GENERAL REQUIREMENTS

1. Work performed shall comply with the following:
2. These General Requirements unless otherwise noted on plans or specifications.
3. Building Code - CBC 2016
4. All applicable local, State and Federal Codes, Ordinances, Laws, regulations and Protective Covenants governing the site of work.
5. Standard Specifications of ASTM as noted herein and as required by the Building Code.
6. All work needs to be performed by qualified and experienced contractors familiar with this type of project.
7. In case of conflict, the more stringent requirement shall govern.
8. On site verification of all dimensions and conditions shall be the responsibility of the contractor and sub-contractors. Noted dimensions take precedence over scale of drawings.
9. Engineer or architect of record is to be notified immediately by the contractor should any question arise or any discrepancy be found pertaining to the working drawings and/or specifications.
10. No deviations from these requirements and structural details shall be made without the written approval of Gouvis Engineering Consulting Group. Approval by the inspector does not constitute authority to deviate from plans or specifications.
11. The design, adequacy, and safety of erection bracing, shoring, temporary supports, etc., is the sole responsibility of the contractor, and has not been considered by the architect or engineer. The contractor is responsible for the stability of the structure prior to the application of all shear walls, roof and floor diaphragms, and finish materials. The contractor shall provide the necessary bracing to provide stability prior to the application of the aforementioned materials. Observation visits to the site by the architect or structural engineer shall not imply the assumption of any responsibility in this regard.

    The builder has requested, contracted with and is compensating Gouvis Engineering Consulting Group for the limited services of providing the minimum structural engineering drawings required, when combined with the other builders' consultants drawings, to obtain a building permit for this project. These drawings are not intended to, nor do they detail all conditions, identify all materials, or define or limit the scope of work required to complete the project. The builder has requested, accepted, and represented that he he will select all materials and manufacturers, qualify and select all installers, direct all ways and means of construction, and provide all subcontractors additional information, above and beyond these drawings, required to complete the project in conformance with all governing agencies and the work will meet or exceed accepted industry standards.
12. Special inspection per Building Code Sec.1704 is required & applies to the types of work indicated on sheet SN-1B/SN-1C (Note: Special inspectors qualification and responsibilities should comply with Building Code Section 1701 Requirements.)
13. Structural analysis for this project is done per applicable Building Code at the time of design considering standard of care.
14. Upon completion of above by the engineer & prior to start of construction, contractor is responsible to check all dimensions, coordinate with the work of other consultants & other trades to ensure compliance with his/her requirements.
15. Gouvis Engineering shall have no liability for waterproofing or moisture transmission issues, whether related to concrete slabs, footings, foundations, or otherwise. Owner and Contractor shall be entirely responsible for such issues, and will defend and indemnify Gouvis Engineering against all such claims.

DESIGN CRITERIA

1. SOILS
   Foundation engineering has been predicated on data and recommendations contained in the soils report by: N/A
2. LATERAL LOADS:

   Seismic Design Category: D — Wind Speed: 110
   Seismic Importance Factor (I) = 1.0 — Wind Exposure: C

   Site Class = D
   S_s: 1.082 — S_{DS}: 0.770
   S_1: 0.418 — S_{D1}: 0.441

   Structural Observation is required for structures greater than two stories above grade plane and assigned to Seismic Design Category "E". Contractor/Owner must contact Gouvis Engineering to schedule observations as needed basis prior to specific stage of that phase.
3. DESIGN LOADS:

Floor load		Roof load	
Dead Load	= 55 psf	Dead Load	= 35 psf
Live Load	= 40 psf	Live Load	= 20 psf
Total	= 95 psf	Total	= 55 psf

SHOP DRAWINGS

1. Sufficient copies of shop drawings for any member or product designed by entity other than Gouvis Engineering Consulting Group shall be submitted to Gouvis Engineering Consulting Group prior to fabrication for review. Contractor shall submit shop drawings of reinforcement for concrete masonry walls, concrete components with compressive strength more than 2500 psi and structural steel to Gouvis Engineering Consulting Group to review and obtain approval prior to fabrication. Shop Drawings shall be original drawings prepared for the project specific information, drawn accurately to scale. Direct copies and modified reproductions of the Contract Documents will not be accepted. Allow sufficient time from the receipt of complete submittal for review and processing by Gouvis Engineering Consulting Group.
2. Review of shop drawings by Gouvis Engineering Consulting Group does not relieve the engineer responsible for the design or the contractor from compliance with Building Code.
3. Gouvis Engineering Consulting Groups review of the shop drawings consists of checking general conformance with structural drawings. Design accuracy of such product, dimensions and quantity of the product is not reviewed by Gouvis Engineering Consulting Group.

