

PROJECT NARRATIVE

THIS SCOPE OF THIS REMODEL PROJECT INCLUDES THE FOLLOWING:

- ICE HOUSE CONTAINING FIVE CURLING SHEETS
- RESTROOMS, LOCKER ROOMS, OFFICE, AND STORAGE AREAS
- MECHANICAL AND PLUMBING EQUIPMENT FOR ICE HOUSE OUTSIDE EAST SIDE OF BUILDING

- # DEFERRED APPROVALS
- NOTE: ALL DEFERRED APPROVAL ITEMS SHALL FIRST BE SUBMITTED TO THE REGISTERED DESIGN PROFESSIONAL, THE ARCHITECT, WHO SHALL REVIEW THEM TO SEE IF THEY ARE FOUND TO BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. IF THEY ARE, THE ARCHITECT WILL ADD A NOTATION TO THE DEFERRED APPROVAL ITEM DOCUMENTS INDICATING THAT THEY HAVE BEEN REVIEWED AND FOUND TO BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. CONTRACTOR WILL SUBMIT THEM TO THE BUILDING OFFICIAL FOR PLAN REVIEW. THE DEFERRED APPROVAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DEFERRED APPROVAL ITEM DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL, PER CBC 107.3.4.2
- DEFERRED APPROVAL ITEMS TO BE SUBMITTED AFTER BUILDING PERMIT ISSUANCE:
- AUTOMATIC FIRE SPRINKLER SYSTEM MODIFICATIONS
 - FIRE ALARM SYSTEM MODIFICATIONS

NOTE: ALL DEFERRED APPROVAL ITEMS SHALL FIRST BE SUBMITTED TO THE REGISTERED DESIGN PROFESSIONAL, THE ARCHITECT, WHO SHALL REVIEW THEM TO SEE IF THEY ARE FOUND TO BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. IF THEY ARE, THE ARCHITECT WILL ADD A NOTATION TO THE DEFERRED APPROVAL ITEM DOCUMENTS INDICATING THAT THEY HAVE BEEN REVIEWED AND FOUND TO BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. CONTRACTOR WILL SUBMIT THEM TO THE BUILDING OFFICIAL FOR PLAN REVIEW. THE DEFERRED APPROVAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DEFERRED APPROVAL ITEM DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL. PER CBC 107.3.4.2

CODE COMPLIANCE

THIS PROJECT SHALL COMPLY WITH:

- 2016 CALIFORNIA BUILDING CODE
- 2016 CALIFORNIA MECHANICAL CODE
- 2016 CALIFORNIA PLUMBING CODE
- 2016 CALIFORNIA ELECTRICAL CODE
- 2016 CALIFORNIA FIRE CODE
- 2016 CALIFORNIA ENERGY CODE
- 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE
- CITY OF OAKLAND ORDINANCES

THIS PROJECT SHALL COMPLY WITH:

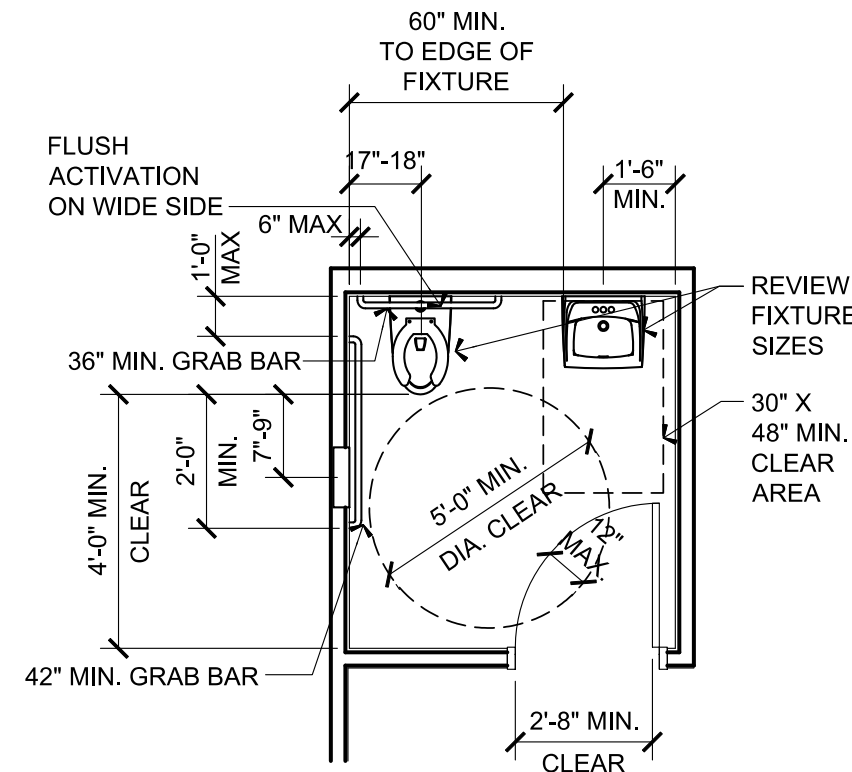
- 2016 CALIFORNIA BUILDING CODE
- 2016 CALIFORNIA MECHANICAL CODE
- 2016 CALIFORNIA PLUMBING CODE
- 2016 CALIFORNIA ELECTRICAL CODE
- 2016 CALIFORNIA FIRE CODE
- 2016 CALIFORNIA ENERGY CODE
- 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE
- CITY OF OAKLAND ORDINANCES

G1.1

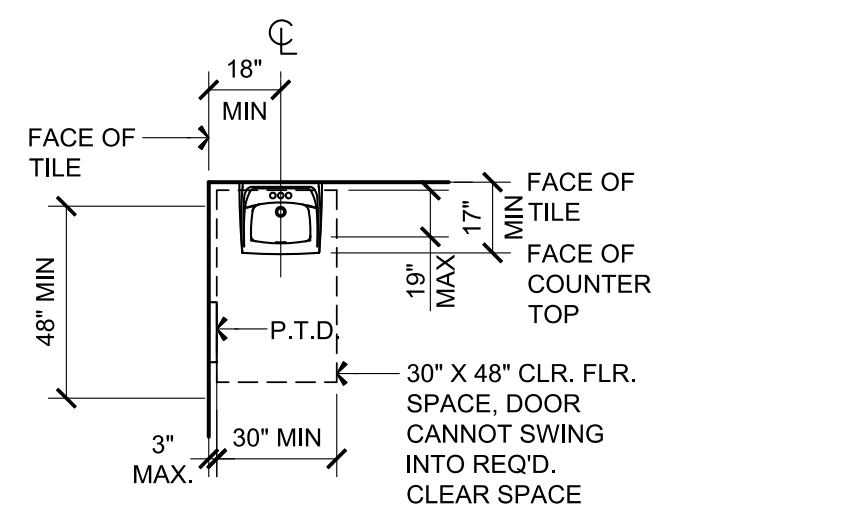
ABBREVIATIONS

&	AND	PB	PIPE BOLLARD
@	AT	PERIM	PERIMETER
AB	ANCHOR BOLT	PFB	PREFABRICATED
AC	ASPHALT CONCRETE	PL	PLATE/PROPERTY LINE
A/C	AIR CONDITIONER	PLAS LAM	PLASTIC LAMINATE
ACOUS	ACOUSTICAL	PLAS	PLASTIC/PLASTER
AD	AREA DRAIN	PLYWD	PLYWOOD
ADJ	ADJACENT/ADJUSTABLE	PR	PAIR
AFF	ABOVE FINISH FLOOR	PT	POINT
AGG	AGGREGATE	PTD	PAPER TOWEL DISPENSER
ALUM	ALUMINUM	PTD/R	PAPER TOWEL DISPENSER & RECEPTACLE
APP	APPLICATION		
APPROX	APPROXIMATE		
ARCH	ARCHITECTURAL		
ASPH	ASPHALT		
		R	RISER/RADIUS
BD	BOARD	RB	RUBBER BASE
BLDG	BUILDING	RD	ROOF DRAIN
BLK(G)	BLOCK(ING)	REFIG	REFRIGERATOR
BM	BEAM, BENCHMARK	REINF	REINFORCED
BOT	BOTTOM	REM	REMOVE
BRG	BEARING	REQD	REQUIRED
BUR	BUILT UP ROOF	REV	REVERSED
		RHMB	ROUND HEAD MACHINE BOLT
CAB'T	CABINET	RHWS	ROUND HEAD WOOD SCREW
CB	CATCH BASIN	RM	ROOM
CEM	CEMENT	RO	ROUGH OPENING
CER	CERAMIC	RWD	REDWOOD
C.F.M.	CUBIC FEET/MINUTE		
C.I.	CAST IRON	SC	SOLID CORE
C.J.	CONTROL JOINT	SCD	SEAT COVER DISPENSER
CL	CENTER LINE	SCHED	SCHEDULE
CLG	CEILING	SD	SOAP DISPENSER
CMU	CONCRETE MASONRY UNIT	SECT	SECTION
CTR	CENTER	SHT	SHEET
COL	COLUMN	SHTG	SHEATHING
CONC	CONCRETE	SIM	SIMILAR
CONN	CONNECTION	S.M.S.	SHEET METAL SCREW
CONST	CONSTRUCTION	SND	SANITARY NAPKIN DISPENSER
CONT	CONTINUOUS	SNR	SANITARY NAPKIN RECEPTACLE
CT	CERAMIC TILE	SQ	SQUARE
		SS	STAINLESS STEEL
Ø	DIAMETER	STD	STANDARD
DBH	DIAMETER AT BREAST HEIGHT	STL	STEEL
DBL	DOUBLE	STOR	STORAGE
DET	DETAIL	STRUCT	STRUCTURAL
DF	DRINKING FOUNTAIN	SUSP	SUSPENDED
DF	DOUGLAS FIR	SYM	SYMETRICAL
DIA	DIAMETER	SYS	SYSTEM
DIM	DIMENSION		
DN	DOWN	T	TREAD
DR	DOOR	TB	TACKBOARD
DS	DOWNSPOUT	TBR	TO BE REMOVED
DWG	DRAWING	T&G	TONGUE AND GROOVE
		TEL	TELEPHONE
(E)	EXISTING	TEMP.	TEMPERED GLAZING
EA	EACH	THK	THICKNESS
EB	EXPANSION BOLT	TO	TOP OF
E.J.	EXPANSION JOINT	TOB	TOP OF BLOCK
ELECT	ELECTRICAL	TOM	TOP OF MASONRY
ELEV	ELEVATION	TOP	TOP OF PLATE
EQ	EQUAL	TOS	TOP OF SLAB
EQUIP	EQUIPMENT	TOW	TOP OF WALL
EXH	EXHAUST	TPD	TOILET PAPER DISPENSER
EXIST	EXISTING	TS	TUBULAR STEEL
EXP	EXPANSION	TP	TYPICAL
EXTER.	EXTERIOR	UNO	UNLESS NOTED OTHERWISE
		UR	URINAL
FBGL	FIBERGLASS	VERT	VERTICAL
FE/FE	FIRE EXTINGUISHER/CABINET	VG	VERTICAL GRAIN
FD	FLOOR DRAIN	VT	VINYL TILE
FF	FINISH FLOOR	VWC	VINYL WALL COVERING
FHWS	FLAT HEAD WOOD SCREW		
FIN	FINISH	W/	WITH
FLR	FLOOR(ING)	WAIN	WAINSCOT
FCC	FACE OF CONCRETE	WB	WOOD BASE
FOF	FACE OF FINISH	WC	WATER CLOSET
FOM	FACE OF MASONRY	WD	WOOD
FOS	FACE OF STUD	WH	WATER HEATER
FRAMG	FRAMING	WDW	WINDOW
FTG	FOOTING	WP	WATERPROOF(ING)
FURN	FURNISHED	WWF	WELDED WIRE FABRIC
GA	GAUGE		
GALV	GALVANIZED		
GB	GRAB BAR		
G.I.	GALVANIZED IRON		
GLB	GLUE LAMINATED BEAM		
GSM	GALVANIZED SHEET METAL		
GYP	GYPSUM		
GYP BD	GYPSUM BOARD		
HB	HOSE BIB		
HC	HANDICAPPED		
HDR	HEADER		
HDWR	HARDWARE		
HM	HOLLOW METAL		
HORIZ	HORIZONTAL		
HT.	HEIGHT		
ID	INSIDE DIAMETER		
INSUL	INSULATION		
INTER	INTERIOR		
JAN	JANITOR		
JS	JANITOR SINK		
JT	JOINT		
K.D.	KILN DRIED		
LAM	LAMINATE		
LAV	LAVATORY		
LT	LIGHT		
MAS	MASONRY		
MAT	MATERIAL		
MAX	MAXIMUM		
M.B.	MACHINE BOLT		
MB	MEMBRANE		
MECH	MECHANICAL		
MFR	MANUFACTURER		
MIN	MINIMUM		
MISC	MISCELLANEOUS		
MTD	MOUNTED		
MTL	METAL		
MTP	METAL TOILET PARTITION		
(N)	NEW		
NAT	NATURAL		
N.I.C.	NOT IN CONTRACT		
NTS	NOT TO SCALE		
OV/	OVER		
OC	ON CENTER(S)		
OD	OUTSIDE DIAMETER		
OPG	OPENING		
OPP	OPPOSITE		

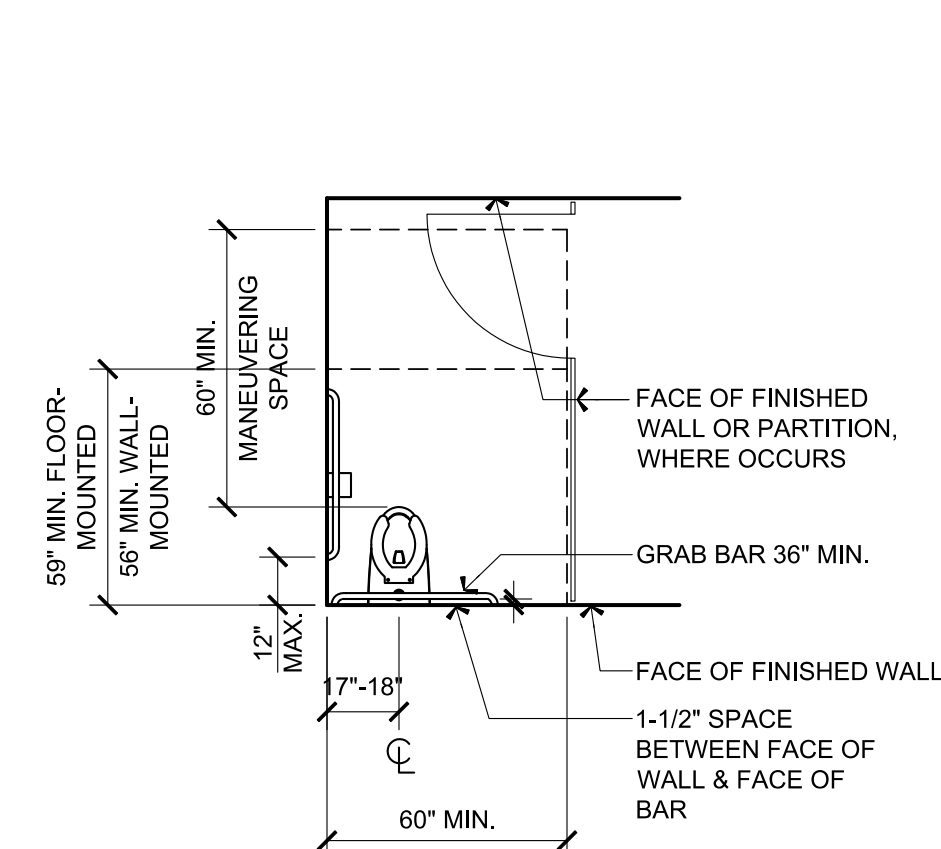
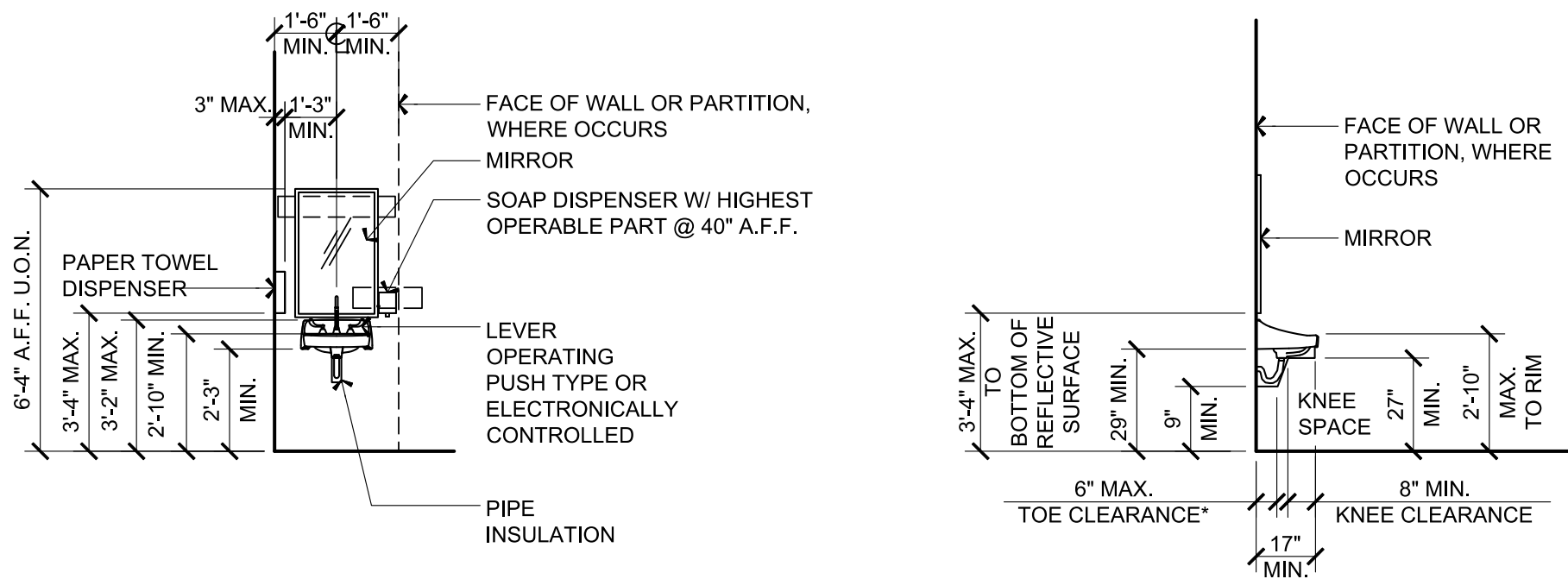
ACCESSIBLE FIXTURE & ACCESSORY MOUNTING HEIGHTS



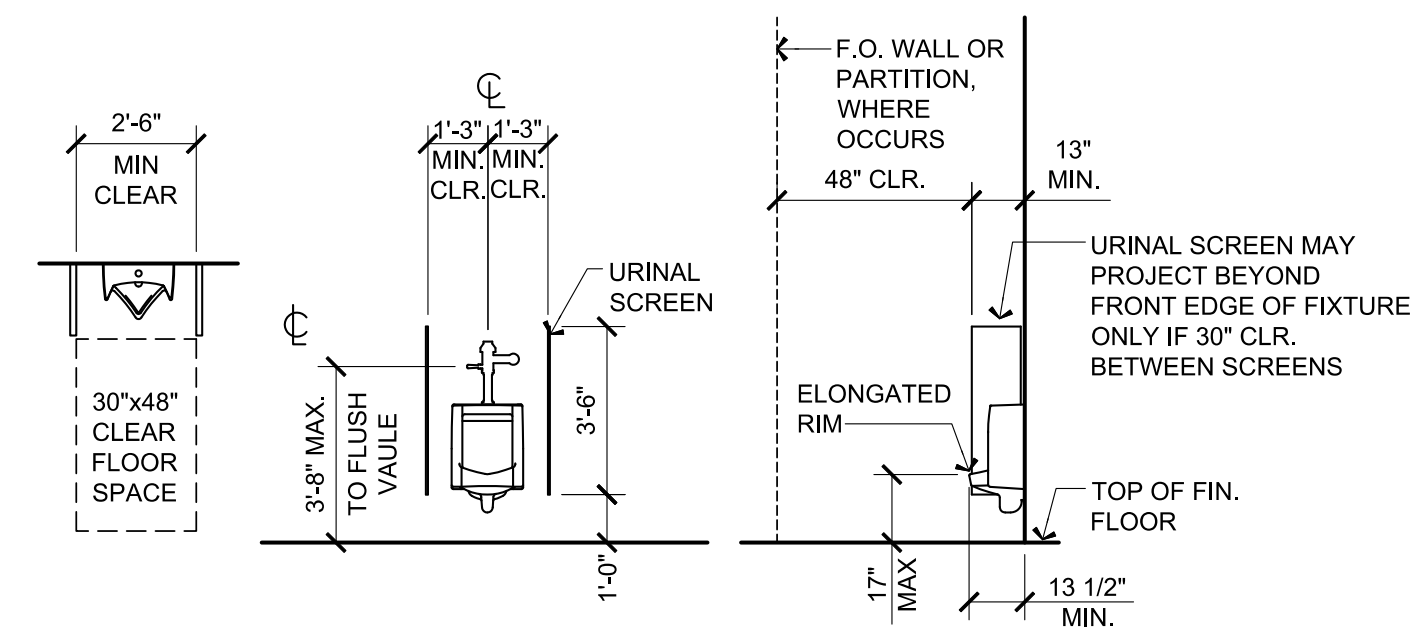
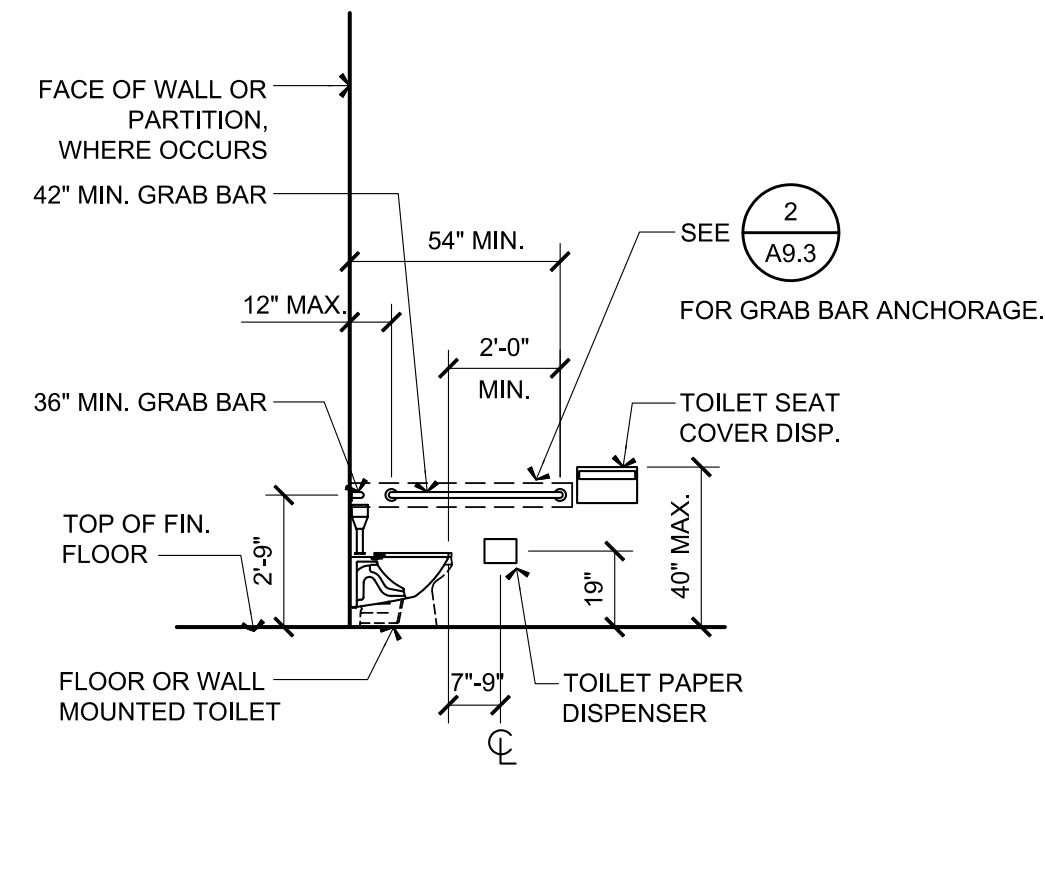
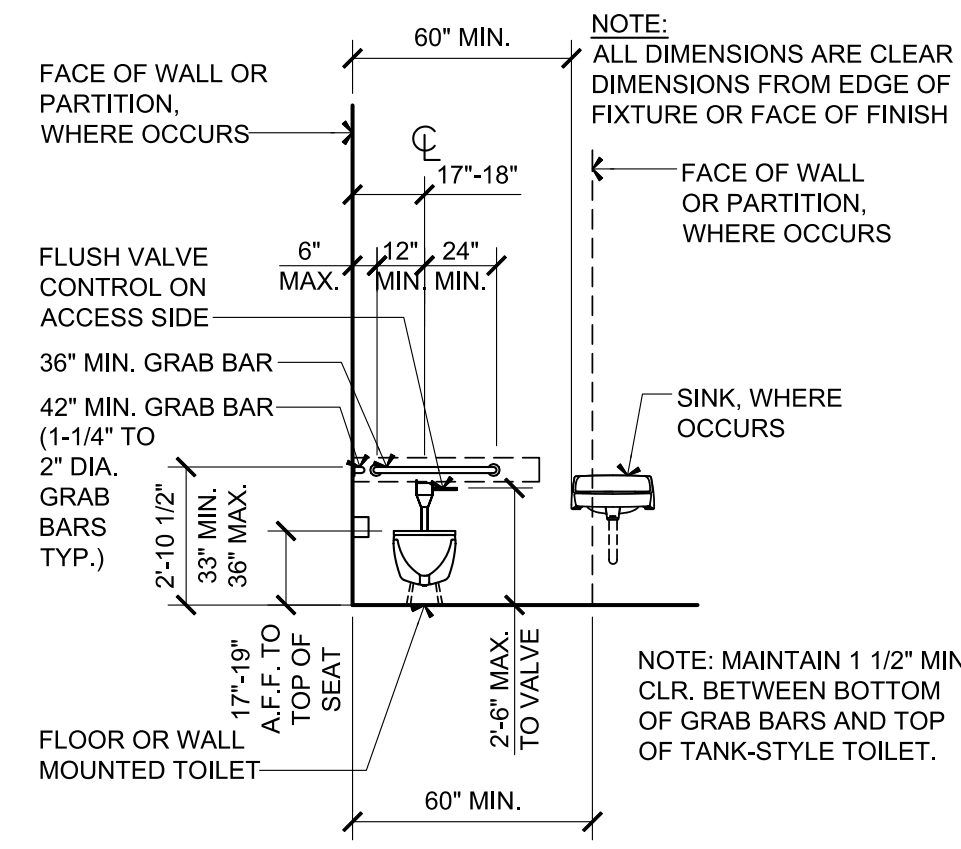
RESTROOM



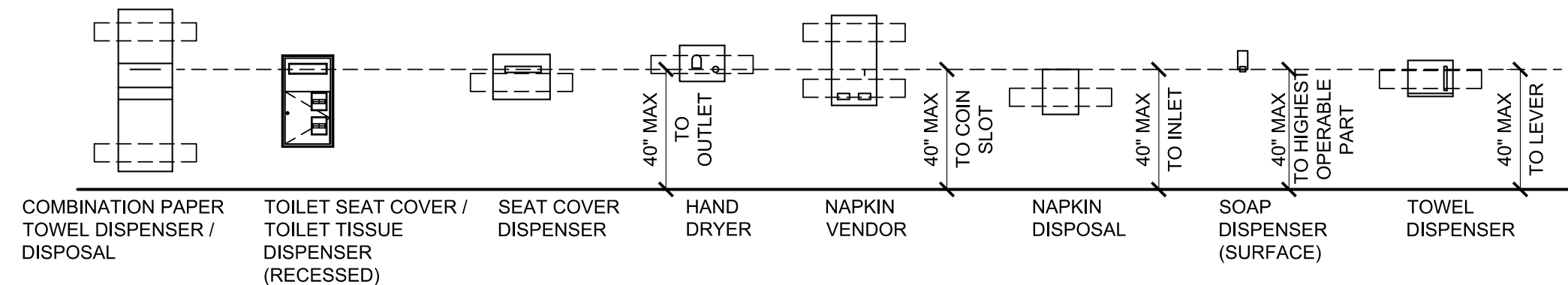
LAVATORY



WATER CLOSET



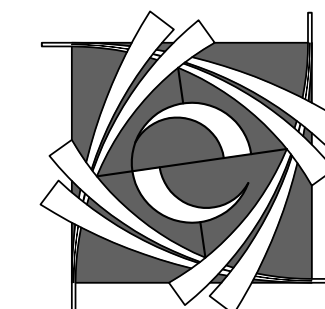
URINAL



DISPENSERS

RESTROOM NOTES

- OPERABLE PARTS AND CONTROLS FOR WATER CLOSETS, URINAL, AND LAVATORIES SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE NO GREATER THAN 5 POUNDS-FORCE. LEVER-OPERATED PUSH-TYPE AND ELECTRONICALLY CONTROLLED MECHANISMS ARE EXAMPLES OF ACCEPTABLE DESIGNS. (CBC 11B-309.4)
- HAND-OPERATED FLUSH CONTROLS SHALL BE LOCATED 44" MAXIMUM ABOVE THE FLOOR. (CBC 11B-604.6)
- HANDLES AND LATCHES ON ACCESSIBLE TOILET COMPARTMENT DOORS SHALL COMPLY WITH CBC SECTION 11B-309.4. OPERABLE PARTS OF SUCH HARDWARE SHALL BE 34 INCHES MINIMUM AND 44 INCHES MAXIMUM ABOVE THE FLOOR.



ELLENBERGER
ARCHITECTURE

420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-4373
ellenbergerarchitecture.com

CONSULTANT

DEDICATED ICE FACILITY

FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

ACCESSIBILITY REQUIREMENTS & ABBREVIATIONS

DRAWING STATUS

CONSTRUCTION DOCUMENTS

INITIAL PLAN REVIEW SUBMITTAL

REVISIONS

Symbol	Description	By	Date

Drawn By WDE

Date Drawn 8-27-2018

Scale 1/4" = 1'-0"

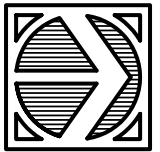
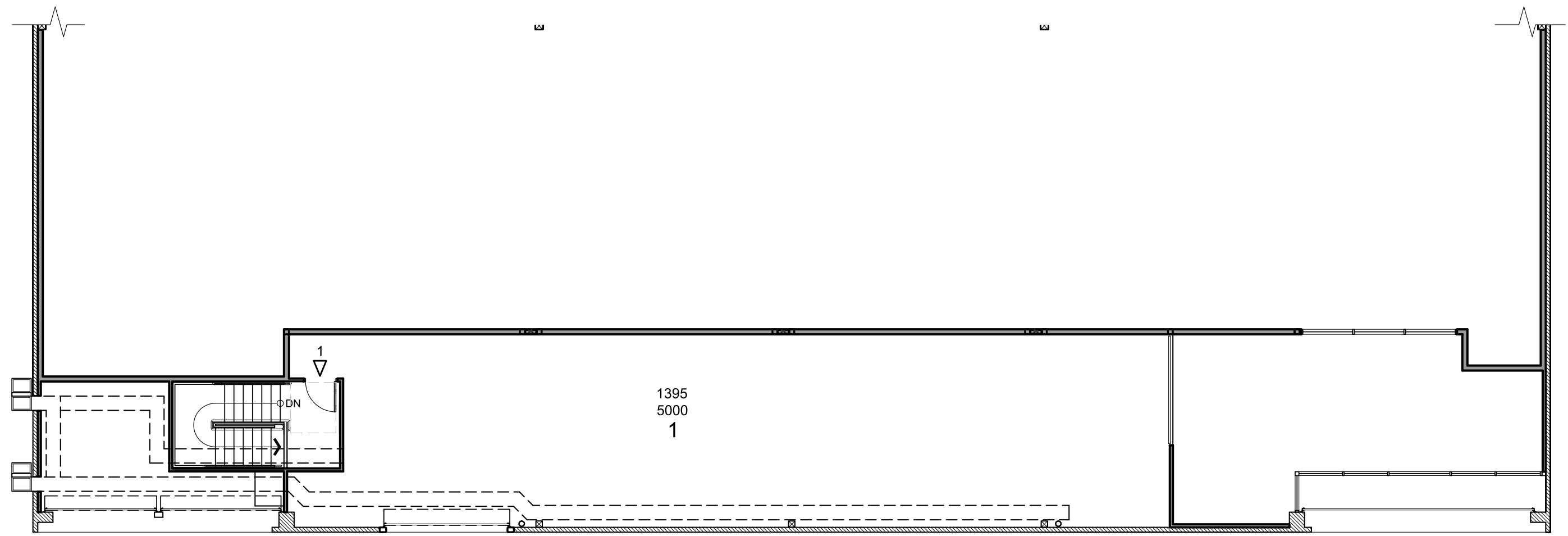
Job Number 17-3059



Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by, or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

SHEET NUMBER

G1.2



PROJECT
NORTH

SECOND FLOOR EXITING PLAN

SCALE: 3/32" = 1'-0"

EXITING PLAN LEGEND

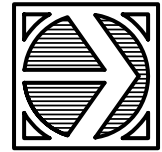
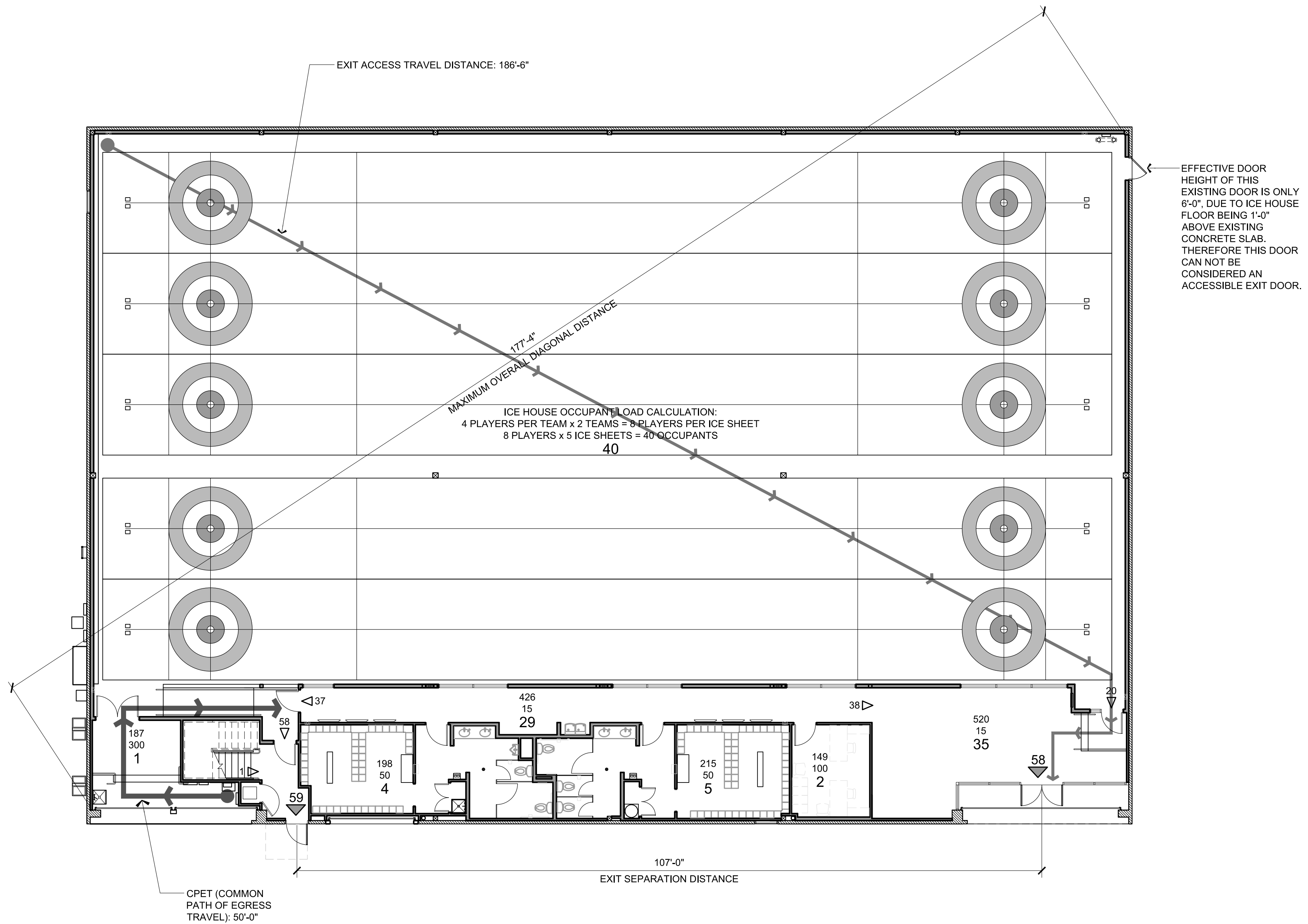
450 ← AREA OF ROOM, IN SQUARE FEET
15 ← OCCUPANT LOAD FACTOR
30 ← OCCUPANT LOAD FOR ROOM

EXITING REQUIREMENTS

TOTAL BUILDING OCCUPANT LOAD (SEE EXITING DIAGRAM BELOW), PER CBC TABLE 1004.1.2: 123

NUMBER OF EXITS REQUIRED, PER CBC TABLE 1021.3(1): 2
NUMBER OF EXITS PROVIDED: 2 OK

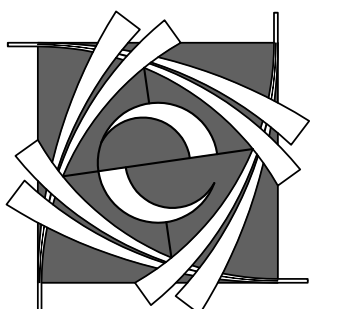
REQUIRED WIDTH OF EXITS, PER CBC 1005.3.2: $123 / 2 \times 0.2 = 12.3"$
MINIMUM WIDTH OF EXITS PROVIDED: 36" OK



PROJECT
NORTH

FIRST FLOOR EXITING PLAN

SCALE: 3/32" = 1'-0"



ELLENBERGER
ARCHITECTURE

420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-6373
ellenbergerarchitecture.com

CONSULTANT

DEDICATED
ICE FACILITY
FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

EXITING PLAN

DRAWING STATUS

CONSTRUCTION
DOCUMENTS

INITIAL PLAN REVIEW SUBMITTAL

REVISIONS

Symbol	Description	By	Date
--------	-------------	----	------

--	--	--	--

--	--	--	--

Drawn By	WDE
----------	-----

Date Drawn	8-27-2018
------------	-----------

Scale	AS NOTED
-------	----------

Job Number	17-3059
------------	---------



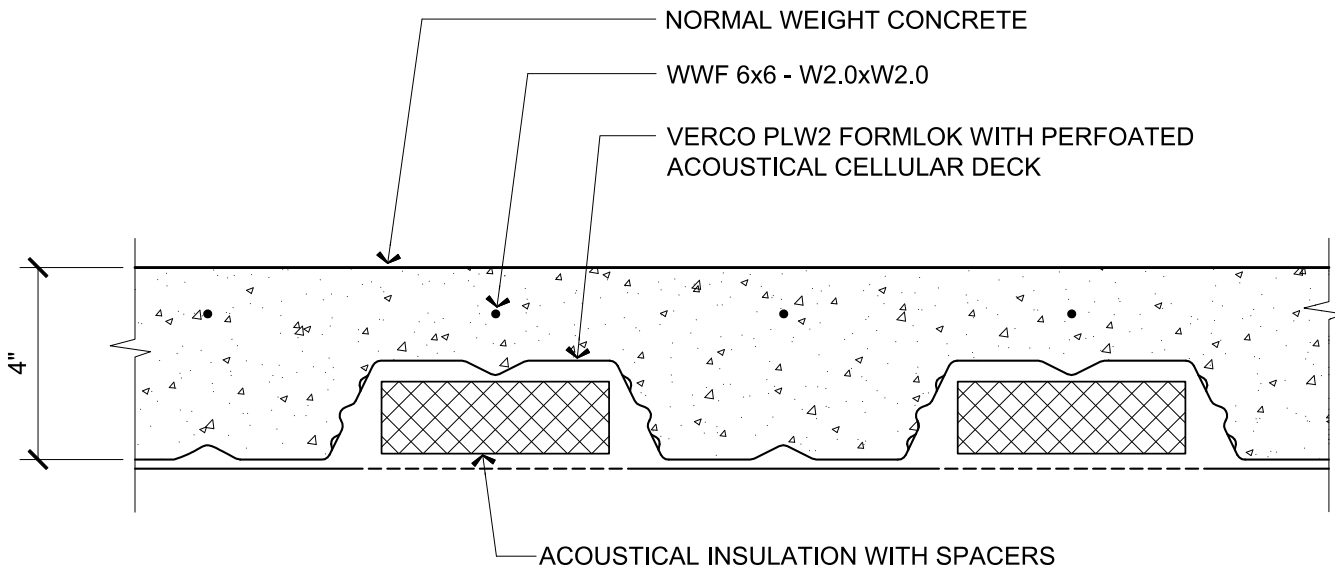
Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by, or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

SHEET NUMBER

G1.3

CONSTRUCTION ASSEMBLY SCHEDULE

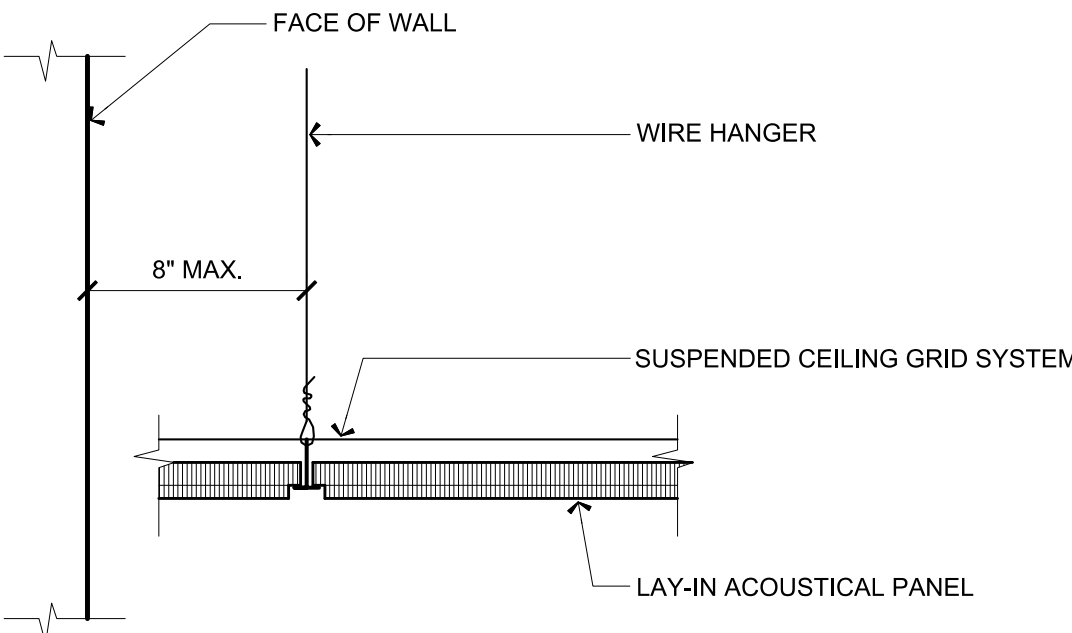
FLOOR



F	COMPOSITE METAL DECK
2	NON-RATED

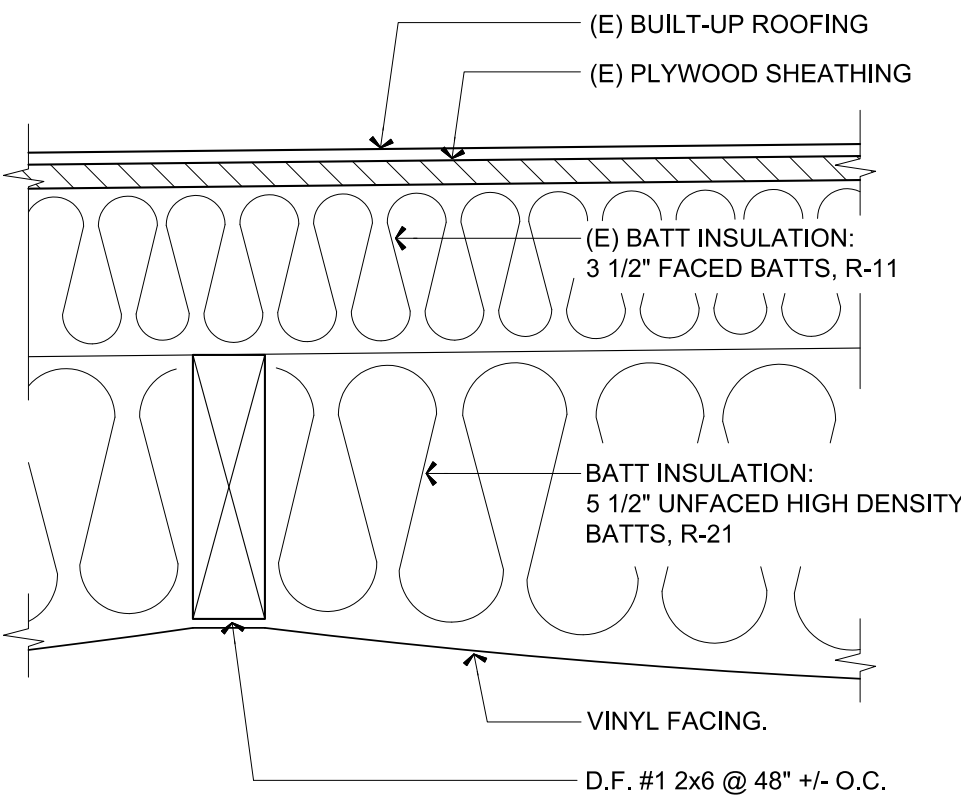
SCALE: 3" = 1'-0"

CEILING



C	SUSPENDED ACOUSTICAL CEILING
1	NON-RATED SEE DETAILS AND NOTES ON SHEET A9.2

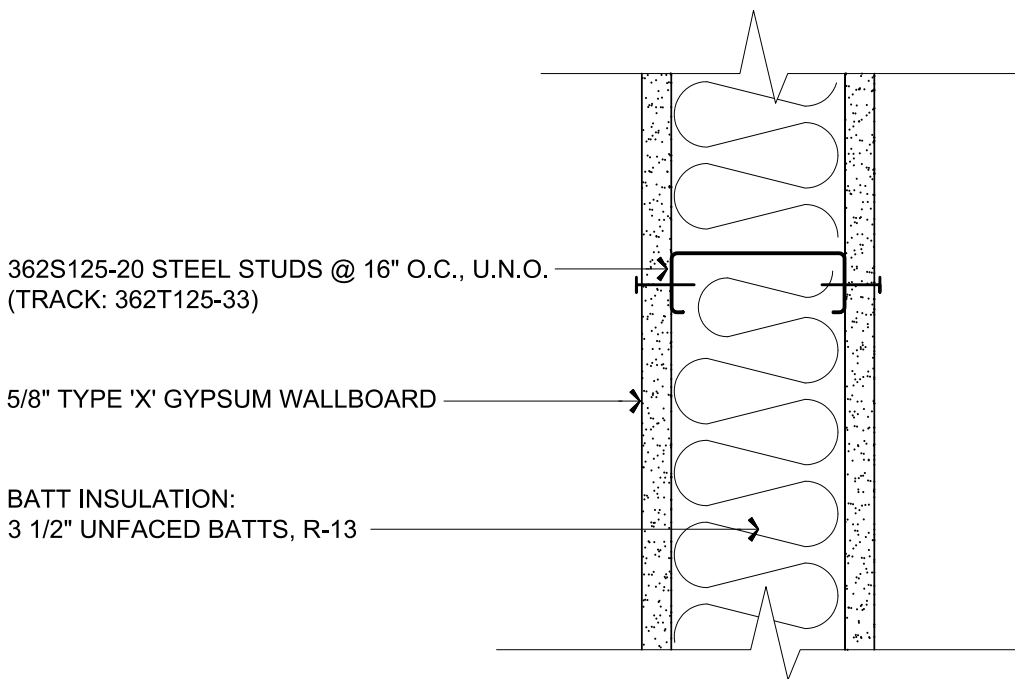
SCALE: 3" = 1'-0"



C	VINYL FACING OVER BATT INSULATION AT ROOF
2	NON-RATED

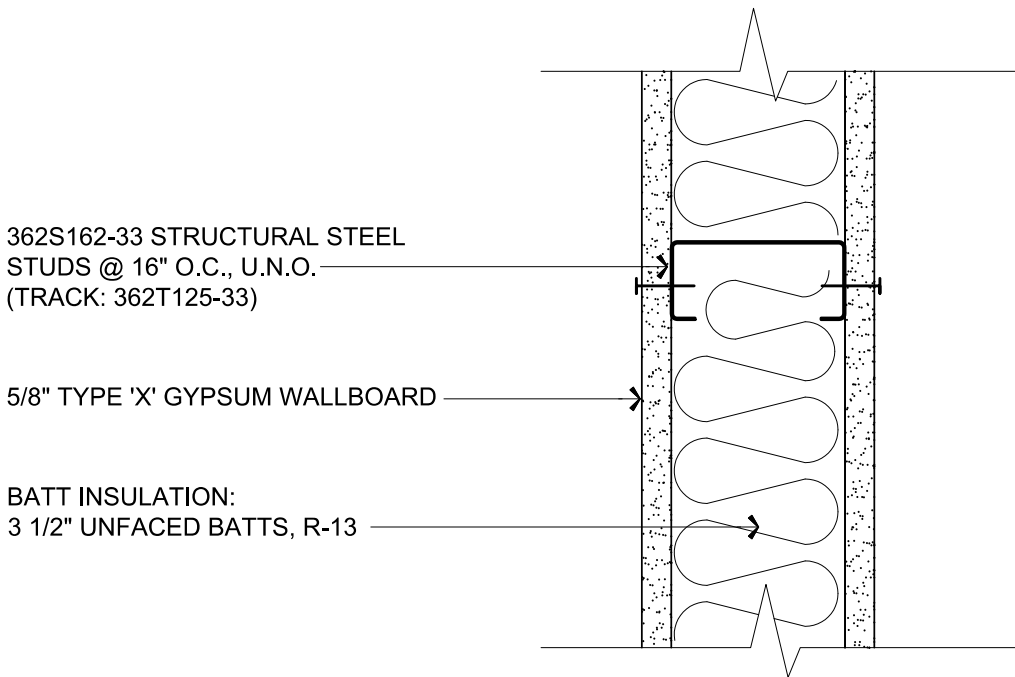
SCALE: 3" = 1'-0"

WALL



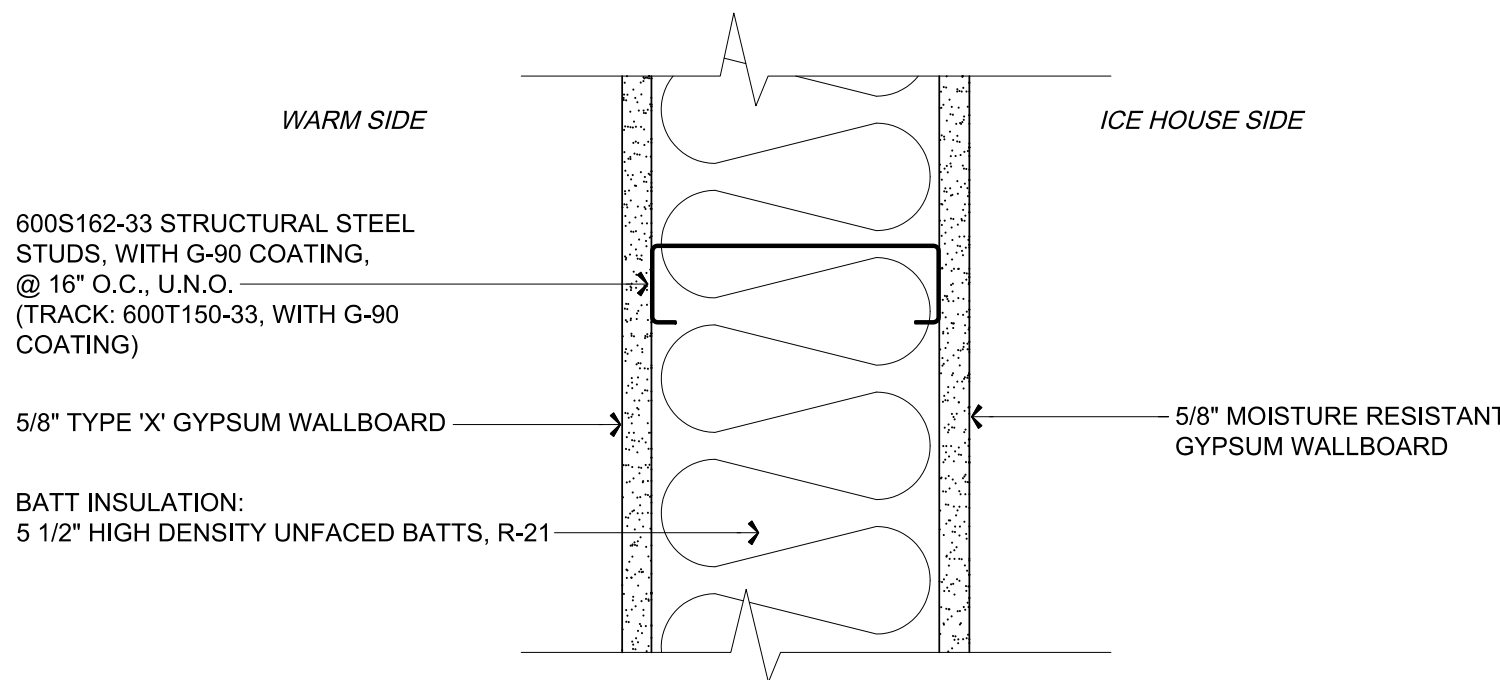
W	3 5/8" NON-STRUCTURAL STEEL STUD, INTERIOR WALL
1	NON-RATED

SCALE: 3" = 1'-0"



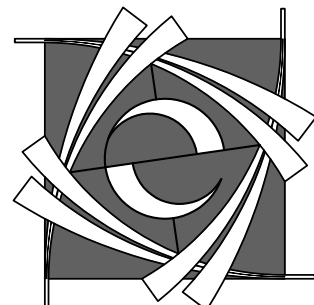
W	3 5/8" STRUCTURAL STEEL STUD, INTERIOR WALL
2	NON-RATED

SCALE: 3" = 1'-0"



W	6" STRUCTURAL STEEL STUD, INTERIOR WALL AT ICE HOUSE
3	NON-RATED

SCALE: 3" = 1'-0"



ELLENBERGER
ARCHITECTURE

420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-4373
ellenbergerarchitecture.com

CONSULTANT

DEDICATED
ICE FACILITY
FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

ASSEMBLY
SCHEDULE

DRAWING STATUS

CONSTRUCTION
DOCUMENTS

INITIAL PLAN REVIEW SUBMITTAL

REVISIONS

Symbol	Description	By	Date

Drawn By	WDE
Date Drawn	8-27-2018
Scale	AS NOTED
Job Number	17-3059



Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by, or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

SHEET NUMBER

G1.4

RECYCLING & DIVERSION OF DEBRIS REQUIREMENTS

15.34.010 - Title.

The provisions of Section 15.34.010 through Section 15.34.090 inclusive, shall be known as the City of Oakland "Construction and demolition debris collection, transportation, waste reduction and recycling requirements."

15.34.020 - Purpose and intent.

The purpose of these provisions is to prescribe requirements designed to meet and further the goals of the California Integrated Waste Management Act of 1989 Assembly Bill 939 and the Alameda County Waste Reduction and Recycling Act of 1990 (Measure D). The intent of these provisions is to divert at a minimum 50 percent of C&D debris from landfills; process and return the materials into the economic mainstream thereby conserving natural resources; and stimulate markets for recycled and salvaged materials. The City Administrator or his/her designee is authorized to develop guidelines to implement the requirements of this chapter, which may be amended from time to time.

15.34.030 - Definitions.

For the purpose of this Chapter 15.34, the following definitions shall apply:

"Addition" means an extension or increase in floor area or height of a building or structure (as adopted in Section 15.04.005).

"Affected project" means a project that requires a waste reduction and recycling plan ("WRRP") because it meets one or more of the following criteria:

1. It is new construction;
2. It is nonresidential or apartment house demolition;
3. It is a nonresidential or apartment house addition or alteration that has a construction valuation greater than or equal to \$50,000.00.

Affected projects exclude projects required to divert C&D debris under the 1997 requirements of the Modifications to the Standard Specifications for Public Works Construction (Ordinance No. 12049 C.M.S.).

"Alteration" means any change, addition or modification in construction or occupancy (as adopted in Section 15.04.005).

"Apartment house" means any building or portion thereof that contains three or more dwelling units and, for the purpose of this chapter, includes residential condominiums (as adopted in Section 15.04.005).

"Appeal" means the process outlined in Section 15.34.090.

"Applicant" means any individual, firm, limited liability company, association, partnership, political subdivision, government agency, municipality, industry, public or private corporation, or any other entity that undertakes any construction, demolition, addition, or alteration project within the City.

"Building official" means the officer or other designated authority charged with the administration and enforcement of the California Building Code ("CBC") and the City's amendments to the CBC (as adopted in Section 15.04.005).

"Construction" means the manner or method of building (as adopted in Section 15.04.005).

"Construction and demolition debris," "C&D debris," or "construction debris" means materials resulting from construction, remodeling, repair or demolition operations on any house, residential property, commercial building, pavement or other structure for which the City requires a building or demolition permit, or from a non-permitted municipal project. Construction and demolition debris includes but is not limited to rocks, soils, tree remains and other plant debris which results from land clearing or land development operations in preparation for construction, C&D debris may include materials that have been source separated.

"Demolition" means the deconstructing, destroying, razing, tearing down, or wrecking of any facility including its foundation, covered by this chapter. As used herein, the word "demolition" shall include any partial demolition and any interior demolition affecting more than ten percent of the replacement value of the structure as determined by the Building Official. Demolition work includes: (1) proper handling of materials pursuant to applicable regulations and approved plans, if any, (2) termination of utilities serving the premises including permits and final inspections and approvals, (3) removal of driveways and repair of public sidewalks, as required, and (4) site cleanup and restoration including grading, landscaping, and fencing as required.

"Divert," "diverted," or "diversion" means to use C&D debris for any purpose other than disposal in a landfill, incineration facility, or alternative daily cover. Methods to divert materials from landfills include reuse, salvage, and recycling.

"Diversion attainment" means at least 50 percent by weight of the total C&D debris is diverted on an affected project.

"Fixed body vehicle" means any wheeled motor vehicle that does not rely on a roll-off box or other detachable container to collect, contain and transport material.

"Hearing Officer" means the City staff designated by the City Administrator to whom appeals can be made under this chapter.

"Non-affected projects" means projects that do not require a WRRP. Applicants for non-affected projects shall be encouraged to divert at least 50 percent of all project-related C&D debris.

"Non-permitted municipal projects" means construction and/or demolition projects on or of City-owned property, managed by City employees, which are not required to obtain a building or demolition permit.

"Recycle" or "recycling" means the process of collecting, sorting, cleansing, treating, and reconstituting materials for the purpose of using the altered form in the manufacture of a new product. Recycling does not include burning, incinerating, or thermally destroying C&D debris.

"Reuse" means recovering material for repeated use in the same form. This includes materials that are reused at the same location as they are generated.

"Salvage" means the recovering of C&D debris from a building or demolition site for the purpose of recycling, reuse, or proper storage for future recycling or reuse.

"Source separated" means materials that have been segregated from C&D debris, for the purpose of diversion, by or for the generator thereof at the service address at which the materials were generated.

"Summary report" means the report to be submitted to the Building Official at the conclusion of the affected project and prior to the final inspection, issuance of a temporary certificate of occupancy, or certificate of occupancy.

"Targeted materials" means the C&D debris listed on the WRRP form that could potentially be reused, recycled, or salvaged.

"Unpermitted materials" means wastes or other materials that class III disposal sites may not receive under their permits.

"WRRP" means waste reduction and recycling plan.

"WRRP form" means a form, provided by the City for the purpose of compliance with this chapter that must be submitted by the applicant for any affected project. "WRR Review Official" means the Waste Reduction and Recycling Review Official who is the City staff designated and authorized by the City Administrator and is responsible for implementing this chapter.

15.34.040 - Collection and transportation of C&D debris.

- A. Pursuant to the authority provided by Article X, Section 1000 of the Oakland City Charter, any franchise for the collection and transportation of C&D debris within the City may be granted by the City Administrator on such terms and conditions as are determined by the City Council to be in the best interests of the City. Such terms and conditions shall be evidenced by a written non-exclusive franchise agreement, approved in form by the City Council, and executed by the City Administrator and franchisee(s).

- B. It is unlawful to collect, transport or dispose of construction and demolition debris anywhere in the City except as provided for in this chapter. It is unlawful for any person other than persons in possession of a non-exclusive franchise agreement granted by the City, or those persons employed by such franchised collector(s) to collect or transport any construction and demolition debris within the City except:

1. Donated Materials. Construction and demolition debris generated in the City that are donated by the generator.
2. Materials Hauled by Owner or its Contractor. Construction and demolition debris that are removed from any service address and are transported to a processing or disposal site by:

- (a) The owner of such service address;
- (b) The full-time employee of the owner that uses the owner's equipment to transport materials; or
- (c) A construction contractor performing construction work at the service address, whose collection and transport of the C&D debris is incidental to the service being performed, provided that such contractor uses a fixed-body vehicle for the collection and transportation of the C&D debris, and such contractor collects and transports the materials at no additional or separate fee using contractor's employees and contractor's equipment. For purposes of this section, except as set forth below, the term "incidental to the service being performed" shall mean that the material requiring collection and transportation is generated by the activity of the contractor performing the hauling.

- I. For example, a construction contractor who remodels a kitchen can collect and transport those materials related to such construction in a fixed body vehicle for no additional fee without obtaining a non-exclusive C&D debris franchise agreement granted by the City.

- II. As an additional example, a contractor whose responsibility with relation to the project is to clean up a site and transport C&D debris generated by other contractors or the owner/occupant must obtain a non-exclusive C&D debris franchise agreement from the City, and the collection and transport of such C&D debris from the site by such contractor is not considered as "incidental to the service being performed".

- III. Nothing in this section shall authorize a demolition contractor performing demolition services in relation to a City-approved building or demolition permit to collect and transport C&D debris without obtaining an executed non-exclusive C&D debris franchise agreement granted by the City.

- (d) Projects on City Property. C&D debris removed from a project site by City employees, provided that the C&D debris being removed is generated from a City-owned property.

3. Effective until December 31, 2015, those persons who have submitted a complete application for a non-exclusive C&D debris franchise agreement to the City may collect or transport construction and demolition debris within the City provided they do so in accordance with the terms and conditions of the City's non-exclusive construction and demolition debris franchise agreement. Such compliance shall include the fulfillment of the obligations of the non-exclusive franchise agreements and this chapter.

- C. Construction and demolition debris collected under this chapter shall only be transported to and processed and/or disposed of at facilities permitted to accept, process and/or dispose of construction and demolition debris under applicable law.

- D. The following materials shall not be collected under this chapter unless a collector is otherwise authorized to do so by applicable law: hazardous waste (as defined by Section 8.28.010), medical waste (as defined by Section 8.28.010), unacceptable waste (as defined by Section 8.28.010), batteries, human waste and other potentially infectious material, and liquid wastes.

- E. Nothing in this Section 15.34.040 shall prevent other persons from collecting, transporting, processing and/or marketing materials that have been source separated by material type.

15.34.045 - City fees.

The City may collect from non-exclusive C&D debris franchisees monies to recover the cost of administering the C&D debris program and in consideration of award of a franchise agreement.

15.34.050 - Submission of a waste reduction and recycling plan (WRRP).

- A. WRRP Forms. For affected projects, prior to issuance of a building or demolition permit, the applicant shall complete and submit a WRRP form to the City's Building Official. The completed WRRP form shall delineate all of the following:

1. The estimated volume or weight of the affected project C&D debris to be generated, listed by each type of material; and
2. Volume or weight of the C&D debris to be reused, salvaged or recycled listed by each type of material; and
3. The estimated volume or weight of C&D debris that will be landfilled listed by each type of material.

15.34.060 - Review of WRRP.

- A. Notwithstanding any other provision of this chapter, no building or demolition permit shall be issued by the City for any affected project prior to approval of the WRRP by the WRR Review Official. Approval shall not be required if an emergency demolition is required to protect public health or safety pursuant to Section 15.36.080.

- B. Using the established guidelines, the WRR Review Official shall approve a WRRP only if:

1. The WRRP provides all the information set forth in Section 15.34.050 of this chapter; and
2. The WRRP indicates that at least 50 percent by weight of all C&D debris generated by the project will be diverted; or
3. The applicant demonstrates good cause as to why at least 50 percent by weight of all C&D debris generated by the project will not be diverted. If the WRR Review Official fails to approve the WRRP, he/she shall explain in writing the basis for denial.

15.34.070 - Submission of a completed summary report.

- A. Documentation. At the conclusion of each affected project and prior to the final inspection, issuance of temporary certificate of occupancy, or certificate of occupancy by the City, the applicant shall submit to the Building Official a summary report which contains the following documentation:

1. The actual volume or weight of C&D debris that was diverted by type of material, diversion method, and the actual volume or weight of C&D debris that was not diverted;
 2. Any additional information the applicant believes is relevant to determining its efforts to comply in good faith with this Chapter 15.34;
 3. Any barriers encountered that prohibited diversion of C&D debris; and
 4. Any recommended actions that would further the efforts to recycle C&D debris.
- B. Determination of Diversion. The WRR Review Official shall review the information submitted under Section 15.34.050(A) to determine whether the applicant has diverted 50 percent by weight of the C&D debris based on established guidelines, as follows:
1. Diversion Attainment. The applicant shall be found to have achieved a diversion attainment if at least 50 percent by weight of the C&D debris generated by the affected project is diverted, and appropriate documentation as outlined in Section 15.34.070 is provided.
 2. Good Faith Effort. When the WRR Review Official determines that the affected project has not achieved diversion attainment, he/she shall determine whether the applicant has made a good faith effort to comply with this Chapter 15.34. In making this determination, the WRR Review Official may consider information submitted by the applicant, the availability of markets for the C&D debris that was not diverted, the size and type of project, the documented efforts of the applicant to divert C&D debris, and barriers encountered.
 3. Nonattainment. The WRR Review Official shall determine the affected project to have a nonattainment status if he/she determines that the applicant has not made a good faith effort to achieve diversion attainment or if the applicant fails to submit the documentation required by Section 15.34.070. All nonattainment information including applicant name, type and size of project, and any reason for nonattainment shall be documented by the WRR Review Official.

