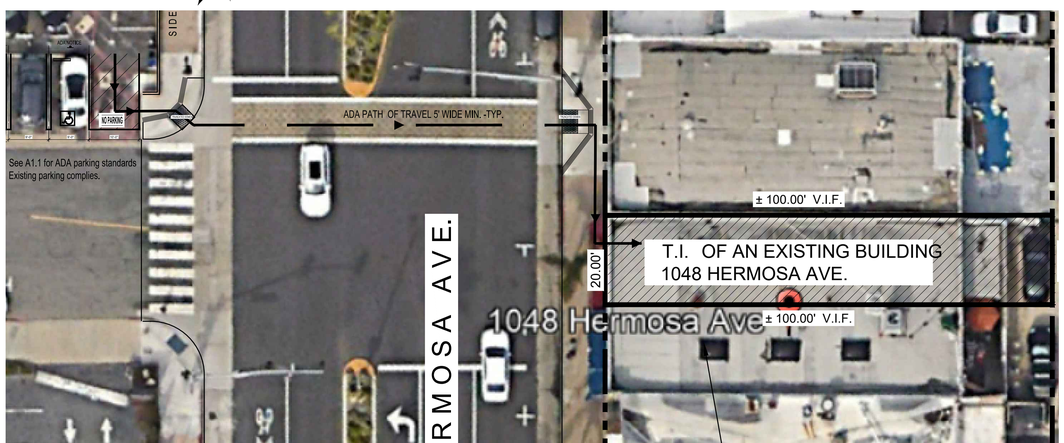


1 Plot Plan
1:20



2 Vicinity Map
NTS



3 Ada Path of Travel
SCALE 1/16"=1'-0"

NOTE:

Path of travel to area of work shall be accessible to the disabled.
Bathroom serving the area of work shall be accessible to the disabled,
Existing parking shall be accessible to the disabled.
Drinking fountain and public telephone when provided shall be accessible to the disabled

GENERAL NOTES:

a. Any change to existing fire sprinkler or fire alarm systems must be submitted for separate plan review. [Fire Prevention Bureau Manhattan Beach Fire Department]

b. Fire sprinklers shall be under separate plan check and permit.

c. Property address(s) must be permanently affixed to building in accordance with MBFC 505.1 prior to final fire inspection." [MBMC 3.16.20]

d. Include the City of Hermosa Beach ADA Declaration Table on the plans. Complete data on Summary of Accessibility upgrade for Commercial projects.

e. All new or existing buildings and structures in the City of Manhattan Beach shall provide underground electrical and communication service laterals on the premises to be served, as required in MBMC § 12.050.

f. All electrical, telephone, cable television system, and similar service wires and cables which provide direct service to new main buildings, new accessory buildings, and structures, shall be installed underground in compliance with all applicable building and electrical codes, safety regulations, and orders, rules of the Public Utilities Commission of the State of California, and specifications or standards of the Public Works Department.

g. All electrical, telephone, cable television system, and similar service wires and cables shall also be placed underground when existing buildings, existing accessory buildings, and structures are repaired, remodeled, altered or expanded, where the value, as determined for building permit fee purposes, by the Building Code of the City of Manhattan Beach, of such repairs or remodeling, or expansion exceeds fifty percent (50%) of the value of the building or structure as determined by the California Building Code.

h. Wiring between the accessory buildings and the main buildings shall be in an underground system.

i. Future underground utility services equipment shall be installed at the time of construction for new or existing buildings and structures. Future underground utility equipment shall include all conduits, wires, pullboxes, electrical panel, and other appurtenances which may be required for future underground utility

UNDERGROUND UTILITIES REQUIRED.

Services from the building or structure to an approved location on the property line of the parcel. Where a building or structure is served by utilities not situated on the same side of the public street, or not located in the public right-of-way at the front of the property, the property may continue to be served from the alternate location and by overhead wires until completion said future underground utility conversion.

Drawing Index

Dwg #	DRAWING TITLE
A00	SITE, DATA, INDEX & NOTES
A01	GREEN BUILDING NON-COMMERCIAL MEASUREMENTS
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A03	GREEN BUILDING NON-COMMERCIAL MEASUREMENTS
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A1.1	PLOT PLAN
A1.2	EXIST. & PROPOSED1ST FLOOR, 2ND FLOOR PLANS
A1.3	LIVE & SAFETY FLOOR PLANS
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M-1.0	HVAC, GENERAL NOTES & LEGENDS
M-1.1	HVAC EQUIPMENT & SCHEDULES
M-1.2	HVAC EQUIPMENT & DETAILS
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E-1.0	ELECTRICAL GENERAL NOTES & S.L.D.
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E-2.1	ELECTRICAL POWER PLAN
E-T24	ELECTRICAL T24
P-1.0	PLUMBING GENERAL NOTES, SCHEDS
P-2.0	PLUMBING FLOOR PLANS
S0.1	GENERAL NOTES
S1.1	FOUNDATION & FRAMING DETAILS
S1.2	MISC. AND TYPICAL FRAMING DETAILS
S2.1	FLOOR FRAMING & FOUNDATION PLANS

Symbols

VIEW REFERENCE

DETAIL NO. / SHEET NO. — A1 View Name (VIEW TITLE); A101 (SHEET NO.); 1/8" = 1'-0" (VIEW SCALE)

REFERENCE TYPE / DETAIL NO. / SHEET NO. — BUILDING ELEVATION

REFERENCE TYPE / DETAIL NO. / SHEET NO. — INTERIOR ELEVATION

REFERENCE TYPE / DETAIL NO. / SHEET NO. — BUILDING SECTION

REFERENCE TYPE / DETAIL NO. / SHEET NO. — WALL SECTION / DETAIL

REFERENCE TYPE / DETAIL NO. / SHEET NO. — ENLARGEMENT / DETAIL

LOCATION ID

ROOM NO. / ROOM FINISHES (SEE BELOW) / ROOM NO. — 101 ROOM NAME; F1 WB WF CF1; Room name; 101 — ROOM IDENTIFICATION

GRID ID / LEVEL ID — A; LEVEL 01 — COLUMN GRID, BUILDING LEVEL

ELEVATION — 0'-0" — SPOT ELEVATION

N — NORTH ARROW

BUILDING ELEMENT ID

DOOR NO. — 101 — DOOR IDENTIFICATION

LOUVER NO. — L1 — LOUVER IDENTIFICATION

WINDOW NO. — 01 — WINDOW IDENTIFICATION

STOREFRONT NO. — S1 — WINDOW IDENTIFICATION

BUILDING ASSEMBLY TYPES

(1) Bm3-a W1.1 — PARTITION TYPE, WALL TYPE

FL# — FLOOR TYPE

CL# — CEILING TYPE

RF# — ROOF TYPE

PROJECT DESCRIPTION: TENANT IMPROVEMENT

OWNER: GIANCARLO D'AGOSTINO

SITE ADDRESS: 1048 HERMOSA AVE., HERMOSA BEACH, CA 90254

LEGAL DESCRIPTION: AIN 4187-006-004

ZONING: DOWN TOWN

COASTAL ZONE STATUS: N/A

CONSTRUCTION TYPE: TYPE V-N NOT SPRINKLERED

OCCUPANCY GROUP B

LOT AREA: 2,000 SQ. FT.

BUILDING AREA: GND FLR 1,640 S.F. MEZZ 375 S.F. TOTAL 2,015 S.F.

Project Data

ARCHITECT:
GOITOM TEKLETSION GTA DESIGN GROUP
2100 N. SEPULVEDA BLVD. #44
310-546-5550
LICENSE NUMBER: C3192

STRUCTURAL
ENGINEERING STRUCTURES, INC.
BRIAN KHOURY, C.E. C61402
PH 909.615.6962

MEP
GMEP ENGINEERS
26439 RANCH PKWY. ST, SUITE 120
LAKE FOREST, CA 92630
PH 949.267.9095

Project Directory

CITY, STATE, NATIONALLY APPLICABLE CODES

BUILDING SHALL COMPLY WITH CALIFORNIA TITLE-24
2022 CALIFORNIA BUILDING CODE
2022 CALIF. GREEN BUILDING CODE
2022 RESIDENTIAL CODE, CALIFORNIA PLUMBING CODE
2022 CALIFORNIA MECHANICAL CODE
2022 CALIFORNIA ELECTRICAL CODE
2022 STATE OF CALIFORNIA, HERMOSA BEACH CITY AND 2022 LA COUNTY AMENDMENTS.

Applicable Codes

The work consists in the Tenant Improvement of an an existing building and shall consist in the selective removal of walls, existing electrical and plumbing fixtures, stair and finishes of approximately 1,639 sq. ft. in ground floor and mezzanine. Reconditioning or replacing of existing air conditioning unit and ducting system and building of a new ADA bathroom and storefront.

Scope of work

GTA Design Group
Architects
Landscape Design
Goitom Tekletsion, architect
Licence C31925
2100 N. Sepulveda Blvd, Suite 44
Manhattan Beach CA 90266
PH 310.546.5550 FAX 310.546.9250
EMAIL goitom@agarchitecture.com
www.agarchitecture.com

LICENSED ARCHITECT GOITOM TEKLETSION Exp. 7-31-25 C31925 STATE OF CALIFORNIA

OWNER

PROJECT/LOCATION
DRIVE SB Tenant Improvement
1048 Hermosa Ave., Hermosa Beach CA 90254

SHEET TITLE:
TENANT IMPROVEMENT
SITE, VICINITY & DATA PLAN

JOB NUMBER:

PRINT DATE:
11-22-2023

PERMIT DATE:

REVISIONS:
-

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SHEET NO:
A00
OF SHEETS

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SUBMITTAL 11-22-2023

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
NONRESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2023)

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

CHAPTER 3
GREEN BUILDING
SECTION 301 GENERAL

301.1 SCOPE. Buildings shall be designed to include the green building measures specified as mandatory in the application checklists contained in this code. Voluntary green building measures are also included in the application checklists and may be included in the design and construction of structures covered by this code, but are not required unless adopted by a city, county, or city and county as specified in Section 101.7.

301.3 NONRESIDENTIAL ADDITIONS AND ALTERATIONS. [BSC-CG] The provisions of individual sections of Chapter 5 apply to newly constructed buildings, building additions of 1,000 square feet or greater, and/or building alterations with a permit valuation of $200,000 or above (for occupancies within the authority of California Building Standards Commission). Code sections relevant to additions and alterations shall only apply to the portions of the building being added or altered within the scope of the permitted work.

A code section will be designated by a banner to indicate where the code section only applies to newly constructed buildings [N] or to additions and/or alterations [A]. When the code section applies to both, no banner will be used.

301.3.1 Nonresidential additions and alterations that cause updates to plumbing fixtures only:

Note: On and after January 1, 2014, certain commercial real property, as defined in Civil Code Section 1101.3, shall have its noncompliant plumbing fixtures replaced with appropriate water-conserving plumbing fixtures under specific circumstances. See Civil Code Section 1101.1 *et seq.* for definitions, types of commercial real property affected, effective dates, circumstances necessitating replacement of noncompliant plumbing fixtures, and duties and responsibilities for ensuring compliance.

301.3.2 Waste Diversion. The requirements of Section 5.408 shall be required for additions and alterations whenever a permit is required for work.

301.4 PUBLIC SCHOOLS AND COMMUNITY COLLEGES. (see GBSC)
301.5 HEALTH FACILITIES. (see GBSC)

SECTION 302 MIXED OCCUPANCY BUILDINGS

302.1 MIXED OCCUPANCY BUILDINGS. In mixed occupancy buildings, each portion of a building shall comply with the specific green building measures applicable to each specific occupancy.

SECTION 303 PHASED PROJECTS

303.1 PHASED PROJECTS. For shell buildings and others constructed for future tenant improvements, only those code measures relevant to the building components and systems considered to be new construction (or newly constructed) shall apply.

303.1.1 Initial Tenant improvements. The provisions of this code shall apply only to the initial tenant improvements to a project. Subsequent tenant improvements shall comply with the scoping provisions in Section 301.3 non-residential additions and alterations.

ABBREVIATION DEFINITIONS:

HCD	Department of Housing and Community Development
BSC	California Building Standards Commission
DSA-SS	Division of the State Architect, Structural Safety
OSHPD	Office of Statewide Health Planning and Development
LR	Low Rise
HR	High Rise
AA	Additions and Alterations
N	New

CHAPTER 5
NONRESIDENTIAL MANDATORY MEASURES
DIVISION 5.1 PLANNING AND DESIGN
SECTION 5.101 GENERAL

5.101.1 SCOPE
The provisions of this chapter outline planning, design and development methods that include environmentally responsible site selection, building design, building siting and development to protect, restore and enhance the environmental quality of the site and respect the integrity of adjacent properties.

SECTION 5.102 DEFINITIONS

5.102.1 DEFINITIONS
The following terms are defined in Chapter 2 *(and are included here for reference)*

CUTOFF LUMINAIRES. Luminaires whose light distribution is such that the candela per 1000 lamp lumens does not numerically exceed 25 (2.5 percent) at an angle of 90 degrees above nadir, and 100 (10 percent) at a vertical angle of 80 degrees above nadir. This applies to all lateral angles around the luminaire.

LOW-EMITTING AND FUEL EFFICIENT VEHICLES.
Eligible vehicles are limited to the following:

1. Zero emission vehicle (ZEV), enhanced advanced technology PZEV (enhanced AT ZEV) or transitional zero emission vehicles (TZEV) regulated under CCR, Title 13, Section 1962.
2. High-efficiency vehicles, regulated by U.S. EPA, bearing a fuel economy and greenhouse gas rating od 9 oe 10 as regulated under 40 CFR Section 600 Subpart D.

NEIGHBORHOOD ELECTRIC VEHICLE (NEV). A motor vehicle that meets the definition of "low-speed vehicle" either in Section 385.5 of the Vehicle Code or in 49CFR571.500 (as it existed on July 1, 2000), and is certified to zero-emission vehicle standards.

TENANT-OCCUPANTS. Building occupants who inhabit a building during its normal hours of operation as permanent occupants, such as employees, as distinguished from customers and other transient visitors.

VANPOOL VEHICLE. Eligible vehicles are limited to any motor vehicle, other than a motortruck or truck tractor, designed for carrying more than 10 but not more than 15 persons including the driver, which is maintained and used primarily for the nonprofit work-related transportation of adults for the purpose of ridesharing.

Note: Source: Vehicle Code, Division 1, Section 668

ZEV. Any vehicle certified to zero-emission standards.

SECTION 5.106 SITE DEVELOPMENT

5.106.1 STORM WATER POLLUTION PREVENTION FOR PROJECTS THAT DISTURB LESS THAN ONE ACRE OF LAND. Newly constructed projects and additions which disturb less than one acre of land, and are not part of a larger common plan of development or sale, shall prevent the pollution of storm water runoff from the construction activities through one or more of the following measures:

5.106.1.1 Local ordinance. Comply with a lawfully enacted storm water management and/or erosion control ordinance.

5.106.1.2 Best Management Practices (BMPs). Prevent the loss of soil through wind or water erosion by implementing an effective combination of erosion and sediment control and good housekeeping BMPs.

1. Soil loss BMPs that should be considered for implementation as appropriate for each project include, but are not limited to, the following:
   a. Scheduling construction activity during dry weather, when possible.
   b. Preservation of natural features, vegetation, soil, and buffers around surface waters.
   c. Drainage swales or lined ditches to control stormwater flow.
   d. Mulching or hydroseeding to stabilize disturbed soils.
   e. Erosion control to protect slopes.
   f. Protection of storm drain inlets (gravel bags or catch basin inserts).
   g. Perimeter sediment control (perimeter silt fence, fiber rolls).
   h. Sediment trap or sediment basin to retain sediment on site.
   i. Stabilized construction exits.
   j. Wind erosion control.
   k. Other soil loss BMPs acceptable to the enforcing agency.
2. Good housekeeping BMPs to manage construction equipment, materials, non-stormwater discharges and wastes that should be considered for implementation as appropriate for each project include, but are not limited to, the following:
   a. Dewatering activities.
   b. Material handling and waste management.
   c. Building materials stockpile management.
   d. Management of washout areas (concrete, paints, stucco, etc.).
   e. Control of vehicle/equipment fueling to contractor's staging area.
   f. Vehicle and equipment cleaning performed off site.
   g Spill prevention and control.
   h. Other housekeeping BMPs acceptable to the enforcing agency.

5.106.2 STORMWATER POLLUTION PREVENTION FOR PROJECTS THAT DISTURB ONE OR MORE ACRES OF LAND. Comply with all lawfully enacted stormwater discharge regulations for projects that (1) disturb one acre or more of land, or (2) disturb less than one acre of land but are part of a larger common plan of development sale.

Note: Projects that (1) disturb one acre or more of land, or (2) disturb less than one acre of land but are part of the larger common plan of development or sale must comply with the post-construction requirements detailed in the applicable National Pollutant Discharge Elimination System (NPDES) General permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities issued by the State Water Resources Control Board or the Lahontan Regional Water Quality Control Board (for projects in the Lake Tahoe Hydrologic Unit).

The NPDES permits require postconstruction runoff (post-project hydrology) to match the preconstruction runoff (pre-project hydrology) with the installation of postconstruction stormwater management measures. The NPDES permits emphasize runoff reduction through on-site stormwater use, interception, evapotranspiration, and infiltration through nonstructural controls, such as Low Impact Development (LID) practices, and conversation design measures. Stormwater volume that cannot be addressed using nonstructural practices is required to be captured in structural practices and be approved by the enforcing agency.

Refer to the current applicable permits on the State Water Resources Control Board website at: www.waterboards.ca.gov/constructionstormwater. Consideration to the stormwater runoff management measures should be given during the initial design process for appropriate integration into site development.

5.106.4 BICYCLE PARKING. For buildings within the authority of California Building Standards Commission as specified in Section 103, comply with Section 5.106.4.1. For buildings within the authority of the Division of the State Architect pursuant to Section 105, comply with Section 5.106.4.2

5.106.4.1 Bicycle parking. [BSC-CG] Comply with Sections 5.106.4.1.1 and 5.106.4.1.2; or meet the applicable local ordinance, whichever is stricter.

5.106.4.1.1 Short-term bicycle parking. If the new project or an addition or alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5% of new visitor motorized vehicle parking spaces being added, with a minimum of one bike capacity rack.
Exception: Additions or alterations which add nine or less visitor vehicular parking spaces.

5.106.4.1.2 Long-term bicycle parking. For new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5 percent of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility.

5.106.4.1.3 For additions or alterations that add 10 or more tenant-occupant vehicular parking spaces, provide secure bicycle parking for 5 percent of the tenant vehicular parking spaces being added, with a minimum of one bicycle parking facility.

5.106.4.1.4 For new shell buildings in phased projects provide secure bicycle parking for 5 percent of the anticipated tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility.

5.106.4.1.5 Acceptable bicycle parking facility for Sections 5.106.4.1.2, 5.106.4.1.3, and 5.106.4.1.4 shall be convenient from the street and shall meet one of the following:

1. Covered, lockable enclosures with permanently anchored racks for bicycles;
2. Lockable bicycle rooms with permanently anchored racks; or
3. Lockable, permanently anchored bicycle lockers.

Note: Additional information on recommended bicycle accommodations may be obtained from Sacramento Area Bicycle Advocates.

5.106.4.2 Bicycle parking. [DSA-SS] For public schools and community colleges, comply with Sections 5.106.4.2.1 and 5.106.4.2.2

5.106.4.2.1 Student bicycle parking. Provide permanently anchored bicycle racks conveniently accessed with a minimum of four two-bike capacity racks per new building.
5.106.4.2.2 Staff bicycle parking. Provide permanent, secure bicycle parking conveniently accessed with a minimum of two staff bicycle parking spaces per new building. Acceptable bicycle parking facilities shall be convenient from the street or staff parking area and shall meet one of the following:

1. Covered, lockable enclosures with permanently anchored racks for bicycles;
2. Lockable bicycle rooms with permanently anchored racks; or
3. Lockable, permanently anchored bicycle lockers.

5.106.5.3 Electric vehicle (EV) charging. [N] Construction to provide electric vehicle infrastructure and facilitate electric vehicle charging shall comply with Section 5.106.5.3.1 and shall be provided in accordance with regulations in the California Building Code and the California Electrical Code.

Exceptions:
1. On a case-by-case basis where the local enforcing agency has determined compliance with this section is not feasible based upon one of the following conditions:
   a. Where there is no local utility power supply
   b. Where the local utility is unable to supply adequate power.
   c. Where there is evidence suitable to the local enforcement agency substantiating the local utility infrastructure design requirements, directly related to the implementation of Section 5.106.5.3, may adversely impact the construction cost of the project.
2. Parking spaces accessible only by automated mechanical car parking systems are not required to comply with this code section

5.106.5.3.1 EV capable spaces.
[N] EV capable spaces shall be provided in accordance with Table 5.106.5.3.1 and the following requirements:
1. Raceways complying with the California Electrical Code and no less that 1-inch (25 mm) diameter shall be provided and shall originate at a service panel or a subpanel(s) serving the area, and shall terminate in close proximity to the proposed location of the EV capable and into a suitable listed cabinet, box,enclosure or equivalent. A common raceway may be used to serve multiple EV charging spaces.
2. A service panel or subpanel (s) shall be provided with panel space and electrical load capacity for a dedicated 208/240 volt, 40-ampere minimum branch circuit for each EV capable space, with delivery of 30-ampere minimum to an installed EVSE at each EVCS.
3. The electrical system and any on-site distribution transformers shall have sufficient capacity to supply full rated amperage at each EV capable space.
4. The service panel or subpanel circuit directory shall identify the reserved overcurrent protective devices space(s) as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE."

Note: A parking space served by electric vehicle supply equipment or designed as a future EV charging space shall count as at least one standard automobile parking space only for the purpose of complying with any applicable minimum parking space requirements established by an enforcement agency. See vehicle Code Section 22511.2 for further details.

TABLE 5.106.5.3.1

TOTAL NUMBER OF ACTUAL PARKING SPACES	NUMBER OF REQUIRED EV CAPABLE SPACES	NUMBER OF EVCS (EV CAPABLE SPACES PROVIDED WITH EVSE)^2
0-9	0	0
10-25	2	0
26-50	8	2
51-75	13	3
76-100	17	4
101-150	25	6
151-200	35	9
201 AND OVER	20% of total[1]	25% of EV capable spaces[1]

1. Where there is insufficient electrical supply.
2. The number of required EVCS (EV capable spaces provided with EVSE) in column 3 count towards the total number of required EV capable spaces shown in column 2.

5.106.5.3.2 Electric vehicle charging stations (EVCS)
EV capable spaces shall be provided with EVSE to create EVCS in the number indicated in Table 5.106.5.3.1. The EVCS required by Table 5.106.5.3.1 may be provided with EVSE in any combination of Level 2 and Direct Current Fast Charging (DCFC), except that at least one Level 2 EVSE shall be provided.

One EV charger with multiple connectors capable of charging multiple EVs simultaneously shall be permitted if the electrical load capacity required by Section 5.106.5.3.1 for each EV capable space is accumulatively supplied to the EV charger.

The installation of each DCFC EVSE shall be permitted to reduce the minimum number of required EV capable spaces without EVSE by five and reduce proportionally the required electrical load capacity to the service panel or subpanel.

5.106.5.3.3 Use of automatic load management systems (ALMS).
ALMS shall be permitted for EVCS. When ALMS is installed, the required electrical load capacity specified in Section
5.106.5.3.1 for each EVCS may be reduced when serviced by an EVSE controlled by an ALMS. Each EVSE controlled by an ALMS shall deliver a minimum 30 amperes to an EV when charging one vehicle and shall deliver a minimum 3.3 kW while simultaneously charging multiple EVs.

5.106.5.3.4 Accessible EVCS.
When EVSE is installed, accessible EVSC shall be provided in accordance with the *California Building Code*, Chapter 11B, Section 11B-228.3.
Note: For EVCS signs, refer to Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s).

5.106.5.4 Electric Vehicle (EV) charging: medium-duty and heavy-duty. [N]
Construction shall comply with section 5.106.5.4.1 to facilitate future installation of electric vehicle supply equipment (EVSE). Construction for warehouses, grocery stores and retail stores with planned off-street loading spaces shall also comply with Section 5.106.5.4.1 for future installation of medium- and heavy-duty EVSE.
Exceptions:
1. On a case-by-case basis where the local enforcing agency has determined compliance with this section is not feasible based upon one of the following conditions:
   a. Where there is no local utility power supply.
   b. Where the local utility is unable to supply adequate power.
   c. Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 5.106.5.3, may adversely impact the construction cost of the project.

When EVSE(s) is/are installed, it shall be in accordance with the *California Building Code*, the *California Electrical Code* and as follows:

5.106.5.4.1 Electric vehicle charging readiness requirements for warehouse, grocery stores and retail stores with planned off-street loading spaces.
[N] In order to avoid future demolition when adding EV charging supply and distribution equipment, spare raceways(s) or busway(s) and adequate capacity for transformers(s), service panels(s) or subpanel(s) shall be installed at the time of construction in accordance with the California Electrical Code. Construction plans and specifications shall include but are not limited to, the following:
1. The transformer, main service equipment and subpanel shall meet the minimum power requirement in Table 5.106.5.4.1 to accommodate the dedicated branch circuits for the future installation of EVSE.
2. The construction documents shall indicate on or more location(s) convenient to the planned offstreet loading space(s) reserved for medium-and heavy-duty ZEV charging cabinets and charging dispensers, and a pathway reserved for routing of conduit from the termination of the raceway(s) or busway(s) to the charging cabinet(s) and dispenser(s) as shown in Table 5.106.5.4.1
3. Raceway(s) or busway(s) originating at a main service panel or a subpanel(s) serving the area where potential future medium-and heavy-duty EVSE will be located and shall terminate in close proximity to the potential future location of the charging equipments for medium- and heavy-duty vehicles.
4. The raceway(s) or busway(s) shall be sufficient size to carry the minimum additional system load to the future location of the charging for medium- and heavy-duty ZEVs as shown in Table 5.106.5.4.1.

TABLE 5.106.5.4.1 RACEWAY CONDUIT AND PANEL POWER REQUIREMENTS FOR MEDIUM- AND HEAVY-DUTY EVSE [N]

BUILDING TYPE	BUILDING SIZE (SQ. FT.)	NUMBER OF OFF-STREET LOADING SPACES	ADDITIONAL CAPACITY REQUIRED (KVA) FOR RACEWAY & BUSWAY AND TRANSFORMER & PANEL
Grocery	10,000 to 90,000	1 or 2	200
		3 or Greater	400
	Greater than 90,000	1 or Greater	400
Retail	10,000 to 135,000	1 or 2	200
		3 or Greater	400
	Greater than 135,000	1 or Greater	400
Warehouse	20,000 to 256,000	1 or 2	200
		3 or Greater	400
	Greater than 256,000	1 or Greater	400

5.106.8 LIGHT POLLUTION REDUCTION. [N]. I Outdoor lighting systems shall be designed and installed to comply with the following:

1. The minimum requirements in the California Energy Code for Lighting Zones 0-4 as defined in Chapter 10, Section 10-114 of the California Administrative Code; and
2. Backlight (B) ratings as defined in IES TM-15-11 (shown in Table A-1 in Chapter 8);
3. Uplight and Glare ratings as defined in California Energy Code (shown in Tables 130.2-A and 130.2-B in Chapter 8) and
4. Allowable BUG ratings not exceeding those shown in Table 5.106.8, [N] or Comply with a local ordinance lawfully enacted pursuant to Section 101.7, whichever is more stringent.

Exceptions: [N]

1. Luminaires that qualify as exceptions in Sections 130.2 (b) and 140.7 of the California Energy Code.
2. Emergency lighting.
3. Building facade meeting the requirements in Table 140.7-B of the California Energy Code, Part 6.
4. Custom lighting features as allowed by the local enforcing agency, as permitted by Section 101.8 Alternate materials, designs and methods of construction.
5. Luminaires with less than 6,200 initial luminaire lumens.

TABLE 5.106.8 [N] MAXIMUM ALLOWABLE BACKLIGHT, UPLIGHT AND GLARE (BUG) RATINGS 1,2

ALLOWABLE RATING	LIGHTING ZONE LZ0	LIGHTING ZONE LZ1	LIGHTING ZONE LZ2	LIGHTING ZONE LZ3	LIGHTING ZONE LZ4
MAXIMUM ALLOWABLE BACKLIGHT RATING 3					
Luminaire greater than 2 mounting heights (MH) from property line	N/A	No Limit	No Limit	No Limit	No Limit
Luminaire back hemisphere is 1-2 MH from property line	N/A	B2	B3	B4	B4
Luminaire back hemisphere is 0.5-1 MH from property line	N/A	B1	B2	B3	B3
Luminaire back hemisphere is less than 0.5 MH from property line	N/A	B0	B0	B1	B2
MAXIMUM ALLOWABLE UPLIGHT RATING (U)					
For area lighting 3	N/A	U0	U0	U0	U0
For all other outdoor lighting,including decorative luminaires	N/A	U1	U2	U3	UR
MAXIMUM ALLOWABLE GLARE RATING 3 (G)					
MAXIMUM ALLOWABLE GLARE RATING 3 (G)	N/A	G1	G2	G3	G4
MAXIMUM ALLOWABLE GLARE RATING 3 (G)	N/A	G0	G1	G1	G2
MAXIMUM ALLOWABLE GLARE RATING 3 (G)	N/A	G0	G0	G1	G1
MAXIMUM ALLOWABLE GLARE RATING 3 (G)	N/A	G0	G0	G0	G1

1. IESNA Lighting Zones 0 and 5 are not applicable; refer to Lighting Zones as defined in the *California Energy Code* and Chapter 10 of the *California Administrative Code.*

2. For property lines that abut public walkways, bikeways, plazas and parking lots, the property line may be considered to be 5 feet beyond the actual property line for purpose of determining compliance with this section. For property lines that abut public roadways and public transit corridors, the property line may be considered to be the centerline of the public roadway or public transit corridor for the purpose of determining compliance with this section.

3. General lighting luminaires in areas such as outdoor parking, sales or storage lots shall meet these reduced ratings. Decorative luminaries located in these areas shall meet *U*-value limits for "all other outdoor lighting"

5.106.8.1 Facing- Backlight
Luminaries within 2MH of a property line shall be oriented so that the nearest property line is behind the fixture, and shall comply with the backlight rating specified in Table 5.106.8 based on the lighting zone and distance to the nearest point of that property line.
Exception: Corners. If two property lines (or two segments of the same property line) have equidistant point to the luminaire, then the luminaire may be oriented so that the intersection of the two lines (the corner) is directly behind the luminaire. The luminaire shall still use the distance to the nearest points(s) on the property lines to determine the required backlight rating.

5.106.8.2 Facing-Glare.
For luminaires covered by 5.106.8.1, if a property line also exists within or extends into the front hemisphere within 2MH of the luminaire then the luminaire shall comply with the more stringent glare rating specified in Table 5.106.8 based on the lighting zone and distance to the nearest point on the nearest property line within the front hemisphere.

Note: [N]
1.See also *California Building Code*, Chapter 12, Section 1205.6 for college campus lighting requirements for parking facilities and walkways.
2.Refer to Chapter 8 (Compliance Forms, Worksheets and Reference Material) for IES TM-15-11 Table A-1, *California Energy Code* Tables 130.2-A and 130.2-B.
3. Refer to the *California Building Code* for requirements for additions and alterations.

5.106.10 GRADING AND PAVING. Construction plans shall indicate how site grading or a drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following:

1. Swales.
2. Water collection and disposal systems.
3. French drains.
4. Water retention gardens.
5. Other water measures which keep surface water away from buildings and aid in groundwater recharge.
Exception: Additions and alterations not altering the drainage path.

5.106.12 SHADE TREES [DSA-SS]. Shade Trees shall be planted to comply with Sections 5.106.12.1, 5.106.12.2, and 5.106.12.3. Percentages shown shall be measured at noon on the summer solstice. Landscape irrigation necessary to establish and maintain tree health shall comply with Section 5.304.6.

5.106.12.1 Surface parking areas. Shade tree plantings, minimum #10 container size or equal, shall be installed to provide shade over 50 percent of the parking area within 15 years.

Exceptions: Surface parking area covered by solar photovoltaic shade structures with roofing materials that comply with Table A5.106.11.2.2 in Appendix A5 shall be permitted in whole or in part in lieu of shade tree planting.

5.106.12.2 Landscape areas. Shade tress plantings, minimum #10 container size or equal shall be installed to provide shade of 20% of the landscape area within 15 years.

Exceptions: Playfields for organized sport activity are not included in the total area calculation.

5.106.12.3. Hardscape areas. Shade tree plantings, minimum #10 container size or equal shall be installed to provide shade over 20 percent of the hardscape area within 15 years.

Exceptions:
1. Walks, hardscape areas covered by solar photovoltaic shade structures or shade structures with roofing materials that comply with Table A5.106.11.2.2 in Appendix A5 shall be permitted in whole or in part in lieu of shade tree planting.
2. Designated and marked play areas of organized sport activity are not included in the total area calculation.

DIVISION 5.2 ENERGY EFFICIENCY
SECTION 5.201 GENERAL

5.201.1 Scope [BSC-CG]. *California Energy Code [DSA-SS].* For the purposes of mandatory energy efficiency standards in this code, the California Energy Commission will continue to adopt mandatory building standards.

DIVISION 5.3 WATER EFFICIENCY AND CONSERVATION
SECTION 5.301 GENERAL

5.301.1 Scope. The provisions of this chapter shall establish the means of conserving water use indoors, outdoors and in wastewater conveyance.

SECTION 5.302 DEFINITIONS

5.302.1 Definitions. The following terms are defined in Chapter 2 *(and are included here for reference)*

EVAPOTRANSPIRATION ADJUSTMENT FACTOR (ETAF) [DSA-SS]. An adjustment factor when applied to reference evapotranspiration that adjusts for plant factors and irrigation efficiency, which ae two major influences on the amount of water that needs to be applied to the landscape.

FOOTPRINT AREA [DSA-SS]. The total area of the furthest exterior wall of the structure projected to natural grade, not including exterior areas such as stairs, covered walkways, patios and decks.

METERING FAUCET. A self-closing faucet that dispenses a specific volume of water for each actuation cycle. The volume or cycle duration can be fixed or adjustable.

GRAYWATER. Pursuant to Health and Safety Code Section 17922.12, "graywater" means untreated wastewater that has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. "Graywater" includes, but is not limited to wastewater from bathtubs, showers, bathroom washbasins, clothes washing machines and laundry tubs, but does not include waste water from kitchen sinks or dishwashers.

MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO). The California ordinance regulating landscape design, installation and maintenance practices that will ensure commercial, multifamily and other developer installed landscapes greater than 2500 square feet meet an irrigation water budget developed based on landscaped area and climatological parameters.

MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO). [HCD] The California model ordinance (California Code of Regulations, Title 23, Division 2, Chapter 2.7), regulating landscape design, installation and maintenance practices. Local agencies are required to adopt the updated MWELO, or adopt a local ordinance at least as effective as the MWELO.

POTABLE WATER. Water that is drinkable and meets the U.S. Environmental Protection Agency (EPA) Drinking Water Standards. See definition in the California Plumbing Code, Part 5.

POTABLE WATER. [HCD] Water that is satisfactory for drinking, culinary, and domestic purposes, and meets the U.S. Environmental Protection Agency (EPA) Drinking Water Standards and the requirements of the Health Authority Having Jurisdiction.

RECYCLED WATER. Water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur [Water Code Section 13050 (n)]. Simply put, recycled water is water treated to remove waste matter attaining a quality that is suitable to use the water again.

SUBMETER. [HCD 1] A secondary device beyond a meter that measures water consumption of an individual rental unit within a multiunit residential structure or mixed-use residential and commercial structure. (See Civic Code Section 1954.202 (g) and Water code Section 517 for additional details.)

WATER BUDGET. Is the estimated total landscape irrigation water use which shall not exceed the maximum applied water allowance calculated in accordance with the Department of Water Resources Model Efficient Landscape Ordinance (MWELO).

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GTA Design Group
Architects
Landscape Design
Goitom Tekfetsion, architect
Licence C31925
2100 N. Sepulveda Blvd. Suite 44
Manhattan Beach CA 90266
PH 310.546.5550 FAX 310.546.9250
EMAIL goitom@gtaarchitecture.com
www.gtaarchitecture.com

LICENSED ARCHITECT · GOITOM TEKFETSION · Exp. 7-31-25 C31925 · STATE OF CALIFORNIA

OWNER

PROJECT/LOCATION
DRIVE SB Tenant Improvement
1048 Hermosa Ave., Hermosa Beach CA 90254

SHEET TITLE:
CAL GREEN
TENANT IMPROVEMENT
SITE, VICINITY & DATA PLAN

JOB NUMBER:

PRINT DATE:
05-12-2023

PERMIT DATE:

REVISIONS:
-
1
2

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SUBMITTAL 11-22-2023

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
NONRESIDENTIAL MANDATORY MEASURES, SHEET 2 (January 2023)

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

Y	N/A	RESPON. PARTY

SECTION 5.303 INDOOR WATER USE

5.303.1 METERS. Separate submeters or metering devices shall be installed for the uses described in Sections 5O3.1.1 and 503.1.2.

5.303.1.1 Buildings in excess of 50,000 square feet. Separate submeters shall be installed as follows:

1. For each individual leased, rented or other tenant space within the building projected to consume more than 100 gal/day (380 L/day), including, but not limited to, spaces used for laundry or cleaners, restaurant or food service, medical or dental office, laboratory, or beauty salon or barber shop.
2. Where separate submeters for individual building tenants are unfeasible, for water supplied to the following subsystems:
   a. Makeup water for cooling towers where flow through is greater than 500 gpm (30 L/s).
   b. Makeup water for evaporative coolers greater than 6 gpm (0.04 L/s).
   c. Steam and hot water boilers with energy input more than 500,000 Btu/h (147 kW).

5.303.1.2 Excess consumption. A separate submeter or metering device shall be provided for any tenant within a new building or within an addition that is projected to consume more than 1,000 gal/day.

5.303.3 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:

5.303.3.1 Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-Type toilets.

Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced flushes and one full flush.

5.303.3.2 Urinals.

5.303.3.2.1 Wall-mounted Urinals. The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush.

5.303.3.2.2 Floor-mounted Urinals. The effective flush volume of floor-mounted or other urinals shall not exceed 0.5 gallons per flush.

5.303.3.3 Showerheads. [BSC-CG]

5.303.3.3.1 Single showerhead. Showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Showerheads.

5.303.3.3.2 Multiple showerheads serving one shower. When a shower is served by more than one showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi, or the shower shall be designed to allow only one shower outlet to be in operation at a time.
Note: A hand-held shower shall be considered a showerhead.

5.303.3.4 Faucets and fountains.

5.303.3.4.1 Nonresidential Lavatory faucets. Lavatory faucets shall have a maximum flow rate of not more than 0.5 gallons per minute at 60 psi.

5.303.3.4.2 Kitchen faucets. Kitchen faucets shall have a maximum flow rate of not more than 1.8 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per minute at 60 psi.

5.303.3.4.3 Wash fountains. Wash fountains shall have a maximum flow rate of not more than1.8 gallons per minute/20 [rim space (inches) at 60 psi].

5.303.3.4.4 Metering faucets. Metering faucets shall not deliver more than 0.20 gallons per cycle.

5.303.3.4.5 Metering faucets for wash fountains. Metering faucets for wash fountains shall have a maximum flow rate of not more than 0.20 gallons per minute/20 [rim space (inches) at 60 psi].

Note: Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.

5.303.3.4.6 Pre-rinse spray value
When installed, shall meet the requirements in the *California Code of Regulations*, Title 20 (Appliance Efficiency Regulations), Section 1605.1 (h)(4) Table H-2, Section 1605.3 (h)(4)(A), and Section 1607 (d)(7), and shall be equipped with an integral automatic shutoff.

FOR REFERENCE ONLY: The following table and code section have been reprinted from the *California Code of Regulations*, Title 20 (Appliance Efficiency Regulations), Section 1605.1 (h)(4) and Section 1605.3 (h)(4)(A).

TABLE H-2

STANDARDS FOR COMMERCIAL PRE-RINSE SPRAY VALUES MANUFACTURED ON OR AFTER JANUARY 28, 2019

PRODUCT CLASS [spray force in ounce force (ozf)]	MAXIMUM FLOW RATE (gpm)
Product Class 1 (≤ 5.0 ozf)	1.00
Product Class 2 (> 5.0 ozf and ≤ 8.0 ozf)	1.20
Product Class 3 (> 8.0 ozf)	1.28

5.303.4 COMMERCIAL KITCHEN EQUIPMENT.

5.303.4.1 Food Waste Disposers. Disposers shall either modulate the use of water to no more than 1 gpm when the disposer is not in use (not actively grinding food waste/no-load) or shall automatically shut off after no more than 10 minutes of inactivity. Disposers shall use no more than 8 gpm of water.
Note: This code section does not affect local jurisdiction authority to prohibit or require disposer installation.

5.303.5 AREAS OF ADDITION OR ALTERATION. For those occupancies within the authority of the California Building Standards Commission as specified in Section 103, the provisions of Section 5.303.3 and 5.303.4 shall apply to new fixtures in additions or areas of alteration to the building.

5.303.6 STANDARDS FOR PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures and fittings shall be installed in accordance with the *California Plumbing Code*, and shall meet the applicable standards referenced in Table 1701.1 of the *California Plumbing Code* and in Chapter 6 of this code.

SECTION 5.304 OUTDOOR WATER USE

5.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS. Nonresidential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.

Notes:
1. The Model Water Efficient Landscape Ordinance (MWELO) is located in the California Code of Regulations, Title 23, Chapter 2.7, Division 2.
2. MWELO and supporting documents, including a water budget calculator, are available at: https://www.water.ca.gov/.

