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VISUAL CONTACT WITH THIS DOCUMENT SHALL CONSTITUTE CONCLUSIVE EVIDENCE OF ACCEPTANCE OF THESE RESTRICTIONS CONTRACTORS SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS ON THE JOB. UPON DISCOVERY OF ANY VARIATION DISCREPANCY OR OMISSION. NOTIFY RICHARDS E JOHNSON. A.I.A AND PRIOR TO PROCEEDING WITH RELATED WORK. OBTAIN WRITTEN RESOLUTION FROM THE ARCHITECT

F.A.R. Calculator

Instructions: Enter the information in the white boxes below. The spreadsheet will calculate the proposed FAR (floor area ratio), the 100% max FAR (per the Zoning Ordinance for "Required FAR"), and the 85% max FAR (per the Zoning Ordinance for "Required FAR"). Additionally it will determine whether a FAR Modification is required. "Guideline FAR" calculations are as outlined in the "Applicability" section of the Single Family Residence Design Guidelines, page 23-C.

The **Net Lot Area** does not include any Public Road Easements or Public Road Right-of-Way areas. The proposed **TOTAL Net FAR Floor Area** shall include the net floor area of all stories of all building, but may or may not include basement/cellar floor area. For further clarification on these definitions please refer to SBMC §28.15.083 & 30.300. This form has not yet been updated for current Title 30 zone designations, see SBMC §30.05.010 for comparison.

ENTER Project Address:	**3627 CAMPANIL DRIVE**
Is there a basement or cellar existing or proposed?	**No**
ENTER Proposed TOTAL Net FAR Floor Area (in sq. ft.):	**4,022**
ENTER Zone ONLY from drop-down list:	**A-1 or RS-1A**
ENTER Net Lot Area (in sq. ft.):	**57,499**
Is the height of existing or proposed buildings 17 feet or greater?	**No**
Are existing or proposed buildings two stories or greater?	**No**
The FAR Requirements are:	**GUIDELINE****
ENTER Average Slope of Lot:	**19.00%**
Does the height of existing or proposed buildings exceed 25 feet?	**No**
Is the site in the Hillside Design District?	**Yes**
Does the project include 500 or more cu. yds. of grading outside the main building footprint?	**No**
An FAR MOD is not required per SBMC §28.15 or §30.20.030	
FLOOR AREA RATIO (FAR):	**0.070**
Lot Size Range:	**>= 20,000 sq. ft.**
MAX FAR Calculation (in sq. ft.):	**4,430 + (0.013 x lot size in sq. ft.)**
100% MAX FAR:	**0.090**
100% MAX FAR (in sq. ft.):	**5,177**
85% of MAX FAR (in sq. ft.):	**4,401**
80% of MAX FAR (in sq. ft.):	**4,142**
The 4022 square foot proposed total is 78% of the MAX FAR.*	

* **NOTE:** Percentage total is rounded up.

****NOTE:** If your project is located on a site with multiple or overlay zones, please contact Planning Staff to confirm whether the FAR limitations are "Required" or "Guideline".

Acreage Conversion Calculator

ENTER Acreage to Convert to square footage:	**1.32**
Net Lot Area (in sq. ft.):	**57499.2**

CONSULTANTS :

ARCHITECT: MISSION GROUP ARCHITECTS
RICHARD E. JOHNSON/ ARCHITECT, AIA
1230-I COAST VILLAGE CIRCLE
SANTA BARBARA, CA. 93108
(805) 969-5910
rejmgasb@gmail.com

STRUCTURAL ENGINEER: KEVIN L. VANDERVORT STRUCTURAL ENGINEERING
250 STORKE ROAD SUITE 12
GOLETA, CA. 93117
(805) 562-8462
kevin@klvse.com

CIVIL ENGINEER:
STORM WATER MANAGEMENT: MIKE GONES C.E. RCE #38168
1219 1/2 LAGUNA STREET
SANTA BARBARA, CA. 93101
(805) 966-2259
mikegonesce@outlook.com

ELECTRICAL ENGINEERING: JMPE ELECTRICAL ENGINEERING
JOHN MALONEY CA. REG. E13083
627 OLIVE STREET
SANTA BARBARA, CA. 93105
(805) 569-9216
MALONEY@JMPE.NET

MECHANICAL ENGINEERING:
ENERGY/TITLE-24: MECHANICAL ENGINEERING CONSULTANTS, INC.
PAUL TZIOUVARAS
315 E. CANON PERDIDO STREET SUITE "B"
SANTA BARBARA, CA. 93101
(805) 957-4632
PAUL@MECENG.COM

SOILS INVESTIGATIONS: PACIFIC MATERIALS LABORATORY
RON PIKE
35-A SOUTH LA PATERA LANE
GOLETA, CA. 93116
(805) 964-6901
PML@PML.SBCOXMAIL.COM
SEE SHEET A-0.4 FOR SOILS RECOMENDATIONS
LAB #: 115040-2
FILE #: 16-11153-2

SHEET INDEX		DATE	REVISION
A-0	PROJECT INFORMATION	REV. 9-14-24	1 EXT. COLOR
A-0.1	EXISTING SITE PLAN		
A-0.2	CALIFORNIA GREEN BUILDING STANDARDS SHEET 1		
A-0.3	CALIFORNIA GREEN BUILDING STANDARDS SHEET 2		
A-0.4	PHOTOS & COLOR BOARD	REV. 9-14-24	1 EXT. COLOR
A-0.4a	SOILS RECOMMENDATIONS		
A-0.5	SITE PHOTOS		
A-0.6	SITE PHOTOS		
C1.0	CIVIL GENERAL NOTES		
C1.1	OVERALL SITE PLAN		
C2.0	PARTIAL SITE PLAN		
C2.1	STORM WATER CONTROL PLAN		
C3.0	EROSION CONTROL PLAN / SITE SECTIONS		
C4.0	DETAILS		
C5.0	DETAILS		
A1.0	PROPOSED OVERALL SITE PLAN		
A1.1	PROPOSED PARTIAL SITE PLAN		
A2.0	PROPOSED FLOOR PLAN & SCHEDULES	REV. 7-8-24	1 WTR.HTR.
A3.0	PROPOSED ROOF PLAN & REFLECTED CEILING PLAN		
A4.0	PROPOSED EXTERIOR ELEVATIONS	REV. 9-14-24	1 EXT. COLOR
A5.0	PROPOSED SECTIONS		
A6.0	ARCHITECTURAL DETAILS		
A6.1	ARCHITECTURAL DETAILS		
A6.2	ARCHITECTURAL DETAILS		
A6.3	ARCHITECTURAL DETAILS		
A6.4	ARCHITECTURAL DETAILS		
A6.5	ARCHITECTURAL DETAILS		
E-1	ELECTRICAL GENERAL NOTES		
E-1.1	LIGHTING COMPLIANCE FORMS		
E-2	POWER PLAN		
E-3	LIGHTING PLAN & ELECTRICAL ROOF PLAN		
M1.1	MECHANICAL GENERAL NOTES	REV. 4-19-24	1 WTR.HTR.
M1.2	MECHANICAL SCHEDULES	REV. 4-19-24	1 WTR.HTR.
M1.3	T-24 COMPLIANCE DOCUMENTS	REV. 4-19-24	1 WTR.HTR.
M2.1	MECHANICAL PLAN & DETAILS	REV. 4-19-24	1 WTR.HTR.
P1.1	PLUMBING SCHEDULES & SPECIFICATIONS	REV. 4-19-24	1 WTR.HTR.
P2.1	PLUMBING PLAN & DETAILS	REV. 4-19-24	1 WTR.HTR.
S1.1	GENERAL STRUCTURAL SPECIFICATIONS / NOTES		
S1.2	STANDARD STRUCTURAL DETAILS		
S1.3	SPECIFICATIONS		
S2	FOUNDATION PLAN		
S3	ROOF FRAMING PLAN		
S4	STRUCTURAL DETAILS		

PROJECT INFORMATION:

OWNERS: DR. PAULA KISLAK
545 HODGES LANE
SANTA BARBARA, CALIFORNIA 93108
PK99@COX.NET

PROJECT ADDRESS: 3627 CAMPANIL DRIVE
SANTA BARBARA, CALIFORNIA 93109

PROPERTY USE: EXISTING: 1 SINGLE FAMILY RESIDENCE
PROPOSED: SINGLE FAMILY w/ ADU

APN: 047-101-003

LOT SIZE: 61,561 SF
1.32 ACRES

ZONING: RS-1A (SBMC TITLE 30)

GENERAL PLAN: LOW DENSITY RESIDENTIAL (MAX. 1 DU/AC.)

SPECIAL DESIGN DISTRICT: HILLSIDE

SETBACKS: FRONT: 35'-0" INTERIOR: 15'-0" (HOA 25'-0") ADU: 4'-0"

AVG. PARCEL SLOPE: 21% APPROX. PER CITY RECORDS

FEMA FLOOD ZONE: ZONE X

HEIGHT LIMIT: 30'-0" FROM LOWEST NATURAL OR FINISHED GRADE
16'-0" FOR ACCESSORY DWELLING UNIT

HIGH FIRE: YES - COASTAL INLAND

FIRE SPRINKLERS: YES

OCCUPANCY: GROUP R-3 (RESIDENCE)

TYPE OF CONSTRUCTION: V-B

PARKING REQUIREMENTS:
EXISTING PARKING - PRIMARY RES.: COVERED 3 / 1 UNCOVERED
PROPOSED PARKING - PRIMARY RES.: COVERED 3 / 0 UNCOVERED
REQUIRED PARKING - PRIMARY RES.: 2 COVERED STALLS
EXISTING PARKING - ADU: N/A
PROPOSED PARKING - ADU: PROPOSED 0 COVERED / 1 UNCOVERED
REQUIRED PARKING - ADU: 1 PURSUANT TO SBMC 30.185.040 SINCE PROJECT DOES NOT COMPLY WITH EXEMPTIONS

STORM WATER SUMMARY:

WATER QUALITY PER TIER 2 (STORAGE NOT REQUIRED)
REQUIRED BY CITY OF SANTA BARBARA WILL BOTH BE ACCOMPLISHED BY INSTALLATION OF CISTERN STORAGE SYSTEM. THIS SYSTEM ASSURES NO INCREASE IN RUNOFF FROM THE PROPOSED DEVELOPMENT FOR STORM RUNOFF UP TO THE 25 YEAR STORM. OVERFLOW FOR STORMS GREATER THAN THIS WILL HONOR THE EXISTING HISTORICAL RUNOFF PATTERNS OF USING THE EXISTING NATURAL WATERSHED.

PROPOSED NEW IMPERVIOUS AREA: 1539 SF
PROPOSED REPLACED/REDEVELOPED IMPERVIOUS AREA: 0 SF
PROPOSED REMOVED IMPERVIOUS AREA: 264 SF
EXISTING IMPERVIOUS AREA TO REMAIN: 7031 SF
SELF TREATING WALKS: 367 SF

TOTAL NEW IMPERVIOUS AREA: 1906 SF
SEE CIVIL PLANS ON SHEET C2.1 FOR CALCULATIONS & DETAILS

SCOPE OF WORK:

THIS PROPOSAL IS FOR CONSTRUCTION OF A 1200 SF ACCESSORY DWELLING UNIT IN THE CITY OF SANTA BARBARA PURSUANT TO SBMC 30.185.040. ADDITIONALLY, A 184 SF ROOF DECK AND ACCESS STAIRS ARE PROPOSED, ALONG WITH 182 LINEAR FT. OF SITE/RETAINING WALLS ARE PROPOSED. THERE IS AN EXISTING 1 STORY PRIMARY RESIDENCE OF 2,195 SF WITH ATTACHED GARAGE OF 627 SF ON THE PROPERTY. THE PROJECT WILL REQUIRE 153 CY OF GRADING. 1 PARKING SPACE IS PROPOSED ON EXISTING AC DRIVEWAY. THE EXISTING SEWER LATERAL IS PROPOSED TO BE REPLACED IN IT'S ENTIRETY.

REV. 1 to BLD2022-03023 - SCOPE OF WORK:

THIS PROPOSAL IS FOR BUILDING COLORS CHANGE FROM PERMITTED COLORS THAT CURRENTLY MATCH EXISTING PRIMARY RESIDENCE TO NEW COLORS THAT WILL MATCH PENDING NEW PRIMARY RESIDENCE FINISH COLORS WHICH IS CURRENTLY UNDER REVIEW (PLN2023-00507) PER SBMC EXCEPTION 30.185.040.H.11.A. ADDITIONALLY, CHANGE PROPOSED WATER HEATER TO A TANKLESS MODEL

BUILDING TABULATIONS:

3726 CAMPANIL DRIVE

	NET	GROSS
EXISTING PRIMARY RES. FLOOR AREA:	2,195 SF NET	2,300 SF GROSS
EXISTING PRIMARY RES. GARAGE AREA:	627 SF NET	677 SF GROSS
EXISTING TOTAL FLOOR AREA:	2,822 SF NET	2,977 SF GROSS

ACCESSORY BUILDING CUMULATIVE ALLOWANCE:

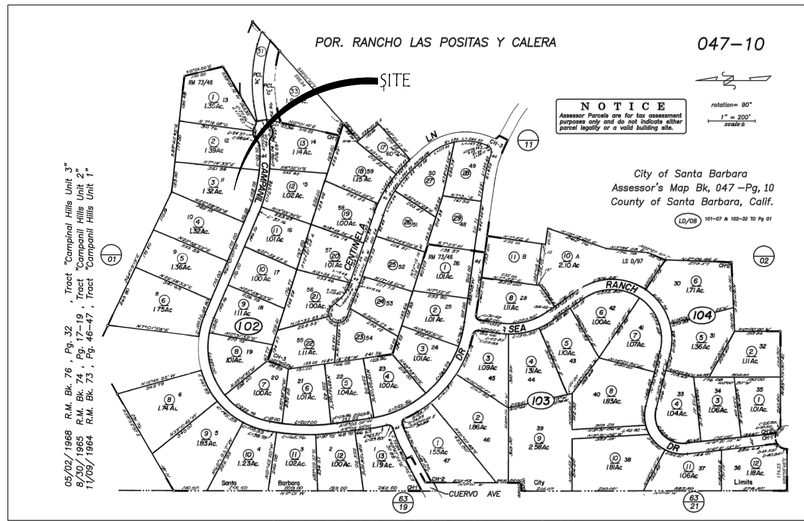
PROPOSED ADU FLOOR AREA:	1,200 SF NET	1,299 SF GROSS
EXISTING GARAGE:	627 SF NET	677 SF GROSS
ACCESSORY STRUCTURES:	NONE	NONE
TOTALS: (1,950 SF ALLOWED)	1,827 SF NET	1,976 SF GROSS
	PROJECT COMPLIES WITH SBMC 30.140.020	

GRADING QUANTITIES:

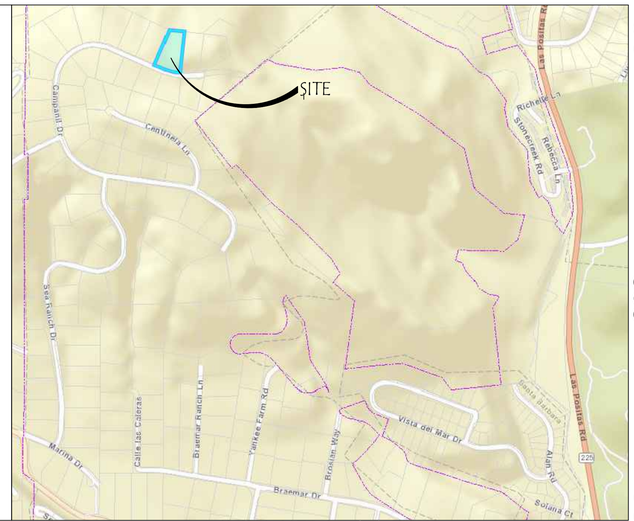
	TOTALS
CUT:	100 CY
FILL:	53 CY
EXPORT:	0 CY
IMPORT:	0 CY
TOTALS:	153 CY (SEE CIVIL SHEETS)

PUBLIC WORKS NOTE:

FOR ANY WORK IN THE PUBLIC RIGHT OF WAY OR CITY SEWER EASEMENT A SEPARATE PERMIT THROUGH THE PUBLIC WORKS DEPT. WILL BE REQUIRED.



ASSESSOR PARCEL MAP



VICINITY MAP

CODE COMPLIANCE:

1. ALL WORK SHALL COMPLY WITH ALL OF THE FOLLOWING:
   - 2019 CALIFORNIA RESIDENTIAL CODE
   - 2019 CALIFORNIA MECHANICAL CODE
   - 2019 CALIFORNIA ELECTRICAL CODE
   - 2019 CALIFORNIA FIRE CODE
   - 2019 CALIFORNIA ENERGY CODE (T-24)
   - 2019 CALIFORNIA PLUMBING CODE
   - 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE
   - 2019 CALIFORNIA BUILDING CODE
   - CITY OF SANTA BARBARA MUNICIPAL CODE AND ADOPTED ORDINANCES #5919
   - CRC SECTION R327 MATERIALS & CONSTRUCTION METHOD FOR EXT. WILDFIRE EXPOSURE.

GENERAL NOTES:

PRIOR TO START OF CONSTRUCTION, THE CONTRACTOR SHALL SCHEDULE A PRECONSTRUCTION CONFERENCE WITH ALL PARTIES INVOLVED AT THE PROJECT SITE TO REVIEW THE SPECIAL INSPECTION REQUIREMENTS, PROCEDURES, AND INDIVIDUAL SPECIAL INSPECTORS THAT WILL BE ASSIGNED TO THE PROJECT, AS WELL AS REQUIREMENTS FOR STRUCTURAL OBSERVATION. CONTRACTOR SHALL CONTACT THE CITY OF SANTA BARBARA BUILDING DIVISION TO CONFIRM AN ACCEPTABLE MEETING DATE AND TIME.

NO NATURAL GAS INFRASTRUCTURE TO SERVE ASSESSORY DWELLING UNIT PER SECTION 22.110 OF THE CITY OF SANTA BARBARA MUNICIPAL CODE.

THE NFRC THERMAL PERFORMANCE LABELS SHALL REMAIN ON THE WINDOWS AND/OR DOORS UNTIL FINAL INSPECTION.

SOLAR PANELS AT ROOF DECK WILL BE UNDER A SEPARATE PERMIT.

PROPOSED ACCESSORY DWELLING UNIT FOR: KISLAK RESIDENCE @ 3627 CAMPANIL DRIVE
SANTA BARBARA CALIFORNIA 93109

LICENSED ARCHITECT
RICHARD E. JOHNSON
No. 14425
STATE OF CALIFORNIA

REVISIONS
REV.1 9/14/2024
EXT. COLORS
WTR. HTR.

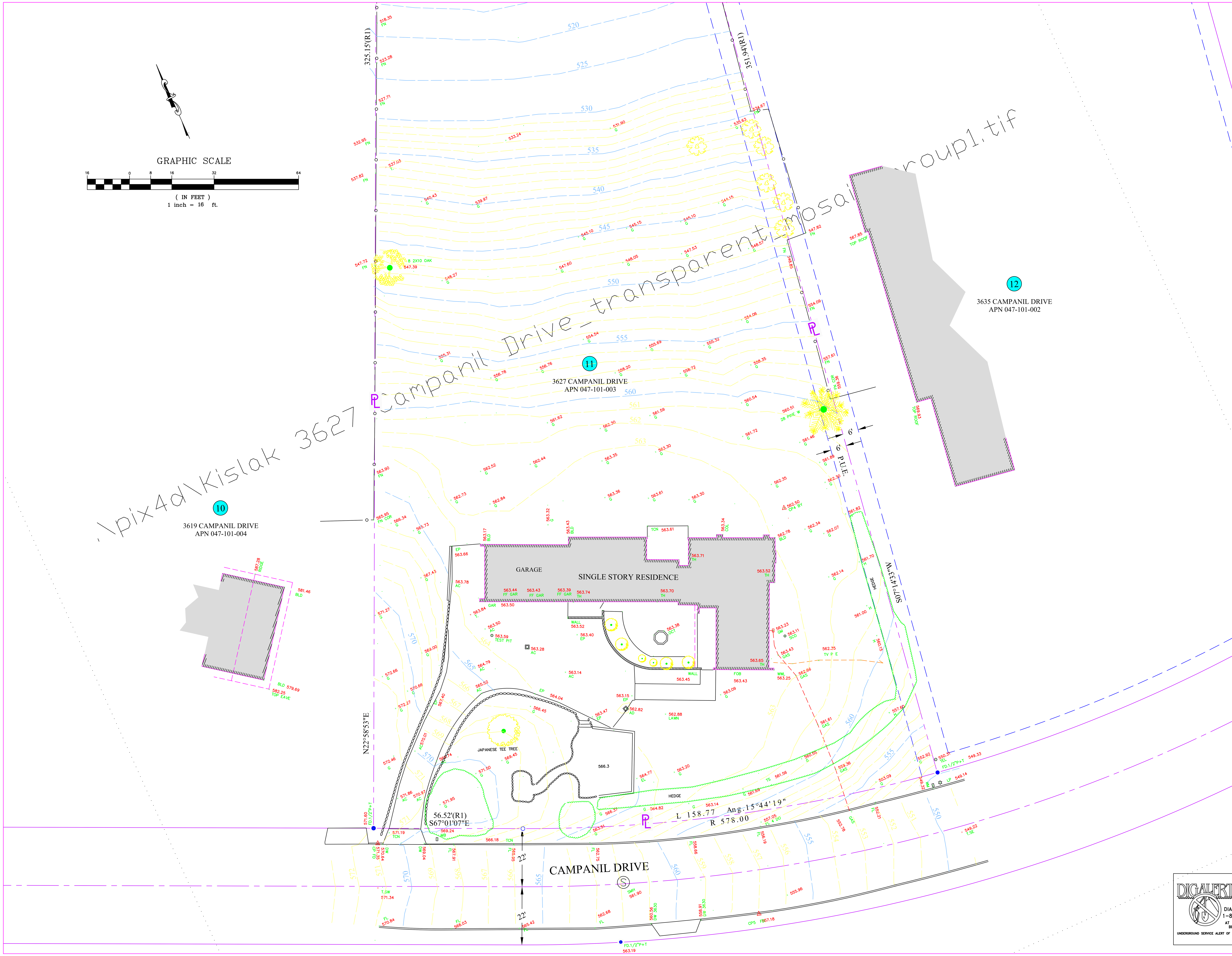
MISSION GROUP ARCHITECTS
R E JOHNSON AIA
© COPYRIGHT MISSION GROUP ARCHITECTS
1230 COAST VILLAGE CIRCLE, STE H SANTA BARBARA CALIFORNIA 93108 805-969-5910

PROJECT INFORMATION

PROPOSED ADU FOR:
KISLAK RESIDENCE
3627 CAMPANIL DRIVE
SANTA BARBARA, CALIFORNIA 93109

DATE 09/14/2024

SHEET A-0



LEGEND

AC	ASPHALT CONCRETE
AD	AREA DRAIN
BLD	BUILDING
CIT	CITRUS TREE
COL	COLUMN
CP	CONTROL POINT (survey)
DL	DRIPLINE (oak tree)
DO	DRAIN OUTLET (pipe)
DW	DRIVEWAY
E	EASTERLY
EM	ELECTRIC METER
EP	EDGE OF PAVEMENT
FD	FOUND (survey monument)
FF	FINISH FLOOR
FL	FLOWLINE
FN	FENCE
FOB	FACE OF BUILDING
G	GRADE
GAR	GARAGE
GM	GAS METER
H	HEDGE
LP	LAMP POLE
N	NORTHERLY
PEP	PEPPER TREE
PL	PARCEL LINE
P.U.E.	PUBLIC UTILITY EASEMENT
S	SOUTHERLY
SM	SMALL
SMH	SEWER MANHOLE
T	TOP of *
TC	TOP OF CURB
TCN	TOP OF CONCRETE
TEL	TELEPHONE EQUIP.
TH	THRESHOLD
TOE	TOE OF SLOPE
TS	TOP OF SLOPE or
TS	TOP OF STEP(s)
TV P E	T.V, TELEPHONE, & ELECTRIC (underground utility lines)
TW	TOP OF WALL
W	WESTERLY
WL	WALL
WM	WATER METER
WV	WATER VALVE
WWL	WING WALL

DIGALERT
DIAL TOLL FREE
1-800-227-2600
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

ATTENTION:
ALL UNDERGROUND UTILITIES AND SUB-STRUCTURES SHOWN HEREON WERE OBTAINED FROM THE BEST AVAILABLE SOURCES AND ARE PRESUMED TO BE ACCURATE AND COMPLETE, BUT SINCE THE INFORMATION WAS OBTAINED FROM OTHERS, THE OFFICE OF PROBER LAND SURVEYING CANNOT GUARANTEE SAID INFORMATION AS BEING ACCURATE AND COMPLETE. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO VERIFY, LOCATE AND PROTECT ALL UTILITIES AND SUBSTRUCTURES SHOWN OR NOT SHOWN.

G:\LandProject_2022\Kislak 3627 Campanil Drive\dwg\Kislak 3627 Campanil Drive v4.dwg 3/31/2022 9:33:47 PM PDT

\Logo\LogoSmall743104.jpg
645 Flora Vista Drive, SB, CA 93109
(805) 452-9690 Fax 964-2415 plssb@cox.net
www.ProberLandSurveying.com

PROFESSIONAL LAND SURVEYOR
JEFFERY K. PROBER
No. 8101
Exp. 12-31-22
STATE OF CALIFORNIA

3627 Campanil Drive

Santa Barbara, CA

Topographic Survey

Surveyor's Notes:

1. BOUNDARY DATA: CAMPANIL HILLS TR. BK.73, PG.46 OF MAPS (R1)
2. HORIZONTAL DATUM: NAD83; COORD.SYSTEM: SPC CA 05 sFT, EPOCH 2022.75
3. VERTICAL DATUM: NAVD88; INITIAL STA. SMARTNET 3229
4. PARCEL SIZE: 1.32 AC.GROSS& NET (R1)
5. A CURRENT TITLE REPORT IS REQUIRE TO VERIFY AND PLOT ALL EASEMENTS AFFECTING SUBJECT LOT.
6. BASIS OF BOUNDARY (RECORD BOUNDARY ROTATED TO GRID): FRONT LOT CORNERS (Pt.50 > Pt.56 SHOWN HEREON) S71°19'57"E 214.51' MEASURED; S72°49'10"E 214.40' CALC. FROM (R1); ROTATION = -1°29'13"
7. ORTHOMOSAIC IMAGE: PHANTOM 4 PRO DRONE + PIX4D MAPPER

Drawn By	JKP
Field Work Performed	3-30-2022
Scale	1inch = 16 ft.

A0.1

2019 CALIFORNIA GREEN BUILDING STANDARDS CODE

RESIDENTIAL MANDATORY MEASURES, SHEET 1 (July 2021, Includes July 2021 Supplement)

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

CHAPTER 3
GREEN BUILDING

SECTION 301 GENERAL

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

301.1.1 Additions and alterations. [HCD] The mandatory provisions of Chapter 4 shall be applied to 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 specific area of the addition or alteration.

Note: On and after January 1, 2014, residential buildings undergoing permitted alterations, additions, or improvements shall replace noncompliant plumbing fixtures with water-conserving plumbing fixtures. 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 other important enactment dates.

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 buildings, or both. Individual sections will be designated by banners to indicate where the section applies specifically to low-rise only (LR) or high-rise only (HR). When the section applies to both low-rise and high-rise buildings, no banner will be used.

SECTION 302 MIXED OCCUPANCY BUILDINGS

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

Exceptions:
1. [HCD] Accessory structures and accessory occupancies serving residential buildings shall comply with Chapter 4 and Appendix A4, as applicable.
2. [HCD] For purposes of *CAL*Green, live/work units, complying with Section 419 of the *California Building Code*, shall not be considered mixed occupancies. Live/Work units shall comply with Chapter 4 and Appendix A4, as applicable.

DIVISION 4.1 PLANNING AND DESIGN

ABBREVIATION DEFINITIONS:

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

CHAPTER 4
RESIDENTIAL MANDATORY MEASURES

SECTION 4.102 DEFINITIONS

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

FRENCH DRAIN. A trench, hole or other depressed area loosely filled with rock, gravel, fragments of brick or similar pervious material used to collect or channel drainage or runoff water.

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 used for perimeter and inlet controls.

4.106 SITE DEVELOPMENT

4.106.1 GENERAL. Preservation and use of available natural resources shall be accomplished through evaluation and careful planning to minimize negative effects on the site and adjacent areas. Preservation of slopes, management of storm water drainage and erosion controls shall comply with this section.

4.106.2 STORM WATER DRAINAGE AND RETENTION DURING CONSTRUCTION. Projects which disturb less than one acre of soil and are not part of a larger common plan of development which in total disturbs one acre or more, shall manage storm water drainage during construction. In order to manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion and retain soil runoff on the site.

1. Retention basins of sufficient size shall be utilized to retain storm water on the site.
2. Where storm water is conveyed to a public drainage system, collection point, gutter or similar disposal method, water shall be filtered by use of a barrier system, wattle or other method approved by the enforcing agency.
3. Compliance with a lawfully enacted storm water management ordinance.

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

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

1. Swales
2. Water collection and disposal systems
3. French drains
4. Water retention gardens
5. Other water measures which keep surface water away from buildings and aid in groundwater recharge.

Exception: Additions and alterations not altering the drainage path.

4.106.4 Electric vehicle (EV) charging for new construction. New construction shall comply with Sections 4.106.4.1, 4.106.4.2, or 4.106.4.3 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.

Exceptions:
1. On a case-by-case basis, where the local enforcing agency has determined EV charging and infrastructure are not feasible based upon one or more of the following conditions:
   1.1 Where there is no commercial power supply.
   1.2 Where there is evidence substantiating that meeting the requirements will alter the local utility infrastructure design requirements on the utility side of the meter so as to increase the utility side cost to the homeowner or the developer by more than $400.00 per dwelling unit.
2. Accessory Dwelling Units (ADU) and Junior Accessory Dwelling Units (JADU) without additional parking facilities.

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

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 accordance with the *California Electrical Code.*

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

4.106.4.2 New multifamily dwellings. If residential parking is available, 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 EVSE. Calculations for the required number of EV spaces shall be rounded up to the nearest whole number.

Notes:
1. Construction documents are intended to demonstrate the project's capability and capacity for facilitating future EV charging.
2. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.
3. A parking space served by electric vehicle supply equipment or designated as a future EV charging space shall count as at least one standard automobile parking space for the purpose of complying with any applicable minimum parking space requirements established by a local jurisdiction. See *Vehicle Code* Section 22511.2 for further details.

4.106.4.2.1 Electric vehicle charging space (EV space) locations. Construction documents shall indicate the location of proposed EV spaces. Where common use parking is provided at least one EV space shall be located in the common use parking area and shall be available for use by all residents.

4.106.4.2.1.1 Electric Vehicle Charging Stations (EVCS) When EV chargers are installed, EV spaces required by Section 4.106.2.2, Item 3, shall comply with at least one of the following options:

1. The EV 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 EV space shall be located on an accessible route, as defined in the *California Building Code,* Chapter 2, to the building.

Exception: Electric vehicle charging stations designed and constructed in compliance with the *California Building Code,* Chapter 11B, are not required to comply with Section 4.106.4.2.1.1 and Section 4.106.4.2.2, Item 3.

Note: Electric Vehicle charging stations serving public housing are required to comply with the *California Building Code*, Chapter 11B.

4.106.4.2.2 Electric vehicle charging space (EV space) dimensions. The EV space 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).
3. One in every 25 EV spaces, but not less than one EV space, shall have an 8-foot (2438 mm) wide minimum aisle. A 5-foot (1524 mm) wide minimum aisle shall be permitted provided the minimum width of the EV space is 12 feet (3658 mm).
   a. Surface slope for this EV space and the aisle shall not exceed 1 unit vertical in 48 units horizontal (2.083 percent slope) in any direction.

4.106.4.2.3 Single EV space required. Install a listed raceway capable of accommodating a 208/240-volt dedicated 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 enclosure in close proximity to the proposed location of the EV space. Construction documents shall identify the raceway termination point. The service panel and/or subpanel shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

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 accordance with the *California Electrical Code.*

4.106.4.2.4 Multiple EV spaces required. Construction documents shall indicate the raceway termination point and proposed location of future EV spaces and EV chargers. Construction documents shall also provide information on amperage of future EVSE, raceway method(s), wiring schematics and electrical load calculations to verify that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at the full rated amperage of the EVSE. Plan design shall be based upon a 40-ampere minimum branch circuit. Required raceways and related components that are planned to be installed underground, enclosed, inaccessible or in concealed areas and spaces shall be installed at the time of original construction.

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 accordance with the *California Electrical Code.*

4.106.4.2.5 Identification. The service panel or subpanel circuit directory shall identify the overcurrent protective device space(s) reserved for future EV charging purposes as "EV CAPABLE" in accordance with the *California Electrical Code.*

4.106.4.3 New hotels and motels. All newly constructed hotels and motels shall provide EV spaces capable of supporting future installation of EVSE. The construction documents shall identify the location of the EV spaces.

Notes:

1. Construction documents are intended to demonstrate the project's capability and capacity or facilitating future EV charging.
2. There is no requirement for EV spaces to be constructed or available until EV chargers are installed for use.
3. A parking space served by electrical vehicle supple equipment or designed as a future EV charging space shall count as at least one standard automobile parking space for the purpose of complying with any applicable minimum parking space requirements established by a local jurisdiction. See *Vehicle Code* Section 22511.2 for further details.

4.106.4.3.1 Number of required EV spaces. The number of required EV spaces shall be based on the total number of parking spaces provided for all types of parking facilities in accordance with Table 4.106.4.3.1. Calculations for the required number of EV spaces shall be rounded up to the nearest whole number.

TABLE 4.106.4.3.1

TOTAL NUMBER OF PARKING SPACES	NUMBER OF REQUIRED EV SPACES
0-9	0
10-25	1
26-50	2
51-75	4
76-100	5
101-150	7
151-200	10
201 and over	6 percent of total

4.106.4.3.2 Electric vehicle charging space (EV space) dimensions. The EV spaces shall be designed to comply with the following:

1. The minimum length of each EV space shall be 18 feet (5486mm).
2. The minimum width of each EV space shall be 9 feet (2743mm)

4.106.4.3.3 Single EV space required. When a single EV space is required, the EV space shall be designed in accordance with Section 4.106.4.2.3.

4.106.4.3.4 Multiple EV spaces required. When multiple EV spaces are required, the EV spaces shall be designed in accordance with Section 4.106.4.2.4.

4.106.4.3.5 Identification. The service panels or sub-panels shall be identified in accordance with Section 4.106.4.2.5.

4.106.4.3.6 Accessible EV spaces. In addition to the requirements in Section 4.106.4.3, EV spaces for hotels/motels and all EVSE, when installed, shall comply with the accessibility provisions for the EV charging stations in the *California Building Code*, Chapter 11B.

DIVISION 4.2 ENERGY EFFICIENCY

4.201 GENERAL
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.

DIVISION 4.3 WATER EFFICIENCY AND CONSERVATION

4.303 INDOOR WATER USE
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, and 4.303.4.4.

Note: All noncompliant plumbing fixtures in any residential real property shall be replaced with water-conserving plumbing fixtures. 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 other important enactment dates.

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

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

4.303.1.2 Urinals. The effective flush volume of wall mounted urinals shall not exceed 0.125 gallons per flush. The effective flush volume of all other urinals shall not exceed 0.5 gallons per flush.

4.303.1.3 Showerheads.

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 WaterSense Specification for Showerheads.

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

Note: A hand-held shower shall be considered a showerhead.

4.303.1.4 Faucets.

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 not be less than 0.8 gallons per minute at 20 psi.

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.

4.303.1.4.3 Metering Faucets. Metering faucets when installed in residential buildings shall not deliver more than 0.2 gallons per cycle.

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 to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per minute at 60 psi.

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

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

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

TABLE H-2

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

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

Title 20 Section 1605.3 (h)(4)(A): Commercial prerinse spray values manufactured on or after January 1, 2006, shall have a minimum spray force of not less than 4.0 ounces-force (ozf)[113 grams-force(gf)]

4.303.2 Submeters for multifamily buildings and dwelling units in mixed-used residential/commercial buildings.
Submeters shall be installed to measure water usage of individual rental dwelling units in accordance with the *California Plumbing Code*.

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*.

NOTE:
THIS TABLE COMPILES THE DATA IN SECTION 4.303.1, AND
IS INCLUDED AS A CONVENIENCE FOR THE USER.

TABLE - MAXIMUM FIXTURE WATER USE

FIXTURE TYPE	FLOW RATE
SHOWER HEADS (RESIDENTIAL)	1.8 GMP @ 80 PSI
LAVATORY FAUCETS (RESIDENTIAL)	MAX. 1.2 GPM @ 60 PSI MIN. 0.8 GPM @ 20 PSI
LAVATORY FAUCETS IN COMMON & PUBLIC USE AREAS	0.5 GPM @ 60 PSI
KITCHEN FAUCETS	1.8 GPM @ 60 PSI
METERING FAUCETS	0.2 GAL/CYCLE
WATER CLOSET	1.28 GAL/FLUSH
URINALS	0.125 GAL/FLUSH

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

NOTES:

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

DIVISION 4.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

4.406 ENHANCED DURABILITY AND REDUCED MAINTENANCE
4.406.1 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 openings with cement mortar, concrete masonry or a similar method acceptable to the enforcing agency.

4.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING
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.

Exceptions:

1. Excavated soil and land-clearing debris.
2. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist or are not located reasonably close to the jobsite.
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.

4.408.2 CONSTRUCTION WASTE MANAGEMENT PLAN. Submit a construction waste management plan in conformance with Items 1 through 5. The construction waste management plan shall be updated as necessary and shall be available during construction for examination by the enforcing agency.

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.
2. Specify if construction and demolition waste materials will be sorted on-site (source separated) or bulk mixed (single stream).
3. Identify diversion facilities where the construction and demolition waste material collected will be taken.
4. Identify construction methods employed to reduce the amount of construction and demolition waste generated.
5. Specify that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both.

4.408.3 WASTE MANAGEMENT COMPANY. Utilize a waste management company, approved by the 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.

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

4.408.4 WASTE STREAM REDUCTION ALTERNATIVE [LR]. Projects that generate a total combined weight of construction and demolition waste disposed of in landfills, which do not exceed 3.4 lbs./sq.ft. of the building area shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1

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 per square foot of the building area, shall meet the minimum 65% construction waste reduction requirement in Section 4.408.1

4.408.5 DOCUMENTATION. Documentation shall be provided to the enforcing agency which demonstrates compliance with Section 4.408.2, items 1 through 5, Section 4.408.3 or Section 4.408.4..

Notes:

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 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).

4.410 BUILDING MAINTENANCE AND OPERATION
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:

1. Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure.
2. Operation and maintenance instructions for the following:
   a. Equipment and appliances, including water-saving devices and systems, HVAC systems, photovoltaic systems, electric vehicle chargers, water-heating systems and other major appliances and equipment.
   b. Roof and yard drainage, including gutters and downspouts.
   c. Space conditioning systems, including condensers and air filters.
   d. 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.
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.
6. Information about water-conserving landscape and irrigation design and controllers which conserve water.
7. Instructions for maintaining gutters and downspouts and the importance of diverting water at least 5 feet away from the foundation.
8. Information on required routine maintenance measures, including, but not limited to, caulking, painting, grading around the building, etc.
9. 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.
11. Information from CAL Fire on maintenance of defensible space around residential structures.

4.410.2 RECYCLING BY OCCUPANTS. Where 5 or more multifamily dwelling units are constructed on a building site, provide readily accessible area(s) that serves all buildings on the site and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waster, and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive.

Exception: Rural jurisdictions that meet and apply for the exemption in Public Resources Code Section 42649.82 (a)(2)(A) et seq. are note required to comply with the organic waste portion of this section.

DIVISION 4.5 ENVIRONMENTAL QUALITY

SECTION 4.501 GENERAL
4.501.1 Scope
The provisions of this chapter shall outline means of reducing the quality of air contaminants that are odorous, irritating and/or harmful to the comfort and well being of a building's installers, occupants and neighbors.

SECTION 4.502 DEFINITIONS
5.102.1 DEFINITIONS
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 cores, not including furniture, fixtures and equipment (FF&E) not considered base building elements.

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

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.

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2019 CALIFORNIA GREEN BUILDING STANDARDS CODE

RESIDENTIAL MANDATORY MEASURES, SHEET 1 (July 2021, Includes July 2021 Supplement)

AIA California

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

Y | 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 O^3/g ROC).
Note: MIR values for individual compounds and hydrocarbon solvents are specified in CCR, Title 17, Sections 94700 and 94701.

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 Table 4.504.3 shall apply.

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 8, Rule 49.

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:

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

TABLE 4.504.1 - ADHESIVE VOC LIMIT1,2

(Less Water and Less Exempt Compounds in Grams per Liter)

ARCHITECTURAL APPLICATIONS	VOC LIMIT
INDOOR CARPET ADHESIVES	50
CARPET PAD ADHESIVES	50
OUTDOOR CARPET ADHESIVES	150
WOOD FLOORING ADHESIVES	100
RUBBER FLOOR ADHESIVES	60
SUBFLOOR ADHESIVES	50
CERAMIC TILE ADHESIVES	65
VCT & ASPHALT TILE ADHESIVES	50
DRYWALL & PANEL ADHESIVES	50
COVE BASE ADHESIVES	50
MULTIPURPOSE CONSTRUCTION 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

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

2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.

TABLE 4.504.2 - SEALANT VOC LIMIT

(Less Water and Less Exempt Compounds in Grams 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

TABLE 4.504.3 - VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS2,3

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

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 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

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

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

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

TABLE 4.504.5 - FORMALDEHYDE LIMITS1

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

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

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

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.

hhttps://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 seq.), 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:

1. Product certifications and specifications.
2. Chain of custody certifications.
3. Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17, Section 93120, et seq.).
4. Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered Wood Association, the Australian AS/NZS 2269, 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 following:

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:

1. 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.

Insulation 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 recommendations prior to enclosure.

4.506 INDOOR AIR QUALITY AND EXHAUST

4.506.1 Bathroom exhaust fans. Each bathroom shall be mechanically ventilated and shall comply with the following:

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 humidity control.
   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 adjustment.
   b. A humidity control may be a separate component to the exhaust fan and is not required to be integral (i.e., built-in)

Notes:

1. For the purposes of this section, a bathroom is a room which contains a bathtub, shower or tub/shower combination.
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.
2. 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.

CHAPTER 7
INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS

702 QUALIFICATIONS

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

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

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

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

Notes:

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

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

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

703 VERIFICATIONS

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

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

LICENSED ARCHITECT
RICHARD ELLSWORTH JOHNSON
C14425
STATE OF CALIFORNIA

REVISIONS

MISSION GROUP ARCHITECTS
R E JOHNSON AIA

CGBSC SHEET 2

PROPOSED ADU FOR:
KISLAK RESIDENCE
3627 CAMPANIL DRIVE
SANTA BARBARA, CALIFORNIA 93109

DATE
6/30/2023

SHEET
A0.3

1230 COAST VILLAGE CIRCLE STE H SANTA BARBARA CALIFORNIA 93108 805-969-5910

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SOUTH SIDE EXISTING RESIDENCE TO BE DEMOLISHED

NORTH SIDE EXISTING RESIDENCE TO BE DEMOLISHED

MATERIALS LEGEND:

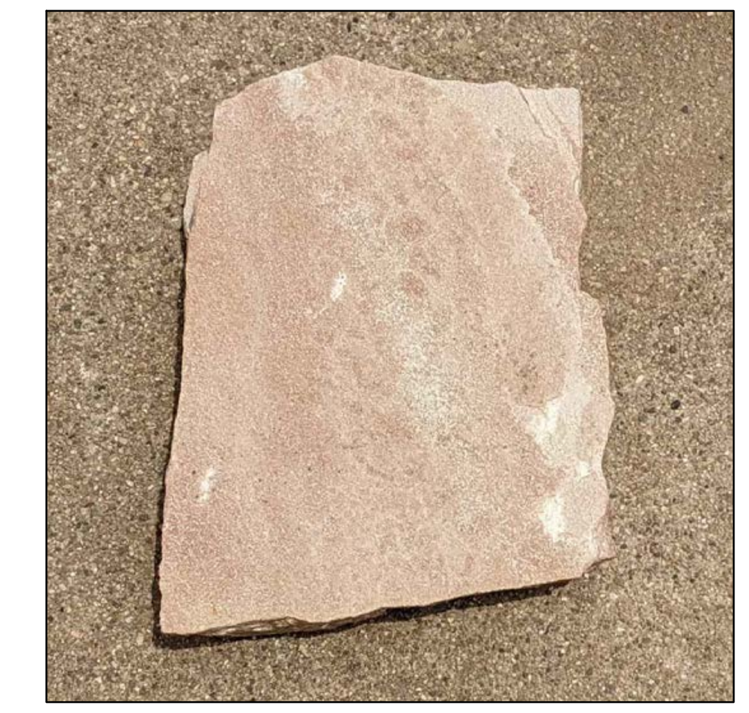
NOTE: VERIFY ALL COLORS AND MATERIALS WITH OWNER PRIOR TO ORDERING

1. ROOFING: TWO PIECE MISSION TILE BY REDLANDS CLAY TILE
   UL CLASS "A" FIRE RATING
   ICC: ESR-4395
   COLOR – 3 TILE CUSTOM BLEND
   40% LIGHT TILE, 30% & 30% DARK TILES
2. EXTERIOR PLASTER: 7/8" SMOOTH TROWEL EXTERIOR PLASTER
   OVER MTL. LATH. & TYVEK HOMEWRAP TYPICAL
   COLOR: CUSTOM COLOR AS SHOWN (SOFT PINK)
3. STONE VENEER: BEIGE TRAVERTINE VENEER OVER SCRATCH COAT/GAL. LATH
   OVER TYVEK WATERPROOF BARRIER OVER PLYWD.
   FLOORING TO BE CHEROKEE SANDSTONE
4. CARVED STONE TRIM: BEIGE TRAVERTINE VENEER (SEE ABOVE)
5. DOORS & WDWS.: STEEL WINDOWS & DOORS BY MIRAMAR MFG. INC
   ALL GLASS TO MEET CRITERIA SET FORTH IN ENERGY CALC.
   DUAL GLAZED w/ MAX. U-FACTOR OF .35
   & MAX. SHGC OF OF .35
   COLOR: BLACK
6. GUTTERS & FLASHING: 20 GA. MIN. COPPER GUTTERS AND FLASHING
   NEW GUTTERS TO HAVE DEBRIS GUARD
7. CUSTOM WROUGHT IRON: DESIGN TO BE DETERMINED
   DESIGN SHALL COMPLY WITH [CRC SECTION R312]
   SEE DETAIL 2/A6.2 FOR GENERAL NOTES
8. STACKED ALLANBLOCK: AB EUROPA COLLECTION

5 DOORS & WINDOWS

CONCEPTUAL RENDERING OF PENDING PROPOSED RESIDENCE (PLN2023-00507)

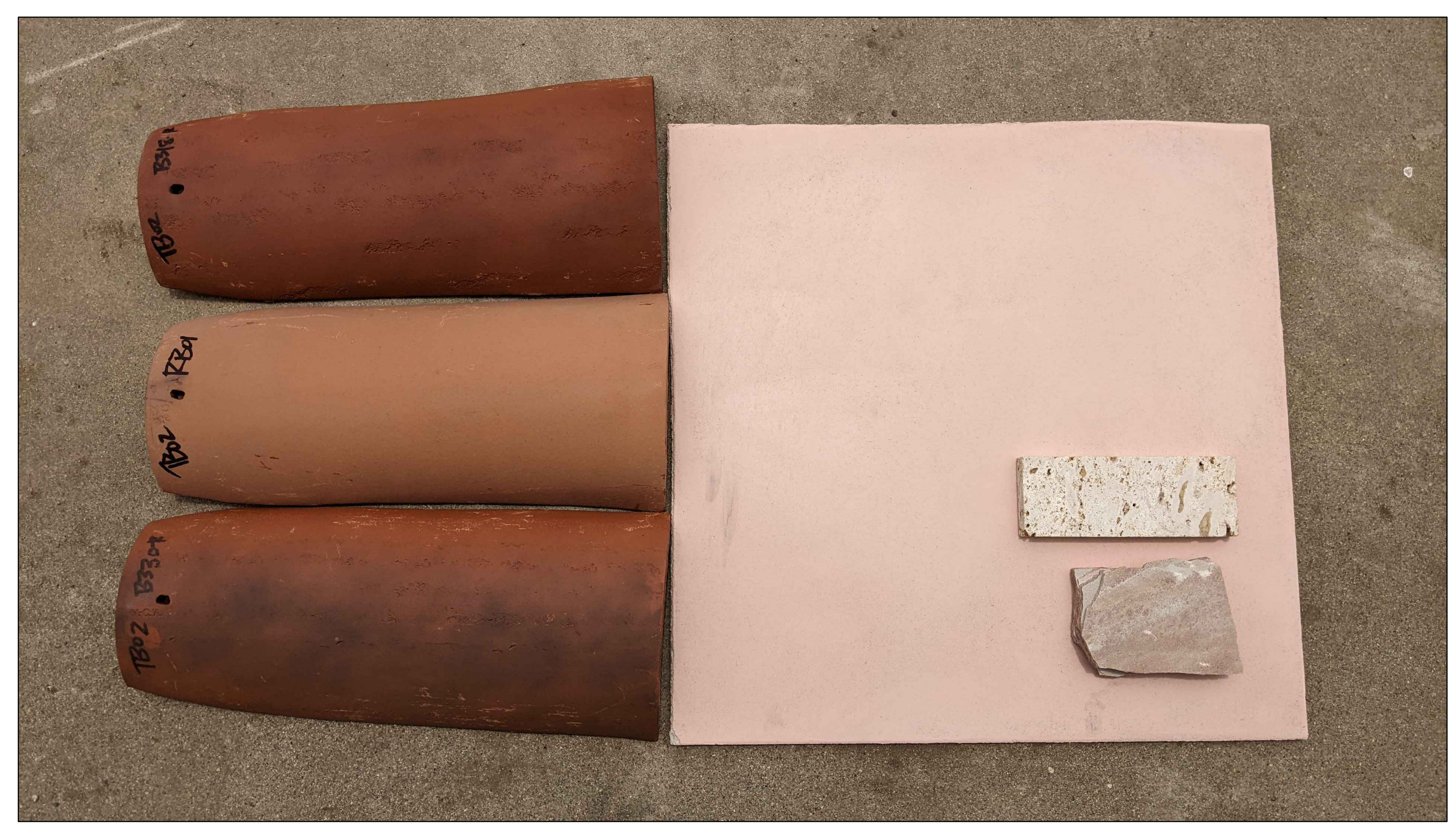
2 EXT. PLASTER



3 PAVING

1 ROOF TILE

3 VENEER & TRIM



OVERALL PROPOSED MATERIALS BOARD

NT OF RICHARD E JOHNSON A.I.A

LICENSED ARCHITECT
STATE OF CALIFORNIA

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PHOTOS AND COLOR BOARD

PROPOSED ADU FOR:
KISLAK RESIDENCE
3627 CAMPANIL DRIVE
SANTA BARBARA, CALIFORNIA 93109

DATE
09/14/2024

SHEET
A0.4

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April 6, 2023
Lab No: 140385-2
File No: 23-11153-2

Paula Kislak
545 Hodges Lane
Santa Barbara, CA 93108

SUBJECT: Grading and Foundation Plan Review
Proposed Accessory Dwelling Unit (ADU)
3627 Campanil Drive
Santa Barbara, California

REFERENCE: This Laboratory's Preliminary Geotechnical Investigation Report
Lab No. 115040-2, Dated December 22, 2017

This Laboratory's Preliminary Geotechnical Investigation Update Report
Lab No. 137805-2, Dated May 3, 2022

Dear Ms. Kislak:

In accordance with your request, I have reviewed the grading and foundation plan for the proposed ADU. Based upon my review, it is my opinion the grading and foundation plan is in substantial conformance with the recommendations of our geotechnical report referenced above.

This review is not comprehensive and does not include a review of the architect's and/or civil and structural engineers' design and calculations.

The observation of excavations during the construction phase represents an opportunity by our firm either to confirm soil conditions estimated by the exploratory borings, or to discover soil conditions that have not been addressed. When such undisclosed conditions are encountered, opinions and recommendations addressing these conditions will be rendered at that time.

The reference report is considered preliminary and no person should consider the recommendations or soil conditions described therein as conclusive. The recommendations and conclusions contained in the reference report are considered preliminary until all excavations have been observed during the construction phase, after which a final report will be issued at your request stating that the grading and foundation works accomplished and installed are appropriate for the soil conditions encountered.

If you have any questions concerning this report, please do not hesitate to call. Thank you for the opportunity of providing this service.

Respectfully submitted,

PACIFIC MATERIALS LABORATORY, INC.

Ronald J. Pike
Geotechnical Engineer, G. E. 2291

RJP:lec
cc: Paula Kislak, Email: pk99@cox.net

"We Test The Earth"

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INTRODUCTION

This report presents the results of a preliminary geotechnical investigation performed at 3627 Campanil Drive, in the County of Santa Barbara, California. Existing at the site is a single-family residence. It is proposed to build a swimming pool in the backyard. It is also proposed to build additions around the perimeter of the existing footprint at selected locations. The site is level as the result of a previous grading operation. The level pad transitions to descending slopes on the north, south, and east sides.

SCOPE OF WORK

It is the purpose of this investigation to classify the soil disclosed by the exploratory borings by observation and tests on selected samples. In addition, this study includes laboratory tests to evaluate soil strength, the effect of moisture variation on the soil-bearing capacity, compressibility, liquefaction, and expansiveness. Based upon this information, we will provide preliminary foundation recommendations for the proposed additions and swimming pool.

The scope of this investigation does not include the analysis of the corrosive potential of the soil, previous site construction, or analysis of geologic structures and their associated features, such as faults, fractures, bedding planes, strike and dip angles, ancient landslides, potential for earth movement in undisturbed or natural soil formations sloped or level, or other sources of potential instability which relate to the geologic conditions, as these items should be addressed by a qualified Engineering Geologist.

This exploration was conducted in accordance with presently accepted geotechnical engineering procedures currently applied in the local community in order to provide the appropriate geotechnical design characteristics of the foundations soils and of the proposed fill soils in order to properly evaluate the proposed structure with respect to differential settlement based upon the anticipated soil characteristics at the time of construction.

LIMITATIONS

This Laboratory's basic assumption is that the soil borings presented herein are representative of the entire footprint of the proposed development, however, no warranty is implied. If, during the course of construction, soil conditions are encountered which vary from those presented herein, please contact this Laboratory immediately so appropriate field modifications may be expeditiously proposed.

It is your responsibility to contact our office, providing at least 48 hours of notice for grading or footing excavation observations and testing. The observation of excavations during the construction phase represents an opportunity by our firm to either confirm soil conditions estimated by the exploratory borings or to discover soil conditions which have not been

addressed. When such undisclosed conditions are encountered, opinions and recommendations addressing these conditions will be rendered at that time.

This report is considered preliminary and no person should consider the recommendations or soil conditions described herein as conclusive. The recommendations and conclusions of this report are considered preliminary until all excavations have been observed during the construction phase, after which a final report will be issued stating that the grading and foundation works accomplished and installed are appropriate for the soil conditions encountered.

FIELD INVESTIGATION

The subsurface soil conditions were explored by four truck-mounted auger borings, which were drilled to depths of up to 50 feet. The locations of the borings were selected as appropriate and representative. Representative relatively "undisturbed" tube soil samples were obtained during the drilling operation by the Modified California sampler method. Laboratory tests and analysis of representative soil samples, obtained during the drilling operation, were performed to estimate the engineering properties and determine the soil classification. The locations of the borings are shown on Plate 1; these locations are approximate and have not been located by surveyed measurements. The boring log data is presented in Appendix A, "Field Investigation", while the results of the laboratory tests are provided in Appendix B, "Laboratory Tests".

SOIL CONDITIONS

1. No groundwater was encountered in the exploratory borings that extended to depths of up to 50 feet. It should be recognized that water table elevations, even seasonal perched water tables, might fluctuate with time, being dependent upon seasonal precipitation, irrigation, land use, and climatic conditions, as well as other factors. Therefore, water level observations at the time of the field investigation may vary from those encountered during the construction phase of the project. The evaluation of such factors is beyond the scope of this report.
2. The soil profile consists of the dark brown clay of the Rincon Formation, underlain by the Rincon Shale.
3. The black clay topsoil of the Rincon Formation was encountered at a depth of 40 feet in Boring No. 1, indicating approximately 40 feet of fill was placed to create the level pad. The Rincon Shale was encountered at a depth of 50 feet.
4. The supporting soil was found to have a very high potential for expansion.
5. The results of the Consolidation Tests indicate the soil is subject to swell with increased moisture content.

6. The soil profile at this site is judged to be stiff soil corresponding to a Site Class D as defined by Table 1613.5.2 of the 2013 California Building Code (CBC). This estimate is based on the borings, which encountered the geologic formation known as the Rincon Formation , which is widely regarded as a Type D soil profile since the Standard Penetration Resistance typically results in blow counts having a range of between 15 to 50.
7. The potential for liquefaction is considered to be very low.

PRELIMINARY CONCLUSIONS AND RECOMMENDATIONS

It is the opinion of this Laboratory the proposed construction is feasible from a soil-engineering perspective provided the recommendations contained in this soil engineering report are incorporated into the design and implemented during construction, and provided the owner and future owners understand certain foundation performance limitations.

The clay soil supporting the existing structure is expansive. As the moisture content changes from season to season, the soils supporting the foundation are expected to shrink and expand. The existing single-story house appears to be experiencing these phenomena, based on my observation of cracks in the surfaces of the structure.

It is the understanding of this Laboratory the proposed additions will be one-story wood frame structures. The foundation recommendations for the additions, which follow, conform to the California Building Code (CBC) requirements for the construction of foundations placed on expansive soil.

The foundation design method is provided in the CBC, Section 1808.6.2. This method does not result in a foundation that can prevent the upward heaving movement of an expanding clay, nor the settlement of a shrinking clay. The foundation design is based on the construction of a rigid concrete slab that will move up and down with the unstable clay, but only tilt and not distort while moving, in the attempt to keep the superstructure from distorting while also moving. The problem, for which there may not be an economical solution, is that a foundation for the addition, built to the foundation recommendations contained in this document, will be attached to a different and existing old foundation (not designed to mitigate the effects of expansive soil) and, therefore, differential movement between the two types of foundations is to be expected. The only way to mitigate the anticipated differential movement is to remove the existing old foundation and replace it with a new foundation of the same construction as the foundation proposed for the addition. This option is typically not selected and, when not selected, the owners and future owners must be informed that differential movement between the existing house and the addition cannot otherwise be prevented and, therefore, must be accepted and tolerated if the two types of foundations are connected. The movement may spread cracks throughout the building.

The complete removal of the existing foundation and the construction of a new foundation using piles, grade beams, and a structural slab would mitigate the potential foundation problems derived from expansive soil. No pile recommendations are

provided in this report for the proposed additions to the house because it is assumed the owners will not want to go to the expense of using a pile foundation throughout the old house and the new addition, but rather tolerate the cracks in the surfaces of walls, floors, and ceilings both in the existing and in the proposed structure. If this is not correct and pile recommendations for the house foundation are wanted, please notify our office.

Based upon this understanding, we present the following preliminary recommendations:

FOUNDATIONS

The supporting soils were found to be expansive based on the current CBC. Such soil conditions define the soil as being expansive and require the foundation be designed in compliance with Section 1808.6.2. Based on this understanding, we recommend the following:

1. A mat foundation shall be designed to conform to Section 1808.6.2, using the Wire Reinforcement Institute (WRI) Method. The Project Structural Engineer shall perform the calculation to design the foundation for the addition using the WRL Manual. If the dimensions of the slab, footings, and tie beams are less than the minimum dimensions specified in this section, the larger dimensions shall govern. The same is true for the steel reinforcement.
2. The foundation recommendations which follow are recommended minimums. The actual foundation may exceed these minimums depending on the results of the design using the WRI Method.
3. All continuous exterior footings of the structure shall extend a minimum of 36 inches and all continuous interior footings shall extend a minimum distance of 24 inches below the compacted pad grade.
4. Due to the expansion potential of the soil, the Project Structural Engineer shall utilize Section 1808.6.2 of the CBC for the design of the concrete slab-on-grade floor, foundation, and the interior tie beams using the WRI Method. The effective Plasticity Index (P.I. x C_S x C_0) shall be assumed to be 46. As a minimum, a network of tie beams shall be placed in two directions, perpendicular to each other and at a spacing of approximately 15 feet on center each way. The tie beams shall be a minimum of 20 inches deep below the top of the concrete slab-on-grade floor and shall be a minimum of 12 inches wide, with horizontal rebar placed near the top and near the bottom of the tie beam. The tie beam shall be doweled into the concrete slab-on-grade floor with a minimum of No. 3 rebar at 18 inches on center.
5. All footings shall contain a minimum of two No. 4 horizontal rebar placed one in the base and one in the stem of the footing. The Project Civil or Structural Engineer shall specify the foundation steel reinforcement based on either the WRI method and/or as required to resist the imposed loads.

6. Interior isolated spread footings may not be utilized unless connected on 4 sides, where possible, to tie beams. These footings shall extend a minimum of 24 inches below pad grade on the interior and 36 inches below the lowest adjacent ground surface on the exterior.
7. As a minimum, concrete slabs on grade shall be a full 6 inches thick and shall contain No. 3 rebar spaced 18 inches on center each way. The steel reinforcement shall be placed near the center of the slab. The slab shall be underlain with a minimum 4-inch coarse washed concrete sand layer. A 10-mil or heavier impervious membrane shall cover a sand layer. These concrete slab-on-grade requirements shall be modified as needed by the designers for surcharge loads, wheel loads, concentrated loads, or for moisture control. The floor covering supplier or manufacturer should be contacted for their specifications for design features which will result in a successful bond between the concrete slab and floor covering. Floor flatness and shrinkage crack control must be addressed by a competent contractor experienced in the skill of concrete placement. The owners or their agents shall inform those designing, building, and installing the concrete slab on grade and flooring of the performance and aesthetics expected.
8. Concrete slabs on grade shall be doweled into all adjacent footings using No. 3 rebar spaced 18 inches on center.
9. Based upon compliance with the above recommendations, an allowable soil bearing value for compacted soil 2,000 psf for 24-inch-deep footings and 2,500 psf for 36-inch-deep footings with a one-third increase when considering wind or seismic forces may be assumed.
10. Floor elevations located lower than the surrounding exterior grades are recommended to be protected from moisture intrusion. Please consult the building designer for details, such as waterproofing and French drains.
11. The Geotechnical Engineer shall be requested to observe the footing excavations after the compaction tests are completed and prior to placement of the rebar reinforcing.

While these recommendations are intended to provide satisfactory foundation performance for a new structure, it should be noted the concrete foundation will be in contact with an expansive soil. The new foundation will be connected to the existing foundation, which is different and inadequate to prevent damage from expansive soil. Consequently, you may expect cracks to appear as a result of the movement. Also, changes over time may alter the foundation's ability to remain level (i.e. broken water lines, droughts, non-symmetrical irrigation practices and altered drainage grades). In addition, associated features, such as porches, patios, driveways, sidewalks, and curbs, will be subject to differential movement. Porches and patios of concrete slab-on-grade construction are recommended to be attached to the perimeter foundation of the proposed structures such that an equivalent elevation is maintained at the joints. All concrete features shall be reinforced with continuous horizontal

steel and doweled cold joints. The joint between the old and the new structures may also experience differential movement. Where possible, construction joints are recommended for surface crack control. Over the life of the structure, maintenance or replacement of sections of the associated features and appurtenances damaged by the expansive soils may be required.

RESISTANCE TO LATERAL LOADS

Lateral loads may be resisted by frictional resistance along the foundation base and passive earth pressures along the foundation sides. An allowable friction coefficient of 0.35 may be used. The passive pressures of 350 pcf of footing may be used. A triangular distribution should be used. The frictional resistance and the passive pressure may be combined without reduction. The resistance may be increased by one-third for wind or seismic loading.

SWIMMING POOL

The location selected for the proposed swimming pool was found to be on a previously placed fill, approximately 40-feet thick. The fill is underlain by a 10-foot layer of black Rincon clay. This is the original topsoil layer. The Rincon shale was encountered below the black clay at a depth of 50 feet. These soil conditions make the placement of a swimming pool at that location a potential risk for damage to the pool. The potential for unstable slopes and expansive soil to damage the pool is high and there is no economical mitigation. Supporting the pool on piles doesn't make sense because the piles would need to be at least 60 feet deep and that is too long to prevent lateral creep movement. All slopes in Santa Barbara are landslide prone when heavy rains occur. The height and soil type associated with the north slope is such that an incident of instability is possible. It is possible to construct a swimming pool at the proposed location provided it is understood the pool may be damaged by potential slope instability. The recommendations below provide a pool foundation that mitigates the effects of expansive soil only.

1. The foundation system for the proposed replacement pool shall be reinforced concrete grade beams supported by reinforced concrete cast-in-place piles.
2. The reinforced concrete piles shall be a minimum of 18 inches in diameter and shall extend a minimum distance of 15 feet below the floor of the pool.
3. The vertical load capacity of the piles may be based on a skin friction value of 500 psf for the total length of the pile embedded below the floor of the pool.
4. The piles, grade beams, walls, and floor of the pool shall be designed by a Civil or Structural Engineer.
5. A 4-inch-tall collapsible cardboard box (CCB) forming material, such as SureVoid™ or equivalent, shall be placed below the grade beams and below concrete structural slabs to prevent the uplift swell pressures of the expansive soil from acting on the bottom of the structure.

6. The bottom of the pile excavation shall be cleaned of debris, using a pancake auger for the last pass, in order to provide end-bearing contact.
7. This Laboratory shall be requested to inspect all excavations prior to steel and concrete placement.
8. Concrete pool decks will move differentially with respect to the pool structure. This may be due to the difference in support elevations. A flexible deck performs best and hides the differential movement. An example of a flexible deck is individual stone pavers with grass growing between the joints. It is recommended that a flexible surrounding deck be incorporated into the design.
9. The walls of the swimming pool shall be designed to resist a lateral earth load of 100 pcf.
10. The walls of the pool shall be designed as freestanding walls deriving no lateral support from the adjacent soil.
11. The owner or his agent shall request the Project Geotechnical Engineer to also observe all excavations prior to placement of compacted soil, or rebar and shotcrete.
12. We request the foundation plan be submitted to our office for a general review to verify substantial compliance to the recommendations contained in this report.

ADJACENT LOADS

Where footings are placed at varying elevations, the effect of adjacent loads may be calculated using the widely published Formulas for Stresses in Semi-infinite Elastic Foundations or the Boussinesq figures and equations for both vertical and horizontal surcharge loads.

APPURTENANCES

The expansive soil encountered at the site is identified as the most challenging aspect of the foundation design. The Rincon Formation is prone to instabilities, such as surficial slope failures, mudflows, creep, expansion, and shrinkage. Perfect performance of appurtenant improvements, as well as the old and new footings of the house, is an unacceptable level of expectation on the part of the property owner or future owners. Associated features, such as patios, walkways, trellis columns, pool equipment enclosure, and driveways will be subject to movement due to the expansion and shrinkage of the clay surface soils. The foundation design is intended to support the structure in a safe manner and with an acceptable risk of movement that must be accepted by the owner.

An economical way of reducing the anticipated movement of the appurtenant improvements, such as walkways and patios, is by moisture control of the supporting soils and by carefully choosing the type of building materials used to construct these associated

features. Moisture control can be approached by installing surface storm drain collection systems, controlling surface water, and the proper placement of planting areas around the foundation system. Water entering the subsurface soils can be reduced by the placement of a false bottom below planters or an impervious membrane, such as visqueen beneath decorative rock, patios, or paths. Controlling surface water and directing it away from slopes is critical. However, even with correct drainage, the moisture content of the soil will change from summer to winter and, therefore, the soils will shrink and swell, moving any item supported over the soil. Drainage can serve to reduce the rate of movement.

With respect to construction materials for the appurtenant improvements, redwood decks are more flexible than concrete patios and do not reflect as much damage from soil movement. If concrete flatwork is required, there are at least two alternative approaches. One is to maintain exterior flatwork disconnected from the exterior foundation of the house, since the exterior flatwork may experience more movement than the foundation. By leaving the two disconnected, the exterior flatwork is allowed to float. The problem, however, is that the flatwork may tend to float away from the house, creating an uneven gap distance between the foundation and the edge of the concrete slab or creating a trip edge at porch entries.

The other alternative is to dowel the flatwork into the exterior foundation with steel rebar to prevent the differential movement and to prevent the gap and trip edge from occurring. This method, however, holds one end of the flatwork fixed while the other is free to move, thus cracking the concrete. For either method, the owner can expect movement and, therefore, cracks. Individual stone pavers with grass between the joints provide an alternative style of "flatwork" with less cracks and the differential movement is not as noticeable. Where the improvements discussed above are located adjacent to slopes, a lateral and downward creeping occurs which undermines the feature constructed over and supported by the expansive soil. Prevention of the downward movement is only accomplished with a drilled pile and grade beam foundation system.

SETTLEMENT

It is the intent of the recommendations contained in this report to achieve angular distortions[1] of approximately 1/480. A total settlement of approximately 1 inch or less is anticipated in the undisturbed, native soil and approximately 1% to 1.5% of the fill height is the anticipated total settlement at areas where compacted fill soil is placed in accordance with the grading recommendations provided in this soil engineering report. Movement from expansive soil has already been discussed in this report under the heading APPURTENANCES. The soil bearing values and estimated settlements contained in this report are preliminary and may need to be modified after the foundation and grading plans are substantially complete.

[1] Angular distortion is the ratio of the vertical differential settlement divided by the horizontal distance over which the vertical differential is measured.

CONSTRUCTION OBSERVATION

The owner or his agent shall request the Project Geotechnical Engineer to observe all excavations prior to placement of compacted soil, gravel backfill, or rebar and concrete.

PLAN REVIEW

We request the grading and foundation plans be submitted to our office for a general review to verify substantial compliance to the recommendations contained in this report.

CLOSURE

The recommendations contained herein are for the sole use of our client and are based upon this Laboratory's understanding of the project which has been described herein. If the project scope, location, or conceptual design is subsequently altered, this Laboratory shall be requested to modify, as necessary, the recommendations contained herein as is appropriate for the new development concept. If the recommendations of this report are not implemented within one year, we recommend an update and review of the contents of this report be performed by this Laboratory.

The recommendations contained herein are based upon the assumption that Pacific Materials Laboratory shall be requested to perform the testing and observation services which will be required during the grading and foundation operations in order to verify that the actual soil conditions encountered and the construction procedures are consistent with the recommendations contained herein. If this service is performed by others, only the technical correctness of the actual analytical soil tests described here is attested to by this Laboratory.

Thank you for the opportunity of providing this service. If you have any questions regarding this matter, please do not hesitate to call.

Respectfully submitted,

PACIFIC MATERIALS LABORATORY, INC.

