

PROJECT DESCRIPTION

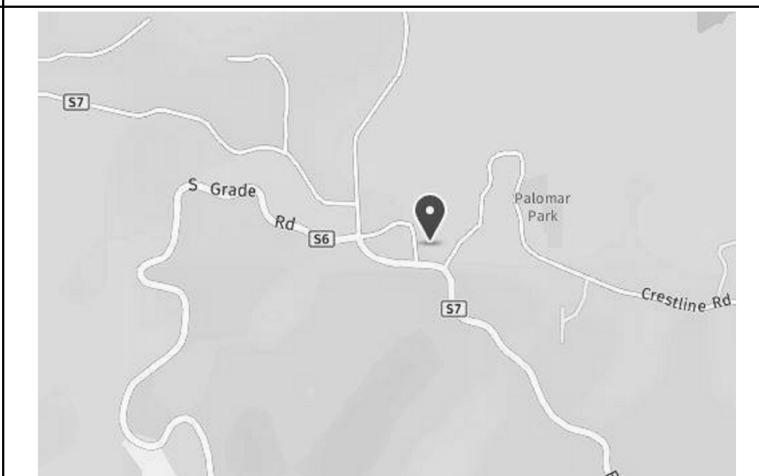
- Construct An approximately 2,000 square foot conventionally framed Living Quarters Building for 4 to 6 firefighters.
- Retrofit existing restrooms within the Community Center into a single ADA compliant restroom
- Upgrade existing office inside Fire Station including paint, flooring lighting and air conditioning and heating. Provide ADA ccompliant entrance door.
- Provide paved surface parking, with 5 spaces at the Living Quarters and 2 spaces at the Community Center, including one ADA compliant space with a Path of Travel (POT) to the ADA restroom within the building and POT to the office within the Fire Station.
- Provide a 20 foot wide concrete paved fire access lane around the east side of the existing Fire Station.

 Extend the 20 foot wide drive from the south edge of the departure apron to connect with East Grade Road. The driveway apron shall meet all County standards and incorporate the drainage patterns of E. Grade Road.
- Provide a diesel fuel emergency generator.
- Fencing repairs at chain link fence at north side of property, approximately 125 feet of fencing
- Integrated Building Automation Systems (BAS) includes HVAC, lighting, utility metering, and on-site energy generation. Metering will meet the County Standards and the BAS system will tie into the County system.

VICINITY MAP PROJECT DIRECTORY

2016 California Building Code County of San Diego SUSMP County of San Diego Hydrology Manual San Diego Regional Standard Drawings (Current Edition) Standard Specifications for Public Works Construction (Greenbook, Current Edition)

GOVERNING STANDARDS



Platt/Whitelaw Architects (architecture) 4034 30TH Street San Diego, CA 92104 (619) 546-4326

Nasland (civil/survey) 4740 Ruffner Street San Diego, CA 92111 (858) 292-7770 aark engineering (structural) 1870 Cordell Court, Suite 202 El Cajon, CA 92020 619-312-6336

Turpin & Rattan (MEP) 4719 Palm Avenue La Mesa, CA 91941-5221 (619) 466-6224

DRAWING INDEX

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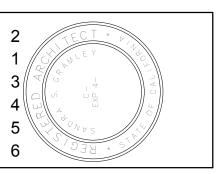
hytelaw

ts,Inc.

street

california

Platt/Whitela
Architects,Inc



STRUCTURAL

ARCHITECTURAL

GENERAL

C-001

Civil Coversheet

Floor Plan

Roof Plan

Grading and Drainage Plan Grading and Drainage Plan

Floor Plans, Schedules, Details

North & South Building Elevations

Reflected Ceiling Plan

Existing Conditions / Site Demolition Plan Proposed Conditions & Site Improvements

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Project Number

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EET

G-001

FIRE STATION 79 LIVING QUARTERS

EROSION AND SEDIMENT CONTROL NOTES

TEMPORARY EROSION/SEDIMENT CONTROL, PRIOR TO COMPLETION OF FINAL IMPROVEMENTS, SHALL BE PERFORMED BY THE CONTRACTOR OR QUALIFIED PERSON AS INDICATED BELOW:

1. ALL REQUIREMENTS OF THE COUNTY OF SAN DIEGO "BMP DESIGN MANUAL" MUST BE INCORPORATED INTO THE DESIGN AND CONSTRUCTION OF THE PROPOSED GRADING/IMPROVEMENTS CONSISTENT WITH THE APPROVED STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND/OR WATER POLLUTION CONTROL PLAN (WPCP) FOR CONSTRUCTION LEVEL BMP'S AND FOR PERMANENT POST CONSTRUCTION TREATMENT CONTROL PERMANENT BMP'S, THE STORM WATER QUALITY MANAGEMENT PLAN (SWQMP) IF APPLICABLE.

2. FOR STORM DRAIN INLETS, PROVIDE A GRAVEL BAG SILT BASIN IMMEDIATELY UPSTREAM OF INLET AS INDICATED ON DETAILS.

3. FOR INLETS LOCATED AT SUMPS ADJACENT TO TOP OF SLOPES, THE CONTRACTOR SHALL ENSURE THAT WATER DRAINING TO THE SUMP IS DIRECTED INTO THE INLET AND THAT A MINIMUM OF 1.00' FREEBOARD EXISTS AND IS MAINTAINED ABOVE THE TOP OF THE INLET. IF FREEBOARD IS NOT PROVIDED BY GRADING SHOWN ON THESE PLANS, THE CONTRACTOR SHALL PROVIDE IT VIA TEMPORARY MEASURES, I.E. GRAVEL BAGS OR DIKES.

4. THE CONTRACTOR OR QUALIFIED PERSON SHALL BE RESPONSIBLE FOR CLEANUP OF SILT AND MUD ON ADJACENT STREET(S) AND STORM DRAIN SYSTEM DUE TO CONSTRUCTION ACTIVITY.

5. THE CONTRACTOR OR QUALIFIED PERSON SHALL CHECK AND MAINTAIN ALL LINED AND UNLINED DITCHES AFTER EACH RAINFALL.

6. THE CONTRACTOR SHALL REMOVE SILT AND DEBRIS AFTER EACH MAJOR RAINFALL.

7. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. ALL NECESSARY MATERIALS SHALL BE STOCKPILED ON SITE AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.

8. THE CONTRACTOR SHALL RESTORE ALL EROSION/SEDIMENT CONTROL DEVICES TO WORKING ORDER TO THE SATISFACTION OF THE CITY ENGINEER OR RESIDENT ENGINEER AFTER EACH RUN-OFF PRODUCING RAINFALL.

9. THE CONTRACTOR SHALL INSTALL ADDITIONAL EROSION/SEDIMENT CONTROL MEASURES AS MAY BE REQUIRED BY THE RESIDENT ENGINEER DUE TO UNCOMPLETED GRADING OPERATIONS OR UNFORESEEN CIRCUMSTANCES, WHICH MAY ARISE.

10. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT PUBLIC TRESPASS ONTO AREAS WHERE IMPOUNDED WATERS CREATE A HAZARDOUS CONDITION.

11. ALL EROSION/SEDIMENT CONTROL MEASURES PROVIDED PER THE APPROVED GRADING PLAN SHALL BE INCORPORATED HEREON. ALL EROSION/SEDIMENT CONTROL FOR INTERIM CONDITIONS SHALL BE DONE TO THE SATISFACTION OF THE RESIDENT ENGINEER.

12. GRADED AREAS AROUND THE PROJECT PERIMETER MUST DRAIN AWAY FROM THE FACE OF THE SLOPE AT THE CONCLUSION OF EACH WORKING DAY.

13. ALL REMOVABLE PROTECTIVE DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY WHEN RAIN IS IMMINENT.

14. THE CONTRACTOR SHALL ONLY GRADE, INCLUDING CLEARING AND GRUBBING FOR THE AREAS FOR WHICH THE CONTRACTOR OR QUALIFIED PERSON CAN PROVIDE EROSION/SEDIMENT CONTROL

15. THE CONTRACTOR SHALL ARRANGE FOR WEEKLY MEETINGS DURING OCTOBER 1ST TO APRIL 30TH FOR PROJECT TEAM (GENERAL CONTRACTOR, QUALIFIED PERSON, EROSION CONTROL SUBCONTRACTOR IF ANY, ENGINEER OF WORK, OWNER/DEVELOPER AND THE RESIDENT ENGINEER) TO EVALUATE THE ADEQUACY OF THE EROSION/SEDIMENT CONTROL MEASURES AND OTHER RELATED CONSTRUCTION ACTIVITIES.

ALL GRADES SHOWN ON THESE PLANS WERE DESIGNED IN COMPLIANCE WITH THE 2016 CALIFORNIA BUILDING CODE (CBC) AND

CONTRACTORS' RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THESE CODES. SHOULD A DESIGN QUESTION ARISE OR A

PHASES OF WORK RELATING TO CBC AND ADA ACCESS FOR THIS PROJECT. CONSTRUCTION THAT EXCEEDS MAXIMUM OR

EXACT METHODS OR MEANS USED BY THE CONTRACTOR OR THEIR SUB-CONTRACTORS DURING CONSTRUCTION, THE CIVIL ENGINEER ASSUMES NO RESPONSIBILITY FOR THE FINAL ACCEPTANCE OF ADA-RELATED ITEMS BY THE AGENCY HAVING

FIELD CONDITION PRESENT ITSELF THAT IS DIFFERENT FROM THESE PLANS, WORK SHALL CEASE AND THE CIVIL ENGINEER BE NOTIFIED SO THAT AN ACCEPTABLE SOLUTION CAN BE DETERMINED. THE CONTRACTOR IS ADVISED TO CAREFULLY CHECK ALL

MINIMUM DIMENSIONS AND SLOPES AS DEFINED BY CBC AND ADA ARE SUBJECT TO REJECTION AND MAY BE REQUIRED TO BE REMOVED AND REPLACED AT THE CONTRACTOR'S SOLE COST. SINCE THE CIVIL ENGINEER OR SURVEYOR CANNOT CONTROL THE

THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN (ADA) TO ALLOW FOR CONSTRUCTION TOLERANCES. IT IS THE

.0.38 [ACRES] MAX. CUT DEPTH <u>10.0</u> [FT]

EARTHWORK QUANTITIES DO NOT REFLECT ANY SPECIAL CONDITIONS THAT MAY BE ENCOUNTERED DURING CONSTRUCTION AND ARE FOR REFERENCE ONLY. SINCE THE

CONTRACTOR DURING GRADING OPERATIONS, NOR CAN THE ENGINEER GUARANTEE THE

ENGINEER CANNOT CONTROL THE EXACT METHOD OR MEANS USED BY THE

EXACT SOIL CONDITION OVER THE ENTIRE SITE, THE ENGINEER ASSUMES NO RESPONSIBILITY FOR FINAL EARTHWORK QUANTITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THEIR OWN EARTHWORK QUANTITIES FOR BIDDING.

.1,500 [CYD] MAX CUT SLOPE RATIO (2:1MAX) <u>2:1</u>

MAX. FILL DEPTH <u>2.0</u> [FT]

DISABLED ACCESS NOTES

JURISDICTION, ANY OTHER AUTHORITY, OR OTHER AFFECTED PARTIES.

PRELIMINARY GRADING QUANTITIES

CONTRACT AND CONSTRUCTION PURPOSES.

GRADED AREA

CUT QUANTITIES FILL QUANTITIES

EXPORT

SPECIAL NOTES

THE FOLLOWING NOTES ARE PROVIDED TO GIVE DIRECTIONS TO THE CONTRACTOR BY THE ENGINEER OF WORK. THE CITY ENGINEER'S SIGNATURE ON THESE PLANS DOES NOT CONSTITUTE APPROVAL OF ANY OF THESE NOTES AND THE COUNTY WILL NOT BE RESPONSIBLE FOR THEIR ENFORCEMENT.

- 1. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTORS SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER, ENGINEER AND GEOLOGIST HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN THE CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROPERTY, EXCEPTING FOR LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.
- 2. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING FACILITIES (ABOVEGROUND AND UNDERGROUND) WITHIN THE PROJECT SITE AND MAKE EXPLORATORY EXCAVATIONS SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT THE REVISION OF THE CONSTRUCTION PLANS IF IT IS FOUND THE ACTUAL LOCATIONS ARE IN CONFLICT WITH THE PROPOSED WORK.
- 3. DURING CONSTRUCTION: THE CONTRACTOR SHALL PROPERLY GRADE ALL EXCAVATED SURFACES TO PROVIDE POSITIVE DRAINAGE AND PREVENT PONDING OF WATER. HE SHALL CONTROL SURFACE WATER TO AVOID DAMAGE TO ADJOINING PROPERTIES OR TO FINISHED WORK ON THE SITE.
- 4. NASLAND ENGINEERING WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL PROPOSED CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY NASLAND ENGINEERING.
- 5. WORK PERFORMED WITHOUT BENEFIT OF TESTING AND/OR INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL
- 6. THE EXISTENCE AND LOCATION OF UTILITY STRUCTURES AND FACILITIES SHOWN ON THE CONSTRUCTION PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. ATTENTION IS CALLED TO THE POSSIBLE EXISTENCE OF OTHER UTILITY FACILITIES OR STRUCTURES NOT KNOWN OR IN A LOCATION DIFFERENT FROM THAT SHOWN ON THE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN ON THE PLANS AND ANY OTHER EXISTING FACILITIES OR STRUCTURES THAT MAY NOT BE SHOWN.
- 7. ALL GRADES SHOWN ON THIS PLAN WERE DESIGNED AT OR BELOW MAXIMUMS ALLOWED BY THE AMERICANS WITH DISABILITY ACT (A.D.A.) IT IS CONTRACTORS' RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE DISABILITY ACT GUIDELINES (A.D.A.A.G.) IN THE EVENT THAT A DESIGN QUESTION SHOULD ARISE, OR A FIELD CONDITION PRESENT ITSELF THAT IS DIFFERENT FROM THOSE SHOWN ON THESE PLANS, WORK SHALL CEASE AND THE ENGINEER SHALL BE NOTIFIED SO THAT AN ACCEPTABLE SOLUTION CAN BE DETERMINED.
- 8. THE CONTRACTOR IS ADVISED TO CAREFULLY CHECK ALL PHASES OF WORK RELATING TO A.D.A.A.G. ACCESS FOR THIS PROJECT. SINCE THE CODE DOES NOT ALLOW FOR CONSTRUCTION TOLERANCE. ANY CONSTRUCTION THAT EXCEEDS MAXIMUM OR MINIMUM DIMENSIONS AND SLOPES AS CALLED OUT BY A.D.A.A.G. ARE SUBJECT TO REJECTION AND MAY BE REQUIRED TO BE REMOVED AND REPLACED, AT THE CONTRACTORS' EXPENSE.
- 9. SINCE THE CIVIL ENGINEER OR SURVEYOR CANNOT CONTROL THE EXACT METHODS OR MEANS USED BY THE GENERAL CONTRACTOR OR THEIR SUBCONTRACTORS DURING GRADING AND CONSTRUCTION OF THE PROJECT. THE CIVIL ENGINEER OR SURVEYOR ASSUMES NO RESPONSIBILITY FOR THE FINAL ACCEPTANCE OF A.D.A.A.G. RELATED ITEMS BY THE CITY, ANY OTHER AUTHORITY, OR OTHER

PROPERTY LINE NOTE:

THE PROPERTY LINE AND RIGHT OF WAY INFORMATION WAS OBTAINED FROM THE LEGAL DESCRIPTION OF THE SITE AND TIED INTO SOME OF THE CORNER MONUMENTS BUT ONLY REPRESENTS AN APPROXIMATION OF ITS EXACT LOCATION. NO PROPERTY BOUNDARY WAS PERFORMED BY NASLAND AT THIS TIME.

PROPERTY LINE AND RIGHT OF WAY LINE AS SHOWN IS FOR REFERENCE ONLY.

VICINITY MAP NO SCALE

LEGEND

<u>ITEM</u>	<u>SYMBOL</u>
EXISTING CONTOUR	<u> </u>
EXISTING BACKFLOW PREVENTER	BFP
EXISTING ELECTRICAL RISER	配
EXISTING COMMUNICATIONS RISER	CR CR
EXISTING ELECTRIC PULLBOX	I EPB
EXISTING FIRE HYDRANT	
EXISTING GAS VALVE	G∨
EXISTING GUARD POST	⊚ GP
EXISTING STANDARD LIGHT	\Rightarrow
EXISTING SEWER CLEANOUT	oSCO
EXISTING SEWER MANHOLE	SSMH
EXISTING SIGN	
EXISTING WATER VALVE	⊕ W∨
EXISTING WATER METER	
EXISTING IRRIGATION EQUIPMENT	•
EXISTING FENCE	X
PROPOSED TRUNCATED DOMES	900d 1000
PROPOSED PCC HEAVY DUTY PAVEMENT	Δ Δ Δ . Δ . Δ
PROPOSED GRAVEL PARKING	
PROPOSED PCC SIDEWALK	西班牙
LIMITS OF PROPOSED RIP-RAP	
PROPOSED WATER LATERAL	ww
PROPOSED SEWER LATERAL	ss
PROPOSED MASONRY WALL	
PROPOSED BROW DITCH	$\cdot \leftarrow \cdot \leftarrow \cdot$
PROPOSED CONTOUR	<u> </u>

ABBREVIATIONS

- FF = FINISHED FLOOR FS = FINISHED SURFACE
- EG = EXISTING GRADETG = TOP OF GRATETW = TOP OF WALL
- () = EXISTING ELEVATION PL = PROPERTY LINERW = RIGHT OF WAY LINE

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RADING AND DRAINAGE PLAN	C-005

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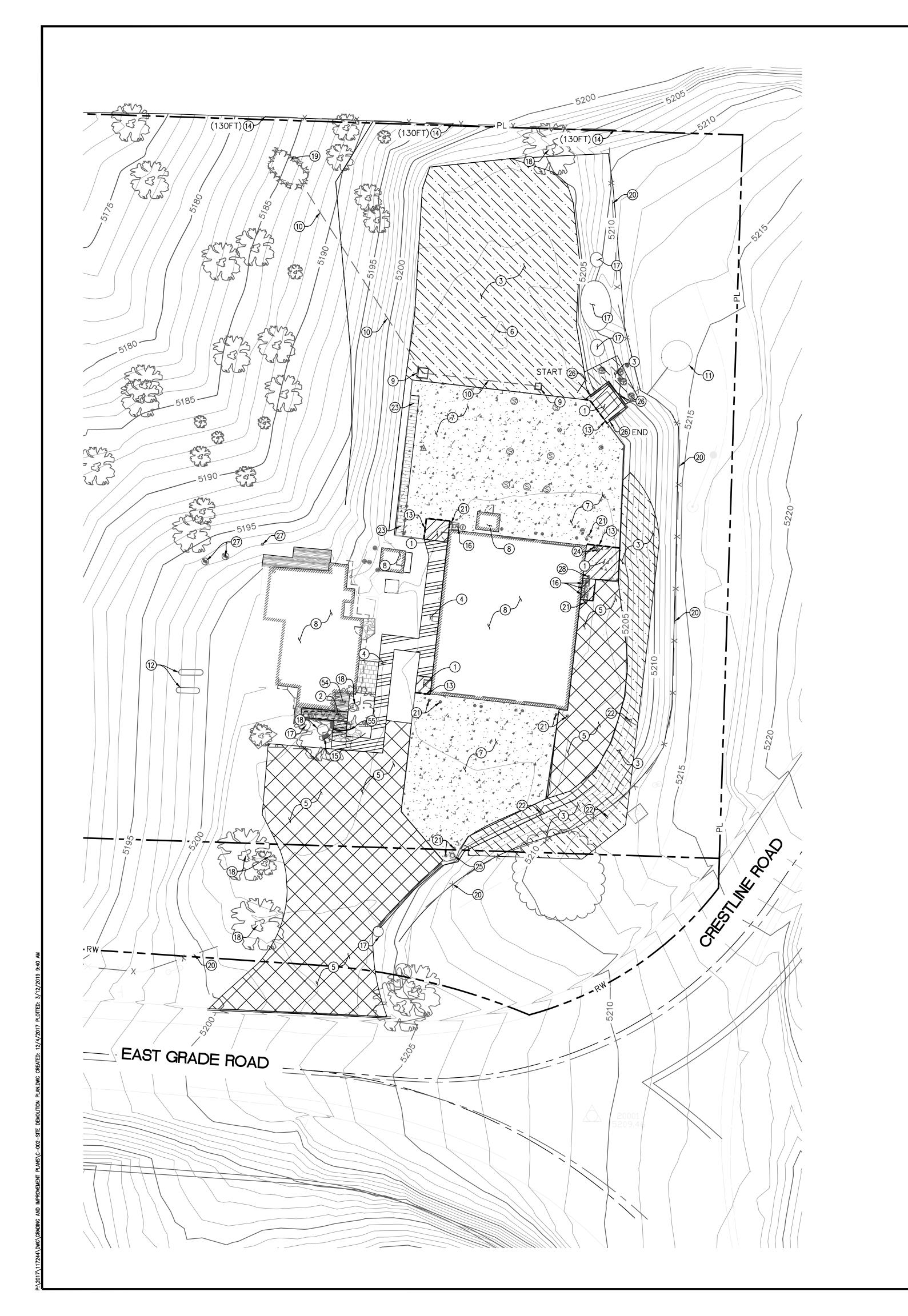
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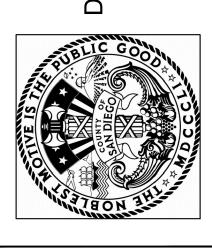
nasland.com

X OF X SHEETS



CONSTRUCTION NOTES

- 1 CONTRACTOR TO REMOVE CONCRETE PAVEMENT /// AND BASE TO SUBGRADE.
- 2 CONTRACTOR TO REMOVE VINYL/ WOOD ______
- 3 CLEAR AND GRUB EXISTING DIRT AREA FOR EARTHWORK.
- 4 CONTRACTOR TO REMOVE EXISTING ASPHALT FOR INSTALLATION OF PCC SIDEWALK.
- (5) CONTRACTOR TO REMOVE EXISTING ASPHALT AND GRAVEL SURFACE FOR INSTALLATION OF PCC DRIVE.
- 6 EXISTING TREE INCLUDING ROOT SYSTEM TO BE REMOVED AND PROPERLY DISPOSED OF.
- 7 PROTECT EXISTING CONCRETE PAVEMENT IN
- 8 PROTECT EXISTING BUILDING IN PLACE.
- 9 EXISTING CATCH BASIN TO REMAIN AND BE PROTECTED IN PLACE.
- (10) EXISTING STORMDRAIN LINE TO REMAIN AND BE PROTECTED IN PLACE.
- (11) EXISTING WATER TANK TO REMAIN AND BE PROTECTED IN PLACE.
- (12) EXISTING SEPTIC TANK TO REMAIN AND BE PROTECTED IN PLACE.
- (13) SAWCUT EXISTING PCC. ----
- (14) CONTRACTOR TO REMOVE AND REPLACE DAMAGED CHAINLINK FENCE. CONTRACTOR TO FIELD VERIFY AND MATCH EXISTING HEIGHT OF FENCE.
- 15) PROTECT EXISTING HISTORIC ROCK WALL IN PLACE.
- (16) PROTECT EXISTING ELECTRICAL RISER IN PLACE.
- (17) EXISTING BOULDER TO REMAIN AND BE PROTECTED IN PLACE.
- (18) PROTECT EXISTING TREE IN PLACE.
- (19) EXISTING RIP-RAP TO REMAIN PROTECTED IN PLACE.
- 20 EXISTING FENCE TO REMAIN AND BE PROTECTED IN PLACE.
- (21) EXISTING BOLLARD TO REMAIN AND BE PROTECTED IN PLACE.
- (22) EXISTING SIGN TO BE REMOVED AND SALVAGED FOR RELOCATION.
- 23) EXISTING FIRE HOSE RACK TO REMAIN AND BE PROTECTED IN PLACE.
- (24) EXISTING VALVES TO REMAIN AND BE PROTECTED IN PLACE.
- (25) EXISTING FIRE DEPARTMENT CONNECTION UTILITY TO REMAIN AND BE PROTECTED IN PLACE.
- 26 EXISTING WALL TO BE REMOVED.
- (27) EXISTING LEACH FIELD TO REMAIN AND BE PROTECTED IN PLACE.
- (28) EXISTING BOLLARD TO BE REMOVED AND SALVAGED FOR RELOCATION.
- (54) PROTECT EXISTING VINYL/ WOOD WALKWAY AT DOORWAY ENTRANCE.
- (55) REMOVE EXISTING STONE STEPS.



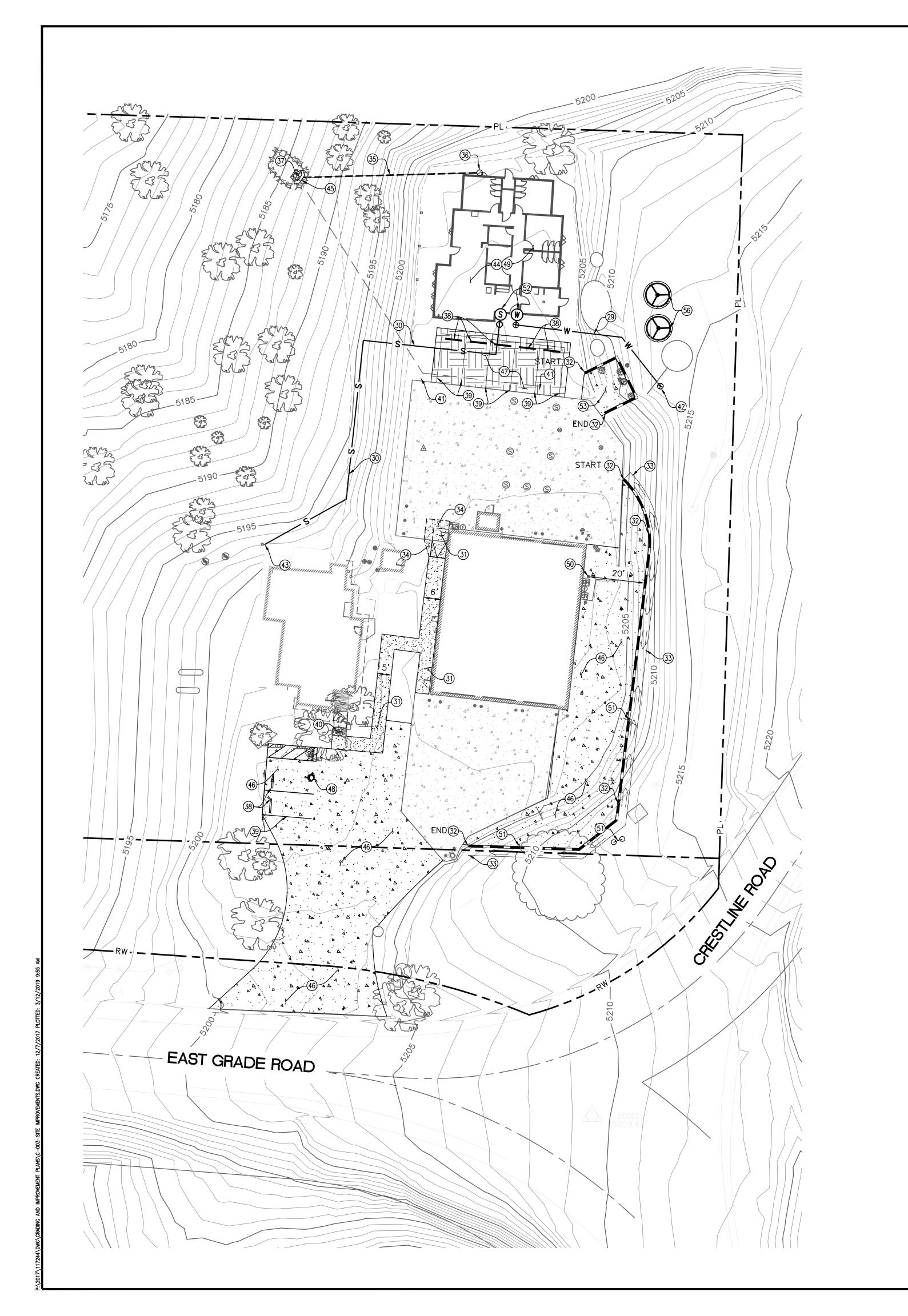
X OF X SHEETS

C-002

T (858) 292-7770 4740 Ruffner Street San Diego, CA 92111

SCALE 1" = 20'

Nasiand Surveying



CONSTRUCTION NOTES

(31) CONSTRUCT 4.5" CONCRETE SIDEWALK WITH REINFORCEMENT, NO.3 BAR 18" (1997) O.C. BOTH DIRECTIONS.

(32) CONSTRUCT TYPE 2 MASONRY RETAILING WALL PER SDRSD C-02. (33) CONSTRUCT TYPE B BROW DITCH PER SDRSD D−75. :===========

(34) CONSTRUCT WARPED CONCRETE RAMP TO CONNCECT THE ADA PATH OF TRAVEL TO EXISTING CONCRETE. SLOPED AT 5:1 MAX TO MATCH EXISTING.

(35) INSTALL 6" PVC STORM DRAIN. - - -

(36) CONNECT ROOF DRAIN TO PROPOSED 50 GALLON RAIN BARREL.

(37) INSTALL 1/4 TON RIP−RAP ENERGY DISSIPATER PER SDRSD D−40.

(38) INSTALL CONCRETE WHEEL STOP PER SAN DIEGO COUNTY PARKING DESIGN MANUAL.

(39) PAINT 4" WIDE TRAFFIC WHITE STRIPING. SEE PLAN FOR DIMENSIONS.

(40) INSTALL YELLOW ARMOR TILE OR APPROVED EQUAL CAST IN PLACE DETECTABLE WARNING SURFACE.

(41) PAINT STORM DRAIN INLET STENCIL PER THE COUNTY OF SAN DIEGO BMP DESIGN MANUAL.

(42) CONNECT TO EXISTING 1" WATER LINE.

(43) CONNECT PROPOSED SEWER LATERAL TO EXISTING SEPTIC STUB.

(44) REMEDIAL GRADING FOR BUILDING PAD PER GEOTECHNICAL RECOMMENDATIONS.

45 INSTALL WING HEADWALL PER SDRSD D-34.

47 INSTALL 7.5" OF CRUSHED ROCK LAYER ON TOP OF COMPACTED NATIVE SOIL.

48 ADA VAN ACCESSIBLE STALL STRIPING AND SIGNAGE PER SDRSD M-27A AND M-28B.

(49) PROPOSED FIRE STATION 79 LIVING QUARTERS. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.

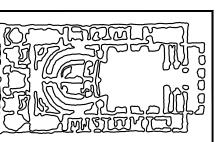
(50) RE-INSTALL SALVAGED BOLLARD.

(51) RE-INSTALL SALVAGED SIGN.

(52) REFER TO MECHANICAL PLANS FOR SEWER AND WATER CONNECTION TO THE PROPOSED BUILDING.

(53) CONSTRUCT CONCRETE PAD FOR ELECTRICAL GENERATOR.

(56) INSTALL ABOVE GROUND WATER TANK.





SCALE 1" = 20'

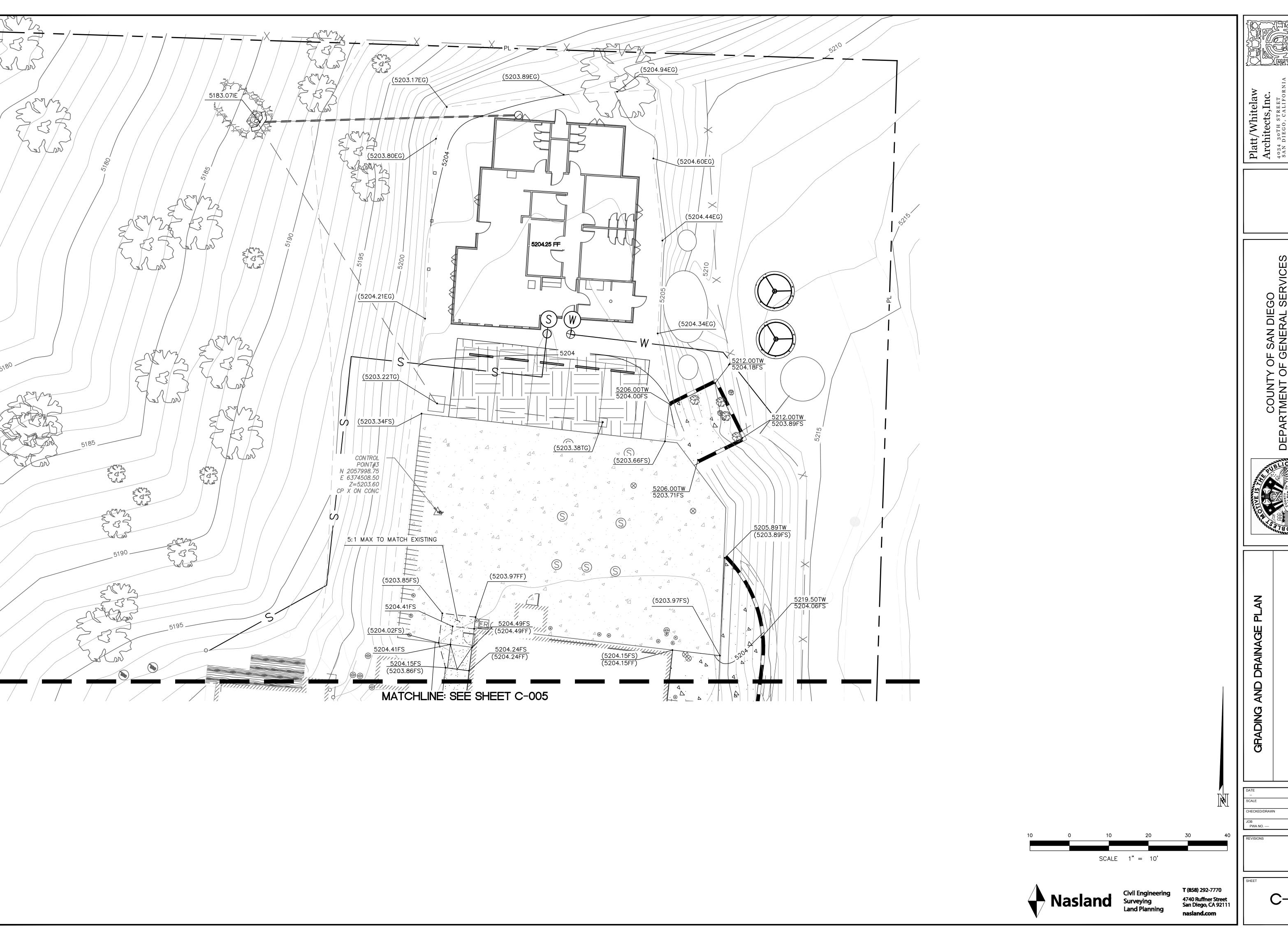
Nasland Civil Engineering
Surveying
Land Planning

C-003

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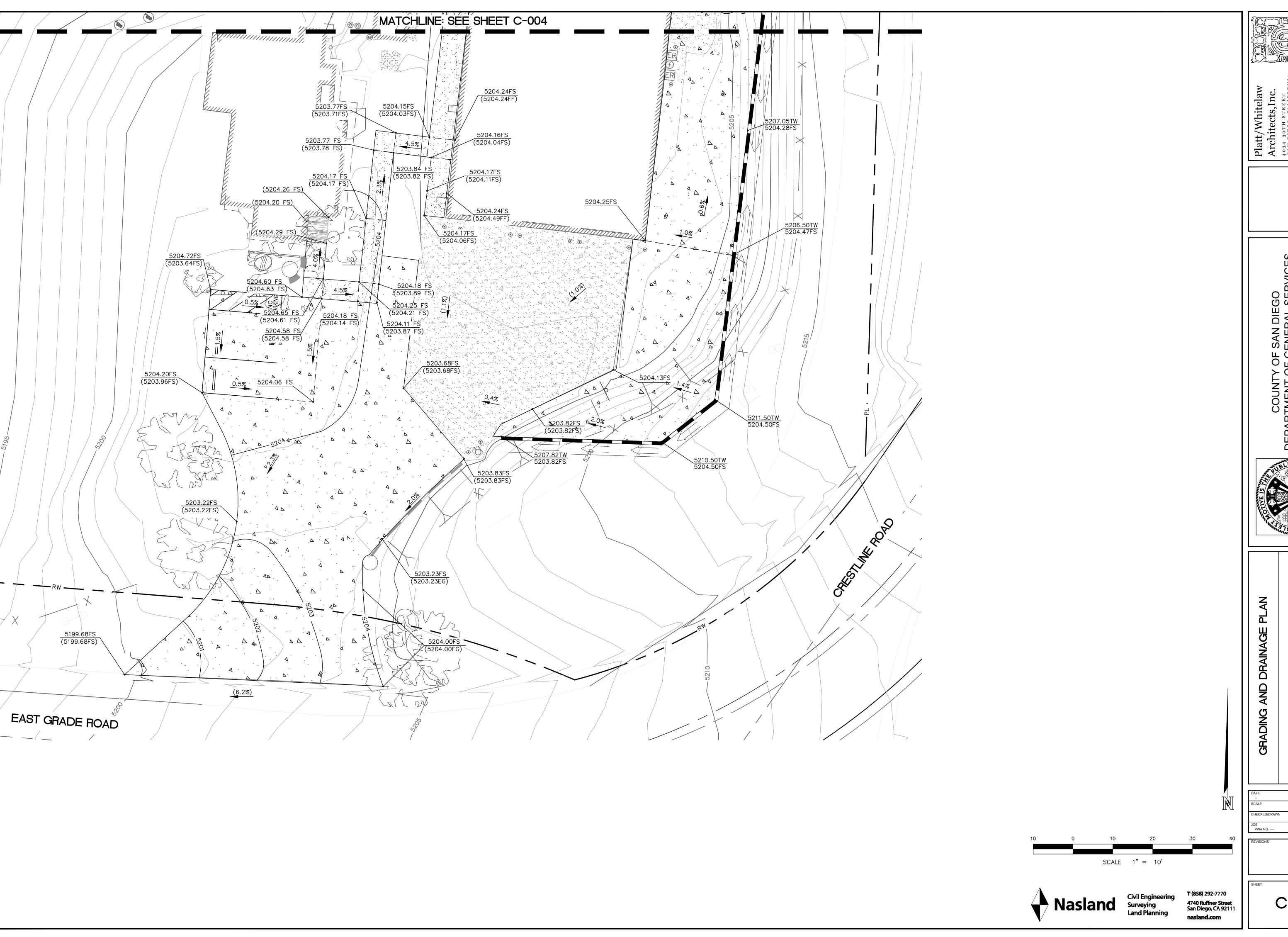
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QUARTERS STATION 79 LIVING