5.304.6 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS. For public schools and community colleges, landscape projects as described in Sections 5.304.6.1 and 5.304.6.2 shall comply with the California Department of Water Resources Model Water Efficient Landscape Ordinance (MWELO) commencing with Section 490 of Chapter 2.7, Division 2, Title 23, *California Code of Regulations*, except that the evapotranspiration adjustment factor (ETAF) shall be 0.65 with an additional water allowance for special landscape areas (SLA) of 0.35.

Exception: Any project with an aggregate landscape area of 2,500 square feet or less may comply with the prescriptive measures contained in Appendix D of the MWELO.

5.304.6.1 Newly constructed landscapes. New construction projects with an aggregate landscape area equal to or greater than 500 square feet.

5.304.6.2 Rehabilitated landscapes. Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 1,200 square feet.

DIVISION 5.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

SECTION 5.401 GENERAL

5.401.1 SCOPE. The provisions of this chapter shall outline means of achieving material conservation and resource efficiency through protection of buildings from exterior moisture, construction waste diversion, employment of techniques to reduce pollution through recycling of materials, and building commissioning or testing and adjusting.

SECTION 5.402 DEFINITIONS

5.402.1 DEFINITIONS. The following terms are defined in Chapter 2 *(and are included here for reference)*

ADJUST. To regulate fluid flow rate and air patterns at the terminal equipment, such as to reduce fan speed or adjust a damper.

BALANCE. To proportion flows within the distribution system, including sub-mains, branches and terminals, according to design quantities.

BUILDING COMMISSIONING. A systematic quality assurance process that spans the entire design and construction process, including verifying and documenting that building systems and components are planned, designed, installed, tested, operated and maintained to meet the owner's project requirements.

ORGANIC WASTE. Food waste, green waste, landscape and pruning wste, nonhazardous wood waste, and food soiled paper waste that is mixed in with food waste.

TEST. A procedure to determine quantitative performance of a system or equipment

SECTION 5.407 WATER RESISTANCE AND MOISTURE MANAGEMENT

5.407.1 WEATHER PROTECTION. Provide a weather-resistant exterior wall and foundation envelope as required by California Building Code Section 1402.2 (Weather Protection), manufacturer's installation instructions or local ordinance, whichever is more stringent.

5.407.2 MOISTURE CONTROL. Employ moisture control measures by the following methods.

5.407.2.1 Sprinklers. Design and maintain landscape irrigation systems to prevent spray on structures.

5.407.2.2 Entries and openings. Design exterior entries and/or openings subject to foot traffic or wind-driven rain to prevent water intrusion into buildings as follows:

5.407.2.2.1 Exterior door protection. Primary exterior entries shall be covered to prevent water intrusion by using nonabsorbent floor and wall finishes within at least 2 feet around and perpendicular to such openings plus at least one of the following:

1. An installed awning at least 4 feet in depth.
2. The door is protected by a roof overhang at least 4 feet in depth.
3. The door is recessed at least 4 feet.
4. Other methods which provide equivalent protection.

5.407.2.2.2 Flashing. Install flashings integrated with a drainage plane.

SECTION 5.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING

5.408.1 CONSTRUCTION WASTE MANAGEMENT. Recycle and/or salvage for reuse a minimum of 65% of the non-hazardous construction and demolition waste in accordance with Section 5.408.1.1, 5.408.1.2 or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent.

5.408.1.1 Construction waste management plan. Where a local jurisdiction does not have a construction and demolition waste management ordinance, submit a construction waste management plan that:

1. Identifies the construction and demolition waste materials to be diverted from disposal by efficient usage, recycling, reuse on the project or salvage for future use or sale.
2. Determines if construction and demolition waste materials will be sorted on-site (source-separated) or bulk mixed (single stream).
3. Identifies diversion facilities where construction and demolition waste material collected will be taken.
4. Specifies that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both.

5.408.1.2 Waste Management Company. Utilize a waste management company that can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with this section.

Note: The owner or contractor shall make the determination if the construction and demolition waste material will be diverted by a waste management company.

Exceptions to Sections 5.408.1.1 and 5.408.1.2:

1. Excavated soil and land-clearing debris.
2. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist.
3. Demolition waste meeting local ordinance or calculated in consideration of local recycling facilities and markets.

5.408.1.3 Waste stream reduction alternative. The combined weight of new construction disposal that does not exceed two pounds per square foot of building area may be deemed to meet the 65% minimum requirement as approved by the enforcing agency.

5.408.1.4 Documentation. Documentation shall be provided to the enforcing agency which demonstrates compliance with Sections 5.408.1.1, through 5.408.1.3. The waste management plan shall be updated as necessary and shall be accessible during construction for examination by the enforcing agency.

Notes:

1. Sample forms found in "A Guide to the California Green Building Standards Code (Nonresidential)" located www.dgs.ca.gov/BSC/Resources/Page-Content/Building-Standards-Commission-Resources-List-Folder/CALGreen may be used to assist in documenting compliance with the waste management plan.
2. Mixed construction and demolition debris processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle).

5.408.2 UNIVERSAL WASTE. [A] Additions and alterations to a building or tenant space that meet the scoping provisions in Section 301.3 for nonresidential additions and alterations, shall require verification that Universal Waste items such as fluorescent lamps and ballast and mercury containing thermostats as well as other California prohibited Universal Waste materials are disposed of properly and are diverted from landfills. A list of prohibited Universal Waste materials shall be included in the construction documents.

Note: Refer to the Universal Waste Rule link at: http://www.dtsc.ca.gov/universalwaste/

5.408.3 EXCAVATED SOIL AND LAND CLEARING DEBRIS. 100 percent of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed.

Exception: Reuse, either on or off-site, of vegetation or soil contaminated by disease or pest infestation.

Notes:

1. If contamination by disease or pest infestation is suspected, contact the County Agricultural Commissioner and follow its direction for recycling or disposal of the material.
2. For a map of know pest and/or disease quarantine zones, consult with the California Department of Food and Agriculture. (www.cdfa.ca.gov)

SECTION 5.410 BUILDING MAINTENANCE AND OPERATIONS

5.410.1 RECYCLING BY OCCUPANTS. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive.

Exception: Rural jurisdictions that meet and apply for the exemption in Public Resources Code 42649.82 (a)(2)(A) et seq. shall also be exempt from the organic waste portion of this section.

5.410.1.1 Additions. All additions conducted within a 12-month period under single or multiple permits, resulting in an increase of 30% or more in floor area, shall provide recycling areas on site.

Exception: Additions within a tenant space resulting in less than a 30% increase in the tenant space floor area.

5.410.1.2 Sample ordinance. Space allocation for recycling areas shall comply with Chapter 18, Part 3, Division 30 of the *Public Resources Code*. Chapter 18 is known as the California Solid Waste Reuse and Recycling Access Act of 1991 (Act).

Note: A sample ordinance for use by local agencies may be found in Appendix A of the document at the CalRecycle's web site.

5.410.2 COMMISSIONING. [N] New buildings 10,000 square feet and over. For new buildings 10,000 square feet and over, building commissioning shall be included in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's project requirements. Commissioning shall be performed in accordance with this section by trained personnel with experience on projects of comparable size and complexity. For I-occupancies that are not regulated by OSHPD or for I-occupancies and L-occupancies that are not regulated y the California Energy Code Section 100.0 Scope, all requirements in Sections 5.410.2 through 5.410.2.6 shall apply.

Note: For energy-related systems under the scope (Section 100) of the California Energy Code, including heating, ventilation, air conditioning (HVAC) systems and controls, indoor lighting systems and controls, as well as water heating systems and controls, refer to California Energy Code Section 120.8 for commissioning requirements

Commissioning requirements shall include:

1. Owner's or Owner representative's project requirements.
2. Basis of design.
3. Commissioning measures shown in the construction documents.
4. Commissioning plan.
5. Functional performance testing.
6. Documentation and training.
7. Commissioning report.

Exceptions:

1. Unconditioned warehouses of any size.
2. Areas less than 10,000 square feet used for offices or other conditioned accessory spaces within unconditioned warehouses.
3. Tenant improvements less than 10,000 square feet as described in Section 303.1.1.
4. Open parking garages of any size, or open parking garage areas, of any size, within a structure.

Note: For the purposes of this section, unconditioned shall mean a building, area, or room which does not provide heating and or air conditioning.

Informational Notes:

1. IAS AC 476 is an accreditation criteria for organizations providing training and/or certification of commissioning personnel. AC 476 is available to the Authority Having Jurisdiction as a reference for qualifications of commissioning personnel. AC 476 des not certify individuals to conduct functional performance tests or to adjust and balance systems.
2. Functional performance testing for heating, ventilation, air conditioning systems and lighting controls must be performed in compliance with the *California Energy Code*.

5.410.2.1 Owner's or Owner Representative's Project Requirements (OPR). [N] The expectations and requirements of the building appropriate to its phase shall be documented before the design phase of the project begins. This documentation shall include the following:
1. Environmental and sustainability goals.
2. Building sustainable goals.
3. Indoor environmental quality requirements.
4. Project program, including facility functions and hours of operation, and need for after hours operation.
5. Equipment and systems expectations.
6. Building occupant and operation and maintenance (O&M) personnel expectations.

5.410.2.2 Basis of Design (BOD). [N] A written explanation of how the design of the building systems meets the OPR shall be completed at the design phase of the building project. The Basis of Design document shall cover the following systems:

1. Renewable energy systems.
2. Landscape irrigation systems.
3. Water reuse system.

5.410.2.3 Commissioning plan. [N] Prior to permit issuance a commissioning plan shall be completed to document how the project will be commissioned. The commissioning plan shall include the following:
1. General project information.
2. Commissioning goals.
3. Systems to be commissioned. Plans to test systems and components shall include:
   a. An explanation of the original design intent.
   b. Equipment and systems to be tested, including the extent of tests.
   c. Functions to be tested.
   d. Conditions under which the test shall be performed.
   e. Measurable criteria for acceptable performance.
4. Commissioning team information.
5. Commissioning process activities, schedules and responsibilities. Plans for the completion of commissioning shall be included.

5.410.2.4 Functional performance testing. [N] Functional performance tests shall demonstrate the correct installation and operation of each component, system and system-to-system interface in accordance with the approved plans and specifications. Functional performance testing reports shall contain information addressing each of the building components tested, the testing methods utilized, and include any readings and adjustments made.

5.410.2.5 Documentation and training. [N] A Systems Manual and Systems Operations Training are required, including Occupational Safety and Health Act (OSHA) requirements in *California Code of Regulations* (CCR), Title 8, Section 5142, and other related regulations.

5.410.2.5.1 Systems manual. [N] Documentation of the operational aspects of the building shall be completed within the systems manual and delivered to the building owner or representative. The systems manual shall include the following:
1. Site information, including facility description, history and current requirements.
2. Site contact information.
3. Basic operations and maintenance, including general site operating procedures, basic troubleshooting, recommended maintenance requirements, site events log.
4. Major systems.
5. Site equipment inventory and maintenance notes.
6. A copy of verifications required by the enforcing agency or this code.
7. Other resources and documentation, if applicable.

5.410.2.5.2 Systems operations training. [N] A program for training of the appropriate maintenance staff for each equipment type and/or system shall be developed and documented in the commissioning report and shall include the following:
1. System/equipment overview (what it is, what it does and with what other systems and/or equipment it interfaces).
2. Review and demonstration of servicing/preventive maintenance.
3. Review of the information in the Systems Manual.
4. Review of the record drawings on the system/equipment.

5.410.2.6 Commissioning report. [N] A report of commissioning process activities undertaken through the design and construction phases of the building project shall be completed and provided to the owner or representative.

5.410.4 TESTING AND ADJUSTING. New buildings less than 10,000 square feet. Testing and adjusting of systems shall be required for new buildings less than 10,000 square feet or new systems to serve an addition or alteration subject to Section 303.1.

5.410.4.2 (Reserved)

Note: For energy-related systems under the scope (Section 100) of the California Energy Code, including heating, ventilation, air conditioning (HVAC) systems and controls, indoor lighting system and controls, as well as water heating systems and controls, refer to California Energy Code Section 120.8 for commissioning requirements and Sections 120.5, 120.6, 130.4, and 140.9(b)3 for additional testing requirements of specific systems.

5.410.4.2 Systems. Develop a written plan of procedures for testing and adjusting systems. Systems to be included for testing and adjusting shall include at a minimum, as applicable to the project:

1. Renewable energy systems.
2. Landscape irrigation systems.
3. Water reuse systems.

5.410.4.3 Procedures. Perform testing and adjusting procedures in accordance with manufacturer's specifications and applicable standards on each system.

5.410.4.3.1 HVAC balancing. In addition to testing and adjusting, before a new space-conditioning system serving a building or space is operated for normal use, the system shall be balanced in accordance with the procedures defined by the Testing Adjusting and Balancing Bureau National Standards; the National Environmental Balancing Bureau Procedural Standards; Associated Air Balance Council National Standards or as approved by the enforcing agency.

5.410.4.4 Reporting. After completion of testing, adjusting and balancing, provide a final report of testing signed by the individual responsible for performing these services.

5.410.4.5 Operation and maintenance (O & M) manual. Provide the building owner or representative with detailed operating and maintenance instructions and copies of guaranties/warranties for each system. O & M instructions shall be consistent with OSHA requirements in CCR, Title 8, Section 5142, and other related regulations.

5.410.4.5.1 Inspections and reports. Include a copy of all inspection verifications and reports required by the enforcing agency.

DIVISION 5.5 ENVIRONMENTAL QUALITY

SECTION 5.501 GENERAL

5.501.1 SCOPE. The provisions of this chapter shall outline means of reducing the quantity of air contaminants that are odorous, irritating, and/or harmful to the comfort and well-being of a building's installers, occupants and neighbors.

SECTION 5.502 DEFINITIONS

5.502.1 DEFINITIONS. The following terms are defined in Chapter 2 *(and are included here for reference)*

ARTERIAL HIGHWAY. A general term denoting a highway primarily for through traffic usually on a continuous route.

A-WEIGHTED SOUND LEVEL (dBA). The sound pressure level in decibels as measured on a sound level meter using the internationally standardized A-weighting filter or as computed from sound spectral data to which A-weighting adjustments have been made.

1 BTU/HOUR. British thermal units per hour, also referred to as Btu. The amount of heat required to raise one pound of water one degree Fahrenheit per hour, a common measure of heat transfer rate. A ton of refrigeration is 12,000 Btu, the amount of heat required to melt a ton (2,000 pounds) of ice at 32^{0} Fahrenheit.

COMMUNITY NOISE EQUIVALENT LEVEL (CNEL). A metric similar to the day-night average sound level (Ldn), except that a 5 decibel adjustment is added to the equivalent continuous sound exposure level for evening hours (7pm to 10pm) in addition to the 10 dB nighttime adjustment used in the Ldn.

COMPOSITE WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard and medium density fiberboard. "Composite wood products" does not include hardboard, structural plywood, structural panels, structural composite lumber, oriented strand board, glued laminated timber, timber, prefabricated wood I–joists or finger–jointed lumber, all as specified in California Code of Regulations (CCR), Title 17, Section 93120.1(a).

Note: See CCR, Title 17, Section 93120.1.

DAY-NIGHT AVERAGE SOUND LEVEL (Ldn). The A-weighted equivalent continuous sound exposure level for a 24-hour period with a 10 dB adjustment added to sound levels occurring during nighttime hours (10p.m. to 7 a.m.).

DECIBEL (db). A measure on a logarithmic scale of the magnitude of a particular quantity (such as sound pressure, sound power, sound intensity) with respect to a reference quantity.

ELECTRIC VEHICLE (EV). An automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles, electric motorcycles, and the like, primarily powered by an electric motor that draws current from a rechargeable storage battery, fuel cell, photovoltaic array, or other source of electric current. Plug-in hybrid electric vehicles (PHEV) are considered electric vehicles. For purposes of the *California Electrical Code*, off-road, self-propelled electric vehicles, such as industrial trucks, hoists, lifts, transports, golf carts, airline ground support equipment, tractors, boats, and the like, are not included.

ELECTRIC VEHICLE CHARGING STATION(S) (EVCS)). One or more spaces intended for charging electric vehicles.

ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE). The conductors, including the ungrounded, grounded, and equipment grounding conductors and the electric vehicle connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the electric vehicle.

ENERGY EQUIVALENT (NOISE) LEVEL (Leq). The level of a steady noise which would have the same energy as the fluctuating noise level integrated over the time of period of interest.

EXPRESSWAY. An arterial highway for through traffic which may have partial control of access, but which may or may not be divided or have grade separations at intersections.

FREEWAY. A divided arterial highway with full control of access and with grade separations at intersections.

GLOBAL WARMING POTENTIAL (GWP). The relative forcing impact of one mass-based unit of a given greenhouse gas relative to an equivalent unit of carbon dioxide over a given period of time. Carbon dioxide is the reference compound with a GWP of one.

GLOBAL WARMING POTENTIAL VALUE (GWP VALUE). A 100-year GWP value published by the Intergovernmental Panel on Climate Change (IPCC) in either its Second Assessment Report (SAR) (IPCC, 1995); or its Fourth Assessment A-3 Report (AR4) (IPCC, 2007). The SAR GWP values are found in column "SAR (100-yr)" of Table 2.14.; the AR4 GWP values are found in column "100 yr" of Table 2.14.

HIGH-GWP REFRIGERANT. A compound used as a heat transfer fluid or gas that is: (a) a chlorofluorocarbon, a hdrochlorofluorocarbon, a hydrofluorocarbon, a perfluorocarbon, or any compound or blend of compounds, with a GWP value equal to or greater than 150, or (B) any ozone depleting substance as defined in Title 40 of the Code of Federal Regulations, Part 82, sec.82.3 (as amended March 10, 2009).

LONG RADIUS ELBOW. Pipe fitting installed between two lengths of pipe or tubing to allow a change of direction, with a radius 1.5 times the pipe diameter.

LOW-GWP REFRIGERANT. A compound used as a heat transfer fluid or gas that: (A) has a GWP value less than 150, and (B) is not an ozone depleting substance as defined in Title 40 of the Code of Federal Regulations, Part 82, sec.82.3 (as amended March 10, 2009).

MERV. Filter minimum efficiency reporting value, based on ASHRAE 52.2–1999.

MAXIMUM INCREMENTAL REACTIVITY (MIR). The maximum change in weight of ozone formed by adding a compound to the "Base REactive Organic Gas (ROG) Mixture" per weight of compound added, expressed to hundreths of a gram (g O^{3}/g ROC).

PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging).

PSIG. Pounds per square inch, guage.

REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere.

SCHRADER ACCESS VALVES. Access fittings with a valve core installed.

SHORT RADIUS ELBOW. Pipe fitting installed between two lengths of pipe or tubing to allow a change of direction, with a radius 1.0 times the pipe diameter.

SUPERMARKET. For the purposes of Section 5.508.2, a supermarket is any retail food facility with 8,000 square feet or more conditioned area, and that utilizes either refrigerated display cases, or walk-in coolers or freezers connected to remote compressor units or condensing units.

VOC. A volatile organic compound broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain hydrogen and may contain oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a)

Note: Where specific regulations are cited from different agencies such as SCAQMD, ARB, etc., the VOC definition included in that specific regulation is the one that prevails for the specific measure in question.

SECTION 5.503 FIREPLACES

5.503.1 FIREPLACES. Install only a direct-vent sealed-combustion gas or sealed wood-burning fireplace, or a sealed woodstove or pellet stove, and refer to residential requirements in the California Energy Code, Title 24, Part 6, Subchapter 7, Section 150. Woodstoves, pellet stoves and fireplaces shall comply with applicable local ordinances.

5.503.1.1 Woodstoves. Woodstoves and pellet stoves shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits.

SECTION 5.504 POLLUTANT CONTROL

5.504.1 TEMPORARY VENTILATION. The permanent HVAC system shall only be used during construction if necessary to condition the building or areas of addition or alteration within the required temperature range for material and equipment installation. If the HVAC system is used during construction, use return air filters with a Minimum Efficiency Reporting Value (MERV) of 8, based on ASHRAE 52.2-1999, or an average efficiency of 30% based on ASHRAE 52.1-1992. Replace all filters immediately prior to occupancy, or, if the building is occupied during alteration, at the conclusion of construction.

5.504.3 Covering of duct openings and protection of mechanical equipment during construction. At the time of rough installation and during storage on the construction site until final startup of the heating, cooling and ventilation equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheetmetal or other methods acceptable to the enforcing agency to reduce the amount of dust, water and debris which may enter the system.

DISCLAIMER:*THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING DEPARTMENT JURISDICTIONS, THIS CHECKLIST IS TO BE USED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE USE OF THIS DOCUMENT, INCLUDING VERIFICATION WITH THE FULL CODE.*

GTA Design Group
Architects
Landscape Design
Goitom Tekfetsion, architect
Licence C31925
2100 N. Sepulveda Blvd. Suite 44
Manhattan Beach CA 90266
PH 310.546.5550 FAX 310.546.9250
EMAIL goitom@gtaarchitecture.com
www.gtaarchitecture.com

LICENSED ARCHITECT GOITOM TEKFETSION Exp. 7-31-25 C31925 STATE OF CALIFORNIA

OWNER

PROJECT/LOCATION
DRIVE SB Tenant Improvement
1048 Hermosa Ave., Hermosa Beach CA 90254

SHEET TITLE:
CAL GREEN
TENANT IMPROVEMENT
SITE, VICINITY & DATA PLAN

JOB NUMBER:

PRINT DATE:
11-22-2023

PERMIT DATE:

REVISIONS:
1.
2.
3.

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SUBMITTAL 11-22-2023

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
NONRESIDENTIAL MANDATORY MEASURES, SHEET 3 (January 2023)

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

5.504.4 FINISH MATERIAL POLLUTANT CONTROL. Finish materials shall comply with Sections 5.504.4.1 through 5.504.4.6.

5.504.4.1 Adhesives, sealants and caulks. Adhesives, sealants, and caulks used on the project shall meet the requirements of the following standards:

1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable, or SCAQMD Rule 1168 VOC limits, as shown in Tables 5.504.4.1 and 5.504.4.2. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and trichloroethylene), except for aerosol products as specified in subsection 2, below.

2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than one pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of *California Code of Regulations*, Title 17, commencing with Section 94507.

TABLE 5.504.4.1 - ADHESIVE VOC LIMIT[1,2]

Less Water and Less Exempt Compounds in Grams per Liter

ARCHITECTURAL APPLICATIONS	CURRENT VOC LIMIT
INDOOR CARPET ADHESIVES	50
CARPET PAD ADHESIVES	50
OUTDOOR CARPET ADHESIVES	150
WOOD FLOORING ADHESIVES	100
RUBBER FLOOR ADHESIVES	60
SUBFLOOR ADHESIVES	50
CERAMIC TILE ADHESIVES	65
VCT & ASPHALT TILE ADHESIVES	50
DRYWALL & PANEL ADHESIVES	50
COVE BASE ADHESIVES	50
MULTIPURPOSE CONSTRUCTION ADHESIVES	70
STRUCTURAL GLAZING ADHESIVES	100
SINGLE-PLY ROOF MEMBRANE ADHESIVES	250
OTHER ADHESIVES NOT SPECIFICALLY LISTED	50
SPECIALTY APPLICATIONS	
PVC WELDING	510
CPVC WELDING	490
ABS WELDING	325
PLASTIC CEMENT WELDING	250
ADHESIVE PRIMER FOR PLASTIC	550
CONTACT ADHESIVE	80
SPECIAL PURPOSE CONTACT ADHESIVE	250
STRUCTURAL WOOD MEMBER ADHESIVE	140
TOP & TRIM ADHESIVE	250
SUBSTRATE SPECIFIC APPLICATIONS	
METAL TO METAL	30
PLASTIC FOAMS	50
POROUS MATERIAL (EXCEPT WOOD)	50
WOOD	30
FIBERGLASS	80

1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.

2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168, www.arb.ca.gov/DRDB/SC/CURHTML/R1168.PDF

TABLE 5.504.4.2 - SEALANT VOC LIMIT

Less Water and Less Exempt Compounds in Grams per Liter

SEALANTS	CURRENT VOC LIMIT
ARCHITECTURAL	250
MARINE DECK	760
NONMEMBRANE ROOF	300
ROADWAY	250
SINGLE-PLY ROOF MEMBRANE	450
OTHER	420
SEALANT PRIMERS	
ARCHITECTURAL	
NONPOROUS	250
POROUS	775
MODIFIED BITUMINOUS	500
MARINE DECK	760
OTHER	750

NOTE: FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THESE TABLES, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.

5.504.4.3 Paints and coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Coatings Suggested Control Measure, as shown in Table 5.504.4.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 5.504.4.3 shall be determined by classifying the coating as a Flat, Nonflat or Nonflat-High Gloss coating, based on its gloss, as defined in Subsections 4.21, 4.36 and 4.37 of the 2007 California Air Resources Board Suggested Control Measure, and the corresponding Flat, Nonflat or Nonflat-High Gloss VOC limit in Table 5.504.4.3 shall apply.

5.504.4.3.1 Aerosol Paints and coatings. Aerosol paints and coatings shall meet the PWMIR Limits for ROC in Section 94522(a)(3) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(c)(2) and (d)(2) of *California Code of Regulations*, Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation 8 Rule 49.

TABLE 5.504.4.3 - CONT.

GRAMS OF VOC PER LITER OF COATING, LESS WATER & LESS EXEMPT COMPOUNDS

COATING CATEGORY	CURRENT VOC LIMIT
SPECIALTY COATINGS	
ALUMINUM ROOF COATINGS	400
BASEMENT SPECIALTY COATINGS	400
BITUMINOUS ROOF COATINGS	50
BITUMINOUS ROOF PRIMERS	350
BOND BREAKERS	350
CONCRETE CURING COMPOUNDS	350
CONCRETE/MASONRY SEALERS	100
DRIVEWAY SEALERS	50
DRY FOG COATINGS	150
FAUX FINISHING COATINGS	350
FIRE RESISTIVE COATINGS	350
FLOOR COATINGS	100
FORM-RELEASE COMPOUNDS	250
GRAPHIC ARTS COATINGS (SIGN PAINTS)	500
HIGH-TEMPERATURE COATINGS	420
INDUSTRIAL MAINTENANCE COATINGS	250
LOW SOLIDS COATINGS[1]	120
MAGNESITE CEMENT COATINGS	450
MASTIC TEXTURE COATINGS	100
METALLIC PIGMENTED COATINGS	500
MULTICOLOR COATINGS	250
PRETREATMENT WASH PRIMERS	420
PRIMERS, SEALERS, & UNDERCOATERS	100
REACTIVE PENETRATING SEALERS	350
RECYCLED COATINGS	250
ROOF COATINGS	50
RUST PREVENTATIVE COATINGS	250
SHELLACS:	
CLEAR	730
OPAQUE	550
SPECIALTY PRIMERS, SEALERS & UNDERCOATERS	100
STAINS	250
STONE CONSOLIDANTS	450
SWIMMING POOL COATINGS	340
TRAFFIC MARKING COATINGS	100
TUB & TILE REFINISH COATINGS	420
WATERPROOFING MEMBRANES	250
WOOD COATINGS	275
WOOD PRESERVATIVES	350
ZINC-RICH PRIMERS	340

1. GRAMS OF VOC PER LITER OF COATING, INCLUDING WATER & EXEMPT COMPOUNDS

2. THE SPECIFIED LIMITS REMAIN IN EFFECT UNLESS REVISED LIMITS ARE LISTED IN SUBSEQUENT COLUMNS IN THE TABLE

3. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, ARCHITECTURAL COATINGS SUGGESTED CONTROL MEASURE, FEB. 1, 2008. MORE INFORMATION IS AVAILABLE FROM THE AIR RESOURCES BOARD.

5.504.4.3.2 Verification. Verification of compliance with this section shall be provided at the request of the enforcing agency. Documentation may include, but is not limited to, the following:

1. Manufacturer's product specification
2. Field verification of on-site product containers

5.504.4.4 Carpet Systems.
All carpet installed in the building interior shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers." Version 1.2, January 2017 (Emission testing method for California Specifications 01350).

See California Department of Public Health's website for certification programs and testing labs.
https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material

5.504.4.4.1 Carpet cushion. All carpet cushion installed in the building interior shall meet the requirements of the California Department of Public Health,"Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers,"Version 1.2, January 2017 (Emission testing method for California Specifications 01350).

See California Department of Public Health's website for certification programs and testing labs.
https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material

5.504.4.4.2 Carpet adhesive. All carpet adhesive shall meet the requirements of Table 5.504.4.1.

5.504.4.5 Composite wood products. Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the buildings shall meet the requirements for formaldehyde as specified in ARB's Air Toxics Control Measure (ATCM) for Composite Wood (17 CCR 93120 et seq.). Those materials not exempted under the ATCM must meet the specified emission limits, as shown in Table 5.504.4.5.

5.504.4.5.3 Documentation. Verification of compliance with this section shall be provided as requested by the enforcing agency. Documentation shall include at least one of the following:

1. Product certifications and specifications.
2. Chain of custody certifications.
3. Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17, Section 93120, et seq.).
4. Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered Wood Association, the Australian AS/NZS 2269 or European 636 3S standards.
5. Other methods acceptable to the enforcing agency.

TABLE 5.504.4.5 - FORMALDEHYDE LIMITS[1]

MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION

PRODUCT	CURRENT LIMIT
HARDWOOD PLYWOOD VENEER CORE	0.05
HARDWOOD PLYWOOD COMPOSITE CORE	0.05
PARTICLE BOARD	0.09
MEDIUM DENSITY FIBERBOARD	0.11
THIN MEDIUM DENSITY FIBERBOARD[2]	0.13

1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE WITH ASTM E 1333. FOR ADDITIONAL INFORMATION, SEE CALIFORNIA CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH 93120.12.

2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF 5/16 INCHES (8 MM).

5.504.4.6 Resilient flooring systems. Where resilient flooring is installed, at least 80 percent of floor area receiving resilient flooring shall meet the requirements of the California Department of Public Health,"Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specifications 01350)

See California Department of Public Health's website for certification programs and testing labs.
https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material

5.504.4.6.1 Verification of compliance. Documentation shall be provided verifying that resilient flooring materials meet the pollutant emission limits.

5.504.4.7 Thermal insulation
Comply with the requirements of the California Department of Public Health, "Standard Method of the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, "Version 1.2, January 1.2, January 2017 (Emission testing method for California Specification 01350).
See California Department of Public Health's website for certification programs and testing labs.
https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material

5.504.4.7.1 Verification of compliance.
Documentation shall be provided verifying that thermal insulation materials meet the pollutant emission limits.

5.504.4.8 Acoustical ceiling and wall panels.
Comply with the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, " Version 1.2, January 2017 (Emission testing method for California Specification 01350).
See California Department of Public Health's website for certification programs and testing labs.

5.504.4.8.1 Verification of compliance. Documentation shall be provided verifying that acoustical finish materials meet the pollutant emission limits.

5.504.5.3 Filters. In mechanically ventilated buildings, provide regularly occupied areas of the building with air filtration media for outside and return air that provides at least a Minimum Efficiency Reporting Value (MERV) of 13. MERV 13 filters shall be installed prior to occupancy, and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual.

Exceptions: Existing mechanical equipment.

5.504.5.3.1 Labeling. Installed filters shall be clearly labeled by the manufacturer indicating the MERV rating.

5.504.7 ENVIRONMENTAL TOBACCO SMOKE (ETS) CONTROL. Where outdoor areas are provided for smoking, prohibit smoking within 25 feet of building entries, outdoor air intakes and operable windows and within the building as already prohibited by other laws or regulations; or as enforced by ordinances, regulations or policies of any city, county, city and county, California Community College, campus of the California State University, or campus of the University of California, whichever are more stringent. When ordinances, regulations or policies are not in place, post signage to inform building occupants of the prohibitions.

SECTION 5.505 INDOOR MOISTURE CONTROL

5.505.1 INDOOR MOISTURE CONTROL. Buildings shall meet or exceed the provisions of California Building Code, CCR, Title 24, Part 2, Sections 1202 (Ventilation) and Chapter 14 (Exterior Walls). For additional measures, see Section 5.407.2 of this code.

SECTION 5.506 INDOOR AIR QUALITY

5.506.1 OUTSIDE AIR DELIVERY. For mechanically or naturally ventilated spaces in buildings, meet the minimum requirements of Section 120.1 (Requirements For Ventilation) of the *California Energy Code*, or the applicable local code, whichever is more stringent, and Division 1, Chapter 4 of CCR, Title 8.

5.506.2 CARBON DIOXIDE (CO_2) MONITORING. For buildings or additions equipped with demand control ventilation, CO_2 sensors and ventilation controls shall be specified and installed in accordance with the requirements of the California Energy Code, Section 120(c)(4).

5.506.3 Carbon dioxide (CO2) monitoring in classrooms.
(DSA-SS) Each public K-12 school classroom, as listed in Table 120.1-A of the *California Energy Code*, shall be equipped with a carbon dioxide monitor or sensor that meets the following requirements:

1. The monitor or sensor shall be permanently affixed in a tamper-proof manner in each classroom between 3 and 6 feet (914 mm and 1829 mm) above the floor and at least 5 feet (1524 mm) away from door and operable windows.
2. When the monitor or sensor is not integral to an Energy Management Control System (EMCS), the monitor or sensor shall display the carbon dioxide readings on the device. When the sensor is integral to an EMCS, the carbon dioxide readings shall be available to and regularly monitored by facility personnel.
3. A monitor shall provide notification though a visual indicator on the monitor when the carbon dioxide levels in the classroom have exceeded 1,100ppm. A sensor integral to an EMCS shall provide notification to facility personnel through a visual and/or audible indicator when the carbon dioxide levels in the classroom have exceeded 1,100ppm.
4. The monitor or sensor shall measure carbon dioxide levels at minimum 15- minute intervals and shall maintain a record of previous carbon dioxide measurements of not less than 30 days duration.
5. The monitor or sensor used to measure carbon dioxide levels shall have the capacity to measure carbon dioxide levels with a range of 400ppm to 2000ppm or greater.
6. The monitor or sensor shall be certified by the manufacturer to be accurate within 75ppm at 1,000ppm carbon dioxide concentration and shall be certified by the manufacturer to require calibration no more frequently than once every 5 years.

SECTION 5.507 ENVIRONMENTAL COMFORT

5.507.4 ACOUSTICAL CONTROL. Employ building assemblies and components with Sound Transmission Class (STC) values determined in accordance with ASTM E 90 and ASTM E 413, or Outdoor-Indoor Sound Transmission Class (OITC) determined in accordance with ASTM E 1332, using either the prescriptive or performance method in Section 5.507.4.1 or 5.507.4.2.

Exception: Buildings with few or no occupants or where occupants are not likely to be affected by exterior noise, as determined by the enforcement authority, such as factories, stadiums, storage, enclosed parking structures and utility buildings.

Exception: [DSA-SS] For public schools and community colleges, the requirements of this section and all subsections apply only to new construction.

5.507.4.1 Exterior noise transmission, prescriptive method. Wall and roof-ceiling assemblies exposed to the noise source making up the building or addition envelope or altered envelope shall meet a composite STC rating of at least 50 or a composite OITC rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 in the following locations:

1. Within the 65 CNEL noise contour of an airport.

   Exceptions:

   1. L_{dn} or CNEL for military airports shall be determined by the facility Air Installation Compatible Land Use Zone (AICUZ) plan.
   2. L_{dn} or CNEL for other airports and heliports for which a land use plan has not been developed shall be determined by the local general plan noise element.

2. Within the 65 CNEL or L_{dn} noise contour of a freeway or expressway, railroad, industrial source or fixed-guideway source as determined by the Noise Element of the General Plan.

5.507.4.1.1. Noise exposure where noise contours are not readily available. Buildings exposed to a noise level of 65 dB L_{dn} - 1-hr during any hour of operation shall have building, addition or alteration exterior wall and roof-ceiling assemblies exposed to the noise source meeting a composite STC rating of at least 45 (or OITC 35), with exterior windows of a minimum STC of 40 (or OITC 30).

5.507.4.2 Performance Method. For buildings located as defined in Section 5.507.4.1 or 5.507.4.1.1, wall and roof-ceiling assemblies exposed to the noise source making up the building or addition envelope or altered envelope shall be constructed to provide an interior noise environment attributable to exterior sources that does not exceed an hourly equivalent noise level (Leq-1Hr) of 50 dBA in occupied areas during any hour of operation.

5.507.4.2.1 Site Features. Exterior features such as sound walls or earth berms may be utilized as appropriate to the building, addition or alteration project to mitigate sound migration to the interior.

5.507.4.2.2 Documentation of Compliance. An acoustical analysis documenting complying interior soundlevels shall be prepared by personnel approved by the architect or engineer of record.

5.507.4.3 Interior sound transmission. Wall and floor-ceiling assemblies separating tenant spaces and tenant spaces and public places shall have an STC of at least 40.

Note: Examples of assemblies and their various STC ratings may be found at the California Office of Noise Control: www.toolbase.org/PDF/CaseStudies/stc_icc_ratings.pdf.

SECTION 5.508 OUTDOOR AIR QUALITY

5.508.1 Ozone depletion and greenhouse gas reductions. Installations of HVAC, refrigeration and fire suppression equipment shall comply with Sections 5.508.1.1 and 5.508.1.2.

5.508.1.1 Chlorofluorocarbons (CFCs). Install HVAC, refrigeration and fire suppression equipment that do not contain CFCs.

5.508.1.2 Halons. Install HVAC, refrigeration and fire suppression equipment that do not contain Halons.

5.508.2 Supermarket refrigerant leak reduction. New commercial refrigeration systems shall comply with the provisions of this section when installed in retail food stores 8,000 square feet or more conditioned area, and that utilize either refrigerated display cases, or walk-in coolers or freezers connected to remote compressor units or condensing units. The leak reduction measures apply to refrigeration systems containing high-global-warming potential (high-GWP) refrigerants with a GWP of 150 or greater. New refrigeration systems include both new facilities and the replacement of existing refrigeration systems in existing facilities.

Exception: Refrigeration systems containing low-global warming potential (low-GWP) refrigerant with a GWP value less than 150 are not subject to this section. Low-GWP refrigerants are nonozone-depleting refrigerants that include ammonia, carbon dioxide (CO_2), and potentially other refrigerants.

5.508.2.1 Refrigerant piping. Piping compliant with the California Mechanical Code shall be installed to be accessible for leak protection and repairs. Piping runs using threaded pipe, copper tubing with an outside diameter (OD) less than 1/4 inch, flared tubing connections and short radius elbows shall not be used in refrigerant systems except as noted below.

5.508.2.1.1 Threaded pipe. Threaded connections are permitted at the compressor rack.

5.508.2.1.2 Copper pipe. Copper tubing with an OD less than 1/4 inch may be used in systems with a refrigerant charge of 5 pounds or less.

5.508.2.1.2.1 Anchorage. One-fouth-inch OD tubing shall be securely clamped to a rigid base to keep vibration levels below 8 mils.

5.508.2.1.3 Flared tubing connections. Double-flared tubing connections may be used for pressure controls, valve pilot lines and oil.

Exception: Single-flared tubing connections may be used with a multiring seal coated with industrial sealant suitable for use with refrigerants and tightened in accordance with manufacturer's recommendations.

5.508.2.1.4 Elbows. Short radius elbows are only permitted where space limitations prohibit use of long radius elbows.

5.508.2.2 Valves. Valves Valves and fittings shall comply with the *California Mechanical Code* and as follows.

5.508.2.2.1 Pressure relief valves. For vessels containing high-GWP refrigerant, a rupture disc shall be installed between the outlet of the vessel and the inlet of the pressure relief valve.

5.508.2.2.1.1 Pressure detection. A pressure gauge, pressure transducer or other device shall be installed in the space between the rupture disc and the relief valve inlet to indicate a disc rupture or discharge of the relief valve.

5.508.2.2.2 Access valves. Only Schrader access valves with a brass or steel body are permitted for use.

5.508.2.2.2.1 Valve caps. For systems with a refrigerant charge of 5 pounds or more, valve caps shall be brass or steel and not plastic.

5.508.2.2.2.2 Seal caps. If designed for it, the cap shall have a neoprene O-ring in place.

5.508.2.2.2.2.1 Chain tethers. Chain tethers to fit ovr the stem are required for valves designed to have seal caps.

Exception: Valves with seal caps that are not removed from the valve during stem operation.

5.508.2.3 Refrigerated service cases. Refrigerated service cases holding food products containing vinegar and salt shall have evaporator coils of corrosion-resistant material, such as stainless steel; or be coated to prevent corrosion from these substances.

5.508.2.3.1 Coil coating. Consideration shall be given to the heat transfer efficiency of coil coating to maximize energy efficiency.

5.508.2.4 Refrigerant receivers. Refrigerant receivers with capacities greater than 200 pounds shall be fitted with a device tha indicates the level of refrigerant in the receiver.

5.508.2.5 Pressure testing. The system shall be pressure tested during installation prior to evacuation and charging.

5.508.2.5.1 Minimum pressure. The system shall be charged with regulated dry nitrogen and appropriate tracer gas to bring system pressure up to 300 psig minimum.

5.508.2.5.2 Leaks. Check the system for leaks, repair any leaks, and retest for pressure using the same gauge.

5.508.2.5.3 Allowable pressure change. The system shall stand, unaltered, for 24 hours with no more than a +/- one pound pressure change from 300 psig, measured with the same gauge.

5.508.2.6 Evacuation. The system shall be evacuated after pressure testing and prior to charging.

5.508.2.6.1 First vacuum. Pull a system vacuum down to at least 1000 microns (+/- 50 microns), and hold for 30 minutes.

5.508.2.6.2 Second vacuum. Pull a second system vacuum to a minimum of 500 microns and hold for 30 minutes.

5.508.2.6.3 Third vacuum. Pull a third vacuum down to a minimum of 300 microns, and hold for 24 hours with a maximum drift of 100 microns over a 24-hour period.

