
PROJECT ADDRESS:	1580 Maple Street Redwood City, CA 94062
ASSESSOR'S PARCEL No.	052-532-020

SITE LOCATION MAP



VICINITY MAP

N.T.S.

PROJECT TEAM

ARCHITECT:
CJW ARCHITECTURE
130 PORTOLA ROAD, SUITE A
PORTOLA VALLEY, CA 94028
ATT.: Carter Warr
T: 650-851-9335 F: 650-851-9337
E-MAIL: carter@cjwarchitecture.com

STUCTURAL:
BCA ENGINEERING, INC.
1300 INDUSTRIAL ROAD, SUITE 1
SAN CARLOS, CA 94070
ATT.: Geoff Clifford, S.E.
T: 650-508-2500 ext.25 F: 650-508-2505
E-MAIL: geoff@bcaeng.net

SURVEYOR:
LEA & BRAZE ENGINEERING, INC.
2495 INDUSTRIAL PARKWAY WEST
HAYWARD, CA 94545
ATT.: Johnny Chiu
T: 510-887-4086 F: 510-887-3019
E-MAIL: jchiu@leabraze.com

M.E.P:
TANTECH ENGINEERS, INC.
1431 CEDAR STREET
SAN CARLOS, CA 94070
ATT.: John Tankeh
T: 415-269-4283
E-MAIL: tankeh@comcast.net

LANDSCAPE:
RON HODGES LANDSCAPE ARCHITECT
ATT.: Ron Hodges
T: 707-481-4500
E-MAIL: ronald.hodges@gmail.com

DRAWING INDEX

GENERAL NOTES

1. CODE COMPLIANCE:
1a. Contract and Construction Documents include: AIA Document A201 (2007), the General Conditions of the contract for Construction.

1b. All work is to be performed in accordance with all governing codes, ordinances, and regulations.

2. UTILITIES AND SITE WORK:
2a. General Contractor shall verify all underground utility locations prior to excavation, trenching, or grading of any kind. General Contractor shall coordinate with applicable utility companies when routing electrical, telephone, cable TV, gas, water, sanitary sewer services, or any other utility.

2b. Construction Documents include the Geotechnical Investigation Report By:

2c. Geotechnical Engineer and Civil Engineer shall coordinate drainage system and approved before backfilling. Drainage and positive flow of entire system shall be tested prior to backfill.

2d. General Contractor shall include Soils Engineer in the inspection of foundations, foundation waterproofing and drainage systems, and all related facets of the job. The Architect requires a signed letter stating that the work is in compliance with the Soils Engineer's recommendations.

3. DIMENSIONS:
3a. No dimensions shall be taken by scaling from the drawings. Contact architect for dimension clarifications or additional dimensions as required. Refer to this Cover Sheet for dimensioning standards. Details and the dimensions provided therein take precedence over general floor plans, elevations, and sections.

3b. Verify all dimensions on the job site prior to ordering or manufacturing.

3c. Dimensions noted "clear" must be accurately maintained, and shall not vary more than +-1/8" without written instruction from the Architect. Dimension marked +- mean a tolerance not greater nor smaller than 2" from indicated dimension, u.o.n. verify field dimensions exceeding tolerance with the Architect, and secure Architect's approval.

4. DISCREPANCIES:
4a. In case of any discrepancy in the contract documents, consult the Architect before proceeding.

5. GENERAL CONTRACTOR RESPONSIBILITIES:
5a. General Contractor shall be responsible for coordination and execution of the work shown or implied in the construction documents. General Contractor is responsible for all construction means, methods, and procedures.

5b. General Contractor shall coordinate all facets of work and all trades involved to avoid conflict in the location, installation, and construction of all items of work as indicated on the construction documents. If any work is to be installed by the Owner directly, allowances for such work must be made. Coordinate with Architect.

5c. General Contractor shall review all Contract and Construction Documents; Architectural Drawings include reflected ceiling, finish, electrical, lighting, and mechanical plans; and all schedules prior to pouring concrete and prior to framing. Coordinate locations of shafts, electrical wiring/conduit, HVAC ductwork, and light fixtures with locations of foundations and framing. It is imperative that locations of framing members do not conflict with locations of recessed light fixtures.

5d. General Contractor shall install all appliances specified and all equipment specified according to the respective manufacturer's instructions. All instruction booklets, warrantees, and other information regarding appliances and equipment shall be handed directly to the Owner in a manila envelope at the time of substantial completion. Contractor shall verify that every appliance and every piece of equipment is in perfect working order and that information about all warranties and guarantees is made known to the Owner.

5e. The installer of each major unit of work is required to inspect the substrate and conditions to receive work and shall report all unsatisfactory conditions to the General Contractor and shall not proceed until satisfactory conditions are attained.

5f. No work shall commence with unapproved materials. Any work done with un-approved materials and equipment is at the contractor's risk. See specifications for submittal and substitution requirements.

5g. Construction materials stored on the site shall be properly stacked and protected so as to prevent damage or deterioration until used. Failure in this regard may be cause for rejection of material and/or work.

5h. New/existing finishes and construction shall be protected by the contractor from potential damage caused by construction activity. Damage to finishes or construction caused in this manner shall be repaired or replaced (owner's decision) by the contractor with identical material and/or finishes. Contractor shall make and maintain a photographic record notebook with dated/indexed photographs.

5i. In addition to those shown on drawings, provide and locate access doors or panels in ceiling and wall construction as required by mechanical, plumbing, and electrical work.

5j. General Contractor shall leave the job site "broom clean" at the end of each working day. All materials shall be stored in a neat and safe place to avoid accidents.

6. EQUIPMENT BACKING:
6a. For mounting heights not clearly outlined in the plans or schedules, coordinate with the Architect. Architect shall confirm all electrical device and light fixture locations before contractor pulls wire.

6b. Provide solid backing as necessary for wall mounted shelves, fixtures, and fittings, even when work is to be done by Owner directly. Coordinate work and locations with Owner and Architect.

6c. All fastening devices to be concealed, unless otherwise shown.

7. WEATHERPROOFING:
7a. Weather-strip all exterior doors and windows.

7b. Caulk or otherwise seal around all openings to limit infiltration, including but not limited to: Exterior joints around windows and door frames, between sole plates and floors, at exterior wall intersections and corners, and between exterior wall panels.

7c. General Contractor shall verify that all work on the exterior of the project is watertight. All joints exposed to the elements shall be tested for water tightness prior to substantial completion.

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT
CARTER JENSEN WARR
No. C-19397
REN. 6-30-17
STATE OF CALIFORNIA

PROJECT

LifeMoves Maple Street Shelter
1580 Maple Street Redwood City CA 94063

SHEET TITLE

Title Sheet

REVISIONS

No.	Date	Notes
1	6-17-2016	Building Submittal

JOB: 2015.2801

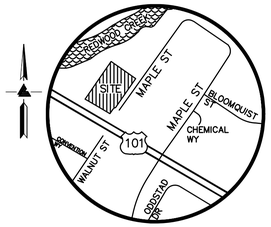
DATE: 6/17/2016

SHEET: T-0.1

3:18 PM

Monday, June 27, 2016

BIM Server: CJW BIM Server 19 - BIM Server 19/2015/Maple Street Shelter_1



VICINITY MAP

NO SCALE

LEGEND AND NOTES

——— — — ———	BOUNDARY LINE
— — — — — —	EASEMENT LINE
———ET———	ELECTRICAL/TELEPHONE OVERHEAD LINE
———x———	FENCE LINE
———G———	GAS LINE (PER USA MARKINGS)
———SS———	SANITARY SEWER LINE
———SD———	STORM DRAIN LINE
———W———	WATER LINE (PER USA MARKINGS)
ARISTO	ARISTOCRAT
C.L.F.	CHAIN LINK FENCE
EUC	EUCALYPTUS
FF	FINISH FLOOR
FL	FLOW LINE
INV	INVERT
M–	MULTIPLE TRUNKS
PVC	POLYVINYL CHLORIDE PIPE
RWD	REDWOOD
RCP	REINFORCED CONCRETE PIPE
RP	ROOF PEAK
TC	TOP OF CURB
TOS	TOP OF SLAB
∘ A	ANODE
• AD	AREA DRAIN
• BOL	BOLLARD
▥ CB	CATCH BASIN
☐ EB	ELECTRICAL BOX
☐ ELEC	ELECTRICAL VAULT
⛯	FIRE HYDRANT
☐ GM	GAS METER
⋈ ICV	IRRIGATION CONTROL VALVE
∂	JOINT POLE
○ SSCO	SANITARY SEWER CLEAN–OUT
○ SSMH	SANITARY SEWER MANHOLE
☐ SS	SANITARY SEWER VAULT
☐ SVCW	SILICON VALLEY CLEAN WATER VAULT
○ SDCO	STORM DRAIN CLEAN–OUT
○ SDMH	STORM DRAIN MANHOLE
✡	STREET LIGHT
☐ WM	WATER METER
⋈ WV	WATER VALVE
⊕	BENCHMARK
XXX.XX	SPOTGRADE
▨	ASPHALT
▨	CONCRETE
▨	GRAVEL
▨	LAWN
○ DRIPLINE	TREE: TYPE AND SIZE AS NOTED

NOTES

ALL DISTANCES AND DIMENSIONS ARE IN FEET AND DECIMALS OF A FOOT.

UNDERGROUND UTILITY LOCATION IS BASED ON SURFACE EVIDENCE.

BUILDING FOOTPRINTS ARE SHOWN AT GROUND LEVEL.

FINISH FLOOR ELEVATIONS ARE TAKEN AT DOOR THRESHOLD (EXTERIOR)

BENCHMARK

CITY OF REDWOOD CITY BENCHMARK
BENCH MARK 62
MAPLE ST AT CHEMICAL WAY – SET BRASS DISC STAMPED "CITY OF REDWOOD CITY BENCHMARK" ON HEADWALL OF CULVERT IN FRONT OF REDWOOD CITY POLICE DEPARTMENT, NORTH SIDE OF CULVERT, 11' FROM FIRE HYDRANT.
ELEVATION = 10.82' (NAVD 88)

EASEMENT NOTE

EASEMENTS SHOWN ARE PER TITLE REPORT PREPARED BY TITLE INSURANCE AND TRUST COMPANY, NO. 406153–RWC, DATED SEPTEMBER 20, 1971.

⊕ SITE BENCHMARK

SURVEY CONTROL POINT
MAG AND SHINER SET IN ASPHALT
ELEVATION = 7.47' (NAVD 88)

GREGORY F. BRAZE
No. 7623
Exp. 12-31-16
ORIGINAL SIGNATURES IN BLUE INK

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS · LAND SURVEYORS

BAY AREA REGION
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(P) (510) 887-4086
(F) (510) 887-3019

SACRAMENTO REGION
3017 DOUGLAS BLVD, # 300
ROSEVILLE, CA 95661
(P) (916)966-1338
(F) (916)797-7363

WWW.LEABRAZE.COM

1580 MAPLE STREET
REDWOOD CITY, CALIFORNIA

SAN MATEO COUNTY
APN: 052–532–020

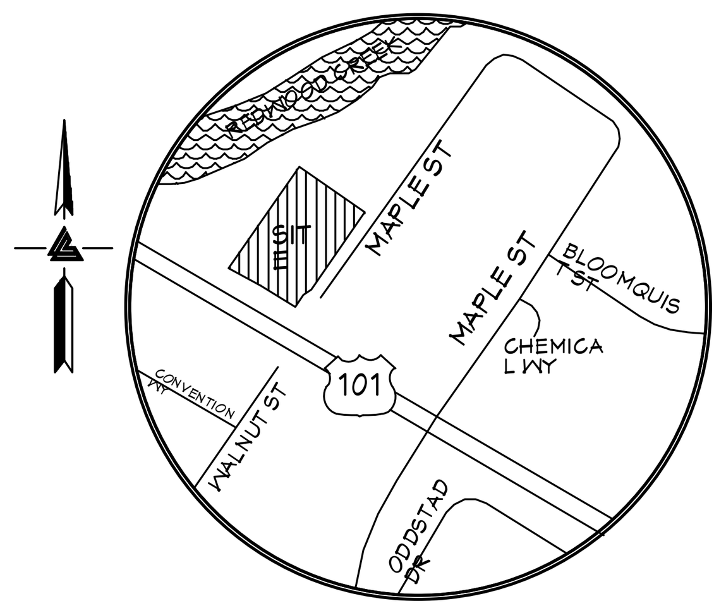
TOPOGRAPHIC SURVEY

REVISIONS	BY
–	–
–	–
–	–
–	–

JOB NO: 2151288
DATE: 01–06–16
SCALE: 1" = 20'
FIELD BY: DR
DRAWN BY: JN
SHEET NO:

SU1

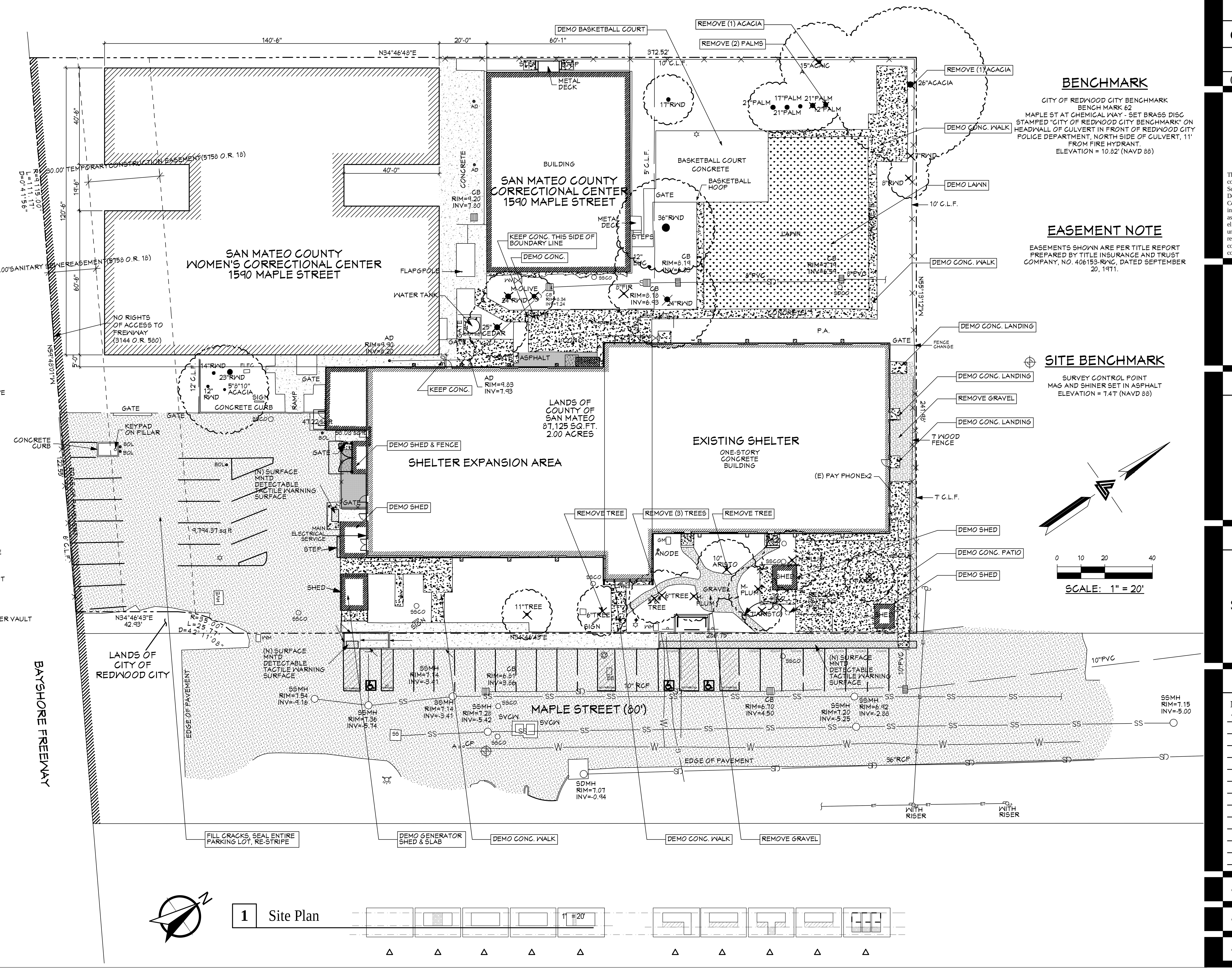
01 OF 01 SHEETS



VICINITY MAP
NO SCALE

LEGEND AND NOTES

	BOUNDARY LINE
	EASEMENT LINE
ET	ELECTRICAL/TELEPHONE OVERHEAD LINE
	FENCE LINE
G	GAS LINE (PER USA MARKINGS)
SS	SANITARY SEWER LINE
D	STORM DRAIN LINE
CW	WATER LINE (PER USA MARKINGS)
ARISTO	ARISTOCRAT
C.L.F.	CHAIN LINK FENCE
EUC	EUCALYPTUS
FF	FINISH FLOOR
FL	FLOW LINE
INV	INVERT
M-	MULTIPLE TRUNKS
PVC	POLYVINYL CHLORIDE PIPE
RWD	REDWOOD
RCP	REINFORCED CONCRETE PIPE
RP	ROOF PEAK
TC	TOP OF CURB
TOS	TOP OF SLAB
A	ANODE
AD	AREA DRAIN
BOL	BOLLARD
CB	CATCH BASIN
EB	ELECTRICAL BOX
ELEC	ELECTRICAL VAULT
	FIRE HYDRANT
GM	GAS METER
ICV	IRRIGATION CONTROL VALVE
	JOINT POLE
SSCO	SANITARY SEWER CLEAN-OUT
SSMH	SANITARY SEWER MANHOLE
SS	SANITARY SEWER VAULT
SVCW	SILICON VALLEY CLEAN WATER VAULT
SDCO	STORM DRAIN CLEAN-OUT
SDMH	STORM DRAIN MANHOLE
	STREET LIGHT
WM	WATER METER
WV	WATER VALVE
	BENCHMARK
XXX.XX	SPOTGRADE
	ASPHALT
	CONCRETE
	GRAVEL
	LAWN
	PAVERS
DRIPLINE	TREE: TYPE AND SIZE AS NOTED



NOTES

ALL DISTANCES AND DIMENSIONS ARE IN FEET AND DECIMALS OF A FOOT.

UNDERGROUND UTILITY LOCATION IS BASED ON SURFACE EVIDENCE.

BUILDING FOOTPRINTS ARE SHOWN AT GROUND LEVEL.

FINISH FLOOR ELEVATIONS ARE TAKEN AT DOOR THRESHOLD (EXTERIOR)

BENCHMARK

CITY OF REDWOOD CITY BENCHMARK
BENCH MARK 62
MAPLE ST AT CHEMICAL WAY - SET BRASS DISC STAMPED "CITY OF REDWOOD CITY BENCHMARK" ON HEADWALL OF CULVERT IN FRONT OF REDWOOD CITY POLICE DEPARTMENT, NORTH SIDE OF CULVERT, 11' FROM FIRE HYDRANT.
ELEVATION = 10.82' (NAVD 88)

EASEMENT NOTE

EASEMENTS SHOWN ARE PER TITLE REPORT PREPARED BY TITLE INSURANCE AND TRUST COMPANY, NO. 406153-RWC, DATED SEPTEMBER 20, 1971.

SITE BENCHMARK

SURVEY CONTROL POINT
MAG AND SHINER SET IN ASPHALT
ELEVATION = 7.47' (NAVD 88)

0 10 20 40
SCALE: 1" = 20'

1 Site Plan

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT
CARTER JENSEN WARR
No. C-19397
REN. 6-30-17
STATE OF CALIFORNIA

PROJECT

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

SHEET TITLE

Site Plan & Demolition

REVISIONS

No.	Date	Notes
1	6-17-2016	Building Submittal

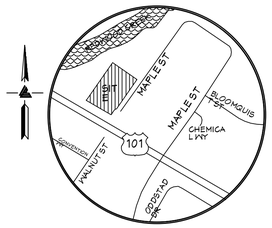
JOB: 2015.2801

DATE: 6/17/2016

SHEET: A-1.2

12:03 PM
Monday, June 27, 2016
BIM Server: CJW BIM Server 19 - BIM Server 19/2015/Maple Street Shelter_1

12:09 PM
Monday, June 27, 2016
BIM Server: CJW BIM Server 19 - BIM Server 19/2015/Maple Street Shelter_1

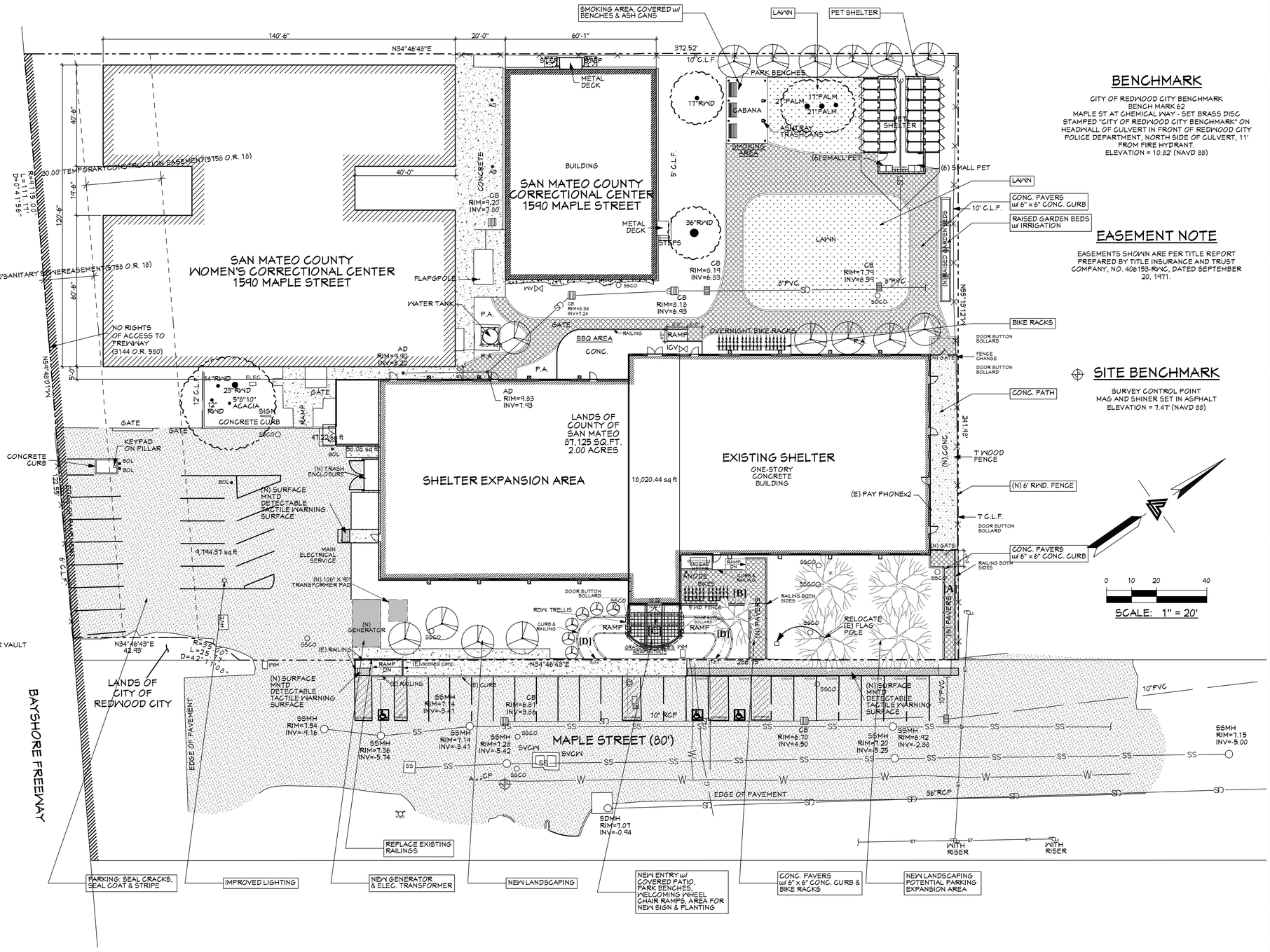


VICINITY MAP

NO SCALE

LEGEND AND NOTES

	BOUNDARY LINE
	EASEMENT LINE
ET	ELECTRICAL/TELEPHONE OVERHEAD LINE
X X	FENCE LINE
G	GAS LINE (PER USA MARKINGS)
SS S	SANITARY SEWER LINE
ID	STORM DRAIN LINE
CW C	WATER LINE (PER USA MARKINGS)
ARISTO	ARISTOCRAT
C.L.F.	CHAIN LINK FENCE
EUC	EUCALYPTUS
FF	FINISH FLOW
FL	FLOW LINE
INV	INVERT
M-	MULTIPLE TRUNKS
PVC	POLYVINYL CHLORIDE PIPE
RWD	REDWOOD
RCP	REINFORCED CONCRETE PIPE
RP	ROOF PEAK
TC	TOP OF CURB
TOS	TOP OF SLAB
A	ANODE
AD	AREA DRAIN
BOL	BOLLARD
CB	CATCH BASIN
EB	ELECTRICAL BOX
ELEC	ELECTRICAL VAULT
	FIRE HYDRANT
GM	GAS METER
IGV	IRRIGATION CONTROL VALVE
	JOINT POLE
SSCO	SANITARY SEWER CLEAN-OUT
SSMH	SANITARY SEWER MANHOLE
SS	SANITARY SEWER VAULT
SVCW	SILICON VALLEY CLEAN WATER VAULT
SDCO	STORM DRAIN CLEAN-OUT
SDMH	STORM DRAIN MANHOLE
	STREET LIGHT
WM	WATER METER
WV	WATER VALVE
	BENCHMARK
XXX.XX	SPOTGRADE
	ASPHALT
	CONCRETE
	GRAVEL
	LAWN
	PAVERS
DRIPLINE	TREE: TYPE AND SIZE AS NOTED



1 Site Plan Proposed 1" = 20'

NOTES

ALL DISTANCES AND DIMENSIONS ARE IN FEET AND DECIMALS OF A FOOT.

UNDERGROUND UTILITY LOCATION IS BASED ON SURFACE EVIDENCE.

BUILDING FOOTPRINTS ARE SHOWN AT GROUND LEVEL.

FINISH FLOOR ELEVATIONS ARE TAKEN AT DOOR THRESHOLD (EXTERIOR)

BENCHMARK

CITY OF REDWOOD CITY BENCHMARK
BENCH MARK 62
MAPLE ST AT CHEMICAL WAY - SET BRASS DISC STAMPED "CITY OF REDWOOD CITY BENCHMARK" ON HEADWALL OF CULVERT IN FRONT OF REDWOOD CITY POLICE DEPARTMENT, NORTH SIDE OF CULVERT, 11' FROM FIRE HYDRANT.
ELEVATION = 10.82' (NAVD 88)

EASEMENT NOTE

EASEMENTS SHOWN ARE PER TITLE REPORT PREPARED BY TITLE INSURANCE AND TRUST COMPANY, NO. 406153-RWC, DATED SEPTEMBER 20, 1971.

SITE BENCHMARK

SURVEY CONTROL POINT
MAG AND SHINER SET IN ASPHALT
ELEVATION = 7.47' (NAVD 88)

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT
CARTER JENSEN WARE
No. C-19397
REN. 6-30-17
STATE OF CALIFORNIA

PROJECT

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

SHEET TITLE

Site Plan Proposed

REVISIONS

No.	Date	Notes
1	6-17-2016	Building Submittal

JOB: 2015.2801

DATE: 6/17/2016

SHEET: A-1.4

Monday, June 27, 2016 12:17 PM

ZONING & SITE CALCULATIONS

APN:	052-532-020
CITY FILE #:	PLN 2001-00528
JURISDICTION:	SAN MATEO COUNTY
PLANNING ZONE:	XXXXX
CODES:	2013 CALIFORNIA BUILDING STANDARD, ADMINISTRATIVE CODE, TITLE 24, PART 1, TITLE 24 CCR 2013 CALIFORNIA MECHANICAL CODE 2013 CALIFORNIA PLUMBING CODE 2013 CALIFORNIA ELECTRIC CODE 2013 CALIFORNIA ENERGY CODE TITLE 24, CLIMATE ZONE 3 2013 CALIFORNIA GREEN BUILDING CODE 2013 CALIFORNIA FIRE CODE
OCCUPANCY CLASSIFICATION: (MIXED USE)	DINING COMMONS: A-2 STAFF OFFICES: B DORMS: E
CONSTRUCTION TYPE:	TYPE V-B, NO HOUR, FULLY SPRINKLED)
EXTERIOR WALLS:	N
OPENINGS TO PROPERTY LINE:	NOT PERMITTED < 5'; PROTECTED < 10'
STRUCTURAL FRAME:	N (1 HOUR AT OCCUPANCY SEPARATIONS)
INTERIOR WALLS & PARTITIONS:	N (1 HOUR & 2 HOUR AT OCCUAPNCY SEPARATIONS)
SHAFT ENCLOSURES:	N
FLOOR/CLG ASSEMBLIES:	N
ROOF/CLG ASEMBLIES:	N
MIXED OCCUPANCY BASIC ALLOWABLE FLOOR AREA PER TABLE 503:	A-2: 6,000 s.f.; B: 9,000 s.f.; R-2: 7,000 s.f.
ALLOWABLE INCREASES	PER CBC 506.2: Side yards not taken PER CBC 506.3: Bldg fully sprinkled area increase factor = 3
A-2 OCCUPANCY ALLOWABLE FLOOR AREA:	6,000 + 18,000 = 24,000
B OCCUPANCY ALLOWABLE FLOOR AREA:	9,000 + 27,000 = 36,000
R-2 OCCUPANCY ALLOWABLE FLOOR AREA:	7,000 + 21,000 = 28,000

A-2		B		R-2		R-2		
1919	+	2557	+	5404	+	7961	=	?
24,000		36,000		28,000		28,000		
.079	+	.071	+	.193	+	.284		

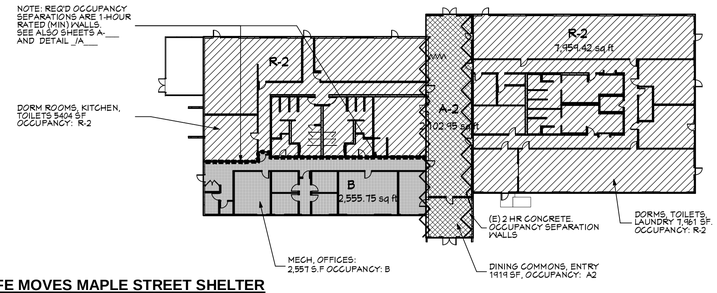
TOTAL ALLOWABLE FLOOR AREA .627 < or equal to 1, therefore OK

MAX HEIGHT/NUMBER OF STORIES TABLE 503 40' / 1 STORY & 2 STORY

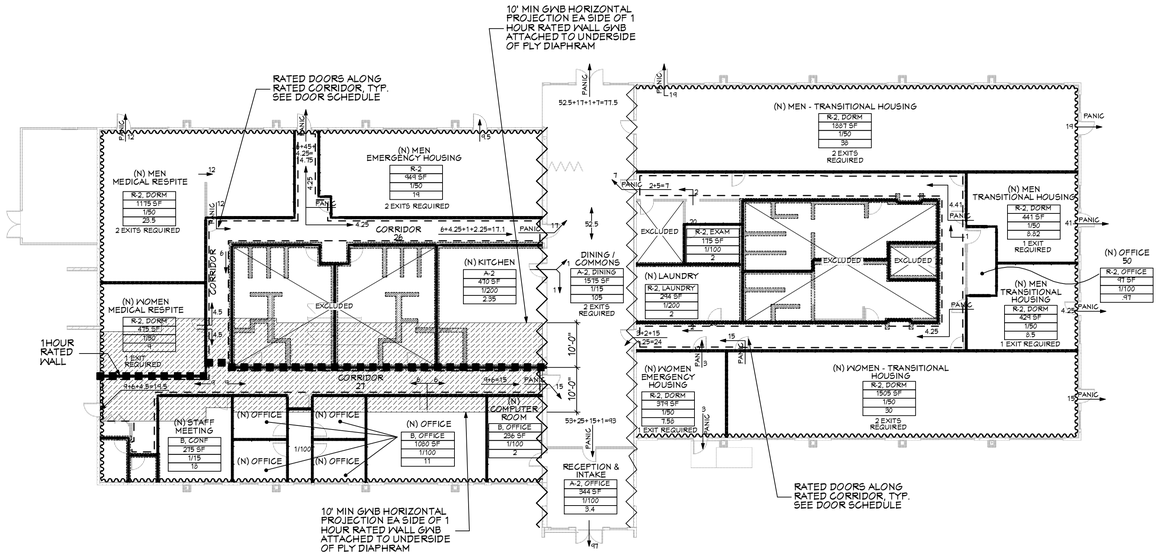
TOTAL LOT AREA 2.00 ACRES (87,125 s.f.)

SITE COVERAGE
17,841 s.f. (EXISTING CONSTRUCTION) = 20%
3,951 s.f. (NEW CONSTRUCTION) = 2.6%
9983 s.f. (TOTAL PROPOSED) = 6.6%
MAX. COVERAGE PERMITTED = 40% (6.6% < 40%, therefore, OK)

BUILDING OCCUPANCIES AND SEPARATIONS

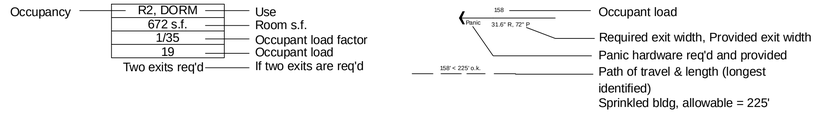


LIFE MOVES MAPLE STREET SHELTER
CONSTRUCTION TYPE: V-B (NO HOUR)
FULLY FIRE SPRINKLED
17,481 SF



1 Exiting Diagram

1/16" = 1'-0"



OCCUPANT LOADS, REQUIRED EXITING, EXIT DISCHARGE

WALL RATINGS LEGEND

- 1 HOUR RATED PARTITION TO JOIST ABOVE WITH HORIZONTAL GWB PROJECTION 10' EITHER SIDE OF WALL
- 1 1/2" SPRAY FOAM INSUL (OR RIDGID) W/ 1 1/2" HAT CHANNELS
- 4" OR 6" STUD WALL W/ SOUND BATTS.
- 1 HOUR CORRIDOR TUNNEL CONSTRUCTION
- (E) 2 HOUR CONCRETE OCCUPANCY SEPARATION WALLS
- 6" HIGH X WALL WIDTH CONC. CURB SEE DETAIL

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT CARTER JENSEN WARE No. C-19397 REN. 6-30-17 STATE OF CALIFORNIA

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Exiting Plan

◦ REVISIONS ◦

No.	Date	Notes
1	6-17-2016	Building Submittal

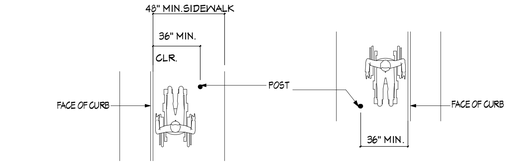
◦ JOB: 2015.2801

◦ DATE: 6/17/2016

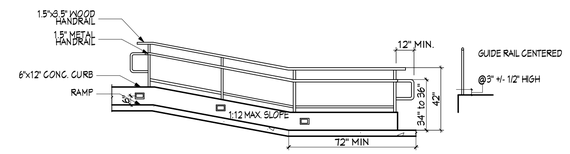
◦ SHEET: A-1.5

BIM Server: CJW BIM Server 19 - BIM Server 19/2015/Maple Street Shelter_1

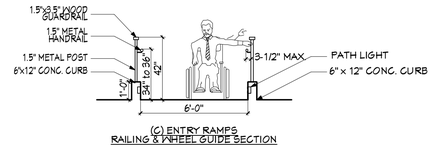
12:24 PM
Monday, June 27, 2016
BIM Server: CJW BIM Server 19 - BIM Server 19/2015/Maple Street Shelter_1



(A) SIDEWALK OBSTRUCTIONS



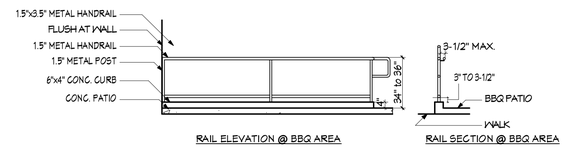
(B) ENTRY GUIDE RAIL & RAMP ELEVATION



(C) ENTRY RAMPS
RAILING & WHEEL GUIDE SECTION

1 Entry Ramps

1/4" = 1'-0"



RAIL ELEVATION @ BBQ AREA

RAIL SECTION @ BBQ AREA

2 BBQ Area Railings

1/4" = 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT
CARTER JENSEN WARE
No. C-19397
REN. 6-30-17
STATE OF CALIFORNIA

PROJECT

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

SHEET TITLE

Site Details

REVISIONS

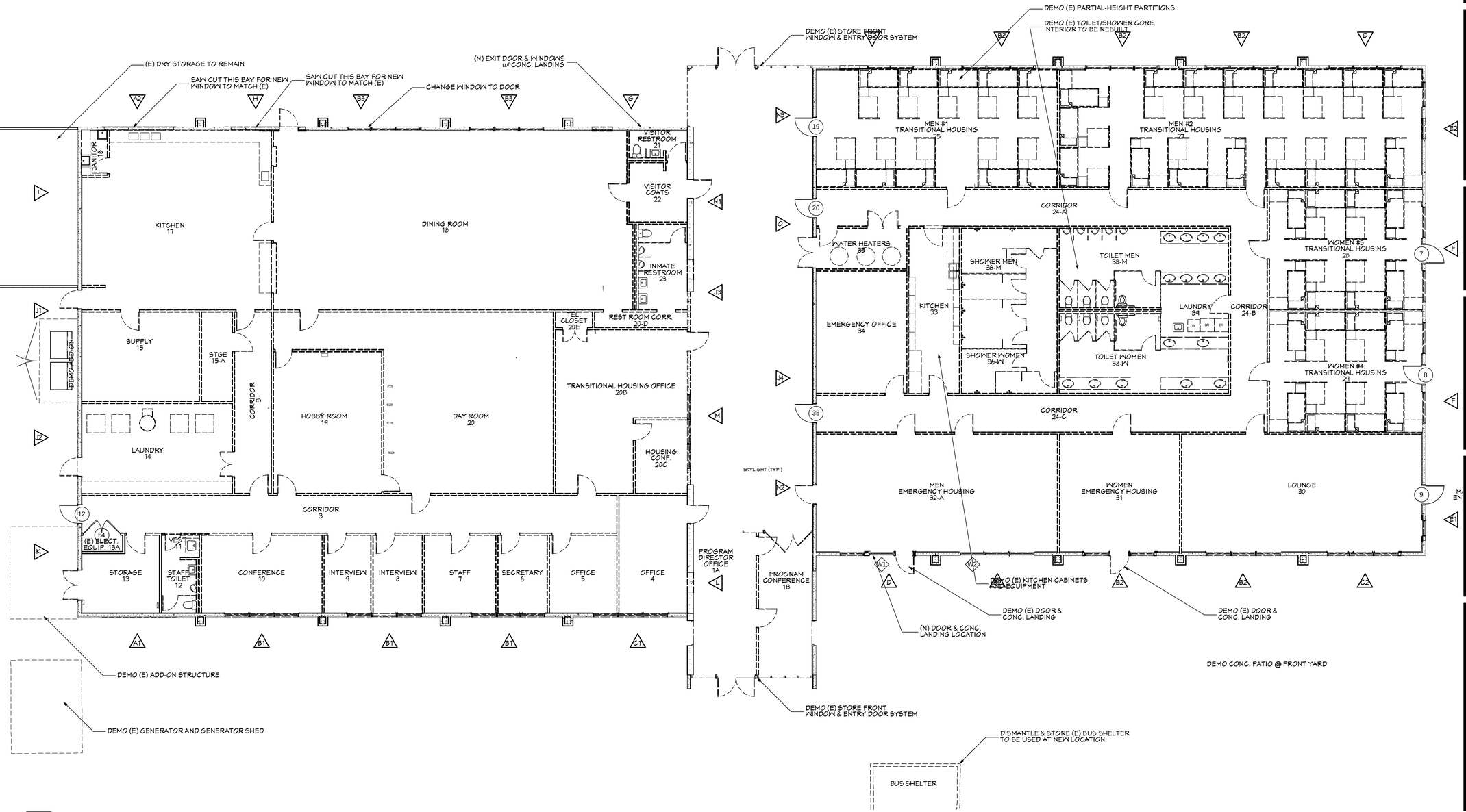
No.	Date	Notes
1	6-17-2016	Building Submittal

JOB: 2015.2801

DATE: 6/17/2016

SHEET: A-1.6

12:29 PM
Monday, June 27, 2016
BIM Server: CJW BIM Server 19 - BIM Server 19/2015/Maple Street Shelter_1



1 Main Floor Demolition plan 1/8" = 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT
CARTER JENSEN WARE
No. C-19397
REN. 6-30-17
STATE OF CALIFORNIA

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Demolition Plan

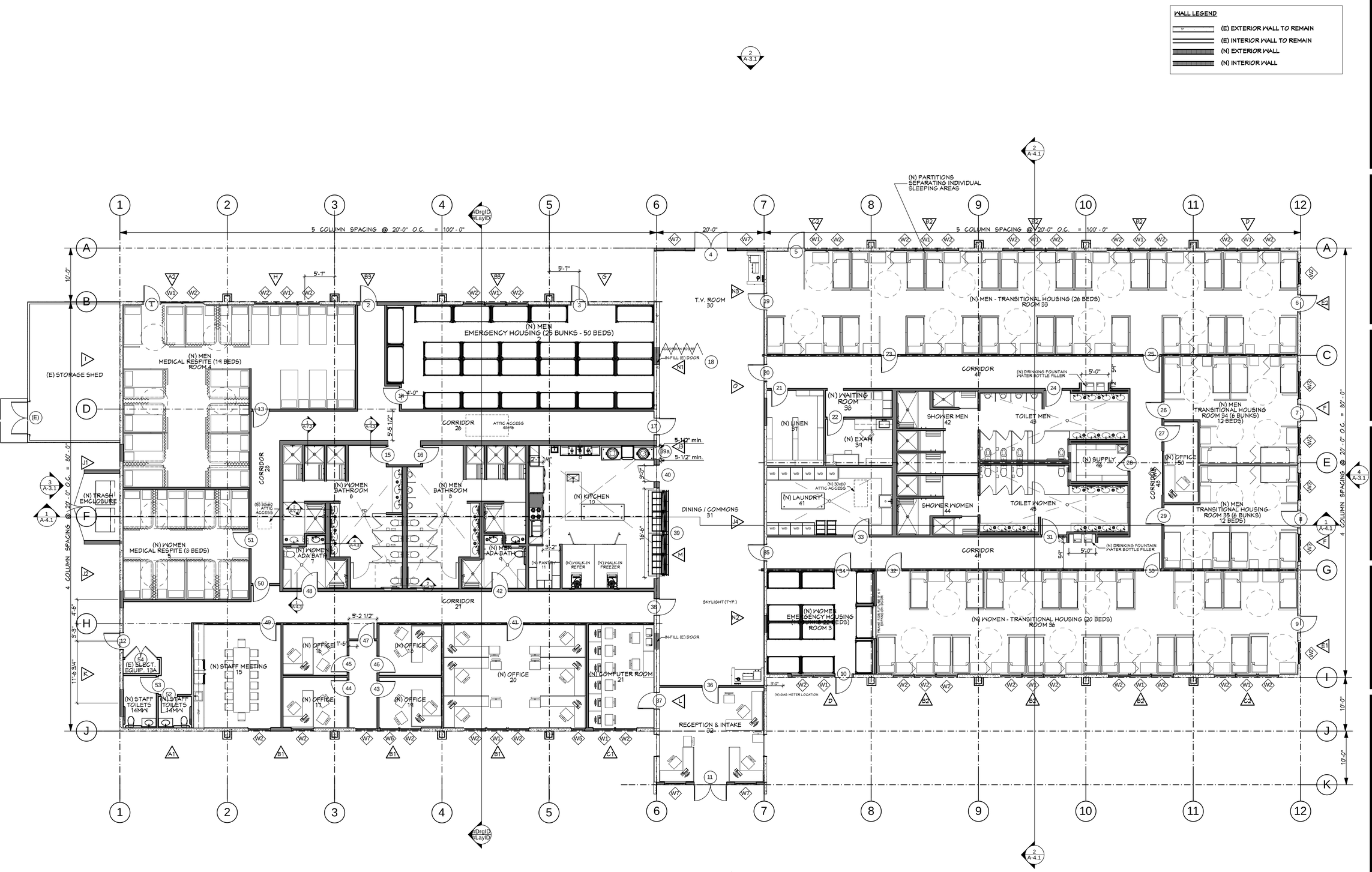
◦ REVISIONS ◦

No.	Date	Notes
1	6-17-2016	Building Submittal

◦ JOB: 2015.2801

◦ DATE: 6/17/2016

◦ SHEET: A-2.2



1 Main Floor Plan 1/8" = 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT CARTER JENSEN WARD No. C-19397 REN. 6-30-17 STATE OF CALIFORNIA

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Main Floor Plan

◦ REVISIONS ◦

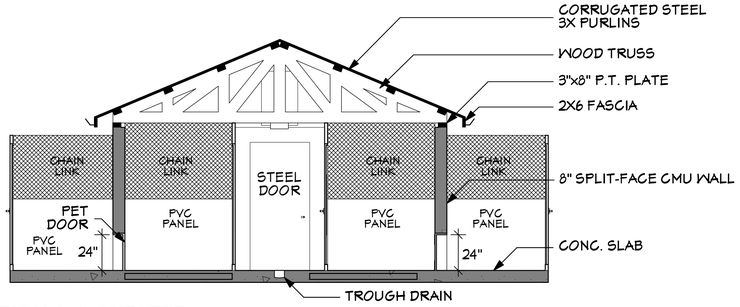
No.	Date	Notes
1	6-17-2016	Building Submittal

◦ JOB: 2015.2801

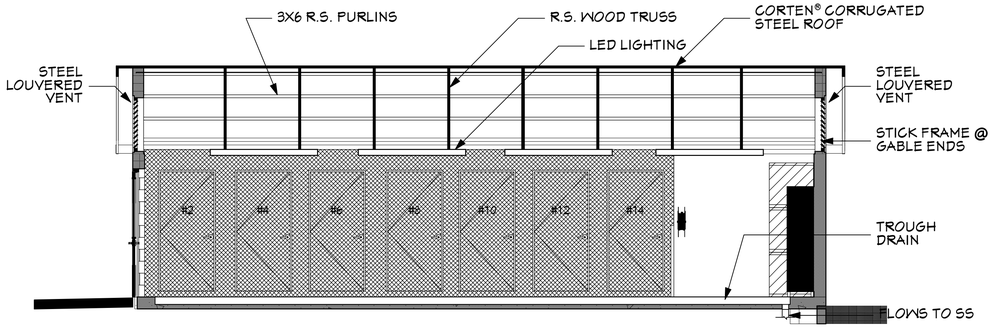
◦ DATE: 6/17/2016

◦ SHEET: A-2.3

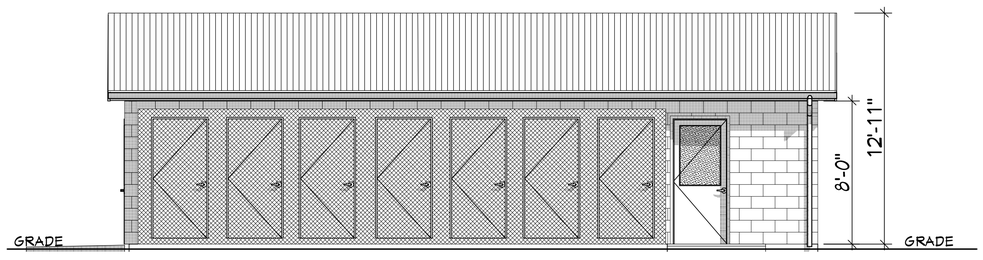
1:38 PM
Monday, June 27, 2016
BIM Server: CJW BIM Server 19 - BIM Server 19/2015/Maple Street Shelter_1



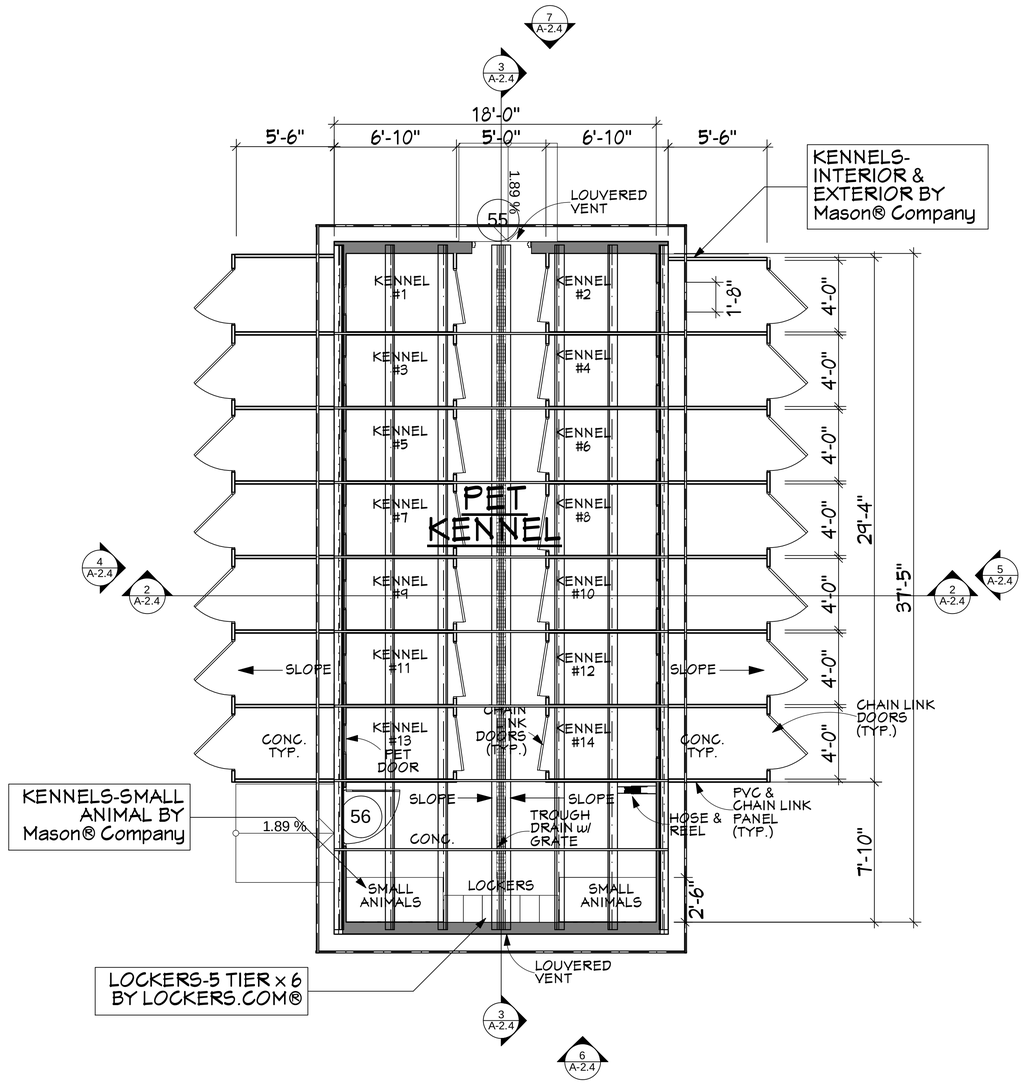
2 SECTION A @ SHELTER 1/4" = 1'-0"



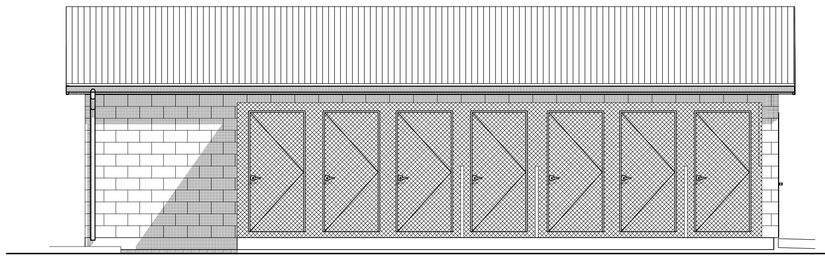
3 SECTION B @ SHELTER 1/4" = 1'-0"



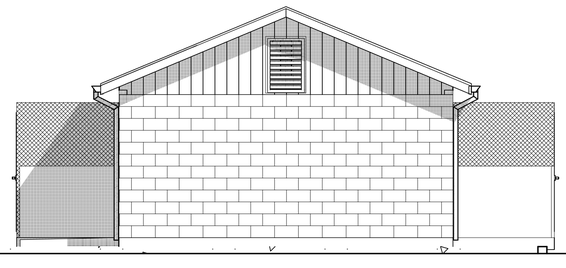
4 KENNEL WEST ELEVATION 1/4" = 1'-0"



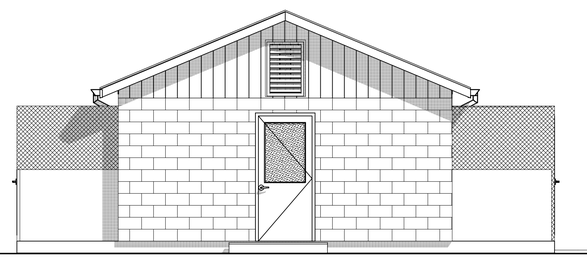
1 Main Floor Plan 1/4" = 1'-0"



5 KENNEL EAST ELEVATION 1/4" = 1'-0"



6 KENNEL SOUTH ELEVATION 1/4" = 1'-0"



7 KENNEL NORTH ELEVATION 1/4" = 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT
CARTER JENSEN WARE
No. C-19397
REN. 6-30-17
STATE OF CALIFORNIA

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Pet Kennel Plan

◦ REVISIONS ◦

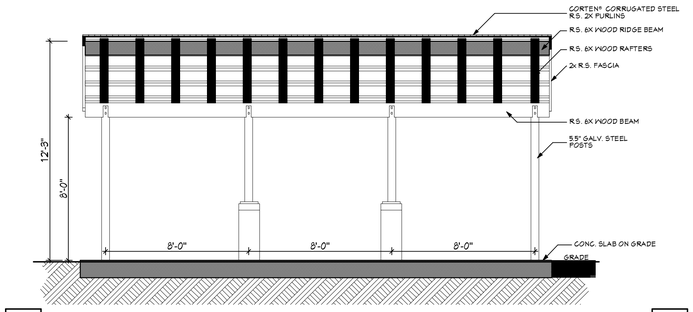
No.	Date	Notes
1	6-17-2016	Building Submittal

◦ JOB: 2015.2801

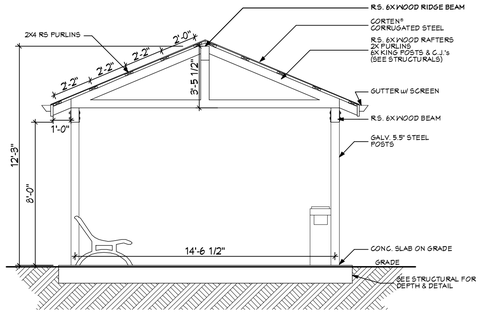
◦ DATE: 6/17/2016

◦ SHEET: A-2.4

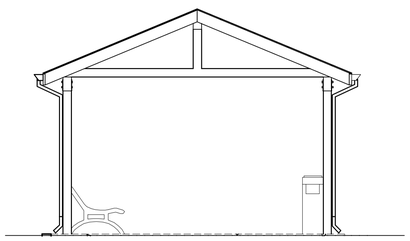
2:03 PM
Monday, June 27, 2016



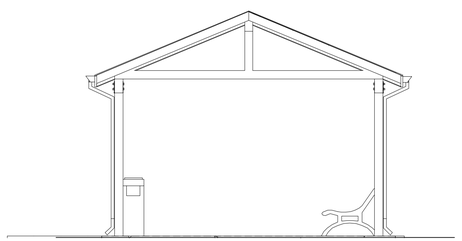
2 SECTION B @ CABANA 1/4" = 1'-0"



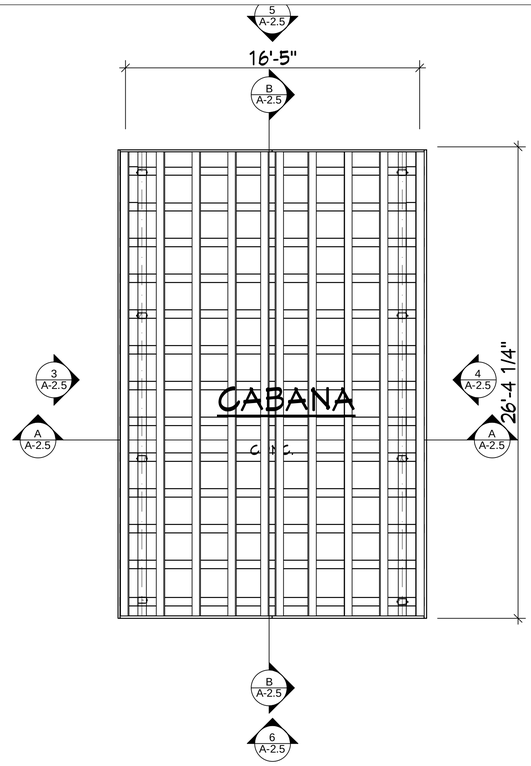
1 SECTION A @ CABANA 1/4" = 1'-0"



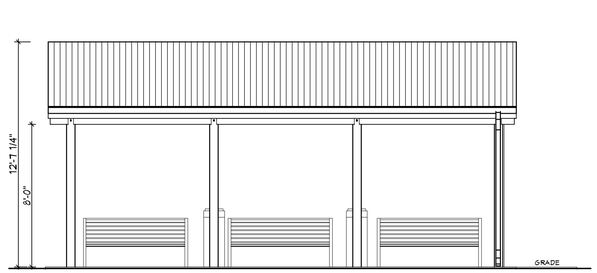
6 CABANA SOUTH ELEVATION 1/4" = 1'-0"



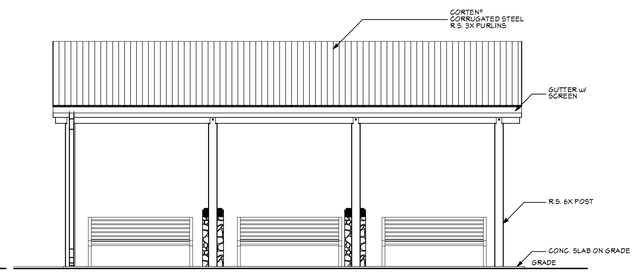
5 CABANA NORTH ELEVATION 1/4" = 1'-0"



7 Main Floor Plan 1/4" = 1'-0"



3 CABANA WEST ELEVATION 1/4" = 1'-0"



4 CABANA EAST ELEVATION 1/4" = 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT
CARTER JENSEN WARE
No. C-19397
REN. 6-30-17
STATE OF CALIFORNIA

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Smoking Cabana Plan

◦ REVISIONS ◦

No.	Date	Notes
1	6-17-2016	Building Submittal

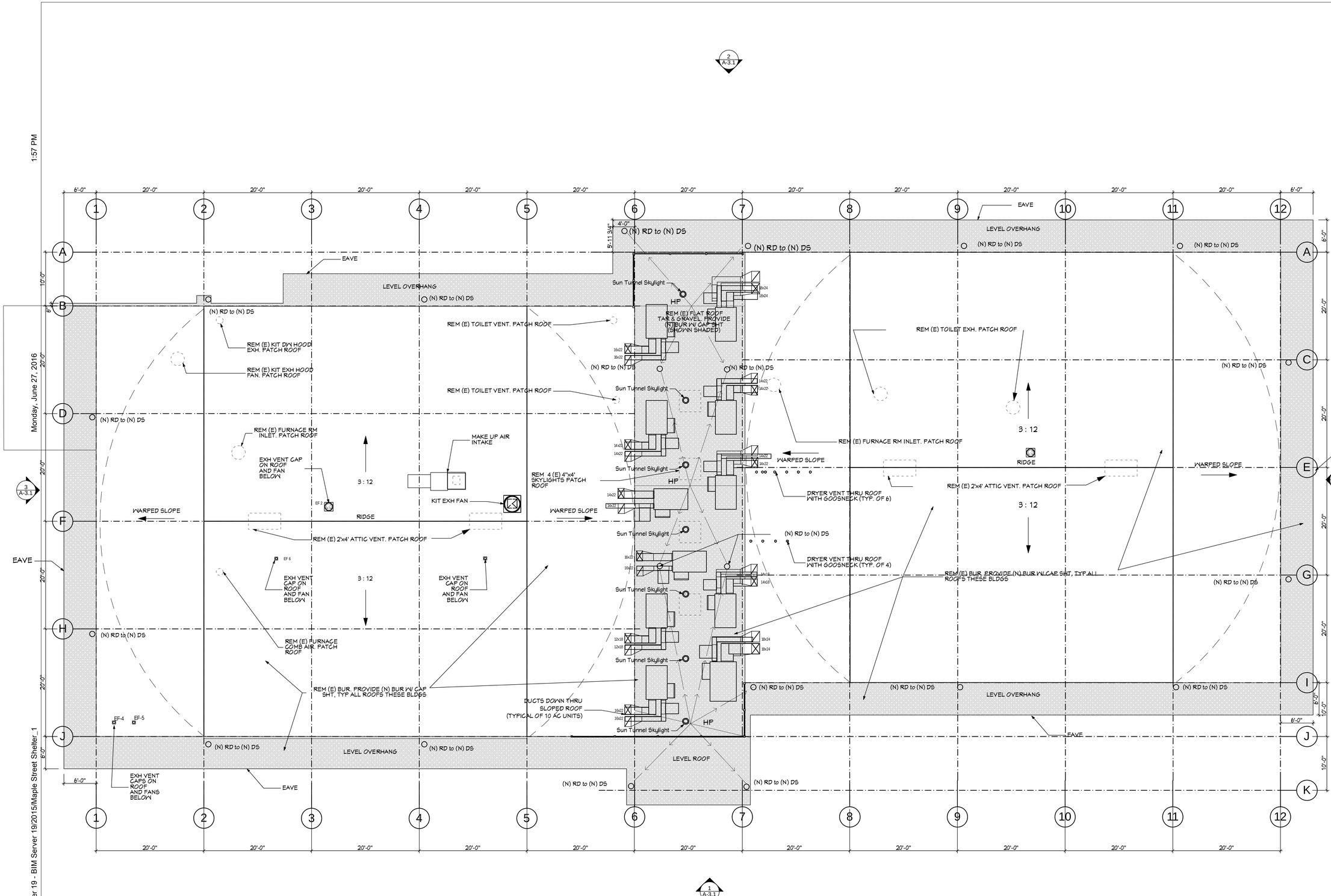
◦ JOB: 2015.2801

◦ DATE: 6/17/2016

◦ SHEET: A-2.5

BIM Server: CJW BIM Server 19 - BIM Server 19/2015/Maple Street Shelter_1

1:57 PM
Monday, June 27, 2016
BIM Server: CJW BIM Server 19 - BIM Server 19/2015/Maple Street Shelter_1



1 Roof Plan 1/8" = 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT
CARTER JENSEN WARE
No. C-19397
REN. 6-30-17
STATE OF CALIFORNIA

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Roof Plan

◦ REVISIONS ◦

No.	Date	Notes
1	6-17-2016	Building Submittal

◦ JOB: 2015.2801

◦ DATE: 6/17/2016

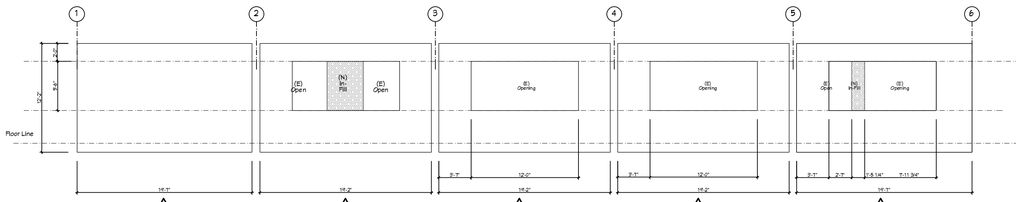
◦ SHEET: A-2.6

ALL DIMENSIONS MUST BE VERIFIED IN FIELD BY THE CONTRACTOR AND THE DOOR AND WINDOW SUB-CONTRACTOR FRIOR TO ORDERING DOORS AND WINDOWS

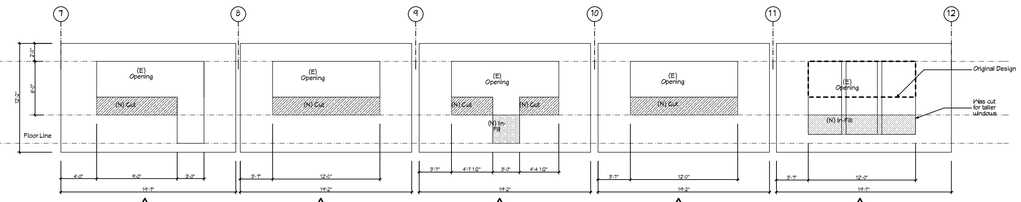
WALL LEGEND

ALL PANELS VIEWED FROM EXTERIOR

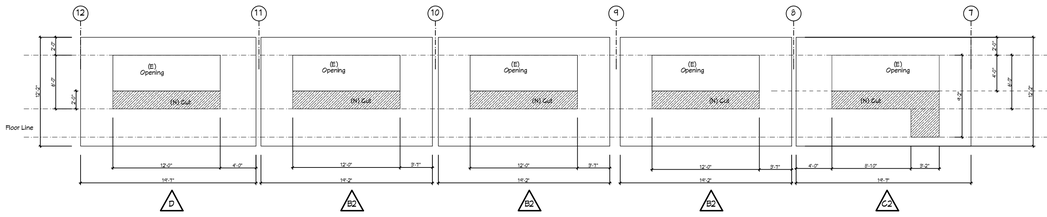
- (N) CUT
- (N) IN-FILL @ (E) OPENING
- (E) OPENING
- A1 PANEL I.D.
- 1 COLUMN GRID



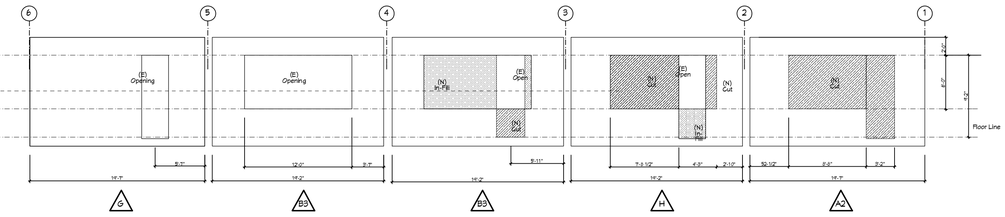
FRONT WALL - SOUTH 1/8" - 1'-0"



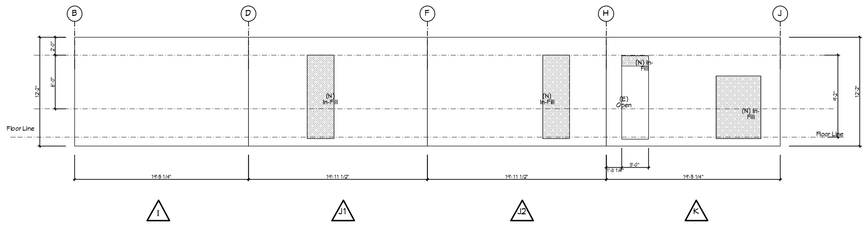
FRONT WALL - NORTH 1/8" - 1'-0"



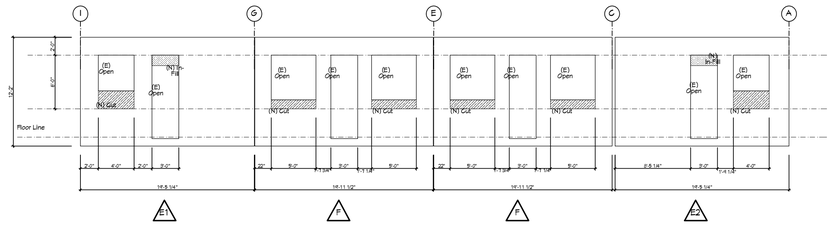
REAR WALL - NORTH 1/8" - 1'-0"



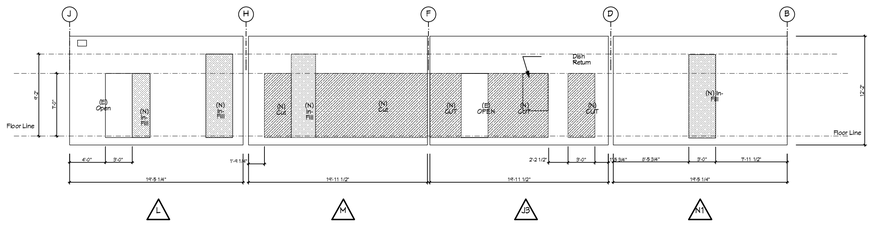
REAR WALL - SOUTH 1/8" - 1'-0"



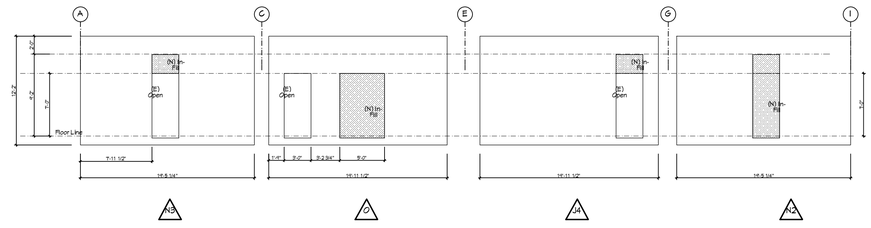
SIDE WALL - WEST 1/8" - 1'-0"



SIDE WALL - EAST 1/8" - 1'-0"



WALL 6 - "KITCHEN WALL" 1/8" - 1'-0"



WALL 7 1/8" - 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work' under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT
CARTER JENSEN WARD
No. C-19397
REN. 6-30-17
STATE OF CALIFORNIA

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Wall Panels

◦ REVISIONS ◦

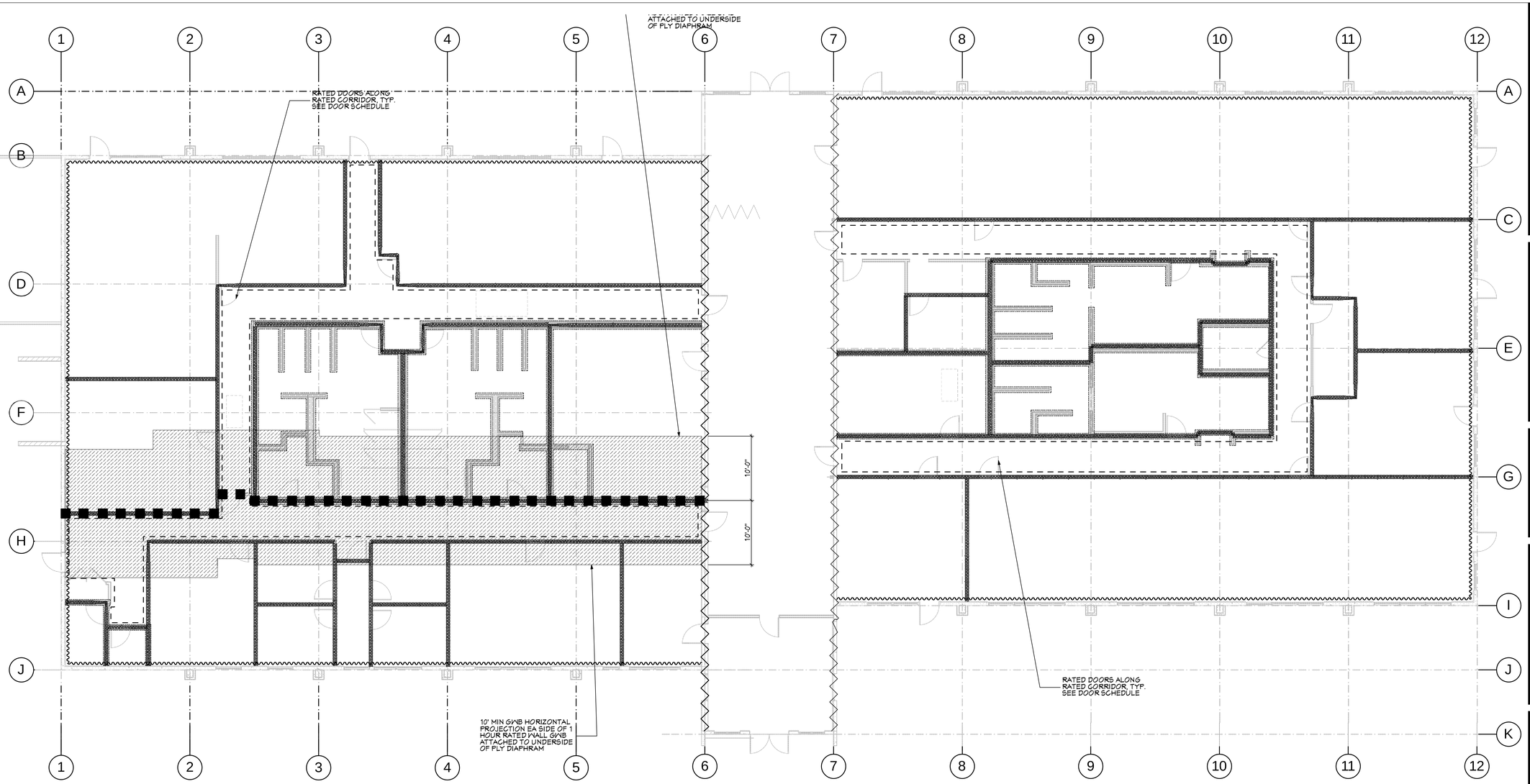
No.	Date	Notes
1	6-17-2016	Building Submittal

◦ JOB: 2015.2801

◦ DATE: 6/17/2016

◦ SHEET: A-2.7

2:07 PM
Monday, June 27, 2016
BIM Server: CJW BIM Server 19 - BIM Server 19/2015/Maple Street Shelter_1



1 Wall Rating Plan 1/8" = 1'-0"

WALL RATINGS LEGEND

- 1 HOUR RATED PARTITION TO JOIST ABOVE WITH HORIZONTAL GWB PROJECTION 10' EITHER SIDE OF WALL
- 1 1/2" SPRAY FOAM INSUL.(OR RIDGID) W/ 1 1/2" HAT CHANNELS
- 4" OR 6" STUD WALL W/ SOUND BATTS.
- 1 HOUR CORRIDOR TUNNEL CONSTRUCTION
- (E) 2 HOUR CONCRETE OCCUPANCY SEPARATION WALLS
- 6" HIGH X WALL WIDTH CONC. CURB SEE DETAIL

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work' under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT
CARTER JENSEN WARE
No. C-19397
REN. 6-30-17
STATE OF CALIFORNIA

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

1 Hour Corridors, Wall Ratings, Curbs & Insulation

◦ REVISIONS ◦

No.	Date	Notes
1	6-17-2016	Building Submittal

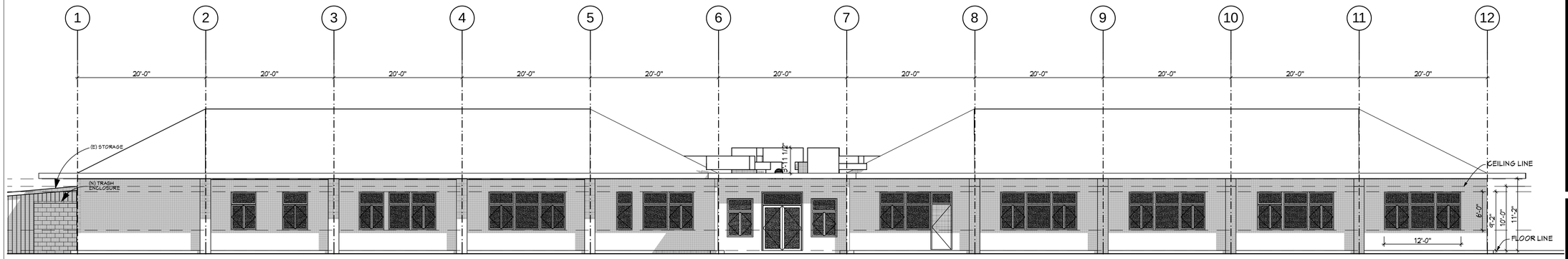
◦ JOB: 2015.2801

◦ DATE: 6/17/2016

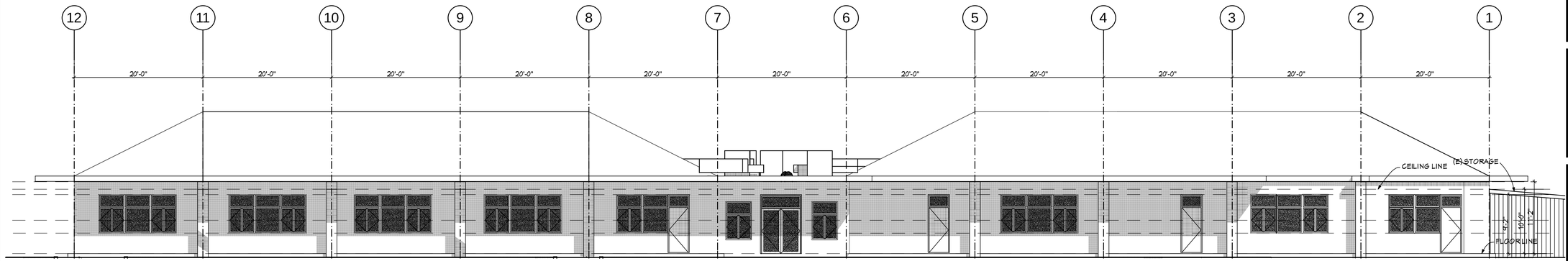
◦ SHEET: A-2.8

2:12 PM
Monday, June 27, 2016
BIM Server: CJW BIM Server 19 - BIM Server 19/2015/Maple Street Shelter_1

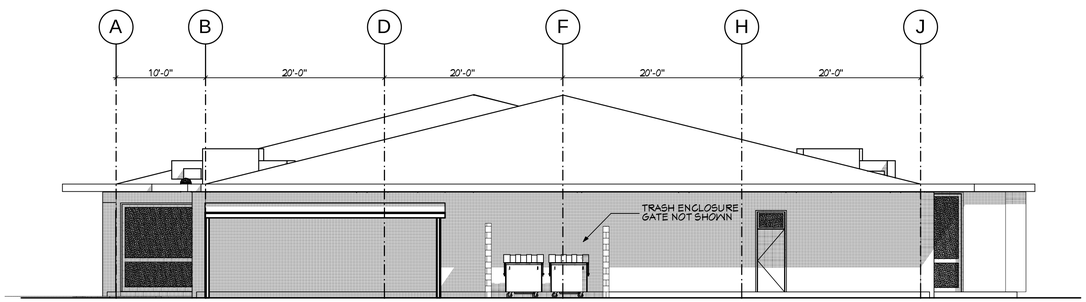
2:37 PM
Monday, June 27, 2016
BIM Server: CJW BIM Server 19 - BIM Server 19/2015/Maple Street Shelter_1



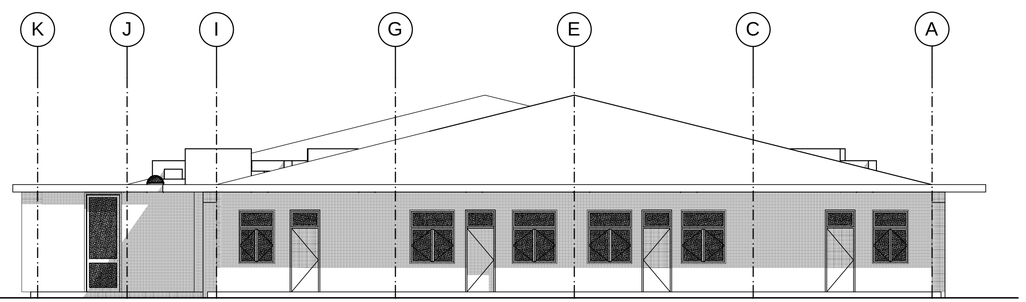
1 East Elevation 1/8" = 1'-0"



2 West Elevation 1/8" = 1'-0"



3 South Elevation 1/8" = 1'-0"



4 North Elevation 1/8" = 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work' under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT
CARTER JENSEN WARE
No. C-19397
REN. 6-30-17
STATE OF CALIFORNIA

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Exterior Elevations

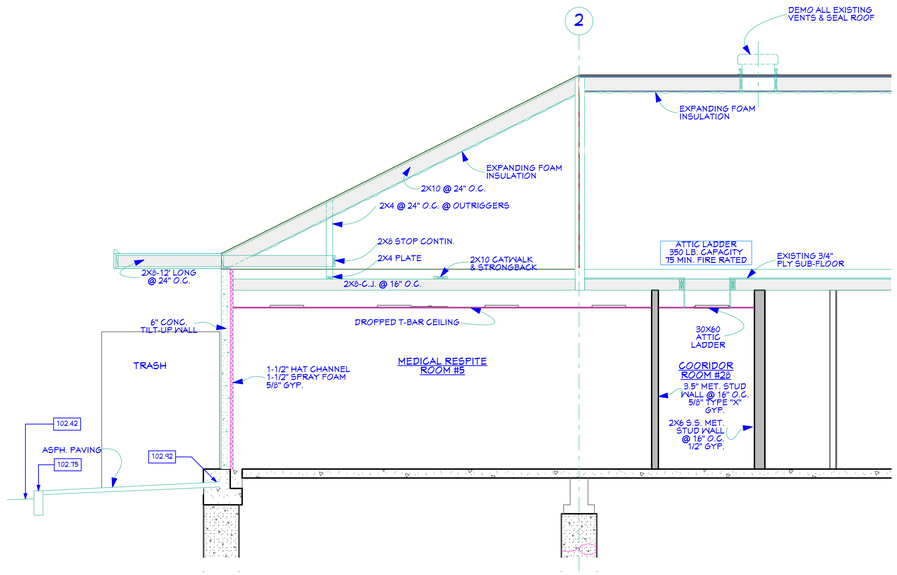
◦ REVISIONS ◦

No.	Date	Notes
1	6-17-2016	Building Submittal

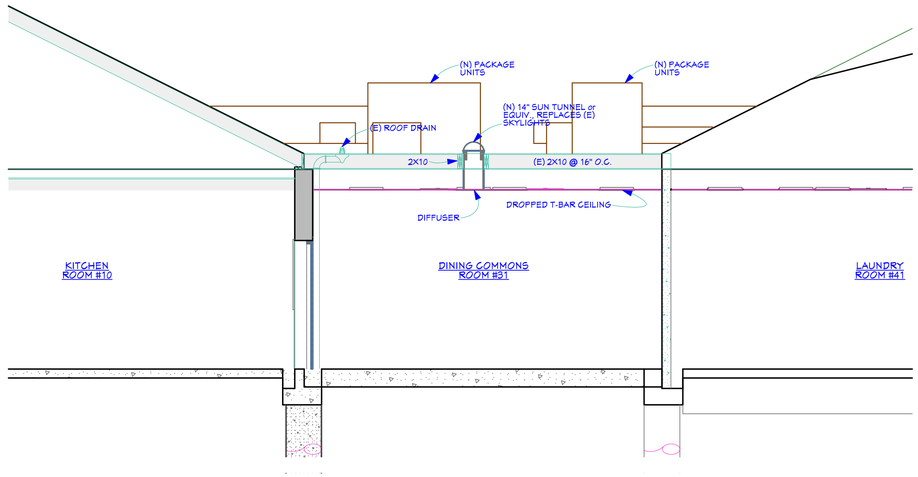
◦ JOB: 2015.2801

◦ DATE: 6/17/2016

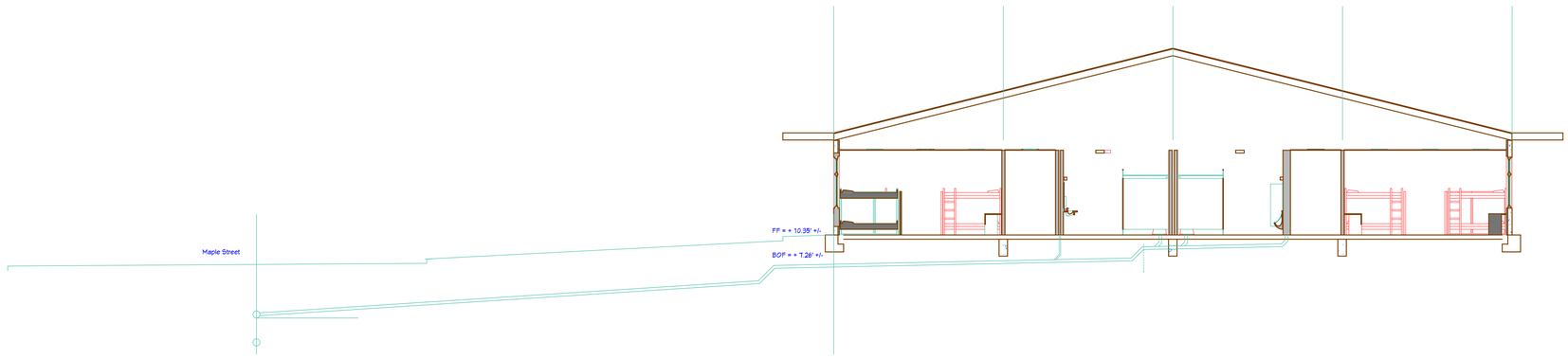
◦ SHEET: A-3.1



1 Partial Cross Section @ Medical Respite 1/4" = 1'-0"



1 Partial Cross Section @ dinning commons 1/4" = 1'-0"



3 Cross Section with SS line detail 1/4" = 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT CARTER JENSEN WARD No. C-19397 REN. 6-30-17 STATE OF CALIFORNIA

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Building Sections

◦ REVISIONS ◦

No.	Date	Notes
1	6-17-2016	Building Submittal

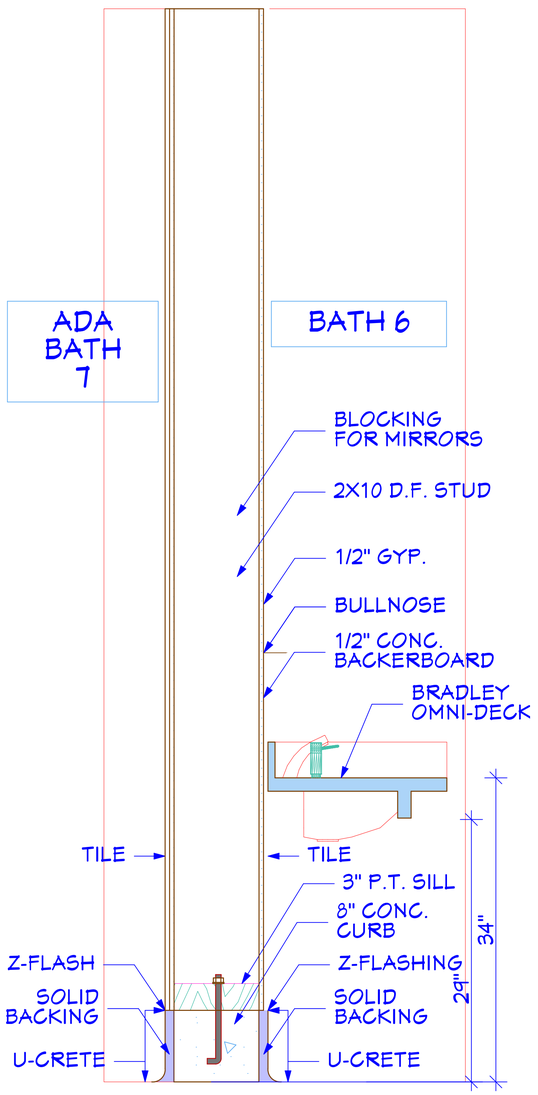
◦ JOB: 2015.2801

◦ DATE: 6/17/2016

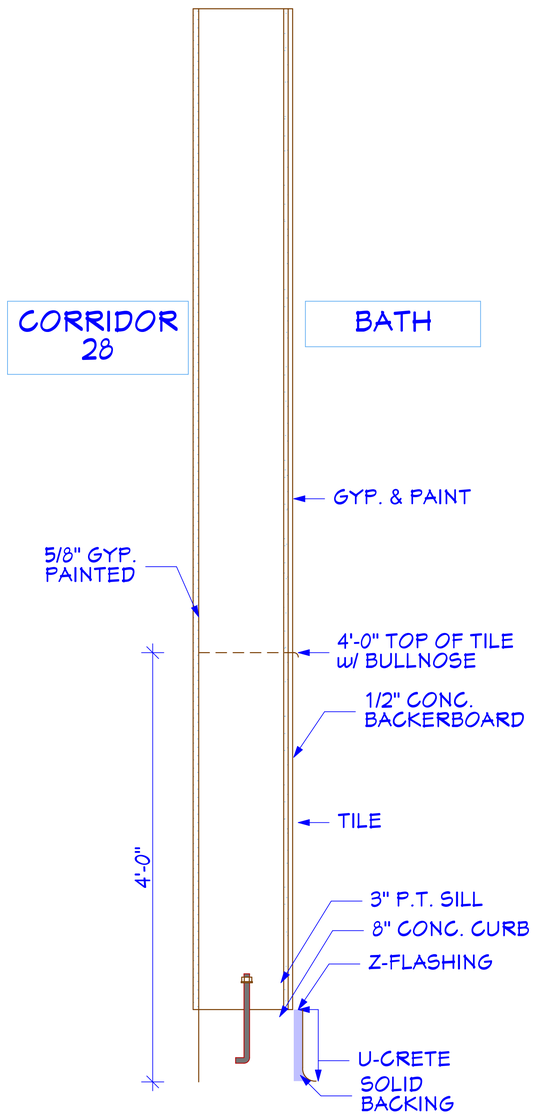
◦ SHEET: A-4.1

Monday, June 27, 2016 2:41 PM
BIM Server: CJW BIM Server 19 – BIM Server 19/2015/Maple Street Shelter_1

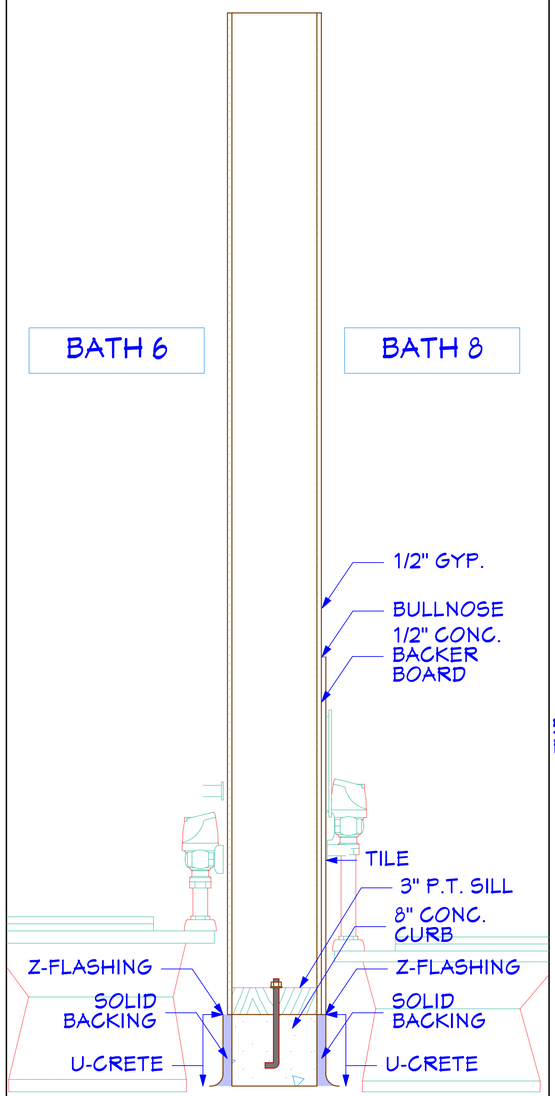
2:41 PM
Monday, June 27, 2016
BIM Server: CJW BIM Server 19 – BIM Server 19/2015/Maple Street Shelter_1



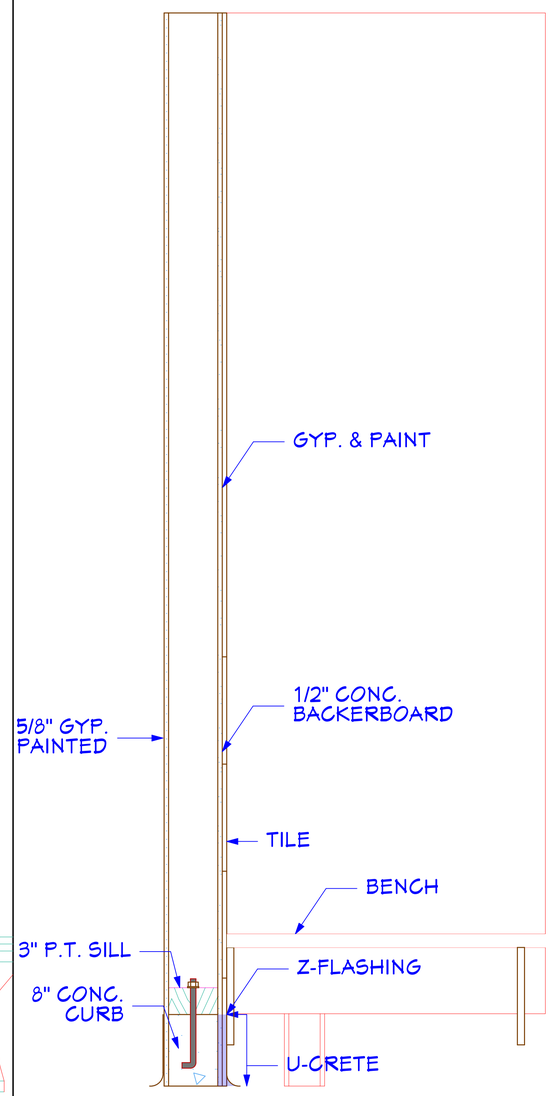
4 SECTION @ TYPICAL LAV 1 1/2"= 1'-0"



3 SECTION @ TYPICAL BATH WALL 1 1/2"= 1'-0"



2 SECTION @ TOILET WALL 1 1/2"= 1'-0"



1 SECTION @ TYPICAL ADA BATH 1 1/2"= 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT
CARTER JENSEN WARD
No. C-19397
REN. 6-30-17
STATE OF CALIFORNIA

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Wall Sections

◦ REVISIONS ◦

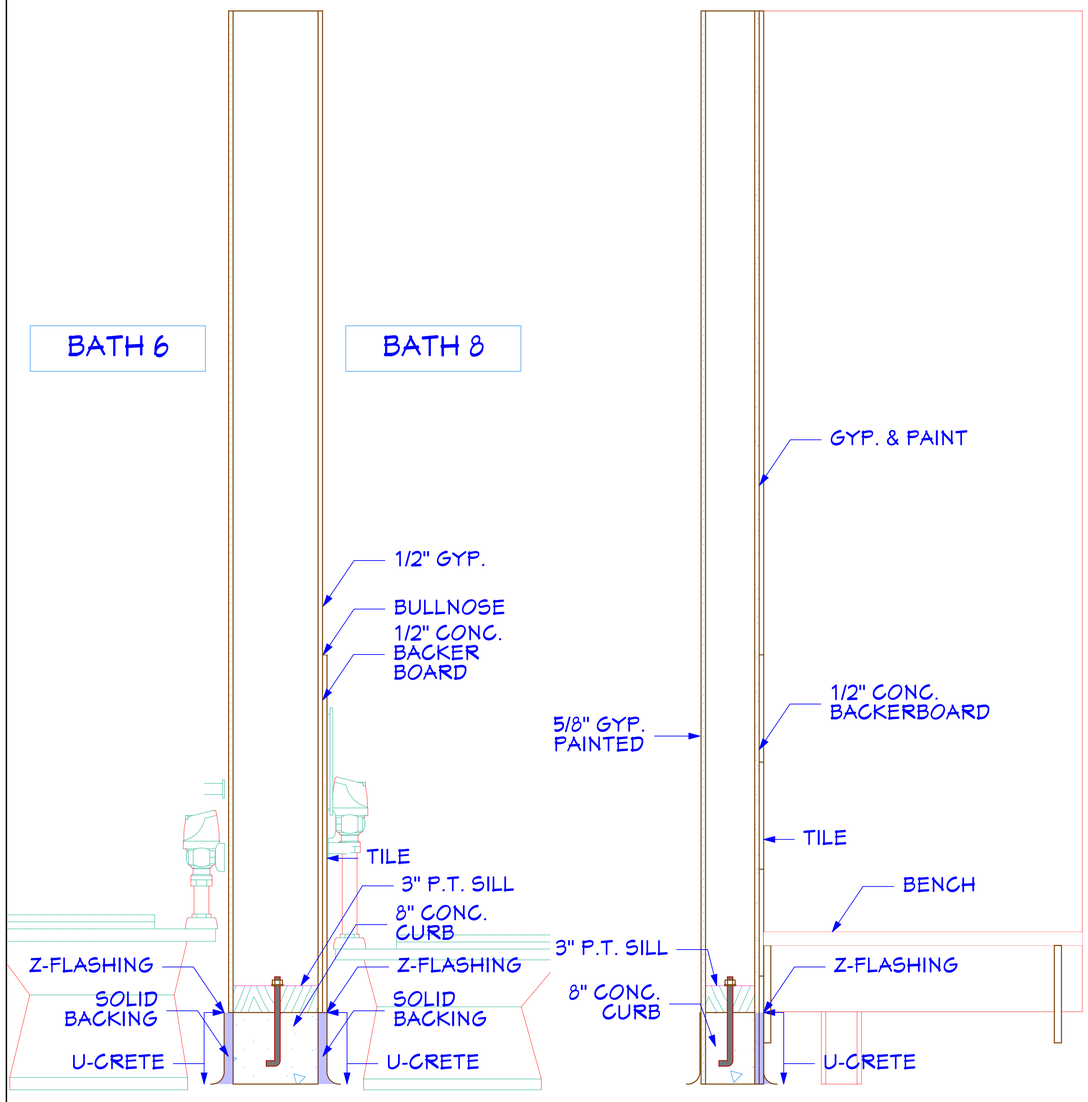
No.	Date	Notes
1	6-17-2016	Building Submittal

◦ JOB: 2015.2801

◦ DATE: 6/17/2016

◦ SHEET: A-4.3

Monday, June 27, 2016 2:41 PM
BIM Server: CJW BIM Server 19 - BIM Server 19/2015/Maple Street Shelter_1



2 SECTION @ TOILET WALL 1 1/2"= 1'-0"

1 SECTION @ TYPICAL ADA BATH 1 1/2"= 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT
CARTER JENSEN WANN
No. C-19397
REN. 6-30-17
STATE OF CALIFORNIA

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Wall Sections

◦ REVISIONS ◦

No.	Date	Notes
1	4-1-2016	Building

◦ JOB: 2015.2801

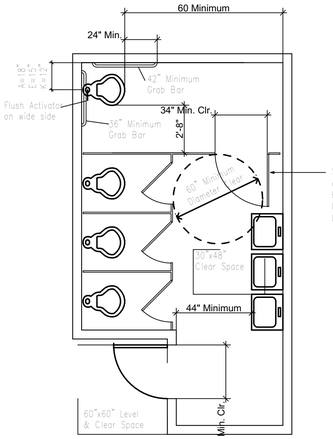
◦ DATE: 6/17/2016

◦ SHEET: A-4.4

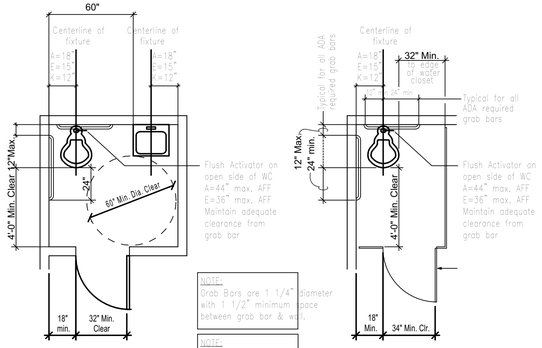
Monday, June 27, 2016 1:05 PM

SHEET NOTES:

1. Painted GWB ceiling on wd framing
2. Painted GWB
3. Paper towel dispenser Bradley 250-15
4. Mirror with shelf (Typical) Bradley model 7805-1836
5. Soap dispenser (Typical) Bradley 6324
6. LED strip light, moisture resistant. See electrical
7. Grab bar. Provide in wall 4 x 6 blk'g w/ A35 clips T & B (Typical). Bradley #812
8. Hollow mtl. frame & wood door; paint
9. F.D. slope to drain
10. Solid surface counter with undermount sinks Bradley OmniDeck 3000 series
11a. T.P. dispenser, Partition mounted (Typical) Bradley #5402
11b. T.P. ADA combi-dispenser, recess mounted (Typical) Bradley #5422
12. Wall mounted seat cover dispenser (Typical) Bradley #584
13. Floor mounted, overhead braced toilet screen partition. Provide in wall 4 x 6 blk'g Bradley HDPE series 400
14a. Shower bench (Typical)
14b. ADA shower bench (Typical)
15. ADA wrap @ drn, HW, CW, (Typical)
16. Floor mounted WC. See plumb'g (typical)
17. Urinal (Typical)
18. Ceramic tile o/ cement brd. Height as dimensioned.
19. Cut out in counter for waste w/ Bradley Waste Chute Model P10-696. See MFG's instructions for cut out size. Order with OmniDeck.
20. Wall mounted urinal screen, min 18" deep from wall, max 12" above floor and min. 5' above floor to top of partition with full height post floor to ceiling.
22. Floor mounted ADA WC. See plumb'g (Typical)
23. Floor-to-Ceiling solid surface @ showers (Typical)
24. Solid surface, 1-Piece shower pan with curb 4 sides. ADA solid surface shower pan, curb 3 sides. Grifform brand.
25a. Shower unit (Typical) Symmons Hydalpe 1-411RS
25b. ADA Shower unit (Typical) Symmons Hydalpe 1-8015-FSB
26. Surface mount ceiling light LED (Typical) Moisture resistant. See electrical.
27. Shower Curtain (Typical)
28. UCrete heavy duty non-slip polyurethane floor (Typical)
29. Trench drain (Typical)
30. Security Towel Hook, Bradley 5A36 (Typical) (2) @ each shower.
31. Semi recessed napkin/tampon vendor,Bradley 4017-10
32. Surface napkin/tampon disposal receptacle, Bradley 4722-15
33. Floor standing waste receptacle,Bradley 377-36-97



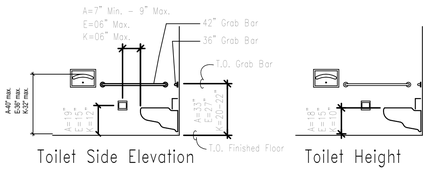
Multiple Accommodation Toilet



Single Occupancy Toilet

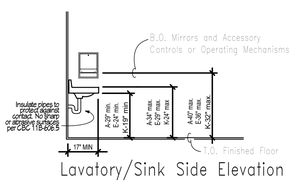
Multiple Toilet Stall

DIMENSION KEY
A = ADULT (13 yrs or older)
E = ELEMENTARY CHILDREN (6 - 12 yrs)
K = KINDERGARTEN

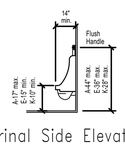


Toilet Side Elevation

Toilet Height

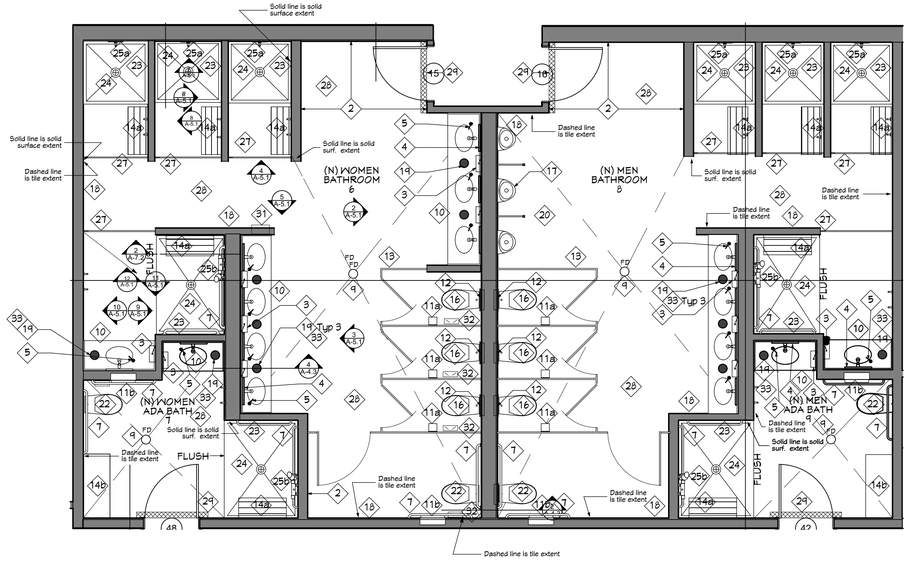


Lavatory/Sink Side Elevation

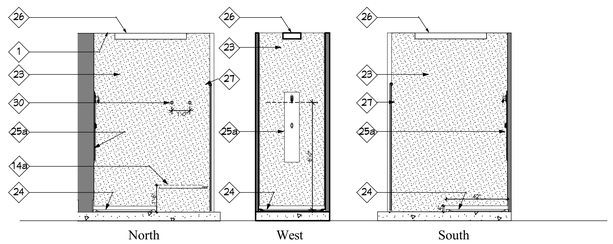


Urinal Side Elevation

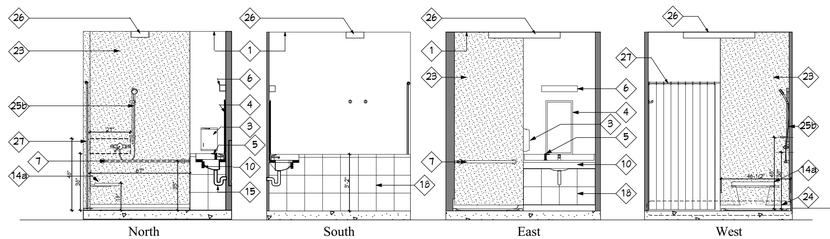
6 TYPICAL ADA DIMENSIONS



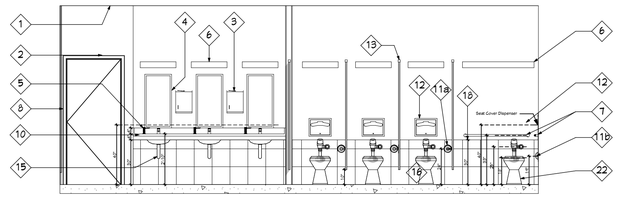
1 South Bathroom Core 1/4" = 1'-0"



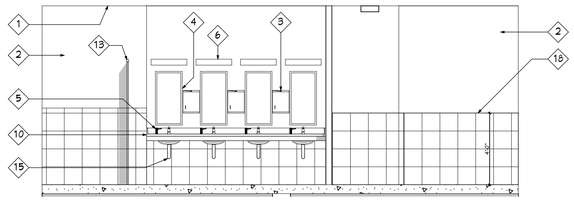
Women's Bath 6 Standard Shower 1/4" = 1'-0"



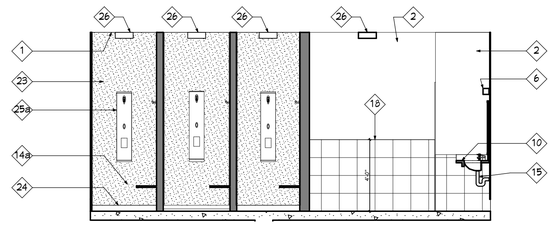
Women's Bath 6 ADA Shower 1/4" = 1'-0"



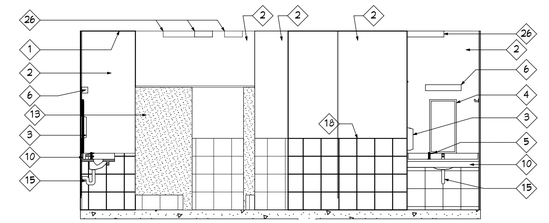
2 Women's Bath 6 North 1/4" = 1'-0"



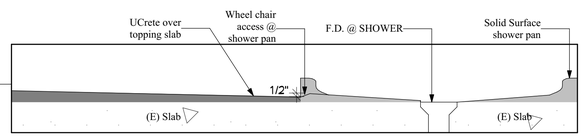
3 Women's Bath 6 South 1/4" = 1'-0"



4 Women's Bath 6 East 1/4" = 1'-0"



5 Women's Bath 6 West 1/4" = 1'-0"



CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT CARTER JENSEN WARD No. C-19397 REN. 6-30-17 STATE OF CALIFORNIA

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

ADA Bathroom Detail

◦ REVISIONS ◦

No.	Date	Notes
1	6-17-2016	Building Submittal

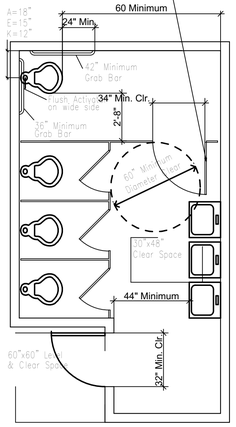
◦ JOB: 2015.2801

◦ DATE: 6/17/2016

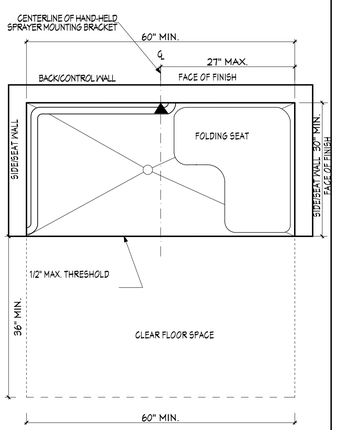
◦ SHEET: A-5.1

BIM Server: CJW BIM Server 19 - BIM Server 19/2015/Maple Street Shelter_1

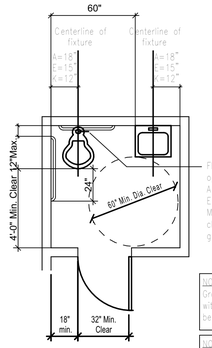
Stall door shall be automatic closing type. Provide U-shaped handle on inside & outside located immediately below the latch.



Multiple Accommodation Toilet

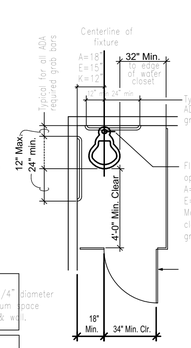


Single Occupancy Shower



Single Occupancy Toilet

Flush Activator on open side of WC
A=44" max. AFF
E=36" max. AFF
Maintain adequate clearance from grab bar



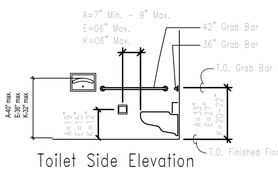
Multiple Toilet Stall

Flush Activator on open side of WC
A=44" max. AFF
E=36" max. AFF
Maintain adequate clearance from grab bar

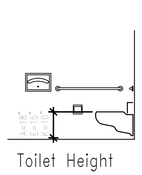
NOTE:
Grab Bars are 1 1/4" diameter with 1 1/2" minimum space between grab bar & wall.

NOTE:
Flush controls at toilets and urinals and water controls for lavies shall be operable with one hand & shall not require tight grasping, pinching or twisting of the wrist and the force required to activate shall be no greater than 5lbf per CBC 11B-309

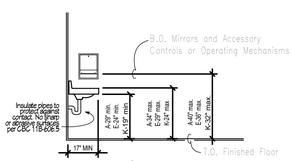
DIMENSION KEY
A = ADULT (13 yrs or older)
E = ELEMENTARY CHILDREN (6 - 12 yrs)
K = KINDERGARTEN



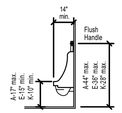
Toilet Side Elevation



Toilet Height



Lavatory/Sink Side Elevation

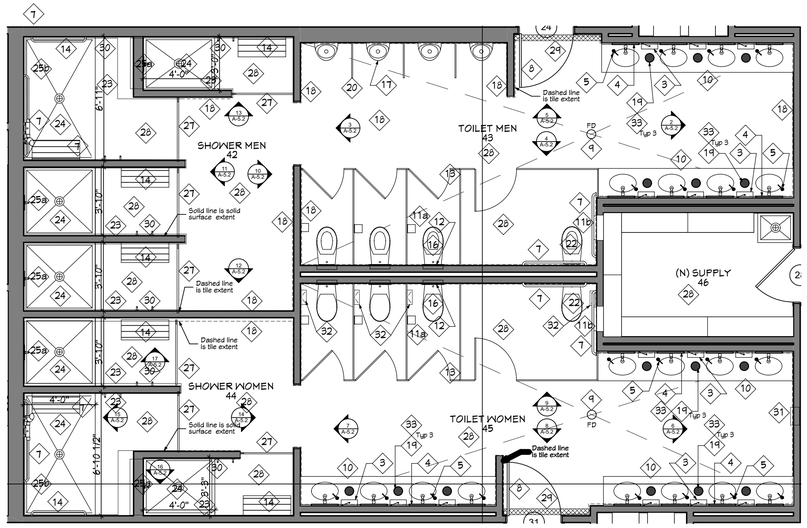


Urinal Side Elevation

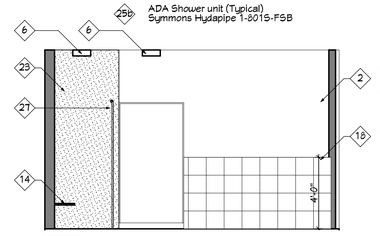
6 TYPICAL ADA DIMENSIONS

SHEET NOTES:

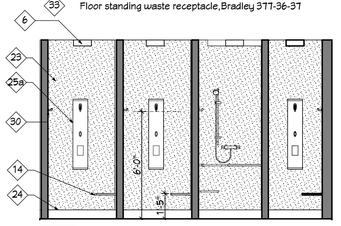
1. Painted GWB ceiling on wd framing
2. Painted GWB
3. Paper towel dispenser Bradley 250-15
4. Mirror with shelf (Typical) Bradley model 1805-1836
5. Soap dispenser (Typical) Bradley 6324
6. LED strip light, moisture resistant. See electrical
7. Grab bar. Provide in wall 4 x 6 blk'g w/ A35 clips T & B (Typical). Bradley #812
8. Hollow mtl. frame & wood door; paint
9. F.D. slope to drain
10. Solid surface counter with undermount sinks Bradley OmniDeck 3000 series
11a. T.P. dispenser, Partition mounted (Typical) Bradley #5402
11b. T.P. ADA combi-dispenser, recess mounted (Typical) Bradley #5422
12. Wall mounted seat cover dispenser (Typical) Bradley #584
13. Floor mounted, overhead braced toilet screen partition. Provide in wall 4 x 6 blk'g Bradley HDPE series 400
14. Shower bench - folding (Typical) Bradley 150
15. ADA wrap @ drn, HN, GN, (Typical)
16. Floor mounted WC. See plumb'g (typical)
17. Urinal (Typical)
18. Ceramic tile o/ cement brd. Height as dimensioned. (dashed lines shows extenty of tile)
19. Cut out in counter for waste w/ P10-696 See MFG's instructions for cut out size. Order with OmniDeck.
20. Wall mounted urinal screen, min 18" deep from wall, max 12" above floor and min. 5' above floor to top of partition with full height post floor to ceiling.
22. Floor mounted ADA WC. See plumb'g (Typical)
23. Floor-to-Ceiling solid surface @ showers (Typical) (solid line shows extent of solid surface)
24. Solid surface, 1-Piece shower pan with curb 4 sides. ADA solid surface shower pan, curb 3 sides. Grifform brand.
25a. Shower unit (Typical) Symmons Hydapipe 1-911RS
25b. ADA Shower unit (Typical) Symmons Hydapipe 1-801S-FSB
26. Surface mount ceiling light LED (Typical) Moisture resistant. See electrical.
27. Shower Curtain (Typical)
28. UCrete heavy duty non-slip polyurethane floor (Typical)
29. Trench drain (Typical)
30. Security Towel Hook, Bradley SA36 (Typical) (2) @ each shower.
31. Semi recessed napkin/tampon vendor,Bradley 4017-10
32. Surface napkin/tampon disposal receptacle, Bradley 4722-15
33. Floor standing waste receptacle,Bradley 377-36-37



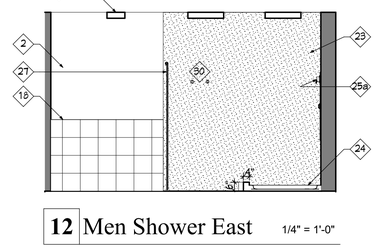
1 Main Floor - Enlarged 1/4" = 1'-0"



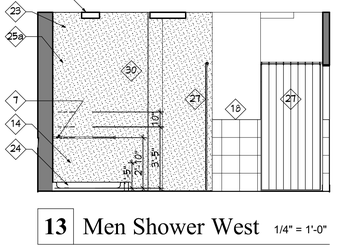
10 Men Shower North 1/4" = 1'-0"



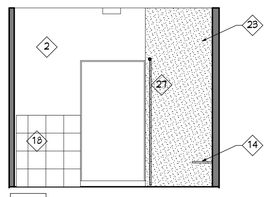
11 Men Shower South 1/4" = 1'-0"



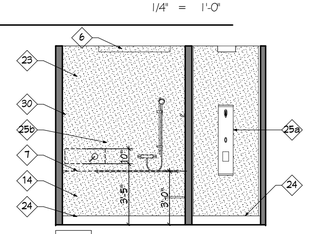
12 Men Shower East 1/4" = 1'-0"



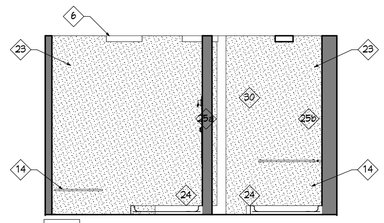
13 Men Shower West 1/4" = 1'-0"



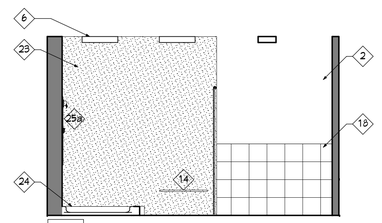
14 Shower Women North



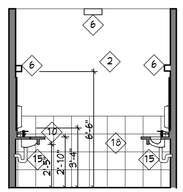
15 Shower Women South



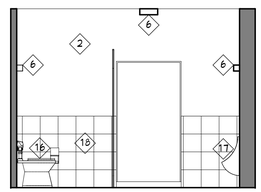
16 Shower Women East



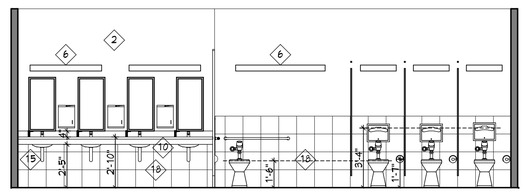
17 Shower Women West



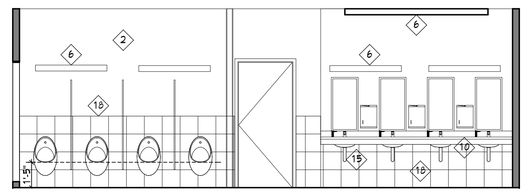
2 Men's North 1/4" = 1'-0"



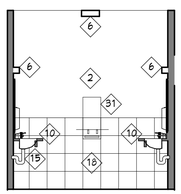
3 Men's South 1/4" = 1'-0"



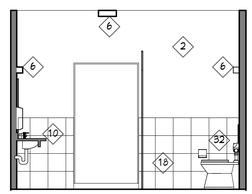
4 Men's - East 1/4" = 1'-0"



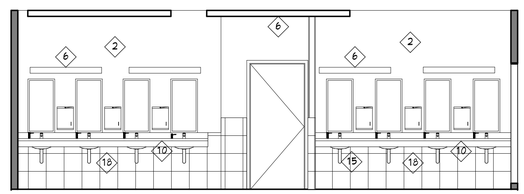
5 Men's - West 1/4" = 1'-0"



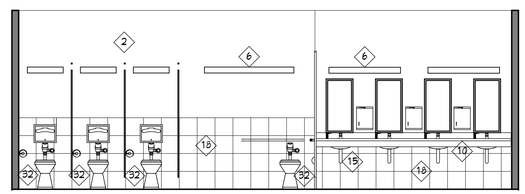
6 Women's North 1/4" = 1'-0"



7 Women's South 1/4" = 1'-0"



8 Women's East 1/4" = 1'-0"



9 Women's West 1/4" = 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT
CARTER JENSEN WARD
No. C-19397
REN. 6-30-17
STATE OF CALIFORNIA

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

ADA Bathroom Detail

◦ REVISIONS ◦

No.	Date	Notes
1	6-17-2016	Building Submittal

◦ JOB: 2015.2801

◦ DATE: 6/17/2016

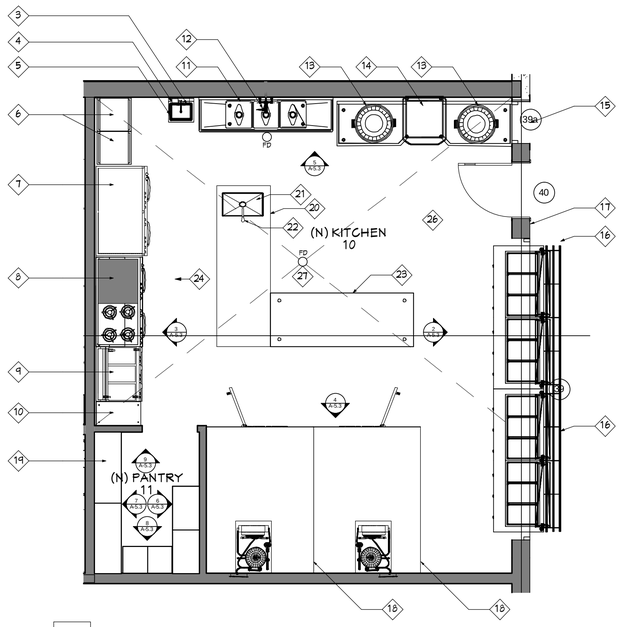
◦ SHEET: A-5.2

Monday, June 27, 2016 1:05 PM
BIM Server: CJW BIM Server 19 - BIM Server 19/2015/Maple Street Shelter_1

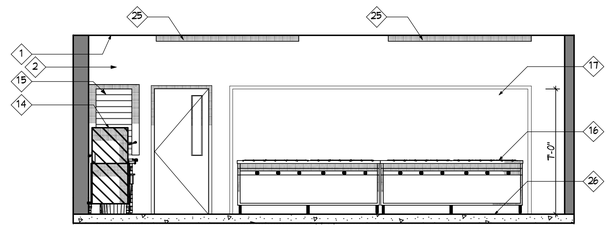
4:08 PM
Monday, June 27, 2016

SHEET NOTES:

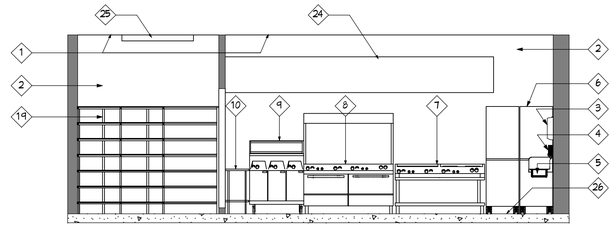
1. Painted GWB ceiling on wd framing
2. Painted GWB
3. Paper towel dispenser Bradley 250-15
4. Soap dispenser (Typical) Bradley 6324
5. Hand Wash Sink Elkay CH51116 LRSC
6. Heated Holding Cabinet (EXISTING) N.I.C. Reuse existing appliances
7. Wolf/Vulcan MSA Series 60" Griddle MSA60, 30" deep
8. Wolf/Vulcan Challenger Series 60" range C6059-6B24CBN
9. Frymaster MJ45-2
10. Stainless Steel worktable w/ casters, approx 14" x 30" John Boos
11. Three compartment sink Elkay 12" Standard Series Sinks 3C18x18-2-18X
12. Pre-Rinse Faucet, wall mount, 90 series, 1 gpm Spray w/ 12" swing spout Chicago Faucet, 510-GG613AL12ABCP
13. (2) BRUTE 32g, 21" High Trash - Recycle barrels, 1-grey, 1-blue model H-1045 (2) BRUTE dolly model: H-2630
14. Hobart Advansys Dishwasher Model: AM15VL
15. Dish return door. Metal, rollup, fire rated 30" x 44"
16. (2) Prince EST108, 108" Steam Table, 8 well, electric Enclosed body, sneeze guard, casters, tray rail
17. Metal, roll up door, fire rated
18. Norlake Kold Locker Walk-Ins 77 Series 6'x8' with floor & chrome shelves (1) Freezer, (1) Refrigerator
19. Shelving. chrome, wire shelves on casters
20. Work Table: s.s base & shelf w/ maple top (custom) 36" x 108", 1-3/4" maple top, cut top for #21 undermount s.s. sink. John Boos SNS17A
21. Prep-Sink, undermount, single hole 16-3/4" x 22-1/2" ELKAY ECTSRAD25226BG
22. Prep-Sink Faucet, 5-1/4" gooseneck, single hole, single lever. Chicago Faucet, 350-E35-317XKABCP
23. Work Table: s.s. base & shelf w/ maple top 36" x 48", 1-3/4" maple top John Boos SNS17
24. Ventilation Hood (SEE Mechanical plans) CaptiveAire
25. Surface mount ceiling light LED (Typical) Moisture resistant. See Electrical Plan
26. UCrete heavy duty non-slip polyurethane floor (Typical)
27. F.D. Slope to drain (Typical)



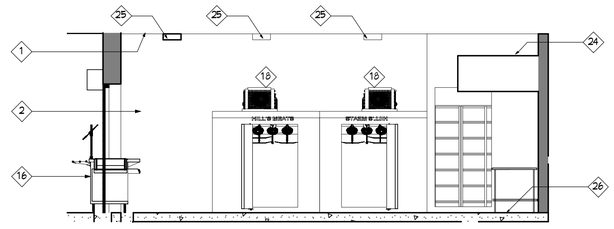
1 Kitchen 1/4" = 1'-0"



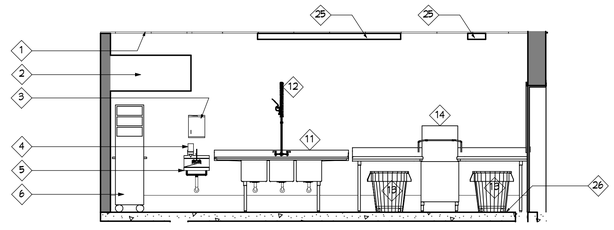
2 Kitchen North 1/4" = 1'-0"



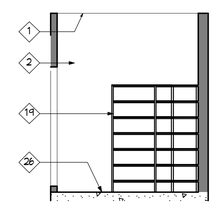
3 Kitchen South 1/4" = 1'-0"



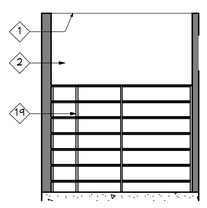
4 Kitchen East 1/4" = 1'-0"



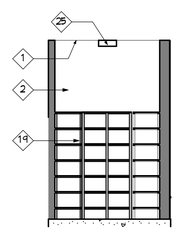
5 Kitchen West 1/4" = 1'-0"



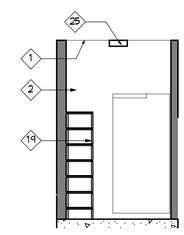
6 Storage North 1/4" = 1'-0"



7 Storage North 1/4" = 1'-0"



8 Storage North 1/4" = 1'-0"



9 Storage North 1/4" = 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT
CARTER JENSEN WARD
No. C-19397
REN. 6-30-17
STATE OF CALIFORNIA

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Kitchen Detail

◦ REVISIONS ◦

No.	Date	Notes
1	6-17-2016	Building Submittal

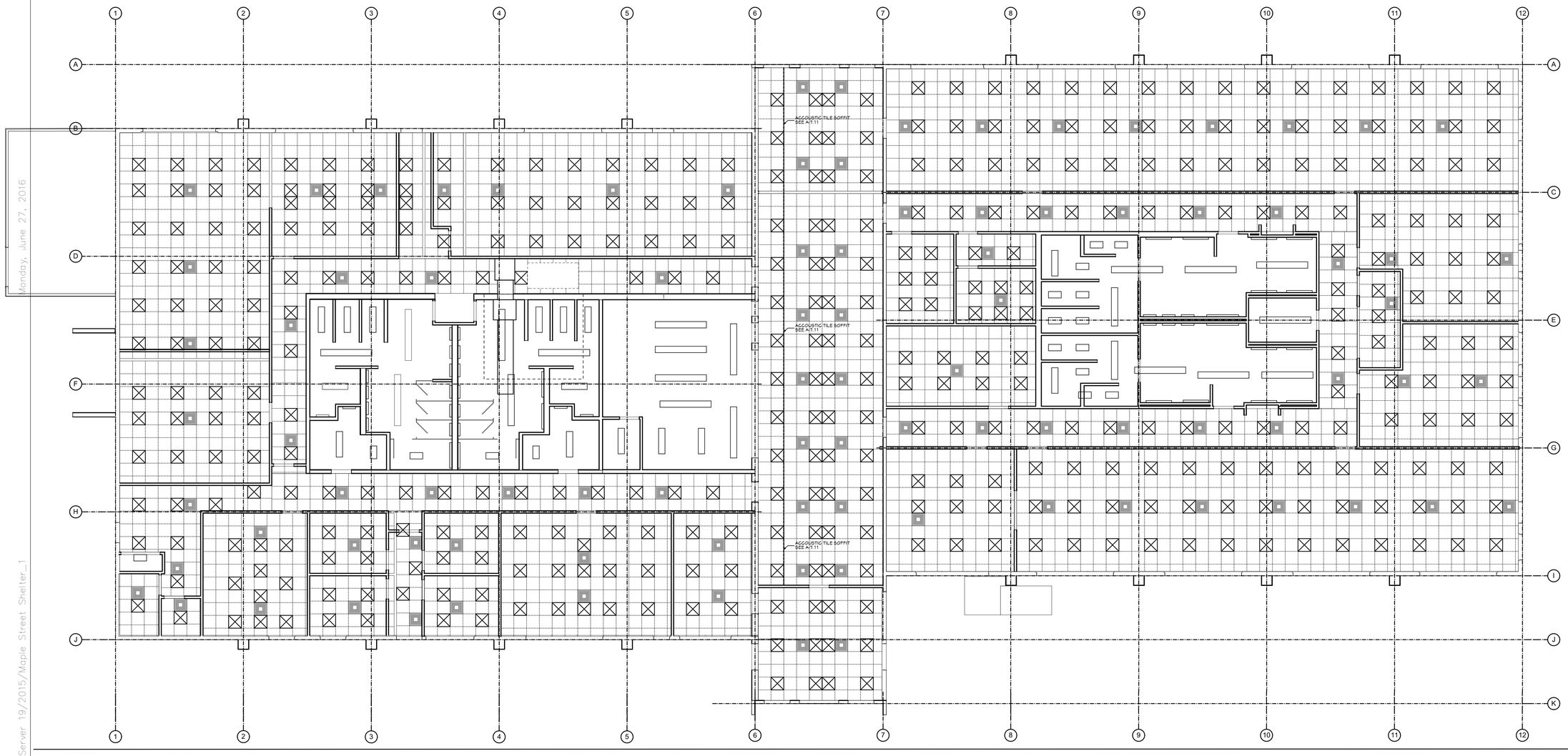
◦ JOB: 2015.2801

◦ DATE: 6/17/2016

◦ SHEET: A-5.3

BIM Server: CJW BIM Server 19 - BIM Server 19/2015/Maple Street Shelter_1

1:06 PM
Monday, June 27, 2016



LEGEND

- 2' x 2' ACCOUSTIC CEILING TILE w/ HANGING T-BAR SUPPORT.
- 2' x 2' L.E.D. DOWNLIGHT
- 2' x 2' HVAC DIFUSSER VENT
- 1' x 2' L.E.D or FLOUR. SURFACE MOUNTED LIGHT
- 1' x 4' L.E.D or FLOUR. SURFACE MOUNTED LIGHT
- 1' x 8' L.E.D or FLOUR. SURFACE MOUNTED LIGHT
- 2' L.E.D SURFACE MOUNTED WALL LIGHT
- 4' L.E.D SURFACE MOUNTED WALL LIGHT
- 8' L.E.D SURFACE MOUNTED WALL LIGHT

1 Reflected Ceiling Plan — 1/8" = 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT
CARTER JENSEN WARD
No. C-19397
REN. 6-30-17
STATE OF CALIFORNIA

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Reflected Ceiling Plan

◦ REVISIONS ◦

No.	Date	Notes
1	6-17-2016	Building Submittal

◦ JOB: 2015.2801

◦ DATE: 6/17/2016

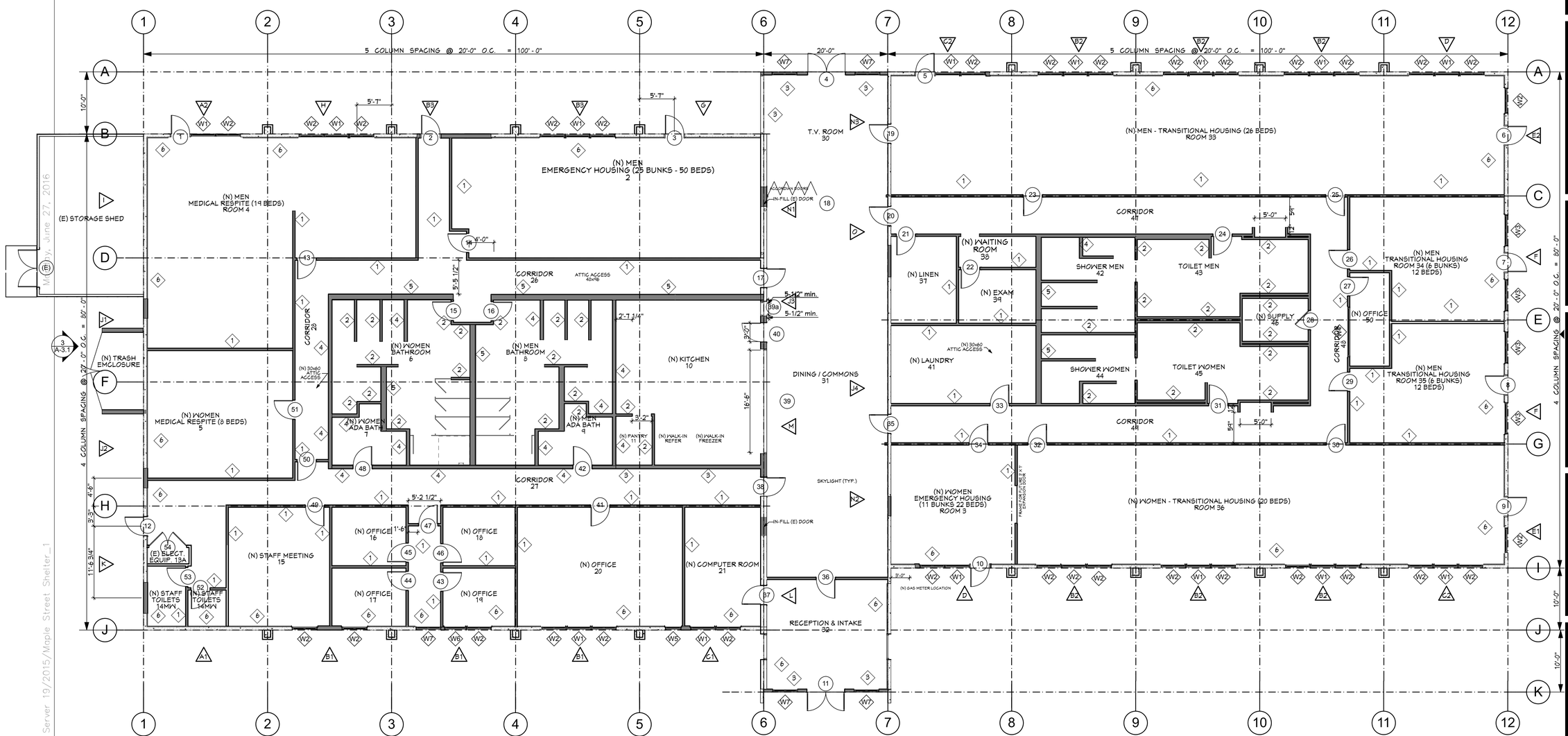
◦ SHEET: A-6.1

BIM Server: C:JW BIM Server 19 — BIM Server 19/2015/Maple Street Shelter_1

2:54 PM
Monday, June 27, 2016

WALL SIZES:

1. 3-5/8" Galv. Metal Stud Wall, 43mil 362S162-43 @ 16" O.C.
2. 3-5/8" S.S. Metal Stud Wall, 43 mil
3. 5-1/2" Galv. Metal Stud Wall 550S162-43 @ 16" O.C.
4. 5-1/2" S.S. Metal Stud Wall
5. 3-5/8" x 12" chase wall S.S. Metal Stud Wall
6. 1-1/2" hat channel furring on all (E) exterior conc tilt panels. Provide150M 25-43 at 16" o.c. with 0.145 Hilti shot pins at 16" o.c. staggered.



