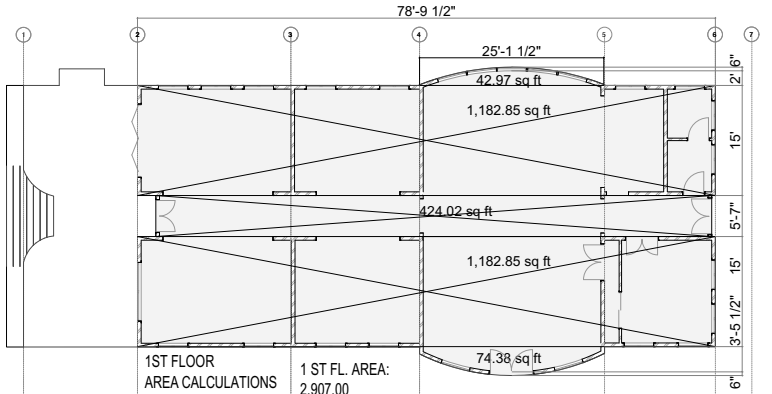
NEW SINGLE FAMILY DWELLING

16391 AZTEC RIDGE DRIVE, SANTA CLARA, CA, 95030

A.P.N. 532-26-098 PARCEL 2

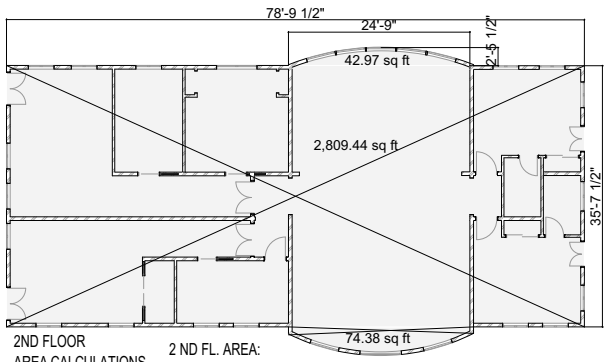
PLANS SHALL BE IN COMPLIANCE WITH:

COUNTY OF SANTA CLARA CODES AND ORDINANCES
CALIFORNIA BUILDING CODE, 2019 EDITION
CALIFORNIA RESIDENTIAL CODE, 2019 EDITION
CALIFORNIA PLUMBING CODE, 2019 EDITION
CALIFORNIA MECHANICAL CODE, 2019 EDITION
CALIFORNIA ELECTRICAL CODE, 2019 EDITION
2019 CALIFORNIA ENERGY CODE
2019 GREEN BUILDING CODE
2019 CALIFORNIA FIRE CODE



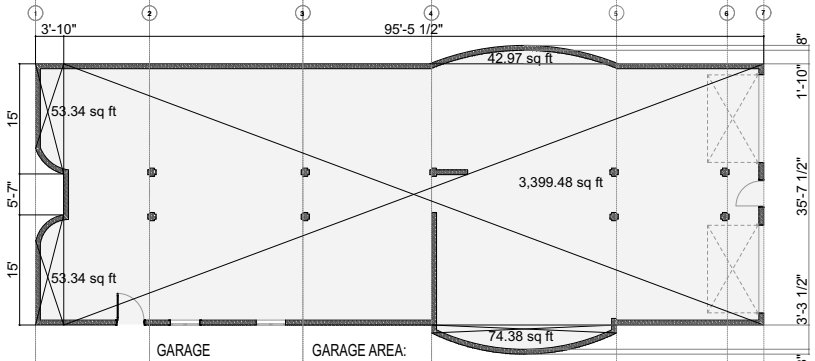
1ST FLOOR AREA CALCULATIONS 1/8"-1'0"

1 ST FL. AREA: 2,907.00



2ND FLOOR AREA CALCULATIONS 1/8"-1'0"

2 ND FL. AREA: 2,927.00



GARAGE AREA CALCULATIONS 1/8"-1'0"

GARAGE AREA: 3,517.00

NOTE: NO TREE TO BE REMOVED AS PART OF THIS PROJECT.

OWNER:	
MR ALEXANDER LUBIVY	408 309 8869
PROJECT DATA	
OCCUPANCY:	R-3 / U
CONSTRUCTION TYPE:	VB
FIRE SPRINKLERS:	YES
STORIES:	2 + GARAGE
APN:	532-26-098
FLOOD ZONE:	D
ZONING:	R1E-2.5s-d1
NET SITE AREA:	65,290 SF
(N) GARAGE:	3,517 SF
(N) 1ST FLOOR:	2,907 SF
(N) 2ND FLOOR:	2,927 SF
(N) 1ST FLOOR DECK	177 SF
(N) 1ST FLOOR REAR DECK	523 SF
(N) 2ND FLOOR DECKS	448 SF
(N) TOTAL CONDITIONED SPACE:	5,834 SF
(N) FOOTPRINT(REAR DECK & 1ST FL & ENTRY PORCH 30" ABOVE GRADE)	4,792SF
(N) LOT COVERAGE:	7.3 %
(N) FAR:	8.9 %
SCOPE OF WORK	
NEW 5,834 SF HOME WITH A 3,517 SF GARAGE. NEW DRIVEWAY NEW SEPTIC SYSTEM	