CHAPTER 7
INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS

702 QUALIFICATIONS

702.1 INSTALLER TRAINING. HVAC system installers shall be trained and certified in the proper installation of HVAC systems including ducts and equipment by a nationally or regionally recognized training or certification program. Uncertified persons may perform HVAC installations when under the direct supervision and responsibility of a person trained and certified to install HVAC systems or contractor licensed to install HVAC systems. Examples of acceptable HVAC training and certification programs include but are not limited to the following:

1. State certified apprenticeship programs.
2. Public utility training programs.
3. Training programs sponsored by trade, labor or statewide energy consulting or verification organizations.
4. Programs sponsored by manufacturing organizations.
5. Other programs acceptable to the enforcing agency.

702.2 SPECIAL INSPECTION [HCD]. When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition to other certifications or qualifications acceptable to the enforcing agency, the following certifications or education may be considered by the enforcing agency when evaluating the qualifications of a special inspector:

1. Certification by a national or regional green building program or standard publisher.
2. Certification by a statewide energy consulting or verification organization, such as HERS raters, building performance contractors, and home energy auditors.
3. Successful completion of a third party apprentice training program in the appropriate trade.
4. Other programs acceptable to the enforcing agency.

Notes:

1. Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.
2. HERS raters are special inspectors certified by the California Energy Commission (CEC) to rate homes in California according to the Home Energy Rating System (HERS).

[BSC-CG] When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition, the special inspector shall have a certification from a recognized state, national or international association, as determined by the local agency. The area of certification shall be closely related to the primary job function, as determined by the local agency.

Note: Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.

703 VERIFICATIONS

703.1 DOCUMENTATION. Documentation used to show compliance with this code shall include but is not limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which demonstrate substantial conformance. When specific documentation or special inspection is necessary to verify compliance, that method of compliance will be specified in the appropriate section or identified applicable checklist.

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GTA Design Group
Architects
Landscape Design
Goitom Tekteshon, architect
Licence C31925
2100 N. Sepulveda Blvd. Suite 44
Manhattan Beach CA 90266
PH 310.546.5550 FAX 310.546.9250
EMAIL goitom@gtaarchitecture.com
www.gtaarchitecture.com

LICENSED ARCHITECT GOITOM TEKTESHON Exp. 7-31-25 C31925 STATE OF CALIFORNIA

OWNER

PROJECT/LOCATION
DRIVE SB Tenant Improvement
1048 Hermosa Ave., Hermosa Beach CA 90254

SHEET TITLE:
CAL GREEN
TENANT IMPROVEMENT
SITE, VICINITY & DATA PLAN

JOB NUMBER:

PRINT DATE:
05-12-2023

PERMIT DATE:

REVISIONS:
1
2
3

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SUBMITTAL 11-22-2023

City of Hermosa Beach
Community Development Department | Planning Division
1315 Valley Drive, Hermosa Beach, CA 90254
o: 310-318-0242 e: planning@hermosabeach.gov
Office Hours: Monday – Thursday 7:00 AM – 6:00 PM

TRANSMITTED VIA EMAIL

March 7, 2024

Chris Frantz
Drive South Bay
1048 Hermosa Avenue
Hermosa Beach, CA 90254

RE: MPA24-002, PDP24-02, CUP24-03 (CUP and PDP Request) – 1048 Hermosa Avenue

Dear Mr. Frantz:

Thank you for submitting a Conditional Use Permit and Precise Development Plan on February 8th, 2023 for 1,839 sqft of tenant improvement work resulting in a total of 2,015 sqft of building area to develop a racing simulator and accessory bar area for on-site alcoholic beverage consumption. During the review of your application, staff found additional information and revisions necessary for the application to be deemed complete. The revisions required include:

1. Please provide a supplemental project narrative or letter detailing the proposed business operation. The narrative should include but not be limited to hours of operation, if any live entertainment activities or events are proposed for the site, and if there will be any food service operations. Please also specify if the request for alcohol service will be limited to beer and wine sales, or if the request is to include distilled spirits/liquor sales. Please specify which type of alcohol license is being sought after.

2. The project includes 400 square feet in added square footage, and requires civil sheets be submitted to Public Works. Complete the C-Sheet Checklist and email to pwplancheck@hermosabeach.gov.

3. Please provide an existing and proposed occupancy plan.
4. The subject site is located in the Coastal Zone. As such, please coordinate with the California Coastal Commission (CCC) to determine whether the proposed tenant improvement, change of use, and business operation will require a Coastal Development Permit or exemption. Coastal staff can be reached at 562-590-5084.

5. In review of the permit records for the subject property, no permit records were identified for the upper mezzanine space. Please label the upper mezzanine portion of the structure as "To be legalized." While new building space typically requires additional parking, no parking is required for the first 5,000 square feet of ground floor retail space in the downtown zone, as well as for additions of less than 500sqft. HBMC 17.44.015. The proposed upper mezzanine space would represent an addition of less than 500 square feet.

6. Ensure that all areas on the floor plans are properly labeled. For instance, it is unclear if the L-shaped table/countertop at the ground floor entry way is a bar, reception area, or something else. (Sheet A 1.2)

7. Please review the attached memorandums from Police, Building & Safety, and Environmental Programs and provide information as requested.

8. Please plan to return the requested information and items listed above no later than March 14th, 2024, to be considered for a Planning Commission hearing at the April 16th, 2024, meeting. Failure to provide the requested materials by this date or of sufficient clarity or quality may result in the applicant receiving a hearing at a later date once all items have been properly addressed.

If you have any questions, please do not hesitate to contact me at (310) 318-0232 or by email at JWhitney@hermosabeach.gov. Staff is available to meet in person at a mutually agreed upon time to discuss the comments above if requested by the applicant.

Sincerely,
Jake Whitney
Assistant Planner

Attachments:
Police Department Memorandum
Building & Safety Memorandum
Trash Enclosure/ Environmental Programs Memorandum
Public Works Memorandum

CC: Carrie Tai, Director of Community Development
Alexis Oropeza, Planning Manager
Guillermo Habelman, Building Official
Douglas Krauss, Environmental Programs Manager

HERMOSA BEACH POLICE DEPARTMENT

MEMORANDUM

To: Community Development Director Carrie Tai
Assistant Planner Jake Whitney

CC: Chief Paul LeBaron
Captain Landon Phillips

From: Captain Mick Gaglia

Date: March 6, 2024

Re: Drive South Bay CUP & PDP Application

The Police Department has reviewed the Conditional Use Permit (CUP) Application and Precise Development Plan for DRIVE South Bay and has concerns about the proposed application. The proposed application will impact the quality-of-life issues in the downtown Pier Plaza area and the ability for the Police Departments to provide citywide public safety.

DRIVE South Bay is located at 1048 Hermosa Avenue, in an area with a very high concentration of late-night alcohol serving establishments. The area commonly known as "Pier Plaza" is within Reporting District (RD) B105 and B106. RD's B105 and B106 is the area from 10th Street to 14th Street, and from The Strand to Manhattan Ave. B105 and B106 combined equals 1.58% of the total area of the city. This relatively small area of the city consists of multiple late-night alcohol serving establishments which creates an attraction for nuisance and other criminal behavior.

In 2022, the Police Department received 23,047 calls for service (CFS). Of those CFS, 4,169 (18.1%) were from the Pier Plaza area. That pattern remained consistent in 2023. From January 1, 2023, thorough the end of November, 17.75% of all calls in the city were generated in the Pier Plaza area. DRIVE South Bay is within 400 ft of the Pier Plaza and is located in the RD B105 zone.

The most common days for CFS are Friday, Saturday and Sunday. The most common time for CFS in the Pier Plaza area is between 8:00pm – 4:00am. In 2022, there were 2,443 CFS (58.6%) in the Pier Plaza area during this time frame. This is a direct correlation to the late-night, alcohol serving establishments which operate after midnight and maintain an attraction for nuisance and criminal behavior.

Citywide Public Safety
Pier Plaza area requires a disproportionate amount of police service when compared to the rest of the city. Nearly 20% of CFS are generated in the Pier Plaza area. When officers are required to focus on incidents in the Pier Plaza area, it takes away the ability to conduct patrol and provide police service to the other areas of the city.

In 2022, the Police Department made 128 arrests for Driving Under the Influence. The most common time for DUI arrest is between 12:00am and 3:00am with 54% of DUI arrests occurring during this time period. The most common days for DUI arrests are Friday and Saturday nights (early Saturday and Sunday mornings). During these peak periods, officers commonly respond to DUI collisions and investigations. When officers are responding to large crowds of people who are intoxicated, fighting and violating quality of life crimes in Pier Plaza, they are not able to conduct patrol to address significant crime issues in the city including DUI, which is most prevalent during the late-night hours.

Pier Plaza Area Quality-of-Life Issues
The Pier Plaza area creates an attraction for violent and criminal behavior. In 2022, 45% of citywide assaults occurred in the Pier Plaza area. From January 1, 2023, through the end of November, 31.6% of citywide assaults occurred in the Pier Plaza area.

In 2022, 40.7% of citywide public intoxication arrests occurred in the Pier Plaza area. This pattern remained consistent in 2023 with 38.6% of all public intoxication arrests occurring in the Pier Plaza area.

A common public nuisance problem, which affects residents, businesses and the entire community are the people who come to Pier Plaza during the late-night hours and urinate in public spaces after drinking in excess. In 2022, the Police Department issued 76 citations for urinating in public and nearly all those citations (96%) occurred in the downtown area. This pattern remained consistent in 2023 with 85.7% of all citations for urinating in public occurring in the Pier Plaza area. The Police Department receives complaints about trash, urine and feces impacting the quality of life of residents and businesses who serve the morning and daytime needs of the Hermosa Beach community. The complaints are direct results of the patrons who frequent late night establishments and continue their actions, during late night hours, in public parking lots, beaches, and streets around Pier Plaza.

The addition of another location serving alcohol will most likely result in increased patrons during late night hours, which will diminish the quality of life for residents and others who use this public space. The Police Department does not have the resources to effectively manage these types of crime on a regular, ongoing basis.

Recommendations
The Hermosa Beach Police Department does not support the addition of an ABC license for any business in the Pier Plaza area where these is currently a heavy saturation of alcohol serving establishments. If any ABC license is approved, the Police Department recommends the following conditions to be added to the CUP for DRIVE South Bay.

General:

1. The business shall be maintained and operated in full compliance with the conditions of this CUP and any law, statute, ordinance, or other regulation hereafter adopted that is applicable to any development or activity on the subject property. Failure of the permittee to cease any development or activity not in full compliance shall be a violation of these conditions.

2. Approval of this permit shall expire twenty-four (24) months from the date of approval by the Planning Commission unless significant construction or improvements or the use authorized hereby has commenced.

3. Prior to the expiration of this approval, the permittee may request an extension of time. No extension shall be considered unless requested, in writing to the Community Development Director including the reason therefore, at least 60 days prior to the expiration date. No additional notice of expiration will be provided.

4. This use shall be considered expired if the use for which this Conditional Use Permit was granted ceased or was suspended for at least 180 successive days.

5. The project shall be substantially consistent with the application submitted and approved by the Planning Commission on (Date of PC Hearing).

6. The Planning Commission may review this Conditional Use Permit and may amend the subject conditions or impose any new conditions if deemed necessary to mitigate detrimental effects on the neighborhood resulting from the subject use.

7. The business shall not adversely affect the welfare of the residents, and/or commercial establishments nearby.

8. The business shall maintain in conformance with all other applicable City of Hermosa Beach and regulatory agency requirements and standards, including but not limited to: California Department of Alcoholic Beverage Control, Los Angeles County Health Department, California Disabled Access Standards (Government Code Title 24), and Los Angeles County National Pollutant Discharge Elimination System Permit (NPDES).

19. Live entertainment shall be prohibited unless otherwise permitted by the City.

20. Noise emanating from the property shall be within the limitations prescribed by the City's Noise Ordinance (Hermosa Beach Municipal Code Chapter 8.24).

21. The business shall install and maintain a video surveillance system that monitors within the interior of the business and the Immediate Area. The video system must be capable of delineating on playback the activity and physical features of persons and areas within the premises and Immediate Area. Recordings shall be retained for a minimum of sixty (60) days and video will be available to Police Department upon request. All video security cameras shall be installed to the satisfaction of the Chief of Police. At the discretion of the Chief of Police, Licensee may be required to add additional video cameras.

22. The Police Chief may determine that where a continuing police problem exists, the matter may be subject to appeal to the Planning Commission who will consider solutions to resolve the matter which may include, but not limited to, the presence of a Police approved doorman and/or security personnel to eliminate the problem. An appeal to the Planning Commission shall be heard within sixty (60) days of filing the appeal. The Police Chief's determination will not be stayed during the pendency of the appeal. If the problem persists, the Police Chief then shall submit a report to the Planning Commission, which will automatically initiate a review of the conditional use permit.

23. In addition to any other remedy provided by law, if the business operating pursuant to this CUP violates any condition of this CUP, the Police Chief or designee may meet and confer with the business to clarify the reason for the violation and to formulate a course of action to vitiate the risk for any future violation. If the business operating pursuant to this CUP continues to violate this CUP (*i.e.*, either a repeat violation or another violation) within any six (6) month period following a meet and confer with the Police Chief, then, at the sole discretion of the Police Chief, modified or additional operational requirements may be imposed by the Police Chief to curtail the violations. These modified or additional operational requirements include, but are not limited to, a reduction in operating hours, required number of staff members during operating hours, additional training for existing staff, and/or any other measures deemed appropriate by the Police Chief. An appeal may be filed to the Planning Commission for any modification or additional operational requirement(s) imposed by the Police Chief. However, the Police Chief's determination will not be stayed during the pendency of the appeal.

The Hermosa Beach Police Department supports the growth of business and for DRIVE South Bay to operate as a driving simulation experience. By accepting the recommended conditions, DRIVE South Bay can establish a new entertainment business and provide non-alcoholic beverages. The recommended conditions are necessary to address consistent public safety issues which reflect an accumulation of multiple businesses operating in the immediate area serving alcohol and creating an attraction for nuisance and other criminal behavior.

CITY OF
HERMOSA BEACH
Community Development
Building & Safety Division

Phone: 310-318-0235
Hours: Mon. – Thur. 7am-6pm
CommunityDevelopment@hermosabeach.gov

PLAN CHECK REVIEW COMMENTS

March 6, 2024

Chris Frantz
1048 Hermosa Ave
Applications: PDP24-02 and CUP24-03
Hermosa Beach, CA 90524

Please address the following comment(s) for your project in Hermosa Beach:

1. Complete the plan review for the permit application and plans for this proposal (B23-00615) and acquire all of the required permits to start and complete the work. Must obtain a Building Final prior to opening for business.
2. Acquire Business License prior to opening for business.
3. Satisfy and close the active Code Enforcement Case ENF22-0003. Case involved the start of demo work without permits. In order to satisfy, must ensure that related item (1) addresses the areas of work and associated fines are paid in full.

Once you have made the corrections, please resubmit via email to communitydevelopment@hermosabeach.gov. Feel free to reach out to the plan checker directly if there are any questions or concerns, email is preferred. In your resubmittal, the following items are required:

- Please submit a response sheet addressing the corrections and include the location of the corrections next to each item.
- Please "bubble" any revisions.

Thank you.

Reviewed by:
Guillermo Hobelman
ghobelman@hermosabeach.gov
City of Hermosa Beach
Building and Code Enforcement Official

CITY OF
HERMOSA BEACH

Date: March 4, 2024

To: Jake Whitney, Associate Planner

From: Doug Krauss, Environmental Programs Manager

Subject: CUP and PDP Review – Drive South Bay, 1048 Hermosa Avenue

Per Hermosa Beach Municipal Code Chapter 8.12.220, all solid waste containers must be kept in enclosures. This requirement serves to improve health and safety onsite and in the surrounding community. Additionally, it helps compliance with important stormwater pollution prevention mandates by minimizing litter and other pollutants from reaching the public right-of-way and, ultimately, the ocean. For this reason we are recommending construction of an enclosure on private property at 1048 Hermosa Avenue that is sufficient to enclose all of the solid waste containers necessary to service the business. At a minimum, this service should include space for a 3-cubic yard bin for trash and a 35-gallon cart for organics recycling and the enclosure should be sized appropriately for this minimal level of service. Consultation with the waste hauler is recommended to determine any alternate bin sizes or service frequencies. Applicant must verify the proper service levels, bin quantities and pick up frequency to determine the exact dimensions of the proposed enclosure.

CITY OF
HERMOSA BEACH
Public Works

To: Community Development
Jake Whitney, Assistant Planner

From: Public Works Department
Michelle Licata, Associate Engineer

CC: Saad Malim, Senior Engineer

Date: March 7, 2024

Re: 1048 Hermosa Ave CUP & PDP Application

Public Works Comments:

1. Public Works Conditions of Approval are applicant is responsible to obtain any applicable ROW permits for tenant improvements, including Dumpster Permits, Staging Permits, Material Drop Off, meter parking fees related to ROW permits, and any other applicable ROW permit required for tenant improvements.

9. Notwithstanding the structure occupant load limits under the Building Code, each customer in the business shall have an available seat at a table or counter, in substantial conformance with the floor plan and seating plan included as an attachment to the staff report. Customers are permitted to freely move around the business and are not required to be seated at all times; however, each customer shall have an available seat.

10. The business shall utilize an electronic method of reservation management to text or otherwise electronically notify patrons when the business is able to accommodate them without the patrons gathering in the immediate area.

Premises:
11. The business shall prevent loitering, unruliness, and boisterous activities of the patrons outside the business or in the immediate area.

12. The exterior of the business shall be maintained in a neat and clean manner and maintained free of graffiti at all times. The removal of all graffiti from the walls, fences, pavement, or buildings within twenty-four hours of discovery of its appearance on the property is required.

13. Any changes to the interior and/or exterior floorplan shall be subject to review and approval of the Planning Commission.

a. The following signs shall be posted in a conspicuous location in a readily visible manner, warning patrons of the illegality of selling/providing alcoholic beverages to persons loitering and drinking within the public realm.
b. "No Loitering or Public Drinking"
c. "It is illegal to possess an open container of alcohol in the vicinity of this establishment"

Operations:
14. The permitted hours of operation shall be 4:00 p.m. to 9:00 p.m. Wednesday-Friday. The permitted hours of operation shall be 11:00 a.m. to 9:00 p.m. Saturday-Sunday

15. A manager who is aware of the conditions of this Conditional Use Permit shall be on the premises during business hours. The Conditional Use Permit shall be maintained on the premise in a location where employees can easily read the conditions.

16. The project site shall be the point-of-sale for the purpose of collecting any sales tax on goods that are sold, delivered or rented on the site.

17. No alcoholic beverages shall be sold from any temporary locations on the premises such as ice tubs, barrels, or any other containers.

18. Under no circumstances shall furniture or other interior/exterior improvements be rearranged from the floor plan attached to the CUP to accommodate dancing, additional entertainment, or greater occupant load absent approval by the Chief of Police, or the Planning Commission.

GTA Design Group
Architects
Landscape Design
Goitom Tekletsion, architect
Licence C31925
2100 N. Sepulveda Blvd. Suite 44
Manhattan Beach CA 90266
PH 310.546.5550 FAX 310.546.9250
EMAIL goitom@gtaarchitecture.com
www.gtaarchitecture.com

LICENSED ARCHITECT
GOITOM TEKLETSION
Exp. 7-31-25
C31925
STATE OF CALIFORNIA

OWNER

PROJECT/LOCATION
DRIVE SB Tenant Improvement
1048 Hermosa Ave., Hermosa Beach CA 90254

SHEET TITLE:
CUP
MPA24-002, PDP24-02, CUP24-03

JOB NUMBER:

PRINT DATE:
05-12-2023

PERMIT DATE:

REVISIONS:
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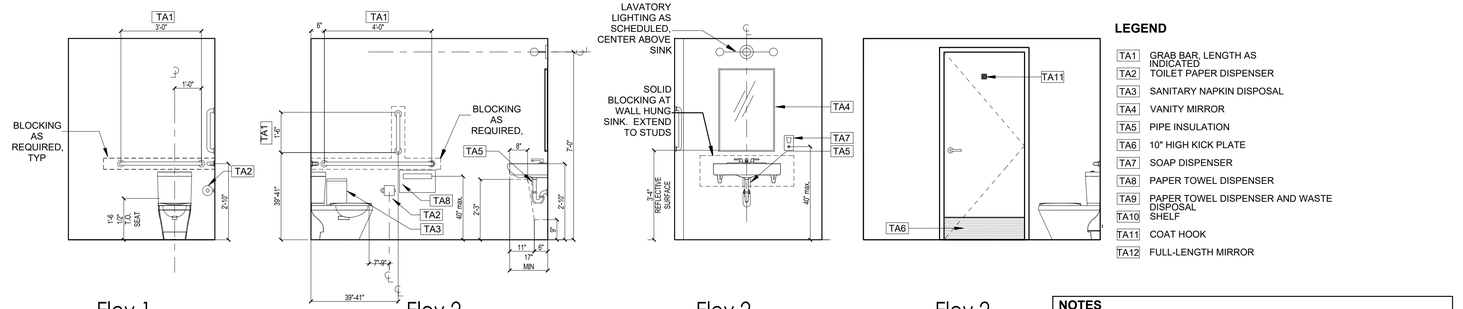
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1 Existing Site Plan
1/32"=1'-0"

FOR REFERENCE ONLY



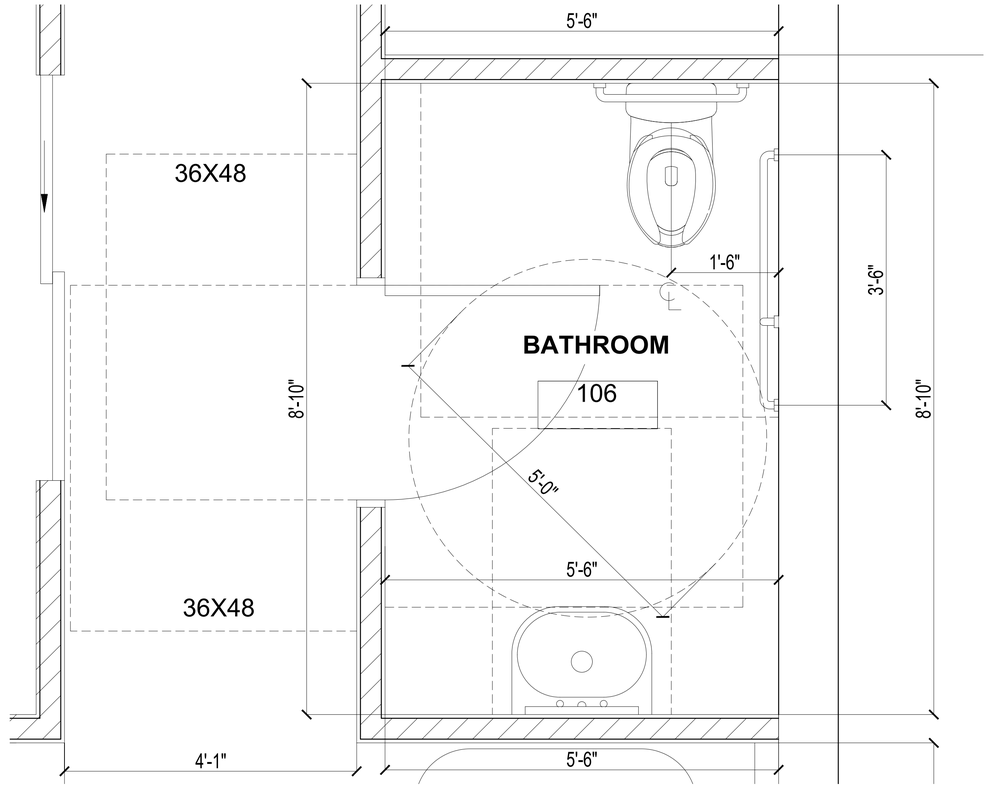
LEGEND

TA1	GRAB BAR, LENGTH AS INDICATED
TA2	TOILET PAPER DISPENSER
TA3	SANITARY NAPKIN DISPOSAL
TA4	VANITY MIRROR
TA5	PIPE INSULATION
TA6	10" HIGH KICK PLATE
TA7	SOAP DISPENSER
TA8	PAPER TOWEL DISPENSER
TA9	PAPER TOWEL DISPENSER AND WASTE DISPOSAL
TA10	SHELF
TA11	COAT HOOK
TA12	FULL-LENGTH MIRROR

NOTES

1. COORDINATE MOUNTING HEIGHTS AND LOCATIONS WITH FINAL FIXTURE & ACCESSORY
2. COMPLY WITH ALL APPLICABLE REQUIREMENTS OF 2020 ADA AND ICC/ANSI A117.1
3. LOCATE ANY LOOSE TRASH RECEPTACLES SO AS NOT TO INTERFERE WITH REQUIRED CLEARANCES

2 Enlarged ADA Rest Room Interior Elevations
3/8"=1'-0"



3 Enlarged ADA Rest Room Plan
1/32"=1'-0"

GTA Design Group
Architects
Landscape Design
Goitom Teklefsion, architect
Licence C31925
2100 N. Sepulveda Blvd. Suite 44
Manhattan Beach CA 90266
PH 310.546.5550 FAX 310.546.9250
EMAIL goitom@gtaarchitecture.com
www.gtaarchitecture.com

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OWNER

PROJECT/LOCATION
DRIVE SB Tenant Improvement
1048 Hermosa Ave., Hermosa Beach CA 90254

SHEET TITLE:
Site Plan & Enlarged ADA
Rest Room Plan and Int. Elevations
TENANT IMPROVEMENT

JOB NUMBER:

PRINT DATE:
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1 Existing Site Plan
1/32"=1'-0"

FOR REFERENCE ONLY



2 Existing Trash Area Photo with New Trash Enclosure (Red Highlight)



Enclosure Details:
- Construction of enclosure built similar to adjacent tenant trash enclosure
- Wood Fencing surrounding 3 sides of trash receptacle. (Front and 2 sides).
- The existing trash receptacle currently resides of existing chain link fence (to remain)
- Enclosure to have accessible cain bolt to keep front gates in place.

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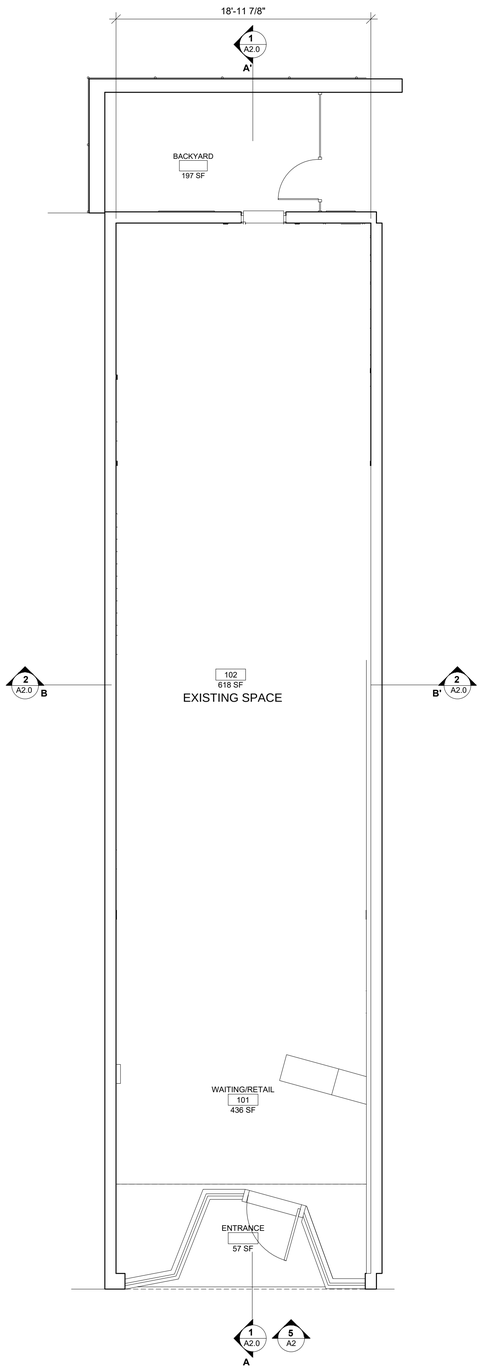
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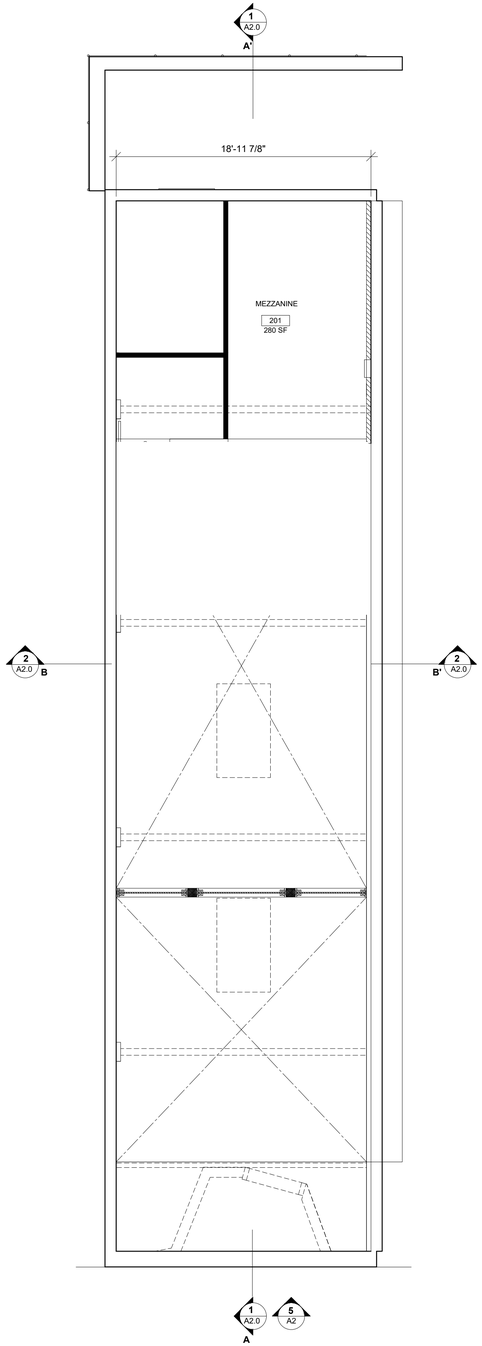
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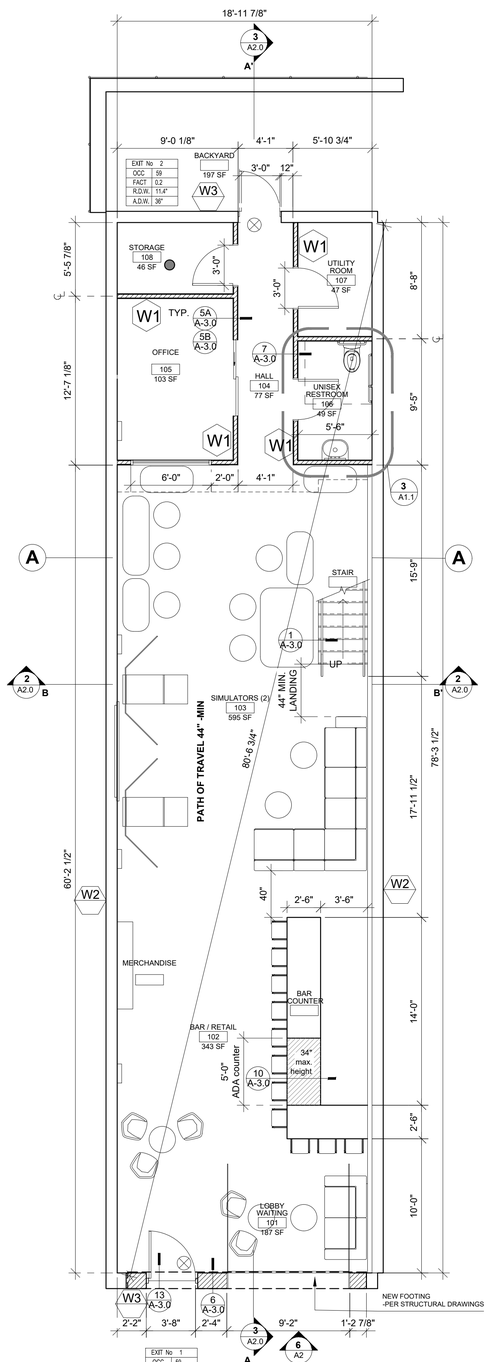
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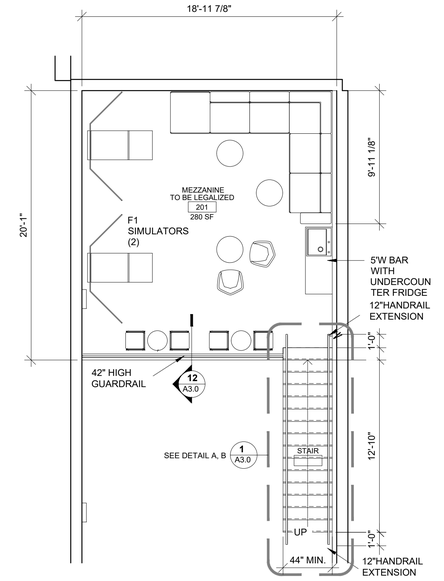
1 Ground Floor Plan (Existing)
3/16"=1'-0"



2 Mezzanine Plan (Existing)
3/16"=1'-0"



3 Ground Floor Plan (Proposed)
3/16"=1'-0"



4 Second Floor Plan ((Proposed))
3/16"=1'-0"

Legend

EXISTING CONSTRUCTION **TO REMAIN**

EXISTING CONSTRUCTION **TO BE REMOVED**

NEW CONSTRUCTION

GTA Design Group
Architects
Landscape Design
Goitom Tekletsion, architect
Licence C31925
2100 N. Sepulveda Blvd. Suite 44
Manhattan Beach CA 90266
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EMAIL goitom@agarchitecture.com
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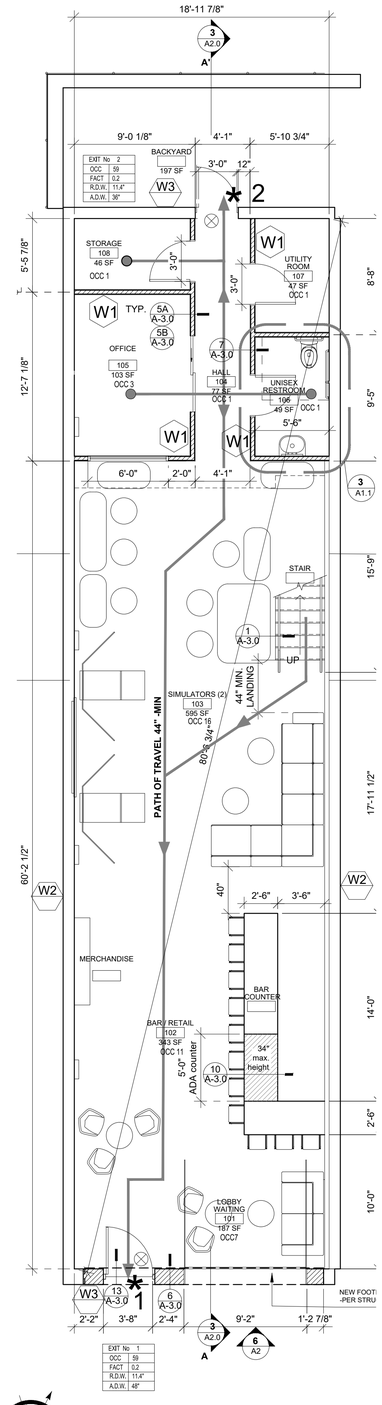
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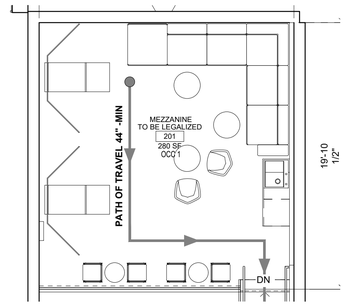
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1 Life and Safety Plan -Gnd

1/32"=1'-0"



2 Life and Safety Plan -2nd

1/32"=1'-0"

LIFE & SAFETY PLAN

GENERAL NOTES:

1. ALL POINTS OF EGRESS SHALL REMAIN ACTIVE DURING DEMOLITION AND CONSTRUCTION.

2. ALL LIFE SAFETY ELEMENTS SHALL REMAIN ACTIVE (WHERE POSSIBLE) DURING RENOVATIONS. ANY DEACTIVATED LIFESAFETY ELEMENTS SHALL BE REACTIVATED IN A TIMELY MANNER AFTER COMPLETION.

2. PER CBC SECTION 1008, THE MEANS OF EGRESS FROM ALL OCCUPIED PARTS OF THE BUILDING SHALL BE PROVIDED WITH NOT LESS THAN 1 FOOT CANDLE AT THE WALKING SURFACE.