1 Wall size plan 1/8" = 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT
CARTER JENSEN WARE
No. C-19397
REN. 6-30-17
STATE OF CALIFORNIA

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Stud Sizes

◦ REVISIONS ◦

No.	Date	Notes
1	4-1-2016	Building

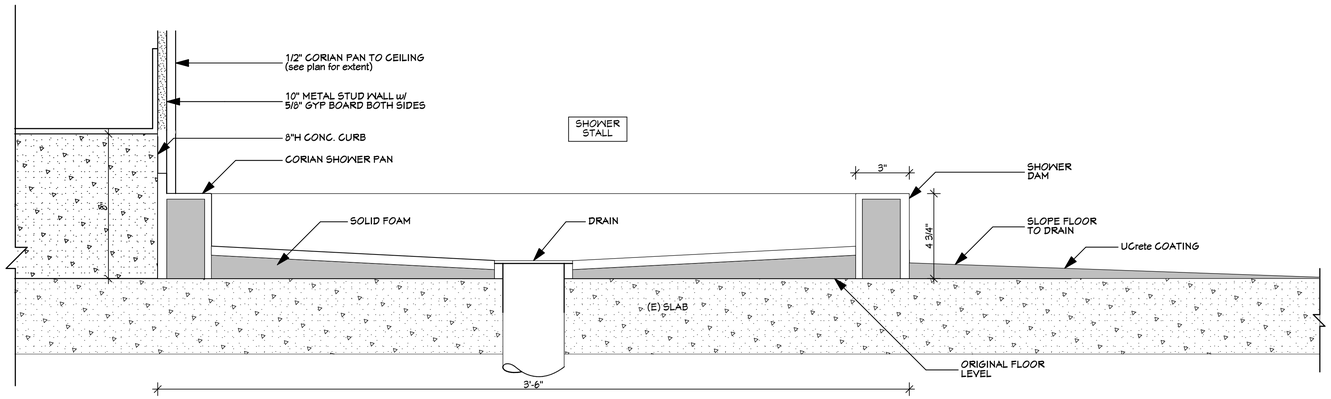
◦ JOB: 2015.2801

◦ DATE: 6/17/2016

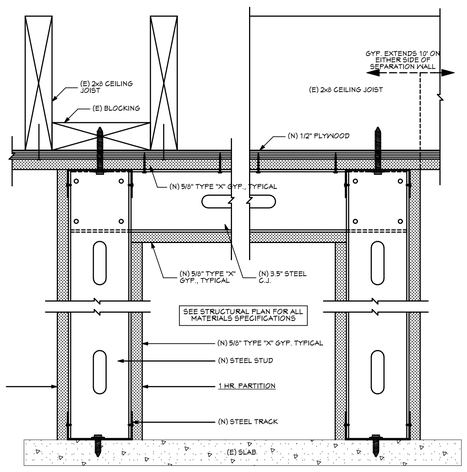
◦ SHEET: A-7.1

BIM Server: CJW BIM Server 19 – BIM Server 19/2015/Maple Street Shelter_1

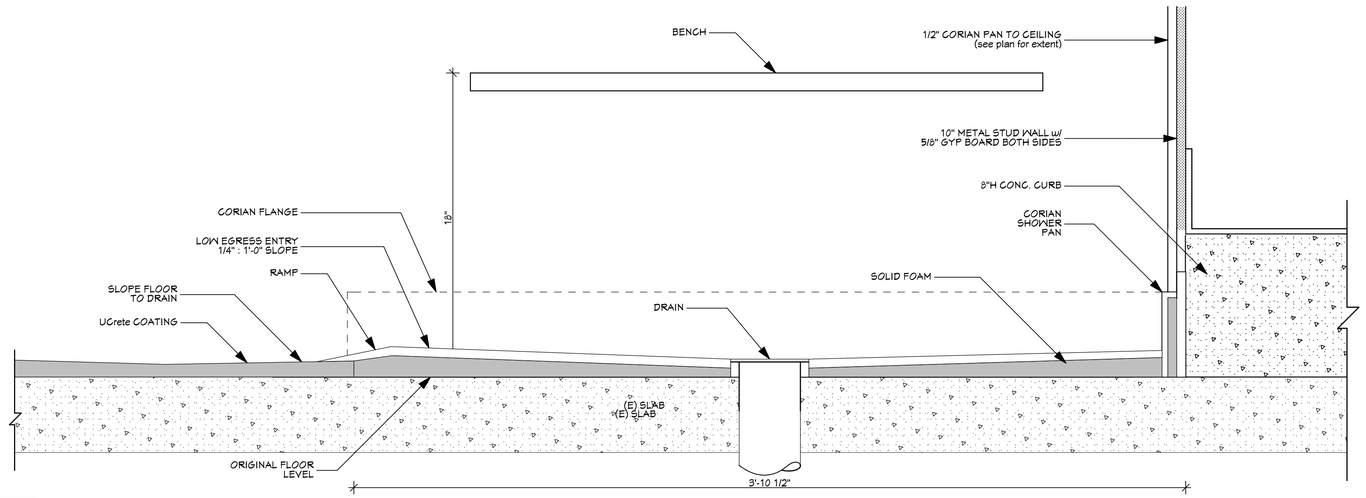
Monday, June 27, 2016 1:08 PM



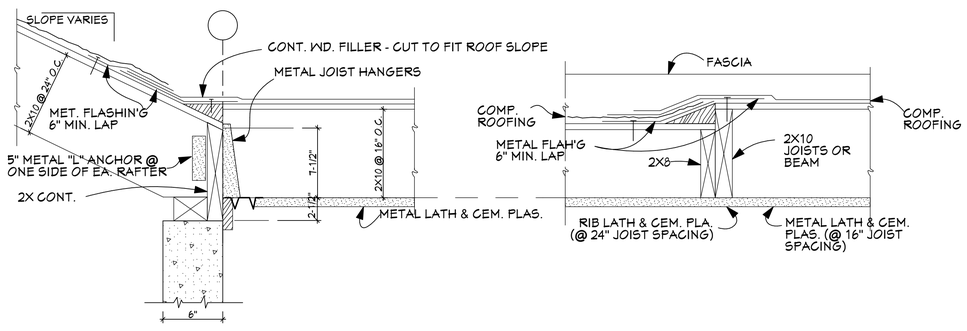
1 BATH 6 WOMEN SHOWER 3" = 1'-0"



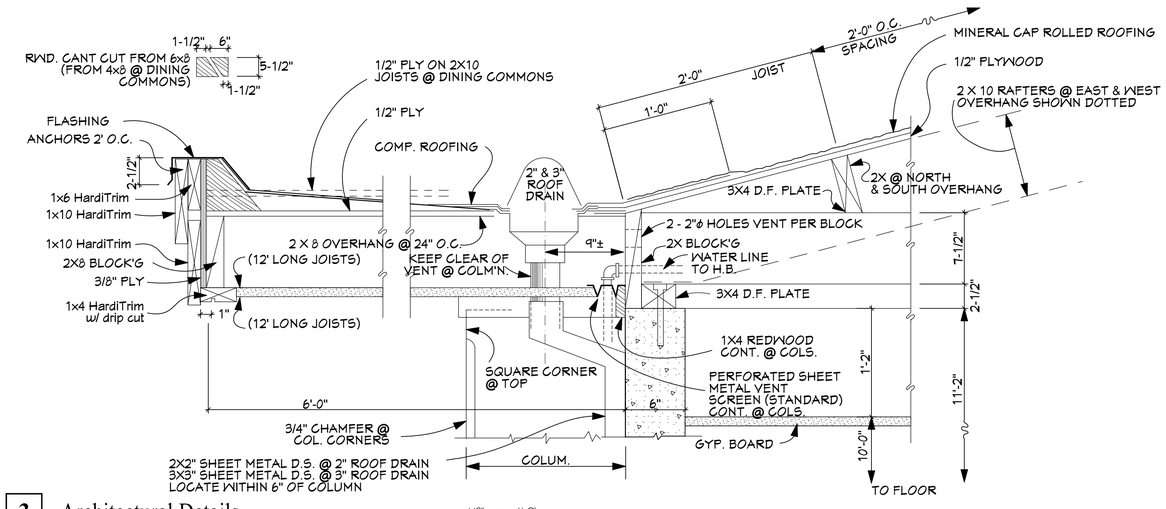
5 1 HR. CORRIDOR & AREA SEP. WALL 3" = 1'-0"



2 BATH 6 WOMEN ADA SHOWER 3" = 1'-0"



4 Architectural Details 1/8" = 1'-0"



3 Architectural Details 1/8" = 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT
CARTER JENSEN WARD
No. C-19397
REN. 6-30-17
STATE OF CALIFORNIA

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Details

◦ REVISIONS ◦

No.	Date	Notes
1	6-17-2016	Building Submittal

◦ JOB: 2015.2801

◦ DATE: 6/17/2016

◦ SHEET: A-7.2

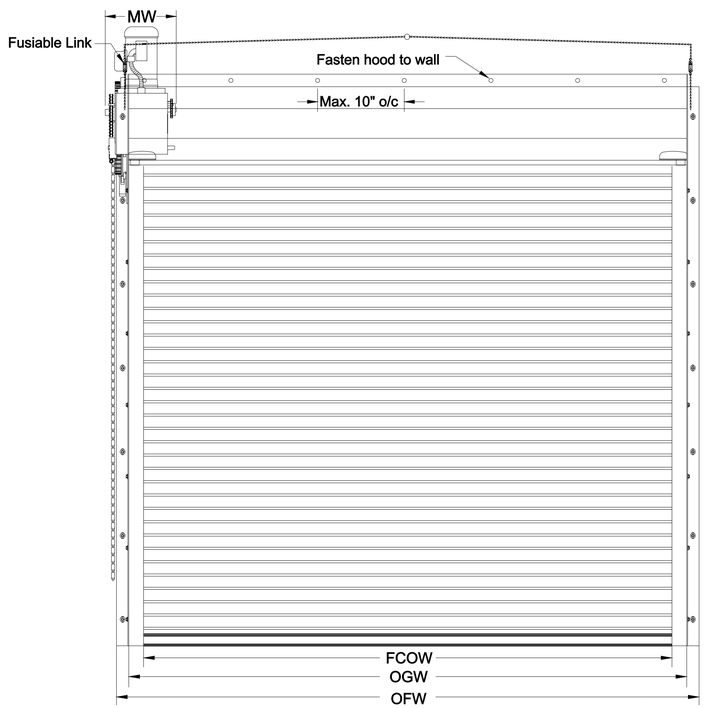
BIM Server: CJW BIM Server 19 — BIM Server 19/2015/Maple Street Shelter_1

PROJECT:	CONTRACT # / P.O. # :	FILE NAME:	DRAWING # :
Maple Street Shelter		WEB GENERATE	6820

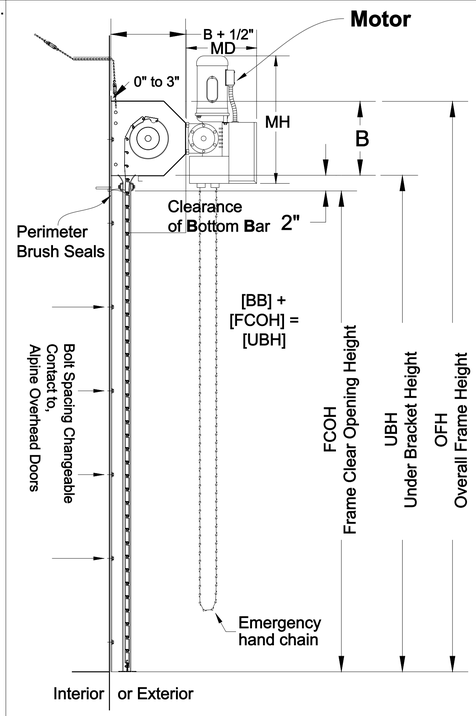
ESTIMATED PRELIMINARY DRAWING SUBJECT TO CHANGE FOR PRODUCTION OR FABRICATION

DRAWING NOT IN SCALE

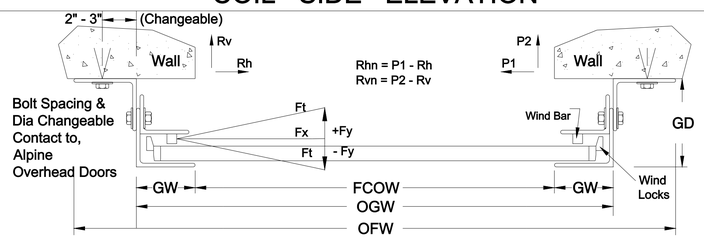
Door is shown right hand drive, left hand is opposite.



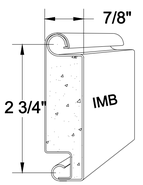
COIL SIDE ELEVATION



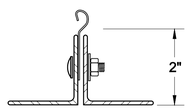
VERTICAL SECTION



GUIDE SECTION



CURTAIN



BOTTOM BAR

QUA-NTITY	MARK	FRAME CLEAR OPENING		OVERALL GUIDE	UNDER BRACKET	OVERALL FRAME		BRACKET	GUIDE WIDTH	GUIDE DEPTH	Tube Size	DRIVE	OPERATION	MOTOR SPECIFICATIONS		
Q	M	F C O Width	F C O Height	O G Width	U B Height	O F Width	O F Height	B	GW	GD	TS	DR	OP	H-Power	Volt	Phase
1	I	17'-0 "	7'-0 "	17.58	7.334	18'-2 "	8.83	18	6.5	4.94	NA	Left	Motor	0.5		
		5181.6	2133.6	5359.4	2235.4	5359.4	2692.6	457.2	165.1	125.41	NA			Alpine Engineer can change, Motor Specification as per Door Size.		

PLEASE CHECK APPROPRIATE BOX, SIGN AND RETURN TO ALPINE

☐ APPROVED (O.K. to Fabrication) ☐ RESUBMIT

☐ APPROVED As Noted ☐ DISAPPROVED

COMPANY NAME _____ **TITLE** _____

SIGNATURE _____

PRINT NAME _____ **DATE** _____

Auto Smoke Fire Storm:

1. Alpine Overhead Doors, Inc. will not be responsible or liable for damage, or improper operation, caused by the materials of other trades fastened to any door components.
2. Opening prep, supports, substrates, framing, jambs, lintels and structurally sufficient wall construction are not included by Alpine Overhead Doors, Inc.
3. All exposed ferrous surfaces, except stainless steel, shall receive one coat of rust-inhibitive primer.
4. Operation: Motor, Left Hand Side
5. Locking: None (Alpine Offers, Slide Locks, Cylinder Locks & Pin Locks)
6. Fire rated doors must be installed in strict accordance with NFPA 80.
7. Doors carries a U.L. rated.
8. Door is built in accordance with Protocol 201, 202 & 203. See Notice of Acceptance for applicable location.

Building Note:

1. Jamb, Lintels,Sills or structural elements required to prepare opening are not included by.
2. Opening of sound and suitable construction will be provided by the purchaser or the support of Alpine Overhead Doors, Inc.
3. In construction of new openings, the purchaser will be responsible for the maintenance of certified dimension on approved shop drawings or as guaranteed otherwise.
4. All electrical wiring and other related work in not supply by Alpine.
5. **Wind Load:** Doors are designed for a maximum pressure of [PSI]
6. **Reaction Forces** (Principal Engineer is required to verify that building structure, can support the below listed reaction forces), Maximum Horizontical Force, Px CallMFG
   Maximum Vertical Force, Py CallMFG

MATERIAL

CURTAIN : 22 GA. Stainless Steel
roll formed 7/8" thick IMB slat sections

FINISH : Stainless Steel

GUIDE : Designed using angles consisting of structural steel, Mount face of the wall

FINISH : Stainless Steel

HOOD : 24 GA. Stainless Steel
formed to fit hexagon brackets

FINISH : Stainless Steel

BOTTOM BAR : Two Stainless Steel Double Angles extending into guides.

FINISH : Stainless Steel

Alpine Overhead Doors,
Auto style doors do not operate with Manual Push Up Operation.

AUTO FIRE STORM WINDSTORM RESISTANT FIRE DOORS IMB

SALES REP.: | BUSINESS: CJW Architecture | CUSTOMER NAME: Clay Baker | CHECK: | DRAWN BY: Web Generate | DATE & TIME: 6/18/2016 5:11:20 PM

Alpine DOORS, INC.
OVERHEAD
8 HULSE RD. E. SETAUKET, N.Y. 11733
TEL: (631)473-9300 FAX: (631)642-0800

© COPYRIGHT November 2002

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT
CARTER JENSEN WARD
No. C-19397
REN. 6-30-17
STATE OF CALIFORNIA

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Kitchen Roolup Door Details

◦ REVISIONS ◦

No.	Date	Notes
1	6-17-2016	Building Submittal

◦ JOB: 2015.2801

◦ DATE: 6/17/2016

◦ SHEET: A-7.3

Monday, June 27, 2016 1:08 PM
BIM Server: CJW BIM Server 19 – BIM Server 19/2015/Maple Street Shelter_1

Monday, June 27, 2016 1:08 PM

BIM Server: CJW BIM Server 19 -- BIM Server 19/2015/Maple Street Shelter_1

Fire Counter-Shutter

1 1/4" Baby Flat Slat

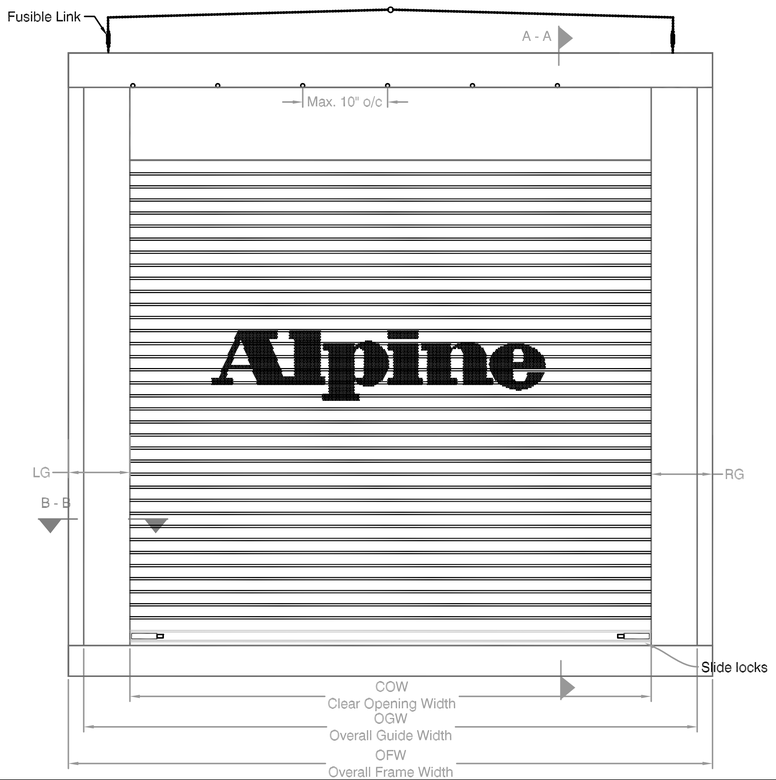
ISO 9001 : 2000 REGISTERED FIRM

GREEN

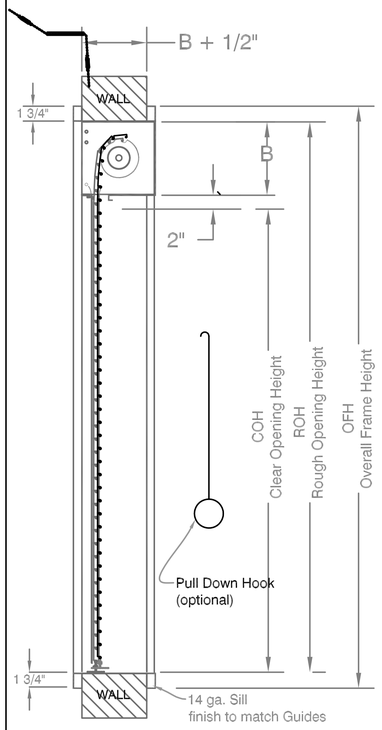
INTEGRAL FRAME FIRE SHUT
Split-FRAME
FRAMED ROLLING COUNTER SHUTTERS

Manual Push-up Operated
Between Jamb Mounted

Page#: Page 1

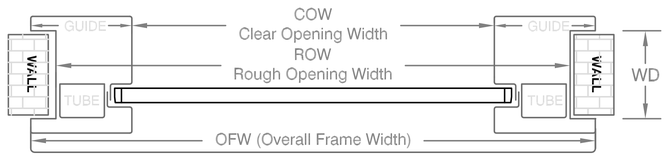


COIL SIDE ELEVATION

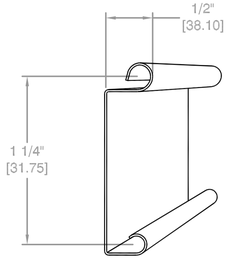


VERTICAL SECTION A - A

LG - Left Guide
RG - Right Guide
B - Bracket
GW - Guide Width
GD - Guide Depth



GUIDE SECTION B - B



1 1/4" baby flat slat

CURTAIN DETAIL

Notes:

1. See page 2 for more options.
2. All metric conversions of dimensions are shown in brackets [ ].

SALES REP:

CUSTOMER:

JOB NAME:

NUMBER:

Manufactured by:

Alpine® OVERHEAD DOORS, INC.
8 HULSE ROAD EAST SETAUKET, N.Y. 11733
TEL: (631)473-9300 FAX: (631)642-0800
© COPYRIGHT MAY 2007

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT
CARTER JENSEN WANN
No. C-19397
REN. 6-30-17
STATE OF CALIFORNIA

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Kitchen Dish Return Door

◦ REVISIONS ◦

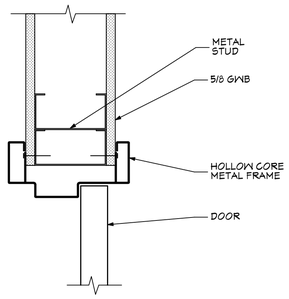
No.	Date	Notes
1	6-17-2016	Building Submittal

◦ JOB: 2015.2801

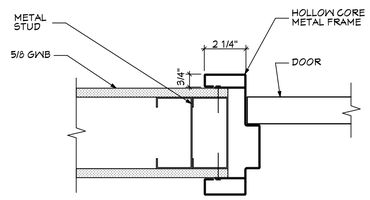
◦ DATE: 6/17/2016

◦ SHEET: A-7.4

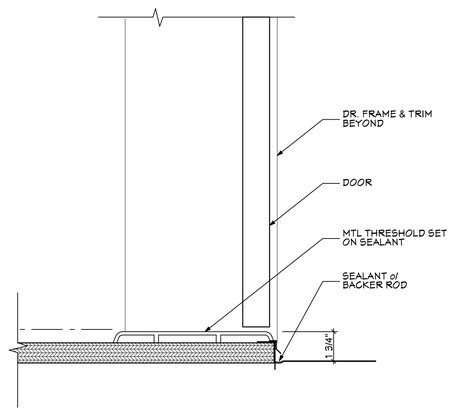
1:08 PM
Monday, June 27, 2016
BIM Server: CJW BIM Server 19 — BIM Server 19/2015/Maple Street Shelter_1



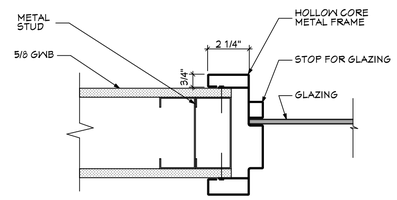
10 Interior Door Header 3" = 1'-0"



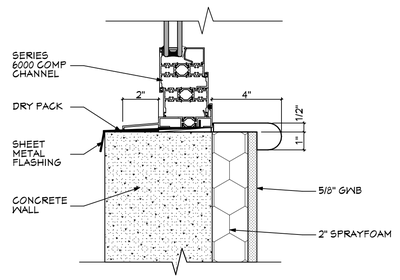
11 Interior Door Jamb 3" = 1'-0"



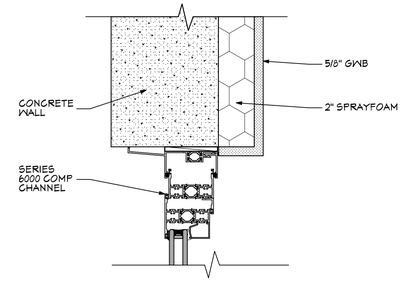
9 Exterior Door Threshold 3" = 1'-0"



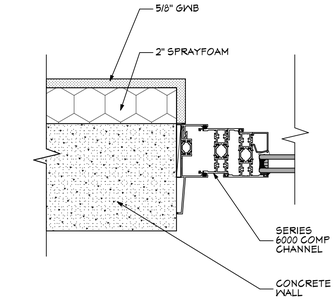
5 Interior Window Jamb 3" = 1'-0"



3 Exterior Window Sill 3" = 1'-0"



1 Exterior Window Header 3" = 1'-0"



2 Exterior Window Jamb 3" = 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT
CARTER JENSEN WARD
No. C-19397
REN. 6-30-17
STATE OF CALIFORNIA

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Window & Door Details

◦ REVISIONS ◦

No.	Date	Notes

◦ JOB: 2015.2801

◦ DATE: 6/17/2016

◦ SHEET: A-7.5

Monday, June 27, 2016 1:08 PM

TYPICAL SUSPENDED CEILING NOTES:

The following notes will be acceptable in plans and specifications for ceiling systems whose total weight including conditioning grilles and light fixtures does not exceed four (4) systems and those supporting lateral loads from partitions will require special design details. 12 ga. (min.) hanger wires may be used for up to and including 4' x 4' grid spacing along main runners.

1.) Provide 12 ga. hanger wires at the ends of all main and cross runners within 8" from the support or within 1/4 of the length of the end tee, which ever is least, for the perimeter of the ceiling area. End connections for runners which are designed and detailed to resist the applied horizontal forces may be used in lieu of the 12 ga. hanger wires subject to the architect review and approval.

2.) Provide trapeze or other supplementary support members at obstructions to main hangers, struts or braces as required at all ceiling breaks, soffits or discontinuous areas. Hanger wires that are more than 1 in 6 out of plumb are to have counter-sloping wires.

3.) Ceiling grid members may be attached to no more than 2 adjacent walls. Ceiling grid members should be at least 1/2 inch free of other walls. If walls run diagonally to ceiling grid system runners, one end of main and cross runners should be free and a minimum of 1/2 inch clear of wall.

4.) At the perimeter of the ceiling area where main or cross runners are not connected to the adjacent wall, provide interconnection between the runners at the free ends to prevent lateral spreading. A metal strut or a 16 ga. wire with positive mechanical connection to the runner may be used. Where the perpendicular distance from the wall to the first parallel runner is 12" or less, this interlock is not required.

5.) Provide sets of four 12 ga. splayed bracing wires oriented 90° from each other at the following spacing:
a.) Place sets of bracing wires at a spacing not more than 12' x 12" on center.
b.) Provide bracing wires at locations not more than 6' from each perimeter wall and at the edge of vertical ceiling offsets. The slope of bracing wires should not exceed 45° from the plane of the ceiling and should be taut without causing the ceiling to lift. Splices in bracing wires are not to be permitted.

6.) Fasten hanger wires with not less than 3 tight turns. Fasten bracing wires with 4 tight turns. Make all tight turns within a distance of 1-1/2 inches. Hanger or bracing wire anchors to the structure should be installed in such a manner that the direction of the wires align as closely as possible with the direction of the forces acting on the wire. Note: Wire turns made by machine where both strands have been deformed or bent in wrapping can waive the 1-1/2" requirement, but the number of turns should be maintained and be as tight as possible.

7.) Separate all ceiling hanging and bracing wires at least 6" from all unbraced ducts, pipes, conduit, etc. It is acceptable to attached lightweight items, such as a single electric conduit not exceeding 3/4" nominal diameter to hanger wires using connectors acceptable to the architect.

8.) When drilled-in concrete anchors are used in reinforced concrete for hanger wires, 1 out of 10 must be field tested for 440 pounds in tension. Shot-in anchors in concrete are not permitted. Report anchor failures to architect for further remedial instructions. Note: Drilled-in anchors require special approval when used in prestressed concrete.

9.) Attach all light fixtures to the ceiling grid runers to resist a horizonal force equal to the weight of the fixtures.

10.) Flush or recessed light fixtures and air terminals or services weighing less than 56 pounds may be supported directly on the runners of the heavy duty grid system but, in addition, they must have a minimum of two 12 ga. slack safety wires attached to the fixture at diagonal corners and anchored to the structure above. All 4 ft. x 4 ft. light fixures must have slack safety wires at each of the 4 corners.

11.) All flush or recessed light fixtures and air terminals or services weighing 56 ponds or more must be independently supported by not less than 4 taut 12 ga. wires each attached to the fixture and to the structure above regardless of the type of ceiling grid system used. The 4 taut 12 ga. wires including their attachment to the structure above must be capable of supporting 4 times the weight of the unit.

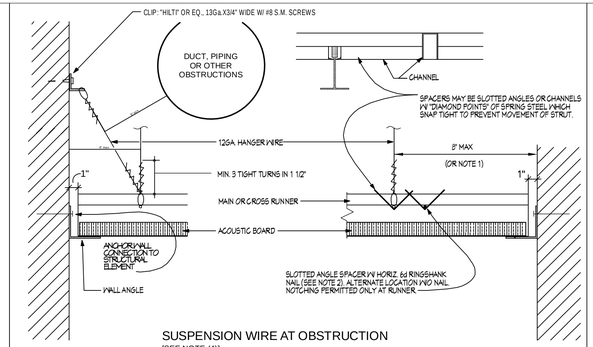
12.) All fixtures and air terminals or services supported on intermediate duty grid systems must be independently supported by not less than 4 taut 12 ga. wires each attached to the fixture or terminal and to the structure above.

13.) Support surface mounted light fixtures by at least two positive devices which surround the ceiling runner and which are each supported from the structure above by a 12 ga. wire. Spring clips or clamps that connect only to the runner are not acceptable.

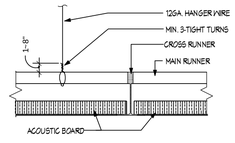
14.) Provide additional supports when light fixtures are 8 feet or longer.

15.) Where occurs, support pendant mounted light fixtures directly from the structure above with hanger wires or cables passing through each pendant hanger and capable of supporting 4 times the weight of the fixture.

6 Typical Suspended Ceiing Notes 1 1/2"= 1'-0"



SUSPENSION WIRE AT OBSTRUCTION
[SEE NOTE (4)]



ACCEPTABLE HANGER WIRE CONNECTION TO GRID

NOTES:

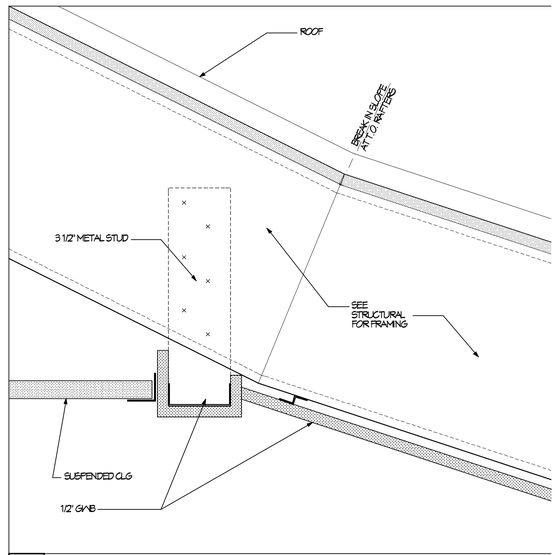
(1) 1/4 OF THE LENGTH OF THE END RUNNER WHICHEVER IS LESS.

(2) NAILS AT ENDS OF HORIZONTAL STRUTS ARE TO BE PLACED WITH NAIL HEAD TOWARD CENTERLINE OF SPAN OF STRUT.

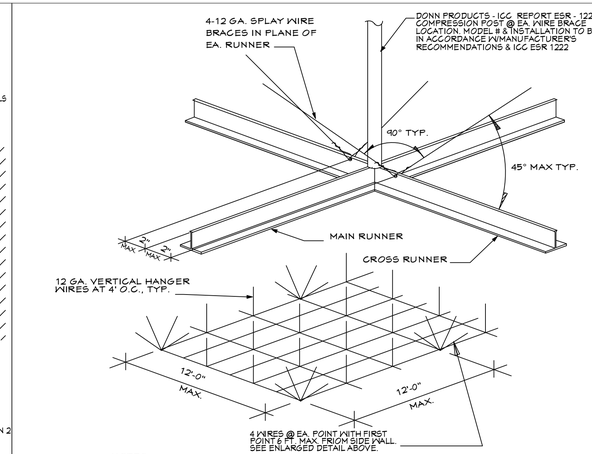
(3) CEILING GRID MEMBERS MAY BE ATTACHED TO NOT MORE THAN 2 ADJACENT WALLS. CEILING GRID MEMBERS SHOULD BE AT LEAST 1/2 INCH FREE OF OTHER WALLS. IF WALLS RUN DIAGONALLY TO CEILING GRID SYSTEM RUNNERS, ONE END OF MAIN AND CROSS RUNNERS SHOULD BE FREE AND A MINIMUM OF 1/2 INCH CLEAR OF WALL.

(4) AT THE PERIMETER OF THE CEILING AREA WHERE MAIN OR CROSS RUNNERS ARE NOT CONNECTED TO THE ADJACENT WALL, PROVIDE INTERCONNECTION BETWEEN THE RUNNERS AT THE FREE END TO PREVENT LATERAL SPREADING. A METAL STRUT OR A 16GA WIRE WITH A POSITIVE MECHANICAL CONECTION TO THE RUNNER MAY BE USED. WHERE THE PERPENDICULAR DISTANCE FROM THE WALL TO THE FIRST PARALLEL RUNNER IS 12" OR LESS, THIS INTERLOCK IS NOT REQUIRED.

4 Suspension Wire at Obstruction 1 1/2"= 1'-0"

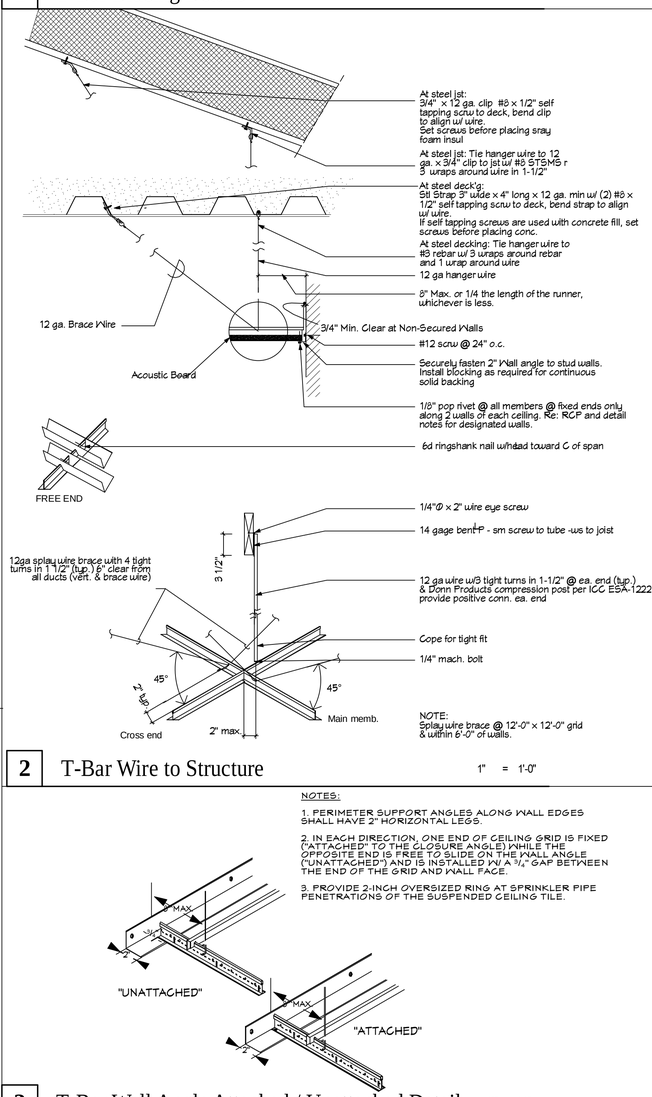


5 SUSP CLG @ GWB CLG 3" = 1'-0"



NOTES:
LIGHT FIXTURE SUPPORT SHALL BE INDEPENDENT FROM CEILING SUPPORT SYSTEM.
HOLD-DOWN CLIPS SHALL BE REQ'D FOR LAY-IN TILES WEIGHING LESS THAN 1 LB.

1 T-Bar Bracing Details 3" = 1'-0"



2 T-Bar Wire to Structure 1" = 1'-0"

NOTES:
1. PERIMETER SUPPORT ANGLES ALONG WALL EDGES SHALL HAVE 2" HORIZONTAL LEGS.
2. IN EACH DIRECTION, ONE END OF CEILING GRID IS FIXED ("ATTACHED" TO THE CLOSURE ANGLE) WHILE THE OPPOSITE END IS FREE TO SLIDE ON THE WALL ANGLE ("UNATTACHED") AND IS INSTALLED W/A 3/4" GAP BETWEEN THE END OF THE GRID AND WALL FACE.
3. PROVIDE 2-INCH OVERSIZED RING AT SPRINKLER PIPE PENETRATIONS OF THE SUSPENDED CEILING TILE.

3 T-Bar Wall Angle Attached / Unattached Detail 1 1/2"= 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT CARTER JENSEN WARD No. C-19397 REN. 6-30-17 STATE OF CALIFORNIA

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Ceiling Detail

◦ REVISIONS ◦

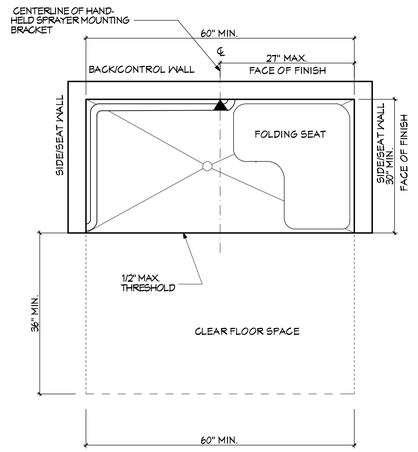
No.	Date	Notes
1	6-17-2016	Building Submittal

◦ JOB: 2015.2801

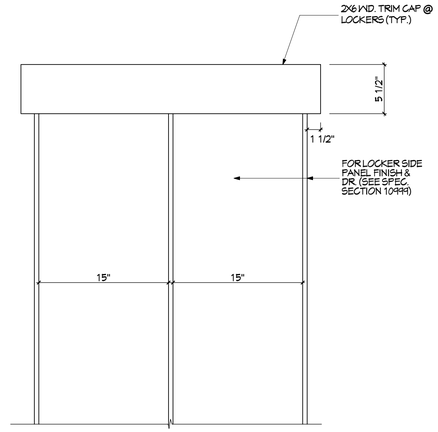
◦ DATE: 6/17/2016

◦ SHEET: A-7.6

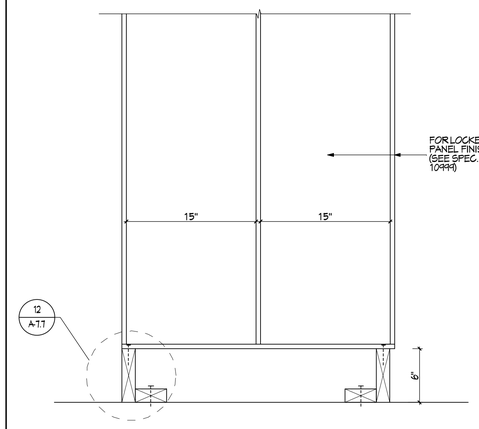
BIM Server: CJW BIM Server 19 – BIM Server 19/2015/Maple Street Shelter_1



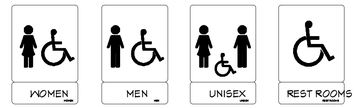
10 ACCESSIBLE SHOWER STALL DETAIL 3/4" = 1'-0"



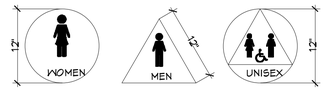
7 TOP OF LOCKER DETAIL 1 1/2"= 1'-0"



8 LOCKER DETAIL 1 1/2"= 1'-0"



WALL - SIGNAGE (TYP.)



DOOR MOUNTED SIGNAGE (TYP.)

NOTE
FIGTOGRAMS &/or LETTERING ARE NOT REQUIRED ON DOOR - MOUNTED SIGNAGE

A) INTERNATIONAL SYMBOL OF ACCESSIBILITY: SECTION 1117.B.5.1 AND SECTIONS AS FOLLOWS

1) DESIGN: SECTION 1117B.5.1.1 AND FIGURE 11B-6
2) COLOR OF SYMBOL: SECTION 1117.B.5.1.2

B) BRAILLE SYMBOLS: SECTION 1117B.5.2.

C) PROPORTION OF LETTERS AND NUMBERS: SECTION 1117B.5.3.

D) CHARACTER HEIGHT: SECTION 1117B.5.4.

E) CONTRAST AND FINISH OF SYMBOLS: SECTION 1117B.5.4.

F) RAISED CHARACTERS AND PICTORIAL SYMBOL SIGNS: SECTION 1117B.5.6.
1) LETTER TYPE: SECTION 1117B.6.6.1.
2) SYMBOL SIZE: SECTION 1117B.6.6.2.
3) PICTORIAL SYMBOL SIGNS (PICTOGRAMS NONGEOMETRIC): SECTION 1117B.6.6.3.

G) INFORMATION POSTED: SECTION 1117B.5.8.

H) MOUNTING LOCATION AND HEIGHT (WHERE PERMANENT IDENTIFICATION PROVIDED OR WHERE SIGNAGE IS REQUIRED FOR ROOMS AND SPACES): SECTION 1117B.5.9.

I) DOORWAYS LEADING TO MEN'S AND WOMEN'S SANITARY FACILITIES: PROVIDE SIGNS THAT COMPLY WITH APPLICABLE REQUIREMENTS OF SECTIONS 1115B.5, 1117B.5.2 & 1117B.5.9.

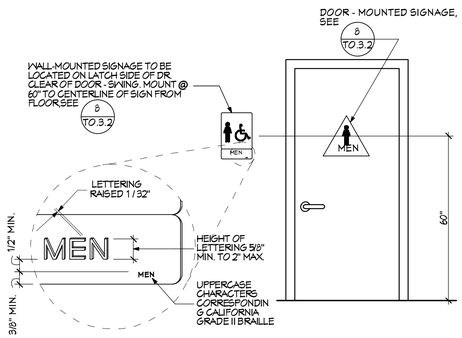
15 A-7.1

5 I.D. SYMBOLS B 1/4" = 1'-0"

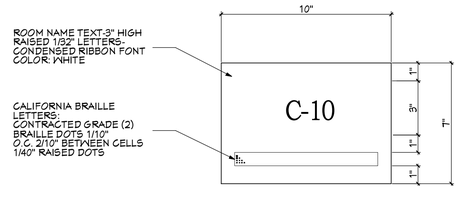
(A) SYMBOL PROPORTIONS

(A) SYMBOL PROPORTIONS

1 ACCESSIBILTY SIGN 1/8" = 1'-0"

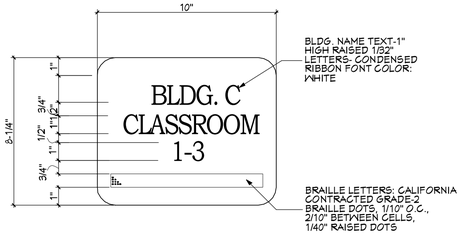


2 I.D. SYMBOLS A 1/4" = 1'-0"



NOTE
PROVIDE ONE SIGN WHERE INDICATED ON PLANS LOCATE SIGN MAX. 12" AWAY FROM DOOR STRIKE SIDE AT 60" A.F.F. TO TOP OF SIGN.

6 ROOM SIGNAGE 3" = 1'-0"



NOTE
PROVIDE ONE SIGN WHERE INDICATED ON PLANS LOCATE SIGN MAX. 12" AWAY FROM DOOR STRIKE SIDE @ 60" A.F.F.

3 BUILDING SIGNAGE 3" = 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT
CARTER JENSEN WARD
No. C-19397
REN. 6-30-17
STATE OF CALIFORNIA

PROJECT

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

SHEET TITLE

ADA Details

REVISIONS

No.	Date	Notes
1	6-17-2016	Building Submittal

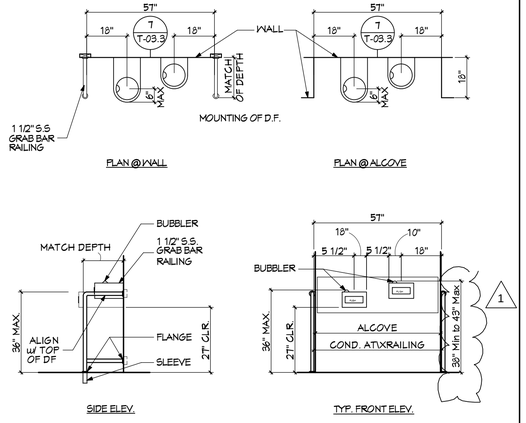
JOB: 2015.2801

DATE: 6/17/2016

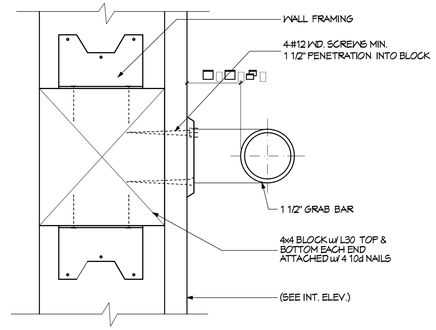
SHEET: A-7.7

Monday, June 27, 2016 1:08 PM
BIM Server: CJW BIM Server 19 — BIM Server 19/2015/Maple Street Shelter_1

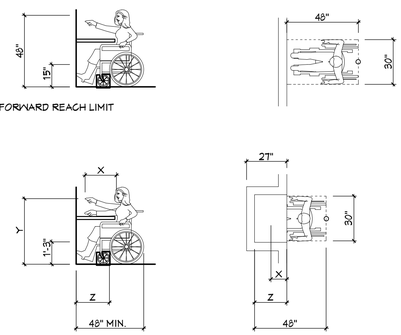
1:08 PM
Monday, June 27, 2016
BIM Server: CJW BIM Server 19 - BIM Server 19/2015/Maple Street Shelter_1



10 DRINKING FOUNTAIN DETAIL 3/8" = 1'-0"

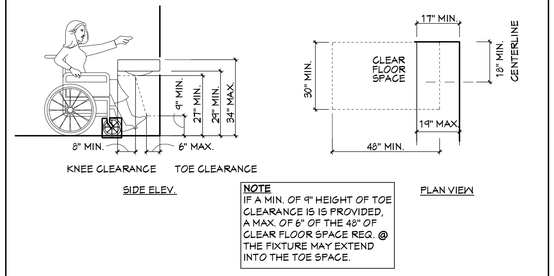


7 GRAB BAR DETAIL 6" = 1'-0"



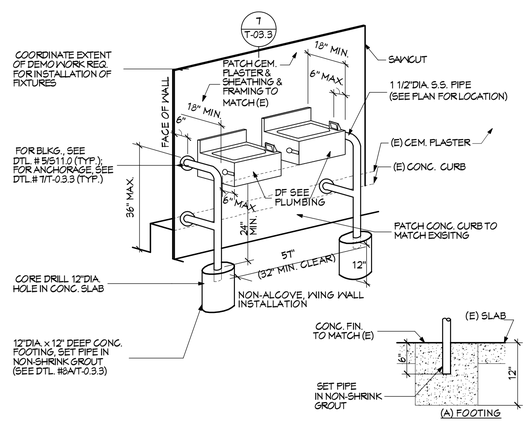
NOTE: X SHALL BE LESS THAN or EQUAL TO 25 INCHES. Z SHALL BE GREATER THAN or EQUAL TO X. WHEN X IS LESS THAN 20 INCHES, THEN Y SHALL BE 48 INCHES MAX. WHEN X IS 20 TO 25 INCHES, THEN Y SHALL BE 48 INCHES MAX.

4 H.C. ACCESS 4 1/4" = 1'-0"

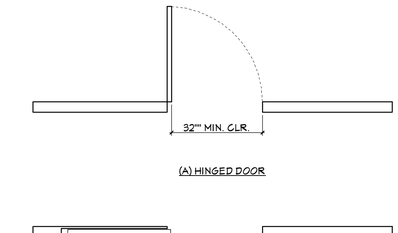


NOTE
IF A MIN. OF 9" HEIGHT OF TOE CLEARANCE IS IS PROVIDED, A MAX. OF 6" OF THE 48" OF CLEAR FLOOR SPACE REQ. @ THE FIXTURE MAY EXTEND INTO THE TOE SPACE.

1 LAVATORY/SINK KNEE CLEARANCE 3/8" = 1'-0"

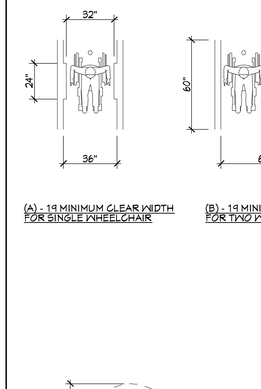


11 DRINKING FOUNTAIN MOUNTING 1/4" = 1'-0"

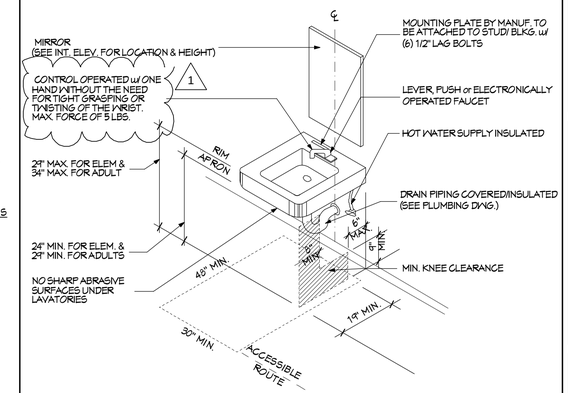


NOTE
PROVIDE BUMPER IN POCKET TO PREVENT DOOR FROM FULLY RECEDING

8 H.C. ACCESSIBILITY OPENINGS 1/2" = 1'-0"

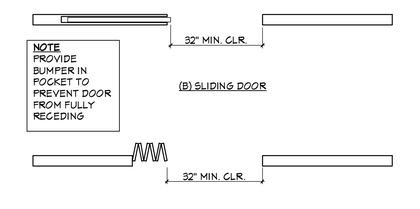


6 H.C. ACCESS 6 1/4" = 1'-0"



2 LAVATORY/SINK CLEARANCE DETAIL 1/4" = 1'-0"

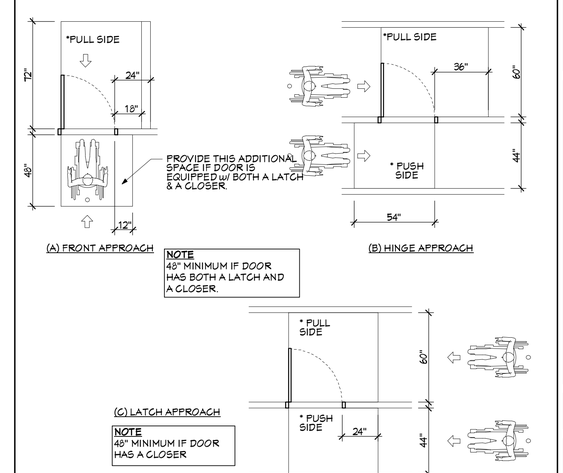
12 HC DRINKING FOUNTAIN 1/4" = 1'-0"



CORRESPONDING REACH HEIGHTS FOR GIVEN DEPTHS

WHEN D = 10" or LESS H = 54" MAX.
WHEN D = 11" H = 53.5" MAX.
WHEN D = 12" H = 53.0" MAX.
WHEN D = 13" H = 52.5" MAX.
WHEN D = 14" H = 51.5" MAX.
WHEN D = 15" H = 51.0" MAX.
WHEN D = 16" H = 50.5" MAX.
WHEN D = 17" H = 50.0" MAX.
WHEN D = 18" H = 49.5" MAX.
WHEN D = 19" H = 49.05" MAX.
WHEN D = 20" H = 48.5" MAX.
WHEN D = 21" H = 47.5" MAX.
WHEN D = 22" H = 47.0" MAX.
WHEN D = 23" H = 46.5" MAX.
WHEN D = 24" H = 46.0" MAX.

9 H.C. ACCESSIBILITY 1/4" = 1'-0"



NOTE
48" MINIMUM IF DOOR HAS BOTH A LATCH AND A CLOSER.

NOTE
48" MINIMUM IF DOOR HAS A CLOSER

3 H.C. ACCESS 3 1/4" = 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT
CARTER JENSEN WARD
No. C-19397
REN. 6-30-17
STATE OF CALIFORNIA

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

ADA Details

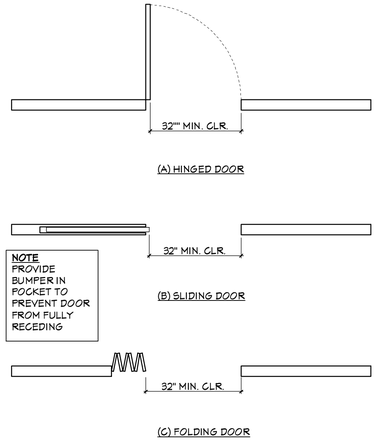
◦ REVISIONS ◦

No.	Date	Notes
1	6-17-2016	Building Submittal

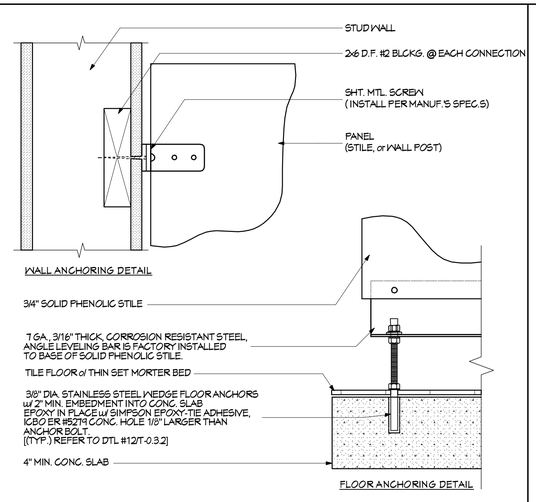
◦ JOB: 2015.2801

◦ DATE: 6/17/2016

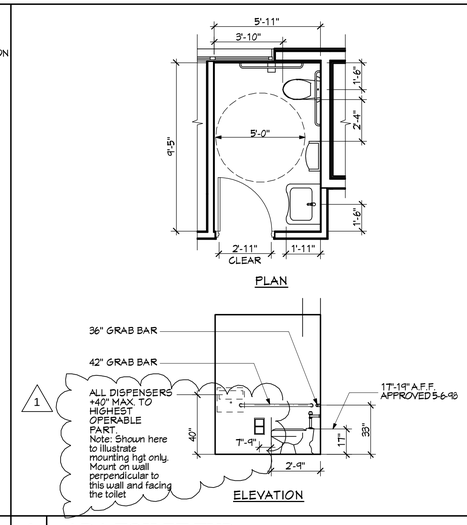
◦ SHEET: A-7.8



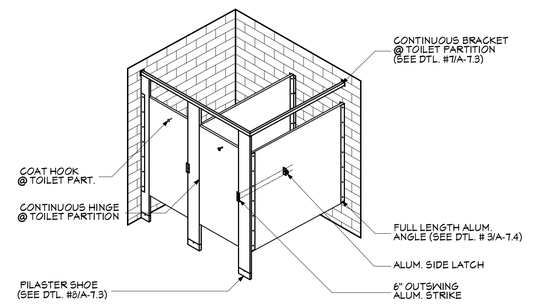
10 ACCESSIBILITY OPENINGS 1/2" = 1'-0"



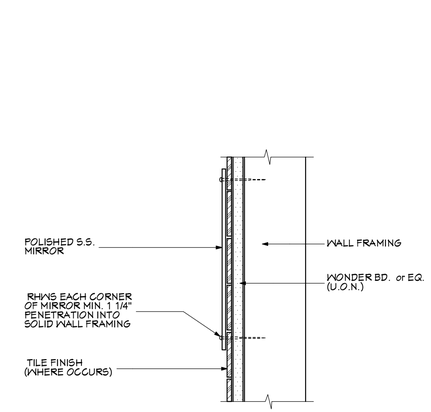
7 FLOOR & WALL ANCHORING DETAILS 3" = 1'-0"



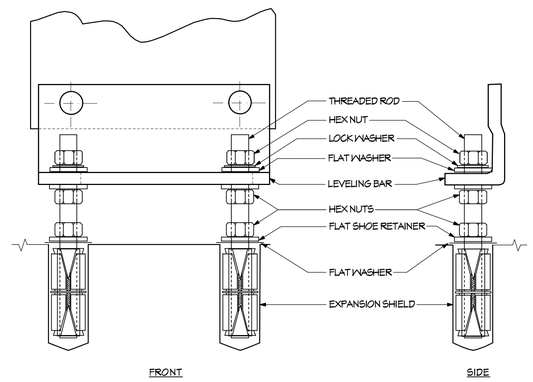
4 ADA TOILET TYP. 1/4" = 1'-0"



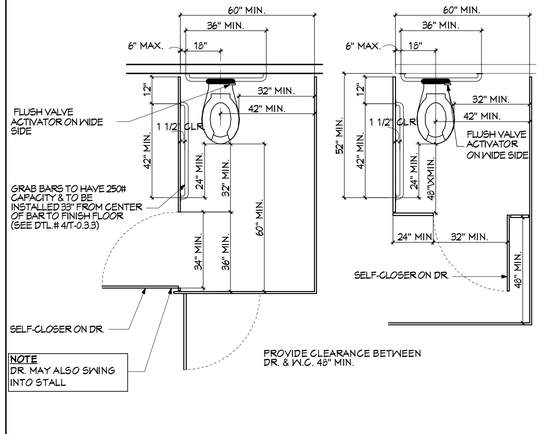
1 TYP. TOILET PARITION 1/4" = 1'-0"



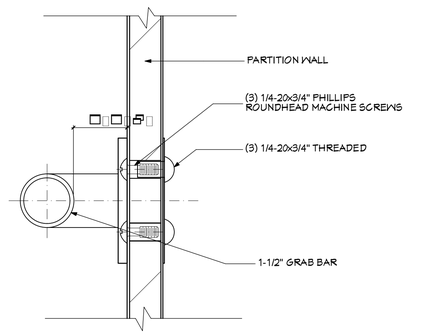
11 MIRROR TILE WAINSCOAT DETAIL 3" = 1'-0"



8 TOILET PARTITION INSTALLATION 1 1/2"= 1'-0"

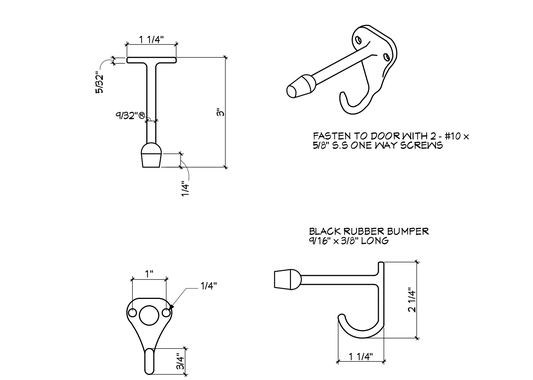


5 ACCESSIBLE TOILET STALLS 3/8" = 1'-0"



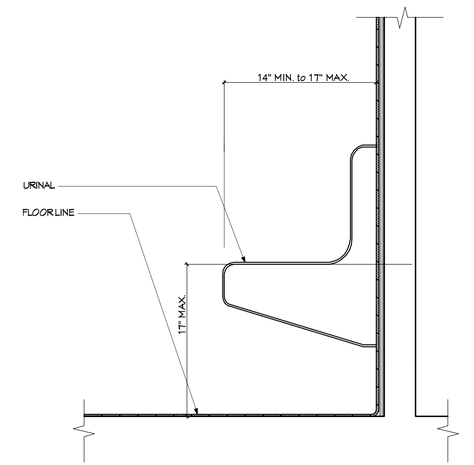
2 TOILET PARTITION GRAB BAR DETAIL 6" = 1'-0"

12 TYP. MIRROR DETAIL 3" = 1'-0"



9 COAT HOOKS & TOILET PARTITIONS 6" = 1'-0"

NOT USED 1



3 ACCESSIBLE URINAL DTL 1 1/2"= 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT CARTER JENSEN WARE No. C-19397 REN. 6-30-17 STATE OF CALIFORNIA

PROJECT

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

SHEET TITLE

ADA Details

REVISIONS

No.	Date	Notes
1	6-17-2016	Building Submittal

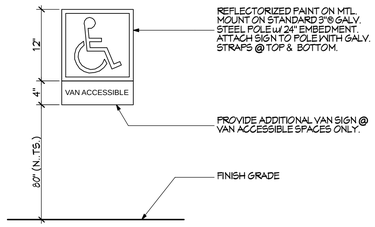
JOB: 2015.2801

DATE: 6/17/2016

SHEET: A-7.9

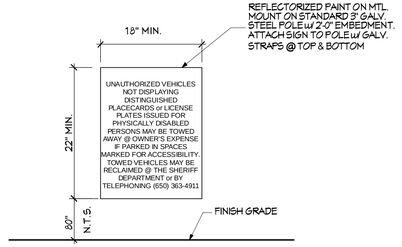
Monday, June 27, 2016 1:08 PM
BIM Server: CJW BIM Server 19 — BIM Server 19/2015/Maple Street Shelter_1

Monday, June 27, 2016 1:08 PM



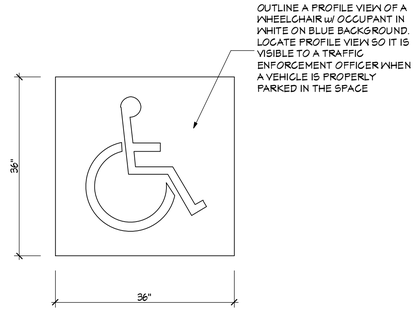
* PER CBC, SECTION 1129B.5

7 ACCESSIBILIE PARKING SYMBOL "J" DETAIL 1'-0"

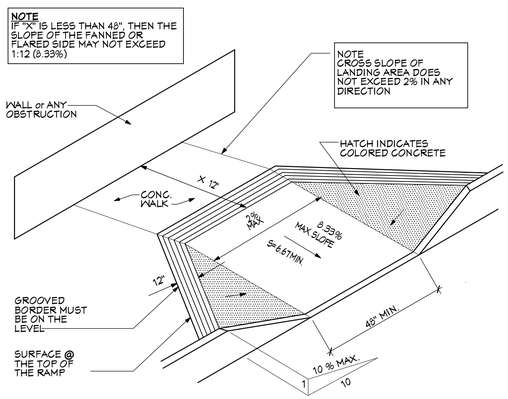


* PER CBC, SECTION 1129B.5

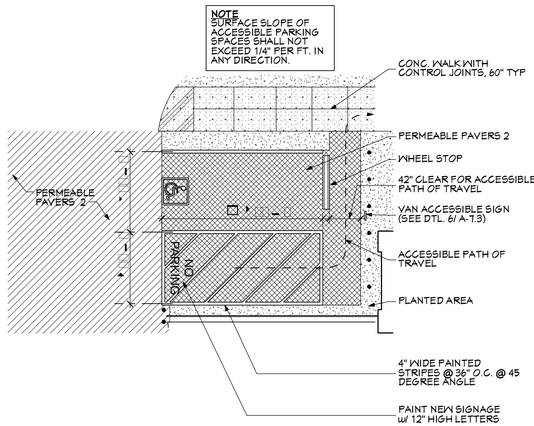
4 UNAUTHORIZED VEHICLE SIGN 1" = 1'-0"



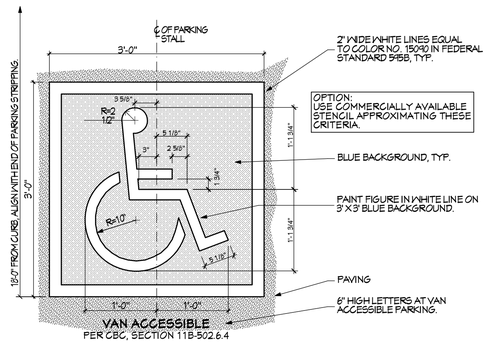
1 ACCESSIBILITY SYMBOL 1" = 1'-0"



8 H.C. RAMP CURB CUT DETAIL 1 1/2"= 1'-0"

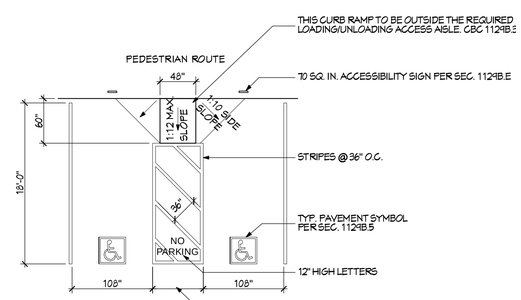


5 VAN ACCESSIBLE PARKING DETAIL 1/8" = 1'-0"

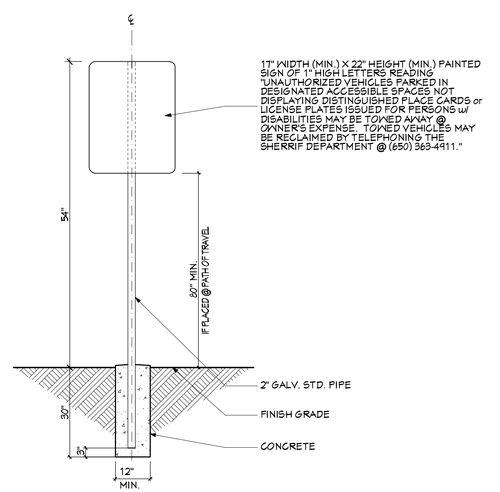


SIGN "H" (Pavement Marking)

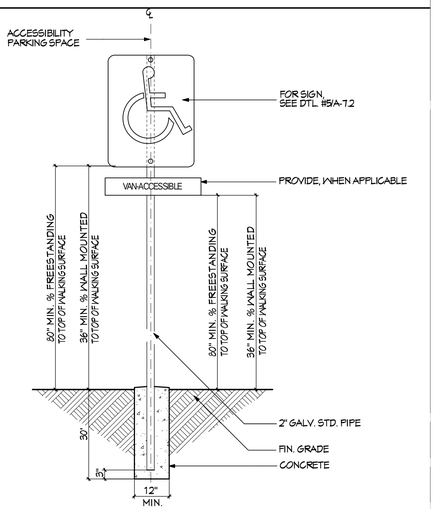
2 ACCESSIBILIY PARKING SYMBOL 1" = 1'-0"



9 H.C. PARKING RAMP DETAIL 1/8" = 1'-0"



6 VEHICLE SIGNAGE DETAIL 1/2" = 1'-0"



3 ACCESSIBLE PARKING SIGN 1/2" = 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT CARTER JENSEN WARD No. C-19397 REN. 6-30-17 STATE OF CALIFORNIA

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

ADA Details

◦ REVISIONS ◦

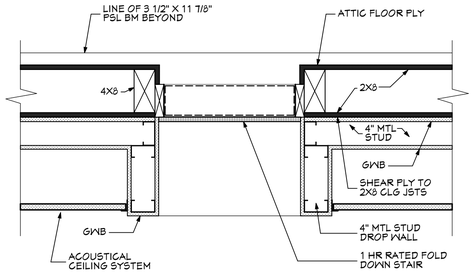
No.	Date	Notes
1	6-17-2016	Building Submittal

◦ JOB: 2015.2801

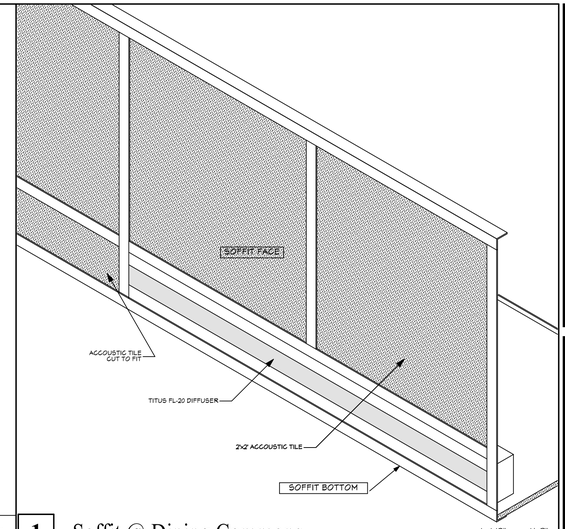
◦ DATE: 6/17/2016

◦ SHEET: A-7.10

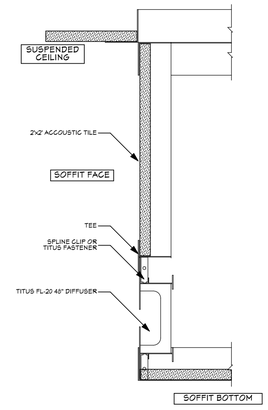
BIM Server: CJW BIM Server 19 – BIM Server 19/2015/Maple Street Shelter_1



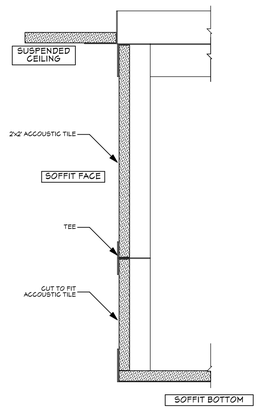
4 Attic Ladder Well 1" = 1'-0"



1 Soffit @ Dining Commons 1 1/2"= 1'-0"



2 Soffit Section @ Dining Commons 1 1/2"= 1'-0"



3 Soffit Section @ Dining Commons 1 1/2"= 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT
CARTER JENSEN WARD
No. C-19397
REN. 6-30-17
STATE OF CALIFORNIA

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Architectural Details

◦ REVISIONS ◦

No.	Date	Notes

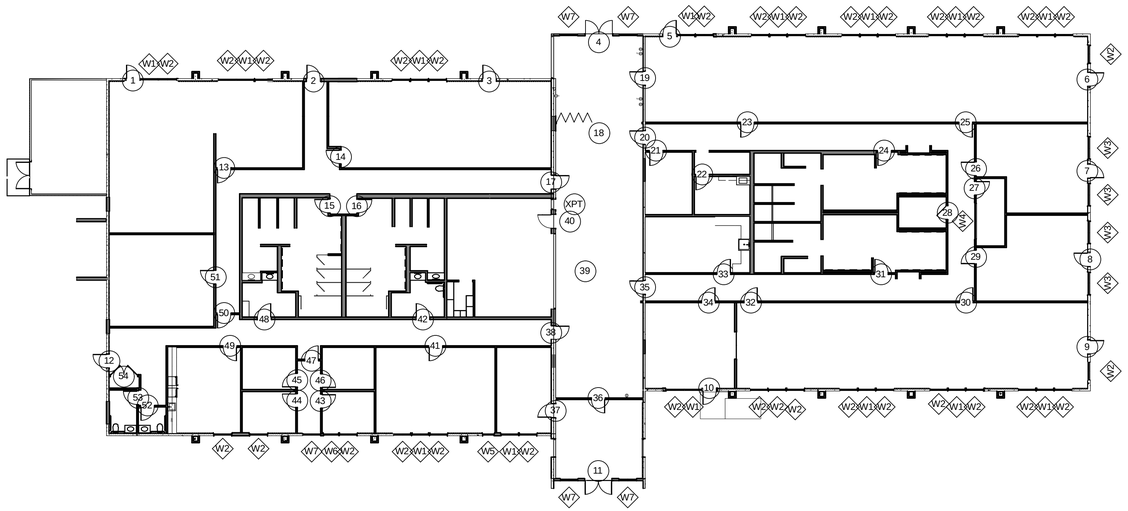
◦ JOB: 2015.2801

◦ DATE: 6/17/2016

◦ SHEET: A-7.11

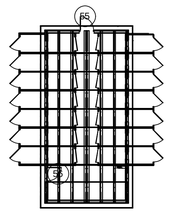
Monday, June 27, 2016 1:08 PM
BIM Server: CJW BIM Server 19 - BIM Server 19/2015/Maple Street Shelter_1

12:44 PM
Monday, June 27, 2016
BIM Server: CJW BIM Server 19 - BIM Server 19/2015/Maple Street Shelter_1



2 Door/Wdw Reference Plan

1/16" = 1'-0"



DOOR AND FRAME SCHEDULE

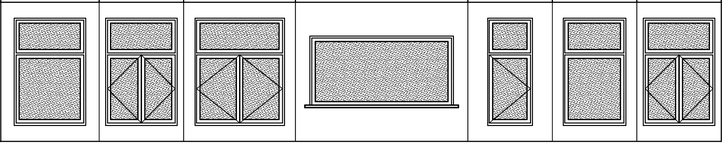
No.	Type	Size Wdth	Size Hgt	Hdwr Grp	Dr Mtrl.	Door Frame Matl	Head	Jamb	Threshold	Fire Rtg.	Swing	Notes
1	A	3'	7'	A	HM	HM				-	R	
2	A	3'	7'	A	HM	HM				-	R	
3	A	3'	7'	A	HM	HM				-	R	
4	B	6'	7'	B	HM	HM				-	R	
5	A	3'	7'	A	HM	HM				-	R	
6	A	3'	7'	A	HM	HM				-	R	
7	A	3'	7'	A	HM	HM				-	R	
8	A	3'	7'	A	HM	HM				-	R	
9	A	3'	7'	A	HM	HM				-	R	
10	A	3'	7'		HM	HM					R	
11	B	6'	7'	B	HM	HM				-	L	
12	A	3'	7'	A	HM	HM				-	L	
13	C	3'	7'	D	WD	HM				20 MIN	R	
14	C	3'	7'	D	WD	HM				20 MIN	R	
15	C	3'	7'	K	WD	HM				20 MIN	L	
16	C	3'	7'	K	WD	HM				20 MIN	R	
17	C	3'	7'	D	WD	HM				90 MIN	L	
18	L	19'	7'	-	WD	HM				None		
19	A	3'	7'	D	WD	HM				90 MIN	L	
20	J	3'	7'	D	WD	HM				90 MIN	L	
21	C	3'	7'	F	WD	HM				20 MIN	L	
22	C	3'	7'	G	WD	HM				20 MIN	L	
23	E	3'	7'	D	WD	HM				20 MIN	L	
24	C	3'	7'	K	WD	HM				20 MIN	L	
25	D	3'	7'	D	WD	HM				20 MIN	R	
26	E	3'	7'	D	WD	HM				20 MIN	R	
27	D	3'	7'	F	WD	HM				20 MIN	L	
28	C	3'	7'	G	WD	HM				20 MIN	R	
29	D	3'	7'	D	WD	HM				20 MIN	R	
30	E	3'	7'	D	WD	HM				20 MIN	L	
31	C	3'	7'	K	WD	HM				20 MIN	R	
32	E	3'	7'	D	WD	HM				20 MIN	L	
33	E	3'	7'	K	WD	HM				20 MIN	L	
34	E	3'	7'	D	WD	HM				90 MIN	L	
35	J	3'	7'	D	WD	HM				-	L	
36	C	3'	7'	C	WD	HM				90 MIN	L	
37	C	3'	7'	E	WD	HM				90 MIN	R	
38	C	3'	7'	D	-	STEEL				90 MIN	L	
39	G	16'-6"	7'	-	Aluminum Louver	HM				90 MIN		
39a	M	2'	3'-8 5/16"		Aluminum Louver	HM						
40	C	3'	7'	E	WD	HM				-	R	
41	C	3'	7'	G	WD	HM				20 MIN	R	
42	C	3'	7'	E	WD	HM				45 MIN	L	
43	C	3'	7'	J	WD	HM				-	L	
44	C	3'	7'	F	WD	HM				-	L	
45	C	3'	7'	F	WD	HM				-	L	
46	C	3'	7'	F	WD	HM				-	L	
47	C	3'	7'	F	WD	HM				20 MIN	R	
48	C	3'	7'	E	WD	HM				45 MIN	R	
49	C	3'	7'	J	WD	HM				20 MIN	R	
50	C	3'	7'	D	WD	HM				45 MIN	L	
51	C	3'	7'	D	WD	HM				20 MIN	L	
52	C	3'	7'	H	WD	HM				20 MIN	R	
53	C	3'	7'	H	WD	HM				20 MIN	R	
54	H	6'	7'	L	WD	HM				20 MIN	L	
55	F	3'	7'	A	HM	HM				-	L	
56	F	3'	7'	A	HM	HM				-	L	

WINDOW SCHEDULE

ID	Size Width	Size Hgt	Material	Head	Jamb	Sill	Type	Head Ht	Quantity	Notes
W1	4'	6'	05 | Aluminum Plain					9'-1 3/4"	1	
W1	4'	6'	05 | Aluminum Plain					9'-2"	13	
W2	4'	6'	05 | Aluminum Plain					9'-1 3/4"	12	
W2	4'	6'	05 | Aluminum Plain					9'-2"	20	
W3	5'	6'	05 | Aluminum Plain					9'-2"	4	
W4	8'	4'	05 | Aluminum Plain					9'-2"	1	
W5	2'-6"	6'	05 | Aluminum Plain					9'-2"	1	
W6	3'-6"	6'	05 | Aluminum Plain					9'-2"	1	
W7	4'	6'	05 | Aluminum Plain					9'-2"	5	

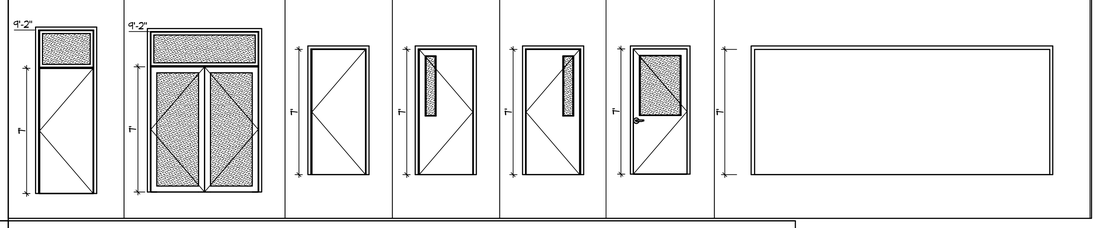
WINDOW TYPES

ID	W1	W2	W3	W4	W5	W6	W7
Style							
Quantity	14	32	4	1	1	1	5
W x H Size	4'-0"x6'-0"	4'-0"x6'-0"	5'-0"x6'-0"	8'-0"x4'-0"	2'-6"x6'-0"	3'-6"x6'-0"	4'-0"x6'-0"



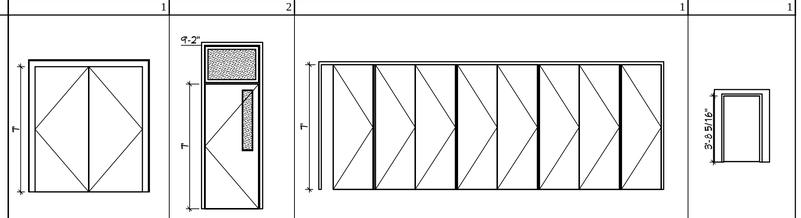
Door Type

Type	A	B	C	D	E	F	G
Quantity	11	2	27	3	6	2	1



Door Type

Type	H	J	L	M
Quantity	1	2	1	1



CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED ARCHITECT
CARTER JENSEN WARE
No. C-19397
REN. 6-30-17
STATE OF CALIFORNIA

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Door & Window Schedules

◦ REVISIONS ◦

No.	Date	Notes
1	6-17-2016	Building Submittal

◦ JOB: 2015.2801

◦ DATE: 6/17/2016

◦ SHEET: A-8.1

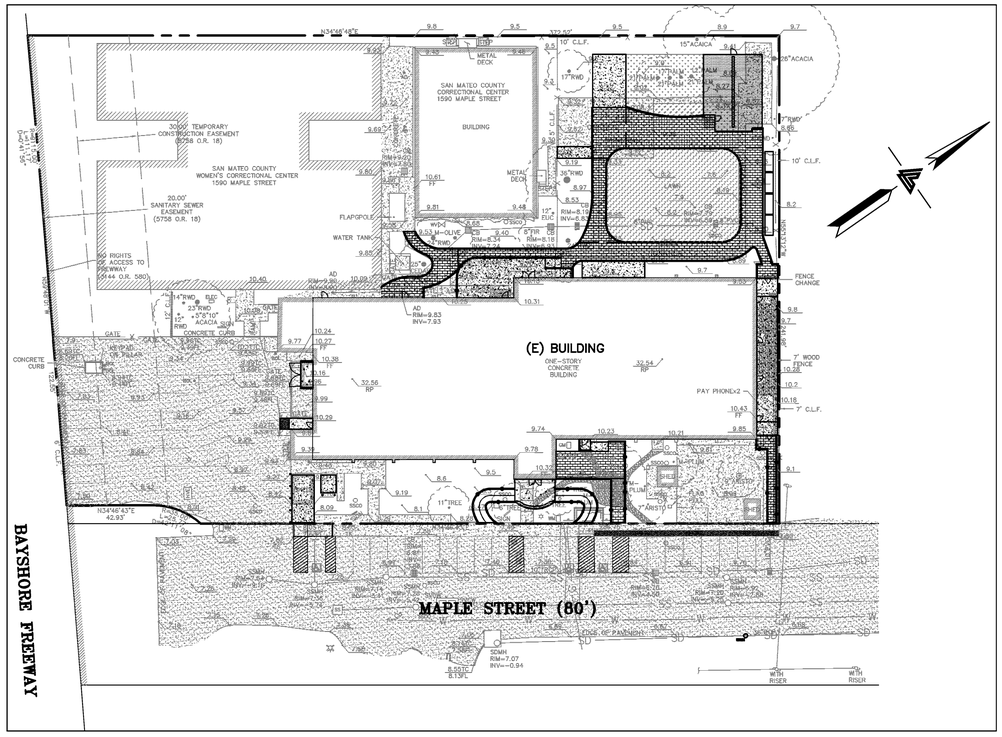
IMPROVEMENT PLANS
LIFEMOVES MAPLE STREET SHELTER
1580 MAPLE STREET
REDWOOD CITY, CALIFORNIA

LEGEND

DESCRIPTION	EXISTING	PROPOSED
BOUNDARY		
PROPERTY LINE		
RETAINING WALL		
RAINWATER TIGHTLINE		RW RW
SUBDRAIN LINE		SUB
TIGHTLINE		TL
STORM DRAIN LINE	SD	SD
SANITARY SEWER LINE	SS	SS
WATER LINE	W	W
GAS LINE	G	G
PRESSURE LINE	P	P
JOINT TRENCH	JT	JT
SET BACK LINE		
CONCRETE VALLEY GUTTER		
EARTHEN SWALE		
CATCH BASIN	CB	CB
JUNCTION BOX	JB	JB
AREA DRAIN	AD	AD
CURB INLET		
STORM DRAIN MANHOLE	SDMH	SDMH
FIRE HYDRANT		
SANITARY SEWER MANHOLE	SSMH	SSMH
SPOT ELEVATION	222.57 INV	222.57 INV
FLOW DIRECTION		
DEMOLISH/REMOVE		D
BENCHMARK		
CONTOURS	200	200
TREE TO BE REMOVED	XX" TREE	XX" TREE

ABBREVIATIONS

AB	AGGREGATE BASE	LF	LINEAR FEET
AC	ASPHALT CONCRETE	MAX	MAXIMUM
ACC	ACCESSIBLE	MH	MANHOLE
AD	AREA DRAIN	MIN	MINIMUM
BC	BEGINNING OF CURVE	MON.	MONUMENT
B & D	BEARING & DISTANCE	(N)	NEW
BM	BENCHMARK	NO.	NUMBER
BW/FG	BOTTOM OF WALL/FINISH GRADE	NTS	NOT TO SCALE
CB	CATCH BASIN	O.C.	ON CENTER
C & G	CURB AND GUTTER	O/	OVER
℄	CENTER LINE	(PA)	PLANTING AREA
CPP	CORRUGATED PLASTIC PIPE (SMOOTH INTERIOR)	PED	PEDESTRIAN
		PIV	POST INDICATOR VALVE
CO	CLEANOUT	PSS	PUBLIC SERVICES EASEMENT
COTG	CLEANOUT TO GRADE	P.	PROPERTY LINE
CONC	CONCRETE	PP	POWER POLE
CONST	CONSTRUCT or –TION	PUE	PUBLIC UTILITY EASEMENT
CONC COR	CONCRETE CORNER	PVC	POLYVINYL CHLORIDE
CY	CUBIC YARD	R	RADIUS
D	DIAMETER	RCP	REINFORCED CONCRETE PIPE
DI	DROP INLET	RIM	RIM ELEVATION
DIP	DUCTILE IRON PIPE	RW	RAINWATER
EA	EACH	R/W	RIGHT OF WAY
EC	END OF CURVE	S	SLOPE
EG	EXISTING GRADE	S.A.D.	SEE ARCHITECTURAL DRAWINGS
EL	ELEVATIONS	SAN	SANITARY
EP	EDGE OF PAVEMENT	SD	STORM DRAIN
EQ	EQUIPMENT	SDMH	STORM DRAIN MANHOLE
EW	EACH WAY	SHT	SHEET
(E)	EXISTING	S.L.D.	SEE LANDSCAPE DRAWINGS
FC	FACE OF CURB	SPEC	SPECIFICATION
FF	FINISHED FLOOR	SS	SANITARY SEWER
FG	FINISHED GRADE	SSCO	SANITARY SEWER CLEANOUT
FH	FIRE HYDRANT	SSMH	SANITARY SEWER MANHOLE
FL	FLOW LINE	ST.	STREET
FS	FINISHED SURFACE	STA	STATION
G	GAS	STD	STANDARD
GA	GAGE OR GAUGE	STRUCT	STRUCTURAL
GB	GRADE BREAK	T	TELEPHONE
HDPE	HIGH DENSITY CORRUGATED POLYETHYLENE PIPE	TC	TOP OF CURB
		TEMP	TEMPORARY
HORIZ	HORIZONTAL	TP	TOP OF PAVEMENT
HI PT	HIGH POINT	TW/FG	TOP OF WALL/FINISH GRADE
H&T	HUB & TACK	TYP	TYPICAL
ID	INSIDE DIAMETER	VC	VERTICAL CURVE
INV	INVERT ELEVATION	VCP	VITRIFIED CLAY PIPE
JB	JUNCTION BOX	VERT	VERTICAL
JT	JOINT TRENCH	W/	WITH
JP	JOINT UTILITY POLE	W, WL	WATER LINE
L	LENGTH	WM	WATER METER
LNDG	LANDING	WWF	WELDED WIRE FABRIC



KEY MAP
1" = 40'

GENERAL NOTES

1. ELEVATIONS AND LOCATIONS OF ALL EXISTING UTILITY CROSSINGS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO START OF ANY CONSTRUCTION AFFECTING SAID LINES. CONTACT USA AT (800) 642–2444 AT LEAST TWO WORKING DAYS PRIOR TO EXCAVATION.

2. ALL APPLICABLE WORK SHALL BE DONE IN ACCORDANCE WITH THE COUNTY STANDARD TECHNICAL SPECIFICATIONS AND DETAILS, PREPARED IN THE OFFICE OF THE ENGINEERING DIVISION, INCLUDING MODIFICATIONS CONTAINED HEREIN.

3. THE CONTRACTOR SHALL RESTORE ALL DAMAGED, REMOVED OR OTHERWISE DISTURBED WALLS, FENCES, SERVICES, UTILITIES, IMPROVEMENTS OR FEATURES OF WHATEVER NATURE, DUE TO CONTRACTOR'S WORK.

4. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE INSTALLATION OF FACILITIES BY PG&E. PACIFIC BELL, AND CABLE T.V. INSTALLATION. VALVE BOXES AND MANHOLES, AND STRUCTURES TO BE SET TO GRADE IN CONCRETE AFTER PAVING.

5. ALL STREET MONUMENTS AND OTHER PERMANENT MONUMENTS DISTURBED DURING THE PROCESS OF CONSTRUCTION SHALL BE REPLACED BEFORE ACCEPTANCE OF THE IMPROVEMENTS BY THE CITY ENGINEER/COUNTY.

6. THE CONTRACTOR SHALL GIVE THE CITY INSPECTOR TWO WORKING DAYS ADVANCE NOTICE FOR INSPECTION. (650) 780–7380

7. FOR LANE CLOSURES, THE CONTRACTOR SHALL PREPARE A TRAFFIC CONTROL PLAN AND OBTAIN APPROVAL OF THE CITY ENGINEER BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PROVIDE FLAGMEN, CONES OR BARRICADES, AS NECESSARY TO CONTROL TRAFFIC AND PREVENT HAZARDOUS CONDITIONS PER THE WORK AREA TRAFFIC CONTROL HANDBOOK.

8. PEDESTRIAN, PUBLIC ACCESSES, WHEELCHAIR ACCESSES SHALL BE MAINTAINED DURING THE CONSTRUCTION TO THE SATISFACTION OF THE CITY ENGINEER.

9. NO TRENCHES OR HOLES SHALL BE LEFT OPEN OVERNIGHT; USE STEEL PLATING OR HOT–MIX ASPHALT AS REQUIRED TO PROTECT OPEN TRENCHES OVERNIGHT.

10. THE CONTRACTOR SHALL CONTROL DUST AT ALL TIMES AND SWEEP STREETS AS OFTEN AS NECESSARY DURING CONSTRUCTION AS REQUIRED BY THE COUNTY ENGINEER.

11. ALL REVISIONS TO THIS PLAN MUST BE REVIEWED AND APPROVED BY THE CITY ENGINEER PRIOR TO CONSTRUCTION AND SHALL BE ACCURATELY SHOWN ON REVISED PLANS STAMPED AND SIGNED BY COUNTY ENGINEER PRIOR TO THE INSTALLATION OF THE IMPROVEMENTS.

12. ALL CONSTRUCTION STAKING FOR CURB, GUTTER, SIDEWALK, SANITARY SEWERS, STORM DRAINS, WATER LINES, FIRE HYDRANTS, ELECTROLIERS, ECT., SHALL BE DONE BY A REGISTERED CIVIL ENGINEER OF LICENSED LAND SURVEYOR.

13. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE MOST CURRENT VERSION OF THE DETAILS AND SPECIFICATIONS FROM THE CITY OF REDWOOD CITY AND COUNTY.

EASEMENT NOTE

EASEMENTS SHOWN ARE PER TITLE REPORT PREPARED BY TITLE INSURANCE AND TRUST COMPANY, NO. 406153–RWC, DATED SEPTEMBER 20, 1971.

UTILITIES / SERVICES

WATER	CITY OF REDWOOD CITY PUBLIC UTILITY COMPANY
SEWER	CITY OF REDWOOD CITY SANITARY DISTRICT
GAS	PACIFIC GAS AND ELECTRIC (PG&E)
ELECTRICITY	PACIFIC GAS AND ELECTRIC (PG&E)
TELEPHONE	AT&T
FIRE PROTECTION	CITY OF REDWOOD CITY

ESTIMATED EARTHWORK QUANTITIES

CUBIC YARDS	CUT	FILL	TOTAL CUBIC YARDS
BUILDING / GARAGE	30	–	30
DRIVEWAY / PARKING	–	–	–
HARDSCAPE	160	–	160
LANDSCAPE	60	–	60
SUBTOTAL	250		250
TOTAL EXPORT (CU. YD.)			250

NOTE:

GRADING QUANTITIES REPRESENT BANK YARDAGE. IT DOES NOT INCLUDE ANY SWELLING OR SHRINKAGE FACTORS AND IS INTENDED TO REPRESENT IN–SITU CONDITIONS. QUANTITIES DO NOT INCLUDE OVER–EXCAVATION, TRENCHING, STRUCTURAL FOUNDATIONS OR PIERS, OR POOL EXCAVATION (IF ANY). NOTE ADDITIONAL EARTHWORKS, SUCH AS KEYWAYS OR BENCHING MAY BE REQUIRED BY THE GEOTECHNICAL ENGINEER IN THE FIELD AT TIME OF CONSTRUCTION. CONTRACTOR TO VERIFY QUANTITIES.

NOTES

ALL DISTANCES AND DIMENSIONS ARE IN FEET AND DECIMALS OF A FOOT.

UNDERGROUND UTILITY LOCATION IS BASED ON SURFACE EVIDENCE.

BUILDING FOOTPRINTS ARE SHOWN AT GROUND LEVEL.

FINISH FLOOR ELEVATIONS ARE TAKEN AT DOOR THRESHOLD (EXTERIOR)

SITE BENCHMARK

SURVEY CONTROL POINT
MAG AND SHINER SET IN ASPHALT
ELEVATION = 7.47' (NAVD 88)

BENCHMARK

CITY OF REDWOOD CITY BENCHMARK
BENCH MARK 62
MAPLE ST AT CHEMICAL WAY – SET BRASS DISC STAMPED "CITY OF REDWOOD CITY BENCHMARK" ON HEADWALL OF CULVERT IN FRONT OF REDWOOD CITY POLICE DEPARTMENT, NORTH SIDE OF CULVERT, 11' FROM FIRE HYDRANT.
ELEVATION = 10.82' (NAVD 88)

OWNER'S INFORMATION

OWNER:
COUNTY OF SAN MATEO
55 COUNTY CENTER–5TH FL
REDWOOD CITY, CA 94063

APN: 052–532–020

REFERENCES

THIS GRADING AND DRAINAGE PLAN IS SUPPLEMENTAL TO:

1. TOPOGRAPHIC SURVEY BY LEA & BRAZE ENGINEERING INC., ENTITLED; "TOPOGRAPHIC SURVEY"
   1580 MAPLE STREET
   REDWOOD CITY, CA
   DATED: 01–06–16
   JOB#2151288

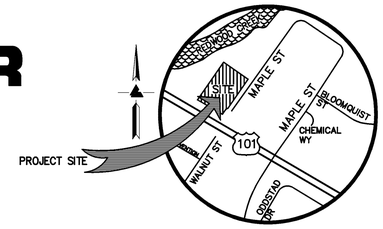
2. SITE PLAN BY CJW ARCHITECTURE
   ENTITLED:
   "SITE PLAN"
   1580 MAPLE STREET
   REDWOOD CITY, CA 94063

3. SOIL REPORT BY XXX. ENTITLED:
   "XXX"
   123 MAIN ST
   ANYTOWN, USA
   JOB# XXX
   DATE: XXX

THE CONTRACTOR SHALL REFER TO THE ABOVE NOTED SURVEY AND PLAN, AND SHALL VERIFY BOTH EXISTING AND PROPOSED ITEMS ACCORDING TO THEM.

NOTE:
FOR CONSTRUCTION STAKING SCHEDULING OR QUOTATIONS PLEASE CONTACT ALEX ABAYA AT LEA & BRAZE ENGINEERING (510)887-4086 EXT 116. aabaya@leabraze.com

CALL BEFORE YOU DIG 1-800-227-2600 USA UNDERGROUND SERVICE ALERT



VICINITY MAP
NO SCALE

"GRADING CERTIFICATE" (TO BE SIGNED AT PROJECT COMPLETION)

(TO BE SIGNED AT PROJECT COMPLETION)
PRIOR TO OCCUPANCY, A LICENSED CIVIL ENGINEER SHALL CERTIFY TO THE COUNTY THAT THE SITE HAS BEEN GRADED TO THE ELEVATIONS SHOWN ON THE PLAN, AND THAT THE SITE WILL DRAIN PROPERLY.

JAMES TOBY — DATE
RCE# 63127
LICENSE EXPIRES 06–30–18
LEA & BRAZE ENGINEERING

"GEOTECHNICAL ENGINEER'S CERTIFICATE"

"REVIEWED AND APPROVED FOR CONFORMANCE WITH SOILS REPORT REQUIREMENTS".

ANNMARIE LUCCHESI — DATE
GEOTECHNICAL ENGINEER

RECORD DRAWINGS (TO BE SIGNED AT PROJECT COMPLETION)

(TO BE SIGNED AT PROJECT COMPLETION)
THESE RECORD DRAWINGS ARE BASED ON LIMITED FIELD REVIEW AND FIELD SURVEYS, AS NECESSARY BY LEA AND BRAZE ENGINEERING, AND WE ASSUME NO LIABILITY FOR THE ACCURACY OF THE INFORMATION.

JAMES TOBY — DATE
RCE# 63127
LICENSE EXPIRES 06–30–18
LEA & BRAZE ENGINEERING

SHEET INDEX

REGISTERED PROFESSIONAL ENGINEER — JAMES TOBY — No. 63127 — CIVIL — STATE OF CALIFORNIA — ORIGINAL SIGNATURES IN BLUE INK

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS • LAND SURVEYORS
BAY AREA REGION
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(P) (510) 887–4086
(F) (510) 887–3019

SACRAMENTO REGION
3017 DOUGLAS BLVD, # 300
ROSEVILLE, CA 95661
(P) (916) 966–1338
(F) (916) 797–7363

WWW.LEABRAZE.COM

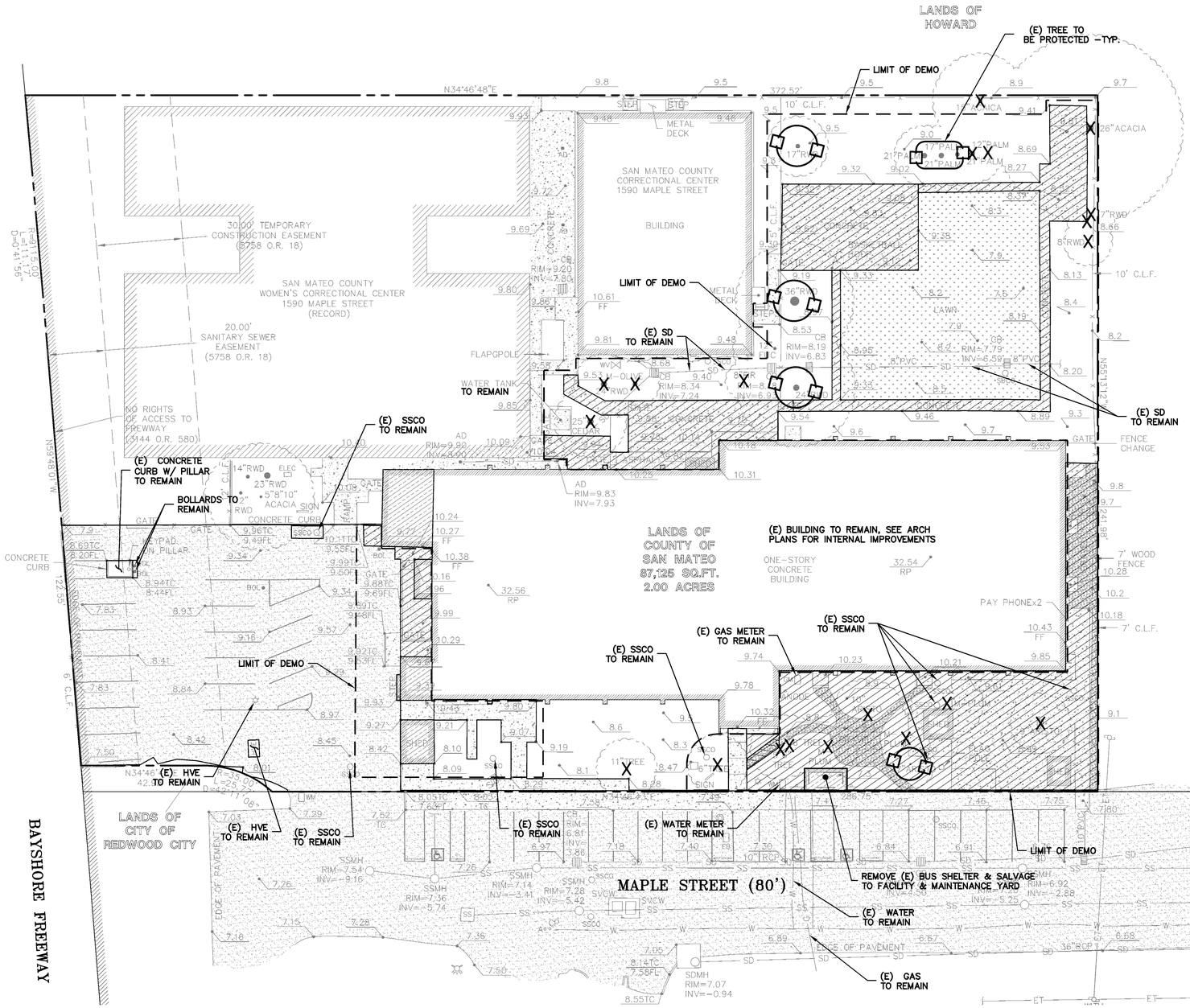
IMPROVEMENT PLANS
LIFEMOVES MAPLE STREET SHELTER
1580 MAPLE STREET
SAN MATEO COUNTY
APN: 052–532–020

TITLE SHEET

REVISIONS	BY
–	–
–	–
–	–
–	–
–	–

JOB NO:	2151287
DATE:	06–17–16
SCALE:	AS NOTED
DESIGN BY:	MH
DRAWN BY:	WM
SHEET NO:	C–1.0

1 OF 17 SHEETS



0 10 20 40

SCALE: 1" = 20'

LEGEND

- REMOVE (E) STRUCTURAL. ALL UNDERGROUND UTILITY TO REMAIN UNLESS NOTED ON PLANS
- REMOVE (E) CONCRETE AND STRUCTURES, UNLESS CALLED OUT TO REMAIN
- TREE PROTECTION
- TREE TO BE REMOVED. CONFIRM ALL TREE REMOVAL WITH ARCHITECT'S AND LANSCAPE ARCHETECT'S PLANS.
- LIMITS OF DEMOLITION

DEMOLITION NOTES:

1. DEMOLISH (E) IMPROVEMENTS AS NECESSARY TO ACCOMMODATE (N) CONSTRUCTION. NO DEMOLITION SHALL COMMENCE WITHOUT REQUIRED DEMOLITION PERMITS.
2. SEE ELECTRICAL PLANS FOR REMOVAL OR RELOCATION OF ALL ELEC/COMM CONDUITS, BOXES, LINE AND ETC
3. SEE UTILITY PLAN FOR ALL NEW TIE-IN AND RELOCATION OF STORM, SANITARY SEWER AND WATER.
4. PRIOR TO DEMOLITION CONTRACTOR SHALL COORDINATE ALL SERVICE PROVIDERS FOR DISCONNECTING PROCESS
5. BACKFILL ALL DEPRESSIONS AND TRENCHES FROM FROM DEMOLITION OF FOUNDATIONS & UTILITIES TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.

REGISTERED PROFESSIONAL ENGINEER
JAMES TOBY
No. 63127
CIVIL
STATE OF CALIFORNIA
ORIGINAL SIGNATURES IN BLUE INK

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS · LAND SURVEYORS
BAY AREA REGION
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(P) (510) 887-4086
(F) (510) 887-3019

SACRAMENTO REGION
3017 DOUGLAS BLVD. # 300
ROSEVILLE, CA 95661
(P) (916)966-1338
(F) (916)797-7363
WWW.LEABRAZE.COM

IMPROVEMENT PLANS
LIFEMOVES MAPLE STREET SHELTER
1580 MAPLE STREET

SAN MATEO COUNTY

APN: 052-532-020

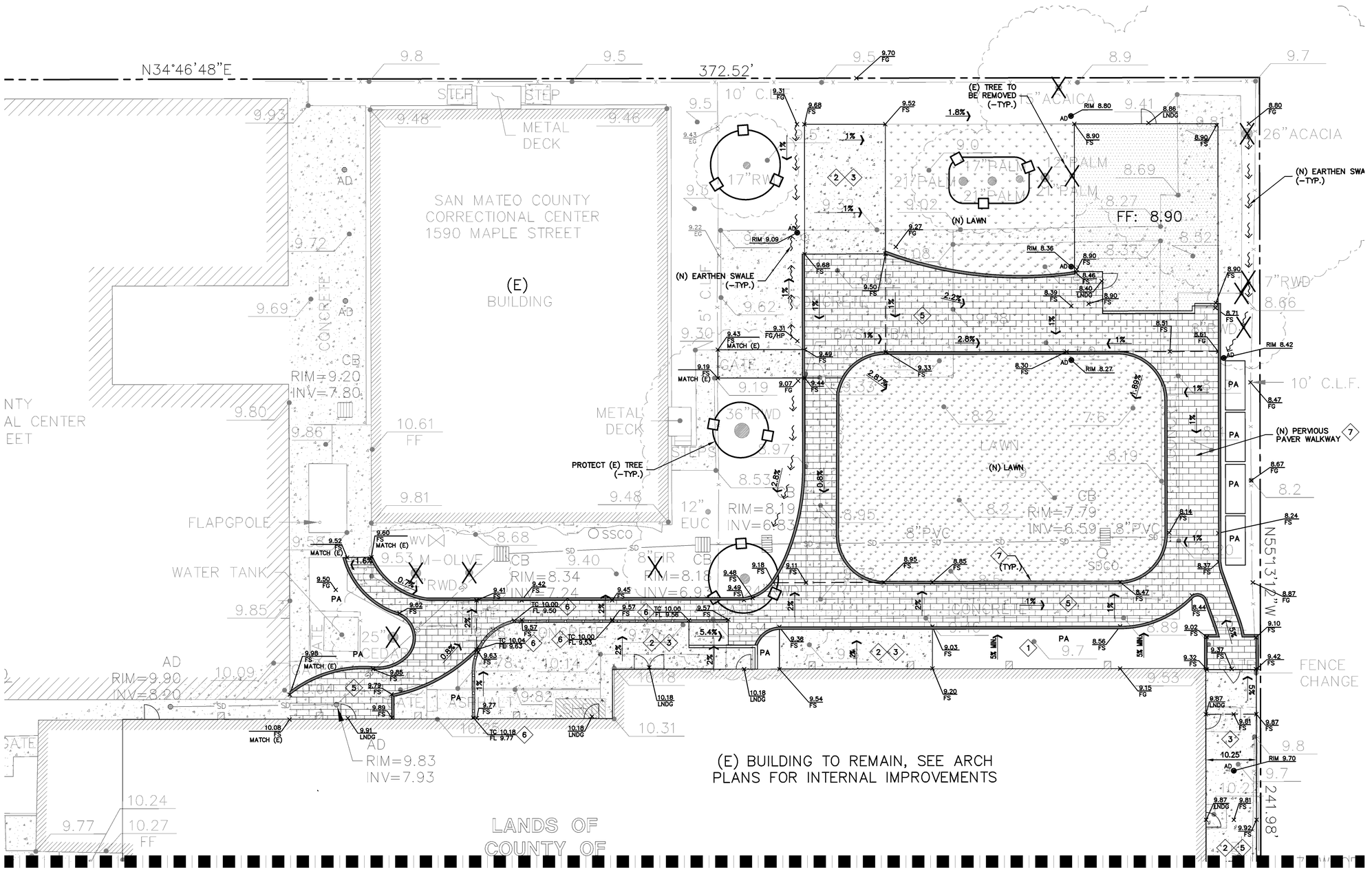
DEMOLITION PLAN

REVISIONS	BY
-	-
-	-
-	-
-	-
-	-

JOB NO: 2151287
DATE: 06-17-16
SCALE: AS NOTED
DESIGN BY: MH
DRAWN BY: WM
SHEET NO:

C-2.0

2 OF 17 SHEETS



MATCHLINE SEE SHEET C-3.1

LEGEND

- GRAVEL
- CONCRETE
- PAVERS
- GRASS
- DETECTABLE WARNING SURFACE

FLATWORK KEYNOTES 1 TO 8

1. FINISHED GRADES AT BUILDING PERIMETER SHALL BE SLOPED AT A MINIMUM OF 5% FOR THE FIRST 10' AWAY FROM THE BUILDING PER CBC 1804.3 OR TO AN APPROVED DRAINAGE SWALE OR STRUCTURE. GRADES SHALL CONTINUE TO SLOPE TOWARDS POSITIVE DRAINAGE AND A POSITIVE OUTFALL. MAINTAIN 8" CLEARANCE BETWEEN FINISH EARTHEN GRADE AND BOTTOM OF MUD SILL AT ALL TIMES PER CBC 2304.11.2 UNLESS STRUCTURAL DETAILING ALLOWS LESS. REFER TO STRUCTURAL PLANS FOR FOUNDATION DESIGN AND DETAILS
2. PROVIDE 2% (1% MIN.) SLOPE ACROSS FLAT WORK AND/OR PAVING PER CBC 2304.11.2. SLOPE TOWARDS POSITIVE DRAINAGE AS SHOWN ON PLAN.
3. (N) REDWOOD HEADER , SEE DETAIL 1 ON SHEET C-5.1.
4. (N) UTILITY PAD/ CONCRETE APRON, SEE DETAIL 4 SHEET C-5.0.
5. (N) UNIT PAVER WALKWAYS, SEE DETAIL 5 ON SHEET C-5.0.
6. (N) VERTICAL CURB, SEE ON DETAIL 7 ON C-5.0
7. (N) FLUSH CURB, SEE DETAIL 2 ON SHEET C-5.0

NOTE:
FOR CONSTRUCTION STAKING SCHEDULING OR QUOTATIONS PLEASE CONTACT ALEX ABAYA AT LEA & BRAZE ENGINEERING (510)887-4086 EXT 116. aabaya@leabraze.com

REGISTERED PROFESSIONAL ENGINEER JAMES TOBY No. 63127 CIVIL STATE OF CALIFORNIA ORIGINAL SIGNATURES IN BLUE INK

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS · LAND SURVEYORS
BAY AREA REGION
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(P) (510) 887-4086
(F) (510) 887-3019
SACRAMENTO REGION
3017 DOUGLAS BLVD, # 300
ROSEVILLE, CA 95661
(P) (916)366-1328
(F) (916)797-7363
WWW.LEABRAZE.COM

IMPROVEMENT PLANS
LIFEMOVES MAPLE STREET SHELTER
1580 MAPLE STREET
APN: 052-532-020
SAN MATEO COUNTY

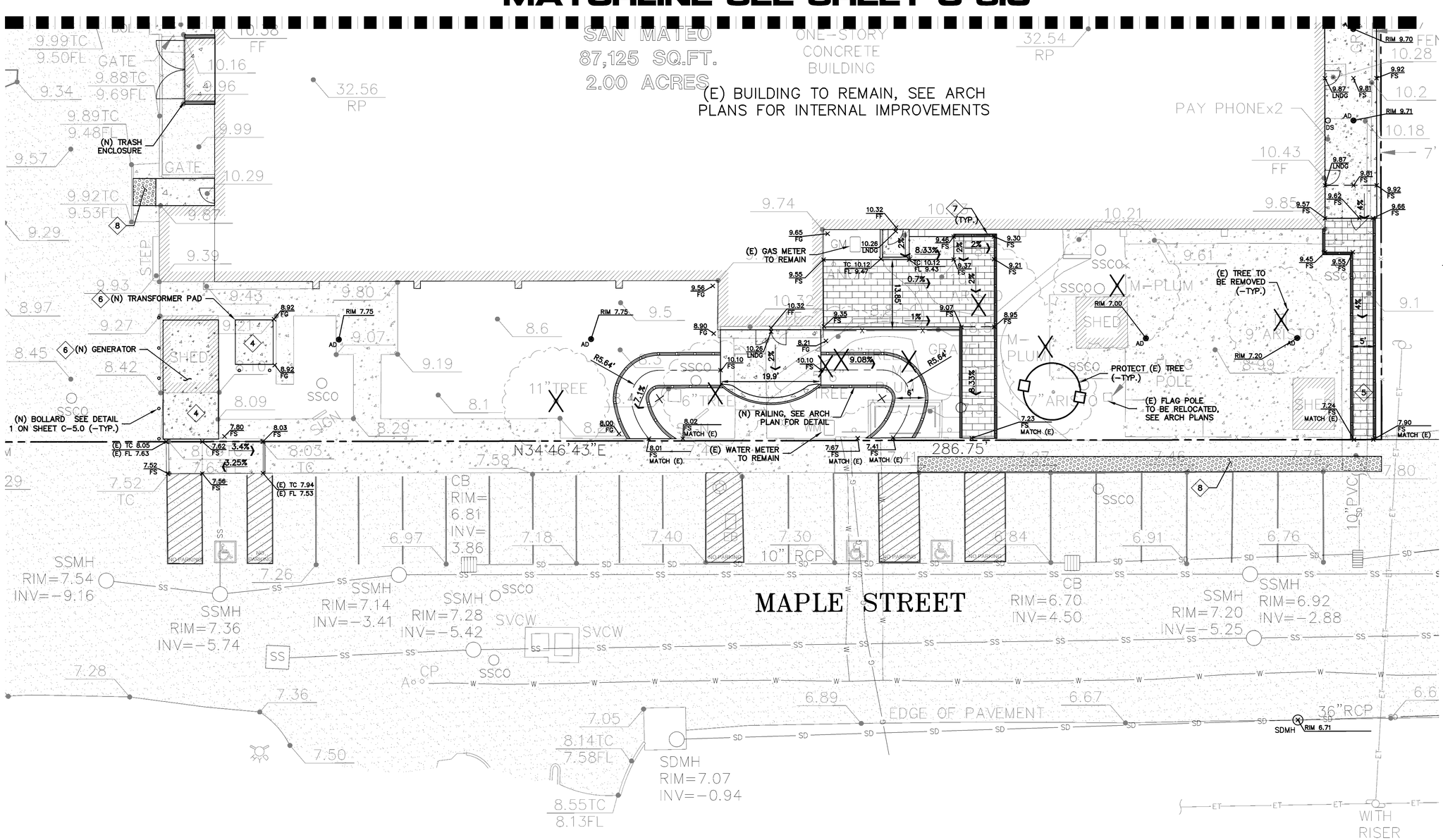
GRADING AND DRAINAGE PLAN

REVISIONS	BY
-	-
-	-
-	-
-	-
-	-

JOB NO:	2151287
DATE:	06-17-16
SCALE:	AS NOTED
DESIGN BY:	MH
DRAWN BY:	WM
SHEET NO:	C-3.0

3 OF 17 SHEETS

MATCHLINE SEE SHEET C-3.0



LEGEND

- GRAVEL
- CONCRETE
- PAVERS
- GRASS
- DETECTABLE WARNING SURFACE

FLATWORK KEYNOTES 1 TO 8

1. FINISHED GRADES AT BUILDING PERIMETER SHALL BE SLOPED AT A MINIMUM OF 5% FOR THE FIRST 10' AWAY FROM THE BUILDING PER CBC 1804.3 OR TO AN APPROVED DRAINAGE SWALE OR STRUCTURE. GRADES SHALL CONTINUE TO SLOPE TOWARDS POSITIVE DRAINAGE AND A POSITIVE OUTFALL. MAINTAIN 8" CLEARANCE BETWEEN FINISH EARTHEN GRADE AND BOTTOM OF MUD SILL AT ALL TIMES PER CBC 2304.11.2 UNLESS STRUCTURAL DETAILING ALLOWS LESS. REFER TO STRUCTURAL PLANS FOR FOUNDATION DESIGN AND DETAILS
2. PROVIDE 2% (1% MIN.) SLOPE ACROSS FLAT WORK AND/OR PAVING PER CBC 2304.11.2. SLOPE TOWARDS POSITIVE DRAINAGE AS SHOWN ON PLAN.
3. (N) REDWOOD HEADER , SEE DETAIL 1 ON SHEET C-5.1.
4. (N) UTILITY PAD/ CONCRETE APRON, SEE DETAIL 4 SHEET C-5.0.
5. (N) UNIT PAVER WALKWAYS, SEE DETAIL 5 ON SHEET C-5.0.
6. (N) VERTICAL CURB, SEE ON DETAIL 7 ON C-5.0
7. (N) FLUSH CURB, SEE DETAIL 2 ON SHEET C-5.0
8.

NOTE:
FOR CONSTRUCTION STAKING SCHEDULING OR QUOTATIONS PLEASE CONTACT ALEX ABAYA AT LEA & BRAZE ENGINEERING (510)887-4086 EXT 116. aabaya@leabraze.com

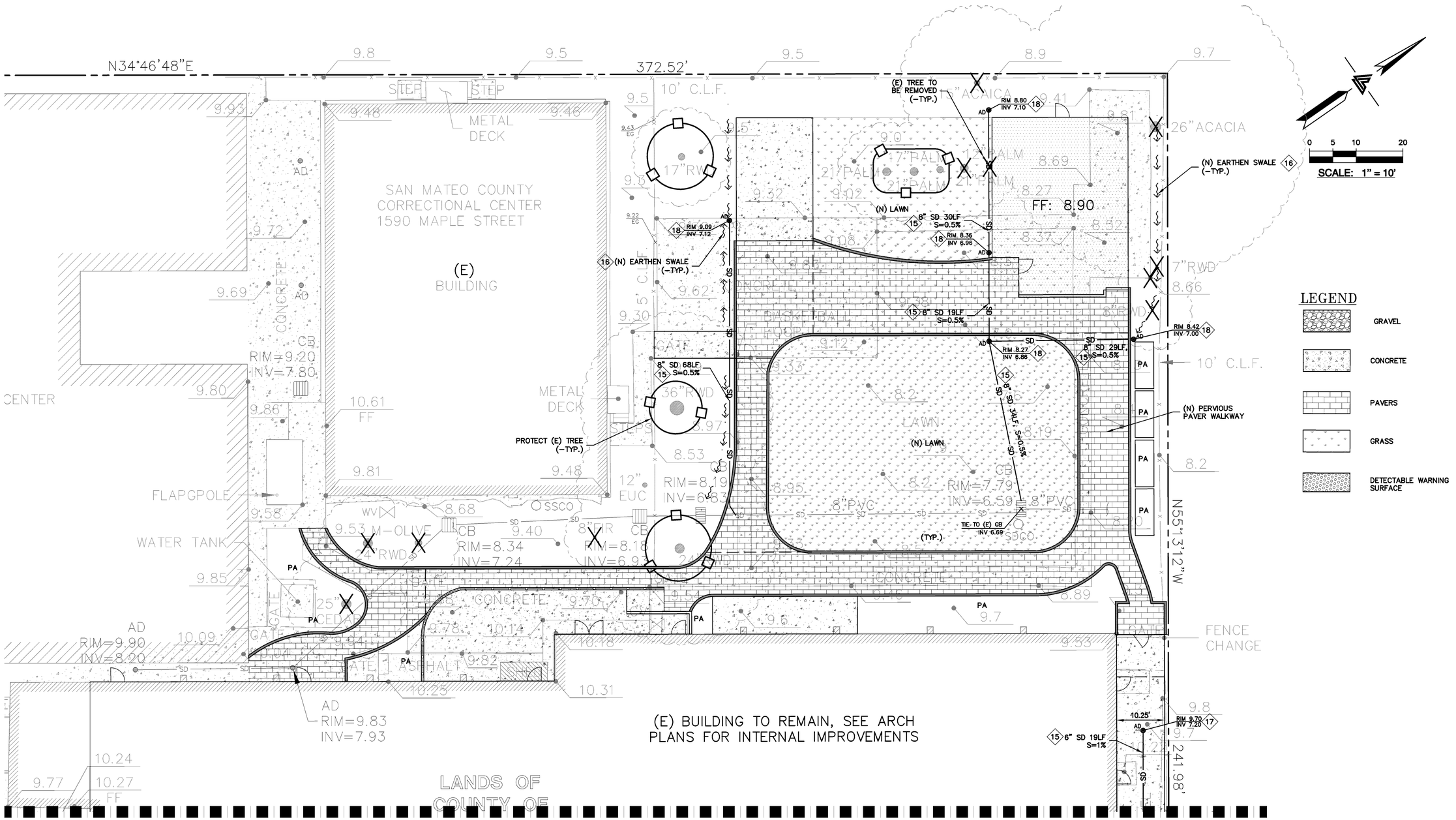
REGISTERED PROFESSIONAL ENGINEER
JAMES TOBY
No. 63127
CIVIL
STATE OF CALIFORNIA
ORIGINAL SIGNATURES IN BLUE INK

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS • LAND SURVEYORS
BAY AREA REGION
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(P) (510) 887-4086
(F) (510) 887-3019
SACRAMENTO REGION
3017 DOUGLAS BLVD, # 300
ROSEVILLE, CA 95661
(P) (916)366-1328
(F) (916)797-7363
WWW.LEABRAZE.COM

IMPROVEMENT PLANS
LIFEMOVES MAPLE STREET SHELTER
1580 MAPLE STREET
APN: 052-532-020
SAN MATEO COUNTY

GRADING AND DRAINAGE PLAN

-	-
-	-
-	-
-	-
-	-
REVISIONS	BY
JOB NO:	2151287
DATE:	06-17-16
SCALE:	AS NOTED
DESIGN BY:	MH
DRAWN BY:	WM
SHEET NO:	C-3.1



MATCHLINE SEE SHEET C-4.1

STORM DRAIN KEYNOTES 15 TO 24

15 INSTALL (N) ON-SITE STORM DRAIN SYSTEM. USE MINIMUM 6" PVC (SDR 35) OR HDPE (ADS N-12 W/ SMOOTH INTERIOR WALLS). MAINTAIN 24" MINIMUM COVER AND SLOPED AT 1% MINIMUM AT ALL TIMES UNLESS OTHERWISE NOTED. PROVIDE CLEAN OUT TO GRADE AT MAJOR CHANGES IN DIRECTION. AVOID USING 90° BENDS AND INSTEAD USE (2) 45° BENDS AND WYE CONNECTIONS.

16 CONSTRUCT (N) EARTHEN SWALE SLOPED AT 1% MINIMUM TOWARDS POSITIVE OUTFALL. SEE DETAIL 1 ON SHEET C-5.1.

17 INSTALL (N) 4" DIAMETER BRASS AREA DRAIN (AD) IN HARDSCAPE AREAS (NDS PART 90C). SEE DETAIL 2 ON C-5.1.

18 INSTALL (N) 4" DIAMETER BRASS ATRIUM GRATE IN LANDSCAPE OR PLANTER AREAS (NDS PART 78B OR 90B FOR 6" DIAMETER BRASS ATRIUM GRATE). DO NOT USE PLASTIC GRATES. SEE DETAIL 3 ON C-5.1.

19 INSTALL (N) "CHRISTY V-1" AREA DRAINS. CONNECT TO ON-SITE STORM DRAIN SYSTEM. SEE DETAIL 4 ON C-6.1.

20 INSTALL (N) "CENTRAL PRECAST CP2424" INLET WITH SIDE OPENING (DI-SO). SEE DETAIL 5 & 6 SHEET C-5.1.

21 CONNECT RAIN WATER DOWNSPOUTS TO 4" PVC (SDR-35) TIGHTLINE, SLOPED AT 1% MINIMUM. DIRECT TO NEAREST STORM DRAIN LINE. PROVIDE CLEAN OUT TO GRADE AT MAJOR CHANGES IN DIRECTION. AVOID USING 90° BENDS AND INSTEAD USE (2) 45° BENDS. TIGHTLINE MAY BE PLACED IN COMMON TRENCH WITH SUBDRAIN LINES, HOWEVER, NOT CONNECT TO SUBDRAIN LINES. CONNECT TO NEAREST STORM DRAIN LINE AS SHOWN ON PLAN.

22 INSTALL (N) STORM DRAIN MANHOLE PER CITY STANDARD DETAIL M-3 ON SHEET C-5.3.

UTILITIES KEYNOTES 31 TO 33

31 INSTALL (N) SANITARY SEWER LATERALS PER CITY STANDARD DETAILS S-1 & S-4 ON SHEET C-6.3.

32 INSTALL (N) SANITARY SEWER MANHOLE PER CITY STANDARD DETAIL M-3 ON SHEET C-6.3.

33 INSTALL (N) UTILITY TRECH PER CITY STANDARD DETAIL UT-1 ON SHEET C-6.3

NOTE:
FOR CONSTRUCTION STAKING SCHEDULING OR QUOTATIONS PLEASE CONTACT ALEX ABAYA AT LEA & BRAZE ENGINEERING (510)887-4086 EXT 116. aabaya@leabraze.com

REGISTERED PROFESSIONAL ENGINEER
JAMES TOBY
No. 63127
CIVIL
STATE OF CALIFORNIA
ORIGINAL SIGNATURES IN BLUE INK

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS · LAND SURVEYORS
BAY AREA REGION
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(P) (510) 887-4086
(F) (510) 887-3019
SACRAMENTO REGION
3017 DOUGAS BLVD, # 300
ROSEVILLE, CA 95661
(P) (916)366-1328
(F) (916)797-7363
WWW.LEABRAZE.COM

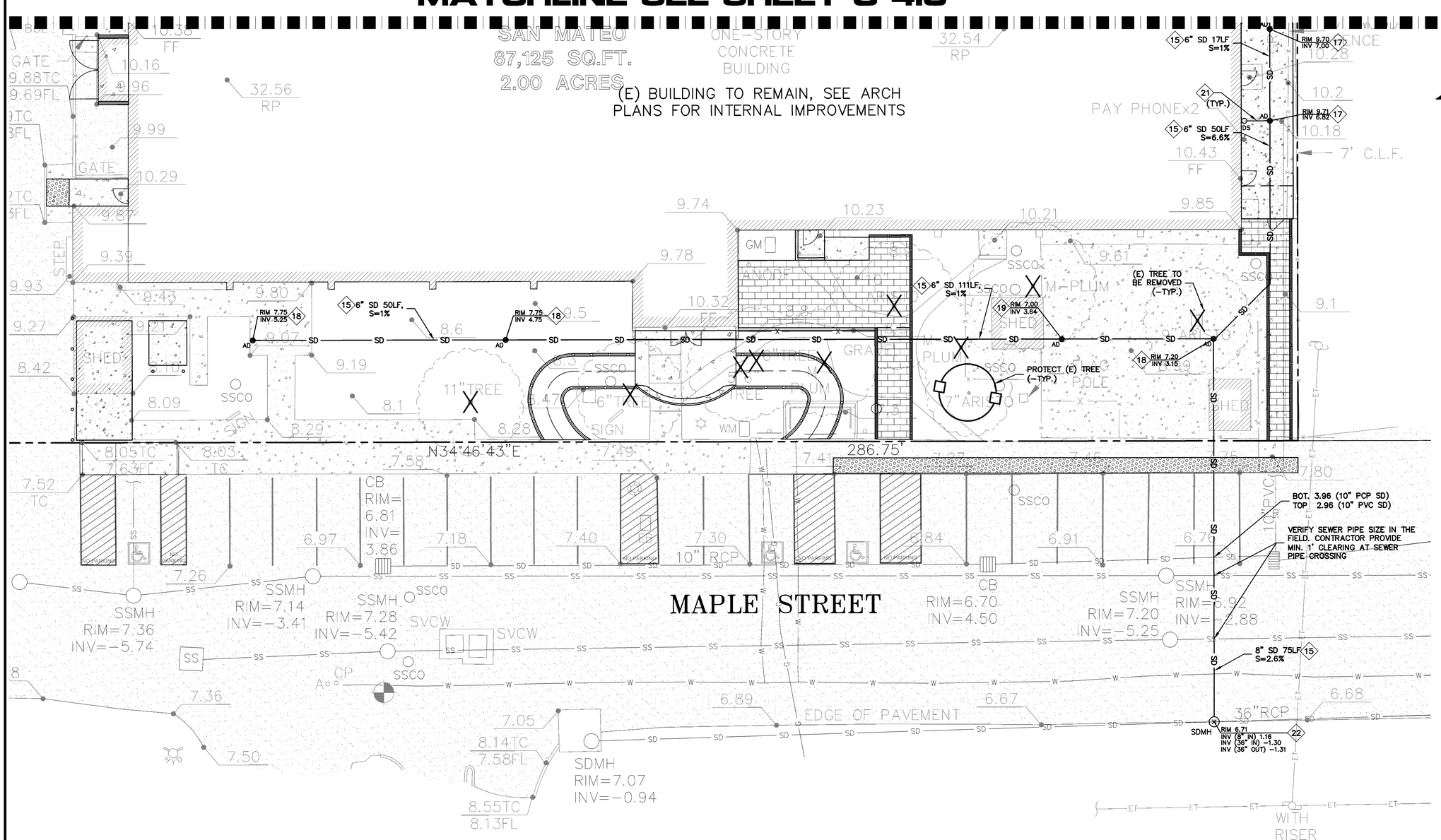
IMPROVEMENT PLANS
LIFEMOVES MAPLE STREET SHELTER
1580 MAPLE STREET
APN: 052-532-020
SAN MATEO COUNTY

UTILITY PLAN

REVISIONS	BY
-	-
-	-
-	-
-	-
-	-

JOB NO:	2151287
DATE:	06-17-16
SCALE:	AS NOTED
DESIGN BY:	MH
DRAWN BY:	WM
SHEET NO:	C-4.0

MATCHLINE SEE SHEET C-4.0



LEGEND

- GRAVEL
- CONCRETE
- PAVERS
- GRASS
- DETECTABLE WARNING SURFACE

STORM DRAIN KEYNOTES 15 TO 24

15 INSTALL (N) ON-SITE STORM DRAIN SYSTEM. USE MINIMUM 6" PVC (SDR 35) OR HDPE (ADS N-12 W/ SMOOTH INTERIOR WALLS). MAINTAIN 24" MINIMUM COVER AND SLOPED AT 1% MINIMUM AT ALL TIMES UNLESS OTHERWISE NOTED. PROVIDE CLEAN OUT TO GRADE AT MAJOR CHANGES IN DIRECTION. AVOID USING 90° BENDS AND INSTEAD USE (2) 45° BENDS AND WYE CONNECTIONS.

16 CONSTRUCT (N) EARTHEN SWALE SLOPED AT 1% MINIMUM TOWARDS POSITIVE OUTFALL. SEE DETAIL 1 ON SHEET C-5.1.

17 INSTALL (N) 4" DIAMETER BRASS AREA DRAIN (AD) IN HARDSCAPE AREAS (NDS PART 90C). SEE DETAIL 2 ON C-5.1.

18 INSTALL (N) 4" DIAMETER BRASS ATRIUM GRATE IN LANDSCAPE OR PLANTER AREAS (NDS PART 78B OR 90B FOR 6" DIAMETER BRASS ATRIUM GRATE). DO NOT USE PLASTIC GRATES. SEE DETAIL 3 ON C-5.1.