A1	PROJECT DATA, AREA CALCULATIONS
A2	PLOT PLAN
A3	GARAGE FLOOR PLAN
A4	FIRST FLOOR PLAN
A5	SECOND FLOOR PLAN
A6	ROOF PLAN, 3D MODELS
A7	PROPOSED EAST ELEVATION
A8	PROPOSED SOUTH ELEVATION
A9	PROPOSED NORTH ELEVATION
A10	PROPOSED WEST ELEVATION
A11	SECTION A-A
A12	SECTION B-B
A13	SECTION C-C
A14	SECTION D-D
A15	SECTION E-E
A16	CALGREEN 1
A17	CALGREEN 2
	SURVEY
T24-1	TITLE 24
T24-2	TITLE 24
	CALGREEN 1 & 2
C0	TITLE SHEET
C1.1	GRADING AND DRAINAGE PLAN
C1.2	GRADING AND DRAINAGE PLAN
C1.3	EARTHWORK, CUT & FILL AREAS
C2	CONSTRUCTION DETAILS
C3.1	COUNTY BMP-1
C3.2	COUNTY BMP-2
C4	EROSION CONTROL PLAN
C5	TRAFFIC CONTROL PLAN
L1	MASTER PLANTING PLAN
L2	WILDFIRE DEFENCE PLAN
L3	HYDROZONE PLAN
L4	IRRIGATION PLAN

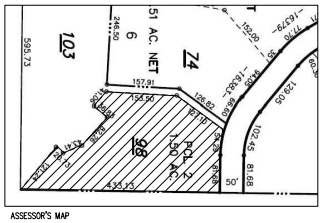
NOTES:
- ALL PERMITS EXCEEDING $1,000.00 IN VALUATION SHALL REQUIRE INSTALLATION OF APPROVED SMOKE AND CARBON MONOXIDE DETECTORS WITHIN THE DWELLING.
- ALL PERMITS EXCEEDING $10,000.00 IN VALUATION SHALL REQUIRE THE INSTALLATION OF AN APPROVED AUTOMATIC GAS SHUT-OFF DEVICE ON THE CUSTOMER OWNED PIPING AT THE UTILITY METER.
- VIF & INSTALL A MOTION SENSITIVE AUTOMATIC GAS SHUTOFF VALVE ON GAS METER WHEN REQUIRED.
- BUILDING ADDRESS NUMBERS MUST BE A MINIMUM OF 4 INCHES IN HEIGHT OR 3 INCHES IN HEIGHT AND SELF-ILLUMINATED.
- CARBON MONOXIDE ALARM AND DETECTOR SHALL BE INSTALLED IN ACCORDANCE W/ THE MANUFACTURER'S INSTRUCTIONS, NFPA 720 INSTALLATION STANDARDS AND CRC.
ALL SMOKE ALARMS SHALL BE 110V CONNECTED TO THE BUILDING WIRING (W/ BATTERY BACKUP INCLUDING LOW BATTERY WARNING FEATURE).
ALL SMOKE ALARMS TO BE INTERCONNECTED.

CONTRACTOR'S NOTES:

- CONTRACTOR SHALL BE FULLY INSURED AND LICENSED IN THE STATE WHERE WORK IS TAKING PLACE.
- THE CONTRACTOR SHALL NOT ORDER MATERIALS NOR SCHEDULE THE WORK UNTIL ALL PLAN DIMENSIONS, SPECIFICATIONS, NOTES, HAVE BEEN VERIFIED IN FILED.
- DRAWINGS, SHOP DRAWINGS AND EXISTING CONDITIONS ARE VERIFIED IN THE FIELD BY THE GENERAL CONTRACTOR. THE GC SHALL INFORM THE ARCHITECT OF ANY CONFLICTS IN WRITING BEFORE CONSTRUCTION COMMENCES. ALL INFORMATION SHOWN ON THE DRAWINGS RELATIVE TO EXISTING CONDITIONS IS GIVEN AS BEST AS PRESENT KNOWLEDGE, BUT WITHOUT GUARANTEE OF ACCURACY.
- IT IS THE RESPONSIBILITY OF THE GC TO NOTIFY THE OWNER AND THE ARCHITECT OF RECORD OF ANY CONDITION FOUND IN THE FIELD TO BE DIFFERENT FROM THOSE SHOWN ON THE PLANS OR SHOP DRAWINGS AND OF NOTED CONFLICTS FOUND ON THE PLANS OR SHOW ON DRAWINGS THAT MAY AFFECT THE COMPLETION OF THE PROJECT, BEFORE SUCH WORK COMMENCES.
- THE GC SHALL REVIEW AND COMPARE THE STRUCTURAL DRAWINGS WITH ARCHITECTURAL, PLUMBING, MECHANICAL, CIVIL, AND ELECTRICAL DRAWINGS, AS PROVIDED IN PERMIT SET.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN FIELD PRIOR TO POURING CONCRETE; ANY DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE ARCHITECT BEFORE PROCEEDING WITH WORK.
- THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING AND NEW PROPERTIES OF THE OWNER OR ADJOINING PROPERTIES. THE CONTRACTOR SHALL NOT UNDERMINE FOUNDATIONS WITHOUT WRITTEN PERMISSION FROM THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MEANS, METHODS, TECHNIQUES AND SEQUENCES OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PROGRAMS AND PROCEDURES DURING CONSTRUCTION, INCLUDED BUT LIMITED TO POLUTION PREVENTION PLAN.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO DESIGN AND IMPLEMENT SHORING SYSTEM PRIOR TO THE BEGINNING OF CONSTRUCTION.
- WHEN A CONFLICT EXISTS ON THE PLANS AND SPECIFICATIONS, DETAIL NOTES AND DRAWINGS SHALL GOVERN AND WRITTEN DIMENSIONS SHALL GOVERN OVER SCALED MEASUREMENTS.
- UNLESS SHOWN OTHERWISE, DETAILS SHOWN ON 'TYPICAL DETAIL' SHEETS SHALL BE USED WHEREVER APPLICABLE. SPECIFIC DETAILS ON THE STRUCTURAL DRAWINGS TAKE PRECEDENCE OVER 'TYPICAL DETAILS'. SPECIFIC NOTES ON STRUCTURAL DRAWINGS TAKE PRECEDENCE OVER NOTES SHOWN IN 'GENERAL NOTES'.
- MANUFACTURERS' NOTES AND SPECIFICATIONS SHALL APPLY WHEN PER CODE.
- DO NOT SCALE DRAWINGS.
- GC IS RESPONSIBLE FOR LOCATING AND AVOIDING UTILITIES. CALL USA NORTH AT 1-800-227-2600.
- VERIFY ALL DIMENSIONS IN FIELD, IN CASE OF DISCREPANCY CONTACT ARCHITECT PRIOR TO CONTINUATION OF WORK.
- THE ISSUANCE OF A BUILDING PERMIT SHALL NOT BE CONSTRUED AS A GUARANTEE THAT ALL OF CODE REQUIREMENTS ARE REFLECTED IN THE DOCUMENT. THE GENERAL CONTRACTOR FOR THE PROJECT SHALL BE ULTIMATELY RESPONSIBLE FOR INSURING THAT THE FINISHED PRODUCT COMPLIES WITH ALL REGULATIONS, LAWS AND CODE REQUIREMENTS.
- WHEN MANUFACTURED ROOF TRUSSES ARE INSTALLED, GC TO PROVIDE TRUSSES CALCS SIGNED BY LICENCE PROFESSIONAL FOR APPROVAL BY CITY OR COUNTY. CALC TO BE REVIEWED AND APPROVED BY ENGINEER OF RECORD PRIO TO BE SUBMITED TO THE BUILDING OFFICAL.
- THE CITY/COUNTY BUILDING OFFICIAL AND/OR FIRE MARSHALL WILL REVIEW THE SCOPE OF WORK AND DETERMINE IF THE EXISTING BUILDING WILL NEED TO BE REQUIRED TO BE RETROFITTED WITH FIRE SPRINKLERS. GC TO CONTACT FIRE DEPARTMENT FOR VERIFICATION, AND UPGRADE WATER METER, LINES AS NECESSARY. IF REQUIRED, FIRE SPRINKER SYSTEM TO BE ON DEFERED PERMIT AND SUBMITED BY THE GC.
- GC TO READ, BE FAMILIAR AND FOLLOW ALL STANDARD PROVISIONS, CONSTRUCTION GUIDE LINES AND REQUIREMENTS OF LISTED, CURRENTLY APPLICABLE CODES AND ORDINANCE.

16391 AZTEC RIDGE DR, SANTA CLARA COUNTY, CA 95030

VICINITY MAP



ASSESSOR'S MAP

REVISIONS

BY

PROJECT FOR
ALEX LUBIVY
16391 AZTEC RIDGE DR.,
LOS GATOS,CA, 95030

NATALIA AMATUNI
n.amatuni@gmail.com
408 4200411

PROJECT NO.