3. FOR TACTILE EXIT SIGN REQUIREMENTS AND LOCATIONS:SEE A0.005: FIGURE 11B-703.4.1

EGRESS LEGEND

	EXISTING 1-HR FIRE RATED WALL
	NEW 1-HR FIRE RATED DEMISING WALL (NOT BEARING)
XX'	PATH OF EGRESS DISTANCE AND DIRECTION
*	BUILDING EXIT DISCHARGE
⊗	EXIT SIGN (PENDANT MOUNTED INTEGRAL CIRCUITRY BATTERY OPERATED LED. SEE ELECTRICAL DRAWINGS & BELOW EXIT SIGN DETAIL 1/A1.100
FEC	FIRE EXTINGUISHER CABINET
FE	FIRE EXTINGUISHER
EW / SS	SAFETY SHOWER / EYE WASH
CR	CARD READER

DOOR CAPACITY LEGEND

NUMBER OF OCCUPANTS

DOOR / CORR. OCCUPANT LOAD FACTOR (INCHES / PERSON)

REQUIRED DOOR WIDTH

ACTUAL DOOR WIDTH

EXIT No	1
OCC	00
FACT	0.2
R.D.W.	13"
A.D.W.	34"

OCCUPANCY CALCULATIONS

AREA #	AREA (SQ. FT.)	OCCUPANCY LOAD FACTOR	OCCUPANCY LOAD
101	187	15	12
102	343	FIXED SEATS	11
103	595	FIXED SEATS	16
104	77	200	1
105	103	50	3
106	49	300	1
107	47	300	1
108	46	300	1
201	280	FIXED SEATS	14
TOTAL			59

GTA Design Group
Architects
Landscape Design
Goitom Tekletsion, architect
Licence C31925
2100 N. Sepulveda Blvd. Suite 44
Manhattan Beach CA 90266
PH 310.546.5550 FAX 310.546.9250
EMAIL goitom@agarchitecture.com
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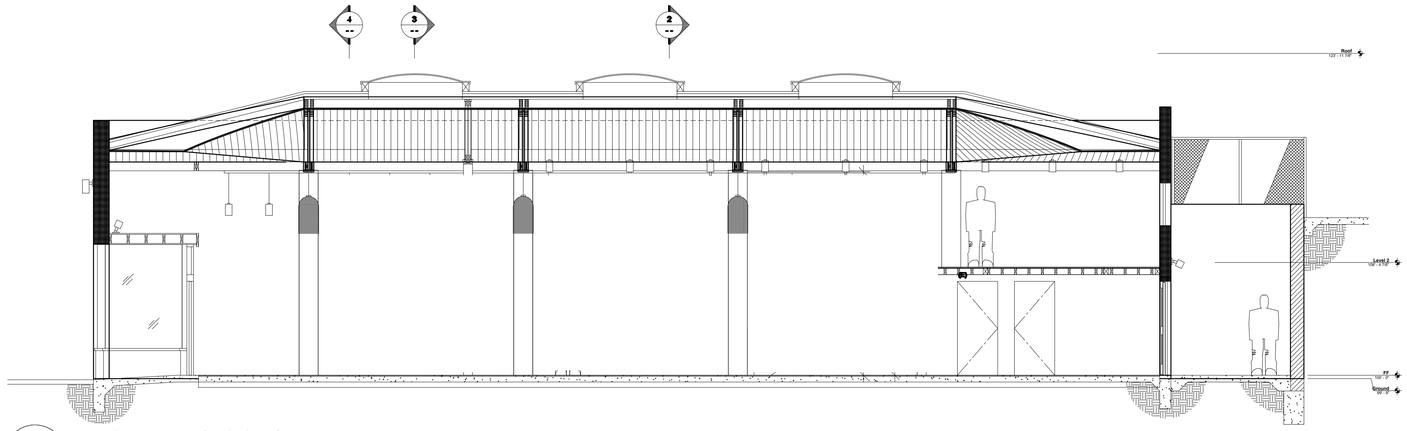
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A1.3

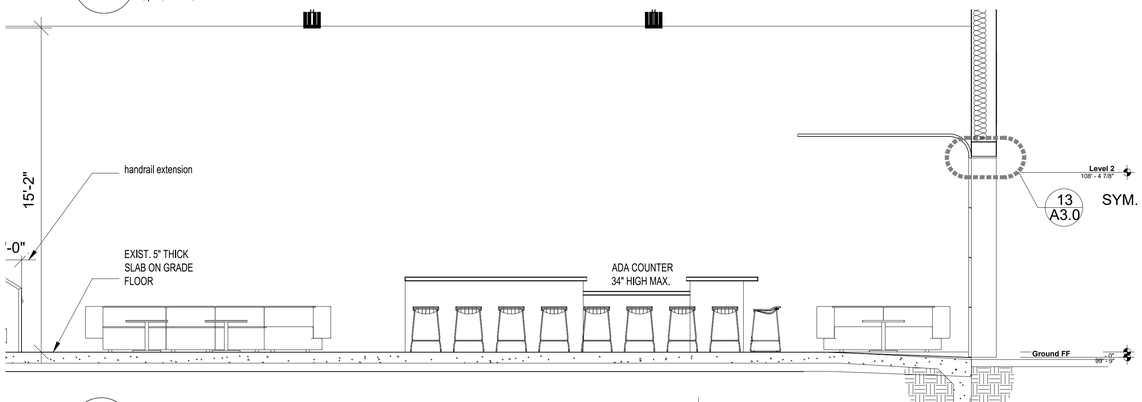
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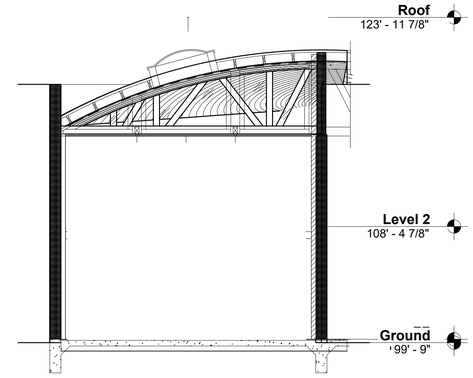
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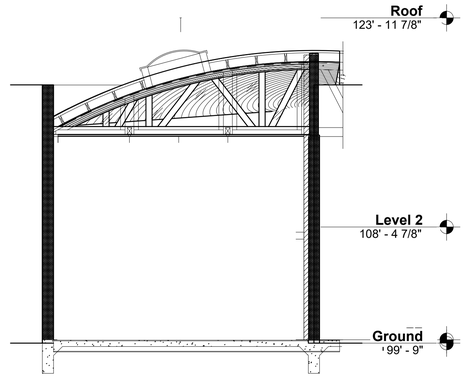
1 Section A-A' (Existing)
3/16"=1'-0"



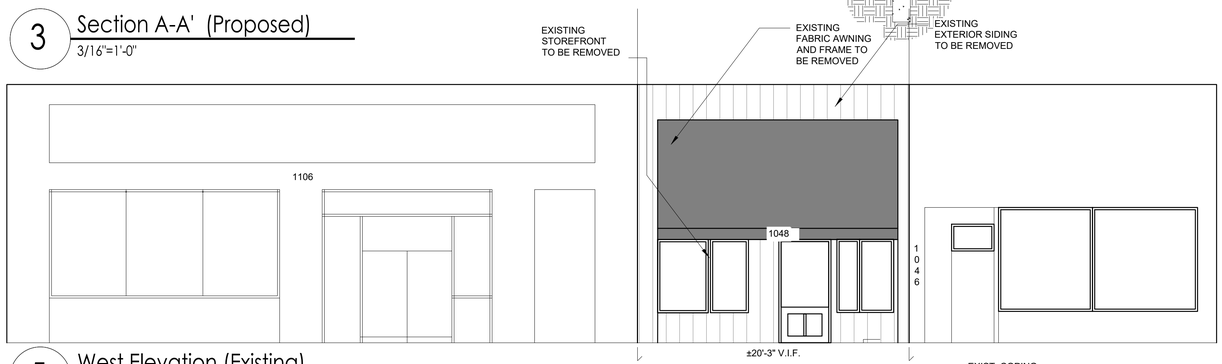
3 Section A-A' (Proposed)
3/16"=1'-0"



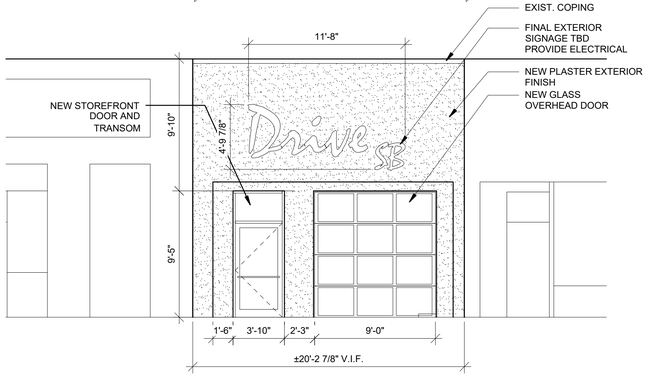
2 Section B-B' (Existing)
3/16"=1'-0"



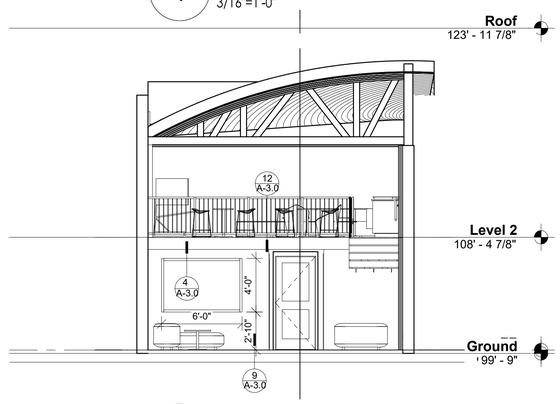
4 Section A-A' Existing)
3/16"=1'-0"



5 West Elevation (Existing)
3/16"=1'-0"



6 West Elevation (Proposed)
3/16"=1'-0"



7 Section A-A' (Proposed)
3/16"=1'-0"

Legend

EXISTING CONSTRUCTION **TO REMAIN**	EXISTING CONSTRUCTION **TO BE REMOVED**	**NEW** CONSTRUCTION

GTA Design Group
Architects
Landscape Design
Goltom Tekletsion, architect
Licence C31925
2100 N. Sepulveda Blvd. Suite 44
Manhattan Beach CA 90266
PH 310.546.5550 FAX 310.546.9250
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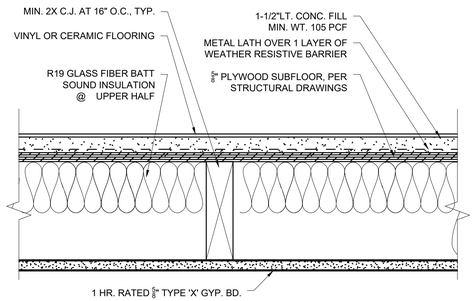
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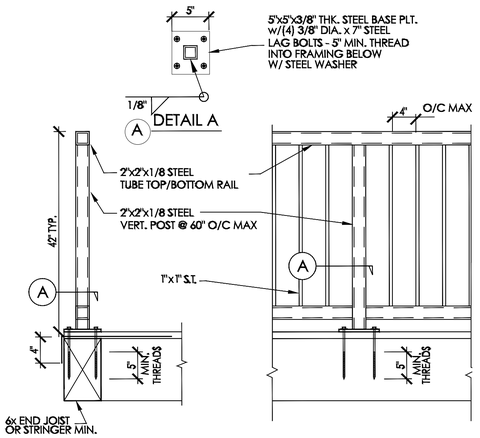
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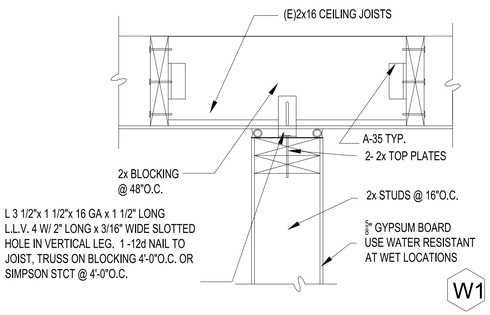
STANDARD SOUND RATED FLOOR -CEILING ASSEMBLIES
STC 50 -IIC 50 FIRE RATING AS SHOWN

FLOOR-CEILING ASSEMBLY 11
SCALE : NTS

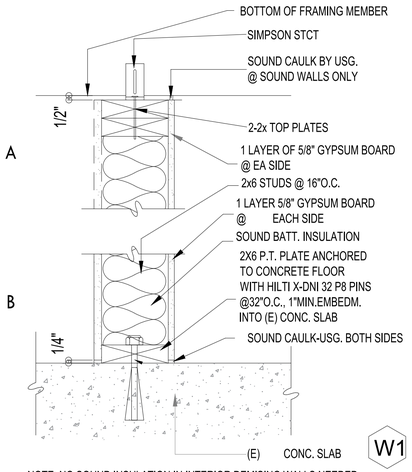


SECTION ELEVATION

GUARDRAIL DETAILS 12
SCALE : 1/4"=1'-0"

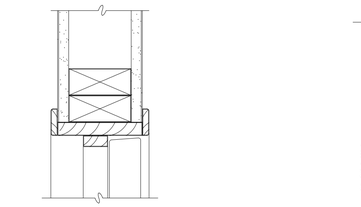


JOIST ANCHORAGE-PARALLEL TO WALL 8
SCALE : 1 1/2" = 1'-0"

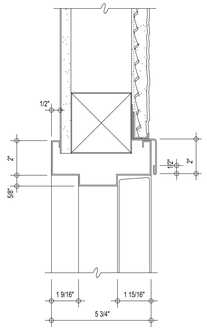


NOTE: NO SOUND INSULATION IN INTERIOR DEMISING WALLS NEEDED

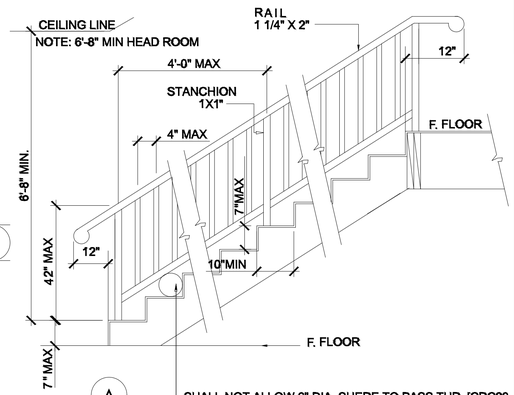
(E) 1 HR F.R. DEMISING WALL DETAIL-TYP. 9
SCALE : NTS

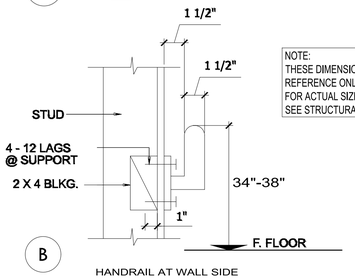


JAMB DETAIL - HEAD SIM. -INTERIOR WALL 4
SCALE : 3" = 1'-0"



JAMB DETAIL - HEAD SIM. EXTERIOR WALL 5
SCALE : 3" = 1'-0"

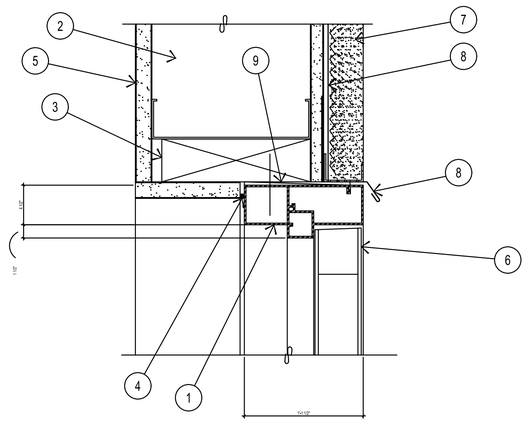




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FOR ACTUAL SIZES AND DIMENSIONS, SEE STRUCTURAL DRAWINGS

SEE STRUCTURAL DETAILS AND CALCULATIONS

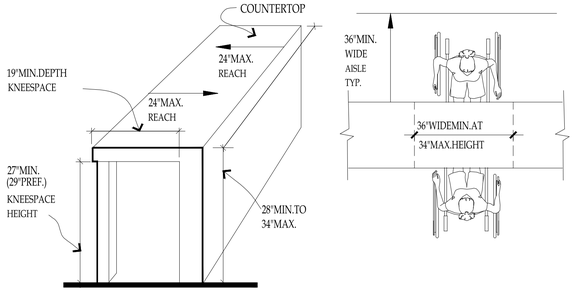
TYPICAL STAIR AND RAILING DETAILS 1
NTS



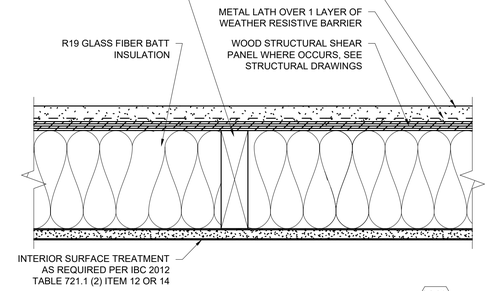
HEAD CONDITION - JAMB SIMILAR

1. ALUMINUM STOREFRONT FRAME.
2. 6" METAL STUD WALL.
3. 2 X 4 CONTINUOUS FIRE TREATED WOOD BLOCKING.
4. SILICONE SEALANT.
5. 5/8" GYPSUM BOARD.
6. ALUMINUM DOOR
7. EXTERIOR STUCCO OVER METAL LATH
8. BUILDING PAPER
9. WOOD SHIM.
10. G.I. FLASHING W/CRIMPED EDGE

ALUMINUM STOREFRONT DOOR FRAME 13
SCALE : 3"=1'-0"

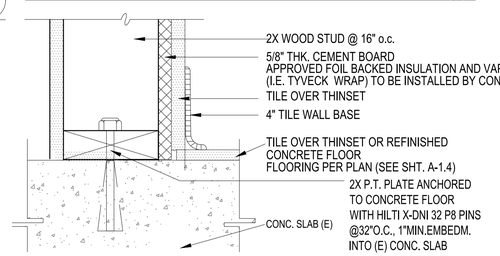


ACCESSIBLE COUNTER DETAILS 10
SCALE : NTS

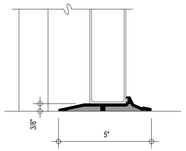


1 HOUR RATED PER IBC 2012 TABLE 721.1. (2), ITEM 15-1.3

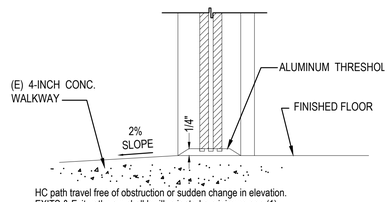
1 HOUR EXTERIOR STUCCO WALL 6
SCALE : NTS



WALL BASE DETAIL @ RESTROOM 7
SCALE : NTS



SILL DETAIL 2
SCALE : 3" = 1'-0"



HC path travel free of obstruction or sudden change in elevation.
EXITS & Exit pathway: shall be illuminated a minimum one (1) candle light at floor level any time the building is occupied.
Door entrance swing outward and labeled "THIS DOOR TO REMAIN UNLOCKED DURING BUSINESS HOURS"
EGRESS:
a. Occupancy Load (proposed) is 9.
b. Maximum travel distance is 45 feet
Exit and Door complied with sections1021.2 and 1008.1.9.3 of the C.F.C.

PANIC HARDWARE ENTRANCE DOOR 3
NTS

GTA Design Group
Architects
Landscape Design
Goltorn Tekletsion, architect
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2100 N. Sepulveda Blvd. Suite 44
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PH 310.546.5550 FAX 310.546.9250
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HVAC NOTES AND SPECIFICATIONS

SECTION 1: SCOPE OF WORK

1. NEW 5 TON SPLIT SYSTEM, NEW RESTROOM EXHAUST, AND NEW AIR DISTRIBUTION.
2. DUCT WORK, ELBOWS, FITTINGS, & DUCT INSULATION.
3. DIFFUSERS, REGISTERS, AND GRILLES
4. HVAC CONTROL SYSTEMS.
5. TESTING AND BALANCING.
6. PERMIT AND INSPECTION.

SECTION 2: FEES, PERMITS & INSPECTIONS

a) CONTRACTOR MUST PAY FEES AND OBTAIN PERMITS, LICENSES, INSPECTIONS, ETC, AS REQUIRED BY ANY LEGALLY CONSTITUTE AUTHORITY.

b) CONTRACTOR SHALL NOT MAKE HIS WORK COVERED OR CLOSED UNTIL THE WORK HAS BEEN INSPECTED AND APPROVED BY ALL AUTHORITIES HAVING JURISDICTION. ANY EXPENSES FOR ADDITIONAL WORK DUE TO THE VIOLATION OF THIS REQUIREMENT WILL BE PAID BY THE CONTRACTOR.

c) THIS DOCUMENT IS NOT FOR BID OR CONSTRUCTION UNTIL THE PLAN HAS BEEN REVIEWED AND APPROVED BY ALL AUTHORITIES HAVING JURISDICTION AND THE PERMIT IS OBTAINED. NO COMPENSATION WILL BE MADE FOR ADDITIONAL WORK DUE TO THE VIOLATION OF THIS REQUIREMENT.

SECTION 3: GENERAL REQUIREMENTS

a) ANY EXISTING CONDITIONS ARE BASED ON LIMITED FIELD VERIFICATION. CONTRACTOR SHALL ADJUST TO ACTUAL FIELD CONDITIONS AT NO ADDITIONAL EXPENSE TO THE TENANT.

b) ALL CONTRACTORS SHALL REVIEW A COMPLETE SET OF CONSTRUCTION DOCUMENTS.

c) CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH DEMOLITION PRIOR TO BIDDING AND START OF WORK. CONTRACTOR IS RESPONSIBLE FOR DEMO OF ALL EXISTING ITEMS, AS REQUIRED, FOR INSTALLATION/CONSTRUCTION OF NEW WORK.

d) CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL EXISTING CONDITIONS PRIOR TO SUBMITTING HIS BID. NO ADDITIONAL COMPENSATION WILL BE MADE FOR ANY EXTRA COSTS DUE TO CONTRACTOR'S FAILURE TO VISIT THE JOBSITE AND/OR PREDETERMINE ALL EXISTING CONDITIONS BEFORE SUBMITTING HIS BID. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ARCHITECT FOR RESOLUTION. NO EXCEPTION.

e) CONTRACTOR SHALL BE RESPONSIBLE FOR THE FIELD VERIFICATION OF ALL UTILITY RUNS, UNDERGROUND AND ABOVE GROUND PIPING AND/OR OTHER IMPROVEMENTS LOCATED ON THE PREMISES. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ALL COSTS RELATING TO THE RELOCATION OF, DAMAGE TO, REPAIR OF ANY EXISTING UTILITY RUNS AND/OR IMPROVEMENTS WHICH ARE DAMAGED AS A RESULT OF WORK IN OR AROUND THE PREMISES.

f) THE MECHANICAL CONTRACTOR SHALL INSPECT AND TEST RUN ALL EXISTING UNITS AT THE START OF CONSTRUCTION AND INFORM THE ARCHITECT OF ANY NECESSARY REPAIRS FOR APPROVAL IN A TIMELY MANNER TO NOT DELAY THE OPENING DATE.

g) ALL APPLIANCES DESIGNED TO BE FIXED IN POSITION SHALL BE SECURELY FASTENED IN PLACE PER BUILDING CODE REQUIREMENTS OR APPLICABLE MANUFACTURER INSTALLATION REQUIREMENTS.

h) THE CONTRACTOR SHALL INSTALL ALL EQUIPMENTS AS REQUIRED TO CONFORM TO THE STRUCTURE. AVOID OBSTRUCTIONS AND MAKE ALL EQUIPMENT REQUIRING MAINTENANCE OR REPAIR ACCESSIBLE.

i) ALL EQUIPMENT FURNISHED SHALL FIT THE SPACE AVAILABLE WITH CONNECTIONS IN THE REQUIRED LOCATIONS AND WITH ADEQUATE SPACE FOR OPERATING AND SERVICING. THE DRAWINGS ARE GENERALLY DIAGRAMMATIC AND INDICATE THE MANNER AND METHOD OF THE INSTALLATION WHILE THE SPECIFICATIONS AND EQUIPMENT LIST DENOTE THE TYPE AND QUALITY OF MATERIAL AND WORKMANSHIP TO BE USED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENTS, WHERE A CONFLICT EXISTS BETWEEN THE DRAWINGS AND THE SPECIFICATIONS, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE ARCHITECT WHOSE DECISION SHALL BE FINAL. NO ALLOWANCE WILL BE MADE SUBSEQUENTLY IN THIS CONNECTION ON BEHALF OF THE CONTRACTOR AFTER AWARD OF THE CONTRACT.

j) ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH ALL APPLICABLE LATEST FEDERAL, STATE AND LOCAL CODES (NFPA, UBC, UMC AND LOCAL BODIES HAVING JURISDICTION). APPLICABLE CODE: CMC 2022, CPC 2022, CALIFORNIA ENERGY EFFICIENCY CODE 2022, CALIFORNIA ELECTRICAL CODE 2022.

k) THE CONTRACTOR SHALL COOPERATE WITH THE OTHER TRADES SO THAT THE INSTALLATION OF ALL EQUIPMENT MAY BE PROPERLY COORDINATED.
k.1) DISCONNECT SWITCHES & LINE VOLTAGE CONNECTIONS (BY ELECTRICAL)
k.2) ALL LINE VOLTAGE WIRING AND CONDUIT (BY ELECTRICAL)
k.3) CONDENSATE PIPING (PLUMBING)

l) ALL ROOFING WORK SHALL BE PERFORMED BY OWNER'S APPROVED ROOFING CONTRACTOR.

m) DISPOSE OF ALL EQUIPMENT NOT REUSED AS A PART OF THE NEW WORK AS DIRECTED BY THE OWNER.

n) ALL ROOF MOUNTED EQUIPMENT SHALL BE LABELED AS TO THE SPACE IT SERVES WITH 3" HIGH WEATHERPROOF VINYL LETTERS.

o) ALL APPLIANCE AND PLUMBING VENTS AND THE DISCHARGE OUTLET OF EXHAUST FANS SHALL BE LEAST TEN (10) FEET IN A HORIZONTAL DIRECTION, OR THREE(3) FEET ABOVE THE OUTSIDE-AIR INTAKES FOR HVAC UNITS.

p) MATERIALS EXPOSED WITHIN DUCTS OR PLENUMS SHALL BE NONCOMBUSTIBLE OR SHALL HAVE A FLAMESPREAD RATING NOT GREATER THAN TWENTY-FIVE(25) AND A SMOKE DEVELOPED RATING NOT GREATER THAN FOUR HUNDRED FIFTY(450) WHEN TESTED AS A COMPOSITE PER APPLICABLE TESTING STANDARD.

q) AFTER INSTALLING WALL, CEILING, OR FLOOR INSULATION, THE INSTALLER SHALL MAKE AVAILABLE TO THE ENFORCEMENT AGENCY OR POST IN A CONSPICUOUS LOCATION IN THE BUILDING, A CERTIFICATE SIGNED BY THE INSTALLER STATING THAT THE INSTALLATION IS CONSISTENT WITH THE PLANS AND SPECIFICATIONS DESCRIBED IN SEC 10.103(A)2A. THE CERTIFICATE SHALL ALSO STATE THE MANUFACTURER'S NAME, MATERIAL IDENTIFICATION, AND THE INSTALLED R-VALUE.

r) INSTALL DUCT INSULATION ONLY AFTER DUCTWORK HAS BEEN INSPECTED AND APPROVED.

s) REGISTERS, GRILLES, AND DIFFUSERS SHALL BE INSTALLED ONLY AFTER ALL CEILINGS AND WALLS ARE FINISHED INCLUDING FINAL PAINTING. CEILING MOUNTED UNITS SHALL BE INSTALLED WITH RIMS TIGHT AGAINST CEILING. WALL MOUNTED UNITS SHALL BE INSTALLED AT LEAST 6 INCHES BELOW THE CEILING UNLESS OTHERWISE NOTED. DAMPERS PROVIDED WITH DIFFUSERS AND REGISTERS SHALL NOT BE USED FOR SYSTEM BALANCING. INSIDE OF DUCT, BEHIND SEE-THROUGH REGISTERS AND GRILLES SHALL BE PAINTED BLACK.

t) ROUND SHEET METAL DUCTS SUSPENDED IN THE AIR SHOULD BE SUPPORTED BY HANGERS AT LEAST EVERY 10 FEET. FLEXIBLE DUCTS SUSPENDED IN THE AIR SHOULD BE SUPPORTED AT LEAST EVERY 4 FEET BY STRAPS THAT ARE AT LEAST 1-1/2" TO 1-3/4" INCHES WIDE, AND THEY SHOULD NOT SAG MORE THAN 1/2" FOR EACH FOOT OF DISTANCE BETWEEN THE SUPPORTS. STRAPS USED ON FLEXIBLE DUCTS SHOULD NOT CONSTRICT THE INNER DIAMETER OF THE DUCT OR CUT THE OUTER JACKET.

u) DUCT SLEEVES AND PREPARED OPENINGS SHALL BE PROVIDED WHERE DUCTS PENETRATE FLOORS, WALLS, CEILINGS OR ROOFS, AND SHALL BE INSTALLED DURING CONSTRUCTION OF THE FLOOR, WALL, CEILING OR ROOF. MECHANICAL CONTRACTOR SHALL COORDINATE LOCATION OF ALL DUCT PENETRATIONS OF STRUCTURE WITH GENERAL CONTRACTOR.

v) DUCT SLEEVES SHALL BE FABRICATED FROM MINIMUM 20 GAUGE GALVANIZED SHEET STEEL. SLEEVE SHALL HAVE ONE(1) INCH CLEARANCE BETWEEN THE DUCT AND THE SLEEVE, OR ONE(1) INCH CLEARANCE BETWEEN THE INSULATION AND THE SLEEVE FOR INSULATED DUCTS. DUCT SLEEVES EMBEDDED IN CONCRETE SHALL BE CONSTRUCTED OF 1/4 INCH THICK CARBON STEEL PLATE, AND SHALL BE WELDED IN ACCORDANCE WITH AWS D1.1.

w) DEMAND CONTROL VENTILATION DEVICES (CO2 SENSORS) SHALL BE INSTALLED IN ACCORDANCE WITH CMC. 121(C)4.

SECTION 4: PRODUCTS

a) THERMOSTAT SHALL BE INSTALLED WITH 7-DAY PROGRAMMABLE AUTO-CHANGE OVER FEATURE. MOUNTING HEIGHT IS 3 TO 4 FEET ABOVE FINISHED FLOOR.

b) ALL AIR DISTRIBUTION SYSTEM DUCTS AND PLENUMS, INCLUDING, BUT NOT LIMITED TO, BUILDING CAVITIES, MECHANICAL CLOSETS, AIR-HANDLER BOXES AND SUPPORT PLATFORMS USED AS DUCTS OR PLENUMS, SHALL BE INSTALLED, SEALED AND INSULATED TO MEET THE REQUIREMENTS OF CHAPTER 6 OF THE CALIFORNIA MECHANICAL CODE. SUPPLY-AIR AND RETURN-AIR DUCTS CONVEYING HEATED OR COOLED AIR SHALL BE INSULATED TO A MINIMUM INSTALLED LEVEL OF R-8, UNLESS NOTED OTHERWISE. INSULATION IS NOT REQUIRED ON LINED DUCTS AND DUCTS EXPOSED TO CONDITIONED SPACE. PROVIDE RFI TO ENGINEER BEFORE CLASSIFYING THE SPACE AS CONDITIONED SPACE. NO COMPENSATION WILL BE MADE IF THE CONTRACTOR FAILS TO VERIFY.

c) DUCT PLENUM SHALL BE GALVANIZED STEEL DUCT. ALL JOINTS, LONGITUDINAL AND TRANSVERSE SEAMS, AND CONNECTIONS IN DUCTWORK, SHALL BE SECURELY FASTENED AND SEALED WITH WELDS, GASKETS, MASTICS (ADHESIVES), MASTIC-PLUS-EMBEDDED-GABRIC SYSTEMS, OR TAPS. TAPS AND MASTICS USED TO SEAL DUCTWORK SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL181A OR UL181B. DUCT CONNECTIONS TO FLANGES OF AIR DISTRIBUTION SYSTEM EQUIPMENT SHALL BE SEALED AND MECHANICALLY FASTENED. DUCT TAP IS NOT PERMITTED AS A SEALANT ON ANY METAL DUCTS. [IECC 2003-803.2.8]

d) FLEXIBLE DUCTWORK SHALL BE IN ACCORDANCE WITH UL181 AND NFPA 90A AND NFPA 90B. ALL TAKEOFFS FROM MAIN AND BRANCH DUCT SHALL BE 45° TAPS WITH VOLUME DAMPERS AS SHOWN ON THE DRAWINGS. GLASS-FLEX TYPE DUCT MAY BE USED AT ENTRANCE TO DIFFUSERS BUT MUST BE NO GREATER THAN 5'-0" IN LENGTH.

e) DUCT SUPPORTS AND HANGERS: PROVIDE HANGERS AND SUPPORTS OF STEEL SHAPES AND RODS CONFORMING TO ASTM A36/A36M, GALVANIZED IN ACCORDANCE WITH ASTM A123. HARDWARE FOR HANGERS AND SUPPORTS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153/A153M. HANGERS AND SUPPORTS SHALL BE FABRICATED IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE, AND SMACNA HVAC SYSTEMS DUCT DESIGN.

f) BUILDING ATTACHMENT: CONCRETE INSERTS, POWER-ACTUATED FASTENERS, OR STRUCTURAL STEEL FASTENERS APPROPRIATE FOR BUILDING MATERIALS. DO NOT USE POWDER-ACTUATED CONCRETE FASTENERS FOR LIGHTWEIGHT AGGREGATE CONCRETES OR FOR SLABS LESS THAN 4 INCHES THICK.

g) STRAPS AND ROD SIZES: CONFORM WITH TABLE 4-1 IN SMACNA HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE, FOR SHEET STEEL WIDTH AND GAUGE AND STEEL ROD DIAMETERS.

h) DUCT ATTACHMENTS: SHEET METAL SCREWS, BLIND RIVETS, OR SELF-DRILLING, SELF-TAPPING METAL SCREWS; COMPATIBLE WITH DUCT MATERIALS.

i) KITCHEN HOOD EXHAUST DUCTWORK: FABRICATE IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE AND NFPA 96. CONSTRUCT OF 16 GAUGE STAINLESS STEEL USING CONTINUOUS EXTERNAL WELDED JOINTS. TYPE II EXHAUST DUCTS TO BE STAINLESS STEEL.

j) VOLUME DAMPERS: PROVIDE VOLUME DAMPERS IN DUCTS CONSTRUCTED OF 22 GAUGE GALVANIZED FOR DUCTS SMALLER THAN 11 INCHES, 20 GAUGE FOR DUCTS SMALLER THAN 21 INCHES, AND 16 GAUGE FOR DUCTS LARGER THAN 21 INCHES. PROVIDE LOCKING QUADRANTS AS REQUIRED. MANUALLY ADJUSTABLE BALANCING DAMPERS SHALL BE PROVIDED TO SUPPLY, RETURN AND EXHAUST DUCTS AT POINTS WHERE BRANCHES ARE TAKEN FROM LARGER DUCTS AND IN BRANCH DUCT TO INDIVIDUAL DIFFUSERS, GRILLES, AND REGISTERS.
1. DAMPER AXLES SHALL BE CONTINUOUS SQUARE RODS NOT SMALLER THAN 3/8-INCH, WITH MACHINED ENDS AND BEARING AT BOTH ENDS.
2. SINGLE-BLADE DAMPER SHALL BE PROVIDED FOR DUCT SIZES UP TO 18 INCH; MULTIBLADE DAMPERS OF OPPOSED BLADE PATTERN SHALL BE PROVIDED FOR CUST SIZE LARGER THAN 18 INCH.

k) T-BAR CEILING SUPPLY DIFFUSER: KRUEGER MODEL 6500 OR APPROVED EQUAL.

l) T-BAR CEILING RETURN DIFFUSER: KRUEGER MODEL 6640 OR APPROVED EQUAL.

m) DUCT HEATER: WHERE ELECTRICAL HEATER ARE INSTALLED IN AIR DUCTS, THE DUCT SHALL BE INSULATED WITH NONCOMBUSTIBLE INSULATION EXTENDING IN EACH DIRECTION FROM THE HEATER. DISTANCE SHALL BE AS RECOMMENDED BY THE HEATER MANUFACTURER.

n) LINED EXPOSED EXTERIOR DUCTWORK SHALL BE 2" THICK, 1.5PCF DENSITY LINING. DUCT SIZE SHOWN ON PLAN SHALL REFER TO OUTER DIMENSIONS UNLESS SPECIFIED OTHERWISE.

o) VOLUME DAMPER MUST BE INSTALLED AT BRANCH TAKE-OFF FROM MAIN SUPPLY DUCT. PROVIDE YOUNG REGULATOR CABLES FOR ADJUSTMENT OF VOLUME DAMPERS IN HARD LID CEILING WHERE ACCESS PANELS ARE NOT PROVIDED.

SECTION 5: EQUIPMENT SUBMITTALS

SUBMITTALS FOR MECHANICAL EQUIPMENTS SHALL BE SUBMITTED TO ARCHITECT AND ENGINEER FOR APPROVAL BEFORE ORDERING SUCH EQUIPMENTS. NO EXCEPTION.

SECTION 6: TESTING

a) AFTER COMPLETION OF WORK, TESTS ON THE HVAC SYSTEMS, INCLUDING A DUCT LEAKAGE TEST, AND ON AIR BALANCE PERFORMANCE ARE REQUIRED. THE AIR QUALITY RESULTS SHOULD CONFORM WITH THE VOLUME SHOWN ON THE PLAN. PROVIDE ALL NECESSARY TESTING EQUIPMENTS AND LABORS AT NO COST TO THE OWNER.

b) THE TESTED AIR QUALITY SHOULD BE WITHIN 5% OF THE DESIGN VALUE INDICATED ON PLANS. NOTIFY ENGINEER IMMEDIATELY IF AIR QUALITY IS OUT OF THE RANGE. NO EXCEPTION.

SECTION 7: OPERATING INSTRUCTIONS

a) THE BUILDER SHALL PROVIDE THE BUILDING OWNER OR PERSON(S) RESPONSIBLE FOR BUILDING MAINTENANCE (IN CASE OF MULTI-TENANT OR CENTRALLY OPERATED BUILDINGS) AT OCCUPANCY THE FOLLOWING:

1)OPERATING INFORMATION: THE APPROPRIATE CERTIFICATE(S) OF COMPLIANCE AND A LIST OF THE FEATURES, MATERIALS, COMPONENTS, AND MECHANICAL DEVICES INSTALLED IN THE BUILDING AND INSTRUCTIONS ON HOW TO OPERATE THEM EFFICIENTLY.
2) MAINTENANCE INFORMATION: REQUIRED ROUTINE MAINTENANCE ACTIONS SHALL BE CLEARLY STATED AND INCORPORATED ON A READILY ACCESSIBLE LABEL. THE LABEL MAY BE LIMITED TO IDENTIFYING THE OPERATION AND MAINTENANCE MANUAL.
3) VENTILATION INFORMATION: A DESCRIPTION OF THE QUANTITIES OF OUTDOOR AND RECIRCULATED AIR THAT THE VENTILATION SYSTEMS ARE DESIGNED TO PROVIDE TO EACH AREA.

b) CONTRACTOR SHOULD PREPARE AT LEAST THREE SETS MANUALS, COVERING
1. OIL AND LUBRICATION INSTRUCTIONS
2. PARTS SCHEDULE AND REPLACEMENT INSTRUCTIONS
3. AIR FLOW AND AIR BALANCE REPORT.

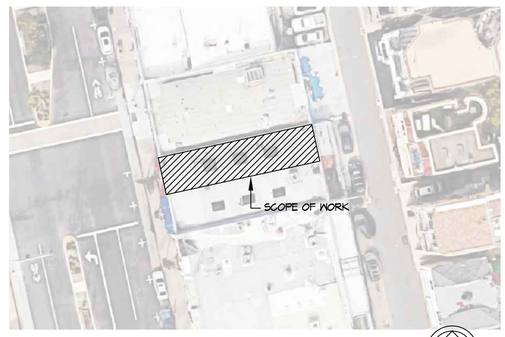
SECTION 8: WARRANTY

a) THE CONTRACTOR SHALL PROVIDE OWNER WITH A WRITTEN MINIMUM TWO (2) YEAR MANUFACTURING WARRANTY ON ALL HVAC EQUIPMENT PROVIDED AND/OR INSTALLED. THE WARRANTY SHALL INCLUDE ALL LABOR, MATERIALS, AND THREE (3) ROUTING SERVICES WITH FILTER CHANGES DURING A ONE (1) YEAR PERIOD.

DUCT WORK SYMBOLS

DOUBLE LINE		SINGLE LINE
	EXISTING EQUIPMENT OR DUCTWORK TO BE REMOVED.	
	EXISTING DUCTWORK TO REMAIN	
	NEW RIGID DUCTWORK	
	MANUAL VOLUME DAMPER (MVD) MOTOR OPERATED DAMPER (MOD)	
AD / AD	ACCESS DOOR	AD
	RADIUS ELBOW (R=1.5)	
	VANED ELBOW	
	BRANCH DUCT TAKE-OFF	
D R	RISE OR DROP DIRECTION OF AIR FLOW	D R
	FLEXIBLE CONNECTION (FXC)	
TAG / CFM	DIFFUSER	TAG / CFM
TAG / CFM	SUPPLY AIR GRILLE (G) OR SUPPLY AIR REGISTER (R)	TAG / CFM
TAG / CFM	RETURN AND/OR EXHAUST AIR GRILLE (G) OR REGISTER (R)	TAG / CFM

	EXHAUST WALL CAP		AIR DEVICE TO BE REMOVED
	OUTSIDE AIR WALL LOUVER		SUPPLY OR OUTSIDE AIR
	KEYED NOTES		RETURN AIR
UC	UNDERCUT DOOR		EXHAUST AIR
DL	DOOR LOWER (FREE AREA REQUIRED INDICATED IN SQUARE FEET)	SD	SMOKE DETECTOR
		SFD	SMOKE/FIRE DAMPER
TAG		T UNIT TAG	THERMOSTAT
AIR QUANTITY (CFM)			POINT OF CONNECTION (P.O.C.)
			ACCESS PANEL



KEY PLAN

SCALE: NONE

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

REGISTERED PROFESSIONAL ENGINEER
GANGYI ZHOU
No. M34279
Exp:12-31-2024
MECHANICAL
STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel 949-267-9095

PROJECT NAME:
1048 HERMOSA AVE
1048 HERMOSA AVE,
HERMOSA BEACH, CA 90254

SHEET TITLE
HVAC GENERAL NOTES AND LEGENDS

DRAWN	GMEP
CHECKED	GMEP
DATE	11/13/23
SCALE	AS NOTED
JOB NO.	23-954
SHEET	M-1.0

EXHAUST CALCULATION

OCCUPANCY CATEGORY	FLOOR AREA (SQ.FT.)	*EXHAUST RATE (CFM/SQFT.)	EXHAUST REQUIREMENTS (CFM)	EXHAUST PROVIDED (CFM)
RESTROOM	--	--	50**	120

NOTES:
*PER CMC TABLE 403.7
**PER UNIT RATE CMC TABLE 403.7

SPLIT SYSTEM HEAT PUMP - OUTDOOR UNIT SCHEDULE

HP

EQUIPMENT NO.	SERVICE	HEATING CAPACITY (BTU/HR)	HSPF2/ C.O.P.	COOLING CAPACITY (BTU/HR)	SEER2/ EER2	ELECTRICAL	REFRIG. PIPING		MINIMUM CIRCUIT AMPS	MAXIMUM FUSE SIZE	MANUFACTURER & MODEL	OPTIONS-ACCESSORIES
						V.-PH.-CY.	LIQUID	SUCTION				
HP 60	SEE PLAN	57,000	8.5/3.7	57,000	15.5/8.5	208-1-60	3/8	3/4	29.1	35	DAIKIN RXTQ60TBVJUA	FACTORY CURB R410 REFRIGERATION OPER. WT. = 225 LBS NOTE #1, #2, #3, #4, #5, #6

NOTES:
1. PROVIDE ALL REQUIRED MATERIALS & INSULATED REFRIGERANT LINES FOR COMPLETE INSTALLATION, SIZE RS/RL PIPING PER MANUFACTURERS GUIDELINES.
2. PROVIDE REQUIRED ACCESS TO INDOOR UNIT PER CMC.
3. PROVIDE PROGRAMMABLE THERMOSTAT.
4. PROVIDE CONTROL WIRING, CONDUIT, ETC. FOR A COMPLETE AND OPERABLE SYSTEM.
5. PROVIDE SECONDARY CONDENSATE DRAIN PAN FOR ALL DX COILS.
6. PROVIDE MERV 13 FILTER AT RETURN AIR PLENUM CONNECTION TO UNIT.