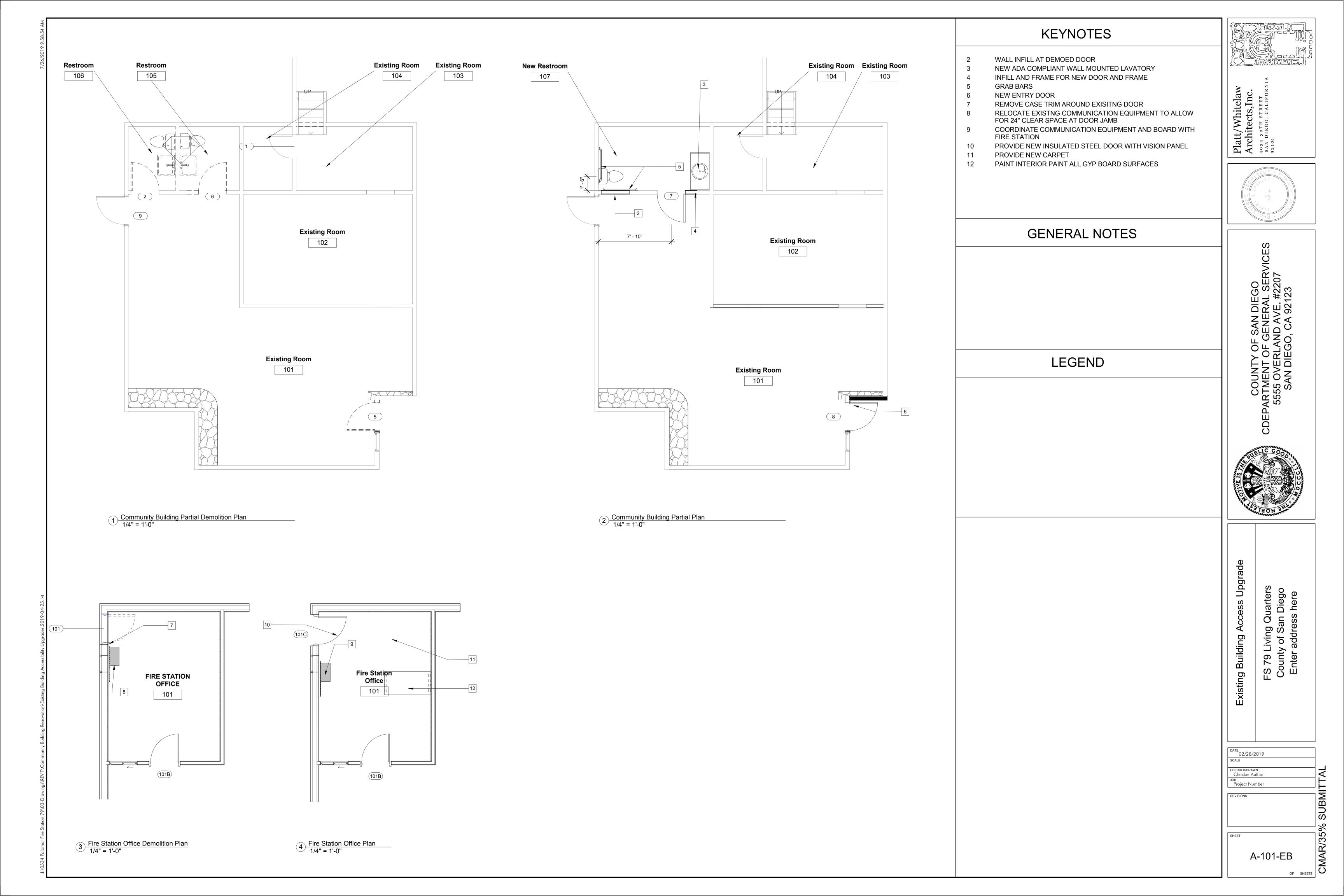
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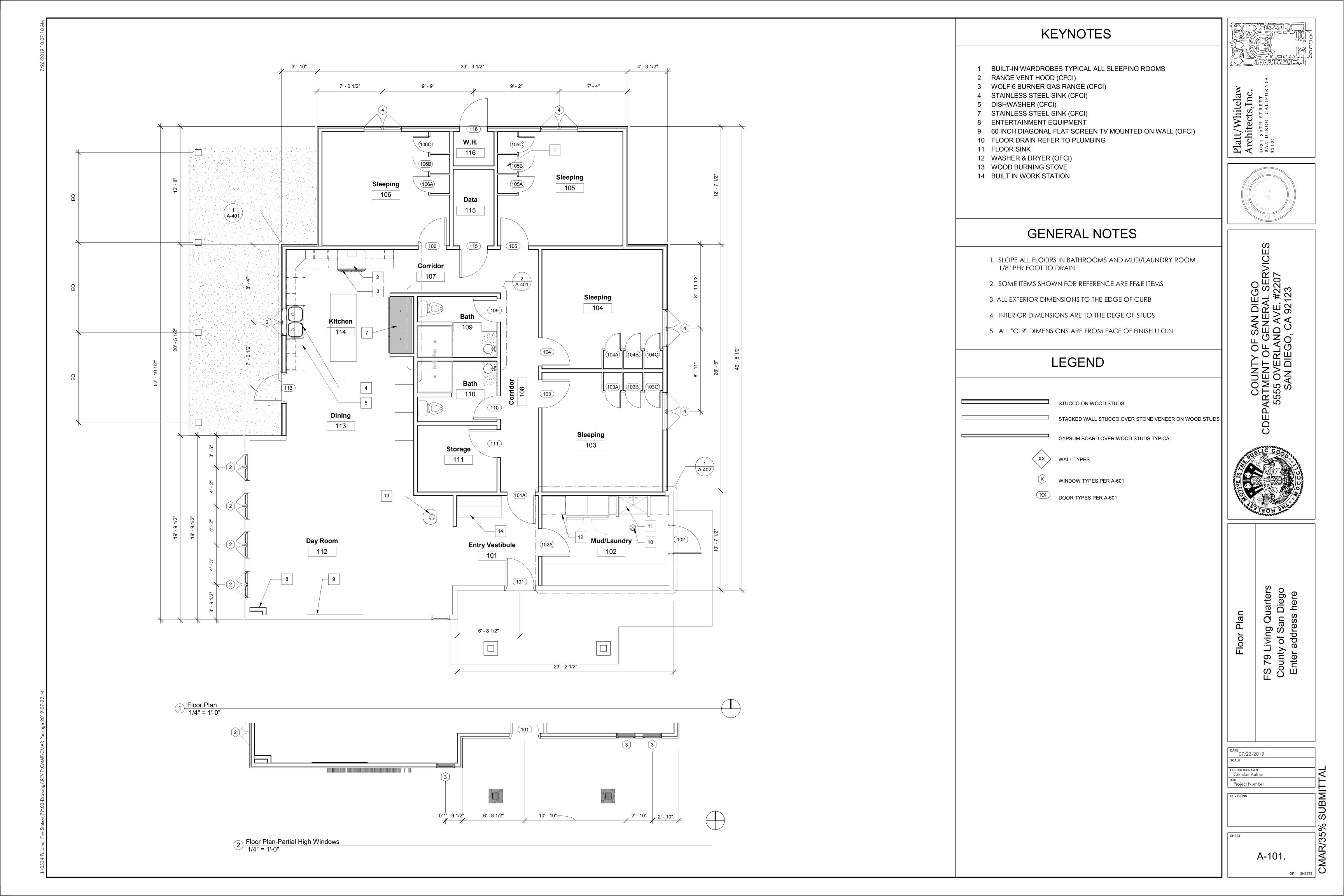


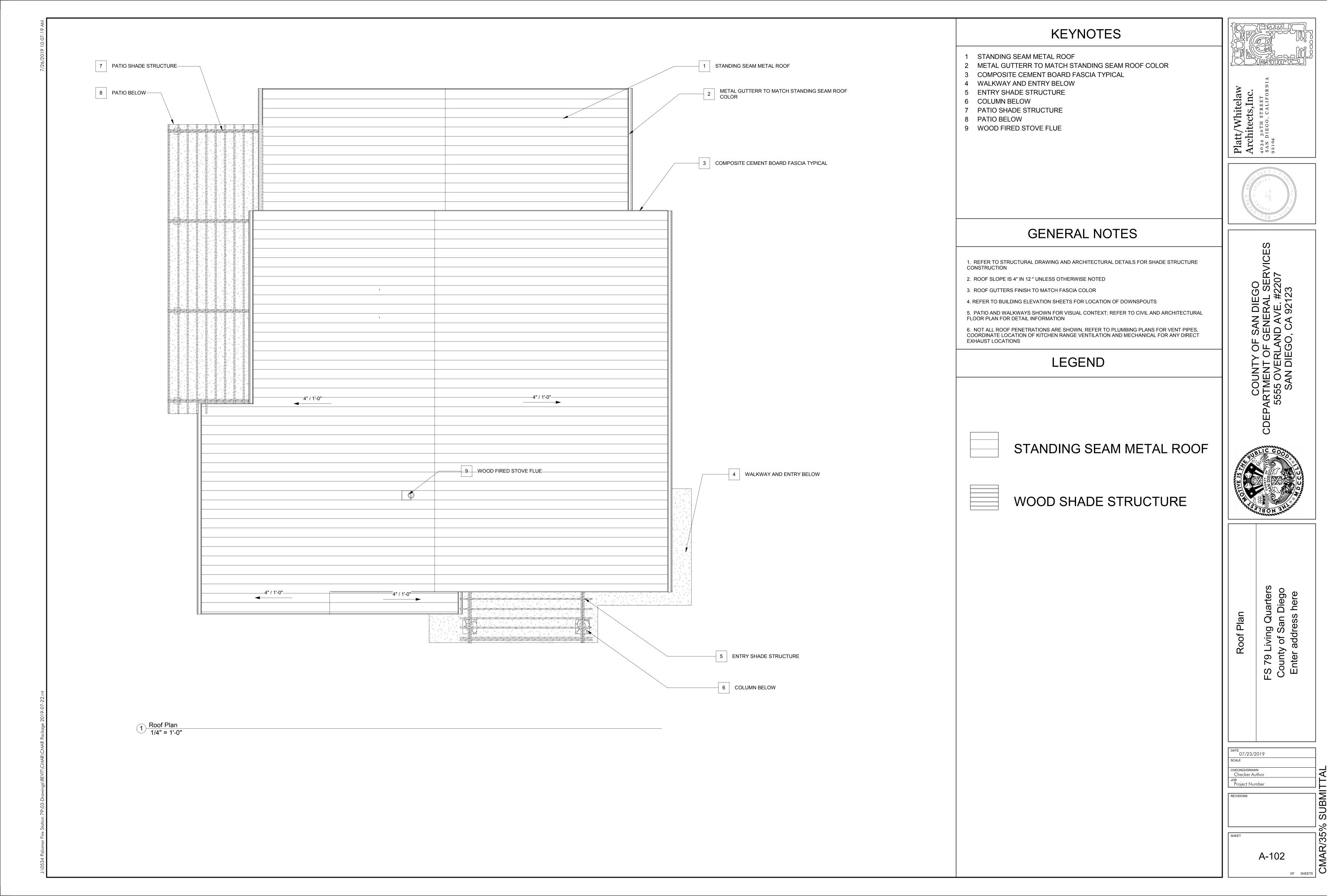
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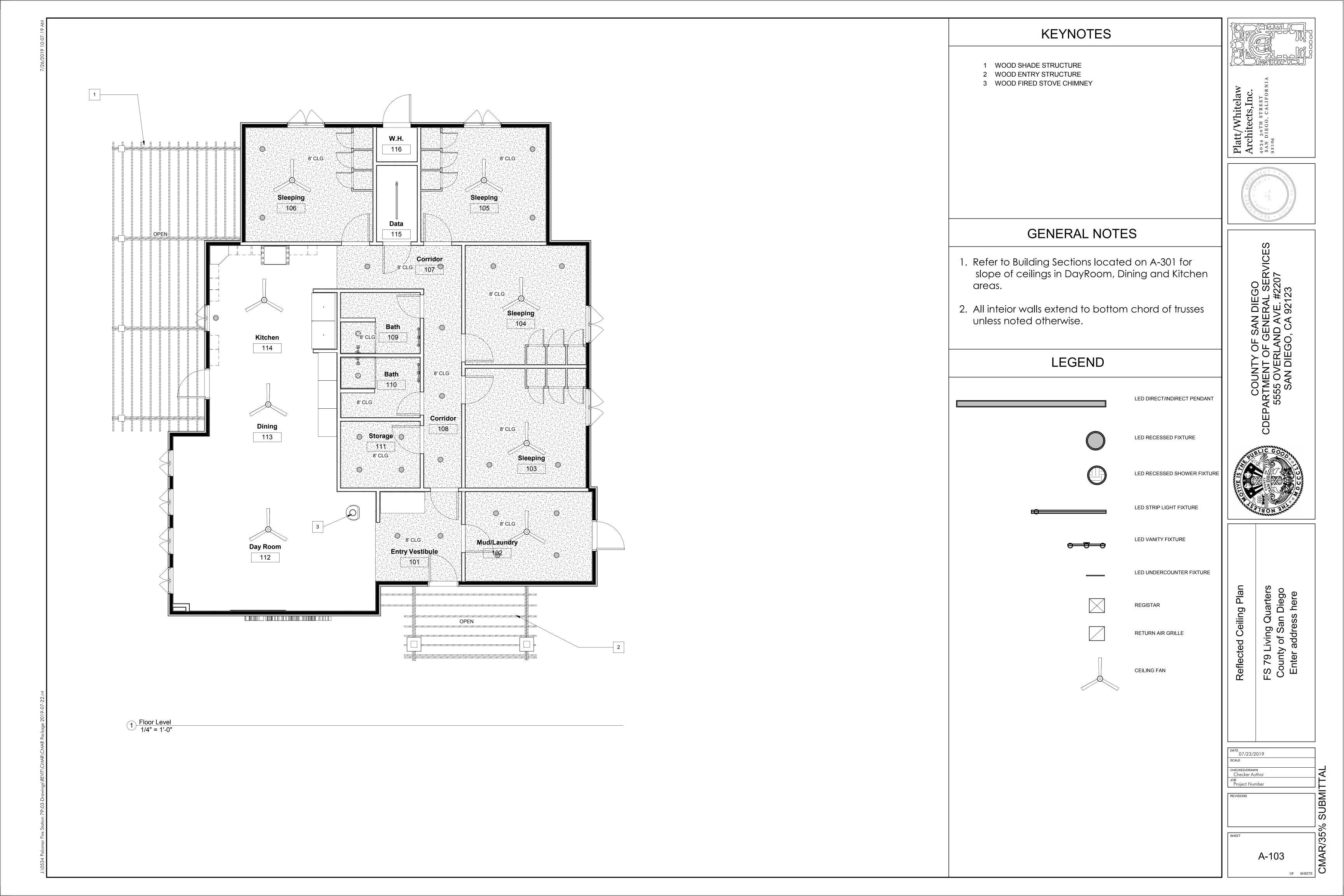


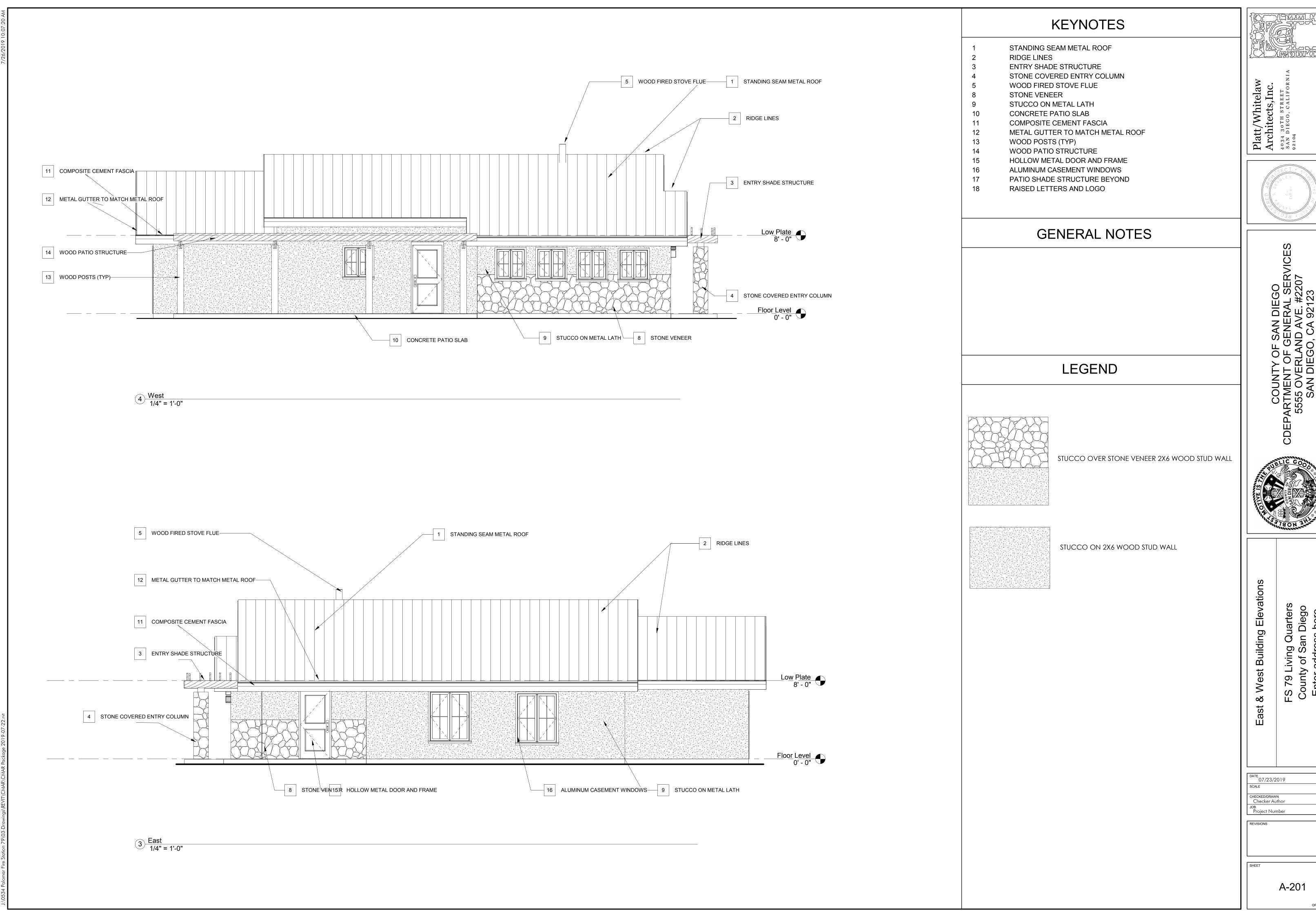
C-005 X OF X SHEETS





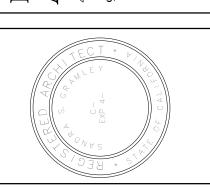






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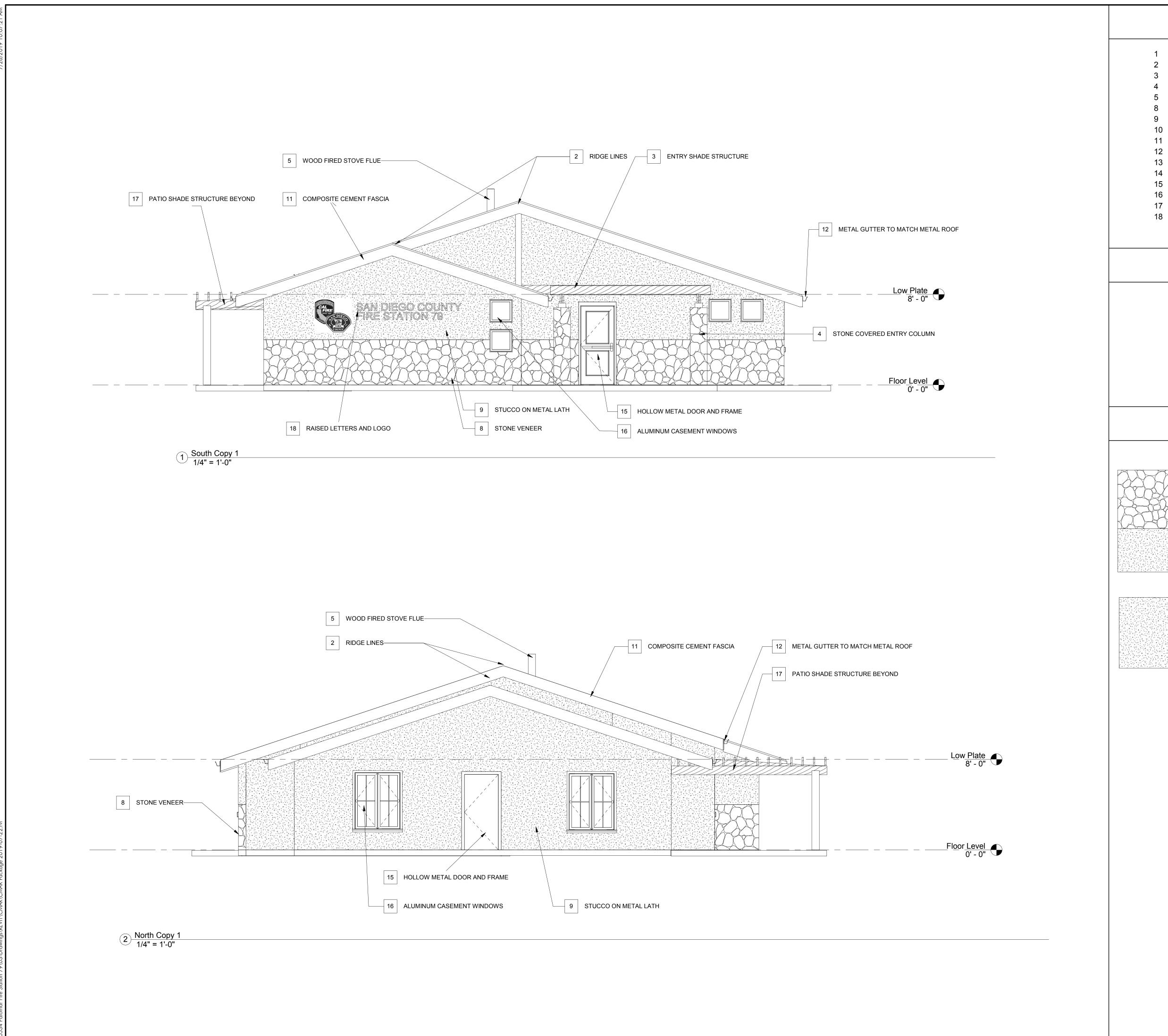
4034 30TH STREET SAN DIEGO, CALIFORNI 92104



FS 79 Living Quarters County of San Diego Enter address here

DATE 07/23/2019

A-201



KEYNOTES

STANDING SEAM METAL ROOF

RIDGE LINES

ENTRY SHADE STRUCTURE STONE COVERED ENTRY COLUMN

> STUCCO ON METAL LATH CONCRETE PATIO SLAB

WOOD FIRED STOVE FLUE STONE VENEER

COMPOSITE CEMENT FASCIA

METAL GUTTER TO MATCH METAL ROOF

WOOD POSTS (TYP) WOOD PATIO STRUCTURE

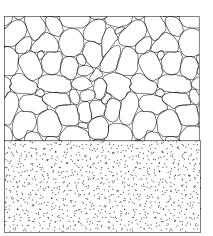
HOLLOW METAL DOOR AND FRAME ALUMINUM CASEMENT WINDOWS

PATIO SHADE STRUCTURE BEYOND

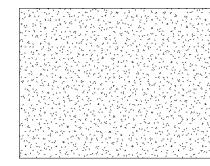
RAISED LETTERS AND LOGO

GENERAL NOTES

LEGEND



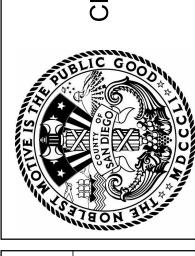
STUCCO OVER STONE VENEER 2X6 WOOD STUD WALL



STUCCO ON 2X6 WOOD STUD WALL

COUNTY OF SAN D CDEPARTMENT OF GENER 5555 OVERLAND AVE SAN DIEGO, CA 93

Platt/Whitelaw Architects, Inc. 4034 30TH STREET SAN DIEGO, CALIFORNI 92104



I DIEGO ERAL SERVICES VE. #2207 .92123

& South Building Elevatio FS 79 Living Quarters County of San Diego Enter address here

DATE 07/23/2019

A-202

STRUCTURAL NOTES, SCHEDULES, AND STATEMENT OF SPECIAL INSPECTIONS

<u>GENERAL</u>

- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO STARTING WORK. THE ENGINEER OF RECORD SHALL BE NOTIFIED OF ANY DISCREPANCIES FOUND. IN NO CASE SHALL WORKING DIMENSIONS BE SCALED FROM PLANS, SECTIONS OR DETAILS ON THE DRAWINGS.
- BEFORE COMMENCING EXCAVATION, THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UNDERGROUND UTILITIES, VALVE PITS OR VAULTS AND SHALL NOT PERFORM WORK THAT WILL DAMAGE THEM OR INTERFERE WITH
- STRUCTURAL DIMENSIONS CONTROLLED BY OR RELATED TO ARCHITECTURAL APPURTENANCES OR MECHANICAL OR ELECTRICAL EQUIPMENT SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
- THE CONTRACT STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT EXISTING AND NEW STRUCTURES DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING, ET CETERA FOR ALL CONSTRUCTION PHASE LOADS.

REINFORCED CONCRETE

- CONCRETE SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH AT 28 DAYS OF 4000 PSI, UNLESS OTHERWISE NOTED.
- MIX DESIGN REQUIREMENTS: CEMENT SHALL BE TYPE II/V; MAXIMUM SLUMP SHALL BE 4" (MAXIMUM SLUMP OF 8" SHALL BE PERMITTED AFTER INTRODUCTION OF A WATER-REDUCING OR SUPER-PLASTICIZER ADMIXTURE); MAXIMUM AGGREGATE SIZE SHALL BE 1"; MAXIMUM WATER-CEMENT RATIO SHALL BE 0.45, WEIGHT OF FINE AGGREGATES SHALL NOT EXCEED 43% OF TOTAL WEIGHT OF FINE AND COARSE AGGREGATES COMBINED, THOROUGHLY CONSOLIDATE CONCRETE USING MECHANICAL VIBRATORS.
- ALL REINFORCING STEEL, ANCHOR BOLTS, DOWELS AND INSERTS SHALL BE WELL-SECURED IN POSITION PRIOR TO PLACING CONCRETE.
- PROVIDE A 3/4" CHAMFER ON ALL EXPOSED CORNERS UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- ALL COLD JOINTS SHALL BE ROUGHENED AND CLEANED PRIOR TO PLACING CONCRETE.
- CONSTRUCTION JOINTS IN CONCRETE INDICATED WITH A ROUGH, CLEAN SURFACE SHALL HAVE A 1/4" MINIMUM AMPLITUDE.

REINFORCING STEEL

- STEEL BAR REINFORCING SHALL CONFORM TO ASTM A615, GRADE 60, WELDING OF REINFORCING STEEL SHALL NOT BE PERMITTED.
- BAR LAP SPLICE LENGTHS FOR BARS INSTALLED IN CONCRETE SHALL BE 48 BAR DIAMETERS UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- BAR LAP SPLICES FOR EPOXY COATED BARS SHALL BE 72 BAR DIAMETERS.
- MINIMUM CONCRETE COVER FOR REINFORCING STEEL SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED ON THE DRAWINGS:

CONCRETE CAST AGAINST EARTH	3"
FORMED CONCRETE EXPOSED TO EARTH	2"
CONCRETE EXPOSED TO WEATHER	2"
ALL OTHER	1 1/3

ALL DETAILING, FABRICATION AND ERECTION OF REINFORCING STEEL SHALL CONFORM TO THE LATEST EDITION OF ACI 315, DETAILS AND DETAILING OF CONCRETE REINFORCEMENT.

STRUCTURAL STEEL

ANGLES, CHANNELS, PLATES, BARS AND RODS SHALL CONFORM TO ASTM A36 UNLESS OTHERWISE NOTED ON THE DRAWINGS.

- HOLLOW STRUCTURAL SECTIONS (RECTANGULAR AND ROUND) SHALL CONFORM TO ASTM A500, GRADE B.
- ANCHOR BOLTS SHALL BE HEADED ANCHOR BOLTS AND SHALL CONFORM TO ASTM F1554, GRADE 36, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- BOLTS SHALL CONFORM TO ASTM F3125, GRADE A325, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- BOLT HOLES SHALL BE 1/16" OVERSIZE UNLESS OTHERWISE NOTED ON THE DRAWINGS. BURNING OF BOLT HOLES
- WELDING SHALL BE PERFORMED BY AWS QUALIFIED WELDERS IN CONFORMANCE WITH THE FOLLOWING, UNLESS OTHERWISE NOTED:

a. CARBON STEEL:

GALVANIZED AS FOLLOWS:

GALVANIZING, STEEL EXPOSED TO WEATHER AND STEEL INDICATED AS GALVANIZED ON THE DRAWINGS SHALL BE

AWS D1.1, E70 SERIES ELECTRODES

- a. STEEL SECTIONS, PLATES, BARS AND RODS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION IN
- CONFORMANCE WITH ASTM A123.
- c. GALVANIZED COATINGS DAMAGED BY TRANSPORTING, HANDLING, CUTTING, BOLTING OR WELDING SHALL BE REPAIRED USING ASTM A780 ZINC-RICH PAINT FOR GALVANIZING.

b. STEEL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN CONFORMANCE WITH ASTM A153.

<u>.UMBER</u>

- WOOD FRAMING SHALL CONFORM TO THE "LUMBER SCHEDULE" UNLESS OTHERWISE NOTED. GRADING SHALL BE IN CONFORMANCE WITH THE 2016 EDITION OF THE CALIFORNIA BUILDING CODE.
- MOISTURE CONTENT OF WOOD SHALL NOT EXCEED 19% BEFORE IT IS ENCLOSED IN CONSTRUCTION. BUILDING MATERIALS WITH VISIBLE SIGNS OF WATER DAMAGE SHALL NOT BE USED IN CONSTRUCTION. MOISTURE CONTENT SHALL BE VERIFIED TO BE IN COMPLIANCE WITH THE FOLLOWING:
- a. MOISTURE CONTENT SHALL BE DETERMINED WITH EITHER A PROBE-TYPE OR CONTACT-TYPE MOISTURE METER.
- b. MOISTURE READINGS SHALL BE TAKEN AT A POINT 2 FEET TO 4 FEET FROM THE GRADE STAMPED END OF EACH PIECE OF WOOD TO BE VERIFIED.
- c. AT LEAST THREE RANDOM MOISTURE READINGS SHALL BE PERFORMED ON WALL, ROOF AND FLOOR FRAMING WITH DOCUMENTATION ACCEPTABLE TO THE BUILDING DEPARTMENT PROVIDED AT THE TIME OF APPROVAL TO ENCLOSE THE WALL, ROOF AND FLOOR FRAMING.
- MINIMUM NAILING AND BOLTING OF WOOD FRAMING MEMBERS AND WOOD SHEATHING SHALL BE AS INDICATED IN THE "WOOD FRAMING FASTENING SCHEDULE" UNLESS OTHERWISE NOTED.
- ALL NAILS SHALL BE <u>GALVANIZED COMMON WIRE NAILS</u>, UNLESS OTHERWISE NOTED. NAILS IN CONTACT WITH FIRE RETARDANT TREATED OR PRESSURE TREATED WOOD SHALL BE HOT DIPPED GALVANIZED (ASTM A153) OR STAINLESS STEEL (TYPE 304 OR 316). WHEN REQUIRED TO PREVENT SPLITTING, PRE-DRILL FOR NAILS WITH 1/8" DIAMETER DRILL
- BOLTS AND LAG SCREWS SHALL CONFORM TO ASTM A307 AND ANSI/ASME STANDARD B18.2.1-1981, <u>AND SHALL BE</u> GALVANIZED. BOLTS AND LAG SCREWS IN CONTACT WITH FIRE RETARDANT TREATED OR PRESSURE TREATED WOOD SHALL BE HOT DIPPED GALVANIZED (ASTM A153) OR STAINLESS STEEL (TYPE 304 OR 316). STANDARD WASHERS SHALL BE PROVIDED UNDER HEAD AND NUT OF ALL BOLTS IN WOOD FRAMING. BOLT THREADS SHALL NOT BEAR ON WOOD. DRILLED HOLES FOR BOLTS SHALL BE 1/16" LARGER IN DIAMETER THAN BOLT.
- ANCHOR BOLTS IN CONTACT WITH FIRE RETARDANT TREATED OR PRESSURE TREATED WOOD SHALL BE HOT DIPPED ZINC COATED GALVANIZED (ASTM A153 OR ASTM B695, CLASS 55 FOR MECHANICALLY DEPOSITED ZINC COATINGS) OR STAINLESS STEEL (TYPE 304 OR 316). ANCHOR BOLT PLATE WASHERS SHALL BE HOT DIPPED GALVANIZED (ASTM A153). ANCHOR BOLT THREADS SHALL NOT BEAR ON WOOD. DRILLED HOLES FOR ANCHOR BOLTS SHALL BE 1/16" LARGER IN DIAMETER THAN ANCHOR BOLT.
- ALL BOLTS SHALL BE RETIGHTENED IMMEDIATELY PRIOR TO CLOSING IN FRAMING.
- METAL FRAMING CONNECTORS SHALL BE "SIMPSON" BRAND OR ENGINEER APPROVED EQUIVALENT, AND SHALL BE GALVANIZED. METAL FRAMING CONNECTORS IN CONTACT WITH FIRE RETARDANT TREATED OR PRESSURE TREATED WOOD SHALL BE HOT DIPPED GALVANIZED (ASTM A123) OR STAINLESS STEEL (TYPE 316L), METAL FRAMING CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S LATEST PUBLISHED INSTALLATION INSTRUCTIONS USING THE LARGER SIZE AND QUANTITY OF FASTENERS INDICATED, UNLESS OTHERWISE NOTED.

FOUNDATION

THE ALLOWABLE SOIL BEARING PRESSURE USED FOR DESIGN IS 1.500 PSF FOR GRAVITY LOADS AND 2,000 PSF FOR LOADS WHICH INCLUDE WIND OR SEISMIC LOADING ASSUMING CLASS 5 FOUNDATION MATERIAL PER TABLE 1806.2 OF THE 2016 CALIFORNIA BUILDING CODE.

115 MPH

FOUNDATION DESIGN PARAMETERS, CBC TABLE 1806.2:

SOIL TYPE: CLASS 5 (CL, ML, MH OR CH) ALLOWABLE BEARING PRESSURE: 1,500 PSF PASSIVE SOIL RESISTANCE: 150 PCF

DESIGN CRITERIA

- 1. DESIGN BUILDING CODE 2016 CALIFORNIA BUILDING CODE
- RISK CATEGORY
- 3. LIVE LOAD: 20 PSF WIND DESIGN CRITERIA:
- WIND EXPOSURE 5. ROOF SNOW LOAD 50 PSF
- 6. SEISMIC DESIGN CRITERIA:

BASIC WIND SPEED

- SHORT PERIOD MCE SPECTRAL RESPONSE ACCELERATION, Ss 1.696 1 SECOND PERIOD MCE SPECTRAL RESPONSE ACCELERATION, S1 0.662 SHORT PERIOD MCE SPECTRAL
- RESPONSE ACCELERATION, SMS 1.696 1 SECOND PERIOD MCE SPECTRAL RESPONSE ACCELERATION, SMI
- SITE CLASS SEISMIC DESIGN CATEGORY DESIGN SHORT PERIOD MCE SPECTRAL
- DESIGN 1 SECOND PERIOD MCE SPECTRAL RESPONSE ACCELERATION, Son BUILDING SEISMIC FACTORS

RESPONSE ACCELERATION, SDS

RESPONSE MODIFICATION FACTOR, R STRUCTURAL OVERSTRENGTH FACTOR, Ω_{\circ} DEFLECTION AMPLIFICATION FACTOR, Ca SEISMIC IMPORTANCE FACTOR, I 0.261 W HORIZONTAL STATIC BASE SHEAR, Cs

SPECIAL INSPECTION AND TESTING

VERTICAL SEISMIC LOAD EFFECT, EV

1. SPECIAL INSPECTION IS REQUIRED PER CHAPTER 17 OF THE 2016 CALIFORNIA BUILDING CODE AND AS SUMMARIZED BELOW. THE OWNER SHALL EMPLOY A SPECIAL INSPECTION AGENCY APPROVED BY THE BUILDING DEPARTMENT PRIOR TO THE START OF WORK. COPIES OF ALL INSPECTION REPORTS SHALL BE SUBMITTED TO THE ARCHITECT OF RECORD, STRUCTURAL ENGINEER OF RECORD, AND BUILDING INSPECTOR IN A TIMELY MANNER.