Ronald J. Pike
Geotechnical Engineer, G. E. 2291

RJP:vlh
cc: Addressee (3)
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OF RICHARD E JOHNSON A.I.A

LICENSED ARCHITECT
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SOILS
RECOMENDATIONS

PROPOSED ADU FOR:
KISLAK RESIDENCE
3627 CAMPANIL DRIVE
SANTA BARBARA, CALIFORNIA 93109

DATE
07/3/2024

SHEET
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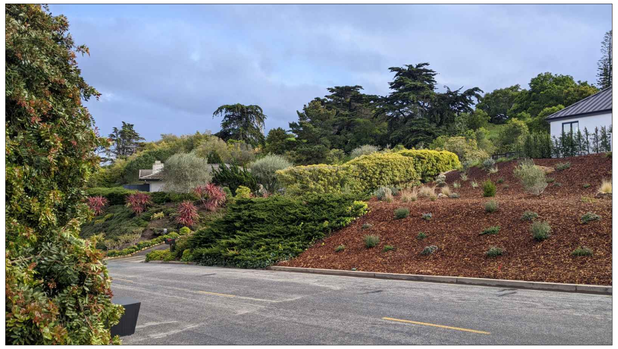
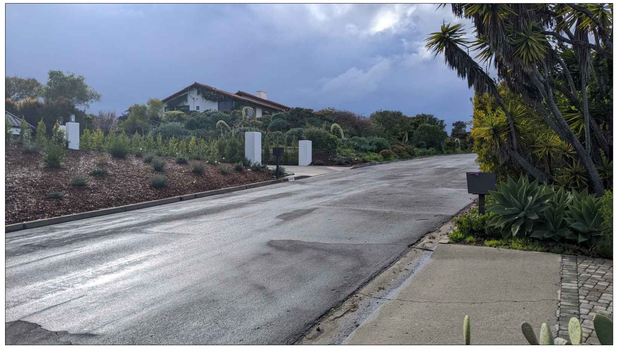


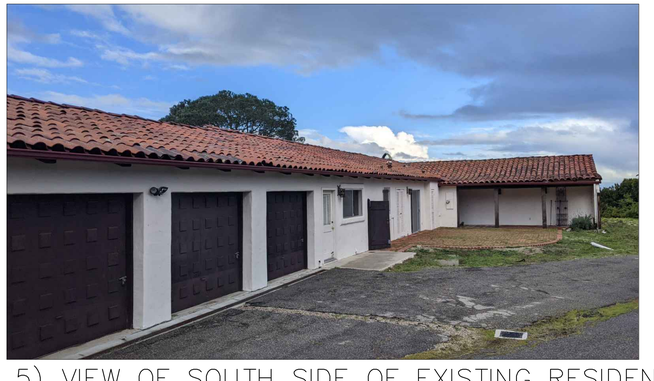


1) STREET VIEW TO SOUTHDIRECTLY ACROSS STREET FROM PROPERTY

2) STREET VIEW TO NORTH TOWARDS PROPERTY

3) VIEW TO NORTH DOWN (E) DRIVEWAY

4) STREET VIEW TO NORTH TOWARDS PROPERTY



5) VIEW OF SOUTH SIDE OF EXISTING RESIDENCE LOOKING EAST

LICENSED ARCHITECT
RICHARD E JOHNSON
No. 17425
STATE OF CALIFORNIA

REVISIONS

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R E JOHNSON AIA

SITE PHOTOS

PROPOSED ADU FOR:
KISLAK RESIDENCE
3627 CAMPANIL DRIVE
SANTA BARBARA, CALIFORNIA 93109

DATE
6/30/2023

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6) NORTH SIDE OF EXISTING RESIDENCE LOOKING EAST

7) WEST SIDE OF EXISTING RESIDENCE LOOKING SOUTH

8) EAST SIDE OF EXISTING RESIDENCE LOOKING SOUTH

9) EAST SIDE OF EXISTING RESIDENCE LOOKING NORTH

10) WEST SIDE OF EXISTING PROPERTY LOOKING NORTH (ADU SITE)

11) NORTH SIDE OF EXISTING RESIDENCE LOOKING WEST (ADU SITE)

12) AERIAL VIEW OF SITE AND VICINITY

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SITE PHOTOS

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KISLAK RESIDENCE
3627 CAMPANIL DRIVE
SANTA BARBARA, CALIFORNIA 93109

DATE
6/30/2023

SHEET
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SITEWORK SPECIFICATIONS

2010 GENERAL REQUIREMENTS

2011 SCOPE: The proposed work consists of the following: Earthwork, storm drainage, utilities, paving, retaining walls, and related sitework.

2012 DETAIL: The drawings are intended to show or reference all details necessary to construct the proposed work. The contractor shall review these drawings and determine prior to commencement of construction if additional details or clarification of information is necessary. The engineer shall be given sufficient time to provide any additional information prior to construction.

2013 EXISTING CONDITIONS: The contractor shall verify all existing conditions and measurements shown on the drawings and report any differences to the engineer prior to construcion.

2014 PROTECTION OF FACILITIES: The contractor shall be responsible for all on and off site structures, streets, utilities and landscaping.

2015 SURVEYING: The contractor shall provide for all surveying required to locate property lines, set flow lines of pipes and gutters to obtain new final grades and any other surveying required to construct the improvements.

2016 PERMITS: The contractor shall pay for all permits, licenses,and fee required by the governing agencies except, the owner shall pay for the general building and grading permits. The contractor may be required to sign the general building and grading permits.

2017 INSPECTION: The contractorshall be responsible for requesting, coordinating and obtaining all inspections requires by the local building codes. Allow 24 hours advance notice.

2018 SPECIAL INSPECTION: Special testing and inspection by a certified material testing laboratory and/or licensed special inspector may be required as noted below. The contractor shall be responsible for requesting, coordinating and obtaining all inspections and testing as may be required. The owner shall pay for the initial testing and inspection. Any additional testing and inspection required by the contractors performance or scheduling shall be paid by the contractor.

1. Observe the over excavation to determine that the depth of excavation and bottom of the subgrade are suitable.
2. Observe the exposed subgrade and keyway in areas to receive fill and in areas where excavation has resulted in the desired finished subgrade, observe proof rolling and delineate areas requiring additional excavation.
3. Perform visual observation to evaluate the suitability of on-site and imported soils for fill placement; collect and submit soil samples for laboratory testing.
4. Perform field density and compaction testing to determine the percentage of compaction achieved during placement of fills.
5. Observe and probe foundation bearing materials to confirm that suitable bearing materials are present at the design grades.
6. Observe and test the backfill of retaining walls.
7. Observe and test the backfill of utility trenches.
8. Observe and test the construction of the subgrade and base for exterior paving.
9. Observe the construction and protection of slopes.

2019 RECORD KEEPING: The contractor shall keep a set of the approved drawings, permits and contract documents in a protected on site location at all times and shall keep daily field reports of all special inspection and testing.

2020 AS BUILT DRAWING: the contractor shall keep accurate as-built drawings of all work as required such that final drawings by the engineer may be provided to the owner.

2021 AUTHORIZED CHANGES: The engineer shall review and approve any changes to the drawings or specifications prior to construction.

2022 CODE REQUIREMENTS: All work shall be performed in accordance with the latest edition of governing codes and local ordinances unless specifically noted otherwise in the drawing or specification.

2023 PLAN COORDINATION: The contractor shall refer to the project architectural drawings and specifications including those for site layout, building, mechanical, electrical and landscaping improvements and for interfacing with all improvements called for therein.

2024 UNDERGROUND UTILITIES: The contractor shall make a thorough search for all underground structures and utilities and shall request all utility agencies to locate all underground structures and utilities prior to excavation. Call the underground service alert (2) full days in advance of commencing construction at 811.

2025 CLEAN UP: Remove all waste, debris, excess materials, tools and equipment from the premise.

2050 DEMOLITION

2051 REMOVAL: Specific existing improvements shall be removed as required to construct new improvements. Where required the improvements to be removed shall include disconnection and capping of utilities lines serving the improvements and any foundation structures supporting such improvements.

2052 UTILITIES: Location of existing utilities may or may not be showed in their entirety or exact location on the drawing. Contractor shall determine actual extent and location of utilities. Contractor shall coordinate disconnection of utilities with the utility company and owner. Where shown on the drawings, utilities may be abandoned in place, unless they conflict with new improvements. Contractor shall provide for temporary disconnect where reconnection is required.

2053 SALVAGING OF MATERIALS: Where saving of materials to be removed is required, the contractor shall deliver materials to an on site storage location designated by the owner.

2054 PAVEMENT: Where required by the drawings, certain sections of pavement shall be replaced or removed. The contractor and engineer shall meet at the site and designate the specific areas to be replaced or removed. All cuts in pavement shall be made by sawcutting to create straight and neat joints.

2200 SHORING AND BRACING

2201 SHORING AND BRACING: The contractor shall be responsible for all excavation including shoring and protecting of adjacent property, structures, streets, utilities.

2202 SHORING: The contractor is responsible for the design and construction of any shoring required to meet OSHA requirements.

2250 EARTHWORK

2251 CODE REQUIREMENTS: All grading shall conform with Appendix J of the California Building Code, the local grading ordinances and the soils/geotechnical report.

2253 SANTA BARBARA CITY GRADING NOTES:

1. All grading shall conform with Santa Barbara Municipal Code Chapter 14 and standards and requirements pertaining thereto, these construction drawings and the recommendations of the soils engineer and engineering geologist.
2. Contractor to notify the grading inspector and soils laboratory at least 48 hours before start of grading work or any pre-construction meeting.
3. Contractor shall employ all labor, equipment and methods required to prevent his operations from producing dust in amounts damaging to adjacent property, cultivated vegetation and domestic animals or causing a nuisance to persons occupying buildings in the vicinity of the job site. Contractor shall be responsible for damage caused by dust from his grading operation.
4. Before beginning work requiring exporting or importing of materials, the contractor shall obtain approval from Public Works Road Division for haul routes used and methods provided to minimize the deposit of soils on country roads. Grading/road inspectors shall monitor this requirement with a contractor.
5. The Geotechnical engineer shall provide observation and testing during grading operations in the field and shall submit a final report stating that all earth work was properly completed and is in substantial conformance with the requirements of the grading ordinance.
6. Areas to be graded shall be cleared of all vegetation including roots and all unsuitable material for a structural fill, then scarified to a depth of 6" prior to placing of any fill. Call grading inspector for initial inspection.
7. A thorough search shall be made for all abandoned man-made facilities such as septic tank systems, fuel or water storage tanks, and pipelines or conduits. Any such facilities encountered shall be removed and the depression properly filled and compacted under observation of the geotechnical engineer.
8. Areas with existing slopes which are to receive fill material shall be keyed and benched. The design and installation of the keyway shall be per the geotechnical engineer's recommendation of per County Standard Detail no. G-13.
9. Fill material shall be spread in lifts not exceeding 6" in compacted thickness, moistened or dried as necessary to near optimum moisture content and compacted by an approved method. Fill material shall be compacted to a minimum of 90% maximum density as determined by 1957 ASTM D-1557-91 modified proctor (AASHO) test or similar approved methods. Some fill areas may require compaction to a greater density if called for in the construction documents. Soil tests shall be conducted at not less than one test for each 18" of fill and/or for each 500 cubic yards of fill placed.
10. Cut slopes shall not exceed a grade of 2 horizontal to 1 vertical. Fill and combination fill and cut slopes shall not exceed 2 horizontal to 1 vertical. Slopes over three feet in vertical height shall be planted with approved perennial or treated with equally approved erosion control measures prior to final inspection.
11. Surface drainage shall be provided at a minimum of 5% for 10 feet away from the foundation line or any structure.
12. All trees that are to remain on site shall be temporarily fenced and protected around the dripline during grading.
13. An erosion and sediment control shall be required as part of the grading plan and permit requirements.
14. "Best Management Practices for Construction Activities: Eroded sediments and other pollutants must be retained onsite and may not be transported from the site via sheet flow, swale, area drains, neutral drainage courses, or wind. Stockpiles of earth and other construction related materials must be protected from being transported from the site by the forces of wind or water. Fuels, oils, solvents, and other toxic materials must be stored in accordance with their listing and are not to contaminate the soil and surface waters. All approved storage containers are to be protected from the weather. Spills may not be washed into the drainage system. Excess or waste concrete may not be washed into public way or any other drainage system. Provisions must be made to retain concrete wastes on site until they can be disposed as a solid waste. Trash and construction related solid waste must be deposited into a covered waste receptacle to prevent contamination of rainwater and dispersal by wind. Sediments and other material may not be tracked from to the site by vehicle traffic. The construction entrance roadways must be stabilized so as to inhibit sediments from being deposited into the public way. Accidental deposition must be swept up immediately and may not be washed down by rain or other means. Any slopes with disturbed soils or denuded of vegetation must be stabilized so as to minimize erosion by wind and water."
15. If grading occurs during Nov. 1 through Apr. 15, no grading shall occur unless approved erosion and sediment control measures are in place. Discharges of sediment from the project site may result in a "Stop Work Order".
16. All earthwork on hillsides, sloping or mountainous terrain shall be stabilized to protect and prevent loss of soils, as necessary, year-round.

2254 REPORTS: The following reports have been prepared for this project and the recommendations included therein shall be incorporated into this specification: Preliminary Geotechnical Investigation by Pacific Materials Lab. dated Dec. 22, 2016. Addendum Report dated Dec. 13, 2017. Update letter May 3, 2022

2255 SPECIFIC REQUIREMENTS:

GRADING

1. **All of the grading is anticipated to be a cut excavation with no fill soil being placed, or a very minor amount in the northeast corner of the motor court. In the areas to be prepared to receive compacted fill soil, the loose topsoil and compressible surface soils shall be removed and observed by a representative of our firm. Upon approval of excavation, the exposed ground surface shall be scarified an additional 6 to 8 inches, moistened or dried to near the optimum moisture content, and compacted to 90% of the relative compaction. The depth of the fill shall be limited to a vertical height of 18 inches.**
2. **The removed surface soils and/or imported approved fill may then be placed in loose lifts of approximately 6 inches, thoroughly mixed, moistened or dried to near optimum moisture content, and compacted to a minimum of 90% relative compaction.**
3. **Import soils, if required for compacted fill, shall be granular, non-expansive soils which are equal to, or superior in quality to, the on-site soils as determined by this Laboratory prior to importation of the fill material to the site. This is not referring to retaining wall backfill. See the RETAINING WALLS section of this report for retaining wall backfill requirements.**
4. **The compaction standard shall be the latest adoption of the ASTM D-1557 method of compaction.**
5. **Positive surface drainage shall direct water away from all slopes and away from the foundation system of the proposed structure.**

2256 EARTHWORK ESTIMATE:
The following earthwork estimate is for permit purposes only.

	Inside bldg	Outside bldg	Total
Cut	44 Cu. Yds.	56 Cu. Yds.	100 Cu. Yds.
Fill	11 Cu. Yds.	42 Cu. Yds.	53 Cu. Yds.
Total	55 Cu. Yds.	98 Cu. Yds.	153 Cu. Yds.

Note: Exact shrinkage, consolidation and subsidence factors and losses due to clearing operations are not included. Estimated earthwork quantities are based on the difference between existing ground surface and proposed finished grades as shown on the plan, or subgrades, and should vary according to these factors. Contractor shall confirm existing topography, shall review the site and the soils reports, and shall preform an independent quantify takeoff and bid accordingly.

2257 TESTING AND INSPECTION: See soils/geotechnical report for scope of testing and inspection required during earthwork operations.

2300 BUILDING EXCAVATION

2301 BUILDING EXCAVATION AND FILL: Refer to structural specifications for specific building foundation excavation and/or fill requirements and testing, inspection and construction requirements.

2350 UTILITY TRENCHING

2351 UTILITY TRENCHING AND BACKFILL: Vertical trench excavations less than 5 feet deep should be capable of standing with minimum shoring or bracing for short construction periods. Trenches 5 feet or more deep should be provided with more substantial shoring or bracing. The attention of contractors should be drawn to the State of California Construction Safety Orders for "Excavations, trenches, Earthwork".

2352 BEDDING: For the purposes of this section, bedding is defined as material placed in a trench up to 1 foot above a utility pipe and backfill is all material placed in the trench above the bedding. Unless concrete bedding is required around utility pipes, free draining sand shall be used as bedding. Sand proposed for use in bedding should be tested in laboratory to verify its suitability and to measure its compaction characteristics. Sand bedding should be compacted by mechanical means to achieve atleast 90 percent relative density based on ASTM tests D-4283 and D-4284.

2353 BACKFILL: Approved, on site, inorganic soil, or imported materials may be used as utility trench backfill, a sample of it should be tested and approved by the soils engineer before any is delivered to the site.

2354 COMPACTION: Proper compaction of trench backfill will be necessary under and adjacent to structural fill, building foundations, concrete slabs and vehicle pavements. In these areas, backfill should be conditioned with water to produce a soil-water content of about 3 to 5 percent above optimum value and placed in horizontal layers not exceeding 6 inches in thickness (before compaction). Each layer should be compacted to at least 90% relative compaction based on ASTM Test D-1557. The upper 12 inches of trench backfill under vehicle pavements should be compacted to at least 95% relative compaction. Where any trench crosses the perimeter line of any building, the trench should be completely plugged and sealed with compacted clay soil for a horizontal distance of 2 feet on either side of the foundation.

2355 TRENCHES: To reduce the potential for piping loss of utility line bedding and backfill, slurry or lean concrete plugs should be installed in utility trenches which slope steeper than 10%. The plugs should be a minimum of 2 feet thick and should be placed at 50 foot maximum intervals. The plugs should extend 2 feet below and 2 feet into both sidewalls of the trench. The top of the plug should extend to within 6 inches of the top of the trench. At the bottom of the trench, a pocket of free draining gravel (approximately 1 cubic foot per foot of trench width) should be placed immediately up-gradiant of each plug. The gravel pocket should be wrapped in a permeable synthetic filter fabric conforming to Caltrans Section 88-1.03 for underdrains, and should be drained by a PVC pipe sloped to daylight.

2400 POTABLE WATER SYSTEM

2401 CODE: The potable water system shall be installed in accordance with the latest edition of the California Plumbing Code.

2402 LIMITS: This section addresses underground domestic water from the meter to a point two feet outside of any new buildings or to the point of connection of existing buildings.

2403 PIPE AND FITTINGS: Pipe and fittings shall be type L copper with soldered joints or schedule 40 pvc with solvent weld or threaded joint and shall conform to the requirements of the CPC. All above grade pipe shall be metal.

2404 VALVES: Valves shall be PVC construction rated for 150 psi as manufactured by Ryan Herco Products Corporation or equivalent. PVC valves greater than 2" diameter shall not be used unless approved by the engineer.

2405 INSTALLATION: Pipe assembly and installation shall be in conformance with AWWA and CPC standards and with the manufacturer's guidelines and recommendations. Pipe, fittings and appurtenances shall fit in place without strain and shall be supported and anchored as necessary.

Above ground piping systems shall include union or flange connections placed as necessary to allow removal of system components for servicing or repair; piping shall be supported or anchored at intervals reccomended by the manufacturer for the intended application, not to exceed intervals required by the current edition of the California Plumbing Code. Pipe and fittings shall be assembled usind non-toxic lubricants and compounds.

Unless otherwise called for on the plans or otherwise specefied herein, adaption from PVC to iron or steel pipe and fittings installed below ground shall be wrapped with coal tar tape applied over its companion primer.

2407 TESTING: Hydrostatic pressure test in accordance with the CPC.

2408 PRESSURE REGULATOR: Shall be installed adjacent to the water valve near the service entrance to each living unit unless otherwise specified. The pressure regulator shall be IAMPMO approved.

2450 FIRE WATER SYSTEMS

2451 LIMITS: This section covers the private fire line and sprinkler supply system from the double check valve assembly to a point two feet outside of any new building. The double check valve assembly will be constructed under a seperate permit. The building sprinkler system will be installed under seperate permits.

2550 STORM SEWAGE SYSTEMS

2551 STORM DRAINAGE: Prior to commencement of storm drainage installation, the contractor and engineer shall meet to review the proposed storm drainage plan.

2552 SCHEDULING: Contractor shall schedule gravity pipeline work ahead of other underground conduit construction.

2553 LAYOUT: Gravity storm drain work shall begin at the lowest point and proceed upstream.

2554 CONCRETE: Concrete for all drainage facilities shall be 2500 psi @ 28 days.

2556 NON METALLIC PIPE: Storm drain piping 6" diameter and less unless specifically noted otherwise shall be non perforated, heavy duty smooth wall poly polyethylene pipe conforming to ASTM F810 as manufactured by Advanced Drainage Systems, Hancor or equal. Corrugated pipe may be used from the downspout to the collector drain line. Fittings shall be heavy duty polyethylene and selected to fit pipe and drain boxes. Unless noted otherwise, all pipe shall be laid at a minimum 1/4" per foot slope.

For storm drain pipe greater than 6" in diameter use heavy duty, non-perforated corrugated HDPE pipe with smooth lining as manufactured by Advanced Drainage System N-12 or equal.

PVC (Polyvinyl Chloride) Pipe shall conform to the requirements of ANSI/ASTM D3034-78, Type PSM for gravity flow sewers and shall be SDR 35. Gaskets shall be flexible elastomeric seals meeting the requirements of ASTM D3212-77.

2558 TESTING: Underground storm drainage system, shall be water pressure tested prior to burying pipes.

2559 CODE REQUIREMENTS: All private storm drain improvement materials and construction methods shall be in accordance with these drawings and the requirements of the local building department.

2560 RAIN GUTTERS AND DOWNSPOUTS: The finished structure shall be fitted with rain gutters and downspouts that collect and discharge all roof rain water run-off to underground drainage system or hard paved surface as indicated. Rain gutters and downspouts shall be per the architectural drawings. Gutters tributary to chamber, rain barrels, or cisterns shall be screened with a leaf guard or ½" to ¼" min. corrosion resistant metallic hardware fabric.

2561 TRENCHING: For bedding and backfill material see Section 2350.

2564 GRATES: Grates located in yard areas shall be cast iron. Grates located in vehicle travelways shall be rated for heavy traffic loading, shall be bicycle proof, and shall be cast iron as manufactured by Alhambra Foundry or the Neenan Foundry Co. or equal.

2565 GRATES: Grates for non metallic drain boxes shall be PVC or ABS, or PE or equal and shall be matched to fit the drain box.

Grates in hard surfaced patio areas shall be brass or bronze grate and frame as manufactured by the Zurn company or equal. Contractor to submit shop drawings of all grates to engineer for approval prior to installation.

2566 DRAINAGE DITCHES: Where rock in mortar drainage ditches adjacent to road pavement occurs, use 4-8 diameter sandstone boulders of dressed stone set in 4 grout (2000 psi @ 28 days) with 6x6, 10/10 w.w. mesh.

2567 FRENCH DRAIN: Pipe shall be PVC or ABS smooth wall non corrugated with holes (not slots) at 60 and 120. Holes shall be placed at 4 O'clock and 8 O'clock.

The french drain should be placed on the outside of the continuous footing in the area to be protected. It should consist of a minimum 4"ø rigid PVC perforated pipe at the bottom of a 12" wide trench filled with the free draining gravel. The gravel shall be wrapped with a filter fabric.

2568 FILTER FABRIC: Shall be a non woven geotextile fabric with high flow capacity and small pore size such as Mirafi 140 N. or equal. The fabric shall be installed in accordance with the manufacturers requirements.

2570 GRAVEL FILTER: Shall be 3/4"-1" diameter round rock.

2600 SANITARY SEWAGE SYSTEMS

2601 CODE REQUIREMENTS: The sanitary sewer system shall be installed in accordance with the latest edition of the California Plumbing Code.

2602 LIMITS: This section covers the building sewer line from the face of the building to the public sewer lateral.

2603 PIPE AND FITTING: Sanitary sewer pipe 4 inches in diameter and less shall be ABS rated sewer pipe per ANSI D 2751-80.

Sanitary sewer pipe 6 inches in diameter and greater shall be PW pipe Twinseal PVC or John Mansville Ring-Tite PVC sewer pipe meeting ASTM D-3034.

2604 INSTALLATION: Unless specific noted otherwise, pipe shall be laid at a minimum 1/4" per foot slope. Bedding and backfill shall be in accordance with section 2350.

2605 TESTING: Testing of underground pipe shall be in accordance with CPC.

2607 CLEAN OUTS: Cleanouts shall be installed in accordance with CPC.

2700 ELECTRICAL, CABLE, TELEPHONE SYSTEM

2701 EXISTING SYSTEM: The exact extent and location of the existing underground electrical, cable or telephone system has not been on the drawings but is known to exist.

2702 DRAWINGS BY OTHER: A seperate underground electrical, cable and telephone plan has been prepared by others.

2703 COORDINATION: The contractor shall coordinate the electrical, cable and telephone conduit and wire installation with the other underground pipes shown on the plan. Gravity flow pipeline systems shall be installed before electrical, cable and telephone conduits.

2704 UTILITY COMPANY APPROVAL: All electrical, cable TV, and telephone conduit shall be approved by the respective utility company.

2706 PROPOSED ELECTRICAL DISTRIBUTION: Information shown on these drawings is approximate only and must be supplemented prior to construction with accurate electrical drawings provided by an electrical consultant or licensed electrical contractor.

2800 PORTLAND CEMENT CONCRETE PAVING

2801 CODE REQUIREMENTS: All concrete construction shall be installed in accordance with the ACI standards of practice.

2802 EXPANSION JOINTS: Expansion joints shall be installed wherever concrete is restricted from moving such as where it abuts other concrete surfaces, curbs. Existing structures, etc. These joints shall be premolded, elastic resilient material 3/4" thick.

2803 CONTROL JOINTS: Control joints shall be placed at 15-20 ft. intervals and shall be 3/4" to 1" deep. Consult with engineer for finish appearance.

2804 CURING: The contractor shall determine curing methods to provide complete and carefull curing of all concrete work.

2805 LAYOUT: Plan elevations shown on walkways are for drainage and rough grading design only. It shall be contractor's responsibility to perform detailed layout for and to construct walkways, ramps, and steps in conformance with all building code requirements including those for dimensioning and surface texture.

2807 PAVEMENT DESIGN: Concrete flatwork shall have a minimum structural section as follows:

LOCATION	EARTH SUBGRADE	BASE	CONCRETE STRENGTH	CONCRETE REINFORCMENT
Sidewalk/ Patio	9" recomp	4" CLII	5"/2500 psi	#4's @ 18" OCEW

2808 RECOMPACTION: Earth subgrade and base shall be recompacted to 95% relative compaction per ASTM D-1557.

2809 FINISHING: Concrete flatwork shall have the following finishes unless specified otherwise by the Architect:

LOCATION	FINISH	COLORED CONCRETE
Sidewalks	Steel Trowel Light Broom	White pigment curing seal or colored stamped concrete per drawings
Patios	Steel Trowel Light Broom	Colored, stamped concrete
Stairs	Steel Trowel Light Broom	Colored, stamped concrete
Trash Enclosure	Light Broom	White pigment curing seal

2875 RETAINING WALL

2876 EXCAVATION: Footings shall be placed in firm natural ground or certified recompaction earth.

2877 EXCAVATION INSPECTION: Soils engineer shall inspect all footing excavations before installing reinforcing steel or forms.

2878 FOOTINGS: Concrete shall be 2500 psi @ 28 days conforming to ASTM C150.

2879 REBAR: Shall be ASTM A 615, grade 60 for #5 bars and larger, grade 40 for #4 bars and smaller.

2880 REBAR SPLICE: Minimum rebar splice shall be 40 bar diameters. Stagger splices in adjacent bars by the length of the splice.

2881 MORTAR: Mortar shall be type M or S.

2882 MASONRY: Masonry shall be F_M = 1500 psi.

2883 GROUT: Grout all cells. Grout shall be 2000 psi @ 28 days.

2884 EXPANSION JOINTS: Walls which are not adjacent to the building shall have expansion joints at a maximum spacing of 30 feet on center.

2885 WATERPROOFING: Walls shall be waterproofed per the architects requirements. Assume miradrain with gravel backfill over miradry or equal.

2886 BACKFILLING: Backfill shall be free-draining granular soil. Compact to 90% relative density. Allow wall to gain 21 days strength before backfilling. If backfill supports driveway compact to 95% relative density.

2887 DRAINAGE: Provide continuous 4" perforated ABS drain line behind all walls. Drain shall be sloped 1% towards outlet. Contractor shall provide filter blanket in gravel bed to prevent plugging of perforations.

2888 BLOCK: Concrete blocks shall conform to ASTM C90.

2889 EXPANSION JOINTS: Provide vertical expansion joints at max. 30' intervals by placing rubber-strip or celotex for full vertical hgt. of wall. Longitudinal steel to terminate on each side of joint.

2890 CODE: All work shall be accordance with 2019 CBC.

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2886 BACKFILLING: Backfill shall be free-draining granular soil. Compact to 90% relative density. Allow wall to gain 21 days strength before backfilling. If backfill supports driveway compact to 95% relative density.

2887 DRAINAGE: Provide continuous 4" perforated ABS drain line behind all walls. Drain shall be sloped 1% towards outlet. Contractor shall provide filter blanket in gravel bed to prevent plugging of perforations.

2888 BLOCK: Concrete blocks shall conform to ASTM C90.

2889 EXPANSION JOINTS: Provide vertical expansion joints at max. 30' intervals by placing rubber-strip or celotex for full vertical hgt. of wall. Longitudinal steel to terminate on each side of joint.

2890 CODE: All work shall be accordance with 2019 CBC.

2900 FENCING

2901 REMOVAL: Where fence removal is required per the drawings, fence material shall be saved to the practical extent and neatly stockpiled in a location approved by the owner. Damage fencing and/or concrete bases shall be properly disposed off-site.

2902 RELOCATION: When fences are required to be relocated per the drawings, new fence post shall set in new concrete footings per the fence manufacturers standard requirements or at the spacing currently existing. Chain link fencing shall be reinstalled per the manufacturers standard requirements.

2903 MATERIALS: Fencing and gates within fencing shall be metal, painted black and design shall match existing house guardrail. Gates shall include hardware to provide for self closing and self latching.

2904 Design:

See Architectural Drawings and Specifications.

2920 LANDSCAPING

2921 DRAWINGS: Landscape drawings showing planting, irrigation, and miscellaneous features have been prepared by others.

2922 COORDINATION OF IMPROVEMENTS: The contractor shall be responsible for the coordination of the landscape drawings with the other site development drawings.

2930 LANDSCAPING IRRIGATION SYSTEM

2931 SYSTEM DRAWINGS: A landscape irrigation system drawing has been prepared by others for this project.

2932 EXISTING SYSTEMS: The exact extent and location of the existing irrigation has not been shown on the drawing. The contractor and owner shall locate the existing underground pipe, heads and valves prior to construction.

2933 CONNECTION TO POTABLE WATER SYSTEM: A tee connection shall be provided for in the potable water system for connection of the landscape irrigation systems. The landscape irrigation system will require a backflow prevention device.

2975 EROSION CONTROL (CITY)

2976 CATCH BASIN PROTECTION: A filter system shall be used on catch basin (drop inlets) in public and private streets, and parking areas as a means of sediment control. Alternate methods will require the approval of the city.

2977 SEDIMENT FILTER / BARRIERS: For all projects, a silt fence or straw wattle dike shall be installed along the down slope edge of the disturbed area prior to the commencement of grading. The sediment filter structures will be located so that all runoff from the construction site is filtered, or passes through a sediment detention basin prior to crossing a property line, entering a creek or entering the city storm drain basin. Sediment filter structures are to be inspected regularly by the city inspection staff during inspection scheduled by the contractor or engineer of record, and sediment removed when the depth of sediment is no more than one half the height of the structure. Silt fences and straw wattles shall be installed according to the standard references cited.

2978 SILT FENCES: Should be installed where sediment from sheet flow or rill and gully erosion will enter directly onto adjacent property. When installing, it is important the fabric material be anchored into a trench and backfilled. Maintenance of filter fences is similar to that of straw wattles in that the fabric must be inspected and needed repairs implemented after every storm event. Sediment deposits should be removed when material reaches no more than a depth of one-half the fence height.

2979 PROTECTION OF EXISTING VEGETATION: As far as is practicable, existing vegatation shall be protected and left in place, in accordance with the clearing limits shown on the approved building, grading or public works and erosion control plans. The exception is where exotic plant materials are to be removed, or fire fuels to be reduced in accordance with an approved plan.

2980 MAINTAINANCE RESPONSIBILITY: It shall be the owner's responsibility to maintain control of the entire construction operations and to keep the entire site in compliance with the soil erosion control plan. Owner / contractor shall be responsible for monitoring erosion and sediment control measures prior, during and after storm events. Monitoring includes maintaining a file. Documenting on-site inspections, problems encountered, corrective actions, and notes and a red-line map of remedial implementation measures.

2981 HAULING OF MATERIALS: Reasonable care shall be taken hauling any earth, sand, gravel, stone, debris or any hazardous substances over public street , alley of other public street. Should any blow, spill or track over and upon said public or adjacent private property, immediate clean-up shall occur. Construction entrances shall be installed prior to commencement of grading. All construction traffic entering onto the paved roads must cross the stabilized construction entranceway.

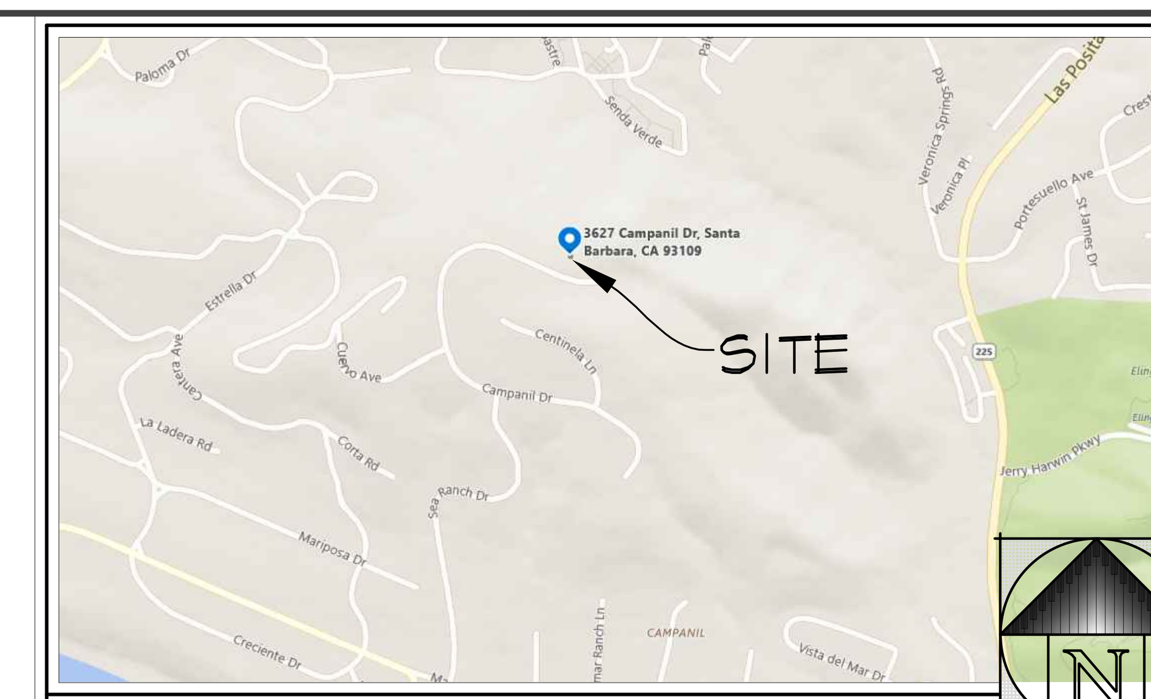
2982 SANITARY FACILITIES: Shall be maintained on-site as appropriate.

2983 EROSION PREVENTION: During the rainy season, all paved areas shall be kept clear of earth material and debris. All earth stockpiles over 2.0 CU.YDs shall be covered by a tarp and ringed with straw bales or silt fencing. The site shall be maintained so as to minimize sediment-laden runoff to any storm drainage system including existing drainage swales and watercourses.

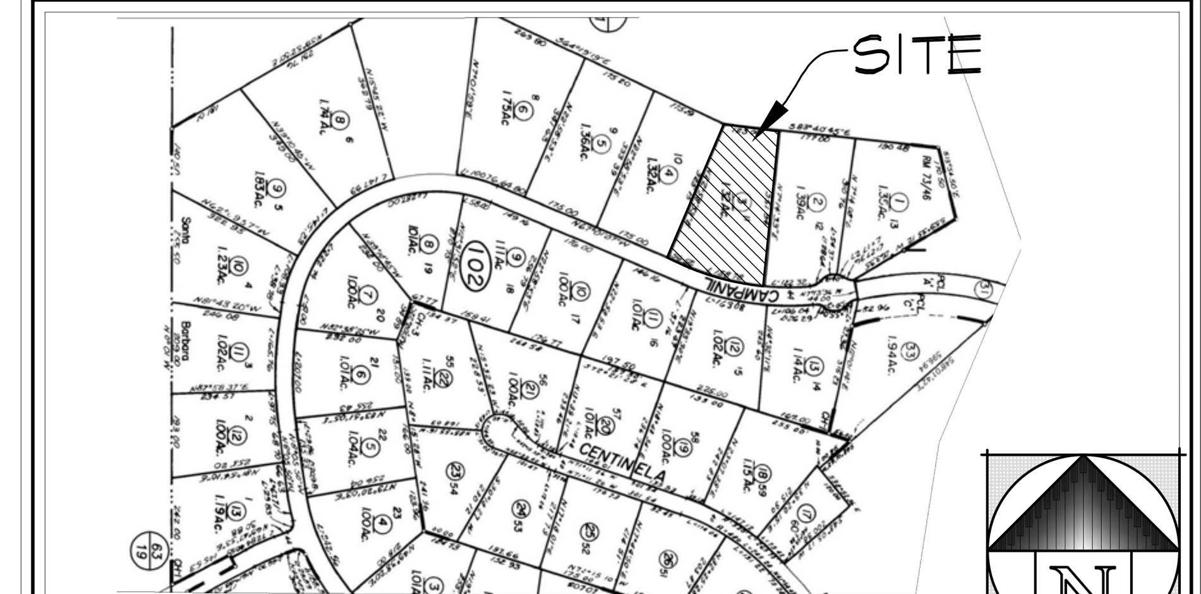
2984 POLLUTION ABATEMENT: Construction operations shall be carried out in such a manner that erosion and water pollution will be minimized. State and local laws concerning pollution abatement shall be complied with.

2985 RAINY SEASON RESTRICTIONS: The facilities shown on this plan are designed to control erosion and sediment during the rainy season, November 1 to April 15. Facilities are to be operable prior to October 15 of any year. Grading operations during the rainy season which leave denuded slopes shall be protected with erosion control measures immediatley following grading on the slopes. This will include use of straw mulch and tackifier, and erosion control blankets.

2986 WINTERIZATION: This plan covers only the first winter following grading with assumed site conditions as shown on the detailed erosion control plan. Prior to September 15, the completion of site improvement shall be evaluated and revisions made to this plan as necessary with the approval of the city. Plans are to be resubmitted for approval prior to August 15 of each subsequent year until site improvements are accepted by the city.



VICINITY MAP
N.T.S.



ASSESSORS MAP
N.T.S.

PROJECT ADDRESS:	3627 CAMPANIL DR. SANTA BARBARA, CA.
OWNER:	DR. PAULA KISLAK
PROPOSED WORK:	STORM WATER MANAGEMENT, GRADING, DRAINAGE, PAVING, UTILITIES & RELATED SITE WORK & EROSION CONTROL FOR ADU
APN:	047-101-003
LAND USE ZONE:	A-1
LOT AREA:	1.32 ACRES 57,500 S.F. (AREAS BASED ON PROBER SURVEY)
FLOOD ZONE:	'X'
FIRE ZONE:	YES (VERY HIGH FIRE ZONE)
GRADING QUANTITIES:	SEE SPEC SECTION 2256 THIS SHEET

PROJECT DATA

1. TOPOGRAPHICAL SURVEY BY: PROBER LAND SURVEYING DATED NOV. 18, 2016. PH# (805) 452-4640
2. ARCHITECTURAL DRAWINGS BY MSSION GROUP ARCHITECT ARCHITECTS. PH# (805) 464-5410
3. LANDSCAPE DRAWINGS BY
4. SOILS REPORT BY PACIFIC MATERIALS LABORATORY DATED DEC. 22, 2016 AND ADDENDUM DEC. 13, 2017. PH# (805) 964-6901 UPDATE LETTER MAY 3, 2022

REFERENCES

1. WATER	CITY OF SANTA BARBARA	1-805-564-5413
2. SEWER	CITY OF SANTA BARBARA	1-805-564-5413
3. GAS	THE GAS COMPANY	1-800-427-2200
4. CABLE T.V.	COX COMMUNICATIONS	1-805-683-6651
5. TELEPHONE	VERIZON	1-800-483-4000
6. ELECTRICITY	SOUTHERN CALIFORNIA EDISON	1-800-684-8123

UTILITY COMPANY & CONTACTS

C1.0	SITEWORK SPECIFICATIONS, VICINITY MAP, ASSESSORS PARCEL MAP, SITE DATA, REFERENCES
C1.1	KEY MAP/TOPO/DEMOLITION PLAN
C2.0	GRADING, DRAINAGE & UTILITIES PLAN, CONSTRUCTION NOTES, SYMBOLS
C2.1	STORM WATER MANAGEMENT, HYDROLOGY STUDY, BMP INSPECTION
C3.0	SITE SECTIONS, EROSION CONTROL PLAN AND DETAILS
C4.0	SITEWORK DETAILS
C5.0	RAIN HARVESTING SYSTEM

SHEET INDEX

ATTENTION:

ALL UNDERGROUND UTILITIES AND SUBSTRUCTURES SHOWN HEREON WERE OBTAINED FROM THE BEST AVAILABLE SOURCES AND ARE PRESUMED TO BE ACCURATE AND COMPLETE, BUT SINCE THE INFORMATION WAS OBTAINED FROM OTHERS, IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO VERIFY, LOCATE, AND PROTECT ALL UTILITIES AND SUBSTRUCTURES SHOWN OR NOT SHOWN.

MARK OUT PROPOSED EXCAVATION AREA IN WHITE PAINT OR PROVIDE OTHER SUITABLE MARKINGS.

CALL UNDERGROUND SERVICE ALERT AT 811 FROM 6AM TO 7PM, MONDAY THROUGH FRIDAY (EXCLUDING HOLIDAYS) AT LEAST TWO BUSINESS DAYS BEFORE DIGGING. NOTIFYING UNDERGROUND SERVICE ALERT PRIOR TO EXCAVATION IS REQUIRED BY CALIFORNIA STATE LAW. FAILURE TO COMPLY CAN CARRY HEAVY FINES. UNDERGROUND SERVICE ALERT WILL CONTACT LOCAL UTILITIES TO MARK THE LOCATION OF ALL UTILITY-OWNED LINES FOR FREE.

WAIT UNTIL THE UTILITY COMPANY EITHER MARKS ITS PIPELINES AND INDICATES PIPE MATERIAL AND DIAMETER – OR ADVISES YOU THE AREA IS CLEAR OF ITS PIPES BEFORE YOU START DIGGING.

USE ONLY HAND TOOLS WITHIN 24 INCHES OF EACH MARKED UTILITY LINE TO DETERMINE THE EXACT LOCATION OF ALL LINES BEFORE USING ANY POWER EXCAVATION EQUIPMENT IN THE AREA. MEASURE THE 24 INCHES FROM THE INDICATED OUTSIDE DIAMETER ON EACH SIDE OF THE PIPE.

CALL 811

UNDERGROUND SERVICE ALERT

REGISTERED PROFESSIONAL ENGINEER
MIKE GONES
RCE 38168
Exp. 3/25/2025
CIVIL
STATE OF CALIFORNIA

STAMP

MIKEGONES
CIVIL ENGINEER
RCE 38168
1219 1/2 LAGUNA ST
SANTA BARBARA, CA 93101
ph: (805) 966-2259
fax: (805) 966-3860
mikegones@cox.net

KISLAK ADU
3627 CAMPANIL DRIVE
SANTA BARBARA, CA 93109

Drawings by EG

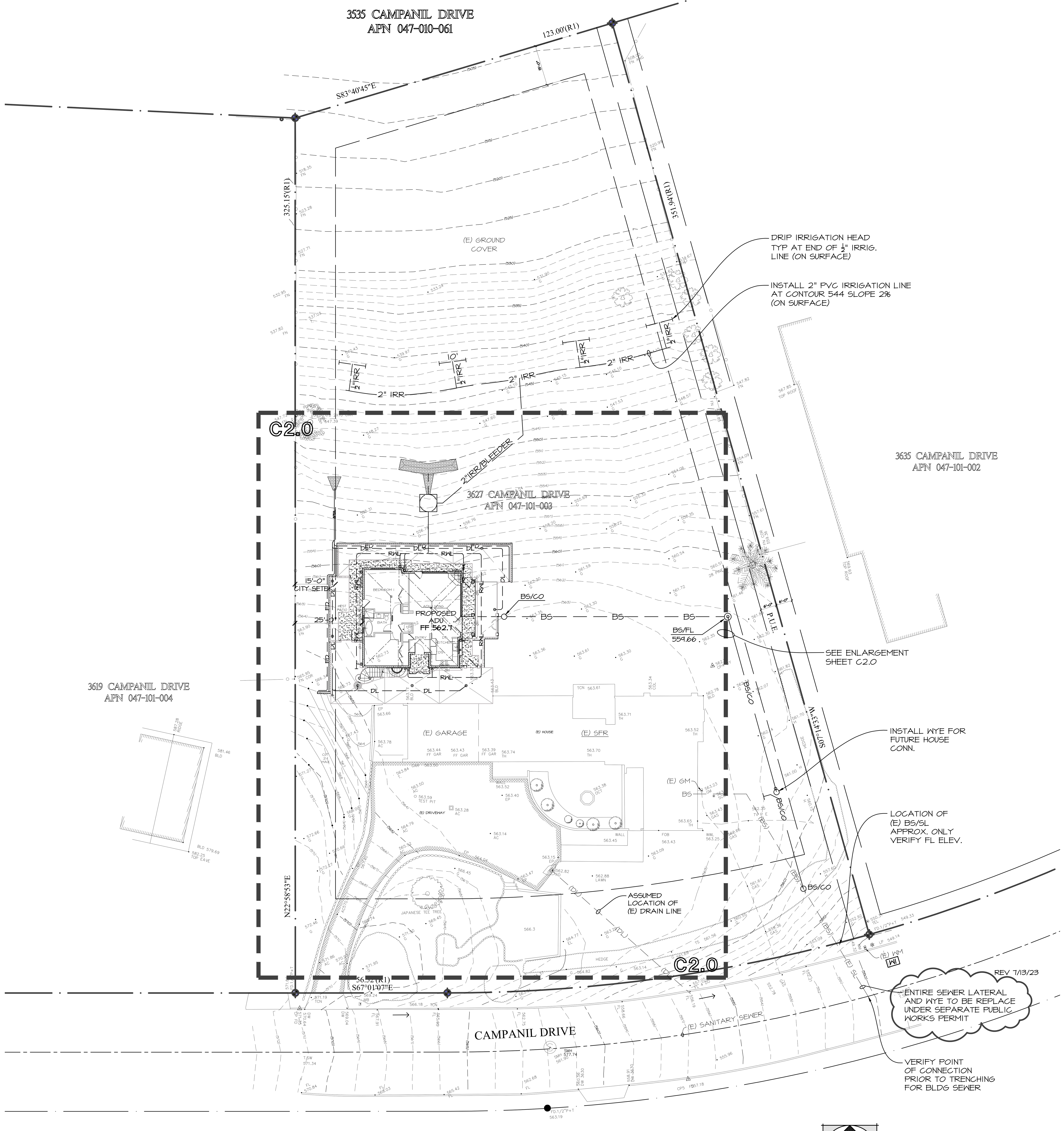
DATE: 6/30/2023

REVISIONS:

JOB No: 22712

C1.0

SHEET 1 of 7



KEY MAP/TOPO PLAN

SURVEYOR's NOTES

1. BOUNDARY DATA: CAMPANIL HILLS TR. BK.73, PG.46 OF MAPS (R1)
2. HORIZONTAL DATUM: NAD83; COORD.SYSTEM: SPC CA 05 sFT, EPOCH 2022.75
3. VERTICAL DATUM: NAVD88; INITIAL STA. SMARTNET 3229
4. PARCEL SIZE: 1.32 AC.GROSS& NET (R1)
5. A CURRENT TITLE REPORT IS REQUIRE TO VERIFY AND PLOT ALL EASEMENTS AFFECTING SUBJECT LOT.
6. BASIS OF BOUNDARY (RECORD BOUNDARY ROTATED TO GRID): FRONT LOT CORNERS (Pt.50 > Pt.56 SHOWN HEREON) S71°19'57"E 214.51' MEASURED; S72°49'10"E 214.40' CALC. FROM (R1); ROTATION = -1°29'13"
7. ORTHOMOSAIC IMAGE: PHANTOM 4 PRO DRONE + PIX4D MAPPER

REGISTERED PROFESSIONAL ENGINEER
MIKE GONES
RCE 38168
Exp. 3/25/2025
CIVIL
STATE OF CALIFORNIA
STAMP

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mikegonesce@cox.net

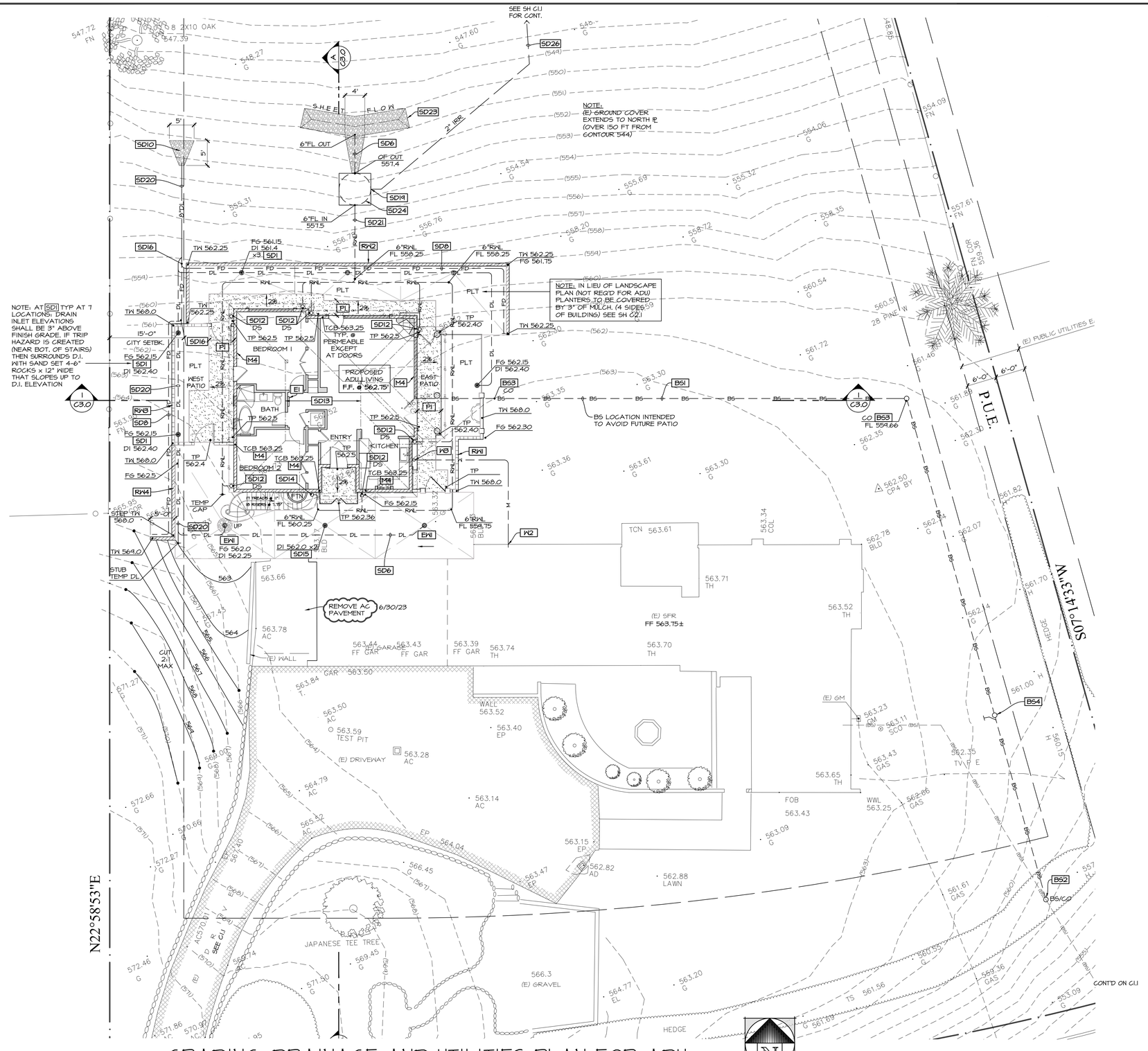
KISLAK ADU
3627 CAMPANIL DRIVE
SANTA BARBARA, CA 93109

Drawings by EG
DATE: 6/30/2023
REVISIONS:
REV 7/13/2023

JOB No: 22712

C1.1

THESE DRAWINGS ARE THE PROPERTY OF MIKE GONES C.E., AND MAY BE USED ONLY FOR THE SPECIFIC PROJECT


SEE SH C1.1 FOR CONT.
SD26
SHEET FLOW
SD23
2' IRR.
NOTE: (E) GROUND COVER EXTENDS TO NORTH PL (OVER 150 FT FROM CONTOUR 544)
6"FL OUT
SD6
OF OUT 557.4
SD19
SD24
6"FL IN 557.5
SD21
SD10
SD20
SD16
TW 562.25
FG 561.15 DI 561.4 x3
SD1
RW2
6"RWL FL 558.25
TW 562.25 FG 561.15
NOTE: IN LIEU OF LANDSCAPE PLAN (NOT REQ'D FOR ADU) PLANTERS TO BE COVERED BY 3" OF MULCH. (4 SIDES OF BUILDING) SEE SH C2.1
NOTE: AT SD1 TYP AT 7 LOCATIONS, DRAIN INLET ELEVATIONS SHALL BE 3" ABOVE FINISH GRADE. IF TRIP HAZARD IS CREATED (NEAR BOT. OF STAIRS) THEN SURROUNDS D.I. WITH SAND SET 4-6" ROCKS x 12" WIDE THAT SLOPES UP TO D.I. ELEVATION
15'-0" CITY SETBK.
TW 568.0
FG 562.15
SD1
DI 562.40
TW 562.5
SD12 DS
TCB 563.25 TYP. @ PERMEABLE EXCEPT AT DOORS
TP 562.40
TP 562.5
BEDROOM 1
PROPOSED ADU LIVING F.F. @ 562.75'
EAST PATIO
WEST PATIO
BATH
ENTRY
KITCHEN
BEDROOM 2
TCB 563.25
SD14
SD13
RW3
SD8
RW4
TEMP CAP
STEP TW 560.0
SD20
UP
EW1
FG 562.0
DI 562.25
TW 564.0
STUB TEMP DL
6"RWL FL 560.25
DI 562.0 x2
SD15
SD6
6"RWL FL 559.75
W2
TCN 563.61
563.71 TH
563.52 TH
563.70 TH
(E) SFR FF 563.75±
563.78 AC
563.44 FF GAR
563.43 FF GAR
563.39 FF GAR
563.74 TH
(E) GARAGE
(E) WALL
563.84 T.
GAR 563.50
563.50 AC
563.59 TEST PIT
(E) DRIVEWAY
563.28 AC
WALL 563.52
563.40 EP
563.14 AC
564.79 AC
565.82 AC
564.04 EP
563.15 EP
562.82 AD
562.88 LAWN
566.3 (E) GRAVEL
JAPANESE TEE TREE
REMOVE AC PAVEMENT 6/30/23
CUT 2:1 MAX
EP 563.66
563
564
565
566
567
568
569
570
571
572
(E) PUBLIC UTILITIES E.
6'-0"
6'-0"
P.U.E.
S07°14'33"W
HEDGE
561.82
562.14
561.70 H
561.00 H
560.15 H
557.61 FN
554.09 FN
559.36 FN COR
560.54
560.51
561.72
561.46
562.30
562.35
562.07
562.84
562.78 BLD
563.36
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563.34 COL
562.50 CP4 BY
561.89
561.61 GAS
562.35 TV/P E
563.65 TH
563.43 FOB
563.25 WWL
563.66 GAS
563.23 GM
563.11 SCO
560.55
559.36 GAS
563.09
561.56 TS
563.20
564.77 EL
563.47 EP
569.74
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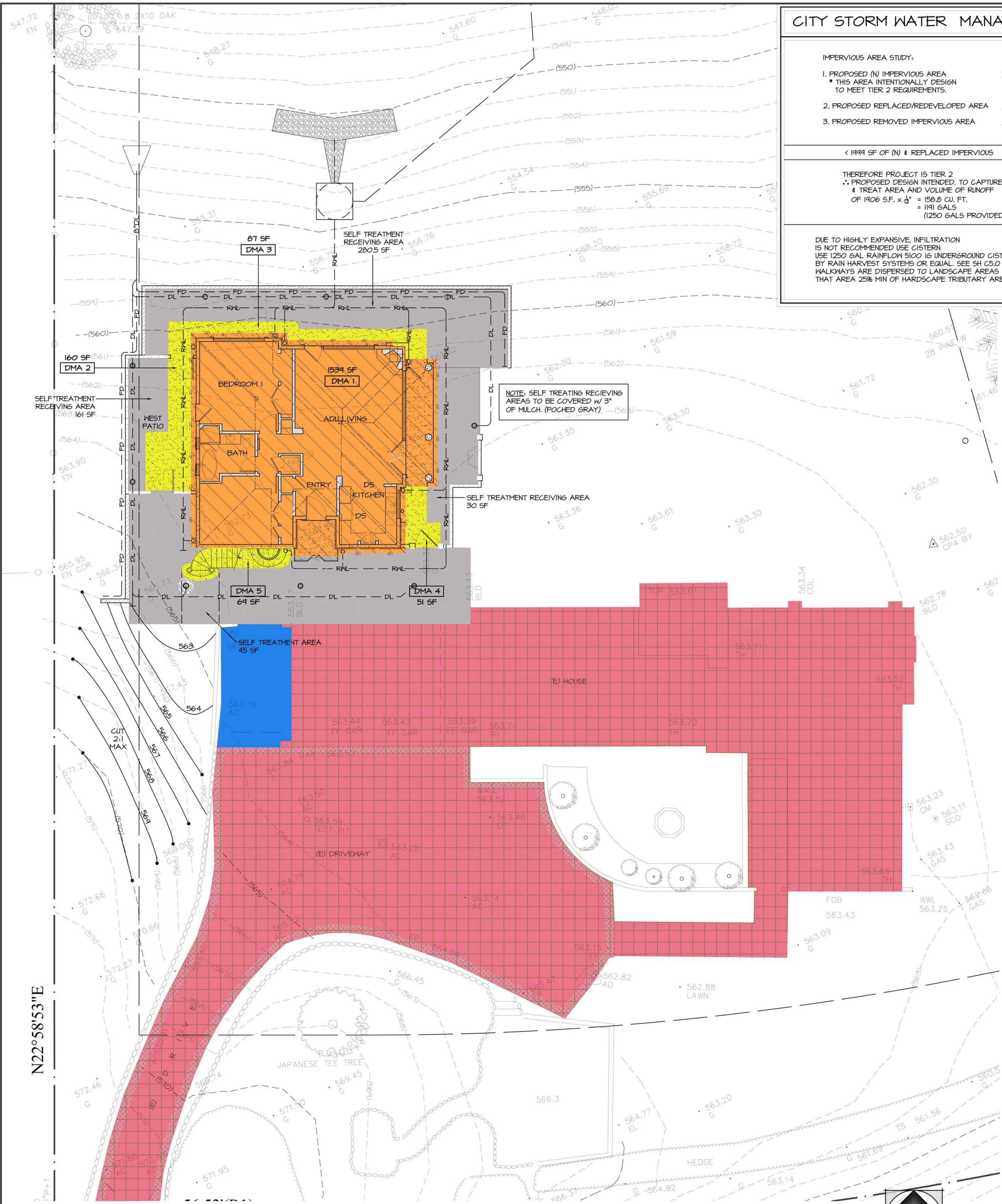


STORM WATER DRAINAGE MANAGEMENT AREA STUDY

1" = 10'

CITY STORM WATER MANAGEMENT

IMPERVIOUS AREA STUDY:

1. PROPOSED (N) IMPERVIOUS AREA — 1906*
   * THIS AREA INTENTIONALLY DESIGN TO MEET TIER 2 REQUIREMENTS.
2. PROPOSED REPLACED/REDEVELOPED AREA — 0
3. PROPOSED REMOVED IMPERVIOUS AREA — 264

< 1999 SF OF (N) & REPLACED IMPERVIOUS

THEREFORE PROJECT IS TIER 2
∴ PROPOSED DESIGN INTENDED. TO CAPTURE & TREAT AREA AND VOLUME OF RUNOFF OF 1906 S.F. x $\frac{1}{12}$" = 158.8 CU. FT.
= 1191 GALS
(1250 GALS PROVIDED)

DUE TO HIGHLY EXPANSIVE, INFILTRATION IS NOT RECOMMENDED USE CISTERN
USE 1250 GAL RAINFLOW 5100 IG UNDERGROUND CISTERN SYSTEM BY RAIN HARVEST SYSTEMS OR EQUAL. SEE SH C5.0
WALKWAYS ARE DISPERSED TO LANDSCAPE AREAS THAT AREA 25% MIN OF HARDSCAPE TRIBUTARY AREA.

LEGEND: AREA STUDY

PROPOSED NEW IMPERVIOUS AREA- AREA WHERE NEW IMPERVIOUS AREA (E.G. HARDSCAPE AND ROOF) IS PROPOSED WHERE THERE IS EXISTING PERVIOUS AREA (LANDSCAPING, PERMEABLE PAVEMENT, ETC.)
1539 SQ FT DMA 1

PROPOSED REPLACED/REDEVELOPED IMPERVIOUS AREA- AREA WHERE NEW IMPERVIOUS AREA (E.G. HARDSCAPE AND ROOF) IS PROPOSED WHERE THERE IS CURRENTLY EXISTING IMPERVIOUS AREA (E.G. HARDSCAPE AND ROOF)
0 SQ FT

PROPOSED REMOVED IMPERVIOUS AREA- AREA WHERE NEW PERVIOUS AREA IS PROPOSED (LANDSCAPING, PERMEABLE PAVEMENT, ETC) WHERE THERE IS CURRENTLY EXISTING IMPERVIOUS AREA (E.G. HARDSCAPE AND ROOF)
264 SQ FT

(E) IMPERVIOUS TO REMAIN
7031 SQ FT (E) HOUSE & DRIVEWAY

SELF TREATING WALKS (DRAINS TO VEGETATION YARD/SELF TREATMENT AREAS)
367 SQ FT DMA 2-5
AREA REQ'D = .25x367 = 92 SF
AREA PROVIDED = 517 SF

NOTE: TOTAL NEW IMPERVIOUS AREA (INCLUDING SELF TREATING WALKS) = 1539 + 367 = 1906 SF
PROPOSED IMPERVIOUS AREA IS CUMULATIVE FOR TWO YEARS AFTER CERTIFICATE OF OCCUPANCY TO PREVENT PIECE MEALING OF PROJECTS TO AVOID STORM WATER MANAGEMENT.

NOTE: AREAS SHOWN ARE IN COLOR PLEASE PRINT IN COLOR BEFORE REVIEW.

AREA TO BE COVERED IN 3" OF MULCH.

POST CONSTRUCTION BMP INSPECTION

The following mandatory inspection by the city Building inspector or City QSP are required. Inspection shall be called in by Contractor 72 hours prior to needed inspection. The City will then route to the QSP inspector or third Party Company.

A. General — 1. Pre construction meeting attendance.

B. Cistern —
1. Excavation
2. After tanks set on certified class II base.
3. After U.G. piping is complete.
4. After system is complete with pumps/controls etc.

C. Irrigation pipe — 1. After pipe & irrig. heads are installed.

STORM WATER HYDROLOGY STUDY

$Q_{25}pre$ = CIA (cfs)
= [0.95x2.9x(7295/43560)] + [0.71x2.9x(50205/43560)]
= 0.46 cfs + 2.37 cfs
= 2.83 cfs

$Q_{25}post$ = CIA (cfs)
= [0.95x2.9x(9201/43560)] + [0.71x2.9x(48299/43560)]
= 0.58 + 2.28 cfs
= 2.86 cfs

% increase = (2.86-2.83)/2.83 = 0.011 (1.1%)

Q = CIA (cfs) (rational formula)
*C = 0.71 landscape *(per County Engineering Design Standards, runoff coefficiency vs. rainfall figure 2 of Blue Book)
C = 0.95 hardscape
I = 2.9 in/hr 25 yr storm (per County Flood Control intensity duration curves, figure 1 of Blue Book)
A = tributary area in acres

Volume Reduction Requirements (Storm Volume):

Compare $\triangle Vol_{25}$ (25 yr storm runoff volume to be retained on site) to 1.0 in/24 hr storm.

Per City of SB Storm Guidance Manual, Appendix C p. C-3:

$\triangle Vol_{25}$ = volume of runoff to be retained on site (cu. ft.)
= 0.5 x $\triangle Q_{25}$ x 2.67 x 720 (T_C in sec)
= 0.5 x (2.86-2.83) x 2.67 x 720
= 28.84 cu. ft.

For 1.0 in/24 hr storm
$Vol_{one\text{-}inch}$ = (N) or replaced impervious area x 1.0 in/12 in/ft
= 1906 x 1.0/12 = 158.8 cu. ft.

$Vol_{one\text{-}inch} > \triangle Vol_{25}$ ∴ required storage = 158.8 cu. ft. x 7.5 gal. ft3 = 1191 gal.

Available storage per sheet C.2 of plans: Underground Cisterns = 1 x 1250 gal. each = 1250 gal.

STORM WATER MANAGEMENT STUDY

THE FOLLOWING INFORMATION IS BASED ON COUNTY STORM WATER BMP GUIDANCE MANUAL & GRADING PLAN AND DRAINAGE BY MIKE GONES CIVIL ENGINEER, DATED MARCH 2023.

1. PROJECT IS HILLSIDE RESIDENTIAL WITH LESS THAN 1999 SF NEW IMPERVIOUS THEREFORE TIER 2.
2. SITE ASSESSMENT
   A. HILLSIDE DESIGN DISTRICT
   B. ARROYO BURRO WATERSHED
   C. TYPE SOIL D / CLAY
   D. SITE SLOPES MOSTLY NORTH > BLDG PAD AREA ≈ 5%
      HILLSIDE ≈ 25%
   E. NO GROUND WATER ANTICIPATED
   F. NO FLOOD HAZARD

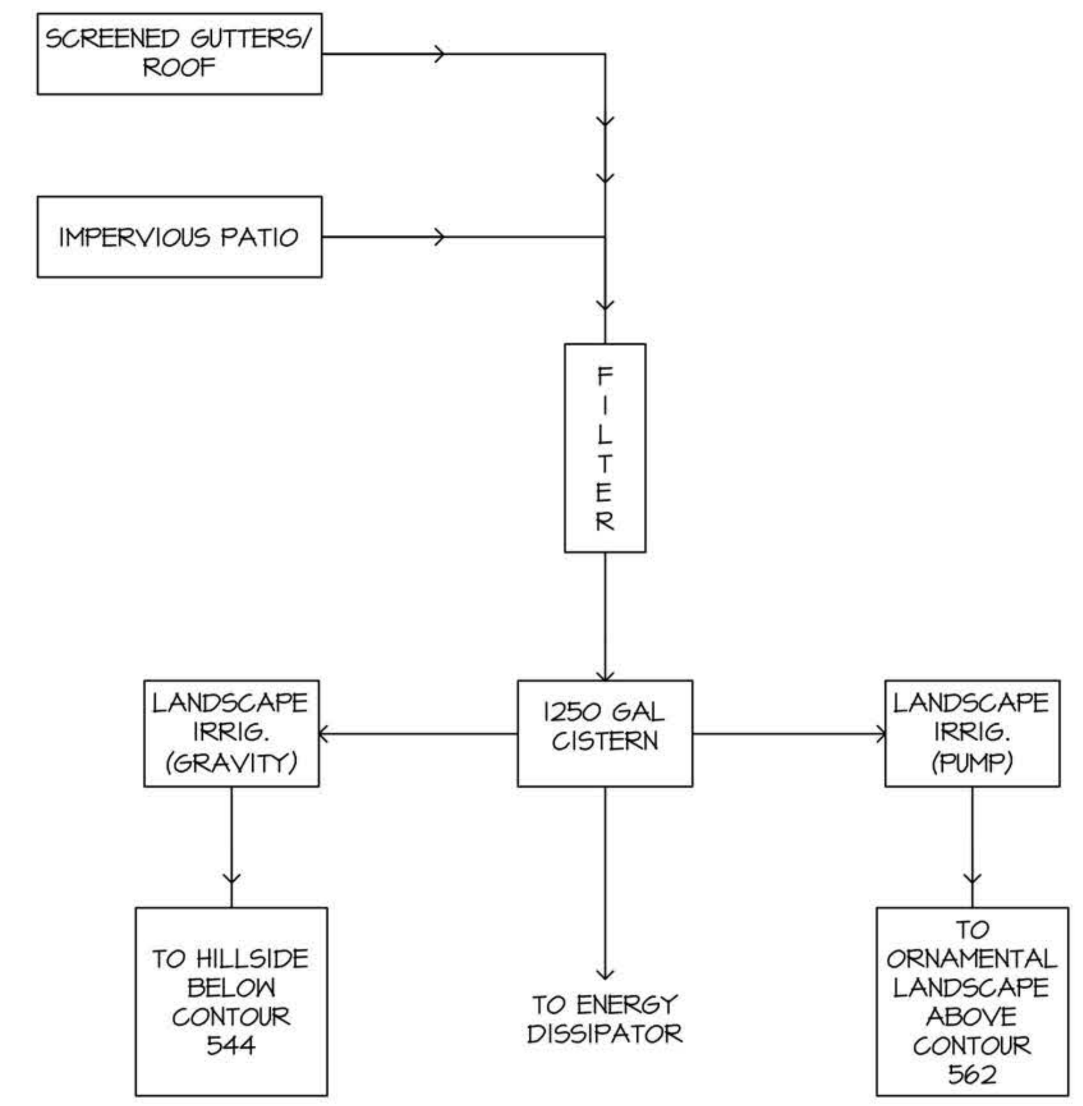
   I. POLLUTANTS OF CONCERN:
      TRASH - NOT AN ISSUE, PROPERTY LINE IS FENCED
      NUTRIENTS - N/A
      BACTERIA - NOT AN ISSUE CONNECTED TO PUBLIC SEWER
      SEDIMENT - NOT AN ISSUE OTHER THAN FROM DURING CONSTRUCTION (EROSION CONTROL PLAN WILL BE PREPARED)
      HYDROCARBON - DRIVEWAY RUNOFF (TREATED BY FILTRATION SYSTEM)
      METAL - NOT AN ISSUE FOR RESIDENTIAL PROJECT
      PESTICIDE - N/A
3. SOILS REPORT: SOIL TYPE: EXPANSIVE CLAY. STEEP HILLSIDE, MINIMAL INFILTRATION.
4. SITE DESIGN BMP OPTIONS: (E) RUNOFF PATTERNS TO BE HONORED. GRADING TO RESPECT (E) CONTOURS.
5. BASIC BMP'S - TIER 2, SEE STORM WATER RUNOFF BMP's.
6. STORM WATER BMP OPTION SELECTED: CISTERN.
7. AREA STUDY FOR HYDROLOGY STUDY SEE SEPARATE STUDY THIS SHEET FOR CITY SWMP AREAS.

A. IMPERVIOUS AREAS (SQ. FT.)	(E)	PROPOSED	CHANGE
1. ROOF AREA	2994	4533	+ 1539
2. PATIO/WALK	1067	1434	+ 367
3. DRIVEWAY	3234	3234	0
4. SUB-TOTAL	7295	9201	+ 1906
B. PERVIOUS (SQ. FT.)	(E)	PROPOSED	PROPOSED
1. PATIO/WALK	0	0	0
2. DRIVEWAY	0	0	0
3. LANDSCAPE	50,205	48,299	- 1906
3. SUB-TOTAL	50,205	48,299	- 1906
TOTAL A4 + B3	57,500	57,500	0

NOTES: 1. INCREASE IN IMPERVIOUS < 2000 S.F. ∴ TIER 2.

8. PROPOSED IMPERVIOUS AREA = 1906 SF x $\frac{1}{12}$ = 158.8 CU. FT. (Vwq) x 7.5 GAL/CU. FT. = 1191 GAL. SEE HYDROLOGY STUDY THIS SHEET FOR MORE INFORMATION.

IMPERVIOUS AREA DATA:
NEW IMPERVIOUS AREA = 1906 S.F.
REPLACED IMPERVIOUS AREA = 0 S.F.
REMOVED IMPERVIOUS AREA = 0 S.F.



NOTE: SEE SITE PLAN C2.0 FOR IRRIGATION CONTROL/VALVES THAT USE RAINWATER FOR LANDSCAPE IRRIGATION.

STORM WATER BMP MAINTENANCE AGREEMENT

THE PROPOSED STORM WATER BEST MANAGEMENT PRACTICES WILL BE MAINTAINED PURSUANT TO SBMC 22.87.050. PROPOSED BEST MANAGEMENT PRACTICES: UNDERGROUND CISTERNS CONNECTED TO LANDSCAPING AND PERMEABLE PATH SELF TREATING WALKWAYS.

Paula Kislak 6/30/23

PROPERTY OWNER SIGNATURE
PAULA KISLAK — DATE

STORM WATER MANAGEMENT CERTIFICATION

BEFORE BUILDING INSPECTOR WILL GRANT CERTIFICATE OF OCCUPANCY AND FINALIZE THE BUILDING PERMIT, THE BUILDING AND SAFETY DIVISION OR THEIR CONTRACTED QSP SERVICE PROVIDER MUST VERIFY THAT ALL POST CONSTRUCTION STORM WATER BMP'S WERE INSTALLED AS APPROVED AND THAT THEY COMPLY WITH THE CITY'S TIER 3 STORM WATER REQUIREMENTS.

REGISTERED PROFESSIONAL ENGINEER
MIKE GONES
RCE 38168
Exp. 3/25/2025
CIVIL
STATE OF CALIFORNIA
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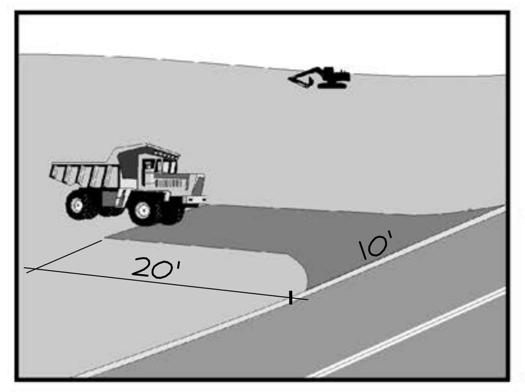
Drawings by EG
DATE: 6/30/2023
REVISIONS:

JOB No: 22772

C2.1

Stabilized Construction Entrance/Exit TC-1



Standard Symbol

BMP Objectives
- ● Soil Stabilization
- ○ Sediment Control
- ● Tracking Control
- ● Wind Erosion Control
- ○ Non-Storm Water Management
- ○ Materials and Waste Management

Definition and Purpose A stabilized construction access is defined by a point of entrance/exit to a construction site that is stabilized to reduce the tracking of mud and dirt onto public roads by construction vehicles.