15.34.080 - City's rights to monitor and inspect.

- A. Audit. City's WRR Review Official may inspect and monitor all affected projects to determine levels of actual diversion activities and validate the information provided in the WRRP and summary report.

- B. Supporting Documentation. Applicant shall retain the receipts or weight tickets for the quantities of materials reused, salvaged, recycled and landfilled as indicated in the summary report form for one year after the final inspection, and issuance of temporary certificate of occupancy or certificate of occupancy.

- C. Materials Targeted for Diversion. The City Administrator or his/her designee may change the C&D debris materials targeted for diversion from time to time, based on local markets and conditions to further the intent of this chapter.

15.34.090 - Appeals.

An appeal of the WRR Official's decision not to approve the WRRP shall be made to the Hearing Officer according to the following appeal procedures:

- A. Within ten calendar days after the date of a written decision by the WRR Review Official to deny the WRRP, an appeal in writing from said decision must be filed with the WRR Review Official by the applicant or any other interested party on a form prescribed by the WRR Review Official. The appeal shall state specifically the error, abuse of discretion, or claim where the decision of the WRR Review Official was not supported by substantial evidence in the record.
- B. Upon receipt of the appeal, the Hearing Officer shall set the date for consideration thereof and, not less than ten days prior thereto, give a written notice to the applicant and/or appellant.
- C. In deciding the appeal, the Hearing Officer shall consider the purpose and intent, as well as the letter, of the pertinent provisions of this Chapter 15.34, and shall affirm, modify, or reverse the written decision of the WRR Review Official.
- D. The written decision of the Hearing Officer shall be final.
- E. Appeal fees shall be in accordance with the City's master fee schedule.

15.34.100 - Violations, enforcement and remedies.

- A. Penalty for Violation. Any person convicted of an infraction under the provision of this chapter shall be punished upon a first conviction by a fine of not more than \$100.00 and, for a second conviction within a period of one year, by a fine of not more than \$200.00 and, for a third or any subsequent conviction within a one-year period, by a fine of not more than \$500.00. Any violation beyond the third conviction within a one-year period may be charged by the City Attorney or the District Attorney as a misdemeanor and the penalty for conviction of the same shall be punishable by a fine of not more than \$1,000.00 or by imprisonment in the county jail for a period of not more than six months or by both.

- B. Continuing Violation. Unless otherwise provided, a person shall be deemed guilty of a separate offense for each and every day during any portion of which a violation of this chapter is committed, continued or permitted by the person and shall be punishable accordingly as herein provided.

- C. Violations Deemed a Public Nuisance. In addition to the penalties herein provided, any condition caused or permitted to exist in violation of any of the provisions of this chapter is a threat to the public health, safety and welfare, and is declared and deemed a nuisance.

- D. Civil Actions. In addition to any other remedies provided in this chapter, any violation of this chapter may be enforced by civil action brought by the City. In any such action, the City may seek, and the court shall grant, as appropriate, any or all of the following remedies:

1. A temporary and/or permanent injunction;
 2. Assessment of the violator for the costs of any investigation, inspection, or monitoring survey which led to the establishment of the violation, and for the reasonable costs of preparing and bringing legal action under this subsection (including attorneys' fees);
 3. Costs incurred in removing, correcting, or terminating the adverse effects resulting from the violation (including attorneys' fees).
- E. Authority to Issue Citations. Authorized enforcement officials or employees may issue a citation and notice to appear in the manner prescribed by Chapter 5c of Title 3, Part 2 of the Penal Code, including Section 853.6 (or as the same may hereafter be amended). It is the intent of the City Council that the immunities prescribed in Section 836.5 of the Penal Code be applicable to public officers or employees or employees acting in the course and scope of employment pursuant to this chapter.
- F. Administrative Enforcement Option. Chapters 1.08, 1.12 and 1.16 of this Code, which provide for alternative code enforcement mechanisms, including but not limited to a civil penalty program and an administrative citation program, are incorporated by reference as if fully set forth herein.
- G. Remedies Not Exclusive. Remedies under this chapter are in addition to and do not supersede or limit any and all other remedies, civil or criminal. The remedies provided for herein shall be cumulative and not exclusive.

GREEN BUILDING CODE REQUIREMENTS

Construction Waste Management

Contractor is to comply with the City of Oakland's Construction and Demolition Debris Waste Reduction and Recycling Ordinance

Recycling by Occupants

Provide adequate space and equal access for storage, collection and loading of compostable, recyclable and landfill materials.

Adhesives, sealants, and caulks

Comply with VOC limits in SCAQMD Rule 1168 VOC limits and California Code of Regulations Title 17 for aerosol adhesives. (CalGreen 5.504.4.1)

Paints and coatings

Comply with VOC limits in the Air Resources Board Architectural Coatings Suggested Control Measure and California Code of Regulations Title 17 for aerosol paints. (CalGreen 5.504.4.3.1)

Carpet

All carpet must meet one of the following:

1. Carpet and Rug Institute Green Label Plus Program,
 2. California Department of Public Health Standard Practice for the testing of VOCs (Specification 01350),
 3. NSF/ANSI 140 at the Gold level,
 4. Scientific Certifications Systems Sustainable Choice, OR
 5. California Collaborative for High Performance Schools EQ2.2 and listed in the CHPS High Performance Product Database
- AND carpet cushion must meet Carpet and Rug Institute Green Label,
- AND indoor carpet adhesive & carpet pad adhesive must not exceed 50 g/L VOC content.

Composite wood

Meet CARB Air Toxics Control Measure for Composite Wood including meeting the emission limits in CalGreen Table 5.504.4.5.

Resilient flooring systems

For 80% of floor area receiving resilient flooring, install resilient flooring complying with:

1. Certified under the Resilient Floor Covering Institute (RFCI) FloorScore program,
2. Compliant with the VOC-emission limits and testing requirements of California Department of Public Health 2010 Standard Method for the Testing and Evaluation Chambers v.1.1,
3. Compliant with the Collaborative for High Performance Schools (CHPS) EQ2.2 and listed in the CHPS High Performance Product Database, OR
4. Certified under the Greenguard Children & Schools Program to comply with California Department of Public Health criteria.(CalGreen 5.504.4.4 and 5.504.4.6)

Temporary Ventilation

If the HVAC system is used during construction, use return air filters with a MERV of 8, based on ASHRAE 52.2-1999, or an average efficiency of 30% based on ASHRAE 52.1-1992. Replace all filters immediately prior to occupancy. Applies to additions or alterations. (CalGreen 5.504.1)

Testing and Adjusting:

1. Develop and implement a plan of procedures for testing and adjusting new systems, including (as applicable): HVAC; indoor and outdoor lighting and controls; water heating; renewable energy; landscape irrigation; and water reuse systems.
2. Balance new HVAC systems before operation for normal use.
3. Provide the Owner or representative with a final report of testing.
4. Provide the building representative with detailed operating and maintenance instructions and copies of all guarantees/warranties for each system. (CalGreen 5.410.4 through 5.410.4.5.1)

Air Filtration

Provide at least MERV-8 filters 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. (CalGreen 5.504.5.3 through 5.504.5.3.1)

Indoor Water Efficiency

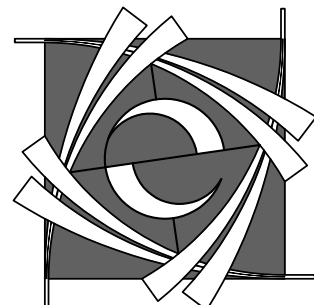
Install compliant fixtures. Replace all noncompliant fixtures, including existing fixtures, in project area. Fix leaks.

Existing Noncompliant Plumbing Fixtures

All fixtures that are not compliant with the City of Brisbane Indoor Water Conservation Regulations that serve or are located within the project area must be replaced with fixtures or fittings meeting the maximum flow rates and standards referenced above.

Noncompliant plumbing fixtures include:

- Any toilet manufactured for use more than 1.6 gallons of water per flush.
- Any urinal manufactured for use more than 1 gallon of water per flush.
- Any showerhead manufactured to have a flow capacity of more than 2.5 gallons of water per minute.
- Any interior faucet that emits more than 2.2 gallons of water per minute.



ELLENBERGER
ARCHITECTURE

420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-4373
ellenbergerarchitecture.com

CONSULTANT

DEDICATED
ICE FACILITY
FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

GREEN BUILDING &
RECYCLING
REQUIREMENTS

DRAWING STATUS

CONSTRUCTION
DOCUMENTS

INITIAL PLAN REVIEW SUBMITTAL

REVISIONS

Symbol	Description	By	Date
--------	-------------	----	------

_____	_____	_____	_____
-------	-------	-------	-------

_____	_____	_____	_____
-------	-------	-------	-------

_____	_____	_____	_____
-------	-------	-------	-------

_____	_____	_____	_____
-------	-------	-------	-------

Drawn By	WDE
----------	-----

Date Drawn	8-27-2018
------------	-----------

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

Job Number	17-3059
------------	---------



Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by, or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

SHEET NUMBER

G1.5

SITE PLAN

CONCRETE NOTES

1.	AT TENANT SPACE ENTRANCE DOORS, CONTRACTOR IS TO VERIFY THAT (E) DOOR THRESHOLDS MEET THE FOLLOWING REQUIREMENTS: FLOOR OR LANDING SHALL NOT BE MORE THAN 1/2" LOWER THAN THE THRESHOLD OF THE DOORWAY PER CBC 11B-303.3. CHANGE IN LEVEL BETWEEN 1/4" AND 1/2" SHALL BE BEVELED WITH A SLOPE NOT GREATER THAN 1 UNITS VERTICAL TO 2 UNITS HORIZONTAL.
----	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

SITE PLAN EXISTING CONDITIONS KEY NOTES

- 1 (E) BUILDING
- 2 (E) ROOF OVERHANG
- 3 (E) PUBLIC SIDEWALK
- 4 (E) ASPHALT CONCRETE AREA
- 5 (E) PROPERTY LINE, TYP.
- 6 (E) PG&E ELECTRICAL TRANSFORMER
- 7 (E) STREET LIGHT POLE FIXTURE
- 8 (E) CONCRETE LANDING
- 9 (E) LANDSCAPE PLANTER, INDICATED BY DOTTED GREYS/SCALE HATCH PATTERN, TYP.
- 10 (E) DRIVEWAY
- 11 (E) PYLON SIGN
- 12 (E) MANUAL ROLLING GATE
- 13 (E) FENCE
- 14 (E) GAS METER
- 15 (E) WATER METER
- 16 (E) FIRE HYDRANT
- 17 (E) TREE
- 18 (E) CONCRETE LANDING TO REMAIN. REMOVE AWNING.

PARKING REQUIREMENTS

PARKING REQUIRED BY THE SAN FRANCISCO BAY AREA CURLING CLUB (S.F.B.A.C.C.):
CURLING FACILITY: (8 CURLERS / SHEET) x 5 SHEETS = 40 OCCUPANTS = 40 SPACES
OFFICES, VIEWING AREA & WARM ROOM: USED BY SAME CURLERS AFTER PRACTICES
(NO ADDITIONAL PARKING REQUIRED)
SPECTATORS: 5 OCCUPANTS = 5 SPACES
BECAUSE APPROXIMATELY 25% OF THE CLUB MEMBERS AND SPECTATORS WILL TAKE PUBLIC
TRANSPORTATION, RIDE BICYCLES, OR RIDESHARE TO THE FACILITY, 34 PARKING SPACES (45 x 65%) WILL
BE REQUIRED BY THE S.F.B.A.C.C..
SUBTOTAL SPACES REQUIRED: 34 SPACES

PARKING PROVIDED:
51 PARKING SPACES PROVIDED

ACCESSIBLE PARKING:
3 SPACES ARE REQUIRED, AND 3 ARE PROVIDED.

LOW-EMITTING, FUEL-EFFICIENT, AND CARPOOL/VAN VEHICLE PARKING:
6 TOTAL SPACES ARE REQUIRED, AND 6 TOTAL ARE PROVIDED

FUTURE ELECTRIC VEHICLE CHARGING STATION:
4 SPACES ARE REQUIRED, AND 4 ARE PROVIDED

LONG-TERM BICYCLE PARKING
3 BIKE CAPACITY (51 x 0.05) REQUIRED; 4 BIKE CAPACITY PROVIDED

SHORT-TERM BICYCLE PARKING:
3 BIKE CAPACITY (51 x 0.05) REQUIRED; 7 BIKE CAPACITY PROVIDED

PARKING REQUIRED BY THE SAN FRANCISCO BAY AREA CURLING CLUB (S.F.B.A.C.C.):
CURLING FACILITY: (8 CURLERS / SHEET) x 5 SHEETS = 40 OCCUPANTS = 40 SPACES
OFFICES, VIEWING AREA & WARM ROOM: USED BY SAME CURLERS AFTER PRACTICES
(NO ADDITIONAL PARKING REQUIRED)
SPECTATORS: 5 OCCUPANTS = 5 SPACES
BECAUSE APPROXIMATELY 25% OF THE CLUB MEMBERS AND SPECTATORS WILL TAKE PUBLIC
TRANSPORTATION, RIDE BICYCLES, OR RIDESHARE TO THE FACILITY, 34 PARKING SPACES (45 x 65%) WILL
BE REQUIRED BY THE S.F.B.A.C.C..
SUBTOTAL SPACES REQUIRED: 34 SPACES

PARKING PROVIDED:
51 PARKING SPACES PROVIDED

ACCESSIBLE PARKING:
3 SPACES ARE REQUIRED, AND 3 ARE PROVIDED.

LOW-EMITTING, FUEL-EFFICIENT, AND CARPOOL/VAN VEHICLE PARKING:
6 TOTAL SPACES ARE REQUIRED, AND 6 TOTAL ARE PROVIDED

FUTURE ELECTRIC VEHICLE CHARGING STATION:
4 SPACES ARE REQUIRED, AND 4 ARE PROVIDED

LONG-TERM BICYCLE PARKING
3 BIKE CAPACITY (51 x 0.05) REQUIRED; 4 BIKE CAPACITY PROVIDED

SHORT-TERM BICYCLE PARKING:
3 BIKE CAPACITY (51 x 0.05) REQUIRED; 7 BIKE CAPACITY PROVIDED

ACCESSIBLE PARKING:
3 SPACES ARE REQUIRED, AND 3 ARE PROVIDED.

LOW-EMITTING, FUEL-EFFICIENT, AND CARPOOL/VAN VEHICLE PARKING:
6 TOTAL SPACES ARE REQUIRED, AND 6 TOTAL ARE PROVIDED

FUTURE ELECTRIC VEHICLE CHARGING STATION:
4 SPACES ARE REQUIRED, AND 4 ARE PROVIDED

LONG-TERM BICYCLE PARKING
3 BIKE CAPACITY (51 x 0.05) REQUIRED; 4 BIKE CAPACITY PROVIDED

SHORT-TERM BICYCLE PARKING:
3 BIKE CAPACITY (51 x 0.05) REQUIRED; 7 BIKE CAPACITY PROVIDED

LOW-EMITTING, FUEL-EFFICIENT, AND CARPOOL/VAN VEHICLE PARKING:
6 TOTAL SPACES ARE REQUIRED, AND 6 TOTAL ARE PROVIDED

FUTURE ELECTRIC VEHICLE CHARGING STATION:
4 SPACES ARE REQUIRED, AND 4 ARE PROVIDED

LONG-TERM BICYCLE PARKING
3 BIKE CAPACITY (51 x 0.05) REQUIRED; 4 BIKE CAPACITY PROVIDED

SHORT-TERM BICYCLE PARKING:
3 BIKE CAPACITY (51 x 0.05) REQUIRED; 7 BIKE CAPACITY PROVIDED

FUTURE ELECTRIC VEHICLE CHARGING STATION:
4 SPACES ARE REQUIRED, AND 4 ARE PROVIDED

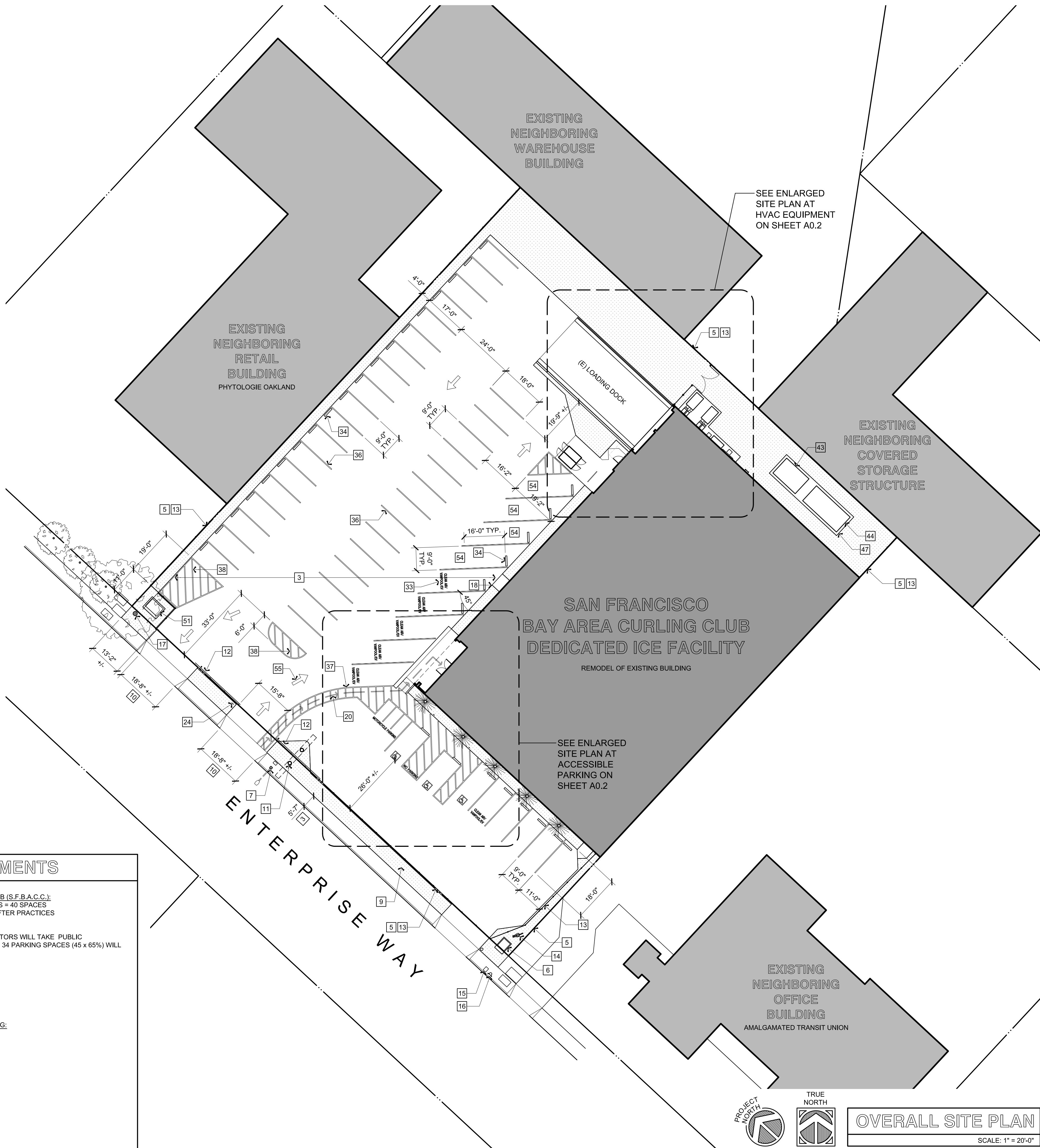
LONG-TERM BICYCLE PARKING
3 BIKE CAPACITY (51 x 0.05) REQUIRED; 4 BIKE CAPACITY PROVIDED

SHORT-TERM BICYCLE PARKING:
3 BIKE CAPACITY (51 x 0.05) REQUIRED; 7 BIKE CAPACITY PROVIDED

LONG-TERM BICYCLE PARKING
3 BIKE CAPACITY (51 x 0.05) REQUIRED; 4 BIKE CAPACITY PROVIDED

SHORT-TERM BICYCLE PARKING:
3 BIKE CAPACITY (51 x 0.05) REQUIRED; 7 BIKE CAPACITY PROVIDED

SHORT-TERM BICYCLE PARKING:
3 BIKE CAPACITY (51 x 0.05) REQUIRED; 7 BIKE CAPACITY PROVIDED



SITE PLAN NEW WORK KEY NOTES	
20	ACCESSIBLE ROUTE OF TRAVEL, AS INDICATED BY SHADED, DASHED LINE, TO BE CONTINUOUSLY ACCESSIBLE, PER CBC SECTIONS 11B-402.2 AND 11B-403. ACCESSIBLE ROUTE OF TRAVEL IS TO COMPLY WITH CBC SECTIONS 11B-302.1, 11B-402.2, AND 11B-403, AND 11B-406. ACCESSIBLE ROUTE OF TRAVEL TO BE MINIMUM 48" IN WIDTH, PER CBC 11B-406.5.2.
21	ACCESSIBLE PARKING SURFACE IDENTIFICATION GRAPHIC. SEE DETAIL 4/A0.4.
22	VAN ACCESSIBLE PARKING SIGNAGE. SEE DETAIL 5/A0.4.
23	ACCESSIBLE PARKING SIGNAGE. SEE DETAIL 5/A0.4.
24	"UNAUTHORIZED VEHICLES..." TOW-AWAY SIGN, PER CBC 11B-502.8.
25	VAN ACCESSIBLE PARKING SPACE: 9'-0" WIDE X 18'-0" DEEP. MAXIMUM PERMITTED SLOPE OF ACCESSIBLE PARKING SPACES AND ACCESS AISLES IS 2% IN ALL DIRECTIONS, PER CBC SECTION 11B-502.4.
26	ACCESSIBLE PARKING SPACE: 9'-0" WIDE X 18'-0" DEEP. MAXIMUM PERMITTED SLOPE OF ACCESSIBLE PARKING SPACES AND ACCESS AISLES IS 2% IN ALL DIRECTIONS, PER CBC SECTION 11B-502.4.
27	8'-0" WIDE (MIN.) X 18'-0" DEEP (MIN.) LOADING/UNLOADING AISLE MARKED BY A 4" BLUE BORDER AND 4" WHITE STRIPING AT 3'-0" O.C. WITHIN THE AREA. DIMENSIONS SHOWN ON SITE PLAN SUPERCEDE THE MIN. DIMENSIONS NOTES ABOVE.
28	5'-0" WIDE (MIN.) X 18'-0" (MIN.) DEEP LOADING/UNLOADING AISLE MARKED BY A 4" BLUE BORDER AND 4" WHITE STRIPING AT 3'-0" O.C. WITHIN THE AREA. DIMENSIONS SHOWN ON SITE PLAN SUPERCEDE THE MIN. DIMENSIONS NOTES ABOVE.
29	ACCESSIBLE RAMP
30	CLEAR SPACE FOR ACCESSIBILITY, TYP., AT DOOR
31	"NO PARKING" WHITE LETTERING, 12" HIGH
32	"MOTORCYCLE PARKING" WHITE LETTERING, 12" HIGH
33	"CLEAN AIR / VANPOOL / EV" WHITE LETTERING, 12" HIGH
34	CONCRETE WHEEL STOP, 4'-0" LENGTH, TYP.
35	DETECTABLE WARNING MAT. SEE DETAIL 3/A0.4.
36	4" WIDE WHITE STRIPING, TYP.
37	4" WHITE STRIPING AT PERIMETER OF, AND AT 3'-0" O.C. WITHIN, THE ACCESSIBLE PATH OF TRAVEL.
38	4" WHITE STRIPING AT 3'-0" O.C.
39	CONCRETE WALKWAY, 4" THICK. AGGREGATE BASE TO BE MIN. 3" CLASS 2 A.B. INSTALL MIN. 3" CLASS 2 A.B., IF NEEDED. REINFORCEMENT: #3 GRADE 40 REBAR @ 18" O.C., E.W. PROVIDE EXPOSED AGGREGATE FINISH, TO MATCH THE (E) ADJACENT CONCRETE WALKWAY.
40	CONCRETE EXPANSION JOINT. MATCH APPEARANCE OF (E) JOINTS.
41	SEE GENERAL NOTES ON SHEET A0.1 FOR DOOR THRESHOLD CONDITION.
42	PROVIDE #4 REBAR DOWELS @ 24" O.C. AT CONNECTION TO (E) CONCRETE SLAB. MIN. 4" EMBEDMENT INTO (E) SLAB. SET DOWELS INTO (E) SLAB WITH EPOXY.
43	HVAC UNIT FOR ICE HOUSE. SEE DRAWINGS BY EVERYTHING ICE.
44	CHILLER UNIT FOR ICE HOUSE. SEE DRAWINGS BY EVERYTHING ICE.
45	HVAC UNIT. SEE MECHANICAL SHEETS.
46	EXTERIOR HVAC DUCTWORK. SEE MECHANICAL SHEETS.
47	CONCRETE SLAB BELOW EQUIPMENT
48	MAIN SWITCHBOARD. SEE ELECTRICAL SHEETS.
49	TRANSFORMER. SEE ELECTRICAL SHEETS.
50	ELECTRICAL PANEL. SEE ELECTRICAL SHEETS.
51	PG&E ELECTRICAL TRANSFORMER
52	5-LOONG WAVE BIKE RACK, WITH 7-BIKE CAPACITY 68" LENGTH X 2 3/8" O.D., COLOR: BLACK; SURFACE MOUNT; PROVIDE 7'-0" X 7'-0" CONCRETE PAD AT BIKE RACK.
53	BICYCLE LOCKER MANUFACTURER: GROUND CONTROL SYSTEMS CLASS 1 BICYCLE LOCKER, BLACK DURAPLAS COATED, OPEN DOOR, MODEL: MBV-2; CAPACITY: 2 BICYCLES
54	FUTURE ELECTRIC VEHICLE CHARGING STATION
55	PAINTED DIRECTIONAL TRAFFIC ARROW
56	FENCE, 8'-0" TALL
57	GATE: HINGED, PAIR, TOTAL OPENING 10'-0" WIDE, 8'-0" TALL GATE.
58	REMOVE (E) A.C. THAT EXCEEDS 2% SLOPE, AND PLACE A.C. TO PROVIDE A MAX. 2% SLOPE AWAY FROM BUILDING

- 20 ACCESSIBLE ROUTE OF TRAVEL, AS INDICATED BY SHADED, DASHED LINE, TO BE CONTINUOUSLY ACCESSIBLE, PER CBC SECTIONS 11B-402.2 AND 11B-403. ACCESSIBLE ROUTE OF TRAVEL IS TO COMPLY WITH CBC SECTIONS 11B-302.1, 11B-402.2, AND 11B-403. AND 11B-406. ACCESSIBLE ROUTE OF TRAVEL TO BE MINIMUM 48" IN WIDTH, PER CBC 11B-406.5.2.

21 ACCESSIBLE PARKING SURFACE IDENTIFICATION GRAPHIC. SEE DETAIL 4/A0.4.

22 VAN ACCESSIBLE PARKING SIGNAGE. SEE DETAIL 5/A0.4.

23 ACCESSIBLE PARKING SIGNAGE. SEE DETAIL 5/A0.4.

24 "UNAUTHORIZED VEHICLES..." TOW-AWAY SIGN, PER CBC 11B-502.8.

25 VAN ACCESSIBLE PARKING SPACE: 9'-0" WIDE X 18'-0" DEEP. MAXIMUM PERMITTED SLOPE OF ACCESSIBLE PARKING SPACES AND ACCESS AISLES IS 2% IN ALL DIRECTIONS, PER CBC SECTION 11B-502.4.

26 ACCESSIBLE PARKING SPACE: 9'-0" WIDE X 18'-0" DEEP. MAXIMUM PERMITTED SLOPE OF ACCESSIBLE PARKING SPACES AND ACCESS AISLES IS 2% IN ALL DIRECTIONS, PER CBC SECTION 11B-502.4.

27 8'-0" WIDE (MIN.) X 18'-0" DEEP (MIN.) LOADING/UNLOADING AISLE MARKED BY A 4" BLUE BORDER AND 4" WHITE STRIPING AT 3'-0" O.C. WITHIN THE AREA. DIMENSIONS SHOWN ON SITE PLAN SUPERCEDE THE MIN. DIMENSIONS NOTES ABOVE.

28 5'-0" WIDE (MIN.) X 18'-0" (MIN.) DEEP LOADING/UNLOADING AISLE MARKED BY A 4" BLUE BORDER AND 4" WHITE STRIPING AT 3'-0" O.C. WITHIN THE AREA. DIMENSIONS SHOWN ON SITE PLAN SUPERCEDE THE MIN. DIMENSIONS NOTES ABOVE.

29 ACCESSIBLE RAMP

30 CLEAR SPACE FOR ACCESSIBILITY, TYP., AT DOOR

31 "NO PARKING" WHITE LETTERING, 12" HIGH

32 "MOTORCYCLE PARKING" WHITE LETTERING, 12" HIGH

33 "CLEAN AIR / VANPOOL / EV" WHITE LETTERING, 12" HIGH

34 CONCRETE WHEEL STOP, 4'-0" LENGTH, TYP.

35 DETECTABLE WARNING MAT. SEE DETAIL 3/A0.4.

36 4" WIDE WHITE STRIPING, TYP.

37 4" WHITE STRIPING AT PERIMETER OF, AND AT 3'-0" O.C. WITHIN, THE ACCESSIBLE PATH OF TRAVEL.

38 4" WHITE STRIPING AT 3'-0" O.C.

39 CONCRETE WALKWAY, 4" THICK. AGGREGATE BASE TO BE MIN. 3" CLASS 2 A.B.. INSTALL MIN. 3" CLASS 2 A.B., IF NEEDED.
REINFORCEMENT: #3 GRADE 40 REBAR @ 18" O.C., E.W. PROVIDE EXPOSED AGGREGATE FINISH, TO MATCH THE (E) ADJACENT CONCRETE WALKWAY.

40 CONCRETE EXPANSION JOINT. MATCH APPEARANCE OF (E) JOINTS.

41 SEE GENERAL NOTES ON SHEET A0.1 FOR DOOR THRESHOLD CONDITION.

42 PROVIDE #4 REBAR DOWELS @ 24" O.C. AT CONNECTION TO (E) CONCRETE SLAB. MIN. 4" EMBEDMENT INTO (E) SLAB. SET DOWELS INTO (E) SLAB WITH EPOXY.

43 HVAC UNIT FOR ICE HOUSE. SEE DRAWINGS BY EVERYTHING ICE.

44 CHILLER UNIT FOR ICE HOUSE. SEE DRAWINGS BY EVERYTHING ICE.

45 HVAC UNIT. SEE MECHANICAL SHEETS.

46 EXTERIOR HVAC DUCTWORK. SEE MECHANICAL SHEETS.

47 CONCRETE SLAB BELOW EQUIPMENT

48 MAIN SWITCHBOARD. SEE ELECTRICAL SHEETS.

49 TRANSFORMER. SEE ELECTRICAL SHEETS.

50 ELECTRICAL PANEL. SEE ELECTRICAL SHEETS.

51 PG&E ELECTRICAL TRANSFORMER

52 5-LOOP WAVE BIKE RACK, WITH 7-BIKE CAPACITY
68" LENGTH X 2 3/8" O.D., COLOR: BLACK; SURFACE MOUNT; PROVIDE 7'-0" X 7'-0" CONCRETE PAD AT BIKE RACK.

53 BICYCLE LOCKER
MANUFACTURER: GROUND CONTROL SYSTEMS
CLASS 1 BICYCLE LOCKER, BLACK DURAPLAS COATED, OPEN DOOR, MODEL: MBV-2; CAPACITY: 2 BICYCLES

54 FUTURE ELECTRIC VEHICLE CHARGING STATION

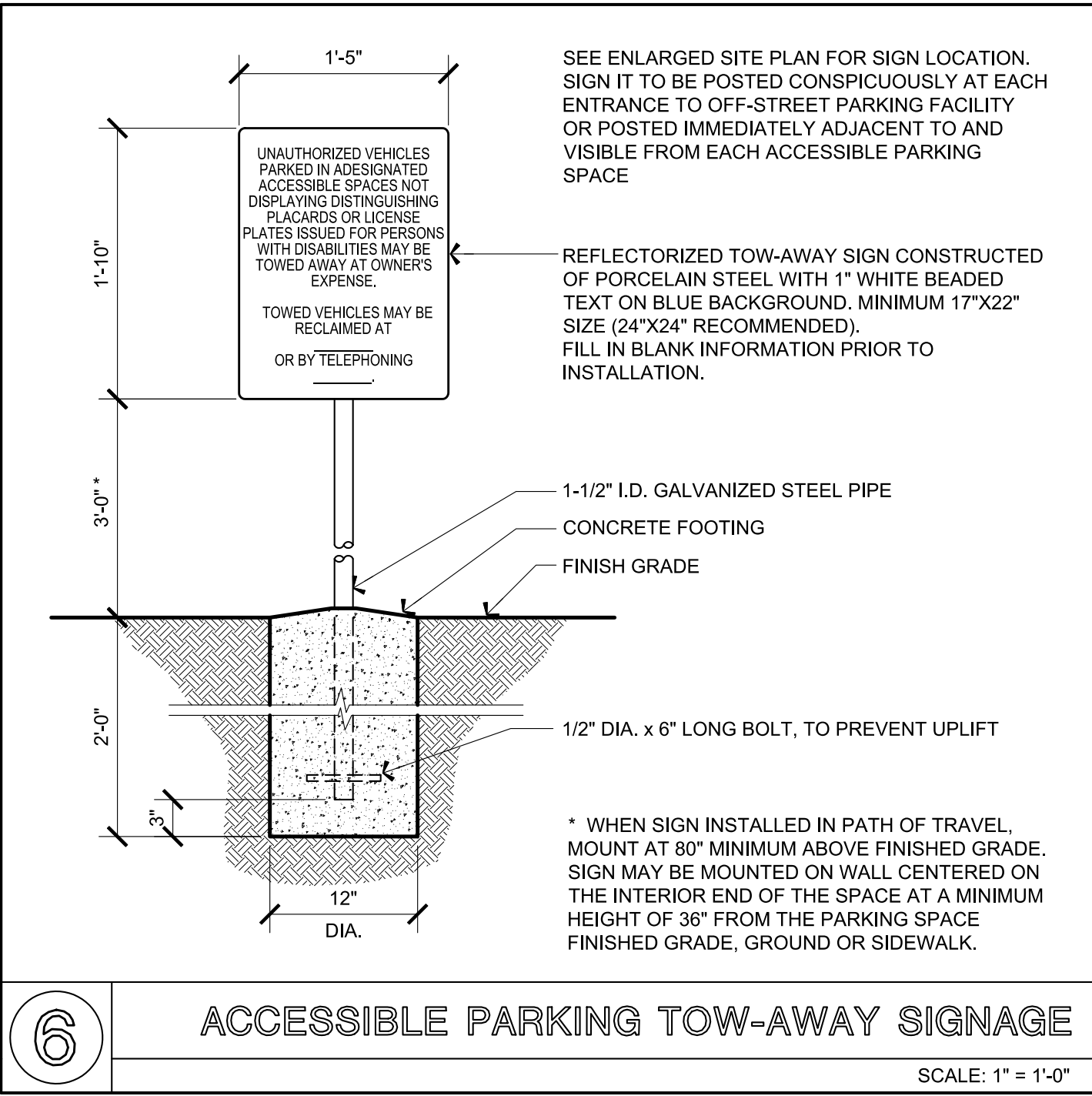
55 PAINTED DIRECTIONAL TRAFFIC ARROW

56 FENCE, 8'-0" TALL

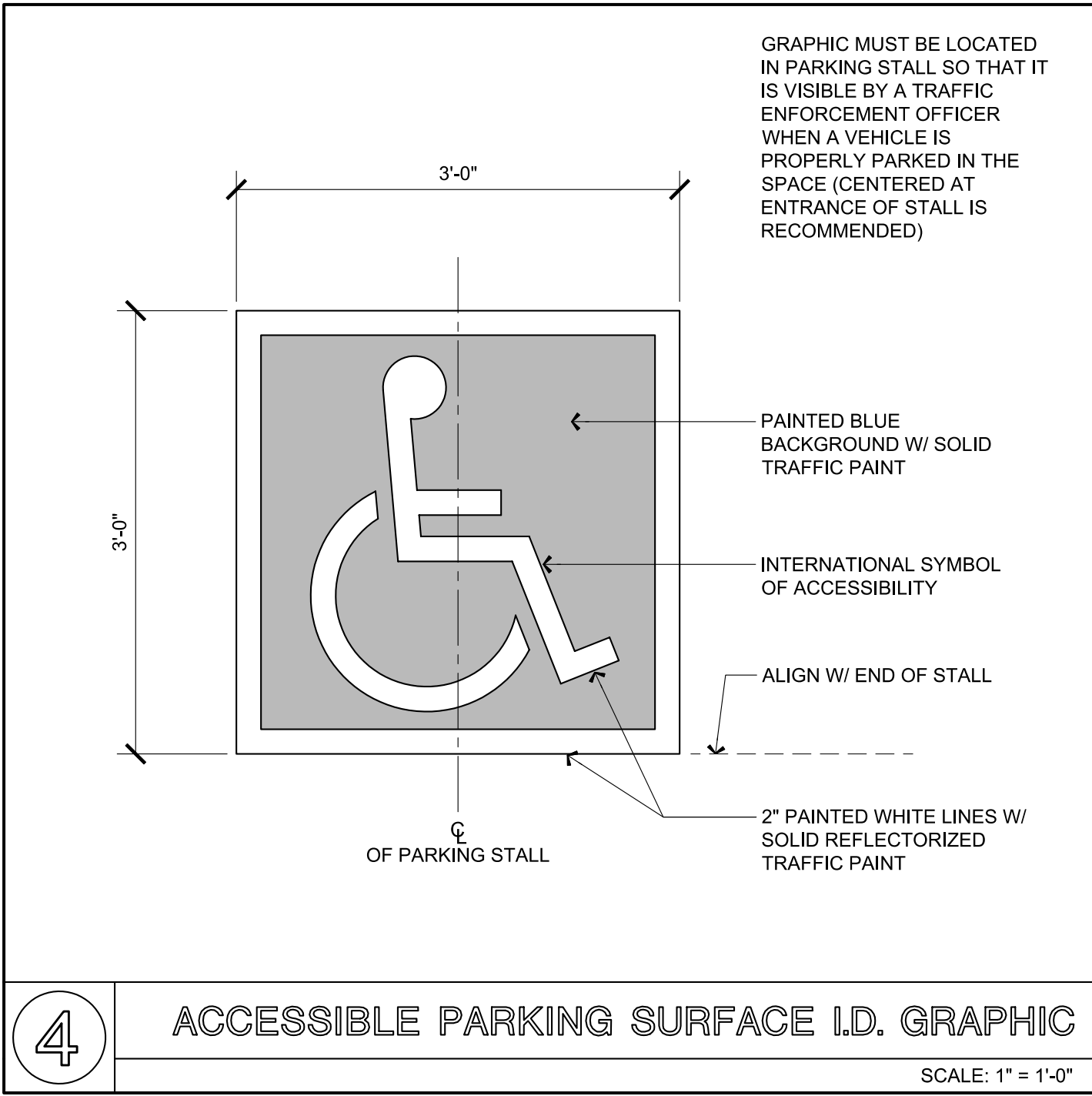
57 GATE: HINGED, PAIR, TOTAL OPENING 10'-0" WIDE, 8'-0" TALL GATE.

58 REMOVE (E) A.C. THAT EXCEEDS 2% SLOPE, AND PLACE A.C. TO PROVIDE A MAX. 2% SLOPE AWAY FROM BUILDING

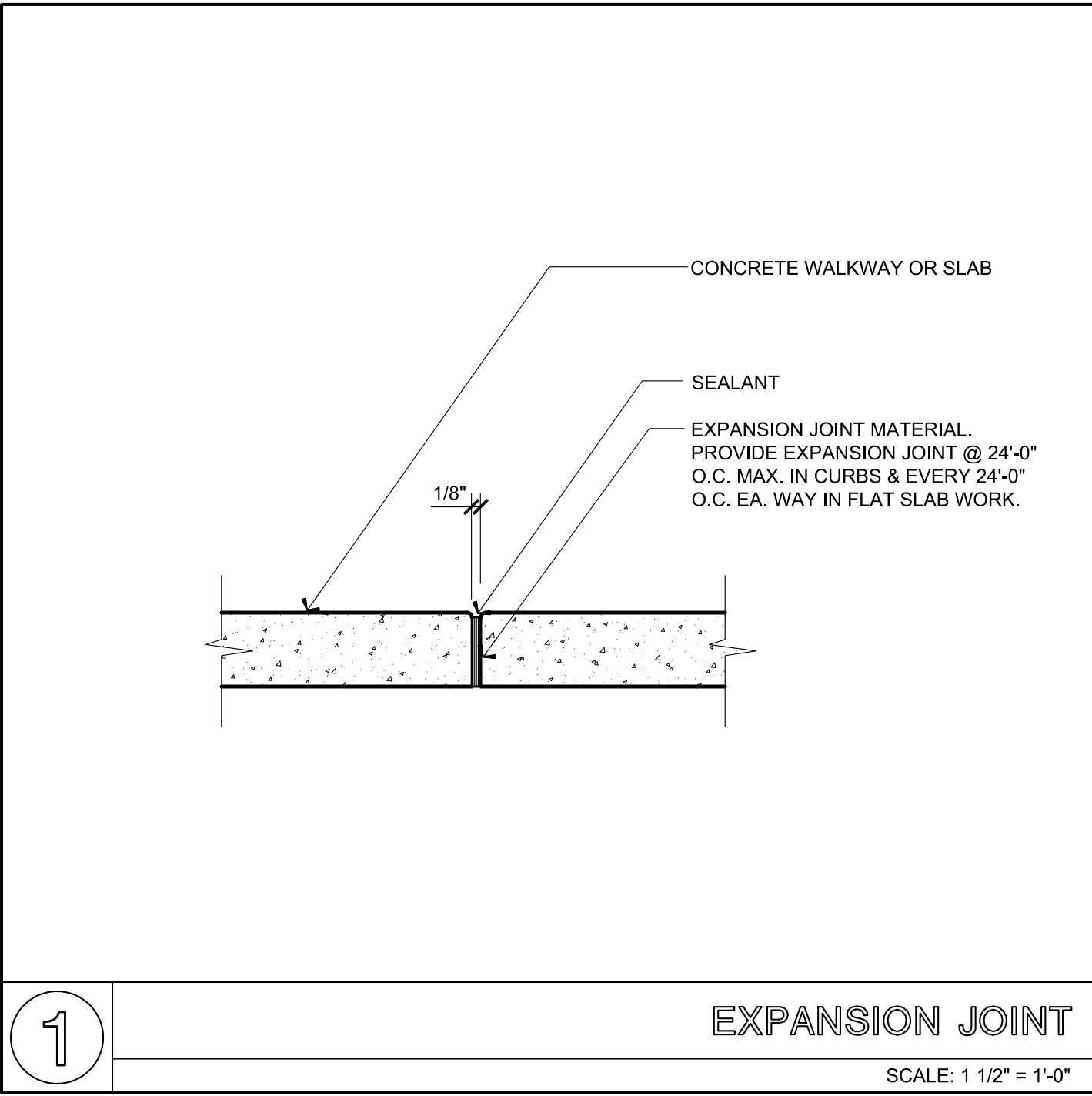




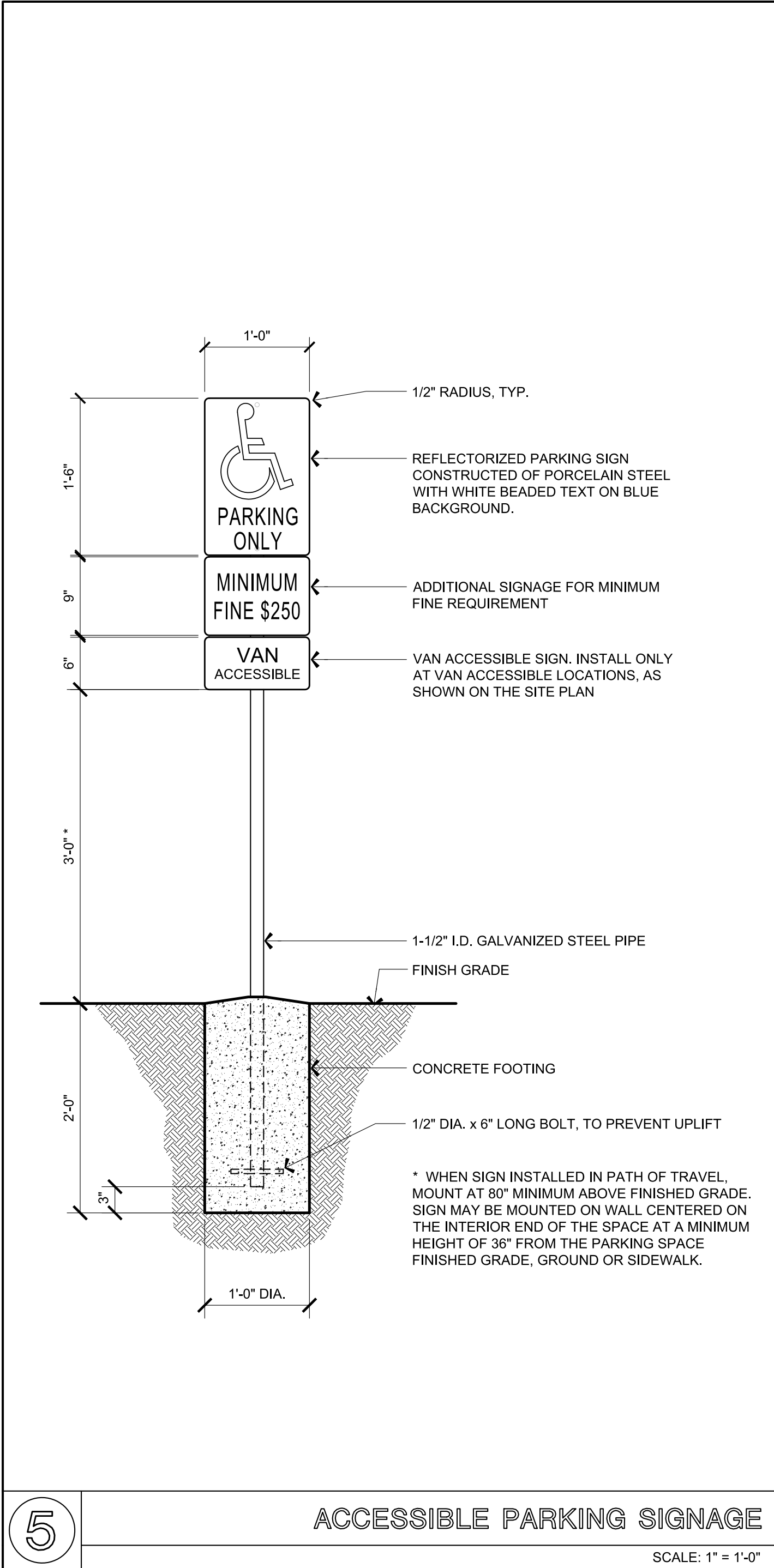
6 ACCESSIBLE PARKING TOW-AWAY SIGNAGE SCALE: 1" = 1'-0"



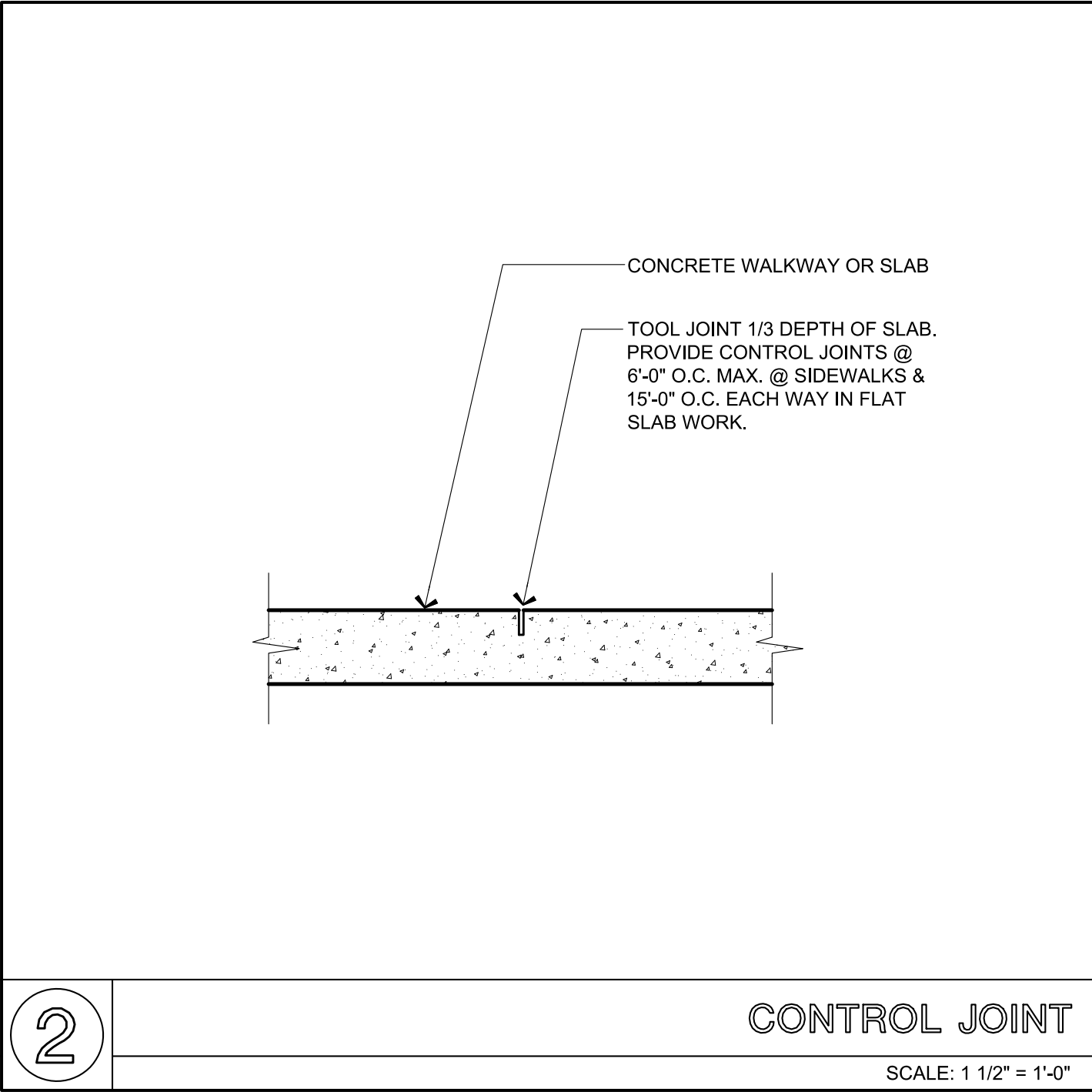
4 ACCESSIBLE PARKING SURFACE I.D. GRAPHIC SCALE: 1" = 1'-0"



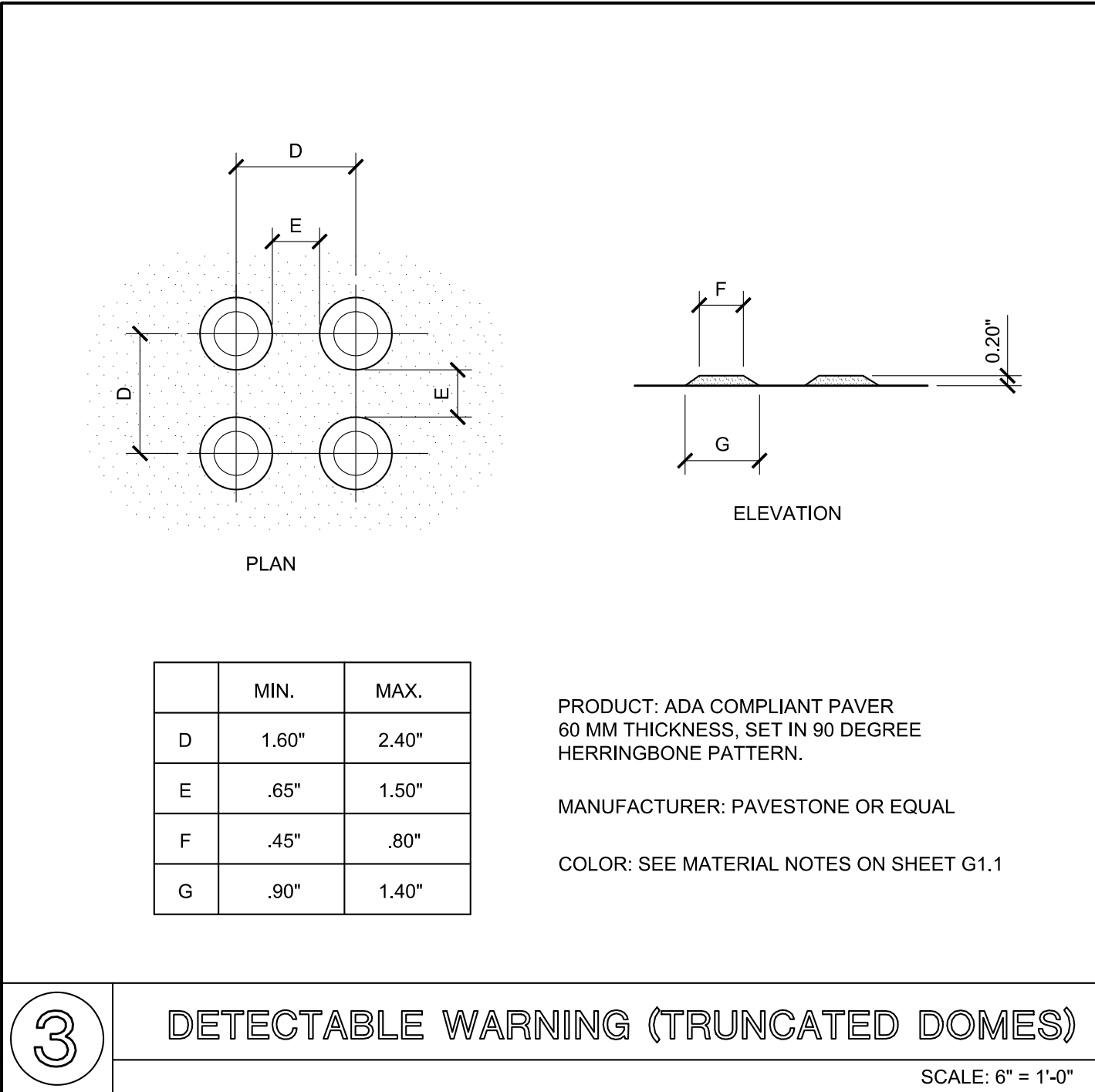
1 EXPANSION JOINT SCALE: 1 1/2" = 1'-0"



5 ACCESSIBLE PARKING SIGNAGE SCALE: 1" = 1'-0"



2 CONTROL JOINT SCALE: 1 1/2" = 1'-0"



3 DETECTABLE WARNING (TRUNCATED DOMES) SCALE: 6" = 1'-0"



420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-6373
ellenbergerarchitecture.com

CONSULTANT

DEDICATED
ICE FACILITY
FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

SITE DETAILS

DRAWING STATUS

CONSTRUCTION
DOCUMENTS

INITIAL PLAN REVIEW SUBMITTAL

REVISIONS

Symbol	Description	By	Date

Drawn By WDE

Date Drawn 8-27-2018

Scale AS NOTED

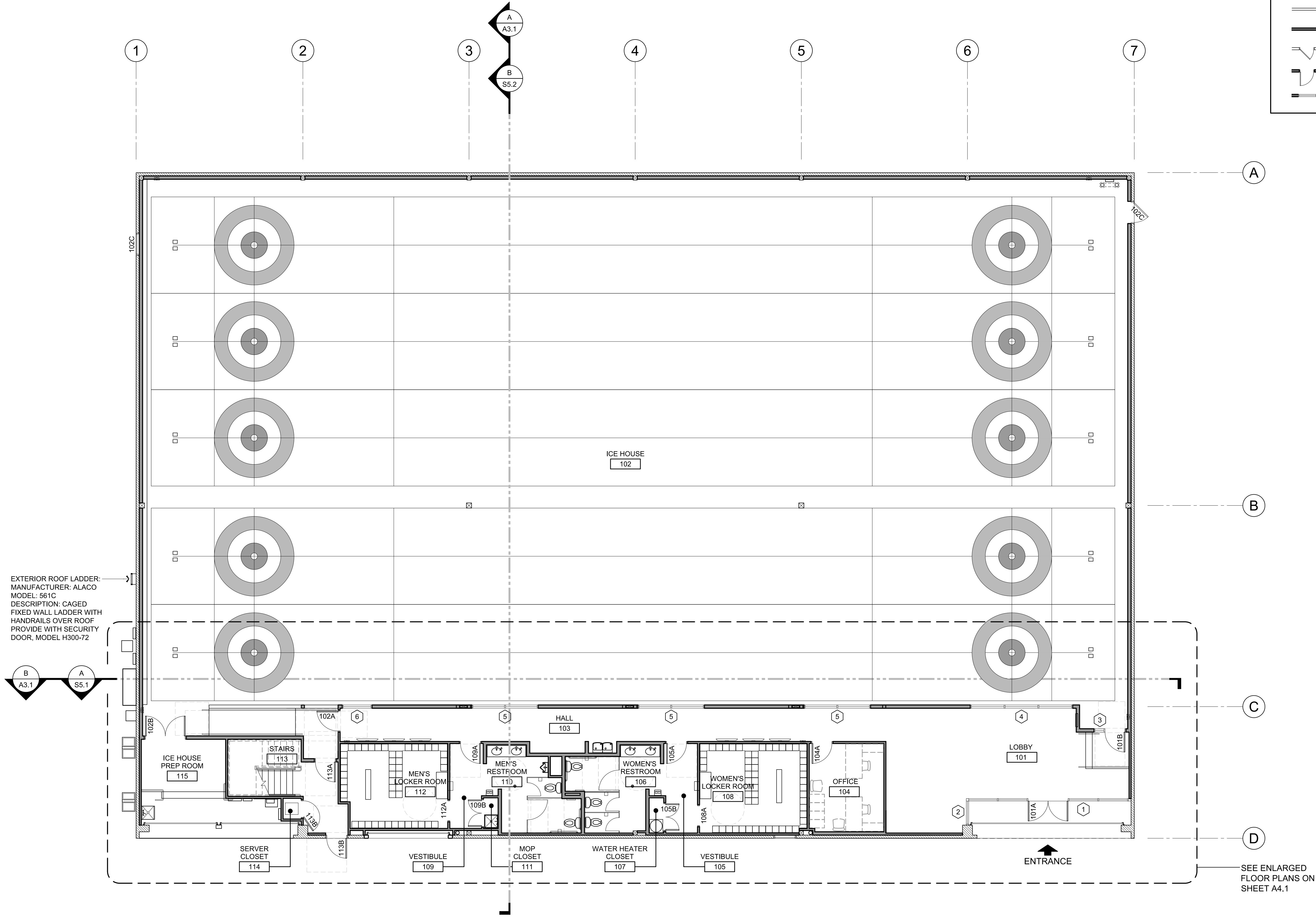
Job Number 17-3059



Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by, or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

SHEET NUMBER

A0.3



LEGEND

EXISTING TILT-UP CONCRETE WALL

EXISTING WOOD STUD WALL

ELLENBERGER
ARCHITECTURE

420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-4373
ellenbergerarchitecture.com

CONSULTANT

DEDICATED
ICE FACILITY

FOR THE

SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

OVERALL
FIRST FLOOR PLAN

DRAWING STATUS

CONSTRUCTION
DOCUMENTS

INITIAL PLAN REVIEW SUBMITTAL

REVISIONS			
Symbol	Description	By	Date

Drawn By	WDE
Date Drawn	8-27-2018
Scale	AS NOTED
Job Number	17-3059



Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by, or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

SHEET NUMBER
A2.1

TRUE
NORTH

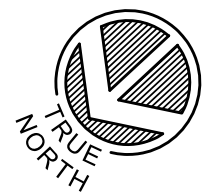
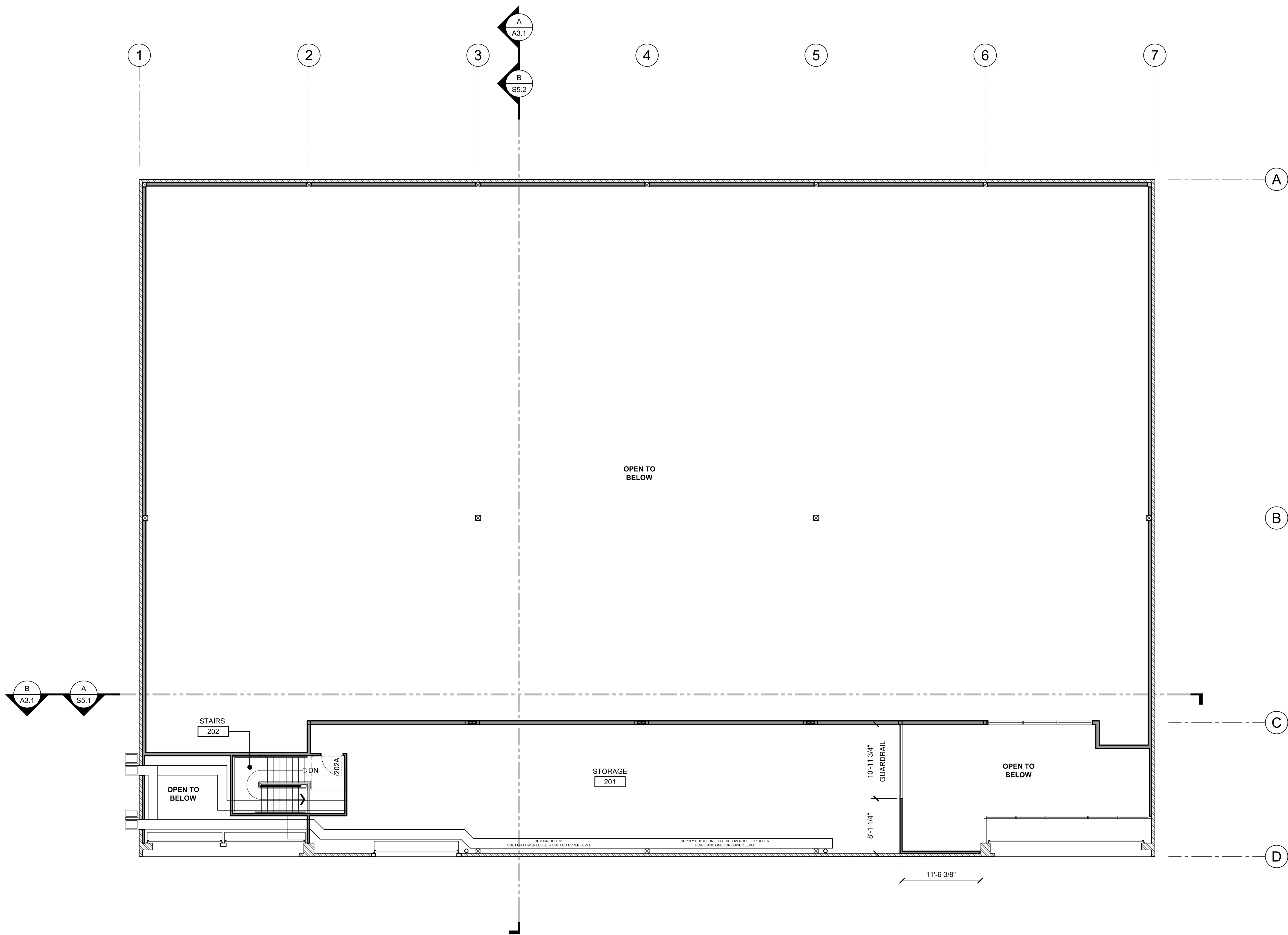
PROJECT
NORTH

OVERALL FIRST FLOOR PLAN

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

LEGEND

EXISTING TILT-UP CONCRETE WALL

EXISTING WOOD STUD WALL

NEW WORK SECOND FLOOR PLAN

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



ELLENBERGER
ARCHITECTURE

420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-6373
ellenbergerarchitecture.com

CONSULTANT

DEDICATED
ICE FACILITY
FOR THE



8450 ENTERPRISE WAY
OAKLAND, CA 94621

NEW WORK
SECOND
FLOOR PLAN

DRAWING STATUS

CONSTRUCTION
DOCUMENTS

INITIAL PLAN REVIEW SUBMITTAL

REVISIONS

Symbol	Description	By	Date
--------	-------------	----	------

Drawn By	WDE
----------	-----

Date Drawn	8-27-2018
------------	-----------

Scale	AS NOTED
-------	----------

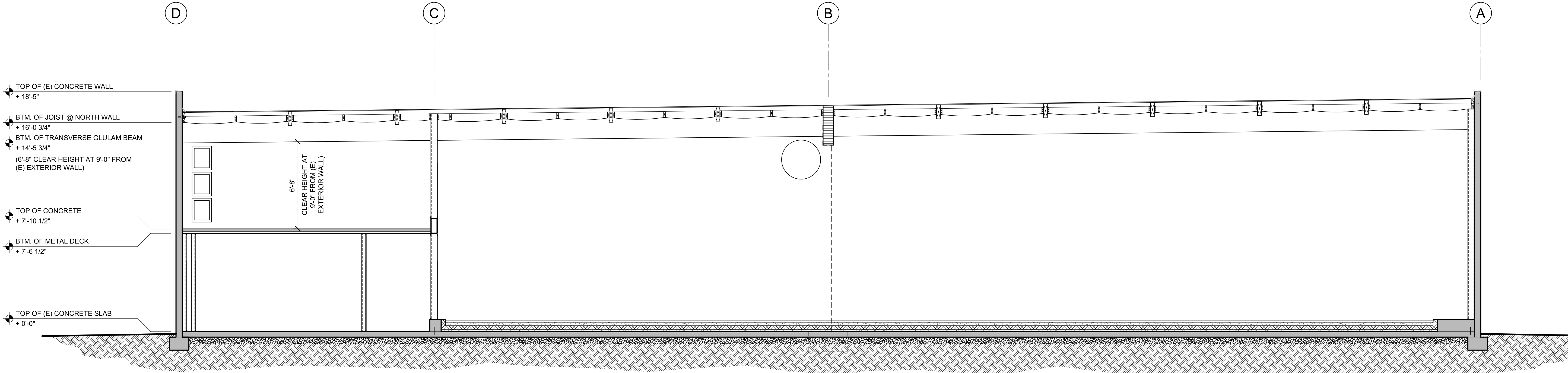
Job Number	17-3059
------------	---------



Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by, or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

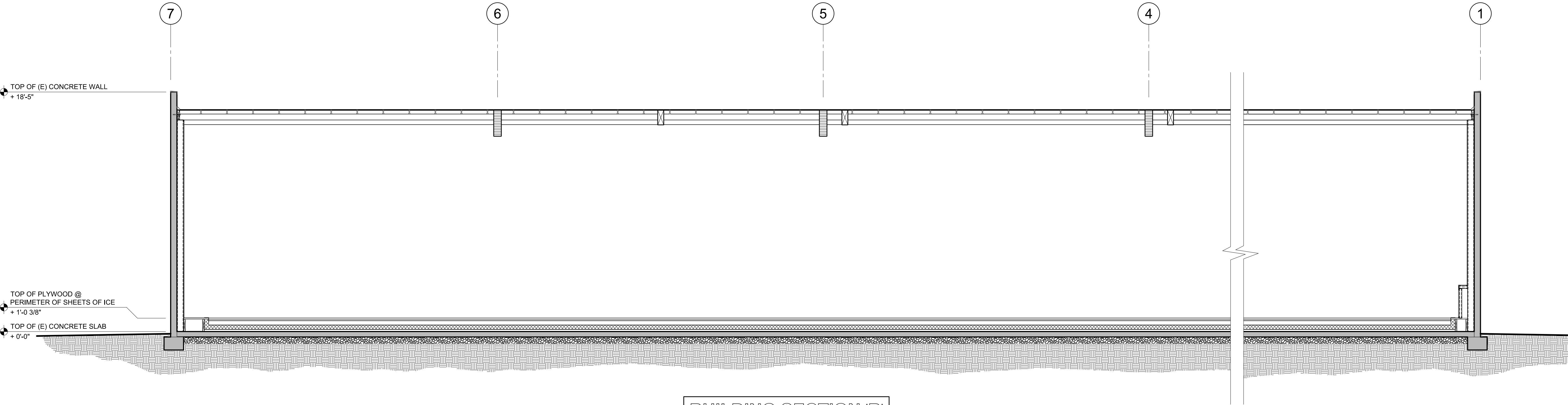
SHEET NUMBER

A2.2



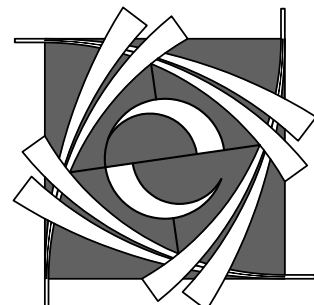
BUILDING SECTION 'A'

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



BUILDING SECTION 'B'

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



ELLENBERGER
ARCHITECTURE

420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-6373
ellenbergerarchitecture.com

CONSULTANT

DEDICATED
ICE FACILITY
FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

BUILDING SECTION

DRAWING STATUS

**CONSTRUCTION
DOCUMENTS**

INITIAL PLAN REVIEW SUBMITTAL

REVISIONS

Symbol	Description	By	Date
--------	-------------	----	------

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Drawn By	WDE
----------	-----

Date Drawn	8-27-2018
------------	-----------

Scale	AS NOTED
-------	----------

Job Number	17-3059
------------	---------

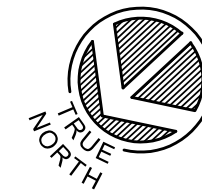
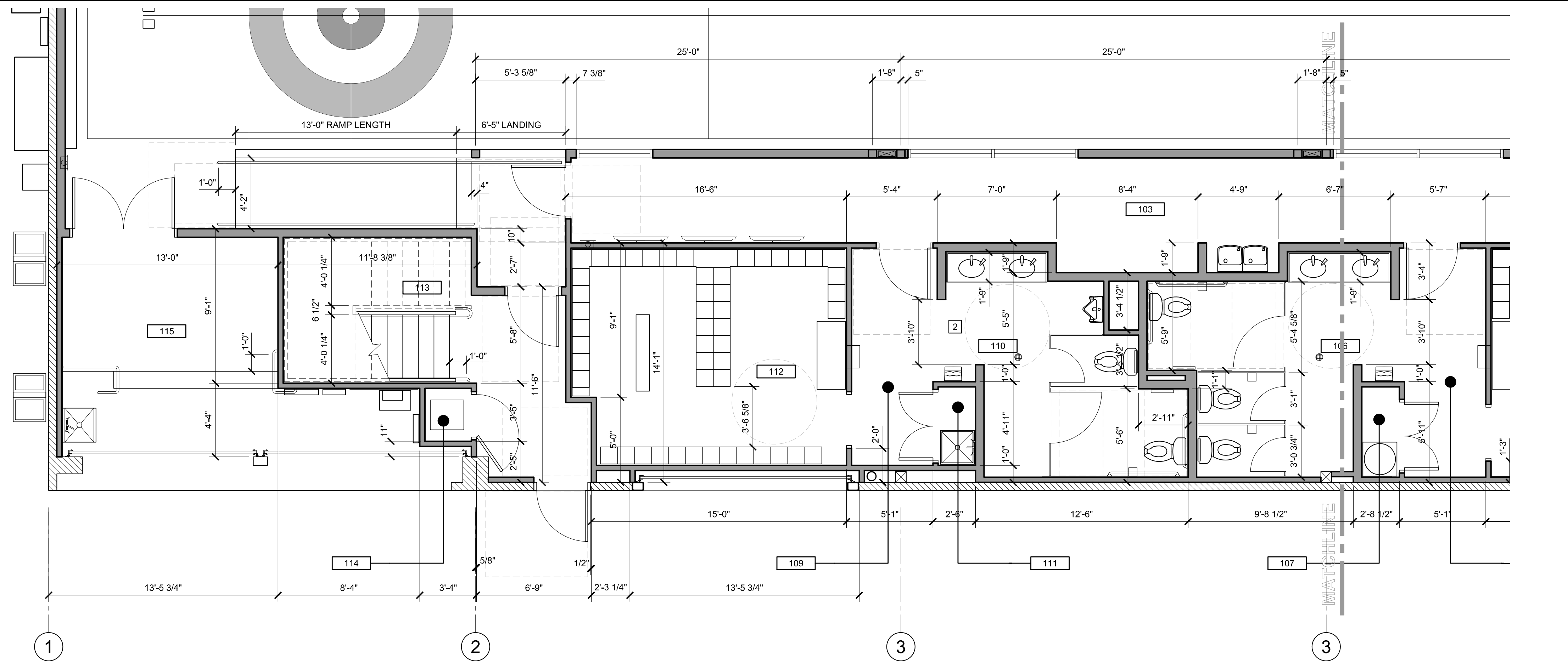


Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by, or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

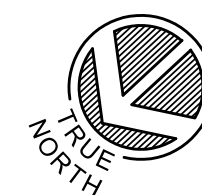
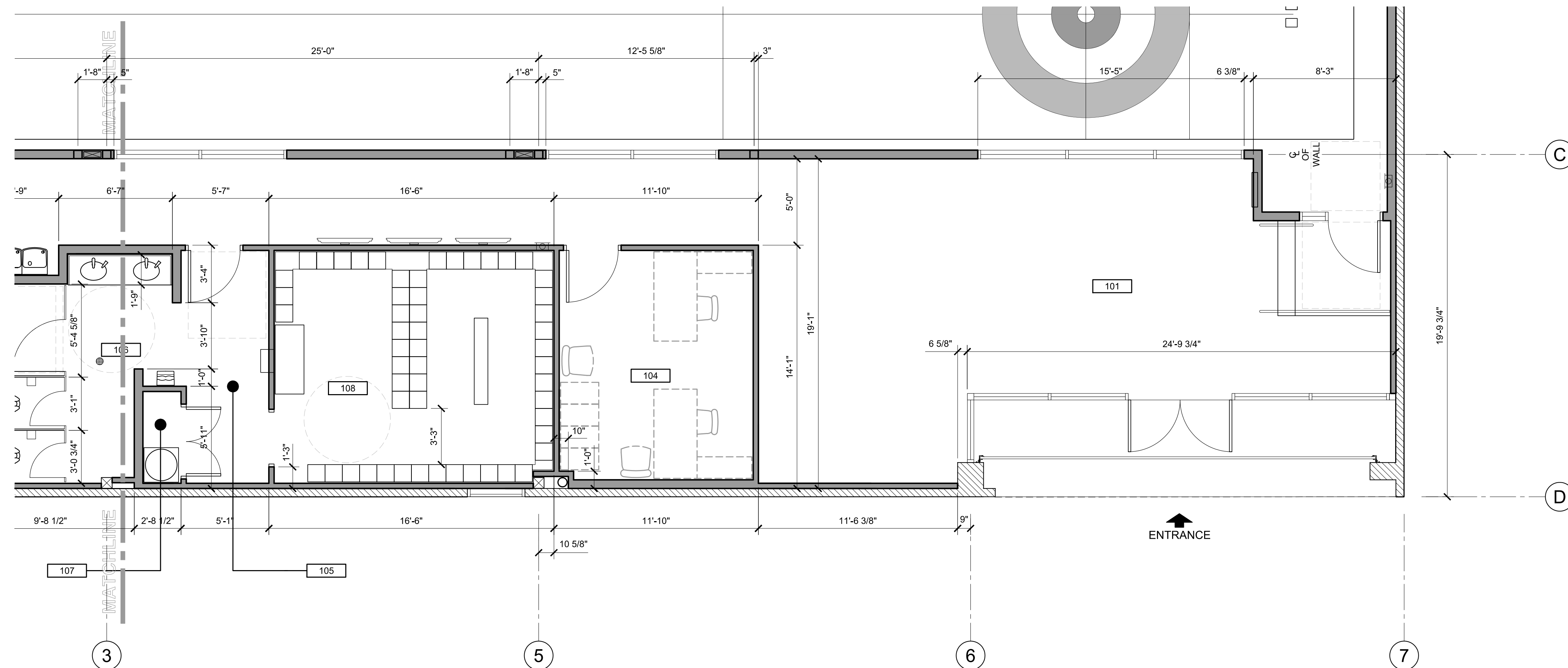
SHEET NUMBER

A3.1

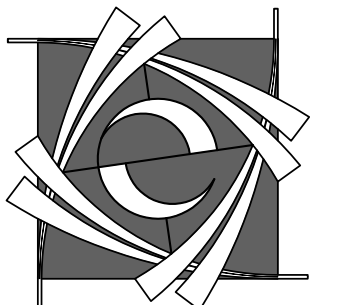
A4.1



NEW WORK ENLARGED FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"



NEW WORK ENLARGED FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"



ELLENBERGER
ARCHITECTURE

420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-6373
ellenbergerarchitecture.com

CONSULTANT

DEDICATED
ICE FACILITY
FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

NEW WORK
ENLARGED
FLOOR PLANS

DRAWING STATUS

CONSTRUCTION
DOCUMENTS

INITIAL PLAN REVIEW SUBMITTAL

REVISIONS

Symbol	Description	By	Date
--------	-------------	----	------

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

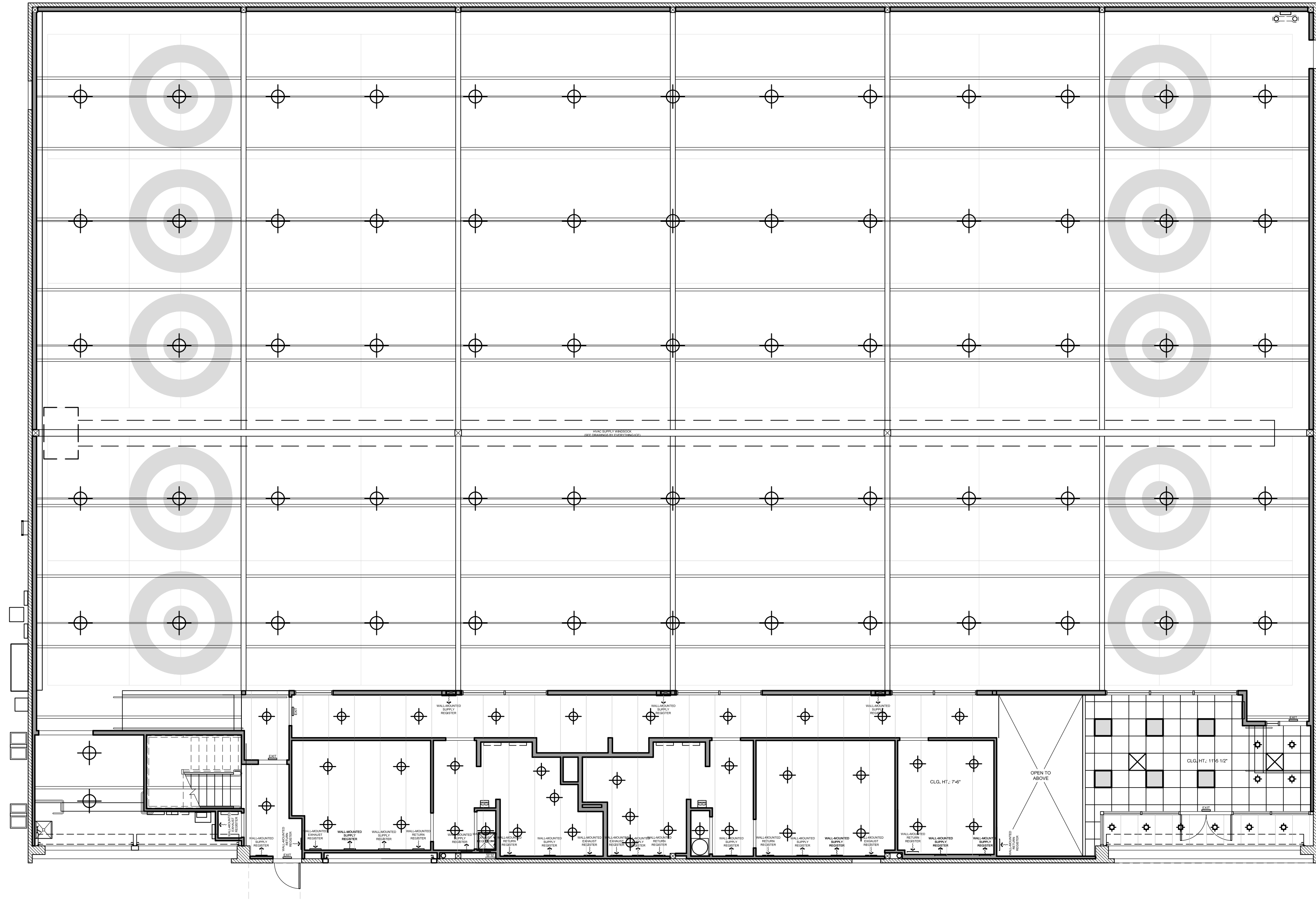
--	--	--	--

--	--	--	--

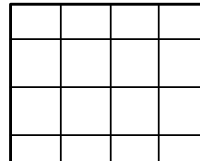
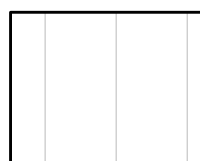








--	--	--	--

--	--	--	--

--	--	--	--



LEGEND

-  SUSPENDED ACOUSTICAL CEILING IN 2'X2' GRID
-  OPEN TO EXPOSED METAL DECK
-  2'X2' LAY-IN LED LIGHT FIXTURE
-  RECESSED CAN LIGHT FIXTURE
-  WALL-MOUNTED VANITY LIGHT FIXTURE
-  SURFACE MOUNTED LED LIGHT FIXTURE
-  HVAC SUPPLY DIFFUSER
-  HVAC RETURN REGISTER
-  HVAC EXHAUST REGISTER
-  EXIT SIGN W/ EMERGENCY LIGHTING. SEE SHEET E1.2.

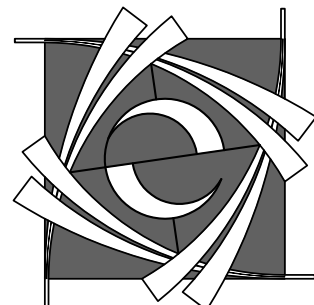
GENERAL NOTES

- CEILING HEIGHT IS 7'-6" A.F.F., UNLESS OTHERWISE NOTED.
- MAINTAIN CEILING HEIGHTS AND LIGHTING LAYOUT PATTERNS SHOWN, UNLESS OTHERWISE APPROVED BY ARCHITECT. CONFLICTS CAUSED BY DUCTWORK, SPRINKLER PIPING, CONDUIT, AND/OR OTHER ITEMS OR FEATURES OF CONSTRUCTION DOES NOT CONSTITUTE CAUSE FOR VARIANCE FROM CEILING HEIGHTS AND/OR LIGHTING LAYOUTS INDICATED IN THESE DRAWINGS. COORDINATE ALL WORK TO ACHIEVE HEIGHTS AND LAYOUTS AS INDICATED IN THESE DRAWINGS.
- AT ACOUSTICAL TILE CEILINGS, ALL FIXTURES AND EQUIPMENT ARE TO BE CENTERED WITHIN CEILING TILES, IN BOTH DIRECTIONS.
- REFER TO MECHANICAL, ELECTRICAL, FIRE SPRINKLER (DEFERRED PERMIT APPROVAL) AND SECURITY DRAWINGS FOR ADDITIONAL CONSTRUCTION FEATURES, SYSTEMS, FIXTURES, AND EQUIPMENT LOCATED IN, ON, AND ABOVE CEILINGS. THESE ITEMS ARE SHOWN ON REFLECTED CEILING PLANS FOR GENERAL INFORMATION AND LAYOUT PURPOSES ONLY.
- SPRINKLER HEAD LOCATIONS SHALL RESULT IN A UNIFORM AND REPETITIVE PATTERN FOR EACH AREA, AND ARE TO BE LOCATED SYMMETRICALLY WITH RESPECT TO WALLS, CEILING GRIDS, AND LIGHT FIXTURES. SPRINKLER HEADS IN ACOUSTICAL TILE CEILINGS ARE TO BE LOCATED IN THE CENTERS OF THE CEILING TILES.



FIRST FLOOR REFLECTED CEILING PLAN

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



ELLENBERGER
ARCHITECTURE

420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-4373
ellenbergerarchitecture.com

CONSULTANT

DEDICATED ICE FACILITY FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621


FIRST FLOOR REFLECTED CEILING PLAN

DRAWING STATUS

CONSTRUCTION DOCUMENTS

INITIAL PLAN REVIEW SUBMITTAL

REVISIONS

Symbol	Description	By	Date
	PLAN CHANGE	WDE	8/22/2017

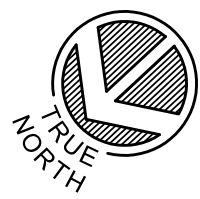
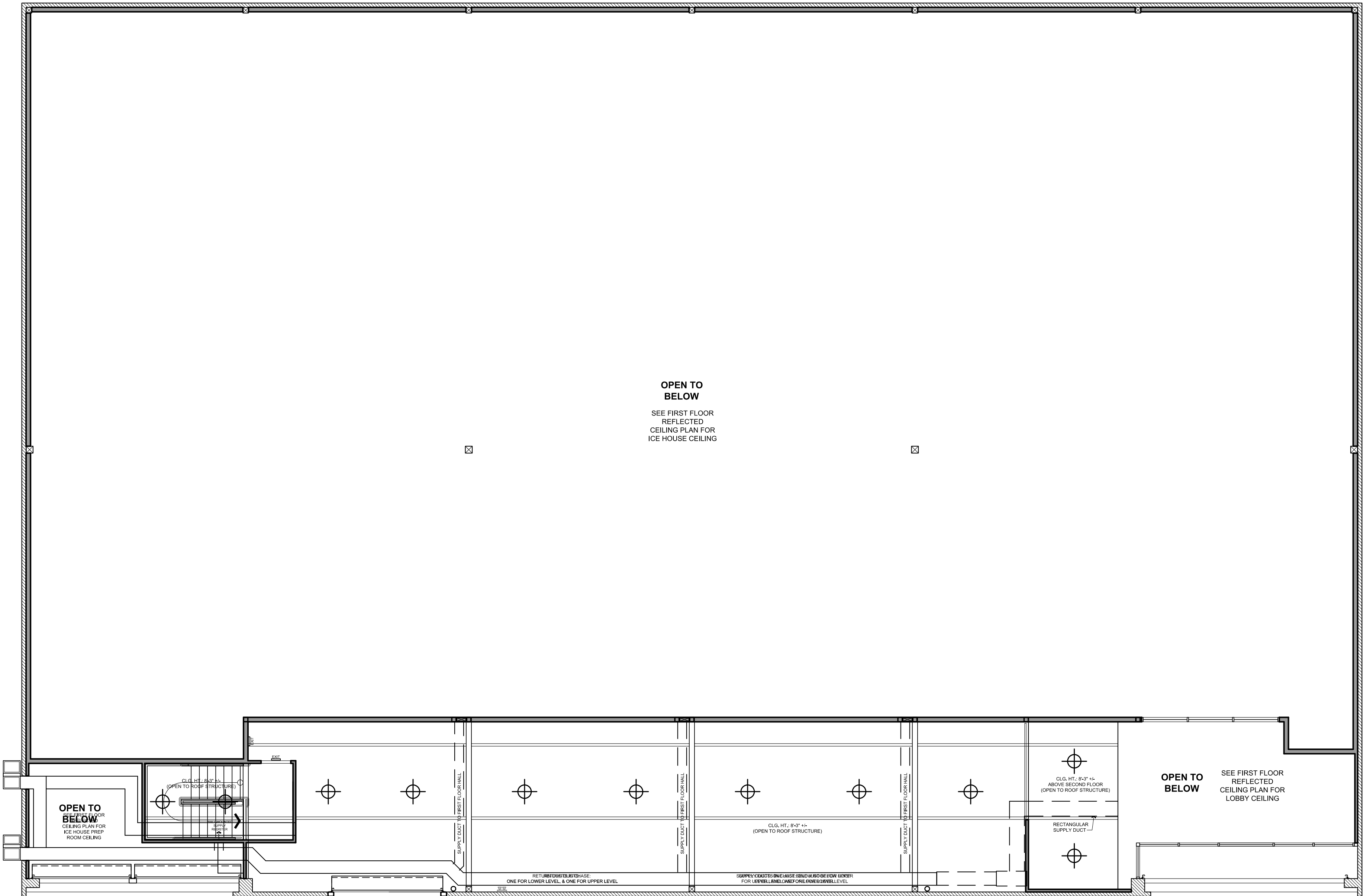
Drawn By	WDE
Date Drawn	8-27-2018
Scale	AS NOTED
Job Number	17-3059



Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by, or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

SHEET NUMBER

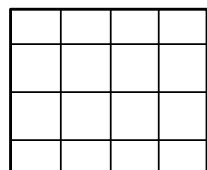
A6.1



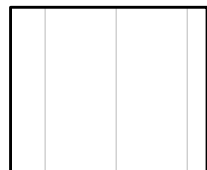
SECOND FLOOR REFLECTED CEILING PLAN

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

LEGEND



SUSPENDED
ACOUSTICAL CEILING
IN 2X2' GRID



OPEN TO EXPOSED
METAL DECK



2x2' LAY-IN LED LIGHT FIXTURE



RECESSED CAN LIGHT FIXTURE



WALL-MOUNTED VANITY LIGHT FIXTURE



SURFACE MOUNTED LED LIGHT FIXTURE



HVAC SUPPLY DIFFUSER



HVAC RETURN REGISTER



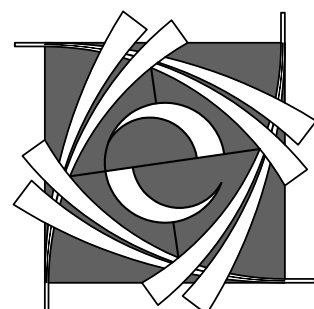
HVAC EXHAUST REGISTER



EXIT SIGN W/ EMERGENCY LIGHTING.
SEE SHEET E1.2.

GENERAL NOTES

- CEILING HEIGHT IS 7'-6" A.F.F., UNLESS OTHERWISE NOTED.
- MAINTAIN CEILING HEIGHTS AND LIGHTING LAYOUT PATTERNS SHOWN, UNLESS OTHERWISE APPROVED BY ARCHITECT. CONFLICTS CAUSED BY DUCTWORK, SPRINKLER PIPING, CONDUIT, AND/OR OTHER ITEMS OR FEATURES OF CONSTRUCTION DOES NOT CONSTITUTE CAUSE FOR VARIANCE FROM CEILING HEIGHTS AND/OR LIGHTING LAYOUTS INDICATED IN THESE DRAWINGS. COORDINATE ALL WORK TO ACHIEVE HEIGHTS AND LAYOUTS AS INDICATED IN THESE DRAWINGS.
- AT ACOUSTICAL TILE CEILINGS, ALL FIXTURES AND EQUIPMENT ARE TO BE CENTERED WITHIN CEILING TILES, IN BOTH DIRECTIONS.
- REFER TO MECHANICAL, ELECTRICAL, FIRE SPRINKLER (DEFERRED PERMIT APPROVAL) AND SECURITY DRAWINGS FOR ADDITIONAL CONSTRUCTION FEATURES, SYSTEMS, FIXTURES, AND EQUIPMENT LOCATED IN, ON, AND ABOVE CEILINGS. THESE ITEMS ARE SHOWN ON REFLECTED CEILING PLANS FOR GENERAL INFORMATION AND LAYOUT PURPOSES ONLY.
- SPRINKLER HEAD LOCATIONS SHALL RESULT IN A UNIFORM AND REPETITIVE PATTERN FOR EACH AREA, AND ARE TO BE LOCATED SYMMETRICALLY WITH RESPECT TO WALLS, CEILING GRIDS, AND LIGHT FIXTURES. SPRINKLER HEADS IN ACOUSTICAL TILE CEILINGS ARE TO BE LOCATED IN THE CENTERS OF THE CEILING TILES.



ELLENBERGER
ARCHITECTURE

420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-6373
ellenbergerarchitecture.com

CONSULTANT

DEDICATED
ICE FACILITY
FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

SECOND FLOOR
REFLECTED
CEILING PLAN

DRAWING STATUS

CONSTRUCTION
DOCUMENTS

INITIAL PLAN REVIEW SUBMITTAL

REVISIONS

Symbol	Description	By	Date
	PLAN CHANGE	WDE	8/2/2017

Drawn By WDE

Date Drawn 8-27-2018

Scale AS NOTED

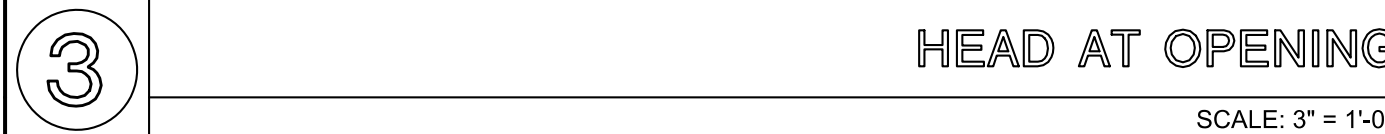
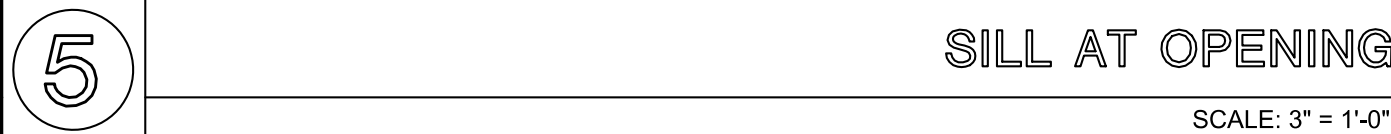
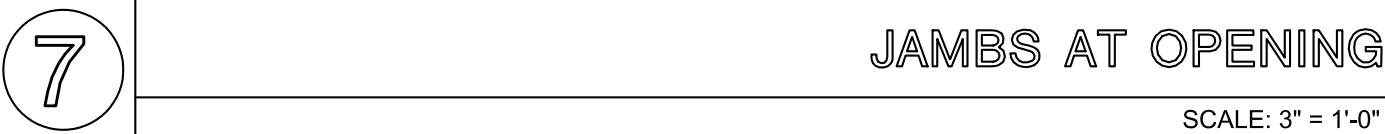
Job Number 17-3059



Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by, or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

SHEET NUMBER

A6.2



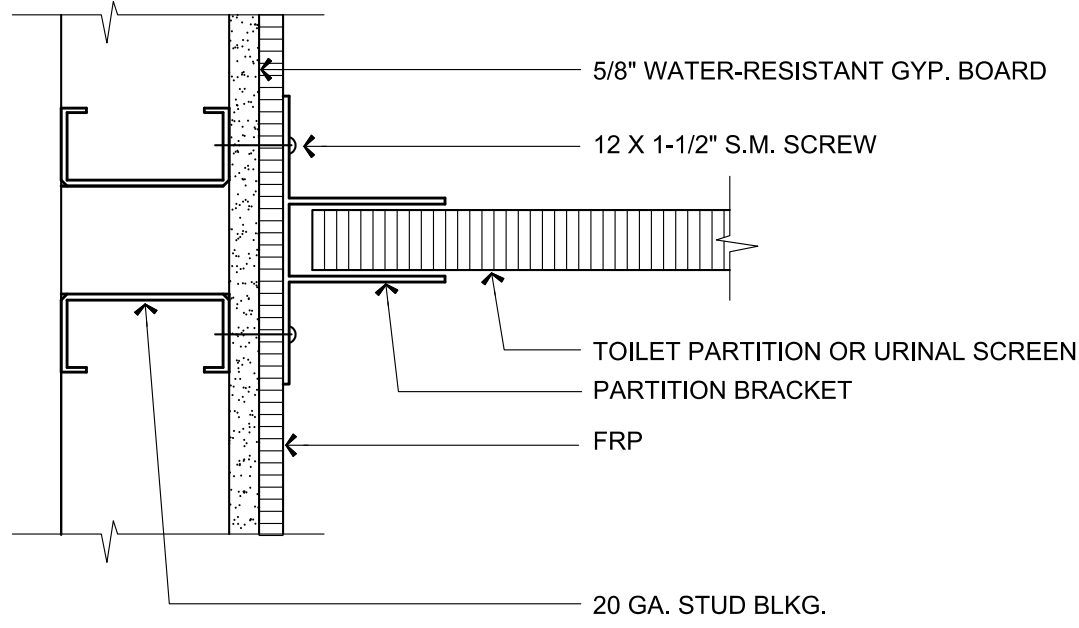
- 2

INTERIOR PARTITION NOTES

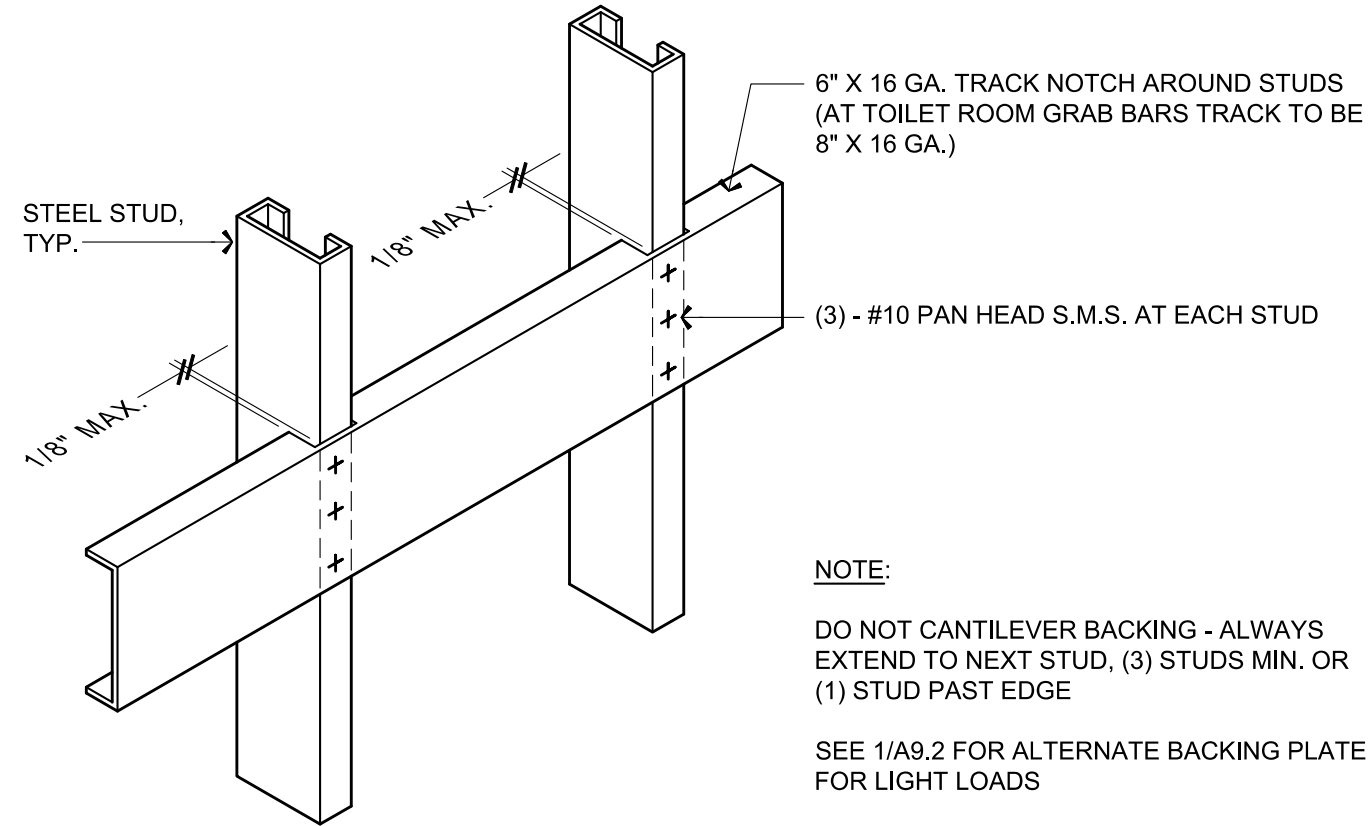
N.T.S.



A9.1



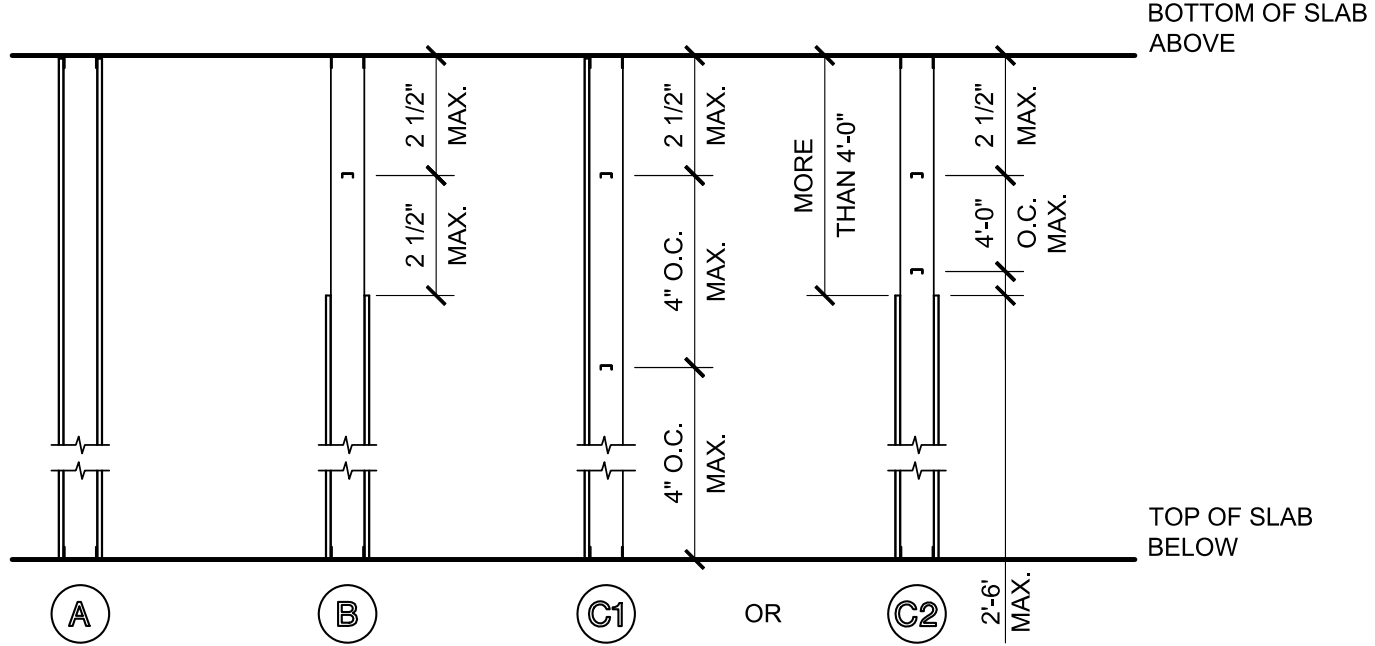
4 TOILET PARTITION & URINAL SCREEN ANCHOR
SCALE: 3" = 1'-0"



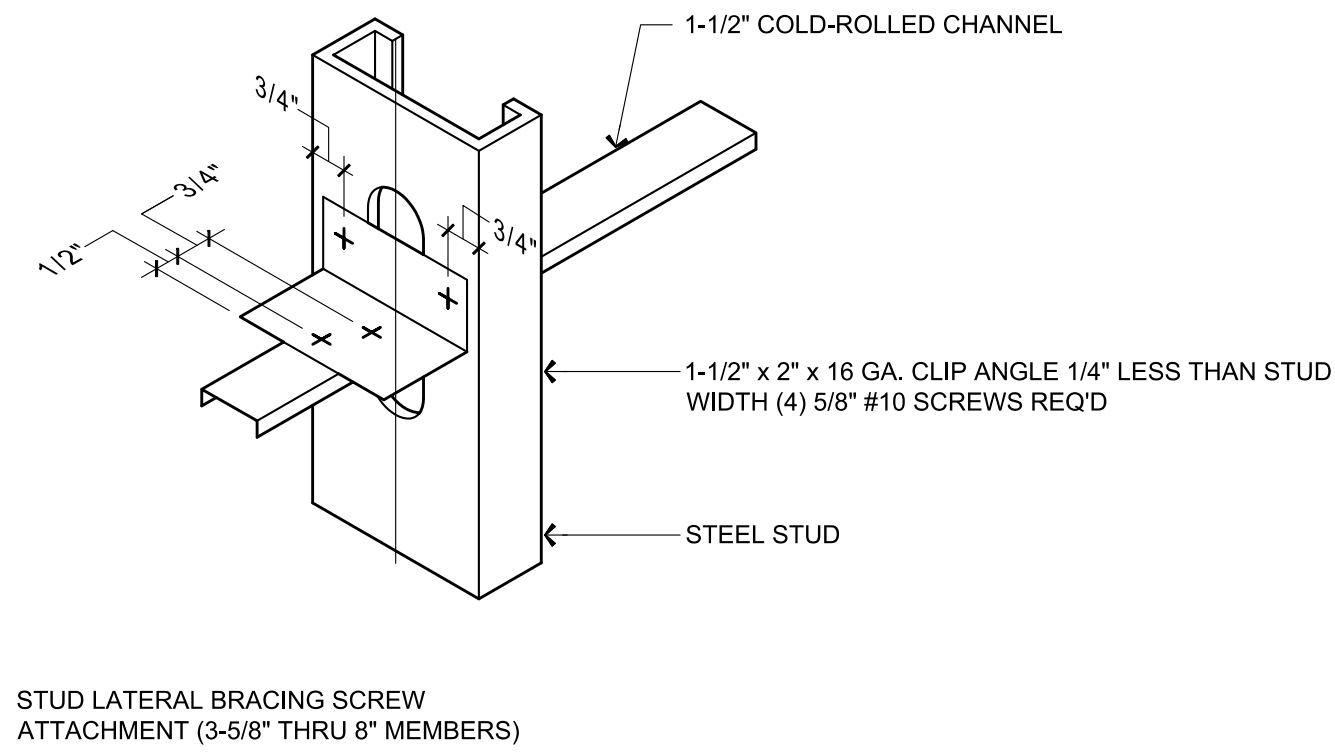
1 BACKING PLATE, TYPICAL
N.T.S.

LATERAL BRACING SCHEDULE

NOTE: NO NOTCHES OR PENETRATIONS ALLOWED IN COLD ROLLED CHANNEL.

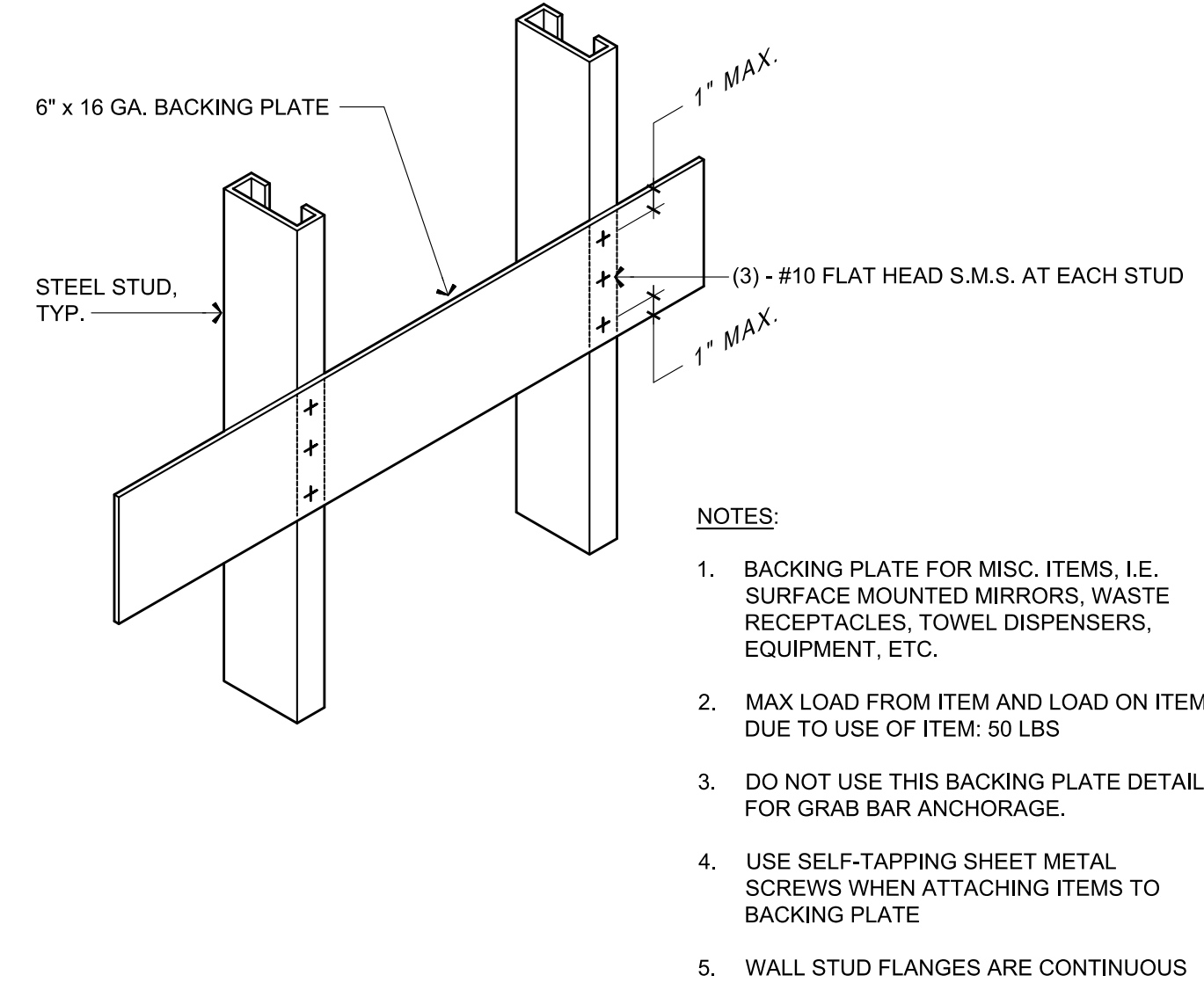


CONDITION	REQUIREMENT
A CONTINUOUS GYPSUM WALLBOARD FULL HEIGHT ON BOTH SIDES	NO LATERAL BRACING REQUIRED
B GYPSUM WALLBOARD ON BOTH SIDES WITHIN 4'-0" OF BOTTOM OF SLAB ABOVE	LATERAL BRACING REQUIRED WITHIN 2'-6" OF BOTTOM OF SLAB ABOVE
C1 GYPSUM WALLBOARD ON ONE SIDE ONLY OR	LATERAL BRACING REQUIRED WITHIN 2'-6" OF BOTTOM OF SLAB ABOVE AND 4'-0" MAX. WITHIN LENGTH OF WALL WITHOUT GYP. BD. ON BOTH SIDES
C2 GYPSUM WALLBOARD ON BOTH SIDES WITH TOP MORE THAN 4'-0" FROM BOTTOM OF SLAB ABOVE	

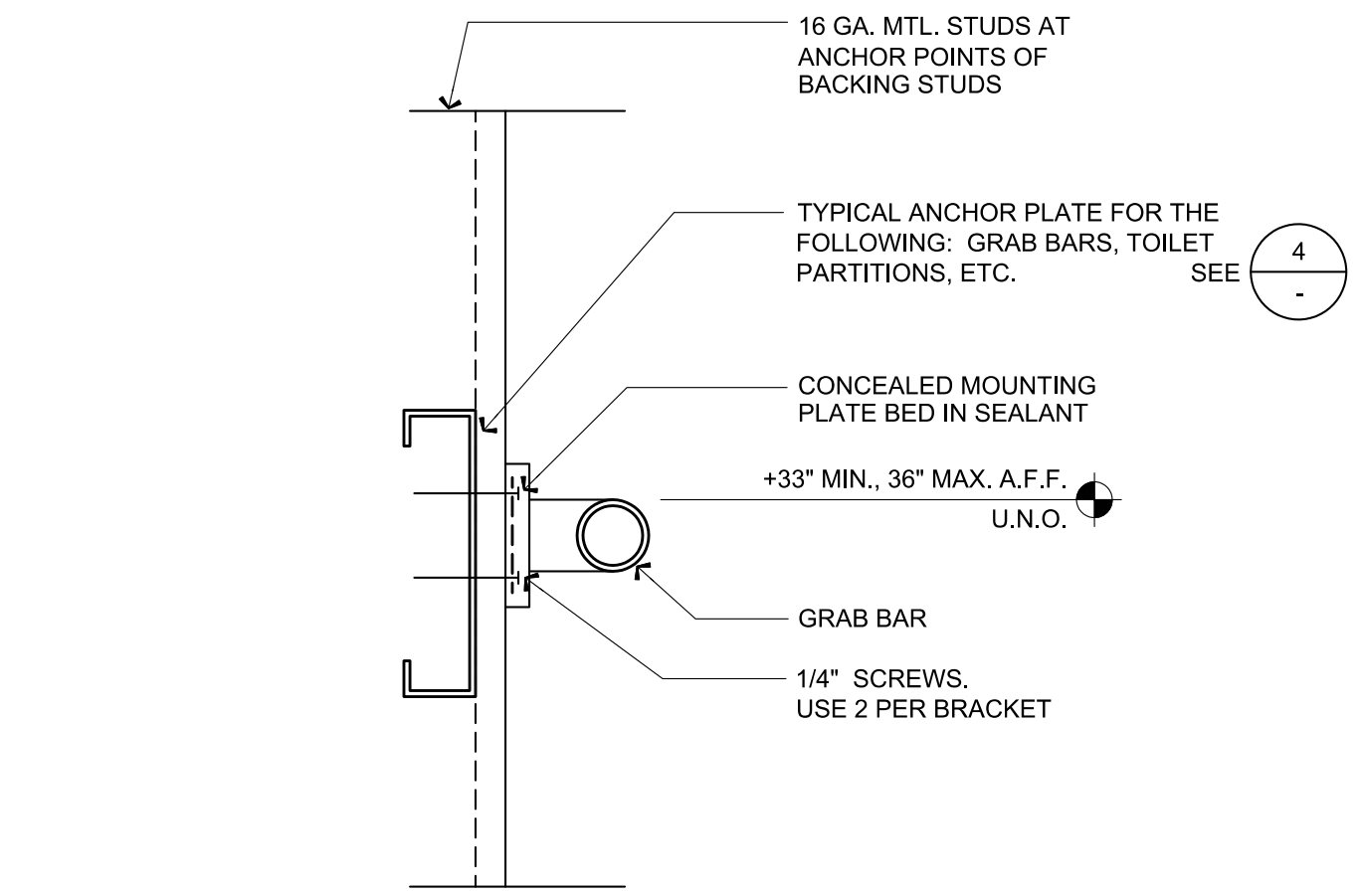


NOTE:
LATERAL BRACING IS REQUIRED ONLY WHEN GYPSUM BOARD IS NOT CONTINUOUS ON BOTH SIDES FROM FLOOR TO BOTTOM OF SLAB ABOVE.

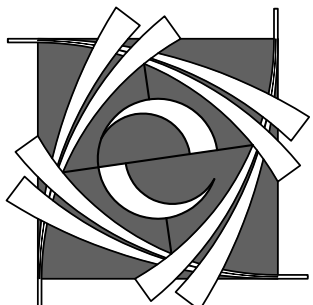
5 LATERAL BRACING OF STEEL STUDS
SCALE: 3" = 1'-0"



2 BACKING PLATE, FOR LIGHT ITEMS ONLY
N.T.S.



3 GRAB BAR ANCHORAGE
SCALE: 3" = 1'-0"



ELLENBERGER
ARCHITECTURE

420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-6373
ellenbergerarchitecture.com

CONSULTANT

DEDICATED
ICE FACILITY
FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

WALL
FRAMING
DETAILS

DRAWING STATUS

CONSTRUCTION
DOCUMENTS

INITIAL PLAN REVIEW SUBMITTAL

REVISIONS

Symbol	Description	By	Date

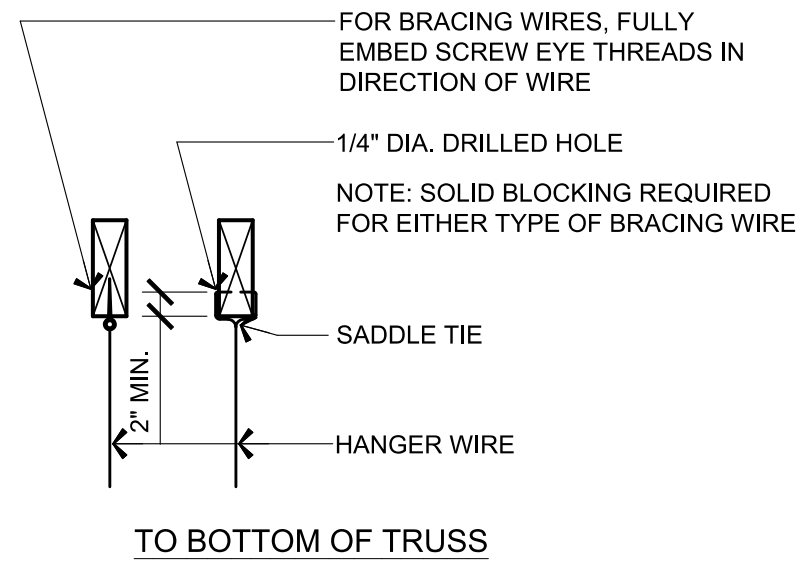
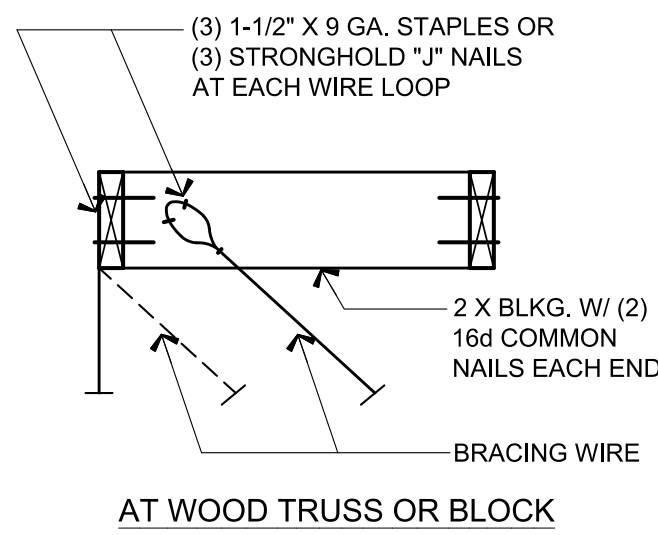
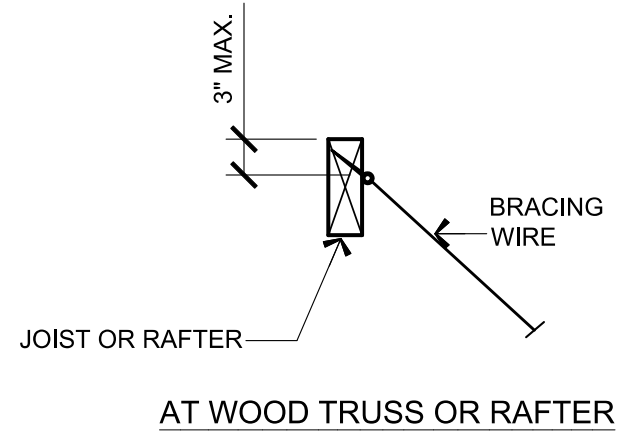
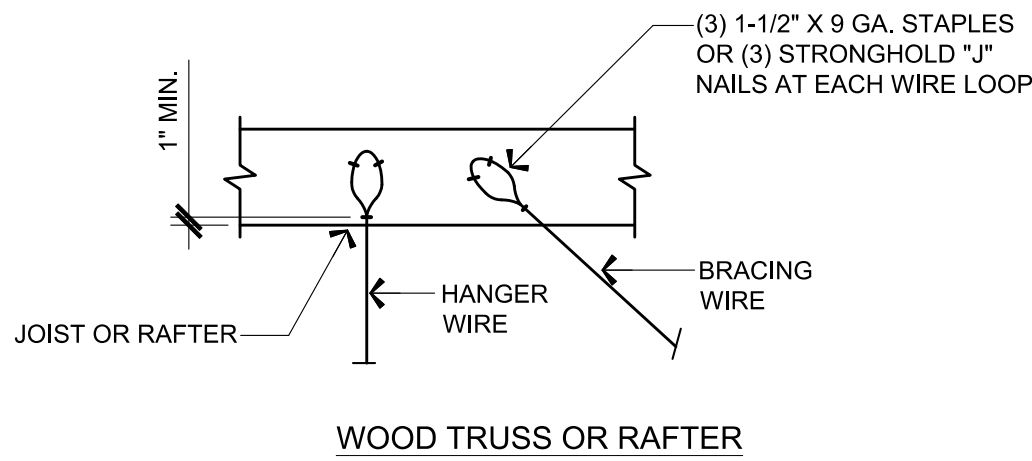
Drawn By	WDE
Date Drawn	8-27-2018
Scale	AS NOTED
Job Number	17-3059



Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by, or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

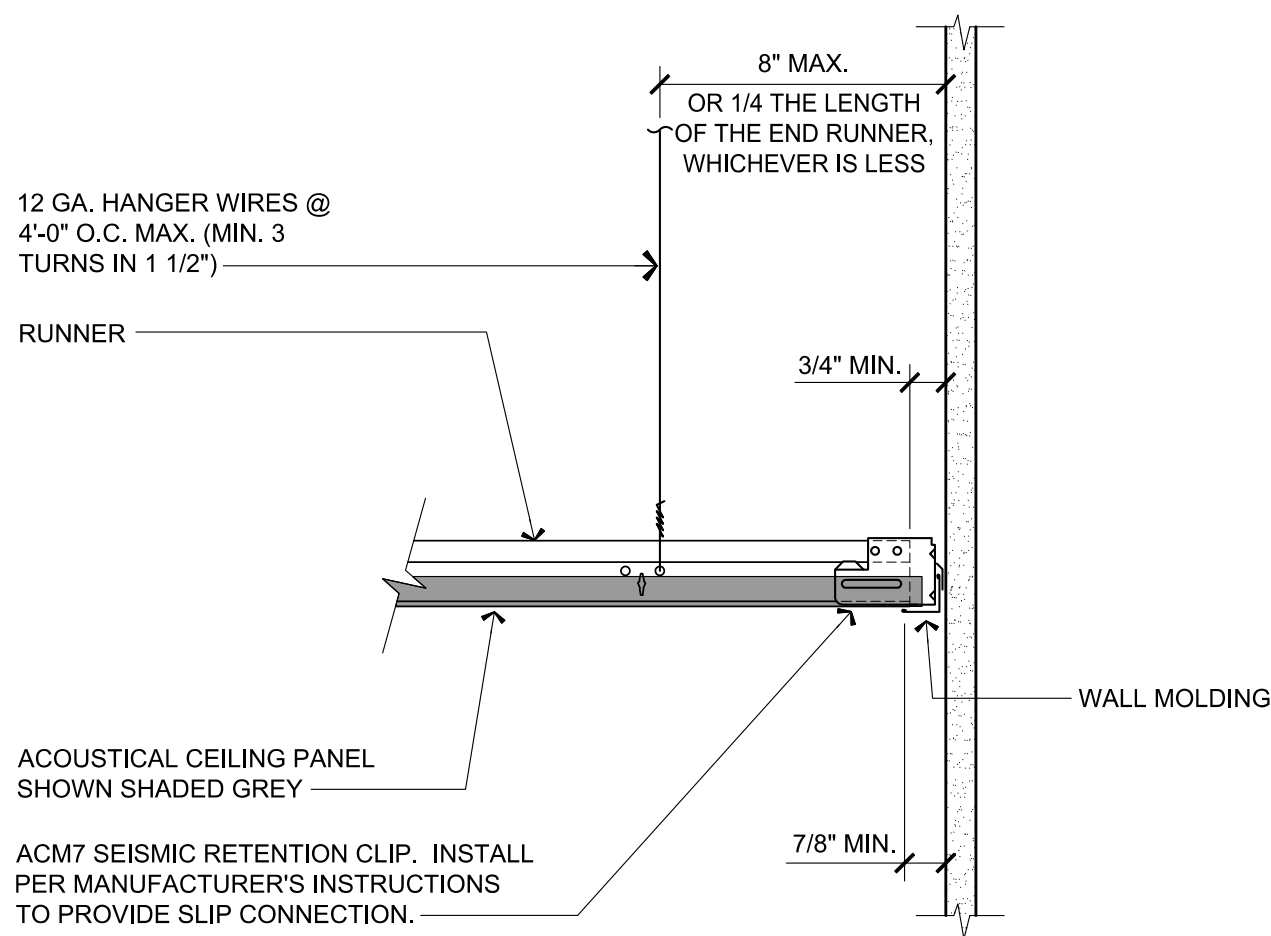
SHEET NUMBER

A9.2



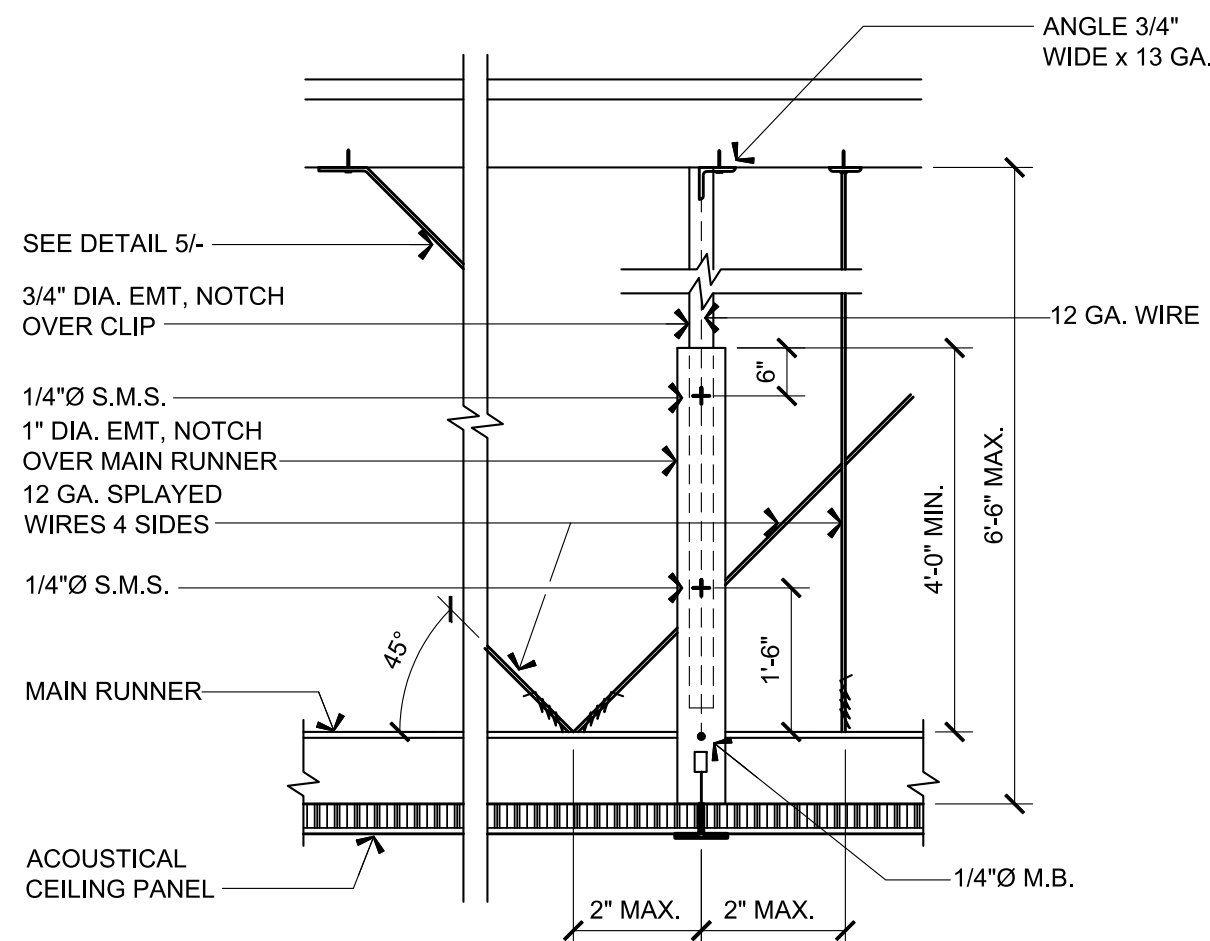
7 SEISMIC BRACING WIRE ATTACHMENT OPTIONS

SCALE: 3/4" = 1'-0"



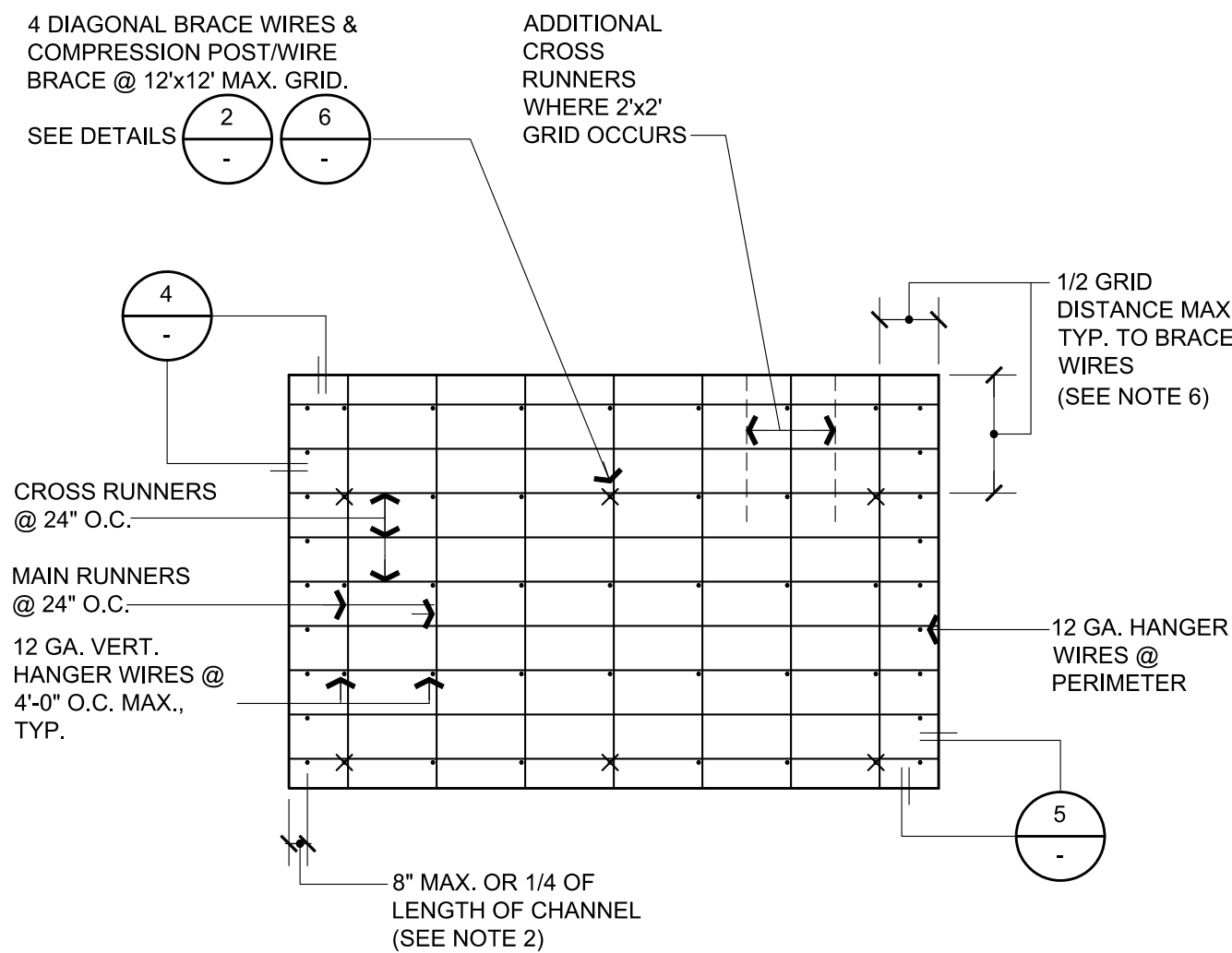
5 SUSPENDED CEILING SLIP JOINT AT WALL

SCALE: 3" = 1'-0"



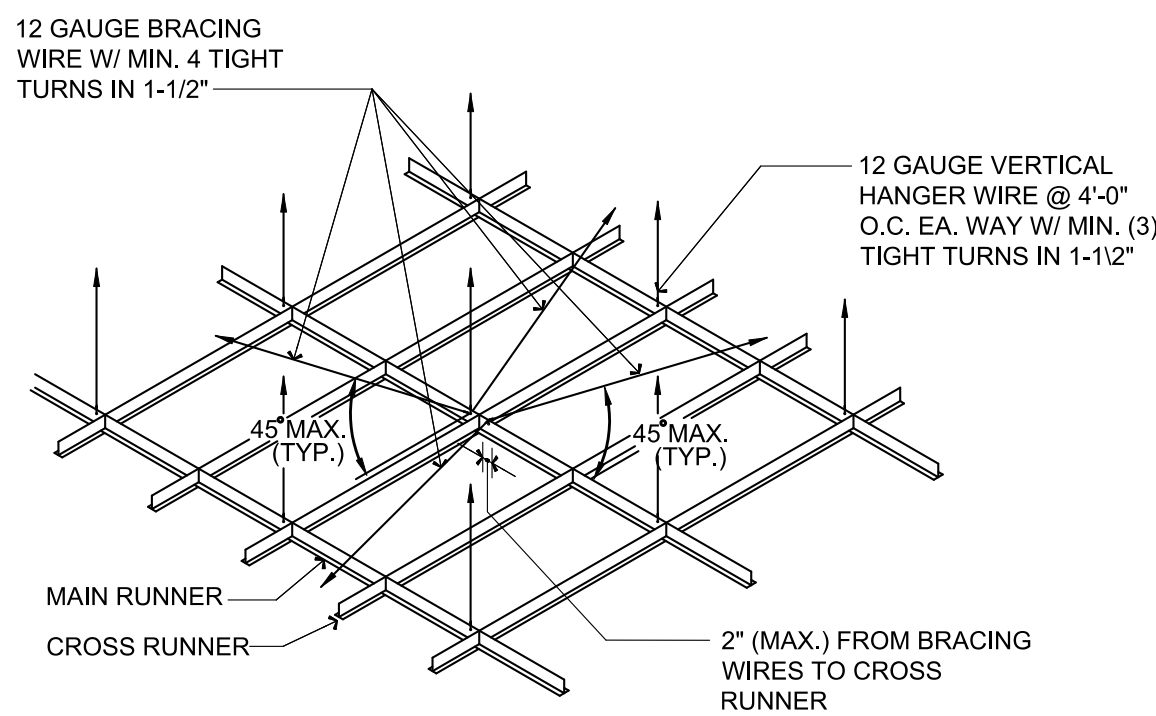
6 SUSPENDED CEILING COMPRESSION POST

N.T.S.