0.226 D

1.131

- THE SPECIAL INSPECTIONS IDENTIFIED ON THE PLANS ARE IN ADDITION TO, AND NOT A SUBSTITUTE FOR, THOSE INSPECTIONS REQUIRED TO BE PERFORMED BY A BUILDING INSPECTOR.
- CONTINUOUS INSPECTION SHALL BE PROVIDED DURING THE PERFORMANCE OF WORK REQUIRING SPECIAL INSPECTION, UNLESS OTHERWISE NOTED. WHEN WORK IN MORE THAN ONE CATEGORY OF WORK REQUIRING SPECIAL INSPECTION IS TO BE PERFORMED SIMULTANEOUSLY, OR THE GEOGRAPHIC LOCATION OF THE WORK IS SUCH THAT IT CANNOT BE CONTINUOUSLY OBSERVED, IT SHALL BE THE RESPONSIBILITY OF THE AGENT TO EMPLOY A SUFFICIENT NUMBER OF SPECIAL INSPECTORS TO ASSURE THAT ALL WORK IS CONTINUOUSLY INSPECTED IN ACCORDANCE WITH THOSE PROVISIONS.
- 4. OFF-SITE FABRICATION: SPECIAL INSPECTION IS REQUIRED FOR FABRICATION OF MEMBERS AND ASSEMBLIES PERFORMED IN A FABRICATION SHOP NOT APPROVED BY THE BUILDING DEPARTMENT. FABRICATOR SHALL BE REGISTERED AND APPROVED BY THE BUILDING DEPARTMENT FOR THE FABRICATION OF MEMBERS AND ASSEMBLIES ON THE PREMISES OF THE FABRICATOR'S SHOP.
- 5. THE CONTRACTOR SHALL NOTIFY THE SPECIAL INSPECTOR OR INSPECTION AGENCY AT LEAST ONE WORKING DAY PRIOR TO PERFORMING ANY WORK THAT REQUIRES SPECIAL INSPECTION.
- 6. THE CONTRACTOR SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY FOR CONSTRUCTION OF ITEMS LISTED IN THE STATEMENT OF SPECIAL INSPECTIONS PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR'S STATEMENT OF RESPONSIBILITY SHALL CONTAIN: (1) ACKNOWLEDGEMENT OF AWARENESS OF THE SPECIAL REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS; (2) ACKNOWLEDGEMENT THAT CONTROL WILL BE EXERCISED TO OBTAIN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS APPROVED BY THE BUILDING OFFICIAL; (3) PROCEDURES FOR EXERCISING CONTROL WITHIN THE CONTRACTOR'S ORGANIZATION; (4) THE METHOD AND FREQUENCY OF REPORTING AND DISTRIBUTION OF THE SPECIAL INSPECTION REPORTS; AND (5) IDENTIFICATION AND QUALIFICATIONS OF THE PERSON OR PERSONS EXERCISING SUCH CONTROL AND THEIR POSITION IN THE ORGANIZATION.

STATEMENT OF SPECIAL INSPECTIONS

CBC REF	DESCRIPTION OF TYPE OF INSPECTION REQUIRED, LOCATION, REMARKS, ET CETERA	DESIGN STRENGTH
1705.3	CONCRETE CONSTRUCTION. CONTINUOUS INSPECTIONS: INSPECT BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE; AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE; INSPECTION OF CONCRETE FOR PROPER APPLICATION TECHNIQUES. PERIODIC INSPECTIONS: INSPECTION OF REINFORCING STEEL AND PLACEMENT; VERIFICATION OF USE OF REQUIRED DESIGN MIX; INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES; INSPECT FORMWORK FOR SHAPE, LOCATION, AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	fc = 4000 PSI
1705.3	POST-INSTALLED ANCHORS IN CONCRETE (SCREW ANCHOR). CONTINUOUS INSPECTIONS: VERIFY ANCHOR TYPE AND DIMENSIONS, HOLE CLEANLINESS, EMBEDMENT DEPTH, CONCRETE TYPE, CONCRETE COMPRESSIVE STRENGTH, DRILL BIT DIAMETER, HOLE DEPTH, EDGE DISTANCE, ANCHOR SPACING, CONCRETE THICKNESS, INSTALLATION TORQUE AND MAXIMUM IMPACT WRENCH TORQUE RATING. THE INSPECTOR SHALL ALSO VERIFY THAT THE ANCHOR INSTALLATION COMPLIES WITH THE ICC EVALUATION REPORT AND SIMPSON'S PUBLISHED INSTALLATION INSTRUCTIONS.	TITEN HD SCREW ANCHOR (ICC ESR-2713)
1705.6	PERIODIC INSPECTIONS: VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY; VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL; PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS; OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY PRIOR TO PLACEMENT OF COMPACTED FILL. CONTINUOUS INSPECTIONS: VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	SEE FOUNDATION NOTES THIS SHEET

LUMBER SCHEDULE

LUMBER SCHEDULE		
MEMBER	SPECIES	GRADE
2x4 STUDS, PLATES, STRIPPING, MISC CONCEALED FRAMING, BLKG, & FIRE STOPPING	DOUGLAS FIR/LARCH	CONSTRUCTION GRADE (NO 1 FOR STUDS OVER 10'-0" HIGH)
SILLS ON CONCRETE OR MASONRY	PRESSURE TREATED DOUGLAS FIR/LARCH	NO 2
POSTS 5x5 & LARGER	DOUGLAS FIR/LARCH	NO 1 POSTS & TIMBERS
2x AND 3x (LARGER THAN 4" WIDE) STUDS, PLATES AND JOISTS	DOUGLAS FIR/LARCH	NO 1
ALL 4x DIMENSIONED LUMBER	DOUGLAS FIR/LARCH	NO 1
BEAMS & STRINGERS 5x5 AND LARGER	DOUGLAS FIR/LARCH	NO 1 BEAMS & STRINGERS
LAMINATED VENEER LUMBER (LVL)	PER MANUFACTURER	2.0E - 2900Fb
WALL SHEATHING, NON-SHEAR WALLS	PER MANUFACTURER	APA RATED SHEATHING (PS 1 OR PS 2) EXPOSURE 1 MIN SPAN RATING = 24/0
WALL SHEATHING, SHEAR WALLS	PER MANUFACTURER	APA STRUCTURAL I SHEATHING (PS 1 OR PS 2), EXPOSURE 1 MIN SPAN RATING = 24/0
ROOF SHEATHING	PER MANUFACTURER	APA RATED SHEATHING (PS 1 OR PS 2), EXPOSURE 1 MIN SPAN RATING = 24/16
EXTERIOR FRAMING	PRESSURE-TREATED DOUGLAS FIR/LARCH	NO 1

WOOD FRAMING FASTENING SCHEDULE

(CBC TABLE 2304.9.1)

CONNICATION

CONNECTION	FASTENING	LOCATION
JOIST TO SILL OR GIRDER	(4) 8d COMMON (2 1/2" x 0.131") (4) 3" x 0.131" NAILS (4) 3" 14 GA STAPLES	TOENAIL
BRIDGING TO JOIST	(2) 8d COMMON (2 1/2" x 0.131") (2) 3" x 0.131" NAILS (2) 3" 14 GA STAPLES	TOENAIL EACH END
TOP PLATE TO STUD	(2) 16d COMMON (3 1/2" x 0.162") (3) 3" x 0.131" NAILS (3) 3" 14 GA STAPLES	END NAIL
DOUBLE STUDS	16d (3 1/2" x 0.135") @ 24" OC 3" x 0.131" NAILS @ 8" OC 3" 14 GA STAPLES @ 8" OC	FACE NAIL
DOUBLE TOP PLATES	16d (3 1/2" x 0.135") @ 16" OC 3" x 0.131" NAILS @ 12" OC 3" 14 GA STAPLES @ 12" OC	TYPICAL FACE NAIL
DOUBLE TOP PLATE LAP SPLICES	(8) 16d COMMON (3 1/2" x 0.162") (12) 3" x 0.131" NAILS (12) 3" 14 GA STAPLES	LAP SPLICES
BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE	(3) 8d COMMON (2 1/2" x 0.131") (3) 3" x 0.131" NAILS (3) 3" 14 GA STAPLES	TOENAIL
RIM JOIST TO TOP PLATE	8d (2 1/2" x 0.131") @ 6" OC 3" x 0.131" NAILS @ 6" OC 3" 14 GA STAPLES @ 6" OC	TOENAIL
CEILING JOISTS, LAPS OVER PARTITIONS (SEE CBC SECTION 2308.10.4.1, TABLE 2308.10.4.1)	(3) 16d COMMON (3 1/2" x 0.162") (4) 3" x 0.131" NAILS (4) 3" 14 GA STAPLES	FACE NAIL
CEILING JOISTS TO PARALLEL RAFTERS (SEE CBC SECTION 2308.10.4.1, TABLE 2308.10.4.1)	(3) 16d COMMON (3 1/2" x 0.162") (4) 3" x 0.131" NAILS (4) 3" 14 GA STAPLES	FACE NAIL
BUILT-UP CORNER STUDS	16d COMMON (3 1/2" x 0.162") 3" x 0.131" NAILS 3" 14 GA STAPLES	24" OC 16" OC 16" OC

STRUCTURAL ABBREVIATIONS FG

AND

ABOVE

ADDITIONAL

ALTERNATE

ANCHOR

BELOW

BLOCK

BEAM

BUILDING

BLOCKING

BOTTOM

BEARING

BETWEEN

CANTILEVER

CODE

CENTER LINE

CEILING

COLUMN

DOUBLE

DIAMETER

DIAGONAL

DIMENSION

DRAWING

EACH FACE

ELEVATION

ELEVATION

EMBEDMENT

EQUAL

EACH WAY

EXPANSION

EXISTING

EXPANSION JOINT

EDGE/END NAIL(ING)

DOWEL

EACH

DETAIL

CONCRETE

CONSTRUCTION

CONTINUOUS

CI FAR

ABV

ADDL

AEWS

ANCH

ARCH

BLDG

BLK

BLKG ВМ

BOP

BOTT

BRG

BTWN

CBC

CLG

CLR

COL

CONC

CONST

CONT

CTR

DBL

DET

DIA

DIAG

DIM

DWG

DWL

EΑ

ELEV

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ΕW

EXIST

EXP

LOCATION

EMBED

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APPROX

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FOW

FRMG

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GALV

HDG

HSS

INSP

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JST

LBS

LONG

MATI

MAX

MECH

MFR

MIN

MISC

MTL

NTS

OC

OD

 OH

OPN

PTDF

OPNG

LG

FT

FV

ANCHOR BOLT

AUTOMATIC END

APPROXIMATE(LY)

BOUNDARY NAILING

CALIFORNIA BUILDING

CONSTRUCTION JOINT

BOTTOM OF PIER

ARCHITECTURAL

WELDED STUD(S)

EXTERIOR	PERP	PERPENDICULAR
FINISH FLOOR	PLF	POUNDS PER LINEAL
FINISH GRADE		FOOT
FINISH	PSF	POUNDS PER SQUAI
FLOOR		FOOT
FIELD NAIL(ING)	PSI	POUNDS PER SQUAI
FOUNDATION		INCH
FACE OF CONCRETE	REINF	REINFORCED,
FACE OF STUD		REINFORCING
FACE OF WALL	REQD	REQUIRED
FRAMING	RET	RETAINING
FOOT	SC	SCALE
FOOTING	SCHED	SCHEDULE
FIELD VERIFY	SCW	SCREW
GAGE	SHT	SHFFT

T&G

THD

TOP

HEINE	REINFORGED,
	REINFORCING
REQD	REQUIRED
RET	RETAINING
SC	SCALE
SCHED	SCHEDULE
SCW	SCREW
SHT	SHEET
SHTG	SHEATHING
SIM	SIMILAR
SMS	SHEET METAL SCREW
SP	SPECIAL
SPCG	SPACING
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
STIFF	STIFFENER
STL	STEFL
STRUC	STRUCTURAL
SYMM	SYMMETRICAL
T&B	TOP AND BOTTOM
IGD	TOI AIND BOTTON

TOP AND BOTTOM TONGUE AND GROOVE THREAD(ED) THICK(NESS) THRU THROUGH TOP OF PIER TOE NAIL TRANSVERSE TYPICAL

TRANSV TYP UON UNLESS OTHERWISE NOTED **VERTICAL** VERIFY IN FIELD WITH WASHER WSHR WEIGHT

OPPOSITE HAND OPEN OPENING PLATE PRESSURE TREATED PRESSURE TREATED DOUGLAS FIR

GALVANIZE(D)

HOT DIPPED

HORIZONTAL

HOLLOW STEEL

SECTION

INSIDE DIAMETER

HANGER

HOOK

HEIGHT

INSPECTION

INTERIOR

JOIST

JOINT

POUND

LONG

POUNDS

MATERIAL

MAXIMUM

MINIMUM

METAL

LONGITUDINAL

MECHANICAL

MANUFACTURER

MISCELLANEOUS

NOT TO SCALE

OUTSIDE DIAMETER

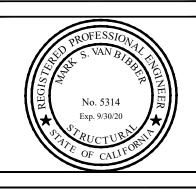
ON CENTER

GALVANIZED

HIGH STRENGTH BOLT

GRADE

ARE



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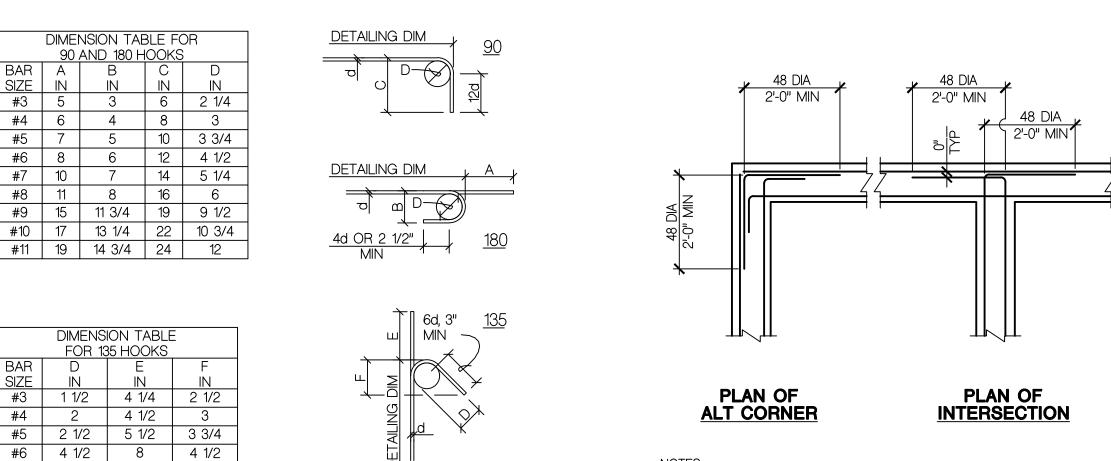
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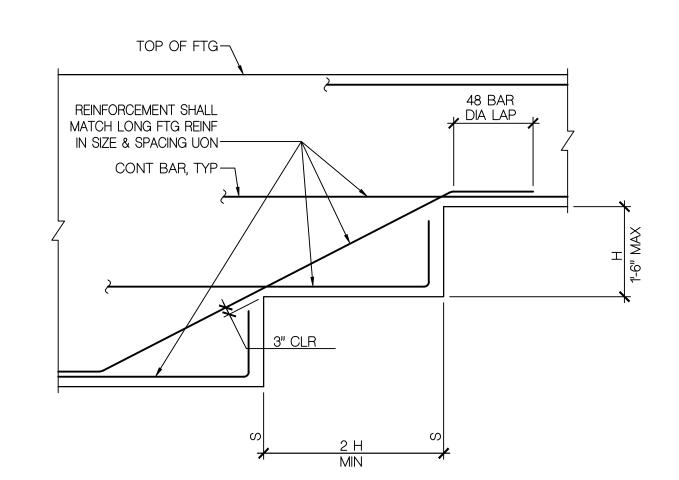
OF SHEETS O

1870 Cordell Court Suite 202 El Cajon, CA 92020 tel 619 312 6336 aarkengineering.com



1. WHERE SINGLE CURTAIN OF REINFORCING OCCURS, BEND BARS AS SHOWN FOR OUTSIDE BARS.

2. FOR MORE THAN 2 BARS PER LAYER, EXTEND INNER BARS 12" INTO PERPENDICULAR FOOTING. OUTER BARS SHALL BE PLACED AS INDICATED.



FOOTING -

WHERE PIPES OR CONDUITS ARE MORE THAN 24" BELOW BOTTOM OF FOOTING,

STEP DOWN FOOTING PER DETAIL 3 THIS SHEET TO CAPTURE PIPES OR CONDUITS.

TYPICAL DETAIL WHERE PIPES OR CONDUITS INTERSECT FOOTINGS SCALE: NONE

NON-CORROSIVE — SLEEVE, INSIDE

OF PIPE, TYP

DIA OF SLEEVE

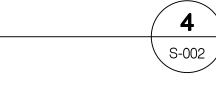
TO BE 2" LARGER

THAN OUTSIDE DIA

NOTE:

3

√ S-002



9" MIN

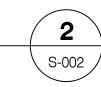
-NO DIGGING FOR PIPE

TRENCH PARALLEL TO

FTG BELOW THIS LINE



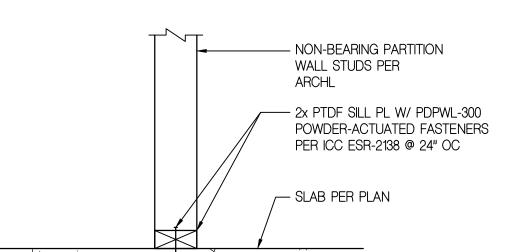
TYPICAL FOOTING CORNERS AND INTERSECTIONS SCALE: NONE

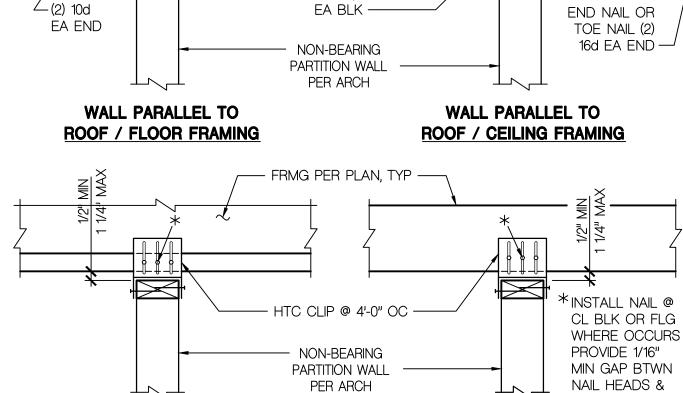


PLAN OF TYPICAL CORNER

SCALE: NONE







— 2x4 BLK @ 4'-0" OC —

- FRMG PER PLAN, TYP

- PLUG VOID BETWEEN PIPE AND SLEEVE

OC, 2 MIN —

1'-6"

MIN

W/ COMPRESSIBLE FILLER EA SIDE, TYP

WALL PERPENDICULAR TO ROOF / FLOOR FRAMING

WALL PERPENDICULAR TO ROOF / CEILING FRAMING

TYPICAL INTERIOR NON-BEARING WALL HEAD DETAILS SCALE: NONE



OF SAN DIEGO F GENERAL SERVICE LAND AVE. #2207 GO, CA 92123

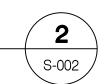
DETAIL! 79

#8 11 8 16 6 #9 | 15 | 11 3/4 | 19 | 9 1/2 #10 | 17 | 13 1/4 | 22 | 10 3/4 #11 | 19 | 14 3/4 | 24 | 12

UNLESS OTHERWISE NOTED, THESE DIMENSIONS SHALL BE USED

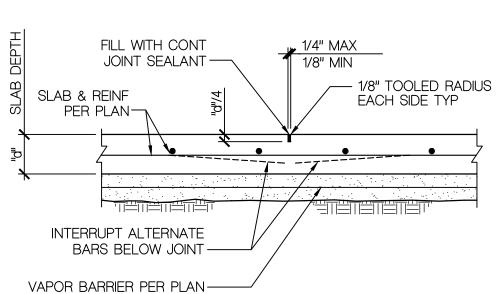
TYPICAL REINFORCING BENDS AND HOOKS

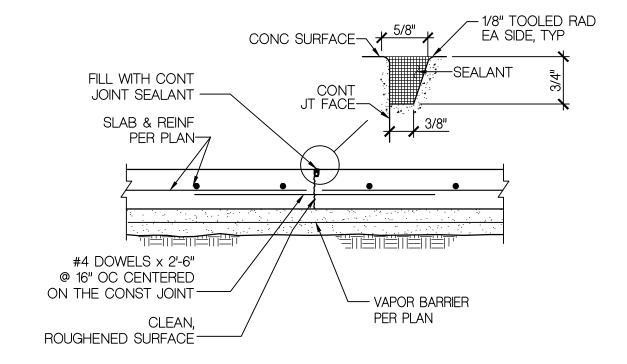
SCALE: NONE



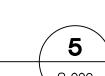
TYPICAL STEPPED FOOTING DETAL

1. A CONSTRUCTION JOINT (MARK CJ2) MAY BE USED IN LIEU OF





CONSTRUCTION JOINT MARK CJ2



TYPICAL NON-BEARING WALL SILL PLATE DETAIL

6

S-002

SCALE: NONE

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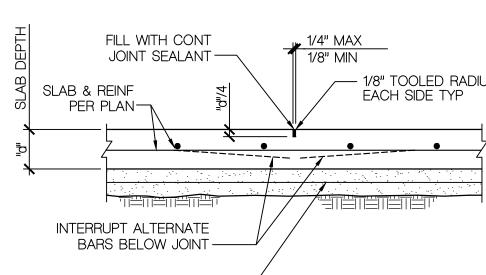
CONNECTOR

S-002

FOR ALL INDICATED HOOKS.

SCALE: NONE

CONTRACTION JOINTS (MARK CJ1) AT THE CONTRACTOR'S OPTION. 2. MAXIMUM JOINT SPACING SHALL BE 12'-0" OC.



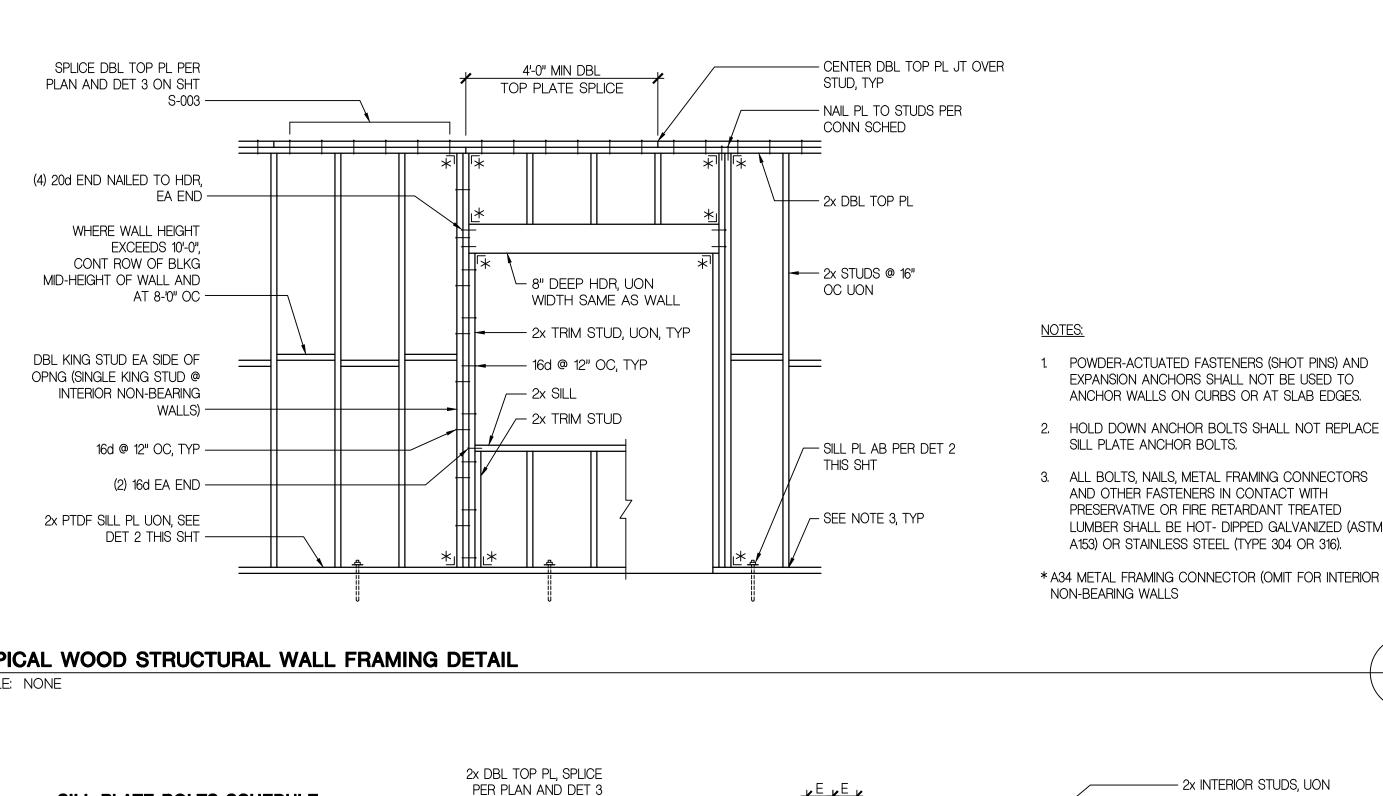
CONTRACTION JOINT MARK CJ1

TYPICAL SLAB-ON-GRADE JOINT DETAILS

√ S-002

AS NOTED CHECKED/DRAW MVB/DG

OF SHEETS %



THIS SHT -

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EN, TYP-

EDGE

MEMBER

THICK

* * * *

- VERT OR HORIZ SHTG SHEETS

∟MAX AB SPACING

6" MAX EDGE NAILING

(EN) SPCG, SEE SCHED

HOLD DOWN WHERE

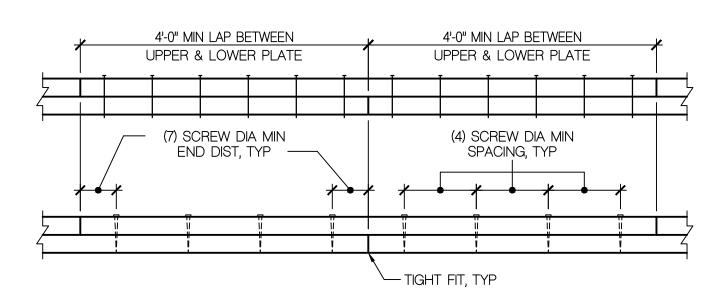
INDICATED ON PLAN

(SEE DET 5 THIS SHT) -

- 2x PTDF UON - AB & WSHR, TYP - NOTCHED OR DRILLED HOLE

NOTES:

- 1. TYPICAL ANCHOR BOLT END DISTANCE L = 4 1/2" MIN, 12" MAX.
- 2. ANCHOR BOLTS SHALL BE INSTALLED AT 12" MAXIMUM FROM EACH END OF EACH SILL PLATE PIECE, AND SHALL BE SPACED AT 48" ON CENTER MAXIMUM. SEE DETAIL 4 THIS SHEET FOR ANCHOR BOLT SPACING AT SHEAR WALLS.
- 3. WHERE SILL PLATE IS NOTCHED, DRILLED OR CUT MORE THAN ONE THIRD OF ITS WIDTH, INSTALL ANCHOR BOLT EACH SIDE AS SHOWN. NOTCHES, CUTS AND HOLES SHALL BE TREATED WITH A PRESERVATIVE SOLUTION CONFORMING TO AWPA STANDARD M4.
- 4. ANCHOR BOLTS SHALL BE 5/8" DIAMETER WITH 3" x 3" x 0,229" PLATE WASHERS, UNLESS OTHERWISE NOTED. ANCHOR BOLTS AND WASHERS SHALL BE COATED AS NOTED ON SHEET S-001.
- 5. MINIMUM ANCHOR BOLT EMBEDMENT SHALL BE 7", MEASURED FROM TOP OF THE CONCRETE SLAB, THE LENGTH OF ANCHOR BOLT IN CONCRETE CURBS SHALL NOT APPLY TO THIS MINIMUM EMBEDMENT.
- 6. ANCHOR BOLTS WITH DAMAGED THREADS SHALL NOT BE USED.
- 7. WHERE SILL PLATE ANCHORS MUST BE POST-INSTALLED, PROVIDE 3/4" SIMPSON TITEN HD SCREW ANCHORS WITH 6 1/4" MIN EMBEDMENT & 1 3/4" MIN EDGE DISTANCE, INSTALL PER ICC ESR-2713, SPECIAL INSPECTION IS REQUIRED FOR POST-INSTALLED ANCHOR INSTALLATION. POST-INSTALLED ANCHORS SHALL NOT REPLACE HOLD DOWN ANCHOR BOLTS.



NAILED SPLICE SCREWED SPLICE SCHEDULE SCHEDULE

MARK	NAILS	N	/ARI
A	(8) 16d		\bigcirc
B	(10) 16d		(E)
(C)	(12) 16d		F

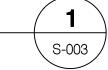
MARK	SDS 1/4 SCREWS
D	(6) 1/4" SCREWS
E	(12) 1/4" SCREWS
F	(24) 1/4" SCREWS

- 1. SPLICE 2x DOUBLE TOP PLATES PER MARK "A" AND 3x DOUBLE TOP PLATES PER MARK "A" OF THE ABOVE SCHEDULE, UNLESS OTHERWISE INDICATED.
- SCREWS SHALL BE 3" LONG FOR 2x PLATES AND 5" LONG FOR 3x PLATES.
- 3. JOINTS IN UPPER AND LOWER PLATE SHALL BE CENTERED OVER STUD OR MULLION. ALL NAILS SHALL BE COMMON WIRE NAILS.

5. SCHEDULE INDICATES NUMBER OF NAILS OR SCREWS ON EACH SIDE OF EACH JOINT.

TYPICAL WOOD STRUCTURAL WALL FRAMING DETAIL

SCALE: NONE



EXPANSION ANCHORS SHALL NOT BE USED TO

ANCHOR WALLS ON CURBS OR AT SLAB EDGES.

AND OTHER FASTENERS IN CONTACT WITH

PRESERVATIVE OR FIRE RETARDANT TREATED

A153) OR STAINLESS STEEL (TYPE 304 OR 316).

LUMBER SHALL BE HOT- DIPPED GALVANIZED (ASTM

- 2x INTERIOR STUDS, UON

PAST TOP PL

OCCURS)

- LOCATION WHERE SHT EXTENDS

- DBL 2x END STUD OR POST PER PLAN (WHERE NO HOLD DOWN

- CENTER SHTG JT ON JT STUD

PER DET 7 THIS SHT

- JT STUD PER SCHED

SILL PL ONLY)

- SILL PL PER SCHED

- BLKG PER DET 1 THIS SHT

STAGGER EDGE NAILING @ JT STUD

- VERT SHTG JT CENTERED ON JT

- 5/8" AB SPACING PER SCHED W/

BOUNDARY OF DIAPHRAGM (SHTG MAY EXTEND BEYOND

DIAPHRAGM BOUNDARY)

- BOUNDARY NAILING

- BLKG @ TRANSVERSE JOINTS IF REQD (SEE

- FIELD NAILING (FN) AT

- CENTER EDGES OF

SHT'G ON FRAMING

DETAIL 7 THIS SHT

└─3/8" MIN EDGE DIST

FRAMING PLAN

PROVIDE 1/8" GAP BTWN ALL PANEL ENDS & EDGES, TYP

-JOIST SIZE & SPCG PER

FOR NAILS

- EDGE NAILING (EN), STAGGER PER

SCHEDULE)

INTERMEDIATE SUPPORTS

3"x3"x0.229" PL WASHER (OCCURS @

SILL PLATE ANCHOR BOLTS.

NON-BEARING WALLS

TYPICAL SILL PLATE BOLTING DETAIL

S-003

TYPICAL DOUBLE TOP PLATE SPLICES

SCALE: NONE



SILL PLAT	SILL PLATE BOLTS SCHEDULE								
MARK	WALL SIDES SHEATHED	FASTENER SPACING BOLT							
	1	48"							
6)	2	32"							
	1	44"							
(4)	2	22"							
<u></u>	1	34"							
$\langle 3 \rangle$	2	16"							

WALL SHEATHING AND NAILING SCHEDULE NAIL E JOINT SILL PL THK | SIZE | SPCG | BLKG AND JT STUD 15/32" | 10d | 6" | (4) 15/32" 10d 4" 2x* (3) 15/32" 10d 3" 3x

* 3x WHERE WALL IS SHEATHED BOTH SIDES

TYPICAL SHEAR WALL SHEATHING SCHEDULE

1. FIELD NAILING (FN): 10d @ 12" OC.

NOTES:

SCALE: NONE

- 2. ALL NAILS SHALL BE COMMON OR GALVANIZED BOX WIRE NAILS.
- 3. MINIMUM DIMENSION OF ANY SHEATHING SHEET EQUALS 16" OR STUD SPACING, WHICHEVER IS

SECTION A-A

DIAPHRAGM SHEATHING & NAILING SCHEDULE

1. DIAPHRAGM SHEATHING NAILS SHALL BE DRIVEN SO THAT THEIR HEADS ARE FLUSH

2. TRANSVERSE BLOCKING MAY BE OMITTED IF TONGUE AND GROOVE SHEATHING IS

BN SPCG | EN SPCG | FN SPCG |

12"

4. ANCHOR BOLTS AND PLATE WASHERS SHALL BE HOT-DIPPED GALVANIZED.

TRANSVERSE JOINT -

EDGE NAILING (EN) -

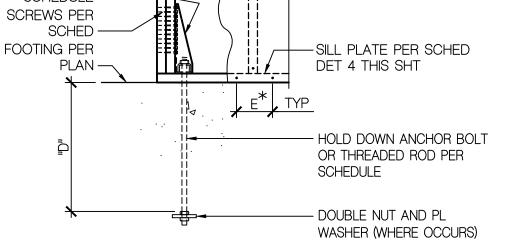
SHTG PER SCHED —

2x4 FLAT BLKG WHERE REQD,

TOENAIL (2) 8d EA END-

SCALE: NONE

-FIELD NAILING PER SCHED DET 4 THIS SHT EDGE STUDS PER SCHED ₩ALL SHTG PER SCHED HOLD DOWN PER DET 4 THIS SHT SCHEDULE



HOLD DOWN AT FOUNDATION

HOLD DOWN SCHEDULE

MARK	EDGE STUDS	SIMPSON HOLD DOWN	SIMPSON SDS 1/4"x2 1/2" FASTENERS	ANCHOR BOLT DIAMETER	ANCHOR BOLT	" O"	HOLD DOWN CAPACITY	ANCHOR CAPACITY
A	(2) 2x	HDU2-SDS2.5	6	5/8"	SIMPSON SB5/8x24	18"	3075 LBS	5730 LBS

- 1. HOLD DOWN ANCHOR BOLTS SHALL BE HOT-DIPPED GALVANIZED (ASTM A153).
- 2. STEP DOWN FOOTING PER DETAIL 3 ON SHEET S-002 WHERE REQUIRED TO ACHIEVE MINIMUM ANCHOR BOLT EMBEDMENT.
- 3. HOLD DOWN ANCHOR BOLTS SHALL BE HELD IN PLACE DURING CONCRETE PLACEMENT USING ABS AND ANCHORMATE ANCHOR BOLT HOLDERS, OR EQUIVALENT.
- 4. WHERE CURB OCCURS, EMBEDMENT SHALL START AT TOP OF SLAB.
- 5. WHERE HOLD DOWN OCCURS ADJACENT TO A POST ON THE PLAN, USE THE LARGER OF THE INDICATED POST OR THE SCHEDULED END STUDS.
- * SEE SCHEDULE ON DETAIL 4 THIS SHEET FOR SHEATHING EDGE NAILING. APPLY EDGE NAILING TO ALL EDGE STUDS.

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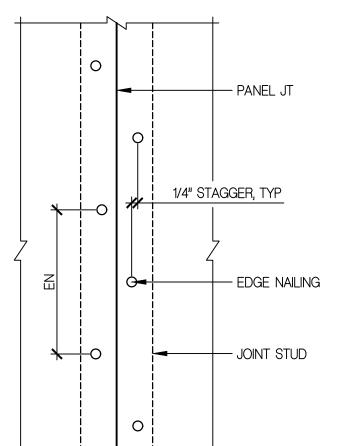
SE #22

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SHEAR WALL HOLD DOWN SCHEDULE SCALE: NONE

S-003





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MVB/DG

AS NOTED

S-003 OF SHEETS O

TYPICAL ROOF SHEATHING SCHEDULE

THICK

1/2"

WITH THE SURFACE OF THE SHEATHING.