DATE

A 1 OF

SHEET NUMBER

APN: 532-26-098
PARCEL 2

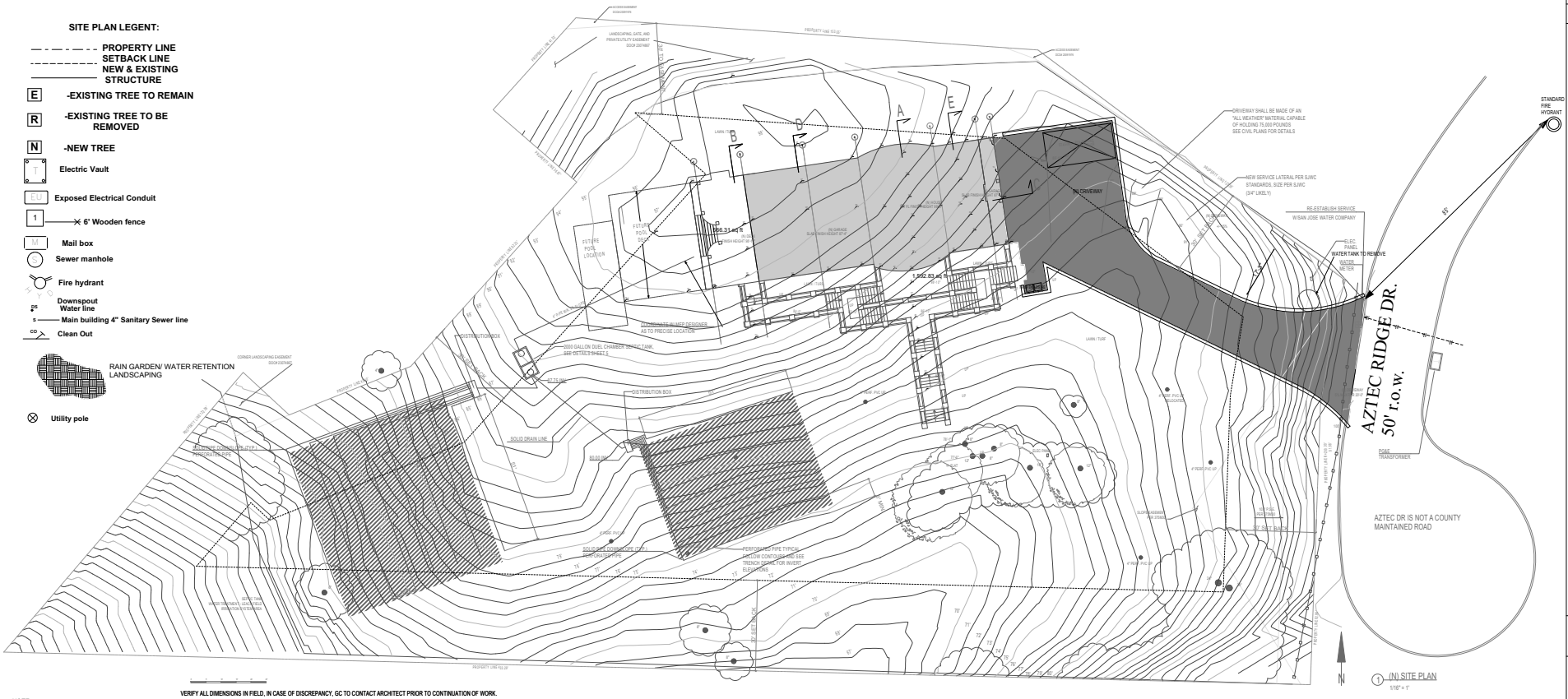
[613 M 2]
1.50± ACRES

NOTES:

1.LIMIT SITE GRADING TO DRIVEWAY, GARAGE & UNDER HOUSE AREA.
2.CONSTRUCT DRIVEWAY APPROACH TO CONTAIN STREET & GUTTER FLOW
3.NO TREES TO BE REMOVED WITHOUT APPROVAL

SITE PLAN LEGENT:

- PROPERTY LINE
- SETBACK LINE
- NEW & EXISTING STRUCTURE
- E -EXISTING TREE TO REMAIN
- R -EXISTING TREE TO BE REMOVED
- N -NEW TREE
- Electric Vault
- Exposed Electrical Conduit
- 6' Wooden fence
- Mail box
- Sewer manhole
- Fire hydrant
- Downspout
- Water line
- Main building 4" Sanitary Sewer line
- Clean Out
- RAIN GARDEN/ WATER RETENTION LANDSCAPING
- Utility pole



(N) SITE PLAN
1/16" = 1'

VERIFY ALL DIMENSIONS IN FIELD, IN CASE OF DISCREPANCY, GC TO CONTACT ARCHITECT PRIOR TO CONTINUATION OF WORK.

NOTE:

AZTEC RIDGE DRIVE IS NOT A COUNTY MAINTAINED ROAD.

GC TO MAINTAIN ADJOINING STREETS FREE AND CLEAN OF PROJECT DIRT, MUD, MATERIALAND DEBRIS DURING CONSTRUCTION PERIOD, AND MAINTAIN FIRE TRUCK ACCESS TO OTHER PROPERTIES.

GC TO INSTALL STRAW WATTLE AS NEEDED DURING CONSTRUCTION TO PREVENT RUNOFFS ON ADJACENT SITES, AND PUBLIC RIGHT OF WAY.

WHEN NEW FOUNDATIONS ARE NEEDED FOR THE PROJECT, AT THE TIME OF FOUNDATION INSPECTION IF REQUIRED BY CITY INSPECTOR, CORNER STAKES OR OFFSET STAKES MUST BE ESTABLISHED BY A LAND SURVEYOR REGISTERED IN THE STATE OF CALIFORNIA AND VERIFIED BY THE FIELD INSPECTOR TO ENSURE THAT NEW STRUCTURE CONSTRUCTION IS LOCATED IN ACCORDANCE WITH THE APPROVED PLANS, AND DOES NOT ENCROACH IN THE SETBACK.

ALL NEW ROOF DRAINAGE WILL BE DIRECTED TO LANDSCAPED AREAS TO THE EXTENT FEASIBLE AND NOT ONTO ADJACENT PROPERTIES. SEE CIVIL PLAN.

DRIVEWAY SHALLL BE MADE OF AN "ALL WEATHER " MATERIAL CAPABLE OF HOLDING 75, 000 POUNDS.

PLOT PLAN
1/ 16"=1'0"