19 INSTALL (N) "CHRISTY V-1" AREA DRAINS. CONNECT TO ON-SITE STORM DRAIN SYSTEM. SEE DETAIL 4 ON C-6.1.

20 INSTALL (N) "CENTRAL PRECAST CP2424" INLET WITH SIDE OPENING (DI-SO). SEE DETAIL 5 & 6 SHEET C-5.1.

21 CONNECT RAIN WATER DOWNSPOUTS TO 4" PVC (SDR-35) TIGHTLINE, SLOPED AT 1% MINIMUM. DIRECT TO NEAREST STORM DRAIN LINE. PROVIDE CLEAN OUT TO GRADE AT MAJOR CHANGES IN DIRECTION. AVOID USING 90° BENDS AND INSTEAD USE (2) 45° BENDS. TIGHTLINE MAY BE PLACED IN COMMON TRENCH WITH SUBDRAIN LINES, HOWEVER, NOT CONNECT TO SUBDRAIN LINES. CONNECT TO NEAREST STORM DRAIN LINE AS SHOWN ON PLAN.

22 INSTALL (N) STORM DRAIN MANHOLE PER CITY STANDARD DETAIL M-3 ON SHEET C-5.3.

UTILITIES KEYNOTES 31 TO 33

31 INSTALL (N) SANITARY SEWER LATERALS PER CITY STANDARD DETAILS S-1 & S-4 ON SHEET C-6.3.

32 INSTALL (N) SANITARY SEWER MANHOLE PER CITY STANDARD DETAIL M-3 ON SHEET C-6.3.

33 INSTALL (N) UTILITY TRECH PER CITY STANDARD DETAIL UT-1 ON SHEET C-6.3

NOTE:
FOR CONSTRUCTION STAKING SCHEDULING OR QUOTATIONS PLEASE CONTACT ALEX ABAYA AT LEA & BRAZE ENGINEERING (510)887-4086 EXT 116. aabaya@leabraze.com

REGISTERED PROFESSIONAL ENGINEER
JAMES TOBY
No. 63127
CIVIL
STATE OF CALIFORNIA
ORIGINAL SIGNATURES IN BLUE INK

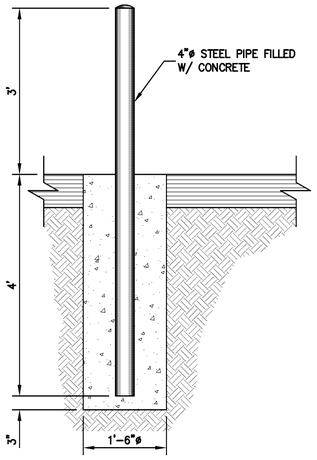
LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS • LAND SURVEYORS
BAY AREA REGION
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(P) (510) 887-4086
(F) (510) 887-3019
SACRAMENTO REGION
3017 DOUGAS BLVD, # 300
ROSEVILLE, CA 95661
(P) (916)366-1328
(F) (916)797-7363
WWW.LEABRAZE.COM

IMPROVEMENT PLANS
LIFEMOVES MAPLE STREET SHELTER
1580 MAPLE STREET
APN: 052-532-020
SAN MATEO COUNTY

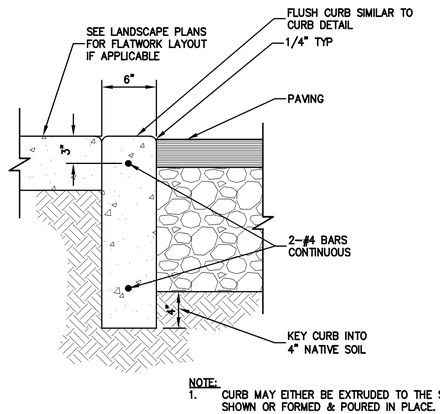
UTILITY PLAN

-	-
-	-
-	-
-	-
-	-
REVISIONS	BY
JOB NO:	2151287
DATE:	06-17-16
SCALE:	AS NOTED
DESIGN BY:	MH
DRAWN BY:	WM

SHEET NO:
C-4.1
6 OF 17 SHEETS

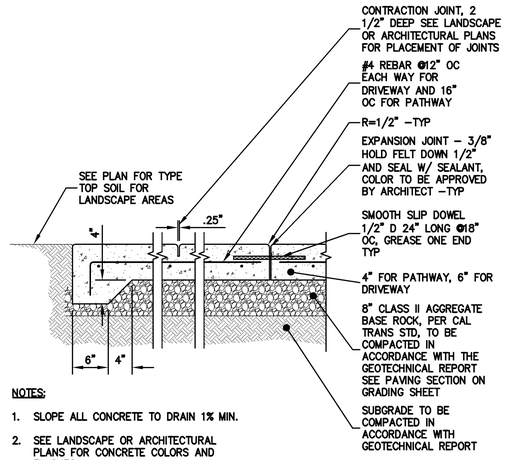


1 C-5.0 **BOLLARD**
NTS



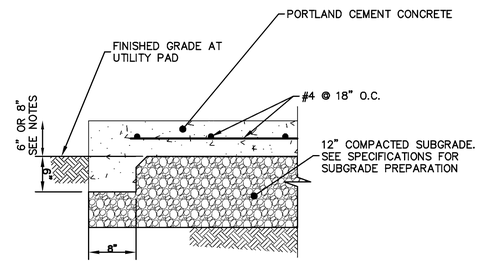
NOTE:
1. CURB MAY EITHER BE EXTRUDED TO THE SHAPE SHOWN OR FORMED & POURED IN PLACE.
2. PROVIDE EXPANSION JOINTS AT 15" O.C.

2 C-5.0 **FLUSH CURB**
NTS



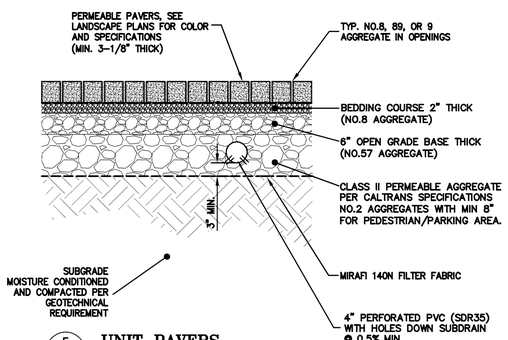
NOTES:
1. SLOPE ALL CONCRETE TO DRAIN 1% MIN.
2. SEE LANDSCAPE OR ARCHITECTURAL PLANS FOR CONCRETE COLORS AND FINISHES.
3. EASE ALL EDGES R=1/2"
4. FELT SHALL BE NON-ASPHALTIC IMPREGNATED.

3 C-5.0 **CONCRETE PAVING**
NTS

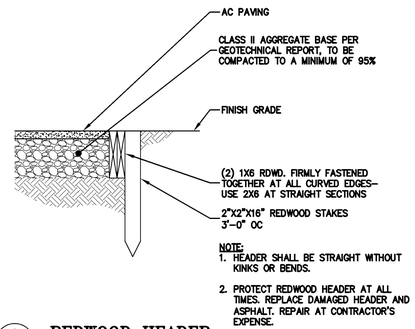


NOTES:
1. TRANSFORMER PAD SHALL BE 6" MIN. WIDER THAN TRANSFORMER ENCLOSURE. TYPICAL TRANSFORMER IS 5'x 8'.
2. GAS METER PAD SHALL BE AS REQUIRED BY PG&E.
3. TRASH ENCLOSURE PAD SHALL BE 8" MIN. AND APRON SHALL EXTEND 10' IN FRONT OF ENCLOSURE.

4 C-5.0 **UTILITY CONCRETE PAD**
NTS

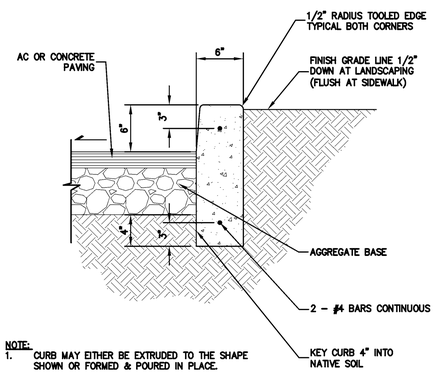


5 C-5.0 **UNIT PAVERS**
NTS



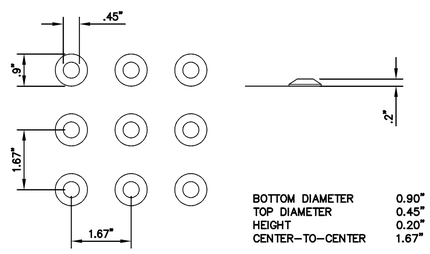
NOTE:
1. HEADER SHALL BE STRAIGHT WITHOUT KINKS OR BENDS.
2. PROTECT REDWOOD HEADER AT ALL TIMES. REPLACE DAMAGED HEADER AND ASPHALT. REPAIR AT CONTRACTOR'S EXPENSE.

6 C-5.0 **REDWOOD HEADER**
NTS



NOTE:
1. CURB MAY EITHER BE EXTRUDED TO THE SHAPE SHOWN OR FORMED & POURED IN PLACE.
2. PROVIDE EXPANSION JOINTS AT 15" O.C.

7 C-5.0 **TYPICAL CURB**
NTS



NOTES:
1. CURB RAMPS SHALL HAVE "DARK GRAY" CAST-IN-PLACE DETECTABLE WARNING SURFACE THAT EXTENDS THE FULL WIDTH AND 3'-0" DEPTH OF THE RAMP. DETECTABLE WARNING SURFACES SHALL CONFORM TO THE DETAILS SHOWN, AND THE REQUIREMENTS IN THE SPECIAL PROVISIONS.
2. THE EDGE OF THE DETECTABLE WARNING SURFACE NEAREST TO THE STREET SHALL BE BETWEEN 6" AND 8" FROM THE GUTTER FLOWLINE.

8 C-5.0 **DETECTABLE WARNING SURFACE**
NTS

REGISTERED PROFESSIONAL ENGINEER
JAMES TOBY
No. 63127
CIVIL
STATE OF CALIFORNIA
ORIGINAL SIGNATURES IN BLUE INK

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS · LAND SURVEYORS
BAY AREA REGION
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(P) (510) 887-4086
(F) (510) 887-3019
SACRAMENTO REGION
3017 DOUGLAS BLVD, # 300
ROSEVILLE, CA 95661
(P) (916)966-1338
(F) (916)797-7363
WWW.LEABRAZE.COM

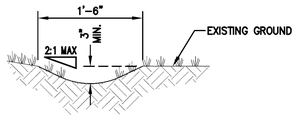
IMPROVEMENT PLANS
LIFEMOVES MAPLE STREET SHELTER
1580 MAPLE STREET
SAN MATEO COUNTY APN: 052-532-020

DETAILS

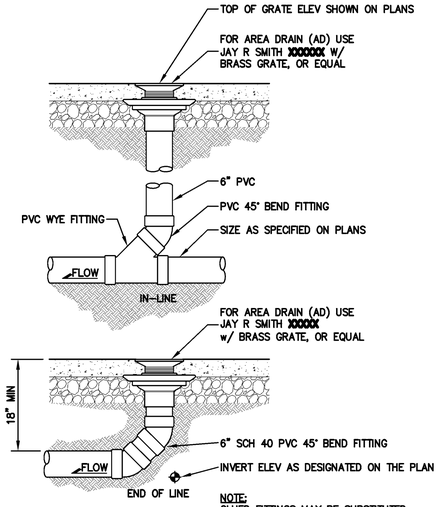
REVISIONS	BY
–	–
–	–
–	–
–	–
–	–

JOB NO:	2151287
DATE:	06-17-16
SCALE:	NTS
DESIGN BY:	MH
DRAWN BY:	WM
SHEET NO:	C-5.0

7 OF 17 SHEETS

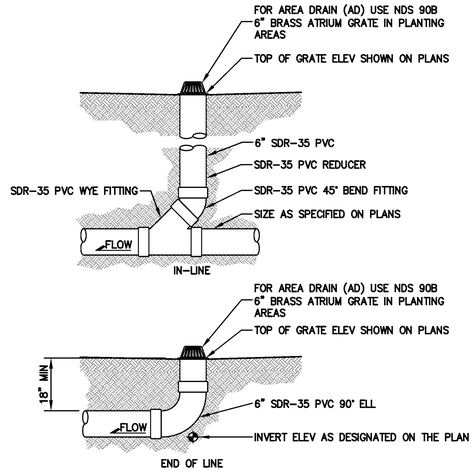


1 C-5.1 **EARTHEN SWALE DETAIL**
NTS



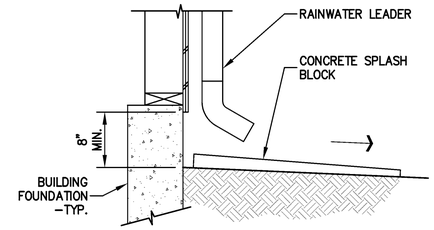
NOTE:
GLUED FITTINGS MAY BE SUBSTITUTED FOR GASKETED FITTINGS AT THE OPTION OF THE INSTALLATION CONTRACTOR.

2 C-5.1 **FLATWORK DRAIN**
NTS

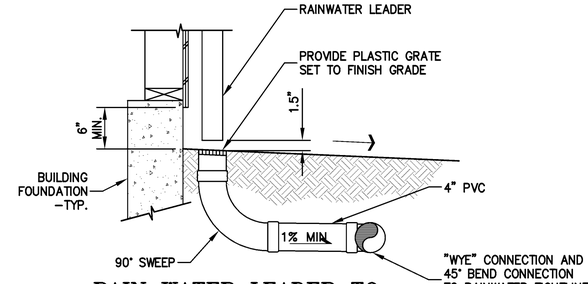


NOTE:
GLUED FITTINGS MAY BE SUBSTITUTED FOR GASKETED FITTINGS AT THE OPTION OF THE INSTALLATION CONTRACTOR.

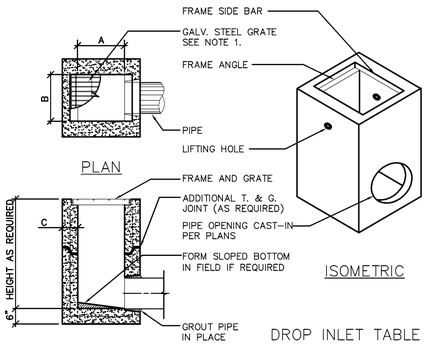
3 C-5.1 **BRASS ATRIUM AREA DRAIN**
NTS



4A C-5.1 **RAIN WATER LEADER**
NTS



4B C-5.1 **RAIN WATER LEADER TO TIGHTLINE CONNECTION**
NTS



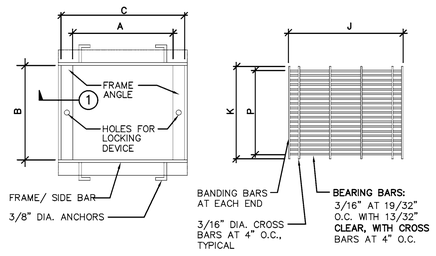
TYPICAL SECTION

NOTES :
1. FRAMES AND GRATES MAY BE SPECIFIED FOR PEDESTRIAN OR H20 TRAFFIC LOADING. ALL GRATES ARE BICYCLE PROOF. OPTIONAL GRATE LOCKING DEVICE AVAILABLE ON REQUEST SEE DRAWING "LOCK" ON PAGE 1-7. CLOSED-MESH GRATES OR CAST IRON FRAME AND GRATES ARE AVAILABLE ON REQUEST.
2. FOR SURFACE AND DISCHARGE OPTIONS AVAILABLE SEE DRAWING NO. "DI-S0" PAGE 1-6 AND "DI-D0" PAGE 1-5.
3. FRAMES AND GRATES DETAILS SEE PAGES 1-8, 1-9, AND 1-10.
4. WALL THICKNESSES ON ALL D.I.S. CAN BE CHANGED UPON REQUEST.
5. 18" WIDE D.I."S REPLACE THE OLD 16" WIDE BOX BK & 1K.

DROP INLET TABLE

MODEL No.	CPC MODEL NAME	A		B		C	
		IN	MM	IN	MM	IN	MM
CP1212	EK	12	300	12	300	4	100
CP1818	CK	18	450	18	450	5	125
CP1824	1K*	18	450	24	600	5	125
CP2424	2K	24	600	24	600	5	125
CP2430	3K	24	600	30	750	5	125
CP3030	5K	30	750	30	750	6	150
CP2436	1L	24	600	36	900	6	150
CP3636	1M	36	900	36	900	6	150
CP2448	3L	24	600	48	1200	6	150
CP3648	3M	36	900	48	1200	6	150
CP4848	1R	48	1200	48	1200	6	150

5 C-5.1 **PRECAST CONCRETE DROP INLET**
NTS



FRAME PLAN GRATE PLAN

MODEL	FRAMES A IN	B IN	C IN	BEARING ANGLE IN	SIDE BAR IN	GRATE J IN	K IN	P IN	BEARING BARS IN	BAND BAR IN	# BARS
CP1212 S H	12-3/8	12-3/8	15	1-1/2X1-1/2	1-1/2x1/4	14-3/4	12-1/8	12-1/16	1-1/4X3/16	1x3/16	21
CP1818 S H	18-3/8	18-3/8	21	1-1/2X1-1/2 2X1-1/2	1-1/2x1/4 2x1/4	20-5/8	18-1/8	18	1-1/4x3/16 1-3/4x3/16	1x3/16 1-1/2x3/16	31
CP1824 S H	18-3/8	24-3/8	21	1-1/2X1-1/2 2X1-1/2	1-1/2x1/4 2x1/4	20-5/8	18-1/8	18	1-1/4x3/16 1-3/4x3/16	1x3/16 1-1/2x3/16	31
CP2424 S H	24-3/8	24-3/8	27	1-1/2X1-1/2 2-1/2X1-1/2	1-1/2x1/4 2-1/2x1/4	26-3/4	24-1/8	23-15/16	1-1/4x3/16 2-1/4x3/16	1x3/16 2x3/16	41

S = SIDEWALK LOADS (300PSF)
H = HEAVY TRAFFIC LOADS (H20)

NOTES :
1. FRAME AND GRATES ARE HOT-DIPPED GALVANIZED AFTER FABRICATION PER ASTM SPEC. A-123.
2. FOR OPTIONAL GRATE LOCKING DEVICE SEE DWG. NO. LOCK, PAGE 1-7.
3. DETAIL-1 SEE PAGES 1-8, 1-9.

6 C-5.1 **PRECAST CONCRETE DROP INLET**
NTS

REGISTERED PROFESSIONAL ENGINEER
JAMES TOBY
No. 63127
CIVIL
STATE OF CALIFORNIA
ORIGINAL SIGNATURES IN BLUE INK

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS · LAND SURVEYORS
BAY AREA REGION
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(P) (510) 887-4086
(F) (510) 887-3019
SACRAMENTO REGION
3017 DOUGLAS BLVD, # 300
ROSEVILLE, CA 95661
(P) (916)966-1338
(F) (916)797-7363
WWW.LEABRAZE.COM

IMPROVEMENT PLANS
LIFEMOVES MAPLE STREET SHELTER
1580 MAPLE STREET
SAN MATEO COUNTY
APN: 052-532-020

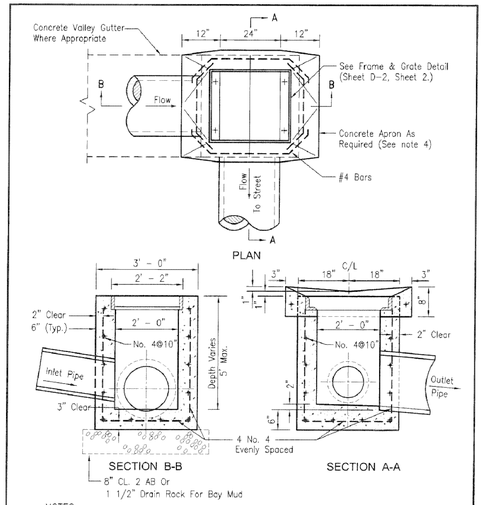
DETAILS

REVISIONS	BY
–	–
–	–
–	–
–	–
–	–

JOB NO: 2151287
DATE: 06-17-16
SCALE: NTS
DESIGN BY: MH
DRAWN BY: WM
SHEET NO:

C-5.1

8 OF 17 SHEETS

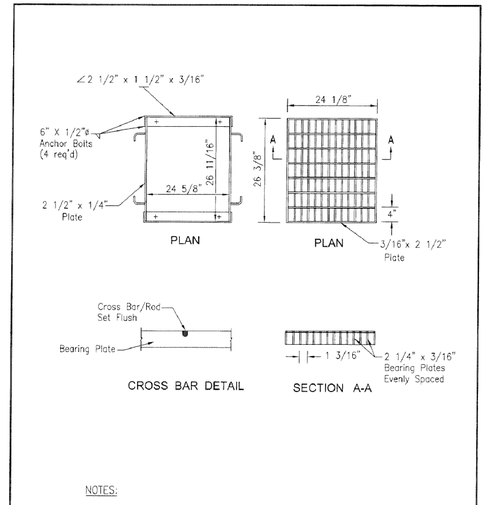


NOTES:

1. Max. outlet pipe 12" diameter.
2. For outlets greater than 12", or deeper than 5', box design shall have prior approval.
3. Provide survey stakes to indicate location and elevation.
4. A concrete apron is required for inlets at valley gutters and paved areas.

NOT TO SCALE

DATE: 06/23/14	**CITY OF REDWOOD CITY** ENGINEERING AND TRANSPORTATION **JUNCTION BOX / AREA DRAIN**	STANDARD DETAIL **D - 2** SHT 1 OF 2

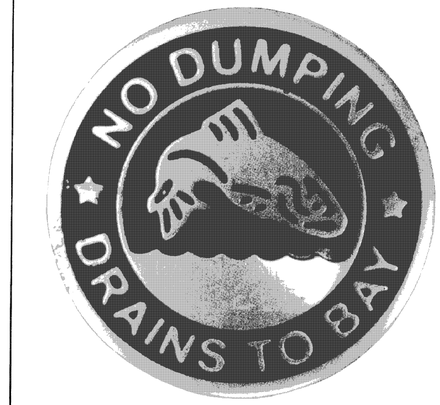


NOTES:

1. Frame and grate to be made of carbon steel.
2. All surfaces to be galvanized after fabrication.
3. Equivalent to Santa Rosa Model HG grate.

NOT TO SCALE

DATE: 06/23/14	**CITY OF REDWOOD CITY** ENGINEERING AND TRANSPORTATION **JUNCTION BOX / AREA DRAIN**	STANDARD DETAIL **D - 2** SHT 2 OF 2

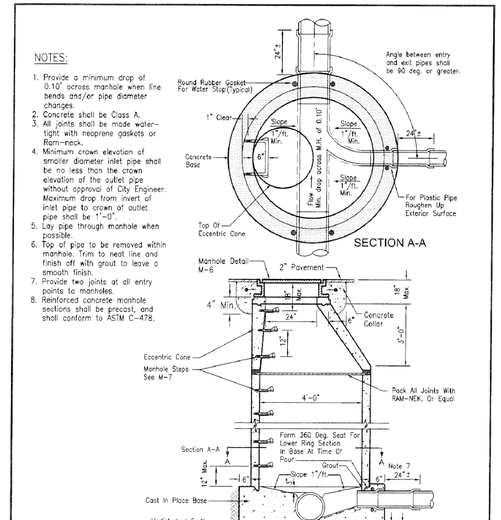


NOTES:

1. DECAL IS ANODIZED ALUMINUM (COLORED BLUE, GREEN AND SILVER) TO BE FURNISHED BY THE CITY.
2. THIS DECAL TO BE ATTACHED ABOVE CURB INLETS AND CATCH BASINS USING EPOXY CEMENT.

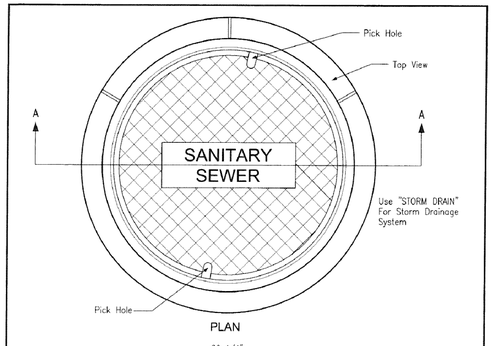
NOT TO SCALE

DATE: 06/23/14	**CITY OF REDWOOD CITY** ENGINEERING AND TRANSPORTATION **MOUNTING PLAQUE FOR INLET LABELING**	STANDARD DETAIL **D - 9** SHT 1 OF 1



NOT TO SCALE

DATE: 06/23/14	**CITY OF REDWOOD CITY** ENGINEERING AND TRANSPORTATION **TYPE I MANHOLE (PIPES 6" TO 21")**	STANDARD DETAIL **M - 3** SHT 1 OF 1

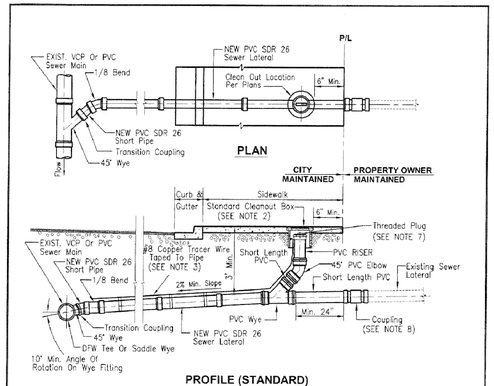


NOTES:

1. All material used in manufacturing shall conform to A.S.T.M. A48, Class 30.
2. All castings to be completely cleaned and painted with asphaltic varnish, after manufacture.
3. Use Phoenix P-1090, D&L Supply A-1024, or equal.

NOT TO SCALE

DATE: 06/23/14	**CITY OF REDWOOD CITY** ENGINEERING AND TRANSPORTATION **MANHOLE FRAME AND COVER**	STANDARD DETAIL **M - 6** SHT 1 OF 1

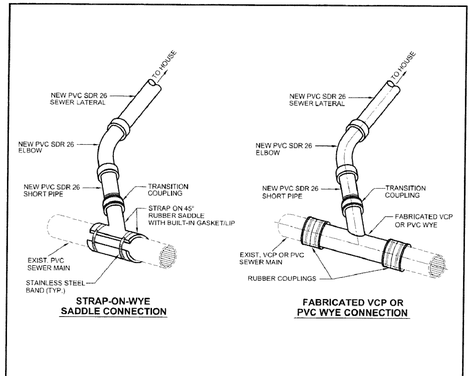


NOTES:

1. Cleanout box shall be Christy concrete type FD8 Curb Valve Box with FD8R lid marked "SEWER" when installed in location not subject to vehicular loading.
2. When installed in location subject to vehicular loading, cleanout box shall be Christy concrete type G05T Traffic Valve Box with G05CT Traffic Lid marked "SEWER" and shall be provided with 8" concrete base.
3. Tape #8 Copper tracer wire at 3' interval with filament tape.
4. Lateral and riser shall be ASTM 3034, PVC SDR 26. PVC fittings shall be SDR 26, as per specifications.
5. To connect new lateral to existing main, use Flex-Seal Adjustable Repair Coupling (ARC) with continuous stainless steel shear ring, by Mission Rubber Company (800-854-9991) or approved equal.
6. Stamp "S" on top of curb for all new laterals.
7. Use PVC cleanout with threaded plug.
8. Use flexible non-shear rubber coupling with stainless steel shear band.

NOT TO SCALE

DATE: 06/23/14	**CITY OF REDWOOD CITY** ENGINEERING AND TRANSPORTATION **SANITARY SEWER LATERAL** **(NEW CONNECTION TO EXIST. SEWER MAIN)**	STANDARD DETAIL **S - 1** SHT 1 OF 2

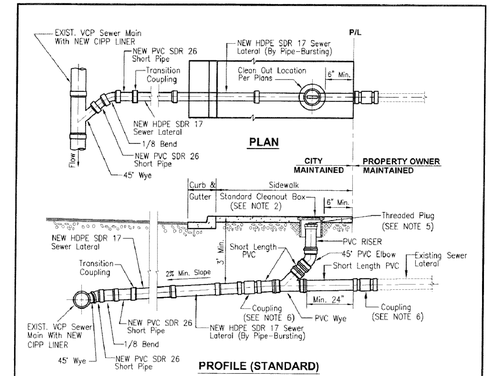


NOTES:

1. RUBBER SADDLES SHALL BE SEALED WITH AN ELASTOMERIC VULCANIZING SEALANT.
2. STAINLESS STEEL SERIES 300 BANDSCREW AND HOUSING SHALL BE USED FOR SADDLES AND RUBBER COUPLINGS.
3. RUBBER COUPLINGS SHALL BE FLEX-SHEAR ADJUSTABLE RUBBER COUPLING (ARC) WITH STAINLESS STEEL SHEAR RING.
4. THESE DETAILS WORK WITH SANITARY SEWER DETAIL S-1, SHEET 1 OF 2.

NOT TO SCALE

DATE: 06/23/14	**CITY OF REDWOOD CITY** ENGINEERING AND TRANSPORTATION **NEW PVC SDR 26 SEWER LATERAL CONNECTION TO EXIST. VCP OR PVC SEWER MAIN**	STANDARD DETAIL **S - 1** SHT 2 OF 2



NOTES:

1. Cleanout box shall be Christy concrete type FD8 Curb Valve Box with FD8R lid marked "SEWER" when installed in location not subject to vehicular loading.
2. When installed in location subject to vehicular loading, cleanout box shall be Christy concrete type G05T Traffic Valve Box with G05CT Traffic Lid marked "SEWER" and shall be provided with 8" concrete base.
3. Lateral and riser shall be ASTM 3034, PVC SDR 26. PVC fittings shall be SDR 26, as per specifications.
4. Stamp "S" on top of curb for all new laterals.
5. Use PVC cleanout with threaded plug.
6. Use flexible non-shear rubber coupling with stainless steel shear band.

NOT TO SCALE

DATE: 06/23/14	**CITY OF REDWOOD CITY** ENGINEERING AND TRANSPORTATION **SANITARY SEWER LATERAL** **(NEW HDPE SDR 17 CONNECTION TO EXIST. VCP SEWER MAIN WITH NEW CIPP LINER)**	STANDARD DETAIL **S - 4** SHT 1 OF 2

REGISTERED PROFESSIONAL ENGINEER
JAMES TOBY
No. 63127
CIVIL
STATE OF CALIFORNIA
ORIGINAL SIGNATURES IN BLUE INK

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS • LAND SURVEYORS
BAY AREA REGION
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(P) (510) 887-4086
(F) (510) 887-3019
SACRAMENTO REGION
3017 DOUGLAS BLVD., # 300
ROSEVILLE, CA 95661
(P) (916)966-1338
(F) (916)797-7363
WWW.LEABRAZE.COM

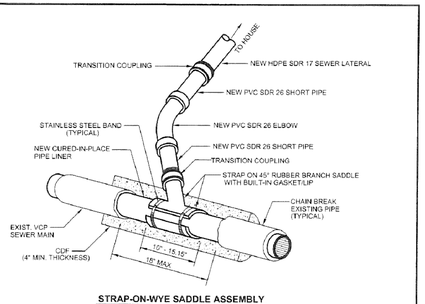
IMPROVEMENT PLANS
LIFEMOVES MAPLE STREET SHELTER
1580 MAPLE STREET
SAN MATEO COUNTY
APN: 052-532-020

DETAILS

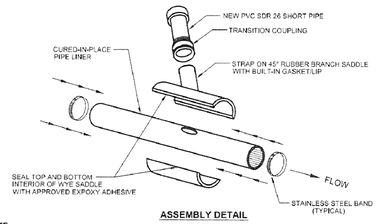
–	–
–	–
–	–
–	–
–	–
REVISIONS	BY
JOB NO:	2151287
DATE:	06-17-16
SCALE:	NTS
DESIGN BY:	MH
DRAWN BY:	WM
SHEET NO:	

C-5.2

9 OF 17 SHEETS



STRAP-ON-WYE SADDLE ASSEMBLY



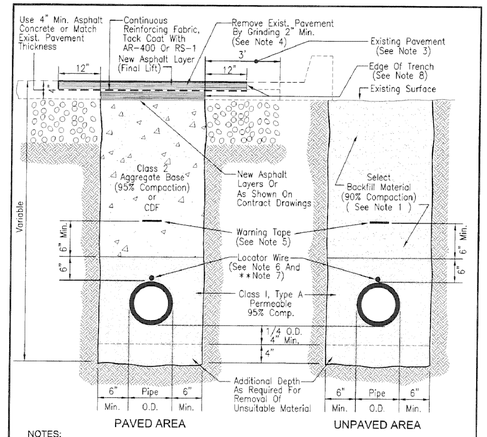
ASSEMBLY DETAIL

NOTE:

1. WORK WITH SANITARY SEWER LATERAL DETAIL S - 4, SHEET 1 OF 2.

NOT TO SCALE

Redwood City California Incorporated 1867	**CITY OF REDWOOD CITY** ENGINEERING AND TRANSPORTATION **STRAP-ON-WYE SADDLE CONNECTION TO EXIST. VCP WITH NEW CURED-IN-PLACE PIPE LINER**	**STANDARD DETAIL** **S - 4** SHT 2 OF 2
DATE: 06/23/14		



NOTES:

1. Select backfill material – material from excavation, free from stones or lumps exceeding 3" in greatest dimension, vegetable matter or unsatisfactory material. (See Specifications)
2. For new streets use design structural section as shown on plans.
3. If the edge of the trench falls within 3' of the gutter, the entire pavement shall be removed.
4. If existing pavement is less than 3" thick, pavement edge shall be sawcut to full depth in lieu of grinding.
5. Place Warning Tape 14" above pipe.
6. Place locator wire at top of pipe. (For water pipes and sanitary sewer force main pipes only)

**7. For new sanitary sewer and storm drain projects, locator wire is no longer needed.

8. If in lieu of grinding, the T-trench is cut the full depth of the pavement then the edge of the T-trench shall be considered the new edge of trench.

NOT TO SCALE

Redwood City California Incorporated 1867	**CITY OF REDWOOD CITY** ENGINEERING AND TRANSPORTATION **UTILITY TRENCH DETAIL**	**STANDARD DETAIL** **UT - 1** SHT 1 OF 1
DATE: 06/23/14		

REGISTERED PROFESSIONAL ENGINEER
JAMES TOBY
No. 63127
CIVIL
STATE OF CALIFORNIA
ORIGINAL SIGNATURES IN BLUE INK

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS · LAND SURVEYORS
BAY AREA REGION
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(P) (510) 887-4086
(F) (510) 887-3019

SACRAMENTO REGION
3017 DOUGLAS BLVD., # 300
ROSEVILLE, CA 95661
(P) (916)966-1338
(F) (916)797-7363
WWW.LEABRAZE.COM

IMPROVEMENT PLANS
LIFEMOVES MAPLE STREET SHELTER
1580 MAPLE STREET
SAN MATEO COUNTY APN: 052-532-020

DETAILS

–	–
–	–
–	–
–	–
–	–
REVISIONS	BY

JOB NO:	2151287
DATE:	06-17-16
SCALE:	NTS
DESIGN BY:	MH
DRAWN BY:	WM

SHEET NO:

C-5.3

10 OF 17 SHEETS

CAUTION:

1. CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT FOR LOCATION OF UNDERGROUND UTILITIES AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION– PHONE (800) 227–2600. CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES PRIOR TO BEGINNING ANY WORK ON THIS SITE.

2. THE LOCATION, SIZES AND/OR DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS PLAN WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. THE CONTRACTOR IS CAUTIONED THAT ONLY ACTUAL EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATIONS AND DEPTHS OF SUCH UNDERGROUND UTILITIES. (A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL KNOWN UNDERGROUND UTILITIES). CONTRACTOR SHALL VERIFY LOCATION AND DEPTH PRIOR TO ANY EXCAVATION OR IMPROVEMENT.

3. THESE DRAWINGS DO NOT ADDRESS CONTRACTOR MEANS, METHODS OR PROCESSES THAT MAY BE ASSOCIATED WITH ANY TOXIC SOILS IF FOUND ON SITE. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL CITY AND COUNTY STANDARDS AND APPROPRIATE REGULATIONS IF TOXIC SOILS ARE ENCOUNTERED. CONTRACTOR MUST NOTIFY THE OWNER'S PROJECT MANAGER IMMEDIATELY IF ANY SOILS ARE EVEN SUSPECTED OF BEING CONTAINED.

GENERAL NOTES

1. ALL GENERAL NOTES, SHEET NOTES, AND LEGEND NOTES FOUND IN THESE DOCUMENTS SHALL APPLY TYPICALLY THROUGHOUT. IF INCONSISTENCIES ARE FOUND IN THE VARIOUS NOTATIONS, NOTIFY THE ENGINEER IMMEDIATELY IN WRITING REQUESTING CLARIFICATION.

2. THESE DRAWINGS AND THEIR CONTENT ARE AND SHALL REMAIN THE PROPERTY OF LEA AND BRAZE ENGINEERING, INC. WHETHER THE PROJECT FOR WHICH THEY ARE PREPARED IS EXECUTED OR NOT. THEY ARE NOT TO BE USED BY ANY PERSONS ON OTHER PROJECTS OR EXTENSIONS OF THE PROJECT EXCEPT BY AGREEMENT IN WRITING AND WITH APPROPRIATE COMPENSATION TO THE ENGINEER.

3. ALL WORK SHALL COMPLY WITH APPLICABLE CODES AND TRADE STANDARDS WHICH GOVERN EACH PHASE OF WORK INCLUDING, BUT NOT LIMITED TO, CALIFORNIA MECHANICAL CODE, CALIFORNIA PLUMBING CODE, CALIFORNIA ELECTRICAL CODE, CALIFORNIA FIRE CODE, CALTRANS STANDARDS AND SPECIFICATIONS, AND ALL APPLICABLE STATE AND/OR LOCAL CODES AND/OR LEGISLATION.

4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND ALL SUBCONTRACTORS TO CHECK AND VERIFY ALL CONDITIONS, DIMENSIONS, LINES AND LEVELS INDICATED. PROPER FIT AND ATTACHMENT OF ALL PARTS IS REQUIRED. SHOULD THERE BE ANY DISCREPANCIES, IMMEDIATELY NOTIFY THE ENGINEER FOR CORRECTION OR ADJUSTMENT THE EVENT OF FAILURE TO DO SO, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTION OF ANY ERROR.

5. ALL DIMENSIONS AND CONDITIONS SHALL BE CHECKED AND VERIFIED ON THE JOB BY EACH SUBCONTRACTOR BEFORE HE/SHE BEGINS HIS/HER WORK. ANY ERRORS, OMISSION, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER/CONTRACTOR BEFORE CONSTRUCTION BEGINS.

6. COMMENCEMENT OF WORK BY THE CONTRACTOR AND/OR ANY SUBCONTRACTOR SHALL INDICATE KNOWLEDGE AND ACCEPTANCE OF ALL CONDITIONS DESCRIBED IN THESE CONSTRUCTION DOCUMENTS, OR EXISTING ON SITE, WHICH COULD AFFECT THEIR WORK.

WORK SEQUENCE

1. IN THE EVENT ANY SPECIAL SEQUENCING OF THE WORK IS REQUIRED BY THE OWNER OR THE CONTRACTOR, THE CONTRACTOR SHALL ARRANGE A CONFERENCE BEFORE ANY SUCH WORK IS BEGUN.

2. SITE EXAMINATION: THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL THOROUGHLY EXAMINE THE SITE AND FAMILIARIZE HIM/HERSELF WITH THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED. THE CONTRACTOR SHALL VERIFY AT THE SITE ALL MEASUREMENTS AFFECTING HIS/HER WORK AND SHALL BE RESPONSIBLE FOR THE CORRECTIONS OF THE SAME. NO EXTRA COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR FOR EXPENSES DUE TO HIS/HER NEGLECT TO EXAMINE, OR FAILURE TO DISCOVER, CONDITIONS WHICH AFFECT HIS/HER WORK.

3. LEA AND BRAZE ENGINEERING, INC. EXPRESSLY RESERVES ITS COMMON LAW COPYRIGHT AND OTHER PROPERTY RIGHTS IN THESE PLANS. THESE PLANS ARE NOT TO BE REPRODUCED, CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER, NOR ARE THEY TO BE ASSIGNED TO A THIRD PARTY WITHOUT FIRST OBTAINING THE WRITTEN PERMISSION AND CONSENT OF LEA AND BRAZE ENGINEERING, INC. IN THE EVENT OF UNAUTHORIZED REUSE OF THESE PLANS BY A THIRD PARTY, THE THIRD PARTY SHALL HOLD HARMLESS LEA AND BRAZE ENGINEERING, INC.

4. CONSTRUCTION IS ALWAYS LESS THAN PERFECT SINCE PROJECTS REQUIRE THE COORDINATION AND INSTALLATION OF MANY INDIVIDUAL COMPONENTS BY VARIOUS CONSTRUCTION INDUSTRY TRADES. THESE DOCUMENTS CANNOT PORTRAY ALL COMPONENTS OR ASSEMBLIES EXACTLY. IT IS THE INTENTION OF THESE ENGINEERING DOCUMENTS THAT THEY REPRESENT A REASONABLE STANDARD OF CARE IN THEIR CONTENT. IT IS ALSO PRESUMED BY THESE DOCUMENTS THAT CONSTRUCTION REVIEW SERVICES WILL BE PROVIDED BY THE ENGINEER. SHOULD THE OWNER NOT RETAIN THE ENGINEER TO PROVIDE SUCH SERVICES, OR SHOULD HE/SHE RETAIN THE ENGINEER TO PROVIDE ONLY PARTIAL OR LIMITED SERVICES, THEN IT SHALL BE THE OWNER'S AND CONTRACTOR'S RESPONSIBILITY TO FULLY RECOGNIZE AND PROVIDE THAT STANDARD OF CARE.

5. IF THE OWNER OR CONTRACTOR OBSERVES OR OTHERWISE BECOMES AWARE OF ANY FAULT OR DEFECT IN THE PROJECT OR NONCONFORMANCE WITH THE CONTRACT DOCUMENTS, PROMPT WRITTEN NOTICE THEREOF SHALL BE GIVEN BY THE OWNER AND/OR CONTRACTOR TO THE ENGINEER.

6. THE ENGINEER SHALL NOT HAVE CONTROL OF OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

SITE PROTECTION

PROTECT ALL LANDSCAPING THAT IS TO REMAIN. ANY DAMAGE OR LOSS RESULTING FROM EXCAVATION, GRADING, OR CONSTRUCTION WORK SHALL BE CORRECTED OR REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL EXISTING SITE UTILITIES AND SHALL COORDINATE THEIR REMOVAL OR MODIFICATIONS (IF ANY) TO AVOID ANY INTERRUPTION OF SERVICE TO ADJACENT AREAS. THE GENERAL CONTRACTOR SHALL INFORM HIM/HERSELF OF MUNICIPAL REGULATIONS AND CARRY OUT HIS/HER WORK IN COMPLIANCE WITH ALL FEDERAL AND STATE REQUIREMENTS TO REDUCE FIRE HAZARDS AND INJURIES TO THE PUBLIC.

EXISTING CONDITIONS:

1. EXISTING TOPOGRAPHIC SURVEY PERFORMED BY LEA & BRAZE ENGINEERING INC. SURVEYING ON 01–06–16 (JOB #2151288), GRADES ENCOUNTERED ON–SITE MAY VARY FROM THOSE SHOWN. CONTRACTOR SHALL REVIEW THE PLANS AND CONDUCT FIELD INVESTIGATIONS AS REQUIRED TO VERIFY EXISTING CONDITIONS AT THE PROJECT SITE.

2. CLIENT SHALL HOLD HARMLESS LEA & BRAZE ENGINEERING FROM ANY AND ALL OCCURRENCES RESULTING FROM THE ACCURACY/INACCURACY OF THE CLIENT SUPPLIED TOPOGRAPHIC AND BOUNDARY SURVEY (AS PREPARED BY OTHERS).

SURVEYOR'S NOTES:

THE TYPES, LOCATIONS, SIZES AND/OR DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS TOPOGRAPHIC SURVEY ARE APPROXIMATE AND WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. ONLY ACTUAL EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATIONS AND DEPTHS OF SUCH UNDERGROUND UTILITIES. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL KNOWN UNDERGROUND UTILITIES. HOWEVER, THE ENGINEER CAN ASSUME NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF IT'S DELINEATE OF SUCH UNDERGROUND UTILITIES WHICH MAY BE ENCOUNTERED. BUT WHICH ARE NOT SHOWN ON THIS SURVEY.

CONTRACTOR SHALL VERIFY ALL UTILITIES IN DEPTH AND LOCATION PRIOR TO CONSTRUCTION.

TREE/PLANT PROTECTION NOTES:

1. PRIOR TO BEGINNING CONSTRUCTION, CONTRACTOR SHALL IDENTIFY, CONFIRM WITH OWNER AND PROTECT EXISTING TREES AND PLANTS DESIGNED AS TO REMAIN.
2. PROVIDE 6 FOOT TALL TREE PROTECTION FENCE WITH DISTINCTIVE MARKING VISIBLE TO CONSTRUCTION EQUIPMENT, ENCLOSING DRIP LINES OF TREES DESIGNED TO REMAIN.
3. WORK REQUIRED WITHIN FENCE LINE SHALL BE HELD TO A MINIMUM, AVOID USE OF HEAVY EQUIPMENT WITHIN FENCED AREA AND DO NOT PARK ANY VEHICLES UNDER DRIP LINE OF TREES. DO NOT STORE EQUIPMENT OR MATERIALS WITHIN FENCE LINE.
4. PRIOR TO REMOVING ROOTS AND BRANCHES LARGER THAN 2" IN DIAMETER OF TREES OR PLANTS THAT IS TO REMAIN, CONSULT WITH THE OWNER'S PROJECT MANAGER.
5. ANY GRADE CHANGES GREATER THAN 6" WITHIN THE DRIPLINE OF EXISTING TREES SHALL NOT BE MADE WITHOUT FIRST CONSULTING THE LANDSCAPE ARCHITECT / CIVIL ENGINEER.
6. PROTECT EXISTING TREES TO REMAIN FROM SPILLED CHEMICALS, FUEL OIL, MOTOR OIL, GASOLINE AND ALL OTHER CHEMICALLY INJURIOUS MATERIALS; AS WELL AS FROM PUDDLING OR CONTINUOUSLY RUNNING WATER. SHOULD A SPILL OCCUR, STOP WORK IN THAT AREA AND CONTACT THE CITY'S ENGINEER / INSPECTOR IMMEDIATELY. CONTRACTOR SHALL BE RESPONSIBLE TO MITIGATE DAMAGE FROM SPILLED MATERIAL AS WELL AS MATERIAL CLEAN UP.
7. PROVIDE TEMPORARY IRRIGATION TO ALL TREES AND PLANTS THAT ARE IN OR ADJACENT TO CONSTRUCTION AREAS WHERE EXISTING IRRIGATION SYSTEMS MAY BE AFFECTED BY THE CONSTRUCTION. ALSO PROVIDE TEMPORARY IRRIGATION TO RELOCATE TREES.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR ONGOING MAINTENANCE OF ALL TREES AND PLANTS DESIGNED TO REMAIN AND FOR MAINTENANCE OF RELOCATED TREES STOCKPILED DURING CONSTRUCTION. CONTRACTOR WILL BE REQUIRED TO REPLACE TREES OR PLANTS THAT DIE DUE TO LACK OF MAINTENANCE.

DEMOLITION NOTES:

1. CONTRACTOR IS TO COMPLY WITH ALL GENERAL AND STATE REQUIREMENTS INVOLVING THE REMOVAL AND DISPOSAL OF HAZARDOUS MATERIAL(S).
2. THE CONTRACTOR SHALL LOCATE AND CLEARLY MARK (AND THEN PRESERVE THESE MARKERS) FOR THE DURATION OF CONSTRUCTION OF ALL TELEPHONE, DATA, STREET LIGHT, SIGNAL LIGHT AND POWER FACILITIES THAT ARE IN OR NEAR THE AREA OF CONSTRUCTION.
3. CONTRACTOR'S BID IS TO INCLUDE ALL VISIBLE SURFACE AND ALL SUBSURFACE FEATURES IDENTIFIED TO BE REMOVED OR ABANDONED IN THESE DOCUMENTS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR A SITE INSPECTION TO FULLY ACKNOWLEDGE THE EXTENT OF THE DEMOLITION WORK.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY AND ALL PERMITS NECESSARY FOR ENCROACHMENT, GRADING, DEMOLITION, AND STATE JURISDICTIONS.
6. THE CONTRACTOR SHALL PAY ALL FEES ASSOCIATED WITH DISPOSAL OF MATERIALS.
7. BACKFILL ALL DEPRESSIONS AND TRENCHES FROM DEMOLITION OF FOUNDATIONS & UTILITIES TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.
8. WITHIN LIMITS OF WORK, REMOVE CURBS, GUTTERS, LANDSCAPING, SIGNAGE, TREES, SCRUBS, ASPHALT, UNDERGROUND PIPES, ETC. AS INDICATED ON THE PLANS AND SPECIFICATIONS.
9. REMOVAL OF LANDSCAPING SHALL INCLUDE ROOTS AND ORGANIC MATERIALS TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.
10. PRIOR TO BEGINNING DEMOLITION WORK ACTIVITIES, CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES OUTLINED IN THE EROSION PLAN & DETAILS.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING ALL DEMOLITION MATERIALS, OR STORING SELECTED ITEMS BY OWNER'S REPRESENTATIVE AT DESIGNATED LOCATIONS.
12. THE CONTRACTOR SHALL MAINTAIN ALL SAFETY DEVICES, AND SHALL BE RESPONSIBLE FOR CONFORMANCE TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS LAWS AND REGULATIONS.
13. THE CONTRACTOR SHALL PROTECT FROM DAMAGE ALL EXISTING IMPROVEMENTS FACILITIES AND STRUCTURES WHICH ARE TO REMAIN. ANY ITEMS DAMAGED BY THE CONTRACTOR OR HIS AGENTS OF ANY ITEMS REMOVED FOR HIS USE SHALL BE REPLACED IN EQUAL OR BETTER CONDITION AS APPROVED BY THE ARCHITECT OR OWNER'S REPRESENTATIVE.
14. COORDINATE WITH ELECTRICAL, MECHANICAL, LANDSCAPING AND ARCHITECTURAL DRAWINGS FOR UTILITY SHUT–DOWN / DISCONNECT LOCATIONS. CONTRACTOR IS TO SHUT OFF ALL UTILITIES AS NECESSARY PRIOR TO DEMOLITION. CONTRACTOR IS TO COORDINATE SERVICE INTERRUPTIONS WITH THE DEVELOPER / OWNER. DO NOT INTERRUPT SERVICES ADJACENT OFF–SITE OWNERS. ALSO SEE ARCHITECTURAL PLANS FOR ADDITIONAL DEMOLITION SCOPE OF WORK.
15. DEMOLITION INCLUDES REMOVAL OF ALL ITEMS ASSOCIATED WITH THE UTILITY, RETAINING WALL, FENCE, TREE OR BUILDING, INCLUDING BUT NOT LIMITED TO FOOTINGS, VALVES, ROOTS, BACKFILL, ETC. AND SHALL INCLUDE PREPARING THE SITE FOR NEW UTILITIES, BUILDINGS, RETAINING WALLS, ETC.
16. ALL MATERIALS TO BE DEMOLISHED AND REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE LAWFULLY DISPOSED OF OFF–SITE.
17. THE PLAN IS NOT INTENDED TO BE A COMPLETE CATALOGUE OF ALL EXISTING STRUCTURES AND UTILITIES. THIS PLAN INTENDS TO DISCLOSE GENERAL INFORMATION KNOWN BY THE ENGINEER AND TO SHOW THE LIMITS OF THE AREA WHERE WORK WILL BE PERFORMED. THIS PLAN SHOWS THE EXISTING FEATURES TAKEN FROM A FIELD SURVEY, FIELD INVESTIGATIONS AND AVAILABLE INFORMATION. THIS PLAN MAY OR MAY NOT ACCURATELY REFLECT THE TYPE OR EXTENT OF THE ITEMS TO BE ENCOUNTERED AS THEY ACTUALLY EXIST. WHERE EXISTING FEATURES ARE NOT SHOWN, IT IS IMPLIED THAT THEY ARE NOT TO BE DEMOLISHED OR REMOVED. THE CONTRACTOR SHALL PERFORM A THOROUGH FIELD INVESTIGATION AND REVIEW OF THE SITE WITHIN THE LIMIT OF WORK SHOWN IN THIS PLAN SET TO DETERMINE THE TYPE, QUANTITY AND EXTENT OF ANY AND ALL ITEMS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DETERMINING THE EXTENT OF EXISTING STRUCTURES AND UTILITIES AND QUANTITY OR WORK INVOLVED IN REMOVING THESE ITEMS FROM THE SITE.
18. ALL ABANDONED BUILDINGS AND FOUNDATIONS, TREE (EXCEPT THOSE SPECIFIED TO REMAIN FOR LANDSCAPING PURPOSES), FENCES, VEGETATION AND ANY SURFACE DEBRIS SHALL BE REMOVED AND DISPOSED OF OFF THE SITE BY THE CONTRACTOR.
19. ALL ABANDONED UNDERGROUND TANKS AND ANY OTHER SUBSURFACE STRUCTURES EXISTING IN PROPOSED DEVELOPMENT AREAS SHALL BE REMOVED PRIOR TO ANY GRADING OR FILL OPERATION. ALL APPURTENANT DRAIN FIELDS AND OTHER CONNECTING LINES MUST ALSO BE TOTALLY REMOVED.
20. ALL UNDERGROUND IRRIGATION OR UTILITY LINES SHALL BE REMOVED 5' BEYOND PROPOSED BUILDING FOUNDATION. THE APPROPRIATE FINAL DISPOSITION OF SUCH LINES DEPEND UPON THEIR DEPTH AND LOCATION AND THE METHOD OF REMOVAL OR DEMOLITION SHALL BE DETERMINED BY THE SOILS ENGINEER. ONE OF THE FOLLOWING METHODS WILL BE USED:

    A. EXCAVATE AND TOTALLY REMOVE THE UTILITY LINE FROM THE TRENCH.

    B. EXCAVATE AND CRUSH THE UTILITY LINE IN THE TRENCH.

    C. CAP THE ENDS OF THE UTILITY LINE WITH CONCRETE TO PREVENT THE ENTRANCE OF WATER. THE LOCATIONS AT WHICH THE UTILITY LINE WILL BE CAPPED WILL BE DETERMINED BY THE CITY ENGINEER. THE LENGTH OF THE CAP SHALL NOT BE LESS THAN FIVE FEET, AND THE CONCRETED MIX EMPLOYED SHALL HAVE MINIMUM SHRINKAGE.

PAVEMENT SECTION:.

1. SEE STRUCTURAL DRAWINGS FOR BUILDING SLAB SECTIONS AND PAD PREPARATIONS.
2. SEE GRADING AND DRAINAGE PLAN AS WELL AS DETAIL SHEETS FOR FLATWORK SECTIONS AND BASE REQUIREMENTS.
3. EXISTING PAVEMENT SHALL BE TACK COATED PRIOR TO CONSTRUCTING NEW PAVEMENT.
4. THE FINAL OR SURFACE LAYER OF ASPHALT CONCRETE SHALL NOT BE PLACED UNTIL ALL ON–SITE IMPROVEMENTS HAVE BEEN COMPLETED, INCLUDING ALL GRADING, AND ALL UNACCEPTABLE CONCRETE WORK HAS BEEN REMOVED AND REPLACED. UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER AND/OR DEVELOPER'S CITY ENGINEER.
5. ALL PAVING SHALL BE IN CONFORMANCE WITH THE LATEST EDITION OF CALTRANS STANDARD SPECIFICATIONS.

SITE MAINTENANCE:

1. REMOVE ALL DIRT, GRAVEL, RUBBISH, REFUSE, AND GREEN WASTE FROM STREET PAVEMENT AND STORM DRAINS ADJOINING THE SITE. LIMIT CONSTRUCTION ACCESS ROUTES ONTO THE SITE AND PLACE GRAVEL PADS AT THESE LOCATIONS. DO NOT DRIVE VEHICLES AND EQUIPMENT OFF THE PAVED OR GRAVELED AREAS DURING WET WEATHER.
2. SWEEP OR VACUUM THE STREET PAVEMENT AND SIDEWALKS ADJOINING THE PROJECT SITE AND THE ON–SITE PAVED AREAS ON A DAILY BASIS. SCRAPE CAKED–ON MUD AND DIRT FROM THESE AREAS BEFORE SWEEPING. CORNERS AND HARD TO REACH AREAS SHALL BE SWEPT MANUALLY.
3. CONTRACTOR SHALL: GATHER ALL CONSTRUCTION DEBRIS ON A REGULAR BASIS AND PLACE IT IN A DUMPSTER OR OTHER CONTAINER WHICH IS EMPTIED OR REMOVED ON A REGULAR BASIS. WHEN APPROPRIATE, USE TARPS ON THE GROUND TO COLLECT FALLEN DEBRIS OR SPLATTERS THAT COULD CONTRIBUTE TO STORM WATER RUNOFF POLLUTION.
4. IF THE STREET, SIDEWALKS AND/OR PARKING LOT ARE PRESSURE WASHED, DEBRIS MUST BE TRAPPED AND COLLECTED TO PREVENT ENTRY INTO THE STORM DRAIN SYSTEM. NO CLEANING AGENT MAY BE DISCHARGED INTO THE STORM DRAIN. IF ANY CLEANING AGENT OR DEGREASER IS USED, WASHED WATER MUST BE COLLECTED AND DISCHARGED TO THE SANITARY SEWER, SUBJECT TO THE APPROVAL OF THE OWNER'S PROJECT MANAGER, OR OTHERWISE DISPOSED OF THROUGH APPROVED DISPOSAL METHODS.
5. CREATE A CONTAINED AND COVERED AREA ON THE SITE FOR THE STORAGE OF BAGS, CEMENT, PAINTS, OILS, FERTILIZERS, PESTICIDES, OR OTHER MATERIAL USED ON THE SITE THAT HAVE THE POTENTIAL OF BEING WIND–BLOWN OR IN THE EVENT OF A MATERIAL SPILL.
6. NEVER CLEAN MACHINERY, EQUIPMENT OR TOOLS INTO A STREET, GUTTER OR STORM DRAIN.
7. ENSURE THAT CEMENT TRUCKS, PAINTERS, OR STUCCO/PLASTER FINISHING CONTRACTORS DO NOT DISCHARGE WASH WATER FROM EQUIPMENT, TOOLS OR RINSE CONTAINERS INTO GUTTERS OR DRAINS.
8. THE ON–SITE STORM DRAIN FACILITIES SHALL BE CLEANED A MINIMUM OF TWICE A YEAR AS FOLLOWS: IMMEDIATELY PRIOR TO OCTOBER 15TH AND ONCE IN JANUARY. ADDITIONAL CLEANING MAY BE REQUIRED IF FOUND NECESSARY BY THE CITY ENGINEER/INSPECTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR COST ASSOCIATED WITH CLEANING.
9. PREVENT DUST FROM LEAVING THE SITE AND ACCUMULATING ON ADJACENT AREAS AS REQUIRED IN THE DUST CONTROL NOTES ON THIS SHEET.
10. PREVENT SEDIMENT LADEN STORM RUN–OFF FROM LEAVING THE SITE OR ENTERING STORM DRAIN OR SANITARY SEWER SYSTEMS AS REQUIRED IN THE EROSION AND SEDIMENTATION CONTROL NOTES ON THIS SHEET.
11. MAINTAIN EXISTING TREES AND PLANTS THAT ARE TO REMAIN AS REQUIRED BY THE TREE AND PLANT PROTECTION NOTES ON THE SHEET.

EARTHWORK QUANTITY NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE QUANTITIES OF ALL FORMS OF EARTHWORK ON THIS PROJECT AND BASING THE BID ON THOSE QUANTITIES WITH FULL KNOWLEDGE THAT ADDITIONAL PROCESSES – INCLUDING ENGINEERING – AND QUANTITIES ARE ALSO TO BE INCLUDED IN THE BID PER THE FOLLOWING NOTES.

2. THE CONTRACTOR SHALL MAKE AN INITIAL DETERMINATION OF THE QUANTITIES, BASED ON A DETAILED SITE VISIT. THE TOPOGRAPHIC SURVEY, THE GEOTECHNICAL REPORT, THE FINISH GRADES SHOWN ON THESE DRAWINGS, THE SIZE AND EXTENT OF FOOTINGS, THE PREPARATION AND MATERIALS USED FOR BUILDING SLABS, PAVEMENT SECTIONS, AND THE SIZE AND DEPTH OF UTILITY TRENCHES, INCLUDING THE UTILITY CONTRACTORS ANTICIPATED RE–USE OF EXISTING MATERIAL FOR BACKFILL IF ANY.

3. THE CONTRACTOR SHALL MEET THE GRADES SHOWN ON THE DRAWINGS, ADJUSTING THE AMOUNT OF IMPORT OR EXPORT AS REQUIRED TO DO SO. NO ASSUMPTIONS SHOULD BE MADE ABOUT THE SITE BALANCING. NO ADJUSTMENTS TO THE GRADE SHALL BE PERMITTED UNLESS SPECIFICALLY APPROVED BY THE ARCH/ENGR IN WRITING AFTER THE IMPACT OF ANY GRADE CHANGES (IMPACT TO RAMPS, STAIRS, WORK BY OTHERS, ETC.) HAS BEEN THOROUGHLY REVIEWED BY THE ARCH/ENGR. WHEN PREPARING THE EARTHWORK BIDS, DO NOT ASSUME ANY CHANGES TO THE FINISHED GRADES SHOWN ON THESE DRAWINGS WILL BE PERMITTED.

SITE FENCING NOTES:

1. CONTRACTOR SHALL PROVIDE A CONSTRUCTION FENCE AROUND THE ENTIRE AREA OF DEMOLITION AND CONSTRUCTION, INCLUDING ALL STAGING, STORAGE, CONSTRUCTION OFFICE AND LAYDOWN AREAS.
2. FENCE LOCATION MAY BE ADJUSTED FROM TIME TO TIME AS CONSTRUCTION PROCEEDS TO EXCLUDE SOME AREAS WHERE CONSTRUCTION WORK IS NOT BEING DONE AND THE AREA IS NOT OBJECTIONABLE IN VISUAL APPEARANCE, AT THE DISCRETION AND APPROVAL OF THE DISTRICT STAFF.
3. CONSTRUCTION FENCE SHALL BE A MINIMUM OF A 6' HIGH GALVANIZED CHAIN LINK FENCE WITH GREEN WINDSCREEN FABRIC ON THE OUTSIDE OF THE FENCE.
4. CONTRACTOR SHALL REPLACE THE GREEN FABRIC AT LEAST ONCE A YEAR OR AT SUCH A TIME AS IT BECOMES TATTERED AND UNSIGHTLY DUE TO WIND OR CONSTRUCTION ACTIVITIES.

DUST CONTROL:

1. WATER TRUCKS SHALL BE PRESENT AND IN USE AT THE CONSTRUCTION SITE. ALL PORTIONS OF THE SITE SUBJECT TO BLOWING DUST SHALL BE WATERED AS OFTEN AS DEEMED NECESSARY BY THE APPROPRIATE GOVERNMENTAL AGENCY IN ORDER TO ENSURE PROPER CONTROL OF BLOWING DUST FOR THE DURATION OF THE PROJECT.
2. WATERING ASSOCIATED WITH ON–SITE CONSTRUCTION ACTIVITY SHALL TAKE PLACE BETWEEN THE ESTABLISHED CONSTRUCTION HOURS AND SHALL INCLUDE AT LEAST ONE LATE–AFTERNOON WATERING TO MINIMIZE THE EFFECTS OF BLOWING DUST.
3. ALL PUBLIC STREETS AND MEDIANS SOILED OR LITTERED DUE TO THIS CONSTRUCTION ACTIVITY SHALL BE CLEANED AND SWEPT ON A DAILY BASIS DURING THE WORK WEEK, OR AS OFTEN AS DEEMED NECESSARY BY THE OWNER'S ENGINEER/INSPECTOR, TO THE SATISFACTION OF THE CITY'S DEPARTMENT OF PUBLIC WORKS.
4. WATERING ON PUBLIC STREETS OR POWER WASHING SEDIMENTATION ON STREETS SHALL NOT OCCUR, UNLESS CONTRACTOR COLLECTS AND FILTERS THE WASH WATER PRIOR TO ITS ENTERING THE CITY'S STORM DRAIN SYSTEM.
5. ON–SITE PAVED ACCESS ROADS, PARKING AREAS AND STAGING AREAS SHALL BE SWEPT DAILY WITH A WATER SWEEPER.
6. WHEEL WASHERS SHALL BE INSTALLED AND USED TO CLEAN ALL TRUCKS AND EQUIPMENT LEAVING THE CONSTRUCTION SITE. IF WHEEL WASHERS CANNOT BE INSTALLED, TIRES OR TRACKS OF ALL TRUCKS AND EQUIPMENT SHALL BE WASHED OFF BEFORE LEAVING THE CONSTRUCTION SITE.
7. GRADING OR ANY OTHER OPERATIONS THAT CREATES DUST SHALL BE STOPPED IMMEDIATELY IF DUST AFFECTS ADJACENT PROPERTIES. THE CONTRACTOR SHALL PROVIDE SUFFICIENT DUST CONTROL FOR THE ENTIRE PROJECT SITE IN ACCORDANCE WITH THE PROJECT SWPPP AT ALL TIMES. THE SITE SHALL BE SPRINKLERED AS NECESSARY TO PREVENT DUST NUISANCE. IN THE EVENT THAT THE CONTRACTOR NEGLECTS TO USE ADEQUATE MEASURES TO CONTROL DUST. THE CITY RESERVES THE RIGHT TO TAKE WHATEVER MEASURES ARE NECESSARY TO CONTROL DUST AND CHARGE THE COST TO THE CONTRACTOR.
8. THE PERMITEE IS RESPONSIBLE FOR DUST CONTROL MEASURES AND FOR OBTAINING ALL REQUIRED PERMITS AND APPROVALS. ALL GRADING OPERATIONS SHALL BE SUSPENDED DURING SECOND (OR WORSE) STAGE SMOG ALERTS.
9. ALL TRUCKS HAULING SOIL, SAND, AND OTHER LOOSE MATERIALS SHALL BE COVERED WITH TARPAULINS OR OTHER EFFECTIVE COVERS.

GRADING & DRAINAGE NOTES:

1. SCOPE OF WORK
   THESE SPECIFICATIONS AND APPLICABLE PLANS PERTAIN TO AND INCLUDE ALL SITE GRADING AND EARTHWORK ASSOCIATED WITH THE PROJECT INCLUDING, BUT NOT LIMITED TO THE FURNISHING OF ALL LABOR, TOOLS AND EQUIPMENT NECESSARY FOR SITE CLEARING AND GRUBBING, SITE PREPARATION, DISPOSAL OF EXCESS OR UNSUITABLE MATERIAL, STRIPPING, KEYING, EXCAVATION, OVER EXCAVATION, RECOMPACTION PREPARATION FOR SOIL RECEIVING FILL, PAVEMENT, FOUNDATION OF SLABS, EXCAVATION, IMPORTATION OF ANY REQUIRED FILL MATERIAL, PROCESSING, PLACEMENT AND COMPACTION OF FILL AND SUBSIDIARY WORK NECESSARY TO COMPLETE THE GRADING TO CONFORM TO THE LINES, GRADING AND SLOPE SHOWN ON THE PROJECT GRADING PLANS.
2. GENERAL
   A. ALL SITE GRADING AND EARTHWORK SHALL CONFORM TO THE RECOMMENDATIONS OF THESE SPECIFICATIONS, THE SOILS REPORT BY WAYPOINT ANALYTICAL: "GEOTECHNICAL INVESTIGATIONS", PROJECT NUMBER. 16–092–0105, DATED APRIL 12, 2016.
   B. ALL FILL MATERIALS SHALL BE DENSIFIED SO AS TO PRODUCE A DENSITY NOT LESS THAN 90% RELATIVE COMPACTION BASED UPON ASTM TEST DESIGNATION D1557. FIELD DENSITY TEST WILL BE PERFORMED IN ACCORDANCE WITH ASTM TEST DESIGNATION 2922 AND 3017. THE LOCATION AND FREQUENCY OF THE FIELD DENSITY TEST WILL BE AS DETERMINED BY THE SOIL ENGINEER. THE RESULTS OF THESE TEST AND COMPLIANCE WITH THE SPECIFICATIONS WILL BE THE BASIS UPON WHICH SATISFACTORY COMPLETION OF THE WORK WILL BE JUDGED BY THE SOIL ENGINEER. ALL CUT AND FILL SLOPES SHALL BE CONSTRUCTED AS SHOWN ON PLANS, BUT NO STEEPER THAN TWO (2) HORIZONTAL TO ONE (1) VERTICAL.
   C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SATISFACTORY COMPLETION OF ALL THE EARTHWORK IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS. NO DEVIATION FROM THESE SPECIFICATIONS SHALL BE MADE EXCEPT UPON WRITTEN APPROVAL BY THE SOILS ENGINEER. BOTH CUT AND FILL AREAS SHALL BE SURFACE COMPLETED TO THE SATISFACTION OF THE SOILS ENGINEER AT THE CONCLUSION OF ALL GRADING OPERATIONS AND PRIOR TO FINAL ACCEPTANCE. THE CONTRACTOR SHALL NOTIFY THE SOILS ENGINEER AT LEAST TWO (2) WORKING DAYS PRIOR TO DOING ANY SITE GRADING AND EARTHWORK INCLUDING CLEARING.
3. CLEARING AND GRUBBING
   A. THE CONTRACTOR SHALL ACCEPT THE SITE IN ITS PRESENT CONDITION. ALL EXISTING PUBLIC IMPROVEMENTS SHALL BE PROTECTED. ANY IMPROVEMENTS DAMAGED SHALL BE REPLACED BY THE CONTRACTOR AS DIRECTED BY THE LOCAL JURISDICTION WITH NO EXTRA COMPENSATION.
   B. ALL ABANDONED BUILDINGS AND FOUNDATIONS, TREE (EXCEPT THOSE SPECIFIED TO REMAIN FOR LANDSCAPING PURPOSES), FENCES, VEGETATION AND ANY SURFACE DEBRIS SHALL BE REMOVED AND DISPOSED OF OFF THE SITE BY THE CONTRACTOR.
   C. ALL ABANDONED SEPTIC TANKS AND ANY OTHER SUBSURFACE STRUCTURES EXISTING IN PROPOSED DEVELOPMENT AREAS SHALL BE REMOVED PRIOR TO ANY GRADING OR FILL OPERATION. ALL APPURTENANT DRAIN FIELDS AND OTHER CONNECTING LINES MUST ALSO BE TOTALLY REMOVED.
   D. ALL ABANDONED UNDERGROUND IRRIGATION OR UTILITY LINES SHALL BE REMOVED OR DEMOLISHED. THE APPROPRIATE FINAL DISPOSITION OF SUCH LINES DEPEND UPON THEIR DEPTH AND LOCATION AND THE METHOD OF REMOVAL OR DEMOLITION SHALL BE DETERMINED BY THE SOILS ENGINEER. ONE OF THE FOLLOWING METHODS WILL BE USED:
      (1) EXCAVATE AND TOTALLY REMOVE THE UTILITY LINE FROM THE TRENCH.
      (2) EXCAVATE AND CRUSH THE UTILITY LINE IN THE TRENCH.
      (3) CAP THE ENDS OF THE UTILITY LINE WITH CONCRETE TO PREVENT THE ENTRANCE OF WATER. THE LOCATIONS AT WHICH THE UTILITY LINE WILL BE CAPPED WILL BE DETERMINED BY THE UTILITY DISTRICT ENGINEER. THE LENGTH OF THE CAP SHALL NOT BE LESS THAN FIVE FEET, AND THE CONCRETED MIX EMPLOYED SHALL HAVE MINIMUM SHRINKAGE.
4. SITE PREPARATION AND STRIPPING
   A. ALL SURFACE ORGANICS SHALL BE STRIPPED AND REMOVED FROM BUILDING PADS, AREAS TO RECEIVE COMPACTED FILL AND PAVEMENT AREAS.
   B. UPON THE COMPLETION OF THE ORGANIC STRIPPING OPERATION, THE GROUND SURFACE (NATIVE SOIL SUBGRADE) OVER THE ENTIRE AREA OF ALL BUILDING PADS, STREET AND PAVEMENT AREAS AND ALL AREAS TO RECEIVE COMPACTED FILL SHALL BE PLOWED OR SCARIFIED UNTIL THE SURFACE IS FREE OF RUTS, HUMMOCKS OR OTHER UNEVEN FEATURES WHICH MAY INHIBIT UNIFORM SOIL COMPACTION. THE GROUND SURFACE SHALL THEN BE DISCED OR BLADED TO A DEPTH OF AT LEAST 6 INCHES. UPON ENGINEER'S SATISFACTION, THE NEW SURFACE SHALL BE WATER CONDITIONED AND RECOMPACTED PER REQUIREMENTS FOR COMPACTING FILL MATERIAL.
5. EXCAVATION
   A. UPON COMPLETION OF THE CLEARING AND GRUBBING, SITE PREPARATION AND STRIPPING, THE CONTRACTOR SHALL MAKE EXCAVATIONS TO LINES AND GRADES NOTED ON THE PLAN. WHERE REQUIRED BY THE SOILS ENGINEER, UNACCEPTABLE NATIVE SOILS OR UNENGINEERED FILL SHALL BE OVER EXCAVATED BELOW THE DESIGN GRADE. SEE PROJECT SOILS REPORT FOR DISCUSSION OF OVER EXCAVATION OF THE UNACCEPTABLE MATERIAL. RESULTING GROUND LINE SHALL BE SCARIFIED, MOISTURE–CONDITIONED AND RECOMPACTED AS SPECIFIED IN SECTION 4 OF THESE SPECIFICATIONS. COMPACTED FILL MATERIAL SHALL BE PLACED TO BRING GROUND LEVEL BACK TO DESIGN GRADE.
   B. EXCAVATED MATERIALS SUITABLE FOR COMPACTED FILL MATERIAL SHALL BE UTILIZED IN MAKING THE REQUIRED COMPACTED FILLS. THOSE NATIVE MATERIALS CONSIDERED UNSUITABLE BY THE SOILS ENGINEER SHALL BE DISPOSED OF OFF THE SITE BY THE CONTRACTOR.
6. EXCAVATION
   A. UPON COMPLETION OF THE CLEARING AND GRUBBING, SITE PREPARATION AND STRIPPING, THE CONTRACTOR SHALL MAKE EXCAVATIONS TO LINES AND GRADES NOTED ON THE PLAN. WHERE REQUIRED BY THE SOILS ENGINEER, UNACCEPTABLE NATIVE SOILS OR UNENGINEERED FILL SHALL BE OVER EXCAVATED BELOW THE DESIGN GRADE. SEE PROJECT SOILS REPORT FOR DISCUSSION OF OVER EXCAVATION OF THE UNACCEPTABLE MATERIAL. RESULTING GROUND LINE SHALL BE SCARIFIED, MOISTURE–CONDITIONED AND RECOMPACTED AS SPECIFIED IN SECTION 4 OF THESE SPECIFICATIONS. COMPACTED FILL MATERIAL SHALL BE PLACED TO BRING GROUND LEVEL BACK TO DESIGN GRADE.
   B. EXCAVATED MATERIALS SUITABLE FOR COMPACTED FILL MATERIAL SHALL BE UTILIZED IN MAKING THE REQUIRED COMPACTED FILLS. THOSE NATIVE MATERIALS CONSIDERED UNSUITABLE BY THE SOILS ENGINEER SHALL BE DISPOSED OF OFF THE SITE BY THE CONTRACTOR.

JAMES TOBY
No. 63127
CIVIL
ORIGINAL SIGNATURES IN BLUE INK

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS · LAND SURVEYORS

BAY AREA REGION
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(P) (510) 887–4086
(F) (510) 887–3019

SACRAMENTO REGION
3017 DOUGLAS BLVD, # 300
ROSEVILLE, CA 95661
(P) (916)966–1338
(F) (916)797–7363

WWW.LEABRAZE.COM

IMPROVEMENT PLANS
LIFEMOVES MAPLE STREET SHELTER
1580 MAPLE STREET
SAN MATEO COUNTY
APN: 052–532–020

NOTES

REVISIONS	BY
–	–
–	–
–	–
–	–
–	–

JOB NO:	2151287
DATE:	06–17–16
SCALE:	NTS
DESIGN BY:	MH
DRAWN BY:	WM

SHEET NO:
C-7.0
12 OF 17 SHEETS

GRADING & DRAINAGE NOTES (CONT.):

7. PLACING, SPREADING AND COMPACTING FILL MATERIAL
   A. FILL MATERIALS
      THE MATERIALS PROPOSED FOR USE AS COMPACTED FILL SHALL BE APPROVED BY THE SOILS ENGINEER BEFORE COMMENCEMENT OF GRADING OPERATIONS. THE NATIVE MATERIAL IS CONSIDERED SUITABLE FOR FILL; HOWEVER, ANY NATIVE MATERIAL DESIGNATED UNSUITABLE BY THE SOILS ENGINEER SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR. ANY IMPORTED MATERIAL SHALL BE APPROVED FOR USE BY THE SOILS ENGINEER, IN WRITING, BEFORE BEING IMPORTED TO THE SITE AND SHALL POSSESS SUFFICIENT FINES TO PROVIDE A COMPETENT SOIL MATRIX AND SHALL BE FREE OF VEGETATIVE AND ORGANIC MATTER AND OTHER DELETERIOUS MATERIALS. ALL FILL VOIDS SHALL BE FILLED AND PROPERLY COMPACTED. NO ROCKS LARGER THAN THREE INCHES IN DIAMETER SHALL BE PERMITTED.
   B. FILL CONSTRUCTION
      THE SOILS ENGINEER SHALL APPROVE THE NATIVE SOIL SUBGRADE BEFORE PLACEMENT OF ANY COMPACTED FILL MATERIAL. UNACCEPTABLE NATIVE SOIL SHALL BE REMOVED AS DIRECTED BY THE SOILS ENGINEER. THE RESULTING GROUND LINE SHALL BE SCARIFIED MOISTURE CONDITIONED AND RECOMPACTED AS SPECIFIED IN SECTION 4 OF THESE SPECIFICATIONS. COMPACTED FILL MATERIAL SHALL BE PLACED TO BRING GROUND LEVEL BACK TO DESIGN GRADE. GROUND PREPARATION SHALL BE FOLLOWED CLOSELY BY FILL PLACEMENT TO PREVENT DRYING OUT OF THE SUBSOIL BEFORE PLACEMENT OF THE FILL.
      THE APPROVED FILL MATERIALS SHALL BE PLACED IN UNIFORM HORIZONTAL LAYERS NO THICKER THAN 8" IN LOOSE THICKNESS. LAYERS SHALL BE SPREAD EVENLY AND SHALL BE THOROUGHLY BLADE MIXED DURING THE SPREADING TO ENSURE UNIFORMITY OF MATERIAL IN EACH LAYER. THE SCARIFIED SUBGRADE AND FILL MATERIAL SHALL BE MOISTURE CONDITIONED TO AT LEAST OPTIMUM MOISTURE. WHEN THE MOISTURE CONTENT OF THE FILL IS BELOW THAT SPECIFIED, WATER SHALL BE ADDED UNTIL THE MOISTURE DURING THE COMPACTION PROCESS. WHEN THE MOISTURE CONTENT OF THE FILL IS ABOVE THAT SPECIFIED, THE FILL MATERIAL SHALL BE AERATED BY BLADING OR OTHER SATISFACTORY METHODS UNTIL THE MOISTURE CONTENT IS AS SPECIFIED.
      AFTER EACH LAYER HAS BEEN PLACED, MIXED, SPREAD EVENLY AND MOISTURE CONDITIONED, IT SHALL BE COMPACTED TO AT LEAST THE SPECIFIED DENSITY.
      THE FILL OPERATION SHALL BE CONTINUED IN COMPACTED LAYERS AS SPECIFIED ABOVE UNTIL THE FILL HAS BEEN BROUGHT TO THE FINISHED SLOPES AND GRADES AS SHOWN ON THE PLANS. NO LAYER SHALL BE ALLOWED TO DRY OUT BEFORE SUBSEQUENT LAYERS ARE PLACED.
      COMPACTION EQUIPMENT SHALL BE OF SUCH DESIGN THAT IT WILL BE ABLE TO COMPACT THE FILL TO THE SPECIFIED MINIMUM COMPACTION WITHIN THE SPECIFIED MOISTURE CONTENT RANGE. COMPACTION OF EACH LAYER SHALL BE CONTINUOUS OVER ITS ENTIRE AREA UNTIL THE REQUIRED MINIMUM DENSITY HAS BEEN OBTAINED.
8. CUT OR FILL SLOPES
   ALL CONSTRUCTED SLOPES, BOTH CUT AND FILL, SHALL BE NO STEEPER THAN 2 TO 1 (HORIZONTAL TO VERTICAL). DURING THE GRADING OPERATION, COMPACTED FILL SLOPES SHALL BE OVERFILLED BY AT LEAST ONE FOOT HORIZONTALLY AT THE COMPLETION OF THE GRADING OPERATIONS, THE EXCESS FILL EXISTING ON THE SLOPES SHALL BE BLADED OFF TO CREATE THE FINISHED SLOPE EMBANKMENT. ALL CUT AND FILL SLOPES SHALL BE TRACK WALKED AFTER BEING BROUGHT TO FINISH GRADE AND THEN BE PLANTED WITH EROSION CONTROL SLOPE PLANTING. THE SOILS ENGINEER SHALL REVIEW ALL CUT SLOPES TO DETERMINE IF ANY ADVERSE GEOLOGIC CONDITIONS ARE EXPOSED. IF SUCH CONDITIONS DO OCCUR, THE SOILS ENGINEER SHALL RECOMMEND THE APPROPRIATE MITIGATION MEASURES AT THE TIME OF THEIR DETECTION.
9. SEASONAL LIMITS AND DRAINAGE CONTROL
   FILL MATERIALS SHALL NOT BE PLACED, SPREAD OR COMPACTED WHILE IT IS AT AN UNSUITABLY HIGH MOISTURE CONTENT OR DURING OTHERWISE UNFAVORABLE CONDITIONS. WHEN THE WORK IS INTERRUPTED FOR ANY REASON THE FILL OPERATIONS SHALL NOT BE RESUMED UNTIL FIELD TEST PERFORMED BY THE SOILS ENGINEER INDICATE THAT THE MOISTURE CONDITIONS IN AREAS TO BE FILLED ARE AS PREVIOUSLY SPECIFIED. ALL EARTH MOVING AND WORKING OPERATIONS SHALL BE CONTROLLED TO PREVENT WATER FROM RUNNING INTO EXCAVATED AREAS. ALL EXCESS WATER SHALL BE PROMPTLY REMOVED AND THE SITE KEPT DRY.
10. DUST CONTROL
   THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY FOR THE ALLEVIATION OR PREVENTION OF ANY DUST NUISANCE ON OR ABOUT THE SITE CAUSED BY THE CONTRACTOR'S OPERATION EITHER DURING THE PERFORMANCE OF THE GRADING OR RESULTING FROM THE CONDITION IN WHICH THE CONTRACTOR LEAVES THE SITE. THE CONTRACTOR SHALL ASSUME ALL LIABILITY INCLUDING COURT COST OF CO-DEFENDANTS FOR ALL CLAIMS RELATED TO DUST OR WIND-BLOWN MATERIALS ATTRIBUTABLE TO HIS WORK. COST FOR THIS ITEM OF WORK IS TO BE INCLUDED IN THE EXCAVATION ITEM AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.
11. INDEMNITY
   THE CONTRACTOR WILL HOLD HARMLESS, INDEMNIFY AND DEFEND THE ENGINEER, THE OWNER AND HIS CONSULTANTS AND EACH OF THEIR OFFICERS AND EMPLOYEES AND AGENTS, FROM ANY AND ALL LIABILITY CLAIMS, LOSSES OR DAMAGE ARISING OR ALLEGED TO HEREIN, BUT NOT INCLUDING THE SOLE NEGLIGENCE OF THE OWNER, THE ARCHITECT, THE ENGINEER AND HIS CONSULTANTS AND EACH OF THEIR OFFICERS AND EMPLOYEES AND AGENTS.
12. SAFETY
   IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE. INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
   THE DUTY OF THE ENGINEERS TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES, IN, ON OR NEAR THE CONSTRUCTION SITE.
13. GUARANTEE
   NEITHER THE FINAL PAYMENT, NOR THE PROVISIONS IN THE CONTRACT, NOR PARTIAL, NOR ENTIRE USE OR OCCUPANCY OF THE PREMISES BY THE OWNER SHALL CONSTITUTE AN ACCEPTANCE OF THE WORK NOT DONE IN ACCORDANCE WITH THE CONTRACT OR RELIEVES THE CONTRACTOR OF LIABILITY IN RESPECT TO ANY EXPRESS WARRANTIES OR RESPONSIBILITY FOR FAULTY MATERIAL OR WORKMANSHIP. THE CONTRACTOR SHALL REMEDY ANY DEFECTS IN WORK AND PAY FOR ANY DAMAGE TO OTHER WORK RESULTING THERE FROM WHICH SHALL APPEAR WITHIN A PERIOD OF ONE (1) CALENDAR YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THE WORK.
14. TRENCH BACKFILL
   EITHER THE ON-SITE INORGANIC SOIL OR APPROVED IMPORTED SOIL MAY BE USED AS TRENCH BACKFILL. THE BACKFILL MATERIAL SHALL BE MOISTURE CONDITIONED PER THESE SPECIFICATIONS AND SHALL BE PLACED IN LIFTS OF NOT MORE THAN SIX INCHES IN HORIZONTAL UNCOMPACTED LAYERS AND BE COMPACTED BY MECHANICAL MEANS TO A MINIMUM OF 90% RELATIVE COMPACTION. IMPORTED SAND MAY BE USED FOR TRENCH BACKFILL MATERIAL PROVIDED IT IS COMPACTED TO AT LEAST 90% RELATIVE COMPACTION. WATER JETTING ASSOCIATED WITH COMPACTION USING VIBRATORY EQUIPMENT WILL BE PERMITTED ONLY WITH IMPORTED SAND BACKFILL WITH THE APPROVAL OF THE SOILS ENGINEER. ALL PIPES SHALL BE BEDDED WITH SAND EXTENDING FROM THE TRENCH BOTTOM TO TWELVE INCHES ABOVE THEPIPE. SAND BEDDING IS TO BE COMPACTED AS SPECIFIED ABOVE FOR SAND BACKFILL.

15. EROSION CONTROL
   A. ALL GRADING, EROSION AND SEDIMENT CONTROL AND RELATED WORK UNDERTAKEN ON THIS SITE IS SUBJECT TO ALL TERMS AND CONDITIONS OF THE COUNTY GRADING ORDINANCE AND MADE A PART HEREOF BY REFERENCE.
   B. THE CONTRACTOR WILL BE LIABLE FOR ANY AND ALL DAMAGES TO ANY PUBLICLY OWNED AND MAINTAINED ROAD CAUSED BY THE AFORESAID CONTRACTOR'S GRADING ACTIVITIES, AND SHALL BE RESPONSIBLE FOR THE CLEANUP OF ANY MATERIAL SPILLED ON ANY PUBLIC ROAD ON THE HAUL ROUTE.
   C. THE EROSION CONTROL MEASURES ARE TO BE OPERABLE DURING THE RAINY SEASON, GENERALLY FROM OCTOBER FIRST TO APRIL FIFTEENTH. EROSION CONTROL PLANTING IS TO BE COMPLETED BY OCTOBER FIRST. NO GRADING OR UTILITY TRENCHING SHALL OCCUR BETWEEN OCTOBER FIRST AND APRIL FIFTEENTH UNLESS AUTHORIZED BY THE LOCAL JURISDICTION.
   D. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED AND CHANGES TO THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE MADE TO MEET FIELD CONDITIONS ONLY WITH THE APPROVAL OF OR AT THE DIRECTION OF THE SOILS ENGINEER.
   E. DURING THE RAINY SEASON, ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT-LADEN RUNOFF TO ANY STORM DRAINAGE SYSTEM.

   F. ALL EROSION CONTROL FACILITIES MUST BE INSPECTED AND REPAIRED AT THE END OF EACH WORKING DAY DURING THE RAINY SEASON.
   G. WHEN NO LONGER NECESSARY AND PRIOR TO FINAL ACCEPTANCE OF DEVELOPMENT, SEDIMENT BASINS SHALL BE REMOVED OR OTHERWISE DEACTIVATED AS REQUIRED BY THE LOCAL JURISDICTION.
   H. A CONSTRUCTION ENTRANCE SHALL BE PROVIDED AT ANY POINT OF EGRESS FROM THE SITE TO ROADWAY. A CONSTRUCTION ENTRANCE SHOULD BE COMPOSED OF COARSE DRAIN ROCK (2" TO 3") MINIMUM DIAMETER) AT LEAST EIGHT INCHES THICK BY FIFTY (50) FEET LONG BY TWENTY (20) FEET WIDE UNLESS SHOWN OTHERWISE ON PLAN AND SHALL BE MAINTAINED UNTIL THE SITE IS PAVED.
   I. ALL AREAS SPECIFIED FOR HYDROSEEDING SHALL BE NOZZLE PLANTED WITH STABILIZATION MATERIAL CONSISTING OF FIBER, SEED, FERTILIZER AND WATER, MIXED AND APPLIED IN THE FOLLOWING PROPORTIONS:
      FIBER, 2000 LBS/ACRE
      SEED, 55 LBS/ACRE (SEE NOTE J, BELOW)
      FERTILIZER (7-2-1), 1,000 LBS/ACRE
      WATER, AS REQUIRED FOR APPLICATION
   J. SEED MIX SHALL BE PER CALTRANS STANDARDS.
   K. WATER UTILIZED IN THE STABILIZATION MATERIAL SHALL BE OF SUCH QUALITY THAT IT WILL PROMOTE GERMINATION AND STIMULATE GROWTH OF PLANTS. IT SHALL BE FREE OF POLLUTANT MATERIALS AND WEED SEED.
   L. HYDROSEEDING SHALL CONFORM TO THE PROVISIONS OF SECTION 20, EROSION CONTROL AND HIGHWAY PLANTING", OF THE STANDARD SPECIFICATIONS OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION, AS LAST REVISED.
   M. A DISPERSING AGENT MAY BE ADDED TO THE HYDROSEEDING MATERIAL, PROVIDED THAT THE CONTRACTOR FURNISHES SUITABLE EVIDENCE THAT THE ADDITIVE WILL NOT ADVERSELY AFFECT THE PERFORMANCE OF THE SEEDING MIXTURE.
   N. STABILIZATION MATERIALS SHALL BE APPLIED AS SOON AS PRACTICABLE AFTER COMPLETION OF GRADING OPERATIONS AND PRIOR TO THE ONSET OF WINTER RAINS, OR AT SUCH OTHER TIME AS DIRECTED BY THE COUNTY ENGINEER. THE MATERIAL SHALL BE APPLIED BEFORE INSTALLATION OF OTHER LANDSCAPING MATERIALS SUCH AS TREES, SHRUBS AND GROUND COVERS.
   O. THE STABILIZATION MATERIAL SHALL BE APPLIED WITHIN 4-HOURS AFTER MIXING. MIXED MATERIAL NOT USED WITHIN 4-HOURS SHALL BE REMOVED FROM THE SITE.
   P. THE CONTRACTOR SHALL MAINTAIN THE SOIL STABILIZATION MATERIAL AFTER PLACEMENT. THE COUNTY ENGINEER MAY REQUIRE SPRAY APPLICATION OF WATER OR OTHER MAINTENANCE ACTIVITIES TO ASSURE THE EFFECTIVENESS OF THE STABILIZATION PROCESS. APPLICATION OF WATER SHALL BE ACCOMPLISHED USING NOZZLES THAT PRODUCE A SPRAY THAT DOES NOT CONCENTRATE OR WASH AWAY THE STABILIZATION MATERIALS.
6. CLEANUP
   THE CONTRACTOR MUST MAINTAIN THE SITE CLEAN, SAFE AND IN USABLE CONDITION. ANY SPILLS OF SOIL, ROCK OR CONSTRUCTION MATERIAL MUST BE REMOVED FROM THE SITE BY THE CONTRACTOR DURING CONSTRUCTION AND UPON COMPLETION OF THE PROJECT. COST FOR THIS ITEM OF WORK SHALL BE INCLUDED IN THE EXCAVATION AND COMPACTION ITEM AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

GENERAL UTILITY SYSTEM NOTES:

1. ALL TRENCHES SHALL BE BACKFILLED PER THE GEOTECHNICAL ENGINEER RECCOMMENDATIONS.
2. CLEAN OUTS, CATCH BASINS AND AREA DRAINS ARE TO BE ACCURATELY LOCATED BY THEIR RELATIONSHIP TO THE BUILDING, FLATWORK, ROOF DRAINS, AND/OR CURB LAYOUT, NOT BY THE LENGTH OF PIPE SPECIFIED IN THE DRAWINGS (WHICH IS APPROXIMATE).
3. CONTRACTOR SHALL STAKE LOCATION OF ABOVE GROUND UTILITY EQUIPMENT (BACKFLOW PREVENTOR, SATELLITE DISH, TRANSFORMER, GAS METER, ETC.) AND MEET WITH OWNER TO REVIEW LOCATION PRIOR TO INSTALLATION. PLANNING DEPARTMENT MUST SPECIFICALLY AGREE WITH LOCATION PRIOR TO PROCEEDING WITH THE INSTALLATION.
4. CONTRACTOR SHALL PREPARE AN ACCURATE COMPOSITE UTILITY PLAN THAT TAKES INTO ACCOUNT THE ACTUAL LOCATION OF EXISTING UTILITIES AS DETERMINED DURING THE DEMOLITION WORK. THE UTILITIES SHOWN ON THE CIVIL DRAWINGS, AND THE SITE POWER, CONDUITS AND LIGHTING SHOWN ON THE ELECTRICAL PLANS. THE FIRE SPRINKLER SYSTEM SHALL BE INCLUDED AS DESIGNED BY THE DESIGN/BUILD UNDERGROUND FIRE SPRINKLER CONTRACTOR.
5. COMPLETE SYSTEMS: ALL UTILITY SYSTEMS ARE DELINEATED IN A SCHEMATIC MANNER ON THESE PLANS. CONTRACTOR IS TO PROVIDE ALL FITTINGS, ACCESSORIES, AND WORK NECESSARY TO COMPLETE THE UTILITY SYSTEM SO THAT IT IS FULLY FUNCTIONING FOR THE PURPOSE INTENDED.
6. UNDERGROUND UTILITIES OR STRUCTURES ARE SHOWN IN THEIR APPROXIMATE LOCATIONS AND EXTENT BASED UPON RECORD INFORMATION. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE ON THE ACCURACY OR COMPLETENESS FOR THE INFORMATION SHOWN. THE OWNER, BY ACCEPTING THESE PLANS OR PROCEEDING WITH IMPROVEMENTS PURSUANT THERETO, AGREES TO ASSUME LIABILITY AND TO HOLD THE UNDERSIGNED HARMLESS FOR ANY DAMAGES RESULTING FROM THE EXISTENCE OF UNDERGROUND UTILITIES OR STRUCTURES NOT REPORTED TO THE UNDERSIGNED; NOT INDICATED ON THE PUBLIC RECORDS EXAMINED, LOCATED AT VARIANCE WITH THOSE REPORTED OR SHOWN ON RECORDS EXAMINED.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL UTILITIES FROM DAMAGE DURING COMPACTION OF ROADWAY SUBGRADE AND PRIOR TO PLACEMENT OF FINAL PAVEMENT SECTIONS.
8. CONTRACTOR SHALL VERIFY ALL EXISTING INVERT ELEVATIONS FOR STORM DRAIN AND SANITARY SEWER CONSTRUCTION PRIOR TO COMMENCEMENT OF ANY WORK. ALL WORK FOR STORM AND SANITARY SEWER INSTALLATION SHALL BEGIN AT THE DOWNSTREAM CONNECTION POINT. THIS WILL ALLOW FOR ANY NECESSARY ADJUSTMENTS TO BE MADE PRIOR TO THE INSTALLATION OF THE ENTIRE LINE. IF THE CONTRACTOR FAILS TO BEGIN AT THE DOWNSTREAM CONNECTION POINT AND WORKS UP STREAM, HE SHALL PROCEED AT HIS OWN RISK AND BE RESPONSIBLE FOR ANY ADJUSTMENTS NECESSARY. CONTRACTOR SHALL VERIFY LOCATION OF SANITARY SEWER LATERAL WITH OWNER PRIOR TO CONSTRUCTION.
9. EXISTING UTILITY CROSSINGS OF THE NEW PIPELINE ARE SHOWN ACCORDING TO THE BEST AVAILABLE INFORMATION. GAS, WATER AND SEWER, SERVICE LATERALS ARE SHOWN ACCORDING TO THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL VERIFY THE TYPE, SIZE, LOCATION, AND DEPTH OF ALL EXISTING UTILITIES (BOTH MAINS AND LATERALS) ARE CORRECT AS SHOWN. NO GUARANTEE IS MADE THAT ALL EXISTING UTILITIES (BOTH MAINS AND LATERALS) ARE SHOWN. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING AND SHALL PROTECT ALL EXISTING UTILITIES (BOTH MAINS AND LATERALS) FROM DAMAGE DUE TO HIS OPERATION.
10. CONTRACTOR SHALL UNCOVER AND EXPOSE ALL EXISTING UTILITY AND SEWER LINES WHERE THEY ARE TO BE CROSSED ABOVE OR BELOW BY THE NEW FACILITY BEING CONSTRUCTED IN ORDER TO VERIFY THE GRADE AND TO ENSURE THAT THERE IS SUFFICIENT CLEARANCE.
    VERTICAL SEPARATION REQUIREMENTS:
    A MINIMUM OF SIX (6) INCHES VERTICAL CLEARANCE SHALL BE PROVIDED BETWEEN CROSSING UTILITY PIPES, EXCEPT THAT THE MINIMUM VERTICAL CLEARANCE BETWEEN WATER AND SANITARY SEWER PIPELINES SHALL BE 12 INCHES AND ALL NEW WATER PIPES SHALL BE TYPICALLY INSTALLED TO CROSS ABOVE/OVER EXISTING SANITARY SEWER PIPELINES.
    WHERE NEW WATER PIPELINES ARE REQUIRED TO CROSS UNDER EXISTING AND/OR NEW SANITARY SEWER PIPELINES, THE MINIMUM VERTICAL SEPARATION SHALL BE 12 INCHES. WATER LINE PIPE ENDS SHALL BE INSTALLED NO CLOSER THEN 10' MINIMUM HORIZONTAL DISTANCE FROM CENTERLINE OF UTILITY CROSSINGS WHERE FEASIBLE.
    HORIZONTAL SEPARATION REQUIREMENTS:
    A MINIMUM HORIZONTAL SEPARATION BETWEEN NEW PIPELINES AND ANY EXISTING UTILITIES SHALL BE 5' FEET EXCEPT THAT THE MINIMUM HORIZONTAL SEPARATION FOR WATER AND SANITARY SEWER PIPELINES SHALL BE 10' MINIMUM, UNLESS OTHERWISE NOTED.
    A MINIMUM HORIZONTAL SEPARATION BETWEEN NEW PIPELINES AND JOINT TRENCH SHALL BE 5 FEET.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING APPROPRIATE UTILITIES AND REQUESTING VERIFICATION OF SERVICE POINTS, FIELD VERIFICATION OF LOCATION, SIZE, DEPTH, ETC. FOR ALL THEIR FACILITIES AND TO COORDINATE WORK SCHEDULES.

STORM DRAIN NOTES:

1. ALL STORM DRAIN PIPE SHALL BE PVC SDR 35. PIPE SHALL BE SIZED AS SPECIFIED ON THE PLANS. ALL DIRECTION CHANGES SHALL BE MADE WITH A WYE CONNECTION OR LONG SWEEP ELBOWS, REGULAR ELBOWS, AND TEE'S SHOULD BE AVOIDED.
2. USE DETECTABLE METALIZED WARNING TAPE APPROXIMATE 6" BELOW THE SURFACE. TAPE SHALL BE A BRIGHT COLOR AND IMPRINTED WITH "CAUTION-STORM DRAIN LINE BELOW", CALPICO TYPE 2 OR EQUAL.
3. PAINT THE TOP OF THE CURBS ADJACENT TO EACH CATCH BASIN INSTALLED UNDER THE WORK OR ADJACENT TO THIS SITE WITH THE WORDS "NO DUMPING! FLOWS TO BAY" PER COUNTY STANDARDS.
4. ALL AREA DRAINS AND CATCH BASINS GRATES WITHIN PEDESTRIAN ACCESSIBLE AREAS SHALL MEET ADA REQUIREMENTS.
5. ALL TRENCHES SHALL BE BACKFILLED PER THE SPECIFICATIONS WITH APPROPRIATE TEST BY THE GEOTECHNICAL ENGINEER TO VERIFY COMPACTION VALUES.
6. FOR GRAVITY FLOW SYSTEMS CONTRACTOR SHALL VERIFY (POTHOLE IF NECESSARY) SIZE, MATERIAL, LOCATION AND DEPTH OF ALL SYSTEMS ARE TO BE CONNECTED TO OR CROSSED PRIOR TO TRENCHING OR INSTALLATION OF ANY GRAVITY FLOW SYSTEM.
7. COMPLETE SYSTEMS; ALL UTILITY SYSTEMS ARE DELINEATED IN SCHEMATIC MANNER ON THESE PLANS. CONTRACTOR IS TO PROVIDE ALL FITTINGS, ACCESSORIES, AND WORK NECESSARY TO COMPLETE THE UTILITY SYSTEM SO THAT IT IS FULLY FUNCTIONING FOR THE PURPOSE INTENDED.
8. PRIVATE STORM DRAIN LINE WITH A MINIMUM OF TWO (2) FEET OF COVER IN NON-TRAFFIC AREAS SHALL BE POLYVINAL CHLORIDE (PVC) SDR 35.

SANITARY SEWER NOTES:

1. INSTALL DETECTABLE METALIZED WARNING TAPE APPROXIMATELY 6"-12" BELOW THE SERVICE IN NON-PAVED AREAS, AND AT THE BOTTOM OF BASEROCK FOR PAVED AREAS. GREEN IMPRINTED WITH "CAUTION- SANITARY SEWER LINE BELOW", CALPICO TYPE 2 OR EQUAL.
2. ALL SEWER WORK SHALL BE IN CONFORMANCE WITH THE CITY/TOWN OR APPROPRIATE SANITARY SEWER DISTRICT.
3. PUBLIC AND PRIVATE SANITARY SEWER MAIN AND SERVICE LINE 4-INCH THROUGH 8-INCH SHALL BE POLYVINYL CHLORIDE (PVC) SDR 26 SEWER PIPE.
4. WHERE CONNECTION IS TO BE MADE TO AN EXISTING SEWER OR STRUCTURE, SAID EXISTING SEWER OR STRUCTURE SHALL BE UNCOVERED AND CHECKED FOR LOCATION AND ELEVATION PRIOR TO STAKING NEW SEWER DEPTH AND LOCATION. ANY DISCREPANCY BETWEEN THE PLANS AND THE FIELD INFORMATION SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER.
5. MINIMUM SLOPE FOR SITE SANITARY SEWER PIPES SHALL BE CURRENT UPC REQUIREMENTS:
   4" - 2%
   6" - 1%
   8" & LARGER - 0.5%
6. ALL LATERALS SHALL HAVE A CLEANOUT AT THE FACE OF THE BUILDING AND AT THE PROPERTY LINE, AS SHOWN ON THE PLANS AND PER THE CITY/TOWN STANDARDS OR APPROPRIATE SANITARY SEWER DISTRICT.

WATER SYSTEM NOTES:

1. WHERE WATER LINES HAVE TO CROSS SANITARY SEWER LINES, DO SO AT A 90 DEGREE ANGLE AND WATER LINES SHALL BE MINIMUM OF 12" ABOVE THE TOP OF THE SANITARY SEWER LINES.
2. WATER LINES ARE SHOWN SCHEMATICALLY; CONTRACTOR SHALL IDENTIFY EACH ANGLE AND/ OR BEND THAT MAY BE REQUIRED TO ACCOMPLISH THE INTENDED DESIGN.
3. USE DETECTABLE METALIZED WARNING TAPE APPROXIMATELY 6" BELOW THE SURFACE, TAPE SHALL BE A BRIGHT COLOR AND IMPRINTED WITH "CAUTION-WATER LINE BELOW", CALPICO TYPE 2 OR EQUAL.
4. ALL WATER SERVICE CONNECTIONS SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY/COUNTY OR APPLICABLE WATER DISTRICT STANDARDS.
5. WATER MAIN AND WATER SERVICE LINE 2-INCH THROUGH 12-INCH SHALL BE POLYVINYL CHLORIDE (PVC) AND SHALL MEET AWWA C900, RATED FOR 200 PSI CLASS PIPE WITH EPOXY COATED DUCTILE IRON FITTINGS AND FUSION EPOXY COATED GATE VALVES. ALL JOINTS SHALL FACTORY MANUFACTURED WITH BEL AND SPIGOT ENDS AND RUBBER GASKETS. NONMETALLIC WATER LINES HAVE TRACER WIRE INSTALLED PER CITY/COUNTY STANDARDS.
6. CONNECTION TO THE EXISTING WATER MAIN SHALL BE APPROVED BY THE CITY/TOWN. THE DEVELOPER SHALL PAY THE ACTUAL COSTS OF CONSTRUCTION. THE CONTRACTOR SHALL PERFORM ALL EXCAVATION PREPARE THE SITE, FURNISH ALL MATERIALS, INSTALL TAPPING TEE VALVE AND ALL THRUST BLOCKS. BACKFILL, RESTORE THE SURFACE, AND CLEANUP. THE CITY WILL PROVIDE THE DEVELOPER WITH A LIST OF APPROVED CONTRACTORS FOR MAKING WET TAPS. NONMETALLIC WATER LINES SHALL HAVE TRACER WIRES INSTALLED.
7. ALL WATER LINES SHALL BE INSTALLED WITH 3' MINIMUM COVER.
8. ALL WATER VALVES SHALL BE PER CITY\WATER DISTRICT STANDARD.
9. CONCRETE THRUST BLOCKS SHALL BE INSTALLED AT ALL TEES, CROSSES, BENDS (HORIZONTAL AND VERTICAL), AT SIZE CHANGES AND AT FIRE HYDRANTS PER CITY STANDARD. AWWA C600, SECTION 3.8 UNLESS NOTED OTHERWISE.
10. ALL WATER VALVES SHALL BE CLUSTERED, UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER OR WATER DISTRICT.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COLLECTING AND DELIVERING WATER SAMPLES FOR ANALYSIS TO A CITY APPROVED LAB.
12. ALL LANDSCAPE IRRIGATION SYSTEMS SHALL BE IN ACCORDANCE WITH THE LANDSCAPE ARCHITECTURAL PLANS AND SPECIFICATIONS AND SHALL BE CONNECTED TO THE EXISTING AND/OR NEW WATER SYSTEM AND METERED ACCORDINGLY.
13. INSTALL CITY/COUNTY APPROVED PRESSURE REGULATOR AND REDUCED BACKFLOW PREVENT OR ON WATER LINE AT ENTRANCE TO BUILDING REFERENCE PLUMBING PLANS FOR MORE DETAIL.

STORMWATER POLLUTION PREVENTION NOTES

1. STORE, HANDLE, AND DISPOSE OF CONSTRUCTION MATERIALS AND WASTES PROPERLY, SO AS TO PREVENT THEIR CONTACT WITH STORMWATER.
2. CONTROL AND PREVENT THE DISCHARGE OF ALL POTENTIAL POLLUTANTS, INCLUDING SOLID WASTES, PAINTS, CONCRETE, PETROLEUM PRODUCTS, CHEMICALS, WASH WATER OR SEDIMENT, AND NON-STORMWATER DISCHARGES TO STORM DRAINS AND WATER COURSES.
3. USE SEDIMENT CONTROL OR FILTRATION TO REMOVE SEDIMENT FROM DEWATERING EFFLUENT.
4. AVOID CLEANING, FUELING, OR MAINTAINING VEHICLES ON SITE, EXCEPT IN A DESIGNATED AREA IN WHICH RUNOFF IS CONTAINED AND TREATED.
5. DELINEATE CLEARING LIMITS, EASEMENTS, SETBACKS, SENSITIVE OR CRITICAL AREAS, BUFFER ZONES, TREES AND DISCHARGE COURSE WITH FIELD MARKERS.
6. PROTECT ADJACENT PROPERTIES AND UNDISTURBED AREAS FROM CONSTRUCTION IMPACTS USING VEGETATIVE BUFFER STRIPS, SEDIMENT BARRIERS OF FILTERS, DIKES, MULCHING, OR OTHER MEASURES AS APPROPRIATE.
7. PERFORM CLEARING AND EARTH MOVING ACTIVITIES DURING DRY WEATHER TO THE MAXIMUM EXTENT PRACTICAL.
8. LIMIT AND TIME APPLICATIONS OF PESTICIDES AND FERTILIZERS TO PREVENT POLLUTED RUNOFF.
9. LIMIT CONSTRUCTION ACCESS ROUTES AND STABILIZE DESIGNATED ACCESS POINTS.
10. AVOID TRACKING DIRT OR MATERIALS OFF-SITE; CLEAN OFF-SITE PAVED AREAS AND SIDEWALKS USING DRY SWEEPING METHODS TO THE MAXIMUM EXTENT PRACTICAL.

SUPPLEMENTAL MEASURES

A. THE PHRASE "NO DUMPING - DRAINS TO BAY" OR EQUALLY EFFECTIVE PHRASE MUST BE LABELED ON STORM DRAIN INLETS (BY STENCILING, BRANDING, OR PLAQUES) TO ALERT THE PUBLIC TO THE DESTINATION OF STORM WATER AND TO PREVENT DIRECT DISCHARGE OF POLLUTANTS INTO THE STORM DRAIN.
B. USING FILTRATION MATERIALS ON STORM DRAIN COVERS TO REMOVE SEDIMENT FROM DEWATERING EFFLUENT.
C. STABILIZING ALL DENUDED AREAS AND MAINTAINING EROSION CONTROL MEASURES CONTINUOUSLY FROM OCTOBER 15 AND APRIL 15.
D. REMOVING SPOILS PROMPTLY, AND AVOID STOCKPILING OF FILL MATERIALS, WHEN RAIN IS FORECAST. IF RAIN THREATENS, STOCKPILED SOILS AND OTHER MATERIALS SHALL BE COVERED WITH A TARP OR OTHER WATERPROOF MATERIAL.
E. STORING, HANDLING, AND DISPOSING OF CONSTRUCTION MATERIALS AND WASTES SO AS TO AVOID THEIR ENTRY TO THE STORM DRAIN SYSTEMS OR WATER BODY.
F. AVOIDING CLEANING, FUELING, OR MAINTAINING VEHICLES ON-SITE, EXCEPT IN AN AREA DESIGNATED TO CONTAIN AND TREAT RUNOFF.

NOTE:
THESE NOTES ARE INTENDED TO BE USED AS A GENERAL GUIDELINE. THE REFERENCED SOILS REPORT FOR THE PROJECT AND GOVERNING AGENCY GRADING ORDINANCE SHALL SUPERSEDE THESE NOTES. THE SOILS ENGINEER MAY MAKE ON-SITE RECOMMENDATIONS DURING GRADING OPERATIONS.

REGISTERED PROFESSIONAL ENGINEER
JAMES TOBY
No. 63127
CIVIL
STATE OF CALIFORNIA
ORIGINAL SIGNATURES IN BLUE INK

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS · LAND SURVEYORS

BAY AREA REGION
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(P) (510) 887-4086
(F) (510) 887-3019

SACRAMENTO REGION
3017 DOUGLAS BLVD, # 300
ROSEVILLE, CA 95661
(P) (916)966-1338
(F) (916)797-7363

WWW.LEABRAZE.COM

IMPROVEMENT PLANS
LIFEMOVES MAPLE STREET SHELTER
1580 MAPLE STREET

SAN MATEO COUNTY
APN: 052-532-020

NOTES

REVISIONS	BY
-	-
-	-
-	-
-	-
-	-

JOB NO: 2151287
DATE: 06-17-16
SCALE: NTS
DESIGN BY: MH
DRAWN BY: WM
SHEET NO:

C-6.1

13 OF 17 SHEETS

EROSION CONTROL NOTES:

1. IT SHALL BE THE OWNER'S/CONTRACTOR'S RESPONSIBILITY TO MAINTAIN CONTROL OF THE ENTIRE CONSTRUCTION OPERATION AND TO KEEP THE ENTIRE SITE IN COMPLIANCE WITH THIS EROSION CONTROL PLAN.
2. THE INTENTION OF THIS PLAN IS FOR INTERIM EROSION AND SEDIMENT CONTROL ONLY. ALL EROSION CONTROL MEASURES SHALL CONFORM TO CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD'S FIELD MANUAL FOR EROSION AND SEDIMENTATION CONTROL, THE CALIFORNIA STORM WATER QUALITY ASSOCIATION BEST MANAGEMENT PRACTICES HANDBOOK FOR CONSTRUCTION, AND THE LOCAL GOVERNING AGENCY FOR THIS PROJECT.
3. OWNER/CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO, DURING, AND AFTER STORM EVENTS. PERSON IN CHARGE OF MAINTAINING EROSION CONTROL MEASURES SHOULD WATCH LOCAL WEATHER REPORTS AND ACT APPROPRIATELY TO MAKE SURE ALL NECESSARY MEASURES ARE IN PLACE.
4. SANITARY FACILITIES SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
5. DURING THE RAINY SEASON, ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT–LADEN RUNOFF TO ANY STORM DRAINAGE SYSTEM, INCLUDING EXISTING DRAINAGE SWALES AND WATERCOURSES.
6. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION WILL BE MINIMIZED. COMPLIANCE WITH FEDERAL, STATE AND LOCAL LAWS CONCERNING POLLUTION SHALL BE MAINTAINED AT ALL TIMES.
7. CONTRACTOR SHALL PROVIDE DUST CONTROL AS REQUIRED BY THE APPROPRIATE FEDERAL, STATE AND LOCAL AGENCY REQUIREMENTS.
8. ALL MATERIALS NECESSARY FOR THE APPROVED EROSION CONTROL MEASURES SHALL BE IN PLACE BY OCTOBER 15TH.
9. EROSION CONTROL SYSTEMS SHALL BE INSTALLED AND MAINTAINED THROUGHOUT THE RAINY SEASON, OR FROM OCTOBER 15TH THROUGH APRIL 15TH, WHICHEVER IS LONGER.
10. IN THE EVENT OF RAIN, ALL GRADING WORK IS TO CEASE IMMEDIATELY AND THE SITE IS TO BE SEALED IN ACCORDANCE WITH THE APPROVAL EROSION CONTROL MEASURES AND APPROVED EROSION CONTROL PLAN.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING AND REPAIRING EROSION CONTROL SYSTEMS AFTER EACH STORM.
12. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BY LOCAL JURISDICTION'S ENGINEERING DEPARTMENT OR BUILDING OFFICIALS.
13. MEASURES SHALL BE TAKEN TO COLLECT OR CLEAN ANY ACCUMULATION OR DEPOSIT OF DIRT, MUD, SAND, ROCKS, GRAVEL OR DEBRIS ON THE SURFACE OF ANY STREET, ALLEY OR PUBLIC PLACE OR IN ANY PUBLIC STORM DRAIN SYSTEMS. THE REMOVAL OF AFORESAID SHALL BE DONE BY STREET SWEEPING OR HAND SWEEPING. WATER SHALL NOT BE USED TO WASH SEDIMENTS INTO PUBLIC OR PRIVATE DRAINAGE FACILITIES.
14. EROSION CONTROL MEASURES SHALL BE ON–SITE FROM SEPTEMBER 15TH THRU APRIL 15TH.
15. ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED THROUGHOUT THE RAINY SEASON OR FROM OCTOBER 15 THRU APRIL 15, WHICHEVER IS GREATER.
16. PLANS SHALL BE DESIGNED TO MEET C3 REQUIREMENTS OF THE MUNICIPAL STORMWATER REGIONAL PERMIT("MRP") NPDES PERMIT CAS 612008.
17. THE CONTRACTOR TO NPDES (NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM) BEST MANAGEMENT PRACTICES (BMP) FOR SEDIMENTATION PREVENTION AND EROSION CONTROL TO PREVENT DELETERIOUS MATERIALS OR POLLUTANTS FROM ENTERING THE TOWN OR COUNTY STORM DRAIN SYSTEMS.
18. THE CONTRACTOR MUST INSTALL ALL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO THE INCEPTION OF ANY WORK ONSITE AND MAINTAIN THE MEASURES UNTIL THE COMPLETION OF ALL LANDSCAPING.
19. THE CONTRACTOR SHALL MAINTAIN ADJACENT STREETS IN A NEAT, CLEAN DUST FREE AND SANITARY CONDITION AT ALL TIMES AND TO THE SATISFACTION OF THE TOWN INSPECTOR. THE ADJACENT STREET SHALL AT ALL TIMES BE KEPT CLEAN OF DEBRIS, WITH DUST AND OTHER NUISANCE BEING CONTROLLED AT ALL TIMES. THE CONTRACTOR BE RESPONSIBLE FOR ANY CLEAN UP ON ADJACENT STREETS AFFECTED BY THE BY THEIR CONSTRUCTION, METHOD OF STREET CLEANING SHALL BE BY DRY SWEEPING OF ALL PAVED AREAS. NO STOCKPILING OF BUILDING MATERIALS WITHIN THE TOWN RIGHT–OF–WAY.
20. SEDIMENTS AND OTHER MATERIALS SHALL NOT BE TRACKED FROM THE SITE BY VEHICLE TRAFFIC. THE CONTRACTOR SHALL INSTALL A STABILIZED CONSTRUCTION ENTRANCE PRIOR TO THE INSPECTION OF ANY WORK ONSITE AND MAINTAIN IT FOR THE DURATION OF THE CONSTRUCTION PROCESS SO AS TO NOT INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC RIGHT–OF–WAY UNTIL THE COMPLETION OF ALL LANDSCAPING.
21. THE CONTRACTOR SHALL PROTECT DOWN SLOPE DRAINAGE COURSES, STREAMS AND STORM DRAINS WITH ROCK FILLED SAND BAGS, TEMPORARY SWALES, SILT FENCES, AND EARTH PERMS IN CONJUNCTION OF ALL LANDSCAPING.
22. STOCKPILED MATERIALS SHALL BE COVERED WITH VISQUEEN OR A TARPAULIN UNTIL THE MATERIAL IS REMOVED FROM THE SITE. ANY REMAINING BARE SOIL THAT EXISTS AFTER THE STOCKPILE HAS BEEN REMOVED SHALL BE COVERED UNTIL A NATURAL GROUND COVER IS ESTABLISHED OR IT IS SEEDED OR PLANTED TO PROVIDE GROUND COVER PRIOR TO THE FALL RAINY SEASON.
23. EXCESS OR WASTE CONCRETE MUST NOT BE WASHED INTO THE PUBLIC RIGHT–OF–WAYOR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE.
24. TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION AND DISPERSAL BY WIND FUELS, OILS, SOLVENTS AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MUST NOT BE WASHED INTO THE DRAINAGE SYSTEM,
25. DUST CONTROL SHALL BE DONE BY WATERING AND AS OFTEN AS REQUIRED BY THE TOWN INSPECTOR.
26. SILT FENCE(S) AND/OR FIBER ROLL(S) SHALL BE INSTALLED PRIOR TO SEPTEMBER 15TH AND SHALL REMAIN IN PLACE UNTIL THE LANDSCAPING GROUND COVER IS INSTALLED. CONTRACTOR SHALL CONTINUOUSLY MONITOR THESE MEASURES, FOLLOWING AND DURING ALL RAIN EVENTS,TO PUBLIC OWNED FACILITIES.

0 10 20 40

SCALE: 1" = 20'

PURPOSE:

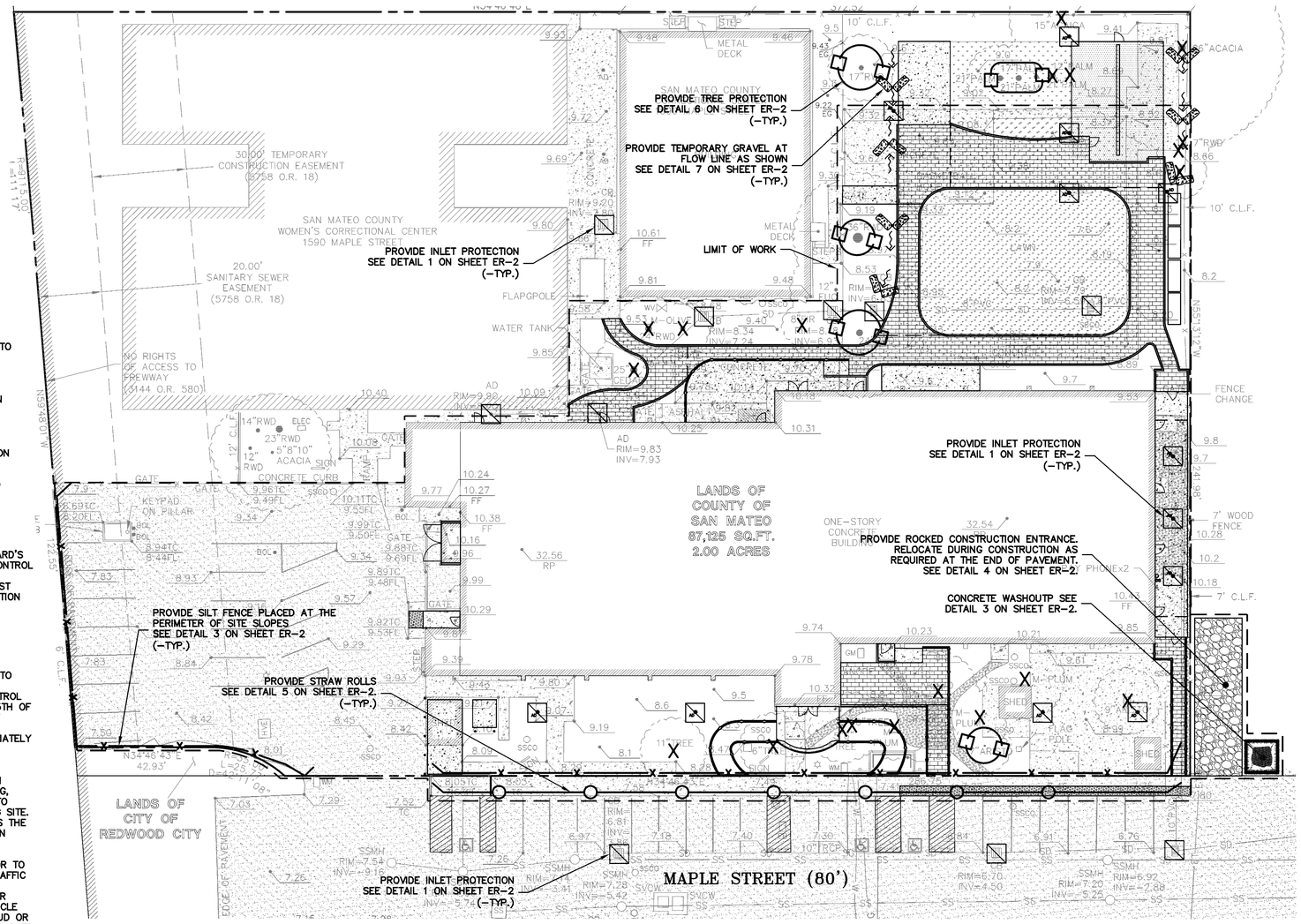
THE PURPOSE OF THIS PLAN IS TO STABILIZE THE SITE TO PREVENT EROSION OF GRADED AREAS AND TO PREVENT SEDIMENTATION FROM LEAVING THE CONSTRUCTION AREA AND AFFECTING NEIGHBORING SITES, NATURAL AREAS, PUBLIC FACILITIES OR ANY OTHER AREA THAT MIGHT BE AFFECTED BY SEDIMENTATION. ALL MEASURES SHOWN ON THIS PLAN SHOULD BE CONSIDERED THE MINIMUM REQUIREMENTS NECESSARY. SHOULD FIELD CONDITIONS DICTATE ADDITIONAL MEASURES, SUCH MEASURES SHALL BE PER CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD'S FIELD MANUAL FOR EROSION AND SEDIMENTATION CONTROL AND THE CALIFORNIA STORM WATER QUALITY ASSOCIATION BEST MANAGEMENT PRACTICES HANDBOOK FOR CONSTRUCTION. LEA & BRAZE ENGINEERING SHOULD BE NOTIFIED IMMEDIATELY SHOULD CONDITIONS CHANGE.

REFERENCES:

1. CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD'S FIELD MANUAL FOR EROSION AND SEDIMENTATION CONTROL
2. CALIFORNIA STORM WATER QUALITY ASSOCIATION BEST MANAGEMENT PRACTICES HANDBOOK FOR CONSTRUCTION

EROSION CONTROL MEASURES:

1. THE FACILITIES SHOWN ON THIS PLAN ARE DESIGNED TO CONTROL EROSION AND SEDIMENT DURING THE RAINY SEASON, OCTOBER 15TH TO APRIL 15. EROSION CONTROL FACILITIES SHALL BE IN PLACE PRIOR TO OCTOBER 15TH OF ANY YEAR. GRADING OPERATIONS DURING THE RAINY SEASON WHICH LEAVE DENUDED SLOPES SHALL BE PROTECTED WITH EROSION CONTROL MEASURES IMMEDIATELY FOLLOWING GRADING ON THE SLOPES.
2. SITE CONDITIONS AT TIME OF PLACEMENT OF EROSION CONTROL MEASURES WILL VARY. APPROPRIATE ACTION INCLUDING TEMPORARY SWALES, INLETS, HYDROSEEDING, STRAW BALES, ROCK SACKS, ETC. SHALL BE TAKEN TO PREVENT EROSION AND SEDIMENTATION FROM LEAVING SITE. EROSION CONTROL MEASURES SHALL BE ADJUSTED AS THE CONDITIONS CHANGE AND THE NEED OF CONSTRUCTION SHIFT.
3. CONSTRUCTION ENTRANCES SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF GRADING. ALL CONSTRUCTION TRAFFIC ENTERING ONTO THE PAVED ROADS MUST CROSS THE STABILIZED CONSTRUCTION ENTRANCES. CONTRACTOR SHALL MAINTAIN STABILIZED ENTRANCE AT EACH VEHICLE ACCESS POINT TO EXISTING PAVED STREETS. ANY MUD OR DEBRIS TRACKED ONTO PUBLIC STREETS SHALL BE REMOVED DAILY AND AS REQUIRED BY THE GOVERNING AGENCY.
4. ALL EXPOSED SLOPES THAT ARE NOT VEGETATED SHALL BE HYDROSEEDED. IF HYDROSEEDING IS NOT USED OR IS NOT EFFECTIVE BY OCTOBER 15, THEN OTHER IMMEDIATE METHODS SHALL BE IMPLEMENTED, SUCH AS EROSION CONTROL BLANKETS, OR A THREE–STEP APPLICATION OF 1) SEED, MULCH, FERTILIZER 2) BLOWN STRAW 3) TACKIFIER AND MULCH. HYDROSEEDING SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF SECTION 20" EROSION CONTROL AND HIGHWAY PLANTING" OF THE STANDARD SPECIFICATION OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION, AS LAST REVISED. REFER TO THE EROSION CONTROL SECTION OF THE GRADING SPECIFICATIONS THAT ARE A PART OF THIS PLAN SET FOR FURTHER INFORMATION.
5. INLET PROTECTION SHALL BE INSTALLED AT OPEN INLETS TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAIN SYSTEM. INLETS NOT USED IN CONJUNCTION WITH EROSION CONTROL ARE TO BE BLOCKED TO PREVENT ENTRY OF SEDIMENT. MINIMUM INLET PROTECTION SHALL CONSIST OF A ROCK SACKS OR AS SHOWN ON THIS PLAN
6. THIS EROSION AND SEDIMENT CONTROL PLAN MAY NOT COVER ALL THE SITUATIONS THAT MAY ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. VARIATIONS AND ADDITIONS MAY BE MADE TO THIS PLAN IN THE FIELD. A REPRESENTATIVE OF LEA & BRAZE ENGINEERING SHALL PERFORM A FIELD REVIEW AND MAKE RECOMMENDATIONS AS NEEDED. CONTRACTOR IS RESPONSIBLE TO NOTIFY LEA & BRAZE ENGINEERING AND THE GOVERNING AGENCY OF ANY CHANGES.
7. THE EROSION CONTROL MEASURES SHALL CONFORM TO THE LOCAL JURISDICTION'S STANDARDS AND THE APPROVAL OF THE LOCAL JURISDICTION'S ENGINEERING DEPARTMENT.
8. STRAW ROLLS SHALL BE PLACED AT THE TOE OF SLOPES AND ALONG THE DOWN SLOPE PERIMETER OF THE PROJECT. THEY SHALL BE PLACED AT 25 FOOT INTERVALS ON GRADED SLOPES. PLACEMENT SHALL RUN WITH THE CONTOURS AND ROLLS SHALL BE TIGHTLY END BUTTED. CONTRACTOR SHALL REFER TO MANUFACTURES SPECIFICATIONS FOR PLACEMENT AND INSTALLATION INSTRUCTIONS.



PERIODIC MAINTENANCE:

1. MAINTENANCE IS TO BE PERFORMED AS FOLLOWS:
   - A. DAMAGES CAUSED BY SOIL EROSION OR CONSTRUCTION SHALL BE REPAIRED AT THE END OF EACH WORKING DAY.
   - B. SWALES SHALL BE INSPECTED PERIODICALLY AND MAINTAINED AS NEEDED.
   - C. SEDIMENT TRAPS, BERMS, AND SWALES ARE TO BE INSPECTED AFTER EACH STORM AND REPAIRS MADE AS NEEDED.
   - D. SEDIMENT SHALL BE REMOVED AND SEDIMENT TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO A DEPTH OF 1' FOOT.
   - E. SEDIMENT REMOVED FROM TRAP SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
   - F. RILLS AND GULLIES MUST BE REPAIRED.
2. GRAVEL BAG INLET PROTECTION SHALL BE CLEANED OUT WHENEVER SEDIMENT DEPTH IS ONE HALF THE HEIGHT OF ONE GRAVEL BAG.
3. STRAW ROLLS SHALL BE PERIODICALLY CHECKED TO ASSURE PROPER FUNCTION AND CLEANED OUT WHENEVER THE SEDIMENT DEPTH REACHED HALF THE HEIGHT OF THE ROLL.
4. SILT FENCE SHALL BE PERIODICALLY CHECKED TO ASSURE PROPER FUNCTION AND CLEANED OUT WHENEVER THE SEDIMENT DEPTH REACHES ONE FOOT IN HEIGHT.
5. CONSTRUCTION ENTRANCE SHALL BE REGRAVELED AS NECESSARY FOLLOWING SILT/SOIL BUILDUP.
6. ANY OTHER EROSION CONTROL MEASURES SHOULD BE CHECKED AT REGULAR INTERVALS TO ASSURE PROPER FUNCTION

EROSION CONTROL LEGEND

- GRAVEL BAG
- INLET PROTECTION
- STRAW ROLL
- SILT FENCE
- CONCRETE WASHOUT
- CONSTRUCTION ENTRANCE
- TREE PROTECTION
- LIMITS OF WORK

NOTE:
SEAL ALL OTHER INLETS NOT INTENDED TO ACCEPT STORM WATER AND DIRECT FLOWS TEMPORARILY TO FUNCTIONAL SEDIMENTATION BASIN INLETS. –TYP

REGISTERED PROFESSIONAL ENGINEER JAMES TOBY No. 63127 CIVIL STATE OF CALIFORNIA ORIGINAL SIGNATURES IN BLUE INK

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS • LAND SURVEYORS
BAY AREA REGION
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(P) (510) 887–4086
(F) (510) 887–3019
SACRAMENTO REGION
3017 DOUGLAS BLVD., # 300
ROSEVILLE, CA 95661
(P) (916)966–1338
(F) (916) 797–7363
WWW.LEABRAZE.COM

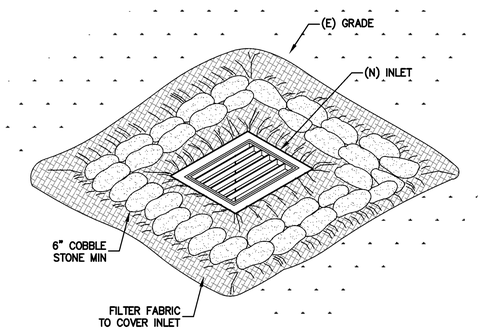
IMPROVEMENT PLANS
LIFEMOVES MAPLE STREET SHELTER
1580 MAPLE STREET
SAN MATEO COUNTY
APN: 052–532–020

EROSION CONTROL PLAN

REVISIONS	BY
–	–
–	–
–	–
–	–
–	–

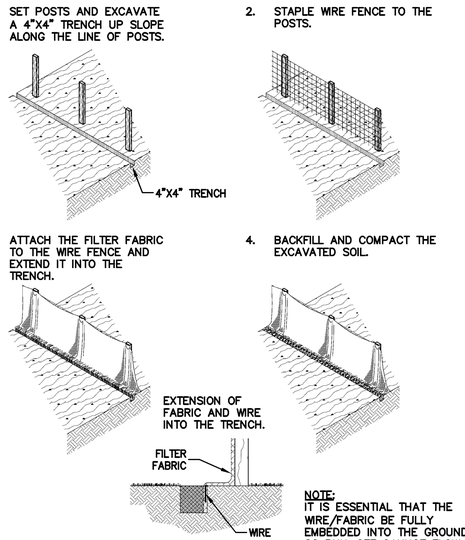
JOB NO:	2151287
DATE:	06–17–16
SCALE:	AS NOTED
DESIGN BY:	MH
DRAWN BY:	WM
SHEET NO:	ER–1

14 OF 17 SHEETS



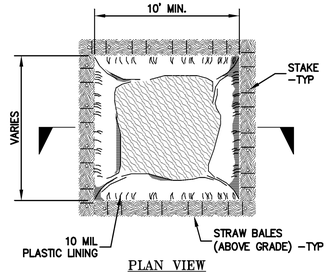
1 ER-2 **INLET PROTECTION**
NTS

1. SET POSTS AND EXCAVATE A 4"X4" TRENCH UP SLOPE ALONG THE LINE OF POSTS.
2. STAPLE WIRE FENCE TO THE POSTS.
3. ATTACH THE FILTER FABRIC TO THE WIRE FENCE AND EXTEND IT INTO THE TRENCH.
4. BACKFILL AND COMPACT THE EXCAVATED SOIL.