Appropriate Applications
- Use at construction sites:
  - Where dirt or mud can be tracked onto public roads.
  - Adjacent to water bodies.
  - Where poor soils are encountered.
  - Where dust is a problem during dry weather conditions.
- This BMP may be implemented on a project-by-project basis in addition to other BMPs when determined necessary and feasible by the Resident Engineer (RE).

Limitations
- Site conditions will dictate design and need.

Standards and Specifications
- Limit the points of entrance/exit to the construction site.
- Limit speed of vehicles to control dust.
- Properly grade each construction entrance/exit to prevent runoff from leaving the construction site.
- Route runoff from stabilized entrances/exits through a sediment-trapping device before discharge.
- Design stabilized entrance/exit to support the heaviest vehicles and equipment that will use it.

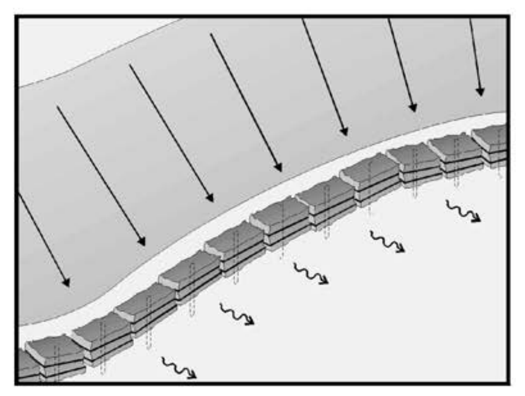
5 | CONSTRUCTION ENTRANCE | N.T.S.

BEST MANAGEMENT PRACTICES FOR CONSTRUCTION ACTIVTIES:

- ERODED SEDIMENTS AND OTHER POLLUTANTS MUST BE RETAINED ON SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES OR WIND.
- STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEINGTRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER.
- FUELS, OILS, SOLVENTS AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM.
- EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS MUST BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF AS A SOLID WASTE.
- TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.
- SEDIMENTS AND OTHER MATERIAL MAY NOT BE TRACED FROM THE SITE BY VEHICLE TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
- ANY SLOPES WITH DISTURBED SOILS OR DEMANDED OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER.

1 | BEST MANAGEMENT PRACTICES

Straw Bale Barrier SC-9



Standard Symbol

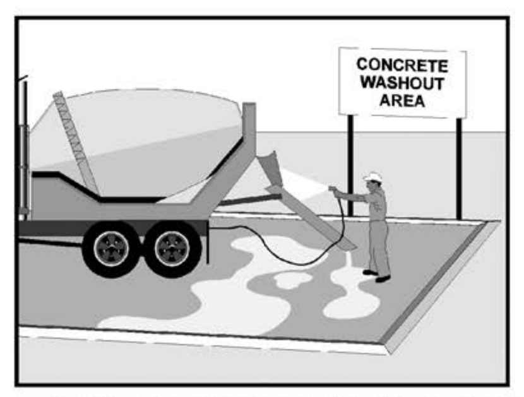
BMP Objectives
- ○ Soil Stabilization
- ● Sediment Control
- ○ Tracking Control
- ○ Wind Erosion Control
- ○ Non-Storm Water Management
- ○ Materials and Waste Management

Definition and Purpose A straw bale barrier is a temporary linear sediment barrier consisting of straw bales, designed to intercept and slow sediment-laden sheet flow runoff. Straw bale barriers allow sediment to settle from runoff before water leaves the construction site.

Appropriate Applications
- This BMP may be implemented on a project-by-project basis in addition to other BMPs when determined necessary and feasible by the Resident Engineer (RE).
- Along the perimeter of a site.
- Along streams and channels.
- Below the toe of exposed and erodible slopes.
- Down slope of exposed soil areas.
- Around stockpiles.
- Across minor swales or ditches with small catchments.
- Around above grade type temporary concrete washouts (See BMP WM-8, "Concrete Waste Management").
- Parallel to a roadway to keep sediment off paved areas.

6 | STRAW BALE BARRIER | N.T.S.

Concrete Waste Management WM-8



Standard Symbol

BMP Objectives
- ○ Soil Stabilization
- ○ Sediment Control
- ○ Tracking Control
- ○ Wind Erosion Control
- ● Non-Storm Water Management
- ● Materials and Waste Management

Definition and Purpose These are procedures and practices that are designed to minimize or eliminate the discharge of concrete waste materials to the storm drain systems or watercourses.

Appropriate Applications
- Concrete waste management procedures and practices are implemented on construction projects where concrete is used as a construction material or where concrete dust and debris result from demolition activities.
- Where slurries containing portland cement concrete (PCC) or asphalt concrete (AC) are generated, such as from sawcutting, coring, grinding, grooving, and hydro-concrete demolition.
- Where concrete trucks and other concrete-coated equipment are washed on site, when approved by the Resident Engineer (RE). See also NS-8, "Vehicle and Equipment Cleaning."
- Where mortar-mixing stations exist.

Limitations
- None identified.

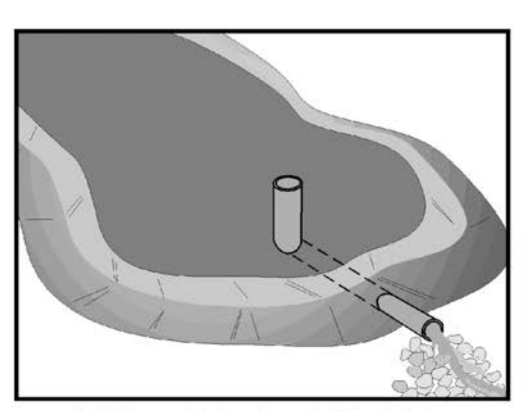
Standards and Specifications

Education
- Educate employees, subcontractors, and suppliers on the concrete waste management techniques described herein.
- The Contractor's Water Pollution Control Manager (WPCM) shall oversee and enforce concrete waste management procedures.

Concrete Slurry Wastes
- PCC and AC waste shall not be allowed to enter storm drains or watercourses.

2 | CONCRETE WASHOUT AREA | N.T.S.

Sediment/Desilting Basin SC-2



Standard Symbol

BMP Objectives
- ○ Soil Stabilization
- ● Sediment Control
- ○ Tracking Control
- ○ Wind Erosion Control
- ○ Non-Storm Water Management
- ○ Materials and Waste Management

Definition and Purpose A sediment/desilting basin is a temporary basin formed by excavating and/or constructing an embankment so that sediment-laden runoff is temporarily detained under quiescent conditions, allowing sediment to settle out before the runoff is discharged (refer to Figures 1 and 2).

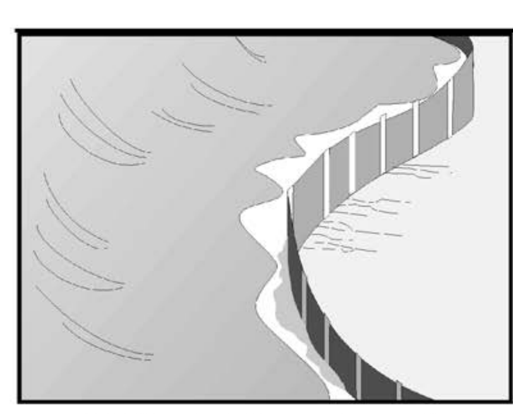
Appropriate Applications Sediment basins shall be designed in accordance with Section A of the State of California NPDES General Permit for Storm Water Discharges Associated with Construction Activities (General Permit). If there is insufficient area to construct a sediment basin in accordance with the General Permit requirements, then the alternate desilting design standards specified herein may be used. This BMP may be implemented on a project-by-project basis with other BMPs when determined necessary and feasible by the RE.

Sediment/Desilting Basins shall be considered for use:
- On construction projects with disturbed areas during the rainy season.
- Where sediment-laden water may enter the drainage system or watercourses.
- At outlets of disturbed soil areas with areas between 2 ha and 4 ha (5 ac and 10 ac).

Limitations
- Alternative BMPs must be thoroughly investigated for erosion control before selecting temporary desilting basins.
- Requires large surface areas to permit settling of sediment.
- Not appropriate for drainage areas greater than 30 ha (75 ac).
- Not to be located in live streams

7 | SEDIMENTATION BASIN | N.T.S.

Silt Fence SC-1



Standard Symbol

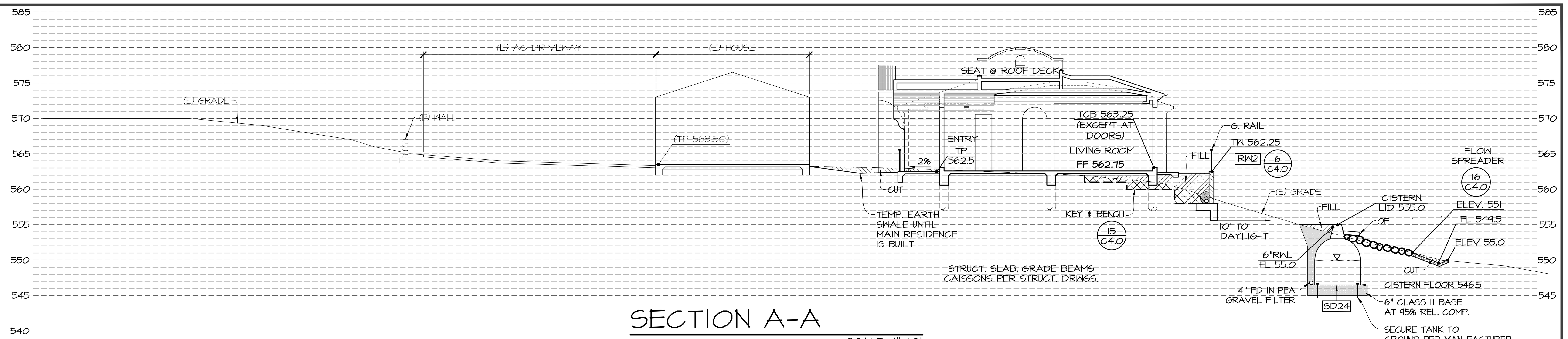
BMP Objectives
- ○ Soil Stabilization
- ● Sediment Control
- ○ Tracking Control
- ○ Wind Erosion Control
- ○ Non-Storm Water Management
- ○ Materials and Waste Management

Definition and Purpose A silt fence is a temporary linear sediment barrier of permeable fabric designed to intercept and slow the flow of sediment-laden sheet flow runoff. Silt fences allow sediment to settle from runoff before water leaves the construction site.

Appropriate Applications Silt fences are placed:
- Below the toe of exposed and erodible slopes.
- Down-slope of exposed soil areas.
- Around temporary stockpiles.
- Along streams and channels.
- Along the perimeter of a project.

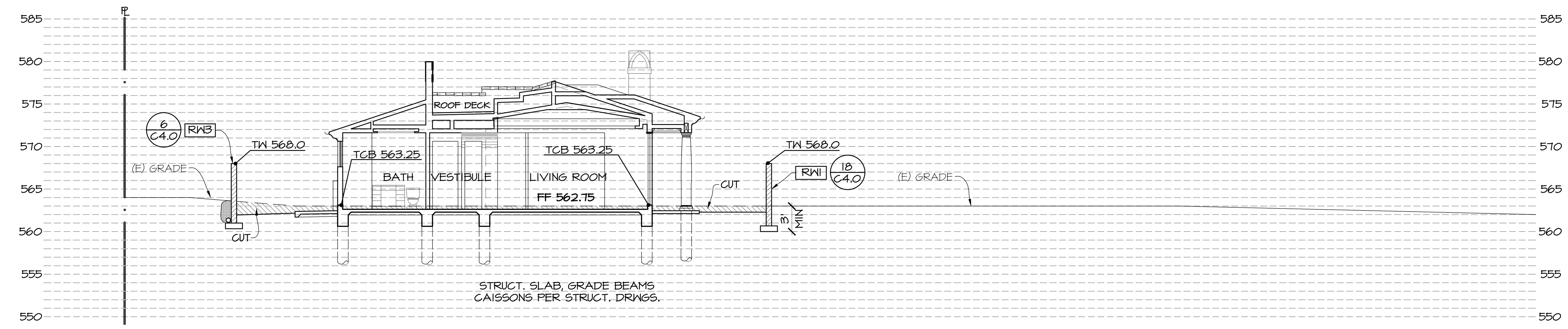
Limitations
- Not effective unless trenched and keyed in.
- Not intended for use as mid-slope protection on slopes greater than 1:4 (V:H).
- Must be maintained.
- Must be removed and disposed of.
- Don't use below slopes subject to creep, slumping, or landslides.
- Don't use in streams, channels, drain inlets, or anywhere flow is concentrated.
- Don't use silt fences to divert flow.

3 | SILT FENCE | N.T.S.



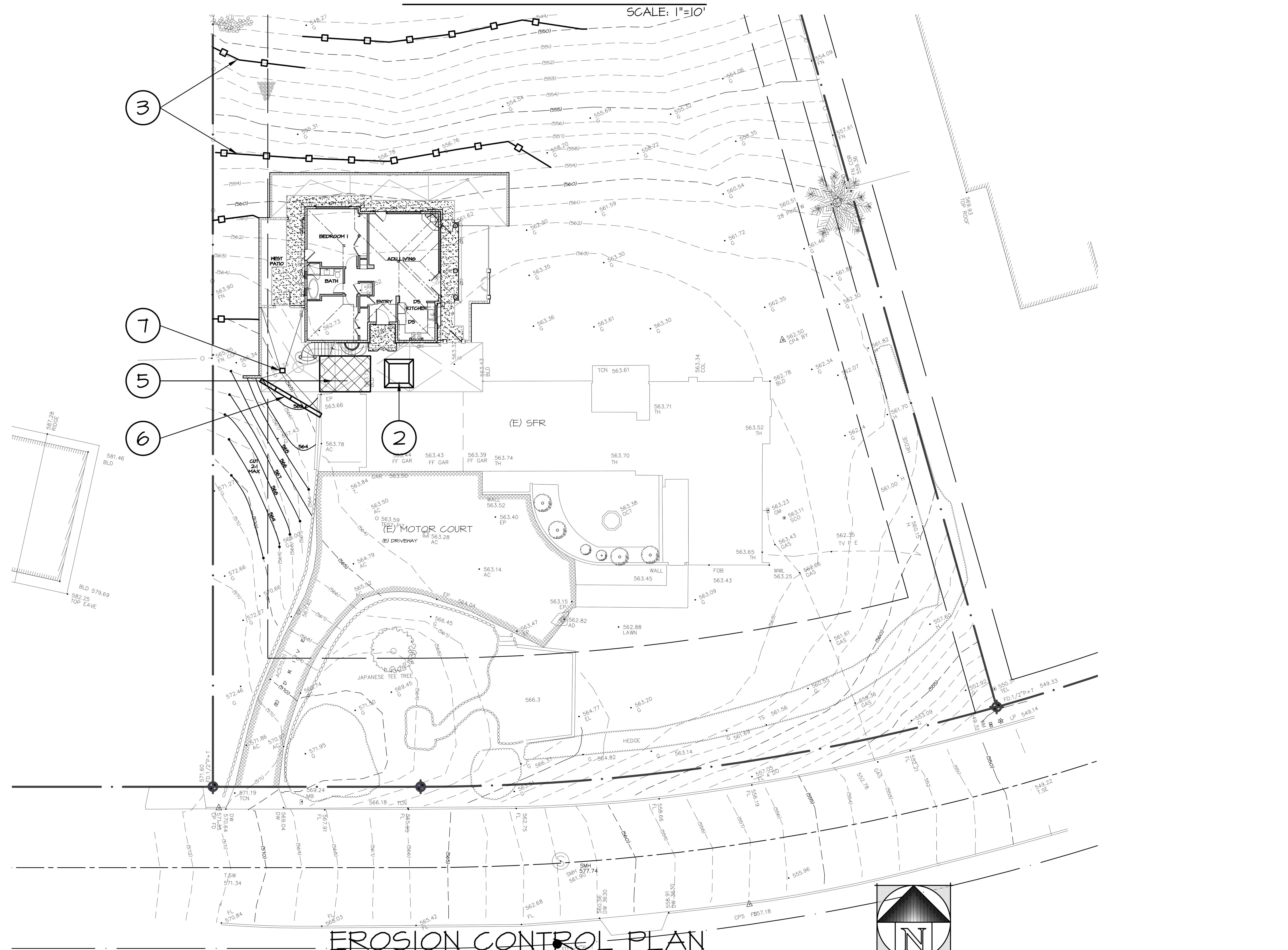
SECTION A-A

SCALE: 1"=10'



SECTION 1-1

SCALE: 1"=10'



EROSION CONTROL PLAN

STAMP

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Drawings by EG

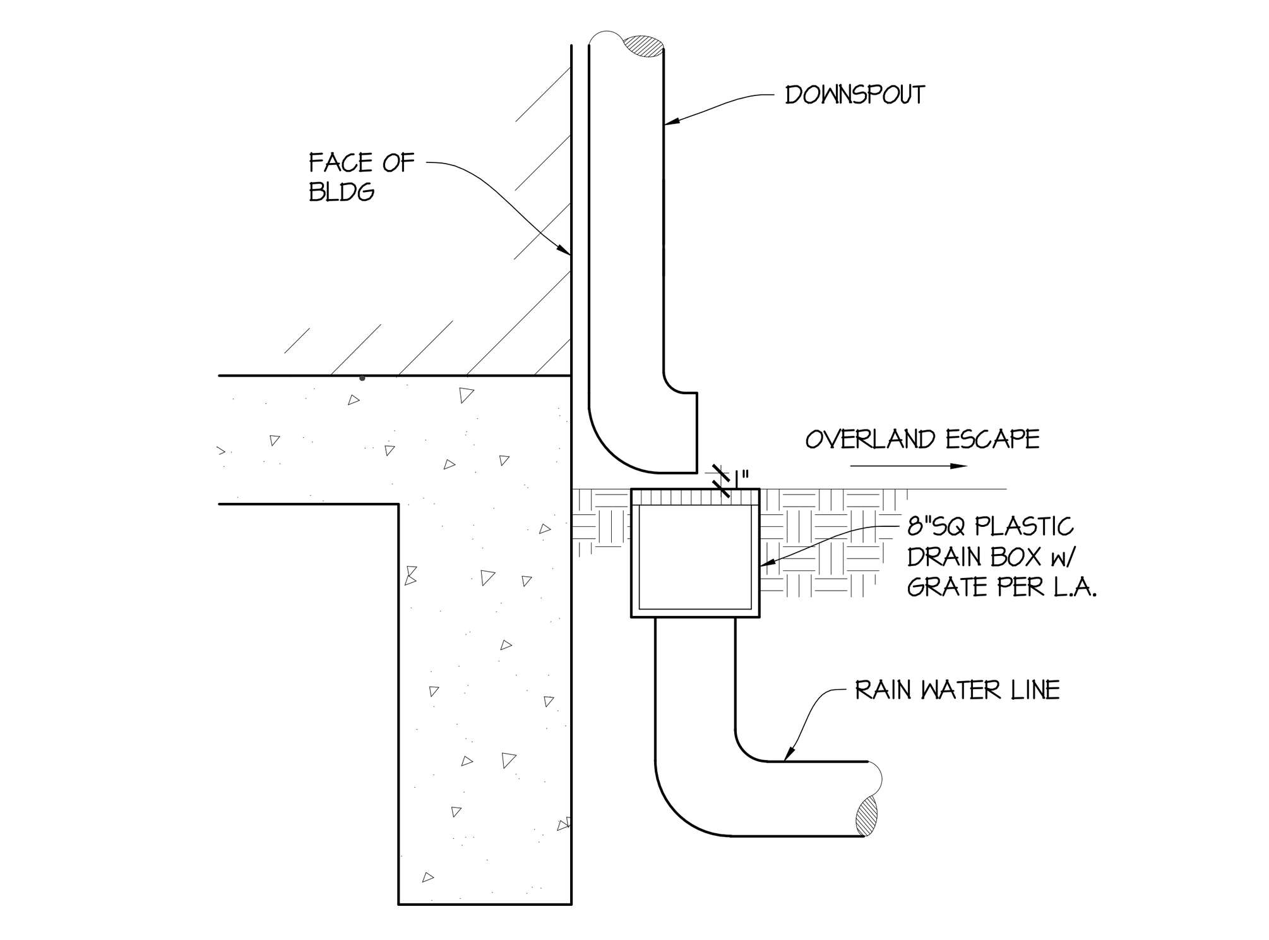
DATE: 6/30/2023

REVISIONS:

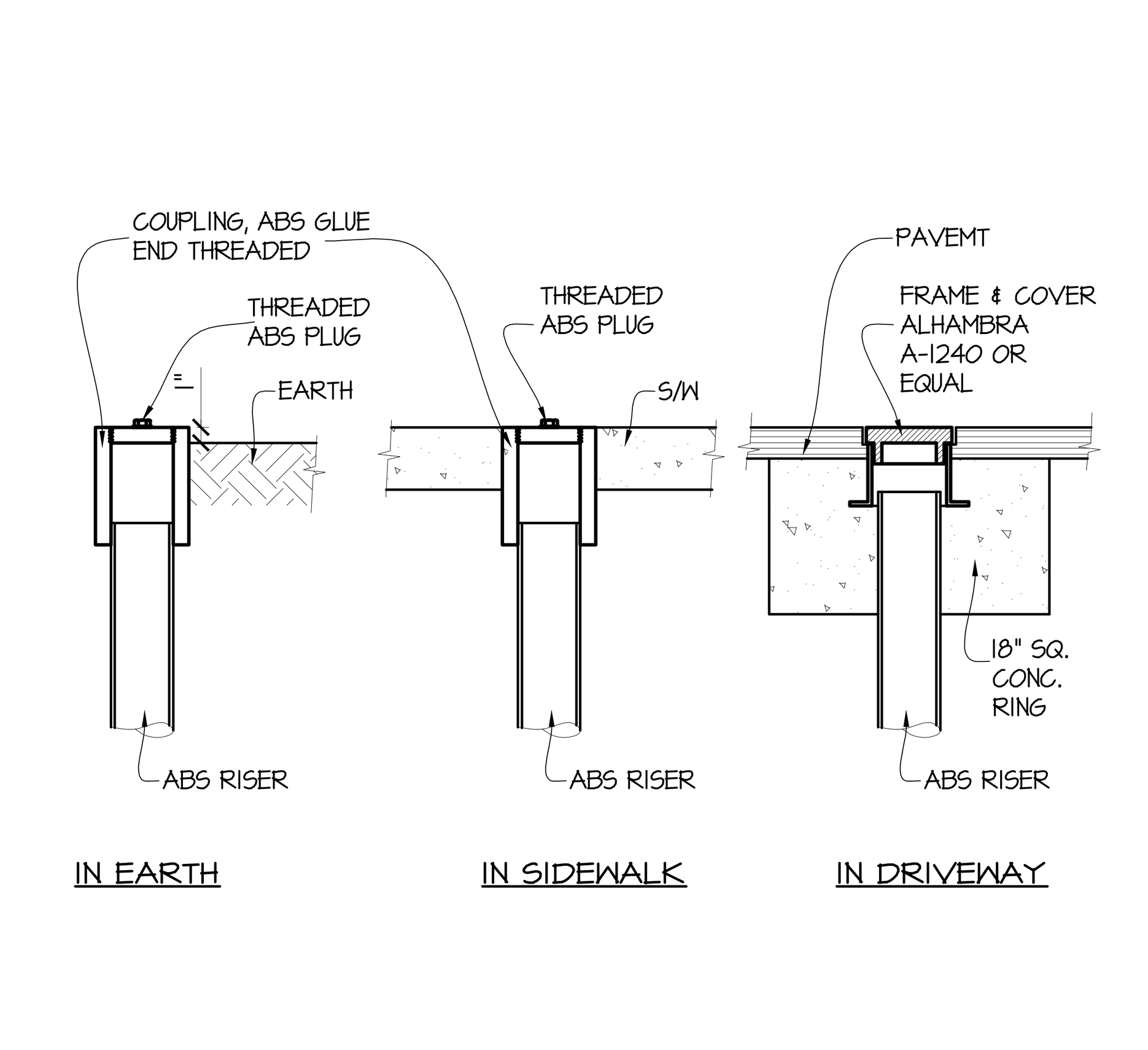
JOB No: 22772

C3.0

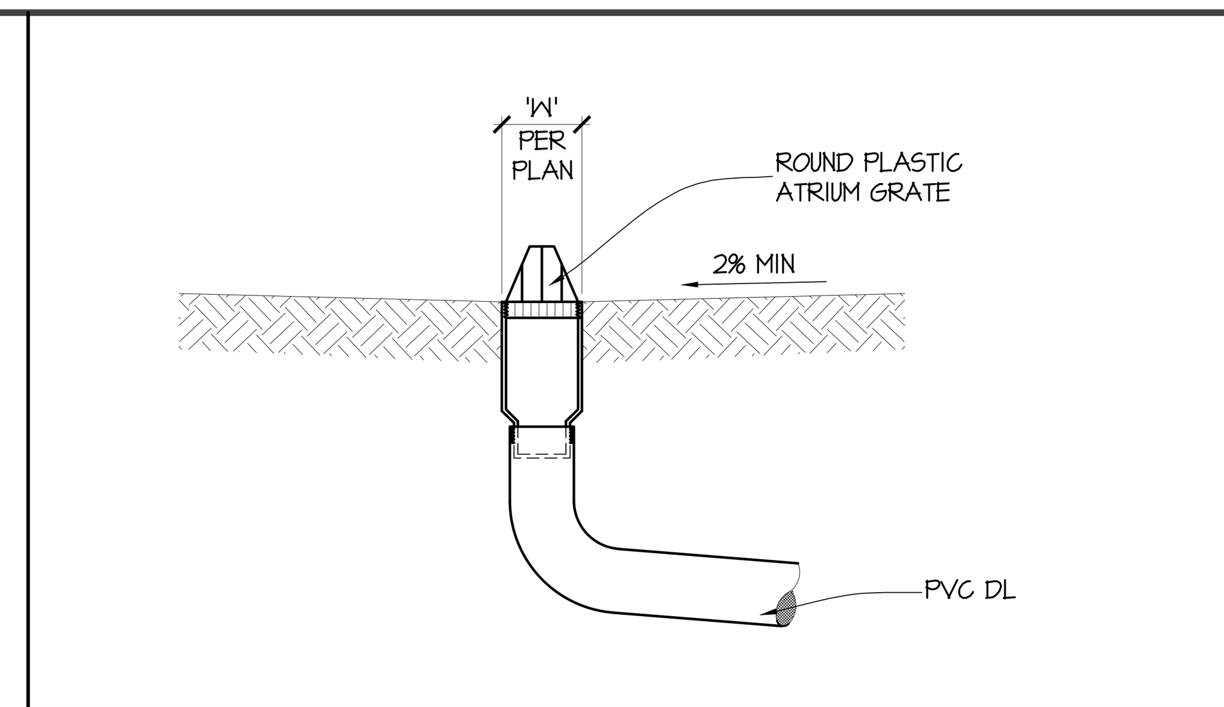
SHEET 5 of 7



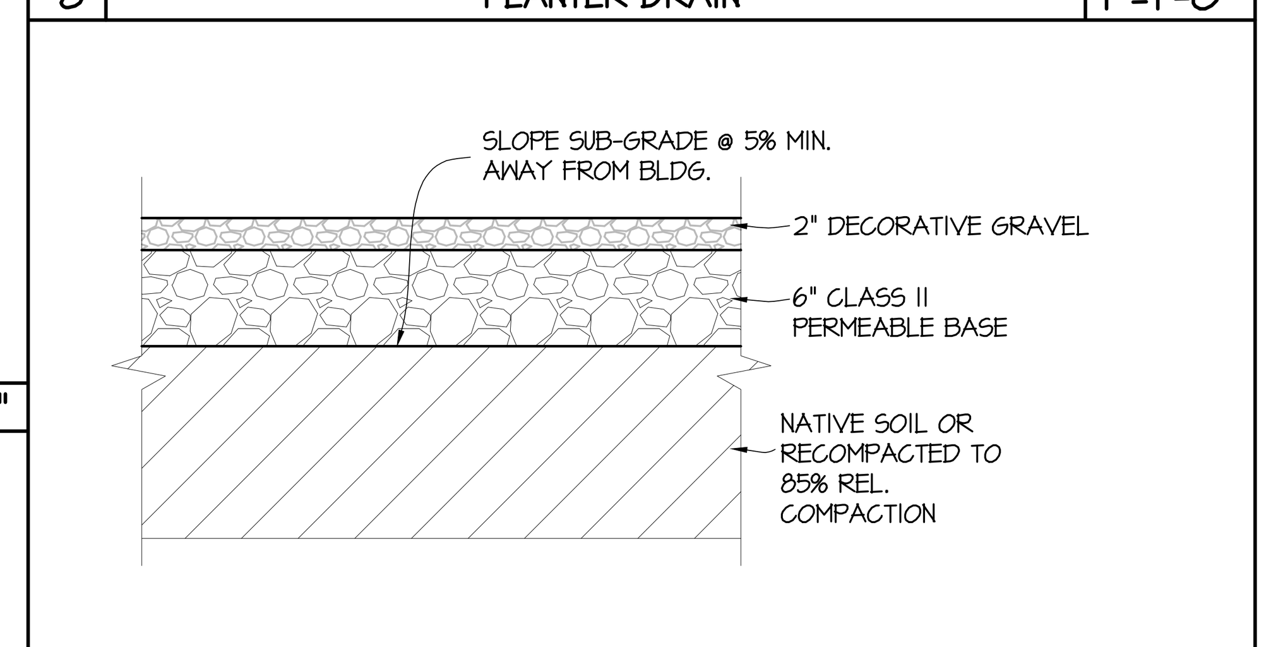
17 DS TO CATCH BASIN 1"=1'-0"



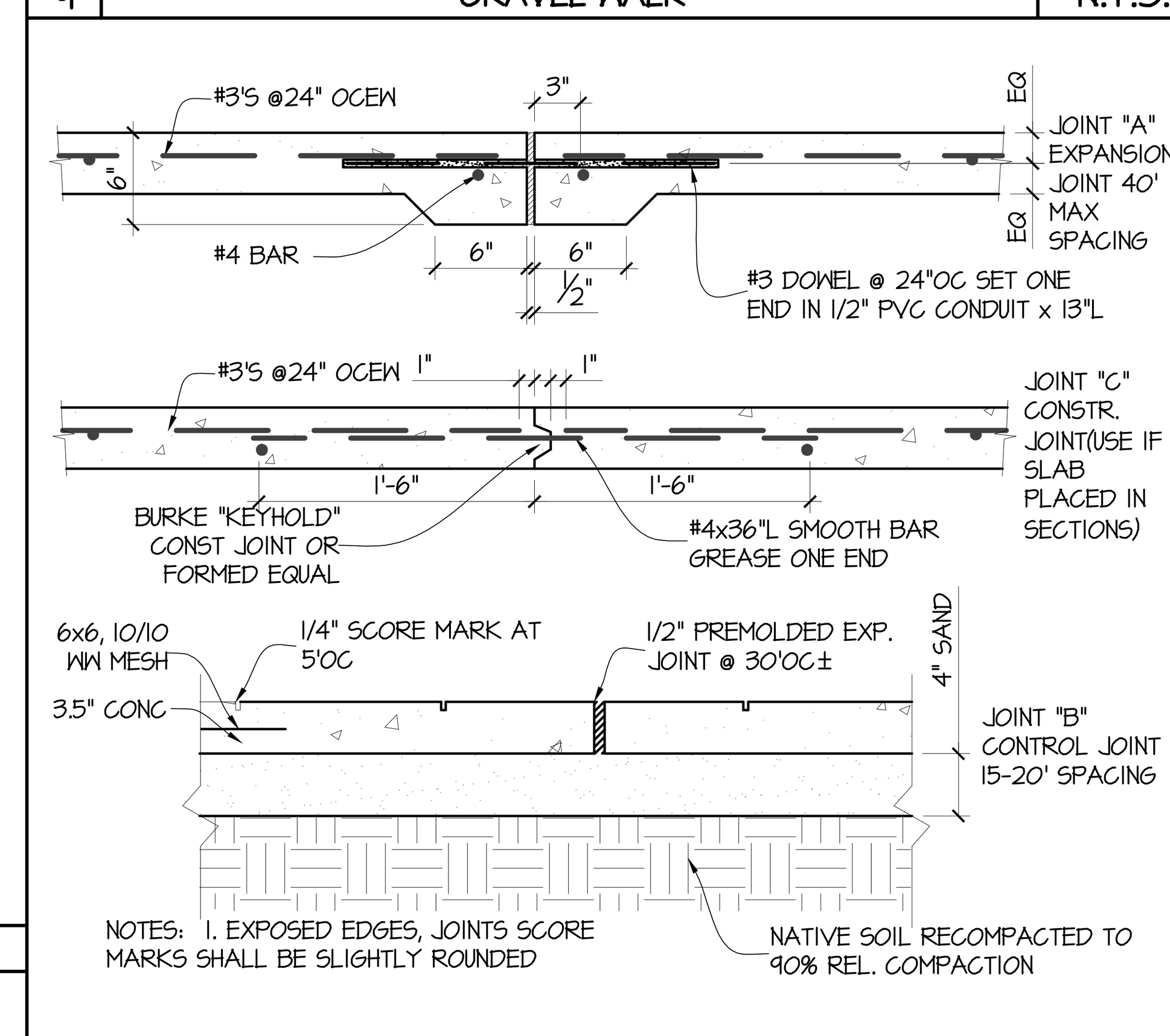
13 CLEANOUT DETAIL 1"=1'-0"



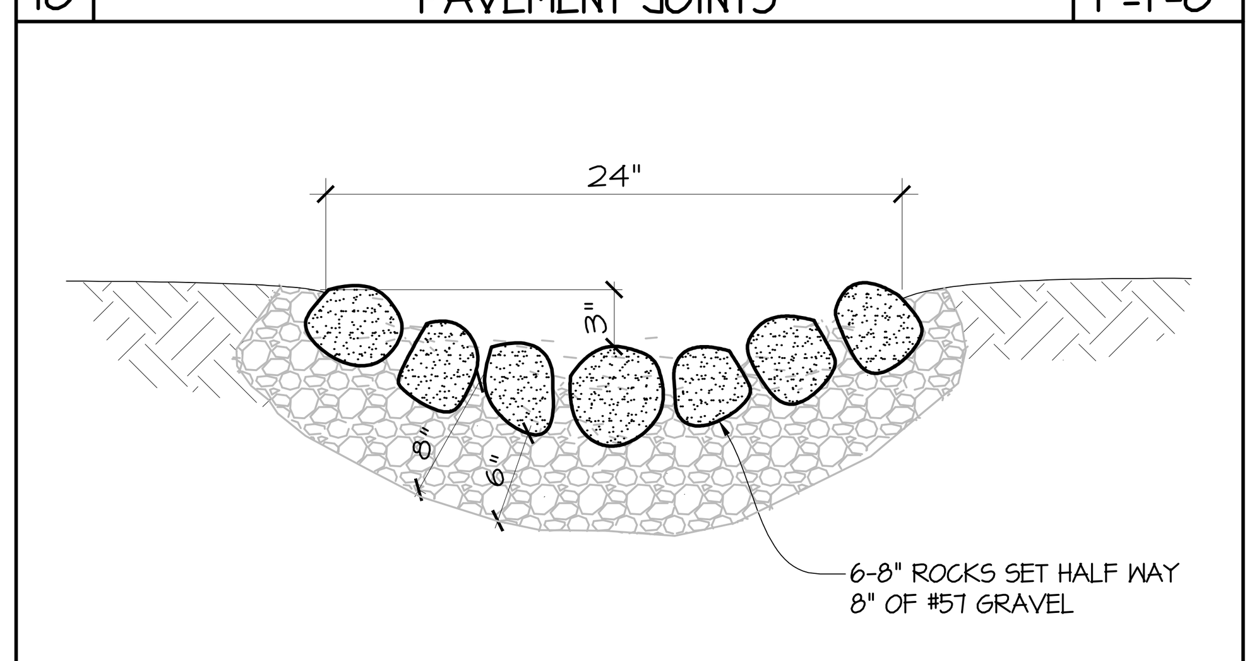
8 PLANTER DRAIN 1"=1'-0"



9 GRAVEL WALK N.T.S.



10 PAVEMENT JOINTS 1"=1'-0"



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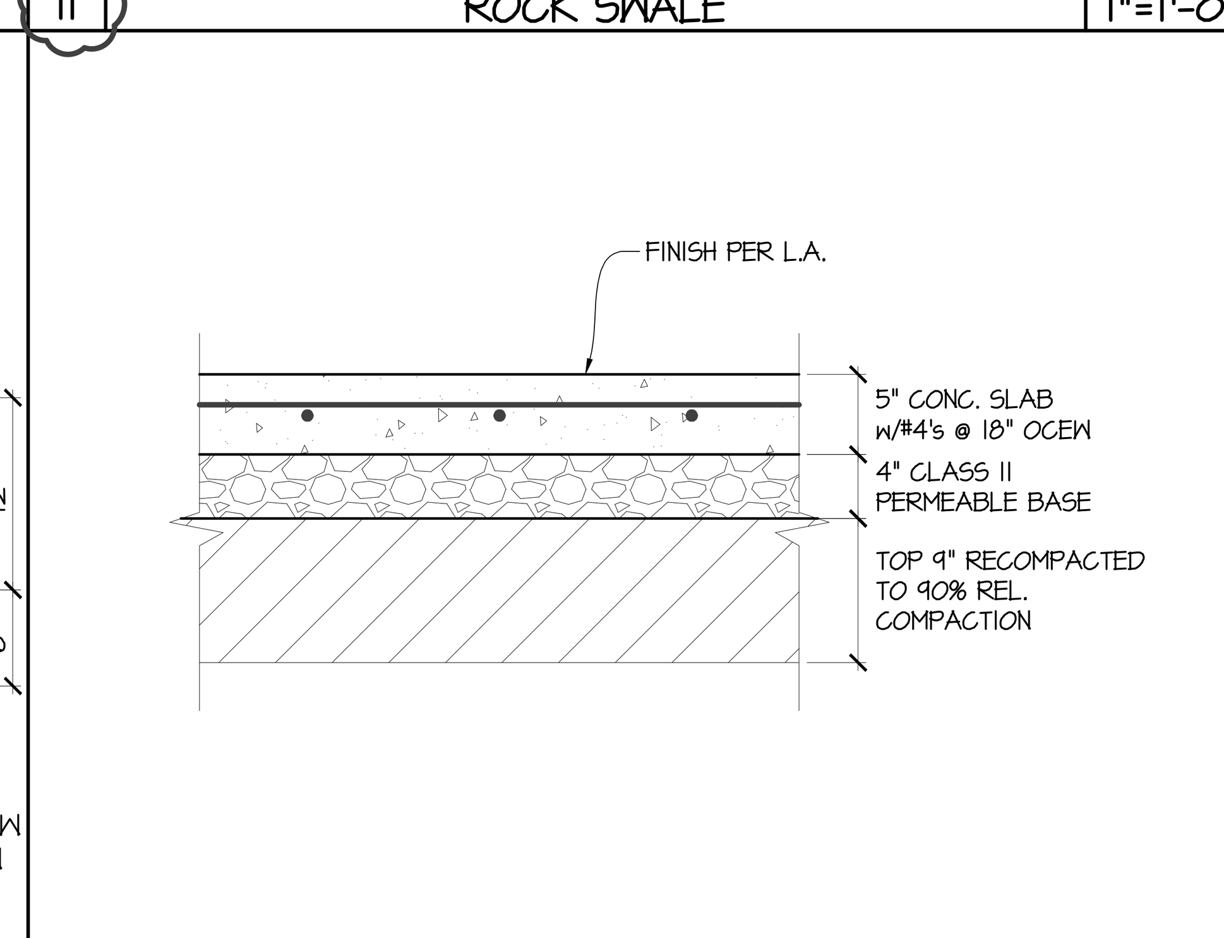
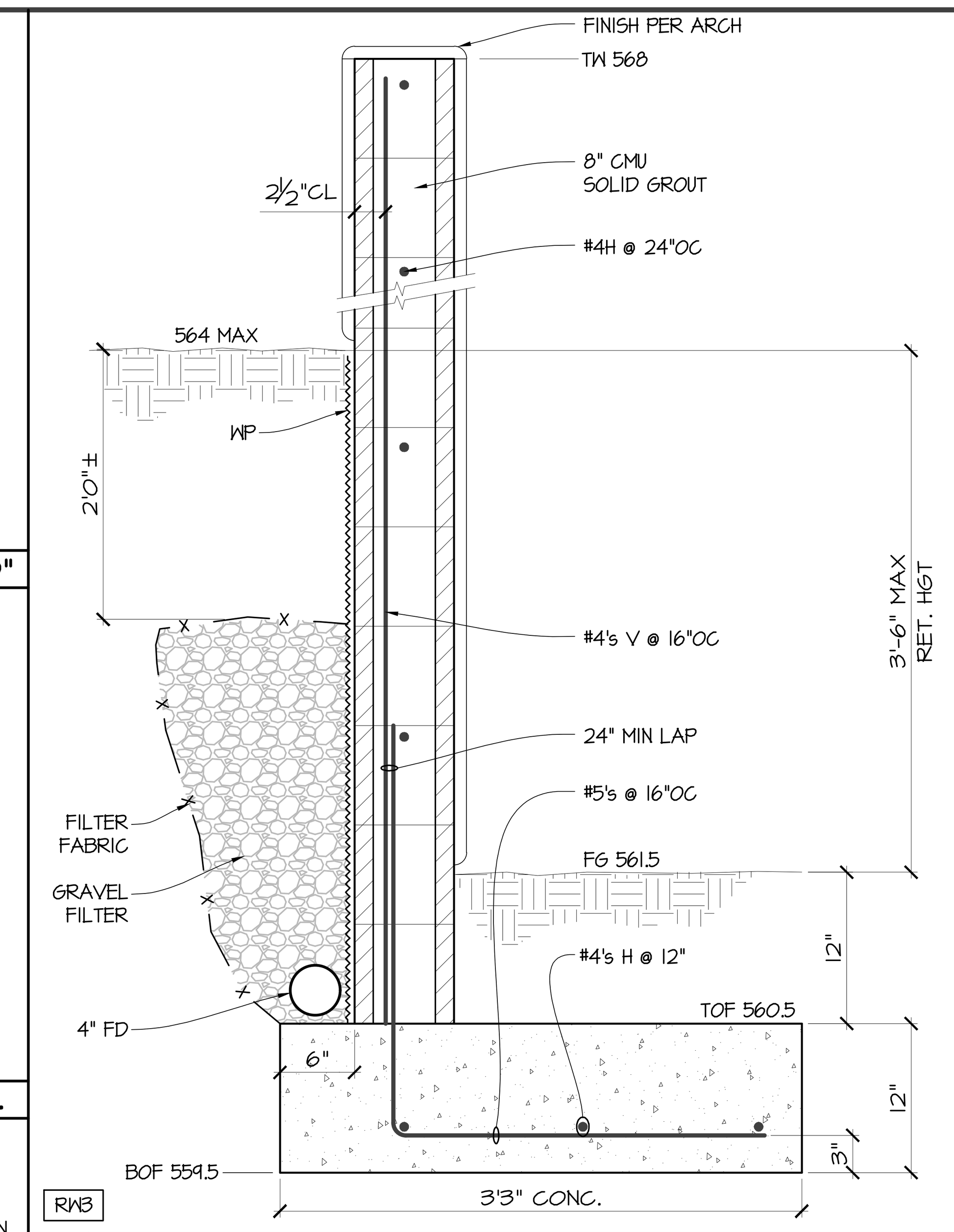
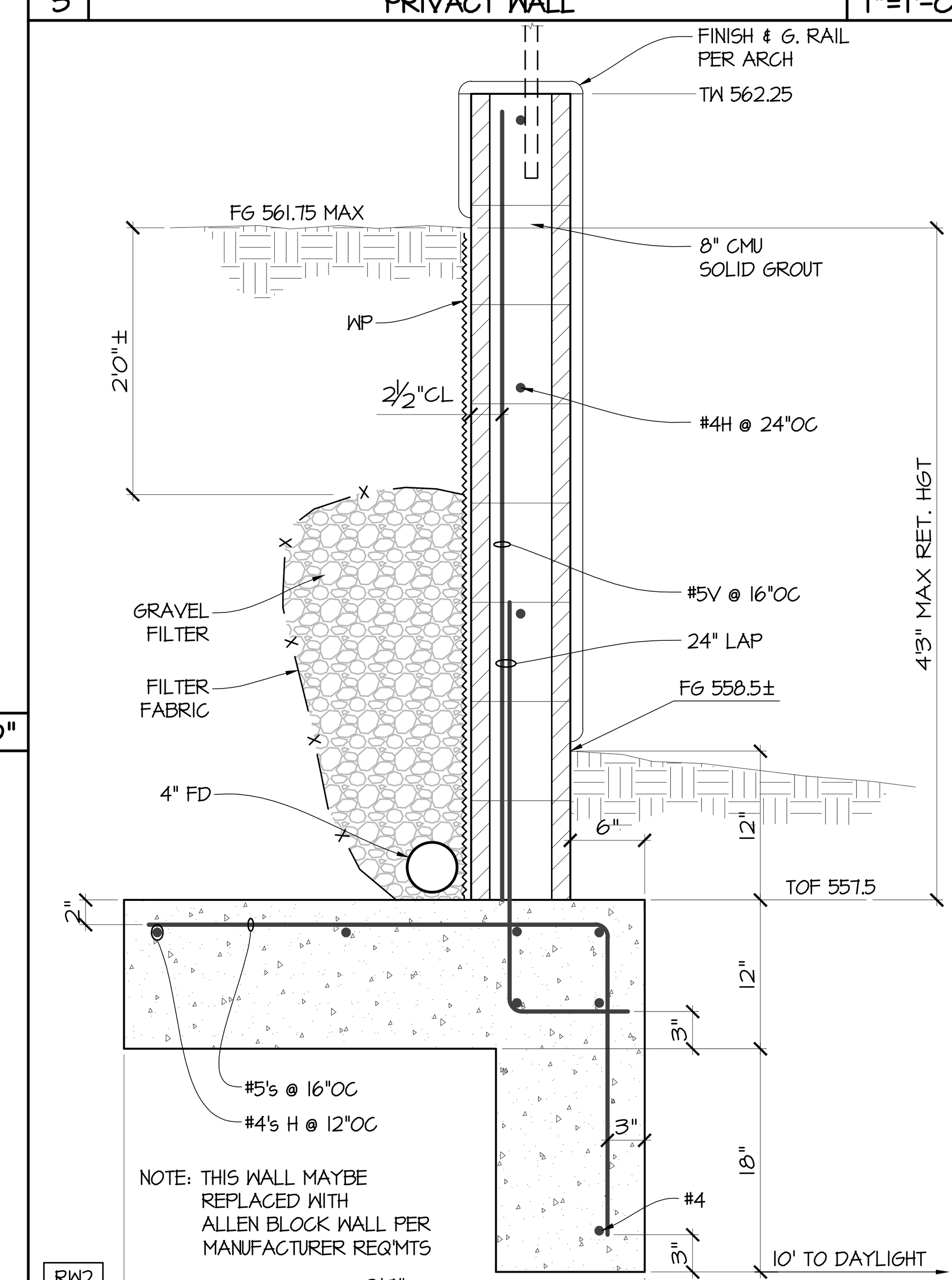
11 ROCK SWALE 1"=1'-0"



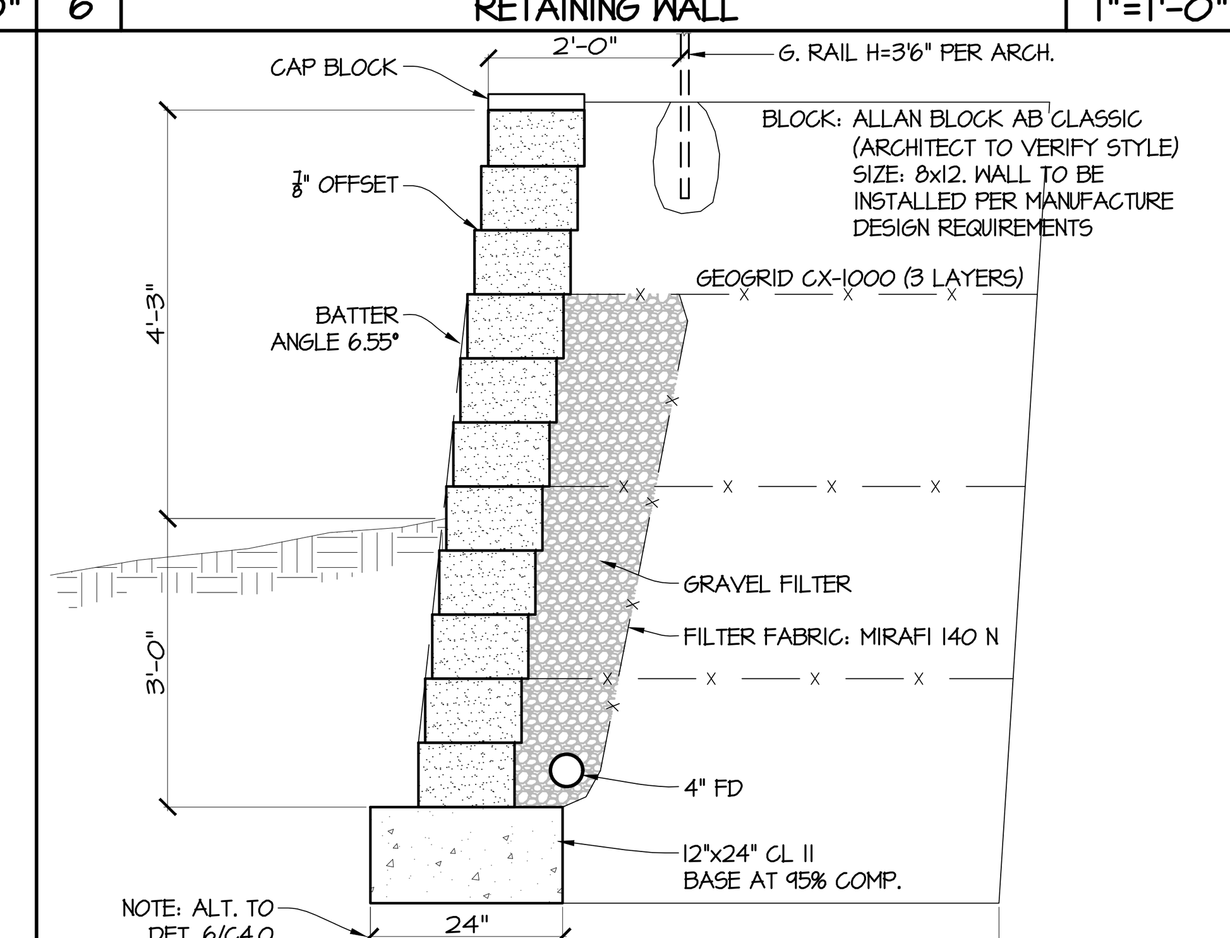
12 CONCRETE WALKWAY/PATIO 1"=1'-0"



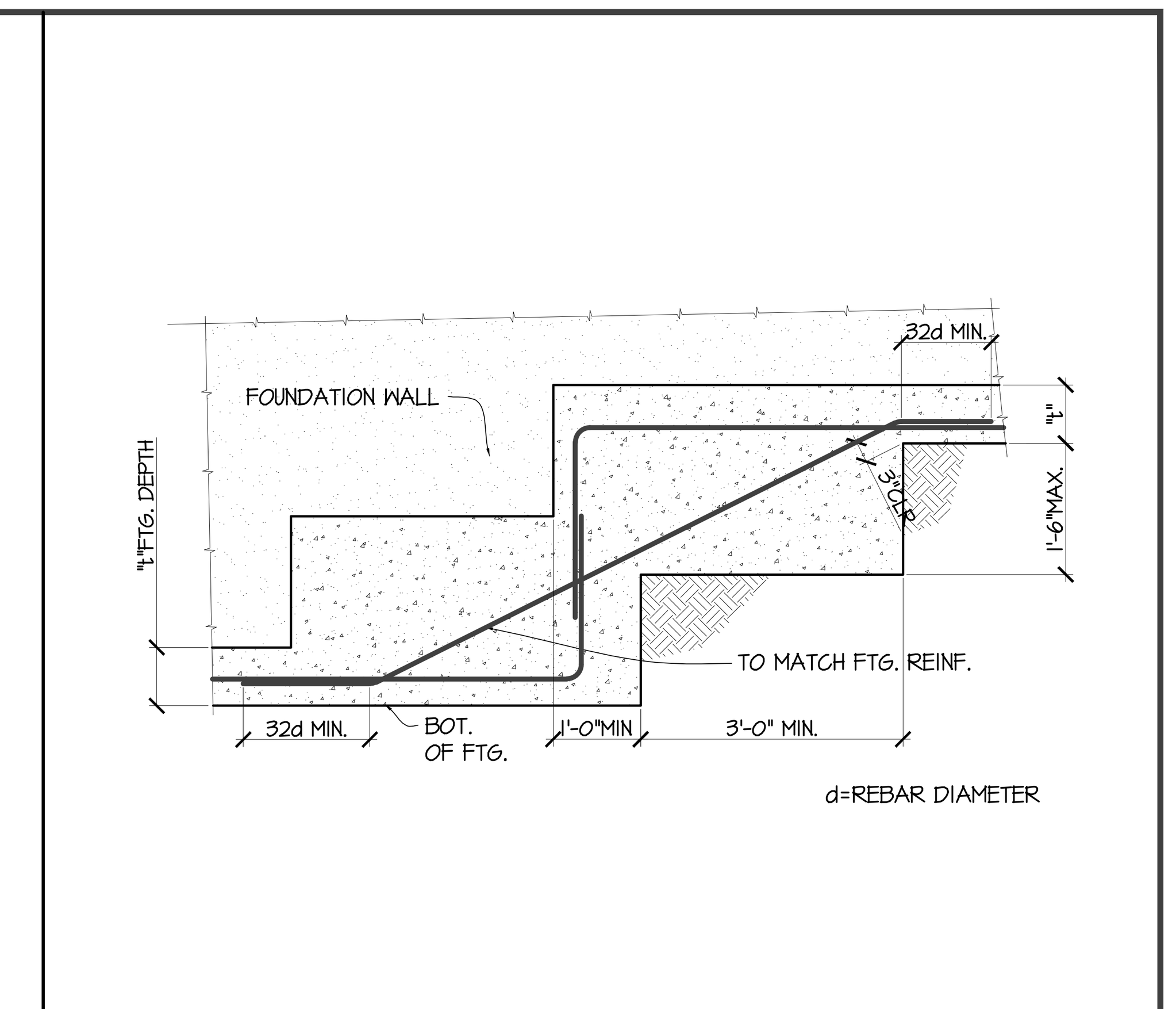
5 PRIVACY WALL 1"=1'-0"



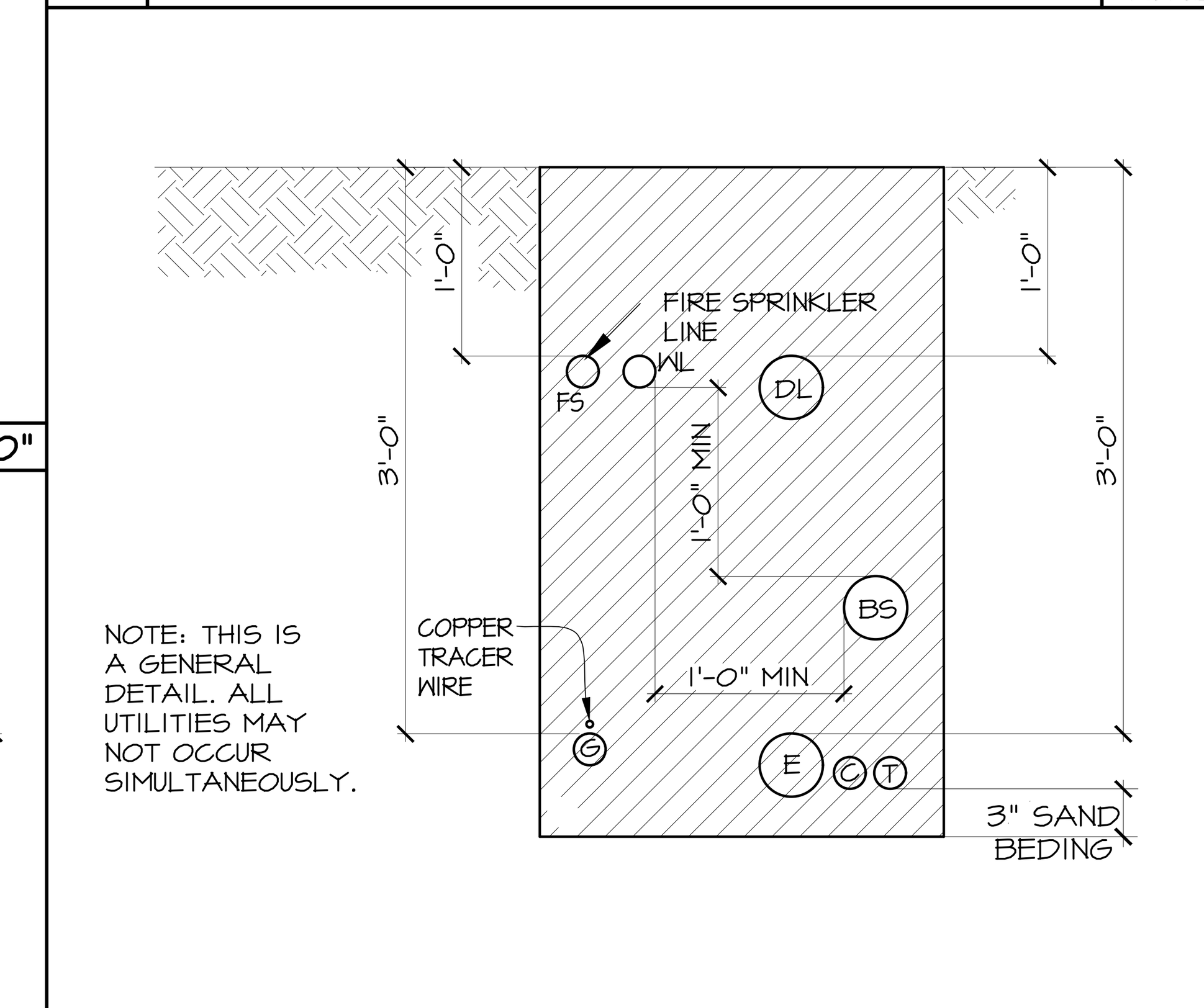
6 RETAINING WALL 1"=1'-0"



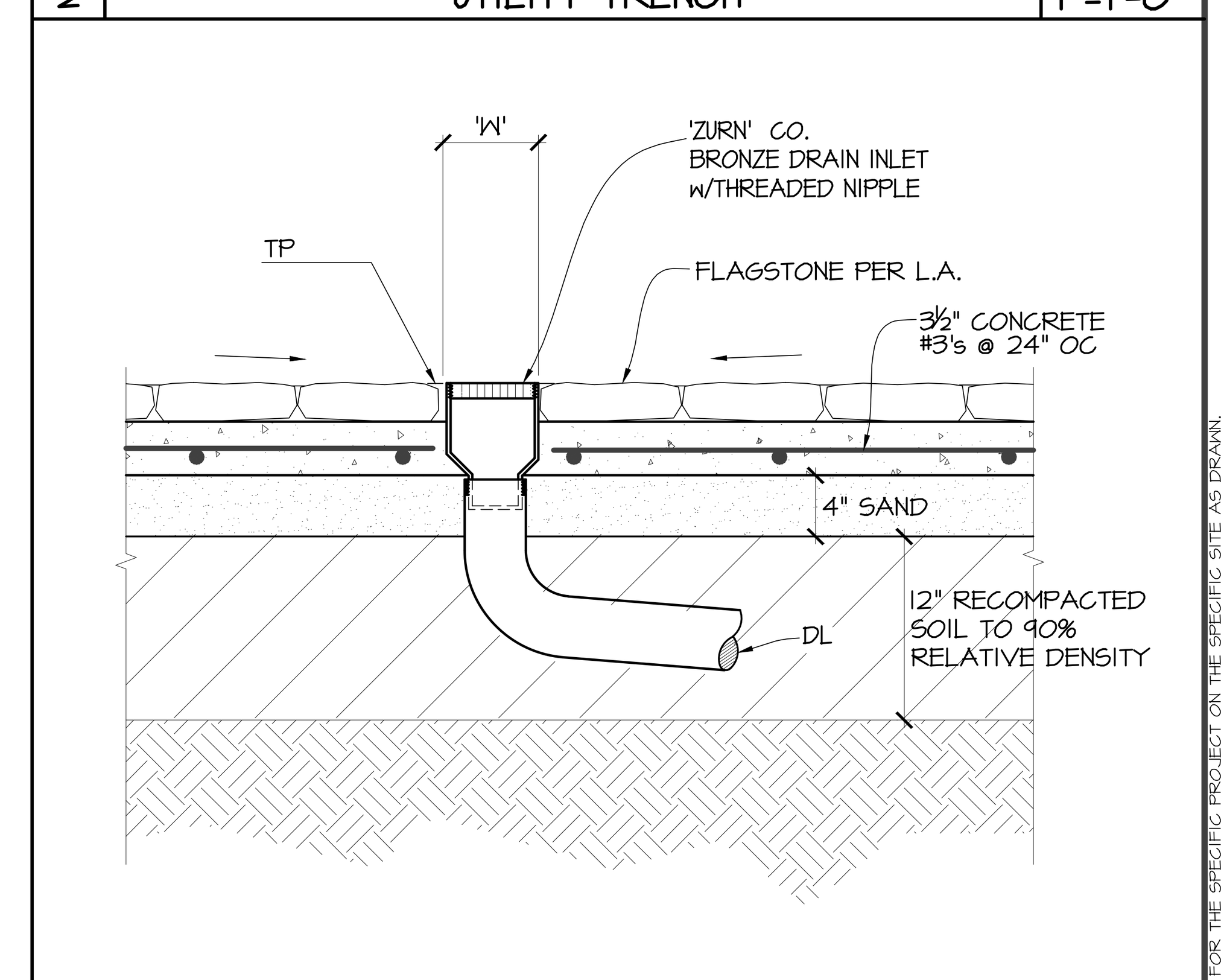
7 SEGMENTAL RETAINING WALL 1/2"=1'-0"



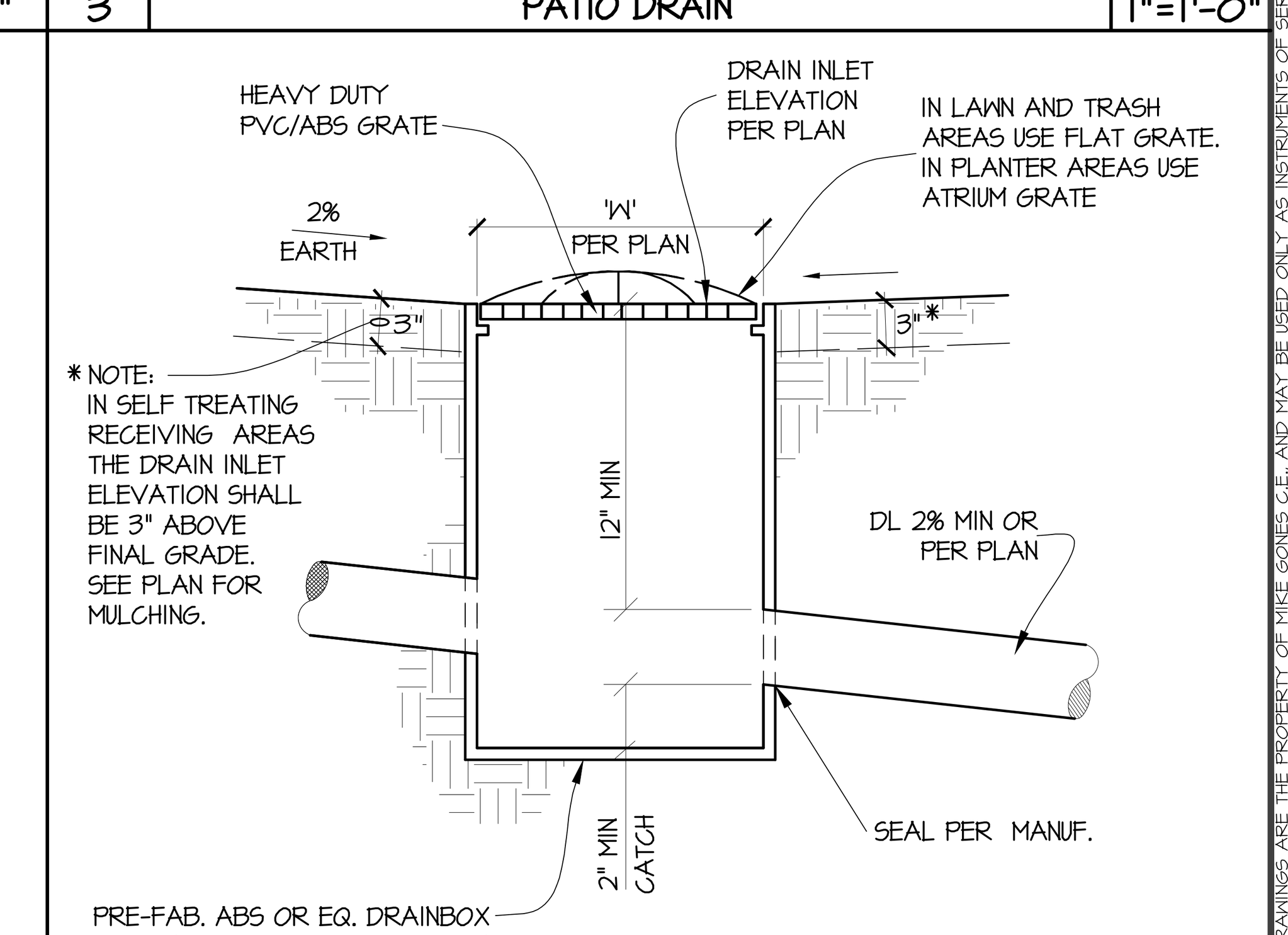
1 STEPPED FOOTING N.T.S.



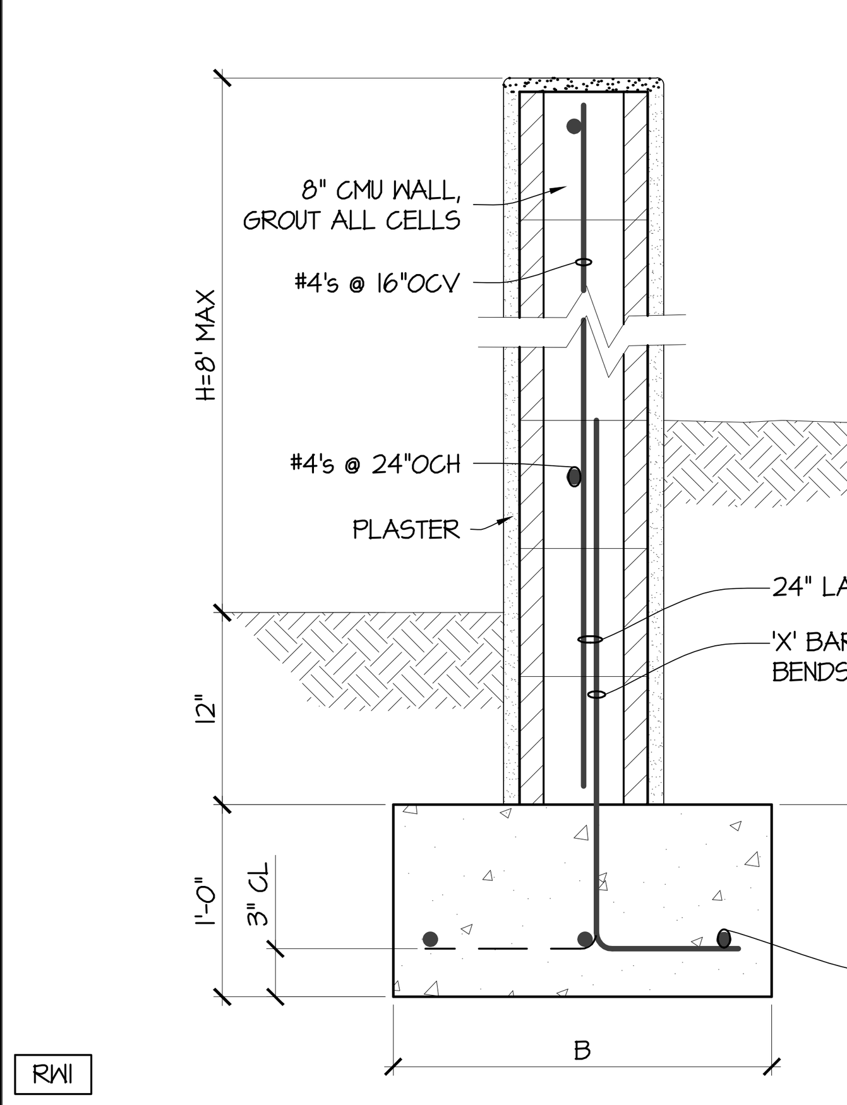
2 UTILITY TRENCH 1"=1'-0"



3 PATIO DRAIN 1"=1'-0"

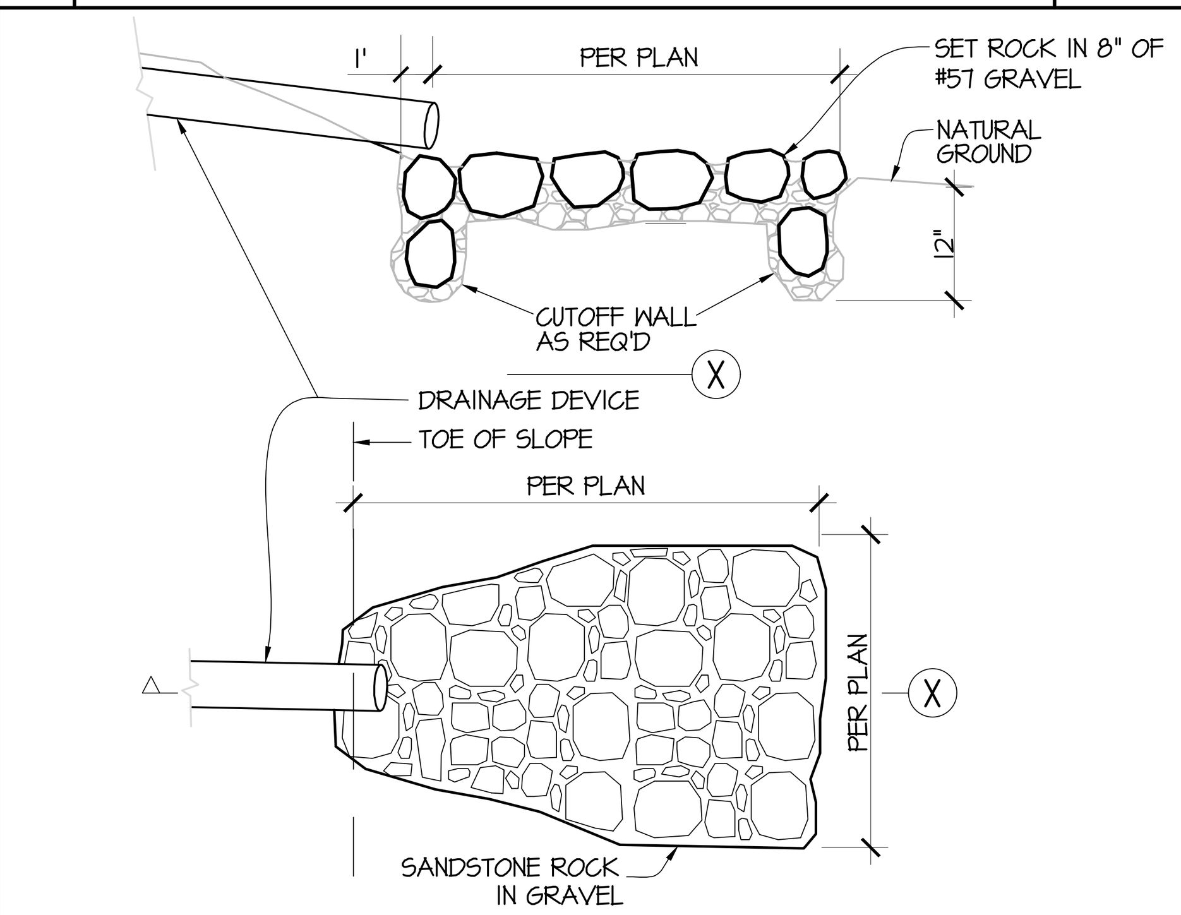


4 YARD DRAIN 1"=1'-0"



H	B	'X' BAR
8'0"	4'0"	#5's @ 16"
7'4"	3'8"	#5's @ 16"
6'8"	3'4"	#5's @ 16"
6'0"	3'0"	#4's @ 16"
5'4"	2'8"	#4's @ 16"

18 PRIVACY WALL 1"=1'-0"



NOTES:

1. CUTOFF WALLS TO BE PROVIDED AS NECESSARY TO PREVENT UNDERCUTTING.
2. HORIZONTAL DIMENSIONS SHOWN ARE MINIMUM AND SHALL BE INCREASED PER PLAN.
3. ENERGY DISSIPATOR TO BE ROUND SANDSTONE ROCK WITH MINIMUM DIMENSION OF 9".