STRUCTURAL STEEL

GENERAL

1. All structural steel materials and construction shall conform to the requirements specified in Building Code, Chapter 22 & Reference.

MATERIALS

2. Steel shall be primed with a rust resistance primer & should conform to ASTM A36 (fy=36 ksi) as a minimum, unless otherwise noted. All W shapes to be ASTM A992. (fy=50 ksi)
3. Steel pipe shall conform to ASTM A53, Grade B (Fy=35 ksi).
4. Round HSS tubing shall conform to ASTM A500 Grade B (Fy=42 ksi)
5. Rectangular and square HSS tubing shall conform, to ASTM A500, Grade B (Fy=46 ksi).
6. All structural welding procedures and materials shall conform to Building Code, Section 2204.1. All welding shall be by the shield metal arc welding process or the submerged arc welding process using E70XX-low hydrogen electrodes, unless otherwise noted.
7. All bolts for connections of steel members shall conform to Building Code, Section 2204.2 & ASTM A325N, unless otherwise noted. Holes for bolts should be drilled or punched & shall be 1/16" larger than bolt diameter.
8. Prefabricated steel moment frames per manufacturer. Steel moment frame manufacturer shall submit shop drawing, design calculations, and approved moment frame test report (ICC, IAMPO, or test per Appendix S of AISC SEISMIC PROVISION) to GOUVIS ENGINEERING for review.

WELDS

9. All shop welding and fabrication must be done in a shop approved by a special inspection agency which is approved by the Building Official. All field welding must be performed by a certified welder and a special inspector shall continuously inspect all structural field welding. Both shall be approved by the Building Official.

SPECIAL INSPECTION:

1. In addition to the regular inspection the following items will also require special inspection in accordance with Sec.1704, unless exempted by the exceptions of Sec.1704.2, of the Building Code
2. Soils compliance prior to the foundation inspection, post-tensioned foundation, high strength steel and concrete.
3. All inspections and tests shall be performed by a qualified testing agency retained by the owner.
4. The special inspector shall be qualified and approved by the building department and acceptable to the architect.
5. The special inspector shall observe work assigned for conformance to the approved design drawings and specifications.
6. The special inspector shall furnish an inspection report to the building department, engineer and architect of record. Copies of the report shall be available at the job site at all times.
7. Final reports for all inspections and testing must be provided by the special inspector. Final reports shall document completion of all inspections and correction of all noted discrepencies.
8. The duties of the special inspector shall be in conformance with the requirements of section 1704 of the latest edition of the CBC.
9. Contractor shall be responsible for all expenses due to any premature notification of inspection which results in additional site visits.
10. Failure of notification by the contractor for inspection on a timely basis may result in complete removal and replacement of all work performed at contractors expense.
11. Site visits by the structural engineer do not constitute an inspection.

SHEET INDEX

SN-1 - General Notes, Requirements & Structural Details

S-1.1 - PARTIAL FOUNDATION PLAN

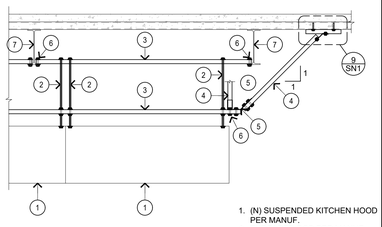
S-1.2 - PARTIAL FRAMING PLANS

FOR THE CONSTRUCTION OF STEEL ELEMENTS OF BUILDING & STRUCTURES, ITEMS OF SPECIAL INSPECTION & VERIFICATIONS BY A SPECIAL INSPECTOR ARE REQUIRED & SUMMARIZED IN THE FOLLING TABLE:

SPECIAL INSPECTION TABLE FOR STEEL STRUCTURES

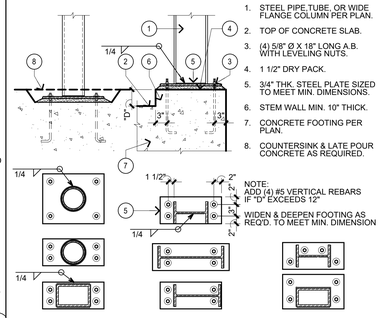
VERIFICATION & INSPECTION	Quality Assurance: Performed	Quality Assurance: Observed	Reference Standard
TASKS PRIOR TO WELDING			
2. Manufacture certifications for welding consumables available.	✓		
3. Material identification (type / grade).		✓	
4. Welder identification system.		✓	
5. Fit-up groove welds (including joint geometry). a. Joint preparation. b. Dimensions (alignment, root opening, root face, bevel)f. c. Cleanliness (condition of steel surfaces). d. Tacking (tack weld quality and location). e. Backing type and fit (if applicable).		✓	AISC 360-10 TABLE N5.4-1
6. Configuration and finish of access holes.		✓	
7. Fit-up of fillet welds. a. Dimensions (alignment, gaps at root). b. Cleanliness (condition of steel surfaces). c. Tacking (tack weld quality and location).		✓	
8. Check welding equipment.		-	
TASKS DURING WELDING			
1. Use of qualified welders.		✓	AISC 360-10 TABLE N5.4-2
2. Control and handling of welding consumables. a. Packaging. b. Exposure control.		✓	
3. No welding over cracked tack welds.		✓	
4. Environmental conditions. a. Wind speed within limits. b. Precipitation and temperature.		✓	
5. WPS followed: a. Settings on welding equipment. b. Travel speed. c. Selected welding materials. d. Shielding gas type/ flow rate. e. Preheat applied. f. Interpass temperature maintained (min./ max.). g. Proper position (F, V, H, OH).		✓	
6. Welding techniques. a. Interpass and final cleaning. b. Each pass within profile limitations. c. Each pass meets quality requirements.		✓	
TASKS AFTER WELDING			
1. Welds cleaned.		✓	AISC 360-10 TABLE N5.4-3
2. Size, length and location of welds.	✓		
3. Welds meet visual acceptance criteria. a. Crack prohibition. b. Weld/ base-metal fusion. c. Crater cross section. d. Weld profiles. e. Weld size. f. Undercut. g. Porosity.		✓	
4. Arc strikes.	✓		
5. K-area.	✓		
6. Backing removed and weld tabs removed (if required).	✓		
7. Repair activities.	✓		
8. Document acceptance or rejection of welded joint or member.	✓		

VERIFICATION & INSPECTION	Quality Assurance: Performed	Quality Assurance: Observed	Reference Standard
TASKS PRIOR TO BOLTING			
1. Manufacturer's certifications available for fastener materials.	✓		AISC 360-10 TABLE N5.6-1
2. Fasteners marked in accordance with ASTM requirements.		✓	
3. Proper fasteners selected for the joint detail (grade, type, bolt length if threads are to be excluded from shear plane).		✓	
4. Proper bolting procedure selected for joint detail.		✓	
5. Connecting elements, including the appropriate faying surface condition and hole preparation, if specified, meet applicable requirements.		✓	
6. Pre-installation verification testing by installation personnel observed and documented for fastener assemblies and methods used.		✓	
7. Proper storage provided for bolts, nuts, washers and other fastener components.		✓	
TASKS DURING BOLTING			
1. Fastener assemblies, of suitable condition, placed in all holes and washers (if required) are positioned as required.		✓	AISC 360-10 TABLE N5.6-2
2. Joint brought to the snug-tight condition prior to the pretensioning operation.		✓	
3. Fastener component not turned by the wrench prevented from rotating.		✓	
4. Fasteners are pretensioned in accordance with the RCSC Specification, progressing systematically from the most rigid point toward the free edges.		✓	
TASKS AFTER BOLTING			
1. Document acceptance or rejection of bolted connections.	✓		AISC 360-10 TABLE N5.6-3



1. (N) SUSPENDED KITCHEN HOOD PER MANUF.
2. THREADED ROB PER MANUF.
3. (N) P1000 UNISTRUT OR EQUIV.
4. (N) P1000 UNISTRUT DIAGONAL LATERAL BRACE, PROVIDE AT EACH CORNER IN EACH ORTHOGONAL DIRECTION.
5. (N) P1843 UNISTRUT ADJUSTABLE HINGE.
6. 1/2"Ø M.B., TYP.
7. (E) Wx STEEL BEAM, DRILL HOLES IN BOTTOM FLANGE AS REQ'D FOR BOLT ATTACHMENT, 1 1/2" MIN DIST FROM EDGE.
8. (E) METAL DECK W/ CONC.

