#### GENERAL NOTES GREEN CODE **ABBREVIATIONS** 1. CONTRACTORS SHALL VERIFY ALL **G1**. ANNULAR SPACES AROUND PIPES, ELECTRIC DIMENSIONS WITH CONDITIONS AT THE JOB CABLES, CONDUITS OR OTHER OPENINGS IN SOLE/ **ACCOUSTICAL** ACOUS. SITE BEFORE PROCEEDING WITH ANY WORK BOTTOM PLATES AT EXTERIOR WALLS SHALL BE A.D. AREA DRAIN CONTRACTORS SHALL NOTIFY PROJECT CLOSED WITH CEMENT MORTAR, CONCRETE ADJ. ADJUSTABLE OR **DESIGNER IF EXISTING CONDITIONS DIFFER** MASONRY OR A SIMILAR METHOD ACCEPTABLE TO THE ADJACENT FROM THOSE ON DRAWINGS. ENFORCING AGENCY TO PREVENT PASSAGE OF **ABOVE GRADE** RODENTS PER CGBSC 4.406.1. A.F.F. **ABOVE FINISHED** 2. ALL DIMENSIONS SHALL BE AS INDICATED ON **G2**. MIN. 65% OF THE CONSTRUCTION WASTE FLOOR DRAWINGS OR AS CLARIFIED BY PROJECT GENERATED SHALL BE RECYCLED AND/OR SALVAGED **ALUMINUM** DESIGNER. UNDER NO CIRCUMSTANCES SHALL PER CGBSC 4.408.1. **ARCH ARCHITECTURAL** DIMENSIONS BE DETERMINED BY SCALING THE G3. AN OPERATION AND MAINTENANCE MANUAL SHALL **ASPH ASPHALT** DRAWINGS. BE PROVIDED TO THE BUILDING OCCUPANT OR BOARD BD. OWNER PER CGBSC 4.410.1. BUILDING BLDG 3. ANY ERRORS, OMISSIONS, OR CONFLICTS BM. BEAM **G4**. AT THE TIME OF ROUGH INSTALLATION, DURING FOUND IN THE VARIOUS PARTS OF THE CH. **CEILING HEIGHT** STORAGE ON THE CONSTRUCTION SITE AND UNTIL CONSTRUCTION DOCUMENTS SHALL BE CAB. **CABINET** FINAL STARTUP OF THE HEATING, COOLING AND BROUGHT TO THE ATTENTION OF THE PROJECT CEM. **CEMENT** VENTILATING EQUIPMENT, ALL DUCT AND OTHER DESIGNER PRIOR TO COMMENCEMENT OF CER. CERAMIC RELATED AIR INTAKE AND DISTRIBUTION COMPONENT WORK. CLEAR CLR. OPENINGS SHALL BE COVERED. TAPE, PLASTIC, SHEET **COLUMN** COL. METALS, OR OTHER METHODS ACCEPTABLE TO THE 4. ALL WORK SHALL COMPLY WITH ALL CONSTR CONSTRUCTION ENFORCING AGENCY TO REDUCE THE AMOUNT OF APPLICABLE CODES, ORDINANCES, AND THE CONT CONTINUOUS WATER, DUST AND DEBRIS ENTERING THE SYSTEM HIGHEST STANDARDS OF THE TRADE. CONC CONCRETE MAY BE USED PER CGBSC 4.504.1. DEEP **G5**. FINISH MATERIALS SHALL COMPLY WITH SECTION 5. ALL WORK SHALL BE DONE IN A SAFE, DIAMETER DIA. ORDERLY MANNER WITHOUT DAMAGE TO 4.504.2.1 THROUGH 4.504.5.1. DS. **DOWNSPOUT** OTHER PARTS OF THE PREMISES OR ADJACENT G6. ADHESIVES. SEALANT AND CAULKS SHALL BE DWG. DRAWING PROPERTIES. COMPLIANT WITH VOC OR OTHER TOXIC COMPOUND ELEV. **ELEVATION** LIMIT PER CGBSC 4.504.2.1. **EXISTING** (E) 6. NO MATERIALS CONTAINING ASBESTOS MAY G7. PAINT AND COATING SHALL BE COMPLIANT WITH EAST BE USED. VOC LIMIT PER CGBSC 4.504.2.2. EACH EA. **G8**. AEROSOL PAINTS AND COATINGS SHALL BE ELEC. **ELECTRICAL** CODE COMPLIANCE COMPLIANT WITH PRODUCT WEIGHTED MIR LIMITS EQ. **EQUAL** FOR ROC OR OTHER TOXIC COMPOUND PER CGBSC **EXTERIOR** EXT. CITY OF SUNNYVALE MUNICIPAL CODE 4.504.2.3. EXP. **EXPANSION** 2022 CBC, CALIFORNIA BUILDING CODE **G9**. DOCUMENTATION SHALL BE PROVIDED TO THE F.E.C. FIRE EXTINGUISHER 2022 CRC, CALIFORNIA RESIDENTIAL CODE CITY BUILDING INSPECTOR UPON REQUEST. **CABINET** 2022 CMC, CALIFORNIA MECHANICAL CODE VERIFYING THAT COMPLIANT VOC LIMIT MATERIALS FIN. FINISH 2022 CEC, CALIFORNIA ELECTRICAL CODE **FLOOR** HAVE BEEN USED PER CGBSC 4.504.2.4. FLR. 2022 CPC, CALIFORNIA PLUMBING CODE **FLUORESCENT** FLUOR. **G10**. ALL CARPET AND CARPET SYSTEMS SHALL BE 2022 CFC, CALIFORNIA FIRE CODE **FACE OF FINISH** F.O.F. COMPLIANT WITH VOC LIMIT PER CGBSC 4.504.3. 2022 CCR, CALIFORNIA CODE OF REGULATIONS, TITLE 24 F.O.S. FACE OF STUD **G11**. 80% OF FLOOR AREA RECEIVING RESILIENT 2022 CALIFORNIA GREEN BUILDING STANDARD CODE FT. FOOT OR FEET FLOORING SHALL COMPLY WITH VOC EMISSION LIMITS 2022 CALIFORNIA ENERGY CODE **GALV GALVANIZED** DEFINED IN THE COLLABORATIVE FOR HIGH GA. **GAUGE** PERFORMANCE PRODUCT (CHPS) LOW-EMITTING GL. GLASS MATERIAL LIST OR BE CERTIFIED UNDER THE **GYPSUM** RESILIENT FLOOR COVERING INSTITUTE (RCFI) **HEIGHT** FLOOR SCORE PROGRAM PER CGBSC 4.504.3.4. HEX. **HEXAGON G12**. HARDWOOD PLYWOOD, PARTICLEBOARD AND MEDIUM DENSITY FIBERBOARD COMPOSITE WOOD **HOLLOW CORE** PRODUCTS USED ON THE INTERIOR OR EXTERIOR OF **HOLLOW METAL** THE BUILDING SHALL BE COMPLIANT WITH LOW HOUR FORMALDEHYDE EMISSIONS STANDARDS PER CGBSC INSULATION INTERIOR **G13**. A CAPILLARY BREAK SHALL BE INSTALLED IF A LONG SLAB ON GRADE FOUNDATION SYSTEM IS USED. THE **LIGHT** USE OF A 4" THICK BASE OF 1/2" OR LARGER CLEAN **MINIMUM** MOUNTED AGGREGATE UNDER A 6-MIL VAPOR RETARDER WITH JOINT LAPPED NOT LESS THAN 6" WILL BE PROVIDED (N) NEW PER CGBSC 4.505.2 AND CRC R506.2.3. NORTH **G14**. BUILDING MATERIALS WITH VISIBLE SIGNS OF NOT IN CONTRACT N.I.C. NUMBER OR POUND WATER DAMAGE SHALL NOT BE INSTALLED. WALL AND NO.OR# FLOOR FRAMING SHALL NOT BE ENCLOSED WHEN THE N.T.S. NOT TO SCALE OVERALL O.A. FRAMING MEMBERS EXCEED 19% MOISTURE O.C. ON CENTER CONTENT. MOISTURE CONTENT SHALL BE VERIFIED IN O.H. OPPOSITE HAND COMPLIANCE WITH THE CGBSC 4.505.3. P.D.P. POWDER DRIVEN PIN **G15**. INSTALL ENERGY STAR BATHROOM FANS ON PLATE TIMER OR HUMIDISTAT AND BE DUCTED TO TERMINATE PLASTIC LAMINATE P.LAM. OUTSIDE THE BUILDING, SHALL BE PROVIDED IN PLYWD. PLYWOOD EVERY NEW/REMODELED BATHROOM PER CGBSC REMOVE(D) RADIUS **G16**. HEATING AND AIR-CONDITIONING SYSTEMS REQ. REQUIRE(D) SHALL BE SIZED, DESIGNED AND HAVE THEIR ROOM EQUIPMENT SELECTED USING THE FOLLOWING R.O. **ROUGH OPENING** METHODS (CGBSC 4.507.2): S.C. SOLID CORE 1. THE HEAT LOSS AND HEAT GAIN IS ESTABLISHED SCHED. SCHEDULED ACCORDING TO ANSI/ACCA 2 MANUAL J-2011 OR SIM. SIMILAR EQUAL; SHT. SHEET 2. DUCT SYSTEMS ARE SIZED ACCORDING TO ANSI/ SPEC **SPECIFICATION** ACCA 1 MANUAL D-2014 OR EQUAL STD. STANDARD 3. SELECT HEATING AND COOLING EQUIPMENT STOR. STORAGE ACCORDING TO ANSI/ACCA3 MANUAL S-2014 OR SUSP SUSPENDED **EQUAL** S/S STAINLESS STEEL 4. EXCEPTION: USE OF ALTERNATE DESIGN SQ. SQUARE TEMPERATURES NECESSARY TO ENSURE THE TELEPHONE TEL. SYSTEMS FUNCTION ARE ACCEPTABLE. T.&G. **TONGUE & GROOVE G17**. HVAC SYSTEM INSTALLERS SHALL BE TRAINED THK. THICK AND CERTIFIED IN THE PROPER INSTALLATION OF TYP. TYPICAL **UNLESS OTHERWISE NOTED** U.O.N HVAC SYSTEMS AND EQUIPMENTS BY A RECOGNIZED TRAINING OR CERTIFICATION PROGRAM PER CGBSC VERT. VERTICAL V.I.F. VERIFY IN FIELD V.C.T VINYL COMPOSITION TILE **G18**. DOCUMENTATION OF COMPLIANCE SHALL W.C. WATER CLOSET INCLUDE, BUT IS NOT LIMITED TO, CONSTRUCTION WD. WOOD DOCUMENTS, PLANS, SPECIFICATIONS, BUILDER OR WITH INSTALLER CERTIFICATION, INSPECTION REPORTS, OR W/O WITHOUT OTHER METHODS ACCEPTABLE TO THE LOCAL WP. WATERPROOF ENFORCING AGENCY, OTHER SPECIFIC

W.R

WT.

WATER RESISTANT

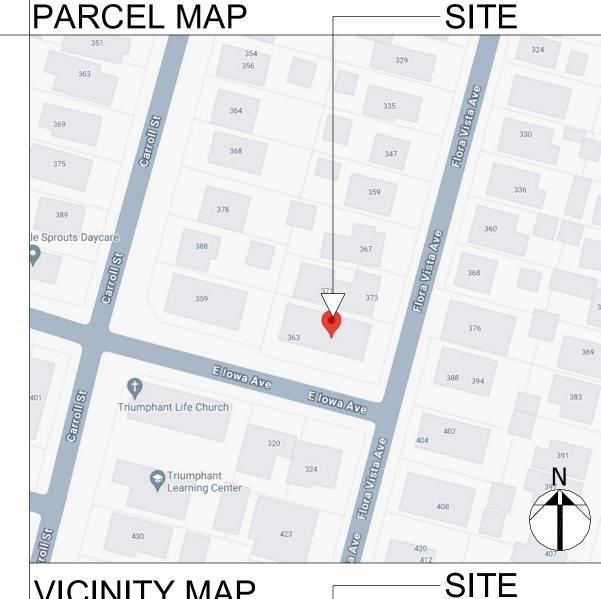
WEIGHT

DOCUMENTATION OR SPECIAL INSPECTIONS

CGBSC 4.703.

IN APPROPRIATE SECTIONS OF CALGREEN PER

NECESSARY TO VERIFY COMPLIANCE ARE SPECIFIED



# INTERIOR & EXTERIOR REMODEL 363 & 365 E IOWA AVE SUNNYVALE, CA 94086

SCOPE OF WORK

10. REPLACE ALL EXISTING DOORS AND WINDOWS. NEW EXTERIOR

SLIDING DOOR IN THE LIVING ROOM

12. NEW LIGHTING FOR ALL ROOMS.

NO. OF BATHROOM: NO. OF FLOORS

11. REPLACE EXISTING GARAGE OVERHEAD DOOR.

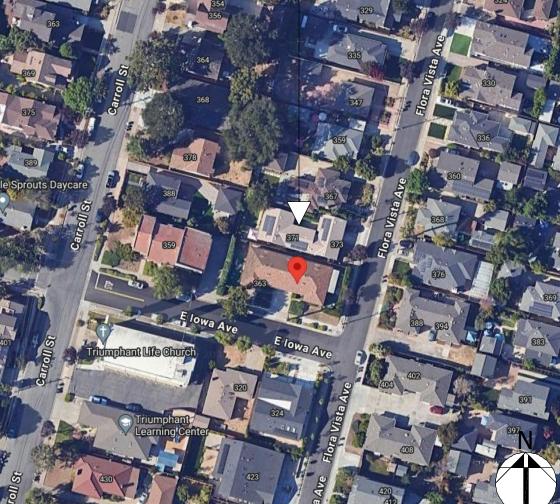
14. REMOVE EXISTING AWNING ON THE EAST SIDE.

13. MECHANICAL, ELECTRICAL AND PLUMBING WORK.



DESIGN BY: 3E DESIGN

VICINITY MAP



**COVER SHEET** 

**GREEN BUILDING STANDARDS** 

**GREEN BUILDING STANDARDS** 

EXISTING FLOOR PLAN

EXISTING ROOF PLAN

PROPOSED FLOOR PLAN

EXISTING AND PROPOSED SITE PLAN

### SHEET INDEX

ARCHITECTURE

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A 1.1

A 2.0

A 3.0

A 3.1

A 3.2

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A 8.0	AIR DUCTING PLAN
CB 1.0	CLEAN BAY BLUE PRINT
LANDSCAPE	
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CIVIL	
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TIVIT	SUBDIVISION PLAN
TM2	EXISTING CONDITION & PRELIMINARY
1 1012	DEMOLITION PLAN
TM3	PERLIMINARY GRADING, DRAINAGE & UTILITY
1100	PLAN

	INTERIOR & EXTERIOR REMODEL FOR BOTH UNIT 363 & 365. SCOPE OF WORK FOR EXTERIOR:	PROJECT ADDRESS:	0	
	1. REPLACE THE ENTIRE ROOF SHINGLES WITH NEW COMPOSITION	363 & 365 E IOWA AVE SUNNYVALE, CA 94086	REVIEW BY:	
	SHINGLES. 2. INSTALL NEW GUTTERS AND DOWNSPOUTS.	SUMM VALE, CA 94000		
j	3. NEW EXTERIOR FASCIA DECORATION.	OWNER:		
Ļ	4. STUCCO WORK FOR THE FRONT PORCH POSTS.	COUNTRYWIDE LLC		
	5. UPGRADE THE ELECTRICAL PANEL TO 400 AMPS, 200 AMP FOR UNIT			
1	363 AND 200 AMP FOR UNIT 365.	SAN JOSE, CA 95128		
•	6. NEW EXTERIOR LIGHTINGS.	CELL: SANDY: (510) 529-8979; ZE: (669) 899-1451		
2		EMAIL: INFO@ARCHGENERALCONSTRUCTION.COM		
	SCOPE OF WORK FOR UNIT 363:			
Ì	1. CONVERT 98 SF EXISTING STORAGE ROOM BY THE GARAGE INTO	DESIGNER:		
36	LIVING SPACE.	3E DESIGN - BUILD		
	2. ADD 1 NEW BEDROOM.	2817 WHIPPLE RD,		
N.	3. ADD 2 NEW BATHROOMS. 4. FULL KITCHEN REMODEL WITH 2 NEW SKYLIGHTS	UNION CITY, CA 94587 (510)520-8300		
4	5. NEW LAUNDRY ROOM BY THE HALL.	INFO@3E.DESIGN		
4	6. NEW GAS FURNACE IN THE ATTIC WITH NEW DUCTING.	111 0602.2201011	111 0	
	7. INSTALL NEW CENTRAL AC.	LANDSCAPE ARCHITECT:	AVE 4086	
b	8. REPLACE THE EXISTING TANK WATER HEATER WITH NEW TANKLESS	ANYI LANDSCAPE STUDIO	A A	
1	WATER HEATER.	2647 ROYAL ANN DRIVE	<b>⋖</b> ø	<u> </u>
Ģ.	9. NEW SUN TUNNEL BY THE HALL.	UNION CITY. CA 94587	IOWA ; CA 9	Ц
	10. REPLACE ALL EXISTING DOORS AND WINDOWS. NEW EXTERIOR	(650)533-0107	00	4
ľ	SLIDING DOOR IN THE LIVING ROOM.	ÂNYÎHUANG@GMAIL.COM	<u>~</u> <sub>    i</sub>	10
	11. REPLACE EXISTING GARAGE OVERHEAD DOOR.	CIVIL:	шЩ	<b>^</b>
	12. NEW LIGHTING FOR ALL ROOMS. 13. MECHANICAL, ELECTRICAL AND PLUMBING WORK.	STERLING CONSULTANTS	365 YVA	ū
ă	13. WESTANICAE, ELECTRICAE AND PEOWIBING WORK.	46560 FREMONT BLVD, SUITE 205	28	
	SCOPE OF WORK FOR UNIT 365:	FREMONT, CA 94538		
	1. CONVERT 98 SF EXISTING STORAGE ROOM BY THE GARAGE INTO	(510)344-8955		
	LIVING SPACE.	1STÉRLINGCONSULTANTS@GMAIL.COM	$\cup$ $\omega$ $\supset$ $\cup$	
	2. ADD 1 NEW BEDROOM		S S	
	3. ADD 2 NEW BATHROOM.			
	4. FULL KITCHEN REMODEL WITH 2 NEW SKYLIGHTS			
	5. NEW GAS FURNACE IN THE ATTIC WITH NEW DUCTING.			
	7. INSTALL NEW CENTRAL AC. 8. REPLACE THE EXISTING TANK WATER HEATER WITH NEW TANKLESS			
	WATER HEATER.			
	9. NEW SUN TUNNEL BY THE HALL.		ZE SS	
	10 DEDITION OF ALL EXPERIENCE AND		22	

**CONTACT LIST** 

PROJECT NUMBER 23043 SUBMITTAL DESCRIPTION

PROPERTY INFORMATION ZONING: 209-24-070 02.02.24 PLANNING SUBMITTAL **OCCUPANCY:** R-3 TYPE OF CONSTRUCTION: FIRE SPRINKLERS: NO 2 (CAR GARAGE) PARKING: LOT NET AREA: 7,584 SF 8,769 SF LOT GROSS AREA: **EXISTING PROPOSED TOTAL** UNIT #363 FLOOR AREA: 1,241 SF **NO CHANGE** 1,241 SF DELTA DATE DESCRIPTION GARAGE GROSS FLOOR AREA: 246 SF **NO CHANGE** 246 SF 4/24/2024 PLANNING 25 SF NO CHANGE 25 SF FRONT PORCH: \_\_\_\_\_ 6/18/2024 PLANNING UNIT #365 /<sub>4</sub> | 7/24/2024 | PLANNING FLOOR AREA: 1.241 SF **NO CHANGE** 1,241 SF 246 SF **NO CHANGE** 246 SF **GARAGE GROSS FLOOR AREA:** 25 SF FRONT PORCH: 25 SF **NO CHANGE COVERED PATIO:** 257 SF - 257 SF 0 SF 2,974 SF TOTAL FLOOR AREA NO CHANGE TOTAL BUILDING FOOTPRINT 3,281 SF -257 SF 3,024 SF LOT COVERAGE: 43.2% NO CHANGE 39.9% 0.392 0.426 -0.034 NO. OF BEDROOMS: NO. OF BATHROOM: +2 SHEET NO. NO. OF FLOORS **NO CHANGE** UNIT #365 A 0.0 NO. OF BEDROOMS:

**NO CHANGE** 



**CHAPTER 3** 

**GREEN BUILDING** 

**SECTION 301 GENERAL** 

specific area of the addition or alteration.

other important enactment dates.

high-rise buildings, no banner will be used.

**ABBREVIATION DEFINITIONS:** 

Additions and Alterations

Low Rise

High Rise

**SECTION 4.102 DEFINITIONS** 

CHAPTER 4

DSA-SS

OSHPD

SECTION 302 MIXED OCCUPANCY BUILDINGS

**301.1 SCOPE.** Buildings shall be designed to include the green building measures specified as mandatory in

but are not required unless adopted by a city, county, or city and county as specified in Section 101.7.

lighting fixtures are not considered alterations for the purpose of this section.

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,

301.1.1 Additions and alterations. [HCD] The mandatory provisions of Chapter 4 shall be applied to

The mandatory provision of Section 4.106.4.2 may apply to additions or alterations of existing parking

additions or alterations of existing residential buildings where the addition or alteration increases the

building's conditioned area, volume, or size. The requirements shall apply only to and/or within the

facilities or the addition of new parking facilities serving existing multifamily buildings. See Section

Note: Repairs including, but not limited to, resurfacing, restriping and repairing or maintaining existing

Note: On and after January 1, 2014, residential buildings undergoing permitted alterations, additions, of

Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate

of occupancy or final permit approval by the local building department. See Civil Code Section 1101.1,

et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and

301.2 LOW-RISE AND HIGH-RISE RESIDENTIAL BUILDINGS. [HCD] The provisions of

individual sections of CALGreen may apply to either low-rise residential buildings high-rise residential

specifically to low-rise only (LR) or high-rise only (HR). When the section applies to both low-rise and

302.1 MIXED OCCUPANCY BUILDINGS. In mixed occupancy buildings, each portion of a building

FRENCH DRAIN. A trench, hole or other depressed area loosely filled with rock, gravel, fragments of brick or similar

WATTLES. Wattles are used to reduce sediment in runoff. Wattles are often constructed of natural plant materials

such as hay, straw or similar material shaped in the form of tubes and placed on a downflow slope. Wattles are also

4.106.1 GENERAL. Preservation and use of available natural resources shall be accomplished through evaluation

1.106.2 STORM WATER DRAINAGE AND RETENTION DURING CONSTRUCTION. Projects which disturb less

Retention basins of sufficient size shall be utilized to retain storm water on the site.

than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre

during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent

2. Where storm water is conveyed to a public drainage system, collection point, gutter or similar

Note: Refer to the State Water Resources Control Board for projects which disturb one acre or more of soil, or

manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface

Other water measures which keep surface water away from buildings and aid in groundwater

1. On a case-by-case basis, where the local enforcing agency has determined EV charging and

1.1 Where there is no local utility power supply or the local utility is unable to supply adequate

1.2 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

2. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional

infrastructure are not feasible based upon one or more of the following conditions:

4.106.4.1 New one- and two-family dwellings and townhouses with attached private garages. For each

dwelling unit, install a listed raceway to accommodate a dedicated 208/240-volt branch circuit. The raceway

shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main

service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to the

concealed areas and spaces. The service panel and/or subpanel shall provide capacity to install a 40-ampere

208/240-volt minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit

4.106.4.1.1 Identification. The service panel or subpanel circuit directory shall identify the overcurrent

protective device space(s) reserved for future EV charging as "EV CAPABLE". The raceway termination

proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or

Exemption: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is installed in close proximity to the proposed location of an EV charger at the time of original construction in

location shall be permanently and visibly marked as "EV CAPABLE".

disposal method, water shall be filtered by use of a barrier system, wattle or other method approved

or more, shall manage storm water drainage during construction. In order to manage storm water drainage

management of storm water drainage and erosion controls shall comply with this section.