REVISIONS

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PROJECT FOR
ALEX LUBIVY
16391 AZTEC RIDGE DR.,
LOS GATOS,CA, 95030

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A 2 OF

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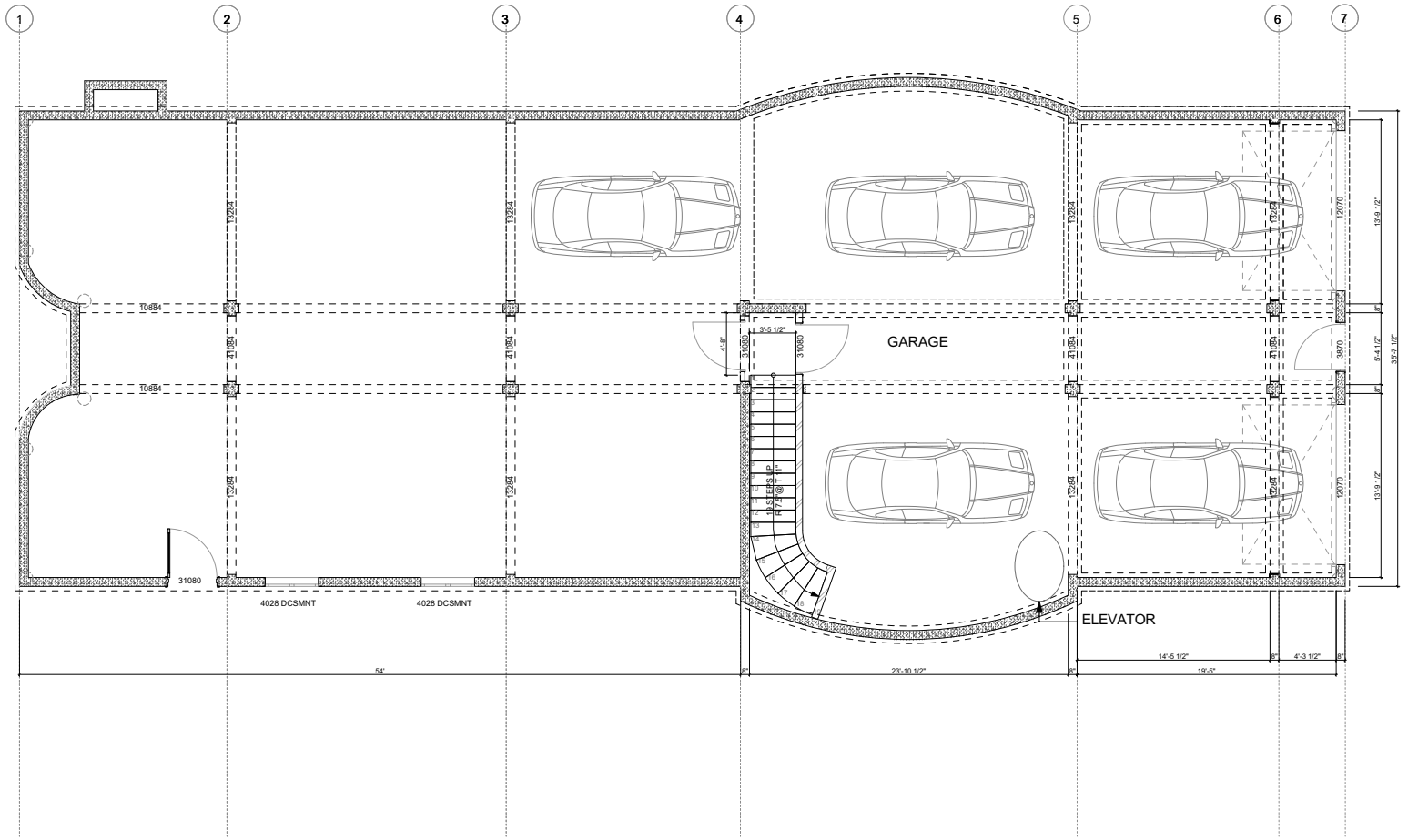

GARAGE FLOOR PLAN
1/4"=1'0"

REVISIONS

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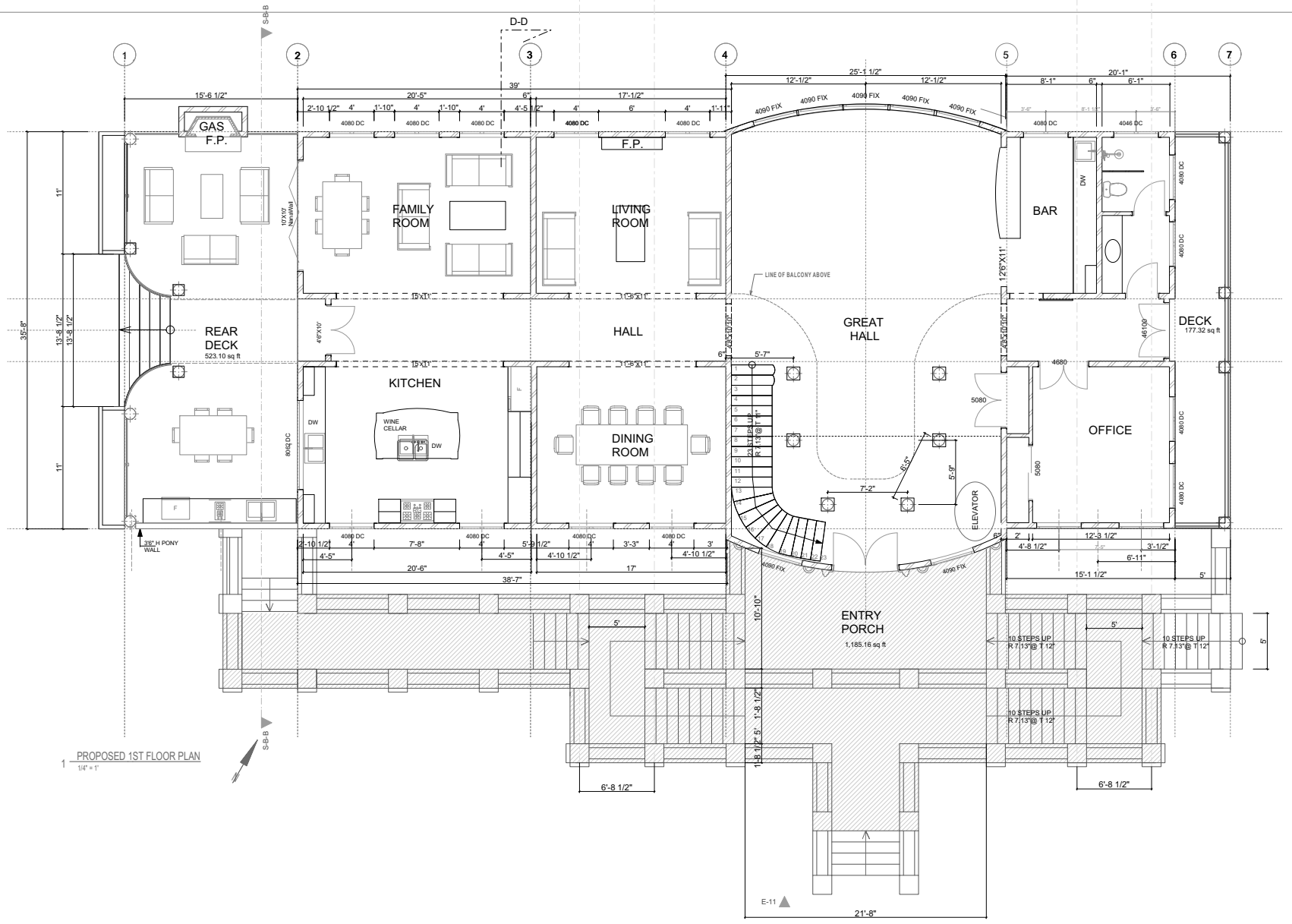