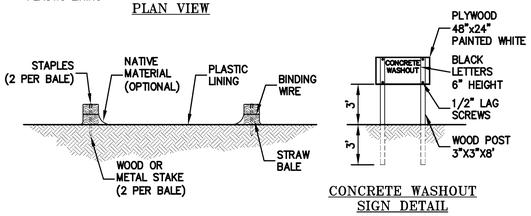


NOTE:
IT IS ESSENTIAL THAT THE WIRE/FABRIC BE FULLY EMBEDDED INTO THE GROUND SO RUN-OFF CANNOT FLOW FREELY UNDER FENCE.

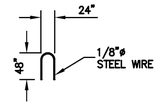
2 ER-2 **SILT FENCE**
NTS



PLAN VIEW



SECTION



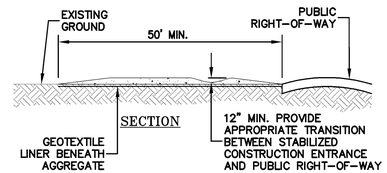
STAPLE DETAIL

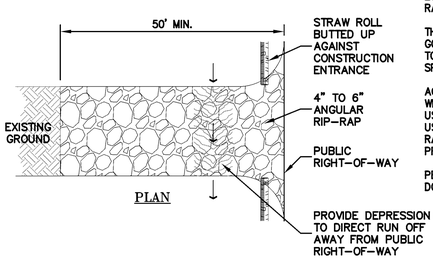
CONCRETE WASHOUT SIGN DETAIL

NOTES:
ACTUAL LAYOUT DETERMINED IN FIELD.

THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 10' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

3 ER-2 **CONCRETE WASHOUT**
NTS





NOTES:

STABILIZED CONSTRUCTION SITE ACCESS SHALL BE CONSTRUCTED OF 3" TO 4" WASHED, FRACTURED STONE AGGREGATE.

MATERIAL SHALL BE PLACED TO A MINIMUM THICKNESS OF 12". LENGTH OF ENTRANCE SHALL BE A MINIMUM OF 50'.

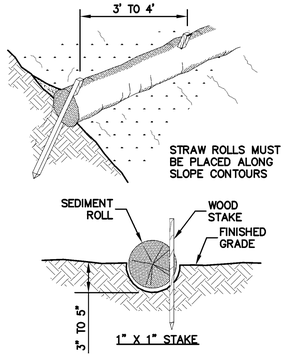
WIDTH SHALL BE A MIN. OF 15' OR GREATER IF NECESSARY TO COVER ALL VEHICULAR INGRESS AND EGRESS. PROVIDE AMPLE TURNING RADII.

THE ENTRANCE SHALL BE KEPT IN GOOD CONDITION BY OCCASIONAL TOP DRESSING WITH MATERIAL AS SPECIFIED IN ABOVE NOTE.

ACCESSES SHALL BE INSPECTED WEEKLY DURING PERIODS OF HEAVY USAGE, MONTHLY DURING NORMAL USAGE, AND AFTER EACH RAINFALL WITH MAINTENANCE PROVIDED AS NECESSARY.

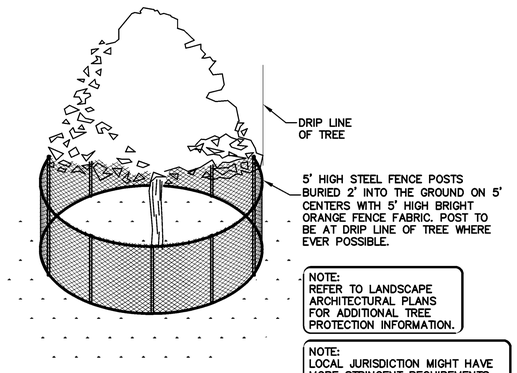
PERIODIC TOP DRESSING SHALL BE DONE AS NEEDED.

4 ER-2 **CONSTRUCTION ENTRANCE**
NTS



NOTE:
1. STRAW ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3" TO 5" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL.
2. CONTRACTOR IS RESPONSIBLE FOR REGULAR MAINTENANCE AND INSPECTION. THE SILT SHALL BE CLEANED OUT WHEN IT REACHES HALF THE HEIGHT OF THE ROLL.

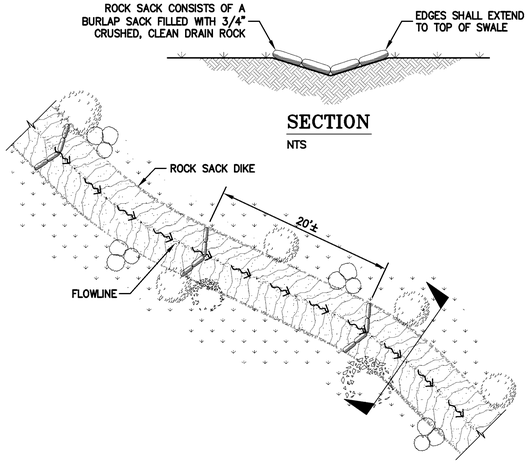
5 ER-2 **STRAW ROLLS FLAT LOT**
NTS



NOTE:
REFER TO LANDSCAPE ARCHITECTURAL PLANS FOR ADDITIONAL TREE PROTECTION INFORMATION.

NOTE:
LOCAL JURISDICTION MIGHT HAVE MORE STRINGENT REQUIREMENTS. CONTRACTOR IS RESPONSIBLE FOR COORDINATING W/ INSPECTOR TO ENSURE PROPER PROCEDURES ARE BEING FOLLOWED.

6 ER-2 **EXISTING TREE PROTECTION DETAIL**
NTS



SECTION
NTS

7 ER-2 **ROCK SACK DIKE IN SWALE**
NTS

REGISTERED PROFESSIONAL ENGINEER
JAMES TOBY
No. 63127
CIVIL
STATE OF CALIFORNIA
ORIGINAL SIGNATURES IN BLUE INK

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS · LAND SURVEYORS
BAY AREA REGION
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(P) (510) 887-4086
(F) (510) 887-3019
SACRAMENTO REGION
3017 DOUGLAS BLVD, # 300
ROSEVILLE, CA 95661
(P) (916)966-1338
(F) (916)797-7363
WWW.LEABRAZE.COM

IMPROVEMENT PLANS
LIFEMOVES MAPLE STREET SHELTER
1580 MAPLE STREET
APN: 052-532-020
SAN MATEO COUNTY

EROSION CONTROL DETAILS

REVISIONS	BY
–	–
–	–
–	–
–	–
–	–

JOB NO:	2151287
DATE:	06-17-16
SCALE:	NTS
DESIGN BY:	MH
DRAWN BY:	WM
SHEET NO:	ER-2

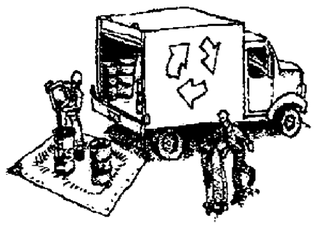
15 OF 17 SHEETS

SAN MATEO COUNTYWIDE
Water Pollution Prevention Program
Clean Water. Healthy Community.

Construction Best Management Practices (BMPs)

Construction projects are required to implement the stormwater best management practices (BMP) on this page, as they apply to your project, all year long.

Materials & Waste Management



Non-Hazardous Materials

- ❑ Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or if not actively being used within 14 days.
- ❑ Use (but don't overuse) reclaimed water for dust control.

Hazardous Materials

- ❑ Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state and federal regulations.
- ❑ Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecast.
- ❑ 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.
- ❑ Arrange for appropriate disposal of all hazardous wastes.

Waste Management

- ❑ Cover waste disposal containers securely with tarps at the end of every work day and during wet weather.
- ❑ Check waste disposal containers frequently for leaks and to make sure they are not overfilled. Never hose down a dumpster on the construction site.
- ❑ Clean or replace portable toilets, and inspect them frequently for leaks and spills.
- ❑ Dispose of all wastes and debris properly. Recycle materials and wastes that can be recycled (such as asphalt, concrete, aggregate base materials, wood, gyp board, pipe, etc.)
- ❑ Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.

Construction Entrances and Perimeter

- ❑ Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
- ❑ Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking. Never hose down streets to clean up tracking.

Equipment Management & Spill Control

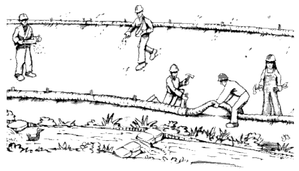
Maintenance and Parking

- ❑ Designate an area, fitted with appropriate BMPs, for vehicle and equipment parking and storage.
- ❑ Perform major maintenance, repair jobs, and vehicle and equipment washing off site.
- ❑ If refueling or vehicle maintenance must be done onsite, work in a bermed area away from storm drains and over a drip pan or drop cloths big enough to collect fluids. Recycle or dispose of fluids as hazardous waste.
- ❑ If vehicle or equipment cleaning must be done onsite, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or surface waters.
- ❑ Do not clean vehicle or equipment onsite using soaps, solvents, degreasers, or steam cleaning equipment.

Spill Prevention and Control

- ❑ Keep spill cleanup materials (e.g., rags, absorbents and cat litter) available at the construction site at all times.
- ❑ Inspect vehicles and equipment frequently for and repair leaks promptly. Use drip pans to catch leaks until repairs are made.
- ❑ Clean up spills or leaks immediately and dispose of cleanup materials properly.
- ❑ Do not hose down surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags).
- ❑ Sweep up spilled dry materials immediately. Do not try to wash them away with water, or bury them.
- ❑ Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- ❑ Report significant spills immediately. You are required by law to report all significant releases of hazardous materials, including oil. To report a spill: 1) Dial 911 or your local emergency response number, 2) Call the Governor's Office of Emergency Services Warning Center, (800) 852-7550 (24 hours).

Earthmoving



- ❑ Schedule grading and excavation work during dry weather.
- ❑ Stabilize all denuded areas, install and maintain temporary erosion controls (such as erosion control fabric or bonded fiber matrix) until vegetation is established.
- ❑ Remove existing vegetation only when absolutely necessary, and seed or plant vegetation for erosion control on slopes or where construction is not immediately planned.
- ❑ Prevent sediment from migrating offsite and protect storm drain inlets, gutters, ditches, and drainage courses by installing and maintaining appropriate BMPs, such as fiber rolls, silt fences, sediment basins, gravel bags, berms, etc.
- ❑ Keep excavated soil on site and transfer it to dump trucks on site, not in the streets.

Contaminated Soils

- ❑ If any of the following conditions are observed, test for contamination and contact the Regional Water Quality Control Board:
  - Unusual soil conditions, discoloration, or odor.
  - Abandoned underground tanks.
  - Abandoned wells
  - Buried barrels, debris, or trash.

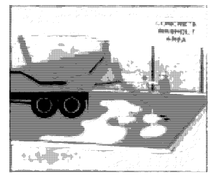
Paving/Asphalt Work

- ❑ Avoid paving and seal coating in wet weather or when rain is forecast, to prevent materials that have not cured from contacting stormwater runoff.
- ❑ Cover storm drain inlets and manholes when applying seal coat, tack coat, slurry seal, fog seal, etc.
- ❑ Collect and recycle or appropriately dispose of excess abrasive gravel or sand. Do NOT sweep or wash it into gutters.
- ❑ Do not use water to wash down fresh asphalt concrete pavement.

Sawcutting & Asphalt/Concrete Removal

- ❑ Protect nearby storm drain inlets when saw cutting. Use filter fabric, catch basin inlet filters, or gravel bags to keep slurry out of the storm drain system.
- ❑ Shovel, abosorb, or vacuum saw-cut slurry and dispose of all waste as soon as you are finished in one location or at the end of each work day (whichever is sooner!).
- ❑ If sawcut slurry enters a catch basin, clean it up immediately.

Concrete, Grout & Mortar Application

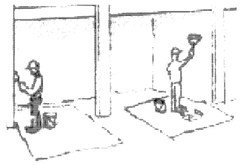


- ❑ Store concrete, grout, and mortar away from storm drains or waterways, and on pallets under cover to protect them from rain, runoff, and wind.
- ❑ Wash out concrete equipment/trucks offsite or in a designated washout area, where the water will flow into a temporary waste pit, and in a manner that will prevent leaching into the underlying soil or onto surrounding areas. Let concrete harden and dispose of as garbage.
- ❑ When washing exposed aggregate, prevent washwater from entering storm drains. Block any inlets and vacuum gutters, hose washwater onto dirt areas, or drain onto a bermed surface to be pumped and disposed of properly.

Landscaping

- ❑ Protect stockpiled landscaping materials from wind and rain by storing them under tarps all year-round.
- ❑ Stack bagged material on pallets and under cover.
- ❑ Discontinue application of any erodible landscape material within 2 days before a forecast rain event or during wet weather.

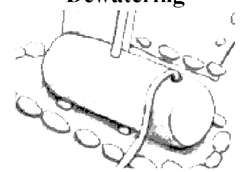
Painting & Paint Removal



Painting Cleanup and Removal

- ❑ Never clean brushes or rinse paint containers into a street, gutter, storm drain, or stream.
- ❑ For water-based paints, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain.
- ❑ For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids as hazardous waste.
- ❑ Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash.
- ❑ Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury, or tributyltin must be disposed of as hazardous waste. Lead based paint removal requires a state-certified contractor.

Dewatering



- ❑ Discharges of groundwater or captured runoff from dewatering operations must be properly managed and disposed. When possible send dewatering discharge to landscaped area or sanitary sewer. If discharging to the sanitary sewer call your local wastewater treatment plant.
- ❑ Divert run-on water from offsite away from all disturbed areas.
- ❑ When dewatering, notify and obtain approval from the local municipality 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 or suspected contamination, call your local agency to determine whether the ground water must be tested. Pumped groundwater may need to be collected and hauled off-site for treatment and proper disposal.

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

REGISTERED PROFESSIONAL ENGINEER
JAMES TOBY
No. 63127
CIVIL
STATE OF CALIFORNIA
ORIGINAL SIGNATURES IN BLUE INK

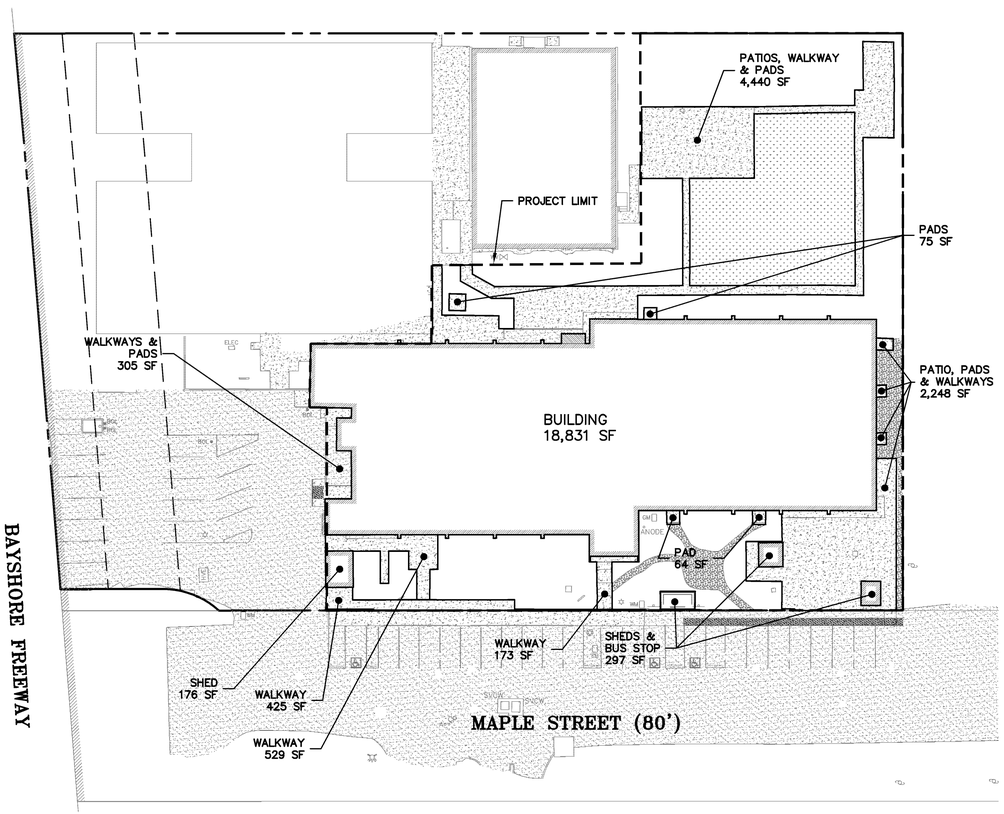
LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS • LAND SURVEYORS
BAY AREA REGION
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(P) (510) 887-4086
(F) (510) 887-3019
SACRAMENTO REGION
3017 DOUGLAS BLVD, # 300
ROSEVILLE, CA 95661
(P) (916)966-1338
(F) (916)797-7363
WWW.LEABRAZE.COM

IMPROVEMENT PLANS
LIFEMOVES MAPLE STREET SHELTER
1580 MAPLE STREET
SAN MATEO COUNTY
APN: 052-532-020

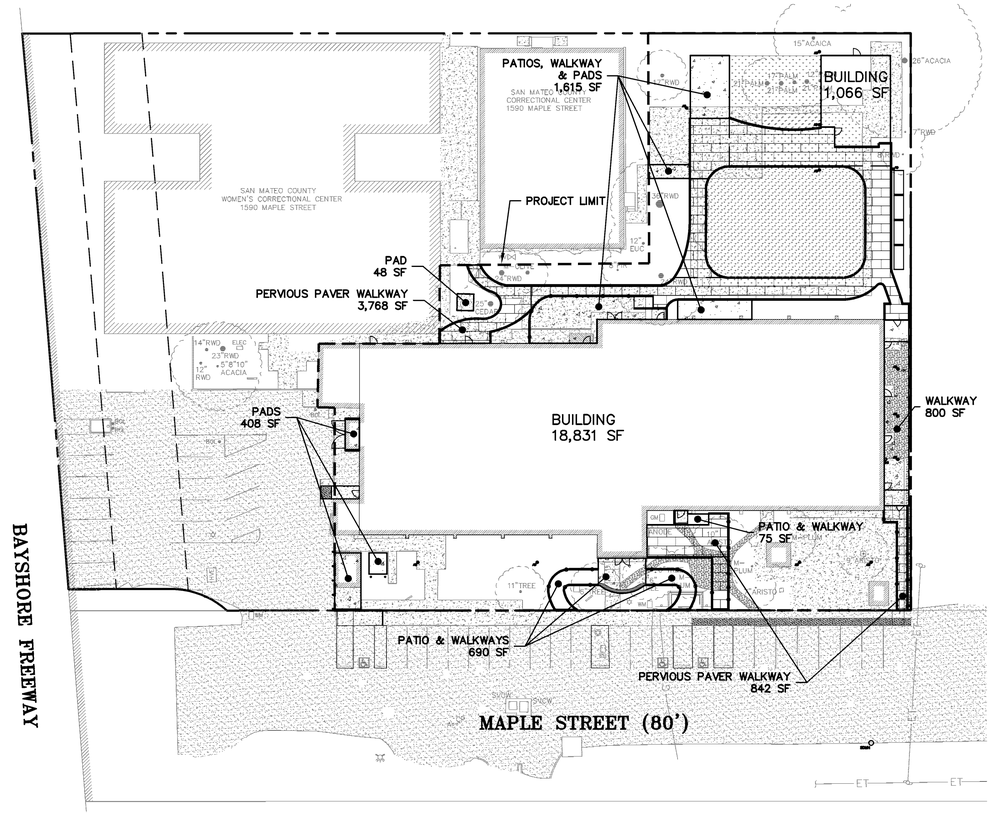
STORM WATER POLLUTION PREVENTION PLAN

REVISIONS	BY
–	–
–	–
–	–
–	–
–	–

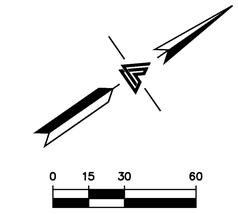
JOB NO: 2151287
DATE: 06-17-16
SCALE:
DESIGN BY: MH
DRAWN BY: WM
SHEET NO:
SW-1
16 OF 17 SHEETS



EXISTING SITE



PROPOSED SITE



LEGEND

- GRAVEL
- CONCRETE
- PAVERS
- GRASS
- DETECTABLE WARNING SURFACE
- PROJECT LIMIT

DEVELOPMENT INFORMATION

TOTAL SITE AREA	**87,179 SQUARE FEET (2 ACRES)**			
TOTAL DISTURBED AREA (PROJECT LIMIT)	**44,419 SQUARE FEET (1.02 ACRE)**			
DEVELOPMENT AREAS	**EXISTING TOTAL S.F.**	**REMOVED TOTAL S.F.**	**NEW TOTAL S.F.**	**PROPOSED TOTAL S.F.**
ROOF AREA	19,304	473	1,066	19,897
IMPERVIOUS SIDEWALKS, PATIO, AND PADS	8,259	7,578	3,621	4,302
IMPERVIOUS UNCOVERED PARKING	0	0	0	0
TOTAL DEVELOPED AREA	27,563	8,051	**4,687**	**24,199**
NET CHANGE IN DEVELOPED AREA	**-3,364 SQUARE FEET (NET DECREASE)**			
FLOOR AREA	REFER TO THE ARCHITECTURAL PLANS FOR PROPOSED FLOOR AREA CALCULATIONS			

REGISTERED PROFESSIONAL ENGINEER
JAMES TOBY
No. 63127
CIVIL
STATE OF CALIFORNIA
ORIGINAL SIGNATURES IN BLUE INK

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS • LAND SURVEYORS
BAY AREA REGION
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(P) (510) 887-4086
(F) (510) 887-3019
SACRAMENTO REGION
3017 DOUGLAS BLVD, # 300
ROSEVILLE, CA 95661
(P) (916)966-1338
(F) (916)797-7363
WWW.LEABRAZE.COM

IMPROVEMENT PLANS
LIFEMOVES MAPLE STREET SHELTER
1580 MAPLE STREET
SAN MATEO COUNTY
APN: 052-532-020

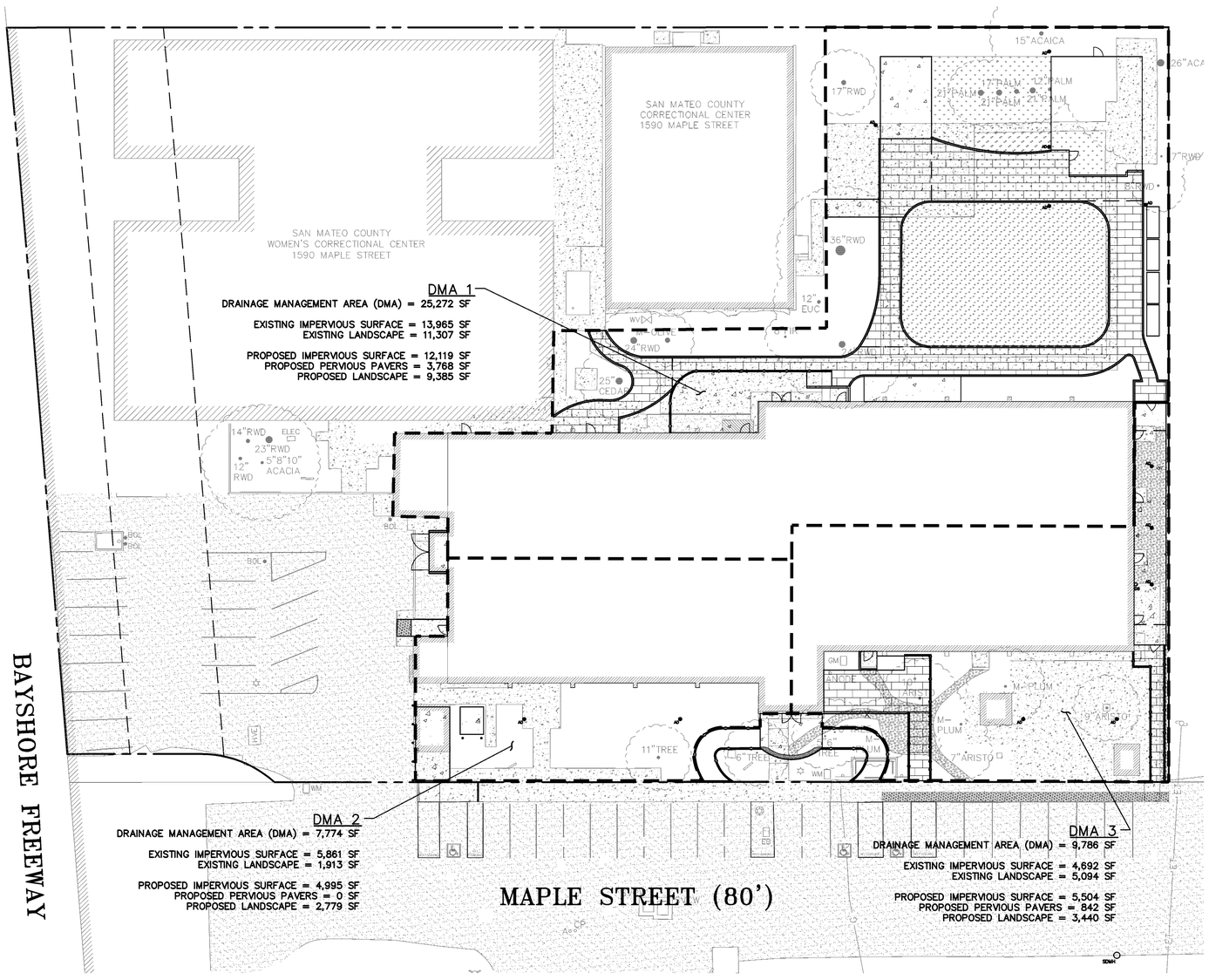
IMPERVIOUS SURFACE EXHIBIT

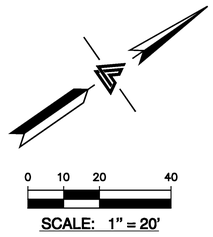
–	–
–	–
–	–
–	–
–	–
REVISIONS	BY

JOB NO: 2151287
DATE: 06-17-16
SCALE: AS NOTED
DESIGN BY: MH
DRAWN BY: WM
SHEET NO:

HYD-1

16 OF 17 SHEETS





LEGEND

- GRAVEL
- CONCRETE
- PAVERS
- GRASS
- DETECTABLE WARNING SURFACE

DEVELOPMENT INFORMATION

TOTAL SITE AREA	**87,179 SQUARE FEET (2 ACRES)**			
TOTAL DISTURBED AREA (PROJECT LIMIT)	**44,419 SQUARE FEET (1.02 ACRE)**			
DEVELOPMENT AREAS	**EXISTING TOTAL S.F.**	**REMOVED TOTAL S.F.**	**NEW TOTAL S.F.**	**PROPOSED TOTAL S.F.**
ROOF AREA	19,304	473	1,066	19,897
IMPERVIOUS SIDEWALKS, PATIO, AND PADS	8,259	7,578	3,621	4,302
IMPERVIOUS UNCOVERED PARKING	0	0	0	0
TOTAL DEVELOPED AREA	27,563	8,051	**4,687**	**24,199**
NET CHANGE IN DEVELOPED AREA	**-3,364 SQUARE FEET (NET DECREASE)**			
FLOOR AREA	REFER TO THE ARCHITECTURAL PLANS FOR PROPOSED FLOOR AREA CALCULATIONS			

DMA 1 STORMWATER CALCULATIONS

USE: RATIONAL METHOD (Q=CIAF)

1. ASSUMPTIONS:
   - i_{10} = 0.86 IN/HR — FROM SAN MATEO COUNTY RAINFALL RUNOFF DATA
   - i_{100} = 1.21 IN/HR — FROM SAN MATEO COUNTY RAINFALL RUNOFF DATA
   - F = 0.8 UNITLESS — FROM SAN MATEO COUNTY RAINFALL RUNOFF DATA
   - C = 0.9 — RUNOFF COEFFICIENT FOR IMPERVIOUS SURFACE
   - C = 0.35 — RUNOFF COEFFICIENT FOR PERVIOUS SURFACE
2. DETERMINE Q:
   PRE-PROJECT CONDITIONS
   - Q_{10} = 0.262 CFS FOR 10 YEAR STORM
   - Q_{100} = 0.367 CFS FOR 100 YEAR STORM

   POST-PROJECT CONDITIONS
   - Q_{10} = 0.245 CFS FOR 10 YEAR STORM
   - Q_{100} = 0.344 CFS FOR 100 YEAR STORM
3. RETENTION SIZING
   CHANGE IN RUNOFF FOR 100 YEAR STORM = -.023 CFS
   THEREFORE NO RETENTION REQUIRED FOR DMA 1.

DMA 2 STORMWATER CALCULATIONS

USE: RATIONAL METHOD (Q=CIAF)

1. ASSUMPTIONS:
   - i_{10} = 0.86 IN/HR — FROM SAN MATEO COUNTY RAINFALL RUNOFF DATA
   - i_{100} = 1.21 IN/HR — FROM SAN MATEO COUNTY RAINFALL RUNOFF DATA
   - F = 0.8 UNITLESS — FROM SAN MATEO COUNTY RAINFALL RUNOFF DATA
   - C = 0.9 — RUNOFF COEFFICIENT FOR IMPERVIOUS SURFACE
   - C = 0.35 — RUNOFF COEFFICIENT FOR PERVIOUS SURFACE
2. DETERMINE Q:
   PRE-PROJECT CONDITIONS
   - Q_{10} = 0.094 CFS FOR 10 YEAR STORM
   - Q_{100} = 0.132 CFS FOR 100 YEAR STORM

   POST-PROJECT CONDITIONS
   - Q_{10} = 0.086 CFS FOR 10 YEAR STORM
   - Q_{100} = 0.122 CFS FOR 100 YEAR STORM
3. RETENTION SIZING
   CHANGE IN RUNOFF FOR 100 YEAR STORM = -.01 CFS
   THEREFORE NO RETENTION REQUIRED FOR DMA 2.

DMA 3 STORMWATER CALCULATIONS

USE: RATIONAL METHOD (Q=CIAF)

1. ASSUMPTIONS:
   - i_{10} = 0.86 IN/HR — FROM SAN MATEO COUNTY RAINFALL RUNOFF DATA
   - i_{100} = 1.21 IN/HR — FROM SAN MATEO COUNTY RAINFALL RUNOFF DATA
   - F = 0.8 UNITLESS — FROM SAN MATEO COUNTY RAINFALL RUNOFF DATA
   - C = 0.9 — RUNOFF COEFFICIENT FOR IMPERVIOUS SURFACE
   - C = 0.35 — RUNOFF COEFFICIENT FOR PERVIOUS SURFACE
2. DETERMINE Q:
   PRE-PROJECT CONDITIONS
   - Q_{10} = 0.095 CFS FOR 10 YEAR STORM
   - Q_{100} = 0.134 CFS FOR 100 YEAR STORM

   POST-PROJECT CONDITIONS
   - Q_{10} = 0.102 CFS FOR 10 YEAR STORM
   - Q_{100} = 0.143 CFS FOR 100 YEAR STORM
3. RETENTION SIZING
   CHANGE IN RUNOFF FOR 100 YEAR STORM = +.009 INCREASE

*DMA 2+3 TRIBUTE TO EXISTING PUBLIC SD SYSTEM WITH NO INCREASE IN RUNOFF. PROJECT FRONTAGE SYSTEM REQUIRE NO RETENTION.

REGISTERED PROFESSIONAL ENGINEER — JAMES TOBY — No. 63127 — CIVIL — STATE OF CALIFORNIA — ORIGINAL SIGNATURES IN BLUE INK

LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS · LAND SURVEYORS
BAY AREA REGION
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(P) (510) 887-4086
(F) (510) 887-3019
SACRAMENTO REGION
3017 DOUGLAS BLVD, # 300
ROSEVILLE, CA 95661
(P) (916)966-1338
(F) (916)797-7363
WWW.LEABRAZE.COM

IMPROVEMENT PLANS
LIFEMOVES MAPLE STREET SHELTER
1580 MAPLE STREET
SAN MATEO COUNTY
APN: 052-532-020

PROPOSED
DRAINAGE EXHIBIT

-	-
-	-
-	-
-	-
-	-
REVISIONS	BY
JOB NO:	2151287
DATE:	06-17-16
SCALE:	AS NOTED
DESIGN BY:	MH
DRAWN BY:	WM
SHEET NO:	

HYD-2

17 OF 17 SHEETS

2 GENERAL NOTES

RE: ALL ELECTRICAL SHEETS

A. ALL ELECTRICAL EQUIPMENT SHALL BE CERTIFIED AND LISTED BY UL OR OTHER NATIONALLY ACCREDITED AGENCIES. ANY EQUIPMENT NOT LISTED SHALL BE FIELD TESTED AND CERTIFIED BY AN APPROVED TESTING AGENCY. PROJECT OWNER AND HIS DESIGN/CONSTRUCTION TEAM SHALL NOTIFY THE BUILDING DEPARTMENT AND ARRANGE FIELD TEST AND CERTIFICATION OF UNLISTED EQUIPMENT PRIOR TO REQUESTING FINAL INSPECTION BY THE BUILDING INSPECTOR.

B. TYPICAL CIRCUIT WIRING FROM THE PANELS SHALL BE THHN/THWN COPPER 75 DEGREE WIRE IN EMT CONDUIT. REFER TO SPEC 16000, EMT CONDUIT SHALL BE SUPPORTED AT 10'–0" ON CENTER AND WITHIN 3"–0" OF EACH JUNCTION.

C. UNDERGROUND CONDUIT STUB–UPS:

1. STUB–UP AND CAP UNDERSLAB CONDUITS AT 6" ABOVE FINISHED FLOOR.
2. VERIFY EXACT LOCATIONS OF ALL OUTLETS WITH ARCHITECT AND OWNER PRIOR TO ROUGH–IN.
3. CONDUIT STUB–UPS AT EQUIPMENT SHALL BE PROVIDED WITH AN APPROVED GROUNDING HUB OR LUG.
4. CONDUIT STUB–UPS AT WALLS SHALL BE A MAXIMUM OF 3" CLEAR OF PROPOSED WALL LOCATIONS.
5. CONDUIT STUB–UPS WITHIN PROPOSED WALLS SHALL BE CENTERED WITHIN WALL SPACE.
6. PROVIDE A PERMANENT LABEL AT ALL STUB–UPS INDICATING LOCATION OF STUB–OUT OR TERMINATION AT THE OTHER END. PROVIDE LABEL AT BOTH ENDS OF CONDUIT RUN. PROVIDE PULL ROPE IN ALL EMPTY CONDUITS.
7. WRAP ALL METAL PORTIONS OF RIGID GALVANIZED STEEL CONDUIT RISERS WITH CORROSIVE RESISTANCE TAPE WHERE EXTENDED BELOW GRADE. PROVIDE SCOTCH #50 TAPE OR APPROVED EQUIVALENT.

D. VERIFY LOCATION OF OUTLETS AND SWITCHES IN FINISHED ROOMS WITH ARCHITECTURAL DRAWINGS OF INTERIOR DETAILS AND FINISH. WHEN CENTERING OUTLETS AND LOCATING BOXES AND OUTLETS, ALLOW FOR OVERHEAD PIPES, DUCTS AND MECHANICAL EQUIPMENT, VARIATIONS IN FIREPROOFING AND PLASTERING, WINDOW AND DOOR TRIM, PANELING, SUSPENDED CEILINGS AND THE LIKE. CORRECT ANY INACCURACY RESULTING FROM FAILURE TO DO SO WITHOUT ANY EXPENSE TO OWNER.

E. THIS SHEET INDICATES A STANDARD LEGEND SHEET. SOME SYMBOLS OR ABBREVIATIONS MAY APPEAR ON THIS SHEET, AND NOT ON THE PROJECT DRAWINGS.

F. LINES OR OTHER SERVICES THAT ARE DAMAGED AS A RESULT OF THIS WORK SHALL PROMPTLY BE REPAIRED AT NO EXPENSE TO THE OWNER AND LANDLORD AND TO THE COMPLETE SATISFACTION OF THE OWNER AND LANDLORD.

G. REFER TO SPECIFICATION SECTION FOR SEISMIC BRACING OF NON–STRUCTURAL ELEMENTS.

H. REFER TO SPECIFICATION SECTION FOR THE PREPARATION AND SUBMITTAL REQUIREMENTS OF COORDINATION DRAWINGS.

I. ALL ELECTRICAL WORK SHALL COMPLY WITH THE 2011 NATIONAL ELECTRICAL CODE AS AMENDED BY THE 2013 CALIFORNIA ELECTRICAL CODE.

J. ALL PANELBOARDS WITH BRANCH CIRCUITS SERVING THE SAME VICINITY SHALL BE BONDED TOGETHER WITH MINIMUM #10 INSULATED CONTINUOUS COPPER CONDUCTOR WHERE MORE THAN TWO PANELS SERVE THE SAME LOCATION PER 517–14.

K. PLANS ARE PREPARED WITH REQUIRED BRANCH CIRCUITS INDICATED BY CIRCUIT NUMBER. PROVIDE AND INSTALL ALL CONDUITS, CONDUCTORS, BOXES, MISCELLANEOUS FITTINGS, ETC. FOR A COMPLETE AND OPERABLE SYSTEM INCLUDING HOME RUN (WHETHER OR NOT SHOWN). BRANCH CIRCUIT INSTALLATION SHALL COMPLY WITH SPECIFICATIONS AND N.E.C. (2011). PROVIDE #10 WIRE FOR 120 VOLT CIRCUIT RUNS OVER 125 FT.

L. THE UNGROUNDED AND NEUTRAL CONDUCTORS OF A MULTI WIRE BRANCH CIRCUIT MUST BE GROUP TOGETHER IN ATLEAST ONE LOCATION BY WIRE TIES OR SIMILAR MEANS AT THE POINT OF ORIGINATION PER NEC 210.4.

M. EACH MULTI WIRE BRANCH CIRCUIT SHALL BE PROVIDED WITH MEANS THAT WILL SIMULTANEOUSLY DISCONNECT ALL UNGROUNDED CONDUCTORS AT THE POINT WHERE THE BRANCH CIRCUIT ORIGINATES PER 210.4B.

OUTLETS:

1. ALL BATHROOM, OUTDOOR, GARAGE RECEPTACLES, LAUNDRY AND KITCHEN COUNTER RECEPTACLES WITHIN SIX FEET OF A SINK ARE TO BE GFCI PROTECTED.
2. WALL MOUNTED OUTLETS DRAWN IN A LINE, OUT FROM THE WALL, SHALL BE CENTERED ABOVE EACH OTHER, AT SCHEDULED HEIGHTS. MOUNT ALL BOXES ON SAME SIDE OF STUD. USE BAR HANGERS OR SCRAP BLOCKS TO CENTER THE BOXES TO EACH OTHER.
3. ELECTRICAL OUTLETS LOCATED ON OPPOSITE SIDES OF ALL FIRE–RATED PARTY WALLS SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF AT LEAST 24 INCHES.
4. WHEN KITCHEN OR BATH OUTLETS AT PARTY WALLS CANNOT BE MOVED TO THE NEXT STUD BAY, FILL THE STUD BAY (OR PORTION OF) WITH FIRE RETARDANT MATERIAL SATISFACTORY TO LOCAL BUILDING / FIRE INSPECTION.
5. PROVIDE A W.P. RECEPTACLE NO FARTHER THAN 25 FEET FROM ANY OUTDOOR EQUIPMENT. SIMILARLY, PROVIDE A STANDARD RECEPTACLE FOR EQUIPMENT IN ATTICS OR MECHANICAL ROOMS.
6. PROVIDE DISCONNECTING MEANS FOR ALL EQUIPMENT REQUIRING SUCH.
7. OUTLET BOXES LOCATED IN 1 HOUR RATED WALLS AND CEILINGS SHALL BE STEEL OR 1 HOUR FIRE RATED PLASTIC AND SHALL HAVE ANNULAR SPACE SEALED WITH 1 HR RATED FIRE STOPPING. PER NEC 300–21 AND UBC–709, 710.
8. ALL PLASTIC CONDUIT OR CABLE IN 1 HR WALLS SHALL HAVE A F RATING.
9. ALL DUPLEX RECEPTACLES IN ALL INHABITABLE ROOMS SHALL BE PROTECTED WITH ARC–FAULT CIRCUIT INTERRUPTERS PER CEC 210–12 AND SHALL BE TAMPERPROOF WHERE REQUIRED BY CEC 406.10.

LIGHTING:

1. ALL WALL MOUNTED FIXTURES ARE TO BE LOCATED AT HEIGHTS ESTABLISHED BY ARCHITECT. HEIGHTS ARE TO BE SET AFTER SUBMITTALS ARE APPROVED. (FINAL FIXTURES SIZES ARE KNOWN.)
2. ALL SITE AND BUILDING EXTERIOR FIXTURES ARE TO BE CONTROLLED BY A TIME SWITCH THAT HAS A PHOTOCELL OVERRIDE. EACH FIXTURE TYPE SHALL BE PROVIDED A TIME SWITCH POLE. TIME SWITCH POLES CAN BE COMBINED AT HOUSE PANEL CIRCUITS TO FILL AND BALANCE CIRCUITS. ALLOW ONE SPARE TIME SWITCH POLE PER PANEL.

1 LEGEND AND ABBREVIATIONS ◇1

RE: ALL ELECTRICAL SHEETS

SYMBOL	DESCRIPTION
SIGNAL	
▷|	TELEPHONE OUTLET: +18" AFF U.O.N.
▷|	DATA OUTLET: +18" AFF U.O.N. (SINGLE, DOUBLE)
▷	TELEPHONE/DATA OUTLETS IN SAME OUTLET BOX
TV	TELEVISION OUTLET: +18" AFF U.O.N.
DS	MAGNETIC DOOR SWITCH
SINGLE LINE DIAGRAM	
M	METER SOCKET
M	TRANSFORMER RATED METER SOCKET AND CT
—N—	NEUTRAL BUS
—G—	GROUND BUS
	CIRCUIT BREAKER
	FUSIBLE SWITCH
FIRE ALARM	
FACP	FIRE ALARM CONTROL PANEL
F	PULL STATION +45" U.O.N.
F	FIRE ALARM HORN +80" AFF U.O.N.
FS	FIRE ALARM STROBE LIGHT +80" AFF U.O.N.
FS	FIRE ALARM STROBE/HORN +80" AFF U.O.N.
DD FD	DUCT SMOKE DETECTOR–S.M.D. FOR EXACT LOCATION
F	SMOKE DETECTOR
H	HEAT DETECTOR
ANN	FIRE ALARM ANNUNCIATOR
FS	FIRE SPRINKLER FLOW SWITCH
SS	FIRE SPRINKLER SUPERVISORY SWITCH OR POST INDICATOR
FSD	FIRE SMOKE DAMPER

NOTE: ALL DEVICE AND OUTLET MOUNTING HEIGHTS ARE MEASURED FROM THE CENTER OF OUTLETS

◇1 PROVIDE 4"X4" SQUARE X 2 1/4" DEEP OUTLET AND RUN 3/4" CONDUIT AND PULL WIRE TO ACCESSIBLE CEILING SPACE (WIRING BY OTHERS)

SYMBOL	DESCRIPTION
EQUIPMENT	
	PANELBOARD / TERMINAL CABINET – SEE SCHEDULE
	PANELBOARD – SEE SCHEDULE
	TERMINAL CABINET, SURFACE MOUNTED SIZE & TYPE AS NOTED
	MAIN SWITCHBOARD OR MOTOR CONTROL CENTER, SEE ONE LINE DIAGRAM
	TELEPHONE TERMINAL BOARD: 4' x 8' x 3/4" PLYWOOD OR AS NOTED w/ DOUBLE DUPLEX RECEPT. & 1 #6 GND
1	MOTOR, N.I.E.S. CONNECT AS REQ., NUMBER INDICATES HP
X / XX	DETAIL DESIGNATION; TOP NUMBER INDICATES DETAIL, BOTTOM LETTER/NUMBER INDICATES SHEET
AC –	MECHANICAL AND PLUMBING EQUIPMENT DESIGNATION
	CEILING EXHAUST FAN, N.I.E.S. CONNECTION BY ELECTRICAL CONTRACTOR
	COMBINATION STARTER/DISCONNECT, FUSED. SIZE AND TYPE AS REQUIRED OR NOTED
F	FUSED DISCONNECT SWITCH, SIZE PER UNIT LABEL
	NON–FUSED DISCONNECT SWITCH
	CONTROL EQUIPMENT
	CIRCUIT BREAKER DISCONNECT SWITCH
	DISTRIBUTION TRANSFORMER, MOUNTING AS NOTED
	BELL, TYPE AS NOTED ON PLANS
	LOW VOLTAGE BUZZER
	LOW VOLTAGE PUSH BUTTON
XX	INDICATES KEYED NOTES THIS SHEET
T	THERMOSTAT, NIES, INSTALL & CONNECT AS REQUIRED
	CIRCUIT BREAKER SHUNT TRIP MODULE
DS	DOOR LIMIT SWITCH
LIGHTING	
	SURFACE MOUNT FLUORESCENT STRIP LIGHT.
	SURFACE MOUNTED FLUORESCENT FIXTURE, (SUBSCRIPT INDICATES SWITCHING CONTROL)
	2x4 RECESSED FLUORESCENT FIXTURE (SUBSCRIPT INDICATES SWITCHING CONTROL)
	POWER TRACK WITH DECORATIVE SHADE TRACK HEADS
	FLUORESCENT STRIP FIXTURE
	INCANDESCENT OR HID FIXTURE
	WALL MOUNTED INCANDESCENT OR HID FIXTURE
	WALL MOUNTED FLUORESCENT FIXTURE
	SURFACE MOUNTED FLUORESCENT WRAPAROUND
	FIXTURE WITH EMERGENCY BALLAST.
	DUAL LAMP EMERGENCY LIGHTING BATTERY UNIT ON WALL OR COLUMN MOUNT. (SEE FIXTURE SCHEDULE TYPE "EM1")
	EXIT SIGN – DIRECTIONAL ARROWS AS INDICATED
	FIXTURE TAG DESIGNATION, SEE FIXTURE SCHEDULE
PC	PHOTO ELECTRIC CONTROL
$	SINGLE POLE TOGGLE SWITCH
$2	TWO POLE TOGGLE SWITCH
$3	THREE–WAY TOGGLE SWITCH
$K	KEY OPERATED SINGLE POLE TOGGLE SWITCH
$HP	MOTOR RATED SINGLE POLE SWITCH, @ UNIT UNO
$P	SINGLE POLE TOGGLE WITH PILOT LIGHT
OS, $OS	MOTION DETECTOR AND BOX, CEILING; WALL MOUNTED, FURNISHED INSTALLED & CONNECTED BY ELECTRICAL CONTRACTOR, LOWER CASE LETTER INDICATES CIRCUIT OR FIXTURE CONTROLLED BY DETECTOR. AIM ADJUSTABLE SENSORS PER DIRECTIONAL ARROWS WHERE INDICATED.
$	LV OERRIDE SWITCH
$D	DIMMER SWITCH AND BOX
$D/OS	DIMMER/OCCUPANCY SENSOR COMBO SWITCH AND BOX
DL	DAYLIT LIGHT PHOTOSENSOR WITH POWER PACK AND BOX

SYMBOL	DESCRIPTION
OUTLETS	
C	RECEPTACLE: DUPLEX 20 AMP, 3WG,125V, NEMA 5–20R WALL MOUNTED +18" AFF U.O.N. (FOR RECEPTACLES SERVING EQUIPMENT, REFER TO EQUIPMENT SCHEDULE, FOR OUTLETS ABOVE COUNTER, VERIFY MNTG HEIGHT)
	AS ⊖ BUT 4–PLEX
C	AS ⊖ BUT GROUND FAULT PROTECTIVE. (SUFFIX C: INDICATES ABOVE COUNTER OR SINK – VERIFY HEIGHT; D: DEDICATED)
	120V OR 240V SPECIAL APPLIANCE OR EQUIPMENT RECEPTACLE (VERIFY FOR NEMA TYPE AND EXACT LOCATION)
J	JUNCTION BOX, WALL MOUNTED/RECESSED, TYPE AS REQ'D.
J	JUNCTION BOX, SIZE & TYPE AS INDICATED OR AS REQ'D.
J	JUNCTION BOX, FLOOR MOUNTED, SIZE & TYPE AS INDICATED OR AS REQ'D.
J	JUNCTION BOX WITH FLEX CONNECTION TO EQUIPMENT
	120V OR 240V SPECIAL APPLIANCE OR EQUIPMENT RECEPTACLE (VERIFY FOR NEMA TYPE AND EXACT LOCATION)
	PRE–MANUFACTURED INTERCONNECT CABLE
	CONNECTION TO EQUIPMENT BY ELECTRICAL CONTRACTOR
	CEILING MOUNTED DUPLEX RECEPTACLE
	DUPLEX RECEPTACLE FLUSH w/ FINISHED FLOOR NEMA 5–20R.
WM	PLUGMOLD MULTI–OUTLET ASSEMBLY, WIREMOLD OR EQUAL W/ OUTLETS AS SHOWN.
	EQUIPMENT CONNECTION
WIRING	
	CONDUIT RUN CONCEALED BELOW FLOOR OR FINISHED GRADE SAWCUT EXISTING SLAB AND PATCH EXISTING CONCRETE TO MATCH IN LIKE AND KIND AFTER INSTALLATION OF CONDUITS.
	CONDUIT CONCEALED IN CEILING OR WALL
	HOMERUN TO RESPECTIVE PANEL OR TERMINAL CABINET– OVERHEAD.
	HOMERUN TO RESPECTIVE PANEL OR TERMINAL CABINET– UNDERGROUND, MAY RUN TO NEAREST WALL OR COLUMN WHERE CONDUIT CAN BE CONCEALED AND RUN OVERHEAD TYPICAL FOR POWER, TEL., LV, SIGNAL, ETC.
	CONDUIT RISER – UP
	CONDUIT RISER – DOWN
X	EXISTING FEEDER TO REMAIN

BRANCH CIRCUIT WITHOUT FURTHER DESIGNATION INDICATES INDICATES A 2 #12 WIRE CIRCUIT
ADDITIONAL NO. OF #12: , 3 #12: , 2 #12 & 1 #12 GND: , 5 #12 & 1 #12 GND: ETC. OTHER WIRE SIZES: (#10 #12), 2 #10 & 1 #12 GND: (#4 #8), 3 #4 & 1 #8 GND: ETC.
INSULATED/ISOLATED GROUND

ABBREVIATIONS	
MT	EMPTY CONDUIT WITH PULLSTRING
EL	EMERGENCY LIGHT
NL	NIGHT LIGHT
(E)	EXISTING
(R)	RELOCATED
(M)	MODIFIED
C	CONDUIT
WP	WEATHERPROOF
EOL	INDICATES DEVICE w/ END–OF–LINE RESISTOR
NIES	NOT IN ELECTRICAL SECTION OF THESE PLANS & SPECIFICATIONS
UNO	UNLESS NOTED OTHERWISE
PFB	PROVIDE FOR FUTURE BREAKER
RE:	REFERENCE, REFER TO AND COORDINATE WITH

NOTE: SYMBOLS INDICATED ABOVE MAY NOT NECESSARILY APPEAR AS PART OF THESE DRAWINGS IF NOT REQUIRED.

5 INDEX OF DRAWINGS

FIRE ALARM SYSTEM IS DEFERRED APPROVAL.

ARCHITECT OR ENGINEER OF RECORD SHOULD REVIEW SUBMITTAL DOCUMENTS FOR PORTIONS OF THE WORK THAT ARE INDICATED AS DEFERRED AND PROVIDE NOTATION THAT THE SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED BY THE A/E FOR CONFORMANCE WITH DESIGN INTENT PRIOR TO SUBMITTING TO THE BUILDING DIVISION FOR APPROVAL. (CBC 106.3.5)

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Legend, general notes

◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

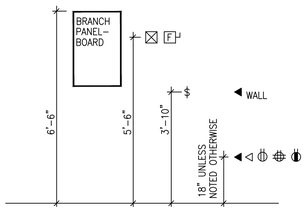
◦ JOB: 2015.2801

◦ DATE: 06/17/16

◦ SHEET: E0.1A

NOTES:

1. MOUNTING HEIGHTS OF ALL ELECTRICAL EQUIPMENT SHALL CONFORM TO ADA REQUIREMENTS.
2. ALL CONTROLS AND SWITCHES INTENDED TO BE USED BY THE OCCUPANT OF THE ROOM OR AREA TO CONTROL LIGHTING AND RECEPTACLE OUTLETS, APPLIANCES OR COOLING, HEATING AND VENTILATING EQUIPMENT, SHALL LOCATED NO MORE THAN 48" MEASURED FROM THE TOP OF THE JUNCTION BOX OR DEVICE BOX NOR LESS THAN 15" MEASURED TO THE BOTTOM OF THE JUNCTION OR DEVICE BOX ABOVE THE FINISH FLOOR.
3. ALL RECEPTACLES OUTLETS ON BRANCH CIRCUITS OF MORE THAN 30-AMPERES OR LESS AND COMMUNICATION SYSTEM RECEPTACLES SHALL BE LOCATED NO MORE THAN 48" MEASURED FROM THE TOP OF RECEPTACLE OUTLET BOX OR RECEPTACLE HOUSING NOR LESS THAN 15" MEASURED TO THE BOTTOM OF THE RECEPTACLE OUTLET BOX OR RECEPTACLE HOUSING ABOVE THE FINISH FLOOR.



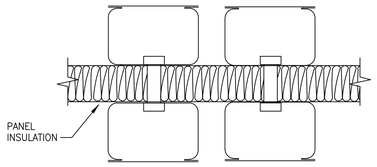
4 STANDARD MOUNTING HEIGHTS
N.T.S.
RE: ALL ELECTRICAL DRAWINGS

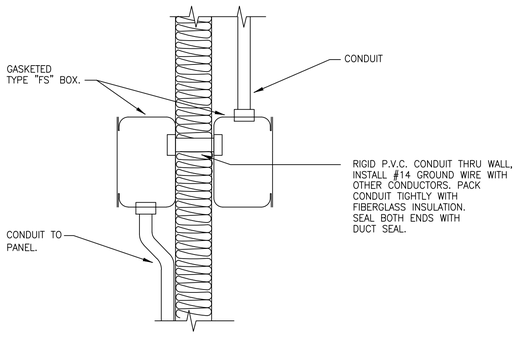
3 FIXTURE SCHEDULE NOTES
RE: E0.1-3

1. OWNER TO APPROVE ALL FIXTURE SUBMITTALS PRIOR TO PURCHASE. PROVIDE ALL CUT SHEETS WITH CORRESPONDING TAG AND MODEL NUMBERS AND SHOW EXPLICITLY ALL STYLES, FINISHES AND COLORS- OTHERWISE CONTRACTOR WILL BEAR ALL RESTOCKING AND RELATED COSTS TO OBTAIN THE PROPER FIXTURE.
2. MANUFACTURER AND DESCRIPTION NOTED ARE TO ESTABLISH MINIMUM STANDARDS FOR FIXTURES. EQUIVALENT WILL BE REVIEWED BASED ON APPEARANCE, CONSTRUCTION AND PHOTOMETRICS. DESCRIPTION SHALL PREVAIL OVER MANUFACTURER CATALOG NUMBERS.
3. FINISH MATERIALS AND COLOR OF ALL LIGHT FIXTURES SHALL BE VERIFIED WITH ARCHITECT AS PART OF SHOP DRAWINGS SUBMITTAL PRIOR TO ORDERING. PROVIDE SAMPLE COLOR CHIPS AND/OR SAMPLES AS REQUESTED.
4. PRISMATIC DIFFUSER LENSES SHALL BE 100% VIRGIN ACRYLIC, MINIMUM 0.125" THICKNESS, PATTERN #12A UNLESS OTHERWISE NOTED.
5. ALL FIXTURES SHALL HAVE A MINIMUM OF AN UNCONDITIONAL TWO YEAR WARRANTY ON ALL BALLASTS (PARTS AND LABOR).
6. ALL EQUIPMENT SHALL BE LISTED AND LABELED BY A NATIONALLY RECOGNIZED TESTING LABORATORY FOR THE SPECIFIC APPLICATION IN WHICH USED. IT SHALL BE INSTALLED AS PER LISTING OOR LABELING.
7. VERIFY EXACT MOUNTING HEIGHTS AND REFERENCE HEIGHTS (I.E., BOTTOM OF FIXTURE, CENTER LINE OF OUTLET BOX, ETC.) WITH ARCHITECT PRIOR TO ROUGH-IN.
8. SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF LIGHT FIXTURES IN CEILING.
9. SURFACE MOUNTED FIXTURES SHALL BE SECURED TO BUILDING STRUCTURE - TOGGLE BOLTS ARE NOT ACCEPTABLE.
10. ALL PENDANT MOUNTED FIXTURES SHALL BE INSTALLED WITH CANOPIES AND STEMS SUCH THAT THEY SWING A MINIMUM OF 45° IN ALL DIRECTIONS WITHOUT HITTING ANY OBSTRUCTIONS. IF THERE ARE OBSTRUCTIONS WITHIN THE 45° SWING AREA, PROVIDE SWAY BRACING TO RESTRICT ANY MOVEMENT.
11. PROVIDE SEISMIC BRACING FOR ALL FIXTURES AS REQUIRED BY STATE OF CALIFORNIA BUILDING CODES AND LOCAL JURISDICTION.
12. SURFACE MOUNTED FIXTURES SHALL CLEAR SPRINKLER HEADS BY 12" MINIMUM.
13. LED SHALL BE 4000K COLOR TEMPERATURE

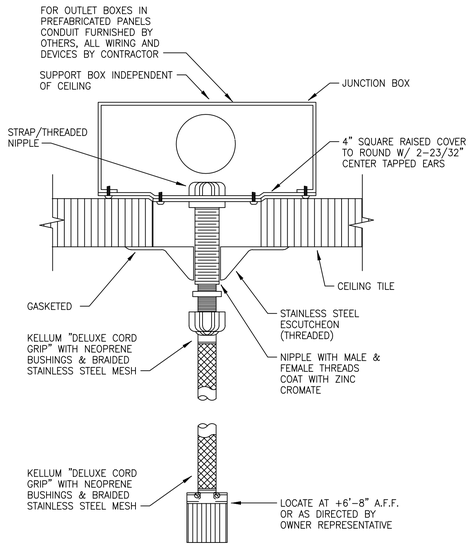
2 FIXTURE SCHEDULE
RE: E2.2

TAG	SYMBOL	DESCRIPTION	MANUFACTURER AND CATALOG #	LAMPS	FIXTURE WATT	VOLT	REMARKS
A		RECESSED 2'X2' LED INDIRECT WITH PERFORATED CENTER BASKET 4000K	LITHONIA 2BLT2-40L-ADSM-EZ1-LP840 HE WILLIAMS	30w LED	30w	120	
A1		SAME AS A EXCEPT WITH 90 CRI COLOR TEMPERATURE	LITHONIA 2BLT2-40L-ADSM-EZ1LP940 HE WILLIAMS	30w LED	30w	120	USE IN HOUSING BED AREA
B		SURF MOUNT 1'X8' LED	FAILSAFE HVL8-8-LD4-2STD-35-UNV-0-EDD1	73w LED	73w	120	
B1		SURF MOUNT 1'X2' LED	FAILSAFE HVL8-2-LD4-1LO-35-UNV-0-EDD1	26.2w LED	26.2w	120	
B2		SAME AS "B1" EXCEPT 1'x4'	FAILSAFE HVL8-4-LD4-1LO-35-UNV-0-EDD1	26.2w LED	26.2w	120	
C1		SURF MOUNT 2' LED WALL LIGHT, COLOR TO BE SELECTED BY ARCHITECT	VISA LIGHTING CV1800 LNW DIM 120	10w LED	10w	120	LOCATE ABOVE MIRROR
C2		SAME AS "C1" EXCEPT 4'	VISA LIGHTING CV1804 LNW DIM 120	28w LED	28w	120	LOCATE ABOVE MIRROR
C3		SAME AS "C1" EXCEPT 5'	VISA LIGHTING CV1806 LNW DIM 120	36w LED	36w	120	LOCATE ABOVE MIRROR
C4		SAME AS "C1" EXCEPT 3'	VISA LIGHTING CV1802 LNW DIM 120	24w LED	24w	120	LOCATE ABOVE MIRROR
E1		UNIVERSAL MOUNT LED EXIT SIGN EMERGENCY BATTERY PACK 90 MINUTES MINIMUM.	TBD	PROVIDED w/ FIXT		120	
X		EXTERIOR LED WALL PACK	GARDCO 104L-16L-530NG1-4-120-BK	30W LED MAX		120	
X2		EXTERIOR LED DOWNLIGHT, WET LOCATION LABEL	WILLIAMS L60-L20C-840-26	26W LED		120	
S1		PARKING LOT LUMINAIRE SINGLE HEAD ALUMINUM HOUSING, ARM MOUNTED, TYPE 5 DISTRIBUTION ALUMINUM REFLECTOR, INTEGRAL LED DRIVER, TEMPERED GLASS LENS. UL WET LOCATION LABEL.. 4" STRAIGHT SQUARE STEEL POLE FACTORY PRIMED AND PAINTED, BLACK ANODIZED 10'-0"	GARDCO P21 MR1 A2-1-5W 55LA-NW-208-BLP-BD	1-55 WATT LED 4000K 70 CRI	208		SEE 5/SE1
S1A		SIMILAR TO 'S1' EXCEPT TWIN HEAD. TYPE 3 DISTRIBUTION	GARDCO P21 MR1 A2-1-3 55LA-NW-208-BLP-BD	1-55W LED 4000K 70 CRI	208		SEE 5/SE1
S2		SIMILAR TO 'SA' EXCEPT TWIN HEAD. 4" STRAIGHT SQUARE STEEL POLE FACTORY PRIMED AND PAINTED, BLACK ANODIZED 10'-0"	GARDCO P21 MR1 A2-2-5W 55LA-NW-208-BLP-BD	2-55 WATT LED 4000K 70 CRI	208		SEE 5/SE1
S3		EXTERIOR LED BOLLARD, WET LOCATION LABEL	GARDCO BRM-830 43 MR NW 360 UNIV-BLP	41w LED	120		
S4		EXTERIOR LED TRELLIS LIGHT, WET LOCATION LABEL	BRUCK 105015 BK	9.6w LED	120		
S5		EXTERIOR LED STEP LIGHT, WET LOCATION LABEL	BRUCK 138022-BN-3-HL	2.6w LED	120		





2 PENETRATION THRU FREEZER/COOLER WALL
N.T.S.
RE: E2.1



1 CEILING PENETRATION DETAIL
N.T.S.
RE: E2,1

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

LCP, lighting fixture schedule

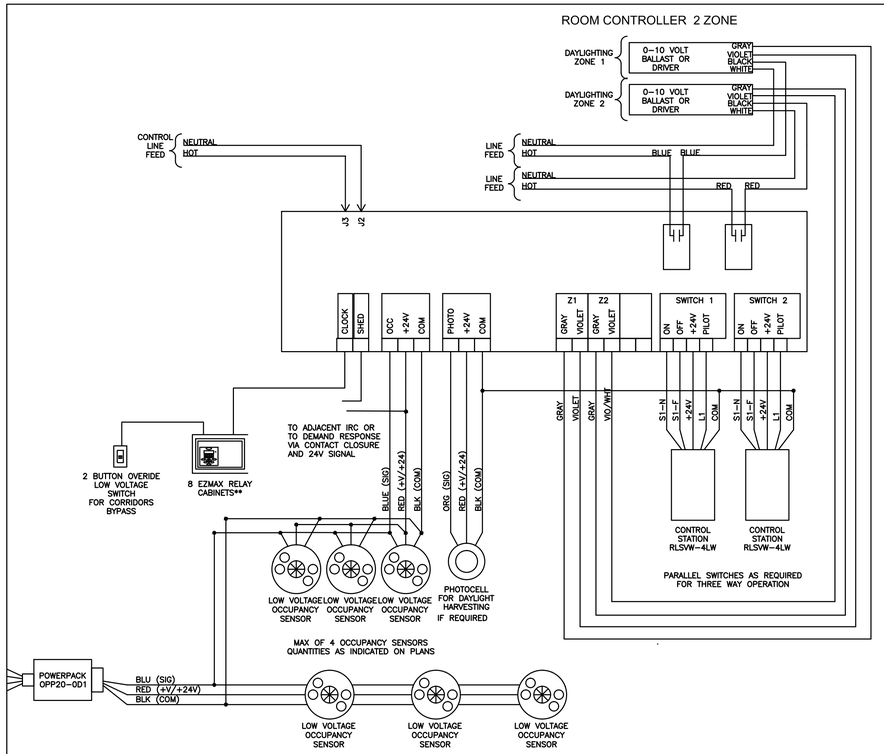
◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

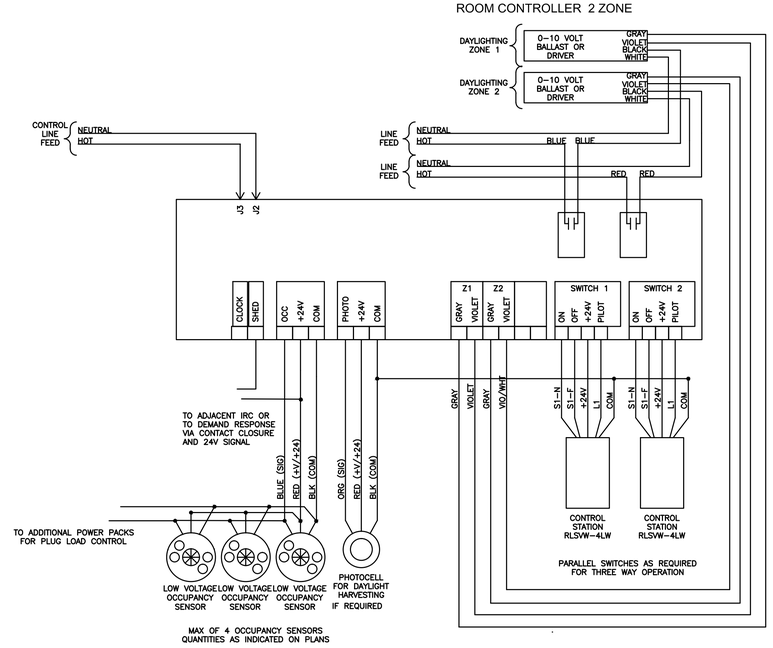
◦ JOB: 2015.2801

◦ DATE: 06/17/16

◦ SHEET: E0.1B



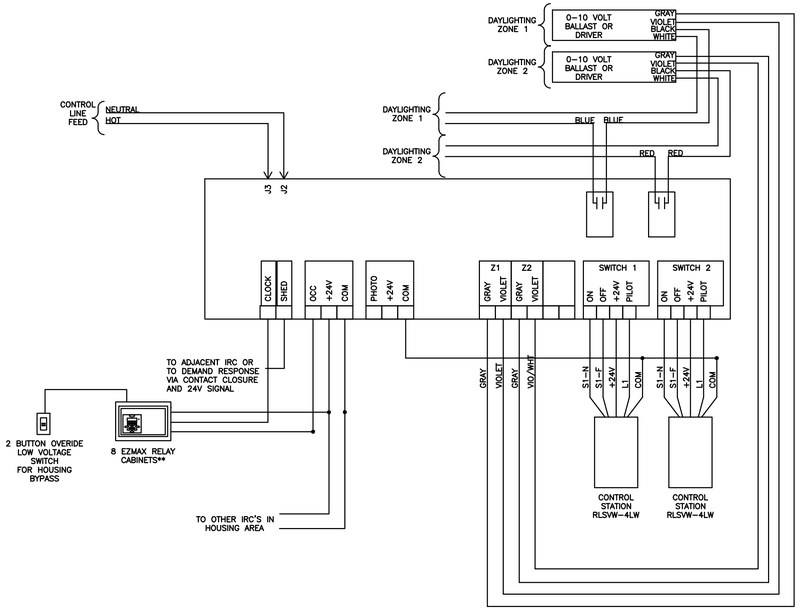
2 ROOM CONTROLLER–LARGE SINGLE RM UP TO 2 ZONES
CORRIDOR PARTIAL OFF BYPASS



3 ROOM CONTROLLER–LARGE SINGLE RM UP TO 2 ZONES
TYPICAL ROOMS

LCP-1 CIRCUIT SCHEDULE RBD08-LO8

RELAY / CIRCUIT		CONTROL			LOAD CIRCUITS			
RELAY NO.	PANEL - BREAKER	OCC SENSOR	ANALOG INPUT	TIME CLOCK	FIELD CIRCUIT	LOAD WATTS	NOTES	(EM)
1	EMX			YES	2,4		PARKING	
2	EMX			YES	1		Exterior WALL	
3	EMX			YES	3		Exterior BOLLARDS	
4	EMX			YES	5		TRELLIS AND RAMP	
5				YES			SPARE	
6				YES			SPARE	
7	EM		2 button	YES			Low Voltage Housing	
8	EM		2 vutton	YES			Low Voltage corridors/lobby	



1 ROOM CONTROLLER– SINGLE RM UP TO 2 ZONES–TIME CLOCK VIA RELAY
HOUSING AREAS

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

LIGHTING CONTROLS

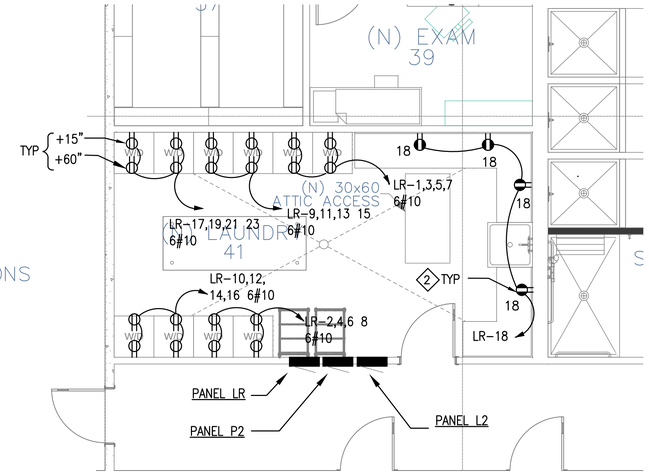
◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

◦ JOB: 2015.2801

◦ DATE: 06/17/16

◦ SHEET: E0.2



4 Power and Signal Plan-Laundry 1/4" = 1'-0"

NOTES:

1. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL HOOD FIRE SUPPRESSION SYSTEM CONTROL WIRING. PROVIDE CONDUIT, WIRE, RELAYS CONTACTOR, ETC. AS REQUIRED. MAKE ALL CONNECTIONS AND INTERLOCKS IN CONFORMANCE WITH THE LOCAL FIRE MARSHALL REQUIREMENTS.
2. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LINE VOLTAGE WIRING AS SHOWN ON "WEBB" DWGS. FOR THE HOOD PREWIRE CONTROL PNL WIRING DIAGRAM, INCLUDING LINE VOLTAGE POWER TO HOOD LIGHTS, LINE VOLTAGE TO CONTROL PANEL AND LINE VOLTAGE WIRING BETWEEN ALL COMPONENTS.
3. REFER TO KITCHEN DRAWING FOR ADDITIONAL INFORMATION.

3 SHEET NOTES

RE: E2.1

A. ALL RACEWAYS PASSING THROUGH THE WALLS, FLOOR OR CEILING OF THE WALK-IN COOLER/FREEZER SHALL BE SEALED WITH COMPOUND PER ARTICLE 300-7(A).

B. PLANS ARE PREPARED WITH REQUIRED BRANCH CIRCUITS INDICATED BY CIRCUIT NUMBERS. PROVIDE AND INSTALL ALL CONDUITS. CONDUCTORS, BOXES, MISCELLANEOUS FITTINGS, ETC. FOR A COMPLETE AND OPERABLE SYSTEM INCLUDING HOME RUN (WHETHER OR NOT SHOWN). BRANCH CIRCUIT INSTALLATION SHALL COMPLY WITH SPECIFICATIONS AND N.E.C. (2011). PROVIDE #10 WIRE FOR 120V CIRCUIT RUNS OVER 125 FT.

C. ALL RECEPTACLE IN KITCHEN AND WITHIN 6 FT OF ANY BASIN SINK OR LAVATORY MUST BE PROTECTED WITH GFCI. THIS INCLUDES ISOLATED GROUND RECEPTACLES.

D. WHERE 208V EQUIPMENT IS SPECIFIED, ELECTRICAL CONTRACTOR TO PROVIDE TRANSFORMER TO CORRECT VOLTAGE TO 240V. OR 230V. VERIFY NAMEPLATE REQUIREMENTS PRIOR TO INSTALLATION.

E. PROVIDE DISCONNECTING MEANS AS REQUIRED FOR ALL APPLIANCE/EQUIP. ALL DISCONNECTS, INCLUDING THOSE WITH FUSES FOR MOTORS A/C'S FANS, COMPRESSORS, ETC., SHALL BE RATED IN HORSEPOWER (BE HEAVY DUTY) AT LEAST EQUAL TO THE HORSEPOWER RATING OF THE MOTOR. NEC 430-109 AND 422C.

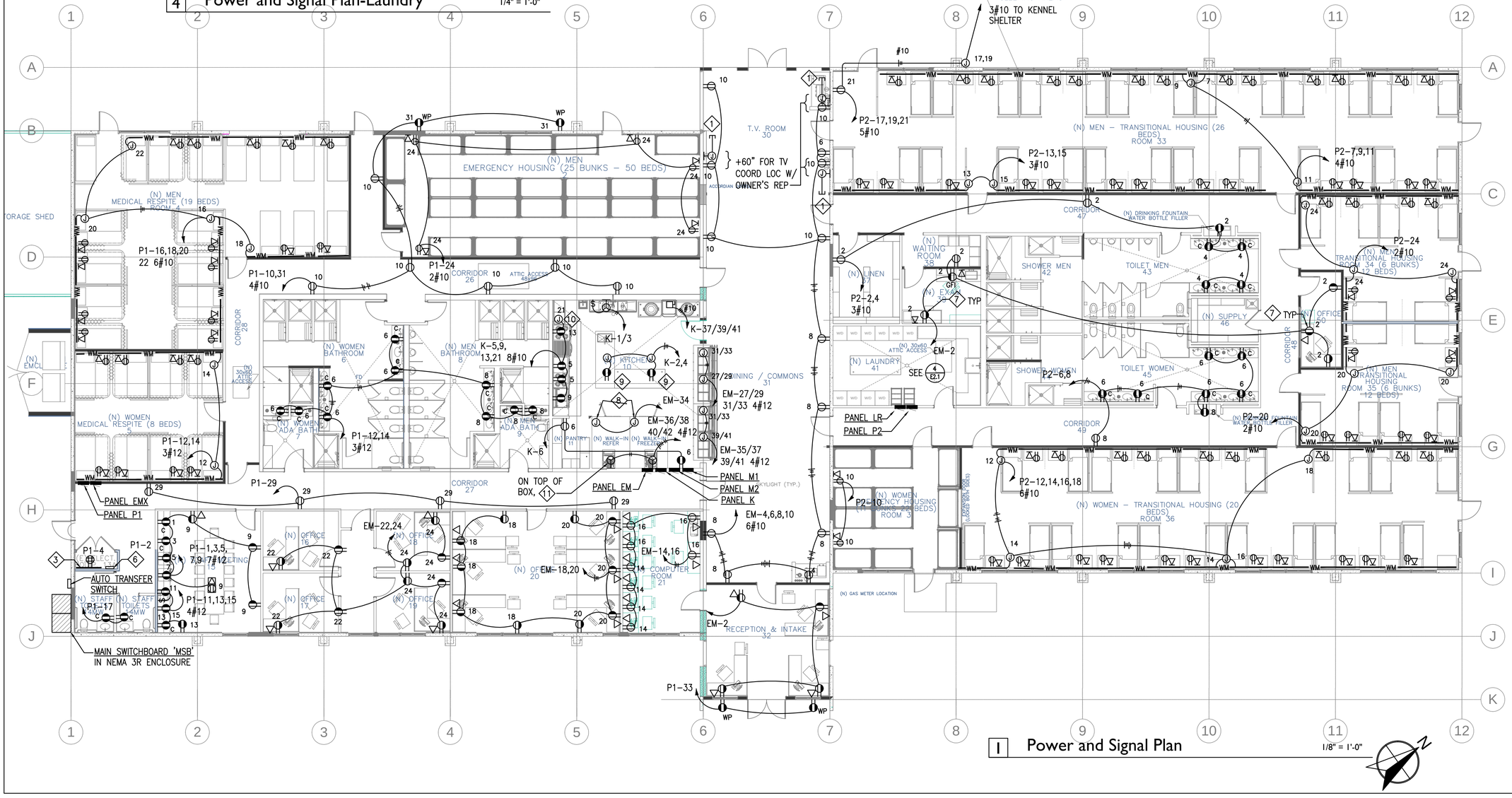
F. ALL AREAS OF FIRE RATED CONSTRUCTION THE POWER WIRING AND POWER CONTROL WIRING SHALL BE INSTALLED IN METALLIC CONDUIT. CBC.

G. UNDERGROUND AND OVERHEAD ROUTING OF BRACH CIRCUITS ARE GENERALLY NOT SHOWN. HOWEVER THE CONTRACTOR SHALL BE HELD FULLY RESPONSIBLE FOR COMPLETE WIRING SYSTEM INCLUDING HOMERUNS, RESTORATION OF ALL NEW OR EXISTING SURFACES REQUIRING SAW CUTTING, PATCHING, PLASTERING, PAINTING AND/OR OTHER REPAIR DUE TO THE INSTALLATION OF ELECTRICAL WORK. CLOSE ALL OPENINGS, REPAIR ALL SURFACES, ETC., AS REQUIRED. VERIFY ANY APPLICABLE SEALANT SPECIFICATIONS WITH OWNER'S REPRESENTATIVE.

2 KEYED NOTES

RE: E2.1

1. PROVIDE 1"C TO ABOVE CEILING IN ACCESSIBLE LOCATION.
2. LOCATE OUTLET ABOVE COUNTER BACKSPLASH, COORDINATE WITH ARCHITECT.
3. PROVIDE TELEPHONE BACKBOARD, 48"W X 96"H X 3/4" THICK PLYWOOD WITH APPROVED GROUNDING MEANS AND 4-PLEX OUTLET. EXTEND EXISTING TELEPHONE SERVICE CONDUIT IN SPACE TO BACKBOARD. VERIFY LOCATION OF SERVICE CONDUIT IN FIELD. COORDINATE FINAL LOCATION OF BOARD IN FIELD WITH OWNER.
4. MAINTAIN REQUIRED CLEARANCE IN FRONT OF EQUIPMENT PER NEC SECTION 110-34.
5. SHOW WINDOW RECEPTACLE, FLUSH MOUNT ON CEILING.
6. LIGHTING CONTROL PANEL "LCP" SEE SHEET E02-3.
7. CONTROLLED WITH ROOM LIGHTS OCCUPANCY SENSOR VIA ROOM CONTROLLER
8. PROVIDE OUTLET FOR BOX FANS, WARMERS AND ETC., LOCATE OUTLET ABOVE BOX AT LOCATION DIRECTED BY BOX INSTALLER. PROVIDE APPROVED VAPOR SEAL AROUND RACEWAY ENTERING BOX INCLUDING INSIDE OF ENTERING RACEWAY AFTER INSTALLATION OF CONDUCTORS.
9. HANG TWISTLOCK RECEPTACLE FROM CEILING OUTLET ON "SO" CORD WITH STRAIN RELIEF. TERMINATE CORD, RECEPTACLE AND OUTLET WITH COVERED NYLON CONNECTOR BODY. VERIFY CORD LENGTH REQUIRED WITH OWNER REPRESENTATIVE.
10. LOCATE OUTLET AND CONNECT TO HOOD FIRE SUPPRESSION SYSTEM AS REQUIRED. VERIFY LOCATION AND COORDINATE W/ HOOD SUPPLIER/INSTALLER, SEE NOTE 1, 2 AND 3 THIS SHEET
11. COORDINATE LOCATION WITH VENDOR/OWNER'S REP



I Power and Signal Plan 1/8" = 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Power and Signal Plan

◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

◦ JOB: 2015.2801

◦ DATE: 06/17/16

◦ SHEET: E2.1

NOTE:

- IRC INTEGRATED ROOM CONTROLLER (IRC) LEVITON# MZD20-1D2.
- LOW VOLTAGE CEILING MOUNTED OCCUPANCY SENSOR OSC10-MOW.
- LOW VOLTAGE CEILING PHOTO SENSOR #ODCOP-OOW.
- ^{D} 4 BUTTON IRC CONTROL SWITCH LEVITON #RLVSW-4LW OR EQUAL
- ^{OS} WALLBOX OCCUPANCY SENSOR SINGLE RELAY LEVITON #ODS15-TDW OR EQUAL
- $ 2 BUTTON OVERRIDE CONTROL SWITCH LEVITON #LVS-2LW
- PPR POWER PACK/RELAY FOR LV OCCUPANCY SENSOR OPP20-OD2.
- LCP 8 CIRCUIT RELAY PANEL LEVITON RBD08-L08.
- PLUG LOAD CONTROL REQUIRES 1 OPP20-OD1 POWER PACK PER CIRCUIT PER SPACE

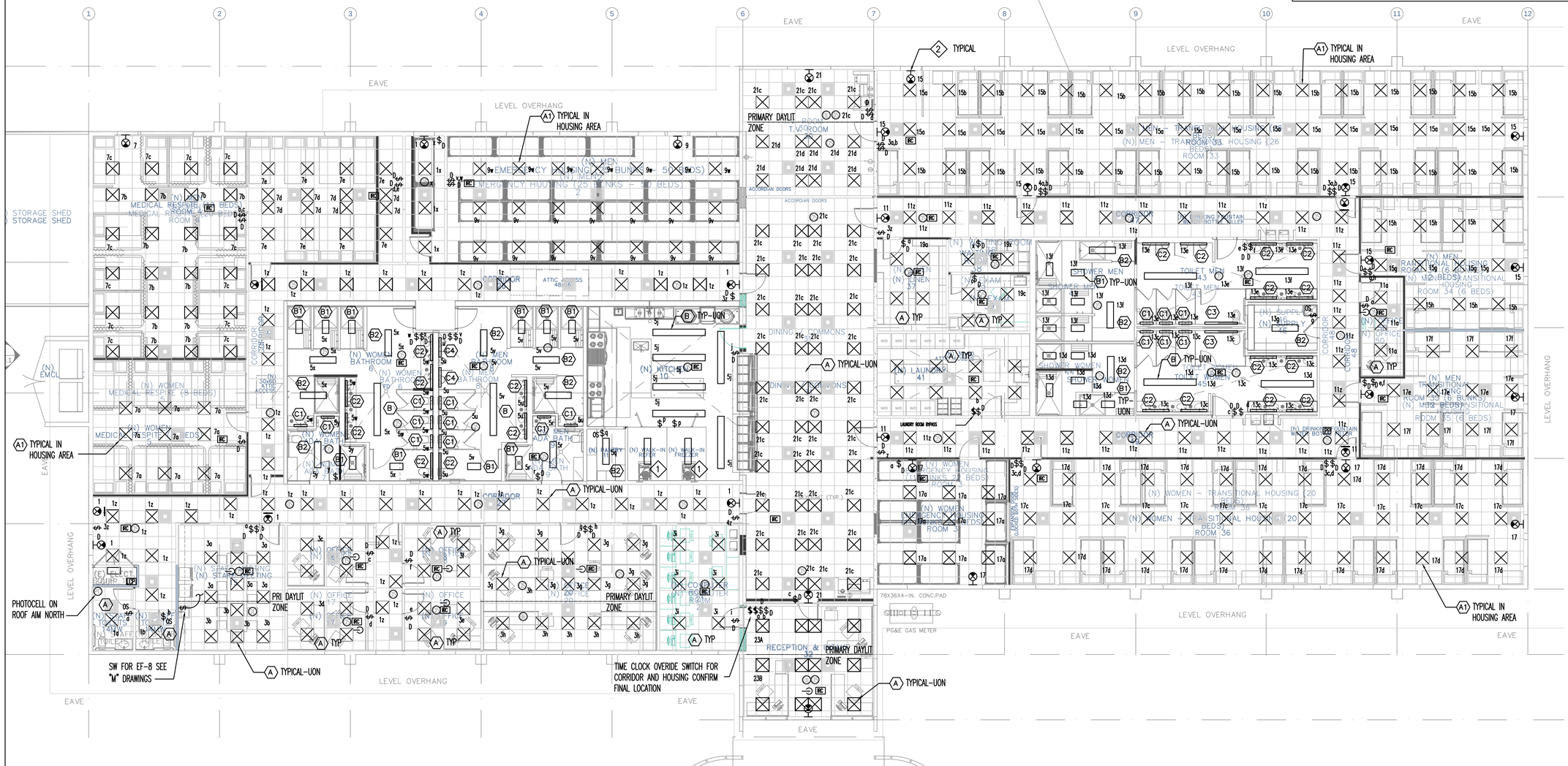
HOUSING/BED AREAS ARE NOT INCLUDED IN THE T24 CALCULATIONS, THESE AREAS ARE WITH 90 CRI LED LAMPS

3 KEYED NOTES
RE:E2.2-2

1. LIGHTS PROVIDED WITH COOLER/FREEZER BOX, COORDINATED WITH BOX MANUFACTURER.
2. CONNECT EXIT/EMERGENCY LIGHT AHEAD OF SWITCH LEG.
3. ALL BUILDING EXTERIOR LIGHTING "CONDUIT" TO BE RUN WITHIN BUILDING WALLS, ABOVE SUSPENDED CEILING. WHERE NOT CONCEALABLE WITHIN SPACE, ATTACH TO WALLS AND PAINT OUT, AS HIGH AS POSSIBLE. ANY EXPOSED CONDUIT MUST BE APPROVED IN ADVANCE OF INSTALLATION BY ARCHITECT.

2 SHEET NOTES
RE:E2.2-2

1. PROVIDE UNSWITCHED HOT TO NIGHTLIGHTS, EMERGENCY LIGHTS, EMERGENCY BALLASTS AND EXIT SIGNS.
2. ALL ELECTRICAL LINES SHALL BE CONCEALED WITHIN THE BUILDING STRUCTURE TO AS GREAT AN EXTENT AS POSSIBLE. ALL EXPOSED CONDUITS SHALL BE INSTALLED AT LEAST 6" OFF FLOOR.
3. ALL SEAMS, GAPS, OPENINGS TO BE PROPERLY SEALED.
4. ADDITIONAL DIRECTIONAL EXIT SIGN AND EMERGENCY LIGHTS TYPE "EX" MAY BE REQUIRED TO CLEARLY INDICATE THE DIRECTION OF EGRESS AND SHALL BE FIELD VERIFIED.
5. ANY TIME A BUILDING OR PORTION OF A BUILDING IS OCCUPIED, THE MEANS OF EGRESS SERVING THE OCCUPIED PORTION SHALL BE ILLUMINATED AT AN INTENSITY OF NOT LESS THAN 1 FOOT CANDLE (I LUX) AT WALKING SURFACE LEVEL.
6. ALL EXTERIOR LIGHTING CIRCUITS THRU LIGHTING CONTROL (LCP).
7. PLANS ARE PREPARED WITH REQUIRED BRANCH CIRCUIT INDICATED BY CIRCUIT NUMBERS. PROVIDE AND INSTALL ALL CONDUITS, CONDUCTORS, BOXES, MISCELLANEOUS FITTINGS, ETC. FOR A COMPLETE AND OPERABLE SYSTEM INCLUDING HOMERUN (WHETHER OR NOT SHOWN). BRANCH CIRCUIT INSTALLATION SHALL COMPLY WITH SPECIFICATIONS AND N.E.C. (2011). PROVIDE #10 WIRE FOR 120V CIRCUIT RUNS OVER 125 FT.
8. ALL CIRCUITS THRU PANEL "EM" U.O.N



I Lighting Plan

1/8" = 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Lighting Plan

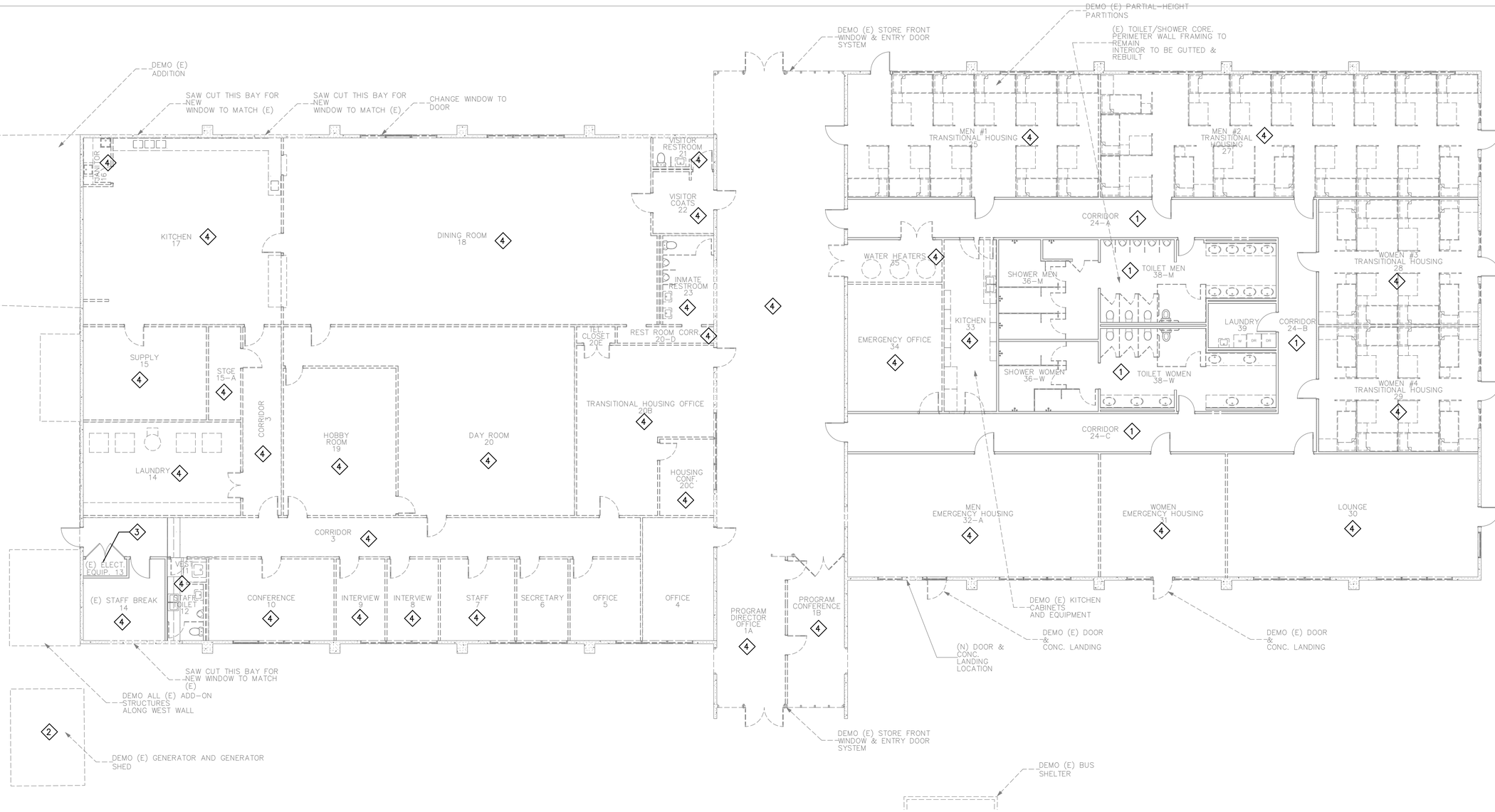
◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

◦ JOB: 2015.2801

◦ DATE: 06/17/16

◦ SHEET: E2.2



1 ELECTRICAL DEMOLITION PLAN

1/8" = 1'-0"

2 KEYED NOTES

RE: E2.1

1. DISCONNECT AND REMOVE ALL OVERHEAD ELECTRICAL FOR NEW CEILING. REMOVE ALL BOXES, OUTLETS, DEVICES, FITTINGS, CONDUIT AND WIRE BACK TO PANELBOARD OR LAST REMAINING OUTLET.
2. DISCONNECT ELECTRICAL TO (E) GENERATOR REMOVE ALL DEVICES, OUTLETS CONDUIT AND WIRE BACK TO PANELBOARD.
3. EXISTING ELECTRICAL TO BE REMOVED DURING FINAL PHASE OF CONSTRUCTION. COORDIANTE WITH OWNER'S REPRESENTATIVE AND GENERAL CONTRACTOR.
4. COMPLETELY REMOVE ALL ELECTRICAL FIXTURES, DEVICES, CONDUIT, AND WIRING IN THIS AREA (EXCEPT AS NOTED) TO ALLOW FOR NEW CONSTRUCTION. MAINTAIN CIRCUITING TO DOWNSTREAM CIRCUITS THAT ARE TO REMAIN. RELOCATE, REPLACE OR EXTEND RACEWAYS TO DOWNSTREAM CIRCUITS AS REQUIRED TO ALLOW CONTINUED USE OF THE SAME. RETAIN ALL WIRING TO MECHANICAL AND ELECTRICAL EQUIPMENT THAT IS TO REMAIN.

3 DEMO NOTES

RE: E2.1 DEMO PLAN

A THESE DEMOLITION DRAWINGS ARE INTENDED TO ASSIST THE ELECTRICAL CONTRACTOR IN ESTABLISHING AREAS REQUIRING DISCONNECTION, REMOVAL, OR RELOCATION OF ELECTRICAL EQUIPMENT, OUTLETS, WIRING, DEVICES, FIXTURES, ETC. AND DO NOT INDICATE ALL OUTLETS, EXACT QUANTITIES OR EXTENT OF DEMOLITION AND RECONNECTION WHICH MAY BE REQUIRED. THE ELECTRICAL CONTRACTOR SHALL VISIT THE JOBSITE AND THOROUGHLY EXAMINE ALL REQUIRING DEMOLITION WORK AND INCLUDE ALL LABOR AND INCIDENTALS WHICH MAY BE NECESSARY TO PERFORM DEMOLITION RECONNECTION AND TEMPORARY POWER CONNECTIONS IN HIS BID.

B DEMOLITION WORK SHALL BE ACCOMPLISHED IN PHASES THROUGHOUT THE CONSTRUCTION PERIOD. ALL DEMOLITION WORK SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR AND OWNER. THE ELECTRICAL CONTRACTOR SHALL OBTAIN THE DEMOLITION SCHEDULE FROM THE GENERAL CONTRACTOR AND MAKE ALLOWANCES IN HIS BID FOR A PHASED DEMOLITION SCHEDULE, INSTALLATION AND/OR RELOCATION OF NEW OR EXISTING FIXTURES AND EQUIPMENT WHICH MAY REQUIRE IN BID TO ALLOW FOR AFTER HOURS CONSTRUCTION WORK AS DIRECTED BY THE GENERAL CONTRACTOR. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR OVERTIME.

C THE ELECTRICAL CONTRACTOR SHALL REMOVE FROM THE PREMISES AND DISPOSE OF ALL ELECTRICAL DEMOLISHED EQUIPMENT, FIXTURES, ETC. VERIFY LOCAL AGENCY REQUIREMENTS PRIOR TO BIDDING.

D THE FACILITY SHALL REMAIN OPEN DURING NORMAL BUSINESS HOURS THROUGHOUT THE DURATION OF THE CONSTRUCTION PROCESS. STORE LIGHTING AND POWER MUST BE MAINTAINED DURING NORMAL STORE OPERATING HOURS. SCHEDULE ANY POWER OUTAGES WITH SAFEWAY (7) SEVEN DAYS IN ADVANCE AND RECEIVE APPROVAL PRIOR TO PROCEEDING. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CONTINUITY IN ELECTRICAL SEVICE AND MAKE ALLOWONCES IN HIS BID FOR TEMPORARY WIRING, CONNECTIONS AND POWER AS REQUIRED TO MINIMIZE DISRUPTION OF SERVICES. COORDINATE REQUIREMENTS WITH GENERAL CONTRACTOR AND OWNER.

E COORDINATE THE ELECTRICAL DEMOLITION WORK WITH THE GENERAL CONTRACTOR AND ALL OTHER TRADES AT THE JOBSITE. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARLY IDENTIFYING ALL CONDUITS, WIRING AND EQUIPMENT WHICH MUST BE MAINTAINED TO PREVENT DAMAGE TO ELECTRICAL CIRCUITS AND EQUIPMENT BY THE DEMOLITION WORK OF OTHER TRADES. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR REPAIR OR REPLACEMENT OF ELECTRICAL CIRCUITS AND/OR EQUIPMENT DAMAGED BY THE DEMOLITION WORK OF OTHERS RESULTING FROM THE FAILURE OF THE ELECTRICAL CONTRACTOR TO CLEARLY IDENTIFY SAID CIRCUITS OR EQUIPMENT.

F THE ELECTRICAL CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL ABANDONED CABLES, CONDUIT, WIRE, BOXES, FITTINGS AND HANGING MATERIALS FOR ELECTRICAL EQUIPMENT ABOVE EXISTING CEILINGS. REMOVAL SHALL CONTINUE THROUGHOUT CONSTRUCTION AS EQUIPMENT AND CIRCUITS ARE DISCONNECTED.

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

ELECTRICAL DEMOLITION PLAN

◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

◦ JOB: 2015.2801

◦ DATE: 06/17/16

◦ SHEET: E2.1D

3 GENERAL NOTES

A. ALL WIRING, DEVICES MOUNTED ON ROOF SHALL BE WEATHERPROOF.

B. PROVIDE CONTROL WIRING FOR HVAC EQUIPMENT PE MECHANICAL DRAWINGS.

C. SIZE ALL FUSES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

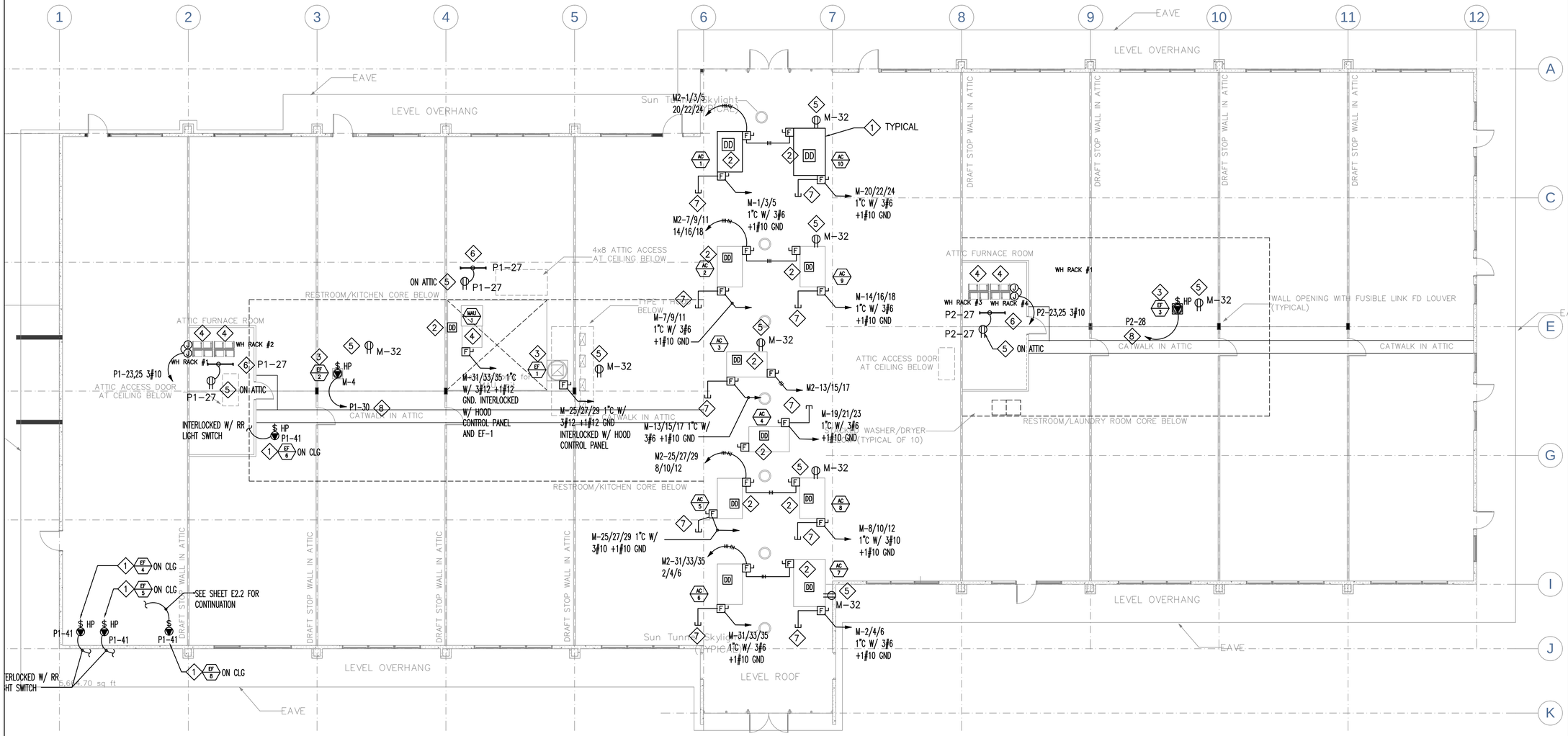
D. ALL U.L. LISTED EQUIPMENT SHALL BE INSTALLED PER THEIR LISTING OR LABELING.

E. PROVIDE NAME TAG IDENTIFICATION OF PANEL NUMBER AND BREAKER NUMBER WITH PERMANENT MARKER ON EACH DISCONNECT SWITCH LOCATED ON ROOF.

F. ROUTE ALL CONDUIT BELOW ROOF, PROVIDE FLASHED ROOF JACKS AS REQUIRED.

2 SHEET NOTES

1. SEE MECHANICAL DRAWINGS FOR EXACT LOCATIONS AND REQUIREMENTS OF ALL MECHANICAL EQUIPMENT.
2. DUCT SMOKE DETECTOR. PROVIDE OUTLET AND CONNECT TO M-34 CIRCUIT
3. EXHAUST FAN LOCATED ON ROOF SEE MECHANICAL DRAWINGS.
4. MAU1- AND WATER HEATERS ARE BELOW ROOF IN ATTIC SPACE.
5. A GFCI PROTECTED RECEPTACLE SHALL BE INSTALLED WITHIN 25 FEET OF ALL NEW HVAC AND VENTILATING EQUIPMENT ON THE ROOF. 15 AND 20 AMPERE, 125 AND 250 VOLT RECEPTACLES INSTALLED IN A WET LOCATION HAVE AN ENCLOSURE THAT IS WEATHERPROOF WHETHER OR NOT THE THE ATTACHMENT PLUG CAP IS INSERTED.
6. PROVIDE 4 FT LED STRIP FIXTURE PENDANT HUNG TO AVOID DUCTS, PIPES ETC WITH BUILT IN MOTION SENSOR SWITCH (DAYBRITE #LF4-FR-31-30K-U-DZT-FH360)
7. PROVIDE 3/4" EMPTY CONDUIT W/ PULLCORD STUBBED INTO CEILING SPACE FOR CONTROLS.
8. INTERLOCKED WITH RESTROOMS LIGHT FIXTURE, PROVIDE RELAYS AS REQUIRED CONNECT SO EXHAUST FAN IS ON WHEN EITHER MEN'S OR WOMEN'S LIGHT SWITCH IS ON. EXHAUST FAN IS OFF WHEN BOTH SWITCHES ARE OFF.



Roof Plan-ELECTRICAL

1/8" = 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Roof Plan
Electrical

◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

◦ JOB: 2015.2801

◦ DATE: 06/17/16

◦ SHEET: E2.3

GENERAL NOTES

1. ALL EQUIPMENT IS NEW, UNLESS OTHERWISE NOTED AS EXISTING.
2. ONLY U.L. LISTED EQUIPMENT SHALL BE USED. SUBMIT SHOP DRAWINGS OF MAIN SWITCHBOARD TO PG&E AND OBTAIN THEIR APPROVAL PRIOR TO RELEASING SHOP DRAWINGS TO MANUFACTURER.
3. ALL WIRE IS COPPER.
4. ALL SECTIONS OF MAIN SWITCHBOARD SHALL HAVE THE HORIZONTAL AND VERTICAL BUS BARS RATED FOR THE AMPERE RATING SHOWN ON SINGLE LINE DIAGRAM. REDUCTION OF AMPERE RATING OF BUS BARS THROUGHOUT THE SECTIONS OF MAIN SWITCHBOARDS IS NOT ACCEPTABLE.
5. EACH SWITCHBOARD, PANELBOARDS, CONTROL PANELS SHALL BE FIELD MARK/ATTACH WARNING LABELS " WARNING: POTENTIAL ARC FLASH HAZARD. Appropriate PPE and Tools Required when working on this equipment."
6. BUILDING DEPT. APPROVAL IS CONDITIONAL FOR THE SWITCHBOARD AND DOWNSTREAM PANELS TO MATCH OR EXCEED THE UTILITY CO. PROVIDED AIC RATING AT THE POINT OF SERVICE.
7. ALL UNDERGROUND SERVICE CONDUITS SHALL BE SEALED PER CEC 2010 ARTICLE 230-8.
8. ALL DEVICES ARE 3 POLE (UON).
9. SUPPLY METERING SECTIONS WITH SIDE RACEWAY SECTION TO FACILITATE OVERHEAD TENANT FEEDERS.
10. OBTAIN UTILITY COMPANY APPROVAL PRIOR TO SUBMITTING TO ENGINEER.

SINGLE LINE DIAGRAM NOTES

1. ALL COMPONENTS SHOWN ON THE SINGLE LINE DIAGRAM SHALL BE "SERIES-COMBINATION RATED SYSTEM" ADEQUATE FOR THE MAXIMUM FAULT CURRENT AVAILABLE AT THE POINT OF APPLICATION, INCORPORATING THE CURRENT LIMITING OVERCURRENT PROTECTIVE DEVICES AS SPECIFIED. SHOP DRAWINGS SHALL INDICATE SERIES- COMBINATION RATING AND INCLUDE A COPY OF ALL LABELING, INCLUDING RESPECTIVE UL LISTINGS. ALL SERIES RATED PANELS SHALL BE MARKED PER CEC 2010 ARTICLE 110-22.
2. PROVIDE 1"C.,1#6 THWN CU TO MAIN TELEPHONE BACKBOARD.
3. CONTINUOUS COPPER GROUND BUS.
4. UTILITY TRANSFORMER CONCRETE PAD, BY SITE GENERAL CONTRACTOR.
5. PROVIDE 20 FOOT OF 1#3/0 B.C. TO UFER GROUND. 2" MINIMUM CONCRETE ENCASEMENT AT BOTTOM OF BUILDING FOOTING.
6. PROVIDE 1"C.,1#3/0 THWN, CU TO BUILDING COLD METALLIC WATER PIPING SYSTEM.
7. PROVIDE 1"C.,1#3/0 THWN, CU TO ACCESSIBLE GAS MAIN. CONNECT ON SECONDARY SIDE OF METER AT SERVICE ENTRY.
8. PROVIDE 3" HOUSEKEEPING CONCRETE PAD OR BUILDING CONCRETE PAD.

Table 8-4 Summary of Voltage Drop Limits

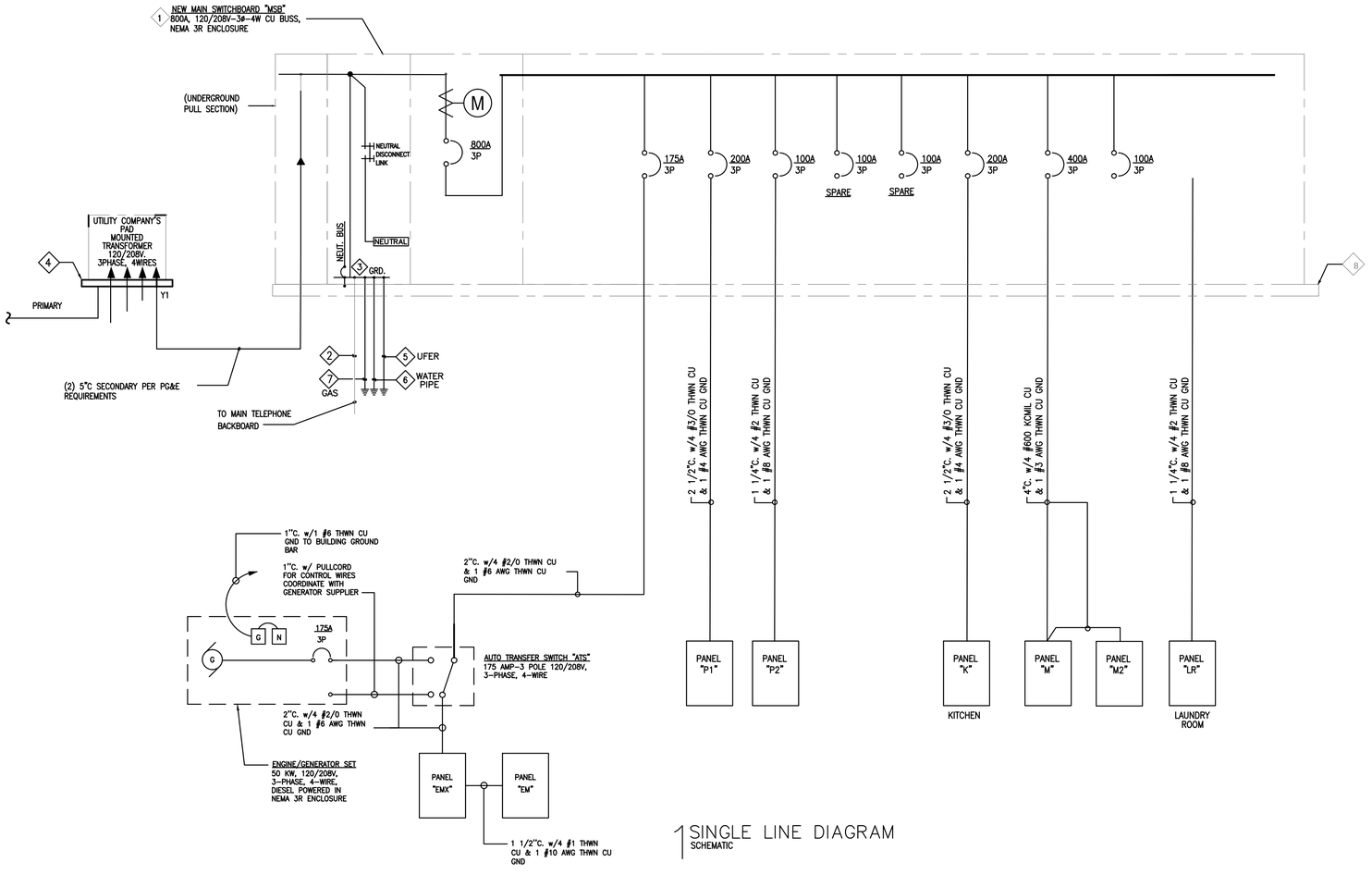
Circuit Volts (V)	2% Voltage Drop (V)	3% Voltage Drop (V)	Total Loss (V)
120	2.4	3.6	6.0
208	4.2	6.2	10.4
240	4.8	7.2	12.0
277	5.5	8.3	13.9
480	9.6	14.4	24.0

Table 8-5 Voltage Drop for Common Copper Wire Gauges and Current Loads

Wire	Circuit Amps	Maximum Feeder Length					Maximum Branch Circuit Length				
		120	208	240	277	480	120	208	240	277	480
14*	12	39	67	78	90	156	58	101	117	135	233
12*	16	46	80	93	107	185	69	120	139	160	278
10	24	48	83	96	111	192	72	125	144	166	288
8	32	57	99	115	132	229	86	149	172	199	344
6	40	73	127	146	169	293	110	190	220	253	439
4	52	89	154	178	206	356	134	232	267	309	535
2	72	103	178	206	237	412	154	267	309	356	617
0	96	123	212	245	283	490	184	319	368	424	735
00	108	137	238	274	317	549	206	357	412	475	823
0000	144	163	283	327	377	654	245	425	490	566	980
250 (kcmil)	164	170	294	340	392	679	255	441	509	588	1019
300	184	181	314	362	418	725	272	471	543	627	1087
350	200	195	338	390	450	779	292	506	584	675	1169
500	248	224	388	448	517	896	336	582	672	776	1344

Table 8-6 Voltage Drop for Common Aluminum Wire Gauges and Current Loads

Wire	Circuit Amps	Maximum Feeder Length					Maximum Branch Circuit Length				
		120	208	240	277	480	120	208	240	277	480
14*	12	24	41	47	55	95	36	62	71	82	142
12*	16	28	49	56	65	113	42	73	85	98	169
10	24	29	51	59	68	118	44	76	88	102	176
8	32	35	61	70	81	140	53	91	105	121	210
6	40	45	77	89	103	178	67	116	134	154	267
4	52	54	94	109	126	218	82	142	163	188	327
2	72	62	108	125	144	250	94	162	187	216	375
0	96	74	129	149	172	298	112	193	223	258	446
00	108	84	145	167	193	334	125	217	251	289	501
0000	144	99	172	198	229	397	149	258	298	344	595
250 (kcmil)	164	103	179	207	239	413	155	269	310	358	620
300	184	111	192	221	255	442	166	287	332	383	663
350	200	119	206	238	274	475	178	309	356	411	713
500	248	137	237	273	316	547	205	355	410	473	820



1 SINGLE LINE DIAGRAM
SCHEMATIC

3 LOAD SUMMARY

ITEM	CONNECTED LOAD (KVA)		
1. PANEL EM/EMX (GENERATOR)	42.9		
2. PANEL K (KITCHEN LOAD)	24.4		
3. M/M2 (MECHANICAL)	140.7		
4. PANEL LR (IAUNDRY)	23.8		
5. PANEL P1	28.8		
6. PANEL P2	25.3		
7.			
8.			
9.			
10. 25% LONG CONTINUOUS LOAD	3.4		
11. 25% LARGEST MOTOR	3.6		
TOTAL	@120/208V-3P,4W		269.1 KVA 748.0 AMPS

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Sinlgle Line Diagram

◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

◦ JOB: 2015.2801

◦ DATE: 06/17/16

◦ SHEET: E3.1

1 PANEL SCHEDULE

NOTE: EACH MULTI WIRE BRANCH CIRCUIT MUST HAVE A MEANS TO SIMULTANEOUSLY DISCONNECT ALL UNGROUNDED CONDUCTORS AT THE POINT WHERE THE BRANCH CIRCUIT ORIGINATES PER NEC 210.4

PANEL EM

120/208 VOLTS, 3 PHASE, 4 WIRE & GROUND
TYPE: BOLT-ON BUS: 100 AMPS
MINIMUM CB INTERRUPTING CAPACITY: 10,000 SYM. AMPS
MAIN: ☒ LUGS ONLY ☐ CB — MOUNTING: ☐ SURFACE ☒ FLUSH

CKT NO	LOAD DESCRIPTION AND LOCATION	LTG	REC	BRKR P	BRKR T	LCL	PHASE KVA LOAD A	PHASE KVA LOAD B	PHASE KVA LOAD C	LCL	BRKR P	BRKR T	RETG	LOAD DESCRIPTION AND LOCATION	CKT NO
1	LTS-CORRIDOR		1	20		1.1	1.3			1	20		7	REC-EXAM RM/OFFICE #50	2
3	LTS-STAFF/OFFICE		1	20				1.7	1.0	1	20			REC-DINE/TV	4
5	LTS-BATHROOM/KITCHEN		1	20					1.2 1.0	1	20			REC-DINE/TV	6
7	LTS-MED RESPITE		1	20		1.4	1.0			1	20			REC-DINE/TV	8
9	LTS-EMERGENCY HOUSING		1	20				0.6	1.0	1	20			REC-DINE/TV	10
11	LTS-CORRIDOR EAST		1	20					0.9 0.7	1	20	4		REC-RECEPTION	12
13	LTS-WOMENS/MEN'S EAST		1	20		1.0	0.7			1	20	4		REC-COMPUTER/IT	14
15	LTS-MEN'S TRANSITIONAL		1	20				1.8	0.7	1	20	4		REC-COMPUTER/IT	16
17	LTS- WOMEN'S TRANSITIONAL		1	20					1.8 0.9	1	20	5		REC-OFFICE 20	18
19	LTS-LAUNDRY/LINEN/EXAM		1	20		0.6	0.9			1	20	5		REC-OFFICE 20	20
21	LTS-DINING		1	20				1.6	0.7	1	20	4		REC-OFFICE 16,17	22
23	LTS-RECEPTION		1	20					0.4 1.1	1	20	6		REC-OFFICE 18,19	24
25	SPARE		1	20						1	20			SPARE	26
27	STEAM TABLE		2	20				1.5		1	20			SPARE	28
29									1.5	1	20			SPARE	30
31	STEAM TABLE		2	20		1.5				1	20			SPARE	32
33								1.5	1.0					REFRIG DOOR HTR/FAN COIL	34
35	STEAM TABLE		2	20					1.5 1.2	2	20			REFRIG COND UNIT	36
37						1.5	1.2								38
39	STEAM TABLE		2	20				1.5	1.2	2	20			REFRIG COND UNIT	40
41									1.5 1.2						42

☐ ISOLATED GROUND BUS — ☐ 200% RATED NEUTRAL

SUB TOTALS: A 12.2 | B 15.8 | C 14.9 — CONNECTED KVA PER PHASE
SUB TOTALS: A 102 | B 132 | C 124 — CONNECTED AMPS PER PHASE
TOTAL CONNECTED LOAD 42.9 KVA+[3.5 (LCL) KVA x 25%] = 46.4 KVA= 71 AMPS

PANEL EMX

120/208 VOLTS, 3 PHASE, 4 WIRE & GROUND
TYPE: BOLT-ON BUS: 225 AMPS
MINIMUM CB INTERRUPTING CAPACITY: 10,000 SYM. AMPS
MAIN: ☒ LUGS ONLY ☐ CB — MOUNTING: ☐ SURFACE ☒ FLUSH

CKT NO	LOAD DESCRIPTION AND LOCATION	LTG	REC	BRKR P	BRKR T	LCL	PHASE KVA LOAD A	PHASE KVA LOAD B	PHASE KVA LOAD C	LCL	BRKR P	BRKR T	RETG	LOAD DESCRIPTION AND LOCATION	CKT NO
1	LTS-EXTERIOR		1	20		0.6	0.3			2	20			LTS-PARKING	2
3	LTS-BOLLARDS		1	20				0.7	0.3						4
5	LTS-TRELLIS/DRIVEWAY		1	20					0.1 1.0	1	20			SPARE	6
7	SPARE		1	20						1	20			SPARE	8
9	SPARE		1	20						1	20			SPARE	10
11	SPARE		1	20						1	20			SPARE	12
13	SPARE		1	20						1	20			SPARE	14
15	SPARE		1	20						1	20			SPARE	16
17	SPARE		1	20						1	20			SPARE	18
19	SPARE					12.6				1	20			SPARE	20
21	PANEL EM		3	100				13.7		1	20			SPARE	22
23									15.8	1	20			SPARE	24
25															26
27															28
29															30
31															32
33															34
35															36
37															38
39															40
41															42

☐ ISOLATED GROUND BUS — ☐ 200% RATED NEUTRAL

SUB TOTALS: A 13.5 | B 14.7 | C 16.9 — CONNECTED KVA PER PHASE
SUB TOTALS: A 113 | B 123 | C 141 — CONNECTED AMPS PER PHASE
TOTAL CONNECTED LOAD 45.1 KVA+[0.0 (LCL) KVA x 25%] = 45.1 KVA= 125 AMPS

PANEL K

120/208 VOLTS, 3 PHASE, 4 WIRE & GROUND
TYPE: BOLT-ON BUS: 225 AMPS
MINIMUM CB INTERRUPTING CAPACITY: 10,000 SYM. AMPS
MAIN: ☒ LUGS ONLY ☐ CB — MOUNTING: ☐ SURFACE ☒ FLUSH

CKT NO	LOAD DESCRIPTION AND LOCATION	LTG	REC	BRKR P	BRKR T	LCL	PHASE KVA LOAD A	PHASE KVA LOAD B	PHASE KVA LOAD C	LCL	BRKR P	BRKR T	RETG	LOAD DESCRIPTION AND LOCATION	CKT NO
1	DISPOSER		2	20		1.3	1.0			1	20			REC-KITCHEN	2
3								1.3	1.0	1	20			REC-KITCHEN	4
5	REC-KITCHEN UNDER HOOD		1	20					1.0 1.0	1	20			REC-KITCHEN	6
7	SHUNT TRIP									1	20			SPARE	8
9	REC-KITCHEN UNDER HOOD		1	20				1.0		1	20			SPARE	10
11	SHUNT TRIP									1	20			SPARE	12
13	REC-KITCHEN UNDER HOOD		1	20		1.0				1	20			SPARE	14
15	SHUNT TRIP								1.0	1	20			SPARE	16
17	SPARE		1	20						1	20			SPARE	18
19	SPARE		1	20						2	20			SPARE	20
21	HOOD CONTROL PANEL		1	20				0.5							22
23	HOOD LIGHTS		1	20					0.4	2	20			SPARE	24
25						0.7									26
27	EXH FAN EF-1		3	15				0.7		2	20			SPARE	28
29									0.7						30
31						0.6				2	20			SPARE	32
33	MAKE UP AIRE MUA-1		3	15				0.6							34
35									0.6	1	20			SPARE	36
37						3.0				1	20			SPARE	38
39	DISH WASHER		3	30				3.0		1	20			SPARE	40
41									3.0	1	20			SPARE	42

☐ ISOLATED GROUND BUS — ☐ 200% RATED NEUTRAL

SUB TOTALS: A 7.6 | B 9.1 | C 7.7 — CONNECTED KVA PER PHASE
SUB TOTALS: A 63 | B 76 | C 64 — CONNECTED AMPS PER PHASE
TOTAL CONNECTED LOAD 24.4 KVA+[0.0 (LCL) KVA x 25%] = 24.4 KVA= 68 AMPS

PANEL LR

120/208 VOLTS, 3 PHASE, 4 WIRE & GROUND
TYPE: BOLT-ON BUS: 100 AMPS
MINIMUM CB INTERRUPTING CAPACITY: 10,000 SYM. AMPS
MAIN: ☒ LUGS ONLY ☐ CB — MOUNTING: ☐ SURFACE ☐ FLUSH

	CKT NO	LOAD DESCRIPTION AND LOCATION	LTG	REC	BRKR P	BRKR T	LCL	PHASE KVA LOAD A	PHASE KVA LOAD B	PHASE KVA LOAD C	LCL	BRKR P	BRKR T	RETG	LOAD DESCRIPTION AND LOCATION	CKT NO	
**	1	REC-LAUNDRY			1	20		1.0	1.0			1	20		REC-LAUNDRY	2	**
**	3	REC-LAUNDRY			1	20			1.0	1.0		1	20		REC-LAUNDRY	4	**
**	5	REC-LAUNDRY			1	20				1.0 1.0		1	20		REC-LAUNDRY	6	**
**	7	REC-LAUNDRY			1	20		1.0	1.0			1	20		REC-LAUNDRY	8	**
**	9	REC-LAUNDRY			1	20			1.0	1.0		1	20		REC-LAUNDRY	10	**
**	11	REC-LAUNDRY			1	20				1.0 1.0		1	20		REC-LAUNDRY	12	**
**	13	REC-LAUNDRY			1	20		1.0	1.0			1	20		REC-LAUNDRY	14	**
**	15	REC-LAUNDRY			1	20			1.0	1.0		1	20		REC-LAUNDRY	16	**
**	17	REC-LAUNDRY			1	20				1.0 0.8		1	20	4	REC-LAUNDRY ABOVE CTR	18	
**	19	REC-LAUNDRY			1	20		1.0	1.0			1	20		SPARE	20	
**	21	REC-LAUNDRY			1	20			1.0	1.0		1	20		SPARE	22	
**	23	REC-LAUNDRY			1	20				1.0 1.0		1	20		SPARE	24	
	25	SPARE			1	20						1	20		SPARE	26	
	27	SPARE			1	20						1	20		SPARE	28	
	29	SPARE			1	20						1	20		SPARE	30	
	31	SPARE			1	20						1	20		SPARE	32	
	33	SPARE			1	20						1	20		SPARE	34	
	35	SPARE			1	20						1	20		SPARE	36	
	37	SPARE			1	20						1	20		SPARE	38	
	39	SPARE			1	20						1	20		SPARE	40	
	41	SPARE			1	20						1	20		SPARE	42	

☐ ISOLATED GROUND BUS — ☐ 200% RATED NEUTRAL

SUB TOTALS: A 8.0 | B 8.0 | C 7.8 — CONNECTED KVA PER PHASE
SUB TOTALS: A 67 | B 67 | C 65 — CONNECTED AMPS PER PHASE
TOTAL CONNECTED LOAD 23.8 KVA+[0.0 (LCL) KVA x 25%] = 23.8 KVA= 66 AMPS

** PROVIDE GFI BREAKER AND DED NEUTRALS FOR THESE CIRCUITS

PANEL P1

120/208 VOLTS, 3 PHASE, 4 WIRE & GROUND
TYPE: BOLT-ON BUS: 225 AMPS
MINIMUM CB INTERRUPTING CAPACITY: 10,000 SYM. AMPS
MAIN: ☒ LUGS ONLY ☐ CB — MOUNTING: ☐ SURFACE ☒ FLUSH

CKT NO	LOAD DESCRIPTION AND LOCATION	LTG	REC	BRKR P	BRKR T	LCL	PHASE KVA LOAD A	PHASE KVA LOAD B	PHASE KVA LOAD C	LCL	BRKR P	BRKR T	RETG	LOAD DESCRIPTION AND LOCATION	CKT NO
1	REC-STAFF MTG (COFFEE)		1	1	20		1.5	0.5			1	20		LCP POWER	2
3	REC-STAFF MTG (MICROWAVE)		1	1	20			1.5	0.5		1	20		TELEPHONE CABINET	4
5	REC-STAFF MTG (FRIDGE)		1	1	20				0.8 1.2		1	20	6	REC-BATHROOM	6
7	REC-STAFF MTG (FRIDGE)		1	1	20		0.8	0.8			1	20	4	REC-BATHROOM	8
9	REC-STAFF MTG CONV		1	1	20			1.5	1.2		1	20	6	REC-CORRIDOR	10
11	REC-STAFF MTG (DISPOSER)		5	1	20				1.0 1.0		1	20		REC-MEDICAL RESPITE 5	12
13	REC-STAFF MTG (ABOVE CTR)		2	1	20		0.4	1.0			1	20		REC-MEDICAL RESPITE 5	14
15	REC-DW		1	1	20			1.0	1.0		1	20		REC-MEDICAL RESPITE 4	16
17	REC-TOILETS		2	1	20				0.4 1.0		1	20		REC-MEDICAL RESPITE 4	18
19	SPARE			1	20		1.0				1	20		REC-MEDICAL RESPITE 4	20
21	SPARE			1	20				1.0		1	20		REC-MEDICAL RESPITE 4	22
23	WATER HTR CONTROL PNL			1	20				1.9 1.0		1	20		REC-EMERGENCY HSG	24
25	WATER HTR CONTROL PNL			1	20		1.9				1	20		SPARE	26
27	REC/LTS ATTIC			1	20			0.3			1	20		SPARE	28
29	REC-CORRIDOR		4	1	20				0.7 0.6		1	20		EXH FAN EF-2	30
31	REC-EXTERIOR		2	1	20		0.4				1	20		SPARE	32
33	REC-EXTERIOR		2	1	20			0.4			1	20		SPARE	34
35	SPARE			1	20						1	20		SPARE	36
37	SPARE			1	20		1.0				1	20		GENERAC BATTERY CHARGER	38
39	SPARE			1	20			1.0			1	20		GENERATOR HEATER	40
41	SPARE			1	20				0.5		1	20		EXH FANS 4,5,6,8	42

☐ ISOLATED GROUND BUS — ☐ 200% RATED NEUTRAL

SUB TOTALS: A 9.3 | B 9.4 | C 10.1 — CONNECTED KVA PER PHASE
SUB TOTALS: A 78 | B 78 | C 84 — CONNECTED AMPS PER PHASE
TOTAL CONNECTED LOAD 28.8 KVA+[0.0 (LCL) KVA x 25%] = 28.8 KVA= 80 AMPS

PANEL P2

120/208 VOLTS, 3 PHASE, 4 WIRE & GROUND
TYPE: BOLT-ON BUS: 225 AMPS
MINIMUM CB INTERRUPTING CAPACITY: 10,000 SYM. AMPS
MAIN: ☒ LUGS ONLY ☐ CB — MOUNTING: ☐ SURFACE ☒ FLUSH

CKT NO	LOAD DESCRIPTION AND LOCATION	LTG	REC	BRKR P	BRKR T	LCL	PHASE KVA LOAD A	PHASE KVA LOAD B	PHASE KVA LOAD C	LCL	BRKR P	BRKR T	RETG	LOAD DESCRIPTION AND LOCATION	CKT NO
1	SPARE		3	1	20		0.6	1.0			1	20	5	REC-CORRIDOR	2
3	SPARE		3	1	20			0.6	0.8		1	20	4	REC-MEN'S TRANSITIONAL	4
5	SPARE		3	1	20				0.6 1.2		1	20	6	REC-WOMEN'S	6
7	REC-TRANSITIONAL HSG			1	20		1.0	0.6			1	20	3	REC-CORRIDOR	8
9	REC-TRANSITIONAL HSG			1	20			1.0	1.0		1	20		REC-WOMEN'S EMERGENCY HS	10
11	REC-TRANSITIONAL HSG			1	20				1.0 1.0		1	20		REC-WOMEN'S TRANSITIONAL	12
13	REC-TRANSITIONAL HSG			1	20		1.0	1.0			1	20		REC-WOMEN'S TRANSITIONAL	14
15	REC-TRANSITIONAL HSG			1	20			1.0	1.0		1	20		REC-WOMEN'S TRANSITIONAL	16
17	KENNEL POWER			1	20				1.0 1.0		1	20		REC-WOMEN'S TRANSITIONAL	18
19	KENNEL POWER			1	20		1.0	1.0			1	20		REC-MEN'S TRANSITIONAL	20
21	REC-MEN'S EMERG HSG			1	20			0.2	1.0		1	20		SPARE	22
23	WATER HEATER CONT PNL			1	20				1.9 1.0		1	20		REC-MEN'S TRANSITIONAL	24
25	WATER HEATER CONT PNL			1	20		1.9	0.6			1	20		SPARE	26
27	REC/LTS-ATTIC			1	20			0.3			1	20		EXH FAN EF-3	28
29	SPARE			1	20						1	20		SPARE	30
31	SPARE			1	20						1	20		SPARE	32
33	SPARE			1	20						1	20		SPARE	34
35	SPARE			1	20						1	20		SPARE	36
37															38
39	SPARE			1	20						1	20		SPARE	40
41															42

☐ ISOLATED GROUND BUS — ☐ 200% RATED NEUTRAL

SUB TOTALS: A 9.7 | B 6.9 | C 8.7 — CONNECTED KVA PER PHASE
SUB TOTALS: A 81 | B 58 | C 73 — CONNECTED AMPS PER PHASE
TOTAL CONNECTED LOAD 25.3 KVA+[0.0 (LCL) KVA x 25%] = 25.3 KVA= 70 AMPS

232525

PANEL M **

120/208 VOLTS, 3 PHASE, 4 WIRE & GROUND
TYPE: BOLT-ON BUS: 400 AMPS
MINIMUM CB INTERRUPTING CAPACITY: 10,000 SYM. AMPS
MAIN: ☒ LUGS ONLY ☐ CB — MOUNTING: ☐ SURFACE ☒ FLUSH

CKT NO	LOAD DESCRIPTION AND LOCATION	LTG	REC	BRKR P	BRKR T	LCL	PHASE KVA LOAD A	PHASE KVA LOAD B	PHASE KVA LOAD C	LCL	BRKR P	BRKR T	RETG	LOAD DESCRIPTION AND LOCATION	CKT NO
1							4.2	5.0							2
3	AC-1			3	50			4.2	5.0		3	50		AC-7	4
5									4.2 5.0						6
7							3.6	2.8							8
9	AC-2			3	45			3.6	2.8		3	30		AC-8	10
11									3.6 2.8						12
13							3.6	4.2							14
15	AC-3			3	45			3.6	4.2		3	50		AC-9	16
17									3.6 4.2						18
19							4.2	4.2							20
21	AC-4			3	50			4.2	4.2		3	50		AC-10	22
23									4.2 4.2						24
25							2.6								26
27	AC-5			3	30			2.6			3	50		SPARE	28
29									2.6						30
31							4.2	1.0			1	20		REC-ROOF	32
33	AC-6			3	50			4.2	0.5		1	20		DUCT SMOKE DETECTOR	34
35									4.2		1	20		SPARE	36
37											1	20		SPARE	38
39	SPARE			3	20						1	20		SPARE	40
41											1	20		SPARE	42

☐ ISOLATED GROUND BUS — ☐ 200% RATED NEUTRAL

SUB TOTALS: A 39.6 | B 39.1 | C 38.6 — CONNECTED KVA PER PHASE
SUB TOTALS: 330 | 326 | 322 — CONNECTED AMPS PER PHASE
TOTAL CONNECTED LOAD 117.3 KVA+[0.0 (LCL) KVA x 25%] = 117.3 KVA= 326 AMPS

**PROVIDE FEED THRU LUGS FOR PANEL M2

PANEL M2

120/208 VOLTS, 3 PHASE, 4 WIRE & GROUND
TYPE: BOLT-ON BUS: 400 AMPS
MINIMUM CB INTERRUPTING CAPACITY: 10,000 SYM. AMPS
MAIN: ☒ LUGS ONLY ☐ CB — MOUNTING: ☐ SURFACE ☒ FLUSH

CKT NO	LOAD DESCRIPTION AND LOCATION	LTG	REC	BRKR P	BRKR T	LCL	PHASE KVA LOAD A	PHASE KVA LOAD B	PHASE KVA LOAD C	LCL	BRKR P	BRKR T	RETG	LOAD DESCRIPTION AND LOCATION	CKT NO
1							0.6	0.8							2
3	AC-1 ECO POWER EXHAUST			3	15			0.6	0.8		3	15		AC-7 ECO POWER EXHAUST	4
5									0.6 0.8						6
7							0.6	0.6							8
9	AC-2 ECO POWER EXHAUST			3	15			0.6	0.6		3	15		AC-8 ECO POWER EXHAUST	10
11									0.6 0.6						12
13							0.6	0.6							14
15	AC-3 ECO POWER EXHAUST			3	15			0.6	0.6		3	15		AC-9 ECO POWER EXHAUST	16
17									0.6 0.6						18
19							0.6	0.6							20
21	AC-4 ECO POWER EXHAUST			3	15			0.6	0.6		3	15		AC-10 ECO POWER EXHAUST	22
23									0.6 0.6						24
25							0.6	0.6							26
27	AC-5 ECO POWER EXHAUST			3	15			0.6	0.6		3	15		SPARE	28
29									0.6 0.6						30
31							0.6	1.0			1	20		SPARE	32
33	AC-6 ECO POWER EXHAUST			3	15			0.6	1.0		1	20		SPARE	34
35									0.6 1.0		1	20		SPARE	36
37											1	20		SPARE	38
39	SPARE			3	20						1	20		SPARE	40
41											1	20		SPARE	42

☐ ISOLATED GROUND BUS — ☐ 200% RATED NEUTRAL

SUB TOTALS: A 7.8 | B 7.8 | C 7.8 — CONNECTED KVA PER PHASE
SUB TOTALS: 65 | 65 | 65 — CONNECTED AMPS PER PHASE
TOTAL CONNECTED LOAD 23.4 KVA+[0.0 (LCL) KVA x 25%] = 23.4 KVA= 65 AMPS

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Panel Schedule

◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

◦ JOB: 2015.2801

◦ DATE: 06/17/16

◦ SHEET: E3.2

1 TITLE 24

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 08/15) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 1 of 6)
Project Name: LifeMoves Maple St	Date Prepared: 6/12/2016

A. General Information

Climate Zone: 3	Conditioned Floor Area : 10,173				
	Unconditioned Floor Area : 0				
Building Type:	☑ Nonresidential	☐ High-Rise Residential	☐ Hotel/Motel		
☐ Schools	☐ Relocatable Public Schools	☑ Conditioned Spaces	☐ Unconditioned Spaces		
Phase of Construction:	☐ New Construction	☐ Addition	☑ Alteration		
Method of Compliance:	☐ Complete Building	☑ Area Category	☐ Tailored		
Project Address: 1580 Maple St					

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	FORM	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

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 08/15) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 2 of 6)
Project Name: LifeMoves Maple St	Date Prepared: 6/12/2016

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
1.	**Installed** Lighting NRCC-LTI-01-E, page 4	+	8,555	**Installed** Lighting NRCC-LTI-01-E, page 4	+	0
2.	PORTABLE ONLY FOR OFFICES NRCC-LTI-01-E, page 3	+				
3.	Minus Lighting Control Credits NRCC-LTI-02-E, page 2	-	0	Minus Lighting Control Credits NRCC-LTI-02-E, page 2	-	0
4.	Adjusted **Installed** Lighting Power (row 1 plus row 2 minus row 3)	=	8,555	Adjusted **Installed** Lighting Power (row 1 minus row 3)	=	0
5.	Complies ONLY if **Installed** ≤ **Allowed**			Complies ONLY if **Installed** ≤ **Allowed**		
6.	**Allowed** Lighting Power Conditioned NRCC-LTI-03-E, page 1		8,795	**Allowed** Lighting Power Unconditioned NRCC-LTI-03-E, page 1		0

D. Declaration of Required Installation Certificates

Declare by selecting yes for all Installation 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 08/15) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 3 of 6)
Project Name: LifeMoves Maple St	Date Prepared: 6/12/2016

E. Declaration of Required Certificates of Acceptance

Declare by checking 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

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 this page and on the next page 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 form (NRCC-LTI-05-E) when line-voltage track lighting is installed.