3. Compliance with a lawfully enacted storm water management ordinance.

**Exception**: Additions and alterations not altering the drainage path.

are part of a larger common plan of development which in total disturbs one acre or more of soil.

(Website: https://www.waterboards.ca.gov/water\_issues/programs/stormwater/construction.html)

**4.106.4 Electric vehicle (EV) charging for new construction.** New construction shall comply with Sections 4.106.4.1 or 4.106.4.2 to facilitate future installation and use of EV chargers. Electric vehicle supply

equipment (EVSE) shall be installed in accordance with the California Electrical Code, Article 625.

4.106.4, may adversely impact the construction cost of the project.

4.106.3 GRADING AND PAVING. Construction plans shall indicate how the site grading or drainage system will

and careful planning to minimize negative effects on the site and adjacent areas. Preservation of slopes,

1. [HCD] Accessory structures and accessory occupancies serving residential buildings shall

2. [HCD] For purposes of CALGreen, live/work units, complying with Section 419 of the California

Building Code, shall not be considered mixed occupancies. Live/Work units shall comply with

shall comply with the specific green building measures applicable to each specific occupancy.

comply with Chapter 4 and Appendix A4, as applicable.

Chapter 4 and Appendix A4, as applicable.

Department of Housing and Community Development

Office of Statewide Health Planning and Development

RESIDENTIAL MANDATORY MEASURES

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

pervious material used to collect or channel drainage or runoff water.

property, prevent erosion and retain soil runoff on the site.

by the enforcing agency

water include, but are not limited to, the following:

parking facilities.

accordance with the California Electrical Code.

overcurrent protective device.

French drains

Water retention gardens

Water collection and disposal systems

DIVISION 4.1 PLANNING AND DESIGN

California Building Standards Commission

Division of the State Architect, Structural Safety

buildings, or both. Individual sections will be designated by banners to indicate where the section applies

improvements shall replace noncompliant plumbing fixtures with water-conserving plumbing fixtures.

# California 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

RESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2023)

4.106.4.2 New multifamily dwellings, hotels and motels and new residential parking facilities.

than 20 sleeping units or guest rooms.

EV chargers installed

EV chargers are installed for use.

EV chargers are installed for use.

capacity to the required EV capable spaces.

4.106.4.2.2.1 Electric vehicle charging stations (EVCS).

EVCS shall comply with at least one of the following options:

4.106.4.2.2.1.2 Electric vehicle charging stations (EVCS) dimensions.

The charging spaces shall be designed to comply with the following:

1. The minimum length of each EV space shall be 18 feet (5486 mm).

2. The minimum width of each EV space shall be 9 feet (2743 mm).

construction in accordance with the California Electrical Code.

percent slope) in any direction

4.106.4.2.2.1.3 Accessible EV spaces.

4.106.4.2.3 EV space requirements.

Exception: Areas of parking facilities served by parking lifts.

EVs at all required EV spaces at a minimum of 40 amperes.

a. Construction documents shall show locations of future EV spaces.

Exception: Areas of parking facilities served by parking lifts.

area and shall be available for use by all residents or guests.

future EV charging.

sleeping units or guest rooms.

EVs at all required EV spaces at a minimum of 40 amperes.

this section.

When parking is provided, parking spaces for new multifamily dwellings, hotels and motels shall meet the

requirements of Sections 4.106.4.2.1 and 4.106.4.2.2. Calculations for spaces shall be rounded up to the nearest

whole number. A parking space served by electric vehicle supply equipment or designed as a future EV charging

applicable minimum parking space requirements established by a local jurisdiction. See Vehicle Code Section 22511.2

4.106.4.2.1Multifamily development projects with less than 20 dwelling units; and hotels and motels with less

The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to

**1.EV Capable.** Ten (10) percent of the total number of parking spaces on a building site, provided for all types

of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2

EVSE. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical

system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all

The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved

1.When EV chargers (Level 2 EVSE) are installed in a number equal to or greater than the required number

2.When EV chargers (Level 2 EVSE) are installed in a number less than the required number of EV capable

a. Construction documents are intended to demonstrate the project's capability and capacity for facilitating

b.There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or

2.EV Ready. Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power

Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per

4.106.4.2.2 Multifamily development projects with 20 or more dwelling units, hotels and motels with 20 or more

The number of dwelling units, sleeping units or guest rooms shall be based on all buildings on a project site subject to

1.EV Capable. Ten (10) percent of the total number of parking spaces on a building site, provided for all types

of parking facilities, shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2

system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all

The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved

Exception: When EV chargers (Level 2 EVSE) are installed in a number greater than five (5) percent of

reduced by a number equal to the number of EV chargers installed over the five (5) percent required.

parking spaces required by Section 4.106.4.2.2, Item 3, the number of EV capable spaces required may be

b. There is no requirement for EV spaces to be constructed or available until receptacles for EV charging or

2.EV Ready. Twenty-five (25) percent of the total number of parking spaces shall be equipped with low power

Level 2 EV charging receptacles. For multifamily parking facilities, no more than one receptacle is required per

3.EV Chargers. Five (5) percent of the total number of parking spaces shall be equipped with Level 2 EVSE.

Where common use parking is provided, at least one EV charger shall be located in the common use parking

When low power Level 2 EV charging receptacles or Level 2 EVSE are installed beyond the minimum required

served by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes, and installed EVSE shall

have a capacity of not less than 30 amperes. ALMS shall not be used to reduce the minimum required electrical

an automatic load management system (ALMS) may be used to reduce the maximum required electrical

capacity to each space served by the ALMS. The electrical system and any on-site distribution transformers

shall have sufficient capacity to deliver at least 3.3 kW simultaneously to each EV charging station (EVCS)

Electric vehicle charging stations required by Section 4.106.4.2.2, Item 3, shall comply with Section 4.106.4.2.2.1.

shall not be required to comply with this section. See California Building Code, Chapter 11B, for applicable

Exception: Electric vehicle charging stations serving public accommodations, public housing, motels and hotels

1.The charging space shall be located adjacent to an accessible parking space meeting the requirements of

the California Building Code, Chapter 11A, to allow use of the EV charger from the accessible parking space.

2.The charging space shall be located on an accessible route, as defined in the California Building Code,

Exception: Electric vehicle charging stations designed and constructed in compliance with the California

3.One in every 25 charging spaces, but not less than one, shall also have an 8-foot (2438 mm) wide minimum

a.Surface slope for this EV space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083

In addition to the requirements in Sections 4.106.4.2.2.1.1 and 4.106.4.2.2.1.2, all EVSE, when installed, shall

comply with the accessibility provisions for EV chargers in the California Building Code, Chapter 11B. EV ready

spaces and EVCS in multifamily developments shall comply with California Building Code, Chapter 11A, Section

1.Single EV space required. Install a listed raceway capable of accommodating a 208/240-volt dedicated branch

raceway termination point, receptacle or charger location, as applicable. The service panel and/ or subpanel shall

circuit. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall

originate at the main service or subpanel and shall terminate into a listed cabinet, box or enclosure in close

proximity to the location or the proposed location of the EV space. Construction documents shall identify the

have a 40-ampere minimum dedicated branch circuit, including branch circuit overcurrent protective device

Exception: A raceway is not required if a minimum 40-ampere 208/240-volt dedicated EV branch circuit is

installed in close proximity to the location or the proposed location of the EV space, at the time of original

2.Multiple EV spaces required. Construction documents shall indicate the raceway termination point and the

location of installed or future EV spaces, receptacles or EV chargers. Construction documents shall also provide

information on amperage of installed or future receptacles or EVSE, raceway method(s), wiring schematics and

electrical load calculations. Plan design shall be based upon a 40-ampere minimum branch circuit. Required

installed, or space(s) reserved to permit installation of a branch circuit overcurrent protective device.

aisle. A 5-foot (1524 mm) wide minimum aisle shall be permitted provided the minimum width of the EV space is

Building Code, Chapter 11B, are not required to comply with Section 4.106.4.2.2.1.1 and Section

dwelling unit when more than one parking space is provided for use by a single dwelling unit.

for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.

EVSE. Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical

dwelling unit when more than one parking space is provided for use by a single dwelling unit.

spaces, the number of EV capable spaces required may be reduced by a number equal to the number of

for future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code.

space shall count as at least one standard automobile parking space only for the purpose of complying with any

NOT APPLICABLE RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.) installed in close proximity to the location or the proposed location of the EV space at the time of original construction in accordance with the California Electrical Code. 1.304 OUTDOOR WATER USE 4.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS. Residential developments shall comply with The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water future EV charging purposes as "EV CAPABLE" in accordance with the California Electrical Code. Efficient Landscape Ordinance (MWELO), whichever is more stringent. 4.106.4.2.5 Electric Vehicle Ready Space Signage. Electric vehicle ready spaces shall be identified by signage or pavement markings, in compliance with Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its 1. The Model Water Efficient Landscape Ordinance (MWELO) is located in the California Code Regulations, Title 23, Chapter 2.7, Division 2. MWELO and supporting documents, including water budget calculator, are available at: https://www.water.ca.gov/ 4.106.4.3 Electric vehicle charging for additions and alterations of parking facilities serving existing multifamily buildings. DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE When new parking facilities are added, or electrical systems or lighting of existing parking facilities are added or altered and the work requires a building permit, ten (10) percent of the total number of parking spaces added or **EFFICIENCY** altered shall be electric vehicle charging spaces (EV spaces) capable of supporting future Level 2 EVSE. 1.406 ENHANCED DURABILITY AND REDUCED MAINTENANCE I.406.1 RODENT PROOFING. Annular spaces around pipes, electric cables, conduits or other openings in sole/bottom plates at exterior walls shall be protected against the passage of rodents by closing such 1. Construction documents are intended to demonstrate the project's capability and capacity for facilitating future openings with cement mortar, concrete masonry or a similar method acceptable to the enforcing 2. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use. 1.408 CONSTRUCTION WASTE REDUCTION. DISPOSAL AND RECYCLING DIVISION 4.2 ENERGY EFFICIENCY 4.408.1 CONSTRUCTION WASTE MANAGEMENT. Recycle and/or salvage for reuse a minimum of 65 percent of the non-hazardous construction and demolition waste in accordance with either Section 4.408.2, 4.408.3 or 4.408.4, or meet a more stringent local construction and demolition waste management ordinance. **4.201.1 SCOPE.** For the purposes of mandatory energy efficiency standards in this code, the California Energy Commission will continue to adopt mandatory standards. Exceptions: DIVISION 4.3 WATER EFFICIENCY AND CONSERVATION Excavated soil and land-clearing debris. 2. Alternate waste reduction methods developed by working with local agencies if diversion or 4.303 INDOOR WATER USE recycle facilities capable of compliance with this item do not exist or are not located reasonably 4.303.1 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the sections 4.303.1.1, 4.303.1.2, 4.303.1.3, 3. The enforcing agency may make exceptions to the requirements of this section when isolated jobsites are located in areas beyond the haul boundaries of the diversion facility. Note: All noncompliant plumbing fixtures in any residential real property shall be replaced with water-conserving 4.408.2 CONSTRUCTION WASTE MANAGEMENT PLAN. Submit a construction waste management plan plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final in conformance with Items 1 through 5. The construction waste management plan shall be updated as completion, certificate of occupancy, or final permit approval by the local building department. See Civil necessary and shall be available during construction for examination by the enforcing agency. Code Section 1101.1, et seq., for the definition of a noncompliant plumbing fixture, types of residential buildings affected and other important enactment dates. 1. Identify the construction and demolition waste materials to be diverted from disposal by recycling, reuse on the project or salvage for future use or sale. 4.303.1.1 Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per 2. Specify if construction and demolition waste materials will be sorted on-site (source separated) or flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense bulk mixed (single stream). 3. Identify diversion facilities where the construction and demolition waste material collected will be Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume 4. Identify construction methods employed to reduce the amount of construction and demolition waste of two reduced flushes and one full flush. Specify that the amount of construction and demolition waste materials diverted shall be calculated 4.303.1.2 Urinals. The effective flush volume of wall mounted urinals shall not exceed 0.125 gallons per flush. by weight or volume, but not by both. The effective flush volume of all other urinals shall not exceed 0.5 gallons per flush. I.408.3 WASTE MANAGEMENT COMPANY. Utilize a waste management company, approved by the 4.303.1.3 Showerheads. enforcing agency, which can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with Section 4.408.1. 4.303.1.3.1 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 Note: The owner or contractor may make the determination if the construction and demolition waste WaterSense Specification for Showerheads. materials will be diverted by a waste management company. **4.303.1.3.2 Multiple showerheads serving one shower**. When a shower is served by more than one I.408.4 WASTE STREAM REDUCTION ALTERNATIVE [LR]. Projects that generate a total combined showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by weight of construction and demolition waste disposed of in landfills, which do not exceed 3.4 a single valve shall not exceed 1.8 gallons per minute at 80 psi, or the shower shall be designed to only lbs./sq.ft. of the building area shall meet the minimum 65% construction waste reduction requirement in allow one shower outlet to be in operation at a time Note: A hand-held shower shall be considered a showerhead. **4.408.4.1 WASTE STREAM REDUCTION ALTERNATIVE.** Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 2 pounds 4.303.1.4 Faucets. per square foot of the building area, shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1 4.303.1.4.1 Residential Lavatory Faucets. The maximum flow rate of residential lavatory faucets shall not exceed 1.2 gallons per minute at 60 psi. The minimum flow rate of residential lavatory faucets shall I.408.5 DOCUMENTATION. Documentation shall be provided to the enforcing agency which demonstrates not be less than 0.8 gallons per minute at 20 psi. compliance with Section 4.408.2, items 1 through 5, Section 4.408.3 or Section 4.408.4... 4.303.1.4.2 Lavatory Faucets in Common and Public Use Areas. The maximum flow rate of lavatory faucets installed in common and public use areas (outside of dwellings or sleeping units) in residential buildings shall not exceed 0.5 gallons per minute at 60 psi. 1. Sample forms found in "A Guide to the California Green Building Standards Code (Residential)" located at www.hcd.ca.gov/CALGreen.html may be used to assist in **4.303.1.4.3 Metering Faucets.** Metering faucets when installed in residential buildings shall not deliver documenting compliance with this section. 2. Mixed construction and demolition debris (C & D) processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle). 4.303.1.4.4 Kitchen Faucets. The maximum flow rate of kitchen faucets shall not exceed 1.8 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not 4.410 BUILDING MAINTENANCE AND OPERATION to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per 4.410.1 OPERATION AND MAINTENANCE MANUAL. At the time of final inspection, a manual, compact disc, web-based reference or other media acceptable to the enforcing agency which includes all of the following shall be placed in the building: Note: Where complying faucets are unavailable, aerators or other means may be used to achieve 1. Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure 4.303.1.4.5 Pre-rinse spray valves. 2. Operation and maintenance instructions for the following: When installed, shall meet the requirements in the California Code of Regulations, Title 20 (Appliance a. Equipment and appliances, including water-saving devices and systems, HVAC systems, Efficiency Regulations), Sections 1605.1 (h)(4) Table H-2, Section 1605.3 (h)(4)(A), and Section 1607 photovoltaic systems, electric vehicle chargers, water-heating systems and other major (d)(7) and shall be equipped with an integral automatic shutoff. appliances and equipment Roof and yard drainage, including gutters and downspouts. FOR REFERENCE ONLY: The following table and code section have been reprinted from the California c. Space conditioning systems, including condensers and air filters. Code of Regulations, Title 20 (Appliance Efficiency Regulations), Section 1605.1 (h)(4) and Section Landscape irrigation systems. e. Water reuse systems. 3. Information from local utility, water and waste recovery providers on methods to further reduce resource consumption, including recycle programs and locations. TABLE H-2 4. Public transportation and/or carpool options available in the area. 5. Educational material on the positive impacts of an interior relative humidity between 30-60 percent and what methods an occupant may use to maintain the relative humidity level in that range. STANDARDS FOR COMMERCIAL PRE-RINSE SPRAY 6. Information about water-conserving landscape and irrigation design and controllers which conserve VALUES MANUFACTURED ON OR AFTER JANUARY 28, 2019 7. Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation. PRODUCT CLASS 8. Information on required routine maintenance measures, including, but not limited to, caulking, MAXIMUM FLOW RATE (gpm) [spray force in ounce force (ozf)] painting, grading around the building, etc. Information about state solar energy and incentive programs available 10. A copy of all special inspections verifications required by the enforcing agency or this code. Product Class 1 (≤ 5.0 ozf) 1.00 11. Information from the Department of Forestry and Fire Protection on maintenance of defensible space around residential structures. Product Class 2 (> 5.0 ozf and  $\leq 8.0$  ozf) 1.20 12. Information and/or drawings identifying the location of grab bar reinforcements. Product Class 3 (> 8.0 ozf) 4.410.2 RECYCLING BY OCCUPANTS. Where 5 or more multifamily dwelling units are constructed on a Title 20 Section 1605.3 (h)(4)(A): Commercial prerinse spray values manufactured on or after January building site, provide readily accessible area(s) that serves all buildings on the site and are identified for the 1, 2006, shall have a minimum spray force of not less than 4.0 ounces-force (ozf)[113 grams-force(gf)] depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waster, and metals, or meet a lawfully enacted local recycling 4.303.2 Submeters for multifamily buildings and dwelling units in mixed-used residential/commercial Submeters shall be installed to measure water usage of individual rental dwelling units in accordance with the **Exception:** Rural jurisdictions that meet and apply for the exemption in Public Resources Code Section California Plumbing Code. 42649.82 (a)(2)(A) et seq. are note required to comply with the organic waste portion of **4.303.3 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. DIVISION 4.5 ENVIRONMENTAL QUALITY THIS TABLE COMPILES THE DATA IN SECTION 4.303.1, AND IS INCLUDED AS A SECTION 4.501 GENERAL CONVENIENCE FOR THE USER. The provisions of this chapter shall outline means of reducing the quality of air contaminants that are odorous, TABLE - MAXIMUM FIXTURE WATER USE irritating and/or harmful to the comfort and well being of a building's installers, occupants and neighbors. SECTION 4.502 DEFINITIONS **FIXTURE TYPE** SHOWER HEADS (RESIDENTIAL) 1.8 GMP @ 80 PSI The following terms are defined in Chapter 2 (and are included here for reference) AGRIFIBER PRODUCTS. Agrifiber products include wheatboard, strawboard, panel substrates and door MAX. 1.2 GPM @ 60 PSI MIN. 0.8 GPM @ 20 LAVATORY FAUCETS (RESIDENTIAL) cores, not including furniture, fixtures and equipment (FF&E) not considered base building elements. LAVATORY FAUCETS IN COMMON & PUBLIC COMPOSITE WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard and 0.5 GPM @ 60 PSI

nedium density fiberboard. "Composite wood products" does not include hardboard, structural plywood,

structural panels, structural composite lumber, oriented strand board, glued laminated timber, prefabricated

wood I-joists or finger-jointed lumber, all as specified in California Code of regulations (CCR), title 17, Section

**DIRECT-VENT APPLIANCE.** A fuel-burning appliance with a sealed combustion system that draws all air for

combustion from the outside atmosphere and discharges all flue gases to the outside atmosphere.



2817 WHIPPLE RD,

DESIGN BY: 3E DESIGN

REVIEW BY

2 A ⊗ Z 363 SUN

> PROJECT NUMBER SUBMITTAL DESCRIPTION 02.02.24 PLANNING SUBMITTAL

REVISION

DELTA DATE DESCRIPTION 4/24/2024 PLANNING 6/18/2024 PLANNING /<sub>4</sub> |7/24/2024 | PLANNING

SHEET NO.

raceways and related components that are planned to be installed underground, enclosed, inaccessible or in 0.125 GAL/FLUSH concealed areas and spaces shall be installed at the time of original construction. DISCLAIMER: THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AN MEANS TO INDIVIDUAL NEEDS. THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE USE OF THIS DOCUMENT, INCLUDING VERIFICATION WITH THE FULL CODE.

USE AREAS

KITCHEN FAUCETS

METERING FAUCETS

WATER CLOSET

1.8 GPM @ 60 PSI

0.2 GAL/CYCLE

1.28 GAL/FLUSH



# AAAA AAI IEADAIIA ADEENI DIIII DINIA ATANDADDA AADE

N/A RESPON PARTY

TABLE 4.504.3 - VOC CONTENT LIMITS FOR

ARCHITECTURAL COATINGS2,3

2022 CALIFORNIA GREEN BUILDING STANDARDS CO	DE
RESIDENTIAL MANDATORY MEASURES, SHEET 2 (January 2023)	

N/A RESPON PARTY 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 hundredths of a gram (g O3/g ROC). Note: MIR values for individual compounds and hydrocarbon solvents are specified in CCR, Title 17, Sections 94700 MOISTURE CONTENT. The weight of the water in wood expressed in percentage of the weight of the oven-dry wood. 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). Note: PWMIR is calculated according to equations found in CCR, Title 17, Section 94521 (a).

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

VOC. A volatile organic compound (VOC) 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).

4.503 FIREPLACES 4.503.1 GENERAL. Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed woodstove or pellet stove 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. Woodstoves, pellet stoves and fireplaces shall also comply with applicable local ordinances.