1 PROPOSED 1ST FLOOR PLAN
1/4" = 1'

REVISIONS

BY

PROJECT FOR
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16391 AZTEC RIDGE DR.,
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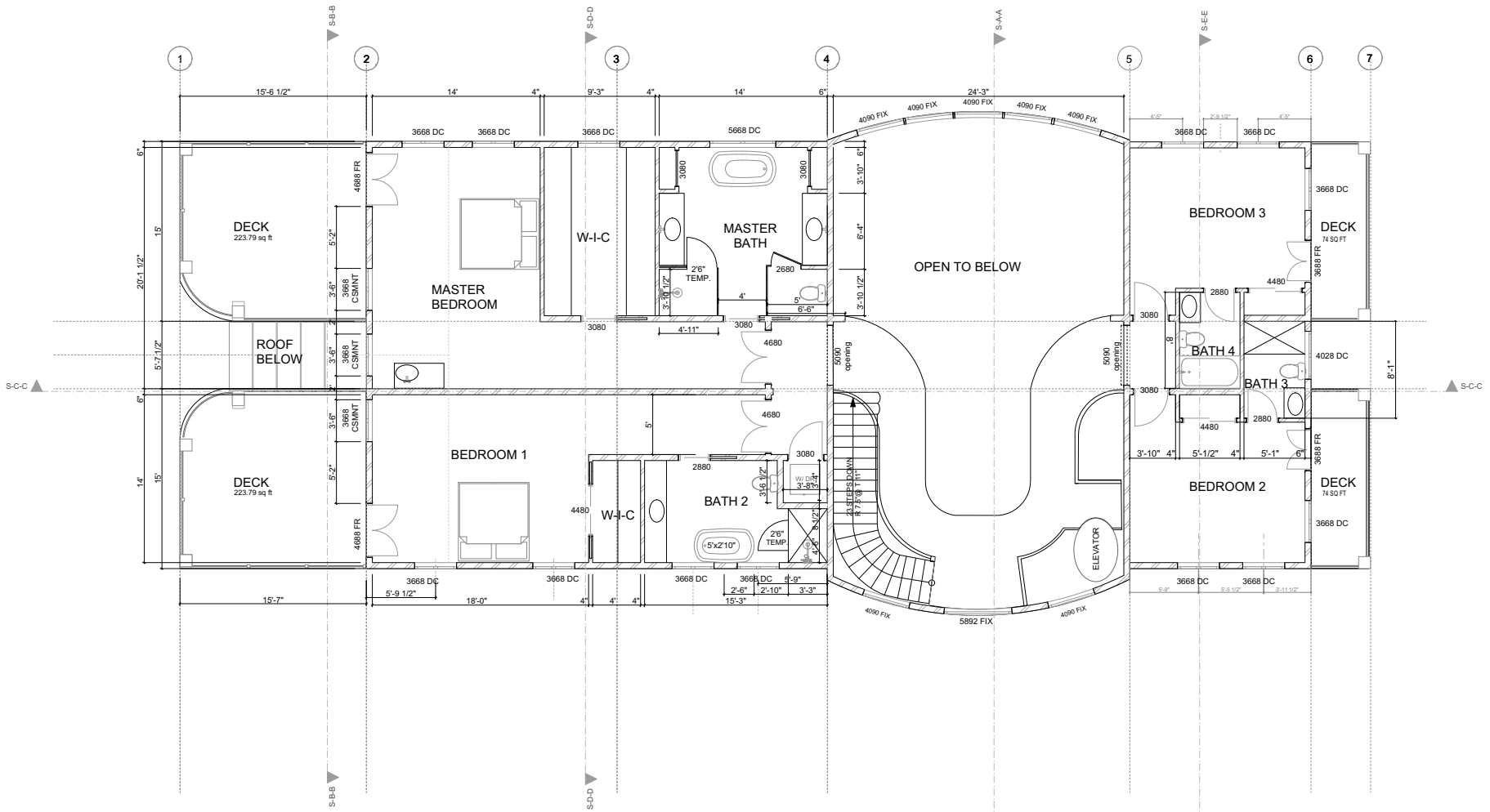

SECOND FLOOR
1/ 4"=1'0"

REVISIONS

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16391 AZTEC RIDGE DR.,
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A 5 OF

SHEET NUMBER

Under Eave FOR W.U.I.(SFM Standard 12-7A-3)

◊Company Name: BARRIER TECHNOLOGY CORP.
510 4th Street North, Watkins, MN 55389
Product Description: Blazeguard® sheathing with Pyrotite bonded to ½" CDX plywood, 3/8", 15/32", ½", 5/8" or ¾" thickness, panel size 4'x8'.