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 08/15) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 4 of 6)
Project Name: LifeMoves Maple St	Date Prepared: 6/12/2016

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 form.
- ☐ 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 Watts Per Square Foot							Office Location	Field Inspector	
1	2	3	4	5	6	7	8	9	10	
Complete Luminaire Description (i.e., LED, under cabinet, furniture mounted direct/indirect)	Watts per Luminaire	Number of Luminaires	Installed portable luminaire watts in this office (G02 x G03)	Square feet of this office	Watts per square foot (G04 / G05)	If F ≤ 0.3, enter zero; if G06 > 0.3, (G06-0.3)	G05 x G07	Identify Office area in which these portable luminaires are installed	Pass	Fail
									☐	☐
									☐	☐
									☐	☐
									☐	☐
									☐	☐
Total installed portable luminaire watts that are greater than 0.3 watts per square foot per office:								Enter sum total of all pages into NRCC-LTI-01-E; Page 1		

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 08/15) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 5 of 6)
Project Name: LifeMoves Maple St	Date Prepared: 6/12/2016

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]	
A	B	C	D		E	F	G	H	
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 §130.0(c)	Number Luminaires	Total Installed Watts in this area (H03 x H05)	Primary Function area in which these luminaires are installed	Pass	Fail
A	30w LED	30.0	☑	☐	12	360	Laundry	☐	☐
A	30w LED	30.0	☑	☐	66	1,980	Corridors	☐	☐
A	30w LED	30.0	☑	☐	2	60	Corridor/Restroom/Support	☐	☐
A	30w LED	30.0	☑	☐	52	1,560	Dining Room	☐	☐
A	30w LED	30.0	☑	☐	4	120	Treatment/Examination	☐	☐
A	30w LED	30.0	☑	☐	14	420	Waiting Area	☐	☐
A	30w LED	30.0	☑	☐	6	180	Lounge, Recreation	☐	☐
A	30w LED	30.0	☑	☐	15	450	Office > 250 sqft	☐	☐
A	30w LED	30.0	☑	☐	10	300	Convention/Conference/Meeting	☐	☐
				INSTALLED WATTS PAGE TOTAL:		5,430	Enter sum total of all pages into NRCC-LTI-01-E; Page 2		

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 08/15) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 5 of 6)
Project Name: LifeMoves Maple St	Date Prepared: 6/12/2016

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]	
A	B	C	D		E	F	G	H	
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 §130.0(c)	Number Luminaires	Total Installed Watts in this area (H03 x H05)	Primary Function area in which these luminaires are installed	Pass	Fail
A	30w LED	30.0	☑	☐	19	570	Office <= 250 sqft	☐	☐
B	73w LED	73.0	☑	☐	6	438	Corridor/Restroom/Support	☐	☐
B	73w LED	73.0	☑	☐	6	438	Kitchen, Food Preparation	☐	☐
B1	26.2w LED	26.2	☑	☐	22	576	Corridor/Restroom/Support	☐	☐
B2	32w LED	32.0	☑	☐	1	32	All Others	☐	☐
B2	26.2w LED	26.2	☑	☐	11	288	Corridor/Restroom/Support	☐	☐
C1	10W LED	10.0	☑	☐	16	160	Corridor/Restroom/Support	☐	☐
C2	28w LED	28.0	☑	☐	18	504	Corridor/Restroom/Support	☐	☐
C3	35w LED	35.0	☑	☐	2	70	Corridor/Restroom/Support	☐	☐
				INSTALLED WATTS PAGE TOTAL:		3,077	Enter sum total of all pages into NRCC-LTI-01-E; Page 2		

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

∘ PROJECT ∘

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

∘ SHEET TITLE ∘

Title 24
Lighting

∘ REVISIONS ∘

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

∘ JOB: 2015.2801

∘ DATE: 06/17/16

∘ SHEET: E4.1

1 TITLE 24

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 08/15) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 5 of 6)
Project Name: LifeMoves Maple St	Date Prepared: 6/12/2016

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]	
A	B	C	D		E	F	G	H	
			How wattage was determined						
Name or Item Tag	Complete Luminaire Description (i.e, 3 lamp fluorescent troffer, F32T8, one dimmable electronic ballast)	Watts per Luminaire	CEC default from NA8	According to §130(c)	Number Luminaires	Total Installed Watts in this area (W03 x H05)	Primary Function area in which these luminaires are installed	Pass	Fail
C4	24w LED	24.0	☑	☐	2	48	Corridor/Restroom/Support	☐	☐
			☐	☐				☐	☐
			☐	☐				☐	☐
			☐	☐				☐	☐
			☐	☐				☐	☐
			☐	☐				☐	☐
			☐	☐				☐	☐
			☐	☐				☐	☐
			☐	☐				☐	☐
INSTALLED WATTS PAGE TOTAL:						48	Enter sum total of all pages into NRCC-LTI-01-E; Page 2		

STATE OF CALIFORNIA
INDOOR LIGHTING
CEC-NRCC-LTI-01-E (Revised 08/15) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-01-E
Indoor Lighting	(Page 6 of 6)
Project Name: LifeMoves Maple St	Date Prepared: 6/12/2016

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

Documentation Author Name:	Documentation Author Signature:
Company: Tantech Engineers	Signature Date: 6/12/2016
Address:	CEA Certification Identification (if applicable):
City/State/Zip: ,	Phone:

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

Responsible Designer Name: TANTECH ENGINEERS	Responsible Designer Signature:
Company: TANTECH ENGINEERS	Date Signed:
Address: 1431 CEDAR ST	License:
City/State/Zip: SAN CARLOS, CA 94070	Phone: 415-269-4283

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-02-E (Revised 05/15) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-02-E
Indoor Lighting - Lighting Controls	(Page 1 of 3)
Project Name: LifeMoves Maple St	Date Prepared: 6/12/2016

The NRCC-LTI-02-E shall be used to document all mandatory and prescriptive lighting controls that are applicable to the project.

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 a system or energy management control system in accordance with §110.9. An Installation Certificate shall be submitted in accordance with Section 130.4(b).
	✔	One or more Track Lighting Integral Current Limiters shall be installed which have been certified to the Energy Commission in accordance with §110.9 and §130.0. Additionally, an Installation Certificate shall be submitted in accordance with Section 130.4(b).
	✔	A Track Lighting Supplementary Overcurrent Protection Panel shall be installed in accordance with Section 110.9 and Section 130.0. Additionally, an installation Certificate shall be installed in accordance with Section 130.4(b).
✔		All lighting controls and equipment shall comply with the applicable requirements in §110.9 and shall be installed in accordance with the manufacturer's instructions in accordance with Section 130.1.
✔		All luminaires shall be functionally controlled with manually switched ON and OFF lighting controls in accordance with Section 130.1(a).
✔		General lighting shall be separately controlled from all other lighting systems in an area. Floor and wall display, window display, case display, ornamental, and special effects lighting shall each be separately controlled on circuits that are 20 amps or less. When track lighting is used, general, display, ornamental, and special effects lighting shall each be separately controlled; in accordance with Section 130.1(a)4.
✔		The general lighting of any enclosed area 100 square feet or larger, with a connected lighting load that exceeds 0.5 watts per square foot shall meet the multi-level lighting control requirements in accordance with Section 130.1(b).
✔		All installed indoor lighting shall be equipped with controls that meet the applicable Shut-OFF control requirements in Section 130.1(c).
✔		Lighting in all Daylit Zones shall be controlled in accordance with the requirements in Section 130.1(d) and daylit zones are shown on the plans.
✔		Lighting power in buildings larger than 10,000 square feet shall be capable of being automatically reduced in response to a Demand Responsive Signal in accordance with Section 130.1(e).
✔		Before an occupancy permit is granted for a newly constructed building or area, or a new lighting system serving a building, area, or site is operated for normal use, indoor lighting controls serving the building, area, or site shall be certified as meeting the Acceptance Requirements for Code Compliance in accordance with Section 130.4.(a). The controls required to meet the Acceptance Requirements include automatic daylight controls, automatic shut-OFF controls, and demand responsive controls.

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-02-E (Revised 05/15) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-02-E
Indoor Lighting - Lighting Controls	(Page 2 of 3)
Project Name: LifeMoves Maple St	Date Prepared: 6/12/2016

A separate document must be filled out for Conditioned and Unconditioned Spaces. This page is used only for the following:
☑ CONDITIONED SPACES ☐ UNCONDITIONED SPACES

MANDATORY AND PRESCRIPTIVE INDOOR LIGHTING CONTROL SCHEDULE, PAF CALCULATION, and FIELD INSPECTION CHECKLIST

Lighting Control Schedule			Standards Complying With [1] (✔ all that apply, or enter 'E' if Exempted)						PAF Credit Calculation [2]			✔ If Acceptance Test Required	Field Inspector	
									Watts of Controlled Lighting	PAF	Control Credit (K x L)			
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
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
														☐	☐
														☐	☐
														☐	☐
														☐	☐
														☐	☐
														☐	☐
														☐	☐
Control Credit PAGE TOTAL (Sum of Column M):												0			
IF MULTIPLE PAGES ARE USED, ENTER SUM TOTAL OF Control Credit for all pages HERE (Sum of all Column M):												0			
												Enter Control Credit total into NRCC-LTI-01-E; Page 1.			

1. §130.1(a) = Manual area controls; §130.0(b) = Multi Level; §130.1(c) = Auto Shut-Off; §130.1(d) = Mandatory Daylight; §130.1(e) = Demand Responsive; §140.6(d) = Additional lighting controls installed to earn a PAF; §140.6(d) = Prescriptive Secondary Sidelit Daylight Controls.
2. Check Table 140.6-A for correct Factor. PAFs shall not be traded between conditioned and unconditioned spaces. As a condition to earn a PAF, an Installation Certificate is also required to be filled out, signed, and submitted.

STATE OF CALIFORNIA
INDOOR LIGHTING – LIGHTING CONTROLS
CEC-NRCC-LTI-02-E (Revised 05/15) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-02-E
Indoor Lighting - Lighting Controls	(Page 3 of 3)
Project Name: LifeMoves Maple St	Date Prepared: 6/12/2016

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

Documentation Author Name:	Documentation Author Signature:
Company: Tantech Engineers	Signature Date: 6/12/2016
Address:	CEA Certification Identification (if applicable):
City/State/Zip: ,	Phone:

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

Responsible Designer Name: TANTECH ENGINEERS	Responsible Designer Signature:
Company: TANTECH ENGINEERS	Date Signed:
Address: 1431 CEDAR ST	License:
City/State/Zip: SAN CARLOS, CA 94070	Phone: 415-269-4283

STATE OF CALIFORNIA
INDOOR LIGHTING POWER ALLOWANCE
CEC-NRCC-LTI-03-E (Revised 05/15) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-03-E
Certificate of Compliance - Indoor Lighting Power Allowance	(Page 1 of 4)
Project Name: LifeMoves Maple St	Date Prepared: 6/12/2016

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)
1. Complete Building Method Allowed Watts. Documented in section B of NRCC-LTI-03-E (below on this page)		
2. Area Category Method Allowed Watts. Documented in section C-1 of NRCC-LTI-03-E (below on this page)		8,795
3. Tailored Method Allowed Watts. Documented in section A of NRCC-LTI-04-E		0
TOTAL ALLOWED BUILDING WATTS. Enter number into correct cell on NRCC-LTI-01, Page 2, Row 1		8,795

☐ Check here if building contains both conditioned and unconditioned areas.

B. COMPLETE BUILDING METHOD LIGHTING POWER ALLOWANCE

1	2		3		4
TYPE OF BUILDING (From §140.6 Table 140.6-B)	WATTS PER (ft²)	X	COMPLETE BLDG. AREA	=	ALLOWED WATTS
Total Area:					
Total Watts. Enter Total Watts into section A, row 1 (Above on this page)					

C -1 AREA CATEGORY METHOD TOTAL LIGHTING POWER ALLOWANCES (D plus E)	Watts
Total from section C-2	8,795
Total from section C-3	0
Total Watts. Enter Total Watts into section A, row 2 (Above on this page)	8,795

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

PROJECT

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

SHEET TITLE

Title 24
Lighting

REVISIONS

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

JOB: 2015.2801

DATE: 06/17/16

SHEET: E4.2

1 TITLE 24

STATE OF CALIFORNIA
INDOOR LIGHTING POWER ALLOWANCE
CEC-NRCC-LTI-03-E (Revised 05/15) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-03-E
Certificate of Compliance - Indoor Lighting Power Allowance	(Page 2 of 4)
Project Name: LifeMoves Maple St	Date Prepared: 6/12/2016

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 B of NRCC-LTI-01-E.
☐ Separately list lighting for each primary function area as defined in §100.1 of the Standards.

A		B		C		D
AREA CATEGORY (From §140.6 Table 140.6-C)		WATTS				ALLOWED
Location in Building	Primary Function Area per Table 140.6-C	PER (ft²)	X	AREA (ft²)	=	WATTS
OFFICE 16	Office <= 250 sqft	1.00		199		199
OFFICE 17	Office <= 250 sqft	1.00		129		129
OFFICE 18	Office <= 250 sqft	1.00		121		121
OFFICE 19	Office <= 250 sqft	1.00		110		110
OFFICE 20	Office > 250 sqft	0.75		530		398
COMPUTER RM	Lounge, Recreation	1.10		249		274
FOOD PREP	Kitchen, Food Preparation	1.60		652		1,043
Conference RM	Convention/Conference/Meeting	1.40		333		466
Reception	Waiting Area	1.10		378		416
Corridor	Corridors	0.60		2,398		1,439
Laundry	Laundry	0.90		320		288
Restrooms	Corridor/Restroom/Support	0.60		2,472		1,483
SUPPLY	All Others	0.60		97		58
Waiting 38	Waiting Area	1.10		68		75
LINEN	Laundry	0.90		163		147
OFFICE 50	Office <= 250 sqft	1.00		108		108
		TOTALS		8,327		
Enter sum total Area Category allowed watts into section C-1 of NRCC-LTI-03-E (this compliance form)						6,753
						WATTS

STATE OF CALIFORNIA
INDOOR LIGHTING POWER ALLOWANCE
CEC-NRCC-LTI-03-E (Revised 05/15) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-03-E
Certificate of Compliance - Indoor Lighting Power Allowance	(Page 2 of 4)
Project Name: LifeMoves Maple St	Date Prepared: 6/12/2016

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 B of NRCC-LTI-01-E.
☐ Separately list lighting for each primary function area as defined in §100.1 of the Standards.

A		B		C		D
AREA CATEGORY (From §140.6 Table 140.6-C)		WATTS				ALLOWED
Location in Building	Primary Function Area per Table 140.6-C	PER (ft²)	X	AREA (ft²)	=	WATTS
DINE	Dining Room	1.10		1,734		1,907
EXAM RM	Treatment/Examination	1.20		112		134
		TOTALS		1,846		
Enter sum total Area Category allowed watts into section C-1 of NRCC-LTI-03-E (this compliance form)						2,042
						WATTS

STATE OF CALIFORNIA
INDOOR LIGHTING POWER ALLOWANCE
CEC-NRCC-LTI-03-E (Revised 05/15) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-03-E
Certificate of Compliance - Indoor Lighting Power Allowance	(Page 3 of 4)
Project Name: LifeMoves Maple St	Date Prepared: 6/12/2016

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)

A	B	C [2]	D	E	F	G
Primary Function	Sq Ft or linear ft [1]	Additional Watts Allowed	Wattage Allowance (B x C)	Description(s) and Quantity of Special Luminaire Types in each Primary Function Area	Total Design Watts [3]	ALLOWED WATTS Smaller of D or F
TOTALS – Enter into TOTAL AREA CATEGORY METHOD ADDITIONAL ALLOWANCES – Section C-1 .						0

1. Use linear feet only for additional allowance for white board or chalk board. All other additional Area Category allowances shall use watts per square foot.
2 . Additional watts are available only when allowed according to the footnotes on bottom of Table 146-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 05/15) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTI-03-E
Certificate of Compliance - Indoor Lighting Power Allowance	(Page 4 of 4)
Project Name: LifeMoves Maple St	Date Prepared: 6/12/2016

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name:	Documentation Author Signature:
Company: Tantech Engineers	Signature Date: 6/12/2016
Address:	CEA Certification Identification (if applicable):
City/State/Zip: ,	Phone:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

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

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

Responsible Designer Name: TANTECH ENGINEERS	Responsible Designer Signature:
Company : TANTECH ENGINEERS	Date Signed:
Address: 1431 CEDAR ST	License:
City/State/Zip: SAN CARLOS, CA 94070	Phone: 415-269-4283

STATE OF CALIFORNIA
OUTDOOR LIGHTING
CEC-NRCC-LTO-01-E (Revised 05/15) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-01-E
Outdoor Lighting	(Page 1 of 4)
Project Name: LifeMoves Maple St	Date Prepared: 6/12/2016

Project Address: 1580 Maple St Redwood City, CA	Total Illuminated Hardscape Area 64,228

General Information
Phase of Construction: ☐ New Construction ☐ Addition ☑ Alteration
Outdoor Lighting Zone (OLZ) ☐ OLZ-1 ☐ OLZ-2 ☑ OLZ-3 ☐ OLZ-4
I have confirmed with the AHJ which OLZ applies to this site. For default lighting zone designations, see Title 24 Part 6, §10-114

LIGHTING COMPLIANCE DOCUMENTS (check box 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.

☑	NRCC-LTO-01-E	Certificate of Compliance
☑	NRCC-LTO-02-E	Outdoor Lighting Controls Certificate of Compliance
☑	NRCC-LTO-03-E	Outdoor Lighting Power Allowance Certificate of Compliance

Summary of Allowed Outdoor Lighting Power			Watts
1.	**Sum Total ALLOWED** Outdoor Lighting Wattage from NRCC-LTO-03-E, page 1	=	7,971
	Complies ONLY if **Installed ≤ Allowed**		↕
2.	**Sum Total INSTALLED** Outdoor lighting Wattage from NRCC-LTO-01-E, page 3		1,968

Declaration of Required Installation Certificates – Declare by checking all Installation Certificates that will be submitted. (Retain copies and verify forms are completed and signed.)

☑ NRCI-LTO-01-E - Must be submitted for all buildings	☐ Field Inspector
☑ NRCI-LTO-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

Declaration of Required Certificates of Acceptance – Declare by checking all of the Certificates of Acceptance that will be submitted. (Retain copies and verify forms are completed and signed.)

☑ NRCA-LTO-02-A - Must be submitted for outdoor lighting controls.	☐ Field Inspector

---

STATE OF CALIFORNIA
OUTDOOR LIGHTING
CEC-NRCC-LTO-01-E (Revised 06/14) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-01-E
Outdoor Lighting	(Page 3 of 4)
Project Name: LifeMoves Maple St	Date Prepared: 6/12/2016

A. OUTDOOR LIGHTING SCHEDULE and FIELD INSPECTION ENERGY CHECKLIST

Luminaire Schedule		Installed Watts					Location	Cutoff	Field Inspector	
A	B	C	D		E	F	G	H	I	
			How wattage was determined							
Name or Item Tag	Complete Luminaire Description	Watts per Luminaire	CEC Default from NA8	According to §130.0(c)	Number of Luminaires	Total Installed Watts in this area (C x E)	Primary Function area in which these luminaires are installed	BUG Rating	Pass	Fail
X1	30w LED	30.0	☑	☐	15	450	Building Facade		☐	☐
X2	26 LED	26.0	☑	☐	6	156	Building Facade		☐	☐
S2	2- 55w LED	110.0	☑	☐	2	220	Automotive Hardscape		☐	☐
S1/S1A	55w LED	55.0	☑	☐	7	385	Automotive Hardscape		☐	☐
S3	41w LED	41.0	☑	☐	17	697	Automotive Hardscape		☐	☐
S4	10W LED	10.0	☑	☐	3	30	Automotive Hardscape		☐	☐
S5	10W LED	10.0	☑	☐	3	30	Automotive Hardscape		☐	☐
			☐	☐					☐	☐
			☐	☐					☐	☐
			☐	☐					☐	☐
			☐	☐					☐	☐
			☐	☐					☐	☐
			☐	☐					☐	☐
			☐	☐					☐	☐
			☐	☐					☐	☐
			☐	☐					☐	☐
			☐	☐					☐	☐
			☐	☐					☐	☐
INSTALLED WATTS PAGE TOTAL:						1,968	Enter sum total of all pages (**Sum Total INSTALLED** Outdoor lighting wattage) into NRCC-LTO-01-E; Page 1		1,968	

CJ W ARCHITECTURE

130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

∘ PROJECT ∘

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

∘ SHEET TITLE ∘

Title 24
Lighting

∘ REVISIONS ∘

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

∘ JOB: 2015.2801

∘ DATE: 06/17/16

∘ SHEET: E4.3

1 TITLE 24

STATE OF CALIFORNIA
OUTDOOR LIGHTING
CEC-NRCC-LTO-01-E (Revised 06/14) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-01-E
Outdoor Lighting	(Page 4 of 4)
Project Name: LifeMoves Maple St	Date Prepared: 6/12/2016

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name:	Documentation Author Signature:
Company: Tantech Engineers	Signature Date: 6/12/2016
Address:	CEA Certification Identification (if applicable):
City/State/Zip: ,	Phone:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

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

Responsible Designer Name: TANTECH ENGINEERS	Responsible Designer Signature:
Company : TANTECH ENGINEERS	Date Signed:
Address: 1431 CEDAR ST	License:
City/State/Zip: SAN CARLOS, CA 94070	Phone: 415-269-4283

STATE OF CALIFORNIA
OUTDOOR LIGHTING CONTROLS
CEC-NRCC-LTO-02-E (Revised 05/15) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-02-E
Outdoor Lighting Controls	(Page 1 of 3)
Project Name: LifeMoves Maple St	Date Prepared: 6/12/2016

The NRCC-LTO-02-E shall be used to document all mandatory outdoor lighting controls that are applicable to the project.

Mandatory Outdoor Lighting Control Declaration Statements

Check all that apply:

- ☐ 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 §110.9(a).
- ☐ 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 §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 §130.1
- ☐ Part-Night Outdoor Lighting Controls, as defined in Section 100.1(b), shall meet the requirements in Section 110.9(b)5
- ☐ All outdoor incandescent luminaires rated over 100 watts, determined in accordance with Section 130.0(c), shall be controlled by a motion sensor.
- ☐ All outdoor luminaires rated for use with lamps greater than 150 lamp watts, determined in accordance with Section 130.0(c), shall comply with Backlight, Uplight, and Glare (collectively referred to as "BUG") in accordance with Section 130.2(b)
- ☐ All installed outdoor lighting shall be controlled by a photocontrol or outdoor astronomical time-switch control in accordance with Section 130.2(c)1
- ☑ All installed outdoor lighting shall be circuited and independently controlled from other electrical loads by an automatic scheduling control in accordance with Section 130.2(c)2
- ☐ All installed outdoor lighting, where the bottom of the luminaire is mounted 24 feet or less above the ground, shall be controlled with automatic lighting controls in accordance with Section 130.2(c)3
- ☐ For Outdoor Sales Frontage, Outdoor Sales Lots, and Outdoor Sales Canopies lighting, an automatic lighting control in accordance with Section 130.2(c)4
- ☐ For Building Facade, Ornamental Hardscape and Outdoor Dining lighting, an automatic lighting control in accordance with Section 130.2(c)5
- ☑ 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 §130.4.(a). Outdoor lighting controls shall comply with the applicable requirements of Section 130.2(c) and Reference Nonresidential Appendix NA7.8

STATE OF CALIFORNIA
OUTDOOR LIGHTING CONTROLS
CEC-NRCC-LTO-02-E (Revised 05/15) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-02-E
Outdoor Lighting Controls	(Page 2 of 3)
Project Name: LifeMoves Maple St	Date Prepared: 6/12/2016

MANDATORY OUTDOOR LIGHTING CONTROL SCHEDULE and FIELD INSPECTION CHECKLIST

Outdoor Lighting Control Schedule			Standards Complying With (✓ all that apply, or enter 'E' if Exempted)						✓ if Acceptance Test Required	Field Inspector	
A	B	C	D	E	F	G	H	I	N	O	
Location and Application of Luminaires being controlled	Type/ Description of Lighting Control (i.e. motion sensor, photocontrol, outdoor astronomical time-switch control, centralized time-based zone lighting control)	# of Units	§130.2(a)	§130.2(c)1	§130.2(c)2	§130.2(c)3	§130.2(c)4	§130.2(c)5		Pass	Fail
										☐	☐
										☐	☐
										☐	☐
										☐	☐
										☐	☐
										☐	☐
										☐	☐
										☐	☐
										☐	☐
										☐	☐
										☐	☐
										☐	☐
										☐	☐
										☐	☐
										☐	☐
										☐	☐

STATE OF CALIFORNIA
OUTDOOR LIGHTING CONTROLS
CEC-NRCC-LTO-02-E (Revised 05/15) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-02-E
Outdoor Lighting Controls	(Page 3 of 3)
Project Name: LifeMoves Maple St	Date Prepared: 6/12/2016

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name:	Documentation Author Signature:
Company: Tantech Engineers	Signature Date: 6/12/2016
Address:	CEA Certification Identification (if applicable):
City/State/Zip: ,	Phone:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

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

Responsible Designer Name: TANTECH ENGINEERS	Responsible Designer Signature:
Company : TANTECH ENGINEERS	Date Signed:
Address: 1431 CEDAR ST	License:
City/State/Zip: SAN CARLOS, CA 94070	Phone: 415-269-4283

STATE OF CALIFORNIA
OUTDOOR LIGHTING POWER ALLOWANCES
CEC-NRCC-LTO-03-E (Revised 05/15) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-03-E
Outdoor Lighting Power Allowances	(Page 1 of 4)
Project Name: LifeMoves Maple St	Date Prepared: 6/12/2016

A. OUTDOOR LIGHTING POWER ALLOWANCE SUMMARY

1. General Hardscape Lighting Power Allowance (Site Total from Section B of NRCC-LTO-03-E)						1.	7,365
2. Additional Specific "use it or lose it" Lighting Power Allowances listed in each of these cells shall be identical to total allowed watts determined in Section C-1 to C-4 of NRCC-LTO-03-E.							
PER APPLICATION from Section C-1		PER UNIT LENGTH (SALES FRONTAGE) from Section C-2		PER HARDSCAPE AREA (ORNAMENTAL LIGHTING) from Section C-3		PER SPECIFIC AREA from Section C-4.	
0	+	0	+	0	+	606	= 2. 606
3. **Sum Total ALLOWED** Outdoor Lighting Wattage (add rows 1 and 2)						3.	7,971

B. GENERAL HARDSCAPE LIGHTING POWER ALLOWANCE FROM TABLE 140.7-A

Area Wattage Allowance (AWA)				Linear Wattage Allowance (LWA)			Initial Wattage Allowance (IWA)	Total General Hardscape Lighting Allowance
A	B	C	D	E	F	G	H	I
Name of area	Illuminated Hardscape Area	AWA Per Square Foot	AWA (B x C)	Perimeter Length of General Hardscape	LPA per Linear Foot	LWA (E x F)	IWA (Watts)	D + G + H
PKG AREA	64,228	0.090	5,781	1,357	0.600	814	770	7,365
							TOTAL	7,365

STATE OF CALIFORNIA
OUTDOOR LIGHTING POWER ALLOWANCES
CEC-NRCC-LTO-03-E (Revised 05/15) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-03-E
Outdoor Lighting Power Allowances	(Page 2 of 4)
Project Name: LifeMoves Maple St	Date Prepared: 6/12/2016

C. ADDITIONAL "USE IT OR LOSE IT" OUTDOOR LIGHTING POWER ALLOWANCES FOR SPECIFIC APPLICATIONS

☐ The additional specific outdoor lighting power allowance shall be the smaller of the allowed lighting power or the actual lighting power used.
☐ Use Outdoor Lighting Zone (OLZ) that is documented on page 1 of NRCC-LTO-01-E to calculate the specific wattage allowances.

C-1. WATTAGE ALLOWANCE PER APPLICATION – Table 140.7-B

☐ Available only for qualifying locations, which include Building Entrances or Exits; Primary Entrances to Senior Care Facilities, Police Stations, Hospitals, Fire Stations, and Emergency Vehicle Facilities; Drive Up Windows; Vehicle Service Station Uncovered Fuel Dispenser
☐ If more than one luminaire type is used per location, use multiple rows for that location

A	B	C	D	E	F	G	H	I	J
	ALLOTTED WATTS			DESIGN WATTS					
Name of Location for which allowance is claimed	Number of qualifying locations	Wattage Allowance per qualifying location	Allotted Watts (B x C)	Luminaire Code or Symbol	Luminaire Description	Luminaire Quantity	Watts per luminaire	Design Watts (G x H)	Allowed Watts (smaller of D or I)
Sum total allowance per application on this site:									0

C-2. WATTAGE ALLOWANCE PER UNIT LENGTH (Sales Frontage) from Table 140.7-B

☐ If more than one luminaire type is used per location, use multiple rows for that location

A	B	C	D	E	F	G	H	I	J
	ALLOTTED WATTS			DESIGN WATTS					
Name of Location for which allowance is claimed	Linear feet of Sales Frontage	Wattage Allowance per linear foot	Allotted Watts (B x C)	Luminaire Code or Symbol	Luminaire Description	Luminaire Quantity	Watts per luminaire	Design Watts (G x H)	Allowed Watts (smaller of D or I)
Sum total allowance for sales frontage on the site:									0

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

PROJECT

LifeMoves Maple Street
Shelter
1580 Maple Street
Redwood City CA 94063

SHEET TITLE

Title 24
Lighting

REVISIONS

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

JOB: 2015.2801

DATE: 06/17/16

SHEET: E4.4

1 TITLE 24

STATE OF CALIFORNIA
OUTDOOR LIGHTING POWER ALLOWANCES
CEC-NRCC-LTO-03-E (Revised 05/15)
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-03-E
Outdoor Lighting Power Allowances	(Page 3 of 4)
Project Name: LifeMoves Maple St	Date Prepared: 6/12/2016

C-3. WATTAGE ALLOWANCE PER SQUARE FOOT OF HARDSCAPE AREA (Ornamental Lighting) – Table 140.7-B

☐ Allowance for the total site illuminated hardscape area. Luminaires qualifying for this allowance shall be rated for 100 watts or less as determined in accordance with Section 130.0(c), and shall be post-top luminaires, lanterns, pendant luminaires, or chandeliers.

☐ If more than one luminaire type is used per location, use multiple rows for that location

A	B	C	D	E	F	G	H	I	J
	ALLOTTED WATTS			DESIGN WATTS					
Name of area for which ornamental allowance is claimed	Square feet of Hardscape	Wattage Allowance per square foot	Allotted Watts (B x C)	Luminaire Code or Symbol	Luminaire Description	Luminaire Quantity	Watts per luminaire	Design Watts (G x H)	Allowed Watts (smaller of D or I)
							Sum total allowance for ornamental lighting on the site:		0

C-4. WATTAGE ALLOWANCE PER SQUARE FOOT OF SPECIFIC AREA - Table 140.7-B

☐ Allowances for Building Facades; Outdoor Sales Lots; Vehicle Service Station Hardscape; Vehicle Service Station Canopies; Sales Canopies; Non-sales Canopies; Guard Stations; Student Pick-up/Drop-off zone: Outdoor Dining; Special Security Lighting for Retail Parking and Pedestrian Hardscape.

☐ If more than one luminaire type is used per location, use multiple rows for that location

A	B	C	D	E	F	G	H	I	J
	ALLOTTED WATTS			DESIGN WATTS					
Name of Location for which allowance is claimed	Illuminated Area of Application	Wattage Allowance per square foot	Allotted Watts (B x C)	Luminaire Code or Symbol	Luminaire Description	Luminaire Quantity	Watts per luminaire	Design Watts (G x H)	Allowed Watts (smaller of D or I)
BUILDING FACADE	5,769	0.350	2,019	X1	30w LED	15	30.0	450	606
				X2	26 LED	6	26.0	156	
							Sum total allowance for specific area on the site:		606

STATE OF CALIFORNIA
OUTDOOR LIGHTING POWER ALLOWANCES
CEC-NRCC-LTO-03-E (Revised 05/15)
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-03-E
Outdoor Lighting Power Allowances	(Page 4 of 4)
Project Name: LifeMoves Maple St	Date Prepared: 6/12/2016

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name:	Documentation Author Signature:
Company: Tantech Engineers	Signature Date: 6/12/2016
Address:	CEA Certification Identification (if applicable):
City/State/Zip: ,	Phone:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

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

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

Responsible Designer Name: TANTECH ENGINEERS	Responsible Designer Signature:
Company : TANTECH ENGINEERS	Date Signed:
Address: 1431 CEDAR ST	License:
City/State/Zip: SAN CARLOS, CA 94070	Phone: 415-269-4283

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

∘ PROJECT ∘

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

∘ SHEET TITLE ∘

Title 24
Lighting

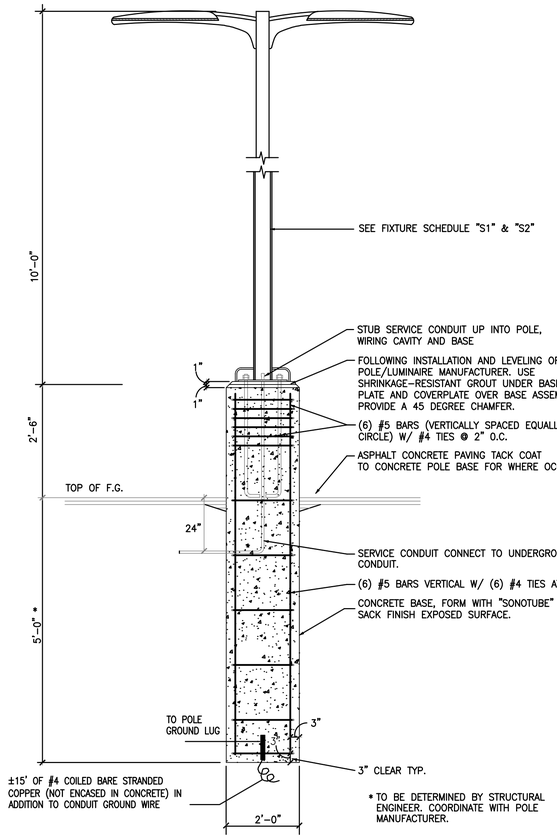
∘ REVISIONS ∘

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

∘ JOB: 2015.2801

∘ DATE: 06/17/16

∘ SHEET: E4.5



NOTES:

1. PAINT EXPOSED SURFACES OF POLE BASE WITH TWO (2) COATS YELLOW OR WHITE.
2. INSTALL POLE BASE IN COMPETENT SUPPORTING SOIL AS APPROVED BY THE GEOTECHNICAL ENGINEER DURING FOUNDATION CONSTRUCTION.
3. LIGHT FIXTURE AND BASE FURNISHED INSTALLED BY GENERAL CONTRACTOR

5 BASE FOR LIGHT STANDARD
N.T.S.

4 ELECTRICAL NOTES
RE:SE2

A. MARK ALL STUBOUTS WITH SUBSTANTIAL WOODEN STAKES.

B. ALL BOXES SUBJECT TO VEHICULAR TRAFFIC SHOULD BE CAREFULLY RATED FOR HEAVY VEHICULAR TRAFFIC.

C. PROVIDE ALL SPLICE/PULLBOXES WITH BOTTOM AND EXTENSIONS AS REQUIRED.

D. WHERE CONDUIT PASSES UNDER EXTERIOR FOOTINGS, BACKFILL TRENCH WITHIN 5' OF BUILDING WITH IMPERVIOUS SOIL AS APPROVED BY SOILS ENGINEER.

E. ALL EQUIPMENT SHALL BE LISTED AND LABELED BY A NATIONALLY RECONIZED TESTING LABORATORY FOR THE SPECIFIC APPLICATION IN WHICH USED, AND SHALL BE INSTALLED AS PER LISTING OR LABELING.

F. ALL EMPTY CONDUITS SHALL HAVE PULLCORDS INSTALLED AND PERMANENTLY MARKED TO IDENTIFY THEIR INTENDED USES.

G. WHERE MAIN SITE LIGHTING FIXTURE BASES DO NOT OCCUR ON AN ISLAND, BASE SHALL OCCUR AT CROSS-LINES OF PARKING STALLS. VERIFY PRECISE LOCATION WITH ARCHITECT BEFORE INSTALLATION OF CONCRETE BASES, INCLUDING SIGNS.

H. CONTRACTOR MAY INCREASE CONDUIT SIZES INDICATED FOR EASE OF PULLING- WITH NO ADDITIONAL COST TO OWNER (SITE LIGHTING ONLY).

I. PROVIDE GROUND WIRE IN ALL NON-METALLIC UNDERGROUND CONDUITS, PER CODE, 1#12 CU. MINIMUM (GROUND WIRE GENERALLY NOT SHOWN). USE PVC SCHEDULE 40 OR 80 FOR NON-METALLIC CONDUITS.

J. UNDERGROUND BRANCH CIRCUIT RACEWAYS SHALL BE A MINIMUM OF 24" BELOW FINISHED GRADE.

K. SEE BUILDING DRAWING FOR BUILDING-MOUNTED LIGHTING

L. SEE ARCHITECTURAL AND LANDSCAPE DRAWINGS FOR PRECISE LOCATION OF FLATWORK, WALKWAY AND LIGHTING FIXTURES. COODINATE BOX LOCATIONS WITH LANDSCAPING TO OCCUR IN PLANTED AREAS, NOT LAWNS OR PAVING, WHERE POSSIBLE.

M. SEE ARCHITECTURAL SITEWORK AND CIVIL DRAWINGS FOR PRECISE LOCATIONS OF PARKING LOT LUMINAIRES.

N. ALL 20A CIRCUITS UP TO 100'-0" IN LENGTH SHALL UTILIZE #12 CONDUCTORS MINIMUM, UNLESS NOTED OTHERWISE. ALL 20A CIRCUITS FROM 101'-0" TO 150'-0" IN LENGTH SHALL UTILIZE #10 CONDUCTORS MINIMUM. ALL 20A CIRCUITS 151'-0" UP TO 250'-0" IN LENGTH SHALL UTILIZE #8 CONDUCTORS MINIMUM. CIRCUITS ABOVE 251'-0" SHALL UTILIZE #6 CONDUCTORS MINIMUM. REDUCE TO #12 CONDUCTORS AT PANEL FOR FINAL CONNECTIONS TO CIRCUIT BREAKER.

1 LEGEND
RE: SE2

SYMBOL	DESCRIPTION
—U/P—	UNDERGROUND ELECTRICAL DUCT LINE POWER, 24" DEEP PER UTILITY CO REQUIREMENTS. SAWCUT (E) PAVING FOR NEW CONDUITS AND PATCH EXISTING PAVING TO MATCH IN LIKE AND KIND AFTER INSTALLATION OF CONDUITS.
▨	PRE-CAST ELECTRICAL SPLICE BOX 13"X24"X16" DEEP (SIZE PER NEC) DUTY TRAFIC COVER WHERE EXPOSED TO LOCATE SO AS HOT TO AFFECT PLANTING.
⊙	DECORATIVE POLE MOUNTED FIXTURE.
□•, □•□	POLE MOUNTED LUMINAIRE(S) WITH SINGLE HEAD, TWIN HEADS.
- - - -	CONDUIT 3/4"C. W/ 3#8 MIN UON, DOWN 24" SAWCUT AND PATCH (E) PAVING.

2 KEYED NOTES
RE: SE2

1. PROPOSED LOCATION FOR P.G. & E. CO. TRANSFORMER VAULT. COORDINATE FINAL LOCATION AND ALL REQUIREMENTS PRIOR TO INSTALLATION WITH P.G. & E. REPRESENTATIVE
2. STUB OUT 1-4"C. 1'-0" BEYOND PROPERTY LINE FOR P.G. & E. PRIMARY UTILITY SERVICE. COORDINATE ALL REQUIREMENTS WITH P.G. & E. PRIOR TO INSTALLATION.
3. PROVIDE 2-5" CONDUIT BETWEEN TRANSFORMER AND PULL SECTION FOR SECONDARY ELECTRICAL SERVICE. COORDINATE ALL REQUIREMENTS WITH P.G. & E. PRIOR TO INSTALLATION. SEE SINGLE LINE DIAGRAM ON SHEET E3.1.
4. MAIN SWITCHBOARD "MSA" 800A, 120/208V, 3PH, 4W IN NEMA 3R ENCLOSURE
5. PROPOSED LOCATION FOR TRANSFORMER PAD FOR NEW PG&E PAD MOUNT TRANSFORMER IF REQUIRED - COORDINATE WITH PG&E SERVICE REPRESENTATIVE.
6. INCLUDES INTERNAL SHIELD 1N FIXTURE TO PREVENT LIGHT TRESPASS TO ADJACENT PROPERTY.
7. THRU LIGHTING CONTROL SEE SHEET E02
8. ALL BUILDING EXTERIOR LIGHTING "CONDUIT" TO BE RUN WITHIN BUILDING WALLS, ABOVE SUSPENDED CEILING. WHERE NOT CONCEALABLE WITHIN SPACE, ATTACH TO WALLS AND PAINT OUT, AS HIGH AS POSSIBLE. ANY EXPOSED CONDUIT MUST BE APPROVED IN ADVANCE OF INSTALLATION BY ARCHITECT.

3 GENERAL NOTES
RE:SE2

(SEE PG&E JOINT TRENCH UTILITY PLANS FOR TRENCHING, ROUTING, SUBSTRUCTURE SIZES AND LOCATIONS)

1. ALL THE CONTRACTOR INSTALLED FACILITIES AND TRENCHING MUST BE INSPECTED BY A PG&E INSPECTOR. WHEN APPROVED, THE INSPECTOR WILL SIGN THE PG&E UNDERGROUND INSPECTION RECORD. PLEASE MAKE ARRANGEMENTS FOR INSPECTIONS A MINIMUM OF (3 WORKING DAYS) 72 HOURS IN ADVANCE. FAX THE "REQUEST FOR INSPECTION" FORM WITHIN 72 HOURS (831)784-3334. ANY QUESTIONS, PLEASE CALL YOUR PG&E REPRESENTATIVE.
2. ALL MATERIALS AND WORKMANSHIP MUST MEET THE REQUIREMENTS AND SPECIFICATION AS OUTLINED HEREIN, AND SHOULD NOT BE INSTALLED WITHOUT PRIOR NOTICE TO THE INSPECTOR. ANY MATERIAL OR WORKMANSHIP NOT APPROVED BY THE INSPECTOR SHALL BE CORRECTED AND INSTALLED IN AN APPROVED MANNER. NO WORK SHALL BE BACKFILLED, COVERED, OR IN ANYWAY CONCEALED UNTIL IT HAS BEEN APPROVED BY A PG&E INSPECTOR.
3. THE CONTRACTOR IS REQUIRED TO GUARANTEE ALL MATERIAL AND WORKMANSHIP FOR A PERIOD OF 2 YEARS AFTER FINAL ACCEPTANCE BY PG&E. SIGNATURE ON THE CHECK LIST CONSTITUTES THE CONTRACTOR'S RECOGNITION OF THIS REQUIREMENT.
4. CONTACT UNDERGROUND SERVICE ALERT (U.S.A.), 2 WORKING DAYS IN ADVANCE OF DIGGING (1-800- 227-2600).
5. IMMEDIATE BACKFILL OF PG&E FACILITIES IS REQUIRED; MANPOWER, TOOLS AND EQUIPMENT MUST BE PROVIDED BY THE CONTRACTOR.
6. FOR CUSTOMER OWNED SERVICE TERMINATION FACILITIES REFER TO PG&E GAS AND ELECTRIC SERVICE REQUIREMENTS MANUAL (GREEN BOOK)

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

SITE ELECTRICAL PLAN NOTES,

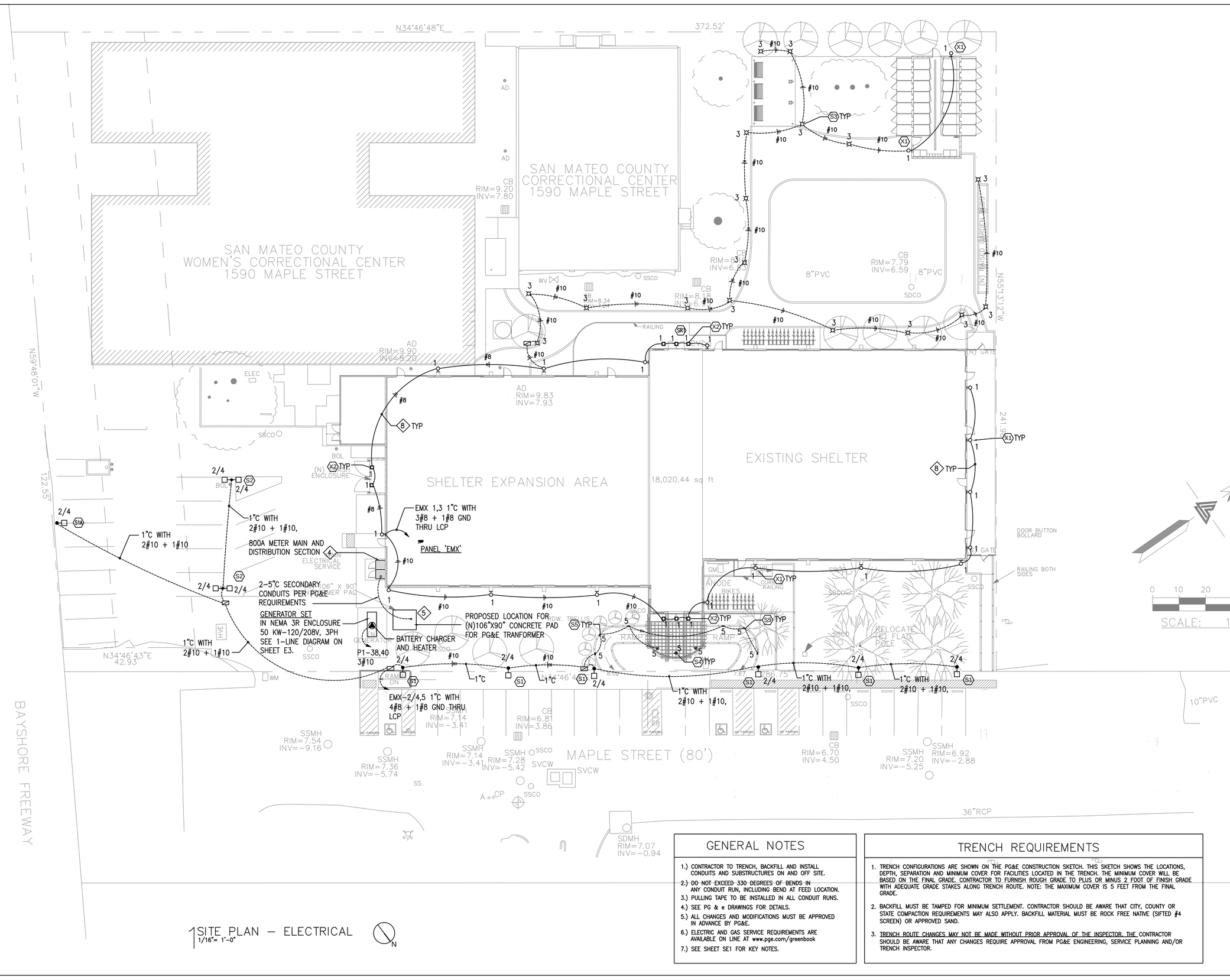
◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

◦ JOB: 2015.2801

◦ DATE: 06/17/16

◦ SHEET: SE1



SITE PLAN – ELECTRICAL

1/16"= 1'-0"

GENERAL NOTES

1.) CONTRACTOR TO TRENCH, BACKFILL AND INSTALL CONDUITS AND SUBSTRUCTURES ON AND OFF SITE.

2.) DO NOT EXCEED 330 DEGREES OF BENDS IN ANY CONDUIT RUN, INCLUDING BEND AT FEED LOCATION.

3.) PULLING TAPE TO BE INSTALLED IN ALL CONDUIT RUNS.

4.) SEE PG & e DRAWINGS FOR DETAILS.

5.) ALL CHANGES AND MODIFICATIONS MUST BE APPROVED IN ADVANCE BY PG&E.

6.) ELECTRIC AND GAS SERVICE REQUIREMENTS ARE AVAILABLE ON LINE AT www.pge.com/greenbook

7.) SEE SHEET SE1 FOR KEY NOTES.

TRENCH REQUIREMENTS

1. TRENCH CONFIGURATIONS ARE SHOWN ON THE PG&E CONSTRUCTION SKETCH. THIS SKETCH SHOWS THE LOCATIONS, DEPTH, SEPARATION AND MINIMUM COVER FOR FACILITIES LOCATED IN THE TRENCH. THE MINIMUM COVER WILL BE BASED ON THE FINAL GRADE. CONTRACTOR TO FURNISH ROUGH GRADE TO PLUS OR MINUS 2 FOOT OF FINISH GRADE WITH ADEQUATE GRADE STAKES ALONG TRENCH ROUTE. NOTE: THE MAXIMUM COVER IS 5 FEET FROM THE FINAL GRADE.

2. BACKFILL MUST BE TAMPED FOR MINIMUM SETTLEMENT. CONTRACTOR SHOULD BE AWARE THAT CITY, COUNTY OR STATE COMPACTION REQUIREMENTS MAY ALSO APPLY. BACKFILL MATERIAL MUST BE ROCK FREE NATIVE (SIFTED #4 SCREEN) OR APPROVED SAND.

3. TRENCH ROUTE CHANGES MAY NOT BE MADE WITHOUT PRIOR APPROVAL OF THE INSPECTOR. THE CONTRACTOR SHOULD BE AWARE THAT ANY CHANGES REQUIRE APPROVAL FROM PG&E ENGINEERING, SERVICE PLANNING AND/OR TRENCH INSPECTOR.

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

SITE ELECTRICAL PLAN

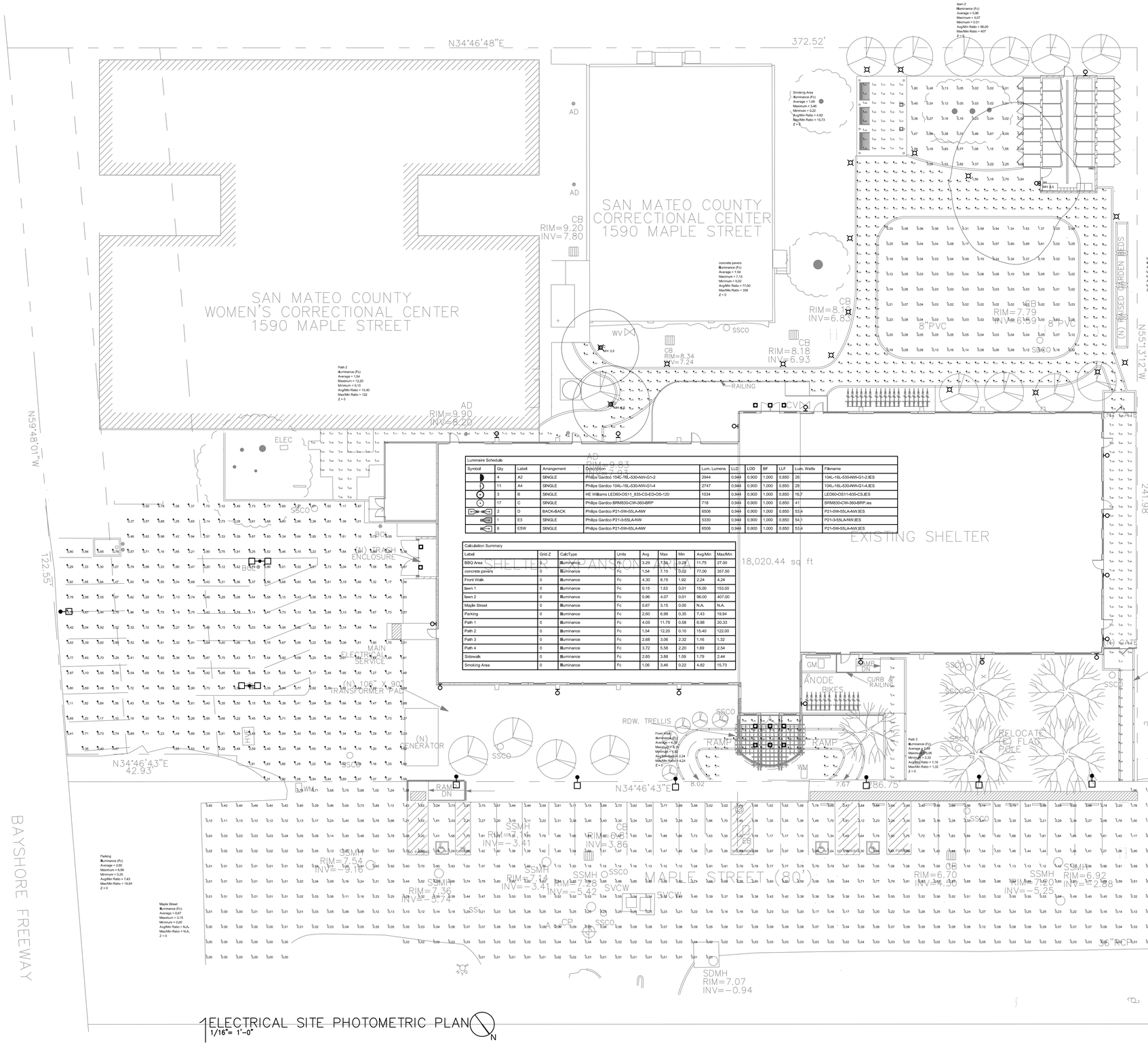
◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

◦ JOB: 2015.2801

◦ DATE: 06/17/16

◦ SHEET: SE2



Luminaire Schedule

Symbol	Qty	Label	Arrangement	Description	Lum. Lumens	LLD	LDD	BF	LLF	Lum. Watts	Filename
◗	4	A2	SINGLE	Philips Gardco 104L-16L-530-NW-G1-2	2944	0.944	0.900	1.000	0.850	28	104L-16L-530-NW-G1-2.IES
D	11	A4	SINGLE	Philips Gardco 104L-16L-530-NW-G1-4	2747	0.944	0.900	1.000	0.850	28	104L-16L-530-NW-G1-4.IES
⊙	3	B	SINGLE	HE Williams LED60-OS11_835-CS-ED-OS-120	1034	0.944	0.900	1.000	0.850	16.7	LED60-OS11-835-CS.IES
○	17	C	SINGLE	Philips Gardco BRM830-CW-360-BRP	718	0.944	0.900	1.000	0.850	41	BRM830-CW-360-BRP.ies
⇔	2	D	BACK-BACK	Philips Gardco P21-5W-55LA-NW	6506	0.944	0.900	1.000	0.850	53.4	P21-5W-55LA-NW.IES
▨	1	E3	SINGLE	Philips Gardco P21-3-55LA-NW	5330	0.944	0.900	1.000	0.850	54.1	P21-3-55LA-NW.IES
⇒	6	E5W	SINGLE	Philips Gardco P21-5W-55LA-NW	6506	0.944	0.900	1.000	0.850	53.4	P21-5W-55LA-NW.IES

Calculation Summary

Label	Grid Z	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
BBQ Area	0	Illuminance	Fc	3.29	7.56	0.28	11.75	27.00
concrete pavers	0	Illuminance	Fc	1.54	7.15	0.02	77.00	357.50
Front Walk	0	Illuminance	Fc	4.30	8.15	1.92	2.24	4.24
lawn 1	0	Illuminance	Fc	0.15	1.53	0.01	15.00	153.00
lawn 2	0	Illuminance	Fc	0.96	4.07	0.01	96.00	407.00
Maple Street	0	Illuminance	Fc	0.67	3.15	0.00	N.A.	N.A.
Parking	0	Illuminance	Fc	2.60	6.98	0.35	7.43	19.94
Path 1	0	Illuminance	Fc	4.05	11.79	0.58	6.98	20.33
Path 2	0	Illuminance	Fc	1.54	12.20	0.10	15.40	122.00
Path 3	0	Illuminance	Fc	2.68	3.06	2.32	1.16	1.32
Path 4	0	Illuminance	Fc	3.72	5.58	2.20	1.69	2.54
Sidewalk	0	Illuminance	Fc	2.85	3.88	1.59	1.79	2.44
Smoking Area	0	Illuminance	Fc	1.06	3.46	0.22	4.82	15.73

1 ELECTRICAL SITE PHOTOMETRIC PLAN
1/16" = 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

ELECTRICAL SITE PHOTOMETRIC PLAN

◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

◦ JOB: 2015.2801

◦ DATE: 06/17/16

◦ SHEET: SE3

NAIL SCHEDULE

A) WOOD MEMBERS SHALL BE CONNECTED WITH NAILING INDICATED IN CBC TABLE 2306.4.1 (WALL), 2306.3.1 (ROOF) & 2304.9.1 FASTENING SCHEDULE UNLESS GREATER SIZES AND NUMBER OF NAILS ARE SHOWN OR NOTED ON DRAWINGS; NAILS EXPOSED TO WEATHER SHALL BE GALVANIZED; NAILS SHALL BE COMMON WIRE NAILS; PRE-DRILLED HOLES FOR NAILS SHALL BE PROVIDED WHERE THE WOOD MEMBERS TEND TO SPLIT; WOOD MEMBERS SHALL BE REPLACED AND REMOVED FROM JOB PROMPTLY WHERE REQUIRED. SHORT PLYWOOD NAILS FOR EQUIVALENT SHEAR VALUE MAY BE USED. SEE PLANS FOR NAIL SPACING. ROOF SHEATHING 8d AT 6 INCHES O.C. AT SUPPORTED EDGES. 8d AT 12 INCHES O.C. INTERMEDIATE SUPPORTS. FLOOR SHEATHING 10d AT 6 INCHES O.C. AT BOUNDARIES AND PANEL EDGES AND 10d AT 10 INCHES O.C. AT INTERMEDIATE SUPPORTS. PLYWOOD WALL SHEATHING SHALL BE NAILED PER SHEAR WALL SCHEDULE AT SHEAR WALLS, AND AT A MINIMUM OF 8d AT 6 INCHES O.C. ALL OTHER EDGES.
USE 3/8" EDGE DISTANCE FOR STRUCTURAL PANEL BOUNDARY NAILING.

ALL DIAPHRAGM AND SHEAR WALL NAILING SHALL UTILIZE COMMON NAILS WITH FULL HEADS.

MECHANICALLY DRIVEN NAILS USED IN WOOD STRUCTURAL, PANEL SHEAR WALLS SHALL MEET THE SAME DIMENSIONS AS THAT FOR HAND DRIVEN NAILS., INCLUDING DIAMETER, MINIMUM LENGTH AND MINIMUM HEAD DIAMETER. CLIPPED HEAD OR BOX NAILS ARE NOT ACCEPTABLE.

SHEATHING NAILS OR OTHER APPROVED SHEATHING CONNECTORS SHALL BE DRIVEN SO THAT HEADS OR CROWN IS FLUSH WITH THE SURFACE OF THE SHEATHING

AT PRESSURE TREATED LUMBER USE HOT-DIPPED GALVANIZED OR STAINLESS STEEL, . CBC 2304.9.5

NAIL SCHEDULE CBC TABLE 2304.9.1

CONNECTION	FASTENING	LOCATION
1. JOIST TO SILL OR GIRDER	3-8d COMMON (2 1/2"x0.131") 3-3"x0.131" NAILS 3-3" 14 GA STAPLES	TOE NAIL
2. BRIDGING TO JOIST	2-8d COMMON (2 1/2"x0.131") 2-3"x0.131" NAILS 2-3" 14 GA STAPLES	TOE NAIL EACH END
3. 1"x6" SUBFLOOR OR LESS TO EACH JOIST	2-8d COMMON (2 1/2"x0.131")	FACE NAIL
4. WIDER THAN 1"x6" SUBFLOOR TO EACH JOIST	3-8d COMMON (2 1/2"x0.131")	FACE NAIL
5. 2" SUBFLOOR TO JOIST OR GIRDER	2-16d COMMON (3 1/2"x0.162")	BLIND AND FACE NAIL
6. SOLE PLATE TO JOIST OR BLOCKING	16d COMMON (3 1/2"x0.131") AT 16" O.C. 3"x0.131" NAILS AT 8" O.C. 3" 14 GA STAPLES AT 12" O.C.	TYPICAL FACE NAIL
SOLE PLATE TO JOIST OR BLOCKING AT BRACED WALL PANEL	3-16d COMMON (3 1/2"x0.131") AT 16" O.C. 4-3"x0.131" NAILS AT 8" O.C. 4-3" 14 GA STAPLES AT 12" O.C.	BRACED WALL PANELS
7. TOP PLATE TO STUD	2-16d COMMON (3 1/2"x0.162") 3-3"x0.131" NAILS 3-3" 14 GA STAPLES @8 screw each side at metal stud	END NAIL
8. STUD TO SOLE PLATE	4-8d COMMON (2 1/2"x0.131") AT 16" O.C. 4-3"x0.131" NAILS 4-3" 14 GA STAPLES @8 screw each side at metal studs	TOE NAIL
	2-20d COMMON (4"x0.192") 3-3"x0.131" NAILS 3-3" 14 GA STAPLES	END NAIL
9. DOUBLE STUDS	16d COMMON (3 1/2"x0.135") @ 24" O.C. 3"x0.131" NAILS @ 8" O.C. 3" 14 GA STAPLES @ 8" O.C.	FACE NAIL
10. DOUBLE TOP PLATES	16d COMMON (3 1/2"x0.135") AT 16" O.C. 3"x0.131" NAILS AT 12" O.C. 3" 14 GA STAPLES AT 12" O.C.	TYPICAL FACE NAIL
DOUBLE TOP PLATES	8-16d COMMON (3 1/2"x0.162") 12-3"x0.131" NAILS 12-3" 14 GA STAPLES	LAP SPLICE
11. BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATES	3-8d COMMON (2 1/2"x0.131") 3-3"x0.131" NAILS 3-3" 14 GA STAPLES	TOE NAIL
12. RIM JOIST TO TOP PLATE	8d COMMON (2 1/2"x0.131") AT 6" O.C. 3"x0.131" NAILS AT 6" O.C. 3" 14 GA STAPLES AT 6" O.C.	TOE NAIL
13. TOP PLATE, LAPS AND INTERSECTIONS	2-16d COMMON (3 1/2"x0.162") 3-3"x0.131" NAILS 3-3" 14 GA STAPLES Corner or Intersection 4-@8 Screws at metal studs	FACE NAIL
14. CONTINUOUS HEADER, TWO PIECES	16d COMMON (2 1/2"x0.162")	TOE NAIL
15. CEILING JOISTS TO PLATE	3-8d COMMON (2 1/2"x0.131") 5-3"x0.131" NAILS 5-3" 14 GA STAPLES	TOE NAIL
16. CONTINUOUS HEADER TO STUD	4-8d COMMON (2 1/2"x0.131")	TOE NAIL
17. CEILING JOISTS, LAPS OVER PARTIONS. (SEE SECTION 2308.10.4.1, TABLE 2308.10.4.1.	3-16d COMMON (3 1/2"x0.162") MINIMUM TABLE 2308.10.4.1 4-3"x0.131" NAILS 4-3" 14 GA STAPLES	FACE NAIL
18. CEILING JOISTS TO PARALLEL RAFTERS. (SEE SECTION 2308.10.4.1, TABLE 2308.10.4.1.	3-16d COMMON (3 1/2"x0.162") MINIMUM TABLE 2308.10.4.1 4-3"x0.131" NAILS 4-3" 14 GA STAPLES	FACE NAIL
19. RAFTER TO PLATE. (SEE SECTION 2308.10.1, TABLE 2308.10.1)	3-8d COMMON (2 1/2"x0.131") 3-3"x0.131" NAILS 3-3" 14 GA STAPLES	TOE NAIL
20. 1" DIAGONAL BRACE TO EACH STUD PLATE	2-8d COMMON (2 1/2"x0.131") 2-3"x0.131" NAILS 3-3" 14 GA STAPLES	FACE NAIL
21. 1"x8" SHEATHING TO EACH BEARING	3-8d COMMON (2 1/2"x0.131")	FACE NAIL
22. WIDER THAN 1"x8" SHEATHING TO EACH BEARING	3-8d COMMON (2 1/2"x0.131")	FACE NAIL
23. BUILT-UP CORNER STUDS	16d COMMON (3 1/2"x0.162") 3"x0.131" NAILS 3" 14 GA STAPLES	24" O.C. 16" O.C. 16" O.C.
24. BUILT-UP GIRDER AND BEAMS	20d COMMON (4"x0.192") AT 32" O.C. 3"x0.131" NAILS AT 24" O.C. 3" 14 GA STAPLES AT 24" O.C.	FACE NAIL AT TOP & BOTT. STAGGERED ON OPPOSITE SIDES
	2-20d COMMON (4"x0.192") 3-3"x0.131" NAILS 3-3" 14 GA STAPLES	FACE NAIL AT ENDS AND AT EACH SPLICE
25. 2" PLANKS	16d COMMON (3 1/2"x0.162")	AT EACH BEARING
26. COLLAR TIE TO RAFTER	3-10d COMMON (3"x0.148") 4-3"x0.131" NAILS 4-3" 14 GA STAPLES	FACE NAIL
27. JACK RAFTER TO HIP	4-10d COMMON (3 1/2"x0.148") 4-3"x0.131" NAILS 4-3" 14 GA STAPLES	TOE NAIL
	2-16d COMMON (3 1/2"x0.162") 3-3"x0.131" NAILS 3-3" 14 GA STAPLES	FACE NAIL

1 Common or box nails may be used except where otherwise stated.
2 Nails spaced at 6 inches on center at edges, 12" at intermediate supports except 6 inches at all supports where spans are 48 inches or more. For nailing of wood structural panel and particleboard diaphragms and shear walls, refer to section 2344.3 (California Building Code). Nails for wall sheathing may be continuous, box or casing.
3 Common or deformed shank.
4 Common.
5 Deformed shank.
6 Corrosion-resistant siding or casing nails conforming to the requirements of section 2325A.1 (California Building Code).
7 Fasteners spaced 3 inches on center at exterior edges and 6 inches on center at intermediate supports.
8 Corrosion-resistant roofing nails with 7/16-inch-diameter head and 1 1/2 inch length for 1/2-inch sheathing and 1 1/2-inch length for 25/32-inch sheathing conforming to the requirements of section 2325A.1 (California Building Code).
9 Corrosion-resistant staples with nominal 7/16-inch-diameter head and 1 1/2-inch length for 1/2-inch sheathing and 1 1/2 inch length for 25/32-inch sheathing conforming to the requirements of section 2325A.1 (California Building Code).
10 Panel supports at 16 inches [20 inches if strength axis in the long direction of panel, unless otherwise marked]. Casing or finish nails spaced 6 inches on panel edges, 12 inches at intermediate supports.
11 Panel supports at 24 inches. Casing or finish nails spaced 6 inches on panel edges, 12 inches at intermediate supports.

SEE DETAILS FOR METAL STUD WALL CONNECTIONS AND ALSO THE SSMA PRODUCT TECHNICAL PUBLICATION

NAIL SCHEDULE

TESTING AND INSPECTION

ADHERE TO COUNTY OF SAN MATEO REQUIREMENTS SEE SPECIAL INSPECTION FORM

I. MASONRY: PER CBC CHAPTER 21 and CHAPTER 17

II. CONCRETE & SHOTCRETE - C.B.C. CHAPTER 19

A. MATERIALS
1. Portland Cement Tests 1903.2
2. Concrete Aggregates 1903.3
3. Reinforcing Bars 1905.5
4. Batch Plant Inspection

B. CONCRETE & SHOTCRETE QUALITY
1. Proportions of Concrete 1905
2. Strength Tests of Concrete 1905
3. Splitting Tensile Tests 1905

C. CONCRETE & SHOTCRETE INSPECTION CHAPTER 1704
1. Job Site Inspection 1905
2. Batch Plant or Weighmaster Inspection 1905
3. Reinforcing Bar Welding Inspection
4. All Mechanical Splices
5. Bolts Installed in Concrete per 1704

III. STEEL - STATE CHAPTER 22 AND AISC 13TH ADDITION AND PER 1704

A. MATERIALS
1. Structural Steel, Cold Formed Steel 2209 & 2210
2. Material Identification 2109 & 2210 AND AISC A3

B. INSPECTION AND TESTS OF STRUCTURAL STEEL
1. Tests of Structural and Cold Formed Steel
2. Welding Inspection
3. Non-Destructive Weld Testing
4. High Strength Bolting (A325 and A490 bolts)

IV. FOUNDATION - PER 1704

ABREVIATIONS

A.B.	ANCHOR BOLT
B.N.	BOUNDARY NAILING
BM	BEAM
BLG	BLOCK
BLKG	BLOCKING
C.J.	CONSTRUCTION JOINT
CONC	CONCRETE
CONT	CONTINUOUS
COL	COLUMN
CMU	CONCRETE MASONRY UNIT
d	PENNY (NAILS)
DET	DETAIL
DIA	DIAMETER
D.F.	DOUGLAS FIR
DIAG	DIAGONAL
EA.	EACH
E.W.	EACH WAY
E.N.	EDGE NAILING
EQ.	EQUAL
(E)	EXISTING
F.N.	FIELD NAILING
F.J.	FLOOR JOIST
FLR	FLOOR
FTG	FOOTING
GA	GAGE
GALV	GALVANIZED
GLB	GLUE-LAM BEAM
HDR	HEADER
H.D.G.	HOT DIPPED GALVANIZED
INT.	INTERIOR
JST	JOIST
LBS	POUNDS
MECH.	MECHANICAL
MIN.	MINIMUM
(N)	NEW
O.C.	ON CENTER
OPP.	OPPOSITE
P.T.	PRESSURE TREATED
P.T.D.F.	PRESSURE TREATED DOUGLAS FIR
PL.	PLATE
PLYD	PLYWOOD
RR	ROOF RAFTER
SHTG	SHEATHING
SIM.	SIMILAR
SHT	SHEET
S.W.S.	SHEAR WALL SCHEDULE
SQ.	SQUARE
T.O.C.	TOP OF CONCRETE
T.O.S.	TOP OF STEEL
TS	TUBE STEEL
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
W.W.M	WELDED WIRE MESH

DEFERRED SUBMITTALS AND SUBMITTALS:
WOOD ROOF TRUSSES ARE A DEFERRED ITEM
WHEN SUBMITTED BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE, DEFERRED SUBMITTAL DOCUMENTS SHALL BEAR A NOTATION INDICATING THE DOCUMENTS HAVE BEEN REVIEWED BY THE REGISTERED DESIGN PROFESSIONAL AND HAVE BEEN FOUND TO BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING

GEOFFREY CLIFFORD S.E. IS THE THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE FOR REVIEWING SUBMITTALS

OBSERVATIONS BY THE STRUCTURAL ENGINEER

BCA STRUCTURAL ENGINEERING INC, WILL PROVIDE PERIODIC OBSERVATIONS OF THE CONSTRUCTION AND WRITTEN REPORTS TO THE BUILDING DEPARTMENT. THESE VISITS WILL OCCUR BUT ARE NOT LIMITED TO AT THE FOLLOWING ITEMS.

1. REINFORCING FOR SLAB.
2. FOOTING REINFORCING.
3. FINAL FRAMING OBSERVATIONS OR AS REQUESTED.
4. ORIENTATION AND PLACEMENT OF CONNECTED COMPONENTS.

THE STRUCTURAL ENGINEER OF RECORD SHALL A) REPORT ANY OBSERVED DEFICIENCIES TO THE OWNER, CONTRACTOR, AND BUILDING OFFICIAL, AND B) SUBMIT A FINAL REPORT DOCUMENTING SITE VISITS AND OBSERVATIONS, NOTING ANY DEFICIENCIES THAT CORRECTIVE WORK HAS BEEN COMPLETED, AND THAT CONSTRUCTION PROCEEDED IN ACCORDANCE WITH THE APPROVED PLANS, SPECIFICATIONS, AND APPLICABLE CODED AND REGULATIONS.

OTHER ITEMS IN REQUIRING SPECIAL INSPECTIONS
a. SHOP AND FIELD WELDING OF STRUCTURAL STEEL:
i. IDENTIFY ON THE STRUCTURAL PLANS THE INSPECTION POINTS AND FREQUENCIES REQUIRED FOR THE FOLLOWING:
1. VISUAL WELDING INSPECTION
2. NONDESTRUCTIVE TESTING OF WELDS
3. INSPECTION OF BOLTING
4. OTHER INSPECTIONS
b. WOOD FRAMING: PERIODIC INSPECTION OF DIAPHRAGMS, INCLUDING NAILING, BOLTING, ANCHORING AND OTHER FASTENING OF COMPONENTS INCLUDING HOLDOWNS OF THE SEISMIC FORCE RESISTING SYSTEM WHERE CBC 1707.3
f. NON-SHRINK GROUT
g. MASONRY

GENERAL NOTES

A. GENERAL

1. ALL WORK SHALL CONFORM TO CURRENT CALIFORNIA BUILDING CODES, FEDERAL, STATE AND LOCAL CODE REQUIREMENTS, LAWS AND ORDINANCES.

2. THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS AT THE JOB SITE AND SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BETWEEN ACTUAL CONDITIONS AND WHAT IS SHOWN ON THE DRAWINGS BEFORE PROCEEDING WITH THE WORK.

3. ANY OMISSIONS OR CONFLICTS BETWEEN THE ARCHITECTURAL, STRUCTURAL AND MECHANICAL DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT BEFORE ANY RELATED WORK IS STARTED.

4. SHOP DRAWINGS REQUIRED BY THE SPECIFICATIONS SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO FABRICATION, AND ALLOW REASONABLE TIME FOR REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF THE BUILDING DURING THE CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ADEQUATE SHORING. BRACING AND GUYS IN ACCORDANCE WITH ALL NATIONAL, STATE AND LOCAL SAFETY ORDINANCES. ANY DEVIATIONS MUST BE APPROVED PRIOR TO ERECTION.

6. MECHANICAL EQUIPMENT MUST BE FIRMLY ATTACHED TO THE STRUCTURE. ALL MECHANICAL EQUIPMENT INTENDED TO BE SUPPORTED ON, OR FROM THE STRUCTURE, UNLESS INDICATED WITHIN STRUCTURAL DRAWINGS, SHALL BE SUBMITTED TO THE ARCHITECT FOR ENGINEER'S APPROVAL PRIOR TO INSTALLATION.

7. ALL CONDITIONS NOT CLEARLY SHOWN OR DETAILED SHALL BE OF THE SAME TYPE AND CHARACTER AS THOSE SHOWN FOR SIMILAR CONDITIONS.

B. FOUNDATION

1. FOUNDATION DESIGN IS BASED ON A REPORT BY BAGG ENGINEERS PROJECT No COUSM-16-01, ISSUE DATE MAY, 4 2016 ~~DESIGN CRITERIA CONVENTIONAL FOUNDATION SOIL BEARING CAPACITY 2000 PSF CONT. FTG STARTING 18" DOWN.~~

2. SLABS SHALL BE SUPPORTED ON UNIFORM SUBGRADE MATERIAL - MOISTURE CONDITIONED. ~~PROVIDE 4" FREE DRAINING GRAVEL BENEATH SLABS.~~

3. FOUNDATION EXCAVATIONS SHALL BE EXAMINED AND CERTIFIED BY A GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF ANY REINFORCING STEEL OR CONCRETE.

C. CONCRETE

1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS

2. CONCRETE SHALL BE REGULAR WEIGHT HARD ROCK TYPE (150#/CF). AGGREGATE SHALL CONFORM TO ASTM C33, U.N.O..

3. CEMENT SHALL CONFORM TO ASTM C150, TYPE 1 OR 2.

4. PLACEMENT OF CONCRETE SHALL BE IN CONFORMANCE WITH ACI 318.

5. CONCRETE SHALL BE MACHINE MIXED AND DELIVERED IN ACCORDANCE WITH ASTM C-94. SUBMIT MIX DESIGN TO THE ARCHITECT FOR APPROVAL PRIOR TO PLACING CONCRETE.

6. PROVIDE MINIMUM CLEAR COVER OF CONCRETE OVER REINFORCING AS FOLLOWS:
A) AGAINST EARTH FORM - 3 INCHES
B) EXPOSED TO EARTH BUT POURED AGAINST FORM - 2 INCHES

D. REINFORCING STEEL

1. ALL REINFORCING STEEL SHALL CONFORM TO ASTM SPECIFICATION A615 GRADE 60 FOR # 5 AND LARGER BARS AND GRADE 40 FOR # 3 AND # 4.

2. ALL REINFORCING STEEL SHALL BE LAPPED AS NOTED BELOW. SEE 7/S1.2 UNLESS OTHERWISE NOTED IN PLANS. SPLICES SHALL BE LOCATED AS DETAILED IN THE PLANS. STAGGER ALL LAPS AND SPLICES.

3. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A82 AND A185.

4. ANCHOR BOLTS, DOWELS AND OTHER EMBEDDED ITEMS SHALL BE SECURELY TIED IN PLACE BEFORE CONCRETE IS PLACED, USE CUT THREAD ANCHOR BOLTS ONLY.

E. STRUCTURAL AND MISCELLANEOUS STEEL

1. FABRICATION AND ERECTION TO BE IN ACCORDANCE WITH LATEST AISC SPECIFICATIONS INCLUDING SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS.

2 STRUCTURAL STEEL MEMBERS:

ASTM A992, GRADE 50 FOR ROLLED SHAPES AND ASTM A36 PLATES
ASTM A500, GRADE B. FOR TUBE STEEL (TS & HSS)
ASTM A53, GRADE B FOR STRUCTURAL PIPES
ANCHOR BOLTS ASTM A307, U.O.N ON DRAWINGS.
BOLTS ASTM A325N, U.O.N ON DRAWINGS.
WELDING ELECTRODES E-70XX

ALL STEEL EXPOSED TO WEATHER SHALL BE GALVANIZED.

3. WELDING TO BE IN ACCORDANCE WITH THE MOST CURRENT AWS SPECIFICATIONS. WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS USING E-70XX ELECTRODES.
THE INSPECTION OF WELDING SHALL BE PERFORMED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 6 OF THE AWS STRUCTURAL WELDING CODE - STEEL, D1.1. NON DESTRUCTIVE TESTING SHALL BE BY (UT) ULTRASONIC OR (MT) MAGNETIC PARTICAL TESTING.

4. ALL PLATES, ETC., TO BE BOLTED TO CONCRETE ELEMENTS SHALL NOT BE FABRICATED UNTIL THE BOLTS HAVE BEEN LOCATED IN THE FIELD.

5. ALL HIGH STRENGTH BOLTS SHALL BE ASTM A325N TYP. THREADS MAY BE INCLUDED IN THE SHEAR PLANES. SPECIAL INSPECTIONS ARE REQUIRED FOR ALL HIGH STRENGTH BOLTS. ANCHOR BOLTS AT MOMENT FRAMES SHALL BE MADE FROM F1554 GRADE 105 STEEL

6. STEEL TO BE SHOP PRIMED, EXCEPT WHERE EMBEDDED IN CONCRETE OR AREAS TO BE WELDED.

7. FABRICATOR SHALL IDENTIFY MATERIALS PROCEDURES ETC PER AISC PROVISION M5.1

8. WELDED STEEL STUDS SHALL CONFIRM WITH ICC 2614 OR APPROVED EQUAL

ROOF MATERIAL WEIGHT SHALL NOT EXCEED 5 PSF INSTALLED

F. WOOD FRAME CONSTRUCTION

1. GENERAL WOOD FRAMING: WOOD FRAMING THROUGHOUT THE BUILDING SHALL BE CONSTRUCTED IN ACCORDANCE WITH CALIFORNIA BUILDING CODE (2013) AND THE STANDARD PRACTICES RECOMMENDED BY AMERICAN INSTITUTE OF TIMBER CONSTRUCTION AND WCLA GRADING. FOR NAILING SEE 2304.9.1. BOLTS IN WOOD FRAMING SHALL BE STANDARD MACHINE BOLTS WITH SQUARE 2x2x3/16 WASHERS.
EXCEPT SILL PLATES SHALL HAVE PLATE 1/4x3x3 WASHER.

2. JOIST HANGER AND MISCELLANEOUS CONNECTORS:
MEMBERS NOT RESTING ON, OR FRAMED OVER THEIR SUPPORT SHALL BE SUPPORTED BY MEANS OF "SIMPSON STRONG-TIE" JOIST HANGERS. HANGERS SHALL COMPLY WITH AND BE NAILED IN ACCORDANCE WITH MANUFACTURER'S ICC APPROVALS.

3. WOOD PLATES: BEARING DIRECTLY UPON CONCRETE SHALL BE PRESSURE TREATED D.F.

4. UNLESS OTHERWISE NOTES ON DRAWINGS OR IN SPECIFICATIONS FRAMING MEMBERS SHALL HAVE THE FOLLOWING GRADING:
A) ALL BEAMS, COLUMNS, POSTS AND CANTILEVER JOISTS AT BALCONIES: DOUGLAS FIR, GRADE MARK - NO. 1.
B) FRAMING: JOISTS, STUDS, PLATES, RAFTERS: DOUGLAS FIR, GRADE MARK - NO. 2.

5. PLYWOOD SHEATHING: SHALL BE DFPA CDX OR OSB OR EQUAL UNLESS OTHERWISE NOTED ON DRAWINGS; SOFTWOOD PLYWOOD USED STRUCTURALLY SHALL CONFORM TO PRODUCT STANDARDS. PS 1-95 AND SHALL BEAR THE DFPA GRADE - TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION. ROOF SHEATHING SHALL BE 5/8 INCHES THICK (32/16). 5 PLY. FLOOR SHEATHING SHALL BE 3/4 INCHES THICK (48/24), TONGUE AND GROOVED AND SHALL BE GLUED AND NAILED. WALL SHEATHING SHALL BE A MIN. OF 1/2 INCHES THICK, U.N.O.

6. FRAMING CONTRACTOR SHALL PROTECT HIS WORK FROM ANY DAMAGES DUE TO WEATHER CONDITIONS AT TIME OF CONSTRUCTION.

G. MISCELLANEOUS MATERIALS

1. PSL BEAMS BY TRUS JOIST Fb = 2900 PSI FV = 290 PSI E= 2,000 KSI OR EQUAL PRODUCT: BOISE CASCADE - VERSA LAM 3100, ANTHONY - POWER BEAM, GEORGIA PACIFIC GP LAM 2.0, LOUISIANA PACIFIC GANGLAM 2.0 ES 2950 OR 3100, ROSBORO - ROBORO BIGBEAM. LVL BY TRUS JOIST Fb = 2600 PSI FV = 285 PSI E= 1,900 KSI
2. GLULAM BEAMS 24F V-4 AT SIMPLY SPANS OR 24F-V8 AT CONTINUOUS SPANS TENSION LAMS AT TOP & BOTTOM. BEAM SHALL BE STAMPED WITH APPROVAL STAMP. PROVIDE ONE (1) FACTORY COAT OF MOISTURE SEALER, AND ALL ENDS AFTER CUTTING, COATED WITH END SEALER.
3. WOOD TRUSSES DOUGLAS FUR LARCH GRADE AS REQUIRED BY TRUSS DESIGN.
4. LAG SCREWS PER ANSI B18.2.1
5. NON SHRINK GROUT SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI

H. NAIL SCHEDULE

1. WOOD MEMBERS SHALL BE CONNECTED WITH NAILING INDICATED IN NDS-SDPSW TABLE 4.3A (WALL), TABLE 4.2A (ROOF) & CBC 2304.9.1 FASTENING SCHEDULE UNLESS GREATER SIZES AND NUMBER OF NAILS ARE SHOWN OR NOTED ON DRAWINGS; NAILS EXPOSED TO WEATHER SHALL BE GALVANIZED; NAILS SHALL BE COMMON WIRE NAILS; HOLES FOR NAILS SHALL BE PROVIDED WHERE THE WOOD MEMBERS TEND TO SPLIT; WOOD MEMBERS SHALL BE REPLACED AND REMOVED FROM JOB PROMPTLY. SHORT PLYWOOD NAILS FOR EQUIVALENT SHEAR VALUE MAY BE USED. SEE PLANS FOR NAIL SPACING. ROOF SHEATHING 8d AT 6 INCHES O.C. AT SUPPORTED EDGES. 8d AT 12 INCHES O.C. INTERMEDIATE SUPPORTS. FLOOR SHEATHING 8d AT 6 INCHES O.C. AT BOUNDARIES AND PANEL EDGES AND 8d AT 10 INCHES O.C. AT INTERMEDIATE SUPPORTS. PLYWOOD WALL SHEATHING SHALL BE NAILED PER SHEAR WALL SCHEDULE AT SHEAR WALLS, AND AT A MINIMUM OF 8d AT 6 INCHES O.C. ALL OTHER EDGES.

2. AT PRESSURE TREATED LUMBER USE HOT-DIPPED GALVANIZED, STAINLESS STEEL, SILICON BRONZE, OR COPPER. CBC 2304.9.5

K. MASONRY

1. MASONRY UNITS SHALL BE LIGHTWEIGHT OPEN END UNITS CONFORMING TO ASTM C90, GRADE N-11 ALSO CONFORMING TO ASTM C-90. WITH A MINIMUM COMPRESSIVE STRENGTH OF 1900 PSI. FOR fm OF 1500 PSI PER CBC 2013 TABLE 2105.2.2.1.2

2. GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI AT 28 DAYS. GROUT SHALL FLOW WITHOUT SEGREGATION AND SHALL CONFORM TO CBC SECTION 2103.13 & CBC SECTION 2105.2.2.1.2(3)

3. MORTAR SHALL BE TYPE "S" AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 1900 PSI AT 28 DAYS AND SHALL CONFORM TO ASTM C270 AND SHALL ALSO CONFORM TO CBC SECTION 2103.9 & CBC TABLE 2105.2.2.1.2

4. ALL CELLS SHALL BE SOLIDLY FILLED WITH GROUT PER CBC 2013 TABLE 2105.2.2.1.2 CONSOLIDATE ALL GROUTING OPERATIONS BY USE OF A VIBRATOR.

G. STEEL STUDS

1. STEEL STUDS & JOISTS SHALL BE C-STUDS WITH A MINIMUM YIELD OF 33,000 PSI FOR 18 AND 20 GAGE, AND 50,000 FOR 14 AND 16 GAGE. STUDS SHALL BE OF THE SIZE, GAGE AND SPACING SHOWN ON THE DRAWINGS IN CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS ADEQUATE FOR DEVELOPMENT OF FULL MOMENT CAPACITY OF THE STUDS. FOR LOAD STUDS, TRACK SHALL BE OVERSIZE TO PROVIDE FULL STUDS BEARING. SCREWS SHALL BE ELCO DRIL-FLEX, ICC 3294, OR APPROVED EQUAL.
PROVIDE G-90 GALVANIZING ON ALL METAL STUDS AND TRACKS

ICC NUMBERS FOR STUDS SHALL BE ER 4943 OR ES 4782 OR APPROVED EQUAL

AT BATHROOM, KITCHEN AND SHOWER AREAS USE STAINLESS STEEL STUDS AND TRACKS

HAT CHANNELS AT CONCRETE WALL FURRING SHALL BE BE 150F125-30 AT 16" O.C. ATTACHED WITH HILTI (OR EQUAL) POWDER DRIVEN FASTENERS 0.145x 1" LONG AT 16" O.C. STAGGERED.
AT CONCRETE WALL STEEL REINFORCING PLATES COPE BOTTOM OF HAT CHANNEL AND TACK WELD AS REQUIRED.

DESIGN INFORMATION

ROOF LOAD
DL = 15 PSF
LL = 20 PSF

FLOOR LOAD
DL = SLAB ON GRADE
LL = 40 PSF

CODE: 2013 CBC ASCE 7-10

SEISMIC DESIGN CATAGORY = E
I = 1.00 LESS THAN 300 OCCUPANTS
R = 4
Fa = 1 Fv = 1.5
Ss = 1.615 S1 = 0.742
Sms = 1.615 Sds = 1.077 Sd1 = 0.742
SITE CLASS = D OR E
$V = \frac{SDS \times W}{R/I} F = 0.269W$
V = 0.192 W WORKING STRESS

ANALYSIS PROCEDURE
EQUIVALENT LATERAL FORCE PROCEDURE

SEISMIC FORCE RESISTING SYSTEM
CONCRETE SHEAR WALLS

WIND LOAD = 110 MPH, EXP C, λ=1.00

CJW ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) (650) 851-9337

© ALL DRAWINGS AND WRITTEN MATERIAL HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT, AND THE SAME MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT.

BC|A
STRUCTURAL ENGINEERING, INC.
1300 Industrial Road Unit 1
San Carlos, California 94070
[T] 650.508.2500
[F] 650.508.2505
www.BCAeng.net

REGISTERED PROFESSIONAL ENGINEER
GEOFFREY S. CLIFFORD
S3662
Exp : 3/31/2017
STRUCTURAL
STATE OF CALIFORNIA

BCA J No. 15445 6/17/2016

• PROJECT •

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City, CA 94063

• TITLE •

STANDARD DETAILS

SCALE : NOTED

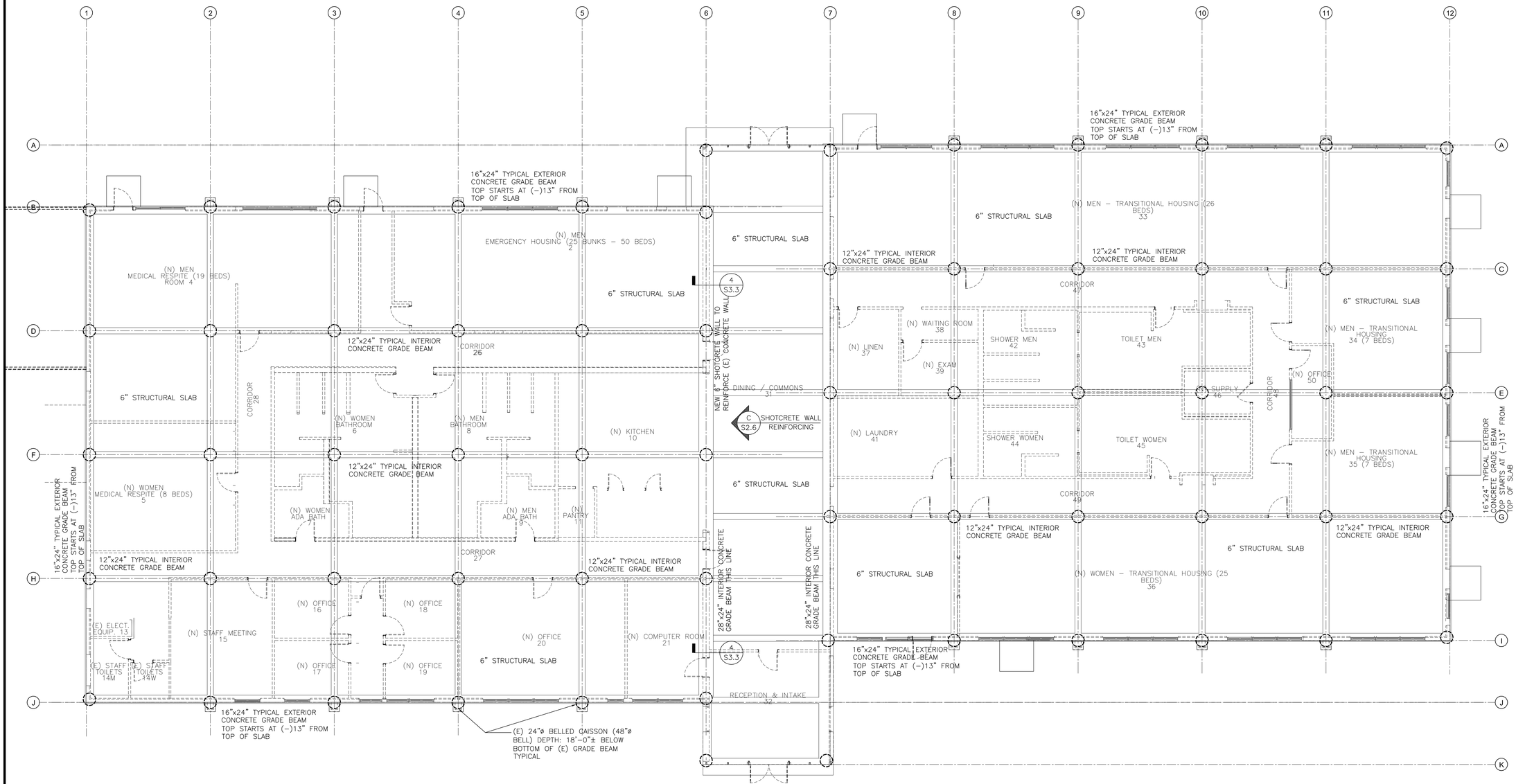
• REVISIONS •

No.	Date	Notes
	6-17-16	BUILDING SUBMITTAL 1

• JOB: 2015.2801

• DATE: 12/8/2015

• DWG #: S1



REFER TO DRAWINGS S2.6, S2.7 & A2.7 FOR CONCRETE PANEL MODIFICATION FOR NEW WINDOWS AND DOORS

12 S3.1 REFER TO ARCHITECTURAL DRAWINGS SHEET A–2.8 FOR LOCATION OF CONCRETE CURBS ON SLABS

A EXISTING FOUNDATION PLAN

SCALE: 1/8" = 1'–0"

CJW ARCHITECTURE

130 Portola Road, suite A
Portola Valley, CA 94028

(650) 851-9335 / (Fax) (650) 851-9337

© ALL DRAWINGS AND WRITTEN MATERIAL HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT, AND THE SAME MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT.

BC|A
STRUCTURAL ENGINEERING, INC.

1300 Industrial Road Unit 1
San Carlos, California 94070
[T] 650.508.2500
[F] 650.508.2505
www.BCAeng.net

REGISTERED PROFESSIONAL ENGINEER – GEOFFREY S. CLIFFORD – S3662 Exp : 3/31/2017 – STRUCTURAL – STATE OF CALIFORNIA

BCA J No. 15445 6/17/2016

• PROJECT •

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City, CA 94063

• TITLE •

EXISTING FOUNDATION PLAN

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

• REVISIONS •

No.	Date	Notes
	6–17–16	BUILDING SUBMITTAL 1

• JOB: 2015.2801

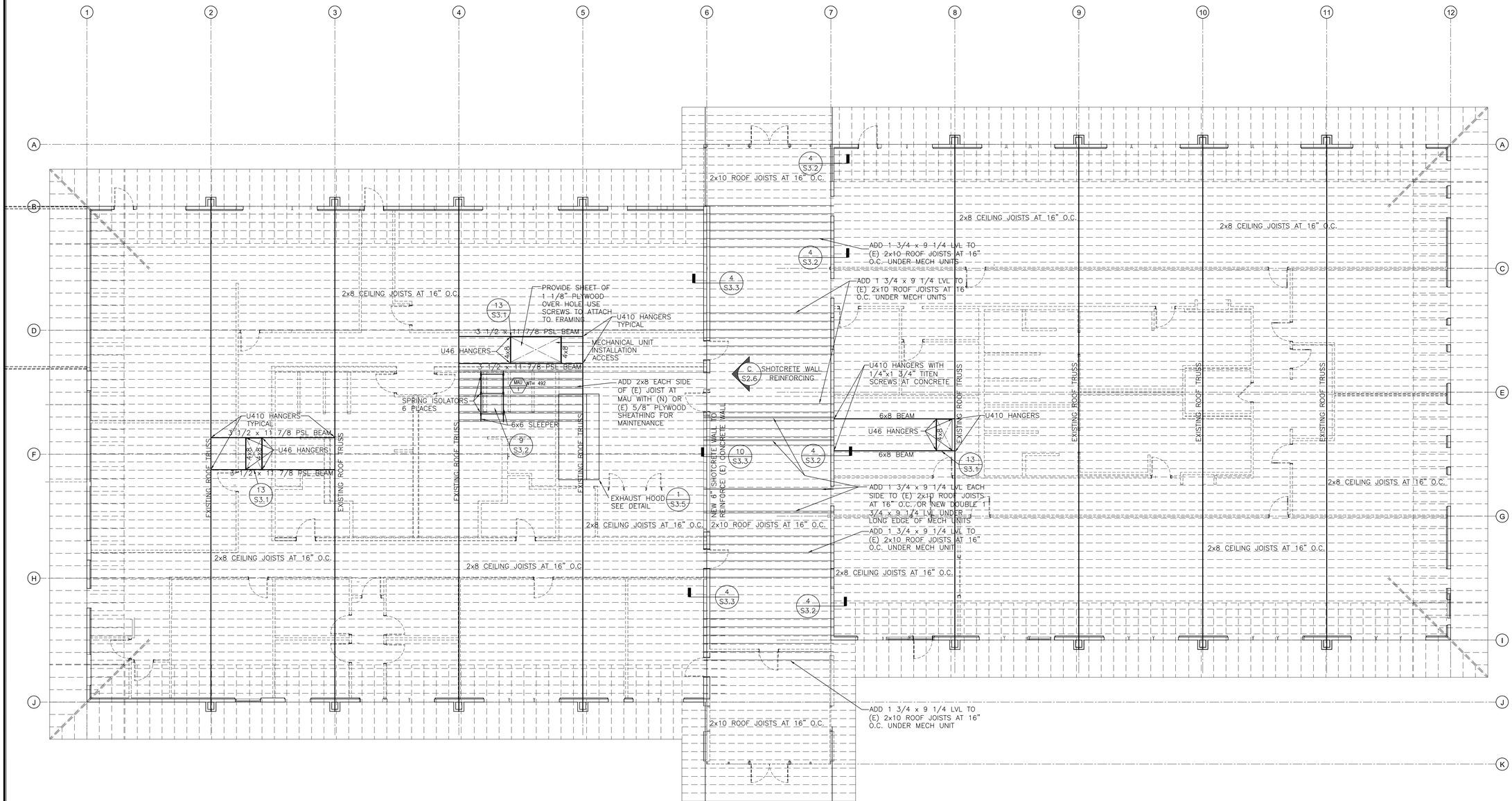
• DATE: 12/8/2015

• DWG #: S2.1

INT WALL STUDS: 362S162-43 (33 KSI)
& 550S162-43 (50 KSI) @ 16" O.C. U.N.O. SEE ARCHITECTURAL DRAWINGS FOR SIZES AND LOCATIONS
TRACKS 362T150-43 & 550T150-43
PROVIDE STAINLESS STEEL STUDS AND TRACKS AT KITCHEN AND BATHROOM AND SHOWER AREAS
SEE ARCHIT DRAWINGS FOR ADDITIONAL INFORMATION
SEE DRAWING S3.1 FOR TYPICAL STUD DETAILS

CEILING FRAMING NOTES

CEILING JOISTS USE:
600S162-33 AT 16" O.C. FOR SPANS UP TO 15'-0" (15 / S3.1)
600S162-43 AT 16" O.C. FOR SPANS UP TO 18'-0" (16 / S3.1)
800S162-43 AT 16" O.C. FOR SPANS UP TO 24'-0"



A CEILING FRAMING PLAN
SCALE: 1/8" = 1'-0"

REFER TO DRAWINGS S2.6, S2.7 & A2.7 FOR CONCRETE PANEL MODIFICATION FOR NEW WINDOWS AND DOORS

REFER TO DRAWINGS SHEET S2.4 FOR SEISMIC RETROFIT PLAN

REFER TO DRAWINGS S3.2 & S3.5 FOR MECHANICAL UNIT & EXHAUST HOOD MOUNTING DETAILS

CJW ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) (650) 851-9337

© ALL DRAWINGS AND WRITTEN MATERIAL HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT, AND THE SAME MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT.

BC|A
STRUCTURAL ENGINEERING, INC.
1300 Industrial Road Unit 1
San Carlos, California 94070
[T] 650.508.2500
[F] 650.508.2505
www.BCAeng.net

REGISTERED PROFESSIONAL ENGINEER
GEOFFREY S. CLIFFORD
S3662
Exp : 3/31/2017
STRUCTURAL
STATE OF CALIFORNIA

BCA
No. 15445
6/17/2016

• PROJECT •

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City, CA 94063

• TITLE •

CEILING FRAMING PLAN

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

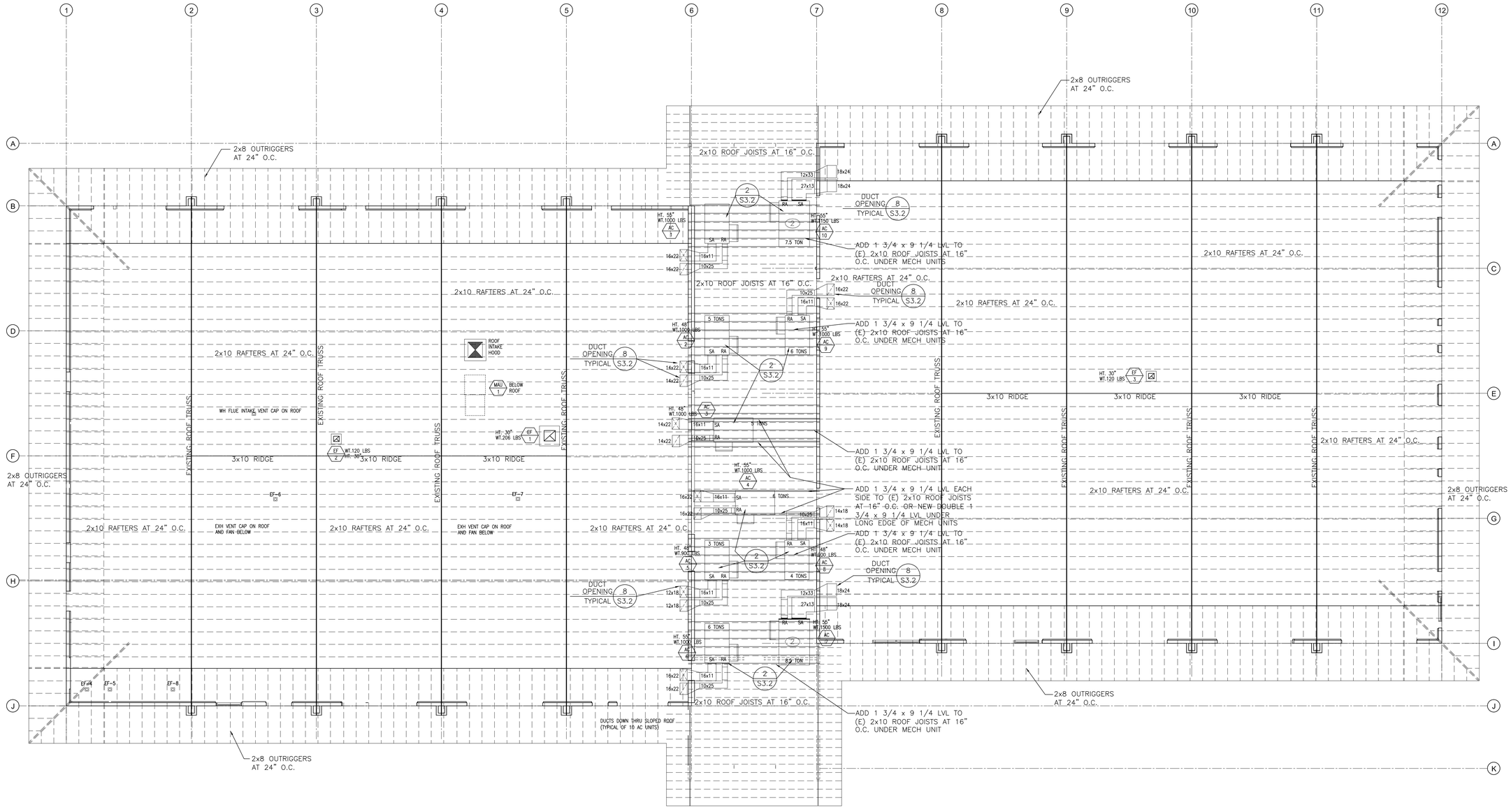
• REVISIONS •

No.	Date	Notes
	6-17-16	BUILDING SUBMITTAL 1

• JOB: 2015.2801

• DATE: 12/8/2015

• DWG #: S2.2



REFER TO DRAWINGS S3.2 FOR MECHANICAL UNIT MOUNTING DETAILS AND DUCT OPENING DETAIL

REFER TO DRAWINGS SHEET S2.4 FOR SEISMIC RETROFIT PLAN

A ROOF FRAMING PLAN

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

CJW ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) (650) 851-9337

© ALL DRAWINGS AND WRITTEN MATERIAL HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT, AND THE SAME MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT.

BC|A
STRUCTURAL ENGINEERING, INC.
1300 Industrial Road Unit 1
San Carlos, California 94070
[T] 650.508.2500
[F] 650.508.2505
www.BCAeng.net

REGISTERED PROFESSIONAL ENGINEER
GEOFFREY S. CLIFFORD
S3662
Exp : 3/31/2017
STRUCTURAL
STATE OF CALIFORNIA

BCA J No. 15445

6/17/2016

• PROJECT •

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City, CA 94063

• TITLE •

ROOF FRAMING PLAN

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

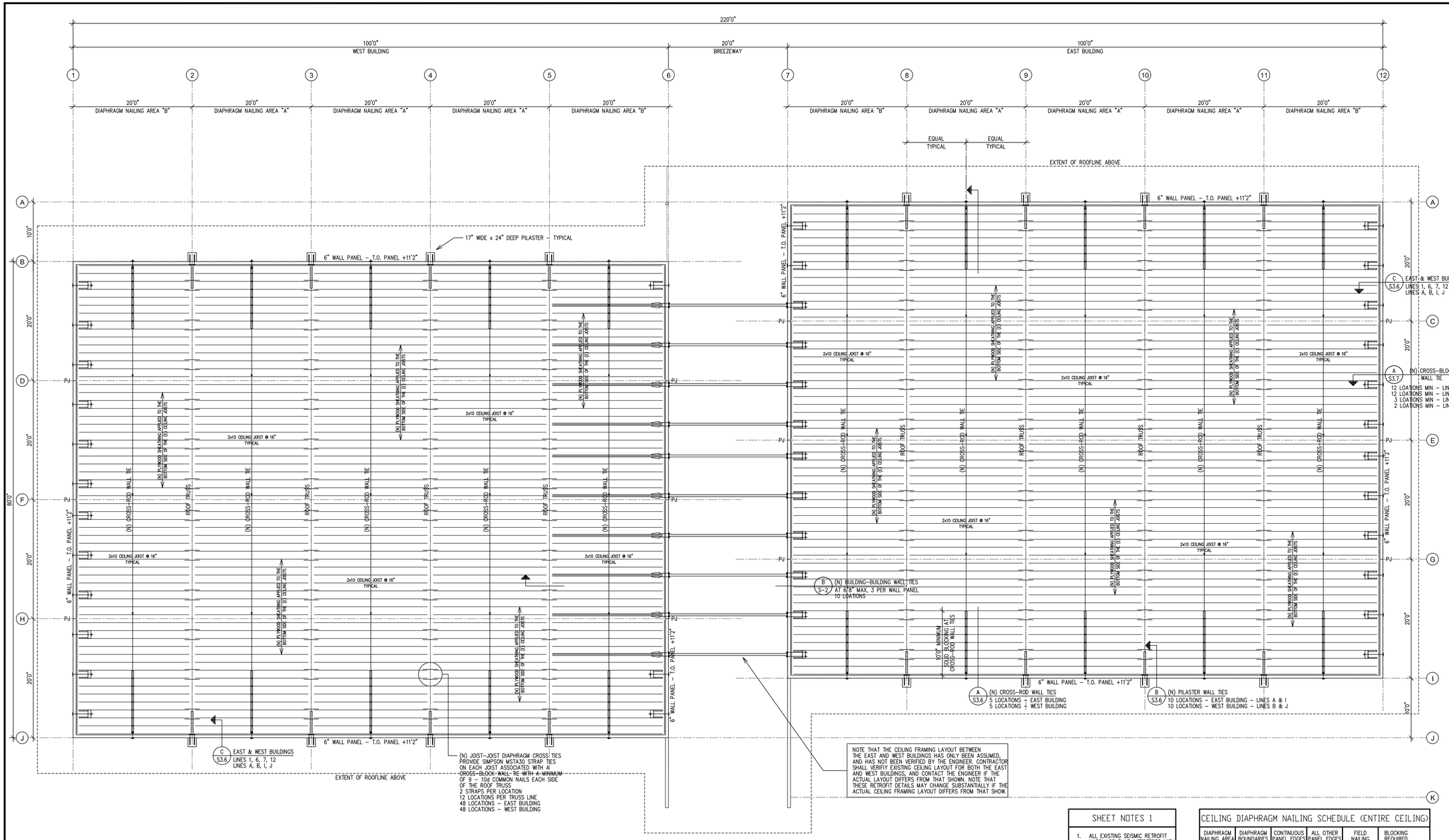
• REVISIONS •

No.	Date	Notes
	6-17-16	BUILDING SUBMITTAL 1

• JOB: 2015.2801

• DATE: 12/8/2015

• DWG #: S2.3



SEISMIC DESIGN LOADING

ELEMENTS OF STRUCTURES - WALL ANCHORAGE SYSTEMS

CRITERIA: 2013 CALIFORNIA BUILDING CODE (ASCE 7-10)

LOCATION: LATITUDE = 37.49, LONGITUDE = 122.22.

SOILS: SITE CLASS D.

Fpusd	=	0.4 Sds ka Ie Wp	ULTIMATE STRENGTH DESIGN, Eqn 12.11-1
	=	0.2 ka Ie Wp	MINIMUM (PER LINER FOOT OF WALL)
Sds	=	1.077	DESIGN EARTHQUAKE SPECTRAL RESPONSE ACCELERATION AT SHORT PERIOD, PER SECTION 11.4.4 & USGS WEBSITE.
ka	=	1.0 + Lf/100	DIAPHRAGM FLEXIBILITY AMPLIFICATION FACTOR
	=	2.00	DEFAULT VALUE, UNLESS DETERMINED OTHERWISE
Lf	=	DIAPHRAGM SPAN BETWEEN LATERAL LOAD RESISTING ELEMENTS	
Ip	=	1.00	IMPORTANCE FACTOR (TABLE 11.5-1).
Wp	=	WALL WEIGHT TRIBUTARY TO THE WALL ANCHOR.	
Fpusd	=	0.862 x Wp	ULTIMATE STRENGTH DESIGN, Eqn 12.11-1
	=	0.400 x Wp	MINIMUM
Fpasd	=	0.615 x Wp	ALLOWABLE STRESS DESIGN (= Fpusd /1.4)
	=	0.286 x Wp	MINIMUM
ASI	=	1.00	ALLOWABLE STRESS INCREASE, MAXIMUM.
LDF	=	1.60	LOAD DURATION FACTOR, WOOD ELEMENTS.
LF	=	1.40	LOAD FACTOR, STEEL ELEMENTS, SECTION 12.11.2.2.2.

NEW CEILING DIAPHRAGM AT UNDER SIDE OF CEILING JOISTS

COVERS THE ENTIRE CEILING FROM GRID LINES (1) TO (6) THROUGH (B) TO (J) AND GRID LINES (7) TO (12) THROUGH (A) TO (I)

REFERENCES

SHEETS 1 TO 12, ALL DATED APRIL 5, 1966 (EXCEPT SHEET 1, WHICH IS DATED JULY 16, 1966), PREPARED BY THE COUNTY OF SAN MATEO'S ARCHITECTURAL AND ENGINEERING DIVISION, FOR THE COUNTY OF SAN MATAEO WORK FOURLOUGH FACILITY.

ROOF FRAMING PLAN

SCALE 1/8" = 1'- 0"

SHEET NOTES 1

1. ALL EXISTING SEISMIC RETROFIT HARDWARE THAT INTERFERES WITH THE INSTALLATION OF NEW SEISMIC RETROFIT HARDWARE SHALL BE REMOVED
2. QUANTITIES SHOWN ARE FOR INFORMATION PURPOSES ONLY AND SHALL NOT BE RELIED UPON FOR BIDDING PURPOSES
3. ALL ITEMS SHOWN ARE EXISTING (E), UNLESS NOTED NEW (N), OR OTHERWISE
4. ALL EXISTING INFORMATION SHOWN HAS BEEN DERIVED FROM A LIMITED VISUAL WALK-THROUGH SURVEY OF THE BUILDING, AND THE REFERENCES NOTED.

CEILING DIAPHRAGM NAILING SCHEDULE (ENTIRE CEILING)

DIAPHRAGM NAILING AREA	DIAPHRAGM BOUNDARIES	CONTINUOUS PANEL EDGES	ALL OTHER PANEL EDGES	FIELD NAILING	BLOCKING REQUIRED
A	8d @ 4"	8d @ 6"	8d @ 6"	8d @ 10"	YES
B	8d @ 4"	8d @ 4"	8d @ 6"	8d @ 10"	YES
C	8d @ 2"	8d @ 2"	8d @ 4"	8d @ 10"	YES
D	8d @ 2"	8d @ 2"	8d @ 3"	8d @ 10"	YES

1. ALL NAILS SHALL BE STANDARD LENGTH "COMMON" WIRE NAILS.
2. ALL BLOCKING TO BE EITHER 3x4 OR 4x4 BLOCKING.
3. FRAMING WIDTH SHALL BE 3x OR GREATER WHERE NAILING AT PLYWOOD PANEL EDGES IS 3" OR LESS.
4. PLYWOOD SHEATHING SHALL BE 1/2" THICK - 5 PLY - CDX PLYWOOD.
5. PLYWOOD SHEETS SHALL BE STAGGERED, AND ORIENTATED WITH THE LONG DIRECTION PERPENDICULAR TO THE RUN OF THE CEILING JOISTS.

STATEMENT OF PURPOSE

THE PURPOSE OF THE SEISMIC RETROFIT MODIFICATIONS ASSOCIATED WITH THIS SHEET AND ASSOCIATED SET OF PLANS IS ONLY TO INCREASE THE CAPACITY OF VARIOUS LATERAL LOAD RESISTING ELEMENTS OF THE NOTED BUILDING. ALL NEW STRUCTURAL ELEMENTS ARE TO BE DESIGNED PER THE STANDARDS SET FORTH IN THE 2013 EDITION OF THE CALIFORNIA BUILDING CODE. THESE MODIFICATIONS ALONE WILL NOT NECESSARILY BRING THE OVERALL BUILDING INTO COMPLIANCE WITH THE SEISMIC STANDARDS SET FORTH IN THIS BUILDING CODE, AND WILL NOT NECESSARILY PREVENT DAMAGE FROM OCCURRING IN THIS BUILDING DURING AN EARTHQUAKE. THESE MODIFICATIONS ARE NOT NECESSARILY TO BE CONSIDERED A COMPLETE SEISMIC RETROFIT OF THE BUILDING.

CJW ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) (650) 851-9337

© ALL DRAWINGS AND WRITTEN MATERIAL HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT, AND THE SAME MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT.

BC|A
STRUCTURAL ENGINEERING, INC.
1300 Industrial Road Unit 1
San Carlos, California 94070
[T] 650.508.2500
[F] 650.508.2505
www.BCAeng.net

REGISTERED PROFESSIONAL ENGINEER GEOFFREY S. CLIFFORD S3662 Exp : 3/31/2017 STRUCTURAL STATE OF CALIFORNIA

BCA J No. 15445 6/17/2016

• PROJECT •

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City, CA 94063

• TITLE •

ROOF FRAMING PLAN

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

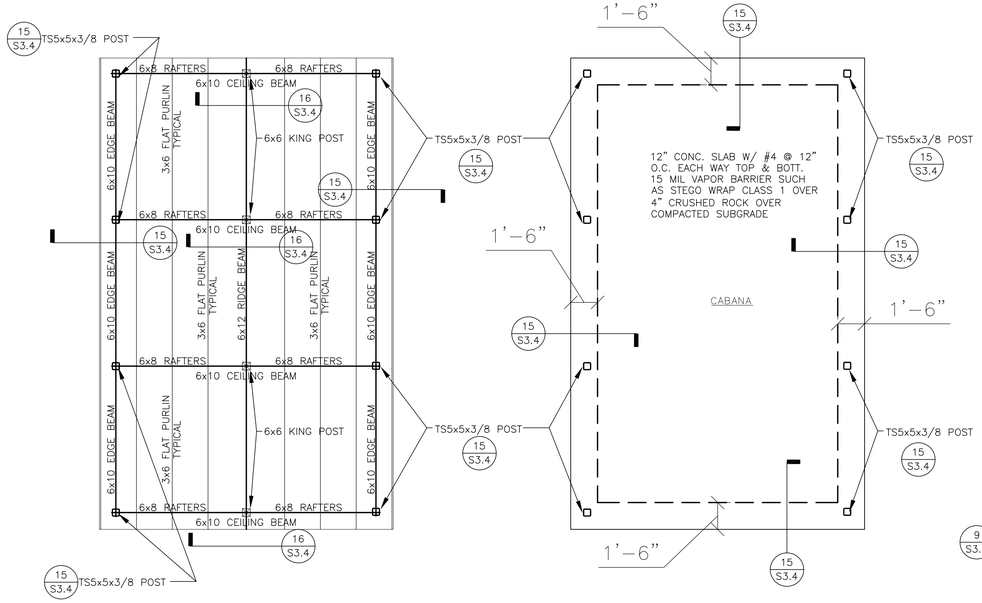
• REVISIONS •

No.	Date	Notes
	6-17-16	BUILDING SUBMITTAL 1

• JOB: 2015.2801

• DATE: 12/8/2015

• DWG #: S2.4

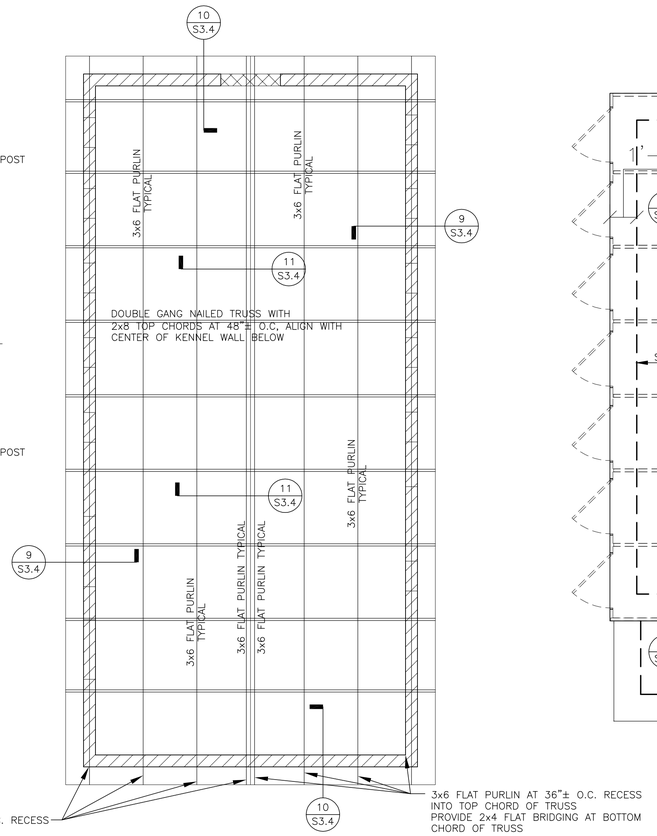


F CABANA ROOF FRAMING PLAN

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

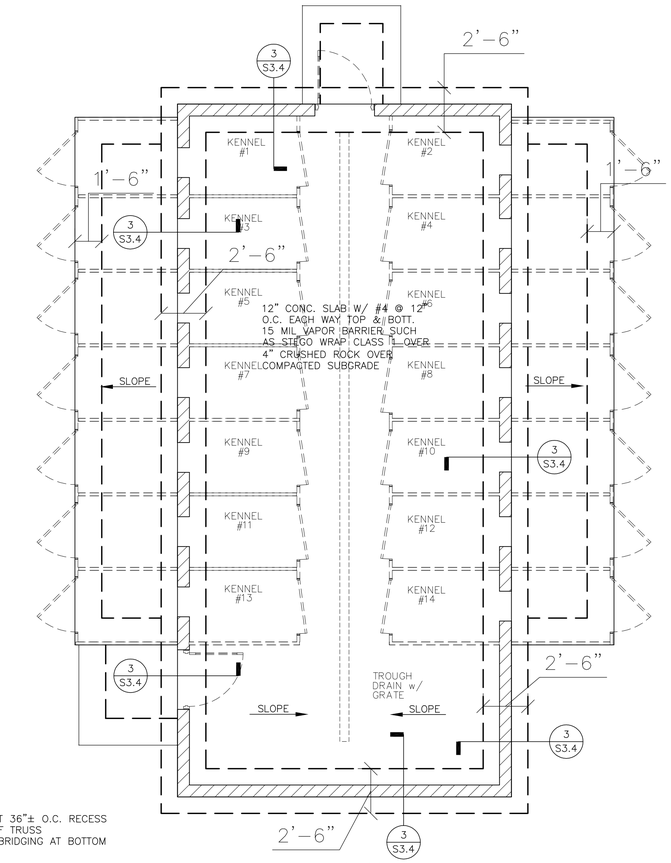
G CABANA FOUNDATION PLAN

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



A KENNEL ROOF FRAMING PLAN

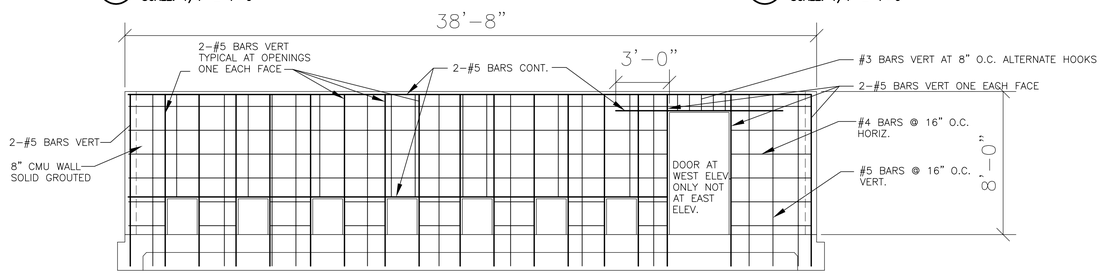
SCALE: 1/4" = 1'-0"



B KENNEL FOUNDATION PLAN

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

FOUNDATION: DEEP FOUNDATION BELOW MAT SLABS IF ANY TO BE DETERMINED ONCE GEOTECHNICAL REPORT IS AVAILABLE



C CMU REINFORCING EAST AND WEST ELEVATION

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

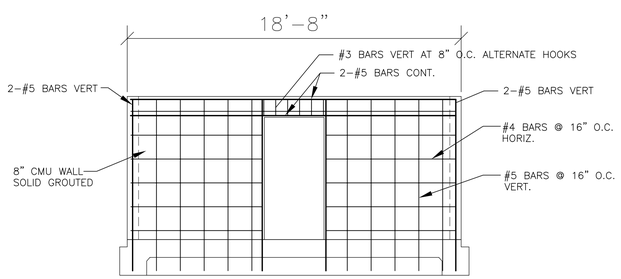
KENNEL ROOF FRAMING: ENGINEERED TRUSSES @ 48"±o.c. MAX.

ROOF FRAMING NOTES

1. ROOF SHEATHING: 20 GAGE CORRUGATED METAL ROOFING NAILING: ALL MEMBERS = #8 SCREWS @ 6" O.C.
2. TRUSSES SHALL BE SPACED @ 48" O.C. TRUSS CALCULATIONS, FRAMING PLANS, AND SHOP DRAWINGS SHALL BE PREPARED BY THE MANUFACTURER AND SUBMITSED TO THE ENGINEER AND THE BUILDING DEPARTMENT FOR REVIEW BEFORE FABRICATION.

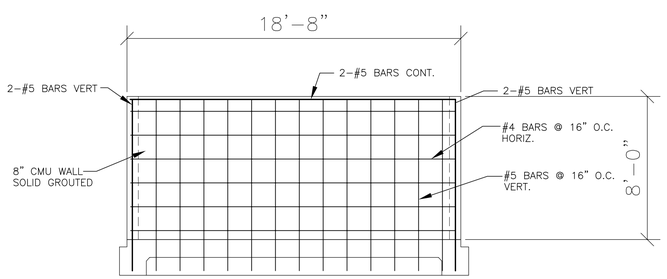
PREMANUFACTURED TRUSS LOADS	
TOP CHORD	
DL	10 PSF
LL	20 PSF
BOTTOM CHORD	
DL	5 PSF
*LL	10 PSF
LATERAL LOAD AT TIE TRUSSES	
SL	4000 LBS

* NOT CONCURRENT W/ TOP CHORD LIVE LOAD



D CMU REINFORCING NORTH ELEVATION

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



E CMU REINFORCING SOUTH ELEVATION

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

CJW ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) (650) 851-9337

© ALL DRAWINGS AND WRITTEN MATERIAL HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT, AND THE SAME MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT.

BC|A
STRUCTURAL ENGINEERING, INC.
1300 Industrial Road Unit 1
San Carlos, California 94070
[T] 650.508.2500
[F] 650.508.2505
www.BCAeng.net

REGISTERED PROFESSIONAL ENGINEER
GEOFFREY S. CLIFFORD
S3662
Exp : 3/31/2017
STRUCTURAL
STATE OF CALIFORNIA

BCA J No. 15445

6/17/2016

• PROJECT •

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City, CA 94063

• TITLE •

CABANA & KENNEL FRAMING PLANS & WALL REINF ELEV'S

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

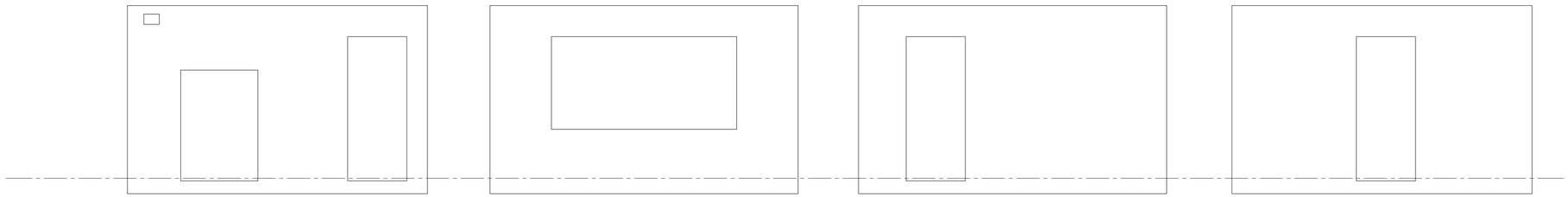
• REVISIONS •

No.	Date	Notes
	6-17-16	BUILDING SUBMITTAL 1

• JOB: 2015.2801

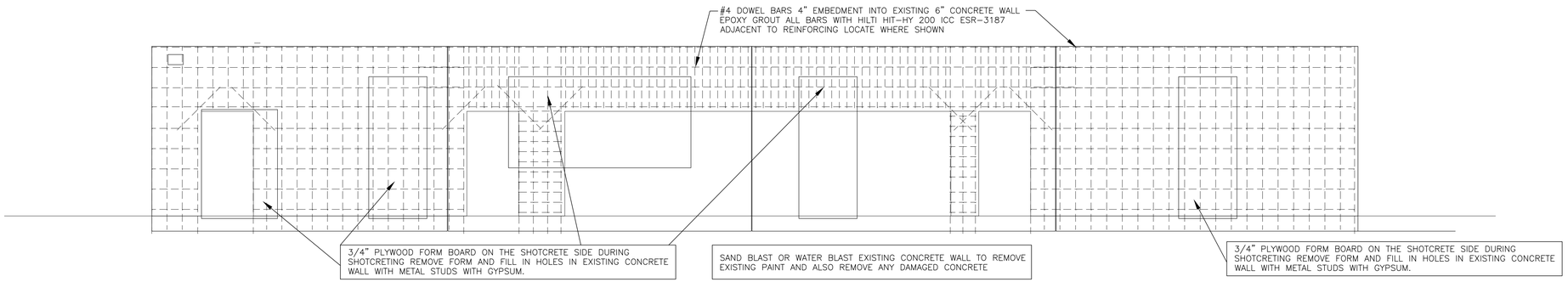
• DATE: 12/8/2015

• DWG #: S2.5

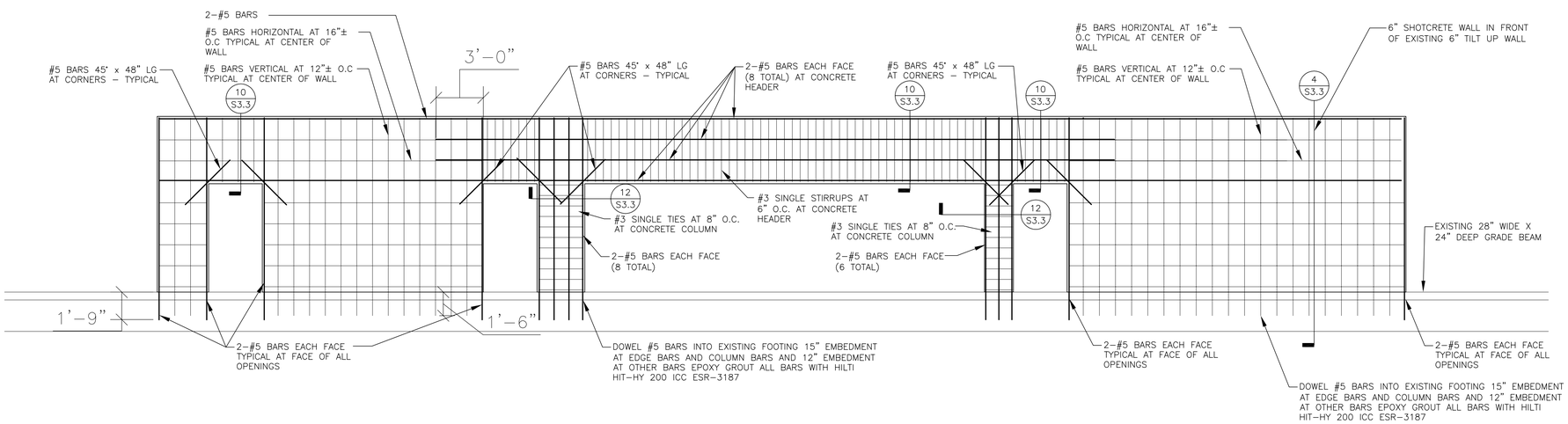


ORIGINAL DESIGN PANEL L | ORIGINAL DESIGN PANEL M | ORIGINAL DESIGN PANEL J3 | ORIGINAL DESIGN PANEL N1

(A) ORIGINAL CONCRETE PANEL ELEVATION
SCALE: 1/4" = 1'-0"



(B) DOWELING ELEVATION AT EXISTING CONCRETE WALL
SCALE: 1/4" = 1'-0"



(C) REINFORCING ELEVATION AT NEW SHOTCRETE WALL
SCALE: 1/4" = 1'-0"

CJW ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) (650) 851-9337

© ALL DRAWINGS AND WRITTEN MATERIAL HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT, AND THE SAME MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT.