4.504 POLLUTANT CONTROL 4.504.1 COVERING OF DUCT OPENINGS & PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION. At the time of rough installation, during storage on the construction site and until final startup of the heating, cooling and ventilating equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheet metal or other methods acceptable to the enforcing agency to reduce the amount of water, dust or debris which may enter the system.

4.504.2 FINISH MATERIAL POLLUTANT CONTROL. Finish materials shall comply with this section.

4.504.2.1 Adhesives, Sealants and Caulks. Adhesives, sealant and caulks used on the project shall meet the requirements of the following standards unless more stringent local or regional air pollution or air quality management district rules apply:

- 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 Table 4.504.1 or 4.504.2, as applicable. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and tricloroethylene), 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 1 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.

4.504.2.2 Paints and Coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Suggested Control Measure, as shown in Table 4.504.3, 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 4.504.3 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

4.504.2.3 Aerosol Paints and Coatings. Aerosol paints and coatings shall meet the Product-weighted MIR Limits for ROC in Section 94522(a)(2) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(e)(1) and (f)(1) 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

**4.504.2.4 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:

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

(Less Water and Less Exempt Compounds in Grams per Liter)				
ARCHITECTURAL APPLICATIONS	VOC LIMIT			
NDOOR 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 ADHESIVE	70			
STRUCTURAL GLAZING ADHESIVES	100			
SINGLE-PLY ROOF MEMBRANE ADHESIVES	250			
OTHER ADHESIVES NOT 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			

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.

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 COATINGS1	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

- 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 AVAILABLE FROM THE AIR RESOURCES BOARD.

TABLE 4.504.2 - SEALANT VOC LIM	1IT
(Less Water and Less Exempt Compounds in Gra	ams per Liter)
SEALANTS	VOC LIMIT
ARCHITECTURAL	250
MARINE DECK	760
NONMEMBRANE ROOF	300
ROADWAY	250
SINGLE-PLY ROOF MEMBRANE	450
OTHER	420
SEALANT PRIMERS	
ARCHITECTURAL	
NON-POROUS	250
POROUS	775
MODIFIED BITUMINOUS	500
MARINE DECK	760
OTHER	750

COATING CATEGORY	VOC LIMIT
FLAT COATINGS	50
NON-FLAT COATINGS	100
NONFLAT-HIGH GLOSS COATINGS	150
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 <sub>1</sub>	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

SUGGESTED CONTROL MEASURE, FEB. 1, 2008. MORE INFORMATION IS

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 FIBERBOARD2	0.13		

CHAPTER 7

702 QUALIFICATIONS

1. State certified apprenticeship programs.

4. Programs sponsored by manufacturing organizations. Other programs acceptable to the enforcing agency.

performance contractors, and home energy auditors.

4. Other programs acceptable to the enforcing agency.

project they are inspecting for compliance with this code.

the appropriate section or identified applicable checklist.

**703 VERIFICATIONS** 

Public utility training programs.

INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS

702.1 INSTALLER TRAINING. HVAC system installers shall be trained and certified in the proper

Examples of acceptable HVAC training and certification programs include but are not limited to the following:

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.

3. Training programs sponsored by trade, labor or statewide energy consulting or verification organizations.

**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

considered by the enforcing agency when evaluating the qualifications of a special inspector:

project they are inspecting for compliance with this code.

shall be closely related to the primary job function, as determined by the local agency.

Certification by a national or regional green building program or standard publisher.

. Successful completion of a third party apprentice training program in the appropriate trade.

homes in California according to the Home Energy Rating System (HERS).

[BSC] When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall

this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the

employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with

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

Note: Special inspectors shall be independent entities with no financial interest in the materials or the

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

documentation or special inspection is necessary to verify compliance, that method of compliance will be specified in

methods acceptable to the enforcing agency which demonstrate substantial conformance. When specific

other certifications or qualifications acceptable to the enforcing agency, the following certifications or education may be

2. Certification by a statewide energy consulting or verification organization, such as HERS raters, building

Special inspectors shall be independent entities with no financial interest in the materials or the

2. HERS raters are special inspectors certified by the California Energy Commission (CEC) to rate

CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH 93120.12. 2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF 5/16" (8 MM).

WITH ASTM E 1333. FOR ADDITIONAL INFORMATION, SEE CALIF.

DIVISION 4.5 ENVIRONMENTAL QUALITY (continued) 4.504.3 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 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.

4.504.3.1 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 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.

4.504.3.2 Carpet adhesive. All carpet adhesive shall meet the requirements of Table 4.504.1.

4.504.4 RESILIENT FLOORING SYSTEMS. Where resilient flooring is installed, at least 80% 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 Specification 01350)

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

**4.504.5 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 for Composite Wood (17 CCR 93120 et seg.), by or before the dates specified in those sections, as shown in Table 4.504.5

4.504.5.1 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:

- Product certifications and specifications. Chain of custody certifications.
- 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, European 636 3S standards, and Canadian CSA 0121, CSA 0151, CSA 0153 and CSA 0325 standards.
- 5. Other methods acceptable to the enforcing agency.

4.505 INTERIOR MOISTURE CONTROL

**4.505.1 General.** Buildings shall meet or exceed the provisions of the California Building Standards Code.

4.505.2 CONCRETE SLAB FOUNDATIONS. Concrete slab foundations required to have a vapor retarder by California Building Code, Chapter 19, or concrete slab-on-ground floors required to have a vapor retarder by the California Residential Code, Chapter 5, shall also comply with this section.

4.505.2.1 Capillary break. A capillary break shall be installed in compliance with at least one of the

- 1. A 4-inch (101.6 mm) thick base of 1/2 inch (12.7mm) or larger clean aggregate shall be provided with a vapor barrier in direct contact with concrete and a concrete mix design, which will address bleeding shrinkage, and curling, shall be used. For additional information, see American Concrete Institute, ACI 302.2R-06.
- 2. Other equivalent methods approved by the enforcing agency. 3. A slab design specified by a licensed design professional.

**4.505.3 MOISTURE CONTENT OF BUILDING MATERIALS.** Building materials with visible signs of water damage shall not be installed. Wall and floor framing shall not be enclosed when the framing members exceed 19 percent moisture content. Moisture content shall be verified in compliance with the following:

- . Moisture content shall be determined with either a probe-type or contact-type moisture meter. Equivalent moisture verification methods may be approved by the enforcing agency and shall satisfy requirements
- found in Section 101.8 of this code. 2. Moisture readings shall be taken at a point 2 feet (610 mm) to 4 feet (1219 mm) from the grade stamped end
- of each piece verified. 3. At least three random moisture readings shall be performed on wall and floor framing with documentation acceptable to the enforcing agency provided at the time of approval to enclose the wall and floor framing.

nsulation products which are visibly wet or have a high moisture content shall be replaced or allowed to dry prior to enclosure in wall or floor cavities. Wet-applied insulation products shall follow the manufacturers' drying

#### 1.506 INDOOR AIR QUALITY AND EXHAUST **4.506.1 Bathroom exhaust fans.** Each bathroom shall be mechanically ventilated and shall comply with the

- 1. Fans shall be ENERGY STAR compliant and be ducted to terminate outside the building. 2. Unless functioning as a component of a whole house ventilation system, fans must be controlled by a
  - a. Humidity controls shall be capable of adjustment between a relative humidity range less than or
- equal to 50% to a maximum of 80%. A humidity control may utilize manual or automatic means of
- b. A humidity control may be a separate component to the exhaust fan and is not required to be integral (i.e., built-in)

ecommendations prior to enclosure.

- 1. For the purposes of this section, a bathroom is a room which contains a bathtub, shower or 2. Lighting integral to bathroom exhaust fans shall comply with the California Energy Code.
- 4.507 ENVIRONMENTAL COMFORT
  4.507.2 HEATING AND AIR-CONDITIONING SYSTEM DESIGN. Heating and air conditioning systems shall be

#### sized, designed and have their equipment selected using the following methods:

- 1. The heat loss and heat gain is established according to ANSI/ACCA 2 Manual J 2011 (Residential Load Calculation), ASHRAE handbooks or other equivalent design software or methods.
- Duct systems are sized according to ANSI/ACCA 1 Manual D 2014 (Residential Duct Systems), ASHRAE handbooks or other equivalent design software or methods.
- 3. Select heating and cooling equipment according to ANSI/ACCA 3 Manual S 2014 (Residential Equipment Selection), or other equivalent design software or methods.

**Exception:** Use of alternate design temperatures necessary to ensure the system functions are acceptable.

NOT APPLICABLE WWW.3E.DESIGN INFO@3E.DESIGN 510.735.6475 2817 WHIPPLE RD, UNION CITY, CA 94587

DESIGN BY: 3E DESIGN

**REVIEW BY:** 

⊗ Z

363 SUN

PROJECT NUMBER

SUBMITTAL

DATE	DESCRIPTION
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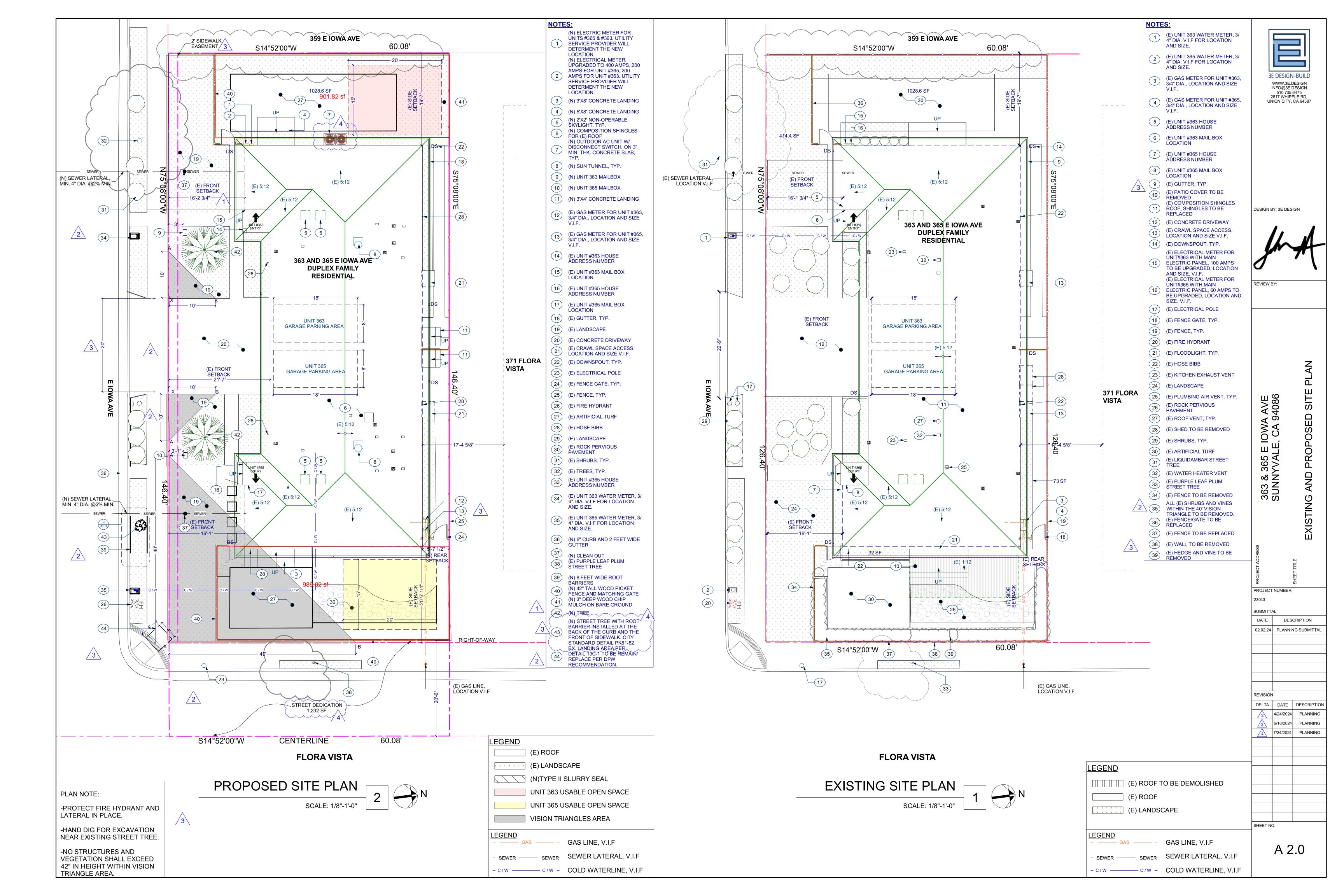
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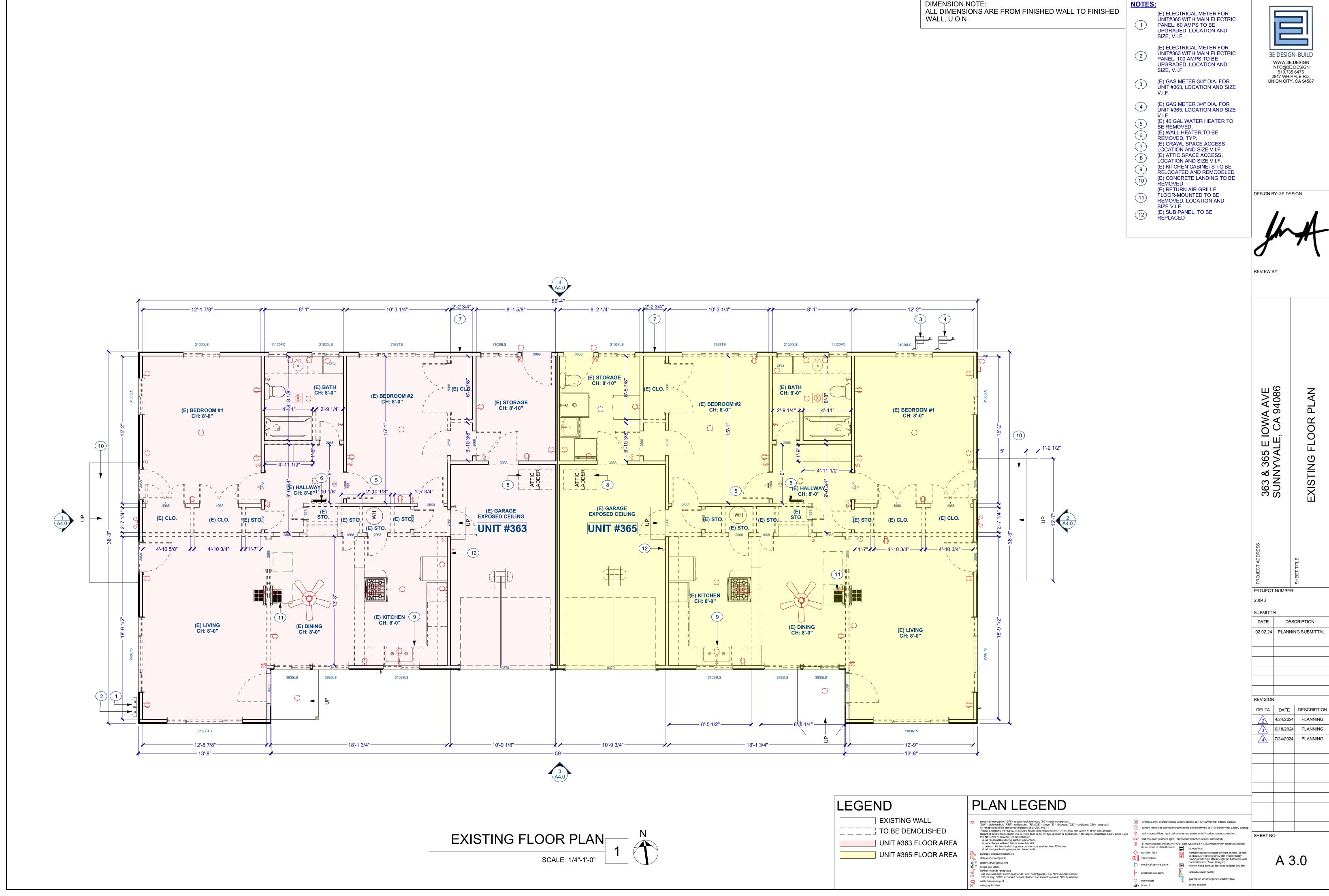
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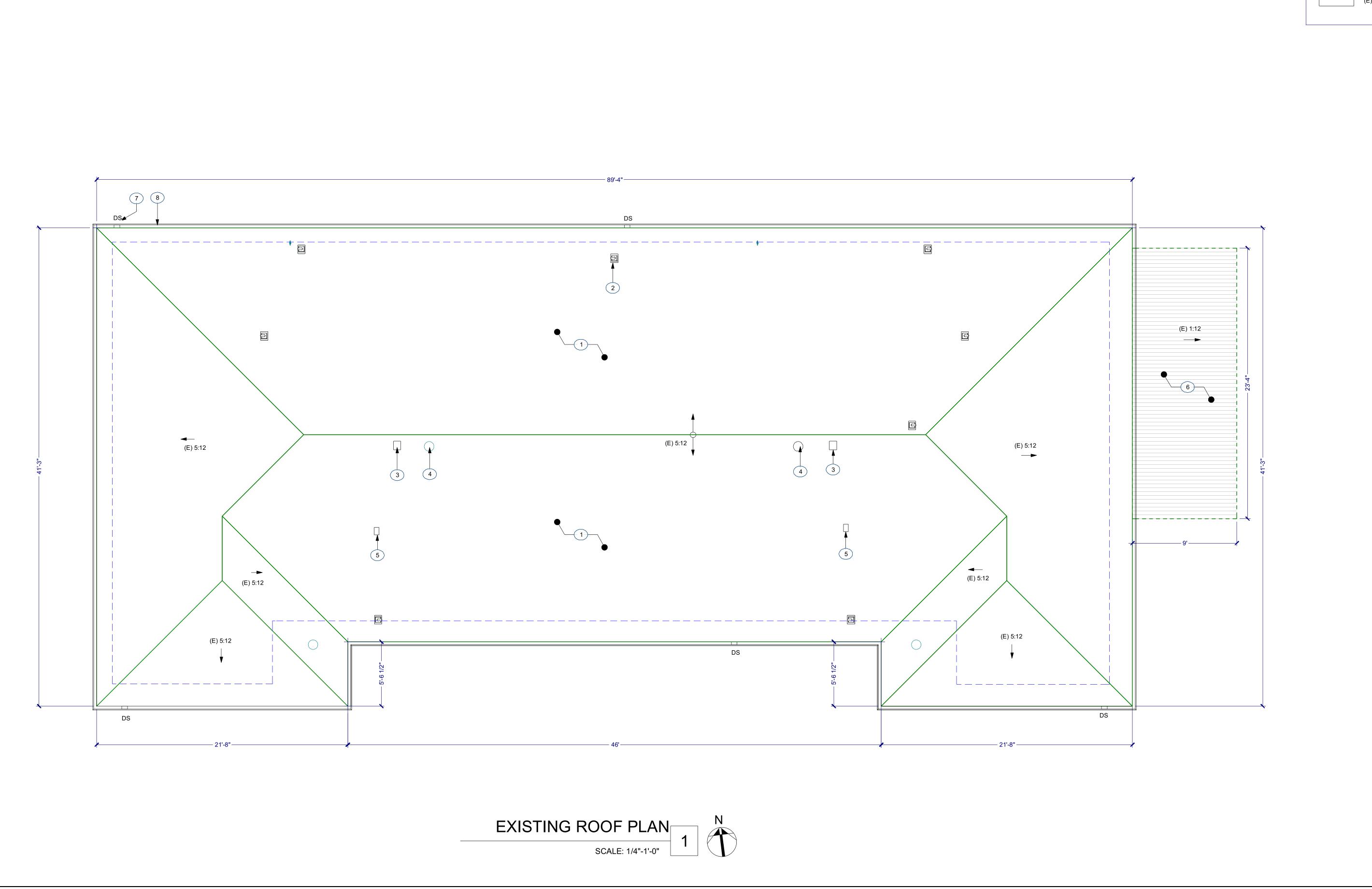
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#### NOTES:

- (E) COMPOSITION SHINGLES ROOF TO BE REPLACED
- (E) PLUMBING AIR VENT, TYP.
- 3 (E) WATER HEATER VENT
- 4 (E) ROOF VENT, TYP.
- 5 (E) KITCHEN EXHAUST VENT, V.I.F.
- (E) ALUMINUM AWNING ROOF TO BE REMOVED
  (E) DOWNSPOUT TO BE REPLACED, TYP.
- 8 (E) GUTTER TO BE REPLACED, TYP.