HOOD SUPPORT DETAIL — 8

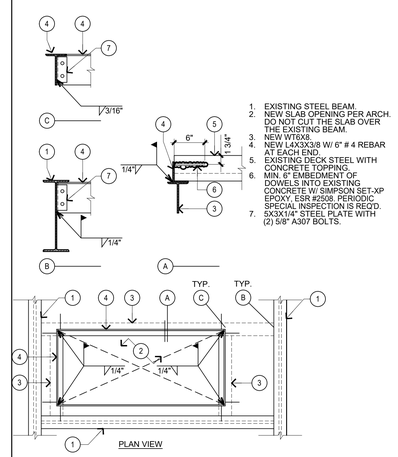


1. STEEL PIPE,TUBE, OR WIDE FLANGE COLUMN PER PLAN.
2. TOP OF CONCRETE SLAB.
3. (4) 5/8" Ø X 18" LONG A.B. WITH LEVELING NUTS.
4. 1 1/2" DRY PACK.
5. 3/4" THK. STEEL PLATE SIZED TO MEET MIN. DIMENSIONS.
6. STEM WALL MIN. 10" THICK.
7. CONCRETE FOOTING PER PLAN.
8. COUNTERSINK & LATE POUR CONCRETE AS REQUIRED.

NOTE:
ADD (4) #5 VERTICAL REBARS IF "D" EXCEEDS 12"

WIDEN & DEEPEN FOOTING AS REQ'D. TO MEET MIN. DIMENSION

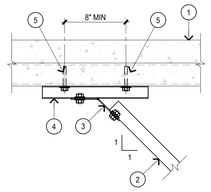
FOUNDATION DETAIL — GE51–110119 — 4



1. EXISTING STEEL BEAM.
2. NEW SLAB OPENING PER ARCH. DO NOT CUT THE SLAB OVER THE EXISTING BEAM.
3. NEW WT6X8.
4. NEW L4X3X3/8 W/ 6" # 4 REBAR AT EACH END.
5. EXISTING DECK STEEL WITH CONCRETE TOPPING.
6. MIN. 6" EMBEDMENT OF DOWELS INTO EXISTING CONCRETE W/ SIMPSON SET-XP EPOXY. ESR #2508. PERIODIC SPECIAL INSPECTION IS REQ'D.
7. 5X3X1/4" STEEL PLATE WITH (2) 5/8" A307 BOLTS.

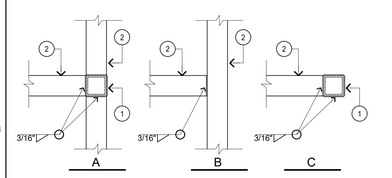
PLAN VIEW

METAL DECK OPENING DETAIL — 1



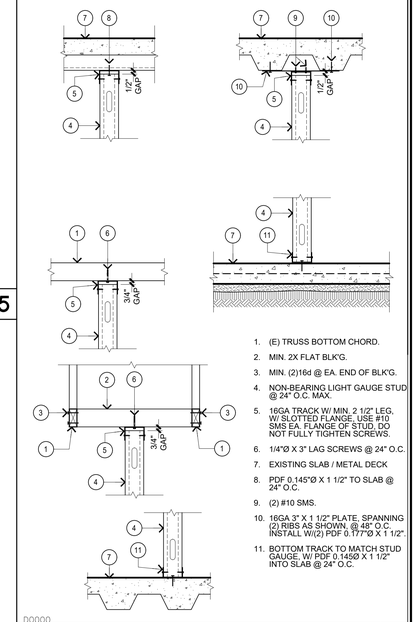
1. (E) CONC SLAB ON METAL DECKING
2. (N) P1000 UNISTRUCT DIAGONAL BRACE, REVERSE POSITION AS NEEDED
3. (N) P1843W UNISTRUT HINGE W/ HHCS 1/2"Ø M.B.
4. (N) LS1012F UNSTRUT
5. 1/2"Ø HILTI KWIK 3 CARBON STEEL EXPANSION ANCHORS W/ 3" EMBED. (ESR-2302) SPECIAL INSPECTION W/ FLAT WASHER & HEX NUT. ENSURE ANCHORS ARE CENTERED AT BOTTOM OF METAL DECKING FLUTES FOR PERPENDICULAR CONDITION.