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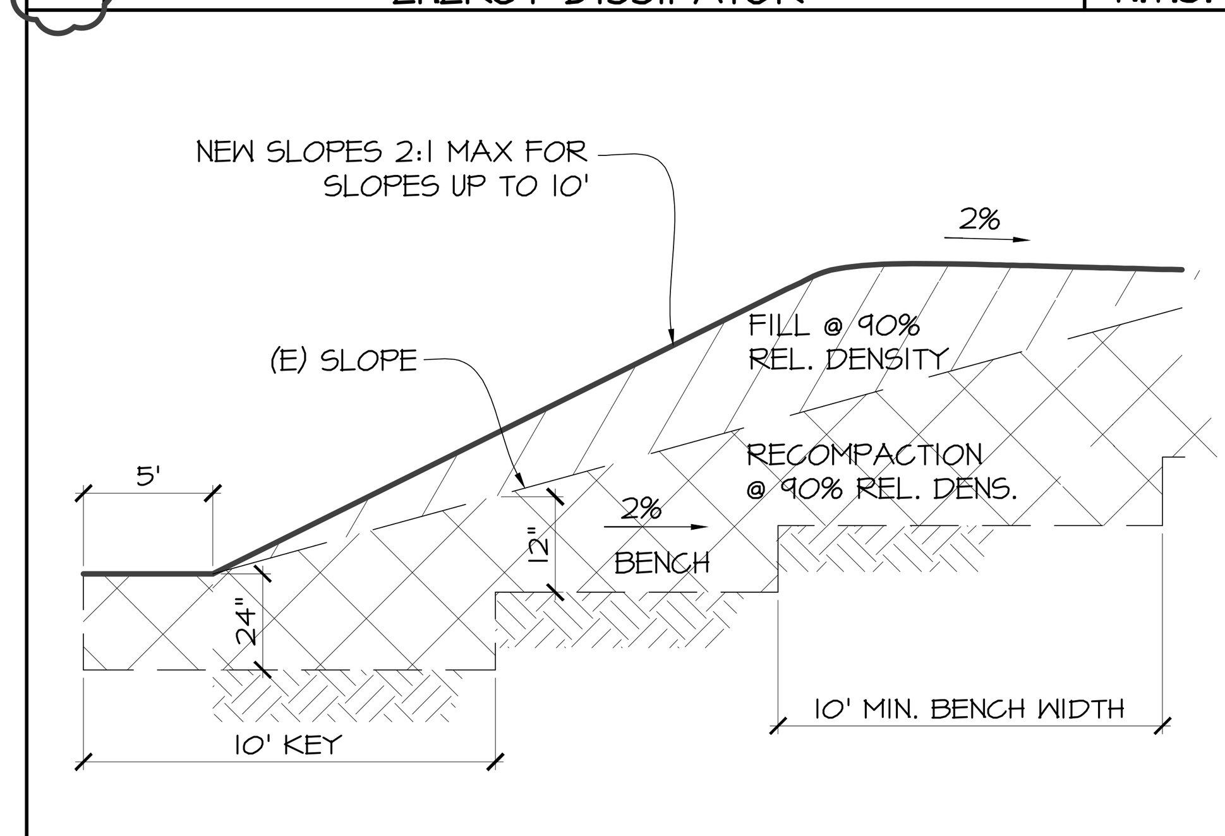
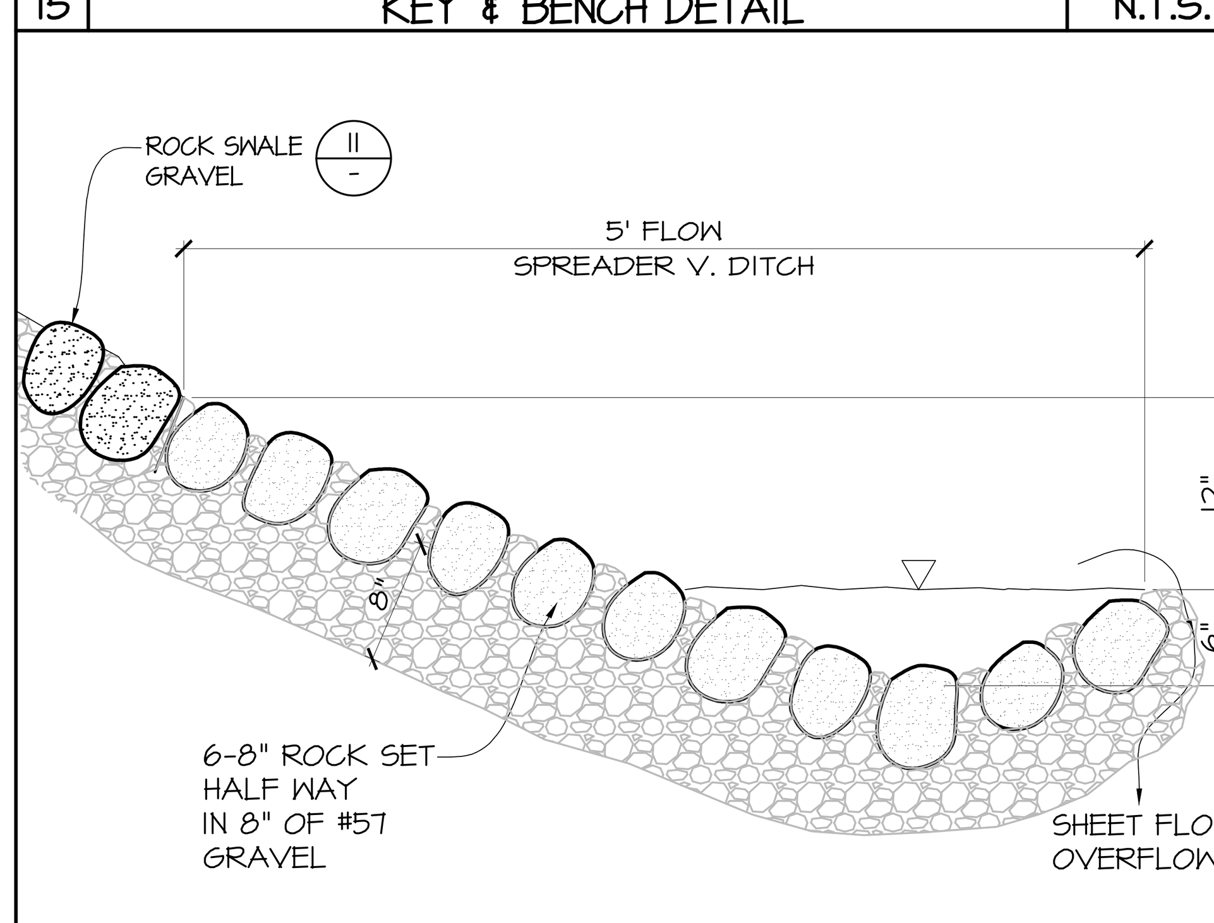
14 ENERGY DISSIPATOR N.T.S.



15 KEY & BENCH DETAIL N.T.S.



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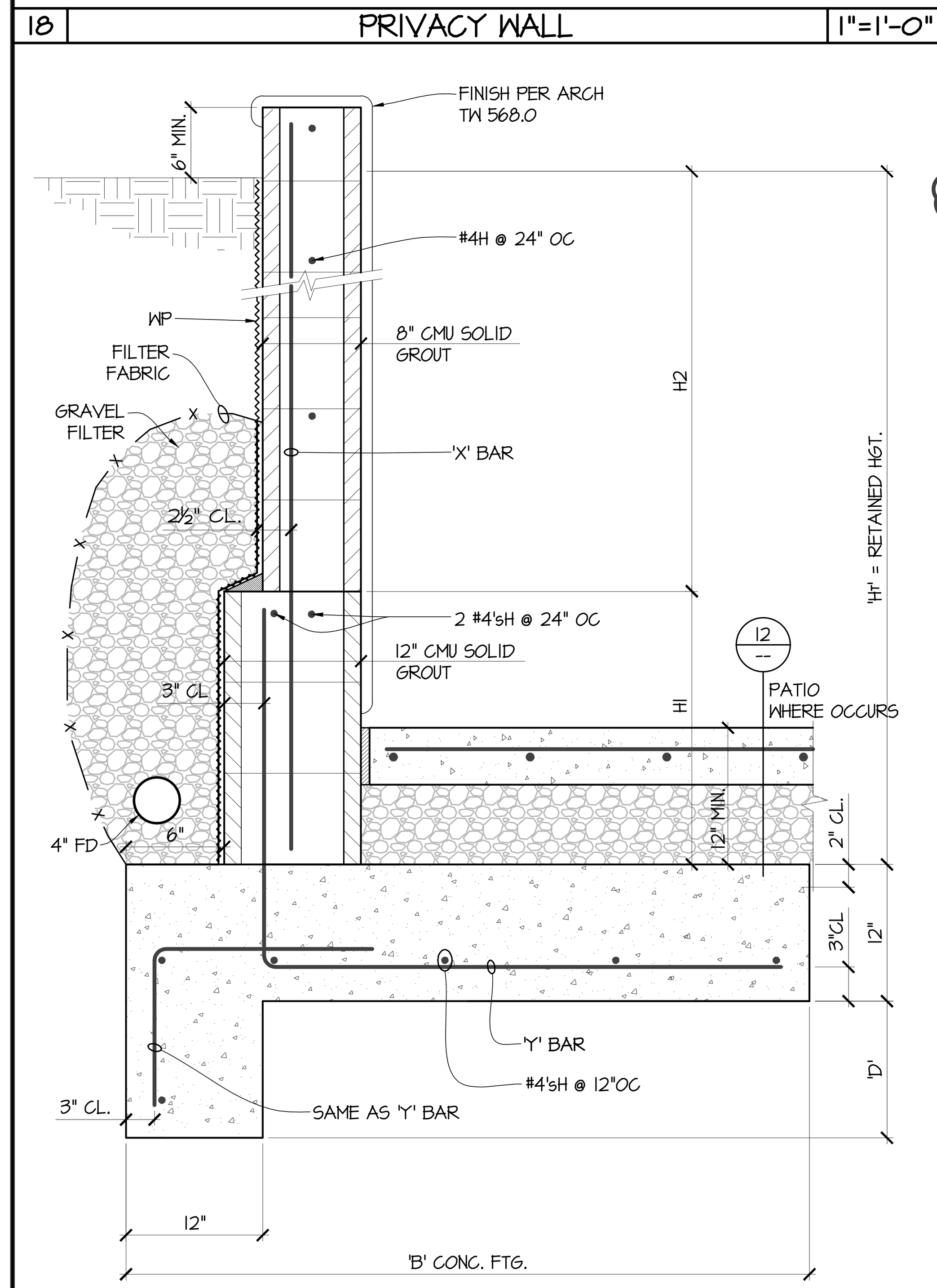
16 FLOW SPREADER V. DITCH 1"=1'-0"



Ht	H1	H2	X BAR	Y BAR	B	D
6'0"	2'0"	4'0"	#4's @ 16"	#5's @ 16"	4'0"	1'3"
5'4"	2'0"	3'4"	#4's @ 16"	#5's @ 16"	3'9"	1'0"
4'8"	--	4'8"	#4's @ 16"	#5's @ 16"	3'6"	1'0"
4'0"	--	4'0"	#4's @ 16"	#5's @ 16"	3'3"	1'0"
3'4"	--	3'4"	#4's @ 16"	#5's @ 16"	2'9"	--

20 RETAINING WALL 1"=1'-0"

REGISTERED PROFESSIONAL ENGINEER
RCE 38168
Exp. 3/25/2025
CIVIL
STATE OF CALIFORNIA
STAMP

MIKE GONES
CIVIL ENGINEER
RCE 38168
1219 1/2 LAGUNA ST.
SANTA BARBARA, CA 93101
ph: (805) 966-2259
fax: (805) 966-3800
mikegonesce@cox.net

KISLAK ADU
3627 CAMPANIL DRIVE
SANTA BARBARA, CA 93109

Drawings by EG

DATE: 6/30/2023

REVISIONS:

JOB No: 22T12

C4.0

RainHarvest Systems

4475 Alicia Lane
Cumming, GA 30028
770-889-2533
Sales@RainHarvest.com

Rainwater Harvesting Systems
Submittal For:

RainFlo 5100 IG

Complete Rainwater Harvesting System

NOTES: FOR RAIN HARVESTING SYSTEM

1. INFO SHOWN HERE IS FOR GENERAL PERMIT PURPOSES. GO TO WWW.RAINHARVEST.COM FOR FULL BROCHURE.COM FOR FULL BROCHURE, DETAILS & INSTALLATION REQT'S.
2. CONTRACTOR MAY ELECT TO SUBSTITUTE COMPARABLE SYSTEM IF APPROVED IN ADVANCE BY THE PROJECT ENGINEER.
3. THIS SYSTEM IS ANTICIPATED TO REQUIRE 1-1250 GAL. TANKS.
4. ALL SYSTEM DETAILS TO BE WORKED OUT IN ADVANCE WITH PROJECT ENGINEER AND LANDSCAPE ARCHITECT PRIOR TO ORDERING AND INSTALLING.
5. SEE SHEET C1.1 PLAN FOR CONNECTION TO IRRIGATION SYSTEM. FINAL PUMP SIZE TO BE SELECTED BASED ON PLANTING PLAN & IRRIGATION DEMAND.

RainHarvest Systems | GRAF

Graf Carat-S Rainwater Tanks

The new generation of Carat rainwater underground tanks has been specially developed for rainwater harvesting

The Carat-S Underground Tank:

The lineup consists of four modular tank units ranging from 700 gallons to 1,700 gallons which are expandable up to thousands of gallons. The precision, modular, and ultra-high strength design of the Carat-S makes it the choice of professionals worldwide. The Graf Carat tank is guaranteed not to collapse when empty when installed per the manufacturer's specifications.

Carat-S Rainwater Tank Features:

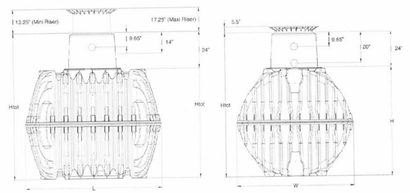
- 15 Year manufacturer's warranty
- Suitable for vehicle loading (when combined with the cast iron lid option)
- Variable installation depth with double-sealed telescopic riser
- Convenient 31-1/2" manway opening
- Attractive locking green lid
- Internal pre-filtration option
- Easy to transport and install
- Ultra-high strength materials and design
- Frost-proof installation underground
- Groundwater stable to the middle of the tank

Internal Filter Package Option:

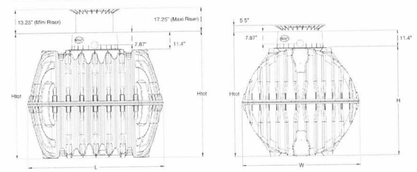
Specially designed for rainwater harvesting, the Graf Optimax Pro® internal self-cleaning filter uses patented filter technology to filter debris from roof areas up to 3,750 sq. ft.

- Greatly simplified installation
- Only one manway and lid in the yard
- Provides over 95% water yield
- Self-cleaning
- Very low maintenance

Dimensions with Maxi Tank Dome:



Dimensions with Mini Tank Dome:



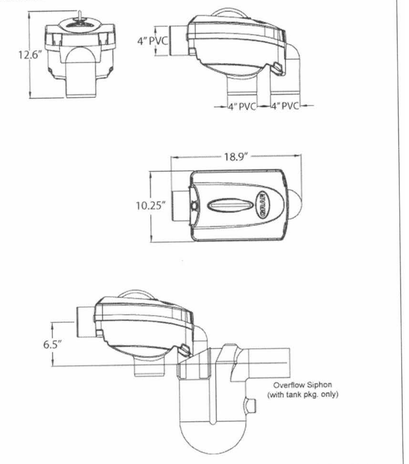
Tank	700 US Gallons	1000 US Gallons	1250 US Gallons	1700 US Gallons	1700 US Gallons (Expansion Tank)
Part No.	372001	372002	372003	372004	372014
Weight	265 lb.	331 lb.	408 lb.	485 lb.	485 lb.
L	82"	90"	90"	94"	94"
W	62"	69"	78"	86"	86"
H	55"	62.5"	71.5"	82.5"	82.5"
Htot*	79"	86.5"	95.5"	106.5"	NA
Htot**	66"	73.5"	82.5"	93.5"	NA

*Htot = total height **with Maxi Tank Dome. Deeper burial depths can be achieved using optional extension rings

GRAF | Optimax® Pro Internal Filter | Part Number 340037

US Adaptation by RainHarvest Systems

Dimensions:



Otto Graf GmbH
Kunststofferzeugnisse
79331 Teningen

Carl-Zeiss-Str. 2-6
Telefon 07641/589-0
Telefon 07641/589-50
Email: info@graf-online.de
www.graf-online.de

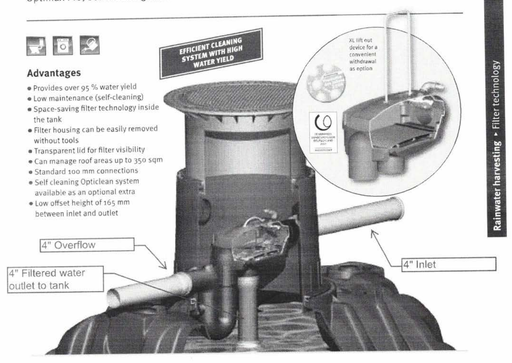
RainHarvest Systems, LLC
6075 Parkway North Drive
Cumming, GA 30040
Tel: 770-889-2533 Fax: 770-889-2577
www.RainHarvest.com

Internal filter technology

Optimax Pro, self-cleaning Filter

GRAF

Rainwater harvesting • Filter technology



Advantages

- Provides over 95 % water yield
- Low maintenance (self-cleaning)
- Space-saving filter technology inside the tank
- Filter housing can be easily removed without tools
- Transparent lid for filter visibility
- Can manage roof areas up to 350 sqm
- Standard 100 mm connections
- Self cleaning Opticlean system available as an optional extra
- Low offset height of 165 mm between inlet and outlet

Optimax-Pro Filter internal
Order no. 340037

Accessories

Cleaning unit Opticlean® internal
without hose
Order no. 340040

Quick assembly sleeve Spannfix
patented (Page 47)
Order no. 340502

XL lift out device
for a convenient withdrawal of filter cover and filter insert, length 505 mm
Order no. 330220

Webcode G2102

Cleaning unit Opticlean®

- Very intense water jet for cleaning the filter sieve
- Routine maintenance intervals are kept to a minimum
- An automatic activation of the cleaning unit is carried out together with the automatic filter cleaning unit and the Aqua-Center-Silentio

Mode of operation Opticlean®

Filter cartridge

Very smooth surface and, therefore, max. self cleaning, mesh width 0.35 mm (0.01")

3-layer filter assembly

Connecting dimensions
for telescopic dome shaft

Dome shaft	Tank overflow	Emergency overflow
Mini	495-695 mm	660-860 mm
Mini	19.5-27.4"	25.9-33.9"
Maxi	400-700 mm	660-960 mm

RAINFLO®

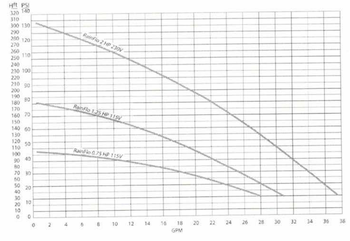
Universal Rainwater Pumps

High performance multi-stage rainwater pumps for residential, commercial, and light-industrial rainwater collection systems.

Submersible and External Mounted Capability:

RainFlo universal pumps are specially designed for the unique requirements of rainwater collection systems. Equipped with a large threaded bottom inlet large for internal flow-based cooling and connection to a floating filter, these pumps can be installed vertically or horizontally and they can either be submersed inside a tank or mounted externally on the ground or other platform. Other features include a stainless steel base, adjustable float switch for run-dry protection, external capacitor housed in a wiring box with circuit breaker and master on/off switch for long life and ease of maintenance.

Pump Performance:



Durable, Dependable and High Performance:

Available in 0.75HP/115V, 1.25HP/115V and 2.0HP 230V models, construction consists of 304 stainless steel housings, dual Italian mechanical seals, American thermal protection, GE-Noryl diffuser and impellers, external starting capacitor and a 45 foot power cord. The pump is particularly quiet and durable from its solid construction. The water end is installed under the motor which keeps the motor cooled with the pumped water. The Noryl impellers and diffusers offer high abrasion resistance while the Italian double mechanical seals ensure long life and enhanced reliability.

The oil chamber is filled with non-toxic cooling oil. Ball bearings are self-lubricating and internal cast iron components are electrocoated with polybutadiene varnish to prevent corrosion which is sometimes associated with the typical lower pH of rainwate r.

Installation may be oriented either vertical or horizontal so long as water is available at the intake to prevent a run-dry condition.

Specifications:

RainFlo Submersible Pumps			
Model No.	**RF075-S**	**RF125-S & SC**	**RF200-S**
Horsepower:	0.75	1.25	2.0
Nominal Voltage Range:	115V, 60Hz, 8.6A max.	115V, 60Hz, 14A max	230V, 60Hz, 9A max.
P1kW:	1.0	1.24	2.3
P2kW:	0.6	0.95	1.6
Impeller stages:	2	3	5
Maximum flow:	29 GPM	34 GPM	36 GPM
GPM at 50 psi (0 Head):	See Curve	17 GPM	29 GPM
GPM at 40 psi (0 Head):	8 GPM	22 GPM	31 GPM
Maximum head:	105' TDH	180' TDH	310' TDH
System pressure:	Up to 46 PSI	Up to 78 PSI	Up to 135 PSI
Inlet/Outlet size:	1-1/4" FPT	1-1/4" FPT	1-1/4" FPT
Weight:	36 Lbs.	41 Lbs.	46 Lbs.
Dimensions:	7" X 7" X 20"(incl. base)	7" X 7" X 22" (incl. base)	7" X 7" X 24" (incl. base)
Thermal protection:	Yes	Yes	Yes
Motor:	2-pole induction, Continuous duty	Same	Same
RPM:	3450	3450	3450
Cooling:	Water cooled/intake	Water cooled/intake	Water cooled/intake
Insulation class:	F	F	F
Protection:	IP68	IP68	IP68
Certifications:	CE	CE	CE
Warranty:	1 Year	1 Year	1 Year

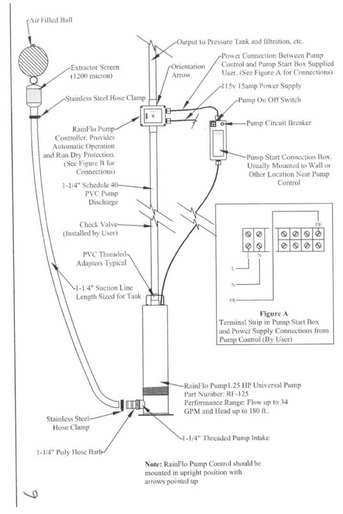


Figure A
Terminal Strip in Pump Start Box and Power Supply Connections from Pump Control (By User)

Note: RainFlo Pump Control should be mounted in upright position with arrows pointed up

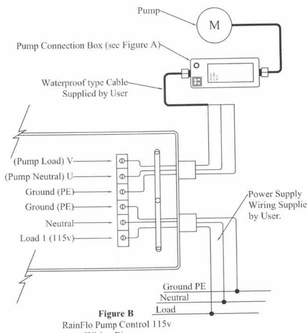


Figure B
RainFlo Pump Control 115v Wiring Diagram

NOTE: This drawing is for illustrative purposes only. Actual systems and designs may vary. Always check with local building codes as they will apply. Electrical work to be performed by licensed professional. Points of use shall be labeled as: **"Non Potable water, Do Not Drink!"**

RainFlo Pump and Controller Wiring Detail

RainHarvest Systems LLC
6075 Parkway North Drive Suite D
Cumming, GA 30040
Tel: 770-889-2533 Fax: 770-889-2577

REGISTERED PROFESSIONAL ENGINEER
MIKE GONES
RCE 38168
Exp. 8/25/2025
CIVIL
STATE OF CALIFORNIA

STAMP

MIKE GONES
CIVIL ENGINEER
RCE 38168
1213 1/2 JACINTA ST.
SANTA BARBARA, CA 93101
ph.: (805) 966-2259
fax: (805) 966-3800
mikegones@west.net

KISLAK ADU
3627 CAMPANIL DRIVE
SANTA BARBARA, CA 93109

Drawings by EG
DATE: 6/30/2023
REVISIONS:

JOB No: 22712

C5.0

SHEET 7 of 7

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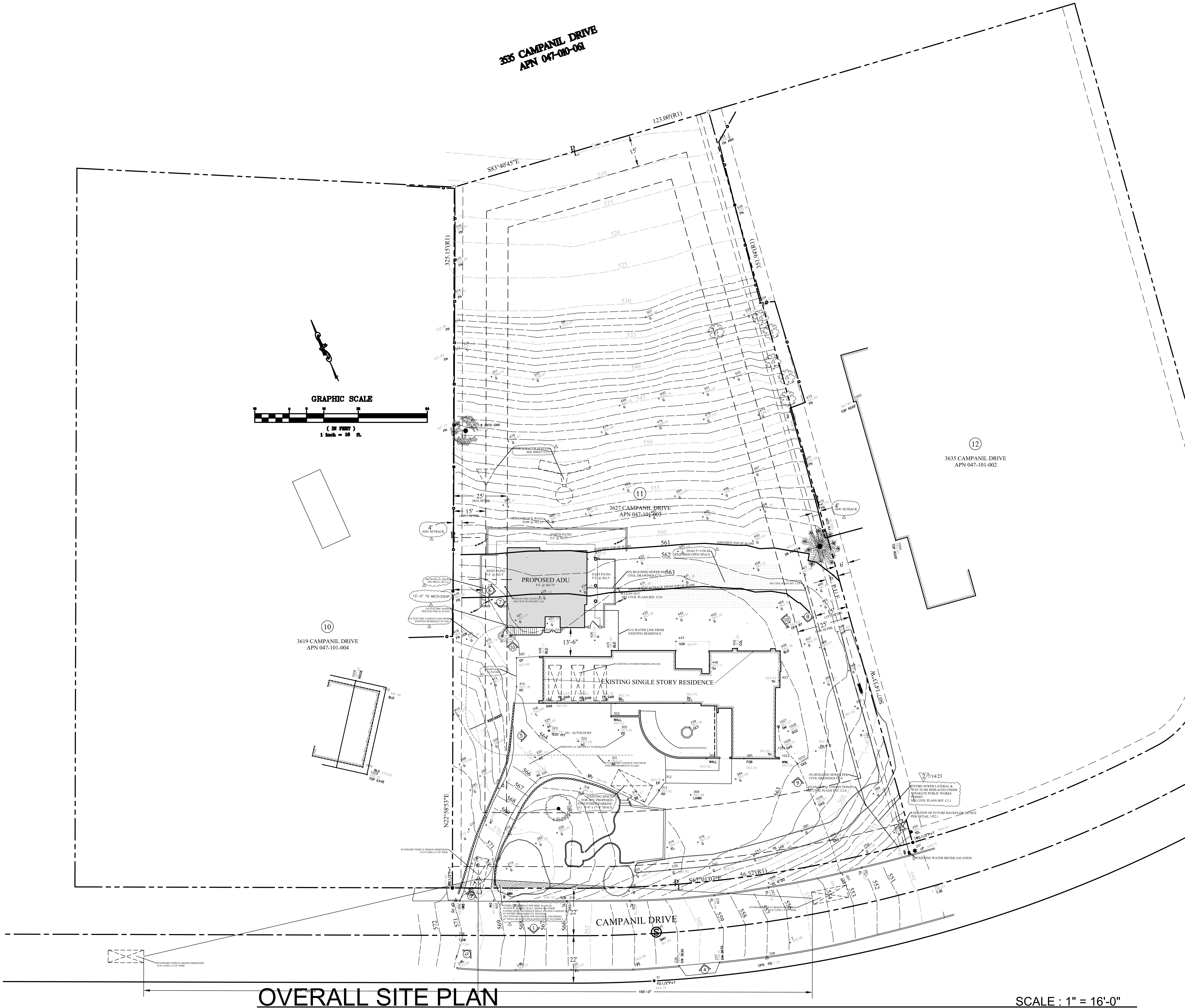

OVERALL SITE PLAN

SCALE : 1" = 16'-0"

LEGEND

AC	ASPHALT CONCRETE
AD	AREA DRAIN
BLD	BUILDING
CIT	CITRUS TREE
COL	COLUMN
CP	CONTROL POINT (survey)
DL	DRIPLINE (oak tree)
DO	DRAIN OUTLET (pipe)
DW	DRIVEWAY
E	EASTERLY
EM	ELECTRIC METER
EP	EDGE OF PAVEMENT
FD	FOUND (survey monument)
FF	FINISH FLOOR
FL	FLOWLINE
FN	FENCE
FOB	FACE OF BUILDING
G	GRADE
GAR	GARAGE
GM	GAS METER
H	HEDGE
LP	LAMP POLE
N	NORTHERLY
PEP	PEPPER TREE
PL	PARCEL LINE
P.U.E.	PUBLIC UTILITY EASEMENT
S	SOUTHERLY
SM	SMALL
SMH	SEWER MANHOLE
T	TOP of *
TC	TOP OF CURB
TCN	TOP OF CONCRETE
TEL	TELEPHONE EQUIP.
TH	THRESHOLD
TOE	TOE OF SLOPE
TS	TOP OF SLOPE or
TS	TOP OF STEP(s)
TV P E	T.V, TELEPHONE, & ELECTRIC (underground utility lines)
TW	TOP OF WALL
W	WESTERLY
WL	WALL
WM	WATER METER
WV	WATER VALVE
WWL	WING WALL

REVISIONS

MISSION GROUP ARCHITECTS
R E JOHNSON AIA

SITE PLAN

PROPOSED ADU FOR:
KISLAK RESIDENCE
3627 CAMPANIL DRIVE
SANTA BARBARA, CALIFORNIA 93109

DATE
7/14/2023

SHEET
A-1

1130 COAST VILLAGE CIRCLE STE H SANTA BARBARA CALIFORNIA 93108 805-969-5910

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SAMSUNG

SUBMITTAL AC030BNHDCH/AA / AC030BXADCH/AA (CNH30HDB / CXH30ADB) Page 1 of 4
Samsung Duct S, Single Zone Duct, Split System

Job Name
Purchaser
Submitted to
Unit Designation

Location
Engineer
Reference ☐ Approval ☐ Construction ☐
Schedule #

Specifications

Model	Indoor Unit Model Number (US Code)		AC030BNHDCH/AA (CNH30HDB)
	Outdoor Unit Model Number (US Code)		AC030BXADCH/AA (CXH30ADB)
Performance [1]	Nominal Capacity	Cooling / Heating (Btu/h)	30,000 / 32,000
	Capacity Range	Cooling (Btu/h)	8,600 - 34,000
		Heating (Btu/h)	7,900 - 41,000
	SEER / EER		17.7 / 10.3
	COP (nominal heating)		3.3
	HSPF		11
	AHRI Certification Number		207465458
Power	Voltage	e / V / Hz	1 / 208-230 / 60
	Working Voltage Range (VAC)		176 - 254 (max. 3% deviation from each)
	Operating Current (min. / std. / max.)	Cooling (A)	3.5 / 13.3/ 17.2
		Heating (A)	3.1 / 13.0 / 24.0
	Max. Breaker	Amps	30
	Min. Circuit Ampacity (A)		24
Dimensions	W X H X D	Indoor Unit	47 1/4 X 9 13/16 X 27 9/16
	(in.)	Outdoor Unit	37 X 39 5/16 X 13
	Duct Connections	Supply (in.)	45 5/16 X 8 11/16
	(W X H)	Return (ID, in.)	45 5/16 X 8 11/16
	Weight	Indoor Unit	76.1
	(lbs.)	Outdoor Unit	159.8
Sound Pressure Level	Indoor Unit dB(A)	L / M / H	33 / 37 / 41
	Outdoor Unit dB(A)	Cooling / Heating (high)	50 / 52
Operating Temperatures	Outdoor	Cooling	23° ~ 122°F (-5° ~ 50°C)
		Heating	0 ~ 122°F (-18 ~ 50°C) w/ baffle
	Indoor	Cooling	-4 ~ 75°F (-20 ~ 24°C)
		Heating	61 ~ 90°F (16 ~ 32°C)
			T ≤ 80°F (27°C)
Pipe Connections	Indoor & Outdoor	High side (flare)	3/8"
		Low side (flare)	5/8"
	Maximum (ft.)		164
	Maximum Vertical Separation (ft.)		98.4
	Condensate Connection (with included adapter)		1 1/16" ID for 3/4" PVC
Refrigerant	Type		R410A
	Control Method		Electronic Expansion Valve
	Factory Charge	lbs.	5.7
	Charged for		24.6 ft
	Additional Refrigerant		0.11 oz/ft over 24.6 ft
Compressor	Manufacturer		Samsung
	Type		Inverter Driven, Twin BLDC Rotary
	RLA	Amps	16.2
Evaporator Fan	Type		BLDC (1) With Sirocco Fan (3)
	Air Volume	CFM (L/M/H)	600 / 759 / 918 (at standard ESP)
	Output (W) / FLA (A)		153 W / 2.10 A
	Static Pressure	Standard (°WC)	0.58
		Min. / Max. (°WC)	0.1 - 0.79
Condenser Fan	Motor		BLDC With Axial Type Fan (1)
	FLA / Watts / CFM (max.)		1.25 A / 125 W / 2,684 CFM
Safety	Certifications		UL 1995
	Devices: PCB fuses, indoor unit terminal block thermal fuse, current transformer, over-voltage protection, crankcase heating, temperature limit protection logic, compressor overload sensing		

[1] Certified in accordance with the AHRI Unitary Small Air-Source Heat Pumps (USHP) Certification Program which is based on the latest edition of AHRI Standard 210/240

Samsung HVAC maintains a policy of ongoing development, specifications are subject to change without notice. Refer to www.AHRIdirectory.org for current reference numbers.

ECO2 SYSTEMS

SUBMITTAL : GS4-45HPC & SAN-43SSAQA 43 Gallon Tank

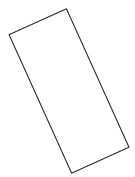
SANCO2

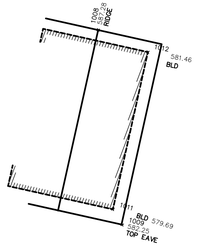
Job Name
Purchaser
Submitted to
Unit Designation

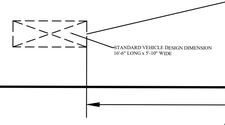
Location
Engineer
Reference ☐ Approval ☐ Construction ☐
Schedule #

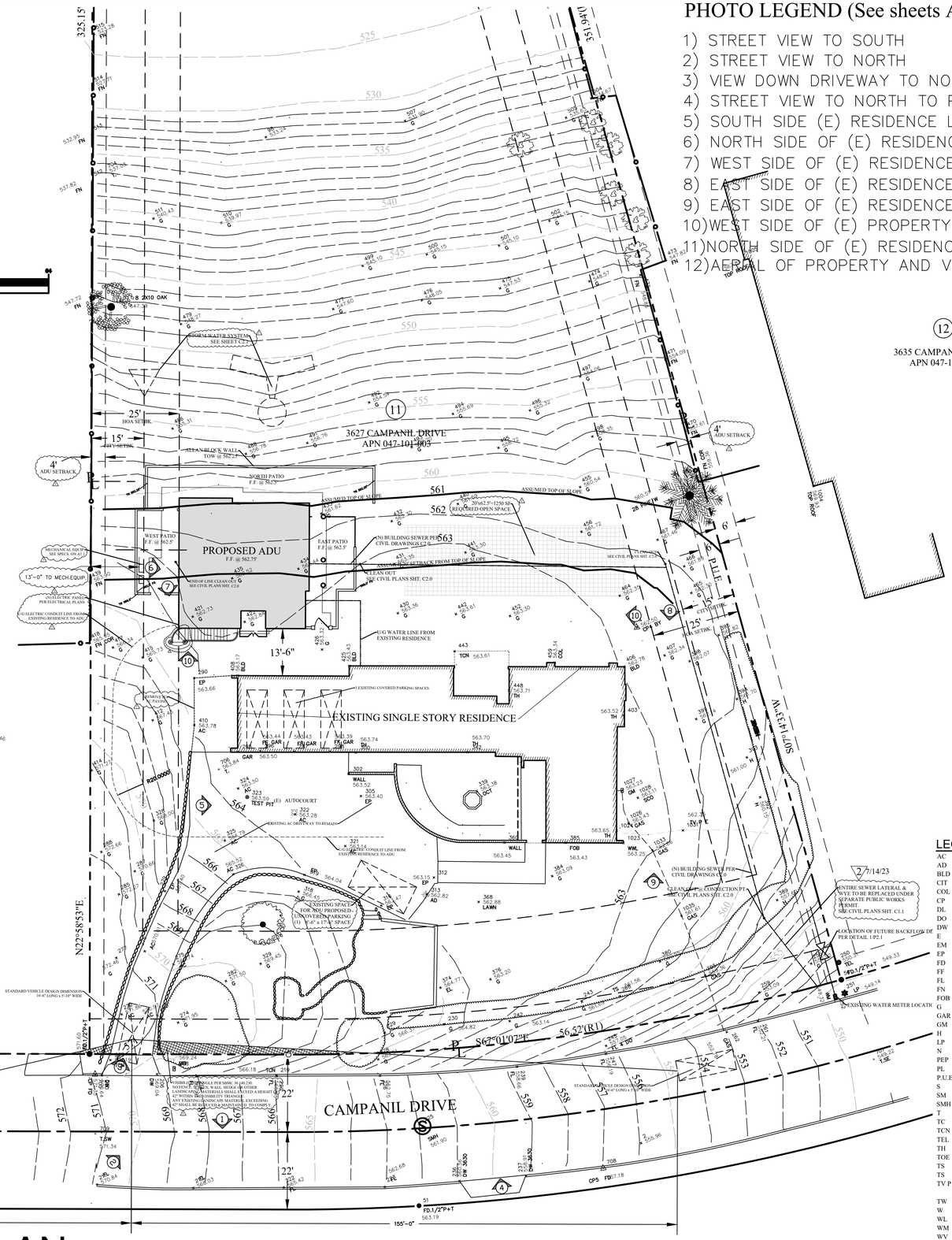
Specifications	GS4-45HPC
Performance	
Uniform Energy Factor	3.10
Uniform First Hour Rating	69 Gallons
Nom Heating Capacity (Btu/h)	15,400 Btu/h
Nom Heating Capacity (kw)	4.5kw
Heating COP @ 80/47/17°F	5.5 / 4.2 / 2.8
Water Temperature Setting (°F)	45 or 149 DegF
Refrigerant Type	R744 (CO_2)
Refrigerant Charge (Oz)	25.4oz (720g)
Power Voltage	208/230v-1Ph-60Hz
Breaker Size	15A
MCA (Amps)	10.2A
Compressor RLA/LRA (Amps)	7.5A / 9.8A
Fan Motor RLA/Watts	0.4A / 70W
Pump RLA/Watts	0.4A / 40W
Noise Level (DbA)	37
Weight (lbs)	108lbs
Storage Tank	**SAN-43SSAQA**
Nominal Volume	43 Gallons
Pressure Relief Valve (Psig & °F	125 & 210°F
Temperature Sensor	Thermistor
Tank Weight (lbs)	88lbs
Standby Loss in 67°F Ambient	91 Btu/h
Tank Connection Sizes	
Cold Water Inlet	3/4" NPT
Hot Water Outlet	3/4" NPT
Cold Water to Heat Pump	3/4" NPT
Hot Water Return from HP	3/4" NPT
Pipe Size - Tank to Heat Pump	
Cold Water pipe - Tank to HP	1/2"
Hot Water pipe - HP to Tank	1/2"
Max Pipe Length inc	66ft
Max Vertical Separation of	23ft
Certifications	
Safety	ETL & ETLc Pending
Performance	Energy Star Pending
Warranty - System	3 Years Labor
Heat Pump	10 Years Parts
Tank	15Yrs Limited Lifetime

GRAPHIC SCALE
0 4 8 16 24 64
(IN FEET)
1 inch = 16 ft.








PROPOSED ADU
F.F. @ 562.75'
EXISTING SINGLE STORY RESIDENCE
CAMPANIL DRIVE
S67°01'02"E
S67°01'02"E 56.52'(R1)
N22°58'53"E
S07°14'33"W
325.15'
351.94'(R1)
155'-0"
155'-0"
(10) 3619 CAMPANIL DRIVE APN 047-101-004
(11) 3627 CAMPANIL DRIVE APN 047-101-003
(12) 3635 CAMPANIL DRIVE APN 047-101-002
25' HOA SETBK.
15' REAR SETBK.
4' ADU SETBACK
13'-6"
22'
STORM WATER SYSTEM SEE SHEET C3.0
(N) BUILDING SEWER PER CIVIL DRAWINGS C2.0
CLEANOUT & CONNECTION PT SEE CIVIL PLANS SHT. C2.0
ENTIRE SEWER LATERAL & "WYE TO BE REPLACED UNDER SEPARATE PUBLIC WORKS PERMIT. SEE CIVIL PLANS SHT. C1.1
2/7/14/23
LOCATION OF FUTURE BACKFLOW DE PER DETAIL 1/P2.1
EXISTING WATER METER LOCATI
(E) AUTOCOURT
EXISTING AC DRIVEWAY TO REMAIN
EXISTING SPACE FOR NOL PROPOSED UNCOVERED PARKING (1) 9'-6" x 17'-6" SPACE
EXISTING COVERED PARKING SPACES
UG WATER LINE FROM EXISTING RESIDENCE
UG ELECTRIC CONDUIT LINE FROM EXISTING RESIDENCE TO ADU
UG ELECTRIC CONDUIT LINE FROM EXISTING RESIDENCE TO ADU
(N) BUILDING SEWER PER CIVIL DRAWINGS C2.0
CLEAN OUT SEE CIVIL PLANS SHT. C2.0
ASSUMED SETBACK FROM TOP OF SLOPE
ASSUMED TOP OF SLOPE
REQUIRED OPEN SPACE
NORTH PATIO F.F. @ 562.5'
WEST PATIO F.F. @ 562.5'
EAST PATIO F.F. @ 562.5'
MECHANICAL EQUIP. SEE SPECS. ON A2.1
13'-0" TO MECH.EQUIP.
ELECTRICAL PANEL PER ELECTRICAL PLANS
END OF LINE CLEAN OUT @ SEE CIVIL PLANS SHT. C2.0
REMOVE EXISTING PAVING
ALTA BLOCK WALL TOW @ 562.25
STANDARD VEHICLE DESIGN DIMENSION 16'-6" LONG x 7'-10" WIDE
WASHELLI ORDINANCE PUB SHMC 30.140.230 NO FENCE, SCREEN, WALL, HEDGE OR OTHER LANDSCAPING MATERIALS SHALL EXCEED A HEIGHT OF 42" WITHIN 10' OF THE INTERSECTION AND NO EXISTING LANDSCAPE MATERIAL EXCEEDING 42" SHALL BE ALLOWED TO MAINTAIN TO COMPLY
STANDARD VEHICLE DESIGN DIMENSION 16'-6" LONG x 7'-10" WIDE
STANDARD VEHICLE DESIGN DIMENSION 16'-6" LONG x 7'-10" WIDE
8 2X10 OAK
1 OAK
1 OAK
1

DOOR SCHEDULE

MARK NO.	TYPE	SIZE W	SIZE H	SIZE T	MATL	DETAILS SHT. A–6.1 U.N.O. H	J	S	REMARKS
1		3'–6"	9'–0"	1¾"	SC WD.	X/AX	X/AX	X/AX	SOLID CORE WOOD PLANK FINISH, RADIUS ARCH TOP
2		PR. 6'–0"	9'–0"		STL/GLS	5/A6.1	8/A6.1	11/A6.1	THREE LIGHT FRENCH DOOR w/TEMPERED GLASS
3		3'–6"	9'–0"	1¾"	SC WD.				INTERIOR POCKET DOOR
4		3'–0"	8'–0"	1¾"	STL/GLS	5/A6.1	8/A6.1	12/A6.1	3 LIGHT FRENCH DOOR w/TEMPERED GLASS
5		PR. 5'–0"	8'–0"	1¾"	SC WD.	10/A6.1			INTERIOR DOOR
6		3'–0"	8'–0"	1¾"	SC WD.	10/A6.1			INTERIOR DOOR
7		2'–8"	8'–0"	1¾"	SC WD.	10/A6.1			INTERIOR DOOR
8		2'–0"	6'–8"	½"	TEMP GL.				TEMPERED GLASS SHOWER DOOR
9	⚠	2'–8"	8'–0"	1¾"	SC WD.	10/A6.1			50% OPEN LOUVER INT. DOOR, APPROX. 950 S.I. NFA
10		3'–0"	8'–0"	1¾"	SC WD.	10/A6.1			INTERIOR DOOR
11		PR.2'–0"	8'–0"	1¾"	SC WD.	10/A6.1			INTERIOR DOOR
12		2'–2"	7'–0"	1¾"	SC WD.				VERT. PLNK. DR. w/LVRED. 12"x12" opn'g tp. and btm.
13		2'–4"	8'–0"	1¾"	SC WD.				INTERIOR DOOR
14		PR.1'–6"	5'–0"		WRT. IRON				WROUGHT IRON GATE, DESIGN TBD
15		4'–0"	5'–8"	1¾"	SC WD.				SOLID CORE WOOD PLANK GATE, FLAT ARCH TOP
16		2'–9"	6'–0"		WRT. IRON				WROUGHT IRON GATE, DESIGN TBD
17		4'–0"	6'–0"		WRT. IRON				WROUGHT IRON GATE, DESIGN TBD
18		4'–0"	6'–0"		WRT. IRON				WROUGHT IRON GATE, DESIGN TBD
19									
20									

WINDOW SCHEDULE

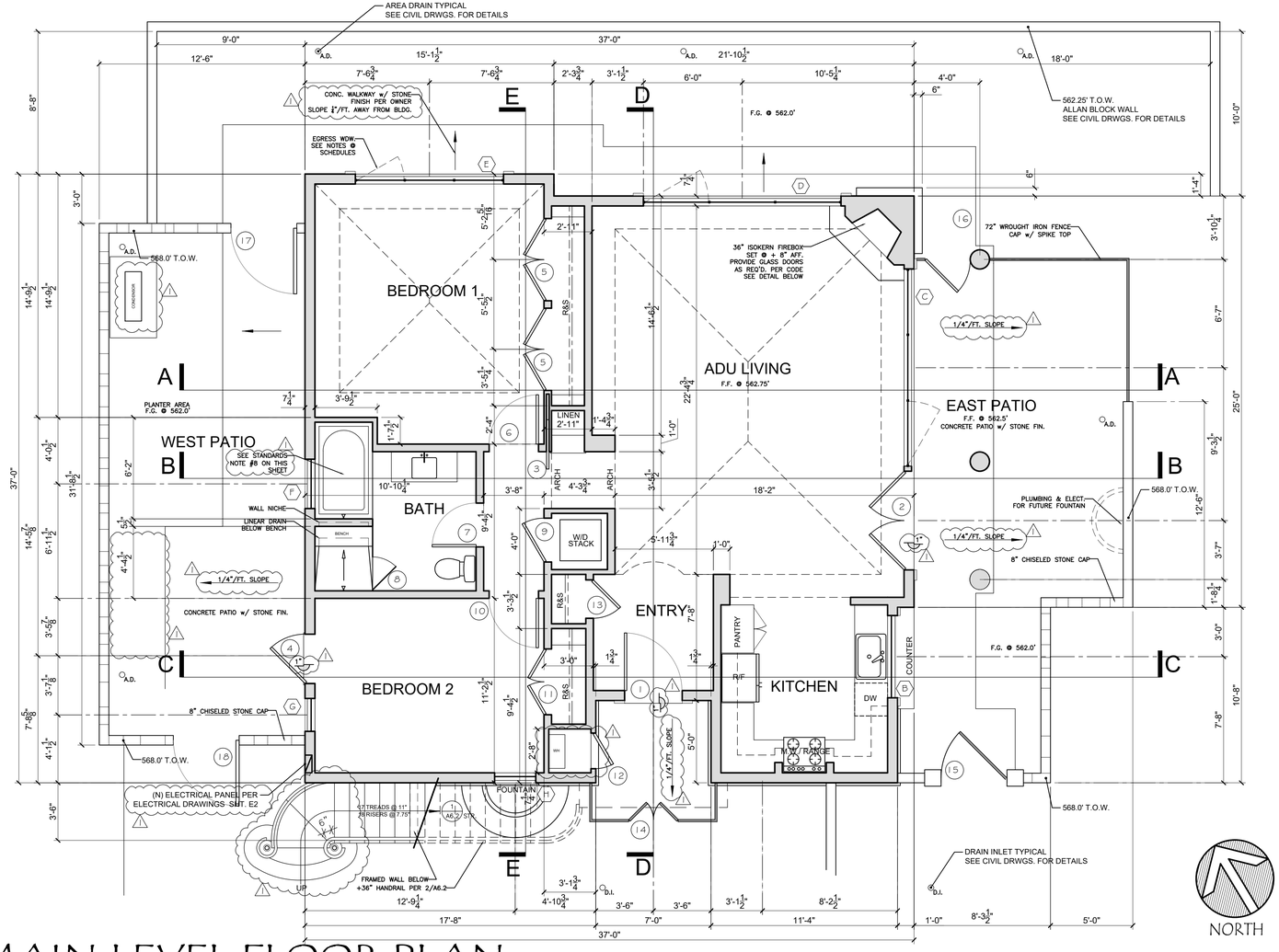
MARK NO.	TYPE	FRAME SIZE W	FRAME SIZE H	MATL	DETAILS SHT. A–6.1 UNO H	J	S	ROOM	MFG.	QTY.	REMARKS
A											
B	CSMT.	5'–0"	4'–0"	STL/GL	5/A6.1	6/A6.1	2/A6.1	KITCHEN		1	
C	FIXED	12'–0"	8'–4"	STL/GL	5/A6.1	6/A6.1	7/A6.1	LIV. RM.		1	12 LIGHT STL. FRAME w/ TEMP. GLASS
D	FIXED	12'–0"	8'–4"	STL/GL	5/A6.1	6/A6.1	7/A6.1	LIV. RM.		1	12 LIGHT STL. FRAME w/ TEMP. GLASS
E	FIXED	9'–0"	7'–4"	STL/GL	5/A6.1	6/A6.1	7/A6.1	BDRM. 1		1	9 LIGHT STL. FRAME w/ TEMP. GLASS
F	CSMT.	3'–0"	4'–0"	STL/GL	1/A6.1	3/A6.1	1/A6.1	BATH 1		1	6 LIGHT STL. FRAME w/TEMP. GLASS
G	CSMT.	2'–0"	7'–4"	STL/GL	1/A6.1	3/A6.1	1/A6.1	BDRM. 2		1	10 LIGHT STL. FRAME w/ TEMP. GLASS
H	CSMT.	2'–6"	5'–0"	STL/GL	5/A6.1	6/A6.1	7/A6.1	BDRM. 2		1	EGRESS WINDOW–SEE NOTES
I											
J											
K											
L											
M											

DOOR NOTES:

1. THE FOLLOWING DOORS SHALL HAVE MATCHING COLOR ALUMINUM SCREENS: 2,4.
2. ALL EXTERIOR DOORS TO BE DUAL GLAZED WITH A MINIMUM OF ONE TEMPERED PANE. MUNTINS (IF APPLICABLE) SHALL BE "AUTHENTIC DIVIDED LIGHT".
3. PANEL DOORS TO BE (2) PANEL AS MANUFACTURED BY T.M. COBB. TYPICAL INTERIOR DOORS WITH V.G. DOUGLAS FIR RAILS. PANELS TO BE MULTIFIBER BOARD UNLESS OTHERWISE NOTED.
4. ALL EXTERIOR DOORS SHALL BE WEATHERSTRIPPED. PEMKO 356DV ASTRAGAL ON INACTIVE LEAF OF EACH PAIR OF DOORS.
5. ALL DOORS TO BE PROTECTED FROM MOISTURE AND PRIMED AND SEALED (TOP AND BOTTOM) IMMEDIATELY UPON ARRIVAL TO SITE. GENERAL CONTRACTOR TO ASSUME THE RESPONSIBILITY FOR CONDITION OF DOORS DURING CONSTRUCTION PERIOD. ALL PRIMING OF DOORS TO BE PER DOOR MANUFACTURER'S SPECIFICATIONS. IF DOOR TOPS AND BOTTOMS ARE RECUT AFTER PRIMING OR PAINTING, THEY ARE TO BE REPRIMED OR PAINTED IMMEDIATELY.
6. HARDWARE NOT SPECIFIED IN NOTES OR ABOVE SHALL BE INCLUDED IN FINISH HARDWARE ALLOWANCE.
7. DOORS WHICH HAVE SPECIAL DECORATIVE GLASS SPECIFIED ARE TO COME FROM MANUFACTURER WITHOUT GLAZING UNLESS OTHERWISE NOTED.
8. ALL EXTERIOR DOORS SHALL BE HOPE DOOR/WINDOW SYSTEMS w/ DUAL 20% ≥ LEED–H ENERGY STAR GLAZING. MAX. U–FACTOR OF .35 & MAX. SHGC OF .35 PER ENERGY CALCS. ON SHEET A–X.0.

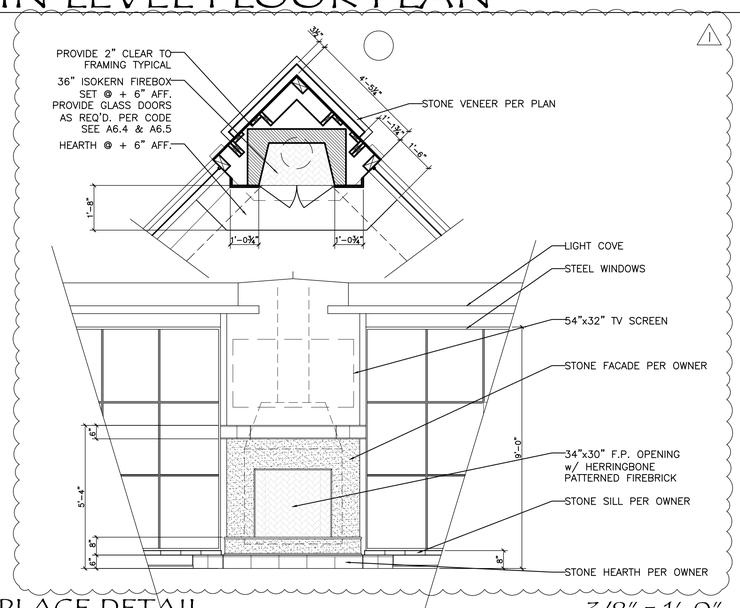
WINDOW NOTES:

1. ALL OPERABLE CASEMENT OR PARTIAL CASEMENT WINDOWS SHALL HAVE REMOVABLE ALUMINUM SCREENS. COLOR: MATCH WINDOW COLOR.
2. WINDOWS SHALL RECEIVE SHADING DEVICES PER ENERGY CALCS. (IF REQUIRED IN TITLE 24 NOTES.)
3. ALL WINDOWS TO BE DUAL GLAZING WITH MINIMUM ONE PANE TEMPERED. MUNTINS SHALL BE "AUTHENTIC DIVIDED LIGHT".
4. ALL WINDOWS TO PROTECTED FROM MOISTURE AND PRIMED AND SEALED (TOP AND BOTTOM) IMMEDIATELY UPON ARRIVAL TO SITE. GENERAL CONTRACTOR TO ASSUME THE RESPONSIBILITY FOR CONDITION OF WINDOWS DURING CONSTRUCTION PERIOD. ALL PRIMING OF WINDOWS TO BE PER MANUFACTURER'S SPECIFICATIONS.
5. SCHEDULED "CUSTOM" WINDOWS SHALL CONFORM TO HEAD, JAMB, AND SILL DETAILS. VERIFY DETAILS OF EACH SPECIFIC WINDOW CONFIGURATION AND CONSTRUCTION WITH ARCHITECT PRIOR TO FABRICATION.
6. ALL DIMENSIONS SHOWN ON WINDOW SCHEDULE ARE FINISHED OPENINGS. VERIFY R.O.
7. HARDWARE NOT SPECIFIED IN NOTES OR ABOVE SHALL BE INCLUDED IN FINISH HARDWARE ALLOWANCE.
8. ALL FACTORY WINDOWS TO BE FACTORY PRIMED UNLESS OTHERWISE NOTED.
9. WINDOWS WHICH HAVE SPECIAL DECORATIVE GLASS SPECIFIED ARE TO COME FROM MANUFACTURER WITHOUT GLAZING UNLESS OTHERWISE NOTED.
10. ALL EGRESS WINDOWS SHALL HAVE AT MINIMUM: 20" WIDTH CLEARANCE, 24" HEIGHT CLEARANCE, 5.7 SF OPENING & SHALL HAVE A MAX. SILL HEIGHT OF NO MORE THAN 44" ABOVE FINISH FLOOR.
11. ALL WINDOWS SHALL BE MILGARD ALUMINUM SERIES w/ DUAL 20% ≥ LEED–H ENERGY STAR GLAZING. MAX. U–FACTOR OF.35 AND MAX. SHGC OF .35. SEE ENERGY CALCS. ON SHEET A–X.0



MAIN LEVEL FLOOR PLAN

1/4" = 1'–0"



FIREPLACE DETAIL

3/8" = 1'–0"

STANDARD GENERAL NOTES:

1. PROVIDE MIXING VALVES AT SHOWERS PER CPC.
2. EACH SHOWERHEAD SHALL NOT EXCEED A WATER FLOW RATE OF 1.8 GPM.
3. KITCHEN FAUCET SHALL NOT EXCEED A WATER FLOW RATE OF 1.8 GPM.
4. RESIDENTIAL LAVATORY FAUCET SHALL NOT EXCEED A FLOW RATE OF 0.5 GPM.
5. TOILETS SHALL BE 1.28 GPF MAX. NOTE: ALL PLUMBING FIXTURES ARE TO MEET THE STANDARDS REFERENCED IN THE TABLE 4.303.3 OF CGBSC 4.303.1 SEE SHEET A0.2.
6. REFERENCE MANDATORY MEASURE REQUIREMENTS FOR CALIFORNIA ENERGY CODE AND CGBSC ON SHEETS A0.2 & A0.3.
7. EXHAUST FANS @ WATER CLOSET COMPARTMENTS SHALL PROVIDE MIN. OF 5 AIR CHANGES PER HOUR AND BE CONTROLLED BY A HUMIDISTAT SENSOR.
8. SHOWERS AND WALLS ABOVE BATHTUBS WITH SHOWERHEADS SHALL BE FINISHED WITH A NONABSORBENT SURFACE TO A HEIGHT OF NOT LESS THAN 6'–0" ABOVE THE FLOOR. (CRC R307.2)

LEGEND:

- NEW WALL
- EXISTING WALL TO REMAIN VERIFY ALL (E) DIMENSIONS REPORT DISCREPANCIES TO ARCHITECT
- EXISTING WALL TO BE REMOVED
- HIDDEN WALL BELOW
- (T) TEMPERED GLASS AS REQUIRED BY CODE
- (X)(X) INTR. ELEVATION REFERENCE SEE SHEET INDICATED
- D SECTION REFERENCE SEE SHEET A–5
- (1) DOOR REFERENCE SEE SHEET A–X
- (A) WINDOW REFERENCE SEE SHEET A–X
- FINISH NOTES
  - 4 2x4 STUD WALL @ 16" O.C.
  - 8 2x8 STUD WALL @ 16" O.C.
  - 10 2x10 STUD WALL @ 16" O.C.
  - 12 2x12 STUD WALL @ 16" O.C.

TYP. INTR. WALL TO BE 2x6 STUD WALL @ 16" O.C. U.N.O. PROVIDE SOUND INSULATION

TYP. EXTERIOR WALL TO BE 2x8 STUD WALL @ 16" O.C. U.N.O. PROVIDE INSULATION PER ENERGY CALCS.

LICENSED ARCHITECT — RICHARD E. JOHNSON — No. C-27425 — STATE OF CALIFORNIA

REVISIONS
1 7/8/2024

MISSION GROUP ARCHITECTS
R E JOHNSON AIA
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PROPOSED ADU FOR:
KISLAK RESIDENCE
3627 CAMPANIL DRIVE
SANTA BARBARA, CALIFORNIA 93109

DATE 7/8/2024

SHEET A-2

FLOOR PLAN & SCHEDULES

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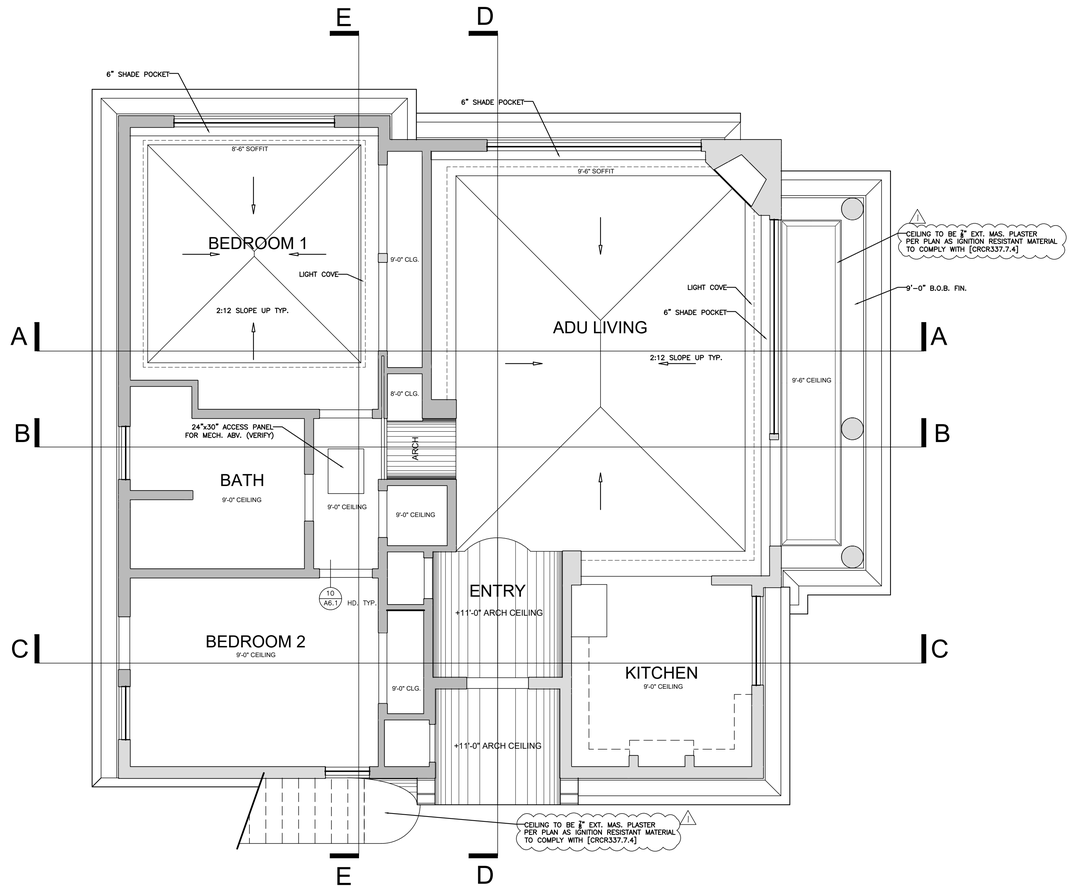
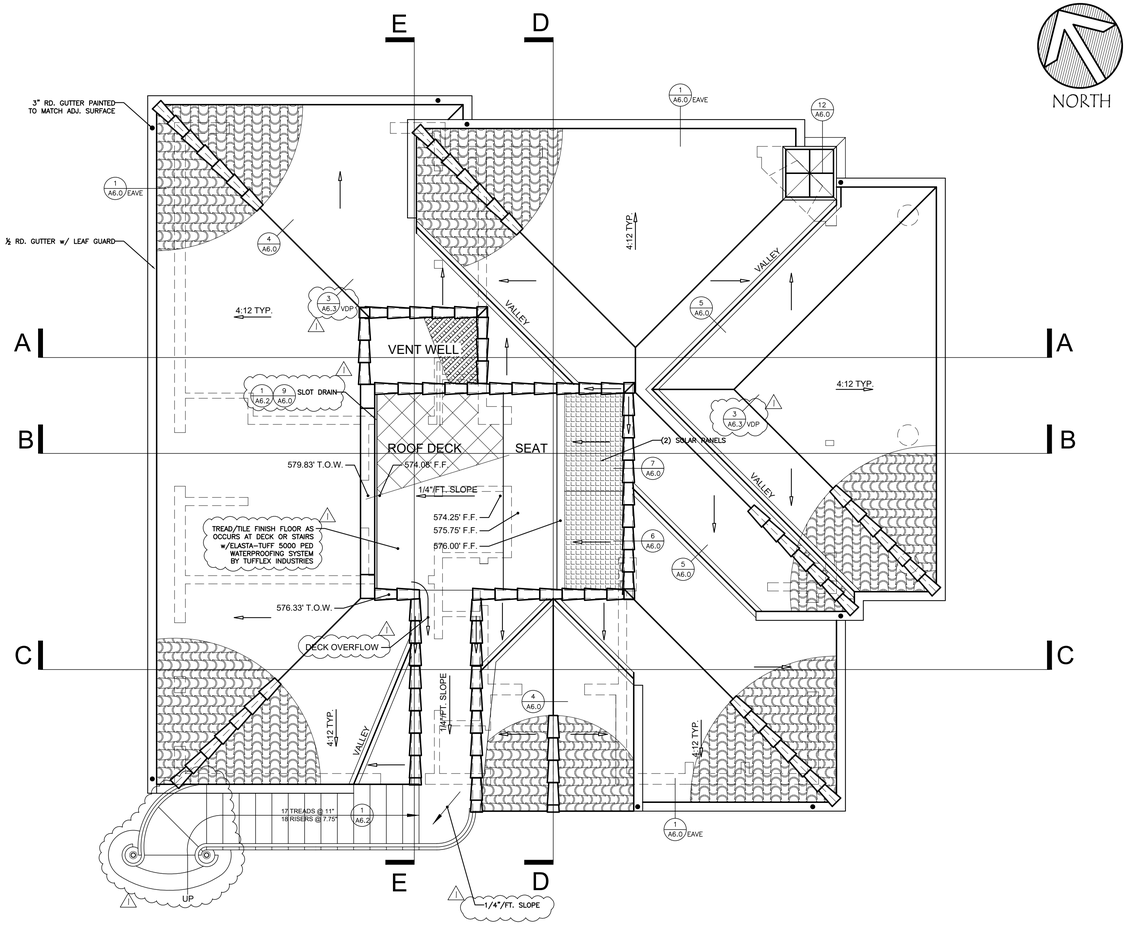


REFLECTED CEILING PLAN

1/4" = 1'-0"



ROOF PLAN

1/4" = 1'-0"

NORTH

LICENSED ARCHITECT
RICHARD E. JOHNSON
No. C-25425
STATE OF CALIFORNIA

REVISIONS

MISSION GROUP ARCHITECTS
R E JOHNSON AIA

ROOF PLAN
REFLECTED CEILING PLAN

SHEET A-3

DATE 6/30/2023

PROPOSED ADU FOR:
KISLAK RESIDENCE
3627 CAMPANIL DRIVE
SANTA BARBARA, CALIFORNIA 93109

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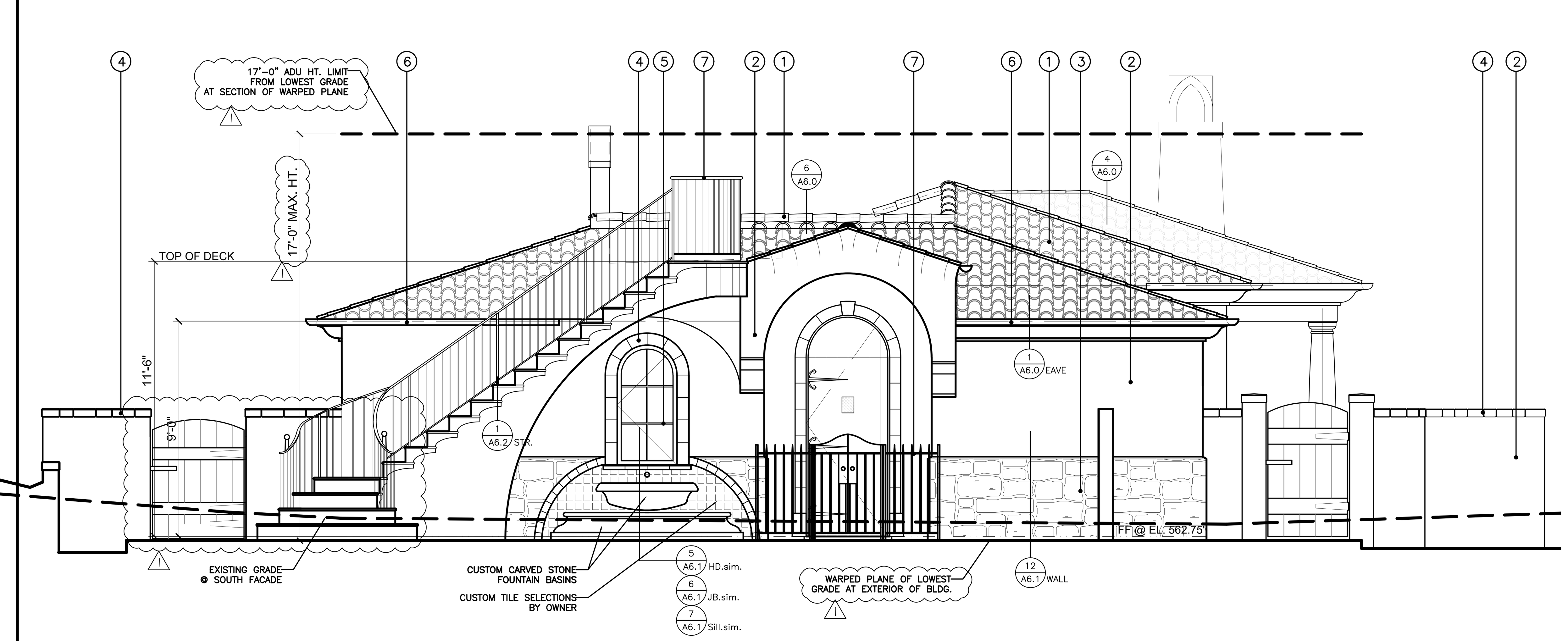
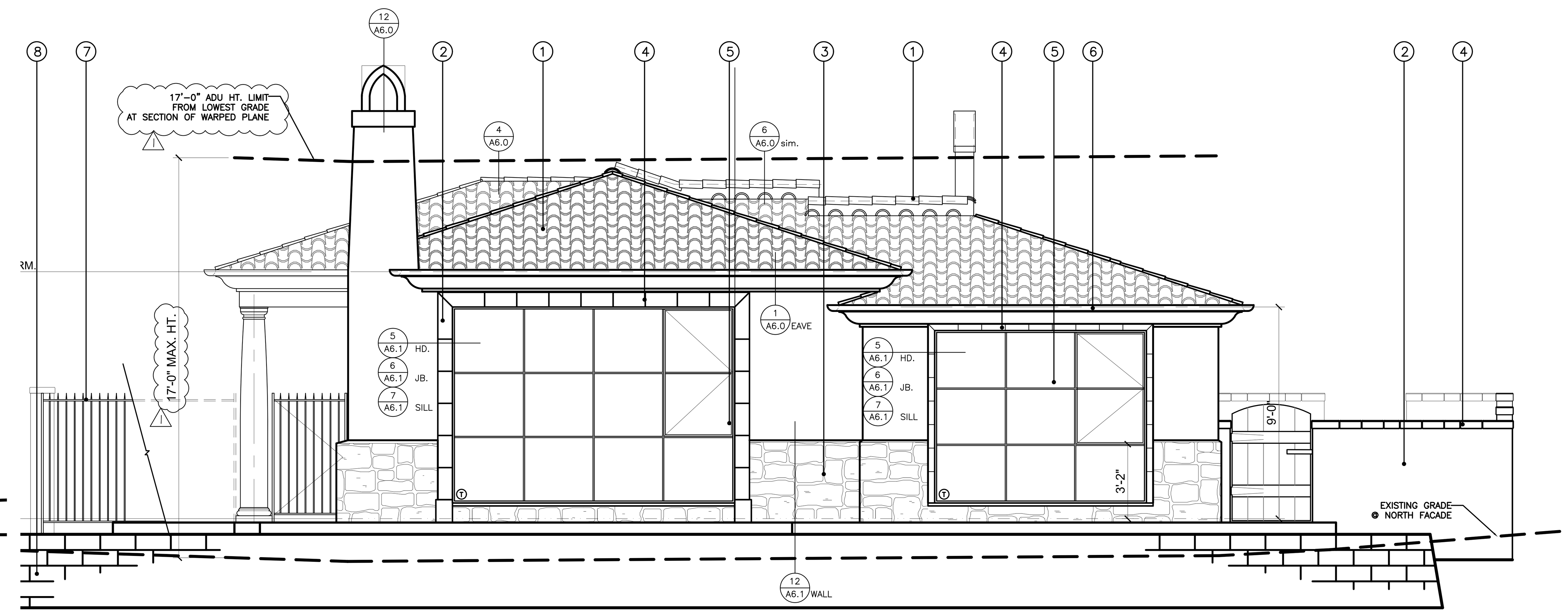