BC|A
STRUCTURAL ENGINEERING, INC.
1300 Industrial Road Unit 1
San Carlos, California 94070
[T] 650.508.2500
[F] 650.508.2505
www.BCAeng.net

REGISTERED PROFESSIONAL ENGINEER
GEOFFREY S. CLIFFORD
S3662
Exp : 3/31/2017
STRUCTURAL
STATE OF CALIFORNIA

BCA No. 15445

6/17/2016

• PROJECT •

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City, CA 94063

• TITLE •

WALL ELEVATIONS AT GRID LINE 6

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

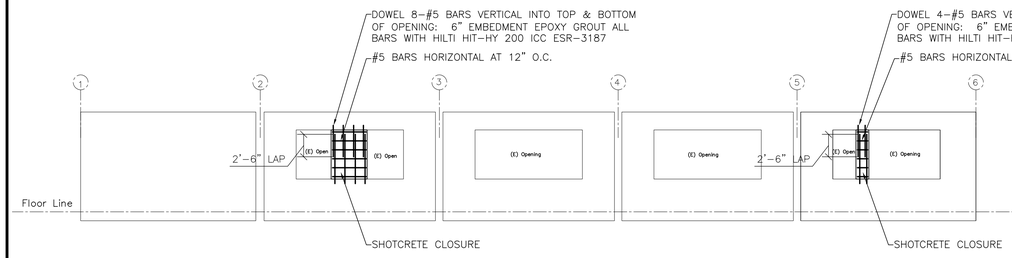
• REVISIONS •

No.	Date	Notes
	6-17-16	BUILDING SUBMITTAL 1

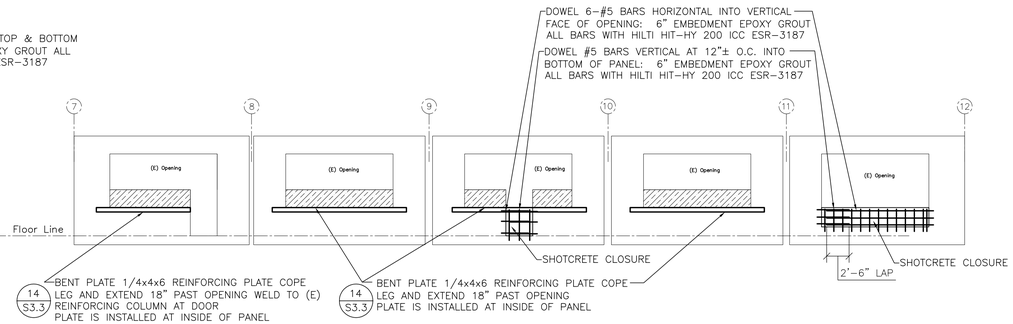
• JOB: 2015.2801

• DATE: 12/8/2015

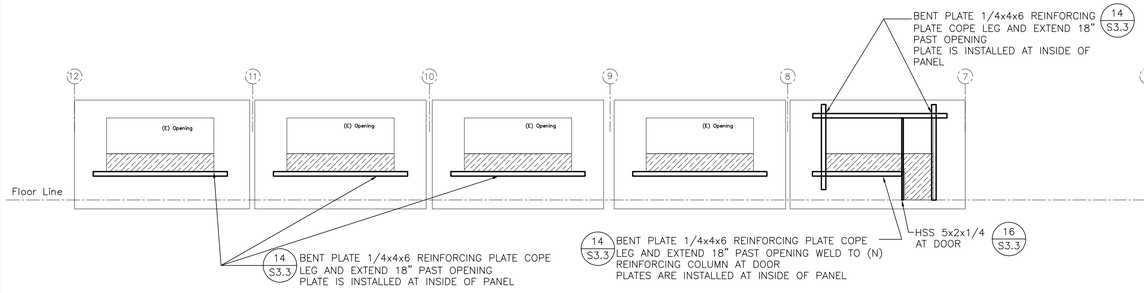
• DWG #: S2.6



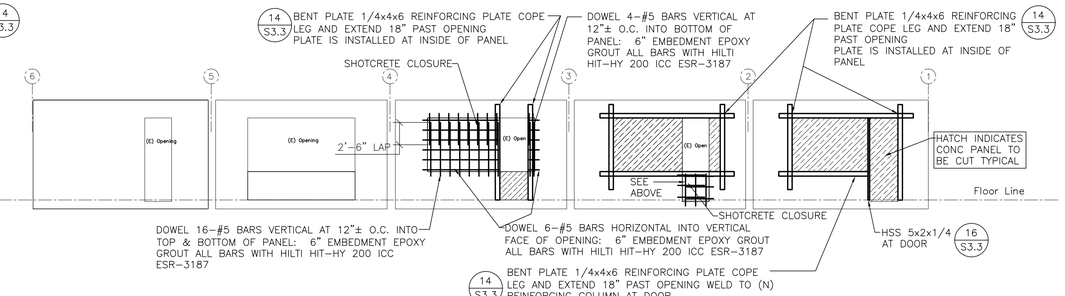
A FRONT WALL SOUTH
SCALE: 1/8" = 1'–0"



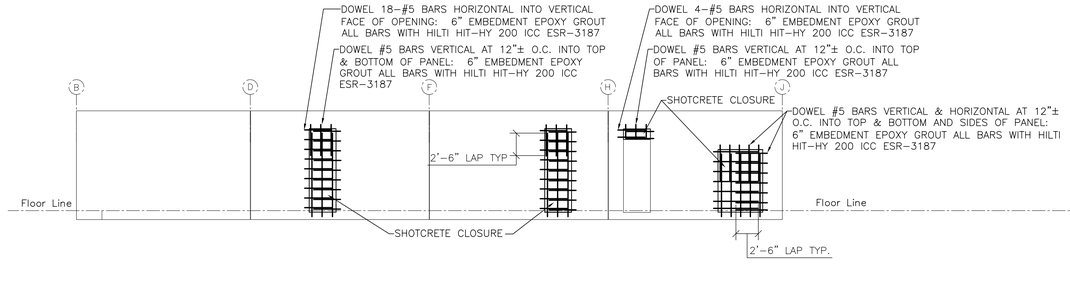
B FRONT WALL NORTH
SCALE: 1/8" = 1'–0"



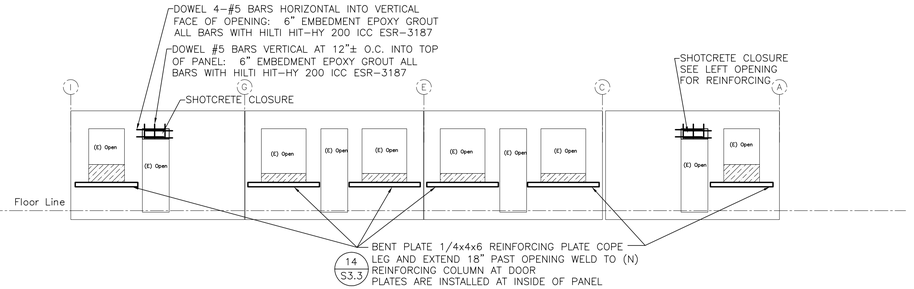
C REAR WALL NORTH
SCALE: 1/8" = 1'–0"



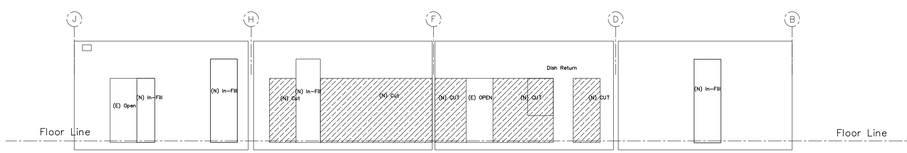
D REAR WALL SOUTH
SCALE: 1/8" = 1'–0"



E SIDE WALL WEST
SCALE: 1/8" = 1'–0"

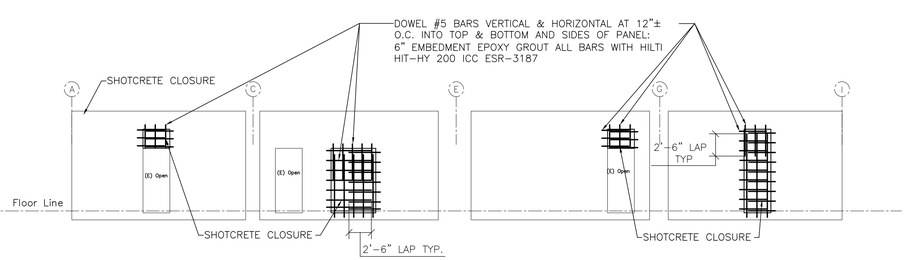


F SIDE WALL EAST
SCALE: 1/8" = 1'–0"



SEE SHEET S2.6 FOR REINFORCING DETAILS FOR THIS WALL

G WALL 6 KITCHEN WALL
SCALE: 1/8" = 1'–0"



H WALL 7
SCALE: 1/8" = 1'–0"

WORK THIS DRAWING WITH ARCHITECTURAL DRAWING A–2.7

IT IS THE CONTRACTOR RESPONSIBILITY TO FIELD VERIFY ALL CONDITIONS BEFORE FABRICATION OF ANY ITEM.

DIMENSIONS OF OPENING SHALL BE COORDINATED WITH WINDOW AND DOOR MANUFACTURER AND ALL EXISTING AND NEW CONDITIONS

CJW ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) (650) 851-9337

© ALL DRAWINGS AND WRITTEN MATERIAL HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT, AND THE SAME MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT.

BC|A
STRUCTURAL ENGINEERING, INC.
1300 Industrial Road Unit 1
San Carlos, California 94070
[T] 650.508.2500
[F] 650.508.2505
www.BCAeng.net

REGISTERED PROFESSIONAL ENGINEER
GEOFFREY S. CLIFFORD
S3662
Exp : 3/31/2017
STRUCTURAL
STATE OF CALIFORNIA

BCA J No. 15445

6/17/2016

• PROJECT •

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City, CA 94063

• TITLE •

WALL ELEVATIONS CONCRETE WALLS

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

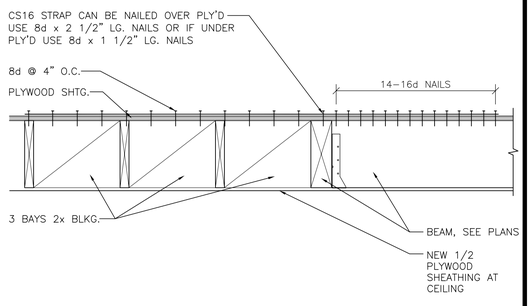
• REVISIONS •

No.	Date	Notes
	6–17–16	BUILDING SUBMITTAL 1

• JOB: 2015.2801

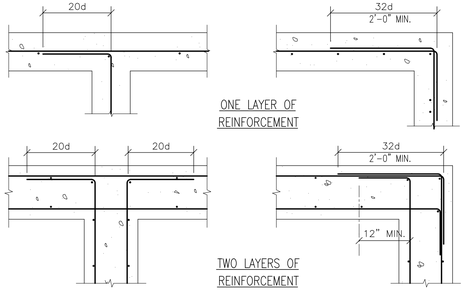
• DATE: 12/8/2015

• DWG #: S2.7



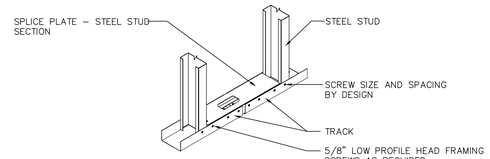
STRAP AT CEILING/ROOF OPENING 13

1"=1'-0"

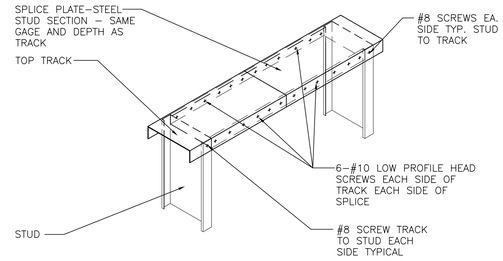


TYPICAL LAP SPLICES - CONC. 9

N.T.S.

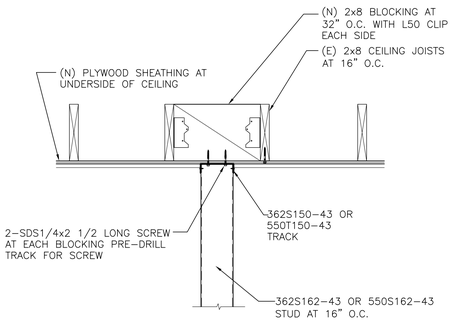


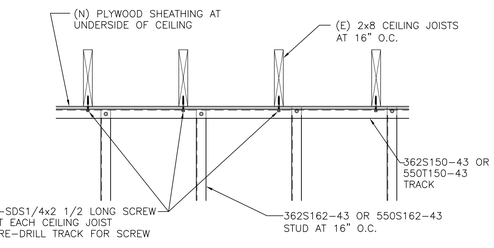
BOTT. TRACK SPLICE 5



TOP TRACK SPLICE 1

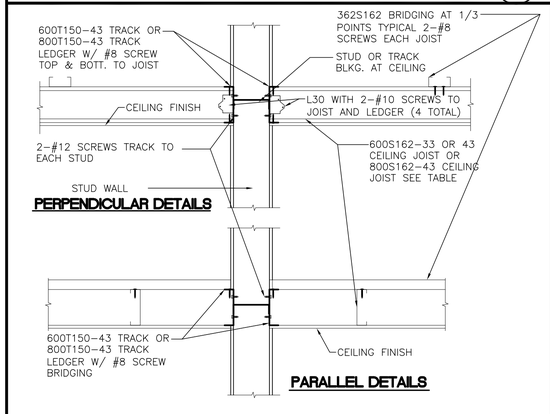
1"=1'-0"





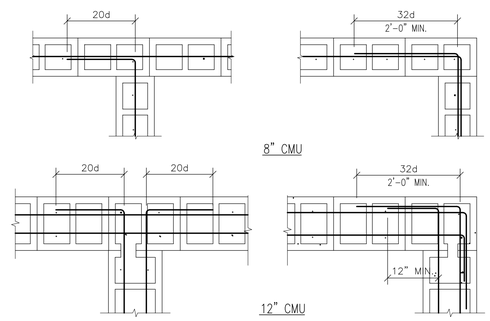
NEW WALLS AT (E) CEILING 15

1"=1'-0"



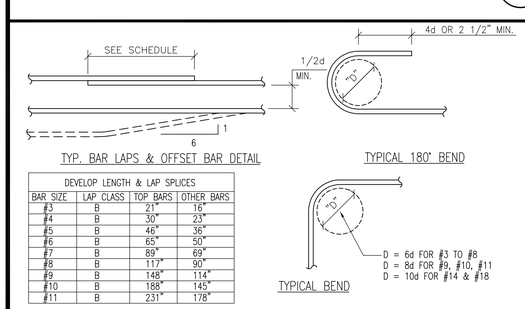
CEILING DETAILS 16

1"=1'-0"



TYPICAL LAP SPLICES - CMU 10

N.T.S.

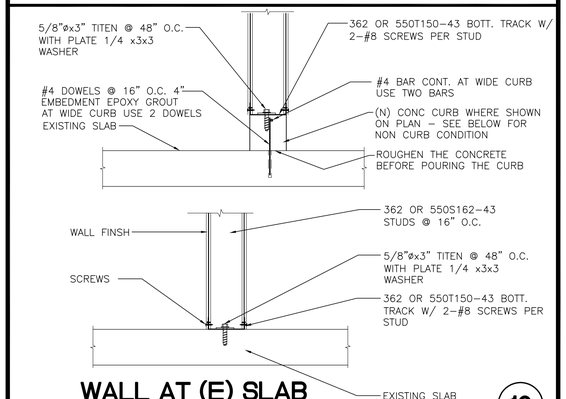


DEVELOP LENGTH & LAP SPLICES

BAR SIZE	LAP CLASS	TOP BARS	OTHER BARS
#3	B	21"	16"
#4	B	30"	23"
#5	B	46"	36"
#6	B	65"	50"
#7	B	89"	69"
#8	B	117"	90"
#9	B	148"	114"
#10	B	188"	145"
#11	B	231"	178"

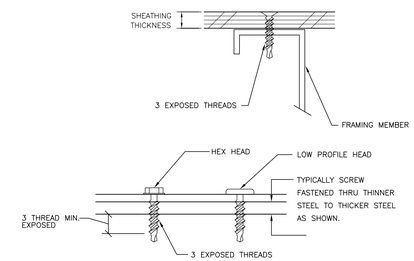
TYP. BAR LAPS AND OFFSETS 11

N.T.S.

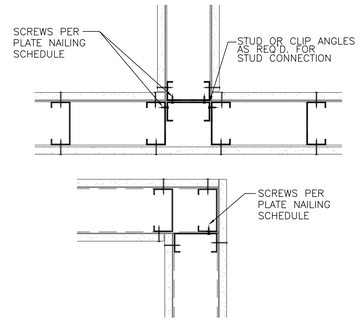


WALL AT (E) SLAB 12

1"=1'-0"

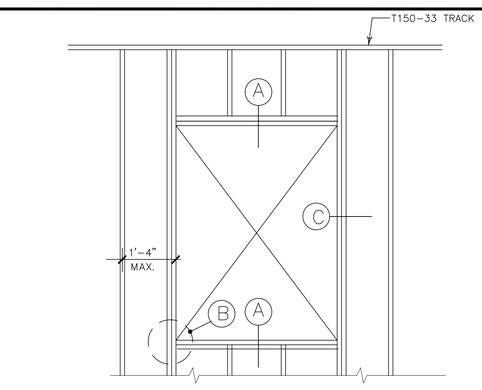


MIN. THREAD EXPOSURE 6



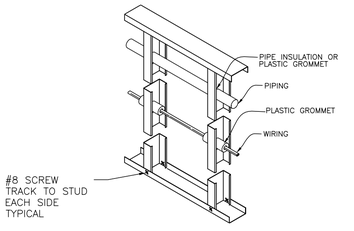
CORNER FRAMING 2

1"=1'-0"



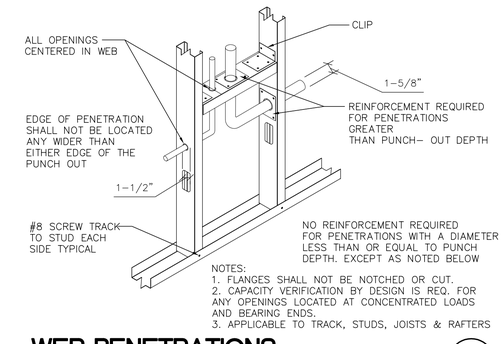
TYPICAL WALL FRAMING 8

N.T.S.



PENETRATION AT PUNCH OUT 3

1"=1'-0"



WEB PENETRATIONS 4

N.T.S.

CJW ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) (650) 851-9337

© ALL DRAWINGS AND WRITTEN MATERIAL HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT, AND THE SAME MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT.

BC|A
STRUCTURAL ENGINEERING, INC.
1300 Industrial Road Unit 1
San Carlos, California 94070
[T] 650.508.2500
[F] 650.508.2505
www.BCAeng.net

REGISTERED PROFESSIONAL ENGINEER
GEOFFREY S. CLIFFORD
S3662
Exp : 3/31/2017
STRUCTURAL
STATE OF CALIFORNIA

BCA No. 15445
6/17/2016

• PROJECT •

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City, CA 94063

• TITLE •

STANDARD DETAILS

SCALE : NOTED

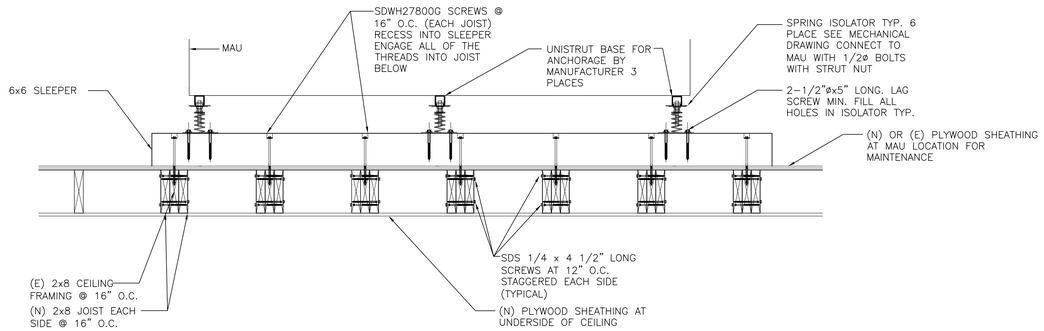
• REVISIONS •

No.	Date	Notes
	6-17-16	BUILDING SUBMITTAL 1

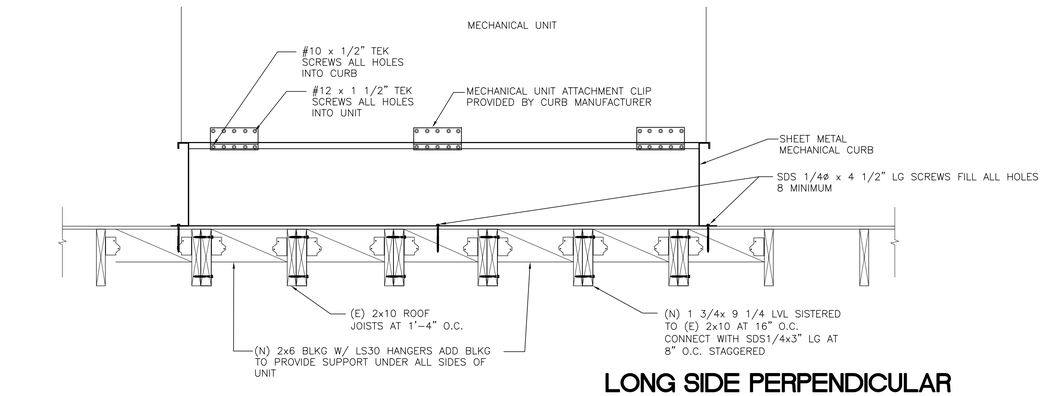
• JOB: 2015.2801

• DATE: 12/8/2015

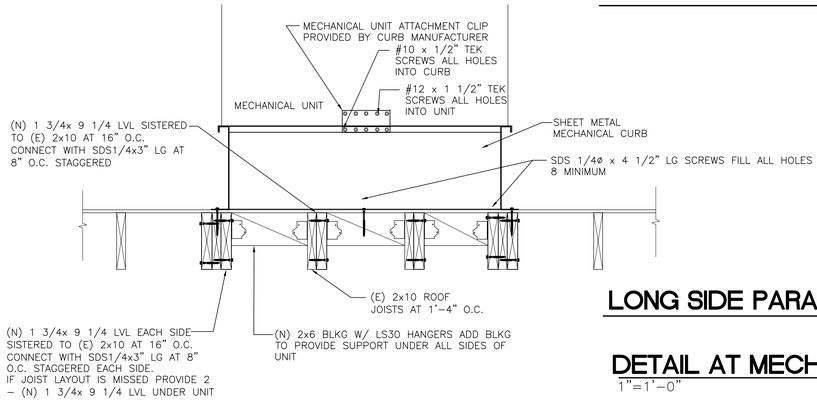
• DWG #: S3.1



MAU SUPPORT AND ANCHORAGE 9
1"=1'-0"



LONG SIDE PERPENDICULAR



LONG SIDE PARALLEL

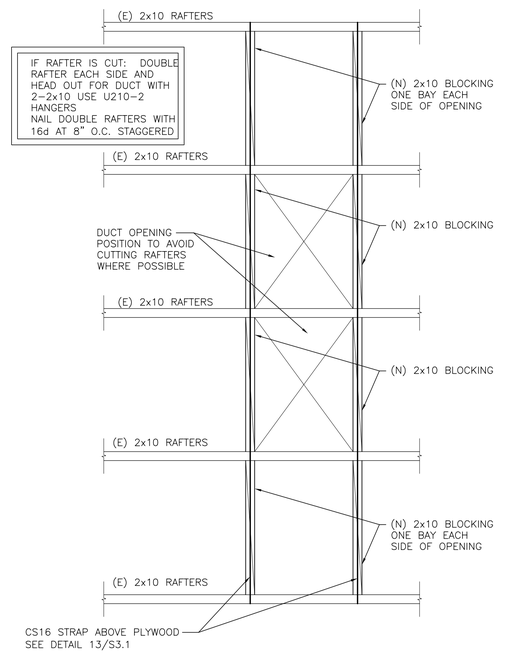
DETAIL AT MECHANICAL CURB 2
1"=1'-0"

DETAIL 14
1"=1'-0"

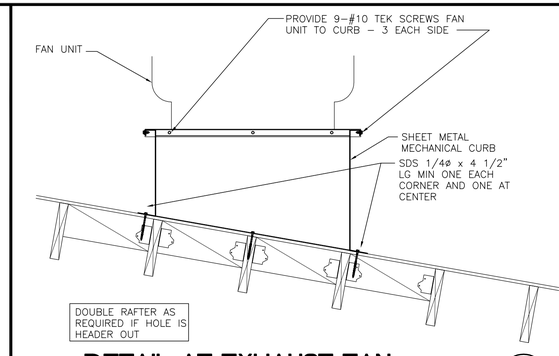
DETAIL 10
1"=1'-0"

DETAIL 15
1"=1'-0"

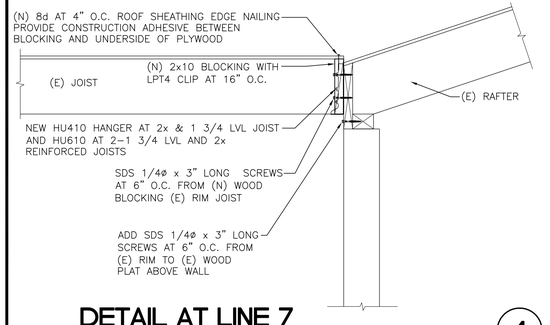
DETAIL 11
1"=1'-0"



DETAIL AT DUCT OPENING 8
1"=1'-0"



DETAIL AT EXHAUST FAN 3
1"=1'-0"



DETAIL AT LINE 7 4
1"=1'-0"

DETAIL 16
1"=1'-0"

DETAIL 12
1"=1'-0"

CJW ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) (650) 851-9337

© ALL DRAWINGS AND WRITTEN MATERIAL HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT, AND THE SAME MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT.

BC|A
STRUCTURAL ENGINEERING, INC.
1300 Industrial Road Unit 1
San Carlos, California 94070
[T] 650.508.2500
[F] 650.508.2505
www.BCAeng.net

REGISTERED PROFESSIONAL ENGINEER
GEOFFREY S. CLIFFORD
S3662
Exp : 3/31/2017
STRUCTURAL
STATE OF CALIFORNIA

BCA J No. 15445
6/17/2016

• PROJECT •

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City, CA 94063

• TITLE •

STRUCTURAL DETAILS

SCALE : NOTED

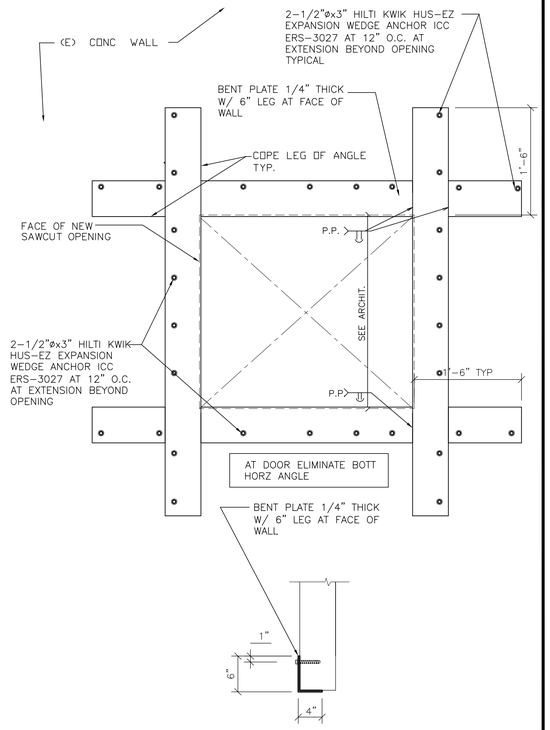
• REVISIONS •

No.	Date	Notes
	6-17-16	BUILDING SUBMITTAL 1

• JOB: 2015.2801

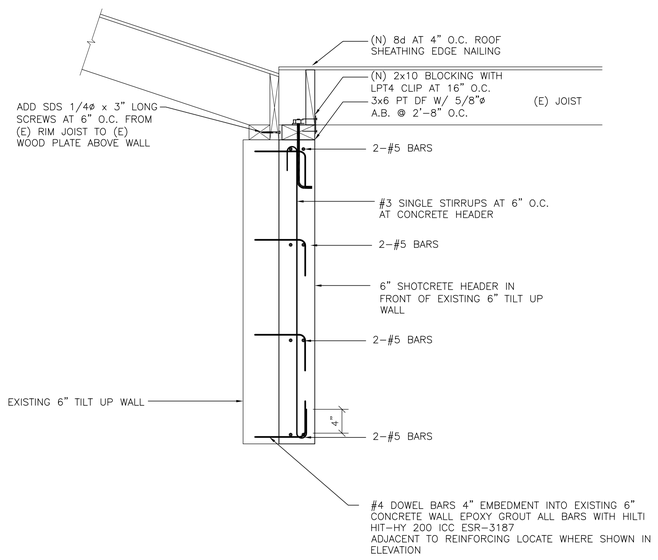
• DATE: 12/8/2015

• DWG #: S3.2



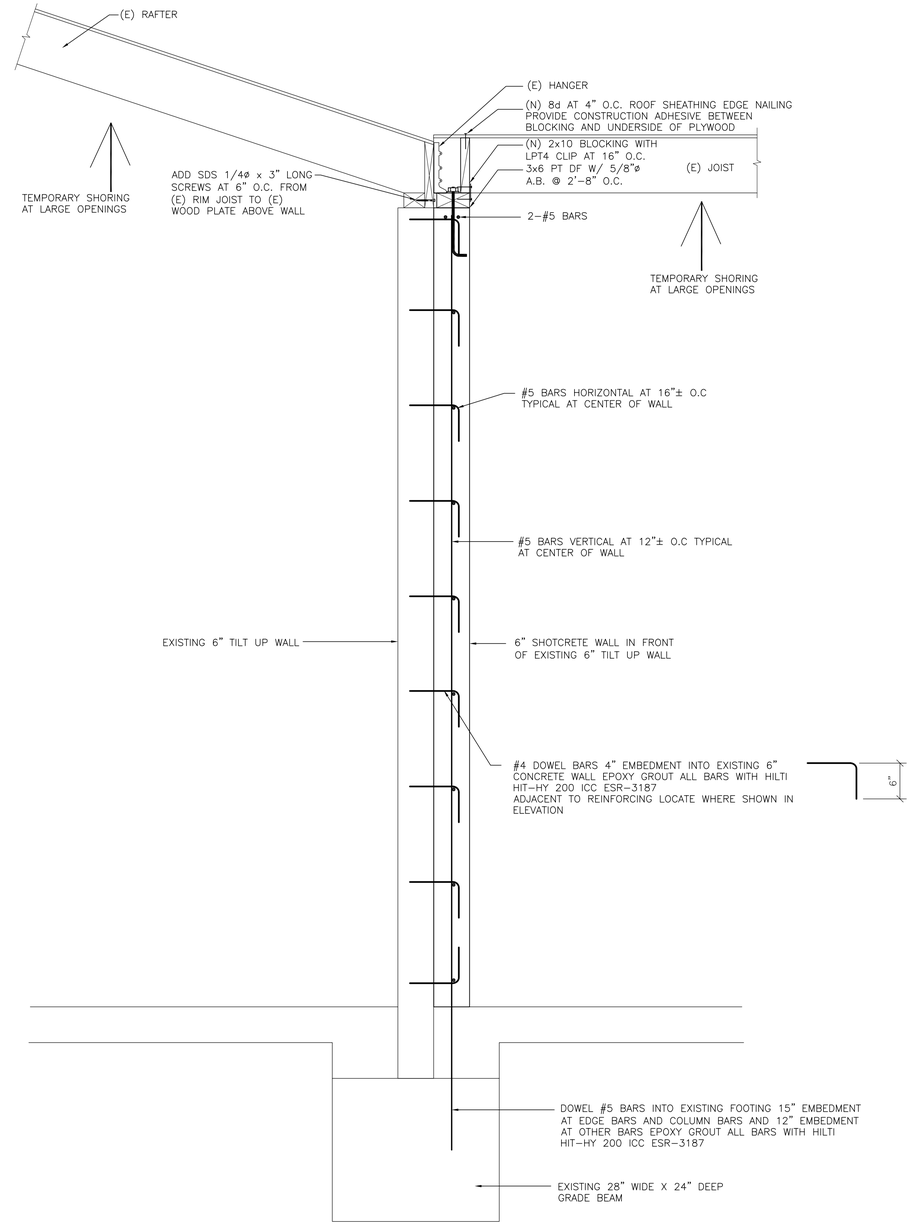
DETAIL AT REINFORCING PLATE 14

1"=1'-0"



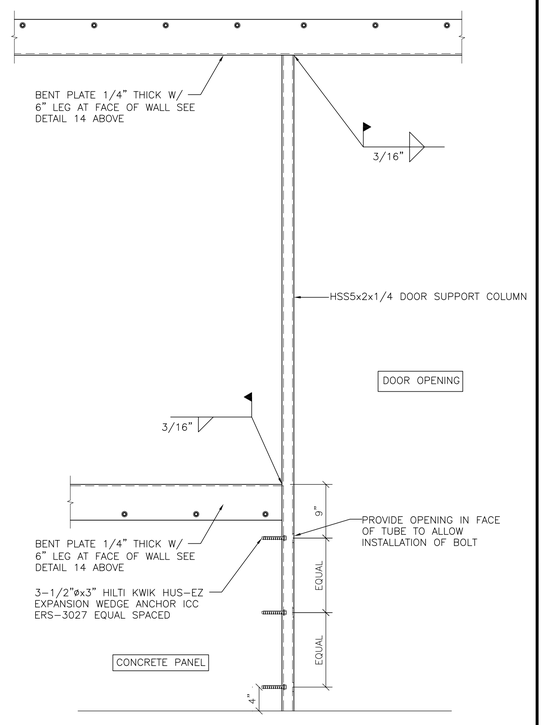
SECTION AT SHOTCRETE HEADER 10

1"=1'-0"



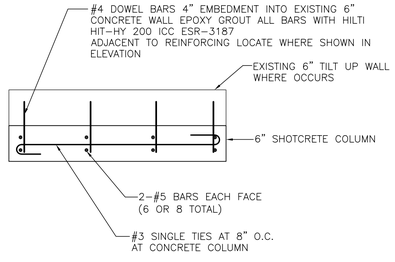
SECTION AT LINE 6 WALL REINFORCING 4

1"=1'-0"



DETAIL AT NEW DOORWAY 16

1"=1'-0"



PLAN AT SHOTCRETE COLUMN 12

1"=1'-0"

CJW ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) (650) 851-9337

© ALL DRAWINGS AND WRITTEN MATERIAL HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT, AND THE SAME MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT.

BC|A
STRUCTURAL ENGINEERING, INC.
1300 Industrial Road Unit 1
San Carlos, California 94070
[T] 650.508.2500
[F] 650.508.2505
www.BCAeng.net

REGISTERED PROFESSIONAL ENGINEER
GEOFFREY S. CLIFFORD
S3662
Exp : 3/31/2017
STRUCTURAL
STATE OF CALIFORNIA

BCA J No. 15445

6/17/2016

• PROJECT •

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City, CA 94063

• TITLE •

STRUCTURAL DETAILS

SCALE : NOTED

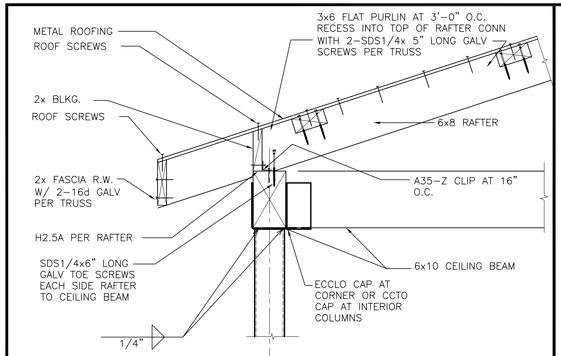
• REVISIONS •

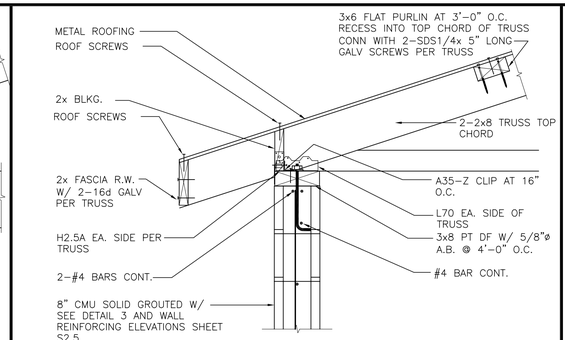
No.	Date	Notes
	6-17-16	BUILDING SUBMITTAL 1

• JOB: 2015.2801

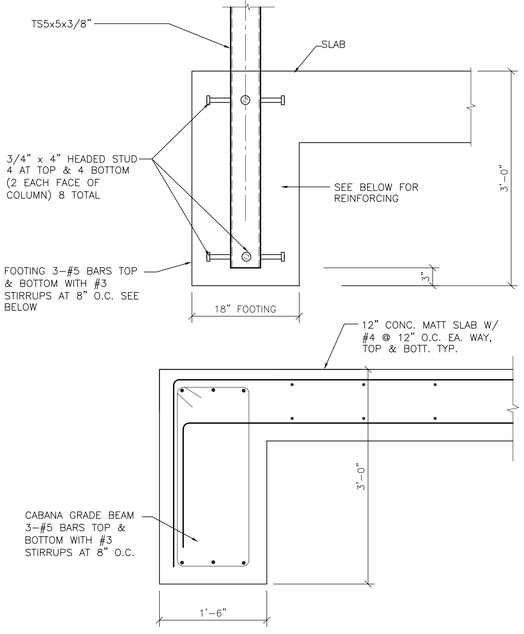
• DATE: 12/8/2015

• DWG #: S3.3

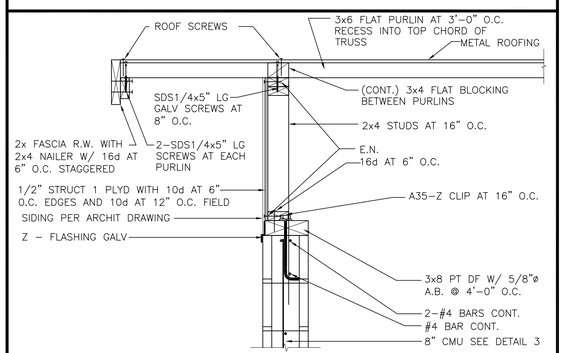




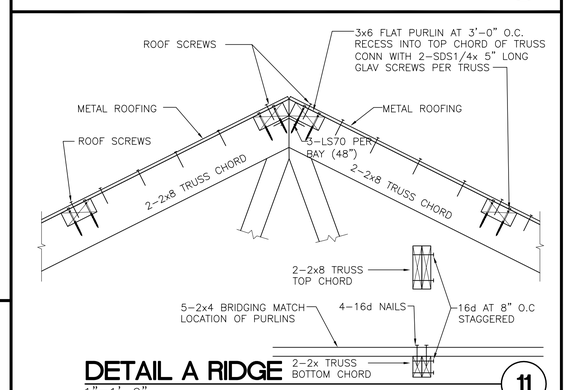
DETAIL AT EAVE 9
1"=1'-0"



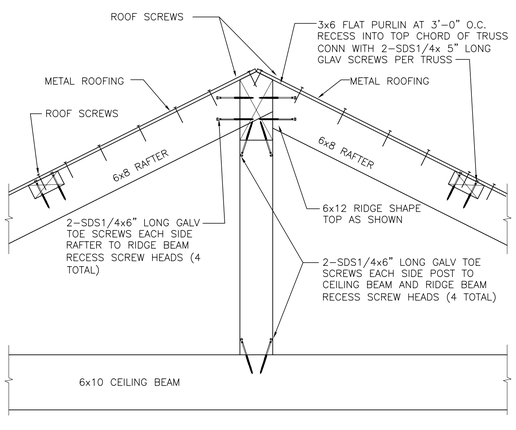
DETAIL AT CABANA COLUMN 15
1"=1'-0"



DETAIL AT RAKE 10
1"=1'-0"

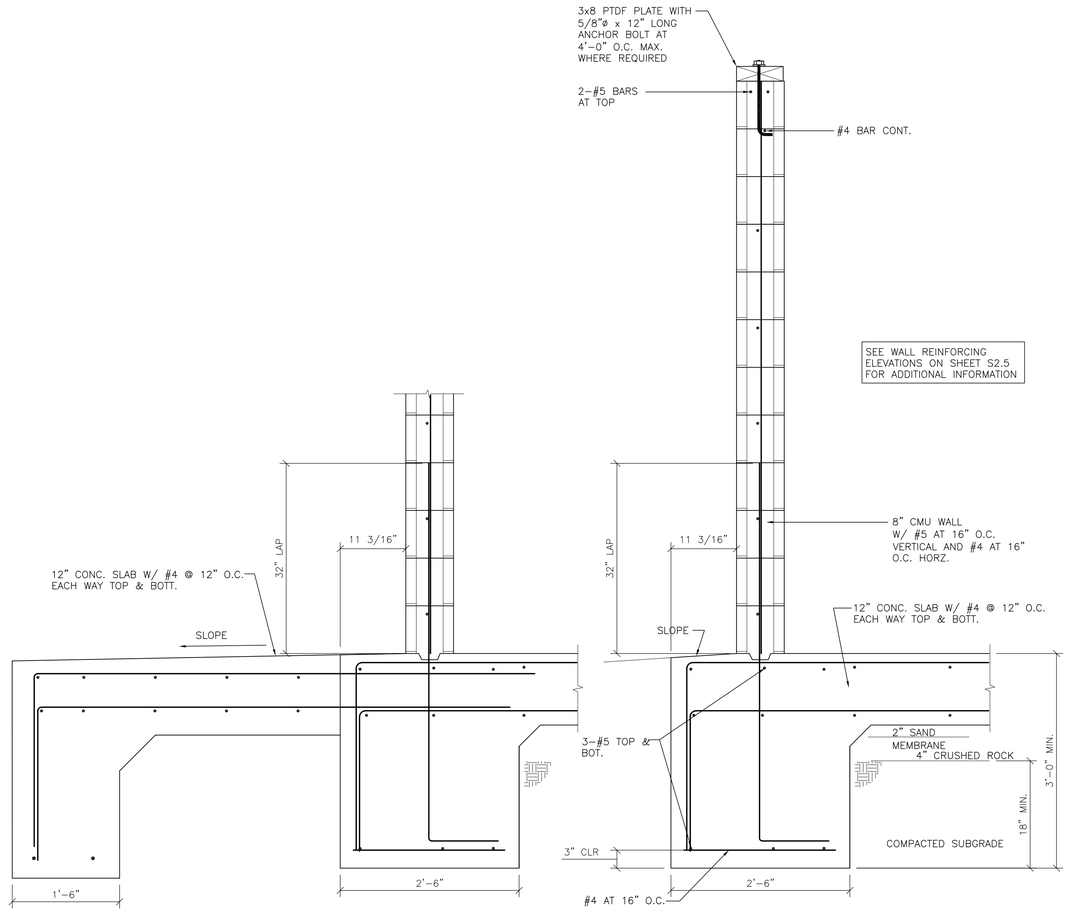


DETAIL A RIDGE 11
1"=1'-0"

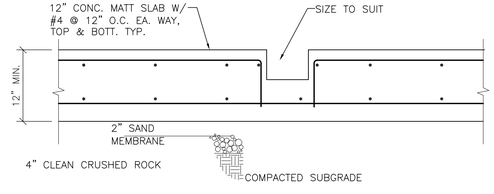


DETAIL AT RIDGE 16
1"=1'-0"

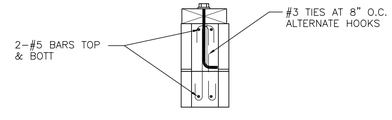
DETAIL 12
1"=1'-0"



DETAIL AT CMU WALL 3
1"=1'-0"



DETAIL AT TRENCH DRAIN 8
1"=1'-0"



DETAIL AT CMU LINTEL 4
1"=1'-0"

CJW ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) (650) 851-9337

© ALL DRAWINGS AND WRITTEN MATERIAL HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT, AND THE SAME MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT.

BC|A
STRUCTURAL ENGINEERING, INC.
1300 Industrial Road Unit 1
San Carlos, California 94070
[T] 650.508.2500
[F] 650.508.2505
www.BCAeng.net

REGISTERED PROFESSIONAL ENGINEER GEOFFREY S. CLIFFORD S3662 Exp : 3/31/2017 STRUCTURAL STATE OF CALIFORNIA

BCA J No. 15445 6/17/2016

• PROJECT •

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City, CA 94063

• TITLE •

STRUCTURAL DETAILS

SCALE : NOTED

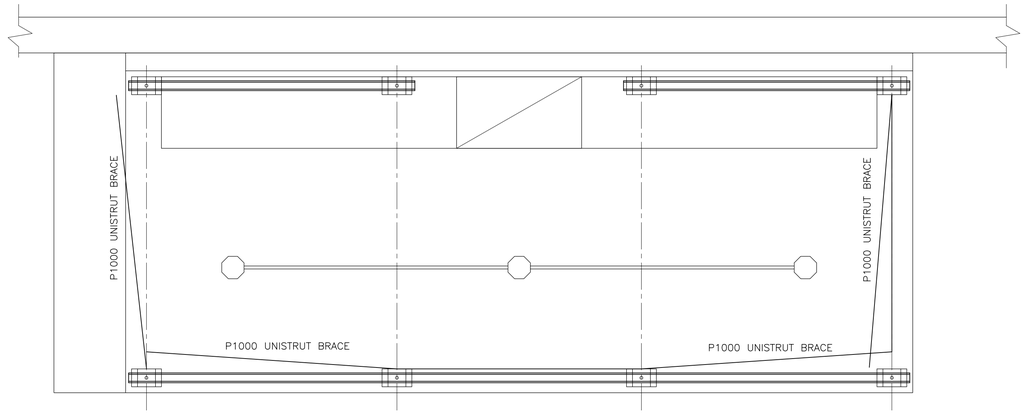
• REVISIONS •

No.	Date	Notes
	6-17-16	BUILDING SUBMITTAL 1

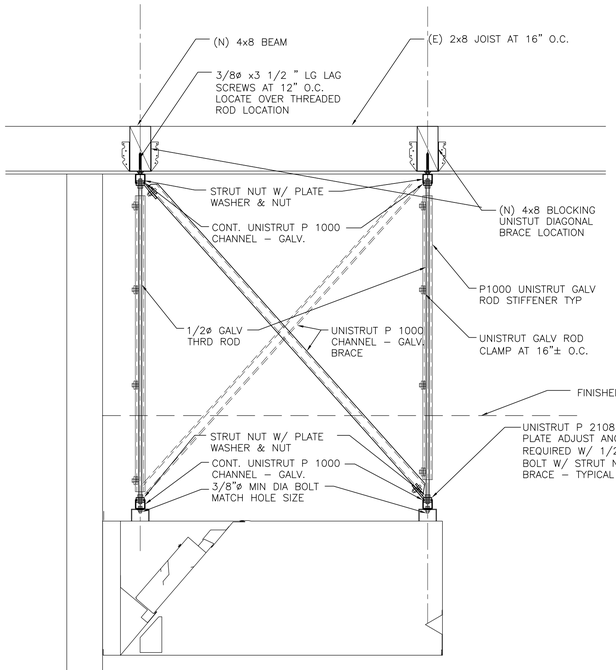
• JOB: 2015.2801

• DATE: 12/8/2015

• DWG #: S3.4

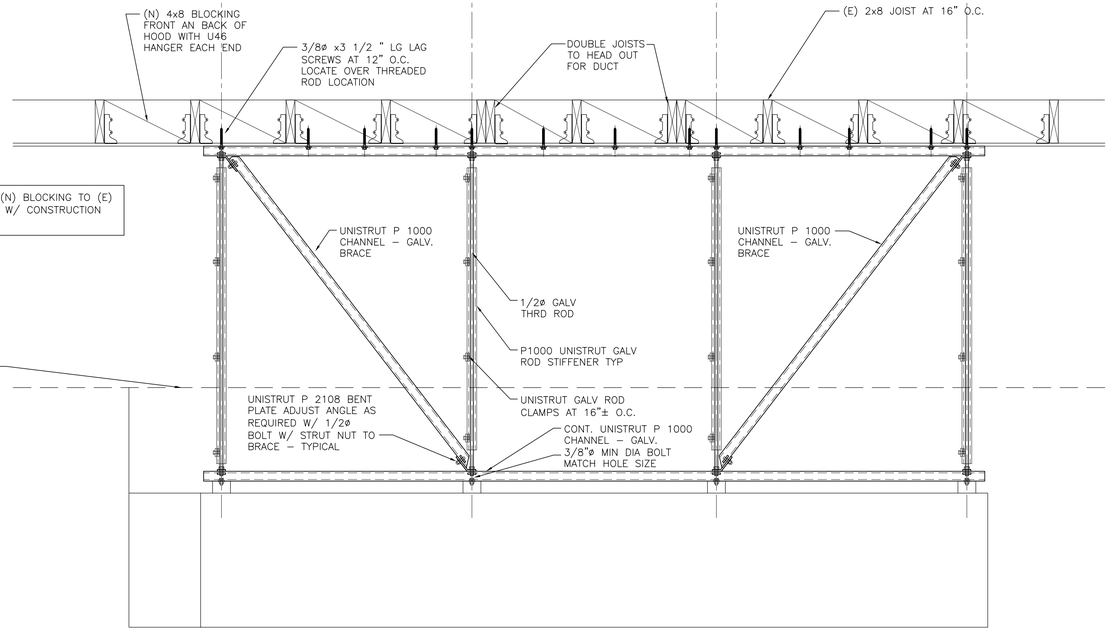


PLAN VIEW



SECTION VIEW

GLUE ALL (N) BLOCKING TO (E) SHEATHING W/ CONSTRUCTION ADHESIVE



FRONT ELEVATION

DETAIL AT EXHAUST HOOD SUPPORT

1"=1'-0"

1

CJW ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) (650) 851-9337

© ALL DRAWINGS AND WRITTEN MATERIAL HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT, AND THE SAME MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT.

BCA
STRUCTURAL ENGINEERING, INC.
1300 Industrial Road Unit 1
San Carlos, California 94070
[T] 650.508.2500
[F] 650.508.2505
www.BCAeng.net

REGISTERED PROFESSIONAL ENGINEER
GEOFFREY S. CLIFFORD
S3662
Exp : 3/31/2017
STRUCTURAL
STATE OF CALIFORNIA

BCA J No. 15445 6/17/2016

• PROJECT •

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City, CA 94063

• TITLE •

EXHAUST HOOD DETAILS

SCALE : NOTED

• REVISIONS •

No.	Date	Notes
	6-17-16	BUILDING SUBMITTAL 1

• JOB: 2015.2801

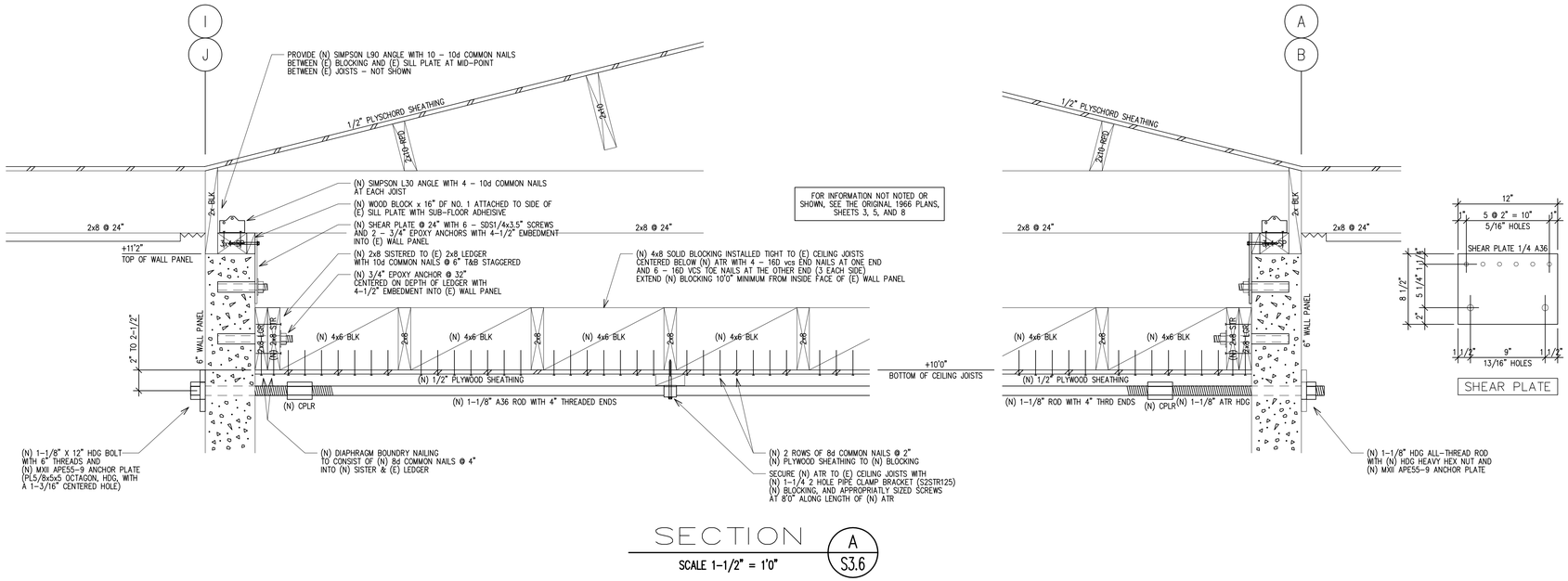
• DATE: 12/8/2015

• DWG #: S3.5

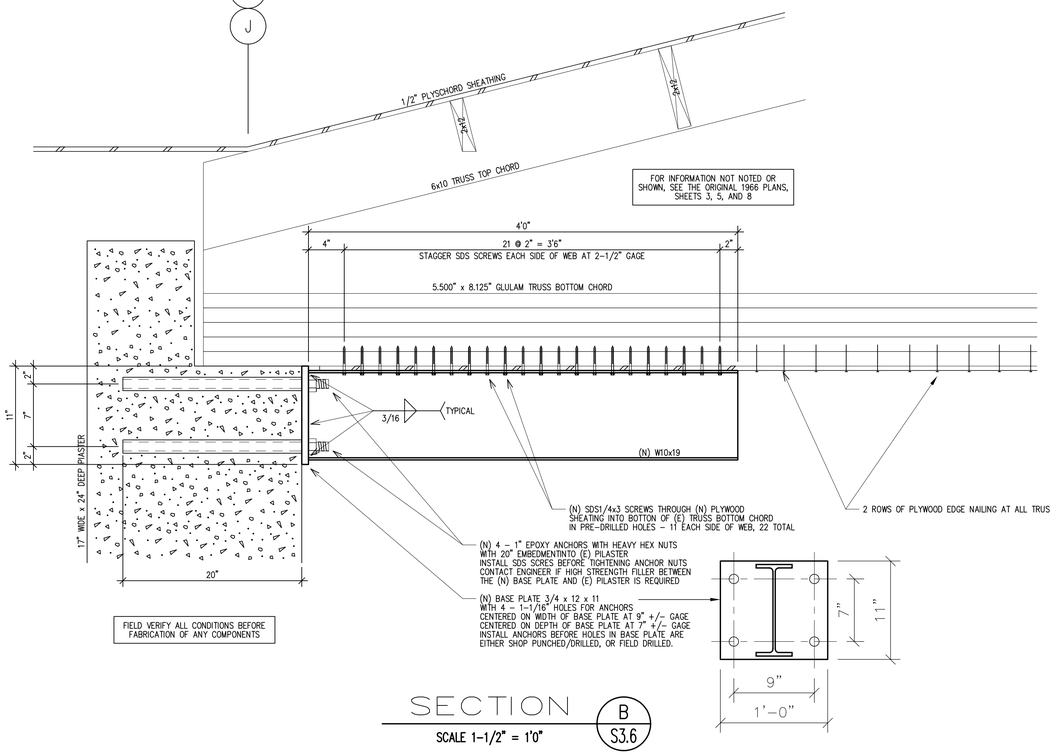
STRUCTURAL NOTES

1. MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE MINIMUM REQUIREMENTS OF THE CALIFORNIA BUILDING CODE (CBC), 2013 EDITION, AND ALL LOCAL ORDINANCES.
2. INFORMATION REGARDING EXISTING CONSTRUCTION IS BELIEVED TO BE CORRECT, BUT NOT GUARANTEED. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL REVIEW ALL DRAWINGS AND SPECIFICATIONS, AND FIELD VERIFY ALL DIMENSIONS, EXISTING JOB CONDITIONS, AND CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF EXISTING JOB CONDITIONS AND/OR CONSTRUCTION IS NOT AS SHOWN ON THE DRAWINGS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION, INCLUDING THE SAFETY OF ALL PERSONS WHO COME IN CONTACT WITH THE PROJECT.
4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ADEQUATE BRACING AND SUPPORT OF ALL TEMPORARY CONSTRUCTION AND PARTIALLY COMPLETED PORTIONS OF THE WORK. SUCH BRACING, SHORING, AND SUPPORT SHALL INSURE THE SAFETY OF THE STRUCTURE AND ALL PERSONS WHO COME IN CONTACT WITH THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR ALL SHORING, BRACING, AND DEMOLITION PROCEDURES.
5. ALL WORK SHALL CONFORM TO THESE NOTES AND DRAWINGS IN ALL RESPECTS. NO CHANGES SHALL BE ALLOWED WITHOUT WRITTEN AUTHORITY FROM THE ENGINEER.
6. NON-SHRINK GROUT, AS CALLED FOR IN THE PLANS, SHALL BE NON-SHRINK, NON-METALLIC, FLOWABLE OR DRY PACK.
7. EXPANSION ANCHORS INSTALLED IN CONCRETE – HILTI KWIK BOLT TZ ANCHORS, OR APPROVED EQUAL, AND INSTALLED IN STRICT CONFORMANCE WITH THE WITH THE MANUFACTURER'S DIRECTIONS AND ICC REPORT NO. ESR-1917.
8. EPOXY FOR ANCHORING THREADED RODS IN CONCRETE – HILTI HIT-HY 200 EPOXY, OR APPROVED EQUAL, AND INSTALLED IN STRICT CONFORMANCE WITH THE MANUFACTURER'S DIRECTIONS AND ICC REPORT NO. ESR-3187.
9. EPOXY FOR ANCHORING THREADED RODS AND ANCHORS IN CONCRETE OR GROUT FILLED CONCRETE BLOCK SHALL BE ALLOWED TO CURE FOR A PERIOD OF 1.25 x THE MANUFACTURE'S RECOMMENDED CURE TIME BEFORE THE THREADED RODS MAY BE TIGHTENED OR SUBJECTED TO LOAD.
10. STRUCTURAL STEEL WF SHAPES SHALL CONFORM TO ASTM A992. FLANGE STRENGTHENING PLATES USED WITH MOMENT FRAMES SHALL BE GRADE 50. PIPE USED STRUCTURALLY SHALL CONFORM TO ASTM A53, GRADE B. STEEL TUBES SHALL CONFORM TO ASTM A500, GRADE B. ALL OTHER STRUCTURAL STEEL SHAPES AND PLATES SHALL CONFORM TO ASTM A36.
11. ALL STRUCTURAL STEEL SHALL BE DESIGNED, DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE AISC SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS, LATEST EDITION.
12. THE STEEL ERECTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ERECTION BRACING AND SHORING, AS REQUIRED.
13. ALL STRUCTURAL AND MISCELLANEOUS STEEL, EXCEPT STEEL TO BE EMBEDDED IN CONCRETE, GALVANIZED, OR FIELD WELDED, SHALL BE SHOP PAINTED WITH ONE COAT OF RED OXIDE PAINT AND TOUCHED UP IN THE FIELD AFTER ERECTION OR INSTALLATION, UNLESS NOTED OTHERWISE. COMPONENTS INDICATED TO BE POWDER COATED SHALL BE COATED WITH DUPONT CASCADE BLACK, UNLESS INDICATED OTHERWISE.
14. ALL STEEL INDICATED TO BE GALVANIZED SHALL BE HOT DIP GALVANIZED PER ASTM A123 AFTER FABRICATION, UNLESS NOTED OTHERWISE.
15. WELDING SHALL CONFORM TO AWS SPECIFICATIONS AND SECTION J2 OF THE AISC SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS, LATEST EDITIONS. WELDING ELECTRODES SHALL BE E70, OR APPROVED EQUAL. ALL WELDING SHALL BE PERFORMED BY WELDERS HOLDING CURRENT CERTIFICATION FOR THE TYPE OF WELDS INDICATED ON THE PLANS.
16. BOLTS SHALL CONFORM TO ASTM A307, UNLESS NOTED OTHERWISE. NUTS SHALL CONFORM TO ASTM A563, UNLESS NOTED OTHERWISE. ALLTHREAD ROD SHALL NOT BE SUBSTITUTED FOR BOLTS.
17. HIGH STRENGTH BOLTS SHALL CONFORM TO ASTM A325, AND SHALL BE PROCURED WITH CERTIFICATION, LOT CONTROL, AND FULL TRACEABILITY. NUTS TO BE USED WITH HIGH STRENGTH BOLTS SHALL CONFORM TO ASTM A192-2H.
18. ROD WITH THREADED ENDS SHALL CONFORM TO ASTM A36, UNLESS NOTED OTHERWSE. STANDARD ALLTHREAD ROD SHALL MEET THE MINIMUM YIELD AND TENSILE STRENGTH REQUIREMENTS PER ASTM A36, UNLESS NOTED OTHERWISE.
19. HIGH STRENGTH ROD SHALL CONFORM TO ASTM A193-B7, UNLESS NOTED OTHERWISE. NUTS TO BE USED WITH HIGH STRENGTH RODS SHALL CONFORM TO ASTM A192-2H. THE LOAD CAPACITY OF ALL COUPLERS TO BE USED WITH HIGH STRENGTH ROD SHALL EXCEED THE LOAD CAPACITY OF THE ROD.
20. LAG BOLTS SHALL CONFORM TO ASTM A307, AND BE INSTALLED IN HOLES PRE-DRILLED FOR BOTH THE SHANK AND THREADED PORTIONS OF THE LAG BOLT. HOLE SIZE FOR THE SHANK PORTION SHALL MATCH THE DIAMETER OF THE LAG BOLT. GENERAL HOLE SIZES FOR THE THREADED PORTION SHALL BE 1/4" FOR 3/8" LAGS, 5/16" FOR 1/2" LAGS, 3/8" FOR 5/8" LAGS, 1/2" FOR 3/4" LAGS, 5/8" FOR 7/8" LAGS, AND 3/4" FOR 1" LAGS. ADJUST HOLES SIZES AS NECESSARY IF WOOD SPLITTING OCCURS. LAG BOLTS SHALL BE INSTALLED BY ROTATING THE LAG BOLT WITH A WRENCH, AND NOT BY DRIVING WITH A HAMMER. BEE'S WAX SHALL BE USED TO FACILITATE INSTALLATION AND MITIGATE THE POTENTIAL FOR WOOD SPLITTING.
21. ALL FASTENERS AND RELATED ITEMS, EXCEPT HIGH STRENGTH BOLTS, ROD, AND NUTS, SHALL BE ZINC PLATED.
22. MISCELLANEOUS STRUCTURAL WOOD FRAMING SHALL BE DOUGLAS FIR, NO. 1 GRADE. WOOD STUDS, NON STRUCTURAL FRAMING, AND MISCELLANEOUS BLOCKING SHALL BE DOUGLAS FIR, NO. 2 GRADE. WOOD POSTS AND TIMBERS SHALL BE DOUGLAS FIR, NO. 1 GRADE.
23. PLYWOOD SHEATHING FOR SHEARWALLS AND DIAPHRAGMS SHALL BE AMERICAN PLYWOOD ASSOCIATION GRADE MARKED, STRUCTURAL I, 5 PLY, INDEX 32/16, INTERIOR TYPE WITH EXTERIOR GLUE, GROUP 1 OR II SPECIES, UNLESS SPECIFIED OTHERWISE. LAY WITH FACE PLYS PERPENDICULAR TO SUPPORTS FOR ROOFS AND FLOORS, AND STAGGER SHEETS.
24. PLYWOOD SHEATHING FOR SHIMMING AND/OR PADDING APPLICATIONS ASSOCIATED WITH XT INSTALLATIONS SHALL BE AMERICAN PLYWOOD ASSOCIATION GRADE MARKED, STRUCTURAL I, 5 PLY, INDEX 32/16, INTERIOR TYPE WITH EXTERIOR GLUE, GROUP 1 OR II SPECIES, UNLESS INDICATED OTHERWISE.
25. BOLT HOLES IN WOOD SHALL BE BORED 1/32" TO 1/16" LARGER IN DIAMETER THAN THE NOMINAL BOLT DIAMETER. BOLTS SHALL HAVE STANDARD CUT WASHERS BETWEEN WOOD, NUTS AND BOLT HEADS. STEEL PLATE WASHERS SHALL BE USED WHERE BOLTS ARE IN TENSION. ALL NUTS SHALL BE TIGHTENED WHEN INSTALLED, AND RE-TIGHTENED BEFORE ENCLOSING WITH FINISH CONSTRUCTION.
26. ALL NAILS SHALL BE "COMMON" WIRE NAILS, UNLESS NOTED OTHERWISE. GALVANIZED NAILS SHALL BE USED WHERE NAILS ARE EXPOSED TO WEATHER.
27. HOLES FOR NAILS IN SHEET METAL CONNECTORS, STEEL PLATES, AND STEEL SHAPES, SHALL NOT EXCEED THE DIAMETER OF THE NAIL BY MORE THAN 1/64" FOR UNGALVANIZED NAILS, AND 1/32" FOR GALVANIZED NAILS (5/32" FOR 10d COMMON UNGALVANIZED NAILS AND 16d V. C. SINKERS).
28. STANDARD JOIST HANGERS AND FRAMING CONNECTORS SHALL BE MANUFACTURED BY SIMPSON STRONG TIE AND INSTALLED FOR FULL RATED LOAD VALUES, UNLESS INDICATED OTHERWISE.
29. ALL SEISMIC RETROFIT HARDWARE DESIGNATED MXII, INCLUDING XT CROSS TIES, FLARE STRUTS, DRAGSTRUTS, PI-GUS, AND ALL RELATED SUB-COMPONENTS, AS WELL AS ALL RELATED FASTENERS, SHALL BE MANUFACTURED AND/OR SUPPLIED BY MERCALLI XII, UNLESS INDICATED OTHERWISE. CONTACT MERCALLI XII AT (510) 654-1906 TEL, (510) 654-1994 FAX.
30. PLYWOOD SUB-FLOOR ADHESIVE SHALL MEET APA AFG-01 OR ASTM D3498. APPROVED SUB-FLOOR ADHESIVES INCLUDE PRO-SERIES SF-400 SUB-FLOOR & CONSTRUCTION ADHESIVE (OHIO SEALANTS, ICBO ER-2769), SFA 66 SUB-FLOOR & CONSTRUCTION ADHESIVE (PRATT & LAMBERT / MIRACLE ADHESIVES, ICBO ER-2231), PL400 SUB-FLOOR CONSTRUCTION ADHESIVE (CONTECH), DAP 4000 SUB-FLOOR & PLYWOOD ADHESIVE (DAP), LOCTITE PL PREMEIUM CONSTRUCTION ADHESIVE (HENKEL), AND SONNEBORN PREMIUM ADHESIVE (BASF).
31. ANY DISCREPANCIES BETWEEN THE PROJECT DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER. UNLESS INDICATED OTHERWISE, THE MORE STRINGENT REQUIREMENT IN DISCREPANCY SHALL PREVAIL.
32. SPECIAL INSPECTIONS, AS INTENDED BY SECTION 1701 OF THE CALIFORNIA BUILDING CODE, SHALL BE PROVIDED AS REQUIRED FOR THE FOLLOWING:
    - (a) WELDING OF STRUCTURAL STEEL NOT PERFORMED IN AN APPROVED FABRICATOR'S SHOP. WELDING OF STRUCTURAL STEEL AS INDICATED ON THE PLANS. ALL FULL PENETRATION WELDS, AND ALL FIELD WELDING.
    - (b) THE INSTALLATION OF ALL EXPANSION ANCHORS, UNLESS NOTED OTHERWISE.
    - (c) THE INSTALLATION OF ALL EPOXY ANCHORS, UNLESS NOTED OTHERWISE.

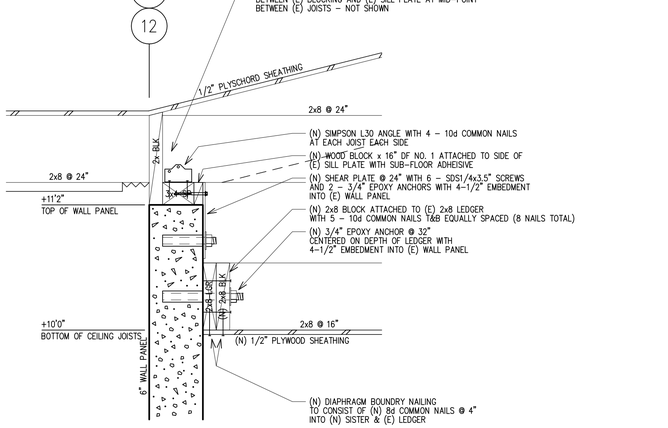
    THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING AND FACILITATING ALL SPECIAL INSPECTIONS.



SECTION A / S3.6
SCALE 1-1/2" = 1'0"



SECTION B / S3.6
SCALE 1-1/2" = 1'0"



SECTION C / S3.6
SCALE 1-1/2" = 1'0"

STATEMENT OF PURPOSE

THE PURPOSE OF THE SEISMIC RETROFIT MODIFICATIONS ASSOCIATED WITH THIS SHEET AND ASSOCIATED SET OF PLANS IS ONLY TO INCREASE THE CAPACITY OF VARIOUS LATERAL LOAD RESISTING ELEMENTS OF THE NOTED BUILDING. ALL NEW STRUCTURAL ELEMENTS ARE TO BE DESIGNED PER THE STANDARDS SET FORTH IN THE 2013 EDITION OF THE CALIFORNIA BUILDING CODE. THESE MODIFICATIONS ALONE WILL NOT NECESSARILY BRING THE OVERALL BUILDING INTO COMPLIANCE WITH THE SEISMIC STANDARDS SET FORTH IN THIS BUILDING CODE, AND WILL NOT NECESSARILY PREVENT DAMAGE FROM OCCURRING IN THIS BUILDING DURING AN EARTHQUAKE. THESE MODIFICATIONS ARE NOT NECESSARILY TO BE CONSIDERED A COMPLETE SEISMIC RETROFIT OF THE BUILDING.

CJW ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) (650) 851-9337

© ALL DRAWINGS AND WRITTEN MATERIAL HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT, AND THE SAME MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT.

BC|A
STRUCTURAL ENGINEERING, INC.
1300 Industrial Road Unit 1
San Carlos, California 94070
[T] 650.508.2500
[F] 650.508.2505
www.BCAeng.net

REGISTERED PROFESSIONAL ENGINEER GEOFFREY S. CLIFFORD S3662 Exp : 3/31/2017 STRUCTURAL STATE OF CALIFORNIA

BCA J No. 15445

6/17/2016

• PROJECT •

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City, CA 94063

• TITLE •

STRUCTURAL DETAILS

SCALE : NOTED

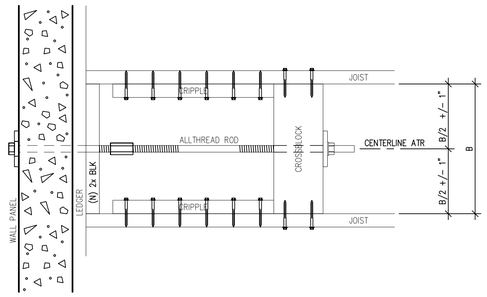
• REVISIONS •

No.	Date	Notes
	6-17-16	BUILDING SUBMITTAL 1

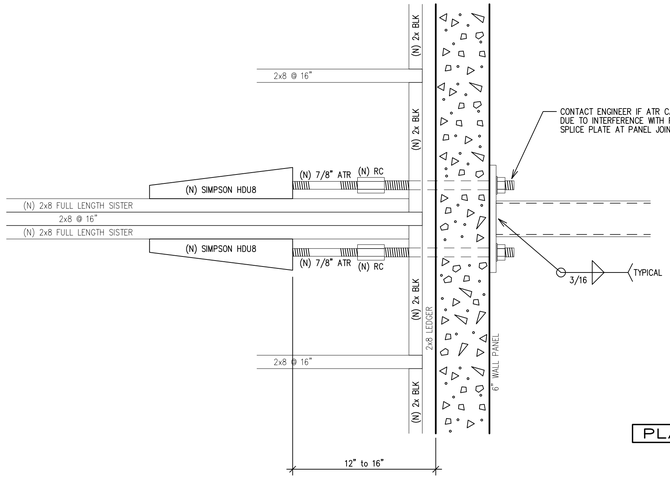
• JOB: 2015.2801

• DATE: 12/8/2015

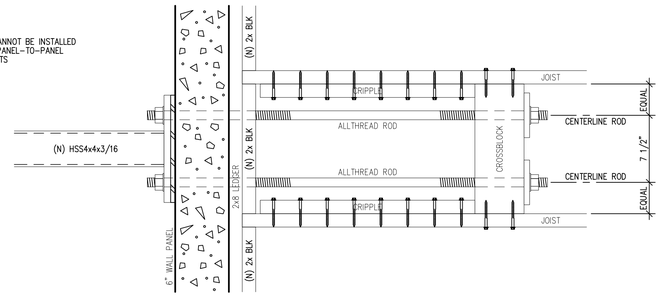
• DWG #: S3.6



PLAN



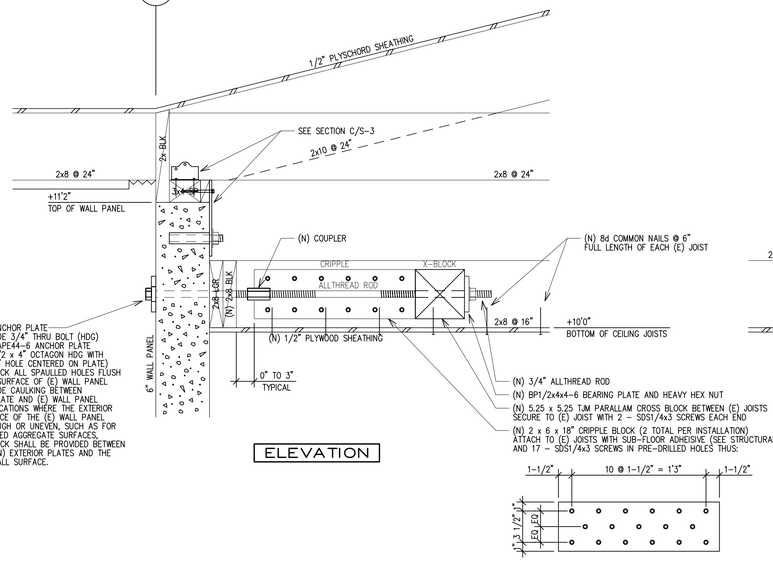
PLAN



NOTE THAT THE CEILING FRAMING LAYOUT BETWEEN THE EAST AND WEST BUILDINGS HAS ONLY BEEN ASSUMED, AND HAS NOT BEEN VERIFIED BY THE ENGINEER. CONTRACTOR SHALL VERIFIY EXISTING CEILING LAYOUT FOR BOTH THE EAST AND WEST BUILDINGS, AND CONTACT THE ENGINEER IF THE ACTUAL LAYOUT DIFFERS FROM THAT SHOWN. NOTE THAT THESE RETROFIT DETAILS MAY CHANGE SUBSTANTIALLY IF THE ACTUAL CEILING FRAMING LAYOUT DIFFERS FROM THAT SHOW.

1 / 12

FOR INFORMATION NOT NOTED OR SHOWN, SEE THE ORIGINAL 1966 PLANS, SHEETS 3, 5, AND 8

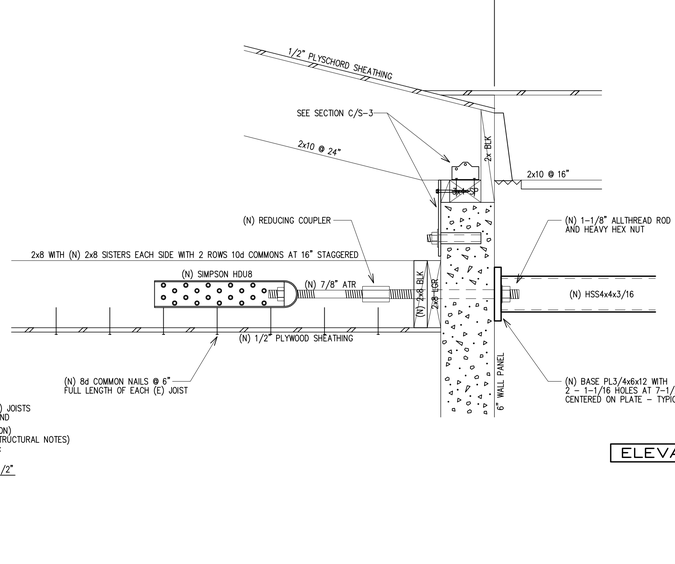


ELEVATION

SECTION A / S3.7
SCALE 1-1/2" = 1'0"

6 / 7

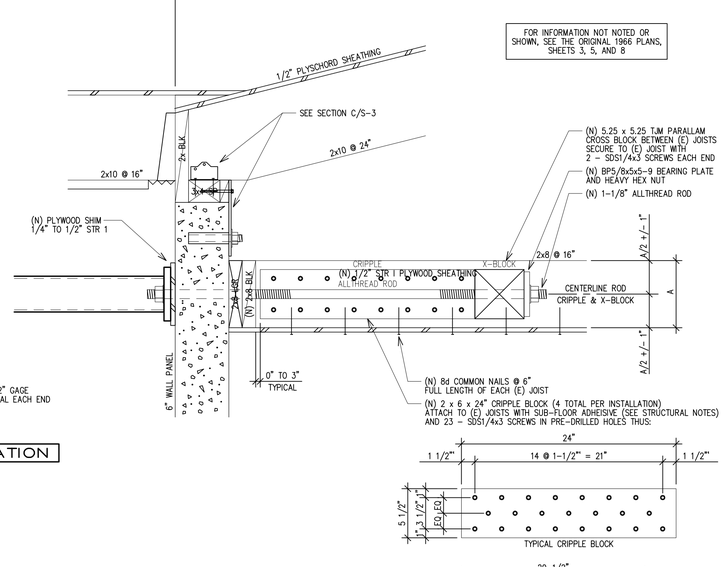
20'0"
VERIFY IN FIELD



ELEVATION

SECTION B / S3.7
SCALE 1-1/2" = 1'0"

FOR INFORMATION NOT NOTED OR SHOWN, SEE THE ORIGINAL 1966 PLANS, SHEETS 3, 5, AND 8



STATEMENT OF PURPOSE

THE PURPOSE OF THE SEISMIC RETROFIT MODIFICATIONS ASSOCIATED WITH THIS SHEET AND ASSOCIATED SET OF PLANS IS ONLY TO INCREASE THE CAPACITY OF VARIOUS LATERAL LOAD RESISTING ELEMENTS OF THE NOTED BUILDING. ALL NEW STRUCTURAL ELEMENTS ARE TO BE DESIGNED PER THE STANDARDS SET FORTH IN THE 2013 EDITION OF THE CALIFORNIA BUILDING CODE. THESE MODIFICATIONS ALONE WILL NOT NECESSARILY BRING THE OVERALL BUILDING INTO COMPLIANCE WITH THE SEISMIC STANDARDS SET FORTH IN THIS BUILDING CODE, AND WILL NOT NECESSARILY PREVENT DAMAGE FROM OCCURRING IN THIS BUILDING DURING AN EARTHQUAKE. THESE MODIFICATIONS ARE NOT NECESSARILY TO BE CONSIDERED A COMPLETE SEISMIC RETROFIT OF THE BUILDING.

CJW ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) (650) 851-9337

© ALL DRAWINGS AND WRITTEN MATERIAL HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT, AND THE SAME MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT.

BC|A
STRUCTURAL ENGINEERING, INC.
1300 Industrial Road Unit 1
San Carlos, California 94070
[T] 650.508.2500
[F] 650.508.2505
www.BCAeng.net

REGISTERED PROFESSIONAL ENGINEER
GEOFFREY S. GUFFEY
S3662
Exp : 3/31/2017
STRUCTURAL
STATE OF CALIFORNIA

BCA J No. 15445
6/17/2016

• PROJECT •

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City, CA 94063

• TITLE •

STRUCTURAL DETAILS

SCALE : NOTED

• REVISIONS •

No.	Date	Notes
	6-17-16	BUILDING SUBMITTAL 1

• JOB: 2015.2801

• DATE: 12/8/2015

• DWG #: S3.7

EXHAUST FAN SCHEDULE

MARK	MFR.	MODEL	CFM	S.P.	RPM	MOTOR HP/A	MOTOR Volts	MOTOR PHASE	WEIGHT LBS	SERVICE	LOCATION	REMARKS
EF-1	CAPTIVE-AIRE	SEE M3.3	3850	1.35"	1061	2HP/5.9A	208V	3PH	206	TYPE 1 HOOD H-1	ROOF	(1)(2)(4)(5)
EF-2	GREENHECK	GB-141-4	1300	0.5"	1009	1/4HP/5.8A	115V	1PH	85	RESTROOMS AND SHOWERS	ROOF	(6)(7)(8)(11)
EF-3	GREENHECK	GB-141-4	1300	0.5"	1009	1/4HP/5.8A	115V	1PH	85	RESTROOMS AND SHOWERS	ROOF	(6)(7)(8)(11)
EF-4	GREENHECK	SP-B150	120	0.25"		48W	115V	1PH	15	STAFF TOILET	CEILING	(7)(9)
EF-5	GREENHECK	SP-B150	120	0.25"		48W	115V	1PH	15	STAFF TOILET	CEILING	(7)(9)
EF-6	GREENHECK	SP-B150	120	0.25"		48W	115V	1PH	15	ADA WOMEN BATH 7	CEILING	(7)(9)
EF-7	GREENHECK	SP-B150	120	0.25"		48W	115V	1PH	15	ADA MEN BATH 9	CEILING	(7)(9)
EF-8	GREENHECK	CSP-A410	300	0.25"	1000	130W	115V	1PH	30	STAFF MEETING ROOM	INLINE	(3)(10)
DF-1 TO DF-10	FANTECH						115V	1PH		LAUNDRY DRYER VENT INLINE FAN	INLINE	(12)

REMARKS:

(1) UPBLAST CENTRIFUGAL FAN, MOUNT ON HINGED AND RAISED CURB
(2) INTERLOCK WITH HOOD CONTROL PANEL & INTERLOCK WITH MAU-1 OPERATION, WIRING BY ELECT CONTRACTOR
(3) INTERLOCK WITH WALL SWITCH WITH PILOT LIGHT (BY ELECT CONTR.)
(4) UL 762 LISTING FOR GREASE HOOD APPLICATION.
(5) GREASE DRAIN TROUGH COLLECTOR
(6) PROVIDE BACKDRAFT DAMPER, ROOF CURB
(7) INTERLOCK WITH LIGHT SWITCH (BY ELECT CONTRACTOR)
(8) MUSHROOM FAN, MFR. ROOF CURB
(9) CEILING FAN WITH BOTTOM MOUNT GRILLE, WITH ROOF JACK AND VENT CAP, BACKDRAFT DAMPER.
(10) INLINE FAN, HANGER KIT WITH SPRING VIBR. ISOLATORS, WITH ROOF JACK AND VENT CAP, BACKDRAFT DAMPER.
(11) PERMATECTOR COATING
(12) INTERLOCK WITH DRYER OPERATION

EXHAUST HOODS

MARK	TAG	MFR.	MODEL	EXHAUST CFM	MAKEUP AIR CFM	EXHAUST DUCT SIZE	EXHAUST S.P.	DIMENSIONS WIDTH	DIMENSIONS DEPTH	DIMENSIONS HEIGHT	SERVICE	REMARKS	TYPE 1	TYPE 2
H-1	#23	CAPTIVE AIRE	SEE M3.1 AND M3.2	3850	3465	36X10	0.99"	14-0"	54"	24"	KITCHEN COOKLINE	(1)(2)(3)(4)	X	

REMARKS AND ACCESSORIES:

(1) HOOD SHALL BE FURNISHED AND INSTALLED BY MECH CONTRACTOR. REFER TO M3.1 AND M3.2 FOR HOOD SHOP DRAWINGS.
(2) HOOD SHALL BE FURNISHED WITH ANSUL SYSTEM, AND HANGING WARDWARE.
(3) MECH CONTRACTOR SHALL FURNISH PREWIRED HOOD CONTROL PANEL SEE SHEET M3.4. THE PANEL SHALL BE INSTALLED BY CONTRACTOR AND FIELD WIRING BY ELECTRICAL CONTRACTOR INCLUDING INTERLOCK WITH ANSUL SYSTEM, EXH FAN, MAKEUP AIR UNIT, FIRE ALARM SYSTEM, SMOKE DETECTORS, GAS SOLENOID VALVE, SHUT TRIP BREAKERS. SEE SHEET M3.4 FOR WIRING DIAGRAMS.
(4) HOOD SHALL BE FURNISHED WITH STAINLESS STEEL MAKEUP AIR PLENUM IN FRONT OF HOOD WITH PERFORATED FACE GRILLES..

PACKAGE AIR CONDITIONING UNITS

SYMBOL	TONS	LOCATION	MANUF'R & MODEL NO.	ALTERNATE BID MFR & MODEL NO. SEE NOTE 8 BELOW	SERVICE	CFM	E.S.P.	REF.	COOLING TOTAL MBH	COOLING SENSIBLE MBH	COOLING EDB/EWB	AMB	HEATING INPUT MBH	HEATING OUTPUT MBH	ELECTRICAL VOLTS	PHASE	MCA	MOCP	COMPR. FLA	SEER	AFUE	MIN OSA CFM	LOCATION	WEIGHT (lbs)	HEIGHT WITH CURB	REMARKS
AC 1	6	ROOF	CARRIER 48TCDA07A	TRANE YSC-074	MEN EMERGENCY HOUSING	2,400	1.2"	R-410A	75	58	80/67	105'F	72	59	208	3	36	50	19.6	13.0	82%	600	ROOF	1000	55"	#1,2,3,4,5,7
AC 2	5	ROOF	CARRIER 48TCDA060A	TRANE YSC-063	MEN - MEDICAL RESPITE WOMEN - MEDICAL RESPITE	2,000	1.2"	R-410A	62	46	80/67	105'F	72	59	208	3	30	45	15.6	13.0	82%	500	ROOF	1000	48"	#1,2,3,4,5,7
AC 3	5	ROOF	CARRIER 48TCDA060A	TRANE YSC-063	TOILET ROOMS, SHOWERS, KITCHEN, CORRIDOR	2,000	1.2"	R-410A	62	46	80/67	105'F	72	59	208	3	30	45	15.6	13.0	82%	500	ROOF	1000	48"	#1,2,3,4,5,7
AC 4	6	ROOF	CARRIER 48TCDA07A	TRANE YSC-074	DINING/COMMONS	2,400	1.2"	R-410A	75	58	80/67	105'F	72	59	208	3	36	50	19.6	13.0	82%	600	ROOF	1000	55"	#1,2,3,4,5,7
AC 5	3	ROOF	CARRIER 48TCDA04	TRANE YSC-033	RECEPTION, COMPUTER ROOM	1,200	1.2"	R-410A	25	35	80/67	105'F	60	49	208	3	22	30	10.4	13.0	82%	360	ROOF	900	48"	#1,2,3,4,5,7
AC 6	6	ROOF	CARRIER 48TCDA07A	TRANE YSC-074	OFFICES AND STAFF MEETING ROOM	2,400	1.2"	R-410A	75	58	80/67	105'F	72	59	208	3	36	50	19.6	13.0	82%	600	ROOF	1000	55"	#1,2,3,4,5,7
AC 7	8.5	ROOF	CARRIER 48TCDD08C3	TRANE YSC-092	WOMEN TRANSITIONAL HOUSING WOMEN EMERGENCY HOUSING	3,400	1.2"	R-410A	105	81	80/67	105'F	125	103	208	3	45	50	28.2	13.0	82%	850	ROOF	1500	55"	#1,2,3,4,5,6
AC 8	4	ROOF	CARRIER 48TCDA05	TRANE YSC-043	MEN TRANSITIONAL HOUSING	1,600	1.2"	R-410A	45	33	80/67	105'F	72	59	208	3	23.8	30	13.7	13.0	82%	400	ROOF	900	48"	#1,2,3,4,5,7
AC 9	6	ROOF	CARRIER 48TCDA07A	TRANE YSC-074	TOILET ROOMS, SHOWERS, LAUNDRY, CORRIDOR, EXAM, OFFICE, LINEN	2,400	1.2"	R-410A	75	58	80/67	105'F	72	59	208	3	36	50	19.6	13.0	82%	600	ROOF	1000	55"	#1,2,3,4,5,7
AC 10	7.5	ROOF	CARRIER 48TCDD08C3	TRANE YSC-092	MEN TRANSITIONAL HOUSING	3,000	1.2"	R-410A	90	69	80/67	105'F	125	103	208	3	47	50	27.2	13.0	82%	750	ROOF	1150	55"	#1,2,3,4,5,6

NOTES:

1. SIDE SA DISCHARGE AND RETURN, HORIZONTAL 100% DIFF. DRYBULB ECONOMIZER, 2" FILTER WITH 30% EFFICIENCY, 100% POWER EXHAUST FAN, VARIABLE FREQUENCY DRIVE FOR SA FAN, DUCT SMOKE DETECTORS, LOW AMBIENT CONTROLS, FACTORY DISCONNECT SWITCH, HIGH EFF. FAN MOTOR, LOW 2-STAGE GAS HEAT, ECONOMIZER FAULT DETECTION, HIGH STATIC SUPPLY AIR FAN MOTORS.
2. PROVIDE NEW SMOKE DETECTORS TO BE INSTALLED IN MAIN S.A. DUCTS BY THE MECHANICAL SECTION, ELECTRICAL SECTION SHALL WIRE DUCT MOUNTED SMOKE DETECTORS. THE DUCT MOUNTED SMOKE DETECTOR SHALL SHUT DOWN EACH RESPECTIVE UNIT. DUCT SMOKE DETECTORS FURNISHED BY MC, INSTALLED BY MC AND WIRED BY EC. DUCT SMOKE DETECTORS SHALL HAVE REMOTE TEST/REST STATIONS. MC AND EC SHALL WIRE UNITS FOR GLOBAL SHUTDOWN SUCH THAT WHEN ONE UNIT DETECTS SMOKE, ALL UNITS SHALL SHUT DOWN SIMULTANEOUSLY - PROVIDE NECESSARY RELAYS AND CONTACTORS.
3. ALL ROOFTOP AC UNITS SHALL BE SET ON 14-INCH MFR. ROOF CURBS WITH SEISMIC HOLD DOWNS.
4. ALL FILTER SYSTEMS SHALL BE MINIMUM RATED FOR MERV 8 PER 2013 CALIFORNIA GREEN CODE.
5. PROVIDE PELICAN PROGRAMMABLE THERMOSTAT, MODEL TS200, WITH REMOET TEMP SENSORS MODEL TA1. PROVIDE PELICAN GATEWAY GW400 WIRELESS CONTROLLER, FACTORY STARTUP AND CUSTOMER TRAINING. LOCATE ALL THERMOSTATS IN OFFICE 18 OR AS DIRECTED BY OWNERS REPRESENTATIVE. MFR VENDOR CONTACT: MARK WILLENS, (925)963-4624, EMAIL: MARK@PELICANWIRELESS.COM
6. ECONOMIZER AND POWER EXHAUST FANS SHALL BE FIELD INSTALLED AND FIELD WIRED PER MFR INSTALLATION INSTRUCTIONS. THE UNIT SHALL BE MICROMETAL PECE-SRT34TA-2W1-D2DH WITH HONEYWELL ACTUATOR AND HONEYWELL JADE CONTROLS. ELECTRICAL CONTRACTOR SHALL PROVIDE SEPARATE LINE VOLTAGE POWER WIRING TO ASSEMBLY AT 208V-3PH, 7.0 MCA. 12.6 MOCP, 2 HP FAN MOTOR, SEE SHEET M3.6
7. ECONOMIZER AND POWER EXHAUST FANS SHALL BE FIELD INSTALLED AND FIELD WIRED PER MFR INSTALLATION INSTRUCTIONS. THE UNIT SHALL BE MICROMETAL PECE-SRT127A-2W1-D2DH WITH HONEYWELL ACTUATOR AND HONEYWELL JADE CONTROLS. ELECTRICAL CONTRACTOR SHALL PROVIDE SEPARATE LINE VOLTAGE POWER WIRING TO ASSEMBLY AT 208V-3PH, 4.8 MCA. 8.6 MOCP, 1 HP FAN MOTOR, SEE SHEET M3.6
8. FOR THE ALTERNATE BID, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF REDESIGN FOR THE PROJECT AS IT PERTAINS TO REDESIGN OF DUCTWORK, PIPING, GAS, ELECTRICAL, STRUCTURAL ENGINEERING, AND IMPACT TO ARCHITECTURAL DESIGN. THE ALTERNATE MANUFACTURER AC UNIT HAS DIFFERENT PHYSICAL DATA FROM SPECIFIED CARRIER UNITS, INCLUDING DUCT CONNECTION LAYOUTS ABOVE ROOF.

MAKEUP AIR UNIT SCHEDULES

MARK	MFR.	CFM	MODEL	S.P.	RPM	BHP	MOTOR HP/Volts/PH/Amps	SERVICE	LOCATION	FAN TYPE IN-LINE	FAN TYPE ROOF MOUNT	FAN TYPE EVAP COOLED	FAN TYPE HEATING	WEIGHT LBS	REMARKS
MAU-1	CAPTIVE AIRE	3465	REFER TO SHEET M3.3 FOR EQUIPMENT INFORMATION					HOODS H-1,EF-1	ATTIC	X		X		492	(1)(2)(3)(4)(5)(6)(7)

REMARKS AND ACCESSORIES:

(1) INDOOR UNIT SIDE DISCHARGE - SEE M3.3
(2) PROVIDE EVAP COOLER, SPRING VIBRATION ISOLATORS
(3) PROVIDE MERV 8 FILTERS AND RACK
(4) INTERLOCK WITH HOOD CONTROL PANEL AND EF-1 - BY E.C.
(5) PROVIDE DUCT SMOKE DETECTORS AND AUTOMATIC SHUTOFF UPON SMOKE DETECTION, SEE NOTE #2 ABOVE FOR GLOBAL SHUTDOWN, PROVIDE REMOTE TEST AND RESET STATION.
(6) SET ABOVE 6x6 SLEEPERS IN ATTIC - SEE STRUCTURAL DRAWINGS. PROVIDE VIBREX MW SAUSSE RMU-EQ SPRING ISOLATORS WITH SEISMIC RESTRAINTS.
(7) PROVIDE GREENHECK GRSI-30 OUTSIDE AIR INTAKE HOOD WITH CURB AND BACKDRAFT DAMPERS.

GENERAL NOTES:

THESE DRAWINGS IS CREATED AS A SCHEMATIC MEANS OF COORDINATING THE VARIOUS TRADES CONTRACTORS THAT WILL BE PERFORMING WORK ABOVE THE SUSPENDED CEILING SYSTEMS IN THE PROJECT. THE DRAWING SHALL BE USED AS A REFERENCE SHEET ONLY AND SHALL NOT BE UTILIZED AS A FINAL SET OF CONSTRUCTION DRAWINGS, OR A DIMENSIONED SHOP DRAWING. DUE TO TIGHT CLEARANCES, ALL CONTRACTORS AND ALL TRADES SHALL INCLUDE IN THEIR BIDS THE NECESSARY TIME AND MATERIAL FOR COORDINATION EFFORTS TO AVOID CONFLICT DURING CONSTRUCTION BETWEEN TRADES AND THE DIFFERENT SYSTEMS SUCH AS DUCTWORK, HANGERS, PIPES, CONDUITS, REFRIGERANT LINES, PLUMBING LINES AND FIRE SPRINKLER LINES. THE GENERAL CONTRACTOR SHALL COORDINATE THE DIFFERENT TRADES AND SUB CONTRACTORS WITH PERIODIC SITE COORDINATION AND FIELD MEASUREMENT/ROUGH-IN MEETINGS TO ENSURE THE LACK OF CONFLICTS IN THE FIELD. THE SUB CONTRACTORS FOR THE DIFFERENT TRADES SHALL BE RESPONSIBLE FOR INITIAL SITE VISITS DURING BID PROCESS, AND THE COORDINATION EFFORTS AND DETAILED SHOP DRAWINGS TO SHOW FIELD CONDITIONS AND TO AVOID CONFLICTS WITH STRUCTURAL MEMBERS, CEILING HEIGHTS, LIGHTING FIXTURES AND OTHER EXISTING BASE BUILDING ELEMENTS. THE LACK OF DILIGENT COORDINATION EFFORTS AND LACK OF SITE VISITS AND FIELD MEASUREMENTS BEFORE START OF CONSTRUCTION AND BEFORE FABRICATION OF DUCTWORK, PIPING AND CONDUITS, SHALL NOT ENTITLE THE SUB CONTRACTORS TO CHANGE ORDERS. ANY DEVIATIONS OR ADJUSTMENTS FROM THIS DRAWING AS REQUIRED BY FIELD CONDITIONS OR ASBUILT CONDITIONS SHALL BE INCLUDED IN THE ORIGINAL BID PRICING FOR ALL TRADES INCLUDING CHANGES TO DUCT LAYOUTS, PIPING LAYOUTS, CONDUIT LAYOUTS, AND SUPPORT LOCATIONS.

ALL EQUIPMENT SHALL BE LISTED BY NATIONALLY RECOGNIZED TESTING LABORATORY ADN PROPERLY LABELED.

NOTES

1. INSTALL ALL DUCTWORK AND PIPING 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 THE EXACT LOCATION OF SINGLE LINE DUCTS.
2. THIS CONTRACTOR SHALL REFER TO ELECTRICAL CONTRACT DOCUMENTS TO OBTAIN THE INFORMATION OF STARTERS, VOLTAGE, PHASE, INTERLOCKING CONTROLS & MISCELLANEOUS EQUIPMENT SUCH AS RELAYS IN STARTERS, ETC., SO THAT ALL ELECTRICAL EQUIPMENT SHALL FULLY COMPLY WITH ELECTRICAL AND CONTROL REQUIREMENTS.
3. THIS CONTRACTOR WILL PROVIDE THREE COPIES OF OPERATING AND MAINTENANCE INSTRUCTIONS TO THE OWNER (IN VINYL COVER).
4. ACCESS OPENINGS FOR DAMPERS SHALL BE INSTALLED IN DUCTWORK WHEREVER FIRE DAMPERS OCCUR.
5. DUCT SIZES WITH LINING SHOWN ARE NET, CLEAR INSIDE DIMENSIONS.
6. PROVIDE HVAC DUCT INSULATION IN ACCORDANCE WITH THE CURRENT ISSUE OF THE CALIFORNIA MECHANICAL CODE.
7. ALL SQUARE ELBOW TURNS IN DUCTWORK SHALL HAVE TURNING VANES.
8. ALL CURBS AND SLEEPERS FOR AC EQUIPMENT, EXHAUST FANS AND CURBED DUCT PENETRATIONS TO BE FURNISHED AND INSTALLED BY LAND LORD UNLESS OTHERWISE NOTED. ALL CURBS AND SLEEPERS TO BE INSTALLED LEVEL WITH FINISH FLOOR. FACTORY CURBS BY MECHANICAL CONTRACTOR.
9. FURNISH AND INSTALL NOISE AND VIBRATION ISOLATION DEVICES ON DUCTWORK AND EQUIPMENT.
10. FLEXIBLE DUCT WORK SHALL NOT BE MORE THAN 6 FEET IN LENGTH FOR ANY ONE APPLICATION.
11. ALL HVAC AND PLUMBING SUPPORTS SHALL BE PER SMCNA STANDARD DETAILS.
12. PROVIDE STARTERS FOR ALL MECHANICAL EQUIPMENT, DISCONNECT SWITCH BY ELECTRICAL.
13. FABRICATE AND INSTALL RECTANGULAR AND ROUND DUCTWORK WITH GALVANIZED STEEL, IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS" OF THE LATEST EDITION.
14. COORDINATE DUCT ROUTING AND HEIGHTS WITH GENERAL CONTRACTOR. VERIFY ALL CLEARANCES BEFORE STARTING WORK.
15. THE CONTRACTOR FOR THIS DIVISION OF WORK IS REQUIRED TO READ THE SPECIFICATIONS AND REVIEW DRAWINGS FOR ALL DIVISIONS OF WORK AND IS RESPONSIBLE FOR THE COORDINATION OF THIS WORK AND THE WORK OF ALL SUBCONTRACTORS WITH ALL DIVISIONS OF WORK. IT IS THIS CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL SUBCONTRACTORS WITH A COMPLETE SET OF BID DOCUMENTS.
16. CONTRACTOR SHALL RESPONSIBLE FOR FIELD VERIFICATION OF ALL EXISTING CONDITIONS PRIOR TO SUBMITTING HIS BID. NO ADDITIONAL CONPENSATION WILL BE MAKE FOR ANY EXTRAS DUE TO CONTRACTOR'S FAILURE TO VISIT THE JOBSITE AND/OR HIS BID. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO ENGINEER FOR RESOLUTION.

CALGREEN 2013 NOTES:

5.410.4 THROUGH 5.410.4.5.1
DEVELOP AND IMPLEMENT A PLAN OF PROCEDURES FOR TESTING AND ADJUSTIN NEW SYSTEMS, INCLUDING (AS APPLICABLE): HVAC, INDOOR AND OUTDOOR LIGHTING AND CONTROLS, WATER HEATING, RENEWABLE ENERGY, LANDSCAPE IRRIGATION, AND WATER REUSE SYSTEMS.
BALANCE NEW HVAC SYSTEMS BEFORE OPERATION FOR NORMAL USE.
PROVIDE THE OWNER OR REPRESENTATIVE WITH A FINAL REPORT OF TESTING.
PROVIDE THE BUILDING REPRESENTATIVE WITH DETAILED OPERATING AND MAINTENANCE INSTRUCTIONS AND COPIES OF ALL GUARANTEES/ WARRANTIES FOR EACH SYSTEM.

5.504.1.3 and 5.504.3
COVERING OF DUCT OPENINGS AND PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION. AT THE TIME OF ROUGH INSTALLATION, OR DURING STORAGE ON THE CONSTRUCTION SITE AND UNTIL FINAL STARTUP OF THE HEATING AND COOLING EQUIPMENT, ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC, SHEET METAL, OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY TO REDUCE THE AMOUNT OF DUCT OR DEBRIS WHICH MAY COLLECT IN THE SYSTEM. PROTECT DUCT OPENINGS ANBD MECHANICAL EQUIPMENT DURING CONSTRUCTION. LIMIT USE OF PERMANENT HVAC DURING CONSTRUCTION TO CONDITIONING NECESSARY FOR MATERIAL AND EQUIPMENT INSTALLATION. IF PERMANENT HVAC IS USED DURING CONSTRUCTION, INSTALL MERV-8 FILTERS ON RETURNS, AND REPLACE ALL FILTERS IMMEDIATEOLY PRIOR TO OCCUPANCY, OR , IF THE BUILDING IS OCCUPIED DURING ALTERATION, AT THE CONCLUSION OF CONSTRUCTION.

504.5.3 AND 5.504.5.3.1:
AIR FILTRATION: PROVIDE AT LEAST MERV-8 FIXTERS IN REGULARLY OCCUPIED SPACES OF MECHANICALLY VENTILATED BUILDINGS. INSTALLED FILTERS MUST BE CLEARLY LABELED BY THE MANUFACTURER INDICATING THE MERV RATING, AND FILTER SPECIFICATION SHALL BE INCLUDED IN THE OPERATION AND MAINTENANCE MANUAL.

LEGEND

SYMBOL	ABBR.	DESCRIPTION
		SUPPLY AIR DUCT UP
		EXHAUST AIR DUCT UP
		RETURN AIR DUCT UP
		RETURN/EXHAUST/SUPPLY DUCT
		MVD MANUAL VOLUME DAMPER
		FLEXIBLE DUCT, 6'-0" LONG MAX.
	CD	CEILING SUPPLY DIFFUSER
	CER	CEILING EXHAUST REGISTER
	CRR	CEILING RETURN REGISTER
		ACOUSTICALLY INSULATED DUCT
T	T'STAT	THERMOSTAT
S		SENSOR
M		MECHANICAL CONTRACTOR
E		ELECTRICAL CONTRACTOR
KEC		KITCHEN EQUIPMENT CONTRACTOR
BD	BD	BACKDRAFT DAMPER
SD	SD	SMOKE DETECTOR
F1		ONE HOUR FIRE DAMPER
F3		THREE HOUR FIRE DAMPER
SF		COMBINATION FIRE/SMOKE DAMPER
	POC	POINT OF CONNECTION
U		UNDERCUT DOOR
		TO BE REMOVED
	AC	AIR CONDITIONING
	AFF	ABOVE FINISH FLOOR
	AHU	AIR HANDLING UNIT
	CB	CIRCUIT BREAKER
	CLG.	CEILING
	CD	CONDENSATE DRAIN
	CONN.	CONNECT/CONNECTION
	CONT.	CONTINUATION
	CFM	CUBIC FEET PER MINUTE
	DET.	DETAIL
	DISC.	DISCONNECT
	DTR	DOWN THRU ROOF
	EF	EXHAUST FAN
	(E)	EXISTING
	E.S.P.	EXTERNAL STATIC PRESSURE
	FC	FAN COIL
	G.C.	GENERAL CONTRACTOR
	HVAC	HEATING, VENTILATING, AIR CONDITIONING
	LL/L.L.	LANDLORD
	MAU	MAKE-UP AIR UNIT
	MCA	MINIMUM CIRCUIT AMPACITY
	MECH.	MECHANICAL
	MFR.	MANUFACTURER
	MOCP	MAXIMUM OVER CURRENT PROTECTION
	(N)	NEW
	OA/OSA	OUTSIDE AIR
	OBD	OPPOSED BLADE DAMPER
	(A)	RELOCATED
	RNA	ROUND NECK ADAPTOR
	S/S	STAINLESS STEEL
	T.S.P.	TOTAL STATIC PRESSURE
	UON	UNLESS OTHERWISE NOTED

DRAWING SCHEDULES

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

LEGEND, NOTES SCHEDULES

◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

◦ JOB: 2015.2801

◦ DATE: 06/17/16

◦ SHEET: M0.1

GENERAL NOTES:

1. INSTALL ALL DUCTWORK AND PIPING 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 THE EXACT LOCATION OF SINGLE LINE DUCTS. CONTRACTOR SHALL VERIFY FIELD CONDITIONS AND CLEARANCES ABOVE CEILING AND SHALL MAKE ADJUSTMENTS TO DUCT SIZES, LAYOUTS, EQUIPMENT LOCATIONS AND OTHERS TO BEST SUIT FIELD CONDITIONS.
2. THIS CONTRACTOR SHALL REFER TO ELECTRICAL CONTRACT DOCUMENTS TO OBTAIN THE INFORMATION OF STARTERS, VOLTAGE, PHASE, INTERLOCKING CONTROLS & MISCELLANEOUS EQUIPMENT SUCH AS RELAYS IN STARTERS, ETC., SO THAT ALL ELECTRICAL EQUIPMENT SHALL FULLY COMPLY WITH ELECTRICAL AND CONTROL REQUIREMENTS.
3. THIS CONTRACTOR WILL PROVIDE THREE COPIES OF OPERATING AND MAINTENANCE INSTRUCTIONS TO THE OWNER (IN VINYL COVER).
4. ACCESS OPENINGS FOR DAMPERS SHALL BE INSTALLED IN DUCTWORK WHEREVER FIRE DAMPERS OCCUR.
5. DUCT SIZES WITH LINING SHOWN ARE NET, CLEAR INSIDE DIMENSIONS.
6. PROVIDE HVAC DUCT INSULATION IN ACCORDANCE WITH ALL APPLICABLE LOCAL CODES.
7. ALL SQUARE ELBOW TURNS IN DUCTWORK SHALL HAVE TURNING VANES.
8. ALL CURBS AND SLEEPERS FOR AC EQUIPMENT, EXHAUST FANS AND CURBED DUCT PENETRATIONS TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR UNLESS OTHERWISE NOTED. ALL CURBS AND SLEEPERS TO BE INSTALLED LEVEL WITH FINISH FLOOR.
9. FURNISH AND INSTALL NOISE AND VIBRATION ISOLATION DEVICES ON DUCTWORK AND EQUIPMENT.
10. FLEXIBLE DUCT WORK SHALL NOT BE MORE THAN 6 FEET IN LENGTH FOR ANY ONE APPLICATION.
11. EACH SINGLE SYSTEM PROVIDING HEATING OR COOLING AIR IN EXCESS OF 2000 CUBIC FEET PER MINUTE SHALL BE EQUIPPED WITH SMOKE DETECTORS & AUTOMATIC SHUT–OFFS.
12. THE ENGINEER DOES NOT TAKE RESPONSIBILITY FOR THE COMPLETE ACCURACY OF THESE CONDITIONS SHOWN ON THE PLANS. THE CONTRACTOR, THEREFORE, SHALL MAKE ALLOWANCES IN HIS BID TO PROVIDE A COMPLETE AND OPERABLE SYSTEM WITH THE INTENT AS DESCRIBED BY THESE DRAWINGS AND SPECIFICATIONS – MAKING PROVISIONS FOR FIELD ADJUSTMENTS AS REQUIRED. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO START OF WORK OR PRICING.
13. OPPOSED BLADE DAMPERS ARE NOT PERMITTED AT THE FACE OF THE DIFFUSERS.
14. CONTRACTOR SHALL FIELD VERIFY DUCT CLEARANCES, TAKE FIELD MEASUREMENTS AND PROVIDE SHOP DRAWINGS FOR ENGINEERS REVIEW PRIOR TO START OF WORK AND DUCT FABRICATION. ADJUST DUCT SIZES AND ROUTING TO BEST SUIT FIELD CONDITIONS. ENGINEER DOES NOT TAKE RESPONSIBILITIES FOR THE ACCURACY OF DUCT CLEARANCES.
15. CONTRACTOR SHALL COORDINATE AND FIELD VERIFY EXACT LOCATION OF ALL HVAC EQUIPMENTS PRIOR TO INSTALLATION. INSTALL EQUIPMENT PER MFR'S RECOMMENDATION AND PROVIDE REQUIRED CLEARANCES FOR SERVICING. ADJUST DUCTWORK AND PIPING ACCORDINGLY TO BEST SUIT FIELD CONDITIONS.

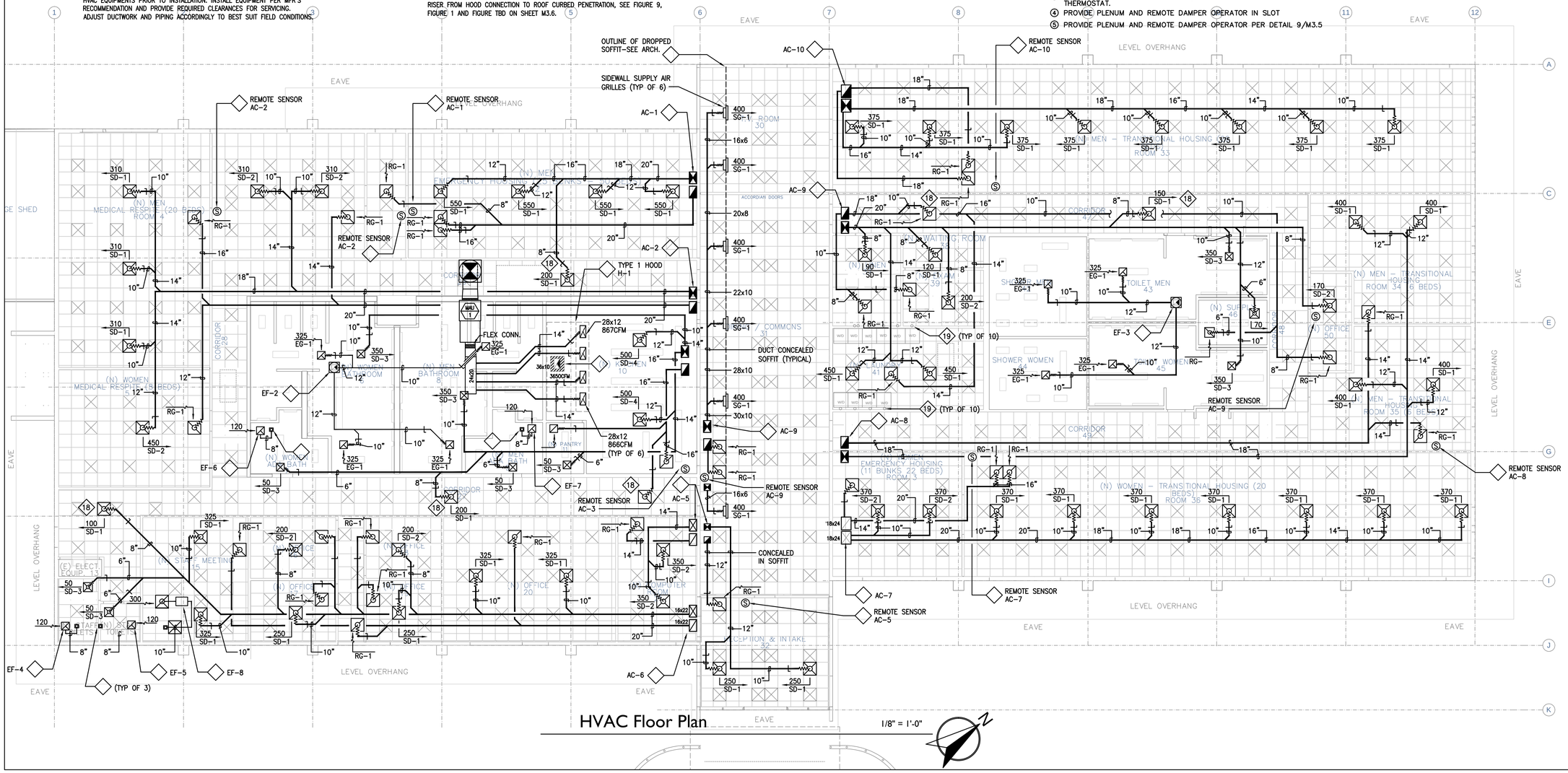
KEYED SHEET NOTES:

1. ALL GREASE DUCTS SHALL SLOPE AT (2%) ¼ INCH PER FOOT TOWARDS LOWEST POINT AT HOOD CONNECTION. GREASE DUCT SYSTEMS SHALL HAVE CLEANOUTS WITH FIRE RATED ACCESS OPENINGS AND DOORS PER CMC 507.5. LOCATE CLEANOUTS AT EVERY 10 FEET ON STRAIGHT DUCT RUNS, AND AT EACH ELBOW FITTING AND WHERE ANY PORTION OF DUCT HAVING SECTIONS INACCESSIBLE FROM THE DUCT ENTRY OR DISCHARGE. CLEANOUT OPENINGS SHALL BE EQUIPPED WITH TIGHT FITTING DOORS CONSTRUCTED OF STEEL HAVING A THICKNESS NOT LESS THAN THAT REQUIRED FOR THE DUCT, AND EQUIPPED WITH A SUBSTANTIAL METHOD OF LATCHING, SUFFICIENT TO HOLD THE DOOR TIGHTLY CLOSED. DOORS SHALL BE SO DESIGNED THAT THEY CAN BE OPENED WITHOUT THE USE OF A TOOL. ALL GREASE DUCTS , AND THE TOP PORTIONS OF THE TYPE 1 HOODS EXPOSED IN PLENUM, AND CONNECTED SYSTEMS CONCEALED ABOVE CEILINGS SHALL BE WRAPPED IN A 2–HOUR FIRE RATED ENCLOSURE PER CMC 507.6 USING 3M FIRE WRAP , FROM DUCT CONNECTION AT HOOD TO THE DUCT PENETRATION THRU ROOF, UP TO 6 INCHES PAST ROOF LINE. PROVIDE FIRE RESISTIVE OPENINGS PER MANUFACTURER SPECIFICATIONS AND DETAILS AT EACH CLEANOUT POINT. REFER TO DETAILS ON SHEET M3.6. AIR VELOCITY IN GREASE DUCTS SHALL BE MAINTAINED BETWEEN 1500 FPM AND 2500 FPM. GREASE DUCT SHALL BE CONSTRUCTED OF BLACK STEEL MINIMUM 16 GAUGE WITH CONTINUOUS LIQUID TIGHT WELD AT ALL JOINTS AND SEAMS.
2. DUCTS SHALL BE SUPPORTED PER THE MINIMUM REQUIREMENT OF UMC TABLE 6–E AND SHALL BE BRACED AND GUYED TO PREVENT LATERAL OR HORIZONTAL SWING. THE USE OF LATERAL OR HORIZONTAL SEISMIC RESTRAINT GUIDELINES PER "SMACNA" IS ALSO APPLICABLE.
3. INSULATION MATERIALS APPLIED TO THE EXTERIOR OF THE DUCTS LOCATED IN THE BUILDING SHALL HAVE A FLAME SPREAD OF NOT MORE THAN 25 AND SMOKE–DENSITY NOT EXCEEDING 50 WHEN TESTED AS A COMPOSITE INSTALLATION.
4. AIR MOVING SYSTEMS SUPPLYING AIR IN EXCESS OF 2,000 CFM SHALL BE EQUIPPED WITH AN AUTOMATIC SHUTOFF/SMOKE DETECTOR. THE SMOKE DETECTOR SHALL AUTOMATICALLY SHUT–OFF THE POWER SOURCE OF THE AIR–MOVING EQUIPMENT UPON DETECTION OF SMOKE IN THE MAIN SUPPLY–AIR DUCT SERVED BY THE EQUIPMENT.
5. CONTRACTOR SHALL FURNISH AND INSTALL TWO LAYERS OF 3M FIRE BARRIER DUCT WRAP SYSTEM AROUND THE GREASE DUCTS THAT ARE CONCEALED ABOVE THE CEILING – REFER TO SHEET M3.6 FOR DETAILS. FOR VERTICAL GREASE DUCT RISER FROM HOOD CONNECTION TO ROOF CURBED PENETRATION, SEE FIGURE 9, FIGURE 1 AND FIGURE TBD ON SHEET M3.6.
6. MECHANICAL CONTRACTOR SHALL PROVIDE RECTANGULAR TO ROUND DUCT TRANSITIONS/FITTINGS WHERE REQUIRED.
7. INSTALL KITCHEN GREASE EXHAUST HOOD. SUPPORT HOOD PER MANUFACTURER'S INSTRUCTIONS. TRANSITION FROM HOOD CONNECTION TO WELDED KITCHEN EXHAUST DUCT SIZES SHOWN.
8. ALL GREASE DUCT SEAMS, JOINTS AND PENETRATIONS AND DUCT TO DUCT COLLAR CONNECTIONS SHALL HAVE A LIQUIDTIGHT CONTINUOUS EXTERNAL WELD. DUCT COLLAR CONNECTIONS SHALL BE ALLOWED TO BE NON WELDED AS SHOWN ON DETAILS ON SECTION 510.5.2 CMC 2013. BUTT–WELDED CONNECTIONS SHALL NOT BE ALLOWED. RECTANGULAR GREASE DUCT SHALL COMPLY WITH CMC 2013 SECTION 510.5.2.1 – 1/2" FLANGE WITH EDGE WELD OR FILLED WELD IS ALLOWED.
9. PROVIDE METAL SHIELD (COLLAR) AT POINT OF CEILING PENETRATION TO SEAL DUCT. PROVIDE FIRE RATED CEILING MATERIAL A MINIMUM OF 18 INCHES FROM OUTER EDGE OF DUCT AT CEILING PENETRATION.
10. RUN DUCT FROM CEILING EXHAUST FAN UP TO HIGH ROOF WITH ROOF VENT AND CAP. TERMINATE VENT CAP 10 FEET FROM FRESH AIR INTAKES.
11. GENERAL: THE DUCT LAYOUT IS SCHEMATIC IN NATURE AND THE CONTRACTOR SHALL TAKE INTO ACCOUNT ALL EXISTING FIELD CONDITIONS INCLUDING BEAM AND JOIST ELEVATIONS AND CEILING HEIGHT REQUIREMENTS BY ARCHITECT. THE PROJECT WILL INVOLVE SOME TIGHT CEILING CLEARANCE AREAS. THE CONTRACTOR SHALL MAKE ADJSTMENTS TO DUCT LAYOUT AND SIZING TO FIT THE EXISTING RESTRICTIONS, AT NO ADDED COSTS TO OWNER. THE CONTRACTOR SHALL PRODUCE DETAILED SHEET METAL SHOP DRAWINGS FOR ENGINEERS REVIERW BEFORE START OF DUCT FABRICATION.
12. GENERAL: FOR CEILING DIFFUSERS IN SHEETROCK CEILING AREAS, THE CONTRACTOR SHALL PROVIDE A PLASTER TRIM THAT ALLOWS THE CEILING DIFFUSER TO BE LAY–IN STYLE. THE INTENT IS TO ALLOW THE DIFFUSERS TO BE MOVED FROM PLASTER TRIM FRAME FOR ACCESS TO CEILING MANUAL AIR VOLUME/BALANCING DAMPER MOUNTED IN FLEX DUCT CONNECTOR, WITHOUT THE NEED FOR REMOTE DAMPER OPERATORS.
13. PROVIDE DUCT SMOKE DETECTORS AT THE MAIN MAKEUP AIR DUCTS FOR MAU–1. THE ELECTRICAL CONTRACTOR SHALL PROVIDE 120V POWER TO THE MAKEUP AIR UNIT AND SHALL INTERLOCK MAKEUP AIR UNITS AND DUCT SMOKE DETECTORS TO SHUT DOWN FANS WHEN SMOKE IS DETECTED. PROVIDE INTERLOCK FOR MONITORING OF DUCT SMOKE DETECTORS BY FIRE ALARM SYSTEM IF APPLICABLE. LOCATE DUCT SMOKE DETECTORS BEFORE THE FIRST BRANCH DUCT.
14. RUN GREASE DUCT UP THRU ROOF TO EXHAUST FAN. INSTALL 3M FIRE WRAP AROUND DUCTWORK PER M3.10 DETAILS. REFER TO SHEET M2.2 FOR CONTINUATION.
15. KEEP AREA ABOVE PANELBOARDS AND ABOVE WORKING AREA OF PANELBOARDS CLEAR OF DUCTWORK IN COMPLIANCE WITH NEC – COORDINATE WITH ELECTRICAL CONTRACTOR.
16. MOUNT ALL THERMOSTATS IN MANAGER'S OFFICE WALL, PROVIDE CLEAR LABELS FOR ALL T'STATS. EACH T'STAT SHALL HAVE A REMOTE TEMPERATURE SENSOR MOUNTED IN SPACE BEING SERVED BY HVAC SYSTEM. FINAL SENSOR LOCATIONS SHALL BE COORDINATED WITH OWNER AND ARCHITECT.
17. RUN LINED DUCT UP THRU ROOF TO AC UNIT. PROVIDE CURBED ROOF PENETRATION PER DETAIL 5/M3.8. REFER TO SHEET M2.2 FOR CONTINUATION.
18. PROVIDE COMBINATION FIRE/SMOKE DAMPER FOR DUCT PENETRATION THRU RATED CEILING LID AT EXIT CORRIDOR WHICH IS A TUNNEL CONSTRUCTION. SEE DETAIL 8/M3.5. PROVIDE REMOTE TEST AND RESET STATION AND MOUNT IN CORRIDOR WALL WITHIN 10 FEET OF FSD.
19. PROVIDE 4–INCH DIAMETER DRYER VENT DUCT THRU ROOF. DUCT SHALL BE OF ALUMINUM CONSTRUCTION. PROVIDE LINT TRAP BOX AND BOOSTER FAN, FANTECH OR EQUAL, ONE PER VENT DUCT. PROVIDE ROOF JACK, FLASHING, AND GOOSENECK TERMINATION ON ROOF WITH INSECT SCREEN.

AIR DEVICE SCHEDULE

SYMBOL (1) (2)	MANUFACTURER / CATALOG NUMBER	SERVICE	NOMINAL SIZE MOD.	NOMINAL SIZE NECK	MOUNTING CEILING	MOUNTING SIDEWALL	MATERIAL STEEL	MATERIAL ALUM.	FINISH	BORDER	REMARKS
SD–1	TITUS PCS	KITCHEN AREAS SUPPLY AIR	24"x24"	SHOWN ON PLAN	●		●		#44 WHITE	LAY–IN T–BAR	①
SD–2	TITUS OMNI	BAR SUPPLY AIR	24"X24"	SHOWN ON PLAN	●		●		#44 WHITE	LAY–IN MOUNT	①②
SD–4	THERMAFUSER TF–HC	CEILING SUPPLY AIR	24"X24"	SHOWN ON PLAN	●		●		#44 WHITE	LAY–IN MOUNT	①②③
SG–1	TITUS FLOWBAR FL–20	DINING AREAS SA AND RA	2"SLOT 4FT L	SHOWN ON PLAN	●		●			BORDER 22 H3 CLIP	④
SD–3	TITUS PMC	KITCHEN AREAS MAKEUP AIR	24"x24"	SHOWN ON PLAN	●		●		#44 WHITE	LAY–IN T–BAR	①
RG–1	TITUS OMNI	BAR AREAS RETURN AIR	24"x24"	SHOWN ON PLAN	●		●		#44 WHITE	LAY–IN T–BAR	①②
EG–1	TITUS PAR	RESTROOMS EXHAUST AIR	12"X12"	SHOWN ON PLAN	●		●		#44 WHITE	LAY–IN MOUNT	①②③
RG–2	TITUS PAR	DINING AREAS CEILING RETURN AIR	40"X6"	SHOWN ON PLAN		●		●	#44 WHITE		⑤

① NECK DIMENSIONS AS INDICATED ON DRAWINGS. PROVIDE ADAPTOR AS REQUIRED.
② PROVIDE PLASTER TRIM FOR LAY–IN INSTALLATION ON SHEETROCK CEILING.
③ THERMALLY POWERED VAV HEATING/COOLING DIFFUSER WITH BUILT IN THERMOSTAT.
④ PROVIDE PLENUM AND REMOTE DAMPER OPERATOR IN SLOT
⑤ PROVIDE PLENUM AND REMOTE DAMPER OPERATOR PER DETAIL 9/M3.5



HVAC Floor Plan

1/8" = 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

HVAC Floor Plan

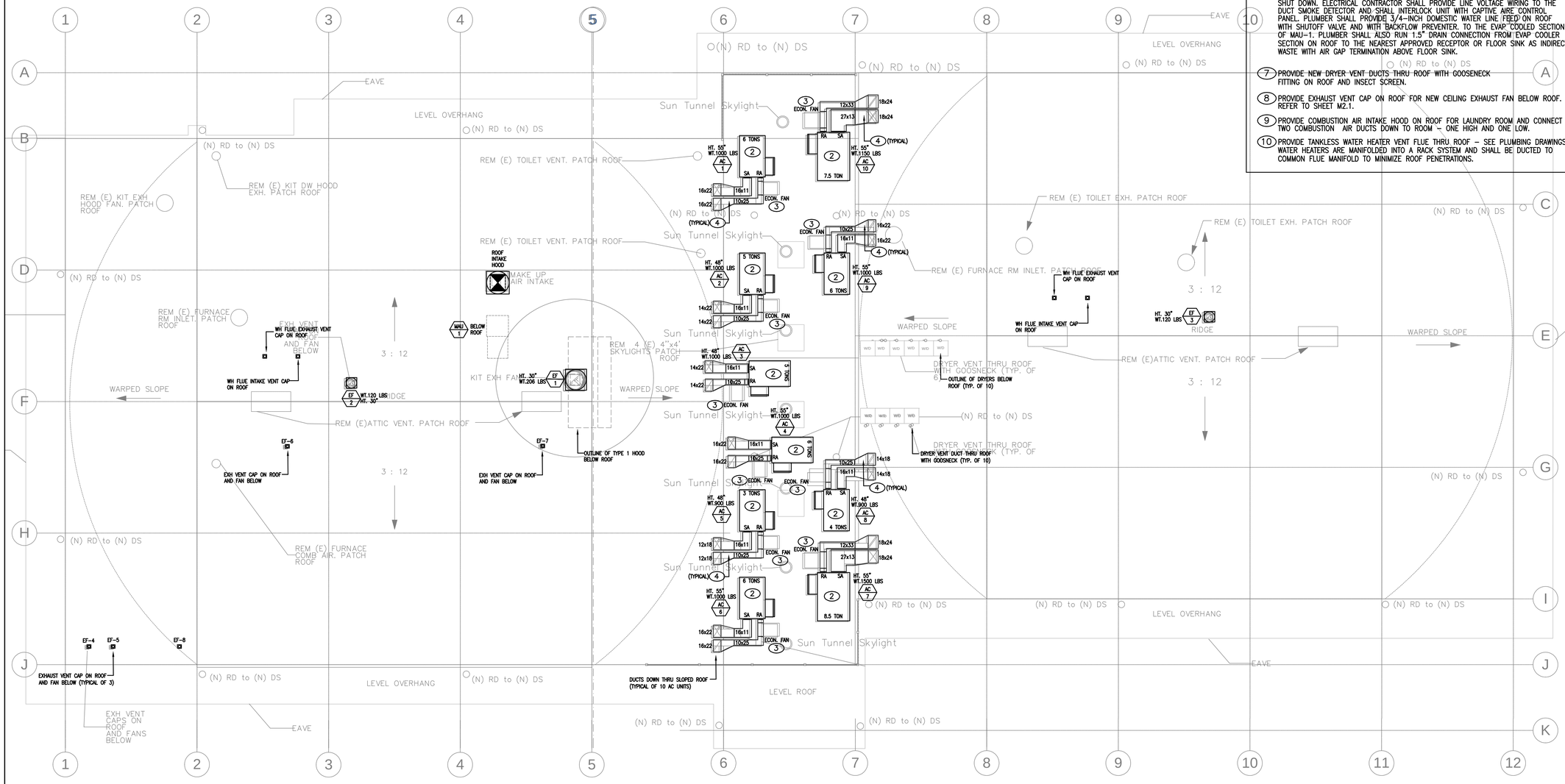
◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

◦ JOB: 2015.2801

◦ DATE: 06/17/16

◦ SHEET: M2.1



HVAC Roof Plan

1/8" = 1'-0"

KEYED SHEET NOTES:

1. DEMOLISH AND REMOVE EXISTING EQUIPMENT ON ROOF, PATCH ROOF WEATHERTIGHT. REFER TO ARCHITECTURAL PLANS.
2. NEW PACKAGE UNITS ON ROOF ON MFR. CURBS – SEE STRUCTURAL ENGINEER DRAWINGS.
3. INSTALL NEW ECONOMIZER/POWER EXHAUST FAN MODULES IN NEW RA DUCTWORK PER MFR INSTALLATION INSTRUCTIONS – SEE SHEET M3.6 FOR DETAILS AND CUT SHEETS. PROVIDE ANGLE IRON SUPPORTS AS REQUIRED AT BOTTOM OF UNIT TO ROOF SURFACE.
4. FURNISH AND INSTALL NEW FULLSIZE S.A. AND R.A. DUCTS ABOVE ROOF FOR NEW PACKAGE UNITS. PROVIDE INSULATED ACOUSTICAL INTERNAL LINING FOR EXPOSED DUCTS ABOVE ROOF. PROVIDE FLEXIBLE DUCT CONNECTORS. PROVIDE TRANSITIONS AS REQUIRED TO CONNECT TO NEW ROOF DUCT PENETRATIONS.
5. FURNISH AND INSTALL NEW EXHAUST FAN ON MFR ROOF CURB. REFER TO SHEET M3.2 FOR DETAIL.
6. FURNISH AND INSTALL NEW MAKEUP AIR UNIT ON ROOF. PROVIDE MFR ROOF CURB AS SHOWN ON SHEET M3.2 ALONG WITH ADDITIONAL METAL SUPPORT LEGS THAT CAN BE SET ABOVE 6X6 REDWOOD SLEEPERS. PROVIDE BOTTOM DUCT CONNECTION AND DUCT SMOKE DETECTOR MOUNTED IN MAKEUP AIR DUCT. INTERLOCK UNIT WITH DUCT SMOKE DETECTOR SUCH THAT IF THE SMOKE DETECTOR TRIPS, THE UNIT SHALL SHUT DOWN. ELECTRICAL CONTRACTOR SHALL PROVIDE LINE VOLTAGE WIRING TO THE DUCT SMOKE DETECTOR AND SHALL INTERLOCK UNIT WITH CAPTIVE AIRE CONTROL PANEL. PLUMBER SHALL PROVIDE 3/4–INCH DOMESTIC WATER LINE FEED ON ROOF WITH SHUTOFF VALVE AND WITH BACKFLOW PREVENTER. TO THE EVAP COOLED SECTION OF MAU–1. PLUMBER SHALL ALSO RUN 1.5" DRAIN CONNECTION FROM EVAP COOLER SECTION ON ROOF TO THE NEAREST APPROVED RECEPTOR OR FLOOR SINK AS INDIRECT WASTE WITH AIR GAP TERMINATION ABOVE FLOOR SINK.
7. PROVIDE NEW DRYER VENT DUCTS THRU ROOF WITH GOOSENECK FITTING ON ROOF AND INSECT SCREEN.
8. PROVIDE EXHAUST VENT CAP ON ROOF FOR NEW CEILING EXHAUST FAN BELOW ROOF. REFER TO SHEET M2.1.
9. PROVIDE COMBUSTION AIR INTAKE HOOD ON ROOF FOR LAUNDRY ROOM AND CONNECT TWO COMBUSTION AIR DUCTS DOWN TO ROOM – ONE HIGH AND ONE LOW.
10. PROVIDE TANKLESS WATER HEATER VENT FLUE THRU ROOF – SEE PLUMBING DRAWINGS. WATER HEATERS ARE MANIFOLDED INTO A RACK SYSTEM AND SHALL BE DUCTED TO COMMON FLUE MANIFOLD TO MINIMIZE ROOF PENETRATIONS.