LATERAL BRACING DETAIL — 9



1. HSS COL. PER PLAN.
2. HSS BEAM PER PLAN.

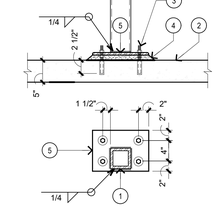
CONNECTION DETAIL — D0019 — 5



1. (E) TRUSS BOTTOM CHORD.
2. MIN. 2X FLAT BLK'G.
3. MIN. (2)16d @ EA. END OF BLK'G.
4. NON-BEARING LIGHT GAUGE STUD @ 24" O.C. MAX.
5. 16GA TRACK W/ MIN. 2 1/2" LEG, W/ SLOTTED FLANGE, USE #10 SMS EA. FLANGE OF STUD. DO NOT FULLY TIGHTEN SCREWS.
6. 1/4"Ø X 3" LAG SCREWS @ 24" O.C.
7. EXISTING SLAB / METAL DECK
8. PDF 0.145"Ø X 1 1/2" TO SLAB @ 24" O.C.
9. (2) #10 SMS.
10. 16GA 3" X 1 1/2" PLATE, SPANNING (2) RIBS AS SHOWN, @ 48" O.C. INSTALL W/(2) PDF 0.177"Ø X 1 1/2".
11. BOTTOM TRACK TO MATCH STUD GAUGE, W/ PDF 0.1450 X 1 1/2" INTO SLAB @ 24" O.C.

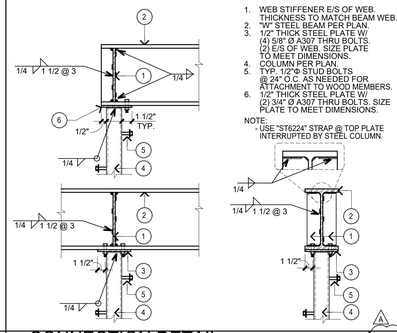
D0000

TYP. NON-BEARING STUD WALL — 2



1. EXISTING STEEL BEAM.
2. NEW 4X10X1/4 STL. TUBE DOWNRIGGER
3. NEW 4X10X1/4" STL. BEAM.

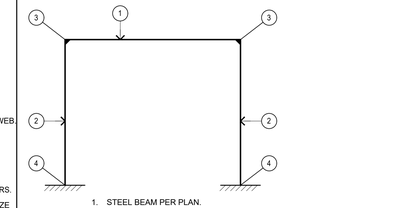
HSS COLUMN CONNECTION DETAIL — 10



1. WEB STIFFENER E/S OF WEB. THICKNESS TO MATCH BEAM WEB.
2. "W" STEEL BEAM PER PLAN.
3. 1/2" THICK STEEL PLATE W/ (4) 5/8" Ø A307 THRU BOLTS. (2) E/S OF WEB. SIZE PLATE TO MEET DIMENSIONS.
4. COLUMN PER PLAN.
5. TYP. 1/2"Ø STUD BOLTS @ 24" O.C. AS NEEDED FOR ATTACHMENT TO WOOD MEMBERS.
6. 1/2" THICK STEEL PLATE W/ (2) 3/4" Ø A307 THRU BOLTS. SIZE PLATE TO MEET DIMENSIONS.

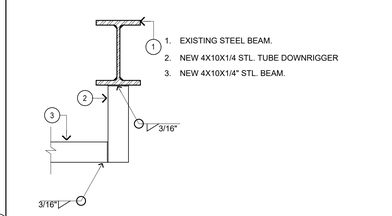
NOTE:
- USE "ST6224" STRAP @ TOP PLATE INTERRUPTED BY STEEL COLUMN.

CONNECTION DETAIL — D0019 — 6



1. STEEL BEAM PER PLAN.
2. CONT. STL COL. PER PLAN.
3. CONNECTION PER DET. 5A/SN-1
4. CONNECTION PER DETAIL 4/SN-1

MOMENT FRAME — 3



1. STEEL WIDE FLANGE COLUMN PER PLAN.
2. TOP OF (E) CONCRETE SLAB.
3. (4) 1/2" Ø X 2 1/2" EMBED SIMPSON TITEN-HD ANCHORS
4. 1" DRY PACK (AS REQ'D)
5. 3/4" THK. STEEL PLATE SIZED TO MEET MIN. DIMENSIONS.