R1

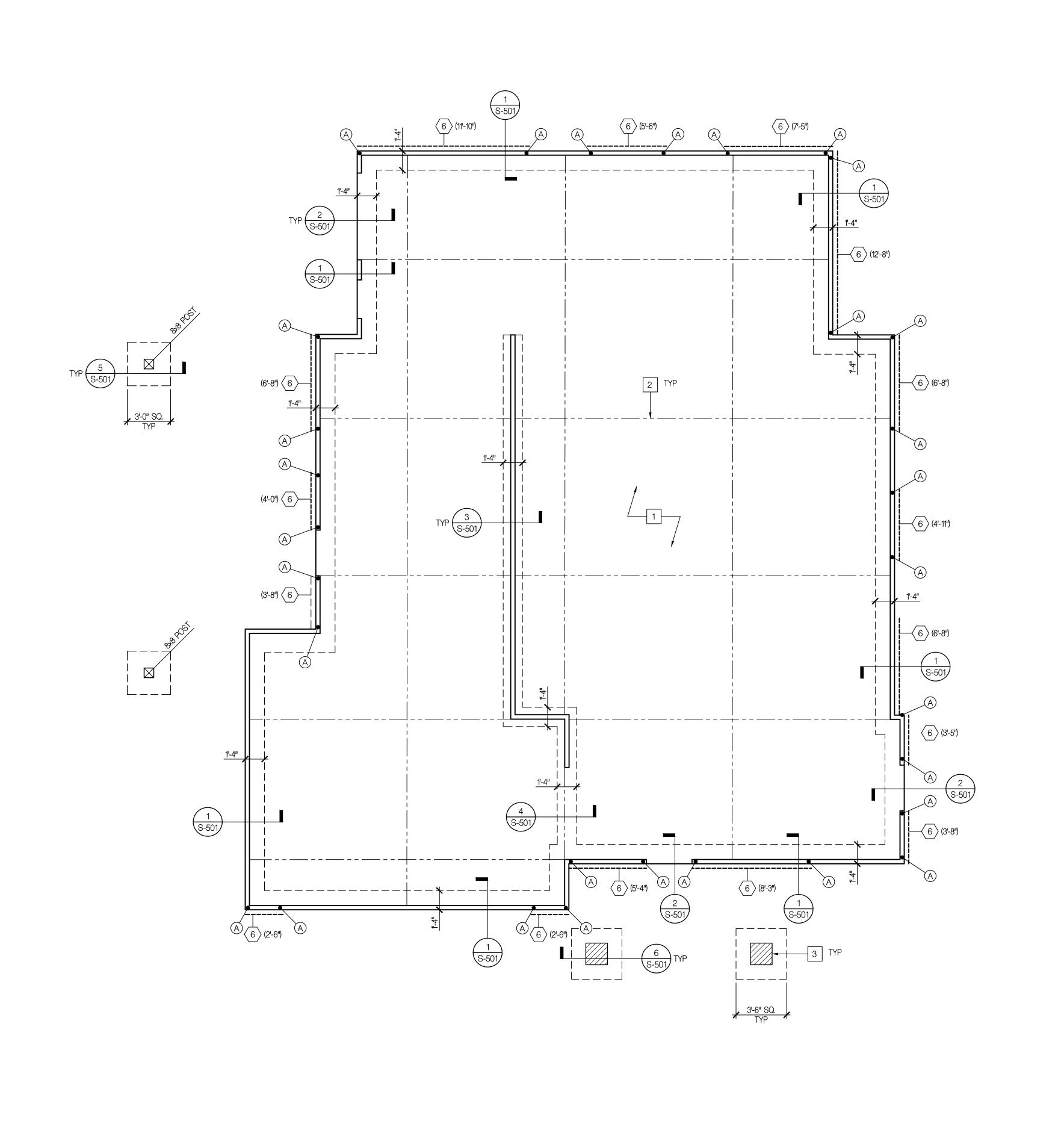
SCALE: NONE

S-003

TYPICAL STAGGERED NAILING AT SHEATHING JOINT SCALE: NONE

S-003

S-003





- 4" CONC SLAB-ON-GRADE W/ #4 @ 16" OC EA WAY AT MID-DEPTH OF SLAB OVER 15 MIL STEGO VAPOR BARRIER OVER 4" SAND (SEE DET 5 ON SHT S-002)
- 2 CONCRETE SLAB-ON-GRADE CONSTRUCTION JOINTS PER DET 5 ON SHT S-002
- 3 16" SQUARE CMU ENTRY CANOPY SUPPORT PILASTER

FOUNDATION LEGEND

INDICATES NEW STRUCTURAL (BEARING AND/OR SHEAR) WALL FRAMED WITH 2x4 STUDS @ 16" ON CENTER (SEE DET 1 ON SHT S-003)

INDICATES SHEAR WALL HOLD DOWN PER DET 5 ON SHT S-003

INDICATES WOOD SHEAR WALL SHEATHING PER DET 4 ON SHT S-003 (MINIMUM SHEATHED LENGTH NOTED IN PARENTHESIS)

INDICATES EDGE OF FOOTING

INDICATES EDGE OF CONCRETE SLAB-ON-GRADE

S - INDICATES STEP IN FOOTING PER DETAIL 3 ON SHEET S-002

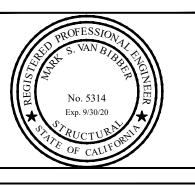
INDICATES WOOD POST AND SIZE

FOUNDATION NOTES

- 1. SOILS SHALL BE PREPARED PER THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS AND EVALUATED BY THE GEOTECHNICAL ENGINEER FOR CONFORMANCE PRIOR TO CONSTRUCTING FOUNDATIONS. REMOVE UNDOCUMENTED FILL AND REPLACE AS COMPACTED FILL TO A DEPTH OF 3'-0" BELOW FINISH GRADE OR 1'-0" BELOW BOTTOM OF THE DEEPEST FOOTING ELEMENT (WHICHEVER RESULTS IN A DEEPER EXCAVATION). REMEDIAL GRADING SHALL EXTEND A HORIZONTAL DISTANCE OF AT LEAST 5'-0" OUTSIDE OF THE BUILDING LIMITS. THE UPPER 3'-0" OF REPLACED COMPACTED FILL SHALL CONSIST OF SOIL WITH A LOW EXPANSIVE POTENTIAL (EI OF 50 OR LESS). SCARIFY AND MOISTURE CONDITION THE UPPER 1'-0" OF SOIL PRIOR TO PLACING FILL. FILL, BACKFILL AND SCARIFIED SURFACES SHALL BE COMPACTED TO A DRY DENSITY OF AT LEAST 90 PERCENT OF MAXIMUM DRY DENSITY AT OR SLIGHTLY ABOVE OPTIMUM MOISTURE CONTENT AS DETERMINED IN ACCORDANCE WITH ASTM D1557.
- 2. PRIOR TO REQUESTING A BUILDING DEPARTMENT FOUNDATION INSPECTION, THE SOILS ENGINEER SHALL CERTIFY IN WRITING THAT: THE BUILDING PAD WAS PREPARED IN ACCORDANCE WITH THE SOILS REPORT; UTILITY TRENCHES ARE PROPERLY BACKFILLED AND COMPACTED; AND THE FOUNDATION EXCAVATIONS, THE SOILS EXPANSIVE CHARACTERISTICS AND BEARING CAPACITY CONFORM TO THE SOILS REPORT.
- 3. PROVIDE A MINIMUM HORIZONTAL SETBACK OF 7 FEET FROM THE BOTTOM OUTSIDE EDGE OF ALL FOOTINGS TO DAYLIGHT AT SLOPED CONDITIONS.
- 4. HOLD DOWN ANCHORS SHALL BE TIED IN PLACE PRIOR TO CALLING FOR FOUNDATION INSPECTION.
- 5. SEE DETAIL 2 ON SHEET S-002 FOR TYPICAL REINFORCING AT FOOTING CORNERS AND INTERSECTIONS.
- 6. STEP FOOTING AS REQUIRED PER DETAIL 3 ON SHEET S-002, UNLESS OTHERWISE NOTED.
- 7. SEE DETAIL 4 ON SHEET S-002 WHERE PIPES OR CONDUITS INTERSECT FOOTINGS.
- 8. SEE DETAIL 6 ON SHEET S-002 FOR TYPICAL NON-BEARING WALL SUPPORTS.9. SEE ARCHITECTURAL FOR ALL DIMENSIONS.
- 10. SHEATH EXTERIOR FACE OF ALL EXTERIOR WALLS PER MARK "6" OF THE SHEAR WALL SHEATHING SCHEDULE, DETAIL 4 ON SHEET S-003, UNLESS OTHERWISE NOTED.

Platt/Whitelaw Architects,Inc.

4034 30TH STREET SAN DIEGO, CALIFORN 92104



COUNTY OF SAN DIEGO
EPARTMENT OF GENERAL SERVIC
5555 OVERLAND AVE. #2207
SAN DIEGO, CA 92123



FOUNDATION PLAN
FIRE STATION 79 LIVING QUARTERS

DATE
-SCALE
AS NOTED
CHECKED/DRAWN
MVB/DG
JOB
PWA.035.00

REVISIONS

1870 Cordell Court

El Cajon, CA 92020 tel 619 312 6336

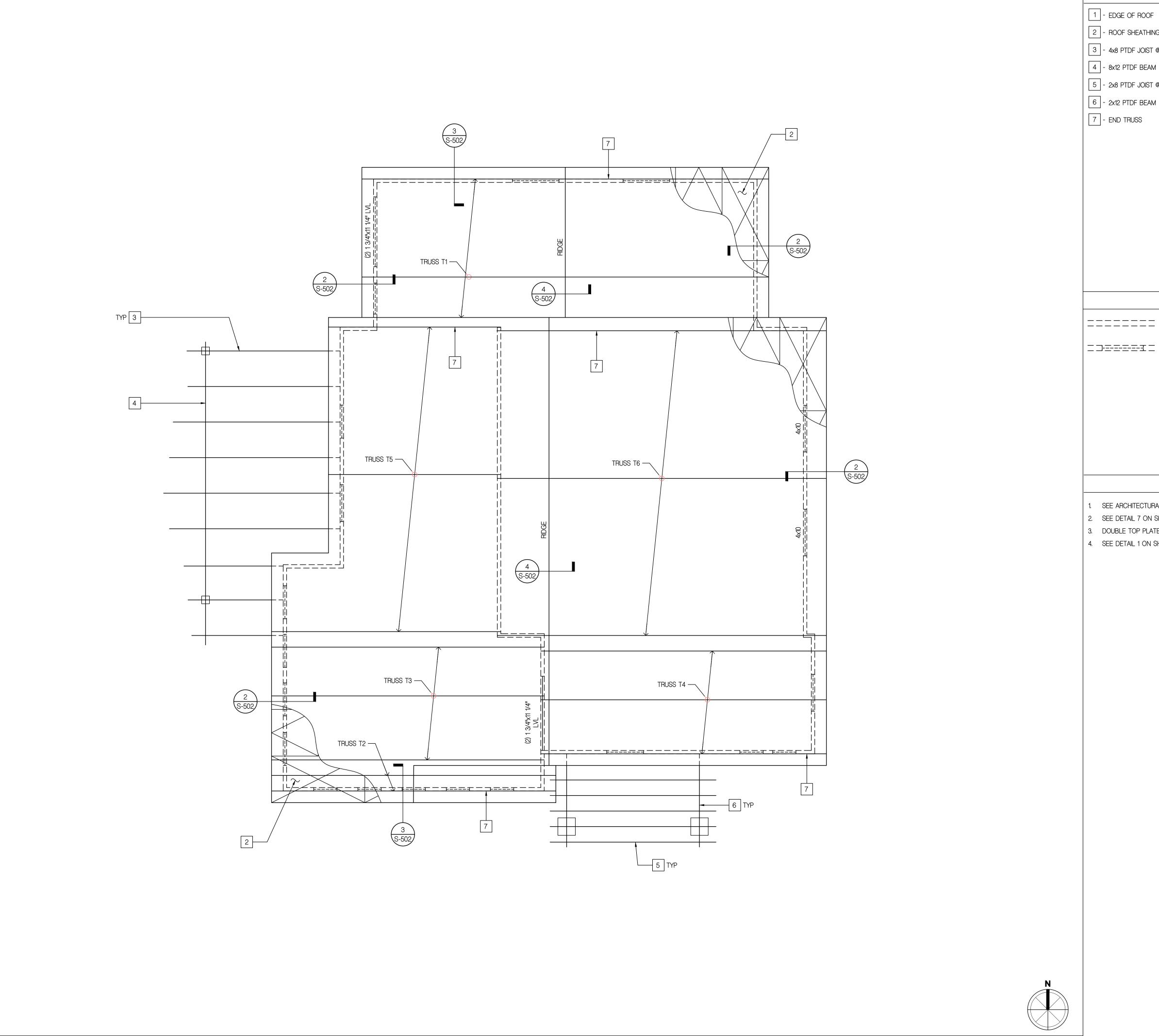
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Suite 202

S-101

N

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



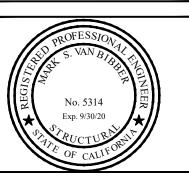
ROOF FRAMING PLAN KEYNOTES

2 - ROOF SHEATHING PER MARK R1 OF DETAIL 6 ON SHT S-003

3 - 4x8 PTDF JOIST @ 36" OC

4 - 8x12 PTDF BEAM

5 - 2x8 PTDF JOIST @ 16" OC



ROOF FRAMING PLAN LEGEND

_____ _ _ _ _ INDICATES STRUCTURAL (BEARING OR SHEAR) WALL BELOW

_______ INDICATES WALL OPENING BELOW, PROVIDE HEADER PER DETAIL 1 ON SHEET S-003 (UON)

ROOF FRAMING PLAN NOTES

SEE ARCHITECTURAL FOR DIMENSIONS NOT SHOWN.

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

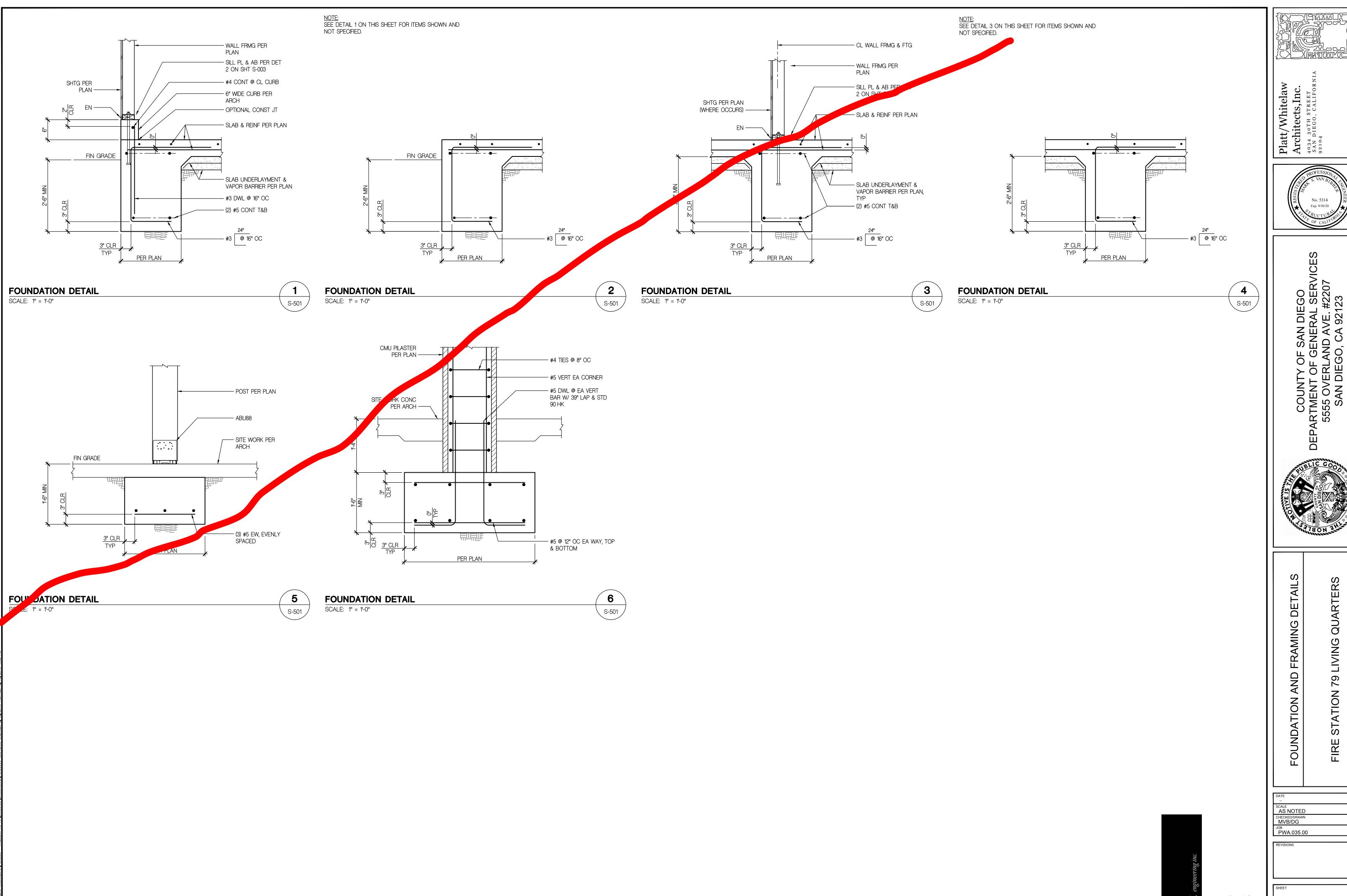
- 2. SEE DETAIL 7 ON SHEET S-002 FOR TYPICAL NON-BEARING WALL SUPPORTS.
- 3. DOUBLE TOP PLATES PER SCHEDULE MARK D IN DETAIL 3 ON SHEET S-003 UNLESS OTHERWISE NOTED. 4. SEE DETAIL 1 ON SHEET S-502 FOR TRUSS SCHEDULE.

COUNTY C DEPARTMENT OF 5555 OVERL SAN DIEC

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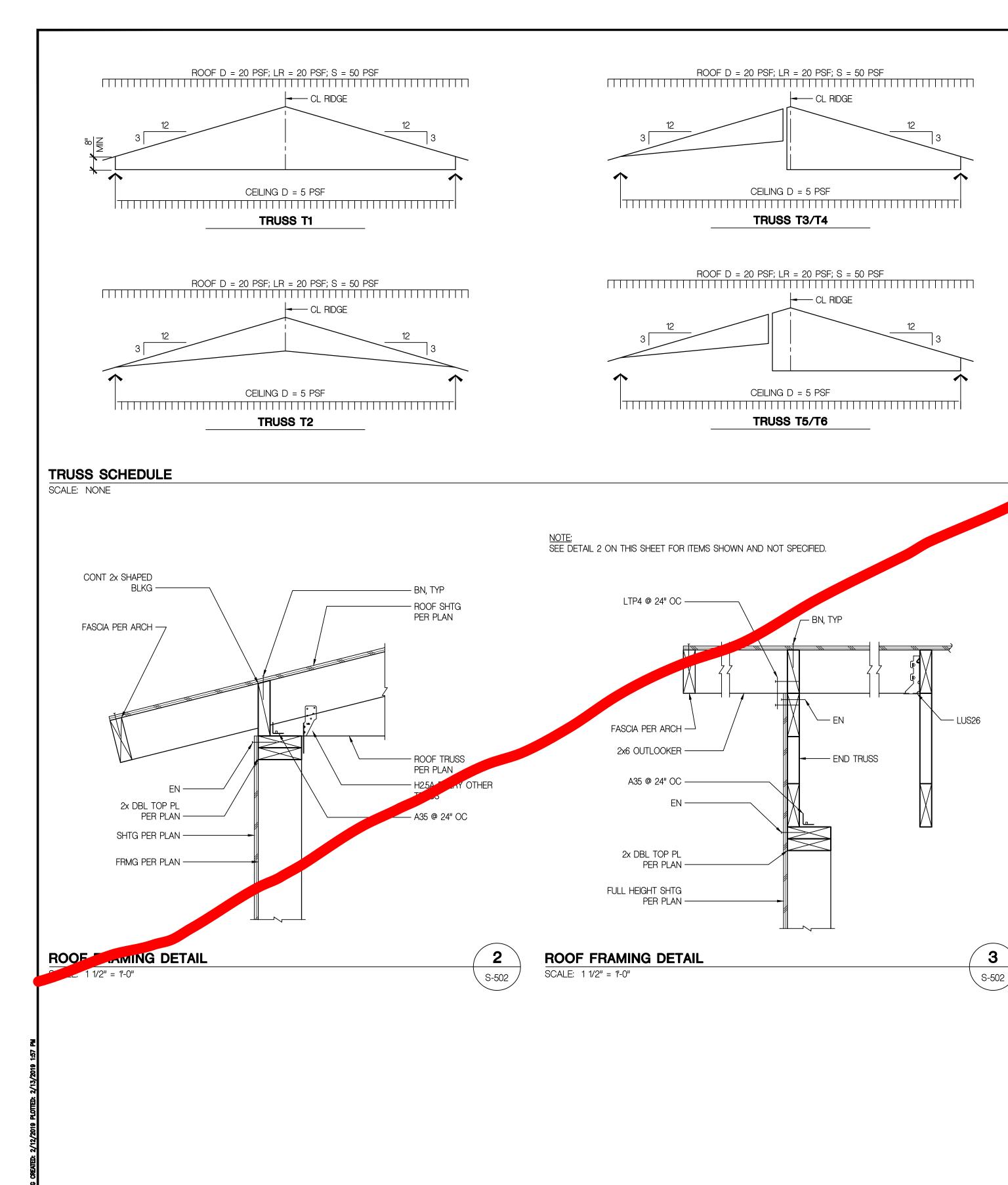
S-102

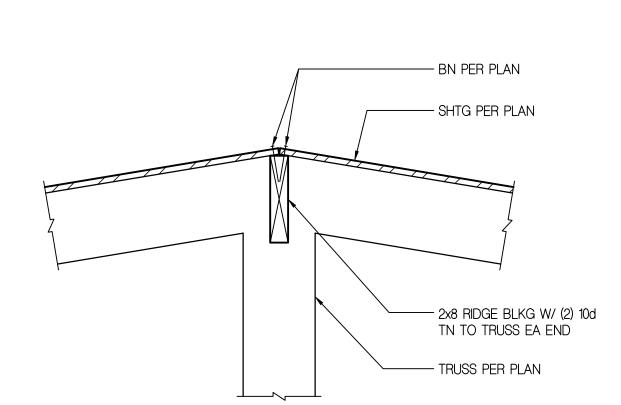


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S-501

79





ROOF FRAMING DETAIL

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

ROOF TRUSS NOTES:

OTHERWISE NOTED.

DEFLECTION TO L/360.

7. ROOF TRUSS DESIGN LOADS:

a. TOP CHORD DEAD LOAD:

d. TOP CHORD SNOW LOAD:

e. BOTTOM CHORD DEAD LOAD:

f. BOTTOM CHORD LIVE LOAD

WITH ROOF LIVE LOA

b. TOP CHORD ROOF LIVE LOAD:

c. TOP CHORD WIND LOAD (UPLIFT):

1. SEE ARCHITECTURAL FOR CEILING RISE AND RUN.

FOR ROOF PITCH OR TRIBUTARY AREA.

ROOF TRUSSES PER TRUSS MANUFACTURER DRAWINGS.

2. PROVIDE 2x4 "X" BRACING AT 8'-0" OC MAX, (3) LOCATIONS MIN (1/4 SPAN POINTS) FOR

3. ROOF TRUSSES SHALL BE SPACED AT 16 INCHES ON CENTER MAXIMUM, UNLESS

4. TRUSS TOP CHORD MEMBERS SHALL BE 2x6 MINIMUM, UNLESS OTHERWISE NOTED.

ADDITIONAL CONCENTRATED LOADS, AXIAL LOADS, ET CETERA AS NOTED. LOADS

LISTED ARE UNFACTORED. LOAD COMBINATIONS FOR DESIGN SHALL CONFORM TO

THE 2016 CALIFORNIA BUILDING CODE. ROOF LIVE LOAD HAS NOT BEEN REDUCED

20 PSF

20 PSF (REI

10 PSF (NON-CONCURRENT

5. THE MANUFACTURER SHALL DESIGN ROOF TRUSSES FOR UNIFORM LOADS PLUS

6. ROOF TOTAL LOAD DEFLECTION SHALL BE LIMITED TO L/240 AND LIVE LOAD

8. IN ADDITION TO THE LOADS LISTED IN THE PRECEDING NOTE, ALL TRUSSES SHALL BE DESIGNED FOR AN ADDITIONAL 200 LB CONCENTRATED DEAD LOAD AT ANY ONE PANEL POINT.

9. LOADS LISTED ABOVE DO NOT INCLUDE TRUSS SELF-WEIGHT. TRUSS
MANUFACTURER SHALL ACCOUNT FOR TRUSS SELF-WEIGHT IN THE TRUSS DESIGN.

CD REVERSIBLE, UNLESS OTHERWISE 10. WIND AND SEISMIC LOADS SHALL BE CONST

11. ALIGN TRUSS PANEL POINTS 7 LITATE DUCT PASSAGE AND SPRINKLER BRANCH LED BY THE ARCHITECTURAL OR MECHANICAL LINE PASSAGE WHERE PE DRAWINGS.

12. EACH TRUS ALL BE LEGIBLY BRANDED, MARKED OR OTHERWISE HAVE LY AFFIXED THERETO THE FOLLOWING INFORMATION LOCATED WITHIN 2 THE CENTER OF THE SPAN ON THE FACE OF THE BOTTOM CHORD:

. IDENTITY OF THE COMPANY MANUFACTURING THE TRUSS

b. THE DESIGN LOAD

S-502

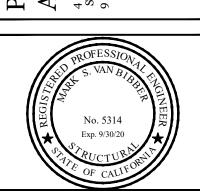
c. THE SPACING OF THE TRUSSES

13. CONTRACTOR SHALL SUBMIT A COMPLETE TRUSS SUBMITTAL PACKAGE SEALED AND SIGNED BY A CALIFORNIA-LICENSED PROFESSIONAL ENGINEER, INCLUDING THE FOLLOWING:

a. DRAWINGS SHOWING TRUSS LAYOUT WITH DIMENSIONS AND TRUSS IDENTIFICATION NUMBERS CORRESPONDING TO THE TRUSS CALCULATIONS

b. TRUSS CALCULATIONS INDICATING ALL TRUSS LUMBER SIZES AND GRADES

c. TRUSS-TO-TRUSS CONNECTION DETAILS INDICATING REQUIRED STRUCTURAL CONNECTORS



S-502



QUARTI DET, 79

AS NOTED CHECKED/DRAW MVB/DG

PWA.035.00

S-502 OF SHEETS %

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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 13.6.5.6, 13.6.7, 13.6.8, AND 2016 CBC, SECTIONS 1616A.1.23, 1616A1.24, 1616A.1.25 AND 1616A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PRE-APPROVED INSTALLATION GUIDE (E.G., SMACNA OR OSHPOD 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 SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

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

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

MP □ MD □ PP □ E □ - OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPOD PRE-APPROVAL (OPM#) #

MP□ MD□ PP□

- OPTION 3: SHALL COMPLY WITH SMACNA SEISMIC RESTRAINT MANUAL, OSHPOD EDITION (2009), INCLUDING ANY ADDENDA. FASTENERS AND OTHER ATTACHMENTS NOT SPECIFICALLY IDENTIFIED IN THE SMACNA SEISMIC RESTRAINT MANUAL, OSHPOD EDITION, ARE DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS. THE DETAILS SHALL ACCOUNT FOR THE APPLICABLE SEISMIC HAZARD LEVEL ____ AND CONNECTION LEVEL ____ FOR THE PROJECT AND CONDITIONS.

GENERAL NOTES

GENERAL NOTES:

- ALL WORK OF THIS SECTION SHALL FULLY CONFORM TO THE REQUIREMENTS OF THE 2016 CALIFORNIA PLUMBING CODE (C.P.C.), 2016 CALIFORNIA BUILDING CODE (C.B.C.), 2016 CALIFORNIA MECHANICAL CODE (C.M.C.), CALIFORNIA ADMINISTRATIVE CODE TITLE 24, THE CALIFORNIA GREEN STANDARDS MODEL CODE, THE AMERICAN SOCIETY OF TESTING AND MATERIALS AND APPLICABLE NFPA STANDARDS.
- SUBSTITUTIONS: BIDDERS WISHING TO OBTAIN APPROVAL OF AN ARTICLE, DEVICE, PRODUCT, MATERIAL, FIXTURE, FORM OR TYPE OF CONSTRUCTION OTHER THAN THOSE SPECIFIED BY NAME, MAKE OR CATALOG NUMBER, SHALL REQUEST VERBAL APPROVAL FROM THE ARCHITECT NOT LESS THAN TEN (10) DAYS BEFORE THE BID DUE DATE. WRITTEN APPROVAL CANNOT BE FINALIZED UNTIL SUBMITTALS ARE EXAMINED.
- THE SPECIFICATIONS ARE AN INTEGRAL PART OF THESE DOCUMENTS AND THE REQUIREMENTS THEREIN MUST BE INCLUDED IN THE INTERPRETATION OF THE DRAWINGS AND IMPLEMENTATION OF WORK.
- AREA SEPARATION WALLS: WHERE PLUMBING PENETRATES THE AREA SEPARATION WALL SURFACE. THE SECTION PASSING THROUGH THE WALL SURFACE AND THE FIXTURE CONNECTIONS ATTACHED THERETO, SHALL BE ONLY OF

UTILITY NOTES:

- EXISTING GAS PIPING SHOWN TO REMAIN SHALL BE CAPPED AND PROTECTED DURING CONSTRUCTION. FOLLOWING COMPLETION OF WORK THE ENTIRE GAS SYSTEM SHALL BE PURGED WITH INERT GAS IN ACCORDANCE WITH NFPA 54 CHAPTER 8 AND THE SERVING UTILITY REQUIREMENTS.
- WATER, SEWER AND STORM DRAIN PIPING ON THE PLUMBING PLANS IS SHOWN UP TO THE 5-FOOT LINE. FOR CONTINUATION. SEE CIVIL DRAWINGS. VERIFY ALL POINT OF CONNECTIONS PRIOR TO INSTALLATION OF ANY PIPING.
- LOCATIONS AND DEPTHS OF EXISTING UNDERGROUND UTILITIES AND OTHER UNDERGROUND OBSTRUCTIONS AND CONDITIONS ARE GENERALLY UNKNOWN AND IF SHOWN ARE AT APPROXIMATE LOCATIONS. CONTRACTOR SHALL HIRE A UTILITY LOCATING SERVICE TO LOCATE ALL EXISTING PLUMBING AND OTHER UNDERGROUND UTILITIES PRIOR TO DIGGING. VERIFY EXACT LOCATION SIZE AND EXTENT OF ALL OBSTRUCTIONS AND OTHER CONDITIONS WHICH MAY AFFECT THE PROPOSED WORK UNDER THE PROJECT. TAKE EVERY PRECAUTION TO PREVENT DAMAGE TO EXISTING WORK, INCLUDING HAND DIGGING AROUND EXISTING UTILITIES, TREE ROOT SYSTEMS, AND HARDSCAPE FEATURES. ANY DAMAGE TO EXISTING UTILITIES OR STRUCTURES SHALL BE IMMEDIATELY REPAIRED OR REPLACED IN ACCORDANCE WITH THE CLIENT'S DIRECTION AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL EXERCISE EXTREME CARE TO AVOID DAMAGE IN EXPOSING UNDERGROUND SERVICES. IN ADDITION TO WHAT IS NOTED ABOVE, THE CONTRACTOR SHOULD REQUEST THAT UTILITY AGENCIES LOCATE AND MARK ANY UNDERGROUND PIPING OR CABLES THAT MAY BE IN THE AREA OF WORK. WHERE AN UNDERGROUND FACILITY IS ENCOUNTERED WHICH IS NOT SHOWN ON THE PLANS OR MENTIONED IN ANY OTHER CONTRACT DOCUMENT, THE CONTRACTOR SHALL DISCONTINUE THE EXCAVATION AND IMMEDIATELY CALL THE ARCHITECT FOR INSPECTION.
- PRIOR TO INSTALLATION OF ANY SEWER AND STORM DRAIN LINES, THE CONTRACTOR SHALL PHYSICALLY VERIFY THE ELEVATION, SIZE AND MATERIAL AT THE POINT OF CONNECTION. IF THE ACTUAL ELEVATION IS HIGHER THAN INDICATED AND THE BUILDING SEWER OR DRAIN CANNOT BE INSTALLED AS SHOWN, THE CONTRACTOR SHALL NOT PROCEED WITH THE CONSTRUCTION OF SAID LINES AND SHALL IMMEDIATELY INFORM THE ARCHITECT.

ENERGY CONSERVATION NOTES:

ALL SINK FAUCETS AND SHOWERHEADS USED FOR OTHER THAN SAFETY REASONS SHALL BE EQUIPPED WITH FLOW CONTROL DEVICES TO LIMIT TOTAL FLOW TO A MAXIMUM OF 2.2 GALLONS PER MINUTE AND SHALL BE LISTED ON THE CALIFORNIA ENERGY COMMISSION DIRECTORY OF CERTIFIED SHOWERHEADS AND FAUCETS.

INTERRUPTION OF SERVICES AND DEMOLITION NOTES:

- DEMOLITION, CAPPING AND REROUTING SHALL BE PERFORMED AS SHOWN TO ACCOMMODATE NEW CONSTRUCTION.
- 2. EXISTING SERVICES REQUIRED TO STAY IN OPERATION IN AREAS NOT REMODELED SHALL BE MAINTAINED. REROUTED OR OTHERWISE PROVIDED WITH TEMPORARY CONNECTIONS TO PREVENT INTERRUPTIONS.
- IF IMPOSSIBLE TO PREVENT INTERRUPTIONS, CONNECTIONS SHALL BE PERFORMED DURING "OFF-HOURS" AND COORDINATED WITH THE OWNER'S REPRESENTATIVE.
- 4. PROVIDE A MINIMUM OF SEVEN (7) DAYS WRITTEN ADVANCE NOTICE OF INTERRUPTION. DO NOT INTERRUPT SERVICES WITHOUT WRITTEN CONSENT OF THE OWNER.
- 5. EXISTING PIPING FIXTURES AND EQUIPMENT ARE SHOWN AT APPROXIMATE LOCATIONS.
- 6. CONTRACTOR SHALL ENSURE THAT ALL EXISTING TO REMAIN PLUMBING FIXTURES ARE RECONNECTED TO NEW DOMESTIC WATER SYSTEM AND FULLY OPERATIONAL.
- 7. CONTRACTOR SHALL ENSURE THAT ALL EXISTING PIPING SYSTEMS IN THE AREA OF WORK, WHETHER DIRECTLY INVOLVED IN THE CONSTRUCTION OR NOT, ARE FULLY OPERATIONAL AT THE CONCLUSION OF WORK.

GENERAL NOTES

FIXTURES:

- ALL FIXTURES SHALL BE NEW, APPROVED, FREE FROM FLAWS AND BLEMISHES WITH CLEAR AND CLEAN FINISHED SURFACES.
- 2. FOR FIXTURE LOCATIONS SEE ARCHITECTURAL PLANS.
- PROVIDE ANGLE STOPS AT HOT AND COLD WATER SUPPLIES TO EACH FIXTURE. STOPS SHALL BE LOOSE KEY QUARTER TURN STOP, BRASS BALL AND STEM WITH POLISHED CHROME-PLATED BRASS ESCUTCHEONS. BRASSCRAFT, NIBCO OR EQUAL.
- ALL PLUMBING FIXTURES SHOWN ON DRAWINGS AND AS LISTED ON THE DRAWING FIXTURE SCHEDULE SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. FIXTURES AND TRIM SHALL BE PROPERLY ANCHORED AND CAULKED ALONG ALL JOINTS.
- ALL WALL PENETRATIONS SHALL BE PROVIDED WITH POLISHED CHROME-PLATED CAST BRASS WALL ESCUTCHEONS.
- 6. FIXTURE TRAPS ABOVE FLOOR SHALL BE CHROME PLATED "P" TRAPS WITH BRONZE NUTS UNLESS OTHERWISE INDICATED. TRAP ARMS SHALL BE 17 GAUGE CHROME-PLATED BRASS.
- HOSE BIBBS: PERMANENT VACUUM BREAKERS SHALL BE INCLUDED WITH ALL HOSE BIBBS.