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Lighting Plan

◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

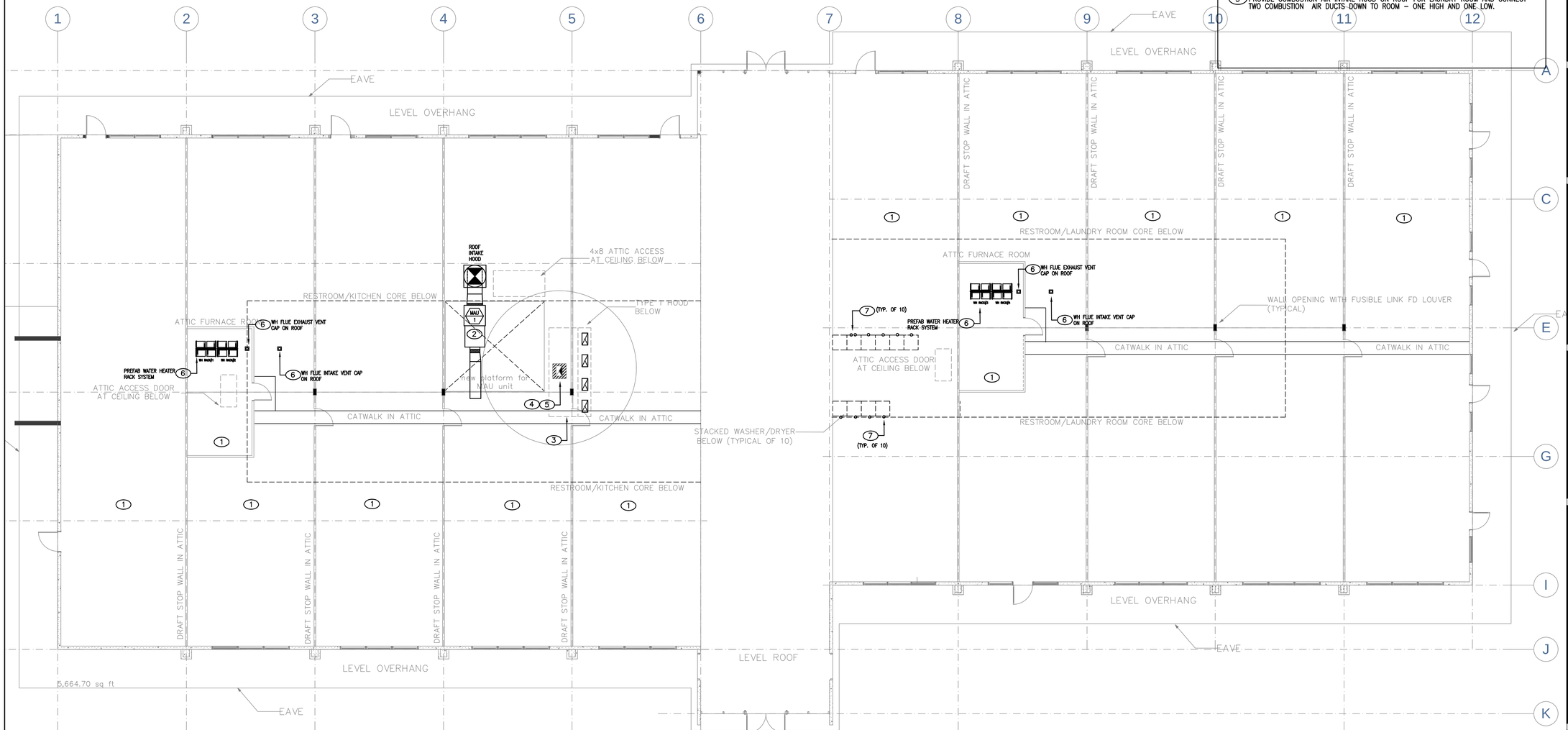
◦ JOB: 2015.2801

◦ DATE: 06/17/16

◦ SHEET: M2.2

KEYED SHEET NOTES:

1. DEMOLISH AND REMOVE EXISTING EQUIPMENT AND DUCTWORK AND PIPING IN ATTIC SPACE – VERIFY CONDITIONS IN FIELD.
2. NEW MAKEUP AIR UNIT IN ATTIC, SET ON 6X6 SLEEPERS – SEE STRUCTURAL PLANS. PROVIDE MW SAUSSE VIBREX SPRING ISOLATORS WITH SEISMIC RESTRAINTS. PROVIDE SHEET METAL DRAIN PAN BELOW UNIT. PLUMBER SHALL RUN 3/4" DRAIN LINE FROM PAN THRU CEILING WITH ESCUTCHEON AND TERMINATE AT CEILING ABOVE SINK.
3. OUTLINE OF TYPE 1 HOOD BELOW SHOWN FOR REFERENCE.
4. GREASE DUCT RISER WITH FIRE RATED WRAP ENCLOSURE – SEE SHEET M2.1. PROVIDE CLEANOUT OPENING IN ATTIC SPACE, BELOW ROOF.
5. FURNISH AND INSTALL NEW EXHAUST FAN ON MFR ROOF CURB. REFER TO SHEET M2.2 FOR CONTINUATION.
6. TANKLESS WATER HEATERS BY PLUMBER – SEE PLUMBING DRAWINGS. WATER HEATERS ARE MANIFOLDED INTO A RACK SYSTEM AND SHALL BE FACTORY ASSEMBLED AND PREPIPED AND PREWIRED. THE MECH CONTRACTOR SHALL INSTALL THE PVC FLUE VENTING MANIFOLD (FURNISHED BY PLUMBER AS A KIT) AND SHALL INSTALL CONNECTIONS TO EACH WATER HEATER. PROVIDE VENT TERMINATION THRU ROOF. THERE SHALL BE TWO 8-INCH MANIFOLDS AND MAINS SHARED WITH THE TWO SIDE BY SIDE RACK SYSTEMS, 4 WATER HEATERS PER RACK, TWO RACKS PER GROUP AS SHOWN. ONE 8-INCH MANIFOLD AND FLUE VENT THRU ROOF SHALL BE UTILIZED FOR EXHAUST VENT AND ONE SHALL BE USED FOR COMBUSTION AIR INTAKE. INSTALL FLUES PER MANUFACTURER INSTALLATION INSTRUCTIONS AND PROVIDE SEPARATION ON ROOF PER MFR INSTRUCTIONS.
   PROVIDE SLOPED ROOF FLASHING AND ROOF JACK, AND PROVIDE RAIN CAP FOR INTAKE VENT CAP. PAINT VENTS AND CAP PER ARCHITECTS INSTRUCTIONS.
7. PROVIDE NEW DRYER VENT DUCTS THRU ATTIC SPACE AND UP THRU ROOF WITH GOOSENECK DUCT FITTING ON ROOF AND INSECT SCREEN.
   DRYER VENT DUCTS SHALL BE RIGID ALUMINUM CONSTRUCTION PER CMC 2013.
   PROVIDE ROOF JACK, FLASHING AND GOOSENECK FITTING ON ROOF WITH INSECT SCREEN.
8. PROVIDE EXHAUST VENT CAP ON ROOF FOR NEW CEILING EXHAUST FAN BELOW ROOF. REFER TO SHEET M2.1.
9. PROVIDE COMBUSTION AIR INTAKE HOOD ON ROOF FOR LAUNDRY ROOM AND CONNECT TWO COMBUSTION AIR DUCTS DOWN TO ROOM – ONE HIGH AND ONE LOW.



HVAC ATTIC PLAN

1/8" = 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

HVAC ATTIC PLAN

◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

◦ JOB: 2015.2801

◦ DATE: 06/17/16

◦ SHEET: M2.3

HOOD INFORMATION – Job#2594520

HOOD NO.	TAG	MODEL	LENGTH	MAX. COOKING TEMP.	EXHAUST PLENUM RISER(S) TOTAL EXH. CFM	WIDTH	LENG.	DIA.	CFM	S.P.	TOTAL SUPPLY CFM	HOOD CONSTRUCTION	HOOD CONFIG. END TO END	ROW
1		5424 ND-2-PSP-F	14' 0.00"	600 Deg.	3850	10"	36"		3850	-0.999"	3465	430 SS Where Exposed	ALONE	ALONE

NOTE: MODEL ND-2 IS AN ETL LISTED HOOD
ETL LISTING IS 200 CFM/FT (600 DEGREES)
□ □ETL LISTING □14□0" □2800 CFM □3850 CFM (DESIGN)
MODEL ND-2 IS ETL LISTED WITH 1 E□ RISER UP TO 16□

HOOD INFORMATION

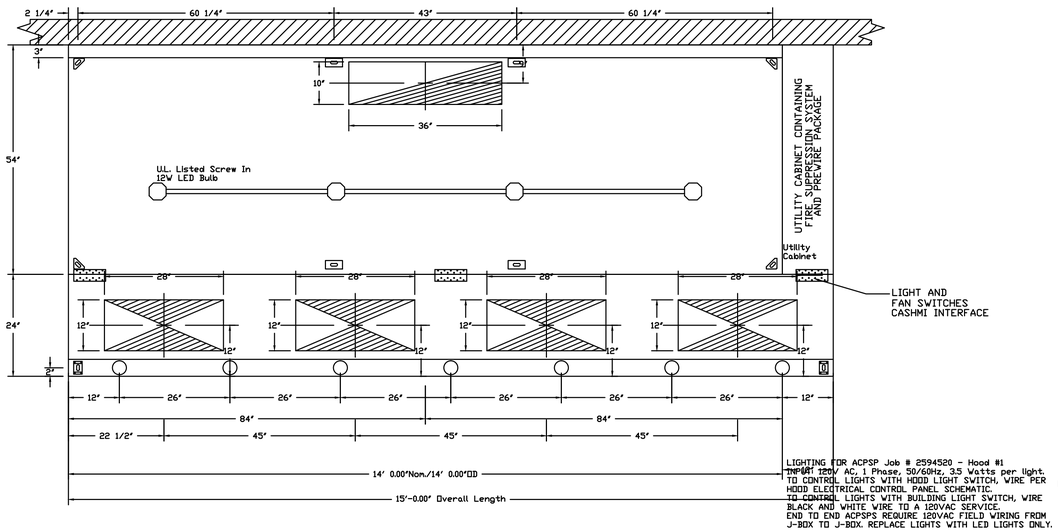
HOOD NO.	TAG	FILTER(S) TYPE	QTY.	HEIGHT	LENGTH	EFFICIENCY @ 9 MICRONS	LIGHT(S) QTY.	TYPE	WIRE GUARD	UTILITY CABINET(S) LOCATION	FIRE SYSTEM TYPE	FIRE SYSTEM SIZE	ELECTRICAL MODEL #	SWITCHES QUANTITY	FIRE SYSTEM PIPING	HOOD HANGING WGHT
1		Captrate Solo Filter	10	20"	16"	93% See Filter Spec.	4	Screw In 12W LED	NO	Right	Ansul R102	3.0/3.0	SC-31111002	1 Light 1 Fan	YES	963 LBS

HOOD OPTIONS

HOOD NO.	TAG	OPTION
1		FIELD WRAPPER 16.00" High Front, Left, Right
		BACKSPLASH 80.00" High X 180.00" Long 430 SS Vertical
		RIGHT QUARTER END PANEL 23" Top Width, 0" Bottom Width, 23" High 430 SS
		LEFT QUARTER END PANEL 23" Top Width, 0" Bottom Width, 23" High 430 SS

PERFORATED SUPPLY PLENUM(S)

HOOD NO.	TAG	POS.	LENGTH	WIDTH	HEIGHT	TYPE	RISER(S) WIDTH	LENG.	DIA.	CFM	S.P.
1		Front	180"	24"	6"	MUA	12"	28"		866	0.276"
						MUA	12"	28"		866	0.276"
						MUA	12"	28"		866	0.276"
						MUA	12"	28"		866	0.276"



PLAN VIEW – Hood #1
14' 0.00" LONG 5424ND-2-PSP-F
NOTE: Additional hanging angles provided for hoods 12' and longer.

SPECIFICATION: CAPTRATE® GREASE-STOP® SOLO FILTER

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

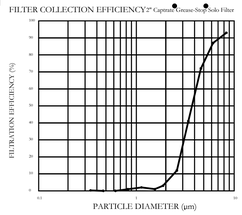
FILTER IS STAINLESS STEEL CONSTRUCTION, AND SIZED TO FIT INTO STANDARD 2-INCH DEEP HOOD CHANNEL(S).

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

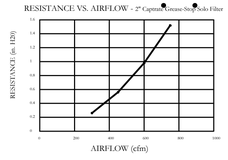
GREASE EXTRACTION EFFICIENCY PERFORMANCE SHALL REMOVE AT LEAST 75% OF GREASE PARTICLES FIVE MICRONS IN SIZE, AND 90% GREASE PARTICLES SEVEN MICRONS IN SIZE AND LARGER, WITH A CORRESPONDING PRESSURE DROP NOT TO EXCEED 1.0 INCHES OF WATER GAUGE.

THE CAPTRATE GREASE-STOP SOLO WAS TESTED TO ASTM STANDARD ASTM F2519-05.

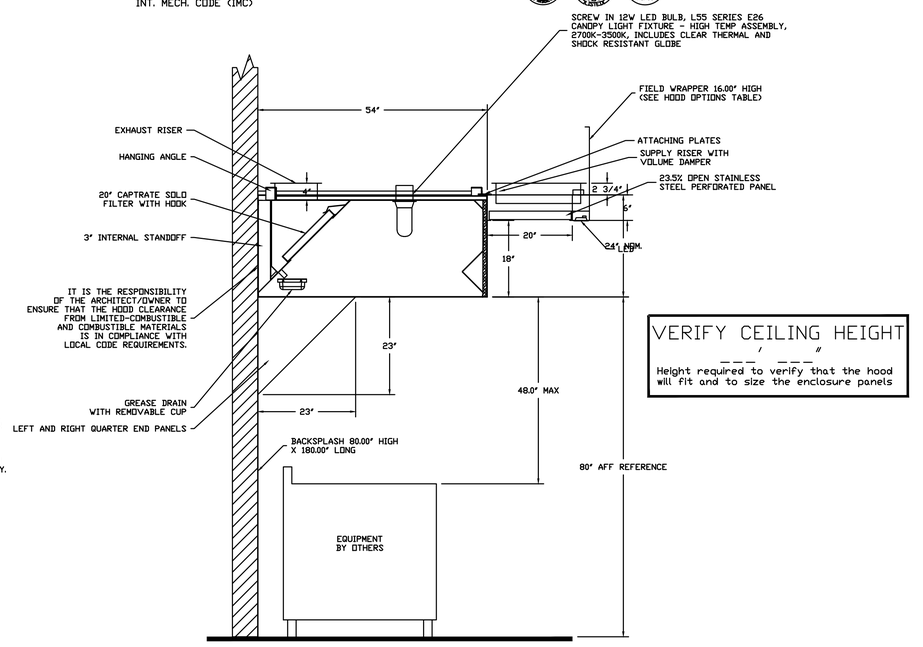
FILTER COLLECTION EFFICIENCY:2" Captrate Grease-Stop® Solo Filter



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



CAPTRATE FILTERS ARE BUILT IN COMPLIANCE WITH.
NFPA #96
NSF STANDARD #2
UL STANDARD #1046
INT. MECH. CODE (IMC)



SECTION VIEW – MODEL 5424ND-2-PSP-F
HOOD – #1

VERIFY CEILING HEIGHT
___' ___"
Height required to verify that the hood will fit and to size the enclosure panels

DEMONSTRATIONS ARE AVAILABLE AT THE CALIFORNIA BAY AREA DISPLAY CENTER FOR PRICES AND QUESTIONS, CALL
DANNY NG
REFERENCE JOB# 2594520
REG91@CAPTIVEAIRE.COM
PHONE: (415) 956-2200 FAX: (919) 227-5940

CORNER HANGING ANGLE DETAIL ND-2

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

FOR QUESTIONS, CALL THE CAPTIVE-AIRE SYSTEMS CENTRAL CALIFORNIA OFFICE
Region 91
8 ADRIAN COURT
BURLINGAME, CA 94010
PHONE: (415) 956-2200
EMAIL: REG91@CAPTIVEAIRE.COM

CAPTIVE-AIRE HOODS ARE BUILT IN COMPLIANCE WITH

NFPA #96
UL 710 & ULC710 STANDARDS
E.T.L. LISTED 3054804-001

CAPTRATE & KLEEN-GARD FILTERS ARE BUILT IN COMPLIANCE WITH

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

REVISIONS

	DESCRIPTION	DATE:
△		
△		
△		
△		

CAPTIVE-AIRE
CENTRAL CA
8 Adrian Court, Burlingame, CA. 94010 PHONE: (415) 956-2200 FAX: (919) 227-5940 EMAIL: reg91@captiveaire.com
www.captiveaire.com

LifeMoves Maple Street Shelter
1580 MAPLE STREET,
REDWOOD CITY, CA, 94063

DATE: 3/11/2016
DWG.#: 2594520
DRAWN BY:
SCALE: 3/4" = 1'-0"
MASTER DRAWING
SHEET NO. 1

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Hood Shop Drawings

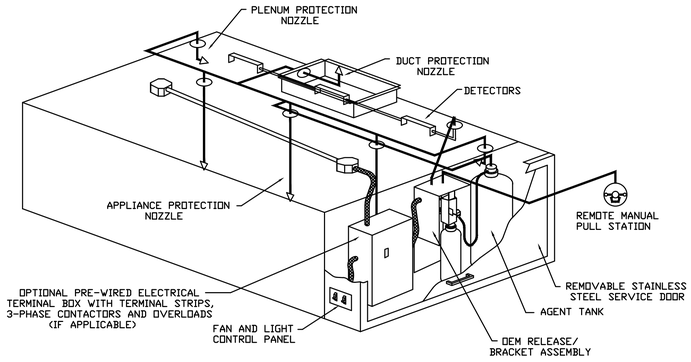
◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

◦ JOB: 2015.2801
◦ DATE: 06/17/16
◦ SHEET: M3.1

Fire System Information – Job#2594520

FIRE SYSTEM NO.	Tag	TYPE	SIZE	FLOW POINTS	INSTALLATION	
					SYSTEM	LOCATION ON HOOD
1		Ansul R102	3.0/3.0	22	Fire Cabinet Right	Right



TYPICAL ANSUL R-102 SYSTEM LAYOUT

DEMONSTRATIONS ARE AVAILABLE AT THE CALIFORNIA BAY AREA DISPLAY CENTER FOR PRICES AND QUESTIONS, CALL
DANNY NG
REFERENCE JOB# 2594520
REG91@CAPTIVEAIRE.COM
PHONE: (415) 956-2200 FAX: (919) 227-5940

ND-2 Series with PSP Accessory Specification

The model ND-2 with PSP Accessory is a compensating canopy hood rated for all types of cooking equipment. The hood shall have the size, shape and performance specified on drawings.

Construction shall be type 430 stainless steel, with a #3 or #4 polish where exposed. The manufacturer, ETL and NSF shall determine the individual component construction. Construction shall be dependent on the structural application to minimize distortion and other defects. All seams, joints and penetrations of the hood enclosure to the lower outermost perimeter that directs and captures grease-laden vapor and exhaust gases shall have a liquid-tight continuous external weld in accordance with NFPA 96. The hood shall be wall type with a minimum of four connections for hanger rods. Connectors shall have 9/16" holes pre-punched in 1 ¼" x 1 ¼" angle iron at the factory to allow for hanger rod connection by others.

The hood shall be furnished with U.L. classified filters, supplied in size and quantity as required by ventilator.
The filters shall extend the full length of the hood and the filler panels shall not be more than 6' in width.

The hood manufacturer shall supply complete computer generated submittal drawings including hood sections view(s) and hood plan view(s). These drawings must be available to the engineer, architect and owner for their use in construction, operation and maintenance.

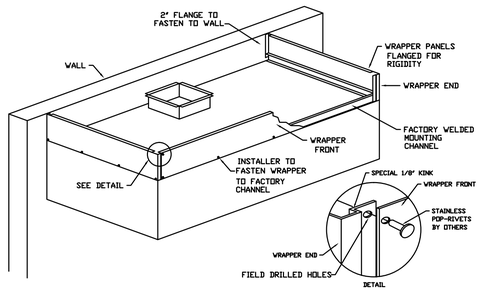
Exhaust duct collar to be 4" high with 1" flange. Duct sizes, CFM and static pressure requirements shall be as shown on drawings. Static pressure requirements shall be precise and accurate; air velocity and volume information shall be accurate within 1-ft increments along the length of the ventilator.

U.L. incandescent light fixtures and globes shall be installed and pre-wired to a junction box. The light fixtures shall be installed with a maximum of 4'0" spacing on center and allow up to a 100 watt standard light bulb.

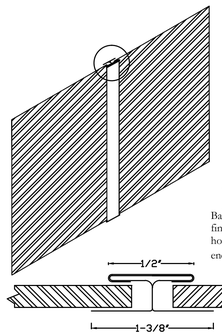
The hood shall have:
- A double wall insulated front to eliminate condensation and increase rigidity. The insulation shall have a flexural modulus of 475 EI, meet UL 181 requirements and be in accordance with NFPA 90A and 90B.
- An integral front baffle to direct grease laden vapors toward the exhaust filter bank.
- A built-in wiring chase provided for outlets and electrical controls on the hood face and shall not penetrate the capture area or require an external chase way.
- Removable grease cup for easy cleaning.

The hood shall be ETL Listed as "Exhaust Hood Without Exhaust Damper", NSF Listed and built in accordance with NFPA 96.

The hood shall be listed for 450°F cooking surfaces at 150 CFM/ft, 600°F cooking surfaces at 200 CFM/ft, and 700°F cooking surfaces at 250 CFM/ft. The hood shall be ETL Listed as "Exhaust Hood Without Exhaust Damper".



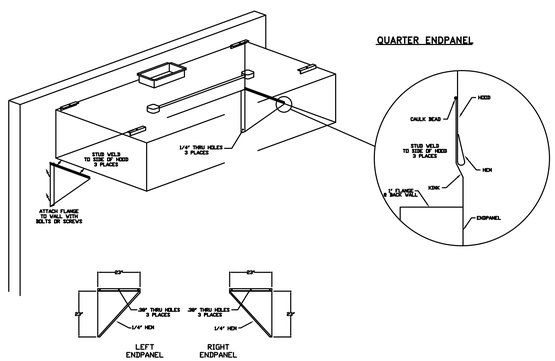
FIELD WRAPPER



Stainless Steel Backsplash and Sidesplash

Backsplash is to be manufactured from #3 or #4 finish S/S of the same guage and material as the hoods. It will be supplied with Batton strips and end strips as needed to close all seams and edges.

Batton Strip Detail



REVISIONS

	DESCRIPTION	DATE:
△		
△		
△		
△		

CAPTIVEAIRE
CENTRAL CA
8 Adrian Court, Burlingame, CA. 94010 PHONE: (415) 956-2200 FAX: (919) 227-5940 EMAIL: reg91@captiveaire.com
www.captiveaire.com

LifeMoves Maple Street Shelter
1580 MAPLE STREET,
REDWOOD CITY, CA, 94063

DATE: 3/11/2016

DWG.#: 2594520

DRAWN BY:

SCALE: 3/4" = 1'-0"

MASTER DRAWING

SHEET NO. 2

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Hood Shop Drawings

◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

◦ JOB: 2015.2801

◦ DATE: 06/17/16

◦ SHEET: M3.2

EXHAUST FAN INFORMATION – Job#2594520

FAN UNIT NO.	TAG	FAN UNIT MODEL #	CFM	ESP.	RPM	H.P.	B.H.P.	ø	VOLT	FLA	WEIGHT (LBS.)	SONES
1		NCA18FA	3850	1.350	1061	2.000	1.4990	3	208	5.9	206	15.8

MUA FAN INFORMATION – Job#2594520

FAN UNIT NO.	TAG	FAN UNIT MODEL #	BLOWER	HOUSING	CFM	ESP.	RPM	H.P.	B.H.P.	ø	VOLT	FLA	EVAP COOLER ENTERING DB TEMP.	EVAP COOLER ENTERING WB TEMP.	EVAP COOLER LEAVING DB TEMP.	EVAP COOLER LEAVING WB TEMP.	WEIGHT (LBS.)	SONES
2		A2-G15	G15-PB	A2	3465	0.500	757	1.500	1.2660	3	208	4.6	90.0°F	65.0°F	72.0°F	65.0°F	492	15.2

FAN OPTIONS

FAN UNIT NO.	TAG	OPTION (Qty. – Descr.)
1		1 – Grease Box
2		1 – Evaporative Cooler Wiring Harness
		1 – A 2 Indoor Hanging Option – Includes 2 HSA125 Hanging Spring Isolators per Uni-Strut

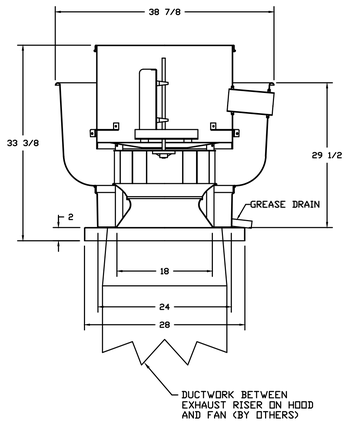
FAN ACCESSORIES

FAN UNIT NO.	TAG	EXHAUST			SUPPLY			
		GREASE CUP	GRAVITY DAMPER	WALL MOUNT	SIDE DISCHARGE	GRAVITY DAMPER	MOTORIZED DAMPER	WALL MOUNT
1		YES						
2					YES			

CURB ASSEMBLIES

NO.	ON FAN	WEIGHT	ITEM	SIZE
1	# 1	41 LBS	Curb	26.500"W x 26.500"L x 20.000"H Vented Hinged
2	# 2	42 LBS	Curb	31.000"W x 31.000"L x 20.000"H
	# 2		Rail	4.000"W x 4.000"L x 36.000"H

FAN #1 NCA18FA – EXHAUST FAN



FEATURES:

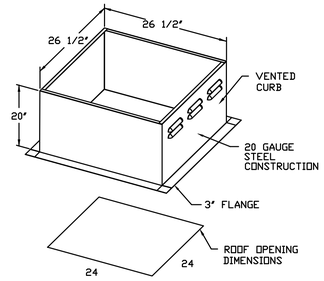
- ROOF MOUNTED FANS
- RESTAURANT MODEL
- UL705 AND UL762
- AMCA SOUND AND AIR CERTIFIED
- WIRING FROM MOTOR TO DISCONNECT SWITCH
- WEATHERPROOF DISCONNECT
- HIGH HEAT OPERATION 300°F (149°C)
- GREASE CLASSIFICATION TESTING

NORMAL TEMPERATURE TEST
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING AIR AT 300°F (149°C) UNTIL ALL FAN PARTS HAVE REACHED THERMAL EQUILIBRIUM, AND WITHOUT ANY DETERIORATING EFFECTS TO THE FAN WHICH WOULD CAUSE UNSAFE OPERATION.

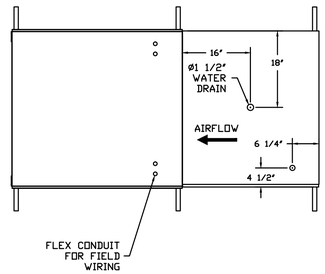
ABNORMAL FLARE-UP TEST
EXHAUST FAN MUST OPERATE CONTINUOUSLY WHILE EXHAUSTING BURNING GREASE VAPORS AT 600°F (316°C) FOR A PERIOD OF 15 MINUTES WITHOUT THE FAN BECOMING DAMAGED TO ANY EXTENT THAT COULD CAUSE AN UNSAFE CONDITION.

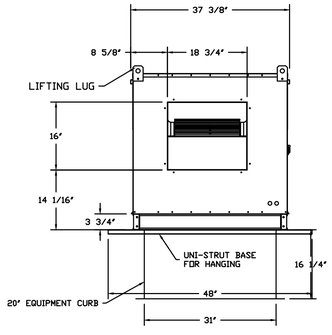
OPTIONS

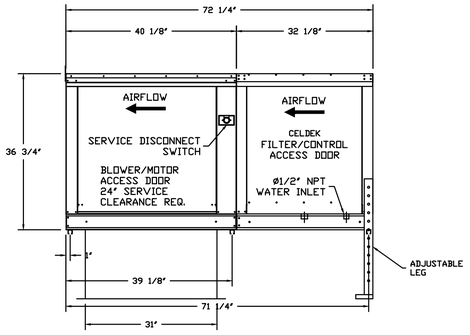
GREASE BOX

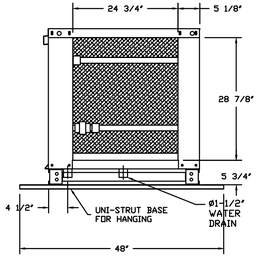


FAN #2 A2-G15 – SUPPLY FAN
1. UNTEMPERED SUPPLY UNIT WITH 15" BLOWER IN SIZE #2 HOUSING
2. EVAP COOLER (CELDEK) – INDOOR
3. SIDE DISCHARGE – AIR FLOW RIGHT -> LEFT
4. 120V WIRING CONNECTION TO ENERGIZE EVAPORATIVE COOLERS FROM UNTEMPERED SUPPLY FANS.
5. INDOOR HANGING CRADLE FOR THE SIZE 2 UNTEMPERED UNIT. 2 HSA125 HANGING ISOLATORS PER UNI-STRUT INCLUDED.









DEMONSTRATIONS ARE AVAILABLE AT THE CALIFORNIA BAY AREA DISPLAY CENTER FOR PRICES AND QUESTIONS, CALL
DANNY NG
REFERENCE JOB# 2594520
REG91@CAPTIVEAIRE.COM
PHONE: (415) 956-2200 FAX: (919) 227-5940

REVISIONS

	DESCRIPTION	DATE:
△		
△		
△		
△		

CAPTIVE AIRE
www.captiveaire.com
8 Adrian Court, Burlingame, CA, 94010 PHONE: (415) 956-2200 FAX: (919) 227-5940 EMAIL: reg91@captiveaire.com
CENTRAL CA

LifeMoves Maple Street Shelter
1580 MAPLE STREET,
REDWOOD CITY, CA, 94063

DATE: 5/5/2016

DWG.#: 2594520

DRAWN BY:

SCALE: 3/4" = 1'-0"

MASTER DRAWING

SHEET NO. 3

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Hood Equipment Details

◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

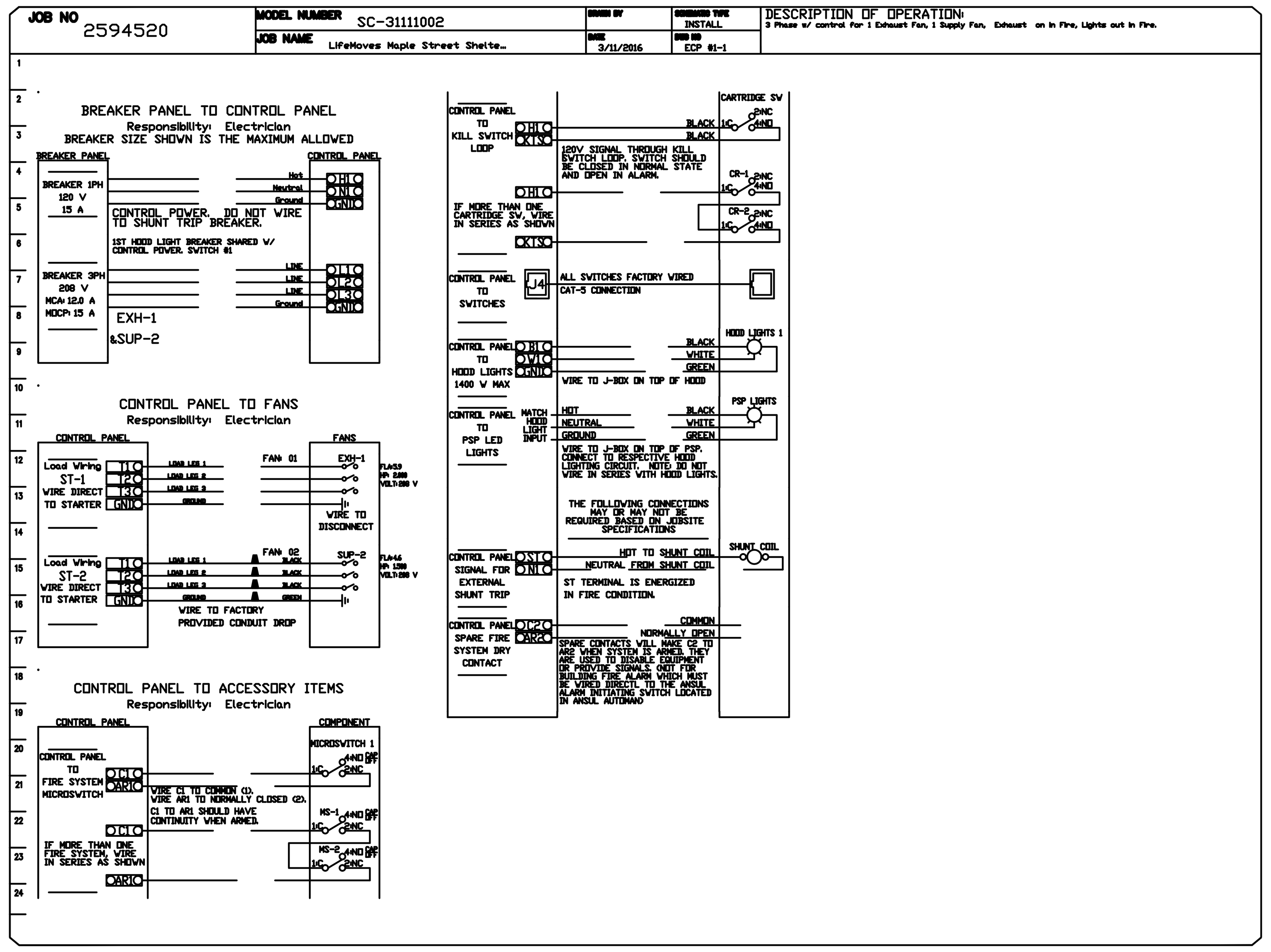
◦ JOB: 2015.2801

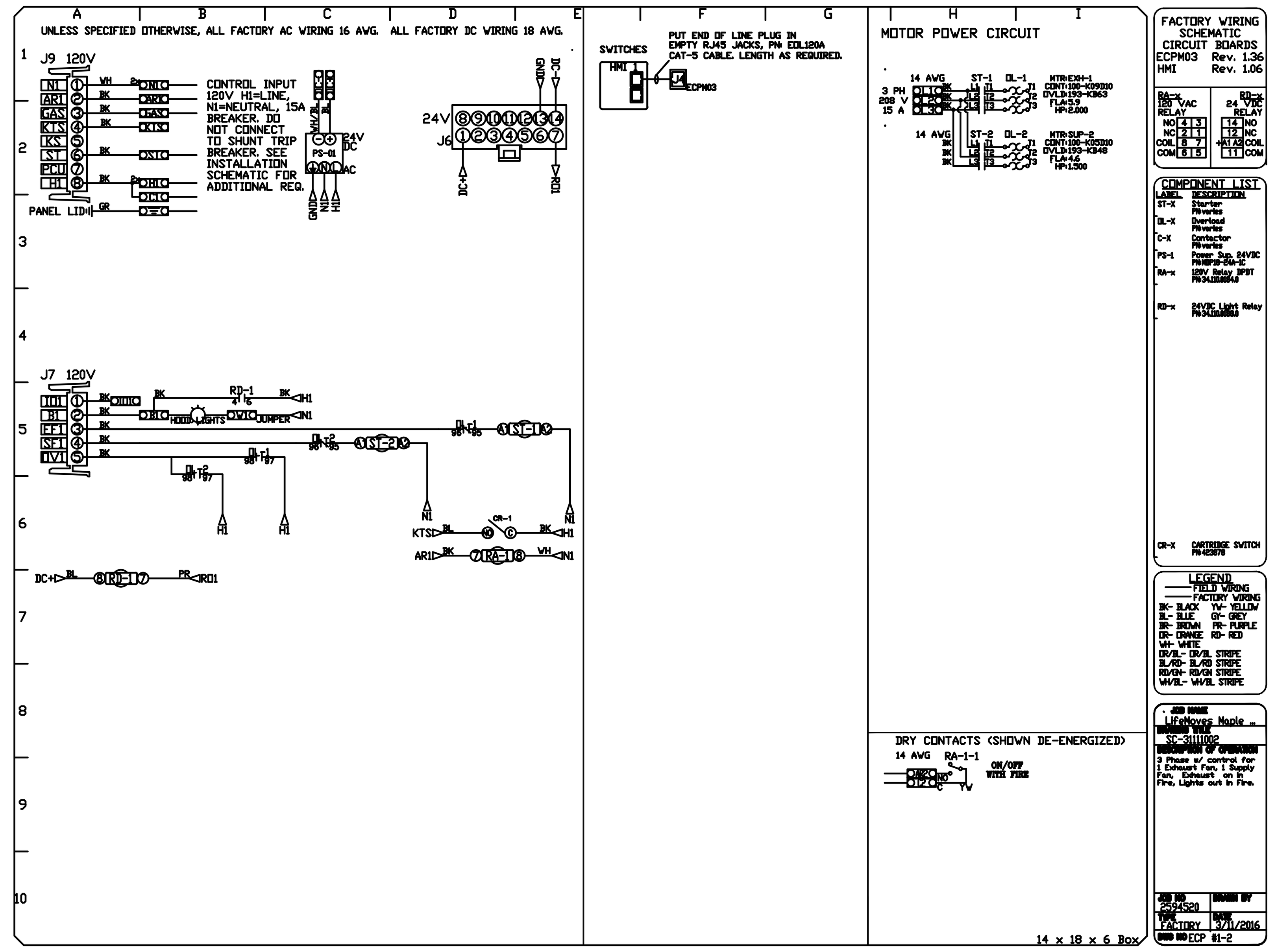
◦ DATE: 06/17/16

◦ SHEET: M3.3

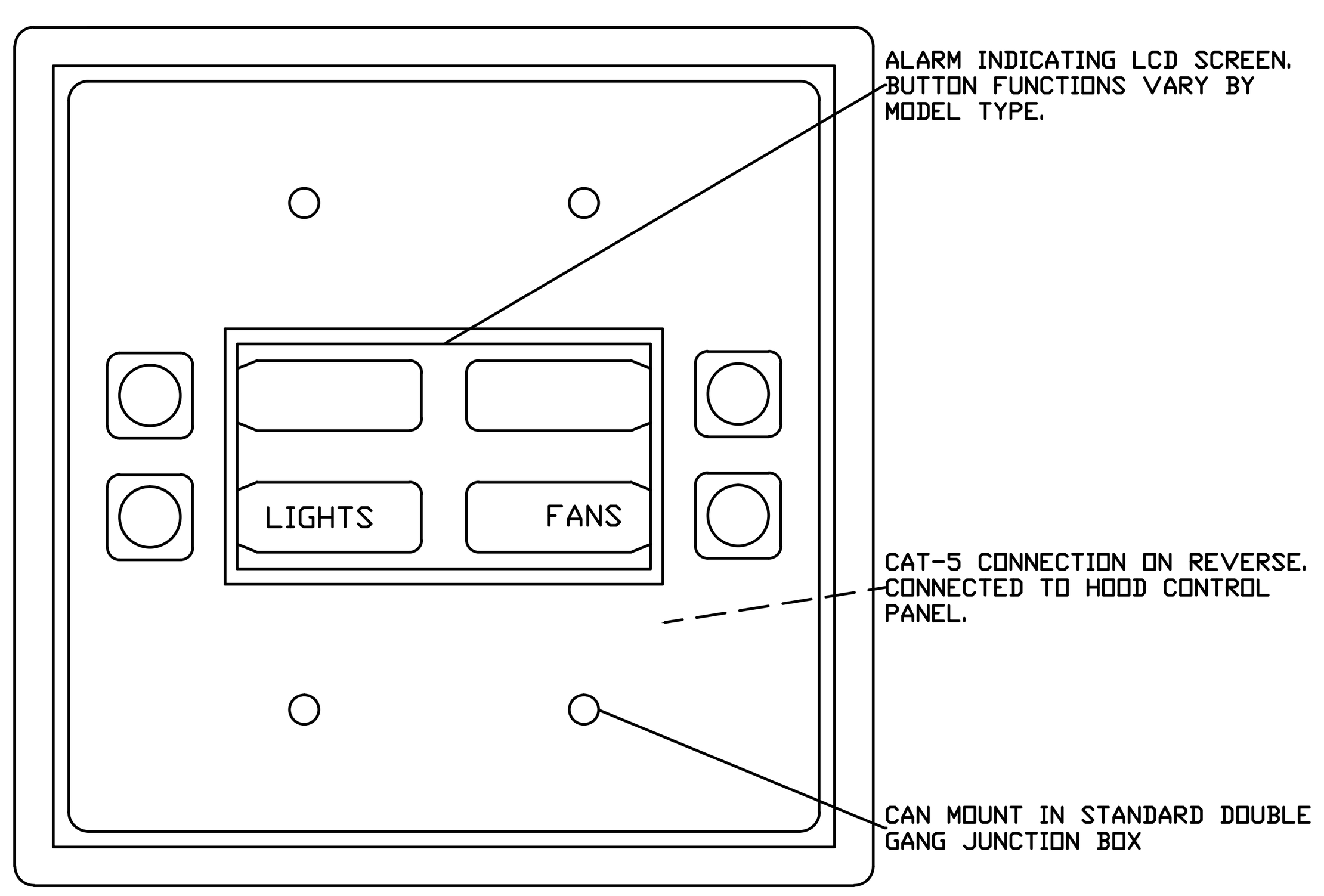
ELECTRICAL PACKAGES – Job#2594520

NO.	TAG	PACKAGE #	LOCATION	SWITCHES		OPTION	FANS CONTROLLED				
				LOCATION	QUANTITY		TYPE	Ø	H.P.	VOLT	FLA
1		SC-31111002	Utility Cabinet Right	Utility Cabinet Right	1 Light	Smart Controls Basic	Exhaust	3	2.000	208	5.9
				Hood # 1	1 Fan		Supply	3	1.500	208	4.6





HOOD CONTROL PACKAGE INTERFACE
with LCD Screen



DEMONSTRATIONS ARE AVAILABLE AT THE CALIFORNIA BAY AREA DISPLAY CENTER FOR PRICES AND QUESTIONS, CALL
DANNY NG
REFERENCE JOB# 2594520
REG91@CAPTIVEAIRE.COM
PHONE: (415) 956-2200 FAX: (919) 227-5940

System Design Verification (SDV)

If ordered, CAS Service will perform a System Design Verification (SDV) once all equipment has had a complete start up per the Operation and Installation Manual. Typically, the SDV will be performed after all inspections are complete.

Any field related discrepancies that are discovered during the SDV will be brought to the attention of the general contractor and corresponding trades on site. These issues will be documented and forwarded to the appropriate sales office. If CAS Service has to resolve a discrepancy that is a field issue, the general contractor will be notified and billed for the work. Should a return trip be required due to any field related discrepancy that cannot be resolved during the SDV, there will be additional trip charges.

During the SDV, CAS Service will address any discrepancy that is the fault of the manufacturer. Should a return trip be required, the general contractor and appropriate sales office will be notified. There will be no additional charges for manufacturer discrepancies.

REVISIONS

	DESCRIPTION	DATE
△		
△		
△		
△		

CAPTIVEAIRE
CENTRAL CA
8 Adrian Court, Burlingame, CA, 94010 PHONE: (415) 956-2200 FAX: (919) 227-5940 EMAIL: reg91@captiveaire.com
www.captiveaire.com

LifeMoves Maple Street Shelter
1580 MAPLE STREET,
REDWOOD CITY, CA, 94063

DATE: 3/11/2016

DWG.#: 2594520

DRAWN BY:

SCALE: 3/4" = 1'-0"

MASTER DRAWING

SHEET NO. 4

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Hood Controls
Wiring Diagrams

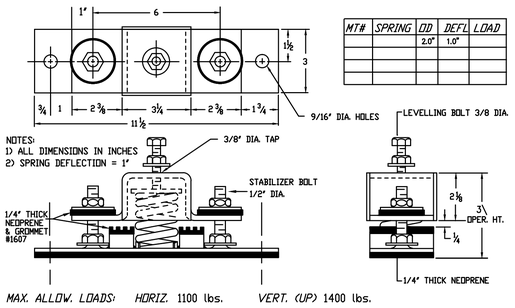
◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

◦ JOB: 2015.2801

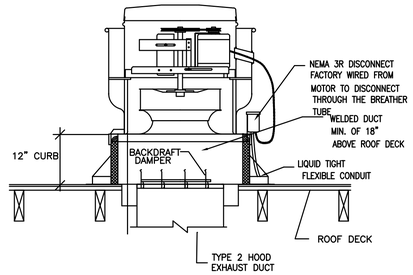
◦ DATE: 06/17/16

◦ SHEET: M3.4

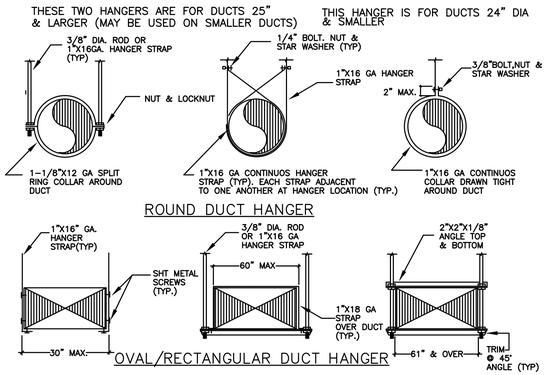


MT#	SPRING	OD	DEFL	LOAD
		2.0"	1.0"	

VIBRATION ISOLATORS | 7

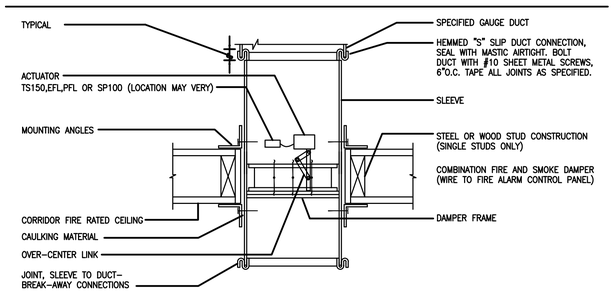


NON-GREASE EXHAUST FAN ON ROOF | 4



NOTES:
1 REFER TO SPECIFICATIONS FOR HANGER SPACINGS.
2 ATTACHMENTS TO OVERHEAD STRUCTURE SHALL BE MADE IN ACCORDANCE WITH STRUCTURAL ENGINEERS REQUIREMENTS AND WEIGHT LIMITATIONS. ALL ATTACHMENT METHODS TO STRUCTURE SHALL BE SUBMITTED TO STRUCTURAL ENGINEER FOR REVIEW

DUCT HANGERS | 1



FIRE/SMOKE DAMPER LISTINGS:
A. UL 555 1HR FIRE RESISTANCE AND UL555S LEAKAGE CLASS 1 AND CLASS 2 LEAKAGE RATINGS
B. CSFM CALIFORNIA STATE FIRE MARSHAL FIRE DAMPER LISTING (FSD36C #3225-245:111 AND SMOKE DAMPER LISTING (#3230-0245:112)

SPECIFICATIONS:

ANGLES ALL AROUND SLEEVE ON BOTH SIDES OF PARTITION. WELDED OR BOLTED TO SLEEVE WITH 1" FILLETS 5" O.C. MAX. OR 1/4" DIA. BOLTS @ 5" O.C. MAX. ANGLES ARE NOT ATTACHED TO WALL (EXCEPT AT SILL WHICH IS OPTIONAL) TO PROVIDE FOR EXPANSION. IN NO CASE SHALL ANGLE OVERLAP WALL FRAME LESS THAN 1". SEE DAMPER MANUFACTURER'S INSTRUCTIONS FOR SIZE AND GAUGE OF ANGLE.

COMBINATION FIRE SMOKE DAMPER SHALL BE FRAMED WITH A MINIMUM OF 16 GAGE GALVANIZED STEEL FORMED INTO A STRUCTURAL HAT CHANNEL SHAPE WITH TABBED CORNERS FOR REINFORCEMENT. THE BLADES SHALL BE SINGLE SKIN 16 GAGE MINIMUM GALVANIZED WITH THREE LONGITUDINAL GROOVES FOR REINFORCEMENT. BEARINGS SHALL BE STAINLESS STEEL SLEEVE TURNING IN AN EXTRUDED HOLE IN THE FRAME. JAMB SEALS SHALL BE STAINLESS STEEL FLEXIBLE METAL COMPRESSION TYPE.
EACH COMBINATION FIRE/SMOKE DAMPER SHALL BE 1-1/2 HOUR RATED UNDER UL STANDARD 555, AND SHALL FURTHER BE CLASSIFIED BY UNDERWRITERS LABORATORIES AS A LEAKAGE RATED DAMPER FOR USE IN SMOKE CONTROL SYSTEMS UNDER THE LATEST VERSION OF UL555S, AND BEAR A UL LABEL ATTESTING TO SAME. DAMPER MANUFACTURER SHALL HAVE TESTED, AND QUALIFIED WITH UL, A COMPLETE RANGE OF DAMPER SIZES COVERING ALL DAMPERS REQUIRED BY THIS SPECIFICATION. TESTING AND UL QUALIFYING A SINGLE DAMPER SIZE IS NOT ACCEPTABLE. THE LEAKAGE RATING UNDER UL555S SHALL BE LEAKAGE CLASS III. SEALS SHALL BE NON-DEGRADABLE METAL TO METAL RATED TO 850 °F. AS PART OF THE UL QUALIFICATION, DAMPERS SHALL HAVE DEMONSTRATED A CAPACITY TO OPERATE (TO OPEN AND CLOSE) UNDER HVAC SYSTEM OPERATING CONDITIONS, WITH PRESSURES OF AT LEAST 4" W.G. IN THE CLOSED POSITION, AND 2000 FPM AIR VELOCITY IN THE OPEN POSITION.
MANUFACTURER SHALL PROVIDE FACTORY ASSEMBLED SLEEVE OF MINIMUM LENGHT FACTORY SUPPLIED CAULK SLEEVE SHALL BE 20 GAGE FOR DAMPERS AS SHOWN. THROUGH 84" WIDE AND 18 GAGE ABOVE 84" WIDE.
DAMPER SHALL BE RESETTABLE AND SUPPLIED WITH 165 DEG. F FUSIBLE LINK.

DUCT SMOKE DETECTOR SHALL BE PHOTO ELECTRONIC TYPE RATED FOR 300 TO 4000 FPM VELOCITY, 32 DEG F TO 120 DEG F OPERATING TEMPERATURE RANGE, 10% TO 85% RELATIVE HUMIDITY OPERATING RANGE.

MANUFACTURER, MODEL NO. AND LISTING NO.

FIRE DAMPER SHALL BE RUSKIN FSD60 – CSFM LISTING #3225-245:102 SMOKE DAMPER CSFM LISTING #3230-245:110
DUCT SMOKE DETECTOR SHALL BE DSDF (HOCHIKI DH-980) – CSFM LISTING #3240-0410:155
PROVIDE REMOTE TEST/REST STATION TO BE MOUNTED IN CORRIDOR WITHIN 10 FEET OF FSD ABOVE CEILING.

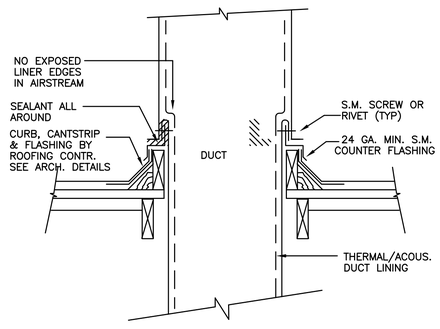
CONTROL SEQUENCE:

DAMPER SHALL OPERATE IN A NORMALLY OPEN POSITION AND SHALL USE A SMOKE DETECTOR ACTUATED MOTOR. CLOSURE OF DAMPER BLADES SHALL BE UPON SMOKE DETECTION OR LOSS OF FUSIBLE LINK. DAMPER SHALL FAIL CLOSE WHEN POWER FAILS TO THE DAMPER. FIRE SMOKE DAMPER SHALL BE TIED TO THE BUILDING FIRE ALARM SYSTEM.

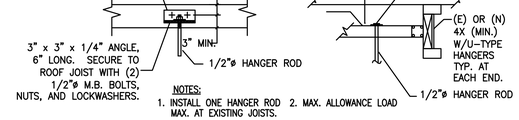
OPERATOR/ACTUATOR MOTOR LOCATED ON CORRIDOR SIDE OF DAMPER. UNIT MAY BE SUPPLIED WITHOUT MOTOR INSTALLED. SEE MANUFACTURER INSTRUCTIONS FOR FIELD MOUNTING OF MOTORS. REFER TO FIRE ALARM DRAWINGS FOR DAMPERS OPERATION SEQUENCE.

GENERAL NOTES:
1. DAMPER DETAIL FOR REFERENCE ONLY.
2. DAMPERS SHALL BE STATE FIRE MARSHAL APPROVED AND INSTALLED STRICTLY PER MANUFACTURER'S PRINTED INSTRUCTIONS.
3. MANUFACTURER'S INSTRUCTIONS SHALL BE MADE AVAILABLE TO THE INSPECTING AUTHORITIES.
4. PLACEMENT OF DAMPER SHALL BE IN THE SAME PLANE AS THE BARRIER BEING PENETRATED.
5. NON-BREAKAWAY DUCT/SLEEVE CONNECTIONS: DUCT SLEEVE CONNECTIONS SHALL BE MINIMUM OF 16 GAGE FOR DAMPERS UP TO 36"WIDE x 24"HIGH AND 14 GAGE FOR DAMPERS EXCEEDING 36"WIDE x 24"HIGH.
6. WHEN OPTIONAL SEALING OF THESE JOINTS IS REQUIRED, THE FOLLOWING SEALANTS MAY BE APPLIED IN ACCORDANCE WITH THE SEALANT MANUFACUTURER'S INSTRUCTIONS. HARDCAST INC – IRON GRIP 601 PRECISION – PA200B4T ECO-DUCT SEAL 44-52

COMBINATION FIRE/SMOKE DAMPER AT CORRIDOR | 8

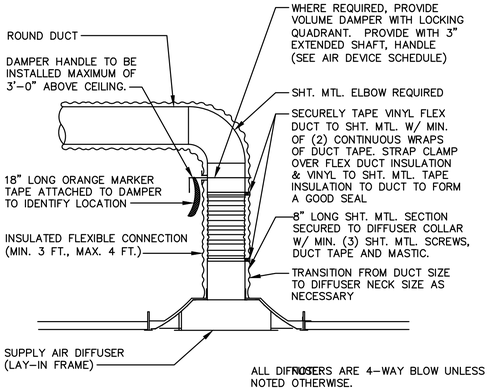


DUCT THRU ROOF DETAIL | 5



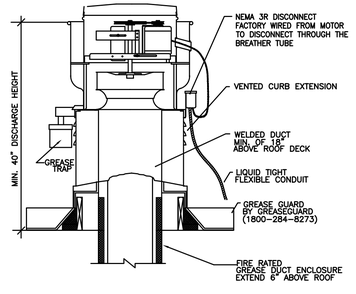
NOTES:
1. INSTALL ONE HANGER ROD 2. MAX. ALLOWANCE LOAD MAX. AT EXISTING JOISTS.

HANGER ROD DETAILS | 2



ALL DIFFUSERS ARE 4-WAY BLOW UNLESS NOTED OTHERWISE.

CEILING DIFFUSER MOUNTING | 6



TYPE 1 HOOD EXHAUST FAN | 3

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

° PROJECT °

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

° SHEET TITLE °

MECHANICAL DETAILS

° REVISIONS °

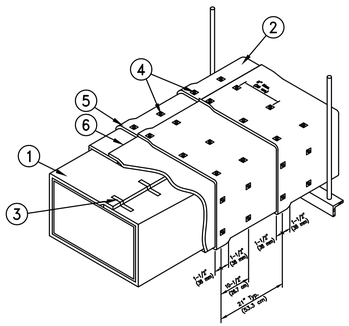
No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

° JOB: 2015.2801

° DATE: 06/17/16

° SHEET: M3.5

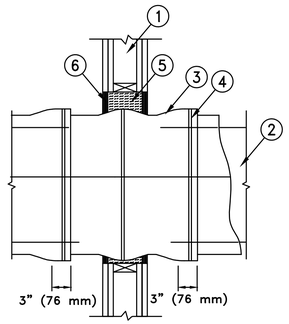
FIGURE TBD
3M FIRE BARRIER DUCT WRAP 615+
VENTILATION AIR DUCT SYSTEMS
1 OR 2 HOUR TELESCOPING TECHNIQUE W/SPEED CLIPS



1.	First Layer 3M Fire Barrier Duct Wrap 615+
2.	Second Layer 3M Fire Barrier Duct Wrap 615+
3.	Filament Tape For Temporary Hold On 1st Layer Duct Wrap
4.	1-1/2" Square (38mm) or 1-1/2" dia (38mm) galvanized speed clips
5.	3 in. (76 mm) Min. Longitudinal Overlap
6.	3 in. (76 mm) Min. Perimeter Overlap

System integrity is limited by quality of installation.

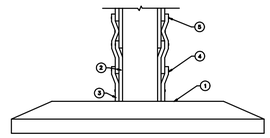
FIGURE 5
3M FIRE BARRIER DUCT WRAP 615+
COMMERCIAL KITCHEN GREASE DUCT SYSTEMS
1 OR 2 HOUR THROUGH PENETRATION SYSTEMS
FIRE–RATED GYPSUM WALLBOARD



1.	Gypsum Wallboard Assembly
2.	Duct
3.	2 Layers 3M Fire Barrier Duct Wrap 615+
4.	Banding or Pinning
5.	Packing Material
6.	3M Fire Barrier 1000 N/S or 2000+ Silicone Sealant

System integrity is limited by quality of installation.

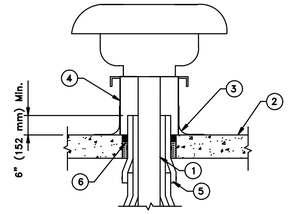
FIGURE 9
3M FIRE BARRIER DUCT WRAP 615+
COMMERCIAL KITCHEN GREASE DUCT SYSTEMS
1 OR 2 HOUR SHAFT ALTERNATIVE ZERO CLEARANCE TO COMBUSTIBLES
SUGGESTED EXHAUST HOOD



1.	Hood
2.	First Layer 3M Fire Barrier Duct Wrap 615+
3.	Second Layer 3M Fire Barrier Duct Wrap 615+
4.	6" (152 mm) Minimum Overlap
5.	Banding Typical

System integrity is limited by quality of installation.

FIGURE 10
3M FIRE BARRIER DUCT WRAP 615+
COMMERCIAL KITCHEN GREASE DUCT SYSTEMS
1 OR 2 HOUR SHAFT ALTERNATIVE ZERO CLEARANCE TO COMBUSTIBLES
SUGGESTED ROOF VENT



1.	Duct
2.	Roof Assembly
3.	Roof Flashing
4.	Vent Flashing
5.	Two Layers 3M Fire Barrier Duct Wrap 615+
6.	Firestopping System for Rated Roof Assemblies Only

System integrity is limited by quality of installation.

FIGURE 1A
TELESCOPING OVERLAP WRAP OPTION
CROSS SECTIONAL VIEW
2 LAYERS

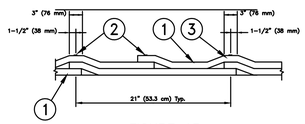


FIGURE 1B
CHECKERBOARD OVERLAP WRAP OPTION
CROSS SECTIONAL VIEW

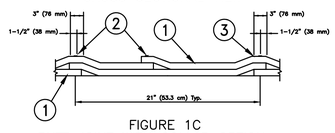
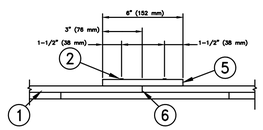


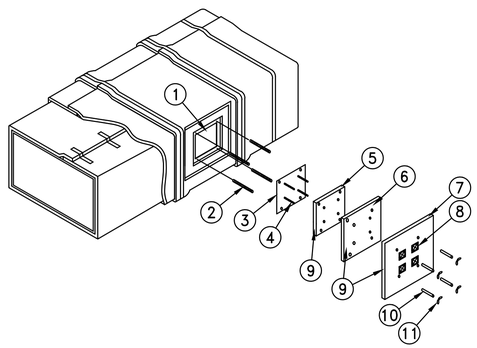
FIGURE 1C
BUTT JOINT WITH COLLAR OPTION
CROSS SECTIONAL VIEW



1.	One Layer 3M Fire Barrier Duct Wrap 615+
2.	Stainless Steel Banding
3.	3 in. (76 mm) Min. Longitudinal Overlap
4.	3 in. (76 mm) Min. Perimeter Overlap
5.	6 in. (152 mm) Wide Collar Made From 3M Fire Barrier Duct Wrap 615+
6.	Firmly Butted Joint

System integrity is limited by quality of installation.

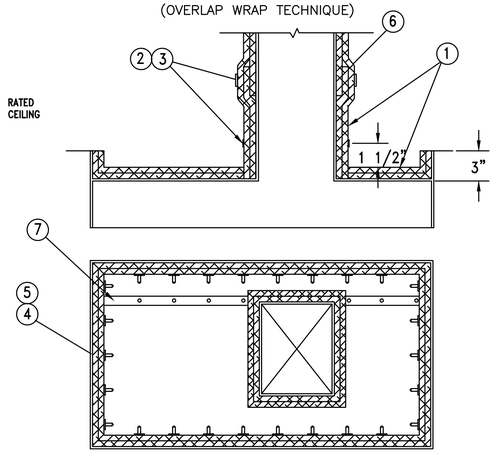
CONSULT CURRENT INDEPENDENT TESTING LABORATORIES (UL, INTERTEK) FOR SYSTEMS OR DESIGN DETAILS



1.	Access Hole
2.	1/4 in. (6 mm) Dia. All Threaded Rods
3.	Access Cover – 16 Gauge
4.	Insulation Pins – Welded
5.	First Layer 3M Fire Barrier Duct Wrap 615+ Cut Same Size As Cover
6.	Second Layer 3M Fire Barrier Duct Wrap 615+ with 1 in. (25 mm) Overlap On All Sides
7.	Third Layer 3M Fire Barrier Duct Wrap 615+ with 1 in. (25 mm) Overlap On All Sides
8.	Speed Clips
9.	Aluminum Tape Covering All Exposed Edges
10.	Spool Pieces For Threaded Rods
11.	1/4 in. (6 mm) Diameter Wing Nuts

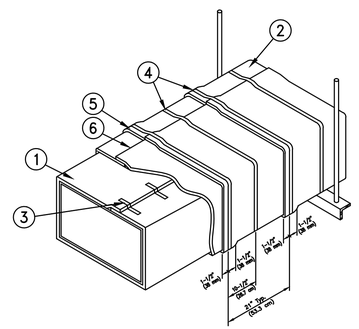
System integrity is limited by quality of installation.

3M FIRE BARRIER 615+ DUCT WRAP
SUGGESTED INSTALLATION FOR GREASE HOOD DETAIL
1 OR 2 HOUR SYSTEM
(OVERLAP WRAP TECHNIQUE)



1. TWO LAYERS OF DUCT WRAP 615+
2. FILAMENT TAPE
3. BANDING
4. 10 GAUGE 6" LONG, COPPER COATED INSULATION PINS
5. SPEED CLIPS
6. 3" MIN. PERIMETER OVERLAP
7. 3" MIN. SEAM OVERLAP

FIGURE 1
3M FIRE BARRIER DUCT WRAP 615+
VENTILATION AIR DUCT SYSTEMS
1 OR 2 HOUR TELESCOPING TECHNIQUE W/BANDING



1.	First Layer 3M Fire Barrier Duct Wrap 615+
2.	Second Layer 3M Fire Barrier Duct Wrap 615+
3.	Filament Tape For Temporary Hold On 1st Layer Duct Wrap
4.	Steel Banding 1/2 in. (13 mm) Wide Min. Typical 10–1/2" O.C.
5.	3 in. (76 mm) Min. Longitudinal Overlap
6.	3 in. (76 mm) Min. Perimeter Overlap

System integrity is limited by quality of installation.

DUCTS > 24" WIDE REQUIRE PINNING ON THE BOTTOM SIDE
PINNING MAY BE OMITTED BY BANDING MAX. 5 1/4" O.C. (133mm). ENSURE THAT MATERIAL IS HELD TIGHTLY TO THE DUCT
CONSULT CURRENT INDEPENDENT TESTING LABORATORIES (UL, INTERTEK) FOR SYSTEMS OR DESIGN DETAILS

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

3M 615+ FIRE WRAP DETAILS

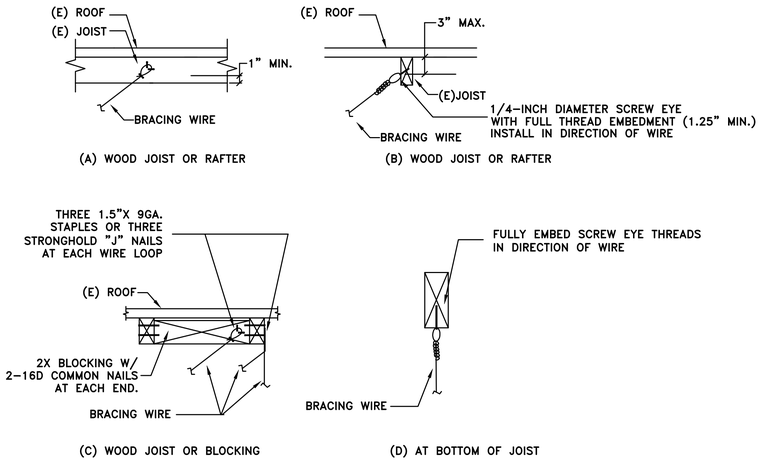
◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

◦ JOB: 2015.2801

◦ DATE: 06/17/16

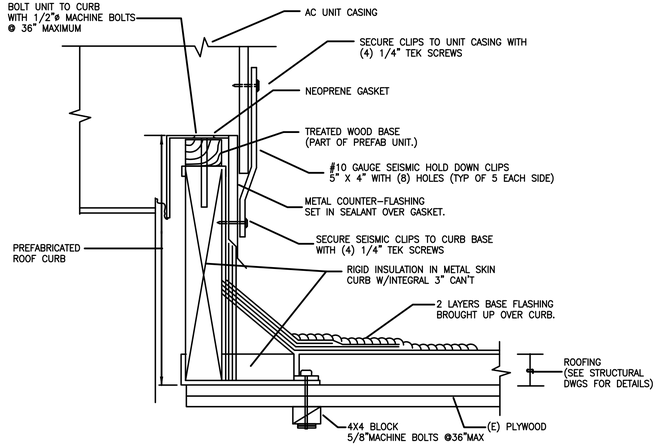
◦ SHEET: M3.6



BRACING WIRE - ATTACHMENT TO STRUCTURE

3 / M3.7

NOTE: ADD NEOPRENE WASHERS AND WAFFLE-PATTERN NEOPRENE PADS UNDER ALL BOLTS AND SCREW HEADS.

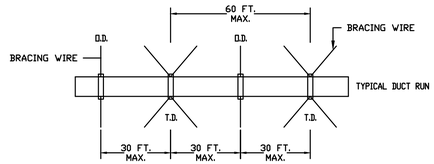


EQUIPMENT ROOF CURB FOR AC UNITS

4 / M3.7

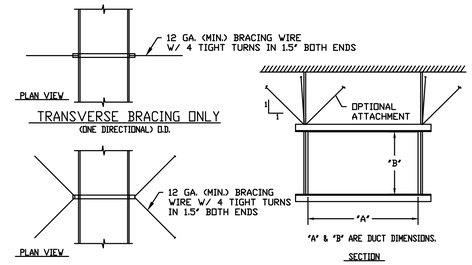
GENERAL NOTES - SEISMIC BRACING OF DUCTS

1. ALL RECTANGULAR AND OVAL DUCTS 6 SQUARE FEET OR LARGER SHALL BE SEISMICALLY BRACED, EXCEPT AS NOTED BELOW.
2. ALL ROUND DUCTS WITH A DIAMETER OF 28 INCHES OR LARGER SHALL BE SEISMICALLY BRACED, EXPECT AS NOTED BELOW.
3. DUCTS INSTALLED WITHIN 12 INCHES OF SUPPORT STRUCTURE, MEASURED TO THE TOP OF THE DUCT, NEED NOT BE BRACED LATERALLY, WHERE THE HANGERS ARE DETAILED TO AVOID BENDING OF THE HANGERS AND THEIR CONNECTIONS.
4. AS A MINIMUM THE BRACES SHALL BE LOCATED AT EACH END OF THE DUCT RUN, WHERE DUCT CHANGES DIRECTION, AND AT INTERSECTIONS OF DUCTS.
5. THE TRANSVERSE BRACING OF A DUCT RUN SHALL NOT BE SPACED FURTHER APART THAN 30 FEET. THE LONGITUDINAL BRACING OF A DUCT RUN SHALL NOT BE SPACED FURTHER APART 60 FEET.
6. WHERE PRACTICAL, LOCATE LATERAL BRACES WITHIN 24 INCHES OF ELBOWS OR INTERSECTIONS OF THE DUCTS. THIS ENABLES ONE BRACE TO ACT AS TRANSVERSE BRACE FOR THE DUCT RUN IN ONE DIRECTION AND LONGITUDINAL BRACE FOR THE DUCT RUN IN THE OTHER DIRECTION. THE BRACING AT THE INTERSECTION OF DUCTS SHOULD BE SIZED FOR LARGER DUCT.
7. AT INTERSECTION OF TWO DUCTS, ONE DUCT RUN MAY BRACE A RUN OF EQUAL OR SMALLER SIZED DUCT.
8. THE BRACING SHALL BE ANCHORED TO SOUND STRUCTURAL ELEMENTS OF THE BUILDING. HOWEVER, BRACING FOR ONE DUCT RUN SHALL NOT BE ANCHORED TO DISSIMILAR STRUCTURAL ELEMENTS THAT WILL BE BEHAVE DIFFERENTLY IN A SEISMIC EVENT.

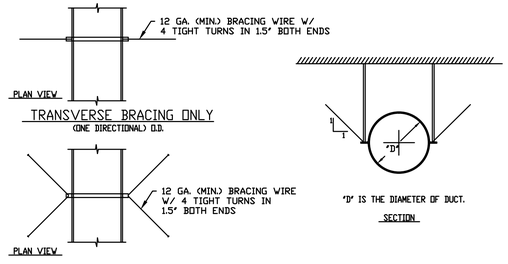


O.D. = ONE (1) DIRECTIONAL BRACING
T.D. = TWO (2) DIRECTIONAL BRACING

TYPICAL LAYOUT



TYPES OF BRACING WIRE FOR RECTANGULAR DUCTS - SCHEMATIC

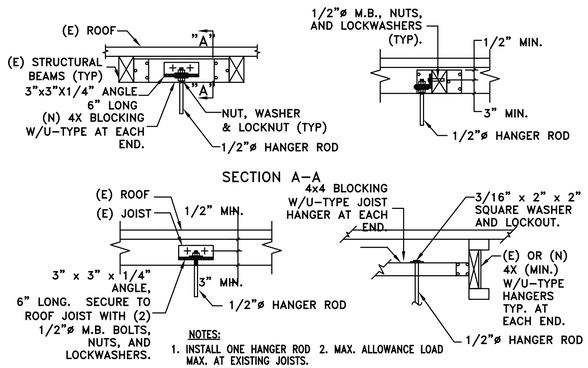


TYPES OF BRACIGN WIRE FOR ROUND DUCTS - SCHEMATIC

DUCTWORK SIESMIC RESTRAINTS

REFER TO STRUCTURAL DETAILS FOR INFORMATION ON ATTACHMENTS TO STRUCTURE

1 / M3.7



NOTES:
1. INSTALL ONE HANGER ROD 2. MAX. ALLOWANCE LOAD MAX. AT EXISTING JOISTS.

HANGER RODS - ATTACHMENT TO STRUCTURE

2 / M3.7

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

MECHANICAL DETAILS

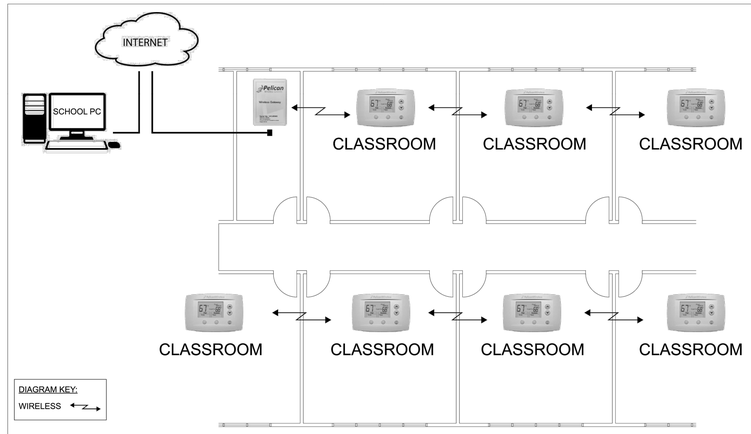
◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

◦ JOB: 2015.2801

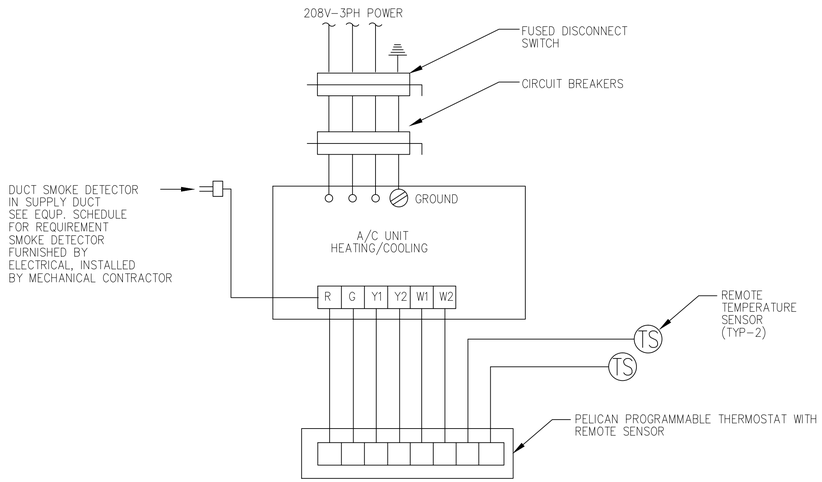
◦ DATE: 06/17/16

◦ SHEET: M3.7



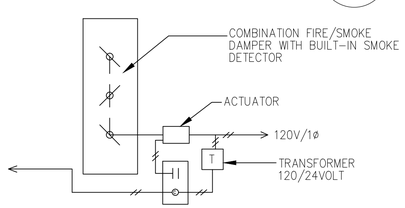
Building Wireless Communication Diagram

SCALE: NTS



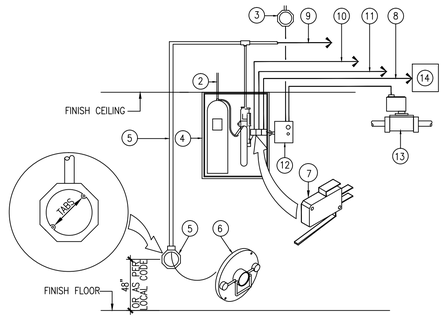
AC UNIT CONTROL DIAGRAM 1

N.T.S.



NOTE: INTERLOCK AC UNIT SUPPLY FAN TO SHUT DOWN UNIT UPON ACTIVATION

COMBINATION FIRE/SMOKE DAMPER CONTROL 5



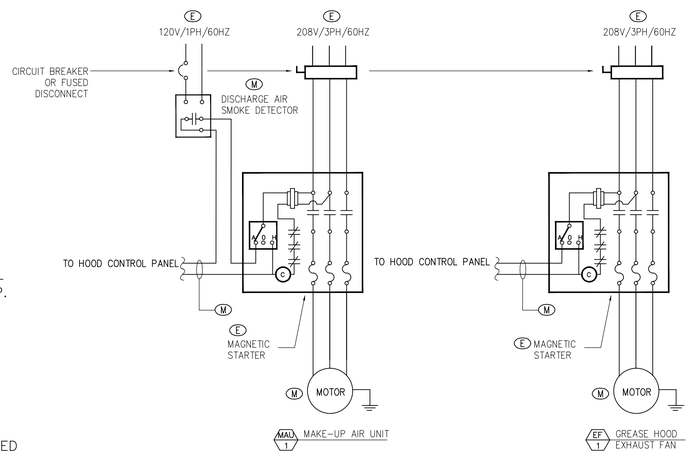
ELECTRICAL FIRE SUPPRESSION SYSTEM NOTES

1. DIAGRAM IS TO SHOW THE SCHEMATIC INTENT OF THE HOOD FIRE SUPPRESSION SYSTEM. IT DOES NOT NECESSARILY INDICATE ALL WIRING REQUIRED. CONTRACTOR SHALL PROVIDE ALL ELECTRICAL DEVICES, WIRING, ETC FOR A COMPLETE INSTALLATION. REFER TO MECHANICAL DRAWINGS FOR SUPPLY FAN CONTROL DETAIL. REFER TO ANSUL SHOP DRAWINGS FOR FURTHER DETAILS.
2. CHEMICAL PIPING TO HOOD BY OTHERS.
3. 120 VOLT DEDICATED CIRCUIT FROM ELECTRICAL PANEL. PROVIDE AND INSTALL INTERCONNECTION TO MANUAL RESET RELAY THROUGH MICROSWITCH.
4. ANSUL CABINET WITH TANK(S) BY OTHERS.
5. PROVIDE 4" OCTAGONAL J-BOX WITH TABS AT 45 AND 1/2"C. WITH WIRING PER ANSUL MANUFACTURER'S RECOMMENDATION TO RELEASING VALVE.
6. MANUAL PULL STATION(FLUSH MOUNTED). PROVIDED WITH ANSUL SYSTEM, WIRED BY ELECTRICAL CONTRACTOR.
7. SNAP ACTION MICROSWITCHES FOR CONTROL OF GAS SOLENOID VALVE, SUPPLY FAN, SHUNT-TRIP BREAKER, AND CONNECTION TO BASE BUILDING FIRE ALARM MONITORING SYSTEM.
8. PROVIDE ELECTRICAL WIRING INTERCONNECTION TO SUPPLY FAN STARTER. SUPPLY FAN SHALL SHUT DOWN THROUGH MICROSWITCH DURING AN ALARM VIA CAPTIVE AIRE CONTROL PANEL. REFER TO HOOD DRAWINGS.
9. CONDUIT AND SIGNAL CABLE TO FUSIBLE LINKS AT EXHAUST HOOD.
10. CONNECTION TO "SHUNT-TRIP" BREAKER(S) FOR ALL ELECTRICAL EQUIPMENT AND RECEPTACLES BELOW HOOD THROUGH MICROSWITCH.
11. CONNECTION TO BASE BUILDING FIRE ALARM MONITORING SYSTEM THROUGH MICROSWITCH.
12. MANUAL RESET RELAY. PROVIDED BY KITCHEN CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR.
13. SOLENOID GAS SHUT-OFF VALVE PROVIDED BY OTHERS, WIRED BY ELECTRICAL CONTRACTOR(OMIT FOR ELECTRIC COOKING).
14. CAPTIVE AIRE CONTROL PANEL.

ELECTRICAL DETAILS FOR ANSUL FIRE SUPPRESSION SYSTEM

CONTROL NOTES

1. ALL WIRING TO CONFORM TO LOCAL CODES.
2. ——— POWER WIRING BY ELECTRICAL CONTRACTOR.
3. ——— LOW VOLTAGE BY MECHANICAL CONTRACTOR. THE FINAL CONNECTION AND SUPERVISION OF ALL CONTROL WIRING AND INTERLOCK WIRING SHALL BE RESPONSIBILITY OF MECHANICAL CONTRACTOR.
4. (M) FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR.
5. (E) FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.
6. (M/E) FURNISHED BY MECHANICAL CONTRACTOR INSTALLED BY ELECTRICAL CONTRACTOR.
7. COORDINATE WITH ELECTRICALCONTRACTOR PRIOR TO FINALIZING THE BID.
8. THIS DRAWING IS FOR COORDINATION ONLY. THE MECH. CONTRACTOR IS FULLY RESPONSIBLE FOR THE COMPLETE TEMP. CONTROL SYSTEM AND SHOULD INCLUDE IN HIS BID ALL NECEESSARY ITEMS WHETHER SHOWN HERE OR NOT. REFER TO MANUFACTURER'S LITERATURE REGARDING ACTUAL WIRING REQM'TS MECHANICAL CONTRACTOR TO VERIFY TEMP. CONTROLS WITH ACTUAL MANUFACTURER'S CONTROL DIAG. PROVIDE LOCKING COVER FOR THERMOSTATS FOR ALL SYSTEMS SERVING ALL AREAS. MECHANICAL CONTRACTOR TO PROVIDE DETAILED WIRING DIAGRAM FOR REVIEW AND COORDINATION WITH ELECTRICAL CONTRACTOR, 6 COPIES REQUIRED. FINAL THERMOSTAT LOCATIONS TO BE COORDINATED WITH FURNITURE LAYOUT, SHOWN ON SHOP DRAWINGS AND SIGNED OFF BY THE OWNER DUCT SMOKE DETECTOR TO BE FURNISHED BY , INSTALLED BY (M),AND WIRED BY (E).



FAN CONTROL

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

MECHANICAL DETAILS AND CONTROLS

◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

◦ JOB: 2015.2801

◦ DATE: 06/17/16

◦ SHEET: M3.8

STATE OF CALIFORNIA
MECHANICAL SYSTEMS
CEC-NRCC-MCH-01-E (Revised 08/15) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-01-E
Mechanical Systems	(Page 1 of 4)
Project Name: Lifemoves Maple St Shelter-1580 Maple St, Redwood City CA	Date Prepared: 06.17.2016

A. MECHANICAL COMPLIANCE FORMS & 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 2013 Nonresidential Manual
Note: The Enforcement Agency may require all forms to be incorporated onto the building plans.

YES	NO	Form/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-02A to 11A). Required on plans for all submittals.
☒	☐	NRCC-MCH-01-E (Part 3 of 3)	Certificate of Compliance, Required Acceptance Tests (MCH-12A to 18A). 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 08/15) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-01-E
Mechanical Systems	(Page 2 of 4)
Project Name: Lifemoves Maple St Shelter- 1580 Maple St. , Redwood City CA	Date Prepared: 06.17.2016

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

Test Performed By:

Designer:
This form 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 them self 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 form is not considered a completed form 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-02A	MCH-03A	MCH-04A	MCH-05A	MCH-06A	MCH-07A	MCH-08A	MCH-09A	MCH-10A	MCH-11A
Equipment Requiring Testing or Verification	# of Units	Outdoor Air	Single Zone Unitary	Air Distribution Ducts	Economizer Controls	Demand Control Ventilation (DCV)	Supply Fan VAV	Valve Leakage Test	Supply Water Temp. Reset	Hydronic System Variable Flow Control	Automatic Demand Shed Control
AC-1 to AC-10	10	X	X	☐	☐	☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

STATE OF CALIFORNIA
MECHANICAL SYSTEMS
CEC-NRCC-MCH-01-E (Revised 08/15) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-01-E
Mechanical Systems	(Page 3 of 4)
Project Name: Lifemoves Maple St Shelter – 1580 Maple St, Redwood City CA	Date Prepared: 06.17.2016

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

Test Performed By:

Designer:
This form 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 them self 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 form is not considered a completed form 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-12A	MCH-13A	MCH-14A	MCH-15A	MCH-16A	MCH-17A	MCH-18A
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
AC-1 to AC-10	10	☐	☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐

STATE OF CALIFORNIA
MECHANICAL SYSTEMS
CEC-NRCC-MCH-01-E (Revised 08/15) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-01-E
Mechanical Systems	(Page 4 of 4)
Project Name: Lifemoves Maple St Shelter-1580 Maple St, Redwood Coty CA	Date Prepared: 06.17.2016

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Vy Truong	Documentation Author Signature:
Company: Tantech Engineers	Signature Date: 06.17.2016
Address: 1431 Cedar Street	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: San Carlos CA 94070	Phone: 415-269-4283

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: Vy Truong	Responsible Designer Signature:
Company : Tantech Engineers	Date Signed: 06.17.2016
Address: 1431 Cedar Street	License: M32860
City/State/Zip: San Carlos CA 94070	Phone: 415-269-4183

STATE OF CALIFORNIA
HVAC SYSTEM REQUIREMENTS
CEC-NRCC-MCH-02-E (Revised 08/15) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-02-E
HVAC Dry System Requirements	(Page 1 of 3)
Project Name: Lifemoves Maple St Shelter-1580 Maple St., Redwood City CA	Date Prepared: 06.17.2016

A. Equipment Tags and System Description[1] AC-1 to AC-10

MANDATORY MEASURES	T-24 Sections	Reference to the Requirements in the Contract Documents[2]		
Heating Equipment Efficiency[3]	110.1 or 110.2(a)	M0.1		
Cooling Equipment Efficiency[3]	110.1 or 110.2(a)	N/A		
HVAC or Heat Pump Thermostats	110.2(b), 110.2(c)	M0.1		
Furnace Standby Loss Control	110.2(d)	N/A		
Low leakage AHUs	110.2(f)	N/A		
Ventilation[4]	120.1(b)	M0.1		
Demand Control Ventilation[5]	120.1(c)4	N/A		
Occupant Sensor Ventilation Control[6]	120.1(c)5, 120.2(e)3	N/A		
Shutoff and Reset Controls[7]	120.2(e)	M0.1		
Outdoor Air and Exhaust Damper Control	120.2(f)	M2.1		
Isolation Zones	120.2(g)	M2.1		
Automatic Demand Shed Controls	120.2(h)	N/A		
Economizer FDD	120.2(i)	N/A		
Duct Insulation	120.4	M0.2		
PRESCRIPTIVE MEASURES				
Equipment is sized in conformance with 140.4 (a & b)	140.4(a & b)	Y		
Supply Fan Pressure Control	140.4(c)	N		
Simultaneous Heat/Cool[8]	140.4(d)	N		
Economizer	140.4(e)	N		
Heat and Cool Air Supply Reset	140.4(f)	N		
Electric Resistance Heating[9]	140.4(g)	N		
Duct Leakage Sealing and Testing.[10]	140.4(l)	N		

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 space 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 form.*
5. *If one or more space 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 form.*
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 form must be submitted.*

STATE OF CALIFORNIA
HVAC WET SYSTEM REQUIREMENTS
CEC-NRCC-MCH-02-E (Revised 08/15) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-02-E
HVAC Wet System Requirements	(Page 2 of 3)
Project Name: Lifemoves Maple St Shelter-1580 Maple St., Redwood City CA	Date Prepared: 06.17.2016

B. Equipment Tags and System Description[1]

MANDATORY MEASURES	T-24 Sections	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)[6]	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			
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)			
WLHP 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 08/15) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-02-E
HVAC Wet System Requirements	(Page 3 of 3)
Project Name: Lifemoves Maple St Shelter-1580 Maple St., Redwood City CA	Date Prepared: 06.17.2016

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Vy Truong	Documentation Author Signature:
Company: Tantech Engineers	Signature Date: 06.17.2016
Address: 1431 Cedar Street	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: San Carlos CA 94070	Phone: 415-269-4283

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: Vy Truong	Responsible Designer Signature:
Company : Tantech Engineers	Date Signed: 06.17.2016
Address: 1431 Cedar Street	License: M32860
City/State/Zip: San Carlos CA 94070	Phone: 415-269-4283

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

MECH Title
24 Forms

◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

◦ JOB: 2015.2801

◦ DATE: 06/17/16

◦ SHEET: M4.1

STATE OF CALIFORNIA

MECHANICAL VENTILATION AND REHEAT

CEC-NRCC-MCH-03-E (Revised 01/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-03-E
Mechanical Ventilation & Reheat	(Page 1 of 2)
Project Name: Lifemoves Maple St Shelter-1580 Maple St., Redwood City CA	Date Prepared: 06.17.2016

ACTUAL DESIGN INFO (FROM EQUIPMENT SCHEDULES, ETC)						AREA BASIS			OCCUPANCY BASIS			MINIMUM		VAV Reheated Primary Air CFM			VAV Deadband Primary Air CFM		
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
ZONE/ SYSTEM/ VAV BOX TAG	DESIGN PRIMARY COOLING AIRFLOW (CFM)	DESIGN PRIMARY DEAD-BAND AIRFLOW (CFM)	DESIGN PRIMARY HEATING AIRFLOW (CFM)	CNTRL TYPE DDC (Y/N)	TRANSFER AIRFLOW (CFM)	CONDI-TIONED AREA (ft^2)	MIN CFM PER AREA	MIN CFM BY AREA	NUM. OF PEOPLE	CFM PER PERSON	MIN CFM BY OCCU-PANT	REQ'D VENT AIRFLOW (MAX OF I OR L) (CFM)	COM-PLIES	BASED DESIGN PRIMARY COOLING AIR (50% DDC,30% NON-DDC) (CFM)	MAXIMUM REHEAT CFM (MAX OF M OR O)	COM-PLIES?	AIR (20% DDC, N/A NON-DDC) (CFM)	(larger of M or R, N/A for NON-DDC) (CFM)	COM-PLIES
AC-1 to AC-10	22,800	22,800	22,800	N	N/A	18,000	0.15	2700	300	15	4500	4500	Y						

Yellow shaded cells require user input. Remaining cells are protected and automatic

B. The largest amount of primary air supplied by the terminal unit when it's operating in the cooling mode.
C. The smallest amount of primary air supplied by the terminal unit in the deadband mode.
D. The largest amount of primary air supplied by the terminal unit when it's operating in the heating mode.
E. A terminal unit can be controlled with DDC controls, or non-DDC controls. Each control category has different reheat limitations in code.
F. Transfer Air must be provided where Required Ventilation Airflow (Column M) is greater than the Design Primary Deadband Airflow (Column C).
H. Minimum ventilation rate per Section §120.1. Table 120.1-A.
J. Based on number of fixed seats where applicable or the greater of the expected number of occupants and 50% of the CBC occupant load for egress purposes for spaces without fixed seating.
M. Required Ventilation Airflow (Req'd Ventilation Airflow) is the larger of the ventilation rates calculated on an AREA BASIS or OCCUPANCY BASIS (Column I or L)
N. This column identifies whether or not the Design Primary Deadband Airflow complies or not. It compares the value in column M to the value in column C and column F.
O. Design Primary Cooling Airflow * 0.50 for DDC, Design Primary Cooling Airflow * 0.30 for Non-DDC. If the Design Primary Cooling Airflow is less than 300 cfm, then this is not applicable.
P. Maximum of Column M and Column O. If the Design Primary Cooling Airflow is 300 cfm or less, then this is not applicable.
Q. This column identifies whether or not the Design Primary Reheat Airflow at the zone level, complies or not. It compares the value in column P to the value in column D.
R. Design Primary Cooling Airflow * 0.20 for DDC. Not applicable for Non-DDC zones or zones where Design Primary Cooling Airflow is 300 cfm or less.
S. Maximum of Column M and Column R. Not applicable if the Design Primary Cooling Airflow is 300 cfm or less.
T. This column identifies whether or not the Design Primary Deadband Airflow at the zone level, complies or not. It compares the value in column S to the value in column C.

STATE OF CALIFORNIA

MECHANICAL VENTILATION AND REHEAT

CEC-NRCC-MCH-03-E (Revised 01/16) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-03-E
Mechanical Ventilation & Reheat	(Page 2 of 2)
Project Name: Lifemoves Maple St Shelter-1580 Maple St., Redwood City CA	Date Prepared: 06.17.2016

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Vy Truong	Documentation Author Signature:
Company: Tantech Engineers	Signature Date: 06.17.2016
Address: 1431 Cedar Street	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: San Carlos CA 94070	Phone: 415-269-4283

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: Vy Truong	Responsible Designer Signature:
Company : Tantech Engineers	Date Signed: 06.17.2016
Address: 1431 Cedar Street	License: M32860
City/State/Zip: San Carlos CA 94070	Phone: 415-269-4283

STATE OF CALIFORNIA

REQUIRED ACCEPTANCE TESTS

CEC-NRCC-MCH-04-E (Revised 08/15) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-04-E
Required Acceptance Tests	(Page 1 of 3)
Project Name: Lifemoves Maple St Shelter-1580 Maple St., Redwood City CA	Date Prepared: 06.17.2016

A. MECHANICAL COMPLIANCE FORMS & WORKSHEETS
(indicate if worksheet is included)

For detailed instructions on the use of this and all Energy Efficiency Standards compliance forms, refer to the 2013 Nonresidential Manual
Note: The Enforcement Agency may require all forms to be incorporated onto the building plans. Forms NRCC-MCH-04-E and NRCC-MECH-05-E are alternative forms to NRCC-MCH-01-E, NRCC-MCH-02-E and NRCC-MCH-03-E for projects using only single zone packaged HVAC systems.

YES	NO	Form	Title
YES		NRCC-MCH-04-E (1 of 2)	Certificate of Compliance. Required on plans when used.
YES		NRCC-MCH-04-E (2 of 2)	Mechanical Acceptance Tests. Required on plans when used.
YES		NRCC-MCH-05-E (1 of 2)	HVAC Prescriptive Requirements. It is required on plans when used.
	NO	NRCC-MCH-05-E (2 of 2)	Mechanical SWH Equipment Summary is required for all submittals with service water heating, pools or spas. It is required on plans where applicable.

STATE OF CALIFORNIA

REQUIRED ACCEPTANCE TESTS

CEC-NRCC-MCH-04-E (Revised 08/15) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-04-E
Required Acceptance Tests	(Page 2 of 3)
Project Name: Lifemoves Maple St Shelter-1580 Maple St., Redwood City CA	Date Prepared: 06.17.2016

Designer:
This form is to be used by the designer and attached to the plans. Listed below are all the acceptance tests for mechanical systems. The designer is required to check the applicable boxes by all acceptance tests that apply and list all equipment that requires an acceptance test. If all equipment of a certain type requires a test, list the equipment description and the number of systems. The NA number designates the Section in the Appendix of the Nonresidential Reference Appendices Manual that describes the test. Since this form will be part of the plans, completion of this section will allow the responsible party to budget for the scope of work appropriately.

Enforcement Agency:
Systems Acceptance. Before occupancy permit is granted for a newly constructed building or space, or a new space-conditioning system serving a building or space is operated for normal use, all control devices serving the building or space shall be certified as meeting the Acceptance Requirements for Code Compliance.

Systems Acceptance. Before occupancy permit is granted. All newly installed HVAC equipment must be tested using the Acceptance Requirements. .
The NRCC-MCH-04-E form is not considered a completed form and is not to be accepted by the building department unless the correct boxes are checked. The equipment requiring testing, person performing the test (Example: HVAC installer, TAB contractor, controls contractor, PE in charge of project) and what Acceptance test must be conducted. The following checked-off forms are required for ALL newly installed and replaced equipment. In addition a Certificate of Acceptance forms shall be submitted to the building department that certifies plans, specifications, installation certificates, and operating and maintenance information meet the requirements of Section 10-103(b) and Title 24 Part 6. The building inspector must receive the properly filled out and signed forms before the building can receive final occupancy.

Test Description		MCH-02-A	MCH-03-A	MCH-04-A	MCH-05-A	MCH-06-A	MCH-07-A	MCH-11-A	MCH-12-A	MCH-14-A	MCH-18-A	Test Performed By:
Equipment Requiring Testing or Verification	# of units	Outdoor Air	Single Zone Unitary	Air Distribution Ducts	Economizer Controls	Demand Control Ventilation (DCV)	Supply Fan VAV	Automatic Demand Shed Control	FDD for Packaged DX Units	Distributed Energy Storage DX AC Systems	Energy Management Control System	
AC-1 to AC-10	10	x	x		x							

STATE OF CALIFORNIA

REQUIRED ACCEPTANCE TESTS

CEC-NRCC-MCH-04-E (Revised 08/15) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-04-E
Required Acceptance Tests	(Page 3 of 3)
Project Name: Lifemoves Maple St Shelter-1580 Maple St., Redwood City CA	Date Prepared: 06.17.2016

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Vy Truong	Documentation Author Signature:
Company: Tantech Engineers	Signature Date: 06.17.2016
Address: 1431 Cedar Street	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: San Carlos CA 94070	Phone: 415-269-4283

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: Vy Truong	Responsible Designer Signature:
Company : Tantech Engineers	Date Signed: 06.17.2016
Address: 1431 Cedar Street	License: M32860
City/State/Zip: San Carlos CA 94070	Phone: 415-269-4283

STATE OF CALIFORNIA

REQUIREMENTS FOR PACKAGED SINGLE ZONE UNITS

CEC-NRCC-MCH-05-E (Revised 08/15) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-05-E
Requirements for Packaged Single-Zone Units	(Page 1 of 2)
Project Name: Lifemoves Maple St Shelter, 1580 Maple St, Redwood City CA	Date Prepared: 06.17.2016

Equipment Tag(s)[1]		AC-7		AC-8		AC-10	
MANDATORY MEASURES	*T-24 Sections*	*Requirement*[3]	*As Scheduled*[3]	*Requirement*[3]	*As Scheduled*[3]	*Requirement*[3]	*As Scheduled*[3]
Heating Equipment Efficiency[4]	110.1 or 110.2(a)	80%	82%	80%	82%	80%	82%
Cooling Equipment Efficiency[4]	110.1 or 110.2(a)	12.0 EER	13.0 EER	12.0 EER	13.0 EER	12.0 EER	13.0 EER
Thermostats[5]	110.2(b), 110.2(c)	programmable	programmable	programmable	programmable	programmable	programmable
Furnace Standby Loss Control[6]	110.2(d)	N/A	N/A	N/A	N/A	N/A	N/A
Low Leakage AHU	110.2(f)	N/A	N/A	N/A	N/A	N/A	N/A
Ventilation[7]	120.1(b)	700 CFM	850 CFM	300 CFM	400 CFM	650 CFM	750 CFM
Demand Control Ventilation[8]	120.1(c)4	N/A	N/A	N/A	N/A	N/A	N/A
Occupant Sensor Ventilation Control[8]	120.1(c)5, 120.2(e)3	N/A	N/A	N/A	N/A	N/A	N/A
Shutoff and Reset Controls[9]	120.2(e)	N/A	N/A	N/A	N/A	N/A	N/A
Outdoor Air and Exhaust Damper Control	120.2(f)	N/A	N/A	N/A	N/A	N/A	N/A
Automatic Demand Shed Controls	120.2(h)	N/A	N/A	N/A	N/A	N/A	N/A
Economizer FDD	120.2(i)	N/A	N/A	N/A	N/A	N/A	N/A
Duct Insulation	120.4	R4.2	R4.2	R4.2	R4.2	R4.2	R4.2
PRESCRIPTIVE MEASURES							
Equipment is sized in conformance with 140.4 (a & b)	140.4(a & b)	90 mbh sens 110 mbh heat	81 mbh sens 103 mbh heat	35 mbh sens 62 mbh heat	33 mbh sens 59 mbh heat	70 mbh sens 110 mbh heat	69 mbh sens 103 mbh heat
Economizer	140.4(e)	REQUIRED	M0.1	REQUIRED	M0.1	NOT REQD	M0.1
Electric Resistance Heating[10]	140.4(g)						
Duct Leakage Sealing and Testing.[11]	140.4(l)						

Notes:

1. *Provide equipment tags (e.g. AC1 or AC1 to 10). Multiple units of the same make and model with the same application and accessories can be grouped together.*
2. *Enter the following information as appropriate: Unit Manufacturer; Unit Model Number (including all accessories); Description of the unit (e.g. gas-pack or heat pump; rated heating capacity (enter "N/A" if no heating); and, rated cooling capacity (enter "N/A" if no cooling). For unit capacities include the units (e.g. kBtuh or tons).*
3. *For each requirement, enter the minimum requirement from the Standard In the left column (under "Standard Requirement"). In the right column (under "As Scheduled") enter the value for the units as specified.*
4. *Where there is more than one requirement (e.g. full and part load efficiency) enter both with the appropriate labels (e.g. COP and IEER).*
5. *In the left column identify the thermostatic requirements from the standard (e.g. programmable setback thermostat or heatpump with electric heat), . In the right column indicate the capabilities of the thermostat as scheduled.*
6. *If the unit has a furnace which is rated at >=225,000 Btuh of capacity, indicate the rated standby loss and ignition source (e.g. IID). If there is no furnace or the unit is rated for <225,000 Btuh indicate "N/A".*
7. *In the left column, enter both the required ventilation value from Table 120.1A and for the number of occupants times 15 cfm/person. In the right column enter the actual minimum ventilation as scheduled. If the space is naturally ventilated enter "N/A" in the left column and "the space is naturally ventilated" in the right column.*
8. *If the space is required to have either DCV or Occupant Sensor Ventilation Control indicate "required" in the left column (otherwise indicate "N/A" in the left column). If either DCV or Occupant Sensor Ventilation Control is provided indicate "provided" in the right column (otherwise indicate "N/A" in the right column)*
9. *In the left column indicate the required time controls from the standard. In the right column identify the device that provides this functionality (e.g. EMCS or programmable timeclock).*
10. *Enter N/A if there is no electric heating. If the system has electric heating indicate which exception to 140.4(g) applies.*
11. *If duct leakage sealing and testing is required, a **MCH-04-A** form must be submitted.*

STATE OF CALIFORNIA

REQUIREMENTS FOR PACKAGED SINGLE ZONE UNITS

CEC-NRCC-MCH-05-E (Revised 08/15) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-05-E
Requirements for Packaged Single-Zone Units	(Page 1 of 2)
Project Name: Lifemoves Maple St Shelter, 1580 Maple St, Redwood City CA	Date Prepared: 06.17.2016

Equipment Tag(s)[1]		AC-1,4,6,9		AC-2,3		AC-5	
MANDATORY MEASURES	*T-24 Sections*	*Requirement*[3]	*As Scheduled*[3]	*Requirement*[3]	*As Scheduled*[3]	*Requirement*[3]	*As Scheduled*[3]
Heating Equipment Efficiency[4]	110.1 or 110.2(a)	80%	82%	80%	82%	80%	82%
Cooling Equipment Efficiency[4]	110.1 or 110.2(a)	12.0 EER	13.0 EER	12.0 EER	13.0 EER	12.0 EER	13.0 EER
Thermostats[5]	110.2(b), 110.2(c)	programmable	programmable	programmable	programmable	programmable	programmable
Furnace Standby Loss Control[6]	110.2(d)	N/A	N/A	N/A	N/A	N/A	N/A
Low Leakage AHU	110.2(f)	N/A	N/A	N/A	N/A	N/A	N/A
Ventilation[7]	120.1(b)	500 CFM	600 CFM	400 CFM	500 CFM	300 CFM	360 CFM
Demand Control Ventilation[8]	120.1(c)4	N/A	N/A	N/A	N/A	N/A	N/A
Occupant Sensor Ventilation Control[8]	120.1(c)5, 120.2(e)3	N/A	N/A	N/A	N/A	N/A	N/A
Shutoff and Reset Controls[9]	120.2(e)	N/A	N/A	N/A	N/A	N/A	N/A
Outdoor Air and Exhaust Damper Control	120.2(f)	N/A	N/A	N/A	N/A	N/A	N/A
Automatic Demand Shed Controls	120.2(h)	N/A	N/A	N/A	N/A	N/A	N/A
Economizer FDD	120.2(i)	N/A	N/A	N/A	N/A	N/A	N/A
Duct Insulation	120.4	R4.2	R4.2	R4.2	R4.2	R4.2	R4.2
PRESCRIPTIVE MEASURES							
Equipment is sized in conformance with 140.4 (a & b)	140.4(a & b)	60 mbh sens 62 mbh heat	58 mbh sens 59 mbh heat	48 mbh sens 62 mbh heat	46 mbh sens 59 mbh heat	38 mbh sens 51 mbh heat	35 mbh sens 49 mbh heat
Economizer	140.4(e)	REQUIRED	M0.1	REQUIRED	M0.1	NOT REQD	M0.1
Electric Resistance Heating[10]	140.4(g)						
Duct Leakage Sealing and Testing.[11]	140.4(l)						

Notes:

1. *Provide equipment tags (e.g. AC1 or AC1 to 10). Multiple units of the same make and model with the same application and accessories can be grouped together.*
2. *Enter the following information as appropriate: Unit Manufacturer; Unit Model Number (including all accessories); Description of the unit (e.g. gas-pack or heat pump; rated heating capacity (enter "N/A" if no heating); and, rated cooling capacity (enter "N/A" if no cooling). For unit capacities include the units (e.g. kBtuh or tons).*
3. *For each requirement, enter the minimum requirement from the Standard In the left column (under "Standard Requirement"). In the right column (under "As Scheduled") enter the value for the units as specified.*
4. *Where there is more than one requirement (e.g. full and part load efficiency) enter both with the appropriate labels (e.g. COP and IEER).*
5. *In the left column identify the thermostatic requirements from the standard (e.g. programmable setback thermostat or heatpump with electric heat), . In the right column indicate the capabilities of the thermostat as scheduled.*
6. *If the unit has a furnace which is rated at >=225,000 Btuh of capacity, indicate the rated standby loss and ignition source (e.g. IID). If there is no furnace or the unit is rated for <225,000 Btuh indicate "N/A".*
7. *In the left column, enter both the required ventilation value from Table 120.1A and for the number of occupants times 15 cfm/person. In the right column enter the actual minimum ventilation as scheduled. If the space is naturally ventilated enter "N/A" in the left column and "the space is naturally ventilated" in the right column.*
8. *If the space is required to have either DCV or Occupant Sensor Ventilation Control indicate "required" in the left column (otherwise indicate "N/A" in the left column). If either DCV or Occupant Sensor Ventilation Control is provided indicate "provided" in the right column (otherwise indicate "N/A" in the right column)*
9. *In the left column indicate the required time controls from the standard. In the right column identify the device that provides this functionality (e.g. EMCS or programmable timeclock).*
10. *Enter N/A if there is no electric heating. If the system has electric heating indicate which exception to 140.4(g) applies.*
11. *If duct leakage sealing and testing is required, a **MCH-04-A** form must be submitted.*

STATE OF CALIFORNIA

REQUIREMENTS FOR PACKAGED SINGLE ZONE UNITS

CEC-NRCC-MCH-05-E (Revised 08/15) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-MCH-05-E
Requirements for Packaged Single-Zone Units	(Page 2 of 2)
Project Name: Lifemoves Maple St Shelter-1580 Maple St, Redwood City CA	Date Prepared: 06.17.2016

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Vy Truong	Documentation Author Signature:
Company: Tantech Engineers	Signature Date: 06.17.2016
Address: 1431 Cedar Street	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: San Carlos CA 94070	Phone: 415-269-4283

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: Vy Truong	Responsible Designer Signature:
Company : Tantech Engineers	Date Signed: 06.17.2016
Address: 1431 Cedar Street	License: M32860
City/State/Zip: San Carlos CA 94070	Phone: 415-269-4283

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

∘ PROJECT ∘

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

∘ SHEET TITLE ∘

MECH Title
24 Forms

∘ REVISIONS ∘

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

∘ JOB: 2015.2801

∘ DATE: 06/17/16

∘ SHEET: M4.2

STATE OF CALIFORNIA

WATER HEATING SYSTEM GENERAL INFORMATION

CEC-NRCC-PLB-01-E (Revised 08/15) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-PLB-01-E
Water Heating System General Information	(Page 1 of 2)
Project Name: Lifemoves Maple St Shelter, 1580 Maple St, Redwood City CA	Date Prepared: 06.17.2016

A. GENERAL INFORMATION/SYSTEM INFORMATION

1.	Water Heater System Name:	WH-1 thru WH-16
2.	Water Heater System Configuration:	Central
3.	Water Heater System Type:	Domestic Hot Water
4.	Building Type:	Non Residential and Residential
5.	Total Number of Water Heaters in Systems:	16
6.	Central DHW Distribution Type:	Other
7.	Dwelling Unit DHW Distribution Type:	N/A

B. WATER HEATER INFORMATION

Each water heater type requires a separate form.

1.	Water Heater Type:	Tankless Type gas fired
2.	Fuel Type	Gas
3.	Manufacture Name	Rinnai
4.	Model Number	C-199i
5.	Number of Identical Water Heaters:	N/A
6.	Installed Water Heater System Efficiency:	96%
7.	Required Minimum Efficiency:	80%
8.	Standby loss percent or Standby loss total:	4%
9.	Rated Input	199,000 btuh
10.	Pilot Energy:	N/A
11.	Water Heater Tank Storage Volume:	N/A
12.	Exterior Insulation On Water Heater:	R8
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 Efficiency Standards compliance forms, refer to the 2013 Nonresidential Manual Note: The Enforcement Agency may require all forms to be incorporated onto the building plans.

YES	NO	Form/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 08/15) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-PLB-01-E
Water Heating System General Information	(Page 2 of 2)
Project Name: Lifemoves Maple St Shelter, 1580 Maple St, Redwood City CA	Date Prepared: 06.17.2016

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Vy Truong	Documentation Author Signature:
Company: Tantech Engineers	Signature Date: 06.17.2016
Address: 1431 Cedar Street	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: San Carlos CA 94070	Phone: 415-269-4283

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: Vy Truong	Responsible Designer Signature:
Company : Tantech Engineers	Date Signed: 06.17.2016
Address: 1431 Cedar Street	License: M32860
City/State/Zip: San Carlos CA 94070	Phone: 415-269-4283

STATE OF CALIFORNIA

PROCESS COMPLIANCE FORMS AND WORKSHEETS

CEC-NRCC-PRC-02-E (Revised 12/15) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-PRC-01-E
Process Compliance Forms & Checklists	(Page 1 of 3)
Project Name: Lifemoves Maple St Shelter, 1580 Maple St, Redwood City CA	Date Prepared: 06.17.2016

A. PROCESS COMPLIANCE FORMS & 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 2008 Nonresidential Manual Note: The Enforcement Agency may require all forms to be incorporated onto the building plans.

YES	NO	Form/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-8-A). Required on plans for all submittals.
☐	☒	PRC-02-E	Compliance Form for Enclosed Parking Garage Exhaust Fans
☒	☐	PRC-03-E	Compliance Form for Commercial Kitchens
☐	☒	PRC-04-E	Compliance Form for Computer Rooms
☐	☒	PRC-05-E	Compliance Form for Commercial Refrigeration
☐	☒	PRC-06-E	Compliance Form for **ALL** Refrigerated Warehouses
☐	☒	PRC-07-E	Compliance Form for Refrigerated Warehouse ≥ 3,000 ft2
☐	☒	PRC-08-E	Compliance Form for Refrigerated Warehouse Where **Multiple** Spaces that (i) comprise a total of 3,000 square feet or more; and (ii) are collectively served by the same refrigeration system compressor(s) and condenser(s) (central systems).
☐	☒	PRC-09-E	Compliance Form for Laboratory Exhaust
☐	☒	PRC-10-E	Compliance Form for Compressed Air Systems
☐	☒	PRC-11-E	Compliance Form for Process Boilers

STATE OF CALIFORNIA

PROCESS COMPLIANCE FORMS AND WORKSHEETS

CEC-NRCC-PRC-02-E (Revised 12/15) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-PRC-01-E
Process Compliance Forms & Checklists	(Page 2 of 3)
Project Name: Lifemoves Maple St Shelter, 1580 Maple St, Redwood City CA	Date Prepared: 06.17.2016

B. PROCESS ACCEPTANCE FORMS

(check box for required forms)

Designer:
This form 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 them self 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 form is not considered a completed form 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-01A	PRC-02A	PRC-03A	PRC-04A	PRC-05A	PRC-06A	PRC-07A	PRC-08A
Equipment Requiring Testing or Verification	# of units	Compressed Air Systems	Garage Exhaust	Kitchen Exhaust	RHW Evap Fan Motor Controls	RHW Evap Condenser Controls	RHW Air-Cooled Condenser Controls	RHW Variable Speed Compressors	RHW Elect. Underslab Heating
EF-1	1	☐	☐	☒	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐	☐	☐	☐

STATE OF CALIFORNIA

PROCESS COMPLIANCE FORMS AND WORKSHEETS

CEC-NRCC-PRC-02-E (Revised 12/15) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-PRC-01-E
Process Compliance Forms & Checklists	(Page 3 of 3)
Project Name: Lifemoves Maple St Shelter, 1580 Maple St, Redwood City CA	Date Prepared: 06.17.2016

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Vy Truong	Documentation Author Signature:
Company: Tantech Engineers	Signature Date: 06.17.2016
Address: 1431 Cedar Street	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: San Carlos CA 94070	Phone: 415-269-4283

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: Vy Truong	Responsible Designer Signature:
Company : Tantech Engineers	Date Signed: 06.17.2016
Address: 1431 Cedar Street	License: M32860
City/State/Zip: San Carlos CA 94070	Phone: 415-269-4283

STATE OF CALIFORNIA

COMMERCIAL KITCHEN REQUIREMENTS

CEC-NRCC-PRC-03-E (Revised 08/15) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-PRC-03-E
Commercial Kitchen Requirements	(Page 1 of 2)
Project Name: Lifemoves Maple St Shelter, 1580 Maple St, Redwood City CA	Date Prepared: 06.17.2016

VENTILATION COMPLIANCE METHOD: Small Kitchens 149.9(b)2.Ai

Small Kitchens (≤5,000 CFM Type I and II Hood Exhaust) check one			140.9(b)2 A i	140.9(b)2Aii
Large Kitchens (>5,000 CFM Type I and II Hood Exhaust) check one	140.9(b)2Bi	140.9(b)2Bii(a), (b), (c) and (d)	140.9(b)2Biii	140.9(b)2Biv

KITCHEN ROOM NUMBER: Line 02
TOTAL INSTALLED TYPE I and II KITCHEN HOOD EXHAUST (CFM): 3850 cfm
TOTAL BYPASS HOOD MUA (CFM)[3]: n/a
TOTAL TRANSFER AIR AIRFLOW (CFM)[4]: 385 cfm
TOTAL MECHANICALLY HEATED OR COOLED MAKE UP AIR (CFM)[5]: 0 cfm
TOTAL AIR NEEDED FOR HEATING OR COOLING (CFM)[6]: 1600 cfm
TOTAL EXHAUST AIR WITH DEMAND VENTILATION SYSTEMS[7]: n/a

Equipment Tags and System Description[8]		H-1,EF-1	MAU-1	
PRESCRIPTIVE MEASURES	***T-24 Sections***	***Reference to the Requirements in the Contract Documents[9]***		
Bypass Hood Exhaust and MUA	140.9(b)1A	N/A	N/A	
Type I/II Hood Exhaust	140.9(b)1B, Table 140.9-A	M0.1,M3.1	M0.1,M3.1	
Mechanically heated or cooled make up air	140.9(b)2A	N/A	N/A	
Replacement Air/Transfer Air Exhaust	140.9(b)Bi	M0.1	M0.1	
Demand Ventilation Systems	140.9(b)2Bii	N/A	N/A	
Energy Recovery Systems	140.9(b)2Biii	N/A	N/A	
Tempered/Non Mechanical Cooling Air Systems	140.9(b)2Biv	M0.1,M3.3,M3.4	M0.1,M3.3,M3.4	

Notes:
1. Fill in one form for each kitchen in the project.
2. Enter the total installed type I and II kitchen hood exhaust airflow in cubic feet per minute (cfm).
3. Enter the make-up air to bypass hoods (cfm).
4. Enter the total transfer air (cfm).
5. Enter the total mechanically cooled or heated make up air (cfm).
6. Enter the maximum air needed for heating or cooling loads (cfm).
7 Enter the design airflow (cfm) of exhaust with demand ventilation system controls
8. Provide equipment tags (e.g., AHU 1 & 2 or Hoods 1 to 5) for all equipment that is covered by these requirements. Equipment that is similar in requirements and compliance can be grouped in a single column.
9. 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

COMMERCIAL KITCHEN REQUIREMENTS

CEC-NRCC-PRC-03-E (Revised 08/15) — CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-PRC-03-E
Commercial Kitchen Requirements	(Page 2 of 2)
Project Name: Lifemoves Maple St Shelter, 1580 Maple St, Redwood City CA	Date Prepared: 06.17.2016

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Vy Truong	Documentation Author Signature:
Company: Tantech Engineers	Signature Date: 06.17.2016
Address: 1431 Cedar Street	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: San Carlos CA 94070	Phone: 415-269-4283

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: Vy Truong	Responsible Designer Signature:
Company : Tantech Engineers	Date Signed: 06.17.2016
Address: 1431 Cedar Street	License: M32860
City/State/Zip: San Carlos CA 94070	Phone: 415-269-4283

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

∘ PROJECT ∘

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

∘ SHEET TITLE ∘

MECH Title
24 Forms

∘ REVISIONS ∘

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

∘ JOB: 2015.2801

∘ DATE: 06/17/16

∘ SHEET: M4.3

WATER PIPE SIZING CALCULATION

MAPLE STREET SHELTER
DOMESTIC POTABLE WATER

JOB NAME : DOMESTIC POTABLE WATER
JOB NO. :
DATE : 5.20.16

RESERVOIR FED SYSTEM

PRESSURE AVAILABLE : MINIMUM = 70 P.S.I.
MAXIMUM = 76 P.S.I.

PRESSURE REQUIRED AT FARTHEST FIXTURE :	25 P.S.I.
PRESSURE LOSS DUE TO HEIGHT: 15'x.433	6.5 P.S.I.
PRESSURE LOSS THROUGH METER :	6 P.S.I.
PRESSURE LOSS THROUGH BACKFLOW:	12 P.S.I.
OTHER LOSSES :	P.S.I.
TOTAL LOSSES :	49.5 P.S.I.

LOSS AVAILABLE FOR FRICTION :
76 – 49.5 = 26.5 P.S.I.

LENGTH OF RUN – METER TO FARTHEST FIXTURE :

OUTSIDE BUILDING :	50 FT.
INSIDE BUILDING :	200 FT.
TOTAL :	250 FT.
EQUIVALENT RUN : 250 X 1.25 =	312.5 FT.

ALLOWABLE FRICTION LOSSES :

PRESSURE AVAILABLE 26.5 P.S.I. X 100 / EQUIVALENT LENGTH 312.5 FT. = 8.48 P.S.I. / 100 FT.

SET AT 8.48 PSI/100 NOT TO EXCEED 8' PER SECOND

FRICTION LOSS 8.48 PSI PER 100 FEET

SIZE	FIXTURE UNITS			VELOCITY (FPS)	G.P.M.
	CW–FLUSH VALVE	CW–FLUSH TANK	HW		
1/2	0	3	3	2.3	1.7
3/4	0	11	9	3.0	4.5
1	0	24	17	3.5	9.0
1–1/4	14	55	29	4.0	15.6
1–1/2	35	104	48	4.5	25.0
2	136	260	120	5.3	51.5
2–1/2	358	474	246	6.1	91.0
3	699	747	412	6.8	145

GENERAL NOTES:

1. COORDINATE AND VERIFY EXACT LOCATION, SIZE, POINT OF CONNECTION AND INVERT ELEVATION OF SANITARY SEWER, STORM DRAIN, AND WATER BEFORE TRENCHING AND INSTALLATION OF THE PLUMBING SYSTEM. NOTIFY THE ARCHITECT IMMEDIATELY IF THE PLUMBING DRAWINGS INDICATE DIFFERENT LOCATIONS AND INVERT ELEVATION OF THE EXISTING SITE UTILITIES.
2. COORDINATE AND VERIFY WITH STRUCTURAL DRAWINGS FOR EXACT LOCATIONS AND ELEVATIONS OF ALL GRADE BEAMS AND FOOTINGS. PROVIDE AND INSTALL SLEEVES THROUGH BEAMS AS REQUIRED WHETHER OR NOT SLEEVES ARE INDICATED ON THE PLUMBING DRAWINGS.
3. COORDINATE AND VERIFY ALL LOCATIONS, SIZES AND ELEVATIONS OF ALL SLEEVES THROUGH BEAMS, COLUMNS, SLABS AND FOOTINGS WITH STRUCTURAL ENGINEER AND ARCHITECT PRIOR TO STARTING INSTALLATION OF THE PLUMBING SYSTEM.
4. SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF ALL PLUMBING FIXTURES, DRAINS AND EQUIPMENT.
5. ALL HORIZONTAL WASTE LINES SHALL BE RUN AT A MINIMUM SLOPE OF 1/4" PER FOOT UNLESS OTHERWISE NOTED ON PLAN.
6. ALL VENTS THROUGH ROOF SHALL BE 10'–0" MINIMUM AWAY FROM ANY FRESH AIR INTAKE AND WINDOW.
7. THE LOCATION AND ELEVATION OF ALL PLUMBING PIPING SHALL BE VERIFIED AND COORDINATED WITH ALL OTHER TRADES, STRUCTURAL CONDITIONS AND BUILDING CONSTRUCTION PRIOR TO START OF INSTALLATION.
8. ALL VALVES AND COCKS SHALL BE LOCATED TO BE READILY ACCESSIBLE, WHERE VALVES ARE INSTALLED WITHIN OR BEHIND WALLS, PARTITIONS OR CEILINGS, AN ACCESS PANEL SHALL BE INSTALLED.
9. ALL OUTLETS FOR FUTURE CONNECTIONS SHALL BE INSTALLED SO AS TO PERMIT EASY CONNECTION.
10. ALL PLUMBING WORK SHALL BE DONE IN ACCORDANCE WITH BASE–SHELL BUILDING SPECIFICATIONS.
11. ALL WASTE AND VENT PIPE SHALL SERVICE WEIGHT NO–HUB CAST IRON PIPE AND FITTINGS.
12. ALL HOT AND COLD WATER PIPING SHALL BE TYPE "L" COPPER TUBING, HARD DRAWN WITH WROT COPPER FITTINGS WITH COPPER BRAZED JOINTS.
13. ALL HOT WATER PIPING SHALL BE INSULATED, 1" MINIMUM THICKNESS, MANVILLE MICROLOK FIBERGLASS INSULATION.
14. HORIZONTAL RAINWATER PIPING SHALL BE SIZED BASED ON TABLE D–2 OF THE 2001 CALIFORNIA PLUMBING CODE .
15. ROOF DRAINS, OVERFLOW DRAINS AND RAINWATER PIPING WITHIN THE INTERIOR OF THE BUILDING SHALL BE TESTED IN ACCORDANCE WITH THE PROVISIONS OF THE PLUMBING CODE FOR TESTING DRIAN, WASTE AND VENT SYSTEMS .
16. OVERFLOW DRAINS HAVING THE SAME SIZES AS THE ROOF DRAINS SHALL BE INSTALLED WITH THE INLET FLOW LINE LOCATED TWO (2) INCHES ABOVE THE LOW POINT OF THE ROOF .
17. ROOF DRAIN AND OVERFLOW PIPING WITHIN THE BUILDING SHALL UTILIZE APPROVED DRAINAGE FITTINGS .
18. MANUFACTURED ROOF DRAINS AND OVERFLOW (FIXTURES) SHALL BE IAPMO LISTED .
19. FOR POOL DRAINS AND SPA DRAINS, ALL DRAINS SHALL BE PROVIDED WITH ANTI–ENTRAPMENT DEVICE THAT CONFORMS WITH ASME/ANSI STANDARD A112.19.8. REFER TO POOL SHOP DRAWINGS.

GENERAL NOTES | 5

PLUMBING FIXTURE SCHEDULE

UNIT NO.	DESCRIPTION	CONNECTION SIZES TRAP	W	V	CW	HW	REMARKS
WC 1	WATER CLOSET FLUSH VALVE	INT.	4"	2"	1"	–	WALL HUNG WATER CLOSET, KOHLER KINGSTON K–4323, K–4731 SEAT, SLOAN ROYAL 111–1.28 FLUSH VALVE, MIFAB MC–10 WALL CARRIER, ADA COMPLIANT BOLT CAPS AND ANGLE STOP, WHITE VIT. CHINA
WC 2	WATER CLOSET FLUSH VALVE	INT.	4"	2"	1"	–	FLOOR MOUNT WATER CLOSET, KOHLER HIGHCLIFF K–4368, 17"H ELONGATED TOILET WITH BEMIS #195–CC OPEN END SEAT, LESS COVER, SLOAN ROYAL 111–1.28 FLUSH VALVE, ADA COMPLIANT, BOLT CAPS AND ANGLE STOP, WHITE VITREOUS CHINA
UR 1	URINAL	INT.	2"	1–1/2"	3/4"	–	WALL HUNG ADA COMPLIANT URINAL, KOHLER DEXTER K–5016–ET, ZURN Z–6003AV–EWS 0.5 GPF FLUSH VALVE, WHITE VITREOUS CHINA
L 1	LAVATORY, UNDERCOUNTER MOUNT	2"	2"	1–1/2"	1/2"	1/2"	OVAL UNDERCOUNTER MOUNT LAVATORY, KOHLER CAXTON K–2210, 17"x14" WHITE VITREOUS CHINA, WITH OVERFLOW, PROVIDE GRID STRAINER AND BRASS DRAIN PIPE, PROVIDE TRUE BRO LAV INSULATION KIT, STOP AND SUPPLY VALVE, MOEN CHATEAU DECK MOUNT FAUCET WITH 0.4 GPM AERATORS AND ADA COMPLIANT LEVER
L 2	LAVATORY, WALL HUNG	2"	2"	1–1/2"	1/2"	1/2"	WALL HUNG LAVATORY, KOHLER K–2005 WITH WATTS TCA–411 WALL CARRIER, MOEN CA8416 FAUCET, METAL GRID DRAIN ASSY., P–TRAP, STOPS, TRUEBRO 402W AND 105 EZ KIT, 0.4 GPM AERATOR, ADA COMPLIANT
SH 1	WALL SAVER SHOWER ASSEMBLY	––	––	––	3/4"	3/4"	WALL MOUNT RECESSED SHOWER PANEL ASSEMBLY ICON SYSTEMS, FSR–SS–5010, WITH SHOWER HEAD AND THERMOSTATIC MIXING VALVE
SH 2	WALL MOUNT SINGLE SHOWER ASSEMBLY – ADA	2"	2"	1–1/2"	3/4"	3/4"	WALL MOUNT RECESSED SHOWER ASSEMBLY WITH ADA SHOWER SPRAY UNIT PROVIDE JR. SMITH 2005–A5 FLOOR DRAIN WITH 5" DIAMETER NICKEL BRONZE STRAINER
SD 1	SHOWER FLOOR DRAIN	2"	2"	1–1/2"	–	–	
DF 1	DRINKING FOUNTAIN	2"	2"	1–1/2"	3/4"	–	ELKAY EZS7LBC, STAINLESS STEEL, WITH COOLER, WALL MOUNTED, 120V–60Hz 1 PHASE, 4.0 AMPS MOUNT ONE UNIT HIGH AND ONE UNIT LOW TO ACCOMODATE ADA STANDARDS. PROVIDE OPTIONAL STAINLESS STEEL SHROUD.
FD 1	FLOOR DRAIN	2"	2"	1–1/2"	–	–	JR. SMITH 2005–B6 W/ NICKEL BRONZE, SQUARE STRAINER 1/2 INCH TRAP PRIMER TAP, VANDAL PROOF SCREWS CLAMPING COLAR AND SEEPAGE OPENINGS
FS 1	FLOOR SINK	2"	2"	1–1/2"	–	–	JR. SMITH 3120F , 12 INCH SQUARE, 8" SUMP DOME STRAINER AND NICKEL BRONZE HUNGED TOP, TRAP PRIMER, PROVDE HALF GRATE FOR INDIRECT WASTE RECEIVER
FS 2	FLOOR SINK	3"	3"	2"	–	–	J.R. SMITH 3100Y W/ [NICKEL BRONZE GRATE AND TRAP PRIMER.
HB 1	HOSE BIBB	–	–	–	3/4"	–	WOODFORD MODEL 24P CP W/ VAC. BRKR.
HB 2	HOSE BIBB	–	–	–	3/4"	–	ACORN MODEL B151 RECESSED HOSE BOX W/ VAC. BRKR.
MS 1	MOP SINK	3"	3"	2"	1/2"	1/2"	ZURN Z1996–36 MOP SINK , 36X24X10 SIZE, PROVDE STAINLESS STEEL BUMPER GUARD, PROVIDE WALL MOUNT FAUCET WITH VACUUM BREAKER, SS STEEL DRAIN AND LINT BASKET, HOSE WITH HOSE BRACKET, MOP HANGER
MV 1	MIXING VALVE	–	–	–	1"	1–1/4"	SYMMONS MODEL S–400A, THERMOSTATIC MIXING VALVE, 1" INLETS – 1–1/4" OUTLET
TD 1	PET JENNEL TRENCH DRAIN SYSTEM	3"	3"	2"	–	–	ZURN Z–880 POLYETHYLENE TRENCH DRAIN SYSTEM, 2–1/2" WIDE X 3' DEEP, INSTALL PER MFR INSTRUCTIONS, PROVDE DECORATIVE GRATE (WORK WITH ARCHITECT FOR SELECTION) PROVIDE 2" BOTTOM DRAIN CONNECTIONS PER 4 FT SECTION
							FIELD BUILT SYSTEM – SEE DETAILS ON SHEET P2.1
WHR 1 WHR 2 WHR 3 WHR 4	WATER HEATER RACK (TYPICAL OF FOUR)	–	–	–	2"	2"	HIGH EFFICIENCY TANKLESS TYPE WATER HEATER, GAS–FIRED, NORITZ C–199 WITH TRS–04 RACK ASSEMBLY WITH FOUR UNITS PER ASSEMBLY, TWO UNITS BACK TO BACK WATER HEATER RACK ASSEMBLY SHALL BE FACTORY PREPIPED AND PREINSTALELD ON METAL RACK WITH COMMON CW, HW AND GAS MANIFOLDS, RATED FOR MAX. 199X4 = 796 MBH GAS INPUT. PROVIDE 8"PVC COMMON FLUE VENTING KIT FOR BOTH EXHAUST AND COMBUSTION AIR INTAKE WITH VERTICAL THRU ROOF TERMINATIONS – TWO TRS–04 SYSTEMS PER VENT ASSEMBLY KIT. PROVIDE MSB CONTOLLER AND CABLE KITS. INSTALL AND WIRE PER MFR INSTALLATION INSTRUCTIONS. WEIGHT: XXX LBS, DIMENSIONS:
WHA 1	WATER HAMMER ARRESTER	–	–	AS NOTED	–	–	PRECISION PLUMBING PRODUCTS
TP 1	TRAP PRIMER	–	–	–	1/2"	–	PRECISION PLUMBING PRODUCTS OR SLOAN FLUSH VALVE "TAILPIECE".
RPBP 1	REDUCED PRESSURE BACKFLOW PREVENTER	–	–	–	1"	–	WATTS 009–QTS, REDUCED PRESSURE PRINCIPLE, W/ STRAINER, DRAIN TO FLOOR SINK.
PRV 1	PRESSURE REDUCING VALVE	–	–	–	–	–	WATTS #223–5 BRONZE "Y" STRAINER IN LINE.
TP 1	TRAP PRIMER	–	–	–	3/4"	–	PPP #P1–500 WITH DU–4.