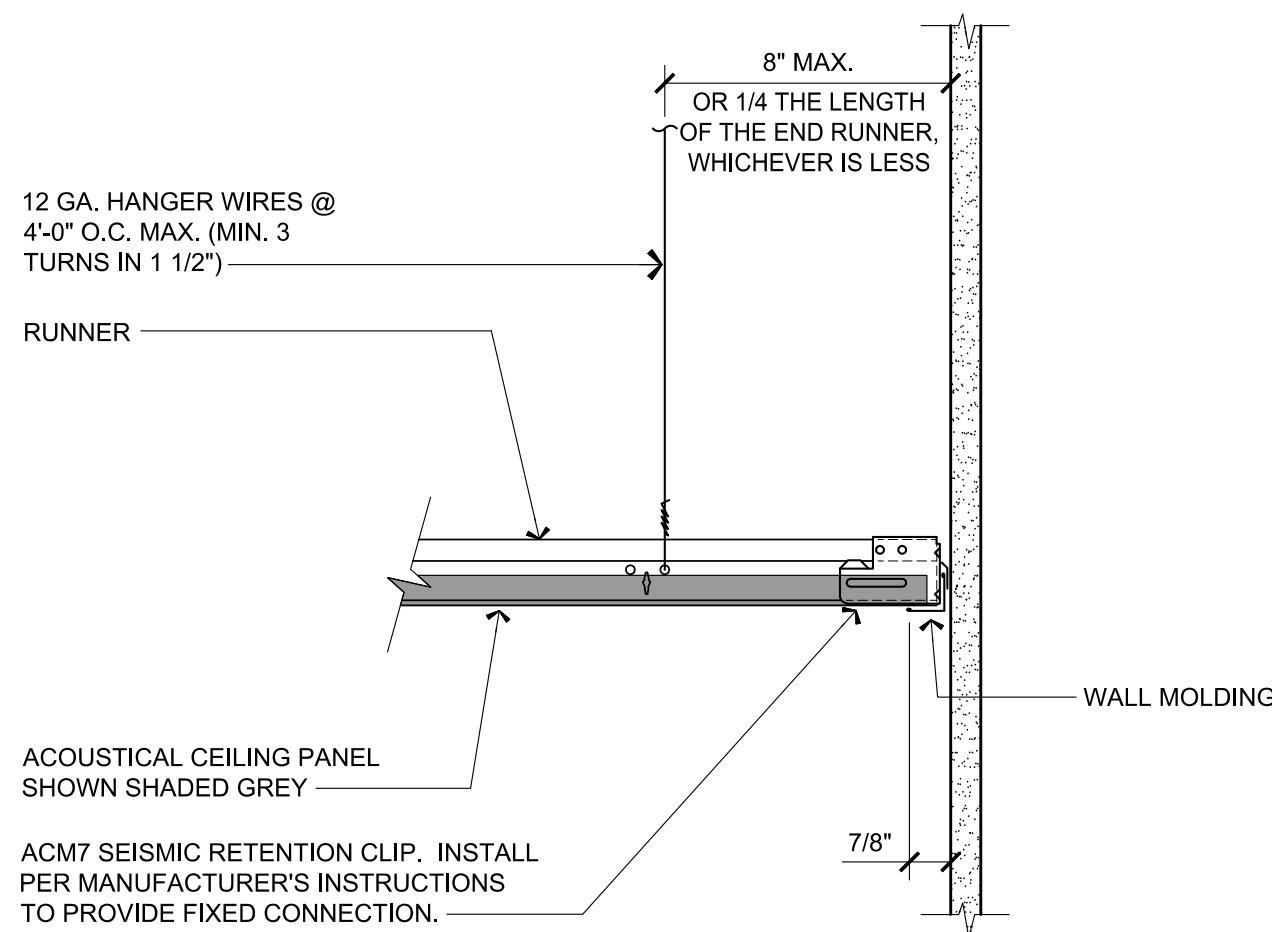
2 DIAGRAMATIC CEILING SUSPENSION SYSTEM

N.T.S.



3 ISOMETRIC OF CEILING SUSPENSION SYSTEM

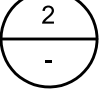
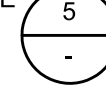

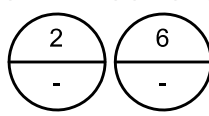
N.T.S.



4 SUSPENDED CEILING FIXED CONDITION AT WALL

SCALE: 3" = 1'-0"

SUSPENDED CEILING NOTES:

- 12 GAUGE (8 GAUGE AT GYPSUM BOARD) HANGER WIRES MAY BE USED FOR UP TO, AND INCLUDING, 4'-0" X 4'-0" GRID SPACING ALONG MAIN RUNNERS. SPLICES ARE NOT BE PERMITTED IN ANY HANGER WIRES. SEE 
- PROVIDE 12 GA. (8 GAUGE AT GYPSUM BOARD) 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, WHICHEVER 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 CITY REVIEW AND APPROVAL.
- PROVIDE TRAPEZE OR OTHER SUPPLEMENTARY SUPPORT MEMBERS AT OBSTRUCTIONS TO MAIN HANGER SPACING. PROVIDE ADDITIONAL 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 SHALL HAVE COUNTER-SLOPING WIRES.
- CEILING GRID MEMBERS MAY BE ATTACHED TO NOT MORE THAN 2 ADJACENT WALLS. CEILING GRID MEMBERS SHOULD BE AT LEAST 1/2" 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" CLEAR OF WALL. SEE 
- 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 16 GAUGE WIRE WITH A 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. SEE 
- PROVIDE SETS OF (4) 12 GAUGE SPLAYED BRACING WIRES ORIENTED 90 DEGREES FROM EACH OTHER AT NOT MORE THAN 12 FEET BY 12 FEET ON CENTER. PROVIDE BRACING WIRES AT LOCATIONS NOT MORE THAN HALF OF THE ABOVE SPACINGS FROM EACH PERIMETER WALL AND AT THE EDGE OF VERTICAL CEILING OFFSETS. THE SLOPE OF THESE WIRES SHOULD NOT EXCEED 45 DEGREES FROM THE PLANE OF THE CEILING AND SHOULD BE TAUT WITHOUT CAUSING THE CEILING TO LIFT. SPLICES IN BRACING WIRES ARE NOT PERMITTED. SEE 
- FASTEN HANGER WIRES WITH NOT LESS THAN 3 TIGHT TURNS. FASTEN BRACING SPLAY 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 WIRE ALIGNS AS CLOSELY AS POSSIBLE WITH THE DIRECTION OF THE FORCES ACTING ON THE WIRE.
- SEPARATE ALL CEILING HANGING AND BRACING WIRES AT LEAST 6 INCHES FROM ALL UNBRACED DUCTS, PIPES, CONDUIT, ETC. IT IS ACCEPTABLE TO ATTACH LIGHTWEIGHT ITEMS, SUCH AS SINGLE ELECTRICAL CONDUIT NOT EXCEEDING 3/4" NOMINAL DIAMETER, TO HANGER WIRES USING CONNECTORS.
- ATTACH ALL LIGHT FIXTURES TO THE CEILING GRID RUNNERS TO RESIST A HORIZONTAL FORCE EQUAL THE WEIGHT OF THE FIXTURES.
- FLUSH OR RECESSED LIGHT FIXTURES AND AIR TERMINALS OR SERVICES WEIGHING LESS THAN 56 POUNDS MAY BE SUPPORTED DIRECTLY ON THE RUNNERS OF A HEAVY DUTY GRID SYSTEM BUT, IN ADDITION, THEY MUST HAVE A MINIMUM OF TWO 12 GAUGE SLACK SAFETY WIRES ATTACHED TO THE FIXTURE AT DIAGONAL CORNERS AND ANCHORED TO THE STRUCTURE ABOVE. ALL FLUSH OR RECESSED LIGHT FIXTURES AND AIR TERMINALS OR SERVICES WEIGHING 56 POUNDS OR MORE MUST BE INDEPENDENTLY SUPPORTED BY NOT LESS THAN (4) TAUT 12 GAUGE WIRES, EACH ATTACHED TO THE FIXTURE AND TO THE STRUCTURE ABOVE, REGARDLESS OF THE TYPE OF CEILING GRID SYSTEM USED.
- (4) TAUT 12 GAUGE WIRES, INCLUDING THEIR ATTACHMENT TO THE STRUCTURE ABOVE, MUST BE CAPABLE OF SUPPORTING 4 TIMES THE WEIGHT OF THE UNIT.
- ALL FIXTURES AND AIR TERMINALS OR SERVICES SUPPORTED ON INTERMEDIATE DUTY GRID SYSTEMS MUST BE INDEPENDENTLY SUPPORTED BY NOT LESS THAN (4) TAUT 12 GAUGE WIRES EACH ATTACHED TO THE FIXTURE OR TERMINAL AND TO THE STRUCTURE ABOVE.
- 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 GAUGE WIRE. SPRING CLIPS OR CLAMPS THAT CONNECT ONLY TO THE RUNNER ARE NOT ACCEPTABLE. PROVIDE ADDITIONAL SUPPORTS WHEN LIGHT FIXTURES ARE 8 FEET OR LONGER.
- 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.
- LAY-IN CEILING ASSEMBLIES IN EXITWAYS SHALL BE INSTALLED WITH A MAIN RUNNER OR CROSS RUNNER SURROUNDING ALL SIDES OF EACH PIECE OF TILE BOARD OR PANEL AND EACH LIGHT FIXTURE OR GRILL SPLICES AND INTERSECTIONS OF SUCH RUNNERS SHALL BE ATTACHED WITH THROUGH CONNECTORS SUCH AS POP RIVETS, SCREWS, PINS, PLATES WITH BENT TABS OR BY OTHER APPROVED CONNECTORS. EXPANSION JOINTS SHALL BE PROVIDED IN THE CEILING AT INTERSECTIONS OF CORRIDORS AND AT JUNCTIONS OF CORRIDORS AND LOBBIES OR OTHER SIMILAR AREAS.
- GYPSUM BOARD SUSPENDED CEILING SYSTEMS SHALL COMPLY WITH TITLE 24, CCR, AND GYPSUM BOARD CEILINGS SHOULD NOT SUPPORT MATERIALS OR BUILDING COMPONENTS OTHER THAN GRILLS, LIGHT FIXTURES, SMALL ELECTRICAL CONDUITS, SMALL DUCTS AND THE LIKE. ALL SUCH COMPONENTS SHOULD BE SUPPORTED EITHER DIRECTLY FROM MAIN RUNNERS, OR BY SUPPLEMENTAL FRAMING WHICH IS SUPPORTED BY MAIN RUNNERS.
- SUSPENDED ACOUSTICAL CEILING SYSTEMS SHALL COMPLY WITH 2010 CBC, ASTM C635, ASTM C636, CISCA (FOR SEISMIC DESIGN CATEGORIES D, E AND F), AND ASCE 7.05. NO VERTICAL LOADS OTHER THAN GYPSUM BOARD DEAD LOAD SHOULD BE APPLIED TO CROSS-FURRING.

GENERAL CEILING NOTES:

- ALL WORK SHALL COMPLY WITH 2013 CBC, ASTM C635, ASTM C636, CISCA (FOR SEISMIC DESIGN CATEGORIES D, E, AND F), AND ASCE 7.05 PARTICULAR ATTENTION IS DIRECTED TO INDEPENDENT SUSPENSION OF FIXTURES, DUCTS, DIFFUSERS, GRID INTERSECTIONS, SPLICES, PERIMETER DETAILS AND SEISMIC REQUIREMENTS.

STRUTS

- STRUTS SHALL BE VERTICAL, AND SHALL NOT HANG MORE THAN 1 IN 6 OUT-OF- PLUMB.
- STRUTS SHALL BE DESIGNED IN ACCORDANCE WITH CBC CHAPTER 22, STEEL (2010 EDITION OF THE CALIFORNIA BUILDING CODE).

ACCEPTABLE STRUT (PIPE) SIZES AND LENGTHS

TRADE SIZE	ALLOWABLE LENGTH	
	EMT	IMC or RMC
1/2"	3'-10"	4'-4"
3/4"	5'-2"	5'-7"
1"	6'-6"	7'-0"
1 1/4"	8'-6"	9'-0"
1 1/2"	9'-10"	10'-5"
2"	---	13'-2"

EMT - ELECTRICAL METALLIC TUBING
IMC - INTERMEDIATE METAL CONDUIT
RMC - RIGID METAL CONDUIT

1 SUSPENDED CEILING & GENERAL CEILING NOTES

N.T.S.



420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-4373
ellenbergerarchitecture.com

CONSULTANT

DEDICATED ICE FACILITY FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

SUSPENDED CEILING DETAILS

DRAWING STATUS

CONSTRUCTION DOCUMENTS

INITIAL PLAN REVIEW SUBMITTAL

REVISIONS

Symbol	Description	By	Date
--------	-------------	----	------

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

Drawn By	WDE
----------	-----

Date Drawn	8-27-2018
------------	-----------

Scale	AS NOTED
-------	----------

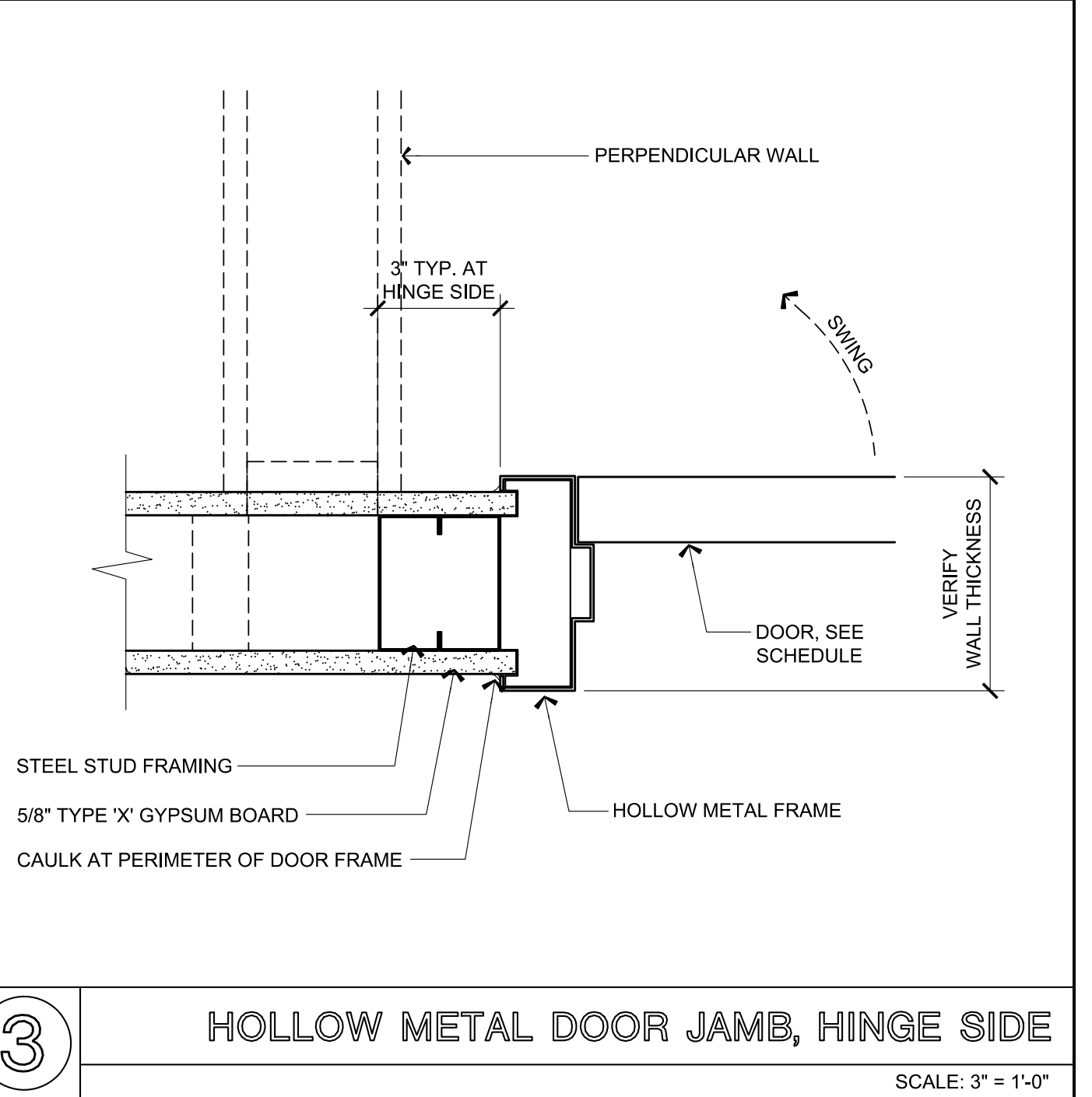
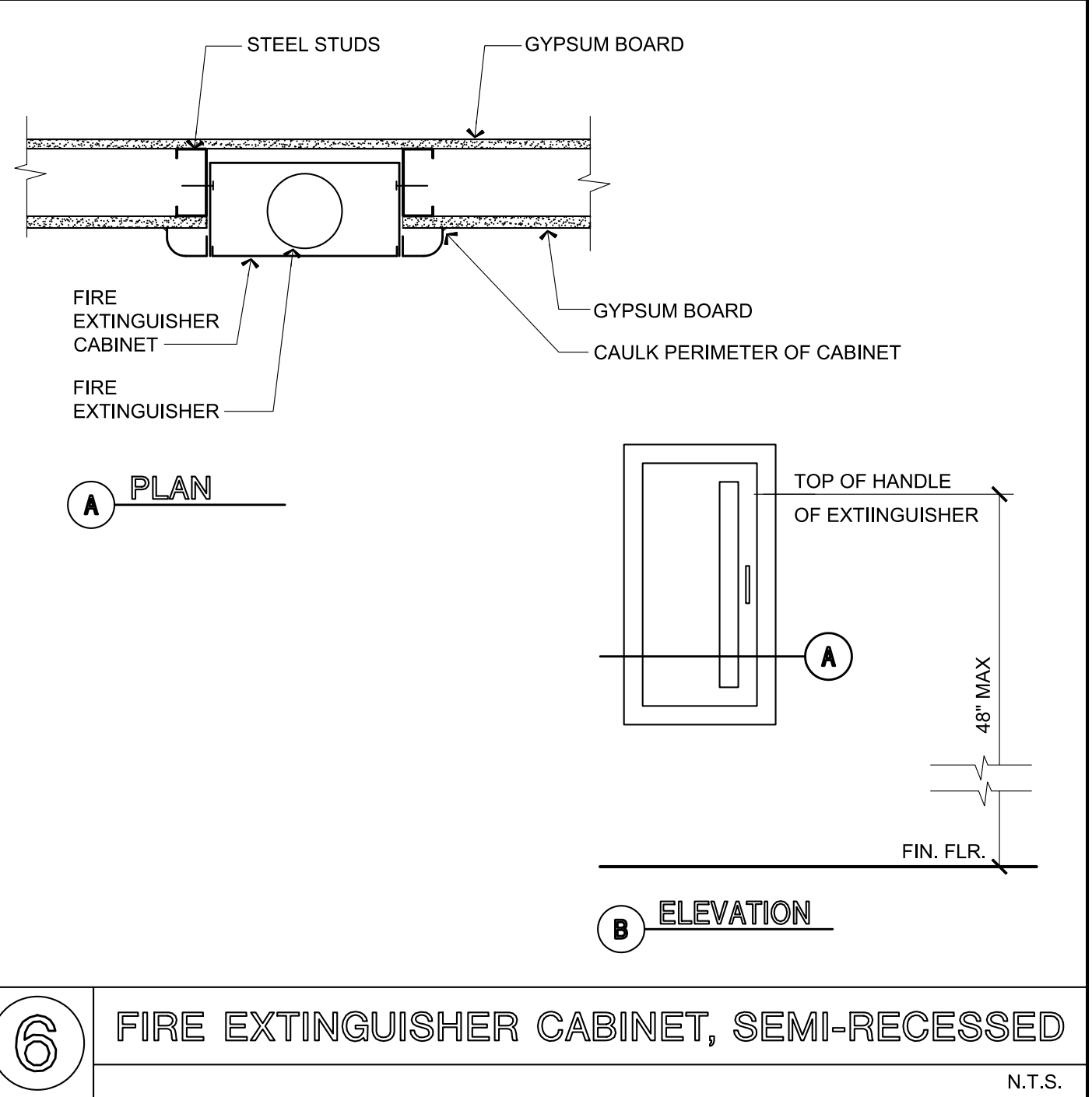
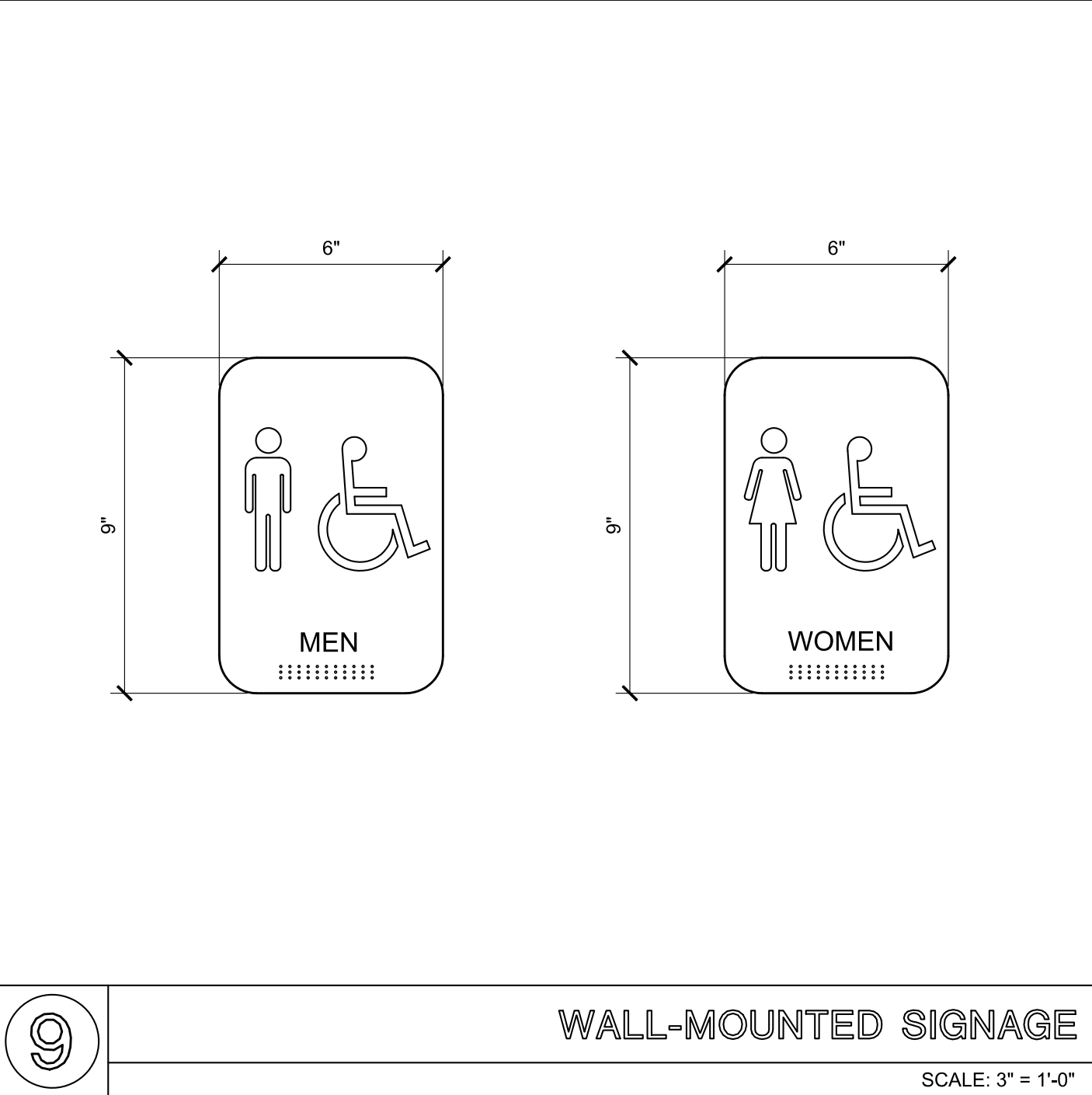
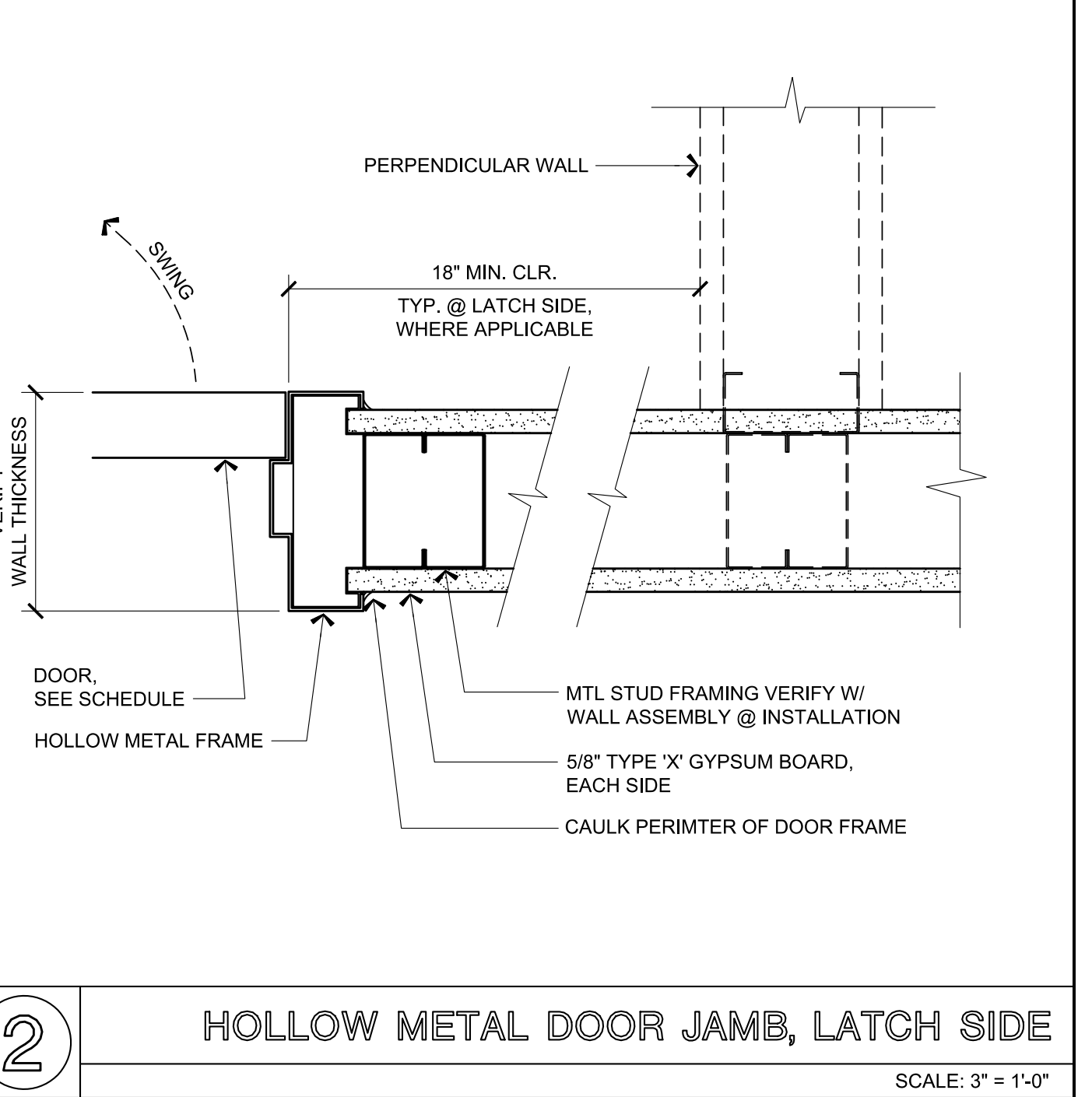
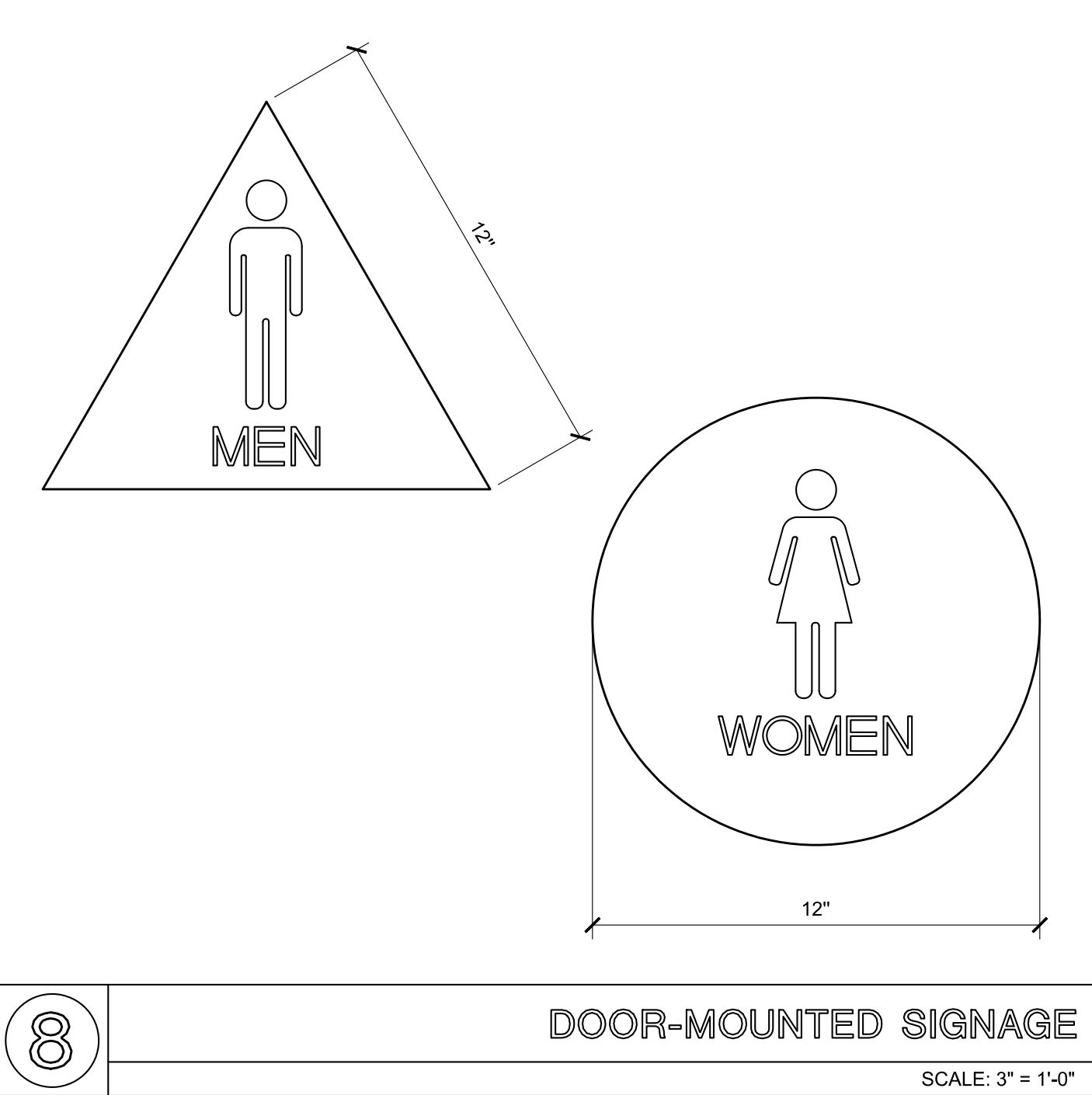
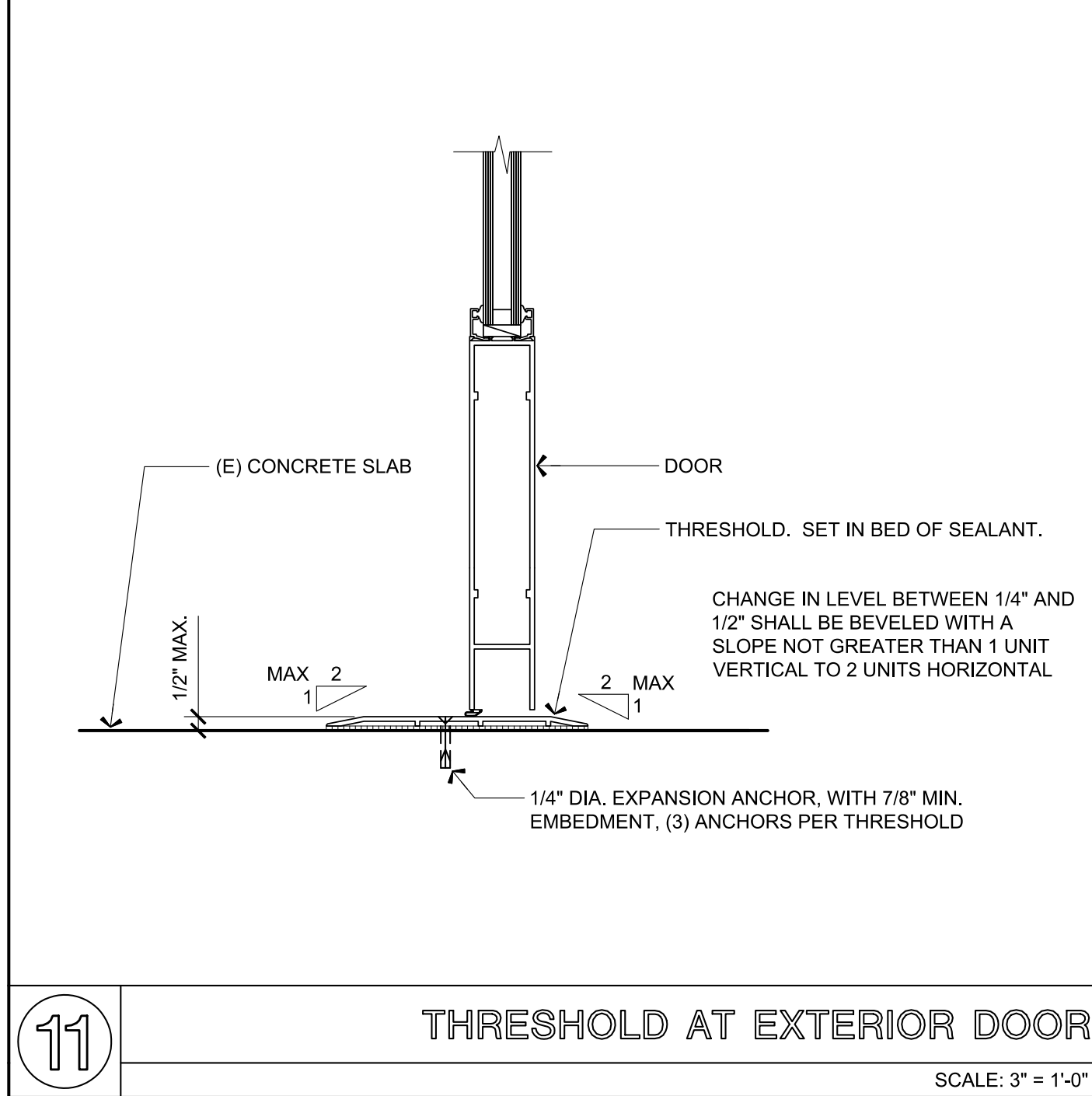
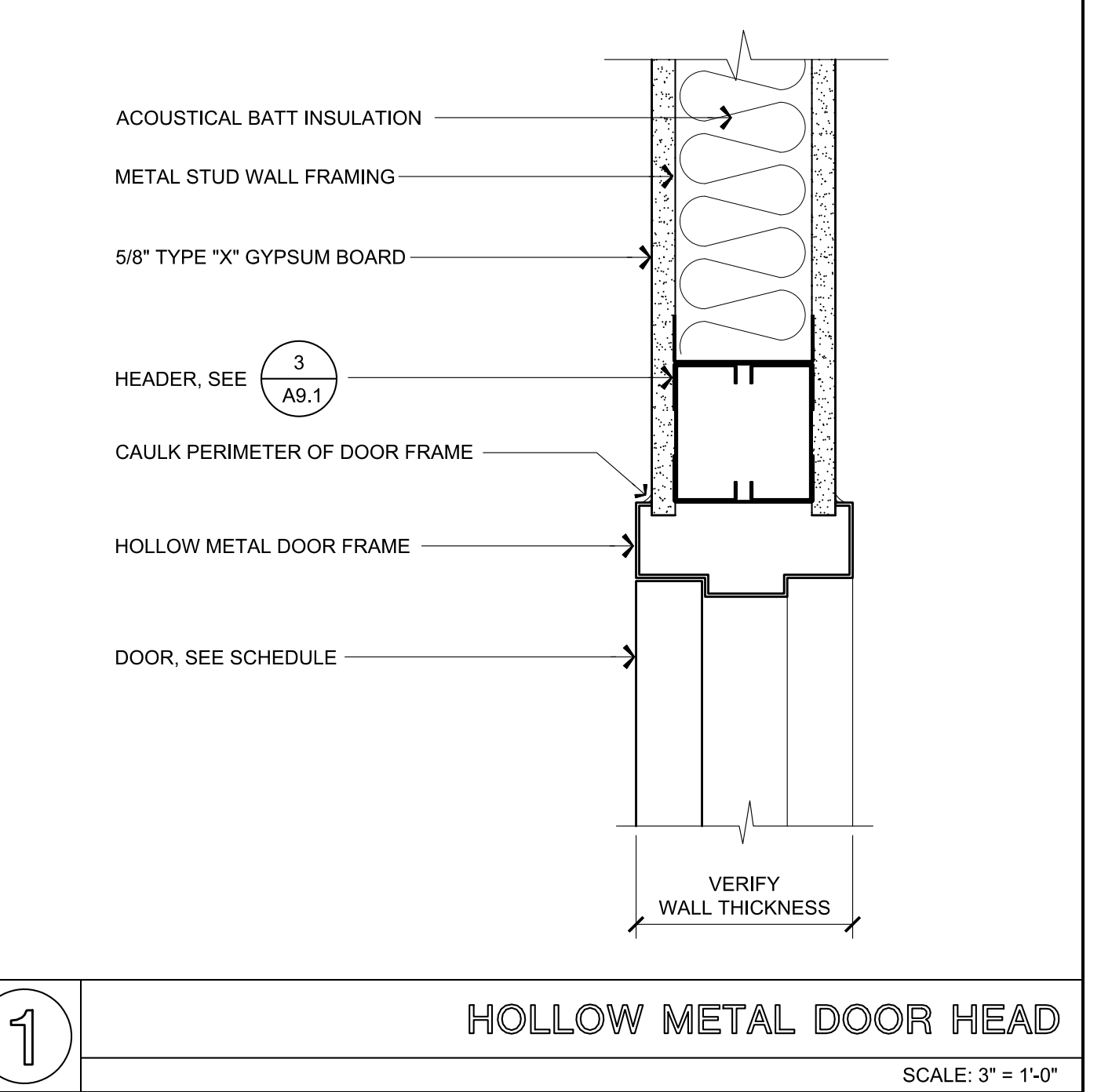
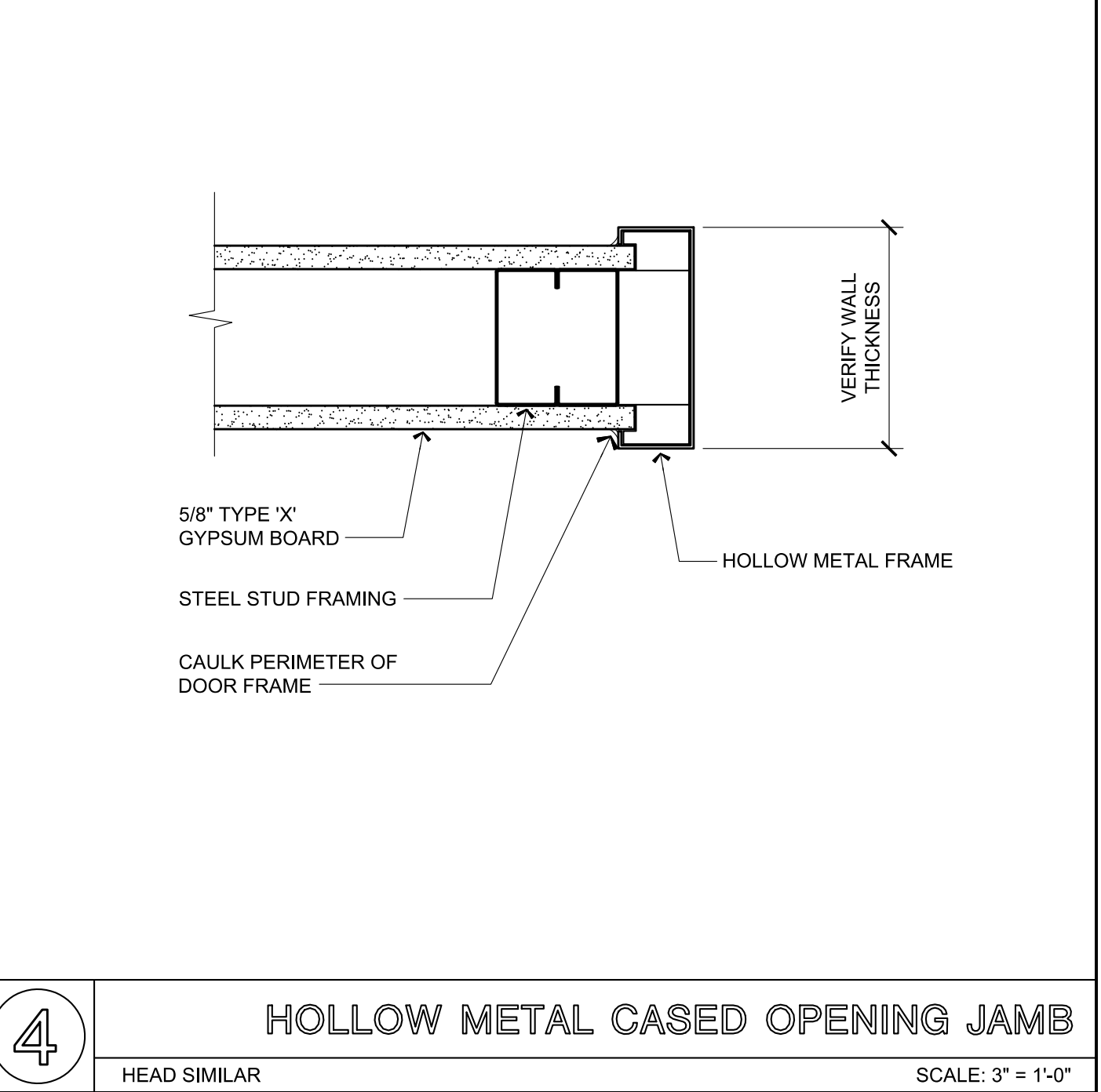
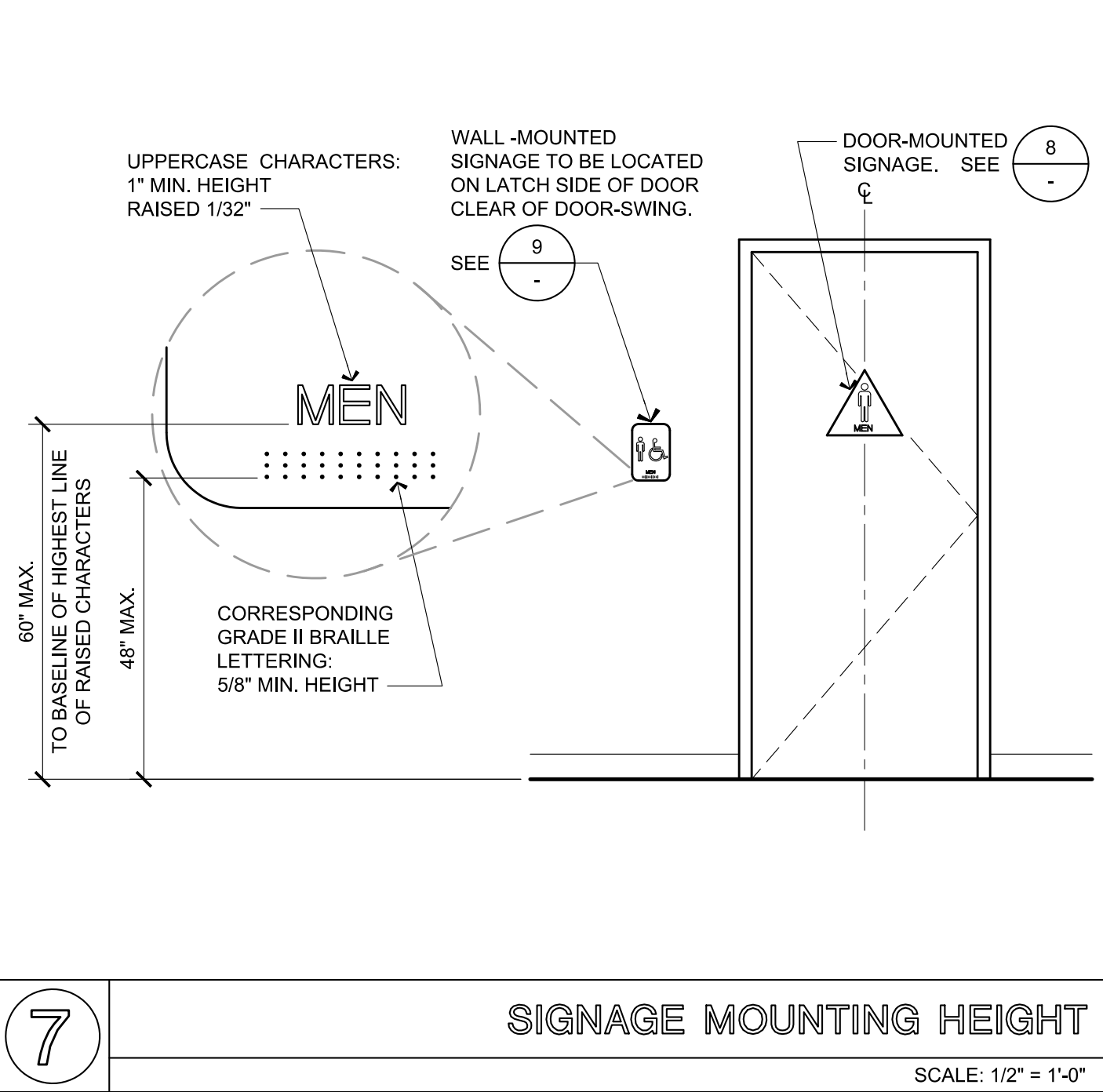
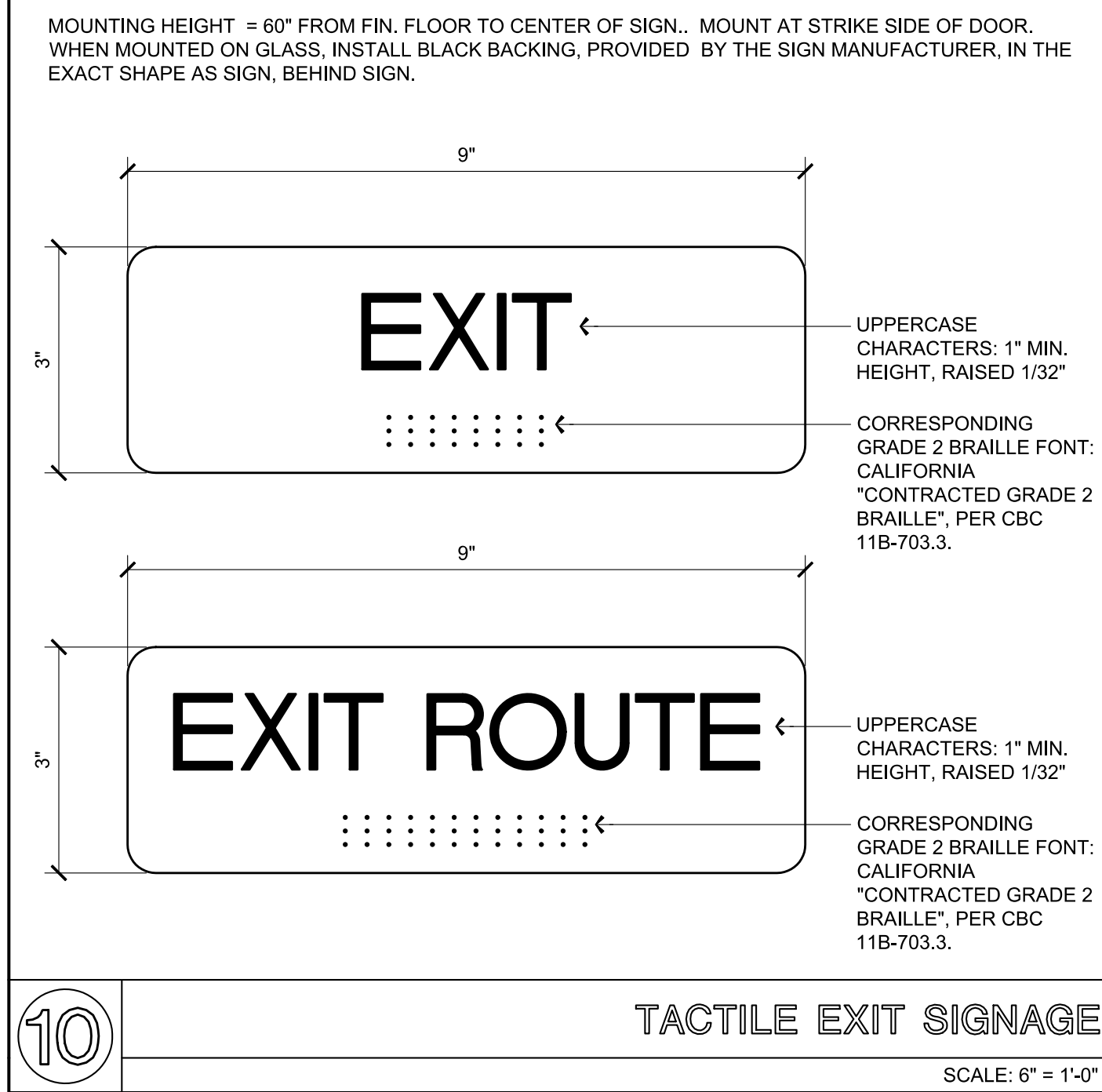
Job Number	17-3059
------------	---------



Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by, or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

SHEET NUMBER

A9.3



REVISIONS			
Symbol	Description	By	Date

Drawn By	WDE
Date Drawn	8-27-2018
Scale	AS NOTED
Job Number	17-3059



Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by, or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

STRUCTURAL NOTES

CONCRETE

1.

ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT ADDITION OF THE ACI MANUAL OF CONCRETE PRACTICE.
2.

ALL CONCRETE MIXES SHALL UTILIZE TYPE II PORTLAND CEMENT CONFORMING TO ASTM C150.
3.

AGGREGATES SHALL CONFORM TO ASTM C33. MAXIMUM AGGREGATE SIZE FOR FOOTINGS AND MASS CONCRETE SHALL NOT EXCEED 1-1/2".
4.

FLY ASH SHALL CONFORM TO ASTM C618, CLASS F. FLY ASH SHALL NOT EXCEED 15% OF CEMENT BY WEIGHT, AND SHALL NOT EXPERIENCE A LOSS ON IGNITION OF GREATER THAN 1%.
5.

ALL CONCRETE MIXES SHALL HAVE A MAXIMUM WATER TO CEMENT RATIO OF 0.50, AND SHALL HAVE AN ENTRAPPED AIR CONTENT OF 1% TO 3%. ADMIXTURES USED SHALL BE SUBJECT TO PRIOR APPROVAL BY THE ENGINEER OF RECORD.
6.

REINFORCING BARS, ANCHOR BOLTS AND CONCRETE INSERTS SHALL BE PROPERLY LOCATED AND SECURELY FASTENED IN POSITION PRIOR TO PLACING CONCRETE.
7.

MAXIMUM CONCRETE SLUMP SHALL NOT EXCEED 3" FOR FOOTINGS, MASS CONCRETE, AND SLABS-ON-GRADE, AND 4" FOR OTHER CONCRETE.
8.

MINIMUM ULTIMATE COMPRESSIVE STRENGTH SHALL BE AS FOLLOWS:

PSI

DAYS

A. FOOTINGS

3,000*

28

B. SLABS-ON-GRADE

3,000*

28

D. LEAN CONCRETE FILL

1,000*

28

* DESIGN STRENGTH = 2,500 psi.

(NORMAL-WEIGHT CONCRETE)
9.

PROJECTING CORNERS OF ALL CONCRETE MEMBERS SHALL BE FORMED WITH 3/4" CHAMFER UNLESS DETAILED OTHERWISE.
10.

THE OUTSIDE DIAMETER (O.D) OF CONDUIT OR PIPE PLACED IN THE PLANE OF A SLAB-ON-GRADE SHALL NOT EXCEED 30% OF SLAB THICKNESS UNLESS SPECIFICALLY DETAILED OTHERWISE AND SHALL BE LOCATED IN MIDDLE 1/3 OF SLAB. CLEAR SPACING BETWEEN ADJACENT CONDUITS OR PIPES SHALL BE TWICE THE LARGER O.D. MINIMUM, UNLESS OTHERWISE NOTED ON PLANS.
11.

SURFACES OF JOINTS REFERENCED AS 'COLD JOINTS', SHALL BE TROWELED OR OTHERWISE FINISHED SMOOTH WITH 2 LAYERS OF BUILDING PAPER BETWEEN SURFACES. ALL OTHER CONCRETE JOINTS SHALL BE ROUGHENED TO 1/4" +/- AMPLITUDE UNLESS OTHERWISE NOTED.
12.

NON-SHRINK GROUT OR DRY PACK SHALL BE A PREMIXED, NON-METALLIC FORMULA WITH A MINIMUM COMPRESSIVE STRENGTH OF 7000 psi AT 28 DAYS AND HAVING THE FOLLOWING CHARACTERISTICS: NO SHRINKAGE AFTER PLACEMENT OR EXPANSION AFTER SET (ASTM C1090); ONE DAY COMPRESSIVE STRENGTH OF AT LEAST 3000 psi (ASTM C109); AND INITIAL SET TIME OF NOT LESS THAN 45 MINUTES (ASTM C191). PROVIDE "HI-FLOW GROUT" OR "DRY PACK GROUT" BY EUCLID, OR AN APPROVED EQUAL.

POST INSTALLED ANCHORS

1.

EXPANSION ANCHORS IN CONCRETE SHALL BE HILTI KWIK BOLT TZ WEDGE ANCHORS PER ICC-ES REPORT ESR-1917.
2.

EXPANSION ANCHORS IN MASONRY SHALL BE HILTI KWIK BOLT 3 WEDGE ANCHORS PER ICC-ES REPORT ESR-1385.
3.

SCREW ANCHORS IN MASONRY SHALL BE SIMPSON TITEN MASONRY SCREW ANCHORS PER ICC-ES REPORT ESR-1056.
4.

EPOXY ADHESIVE ANCHORS IN CONCRETE OR MASONRY SHALL USE SIMPSON SET EPOXY PER ICC-ES REPORT ESR-1772, OR APPROVED EQUAL.

REINFORCING STEEL

1.

REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60 IN ALL CONCRETE AND MASONRY UNLESS NOTED OTHERWISE ON THE PLANS. REINFORCING STEEL THAT IS TO BE WELDED SHALL BE ASTM A706. A706 REBAR SHALL BE WELDED PER THE LATEST AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE.
2.

CLEAR COVERAGE OF CONCRETE OVER OUTER REINFORCING BARS SHALL BE AS FOLLOWS (UNLESS OTHERWISE NOTED):

A.

CONCRETE CAST AGAINST AND EXPOSED TO EARTH-----

3"

B.

INTERIOR STRUCTURAL SLABS, TOP AND BOTTOM-----

3/4"

C.

FORMED CONCRETE EXPOSED TO EARTH OR WEATHER

#6 BAR OR LARGER-----

2"

#6 BAR AND SMALLER-----

1-1/2"
3.

ALL REINFORCING BAR BENDS SHALL BE MADE COLD.
4.

REINFORCING BARS SHALL BE LAPPED OR SPICED AS SHOWN ON DRAWINGS. ANY ADDITIONAL SPLICING OR ALTERNATE METHODS SHALL REQUIRE REVIEW FROM THE ENGINEER.
5.

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING ALL NECESSARY TEMPORARY BRACING AS REQUIRED FOR CONSTRUCTION LOADS, STABILITY AND RESISTANCE TO WIND AND SEISMIC FORCES UNTIL THE ENTIRE STRUCTURE IS COMPLETE.

SPECIAL INSPECTION AND MATERIALS TESTING

1.

SPECIAL INSPECTION AND ASSOCIATED MATERIALS TESTING SHALL BE PERFORMED BY A QUALIFIED PERSON OR AGENCY DESIGNATED BY THE OWNER, WHO SHALL DEMONSTRATE COMPETENCE TO THE SATISFACTION OF THE BUILDING OFFICIAL FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION.

A.

SPECIAL INSPECTOR APPLICATIONS MUST BE REVIEWED AND APPROVED BY THE BUILDING DEPARTMENT PRIOR TO THE ISSUANCE OF A PERMIT.

B.

INSPECTION REPORTS NOTING DISCREPANCIES, IF ANY, ARE TO BE FILED WITH THE BUILDING DEPARTMENT WEEKLY DURING CONSTRUCTION, WHETHER CORRECTED OR NOT.

C.

ALL INSPECTOR'S DAILY LOGS ARE TO BE MAINTAINED ON SITE FOR REVIEW BY THE BUILDING DEPARTMENT FIELD INSPECTORS.
2.

THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK FOR COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS. IF THE DISCREPENCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND THE ENGINEER OF RECORD PRIOR TO THE COMPLETION OF THAT PHASE OF WORK. A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED AT THE COMPLETION OF THAT PHASE OF WORK.
3.

SUMMARY OF TESTS, INSPECTIONS AND SUBMITTALS PERFORMED BY AN APPROVED SPECIAL TESTING LAB, SPECIAL INSPECTOR AND/OR ENGINEER SHALL BE AS SPECIFIED BELOW.

ITEM	TESTING	SPECIAL INSPECTION	CERTIFICATE
CONCRETE STRENGTH			✓
CONCRETE MIX DESIGN			✓
POST INSTALLED ANCHORS	✓	✓	

4.

ALSO REFERENCE ANY APPLICATION(S) FOR SPECIAL INSPECTOR FORM(S) AS REQUIRED FROM THE BUILDING DEPARTMENT COMPLETED BY THE SPECIAL INSPECTOR(S).
5.

THE SPECIAL INSPECTIONS LISTED ABOVE ARE NOT INTENDED TO BE ALL INCLUSIVE AND ONLY REPRESENT SPECIAL INSPECTIONS FOR STRUCTURAL PORTIONS OF THE WORK. ADDITIONAL SPECIAL INSPECTIONS OF ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING OR OTHER SYSTEMS MAY BE REQUIRED. REFER TO THE APPROPRIATE DESIGN DISCIPLINES FOR ADDITIONAL INFORMATION.