- ALL PIPING PENETRATING RATED WALLS OR FLOORS SHALL HAVE FIRESTOP ASSEMBLY MATCHING WALL OR FLOOR RATING. ALL FLOORS ARE ONE HOUR RATED AND FOR LOCATIONS OF RATED WALLS SEE ARCHITECTURAL DWGS.
- PIPING PENETRATING FOUNDATION WALLS SHALL BE PROVIDED WITH STANDARD WEIGHT GALVANIZED STEEL PIPE SLEEVES TWO PIPE SIZES LARGER THAN PIPE PASSING THRU AND WITH VOID FILLED WITH MANUFACTURED SLEEVE SEAL SYSTEM (METRAFLEX OR EQUAL).
- ALL PIPING PENETRATING FOUNDATION WALLS AND FLOORS OR WHICH WILL COME INTO DIRECT CONTACT WITH CONCRETE SHALL BE PROVIDED WITH POLYETHYLENE PIPE SHIELDING INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS. NORTHTOWN "POLYWRAP" AND "POLYWRAP-C"OR EQUAL.

TESTS AND ADJUSTMENTS:

- THE NEW PLUMBING SYSTEM SHALL BE FLUSHED AND THEN TESTED PER LOCAL CODE REQUIREMENTS AND ALL DEFECTS CORRECTED WITH NEW MATERIALS.
- NO PIPING WORK, FIXTURES, OR EQUIPMENT SHALL BE CONCEALED OR COVERED UNTIL INSPECTED BY ENGINEER, WHO SHALL BE NOTIFIED WHEN THE WORK IS LEAK-TIGHT AND READY FOR INSPECTION. ALL TESTS SHALL BE REPEATED AS REQUIRED BY THOSE MAKING THE INSPECTION.
- ALL NEW DOMESTIC WATER PIPING SHALL BE FLUSHED OUT, TESTED AT 150 PSIG AND SHALL BE LEFT UNDER PRESSURE OF SUPPLY MAIN OR A MINIMUM OF 50 PSIG FOR THE REMAINDER OF THE CONSTRUCTION PERIOD. NO AIR TESTING IS ALLOWED. TESTS ARE TO BE APPLIED FOR A MINIMUM PERIOD OF ONE HOUR AND UNTIL TESTS ARE COMPLETE. FINAL PRESSURES AT THE END OF THE TEST PERIOD SHALL BE NOT MORE NOR LESS THAN THAT CAUSED BY EXPANSION OR CONTRACTION OF THE TEST MEDIUM DUE TO TEMPERATURE CHANGES. PROVIDE ADDITIONAL VALVES AS REQUIRED IN THE NEW PIPING DURING CONSTRUCTION TO FACILITATE TESTING.
- PLUMBING FIXTURES SHALL BE FILLED WITH WATER AND CHECKED FOR LEAKS AND RESTRICTED DRAINAGE FLOW. FAUCET AERATORS AND SHOWER HEADS SHALL BE REMOVED AND CLEANED THOROUGHLY.
- SOIL, WASTE, VENT AND CONDENSATE PIPING SHALL BE TESTED WITH A MINIMUM OF 10 FOOT OF HEAD AT EACH JOINT FOR A MINIMUM OF THREE HOURS WITH NO LOSS IN HEAD.
- ALL NEW AND EXISTING GAS PIPING SHALL BE TESTED. PIPING CARRYING GAS AT PRESSURE LESS THAN 14 INCH WATER COLUMN SHALL BE TESTED AT NOT LESS THAN 3 PSI FOR A PERIOD OF ONE HOUR MINIMUM WITH NO LOSS IN PRESSURE. PIPING CARRYING GAS AT PRESSURE MORE THAN 14 INCH WATER COLUMN SHALL BE TESTED AT 60 PSI FOR A PERIOD OF ONE HOUR MINIMUM WITH NO LOSS IN PRESSURE. FOLLOWING PRESSURE TEST THE PIPE SYSTEM SHALL BE PURGED WITH INERT GAS PER C.P.C. 1213.6.

IN ADDITION TO THE UTILITY LOCATION WORK NOTED ABOVE, THE CONTRACTOR SHALL PROVIDE VIDEO RECORDING OF EXISTING UNDERGROUND SEWER LINES. RECORDING SHALL INCLUDE ALL EXISTING PIPING, WHETHER DIRECTLY AFFECTED BY NEW WORK OR NOT. ALL PIPES RECORDED ON THE VIDEO SHALL BE SHOWN WITH DIMENSIONS TO PERMANENT WALLS ON FULL SIZE AND 11x17 DRAWINGS WITH REFERENCES TO RESPECTIVE VIDEO. A WRITTEN REPORT SHALL BE PROVIDED EVALUATING EACH SEPARATE PIPE AND IDENTIFYING AREAS WHERE REPLACEMENT MAY BE REQUIRED. TWO COPIES OF THE VIDEOS, DRAWINGS AND REPORTS SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO COMMENCEMENT OF WORK.

PLUMBING LEGEND SYMBOL ABBR. DESCRIPTION POC POINT OF CONNECTION DENOTES EXISTING (SHOWN LIGHT) (EX) []----REMOVE EXISTING EQUIPMENT OR PIPING WASTE OR SOIL PIPING ABOVE GRADE W OR S W OR S WASTE OR SOIL PIPING BELOW GRADE = = 6M = =GW GREASE WASTE PIPING BELOW GRADE ====== SANITARY VENT PIPING **==**W== IW INDIRECT WASTE PIPING CD $=\omega=$ CONDENSATE DRAIN PIPING (AIR CONDITIONING) ===CW COLD WATER PIPING ==== HW HOT WATER PIPING ===== HWR HOT WATER RETURN PIPING TP TRAP PRIMER LINE PIPING G GAS PIPING (0" W.C. TO 14" W.C.) MPG = MPG =MEDIUM PRESSURE GAS PIPING (15" W.C. TO 5 PSI) BV BALL VALVE **─**♥─ GC GAS COCK - \vee -PRV PRESSURE REDUCING VALVE GAS PRESSURE REGULATOR GPR -RPBP REDUCED PRESSURE BACKFLOW PREVENTER P&TRV PRESSURE & TEMPERATURE RELIEF VALVE FD FLOOR DRAIN FS FLOOR SINK GCO GRADE CLEANOUT IN YARD BOX **---**Ø FCO FLOOR CLEANOUT WCO WALL CLEANOUT ----HB HOSE BIBB TP TRAP PRIMER WHA 'X' WATER HAMMER ARRESTER (P.D.I. SIZE) __ U —--CAPPED PIPE END (DRIP LEG) DN PIPE TURNING DOWN **6**—**6**— VALVE ON RISE OR DROP VTR VENT THRU ROOF ACCESS PANEL B/G BELOW GRADE CFH CUBIC FEET PER HOUR DFU DRAINAGE FIXTURE UNITS ET **EXPANSION TANK** FINISHED FLOOR FLUSH VALVE FIXTURE UNIT FTFU FLUSH TANK FIXTURE UNIT GPF GALLONS PER FLUSH GPM **GALLONS PER MINUTE**

INVERT ELEVATION

SANITARY SEWER

VENT THRU ROOF

WATER CLOSET

WATER HEATER

VOLTS/PHASE/HERTZ

WATER SUPPLY FIXTURE UNITS

LAVATORY

TYPICAL

URINAL

SS

TYP

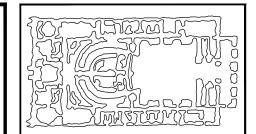
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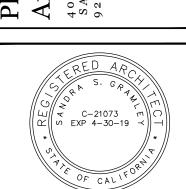
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NO: M33447 LA MESA, CA 91941-5221 Exp: 06/30/20 619 / 466 / 6224 FAX 466 / 6233 E-MAIL: ENGINEER@TREISD.COM

TURPIN & RATTAN CONSULTING ENGINEERS 4719 PALM AVENUE

TREI PROJECT # 17426

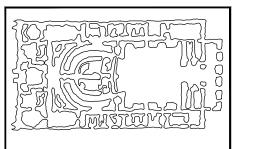
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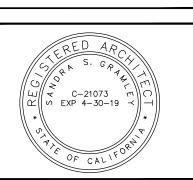
	INSTANTANEOUS WATER HEATER SCHEDULE									
ITEM	LOCATION	MANUFACTURER MODEL NUMBER	FLOW RATE (GPM)	MINIMUM OPERATING PRESSURE (PSIG)	MAXIMUM OPERATING PRESSURE (PSIG)	TEMPERATURE RISE (°F)	ELECTRICAL V/PH W	MAXIMUM OPERATING WEIGHT (LBS)	NOTES	
EWH-1	ADA RESTROOM	CHRONOMITE, MODEL: M-20L	0.5	25	80	57	208/1 416	25	_	

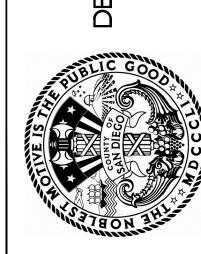
	DOMESTIC HOT WATER STORAGE TANK SCHEDULE											
UNIT TAG			RECOVERY RATE	STORAGE	INPUT				//PERATURE	OPERATING WEIGHT	REMARKS	
			(GPH) @ 90 F	GALLON	(BTU's)	VOLT	AMPS	HZ	ENT	LVG	(LBS.)	
WH-2	A.O.SMITH GPVL-40-211 PROPANE	DOMESTIC HOT WATER	45	40	40,000				55	120	200	

				PLU	MBING FIX	KTURE SO	CHEDULE
			ROUG	H-IN CONNE	CTIONS		
ITEM	FIXTURE	TRAP	WASTE	VENT	CW	МН	REMARKS
<u>WC-1</u>	WATER CLOSET (ACCESSIBLE)	INT.	4"	2"	1"	F	AMERICAN STANDARD "MADERA" 3461.576 ELONGATED, FLOOR MOUNTED FLUT VALVE. PROVIDE COMPLETE WITH SENSOR SLOAN ROYAL 111 RW SFSM-1.28 FLUSH VALVE, OP FRONT SEAT LESS COVER BEMIS 1955CTFR ANTIMICROBIAL WITH STA-TITE FASTENERS, WALVE CUTCHEON, BOLT CAPS AND SUPPLY WITH STOP. ALL EXPOSED METAL PARTS SHALL BE COME PLATED. 1.28 GPF MAXIMUM. OR EQUAL.
<u>WC-2</u>	WATER CLOSET (LIVING QUARTERS)	INT.	4"	2"	3/4"	-	AMERICAN STANDARD CADET FloWise ELONGATED PRESSURE ASSISTED MODEL # 2467.001. WHITE VITREOUS CHINA. ADA HEIGHT. 1.1 GPF.
<u>L-1</u>	LAVATORY (ACCESSIBLE)	1-1/2"	2"	1-1/2"	1/2"	1/2"	AMERICAN STANDARD NO. 9482.000 "OVALYN", 19" 16", VITREOUS CHINA UNDER COUNTER MOUNTED WITH REAR OVERFLOW, FAUCET SLOW SENSOR MODEL #EBF-187-BAT-ADM-CP-0.5GPM-MLM-IR-BT-FCT, CHROME PLATED BRASS, VANDAL RESISTANT AT LOSK WITH 0.4 GPM FLOW RATE, GRID DRAIN, WALL SUPPORT AND QUARTER TURN LOOSE KEY STOPS. AB1950 LOMPLIANT. INSULATE FIXTURE TRAPS AND WATER SUPPLIES WITH TRUEBRO LAV-GUARD WHITE VINYL. MOUNT AT ACCESSIBLE HEIGHT. OR EQUAL.
<u>L-2</u>	LAVATORY (LIVING QUARTERS)	1-1/2"	2"	1-1/2"	1/2"	1/2"	AMERICAN STANDARD NO. 2.000 "OVALYN", 19" X 16", VITREOUS CHINA UNDER COUNTER MOUNTED WITH REAR COUNTER FLOW, FAUCET SLOAN SENSOR MODEL #EBF-187-BAT-ADM-CP-0.5GPM-MLM-IR-BT-FCT, CHROME PLATED BRASS CANDAL RESISTANT AERATOR WITH 0.4 GPM FLOW RATE, GRID DRAIN, WALL SUPPORT AND QUARTER TURN LOCKEY STOPS. AB1953 COMPLIANT. INSULATE FIXTURE TRAPS AND WATER SUPPLIES WITH TRUEBRO LAVOUR AND WHITE VINYL. MOUNT AT ACCESSIBLE HEIGHT. OR EQUAL.
<u>S-1</u>	2 COMP. SINK	2"	2"	1-1/2"	1/2"	1/2"	ELKAY TO STERTONE" #LRAD-2219, 22"x19 1/2"x 6-1/2" DEEP DOUBLE COMPARTMENT WITH OFF CENTRED REAR DRAIN, 18 GAUGE STAINLESS STEEL SELF RIMMING SINK WITH LEDGE. FAUCET: AY #LKE-4000 SINGLE LEVER FAUCET WITH PULL OUT SWING SPOUT AND ROSE SPRAY OUTLET. 1.5 GPM MAX. FILTER: AQUA-PURE AP200 IN-LINE CARBON FILTER WITH (2) REPLACEMENT CARTRIDGES. (HIGH FLOW RATE = 1.75 GPM) OR EQUAL.
<u>SS-1</u>	SERVICE SINK	3"	3"	2"		3/4"	AMERICAN STANDARD, LAKEWELL MODEL #7692.008 ENAMELED CAST IRON 22" X 18" X 10-1/2" DEEP. FAUCET MODEL#8350.235 EXPOSED YOKE WALL MOUNT UTILITY FAUCET. RAP STANDARD: 7798.030 CAST IRON P-TRAP.
<u>WB-1</u>	WASHER BOX	2"	2"	1/2"	3/4"	3/4"	SIOUX CHIEF "OX BOX" WITH 1/4 TURN BALL VALVES AND WATER HAMMER ARRESTORS. 3/4" HOSE CONNECTIONS. OR EQUAL.
<u>FD-1</u>	FLOOR DRAIN	2"	2"	2"	-	-	J.R. SMITH #2005-A, ZURN Z415-B, MIFAB F1100-C CAST IRON BODY WITH 5" DIAMETER NICKEL-BRONZE ADJUSTABLE STRAINER, CLAMPING COLLAR, SEDIMENT BUCKET, 1/2" TRAP PRIMER CONNECTION AND CAST IRON TRAP.
<u>TP-1</u>	TRAP PRIMER				1/2"		PRECISION PLUMBING PRODUCTS "PRIME-RITE" TRAP PRIMER VALVE, BRASS BODY, ADJUSTABLE, WITH DISTRIBUTION UNIT WHERE REQUIRED. PROVIDE COMPLETE WITH 1/2" COPPER TYPE "L" PIPE(S) TO RECEPTOR(S) AND BALL VALVE FOR SHUTOFF. TRAP PRIMERS CONCEALED IN WALL SHALL BE PROVIDED WITH A MINIMUM 12"x12" LOCKABLE STAINLESS STEEL ACCESS PANELF. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. OR EQUAL.
<u>WHA-1</u>	WATER HOWER APT STOR						MIFAB WHB SERIES, J.R. SMITH 5000 SERIES OR ZURN NO. Z-1700 SERIES, BELLOWS TYPE WATER HAMMER ARRESTOR IN ACCORDANCE WITH PDI-WH-201 STANDARDS. PROVIDE UNITS INSTALLED IN WALL WITH A MINIMUM 12"x12" LOCKABLE STAINLESS STEEL ACCESS PANEL. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. OR EQUAL.

	PIPE MATERIAL SCHEDULE						
SERVICE	MATERIALS						
SANITARY SEWER, WASTE AND VENT ABOVE GRADE	CISPI STD 301, ASTM A74 CAST IRON NO HUB, SERVICE WEIGHT WITH <u>HEAVY DUTY</u> STAINLESS STEEL COUPLINGS WITH ELASTOMER GASKET & STAINLESS STEEL BOLTS.						
SANITARY SEWER, WASTE AND VENT BELOW GRADE UNDER BUILDING	CISPI STD 301, ASTM A74 HUB END CAST IRON WITH ASTM C564 GASKETS OR CISPI STD 301, ASTM A74 NO HUB CAST IRON WITH HEAVY DUTY STAINLESS STEEL COUPLINGS (HUSKY SD 4000)						
SANITARY SEWER, WASTE AND VENT BELOW GRADE OUTSIDE OF BUILDING	ASTM D2665 SOLID CORE BELL END SCH. 40 PVC DWV INSTALLED PER ASTM D2321 REQUIREMENTS						
POTABLE WATER ABOVE GRADE	ASTM B88 TYPE L COPPER TUBE, DRAWN TEMPER WITH ANSI B16.22 WROUGHT COPPER SOLDER-JOINT FITTINGS. ASTM B32 95-5 TIN-ANTIMONY SOLDER.						
POTABLE WATER BELOW GRADE	(WITHIN BUILDING): ASTM B88 TYPE K COPPER TUBE, SOFT TEMPER WITH BRAZED ANSI B16.22 WROUGHT COPPER SOLDER-JOINT FITTINGS WHERE REQUIRED. BAG7 SILVER SOLDER. (OUTSIDE OF BUILDING): ASTM D2665 SCH. 40						





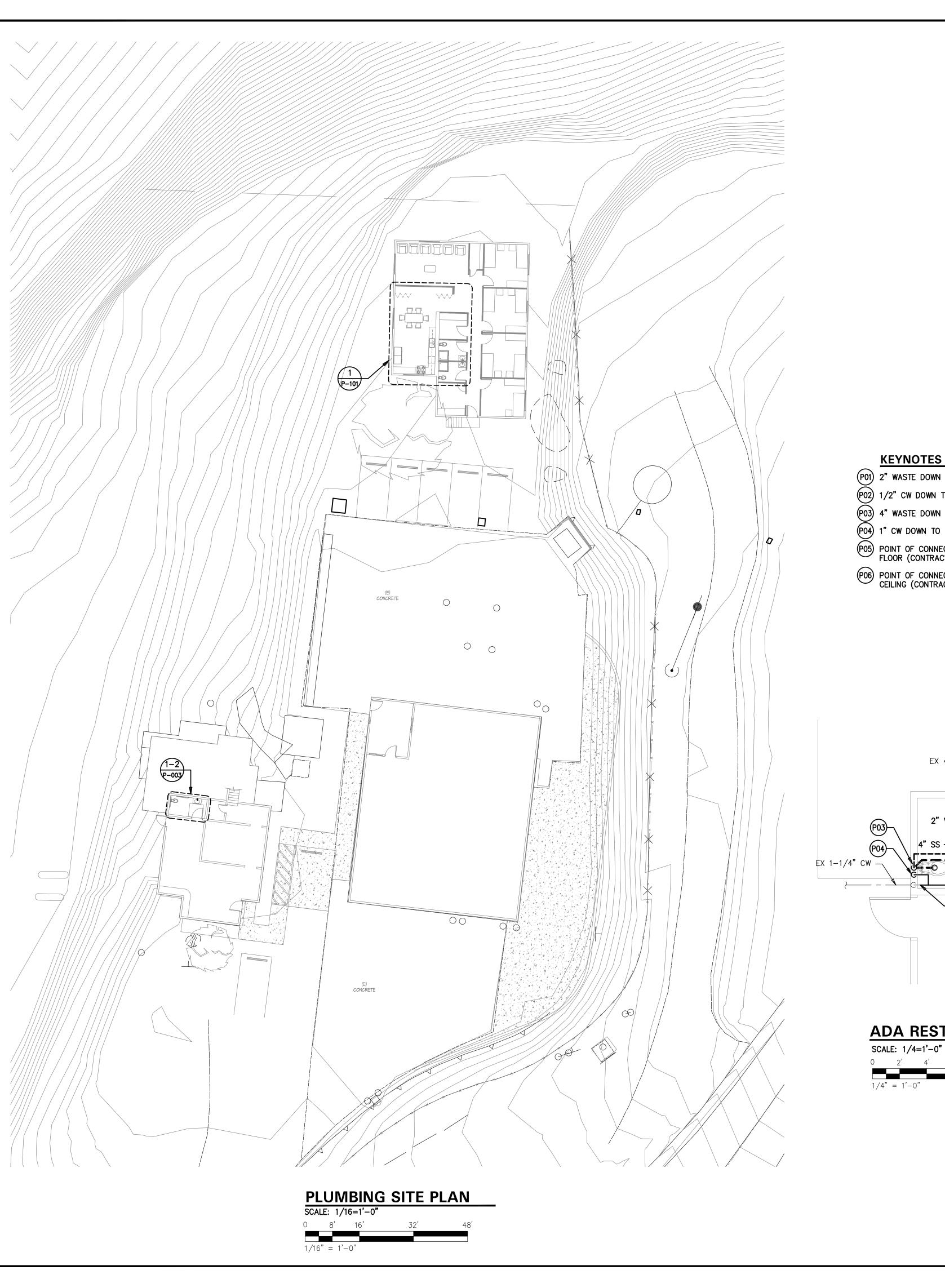


SCHEDULES

PLUMBING :

NO: M33447 Exp: 06/30/20 LA MESA, CA 91941-5221 619 / 466 / 6224 FAX 466 / 6233 E-MAIL: ENGINEER@TREISD.COM TREI PROJECT # 17426

TURPIN & RATTAN ENGINEERING, INC. CONSULTING ENGINEERS 4719 PALM AVENUE

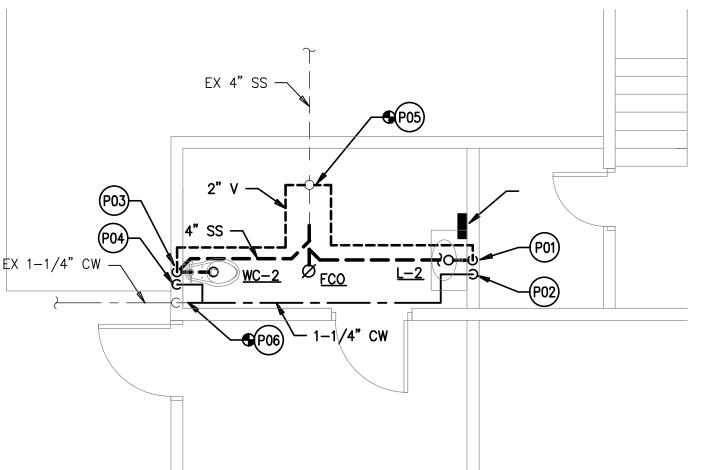


KEYNOTES

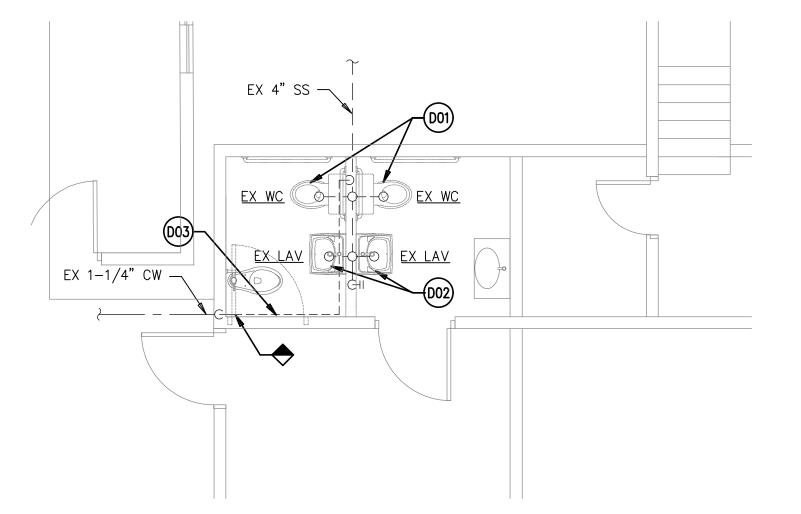
- (P01) 2" WASTE DOWN & 1-1/2" VENT UP TO ABOVE CEILING.
- (P02) 1/2" CW DOWN TO LAVATORY.
- (PO3) 4" WASTE DOWN & 2" VENT UP TO ABOVE CEILING.
- (PO4) 1" CW DOWN TO WATER CLOSET.
- POS POINT OF CONNECTION TO EXISTING SEWER BELOW FLOOR (CONTRACTOR FIELD VERIFY EXACT LOCATION)
- POINT OF CONNECTION TO EXISTING COLD WATER ABOVE CEILING (CONTRACTOR FIELD VERIFY EXACT LOCATION)

DEMO KEYNOTES

- REMOVE EXISTING TOILET, INCLUDING ALL ASSOCIATED PIPES AND FITTINGS IN WALL.
- 002) REMOVE EXISTING LAVATORY, INCLUDING FAUCET, AND ALL ASSOCIATED TRAPS, PIPES AND FITTINGS IN WALL.
- 003) REMOVE EXISTING CW ABOVE CEILING. INCLUDING ALL ASSOCIATED FITTINGS AND HANGER SUPPORTS.

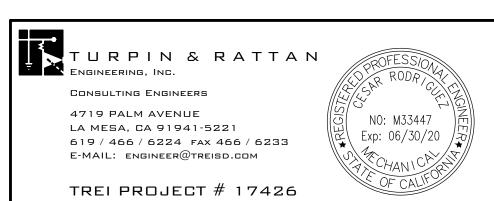


ADA RESTROOM AT COMMUNITY BLDG.



ADA RESTROOM AT COMMUNITY BLDG. DEMO

SCALE: 1/4=1'-0"





SITE **PLUMBING**

P-003

Sleeping Kitchen Sleeping 113 Day Room 112 Entry Vestibule 101 Mud/Laundry 102

KEYNOTES

P01) 4" WASTE DOWN, 2" VENT UP, & 3/4" CW DOWN TO WATER CLOSET.

(PO2) 2" WASTE DOWN, 1-1/2" VENT UP TO ABOVE CEILING & 1/2" H & CW DOWN TO LAVATORY.

P03) 2-1/2" VENT THRU ROOF.

PO4) 2" WASTE DOWN, 1-1/2" VENT UP TO ABOVE CEILING. & 3/4" H & CW DOWN TO SHOWER VALVE.

PO5) 3" WASTE DOWN, 2" VENT UP TO ABOVE CEILING. & 3/4" H & CW DOWN TO SERVICE SINK.

P06) FOR CONTINUATION REFER TO CIVIL DRAWINGS.

CONSULTING ENGINEERS

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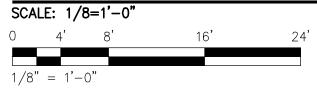


PLUMBING

LIVING QUARTERS

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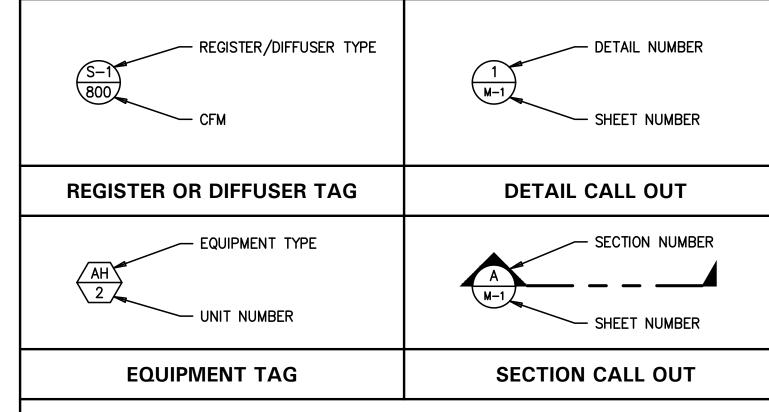
LIVING QUARTERS FLOOR PLAN - PLUMBING



MECHANICAL LEGEND								
SINGLE LINE SYMBOL	DOUBLE LINE SYMBOL	ABBREV.	DESCRIPTION					
			EXISTING HVAC TO REMAIN EXISTING HVAC TO BE REMOVED					
20x12	20x12		DUCT — INSIDE CLEAR DIMENSIONS IN INCHES 1ST DIMENSION, SIDE SHOWN 2ND DIMENSION, NOT SHOWN Ø — ROUND DUCT INSIDE CLEAR DIAMETER IN INCHES					
<i>→ -</i> + <i>→</i>	\longrightarrow		DIRECTION OF AIR FLOW					
UP/DN —→—	UP/DN →		DUCT RISES OR DROPS IN DIRECTION OF ARROW					
			DUCT TRANSITION					
			DUCT CAP					
		MVD	MANUAL VOLUME DAMPER					
BDD	BDD	BDD	BACKDRAFT DAMPER					
В	B	В	BAROMETRIC RELIEF DAMPER					
AP		AP	ACCESS PANEL OR CLEANOUT					
F -	F	FD	FIRE DAMPER 1-1/2 HOUR RATED UNLESS OTHERWISE NOTED					
FS -	FS	FSD	FIRE SMOKE DAMPER 1-1/2 HOUR RATED UNLESS OTHERWISE NOTED					
			SQUARE ELBOW W/TURNING VANES					
			RADIUS ELBOW					
			SUPPLY OR OUTSIDE AIR DUCT UP					
×			SUPPLY OR OUTSIDE AIR DUCT DOWN					
			RETURN AIR DUCT UP					
			RETURN AIR DUCT DOWN					
			EXHAUST AIR DUCT UP					
			EXHAUST AIR DUCT DOWN					
e —			ROUND DUCT UP					
Ø—			ROUND DUCT DOWN					
			FLEXIBLE CONNECTION					
20"x12"L	20"x12"L	L	LINED DUCT — INSIDE CLEAR DIMENSIONS SHOWN					
-y-			SUPPLY AIR TAKEOFF					
·			RETURN/EXHAUST AIR TAKEOFF					
—————————————————————————————————————			SUPPLY AIR TAKEOFF — SPIN—IN FITTING WITH DAMPER					
	판		RECTANGULAR SUPPLY DIFFUSER FOUR-WAY AIRFLOW DIRECTION UNLESS OTHERWISE NOTED					
			RECTANGULAR RETURN GRILLE					
	$\overline{\boxtimes}$		RECTANGULAR EXHAUST GRILLE					
•	<u> </u>	POC	POINT OF CONNECTION					
•		POD	POINT OF DISCONNECTION					
#) RL			KEYNOTE REFRIGERANT LIQUID					
RS			REFRIGERANT SUCTION					
→ - -			PIPE TURNING DOWN PIPE TURNING UP					
			ROOM WALL MOUNTED TEMPERATURE SENSOR					

ļ	ABBREVIATIONS	ABBREVIATIONS			
ABBREV.	DESCRIPTION	ABBREV.	DESCRIPTION		
AFF	ABOVE FINISHED FLOOR	HP	HORSEPOWER		
AMB	AMBIENT	IN	INCHES		
APD	AIR PRESSURE DROP	LAT	LEAVING AIR TEMPERATURE		
ARCH	ARCHITECTURAL	L	LENGTH		
BDD	BACKDRAFT DAMPER	LB	POUNDS		
ВНР	BRAKE HORSEPOWER	LDB	LEAVING DRY BULB TEMPERATURE		
BOD	BOTTOM OF DUCT	LWB	LEAVING WET BULB TEMPERATURE		
втин	BTU PER HOUR	LWT	LEAVING WATER TEMPERATURE		
CD	CONDENSATE DRAIN	MAX	MAXIMUM		
CFM	CUBIC FEET PER MINUTE	мвн	THOUSAND BTU PER HOUR		
CLG	CEILING	MCA	MINIMUM CIRCUIT AMPACITY		
CONT	CONTINUATION	MIN	MINIMUM		
DB	DRY BULB	NC	NORMALLY CLOSED		
DIA Ø	DIAMETER	NO	NORMALLY OPEN		
DX	DIRECT EXPANSION (REFRIGERANT)	NTS	NOT TO SCALE		
EA	EXHAUST AIR	OA	OUTSIDE AIR		
EAT	ENTERING AIR TEMPERATURE	ov	OUTLET VELOCITY		
EDB	ENTERING DRY BULB TEMPERATURE	PD	PRESSURE PROP		
EER	ENERGY EFFICIENCY RATIO	PLBG	PLUMBING		
EFF	EFFICIENCY	PSI	POUNDS PER SQUARE INCH		
ENT	ENTERING	PSIG	PSI GAUGE		
ESP	EXTERNAL STATIC PRESSURE	QTY	QUANTITY		
EWB	ENTERING WET BULB TEMPERATURE	RA	RETURN AIR		
EWT	ENTERING WATER TEMPERATURE	RH	RELATIVE HUMIDITY		
EX	EXISTING	RPM	REVOLUTIONS PER MINUTE		
FT	FEET	SA	SUPPLY AIR		
FF	FINISHED FLOOR	TG	TRANSFER GRILLE		
FLA	FULL LOAD AMPERES	TSP	TOTAL STATIC PRESSURE		
FPI	FINS PER INCH	TYP	TYPICAL		
FPM	FEET PER MINUTE	UNO	UNLESS NOTED OTHERWISE		
FPS	FEET PER SECOND	V/PH/Hz	VOLTS. PHASE, HERTZ		
FT	FEET	VD	VOLUME DAMPER		
FV	FACE VELOCITY	w	WIDTH		
GA	GAUGE	W/	WITH		
GPM	GALLONS PER MINUTE	WB	WET BULB		
Н	HEIGHT	WG	WATER GAUGE		
HD	FEET OF WATER	l wt	WEIGHT		

DESCRIPTION OF TAGS



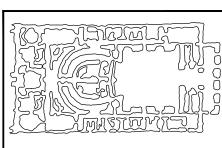
ANCHORAGE AND BRACING NOTES

- ALL EQUIPMENT, PIPING, AND DUCTWORK SHALL BE ANCHORED OR BRACED IN ACCORDANCE WITH THE UNIFORM BUILDING CODE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANCHORAGE AND/OR BRACING FOR ALL EQUIPMENT REGARDLESS OF WHETHER DETAILED OR SHOWN ON PLANS.
- ALL DUCTWORK AND PIPING SHALL BE SUPPORTED OR BRACED IN ACCORDANCE WITH THE SMACNA GUIDELINES FOR "SEISMIC RESTRAINTS OF MECHANICAL SYSTEMS AND PLUMBING PIPING SYSTEMS," SUPERSTRUT "SEISMIC RESTRAINT SYSTEM," UNISTRUT CORP. "SEISMIC BRACING FOR DUCTWORK, CONDUIT, AND CABLE TRAY SUPPORTS," OR B-LINE "SEISMIC RESTRAINTS." IF THE PIPE SIZE EXCEEDS THE SIZE INCLUDED IN THESE MANUALS, CUSTOM DESIGNED SUPPORTS ARE REQUIRED. ALL CUSTOM SUPPORTS REQUIRE THE APPROVAL OF A REGISTERED STRUCTURAL ENGINEER.
- EQUIPMENT ANCHORAGE DETAILING & ENGINEERING CALCULATIONS, TO MEET SELECTED EQUIPMENT MANUFACTURER REQUIREMENTS, ARE TO BE INCLUDED AS PART OF EQUIPMENT SHOP DRAWINGS. CONTRACTOR SHALL FIELD VERIFY HOUSEKEEPING PADS DIMENSIONS BASED ON ANCHORAGE REQUIREMENTS. REFER TO STRUCTURAL DRAWINGS FOR CONCRETE HOUSEKEEPING PAD DESIGN.