#### **LEGEND**

(E) AWNING TO BE DEMOLISHED (E) ROOF

DESIGN BY: 3E DESIGN

**3E DESIGN-BUILD** 

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REVIEW BY:

363 & 365 E IOWA AVE SUNNYVALE, CA 94086

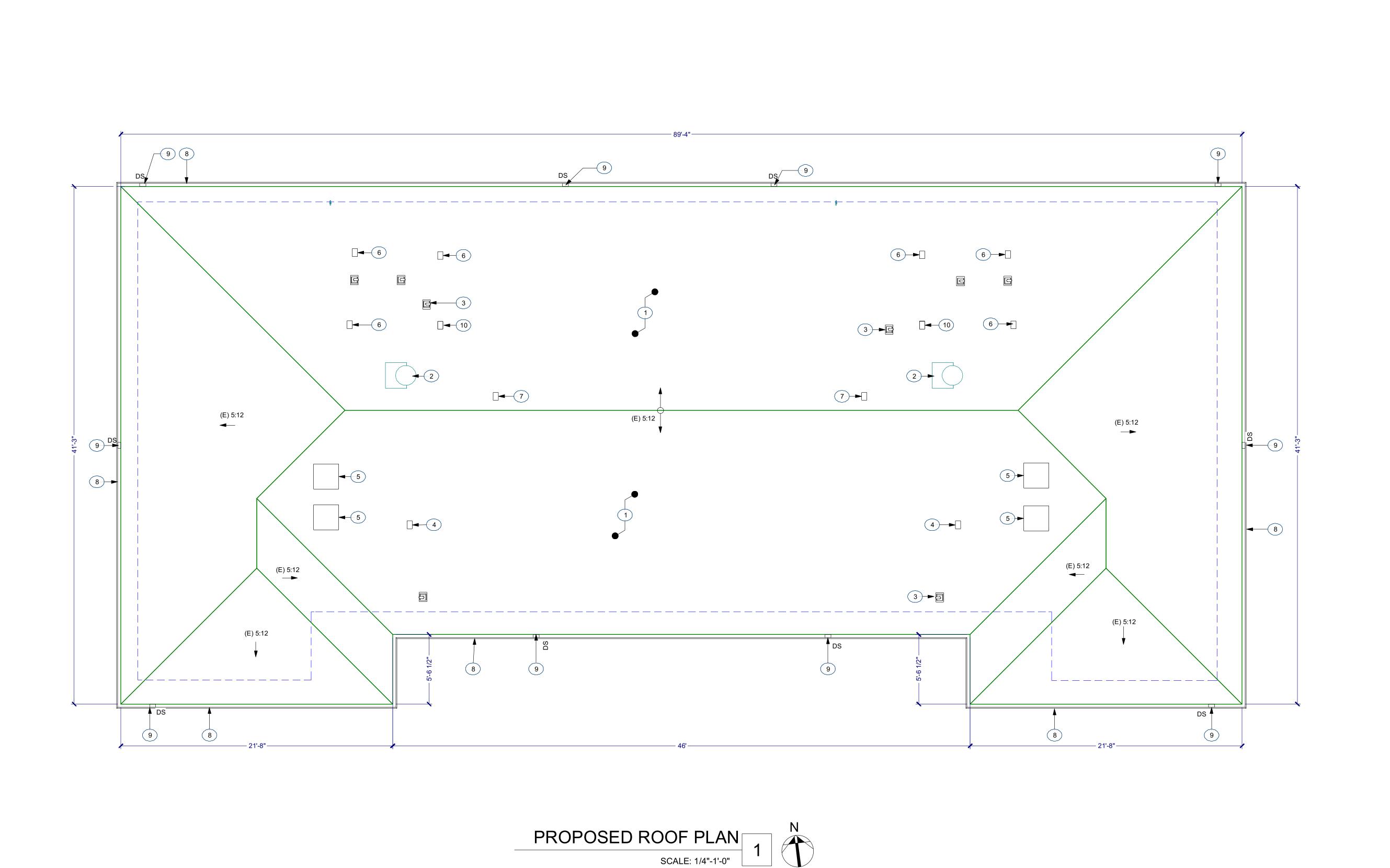
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#### NOTES:

- (N) COMPOSITION SHINGLES FOR THE ENTIRE ROOF.
- 2 (N) SUN TUNNEL, TYP.
- (N) PLUMBING AIR VENT, 1 1/2" ABS
- 4 (N) RANGE HOOD VENT (N) 2'X2' NON-OPERABLE SKYLIGHT, TYP.
- 6 (N) EXHAUST ROOF VENT
- 7 (N) FURNACE ROOF VENT
- 8 (N) GUTTER, TYP.
- (9) (N) DOWNSPOUT, TYP.
- (N) DRYER ROOF VENT

#### **LEGEND**

(E) ROOF

DESIGN BY: 3E DESIGN



**3E DESIGN-BUILD** 

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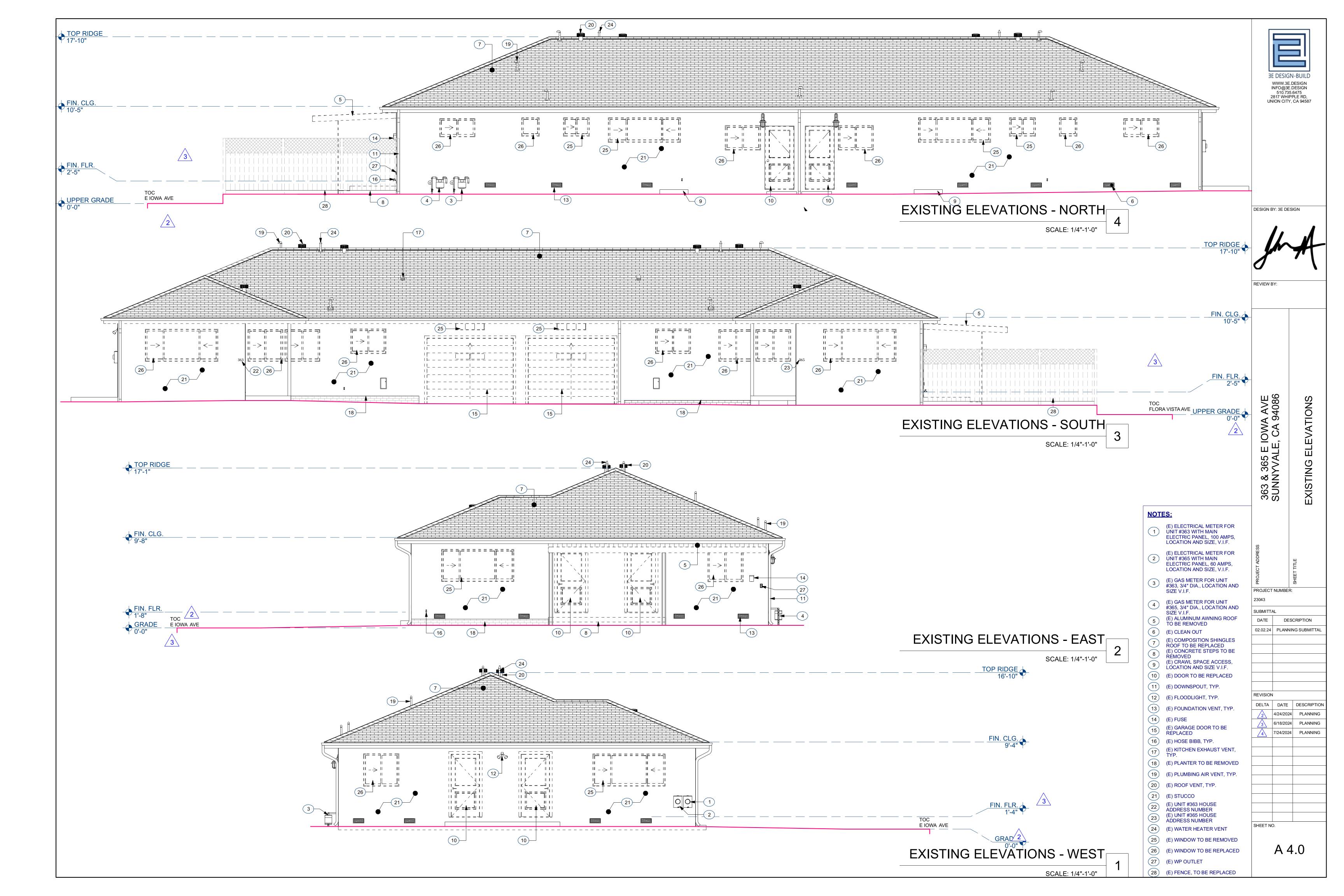
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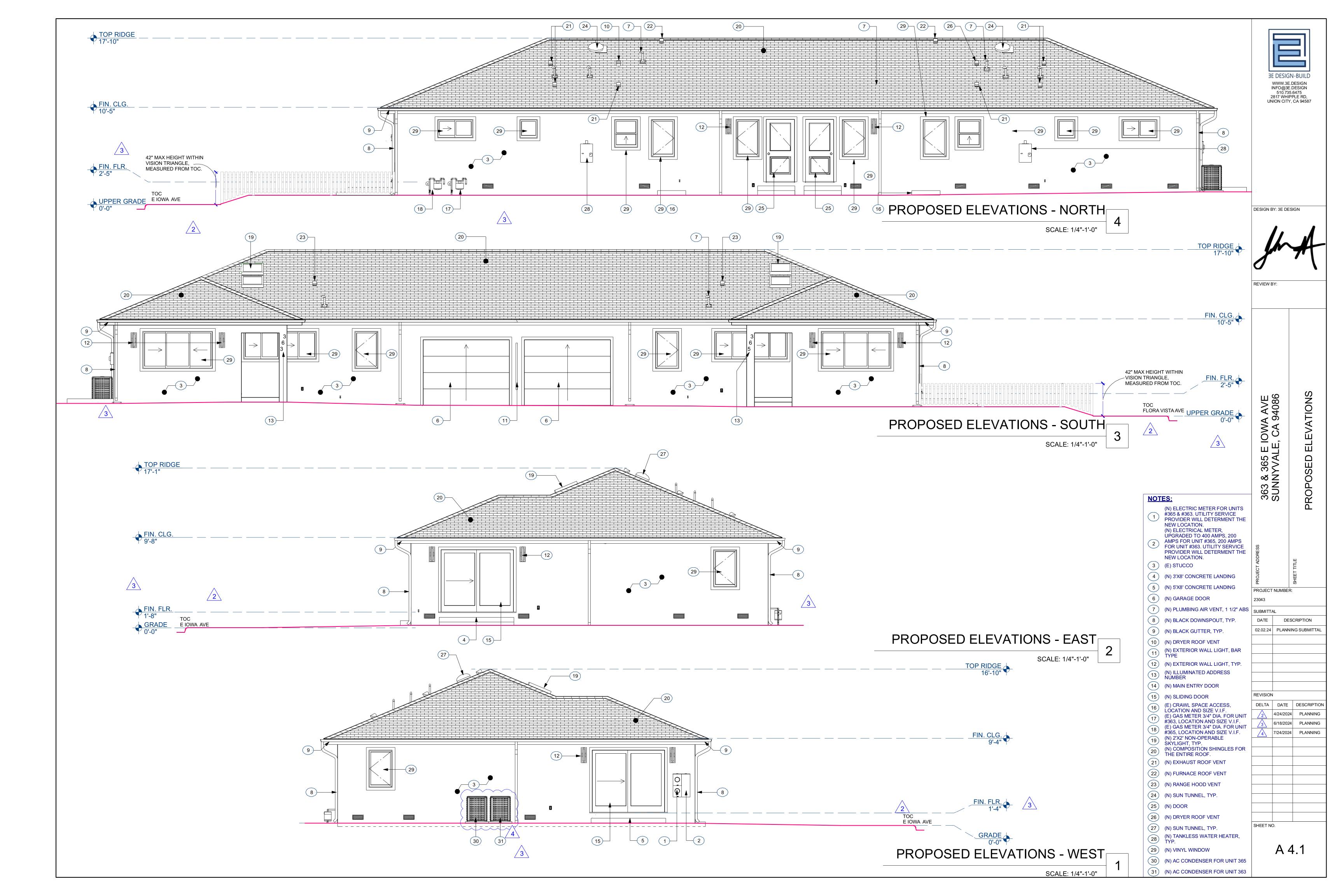
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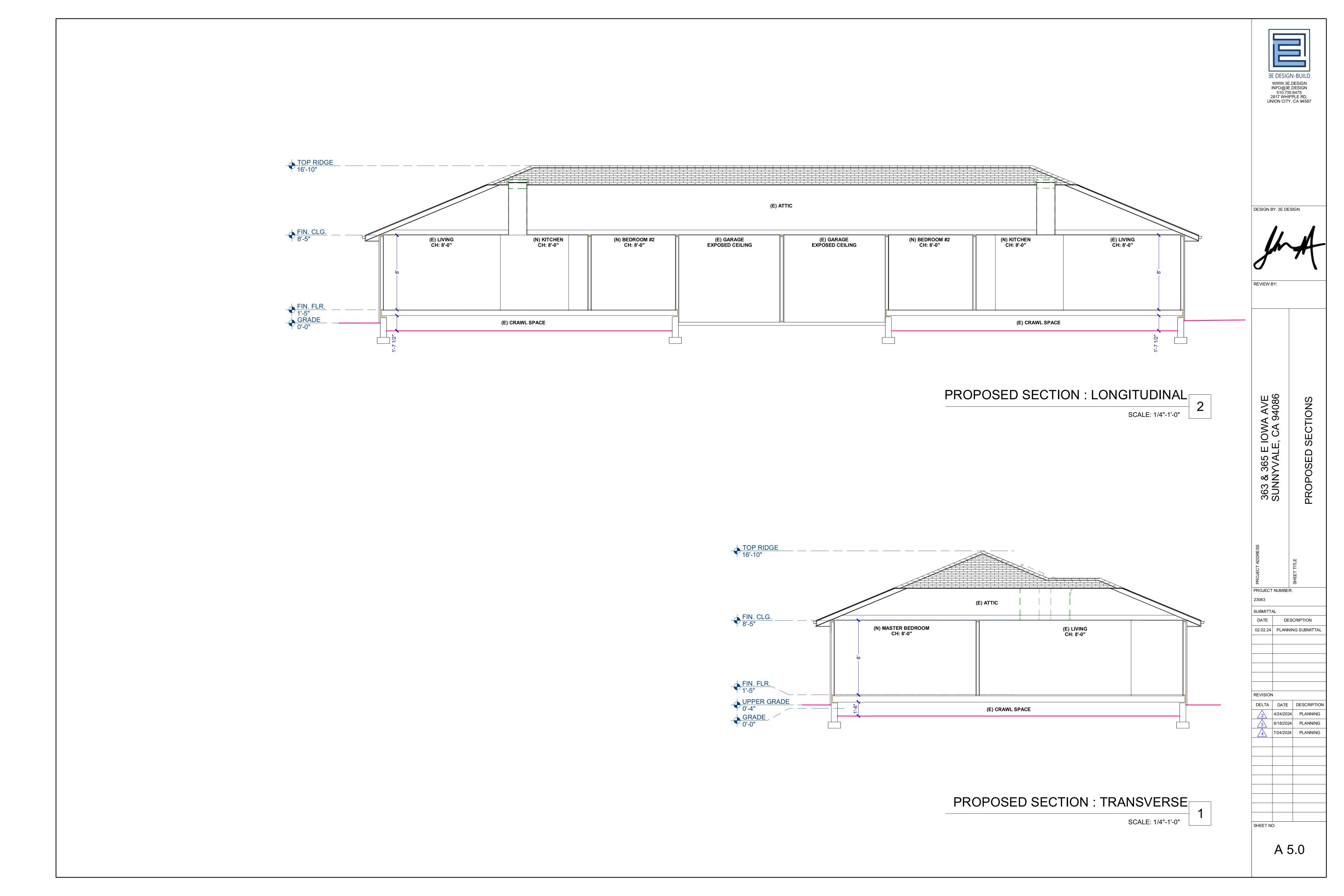
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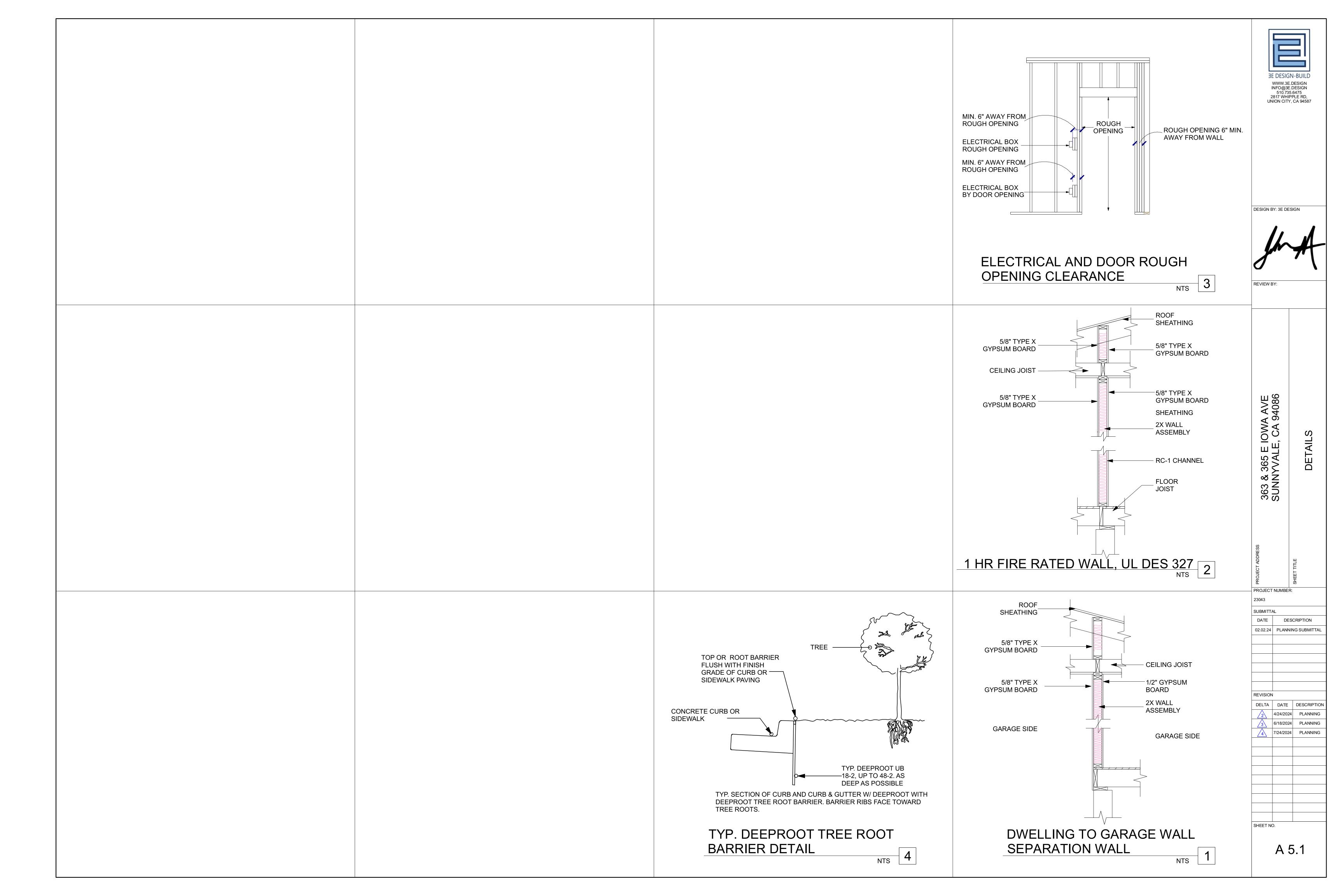
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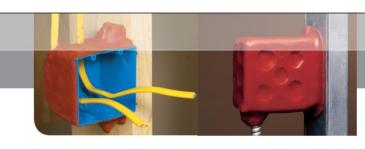
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## 3M™ Fire Barrier Moldable Putty Pads MPP+

Product Data Sheet

#### 1. Product Description

3M™ Fire Barrier Moldable Putty Pads MPP+ are a one-part, ready-to-use, intumescent wall-opening protective. When properly applied to the back of electrical outlet boxes, 3M™ Fire Barrier Moldable Putty Pads MPP+ help control the spread of fire, smoke and noxious gases through fire-restive walls and partitions. Installed in accordance with the UL wall-opening protective listing (UL Category CLIV), the product helps achieve up to 2-hour ratings in a variety of wall constructions. 3M™ Fire Barrier Moldable Putty Pads MPP+ can effectively provide protection for back-to-back metallic electrical boxes. in certain configurations.

3M™ Fire Barrier Moldable Putty Pads MPP+ are also used as a firestop material in through-penetration firestop systems. 3M™ Fire Barrier Moldable Putty Pads MPP+ help to maintain a firestop penetration seal for up to 4 hours. 3M™ Fire Barrier Moldable Putty Pads MPP+ exhibit excellent adhesion to a full range of construction substrates and penetrants. The pads are easily molded by hand (no mixing required). In addition to its fire-resistant properties, the 1/10th in. (2.54mm) thick pads have airborne sound reduction characteristics which helps minimize sound transmission through assemblies requiring an STC rating.



Helps reduce noise transfer\*



4 in. x 8 in. (101.6mm x 203.3mm),

pad sizes available.

7 in. x 7 in. (177.8mm x 177.8mm) and

9.5 in, x 9.5 in, (241.2mm x 241.3mm)

Product Features Excellent adhesion Firestop tested up to 4 hours in Re-enterable/repairable accordance with ASTM E 814 (UL 1479) & CAN/ULC-S115 Halogen-free and solvent-free Excellent aging properties Wall opening protective tested up to 2 hours in accordance with UL 263 • Low VOC Provides draft and cold smoke seal
 Will not dry out or crumble Pliable and conformable—molds

· Red color widely recognized as a fire protective product

Meets the intent of LEED® VOC regulations—helps reduce the quantity of indoor air contaminants that may be odorous, irritating and harmful to the comfort and well-being of the installers and occupants. \*Minimizes noise transfer—STC-Rating of 52 when tested in STC 53-rated wall assembly.

2. Applications 4 in. x 8 in. (101.6mm x 203mm) 3M™ Fire Barrier Moldable Putty Pads MPP+ are typically used as a wall opening protective to meet building requirements, for protection of membrane penetrations made by listed steel or non-metallic electrical boxes. It is also used to seal gaps between cables in multiple penetrations (including fiber optic inner duct) and to firestop cable bundles, insulated pipe, electrical conduit and metal pipe. Larger sized pads, 7 in. x 7 in. and 9.5 in x 9.5 in. (177.8mm x 177.8mm and 241.2mm) are widely used to firestop metallic and non-metallic electrical outlet boxes up to 14 in. x 4.5 in. by 2-1/2 in. (355.6mm x 114.3mm x 63.5mm) deep. For larger applications, pads can be molded together by hand.

3. Specifications 3M™ Fire Barrier Moldable Putty Pads MPP+ shall be a one component, ready-to-use, intumescent elastomer capable of expanding a minimum of 3 times at 1000°F. The material shall be thixotropic and shall be applicable to overhead, vertical and horizontal firestops. Under normal conditions, 3M<sup>™</sup> Fire Barrier Moldable Putty Pads MPP+ shall be noncorrosive to metal and compatible with synthetic cable jackets. The putty shall be listed by independent test agencies such as UL, Intertek or FM. 3M™ Fire Barrier Moldable Putty Pads MPP+ shall be tested to and pass the criteria of ASTM E 814 (UL 1479) Standard Test Method for Fire Tests of Penetration Firestop Systems and CAN/ULC S115 Standard Method of Fire Tests of Firestop Systems. 3M™ Fire Barrier Moldable Putty Pads MPP+ meets the requirements of the IBC, NFPA 5000, NEC (NFPA 70), NFPA 101 and NCB (Canada) Building Codes.