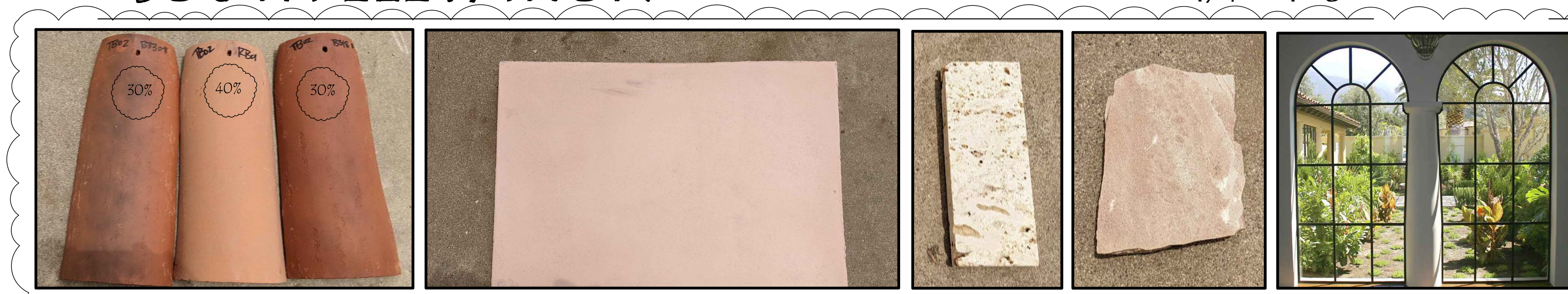
SOUTH ELEVATION

1/4" = 1'-0"

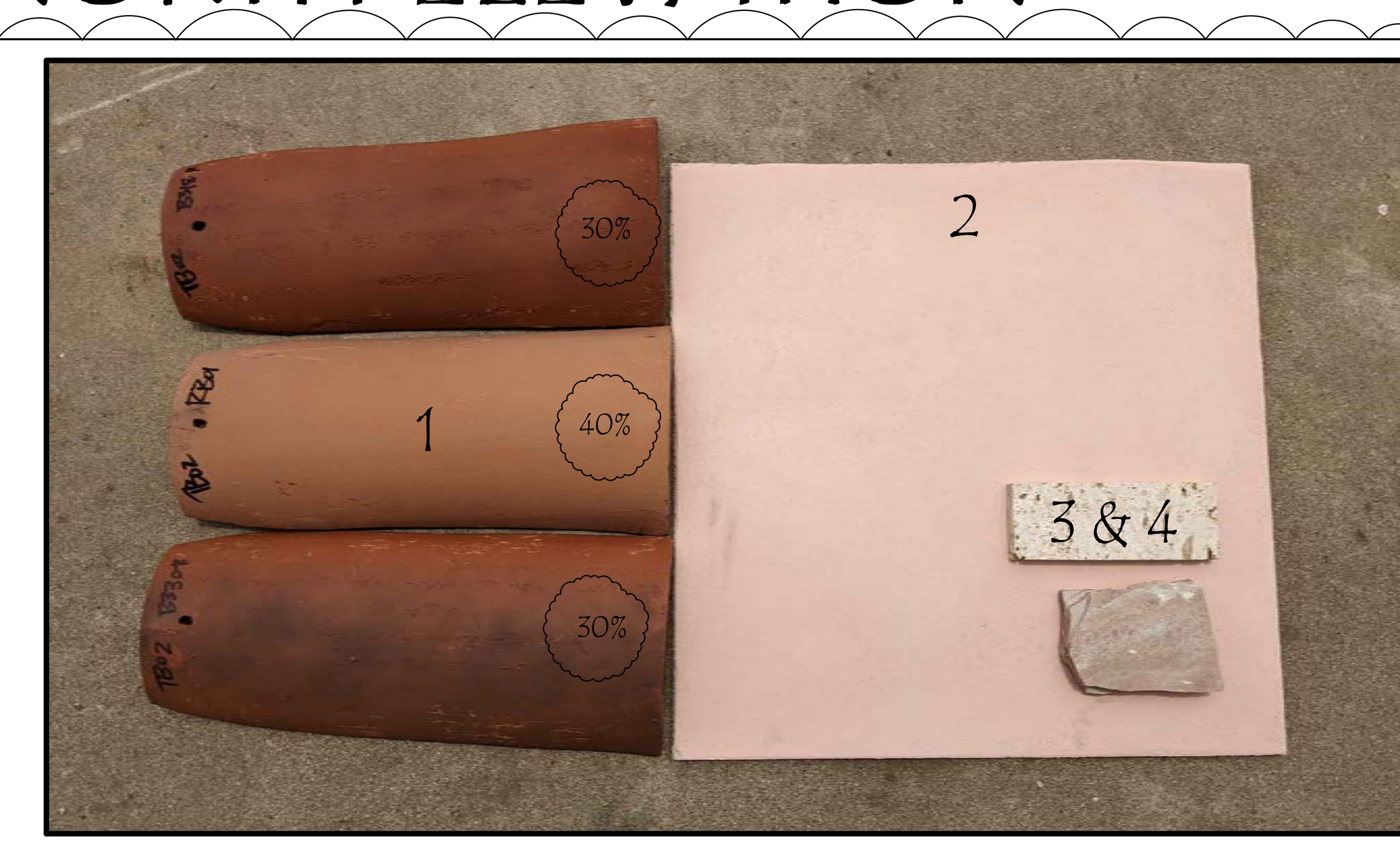


NORTH ELEVATION

1/4" = 1'-0"



1 ROOF TILE　2 EXTERIOR PLASTER　3,4 VENEER　3 PAVING　5 DRS. & WDWS.

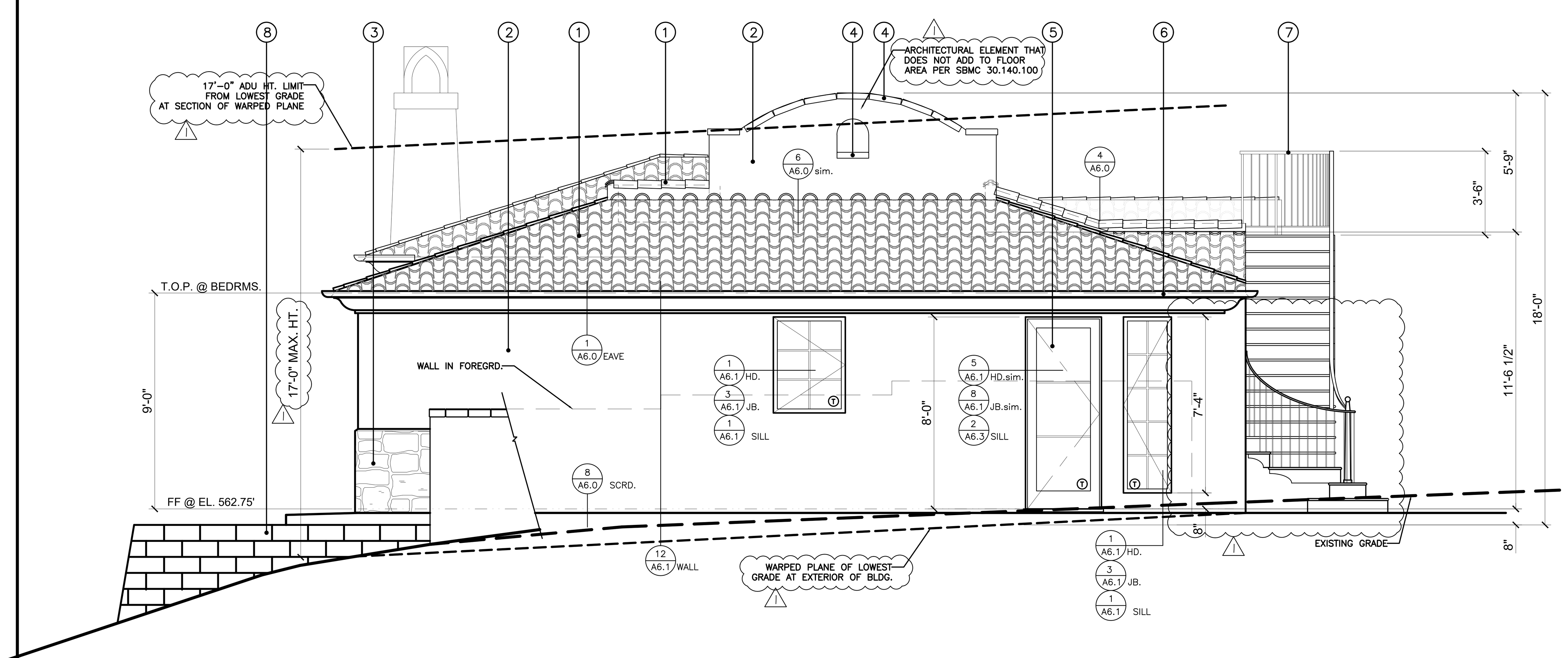


OVERALL COLOR PALETTE

MATERIALS LEGEND:

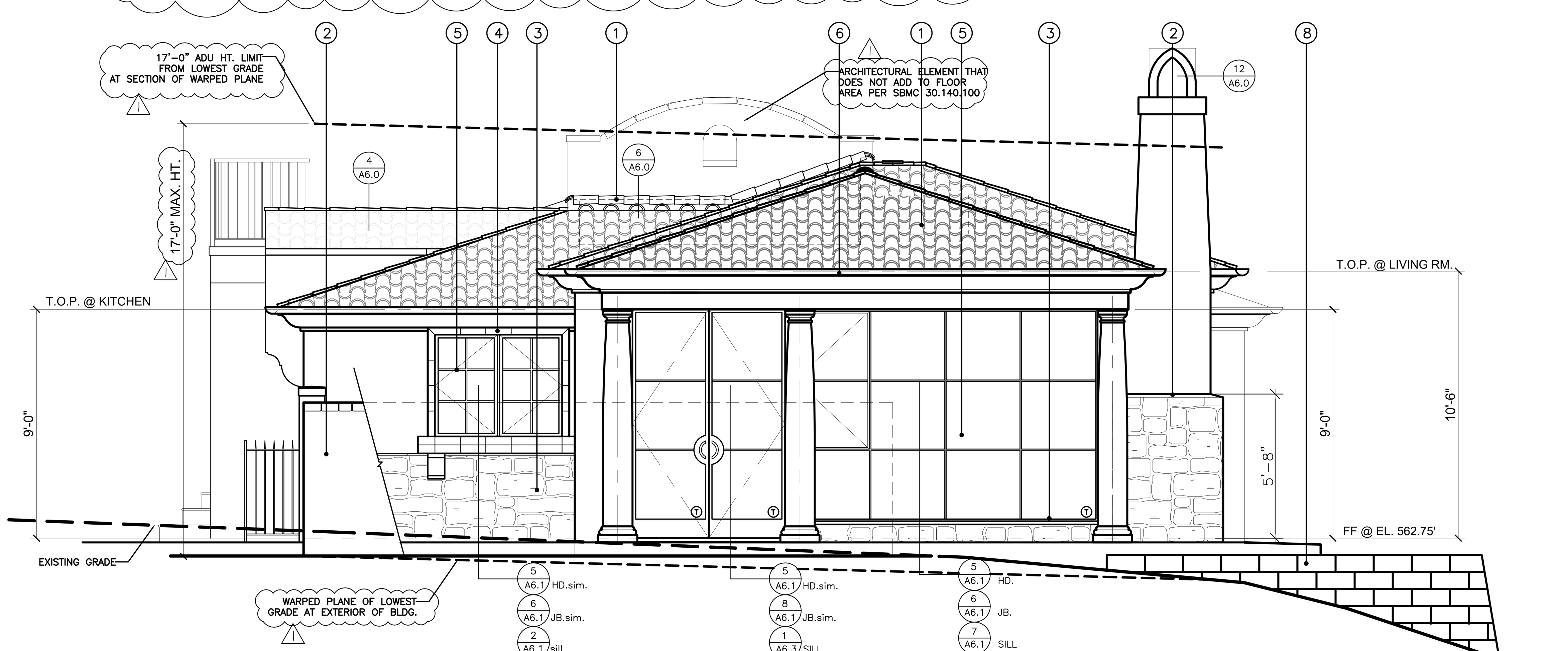
NOTE: VERIFY ALL COLORS AND MATERIALS WITH OWNER PRIOR TO ORDERING

1	ROOFING:	TWO PIECE MISSION TILE BY REDLANDS CLAY TILE UL CLASS "A" FIRE RATING ICC: ESR-4395 COLOR – 3 TILE CUSTOM BLEND 40% LIGHT TILE, 30% & 30% DARK TILES
2	EXTERIOR PLASTER:	7/8" SMOOTH TROWEL EXTERIOR PLASTER OVER MTL. LATH. & TYVEK HOMEWRAP TYPICAL COLOR: CUSTOM COLOR AS SHOWN (SOFT PINK)
3	STONE VENEER:	BEIGE TRAVERTINE VENEER OVER SCRATCH COAT/GAL. LATH OVER TYVEK WATERPROOF BARRIER OVER PLYWD. FLOORING TO BE CHEROKEE SANDSTONE
4	CARVED STONE TRIM:	BEIGE TRAVERTINE VENEER (SEE ABOVE)
5	DOORS & WDWS.:	STEEL WINDOWS & DOORS BY MIRAMAR MFG. INC ALL GLASS TO MEET CRITERIA SET FORTH IN ENERGY CALC. DUAL GLAZED w/ MAX. U-FACTOR OF .35 & MAX. SHGC OF OF .35 COLOR: BLACK
6	GUTTERS & FLASHING:	20 GA. MIN. COPPER GUTTER & FLASHING NEW GUTTERS TO HAVE DEBRIS GUARD
7	CUSTOM WROUGHT IRON:	DESIGN TO BE DETERMINED DESIGN SHALL COMPLY WITH [CRC SECTION R312] SEE DETAIL 2/A6.2 FOR GENERAL NOTES
8	STACKED ALLANBLOCK:	AB EUROPA COLLECTION



WEST ELEVATION

1/4" = 1'-0"



EAST ELEVATION

1/4" = 1'-0"

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REVISIONS
1 7/16/2024 EXT. COLORS

MISSION GROUP ARCHITECTS
R E JOHNSON AIA

EXTERIOR ELEVATIONS

PROPOSED ADU FOR:
KISLAK RESIDENCE
3627 CAMPANIL DRIVE
SANTA BARBARA, CALIFORNIA 93109

DATE
9/14/2024

SHEET
A-4

1230 COAST VILLAGE CIRCLE STE H SANTA BARBARA CALIFORNIA 93108 805-969-5910

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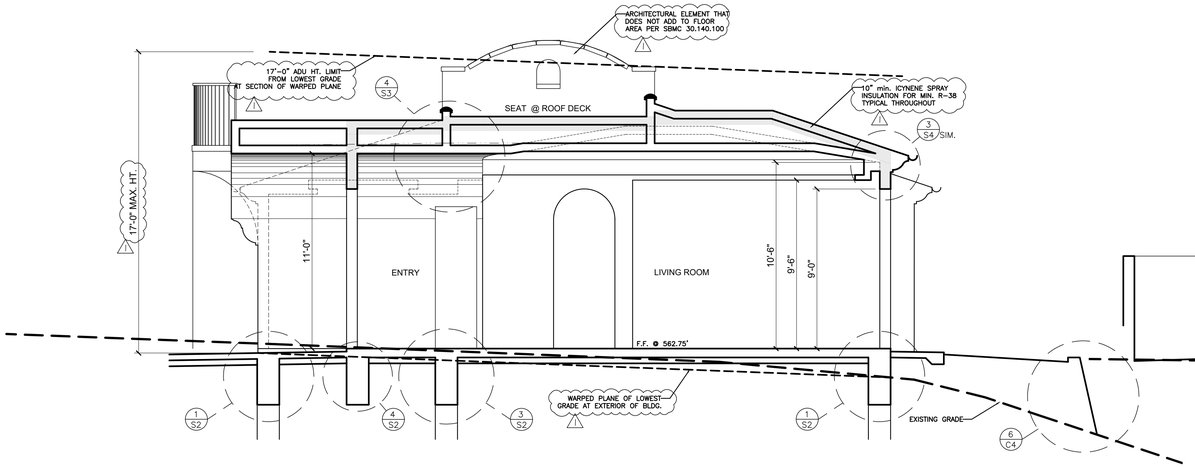
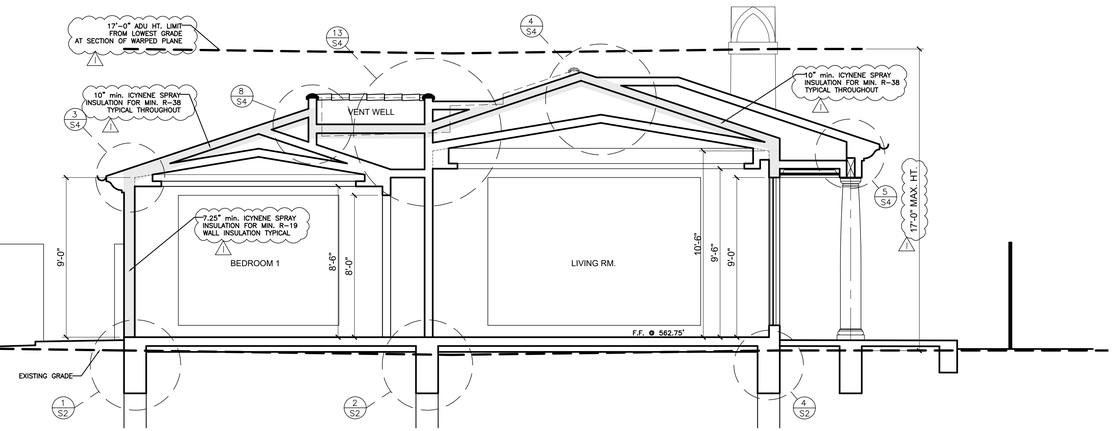


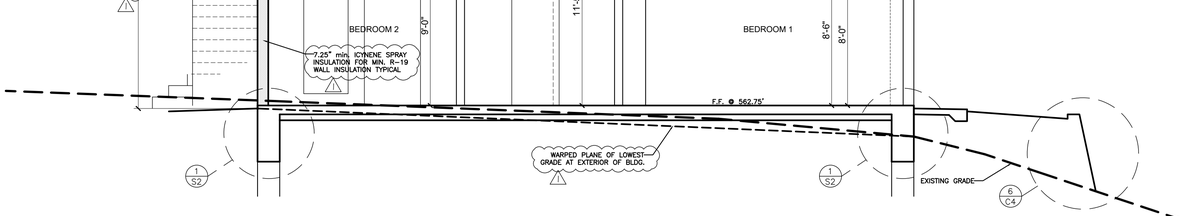
SECTION D

1/4" = 1'-0"



SECTION A

1/4" = 1'-0"



SECTION E

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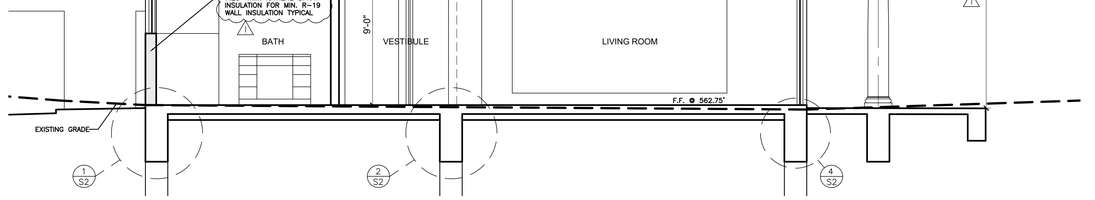

SECTION B

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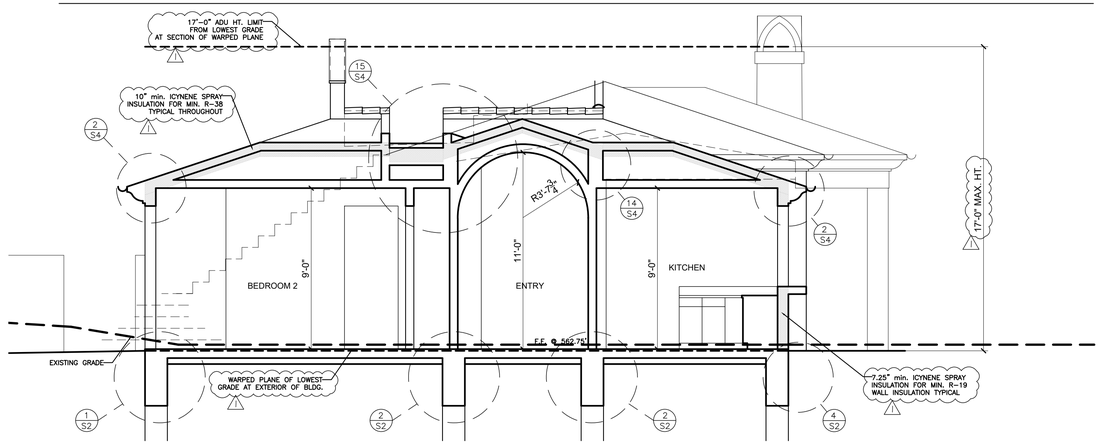

SECTION C

1/4" = 1'-0"

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REVISIONS

SECTIONS

PROPOSED ADU FOR:
KISLAK RESIDENCE
3627 CAMPANIL DRIVE
SANTA BARBARA, CALIFORNIA 93109

DATE 6/30/2023

SHEET A-5

LICENSED ARCHITECT RICHARD E. JOHNSON No. C-25425 STATE OF CALIFORNIA

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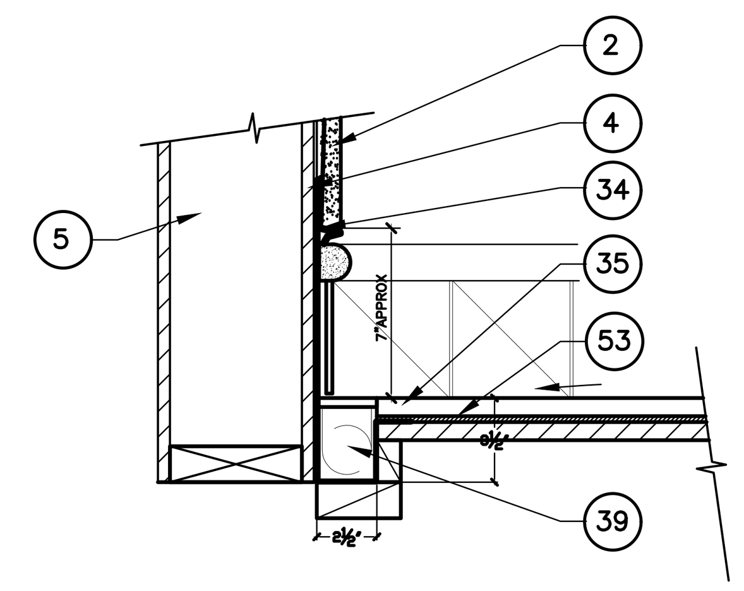
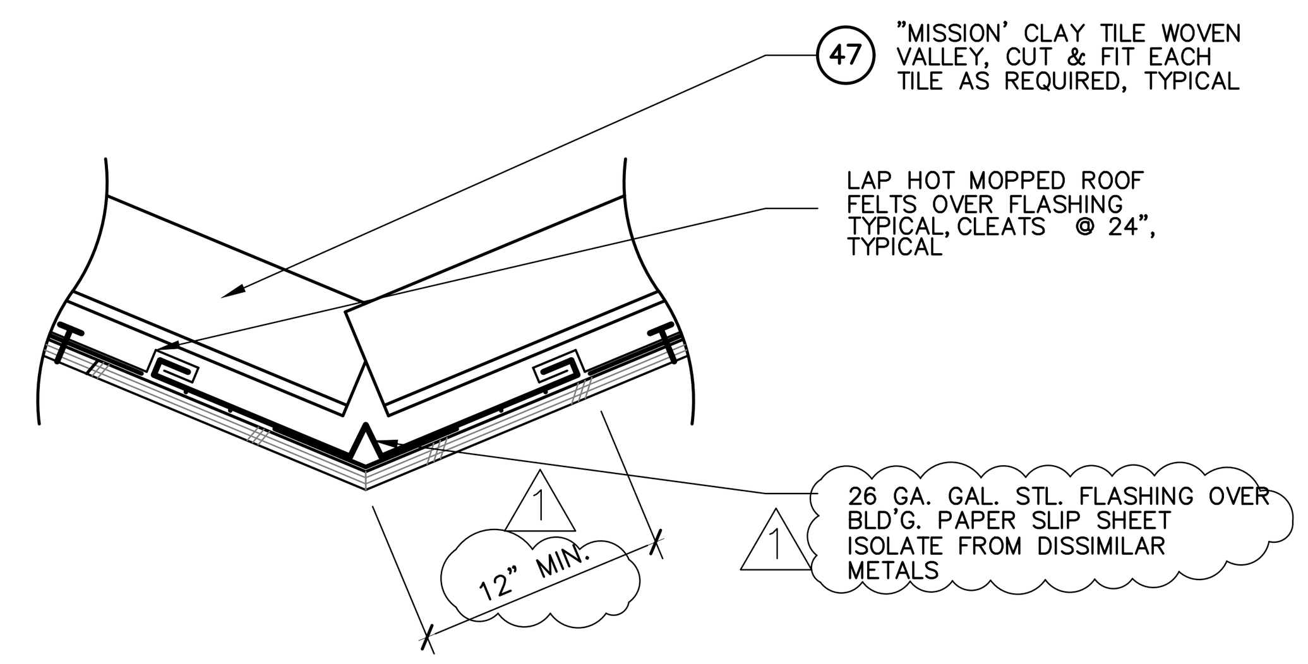
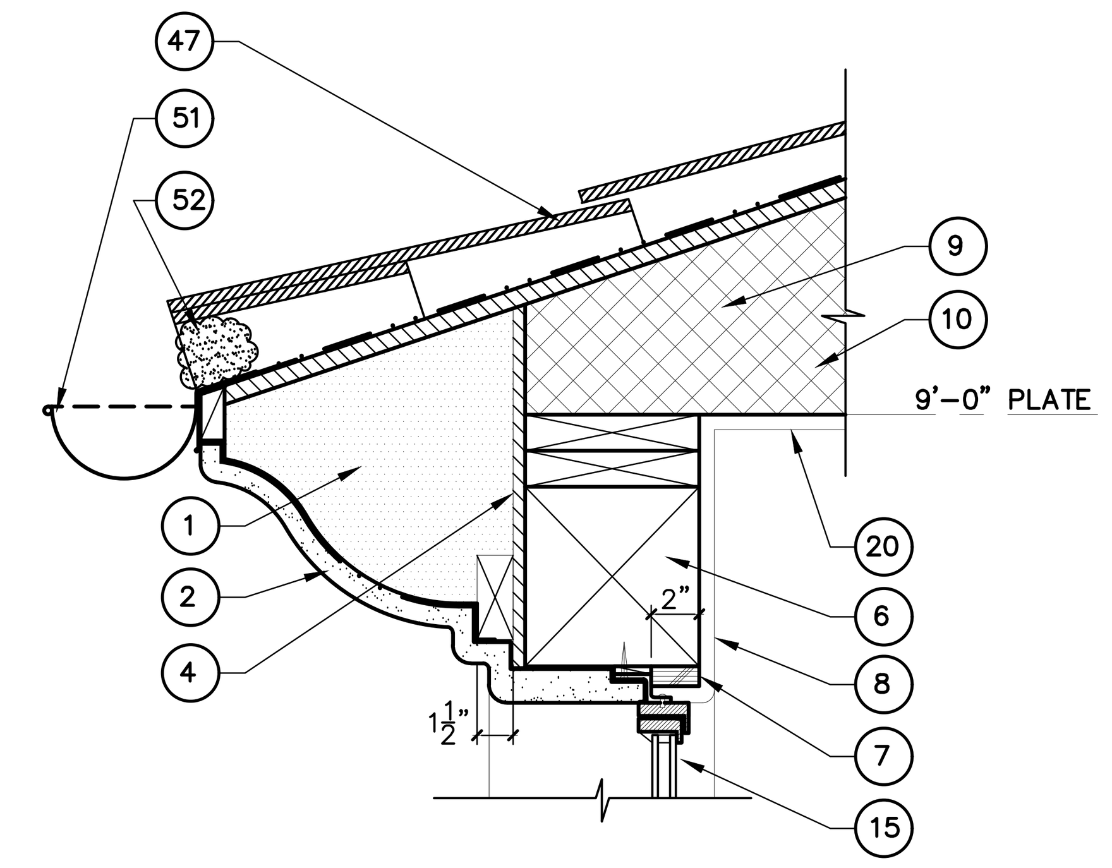


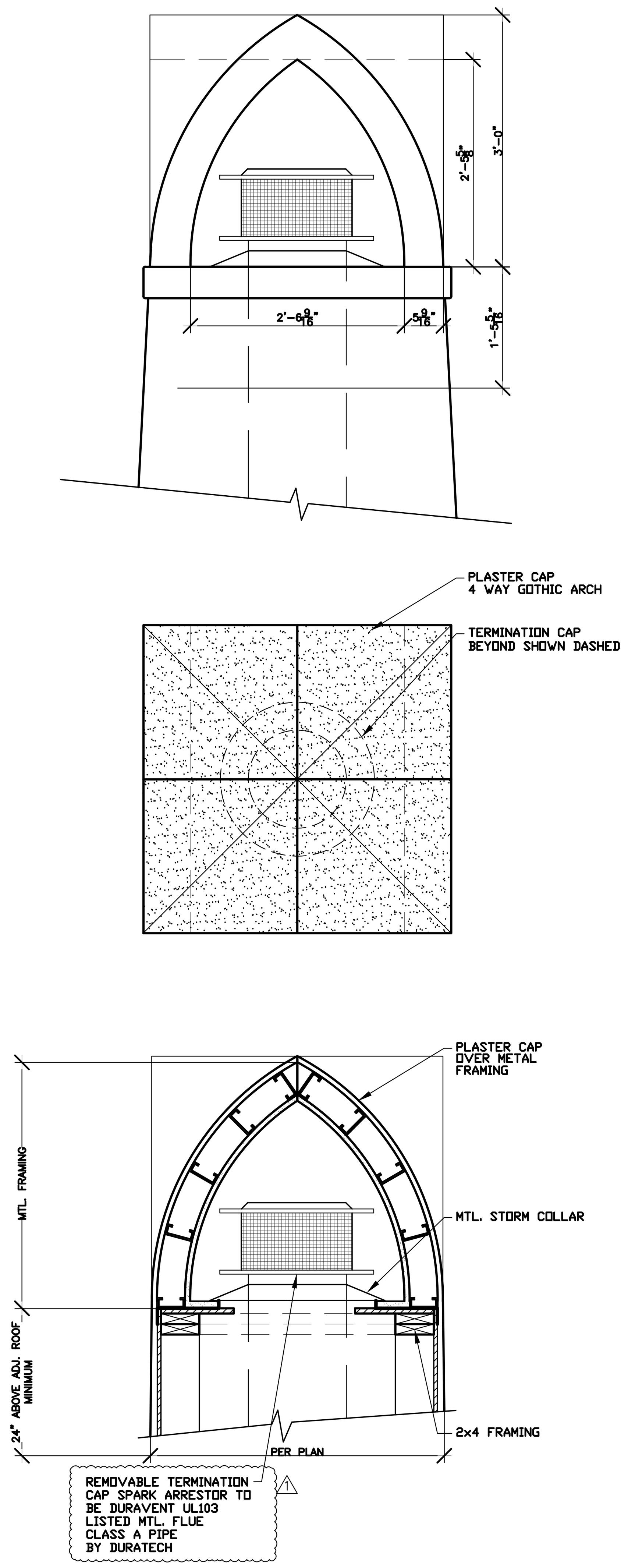
9 SLOT DRAIN @ ROOF DECK
SCALE: 1½" = 1'-0"



5 TYPICAL VALLEY
SCALE: 3" = 1'-0"



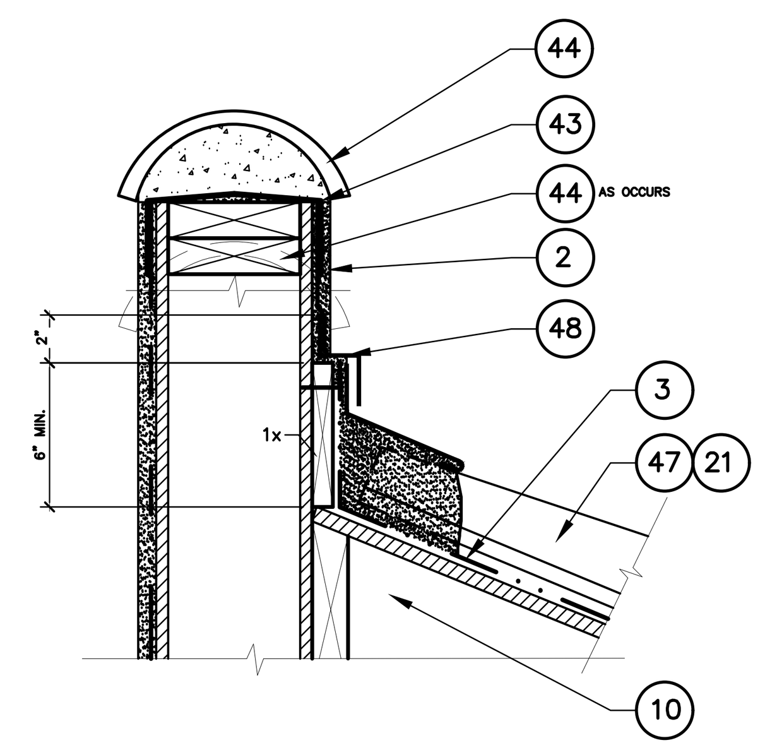
1 TYPICAL EAVE
SCALE: 1½" = 1'-0"



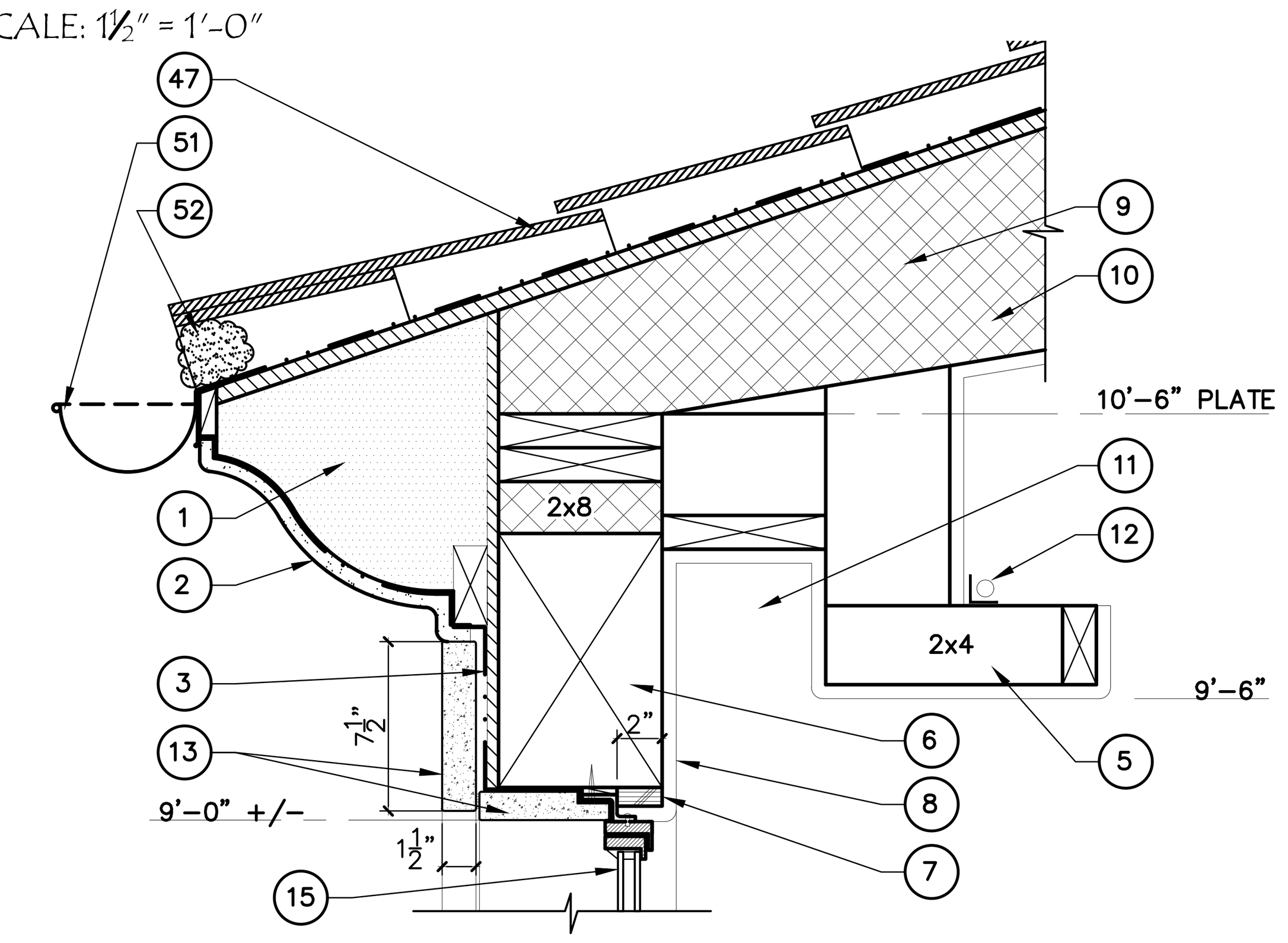
NOTE:
THE SPARK ARRESTOR SHALL BE ACCESSIBLE FOR CLEANING AND THE SCREEN OR CHIMNEY CAP SHALL BE REMOVABLE TO ALLOW FOR CLEANING OF CHIMNEY FLUE. [CRC R1003.9.2.4]

NOTE:
FACTORY BUILT CHIMNEYS SHALL BE LISTED AND LABELED AND SHALL BE INSTALLED AND TERMINATED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. [CRC R1005.1]

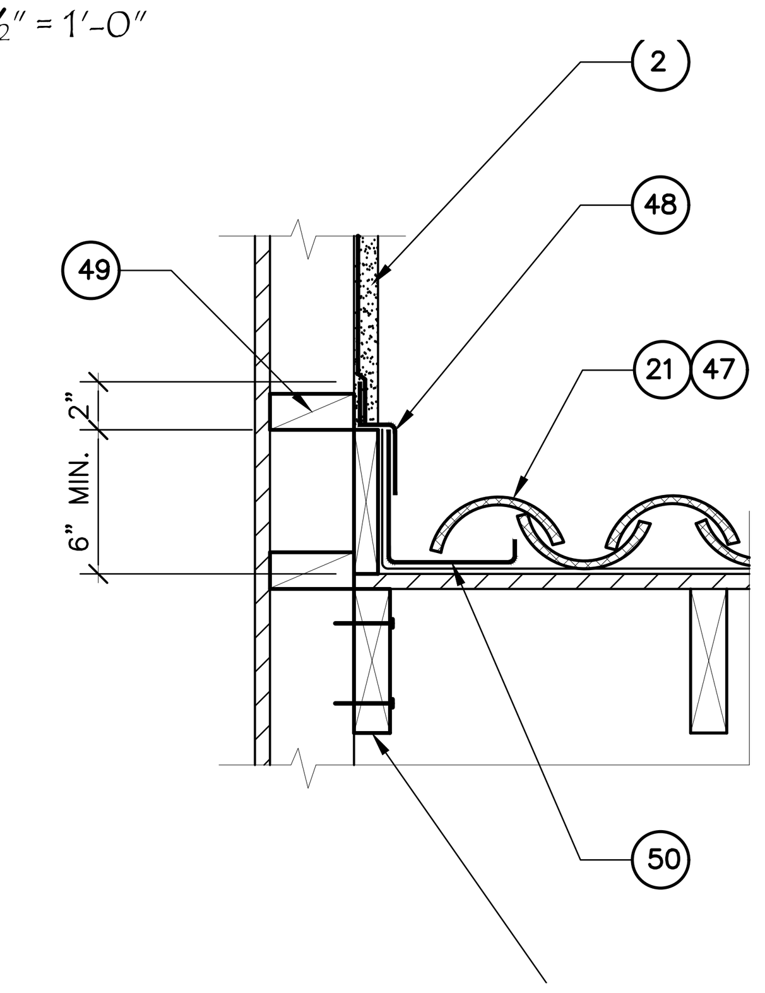
12 CHIMNEY CAP
SCALE: 3/4" = 1'-0"



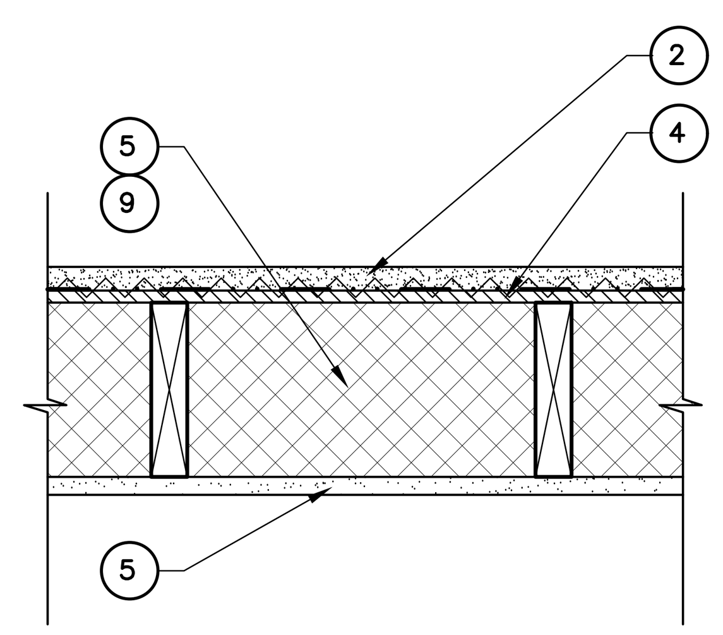
6 TYPICAL RAKE
SCALE: 1½" = 1'-0"



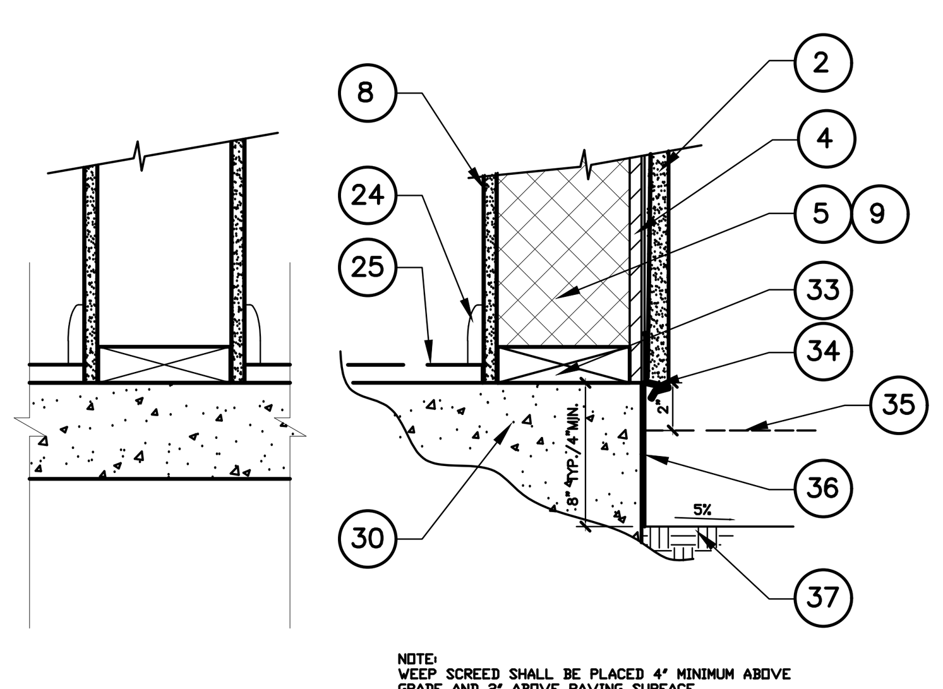
2 TYPICAL EAVE
SCALE: 1½" = 1'-0"



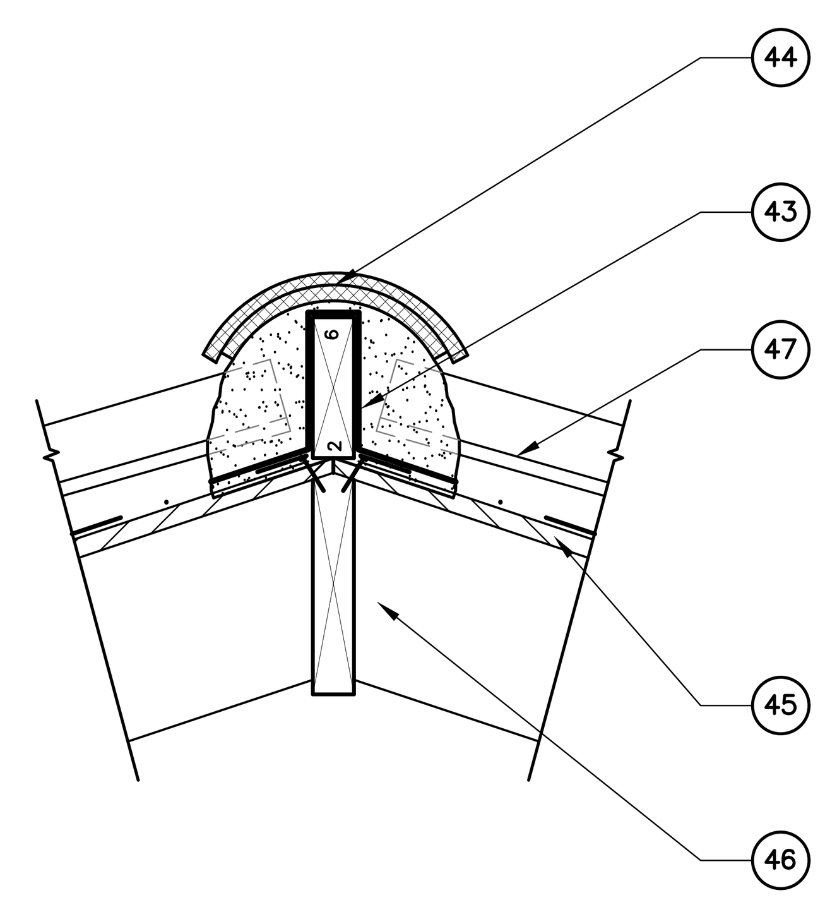
7 TYPICAL RAKE
SCALE: 3" = 1'-0"



3 TYPICAL WALL ASSEMBLY
SCALE: 1½" = 1'-0"



8 TYPICAL BASE SCREED
SCALE: 3" = 1'-0"



4 TYPICAL HIP/RIDGE
SCALE: 3" = 1'-0"

KEY NOTES:

1. STYROFOAM CORBEL PER ARCHITECT/OWNER
2. ⅞" EXTERIOR MASONRY PLASTER OVER WATERPROOF MEMBRANE PER SPECS. OR MIN. 2 LAYERS GRADE "D" OR BETTER
3. WATERPROOF MEMBRANE PER SPECS
4. SHEAR PANEL PER STRUCTURAL
5. 2x FRAMING PER PLAN
6. HEADER PER STRUCTURAL
7. 3/4" PLYWOOD SHIM
8. 5/8" DRYWALL W/ PLASTER SKIM COAT
9. R-19 WALL INSULATION PER ENERGY CALCS. R-30 ICYNENE ATTIC INSULATION PER ENERGY CALCS.
10. TRUSS TO BE DETERMINED
11. 6"x6" DRAPE POCKET
12. LIGHT COVE PER LIGHTING SCHEDULE
13. ELDORADO STONE SURROUND (SEE MATERIALS LEGEND FOR DETAILS)
14. ELDORADO STONE VENEER (SEE MATERIALS LEGEND FOR DETAILS)
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17. SILICONE SEALANT w/BACKING ROD
18. SHEET METAL PAN @ SILL LAP OVER W.P. MEMBRANE AS OCCURS
19. SLOPE @ SILL ONLY
20. CEILING AS OCCURS
21. TILE PER OWNER OVER MORTAR BASE OVER WATERPROOF MEMBRANE.
22. 8"x8"x1/2" METAL "L" BRACKET
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24. MDF BASE BOARD
25. FINISH FLOOR PER PLAN
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27. CARVED SLOPED STONE SILL OVER MORTAR
28. STONE BASE
29. EXTERIOR STONE FLOOR
30. FOUNDATION PER STRUCTURAL
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32. PLYWOOD GUSSET
33. PTDF PLATE PER PLAN
34. PROVIDE PLASTER SCREED NEAR TOP OF FOUNDATION
35. PAVED SURFACE AS OCCURS 2% MIN. SLOPE
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39. ZURN Z880 SLOT DRAIN w/ REMOVABLE DECORATIVE GRATE OR EQ. INSTALLED OVER MTL. FLASHING
40. 3x6 HSS VERTICAL COLUMN PER STRUCT.
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53. ELASTA-TUFF 5000/6000 PED WATERPROOFING SYSTEM BY TUFFLEX AT EXT. STAIRS AND ROOFDECK

LICENSED ARCHITECT — STATE OF CALIFORNIA

REVISIONS

MISSION GROUP ARCHITECTS
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1230 COAST VILLAGE CIRCLE STE H SANTA BARBARA CALIFORNIA 93108 805-969-5910

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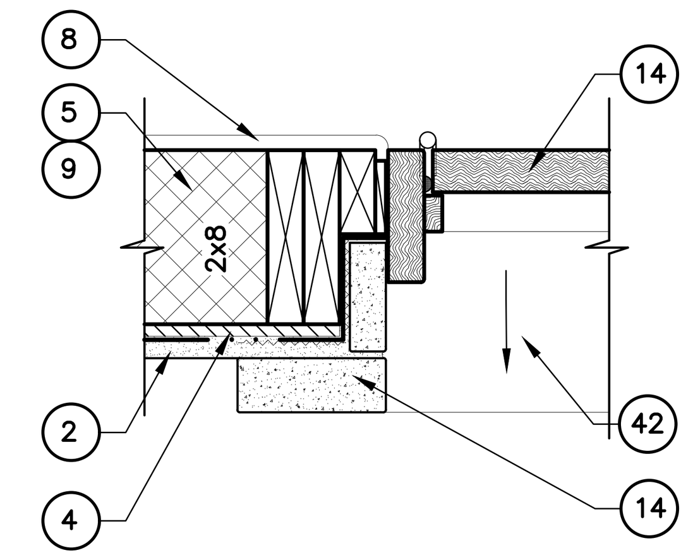
ARCHITECTURAL DETAILS

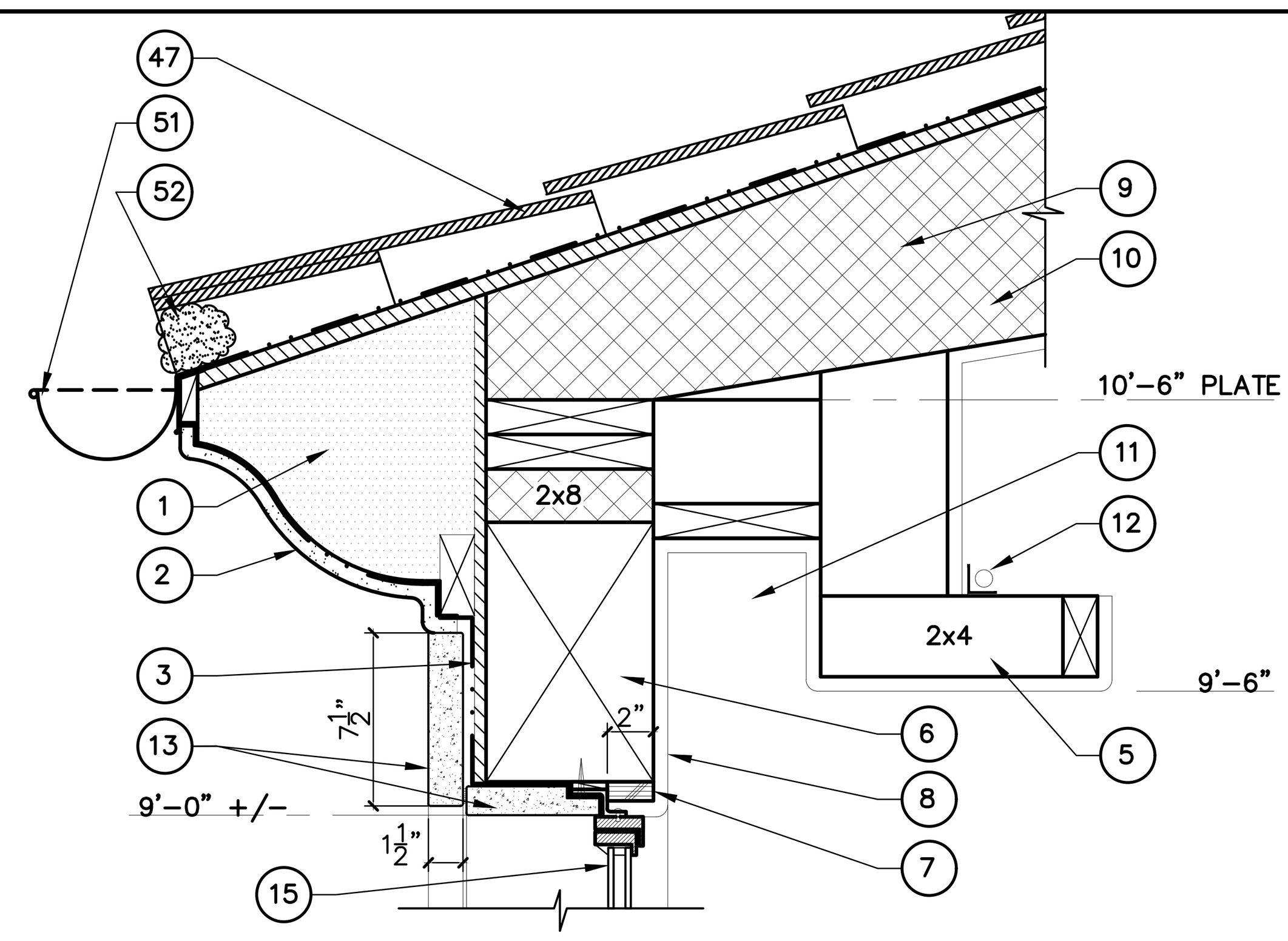
PROPOSED ADU FOR:
KISLAK RESIDENCE
3627 CAMPANIL DRIVE
SANTA BARBARA, CALIFORNIA 93109

DATE 06/30/2023

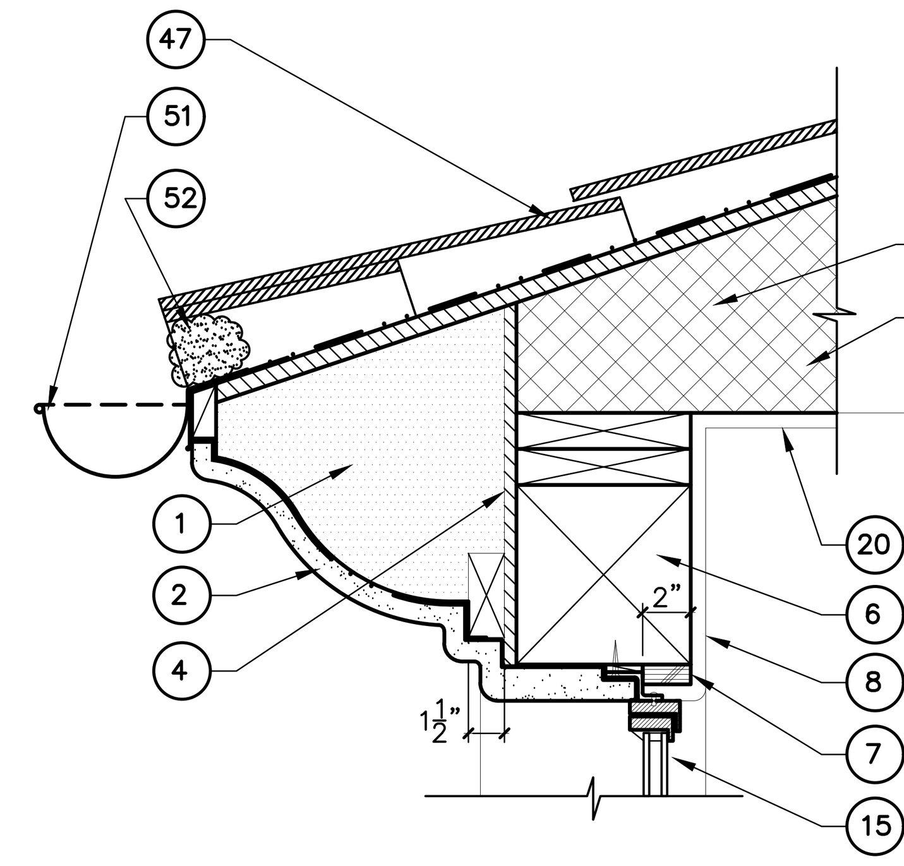
SHEET A6.0

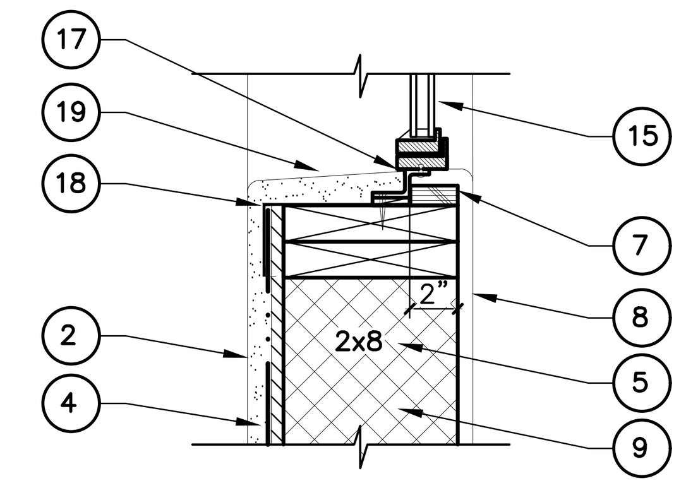


9 ENTRY DOOR JAMB
SCALE: 1½" = 1'-0"

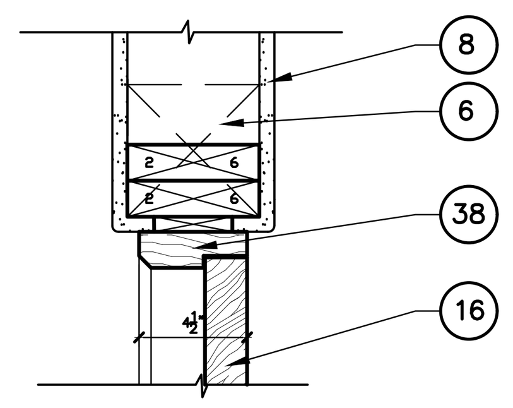


5 WDW. HEAD w/ STONE
SCALE: 1½" = 1'-0"

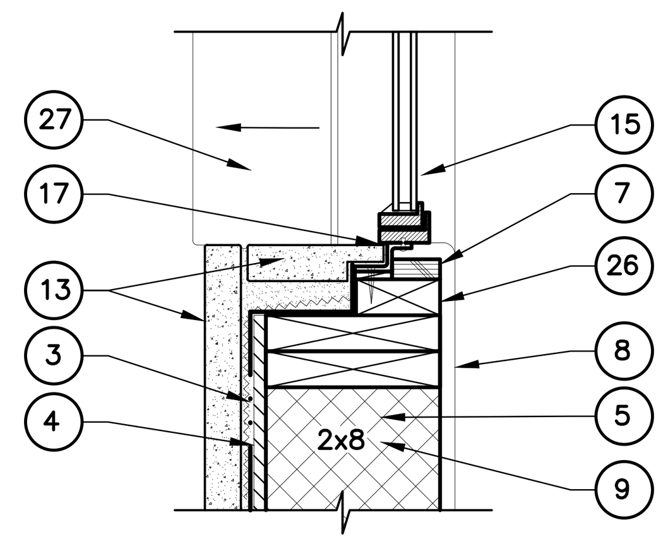




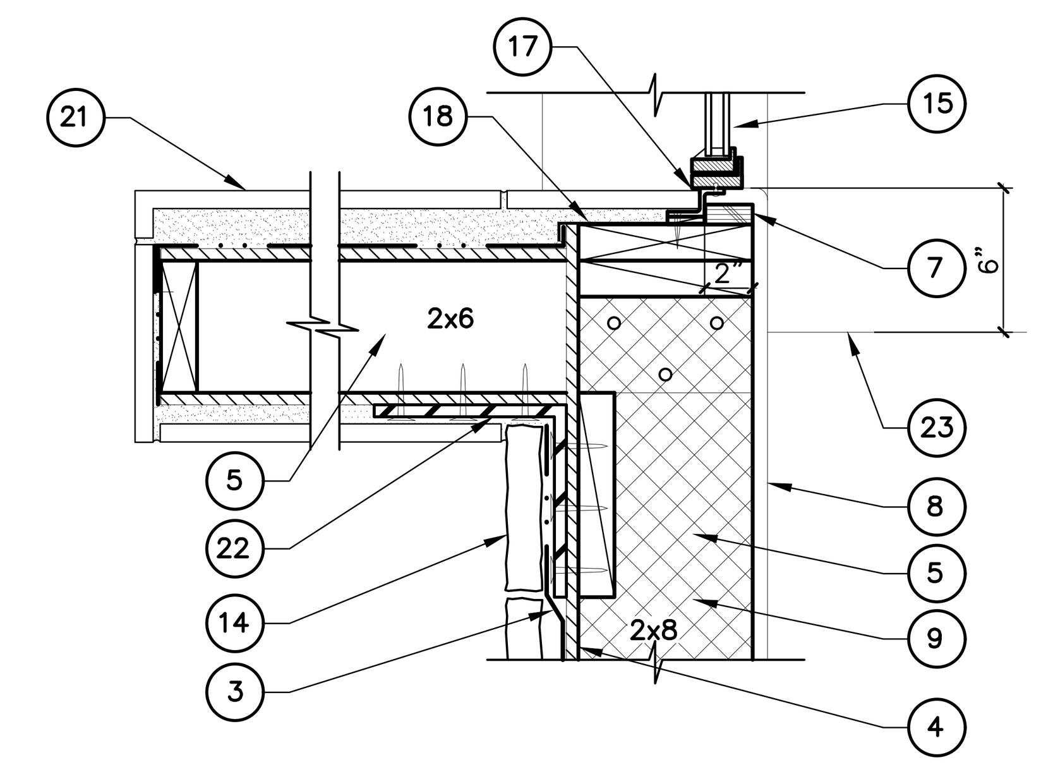
1 TYPICAL WDW. HEAD/SILL
SCALE: 1½" = 1'-0"



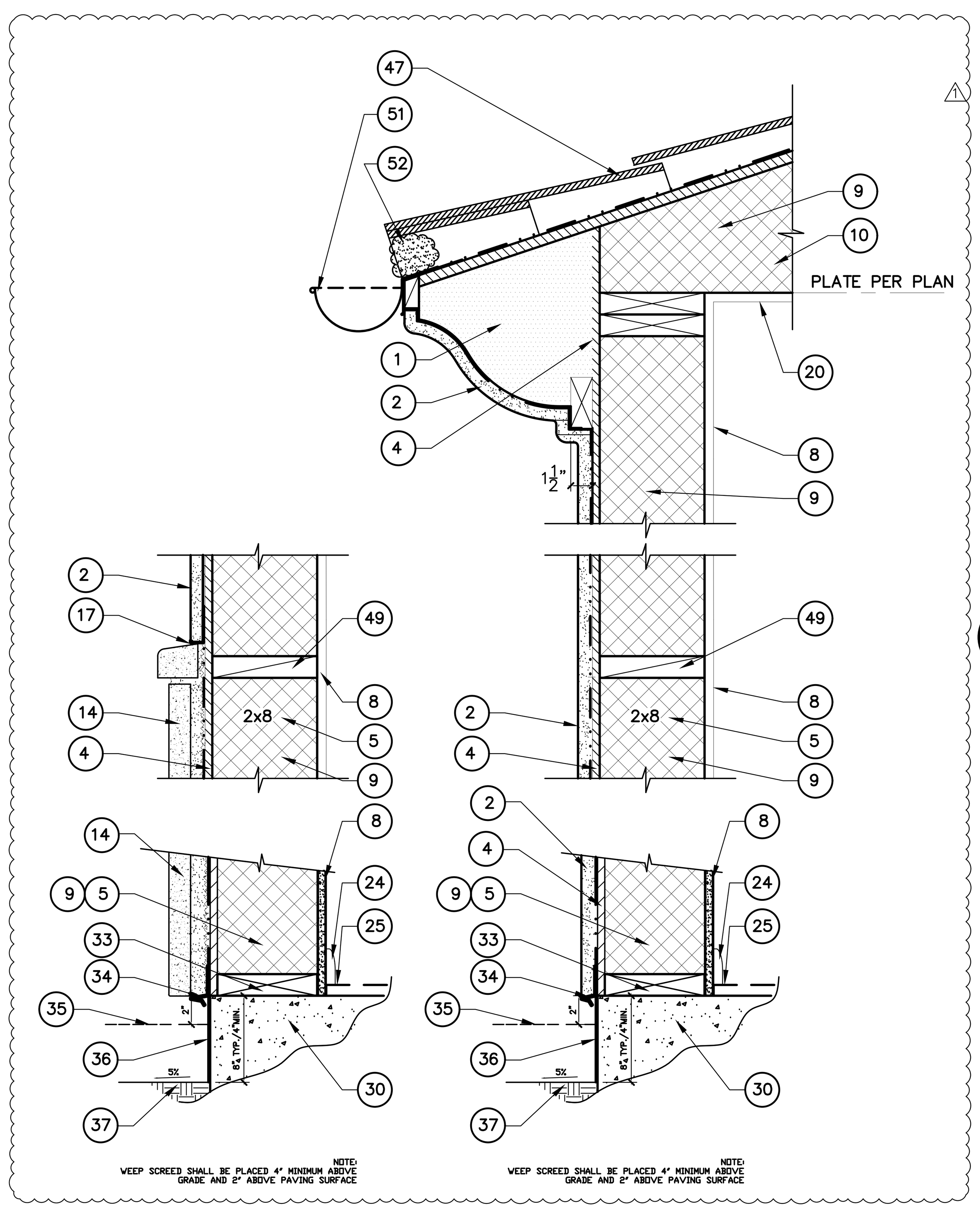
10 TYPICAL INTERIOR DOOR HEAD
SCALE: 1½" = 1'-0"



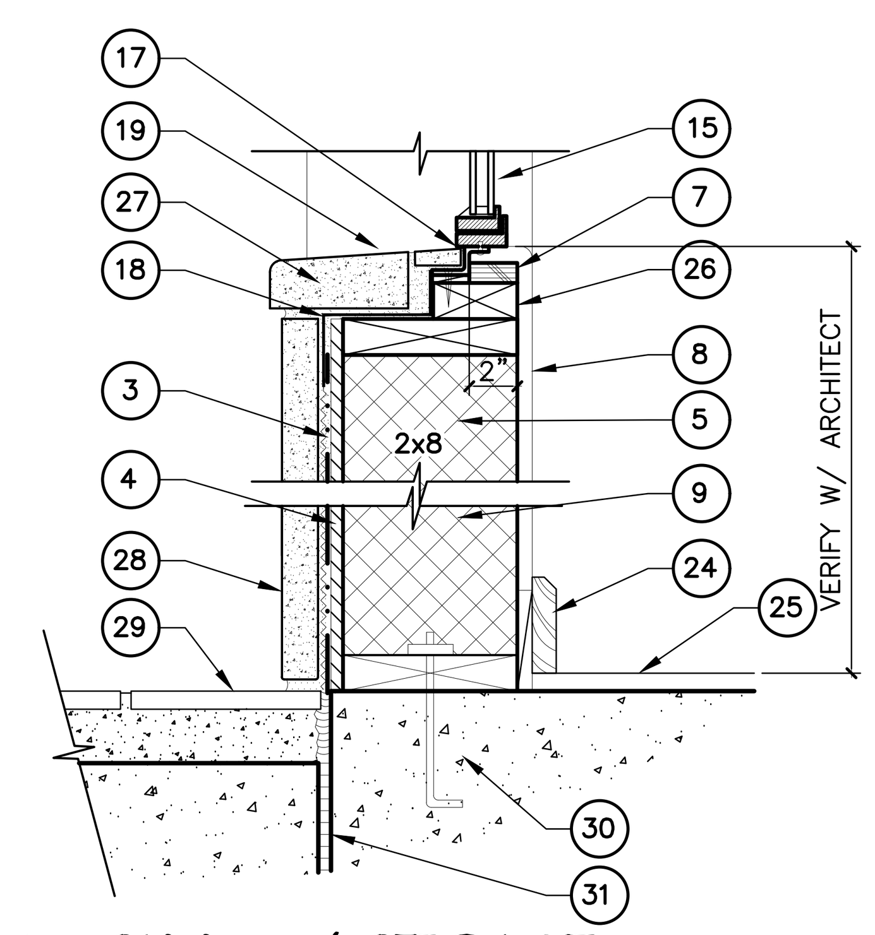
6 WDW. JAMB w/ STONE
SCALE: 1½" = 1'-0"



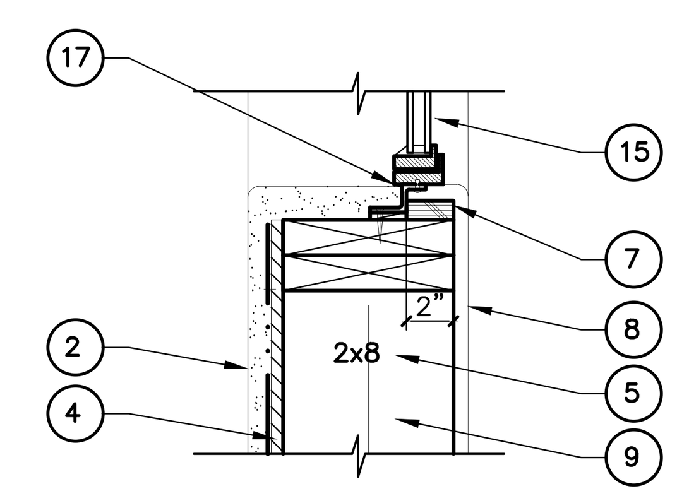
2 WDW. SILL @ KITCHEN
SCALE: 1½" = 1'-0"



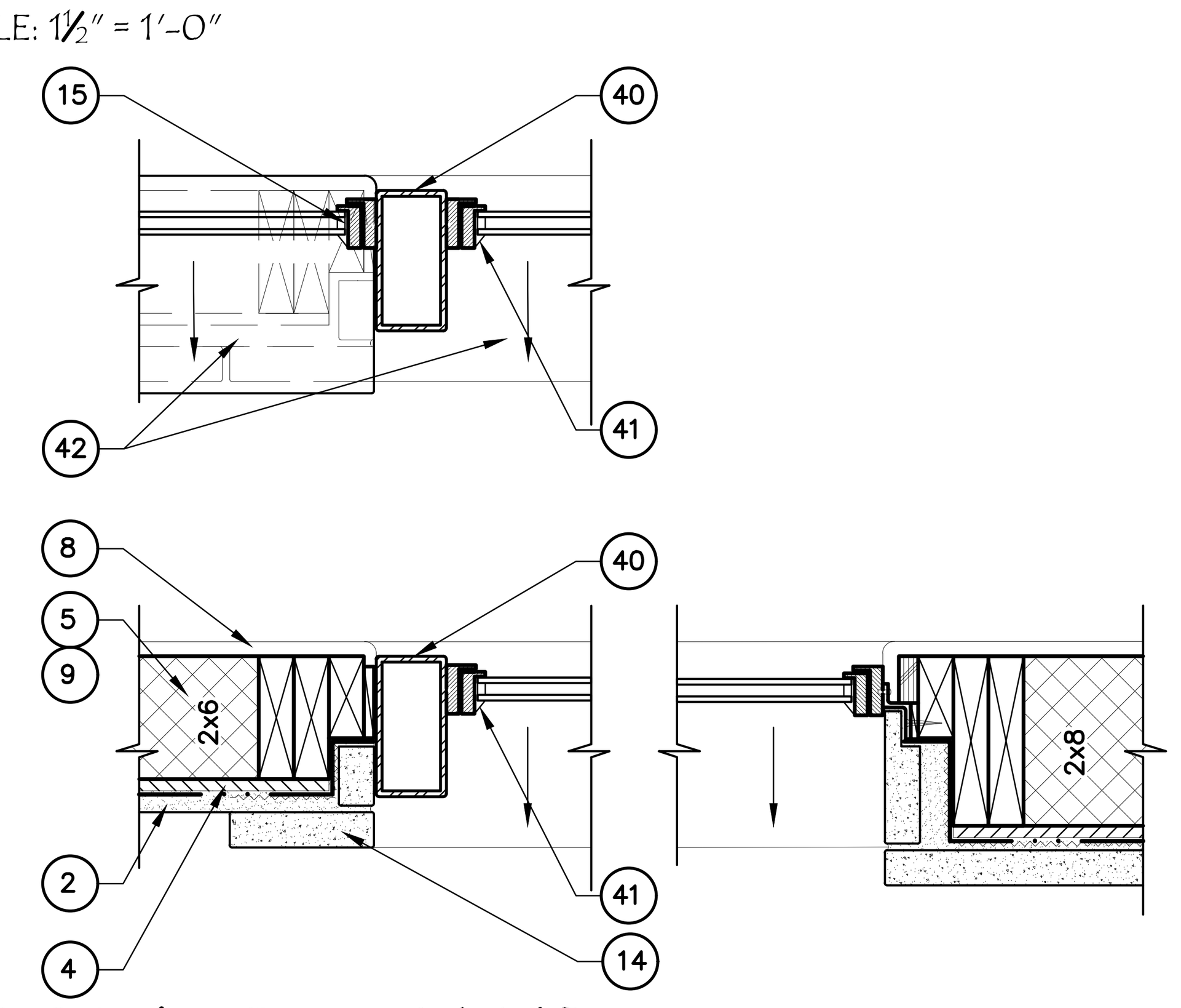
12 TYPICAL EXT. WALL DETAIL
SCALE: 1½" = 1'-0"