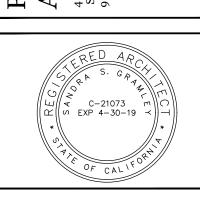
GENERAL NOTES

- ALL WORK SHALL COMPLY WITH THE LATEST EDITION(S) OF THE CALIFORNIA BUILDING, MECHANICAL, PLUMBING, AND OTHER APPLICABLE FEDERAL, STATE, AND LOCAL CODES AS ADOPTED AND ENFORCED BY THE LOCAL JURISDICTION HAVING AUTHORITY. IN CASE THE PLANS SHOW MORE STRINGENT REQUIREMENTS, THE PLANS SHALL GOVERN THE DESIGN, HOWEVER THE DESIGN DOCUMENTS SHALL NOT BE INTERPRETED AS AUTHORITY TO VIOLATE CODE(S) OR REGULATION(S).
- SUBMISSION OF BID IN CONNECTION WITH THIS WORK SHALL IMPLY THAT THE BIDDER HAS EXAMINED THE JOB SITE UNDER WHICH THE CONTRACTOR WILL BE OBLIGATED TO OPERATE UNDER THIS CONTRACT. NO EXTRA CHARGE WILL BE ALLOWED FOR FAILURE OF ANY BIDDER TO EXAMINE THE SITE PRIOR TO BID.
- . WHERE USED, THE TERM "PROVIDE" SHALL MEAN "FURNISH AND INSTALL".
- H. IN THE EVENT OF A CONFLICT OR INCONSISTENCY BETWEEN ITEMS INDICATED ON DESIGN PLANS/SPECIFICATIONS WITH CODE REQUIREMENTS, THE MORE STRINGENT STANDARD SHALL
- CONTRACTOR SHALL FURNISH LABOR, MATERIALS, EQUIPMENT, APPURTENANCES, AND TRANSPORTATION AS REQUIRED TO PROPERLY INSTALL ALL HVAC SYSTEMS OR RELATED COMPONENTS AS INDICATED ON PLANS AND SPECIFIED HEREIN.
- ALL EQUIPMENT, MATERIAL AND APPURTENANCES TO BE INSTALLED AS PART OF THE PROJECT SHALL BEAR AN UNDERWRITERS LABORATORIES LABEL (UL), AND INSTALLED IN SUCH A MANNER FOR WHICH THEY ARE DESIGNED AND APPROVED.
- CONTRACTOR SHALL DOCUMENT AND RELAY ANY MAJOR DEVIATIONS FROM THE DESIGN DOCUMENTS, AND ATTAIN APPROVAL FROM THE OWNER/DESIGN TEAM BEFORE PROCEEDING. CONTRACTOR SHALL PROVIDE AS-BUILT COPIES INDICATING ALL CHANGES/DEVIATIONS MADE DURING CONSTRUCTION. CONTRACTOR SHALL PROVIDE COMPLETED AS-BUILT DRAWINGS IN THE LATEST VERSION OF AUTOCAD.
- B. ALL WORK SHALL BE PERFORMED IN A CLEAN AND WORKMANLIKE MANNER. CARE SHALL BE EXERCISED TO MINIMIZE ANY CONVENIENCE OR DISTURBANCE TO OTHER AREAS OF THE BUILDING WHICH ARE TO REMAIN IN OPERATION. ISOLATE WORK AREAS BY MEANS TO KEEP DUST AND DIRT WITHIN THE CONSTRUCTION AREA.
- NO PIPING. EQUIPMENT. ETC. SHALL BE REMOVED. DISCONNECTED OR SHUT DOWN WITHOUT PRIOR REVIEW WITH THE OWNER'S REPRESENTATIVE TO CONFIRM THAT AREAS TO REMAIN IN OPERATION WILL NOT BE AFFECTED. IF ANY AREAS NOT WITHIN THE SCOPE OF WORK ARE AFFECTED BY ANY SHUTDOWN, REMOVAL OR DISCONNECTION, SUFFICIENT ADVANCE NOTICE MUST BE GIVEN TO THE OWNER'S REPRESENTATIVE INDICATING WHICH AREAS WILL BE AFFECTED, WHEN THE PROPOSED SHUTDOWN WILL OCCUR, AND FOR HOW LONG A PERIOD OF
- IO. THE ARRANGEMENT OF EQUIPMENT AND PIPING SHOWN ON THE DRAWINGS IS BASED UPON INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF DESIGN AND IS NOT INTENDED TO SHOW EXACT DIMENSIONS PARTICULAR TO A SPECIFIC MANUFACTURER. THE DRAWINGS ARE, IN PART, DIAGRAMMATIC AND SOME FEATURES OF THE ILLUSTRATED EQUIPMENT INSTALLATION MAY REQUIRE REVISION TO MEET ACTUAL EQUIPMENT INSTALLATION REQUIREMENTS. STRUCTURAL SUPPORTS, FOUNDATIONS, CONNECTED PIPING, VALVES, PIPE SUPPORTS AND ELECTRICAL CONDUIT SPECIFIED MAY HAVE TO BE ALTERED OR ADDITIONAL ITEMS REQUIRED TO ACCOMMODATE THE EQUIPMENT PROVIDED. NO ADDITIONAL PAYMENT WILL BE MADE FOR SUCH REVISIONS, ALTERATIONS, AND/OR ADDITIONS.
- 1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AT THE SITE MAKING FIELD MEASUREMENTS AND SHOP DRAWINGS NECESSARY FOR FABRICATION OR ERECTION OF HVAC AND PIPING SYSTEMS. MAKE ALLOWANCE FOR BEAMS, PIPES, AND OTHER OBSTRUCTIONS IN BUILDING CONSTRUCTION. CHECK DRAWINGS SHOWING WORK OF OTHER TRADES AND CONSULT WITH THE OWNER'S REPRESENTATIVE IN THE EVENT OF POTENTIAL INTERFERENCE. SHOP DRAWINGS SHALL BE MINIMUM 1/4"=1'-0" SCALE, INDICATING FITTINGS, SIZES, WELDS, AND CONFIGURATIONS AND SUBMITTED IN THE LATEST VERSION OF AUTOCAD TO THE ENGINEER FOR REVIEW.
- 12. CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES PRIOR TO FABRICATION, PURCHASE, AND/OR INSTALLATION OF ALL WORK.
- 13. BEFORE COMMENCEMENT OF WORK, CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS. ELEVATIONS, AND CHARACTERISTICS OF ALL UTILITIES.
- 14. EXISTING MATERIALS THAT ARE REMOVED SHALL NOT BE REUSED IN NEW SYSTEMS, EXCEPT WHERE INDICATED AS BEING RELOCATED.
- 15. ALL EQUIPMENT SHALL BE INSTALLED IN STRICT COMPLIANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 16. GALVANIZED SHEET METAL SHALL BE PROVIDED FOR ALL HVAC DUCT SYSTEMS (EXCEPT WHERE ANOTHER MATERIAL IS INDICATED), AND SHALL BE CONSTRUCTED/SUPPORTED/INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE CALIFORNIA MECHANICAL CODE AND THE LATEST SMACNA STANDARDS.
- 7. ALL PIPING SHALL BE INSTALLED AS INDICATED ON THE DRAWINGS IN A CLEAN AND WORKMANLIKE MANNER AND BE SUPPORTED AS REQUIRED BY CODES. PIPING SHALL BE SET UP AND DOWN AND OFFSET AS REQUIRED TO SUIT FIELD CONDITIONS. DIELECTRIC COUPLINGS SHALL BE USED WHERE DISSIMILAR METALS ARE JOINED.
- 8. CONTRACTOR SHALL PROVIDE ALL NECESSARY SUPPORTS FOR FIXTURES, DUCTWORK, PIPING, AND MECHANICAL EQUIPMENT IN ORDER TO COMPLY WITH SEISMIC REQUIREMENTS AS OUTLINED BY THE LATEST EDITION(S) OF THE CALIFORNIA BUILDING CODE, SMACNA INSTALLATION STANDARDS, AND ALL RELATED LOCAL ORDINANCES.
- 19. CONTRACTOR SHALL NOT BORE, NOTCH, CUT, OR PENETRATE INTO A STRUCTURAL MEMBER WITHOUT WRITTEN APPROVAL FROM THE OWNER'S REPRESENTATIVE OR STRUCTURAL ENGINEER OF RECORD.
- 20. PRIOR TO OCCUPANCY ALL HVAC SYSTEMS SHALL BE BALANCED IN ACCORDANCE WITH AABC OR NEBB STANDARDS AND ALL CONTRACT DOCUMENTS BY AN INDEPENDENT AIR BALANCE CONTRACTOR. CONTRACTOR SHALL PROVIDE CERTIFICATION OF OUTSIDE AIR VENTILATION RATES AND THAT ALL SYSTEMS HAVE BEEN BALANCED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- 21. ALL FLEXIBLE DUCTWORK SHALL NOT EXCEED 5'-0" IN LENGTH TO RESPECTIVE AIR DEVICE, SHALL BE INSTALLED PER MANUFACTURER'S LISTING STRETCHED AS TIGHT AS POSSIBLE. AND SHALL MEET THE REQUIREMENTS OF NFPA 90A SECTION 4.3.2 IN CONSTRUCTION AND INSTALLATION.
- 22. MANUAL VOLUME DAMPERS SHALL BE PROVIDED IN ALL DUCT BRANCHES TO INDIVIDUAL DIFFUSERS, GRILLES, AND REGISTERS.
- 23. AIR DISTRIBUTION SYSTEMS SHALL NOT BE OPERATED WITHOUT A FILTER IN PLACE. CONTRACTOR SHALL REPLACE ALL FILTERS WITH A COMPLETE AND NEW SET PRIOR TO BUILDING OCCUPANCY.
- 24. COVER ALL OPENINGS IN EQUIPMENT, PIPING, DUCTS, AND OTHER SYSTEMS TO EXCLUDE ENTRANCE OF DIRT OR OTHER FOREIGN MATERIAL DURING CONSTRUCTION.





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OF SHEETS

	SPLIT SYSTEM HEAT PUMP UNIT SCHEDULE (OUTDOOR)	
TAG MANUFACTURER MODEL NO. AREA SERVED LOCATION	REFRIG. PIPING SIZE ELECTRICAL DATA LIQUID SUCTION V/PH/Hz MCA MOCP REMARKS	OPERATING WEIGHT (LB)
OU CARRIER 38MAQB183 OFFICE GRADE	1/4" 1/2" 208/1/60 13.0 20 PROVIDE TIME DELAY RELAY, CRANKCASE HEATER, BASE PAN HEATER, CORROSION RESISTANT COATING ON CONDENSER COIL. EACH REFRIGERANT LINE SHALL BE INDIVIDUALLY INSULATED PER MANUFA SRER'S INSTRUCTIONS.	103
OU CARRIER 38MAQB183 DATA GRADE	1/4" 1/2" 208/1/60 13.0 20 PROVIDE TIME DELAY RELAY, CRANKCASE HEATER, BASE PAN HEATER, CORROSION RESISTANT COATING ON CONDENSER COIL. EACH REFRIGERANT LINE SHALL BE INDIVIDUALLY INSULATED PER ANUFACTURER'S INSTRUCTIONS.	103

		SPLIT SYSTEM FURNACE/COIL UNIT SCHEDULE (INDOOR)																					
		GENER	AL DATA				EVAPORATO	RFAN			DX COIL				HEAT	ING INFORMAT	ΠΟΝ		ELEC	TRICAL	_ DATA		ODEDATINO
TAG	MANUFACTURER	R MODEL	AREA SERVED	LOCATION	OUTDOOR UNIT	CFM	OSA ESI	MOTOR HI	P MAKE	MODEL	AIR PRESSURE DROP (IN WC)	TOTAL (MBH)	SENSIBLE (MBH)) AFUE	OUTPUT (MBH)	INPUT (MBH)	EAT (DB)	LAT (DB)	V/PH/H	7 (۷)	rcA Mo	IOCP	REMARKS OPERATING WEIGHT (LB)
FAU 1	CARRIER	58CTY110122	LIVING QUARTERS	ABOVE CEILING	CU 1	2,000	300 0.7	3 1.0	CARRIER	CNPHP6124ALA	0.37	57.8	45.1	80.0	85.0	105.0	59	108	م/1/6	0 1	13.0	20	PROVIDE BOTTOM RETURN FILTER RACK AND 2" MERV 8 FILTER, 4" TYPE B VENT, EC MOTOR, FACTORY PROPANE CONVERSION KIT, CONDENSATE OVERFLOW SWITCH WIRED TO SHUTDOWN CONDENSING UNIT.

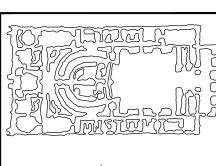
	SPLIT SYSTEM CONDE	SING UNIT SCHEDULE (OUTDOOR)	
TAG MANUFACTURER MODEL AREA SERVED LOCATION INDOOR UNIT	COMPRESSOR CONDENSER CAPACITY ELECTRICAL DATA TYPE REFRIGERANT FAN MOTOR (NOMINAL) SEER EER V/PH/Hz MCA MOCP	IARKS	OPERATING WEIGHT (LB)
CU CARRIER 24ACB760AB03 LIVING QUARTERS GRADE FAU 1		OVIDE CORROSION RESISTANT COIL COATING IN CONDENSER COIL, 2—STAGE COOLING, FACTORY ACCESSORY KITS FOR LOW AMBIENT COOLING KIT, LOUVERED COIL GUARD, REFRIGERANT LINES SHALL BE ULATED PER MANUFACTURER'S INSTRUCTURES.	281

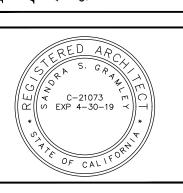
	EXHAUST FAN SCHT JULE														
		GENER	L DATA				DESIGN		ELECTRICAL	DATA				ODED A TIMO	
TAG	MANUFACTURER	MODEL NO	AREA SERVED	LOCATION	TYPE	СҒМ		FAN MOTO	OPERATING TTS) POWER (BHP)	V/PH/Hz	FLA	CONTROL	REMARKS	OPERATING WEIGHT (LB)	
EF 1	GREENHECK	SP-110-VG	RESTROOM	COMMUNITY BLDG RESTROOM	CEILING	110	0.28	940 (8)	_	115/1/60	0.2	LIGHTING CONTROLS	PROVIDE BACKDRAFT DAMPE INTEGRAL DISCONNECT, ALL WRING AND CONNECTIONS REQUIRED FOR FAN OPERATION, EC MOTOR WITH MOUNTED SPEED DIAL.	12	
EF 2	GREENHECK	SP-A90-130-V0	MUDD/LAUNDR	Y LIVING QUARTERS	CEILING	130	0.27	1,041 (12)	_	115/1/60	0.3	CON IROLS	PROVIDE BACKDRAFT SAMPER, INTEGRAL DISCONNECT, ALL WIRING AND CONNECTIONS REQUIRED FOR FAN OPERATION, EC MOTOR WITH MOUNTED SPEED DIAL, ROOF TERMINATION WITH FLASHING FLANGE.	19	
EF 3	GREENHECK	SP-A50-90-VG	ВАТН	LIVING QUARTERS	CEILING	70	0.25	838 (12)	_	115/1/60	0.3	LIGHTING CONTROLS/ HUMIDISTAT	/ PROVIDE PEXDRAFT DAMPER, INTEGRAL DISCONNECT, ALL WIRING AND CONNECTIONS REQUIRED FOR FAN OPERATION, EC MOTOR WITH MOUNTED SPEED DIAL, ROOF TERMINATION WITH FLASHING FLANGE, HUMIDISTAT.	20	
EF 4	GREENHECK	SP-A50-90-VG	ВАТН	LIVING QUARTERS	CEILING	70	0.25	838 (12)) –	115/1/60	0.3	HUMIDISTAT LIGHTING CONTROLS/ HUMIDISTAT	/ PMDE BACKDRAFT DAMPER, INTEGRAL DISCONNECT, ALL WIRING AND CONNECTIONS REQUIRED FOR FAN OPERATION, EC MOTOR WITH MOUNTED SPEED DIAL, ROOF TERMINATION WITH FLASHING FLANGE, HUMIDISTAT.	20	

	AIR DEVICE SCHEDULE													
UNIT NO	TYPE	STYLE	NECK SIZE	CFM RANGE	MODEL	ACCESSORIES								
			6"x4"	35										
(S-1)	SUPPLY AIR	RECTANGULAR CURVED	12"x8"	200	FOR INSTALLATION IN HARD LID CEILING:	MULTI-LOUVER DAMPER								
<u> </u>	SUPPLI AIR	BLADE DIFFUSER	10"x10"	260	TITUS 250-AA	MOETI-ECOVER DAMIFER								
			16"x10"	435										
R-1 -	RETURN, EXHAUST, OR	RETURN, EXHAUST, OR	10"x6"	200	FOR INSTALLATION IN HARD LID CEILING OR WALL:									
(T-1)	TRANSFER AIR	TRANSFER GRILLE	30"x18"	2,000	TITUS 350RL									

NOTES: SELECT FRAME TYPES BASED ON THE CEILING TYPE.

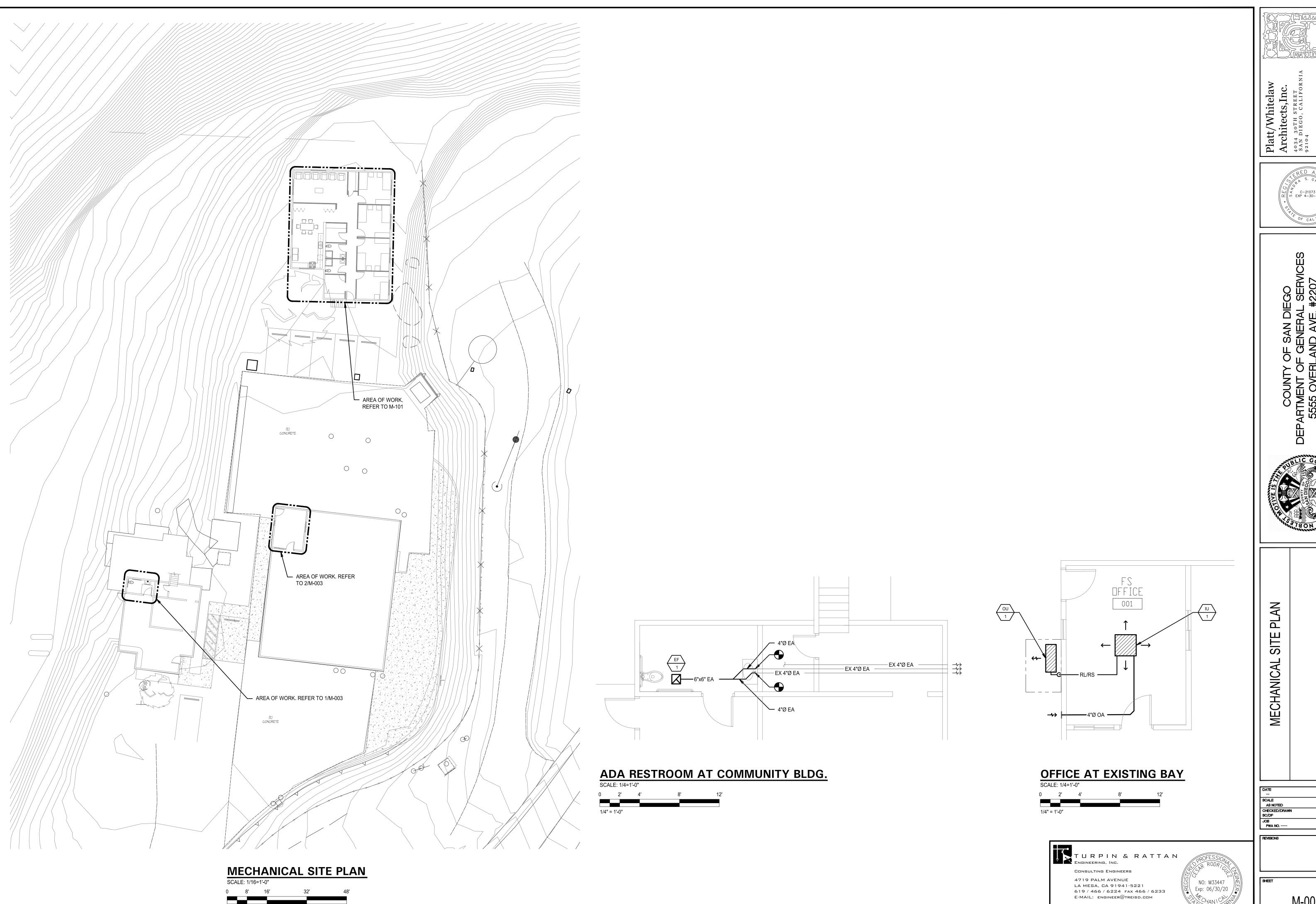


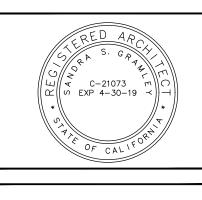




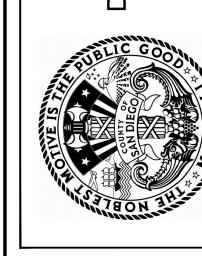


MECHANICAL







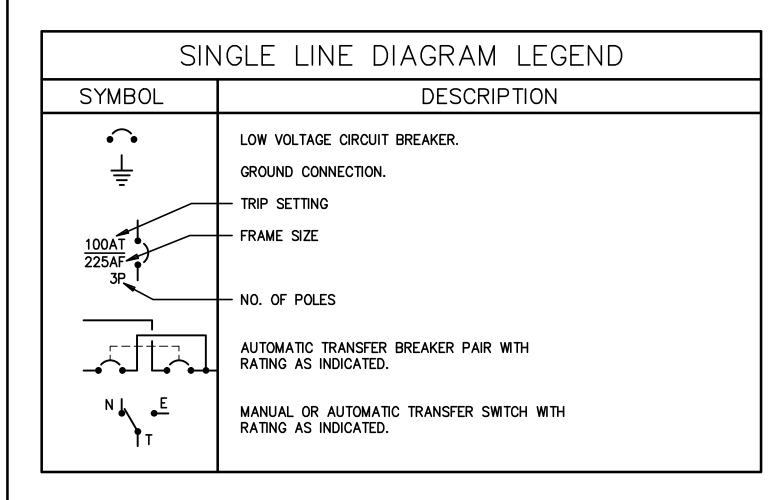


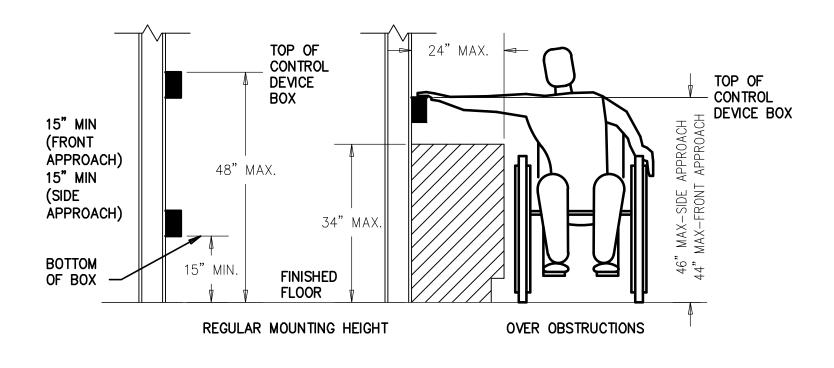
TREI PROJECT # 17426

	ELECTRICAL LEGEND
SYMBOL	DESCRIPTION
[<u>ី</u>]្វាលៈទេ	DASHED SYMBOL INDICATES EXISTING FIXTURE, OUTLET, DEVICE
	OR EQUIPMENT TO BE REMOVED. FINE—LINED SYMBOL INDICATES EXISTING FIXTURE, OUTLET,
	DEVICE OR EQUIPMENT TO REMAIN.
——EX——	EXISTING CONDUIT TO REMAIN. — INDICATES FIXTURE TYPE. SEE FIXTURE SCHEDULE FOR LAMP,
A	WATTAGE, AND MOUNTING INFORMATION. TYPICAL FOR ROOM INDICATED, UNLESS OTHERWISE NOTED.
HA-110	— INDICATES CONTROLLING SWITCH LEG.
	— DENOTES BRANCH CIRCUIT NUMBER SUPPLYING FIXTURE.
	— WHEN USED, DENOTES PANELBOARD SUPPLYING FIXTURE. PENDANT MOUNTED LIGHTING FIXTURE.
	RECESSED MOUNTED LIGHTING FIXTURE.
	SURFACE MOUNTED LIGHTING FIXTURE.
	RECESSED INDIRECT LIGHTING FIXTURE.
	SURFACE MOUNTED LIGHTING FIXTURE.
	STRIP LIGHTING FIXTURE. ROUND LIGHTING FIXTURE. LAMP AND MOUNTING PER FIXTURE
0	TYPE.
Δ O	WALL MOUNTED LIGHTING FIXTURE. MOUNTING HEIGHT AS INDICATED. SPOT OR FLOOD LIGHTING FIXTURE.
v ⊗	CEILING MOUNTED EXIT SIGN. PROVIDE DIRECTIONAL ARROW(S)
	AS INDICATED. WALL MOUNTED EXIT SIGN. PROVIDE DIRECTIONAL ARROW(S) AS
፟	INDICATED. MOUNT AT +96" AFF OR AS INDICATED. SINGLE POLE, SINGLE THROW TOGGLE SWITCH, MOUNTED AT
S a	+45" AFF AT CENTER OF BOX U.O.N. SUBSCRIPT INDICATES CONTROLLING SWITCH LEG. MANUAL MOTOR STARTER SWITCH WITH THERMAL OVERLOAD
$\mathbf{s}^{^{\intercal}}$	PROTECTION. MOUNTED ADJACENT TO MOTOR U.O.N.
(1)	DAYLIGHT SENSOR (SINGLE OR MULTI-ZONE). SYMBOL INDICATES A DAYLIGHT SENSOR OR SENSORS ARE REQUIRED IN THE RESPECTIVE DAYLIT/SKYLIT ZONE(S). EXACT TYPE(S), QUANTITY AND PHYSICAL PLACEMENT WITHIN THE RESPECTIVE ZONE SHALL BE DETERMINED BY THE EQUIPMENT VENDOR AT TIME OF BID. COORDINATION WITH THE COMMISSIONING TEAM DURING CONSTRUCTION IS REQUIRED. DAYLIGHT SETTINGS SHALL BE FINALLY ADJUSTED AFTER FURNITURE, FINAL FINISHES, AND ALL LIGHTING EQUIPMENT ARE INSTALLED AND MADE OPERATIONAL. SENSORS SHALL NOT BE PLACED IN DIRECT SUNLIGHT NOR IN DIRECT ILLUMINATION FROM LIGHT FIXTURES. DEVICE SETTINGS SHALL REDUCE ILLUMINATION LIGHTING POWER BY A MINIMUM OF 65% WHEN DAYLIGHT ILLUMINANCE IS 150% OF DESIGN ILLUMINANCE.
©	INDICATES AN OCCUPANCY SENSOR FEATURE IS REQUIRED IN THIS SPACE/ROOM/AREA. EXACT TYPE(S), QUANTITY AND PHYSICAL PLACEMENT WITHIN THE SPACE/ROOM/AREA SHALL BE DETERMINED BY THE EQUIPMENT VENDOR AT TIME OF BID. COORDINATION WITH THE COMMISSIONING TEAM DURING CONSTRUCTION IS REQUIRED. OCCUPANCY SETTINGS SHALL BE FINALLY ADJUSTED AFTER FURNITURE, FINAL FINISHES, AND ALL LIGHTING EQUIPMENT ARE INSTALLED AND MADE OPERATIONAL.
D	DIMMER SWITCH, MOUNTED AT +45" AFF TO CENTER OF BOX U.O.N.
OC ab	COMBINATION OCCUPANCY SENSOR/WALL SWITCH, WALL MOUNTED AT +45" AFF TO CENTER OF BOX U.O.N. SUBSCRIPT WHEN SHOWN INDICATES BI-LEVEL SWITCHING FUNCTIONS.
Φ	DUPLEX RECEPTACLE, MOUNTED AT +18" AFF TO CENTER OF BOX U.O.N.
①	DUPLEX RECEPTACLE, GFCI TYPE, MOUNTED AT +18" AFF TO CENTER OF BOX U.O.N.
①	SPLIT WIRED RECEPTACLE (TOP HALF CONTROLLED BY WALL SWITCH) MOUNTED AT +18" AFF TO CENTER OF BOX U.O.N.
#	DOUBLE DUPLEX RECEPTACLE, MOUNTED AT +18" AFF TO CENTER OF BOX U.O.N.
⊕	DOUBLE DUPLEX RECEPTACLE GFCI TYPE, MOUNTED AT +18" AFF TO CENTER OF BOX U.O.N.
III	DOUBLE DUPLEX RECEPTACLE, SPLIT WIRED WITH ONE DUPLEX CONTROLLED BY OCCUPANCY SENSOR, MOUNTED AT +18" AFF TO CENTER OF BOX U.O.N.
☆	SPECIAL PURPOSE RECEPTACLE AS NOTED.
= = =	FLUSH MOUNTED PANELBOARD.
_ _ _	SURFACE MOUNTED PANELBOARD. SURFACE MOUNTED CABINET, AS NOTED.
 	FUSED DISCONNECT SWITCH. SIZE AS NOTED. (FDS)
0	JUNCTION BOX. SIZED PER CEC, U.O.N.
AC\	MOTOR CONNECTION.
$\frac{\lambda \sigma}{2}$	MECHANICAL EQUIPMENT REFERENCE.
	CONDUIT CONCEALED UNDER FLOOR SLAB OR UNDERGROUND.
<u> </u>	CONDUIT INSTALLED EXPOSED. ELECTRICAL NOTE REFERENCE (TYPICAL)

INDICATES DETAIL '1' ON SHEET E-6 (TYPICAL)

	ELECTRICAL LEGEND
SYMBOL	DESCRIPTION
3/4"-3#8+1#10 EG ① PA-7 ① PA-7 ② PA-13,15 2 #10	BRANCH CIRCUIT DESIGNATIONS: INDICATES 3/4" CONDUIT WITH (3) 8 AWG CONDUCTORS + (1) 10 AWG EQUIPMENT GROUND. — DENOTES BRANCH CIRCUIT(S) SUPPLYING OUTLET. — WHEN USED, DENOTES PANELBOARD SUPPLYING OUTLET. — DENOTES BRANCH CIRCUIT WIRE SIZE WHEN OTHER THAN 12 AWG.
	BRANCH CIRCUIT WIRING NOTE: MULTIWIRE BRANCH CIRCUITS SHALL ORIGINATE FROM MULTIPLE—POLE CIRCUIT BREAKERS AS REQUIRED BY CEC (NEC) 210.4(B). BRANCH CIRCUITS THAT ORIGINATE FROM SINGLE—POLE CIRCUIT BREAKERS SHALL NOT BE INSTALLED AS PART OF A MULTIWIRE CIRCUIT. EACH SINGLE—POLE BREAKER CIRCUIT SHALL HAVE A DEDICATED NEUTRAL CONDUCTOR. REFER TO THE PANEL SCHEDULES FOR CIRCUIT BREAKER REQUIREMENTS.
F ∇F ▼15 F 15 € 15 F	FIRE ALARM MANUAL PULL STATION, MOUNTED AT +45" AFF TO CENTER OF BOX U.O.N. FIRE ALARM HORN, MOUNTED AT +96" AFF U.O.N. FIRE ALARM HORN WITH VISUAL INDICATION, MOUNTED AT +80" AFF U.O.N. SUBSCRIPT INDICATES CANDELA RATING. CEILING MOUNTED FIRE ALARM HORN WITH VISUAL INDICATION. SUBSCRIPT INDICATES CANDELA RATING. FIRE ALARM VISUAL DEVICE, MOUNTED AT +80" AFF U.O.N. SUBSCRIPT INDICATES CANDELA RATING. SMOKE DETECTOR — PHOTOELECTRIC TYPE.





WHERE LIGHT SWITCHES, RECEPTACLES, TELEPHONE/DATA OUTLETS, DIMMING CONTROL STATIONS, FIRE ALARM PULL STATIONS OR OTHER OPERABLE OUTLET DEVICES OCCUR OVER FIXED OBSTRUCTIONS (SUCH AS CASEWORK, ETC) RESPECTIVE DEVICE MOUNTING HEIGHT LIMITS AFF SHALL BE AS TYPICALLY DEPICTED ABOVE.

MOUNTING HEIGHT LIMITS OVER OBSTRUCTIONS NO SCALE

GENERAL NOTES

- . ALL WORK SHALL BE IN COMPLIANCE WITH THE 2016 EDITION OF THE CEC AND WHERE APPLICABLE AS AMENDED BY THE LOCAL ORDINANCES AND CODES OF GOVERNING MUNICIPALITIES.
- 2. ALL ELECTRICAL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS AND ALL OTHER RELATED CONTRACT
- 3. VERIFY EXACT LOCATION, SIZE, AND EXTENT OF ALL EXISTING UTILITIES, OBSTRUCTIONS AND/OR OTHER CONDITIONS WHICH MAY AFFECT THE PROPOSED WORK UNDER THE PROJECT. THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO PREVENT DAMAGE TO EXISTING WORK. ANY DAMAGE TO EXISTING UTILITIES OR STRUCTURES DURING CONSTRUCTION SHALL BE IMMEDIATELY REPAIRED OR REPLACED IN ACCORDANCE WITH THE OWNER'S DIRECTION AT THE CONTRACTOR'S EXPENSE.
- 4. CAREFULLY EXAMINE ALL CONTRACT DRAWINGS/SPECIFICATIONS AND BE RESPONSIBLE FOR THE PROPER FITTING OF MATERIALS AND EQUIPMENT AT EACH LOCATION AS INDICATED WITHOUT SUBSTANTIAL ALTERATION. IN AS MUCH AS THE DRAWINGS ARE GENERALLY DIAGRAMMATIC AND BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE OFFSETS, FITTINGS AND ACCESSORIES WHICH MAY BE REQUIRED. FURNISH FITTINGS REQUIRED TO MEET SUCH CONDITIONS AT NO COST TO THE OWNER.
- 5. CONDUIT RUNS ARE SHOWN DIAGRAMMATICALLY ONLY AND SHALL BE INSTALLED IN A MANNER TO PREVENT CONFLICTS WITH EQUIPMENT AND STRUCTURAL CONDITIONS. EXPOSED CONDUITS SHALL BE INSTALLED TIGHT AGAINST AND PARALLEL TO BEAMS AND WALLS.
- 6. ALL EXPOSED CONDUIT RUNS WITHIN THE BUILDING SHALL BE INSTALLED TIGHT AGAINST BOTTOM OF BEAMS UNLESS OTHERWISE NOTED.
- 7. CONDUITS SHALL BE TERMINATED SO AS TO PERMIT FINAL CONNECTIONS TO MOTORS AND OTHER EQUIPMENT WITHOUT EXTENSIVE USE OF FLEXIBLE CONDUIT.
- 8. CONDUITS WHICH TERMINATE AT SWITCHBOARD OR PANELBOARDS SHALL BE LOCATED FOR PROPER ALIGNMENT WITHOUT THE NEED FOR AUXILIARY GUTTERS, WIREWAYS OR PANEL EXTENSIONS.
- 9. THE WIRING DIAGRAMS, QUANTITY AND SIZE OF WIRES AND CONDUITS ARE BASED UPON SELECTED STANDARD COMPONENTS OF ELECTRICAL EQUIPMENT. MODIFICATIONS APPROVED BY THE ARCHITECT/ENGINEER MAY BE MADE BY THE CONTRACTOR AT HIS EXPENSE TO ACCOMMODATE EQUIPMENT ACTUALLY PURCHASED. THE BASIC SEQUENCE AND METHOD OF CONTROL SHALL BE MAINTAINED AS INDICATED ON THE DRAWINGS AND SPECIFICATIONS.
- 10. ALL SURFACE MOUNTED PANELS AND PANELBOARDS SHALL BE MOUNTED TO MAINTAIN A 1/4" AIR SPACE BETWEEN THE ENCLOSURE AND THE WALL.
- 11. ALL PANELBOARDS SHALL BE MOUNTED SO THAT THE DISTANCE FROM THE TOP OF THE HIGHEST POSSIBLE CIRCUIT BREAKER OPERATING HANDLE TO THE FLOOR SHALL NOT EXCEED 6'-6".
- 12. WHERE PANEL EXTENSIONS ARE REQUIRED TO EXTEND WIRING FROM EXISTING UNDERGROUND CONDUITS, THEY SHALL BE U.L. LISTED AS PANELBOARDS AND SHALL BE FABRICATED BY THE PANELBOARD MANUFACTURER.
- 13. NAMEPLATES SHALL CONFORM STRICTLY TO INSTRUCTIONS AS SPECIFIED IN THE ELECTRICAL SPECIFICATIONS AND ON THE DRAWINGS. THE FOLLOWING SHALL HAVE NAMEPLATES:
- a. ALL MAIN BREAKERS
- b. ALL FEEDER BREAKERS IN SWITCHBOARDS AND DISTRIBUTION PANELS.
- c. ALL PANELBOARDS AND SWITCHBOARDS
- d. DISCONNECT SWITCHES e. COMBINATION MOTOR STARTERS
- f. ENCLOSED CIRCUIT BREAKERS g. CONTROL CABINETS
- 14. ALL FEEDERS AND BRANCH CIRCUITS SHALL HAVE AN INSULATED EQUIPMENT GROUNDING CONDUCTOR ROUTED WITH THE PHASE/NEUTRAL CONDUCTORS. SYSTEM AND EQUIPMENT GROUNDING CONDUCTORS SHALL

BE SIZED AND INSTALLED AS REQUIRED BY THE CEC U.O.N.

- 15. ALL CIRCUIT PROTECTIVE DEVICES SHALL HAVE THE REQUIRED RATINGS AND INTERRUPTING CAPACITY EQUAL TO OR GREATER THAN 110% OF THE AVAILABLE SHORT CIRCUIT CURRENT AT ITS SUPPLY TERMINAL.
- 16. ALL ELECTRICAL PANELS, LIGHT FIXTURES AND EQUIPMENT RECESSED IN FIRE RATED WALLS AND CEILINGS SHALL BE BOXED WITH EQUIVALENT HOUR RATED CONSTRUCTION.
- 17. OUTLET BOXES, UTILIZATION EQUIPMENT CABINETS, CONDUIT SYSTEMS, LIGHTING FIXTURES AND CONVENIENCE OUTLETS SHALL BE GROUNDED AND BONDED IN ALL ELECTRICAL SYSTEMS OPERATING AT 48 VOLTS AND ABOVE. EACH GROUND WIRE SHALL BE TERMINATED AT THE EQUIPMENT GROUND BAR OR TERMINAL. EQUIPMENT GROUND WIRES SHALL BE SIZED PER CEC 250.122.
- 18. ALL CONDUIT ONLY (C.O.) SHALL HAVE A PULL ROPE CONTAINED WITHIN. LEAVE MINIMUM OF 2'-0" SLACK AT EACH END.
- 19. ALL CONDUITS SHALL BE A MINIMUM TRADE SIZE OF 3/4".
- 20. ALL FEEDER AND BRANCH CIRCUIT WIRING SHALL BE COPPER IN RACEWAY, PER SPECIFICATIONS, REGARDLESS OF APPLICATION. NO ALUMINUM WIRING OR MC CABLE OR AC CABLE SHALL BE USED.
- 21. ALL LIGHTING FIXTURES THAT MAY BE IN CONTACT WITH THE BUILDING'S INSULATION SHALL BE U.L. LISTED FOR SUCH INSTALLATIONS.
- 22. ALL LIGHTING FIXTURES SHALL BE SUPPORTED FOR SEISMIC RESTRAINT PER REQUIREMENTS OF THE CALIFORNIA BUILDING CODE.
- 23. ALL EQUIPMENT AND MATERIALS REMOVED BY THE CONTRACTOR SHALL BE LEGALLY DISPOSED OF BY THE CONTRACTOR UNLESS OTHERWISE
- 24. STUB UP AND CAP (6) 3/4" C.O. FROM THE TOP OF EACH FLUSH MOUNTED PANELBOARD TO 6" ABOVE THE ACCESSIBLE CEILING FOR FUTURE USE.
- 25. FIELD VERIFY EXISTING CONDITIONS AND ADVISE ARCHITECT/ENGINEER OF ANY DISCREPANCIES OR DEVIATIONS BETWEEN PLANS AND ACTUAL CONDITIONS PRIOR TO SUBMITTING BID.