420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-6373
ellenbergerarchitecture.com

CONSULTANT

DEDICATED
ICE FACILITY
FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

STRUCTURAL NOTES

DRAWING STATUS

CONSTRUCTION
DOCUMENTS

INITIAL PLAN REVIEW SUBMITTAL

REVISIONS

Symbol	Description	By	Date

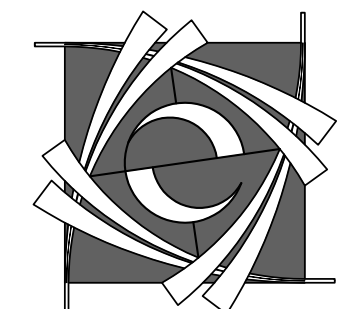
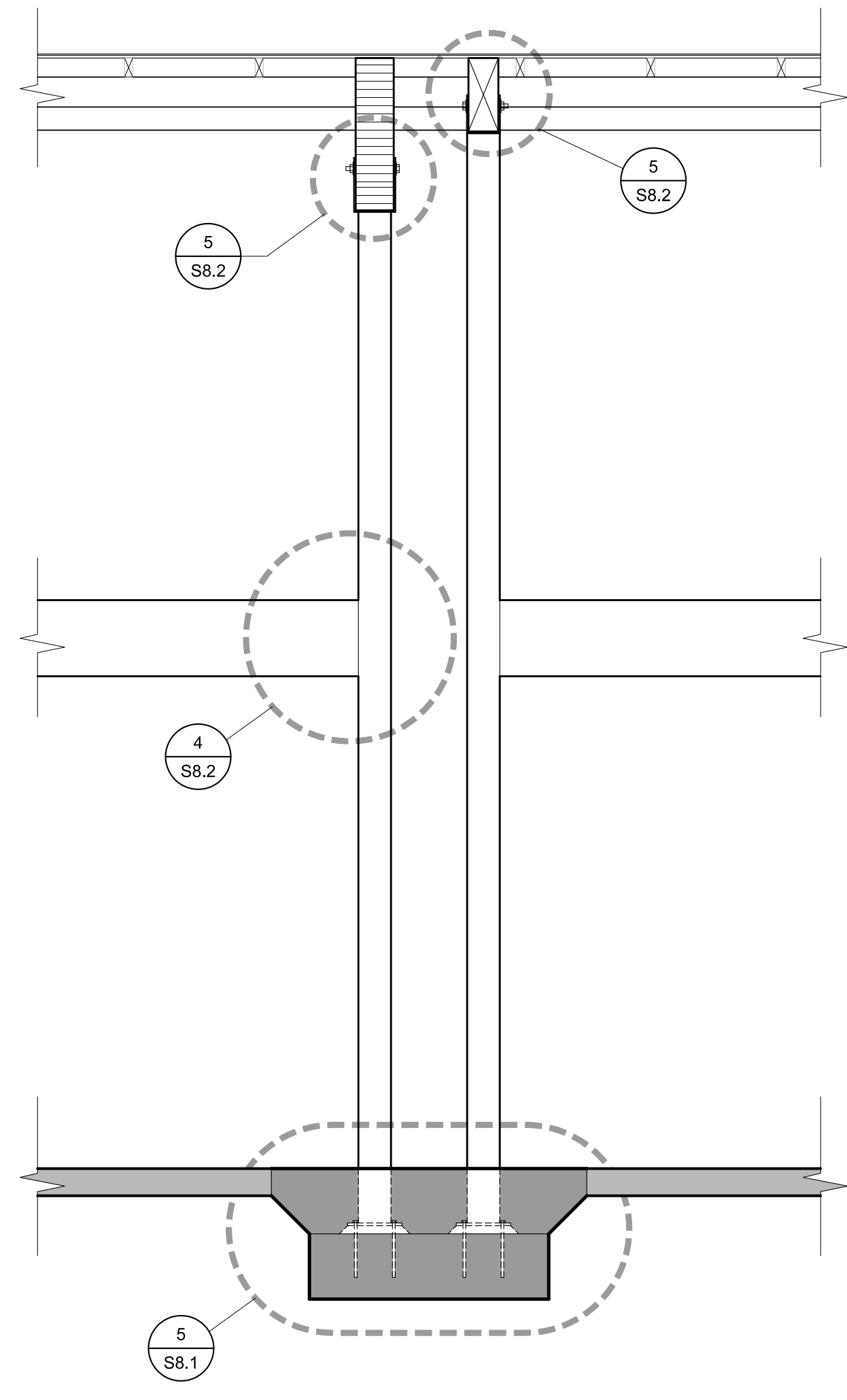
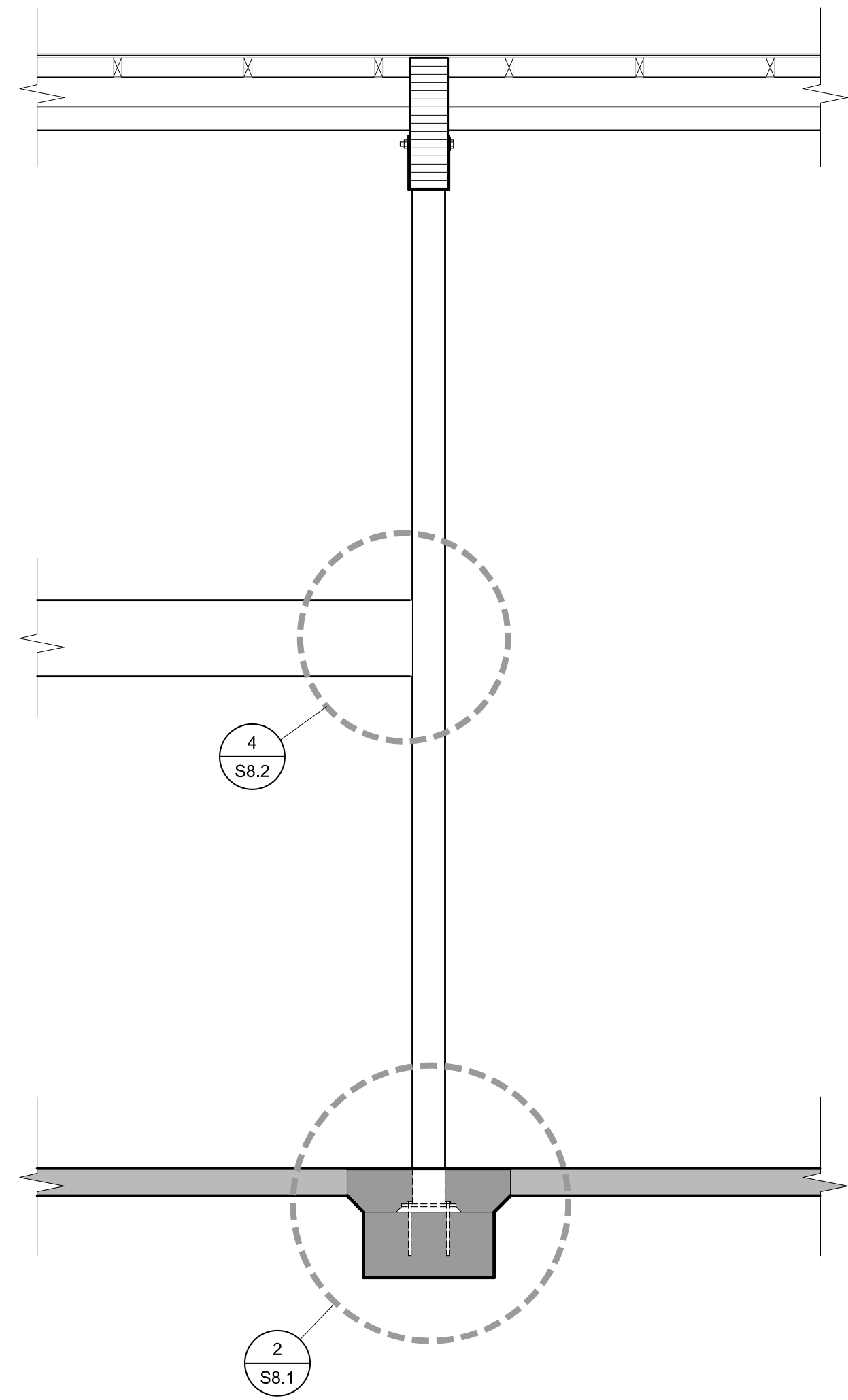
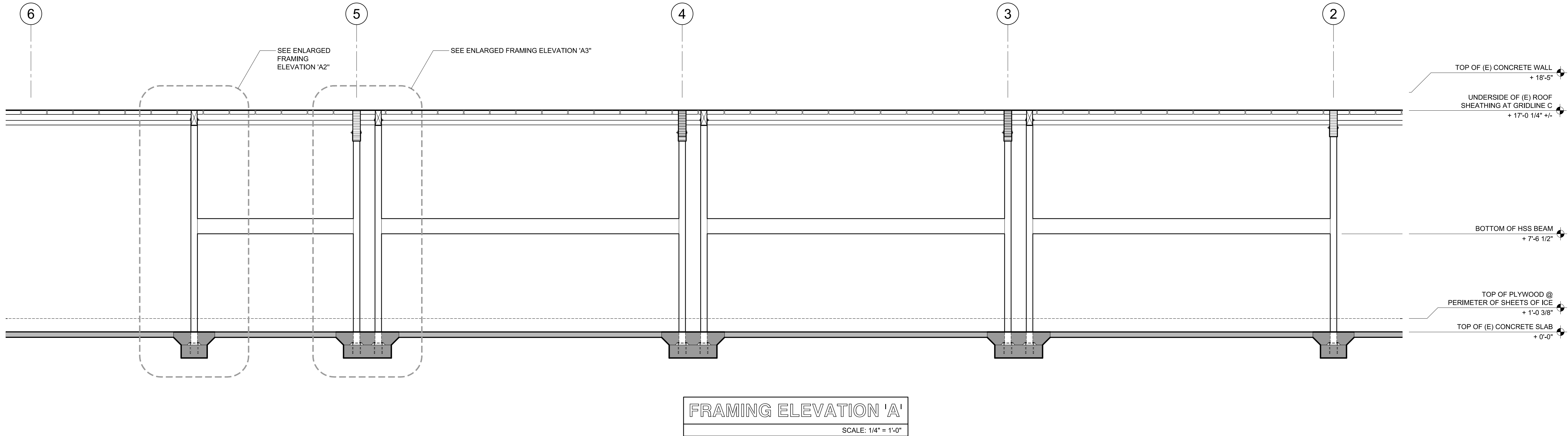
Drawn By	WDE
Date Drawn	8-27-2018
Scale	N.T.S.
Job Number	17-3059



Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by, or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

SHEET NUMBER

S1.1



ELLENBERGER
ARCHITECTURE

420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-4373
ellenbergerarchitecture.com

CONSULTANT

DEDICATED
ICE FACILITY
FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

FRAMING
ELEVATIONS

DRAWING STATUS

CONSTRUCTION
DOCUMENTS

INITIAL PLAN REVIEW SUBMITTAL

REVISIONS

Symbol	Description	By	Date

Drawn By WDE

Date Drawn 8-27-2018

Scale AS NOTED

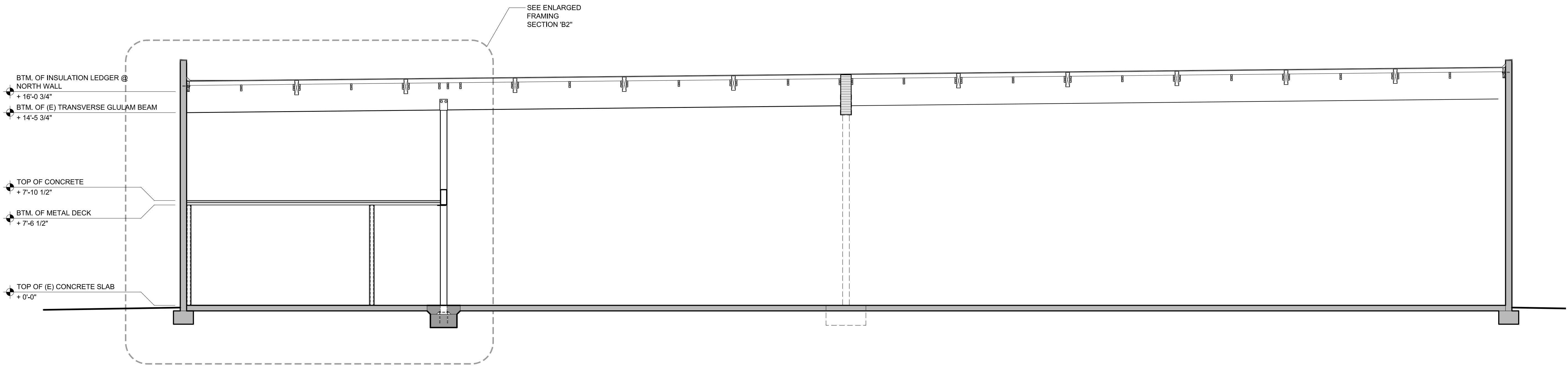
Job Number 17-3059



Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by, or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

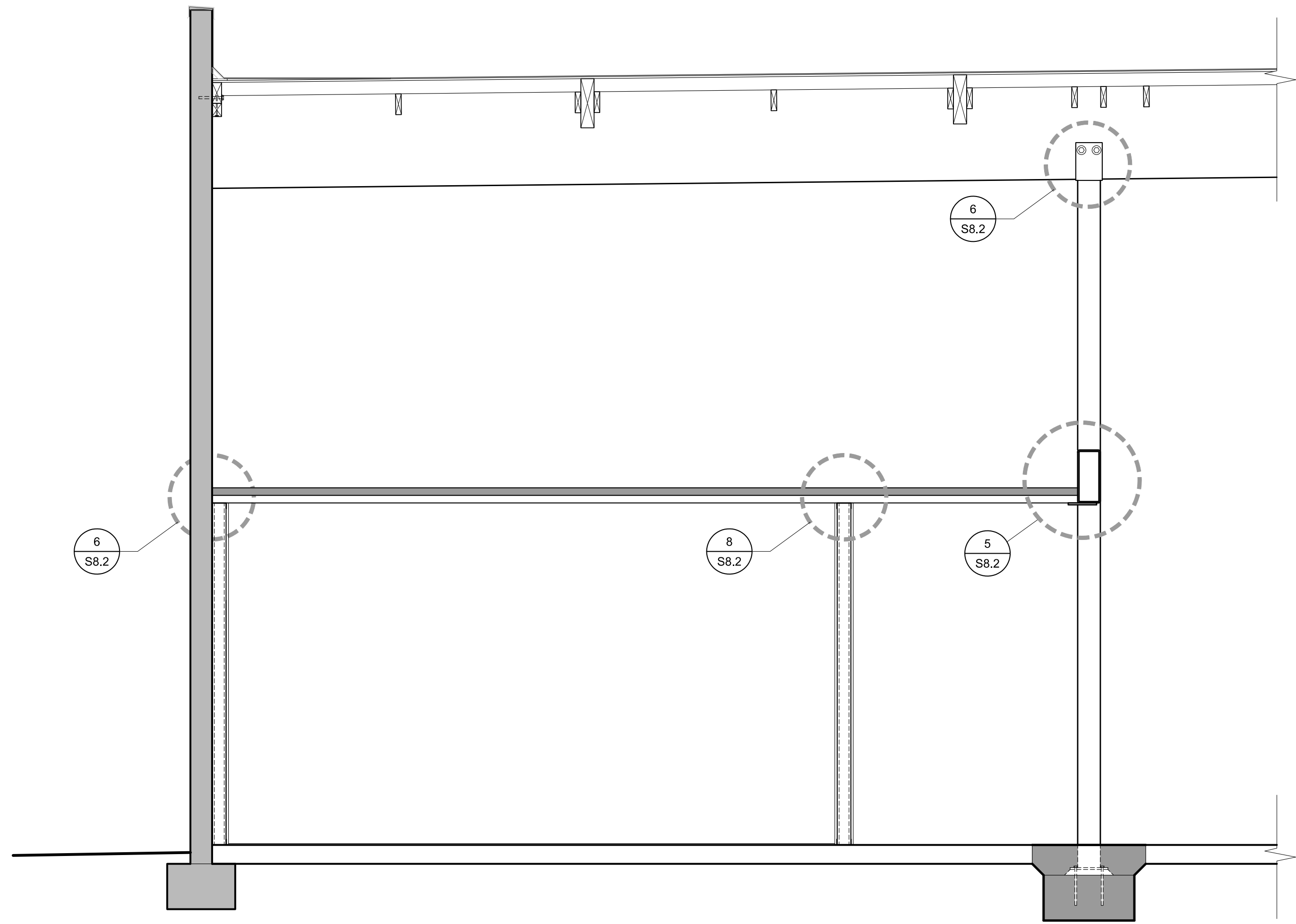
SHEET NUMBER

S5.1



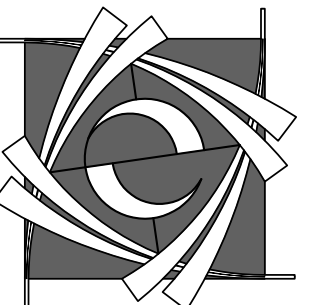
FRAMING SECTION 'B'

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



ENLARGED FRAMING SECTION 'B2'

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



ELLENBERGER
ARCHITECTURE

420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-4373
ellenbergerarchitecture.com

CONSULTANT

DEDICATED
ICE FACILITY
FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

FRAMING
SECTIONS

DRAWING STATUS

CONSTRUCTION
DOCUMENTS

INITIAL PLAN REVIEW SUBMITTAL

REVISIONS

Symbol	Description	By	Date
--------	-------------	----	------

--	--	--	--

--	--	--	--

--	--	--	--

Drawn By	WDE
----------	-----

Date Drawn	8-27-2018
------------	-----------

Scale	AS NOTED
-------	----------

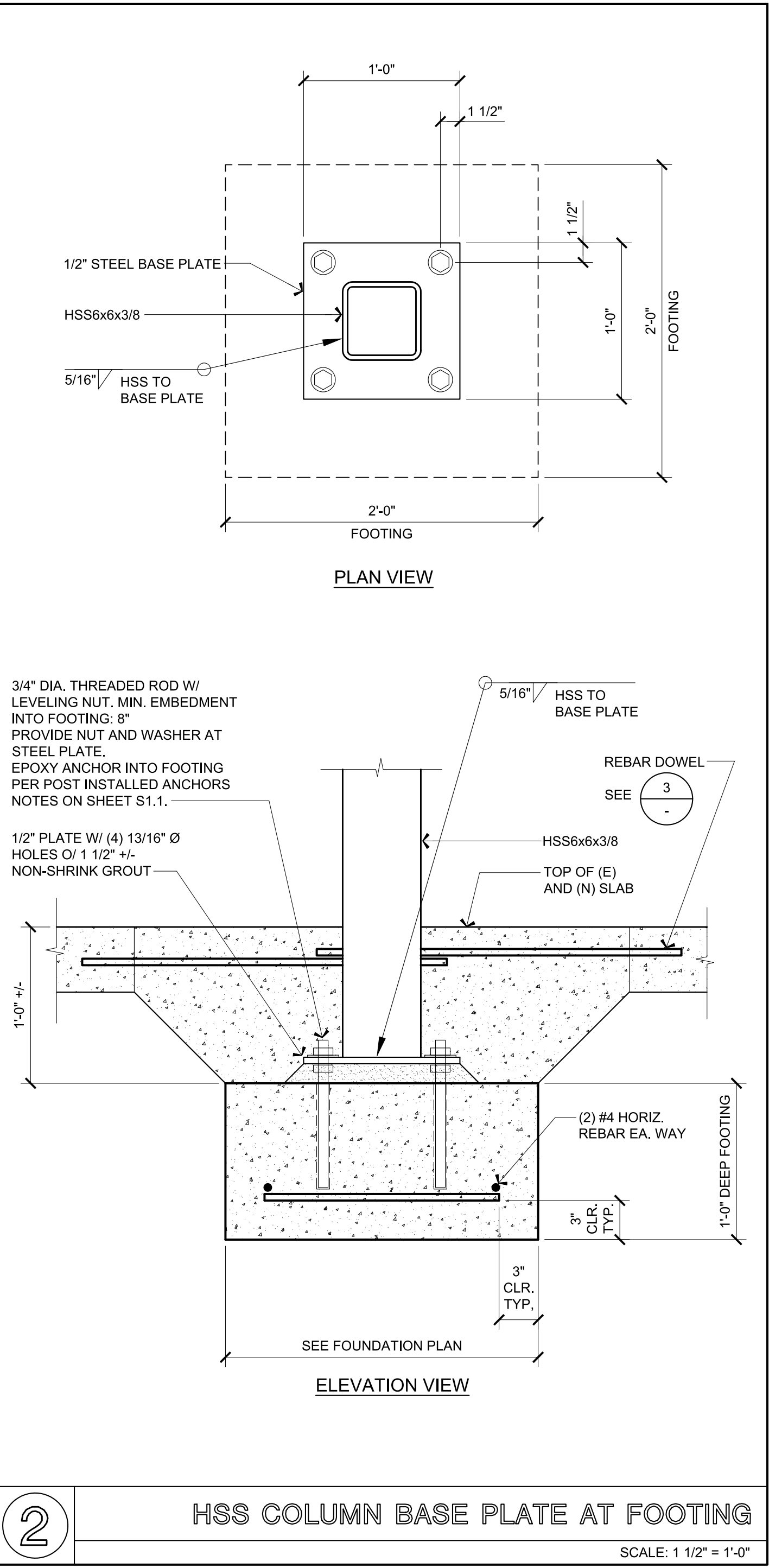
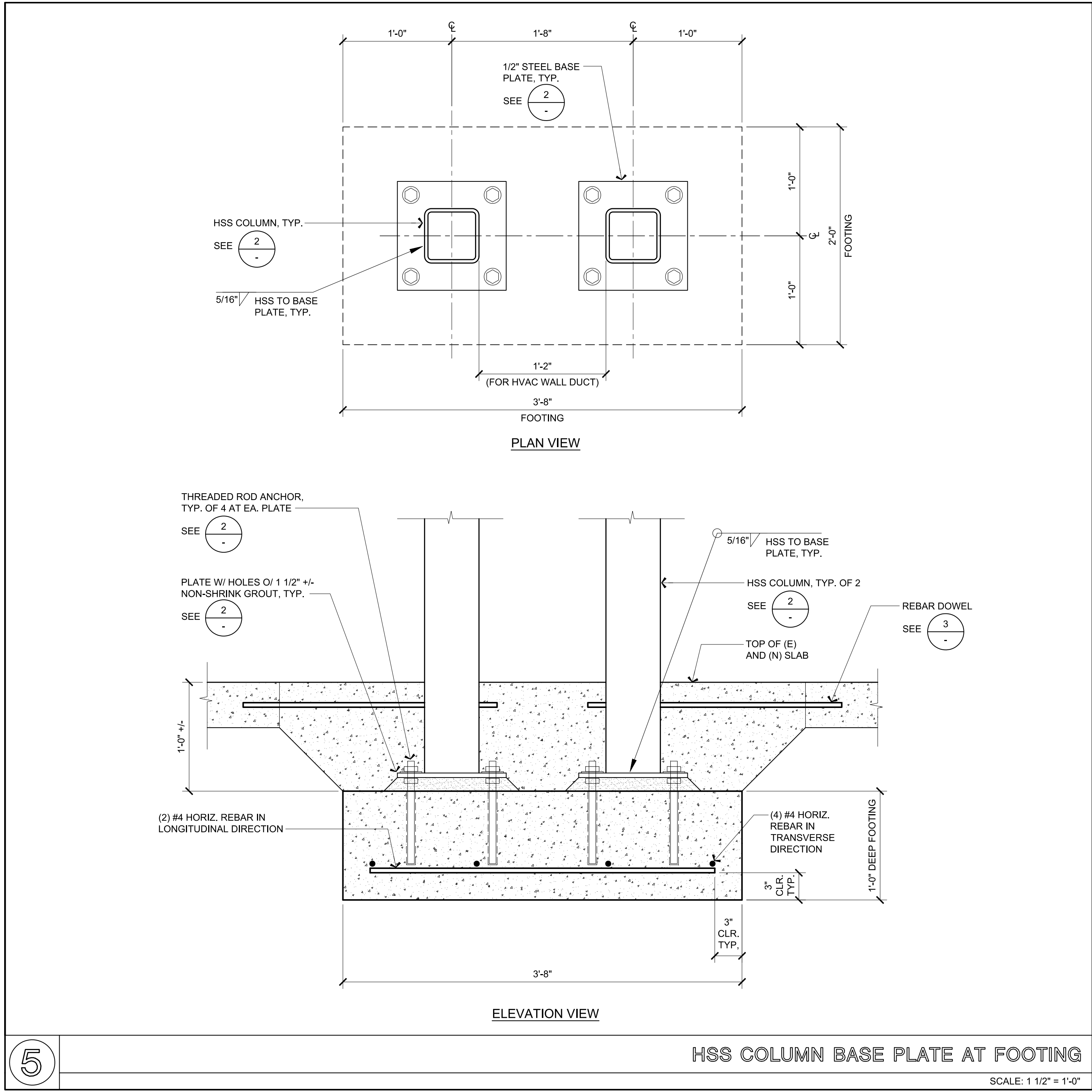
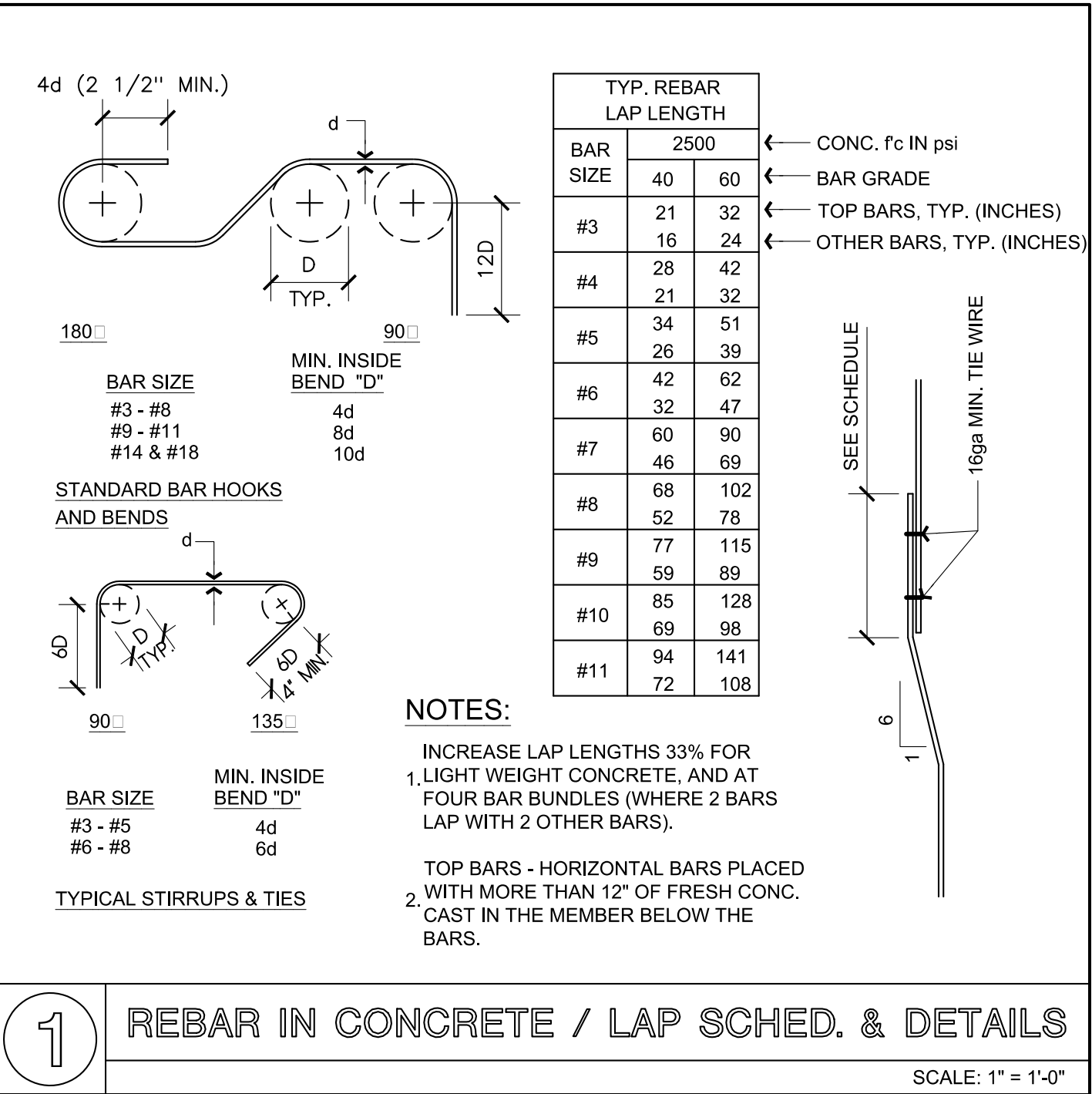
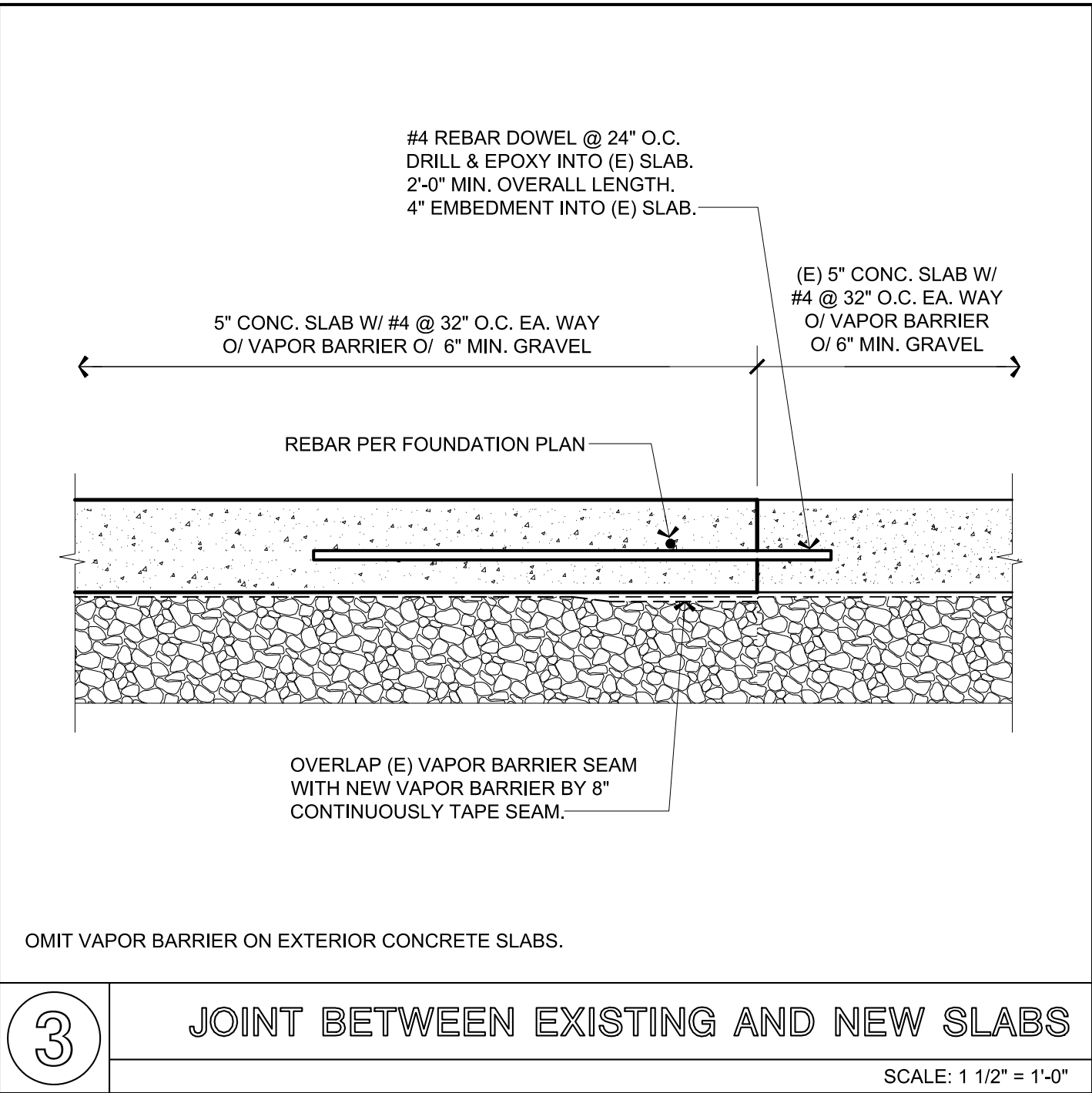
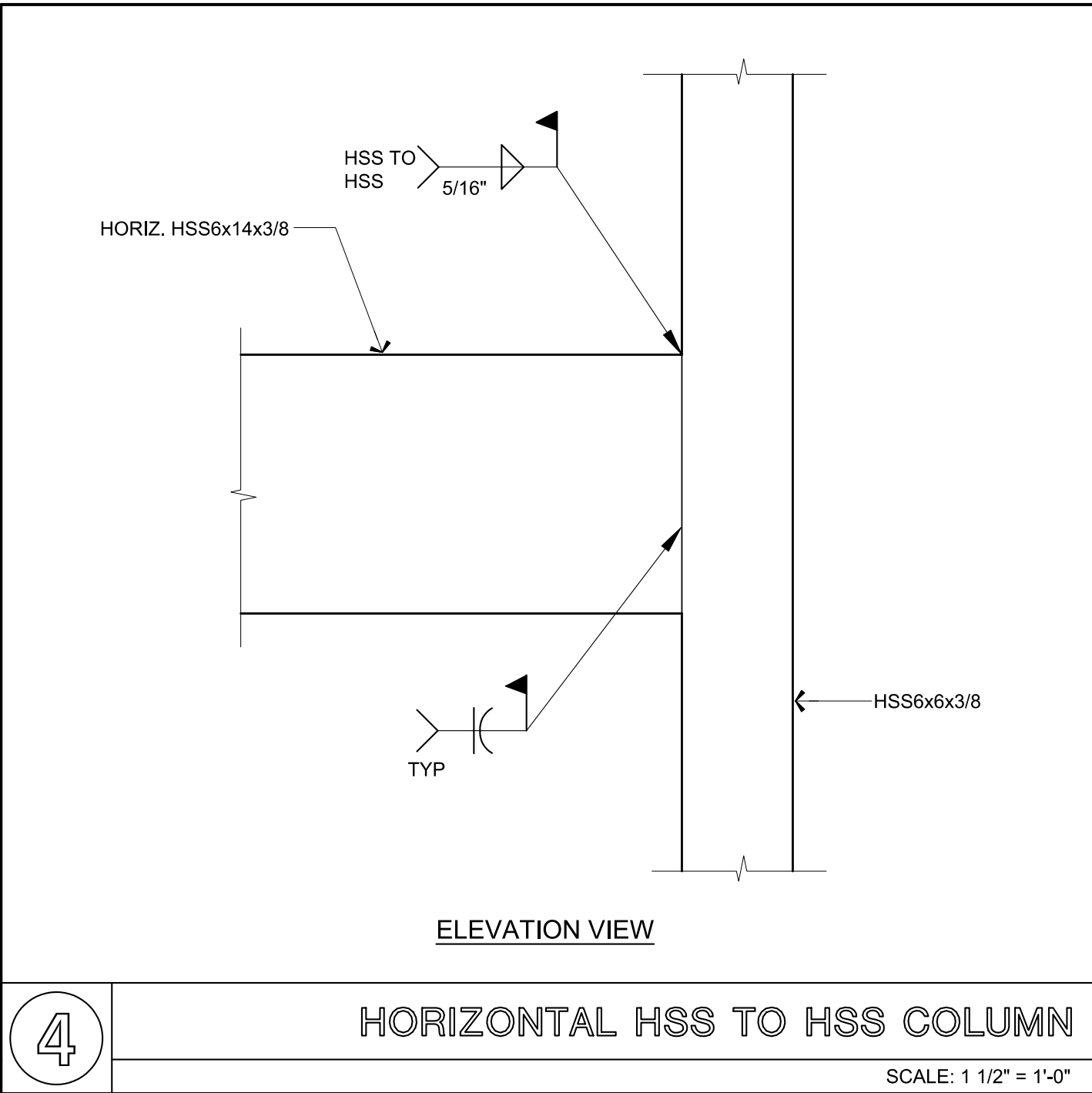
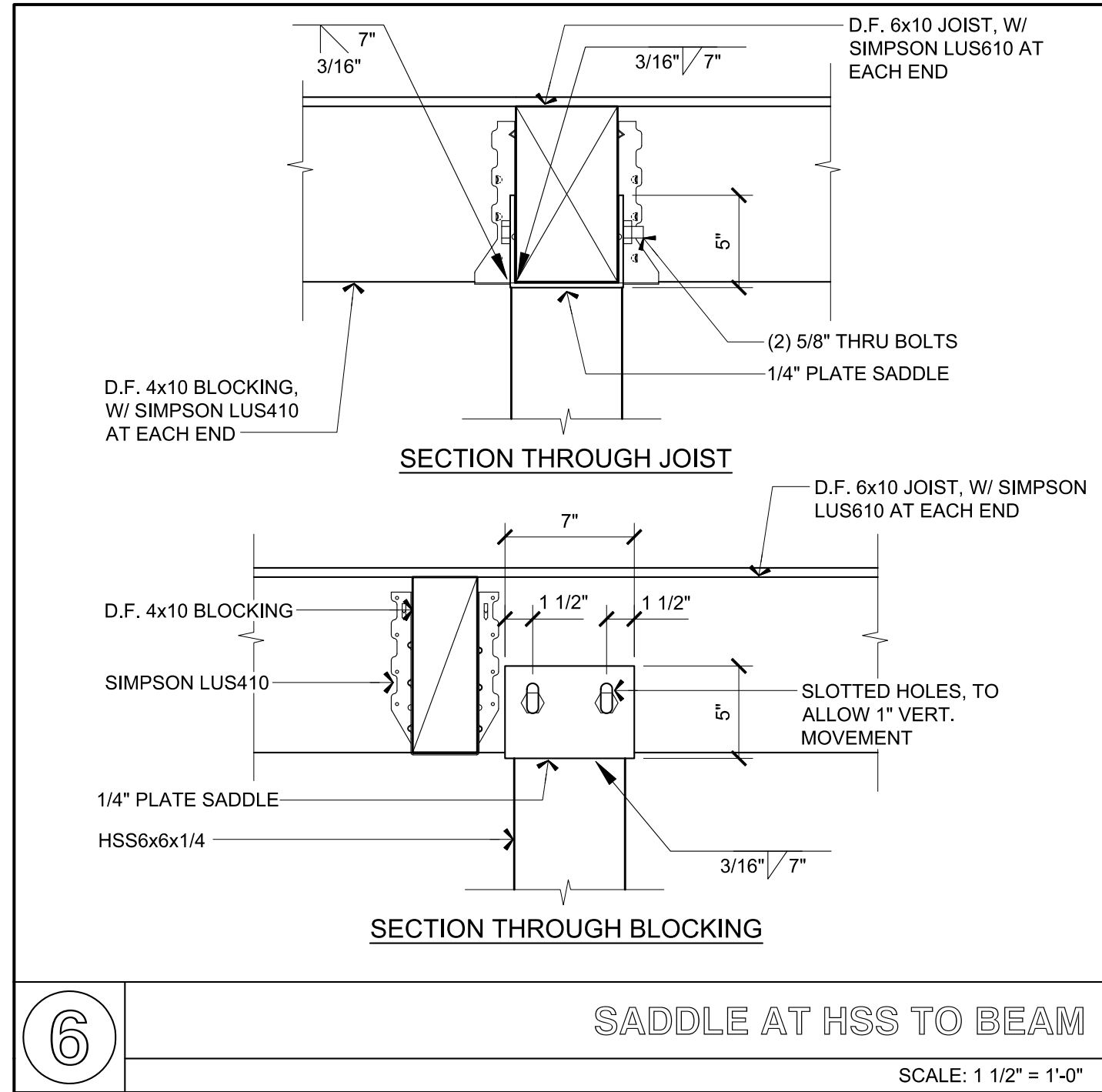
Job Number	17-3059
------------	---------



Copyright ©2018
All designs, arrangements and plans indicated or represented by this
drawing are owned by, and the property of, Ellenberger Architecture, and
were created, evolved and developed for use on, and in conjunction with,
the specified project. None of such designs, arrangements or plans shall be
used by, or disclosed to any person, firm or corporation, other than the
owner of the specified project, for any purpose whatsoever without the
written permission of Ellenberger Architecture.

SHEET NUMBER

S5.2



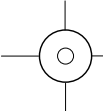
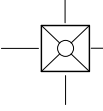
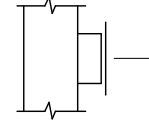
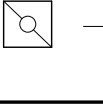
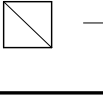
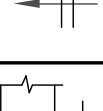
REVISIONS			
Symbol	Description	By	Date

Drawn By	WDE
Date Drawn	8-27-2018
Scale	AS NOTED
Job Number	17-3059

Mechanical Ventilation														
ROOM #	ROOM NAME	Area	SF	Occupant Density (People per 1000 sq.ft.)	ASHRAE 62.1 OCCUPANCY	Occupancy	CAO CODE ANALYSIS OCCUPANCY	Area Outdoor Air Rate (Ra)	People Outdoor Air Rate (Rp)	EZ	ASHRAE	120.1-A.15"S F	15 CFM/ CAO/2)	DESIGN OSA
101	LOBBY	526	526	150	62-Public Assembly Spaces - Lobbies	79		0.12	5		458	79		475
① 102	ICE HOUSE	11731	11731	50	62-General - Conference/Meeting	587		0.06	5		3639	1760		
103	HALL	453	473	0	62-General - Corridor	0		0.06	0		28	71		
104	OFFICE	150	152	5	62-Office Buildings - Office Space	1		0.06	5		14	23		
105	VESTIBULE	67	67	0	62-General - Corridor	0		0.06	0		4	10		
108	WOMEN'S LOCKER ROOM	194	194	50	62-Office Buildings - Breakrooms	10		0.12	5		73	29		
109	VESTIBULE	65	84	0	62-General - Corridor	0		0.06	0		5	13		
112	MEN'S LOCKER ROOM	196	178	50	62-General - Conference/Meeting	10		0.06	5		61	27		
115	ICE HOUSE PREP ROOM	191	191	50	62-Office Buildings - Breakrooms	10		0.12	5		73	29		
201	STORAGE	1357	1391	50	62-General - Conference/Meeting	68		0.06	5		423	209		
205	OFFICE/STORAGE	Not Placed	63	5	62-Office Buildings - Office Space			0.06	5			9		
REMARKS: O.W STANDS FOR OPERABLE WINDOW														
1. ICE HOUSE HVAC BY OTHERS.														
O.W														

AIR CONDITIONING UNIT SCHEDULE																							
MARK	MANUFACTURER/ MODEL	SUPPLY FAN					MOTOR HP	COOLING (MBH)			GAS HEATING (MBH)		AFUE %	SEER	EER	ELECTRICAL DATA				POWER EXHAUST/ECONOMIZER (LBS)	TOTAL WT. (LBS.)	AREA SERVED	REMARKS
		AIRFLOW	MIN OSA	ESP	BHP	RPM		UNIT SIZE	TOTAL	SENSIBLE	IN	OUT				V-Ø-Hz	MCA	MOCP					
AC 1	CARRIER 48LC006A	2000 CFM	800	1.00 in-wg	1.61	1313	2	5	61.5	48.0	90.0	72.0	80	18.40	12.5	460-3-60	15.0	20	50	725	1st FLOOR	1-9	
AC 2	CARRIER 48LC006A	2000 CFM	500	1.00 in-wg	1.61	1313	2	5	61.5	48.0	90.0	72.0	80	18.40	12.5	460-3-60	15.0	20	50	725	2ND FLOOR-	1-9	
REMARKS:												6. PROVIDE WITH FACTORY NON-FUSED DISCONNECT											
1. HORIZONTAL SUPPLY/RETURN DUCT CONFIGURATION.												7. CO2 ROOM SENSOR FOR DEMAND CONTROL VENTILATION.											
2. CARRIER 33 CONNECT "T"STAT W/INTEGRATED AUDIO/VISUAL FAULT ALARM.												8. E-COAT INDOOR & OUTDOOR COILS											
3. MERV-13 2" PLEATED FILTER.												9. PROVIDE OEMFACTORY HINGED ACCESS PANELS.											
4. FACTORY ECONOMIZER WITH DRY-BULB TEMPERATURE CONTROL.																							
5. MEDIUM BELT DRIVE.																							

EXHAUST FAN SCHEDULE												
MARK	MFR	MODEL NO	AIRFLOW	FAN RPM	INLET SONES	ELECTRICAL DATA				WEIGHT	SERVICE	REMARKS
						MOTOR HP	OPER. HP	WATTS	V-Ø-Hz			
EF-1	GREENHECK	G-123-B	800 CFM	1140	7.9	1/6	0.14		115-1-60	50.00 lb	TOILET	1,2,3,4
REMARKS: 1. PROVIDE ACCESSORY ROOF CURB. 2. PROVIDE W/ ECM. 3. FAN TO OPERATE CONTINUOUSLY. 4. ON/OFF CONTROL BY TIME CLOCK.												

AIR TERMINAL SCHEDULE			MANUFACTURER: TITUS (EXCEPT AS NOTED)	
CD		RADIAL DIFFUSER	TMR - POSITION-1, EXPOSED (NO CEILING) STEEL CONSTRUCTION	
CD-1		DUCT MOUNTED CEILING DIFFUSER	TDC - COMPLETE WITH EQUALIZING GRID, THROW-REDUCING VANES, STEEL CONSTRUCTION	
WSR		EXPOSED SUPPLY DIFFUSER	300RL - STEEL CONSTRUCTION, DOUBLE DEFLECTION HORIZONTAL BLADES, EQUALIZING GRID	
WRG		WALL RETURN GRILLE	355R - LOUVERS ON 1/2" CENTERS, STEEL CONSTRUCTION, LOUVERS PARALLEL WITH LONG DIMENSION	
CR		DUCT MOUNTED CEILING RETURN	SAME AS CD EXCEPT NO EQUALIZING GRID	
EG		DUCT MOUNTED EXHAUST GRILLE CEILING RETURN	50F - 1/2" x 1/2" x 1/2" EGGCRATE, ALUMINUM GRID	
DL		DOOR LOUVER	T700 - STEEL CONSTRUCTION WITH FLANGED AND AUXILIARY FRAME	
TG		TRANSFER GRILLE	355R - LOUVERS ON 1/2" CENTERS, STEEL CONSTRUCTION, LOUVERS PARALLEL WITH LONG DIMENSION	
NOTES: 1. ADAPTER NEEDED FOR TRANSITION FROM SQUARE NECK TO ROUND DUCT. 2. SIZE (NECK/FACE) TYPE FACE SIZE FOR T-BAR CEILING ONLY CFM (NO. OF THROW)				

LIST OF APPLICABLE CODES AND STANDARDS:

TITLE 24, PART 2: 2016 CALIFORNIA BUILDING CODE (VOLUMES 1 & 2)
TITLE 24, PART 3: 2016 CALIFORNIA ELECTRICAL CODE
TITLE 24, PART 4: 2016 CALIFORNIA MECHANICAL CODE
TITLE 24, PART 5: 2016 CALIFORNIA PLUMBING CODE
TITLE 24, PART 6: 2016 CALIFORNIA ENERGY CODE
TITLE 24, PART 9: 2016 CALIFORNIA FIRE CODE
TITLE 24, PART 12: 2016 CALIFORNIA REFERENCED STANDARDS CODE

MEP COMPONENT ANCHORAGE NOTE:

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

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

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

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

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

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE:

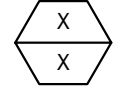
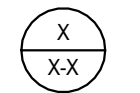


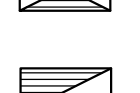
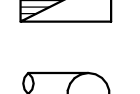
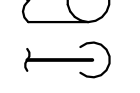
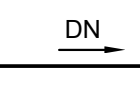
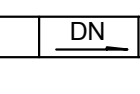
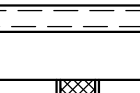
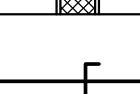
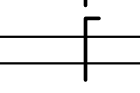
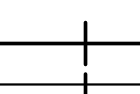
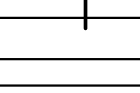

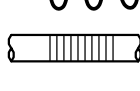
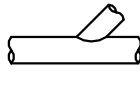
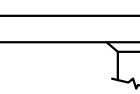
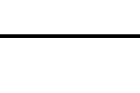
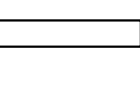
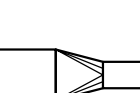


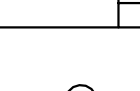
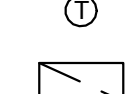
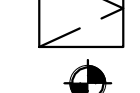




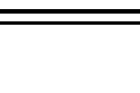
PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-10 SECTION 13.3 AS DEFINED IN ASCE 7-10 SECTION 13.6.8, 13.6.7, 13.6.5.6, AND 2016 CBC, SECTIONS 1616A.1.24, 1616A.1.25, AND 1616A.1.26.

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

MECHANICAL/PLUMBING/DUCTS

M ☐ PP ☐ D ☐ -OPTION 1: ☐ DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS
M ☒ PP ☐ D ☒ -OPTION 2: ☒ SHALL COMPLY WITH THE OSHPD PRE-APPROVAL (OPM #) # 0043-13
M ☐ PP ☐ D ☐ -OPTION 3: ☐ SHALL COMPLY WITH THE SMACNA SEISMIC RESTRAINT

MANUAL, OSHPD EDITION (2009), INCLUDING ANY ADDENDA. FASTENERS AND OTHER ATTACHMENTS NOT SPECIFICALLY IN THE SMACNA SEISMIC RESTRAINT MANUAL, OSHPD EDITION, ARE DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS. THE DETAILS SHALL ACCOUNT APPLICABLE SEISMIC HAZARD LEVEL ____ AND CONNECTIONS LEVEL ____ FOR THE PROJECT AND CONDITIONS.

MECHANICAL LEGEND		
SYMBOL	ABBREVIATION	DESCRIPTION
		EQUIPMENT TYPE
		EQUIPMENT NUMBER
		DETAIL / DRAWING NUMBER
		SHEET NUMBER
	SA OR OA	SECTION THRU SUPPLY AIR OR OUTSIDE AIR DUCT
	RA OR EA	SECTION THRU RETURN AIR OR EXHAUST AIR DUCT
		ROUND DUCT DOWN
	DN OR UP	SLOPE DUCT DOWN OR UP IN DIRECTION OF FLOW
	AL	ACOUSTICAL LINING
	FC	FLEXIBLE DUCT CONNECTION
	VD	VOLUME DAMPER
	FD	FIRE DAMPER
	TV	TURNING VANES
		FLEXIBLE DUCT
		45° ROUND DUCT TAKE-OFF
		45° RECTANGULAR DUCT TAKE-OFF
		90° TURN - ROUND DUCT
		90° RADIUS TURN - ROUND OR RECTANGULAR DUCT
		SQUARE TO ROUND DUCT TRANSITION
		DUCT TRANSITION
		RECTANGULAR DUCT 90° SPLIT
		THERMOSTAT @ 48° AFF
	AP	ACCESS PANEL
	POC	POINT OF CONNECTION
	POD	POINT OF DEMOLITION
	BHP	BRAKE HORSEPOWER
	HP	HORSEPOWER
	SAD	SEE ARCHITECTURAL DRAWINGS
	SSD	SEE STRUCTURAL DRAWINGS
	OEM	ORIGINAL EQUIPMENT MANUFACTURE
	SCD	SEE CIVIL DRAWINGS
BLDG 'MECHANICAL' SHEET LIST		
M1.1	HVAC SCHEDULES AND LEGENDS	
M2.1	MECHANICAL FLOOR PLAN	
M2.2	MECHANICAL 2ND FLOOR PLAN	
M2.3	MECHANICAL ROOF PLAN	
M3.2	MECHANICAL ENLARGEMENT PLAN	
M3.3	MECHANICAL ISOMETRIC	
M3.4	MECHANICAL SECTIONS	
M4.1	MECHANICAL DETAILS	
M4.2	MECHANICAL DETAILS	



ELLENBERGER
ARCHITECTURE

420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-6373
ellenbergerarchitecture.com

CONSULTANT



COSTA ENGINEERS INC.

3274 Villa Lane, Suite 200, San Jose, CA 95128
Tel: 408.253.8171 Fax: 408.253.8473

DEDICATED
ICE FACILITY

FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

HVAC
SCHEDULES
AND LEGENDS

DRAWING STATUS

CONSTRUCTION
DOCUMENTS

INITAL PLAN REVIEW SUBMITTAL

REVISIONS

Symbol	Description	By	Date
--------	-------------	----	------

Drawn By	MQ
----------	----

Date Drawn	8-15-2018
------------	-----------

Scale	12" = 1'-0"
-------	-------------

Job Number	17-3059
------------	---------

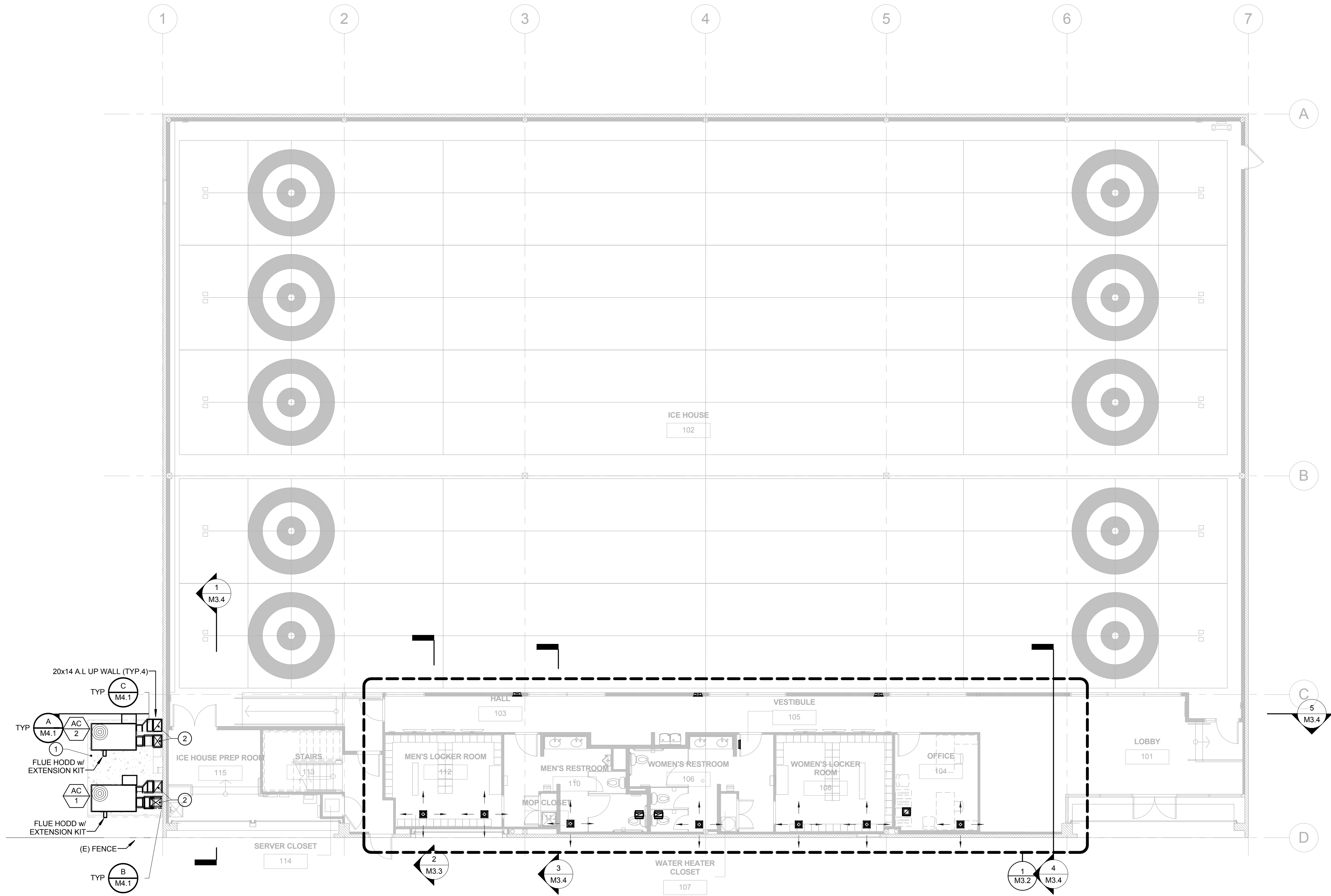


Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by, or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

SHEET NUMBER

M1.1

8/29/2018 11:28:31 AM C:\Users\mquevedo\Documents\18043 SF Bay Curling Club RVT15_mquevedo.rvt



1

MECHANICAL FLOOR PLAN

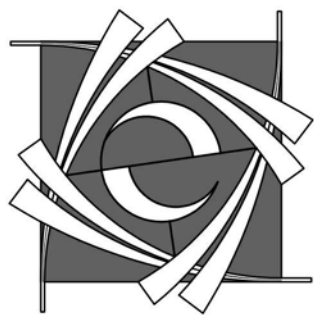
SCALE: 1/8" = 1'-0"

GENERAL NOTES

- FOR MECHANICAL GENERAL NOTES, LEGENDS, AND SYMBOLS, REFER TO SHEET M1.1
- MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE MECHANICAL WORK WITH OTHER TRADES. MAKE ANY OFFSETS AS REQUIRED TO AVOID CONFLICT WITH PIPING, LIGHT FIXTURES, SKYLIGHTS, ETC.
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO PROCEEDING WITH INSTALLATION. NOTIFY ARCHITECT/ENGINEER OF ANY EXISTING CONDITIONS WHICH CONFLICT WITH INFORMATION PROVIDED IN CONSTRUCTION DOCUMENTS.
- CONTRACTOR SHALL COORDINATE ALL GRILLE LOCATIONS AND CEILING TYPES PRIOR TO ORDERING GRILLES. SEE ARCHITECTURAL CEILING PLANS AND ELECTRICAL LIGHTING PLANS.
- ALL BRACING OF DUCTS AND PIPING SHALL BE INSTALLED IN ACCORDANCE WITH SMACNA GUIDELINES, HAZARD LEVEL 'A'.
- WHERE BRACING DETAILS ARE NOT SHOWN ON THE DRAWING OR IN THE GUIDELINES, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT, MECHANICAL ENGINEER AND FIELD INSPECTOR OF THE GOVERNING AUTHORITY.
- SUPPORT AND BRACING OF ALL PIPING AND DUCTWORK SHALL BE IN ACCORDANCE WITH THE SMACNA "GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL SYSTEMS AND PLUMBING PIPING SYSTEMS" OR NO R-003 THE "SUPERSTRUT SEISMIC RESTRAINT SYSTEM" FOR PIPING ONLY.

KEYNOTES

- MOUNT AC UNIT ON 5" THICK REINFORCED CONCRETE SLAB SAD.
- SEE M2.2 FOR CONTINUATION.



ELLENBERGER
ARCHITECTURE

420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-6373
ellenbergerarchitecture.com

CONSULTANT



COSTA ENGINEERS INC.

3274 Villa Lane, Suite 100, San Jose, CA 95128 ph: 707-252-9177 fax: 707-252-4473

DEDICATED
ICE FACILITY

FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

MECHANICAL
FLOOR PLAN

DRAWING STATUS

CONSTRUCTION
DOCUMENTS

INITIAL PLAN REVIEW SUBMITTAL

REVISIONS

Symbol	Description	By	Date
--------	-------------	----	------

Drawn By	MQ
----------	----

Date Drawn	8-15-2018
------------	-----------

Scale	1/8" = 1'-0"
-------	--------------

Job Number	17-3059
------------	---------

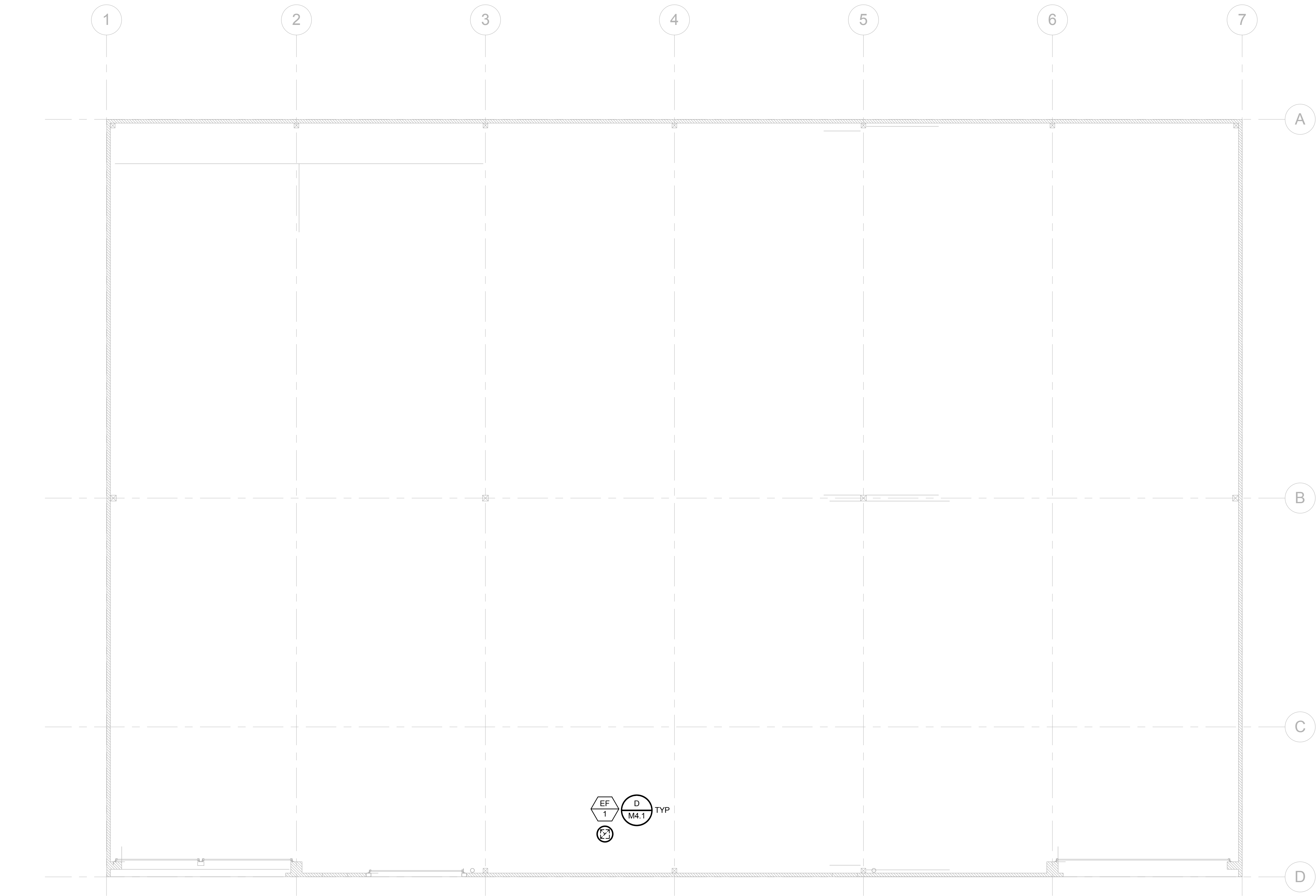


Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with the specified project. None of such designs, arrangements or plans shall be used by, or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

SHEET NUMBER

M2.1

8/29/2018 11:28:32 AM C:\Users\mqveedo\Documents\18043 SF Bay Curling Club RVT15_mquevedo.rvt



GENERAL NOTES

- FOR MECHANICAL GENERAL NOTES, LEGENDS, AND SYMBOLS, REFER TO SHEET M1.1
- MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE MECHANICAL WORK WITH OTHER TRADES. MAKE ANY OFFSETS AS REQUIRED TO AVOID CONFLICT WITH PIPING, LIGHT FIXTURES, SKYLIGHTS, ETC.
- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO PROCEEDING WITH INSTALLATION. NOTIFY ARCHITECT/ENGINEER OF ANY EXISTING CONDITIONS WHICH CONFLICT WITH INFORMATION PROVIDED IN CONSTRUCTION DOCUMENTS.
- CONTRACTOR SHALL COORDINATE ALL GRILLE LOCATIONS AND CEILING TYPES PRIOR TO ORDERING GRILLES, SEE ARCHITECTURAL CEILING PLANS AND ELECTRICAL LIGHTING PLANS.
- ALL BRACING OF DUCTS AND PIPING SHALL BE INSTALLED IN ACCORDANCE WITH SMACNA GUIDELINES, HAZARD LEVEL 'A'.
- WHERE BRACING DETAILS ARE NOT SHOWN ON THE DRAWING OR IN THE GUIDELINES, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT, MECHANICAL ENGINEER AND FIELD INSPECTOR OF THE GOVERNING AUTHORITY.
- SUPPORT AND BRACING OF ALL PIPING AND DUCTWORK SHALL BE IN ACCORDANCE WITH THE SMACNA "GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL SYSTEMS AND PLUMBING PIPING SYSTEMS" OR NO R-003 THE "SUPERSTRUT SEISMIC RESTRAINT SYSTEM" FOR PIPING ONLY.

KEYNOTES

1 -



ELLENBERGER
ARCHITECTURE

420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-6373
ellenbergerarchitecture.com

CONSULTANT



COSTA ENGINEERS INC.