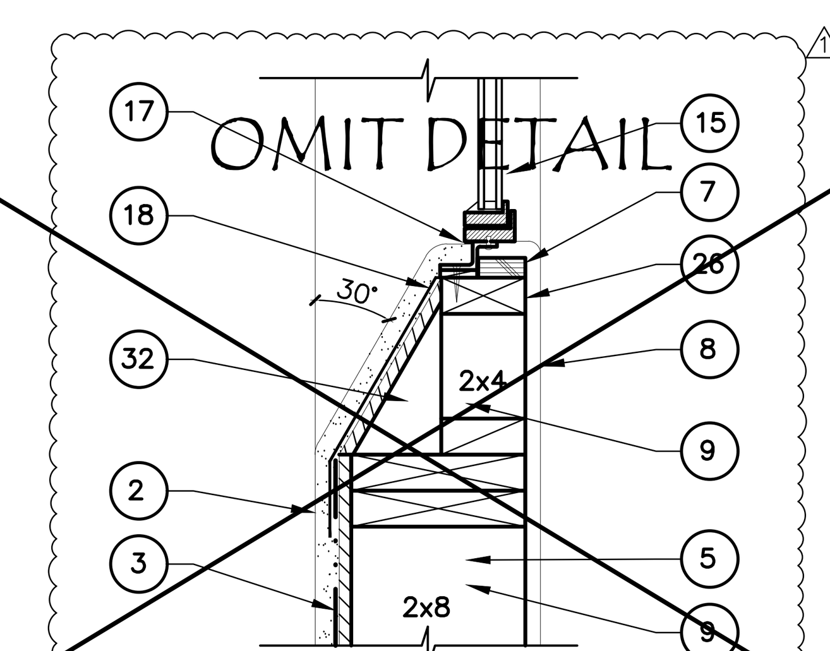
7 WDW. SILL w/ STONE
SCALE: 1½" = 1'-0"



3
SCALE: 1½" = 1'-0"



8 DOOR/WDW. JAMB
SCALE: 1½" = 1'-0"



4 WDW. SILL @ KITCHEN
SCALE: 1½" = 1'-0"

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ARCHITECTURAL DETAILS

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SHEET A6.1

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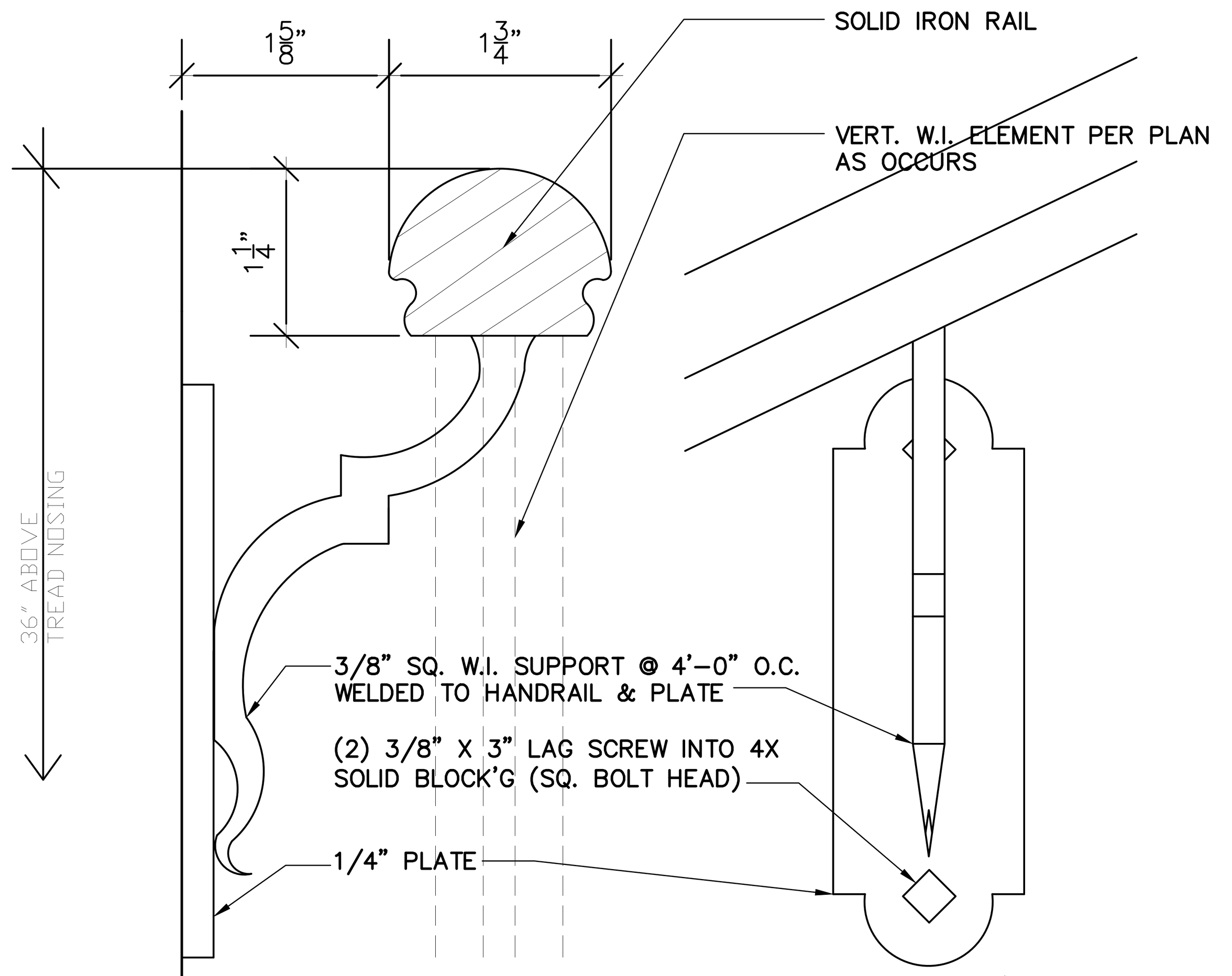
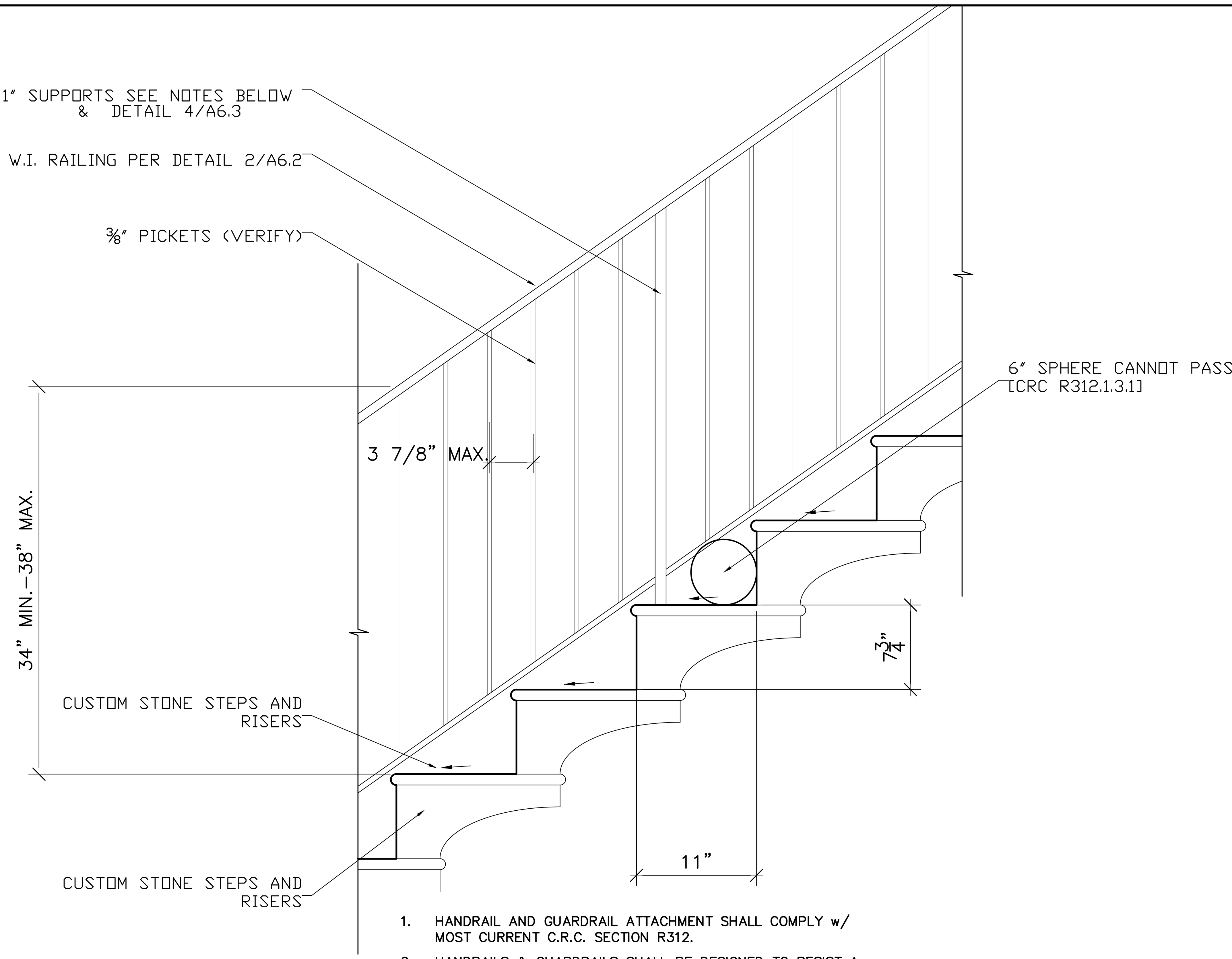


1. HANDRAIL AND GUARDRAIL ATTACHMENT SHALL COMPLY w/ CURRENT CRC SECTION R311.7.8
2. HANDRAILS AND GUARDS SHALL BE DESIGNED TO RESIST A LINEAR LOAD OF 50 LBS. PER LINEAR FOOT IN ACCORDANCE WITH SECTION 4.5.1.OF ASCE 7. [CBC SECTION 1607.8.1]

VERIFY DESIGN WITH ARCHITECT PRIOR TO FABRICATION.

GUARDRAIL SHALL BE CAPABLE TO WITHSTAND LATERAL FORCE OF 20 PLF APPLIED TOP OF RAIL OR 25 PSF LATERAL FORCE @ INTERMEDIATE RAILS.(1611.1 & TABLE 16-B)

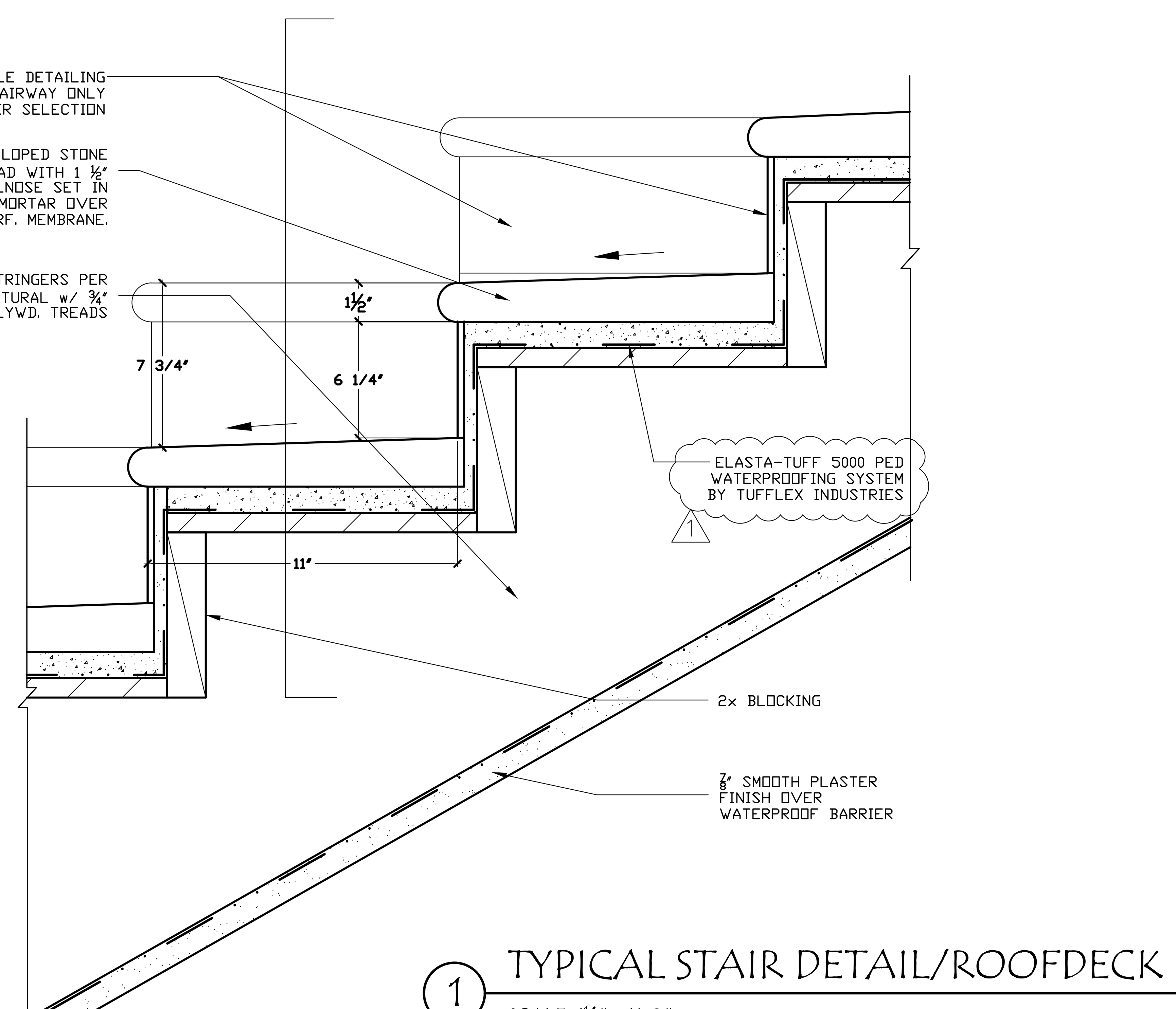


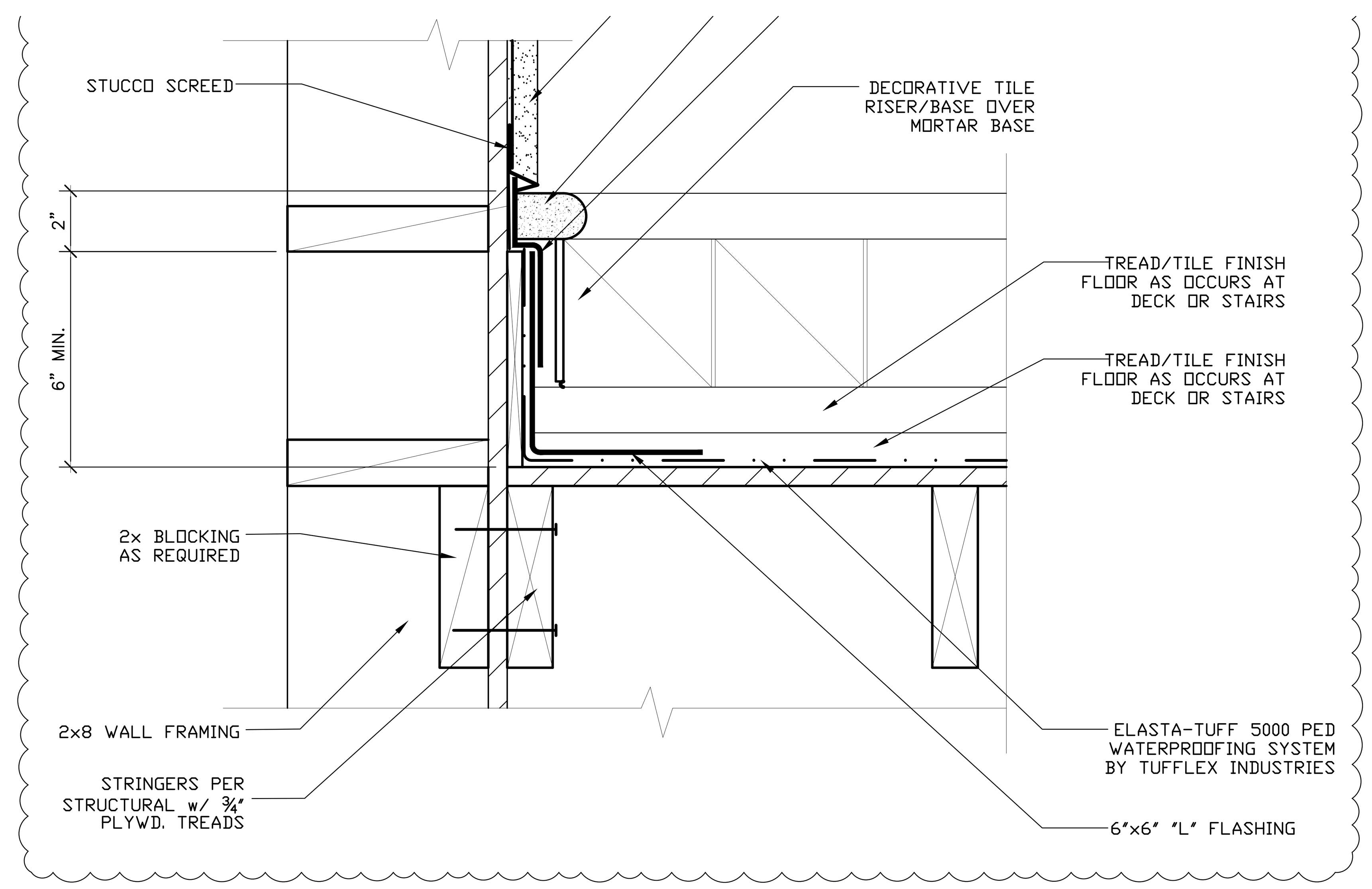
1. HANDRAIL AND GUARDRAIL ATTACHMENT SHALL COMPLY w/ MOST CURRENT C.R.C. SECTION R312.
2. HANDRAILS & GUARDRAILS SHALL BE DESIGNED TO RESIST A CONCENTRATED LOAD OF 200 LBS IN ACCORDANCE WITH SECTION 4.5.1 OF ASCE 7. [C.B.C. 1607.8.1.1].

NOTE:
VERIFY DESIGN WITH ARCHITECT PRIOR TO FABRICATION.

2 TYPICAL HANDRAIL STAIR DETAIL

SCALE: NO SCALE





1 TYPICAL STAIR DETAIL/ROOFDECK BASE WATERPROOFING DETAIL

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

KEY NOTES:

1. STYROFOAM CORBEL PER ARCHITECT/OWNER
2. 7/8" EXTERIOR MASONRY PLASTER OVER WATERPROOF MEMBRANE PER SPECS. OR MIN. 2 LAYERS GRADE "D" OR BETTER
3. WATERPROOF MEMBRANE PER SPECS
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22. 8"x8"x1/2" METAL "L" BRACKET
23. FINISH COUNTER TOP AS OCCURS
24. MDF BASE BOARD
25. FINISH FLOOR PER PLAN
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33. PTDF PLATE PER PLAN
34. PROVIDE PLASTER SCREED NEAR TOP OF FOUNDATION
35. PAVED SURFACE AS OCCURS 2% MIN. SLOPE
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37. FINISH GRADE. SLOPE 5% MINIMUM FROM BLD'G FOR 10'-0" MIN.
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LICENSED ARCHITECT – STATE OF CALIFORNIA

REVISIONS

MISSION GROUP ARCHITECTS

R E JOHNSON AIA

1230 COAST VILLAGE CIRCLE STE H SANTA BARBARA CALIFORNIA 93108 805-969-5910

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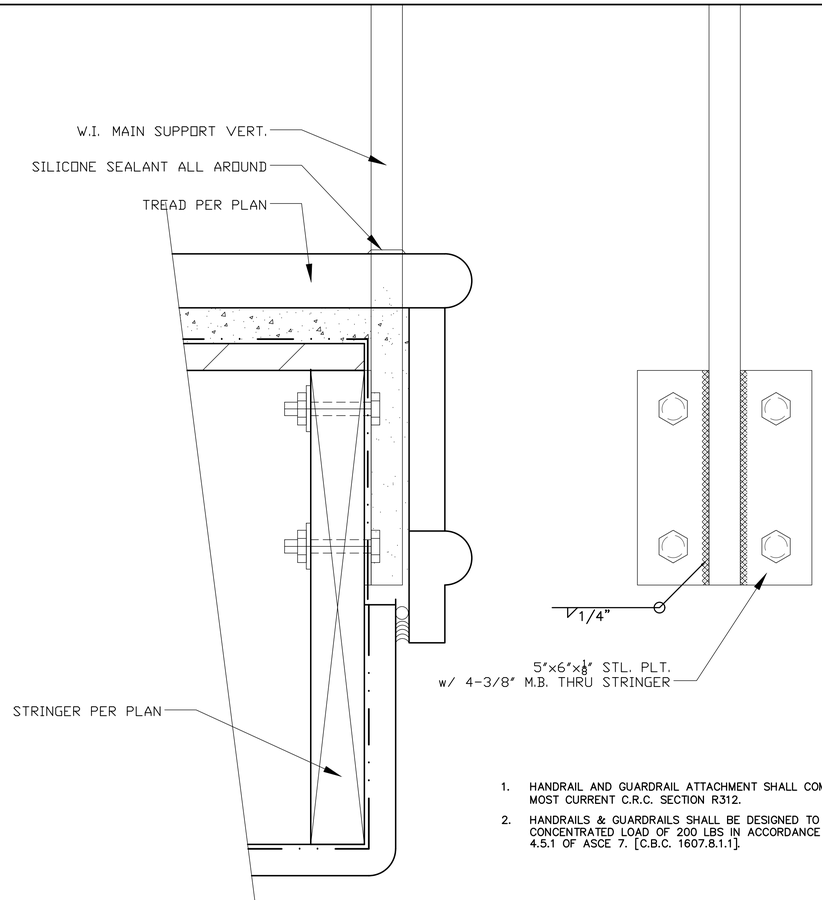
PROPOSED ADU FOR:
KISLAK RESIDENCE
3627 CAMPANIL DRIVE
SANTA BARBARA, CALIFORNIA 93109

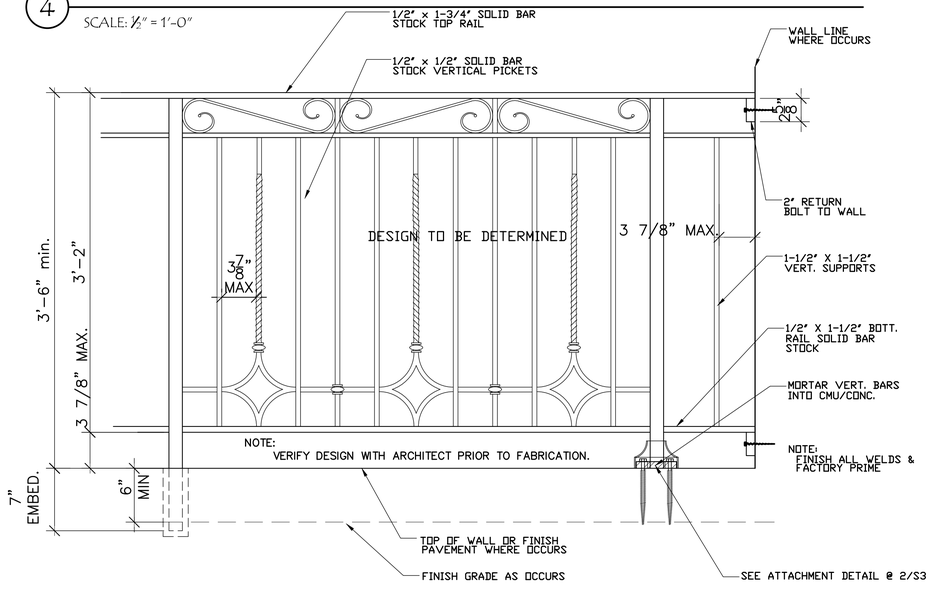
DATE 06/30/2023

SHEET A6.2



4 RAILING ATTACHMENT

SCALE: ½" = 1'-0"



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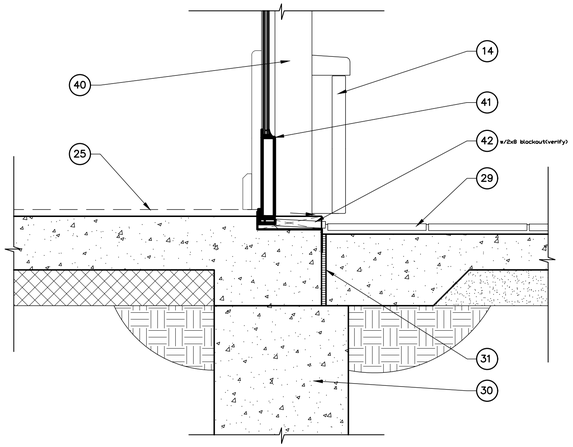
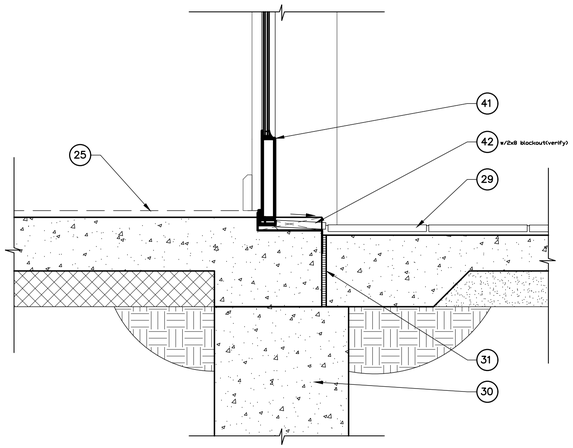
5 TYPICAL GUARDRAIL DESIGN

SCALE: 1½" = 1'-0"



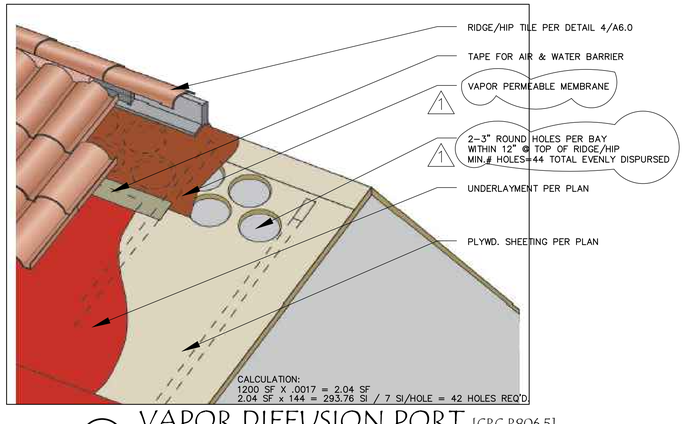
1 TYPICAL EXTERIOR DOOR SILL

SCALE: 1½" = 1'-0"



2 TYPICAL EXTERIOR DOOR SILL

SCALE: 1½" = 1'-0"



3 VAPOR DIFFUSION PORT [CRC R806.5]

SCALE: NONE

KEY NOTES:

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6. HEADER PER STRUCTURAL
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40. 3x6 HSS VERTICAL COLUMN PER STRUCT.
41. STEEL DOOR FRAME PER PLAN
42. SLOPED STONE SILL OVER MTL. PAN
43. 90# CAP SHEET @ RIDGE
44. CAP TILE SET w/MORTAR OVER WP
45. PLYWD SHT'G. PER STRUCTURAL
46. RAFTERS/TRUSS PER STRUCTURAL
47. 2 PIECE MISSION TILE PER PLAN OVER WATERPROOF MEMBRANE PER SPEC.
48. "Z" BAR G.I. FLASH & COUNTERFLASH'G. LAP G.I. FLASHING w/ BUILDING PAPER
49. 2x SOLID BLOCKING
50. G.I. CHANNEL FLASHING
51. COPPER GUTTER w/ LEAF GUARD
52. DBL. STARTER TILE w/ BIRD BLOCK MORTAR
53. ELASTA-TUFF 5000/6000 PED. WATERPROOFING SYSTEM BY TUFFLEX AT EXT. STAIRS AND ROOFDECK

MISSION GROUP ARCHITECTS
R E JOHNSON AIA
1230 COAST VILLAGE CIRCLE, SUITE H SANTA BARBARA, CALIFORNIA 93108 805-969-5010

REVISIONS

LICENSED ARCHITECT
RICHARD E. JOHNSON
12-31-25
STATE OF CALIFORNIA

ARCHITECTURAL DETAILS

PROPOSED ADU FOR:
KISLAK RESIDENCE
3627 CAMPANIL DRIVE
SANTA BARBARA, CALIFORNIA 93109

DATE 06/30/2023

SHEET A6.3

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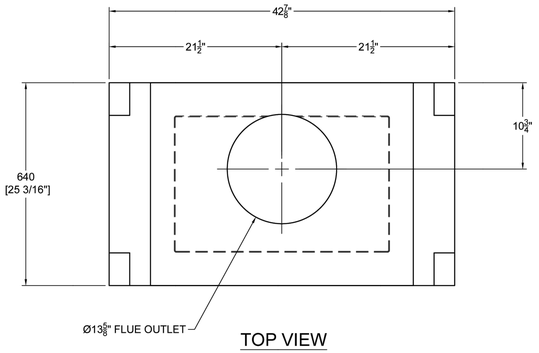
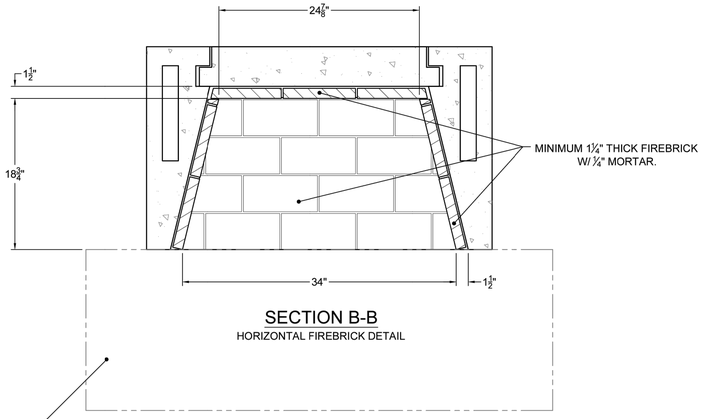


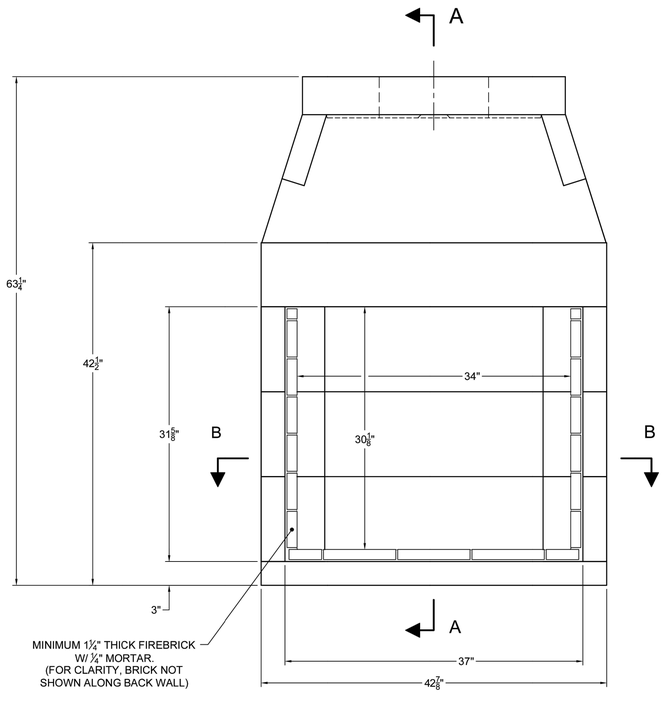
TOP VIEW



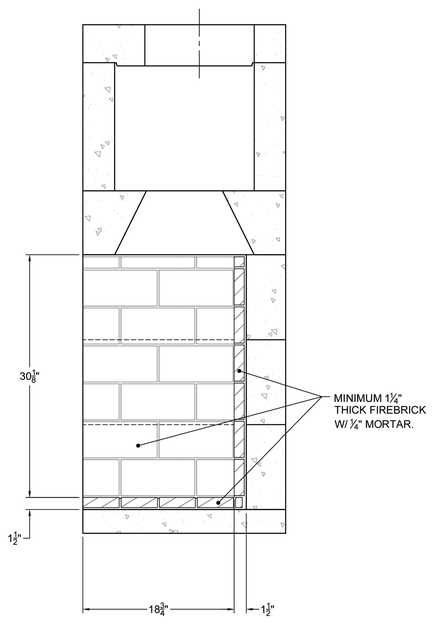
SECTION B-B
HORIZONTAL FIREBRICK DETAIL

ISOKERN FIREBOX AND NONCOMBUSTIBLE HEARTH EXTENSION SHALL BE SUPPORTED BY CONCRETE SLAB WITH NO COMBUSTIBLE UNDERPINNINGS.

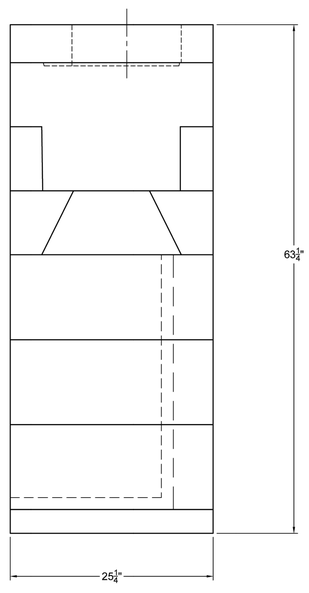
HEARTH EXTENSION SHALL EXTEND A MINIMUM OF 20" TO THE FRONT AND 12" TO THE SIDES OF FIREBOX'S FINISHED OPENING.



FRONT VIEW



SECTION A-A
VERTICAL FIREBRICK SECTION



RIGHT-SIDE VIEW

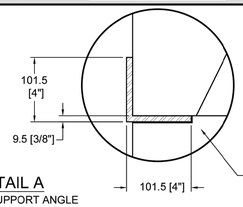
COMPONENT LIST

PART #	DESCRIPTION	QTY.
11	SMOKE DOME (MIDDLE)	2
20	SIDE WALL	6
21	BASEPLATE-36" (STD)	1
25	BACKWALL-36" (STD)	3
34	TOP SLOPING	2
68	DAMPER BEAM-36"	2
77A	TOP PLATE W/345mm HOLE	1
95L	DAMPER END; LEFT	1
95R	DAMPER END; RIGHT	1

GENERAL NOTES

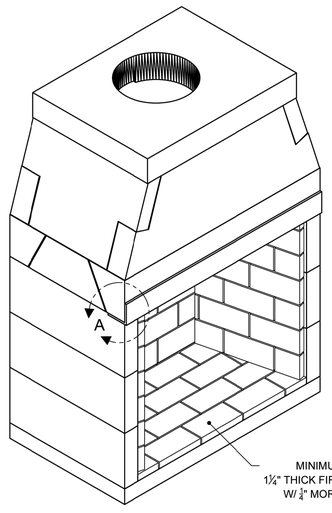
1. FIREPLACE SHALL BE INSTALLED WITH THE MINIMUM CLEARANCES TO COMBUSTIBLES AS LISTED BELOW:
   - UNIT FRONT AND ISOKERN CHIMNEY: 0"
   - SIDES AND REAR: 1.5"
   - COMBUSTIBLE SHEATHING ABOVE OPENING TOP: 8"
   - SHEATHING OR TRIM TO OPENING SIDES: 8"
   - MANTLE ABOVE OPENING: 14"
   - OPENING TO SIDEWALLS: 26"
   - HEARTH EXTENSION BEYOND FRONT: 20"
   - HEARTH EXTENSION BEYOND SIDES (FINISHED): 12"
   - COMBUSTIBLE FLOOR: 4" (MUST USE FIRELITE APPLICATION)
   - INSULATION FROM FIREBOX (UNSHIELDED): 3"
2. UNLESS THE FIRELITE KIT IS UTILIZED, THE FIREPLACE AND NONCOMBUSTIBLE HEARTH EXTENSION SHALL REST ATOP A NONCOMBUSTIBLE FLOORING SYSTEM WITH NO WOODEN UNDERPINNINGS.
3. IF YOU INSTALL A VENTED GAS LOG SET (DECORATIVE GAS APPLIANCE), THE LOG SET MUST COMPLY WITH THE STANDARD FOR DECORATIVE GAS APPLIANCE FOR INSTALLATION IN SOLID FUEL BURNING FIREPLACES, ANSI Z21.60 OR Z21.84 AND SHALL ALSO BE INSTALLED IN ACCORDANCE WITH THE NATIONAL FUEL GAS CODE, ANSI 7223/ NFPA 54; LATEST EDITION. IF YOU WISH TO INSTALL AN UNVENTED (VENT-FREE) GAS LOG SET, ONLY UNVENTED GAS LOG SETS WHICH HAVE BEEN FOUND TO COMPLY WITH THE STANDARD FOR UNVENTED ROOM HEATERS, ANSI Z21.11.2 ARE TO BE INSTALLED IN THIS FIREPLACE. CHECK LOCAL CODES FOR COMPLIANCE FOR UNVENTED (VENT FREE) GAS LOG SETS.
4. 4" COMBUSTION AIR INLET KITS ARE RECOMMENDED BY EARTHCORE FOR THE STANDARD AND MAGNUM SERIES FIREPLACES AND MAY HELP IMPROVE FIREPLACE OPERATION IN HOMES TIGHTLY SEALED AND WITH OTHER VENTILATING APPLIANCES INSTALLED. IF THE INSTALLATION IS TO BE LONGER THAN TEN FEET (10'), THEN THE SIX INCH (6") ADAPTER WILL BE NEEDED. THIS ADAPTER WILL ATTACH TO THE EXISTING FOUR INCH (4") SLEEVE OUTSIDE OF THE UNIT. THE SIX INCH ADAPTER INCLUDES AN ADDITIONAL TWENTY FEET OF 6" FLEX HOSE, FOR A MAXIMUM RUN OF THIRTY FEET (30').
5. DRAWINGS ARE FOR DESIGN PURPOSES ONLY AND ARE THE SOLE PROPERTY OF EARTHCORE INDUSTRIES. ANY REPRODUCTION OR UNAUTHORIZED USE IS STRICTLY PROHIBITED.
6. EARTHCORE/ ISOKERN OR ANY DIVISION THEREOF SHALL NOT BE HELD LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OR EXPENSES ARISING OUT OF THE USE OF THE FIREPLACES OR CHIMNEY SYSTEMS.
7. ALWAYS CHECK LOCAL BUILDING CODES GOVERNING FIREPLACES AND FIREPLACE INSTALLATIONS.

DETAILS (N.T.S)



DETAIL A
DAMPER SUPPORT ANGLE

ISOMETRIC VIEW (N.T.S)



NOTE: WHENEVER THE MAXIMUM DM CHIMNEY HEIGHT OF 57" IS EXCEEDED, OR IN ANY INSTANCE WHERE THE ISOKERN BRICK LEDGE IS USED, IT IS REQUIRED THAT THE FIREBOX/SMOKE DOME ASSEMBLY INCLUDE THE PLACEMENT OF A 4" BY 4" BY 3/8" MINIMUM STEEL ANGLE ACROSS THE FIREBOX OPENING. (SEE DETAIL A)

earthcore® INDUSTRIES, L.L.C.
6899 Phillips Industrial Blvd.
Jacksonville, FL 32256

UNLESS OTHERWISE STATED, ALL DIMENSIONS ARE IN MILLIMETERS
UNSPECIFIED TOLERANCES
THIRD ANGLE PROJECTION
ANG. X ±
LIN. X ±, X ±, XX ±

PROJECT: 36" STANDARD (80s36)
DESCRIPTION: FIREPLACE CONSTRUCTION DOCUMENT
MATERIAL: E.C. PUMICE MIXTURE
DRAWN: K.B.H. DATE: 4/21/22
APPROVED: DATE:
SIZE: D
SCALE: 1-1/2"=1'-0"
DRAWING #: 80s36
REV: D
DO NOT SCALE
SHEET # 1 OF 2

FIREBOX STANDARDS

NO SCALE

MISSION GROUP ARCHITECTS
R E JOHNSON AIA

REVISIONS

ARCHITECTURAL DETAILS

1430 COAST VILLAGE CIRCLE, SUITE H SANTA BARBARA, CALIFORNIA 93108 805-969-5010

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PROPOSED ADU FOR:
KISLAK RESIDENCE
3627 CAMPANIL DRIVE
SANTA BARBARA, CALIFORNIA 93109

DATE 06/30/2023

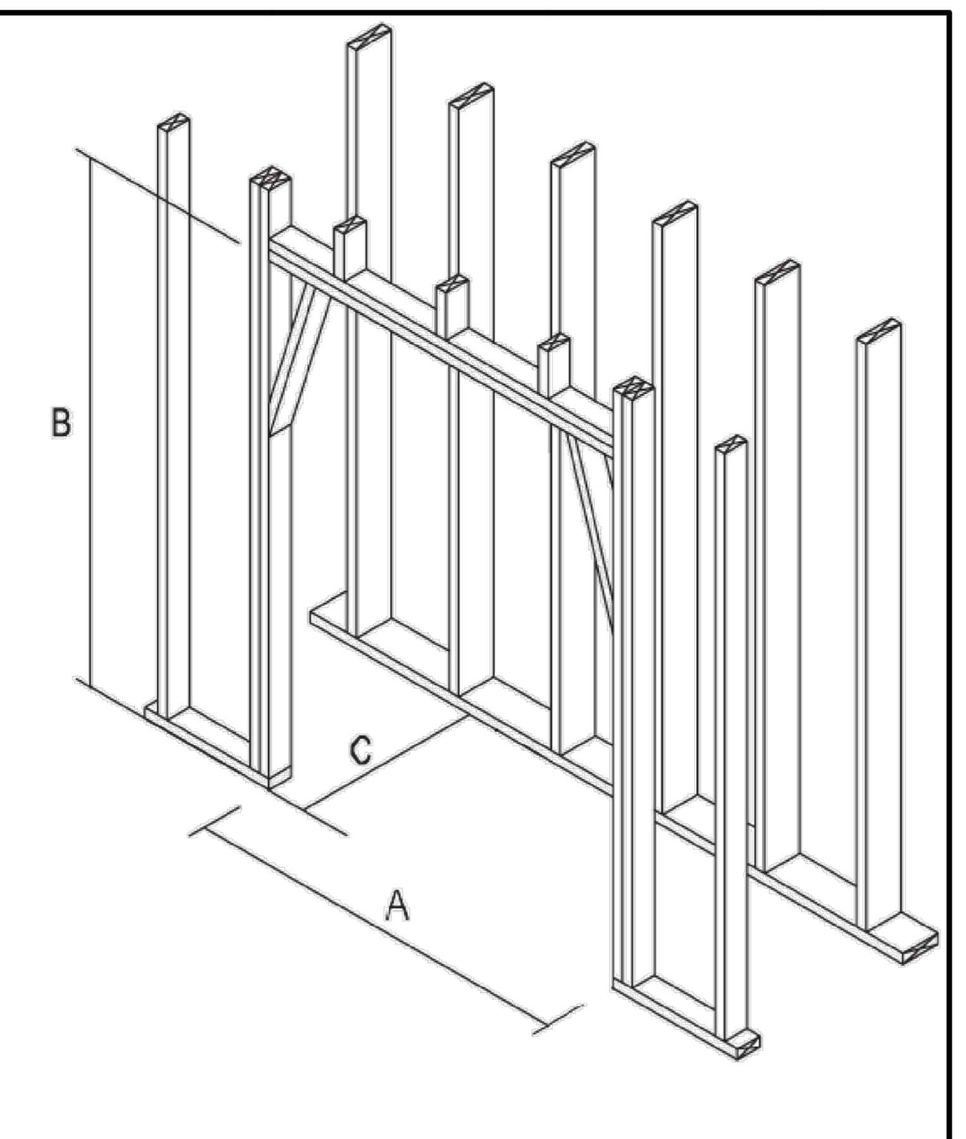
SHEET A6.4

Typical Installation Framing Dimensions

STANDARD	Width - A	Height - B	Depth - C
Model 36	46"	65"	26 3/4"
Model 42	52"	65"	26 3/4"
Model 46	56"	65"	26 3/4"

Notes:

1. "B" includes the 3" thick base plate.
2. "Raised hearth" requires additional rough opening height at "B" equal to the height of the raised hearth detail.
3. Rough framing dimension for width "A" allows for the required 1½" clearance at the sides of the Fireplace.
4. Rough framing dimension for Height "B" will need to be increased by 4" if the Firelite application is utilized.
5. Rough framing dimension for depth "C" allows for the required 1½" clearance at the back of the Fireplace. 26 3/4" is only for an interior wall as most exterior wall framing have insulation, even if the wall is 2x6, the foam they spray expands so typically 31" is allowed on an exterior wall



Corner Installation Framing Dimensions

The following chart of dimensions detail the positioning of an STANDARD Series fireplace in a corner. It also details the positioning of DM chimney where it must turn 45° degrees, if alignment is needed to overhead framing.

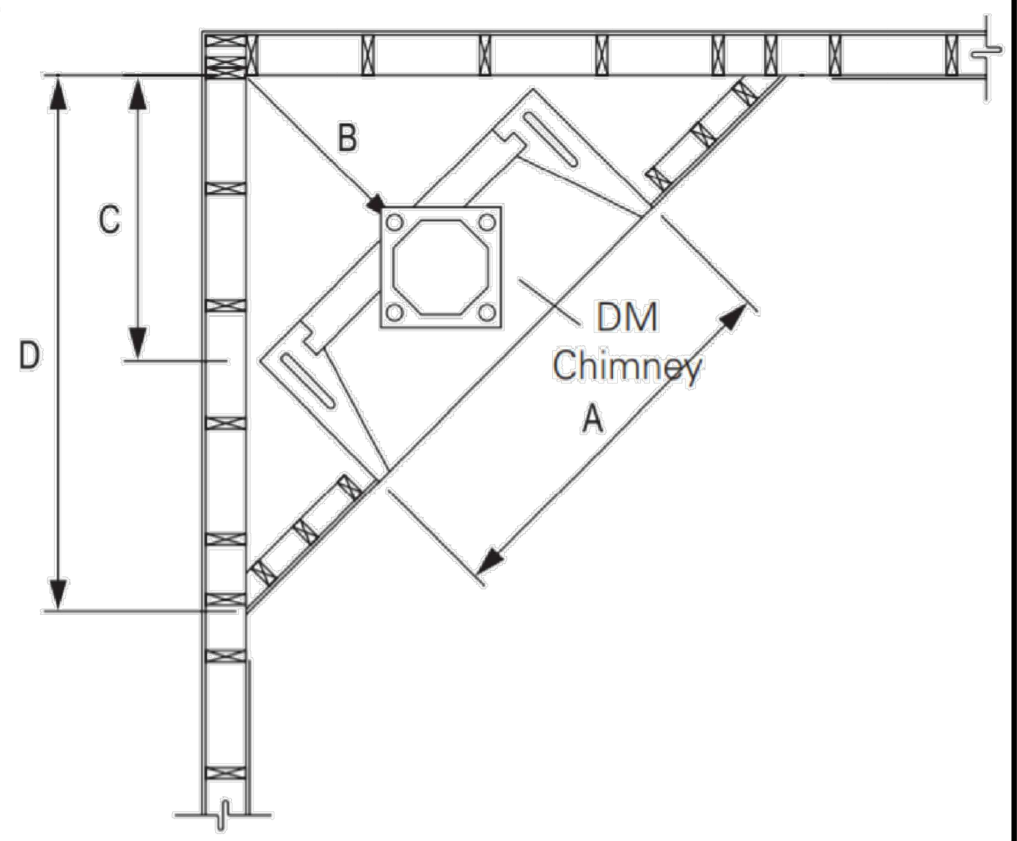
STANDARD	A	B	C	D
Model 36	46"	23 ½"	32"	69"
Model 42	52"	26 ½"	36"	73"
Model 46	56"	28 ½"	39"	76"

To turn flue 45°, first set starting inner liner onto the top plate of the fireplace.

Next, set a DM outer casing onto the inner liner so that the outer casing is at 45° to the firebox and square to the overhead framing system. Run the vertical DM chimney through the overhead framing.

Offset blocks can be used, if necessary, to align with overhead framing before running the vertical DM chimney outer casing and liner.

NOTE: Support the third offset down to footings and at each third offset block thereafter.



Clearance to Combustible Trim - 36, 42 & 46 Models

Hearth Extensions

All STANDARD 36, 42 and 46 Fireplaces shall have hearth extensions of brick, concrete, stone, tile or other code approved noncombustible material. Suitable hearth extension material for the fireplaces shall be placed on the hearth extension's noncombustible substrate and must extend to at least twenty inches (20") in front of the fireplace's finished opening and must extend to at least twelve inches (12") beyond the sides of the finished fireplace opening. **(Figure 68)**

WARNING: The noncombustible hearth extension, by code, must sit on noncombustible substrate which shall have no wood underpinnings.

This means that off-grade wood floor systems shall be constructed in such a way that all wood floor joists and sub-flooring shall stop twenty inches (20") out from the front of the firebox. **(Figure 69)**

Mantle and Mantle Shelf Clearances

Fireplaces are subject to the same building code safety clearances to combustible trim as with any radiant heat fireplace.

All combustible trim shall be kept at least eight inches (8") from the finished fireplace opening.

Combustible trim located along the sides of the fireplace opening, which project more than one and one-half inches (1 1/2") from the face of the fireplace, shall have additional clearance from the eight inches (8") equal to the projection.

Combustible projecting mantles - up to twelve inches (12") of projection - shall not be placed less than fourteen inches (14") from the top of the fireplace opening. Combustible mantles which project more than twelve inches (12") from the face of the fireplace, shall have additional clearance from the fourteen inches (14") equal to the projection.

Note: The local authority having jurisdiction may require greater clearances for projecting combustible mantle shelves. Be sure to check local building codes regarding required clearances to projecting combustible mantles.

Adjoining Walls. Side walls and walls to rooms adjoining fireplace installations cannot be closer than twenty-six inches (26") to the finished fireplace opening.

Note: "Clearance to Combustible Trim" are those distances required to ensure that a fireplace mantle or facing will not catch fire. In most cases the distances should also be adequate to prevent any discoloration or warping due to heat. However each installation presents a unique and completely different set of circumstances involving many variables.

These include paint or finish composition, previous exposure to heat, methods and quality of construction, air flow patterns, etc. Because of these variables, the manufacturer does not guarantee that heat warping or discoloration will never occur.

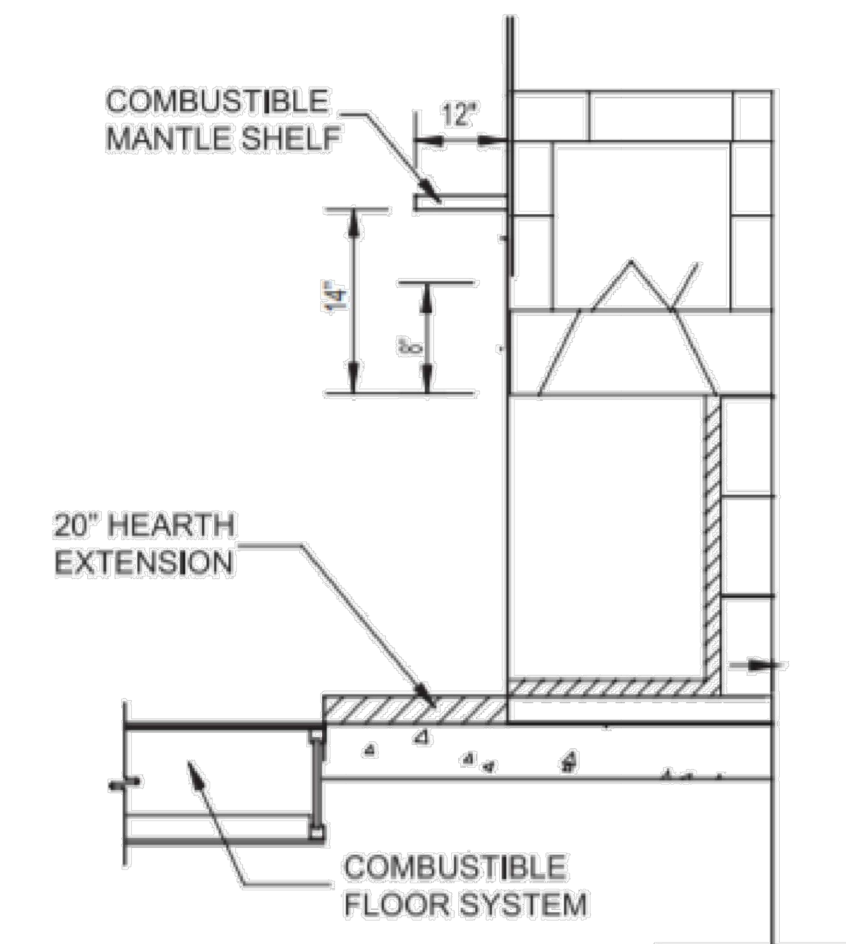


FIGURE 68

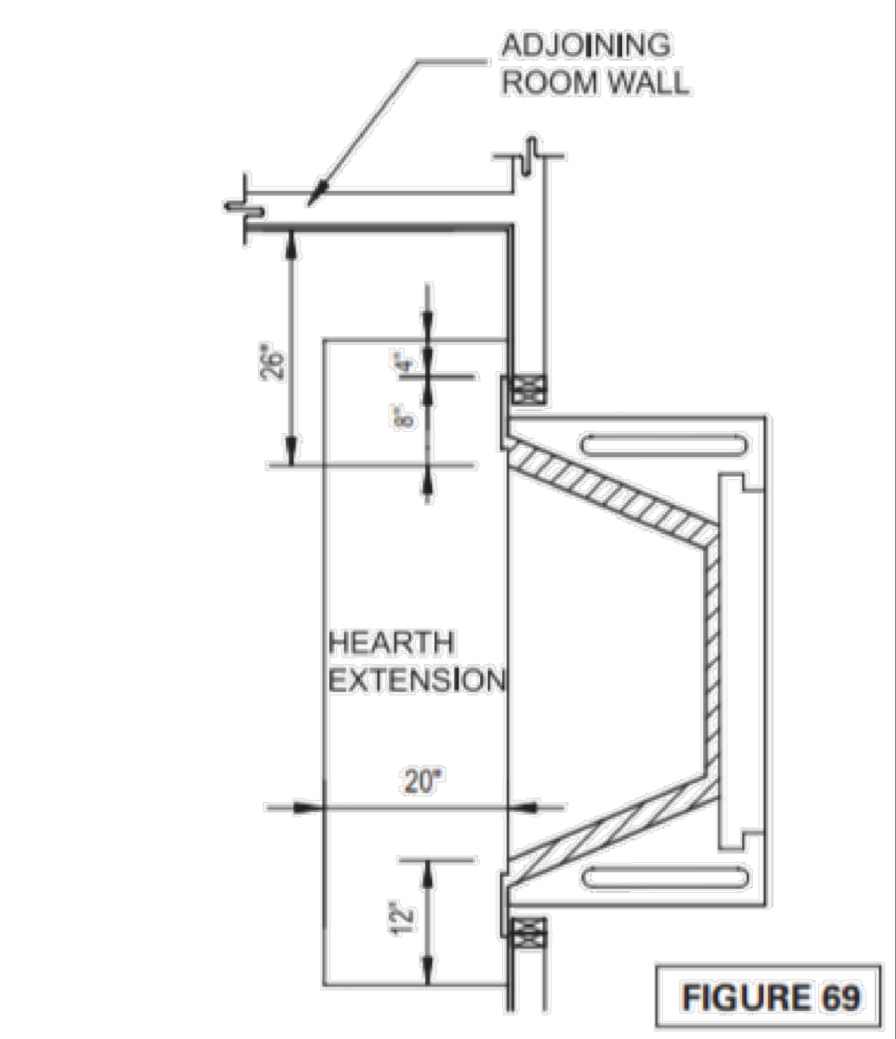


FIGURE 69

MODULAR REFRACTORY FIREPLACE

Intertek
W/N 04895
DO NOT REMOVE OR COVER THIS LABEL

STANDARD: ☐ 36" (80S36) ☐ 42" (80S42) ☐ 46" (80S46)

ISOKERN
MADE IN USA
Chesapeake, VA 23323
Headquarters
Jacksonville, FL 32256

CERTIFIED TO: UL 127, ULC S610

WHI-

CLEARANCE TO COMBUSTIBLES:

SMOKE DOME FRONT AND ISOKERN CHIMNEY	= 0 in.	
UNIT SIDES AND REAR	= 1.5 in.	(38mm)
COMBUSTIBLE SHEATHING ABOVE OPENING	= 8 in.	(203mm)
TOP SHEATHING OR TRIM TO OPENING SIDES	= 8 in.	(203mm)
MANTEL ABOVE OPENING	= 14 in.	(356mm)
OPENING TO SIDEWALL	= 26 in.	(660mm)
HEARTH EXTENSION BEYOND FRONT	= 20 in.	(508mm)
HEARTH EXTENSION BEYOND SIDES	= 12 in.	(305mm)
COMBUSTIBLE FLOOR (MUST USE FIRE-LITE APPLICATION)	= 4 in.	(102mm)
INSULATION FROM FIREBOX	= 3 in.	(76mm)

USE SOLID WOOD FUEL OR LISTED DECORATIVE GAS VENTED OR UNVENTED APPLIANCE. ALSO FOR USE WITH LISTED METAL CHIMNEY. FIRE-LITE APPLICATION TO USE ECO-STEEL CHIMNEY ONLY.

DO NOT USE A FIREPLACE INSERT OR OTHER PRODUCTS NOT SPECIFIED FOR USE WITH THIS PRODUCT. "WARNING" THIS FIREPLACE HAS NOT BEEN TESTED FOR USE WITH GLASS DOORS. TO REDUCE THE RISK OF FIRE OR INJURY, DO NOT INSTALL GLASS DOORS. IF DOORS ARE USED, OPERATE FIREPLACE WITH DOORS FULLY OPEN. WHEN BURNING A DECORATIVE GAS APPLIANCE IN THE FIREPLACE, LOCK THE DAMPER TO THE FULLY OPEN POSITION. DO NOT OPERATE AN UNVENTED GAS LOG SET IN THIS FIREPLACE WITH THE CHIMNEY REMOVED.

SEE INSTALLATION AND OPERATING INSTRUCTIONS FOR THIS MODEL AND ICC # ESR-2316,

CONTACT BUILDING OFFICIAL PRIOR TO INSTALLATION
REFER TO INTERTEK'S DIRECTORY OF BUILDING PRODUCTS FOR DETAILED INFORMATION.

SCAN QR CODE FOR LATEST INSTALLATION MANUALS

Standard Series (All Fuel) Specifications

MANUFACTURER:
ISOKERN Fireplace and Chimney Systems, North America distribution by Earthcore Industries, LLC, Jacksonville, Florida (Telephone 800-642-2920)

PRODUCT DESCRIPTION:
Modular refractory masonry precast fireplace and chimney components.
1. Designed for field assembly as a fireplace and chimney unit.
2. All interlocking parts necessary for assembly of a complete firebox and smoke dome.
3. Interlocking double module chimney components (DM).

MATERIALS:
A. Light weight concrete of a proprietary mixture of Icelandic volcanic aggregate and cement for precast firebox, chimney block and flue liner components.
   1. Compressive Strength: Firebox and Chimney Block: 972 psi.
   2. Compressive Strength: Flue Liner: 1175 psi.
B. Premixed (dry) EARTHCORE ADHESIVE.
   1. Tensile strength: 807 psi; Compressive strength: 2460 psi.
   2. Tested per ASTM C109, ASTM C307, and ANSI 118.4.
C. Standard 1-1/8" thick high temperature refractory brick to line firebox interior
D. Standard cast iron poker-style damper (optional top mount or in-line damper available).

INSTALLATION:
A. Reference manufacturer's installation instructions for standard configurations, weights, sizes and installation details.
B. Suitable masonry foundation and noncombustible hearth extensions must be provided.
C. Unit to be assembled on site per manufacturer's illustrated instructions.
   1. Premixed EARTHCORE ADHESIVE is used at all joints between components.
   2. Firebox to be lined with a minimum 1-1/8" thick rated firebrick.
D. A 1-1/2" minimum clearance to combustible materials is required.
E. A 3" minimum clearance to insulation required.

CERTIFICATION:
A. Warnock Hersey/Intertek Testing Services Report No. 632-912500; 3159656MID008; 3082504-T1
B. Meets or exceeds UL 103HT; UL 103; UL 127; UL 1777; ULC 5610; ANSI 223.1.

CODE COMPLIANCE:
A. SBCCI NO. 9626
B. LARR NO. 25483
C. NYC-MEA 241-90-E
D. ICC REPORT NO. ESR 2316
E. IBC 2006, IRC 2006, IMC 2006

NOTE: Isokern components are a natural material and slight variations in dimensions may occur. These should be no more than 1/8".

earthcore® INDUSTRIES, L.L.C.
6899 Phillips Industrial Blvd.
Jacksonville, Fl. 32256

UNLESS OTHERWISE STATED, ALL DIMENSIONS ARE IN MILLIMETERS	
UNSPECIFIED TOLERANCES	THIRD ANGLE PROJECTION
ANG. .X ± / LIN. X ± / .X ± / .XX ±	
PROJECT:	36" STANDARD (80s36)
DESCRIPTION:	GENERAL INFORMATION AND SPECIFICATIONS
MATERIAL:	
DRAWN: K.B.H	DATE: 4/21/22
APPROVED:	DATE:
SIZE: D	SCALE: N.T.S. (DO NOT SCALE)
DRAWING #: 80s36	REV: D
SHEET # 2 OF 2	

FIREBOX STANDARDS

NO SCALE

REVISIONS

MISSION GROUP ARCHITECTS
R E JOHNSON AIA

ARCHITECTURAL DETAILS

PROPOSED ADU FOR:
KISLAK RESIDENCE
3627 CAMPANIL DRIVE
SANTA BARBARA, CALIFORNIA 93109

DATE 06/30/2023

SHEET A6.5

1230 COAST VILLAGE CIRCLE, STE H SANTA BARBARA, CALIFORNIA 93108 805-969-5910
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ELECTRICAL LOAD CALCULATION

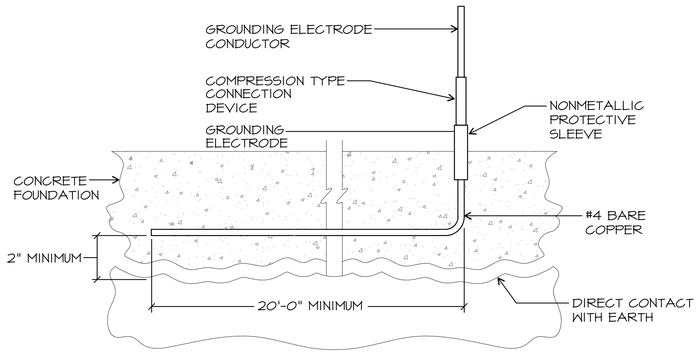
Item #	DESCRIPTION	QTY.	VA	%VA	TOTAL VA
A.	**Lighting & Receptacle, Required Appliance and Laundry Loads**				
	1. Lighting & Receptacles: ENTER QTY. IN SQ. FT. : =>	4,276	3		**12,828**
	2. Small Appliance Circuits:	4	1,500		**6,000**
	3. Laundry Circuits:	2	1,500		**3,000**
	SUBTOTAL				**21,828**
	N.E.C. Demand for above loads (per N.E.C. Table 220-11)				
	1. First 3,000 VA @ 100%		**3,000**	**100%**	**3,000**
	2. Next 117,000 VA @ 35%		**18,828**	**35%**	**6,590**
	3. Remaining Load @ 25%		**0**	**25%**	**0**
	SUBTOTAL FOR ITEM A:				**9,590**
B.	**Fixed appliances**				
	Range Hood Fan	2	100	75%	**150**
	Microwave	2	800	75%	**1,200**
	Refrigerator	2	850	75%	**1,275**
	Bath Fan	5	200	75%	**750**
	Disposal	2	1,000	75%	**1,500**
	Dishwasher	2	1,000	75%	**1,500**
	Wine Cooler	1	800	75%	**600**
				75%	**0**
				75%	**0**
				75%	**0**
				100%	**0**
				100%	**0**
	SUBTOTAL FOR ITEM B:				**6,975**
C.	**ADU AC Unit**	1	3,000	100%	**3,000**
D.	**AC Units**	2	5,000	100%	**10,000**
E.	**Garage Door Opener**	1	300	100%	**300**
F.				100%	**0**
G.				100%	**0**
H.				100%	**0**
I.				100%	**0**
J.				100%	**0**
K.				100%	**0**
L.	**ADU HP WH**	1	4,500	100%	**4,500**
M.	**ADU Stacked W/D**	1	5,000	100%	**5,000**
N.	**Main House Gas Dryer**			100%	**0**
O.	**Main House Gas Water Heater**			100%	**0**
P.	**ADU Electric Range**	1	8,000	100%	**8,000**
Q.	**Main House Gas Range**			100%	**0**
	SUBTOTAL FOR ITEMS C THRU END::				**30,800**
	TOTAL DWELLING UNIT LOAD @ 120/240V, 1 PHASE				**47,365**
	TOTAL DWELLING UNIT LOAD IN AMPS (TOTAL LOAD / 240V)				**197.4**

(N) PANEL SCHEDULE "X"

SERVICE: 120/240V 1Φ 3W | MAIN BKR.: 100A-2P | BUS: 100A | LOC.: SEE PLAN | MTG.: FLUSH

REMARKS	LOAD ΦA	LOAD ΦB	REC	LTG	MISC	POLE	TRIP	CIRC		CIRC	TRIP	POLE	REC	LTG	MISC	LOAD ΦA	LOAD ΦB	REMARKS
SMALL APPLIANCE						1	20	1		2	30	2	1					WASHER/DRYER
"						1	20	3		4	X	X						"
LAUNDRY						1	20	5		6	30	2			1			AC UNIT
BATHROOM						1	20	7		8	X	X						"
SMOKE DETECTORS						1	20	9		10	20	1						SPARE
DISPOSAL						1	20	11		12	20	1						"
DISHWASHER						1	20	13		14	20	1						"
EXTERIOR REC						1	20	15		16	20	1						"
EXTERIOR LTS						1	20	17		18	40	2						EV CHARGER
LANDSCAPE						1	20	19		20								"

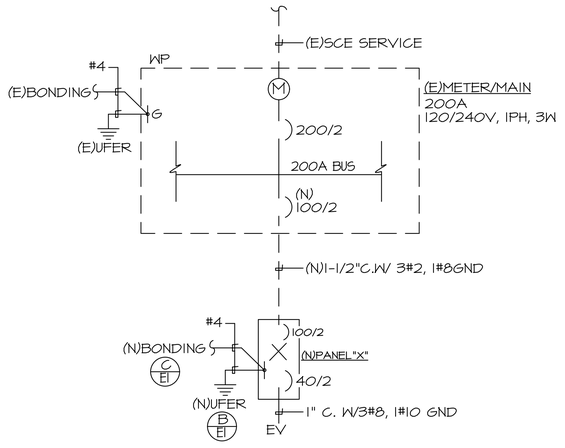
AMPS= SEE ELECTRICAL LOAD CALCULATIONS | MINIMUM BKR | A.I.C. RATING= 10,000 AMPS SYM



THE GROUNDING SYSTEM SHALL CONSIST OF A "UFER" TYPE 20' LONG OF #3/0 BARE COPPER CONDUCTOR EMBEDDED ALONG THE BOTTOM OF A CONCRETE FOOTING OR GRADE BEAM THAT IS IN DIRECT CONTACT WITH THE EARTH.