For technical support relating to 3M™ Fire Protection Products and Systems, call: 1-800-328-1687 For more information on 3M<sup>TM</sup> Fire Protection Products, visit: www.3M.com/firestop

Section 21 00 00 - Fire Suppression Section 26 00 00 - Electrical

Section 07 27 00 - Thermal and Moisture Protection Firestopping

Typically Specified MasterFormat (2004)

Section 07 84 16 - Annular Space Protection

Section 07 87 00 - Smoke Containment Barriers

Section 07 84 00 - Firestopping

Section 07 86 00 - Smoke Seals

FIRE BARRIER SMOKE SEAL

FILL, VOID OR CAVITY MATERIAL FOR USE IN THROUGH-PENETRATION FIRESTOP SYSTEMS SEE UL FIRE RESISTANCE DIRECTORY 90G9

LISTED

FILL, VOID OR CAVITY MATERIALS 90G9

APPROVED

SUBJECT TO THE CONDITIONS OF APPROVAL AS A WALL & FLOOR PENETRATION FIRESTOP WHEN INSTALLED AS DESCRIBED

IN THE CURRENT EDITION OF THE FMRC APPROVAL GUIDE

Intertek

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Intertek

554 In STC 54-rated wall assembly

APPROVED

SUBJECT TO THE CONDITIONS OF APPROV

AS A WALL & FLOOR PENETRATION FIRESTOP WHEN INSTALLED AS DESCRIBEI IN THE CURRENT EDITION OF THE FMRC

APROVAL GUIDE

FILL, VOID OR CAVITY MATERIAL FIRE RESIST

FILL, VOID, OR CAVITY FOR USE IN THROUGH-PENETR FIRESTOP SYSTEMS

SEE UL FIRE RESISTANCE DIRECTORY

WALL OPENING PROTECT

RESISTANCE DIRECTOR

LISTED

### 4 Performance & Typical Physical Properties

+. Periormance & I	ypicai Friysicai Frop
Color:	Dark Red
Nominal Density:	10-12 lbs./gal. (1.2-1.45kg/L)
Nominal Thickness:	1/10 in. (2.54mm)
Surface Burning (ASTM E 84):	Flame Spread 0, Smoke Development 0
Heat Expansion:	Begins at 350°F (177°C) Significant at 400°F (204°C) Free Expansion is Nominal 3 times
STC (ASTM E 90 and ASTM E 413): Tested in STC 53 rated wall assembly	52 when tested on back-to-back metallic electrical boxes in certain configurations
VOC Less H <sub>2</sub> O and Exempt Solvents:	< 250g/L

**Dimensions:** 4 in. x 8 in. x 1/10 in. (101.6mm x 203.2mm x 2.5mm) **Unit Volume:** 2.52 in.<sup>3</sup> (41.4cm<sup>3</sup>) Unit Weight: 2.7 oz (76g)

**Dimensions:** 7 in. x 7 in. x 1/10 in. (177.8mm x 177.8mm x 2.5mm)

Unit Volume: 4.63 in.3 (76.0cm3) Unit Weight: 4.1 oz (116g)

**Dimensions:** 9.5 in. x 9.5 in. x 1/10 in. (241.3mm x 241.3mm x 2.5mm) Unit Volume: 6.1 in.3 (139.8cm3)

**Unit Weight:** 7.6 oz (215g)

#### 5. Packaging, Storage, Shelf Life

Corrugated cardboard box with liner between individual pads. Packaging:

Storage: 3M<sup>™</sup> Fire Barrier Moldable Putty Pads MPP+ should be stored indoors in dry conditions.

3M™ Fire Barrier Moldable Putty Pads MPP+ shelf life is indefinite in original unopened containers. Product will not dry or crumble in opened containers. Normal stock and stock rotation practices are recommended.

Consult a 3M Authorized Fire Protection Products Distributor / Dealer or Sales Representative for 6. Installation Techniques Applicable UL, Intertek or other third-party drawings and system details.

Preparatory Work: The surface of the electrical box, or opening and any penetrating items should be cleaned (i.e. free of dust, grease, oil, loose materials, rust or other substances) to allow for the proper adhesion of the 3M<sup>™</sup> Fire Barrier Moldable Putty+ Pad. Ensure that the surface of the substrates are not

**Installation Details:** Electrical boxes must be firestopped under the following conditions: boxes larger than 16 sq. in. (103 sq. cm), if horizontal spacing between

boxes is less than 24 in. (609.6mm), when multiple boxes are located in one stud cavity or if the aggregate of all boxes exceeds 100 sq. in. per 100 sq. ft. (645 sq. cm. per 9.29 sq. m) — refer to listed system details and applicable local building code requirements. For electrical box installations, a minimum of 1/10 in. (2.5mm) thick putty application is required. 3M™ Fire Barrier Moldable Putty Pads MPP+ are to be installed to completely cover the exterior of the outlet box (except for the side against the stud). To firestop penetrations, install the applicable depth of backing material (if required), remove the desired amount of putty from the pad, form (if necessary) and install as detailed within the listed system. Make sure that putty is in complete contact with the substrate and penetrating item(s).

Note: Partial pads can be pieced together and the seams between partial pads should overlap a minimum of 1/8 in. with the seams

worked with the fingertips to create adhesion at the seam. Limitations: Over application (i.e., using excessive amount of material) of product to vertical surfaces may cause sagging, follow system details. Product is

not impaired by freezing but should be warmed to 32°F (0°C) before applying.

7. Maintenance No maintenance is expected when installed in accordance with the applicable UL, Intertek, FM or other third-party listed system. Once installed, if any section of the 3M<sup>TM</sup> Fire Barrier Moldable Putty Pad MPP+ is damaged, the following procedure will apply: remove damaged putty, clean the affected area and install the proper thickness of putty, ensuring it bonds to the substrate and adjacent putty (product from damaged area can be reused if it is free from contaminants). Putty can be molded together at new/existing putty overlap.

8. Availability 3M™ Fire Barrier Moldable Putty Pads MPP+ are available from 3M Authorized Fire Protection Products Distributors and Dealers. 3M<sup>™</sup> Fire Barrier Moldable Putty Pads MPP+ are available in the following sizes: (10 pads/pack, 10 packs/case) 4 in. x 8 in. x 1/10 in. (101.6mm x 203.2mm x 2.5mm), (20 pads/case) 7 in. x 7 in. 1/10 in. (177.8mm x 177.8mm x 2.5mm), (20 pads/case) 9.5 in. x 9.5 in. 1/10 in. (241.3mm x 241.3mm x 2.5mm); red-colored firestop material. For additional technical and purchasing information regarding this and other 3M Fire Protection Products, please call: 1-800-328-1687 or visit www.3M.com/firestop.

9. Safe Handling Information Consult product's Material Safety Data Sheet (MSDS) from country-of-use prior to handling and disposal.

Shelf Life:

Industrial Adhesives and Tapes Division 3M Center, Building 230-BS-37 St. Paul, MN 55144-1000 800-328-1687 877-369-2923 (Fax) www.3M.com/firestop

Technical Information: The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed. **Product Use:** Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application. Warranty and Limited Remedy: 3M warrants that each 3M Fire Protection Product will be free from defects in material and manufacture for 90 days from the date of purchase from 3M's authorized distributor. 3M MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If a 3M product does not conform to this warranty, the sole and exclusive remedy is, at 3M's option, replacement of the 3M oduct or refund of the purchase price. Limitation of Liability: Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted

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#### 3M™ Fire Barrier Sealant CP 25WB+

**Product Data Sheet** 

**1. Product Description** 3M™ Fire Barrier Sealant CP 25WB+ is a high-performance, ready-to-use, gun-grade, latex-based, intumescent sealant that dries to form a monolithic firestop seal that also acts as a barrier to airborne sound transmission. 3M™ Fire Barrier Sealant CP 25WB+ helps control the spread of fire, smoke and noxious gasses before, during and after exposure to a fire when installed in accordance with a listed through penetration or fire-resistive joint assembly system. 3M™ Fire Barrier Sealant CP 25WB+ firestops blank openings and penetrations passing through fire-rated floor, floor/ceiling or wall assemblies and other fire-rated interior building construction. The unique intumescent

property of this material allows 3M<sup>™</sup> Fire Barrier Sealant CP 25WB+ to expand and help maintain a firestop

penetration seal for up to 4 hours as penetrants are exposed to fire. 3M™ Fire Barrier Sealant CP 25WB+

exhibits excellent adhesion to a full range of construction substrates and penetrants. No mixing is required.



Product Features

 Firestop tested up to 4 hours in accordance with ASTM E 814 (UL 1479) & CAN/ULC S115

Fire Resistance tested for static Extensive listed systems construction joint systems in Sag-resistant accordance with ASTM E 1966 Halogen-free (UL 2079) Excellent adhesion Re-enterable / repairable Paintable Meets UL 1479 aging requirements
 Water clean up Helps minimize sound transfer\*

High-performance firestop sealant that also helps minimize sound transfer

Product Color: Red

Meets the intent of LEED® VOC regulations—helps reduce the quantity of indoor air ontaminants that may be odorous, irritating and harmful to the comfort and well-being of the installers and occupants. <250 g/L VOC contents (less H<sub>2</sub>O and exempt solvents). \*Minimizes noise transfer—STC-Rating of 54 when tested in STC 54-rated wall assembly.

**2. Applications** High-performance 3M<sup>™</sup> Fire Barrier Sealant CP 25WB+ is ideal for sealing single or multiple through penetrations in fire-rated construction. 3M™ Fire Barrier Sealant CP 25WB+ is typically used in mechanical, electrical and plumbing applications to firestop openings created by the following penetrations in fire-rated floors, floor/ceilings or walls: metallic pipe, plastic pipe (excluding CPVC), conduit, power and communication cable, cable trays, busways, combos, insulated pipe and HVAC duct penetrations. 3M™ Fire Barrier Sealant CP 25WB+ is also used to firestop blank openings and static construction joints.

**3. Specifications** 3M<sup>™</sup> Fire Barrier Sealant CP 25WB+ shall be a one component, ready-to-use, gun-grade, latex-based, intumescent firestop sealant capable of expanding a minimum of 3 times its dried volume when exposed to temperatures above 1000°F (538°C). The material shall be thixotropic and shall be applicable to overhead, vertical and horizontal firestops. The sealant shall be listed by independent test agencies such as UL, Intertek or FM. 3M™ Fire Barrier Sealant CP 25WB+ shall be tested to and pass the criteria of ASTM E 814 (UL 1479) Standard Test Method for Fire Tests of Penetration Firestop Systems, ASTM E 1966 (UL 2079) Standard Test Method for Fire Resistive Joint Systems and CAN/ULC S115 Standard Method of Fire Tests of Firestop Systems. 3M™ Fire Barrier Sealant CP 25WB+ meets the requirements of the IBC, IRC, IFC, IPC, IMC, NFPA 5000, NEC (NFPA 70) and NFPA 101.

Typically Specified Division Section 07 84 00 - Firestopping Related Sections

Applied with conventional

caulking equipment (excellent

Section 07 84 16 - Annular Space Protection Section 07 84 43 – Fire-Resistant Joint Sealants Section 07 86 00 – Smoke Seals Section 07 87 00 - Smoke Containment Barriers Section 07 27 00 - Air Barriers Section 21 00 00 – Fire Suppression Section 22 00 00 - Plumbing Section 26 00 00 – Electrical

For technical support relating to 3M Fire Protection Products and Systems, call: 1-800-328-1687 For more information on 3M Fire Protection Products, visit: www.3m.com/firestop



4. Physical Properties **Application Temperature Range:** 40° to 122°F (4° to 50°C) (ASTM C 1299) Service Temperature Range: -20° to 180°F (-28° to 82°C) STC (ASTM E 90 and ASTM E 413): 54 when tested in STC 54-rated wall assembly **Surface Burning** (ASTM E 84): Flame Spread 0 Smoke Development 0

Hardness (ASTM D 2240 Shore A): 85 psi (0.59 MPa) **Tensile Strength:** Volume Shrinkage (ASTM C 1241): 28% VOC Less H<sub>2</sub>O and Exempt Solvents: <1 g/LDry: Under typical conditions of 75°F (23°C) and 50% R.H., sealant

becomes tack-free in about ten minutes and dry-to-touch in 30 to 60

Typical dry rate is approximately 1/8 inch (3 mm) per day.

minutes. Full dry depends upon ambient conditions and volume of sealant.

Unit Volume: 10.1 fl. oz tube (298.7 mL, 18.2 in.3), 20 fl. oz. sausage (591.5 mL, 36.1 in.3), 27 fl. oz tube (798.5 mL, 48.7 in.3), 2 gal. pail (7.57 L, 462 in.3), 5 gal. pail (18.9 L, 1155 in.3)

5. Packaging, Storage, Shelf Life

Product packaged in cartridge or pail is enclosed in HDPE plastic containers, sausage is packaged in aluminum foil wrap Packaging 3M™ Fire Barrier Sealant CP 25WB+ should be stored indoors in dry conditions between 40°F and 90°F (4°C and Storage 32°C) in the original unopened package. Avoid repeated freeze / thaw exposures of the 3M™ Fire Barrier Sealant CP 25WB+ prior to installation.

> 3M™ Fire Barrier Sealant CP 25WB+ shelf life is 12 months in original unopened containers from date of packaging when stored above 68°F (2°C)

Lot numbering (e.g. 8183AS): First digit = Last digit of year manufactured, Second to fourth digit = Julian Date, Letters = Random to

**6. Installation Techniques**Consult a 3M Authorized Fire Protection Products Distributor / Dealer or Sales Representative for Applicable UL, Intertek or other third-party drawings and system details. Preparatory Work

**Installation Details** 

Shelf Life

The surface of the opening and any penetrating items should be cleaned to allow for the proper adhesion of the 3M™ Fire Barrier Sealant CP 25WB+. Ensure that the surface of the substrates are not wet and are frost free. Sealant can be installed with a standard caulking gun, pneumatic pumping equipment or it can be easily applied with a putty knife or trowel. Install the applicable depth of backing material, if required, as detailed within the applicable UL, Intertek, FM or other third-party listed system. Cut the end of the 3M<sup>™</sup> Fire Barrier Sealant CP 25WB+ tube spout to achieve the desired bead width when applying. Install the applicable depth of 3M™ Fire Barrier Sealant CP 25WB+ into the opening

flush with the surface of the substrate, or as detailed within the applicable listed system, at the depth for the assembly and rating that is required. Tool within 5 minutes. Clean all tools immediately after use with water. Limitations

Do not apply 3M™ Fire Barrier Sealant CP 25WB+ when surrounding temperature is less than 40°F (4°C) and in conditions where seals may be exposed to rain or water spray within 18 hours of application. Do not apply 3M<sup>N</sup> Fire Barrier Sealant CP 25WB+ to building materials that bleed oil, plasticizers or solvent (e.g. impregnated wood, oil-based sealants, or green or partially vulcanized rubber). Do not apply 3M™ Fire Barrier Sealant CP 25WB+ to wet or frost-coated surfaces or to areas that are continuously damp or immersed in water.

**NOTICE:** This product is not acceptable for use with chlorinated polyvinylchloride (CPVC) pipes.

7. Maintenance No maintenance should be required when installed in accordance with the applicable UL, Intertek, FM or other thirdparty listed system. Once installed, if any section of the 3M™ Fire Barrier Sealant CP 25WB+ is damaged, the following procedure will apply: remove and reinstall the damaged section in accordance with the applicable listed system, with a minimum 1/2 in. (12.7 mm) overlap onto the adjacent material.

3M™ Fire Barrier Sealant CP 25WB+ is available from 3M Authorized Fire Protection Products Distributors and Dealers. 3M™ Fire Barrier Sealant CP 25WB+ is available in 10.1 fl. oz. cartridges (12/case), 20.0 fl. oz. sausages (10/case), 27.0 fl. oz. cartridges (6/case), 2 gallon pails (1/case) and 5 gallon pails (1/case). For additional technical and purchasing information regarding this and other 3M Fire Protection Products, please call: 1-800-328-1687 or visit www.3m.com/firestop.

**9. Safe Handling Information**Consult product's Material Safety Data Sheet (MSDS) prior to handling and disposal.

**Building and Commercial** Services Division 3M Center, Building 223-2N-21 St. Paul, MN 55144-1000 USA 1-800-328-1687 www.3M.com/firestop

ence that 3M believes are reliable, but the accuracy or completeness of such information is not quaranteed. Product Use: Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application. Warranty and Limited Remedy: 3M warrants that each 3M Fire Protection Product will be free from defects in material and manufacture for 90 days from the date of purchase from 3M's authorized distributor. 3M MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If a 3M product does not conform to this warranty, the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price Limitation of Liability: Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted

Technical Information: The technical information, recommendations and other statements contained in this document are based upon tests or experi-

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DESIGN BY: 3E DESIGN



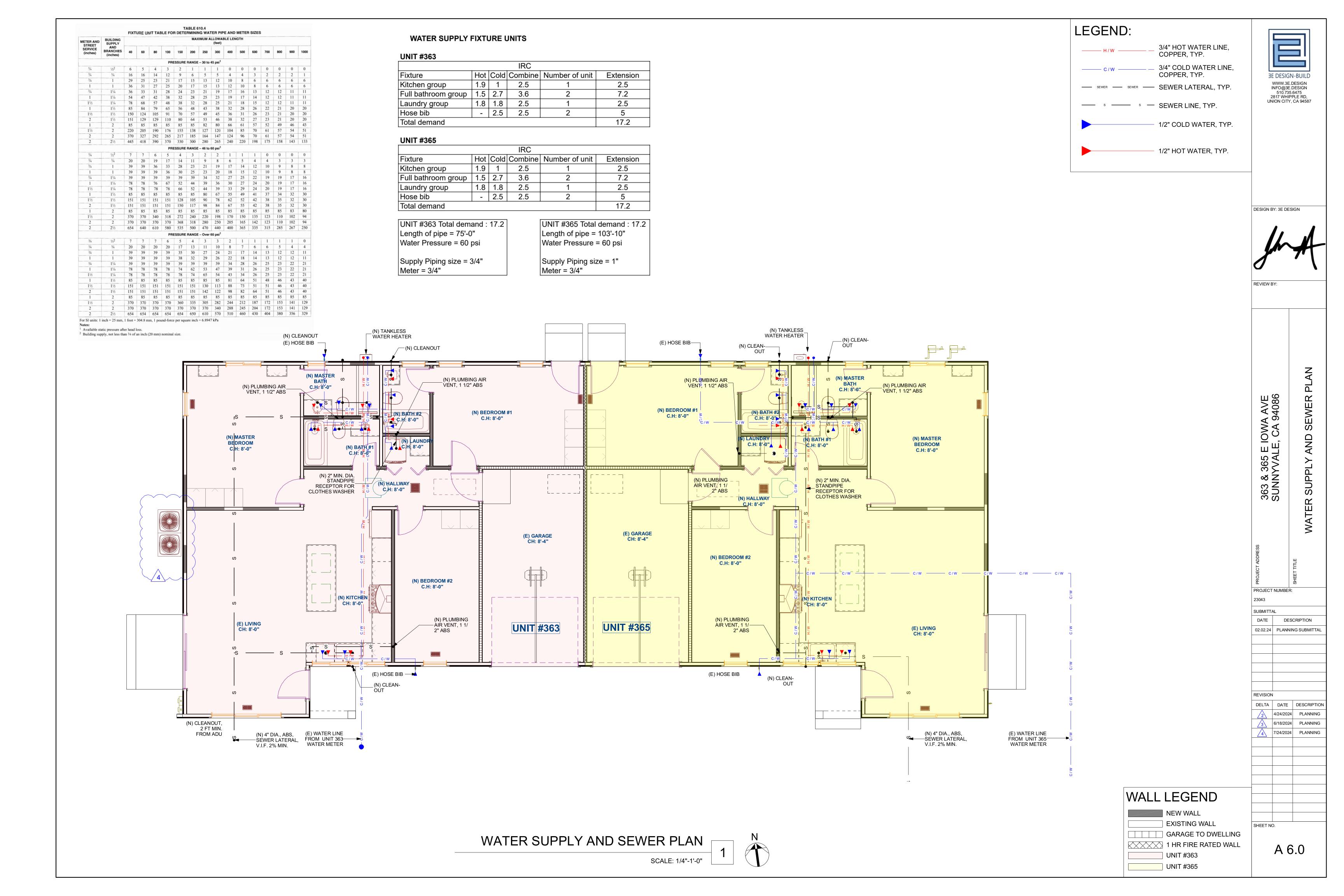
REVIEW BY:

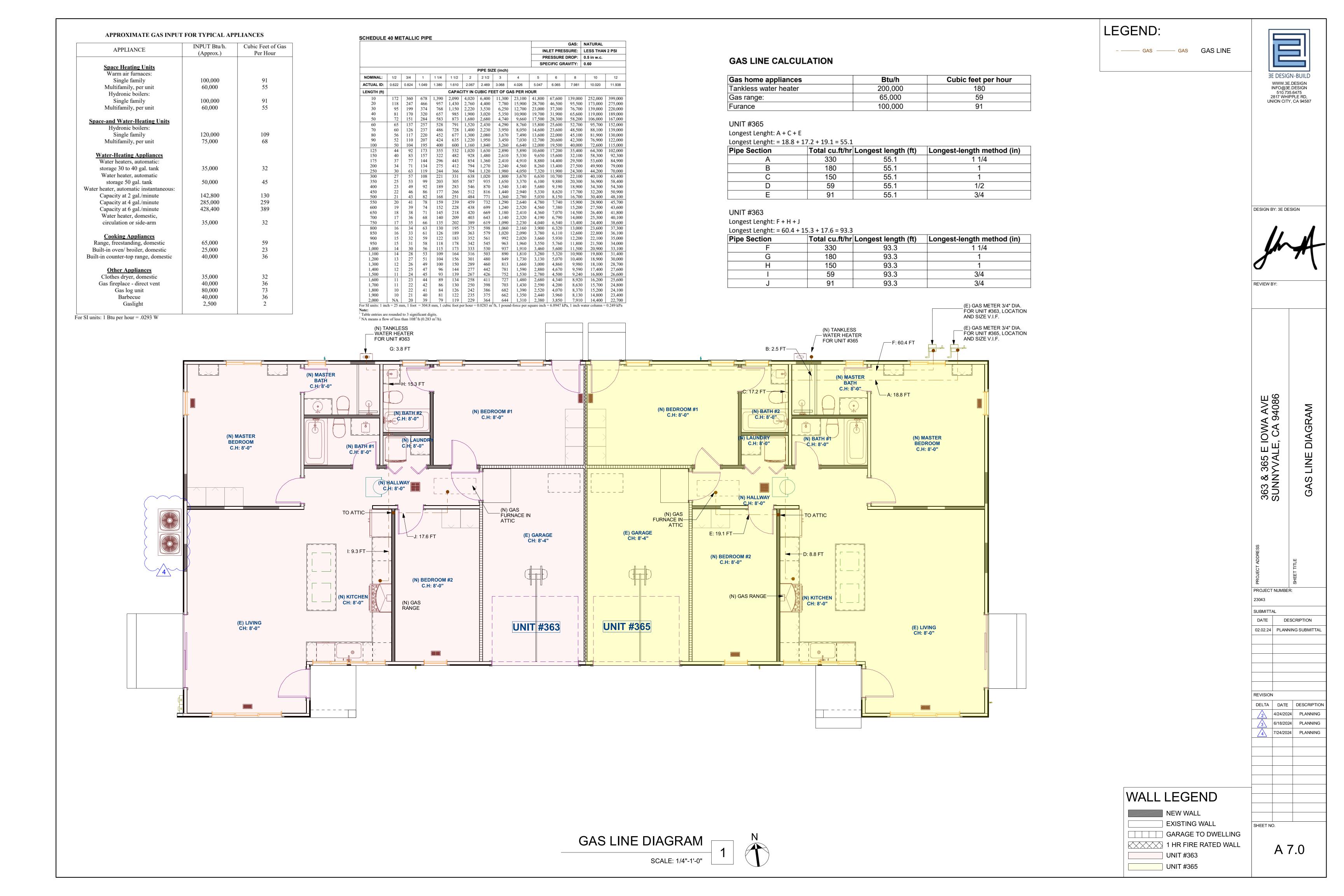
IOWA AVE E, CA 94086 65 VA 363 & SUNN PROJECT NUMBER: 23043 SUBMITTAL DATE DESCRIPTION 02.02.24 PLANNING SUBMITTAL