CONNECTION DETAIL — GE17–111004 — 7

GOUVIS engineering consulting group, inc.®

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tel 760.323.5090

REGISTERED PROFESSIONAL ENGINEER — MIKE HAUSMANN — No. C041283 — Exp. 3/31/22 — CIVIL — STATE OF CALIFORNIA

DATE SIGNED: 4/29/20

RESTRICTIVE NOTICE

PROJECT:
Lakeside Clubhouse

ARCHITECT:
KTGY
Architecture

LOCATION:
7707 El Camino Real
Carlsbad
California

REVISIONS

NO.	DATE	DESCRIPTION
1	4/17/2020	2ND PC SUBMITTAL

SHEET NAME:
GENERAL NOTES, REQUIREMENTS & STRUCTURAL DETAILS

PROJECT NUMBER:
64897

ENGINEER:

DRAFTER:

ISSUED DATE	PLOT DATE:
06/20/2018	04/15/2020

SHEET NUMBER:
SN-1

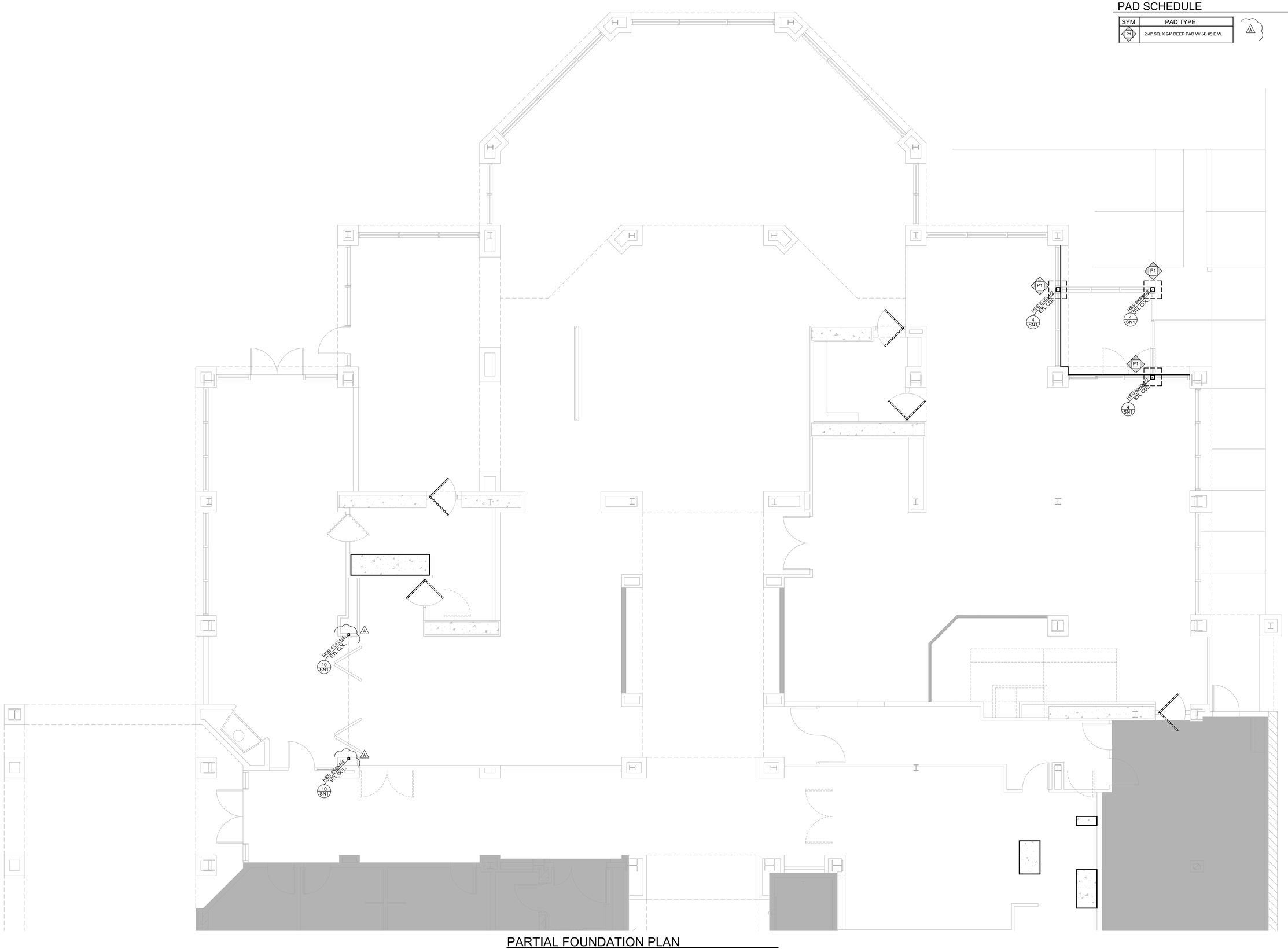
SYMBOLS LEGEND

PX — PAD NUMBER

X / SDX — DETAIL NUMBER / DETAIL SHEET NUMBER

PAD SCHEDULE

SYM.	PAD TYPE
P1	2'-0" SQ. X 24" DEEP PAD W/ (4) #5 E.W.