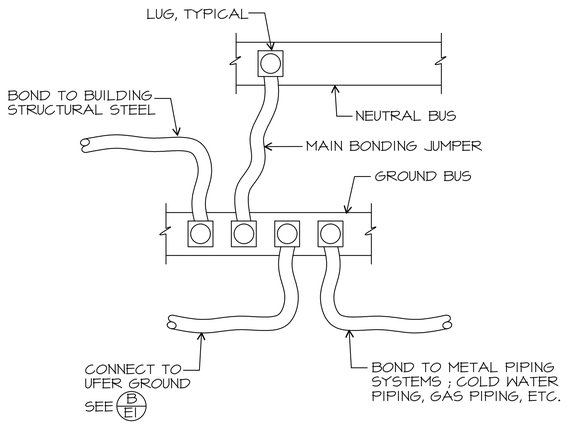
UFER GROUND DETAIL (B)

SCALE: NONE



SINGLE LINE DIAGRAM (A)

SCALE: NONE



BONDING DIAGRAM (C)

SCALE: NONE

GENERAL NOTES

1. VISIT JOB SITE AND VERIFY EXISTING CONDITIONS PRIOR TO BID.
2. THE ELECTRICAL WORK WILL BE INSTALLED IN ACCORDANCE WITH THE 2019 CALIFORNIA ELECTRICAL CODE AND ALL APPLICABLE LOCAL ORDINANCES. WHERE PLANS CALL FOR A HIGHER STANDARD THAN APPLICABLE CODES, THE PLANS SHALL GOVERN.
3. CONDUIT RUNS ARE SHOWN DIAGRAMMATICALLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD TO SUIT FIELD CONDITIONS.
4. ALL ELECTRICAL EQUIPMENT, APPLIANCES AND LIGHTING FIXTURES SHALL BE LISTED BY A RECOGNIZED TEST LAB AND BEAR THAT LABEL OF APPROVAL.
5. CONTRACTOR SHALL FURNISH, INSTALL AND CONNECT ALL MATERIAL AND EQUIPMENT FOR THIS WORK UNLESS OTHERWISE NOTED.
6. FURNISH DISCONNECT SWITCHES AT REMOTE MOTORS.
7. ALL SPACES AS INDICATED ON PANELS OR SWITCHBOARDS SHALL BE COMPLETE WITH HARDWARE AND BUSSING FOR FUTURE BREAKER OR SWITCH.
8. CHECK ARCHITECTURAL PLANS FOR DOOR SWINGS BEFORE INSTALLING SWITCH OUTLETS.
9. GROUNDING AND BONDING SHALL BE PER CODE PLUS ANY ADDITIONAL PROVISIONS SPECIFIED OR SHOWN ON DRAWINGS.
10. ALL CONDUIT RUNS SHALL CONTAIN A CODE SIZED GREEN GROUND WIRE.
11. THESE PLANS ARE NOT COMPLETE UNTIL APPROVED BY THE AUTHORITY HAVING JURISDICTION.
12. ALL FEEDER CONDUCTORS SHALL BE IN CONDUIT. BRANCH CIRCUITS MAY BE NON-METALLIC SHEATHED CABLE.
13. ALL CONDUCTORS SHALL BE COPPER WITH TYPE THHN/THWN INSULATION.
14. COORDINATE WITH SERVING ELECTRICAL UTILITY COMPANY AND MAKE PROVISIONS FOR ELECTRICAL SERVICE ACCORDINGLY. INCLUDE ALL SERVICE COSTS AND UTILITY COMPANY CHARGES IN BID.
15. COORDINATE WITH SERVING TELEPHONE UTILITY COMPANY AND MAKE PROVISIONS FOR TELEPHONE SERVICE ACCORDINGLY. INCLUDE ALL SERVICE COSTS AND ANY UTILITY COMPANY CHARGES IN BID.
16. COORDINATE WITH SERVING CABLE TELEVISION COMPANY AND MAKE PROVISIONS FOR TELEPHONE SERVICE ACCORDINGLY. INCLUDE ALL SERVICE COSTS AND UTILITY COMPANY CHARGES IN BID.
17. ALL PERMITS SHALL BE OBTAINED AND PAID FOR BY THE CONTRACTOR.
18. ALL 120-VOLT, SINGLE PHASE, 15 AND 20 AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS OR DEVICES INSTALLED IN DWELLING UNIT KITCHEN, FAMILY ROOM, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS, OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY A LISTED ARC-FAULT/BRANCH CIRCUIT INTERRUPTER, COMBINATION TYPE, A BRANCH/FEEDER TYPE, A LISTED SUPPLEMENTAL ARC PROTECTION CIRCUIT BREAKER INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT. [CEC 210.12(A)(1) THROUGH (6)].
19. ALL NON-LOCKING TYPE 125-VOLT, 15 AND 20 AMPERE RECEPTACLES IN A DWELLING UNIT SHALL BE LISTED TAMPER-RESISTANT RECEPTACLES. (EXCEPTIONS: (1) RECEPTACLE MORE THAN 5'-6" ABOVE THE FLOOR, (2) RECEPTACLES PART OF A LUMINAIRE OR APPLIANCE, (3) A SINGLE RECEPTACLE OR A DUPLEX RECEPTACLE FOR TWO APPLIANCES THAT ARE NOT EASILY MOVED AND LOCATED WITHIN DEDICATED SPACE AND ARE CORD-AND-PLUG CONNECTED AS PER CEC 400.10(A)(6), (A)(7) OR (A)(8), AND (4) NON-GROUNDING RECEPTACLES USED FOR REPLACEMENTS AS PERMITTED IN CEC 406.4 (D)(2) (A), [CEC 406.12].
20. SMOKE DETECTORS SHALL BE 120V, PHOTOELECTRIC/ION COMBINATION UNITS WITH BATTERY BACK-UP. THEY SHALL BE INTERCONNECTED.
21. HALLWAY DETECTORS SHALL BE COMBINATION SMOKE AND CARBON MONOXIDE DETECTOR. THEY SHALL BE INTERCONNECTED WITH SMOKE DETECTORS.
22. LIGHT FIXTURES IN BATHTUB OR SHOWER AREAS SHALL BE MARKED AS "SUITABLE FOR DAMP LOCATIONS" PER CEC 410.10.
23. WP EXTERIOR RECEPTACLES SHALL HAVE HUBBELL #MP500 EXTRA DUTY COVERS OR EQUAL. ALL RECEPTACLES IN DAMP OR WET LOCATIONS (WP) SHALL BE A LISTED WEATHER-RESISTANT TYPE AND BE GFCI. [CEC 406.9].
24. MANUFACTURER'S LITERATURE SHOWING THAT PROPOSED LED LIGHT FIXTURES ARE HIGH EFFICACY AND CALIFORNIA CERTIFIED IS TO BE ON SITE AT THE TIME OF FIELD INSPECTION. CALIFORNIA ENERGY CODE 150.
25. AT LEAST ONE FIXTURE INSTALLED IN GARAGES, CLOSETS, LAUNDRY ROOMS, AND UTILITY ROOMS SHALL BE CONTROLLED BY A VACANCY SENSOR PER CALIFORNIA ENERGY CODE 150(K)2.
26. AT LEAST ONE LIGHT FIXTURE IN EACH BATHROOM SHALL BE CONTROLLED BY A VACANCY SENSOR PER CALIFORNIA CODE 150(K)2.
27. TWO MINIMUM 1" DIAMETER METALLIC CONDUITS SHALL BE PROVIDED THAT ORIGINATE AT A READILY ACCESSIBLE ATTIC LOCATION WITH PROXIMITY TO A SOLAR ZONE AREA COMPLYING WITH CALIFORNIA ENERGY CODE, SECTION 110.10 AND TERMINATE AT A MINIMUM 4" FROM THE ELECTRICAL PANEL. THE ELECTRICAL JUNCTION BOX AND SEGMENT OF CONDUIT RUN IN THE ATTIC SHALL BE PERMANENTLY AND VISIBLY MARKED AS "FOR FUTURE SOLAR PHOTOVOLTAIC".
28. RECESSED LUMINARIES INSTALLED IN INSULATED CEILINGS SHALL HAVE AN I.C. RATING AND SHALL BE CERTIFIED AS AIR TIGHT.
29. LUMINARIES WITH SCREW BASE SOCKETS SHALL NOT BE RECESSED IN A CEILING.
30. LUMINARIES WITH SCREW BASE SOCKETS SHALL BE MARKED AS JA8-2019-E COMPLIANT AND SHALL ONLY CONTAIN JA8 COMPLIANT LAMPS.
31. ALL JA8 COMPLIANCE LUMINARIES SHALL BE CONTROLLED BY DIMMERS OR VACANCY SENSORS.
32. ALL KITCHEN COUNTERTOP RECEPTACLES ARE TO BE GFCI PROTECTED. RECEPTACLES WITHIN 6 FEET FROM THE TOP INSIDE EDGE OF THE BOWL OF THE SINK, RECEPTACLES WITHIN 6 FEET OF THE OUTSIDE EDGE OF ANY BATHTUB OR SHOWER STALL, AND RECEPTACLES IN LAUNDRY AREAS ARE TO BE GFCI PROTECTED. [CEC 210.8].

SYMBOLS

- CONDUIT EXISTING
- CONDUIT CONCEALED IN WALL OR CEILING
- CONDUIT CONCEALED UNDER FLOOR OR BELOW GRADE
- CONDUIT STUBBED OUT AND CAPPED
- CONDUIT TURNED UP
- CONDUIT TURNED DOWN
- HATCH MARKS INDICATE NO. OF #12 WIRES IN CODE SIZED CONDUIT (3) MAX. IN 1/2" C., (5) MAX. IN 3/4" C., (8) MAX. IN 1"C., NO MARKS = 2 #12
- A-3 HOME RUN: LETTER INDICATES PANEL, NUMBER(S) INDICATES CIRCUIT(S).
- SAWCUT
- GROUND CONNECTION
- DISTRIBUTION SWITCHBOARD OR PANEL
- PANEL, BRANCH CIRCUIT TYPE, SURFACE AND FLUSH
- SIGNAL TERMINAL CABINET, SURFACE & FLUSH
- FLUORESCENT FIXTURE
- 2 OUTLET DATA: BAR INDICATES WALL MOUNT, LETTER INDICATES SWITCH CONTROL, NO. INDICATES CIRCUIT.
- SURFACE FIXTURE ON FLUSH OUTLET.
- RECESSED FIXTURE WITH JUNCTION BOX FOR THRU WIRING
- EXIT LIGHT WITH ARROWS AS SHOWN ON PLANS, WALL AND CEILING MOUNT.
- LOW LEVEL EXIT SIGN, +6" AFF, +4" FROM DOOR JAMB
- A / 100 LIGHT FIXTURE DESIGNATION, LETTER INDICATES TYPE, NO. INDICATES WATTAGE. SEE FIXTURE SCHEDULE.
- FC / 1 MECHANICAL EQUIPMENT DESIGNATION. SEE MECHANICAL DRAWINGS.
- SPECIAL RECEPTACLE - SEE PLAN
- (M) METER
- FLUSH FLOOR RECEPTACLE
- RECEPTACLE, DUPLEX, 15A, 125V, NEMA 5-15R +18" U.N.O.
- DUPLEX RECEPTACLE MTD. ABOVE BACKSPLASH
- DUPLEX RECEPTACLE W/LOWER HALF SWITCHED
- GFI GROUND FAULT CIRCUIT INTERRUPTING RECEPTACLE
- DOUBLE DUPLEX RECEPTACLE
- CEILING RECEPTACLE
- RECEPTACLE, DUPLEX, 20A, 125V, NEMA 5-20R +18" U.N.O.
- JUNCTION BOX 4" SQUARE, 1-1/2" DEEP U.N.O.
- THERMOSTAT F.B.O. +48"
- (2)HP MOTOR, NO. INDICATES HORSEPOWER
- CLOCK OUTLET +7'-6" U.N.O.
- DISCONNECT SWITCH, NON-FUSED
- F DISCONNECT SWITCH FUSED HORSEPOWER RATED OR SIZED AS NOTED
- M COMBINATION MAGNETIC STARTER WITH DISCONNECT SWITCH AND FUSES
- M MAGNETIC MOTOR STARTER W/OVERLOADS IN EACH PHASE
- D DIMMER W/INTEGRAL "ON-OFF" SW.
- PUSHBUTTON
- S SPEAKER
- PC PHOTOCELL
- SD SMOKE DETECTOR
- TELEPHONE/COMPUTER/DATA OUTLET, TWO GANG BOX W/1 GANG COVERPLATE & GROMMETED OPENING +18" U.N.O.
- CABLE TV OUTLET +18" U.N.O.
- M MOTION SENSOR
- $ EXISTING SWITCH
- S SINGLE POLE SWITCH
- ^{2} DOUBLE POLE SWITCH
- ^{3} THREE WAY SWITCH
- ^{P} SWITCH W/PILOT LT.

  (QUIET TOGGLE TYPE RATED AT 20A 120/277V A.C. +42" U.N.O.)
- ^{M} MANUAL MOTOR STARTER

FACP	FIRE ALARM CONTROL PANEL
GFI	GROUND FAULT CIRCUIT INTERRUPTING
LST	LABOR SAVING TANDEM
MLO	MAIN LUGS ONLY
W/	WITH
C.O.	CONDUIT ONLY
W.P.	WEATHERPROOF
F.B.O.	FURNISHED BY OTHERS, INSTALL & CONNECT
U.N.O.	UNLESS NOTED OTHERWISE
N.E.C.	NATIONAL ELECTRICAL CODE
N.I.C.	NOT IN CONTRACT
(E)	EXISTING
(N)	NEW
(R)	REMOVE
(RL)	RELOCATE
S/M	SURFACE MOUNT
U/G	UNDERGROUND
CWP	COLD WATER PIPE
AFF	ABOVE FINISHED FLOOR
HACR	HEATING AND AIR CONDITIONING RATED CIRCUIT BREAKER
N.L.	NIGHT LIGHT

NOTE: NOT ALL SYMBOLS SHOWN ARE USED ON THIS PROJECT.

REVISIONS	BY

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REGISTERED PROFESSIONAL ENGINEER
JAMES M. MALONEY
No. E011085
EXP: 06/30/2024
ELECTRICAL
STATE OF CALIFORNIA

PROPOSED ADU FOR:
KISLAK RESIDENCE
3627 CAMPANIL DRIVE
SANTA BARBARA, CA 93109

GENERAL NOTES
SYMBOLS
SINGLE LINE DIAGRAM

DATE 05-08-2023
SCALE NONE
DRAWN ARRED
SHEET E1

STATE OF CALIFORNIA
Lighting – Single Family Dwellings
CEC-CF2R-LTG-01-E (Revised 01/20) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF INSTALLATION			CF2R-LTG-01-E
Lighting – Single Family Dwellings			(Page 1 of 3)
Project Name: KISLAK RESIDENCE		Enforcement Agency:	Permit Number:
Dwelling Address: 3627 CAMPANIL DRIVE		City: SANTA BARBARA	Zip Code: 93109

A. Installed Lighting and Controls Select Yes or No according to whether your work on the project includes each of the following types of lighting and controls. See Sections B through H for applicable requirements.		**Y or N**
01	High Efficacy luminaires installed in any interior rooms. (See Section B.)	
02	JA8 compliant luminaires and controls installed in any interior rooms. (See Section B.)	
03	Recessed downlight luminaire in ceilings in any interior rooms. (See Section C.)	
04	Screw-based luminaires installed in any interior rooms. (See Section D.)	
05	Enclosed or recessed luminaires installed in any interior rooms. (See Section D.)	
06	Lighting and controls in bathrooms. (See Section E.)	
07	Lighting and controls in laundry rooms. (See Section E.)	
08	Lighting and controls in utility rooms. (See Section E.)	
09	Lighting and controls in garage. (See Section E.)	
10	Outdoor lighting and controls. (See Section H.)	
11	Blank electrical boxes installed more than 5 feet from finished floor. (See Section F.)	
12	Internally illuminated address signs. (See Section G.)	

B. High Efficacy Luminaires and Controls	
01	150.0(k)1A and Table 150.0-A: All luminaires are installed with: • Light sources of one of the lighting technologies specified under the "High Efficacy" column of Table 150.0-A; or • JA8 compliant light sources and the light sources are marked with a label reading "JA8-2019" or "JA8-2019-E".
02	150.0(k)2i: Dimming controls for all luminaires with dimmable JA8 compliant light sources except for those controlled by occupancy or vacancy sensors.
03	150.0(k)2A: Forward phase cut dimmers used with LED light sources shall comply with NEMA SSL 7A.
The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.	

C. Recessed Downlight Luminaires in Ceilings	
01	150.0(k)1Cv: Do not contain screw based sockets.
02	The luminaire shall be marked with "JA8-2019".
03	150.0(k)1Ci: Listed for zero clearance insulation contact (IC).
04	150.0(k)1Cii: Has label certifying air tight.
05	150.0(k)1Ciii: Sealed with a gasket or caulk between the luminaire housing and ceiling, and all air leakage paths between conditioned and unconditioned spaces are sealed with a gasket or caulk.
06	150.0(k)1Civ: Allows ballast maintenance and replacement to be readily accessible to building occupants from below the ceiling without requiring the cutting of holes in the ceiling.
The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.	

D. Additional Luminaire Requirements	
01	150.0(k)1G: **Screw based luminaires** are installed with all of the following requirements: • The luminaire is not recessed downlight luminaire in ceilings; and • The luminaires are installed with lamps or light sources marked with "JA8-2019".
02	150.0(k)1H: **Enclosed or Recessed luminaires** are installed with lamps or other separable light sources marked with "JA8-2019-E".
03	150.0(k)1D: Ballasts for fluorescent lamps rated 13 Watts or greater are electronic.
04	150.0(k)1E: Night lights, step lights and path lights are rated to consume no more than 5 Watts of power and emit more than 150 lumens, or in compliance with Table 150.0-A, or controlled by vacancy sensors.
05	150.0(k)1F: **Lighting integral to exhaust fans** meets the requirements of Table 150.0-A, with exception to the lighting installed by the manufacturer in kitchen exhaust hoods.
The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.	

Registration Number: Registration Date/Time: HERS Provider:
CA Building Energy Efficiency Standards - 2019 Residential Compliance January 2020

STATE OF CALIFORNIA
Lighting – Single Family Dwellings
CEC-CF2R-LTG-01-E (Revised 01/20) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF INSTALLATION			CF2R-LTG-01-E
Lighting – Single Family Dwellings			(Page 2 of 3)
Project Name: KISLAK RESIDENCE		Enforcement Agency:	Permit Number:
Dwelling Address: 3627 CAMPANIL DRIVE		City: SANTA BARBARA	Zip Code: 93109

E. Additional Lighting Controls	
01	150.0(k)2J: In **bathrooms, garages, laundry rooms, and utility rooms**, at least one luminaire in each of these spaces is controlled by an occupant or vacancy sensor providing automatic-off functionality.
02	150.0(k)2B: **Exhaust fans** are controlled separately from lighting systems, or the lighting can be turned OFF on the same control as the fan.
03	150.0(k)2C: Lighting has readily accessible wall-mounted controls that allow the lighting to be manually turned ON and OFF.
04	150.0(k)2D: Lighting controls and equipment are installed in accordance with manufacturer's instructions.
05	150.0(k)2E: No controls bypasses a dimmer, occupancy sensor or vacancy sensor function where that dimmer or sensor has been installed to comply with Section 150.0(k)
06	150.0(k)2F: Lighting controls comply with the applicable requirements in Section 110.9.
07	150.0(k)2G: **Energy Management Control Systems** used to comply with control requirements provide the functionality of the specified control in accordance with Section 110.9, meet the installation certificate requirements in Section 130.4, meets the EMCS requirements in Section 130.0(e), and complies with all other applicable requirements in Section 150.0(k)2.
08	150.0(k)2H: A **multi-scene programmable controller** used to comply with dimmer requirements provides the functionality of a dimmer in accordance with Section 110.9, and complies with all other applicable requirements in Section 150.0(k)2.
09	150.0(k)2K: **Undercabinet lighting** is controlled separately from ceiling installed lighting.
The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.	

F. Blank Electrical Boxes	
01	150.0(k)1B: The number of blank electrical boxes installed more than five feet above the finished floor and do not contain a luminaire or other device, are not greater than the number of bedrooms. The blank boxes are served by dimmer, vacancy sensor, or fan speed control.
The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.	

G. Address Signs	
01	150.0(k)4: Internally illuminated address signs. Internally illuminated address signs shall either: • Comply with Section 140.8. Applicable nonresidential sign lighting compliance forms shall also be submitted; or • Consume no more than 5 Watts of power.
The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.	

H. Single Family Outdoor Lighting	
01	150.0(k)1A and Table 150.0-A: High efficacy outdoor lighting or LED light sources are installed.
02	150.0(k)3A: Outdoor lighting is controlled by a manual ON and OFF switch that permits one of the following automatic actions: • Controlled by a photocell and either a motion sensor or an automatic time switch control; or • Controlled by an astronomical time clock control. Controls that override to ON shall not be allowed unless the override automatically returns the automatic control to its normal operation within 6 hours. An energy management control that provides the specified lighting control functionality and complies with all requirements applicable to the specified controls may be used to meet the above requirements.
The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.	

Registration Number: Registration Date/Time: HERS Provider:
CA Building Energy Efficiency Standards - 2019 Residential Compliance January 2020

STATE OF CALIFORNIA
Lighting – Single Family Dwellings
CEC-CF2R-LTG-01-E (Revised 01/20) CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF INSTALLATION			CF2R-LTG-01-E
Lighting – Single Family Dwellings			(Page 3 of 3)
Project Name: KISLAK RESIDENCE		Enforcement Agency:	Permit Number:
Dwelling Address: 3627 CAMPANIL DRIVE		City: SANTA BARBARA	Zip Code: 93109

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT			
1. I certify that this Certificate of Installation documentation is accurate and complete.			
Documentation Author Name: JOHN MALONEY PE		Documentation Author Signature:	
Documentation Author Company Name: JMPE		Date Signed: 2022-07-25	
Address: 627 OLIVE STREET		CEA/HERS Certification Identification (if applicable):	
City/State/Zip: SANTA BARBARA, CA 93105		Phone: 805-569-9216	
RESPONSIBLE PERSON'S DECLARATION STATEMENT			
I certify the following under penalty of perjury, under the laws of the State of California: 1. The information provided on this Certificate of Installation is true and correct. 2. I am either: a) a responsible person eligible under Division 3 of the Business and Professions Code in the applicable classification to accept responsibility for the system design, construction, or installation of features, materials, components, or manufactured devices for the scope of work identified on this Certificate of Installation, and attest to the declarations in this statement, or b) I am an authorized representative of the responsible person and attest to the declarations in this statement on the responsible person's behalf. 3. The constructed or installed features, materials, components or manufactured devices (the installation) identified on this Certificate of Installation conforms to all applicable codes and regulations and the installation conforms to the requirements given on the Certificate of Compliance, plans, and specifications approved by the enforcement agency. 4. I will ensure that a registered copy of this Certificate of Installation shall be posted or made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a registered copy of this Certificate of Installation is required to be included with the documentation the builder provides to the building owner at occupancy.			
Responsible Builder/Installer Name:		Responsible Builder/Installer Signature:	
Company Name: (Installing Subcontractor or General Contractor or Builder/Owner)		Position With Company (Title):	
Address:		CSLB License:	
City/State/Zip:		Phone:	Date Signed:

Registration Number: Registration Date/Time: HERS Provider:
CA Building Energy Efficiency Standards - 2019 Residential Compliance January 2020

CERTIFICATE OF INSTALLATION – USER INSTRUCTIONS	CF2R-LTG-01-E
Lighting – Single Family – LTG-01	(Page 1 of 1)

CF2R-LTG-01-E User Instructions

There are two version of the residential lighting Certificate of Installation. This version, the CF2R-LTG-01-E, is primarily used for demonstrating compliance with the residential lighting Standards for single-family dwellings.

The LTG-01 shall also be used to demonstrate compliance with the residential lighting requirements for high-rise residential dwelling units; outdoor lighting that is attached to a high-rise residential or hotel/motel building, and is separately controlled from the inside of a dwelling unit or guest room; fire station dwelling accommodations; hotel and motel guest rooms; and, dormitory and senior housing dwelling accommodations. When using the CF2R-LTG-01-E to demonstrate compliance with the lighting in the dwelling units, compliance with lighting that is not in the dwelling units, such as lighting in common areas, shall be demonstrated using the nonresidential lighting compliance documentation.

The other version of the residential lighting Certificate of Compliance, the CF2R-LTG-02-E, is used for demonstrating compliance with the residential lighting Standards for low-rise multi-family dwellings. The primary difference between the LTG-02 and LTG-01 is that the LTG-02 includes additional requirements for demonstrating compliance with residential outdoor lighting, and common areas associated with low-rise multi-family dwelling units.

Section A. Installed Lighting and Controls
This table is used to identify the scope of the work being covered by the responsible person signing this document. One person may be responsible for all of the measures in this table, or several people may each be responsible for only a portion of the measures. If several people are responsible, each person must separately fill out this Certificate of Installation for those measures for which they are responsible. In some situations, such as for alterations and additions, only some of the measures may be included in the total scope of work.

For rows 1 through 12 – insert 'Y' for each measure that is included in the scope of work, and insert 'N' for each measure that is not included in the scope of work.

Section B. High Efficacy Luminaires and Controls
This table is a list of mandatory requirements for high efficacy luminaires.

Section C. Recessed Downlight Luminaires in Ceilings
This table is a list of mandatory requirements for recessed downlight luminaires in ceilings.

Section D. Additional Luminaire Requirements
This table is a list of additional requirements for luminaires.

Section E. LED Luminaires
This table is a list of mandatory requirements for LED luminaires.

Section F. Blank Electrical Boxes
This table is a list of mandatory requirements for blank electrical boxes.

Section G. Address Signs
This table is a list of mandatory requirements for address signs.

Section H. Single Family Outdoor Lighting
This table is a list of mandatory requirements for single family outdoor lighting.

CA Building Energy Efficiency Standards - 2019 Residential Compliance January 2020

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STATE OF CALIFORNIA

PROPOSED ADU FOR:
KISLAK RESIDENCE
3627 CAMPANIL DRIVE
SANTA BARBARA, CA 93109

LIGHTING COMPLIANCE FORMS

DATE	05-08-2023
SCALE	NONE
DRAWN	ARRED
SHEET	E1.1

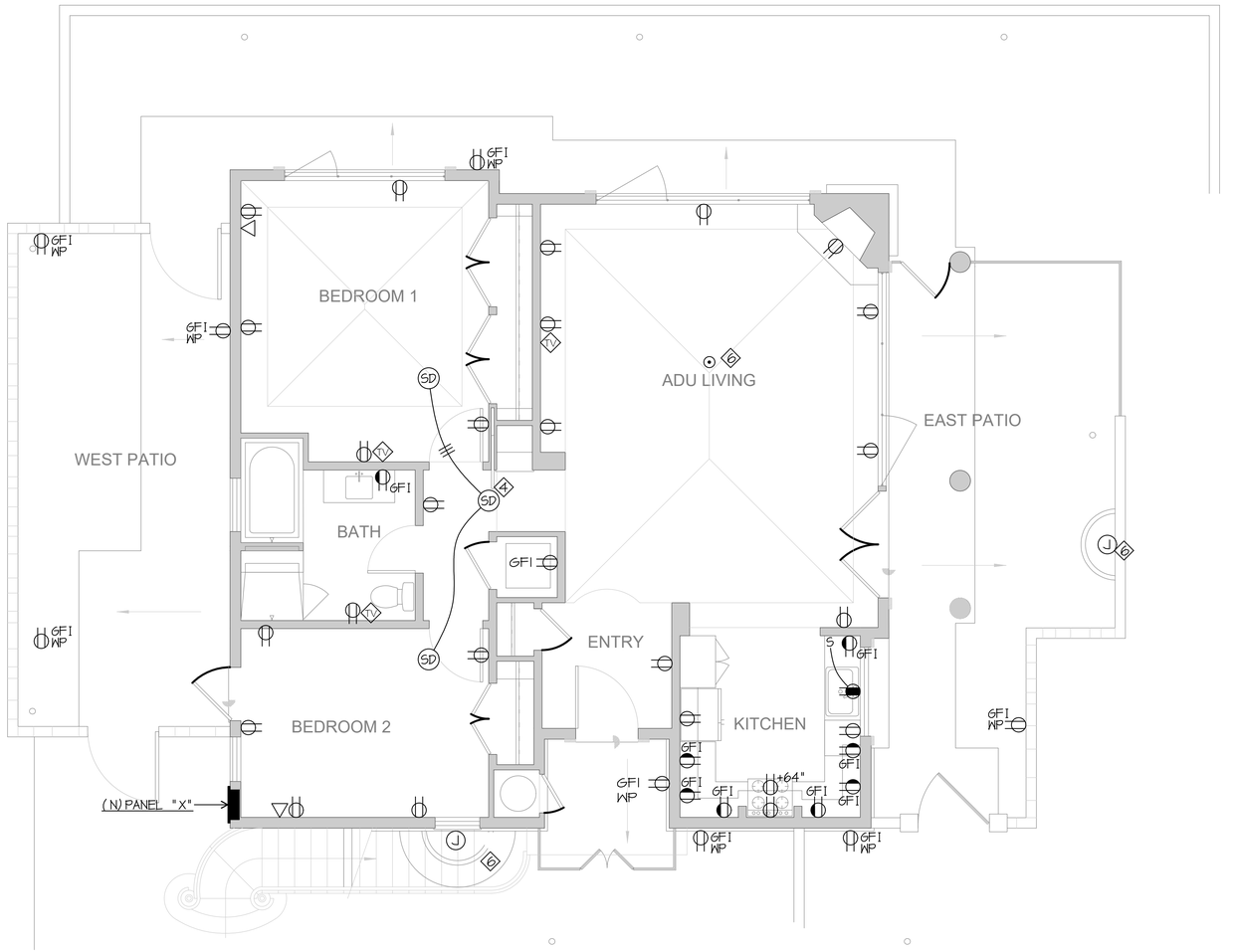
ELECTRICAL NOTES

1. ALL OUTLETS IN DWELLING UNITS SHALL BE PROTECTED BY A LISTED ARC FAULT CIRCUIT INTERRUPTER, COMBINATION TYPE PER CEC 210.12
2. TAMPER RESISTANCE RECEPTACLE SHALL BE INSTALLED IN DWELLING UNITS PER CEC 406.11
3. SMOKE DETECTORS SHALL BE 120V, INTERCONNECTED, PHOTOELECTRIC/ION UNITS WITH BATTERY BACK UP

(4) HALLWAY DETECTORS SHALL BE COMBINATION SMOKE AND CARBON MONOXIDE DETECTOR, PART #KIDDE KN-COSM-BA

(5) VERIFY LOCATION OF FLUSH FLOOR RECEPTACLE PRIOR TO ROUGH IN

(6) CONNECT FOUNTAIN VIA GFCI



POWER PLAN

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

NORTH

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REVISIONS	BY

PROPOSED ADU FOR:
KISLAK RESIDENCE
3627 CAMPANIL DRIVE
SANTA BARBARA, CA 93109

POWER PLAN

DATE 05-08-2023
SCALE 1/4"=1'-0"
DRAWN ARRED
SHEET E2

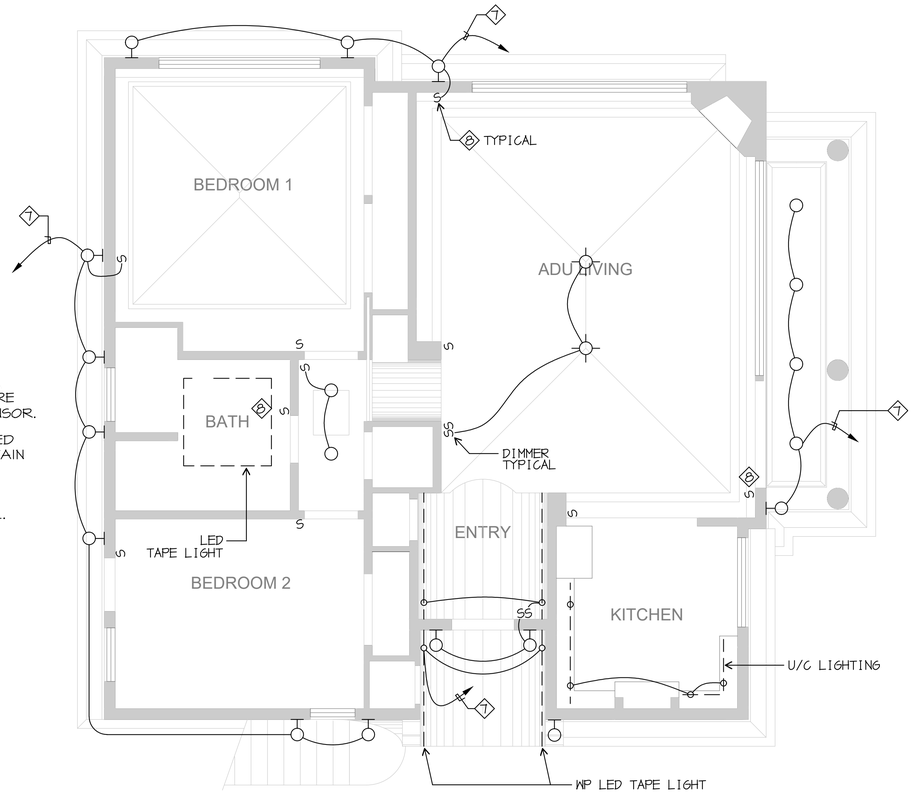
SEE SHEET ID-601 FOR
LIGHT FIXTURE LOCATIONS
+ SPECIFICATIONS

LIGHTING NOTES

1. ALL INSTALLED LIGHTING TO BE HIGH EFFICACY PER REQUIREMENTS OF 2019 CEC SECTION 150.0(k) AND JOINT APPENDIX JA8.
2. BUILDER SHALL PROVIDE THE HOMEOWNER WITH A LUMINAIRE SCHEDULE THAT INCLUDES A LIST OF ALL INSTALLED LAMPS AND LUMINAIRES.
3. ANY JA8 COMPLIANT LAMP MUST BE CONTROLLED BY A VACANCY SENSOR OR DIMMER BASED ON TYPE OF LUMINAIRE OR LAMP INSTALLED.
4. RECESSED FIXTURES SHALL BE IC RATED AND ASTM E283 CERTIFIED.
   RECESSED FIXTURES SHALL NOT CONTAIN A SCREW BASE SOCKET AND MUST BE INSTALLED WITH A LIGHT SOURCE THAT IS JA8 CERTIFIED, SHALL NOT CONTAIN LIGHT SOURCES THAT ARE LABELED "NOT FOR USE IN ENCLOSED FIXTURES" OR "NOT FOR USE IN RECESSED FIXTURES."
5. IN BATHROOMS, LAUNDRY ROOMS, GARAGES, AND UTILITY ROOMS, AT LEAST ONE LUMINAIRE SHALL BE CONTROLLED BY A VACANCY SENSOR.
6. THE NUMBER OF ELECTRICAL BOXES LOCATED ABOVE FINISHED FLOOR THAT DO NOT CONTAIN A LUMINAIRE OR OTHER DEVICE SHALL NOT EXCEED THE NUMBER OF BEDROOMS. THESE BOXES MUST BE SERVED BY A DIMMER, VACANCY SENSOR, OR FAN SPEED CONTROL.

◇7 HOMERUN VIA LIGHTING CONTROL SYSTEM

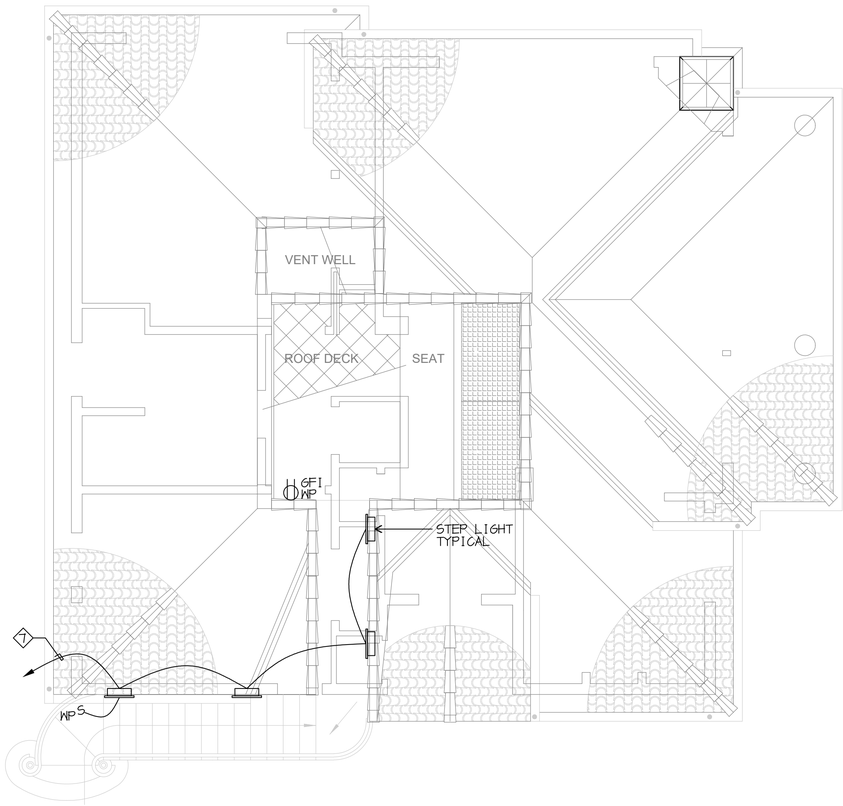
◇B LIGHTING CONTROL KEY PAD



LIGHTING PLAN

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

NORTH



ELECTRICAL ROOF PLAN

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

NORTH

REVISIONS	BY

JMPE
ELECTRICAL ENGINEERING
LIGHTING DESIGN
CA REGISTRATION NO E13083
22311
627 OLIVE STREET
SANTA BARBARA, CA 93101
(805) 569-9216
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email : maloney@jmpe.net
www.jmpe.net

REGISTERED PROFESSIONAL ENGINEER
MICHAEL P. MALONEY
No. E011083
EXP. 06/30/2024
ELECTRICAL
STATE OF CALIFORNIA

PROPOSED ADU FOR:
KISLAK RESIDENCE
3627 CAMPANIL DRIVE
SANTA BARBARA, CA 93109

LIGHTING PLAN
ELECTRICAL ROOF PLAN

DATE 05-08-2023
SCALE 1/4"=1'-0"
DRAWN ARRED
SHEET E3

6. Structural Wood

A. General: All structural wood work shall be done in accordance with the National Design Specification for Wood Construction (NDS-2018 & SDPWS 2018) and the CBC 2019 edition, chapter 23.

B. Structural members shall not be cut or drilled unless specifically noted or detailed.

C. All lumber materials, unless otherwise noted or shown, shall be as follows:
1. Foundation sill, nailers, and ledgers embedded in or in direct contact with concrete or masonry shall be pressure treated D.F.
2. 6x Beam: No. 1 D.F.
3. Framing Members:
   a. Joists, headers, plates, subpurlins, nailers, and blocking shall be D.F. #2 or better unless noted otherwise.
   b. 2x4 studs shall be D.F. construction grade or better.
   c. All 2x joists and rafters are to be solid blocked at all points of bearing. Solid blocking is required at 8'-0"oc unless continuously braced on bottom edge. Blocking may be omitted for ceiling joists and roof rafters eight inches and less in depth, unless noted otherwise on plans.
4. Glue-Laminated Beams:
   a. Glulam beams shall conform to industrial grade 24F-V8 unless noted otherwise. Use architectural grade where noted on architectural plans.
   b. All glulam beams shall be fabricated by a licensed fabricator and shall have AITC certifications.
   c. Adhesives and laminations shall conform to AITC Standard A190.1.
5. Prefabricated Joist Notes:
   a. TJI joists shall be as manufactured by Trus-Joist (by Weyerhaeuser) and shall have solid plywood or Oriented Strand Board webs as recommended by the manufacturer for the loads and spans indicated.
   b. Microlam beams shall be as manufactured by Trus-Joist (by Weyerhaeuser). Multiple pieces shall be joined as follows:
      2 pieces (3) rows 16d nails @ 12"oc
      3 or more pieces (2) rows ½"Φ M.B. @ 12"oc
   c. The joists indicated on the plans are based on the manufacturer's load tables and must be verified by the manufacturer. Submit shop drawings and calculations for each different joist type, span, and loading condition.
   d. Install all joists and beams per the manufacturer's recommendations including all necessary stiffeners, bridging, blocking, and hangers.
   e. Flanges shall be designed to accommodate closely spaced plywood roof or floor diaphragm nailing where occurs on plans.
   f. Design loads shall be as indicated on plans.
   g. Parallam beams shall be as manufactured by Trus-Joist (by Weyerhaeuser) and shall have an E minimum = 2000 ksi.
6. Plywood Sheathing:
   a. Roof Sheathing shall be USDOC PS1 or PS2 rated plywood or OSB as indicated on the plans. Plywood shall be fabricated using exterior glue.
   b. Floor Sheathing shall be USDOC PS1 or PS2 rated plywood or OSB as indicated on the plans. Glue all contact surfaces. Nail with ring shank or screw shank nails.
   c. Wall Sheathing shall be USDOC PS1 or PS2 rated plywood or OSB as scheduled on the plans. Block all panel edges.
   d. Plywood machine nailing will be subject to satisfactory job site demonstration and approval by the structural engineer. The approval is subject to continued satisfactory performance. If nail heads penetrate the outer ply more than would be normal for a hand hammer or if minimum allowable edge distances are not maintained, the performance will be deemed unsatisfactory.
   e. At all unblocked plywood roof sheathing edges, provide one ply clip between each joist unless T & G plywood is used.
   f. Plywood sheet minimum dimensions shall be 24". Minimum area shall be 8 sq. ft.
   g. Face nail 2x6 T & G decking with (2) 16d to each support.
7. Exposed Beams and Joists:
   a. All exposed beams and joists shall be Select Structural D.F., Free of Heart Center and Void of Defects.

D. Bolted Joints
1. Bolts shall be ASTM A-307, unless noted otherwise on plans.
2. Bolt Holes are to be 1/32" to 1/16" larger than bolt diameter. Locate accurately.
3. Washers are to be provided at each bolt head and nut. Place washer next to wood.
4. Lag or Wood Screws shall be screwed and not driven into place.
5. Tighten bolts up snug and re-tighten at the latest practical time during construction.

E. Nailed Joints
1. Size and spacing shall be as shown on the drawings and nailing schedule, Sheet S1.3.
2. Sub-bore when nails tend to split wood. Sub-bore for 20d and larger nails. Drill diameter shall be 0.75 x nail diameter.
3. Nails shall be common or ICC approved plywood nails unless noted otherwise. Common nails shall have the following minimum shank diameters:
   8d nail - .131" diameter
   10d nail - .148" diameter
   16d nail - .162" diameter

F. Joist Hangers and Framing Connectors
1. By Simpson Strong Tie Co. ICC-ES # 209, #393, #413, #1211

G. Fasteners
1. Expansion Anchors to be Hilti Kwik-Bolt TZ ICC-ES-ESR #1917.
2. Epoxy shall be two part epoxy. Use Simpson SET-XP Epoxy ICC-ESR #2508.
3. Powder driven "shot pins" to be Hilti NK72 or approved equal. For use on interior, non-bearing sill plates on slab only.

K. Dry Pack: 1 Part Portland cement to 2 ½ parts sand; or use non-shrink metallic grout (submit proposal to structural engineer for review).

L. Cover to Bars: Cover to reinforcing bars shall be as follows, unless otherwise shown or noted: Cover to reinforcing bars shall be increased by 50% (or epoxy coated reinforcing used) in corrosive environments or other severe exposure conditions.
1. When concrete is placed against ground .....3"
2. When concrete is placed against forms, but after form removal will be in contact with ground .....2"
3. Inside face of walls not exposed to the elements.....¾"
4. All others .....1½"

M. Curing: Keep concrete slab on grade wet for 7 days, or cover with approved curing compound in strict accordance with manufacturer's installation recommendations.

N. Vibrate all concrete in place with a mechanical vibrator used by experienced personnel.

O. Slab Finishes: Interior slab finish shall be troweled smooth. Exterior slab finish shall be with a light broom perpendicular to travel. Unless otherwise noted.

P. Slab tolerance to be planar to within ⅛" in 10 feet when checked with a 10' long rod in any direction.

Q. Sill Plate Anchor Bolts: Provide minimum ⅝" diameter x 10" long anchor bolts spaced at 48" on center and within 12" of all sill plate ends or breaks. Provide additional anchor bolts as required by foundation plan and shear wall schedule. Anchor bolts shall be embedded 7" minimum into concrete.

4. Masonry

A. General: All masonry work shall be done in accordance with the Masonry Standards Joint Committee (MSJC) Building Code requirements for masonry structures (TMS 402-13 / ACI 530-13 / ASCE 5-13), and the CBC 2019 edition, chapter 21.

B. f'm = 1500 psi, (TMS 602 S-16 Table 2) Periodic Special Inspection is required.

C. Concrete masonry units shall be of a quality at least equal to the requirements as set forth in ASTM C-90, medium weight units. Use open ended units with fully mortared joints. F'c = 1900 psi

D. Mortar shall conform to ASTM C-270 type M or S with a compressive strength of 1250 psi at 7 days and 2500 psi at 28 days. Use mix ratios of 3 parts sand and 1 part type 2 Portland cement. Do not use masonry cement.

E. Grout (fine grout) shall conform to ASTM C-476 with a compressive strength of 1250 psi at 7 days and 2000 psi at 28 days. Slump limits shall be a minimum of 8" and a maximum of 11". All masonry cells are to be solid grouted unless otherwise noted. Provide "Grout Aid" admixture in all grout. Follow manufacturer's recommendations for quantities and procedures.

F. Reinforcing shall conform to ASTM A-615 Grade 40 or 60 for #4 and smaller and ASTM A-615 Grade 60 for #5 and larger. Epoxy coated reinforcing shall conform to ASTM A-775. See Sheet S1.3 for all required laps, bends & splices.

G. All Masonry shall be laid true, level, plumb, and neatly in accordance with the plans. Use running bond, unless otherwise noted.

H. No chipped, cracked, soiled, or otherwise imperfect block shall be used in the work.

I. Consolidate all grout using an electric mechanical vibrator of suitable size for masonry work. Vibrate 3 minutes after grout is deposited.

J. Maximum grout lifts shall be 5'-4" maximum. Cleanouts are not required.

5. Structural Steel and Miscellaneous Metals

A. General: All structural steel work shall be done in accordance with the American Institute of Steel Construction Steel Construction Manual (AISC 360), Seismic Design Manual (AISC 341), and the CBC 2019 edition, chapter 22.

B. Materials: All material specifications are to be retained by contractor and to be available to structural engineer at his request.

1. W Shapes:	ASTM	A-992 (50ksi)
2. Pipe Columns:	ASTM	A-53 Grade B (35ksi)
3. Hollow Structural Sections (HHS):	ASTM	A500 Grade B (46ksi)
4. Channels, Angles:	ASTM	A-36 (36ksi)
5. High Strength Bolts:	ASTM	A-325 (120ksi)
6. Anchor Bolts:	ASTM	A-307 or A-36

7. Welding Rod: Heavily coated, conforming to American Welding Society "specifications for Arc welding electrodes" of E70xxx classification. Use low hydrogen electrodes for welding reinforcing bars.

C. Galvanizing: Galvanize all miscellaneous iron angles, clips and other elements exposed to weather or in processing areas.

D. Shop Drawings: Submit a minimum of 2 sets of shop drawings to structural engineer for review (more sets shall be submitted if required by architect or general contractor).

E. Shop Primer: Standard brand of rust inhibitive primer conforming to Federal Specification TT-P-86E, Type III. Galvanized metal primer shall conform to Federal Specification TT-P-64LD, Type II. Do not paint areas to be welded or embedded into masonry or concrete.

F. Erection: All field welding shall be in accordance with American Welding Society Structural Welding Code, AWS D1.1, and all applicable revisions. All welds shall be made only by welders, tackers, and welding operators who have been previously qualified by test as prescribed by the AWS Structural Welding Code, AWS D1.1, and applicable revisions. Weld electrodes shall be as specified by the American Institute of Steel Construction, "Specification for the Design, Fabrication, and Erection of Steel for Buildings": Erection shall be in accordance with the American Institute of Steel Construction "Code of Standard Practice". Adequate temporary guying and bracing shall be installed during erection where needed to secure the framing against wind & seismic forces, erection equipment, and erection operations. Do not use gas cutting torches for correcting fabrication errors in the structural framing. Report any errors to the structural engineer immediately. All bolts to be tightened to "snug tight" conditions, unless noted otherwise.

G. Special Inspection is required for all field welding and high strength bolt installation.

H. Fabrication: Fabricate structural steel in accordance with AISC specifications and as indicated on the shop drawings as reviewed by the architect, structural engineer, and general contractor. Fabrication shop is to be licensed and approved by the building official. If fabrication shop is not licensed and approved, all welding performed in the shop is to be Special inspected by a licensed Special inspector.

1. General

A. The contractor shall inform the Structural Engineer 48 hours in advance of reaching the following stages of construction:
1. Footing excavations completed.
2. Footing reinforcing bars in place.
3. Concrete placing operations.
4. Wood framing completed but not closed in.
5. Ply nailing completed but not covered.
6. All structural work completed.

B. Details shown on the structural drawings are typical, similar details apply to similar conditions. Contractor shall verify existing conditions. Any existing conditions requiring construction different from that shown shall be reported to the architect immediately.

C. All drawings shall be read in conjunction with the specifications, architectural, mechanical, electrical, and all other contract drawings as applicable.

D. Dimensions shown shall take precedence over scale on plans, sections, and details. Notes and details on the drawings shall take precedence over general notes and typical details. Discrepancies shall be brought to the attention of the architect immediately.

E. The contract structural drawings and specifications represent the finished structure. Unless otherwise noted, they do not indicate the method of construction. The contractor shall provide all measures necessary to protect the structure, workmen, or other persons during construction. OSHA regulations are to be strictly adhered to in providing the protective measures as stated above to include, but not limited to, all shoring, bracing, and underpinning.

F. Unless otherwise noted on the structural drawings, use typical details on sheet: **S1.2 & S1.3** as applicable.

G. Dimensions are to be checked and verified by the contractor. Discrepancies are to be reported to the architect immediately. Discrepancies are to be resolved before proceeding with work.

H. All Special inspections are to be performed by a licensed Special Inspector approved by the building official and the structural engineer. The Special Inspector is an Agent of the Owner and is paid by the Owner, per CBC 2019, chapter 17 "Structural Tests and Special Inspections"

2. Foundation Design

A. General: All foundation work shall be done in accordance with the CBC 2019 edition, chapter 18.

B. The Soils Report for this project was prepared by: **Pacific Materials Laboratory**
File Number: **16-11153-2** Dated: **12/22/16, Updated 10/25/17**

C. Foundation design is based on an allowable soil bearing pressure of: **N/A** psf **(Caissons)**

D. Provide 90% minimum soil compaction under all slabs and structural foundation work, unless noted otherwise in the soils report.

E. Earthwork shall be performed in accordance with the soils report and certified by a Special Inspector.

F. Prior to the contractor requesting a building department foundation inspection, the soils engineer (contractor, if soils report is not available) shall advise the building official in writing that:
1) The building pad was prepared in accordance with the approved plans and the soils report (if available).
2) The utility trenches have been properly backfilled and compacted.
3) The foundation excavations, forming, and reinforcements comply with the approved plans and the soils report (if available).

G. Foundation excavations shall not disturb adjacent existing structures.

3. Concrete

A. General: All concrete work shall be done in accordance with the ACI Building Code (ACI 318-14), the ACI manuals of concrete practice, and the CBC 2019 edition, chapter 19.

B. Mix Design: Concrete shall have the following 28 day compressive strengths (unless specifically noted otherwise on plans):

Typical:
Slabs on Grade, Footings.....3000 psi #
Grade Beams, Caissons, Structural Slabs, Basement Walls.....3000 psi #
Retaining Walls.....3000 psi #
#Indicates Special Inspection is required.

Residential: (Light Frame Construction, Two Stories or Less)
Slabs on Grade, Footings.....2500 psi
(Special Inspection is Not Required)

Mix Designs shall be prepared by the concrete supplier or testing agency and reviewed by the structural engineer a minimum of 2 days prior to concrete pour.

C. Cement: Shall Conform to ASTM C-150, Type 2, Low Alkali. Minimum 5 ½ sacks per yard.

D. Aggregate: Fine aggregate to conform to ASTM C-33. Coarse aggregate to comform to ASTM C-33. Maximum size to be 1" (maximum of 1 ½" will be acceptable for footings only). Aggregate gradation shall conform to ASTM C-33. Pea Gravel shall not be used.

E. Reinforcing Materials: #4 and smaller shall conform to ASTM A-706 or A-615 Grade 40 or 60. #5 and larger shall conform to ASTM A-706 or A-615 Grade 60. Steel welded wire reinforcement shall conform to ASTM A-1064. Epoxy coated reinforcing shall conform to ASTM A-775 or A-884. See Sheet S1.3 for all required laps, bends & splices. #6 bars and larger are to be shop fabricated. Make all bends cold.

F. Concrete consistency: Slump limits shall be a minimum of 2 ½" and a maximum of 4". Slabs on grade may be placed with a maximum slump of 5".

G. Mix Designs shall be submitted as specified by the architect. If not specified, submit a minimum of two copies to the structural engineer a min. of 2 days prior to pour.

H. Admixtures: Obtain structural engineers approval for all admixtures not noted: Flyash shall conform to ASTM C-618, type F; air entraining admixtures shall conform to ASTM C-260; water reducing admixtures shall conform to ASTM C-494 or ASTM C-1017.

I. Check with all trades to insure proper placement of all inserts, sleeves, openings, conduits, etc. prior to pouring concrete. All penetrations through grade beams and all penetrations larger than 6" in diameter are to be approved by the structural engineer.

J. All sleeves not specifically shown on the drawings shall be located by the trades involved and shall be reviewed by the structural engineer.

Building Code: CBC 2019 Edition (Based on IBC 2018 Edition)

Structural Observation Program (CBC 2019; 1704.6)

A. The owner shall employ the Engineer of Record licensed in the State of California who is responsible for the structural design, to do structural observation.

B. Engineer of Record: Kevin L. Vandervort, Registration/License Number: S 3734

C. Designated Engineer to do Structural Observation: Kevin L. Vandervort, Registration/License Number: S 3734. EOR shall be contacted at least 48 hours in advance to schedule Structural Observations.

D. The Engineer responsible for the Structural Observation, the Contractor, and appropriate Subcontractors shall hold a pre-construction meeting to review the details of the structural system to be structurally observed.

E. Foundation: Structural elements to be observed prior to placement of concrete in the foundation. Footing excavations width and depth, reinforcing placement, holdoun anchors and anchor bolts at shear walls, and utility line penetrations through structural elements.

F. Floor Framing: Structural elements to be observed at each floor level. Shear wall construction, shear transfer, floor sheathing nailing.

G. Roof Framing: Structural elements to be observed prior to roof covering. Shear wall construction, shear transfer, roof sheathing nailing, prefabricated roof truss installation (where applicable).

H. FINAL OBSERVATION: Structural elements to be observed at the final observation visit. All drag straps and holdoun straps installed, utility rough-ins, and all previous corrections completed.

Project Design Gravity Loads

Roof Loads
Dead Loads: **32** psf **(Mission Tile)**
Live Loads: **20** psf **(4:12 Slope)**

Floor Loads
Dead Loads: **N/A** psf **(Structural Slab)**
Live Loads: **40** psf **(Residential)**

Partition Loads **N/A** psf

Project Design Lateral Loads
Risk Category II

Wind Design Data
(Directional Procedure, Simplified Method) (ASCE 7-16 27.4)
Basic Wind Speed (V_{ult}): **110** mph
Exposure: **B**
Height Above Ground Level (z): **15'**
Maximum Horizontal Design Pressure: **21.89** psf

Seismic Design Data
Equivalent Lateral Force Procedure (ASCE 7, 12.8)
Site Latitude: **34.418**
Site Longitude: **-119.752**
Site Class: **D**
R: **6.5** (Plywood Shear Walls)
Ie: **1.0**
Ss: **2.332**
S1: **0.823**
Sds: **1.866**
Cs: **0.287**
Seismic Design Category: **E**
ρ: **1.3**
$V = \rho C_s W_{DL}$ = **0.373** W_{DL}

Tests and Inspections (X)
The following items require Special Inspection per CBC 2019 edition, chapter 17.
See plans and details for specific locations.

STATEMENT OF SPECIAL INSPECTIONS

WORK REQUIRING SPECIAL INSPECTION AND STRUCTURAL OBSERVATION DURING: (TO BE SELECTED & CHECKED BY THE DESIGN PROFESSIONAL OF RECORD PER CBC 2019)		SPECIAL INSPECT. CONT.	SPECIAL INSPECT. PERIODIC	STRUCT. OBSERV	SOILS ENGN'R
GRADING & FOUNDATION	PLACEMENT OF COMPACTED FILL, GRADING, AND EXCAVATIONS				X
	HELICAL PIER INSTALLATION				
	CAISSON EXCAVATION		X		X
	OTHER				
CONCRETE	MIX DESIGN			X	
	REINFORCING PLACEMENT		X	X	
	COMPRESSION TESTING				
	PNUEMATICALLY PLACED CONCRETE				
	STRUCTURAL - CONCRETE $f'_c \geq 3{,}000$ psi		X	X	
	FOUNDATION / SLAB ON GRADE. CONC. $f'_c = 2{,}500$ psi				
	NON-SHRINK GROUT				
	BOLTS INSTALLED IN CONCRETE				
	OTHER				
DRILLED ANCHORS	INSTALLATION OF ADHESIVE ANCHORS, RODS & DOWELS				
	EXPANSION ANCHORS				
	TITEN HD ANCHORS				
	OTHER				
STRUCTURAL STEEL & WELDING	SHOP WELDING, NON-CERTIFIED & APPROVED SHOPS		X		
	FIELD WELDING				
	STRUCTURAL STEEL ERECTION			X	
	HIGH STRENGTH BOLT CONNECTIONS				
	REINFORCING WELDING				
	METAL DECKING WELDING				
	OTHER				
MASONRY	GROUT MIX DESIGN				
	REINFORCING PLACEMENT IN FOOTING				
	REINFORCING PLACEMENT IN WALL				
	SAMPLE & TEST MORTAR				
	SAMPLE & TEST GROUT				
	MASONRY UNIT PLACING & GROUTING				
	PRISM TESTS				
	BRICK PUSH TESTS				
	OTHER				
WOOD CONSTR.	STRUCTURAL FRAMING MEMBERS & CONNECTIONS			X	
	DIAPHRAGM NAILING			X	
	SHEAR WALLS, HOLDOWNS & SHEAR TRANSFER			X	
	DRAG BEAMS, STRAPS & CONNECTIONS			X	
	FINAL FRAMING			X	
	OTHER				
MISC. TESTS	SPRAY APPLIED FIREPROOFING				
	OTHER				

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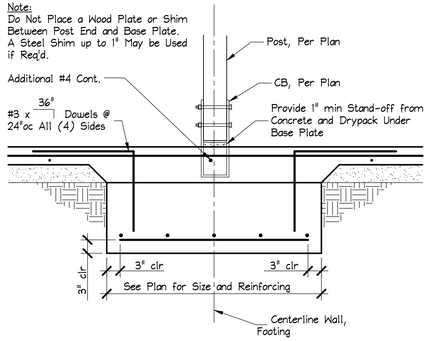
REVISIONS
05/22/2023

REGISTERED PROFESSIONAL ENGINEER KEVIN L. VANDERVORT S 3734 exp. 3/31/24 STRUCTURAL

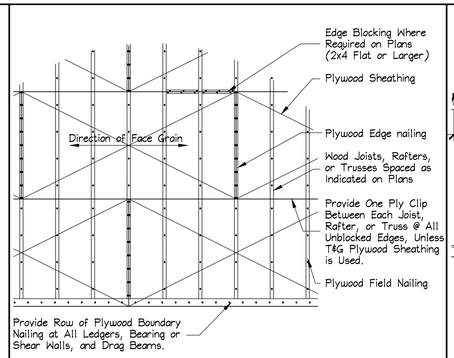
GENERAL NOTES,
SPECIFICATIONS &
TYPICAL DETAILS

PROPOSED ADU FOR:
KISLAK RESIDENCE
3627 CAMPANIL DRIVE
SANTA BARBARA, CALIFORNIA 93109

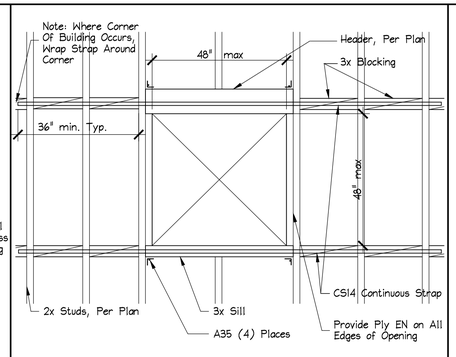
SHEET S1.1
DATE 11/21/2022
K-2233



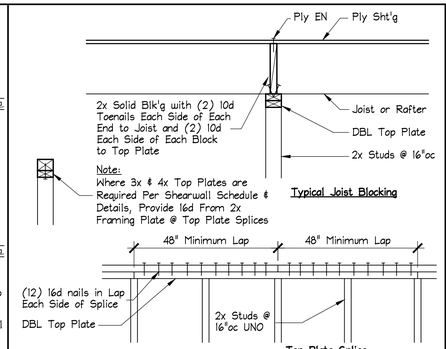
Column Base (CB) 20



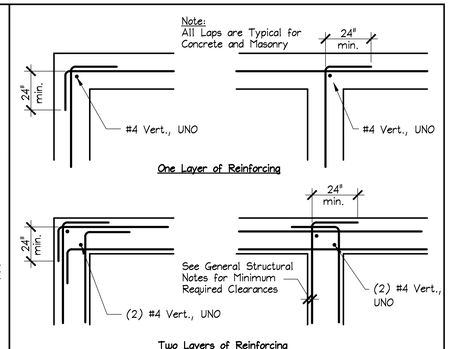
Plywood Sheathing Layout 16



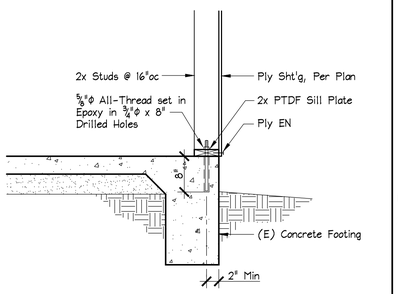
Opening in Shear Wall 12



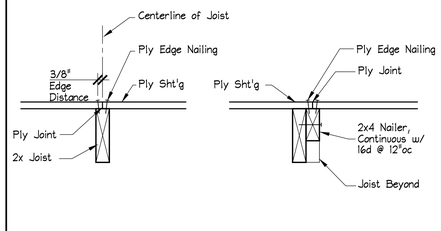
Typ. Joist Blk'g/Top Pl. Splice 8



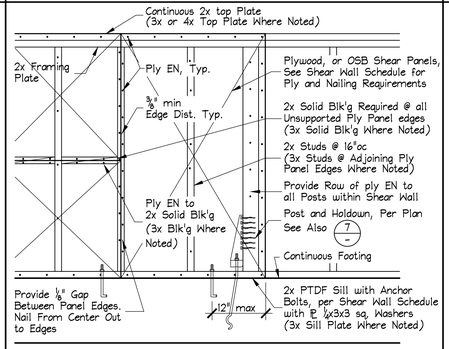
Typical Reinf. at Intersections 4



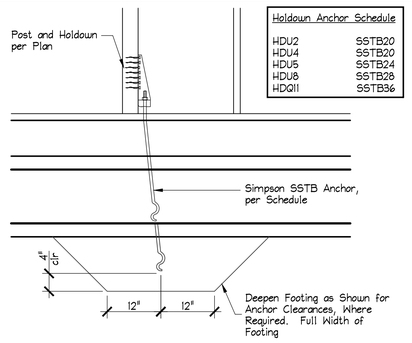
Retrofit Anchor Bolts 19



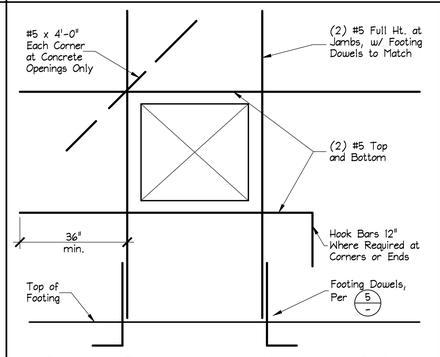
Plywood Joint Detail 15



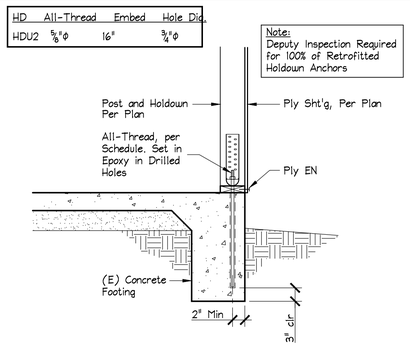
Plywood Shear Wall 11



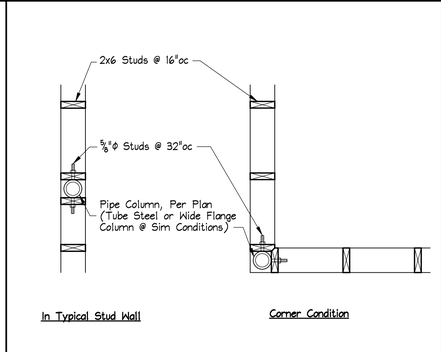
Typical Holdown 7



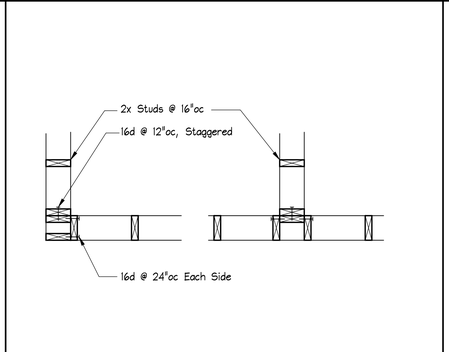
Opening Reinforcing in Conc. or CMU 3



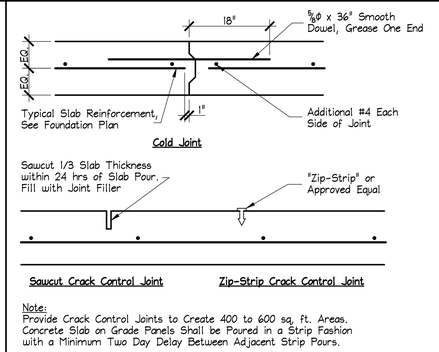
Retrofit Holdown Anchors 18



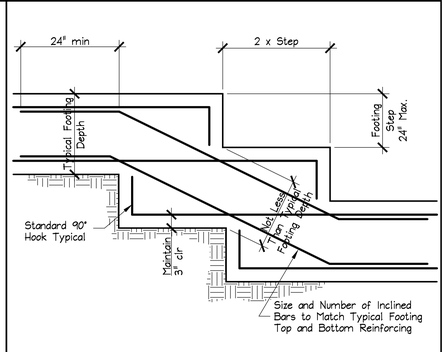
Steel Column in Stud Wall 14



Typical Corner Stud 10

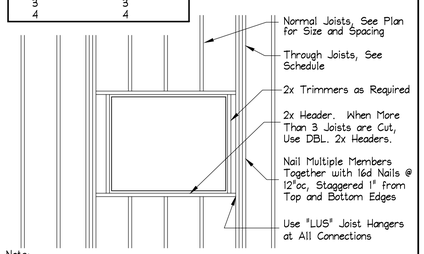


Cold Joint/Crack Control Joint 6



Typical Stepped Footing 2

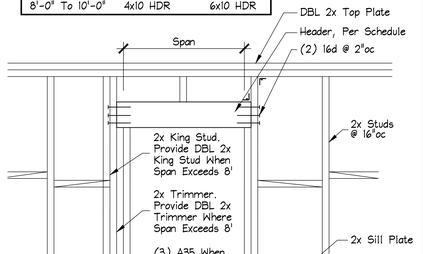
Number of Cut Joists	Total Number of Extra Through Joists
1	2
2	2
3	3
4	4



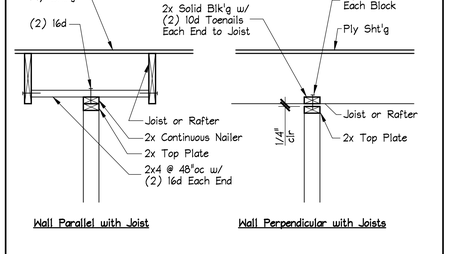
Note:
Replace All Cut 2x Joists with Through 2x Joists at Sides of Openings as Shown. See Schedule for Number of Extra Through Joists Required.