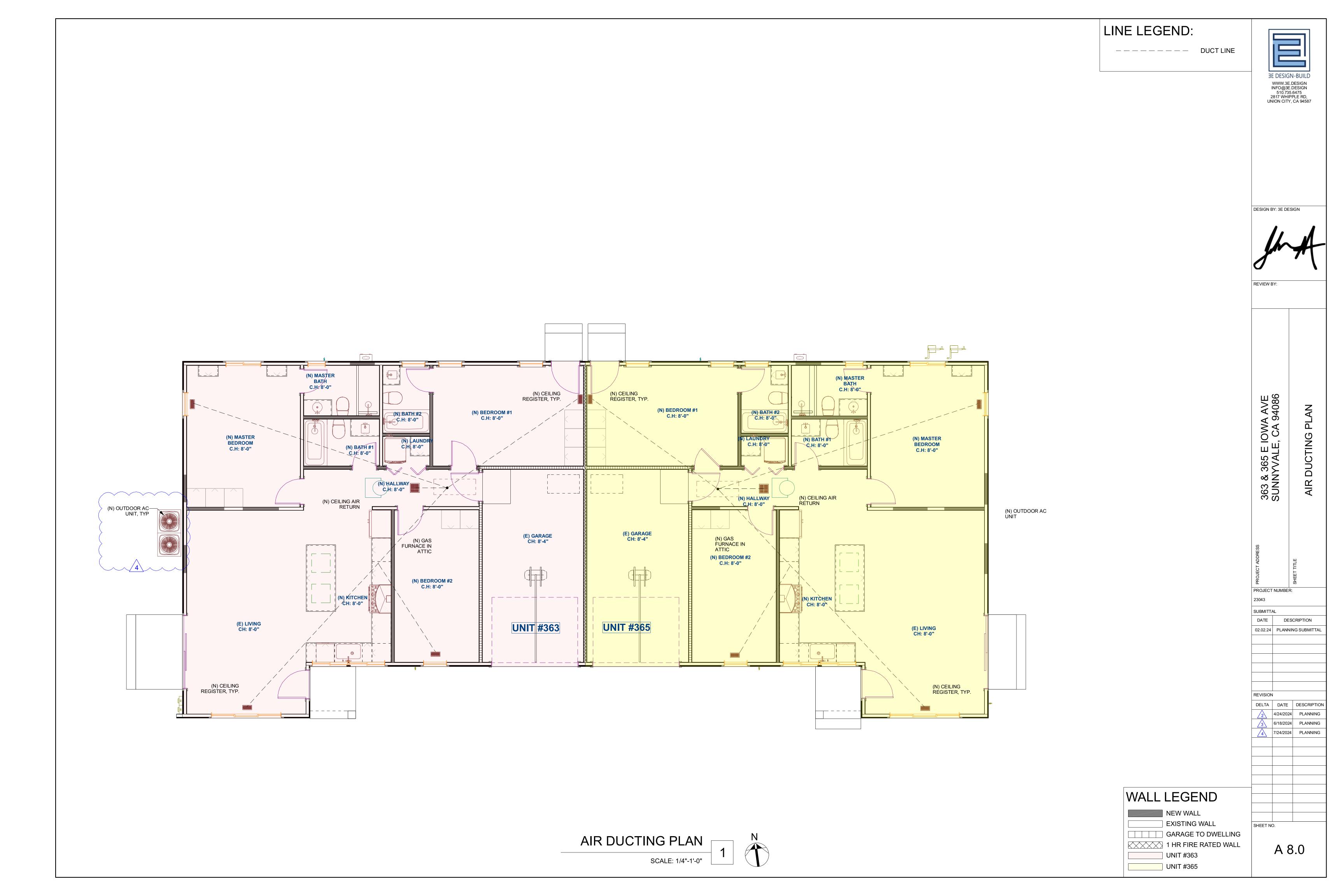
REVISION DELTA DATE DESCRIPTION 4/24/2024 PLANNING 6/18/2024 PLANNING /<sub>4</sub> |7/24/2024 | PLANNING

SHEET NO.

A 5.2









DESIGN BY: 3E DESIGN

REVIEW BY:

365 E IOWA AVE VALE, CA 94086

363 & 36 SUNNY

PROJECT NUMBER:

DESCRIPTION

02.02.24 PLANNING SUBMITTAL

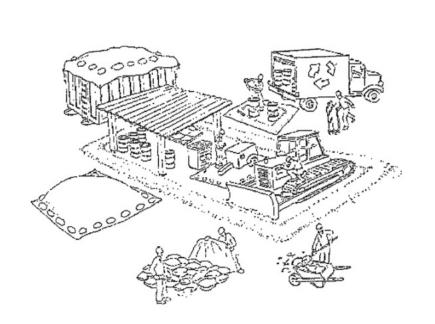
23043

SUBMITTAL

# Clean Bay Blue Print

## Make sure your crews and subs do the job right!

Runoff from streets and other paved areas is a major source of pollution and damage to creeks and the San Francisco Bay. Construction activities can directly affect the health of creeks and the Bay unless contractors and crews plan ahead to keep dirt, debris, and other construction waste away from storm drains and local creeks. Following these guidelines and the project specifications will ensure your compliance with City of Sunnyvale requirements.



### Materials storage & spill cleanup

#### Non-hazardous materials management

- ✓ Sand, dirt, and similar materials must be stored at least 10 feet (3 meters) from catch basins. All construction material must be covered with a tarp and contained with a perimeter control during wet weather or when rain is forecasted or when not actively being used within 14 days.
- ✓ Use (but don't overuse) reclaimed water for dust control as needed.
- ✓ Sweep or vacuum streets and other paved areas daily. Do not wash down streets or work areas with water!
- Recycle all asphalt, concrete, and aggregate base material from demolition activities. Comply with City of Sunnyvale Ordinances for recycling construction materials, wood, gyp board, pipe, etc.
- Check dumpsters regularly for leaks and to make sure they are not overfilled. Repair or replace leaking dumpsters promptly.
- Cover all dumpsters with a tarp at the end of every work day or during wet weather.

#### Hazardous materials management

- Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state, and federal regulations.
- ✓ Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecasted.
- ✓ Follow manufacturer's application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecasted within 24 hours.
- ✓ Be sure to arrange for appropriate disposal of all hazardous wastes.

#### Spill prevention and control

- ✓ Keep a stockpile of spill cleanup materials (rags, absorbents, etc. ) available at the construction site at all times.
- ✓ When spills or leaks occur, contain them immediately and be particularly careful to prevent leaks and spills from reaching the gutter, street, or storm drain. Never wash spilled material into a gutter, street, storm drain, or creek!
- Dispose of all containment and cleanup materials properly.
- Report any hazardous materials spills immediately! Dial 911

#### Construction Entrances and Perimeter

- Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
- ✓ Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking.

## Vehicle and equipment maintenance & cleaning

- Inspect vehicles and equipment for leaks
- frequently. Use drip pans to catch leaks until repairs are made; repair leaks
- Fuel and maintain vehicles on site only in a bermed area or over a drip pan that
- is big enough to prevent runoff. ✓ If you must clean vehicles or equipment
- on site, clean with water only in a bermed area that will not allow
- rinse water to run into gutters, streets, storm drains, or creeks.
- ✓ Do not clean vehicles or equipment on-site using soaps, solvents, degreasers, steam cleaning equipment, etc.

#### Earthwork & contaminated soils

- ✓ Keep excavated soil on the site where it will not collect in the street.
- ✓ Transfer to dump trucks should take place on the site, not in the street.
- ✓ Use fiber rolls, silt fences, or other control measures to minimize the flow of silt off the site.



- ✓ Earth moving activities are only allowed during dry weather
- by permit and as approved by the City Inspector in the Field.
- ✓ Mature vegetation is the best form of erosion control. Minimize disturbance to existing vegetation whenever possible.
- If you disturb a slope during construction, prevent erosion by securing the soil with erosion control fabric, or seed with fastgrowing grasses as soon as possible. Place fiber rolls down-slope until soil is secure.
- ✓ If you suspect contamination (from site history, discoloration, odor, texture, abandoned underground tanks or pipes, or buried debris), call the Engineer for help in determining what should be done, and manage disposal of cntaminated soil according to their instructions.

## Dewatering operations

- ✓ Effectively manage all run-on, all runoff within the site, and all runoff that discharges from the site. Run-on from off site shall be directed away from all disturbed areas or shall collectively be in compliance.
- ✓ Reuse water for dust control, irrigation, or another on-site purpose to the greatest extent possible.
- ▶ Be sure to notify and obtain approval from the Engineer before discharging water to a street, gutter, or storm drain. Filtration or diversion through a basin, tank, or sediment trap may be required.
- ✓ In areas of known contamination, testing is required prior to reuse or discharge of groundwater. Consult with the Engineer to determine what testing is required and how to interpret results. Contaminated groundwater must be treated or hauled off-site for proper disposal.

#### Saw cutting

Storm drain polluters may be liable for fines of \$10,000 or more per day!

- ✓ Always completely cover or barricade storm drain inlets when saw cutting. Use filter fabric, catch basin inlet filters, or sand/gravel bags to keep slurry out of the storm drain system.
- ✓ Shovel, absorb, or vacuum saw-cut slurry and pick up all waste as soon as you are finished in one location or at the end of each work day (whichever is
- ✓ If saw cut slurry enters a catch basin, clean it up immediately.

### Paving/asphalt work



- ✓ Always cover storm drain inlets and manholes when paving or applying seal coat, tack coat, slurry seal, or fog seal.
- ✓ Protect gutters, ditches, and drainage courses with sand/gravel bags, or earthen berms. ✓ Do not sweep or wash down excess sand
- or creeks. Collect sand and return it to the stockpile, or dispose of it as trash. ✓ Do not use water to wash down fresh asphalt

concrete pavement.

from sand sealing into gutters, storm drains,

### Concrete, grout, and mortar storage & waste disposal

- ✓ Store concrete, grout, and mortar under cover, on pallets, and away from drainage areas. These materials must never reach a storm drain.
- ✓ Wash out concrete equipment/trucks off-site or into contained washout areas that will not allow discharge of wash water onto the underlying soil or onto the surrounding areas.



✓ Collect the wash water from washing exposed aggregate concrete and remove it for appropriate disposal off site.

## Painting

- ✓ Never rinse paint brushes or materials in a gutter or street! ✓ Paint out excess water-based paint before rinsing brushes, rollers, or containers in a sink.
- ✓ Paint out excess oil-based paint before cleaning brushes in thinner. Filter paint thinners and solvents for reuse whenever possible.
- Dispose of oil-based paint sludge and unusable thinner as hazardous waste.

## Landscape Materials

- Contain, cover, and store on pallets all stockpiled landscape materials (mulch, compost, fertilizers, etc.) during wet weather or when rain is forecasted or when not actively being used within 14 days.
- ✓ Discontinue the application of any erodible landscape material within 2 days of forecasted rain and during wet weather.

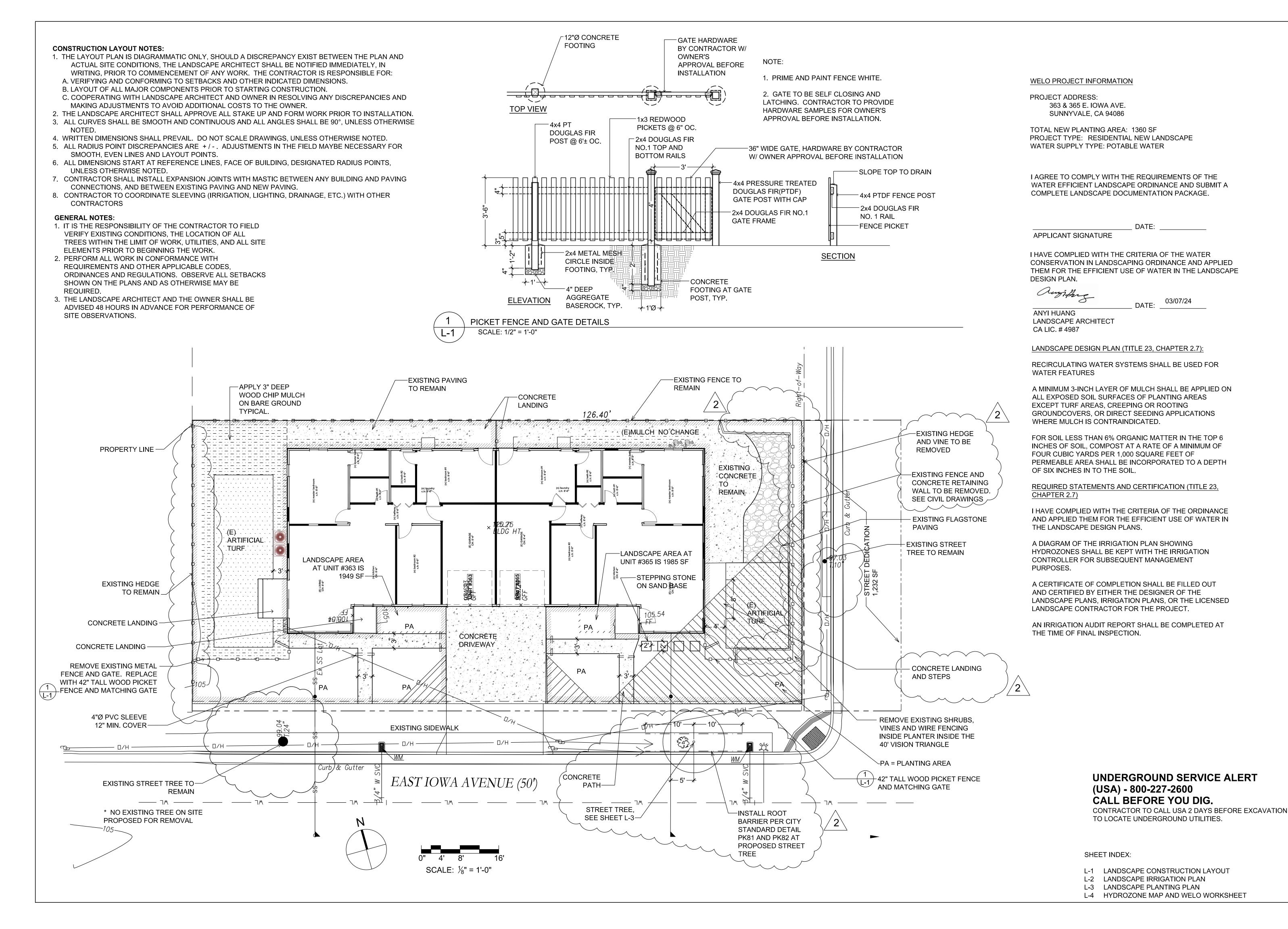
For references and more detailed information: www.cleanwaterprogram.org www.cabmphandbooks.com



REVISION DELTA DATE DESCRIPTION 4/24/2024 PLANNING 6/18/2024 PLANNING 4 7/24/2024 PLANNING

SHEET NO.

CB 1.0





2647 ROYAL ANN DRIVE UNION CITY, CA 94587 anyihuang@gmail.com 650-533-0107

REVISION DATE | NO. 4/16/2024 6/18/2024 2

NOL

DATE: 03/07/2024 SCALE: 1/8" = 1'-0" DRAWN BY: AΗ

PROJECT# 24014

SHEET

L - 1 TOTAL SHEETS: 4

DRAWN BY:
AH
PROJECT #

24014 SHEET

L - 2
TOTAL SHEETS: 4

IRRIGATION LEGEND

SYMBOL DESCRIPTION

2" POLYETHYLENE DISTRIBUTION TUBING (RAINBIRD XT-700).
SECURE IN PLACE WITH GALVANIZED TIE-DOWN STAKE EVERY 4',
UNDER MULCH. USE RAINBIRD XERI-BUG EMITTERS XB-05PC (0.5
GPH) FOR 1 GALLONG PLANTS, XB-10PC (1 GPH) FOR 5 GALLON
PLANTS, AND 2-XB-10PC FOR EACH 15 GALLON PLANT. INSTALL ¼"
TUBING WITH STAKE AND DIFFUSER BUG CAP TO EACH PLANT.
INSTALL FLUSH CAP (RAINBIRD MDCFCAP) AT THE END OF XT-700
TUBING.

RAINBIRD XFD ON SURFACE DRIPLINE, 0.9 GPH, 12" SPACE
(XFD-09-12). 24"Ø CIRCLE. SECURE DRIPLINE WITH LANDSCAPE
STAPLES

STAPLES

1" DIAMETER SCHEDULE 40 PVC IRRIGATION MAIN LINE, BURY 18"
DEEP.

CLASS 200 PVC LATERAL LINE, 1/2" SIZE PIPE AS NOTED. BURY 12"
MINIMUM.

RAINBIRD XACZ-075 PRF (3/4" LOW FLOW ANTI-SIPHON VALVE WITH 3/4" PR RBY FILTER),

INDICATES IRRIGATION CONTROLLER AND STATION NUMBER

3/4"F

INDICATES VALVE SIZE, F = HY-FILTER

INDICATES FLOW RATE (GALLON PER MINUTE)

3/4" BRASS HOSE BIB ON COPPER RISER. WALL MOUNT ON WALL

FEBCO 765 PRESSURE VACUUM BREAKER INSTALLED ON COPPER

RISER 12" ABOVE GRADE.

HUNTER i-CORE 600-M\_EXT CONTROLLER WITH SOLAR SYNC.
MOUNT CONTROLLER ON OUTSIDE WALL. MOUNT SOLAR SYNC
SENSOR ON EAVE UNOBSTRUCTED. POWER BY LICENSED

ELECTRICIAN.

#### IRRIGATION NOTES:

- CONTRACTOR TO TEST WATER SUPPLY FOR AVAILABILITY OF 35 GPM AND VERIFY MINIMUM STATIC WATER PRESSURE OF 55 PSI AT POINT OF CONNECTION.
   TEST PIPES FOR LEAKS BEFORE BACKFILL.
- 3. INSTALL 4" PVC SLEEVE UNDER PAVING, COORDINATE WITH OTHER CONTRACTORS.

IRRIGATION DESIGN PLAN (TITLE 23, CHAPTER 2.7)

PRESSURE REGULATING DEVICES ARE REQUIRED IF WATER PRESSURE IS BELOW OR EXCEEDS THE RECOMMENDED PRESSURE OF THE SPECIFIED IRRIGATION DEVICES.

CHECK VALVES OR ANTI-DRAIN VALVES ARE REQUIRED ON ALL SPRINKLER HEADS WHERE LOW POINT DRAINAGE COULD OCCUR.

#### IRRIGATION STATIONS INFORMATION

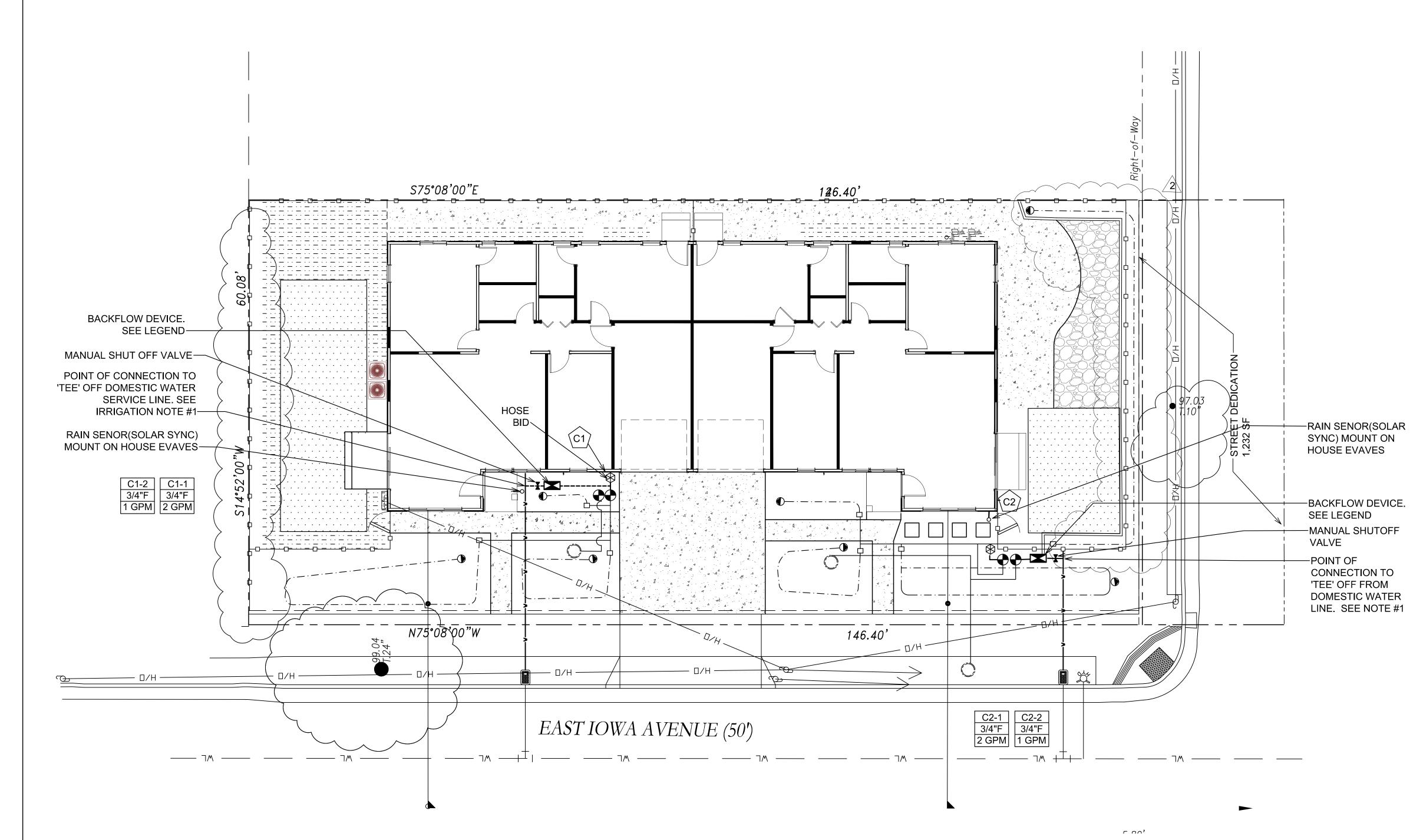
HYDROZONE VALVE #	VALVE SIZE	FLOW RATE (GPM)	APPLICATION TYPE / RATE (IN/HR)	DESIGN OPERATION PRESSURE (PSI)	HYDROZONE / PLANT TYPES
C1-1	3/4"F	2	DRIP/ N/A	30 PSI	Low/ shrubs
C1-2	3/4"F	1	DRIP/ N/A	30 PSI	Low/ tree
C2-1	3/4"F	2	DRIP/ N/A	30 PSI	Low/ shrubs
C2-2	3/4"F	1	DRIP/ N/A	30 PSI	Low/ tree

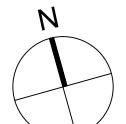
\* F = 'WYE' FILTER, INSTALL AFTER VALVE

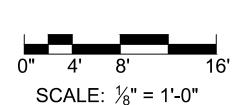
IRRIGATION SCHEDULE NOTE:

1. IRRIGATION SHALL BE LIMITED TO THE HOURS OF 8 PM TO 10 AM.

I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLANS.