PARTIAL FOUNDATION PLAN

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

GOUVIS engineering consulting group, inc.®

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Irvine
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Palm Springs
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REGISTERED PROFESSIONAL ENGINEER — MIKE HAUSMAN — No. C047283 — Exp. 3/31/22 — CIVIL — STATE OF CALIFORNIA

DATE SIGNED: 4/29/20

PROJECT:

Lakeside Clubhouse

ARCHITECT:

KTGY
Architecture

LOCATION:

7707 El Camino Real
Carlsbad
California

REVISIONS

NO.	DATE	DESCRIPTION
1	4/17/2020	2ND PC SUBMITTAL

SHEET NAME:

PARTIAL FOUNDATION PLAN

PROJECT NUMBER: 64897

ENGINEER: MA

DRAFTER: MA

ISSUED DATE:	PLOT DATE:
06/20/2018	04/15/2020

SHEET NUMBER:

S1.1

SYMBOLS LEGEND

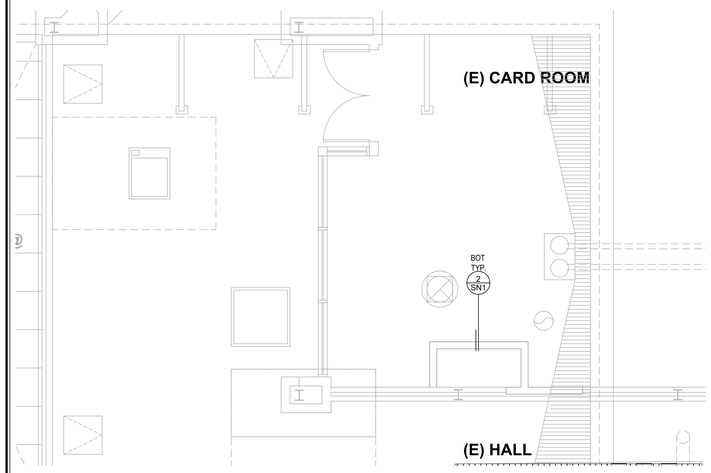
DIRECTION OF STEEL DECK.