◊Company Name: BARRIER TECHNOLOGY CORP.
510 4th Street North, Watkins, MN 55389
Product Description: Blazeguard® sheathing with Pyrotite bonded to 7/16" oriented strand board (OSB), 3/8", 15/32", ½", 5/8" or ¾" thickness, panel size 4'x8'.

◊Company Name: BODYGUARD WOOD PRODUCTS
5485 NW Osprey Place, Portland, OR 97229
Product Description: "Bodyguard® #801" tongue and groove, pressure treated pine, minimum 9/16" thick x 3-1/4" wide (nominal 5/8" x 4"), installed over 1/2" regular gypsum board.
26

◊Company Name: BODYGUARD WOOD PRODUCTS
5485 NW Osprey Place, Portland, OR 97229
Product Description: "Bodyguard® #802" tongue and groove, pressure treated pine, minimum 3/4" thick x 5-7/16" wide (nominal 1" x 6"), installed over 1/2" regular gypsum board.

◊Company Name: BODYGUARD WOOD PRODUCTS
5485 NW Osprey Place, Portland, OR 97229
Product Description: Bodyguard® "V-Rustic" Pattern Number 793, 794 and 795, preservative treated pine, minimum ¾" thick x 6" wide (or wider) dimensions, installed over 1/2" regular gypsum board.

◊Company Name: JAMES HARDIE BUILDING PRODUCTS, INC.
10901 Elm Avenue, Fontana, CA 92337
Product Description: "CemSoffit®" un-vented, fiber-cement soffit, 3/16" thick and ¼" thick.

◊Company Name: JAMES HARDIE BUILDING PRODUCTS, INC.
10901 Elm Avenue, Fontana, CA 92337
Product Description: "HardieSoffit®" un-vented, fiber-cement soffit, 3/16" thick and ¼" thick.

CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION
OFFICE OF THE STATE FIRE MARSHAL
FIRE ENGINEERING - BUILDING MATERIALS LISTING PROGRAM

LISTING SERVICE

LISTING No. 8165-2192:0100 Page 1 of 1

CATEGORY: 8165 -- VENTS FOR WILDLAND URBAN INTERFACE (W.U.I.)

LISTEE: Vulcan Technologies580 Irwin Street, Suite 1, San Rafel, CA 94901
Contact: John Simontacchi (415) 459-6488 Fax (415) 459-6055
Email: johns@firefree.com

DESIGN: Vulcan Technologies
Model VFS414 (4"X14"), VFS614 (6"X14"), VFS814 (8"X14") foundation vent.
Model VE3522 (3.5"X22"), VE 5522 (5.5"X22"), 7522 (7.5"X22") Soffit/Eave vent.
*Model VSC2120 Continuous Soffit Vent.
Aluminum honeycomb core, 5/8" nominal thickness with 1/4" cells.
1 to 2 mil cell walls.
1/4" stainless steel mesh
Intumescent coating

RATING: Rated for use as materials for exterior wildfire exposure in Wildland Urban Interface (WUI) fire areas.

INSTALLATION: In accordance with listee's printed installation instructions, applicable codes and ordinances and in a manner acceptable to the authority having jurisdiction.

MARKING: Listee name. Model number, rating and SFM label.

APPROVAL: Listed as foundation vent, soffit vent, and eave vent for use in Wildland Urban Interface Areas (WUI).

LISTING No. 8165-2232:0500 Page 1 of 1

CATEGORY: 8165 -- VENTS FOR WILDLAND URBAN INTERFACE (W.U.I.)

LISTEE: Brandguard Vents1001 Avenida Pico, Suite C #221, San Clemente, CA 92673
Contact: Kelly Berkompas (949) 481-5300
Email: kellyberkompas@yahoo.com

DESIGN: BrandGuard Vents Model UE 3011 (22"X3.5") , UE 3021 (14"X3.5") UE 3031 (14"X3"), UE 3041 (22"X3"), UE 3051 (22"X5.5"), CS 3011 (120"X3"), CS 3021 (120"X5.5"), Undereave/Soffit Vent constructed of 26 gauge, hot dipped, galvanized sheet steel with phosphatized coating, galvanized 1/8" square mesh screen.

RATING: Rated for use as materials for exterior wildfire exposure in Wildland Urban Interface (WUI) fire areas.

INSTALLATION: In accordance with listee's printed installation instructions, applicable codes and ordinances and in a manner acceptable to the authority having jurisdiction.

MARKING: Listee name. Model number, rating and SFM label.

APPROVAL: Listed as foundation vent, soffit vent, and eave vent for use in Wildland Urban Interface Areas (WUI) for vertical and horizontal installation only.

LISTING No. 8165-2214:0100 Page 1 of 1

CATEGORY: 8165 -- VENTS FOR WILDLAND URBAN INTERFACE (W.U.I.)

LISTEE: Embers Out LLC21520 Yorba Linda Blvd., Suite G 530, Yorba Linda, CA 92887
Contact: George Sh 3-3459 Fax (714) 779-3501
Email: gis155@yah

DESIGN: Embers Out Elite
Model E1212N60(12"X12"), E1218N124 (12"X18"), E1224N168 (12"X24"), E1414N110 (14"X14"), E1418N145 (14"X18"), E1424N187 (14"X24"), E1430N249 (14"X30") exterior vent. Aluminum or Stainless Steel

RATING: Rated for use as materials for exterior wildfire exposure in Wildland Urban Interface (WUI) fire areas.