UNDERGROUND SERVICE ALERT (USA) - 800-227-2600 CALL BEFORE YOU DIG.

CONTRACTOR TO CALL USA 2 DAYS BEFORE EXCAVATION TO LOCATE UNDERGROUND UTILITIES.

Mature Size

DRAWN BY: AΗ

PROJECT# 24014 SHEET

> L - 3 TOTAL SHEETS: 4

PLANTING LIST SYMBOL BOTANICAL NAME - COMMAN NAME

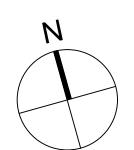
WUCOLS QTY SIZE (HxW) TREES 2 24" box T1 Lagunaria patersonia - Primrose Tree 15'x15' T2 Lagerstreomeia 'Natchez' - Crape Myrtle 1 15 gallon 25'x20' SHRUBS Lavandula steochas 'Otto Quast' - Spanish Lavender 2'x3' 15 | 1 gallon Loropetalum chinensis 'Suzanne' - Fringe Flower 10 1 gallon 4'x4' Rhaphiolepis indica 'Ballerina' - Ballerina Hawthorn 10 5 gallon 2'x4' Rosmarinus officinalis 'Prostratus' - Groundcover rosemary 25 | 1 gallon 1'x4' Salvia leucantha 'Santa Barbara' - Mexican Sage 6 1 gallon 3'x4' Salvia microphylla 'Hot Lips' - Salvia 2 1 gallon 3'x4' Sv Santolina chamaecyparissus - Lavender Cotton 26 5 gallon 2'x3'

WUCOLS CATEGORIES OF WATER NEEDS: VL = VERY LOW, L = LOW WATER USE, M = MODERATE WATER USE

#### NOTE:

- 1. Before planting till the following materials into the top 6" of soil (for each 1,000 S.F.):
  - a. 4 cubic yards nitrogen fortified organic compost
  - 10 LB fertilizer (N16/P6/K8) w/ 2% iron
  - 5 LB sulfate of ammonia
- 2. Mulch all planted areas with a 3" thick layer of medium recycled wood chips, provide sample for Landscape Architect's approval.
- 3. The Landscape Architect and the Owner reserve the right to reject any or all plant material, if such material does not meet the American Standards for Nursery Stock (ANSI). Plant materials shall be guaranteed against latent defects, injuries, pests, diseases or death of plants due to improper planting. Tree missing central leader will be rejected. The Contractor shall promptly replace plants that have died or are not in a vigorous, healthy condition with plants of the same kind and size as originally specified at no expense to the Owner.
- . Landscape Architect to approve plant locations prior to planting.
- 5. The Contractor shall be responsible for the adequate protection of the improvements during construction period and through maintenance period. Damaged areas, such as sprinkler heads or plant materials, shall be replaced or repaired at no additional expense to the Owner.

I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLANS.



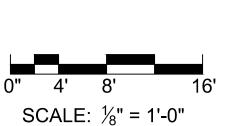
126.40'

( Lo )( Lo )

EAST IOWA AVENUE (50')

(Sv)(Sv)(Sv)(Sv)

146.40'



Rh Rh Rh

UNDERGROUND SERVICE ALERT (USA) - 800-227-2600 CALL BEFORE YOU DIG.

S75°08'00"E

N75°08'00"W

CONTRACTOR TO CALL USA 2 DAYS BEFORE EXCAVATION TO LOCATE UNDERGROUND UTILITIES.

REVISION DATE	NO.
4/16/2024	1
6/18/2024	2

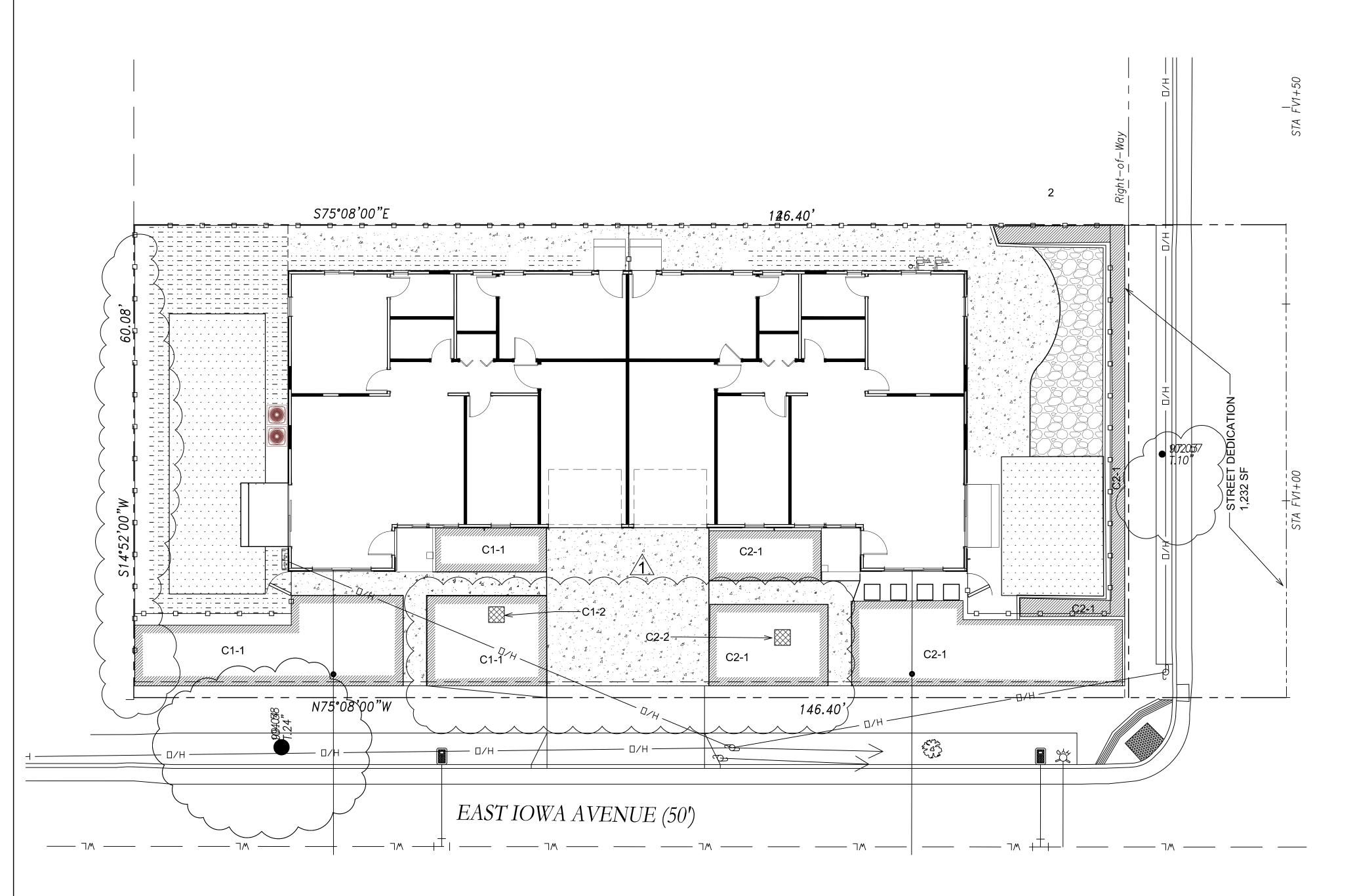
WORKSHEE

03/07/2024 SCALE: 1/8" = 1'-0"

DRAWN BY: AΗ

PROJECT# 24014 SHEET

L - 4 TOTAL SHEETS: 4



JOB ADDRESS: 363 & 365 E. Iowa Ave. Sunnyvale, CA 94086 WATER EFFICIENT LANDSCAPE WORKSHEET Reference Evapotranspiration (ETo) Plant Irrigation Irrigation ETAF Landscape ETAF x Estimated Hydrozone # /Planting | Factor | Method | Efficiency | (PF/IE) | Area (sq. | Area Total Waer Description Use (ETWU) Regular Landscape Areas 0.81 0.37 C1-1 / low water use shrubs 6376.56 0.3 drip 613 227.04 0.3 drip 0.81 0.37 C1-2 / low water use shrubs 0.3 drip 0.81 0.37 723 267.78 7520.81 C2-1 / low water use shrubs 0.3 drip 0.81 0.37 C2-2 / low water use shrubs 8.89 1360 503.70 Totals Special Landscape Areas 0.00 0.00 Totals ETWU Total 13897.37 Maximum Allowed Water Allowance (MAWA) 21008.33

non-residential areas

Required) = Eto X 0.62 x

where 0.62 is a conversion factor that converts acre-

inches per acre per year to gallons per square foot per

ETAF x Area

Irrigation Efficiency ETWU (Annual Gallons Hydrozone #/Planting Description Irrigation Method 0.75 for spray head overhead spray 1.) front Law n or drip 0.81 for drip 2.) low Water use plantings 3.) medium water use planting

MAWA (Annual Gallons Allowed) =  $(Eto)(0.62)[(ETAF \times LA) + ((1-ETAF))]$ x SLA)]

where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square feet, SLA is the total special landscape area in square feet, and ETAF is .55 for residential areas and 0.45 for non-residential areas.

ETAF Calculations
Regular Landscape A

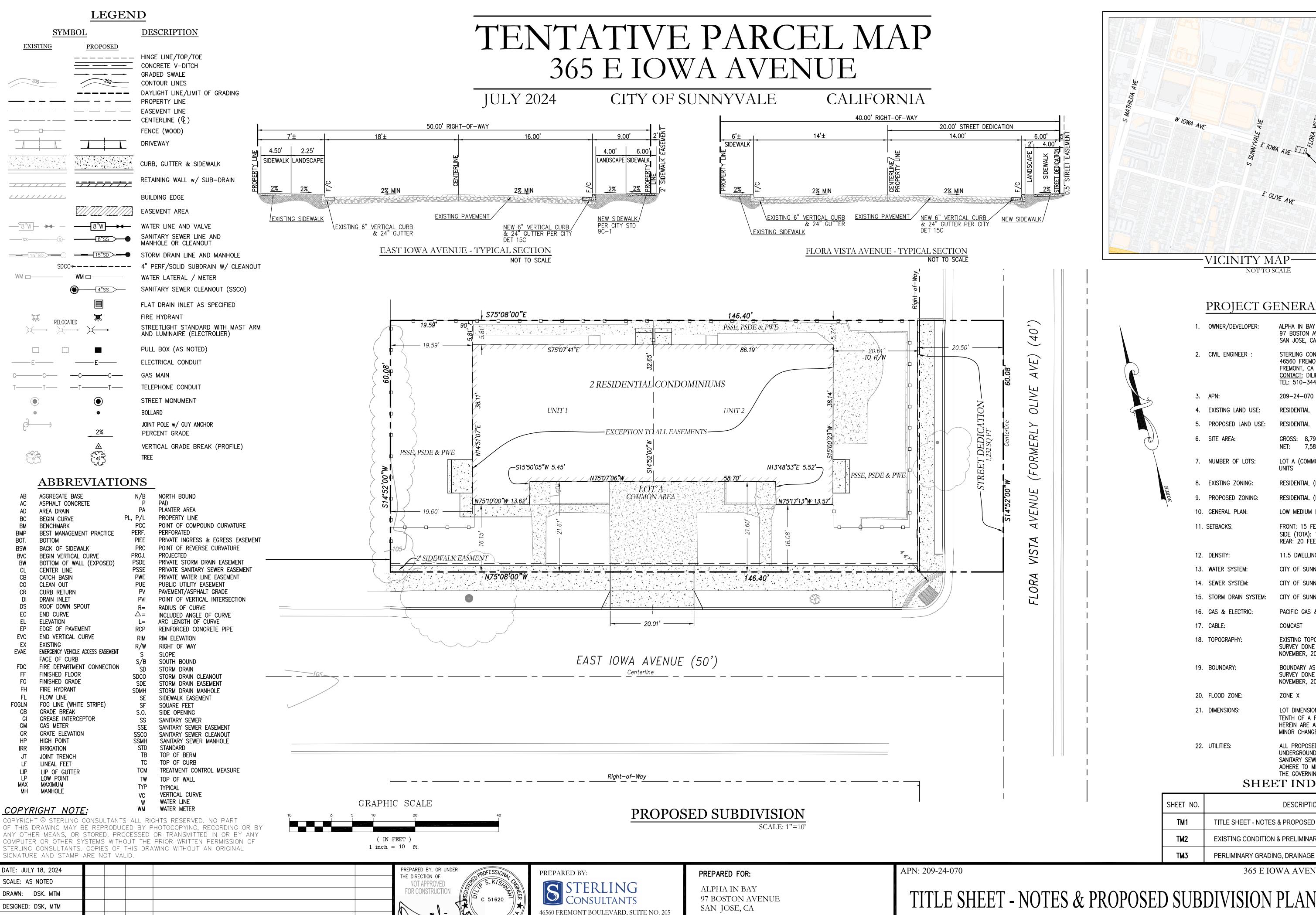
Regular Landscape Areas		
Total ETAF X Area	503.70	
Total Area	1360.00	Average ETAF for Regular Landscape Areas must be
Average ETAF	0.37	0.55 or below for residential areas, and 0.45 or below for

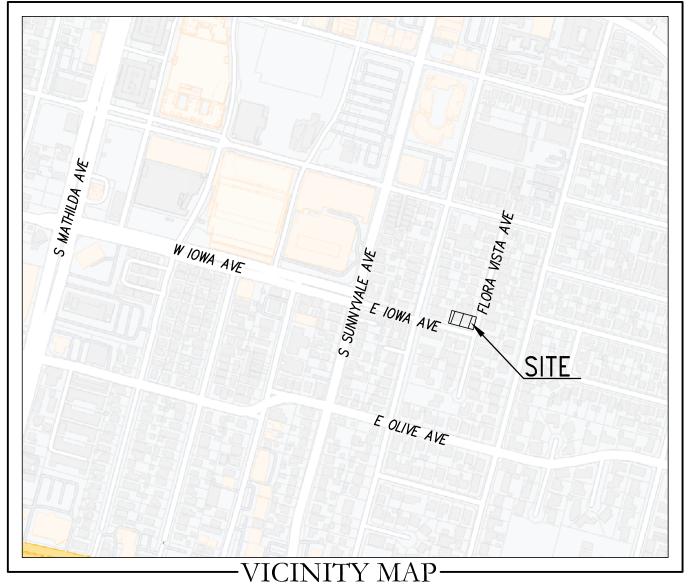
All Landscape Areas Total ETAF x Area 503.70 1360.00 Total Area 0.37 Sitewide ETAF

**UNDERGROUND SERVICE ALERT** (USA) - 800-227-2600 CALL BEFORE YOU DIG.

CONTRACTOR TO CALL USA 2 DAYS BEFORE EXCAVATION

TO LOCATE UNDERGROUND UTILITIES.





### PROJECT GENERAL NOTES:

ALPHA IN BAY 1. OWNER/DEVELOPER: 97 BOSTON AVENUE SAN JOSE, CA 2. CIVIL ENGINEER STERLING CONSULTANTS

46560 FREMONT BOULEVARD, SUITE 205 FREMONT, CA 94538 <u>CONTACT:</u> DILIP S. KISHNANI, P.E., QSD TEL: 510-344-8956; 925-705-3633

3. APN: 209-24-070 RESIDENTIAL 4. EXISTING LAND USE:

PROPOSED LAND USE: RESIDENTIAL

6. SITE AREA:

NET: 7,584 SF (0.1741 ACRES) LOT A (COMMON LOT); 2 CONDOMINIUM

GROSS: 8,796 SF (0.2019 ACRES)

RESIDENTIAL (R2) **EXISTING ZONING:** 

PROPOSED ZONING: RESIDENTIAL (R2) 10. GENERAL PLAN: LOW MEDIUM DENSITY RESIDENTIAL

11. SETBACKS: FRONT: 15 FEET (MIN), 20 FEET (AVERAGE)

SIDE (TOTA): 10 FEET MIN (20% OF WIDTH)
REAR: 20 FEET 11.5 DWELLING UNITS PER ACRE 12. DENSITY:

13. WATER SYSTEM: CITY OF SUNNYVALE 14. SEWER SYSTEM: CITY OF SUNNYVALE

PACIFIC GAS & ELECTRIC (P.G.&E.) 16. GAS & ELECTRIC:

17. CABLE: COMCAST

15. STORM DRAIN SYSTEM:

18. TOPOGRAPHY: EXISTING TOPOGRAPHY IS BASED ON A FIELD SURVEY DONE BY STERLING CONSULTANTS IN NOVEMBER, 2023.

CITY OF SUNNYVALE

19. BOUNDARY: BOUNDARY AS SHOWN IS BASED ON A FIELD SURVEY DONE BY STERLING CONSULTANTS IN NOVEMBER, 2023.

20. FLOOD ZONE: ZONE X

21. DIMENSIONS: LOT DIMENSIONS (SHOWN TO NEAREST TENTH OF A FOOT) AND AREAS SHOWN

HEREIN ARE APPROXIMATE AND SUBJECT TO MINOR CHANGES DURING FINAL DESIGN.

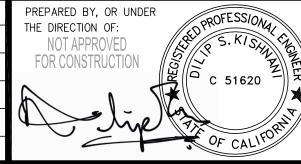
22. UTILITIES: ALL PROPOSED UTILITIES SHALL BE PLACED UNDERGROUND. ALL STORM DRAINS, SANITARY SEWERS AND WATER MAINS SHALL ADHERE TO MINIMUM SIZES & SLOPES PER

> THE GOVERNING AGENCIES. SHEET INDEX

> > **CALIFORNIA**

SHEET NO.	DESCRIPTION		
TM1 TITLE SHEET - NOTES & PROPOSED SUBDIVISION PLAN			
TM2 EXISTING CONDITION & PRELIMINARY DEMOLITION PLAN			
TM3	PERLIMINARY GRADING, DRAINAGE & UTILITY PLAN		

DATE: JULY 18, 2024 SCALE: AS NOTED DRAWN: DSK. MTM DESIGNED: DSK, MTM ENGINEER: DSK CITY APPF MANAGER: DSK NO. BY DATE REVISIONS