Opening in Roof or Flr. Framing 17

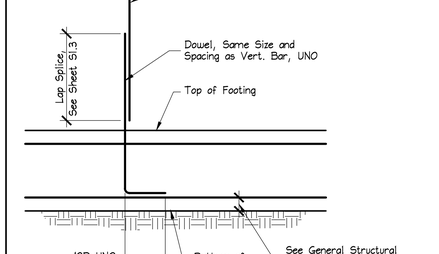
Span	2x4 Stud Wall	2x6 Stud Wall
Up To 4'-0"	4x4 HDR	6x4 HDR
4'-0" To 6'-0"	4x6 HDR	6x6 HDR
6'-0" To 8'-0"	4x8 HDR	6x8 HDR
8'-0" To 10'-0"	4x10 HDR	6x10 HDR



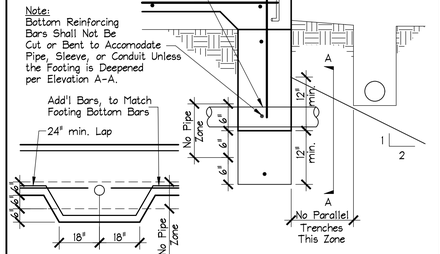
Minimum Header Sizes 13



Non-Bearing Partition Wall 9



Typical Footing Dowel Splice 5



Pipes & Trenches at Footings 1

MISSION GROUP ARCHITECTS
AIA
R.E. JOHNSON

REVISIONS
05/22/2023

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GENERAL NOTES,
SPECIFICATIONS &
TYPICAL DETAILS

PROPOSED ADU FOR:
KISLAK RESIDENCE
3627 CAMPANIL DRIVE
SANTA BARBARA, CALIFORNIA 93109

DATE 11/21/2022

SHEET S1.2

K-2233

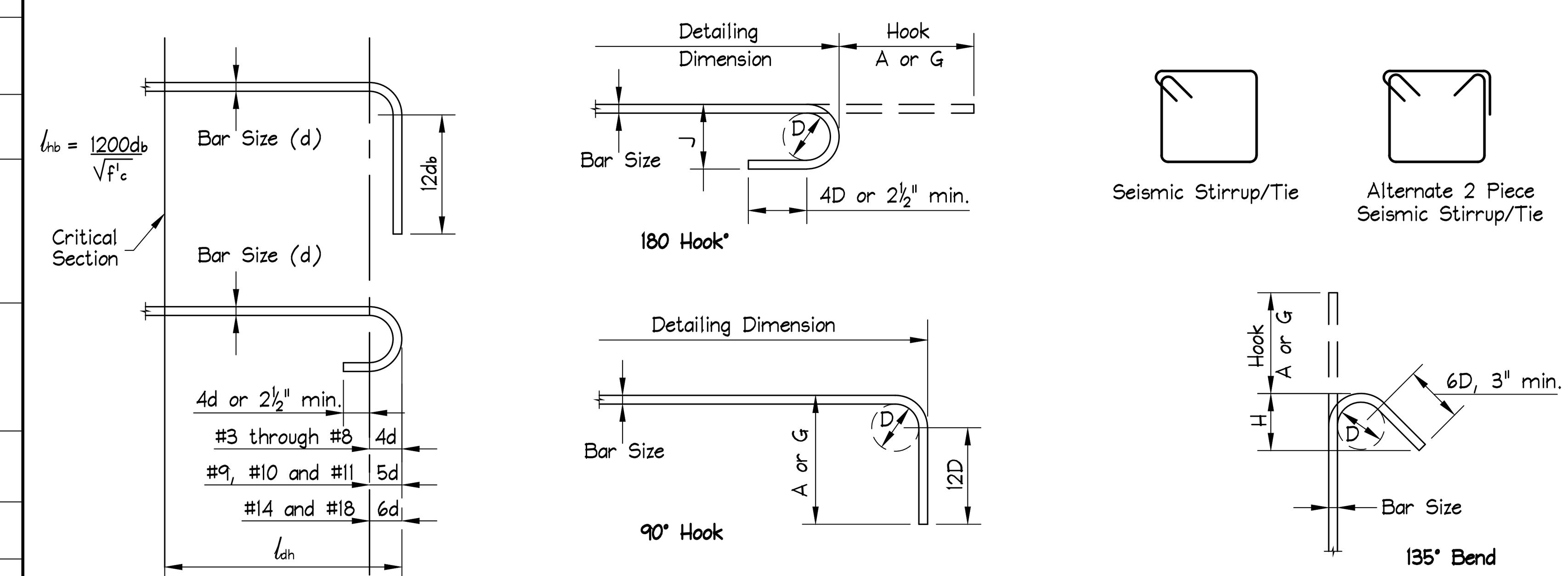
Table 2304.10.1 Minimum Fastening Schedule (Wood) (2)

Description of Building Elements	Number and Type of Fastener	Spacing and Location
Roof		
1. Blocking between ceiling joists, rafters or trusses to top plate or other framing below	3-8d common (2½"x0.131"); or 3-10d box (3" x 0.128"); or 3-3"x0.131" nails 3-3" 14 gage staples, 7/16" crown	Each end, toenail
Blocking between rafters or truss not at the wall top plate, to rafter or truss	2-8d common (2½"x0.131") 2-3"x0.131" nails 2-3" 14 gage staples	Each end, toenail
	2-16d common (3½"x0.162) 2-3"x0.131" nails 2-3" 14 gage staples	End nail
Flat blocking to truss and web filler	16d common (3½"x0.162) @ 6"oc 2-3"x0.131" nails @ 6"oc 2-3" 14 gage staples @ 6"oc	Face nail
2. Ceiling joists to top plate	3-8d common (2½" x 0.131"); or 3-10d box (3"x0.128"); or 3-3"x0.131" nails 3-3" 14 gage staples, 7/16" crown	Each joist, toenail
3. Ceiling joist not attached to parallel rafter, laps over partitions (no thrust) (see Section 2308.7.3.1, Table 2308.7.3.1)	3-16d common (3½"x0.162"); or 4-10d box (3"x0.128"); or 4-3"x0.131" nails 4-3" 14 gage staples, 7/16" crown	Face nail
4. Ceiling joist attached to parallel rafter (heel joint) (see Section 2308.7.3.1, Table 2308.7.3.1)	Per Table 2308.7.3.1	Face nail
5. Collar tie to rafter	3-10d common (3"x0.148"); or 4-10d box (3"x0.128"); or 4-3"x0.131" nails 4-3" 14 gage staples, 7/16" crown	Face nail
6. Rafter or roof truss to top plate (See Secion 2308.7.5, Table 2308.7.5)	3-10d common (3"x0.148"); or 3-16d box (3½"x0.135"); or 4-10d box (3"x 0.128"); or 4-3"x0.131" nails 4-3" 14 gage staples, 7/16" crown	Toenail[c]
7. Roof rafters to ridge valley or hip rafters; or roof rafter to 2-inch ridge beam	2-16d common (3½"x0.162"); or 3-10d box (3"x 0.128"); or 3-3"x0.131" nails 3-3" 14 gage staples, 7/16" crown; or	End nail
	3-10d common (3"x0.148"); or 3-16d box (3½"x0.135"); or 4-10d box (3"x 0.128"); or 4-3"x0.131" nails 4-3" 14 gage staples, 7/16" crown	Toenail
Wall		
8. Stud to stud (not at braced wall panels)	16d common (3½"x0.162");	24"oc face nail
	10d box (3"x 0.128"); or 3-3"x0.131" nails 3-3" 14 gage staples, 7/16" crown	16"oc face nail
9. Stud to stud and abutting studs at intersecting wall corners (at braced wall panels)	16" common (3½"x0.162"); or	16"oc face nail
	16d box (3½"x0.135"); or	12"oc face nail
	3"x0.131" nails 3-3" 14 gage staples, 7/16" crown	12"oc face nail
10. Built-up header (2" to 2") header)	16" common (3½"x0.162"); or	16"oc each edge, face nail
	16d box (3½"x0.135");	12"oc each edge, face nail
11. Continuous header to stud	4-8d common (2½"x0.131"); or 4-10d box (3"x0.128")	Toenail
12. Top plate to top plate	16" common (3½"x0.162"); or	16"oc face nail
	10d box (3"x 0.128"); or 3-3"x0.131" nails 3-3" 14 gage staples, 7/16" crown	12"oc face nail
13. Top plate to top plate, at end joints	8-16d box (3½"x0.135"); or 12-10d box (3"x 0.128"); or 12-3"x0.131" nails 12-3" 14 gage staples, 7/16" crown	Each side of end joint, face nail (minimum 24" lap splice length each side of end joint)
14. Bottom plate to joist, rim joist, band joist or blocking (not at braced wall panels)	16" common (3½"x0.162"); or	16"oc face nail
	16d box (3½"x0.135"); or 3"x0.131" nails 12-3" 14 gage staples, 7/16" crown	12"oc face nail
15. Bottom plate to joist, rim joist, band joist or blocking at braced wall panels	2-16d common (3½"x0.162"); or 3-16d box (3"x 0.135"); or 4-3"x0.131" nails 4-3" 14 gage staples, 7/16" crown	16"oc face nail
16. Stud to top or bottom plate	4-8d common (2½" x 0.131"); or 4-10d box (3"x 0.128"); or 4-3"x0.131" nails 4-3" 14 gage staples, 7/16" crown; or	Toenail
	2-16d common (3½"x0.162"); or 3-10d box (3"x 0.128"); or 3-3"x0.131" nails; or 3-3" 14 gage staples, 7/16" crown	End nail
17. Top or bottom plate to stud	2-16d common (3½"x0.162"); or 3-10d box (3"x 0.128"); or 3-3"x0.131" nails; or 3-3" 14 gage staples, 7/16" crown	End nail
18. Top plates, laps at corners and intersections	2-16d common (3½"x0.162"); or 3-10d box (3"x 0.128"); or 3-3"x0.131" nails; or 3-3" 14 gage staples, 7/16" crown	Face nail
Wall		
19. 1" brace to each stud and plate	2-8d common (2½"x0.131"); or 2-10d box (3"x 0.128"); or 2-3"x0.131" nails; or 2-3" 14 gage staples, 7/16" crown	Face nail
20. 1" x 6" sheathing to each bearing	2-8d common (2½"x0.131"); or 2-10d box (3"x 0.128")	Face nail
21. 1" x 8" and wider sheathing to each bearing	3-8d common (2½"x0.131"); or 3-10d box (3"x 0.128")	Face nail
Floor		
22. Joist to sill, top plate, or girder	3-8d common (2½"x0.131"); or floor 3-10d box (3"x 0.128"); or 3-3"x0.131" nails; or 3-3" 14 gage staples, 7/16" crown	Toenail
23. Rim joist, band joist, or blocking to top plate, sill or other framing member	8d common (2½"x0.131"); or 10d box (3"x 0.128"); or 3"x0.131" nails; or 3" 14 gage staples, 7/16" crown	6"oc, toenail
24. 1" x 6" subfloor or less to each joist	2-8d common (2½"x0.131"); or 2-10d box (3"x 0.128")	Face nail
25. 2" subfloor to joist or girder	2-16d common (3½"x0.162")	Face nail
26. 2" planks (plank & beam - floor & roof)	2-16d common (3½"x0.162")	Each bearing, face nail
27. Built-up girders & beams, 2" lumber layers	20d common (4"x0.192")	32"oc, face nail at top and bottom staggered on opposite sides
	10d box (3"x 0.128"); or 3"x0.131" nails; or 3" 14 gage staples, 7/16" crown	24"oc, face nail at top and bottom staggered on opposite sides
	And: 2-20d common (4"x0.192") 3-10d box (3"x 0.128"); or 3-3"x0.131" nails; or 3-3" 14 gage staples, 7/16" crown	Ends and at each splice, face nail
28. Ledger strip supporting joists or rafters	3-16d box (3½"x0.135"); or 4-10d box (3"x 0.128"); or 4-3"x0.131" nails 4-3" 14 gage staples, 7/16" crown	Each joist or rafter, face nail
29. Joist to band joist or rim joist	3-16d box (3½"x0.135"); or 4-10d box (3"x 0.128"); or 4-3"x0.131" nails 4-3" 14 gage staples, 7/16" crown	End nail
30. Bridging or blocking to joist, rafter or truss	2-8d common (2½"x0.131"); or 2-10d box (3"x 0.128"); or 2-3"x0.131" nails 2-3" 14 gage staples, 7/16" crown	Each end, toenail

Description of Building Elements	Number and Type of Fastener	Edges (inches)	Intermediate supports (inches)
Wood structural panels (WSP), subfloor, roof and interior wall sheathing to framing and particleboard wall sheathing to framing[a]			
31. 3/8" - ½"	6d common or deformed (2"x0.113") (subfloor and wall)	6	12
	8d box or deformed (2½"x0.131)(roof)	6	12
	2⅜"x0.113" nail (subfloor and wall)	6	12
	1¾" 16 gage staple, 7/16" crown (subfloor and wall)	4	8
	2⅜"x0.113" nail (roof)	4	8
	1¾" 16 gage staple, 7/16" crown (roof)	3	6
32. 19/32" - ¾"	8d common (2½"x0.131); or 6d deformed (2"x0.113")	6	12
	2⅜"x0.113" nail; or 2" 16 gage staple, 7/16" crown	4	8
33. 7/8" - 1¼"	10d common (3"x0.148"); or 8d deformed (2½"x0.131)	6	12
Other exterior wall sheathing			
34. ½" fiberboard sheathing[b]	1½" galvanized roofing nail (7/16" head diameter); or 1¼" 16 gage staple with 7/16" or 1" crown	3	6
35. 25/32" fiberboard sheathing[b]	1½" galvanized roofing nail (7/16" head diameter); or 1¼" 16 gage staple with 7/16" or 1" crown	3	6
Wood structural panels combinations subfloor underlayment to framing			
36. ¾" and less	8d common (2½"x0.131); or 6d deformed (2"x0.113")	6	12
37. 7/8" - 1"	8d common (2½"x0.131); or 8d deformed (2½"x0.131)	6	12
38. 1⅛" - 1¼"	10d common (3"x0.148); or 8d deformed (2½"x0.131)	6	12
Panel siding to framing			
39. ½" or less	6d corrosion-resistant siding (1⅞"x0.106"); or 6d corrosion-resistant casing (2"x0.099")	6	12
40. 5/8"	8d corrosion-resistant siding (2⅜"x0.128"); or 6d corrosion-resistant casing (2½"x0.113)	6	12
Wood structural panels (WSP), subfloor, roof and interior wall sheathing to framing and particleboard wall sheathing to framing[a]			
41. ¼"	4d casing (1½"x0.080"); or 4d finish (1½"x0.072")	6	12
42. 3/8"	6d casing (2"x0.199"); or 6d finish (Panel supports at 24 inches)	6	12

Table 2304.10.1 Minimum Fastening Schedule (Wood) (2)

Reinforcing Laps, Bends & Splices (1)



Development l_{dh} of Standard Hooks

Bar Size	Hook Development Lengths f'_c = 2500psi	Hook Development Lengths f'_c = 3000psi
#3	10"	9"
#4	12"	11"
#5	16"	14"
#6	19"	17"
#7	21"	19"
#8	25"	22"

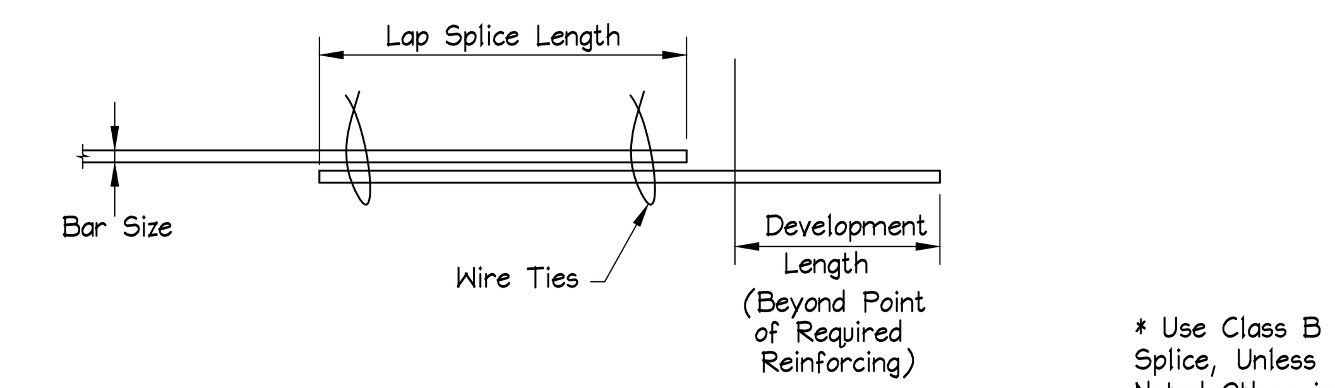
Notes:
1. Tabulated values are based on Grade 40 or 60 reinforcing bars and normal-weight concrete.
2. Tension development lengths of standard hooks are based on ACI 318-14, Sections 25.4.3. Lengths are in inches.
3. For epoxy coated hooks, multiply by 1.2

Recommended End Hooks

Bar Size	D (in.)	180° Hook A or G	180° Hook J	90° Hook A or G
#3	2½"	5"	3"	6"
#4	3"	6"	4"	8"
#5	3¾"	7"	5"	10"
#6	4½"	8"	6"	12"
#7	5¼"	10"	7"	14"
#8	6"	11"	8"	16"

Seismic Stirrup/Ties

Bar Size	D (in.)	135° Seismic Hook A or G	135° Seismic Hook H
#3	1½"	4¼"	3"
#4	2"	4½"	3"
#5	2½"	5½"	3¾"
#6	4½"	8"	4½"
#7	5¼"	9"	5¼"
#8	6"	10½"	6"



* Use Class B Splice, Unless Noted Otherwise

Tension Development & Lap Splice Lengths - Masonry

Bar Size	D (in.)	Development & Lap Splice Lengths: Edge	Center	40db or 12" min.
#2	40	17"	12"	12"
	60	26"	14"	12"
#3	40	26"	14"	15"
	60	38"	21"	15"
#4	40	34"	18"	20"
	60	51"	27"	20"
#5	60	63"	34"	25"
#6	60	99"	53"	30"
#7	60	115"	62"	35"
#8	60	152"	81"	40"

Notes:
1. Edge dimension (cover) > 2" min.
2. Center dimension (cover) > 3.75"
3. Multiply by 1.5 for Epoxy Coated Reinforcing

Compression Development and Lap Splice Lengths - Concrete

Bar Size	Grade	Development Length 2500psi	Development Length 3000psi	Lap Splice 2500psi	Lap Splice 3000psi
#3	40	8"	8"	16"	12"
	60	10"	9"		
#4	40	9"	8"	20"	15"
	60	12"	11"		
#5	60	14"	14"	26"	19"
#6	60	16"	17"	31"	23"
#7	60	18"	19"	36"	27"
#8	60	20"	22"	40"	30"

Notes:
1. Tabulated values are based on Grade 40 or 60 reinforcing bars and normal-weight concrete.
2. Compression development lengths and compression lap splice lengths are based on ACI 318-14, Sections 25.4.9 and 25.5.5, respectively. Lengths are in inches.

Tension Development & Lap Splice Lengths - Concrete

Bar Size	Grade	f'_c	Devel. Length	Class A Splice	Class B Splice*
#2	40	2500	12"	12"	15"
		3000	12"	12"	13"
	60	2500	16"	16"	20"
		3000	14"	14"	19"
#3	40	2500	17"	17"	22"
		3000	15"	15"	19"
	60	2500	25"	25"	32"
		3000	22"	22"	28"
#4	40	2500	22"	22"	29"
		3000	20"	20"	25"
	60	2500	32"	32"	42"
		3000	29"	29"	37"
#5	60	2500	40"	40"	52"
		3000	36"	36"	47"
#6	60	2500	48"	48"	62"
		3000	43"	43"	56"
#7	60	2500	70"	70"	90"
		3000	63"	63"	81"
#8	60	2500	79"	79"	103"
		3000	72"	72"	93"

Notes:
1. Tabulated values are based on Grade 40 or 60 reinforcing bars and normal-weight concrete.
2. Tension development lengths and tension lap splice lengths are based on ACI 318-14, Sections 25.4.2.2 and 25.5, respectively. Tabulated values for beams or columns are based on transverse reinforcement and concrete cover meeting minimum Code requirements. Lengths are in inches.
3. Lap Class A values are the required tension development lengths, l_d ; lap splice lengths are multiples of tension development lengths; Class A splice = 1.0l_d and Class B splice = 1.3l_d (ACI 318-14, Section 25.5.1).
4. For lightweight aggregate concrete, multiply the tabulated values by 1.3.
5. For epoxy-coated bars, multiply the tabulated values by 1.20.

Reinforcing Laps, Bends & Splices (1)

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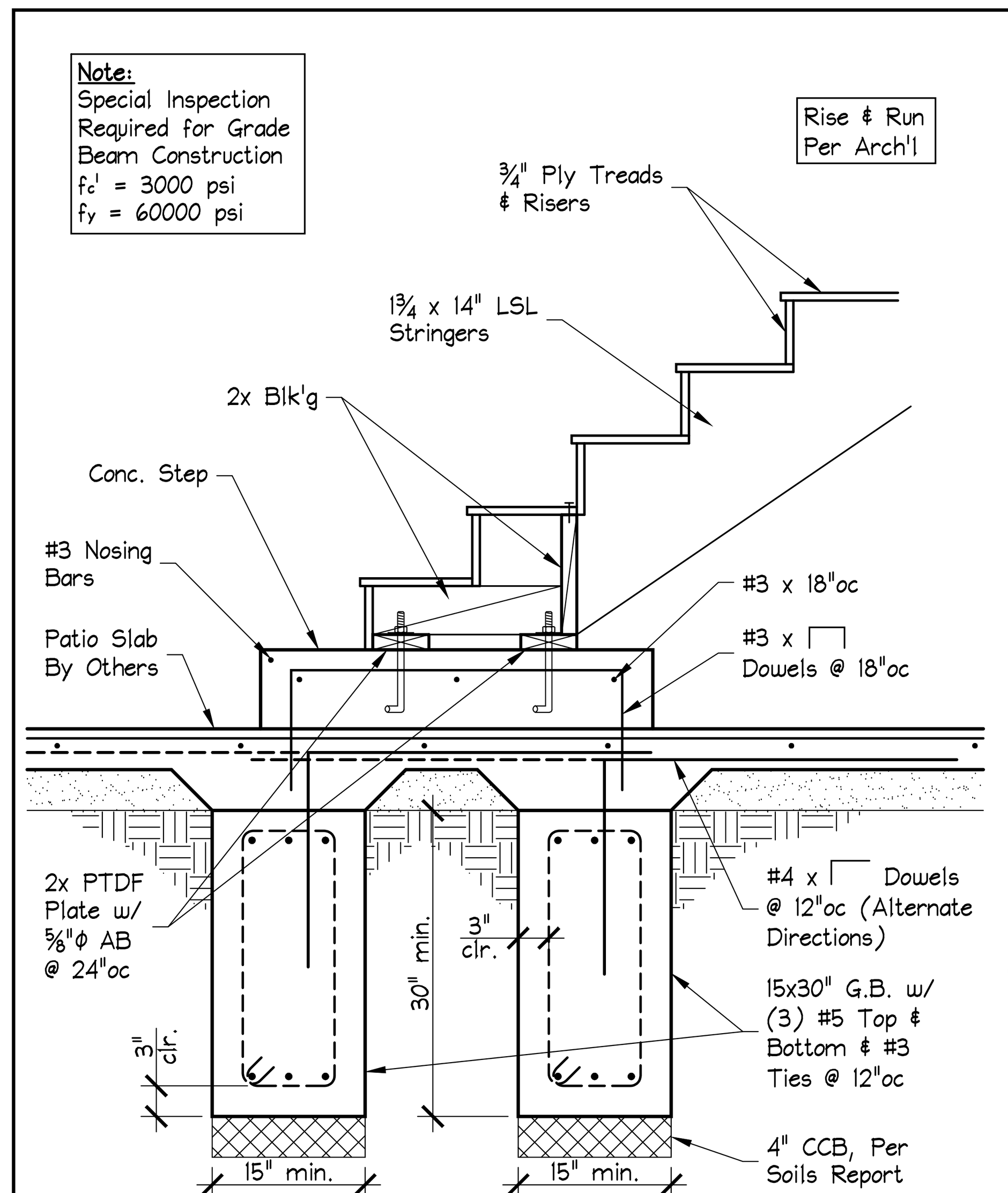
REVISIONS 03/22/2023

PROPOSED ADU FOR:
KISLAK RESIDENCE
3627 CAMPANIL DRIVE
SANTA BARBARA, CALIFORNIA 93109

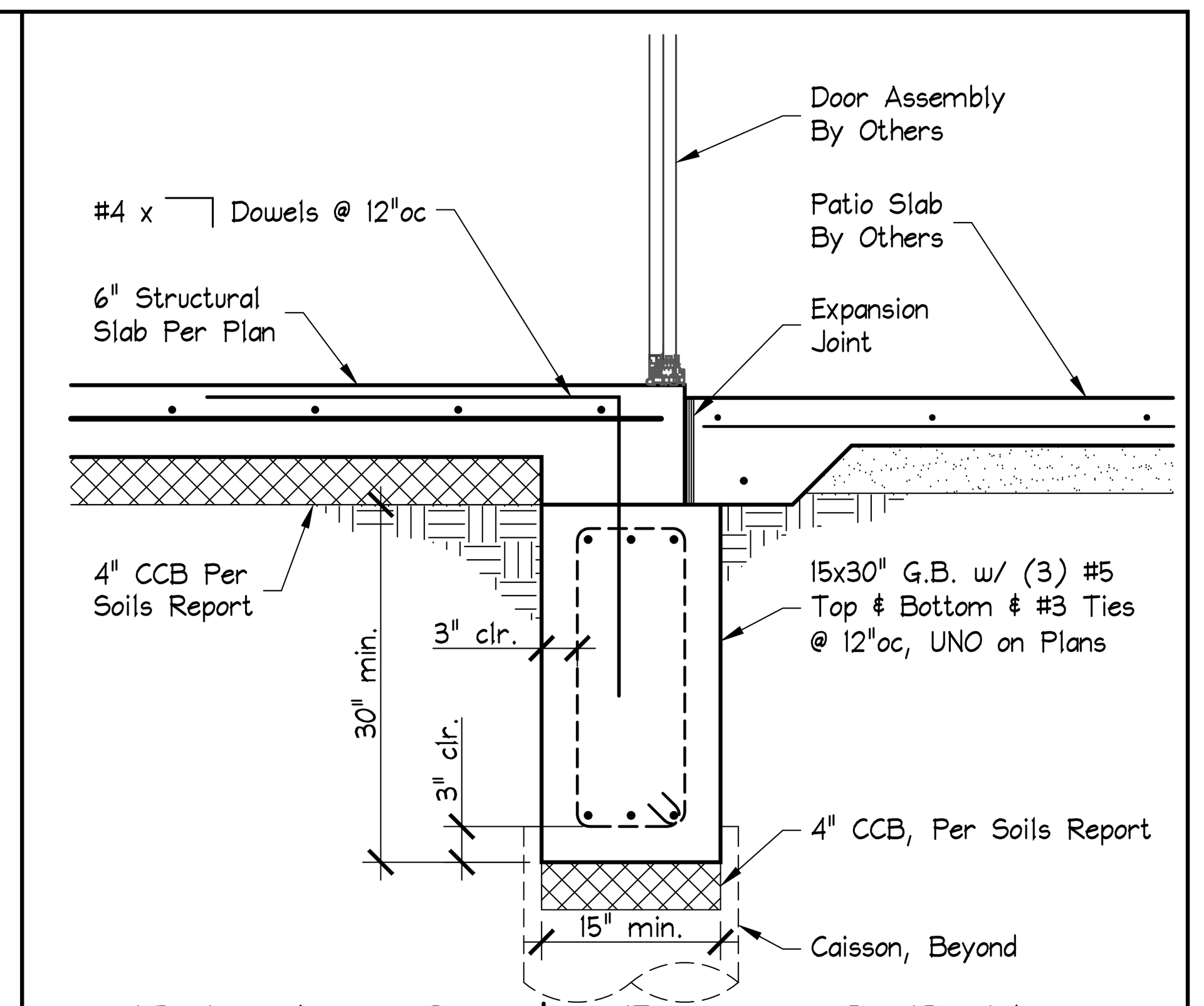
GENERAL NOTES, SPECIFICATIONS & TYPICAL DETAILS

DATE 11/21/2022

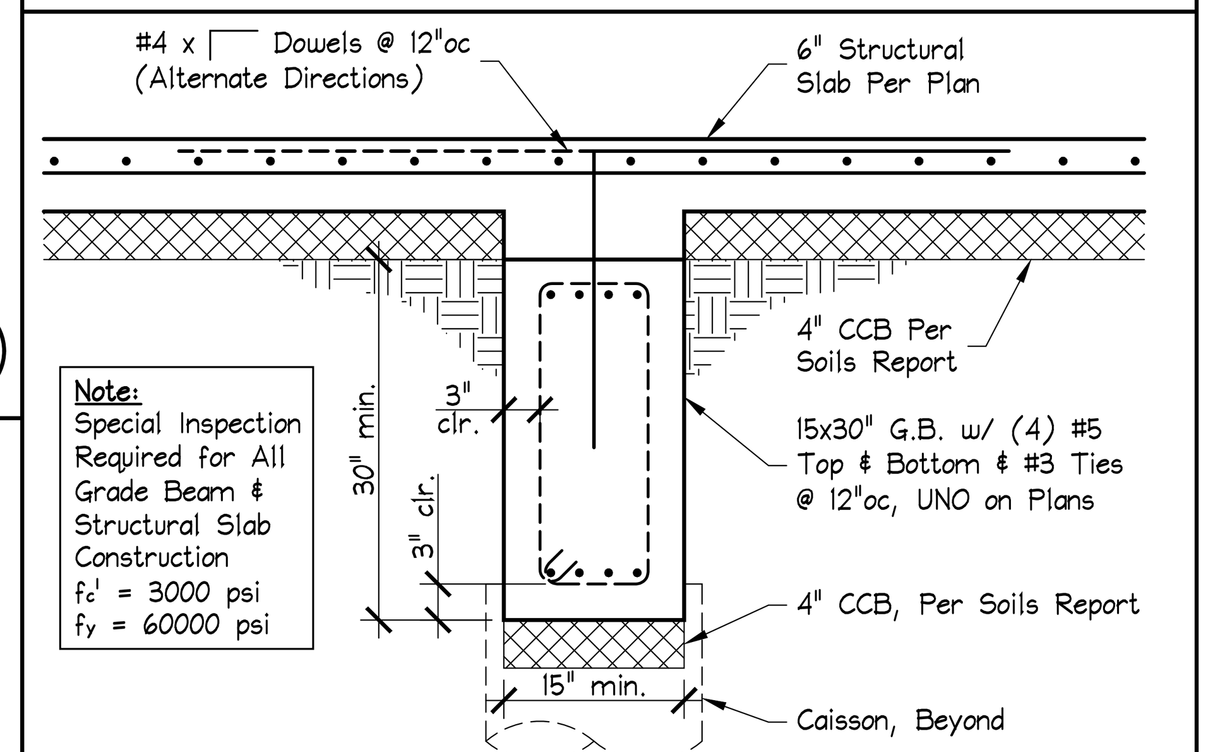
SHEET S1.3
K-2233



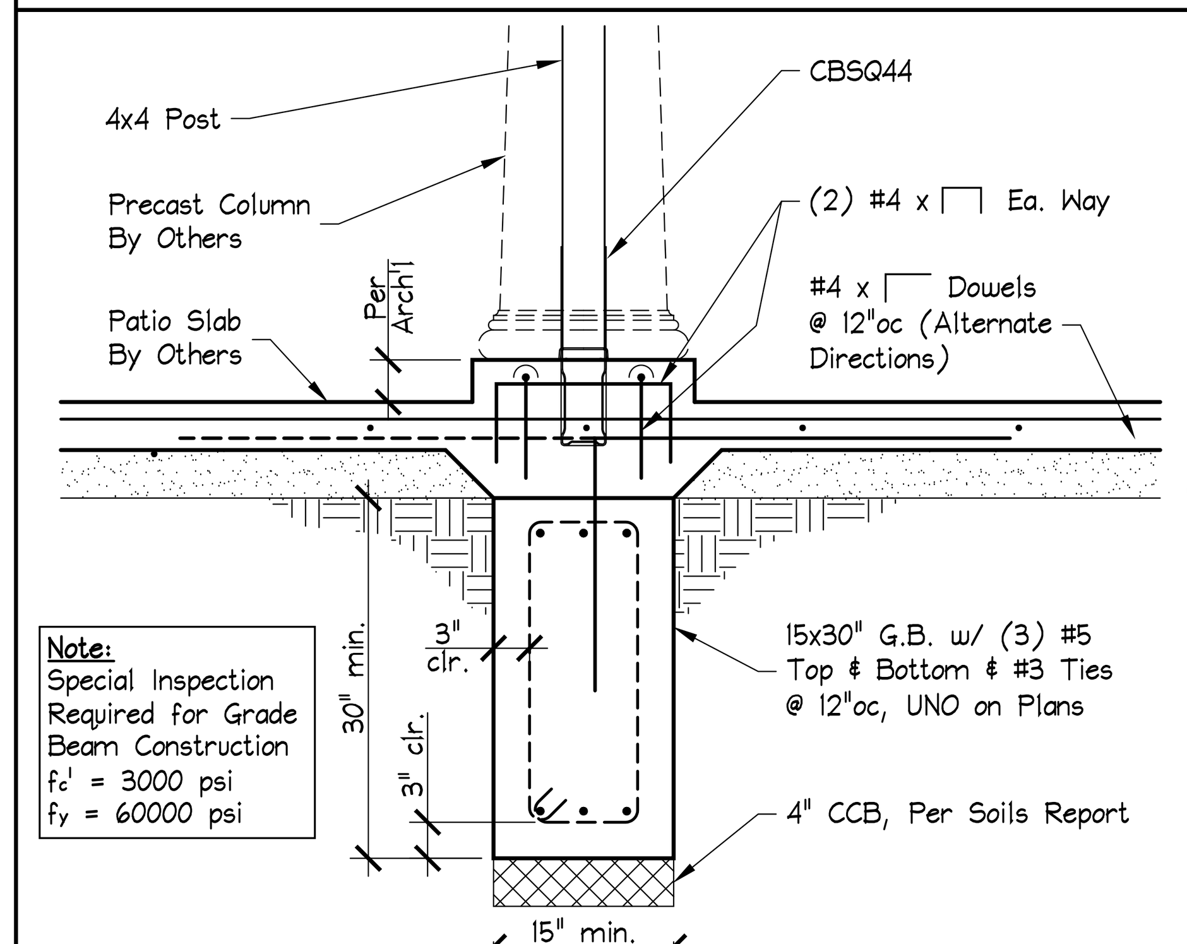
Stair Framing (7)



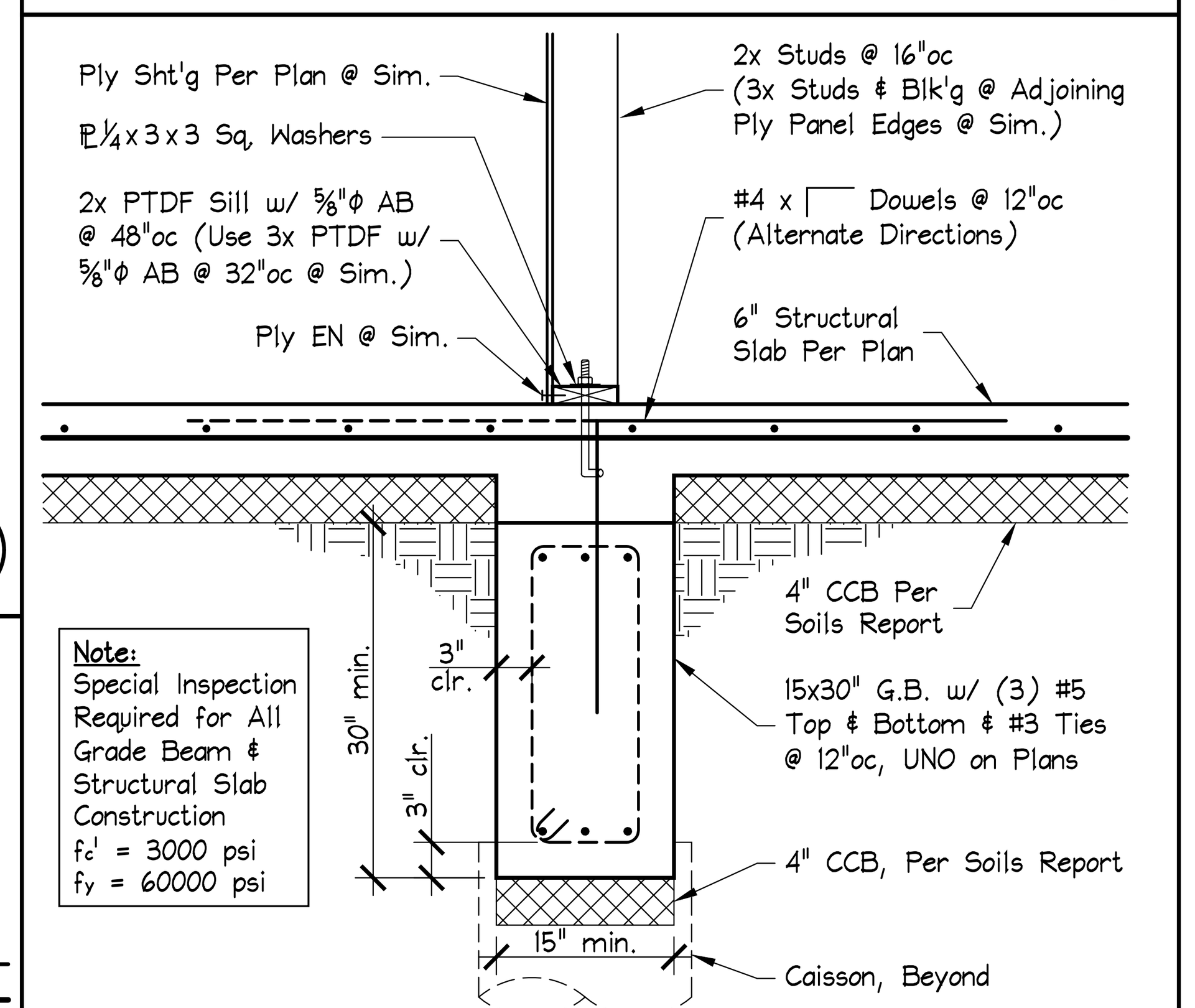
Exterior Grade Beam @ Patio (4)



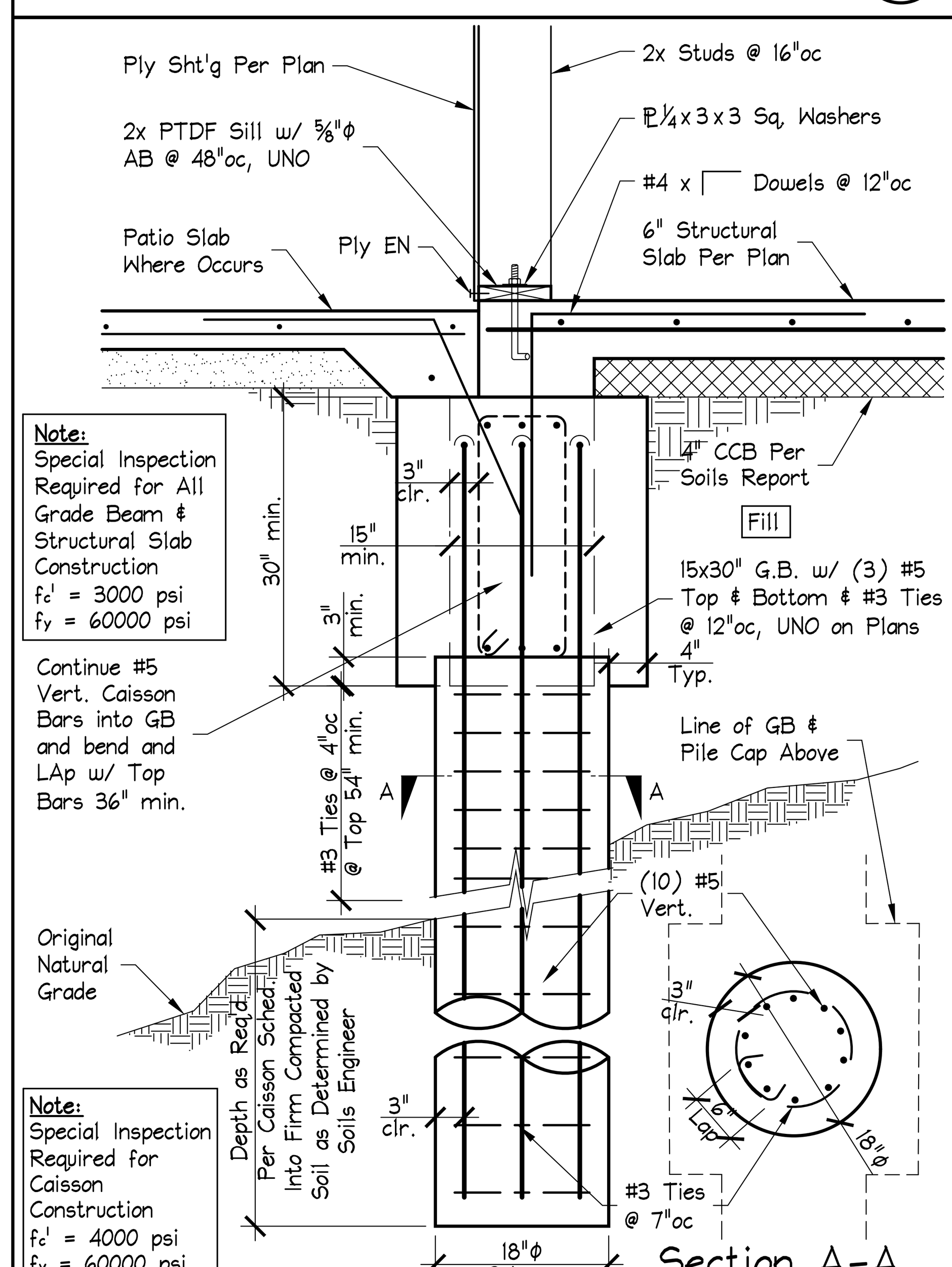
Interior Grade Beam (3)



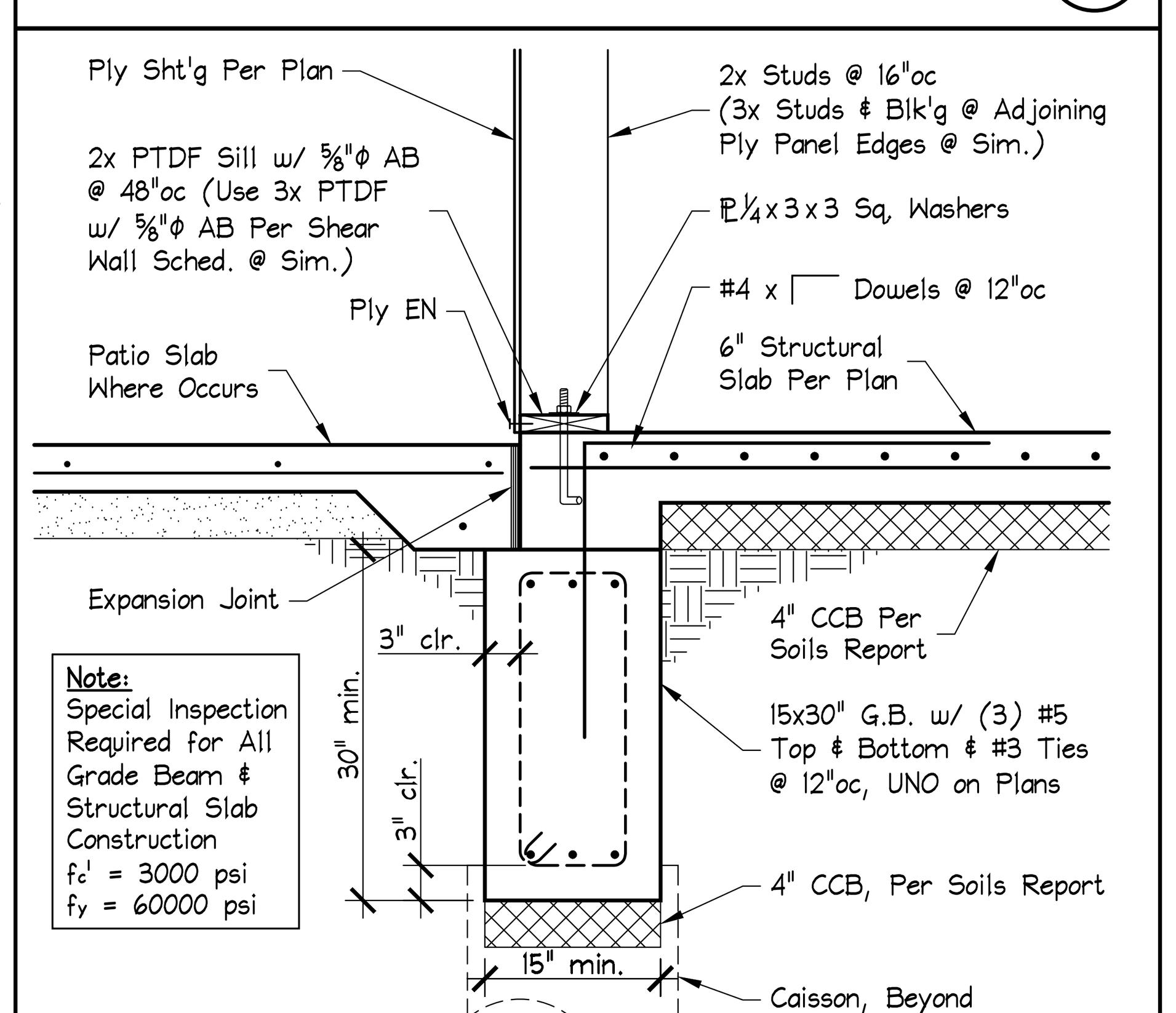
Patio Grade Beam (6)



Interior Grade Beam (2)



Exterior Grade Beam (5)



Exterior Grade Beam (1)

Scale: 3/4" = 1'-0", Typ.

TYPICAL FOUNDATION NOTES

1. Prepare Site per Soils Report By: Braun & Associates, Inc. Dated: December 22, 2016, Updated: March 31, 2018 File # 16-11153-2
2. Contractor to Verify all Dimensions and Coordinate with Architectural Plans.
3. All Anchor Bolts, Slab Dowels, etc. are to be Tied in Place and Holdown Anchors Set in Place by Template Prior to Requesting a Building Department Foundation Inspection.
4. For Shear Wall Anchor Bolting, See Shear Wall Schedule.
5. Prior to the Contractor Requesting a Building Department Foundation Inspection, the Soils Engineer Shall Advise the Building Official in Writing that:
   a. The Building Pad was Prepared in Accordance with the Soils Report
   b. The Utility Trenches have been Properly Backfilled and Compacted
   c. The Foundation Excavations Comply with the Intent of the Soils Report.
6. Holdowns shall be Retightened just Prior to Covering the Wall Framing.
7. All Connectors and/or Fasteners in Contact with Pressure Treated Lumber shall be Stainless Steel (304 or 316) or Hot Dipped Galvanized (ASTM A-123 & A-153) G85 minimum.

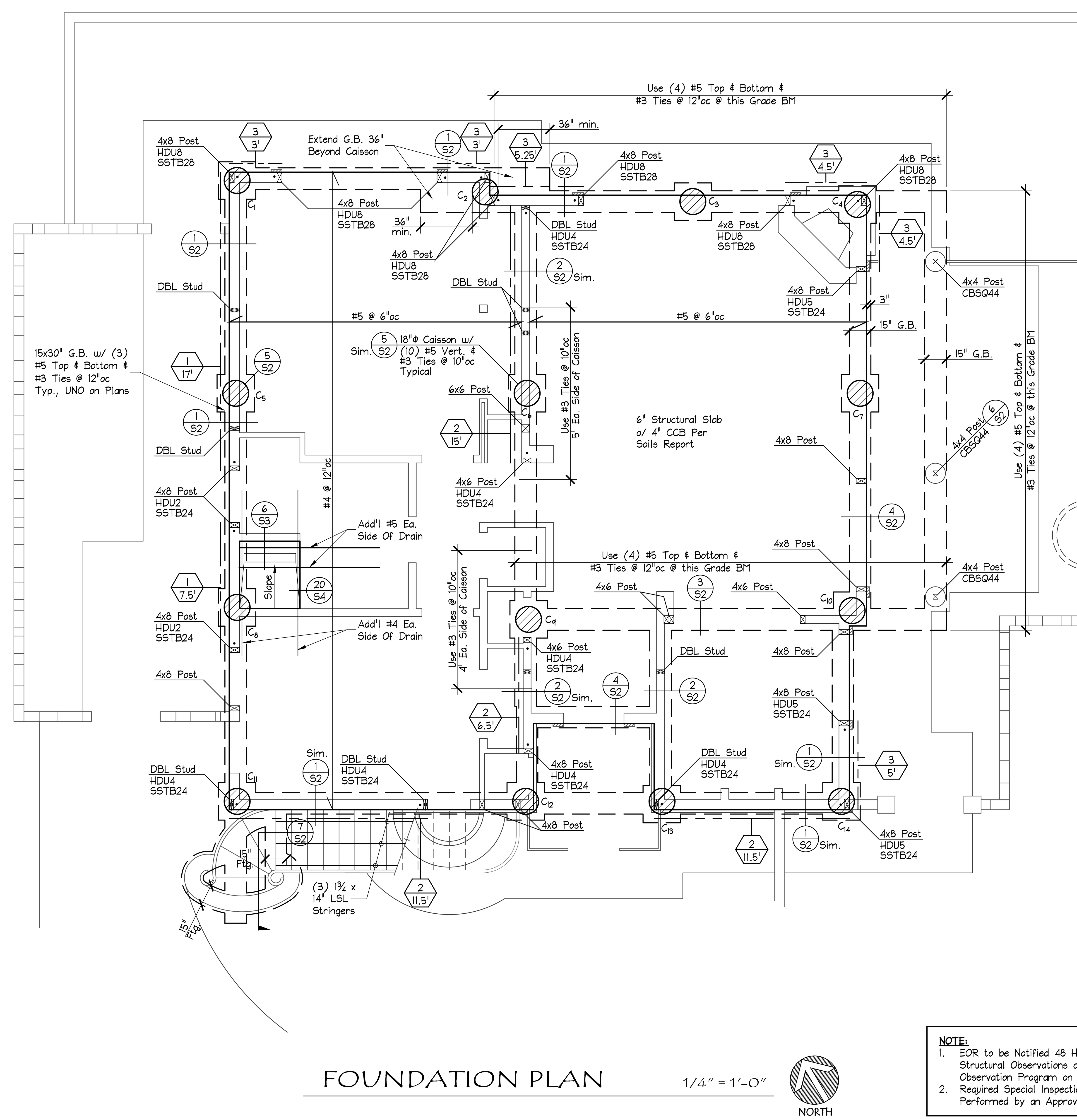
SHEAR WALL SCHEDULE

1 / 10' — Shear Wall Designation; Minimum Shear Wall Length
— — — Extents of Shear Wall

SYM	Ply and Nailing	Sill Anchorage: Concrete	Sill Anchorage: Wood	Blk'g, Rim or Drag to Top Plate: Solid Member	Blk'g, Rim or Drag to Top Plate: TJI Blk'g	Framing: Top Plate	Framing: Sill * Plate	Framing: Studs& Blk'g @ Ply Panel Edges	Allowable Shear Load	Special Inspection
1	15/32" Ply C-DX 10d @ 6"oc EN 10d @ 12"oc FN	5/8"φx12" AB @ 48"oc	16d @ 6"oc	A35 @ 16"oc	16d @ 6"oc	2x	2x	2x	310 #/ft	N/A
2	15/32" Ply C-DX 10d @ 4"oc EN 10d @ 12"oc FN	5/8"φx12" AB @ 32"oc	1/4"φx6" SDS Screws @ 8"oc	A35 @ 12"oc	16d @ 4"oc	2x	3x	3x	460 #/ft	N/A
3	15/32" Ply Struct. 1 10d @ 3"oc EN 10d @ 12"oc FN	5/8"φx12" AB @ 24"oc	1/4"φx6" SDS Screws @ 6"oc	A35 @ 8"oc	N/A	3x	3x	3x	665 #/ft	N/A

1. Use Common Nails Only, Do Not Use Sinkers! 10d Min Shank Dia. = .148"
2. Use 1/4"x3"x3" Square Washers at All Anchor Bolts
3. Where Nails Are Spaced Closer Than 6"oc, the nails Shall be Staggered.
4. Site Built Shear Walls to Maintain a Minimum 2:1 Height to Width Ratio, U.N.O.
5. Install Simpson Strong Wall Per Manufacturer's Recommendations.
6. Simpson Strong Wall Concrete Templates Shall be Used to Correctly Position AB's and HD Anchors for Simpson Strong Wall Products.
7. For Shear Wall Construction Details, see Detail 11/S1.2
8. Use (2) 20d Common Nails to Each Stud In Lieu of (2) 16d where 3x Sill Occurs
9. Where Panels Are Applied on Both Faces of a Shear Wall and Nail Spacing is Less Than 6"oc on Either Side, Panel Joints Shall be Offset to Fall on Different Framing Members. Alternatively, the Width of the Nailed Face of Framing Member Shall be 3" Nominal or Greater @ Adjoining Ply Panel Edges. Nails at All Adjoining Panel Edges Shall be Staggered.

* WSWH Shear Walls: ICC-ES ESR-2652
** SSW Shear Walls: ICC-ES ESR-1679



FOUNDATION PLAN 1/4" = 1'-0"

Caisson Schedule	
Caisson	Min. Depth
C_1	15'
C_2	15'
C_3	15'
C_4	20'
C_5	15'
C_6	26'
C_7	21'
C_8	15'
C_9	26'
C_{10}	31'
C_{11}	15'
C_{12}	16'
C_{13}	15'
C_{14}	15'

Note:
Special Inspection Required for Caisson Construction
f_c' = 4000 psi
f_y = 60000 psi

Note:
Special Inspection Required for All Grade Beam & Structural Slab Construction
f_c' = 3000 psi
f_y = 60000 psi

NOTE:
1. EOR to be Notified 48 Hours in Advance to Schedule Structural Observations as Noted in the Structural Observation Program on Sheet S1.1
2. Required Special Inspections as Noted on S1.1 to be Performed by an Approved and Licensed Special Inspector

PROPOSED ADU FOR:
KISLAK RESIDENCE
3627 CAMPANIL DRIVE
SANTA BARBARA, CALIFORNIA 93109

FOUNDATION PLAN & DETAILS

MISSION GROUP ARCHITECTS
R E JOHNSON
AIA

REVISIONS 03/22/2023

DATE 11/21/2022

SHEET S2

K-2233

1230 COAST VILLAGE CIRCLE STE H SANTA BARBARA CALIFORNIA 93108 805-969-5910
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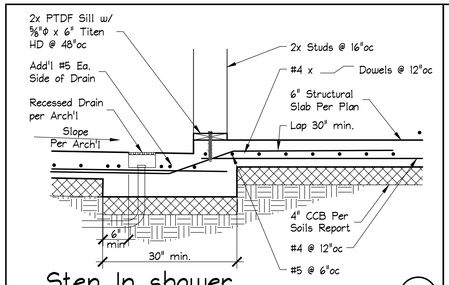
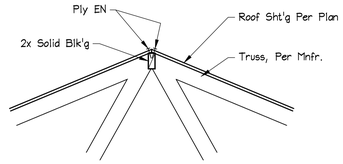
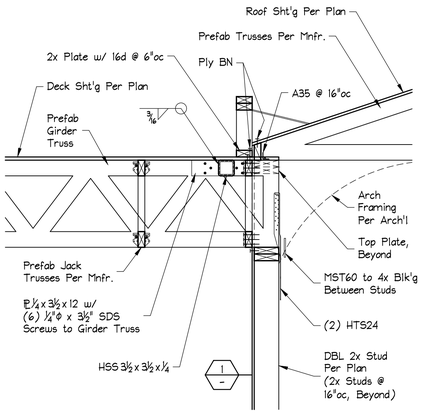


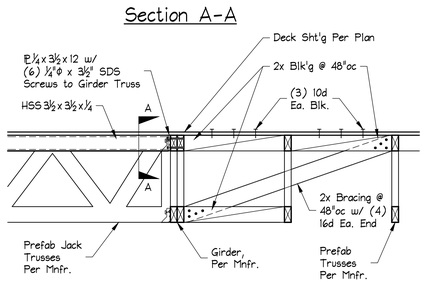
Step In shower (6)



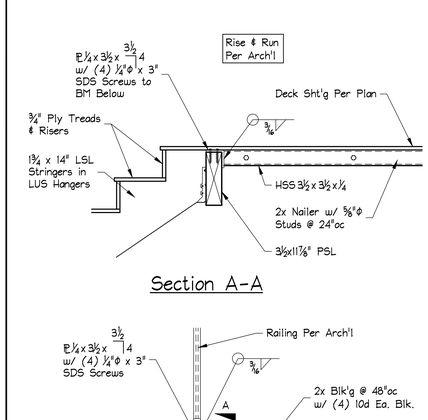
Ridge with Prefab Trusses (3)



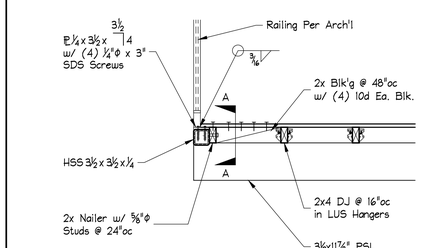
Section A-A



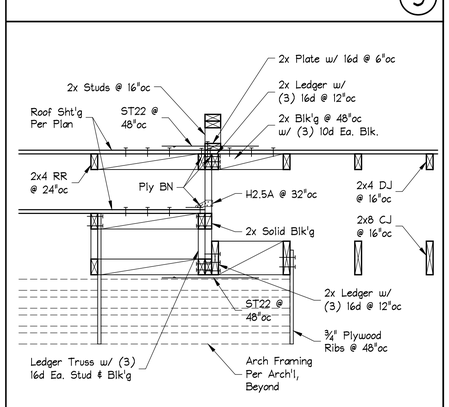
Roof Deck (5)



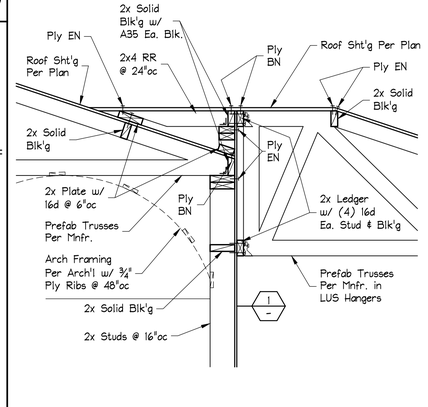
Section A-A



HSS Beam Support (2)



Roof Transition (4)



Roof Transition (1)

Scale: 3/4" = 1'-0", Typ.

1 / 10	Shear Wall Designation Mininum Shear Wall Length Extents of Shear Wall

SHEAR WALL SCHEDULE

SYM	Ply and Nailing	Sill Anchorage: Concrete	Sill Anchorage: Wood	Blk'g, Rim or Drag to Top Plate: Solid Member	Blk'g, Rim or Drag to Top Plate: TJI Blk'g	Framing: Top Plate	Framing: Sill # Plate	Framing: Studs# Blk'g @ Ply Panel Edges	Allowable Shear Load	Special Inspection
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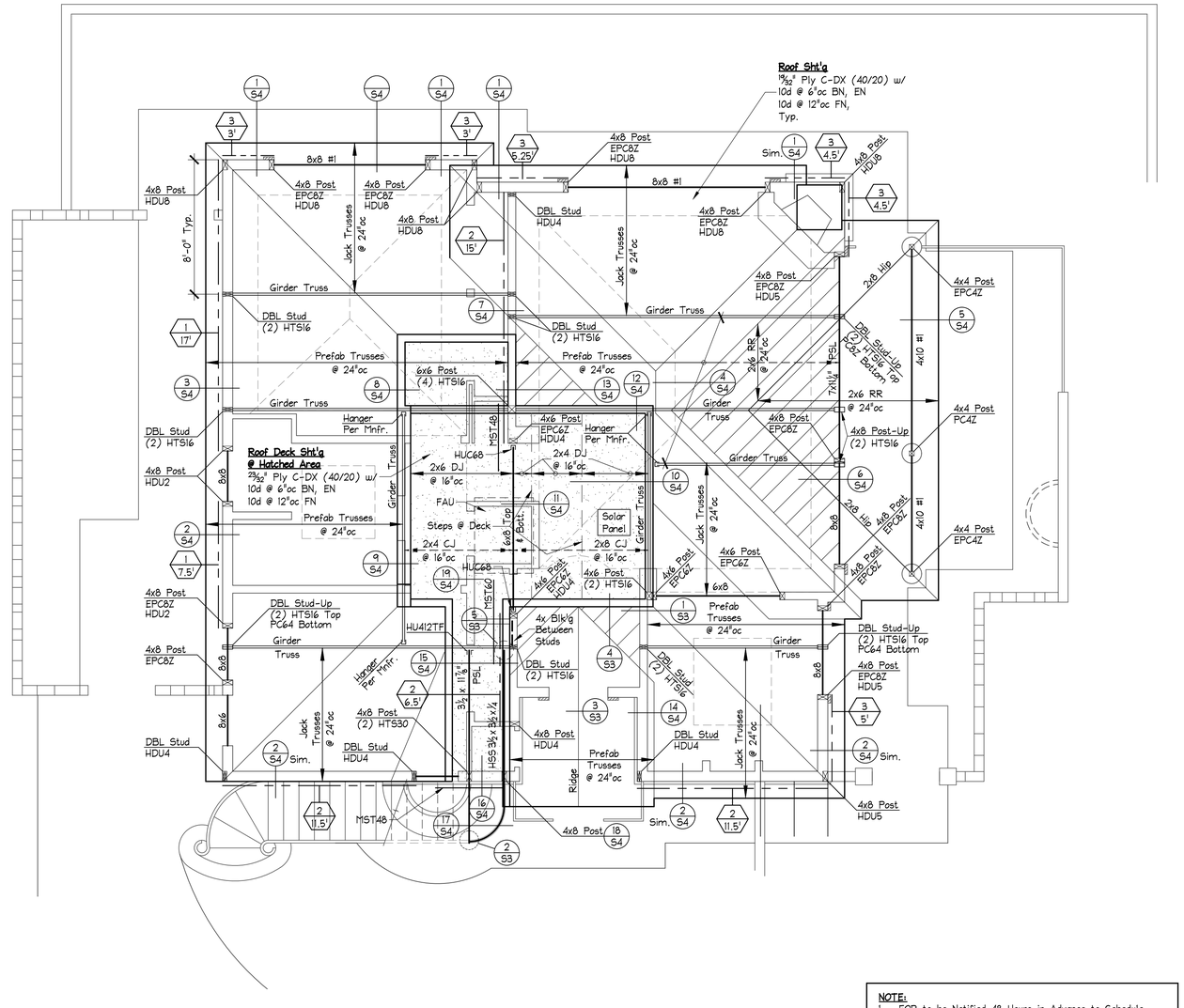

ROOF FRAMING PLAN 1/4" = 1'-0"

NORTH

NOTE:
1. EOR to be Notified 48 Hours in Advance to Schedule Structural Observations as Noted in the Structural Observation Program on Sheet S1.1
2. Required Special Inspections as Noted on S1.1 to be Performed by an Approved and Licensed Special Inspector

MISSION GROUP ARCHITECTS AIA
R E JOHNSON
1230 COAST VILLAGE CIRCLE, STE H SANTA BARBARA, CALIFORNIA 93108 805-969-5510

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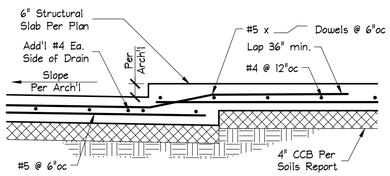
REVISIONS
05/22/2023

ROOF FRAMING
PLAN & DETAILS

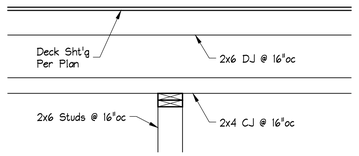
PROPOSED ADU FOR:
KISLAK RESIDENCE
3627 CAMPANIL DRIVE
SANTA BARBARA, CALIFORNIA 93109

DATE 11/21/2022

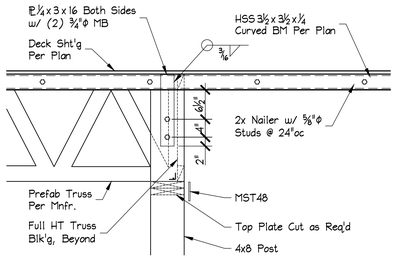
SHEET S3
K-2233



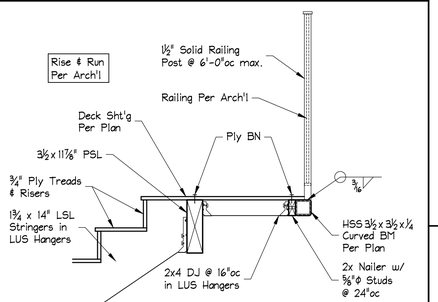
Step In Shower Slab 20



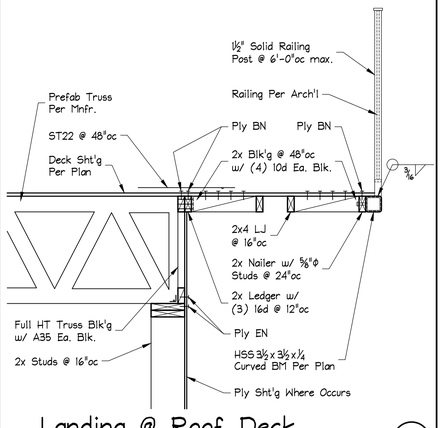
Interior Non-Bearing Wall 19



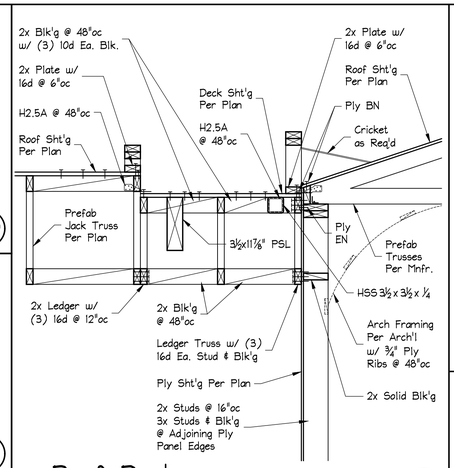
HSS BM Support 18



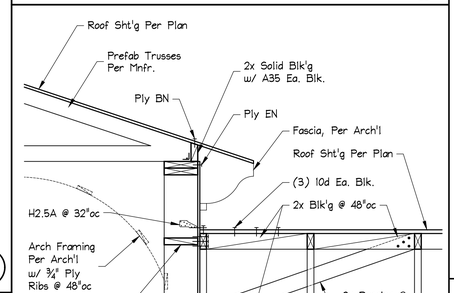
Stair Framing Support 17



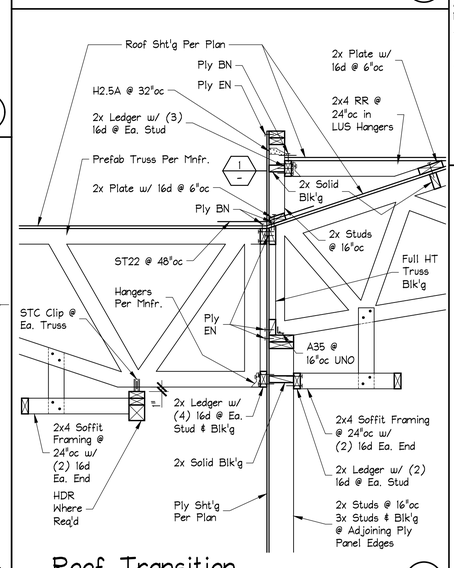
Landing @ Roof Deck 16



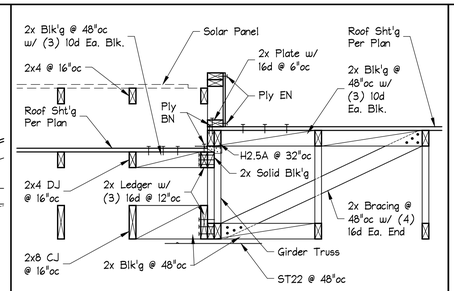
Roof Deck 15



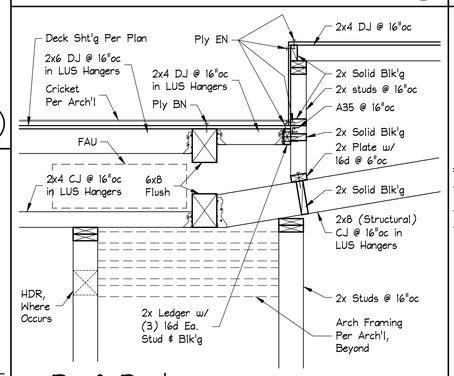
Roof Transition 14



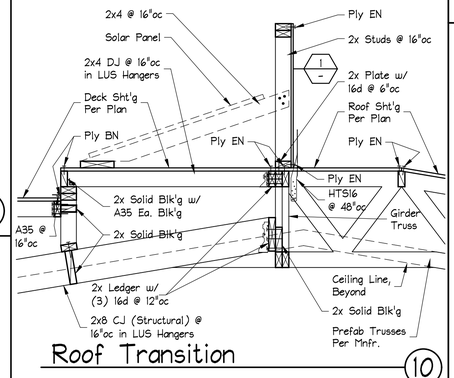
Roof Transition 13



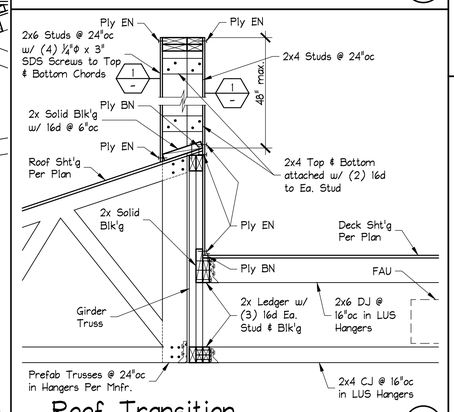
Roof Transition 12



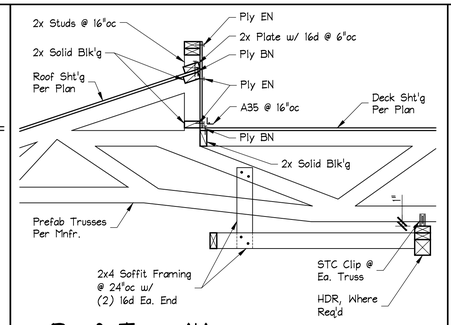
Roof Deck 11



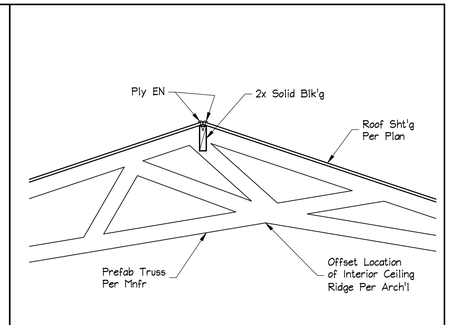
Roof Transition 10



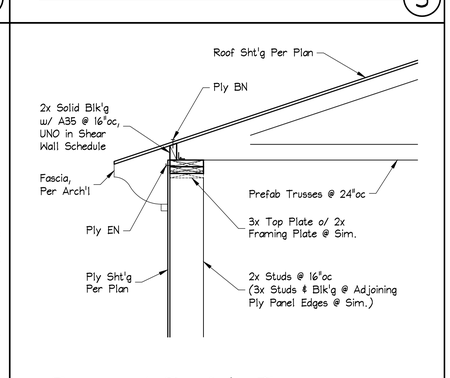
Roof Transition 9



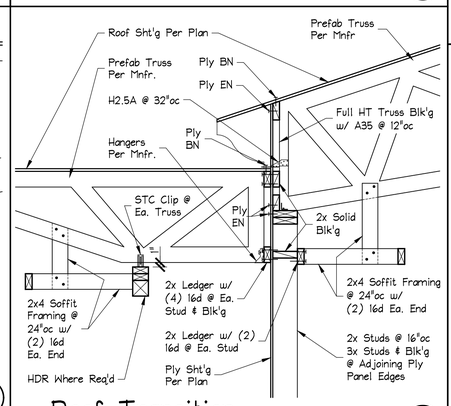
Roof Transition 8



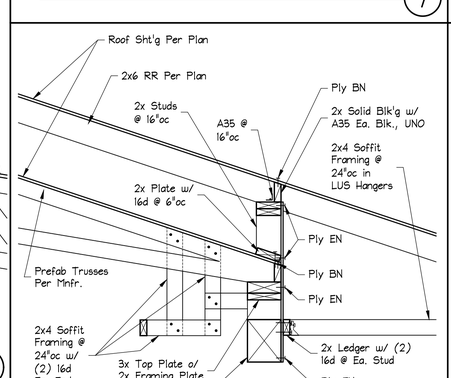
Scissor Truss w/ Offset Int. Ridge 4



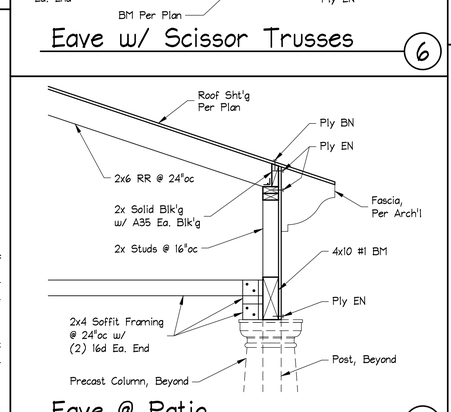
Eave w/ Prefab Trusses 2



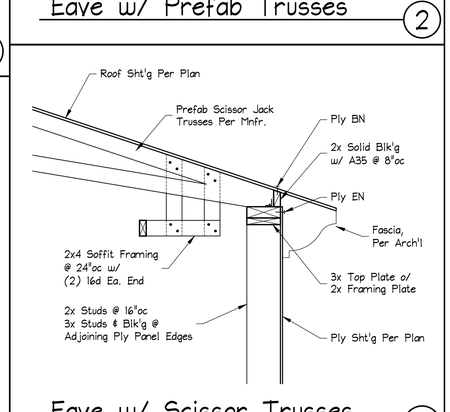
Roof Transition 7



Eave w/ Scissor Trusses 6



Eave @ Patio 5



Eave w/ Scissor Trusses 1

Scale: 3/4" = 1'-0", Typ.

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REVISIONS

PROPOSED ADU FOR:
KISLAK RESIDENCE
3627 CAMPANIL DRIVE
SANTA BARBARA, CALIFORNIA 93109

DATE
10/27/2022

STRUCTURAL DETAILS

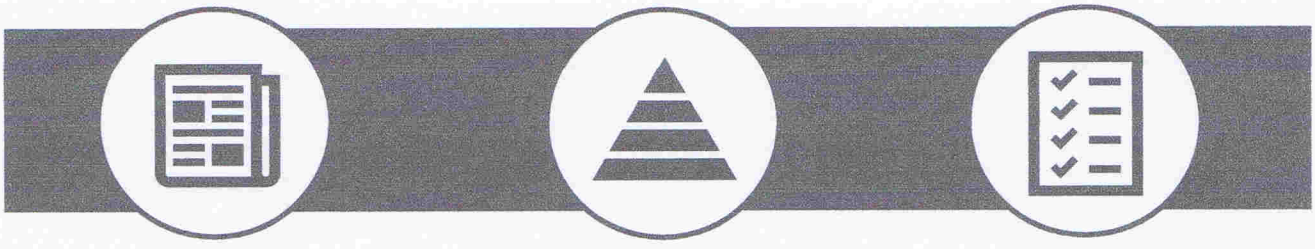
SHEET
S4
K-2233

City of SANTA BARBARA
PLANNING

COMMUNITY DEVELOPMENT DEPARTMENT
630 GARDEN ST. SANTA BARBARA, CA 93101
(805) 564-5578 I SantaBarbaraCA.gov

FINAL APPROVAL CHECKLIST

SUPPLEMENTAL APPLICATION



GENERAL INFORMATION

WHAT IS FINAL APPROVAL?

Final approval is the last level of design review before applying for a Building Permit (BLD) application. Final approval generally occurs at a separate hearing, after project design approval, and includes a complete set of working drawings with all details, color samples, door hardware, and exterior lighting fixtures for review. Applicants may also request project design approval and final approval on the same hearing date, if sufficient details are provided.

HOW DOES THE PROCESS WORK?

Once a project receives project design approval, it shall constitute the substantive design approval of the project. If substantial changes to the plans are proposed after project design approval, a new project design approval will be required. Design review comments on final approval should only address whether the design substantially conforms to the project design approval, and comments on details and landscaping.

WHEN IS A COMPLETED CHECKLIST REQUIRED?

A completed **Final Approval Submittal Checklist** is required when you submit for final approval. To resubmit an application, upload documents, like plans and letters, into the record in the City's Accela Citizen Access Portal (ACA) system, along with the Resubmittal Form. All forms must be completed, signed, and submitted as a PDF attachment to your electronic submittal.

FINAL APPROVAL CHECKLIST

Provide required details and sheet references with your submittal for final approval. Fill in the blank or indicate N/A if "not applicable". Final approval does not permit the omission of any required information.

PROJECT ADDRESS: 3627 CAMPANIL DR. PLN RECORD ID: 2024-00274

ALL BUILDING ELEVATIONS

	Sheet #		Sheet #
☑ Exterior Details	A6.0 – A6.3	☑ Paint or Stain Color (trim, etc.)	A0.4 & A4.0
☑ Exterior Finishes	A0.4 & A4.0	☑ Materials (roofing, plaster, etc.)	" "
☑ Parapet Heights	A4.0 & A5.0	☐ Exterior Lighting (incl. cut sheets)	N/A
☐ Roof/Attic/Understory Vents	N/A	☐ Specification Sheets, as applicable	N/A

CONSTRUCTION DETAILS

	Sheet #		Sheet #
☑ Retaining Wall	C4.0	☑ Ironwork	A6.2
☑ Window/Door detail	A6.1	☑ Stairs	A6.2 & 6.3
☑ Roof Details (eaves)	A6.0	☑ Handrails	A6.2
☑ Decks	A3.0, A5 & 6.2	☐ Skylights	N/A
☐ Fences/Arbors/Trellis	N/A	☐ Awnings	N/A
☐ Trash/Recycling Enclosures	N/A	☑ Gutters and Down Spouts	A3.0

ELECTRICAL/MECHANICAL/PLUMBING EQUIPMENT

	Sheet #
☐ Transformer Vault	N/A
☑ Utility Service Meter	E2
☑ Screening Elements	A1.1
☑ Generators/Electrical/Mechanical/HVAC (including cut sheets & dBA at property lines)	A1.1
☐ Fire Valves (Verify Fire Sprinkler Ordinance per SBMC §8.04 requirements)	N/A
☐ Cross Connection Control Devices (backflow device)	N/A

CONSULTANT/ENGINEER SHEETS

	Sheet #		Sheet #
☑ Electrical	E1 – E3	☑ Structural	S1.1 → S4
☑ Mechanical	M1.1 – M2.1	☑ Plumbing	P1.1 & P1.2

ROOFTOP ARCHITECTURAL DETAILS

		Sheet #
☑	HVAC Equipment (exhaust fans, condensing units, air conditioning units, etc.)	A2.1
☑	Dimensions of equipment and screening	A1.1
☐	Mission tile roofing installation specifications	N/A
☐	Specification Sheets, if applicable	N/A
☑	Parapet Height	A9.0
☐	Screens	N/A
☑	Chimney Caps	A6.0
☑	Flashing	A6.0
☑	Gutters/ Scuppers	A6.0
☑	Solar panel location or potential future solar panel installation (if applicable)	A3.0
☑	High fire roof coverings, valleys, gutters	A6.0

COLOR AND MATERIAL BOARDS

		Sheet #
☑	Paint and Stain Color Names and Numbers	A0.1 & A4.0
☑	Material Type, Brand and Inventory Number	11 11

LANDSCAPE PLAN

		Sheet #			Sheet #
☐	Irrigation Plan	N/A	☐	High Fire/Defensible Space	N/A
☐	Plant Species/Number/Sizes	N/A	☐	Water Conservation Standards	N/A
☐	Planters, Pots, Furniture	N/A	☑	Site Walls (materials and color)	C4.0 & A4.0
☑	Paving Materials	C2.1	☐	Backflow Device	N/A
☑	Erosion Control Measures	C3.0	☐	Rooftop Garden/Landscaped Roof	N/A

Storm Water Management Program (SWMP)

		Sheet #
☑	Location of filtration devices	C2.0
☑	Cross-section details	C4.0
☑	Drainage flow from all impervious areas	C2.1
☑	Amounts of new, replaced, or removed impervious areas	C2.1
☑	Hydrology/Storm Water Report	C2.1