SPLIT SYSTEM HEAT PUMP - INDOOR UNIT SCHEDULE

FC

EQUIPMENT NO.	SERVICE	SUPPLY (CFM)	MIN. OSA (CFM)	E.S.P. (IN W.G.)	COOLING CAPACITY (BTU/HR.)	HEAT PUMP HEATING CAPACITY (BTU/HR.)	BACKUP ELECTR. RESIST. HEATING		ELECTRICAL		MANUFACTURER & MODEL	OPTIONS-ACCESSORIES
							KW	MBH	V.-PH.-CY.	AMPS		
FC 07	SEE PLAN	307	10	0.5	7,500	8,500	--	--	208-1-60	0.3*	DAIKIN FXZQ07TAVJU	R410 REFRIGERATION OPER. WT. = 34.2 LBS ELEC. INTERLOCK W/ IF-1 NOTE #1, #2, #3, #4, #5, #6
FC 30A / FC 30B	SEE PLAN	1000	A: 145 B: 145	0.5	30,000	34,000	--	--	208-1-60	4.9*	DAIKIN FXTQ30TAVJUA	SMOKE DETECTOR R410 REFRIGERATION OPER. WT. = 115 LBS NOTE #1, #2, #3, #4, #5, #6

NOTES:
1. PROVIDE ALL REQUIRED MATERIALS & INSULATED REFRIGERANT LINES FOR COMPLETE INSTALLATION, SIZE RS/RL PIPING PER MANUFACTURERS GUIDELINES.
2. PROVIDE REQUIRED ACCESS TO INDOOR UNIT PER CMC.
3. PROVIDE PROGRAMMABLE THERMOSTAT.
4. PROVIDE CONTROL WIRING, CONDUIT, ETC. FOR A COMPLETE AND OPERABLE SYSTEM.
5. PROVIDE SECONDARY CONDENSATE DRAIN PAN FOR ALL DX COILS.
6. PROVIDE MERV 13 FILTER AT RETURN AIR PLENUM CONNECTION TO UNIT.
*MOCP: 15A

FAN SCHEDULE

EF

EQUIPMENT NO.	SERVICE	LOCATION	CFM	STATIC PRESS. (IN W.G.)	MOTOR				MANUFACTURER & MODEL	OPTIONS-ACCESSORIES
					WATTS	HP	RPM	VOLT.-PH.-CY.		
EF R	RESTROOM	CEILING	120	0.5	47.8	--	900	115-1-60	GREENHECK SP-A200 OR EQUAL	BACKDRAFT DAMPER CONTROLLED BY OCCUPANCY SENSOR OPERATION WT. = 25 LBS
IF 1	OFFICE	CEILING	57	0.25	26	--	2516	120-1-60	S & P TD-100 OR EQUAL	BACKDRAFT DAMPER FILTER & INTAKE HOOD ELEC. INTERLOCK W/ FC-07 OPERATION WT. = 2 LBS

NOTES:

SCHEDULE - AIR DISTRIBUTION

TAG	SERIES	CFM	DUTY	NECK	SIZE	DAMPER	MATERIAL	DESCRIPTION
DG-1	5DMSDR	SEE DWGS	SUPPLY	--	SEE DWGS	YES	ALUMINUM	DUCT MOUNTED

NOTES:
A. REFER TO ARCHITECTURAL DRAWINGS FOR TYPE OF CEILING AND/OR SUSPENSION SYSTEM.
B. FINISH SHALL BE OF THE TYPE AND COLOR SELECTED BY ARCHITECT. SUBMIT FINISH CHART WITH SHOP DRAWINGS.
C. NC < 30.
D. NECK SIZES TO MATCH DUCT CONNECTION UNLESS NOTED OTHERWISE.

SELECTIONS ARE BASED ON PRODUCTIONS BY KRUEGER.
EQUAL PRODUCTS: TITUS, CARNES, METAL*AIRE & PRICE.

VENTILATION CALCULATION

OCCUPANCY CATEGORY	FLOOR AREA (SQ.FT.)	*AREA OUTDOOR AIR RATE (CFM/SQ.FT.)	AREA OUTDOOR AIR REQUIREMENT (CFM)	PERSONS (QTY.)	*PEOPLE OUTDOOR AIR RATE (CFM/PERSON)	PEOPLE OUTDOOR AIR REQUIREMENT (CFM)	OUTSIDE AIR PROVIDED (CFM)
MEZZANINE	376	0.18	67.68	7.52	7.5	56.4	70
OFFICE	104	0.06	6.24	0.52	5	2.6	10
OPEN AREA	1190	0.18	214.2	23.8	7.5	178.5	215

NOTES:
*PER CMC TABLE 402.1

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

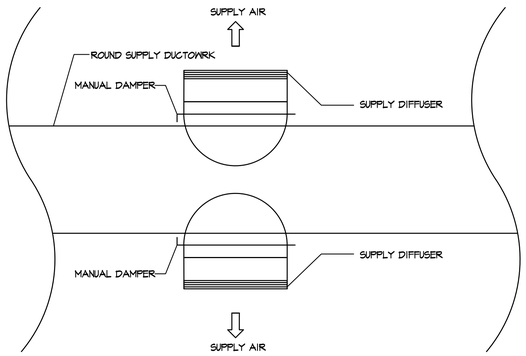
REGISTERED PROFESSIONAL ENGINEER
GANGYI ZHOU
No. M34279
Exp:12-31-2024
MECHANICAL
STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel 949-267-9095

PROJECT NAME:
1048 HERMOSA AVE
1048 HERMOSA AVE,
HERMOSA BEACH, CA 90254

SHEET TITLE
HVAC EQUIPMENT SCHEDULES

DRAWN
GMEP
CHECKED
GMEP
DATE
11/13/23
SCALE
AS NOTED
JOB NO.
23-954
SHEET
M-1.1



TYPICAL EXPOSED DUCT DETAIL

SCALE: NONE

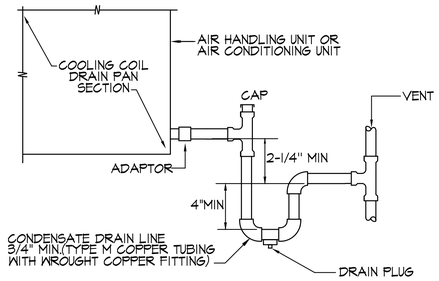
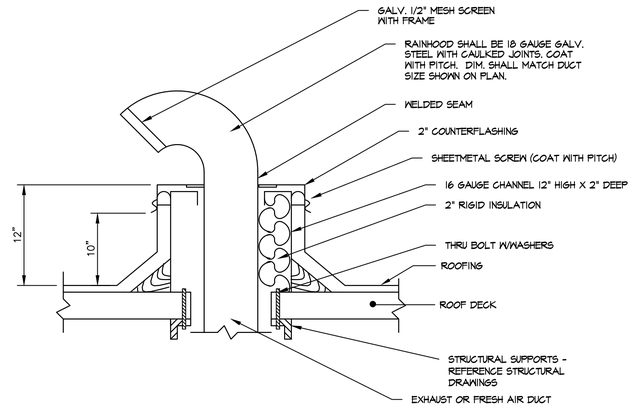


TABLE 310.3 CMC2022	
INT TONS CAPACITY	MIN CD PIPE SIZE
UP TO 20	3/4
21-40	1"
41-90	1-1/4"
91-125	1-1/2"
126-250	2"

NOTES:
1. ALL INTERIOR CONDENSATE DRAIN PIPING SHALL BE INSULATED.
2. SLOPE ALL CONDENSATE DRAIN LINES AT 1%.
3. CONDENSATE DRAIN PIPING SHALL BE TYPE "DWV" HARD DRAWN COPPER TUBING WITH WROUGHT COPPER FITTINGS, 50-50 SOLDERED JOINTS.
4. ALL CONDENSATE LINES SHALL RUN ON THE UNDERSIDE OF THE ROOF STRUCTURE AND DRAIN INTO APPROVED LOCATION. REFER TO PLUMBING DRAWING. ROUTE SECONDARY DRAIN TO EXTERIOR OR PROVIDE A SHUTOFF FLOAT SWITCH.

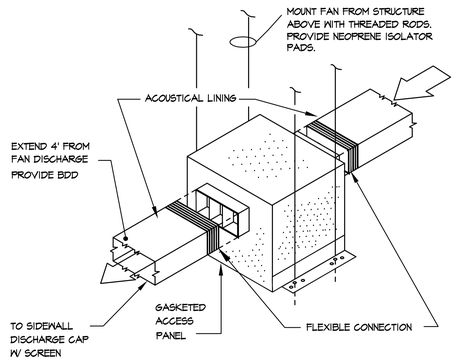
CONDENSATE PIPE

SCALE:NONE



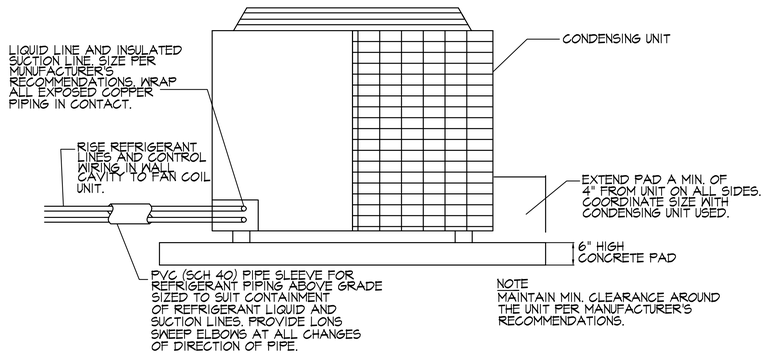
GOOSENECK DETAIL

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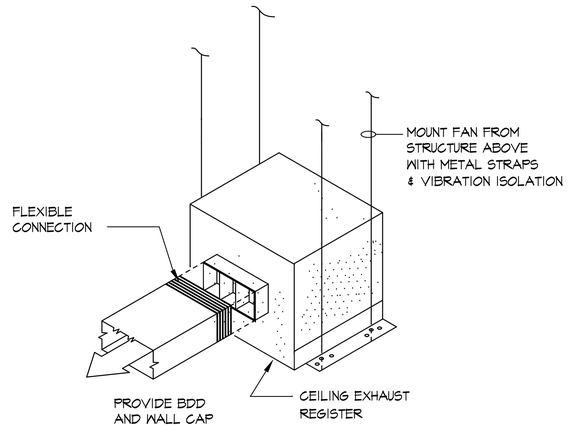
IN-LINE FAN DETAIL

SCALE:NONE



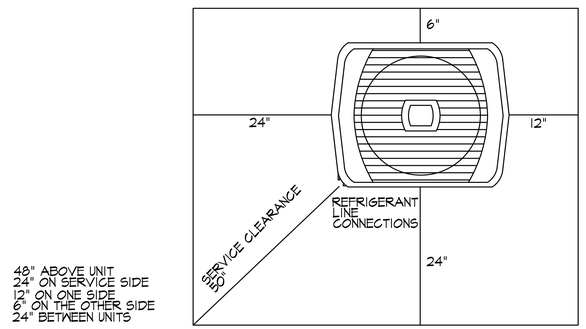
CONDENSING UNIT GROUND INSTALLATION

SCALE: NONE



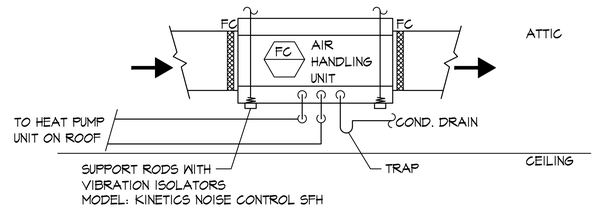
CEILING EXHAUST FAN DETAIL

SCALE:NONE



CONDENSING UNIT CLEARANCES

SCALE: NONE



FANCOIL DETAIL

SCALE:NONE

REVISIONS		
NO.	DATE	DESCRIPTION

SEAL:

REGISTERED PROFESSIONAL ENGINEER
GANGYI ZHOU
No. M34279
Exp:12-31-2024
MECHANICAL
STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

PROJECT NAME:
1048 HERMOSA AVE
1048 HERMOSA AVE,
HERMOSA BEACH, CA 90254

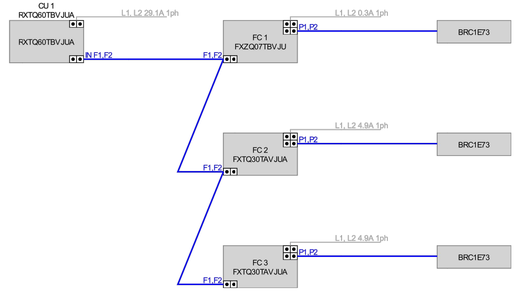
SHEET TITLE
HVAC EQUIPMENT DETAILS

DRAWN: GMEP
CHECKED: GMEP
DATE: 11/13/23
SCALE: AS NOTED
JOB NO.: 23-954
SHEET: M-1.2

DAIKIN

Wiring diagrams

Wiring CU 1



Remarks

P1P2 = AWG 18-2 is required - however always refer to local code for further information.

F1F2 IN/OUT = AWG 18-2 is required - however always refer to local code for further information

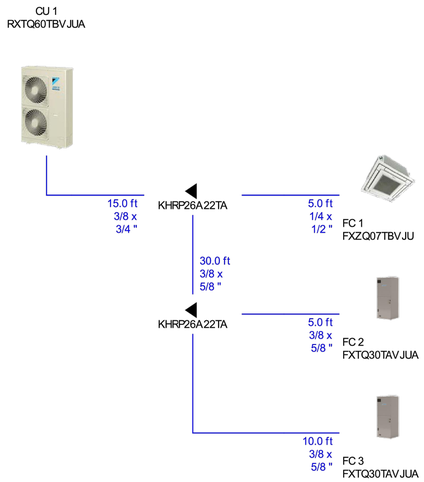
Note:

The VRV Selection application is property of Daikin Europe N.V. Daikin Europe N.V. cannot be held liable for any inaccuracy, reliability of the outcome of the VRV Selection application.

DAIKIN

Piping diagrams

Piping CU 1



The VRV Selection application is property of Daikin Europe N.V. Daikin Europe N.V. cannot be held liable for any inaccuracy, reliability of the outcome of the VRV Selection application.

FOR REFERENCE ONLY, DESIGNED BY OTHERS

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GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
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1048 HERMOSA AVE

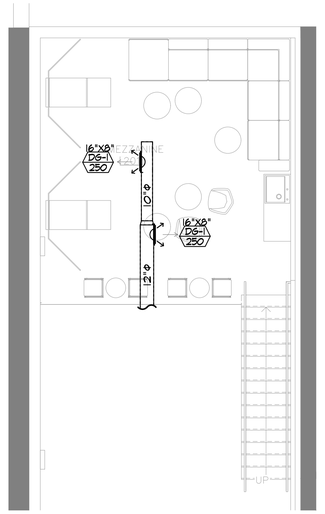
1048 HERMOSA AVE,
HERMOSA BEACH, CA 90254

SHEET TITLE

HVAC PIPING/WIRING DIAGRAMS

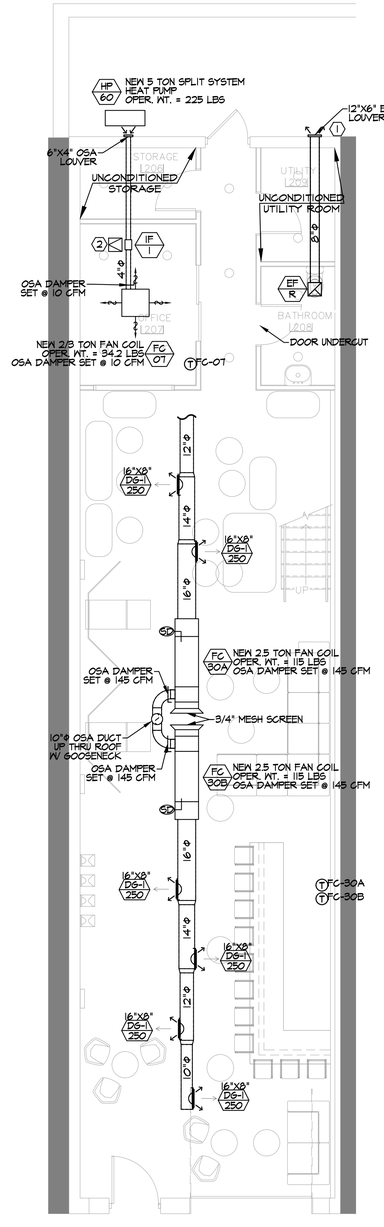
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GMEP
DATE
11/13/23
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JOB NO.
23-954
SHEET

M-1.3



HVAC MEZZANINE PLAN

SCALE: 3/16"=1'0"



HVAC CEILING PLAN

SCALE: 3/16"=1'0"

HVAC KEYED NOTES

1. KEEP 10FT CLEAR FROM ANY FRESH AIR INTAKES, 3FT FROM BUILDING OPENINGS, AND 3FT FROM PROPERTY LINES.
2. 12"X12" ACCESS PANEL PAINTED TO MATCH FINISH CEILING, FOR MAINTENANCE OF INLINE FAN IN HARD LID CEILING.

REVISIONS

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STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

PROJECT NAME:

1048 HERMOSA AVE
1048 HERMOSA AVE,
HERMOSA BEACH, CA 90254

SHEET TITLE

HVAC CEILING PLAN

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GMEP
DATE
11/13/23
SCALE
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23-954
SHEET

M-2.0

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BUILDING ENERGY ANALYSIS REPORT

PROJECT:

Drive SB
1048 Hermosa Ave.
Hermosa Beach, CA 90254

Project Designer:

D'Agostino Construction and Development
531 Main St. #956
El Segundo, CA 90245
310.740.3596

Report Prepared by:

Nathaniel Grey
GMEP Engineers
7491 Talbert Ave.
Huntington Beach, CA 92648
949.267.9095

Job Number:

23-954

Date:

11/13/2023

The EnergyPro computer program has been used to perform the calculations summarized in this compliance report. This program has approval and is authorized by the California Energy Commission for use with both the Residential and Nonresidential 2022 Building Energy Efficiency Standards.

This program developed by EnergySoft, LLC – www.energysoft.com.

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 1 of 14)**

Project Name:	**Drive SB**	**Date Prepared:**	**2023-11-13**

A. General Information

1	Project Name	Drive SB			
2	Run Title	Title 24 Analysis			
3	Project Location	1048 Hermosa Ave.			
4	City	Hermosa Beach	**5**	Standards Version	Compliance 2022
6	Zip code	90254	**7**	Compliance Software (version)	EnergyPro 9.2
8	Climate Zone	6	**9**	Building Orientation (deg)	225
10	Building Type(s)	• Nonresidential	**11**	Weather File	LOS-ANGELES-INTL_STYP20.epw
12	Project Scope	• Existing alteration	**13**	Number of Dwelling Units	0
14	Total Conditioned Floor Area in Scope (ft^2)	1853	**15**	Total # of hotel/motel rooms	0
16	Total Unconditioned Floor Area (ft^2)	0	**17**	Fuel Type	Natural gas
18	Nonresidential Conditioned Floor Area	1853	**19**	Total # of Stories (Habitable Above Grade)	1
20	Residential Conditioned Floor Area	0			

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 2 of 14)**

B. PROJECT SUMMARY

Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within the permit application.

Building Components Complying via Performance						**Building Components Complying Prescriptively**	
Envelope (See Table G)	Nonres	Performance	Solar Thermal Water Heating (See Table I3)	☐	Performance	The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E).	
	MultiFam	Not Included		☒	Not Included		
Mechanical (See Table H)	Nonres	Performance	Covered Process: Commercial Kitchens (see Table J)	☐	Performance	Indoor Lighting (Unconditioned) 140.6 & 170.2(e)	NRCC-LTI-E is required
	MultiFam	Not Included		☒	Not Included	Outdoor Lighting 140.7 & 170.2(e)	NRCC-LTO-E is required
Domestic Hot Water (See Table I)	Nonres	Not Included	Covered Process: Laboratory Exhaust (see Table J)	☐	Performance	Sign Lighting 140.8 & 170.2(e)	NRCC-LTS-E is required
	MultiFam	Not Included		☒	Not Included	**Building Components Complying with Mandatory Measures**	
Lighting (Indoor Conditioned, see Table K)	Nonres	Performance	Photovoltaics (see Table F)	☐	Performance	Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)	
	MultiFam	Not Included		☒	Not Included	Electrical Power Distribution 110.11	NRCC-ELC-E is required
			Battery (see Table F)	☐	Performance	Commissioning 120.8	NRCC-CXR-E is required
				☒	Not Included	Solar and Battery 110.10	NRCC-SAB-E is required

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 3 of 14)**

C1. COMPLIANCE SUMMARY

COMPLIES[3]

	Time Dependent Valuaton (TDV)		**Source Energy Use**
	Efficiency[1] (kBtu/ft^2 - yr)	**Total[2] (kBtu/ft^2 - yr)**	**Total[2] (kBtu/ft^2 - yr)**
Standard Design	384.66	n/a	n/a
Proposed Design	277.34	n/a	n/a
Compliance Margins	**107.32**	**n/a**	**n/a**
	Pass	**n/a**	**n/a**

[1] Efficiency measures include improvements like a better building envelope and more efficient equipment
[2] Compliance Totals include efficiency, photovoltaics and batteries
[3] New Construction, Complete Addition Scope: Building complies when all efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded
Existing, Addition and Alteration Scope: Building complies when efficiency compliance margin is greater than or equal to zero and unmet load hour limits are not exceeded

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 4 of 14)**

C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft^2 - yr)

COMPLIES[2]

Energy Component	**Standard Design (TDV)**	**Proposed Design (TDV)**	**Compliance Margin (TDV)[1]**
Space Heating	0.52	14.62	-14.1
Space Cooling	48.37	39.94	8.43
Indoor Fans	161.9	48.91	112.99
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	113.11	113.11	0
Indoor Lighting	60.76	60.76	0
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**384.66**	**277.34**	**107.32 (27.9%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**384.66**	**277.34**	**107.32 (27.9%)**

[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.

REVISIONS

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MECHANICAL
STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

PROJECT NAME:

1048 HERMOSA AVE
1048 HERMOSA AVE,
HERMOSA BEACH, CA 90254

SHEET TITLE

TITLE 24 FORMS

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JOB NO.
23-954
SHEET

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C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Receptacle	71.7	71.7	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**456.36**	**349.04**	**107.32 (23.5%)**

[1] Notes: This table is not used for Energy Code Compliance.

C6. 'ABOVE CODE' QUALIFICATIONS

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2

C7. ENERGY USE SUMMARY

Energy Component	Standard Design Site (MWh)	Proposed Design Site (MWh)	Margin (MWh)	Standard Design Site (MBtu)	Proposed Design Site (MBtu)	Margin (MBtu)
Space Heating	---	0.9	---	0.3	---	---
Space Cooling	2.2	1.9	0.3	---	---	---
Indoor Fans	10.7	3.2	7.5	---	---	---
Heat Rejection	---	---	---	---	---	---
Pumps & Misc.	---	---	---	---	---	---
Domestic Hot Water	---	---	---	82.2	82.2	0
Indoor Lighting	4	4	0	---	---	---
Flexibility	---	---	---	---	---	---
EFFICIENCY TOTAL	**16.9**	**10**	**6.9**	**82.5**	**82.2**	**0.3**
Photovoltaics	---	---	---	---	---	---
Batteries	---	---	---	---	---	---
ENERGY USE SUBTOTAL	**16.9**	**10**	**6.9**	**82.5**	**82.2**	**0.3**
Receptacle	4.7	4.7	0	---	---	---
Process	---	---	---	---	---	---
Other Ltg	---	---	---	---	---	---
Process Motors	---	---	---	---	---	---
ENERGY USE TOTAL	**21.6**	**14.7**	**6.9**	**82.5**	**82.2**	**0.3**

C8. ENERGY USE INTENSITY (EUI)

	Standard Design (kBtu/ft² / yr)	Proposed Design (kBtu/ft² / yr)	Margin (kBtu/ft² / yr)	Margin Percentage
GROSS EUI[1]	84.3	71.43	12.87	15.27
NET EUI[1]	84.3	71.43	12.87	15.27

[1] Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.

D1. EXCEPTIONAL CONDITIONS

- The project uses the Simplified Geometry Performance Modeling Approach which is not capable of modeling daylighting controls and assumes the prescriptive Secondary Daylit Control requirements are met. PRESCRIPTIVE COMPLIANCE documentation (form NRCC-LTI-02-E) for the requirements of section 140.6(d) Automatic Daylighting Controls in Secondary Daylit Zones is required.
- The building does not include service water heating. Verify that service water heating is not required and is not included in the design.

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01	02	03	04
Opaque Surfaces & Orientation	**Total Gross Surface Area (ft²)**	**Total Fenestration Area (ft²)**	**Window to Wall Ratio (%)**
North-Facing[1]	784	122	15.56
East-Facing[2]	0	0	0
South-Facing[3]	0	0	0
West-Facing[4]	0	0	0
Total	**784**	**122**	**15.56**
Roof	1853	0	0

Notes
[1]North-Facing is oriented to within 45 degrees of true north, including 45 00'00" east of north (NE), but excluding 45 00'00" west of north (NW),
[2]East-Facing is oriented to within 45 degrees of true east, including 45 00'00" south of east (SE), but excluding 45 00'00" north of east (NE),
[3]South-Facing is oriented to within 45 degrees of true south, including 45 00'00" west of south (SW), but excluding 45 00'00" east of south (SE),
[4]West-Facing is oriented to within 45 degrees of true west, including 45 00'00" north of west (NW), but excluding 45 00'00" south of west (SW),

G4. NONRESIDENTIAL AIR BARRIER

01	02
Building Story Name	**Air Barrier**
Com-Floor 1	No air barrier

G5. OPAQUE SURFACE ASSEMBLY SUMMARY

01	02	03	04	05	06		07	08	09	10
Surface Name	**Construction Type**	**Area (ft²)**	**Framing Type**	**Cavity R-Value**	**Continuous R-Value**		**Units**	**Value**	**Description of Assembly Layers**	**Status[1]**
					Interior	**Exterior**				
Slab On Grade6	Underground Floor	1,853	N/A	0	N/A	N/A	F-factor	0.73	Slab Type =Unheated slab on grade Insulation Orientation =None Insulation R-Value =none	E
R-30 Roof Cathedral8	Roof	1,853	Wood	30	N/A	N/A	U-factor	0.0338	AsphaltShingles0_25In Vapor permeable felt - 1/8 in. Plywood - 1/2 in. Air - Cavity - Wall Roof Ceiling - 4 in. or more Composite-1 Gypsum Board - 5/8 in.	E
R-13 Wall10	Exterior Wall	392	Wood	13	N/A	N/A	U-factor	0.1001	Stucco - 7/8 in. Vapor permeable felt - 1/8 in. Composite-2 Gypsum Board - 5/8 in.	E
R-19 Wall14	Exterior Wall	392	Wood	19	N/A	N/A	U-factor	0.0716	Stucco - 7/8 in. Vapor permeable felt - 1/8 in. Composite-3 Gypsum Board - 5/8 in.	A
R-13 Wall101	Interior Wall	3,140	Wood	13	N/A	N/A	U-factor	0.0939	Stucco - 7/8 in. Vapor permeable felt - 1/8 in. Composite-2 Gypsum Board - 5/8 in.	E

[1] Status: N - New, A - Altered, E - Existing

G6A. OPAQUE DOOR SUMMARY (NONRESIDENTIAL)

01	02	03	04
Assembly Name	**Area (ft²)**	**Overall U-factor**	**Status[1]**
Metal Door12	21	0.7	E

[1] Status: N - New, A - Altered, E - Existing

G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)

01	02	03	04	05	06	07	08	09
Fenestration Assembly Name	**Fenestration Type/ Product Type / Frame Type**	**Certification Method[1]**	**Assembly Method**	**Area (ft²)**	**Overall U-factor**	**Overall SHGC**	**Overall VT**	**Status[2]**
Low E	Vertical fenestration Fixed window N/A	NFRC	Site built	122	0.37	0.3	0.5	N

[1] Notes: Newly installed fenestration shall have a certified NFRC Label Certificate or use the CEC default tables found in Table 110.6-A and Table 110.6-B. Center of Glass (COG) values are for the glass-only, determined by the manufacturer, and are shown for ease of verification. Site-built fenestration values are calculated per Nonresidential Appendix NA6 and are used in the analysis.
[2] Status: N - New, A - Altered, E - Existing

H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)

01	02	03	04	05	06	07	08	09	10	11	12
			Heating				**Cooling**				
Equipment Name	**Equipment Type**	**Qty**	**Total Heating Output (kBtu/h)**	**Supp Heat Output (kBtu/h)**	**Efficiency Unit**	**Efficiency**	**Total Cooling Output (kBtu/h)**	**Efficiency Unit**	**Efficiency**	**Economizer Type (if present)**	**Status[1]**
Daikin RXTQ60TBVJUA	Single Zone Heat Pump (SZHP) Air System	1	59.37	0	COP HSPF2	3.75 8.5	54.73	EER2 SEER2	8.5 15.5	No Economizer	N

[1] Status: N - New, A - Altered, E - Existing

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

REGISTERED PROFESSIONAL ENGINEER GANGYI ZHOU No. M34279 Exp.12-31-2024 MECHANICAL STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

PROJECT NAME:
1048 HERMOSA AVE
1048 HERMOSA AVE,
HERMOSA BEACH, CA 90254

SHEET TITLE
TITLE 24 FORMS

DRAWN GMEP
CHECKED GMEP
DATE 11/13/23
SCALE AS NOTED
JOB NO. 23-954
SHEET T-24.1

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections made by Documentation Author indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP).

Building Component	Form/Title
Mechanical	NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap
Mechanical	NRCA-MCH-03-A - Constant Volume Single Zone HVAC

N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

There are no Certificates of Verification applicable to this project

K1. INDOOR CONDITIONED LIGHTING GENERAL INFO

01	02	03	04	05	06
Occupancy Type[1]	Conditioned Floor Area[2] (ft²)	Installed Lighting Power (Watts)	Lighting Control Credits (Watts)	Additional (Custom) Allowance	
				Area Category Footnotes (Watts)	Area Category Footnotes (Watts)
Dining - Bar/Fine	1853	833.85	0	0	0
Building Totals:	**1853**	**833.85**	**0**	**0**	**0**

[1] *See Table 140.6-C*
[2] *See NRCC-LTI--E for unconditioned spaces*
[3] *Lighting information for existing spaces modeled is not included in this table*

K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL

See NRCC-LTI-E for mandatory controls

L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Envelope	NRCI-ENV-01-E - Must be submitted for all buildings
Envelope	NRCI-ENV-E - Envelope (for all buildings)
Mechanical	NRCI-MCH-01-E - Must be submitted for all buildings
Mechanical	NRCI-MCH-E - For all buildings with Mechanical Systems
Indoor Lighting	NRCI-LTI-E - Indoor Lighting (for all buildings)

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections made by Documentation Author indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP).

Building Component	Form/Title
Envelope	NRCA-ENV-02-F - NRFC label verification for fenestration

H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12	13
Name or Item Tag	Qty	Design OA CFM	Supply Fan				Return / Relief Fan					Status[1]
			CFM	Power	Power Units	Control	Fan Type	CFM	Power	Power Units	Control	
Daikin RXTQ60TBVJUA	1	926.5	2,000	0.5	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N

[1] *Status: N - New, A - Altered, E - Existing*

H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION

01	02	03	04	05	06	07
Zone Name	Mechanical Ventilation				Conditioned Area (sf)	DCV or Occupant Sensor Controls, or Both
	Ventilation Function	# of People	Supply OA CFM	Exhaust CFM		
1-Drive SB	Food Service - Bars, cocktail lounges	61.77	926.5	0	1853	N/A

H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12
System ID	System Type	Qty	Rated Capacity (kBtuh)		Airflow (cfm)			Fan			VSD
			Heating	Cooling	Design	Min.	Min. Ratio	Power	Power Units	Cycles	
1-Drive SB-Trm	Uncontrolled	1	N/A	N/A	2,000	N/A	0	N/A	N/A	N/A	☐

Documentation Author's Declaration Statement

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

Documentation Author Name: Nathaniel Grey	Documentation Author Signature: Nathaniel Grey
Company: GMEP Engineers	Signature Date: 11/13/23
Address: 7491 Talbert Ave.	CEA/HERS Certification Identification (if applicable):
City/State/Zip: Huntington Beach, CA 92648	Phone: 949.267.9095

Responsible Person's Declaration statement

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

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I understand that a registered copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to accomplish this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

Responsible Designer Name:	Responsible Designer Signature:	
Company: D'Agostino Construction and Development		
Address: 531 Main St. #956	Date Signed:	
City/State/Zip: El Segundo, CA 90245	License #:	
Phone: 310.740.3596	Title:	Scope:
Responsible Designer Name: Gary Zhou	Responsible Designer Signature: Gary Zhou	
Company: GMEP Engineers		
Address: 26439 Rancho Pkwy., Ste. 120	Date Signed: 11/13/23	
City/State/Zip: Lake Forest, CA 92630	License #: M34279	
Phone: 949.267.9095	Title: MECHANICAL ENG.	Scope: MECHANICAL ENG.

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

REGISTERED PROFESSIONAL ENGINEER — GANGYI ZHOU — No. M34279 — Exp.12-31-2024 — MECHANICAL — STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel 949-267-9095

PROJECT NAME:
1048 HERMOSA AVE
1048 HERMOSA AVE,
HERMOSA BEACH, CA 90254

SHEET TITLE
TITLE 24 FORMS

DRAWN: GMEP
CHECKED: GMEP
DATE: 11/13/23
SCALE: AS NOTED
JOB NO.: 23-954
SHEET: T-24.2

LIGHTING FIXTURE SCHEDULE

MARK	LEGEND	VOLT	COUNT	MOUNT	DESCRIPTION	MANUFACTURER	MODEL NUMBER	LAMPS	INPUT WATTS	NOTES
A 29		120	8	PENDANT	22" PENDANT 3000K COLOR TEMP ELV.TRIAC DIMMING	WAC LIGHTING	PD-45322-BK/GO	LED	29	OR APPROVED EQUAL
B 22.1	EM	120	13	RECESSED	4" RECESSED DOWNLIGHT LED 3500K COLOR TEMP 0-10V DIMMING, EM DENOTES EMERGENCY BACKUP BATTERY 90 MIN	LITHONIA	LDN4 35/20 L04 AR LSS MVOLT GZ10 EIONCP	LED	22.1	OR APPROVED EQUAL
EM 12		120	2	SURFACE	EMERGENCY LIGHTING W/ 90 MINUTE BATTERY PACK	LITHONIA	ELM6L	LED	12	OR APPROVED EQUAL
X 3		120	2	SURFACE	EXIT SIGN W/ 90 MINUTE BATTERY PACK	LITHONIA	LQM	LED	3	OR APPROVED EQUAL

NOTES:
1) VERIFY WITH OWNER OR ARCHITECT BEFORE PURCHASING THE LIGHTING FIXTURES.
2) LIGHTING ABOVE FOOD OR UTENSILS SHALL BE SHATTERPROOF.

ELECTRICAL WIRING METHODS

a) FOR UNDERGROUND AND EXPOSED UP TO +5'-0", OR DAMP LOCATION, THE CONDUIT SHALL BE RIGID STEEL GALVANIZED IMC. NO RUNNING THREADS ARE PERMITTED.

b) GALVANIZED EMT SHALL BE USED IN DRY CONCEALED LOCATIONS AND EXPOSED ABOVE +5'-0". EMT CONNECTORS SHALL BE WATERTIGHT COMPRESSION TYPE.

c) GALVANIZED FLEXIBLE CONDUIT SHALL BE USED ONLY FOR MOTOR AND FIXTURE CONNECTIONS IN LENGTHS NOT TO EXCEED 6'.

d) CONDUITS PENETRATING THE ROOF SHALL BE FLASHED AND COUNTER FLASHED.

e) PVC SCHEDULE 40 MAY BE USED UNDER FLOOR SLABS OR UNDERGROUND WITH GROUND WIRE. PVC UNDERGROUND TO HAVE 24 INCH COVER.

f) SERVICE CONDUITS SHALL BE PVC SCHEDULE 40 OR AS SPECIFIED BY UTILITY COMPANIES.

g) INSTALL FITTINGS, SPECIAL DEVICES AND MATERIAL, WHICH MAY BE REQUIRED FOR THE PROPER INSTALLATION OF THE CONDUIT SYSTEM.

h) REFER TO NEC 300.5 FOR UNDERGROUND INSTALLATION REQUIREMENTS AND DETAILS; NEC 300.6 FOR CORROSION AND DETERIORATION AREAS.

LIGHTING FIXTURE NOTES

a) ALL EQUIPMENTS MUST BE U.L. LISTED. NO EXCEPTION.

b) AUTO-RESETTING THERMAL PROTECTION MUST BE PROVIDED WHEREAS RECESSED INCANDESCENT LIGHTING FIXTURES ARE INSTALLED IN GYPBOARD CEILINGS.

c) PROVIDE UL LISTED THERMAL BARRIER WHEREAS LIGHTING FIXTURES IN CONTACT WITH INSULATION. OR PROVIDE 3" MINIMUM CLEARANCE.

d) WHEN LIGHTING FIXTURES ARE INSTALLED IN FIRE RATED CEILINGS OR WALLS, AN APPROVED FIRE RESISTIVE MANNER CONSISTENT WITH FIRE RATING OF CEILING OR WALLS MUST BE PROVIDED. NO EXCEPTION.

e) REFER TO LATEST ARCHITECTRAL REFLECTED CEILING PLAN FOR EXACT LIGHTING FIXTURE LOCATIONS.

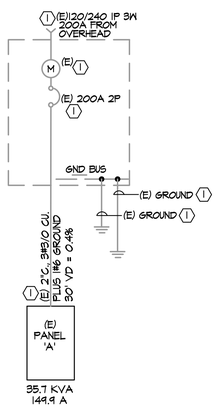
f) CONFIRM WITH ARCHITECTURE FOR LIGHTING FIXTURE SPECIFICATIONS PRIOR TO ANY ORDER. NO EXCEPTION.

g) ALL FLUORESCENT LIGHTING FIXTURES MUST BE EQUIPPED WITH INTERNAL SWITCH TO DISCONNECT ALL CONDUCTORS TO BALLAST FROM THE SOURCE SIMULTANEOUSLY, INCLUDING THE GROUNDED CONDUCTOR IF ANY.

h) LIGHTING STANDARDS REQUIRE A SEPARATE PERMIT. ALL SIGN REQUIRE SEPARATE PERMITS AND APPROVALS ALSO. NO EXCEPTION.



KEY PLAN
SCALE:NONE



ELECTRICAL SINGLE LINE
SCALE: NONE

SINGLE-LINE DIAGRAM GENERAL NOTES

a) ALL CONDUCTORS SHALL BE COPPER AS FOLLOWS:
#12 AWG AND SMALLER - SOLID, TW
#10 AWG AND LARGER - STRANDED, THWN, THHN OR XHHW
ALL CONDUCTORS SIZES ARE BASED ON 75°C TEMPERATURE RATING (NEC. 2020 TABLE 310.16)

b) ALL NEW CIRCUIT BREAKERS, FUSIBLE SWITCHES IN MAINSWITCHBOARD OR PANEL BOARDS SHALL BE SERIES RATED TO MATCH EXISTING AIC RATING OR APPROVED EQUAL OR 65KAIC, UNLESS NOTED OTHERWISE.

c) MOTOR CIRCUIT PROTECTORS SHALL NOT BE A PART OF A SERIES COMBINATION INTERRUPTING RATING.

d) SERIES COMBINATION AIC RATING SHALL NOT BE USED WHEN THE SECONDARY EQUIPMENT IN THE SERIES IS SUBJECTED TO A TOTAL CONNECTED FULL LOAD MOTOR CURRENT OF MORE THAN 1% OF ITS AIC RATING.

e) EQUIPMENT ENCLOSURES SHALL BE CLEARLY MARKED "CAUTION-SERIES RATED SYSTEM - 65KAMPS AVAILABLE, IDENTIFIED REPLACEMENT COMPONENTS REQUIRED", IN COMPLIANCE WITH 2022 CEC (2020 NEC) SECTION 110-22. END USE EQUIPMENT SHALL ALSO BE MARKED WITH THE HIGHER SERIES COMBINATION INTERRUPTING RATING AS PER 2022 CEC SECTION 240-83(C). NO EXCEPTION.

f) FUSES SHALL BE PROVIDED WITH REJECTION TYPE FUSE HOLDERS.

g) ELECTRICAL EQUIPMENT SHALL BE LISTED BY THE CITY, WHERE THE PROJECT IS LOCATED, RECOGNIZED ELECTRICAL TESTING LABORATORY OR APPROVED BY THE DEPARTMENT.

h) NO PIPING, DUCTS OR EQUIPMENT FOREIGN TO ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE LOCATED WITHIN THE DEDICATED SPACE ABOVE THE ELECTRICAL EQUIPMENT.

i) MAIN SERVICE WILL NOT ENERGIZED PRIOR TO THE BUILDING INSPECTOR'S RECEIPT OF A THIRD PARTY "NRTL" TESTING LABORATORY PERFORMANCE TEST CERTIFICATION FOR THE SERVICE GROUND FAULT PROTECTION. 2020 NEC 230.95

SINGLE DIAGRAM KEYED NOTES

(1) THE EQUIPMENT SHOWN IS EXISTING UNDER A PREVIOUS APPROVED CONSTRUCTION PERMIT, NOT A PART OF THIS SUBMITTAL, UNLESS NOTED AS NEW.

CAUTION

GMEP ENGINEERS SHALL NOT BE RESPONSIBLE FOR ANY ELECTRICAL CHANGE ORDERS THAT MAY OCCUR SHOULD FINAL BIDS AND/OR CONSTRUCTION BASED ON THESE DOCUMENTS BE STARTED PRIOR TO ELECTRICAL PLAN CHECK APPROVAL.

ALL WORK TO COMPLY WITH THE 2022 CBC, CPC AND CMC AND THE 2022 CEC (2020 NEC) WITH STATE AND LOCAL AMENDMENTS.

ALL EQUIPMENTS SHALL BE U.L. LISTED AND INSTALLED ACCORDING TO THE LISTING.

CONDUCTORS:
ALL CONDUCTORS SHALL BE COPPER AS FOLLOWS:
#12 AWG AND SMALLER - SOLID, TW
#10 AWG AND LARGER - STRANDED, THWN, THHN OR XHHW
ALL CONDUCTORS SIZES ARE BASED ON 75°C TEMPERATURE RATING (NEC. 2020 TABLE 310.16)

MOUNTING HEIGHT FOR RECEPTACLES AND CONTROL DEVICES:

a) THE BOTTOM OF ELECTRICAL AND COMMUNICATION RECEPTACLES INTENDED TO BE USED BY THE OCCUPANT SHALL BE LOCATED NO LESS THAN 15". [ADA ACCESSIBITY GUIDELINES 4.27.3]

b) RECEPTACLE OUTLETS SHALL BE LOCATED ABOVE, BUT NOT MORE THAN 20 IN. ABOVE, THE COUNTERTOP. SUGGESTION HEIGHT IS 6" [NEC 210.52.C(5)]

c) THE TOP OF SWITCHES SHALL BE INSTALLED NOT LESS THAN 36" NOR MORE THAN 46" ABOVE THE FINISH FLOOR.

d) THERMOSTAT CONTROLS SHALL BE LOCATED NOT LESS THAN 36" NOR MORE THAN 46" ABOVE FINISH FLOOR LINE.