DETAIL NUMBER
DETAIL SHEET NUMBER

FRAMING SCHEDULE

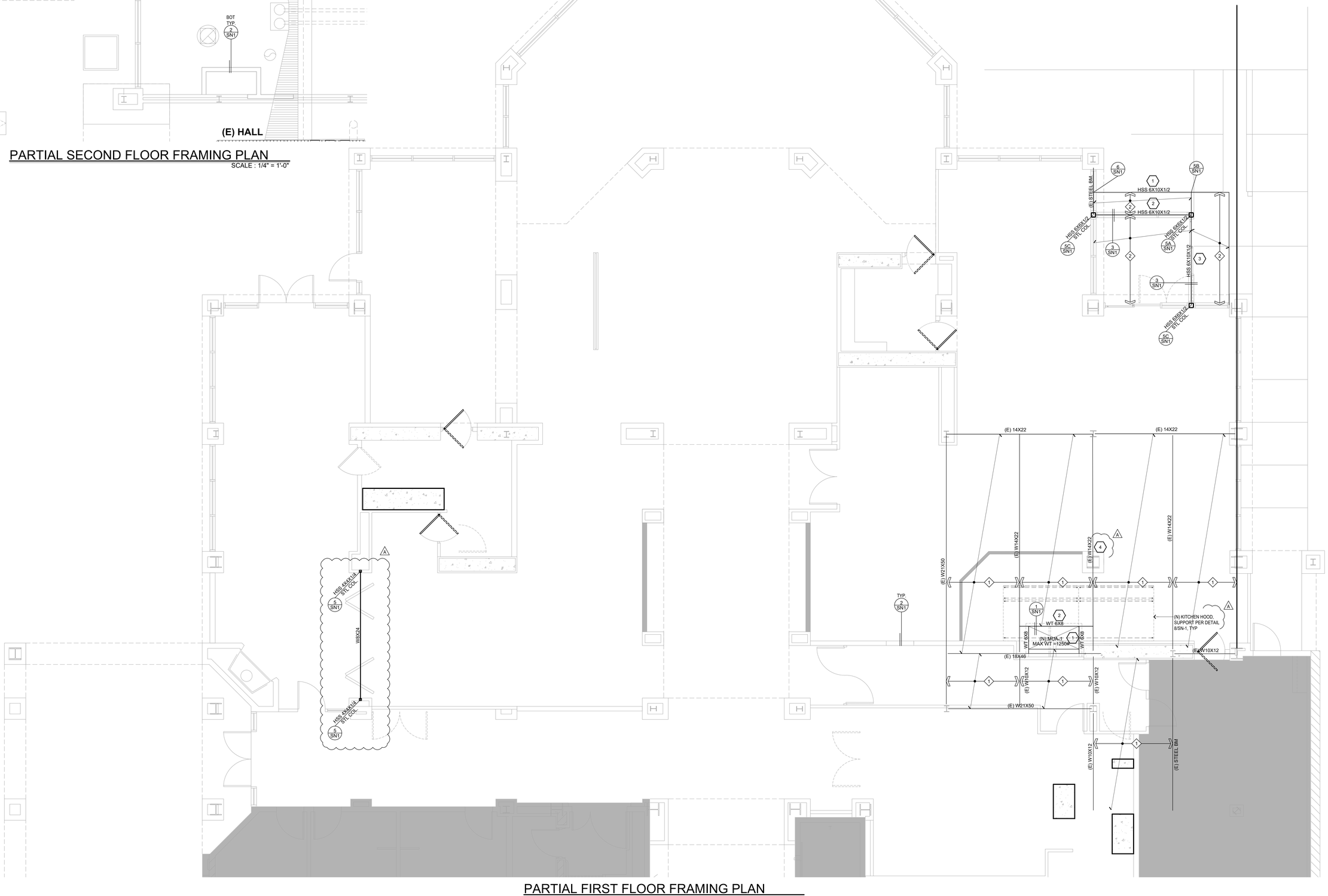
1 EXISTING 1.5 VERCO B FORMLOCK 18 GA STEEL DECK WITH 4 3/4" TOTAL LIGHT WEIGHT CONCRETE SLAB DEPTH W/6X6-W1.4XW1.4 1 1/2" FROM TOP OF SLAB.

2 10" DEEP STEEL JOISTS @ 24" O.C.



PARTIAL SECOND FLOOR FRAMING PLAN

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



PARTIAL FIRST FLOOR FRAMING PLAN

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

GOUVIS engineering consulting group, inc.

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Irvine
tel 949.752.1612
fax 949.752.5321

Palm Springs
tel 760.323.5090

REGISTERED PROFESSIONAL ENGINEER — MIKE HAUSMANN — No. C047283 — Exp. 3/31/22 — CIVIL — STATE OF CALIFORNIA

DATE SIGNED: 4/29/20

PROJECT:

Lakeside Clubhouse

ARCHITECT:

KTGY
Architecture

LOCATION:

7707 El Camino Real
Carlsbad
California

REVISIONS

NO.	DATE	DESCRIPTION
1	4/17/2020	2ND PC SUBMITTAL

SHEET NAME:

PARTIAL FRAMING PLANS

PROJECT NUMBER:

64897

ENGINEER: MA

DRAFTER: MA

ISSUED DATE:	PLOT DATE:
06/20/2018	04/15/2020

SHEET NUMBER:

S1.2