3274 Villa Lane Napa, CA 94558 ph: 707-252-9177 fax: 707-252-4473

DEDICATED
ICE FACILITY

FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

MECHANICAL
ROOF PLAN

DRAWING STATUS

CONSTRUCTION
DOCUMENTS

INITAL PLAN REVIEW SUBMITTAL

REVISIONS

Symbol	Description	By	Date

Drawn By MQ

Date Drawn 8-15-2018

Scale 1/8" = 1'-0"

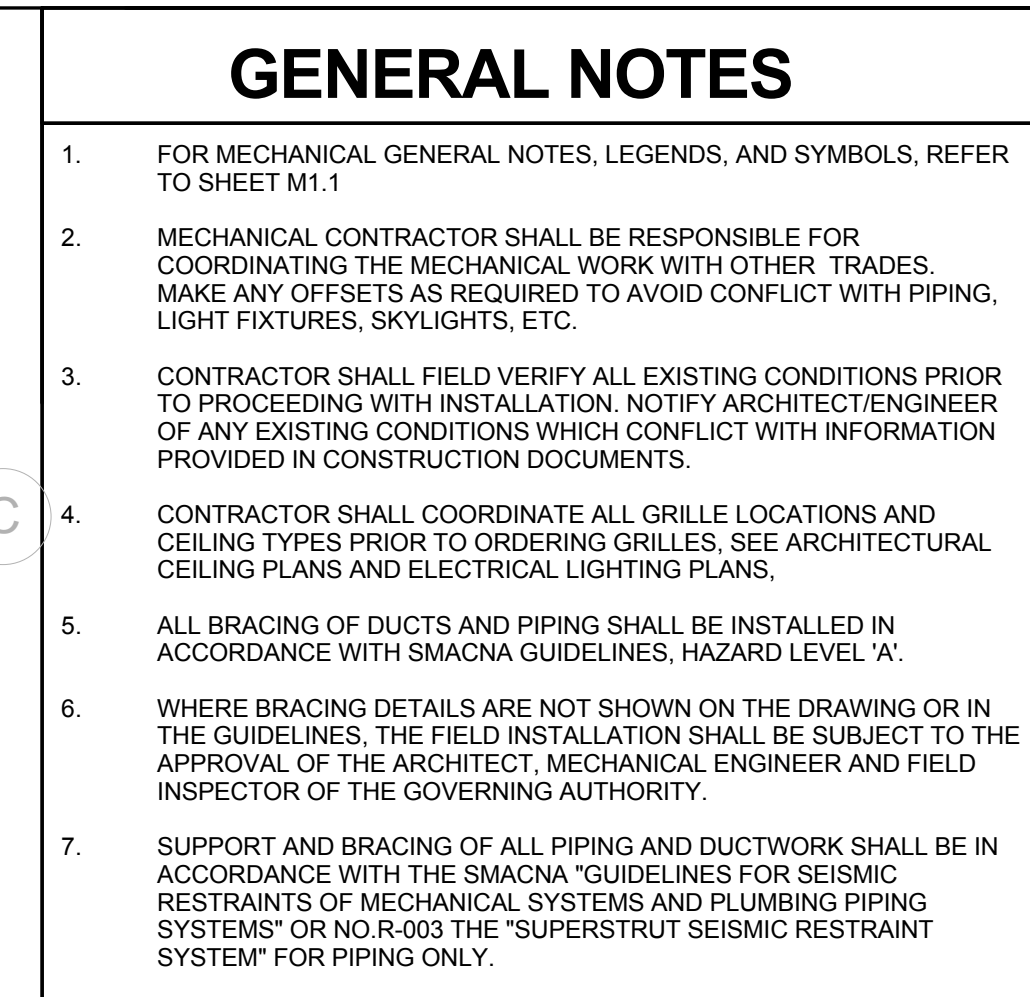
Job Number 17-3059



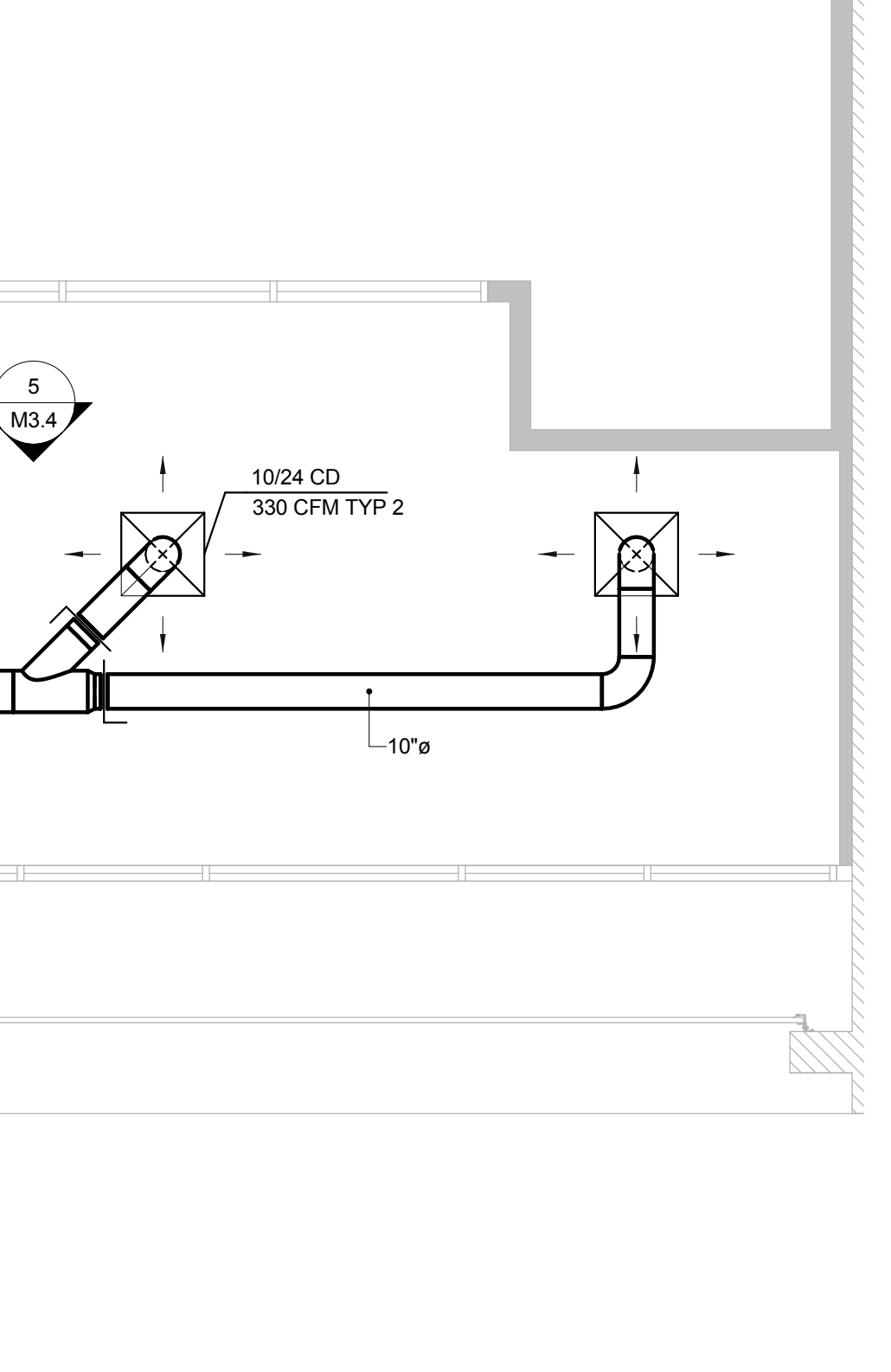
Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by, or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

SHEET NUMBER

M2.3

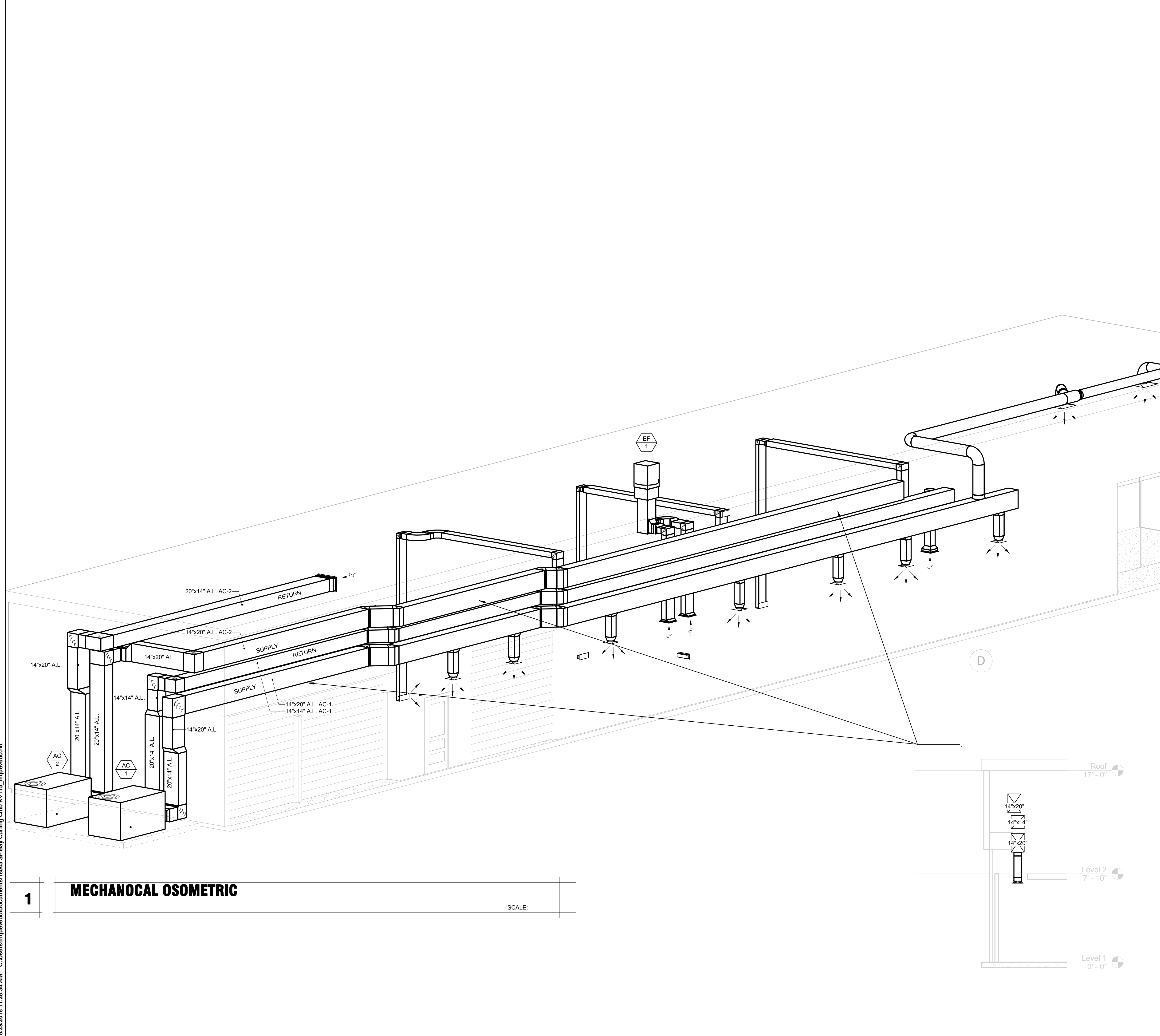


① -



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

M3.2



GENERAL NOTES

1. FOR MECHANICAL GENERAL NOTES, LEGENDS, AND SYMBOLS, REFER TO SHEET M-1.1
2. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE MECHANICAL WORK WITH OTHER TRADES. MAKE ANY OFFSETS AS REQUIRED TO AVOID CONFLICT WITH PIPING, LIGHT FIXTURES, SKYLIGHTS, ETC.
3. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO PROCEEDING WITH INSTALLATION. NOTIFY ARCHITECT/ENGINEER OF ANY EXISTING CONDITIONS WHICH CONFLICT WITH INFORMATION PROVIDED IN CONSTRUCTION DOCUMENTS.
4. CONTRACTOR SHALL COORDINATE ALL GRILLE LOCATIONS AND CEILING TYPES PRIOR TO ORDERING GRILLES, SEE ARCHITECTURAL CEILING PLANS AND ELECTRICAL LIGHTING PLANS.
5. ALL BRACING OF DUCTS AND PIPING SHALL BE INSTALLED IN ACCORDANCE WITH SMACNA GUIDELINES, HAZARD LEVEL 'A'.
6. WHERE BRACING DETAILS ARE NOT SHOWN ON THE DRAWING OR IN THE GUIDELINES, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT, MECHANICAL ENGINEER AND FIELD INSPECTOR OF THE GOVERNING AUTHORITY.
7. SUPPORT AND BRACING OF ALL PIPING AND DUCTWORK SHALL BE IN ACCORDANCE WITH THE SMACNA "GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL SYSTEMS AND PLUMBING PIPING SYSTEMS" OR NO-R-003 THE "SUPERSTRUT SEISMIC RESTRAINT SYSTEM" FOR PIPING ONLY.

- # GENERAL NOTES
-
1. FOR MECHANICAL GENERAL NOTES, LEGENDS, AND SYMBOLS, REFER TO SHEET M-1.
 2. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE MECHANICAL WORK WITH OTHER TRADES. MAKE ANY OFFSETS AS REQUIRED TO AVOID CONFLICT WITH PIPING, LIGHT FIXTURES, SKYLIGHTS, ETC.
 3. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO PROCEEDING WITH INSTALLATION. NOTIFY ARCHITECT/ENGINEER OF ANY EXISTING CONDITIONS WHICH CONFLICT WITH INFORMATION PROVIDED IN CONSTRUCTION DOCUMENTS.
 4. CONTRACTOR SHALL COORDINATE ALL GRILLE LOCATIONS AND CEILING TYPES PRIOR TO ORDERING GRILLES, SEE ARCHITECTURAL CEILING PLANS AND ELECTRICAL LIGHTING PLANS.
 5. ALL BRACING OF DUCTS AND PIPING SHALL BE INSTALLED IN ACCORDANCE WITH SMACNA GUIDELINES, HAZARD LEVEL 'A'.
 6. WHERE BRACING DETAILS ARE NOT SHOWN ON THE DRAWING OR IN THE GUIDELINES, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT, MECHANICAL ENGINEER AND FIELD INSPECTOR OF THE GOVERNING AUTHORITY.
 7. SUPPORT AND BRACING OF ALL PIPING AND DUCTWORK SHALL BE IN ACCORDANCE WITH THE SMACNA "GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL SYSTEMS AND PLUMBING PIPING SYSTEMS" OR NO-R-003 THE "SUPERSTRUT SEISMIC RESTRAINT SYSTEM" FOR PIPING ONLY.

KEYNOTES



ELLENBERGER
ARCHITECTURE

420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-6373
ellenbergerarchitecture.com



ELLENBERGER
ARCHITECTURE


420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-6373
ellenbergerarchitecture.com



ELLENBERGER
ARCHITECTURE

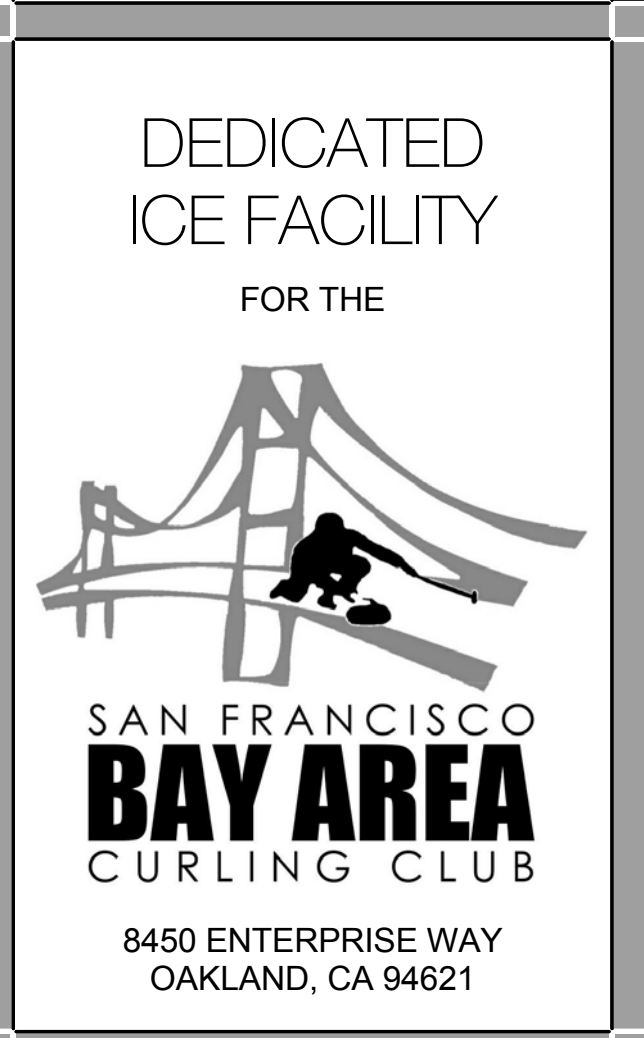
420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-6373
ellenbergerarchitecture.com

CONSULTANT




COSTA ENGINEERS INC.

3274 Villa Lane Napa, CA 94938 ph: 707-253-8177 fax: 707-253-6473




DEDICATED
ICE FACILITY
FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

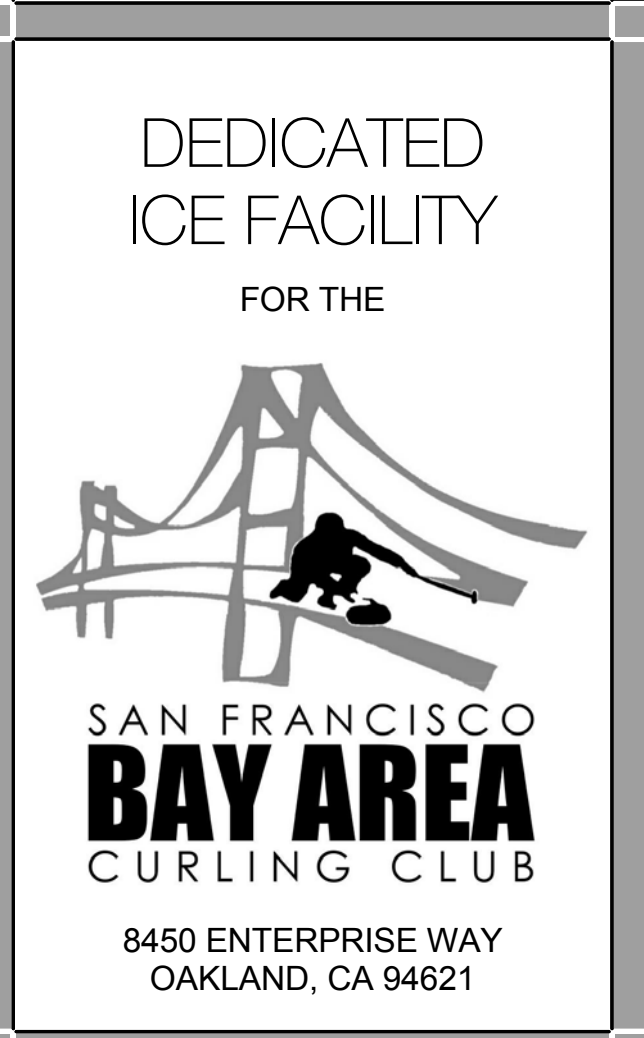
8450 ENTERPRISE WAY
OAKLAND, CA 94621

DEDICATED
ICE FACILITY
FOR THE




SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621




DEDICATED
ICE FACILITY
FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

DEDICATED
ICE FACILITY
FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

MECHANICAL ISOMETRIC

[illegible]

DRAWING STATUS			
CONSTRUCTION DOCUMENTS			
INITIAL PLAN REVIEW SUBMITTAL			
REVISIONS			
Symbol	Description	By	Date

DRAWING STATUS			
CONSTRUCTION DOCUMENTS			
INITIAL PLAN REVIEW SUBMITTAL			
REVISIONS			
Symbol	Description	By	Date

REVISIONS			
Symbol	Description	By	Date
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

REVISIONS			
Symbol	Description	By	Date
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

REVISIONS			
Symbol	Description	By	Date
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

REVISIONS			
Symbol	Description	By	Date
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

REVISIONS			
Symbol	Description	By	Date
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Drawn By	MQ
Date Drawn	8-15-2018
Scale	1/4" = 1'-0"
Job Number	17-3059

Drawn By	MQ
Date Drawn	8-15-2018
Scale	1/4" = 1'-0"
Job Number	17-3059

Drawn By	MQ
Date Drawn	8-15-2018
Scale	1/4" = 1'-0"
Job Number	17-3059

Drawn By	MQ
Date Drawn	8-15-2018
Scale	1/4" = 1'-0"
Job Number	17-3059

Drawn By	MQ
Date Drawn	8-15-2018
Scale	1/4" = 1'-0"
Job Number	17-3059

Drawn By	MQ
Date Drawn	8-15-2018
Scale	1/4" = 1'-0"
Job Number	17-3059

Drawn By	MQ
Date Drawn	8-15-2018
Scale	1/4" = 1'-0"
Job Number	17-3059

Drawn By	MQ
Date Drawn	8-15-2018
Scale	1/4" = 1'-0"
Job Number	17-3059



REGISTERED PROFESSIONAL ENGINEER
CHRISTOPHER J. DELOE
No. M31600
Exp. 12-31-18
MECHANICAL
STATE OF CALIFORNIA

Copyright ©2018

All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Eisenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Eisenberger Architecture.

SHEET NUMBER

M3.3

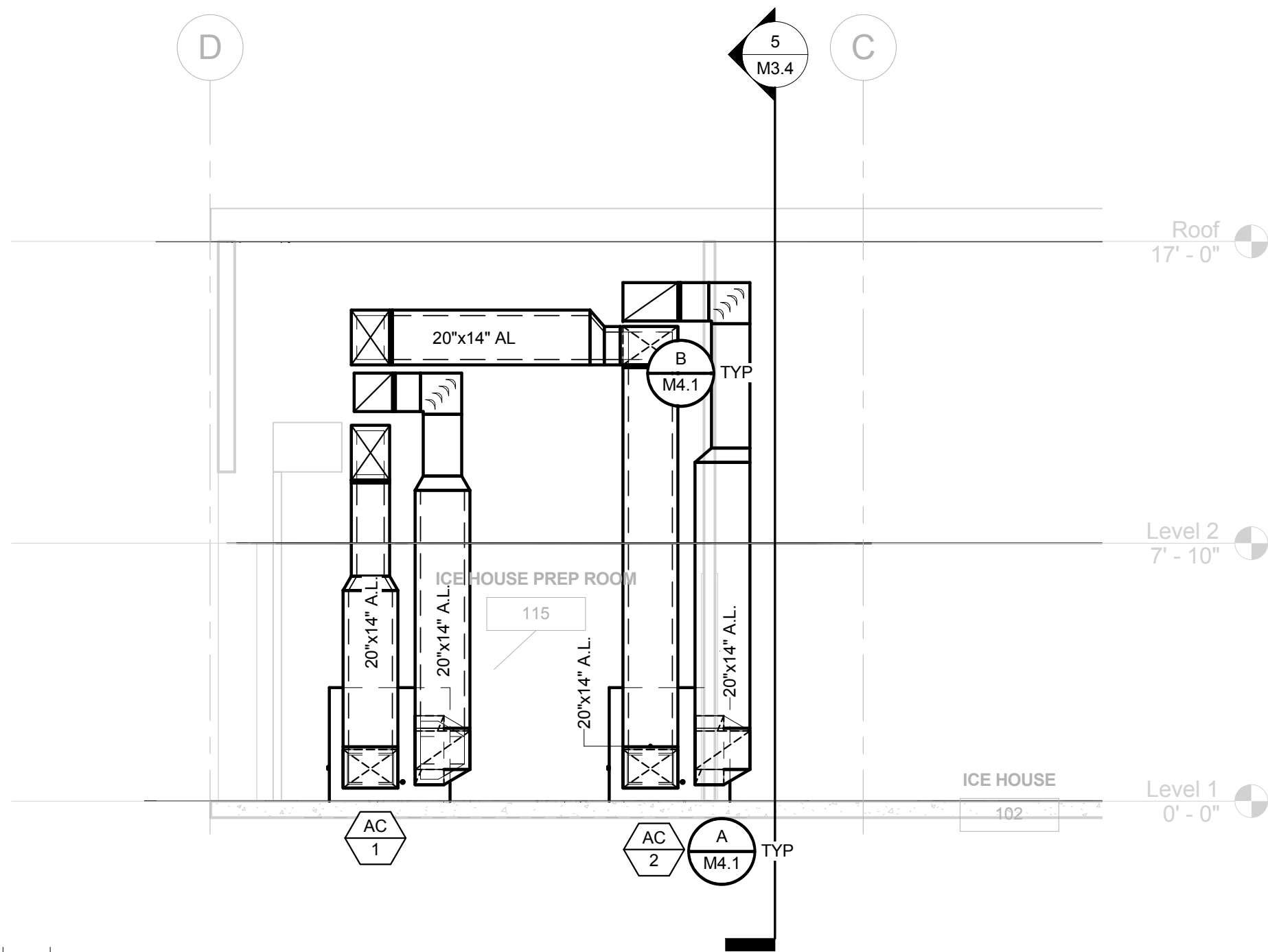
Copyright ©2018

All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Eisenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Eisenberger Architecture.

SHEET NUMBER

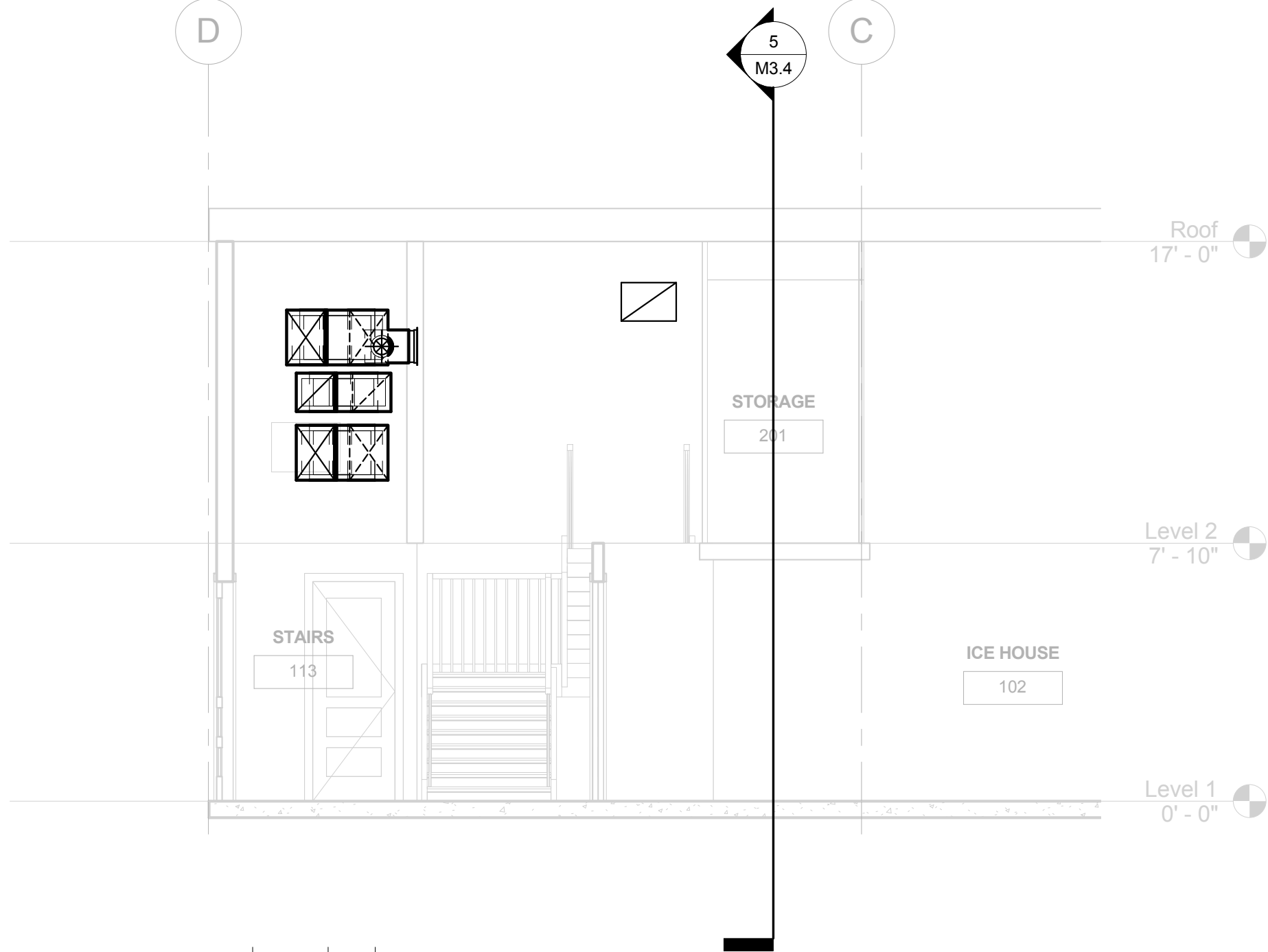
M3.3

8/29/2018 11:28:36 AM C:\Users\mquevedo\Documents\18043 SF Bay Curling Club RVT15_mquevedo.rvt



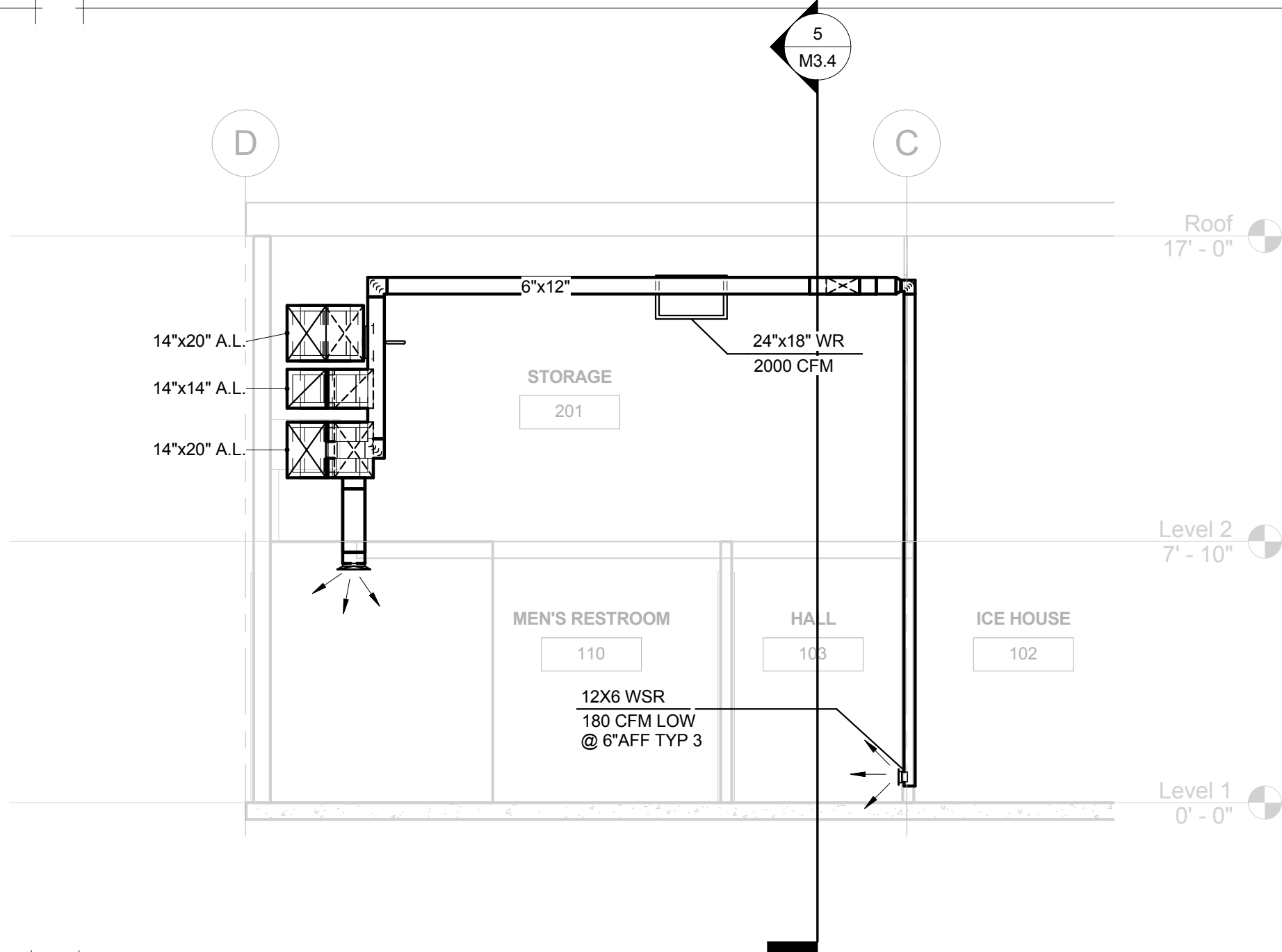
1 MECHANICAL SECTION-1

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



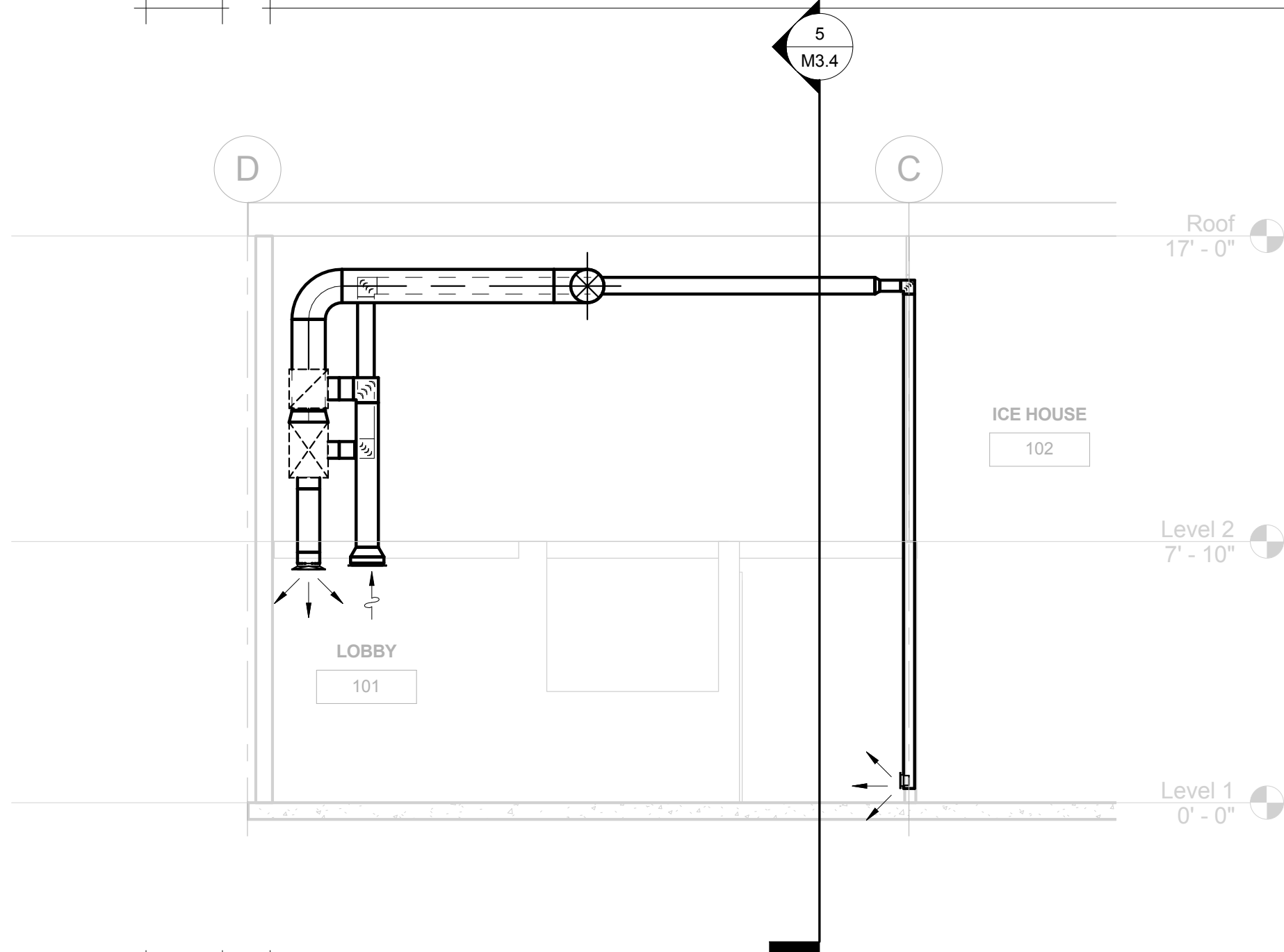
2 MECHANICAL SECTION-2

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



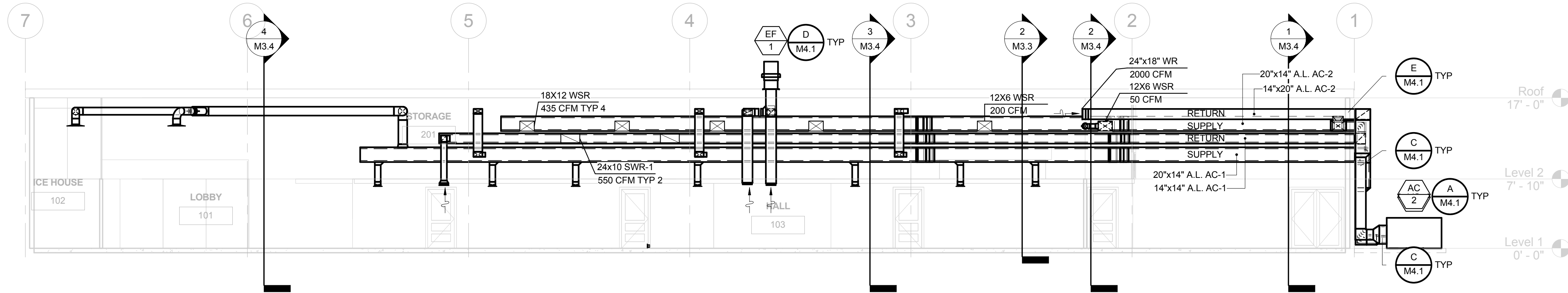
3 MECHANICAL SECTION-3

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



4 MECHANICAL SECTION-4

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



5 MECHANICAL SECTION-5

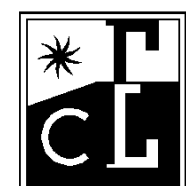
SCALE: 1/8" = 1'-0"



ELLENBERGER
ARCHITECTURE

420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-6373
ellenbergerarchitecture.com

CONSULTANT



COSTA ENGINEERS INC.

3274 Villa Lane, Suite 100, CA 94588 ph: 707-252-9177 fax: 707-252-4473

DEDICATED
ICE FACILITY
FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

MECHANICAL
SECTIONS

DRAWING STATUS

CONSTRUCTION
DOCUMENTS

INITIAL PLAN REVIEW SUBMITTAL

REVISIONS

Symbol	Description	By	Date
--------	-------------	----	------

Drawn By	MQ
----------	----

Date Drawn	8-15-2018
------------	-----------

Scale	As indicated
-------	--------------

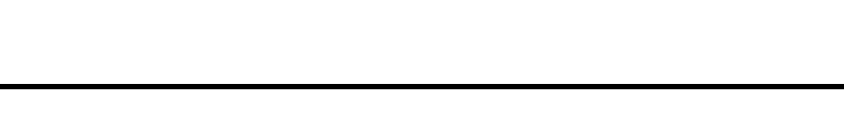
Job Number	17-3059
------------	---------



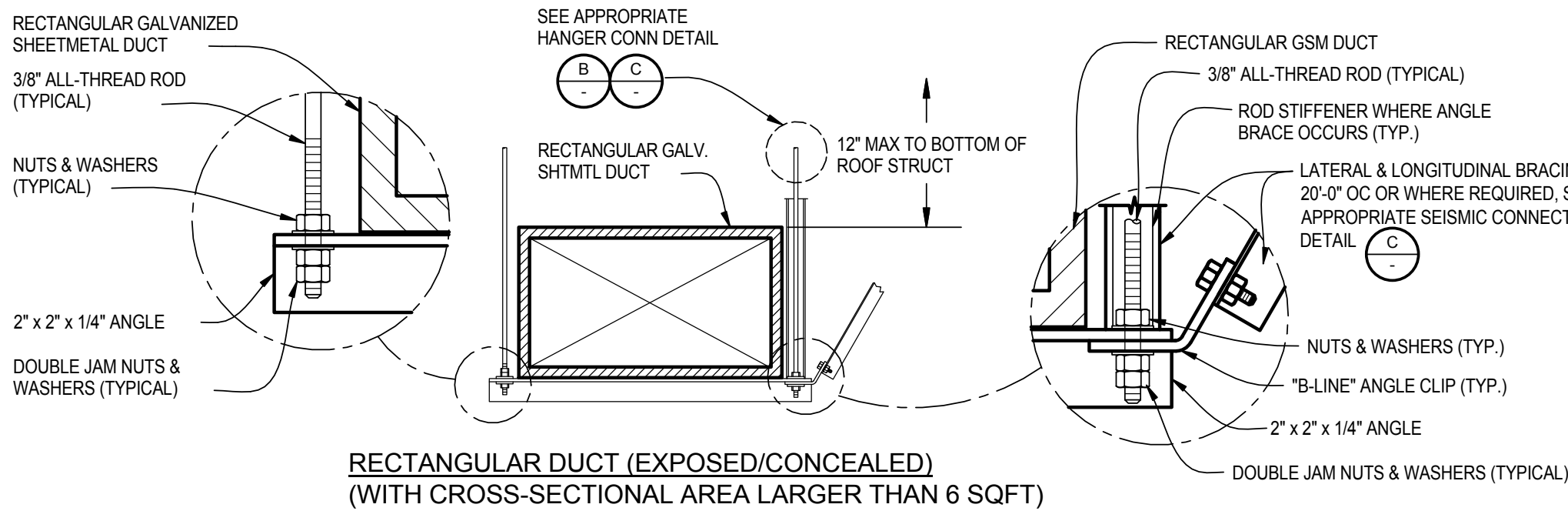
Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with the specified project. None of such designs, arrangements or plans shall be used by, or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

SHEET NUMBER

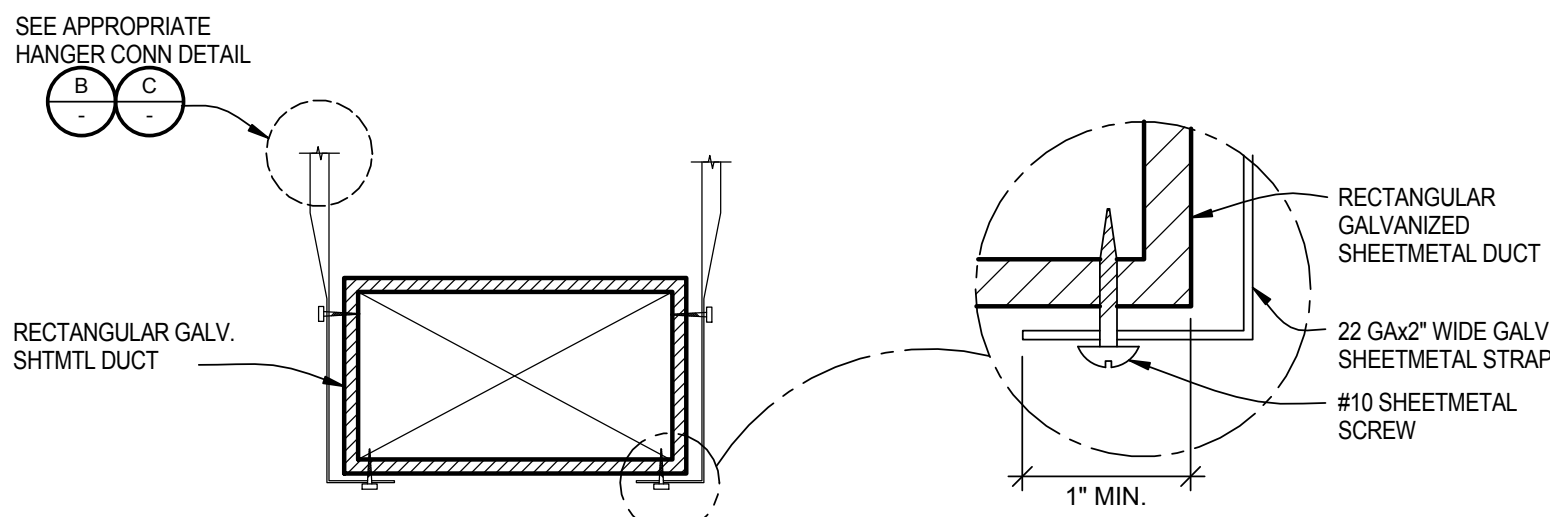
M3.4



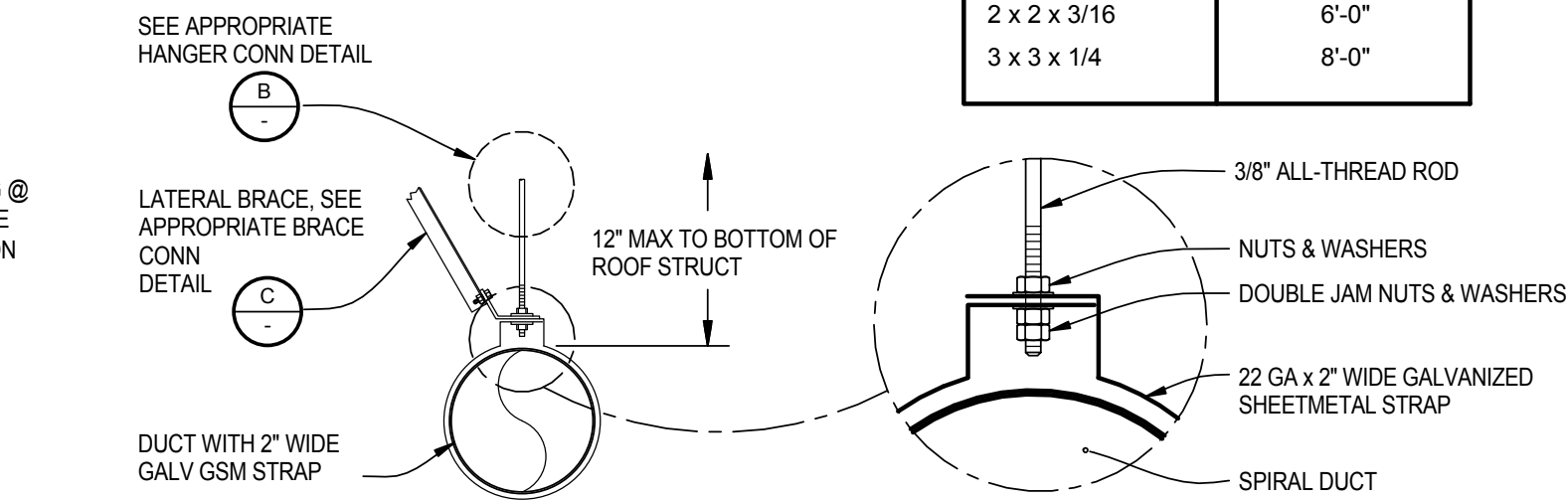
8/29/2018 11:28:37 AM C:\Users\mquevedo\Documents\18043 SF Bay Curling Club RVT15_mquevedo.rvt



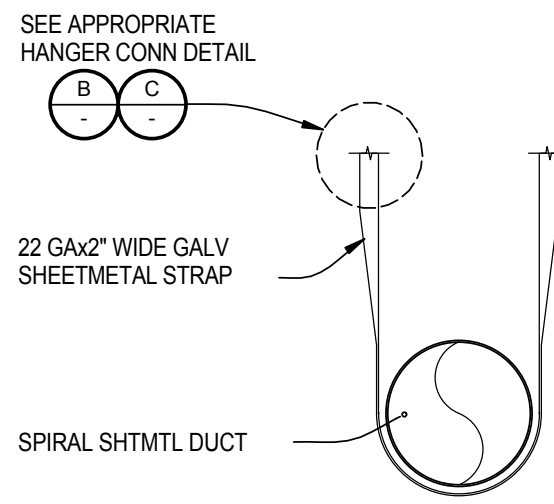
RECTANGULAR DUCT (EXPOSED/CONCEALED)
(WITH CROSS-SECTIONAL AREA LARGER THAN 6 SQFT)



RECTANGULAR DUCT (EXPOSED/CONCEALED)
(WITH CROSS-SECTIONAL AREA SMALLER THAN 6 SQFT)



ROUND DUCT (EXPOSED/CONCEALED)
(WITH CROSS-SECTIONAL AREA LARGER THAN 6 SQFT)



ROUND DUCT (EXPOSED/CONCEALED)
(WITH CROSS-SECTIONAL AREA SMALLER THAN 6 SQFT)

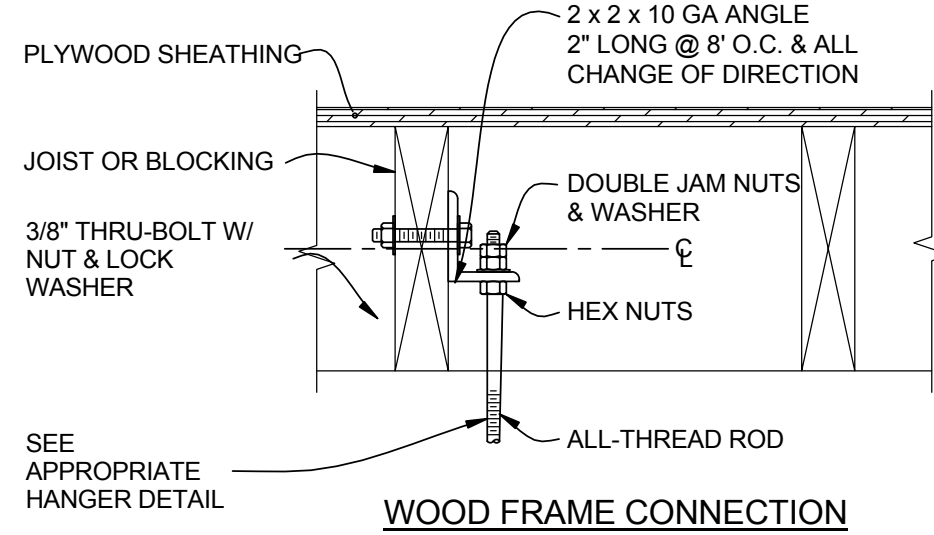
TRAPEZE LOAD & SUPPORT CONDITIONS:
HEAVY: 645 LBS PER TRAPEZE, OR MORE: 1/2" ALL-THREAD TO STEEL
NOT HEAVY: LESS THAN 645 LBS PER TRAPEZE: 3/8" ALL-THREAD TO CONC DECK

TABLE-1	
ANGLE (INCHES)	MAX LENGTH (INCHES)
1-1/2 x 1-1/2 x 1/8	3'-0"
2 x 2 x 3/16	6'-0"
3 x 3 x 1/4	8'-0"

MINIMUM ROD SIZES (INCHES)	PIPE DIAMETER (INCHES)
3/8"	2" & SMALLER PIPE
1/2"	2-1/2" & 3" PIPE
5/8"	4" PIPE

DUCT SUPPORT NOTES:

- ALL STRAPS, RODS, TRAPEZE ANGLES AND TRAPEZE CHANNELS SHALL BE SIZED AND INSTALLED IN ACCORDANCE WITH THE LATEST SMACNA REQUIREMENTS.
- ALL BOLTS, NUTS, SCREWS AND OTHER FASTENING DEVICES SHALL BE LOAD-RATED AND SHALL MEET ALL CODE REQUIREMENTS AND SAFETY FACTORS WHICH APPLY.
- WIRE, USED IN LIEU OF STRAPS AND RODS, IS NOT ALLOWED.
- WHERE APPLICABLE, INSTALL INSULATION AFTER INSTALLING DUCT HANGERS.
- SUPPORTS SHALL BE PLACED AT 8'-0" ON CENTER (MAX) AND AT ALL CHANGES IN DIRECTION.
- LATERAL BRACING REQUIRED ON DUCTS WITH CROSS-SECTIONAL AREA LARGER THAN 6 SQ FT.
- SEISMIC BRACING IS NOT REQUIRED AT HVAC DUCTS THAT ARE 6 FT SQ OR LESS IN CROSS-SECTIONAL AREA, OR WEIGH 10 LB/FT OR LESS.
- SUPPORTS SHALL BE PLACED AT 8'-0" ON CENTER (MAX) AND AT ALL CHANGES IN DIRECTION.
- SEISMIC BRACING IS NOT REQUIRED AT HVAC DUCTS SUPPORTED BY HANGERS THAT ARE 12" OR LESS IN LENGTH FROM THE DUCT SUPPORT POINT TO THE SUPPORTING STRUCTURE. HVAC DUCTS SUPPORTED WITH ROD HANGERS WITH DIAMETER GREATER THAN 3/8 INCH SHALL BE EQUIPPED WITH SWIVELS TO PREVENT INELASTIC BENDING IN THE ROD.
- HVAC DUCTS ARE FREE TO SWING AT 45° IN ANY HORIZONTAL DIRECTION WITHOUT COLLIDING WITH THE STRUCTURE, ARCHITECTURAL ITEMS OR OTHER MECHANICAL, PLUMBING OR ELECTRICAL ITEMS.



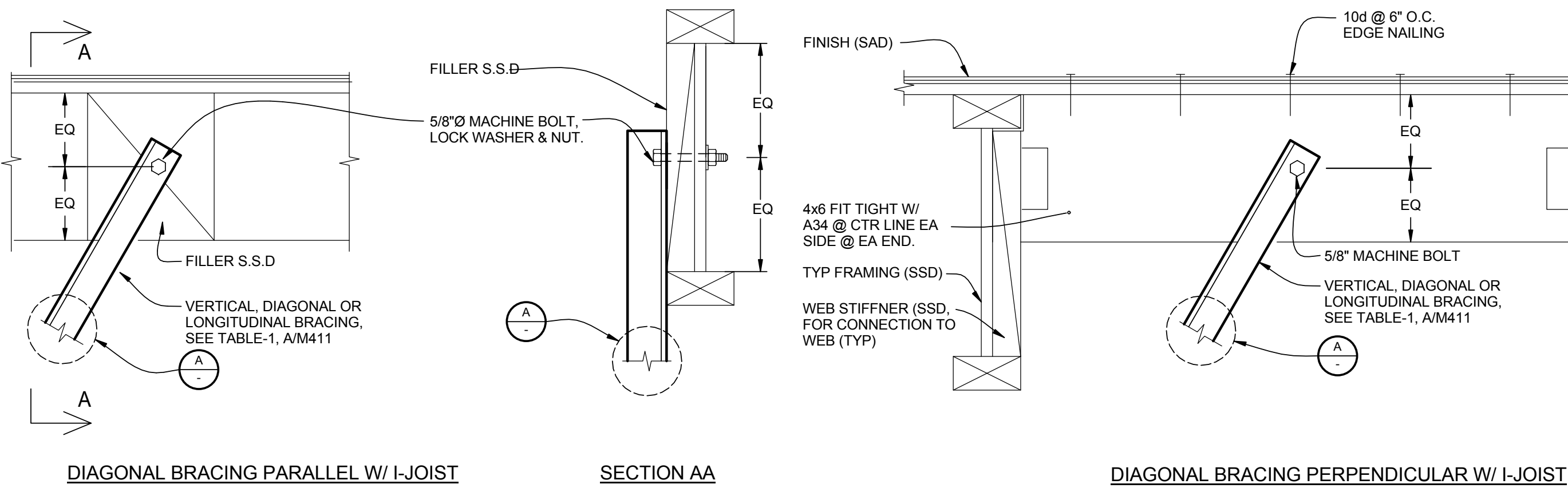
WOOD FRAME CONNECTION

A DUCT SUPPORT DETAIL

SCALE: NONE

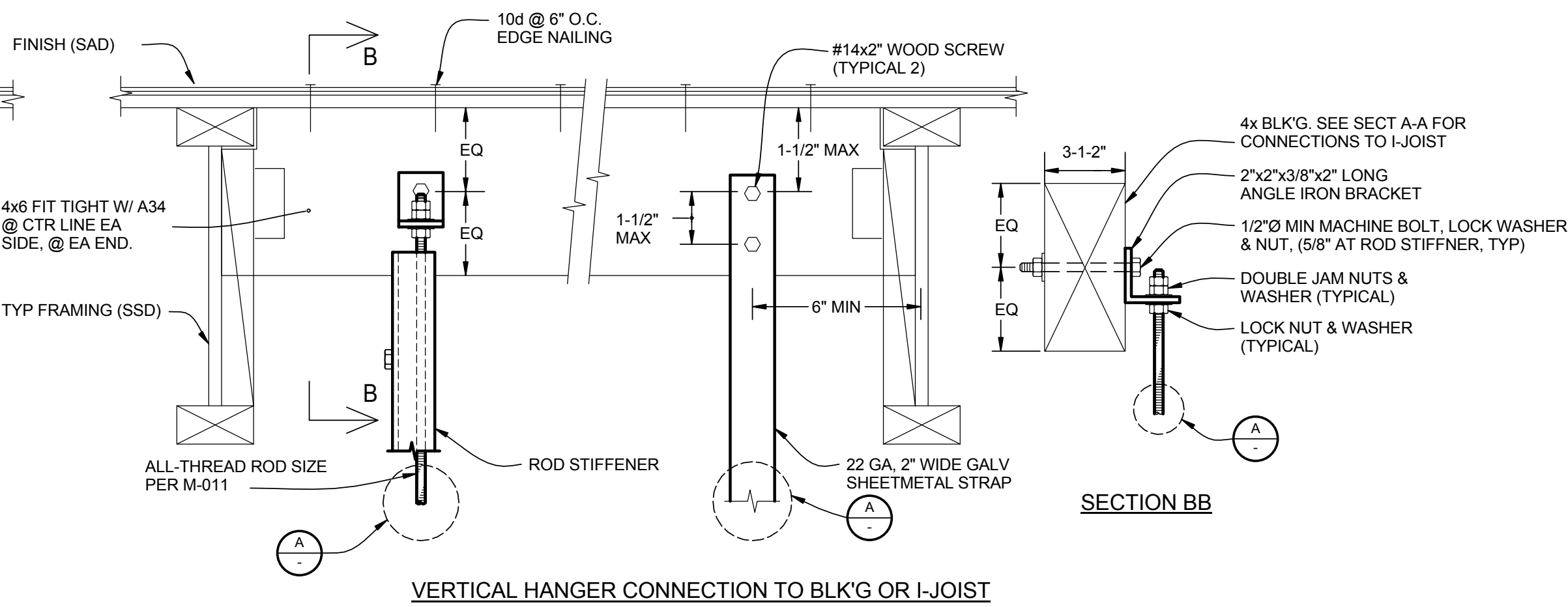
B WOOD FRAME CONNECTION DETAIL

SCALE: NONE



C SEISMIC CONNECTIONS TO WOOD FRAMING

SCALE: NONE

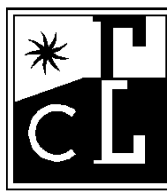


VERTICAL HANGER CONNECTION TO BLK'G OR I-JOIST



420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-6373
ellenbergerarchitecture.com

CONSULTANT



3274 Villa Lane, Suite 100, San Jose, CA 95128 ph: 707-253-9177 fax: 707-253-4473

DEDICATED
ICE FACILITY
FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

MECHANICAL
DETAILS

DRAWING STATUS

CONSTRUCTION
DOCUMENTS

INITIAL PLAN REVIEW SUBMITTAL

REVISIONS

Symbol Description By Date

Drawn By MQ

Date Drawn 8-15-2018

Scale

Job Number 17-3059



Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by, or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

SHEET NUMBER

M4.2

PLUMBING FIXTURE SCHEDULE					
MARK	W	V	CW	HW	REMARKS
P-1A	4"	1 1/2"	1"		TANK TYPE WATER CLOSET
P-1B	4"	1 1/2"	1"		TANK TYPE WATER CLOSET (ADA) SEE ARCH FOR MOUNTING HIGHT
P-2A	2"	1 1/2"	3/4"	3/4"	LAVATORY WITH FAUCET ADA
P-3A	2"	2"	1"		WALL MOUNTED URINAL ADA (S.A.D.FOR MOUNTING HEIGHT)
P-4A	2"	2"	3/4"	3/4"	FLOOR MOUNTED JANITOR SINK
P-6A	2"	1 1/2"	3/4"	0"	HIGH LOW WATER DRINKING STATION. WITH BOTTLE FILLER
FD-1	2"	1 1/2"			FLOOR DRAIN
HB-1			3/4"		HOSE BIBB
CW FIXTURES AND VALVES SHALL BE AB1953 COMPLIANT.					

LIST OF APPLICABLE CODES AND STANDARDS:

TITLE 24, PART 2: 2016 CALIFORNIA BUILDING CODE (VOLUMES 1 & 2)
TITLE 24, PART 3: 2016 CALIFORNIA ELECTRICAL CODE
TITLE 24, PART 4: 2016 CALIFORNIA MECHANICAL CODE
TITLE 24, PART 5: 2016 CALIFORNIA PLUMBING CODE
TITLE 24, PART 6: 2016 CALIFORNIA ENERGY CODE
TITLE 24, PART 9: 2016 CALIFORNIA FIRE CODE
TITLE 24, PART 12: 2016 CALIFORNIA REFERENCED STANDARDS CODE

MEP COMPONENT ANCHORAGE NOTE:

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

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.

2. TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER.

3. MOVABLE EQUIPMENT WHICH IS STATIONED IN ONE PLACE FOR MORE THAN 8 HOURS AND HEAVIER THAN 400 POUNDS ARE REQUIRED TO BE ANCHORED WITH TEMPORARY ATTACHMENTS.

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

- A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.

- B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

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

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE:

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

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

MECHANICAL/PLUMBING/DUCTS

M ☐ PP ☐ D ☐ -OPTION 1: ☐ DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.
M ☒ PP ☐ D ☒ -OPTION 2: ☒ SHALL COMPLY WITH THE OSHPD PRE-APPROVAL (OPM #) # 0043-13
M ☐ PP ☐ D ☐ -OPTION 3: ☐ SHALL COMPLY WITH THE SMACNA SEISMIC RESTRAINT

MANUAL, OSHPD EDITION (2009), INCLUDING ANY ADDENDA. FASTENERS AND OTHER ATTACHMENTS NOT SPECIFICALLY IN THE SMACNA SEISMIC RESTRAINT MANUAL, OSHPD EDITION, ARE DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS. THE DETAILS SHALL ACCOUNT APPLICABLE SEISMIC HAZARD LEVEL ____ AND CONNECTIONS LEVEL ____ FOR THE PROJECT AND CONDITIONS.

ELECTRIC WATER HEATER SCHEDULE										
MARK	MANUF.	MODEL	TYPE	STORAGE CAPACITY	RECOVER Y @ 60F° RISE	ELECTRICAL			OPER. WEIGHT	LOCATION
						V-Ø-HZ	No. Elements	WATTS		
EW11	A.O. SMITH	DEL 40	TANK	40 gal	41	460-3-60	2	6,000 W	349.00 lb	

PLUMBING PIPE MATERIALS:

A. THE FOLLOWING APPLICATIONS ARE FOR INSIDE, BELOW & ABOVE THE BUILDING SLAB AND ENDING AT A POINT 5'-0" OUTSIDE THE PERIMETER BUILDING WALLS.

1. DOMESTIC WATER DISTRIBUTION PIPING BELOW GROUND: ALL INTERIOR DOMESTIC WATER PIPING SHALL BE "K" HARD DRAWN COPPER TUBING (SIL-FOS 2, FOS-DLO 7 OR OTHER SILVER BRAZING MATERIAL). THIS IS REQUIRED FOR WATER SERVICE LINE FROM THE SHUT-OFF VALVE IN THE BUILDING TO A POINT 5 FEET OUTSIDE THE BUILDING.

2. DOMESTIC WATER DISTRIBUTION PIPING ABOVE GROUND: HARD COPPER TUBEM TYPE L.

3. SOIL, WASTE, AND VENT PIPING BELOW GROUND: SCHEDULE 40 POLY VINYL CHLORIDE (PVC) PLASTIC DWV PIPE.

4. SOIL, WASTE, AND VENT PIPING ABOVE GROUND: HUBLESS CAST-IRON SOIL PIPE OR POLY VINYL CHLORIDE (PVC) PLASTIC DWV PIPE.

- 5.NOTE: PVC PIPING IS NOT PERMITTED IN AIR-HANDLING CEILING SPACES. USE ONLY CAST-IRON OR DUCTILE IRON PIPE IN THESE LOCATIONS.

B. THE FOLLOWING APPLICATIONS ARE FOR ONLY FROM 5'-0" OUTSIDE THE BUILDING TO THE UTILITY POINT OF CONNECTION (POC)

UNDERGROUND DOMESTIC WATER SERVICE PIPING FROM A POINT 5 FEET OUTSIDE THE BUILDING TO THE POC.

1. 3/4"-1 1/4" SCHEDULE 40 PVC PIPE WITH SOLVENT-WELDED JOINTS.

2. 1 1/2"-3", SDR-21, PVC PIPE (ASIM D2241) CLASS 200, BELL AND SPIGOT WITH RUBBER GASKETED JOINTS.

3. 3/4"-3", TYPE "K" HARD DRAWN COPPER TUBBING (SIL-FOS 2, FOS-FLO 7 OR OTHER SILVER BRAZING MATERIAL)

4. 4" AND LARGER, SDR-18 PVC PIPE (AWWA C-900) CLASS 150 BELL AND SPIGOT WITH RUBBER GASKETED JOINTS.

UNDERGROUND SANITARY SEWE SERVICE PIPING FROM A POINT 5 FEET OUTSIDE THE BUILDING TO THE POC.