IMPORTANT BID NOTES:

a) DUE TO THE SMALL SCALE OF DRAWINGS, IT IS NOT ALWAYS POSSIBLE TO SHOW ALL DEVICES WHICH MAYBE REQUIRED. CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL EXISTING CONDITIONS BEFORE SUBMITTING HIS BID. NO ADDITIONAL COMPENSATION WILL BE MADE FOR EXTRA DUE TO CONTRACTOR'S FAILURE TO VISIT THE JOB SITE AND/OR FAILURE TO DETERMINE ALL EXISTING CONDITIONS BEFORE SUBMITTING HIS BID.

b) REFER TO COMPLETE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR ADDITIONAL NOTES, SPECIFICATIONS, DETAILS, CONTROLS, ETC. REPORT TO ARCHITECTURE IMMEDIATELY IF ANY CONFLICTS OCCUR BETWEEN THE DRAWINGS AND INCLUDE ALL COST PER ARCHITECTURE'S CLARIFICATION IN BASE BID. THIS REQUIREMENT WILL BE STRICTLY ENFORCED. NO CHANGE ORDERS WILL BE ALLOWED IF THE CONTRACTOR FAILS TO PERFORM THIS FUNCTION.

DEMOLITION NOTES

a) THE DRAWINGS SHOW THE WORK TO BE IN PLACE AT THE COMPLETION OF INSTALLATION. MAKE NECESSARY ALTERNATIONS TO COORDINATE AND CONNECT THE EXISTING ELECTRICAL WORK WITH THE NEW SUCH THAT, WHEN THE WORK IS DONE, THE ENTIRE ELECTRICAL INSTALLATION, EXISTING AND NEW, IS IN COMPLETE OPERATING CONDITION.

b) UNLESS SPECIFICALLY NOTED ON THE CONTRARY, ALL EXISTING LIGHTING FIXTURES, SWITCHES, CONTROLS AND OTHER MATERIALS OR EQUIPMENTS WHICH ARE REPLACED BY NEW AND ARE NOT INDICATED TO BE REUSED SHALL BE RETURNED TO THE OWNER OR BE DISPOSED AS DIRECTED BY THE OWNER.

c) EXISTING MATERIAL TO REMAIN UPON COMPLETION IS INDICATED ON DRAWINGS AS EXISTING. FEEDERS (CONDUIT AND WIRES) ARE EXISTING TO THEIR RESPECTIVE SOURCE. ALTHOUGH NOT INDICATED ON THE DRAWINGS, TEMPORARY REMOVAL OR RE-ROUTE CONDUITS AND REPLACE EXISTING WIRES WITH NEW DURING CONSTRUCTION WORK MAYBE REQUIRED.

d) PROVIDE AND INSTALL NEW COVER PLATES FOR ALL REMOVED OUTLETS, SWITCHES, LIGHT FIXTURES, AND OTHER ELECTRICAL DEVICES WHEN THE OUTLET BOX IS TO REMAIN.

e) REMOVE ALL EXISTING ABANDONED FEEDERS (CONDUITS AND WIRES) BACK TO PANEL BOARDS. LABEL NEW PANEL DIRECTORY AS "SPARE".

f) MAINTAIN CONTINUITY OF ALL ELECTRICAL SYSTEMS, EQUIPMENT, ETC., FED BY ABANDONED OUTLET. THEY SHOULD BE IN OPERATION AFTER THE WORK IS DONE. MAINTAINING CONTINUITY SHALL CONSIST OF RE-ROUTING OF CONDUIT AND WIRING, AS REQUIRED TO SUIT THE EXISTING CONDITIONS.

g) DASHED J-BOX DENOTES APPROXIMATE LOCATION OF EXISTING BOXES IN ACCESSIBLE CEILING SPACE. ALL CONDUIT SHOWN FROM J-BOX IS NEW UNLESS SHOWN OTHERWISE AS DASHED. REFER TO ELECTRICAL SYMBOL LIST.

h) EXISTING LOADS SHOWN ON PANEL SCHEDULES ARE BASED ON ASSUMPTIONS MADE BY FIELD VISIT, ELECTRICAL BILLS OR PUBLIC RESOURCES. NOTIFY ENGINEER IMMEDIATELY IF LOADS EXCEED 16 AMPS ON ANY 20A/1P CIRCUIT. NO EXCEPTION.

i) CAREFULLY REVIEW ARCHITECT'S DEMO DRAWINGS FOR LOCATION OF WALLS BEING REMOVED UNDER THIS SCOPE OF THIS WORK AND REMOVE ALL FEEDERS (CONDUITS AND WIRES) BACK TO LAST DEVICE LEFT IN SERVICE. DO NOT LEAVE ABANDONED.

j) CAREFULLY REVIEW ARCHITECT'S DEMO DRAWINGS FOR EXISTING FLOOR BOXES BEING REMOVED UNDER THIS SCOPE OF WORK. REMOVE FLOOR BOXES AND ALL FEEDERS (CONDUITS AND WIRES) BACK TO LAST DEVICE LEFT IN SERVICE. DO NOT LEAVE ABANDONED.

GENERAL ELECTRICAL NOTES

a) VERIFY IN FIELD. ADJUST THE LOCATIONS OF HOMERUNS AND CIRCUIT NUMBERS ACCORDING TO EXISTING CONDITIONS IF NEEDED. COMMUNICATE WITH ENGINEER IF DESIGN SHOULD BE ALTERNATED. NO EXCEPTION.

b) IDENTIFY ANY OBVIOUS EXISTING CODE VIOLATIONS THAT OCCURS AS AN EXISTING CONDITION AND PROVIDE SEPARATE PRICING TO CORRECT THE CONDITION SO THAT IN THE END, THE ENTIRE ELECTRICAL INSTALLATION COMPLIES WITH THE NATIONAL ELECTRICAL CODE AND ALL OTHER LOCAL CODES.

c) IF THERE IS ANY DEVIATION FROM THE CIRCUITRY SHOWN, PROVIDE AS-BUILT DRAWINGS INDICATING SUCH.

d) AT THE COMPLETION OF CONSTRUCTION WORK, AND PRIOR TO THE FINAL REVIEW BY THE ARCHITECT, PROVIDE PANEL DIRECTORIES IN PANELBOARD FRONTS REFLECTING ALL CHANGES MADE DURING CONSTRUCTION.

e) THIS DOCUMENT IS NOT FOR BID OR CONSTRUCTION UNTIL THE PLAN HAS BEEN REVIEWED AND APPROVED BY ALL AUTHORITIES HAVING JURISDICTION AND THE PERMIT IS OBTAINED. NO COMPENSATION WILL BE MADE FOR ADDITIONAL WORK DUE TO THE VIOLATION OF THIS REQUIREMENT.

ELECTRICAL SYMBOL LIST

SYMBOL	DESCRIPTION
	SECTION 1. SYMBOLS FOR CONDUITS
←	HOMERUN TO PANEL OR EQUIPMENT AS NOTED
———	CONDUIT RUN CONCEALED IN WALL OR ABOVE FINISHED CEILING OR AS NOTED BRANCH CIRCUIT, 2#12 IN 1/2" CONDUIT OR AS NOTED OR SYMBOLIZED AS: —//— 1/2"C.-3 #12 —//— 3/4"C.-6 #12 —//— 1/2"C.-4#12 —//— 3/4"C.-7 #12 —//— 3/4"C.-5#12 —//— 3/4"C.-8#12
– – – –	CONDUIT IN OR UNDER SURFACE AS NOTED, 3/4" MINIMUM SIZE.
——3——	CONDUIT RUN WITH EQUIPMENT GROUNDING CONDUCTOR, SAME SIZE AS CIRCUIT CONDUCTORS, OR AS NOTED.
——3/G——	CONDUIT RUN WITH ISOLATED GROUNDING CONDUCTOR, SAME SIZE AS CIRCUIT CONDUCTORS, OR AS NOTED.
—EM—	CONDUIT WITH EMERGENCY CIRCUIT
—X—	EXISTING CONDUIT TO REMAIN.
—R—	EXISTING CONDUIT TO BE REMOVED.
	SECTION 2. EQUIPMENTS
A	ELECTRICAL PANELBOARD, FLUSH OR SURFACE MOUNTED AS INDICATED LETTERED BALLOON INDICATES DESIGNATION
	JUNCTION BOX, ABOVE CEILING, TYPICALLY USED FOR LIGHTING
	JUNCTION BOX, ABOVE CEILING, OR AS REQUIRED TO SUIT THE APPLICATION
	APPROXIMATE LOCATION OF EXISTING J-BOX IN ACCESSIBLE CEILING SPACE
	DATA OUTLET IN WALL +18" OR AS NOTED. SINGLE GANG OUTLET BOX WITH 3/4" CONDUIT AND PULL WIRE TO ACCESSIBLE CEILING SPACE.
	COMBINATION TELE/DATA OUTLET BOX, +18" OR AS NOTED. SINGLE GANG OUTLET WITH 3/4" CONDUIT AND PULL WIRE TO ACCESSIBLE CEILING SPACE.
	WALL MOUNTED 2 HOUR BY PASS TIMER (TORK #A500 SERIES)
$EXH	EXHAUST FAN SWITCH, +48" OR AS NOTED ON MECHANICAL DRAWINGS
	EXHAUST FAN, F.B.M., WIRED BY ELECTRICAL
	FUSED DISCONNECT SWITCH, SIZE AND FUSED AS NOTED ON PLAN
$	SINGLE POLE SWITCH, +42" OR AS NOTED
HD	WALL MOUNTED DIMMER, 1000 WATT RATING OR AS NOTED. HEIGHTMOUNTING +42" A.F.F. OR AS NOTED.
HD O.S.	WALL MOUNTED DIMMER W/ OCCUPANCY SENSOR. LUTRON MAESTRO OR APPROVED EQUAL, HEIGHTMOUNTING +42" A.F.F. OR AS NOTED.
	SECTION 3. RECEPTACLES
	DUPLEX RECEPTACLE FLUSH IN FLOOR BOX WITH DUPLEX HINGE COVERS
	DUPLEX RECEPTACLE IN WALL 120V, 20AMPS, +18" A.F.F, 3" ABOVE COUNTER OR AS NOTED.
	TWO-GANG DUPLEX RECEPTACLE (QUADPLEX) IN WALL, +18" A.F.F OR AS NOTED
GFI	GFI DUPLEX RECEPTACLE IN WALL, +42" A.F.F OR AS NOTED
	DUPLEX RECEPTACLE (20 AMP) +18" OR AS NOTED (ON A SEPARATE CIRCUIT)
	SPECIAL RECEPTACLE NEMA TYPE AS DESIGNATED, +18" OR AS NOTED
	FLUSH POKE THRU COMBINATION TELE/DATA AND DUPLEX
	DUPLEX PLUG RECEPTACLE, 120V, 20A, SHADED SIDE INDICATES "ISOLATED GROUND" TYPE DUPLEX ECEPTACLE. 18"A.F.F, 3" ABOVE COUNTER OR AS NOTED, DEVICE TO BE "ORANGE" IN COLOR.
	SECTION 4. SENSORS
D	WALL MOUNTED DUAL TECHTWO MOTION SENSOR (THE WATT STOPPER "WA-300").OR EQUIVALENT.
	SECTION 5. MISCELLANEOUS
(#)	REFERENCE TO PLAN NOTES
• UP	CONDUIT STUBBED UP
° DN	CONDUIT STUBBED DOWN
(E)	DENOTES EXISTING TO REMAIN
(N)	DENOTES NEW TO MATCH EXISTING
(R)	DENOTES EXISTING RELOCATED DEVICE AT NEW LOCATION

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

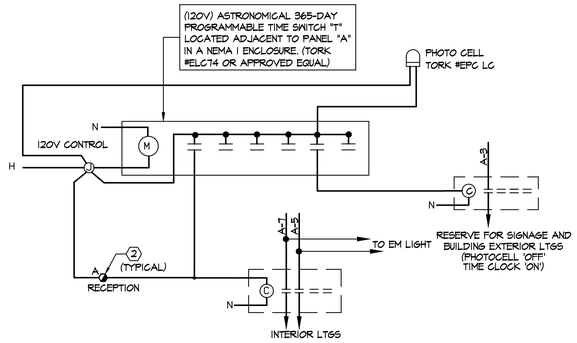
REGISTERED PROFESSIONAL ENGINEER
GANGYI ZHOU
No. 018959
Exp.12-31-2025
ELECTRICAL
STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel 949-267-9095

PROJECT NAME:
1048 HERMOSA AVE
1048 HERMOSA AVE,
HERMOSA BEACH, CA 90254

SHEET TITLE
ELECTRICAL GENERAL NOTES & SINGLE LINE

DRAWN: GMEP
CHECKED: GMEP
DATE: 11/13/23
SCALE: AS NOTED
JOB NO.: 23-954
SHEET: E-1.0

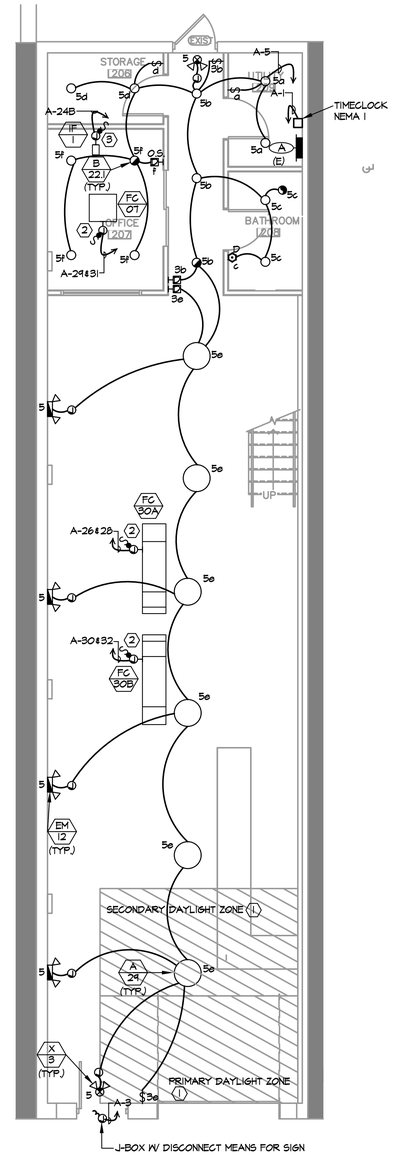


LIGHTING CONTROL KEYED NOTES

1. ELECTRICALLY HELD, REMOTE CONTROL LIGHTING CONTACTOR WITH QUANTITY OF POLES INDICATED. PROVIDE 120V COIL AND MOUNT IN RELAY CABINET. ASCO #4117 SERIES OR SQUARE D #8903 SERIES, TYPICAL, U.N.O.
2. 0-2 HOUR BY-PASS TIME SWITCH (TORK #LC1135M SERIES). REFER TO LIGHTING PLAN FOR LOCATIONS. VERIFY WITH OWNER/ARCHITECT BEFORE ROUGH-IN.
3. PROVIDE A WALL MOUNTED, NEMA 1 RELAY CABINET, SIZE AS REQUIRED, WITH HINGED AND LOCK DOOR. MOUNT CABINET ABOVE PANEL. ALL LIGHTING CONTRACTORS AND RELAYS DESCRIBED HEREIN SHALL MOUNT IN THIS CABINET. CONFIRM CABINET DIMENSION WITH RELAY SUPPLIER PRIOR TO PRICING.
4. ASTRONOMICAL TIME CLOCK AND OVERRIDE SWITCH CONTROL CIRCUIT MUST BE ON THE SAME DEDICATED CIRCUIT. NO EXCEPTION.

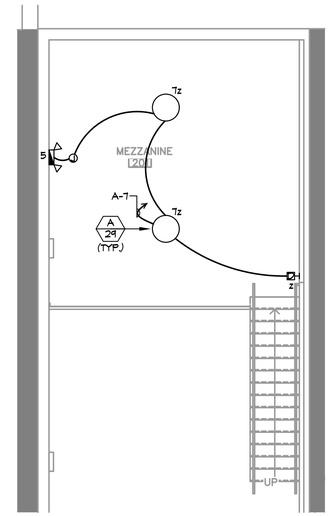
AFTERHOUR LIGHTING CONTROL DIAGRAM

SCALE: NONE



ELECTRICAL LIGHTING PLAN - 1ST FLOOR

SCALE: 3/16"=1'-0"



ELECTRICAL LIGHTING PLAN - MEZZANINE FLOOR

SCALE: 3/16"=1'-0"

ELECTRICAL LIGHTING KEYED NOTES

1. EXCEPTION 3 TO SECTION 130.1(D): ROOMS WITH COMBINED GENERAL LIGHTING WATTAGE UNDER 120W IN PRIMARY/SECONDARY DAYLIGHT ZONES ARE EXEMPT FROM DAYLIGHTING CONTROLS
2. PROVIDE J-BOX W/ 20A/2P MOTOR RATED SWITCH FOR CONNECTION TO FC-30A, FC-30B AND FC-07.
3. PROVIDE J-BOX W/ 20A/1P MOTOR RATED SWITCH FOR CONNECTION TO IF-1.

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

REGISTERED PROFESSIONAL ENGINEER
GANGYI ZHOU
No. 018959
Exp.12-31-2025
ELECTRICAL
STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel 949-267-9095

PROJECT NAME:

1048 HERMOSA AVE

1048 HERMOSA AVE,
HERMOSA BEACH, CA 90254

SHEET TITLE

ELECTRICAL LIGHTING PLAN

DRAWN: GMEP
CHECKED: GMEP
DATE: 11/13/23
SCALE: AS NOTED
JOB NO.: 23-954
SHEET: E-2.0

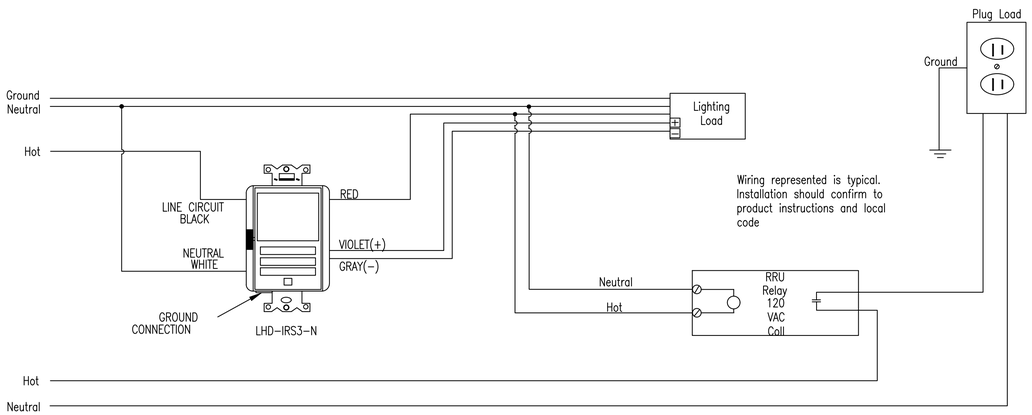
(EXISTING PANEL)

PANEL 'A' — LOCATION: UTILITY ROOM; MAIN (AMP): M.L.O.; BUS RATING: 200 AMPS; 120/240 V 1 Ø 3 W; MOUNTING: SURFACE

DESCRIPTION	VOLTAMPS ØA	VOLTAMPS ØB	LTG	REC	MISC	CKT NO	BKR	BUS ØA	BUS ØB	BKR	CKT NO	MISC	REC	LTG	VOLTAMPS ØA	VOLTAMPS ØB	DESCRIPTION
TIMECLOCK NEMA 1	400					1	20-1			20-1	2				360		UTILITY RM REC
SIGNAGE		1200				3	20-1			20-1	4					540	HALL REC
1ST FLOOR LTG	570					5	20-1			20-1	6				360		STORAGE REC
BAR INSTAHOT		2400				7	20-1			20-1	8					900	OFFICE REC
F1 SIM. 2A	1560					9	20-1			20-1	10				180		BATHROOM REC
F1 SIM. 2B		1560				11	20-1			20-1	12					720	FOH CONV. REC
F1 SIM. 4A – MEZZ.	1560					13	20-1			20-1	14				540		BAR RECS
F1 SIM. 4B – MEZZ.		1560				15	20-1			20-1	16					1560	F1 SIM. 1A
F1 SIM. 3A – MEZZ.	1560					17	20-1			20-1	18				1560		F1 SIM. 1B
F1 SIM. 3B – MEZZ.		1560				19	20-1			20-1	20					1200	SHOW WINDOW REC
BATHROOM INSTAHOT	2400					21	20-1			20-1	22				1200		GARBAGE DISPOSAL
MEZZ. CONV. REC		360				23A	1P-1			1P-1	24A					280	U/C FRIDGE + CONV. REC
HP SERVICE REC		180				23B	1P-1			1P-1	24B					50	P-1
HP-60	3492					25	35/3			15/3	26				588		FC-30A
----		3492				27	/2			/2	28					588	----
FC-07	36					29	15/1			15/1	30				588		FC-30B
----		36				31	/2			/2	32					588	----
SUB-TOTAL	ØA= 17674VA								ØB= 17854VA								

TOTAL CONNECTED VA	=	35528
LCL @ 125 % 520	=	650
TOTAL OTHER LOAD	=	0
PANEL LOAD	=	35.7KVA
FEEDER AMPS	=	149.9 A

NOTES: ① DENOTES EXISTING CIRCUIT BREAKER TO REMAIN; ALL OTHERS ARE NEW TO MATCH EXISTING.

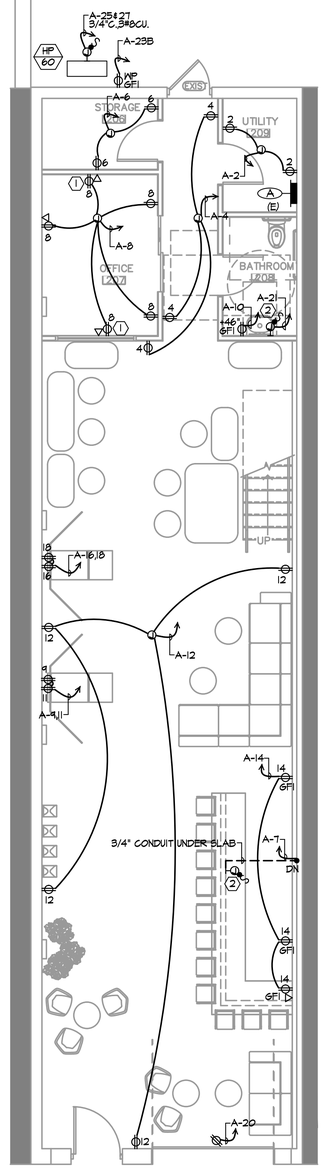


Notes:

1. The LHD-IRS3 sensor requires a Neutral.
2. The RRU120 is shown. If 277v is being used for the lighting please use the RRU227 relay

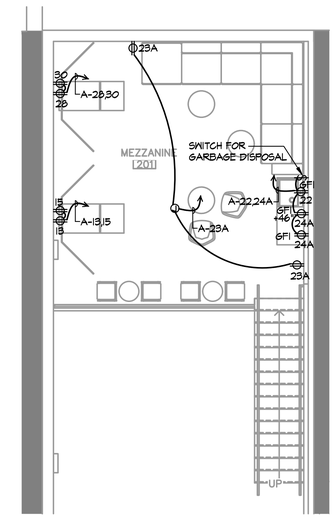
ELECTRICAL CONTROLLED DETAILS

SCALE: NONE



ELECTRICAL POWER PLAN - 1ST FLOOR

SCALE: 3/16"=1'-0"



ELECTRICAL POWER PLAN - MEZZANINE FLOOR

SCALE: 3/16"=1'-0"

ELECTRICAL POWER KEYED NOTES

1. DENOTES RECEPTACLE TO BE CONTROLLED PER 130.5(d). REFER TO WIRING DIAGRAM ON THIS SHEET.
2. PROVIDE J-BOX WITH 20A/1P MOTOR RATED SWITCH FOR CONNECTION TO INSTAHOTS.
3. PROVIDE J-BOX WITH 40A/1P MOTOR RATED SWITCH FOR CONNECTION TO HP-60.

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

REGISTERED PROFESSIONAL ENGINEER
GANGYI ZHOU
No. 018959
Exp.12-31-2025
ELECTRICAL
STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel: 949-267-9095

PROJECT NAME:
1048 HERMOSA AVE
1048 HERMOSA AVE.
HERMOSA BEACH, CA 90254

SHEET TITLE
ELECTRICAL POWER PLAN

DRAWN: GMEP
CHECKED: GMEP
DATE: 11/13/23
SCALE: AS NOTED
JOB NO.: 23-954
SHEET: E-2.1

F. INDOOR LIGHTING FIXTURE SCHEDULE

This table includes all planned permanent and portable lighting other than dwelling unit/ hotel/ motel room lighting. Multifamily dwelling unit and hotel/motel room lighting is documented in Table T. If using Table T to document lighting in multifamily common use areas providing shared provisions for living, eating, cooking or sanitation, those luminaires are not included here.

Designed Wattage: Conditioned Spaces

01	02	03	04	05	06	07	08	09	10	
Name or Item Tag	Complete Luminaire Description	Modular (Track) Fixture	Small Aperture & Color Change[1]	Watts per luminaire[2]	How is Wattage determined	Total Number of Luminaires	Excluded per 140.6(a)3 / 170.2(e)2C	Design Watts	Field Inspector	
									Pass	Fail
A	22" PENDANT 3000K COLOR TEMP ELV.TRIAC DIMMING	No	NA	29	Mfr. Spec	8	No	232	☐	☐
B	4" RECESSED DOWNLIGHT LED 3500K COLOR TEMP 0-10V DIMMING, EM DENOTES EMERGENCY BACKUP BATTERY 90 MIN	No	NA	22.1	Mfr. Spec	13	No	287.3	☐	☐
							Total Designed Watts: CONDITIONED SPACES	519.3		

[1]*FOOTNOTE: Design Watts for small aperture and color changing luminaires which qualify per 140.6(a)4B / 170.2(e)2D is adjusted to be 75% /80% of their rated wattage. Table F automatically makes this adjustment, the permit applicant should enter full rated wattage in column 05.*

[2]*Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per 130.0(c) / 160.5(b). Wattage used must be the maximum rated for the luminaire, not the lamp.*

G. MODULAR LIGHTING SYSTEMS

This section does not apply to this project.

C. COMPLIANCE RESULTS

If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance.

Lighting in conditioned and unconditioned spaces must not be combined for compliance per 140.6(b)1 / 170.2(e)	Allowed Lighting Power per 140.6(b) / 170.2(e) (Watts)					Adjusted Lighting Power per 140.6(a) / 170.2(e) (Watts)				Compliance Results
	01	02	03	04	05	06	07	08		09
	Complete Building 140.6(c)1	Area Category 140.6(c)2 / 170.2(e)4	Area Category Additional 140.6(c)2G / 170.2(e)4Av (+)	Tailored 140.6(c)3 / 170.2(e)4B (+)	**Total Allowed** (Watts)	Total Designed (Watts)	Adjustments PAF Lighting Control Credits 140.6(a)2 / 170.2(e)1B (-)	**Total Adjusted** (Watts) *Includes Adjustments		**05 must be >= 08 140.6 / 170.2(e)**
	(See Table I)	(See Table I)	(See Table J)	(See Table K)		(See Table F)	(See Table P)			
Conditioned		1,092.5			= 1,092.5	≥ 519.3		= 519.3		COMPLIES
Unconditioned					=	≥		=		
Controls Compliance (See Table H for Details)										COMPLIES
Rated Power Reduction Compliance (See Table Q for Details)										

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

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

This document is used to demonstrate compliance with requirements in 110.9, 110.12(c), 130.0, 130.1, 140.6 and 141.0(b)2 for indoor lighting scopes using the prescriptive path for nonresidential and hotel/motel occupancies. It is also used to document compliance with requirements in 160.5, 170.2(e) and 180.2(b)4 for indoor lighting scopes using the prescriptive path for multifamily occupancies. Multifamily includes dormitory and senior living facilities.

A. GENERAL INFORMATION

01	Project Location (city)	Hermosa Beach	04	Total Conditioned Floor Area (ft²)	2,000
02	Climate Zone	6	05	Total Unconditioned Floor Area (ft²)	0
03	Occupancy Types Within Project (select all that apply):		06	# of Stories (Habitable Above Grade)	0
● All Other Occupancies					

B. PROJECT SCOPE

This table includes any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.6 / 170.2(e) or 141.0(b)2 / 180.2(b)4 for alterations.

Scope of Work	**Conditioned Spaces**		**Unconditioned Spaces**	
01	02	03	04	05
My Project Consists of (check all that apply):	Calculation Method	Area (ft²)	Calculation Method	Area (ft²)
☒ New Lighting System	Area Category Method	2000	N/A	0
☐ New Lighting System - Parking Garage	N/A	0	N/A	0
Total Area of Work (ft²)	2000			

N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE /SPECIAL EFFECTS

This section does not apply to this project.

O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE

This section does not apply to this project.

P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF))

This section does not apply to this project.

Q. RATED POWER REDUCTION COMPLIANCE FOR ONE-FOR-ONE ALTERATIONS

This section does not apply to this project.

R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTIONS

This section does not apply to this project.

S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)

This section does not apply to this project.

T. DWELLING UNIT LIGHTING

This section does not apply to this project.

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS

Each area complying using the Complete Building or Area Category Methods per 140.6(b) are included in this table. Column 06 indicates if additional lighting power allowances per 140.6(c) or adjustments per 140.6(a) are being used .

Conditioned Spaces

01	02	03	04	05	06	
Area Description	Complete Building or Area Category Primary Function Area	Allowed Density (W/ft²)	Area (ft²)	Allowed Wattage (Watts)	Additional Allowance / Adjustment	
					Area Category	PAF
OFFICE	Office (<=250 square feet)	0.65	100	65	No	No
BATHROOM	Restroom	0.65	50	32.5	No	No
STORAGE	Storage - MF common areas	0.45	45	20.25	No	No
UTILITY	Electrical Mechancial Telephone Room	0.4	45	18	No	No
CORRIDOR	Corridor	0.4	75	30	No	No
LOUNGE	Lounge	0.55	1,685	926.75	No	No
		TOTALS:	2,000	1,092.5	See Tables J, or P for detail	

J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM

This section does not apply to this project.

K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE

This section does not apply to this project.

L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY

This section does not apply to this project.

M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING

This section does not apply to this project.

H. INDOOR LIGHTING CONTROLS (Not including PAFs)

This table includes lighting controls for conditioned and unconditioned spaces.

Building Level Controls

01	02	03	
		Field Inspector	
		Pass	Fail
Mandatory Demand Response 110.12(c)	Shut-off controls 130.1(c) / 160.5(b)4C	☐	☐
NA < 4,000W subject to multilevel	Whole Building Auto Time Switch		

Area Level Controls

04	05	06	07	08	09	10	11	12	
Area Description	Complete Building or Area Category Primary Function Area	Manual Area Controls 130.1(a) / 160.5(b)4A	Multi-Level Controls 130.1(b) / 160.5(b)4B	Shut-Off Controls 130.1(c) // 160.5(b)4C	Primary/Sky lit Daylighting 130.1(d) / 160.5(b)4D	Secondary Daylighting 130.1(d) / 160.5(b)4D	Interlocked Systems 140.6(a)1/ 170.2(e)2A	Field Inspector	
								Pass	Fail
OFFICE	Office (<=250 square feet)	Readily Accessible	Dimmer	Occupancy Sensor	NA: Not daylit zone	NA: Not daylit zone	No	☐	☐
BATHROOM	Restroom	Readily Accessible	NA: Restrooms	Occupancy Sensor	NA: Not daylit zone	NA: Not daylit zone	No	☐	☐
STORAGE	Storage - MF common areas	Readily Accessible	NA: Enclosed area <100SF	Auto. Time Switch	NA: Not daylit zone	NA: Not daylit zone	No	☐	☐
UTILITY	Electrical Mechancial Telephone Room	Readily Accessible	NA: Enclosed area <100SF	Auto. Time Switch	NA: Not daylit zone	NA: Not daylit zone	No	☐	☐
CORRIDOR	Corridor	Readily Accessible	Dimmer	Auto. Time Switch	NA: Not daylit zone	NA: Not daylit zone	No	☐	☐
LOUNGE	Lounge	Readily Accessible	Dimmer	Auto. Time Switch	NA: General Ltg < 120W	NA: General Ltg < 120W	No	☐	☐
							13		
							Plan Sheet Showing Daylit Zones:		

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: GANGYI ZHOU	Documentation Author Signature:
Company: GMEP Engineers	Signature Date: 11/10/2023
Address: 26439 RANCHO PARKWAY S., STE 120	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: LAKE FOREST/CA/92630	Phone: 949-267-9095

RESPONSIBLE PERSON'S DECLARATION STATEMENT

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

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: GANGYI ZHOU	Responsible Designer Signature:
Company: GMEP ENGINEERS	Date Signed: 11/10/2023
Address: 26439 RANCHO PARKWAY S., STE 120	License: 018959
City/State/Zip: LAKE FOREST/CA/92630	Phone: 949-267-9095

U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selections have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

Form/TItle
NRCI-LTI-E - Must be submitted for all buildings

V. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in this document. If any selections have been changed by the permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and any with "-A" in the form name must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: http://www.energy.ca.gov/title24/attcp/providers.html

Form/Title	Systems/Spaces To Be Field Verified
NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	OFFICE; BATHROOM; STORAGE; UTILITY; CORRIDOR; LOUNGE

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

REGISTERED PROFESSIONAL ENGINEER
GANGYI ZHOU
No. 018959
Exp.12-31-2025
ELECTRICAL
STATE OF CALIFORNIA

GMEP ENGINEERS
26439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel 949-267-9095

PROJECT NAME:
1048 HERMOSA AVE
1048 HERMOSA AVE,
HERMOSA BEACH, CA 90254

SHEET TITLE
ELECTRICAL T24

DRAWN: GMEP
CHECKED: GMEP
DATE: 11/13/23
SCALE: AS NOTED
JOB NO.: 23-954
SHEET: E-T24

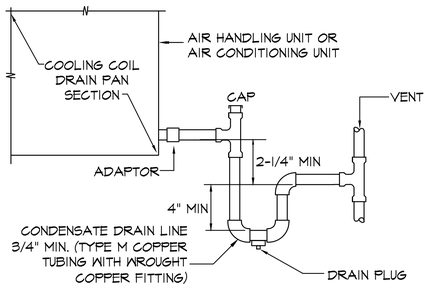
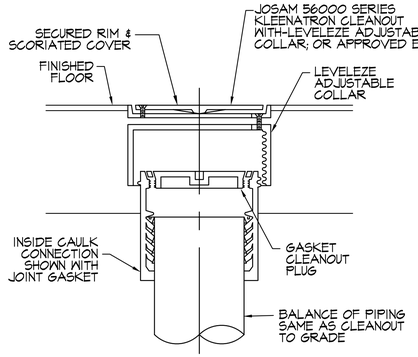


TABLE 310.3 CMC 2022	
INT TONS CAPACITY	MIN CD PIPE SIZE
UP TO 20	3/4"
21-40	1"
41-90	1-1/4"
91-125	1-1/2"
125-250	2"

NOTES:
1. ALL INTERIOR CONDENSATE DRAIN PIPING SHALL BE INSULATED
2. SLOPE ALL CONDENSATE DRAIN LINES AT 1%
3. CONDENSATE DRAIN PIPING SHALL BE TYPE "DWV" HARD DRAWN COPPER TUBING WITH WROUGHT COPPER FITTINGS. 50-50 SOLDERED JOINTS.

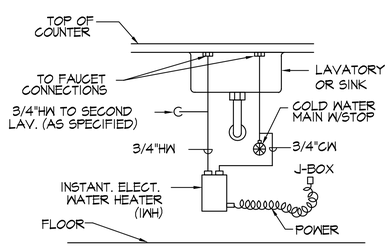
CONDENSATE PIPE

SCALE:NONE



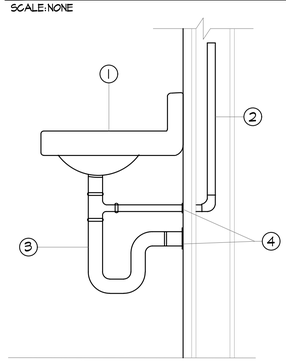
TYPICAL FLOOR CLEANOUT

SCALE:NONE



INSTANTANEOUS WATER HEATER DETAIL

SCALE:NONE

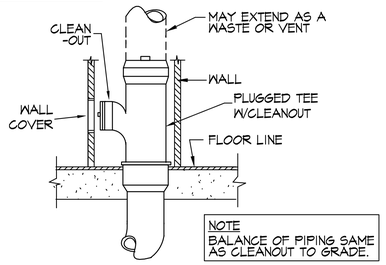


KEYED NOTES:
1. LAVATORY OR SINK
2. 3/4" CONDENSATE PIPE
3. P-TRAP
4. ESCUTCHEON PLATE

NOTE
SEE ARCHITECT'S DRAWING
FOR HANDICAP REQUIREMENTS

PRIMARY CONDENSATE TERMINATION DETAIL

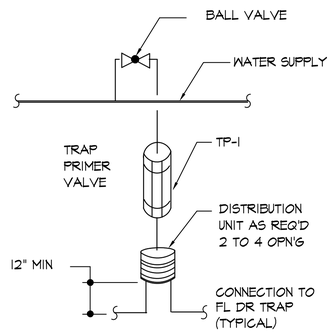
SCALE:NONE



NOTE
BALANCE OF PIPING SAME AS CLEANOUT TO GRADE.

TYPICAL WALL CLEANOUT

SCALE:NONE



TYPICAL TRAP PRIMER DETAIL

SCALE:NONE

FIXTURE SCHEDULE

ITEM	DESCRIPTION	MAKE/MODEL	TRAP	WASTE	VENT	COLD WATER	HOT WATER	REMARKS
WC-1	WATER CLOSET, FLUSH TANK, ADA TYPE. 1.28 GPF	KOHLER K-31621	3"	4"	2"	3/4"	-	KOHLER CIMARRON TWO-PIECE ELONGATED 1.28 GPF FLUSH TANK WATER CLOSET. VERIFY W/ OWNER OR ARCHITECT FOR EXACT FIXTURE SPECIFICATION BEFORE PURCHASING FIXTURE.
L-1	LAVATORY	KOHLER K-2005	1-1/2"	2"	2"	3/4"	3/4"	KOHLER K-2005 WALL-MOUNTED BATHROOM SINK W/KOHLER K-13462 SINGLE FAUCET HOLE, SELF-METERING, 0.5 GPM FAUCET W/ INSIGHT TECHNOLOGY. VERIFY W/ OWNER OR ARCHITECT FOR EXACT FIXTURE SPECIFICATION BEFORE PURCHASING FIXTURE.
S-1	BREAKROOM SINK	KOHLER K-7507-BL	1-1/2"	2"	2"	3/4"	3/4"	KOHLER K-19017-3 UNDERMOUNT SINK W/KOHLER K-10415-CP 1.5 GPM FAUCET. VERIFY W/ OWNER OR ARCHITECT FOR EXACT FIXTURE SPECIFICATION BEFORE PURCHASING FIXTURE.
S-2	BAR SINK	ELKAY D11719	1-1/2"	2"	2"	3/4"	3/4"	ELKAY DAYTON STAINLES SSTEEL SINGLE BOWL DROP-IN BAR SINK W/KOHLER K-10415-CP 1.5 GPM FAUCET. VERIFY W/ OWNER OR ARCHITECT FOR EXACT FIXTURE SPECIFICATION BEFORE PURCHASING FIXTURE.
FD-1	FLOOR DRAIN	JR SMITH 2440	-	2"	2"	-	-	8-1/2" ROUND TOP - HEAVY DUTY FLOOR DRAIN W/ TRACTOR GRATE. VERIFY W/ OWNER OR ARCHITECT FOR EXACT FIXTURE SPECIFICATION BEFORE PURCHASING FIXTURE. PROVIDE TRAP PRIMER.
IWH-1	INSTA-HOT WATER HEATER	CHRONOMITE SR20L OR EQUAL	-	-	-	3/4"	3/4"	CHRONOMITE SR20L 120V 2400W 1 PHASE OR EQUAL. VERIFY W/ OWNER OR ARCHITECT FOR EXACT FIXTURE SPECIFICATION BEFORE PURCHASING FIXTURE.