GENERAL NOTES

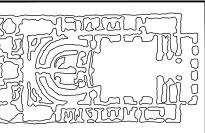
- 26. IF THERE ARE CONFLICTS WITHIN THESE ELECTRICAL DRAWINGS OR BETWEEN THE ELECTRICAL DRAWINGS AND THE SPECIFICATIONS, OR BETWEEN THE ELECTRICAL DRAWINGS AND ANY MECHANICAL. ARCHITECTURAL, PLUMBING OR STRUCTURAL DRAWING, BID THE MORE EXPENSIVE OR ELABORATE PROCESS OR PROCEDURE SHOWN AND CALL THE DISCREPANCY TO THE ARCHITECT/ENGINEER'S ATTENTION. SHOULD THE CLIENT, IN ITS DISCRETION, CHOOSE TO IMPLEMENT THE CHEAPER OR SIMPLER PROCEDURE AFTER BID OPENING, A CREDIT CHANGE ORDER WILL BE ISSUED TO THE CONTRACTOR.
- 28. ALL COLD WATER PIPE GROUND CONNECTIONS SHALL BE MADE WITHIN 5 FT. OF COLD WATER PIPE ENTRANCE INTO THE BUILDING. (REFERENCE CEC 250.52)
- 29. WHERE 120V BRANCH CIRCUITS EXCEED 90 FEET IN LENGTH (200 FEET FOR 277V) INCREASE WIRE SIZE TO THE NEXT LARGER AWG.
- 31. COORDINATE ALL DEVICES AT CASEWORK WITH ARCHITECTURAL INTERIOR ELEVATIONS AND CASEWORK SUBMITTALS PRIOR TO ROUGH-IN.
- 32. ELECTRICAL RECEPTACLE(S) SHALL BE LOCATED WITHIN 18" OF ASSOCIATED TELECOMMUNICATIONS OR AUDIO/VISUAL OUTLET(S) WHERE APPLICABLE. CONTRACTOR SHALL COORDINATE ALL OUTLET LOCATIONS WITH ARCHITECTURAL ELEVATIONS AND CASEWORK SHOP DRAWINGS.
- 34. EXIT SIGNS SHALL BE LOCATED AS NECESSARY TO CLEARLY INDICATE THE DIRECTION OF EGRESS TRAVEL. NO POINT SHALL BE MORE THAN 100'-0" FROM THE NEAREST VISIBLE SIGN. EXIT SIGNS SHALL BE READILY VISIBLE FROM ANY DIRECTION OF APPROACH.
- 35. ALL EXPOSED CABLING ROUTED ABOVE ANY AND ALL CEILINGS SHALL BE PLENUM RATED.
- 36. WIRING FROM EMERGENCY SOURCES SHALL BE KEPT ENTIRELY SEPARATE AND INDEPENDENT OF ALL OTHER WIRING AND EQUIPMENT. AND SHALL NOT ENTER THE SAME RACEWAY, CABLE BOX OR CABINET WITH OTHER WIRING. (REFERENCE CEC 700.9)
- 37. ALL OUTDOOR RECEPTACLES SHALL BE PROVIDED WITH WEATHERPROOF 'WHILE IN USE' COVERS.
- 38. WHERE ITEMS ARE INDICATED FOR DISCONNECTION OR REMOVAL, REMOVE ALL ASSOCIATED CONDUIT, WIRING, SUPPORTS, AND BOXES BACK TO SOURCE UNLESS OTHERWISE NOTED. REMOVE CONDUIT FLUSH WITH SLAB. PATCH WALLS AND FLOORS NOT SCHEDULED FOR DEMOLITION.
- 39. SEAL ALL PENETRATIONS OF RATED WALLS WITH U.L. LISTED FIRE STOP
- 40. ALL ELECTRICAL COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE HORIZONTAL AND VERTICAL FORCES PRESCRIBED IN THE 2013 CBC, SECTIONS 1616A.1.18 THROUGH 1616A.1.26 AND ASCE 7-10, CHAPTER 13.
- THE ATTACHMENT OF THE FOLLOWING ITEMS SHALL BE DESIGNED TO RESIST THE FORCES PRESCRIBED ABOVE. BUT NOT BE DETAILED ON THE PLANS, AND THE PROJECT INSPECTOR WILL VERIFY THAT THESE ITEMS (EQUIPMENT) HAVE BEEN ANCHORED:
- a. EQUIPMENT WEIGHING LESS THAN 400 POUNDS SUPPORTED DIRECTLY
- ON THE FLOOR OR ROOF. b. FURNITURE REQUIRED TO BE ATTACHED IN ACCORDANCE WITH
- ASCE7-10. CHAPTER 13. c. TEMPORARY OR MOVABLE EQUIPMENT WITH FLEXIBLE CONNECTION TO
- POWER OR UTILITIES. d. EQUIPMENT WEIGHING LESS THAN 20 POUNDS SUPPORTED BY
- VIBRATION ISOLATORS. e. EQUIPMENT WEIGHING LESS THAN 20 POUNDS SUPPORTED 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 ELECTRICAL ENGINEER.
- 41. 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 2013 CBC, SECTIONS 1616A. 1.23, 1616A. 1.24, 1616A. 1.25 AND 1616A.1.26.
- THE BRACING AND ATTACHMENTS TO THE STRUCTURE SHALL BE DETAILED ON THE APPROVED DRAWINGS OR THEY SHALL COMPLY WITH ONE OF THE OSHPD PRE-APPROVALS (OPM #).
- COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVALIABLE ON THE JOBSITE PRIOR TO THE START OF HANGING AND BRACING OF THE PIPE, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS.
- THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.
- 42. DIVISION 26 CONTRACTOR SHALL CLOSELY COORDINATE THE RACEWAY INSTALLATION WITH THE DIVISION 27 CONTRACTOR. DIVISION 27 SHALL INSTRUCT DIVISION 26 ON THE SPECIAL REQUIREMENTS FOR THE INSTALLATION OF FIBER OPTIC AND CATEGORY 6 RACEWAYS. DIVISION 27 SHALL INSPECT AND ACCEPT RACEWAY SYSTEMS PRIOR TO THE INSTALLATION OF ANY DATA WIRING.
- 44. THE FIRE ALARM SYSTEM SHOWN ON THESE DRAWINGS IS FOR BIDDING PURPOSES ONLY AND SHALL NOT BE USED FOR CONSTRUCTION. FIRE ALARM SHOP DRAWINGS SHALL BE SUBMITTED BY THE CONTRACTOR TO THE AUTHORITY HAVING JURISDICTION (AHJ) FOR APPROVAL PRIOR TO INSTALLATION. THE DRAWINGS FOR SUBMITTAL SHALL INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:
- a. POINT TO POINT WIRING DIAGRAMS
- b. FIRE ALARM RISER DIAGRAMS
- c. NUMBER OF CONDUCTORS PER CIRCUIT d. SIZE (GAUGE) OF ELECTRICAL CONDUCTORS
- e. SYSTEM BATTERY CALCULATIONS
- f. WORST-CASE VOLTAGE DROP CALCULATIONS
- g. MANUFACTURER'S CUT SHEETS AND CSFM LISTING NUMBERS FOR
- EACH COMPONENT

NOTE: THE FIRE ALARM SYSTEM IS A DESIGN-BUILD EFFORT BY THE ELECTRICAL CONTRACTOR OR HIS APPOINTED SUB-CONTRACTOR.



TREI PROJECT # 17426





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			LIGHT	ING FIX	TURE	SCHE	DULE			
				LAMPS		FIX	TURE			
FIXTURE TYPE	MANUFACTURER AND CATALOG NUMBER 3	EQUIVALENT MANUFACTURER SUBJECT TO APPROVAL OF SHOP DRAWINGS	TYPE	WATTS	COLOR TEMP.	INPUT VOLTS	TOTAL INPUT WATTS	DRIVER TYPE	MOUNTING 2 4 5	DESCRIPTION
A	FINELITE HP-4 ID-8'-S-S-840-TG- F-120V-FA-SC	OR EQUAL (INCLUDING EQUAL OR GREATER DELIVERED LUMEN OUTPUT AND EQUAL OR LESS TOTAL FIXTURE WATTAGE)	LED	58	4000° K	120	58	DIMMING	PENDANT	4" X 8', DIRECT/INDIRECT PENDANT FIXTURE WITH 6736 LUMEN OUTPUT WITH IMPACT-RESISTANT FROSTED VIRGIN ACRYLIC DIFFUSED OPTICS, TOP GLOW UPLIGHT OPTIC AND FLUSH BOTTOM LENS AND INTEGRAL 0-10V DIMMING DRIVER.
B	CONTRASTE UR4E-F-01-11-3090-M	OR EQUAL (INCLUDING EQUAL OR GREATER DELIVERED LUMEN OUTPUT AND EQUAL OR LESS TOTAL FIXTURE WATTAGE)	LED	10	3000° K	120	10	DIMMING	RECESSED	4" LED DOWNLIGHT FIXTURE WITH 850 LUMEN OUTPUT WITH FROSTED LENS, WHITE TRIM AND INTEGRAL 0-10V DIMMING DRIVER.
(C)	CONTRASTE UR4C-F-01-11-3090-M	OR EQUAL (INCLUDING EQUAL OR GREATER DELIVERED LUMEN OUTPUT AND EQUAL OR LESS TOTAL FIXTURE WATTAGE)	LED	10	3000, K	120	10	DIMMING	RECESSED	4" LED DOWNLIGHT SHOWER FIXTURE WITH 850 LUMEN OUTPUT WITH FROSTED LENS, WHITE TRIM AND INTEGRAL 0-10V DIMMING DRIVER.
(D)	COOPER METALUX 4SNLED-LD5-16SL-LW-UNV-L840-CD1-U	OR EQUAL (INCLUDING EQUAL OR GREATER DELIVERED LUMEN OUTPUT AND EQUAL OR LESS TOTAL FIXTURE WATTAGE)	LED	13	4000° K	120	13	DIMMING	PENDANT	4' LED STRIP LIGHT FIXTURE WITH 1688 LUMENS, FULL FROSTED LENS AND WIDE ASTRIBUTION.
F	SEAGULL LIGHTING 4420203-05	OR EQUAL (INCLUDING EQUAL OR GREATER DELIVERED LUMEN OUTPUT AND EQUAL OR LESS TOTAL FIXTURE WATTAGE)	LED	30	4000° K	120	30	DIMMING	PENDANT	THREE LIGHT WALL / BATH VANITY FIXTURE WITH 3 LED BULBS.

FIXTURE NOTES

- 1) FIXTURE CONNECTIONS SHALL BE AS INDICATED ON THE PLANS AND SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF TITLE 24, CALIFORNIA ENERGY EFFICIENCY REGULATIONS.
- 2 ALL TROFFER FIXTURE RECESSED IN SUSPENDED GRID CEILINGS SHALL BE COORY FURNISHED WITH EARTHQUAKE CLIP (EQC), MINIMUM OF 4 PER FIXTURE. IN ADDITION, FIX PRÈS SHALL BE SUPPORTED FROM THE OVERHEAD PULLING STRUCTURE, INDEPENDENTLY FROM DED CEILING SYSTEM.
- G NUMBERS ARE BASED ON VENDOR INFORMATION, LES LITERATURE AND PHOTOMETRIC DATA ON HAND AT THE TIME OF PROJECT DESIGN BY TURPIN & RATTAN ENGINEERING, INC. AND ARE INTENDED TO CONVEY THE FEATURES/PERFORMANCE REQUIRED. EACH FIXTURE MUST BE PROVIDED COMPLETE WITH ALL FITTINGS AS APPROPRIATE FOR PROPER MOUNTING AT THE LOCATIONS INDICATED.
- (4) MOUNTING SHALL INCLUDE CONCEALED SOLID BLOCKING FOR FIXTURES MOUNTED IN/ON WALLS AND CEILINGS EXCEPT AT SUSPENDED CEILINGS WHERE SEISMIC ANCHORING AND/OR RESTRAINT SHALL BE PROVIDED. ALL LIGHT FIXTURES SHALL BE INSTALLED PER THE CALIFORNIA BUILDING CODE.
- 5 WHERE RECESSED FIXTURES ARE INSTALLED IN FIRE RATED CEILINGS, PROVIDE A FIRE RATED ENCLOSURE AROUND EACH FIXTURE.

EMERGENCY FIXTURE CONNECTIONS

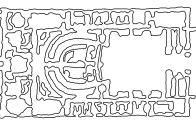
ALL LIGHT FIXTURES WITH INTEGRAL BATTERY PACKS REQUIRE PERMANENT UNSWITCHED POWER TO ENSURE THE BATTERY IS NEVER ALLOWED TO COMPLETELY DISCHARGE.

DO NOT CONNECT THESE FIXTURES TO TEMPORARY BUILDING CONSTRUCTION POWER.

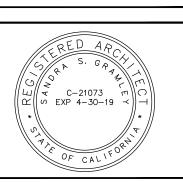
CONNECT ONLY TO PERMANENT BUILDING POWER WHEN AVAILABLE, AND ACCORDING TO THE RESPECTIVE MANUFACTURER'S RECOMMENDATIONS.

SHEET NOTES

- 1. LIGHTING CONTROLS VENDOR SHALL BE RESPONSIBLE FOR PROVIDING ALL PLENUM RATED COMMUNICATIONS CABLING WITH TERMINATIONS, TOGETHER WITH COORDINATION AS NECESSARY FOR THE SUPPLY OF ALL INTEGRATED LIGHTING CONTROL INTERFACE DEVICES IN ALL LIGHT FIXTURES IRRESPECTIVE OF FIXTURE MANUFACTURER TO OFFER A FULLY OPERABLE TITLE 24 COMPLIANT LIGHTING CONTROL SYSTEM.
- 2. CONTRACTOR SHALL PROVIDE TWO (2) WIRELESS CONFIGURATION TOOLS COMPATIBLE WITH THE LIGHTING CONTROL SYSTEM USED ON THIS PROJECT (WATTSTOPPER CAT #LMCT-100, OR EQUAL IF OTHER MANUFACTURER). TURN OVER TO OWNER'S REPRESENTATIVE AT PROJECT COMPLETION.
- 3. THE LIGHTING CONTROL DIAGRAMS ARE REFLECTIVE OF LIGHTING CONTROL SYSTEMS MANUFACTURED BY COOPER-GREENGATE, N-LIGHT OR WATTSTOPPER. OTHER LIGHTING CONTROL SYSTEM MANUFACTURERS MAY NOT BE FULLY OR SATISFACTORILY REPRESENTED HEREIN. ADDITIONAL COMPONENTS MAY BE REQUIRED TO MAKE THE CONTROL SYSTEM FULLY OPERATIVE (AT NO ADDITIONAL COST TO THE OWNER) IF ALTERNATIVE MANUFACTURERS ARE SELECTED FOR THIS PROJECT.
- 4. PRIOR TO INSTALLATION OF LIGHT FIXTURES FOR THIS PROJECT, CONTRACTOR SHALL 'BENCH-TEST' EACH FIXTURE TYPE WITH THE CHOSEN LIGHTING CONTROL SYSTEM AND EACH TYPE OF DIMMING CONTROL STATION. THESE BENCH TESTS SHALL BE DONE IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE AND THE ELECTRICAL ENGINEER ON ONE OCCASION TO ENSURE FULL COMPATIBILITY AND SATISFACTORY OPERATION OF ALL FIXTURE/CONTROL SYSTEM CONFIGURATIONS.









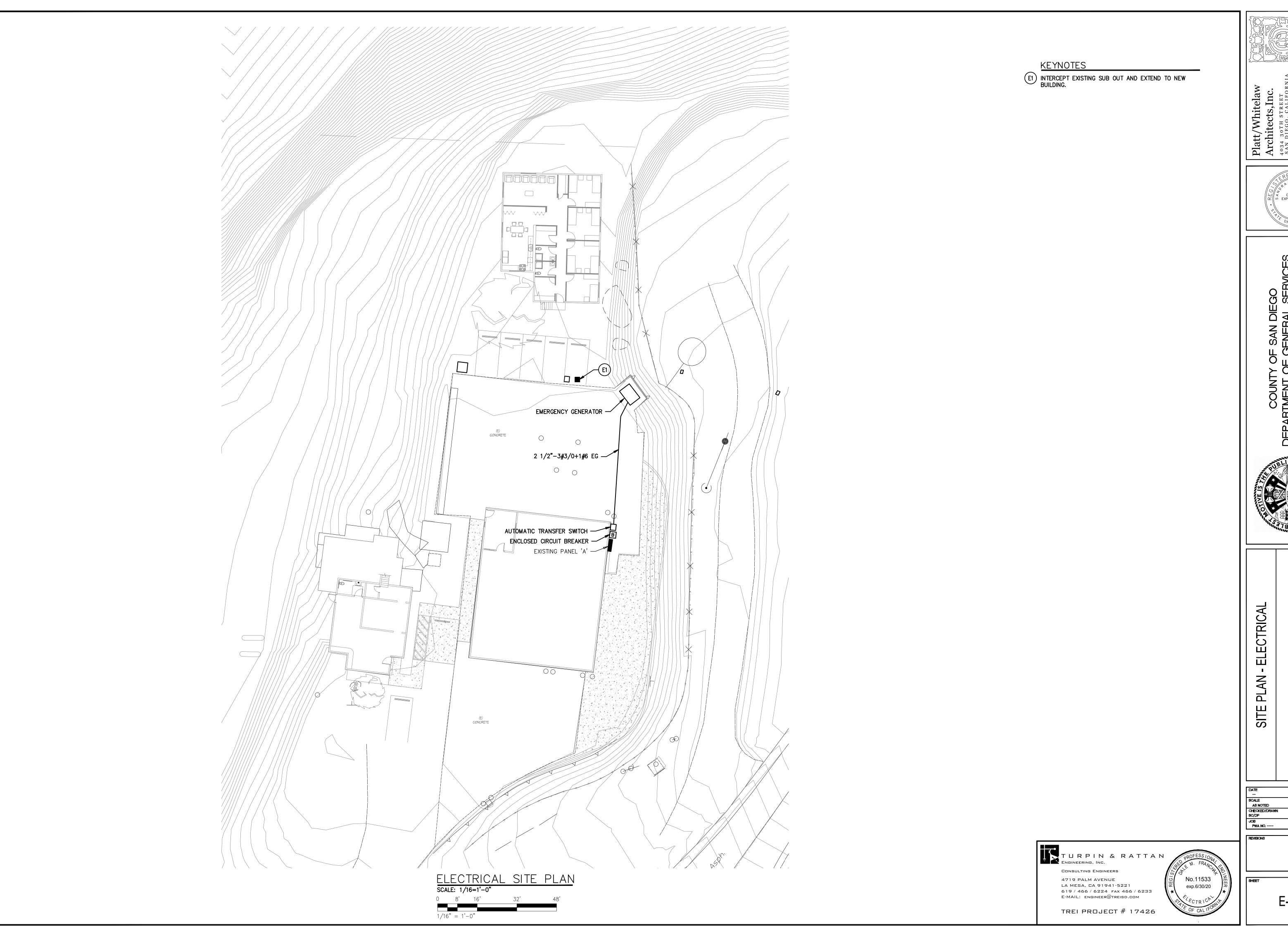
CHEDUL S FIXTURE

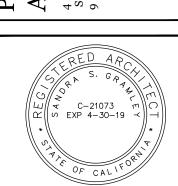
AS NOTED

E-002

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619 / 466 / 6224 FAX 466 / 6233 E-MAIL: ENGINEER@TREISD.COM



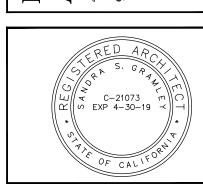




E-003



- PROVIDE POWER FOR CEILING FAN. FIELD COORDINATE EXACT LOCATION.
- (E2) PROVIDE SWITCH FOR SPLIT-WIRED RECEPTACLE.
- PROVIDE SWITCH FOR FAN CONTROL AND DIMMING FOR INTEGRAL FAN LIGHT.
- PROVIDE POWER FOR EXHAUST FAN. FIELD COORDINATE EXACT LOCATION.
- E5) PROVIDE POWER FOR FAN COIL. FIELD COORDINATE EXACT LOCATION.



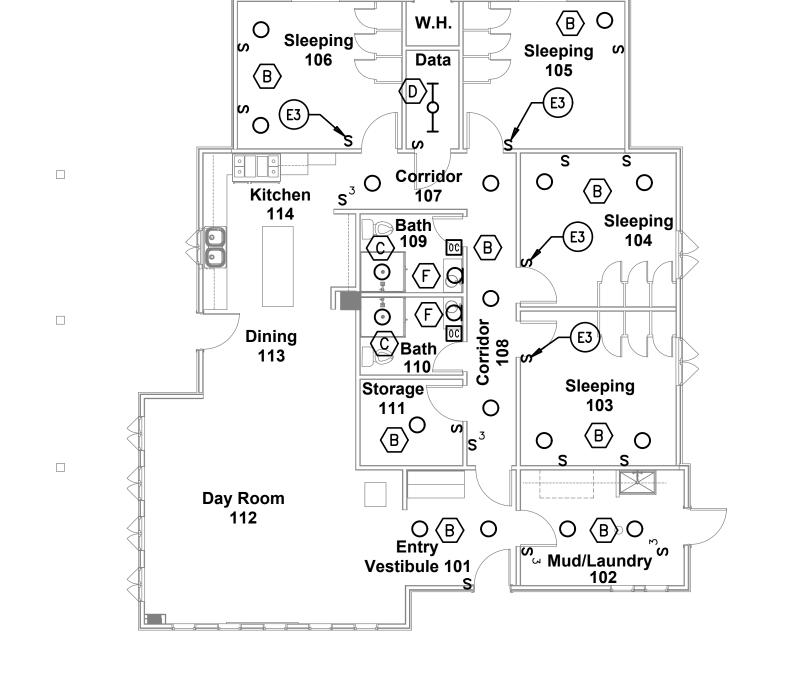


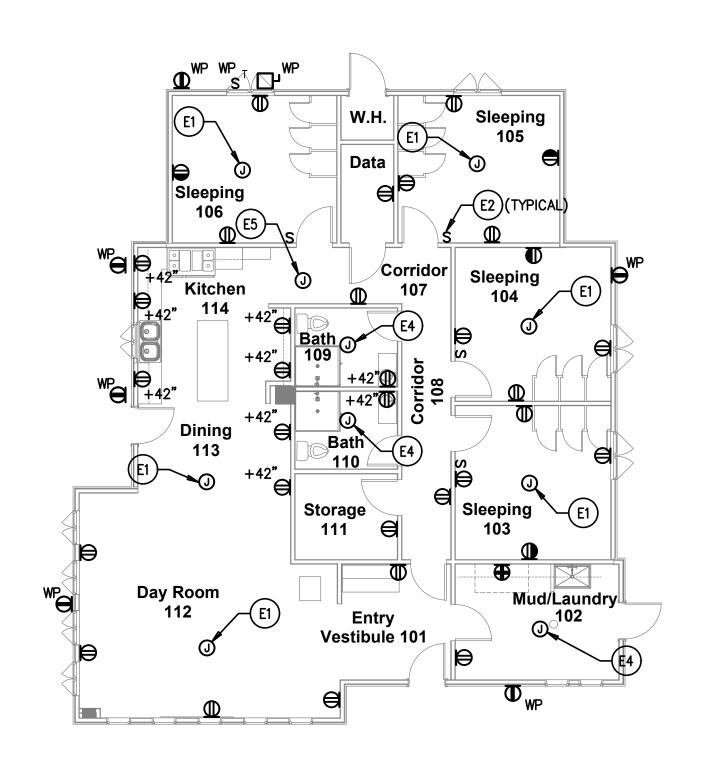
LIVING QUARTERS FLOOR PLAN ELECTRICAL

1 OF SHEETS E-101

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TREI PROJECT # 17426





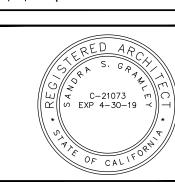


OFFICE AND RESTROOM FLOOR PLAN —ELECTRICAL SCALE: 1/8=1'-0"

KEYNOTES

PROVIDE POWER FOR EXHAUST FAN. FIELD COORDINATE EXACT LOCATION.

E2 XX





OFFICE AND RESTROOM FLOOR PLAN ELECTRICAL

No.11533

exp.6/30/20

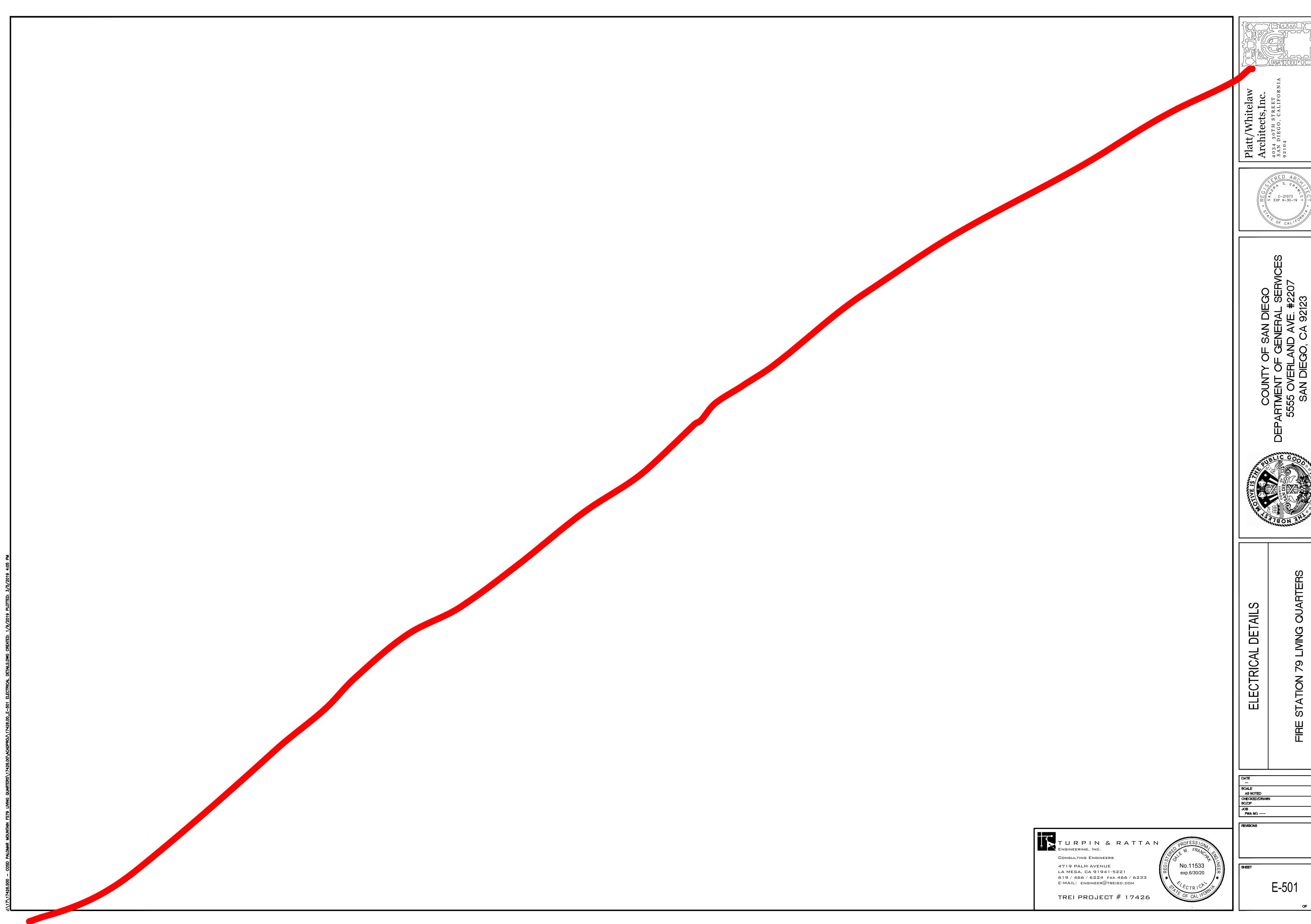
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E-102



STANDBY GENERATOR 50KW/62.5KVA 240/120V SDG&E METER BOX ATS 225A-4P 2 1/2"-3#3/0+1#6 EG EXISTING SDG&E CONNECTION 200AT 200AF 3P PANEL A ANN REMOTE ANNUNCIATOR 2 1/2"-3#3/0+1#6 EG PANEL 'PA'

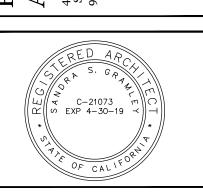
SINGLE LINE DIAGRAM - NEW WORK

KEYNOTES

(E1) 1"C WITH GENERATOR START CIRCUIT.

(E2) 1"C WITH GENERATOR ANNUNCIATOR AND ALARM WIRING.

PROVIDE CONCRETE-ENCASED GROUNDING ELECTRODE PER CEC 250.32(C).





No.11533

exp.6/30/20

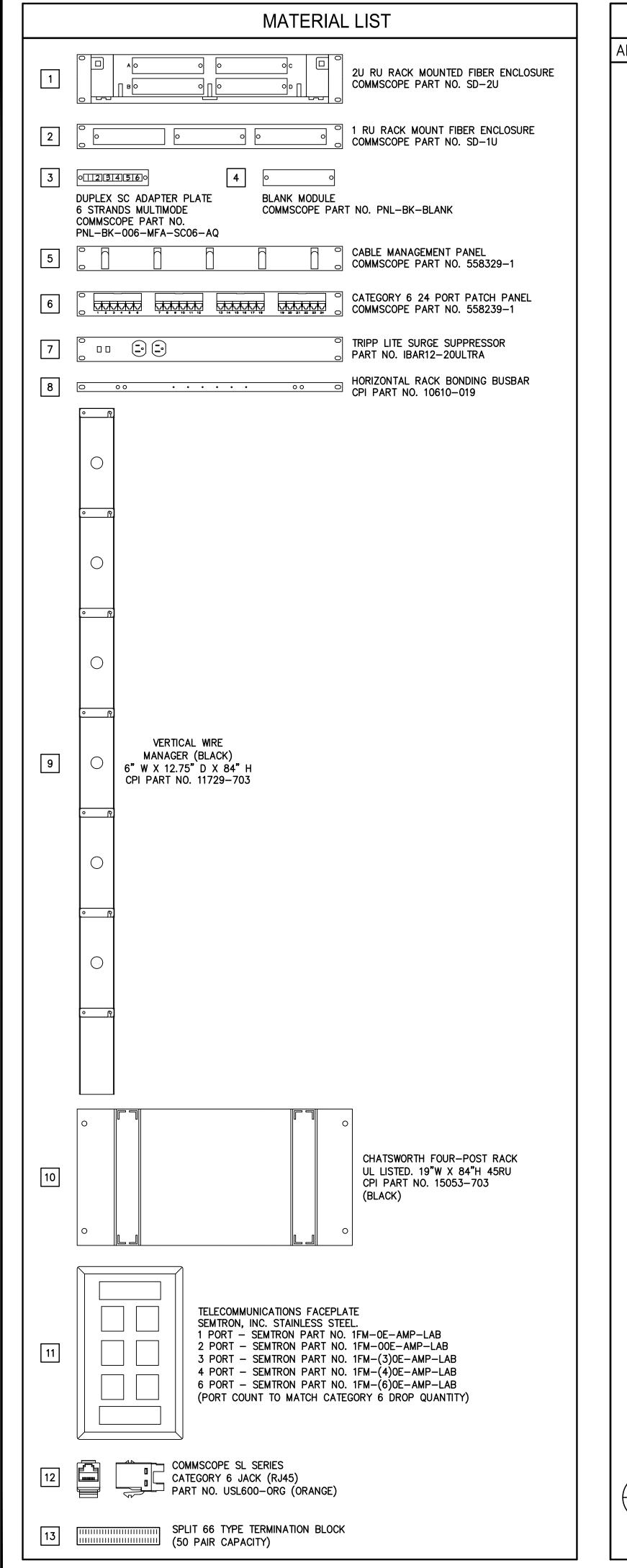
E-601

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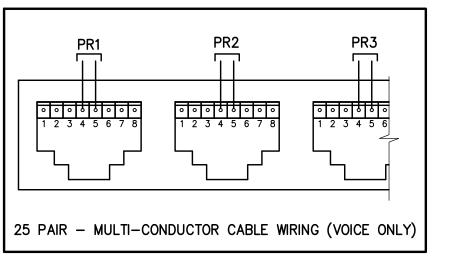


	ABBREVIATIONS
ABBREV.	DESCRIPTION
ADA	AMERICANS WITH DISABILITIES ACT
ACJ	ACCESS CONTROL JUNCTION BOX
AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
AWG	AMERICAN WIRE GAUGE
AV	AUDIO/VISUAL
BBC C	BONDING BACKBONE CONDUCTOR CONDUIT
CATV	COMMUNITY ANTENNA TELEVISION
CCTV	CLOSED CIRCUIT TELEVISION
СОММ	COMMUNICATIONS, OR COMMERCIAL.
СМН	COMMUNICATION MAINTENANCE HOLE
C.O.	CONDUIT ONLY
СРВ	COMMUNICATIONS PULLBOX
DIAG.	DIAGRAM
DIA.	DIAMETER
DPDT	DOUBLE POLE, DOUBLE THROW
EA	EACH
EF	ENTRANCE FACILITY
ELEC.	ELECTRICAL ENERGY MANAGEMENT, CONTROL CYCTEM
EMCS	ENERGY MANAGEMENT CONTROL SYSTEM
ER EX	EQUIPMENT ROOM EXISTING
EX F	FIXED
GND	GROUND
IMC	INTERMEDIATE METAL CONDUIT
1/0	INDOOR/OUTDOOR
IWB	INTERACTIVE WHITEBOARD
LAN	LOCAL AREA NETWORK
LV	LOW VOLTAGE
MIN.	MINIMUM
MAX.	MAXIMUM
MPOE	MINIMUM POINT OF ENTRY (TELCO)
NIC	NOT IN CONTRACT
0/C	ON CENTER
OSP	OUTSIDE PLANT RATED
PBB	PRIMARY BONDING BUSBAR PASSIVE INFRARED
PIR PROJ.	PROJECTOR
PTZ	PAN, TILT, ZOOM
RBB	RACK BONDING BUSBAR
REX	REQUEST TO EXIT
RGB	RACK GROUNDING BUSBAR
RMC	RIDGED METAL CONDUIT
RU	RACK UNIT
SBB	SECONDARY BONDING BUSBAR
SQ.	SQUARE
STC	SIGNAL TERMINAL CABINET
TBC	TELECOMMUNICATIONS BONDING CONDUCTOR
TBB TEBC	TELECOMMUNICATIONS BONDING BACKBONE TELECOMMUNICATIONS EQUIPMENT BONDING CONDUCTOR
TR	TELECOMMUNICATIONS EQUIPMENT BONDING CONDUCTOR TELECOMMUNICATIONS ROOM
T.O.	TELECOMUNICATIONS OUTLET
TYP	TYPICAL
UPS	UNINTERRUPTIBLE POWER SUPPLY
U.O.N.	UNLESS OTHERWISE NOTED
VOIP	VOICE OVER INTERNET PROTOCOL
WAP	WIRELESS ACCESS POINT
WP	WEATHER PROOF
WS	WORK STATION
+45"	MOUNTING HEIGHT OF DEVICE OR OUTLET ABOVE FINISHED FLOOR OF RESPECTIVE LEVEL (CENTER OF DEVICE)
\bigcirc 1	INDICATES DETAIL '1' ON SHEET ET-301
ET-301	INDIONIES DEIMIE I UN SMEET ET-SUT
4	KEYNOTE REFERENCE

	FLOOR PLAN LEGEND
SYMBOL	DESCRIPTION
—— о/н ——	OVERHEAD DISTRIBUTION LINES.
	CONDUIT CONCEALED IN WALL OR CEILING SPACE.
	CONDUIT CONCEALED UNDER FLOOR SLAB OR UNDERGROUND.
	CONDUIT INSTALLED EXPOSED.
	CONDUIT INSTALLED UNDER A RAISED FLOOR OR UNDER A PORTABLE BUILDING.
o	CONDUIT TURNED UP.
•	CONDUIT TURNED DOWN.
E	CONDUIT STUB-OUT INTO ACCESSIBLE CEILING SPACE U.O.N.
	CONDUIT STUBBED UP AND CAPPED IN CEILING SPACE.
———	CONDUIT CONTINUATION.
÷	GROUND CONNECTION.
4	LIQUID TIGHT FLEXIBLE METAL CONDUIT.