1. POLYVINYL CHLORIDE (PVC) SEWER PIPE SHALL CONFORM TO ASTM D3034 (SDR-35)

2. CAST IRON OR DUCTILE IRON PIPE SHALL CONFORM TO USASI #A-21 CLASS 50.

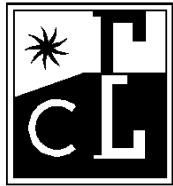
PLUMBING LEGEND		
SYMBOL	ABBREVIATION	DESCRIPTION
		EQUIPMENT TYPE
		EQUIPMENT NUMBER
		DETAIL / DRAWING NUMBER
		SHEET NUMBER
		FIXTURE TYPE/NUMBER
	(N)	NEW PLUMBING AND PIPING SHOWN HEAVY
	(E)	EXISTING PLUMBING AND PIPING SHOWN LIGHT
	SS	SANITARY WASTE ABOVE GROUND
	SS	SANITARY WASTE BELOW GROUND
	V	VENT PIPE
	CW	DOMESTIC COLD WATER PIPE
	HW	DOMESTIC HOT WATER PIPE
	HWR	HOT WATER RETURN PIPE
	110"	TEMPERED HOT WATER PIPE
	CA	COMPRESSED AIR
	CD	CONDENSATE DRAIN
	FW	FILTERED WATER
	G	NATURAL GAS PIPE
	ID	INDIRECT WASTE
	LPG	LIQUID PROPANE GAS
	N2	NITROGEN
	N2O	NITROUS OXIDE
	OA	OIL FREE AREA
	O2	OXYGEN
	PW	PROCESS WASTE PIPE
	RVD	RELIEF VALVE DISCHARGE
	RWL	RAIN WATER LEADER
	SD	STORM DRAIN PIPE
	VAC	VACUUM LINE
	GV	GATE VALVE
		GLOBE VALVE
	BV	BALL VALVE
	BFV	BUTTERFLY VALVE
	CV	CHECK VALVE
		BALANCING VALVE
		GAS COCK OR STOP
	PRV	PRESSURE REDUCING VALVE
	TV	TEMPERING VALVE
		STRAINER
		UNION
		PRESSURE GAUGE AND COCK
	P	PUMP
		THERMOMETER
	CO	CLEANOUT
	WCO	WALL CLEANOUT
	FCO	FLOOR CLEANOUT
	COTG	CLEANOUT TO GRADE
		PRESSURE GUAGE WELL ONLY (PETE'S PLUG)
	HB	HOSE BIBB
		PIPE UP
		PIPE DOWN
		BRANCH TOP CONNECTION
		BRANCH BOTTOM CONNECTION
		BRANCH SIDE CONNECTION
		CAP ON END OF PIPE
		CONCENTRIC REDUCER
		ECCENTRIC REDUCER
		VALVE IN RISER
		POINT OF CONNECTION
		POINT OF DEMOLITION
		CENTER LINE
	AFF	ABOVE FINISHED FLOOR
	AFG	ABOVE FINISHED GRADE
	AP	ACCESS PANEL
	BFF	BELOW FINISHED FLOOR
	CI	CAST IRON
	COTG	CLEANOUT TO GRADE
	DMV	DRAIN, WASTE, AND VENT
	DN	DOWN
	DW	DISHWASHER
	DWG	DRAWING
	(E)	EXISTING
	FCO	FLOOR CLEANOUT
	IE	INVERT ELEVATION
	IW	INDIRECT WASTE
	(N)	NEW
	NIC	NOT IN CONTRACT
	NTS	NOT TO SCALE
	SA	SHOCK ABSORBER
	SAD	SEE ARCHITECTURAL DRAWINGS
	SCD	SEE CIVIL DRAWINGS
	SED	SEE ELECTRICAL DRAWINGS
	SMD	SEE MECHANICAL DRAWINGS
	SSD	SEE STRUCTURAL DRAWINGS
	TYP	TYPICAL
	UMC	UNIFORM MECHANICAL CODE
	UPC	UNIFORM PLUMBING CODE
	UNO	UNLESS NOTED OTHERWISE
	V	VENT
	VTR	VENT THROUGH ROOF
	WCO	WALL CLEANOUT

BLDG 'PLUMBING' SHEET LIST	
P1.1	PLUMBING SCHEDULES & LEGENDS
P2.1	PLUMBING FIRST FLOOR OVERALL PLAN
P3.1	PLUMBING ENLARGEMENT
P4.1	PLUMBING DETAILS



420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-6373
ellenbergerarchitecture.com

CONSULTANT



COSTA ENGINEERS INC.
3274 Villa Lane Napa, CA 94588 ph: 707-253-9171 fax: 707-253-6473

DEDICATED
ICE FACILITY

FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

PLUMBING
SCHEDULES &
LEGENDS

DRAWING STATUS

CONSTRUCTION
DOCUMENTS

INITAL PLAN REVIEW SUBMITTAL

REVISIONS

Symbol	Description	By	Date

Drawn By	MQ
Date Drawn	8-15-2018
Scale	12" = 1'-0"
Job Number	17-3059

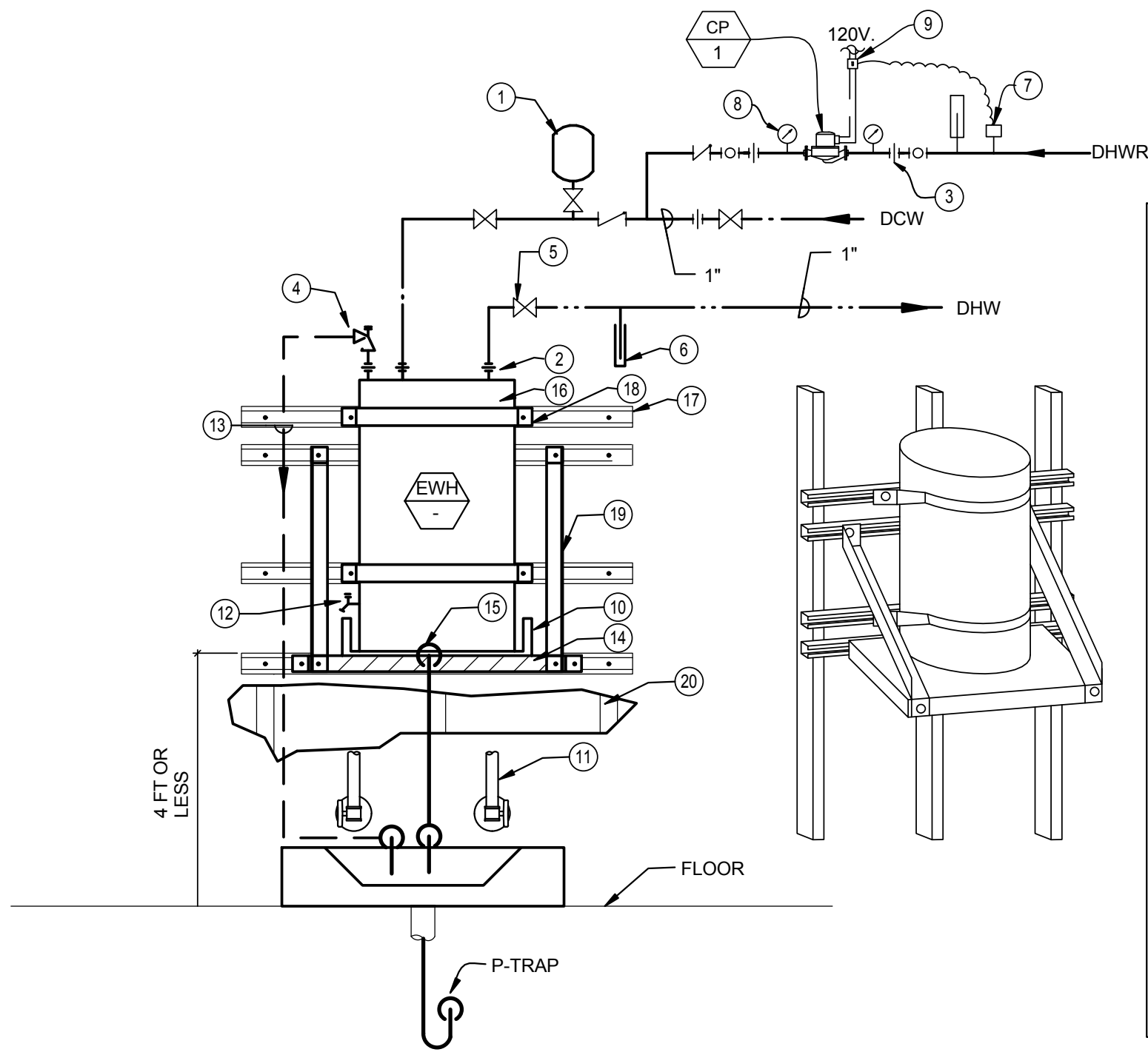


Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by, or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

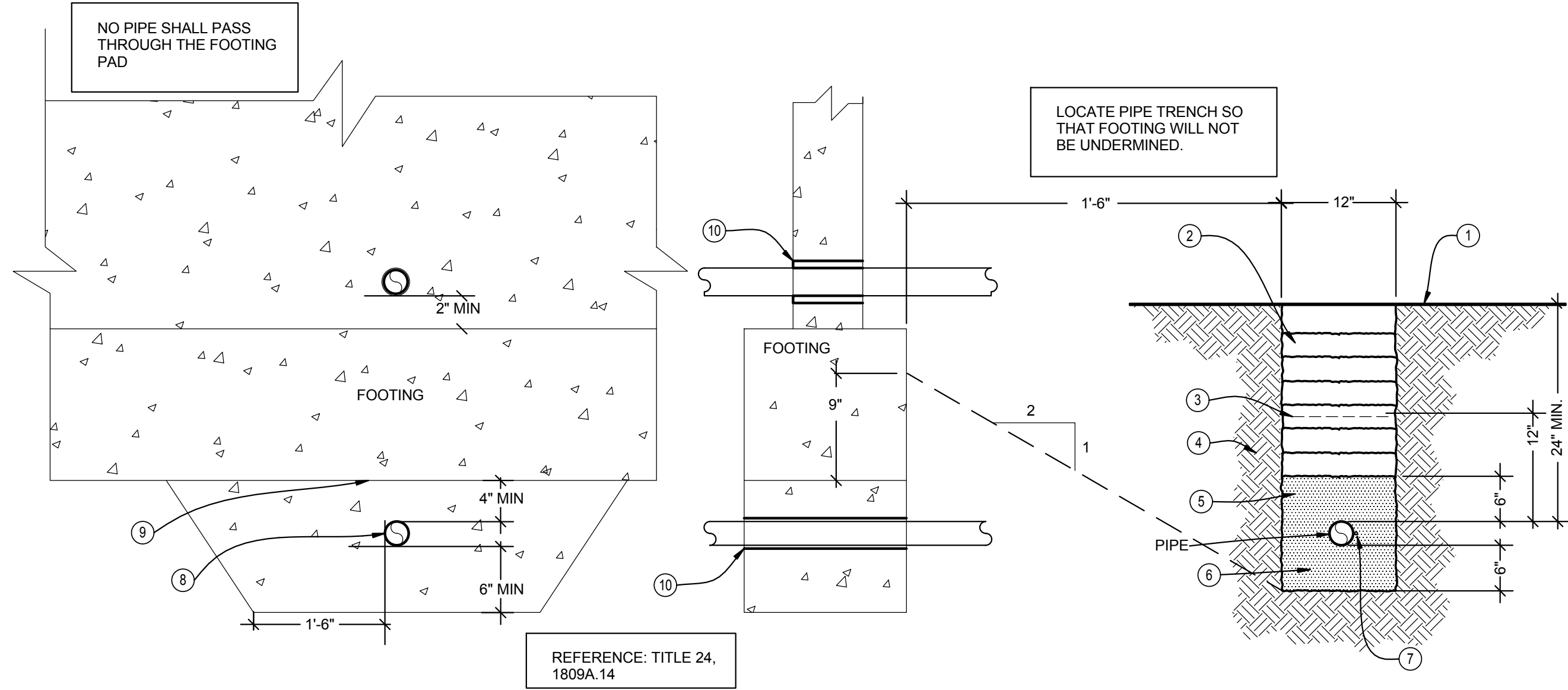
SHEET NUMBER

P1.1

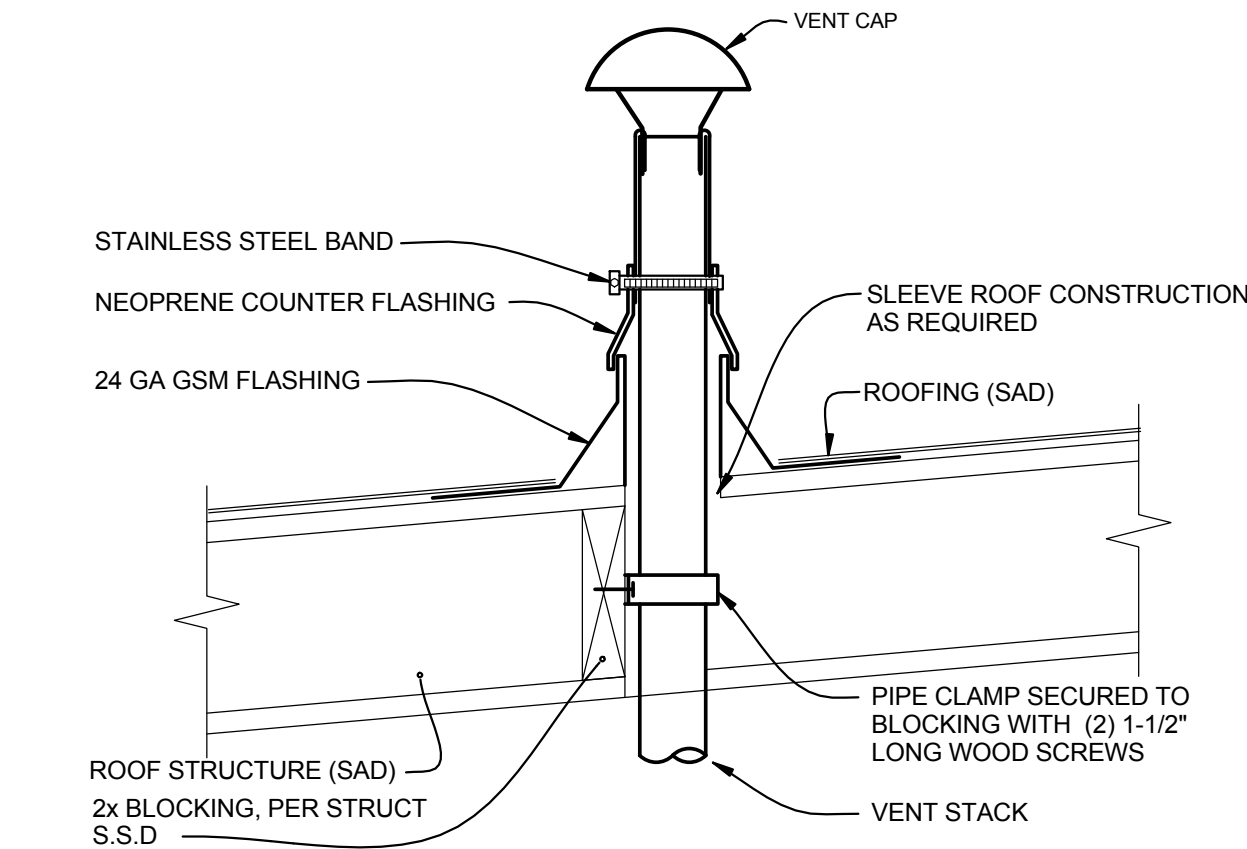




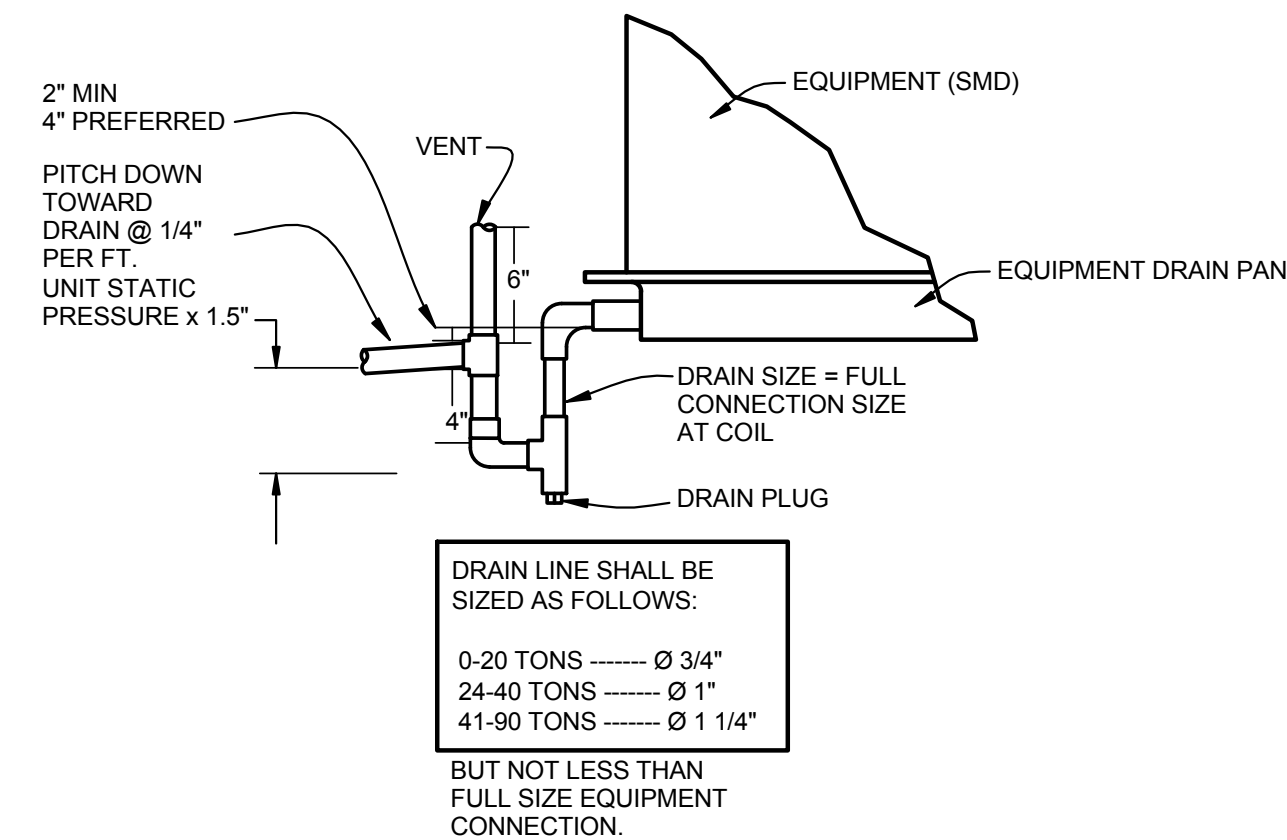
A WALL MOUNTED ELECTRIC WATER HEATER
SCALE: NONE



D PIPE TRENCH DETAIL
SCALE: NONE



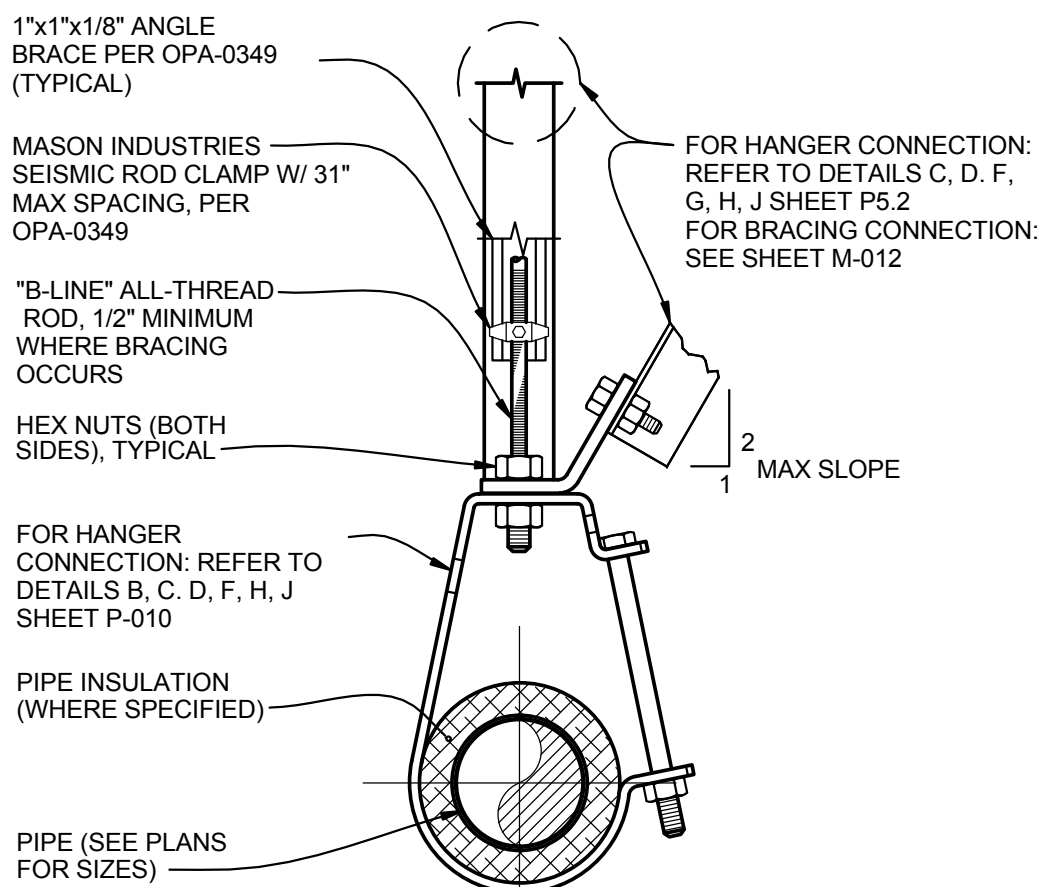
B VENT THRU ROOF DETAIL
SCALE: NONE



C CONDENSATE DRAIN PIPING DETAIL
SCALE: NONE

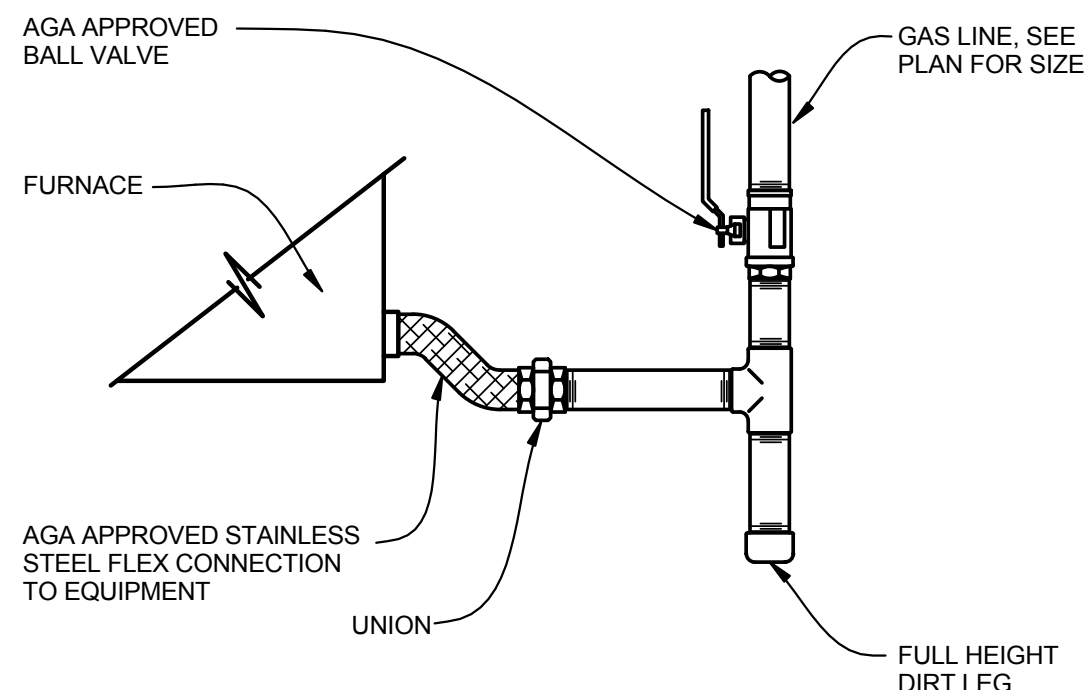
TABLE-1	
ANGLE (INCHES)	MAX LENGTH
1-1/2 x 1-1/2 x 1/8	3'-0"
2 x 2 x 3/16	6'-0"
3 x 3 x 1/4	8'-0"

MINIMUM ROD SIZES (INCHES)	PIPE DIAMETER (INCHES)
3/8"	2" & SMALLER PIPE
1/2"	2-1/2" & 3" PIPE
5/8"	4" PIPE

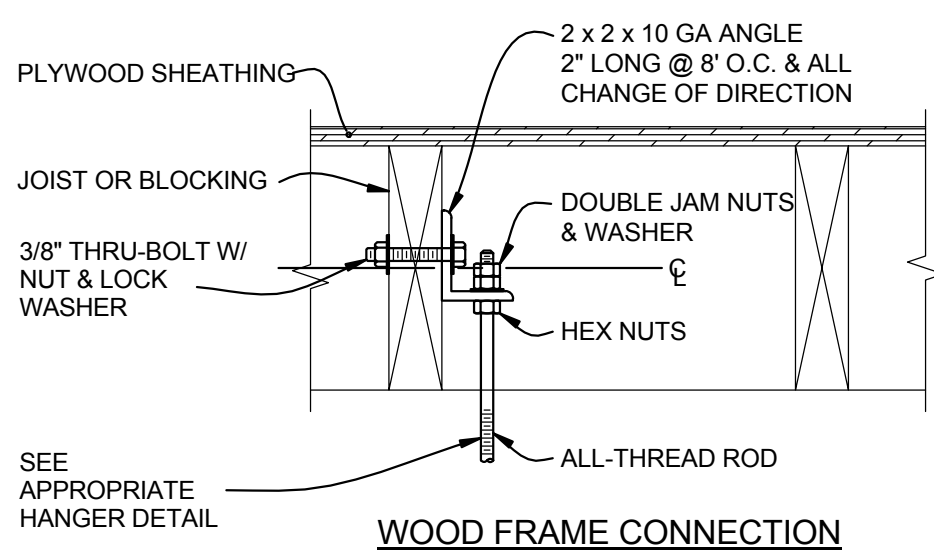


- NOTES:
1. PIPE SUPPORT SPACING PER SPEC 23 05 00 SECTION 3.9C ON SHEETS P-010
 2. SEE PLANS FOR PIPE SIZES.
 3. PROVIDE ROD STIFFENER @ ALL-THREAD WHERE DIAGONAL BRACE OCCURS.
 4. BRACING NOT REQUIRED FOR FUEL PIPES LESS THAN 1" I.D. AND ALL OTHER PIPES LESS THAN 2-1/2".
 5. BRACING NOT REQUIRED FOR PIPING SUSPENDED BY INDIVIDUAL HANGERS 12" OR LESS IN LENGTH.
 6. MAX BRACE LENGTH PER TABLE-1.
 7. LATERAL AND LONGITUDINAL BRACING SHALL BE INSTALLED AT INTERVALS OF 30 TO 40 FEET ON PIPE RUNS.

E TYPICAL PIPE HANGER DETAILS
SCALE: NONE



F GAS CONNECTION TO EQUIPMENT DETAIL
SCALE: NONE

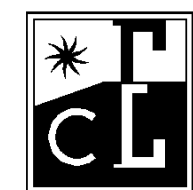


G HANGER WOOD CONNECTION DETAIL
SCALE: NONE



420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-6373
ellenbergerarchitecture.com

CONSULTANT



COSTA ENGINEERS INC.

3274 Villa Lane, Suite 100, San Jose, CA 95128
Tel: 408.253.8177 Fax: 408.253.8473

DEDICATED
ICE FACILITY
FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

PLUMBING
DETAILS

DRAWING STATUS

CONSTRUCTION
DOCUMENTS

INITIAL PLAN REVIEW SUBMITTAL

REVISIONS

Symbol Description By Date

Drawn By MQ

Date Drawn 8-15-2018

Scale

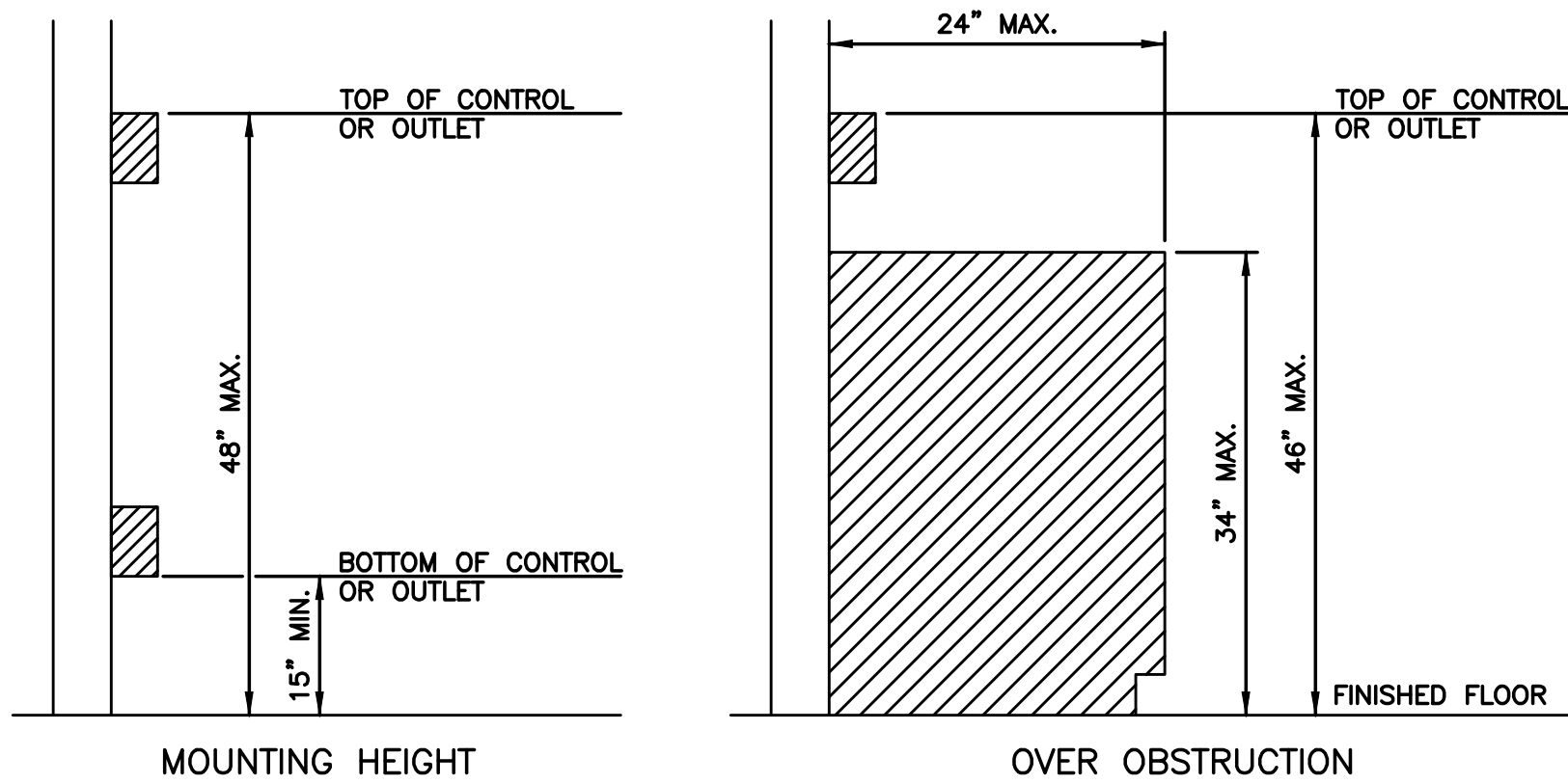
Job Number 17-3059



Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by, or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

SHEET NUMBER

P4.1

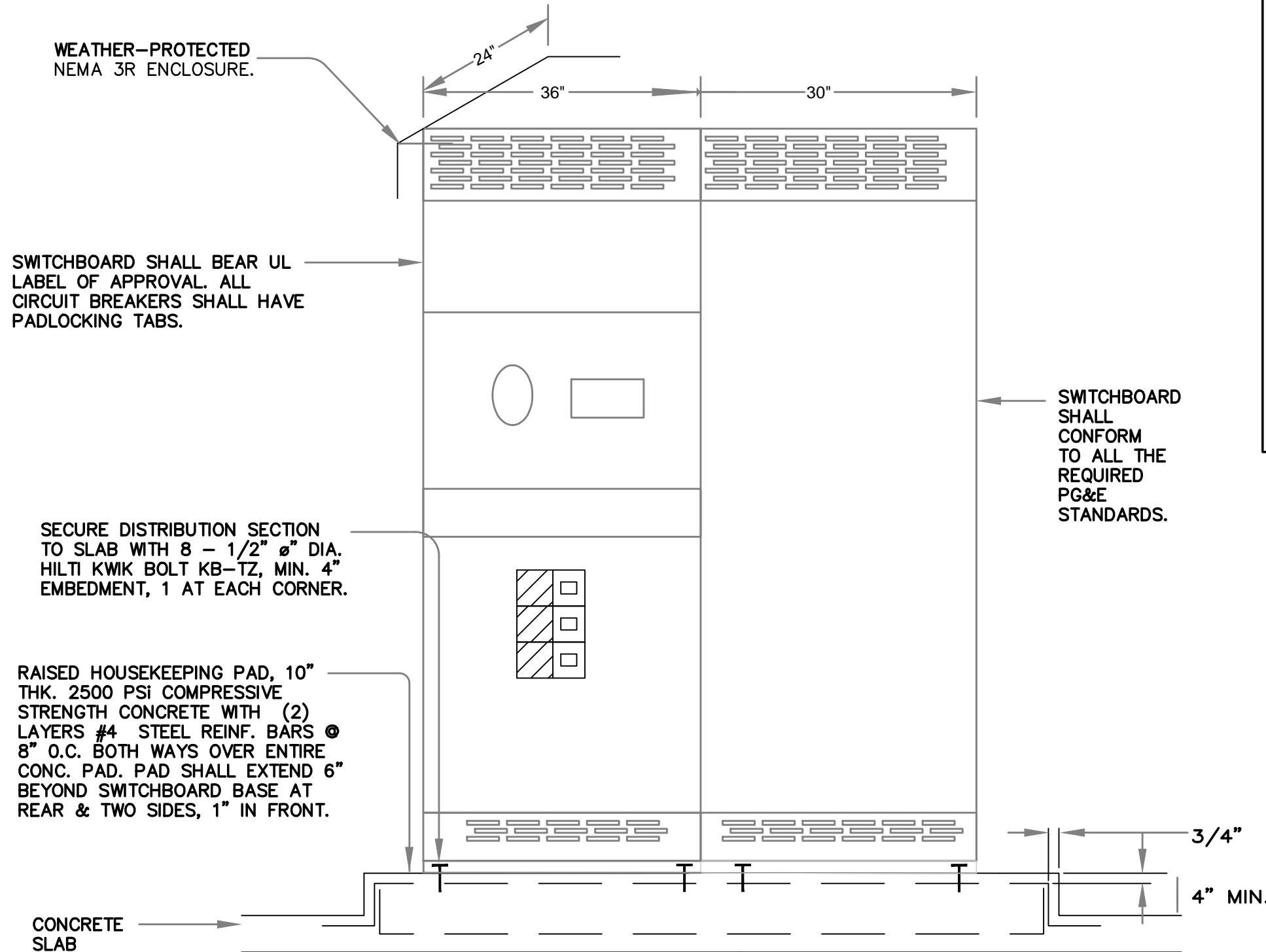


ALL DEVICE HEIGHTS DEPICTED SHALL BE MODIFIED AS REQUIRED BY GOVERNING BUILDING CODES. CONTRACTOR TO VERIFY/RECONCILE APPLICABLE CODE REQUIREMENTS AND ANY DEVICE HEIGHT REQUIREMENTS DEPICTED ON ARCHITECTURAL OR INTERIOR DESIGN PLANS & SPECIFICATIONS PRIOR TO DEVICE ROUGH-IN.

DEVICE ALIGNMENT & MOUNTING HEIGHT DETAILS

SCALE: NTS

1



MAIN SWITCHBOARD ELEVATION

SCALE: NTS

2

SYMBOLS

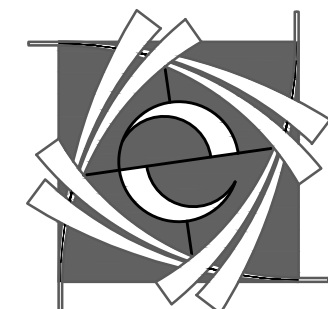
⊙	LIGHTING FIXTURE, WALL MOUNTED
⚡	EGRESS LIGHT - FIXTURES TO HAVE EMERGENCY BATTERY BACK-UP
⊠	2'x4' LIGHT FIXTURE, SEE FIXTURE SCHEDULE
⊠	1'x4' LIGHT FIXTURE, SEE FIXTURE SCHEDULE
➔	EXIT LIGHT FIXTURE. DIRECTIONAL ARROWS AS REQUIRED.
⊠	EMERGENCY LIGHT. MOUNT AT 84" AFF.
⊠	FIRE ALARM CONTROL PANEL
⊠	FIRE PULL STATION AT +45"
⊠	FIRE FLOW SWITCH
⊠	FIRE TAMPER SWITCH
⊠	HORN / STROBE
⊠	JUNCTION BOX
⊠	DAYLIGHTING CONTROL PHOTOSENSOR.
⊠	LIGHTING CONTROL OVER RIDE SWITCH
⊠	LOW VOLTAGE WALL DIMMER SWITCH - +45". LOWER CASE LETTER(S) a,b,c... NEXT TO THE DIMMER REPRESENT DIFFERENT CONTROL ZONES, 3,4 ARE THREE AND FOUR WAY CONTROLS.
⊠	CEILING MOUNTED OCCUPANCY SENSOR, DUAL TECHNOLOGY. SEE LIGHTING CONTROL DIAGRAMS.
⊠	WALL MOUNTED OCCUPANCY SENSOR, DUAL TECHNOLOGY WITH INTEGRAL MANUAL DIMMING CONTROLS.
⊠	PUSH BUTTON
⊠	DOUBLE DUPLEX RECEPTACLE 20A, 125V, +18"AFF UON.
⊠	DUPLEX RECEPTACLE 20A, 125V, +18"AFF UON
⊠	DUPLEX RECEPTACLE 20A, 125V, MOUNT OUTLET ABOVE COUNTER OR BACKSPLASH (VERIFY HEIGHT W/ARCHITECT).
⊠	DOUBLE DUPLEX RECEPTACLE 20A, 125V, WITH ONE CONTROLLED OUTLET. SEE LIGHTING CONTROL DIAGRAMS.
⊠	DUPLEX RECEPTACLE 20A, 125V, SPLIT WIRED CONTROLLED. SEE LIGHTING CONTROL DIAGRAMS.
⊠	GFCI DUPLEX RECEPTACLE 20A, 125V, +18"AFF U.O.N.
⊠	DEDICATED DUPLEX RECEPTACLE 20A, 125V, +18"AFF U.O.N.
⊠	DEDICATED DUPLEX RECEPTACLE 20A, 125V, MOUNT OUTLET ABOVE COUNTER +42" TO CENTER (VERIFY HEIGHT W/ARCHITECT).
⊠	GFCI DUPLEX RECEPTACLE 20A, 125V, MOUNT OUTLET ABOVE COUNTER +42" TO CENTER (VERIFY HEIGHT W/ARCHITECT).
⊠	DUPLEX RECEPTACLE 20A, 125V, MOUNTED IN FLOOR BOX.
⊠	COMBINATION COMM/DATA OUTLET: +18"AFF UON, PROVIDE PULL LINE TO NEAREST ACCESSIBLE CEILING SPACE. SEE ADDITIVE BID REQUIREMENT TWO CHANNEL POWER POLE FOR FURNITURE FEED. WIREMOLD NP800 OR APPROVED EQUAL. VERIFY LENGTH.
⊠	1" CONDUIT AND DOUBLE GANG BOX FOR FURNITURE DATA FEED. 3/4" CONDUIT AND SINGLE GANG BOX FOR FURNITURE POWER FEED. PROVIDE WITH ONE CONTROLLED CIRCUIT.
⊠	MAIN SWITCHBOARD
⊠	LIGHTING OR DISTRIBUTION PANEL.
⊠	DISTRIBUTION TRANSFORMER, MOUNTING AS NOTED
⊠	DISCONNECT SWITCH SIZE & TYPE AS REQUIRED F=FUSED
⊠	VARIABLE FREQUENCY DRIVE (VFD)
⊠	FAN MOTOR SEE MECHANICAL PLANS AND SPECIFICATION
⊠	EXHAUST FAN - SEE MECHANICAL PLANS AND SPECIFICATION
⊠	MECHANICAL EQUIPMENT I.D. TAG - SEE MECHANICAL PLANS
⊠	CIRCUIT CONCEALED IN CEILING OR WALL, 3/4" C. MIN.
⊠	CIRCUIT CONCEALED IN FLOOR OR UNDERGROUND, 3/4" C. MIN.
⊠	HOME RUN TO PANELBOARD OR TERMINAL CABINET, 3/4"C. MIN.
⊠	DENOTES # OF #12 WIRES, NO MARKS = 2 #12, AND 1#12 GROUND.
⊠	CONDUIT SEAL OFF
⊠	TELEPHONE TERMINAL BOARD: SIZE AS SHOWN. DUPLEX RECEPTACLE & 1 #6 CU TO GROUND.
⊠	NOTE 1: ALL DIMENSIONS ARE TO CENTER LINE OF BOX.
⊠	NOTE 2: SYMBOLS INDICATED ABOVE MAY NOT NECESSARILY APPEAR AS PART OF THESE DRAWINGS IF NOT REQUIRED.

ABBREVIATIONS

A	- A -	KV	- K -
ACB	AMPERE	KVA	KILOVOLT AMPERE
AF	AIR CIRCUIT BREAKER	KW	KILOWATT
AFF/AFG	AMP FUSE RATING	KWH	KILOWATT HOUR
AIC	ABOVE FINISHED FLOOR/GRADE	LCP	- L -
AL	AMPERE INTERRUPTING CAPACITY	LTG	LIGHTING CONTROL PANEL
AWG	ALUMINUM	LTG	LIGHTING
BCC	- B -	MAX	- M -
C	BELOW FINISHED CEILING	MCB	MAXIMUM
C	CONDUIT	MIN	MAIN CIRCUIT BREAKER
°C	DEGREE CELSIUS	MTD	MINIMUM
CB	CIRCUIT BREAKER	MTD	MOUNTED
CKT	CIRCUIT	MTG	MOUNTING
CLG	CEILING	NA	- N -
CO	CONDUIT ONLY	NA (E)	NEW
CU	COPPER	NA	NOT APPLICABLE
D	- D -	NF	NON-FUSED
D	DEMOLISH	NIC	NOT IN CONTRACT
ELEC	ELECTRICAL	NL	NIGHT LIGHT
EM	EMERGENCY	NTS	NOT TO SCALE
EMT	ELECTRICAL METALLIC TUBING	O	- O -
EP XP	EXPLOSION PROOF	OD	OUTSIDE DIAMETER
EQ	EQUAL	P	- P -
EQUIP	EQUIPMENT	PB	PULL BOX
EX. (E)	EXISTING	PH	PHASE
EXT	EXTERIOR	PNL	PANEL
F	- F -	PWR	POWER
F	DEGREE FAHRENHEIT	R (R)	RELOCATE(D)
FBO	FUSE	RECEPT	RECEPTACLE
FDR	FURNISHED BY OTHERS	REQ	REQUIRED
FL	FEEDER	RM	ROOM
FL	FLOOR	S	- S -
FLA	FULL LOAD AMPS	SCHED	SCHEDULE
FLEX	FLEXIBLE	SPEC	SPECIFICATION
FT	FEET OR FOOT	T	- T -
G	- G -	TBC	TO BE CONFIRMED
GND	GROUND	TBB	TELEPHONE BACKBOARD
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	TEMP	TEMPORARY
H	- H -	TRANSF	TRANSFORMER
HID	HIGH INTENSITY DISCHARGE	TYP	TYPICAL
HZ	HERTZ	U	- U -
I	- I -	UNO	UNLESS OTHERWISE NOTED
IC	INTERRUPTING CAPACITY	V	- V -
ID	INSIDE DIAMETER	VA	VOLT AMPERE
IG	ISOLATED GROUND	VA	VOLT OR VOLTAGE
ISC	SHORT CIRCUIT	W	- W -
J	- J -	WP	WEATHERPROOF
J	JUNCTION BOX	X	- X -
		+48"	MOUNTING HEIGHT TO CENTER OF DEVICE FROM FINISHED FLOOR OR GRADE, UNLESS OTHERWISE NOTED

GENERAL NOTES

- These general notes are intended to assist the contractor during execution of the work, however, they do not cover all of the specification requirements.
- Locations of equipment are diagrammatic and job conditions may not always permit their installation exactly as shown; however, the design shall be followed as closely as existing conditions and actual building construction permit. The Contractor shall investigate the structural and finish conditions affecting the work and shall provide such fittings and accessories as may be required to meet conditions whether shown or not.
- Coordinate all work with other trades to provide a complete installation. Connect all equipment furnished by others as required. Install all work to clear architectural and structural members.
- Placement and circuiting of exit signs and egress lighting shall comply with the California Building Code (CBC) requirements and with the local fire marshal.
- Install all equipment, conduits, outlets, and fixtures in strict accordance with all applicable codes. (National Electrical Code (NEC), California Electrical Code (CEC) & California Energy Code - Title 24, Part 6)
- Do not scale electrical plans for fixtures, devices, or appliance locations. Use figured dimensions if given or check mechanical and architectural plans.
- All material and equipment is to be listed and installed per manufacturer's specifications, CEC 110-3 and California Title 24.
- The final location of all outlets shall be verified with the owner at the time of construction.
- All outdoor electrical equipment shall be weatherproof.
- All conduit shall be routed concealed unless noted on the plan or approved by the architect or engineer.
- All wiring shall be installed in conduit.
- Provide water tight flex with ground wire for outside mechanical connections.
- The minimum size of all conductors shall be #12 CU or as shown in CEC Table 310-5.
- Provide minimum working clearance per CEC 110-26.
- Outlet boxes installed in fire walls shall be one piece steel and installed in separate (staggered) stud penetrations. Minimum 24 inch horizontal separation.
- Breakers feeding circuits with a common neutral are to be fed in conformance with CEC Section 210.4 (B) using a common trip mechanism.
- Lighting & switches/sensors to be from the same manufacturer.
- All receptacles located in the kitchen/food preparation areas shall be gfci.
- All receptacles located outdoors shall have wet while in use coverplates.



ELLENBERGER
ARCHITECTURE

420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-6373
ellenbergerarchitecture.com

CONSULTANT

DFH & ASSOCIATES, LLC

530.613.7966
P.O. BOX 1362,
MEADOW VISTA, CA 95722
DFHENG@ATT.NET

DEDICATED
ICE FACILITY
FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

SYMBOLS, NOTES,
ABBREVIATIONS &
SCHEDULES

DRAWING STATUS

100% CONSTRUCTION
DOCUMENT SET

NOT FOR CONSTRUCTION

REVISIONS

Symbol	Description	By	Date
--------	-------------	----	------

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

--	--	--	--

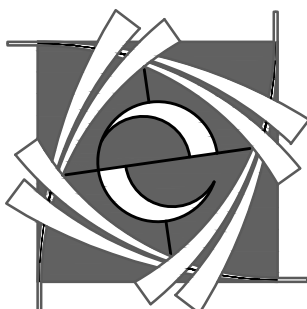
--	--	--	--

--	--	--	--

- SECTION 26 00 00 - ELECTRICAL WORK
- PART 1 - GENERAL
- 1.01 CONDITIONS:
- A. The Requirements of General Conditions and Special Conditions apply to Work of this Section as if fully repeated herein.
- 1.02 WORK INCLUDED:
- A. Provide a complete working installation with all material and equipment as shown and specified.
- B. Wiring Methods: Provide the following wiring methods:
1. Concealed Dry Interior Locations: Use only building wire, Type THHN/THWN-2 insulation, in raceway, metal clad cable.
2. Exposed Dry Interior Locations: Use only building wire, Type THHN/THWN-2 insulation, in raceway, metal clad cable.
3. Above Accessible Ceilings: Use only building wire, Type THHN/THWN-2 insulation, in raceway, metal clad cable.
4. Wet or Damp Interior Locations: Use only building wire, Type THHN/THWN-2 insulation, in raceway.
5. Exterior Locations: Use only building wire, Type XHHW-2 insulation, in raceway.
6. Underground Locations: Use only building wire, Type THHN/THWN-2 insulation, in raceway.
- C. Make electrical connections for equipment furnished as part of Work of other Sections.
- D. Include sealing and fireproofing of conduits and cables.
- E. Electrical products are anchored and fastened to building elements and finishes as follows:
1. Concrete Structural Elements: Provide expansion anchors and powder actuated anchors.
2. Steel Structural Elements: Provide beam clamps and spring steel clips.
3. Concrete Surfaces: Provide expansion anchors.
4. Solid Masonry Walls: Provide expansion anchors.
5. Sheet Metal: Provide sheet metal screws.
6. Wood Elements: Provide wood screws.
- F. Electrical components are identified as follows:
1. Nameplate for each electrical distribution and control equipment enclosure.
2. Label for identification of receptacles, light switches, and control device stations.
3. Wire marker for each conductor at panel boards' gutters, pull boxes, outlet and junction boxes, and each load connection.
4. Permanent ink felt tip marker on cover indicating panel and circuit for junction boxes located above suspended ceilings and below ceilings in non-public areas.
- 1.03 QUALITY ASSURANCE:
- A. Requirements of Regulatory Agencies:
1. Nothing in the Contract Documents shall be construed to permit Work not conforming to applicable codes, laws, ordinances, rules or regulations.
2. All installed or connected equipment shall be labeled or certified for its use by a nationally recognized testing laboratory.
3. All materials and equipment shall be installed in accordance with manufacturer's recommendations and in accordance with the National Electrical Contractors Association (NECA) Standard of Installation.
- 1.04 SUBMITTALS:
- A. General:
1. Submit shop drawings and supplemental data for all materials and equipment specified in this Division.
- 1.05 SITE EXAMINATION AND CONDITIONS:
- A. Examine site; verify dimensions and locations against Drawings and become informed of all conditions under which Work is to be done before submitting proposals.
- 1.06 GUARANTEE:
- A. Provide one year guarantee. Repair or replace as may be necessary any defective work, material or part with no increase in Contract Sum including repair or replacement of other Work, furnishing, equipment or premises caused by such repair or replacement of defective work.
- PART 2 - PRODUCTS
- 2.01 DESIGN REQUIREMENTS
- A. Minimum Raceway Size:
1. 3/4 inch.
2. 1 inch outside foundation line.
- 2.02 Building Wire:
- A. Product Description: Single conductor insulated wire.
- B. Conductor: Copper THHN/THWN except as noted.
- C. Insulation Voltage Rating: 600 volts.
- D. Insulation Temperature Rating: 90 degrees C.
- E. Insulation Material: Thermoplastic.
- 2.03 ARMORED CABLE
- A. Conductor: Copper.
- B. Insulation Voltage Rating: 600 volts.
- C. Insulation Temperature Rating: 90 degrees C.
- D. Insulation Material: Thermoplastic.
- E. Copper green grounding conductor.
- F. Armor Material: Steel.
- G. Armor Design: Galvanized Steel Interlocked (Green Striped).

- 2.04 METAL CLAD CABLE
- A. Conductor: Copper.
- B. Insulation Voltage Rating: 600 volts.
- C. Insulation Temperature Rating: 90 degrees C.
- D. Insulation Material: Thermoplastic.
- E. Full-sized equipment grounding/bonding conductor.
- F. Armor Material: Steel.
- G. Armor Design: Green Steel Interlocked Armor.
- H. Jacket: None.
- 2.05 Wiring Connectors:
- A. Bolted pressure connectors: Cast bronze compression bolts designed for parallel taps, tees, crosses or end-to-end connections.
- B. Insulated spring wire connectors: Multi-part construction incorporating a steel spring enclosed with a color coded outer thermoplastic shell.
- C. Compression type termination lugs: Tin plated copper high-compression type lugs for installation with hand or hydraulically operated crimping tools and dies. Provide 2-hole lugs for size #4/0 AWG and larger wire where terminated to bus bars.
- 2.06 METAL CONDUIT
- A. Rigid Steel Conduit: ANSI C80.1.
- B. Intermediate Metal Conduit (IMC): Rigid steel.
- C. Fittings and Conduit Bodies: NEMA FB 1; Material to match conduit. All steel fittings.
- 2.07 FLEXIBLE METAL CONDUIT:
- A. Product Description: Interlocked steel construction.
- B. Fittings: NEMA FB 1.
- 2.08 LIQUIDTIGHT FLEXIBLE METAL CONDUIT:
- A. Product Description: Interlocked steel construction with PVC jacket.
- B. Fittings: NEMA FB 1.
- 2.09 ELECTRICAL METALLIC TUBING:
- A. Product Description: ANSI C80.3; galvanized tubing.
- B. Fittings: NEMA FB 1; steel set screw type.
- 2.10 NONMETALLIC CONDUIT
- A. Product Description: NEMA TC 2; Schedule 40 PVC for normal power and 80 PVC for emergency power.
- B. Fittings and Conduit Bodies: NEMA TC 3.
- 2.11 OUTLET BOXES
- A. Sheet Metal Outlet Boxes: NEMA OS 1, galvanized steel.
1. Luminaire and Equipment Supporting Boxes: Rated for weight of equipment supported; furnish 1/2 inch male fixture studs where required.
2. Concrete Ceiling Boxes: Concrete type.
- B. Nonmetallic Outlet Boxes: NEMA OS 2.
- C. Cast Boxes: NEMA FB 1, Type FD, aluminum. Furnish gasketed cover by box manufacturer.
- 2.12 WALL SWITCHES AND PLATES:
- A. Product Description: NEMA WD 1, Specification Grade, AC only general-use snap switch.
- B. Body and Handle: White plastic with toggle handle.
- C. Ratings:
1. Voltage: 120-277 volts, AC.
2. Current: 20 amperes.
- D. Wall Plates shall be Stainless Steel.
- 2.13 RECEPTACLES AND PLATES:
- A. Product Description: NEMA WD 1, Specification grade general use receptacle.
- B. Device Body: White plastic.
- C. Configuration: NEMA WD 6.
- D. Convenience Receptacle: Type 5-20.
- E. GFCI Receptacle: Convenience receptacle with integral ground fault circuit interrupter to meet regulatory requirements.
- 2.14 ENCLOSED SWITCHES:
- A. Product Description: NEMA KS 1, Type HD enclosed load interrupter knife switch. Handle lockable in OFF position.
- B. Fuse clips: Designed to accommodate NEMA FU1, Class R and J fuses.
- C. Enclosure: NEMA KS 1, as required to meet conditions. Fabricate enclosure from steel finished with manufacturer's standard gray enamel.
1. Interior Dry Locations: Type 1.
2. Exterior Locations: Type 3R.
- 2.15 BRANCH CIRCUIT PANELBOARDS:
- A. Description: NEMA PB1, circuit breaker type, lighting and appliance branch circuit panelboard.
- B. Minimum fully rated short circuit rating: As indicated on drawing.
- C. Materials:
1. Panelboard Bus: Copper, current carrying components, ratings as indicated on Drawings. Furnish copper ground bus in each panelboard.
2. Molded Case Circuit Breakers: UL 489, bolt-on type thermal magnetic trip circuit breakers, with common trip handle for all poles, listed as Type SWD for lighting circuits, Type HACR for air conditioning equipment circuits, Class A ground fault interrupter circuit breakers as indicated on Drawings. Provide UL class 760 arc-fault interrupter circuit breakers as indicated on Drawings. Do not use tandem circuit breakers.
3. Enclosure: NEMA PB 1, Type 1 or Type 3R for outdoor applications.
4. Cabinet Box: 6 inches deep and 20 inches wide.

5. Cabinet Front: Flush or Surface cabinet front with concealed trim clamps, concealed hinge, metal directory frame, and flush lock keyed alike.
6. Finish in manufacturer's standard gray enamel.
- 2.16 Switchboard:
- A. Switchboard: Shall conform to latest applicable requirements of IEEE, NEMA, UL. Switchboard shall be dead front, dead rear, safety type, with full height copper buses, insulated neutral and ground bus, NEMA-3R enclosure. Do not use cabling inside switchboard as substitute for bus bar conductors. Distribution protective devices shall be removable from front, and shall be group mounted with line and load connections accessible. Set board on housekeeping reinforced concrete pad, minimum three inches (3") above finished grade. Anchor board to concrete pad to resist seismic forces. Each feeder and branch circuit breaker shall be identified with engraved laminated phenolic plate. Letters shall be white with black background.
- 2.17 INTERIOR LUMINAIRES:
- A. Product Description: Complete interior luminaire assemblies, with features, options, and accessories as scheduled.
- 2.18 FLASH PROTECTION
- A. Electrical equipment including switchboards, panelboards, disconnect switches, etc. which are likely to require examination, adjustment or servicing while energized shall be field marked to warn of potential electric arch flash hazards per CEC Article 110.16. Marking shall be a pre-printed label which references NFPA 70E.
- 2.19 NAMEPLATES
- A. Product Description: Laminated three-layer plastic with engraved letters on contrasting background color.
- B. Letter Size:
1. 1/4 inch high letters for identifying individual equipment and loads.
2. 1/2 inch high letters for identifying grouped equipment and loads.
- C. Minimum nameplate thickness: 1/8 inch.
- 2.20 LABELS
- A. Labels: Thermal transfer laminated adhesive tape with 1/8 inch black letters on clear tape cartridge.
- PART 3 - EXECUTION
- 3.01 GENERAL:
- A. Manufacturer's Directions: Follow manufacturer's directions where manufacturers of articles used furnish directions covering points not specified or shown.
- B. All Work shall be done in orderly, workmanlike manner and present neat appearing installation when completed.
- C. Provide metal backing plates, anchor plates, and similar items that are required for anchorage for the Work of this Section; securely weld or bolt to metal framing. Wood blocking or backing will not be permitted in combination with metal framing.
- D. Equipment: Accurately set and level, neatly place support and anchor properly. Anchorage shall conform to the requirements of California Building Code. No allowance will be made for negligence to foresee means of placing, installing or supporting equipment in position.
- 3.02 INSTALLATION - RECEPTACLES AND SWITCHES
- A. Install devices plumb and level.
- B. Install switches with OFF position down.
- C. Install wall dimmers to achieve full rating specified and indicated after derating for ganging as instructed by manufacturer.
- D. Do not share neutral conductor on load side of dimmers.
- E. Install receptacles with grounding pole on top.
- F. Connect wiring device grounding terminal to outlet box with bonding jumper and branch circuit equipment grounding conductor.
- G. Install wall plates on flush mounted switches, receptacles, and blank outlets.
- H. Install decorative plates on switch, receptacle, and blank outlets in finished areas.
- I. Identify receptacle and light switch cover plate with panel and branch circuit number, (for example G-3), with thermal transfer laminated adhesive tape with 1/8 inch black letters on clear tape cartridge.
- J. Connect wiring devices by wrapping solid conductor around screw terminal. Install stranded conductor for branch circuits 10 AWG and smaller. When stranded conductors are used in lieu of solid, use crimp on fork terminals for device terminations. Do not place bare stranded conductors directly under device screws.
- K. Use jumbo size plates for outlets installed in masonry walls.
- L. Install galvanized steel plates on outlet boxes and junction boxes in unfinished areas, above accessible ceilings, and on surface mounted outlets.
- 3.03 INSTALLATION - ENCLOSED SWITCHES
- A. Install enclosed switches where indicated.
- B. Install enclosed switches plumb.
- C. Height: 5 feet to operating handle.
- D. Install fuses for fusible disconnect switches.
- E. Install engraved plastic nameplates. Engrave nameplates with the equipment served and the panel and circuit number supplying the switch.
- F. Apply adhesive tag on inside door of each fused switch indicating NEMA fuse class and size installed.
- 3.04 Installation: Nameplate
- A. Install nameplate parallel to equipment lines.
- B. Install nameplate for each electrical distribution and control equipment enclosure with corrosive-resistant mechanical fasteners, or adhesive.
- C. Install nameplates for each control panel and major control components located outside panel with corrosive-resistant mechanical fasteners, or adhesive.
- D. Secure nameplate to equipment front using screws.
- E. Secure nameplate to inside surface of door on recessed panelboard in finished locations.



ELLENBERGER
ARCHITECTURE

420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-6373
ellenbergerarchitecture.com

CONSULTANT

DFH & ASSOCIATES, LLC
530.613.7966
P.O. BOX 1362,
MEADOW VISTA, CA 95722
DFHENG@ATT.NET

DEDICATED
ICE FACILITY
FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

SPECIFICATIONS

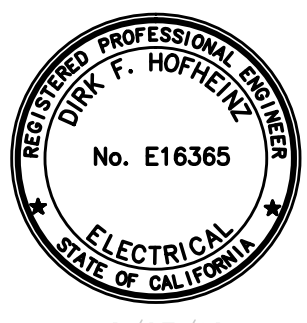
DRAWING STATUS

100% CONSTRUCTION
DOCUMENT SET
NOT FOR CONSTRUCTION

REVISIONS

Symbol	Description	By	Date

Drawn By	WDE
Date Drawn	8-27-2018
Scale	
Job Number	1019



8/27/18

Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by, or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

SHEET NUMBER

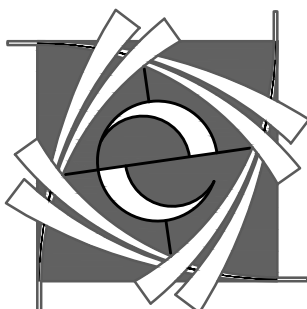
E0.2

- F. Install nameplates for the following:
1. Switchboards.
 2. Switchgear.
 3. Motor Control Centers.
 4. Distribution Panelboards
 5. Panelboards.
 6. Transformers.
 7. Service Disconnects.
 8. Fused and Non-Fused Disconnects.
 9. Automatic Transfer Switches.
- G. Provide color coded nameplates that present, as applicable, the following information:
1. Equipment or device designation.
 2. Amperage, kVA, or horsepower rating where applicable.
 3. Voltage or signal system name.
 4. Source or power or control.
 5. Examples:
 - a. Boards: CH2A; 1000A; 277/480V, 3-Phase, 4-Wire;.
 - b. Feeder Power Supply for Panel "XXX" Originates at Panel "XXX".
 - c. Transformers: T-1; 112.5kVA; 480V to 120/208V, 3-Phase, 4-Wire; Served from H2A; Load Served L2A.
 - d. Disconnects and Individual Motor Starters: AHU-1; 25HP; 480V, 3-Phase, 3-Wires; Served from EHD5.
 - e. Available Fault Current: XX,XXX Amperes. Date Calculated: XX/XX/XX.
- 3.05 INSTALLATION - CONDUCTORS
- A. Route wire and cable to meet Project conditions.
- B. Neatly train and lace wiring inside boxes, equipment, and panelboards.
- C. Identify and color code wire and cable under wire color section. Identify each conductor with its circuit number or other designation indicated.
- D. Special Techniques--Building Wire in Raceway:
1. Pull conductors into raceway at same time.
 2. Install building wire 4 AWG and larger with pulling equipment.
- E. Special Techniques - Cable:
1. Protect exposed cable from damage.
 2. Support cables above accessible ceiling, using spring metal clips or metal cable ties to support cables from structure. Do not rest cable on ceiling panels.
 3. Use suitable cable fittings and connectors.
- F. Special Techniques - Wiring Connections:
1. Clean conductor surfaces before installing lugs and connectors.
 2. Make splices, taps, and terminations to carry full ampacity of conductors with no perceptible temperature rise.
 3. Tape uninsulated conductors and connectors with electrical tape to 150 percent of insulation rating of conductor.
 4. Install split bolt connectors for copper conductor splices and taps, 6 AWG and larger.
 5. Install solderless pressure connectors with insulating covers for copper conductor splices and taps, 8 AWG and smaller.
 6. Install insulated spring wire connectors with plastic caps for copper conductor splices and taps, 10 AWG and smaller.
- G. Install stranded conductors for branch circuits. Install crimp on fork terminals for device terminations. Do not place bare stranded conductors directly under screws.
- H. Install terminal lugs on ends of 600 volt wires unless lugs are furnished on connected device, such as circuit breakers.
- I. Size lugs in accordance with manufacturer's recommendations terminating wire sizes. Install 2-hole type lugs to connect wires 4 AWG and larger to copper bus bars.
- J. For terminal lugs fastened together such as on motors, transformers, and other apparatus, or when space between studs is small enough that lugs can turn and touch each other, insulate for dielectric strength of 2-1/2 times normal potential of circuit.
- 3.06 WIRE COLOR
- A. General:
1. For wire sizes 10 AWG and smaller, install wire colors in accordance with the following:
 - a. Black and red for single phase circuits at 120/240 volts.
 - b. Black, red, and blue for circuits at 120/208 volts single or three phase.
 - c. Orange, brown, and yellow for circuits at 277/480 volts single or three phase.
 2. For wire sizes 8 AWG and larger, identify wire with colored tape at terminals, splices and boxes. Colors are as follows:
 - a. Black and red for single phase circuits at 120/240 volts.
 - b. Black, red, and blue for circuits at 120/208 volts single or three phase.
 - c. Orange, brown, and yellow for circuits at 277/480 volts single or three phase.
- B. Neutral Conductors: White. When two or more neutrals are located in one conduit, individually identify each with proper circuit number.
- C. Branch Circuit Conductors: Install three or four wire home runs with each phase uniquely color coded.
- D. Feeder Circuit Conductors: Uniquely color code each phase.
- E. Ground Conductors:
1. For 6 AWG and smaller: Green.
 2. For 4 AWG and larger: Identify with green tape at both ends and visible points including junction boxes.
- 3.07 INSTALLATION - RACEWAY:

- A. Raceway routing is shown in approximate locations unless dimensioned. Route to complete wiring system.
- B. Arrange raceway supports to prevent misalignment during wiring installation.
- C. Support raceway using coated steel or malleable iron straps, lay-in adjustable hangers, clevis hangers, and split hangers.
- D. Group related raceway; support using conduit rack. Construct rack using steel channel; provide space on each for 25 percent additional raceways.
- E. Do not support raceway with wire or perforated pipe straps. Remove wire used for temporary supports
- F. Do not attach raceway to ceiling support wires or other piping systems.
- G. Construct wireway supports from steel channel.
- H. Route exposed raceway parallel and perpendicular to walls.
- I. Route raceway installed above accessible ceilings parallel and perpendicular to walls.
- J. Route conduit in and under slab from point-to-point.
- K. Maintain clearance between raceway and piping for maintenance purposes.
- L. Maintain 12 inch clearance between raceway and surfaces with temperatures exceeding 104 degrees F.
- M. Cut conduit square using saw or pipe cutter; de-burr cut ends.
- N. Bring conduit to shoulder of fittings; fasten securely.
- O. Join nonmetallic conduit using cement as recommended by manufacturer. Wipe nonmetallic conduit dry and clean before joining. Apply full even coat of cement to entire area inserted in fitting. Allow joint to cure for minimum 20 minutes.
- P. Install conduit hubs to fasten conduit to sheet metal boxes in damp and wet locations and to cast boxes.
- Q. Install no more than equivalent of three 90 degree bends between boxes. Install conduit bodies to make sharp changes in direction, as around beams. Install factory elbows for bends in metal conduit larger than 2 inch size.
- R. Avoid moisture traps; install junction box with drain fitting at low points in conduit system.
- S. Install fittings to accommodate expansion and deflection where raceway crosses seismic and expansion joints.
- T. Install suitable pull string or cord in each empty raceway except sleeves and nipples.
- U. Install suitable caps to protect installed conduit against entrance of dirt and moisture.
- V. Surface Raceway: Install flat-head screws, clips, and straps to fasten raceway channel to surfaces; mount plumb and level. Install insulating bushings and inserts at connections to outlets and corner fittings.
- W. Close ends and unused openings in wireway.
- 3.08 INSTALLATION - BOXES:
- A. Install wall mounted boxes at elevations to accommodate mounting heights as indicated on Drawings.
- B. Adjust box location up to 10 feet prior to rough-in to accommodate intended purpose.
- C. Install pull boxes and junction boxes above accessible ceilings and in unfinished areas only.
- D. In Accessible Ceiling Areas: Install outlet and junction boxes no more than 6 inches from ceiling access panel or from removable recessed luminaire.
- E. Locate flush mounting box in masonry wall to require cutting of masonry unit corner only. Coordinate masonry cutting to achieve neat opening.
- F. Do not install flush mounting box back-to-back in walls; install with minimum 6 inches separation. Install with minimum 24 inches separation in acoustic rated walls.
- G. Secure flush mounting box to interior wall and partition studs. Accurately position to allow for surface finish thickness.
- H. Install stamped steel bridges to fasten flush mounting outlet box between studs.
- I. Install flush mounting box without damaging wall insulation or reducing its effectiveness.
- J. Install adjustable steel channel fasteners for hung ceiling outlet box.
- K. Do not fasten boxes to ceiling support wires or other piping systems.
- L. Support boxes independently of conduit.
- M. Install gang box where more than one device is mounted together. Do not use sectional box.
- N. Install gang box with plaster ring for single device outlets.
- 3.09 INSTALLATION - PANELBOARDS:
- A. Install panelboards in accordance with NEMA PB 1.1.
- B. Install panelboards plumb.
- C. Install recessed panelboards flush with wall finishes.
- D. Height: 6 feet to top of panelboard, install panelboards taller than 6 feet with bottom no more than 4 inches above floor.
- E. Install filler plates for unused spaces in panelboards.
- F. Provide typed circuit directory for each branch circuit panelboard. Revise directory to reflect circuiting changes to balance phase loads. Identify each circuit as to its clear, evident and specific purpose of use.
- G. Install engraved plastic nameplates.
- H. Install spare conduits out of each recessed panelboard to accessible location above ceiling. Minimum spare conduits: 5 empty 1 inch. Identify each as SPARE.
- 3.10 INSTALLATION - TRANSFORMERS:
- A. Use flexible conduit, 2 feet minimum length, for connections to transformer case. Make conduit connections to side panel of enclosure.
- B. Support transformers as follows:
1. Mount wall-mounted transformers using integral flanges or accessory brackets furnished by the manufacturer.
 2. Mount floor-mounted transformers on vibration isolating pads suitable for isolating the transformer noise from the building structure.
 3. Mount trapeze-mounted transformers as indicated.
- C. Unless labeled otherwise, ventilated transformers shall have all sides located at least 6 inches away from walls or other obstructions.