*PLUMBING FIXTURES MUST COMPLY WITH GREEN BUILDING STANDARDS

COPPER TYPE L PIPE SIZING CHART

FOR VELOCITY OF 8FPS (CW) AND 5FPS(HW); PRESSURE LOSS PER 100FT IN PSI=7.0

PIPE SIZE	COLD WATER			HOT WATER	
	TANK FU	F.V. FU	GPM	TANK FU	GPM
1/2"	2	-	2.5	2	2.5
3/4"	8	-	7	8	7
1"	21	-	15	16	12
1 1/4"	46	10	27	28	19
1 1/2"	99	33	43	46	27
2"	254	132	76	119	48
2 1/2"	455	329	115	245	74
3"	719	666	165	406	105
3 1/2"	1091	1091	220	585	140
4"	1668	1668	290	840	185

BASED ON CHART A 105.1(1) OF APPENDIX A IN THE CALIFORNIA PLUMBING CODE(CPC2022)



KEY PLAN

SCALE:NONE

GENERAL PLUMBING NOTES

1. EXISTING CONDITIONS ARE BASED ON LIMITED FIELD VERIFICATION. CONTRACTOR SHALL ADJUST TO ACTUAL FIELD CONDITIONS AT NO ADDITIONAL EXPENSE TO THE TENANT.
2. ALL CONTRACTORS SHALL REVIEW A COMPLETE SET OF CONSTRUCTION DOCUMENTS. PLUMBING CONTRACTOR SHOULD COORDINATE HIS WORK WITH ALL OTHER TRADES. THIS INCLUDES COORDINATING THE LOCATION AND SIZE OF ALL OPENINGS, LOCATIONS OF EQUIPMENT PAD, AND CHANGES OF ELEVATIONS.
3. CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH DEMOLITION RESPONSIBLE TO BIDDING AND START OF WORK. CONTRACTOR IS RESPONSIBLE ALL EXISTING AS REQUIRED FOR INSTALLATION/CONSTRUCTION OF NEW WORK.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL EXISTING CONDITIONS PRIOR TO SUBMITTING HIS BID. VERIFY LOCATION, ELEVATIONS, AND SIZES OF ALL EXISTING PLUMBING AND INFORM THE ARCHITECT OF ANY DISCREPANCIES. NO ADDITIONAL COMPENSATION WILL BE MADE FOR ANY EXTRAS DUE TO CONTRACTOR'S FAILURE TO VISIT THE JOBSITE AND/OR PREDETERMINE ALL EXISTING CONDITIONS BEFORE SUBMITTING HIS BID. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO THE ARCHITECT FOR RESOLUTION. NO EXCEPTION.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR THE FIELD VERIFICATION OF ALL UTILITY RUNS, UNDERGROUND AND ABOVE GROUND PIPING AND/OR OTHER IMPROVEMENTS LOCATED ON THE PREMISES. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ALL COSTS RELATING TO THE RELOCATION OF, DAMAGE TO, REPAIR OF ANY EXISTING UTILITY RUNS AND/OR IMPROVEMENTS WHICH ARE DAMAGED AS A RESULT OF WORK IN OR AROUND THE PREMISES.
6. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT SPECIFICATIONS, LOCATIONS AND MOUNTING HEIGHTS OF ALL PLUMBING FIXTURES. NO EXCEPTION.
7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PREPARE ACCURATE AS-BUILT DRAWINGS DURING CONSTRUCTION AND SUBMIT FOR APPROVAL UPON COMPLETION OF INSTALLATION.
8. CONTRACTOR SHALL FINISH ALL MATERIALS, LABOR, EQUIPMENT, TRANSPORTATION AND SERVICES REQUIRED FOR COMPLETING THE WORK. ALL MATERIALS AND WORK SHALL COMPLY WITH APPLICABLE CODES AND REGULATIONS AND MEET THE APPROVAL OF STATE & LOCAL JURISDICTION.
9. WATER HEATER SHALL BE CERTIFIED BY THE MANUFACTURER AND MUST COMPLY WITH THE EFFICIENCY STANDARDS OF THE CALIFORNIA ENERGY COMMISSION, 2022 EDITION.
10. ALL HOT WATER PIPING SHALL BE INSULATED WITH ARMSTRONG "ARMAFLEX" INSULATION PER SECTION 609.12 OF THE 2022 PLUMBING CODE AND TABLE 120.3-A, SECTION 120.3 OF THE 2022 CALIFORNIA ENERGY CODE.
11. CONTRACTOR SHALL VERIFY WATER PRESSURE CONDITIONS AT THE PROJECT SITE. CONTRACTOR SHALL PROVIDE INSTALL A PRESSURE REGULATOR WHERE THE SUPPLY PRESSURE EXCEEDS 80 PSI.
12. ALL PIPING SHALL BE SUPPORTED AT INTERVAL NOT TO EXCEED THOSE SHOWN IN CPC TABLE 313.3
13. ALL POTABLE WATER OUTLETS WITH HOSE ATTACHMENTS, SUCH AS HOSE BIBS, AND MOP SINKS ARE TO BE PROVIDED WITH A BACKFLOW/ANTI-SIPHON DEVICE.
14. ALL CONCEALED PIPING SHALL BE INSTALLED PER CALIFORNIA PLUMBING CODE 2022. NO EXCEPTION.
15. LAVATORIES IN PUBLIC RESTROOMS SHALL BE LIMITED TO 0.56GPM
16. ALL FAUCETS SHALL COMPLY WITH CALIFORNIA PROPOSITION 65 AND SHALL BE CERTIFIED TO NSF STANDARD 61 SECTION 9 FOR DRINKING WATER COMPONENTS.
17. ALL REQUIRED CLEANOUTS SHALL BE INSTALLED AS PER SEC. 707.0 & 719.0 OF THE 2022 CALIFORNIA PLUMBING CODE.
18. FLOOR DRAINS OR SIMILAR TRAPS DIRECTLY CONNECTED TO THE DRAINAGE SYSTEM AND SUBJECT TO INFREQUENT USE SHALL BE PROVIDED WITH AN APPROVED AUTOMATIC MEANS OF MAINTAINING THEIR WATER SEALS.
19. NEW WATER CLOSET AND ASSOCIATED FLUSHOMETER VALVES SHALL BE NO MORE THAN 1.28 GALLONS PER FLUSH AND SHALL MEET THE AMERICAN STANDARDS INSTITUTE STANDARD A112.19.2 H45 CODE, SECTION 1714.2.1.3(B).
20. NEW URINALS AND ASSOCIATED FLUSHOMETER VALVES SHALL BE NO MORE THAN 0.125 GALLONS PER FLUSH AND SHALL MEET THE AMERICAN STANDARDS INSTITUTE STANDARD A112.19.2 H45 CODE, SECTION 1714.2.1.3(B).
21. ALL PLUMBING VENTS SHALL TERMINATE NOT LESS THAN TEN(10) FEET FROM OR AT LEAST THREE (3) FEET ABOVE ANY DOOR, OPENING, FRESH AIR INTAKE OR VENT SHAFT.
22. SLOPE ALL CONDENSATE DRAIN LINES AT 1% AND SLOPE ALL SEWER PIPING MINIMUM OF 2%.
23. WASTE & VENT PIPING MATERIAL: SHALL BE AB#1 SERVICE WEIGHT CAST IRON NO-HUB SOIL PIPE AND FITTINGS WITH NO-HUB CLAMPS. MUST CONFORM TO CISPI STANDARD 301.04a & 310.04 AND CLEARLY MARKED WITH THE CAST IRON SOIL PIPE INSTITUTE TRADEMARK, MANUFACTURER'S NAME AND COUNTRY OF ORIGIN. ABS/PVC CAN BE USED IF ALLOWED BY LOCAL AUTHORITY HAVING JURISDICTION.
24. WRAP ALL IRON AND COPPER PIPE AND FITTINGS BELOW SLAB OR GRADE WITH 8 MIL POLYETHYLENE WRAP AND 6" MINIMUM ENVELOPE OF CLEAN SAND. ALL ROUND PIPE IN ACCORDANCE WITH NSI/AWWA STANDARD C105/A21.5-82.
25. WATER PIPE SHALL BE TYPE "L" ABOVE GRADE, HARD DRAWN COPPER TUBING, WITH WROUGHT COPPER FITTINGS, SOLDER ALL JOINTS WITH LEAD-FREE SOLDER.
26. CONDENSATE DRAIN PIPE SHALL BE TYPE "DWV" HARD DRAWN COPPER TUBING WITH WROUGHT COPPER FITTINGS, 50-50 SOLDERED JOINTS. INSULATE ALL CONDENSATE DRAIN PIPING WITHIN BUILDING INTERIOR.
27. NEW OR REPAIRED POTABLE WATER SYSTEMS SHALL BE DISINFECTED PRIOR TO USE ACCORDING TO THE METHODS IN CPC 2022 609.10. NO EXCEPTION.
28. CONTRACTOR TO PROVIDE THERMOSTATIC MIXING VALVES FOR PUBLIC-USE LAVATORIES TO LIMIT TEMPERATURE TO A MAXIMUM OF 120 DEGREES FAHRENHEIT (2022 CPC 407.3).
29. THIS DOCUMENT IS NOT FOR BID OR CONSTRUCTION UNTIL THE PLAN HAS BEEN REVIEWED AND APPROVED BY ALL AUTHORITIES HAVING JURISDICTION AND THE PERMIT IS OBTAINED. NO COMPENSATION WILL BE MADE FOR ADDITIONAL WORK DUE TO THE VIOLATION OF THIS REQUIREMENT.
30. THIS PROJECT MUST COMPLY WITH THE CALIFORNIA PLUMBING CODE 2022.

PIPING SYMBOLS

SYMBOL	MEANING
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	DOMESTIC H.W. CIRCULATING
	SANITARY SEWER
	VENT PIPING
	STORM DRAIN PIPING
	GREASE WASTE
C	GAS
CD	CONDENSATE DRAIN

SYMBOL	MEANING
	FLOOR SINK
	FLOOR CLEANOUT
	WALL CLEANOUT
	FLOOR DRAIN
	GAS COCK
TVB-1	PLUMBING FIXTURE
	CONNECT TO EXISTING
	SHUT-OFF VALVE
	RECIRCULATION PUMP
	PIPE CAP
	PIPE ELBOW DOWN
	PIPE ELBOW UP

FIXTURE UNIT CALCULATIONS

FIXTURE TYPE	QTY	DOMESTIC WATER				DRAINAGE	
		FIXTURE DEMAND	HOT DEMAND	TOTAL WATER DEMAND (WSFU)	TOTAL HOT WATER DEMAND	DFU	TOTAL
WATER CLOSET, FLUSH TANK	1	2.5	0.0	2.5	0.0	4	4
LAVATORY	1	1.0	1.0	1.0	1.0	1	1
BAR SINK	1	1.5	1.5	1.5	1.5	2	2
BREAKROOM SINK	1	1.5	1.5	1.5	1.5	2	2
FLOOR DRAIN	1	0.0	0.0	0.0	0.0	2	2
TOTAL FIXTURE UNITS				6.5	4.0		11.0
EQUIVALENT WATER DEMAND IN GPM				6	4		
REQUIRED MINIMUM PIPE SIZE				3/4"	3/4"		3"

REVISIONS

NO.	DATE	DESCRIPTION

SEAL:

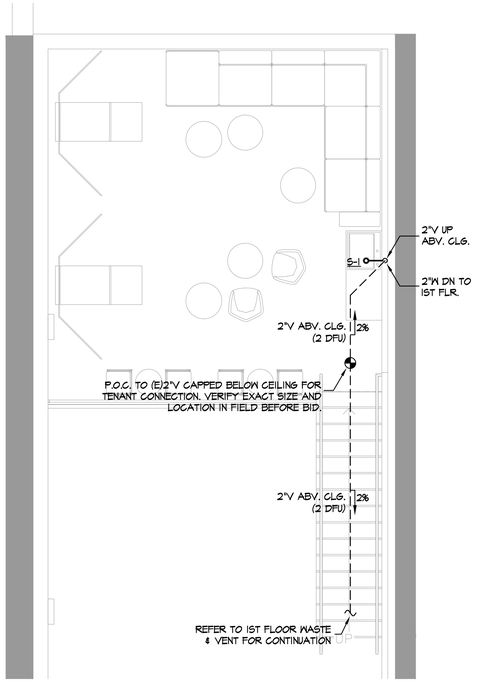
REGISTERED PROFESSIONAL ENGINEER
GANGYI ZHOU
No. M34279
Exp.12-31-2024
MECHANICAL
STATE OF CALIFORNIA

GMEP ENGINEERS
28439 Rancho Pkwy. S., Ste 120
Lake Forest, CA 92630
Tel 949-267-9095

PROJECT NAME:
1048 HERMOSA AVE
1048 HERMOSA AVE,
HERMOSA BEACH, CA 90254

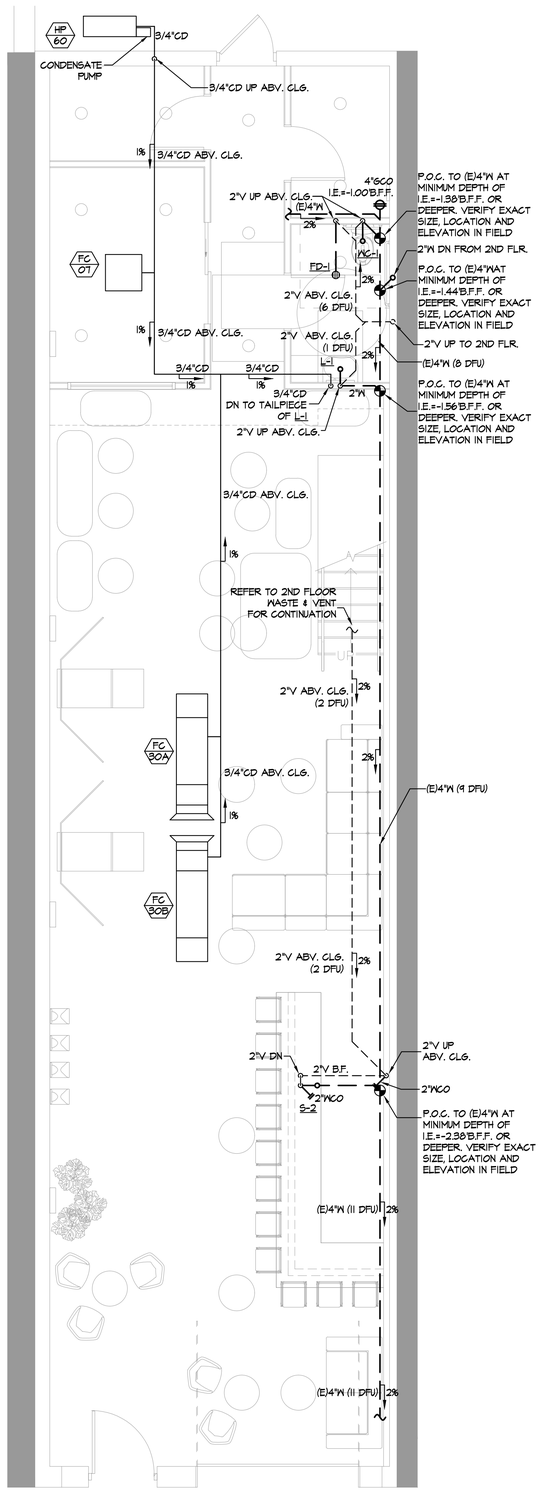
SHEET TITLE
PLUMBING
GENERAL NOTES, SCHEDULES,
CALCULATIONS, DETAILS
& KEY PLAN

DRAWN
GMEP
CHECKED
GMEP
DATE
11/13/23
SCALE
AS NOTED
JOB NO.
23-954
SHEET
P-1.0



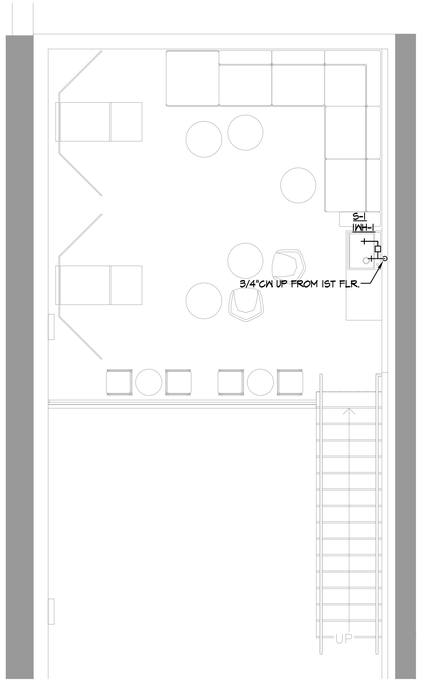
PLUMBING - SECOND FLOOR- WASTE & VENT

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



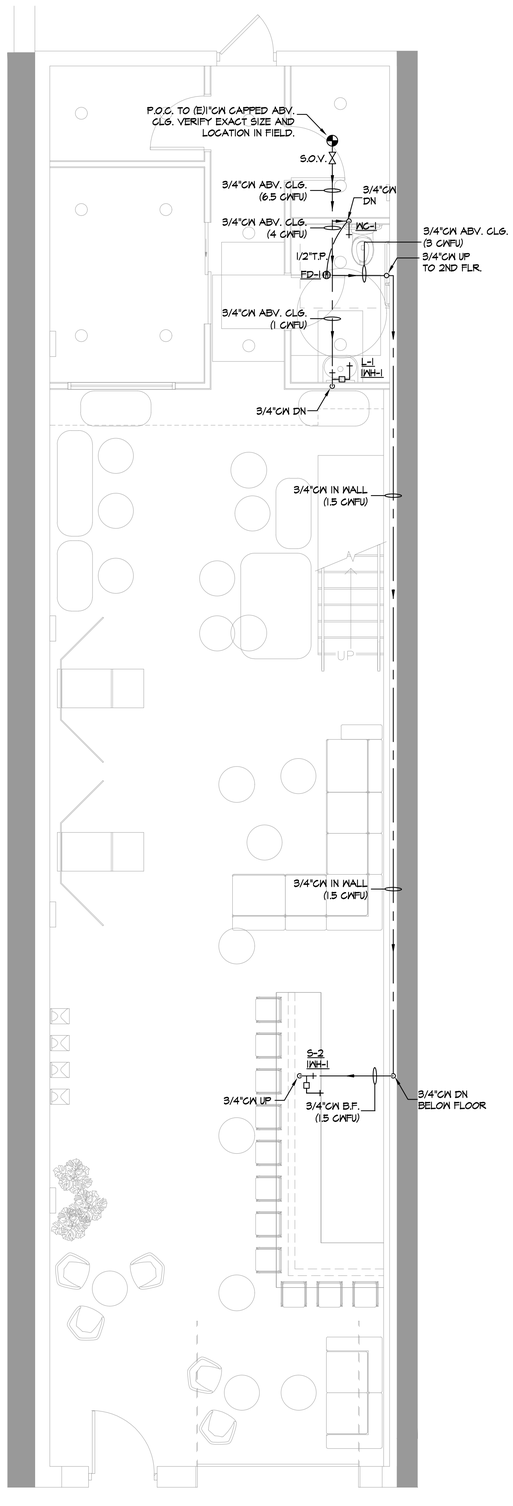
PLUMBING - FIRST FLOOR- WASTE & VENT

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



PLUMBING - SECOND FLOOR- COLD/HOT WATER

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



PLUMBING - FIRST FLOOR- COLD/HOT WATER

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

REVISIONS		
NO.	DATE	DESCRIPTION

SEAL:

REGISTERED PROFESSIONAL ENGINEER
GANGYI ZHOU
No. M34279
Exp.12-31-2024
MECHANICAL
STATE OF CALIFORNIA

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Tel: 949-267-9095

PROJECT NAME:
1048 HERMOSA AVE
1048 HERMOSA AVE.
HERMOSA BEACH, CA 90254

SHEET TITLE
PLUMBING
FLOOR PLANS

DRAWN	GMEP
CHECKED	GMEP
DATE	11/13/23
SCALE	AS NOTED
JOB NO.	23-954
SHEET	P-2.0

MANUFACTURED LUMBER NOTES:

1. ALL MANUFACTURED LUMBER TO BE TIMBERSTRAND OR PARALLAM AS SPECIFIED PER PLAN AND TO COMPLY WITH ICC ESR-1387. MINIMUM DESIGN PROPERTIES TO BE:

TIMBERSTRAND	PARALLAM
E=1,550,000 PSI	E=2,000,000 PSI
Fb=2,325 PSI	Fb=2,900 PSI
Ft=1,070 PSI	Ft=2,025 PSI
Fc perp= 800 PSI	Fc perp= 750 PSI
Fc parall=2,050 PSI	Fc parall=2,900 PSI
Fv=310 PSI	Fv=290 PSI

2. ALL MANUFACTURED LUMBER TO BE FABRICATED IN A SHOP OF A LICENCED FABRICATOR.

3. THE MANUFACTURERS LOGO IS TO BE IMPRINTED ON THE SIDE OF THE MANUFACTURED BEAM.

4. ALL MANUFACTURED BEAMS ARE TO BE LOAD TESTED BY THE MANUFACTURER AND TEST RESULTS SUBMITTED TO THE BUILDING INSPECTOR.

NOTES

1. "THE CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF THE SEISMIC-FORCE-RESISTING SYSTEM SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL PRIOR TO THE COMMENCEMENT OR WORK ON THE SYSTEM"

STRUCTURAL OBSERVATION

1. STRUCTURAL OBSERVATION SHALL BE PROVIDED BY THE ENGINEER OF RECORD. STRUCTURAL OBSERVATION IS THE VISUAL OBSERVATION OF THE ELEMENTS AND CONNECTIONS OF THE STRUCTURAL SYSTEM AT SIGNIFICANT CONSTRUCTION STAGES AND THE COMPLETED STRUCTURE FOR GENERAL CONFORMANCE TO THE APPROVED PLANS AND SPECIFICATIONS. STRUCTURAL OBSERVATION DOES NOT WAIVE THE RESPONSIBILITY FOR THE INSPECTIONS REQUIRED OF THE BUILDING INSPECTOR OR THE DEPUTY INSPECTOR.

2. THE OWNER OR OWNER'S REPRESENTATIVE SHALL COORDINATE AND CALL FOR A MEETING BETWEEN THE ENGINEER OR ARCHITECT RESPONSIBLE FOR THE STRUCTURAL DESIGN, STRUCTURAL OBSERVER, CONTRACTOR, AFFECTED SUBCONTRACTORS AND DEPUTY INSPECTORS. THE PURPOSE OF THE MEETING SHALL BE TO IDENTIFY THE MAJOR STRUCTURAL ELEMENTS AND CONNECTIONS THAT AFFECT THE VERTICAL AND LATERAL LOAD SYSTEMS OF THE STRUCTURE AND TO REVIEW SCHEDULING OF THE REQUIRED OBSERVATIONS. A RECORD OF THE MEETING SHALL BE INCLUDED IN THE FIRST OBSERVATION REPORT SUBMITTED TO THE BUILDING INSPECTOR.

3. THE STRUCTURAL OBSERVER SHALL PERFORM SITE VISITS AT THOSE STEPS IN THE PROGRESS OF THE WORK THAT ALLOW FOR CORRECTION OF DEFICIENCIES WITHOUT SUBSTANTIAL EFFORT OR UNCOVERING OF THE WORK INVOLVED. AT A MINIMUM, THE FOLLOWING SIGNIFICANT CONSTRUCTION STAGES REQUIRE A SITE VISIT AND OBSERVATION REPORT FROM THE STRUCTURAL

CONSTRUCTION STAGES	ELEMENTS/CONNECTIONS TO BE OBSERVED
BEFORE FOUNDATION CONCRETE	FOUNDATION REINFORCEMENT AND SIZE
AT FRAMING STAGE,	BEAM/COLUMN, ROOF/FLOOR DIAPGHRAMS, SHEAR WALLS AND CONNECTIONS

4. UPON COMPLETION OF WORK, THE OBSERVER SHALL SUBMIT A LETTER TO THE BUILDING OFFICIAL ATTESTING THAT SITE VISITS HAVE BEEN MADE AND ALSO IDENTIFY ANY REPORTED DEFICIENCIES WHICH, TO THE BEST OF THE OBSERVERS KNOWLEDGE, HAVE NOT BEEN RESOLVED.

5. HOLD DOWN ANCHORS ARE TO BE RE-TIGHTENED JUST PRIOR TO COVERING THE WALL FRAMING

STRUCTURAL STEEL

1. PROVIDE STRUCTURAL STEEL COMPLYING WITH THE FOLLOWING ASTM STANDARD SPECIFICATIONS, UNLESS NOTED OTHERWISE:

   ALL STRUCTURAL STEEL U.N.O.....ASTM A36
   PIPES.....ASTM A53, GR. B (35 KSI)
   TUBES.....ASTM A500, GR. B (46 KSI)
   ANCHOR BOLTS.....ASTM A307
   THREADED ROUND STOCK.....ASTM A36
   HIGH STRENGTH BOLTSASTM .....A325Z.

2. HIGH STRENGTH BOLTS:

   A. PROVIDE HIGH STRENGTH BOLTS, NUTS AND WASHERS COMPLYING WITH ASTM A325-SC. PROVIDE SLIP CRITICAL BOLTING UNLESS NOTED OTHERWISE.

   B. ASSEMBLE HIGH STRENGTH BOLTS IN COMPLIANCE WITH THE "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS."

   C. TENSION SLIP CRITICAL BOLTING USING ONE OF THE FOLLOWING METHODS: TURN OF NUT USING A CALIBRATED WRENCH, OR DIRECT TENSION INDICATOR WASHERS.

3. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ARCHITECT PRIOR TO FABRICATION. PROVIDE A WELD PROCEDURE SPECIFICATION FOR DUCTILE MOMENT FRAMES, INCLUDING THE SEQUENCE OF WELDING AT GIRDER TO COLUMN, COLUMN TO BASE PLATE CONNECTIONS, AND COLUMN SPLICES AS WELL AS THE SEQUENCE OF WELDING IN EACH FRAME.

4. PROVIDE A CAMBER OF L/360 TO STRUCTURAL STEEL FLOOR MEMBERS WITH SPANS GREATER THAN 15'-0" UNLESS NOTED OTHERWISE.

5. WELD STRUCTURAL STEEL IN COMPLIANCE WITH ANSI/AWS D1.1. WELDERS SHALL BE CERTIFIED BY THE GOVERNING CODE AUTHORITY. WELDED JOINTS SHALL CONFORM TO THE PREQUALIFIED JOINT DETAILS AS INDICATED BY AWS. USE MINIMUM 70 KSI ELECTRODE.

6. UNLESS A LARGER SIZE IS INDICATED, USE THE MINIMUM FILLET WELD SIZE INDICATED BY AISC. WELD LENGTHS INDICATED ARE THE NET EFFECTIVE LENGTH REQUIRED.

7. ALL BUILDING STRUCTURAL STEEL IS DESIGNED FOR UNSHORED CONSTRUCTION, UNLESS NOTED OTHERWISE.

8. FABRICATE AND ERECT STRUCTURAL STEEL IN CONFORMANCE WITH THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS."

9. FIELD CUTTING OR BURNING OF STRUCTURAL STEEL IS NOT PERMITTED, WITHOUT WRITTEN APPROVAL OF THE ARCHITECT.

10. APPLY SPRAYED FIREPROOFING OVER STRUCTURAL STEEL AND DECK USING PRODUCTS APPROVED BY THE GOVERNING CODE AUTHORITY. HOURLY FIRE RESISTIVE REQUIREMENTS SHALL BE DETERMINED USING TABLE 6-A OF THE CALIFORNIA BUILDING CODE, AND BUILDING TYPES OF CONSTRUCTION ON THE ARCHITECTURAL DRAWINGS.

11. SHOP PRIME ALL STRUCTURAL STEEL, EXCEPT AT CONNECTIONS, AND MEMBERS WHICH REQUIRE FIREPROOFING.

REINFORCING STEEL

1. PROVIDE REINFORCING STEEL COMPLYING WITH ASTM A615, GRADE 60. PROVIDE REINFORCING STEEL TO BE WELDED COMPLYING WITH ASTM A706, GRADE 60. FOR REINFORCING STEEL AT DUCTILE MOMENT FRAMES AND SHEARWALLS, PROVIDE REINFORCING STEEL MEETING ASTM A706 AND ACTUAL YIELD STRENGTH BASED ON MILL TESTS NOT TO EXCEED SPECIFIED YIELD BY MORE THAN 18,000 PSI AND THE RATIO OF ACTUAL ULTIMATE TENSILE STRESS TO ACTUAL YIELD TENSILE STRESS SHALL NOT BE LESS THAN 1.25.

2. PROVIDE WELDED WIRE FABRIC COMPLYING WITH ASTM A82 AND A185. LAP WELDED WIRE FABRIC MINIMUM 1 1/2 SPACES OR 12 INCHES. PROVIDE DEFORMED WIRE STIRRUPS COMPLYING WITH ASTM A496 AND A497.

3. LAP REINFORCING STEEL AT SPLICES AT WELL STAGGERED LOCATIONS, AND TO THE FOLLOWING MINIMUM LENGTHS UNLESS NOTED OTHERWISE:

#3.....2'-0"	#8.....5'-3"
#4.....2'-0"	#9.....6'-9"
#5.....2'-3"	#10.....8'-6"
#6.....3'-0"	#11.....10'-6"
#7.....4'-3"	

4. MINIMUM CLEAR DISTANCES BETWEEN BARS INCLUDING AREAS AT SPLICES SHALL BE 1 INCH OR 1 BAR DIAMETER, WHICHEVER IS GREATER. MINIMUM CLEAR DISTANCE AT COLUMNS SHALL BE 1 1/2 INCHES OR 1 1/2 BAR DIAMETERS, WHICHEVER IS GREATER.

5. DOWELS BETWEEN FOOTINGS AND WALLS OR COLUMNS SHALL BE THE SAME SIZE, GRADE, SPACING AND NUMBER AS THE SPECIFIED VERTICAL REINFORCING, AND SHALL LAP AS NOTED ABOVE, UNLESS NOTED OTHERWISE.

6. WELDING OF REINFORCING STEEL SHALL ONLY OCCUR WITH ASTM A706 BARS, AND USING E-90XX LOW HYDROGEN ELECTRODESCOMPLYING WITH ANSI/AWS D1.4.

7. ALL REINFORCING BAR BENDS SHALL BE MADE COLD.

8. SUBMIT SHOP DRAWINGS TO ARCHITECT INDICATING REINFORCING PLACEMENT FOR REVIEW PRIOR TO FABRICATION. PREPARE SHOP DRAWINGS IN CONFORMANCE WITH ACI 315.

SPECIAL INSPECTION

1. INSPECTION BY A REGISTERED DEPUTY INSPECTOR IS REQUIRED FOR THE MATERIALS LISTED BELOW. THE EXTENT OF SUCH INSPECTION SHALL CONFORM TO SECTION 109 & 1704 OF THE CALIFORNIA BUILDING CODE.

SPECIAL INSPECTIONS
(only checked items are required)

MATERIAL	INSPECTION TYPE		NOTES
	CONTINUOUS	PERIODIC	
CONCRETE - Table 1704.4			
Reinforcing Steel	☐	☒	
Reinforcing Steel Welding (see below)			
Inspect bolts and bolt placement	☒	☐	
Verify use of required design mix	☐	☒	
Sampling fresh concrete	☒	☐	e
Concrete placement	☒	☐	
Maintenance of curing techniques	☐	☒	
Formwork dimensions	☐	☒	
STRUCTURAL STEEL - Table 1704.3			
Structural Steel Material	☒	☐	a
Weld Filler Material	☒	☐	b
Welding - Groove Welds	☒	☐	
Welding - Single Pass Fillet Welds less than or equal to 5/16"	☐	☒	
Welding - All other fillet welds	☒	☐	
Reinforcing Steel (rebar)	☐	☒	c
Steel Frame Joint Details	☐	☒	
	☐	☐	
MASONRY - Table 1704.5.1			
Masonry Construction	☐	☐	U.N.O.
Reinforcement Welding	☐	☐	
Grout Placement	☐	☐	
Grout, Mortar, Prism Specimens	☐	☐	
WOOD - Section 1707.3			
Shear Panels with nailing 4" o.c. or less	☐	☐	f
Floor/Roof Diaphragms with nailing 4" o.c. or less	☐	☐	
SOILS - Section 1704.7	☐		d
ANCHORS			
EPOXY/EXPANSION ANCHORS	☒	☐	

NOTES:
a. VERIFY MATERIAL VIA IDENTIFICATION MARKINGS & MILL TEST REPORTS.
b. VERIFY MATERIAL VIA IDENTIFICATION MARKINGS & MANUFACTURER'S CERTIFICATION OF COMPLIANCE.
c. VERIFY WELDABILITY OF REINFORCEMENT OTHER THAN ASTM A706 BARS.
d. INSPECT SITE SOILS PER TABLE 1704.7 AND CONFORMANCE WITH THE SOILS REPORT.
e. INSPECTION INCLUDES SLUMP, AIR CONTENT AND TEMPERATURE TESTS, INCLUDING TAKING SPECIMENS FOR STRENGTH TESTS.
f. INSPECTION INCLUDES PANEL NAILING, SOLE PLATE NAILING, ANCHOR BOLTING, HARDWARE AT TOP OF WALL, HOLDOWN STRAPS, HOLDOWN FOUNDATION ANCHORS AND DRAG STRAPS ATTACHED TO SHEAR WALL.

2. AN AFFIDAVIT SHALL BE ISSUED TO THE ARCHITECT/ENGINEER AND THE BUILDING DEPARTMENT AT THE COMPLETION OF EACH TYPE OF WORK STATING WHETHER THE WORK WAS IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.
3. REQUIREMENT FOR CONTINUOUS INSPECTION OF CONCRETE OVER 2500 PSI STRENGTH

APROVED PRODUCT REPORTS

PROVIDE PRODUCTS AND INSTALLATION PER THE APROVED REPORT.

PRODUCT	ICC-ESR #	LARR #
SET-XP EPOXY	2508	25744
HDU HOLDOWNS	2330	25720
CBQ POST BASE	5952	25552
CCQ COLUMN CAP	2604	25714
LU/HU HANGERS	5672	25076
ST STRAPS	2105	25713
MST STRAPS	5349	25713
CS/CMST COIL STRAPS	5349	25713
A34/A35/LTP ANGLES	2523	25716
H TYPE HARDWARE	2613	25718
PARALLAM BEAM	1387	

CAST-IN-PLACE CONCRETE

1. SCHEDULE OF STRUCTURAL CONCRETE 28 DAY STRENGTHS AND TYPES:

LOCATION IN STRUCTURE	MINIMUM STRENGTH (PSI)	TYPE
SLAB ON GRADE	3000	PEAGRAVEL
WALLS	3000	PEAGRAVEL
FOUNDATION	3000	PEAGRAVEL
GRADE BEAMS	3000	PEAGRAVEL

2. PROVIDE PORTLAND CEMENT CONFORMING TO ASTM C150, TYPE V, WITH A MAXIMUM WATER/CEMENT RATIO OF 0.45 FOR ALL CONCRETE IN CONTACT WITH SOIL.

3. PROVIDE SILICEOUS, NORMAL WEIGHT AGGREGATES OF NATURAL SAND AND ROCK CONSISTING OF SILICA OR COMPOUNDS OTHER THAN CALCIUM OR MAGNESIUM CARBONATE FOR HARDROCK CONCRETE. AGGREGATES ARE TO COMPLY WITH ASTM C33 WITH PROVEN SHRINKAGE CHARACTERISTICS OF LESS THAN 0.05%.

4. SECURELY TIE ANCHOR BOLTS, REINFORCING STEEL, INSERTS, ETC. IN PLACE PRIOR TO POURING CONCRETE OR GROUT.

5. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT PLACED IN CAST-IN-PLACE CONCRETE:

LOCATION IN STRUCTURE	MINIMUM COVER
CAST AGAINST AND PERMANATLY EXPOSED TO GROUND	3"
FORMED CONCRETE EXPOSED TO EARTH OR WEATHER #6 THROUGH #18 BARS	2"
#5 BAR, W31 OR D31 WIRE, AND SMALLER	1 1/2"

6. THE CONTRACTOR SHALL PLACE ALL CONCRETE IN COMPLIANCE WITH ACI 301, AND ACI 304.

7. SUBMIT SHOP DRAWINGS TO ARCHITECT INDICATING LOCATIONS OF ALL CONCRETE CONSTRUCTION JOINTS FOR REVIEW PRIOR TO PLACING CONCRETE. LOCATE JOINTS AT LOCATIONS TO MINIMIZE THE EFFECTS OF SHRINKAGE AS WELL AS LOCATIONS OF MINIMUM SHEAR STRESS.

8. PROVIDE KEYS IN CONSTRUCTION JOINTS UNLESS DETAILED OTHERWISE. THOROUGHLY CLEAN, REMOVE ALL LAITANCE AND THOROUGHLY WET AND REMOVE STANDING WATER IN CONSTRUCTION JOINTS BEFORE PLACING NEW CONCRETE. AT VERTICAL JOINTS SLUSH WITH A COAT OF NEAT CEMENT BEFORE PLACING NEW CONCRETE.

9. ALL CONCRETE SHALL BE MAINTAINED ABOVE 50 DEGREES FAHRENHEIT AND IN A MOIST CONDITION A MINIMUM OF 7 DAYS AFTER PLACEMENT.

10. SLUMP IN CONCRETE USED FOR FLAT SURFACES SHALL NOT EXCEED 4 INCHES.

11. ELECTRICAL CONDUIT, AND MECHANICAL PIPES IN EXCESS OF 1 INCH DIAMETER SHALL NOT BE EMBEDDED IN CONCRETE UNLESS DETAILED. CONDUIT AND PIPES LESS THAN 1 INCH IN DIAMETER MAY BE EMBEDDED IN SLAB ON GRADE, AND ELEVATED SLABS PROVIDED THE SPACING EXCEEDS 2 INCHES ON CENTER IN HORIZONTAL RUNS, AND ARE PLACED WITHIN THE MIDDLE ONE-THIRD OF THE SECTION DEPTH.

FOUNDATION

1. THE FOUNDATION DESIGN IS BASED UPON RECOMMENDATIONS CONTAINED IN GEOTECHNICAL REPORT NO. 21381-19, PREPARED BY NORCAL ENGINEERING, DATED SEPTEMBER 27, 2019, AND ALL SUBSEQUENT ADDENDA AND LETTERS. PERFORM FOUNDATION WORK COMPLYING WITH REPORT AND ADDENDA. THE GEOTECHNICAL REPORT AND ADDENDA ARE PART OF THESE CONTRACT DOCUMENTS AND SHALL BE KEPT ON THE JOB SITE AT ALL TIMES. THE FOLLOWING DESIGN CRITERIA HAS BEEN USED BASED ON THE ABOVE REPORT.

   A. THE FOUNDATION DESIGN IS BASED UPON AN ALLOWABLE BEARING CAPACITY OF 2000 PSF. AN INCREASE OF 33% CAN BE USED FOR SHORT TERM LOADS SUCH AS SEISMIC AND WIND.

   B. THE ALLOWABLE DESIGN LATERAL PASSIVE PRESSURE IS 250 PSF/FT PER FOOT OF DEPTH. AN INCREASE OF 33% CAN BE USED FOR SHORT TERM LOADS SUCH AS SEISMIC AND WIND.

   C. THE ALLOWABLE DESIGN COEFFICIENT OF FRICTION IS 0.4.

   D. ALL FOOTINGS SHALL BE FOUND A MINIMUM OF 2'-0" BELOW ADJACENT GRADE OR FINISH FLOOR WHICHEVER IS GREATER. FOOTING EMBEDMENT IS SUBJECT TO THE REVIEW OF THE GEOTECHNICAL ENGINEER

2. FOUNDATION EXCAVATIONS ARE TO BE INSPECTED AND APPROVED BY THE GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE PRIOR TO THE PLACEMENT OF FILL, REINFORCING STEEL, OR CONCRETE.

3. THE CONTRACTOR IS TO PROVIDE FOR DEWATERING OF EXCAVATIONS FROM EITHER SURFACE WATER, GROUND WATER OR SEEPAGE.

4. THE CONTRACTOR SHALL PROVIDE FOR THE DESIGN AND INSTALLATION OF ALL CRIBBING, SHEET PILES, AND SHORING REQUIRED TO SAFELY RETAIN ALL EXCAVATIONS.

5. ALL EXCAVATIONS SHALL BE PROPERLY BACKFILLED. DO NOT PLACE BACKFILL BEHIND RETAINING WALLS BEFORE THE WALLS HAVE ATTAINED FULL DESIGN STRENGTH. CONTRACTOR SHALL BRACE OR PROTECT ALL BUILDING OR PIT WALLS BELOW GRADE FROM LATERAL LOADS UNTIL ATTACHING FLOORS OR ROOFS ARE FULLY IN PLACE AND HAVE ATTAINED FULL DESIGN STRENGTH. CONTRACTOR SHALL PROVIDE FOR DESIGN, PERMITS, AND INSTALLATION OF ANY REQUIRED BRACING.

6. ALL PILE LENGTHS SHOWN ARE ESTIMATES. SHOULD SOIL AT THE TIP DEPTHS INDICATED NOT BE APPROVED BY THE GEOTECHNICAL ENGINEER, PILE TIP DEPTH WILL BE ALTERED AS REQUIRED.

7. ALL ABANDONED FOOTINGS, UTILITIES, ETC., THAT UNDERMINE OR INTERFERE WITH NEW CONSTRUCTION SHALL BE REMOVED.

GRAVITY LOAD DATA

INTERIOR WALL DEAD LOAD.....7.5 PSF
EXTERIOR WALL DEAD LOAD.....18.0 PSF
FLOOR LIVE LOAD.....100 PSF
FLOOR DEAD LOAD.....14.0 PSF

WIND DATA

BASIC WIND SPEED.....150 MPH EXPOSURE .....C I = 1.0

SEISMIC DATA

SEISMIC DESIGN CATEGORY.....D OCCUPANCY CATEGORY II R....6.5 (LIGHT FRAMED WOOD SHEAR WALL)

Ss=1.92 G Fa=1.2 Sds=(⅔) x Sms=1.54 ro=1.3

V=0.7 Cs W * phi /1.4= 0.22W I = 1.0

ANALYSIS PROCEDURE (EQUIVALENT LATERAL FORCE PROCEDURE)

BUILDING CODE

PERFORM CONSTRUCTION AND WORKMANSHIP IN COMPLIANCE WITH THE DRAWINGS, SPECIFICATIONS, AND THE 2021 INTERNATIONAL BUILDING CODE, 2022 CALIFORNIA BUILDING CODE

GENERAL

3. THE CONTRACTOR SHALL COORDINATE THE WORK OF ALL TRADES, AND VERIFY ALL DIMENSIONS PRIOR TO THE START OF CONSTRUCTION. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES OR INCONSISTENCIES. DO NOT SCALE DRAWINGS.