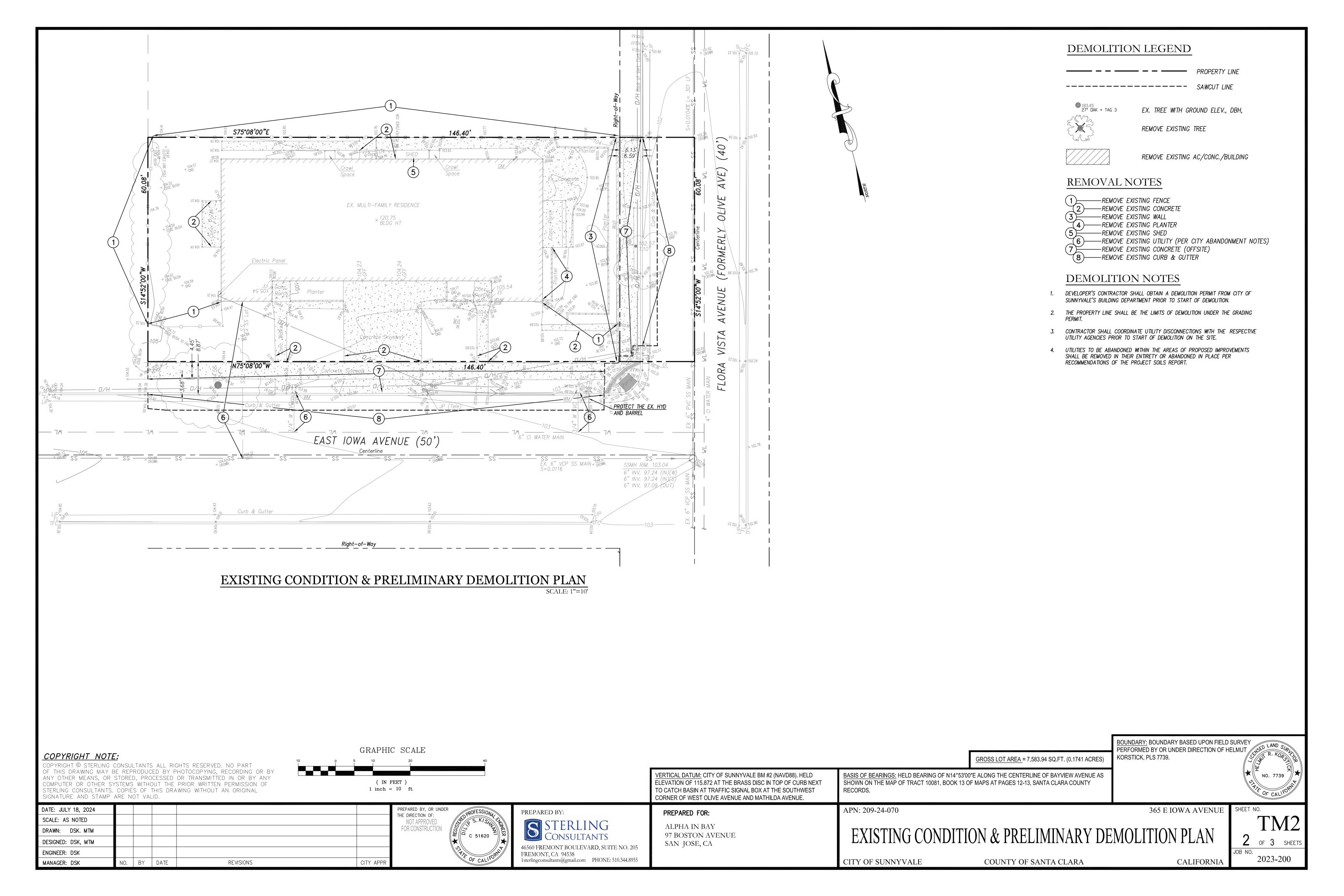


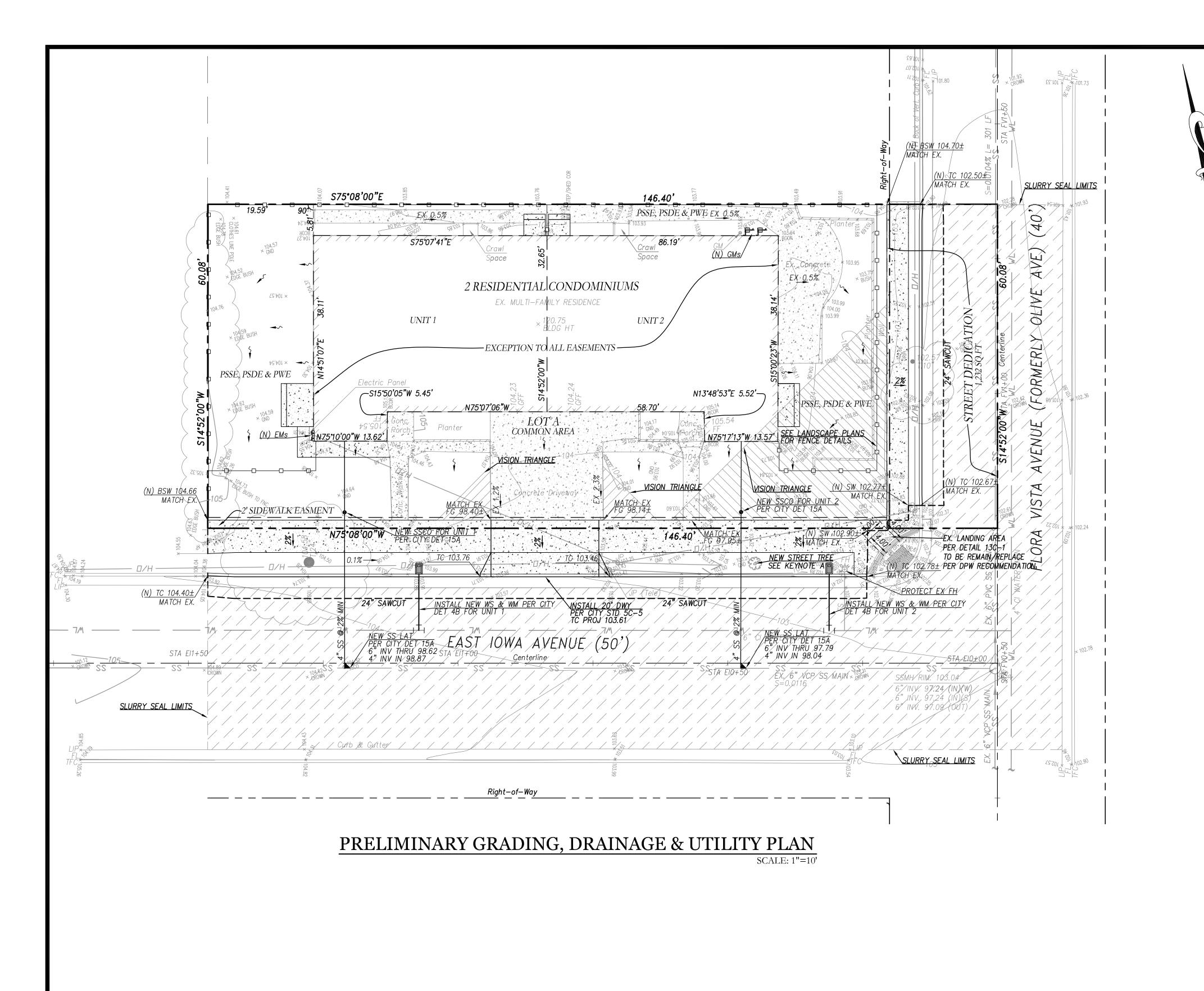


1sterlingconsultants@gmail.com PHONE: 510.344.8955

365 E IOWA AVENUE SHEET NO. OF 3 SHEETS 2023-200

CITY OF SUNNYVALE COUNTY OF SANTA CLARA





#### **GRADING NOTES:**

PLANTED WITH SUITABLE GROUND COVER.

- 1. SITE GRADING & EXCAVATIONS SHALL ADHERE TO ALL RECOMMENDATIONS CONTAINED IN THE PROJECT GEOTECHNICAL REPORT.
- 2. ALL GRADES SHOWN ARE FINISHED GRADES, UNLESS OTHERWISE NOTED. 3. ALL CUT AND FILL SLOPES AT THE BOUNDARY LINES SHALL BE CONSTRUCTED
- IN SUCH A MANNER THAT ADJACENT FENCES WILL NOT BE DAMAGED. GRADING SHALL CONFORM AT BOUNDARY LINES. 4. ALL CUT SLOPES SHALL BE ROUNDED TO MEET EXISTING GRADES AND BLEND WITH

SURROUNDING TOPOGRAPHY. ALL GRADED SLOPES OVER FIVE FEET IN HEIGHT SHALL BE

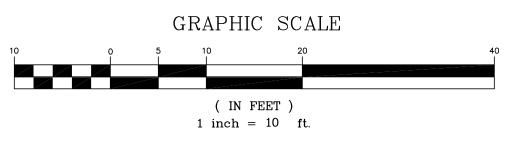
- 5. DURING GRADING OPERATIONS, THE CONTRACTOR SHALL IMPLEMENT DUST CONTROL MEASURES BOTH ON-SITE. STREETS SHALL BE SWEPT PER REQUIREMENTS SPECIFIED IN BLUEPRINT FOR CLEAN BAY.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF SAID GRADING QUANTITIES PRIOR TO THE START OF THE GRADING OPERATION. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR DISTRIBUTING ANY EXCESS MATERIAL OR SUPPLY MATERIAL FOR DEFICIENCIES TO BRING PAVEMENT OR LOTS TO REQUIRED GRADE. CLARIFICATION OF GRADING SHALL BE DONE BY THE ENGINEER.
- 7. WASTEWATER GENERATED DURING CONSTRUCTION SHALL NOT BE DISCHARGED TO THE STORM DRAIN SYSTEM. THIS INCLUDES WASTE FROM PAINTING, SAWCUTTING, CONCRETE WORK, ETC. THE CONTRACTOR SHALL MAKE ARRANGEMENTS TO ELIMINATE DISCHARGES TO THE STORM DRAIN SYSTEM AND, IF NECESSARY, PROVIDE AN AREA FOR ON-SITE WASHING ACTIVITIES DURING CONSTRUCTION. MATERIALS WHICH COULD CONTAMINATE STORM RUNOFF SHALL BE STORED IN AREAS WHICH ARE DESIGNED TO PREVENT EXPOSURE TO RAINFALL AND TO NOT ALLOW STORM WATER TO RUN ONTO THE AREA.
- 8. FLUSHING OF STREETS/PARKING LOTS TO REMOVE DIRT AND CONSTRUCTION DEBRIS IS PROHIBITED UNLESS PROPER SEDIMENT CONTROLS ARE USED. AREAS REQUIRING CLEANING SHOULD BE SWEPT.
- 9. WHERE UNSTABLE OR UNSUITABLE MATERIALS ARE ENCOUNTERED DURING SUBGRADE PREPARATION, THE AREA IN QUESTION SHALL BE OVER EXCAVATED AND REPLACED BY SELECT BACKFILL MATERIAL AS NEEDED.
- 10. WHERE ABANDONED UNDERGROUND STRUCTURES ARE ENCOUNTERED IN THE STREET AREAS, REMOVE TO SUFFICIENT DEPTH TO ALLOW UNDERGROUND LINES TO CROSS, BACKFILL AND COMPACT DURING ROUGH GRADING. THE INSPECTOR MAY REQUIRE FURTHER WORK TO BE DONE IF VISUAL INSPECTION INDICATES SO DURING CONSTRUCTION.
- 11. PRIOR TO ANY GRADING, DEMOLITION OF THE SITE SHOULD BE COMPLETED. DEMOLITION SHOULD INCLUDE THE COMPLETE REMOVAL OF ALL SURFACE AND SUBSURFACE STRUCTURES. IF ANY OF THE FOLLOWING ARE ENCOUNTERED: TREE ROOT SYSTEMS, CONCRETE, SEPTIC TANKS, GAS OR OIL TANKS, STORM INLETS, IRRIGATION PIPES, FOUNDATIONS, ASPHALT, DEBRIS AND TRASH, THESE SHOULD ALSO BE REMOVED, WITH THE EXCEPTION OF ITEMS SPECIFIED BY THE OWNER FOR SALVAGE.
- 12. EARTHWORK QUANTITIES IF SHOWN ON THESE PLANS ARE APPROXIMATE ESTIMATED QUANTITIES AND ARE FURNISHED FOR THE CITY OF SUNNYVALE'S INFORMATION ONLY. THE ACTUAL AMOUNT MAY VARY DEPENDING ON COMPACTION, CONSOLIDATION, STRIPPING AND THE CONTRACTOR'S METHOD OF OPERATION.
- 13. ALL NEW/UPGRADED UTILITIES SHALL BE INSTALLED UNDERGROUND.
- 14. HAND DIG FOR EXCAVATION NEAR EXISTING STREET TREES.

#### **KEYNOTES:**

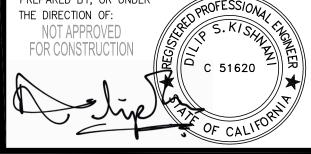
A. STREET TREE WILL REQUIRE ROOT BARRIER TO BE INSTALLED AT THE BACK OF CURB AND THE FRONT OF SIDEWALK. ROOT BARRIER WILL NEED TO FOLLOW THE REQUIREMENTS FO CITY STANDARD DETAILS PK 81-82

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DATE: JULY 18, 2024						F
SCALE: AS NOTED						•
DRAWN: DSK. MTM						
DESIGNED: DSK, MTM						f
ENGINEER: DSK						q
MANAGER: DSK	NO.	BY	DATE	REVISIONS	CITY APPR	





PREPARED FOR: ALPHA IN BAY 97 BOSTON AVENUE

SAN JOSE, CA

APN: 209-24-070

365 E IOWA AVENUE

3 OF 3 SHEETS

2023-200

**CALIFORNIA** 

COUNTY OF SANTA CLARA CITY OF SUNNYVALE

PRELIMINARY GRADING, DRAINAGE & UTILITY PLAN

## 365 E IOWA AVE TRAFFIC CONTROL PLANS

## SUNNYVALE, CALIFORNIA

#### **GENERAL NOTES:**

- 1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE LATEST EDITION OF THE CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD), THE CALTRANS STANDARD PLANS AND SPECIFICATIONS, AND THE CALIFORNIA TEMPORARY TRAFFIC CONTROL HANDBOOK (CATTCH).
- 2. THE LOCAL FIRE DEPARTMENT, SHERIFF/POLICE DEPARTMENT, CALIFORNIA HIGHWAY PATROL, LOCAL SCHOOL DISTRICT, TRANSIT SERVICE PROVIDERS AND UNITED STATES POSTAL SERVICE SHALL BE NOTIFIED 72 HOURS IN ADVANCE OF CONSTRUCTION WORK.
- 3. ALL WORKERS SHALL BE EQUIPPED WITH A REFLECTIVE VEST AND HARD HAT PER THE LATEST ANSI/ISEA 107 STANDARDS. ALL FLAGGERS SHALL ALSO BE EQUIPPED WITH A R1-1/W20-8 "STOP/SLOW" PADDLE AND SHALL BE TRAINED IN THE PROPER FUNDAMENTALS OF FLAGGING TRAFFIC.
- 4. NO PARKING SIGNS SHALL BE PLACED IN ACCORDANCE TO LOCAL AGENCY REQUIREMENTS. OTHERWISE, NO PARKING SIGNS SHALL BE PLACED 72 HOURS PRIOR TO SET UP. SIGNS SHALL BE POSTED EVERY 20 LINEAR FEET OF OCCUPIED SPACE WITH AT LEAST ONE SIGN AT EACH END OF OCCUPIED SPACE.
- 5. ANY CONFLICTING SIGNS SHALL BE COVERED FOR THE LENGTH OF THE JOB.
- 6. CONTRACTOR SHALL MAINTAIN EMERGENCY VEHICLE AND DRIVEWAY ACCESS AT ALL TIMES.
- 7. B.A.T.S. TRAFFIC SOLUTIONS ASSUMES NO LIABILITY WHEN CONTRACTOR DOES OWN SET UP OR MAKES CHANGES TO THE ORIGINAL TRAFFIC CONTROL PLAN. PLANS ARE NOT TO BE DUPLICATED OR REDISTRIBUTED FOR USE BY ANY PERSONS NOT INCLUDED IN THIS SCOPE OF WORK WITHOUT WRITTEN CONSENT.
- 8. PLACE W20-1 "ROAD WORK AHEAD" SIGNS ON ALL SIDE STREETS WITHIN THE ADVANCE WARNING AREA.
- 9. IF PEDESTRIAN ACCESS IS RESTRICTED DURING WORK HOURS, AT LEAST ONE WORKER SHALL BE ASSIGNED WITH THE RESPONSIBILITY TO SAFELY ESCORT DISABLED, ELDERLY, AND/OR ANY OTHER PEDESTRIAN IN NEED OF ASSISTANCE. THE ASSIGNED WORKER(S) MAY ALSO PARTICIPATE IN OTHER CONSTRUCTION ACTIVITIES BUT SHALL ALWAYS BE AWARE OF HIS/HER RESPONSIBILITY TO PROVIDE THIS ASSISTANCE. PEDESTRIANS SHALL NOT BE DIRECTED NOR EXPECTED TO CROSS A ROADWAY AT ANY LOCATION OTHER THAN AT A SIGNALIZED INTERSECTION OR ALL—WAY STOP. ACCOMMODATIONS SHOULD BE MADE ON THE SAME SIDE OF THE ROADWAY AS THE WORK.
- 10. ALL ADVANCED WARNING SIGNS SHALL BE EQUIPPED WITH A HIGH-LEVEL WARNING DEVICE (FLAG TREE).
- 11. TYPE A OR TYPE B FLASHING WARNING LIGHTS SHALL BE USED, AS SHOWN ON THE PLAN, WHEN WORK IS AT NIGHT OR ENCROACHES THE HOURS OF DARKNESS. TYPE B FLASHING WARNING LIGHTS SHALL BE USED, AS SHOWN ON THE PLAN, WHEN WORK IS 24/7 SETUP.
- 12. LIGHT TOWERS SHALL BE USED AT FLAGGER STATIONS AND WORK AREAS WHEN WORK IS AT NIGHT OR ENCROACHES THE HOURS OF DARKNESS. HIGHWAY

  CONSTRUCTION WORK LIGHTING SHALL BE PER CALIFORNIA CODE OF REGULATIONS CONSTRUCTION SAFETY ORDER 1523 (TILE 8, DIVISION 1, CHAPTER 4, ARTICLE 3, SECTION 1523).
- 13. WHEN APPLICABLE, PLACE A MINIMUM OF FOUR CONES AT 50FT INTERVALS IN ADVANCE OF FLAGGER STATION.
- 14. WHEN APPLICABLE, PLACE SHOULDER TAPER IN ADVANCE OF PCMS BOARD. SEE TABLE 1 ON CALTRANS STD T9 FOR SHOULDER TAPER LENGTH.
- 15. NOTHING ALLOWED IN BUFFER OR TRANSITION AREAS UNLESS OTHERWISE SHOWN ON THE PLAN.
- 16. CONTRACTOR SHALL NOT LEAVE EXCAVATIONS UNATTENDED AT ANY TIME AND SHALL PLATE OR BACKFILL EXCAVATED AREA DURING NON-WORKING HOURS.
- 17. CONTRACTOR SHOULD AVOID PLACING SIGNS IN THE BIKE LANE.
- 18. WHEN APPLICABLE, CONTRACTOR SHALL PLACE C27 (CA) "OPEN TRENCH" SIGNS ON EACH END OF AN OPEN TRENCH. C27 (CA) SIGN SHALL FACE TRAFFIC TRAVELING WITHIN 15' OF THE OPEN TRENCH (I.E. DOUBLE SIDED SIGNS IN SOME CASES). PLACE C27 (CA) SIGNS IN THE TRENCH AT INTERVALS NOT TO EXCEED 2,000 FT.
- 19. IT IS RECOMMENDED FOR CREW SAFETY TO HAVE A SHADOW TRUCK PRESENT DURING THE INSTALLATION/REMOVAL OF TRAFFIC CONTROL DEVICES FOR POSTED SPEED LIMITS OF 40MPH TO 50 MPH. FOR POSTED SPEED LIMITS GREATER THAN 50 MPH, A TMA TRUCK IS RECOMMENDED DURING THE INSTALLATION/REMOVAL OF TRAFFIC CONTROL DEVICES.

#### GENERAL NOTES PER CITY OF SUNNYVALE:

- 1. ALL DRIVEWAYS TO REMAIN OPEN UNLESS OTHERWISE INDICATED.
- 2. FLAGGERS TO ASSIST WITH PEDESTRIAN TRAFFIC.
- 3. POST TEMPORARY "NO PARKING" IN ALL AREAS AFFECTED BY THE WORK AREA 72 HOURS PRIOR TO WORK.
- 4. WORK HOURS SHALL COMPLY WITH SMC 16.08.030 MONDAYS THROUGH FRIDAYS ONLY.
- NOTIFY DEPARTMENT OF PUBLIC SAFETY WITH DATES AND TIMES OF TRAFFIC CONTROL IMPLEMENTATION TWO
  WEEKS PRIOR TO START OF WORK.
- 6. NOTIFY BUSINESSES AND PROPERTY OWNERS WITH DATES AND TIMES THAT THEIR ACCESS WILL BE AFFECTED TWO WEEKS PRIOR TO START OF WORK.
- 7. MAINTAIN 5 FEET MINIMUM CLEARANCE WHERE SIDEWALK REMAINS OPEN.
- 8. PLEASE CONTACT VTA WITH TIME AND DATE 2 WEEKS PRIOR TO THE STATE OF WORK IF BUS STOP OPERATION WILL BE AFFECTED DURING CONSTRUCTION, OTHERWISE MAINTAIN EXISTING BUS STOP OPEN AND CLEAR ALL THE TIMES.

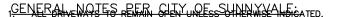
686 E LOCKEFORD ST. LODI. CA

AFTER HOURS EMERGENCY

510-299-5666

365 E IOWA AVE

TRAFFIC CONTROL PLANS

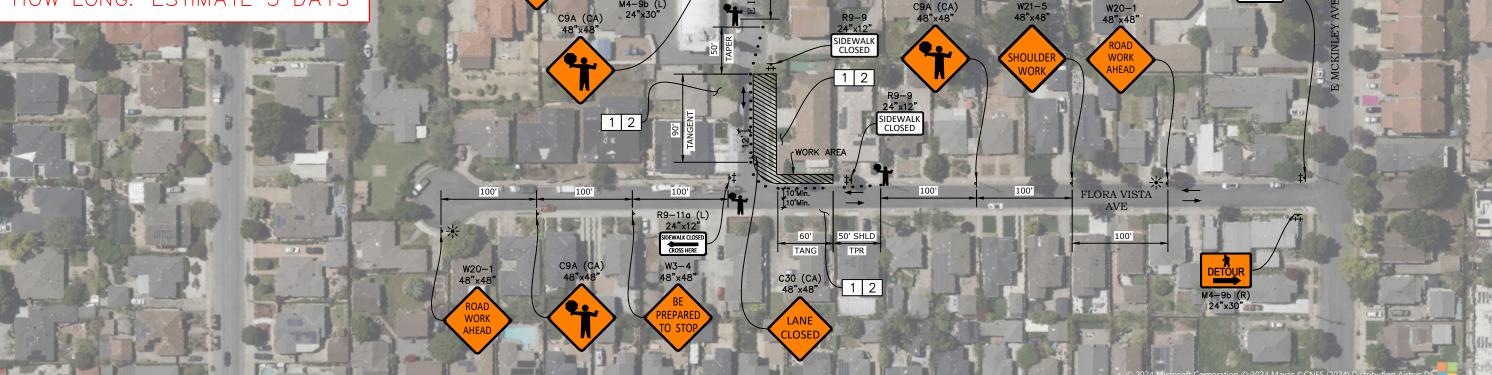


- 2. FLAGGERS TO ASSIST WITH PEDESTRIAN TRAFFIC.
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- MAINTAIN 5 FEET MINIMUM CLEARANCE WHERE SIDEWALK REMAINS OPEN.
- PLEASE CONTACT VTA WITH TIME AND DATE 2 WEEKS PRIOR TO THE STATE OF WORK IF BUS STOP OPERATION WILL BE AFFECTED DURING CONSTRUCTION, OTHERWISE MAINTAIN EXISTING BUS STOP OPEN AND CLEAR ALL THE TIMES.

ESTIMATED DATE: 6/29/2024

WORK HOURS: MON-FRI 7:00AM-6:00PM SATURDAY 8:00AM-5:00PM

HOW LONG: ESTIMATE 3 DAYS



#### **SYMBOLS:**

- → = TRAFFIC LANE CONFIGURATION
- ▼ = TEMPORARY TRAFFIC CONTROL SIGN
- = CHANNELIZING DEVICE (SPACING PER TABLE 1 ON CALTRANS STD T9)
- = FLASHING WARNING LIGHT (SEE GENERAL NOTE 11 ON COVER SHEET)
- | = ADA COMPLIANT PEDESTRIAN BARRICADE

#### PROJECT NOTES:

100'

- 1 NO PARKING. SEE GENERAL NOTE 4 ON COVER SHEET.
- CONTRACTOR SHALL PROVIDE ACCESS TO LOCAL RESIDENTS/BUSINESSES AT ALL TIMES DURING CONSTRUCTION.

365 E IOWA AVE TRAFFIC CONTROL PLANS

SUNNYVALE, CALIFORNIA



SCALE:					
	1:50				
DESIGNED BY:					
	DPATEL				
DATE:	4/30/24				

CAROLL ST

#### AFTER HOURS EMERGENCY 510-299-5666

TCP QUESTIONS? CALL: 209-400-7075

SHEET No. TC-01