- 3.11 INSTALLATION - LUMINAIRES:
- A. Install suspended luminaires using pendants supported from swivel hangers. Provide pendant length required to suspend luminaire at indicated height.
- B. Support luminaires independent of ceiling framing.
- C. Install recessed luminaires using accessories and firestopping materials to meet regulatory requirements for fire rating.
- D. Install clips to secure recessed grid-supported luminaires in place.
- 3.12 TESTING AND ADJUSTING:
- A. Furnish all labor and test equipment required for the Work of this Division. Testing work is defined as that work necessary to establish that equipment has been properly assembled, connected, and checked to verify that intent and purpose of Drawings, manufacturer's instruction manuals, and directions of Architect have been accomplished in satisfactory manner.
- B. Test each individual circuit at panel with equipment connected for proper operation.
- C. Test each individual receptacle device for proper polarity and grounding.
- D. Test each ground fault circuit interrupter for proper operation.

END OF SECTION



ELLENBERGER
ARCHITECTURE

420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-6373
ellenbergerarchitecture.com

CONSULTANT

DFH & ASSOCIATES, LLC
530.613.7966
P.O. BOX 1362,
MEADOW VISTA, CA 95722
DFHENG@ATT.NET

DEDICATED
ICE FACILITY
FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

SPECIFICATIONS

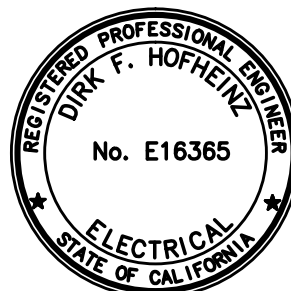
DRAWING STATUS

100% CONSTRUCTION
DOCUMENT SET
NOT FOR CONSTRUCTION

REVISIONS

Symbol	Description	By	Date
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Drawn By	WDE
Date Drawn	8-27-2018
Scale	
Job Number	1019

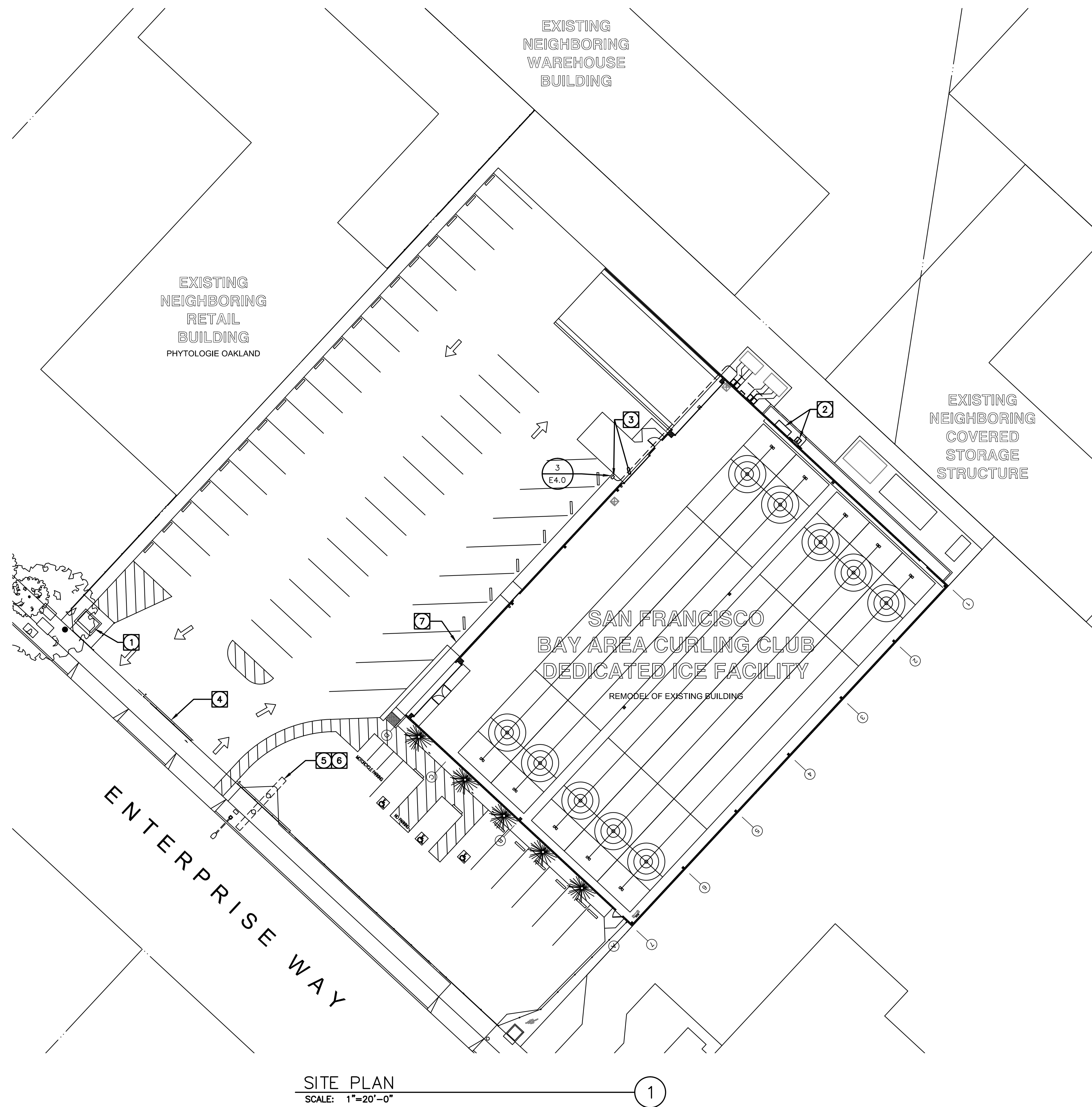


8/27/18

Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by, or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

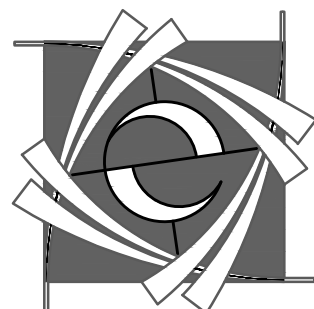
SHEET NUMBER

E0.3



POWER PLAN NOTES:

- 1 PROPOSED UTILITY TRANSFORMER LOCATION. THE UTILITY COORDINATION IS BY THE TENNENT.
- 2 ELECTRICAL GEAR LOCATION. SEE SHEET E1.1.
- 3 PROVIDE 2" C.O. FOR FUTURE CAR CHARGERS. PROVIDE PULL BOX SIZED PER CEC REQUIREMENTS.
- 4 EXISTING ELECTRICAL GATE. FIND EXISTING CONDUIT IN EXISTING BUILDING AND EXTEND TO NEW PANEL L CIRCUIT 32.
- 5 EXISTING ELECTRICAL SIGN. FIND EXISTING CONDUIT IN EXISTING BUILDING AND EXTEND TO NEW PANEL H CIRCUIT 14. ROUTE THROUGH TIME CLOCK. SEE NOTE #6 E1.1.
- 6 EXISTING ELECTRICAL OUTLET. FIND EXISTING CONDUIT IN EXISTING BUILDING AND EXTEND TO NEW PANEL L CIRCUIT 38.
- 7 EXISTING ELECTRICAL BUILDING SIGN. FIND EXISTING CONDUIT IN EXISTING BUILDING AND EXTEND TO NEW PANEL H CIRCUIT 16. ROUTE THROUGH TIME CLOCK. SEE NOTE #6 E1.1.



ELLENBERGER
ARCHITECTURE

420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-6373
ellenbergerarchitecture.com

CONSULTANT

DFH & ASSOCIATES, LLC

530.613.7966
P.O. BOX 1362,
MEADOW VISTA, CA 95722
DFHENG@ATT.NET

DEDICATED
ICE FACILITY

FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

SITE PLAN

DRAWING STATUS

100% CONSTRUCTION
DOCUMENT SET
NOT FOR CONSTRUCTION

REVISIONS

Symbol	Description	By	Date
--------	-------------	----	------

Drawn By	WDE
----------	-----

Date Drawn	8-27-2018
------------	-----------

Scale	
-------	--

Job Number	1019
------------	------

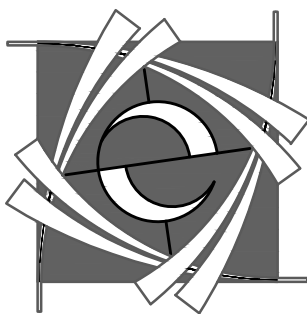


8/27/18

Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by, or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

SHEET NUMBER

E1.0



ELLENBERGER
ARCHITECTURE

420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-6373
ellenbergerarchitecture.com

CONSULTANT

DFH & ASSOCIATES, LLC

530.613.7966
P.O. BOX 1362,
MEADOW VISTA, CA 95722
DFHENG@ATT.NET

DEDICATED
ICE FACILITY

FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

POWER PLAN
1st FLOOR

DRAWING STATUS

100% CONSTRUCTION
DOCUMENT SET

NOT FOR CONSTRUCTION

REVISIONS

Symbol	Description	By	Date
--------	-------------	----	------

Drawn By	WDE
----------	-----

Date Drawn	8-27-2018
------------	-----------

Scale	
-------	--

Job Number	1019
------------	------

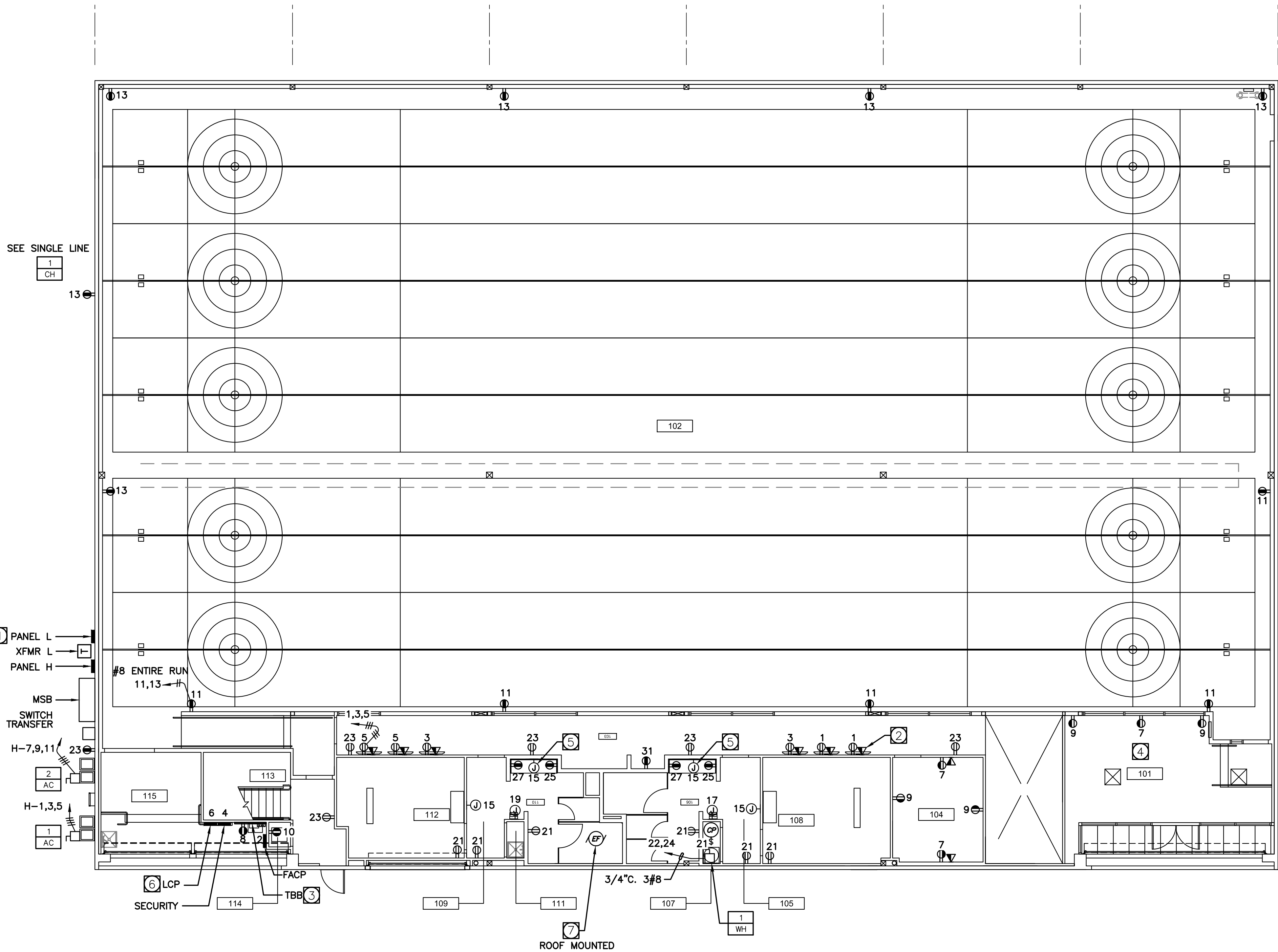


8/27/18

Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

SHEET NUMBER

E1.1

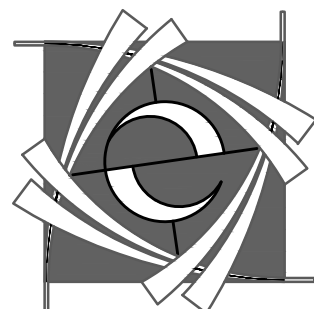


POWER PLAN NOTES:

- 1 ALL CIRCUITS CONNECTED TO PANEL L EXCEPT AS NOTED.
- 2 VERIFY EXACT LOCATION AND MOUNTING HEIGHTS OF ALL DEVICES FOR FLAT SCREES WITH ARCHITECT PRIOR TO ROUGH IN. PROVIDE METAL/PLYWOOD BACKING AND DOUBLE GANG DEEP BOXES AS REQUIRED.
- 3 TBB BY GC. COORDINATE WITH TENANT AND PROVIDE A C.O. TO EXISTING COMMUNICATIONS SERVICE. PROVIDE TELECOM GROUNDING BUS BAR. VERIFY MOUNTING LOCATION AND HEIGHT WITH TENANT.
- 4 PROVIDE CONTROLLED RECEPTACLES PER TITLE 24 REQUIREMENTS. UTILIZE OCCUPANCY SENSOR FOR CONTROLS. SEE THE LIGHTING PLAN.
- 5 VERIFY WITH THE PLUMBING CONTRACTOR AND PROVIDE POWER SUPPLIES AS REQUIRED FOR BOTH THE FACET CONTROLLERS AND SOAP DISPENSERS.
- 6 PROVIDE AUTOMATIC TIME SWITCH CONTROLS FOR ALL INTERIOR LIGHTS. PROVIDE ASTRONIMICAL TIME SWITCH CONTROLS FOR ALL EXTERIOR LIGHTS.
- 7 PROVIDE CONNECTION TO THE EXHAUST FAN. PER NEC 422.31(A) THE CIRCUIT BREAKER IS PERMITTED TO SERVE AS THE DISCONNECT SWITCH. CONNECT TO LIGHTING CONTROL SWITCH FOR POWER AND CONTROL.

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

1



ELLENBERGER
ARCHITECTURE

420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-6373
ellenbergerarchitecture.com

CONSULTANT

DFH & ASSOCIATES, LLC

530.613.7966
P.O. BOX 1362,
MEADOW VISTA, CA 95722
DFHENG@ATT.NET

DEDICATED
ICE FACILITY
FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

LIGHTING PLAN
1st FLOOR

DRAWING STATUS

100% CONSTRUCTION
DOCUMENT SET

NOT FOR CONSTRUCTION

REVISIONS

Symbol	Description	By	Date
--------	-------------	----	------

--	--	--	--

--	--	--	--

Drawn By	WDE
----------	-----

Date Drawn	8-27-2018
------------	-----------

Scale	
-------	--

Job Number	1019
------------	------



8/27/18

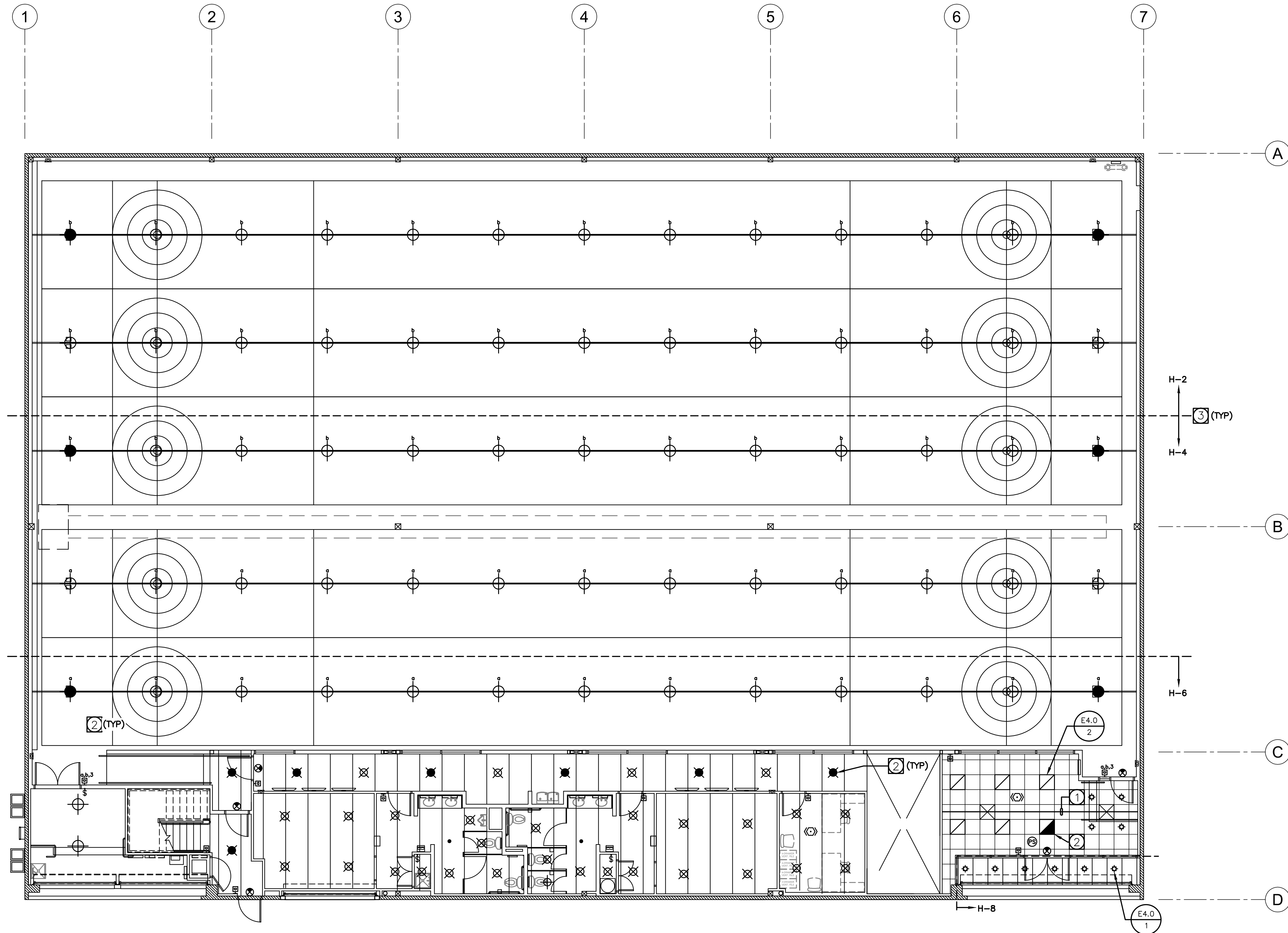
Copyright ©2018
All designs, arrangements and plans indicated or represented by this
drawing are owned by, and the property of, Ellenberger Architecture, and
were created, evolved and developed for use on, and in conjunction with,
the specified project. None of such designs, arrangements or plans shall be
used by, or disclosed to any person, firm or corporation, other than the
owner of the specified project, for any purpose whatsoever without the
written permission of Ellenberger Architecture.

SHEET NUMBER

E2.1

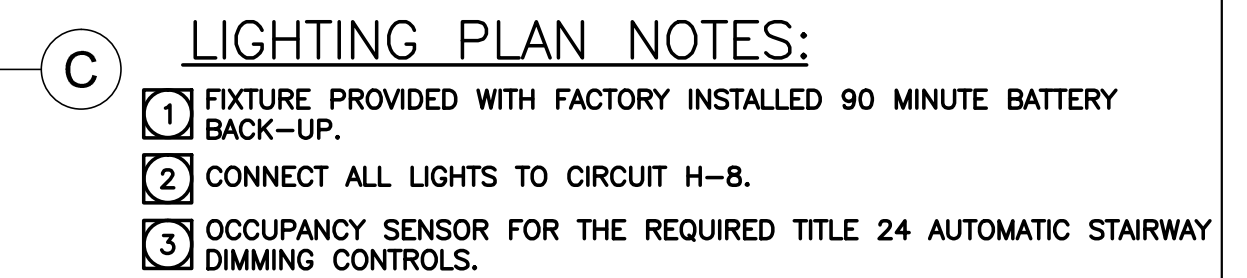
LIGHTING PLAN NOTES:

- 1 PRIMARY DAYLIGHTING CONTROL ZONE. PROVIDE AUTOMATIC DIMMING CONTROLS WITH-IN ZONE.
- 2 FIXTURE PROVIDED WITH FACTORY INSTALLED 90 MINUTE BATTERY BACK-UP.
- 3 CONNECT ALL FIXTURES SHOWN ON SIDE OF P-LINE TO CIRCUIT SHOWN.



LIGHTING PLAN 1st
SCALE: 1/8"=1'-0"

1



LIGHTING PLAN 2nd FLOOR
SCALE: 1/8"=1'-0"



POWER PLAN 2nd FLOOR
SCALE: 1/8"=1'-0"

PANEL H																									
MOUNTING NEMA 3R FEED THRU		SURFACE YES NO		DOUBLE LUG 200% NEUTRAL IG BUS		NO NO NO		VOLTS PHASE WIRE		277/480 3 4		MAIN BUS A.I.C.		M.L.O. 225A VERIFY											
NOTES	LOCATION	A	B	C	L T G	C O N V	R I E C P	M I S C C	B K R	C I R C	C I R C	B K R	M I S C C	R I E C P	C O N V	L T G	A	B	C	LOCATION					
	AC-1	2400							20/3	1	2	20/1					2702			LIGHTING					
	"		2400						"	3	4	20/1						2964		LIGHTING					
	"			2400					"	5	6	20/1							2964	LIGHTING					
	AC-2	2400							20/3	7	8	20/1					1254			LIGHTING					
	"		2400						"	9	10	20/1						287		EXTERIOR LIGHTS					
	"			2400					"	11	12									SPACE					
	SPACE									13	14	20/1					2000			(E) EXTERIOR SIGN					
	SPACE									15	16	20/1						1000		(E) BUILDING SIGN					
	SPACE									17	18									SPACE					
	SPACE									19	20									SPACE					
	SPACE									21	22									SPACE					
	FUTURE ELEV. MTR			3878					20/3	23	24									SPACE					
	FUTURE ELEV. MTR	3878							"	25	26									SPACE					
	FUTURE ELEV. MTR		3878						"	27	28									SPACE					
	SPACE									29	30									SPACE					
	SPACE									31	32									SPACE					
	SPACE									33	34									SPACE					
	SPACE									35	36									SPACE					
	SPACE									37	38	100/3					11400			XFMR L					
	SPACE									39	40							14836		"					
	SPACE									41	42								13940	"					
		A= 26034								B= 27765								C= 25582							
TOTAL VA=		79381 W/LCL= 79381								AMPS= 96								TOTAL LCL= 0 X 25= 0							
HIGH PHASE VA=		27765 W/LCL= 27765								HIGH PHASE AMPS= 100.2								HIGH PHASE LCL= 0 X 25= 0							

PANEL L																			
MOUNTING NEMA 3R FEED THRU		SURFACE YES NO		DOUBLE LUG 200% NEUTRAL IG BUS		NO NO NO		VOLTS PHASE WIRE		120/208 3 4		MAIN BUS A.I.C		225A 225A <u>VERIFY</u>					
N O T E S	LOCATION	A	B	C	L T G	C O N V	R E C P	B K R	C I R C	C I R C	B K R	R E C P	C O N V	L T G	A	B	C	LOCATION	
	FLAT SCREEN	800						2	20/1	1	2	20/1	1		100			FACP	
	FLAT SCREEN	800						2	20/1	3	4	20/1	1			100		SECURITY	
	FLAT SCREEN		800					2	20/1	5	6	20/1	1				100	LCP	
	OFFICE RECEPTS	540				3			20/1	7	8	20/1	1		100			TBB	
	RECEPTS		720			4			20/1	9	10	20/1	1			1200		IT CABINET	
	RECEPTS			900		5			20/1	11	12	30/2	1				2500	EV CHARGER	
	RECEPTS	1080				6			20/1	13	14	* 1			2500			"	
	HAND. SOAP. WATER DISP		300				1	20/1	15	16	30/2	1				2500		EV CHARGER	
	HAND DRYER			1600			1	20/1	17	18	* 1						2500	"	
	HAND DRYER	1600					1	20/1	19	20	30/2	1			2500			EV CHARGER	
	RECEPTS		1080			6			20/1	21	22	* 1				2500		"	
	RECEPTS			1080		6			20/1	23	24							SPACE	
	RECEPTS	360				2			20/1	25	26							SPACE	
	RECEPTS		360			2			20/1	27	28	35/2	1			3000		WATER HEATER	
	SPACE								20/1	29	30	* 1						"	
	FOUNTAIN	820							20/1	31	32						3000	"	
	FUTURE ELEV. LTS		100						20/1	33	34							SPACE	
	FUTURE ELEV. CONTR.			100					20/1	35	36							SPACE	
	FUTURE WARM RM	1000							20/1	37	38							SPACE	
	FUTURE WARM RM		1000						20/1	39	40	20/1	1			1176		(E) GATE MOTOR	
	FUTURE WARM RM			1000					20/1	41	42	20/1	1				360	(E) QUAD RECEPT	
		A= 11400				B= 14836				C= 13940									
TOTAL VA=		40176		W/LCL= 40176		AMPS=		112		TOTAL LCL=		0 X 25 =		0					
HIGH PHASE VA=		14836		W/LCL= 14836		HIGH PHASE AMPS=		124		HIGH PHASE LCL=		0 X 25 =		0					

* GROUNDING ELECTRODE CONDUCTOR SHALL BE SIZED AS FOLLOWS:
SEE RESPECTIVE SYSTEM/
DEVICE SCHEDULE FOR
G.E.C. SIZE.

IF AVAILABLE ON THE PREMISES AT EACH BUILDING AND/OR STRUCTURE SERVED, CONNECT EFFECTIVELY GROUNDED STRUCTURAL STEEL OR EFFECTIVELY GROUNDED UNDERGROUND METAL WATER PIPE WITHIN 5 FT FROM POINT OF ENTRANCE TO THE BUILDING AND/OR STRUCTURE WITH TO THE SEPARATELY SYSTEM PER ART. 250.30(A)(4)(1) & (A)(4)(2) – SEE RESPECTIVE SYSTEM/DEVICE SCHEDULE FOR G.E.C. SIZE. WHERE ACCESS TO EFFECTIVELY GROUNDED STRUCTURAL STEEL OR EFFECTIVELY GROUNDED UNDERGROUND METAL WATER PIPE IS SUFFICIENTLY REMOTE, THE CONTRACTOR MAY ELECT TO INSTALL A COMMON GROUNDING ELECTRODE CONDUCTOR(S) TO TIE (1) OR MORE SEPARATELY DERIVED SYSTEMS TO THE REMOTE GROUNDING ELECTRODES. DESIGN AND INSTALLATION OF SUCH A SYSTEM SHALL FULLY COMPLY WITH ART. 250.30(A)(3).

WHERE GROUNDED STRUCTURAL MEMBER OR EFFECTIVE GROUNDED WATER PIPE IS UNAVAILABLE ON THE PREMISES, PROVIDE 1 #*cu., 3/4"C. TO A CONCRETE-ENCASED ELECTRODE WITH MIN OF 20 FT IN LENGTH OF MIN. #4 BARE ENCASED IN MIN. 2" OF CONCRETE ALL AROUND, OR A GROUND RING IN DIRECT CONTACT WITH EARTH AT A DEPTH NOT LESS THAN 2-1/2 FT. WITH 20 FT. LENGTH MIN. OF #2 BARE COPPER, WHICHEVER IS AVAILABLE, PER ART. 250.52(A) (3) & (4).

PROVIDE BONDING WITH 1 #*cu., *C. TO NEAREST METAL, WATER PIPE (HOT, COLD, SPRINKLER, SEWER, BUILDING MOUNTED – INTERIOR OR EXTERIOR ETC), UNINTENTIONALLY UNGROUNDED BUILDING STEEL, GAS PIPE, HVAC DUCTS IN THE BUILDING PER ART. 250.104 (A), (B), & (C)

WHERE NO EFFECTIVE GROUNDING ELECTRODE IS AVAILABLE PER ART. 250.50, PROVIDE 1 #*cu., 3/4"C. TO OTHER LOCAL METAL UNDERGROUND PIPING SYSTEMS AND TANKS, OR ROD AND PIPE ELECTRODES WITH MIN. OF 8 FT. IN LENGTH AND SHALL BE INSTALLED PER ART. 250.52(A)(5)(a) & (b), OR PLATE ELECTRODES, WHICHEVER IS AVAILABLE, PER ART 250.52 (A)(5), (A)(6) & (A)(7)

NEUTRAL BUS WITHIN EQUIPMENT.

PROVIDE CONNECTION OF GROUNDING CONDUCTORS/ BONDING JUMPERS PER ART.250.8.

WHEN SEPARATELY DERIVED SYSTEM IS A UPS, CPC, PDU OR TRANSFORMER LOCATED IN INFORMATION TECHNOLOGY ROOM, AS DEFINED BY NEC (OR CEC WHERE ADOPTED) ART. 645, SERVER ROOM, DATA CENTER, OR COMPUTER ROOM, PROVIDE 1#2 INSULATED GREEN CONDUCTOR, 3/4"C. AND MECHANICALLY CONNECT TO MAIN TELECOMMUNICATIONS GROUNDING BUS AND, WHEN LOCATED ON A TILE ACCESS FLOOR, TO UNDER FLOOR SIGNAL REFERENCE OR GROUNDING GRID AS REQUIRED.

10' COPPER GROUND ELECTRODE(S) W/ EXOTHERMIC CONNECTION(S) TO GROUND CONDUCTOR. PROVIDE FIBER GLASS INSPECTION WELL(S). QUANTITY AS REQUIRED TO ACHIEVE CODE-REQUIRED RESISTANCE VALUES.

SEPARATELY DERIVED SYSTEM GROUNDING DETAIL

SCALE: NTS

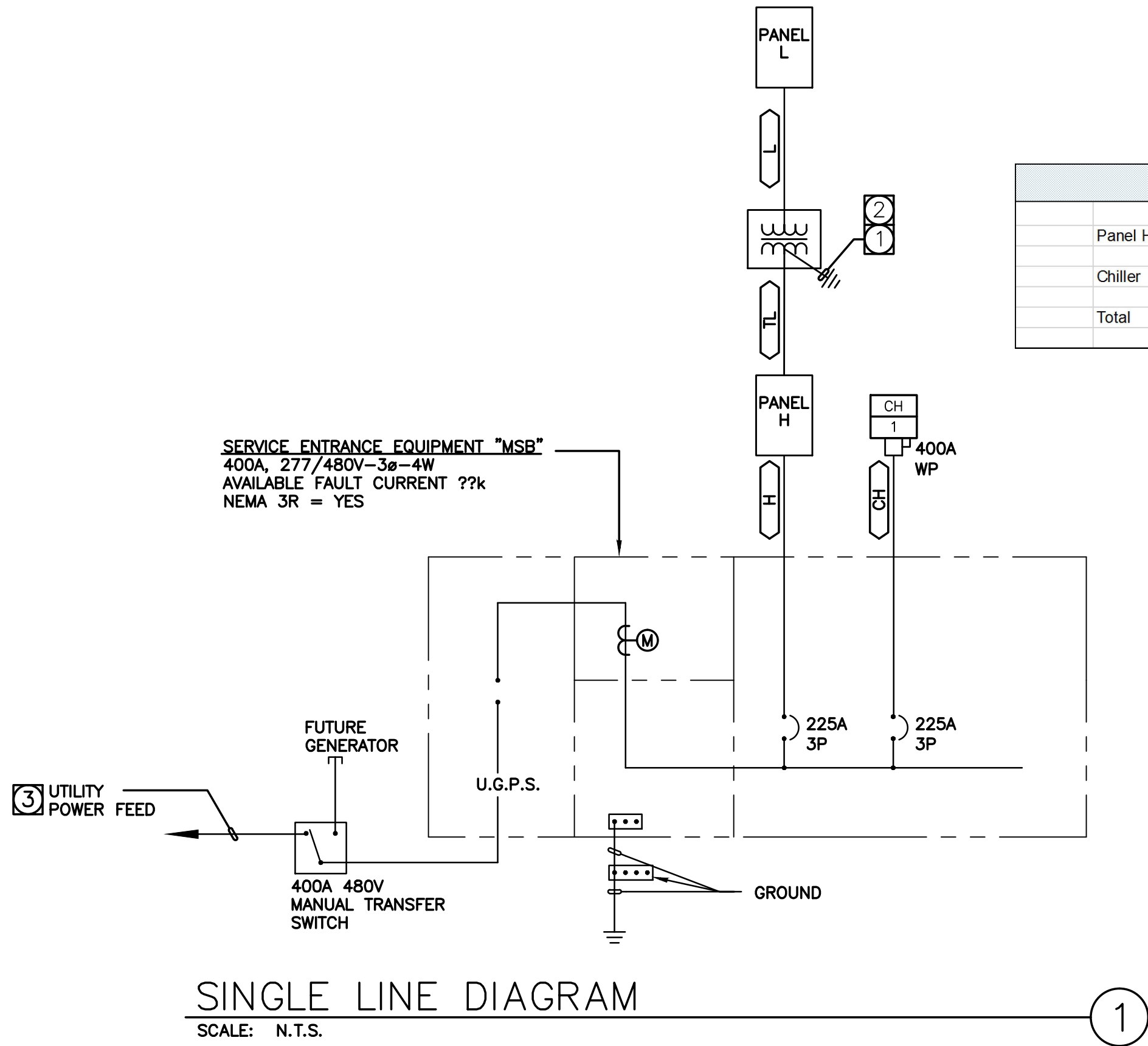
3

TRANSFORMER SCHEDULE

NAME	KVA	WINDING MATERIAL	INPUT			OUTPUT			MIN %Z	A.I.C. VALUE	K VAL.	GEC SIZE	REDUCED SOUND LEVEL	NEMA/ MNTG.	DIMENSIONS			WGT.	REMARKS
			V	P	W	V	P	W							H	W	D		
L	75	COPPER	480	3	3	120/208	3	4	5.0	4131	-	3/4"C, #2	N	1/F	30	30	20	673	-

TRANSFORMER INSTALLATION REQUIREMENTS:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FURNISHING OF ALL MATERIAL, LABOR, EQUIPMENT, AND SERVICES, IN CONNECTION WITH THE INSTALLATION OF A COMPLETE AND FULLY FUNCTIONING AND CODE COMPLIANT INSTALLATION.
- IT IS THE INTENT OF THE CONTRACT DOCUMENTS, WHICH ARE PRESENTED IN A DIAGRAMMATIC FORMAT, TO PROVIDE CONTRACTOR INFORMATION THAT SUPPLEMENTS AND ENHANCES THE GENERALLY ACCEPTED CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES EMPLOYED IN CONNECTION WITH INSTALLATION OF THIS TYPE OF PRODUCT / SYSTEM.
- THE CONTRACTOR SHALL ALSO INCORPORATE THE REQUIREMENTS OF THE MANUFACTURER'S INSTALLATION INSTRUCTIONS / WARRANTY REQUIREMENTS AS PART OF THE REQUIREMENTS OF THE CONSTRUCTION DOCUMENTS. IN THE EVENT OF A CONFLICT BETWEEN THE CONTRACT DOCUMENT REQUIREMENTS AND THE MANUFACTURERS INSTALLATION REQUIREMENTS, THE MORE STRINGENT REQUIREMENTS SHALL APPLY – UNLESS THE MORE STRINGENT REQUIREMENT VOIDS APPLICABLE WARRANTIES OR VIOLATES THE REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION. ANY SUCH CONFLICT SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING THROUGH THE FORMAL RFI PROCESS.
- REFER TO THE ASSOCIATED SCHEDULES, SCHEMATICS, DRAWINGS, AND SPECIFICATIONS FOR DETAILED INFORMATION / REQUIREMENTS ON THIS PRODUCT / SYSTEM.



SPECIFIC SINGLE LINE NOTES:

- PROVIDE GROUNDING PER NEC, OR CEC WHERE ADOPTED, 250.30. SEE TRANSFORMER SCHEDULE FOR GEC SIZING INFORMATION. SEE SEPARATELY DERIVED SYSTEM GROUNDING DETAIL FOR MORE INFORMATION.
- SEE TRANSFORMER SCHEDULE FOR MORE INFORMATION.
- SAN FRANCISCO BAY AREA CURLING CLUB IS PROVIDING THE UTILITY COORDINATION. VERIFY THE AIC AVAILABLE AT THE MAIN SWITCHGEAR WITH THEIR REPRESENTATIVE.

FEEDER SCHEDULE

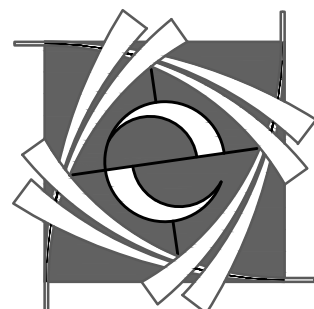
FEEDER	CONDUIT AND CONDUCTORS	LOAD	DISTANCE	V.D. (%)	A.I.C.	NOTES
H	(N) 2-1/2"C. 4#4/0 & 1#4G.	(225)	10	0.08	verify	-
CH	(N) 2-1/2"C. 4#4/0 & 1#4G.	(173.2)	60	0.21	verify	-
TL	(N) 1-1/2"C. 3#1 & 1#6G.	(100)	10	0.12	verify	-
L	(N) 2-1/2"C. 4#4/0 & 1#4G.	(225)	10	0.09	verify	-

GENERAL FEEDER SCHEDULE NOTES:

- ALL FEEDERS SHOWN, UNLESS SPECIFICALLY NOTED OTHERWISE, ARE PRESUMED TO BE ROUTED IN METAL RACEWAYS. IF P.V.C. CONDUITS ARE UTILIZED, THE CONTRACTOR SHALL PROVIDE AN EQUIPMENT GROUND PER NEC, OR CEC WHERE ADOPTED, TABLE 250.122 OR, WHERE REQUIRED, PROVIDE A MAIN BONDING JUMPER PER TABLE 250.66 AND INCREASE THE CONDUIT SIZE ACCORDINGLY.
- LOADS INDICATED WITH " () " REPRESENT WORST CASE LOAD IN AMPS.
- DISTANCE SHOWN IS FOR DESIGN PURPOSES ONLY. IT IS NOT A MATERIAL TAKEOFF.
- VOLTAGE DROP VALUE INDICATED IS AT THE END OF THE FEEDER.
- AVAILABLE FAULT CURRENT VALUE AT THE END OF THE FEEDER INDICATED. CALCULATIONS ARE BASED UPON INITIAL VALUES RECEIVED FROM THE SERVING UTILITY AND THE LENGTH AND IMPEDANCE OF THE FEEDER.

Load Calculation Panels MSB

Panel H				100.2 A	
Chiller				173.2 A	
Total				273.4 A	



ELLENBERGER
ARCHITECTURE

420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-6373
ellenbergerarchitecture.com

CONSULTANT

DFH & ASSOCIATES, LLC

530.613.7966
P.O. BOX 1362,
MEADOW VISTA, CA 95722
DFHENG@ATT.NET

DEDICATED
ICE FACILITY

FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

SINGLE LINE &
DETAILS

DRAWING STATUS

100% CONSTRUCTION
DOCUMENT SET
NOT FOR CONSTRUCTION

REVISIONS

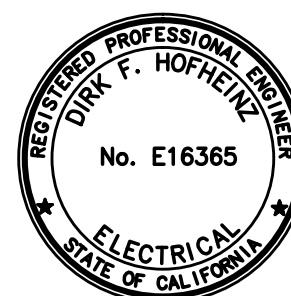
Symbol Description By Date

Drawn By WDE

Date Drawn 8-27-2018

Scale

Job Number 1019

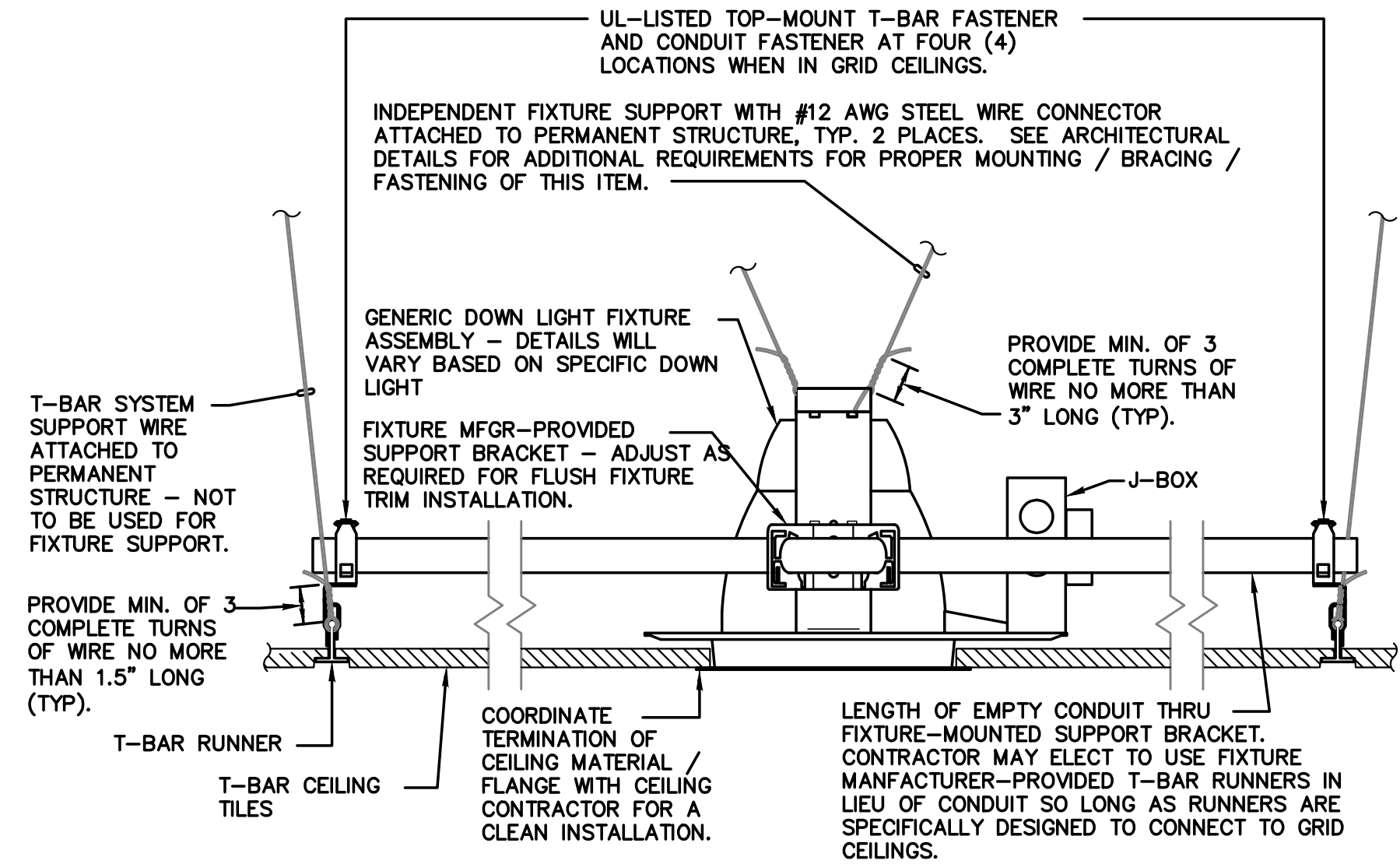


8/27/18

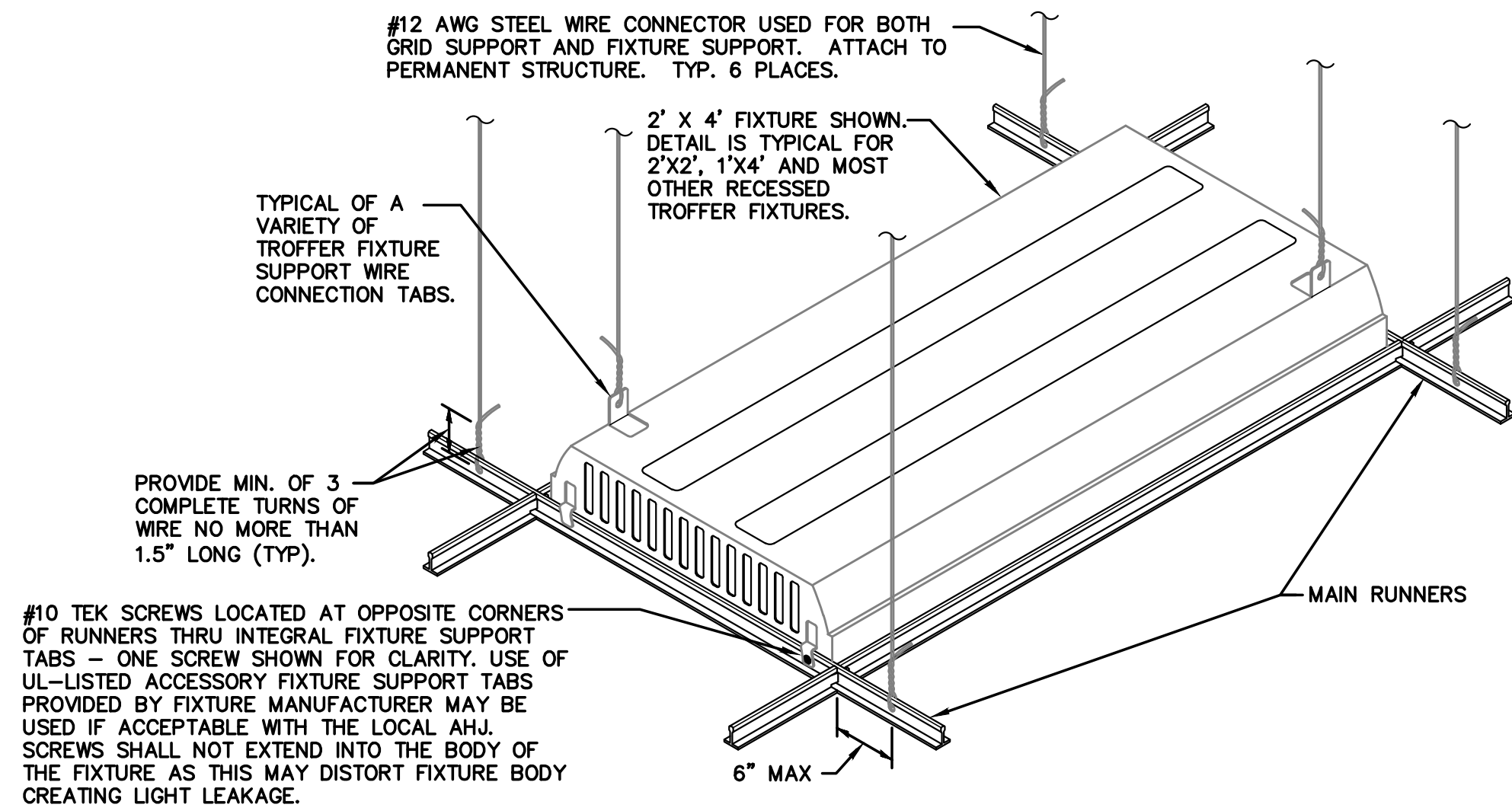
Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by, or disclosed to, any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

SHEET NUMBER

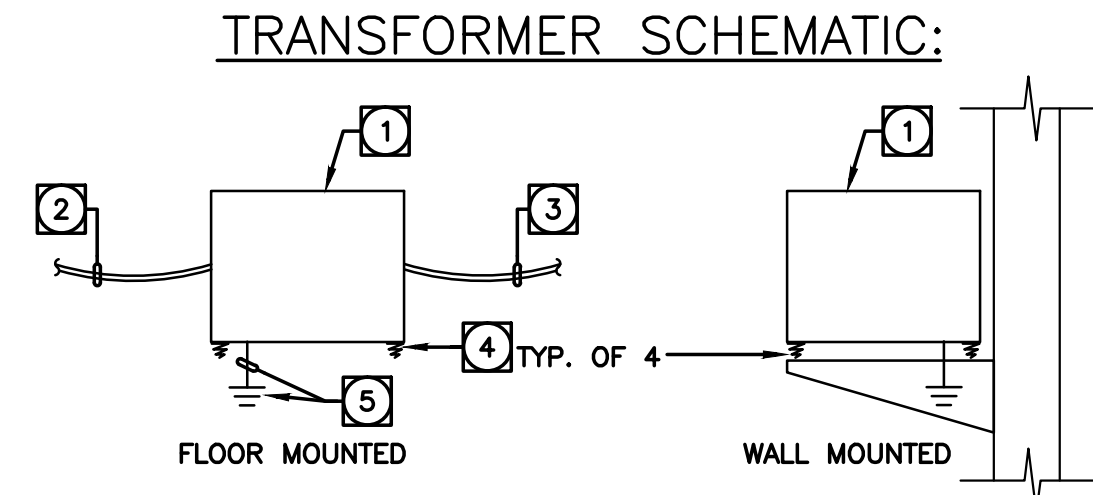
E3.0



DOWN LIGHT FIXTURE SUPPORT DETAIL (T-BAR) 1
SCALE: NTS

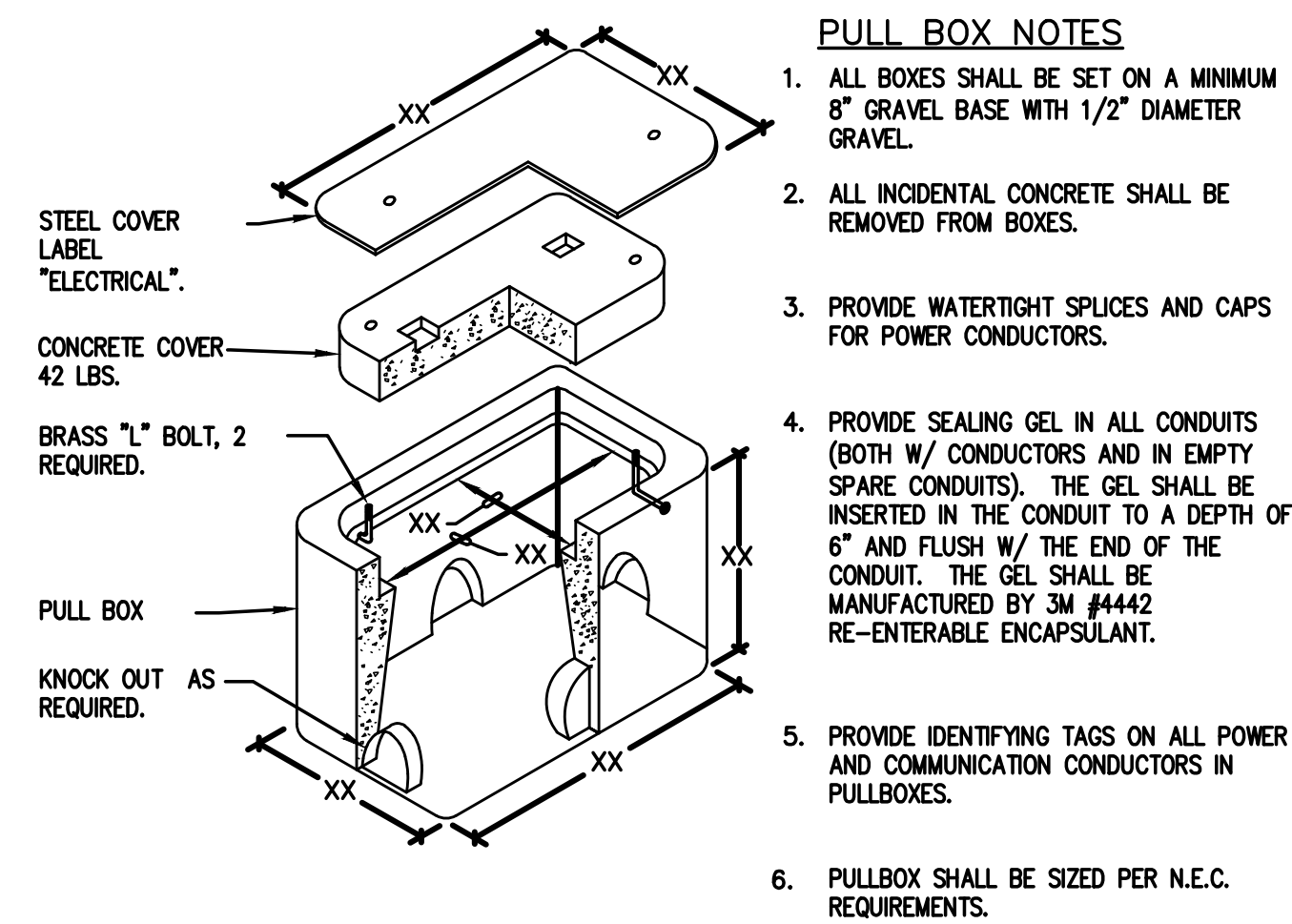


FIXTURE SUPPORT DETAIL (T-BAR) 2
SCALE: NTS

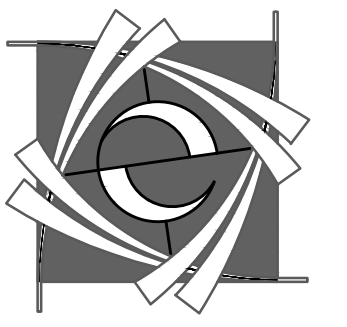


- TRANSFORMER SYSTEM PLAN NOTES:
- 1 TRANSFORMER PER SPECIFICATIONS AND TRANSFORMER SCHEDULE.
 - 2 PRIMARY FEEDER - SEE SINGLE LINE DIAGRAM.
 - 3 SECONDARY FEEDER(S) - SEE SINGLE LINE DIAGRAM.
 - 4 VIBRATION DAMPERS.
 - 5 SEE SEPARATELY DERIVED SYSTEM GROUNDING DETAIL.

TRANSFORMER MOUNTING DETAIL 4
SCALE: N.T.S.



PULLBOX DETAIL 3
SCALE: N.T.S.



ELLENBERGER
ARCHITECTURE

420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-6373
ellenbergerarchitecture.com

CONSULTANT

DFH & ASSOCIATES, LLC

530.613.7966
P.O. BOX 1362,
MEADOW VISTA, CA 95722
DFHENG@ATT.NET

DEDICATED
ICE FACILITY

FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

DETAILS

DRAWING STATUS

100% CONSTRUCTION
DOCUMENT SET
NOT FOR CONSTRUCTION

REVISIONS

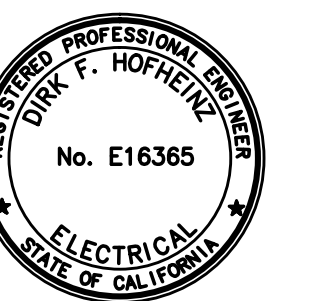
Symbol	Description	By	Date

Drawn By WDE

Date Drawn 8-27-2018

Scale

Job Number 1019

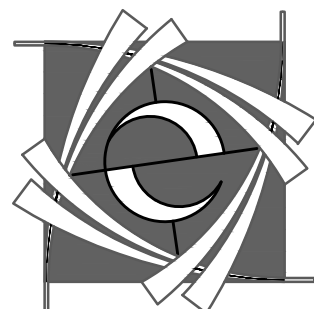


8/27/18

Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

SHEET NUMBER

E4.0



ELLENBERGER
ARCHITECTURE

420 Beatrice Court, Suite G
Brentwood, CA 94513
925-732-6373
ellenbergerarchitecture.com

CONSULTANT

DFH & ASSOCIATES, LLC

530.613.7966
P.O. BOX 1362,
MEADOW VISTA, CA 95722
DFHENG@ATT.NET

DEDICATED
ICE FACILITY
FOR THE



SAN FRANCISCO
BAY AREA
CURLING CLUB

8450 ENTERPRISE WAY
OAKLAND, CA 94621

TITLE 24

DRAWING STATUS

100% CONSTRUCTION
DOCUMENT SET
NOT FOR CONSTRUCTION

REVISIONS

Symbol	Description	By	Date
--------	-------------	----	------

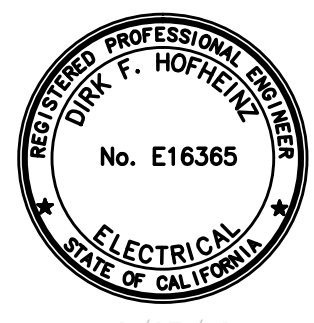
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Drawn By	WDE
----------	-----

Date Drawn	8-27-2018
------------	-----------

Scale	
-------	--

Job Number	1019
------------	------



8/27/18

Copyright ©2018
All designs, arrangements and plans indicated or represented by this drawing are owned by, and the property of, Ellenberger Architecture, and were created, evolved and developed for use on, and in conjunction with, the specified project. None of such designs, arrangements or plans shall be used by, or disclosed to any person, firm or corporation, other than the owner of the specified project, for any purpose whatsoever without the written permission of Ellenberger Architecture.

SHEET NUMBER

E5.0

STATE OF CALIFORNIA
Indoor Lighting
NRCC-LTI-E (Created 9/17)
CERTIFICATE OF COMPLIANCE
This document is used to demonstrate compliance with requirements in §110.9, §130.0, §130.1, §140.6, and §141.0(b)2 for indoor lighting scopes using the prescriptive path.
Project Name: Curling Club
Project Address: _____
Report Page: Page 1 of 6
Date Prepared: 8/16/2018

A. GENERAL INFORMATION
01 Project Location (city): Marina
02 Climate Zone: 3
03 Occupancy Types Within Project (select all that apply):
☒ Office
☐ Retail
☐ Warehouse
☐ High-Rise Residential
☐ Relocatable
04 Total Conditioned Floor Area (ft²): 3,578
05 Total Unconditioned Floor Area (ft²): 0
06 # of Stories (Habitable Above Grade): 2
☐ Hotel/Motel
☐ School
☒ Support Areas
Other (write in): _____

B. PROJECT SCOPE
Table Instructions: Include any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in §140.6 or §141.0(b)2 for alterations. WARNING: Changing the Calculation Method in this table will result in the deletion of data previously input. If you need to change the calculation method, please open a new form or use "Save As".
Scope of Work: _____
Conditioned Spaces: _____
Unconditioned Spaces: _____
My Project Consists of (check all that apply):
☒ New Lighting System
☐ Altered Lighting System
Add Parking Garage-Complete Bldg Method
Remove Parking Garage
Add Altered Lighting System
Remove Last Altered System
Total Area of Work (ft²): 3,578 0

C. COMPLIANCE RESULTS
Table Instructions: If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D, for guidance.
Lighting in conditioned and unconditioned spaces must not be combined for compliance per §140.6(b)1.
Conditioned: 2,342.9 = 2,342.9 ≥ 1,425.6 = 1,425.6 COMPLIES
Unconditioned: _____ = _____ ≥ _____ = _____ Not Applicable
Controls Compliance (See Table H for Details) COMPLIES
Rated Power Reduction Compliance (See Table S for Details) Not Applicable

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2016standards> September 2017

STATE OF CALIFORNIA
Indoor Lighting
NRCC-LTI-E (Created 9/17)
CERTIFICATE OF COMPLIANCE
Project Name: Curling Club
Project Address: _____
Report Page: Page 4 of 6
Date Prepared: 8/16/2018

M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED SPECIAL FUNCTION AREAS
This Section Does Not Apply

N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY
This Section Does Not Apply

O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING
This Section Does Not Apply

P. ADDITIONAL LIGHTING ALLOWANCE: TAILORED ORNAMENTAL/SPECIAL EFFECTS
This Section Does Not Apply

Q. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE
This Section Does Not Apply

R. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (PAF)
This Section Does Not Apply

S. RATED POWER REDUCTION COMPLIANCE BY SPACE
This Section Does Not Apply

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2016standards> September 2017

STATE OF CALIFORNIA
Indoor Lighting
NRCC-LTI-E (Created 9/17)
CERTIFICATE OF COMPLIANCE
Project Name: Curling Club
Project Address: _____
Report Page: Page 2 of 6
Date Prepared: 8/16/2018

D. EXCEPTIONAL CONDITIONS
This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.
No exceptional conditions apply to this project.

E. ADDITIONAL REMARKS
This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. INDOOR LIGHTING FIXTURE SCHEDULE
Table Instructions: Include all permanent designed lighting and all portable lighting in offices.
01 Name or Item Tag
02 Complete Luminaire Description
03 Specialized Luminaire Types
04 Watts per luminaire
05 How Wattage is determined
06 Total number luminaires
07 Exempt per §140.6(a)3
08 Design Watts
09 Field Inspector
A Type A LED
B Type B 16"
C x 8" round
D 13" round
F 2" wall bracket
Total Designed Watts CONDITIONED SPACES: 1,425.6
Reset Add Row Remove Last

*NOTES: Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per §130.0(c). Wattage used must be the maximum rated for the luminaire, not the lamp.

G. TRACK LIGHTING
This Section Does Not Apply

H. INDOOR LIGHTING CONTROLS (Not including PAFs)
Table Instructions: Please include lighting controls for conditioned and unconditioned spaces in this table. When an option having a * is selected, the notes section of this table must be completed. The lighting controls section of the Compliance Summary Table on the first page will show "DOES NOT COMPLY" if the notes are left blank.
Building Level Controls
01 Mandatory Demand Response
02 Shut-off Controls
03 Field Inspector
§130.1(e) §130.1(c)
Not Required ≤ 10,000 SF Whole Building: Automatic Time Switch

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2016standards> September 2017

STATE OF CALIFORNIA
Indoor Lighting
NRCC-LTI-E (Created 9/17)
CERTIFICATE OF COMPLIANCE
Project Name: Curling Club
Project Address: _____
Report Page: Page 5 of 6
Date Prepared: 8/16/2018

T. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION
Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at <http://www.energy.ca.gov/2015publications/CEC-400-2015-033/appendices/forms/NRCC>
YES NO Form/Title Field Inspector
NRCC-LTI-01-E - Must be submitted for all buildings
NRCC-LTI-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.
NRCC-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.
NRCC-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.
NRCC-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.
NRCC-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.

U. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE
Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain why in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: <http://www.energy.ca.gov/title24/attcp/providers.html>
YES NO Form/Title Field Inspector
NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.
NRCA-LTI-03-A - Must be submitted for automatic daylight controls.
NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.
NRCA-LTI-05-A - Must be submitted for institutional tuning power adjustment factor (PAF).

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2016standards> September 2017

STATE OF CALIFORNIA
Indoor Lighting
NRCC-LTI-E (Created 9/17)
CERTIFICATE OF COMPLIANCE
Project Name: Curling Club
Project Address: _____
Report Page: Page 3 of 6
Date Prepared: 8/16/2018

Area Level Controls
04 Area Description
05 Complete Building or Area Category
06 Area Controls
07 Multi-Level Controls
08 Shut-Off Controls
09 Primary/Skylit Daylighting
10 Secondary Daylighting
11 Interlocked Systems
12 Field Inspector
Office Manual ON/OFF Dimmer Auto Timeswitch Included Included
*NOTES: Controls with a * require a note in the space below explaining how compliance is achieved.
EX: Conference 1: Primary/Skylight Daylighting: Exempt because less than 120 watts of general lighting;
EXCEPTION 1 to §130.1(a)2

Plan Sheet Showing Daylit Zones:
Reset Add Row Remove Last

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS
Table Instructions: Complete the table for each area complying using the Complete Building or Area Category Methods per §140.6(b). Indicate if additional lighting power allowances per §140.6(c) or adjustments per §140.6(a) are being used.
01 Area Description
02 Complete Building or Area Category
03 Allowed Density (W/ft²)
04 Area (ft²)
05 Allowed Wattage (Watts)
06 Additional Allowances / Adjustments
Office
Utility
Corridor, RR, Support
Lobby
TOTAL: 3,578 2,342.9
Reset Add Row Remove Last

J. POWER ADJUSTMENT: PORTABLE LIGHTING IN OFFICES
This Section Does Not Apply

K. ADDITIONAL LIGHTING ALLOWANCE: AREA CATEGORY METHOD FOOTNOTES
This Section Does Not Apply

L. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE
This Section Does Not Apply

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2016standards> September 2017

STATE OF CALIFORNIA
Indoor Lighting
NRCC-LTI-E (Created 9/17)
CERTIFICATE OF COMPLIANCE
Project Name: Curling Club
Project Address: _____
Report Page: Page 6 of 6
Date Prepared: 8/16/2018

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT
Documentation Author Name: _____
Company: DFHENG LLC
Address: _____
City/State/Zip: _____
Documentation Author Signature: _____
Signature Date: _____
CEA/ HERS Certification Identification (if applicable): _____
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: Dirk F. Hofheinz
Company: DFH Electrical Engineering Inc
Address: PO Box 1362
City/State/Zip: Meadow Vista, CA 95722
Responsible Designer Signature: _____
Date Signed: _____
License: E16365
Phone: (530) 613-7966

CA Building Energy Efficiency Standards - 2016 Nonresidential Compliance: <http://www.energy.ca.gov/title24/2016standards> September 2017