	TECHNOLOGY LEGEND
SYMBOL	DESCRIPTION
¹ 🖂	TELECOMMUNICATIONS OUTLET (VOICE ONLY) AT +45" AFF U.O.N., NUMBER INDICATES QUANTITY OF CATEGORY 6 DROPS.
³ ▶	TELECOMMUNICATIONS OUTLET (DATA ONLY) AT +18" AFF U.O.N., NUMBER INDICATES QUANTITY OF CATEGORY 6 DROPS.
1/2 ▶	TELECOMMUNICATIONS OUTLET (VOICE/DATA) AT +18" AFF U.O.N., NUMBERS INDICATE QUANTITY OF CATEGORY 6 DROPS.
² •	TELECOMMUNICATIONS OUTLET (DATA ONLY) MOUNTED WITHIN CEILING SPACE. NUMBER INDICATES QUANTITY OF CATEGORY 6 DROPS.
² ▼	TELECOMMUNICATIONS OUTLET (DATA ONLY) MOUNTED IN FLOOR BOX. NUMBER INDICATES QUANTITY OF CATEGORY 6 DROPS.
1/1 🔽	TELECOMMUNICATIONS OUTLET (VOICE/DATA ONLY) MOUNTED IN FLOOR BOX. NUMBER INDICATES QUANTITY OF CATEGORY 6 DROPS.
KP	INTRUSION SYSTEM KEYPAD MOUNTED AT +45" AFF.
®	INTRUSION SYSTEM CEILING MOUNTED INFRARED DEVICE.
®	INTRUSION SYSTEM INFRARED DEVICE MOUNTED TO WALL AT +96" AFF U.O.N.
®	DPDT DOOR CONTACT FLUSH IN DOOR FRAME U.O.N.
	CARD READER AT +45" AFF WITH CONDUIT PATHWAYS AND WIRING FOR DOOR'S ACCESS CONTROL COMPONENTS TO BUILDING'S RESPECTIVE TELECOMMUNICATIONS ROOM FOR A COMPLETE AND FUNCTIONAL ACCESS CONTROL SYSTEM PER OWNER OR OWNER'S ACCESS CONTROL SYSTEM REPRESENTATIVE.
ME	MULLION TYPE CARD READER AT +45" AFF WITH CONDUIT PATHWAYS AND WIRING FOR DOOR'S ACCESS CONTROL COMPONENTS TO BUILDING'S RESPECTIVE TELECOMMUNICATIONS ROOM FOR A COMPLETE AND FUNCTIONAL ACCESS CONTROL SYSTEM PER OWNER OR OWNER'S ACCESS CONTROL SYSTEM REPRESENTATIVE.
ĪΨ	COMMUNITY ANTENNA TV "CATV" COAXIAL OUTLET.
(1)	#12 AWG SPEAKER TERMINAL OUTLET AT HEIGHT INDICATED ON PLAN.
	TELEPHONE OR DATA BACKBOARD, 4' X 8' X 3/4" FIRE RESISTANT PLYWOOD.
EF, ER, TR 🔀	ENTRANCE FACILITY, EQUIPMENT ROOM OR TELECOMMUNICATIONS ROOM.
	PROVISIONS FOR OWNER FURNISHED, OWNER INSTALLED CCTV SECURITY CAMERA. EACH LOCATION SHALL INCLUDE (1) CATEGORY 6 CONNECTION. (CCTV SECURITY CAMERA NIC).
	COMMUNICATIONS PULLBOX.
	COMMUNICATIONS MAINTENANCE HOLE.
#	MATERIAL SHOWN WITH CORRESPONDING NUMBER FROM MATERIAL LIST TO BE PROVIDED AND INSTALLED BY CONTRACTOR.
Q	CEC CODE SIZED JUNCTION BOX FLUSH WITH WALL.
o	CEC CODE SIZED JUNCTION BOX FLUSH WITH CEILING.

MULTI-CONDUCTOR CABLE WIRING DIAGRAM



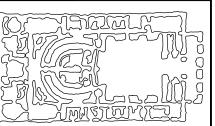
GENERAL NOTES

- EXISTING ELECTRICAL, TELEPHONE, FIRE ALARM AND ALL OTHER COMMUNICATION/SIGNAL SYSTEMS SHALL REMAIN IN OPERATION DURING CONSTRUCTION PERIOD. DO NOT REMOVE ANY EXISTING CONNECTIONS, FACE PLATES OR OTHER EXISTING DEVICES. INTERRUPTION TO EXISTING SYSTEM DUE TO CONTRACTORS ACTIONS SHALL BE REPLACED/RECTIFIED BY THE CONTRACTOR AT NO COST TO THE OWNER.
- THIS DRAWING PACKAGE IS PRESENTED WITH SYMBOLS, REPRESENTATIONS, TEMPLATES AND PARTS LIST OF A SINGLE MANUFACTURER (COMMSCOPE "NETCONNECT"). OTHER OWNER APPROVED MANUFACTURERS SYMBOLS, REPRESENTATIONS. TEMPLATES AND PARTS LISTS RÉQUIRE A CONVERSION PACKAGE AND SHALL BE REQUESTED USING THE 'REQUEST FOR INFORMATION OR REQUEST FOR CLARIFICATION' PROCESS. IF OTHER OWNER APPROVED MANUFACTURERS ARE PROPOSED TO BE USED IN THE CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ADDITIONAL COST RELATED TO CONVERSION FROM DESIGN PACKAGE AND CONTRACTOR'S SUPPLIED PROPOSED INSTALLATION. PROPOSED INSTALLATION SHALL COMPLY WITH CONVERSION LAYOUTS AND PARTS LISTS. THE CONTRACTOR SHALL 'REQUEST CLARIFICATION' FOR ANY QUESTIONS REGARDING THE DESIGN OR IMPLEMENTATION CONSIDERATION WHEN USING THE CONVERSION PROCESS. ADDITIONAL COMPONENTS MAY BE REQUIRED WHEN USING OWNER APPROVED EQUAL MANUFACTURERS.
- 3. THE FOLLOWING BEND RADII SHALL BE MAINTAINED FOR ALL COMMUNICATION UNDERGROUND CONDUIT SWEEPS.

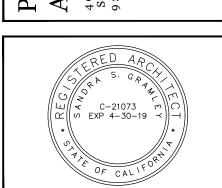
CONDUIT SIZE CONDUIT SWEEP RAI	
2" 24"	
3" 36"	
4" 48"	

- DIVISION 27 CONTRACTOR SHALL CLOSELY COORDINATE THE RACEWAY INSTALLATION WITH THE DIVISION 26 CONTRACTOR. DIVISION 27 SHALL INSTRUCT THE DIVISION 26 ON THE SPECIAL REQUIREMENTS FOR INSTALLATION OF LOW VOLTAGE CABLING RACEWAYS. DIVISION 27 SHALL INSPECT AND ACCEPT RACEWAY SYSTEMS PRIOR TO THE INSTALLATION OF ANY LOW VOLTAGE WIRING.
- REFERENCE SPECIFICATIONS, TITLE SHEET, GENERAL NOTES AND APPLICABLE DRAWINGS FOR ADDITIONAL INFORMATION.
- 6. ALL WORK SHALL BE IN COMPLIANCE WITH THE ADA. CALIFORNIA AMENDMENTS (2016 CEC) AND WHERE APPLICABLE AS AMENDED BY LOCAL ORDINANCES AND CODES OF GOVERNING MUNICIPALITIES.
- ALL ELECTRICAL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS AND ALL OTHER RELATED CONTRACT DRAWINGS.
- 8. CAREFULLY EXAMINE ALL CONTRACT DRAWINGS/SPECIFICATIONS AND BE RESPONSIBLE FOR THE PROPER FITTING OF MATERIALS AND EQUIPMENT AT EACH LOCATION AS INDICATED WITHOUT SUBSTANTIAL ALTERATION. IN AS MUCH AS THE DRAWINGS ARE GENERALLY DIAGRAMMATIC AND BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS AND ACCESSORIES WHICH MAY BE REQUIRED. FURNISHING FITTINGS REQUIRED TO MEET SUCH CONDITIONS SHALL BE AT NO COST TO THE CLIENT.
- 9. CONDUIT RUNS ARE SHOWN DIAGRAMMATICALLY ONLY AND SHALL BE INSTALLED IN A MANNER TO PREVENT CONFLICTS WITH EQUIPMENT AND STRUCTURAL CONDITIONS. EXPOSED CONDUITS SHALL BE INSTALLED PARALLEL TO BEAMS AND WALLS.
- 10. FIELD VERIFY EXISTING CONDITIONS AND ADVISE ENGINEER OF ANY DISCREPANCIES OR DEVIATIONS BETWEEN PLANS AND ACTUAL CONDITIONS PRIOR TO SUBMITTING BID.
- 11. EQUIPMENT AND MATERIALS REMOVED BY THE CONTRACTOR SHALL BE LEGALLY DISPOSED OF BY THE CONTRACTOR. ACTIVE HARDWARE REMOVED BY THE CONTRACTOR SHALL BE GIVEN TO THE OWNER FOR RETENTION OR DISPOSAL.
- 12. EXPOSED CONDUITS, COMMUNICATIONS PULLBOXES AND CONNECTING HARDWARE ASSOCIATED WITH NEW WORK SHALL BE PAINTED TO MATCH ADJACENT SURFACE.
- 13. SUPPORT STRUCTURED CABLING, AUDIO/VISUAL CABLING AND ALL OTHER LOW VOLTAGE CABLING WITH 'J-HOOK' SUPPORTS EVERY 4' WHERE CABLES ARE NOT SUPPORTED, ROUTED THROUGH CONDUIT OR CABLE TRAY. MAINTAIN 12" CLEARANCE FROM ELECTRICAL AND LIGHTING.
- 14. CEILING MOUNTED COMPONENTS SHALL BE POSITIVELY ATTACHED TO CEILING SUSPENSION SYSTEM BY MECHANICAL MEANS TO RESIST A HORIZONTAL FORCE EQUAL TO THE WEIGHT OF THE COMPONENT. PROVIDE A MINIMUM OF TWO ATTACHMENTS PER COMPONENT.
- 15. ELECTRICAL DEVICES ARE DIMENSIONED TO CENTER OF DEVICE U.O.N.
- 16. ELECTRICAL RECEPTACLE(S) SHALL BE LOCATED WITHIN 18" OF ASSOCIATED TELECOMMUNICATIONS OR AUDIO/VISUAL OUTLET(S) WHERE APPLICABLE. CONTRACTOR SHALL COORDINATE ALL OUTLET LOCATIONS WITH ARCHITECTURAL ELEVATIONS AND CASEWORK SHOP DRAWINGS.

MINIMUM CONDUIT SIZES ALLOWED FOR THIS PROJECT	
ACCESS CONTROL	3/4" CONDUIT
INTRUSION	3/4" CONDUIT
CATV	3/4" CONDUIT
TELECOMMUNICATIONS "VOICE / DATA"	1" CONDUIT
AUDIO / VISUAL	1 1/4" CONDUIT



Platt/Whitelaw Architects, Inc.





LEGEND AND GENERAL NOTES CHNOLOGY

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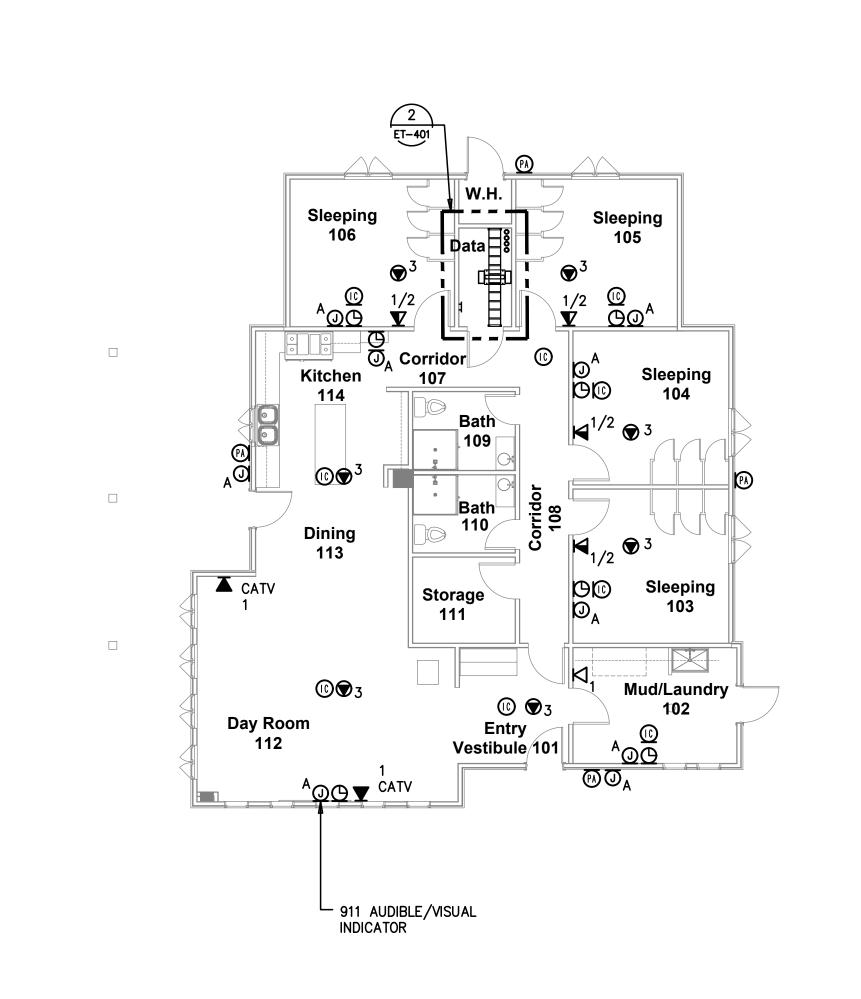
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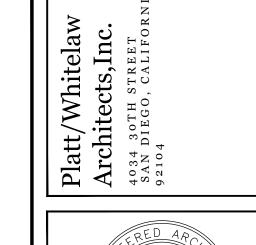
E-MAIL: ENGINEER@TREISD.COM

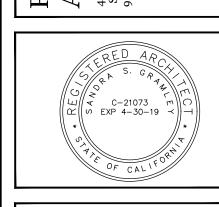
TREI PROJECT # 17426

No.11533

exp.6/30/20







LIVING QUARTERS FLOOR PLAN -TECHNOLOGY

No.11533

exp.6/30/20

CONSULTING ENGINEERS

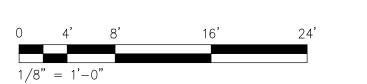
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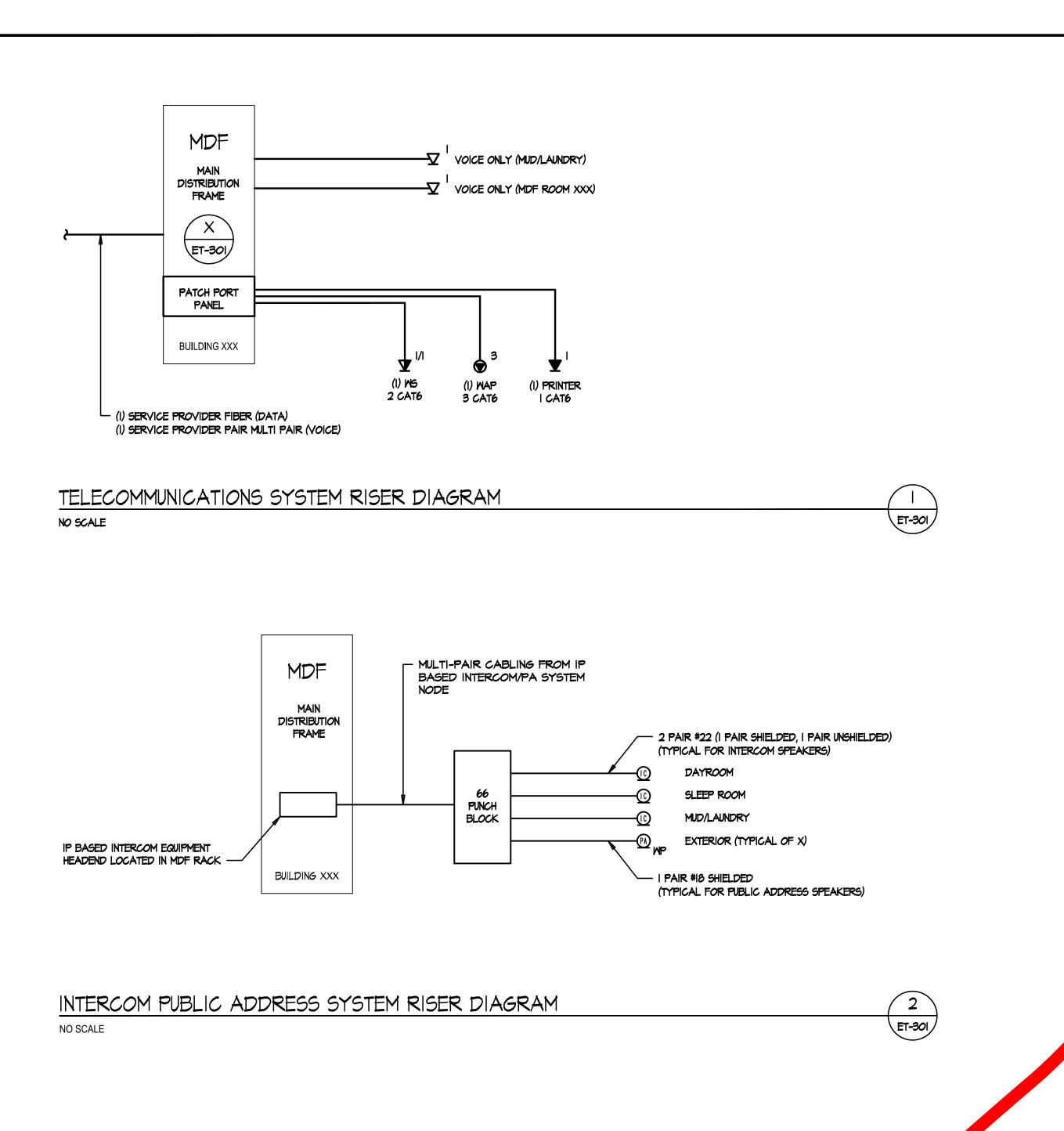
619/466/6224 FAX 466/6233 E-MAIL: ENGINEER@TREISD.COM

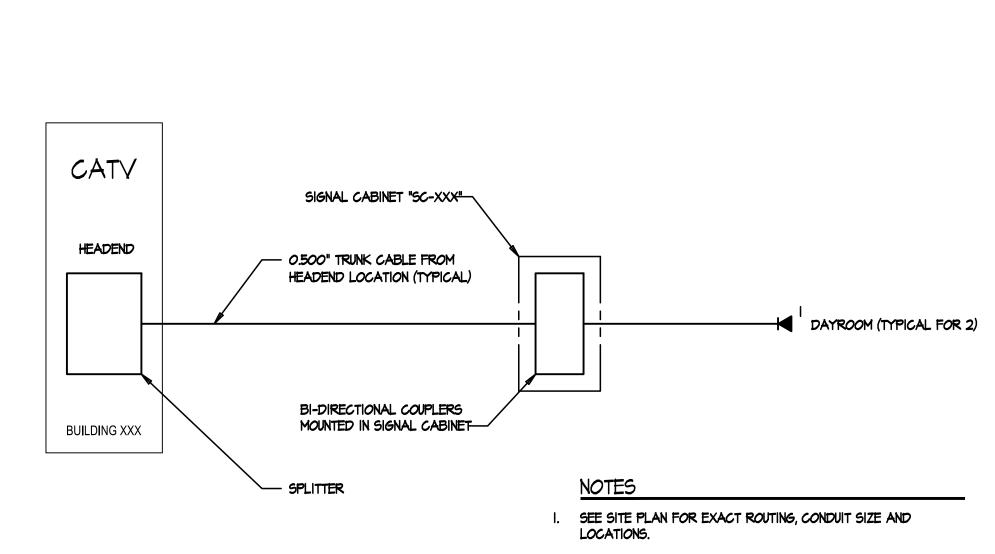
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ET-101

LIVING QUARTERS FLOOR PLAN - TECHNOLOGY
SCALE: 1/8=1'-0"







2. PROVIDE Db CALCULATIONS PER SPECIFICATIONS AND PROVIDE AMPLIFIERS WHERE REQUIRED.

TYPICAL COMPONENTS

- 4"X20"XI/4" GROUND BUS BAR (PBB)

- #6 AMG GROUND WIRE GREEN (INSULATED)

- I/O AMG GROUND MIRE (INSULATED)

- 2 HOLE GROUND LUG

3. SEE FLOOR PLANS FOR EXACT NUMBER OF CATY OUTLETS.

CATY SYSTEM RISER DIAGRAM

MDF PBB

SERVICE GROUND

AT MSB

208Y/120V-3PH, 4W

ELECTRICAL

- REFER TO SHEET E-003 FOR LOCATION

TELECOMMUNICATIONS GROUNDING AND BONDING RISER DIAGRAM

GE #1/O AWG-

NO SCALE

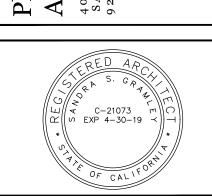
ET-301

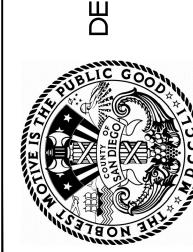
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ET-301

ET-301

SCALE AS NOTED CHECKED/DRAWN SC/DF



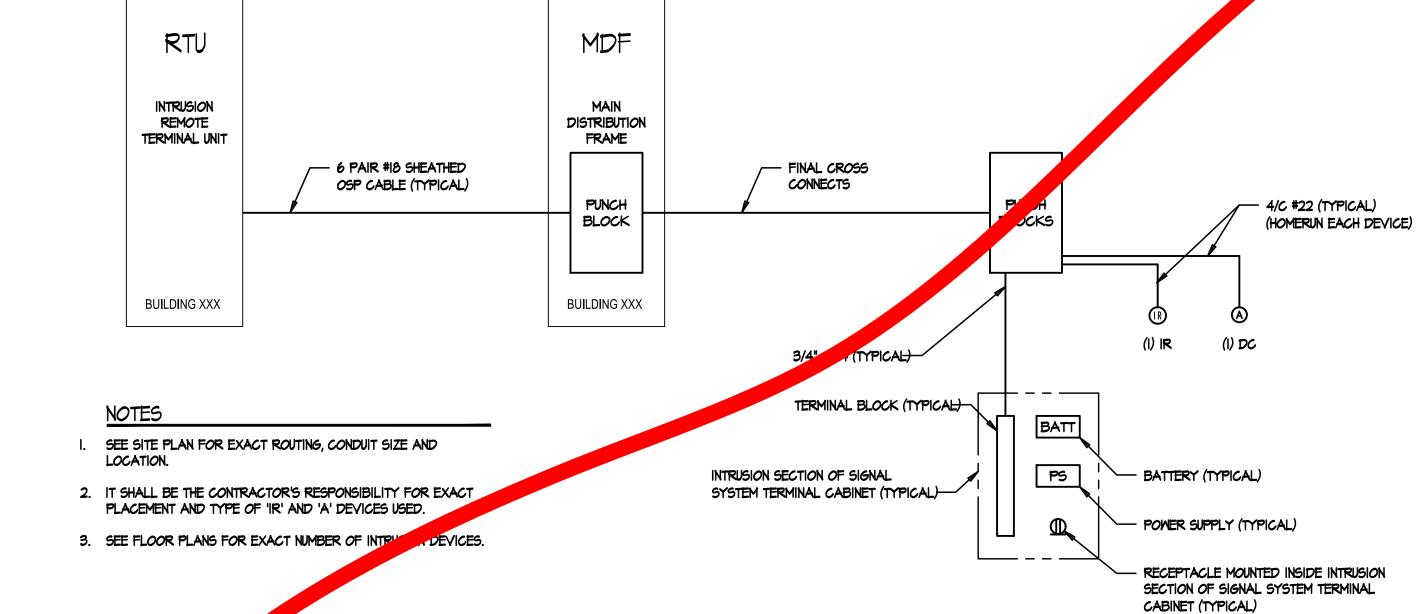


DIAGRAMS RISER TECHNOLOG

ET-301

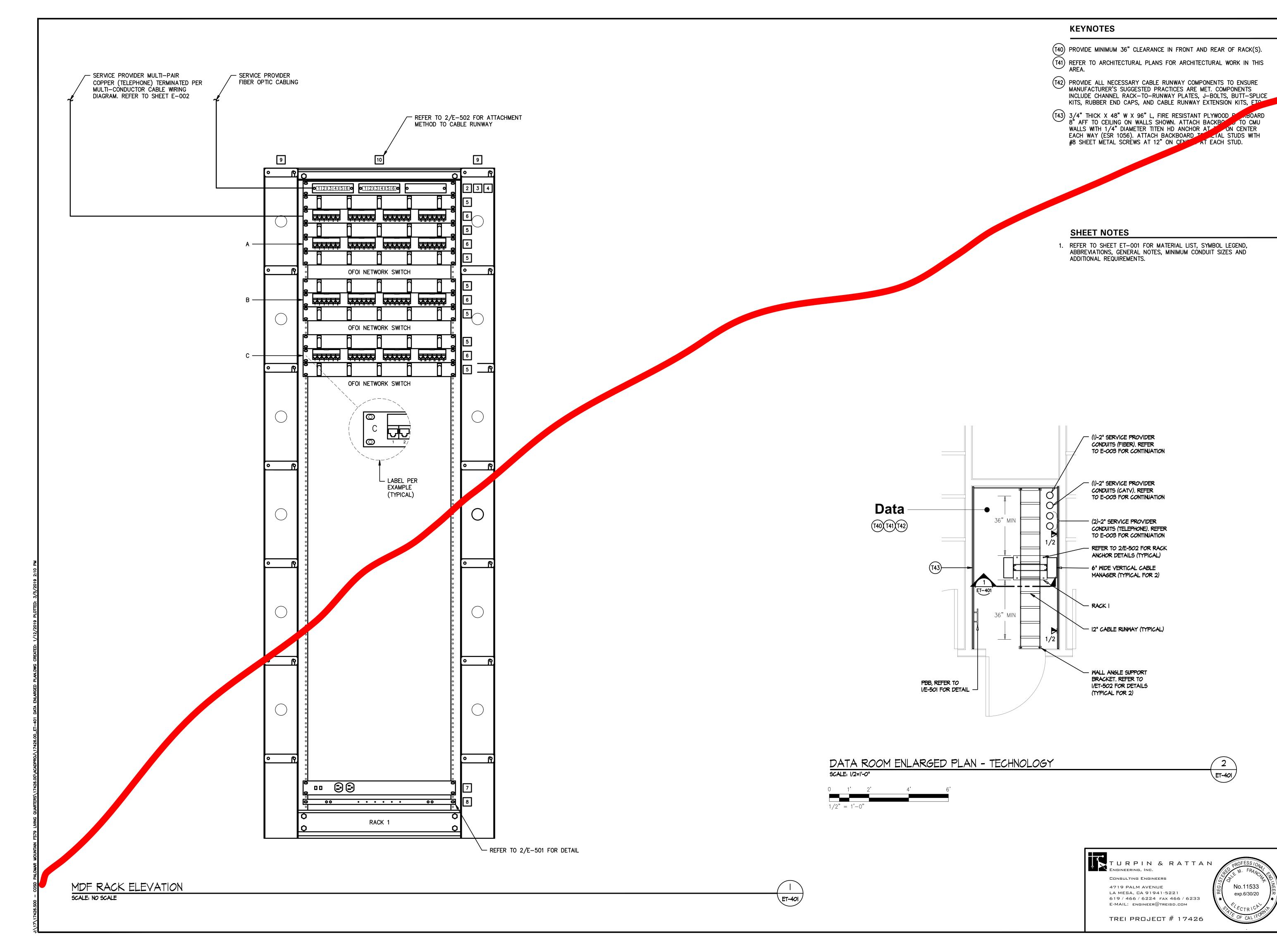
OF SHEETS

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STEM RISER DIAGRAM

NO SCALE



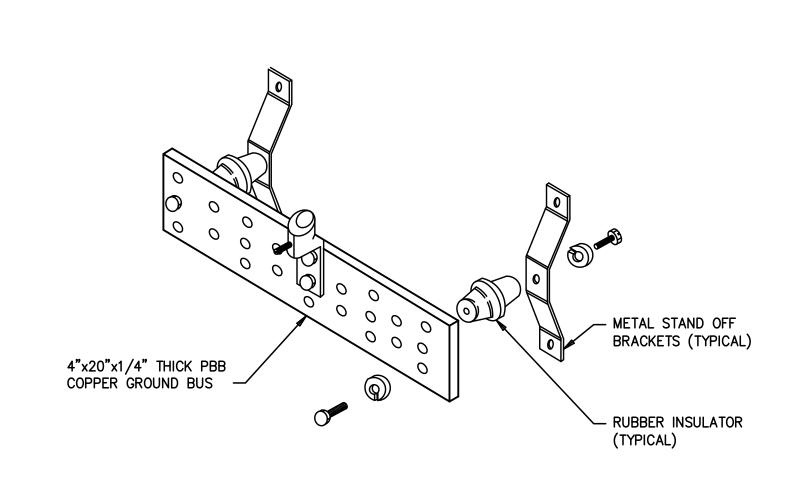




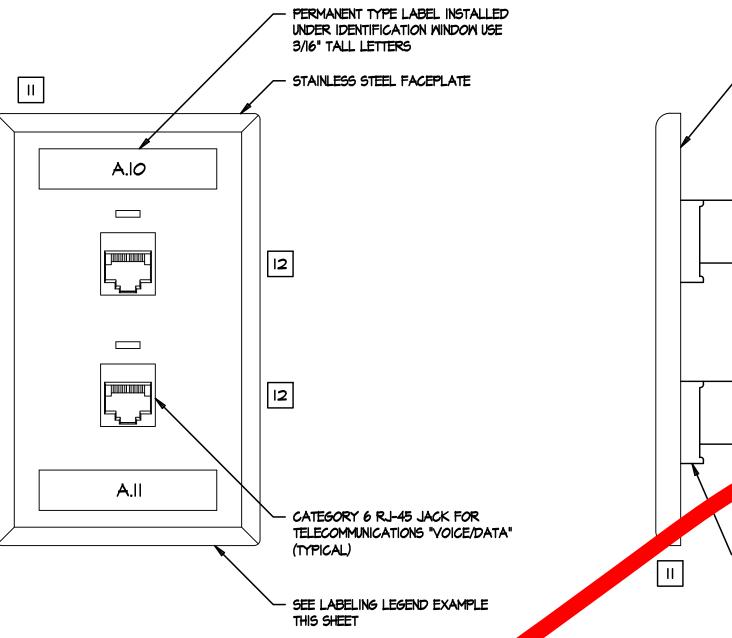
LIVING QUARTERS FLOOR PLAN TECHNOLOGY

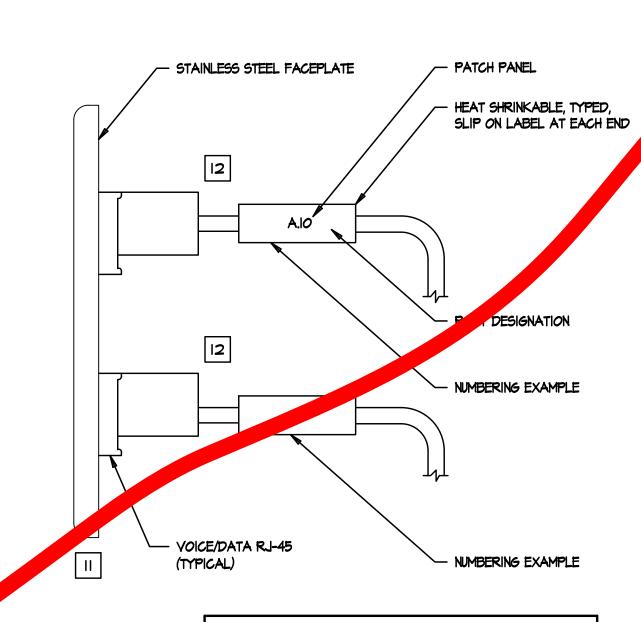
SCALE
AS NOTED
CHECKED/DRAWN
SC/DF

1 CD SHEETS ET-401



PRIMARY BONDING BUSBAR DETAIL NO SCALE





TYPICAL LABELING EXAMPLES	
CABLE	TYPICAL END USE CABINET & TYPE
25 PAIR (VOICE)	25 PAIR VOICE
25 PAIR (INTRUSION)	25 PAIR INTRUSION
6 PAIR (INTRUSION)	6 PAIR INTRUSION
200 PAIR	BLDG 200 PAIR TELCO TIE
24 FIBERS (DATA)	24 F/O DATA
CAT6 (SPARE)	CAT6 SPARE

- IRREVERSIBLE CRIMP CONNECTOR (TYPICAL) TEBC TO PBB/SBB 00 RACK BONDING BUSBAR (RBB) BOND TO PBB

RACK BONDING P SBAR DETAIL

DETAILS **TECHNOLOGY**

SCALE
AS NOTED
CHECKED/DRAWN
SC/DF
JOB
PWA NO. ----

No.11533

exp.6/30/20

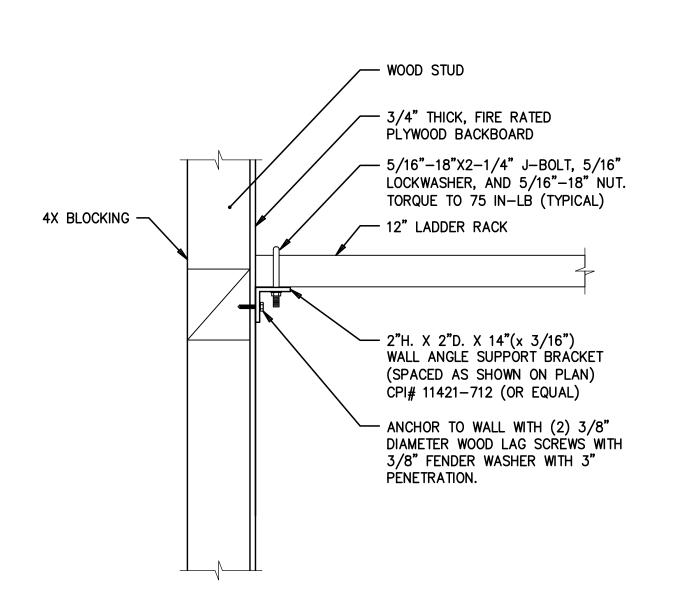
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TELECOMMUNICATIONS "VOICE/DATA" LABELING DETAIL



WALL ANGLE SUPPORT BRACKET DETAIL

NO SCALE

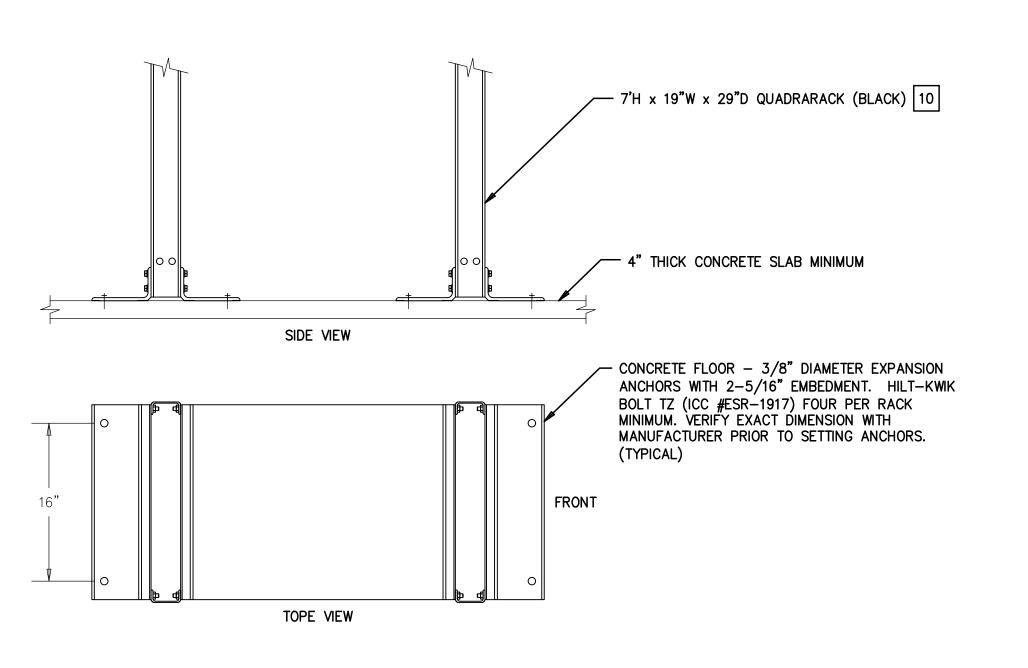
- 5/16"-18"X2-1/4" J-BOLT, 5/16" LOCKWASHER, AND 5/16"-18" NUT. TORQUE TO 75 IN-LB (TYPICAL) ── 12" WIDE CABLE RUNWAY (TYPICAL) 1.5" — ► ATTACH RACK TO CABLE RUNWAY WITH 3" CHANNEL RACK-TO-RUNWAY MOUNTING PLATE (BLACK) CPI #10595-712 OR EQUAL 7'H x 19"W RACK (BLACK) 10

CABLE RUNWAY/RACK ATTACHMENT DETAIL NO SCALE

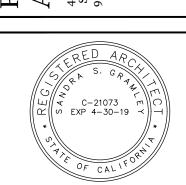
REFER TO 3/E-502 FOR RACK ANCHORING DETAILS. 10

E-502/

FOUR-POST RACK ANCHOR DETAIL NO SCALE



E-502





SUPPORT

DETAILS TECHNOLOGY

SCALE AS NOTED CHECKED/DRAWN SC/DF

OF SHEETS

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