NOTES:
1. FOR ALL LAVATORIES L–1 AND L–2 SERVING THE PUBLIC, PROVIDE A WATER TEMP LIMITING DEVICE THAT LIMITS TEMP TO 120 DEGF MAXIMUM AND CONFORMS WITH STANDARD ASSE 1070, WILKINS MODEL ZW3870XLT OR APPROVED EQUAL.

PLUMBING FIXTURE SCHEDULE | 2

PIPE SCHEDULE

SERVICE	LOCATION	MATERIALS: TYPE L COPPER	TYPE K COPPER	NO–HUB CAST IRON	SCH. 40 BLACK STEEL	SCH. 40 GALV. STEEL	SCH. 40 PVC DWV	SCH. 40 PVC – POTABLE	FITTINGS (SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION)
WATER	INSIDE	●							LEAD FREE SOLDER
	OUTSIDE	●							LEAD FREE SOLDER
WASTE	ABV. FLR.			●					PROVIDE TYLER 2–BAND NO–HUB COUPLINGS
	BEL. FLR.			●					SCH 40 PVC DWV WITH SOVENT WELD JOINTS
VENT	ABV. FLR.			●					PROVIDE TYLER 2–BAND NO–HUB COUPLINGS
	BEL. FLR.			●					PROVIDE TYLER 2–BAND NO–HUB COUPLINGS
INDIRECT WASTE	INSIDE		●						LEAD FREE SOLDER
	OUTSIDE		●						LEAD FREE SOLDER
CONDENSATE DRAIN	INSIDE		●						LEAD FREE SOLDER
	OUTSIDE		●						LEAD FREE SOLDER
GAS	INSIDE				●				SCH. 40 THREADED FITTINGS
	OUTSIDE					●			SCH. 40 THREADED FITTINGS
						●			WELDED JOINTS – 2.5" AND LARGER
STORM DRAIN				●					PROVIDE TYLER 2–BAND NO–HUB COUPLINGS
ROOF DRAIN				●					PROVIDE TYLER 2–BAND NO–HUB COUPLINGS
RECYCLED WATER	INSIDE					●			SEE SHEET P0.2
	OUTSIDE					●			SEE SHEET P0.2

PIPE SCHEDULE & GENERAL NOTES | SCALE NONE | 4

LEGEND

SYMBOL	ABBR.	DESCRIPTION
	S OR W	SOIL OR WASTE ABOVE FLOOR OR GRADE
	S OR W	SOIL OR WASTE BELOW FLOOR OR GRADE
	CWV	COMBINATION WASTE & VENT BELOW GRADE
	SD	STORM DRAIN ABOVE FLOOR OR GRADE
	SD	STORM DRAIN BELOW FLOOR OR GRADE
	OD	OVERFLOW DRAIN ABOVE FLOOR OR GRADE
	OD	OVERFLOW DRAIN BELOW FLOOR OR GRADE
	V	SANITARY VENT
	CW	COLD WATER
ICW	ICW	INDUSTRIAL COLD WATER
	HW	HOT WATER
	HWR	HOT WATER RETURN
A	A	COMPRESSED AIR
F	F	FIRE MAIN
AS	AS	AUTOMATIC FIRE SPRINKLER
ASD	ASD	AUTOMATIC SPRINKLER DRAIN
D	D	INDIRECT DRAIN LINE
CD	CD	CONDENSATE DRAIN
G	G	FUEL GAS
TP	TP	TRAP PRIMER
		DIRECTION OF FLOW
	P.G.	PRESSURE GAUGE W/PETE COCK
	G.C.	GAS COCK
	P.R.V.	PRESSURE REDUCING VALVE
	G.V.	GATE VALVE
	FCO	FLOOR CLEANOUT
	WCO	WALL CLEANOUT
		DOWN
		RISE
		UNION
		SLOPE IN DIRECTION OF FLOW
	W.H.A.	WATER HAMMER ARRESTOR
	P.O.C.	POINT OF CONNECTION
	RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
	ABV.	ABOVE
	A.F.F.	ABOVE FINISHED FLOOR
	A.P.	ACCESS PANEL
	BEH.	BEHIND
	BEL.	BELOW
	CLG.	CEILING
	CONT.	CONTINUATION
	EXIST.	EXISTING
	FDC	FIRE DEPT. CONNECTION
	F.F.E.	FINISHED FLOOR ELEVATION
	FLR.	FLOOR
	FR.	FROM
	GR	GRADE
	HDR	HEADER
	I.E.	INVERT ELEVATION
	O.S.&Y.	OUTSIDE SCREW & YOKE
	PIV	POST INDICATOR VALVE
	VTR	VENT THROUGH ROOF
	PTR	PRESSURE, TEMP., RELIEF VALVE

SHEET INDEX

PLUMBING LEGEND | SCALE NONE

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

∘ PROJECT ∘

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

∘ SHEET TITLE ∘

PLUMBING LEGEND, NOTES, AND SCHEDULES

∘ REVISIONS ∘

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

∘ JOB: 2015.2801

∘ DATE: 06/17/16

∘ SHEET: **P0.1**

RECYCLED WATER SYSTEM:

1. Background: Redwood City's Recycled Water Project provides disinfected tertiary recycled water to City customers for landscape irrigation and a variety of Title 22 approved non–potable uses including dust control, car washing, concrete mixing and other industrial uses.

Redwood City adopted a Recycled Water Use Ordinance in July 2008 that established the recycled water service area and requirements for use within the service area. The Ordinance identifies the required and voluntary uses of recycled water, including requirements for dual plumbing.

2. Project Description: Describe the building in greater detail, include the location of the building, number of stories, rooms, offices, conference rooms, dining room, bathrooms kitchens laundry facility's etc. on each floor. Redwood City will provide potable and recycled water service to the site.

3. Water Supply: Redwood City is the purveyor of both potable and recycled water supplies to the facility. Distribution piping of all water supplies will be labeled accordingly. The following sections provide an overview of the potable and recycled water services.

3.1 Potable Water Service: Section 60314 Report Submittal 2A–E: Describe in detail the potable water lateral line(s) leading from the street to the building. Include the lateral line size street name and all devices potable water will pass through before entering the building.
§60314. Report submittal.
(a) For dual–plumbed recycled water systems, the report submitted pursuant to Section 13522.5 of the Water Code shall contain the following information in addition to the information required by section 60323:
1) A detailed description of the intended use area identifying the following:
a) The number, location, and type of facilities within the use area proposing to use dual plumbed systems,
b) The average number of persons estimated to be served by each facility on a daily basis,
c) The specific boundaries of the proposed use area including a map showing the location of each facility to be served,
d) The person or persons responsible for operation of the dual plumbed system at each facility, and
e) The specific use to be made of the recycled water at each facility.

Example: Two new laterals will be constructed to provide potable water service to the Center – a 6–inch lateral from Main st and a 6–inch lateral from Birch St. A separate water meter will be installed on each lateral. Water in each lateral will pass through its own reduced pressure principle assembly backflow device.

3.2 Recycled Water Service: Section 60314 Report Submittal 2A–E: Describe in detail the recycled water lateral line(s) leading from the street to the building. Include the lateral line size street name and all devices recycled water will pass through before entering the building.
§60314. Report submittal.
(a) For dual–plumbed recycled water systems, the report submitted pursuant to Section 13522.5 of the Water Code shall contain the following information in addition to the information required by section 60323:
1) A detailed description of the intended use area identifying the following:
a) The number, location, and type of facilities within the use area proposing to use dual plumbed systems,
b) The average number of persons estimated to be served by each facility on a daily basis,
c) The specific boundaries of the proposed use area including a map showing the location of each facility to be served,
d) The person or persons responsible for operation of the dual plumbed system at each facility, and
e) The specific use to be made of the recycled water at each facility.

§60315. Design requirements.
The public water supply shall not be used as a backup or supplemental source of water for a dual–plumbed recycled water system unless the connection between the two systems is protected by an air gap separation which complies with the requirements of sections 7602 (a) and 7603 (a) of title 17, California Code of Regulations, and the approval of the Public water system has been obtained.

3.3 Water System Pressure: Water system pressure may vary, the use of pumps may be required, system pressure of the potable water system and recycled water system should be included in this section ; attachments if available.

3.4 Hot Recycled Water Supply: Hot recycled water may be used for commercial laundry, industrial boiler feed. Use(s) shall be listed in this section.

3.5 Distribution System: The potable and recycled water systems will be separate and installed with no cross connections. Each system will be labeled according to Redwood City's Recycled Water Customer Guidelines. Description of pipe identification can be found on (appendix B). Layout(s) shall be included of the recycled and potable water distribution lines. A description of how the potable and recycled water pipelines run throughout the building shall be included in this section.

4. Recycled Water Uses Indoor: Provide a breakdown of each estimated use for each planned recycled water application. Include Indoor, outdoor and cooling towers in this section.

*Recycled water lines are not allowed to pass over area where food is being prepared.

4.1 Recycled Water Uses Outdoor: Provide a breakdown of each estimated use for planned outdoor recycled water application.

4.2 Recycled Water Irrigation: Recycled water is to be used for landscape irrigation. Irrigation hours and use will be in accordance with the City's Recycled Water User Guidelines. Recycled water used for irrigation is metered separately from the indoor recycled water use.

5. Labeling and Signage:
5.1 Above Grade Piping
(1) Potable water pipelines must be labeled with a green background and white lettering. Potable water pipelines may also be wrapped with blue identification tape having the words "POTABLE WATER" visible in contrasting white letters.
(2) Recycled water pipelines must be labeled with a purple background and black uppercase lettering having the words "RECYCLED WATER – DO NOT DRINK" visible in contrasting letters.
• Flexible conduits or hoses must be clearly labeled "CAUTION – RECYCLED WATER" with each adapter or fitting painted purple.
• Piping and fittings, newly installed or existing, must be identified by the application of Mylar tape with wording identifying the pipe as recycled–water piping.
(1) Non–potable water pipelines must be appropriately labeled with a yellow background and black lettering having the words "NON–POTABLE WATER – DO NOT DRINK" visible in contrasting letters.

Exposed valve boxes, vaults, quick coupling valves, outlets and related appurtenance must be color– coded, labeled or tagged, to differentiate recycled water from potable water:
(1) ?For potable water: "POTABLE WATER" in white lettering on a blue background.
(2) For recycled water: "CAUTION – RECYCLED WATER – DO NOT DRINK" in black or white contrasting lettering on a purple background.
(3) For non–potable water: "NON–POTABLE WATER – –– DO NOT DRINK" in contrasting lettering on a yellow background
Tags must be identified with the appropriate wording on both sides. Tags identifying recycled water must have both the appropriate wording and the "Do Not Drink" symbol
5.2 Buried Water Piping
New Pipes:
1) All buried potable lines must be identified by continuous lettering on 3–inch minimum width blue tape with 1–inch white lettering bearing the wording "POTABLE WATER" permanently affixed at 10 foot intervals atop all horizontal piping, laterals and mains.
• Identification tape must extend to all valve boxes, vaults and exposed piping.
• Identification tape is not necessary for extruded blue–colored PVC with continuous wording "POTABLE WATER" printed in contrasting lettering on opposite sides of the pipe.
2) Buried recycled water piping must be purple colored and continuously marked with the wording "RECYCLED WATER – DO NOT DRINK" on opposite sides of the pipe.
• Tape that is at least 3–inches in width and runs continuously along the length of the pipe containing the words "RECYCLED WATER – DO NOT DRINK" is an acceptable alternative to printed pipe.
• The letters must be at least 1–inch in height and either black or white contrasting lettering.
• The tape must be permanently secured to the top of all pipes, mains and laterals.

Existing Pipes:
3) Existing piping need not be marked unless exposed during construction or maintenance. The exposed section of pipe should be appropriately marked as "POTABLE WATER" to the extent feasible.
4) Existing piping need not be marked unless exposed during construction or maintenance. The exposed section of pipe should be marked as "RECYCLED WATER– DO NOT DRINK" to the extent feasible.
5.3 Purple Wrapping Tape Specifications
Where it is not feasible to use purple pipe, exposed recycled water pipes should be wrapped with purple tape. Wrapping should be as follows:
2) Tape shall be fabricated of polyvinyl chloride with a synthetic rubber adhesive and a clear polypropylene protective coating or approved equal.
3) Wrapping tape shall have a minimum nominal thickness of five ten–thousandths (0.0005) inch and a minimum width of two 2 inches.
4) Tape must be purple in color and shall be imprinted in nominal 1/2 inch high black, uppercase letters, with the words "CAUTION: RECYCLED WATER – DO NOT DRINK".
o The lettering shall be imprinted in two 2 parallel lines, such that after wrapping the pipe with 1/2 width overlap, 1 full line of text shall be visible.
5) Wrapping tape is not required for buried PVC pipe manufactured with purple color integral to the plastic and marked on opposite sides to read "CAUTION: RECYCLED WATER – DO NOT DRINK" in intervals not to exceed three 3 feet.

5.4 Appurtenances Identification
Recycled water appurtenances must be identified with tags or labels as belonging to the recycled water system. Recycled water tags or labels must have a purple background with black lettering stating "RECYCLED WATER – DO NOT DRINK," and a "Do Not Drink" symbol.

Potable water appurtenances located near recycled water should be tagged or labeled as part of the potable water system. Labels must have a blue background with "POTABLE WATER" in white lettering.
Examples of appurtenances that must be identified are:
• Valves: Including air/vacuum relief valves, pressure reducing valves, pump control valves, etc.
• Pumps
• Pressure regulators
• Flow meters
• Quick couplers
• Strainers
• Other related components (i.e. trap primers, shock arresters)
• Tank–type water closets that are flushed with reclaimed water shall be labeled: "RECYCLED WATER_ DO NOT DRINK"

5.5 Valves
All valves must have an identification tag on the valve operator. Additionally quick coupling valves must also be installed in a valve box with the valve box cover imprinted with the words "RECYCLED WATER".

5.6 Valves and Mechanical Equipment
1) All valves, except fixture supply control valves, shall be equipped with a locking feature.
2) All mechanical equipment, which is appurtenant to the recycled water system, shall be painted purple to match the wrapping tape.

5.7 Valve Seals
Seal each valve or appurtenance after the reclaimed system has been approved, and placed into operation. These seals shall either be a crimped lead wire seal, or a plastic break–away seal which, if broken after system approval, shall be deemed conclusive evidence that the reclaimed water system has been accessed. The seals should be purple with the words "RECYCLED WATER".

6. Operation:

6.1 Site Supervisor: Each Site must designate a Site Supervisor will be responsible for operation of the on–site water and recycled water systems. The Site Supervisor will be the City's point of contact for the recycled water system and will be involved with monitoring and maintaining the system. The Site Supervisor will be responsible for conducting and submitting all monitoring reports to the City, and will be present for all cross connection inspections and testing.

6.2 Self– Monitoring Reports: Redwood City requires all recycled water users to prepare and submit monthly monitoring reports. Dual Plumbed building monitoring reports include the annual inspection requirements identified in Chapter 16A of the 2013 California Plumbing Code (as may be updated from time to time), as well as site specific requirements as determined by Redwood City. Section 8.3 lists the annual inspection requirements that will be incorporated into the monthly self –monitoring report.

7. Cross Connection Testing and Inspection: Existing Title 22 regulations require an annual visual inspection of the dual plumbed system for possible cross connections between the recycled and potable water systems. The recycled water system must also be tested at least once every four years for possible cross connections. Both the inspections and testing must be conducted by a certified cross connection control specialist.

7.1 Overview of Redwood City's Cross Connection Program: The City has an adopted Cross Connection Control Program that originated in 2008 (Ordinance No. 2331) and was amended in 2013 (Ordinance No. 2391). A copy of Ordinance No. 2391 is included as Appendix A. The terms of the Ordinance are incorporated into Article VII of the City's Municipal Code. The Code includes the requirements for separation of the potable and non–potable water systems, backflow device installation and testing, and air gap separation, as well as cross connection prohibition. The Code also specifies customer/user responsibilities for testing.

Recycled water customers are responsible for contracting with a certified Cross Connection Control Specialist to perform the annual visual inspections and the annual cross connection test. The City will mail a reminder to customers that will include directions for submitting test results to the City. The City maintains a database of all cross connection testing. A City representative will be present at all visual inspections and cross connection tests.

7.2 Initial Cross Connection Test: Prior to delivering recycled water to the site, the City the City will conduct two tests: 1) Full– shut down test; and 2) Cross Connection Test as described in Appendix B.
The Full–Shut Down test will be conducted by the Contractor under direction and in the presence of City staff. The test will consist of two parts. Part 1 will consist of pressurizing the potable water system and de–pressurizing the recycled water system. Part 2 will consist of pressurizing the recycled water system and de–pressurizing the potable water system.

1. Pressurization of the potable water system and de–pressurization of the Recycled water system.
2. Verification of flow from the potable water outlets and absence of flow from the Recycled water system outlets.
3. Pressurization of the Recycled water system and de–pressurization of the potable water system.
4. Verification of flow from the Recycled water outlets and absence of flow from the potable water system outlets.

7.2.1 §60316. Operation requirements.
(a) Prior to the initial operation of the dual–plumbed recycled water system and annually thereafter, the Recycled Water Agency shall ensure that the dual plumbed system within each facility and use area is inspected for possible cross connections with the potable water system. The recycled water system shall also be tested for possible prior to the delivery of recycled water to the facility.
cross connections at least once every four years. The testing shall be conducted in accordance with the method described in the report submitted pursuant to section 60314. The inspections and the testing shall be performed by a cross connection control specialist certified by the California–Nevada section of the American Water Works Association or an organization with equivalent certification requirements. A written report documenting the result of the inspection or testing for the prior year shall be submitted to the department within 30 days following completion of the inspection or testing.

(b) The recycled water agency shall notify the department of any incidence of backflow from the dual–plumbed recycled water system into the potable water system within 24 hours of the discovery of the incident.

7.3 Annual Cross Connection Test
The City will conduct a Cross Connection Inspection and Test annually in coordination with the Site Supervisor. The customer will hire a cross connection control specialist to perform the Annual Visual Inspection. The visual inspection will be conducted In accordance with the Visual Inspection Checklist included in the City's Recycled Water User Guidelines.
The Annual Visual Inspection will be conducted by a certified Cross Connection Control Specialist and will be performed in the presence of the Site Supervisor and City staff. The inspection will include a check of the following:
1. Meter locations of the recycled water and potable water lines to verify that no modifications were made, and that no cross–connections are visible
2. All pumps and equipment, equipment room signs, and exposed piping in the equipment room.
3. All valves to ensure that valve lock seals are still in place and intact.
4. All valve control door signs shall be checked to verify that no signs have been removed. If the visual inspection indicates that the recycled water plumbing has been modified, a Cross–Connection Test is required

7.4 Required 4 year Shut down Test

§60314. Report submittal. (3) The methods to be used by the recycled water agency to assure that the installation and operation of the dual plumbed system will not result in cross connections between the recycled water piping system and the potable water piping system. This shall include a description of pressure, dye or other test methods to be used to test the system every four years.

All dual plumbed buildings are required to perform a full Cross Connection test every 4 years. Inspection may occur more frequent if required by the State, the site has history of violations or cross connections. Currently, a full shut down test is the only approved Cross Connection method in Redwood City. Alternative methods for a Cross Connection test must submitted along with the testing procedures to the State Water Resource Board.

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

Recycled Water System Notes

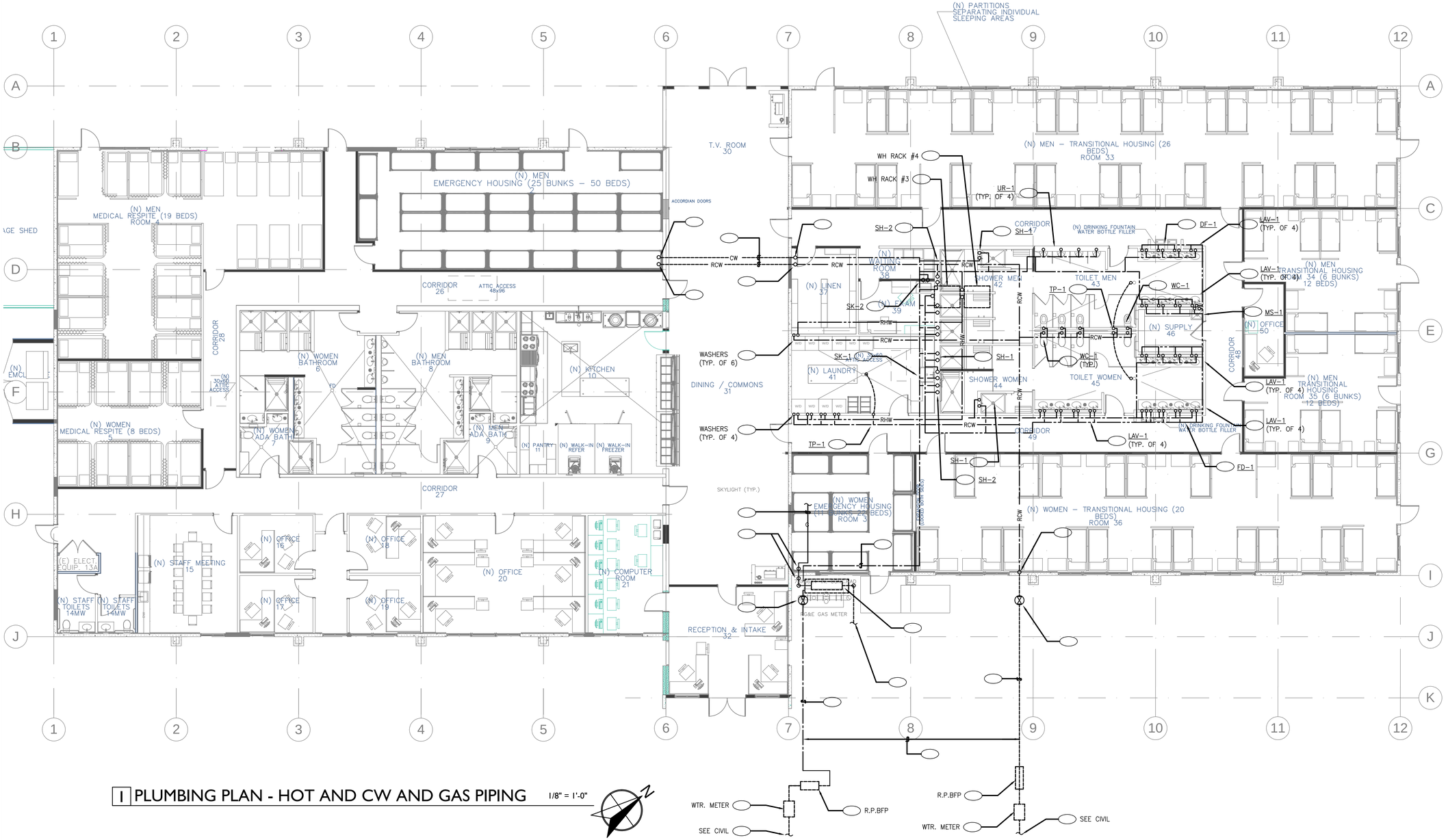
◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

◦ JOB: 2015.2801

◦ DATE: 06/17/16

◦ SHEET: P0.2



1 PLUMBING PLAN - HOT AND CW AND GAS PIPING

1/8" = 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

PLUMBING PLAN - HOT & CW AND GAS PIPING

◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

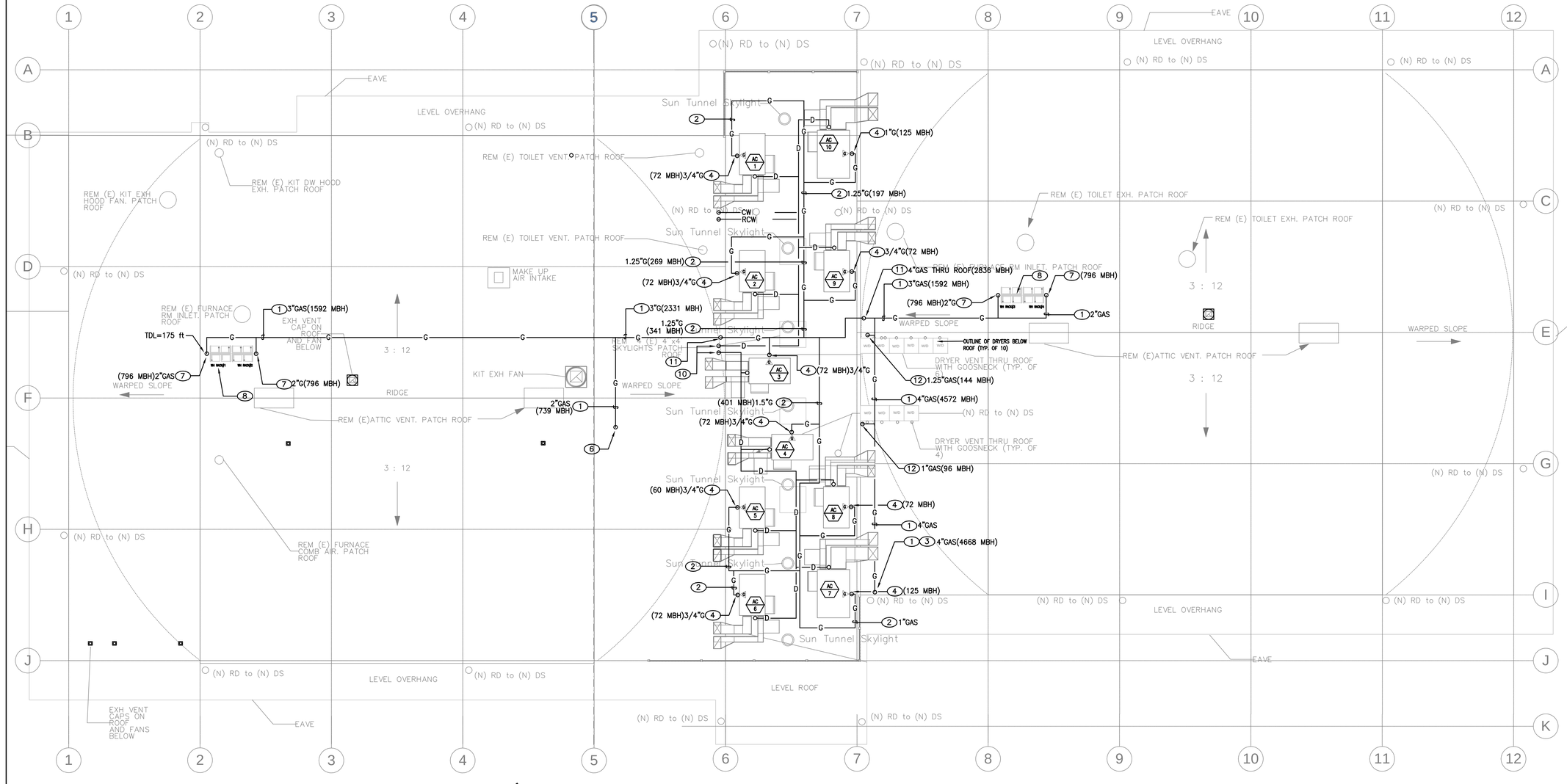
◦ JOB: 2015.2801

◦ DATE: 06/17/16

◦ SHEET: P2.2

KEYED SHEET NOTES:

1. GAS LINE BELOW ROOF. SUPPORT PIPING FROM STRUCTURE PER DETAILS 8 & 11/P3.4.
2. GAS LINE ABOVE ROOF. SUPPORT GAS PIPING ABOVE ROOF PER DETAIL 10/P3.4.
3. THE CONTRACTOR SHALL FURNISH AND INSTALL A NEW 4" LOW PRESSURE GAS LINE AND SHALL CONNECT TO THE NEW GAS METER. RUN THE GAS LINE FROM GAS METER AREA TO THE BLDG EXTERIOR WALL AND RISE ABOVE GRADE AND ENTER BUILDING ABOVE GRADE, EXPOSED. RUN NEW 4-INCH GAS LINE IN WALL UP TO ABOVE T-BAR CEILING IN ATTIC SPACE. SUSPEND PIPING FROM STRUCTURE PER DETAIL 8/P3.4 AND DETAIL 11/P3.4. GAS LINE SHALL HAVE WELDED JOINTS.
4. THE CONTRACTOR SHALL FURNISH AND INSTALL A NEW GAS BRANCH LINE TO THE HVAC UNIT ON ROOF. PROVIDE PIPE REDUCER, GAS SHUTOFF VALVE, DIRT LEG AND FLEXIBLE GAS CONNECTOR.
5. THE CONTRACTOR SHALL COORDINATE WITH PG&E TO SET A NEW LARGER GAS METER SIZED FOR THE CAPACITY OF 4668 MBH. ADVISE OWNER AND GENERAL CONTRACTOR ON PG&E LEAD TIMES FOR GAS METER UPGRADE. INSTALL NEW SEISMIC GAS VALVE AFTER GAS METER. THE SERVICE APPLICATION FORM HAS ALREADY BEEN SUBMITTED AND A SERVICE PLANNER HAS BEEN ESTABLISHED.
6. THE CONTRACTOR SHALL FURNISH AND INSTALL A NEW GAS BRANCH LINE TO THE KITCHEN. ROUTE PIPING DOWN TO SOLENOID VALVE AND DOWN IN WALL TO NEW MANIFOLD BEHIND COOKLINE. PIPE SHALL RUN BELOW ROOF.
7. THE CONTRACTOR SHALL FURNISH AND INSTALL A NEW GAS BRANCH LINE TO THE WATER HEATER RACK IN ATTIC SPACE BELOW ROOF. PROVIDE PIPE REDUCER, GAS SHUTOFF VALVE, DIRT LEG, FLEXIBLE GAS CONNECTOR.
8. WATER HEATER RACK BELow ROOF IN ATTIC SPACE, SHOWN FOR REFERENCE ONLY. REFER TO MECHANICAL PLAN SHEET M2.3 FOR LOCATION.
9. THE CONTRACTOR SHALL FURNISH AND INSTALL NEW PLUMBING VENT THRU ROOF. SEAL ROOF PENETRATION USING ROOFING CONTRACTOR. PROVIDE ROOF JACK AND FLASHING FOR WEATHERTIGHT SEAL. LOCATE TERMINATIONS ON ROOF A MINIMUM OF 15 FEET FROM ANY FRESH AIR INTAKES AND FROM ANY OPERABLE WINDOWS.
10. THE CONTRACTOR SHALL RUN 1.25-INCH CONDENSATE DRAIN LINE DOWN THRU ROOF AND SHALL DISCHARGE TO FLOOR SINK BELOW ROOF AS INDIRECT WASTE WITH AIR GAP. SEE SHEET P2.1. SEAL ROOF PENETRATION WATERTIGHT USING ROOFER.
10. THE CONTRACTOR SHALL RUN 1.25-INCH CONDENSATE DRAIN LINE DOWN THRU ROOF AND SHALL DISCHARGE TO FLOOR SINK BELOW ROOF AS INDIRECT WASTE WITH AIR GAP. SEE SHEET P2.1. SEAL ROOF PENETRATION WATERTIGHT USING ROOFER.
11. RUN GAS LINE BELOW ROOF UP THRU ROOF AND RUN ACROSS FLAT ROOF OVER DINING ROOM AND RUN DOWN AGAIN THRU ROOF TO GET BACK INTO ATTIC SPACE.
12. RUN GAS LINE BELOW ROOF DOWN TO MANIFOLD BEHIND DRYERS AND BRANCH TO EACH DRYER WITH 3/4" PIPE, WITH DIRT LEG, SHUTOFF VALVE AND FLEX GAS CONNECTOR. TYPICAL OF 10 DRYERS THAT ARE STACKED ABOVE WASHERS.



PLUMBING ROOF PLAN

1/8" = 1'-0"

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

PROJECT

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

SHEET TITLE

PLUMBING ROOF PLAN

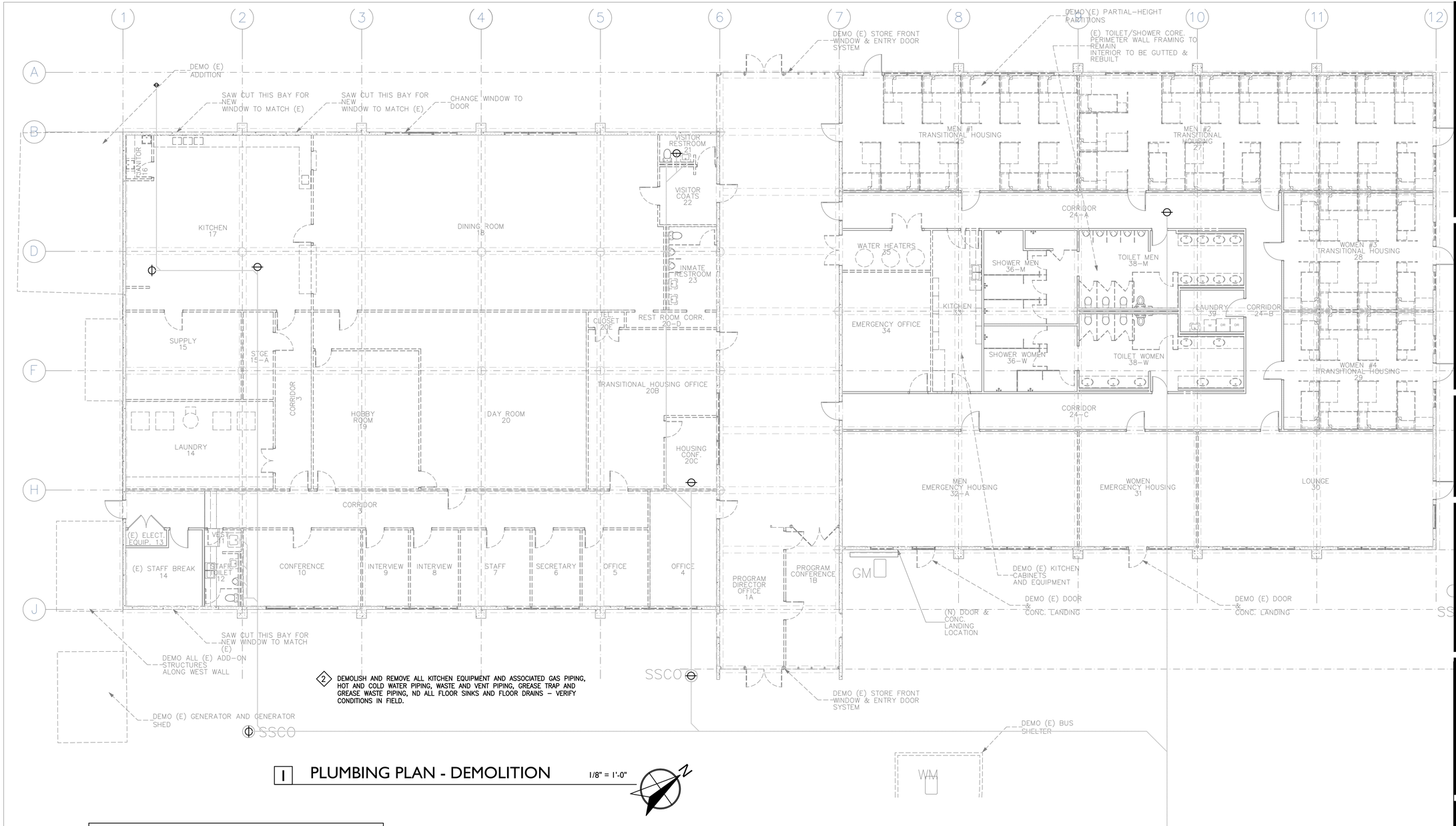
REVISIONS

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

JOB: 2015.2801

DATE: 06/17/16

SHEET: P2.3



2 DEMOLISH AND REMOVE ALL KITCHEN EQUIPMENT AND ASSOCIATED GAS PIPING, HOT AND COLD WATER PIPING, WASTE AND VENT PIPING, GREASE TRAP AND GREASE WASTE PIPING, ND ALL FLOOR SINKS AND FLOOR DRAINS – VERIFY CONDITIONS IN FIELD.

1 PLUMBING PLAN - DEMOLITION

1/8" = 1'-0"

KEY NOTES

1. DEMOLISH AND REMOVE EXISTING RESTROOM FIXTURES AND ASSOCIATED PLUMBING WORK. CAP OFF PIPING BELOW SLAB.
2. DEMOLISH AND REMOVE ALL KITCHEN EQUIPMENT AND ASSOCIATED GAS PIPING, HOT AND COLD WATER PIPING, WASTE AND VENT PIPING, GREASE TRAP AND GREASE WASTE PIPING, AND ALL FLOOR SINKS AND FLOOR DRAINS – VERIFY CONDITIONS IN FIELD.
3. DEMOLISH AND REMOVE ALL LAUNDRY ROOM EQUIPMENT AND ASSOCIATED GAS PIPING, HOT AND COLD WATER PIPING, WASTE AND VENT PIPING, AND ALL FLOOR SINKS AND FLOOR DRAINS – VERIFY CONDITIONS IN FIELD.
4. DEMOLISH AND REMOVE ALL EXISTING WATER HEATERS OR BOILERS AND ASSOCIATED GAS PIPING, FLUES, HOT AND COLD WATER PIPING, WASTE AND VENT PIPING, AND ALL FLOOR SINKS AND FLOOR DRAINS – VERIFY CONDITIONS IN FIELD.
5. THE EXISTING UNDERSLAB SEWER PIPING SHOWN ON PLANS ARE TAKEN FROM BRIEF VISUAL OBSERVATIONS AND FROM OLD RECORD DRAWINGS AND ARE NOT TO BE CONSIDERED AS BUILT CONDITION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD VERIFICATION OF EXISTING CONDITIONS.

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

PLUMBING PLAN - DEMOLITION

◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

◦ JOB: 2015.2801

◦ DATE: 06/17/16

◦ SHEET: P2.4

Note:

Condensate piping shall be CPVC or PVC material and shall not be smaller than the drain connection on the appliance.

Components of the condensate drainage shall be CPVC or PVC material. All components shall be selected for the pressure and temperature rating of the installation.

Where the drain pipes from more than one unit are manifolded together for condensate drainage, the pipe or tubing shall be sized in accordance with an approved method as dictated by local codes.

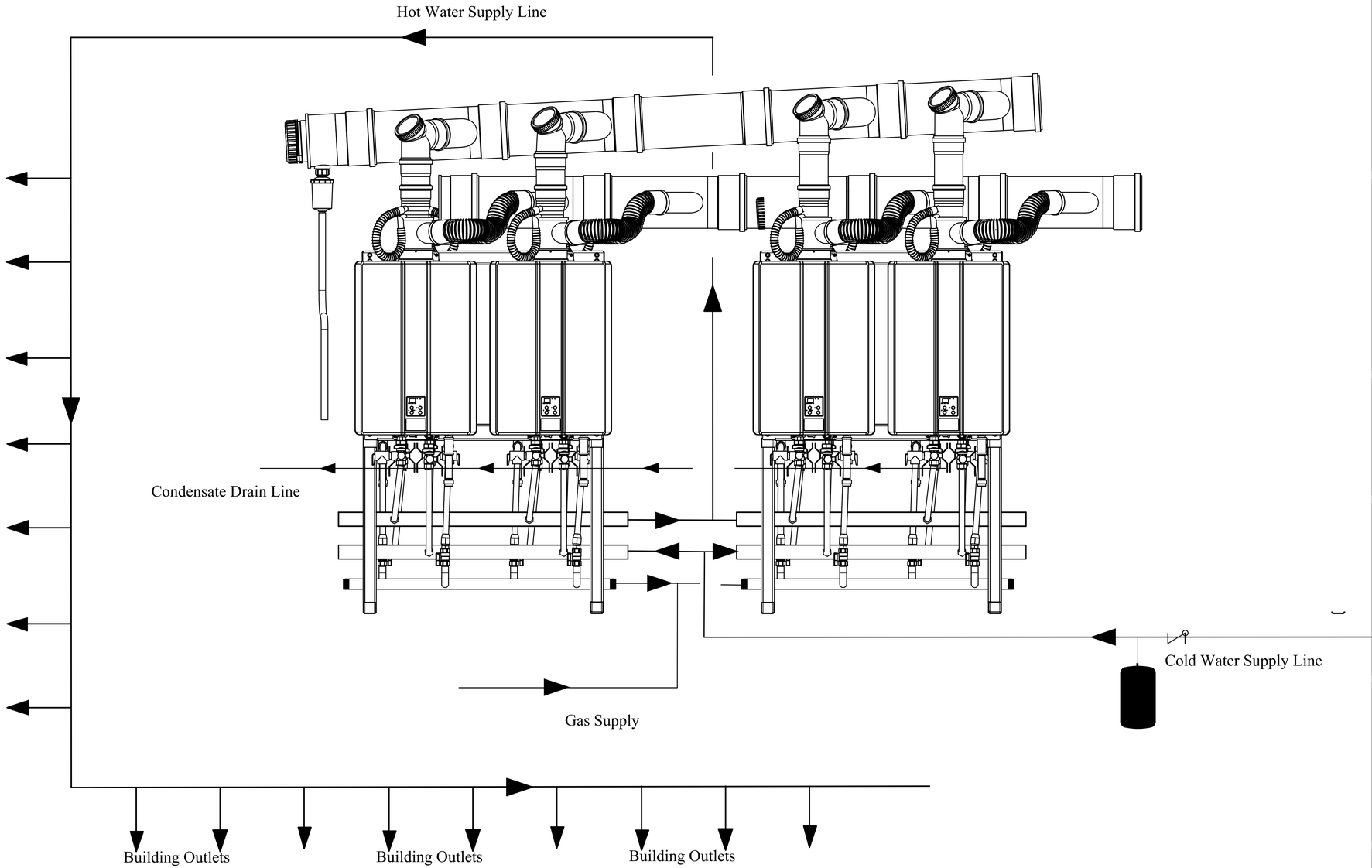
Condensate must be disposed of according to local codes.

Pump should be controlled by an A□uastat, Timer or Combination A□uastat and Timer.

Pump should be sized to maintain circulation loop temperature.

Pump should be sized to overcome the pressure loss through the tankless water heater, supply, and return plumbing. Reference the Rinnai Hot Water System Design Manual, Pump Sizing for Circulation.

Pump should be of bronze or stainless construction.



CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

WATER HEATER DETAILS

◦ REVISIONS ◦

No.	Date	Notes
—	6.17.16	BLDG SUBMITTAL 1

◦ JOB: 2015.2801

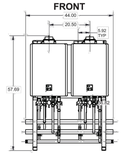
◦ DATE: 06/17/16

◦ SHEET: P3.1

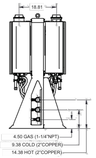
Specifications

4 UNIT FREE STANDING FRAME

FRONT



RIGHT



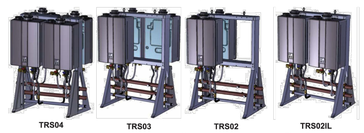
BOTTOM

Model	Configuration	Illustration
TRS04		
TRS03		
TRS02IL	Inline (facing same direction)	
TRS02	Back to Back	

Specifications

4 UNIT FREE STANDING FRAME

Model	TRS04	TRS03	TRS02	TRS02IL
Water Heater Model	RU98i, RUC98i, C199i, RU99s, C199e (NG/LP)			
Crate Dimensions (HxLxD) - in	62 x 55 x 36			
Weight - Fully Assembled - lbs	357	284	210	208
Weight - Shipping (total) - lbs	553	480	406	404
Rack Frame - Specifications				
Frame Rail Type	Sheet Metal			
Frame Material	Aluminum (0.090 5052-H32)			
Frame Finish	Powder Coat			
Color	Gray			
Water & Gas Connections				
Hot Water Trunk Line Diameter	2"			
Cold Water Trunk Line Diameter	2"			
Hot Water Trunk Line Material	Rigid Copper			
Cold Water Trunk Line Material	Rigid Copper			
Water Trunk Connection Type	2" PIPE			
Gas Trunk Line Diameter	1-1/4"			
Gas Trunk Connection Type	1-1/4" MNPT			
Gas Trunk Line Material	Sch 40 Steel			
Gas Branch Line Material	PVC Over CSST			
Electric Requirements				
Voltage	AC 120 Volts—60 Hz			
Maximum Current (Amperes)	16	12	8	8
BTU and Flow Rates for RU98i, RUC98i, C199i, RU98e, C199e (NG/LP)				
Number of Tankless Water Heaters	4	3	2	
Flow rate @ 70°F rise (gpm)	21.6	16.2	10.8	
Flow rate @ 100°F rise (gpm)	15.2	11.4	7.6	
Minimum input rate (Btuh)	15,200			
Maximum input rate (Btuh)	796,000	597,000	398,000	



Rinnai

MSB Kits for Connecting Multiple Water Heaters

The MSB kits can electronically connect up to 25 water heaters.

For proper operation, it is not recommended that different models be connected together. Combining different models may result in lower performance.

Models

For use with Rinnai Tankless Water Heaters* (except for models V53e, V53i, and R63LSe which must use pressure activation valves, PVA).

System Operation

When multiple water heaters are operating, they will attempt to supply equal amounts of hot water.

The order in which each water heater operates is occasionally rotated to ensure equal usage among the entire system.

On initial water flow demand, 1 to 3 units are in standby which means that their servos valves are open until flow demand is determined. Only the necessary number of water heaters will begin to fire to meet demand. Water heaters not firing will close their valves.

The number of units that are in standby can be determined by a dip switch setting of the master MSB board. It is recommended that the dip switch settings on MSB boards other than the master MSB board be set for 1 unit in standby.

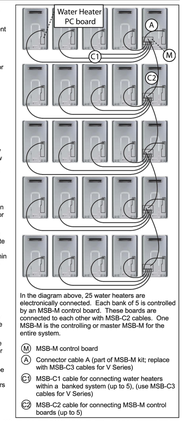
The number of units in standby will affect the activation flow rate. With 3 units in standby, the activation flow rate is 3 times the rate for a single water heater. If the activation flow rate for a single water heater is 0.4 gal/min then for a system with 3 waters heaters in standby, the activation flow rate will be 1.2 gal/min.

Temperature

The temperature setting for all of the connected water heaters is controlled by the temperature controller connected to the water heater with the master MSB Board. Temperature controllers connected to the other units will provide maintenance codes for their respective units.

If water heaters do not use a temperature controller, the temperature will be that temperature setting of the water heater with the master MSB board (120°F or 140°F).

On applicable models (VA, VB), a single MCC-91 can be connected to the master MSB Board to provide temperatures greater than 140°F for all the water heaters in the MSB system.



In the diagram above, 25 water heaters are electronically connected. Each bank of 5 is controlled by an MSB-M control board. These boards are connected to each other with MSB-C2 cables. One MSB-M is the controlling or master MSB-M for the entire system.

- (M) MSB-M control board
- (A) Connector cable A (part of MSB-M kit; replace with MSB-C3 cables for V Series)
- (C1) MSB-C1 cable for connecting water heaters within a banked system (up to 5), (use MSB-C3 cables for V Series)
- (C2) MSB-C2 cable for connecting MSB-M control boards (up to 5)

MSB Kits for Connecting Multiple Water Heaters

MSB Kits - Parts Needed

Use the table to determine the type and number of kits necessary for your system.

Up to 5 water heaters can be connected together using the MSB-M and MSB-C1 kits. When over 5 water heaters are connected together, MSB-M control boards are connected using MSB-C2 kits.

If multiple MSB-M control boards are used, then at least three water heaters should be connected to each MSB-M. Example: With 7 water heaters, one MSB-M should control 4 water heaters and the other MSB-M should control 3 water heaters.

Detailed installation instructions are provided with each of the kits.

* VA, VB, and KA (Condensing) models use the MSB-M, MSB-C1, and MSB-C2 cables

V Series models use the MSB-M, MSB-C2, and MSB-C3 cables. V Series models must use the MSB-C3 cables instead of the MSB-C1 cables and the Cable A in the MSB-M.

** The Rinnai EZConnect™ is less expensive and is specifically designed for connecting 2 water heaters. Applicable models are VA, VB, KA, and V5237.

	Number of Kits Required				
No. of water heaters	No. of water heaters for each bank	MSB-M	MSB-C1 See note *	MSB-C2	MSB-C3 See note *
2**	2	1	NA	NA	1
3	3	1	1	NA	2
4	4	1	2	NA	3
5	5	1	3	NA	4
6	3/3	2	2	1	4
7	4/3	2	3	1	5
8	4/4	2	4	1	6
9	5/4	2	5	1	7
10	5/5	2	6	1	8
11	4/4/3	3	5	2	8
12	4/4/4	3	6	2	9
13	5/4/4	3	7	2	10
14	5/5/4	3	8	2	11
15	5/5/5	3	9	2	12
16	4/4/4/4	4	8	3	12
17	5/4/4/4	4	9	3	13
18	5/5/4/4	4	10	3	14
19	5/5/5/4	4	11	3	15
20	5/5/5/5	4	12	3	16
21	5/4/4/4/4	5	11	4	16
22	5/5/4/4/4	5	12	4	17
23	5/5/5/4/4	5	13	4	18
24	5/5/5/5/4	5	14	4	19
25	5/5/5/5/5	5	15	4	20

MSB-M kit includes
- Control board
- Cable A (18 in, 450 mm)
- Cable B (9.8 ft, 3 m)
- Brackets, ties, and screws
- Instructions

MSB-C1 kit includes
- Cable B (9.8 ft, 3 m)
- Brackets, ties, and screws
- Instructions

MSB-C2 kit includes
- MSB Cable (13.1 ft, 4 m)
- Terminal connectors
- Instructions

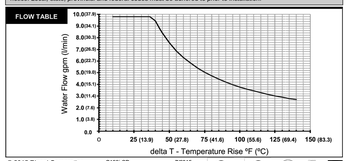
MSB-C3 kit includes
- C3 Cable (9.8 ft, 3 m)
- Instructions

Rinnai C199i (KBD3237FFUDC)

Type of Appliance	Commercial Condensing Tankless Water Heater, Commercial Energy Star
Rinnai model number	REU-KBD3237FFUDC-US
Operation / Installation	Forced combustion; indoor only;
Minimum/Maximum Gas Rate (Input)	15,200 - 199,000 BTUh (4.5-58.3 kWh)
Electrical	Appliance: AC 120 Volts - 60 Hz Temperature Controller: DC 12 Volts
Electrical Consumption	Normal: 75 w Standby: 2 w Anti-frost protection: 146 w
Amperage	Max: 4A
Ignition System	Direct electronic ignition
Hot Water Capacity	Minimum flow rate: 0.26 GPM (1 l/min) Minimum activation flow rate: 0.4 GPM (1.5 l/min) Maximum flow rate: 9.8 GPM (37.1 l/min)
Temperature	Factory Default Range - 98°-120° F (37°- 49°C) Optional Range - 98° - 185° F (37°- 85°C)
Temperature (without remote)	120° F 49°C) (factory default) or 140° F (60°C)
Approved Gas Types	Natural or Propane (ensure unit matches gas type)
Thermal Efficiency	Natural Gas: 96% Propane: 96%
Service Connections	Gas supply: 3/4 inch (19mm) MNPT Cold water inlet: 3/4 inch (19mm) MNPT Hot water outlet: 3/4 inch (19mm) MNPT
Isolation & Pressure Relief Valves Included	Isolation Valves are certified to NSF/ANSI 61 for potable water
Water Flow Control	Water flow sensor, electronic water control and by-pass control
Minimum/Maximum Water Supply Pressure	20 - 150 PSI (138-1035 KPa) (recommended 60 - 80 PSI (414 - 552 KPa) for optimal performance)

Rinnai is continually updating and improving products; therefore, specifications are subject to change without prior notice. Local, state, provincial and federal codes must be adhered to prior to installation.

FLOW TABLE



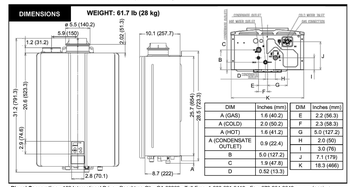
© 2015 Rinnai Corporation C199i-SP 7/2015

Low Lead Content NSF/ANSI 372 SANITATION

Rinnai C199i (KBD3237FFUDC)

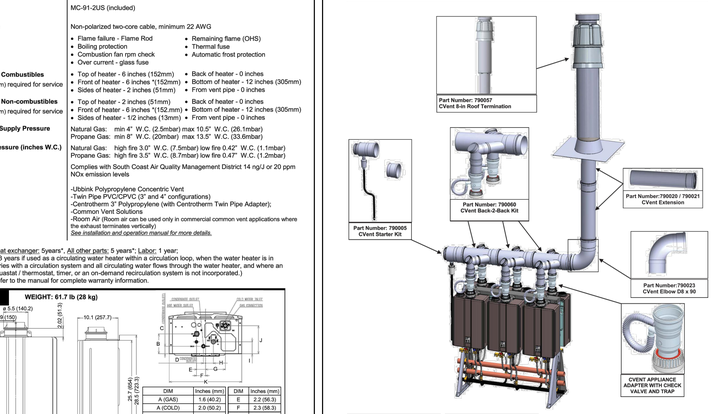
Controller	MC-91-2US (included)
Controller Cable	Non-polarized two-core cable, minimum 22 AWG
Safety Devices	• Flame failure - Flame Rod • Boiling protection • Combustion fan rpm check • Over current - glass fuse • Remaining flame (OHS) • Thermal fuse • Automatic frost protection
Clearances from Combustibles * 24 inches (610mm) required for service	• Top of heater - 6 inches (152mm) • Front of heater - 6 inches *(152 mm) • Sides of heater - 2 inches (51mm) • Back of heater - 0 inches • Bottom of heater - 12 inches (305mm) • From vent pipe - 0 inches
Clearances from Non-combustibles * 24 inches (610mm) required for service	• Top of heater - 2 inches (51mm) • Front of heater - 6 inches *(152 mm) • Sides of heater - 1/2 inches (13mm) • Back of heater - 0 inches • Bottom of heater - 12 inches (305mm) • From vent pipe - 0 inches
Min. / Max. Gas Supply Pressure	Natural Gas: min 4" W.C. (2.5mbar) max 10.5" W.C. (26.1mbar) Propane Gas: min 8" W.C. (20mbar) max 13.5" W.C. (33.6mbar)
Manifold Gas Pressure (inches W.C.)	Natural Gas: high fire 3.0" W.C. (7.5mbar) low fire 0.42" W.C. (1.1mbar) Propane Gas: high fire 3.5" W.C. (8.7mbar) low fire 0.47" W.C. (1.2mbar)
NOx	Complies with South Coast Air Quality Management District 14 ng/J or 20 ppm NOx emission levels
Venting	-Ubbink Polypropylene Concentric Vent -Twin Pipe PVC/CPVC (3" and 4" configurations) -Centrotherm 3" Polypropylene (with Centrotherm Twin Pipe Adapter); -Common Vent Solutions -Room Air (Room air can be used only in commercial common vent applications where the exhaust terminates vertically) *See installation and operation manual for more details.*
Limited Warranty	Heat exchanger: 5years*, All other parts: 5 years*; Labor: 1 year; (* 3 years if used as a circulating water heater within a circulation loop, when the water heater is in series with a circulation system and all circulating water flows through the water heater, and where an aquastat / thermostat, timer, or an on-demand recirculation system is not incorporated.) Refer to the manual for complete warranty information.

DIMENSIONS **WEIGHT: 61.7 lb (28 kg)**



DIM	Inches (mm)	DIM	Inches (mm)
A (GAS)	1.6 (40.2)	E	2.2 (56.3)
A (COLD)	2.0 (50.2)	F	2.3 (58.3)
A (HOT)	1.6 (41.2)	G	5.0 (127.2)
A (CONDENSATE OUTLET)	0.9 (22.4)	H	2.0 (50)
B	5.0 (127.2)	I	3.0 (76)
C	1.9 (47.8)	J	7.1 (179)
D	0.52 (13.3)	K	18.3 (466)

Sample Vertical Termination Assembly-Room Air (C199i Only)



Complete Header Kit (B-to-B):	Complete Header Kit (In-line):
U.S.-CVBB60USRA Canada-CVBB60CARA	U.S.-CVBIL3USRA Canada-CVBIL3CARA

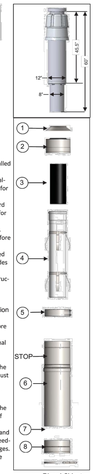
Vent termination per ANSI Z223.1/NFPA 54. For clearances not specified in ANSI Z223.1/NFPA 54, clearances are in accordance with local installation codes and the requirements of the gas supplier.

A9 Vertical Termination Assembly

⚠ WARNING

Improper installation of vent system and components, or failure to follow all installation instructions, can result in property damage or serious injury.

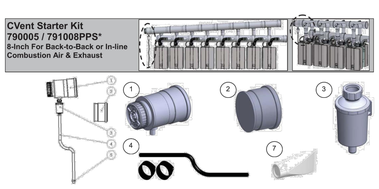
Item	Description	Material	Qty.
1	Storm Collar (Bel)	Stainless	1
2	Terminal Cap	Stainless	1
3	8" Exhaust Extension (Black)	Plastic	1
4	8" Inner Exhaust Assembly (With (2) 8" CVent Distancers)	Plastic	1
5	Terminal Clamp Ring	Stainless	1
6	Terminal Outer Shell	Stainless	1
7	Terminal Base	Stainless	1
8	Termination Clamp	Galvanized	1



General Requirements ,Remarks and Tools:
- Confirm that the box contents match the above Parts list.
- Use suitable tools, beware components might have sharp edges
- Assure that the roof is suitable to support the load of the terminal, and that the flashing is installed in the roof according to local codes.
- (Flat roof) The flashing is made of galvanized steel and can be fixed to the roof with suitable sealing material, please refer to the installation instructions of the specific roofer material supplier for further instructions.
- (Pitched roof) The moldable flashing can be installed in a 3/12 to 12/12 roof pitch using standard flaring devices, please refer to the installation instructions of the specific roof material supplier for additional info and instructions
- The vertical termination should be last component installed in the CVent common vent system. The remaining components in vent system must be appropriately supported and assembled before installation of the termination.
- The termination must be securely fastened/strapped to the building structure with the provided (Termination Clamp) beneath the roof flashing. The roof flashing must be installed per local codes and/or the installation instructions of the roof material manufacturer.
- The termination must be located on the roof per the appliance manufacturers installation instructions and in accordance with local codes.

Assembly of terminal
1. Lubricate seal in item 3 (8" Inner Exhaust Assembly) and slide in item 2 (8" Exhaust Extension (Black)) . Confirm full engagement before proceeding.
2. Assemble item 1 (Terminal Cap) to item 5 (Terminal Outer Shell). Confirm full engagement before proceeding.
3. Position item 4 (Terminal Clamp Ring) over the joint between items 1 &5. With the terminal clamp ring in place tighten the clamps with a flathead screwdriver. Do not over-tighten the clamps as this could cause damage of the termination components.
4. Insert the items 2&3 assembled in step 1 into the outer shell assembly (Items 1,4 & 5). Widen the stainless steel spacers as needed, to ensure the centering of the vent pipe. The black portion must protrude minimum 4 inch over the Terminal Cap.
5. Assemble the Storm Collar above the Terminal Cap and below the exhaust outlet. Use weather proof sealant between the storm collar and black vent extension.
6. (Pitched Roof Installation) slide storm collar [provided with roof flashing] over the terminal to the stop. With a flathead screwdriver, firmly secure the storm collar to the termination shell. Use of weather proof sealant may be applied at this position.
7. Lubricate the mating seal below the roof. Insert the termination into the roof flashing opening and assemble the termination assembly into the socket end of the vent system below the roof. If needed, the 8"transparent vent pipe can be shortened using a fine tooth saw. Always deburr the edges.
8. Confirm the termination is in the vertical position then install item 7 (Termination Clamp) to the structure beneath the roof flashing.

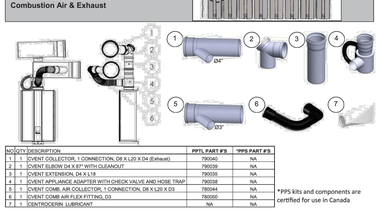
CVent Starter Kit
790005 / 791008PPS*
8-Inch For Back-to-Back or In-line Combustion Air & Exhaust



NO	QTY	DESCRIPTION	PPTL PART #'S	*PPS PART #'S
1	1	CVENT ENDPIECE (EXHAUST) W/ CLEANOUT & CONDENSATE DRAIN (52mm)	790042	NA
2	1	CVENT COMB AIR ENDPIECE D8	780046	NA
3	1	CVENT CONDENSATE TRAP (52mm Connection)	790048	NA
4	1	CVENT DRAIN HOSE AND CLAMPS	790049	NA
6	1	UBBINK INSTALLATION INSTRUCTION	NA	NA
7	1	CENTROCERIN LUBRICANT	NA	NA

*PPS kits and components are certified for use in Canada

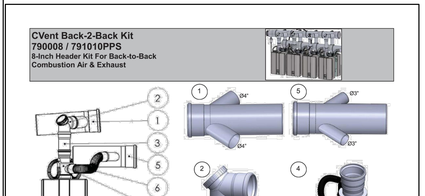
CVent In-line Kit
790007 / 791009PPS*
8-Inch Header Kit For In-line Combustion Air & Exhaust



NO	QTY	DESCRIPTION	PPTL PART #'S	*PPS PART #'S
1	1	CVENT COLLECTOR, 1 CONNECTION, D8 X L20 X D4 (Exhaust)	790040	NA
2	1	CVENT ELBOW D4 X 87° WITH CLEANOUT	790039	NA
3	1	CVENT EXTENSION, D4 X L18	790035	NA
4	1	CVENT APPLIANCE ADAPTER WITH CHECK VALVE AND HOSE TRAP	790038	NA
5	1	CVENT COMB. AIR COLLECTOR, 1 CONNECTION, D8 X L20 X D3	790044	NA
6	1	CVENT COMB AIR FLEX FITTING, D3	780050	NA
7	1	CENTROCERIN LUBRICANT	NA	NA

*PPS kits and components are certified for use in Canada

CVent Back-2-Back Kit
790008 / 791010PPS
8-Inch Header Kit For Back-to-Back Combustion Air & Exhaust



NO	QTY	DESCRIPTION	PPTL PART #'S	*PPS PART #'S
1	1	CVENT COLLECTOR, 2 CONNECTION, D8 X L20	790041	NA
2	2	CVENT ELBOW D4 X 87° WITH CLEANOUT	790039	NA
3	2	CVENT EXTENSION, D4 X L18	790035	NA
4	2	CVENT APPLIANCE ADAPTER WITH CHECK VALVE AND	790038	NA
5	1	CVENT COMB. AIR COLLECTOR, 2 CONNECTION,	780045	NA
6	2	CVENT COMB. AIR FLEX FITTING, D3	780050	NA
7	1	CENTROCERIN LUBRICANT	NA	NA

*PPS kits and components are certified for use in Canada

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

WATER HEATER ACCESSORIES DETAILS

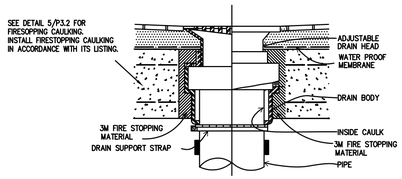
◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

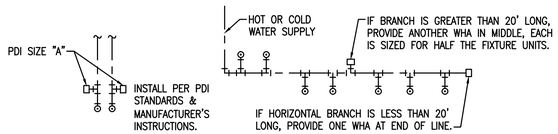
◦ JOB: 2015.2801

◦ DATE: 06/17/16

◦ SHEET: P3.2



FLOOR DRAIN | 7



SINGLE FIXTURES

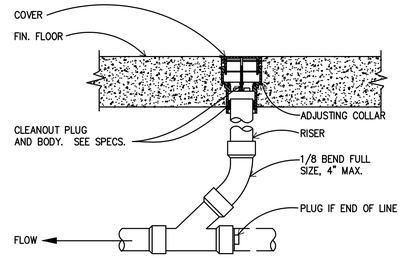
PDI SIZE	PIPE SIZE	FIXTURE UNIT LOAD
A	½"	1–11
B	¾"	12–32
C	1"	33–60
D	1¼"	61–113
E	1½"	114–154
F	2"	154–330

MULTIPLE FIXTURES

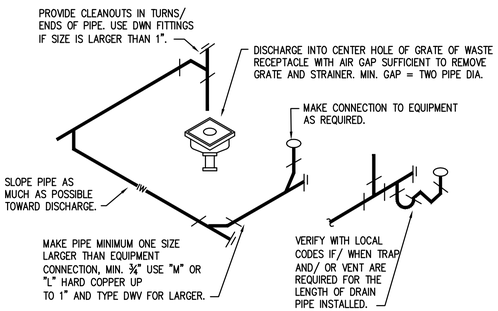
FIXTURE UNIT TABULATION		
FIXTURE	COLD	HOT
VALVE WATER CLOSET	.5	--
TANK WATER CLOSET	2.5	--
URINAL	4	--
LAVATORY	.75	.75
SINK	1.5	1.5
JANITOR'S SINK	2.5	2.5
SHOWER/BATHTUB	1.5	1.5

PLUMBING CONTRACTOR TO PROVIDE WATER HAMMER ARRESTERS BY SIOUX CHIEF, PRECISION PLUMBING PRODUCTS, WATTS OR APPROVED EQUIVELENT WITH PISTON & O–RING CONSTRUCTION, HAVING PDI #WH–201, ASSE #1010 & ANSI #A112.26.1M CERTIFICATION. INSTALL IN HORIZONTAL OR VERTICAL POSITION, BUT NEVER UPSIDE DOWN. INSTALL IN–LINE WITH WATER FLOW DIRECTION IF POSSIBLE. SIZE THE UNITS AS SHOWN ON THE DRAWINGS AND/OR PER THE TABLES SHOWN ABOVE.

WATER HAMMER ARRESTERS | 4

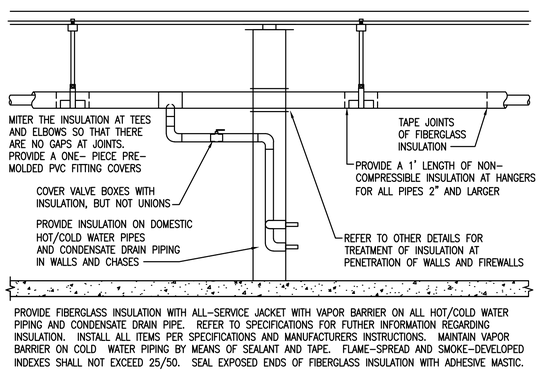


FLOOR CLEANOUT | 1



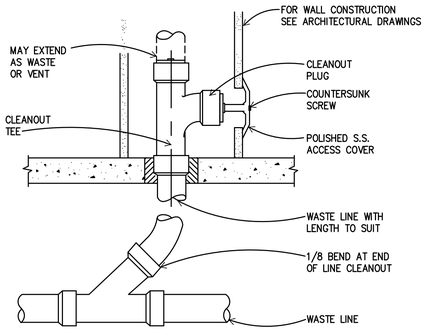
ROUTE PIPE INCONSPICUOUSLY AND UNOBTRUSIVELY. HANG PIPE AS REQUIRED. DO NOT INSULATE INDIRECT DRAIN PIPE WHEN INSTALLED EXPOSED IN FOOD SERVICE FACILITY. REFER TO LOCAL CODES FOR FURTHER INFORMATION.

INDIRECT WASTE DRAIN DETAIL | 8

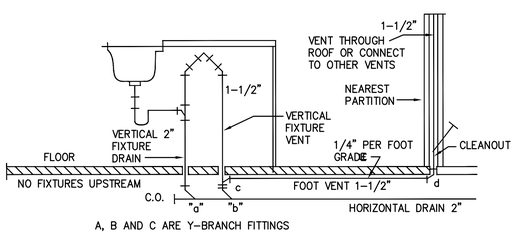


PROVIDE FIBERGLASS INSULATION WITH ALL–SERVICE JACKET WITH VAPOR BARRIER ON ALL HOT/COLD WATER PIPING AND CONDENSATE DRAIN PIPE. REFER TO SPECIFICATIONS FOR FUTHER INFORMATION REGARDING INSULATION. INSTALL ALL ITEMS PER SPECIFICATIONS AND MANUFACTURERS INSTRUCTIONS. MAINTAIN VAPOR BARRIER ON COLD WATER PIPING BY MEANS OF SEALANT AND TAPE. FLAME–SPREAD AND SMOKE–DEVELOPED INDEXES SHALL NOT EXCEED 25/50. SEAL EXPOSED ENDS OF FIBERGLASS INSULATION WITH ADHESIVE MASTIC.

PIPE INSULATION | 5

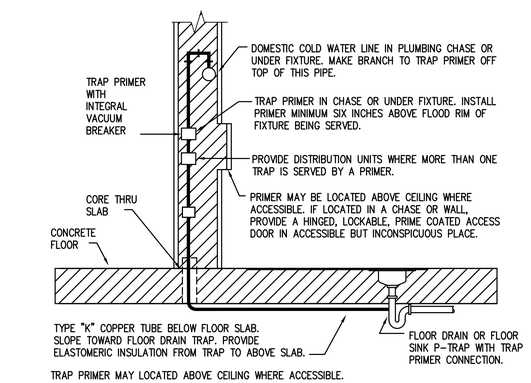


WALL CLEANOUT | 2



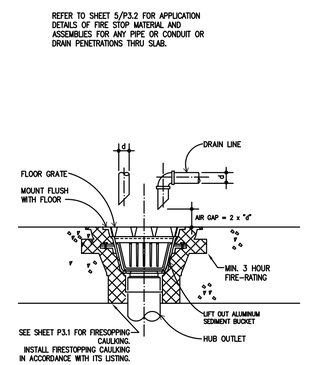
A, B AND C ARE Y–BRANCH FITTINGS

ISLAND LOOP VENT FOR SINK | 9



TRAP PRIMER MAY LOCATED ABOVE CEILING WHERE ACCESSIBLE.

TRAP PRIMER DETAIL | 6



FLOOR SINK | 3

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

PLUMBING DETAILS

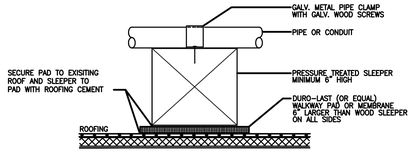
◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

◦ JOB: 2015.2801

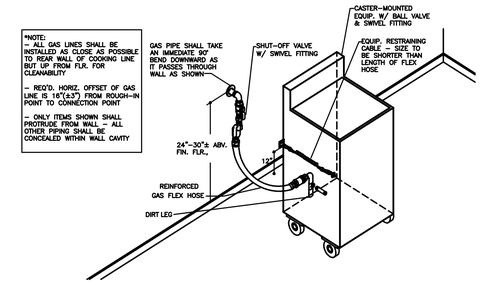
◦ DATE: 06/17/16

◦ SHEET: P3.3

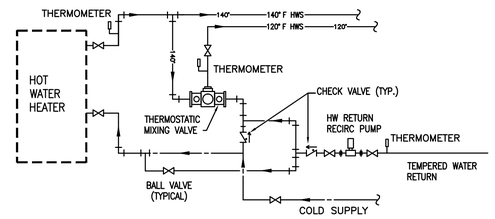


NOTE: SPACING SHALL BE MAXIMUM OF 5'-0" ON CENTERS FOR PIPES 3" AND SMALLER.

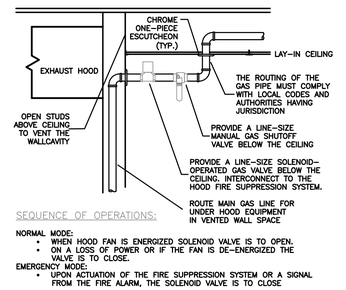
PIPE SUPPORT ON ROOF | 10



GAS PIPE CONNECTION AT COOKLINE | 7



THERMOSTATIC MIXING VALVE | 4

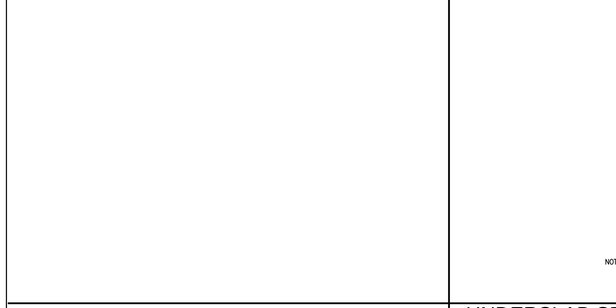


SEQUENCE OF OPERATIONS:

NORMAL MODE:
- WHEN HOOD FAN IS ENERGIZED SOLENOID VALVE IS TO OPEN.
- ON A LOSS OF POWER OR IF THE FAN IS DE-ENERGIZED THE VALVE IS TO CLOSE.

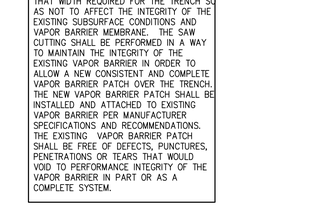
EMERGENCY MODE:
- UPON ACTUATION OF THE FIRE SUPPRESSION SYSTEM OR A SIGNAL FROM THE FIRE ALARM, THE SOLENOID VALVE IS TO CLOSE

KITCHEN GAS SHUTOFF VALVE | 1

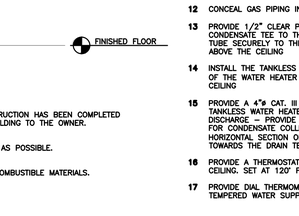


NOTES
1. METAL CHANNEL STRUT SUPPORT LONGER THAN THAN 36" SHALL BE INSTALLED WITH A CENTER SUPPORT ROD.
2. THE HANGER RODS SHALL BE DESIGNED AND SIZED FOR MAXIMUM VERTICAL LOAD OF 50 LBS PER ROD, AND 100 LBS MAXIMUM PER CEILING JOIST, ASSUMING SPACING OF TRAPEZE CHANNELS AT MAXIMUM 10 FEET O.C.
3. FOR TRAPEZE INSTALLATIONS , PROVIDE SEISMIC BRACING WIRES, USE MINIMUM #12 GAUGE BRACING WIRE WITH 4 TIGHT TURNS IN 1.5" BOTH ENDS. BRACES SHALL BE LOCATED AT EACH END OF CONDUIT RUNS, WHERE RUNS CHANGE DIRECTION AND AT INTERSECTIONS. THE TRANSVERSE BRACING SHALL NOT BE SPACED FURTHER APART THAN 30 FEET AND THE LONGITUDINAL BRACING SHALL NOT BE SPACED APART LONGER THAN 60 FEET. THE BRACING WIRES SHALL BE ANCHORED TO STRUCTURAL ELEMENTS OF THE BUILDING.

PIPING AND CONDUIT TRAPEZE HANGER DETAIL | 11

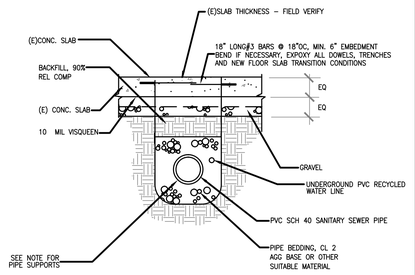


SINGLE PIPE HANGER | 8



HANGER ATTACHMENT | 5

VENT THRU ROOF DETAIL | 2



NOTE: SUSPEND THE NEW UNDERSLAB SEWER LINE PIPING FROM EXISTING GRADE BEAM OR NEW SLAB ASSEMBLY WITH STAINLESS STEEL THREADED RODS BOLTED OR SECURED TO CONCRETE, SPACED AT 8 FEET O.C.

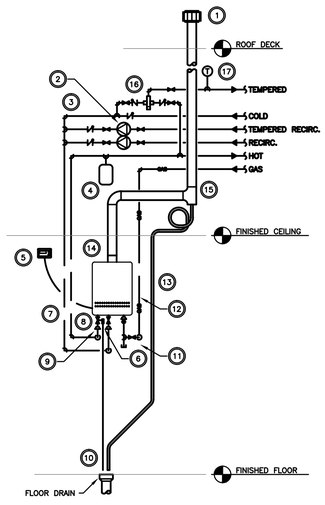
NOTE: CONCRETE THICKNESS, MIXTURE DESIGN, REBAR SIZE AND SPACING, VAPOR BARRIER, SAND AND ROCK SHALL MATCH DEPTH AND PLACEMENT PER EXISTING CONDITION IN FIELD.

(E) CONDITIONS OR CITY STANDARDS SHALL SUPERCEDE THIS DETAIL. (E) CONDITIONS SHALL TAKE PRECEDENCE.

THE GENERAL CONTRACTOR IS RESPONSIBLE FOR SAW CUTTING EXISTING CONCRETE SLABS TO INCLUDE AN OVER CUT BEYOND THAT WIDTH REQUIRED FOR THE TRENCH SO AS NOT TO AFFECT THE INTEGRITY OF THE EXISTING SUBSURFACE CONDITIONS AND VAPOR BARRIER MEMBRANE. THE SAW CUTTING SHALL BE PERFORMED IN A WAY TO MAINTAIN THE INTEGRITY OF THE EXISTING VAPOR BARRIER IN ORDER TO ALLOW A NEW CONSISTENT AND COMPLETE VAPOR BARRIER PATCH OVER THE TRENCH. THE NEW VAPOR BARRIER PATCH SHALL BE INSTALLED AND ATTACHED TO EXISTING VAPOR BARRIER PER MANUFACTURER SPECIFICATIONS AND RECOMMENDATIONS. THE EXISTING VAPOR BARRIER PATCH SHALL BE FREE OF DEFECTS, PUNCTURES, PENETRATIONS OR TEARS THAT WOULD VOID TO PERFORMANCE INTEGRITY OF THE VAPOR BARRIER IN PART OR AS A COMPLETE SYSTEM.

NOTE: THE SLAB SAW CUT AND DOWEL DETAIL SHALL APPLY TO ALL UNDERSLAB PIPING WORK.

UNDERSLAB SEWER AND SLAB DOWEL DETAIL | 9



INSTALLATION NOTES

A.
CLEAN INLET STRAINERS AFTER CONSTRUCTION HAS BEEN COMPLETED AND PRIOR TO TURNOVER OF THE BUILDING TO THE OWNER.

B.
INSTALL PIPING WITH AS FEW ELBOWS AS POSSIBLE.

C.
MAINTAIN REQUIRED CLEARANCES TO COMBUSTIBLE MATERIALS.

KEYED NOTES:

1 PROVIDE RAIN CAP AT FLUE TERMINATION THROUGH ROOF

2 PROVIDE RECIRCULATION PUMPS "P3" AS SHOWN – SUPPORT PUMPS FROM WALL OR STRUCTURE ABOVE – THE PUMPS SHALL BE CONTROLLED BY A TIME CLOCK SET FOR THE OCCUPIED HOURS OF THE STORE AND AN AQUASTAT INSTALLED ON THE RECIRC. PIPE UPSTREAM FROM THE PUMP

3 PROVIDE LINE-SIZE CHECK VALVES IN COLD AND RECIRCULATION WATER PIPES AS SHOWN

4 PROVIDE EXPANSION TANK AS SHOWN. SUPPORT TANK FROM WALL OR STRUCTURE ABOVE

5 INSTALL REMOTE CONTROL PANEL WITHIN 12" OF THE FINISHED CEILING. PROVIDE WIRING FROM THE REMOTE CONTROL PANEL TO THE WATER HEATER. CONCEAL WIRING WITHIN THE WALL.

6 PROVIDE PRESSURE RELIEF VALVE – PIPE PRESSURE RELIEF VALVE TO FLOOR DRAIN.

7 CONCEAL HOT AND COLD WATER PIPING WITHIN THE WALL AS SHOWN. INSULATE EXPOSED AND CONCEALED HOT AND COLD WATER PIPING TO WITHIN 3" OF THE WATER HEATER

8 PROVIDE "THE ISOLATOR EXP" TANKLESS WATER HEATER SERVICE VALVES MANUFACTURED BY WEBSTONE COMPANY, INC. EXPOSED AT THE COLD AND HOT WATER CONNECTIONS TO THE WATER HEATER

9 IF THE COLD, HOT, OR GAS PIPE LINE SIZE AS SHOWN ON THE PLUMBING PLANS IS LARGER THAN THE WATER HEATER CONNECTION SIZES, PROVIDE REDUCERS WITHIN 6" OF THE WATER HEATER

10 PIPE PRESSURE RELIEF VALVE DISCHARGE AND FLUE CONDENSATE DRAIN TO THE FLOOR DRAIN. DRAIN THROUGH AN AIR GAP

11 PROVIDE AN EXPOSED DRIP LEG AND LINE-SIZE GAS VALVE ON THE GAS SERVICE TO THE WATER HEATER

12 CONCEAL GAS PIPING IN THE WALL AS SHOWN

13 PROVIDE 1/2" CLEAR PLASTIC TUBE FROM THE FLUE CONDENSATE TEE TO THE FLOOR DRAIN. FASTEN THE TUBE SECURELY TO THE WALL. PROVIDE A TRAP LOOP ABOVE THE CEILING

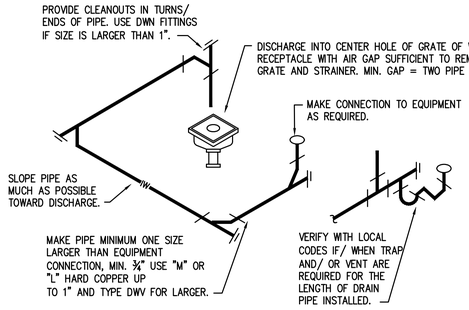
14 INSTALL THE TANKLESS WATER HEATER WITH THE TOP OF THE WATER HEATER WITHIN 18" OF THE FINISHED CEILING

15 PROVIDE A 4"ø CAT. III VENT PIPE FROM THE TANKLESS WATER HEATER TO THE POINT OF DISCHARGE – PROVIDE A TEE WITH A DRAIN FITTING FOR CONDENSATE COLLECTION AND DISPOSAL – SLOPE HORIZONTAL SECTION OF THE FLUE 1/4" PER FOOT TOWARDS THE DRAIN TEE

16 PROVIDE A THERMOSTATIC MIXING VALVE ABOVE THE CEILING. SET AT 120° F.

17 PROVIDE DIAL THERMOMETER INSTALLED IN THE TEMPERED WATER SUPPLY PIPE ABOVE THE CEILING

WATER HEATER DETAIL | 6



ROUTE PIPE INCONSPICUOUSLY AND UNOBTRUSIVELY. HANG PIPE AS REQUIRED. DO NOT INSULATE INDIRECT DRAIN PIPE WHEN INSTALLED EXPOSED IN FOOD SERVICE FACILITY. REFER TO LOCAL CODES FOR FURTHER INFORMATION.

INDIRECT WASTE DRAIN DETAIL | 3

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Tantech Engineers
MEP CONSULTING ENGINEERS
1431 Cedar Street
San Carlos, CA 94070
(415) 269-4283

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

◦ PROJECT ◦

LifeMoves Maple Street Shelter
1580 Maple Street
Redwood City CA 94063

◦ SHEET TITLE ◦

PLUMBING DETAILS

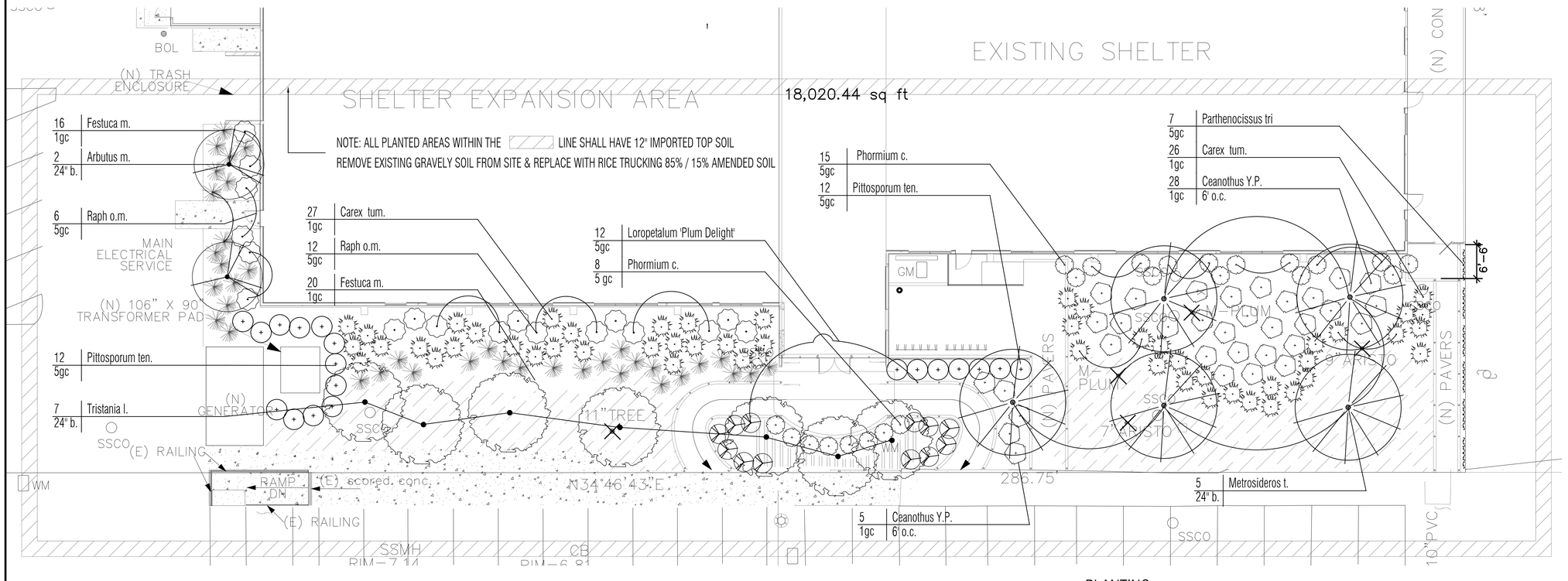
◦ REVISIONS ◦

No.	Date	Notes
	6.17.16	BLDG SUBMITTAL 1

◦ JOB: 2015.2801

◦ DATE: 06/17/16

◦ SHEET: P3.4



LEGEND

TREES

5- 24 " BOX METROSIDEROS EXCELSUS NEW ZEALAND CHRISTMAS TREE

12- 24 " TRISTANIA LAURINA SWAMP MYRTLE

12- 24 " BOX ARBUTUS MARINA STRAWBERRY MADRONE STANDARD

SHRUBS

48- 1 GALLON CEANOTHUS GRESIUS 'YANKEE POINT' CARMEL CREEPER

51- 5 GALLON RHAPHIOLEPIS OVATA MINOR NCN

37- 5 GALLON PITTOSPORUM TENUIFOLIUM 'TOM THUMB' NCN

21- 5 GALLON LOROPETALUM 'PLUM DELIGHT'

23- 5 GALLON PHORMIUM COOKIANUM 'MAORI QUEEN' NEW ZEALAND FLAX

GRASSES & VINES

36- 1 GALLON FESTUCA MAIREI ATLAS FESCUE

179- 1 GALLON CAREX TUMUICOLA BERKELEY SEDGE

42- 1 GALLON CAREX PANSA CALIFORNIA MEADOW SEDGE

7- 5 GALLON PARTHENOCISSUS TRICUSPADATA 'VETCHII' BOSTON IVY

GROUND COVERS

RHIZOMATOUS TALL FESCUE SOD PARK AVE TURF OR EQ. ALL TURF AREAS TO HAVE 12" AMENDED TOPSOIL RICE TRUCKING 85/15 OR APP EQ.

MYOPRUM 'PUTAH CREEK' 1 G.C. @5'O.C.

ROSA 'FLOWER CARPET RED' 5 G.C. @4'O.C.

3" WETTED DEPTH OF RECYCLED MULCH @ EXISTING TREES TO BE SAVED

6" WIDE X8" DEEP CONCRETE MOW BAND @ TREES

PLANT LIST				
BOTANICAL NAME	COMMON NAME	QUANTITY	WATER USE	SIZE
TREES				
Metrosideros excelsus	New Zealand Xmas Tree	5	Low	24" Box
Tristania laurina	Swamp Myrtle	12	Low	24" Box
Arbutus 'Marina"	Strawberry Madrone	12	Low	24" Box
Shrubs				
Ceanothus gresius 'Yankee Point'	Carmel Creeper	48	LOW	1 g.c.
Rhaphiolepis ovata 'Minor'	N.C.N.	51	Low	5 g.c.
Pittosporum tenuifolium 'Tom Thumb'	NCN	37	Moderate	5 g.c.
Loropetalum 'Plum Delight'	NCN	21	Low	5 G.C.
Phormium hybrid. 'Maori Queen'	New Zealand Flax	23	Low	5 G.C.
Grasses & Vines				
Festuca mairei	Atlas Fescue	36	Low	1 G.C.
Carex tumuicola	Berkeley sedge	179	Low	1 G.C.
Carex pansa	California Meadow Sedge	42	Moderate	1 g.c.
Tall fescue sod	NCN	Sod	Moderate	Sod
Myoprum 'Putah Creek'	Myoprum		Low	1 g.c. @ 5' o.c.
Rosa 'Flower Carpet Red'	Flower Carpet Rose		MODERATE	5 g.c. @ 4' o.c.
Parthenocissus tricuspadata	Boston Ivy	7	Low	5 G.C.

PLANTING PLAN SOUTH 1"=10'

0 10 20 scale 1" = 10' feet

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Ron Hodges
Landscape Architect
367 Bridle Path
Healdsburg, CA 95448
ronalde.hodges@gmail.com
707-481-4500

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED LANDSCAPE ARCHITECT RONALD E. HODGES No. 1356 Ronald E. Hodges Signature 08/20/17 Date EXP. 1/31/17 STATE OF CALIFORNIA

• PROJECT •

SAN MATEO SHELTER

• SHEET TITLE •

PLANTING PLAN

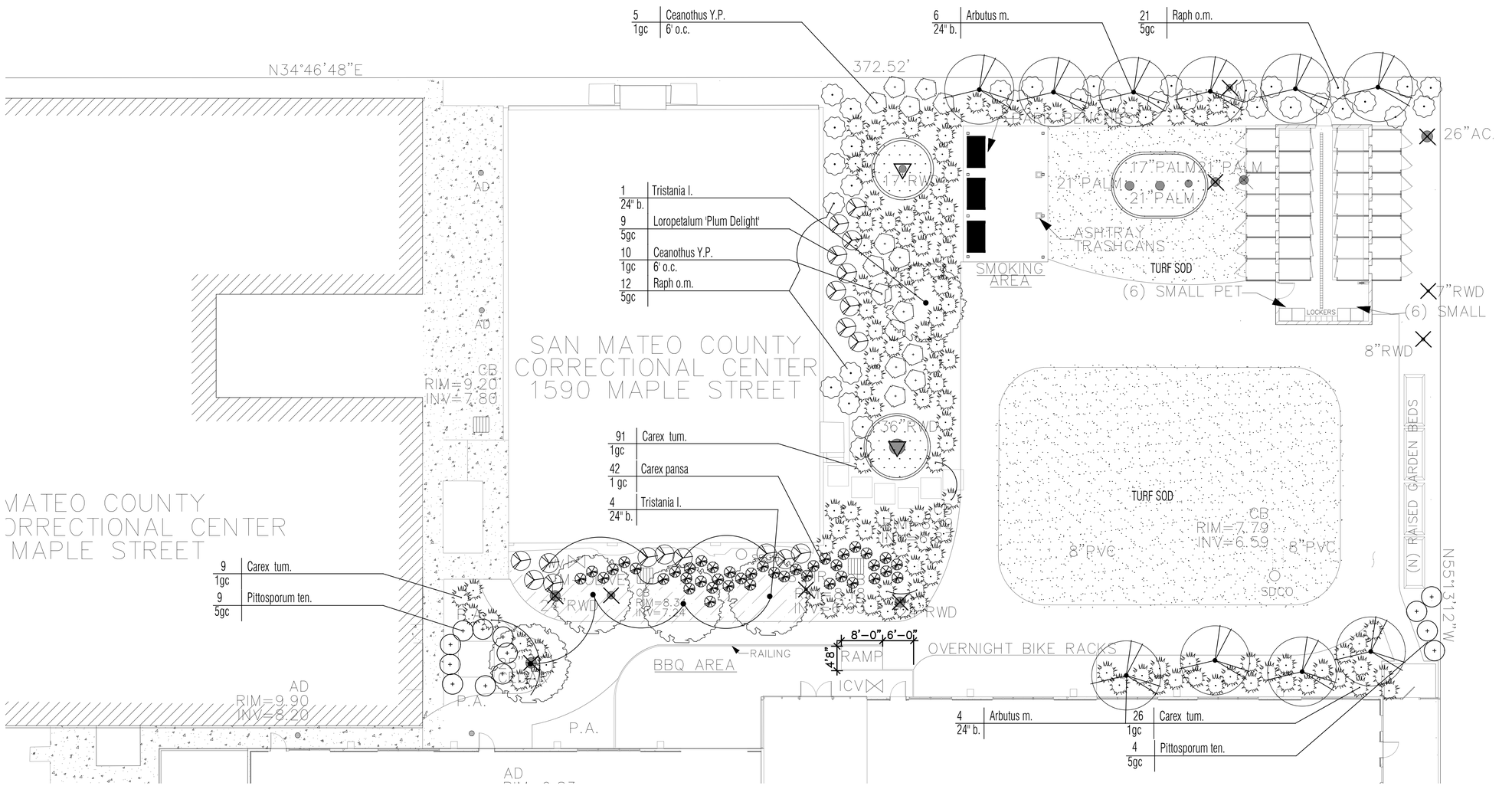
• REVISIONS •

No.	Date	Notes

• JOB: SAN MATEO SHELTER

• DATE:

• SHEET: L-1



LEGEND

TREES

5- 24 " BOX METROSIDEROS EXCELSUS NEW ZEALAND CHRISTMAS TREE

12- 24 " TRISTANIA LAURINA SWAMP MYRTLE

12- 24 " BOX ARBUTUS MARINA STRAWBERRY MADRONE STANDARD

SHRUBS

48- 1 GALLON CEANOTHUS GRESIUS 'YANKEE POINT' CARMEL CREEPER

51- 5 GALLON RHAPHIOLEPIS OVATA MINOR NCN

37- 5 GALLON PITTOSPORUM TENUIFOLIUM 'TOM THUMB' NCN

21- 5 GALLON LOROPETALUM 'PLUM DELIGHT'

23- 5 GALLON PHORMIUM COOKIANUM 'MAORI QUEEN' NEW ZEALAND FLAX

GRASSES & VINES

49- 1 GALLON FESTUCA MAIREI ATLAS FESCUE

179- 1 GALLON CAREX TUMUICOLA BERKELEY SEDGE

42- 1 GALLON CAREX PANSA CALIFORNIA MEADOW SEDGE

7- 5 GALLON PARTHENOCISSUS TRICUSPADATA 'VETCHII' BOSTON IVY

GROUND COVERS

RHIZOMATOUS TALL FESCUE SOD PARK AVE TURF OR EQ. ALL TURF AREAS TO HAVE 12" AMENDED TOPSOIL RICE TRUCKING $\frac{80}{20}$ OR APP EQ.

MYOPRUM 'PUTAH CREEK' 1 G.C. @5'O.C.

ROSA 'FLOWER CARPET RED' 5 G.C. @4'O.C.

3" WETTED DEPTH OF RECYCLED MULCH @ EXISTING TREES TO BE SAVED

6" WIDE X8" DEEP CONCRETE MOW BAND @ TREES

PLANT LIST

BOTANICAL NAME	COMMON NAME	QUANTITY	WATER USE	SIZE
TREES				
Metrosideros excelsus	New Zealand Xmas Tree	5	Low	24" Box
Tristania laurina	Swamp Myrtle	12	Low	24" Box
Arbutus 'Marina'	Strawberry Madrone	12	Low	24" Box
Shrubs				
Ceanothus gresius 'Yankee Point'	Carmel Creeper	48	LOW	1 g.c.
Rhaphiolepis ovata 'Minor'	N.C.N.	51	Low	5 g.c.
Pittosporum tenuifolium 'Tom Thumb	NCN	37	Modetate	5 g.c.
Loropetalum 'Plum Delight'	NCN	21	Low	5 G.C.
Phormium hybrid. 'Maori Queen'	New Zealand Flax	23	Low	5 G.C.
Grasses & Vines				
Festuca mairei	Atlas Fescue	49	Low	1 G.C.
Carex tumuicola	Berkeley sedge	179	Low	1 G.C.
Carex pansa	California Meadow Sedge	42	Moderate	1 g.c..
Tall fescue sod	NCN	Sod	Moderate	Sod
Myoprum 'Putah Creek'	Myoprum		Low	1 g.c. @ 5' o.c.
Rosa 'Flower Carpet Red"	Flower Carpet Rose		MODERATE	5 g.c. @ 4' o.c.
Parthenocissus tricuspadata	Boston Ivy	7	Low	5 G.C.

PLANTING PLAN NORTH 1"=10'

scale 1" = 10' 0 10 20 feet

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Ron Hodges
Landscape Architect
367 Bridle Path
Healdsburg, CA 95448
ronalde.hodges@gmail.com
707-481-4500

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED LANDSCAPE ARCHITECT
RONALD E. HODGES
No. 1356
Ronald E. Hodges
Signature
08/20/11/17
Date
EXP. 1/31/17
STATE OF CALIFORNIA

• PROJECT •

SAN MATEO SHELTER

• SHEET TITLE •

PLANTING PLAN

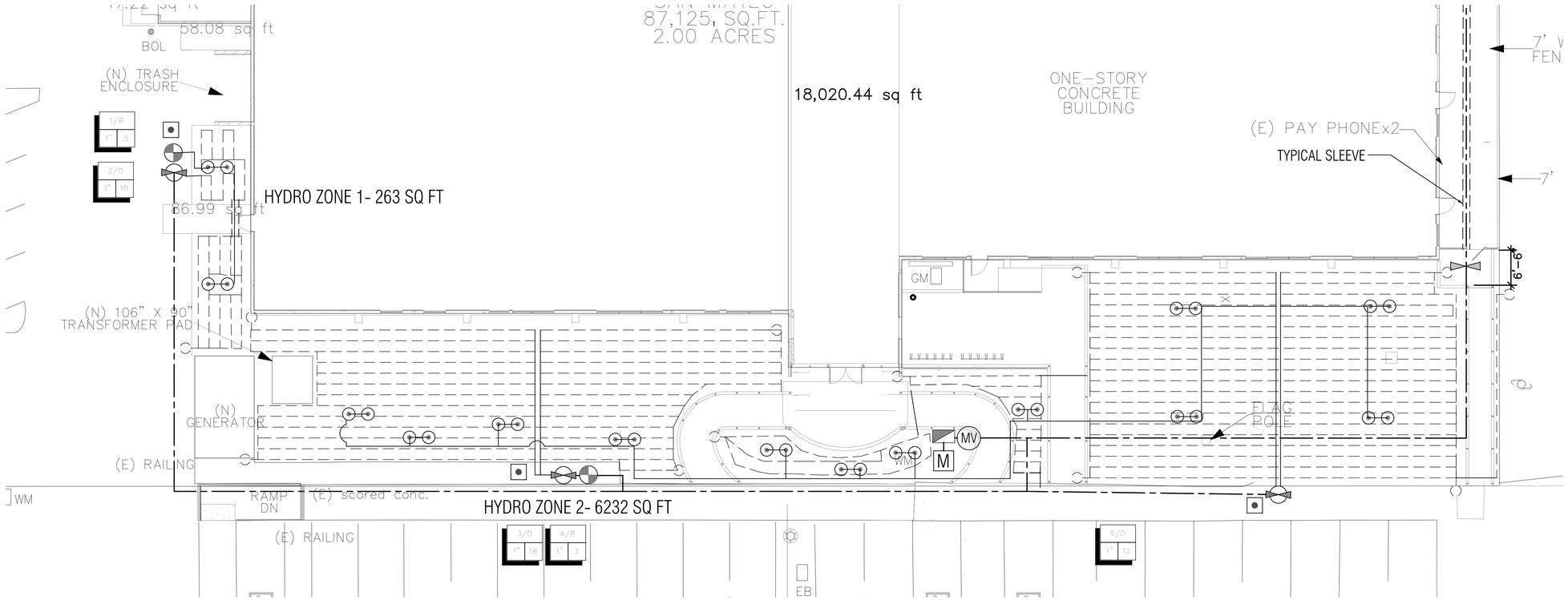
• REVISIONS •

No.	Date	Notes

• JOB: SAN MATEO SHELTER

• DATE:

• SHEET: L-2



IRRIGATION
PLAN
SOUTH
1"=10'

BACKFLOW PREVENTER 1" DIA. SEE DETAIL

1" WATTS PRESSURE REGULATOR SET @ 40 PSI

REMOTE CONTROL VALVE HUNTER PGV-100G SERIES
FOR TREE BUBBLERS ONLY W/ NON-POTABLE BOX COVER

REMOTE CONTROL VALVE HUNTER PGV-100G SERIES
FOR MASTER VALVE IN NON-POTABLE VALVE BOX

LINE SIZE BALL ISOLATION VALVE PER DETAIL VALVES
@ MAIN LINE CROSSINGS UNDER DRIVE WAYS

HUNTER I-Core 6-station base model with outdoor plastic cabinet, North America version
6-Station Module ICM-600
Solar Sync- Wireless (ET/rain sensor) WSS-SEN
Twelve station controller w/ ET module & wireless rain sensor

DRIP VALVE PER DETAIL

BALL ISOLATION VALVE PER DETAIL ONE PER MANIFOLD TO SHUT OFF VALVES

QUICK COUPLER RAINBIRD 33DLRC W/ NON-POTABLE "PURPLE" COVER

HUNTER I-25 ADV -025 ROTOR W/ NON-POTABLE "PURPLE" COVER
HUNTER I-25 ADV -04 ROTOR W/ NON-POTABLE "PURPLE" COVER

TORO 570Z PRX-6P-COM-15-F-PC-V NON POTABLE "PURPLE" NOZZLE

VALVE CALL OUT D- SHRUB DRIP / B- TREE BUBBLER / L- LAWN

HUNTER RZWS-10 - 25 = 10" Root zone watering system at 0.25 GPM
(2 BUBBLERS) PER TREE SEE DETAIL

RAINBIRD XFD-09-12-500 0.90 18 SURFACE DRIP TUBING PER DETAILS L-4

SCHEDULE 40 SOLVENT WELD MAIN LINE 11/2" DIA. NON-POTABLE PIPE- "PURPLE PIPE"

3/4" SCHEDULE 40 LATERAL LINE TO BUBBLERS & DRIP TUBING NON-POTABLE- "PURPLE PIPE"

SCHEDULE 40 SLEEVE UNDER PAVEMENT TYPICAL ALL PIPE CROSSINGS

THREADED END CAP FOR DRIP LINES

HYDRO ZONE 1- 263'
HYDRO ZONE 2- 6232'
HYDRO ZONE 3- 4769'
HYDRO ZONE 4- 8844'
HYDRO ZONE 5- 575'

TOTAL IRRIGATED AREA 20,683 SQ FT

scale 1" = 10' feet (0, 10, 20)

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Ron Hodges
Landscape Architect
367 Bridle Path
Healdsburg, CA 95448
ronalde.hodges@gmail.com
707-481-4500

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED LANDSCAPE ARCHITECT
RONALD E. HODGES
No. 1356
Ronald E. Hodges
Signature
Date
EXP. 1/31/17
STATE OF CALIFORNIA

• PROJECT •

SAN MATEO SHELTER

• SHEET TITLE •

IRRIGATION

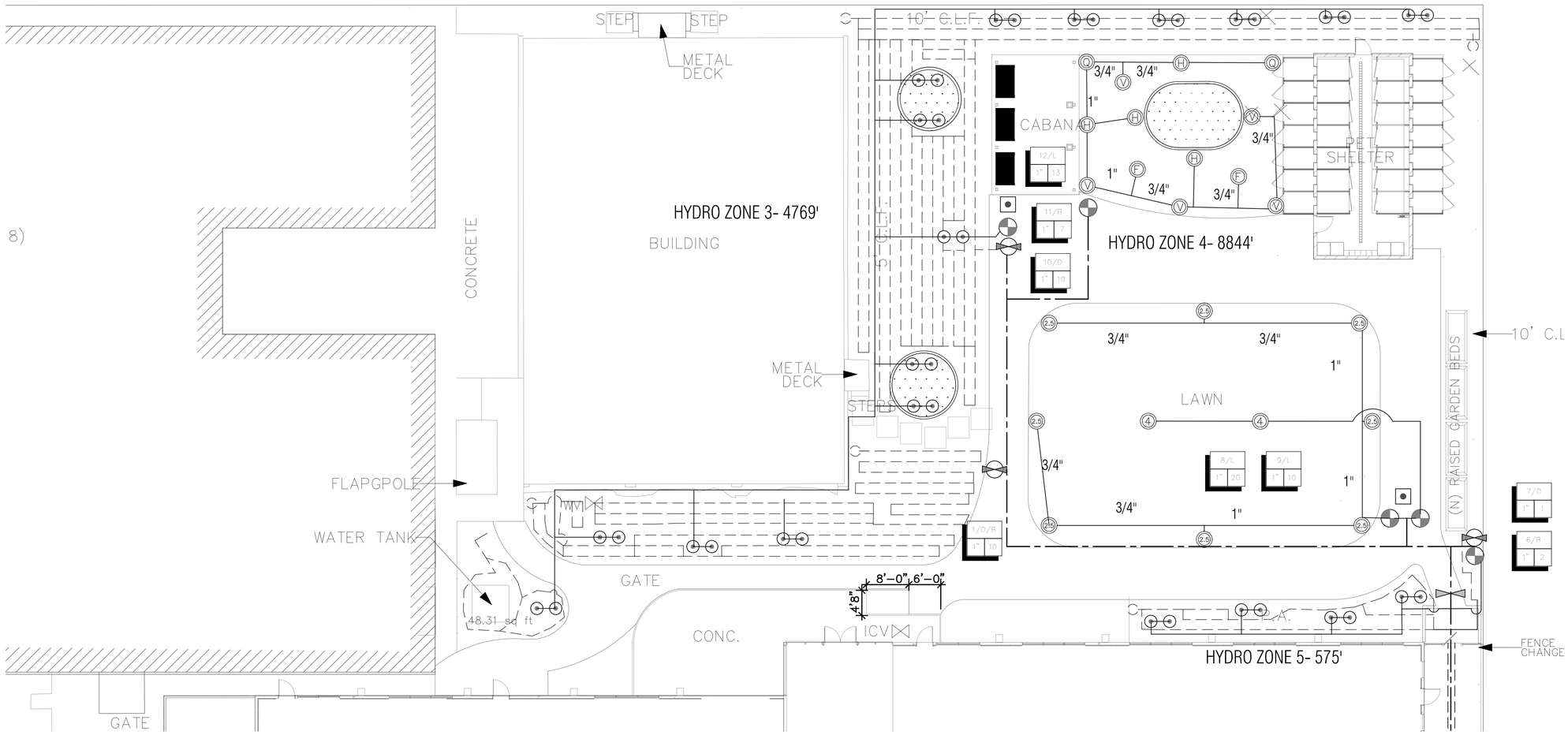
• REVISIONS •

No.	Date	Notes

• JOB: SAN MATEO SHELTER

• DATE:

• SHEET: L-3



PR 1" WATTS PRESSURE REGULATOR SET @ 40 PSI

REMOTE CONTROL VALVE HUNTER PGV-100G SERIES
FOR TREE BUBBLERS ONLY W/ NON-POTABLE BOX COVER

MV REMOTE CONTROL VALVE HUNTER PGV-100G SERIES
FOR MASTER VALVE IN NON-POTABLE VALVE BOX

LINE SIZE BALL ISOLATION VALVE PER DETAIL VALVES
@ MAIN LINE CROSSINGS UNDER DRIVE WAYS

C HUNTER I-Core 6-station base model with outdoor plastic cabinet, North America version
6-Station Module ICM-600
Solar Sync- Wireless (ET/rain sensor) WSS-SEN
Twelve station controller w/ ET module & wireless rain sensor

DRIP VALVE PER DETAIL

BALL ISOLATION VALVE PER DETAIL ONE PER MANIFOLD TO SHUT OFF VALVES

QUICK COUPLER RAINBIRD 33DLRC W/ NON-POTABLE "PURPLE" COVER

2.5 HUNTER I-25 ADV -025 ROTOR W/ NON-POTABLE "PURPLE" COVER
4 HUNTER I-25 ADV -04 ROTOR W/ NON-POTABLE "PURPLE" COVER

V H Q F TORO 570Z PRX-6P-COM-15-F-PC-V NON POTABLE "PURPLE" NOZZLE

7/D VALVE CALL OUT D- SHRUB DRIP / B- TREE BUBBLER / L- LAWN

HUNTER RZWS-10 - 25 = 10" Root zone watering system at 0.25 GPM
(2 BUBBLERS) PER TREE SEE DETAIL

RAINBIRD XFD-09-12-500 0.90 18 SURFACE DRIP TUBING PER DETAILS L-4

SCHEDULE 40 SOLVENT WELD MAIN LINE 11/2" DIA. NON-POTABLE PIPE- "PURPLE F

3/4" SCHEDULE 40 LATERAL LINE TO BUBBLERS & DRIP TUBING NON-POTABLE- "PUF

SCHEDULE 40 SLEEVE UNDER PAVEMENT TYPICAL ALL PIPE CROSSINGS

THREADED END CAP FOR DRIP LINES

HYDRO ZONE 1- 263'
HYDRO ZONE 2- 6232'
HYDRO ZONE 3- 4769'
HYDRO ZONE 4- 8844'
HYDRO ZONE 5- 575'

TOTAL IRRIGATED AREA 20,683 SQ FT

IRRIGATION PLAN
NORTH
1"=10'

scale 1" = 10' feet (0, 10, 20)

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Ron Hodges
Landscape Architect
367 Bridle Path
Healdsburg, CA 95448
ronalde.hodges@gmail.com
707-481-4500

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED LANDSCAPE ARCHITECT
RONALD E. HODGES
No. 1356
Ronald E. Hodges
Signature
Date
EXP. 1/31/17
STATE OF CALIFORNIA

• PROJECT •

SAN MATEO SHELTER

• SHEET TITLE •

IRRIGATIONPLAN

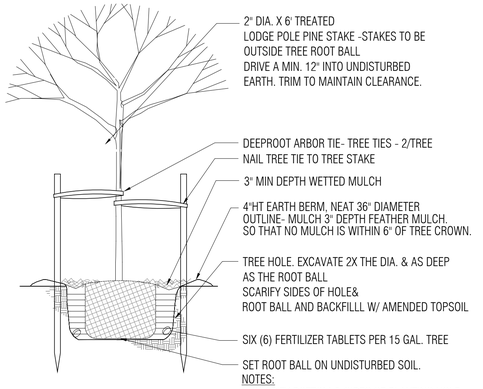
• REVISIONS •

No.	Date	Notes

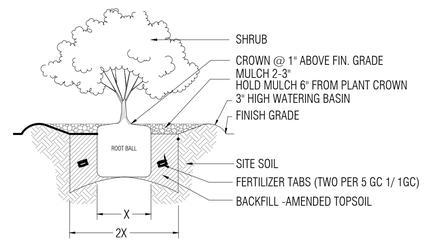
• JOB: SAN MATEO SHELTER

• DATE:

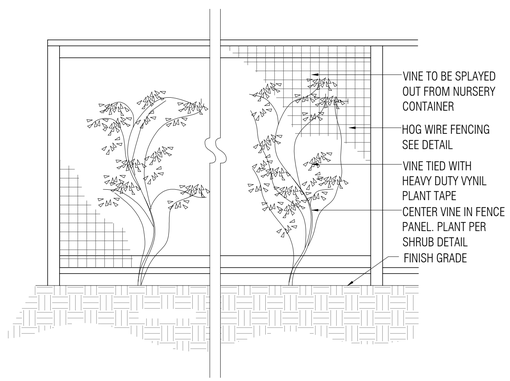
• SHEET: L-4



A L-5 TREE PLANTING DETAIL



B L-5 SHRUB PLANTING DETAIL



C L-5 VINE PLANTING DETAIL

ITEM	MATERIAL	RATE OF APPLICATION
SOIL PREPARATION IN ACCORDANCE WITH THE SPECIFICATIONS FOR GRASS AREAS, SOIL PREPARATION AND SOIL PREPARATION FOR ALL SHRUB, TREE AND/OR GROUNDCOVER AREAS, INCORPORATE SOIL AMENDMENTS INTO TOP 10" OF SITE SOIL ON AREAS W/O IMPORTED TOPSOIL SEE PLANS FOR LOCATION OF IMPORTED TOPSOIL	LANDSCAPE CONTRACTOR TO REFER TO WAYPOINT REPORT 16-092-0105 COMPOSTED RECYCLED ORGANIC SOIL AMMENDMENT	3YARDS/1000 S.F. 7 LBS 21-0-0 5 LBS 0-0-50
PLANTING BACKFILL IN ACCORDANCE WITH THE SPECIFICATIONS FOR PLANTING OF SHRUBS & TREES, INCORPORATE SOIL AMENDMENTS AND FERTILIZERS IN PLANTING BACKFILL AS FOLLOWS:	PER SOILS REPORT	PER SOILS REPORT
PRE-EMERGENCE WEED CONTROL TWO WEEKS AFTER PLANTING OF GROUNDCOVER EXCEPT BIO SWALES,& ARCTOSTAPHYLOS AREAS CULTIVATE, WEED & APPLY PRE-EMERGENCE WEED CONTROL, IN ACCORDANCE W/ MANUFACTURER'S DIRECTIONS, TO ALL GROUNDCOVER AREAS & PLANT BASINS.	RONSTAR OR APPROVED EQUAL	AS PER MFG'S DIRECTIONS.
TOP DRESSING IN ACCORDANCE WITH THE SPECIFICATIONS, AFTER APPLICATION OF PRE-EMERGENCE WEED CONTROL, MULCH GROUNDCOVER AREAS AND PLANT BASINS (KEEP MULCH 6" FROM PLANT CROWNS) WITH MULCH TO WETTED DOWN DEPTHS AS FOLLOWS:	RECYLCED WOOD MULCH OR APPROVED EQUAL	3" DEPTH 2" DEPTH IN MANZINITA AREAS
FEEDING IN ACCORDANCE WITH THE SOILS REPORT FOR FEEDING DURING MAINTENANCE PERIOD, APPLY FERTILIZER TO PLANTINGS AND GROUND- COVER AREAS ONE WEEK PRIOR TO FINAL INSPECTION AS FOLLOWS:	COMMERCIAL FERTILIZER AS REQUIRED BY SOILS REPORT	PER SOILS REPORT
SOILS REPORT SOILS REPORT PREPARED BY WAYPOINT ANALYTICAL 04/06/16 AVALIABLE TO CONTRACTOR 408-727-0330 www.waypointanaylitical.com		

D L-5 PLANTING MATERIALS

PLANTING NOTES

1. INSTALL PLANT MATERIALS AS SHOWN IN THE PLANTING DETAILS.

2. PLANT QUANTITIES ARE NOT PROVIDED ON LEGEND FOR THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE CORRECT QUANTITY OF PLANTS PER THE PLANS

3. NURSERY TRAINING STAKES SHALL BE REMOVED FROM ALL TREES AT TIME OF PLANTING. TREES THAT CAN NOT SUPPORT THEMSELVES WHEN STAKED OR GUYED PER DETAIL SHALL BE REJECTED.

4. TREES TO BE PLANTED WITHIN 4' OF ANY CURBS, PAVEMENTS, OR WALLS MUST BE INSTALLED WITH ROOT BARRIERS, SEE DETAIL FOR TREE PLANTING

5. FERTILIZER TABLETS PER SOILS REPORT

6. CARE SHALL BE TAKEN TO PROTECT EXISTING TREES AND ROOTS. TRENCHING AND DIGGING BENEATH EXISTING TREE CANOPIES SHALL BE DONE MANUALLY. DO NOT CUT ROOTS LARGER THAN 2" IN DIAMETER.

7. CONTRACTOR TO IMPORT AMENDED TOPSOIL MIX AS SHOWN ON PLANS FOR FRONT LANDSCAPE AREAS.

E L-5 PLANTING NOTES

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Ron Hodges
Landscape Architect
367 Bridle Path
Healdsburg, CA. 95448
(707) 481-4500
ronalde.hodges@gmail.com

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED LANDSCAPE ARCHITECT
RONALD E. HODGES
No. 1356
Signature
Date
EXP. 1/31/17
STATE OF CALIFORNIA

• PROJECT •

SAN MATEO SHELTER

• SHEET TITLE •

PLANTING DETAILS

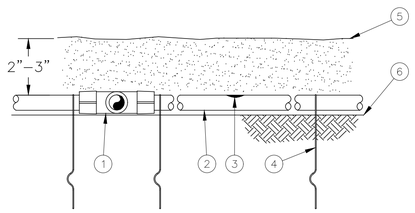
• REVISIONS •

No.	Date	Notes

• JOB:

• DATE:

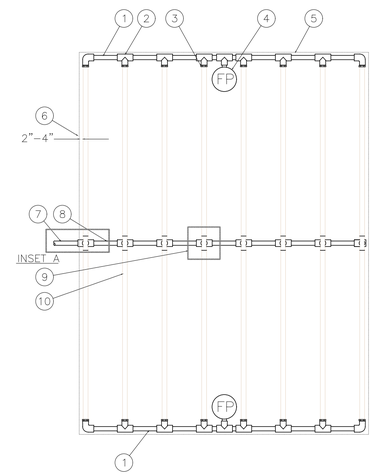
• SHEET: L-5



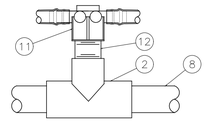
1. EASY FIT COMPRESSION TEE: RAIN BIRD MDCFTEE
2. ON–SURFACE DRIPLINE: RAIN BIRD XF SERIES DRIPLINE POTABLE: XFD DRIPLINE
3. INLINE DRIP EMITTER OUTLET
4. TIE DOWN STAKE: RAIN BIRD TDS–050 WITH BEND (TYPICAL)
5. MULCH
6. FINISH GRADE

NOTES:
1. PLACE TIE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY.
2. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE–DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.

A L-6 DRIP LINE IRRIGATION



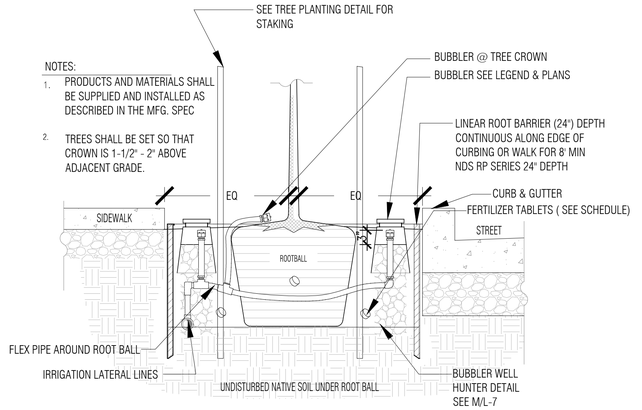
1. PVC EXHAUST HEADER
2. PVC SCH 40 TEE OR EL (TYPICAL)
3. BARB X MALE FITTING: RAIN BIRD XFF–MA FITTING (TYPICAL)
4. FLUSH POINT (TYPICAL) SEE RAIN BIRD DETAIL "XFD FLUSH POINT"
5. PERIMETER OF AREA
6. PERIMETER DRIPLINE PIPE TO BE INSTALLED 2"–4" FROM PERIMETER OF AREA
7. PVC SUPPLY PIPE FROM RAIN BIRD CONTROL ZONE KIT (SIZED TO MEET LATERAL FLOW DEMAND)



INSET A

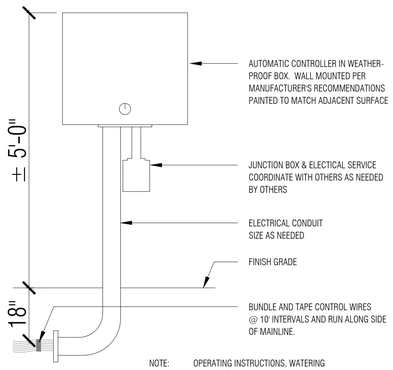
NOTES:
1. DISTANCE BETWEEN LATERAL ROWS AND EMITTER SPACING TO BE 18"
2. LENGTH OF LONGEST DRIPLINE LATERAL SHOULD NOT EXCEED 350'

B L-6 LAYOUT OF INLINE DRIP IRRIGATION



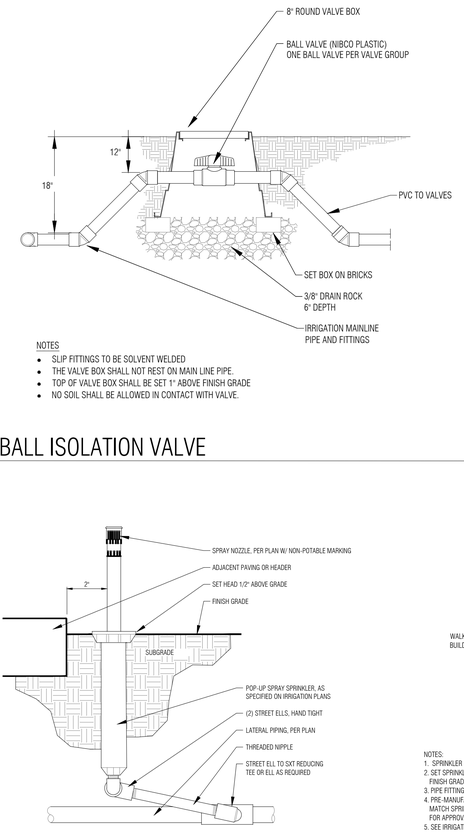
NOTES:
1. PRODUCTS AND MATERIALS SHALL BE SUPPLIED AND INSTALLED AS DESCRIBED IN THE MFG. SPEC
2. TREES SHALL BE SET SO THAT CROWN IS 1-1/2" - 2" ABOVE ADJACENT GRADE.

C L-6 ROOT BARRIER W/ IRRIGATION TYP. FOR STREET TREES



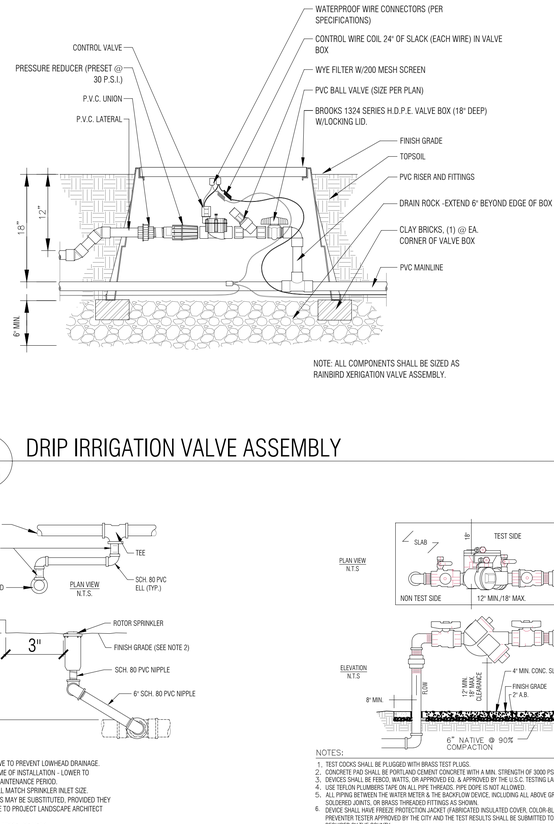
NOTE: OPERATING INSTRUCTIONS, WATERING SCHEDULE, AND REDUCED, LAMINATED PLAN TO BE POSTED INSIDE DOOR OF BOX.

D L-6 CONTROLLER- WALL MOUNT



NOTES
- SLIP FITTINGS TO BE SOLVENT WELDED
- THE VALVE BOX SHALL NOT REST ON MAIN LINE PIPE.
- TOP OF VALVE BOX SHALL BE SET 1" ABOVE FINISH GRADE
- NO SOIL SHALL BE ALLOWED IN CONTACT WITH VALVE.

E L-6 BALL ISOLATION VALVE



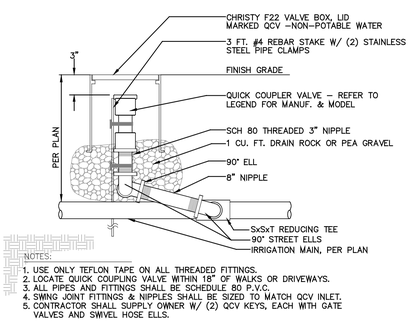
NOTE: ALL COMPONENTS SHALL BE SIZED AS RAINBIRD XERIGATION VALVE ASSEMBLY.

F L-6 DRIP IRRIGATION VALVE ASSEMBLY

IRRIGATION GENERAL NOTES

1. ALL PIPE AND EQUIPMENT (EXCEPT COPPER PIPE, CONTROLLERS, WIRE SLEEVES, AND PIPES SHOWN IN SLEEVES, SHALL BE INSTALLED IN PLANTER AREAS. SOME SHOWN IN PAVED AREAS ON PLAN FOR GRAPHIC CLARITY.
2. LOCATE IRRIGATION CONTROL VALVES (1 PER BOX) IN SHRUB BEDS, APPROXIMATELY 12"–18" FROM PAVEMENTS, WALKS, ETC.. VALVES SHALL NOT BE LOCATED IN LAWN AREAS.
3. COORDINATE PIPE SLEEVING, WIRE–PULLS AND PAVEMENT CROSS–OVERS WITH GENERAL CONTRACTOR PRIOR TO ROUGH GRADING. GENERAL CONTRACTOR SHALL STUB UP AND CAP SLEEVES 12"–18" INSIDE PLANTERS.
4. EXACT LOCATION FOR IRRIGATION CONTROLLER SHALL BE DETERMINED ON SITE BY OWNER'S REPRESENTATIVE. COORDINATE POWER SUPPLY AND WIRE SLEEVING WITH GENERAL CONTRACTOR.
5. ALL EQUIPMENT SHALL BE SUPPLIED AND INSTALLED AS DESCRIBED IN THE SPECIFICATIONS, OR AS SHOWN IN THE DETAILS.
6. CONTRACTOR SHALL INSTALL RAINBIRD 1800 PCS (PRESSURE COMPENSATING SCREENS) AS NEEDED TO REDUCE RADII OF SPRAY PATTERNS, AND TO ELIMINATE OVERSPRAY. REFER TO MANUFACTURER'S CATALOG CHART WHEN SELECTING APPROPRIATE SCREENS.
7. EXISTING TREES TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION. TRENCHING BENEATH THE THE DRIPLINE OF EXISTING TREES SHALL BE AVOIDED, AND SHALL BE PERFORMED MANUALLY WHEN NECESSARY.
8. VALVE STATION ID NUMBERS ON PLAN DESIGNATE THE FOLLOWING: S = SHRUB SPRAY ZONES, L = LAWN ZONES, D = DRIP ZONES. PROGRAM CONTROLLER TO IRRIGATE ZONES IN NUMERIC ORDER SHOWN ON PLAN TO ALLOW INFILTRATION OF APPLIED WATER, AND REDUCE RUNOFF.
9. ALL PIPING AND SPRINKLERS TO BE MARKED NON–POTABLE
   ALL PIPING SHALL BE "PURPLE" PVC DESIGNATED FOR NON–POTABLE USE
   ALL IRRIGATION EQUIPMENT SHALL BE MARKED NON–POTABLE
   ALL VALVE BOXES SHALL HAVE APPROVED NON–POTABLE MARKINGS

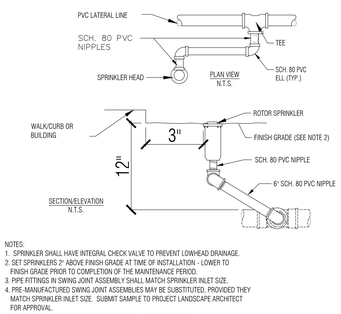
G L-6 IRRIGATION NOTES



NOTES:
1. USE ONLY TEFLON TAPE ON ALL THREADED FITTINGS.
2. LOCATE QUICK COUPLING VALVE WITHIN 18" OF WALKS OR DRIVEWAYS.
3. ALL PIPES AND FITTINGS SHALL BE SCHEDULE 80 P.V.C.
4. SWING JOINT FITTINGS & NIPPLES SHALL BE SIZED TO MATCH QCV INLET.
5. CONTRACTOR SHALL SUPPLY OWNER W/ (2) QCV KEYS, EACH WITH GATE VALVES AND SWIVEL HOSE ELLS.

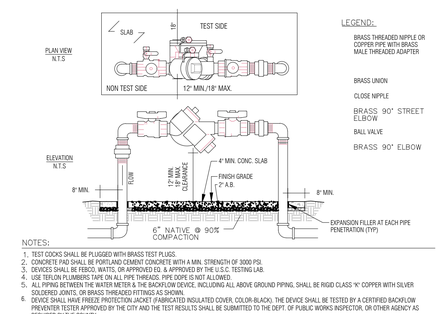
H L-6 QUICK COUPLER

I L-6 POP-UP LAWN HEAD



NOTES:
1. SPRINKLER SHALL HAVE INTEGRAL CHECK VALVE TO PREVENT LOWHEAD DRAINAGE.
2. SET SPRINKLERS 2" ABOVE FINISH GRADE AT TIME OF INSTALLATION - LOWER TO FINISH GRADE PRIOR TO COMPLETION OF THE MAINTENANCE PERIOD.
3. PIPE FITTINGS IN SWING JOINT ASSEMBLY SHALL MATCH SPRINKLER INLET SIZE.
4. PRE-MANUFACTURED SWING JOINT ASSEMBLIES MAY BE SUBSTITUTED, PROVIDED THEY MATCH SPRINKLER INLET SIZE. SUBMIT SAMPLE TO PROJECT LANDSCAPE ARCHITECT FOR APPROVAL.
5. SEE IRRIGATION LEGEND FOR MANUFACTURER / MODEL OF HEAD.

J L-6 LAWN ROTOR HEAD



LEGEND:
- BRASS THREADED NIPPLE OR COPPER PIPE WITH BRASS MALE THREADED ADAPTER
- BRASS UNION
- CLOSE NIPPLE
- BRASS 90° STREET ELBOW
- BALL VALVE
- BRASS 90° ELBOW

NOTES:
1. TEST COCKS SHALL BE PLUGGED WITH BRASS TEST PLUGS.
2. CONCRETE PAD SHALL BE PORTLAND CEMENT CONCRETE WITH A MIN. STRENGTH OF 3000 PSI.
3. DEVICES SHALL BE FEBCO, WATTS, OR APPROVED EQ. & APPROVED BY THE U.S.C. TESTING LAB.
4. USE TEFLON PLUMBERS TAPE ON ALL PIPE THREADS. PIPE DOPE IS NOT ALLOWED.
5. ALL PIPING BETWEEN THE WATER METER & THE BACKFLOW DEVICE, INCLUDING ALL ABOVE GROUND PIPING, SHALL BE RIGID CLASS 'K' COPPER WITH SILVER SOLDERED JOINTS, OR BRASS THREADED FITTINGS AS SHOWN.
6. DEVICE SHALL HAVE FREEZE PROTECTION JACKET (FABRICATED INSULATED COVER, COLOR-BLACK). THE DEVICE SHALL BE TESTED BY A CERTIFIED BACKFLOW PREVENTER TESTER APPROVED BY THE CITY AND THE TEST RESULTS SHALL BE SUBMITTED TO THE DEPT. OF PUBLIC WORKS INSPECTOR, OR OTHER AGENCY AS REQUIRED BY THE COUNTY.
7. BACKFLOW SHALL BE APPROVED AND LABLED FOR NON-POTABLE WATER

K L-6 IRRIGATION BACKFLOW PREVENTER

SIZING CHART

PIPE SIZE	FLOW IN G.P.M.
3/4"ø	0–10 G.P.M.
1"ø	11–16 G.P.M.
1–1/4"ø	16–24 G.P.M.
1–1/2"ø	24–34 G.P.M.
2"ø	34–52 G.P.M.
2–1/2"ø	52–70 G.P.M.

L L-6 PIPE SIZINF

CJ W ARCHITECTURE
130 Portola Road, suite A
Portola Valley, CA 94028
(650) 851-9335 / (Fax) 851-9337

Ron Hodges
Landscape Architect
367 Bridle Path
Healdsburg, CA. 95448
(707) 481-4500
ronald.hodges@gmail.com

These plans are copyrighted and are subject to copyright protection as an "architectural work" under Sec. 102 of the Copyright Act, 17 U.S.O. as amended December 1990 and known as Architectural Works Copyright Protection Act of 1990. The protection includes but is not limited to the overall form as well as the arrangement and composition of spaces and elements of the design. Under such protection, unauthorized use of these plans, work or home represented, can legally result in the cessation of construction or building being seized and /or monetary compensation to CJW Architecture.

LICENSED LANDSCAPE ARCHITECT
RONALD E. HODGES
No. 1356
Signature
Date
EXP. 1/31/17
STATE OF CALIFORNIA

• PROJECT •

SAN MATEO SHELTER

• SHEET TITLE •

IRRIGATION DETAILS

• REVISIONS •

No.	Date	Notes

• JOB:

• DATE: 12/16/2015

• SHEET: L-6