4. THESE NOTES SHALL BE USED IN CONJUNCTION WITH THE PLANS AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND THE ENGINEER. SPECIFIC NOTES AND DETAILS ON THE DRAWINGS TAKE PRECEDENCE OVER THESE GENERAL NOTES AND TYPICAL DETAILS

6. THE CONTRACT DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. UNLESS OTHERWISE SHOWN THEY DO NOT INDICATE MEANS AND METHODS OF CONSTRUCTION. CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. PROVIDE ADEQUATE ERECTION SHORING, BRACING AND GUYS THAT COMPLY WITH LOCAL, STATE, OSHA, AND NATIONAL SAFETY STANDARDS.

7. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL EXCAVATION PROCEDURES INCLUDING LAGGING, SHORING AND PROTECTION OF ADJACENT PROPERTY, STRUCTURES, STREETS AND UTILITIES COMPLYING WITH ALL LOCAL, STATE, OSHA, AND NATIONAL SAFETY STANDARDS.

8. THE CONTRACTOR SHALL INVESTIGATE THE SITE FOR FILLED EXCAVATIONS OR BURIED STRUCTURES SUCH AS FOUNDATIONS, CESSPOOLS, ETC. IF ANY SUCH STRUCTURES ARE FOUND, THE ARCHITECT SHALL BE IMMEDIATELY NOTIFIED.

9. OBSERVATION VISITS TO THE SITE BY FIELD REPRESENTATIVES OF THE ARCHITECT DO NOT INCLUDE INSPECTIONS OF THE PROTECTIVE MEASURES, OR METHODS OF CONSTRUCTION. CONSTRUCTION SUPPORT SERVICES PERFORMED BY REPRESENTATIVES OF THE ARCHITECT SHALL BE DISTINGUISHED FROM CONTINUOUS AND DETAILED INSPECTION SERVICES PERFORMED BY OTHERS.

10. NOTIFY THE ARCHITECT WHEN DRAWINGS BY OTHERS SHOW OPENINGS, HOLES, POCKETS, ETC., IN STRUCTURAL ELEMENTS, BUT ARE NOT SPECIFICALLY DETAILED ON THE STRUCTURAL DOCUMENTS.

11. ALL CODES AND SPECIFICATIONS NOTED ON THESE DRAWINGS SHALL BE THE LATEST APPROVED EDITIONS AND REVISIONS BY THE GOVERNING CODE AUTHORITY HAVING JURISDICTION OVER THIS PROJECT.

12. THE CONTRACTOR SHALL REVIEW AND STAMP ALL SHOP DRAWINGS PRIOR TO SUBMISSION TO THE ARCHITECT. REVIEW THE SHOP DRAWINGS FOR COMPLETENESS AND COMPLIANCE WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS. SUBMIT A WRITTEN REQUEST TO THE ARCHITECT FOR APPROVAL OF ANY MODIFICATION OR SUBSTITUTION. SUBSTITUTIONS AND MODIFICATIONS MUST BE APPROVED PRIOR TO SUBMISSION OF THE SHOP DRAWINGS TO THE ARCHITECT. CLOUD THE SHOP DRAWINGS AT LOCATIONS OF ALL MODIFICATIONS OR SUBSTITUTIONS. MAINTAIN A COPY OF ALL APPROVED SHOP DRAWINGS AT SITE DURING CONSTRUCTION.

13. ALL CONDITIONS NOTED AS EXISTING ARE BASED ON THE BEST INFORMATION CURRENTLY AVAILABLE AT THE TIME OF PREPARATION OF THESE DRAWINGS. THE CONTRACTOR IS TO VERIFY ALL CONDITIONS BEFORE STARTING WORK. SHOULD CONDITIONS ARISE WHICH ARE DIFFERENT FROM THOSE SHOWN ON THE DRAWINGS, THE ARCHITECT, AND THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY AND ADDITIONAL DRAWINGS BASED ON MORE ACCURATE INFORMATION WILL BE PREPARED.

ROUGH CARPENTRY

1. PROVIDE GRADE MARKED DOC PS20 DOUGLAS FIR-LARCH STRUCTURAL LUMBER COMPLYING WITH STANDARD GRADING RULES NO. 16 OF THE WEST COAST LUMBER INSPECTION BUREAU. PROVIDE AIR DRY LUMBER WITH A 19% MAXIMUM MOISTURE CONTENT.

2. PROVIDE STRUCTURAL LUMBER OF THE FOLLOWING CLASSIFICATIONS AND GRADES UNLESS NOTED OTHERWISE:

MEMBER	GRADE
RAFTERS AND JOISTS LARGER THAN 2X4	NO. 2
2X4 JOISTS AND RAFTERS	NO. 2
4X BEAMS, HEADERS AND STRINGERS	NO. 1 OR BETTER
BEAMS, HDRS AND STRINGERS >THAN 4X	NO. 1 OR BETTER
POSTS AND TIMBER	NO. 1 OR BETTER
STUDS, PLATES AND BLOCKING	CONSTRUCTION GRADE
PARALLAM BEAMS	2.0 E, Fb = 2900 PSI

3. PROVIDE PLYWOOD COMPLYING WITH U.S. PRODUCT STANDARD DOC PS 1.95, EACH SHEET OF PLYWOOD SHALL BE IDENTIFIED WITH APPROPRIATE TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION. PLYWOOD GRADES ARE AS FOLLOWS:

   ⅜" OR ½" SHEAR WALL SHEATHING.....STRUCTURAL I, EXTERIOR SPAN RATING 24/0
   FLOOR AND ROOF SHEATHING.....STRUCTURAL 1, EXTERIOR SPAN RATING 24/16

   PROVIDE TONGUE AND GROOVE JOINTS FOR HORIZONTAL SHEATHING. PROVIDE PLYWOOD CLIPS OR EDGE BLOCKING WHERE PLYWOOD IS SQUARE EDGED.

4. PRESSURE TREAT ALL STRUCTURAL LUMBER IN COMPLIANCE WITH SPECIFICATIONS. PROVIDE HOT DIPPED GALVANIZED OR STAINLESS STEEL HANGERS, CONNECTORS, BOLTS AND ACCESSORIES IN CONTACT WITH PRESSURE TREATED STRUCTURAL LUMBER.

5. ALL NAILS, UNLESS INDICATED OTHERWISE, ARE COMMON NAILS WITH DIMENSIONAL PROPERTIES COMPLYING WITH CHAPTER 23 TABLE 2304.9.1.

6. PROVIDE WOOD HARDWARE CONNECTORS AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, INC. COMPLYING WITH APPLICABLE ER REPORT.

7. HOLDOWN ANCHORS: INSTALL HOLDOWNS 1/2" INCH ABOVE THE SILL PLATE. TIGHTEN ANCHOR BOLTS BEFORE TIGHTENING STUD BOLTS. USE EXTRA CARE IN BORING STUD HOLES (1/16" TO ⅛" OVERSIZED). THE HOLDOWN TO BE INSTALLED TIGHT TO THE HOLDOWN DTUD WITHOUT FILLERS. THE STUD BOLTS SHALL NOT BE COUNTERSUNK. DO NOT BEND HOLDOWN ANCHORS.

8. DO NOT CUT OR NOTCH STRUCTURAL LUMBER UNLESS SPECIFICALLY DETAILED OR INDICATED.

9. PROVIDE HOLES FOR BOLTS 1/32" TO 1/16" LARGER THAN NOMINAL BOLT DIAMETER. PROVIDE A307 BOLTS, UNLESS NOTED OTHERWISE, WITH STANDARD CUT WASHER UNDER BOLT HEAD AND NUT. PROVIDE STANDARD WASHERS UNDER HEADS OF LAG SCREWS.

10. RETIGHTEN ALL BOLTS PRIOR TO APPLICATION OF SHEATHING, PLASTER, ETC.

11. PROVIDE LATERAL SUPPORT FOR BEAMS, RAFTERS AND JOISTS AS STIPULATED IN IBC.

12. PROVIDE LEAD HOLES FOR WOOD SCREW EQUAL TO SEVEN EIGHTS THE DIAMETER OF THE SHANK AND THAT FOR THE THREADED PORTION SHALL BE SEVEN EIGHTS THE DIAMETER OF THE SCREW AT THE ROOT OF THE THREAD.

13. NAIL GUNS MUST BE EQUIPPED WITH A FLUSH NAILER ATTACHMENT FOR NAILING OF PLYWOOD SHEAR WALLS, FLOOR SHEATHING AND ROOF SHEATHING.

14. FASTENERS FOR PRESERVATIVE-TREATED AND FIRE RETARDANT WOOD SHALL BE OF HOT DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE, OR COPPER.

15. ALL LANDING BEAMS SHALL HAVE MINE. 4x POST WITH POST CAP AT ALL STAIR LOCATIONS.
16. ALL 3½" OR GREATER DRAG BEAMS MUST HAVE (2) ROW'S OF B.N. AT DIAPHRAGM's

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NADER KHOURY, C.E. C61402



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1048 HERMOSA AVE
HERMOSA BEACH, CA

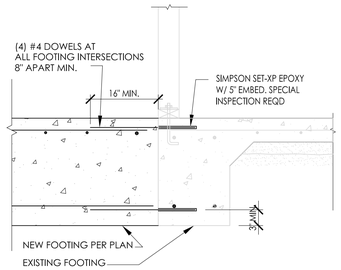
Submittals:

No.	Date	Description
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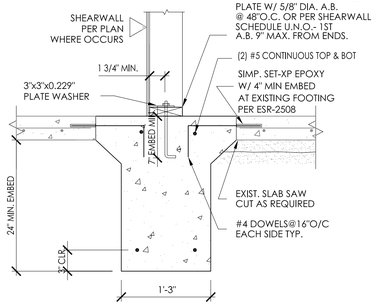
Sheet Title:
GENERAL NOTES

Project Number:	b23-051
Issue Date:	10/16/2023

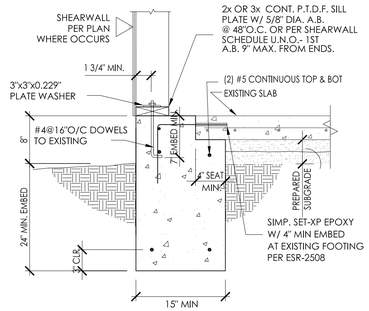
Sheet:
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TYP. EPOXY DETAIL 12



NEW INT. FOOTING DETAIL 8



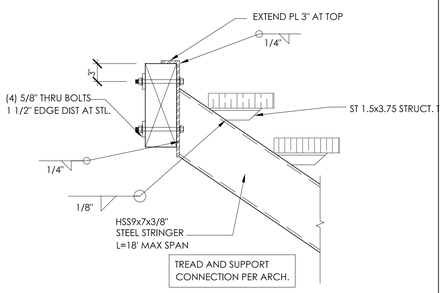
NEW FOOTING AT PERIMETER 4

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NADER KHOURY, C.E. C61402



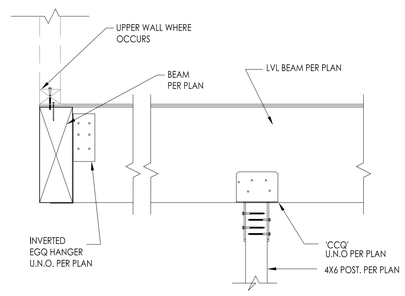
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1048 HERMOSA AVE
HERMOSA BEACH, CA

19

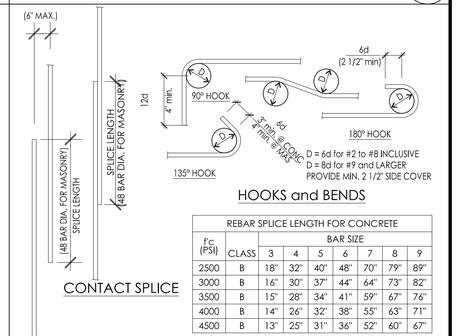


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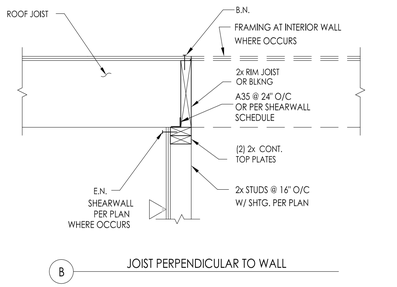


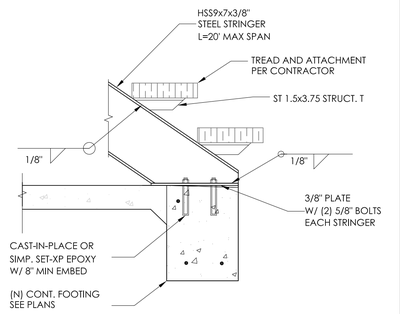
FRAMING AT CANTILEAVERED BM. 7

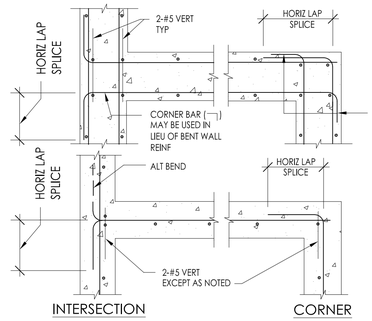


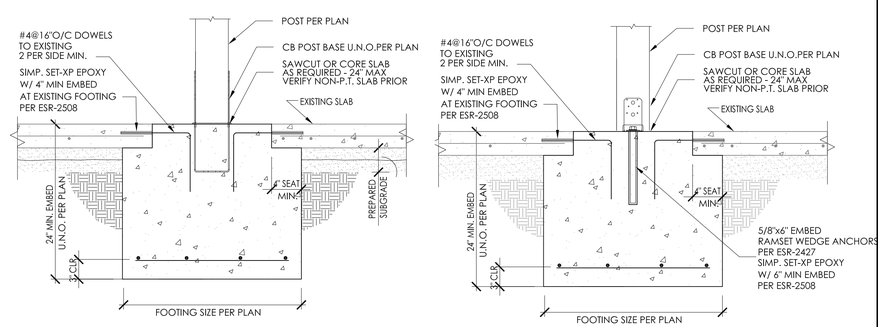
REBAR SPLICE LENGTH FOR CONCRETE								
f'c (PSI)	CLASS	BAR SIZE						
		3	4	5	6	7	8	9
2500	B	18"	32"	40"	48"	70"	79"	89"
3000	B	16"	30"	37"	44"	64"	73"	82"
3500	B	15"	28"	34"	41"	59"	67"	76"
4000	B	14"	26"	32"	38"	55"	63"	71"
4500	B	13"	25"	31"	36"	52"	60"	67"

TENSION LAP SPLICE DETAIL 3

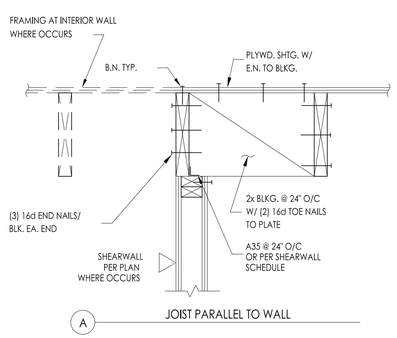




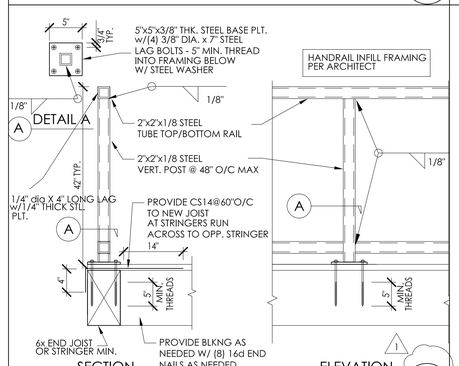




NEW INT. PAD FOOTING 2

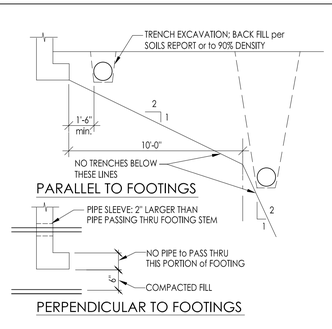


TYP. FRAMING AT FLOOR 17

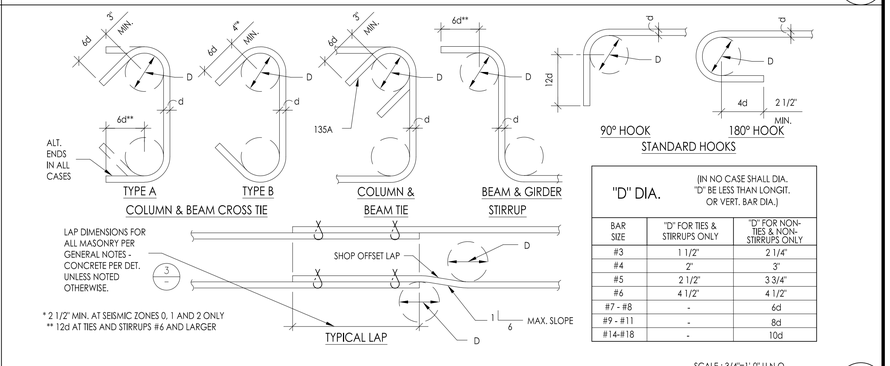


STEEL STRINGER DETAILS 14

STEEL GAURDRAIL DETAIL 13



UTILITY TRENCH DETAIL 9



"D" DIA.	(IN NO CASE SHALL DIA. "D" BE LESS THAN LONGIT. OR VERT. BAR DIA.)	
BAR SIZE	"D" FOR TIES & STIRRUPS ONLY	"D" FOR NON-TIES & NON-STIRRUPS ONLY
#3	1 1/2"	2 1/4"
#4	2"	3"
#5	2 1/2"	3 3/4"
#6	4 1/2"	4 1/2"
#7 - #8	-	6d
#9 - #11	-	8d
#14-#18	-	10d

SCALE : 3/4"=1'-0" U.N.O

TYPICAL BAR BEND DETAIL 1

Submittals:

No.	Date	Description
1	3/11/2024	PLAN CHECK CORRECTIONS

Sheet Title:

FOUNDATION & FRAMING DETAILS

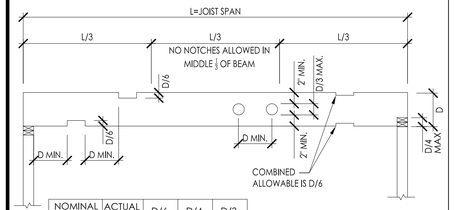
SCALE : 1"=1'-0" U.N.O

Project Number:	b23-051
Issue Date:	10/16/2023

Sheet:

S1.1

20



NOMINAL DEPTH	ACTUAL DEPTH	D/6	D/4	D/3
4"	3 1/2"	9/16"	7/8"	1 1/8"
6"	5 1/2"	7/8"	1 3/8"	1 3/4"
8"	7 1/4"	1 3/16"	1 3/4"	2 7/16"
10"	9 1/4"	1 1/2"	2 5/16"	3 1/16"
12"	11 1/4"	1 7/8"	2 3/4"	3 3/4"
14"	13 1/4"	2 3/16"	3 5/16"	4 7/16"

NOTES
1. D= JOIST OR RAFTER DEPTH
2. L=JOIST OR RAFTER LENGTH
3. WHEN POSSIBLE, LOCATE BORE/NOTCH AT TOP OF MEMBER

ALLOWABLE BORE/NOTCH AT JOIST

19

PLATE WASHER SCHEDULE	
BOLT Ø	MIN. PLATE SIZE
1/2" Ø	0.229" x 3" x 3"
5/8" Ø	0.229" x 3" x 3"
3/4" Ø	5/16" x 3" x 3"
7/8" Ø	5/16" x 3" x 3"
1" Ø	3/8" x 3 1/2" x 3 1/2"
1 1/4" Ø	1/2" x 3 1/2" x 3 1/2"

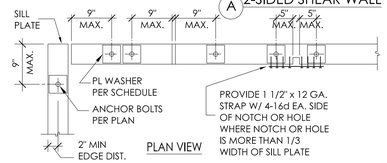
NOTES:
PRESSURE TREAT ALL SILLS BEARING ON CONC. OR MASONRY

TYPICAL EXTERIOR, BEARING, & SHEAR WALLS TO HAVE 5/8" Ø x 12" A.B. @ 32" O/C WITH 3"x3"x0.229" PLATE WASHERS.

STAGG. A.B. AT 2-SIDED SHEAR WALLS

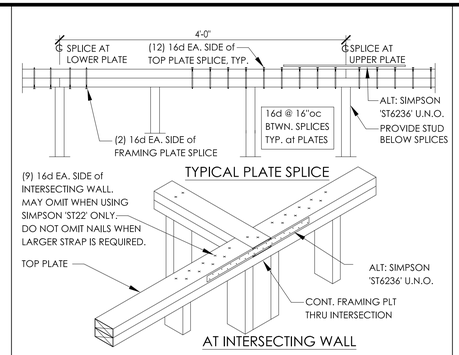


A 2-SIDED SHEAR WALL



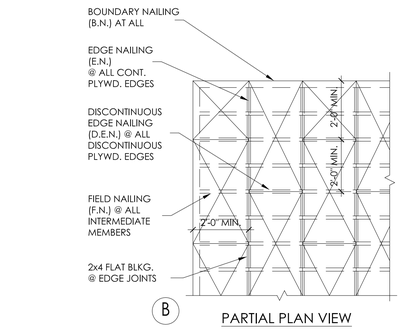
TYPICAL SILL PLATE DETAIL

16

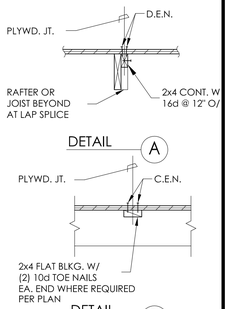


TYPICAL MIN. PLATE SPLICE DETAIL

12



NOTES:
1. RUN LONG DIMENSION OF PLYWD. PERPENDICULAR TO JOIST OR RAFTER.
2. STAGGER END JOINTS 2'-0" MIN. AS SHOWN.
3. NAILING SIZE & SPCG. AS NOTED ON PLAN.
4. NAILS SHALL HAVE A MIN. 3/8" EDGE DISTANCE.
5. ALL JOISTS & RAFTERS SHALL BE LAID OUT IN A 4'-0" MODULE TO COINCIDE W/ PLYWD. PATTERN.
6. USE TONGUE & GROOVE PLYWD. @ UNBLOCKED FLOORS.
7. WHERE JOIST OR RAFTER LAP SPLICE OCCURS & PLYWD. JOINT IS CONT., FRAME JOISTS OR RAFTERS PER A



TYP. FLOOR/ROOF PLYWOOD DETAIL

4

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BRIAN KHOURY 909.615.6962
NADER KHOURY, C.E. C61402

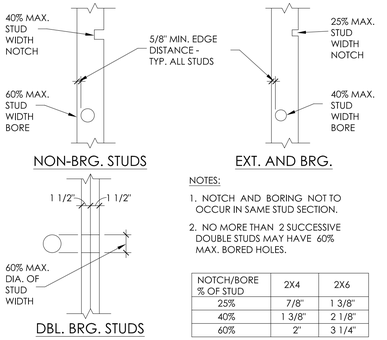


NOMINAL DEPTH	ACTUAL DEPTH	D/6	D/4	D/3
4"	3 1/2"	9/16"	7/8"	1 1/8"
6"	5 1/2"	7/8"	1 3/8"	1 3/4"
8"	7 1/4"	1 3/16"	1 3/4"	2 7/16"
10"	9 1/4"	1 1/2"	2 5/16"	3 1/16"
12"	11 1/4"	1 7/8"	2 3/4"	3 3/4"
14"	13 1/4"	2 3/16"	3 5/16"	4 7/16"

NOTES
1. D= JOIST OR RAFTER DEPTH
2. L=JOIST OR RAFTER LENGTH
3. WHEN POSSIBLE, LOCATE BORE/NOTCH AT TOP OF MEMBER

ALLOWABLE BORE/NOTCH AT JOIST

19

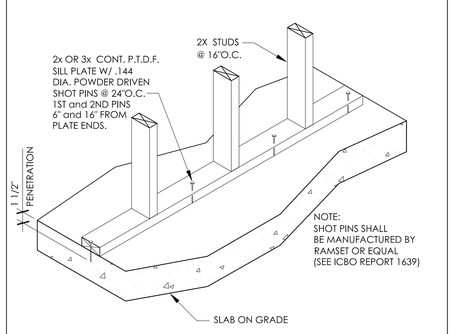


NOTES:
1. NOTCH AND BORING NOT TO OCCUR IN SAME STUD SECTION.
2. NO MORE THAN 2 SUCCESSIVE DOUBLE STUDS MAY HAVE 60% MAX. BORED HOLES.

NOTCH/BORE % OF STUD	2X4	2X6
25%	7/8"	1 3/8"
40%	1 3/8"	2 1/8"
60%	2"	3 1/4"

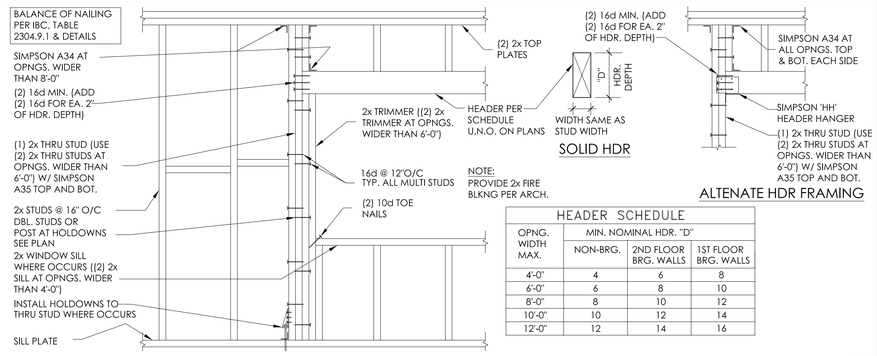
ALOW. NOTCH/BORING AT STUDS

15



TYP. SHOT PIN DETAIL

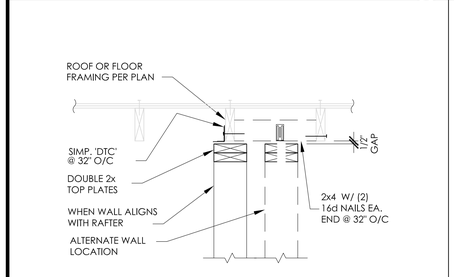
11



HEADER SCHEDULE			
OPNG. WIDTH MAX.	MIN. NOMINAL HDR. "D"		
	NON-BRG.	2ND FLOOR BRG. WALLS	1ST FLOOR BRG. WALLS
4'-0"	4	6	8
6'-0"	6	8	10
8'-0"	8	10	12
10'-0"	10	12	14
12'-0"	12	14	16

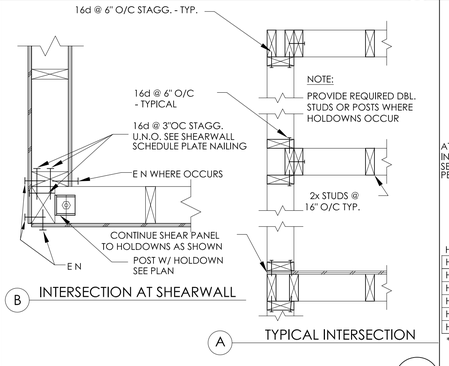
TYPICAL STUD WALL FRAMING AT OPENING

3



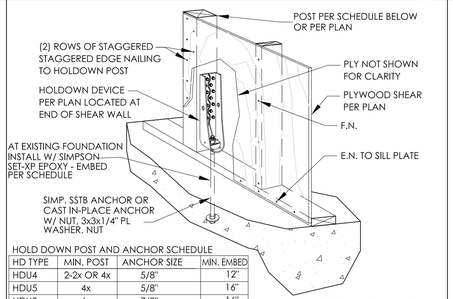
TYPICAL NON-BEARING TOP CONN.

18



TYPICAL STUD WALL AT INTERSECTION

14



HOLD DOWN POST AND ANCHOR SCHEDULE

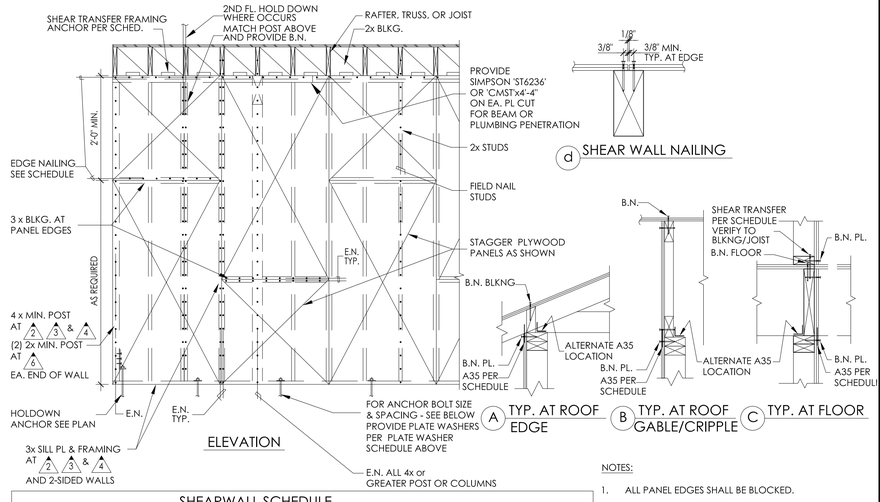
HD TYPE	MIN. POST	ANCHOR SIZE	MIN. EMBED
HDU4	2-2x OR 4x	5/8"	12"
HDU5	4x	5/8"	16"
HDU8	6x	7/8"	16"
HDU11	6x	1"	20"
HDU14	6x	1"	24"

* SEE SHEAR WALL SCHEDULE ALSO

WHERE ERRORS OCCUR, INSTALL ANCHOR OF EQUAL SIZE WITH SIMPSON SET-XP EPOXY AND MINIMUM EMBED PER SCHEDULE.

TYPICAL HOLDOWN DETAIL

10



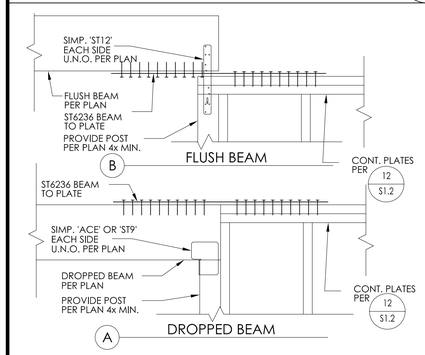
SHEARWALL SCHEDULE						
MARK	SHEATHING	PLYWOOD EDGE NAIL SIZE & SPACING	SHEAR TRANSFER	SILL PL. ANCHOR BOLT SIZE & SPACING x 12" LONG	COMMENTS	v PLF
2	1/2" THK. PLY SHTG. STRUCT 1	10d @ 2"O/C	A35 @ 6"O/C 20d/SDS @ 2"O/C	3x SILL PL-5/8"Ø @ 8"O/C 0.229"x3"x3" PL WASHER	3x FRAMING @ ALL PANEL EDGES	870
3	1/2" THK. PLY SHTG. STRUCT 1	10d @ 3"O/C	A35 @ 8"O/C 20d/SDS @3"O/C	3x SILL PL-5/8"Ø @ 12"O/C 0.229"x3"x3" PL WASHER	3x FRAMING @ ALL PANEL EDGES	665
4	1/2" THK. PLY SHTG. STRUCT 1	10d @ 4"O/C	A35 @ 10"O/C 20d/SDS @ 4"O/C	3x SILL PL-5/8"Ø @ 24"O/C 0.229"x3"x3" PL WASHER	3x FRAMING @ ALL PANEL EDGES	510
6	1/2" THK. PLY SHTG. STRUCT 1	10d @ 6"O/C	A35 @ 16"O/C 20d/SDS @ 6"O/C	2x SILL PL-5/8"Ø @ 32"O/C 0.229"x3"x3" PL WASHER		340

NOTES:
1. ALL PANEL EDGES SHALL BE BLOCKED.
2. ALL NAILS SHALL BE COMMON.
3. PLYWOOD PANELS MAY BE PLACED VERTICALLY OR HORIZONTALLY ACROSS STUDS.
4. DIVIDE SPACING OF SHEAR TRANSFER, SILL PL NAILING BOLTS BY TWO AT DOUBLE-SIDED SHEAR WALLS.
5. 3x MEMBERS MINIMUM REQUIRED @ PNL. JOINTS & SILL PLATES FOR 4", 3" AND 2" O/C EDGE NAILING.
6. PREDRILLING REQUIRED FOR NAIL SIZE 20d OR GREATER.
7. STAGGER VERT JOINTS AT DOUBLE SIDED WALLS.
8. AT 3x SILL PL. 1/4"x6" SIMP. SDS SCREWS MAY BE USED AS ALTERNATE TO 20d - MATCH SCHEDULE SPACING

** = 8d COMMON NAILS - SHANK DIAMETER = 0.131" - LENGTH = 2 1/2"
** = 10d COMMON NAILS - SHANK DIAMETER = 0.148" - LENGTH = 3"
** = 16d COMMON NAILS - SHANK DIAMETER = 0.162" - LENGTH = 3 1/2"

TYP. SHEARWALL SCHEDULE

1



TYP. BEAM/DRAG DETAIL

17

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1048 HERMOSA AVE
HERMOSA BEACH, CA

Submittals:

No.	Date	Description
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Sheet Title:
MISC. AND TYPICAL FRAMING DETAILS

SCALE : 1"=1'-0" U.N.O

Project Number:	b23-051
Issue Date:	10/16/2023

Sheet:
S1.2

WALL AND PLAN SYMBOL LEGEND

4x6 — INDICATES POST SIZE AND HARDWARE AS NEEDED PER PLAN
SIMPSON 'CBQ' BASE AND 'CCQ' CAP MIN U.N.O. PER PLAN

HDU2 — INDICATES SHEAR WALL/POST HOLDOWN AT FOUNDATION/FLOOR PER PLAN
INSTALL PER SIMPSON SPECIFICATION AND DETAILS 1/S1.2 10/S1.2

INDICATES NEW WALLS
2x4 STUD GRADE @16"O/C TYP. ALL WALL UPTO 10'-0" SPAN
2x6 STUD GRADE @16"O/C TYP. ALL WALL UPTO 10'-0" SPAN
2x6 STUD GRADE @16"O/C TYP. ALL WALL UPTO 14'-0" SPAN
2x6 No.1 GRADE @16"O/C TYP. ALL WALL UPTO 15'-6" SPAN
2x6 No.1 GRADE @12"O/C TYP. ALL WALL UPTO 17'-0" SPAN

INDICATES NEW CONCRETE GRADE BEAM/FOOTING/PAD PER PLAN

INDICATES SPAN DIRECTION OF FRAMING / BEAMS PER PLAN

6x8 HDR — INDICATES HDR TO BE INSTALLED AT OPENING HEAD
ALL OPENINGS TO BE FRAMED PER 3/S1.2

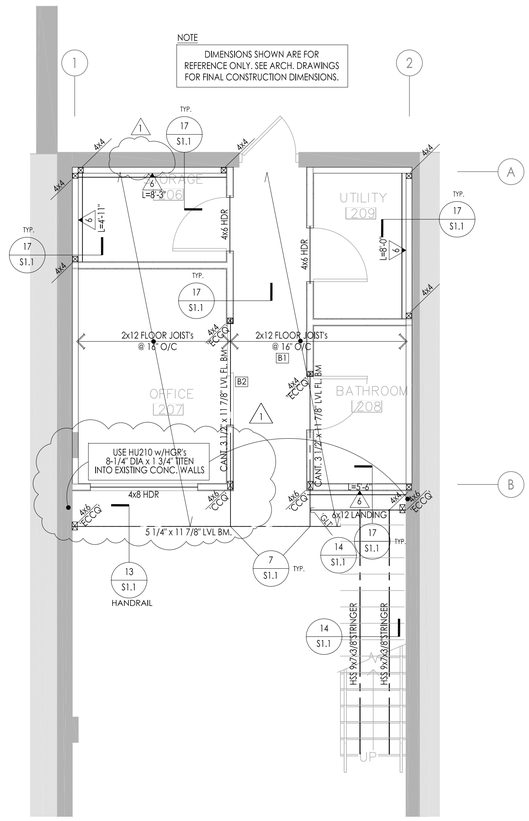
INDICATES NEW CONCRETE FOUNDATION

FLOOR FRAMING PLAN NOTES

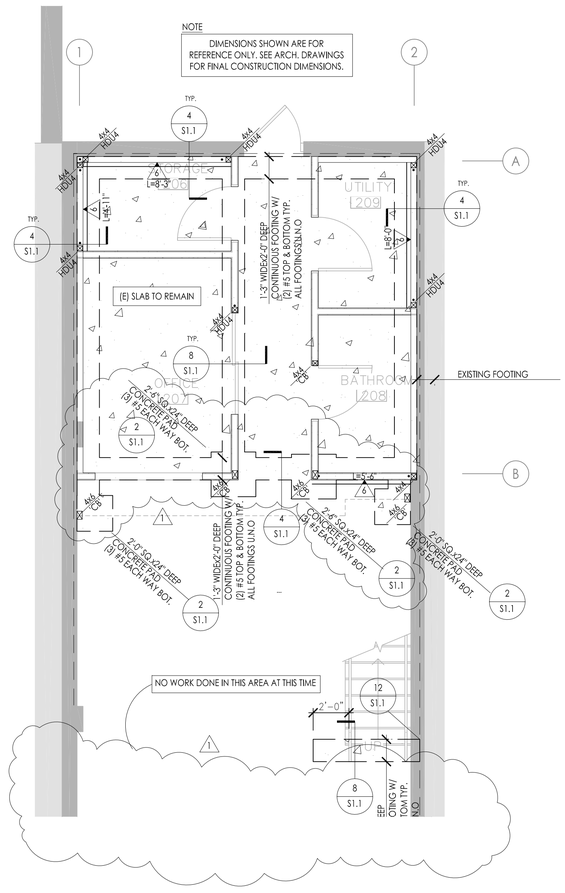
1. TYPICAL ROOF TO BE:
   3/4" STRUCT. 2 PLYWOOD - ALL EDGES UN-BLOCKED
   W/ 10d @ 6" O.C. B.N., 12" O.C. F.N. - SEE DETAIL 4/S1.2
2. SEE ARCH. PLAN FOR DIMENSIONS, TOP OF SHEATHING ELEVATION, FOUNDATION ELEVATION, AND FURTHER DETAIL
3. FOR GENERAL NOTES AND TYPICAL DETAILS SEE STRUCTURAL SHEETS
4. ALL DOUBLE TOP PLATES TO BE SPLICED PER 12/S1.2
5. ALL WALLS TO HAVE 2x OR 3xSILL PLATE AS REQUIRED PER PLAN WITH 16d@12"O/C OR PER SHEARWALLS SCHEDULE.
   3x SILL PL W/ 1/4"x6" SDS SCREWS@12"O/C OR PER SHEARWALLS SCHEDULE. SEE 1/S1.2 16/S1.2
6. ALL BEAM/POST/FOOTING CONNECTION TO BE SIMP. 'CCQ' & 'CBQ' U.N.O
7. ALL BEAM TO BEAM CONNECTION TO BE SIMP. 'HU' & 'HUC' U.N.O. TF WHEN POSSIBLE
8. ALL NON-BEARING INTERIOR WALLS TO HAVE TOP CONNECTIONS AS SHOWN IN TYPICAL DETAIL 18/S1.2

FOUNDATION NOTES:

1. FOR ALL DIMENSIONS NOT SHOWN ON THIS PLAN - SEE ARCHITECTURAL DRAWINGS.
2. FOR GENERAL NOTES AND TYPICAL DETAILS SEE STRUCTURAL SHEETS
3. MINIMUM CONCRETE TO BE f'c=3000 PSI TYPE V WITH W/C RATIO=0.45.
4. MINIMUM STEEL TO BE f'y=60 KSI.
7. CONTRACTOR TO PROVIDE A MINIMUM OF 8" BETWEEN TIMBER AND EARTH AT THE BUILDING PERIMETER.
8. PROVIDE 2x OR 3x TREATED SILL PLATES AS INDCATED PER PLAN AND DETAIL 1/S1.2
9. ALL WALLS TO HAVE 5/8"x12" A.B. @ 4'-0"O/C MAX. PER 16/S1.2 OR PER SHEARWALLS SCHEDULE
   WITH 3x3x 0.229" PLATE WASHER PER 1/S1.2
   NEW SHEARWALLS INSTALLED AT EXISTING WALLS TO HAVE NEW ANCHOR BOLTS INSTALLED WITH 5" EMBED IN SIMPSON SET-XP EPOXY PER THE SHEAR WALL SCHEDULE.
10. INTERIOR/NON-BEARING WALLS TO BE ANCHORED TO SLAB PER 11/S1.2
11. HOLDOWN HARDWARE MUST BE SECURED IN PLACE PRIOR TO FOUNDATION INSPECTION.
12. HOLDOWN CONNECTOR WITH BOLTS INTO WOOD FRAMING REQUIRE APPROVED PLATE WASHERS.
13. EMBED FOUNDATION 2'-0" MINIMUM INTO SUBGRADE U.N.O.



FLOOR FRAMING PLANS



FOUNDATION PLANS

ENGINEERING STRUCTURES, INC.
BRIAN KHOURY 909.615.6962
NADER KHOURY, C.E. C61402

PROFESSIONAL ENGINEER — NADER B. KHOURY — No. 61402 — EXP. 06/30/25 — CIVIL — STATE OF CALIFORNIA

TI
1048 HERMOSA AVE
HERMOSA BEACH, CA

Submittals:

No.	Date	Description
1	3/11/2024	PLAN CHECK CORRECTIONS

Sheet Title:

FLOOR FRAMING & FOUNDATION PLANS

SCALE : 1/4"=1'-0" U.N.O

Project Number:	b23-051
Issue Date:	10/16/2023

Sheet:

S2.1