INSTALLATION: In accordance with listee's printed installation instructions, applicable codes and ordinances and in a manner acceptable to the authority having jurisdiction.

MARKING: Listee name. Model number, rating and SFM label.

APPROVAL: Listed as foundation vent, soffit vent, and eave vent for use in Wildland Urban Interface Areas (WUI) for vertical installation only.

NOTE: This listing is considered an alternate method of compliance with 706A, 2013 CBC. Alternate Metods of Compliance are listed as a one time listing only.

ROOF PLAN
1/4"=1'0"

NEW ROOF: IB ROOF SYSTEM PVC MEMBRANE

NOTE 1:
ROOF GUTTERS SHALL BE PROVIDED WITH GUTTER SCREENS TO PREVENT THE ACCUMULATION OF LEAVES AND DEBRIS IN THE GUTTER.

LEGEND:

DS DOWNSPOUT. SEE N.12/ A1

REVISIONS

BY

PROJECT FOR
ALEX LUBIVY
16391 AZTEC RIDGE DR.,
LOS GATOS,CA, 95030

NATALIA AMATUNI
n.amatuni@gmail.com
408 4200411

PROJECT NO.

DATE

A 6 OF

SHEET NUMBER

TYP. ROOF AT SLOPED CEILINGS

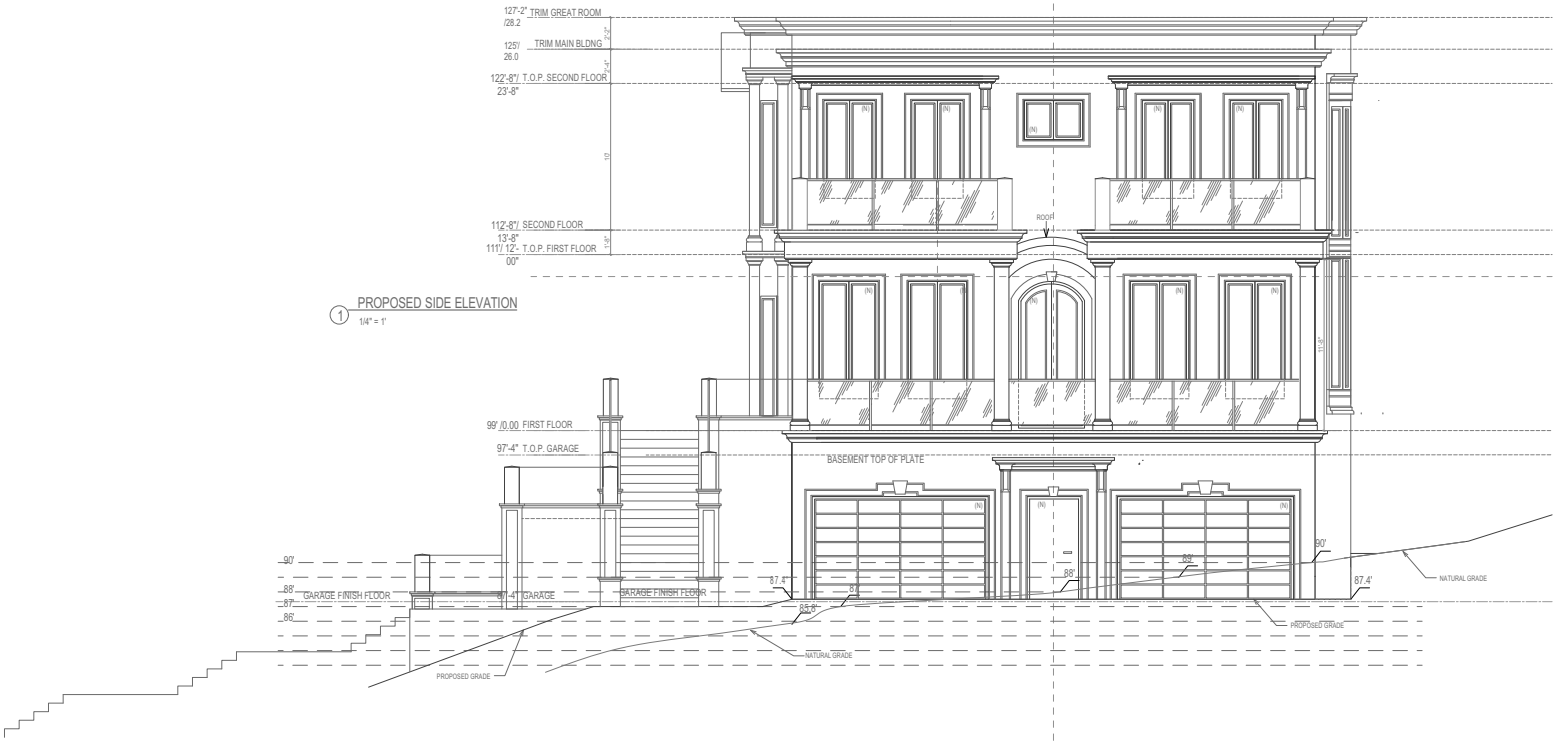
COMPOSITION SHINGLES (CLASS "A" FIRE RATING) O/ 30 LB. BUILDING PAPER O/ 1/2" CDX PLYWOOD O/2X8 RAFTERS D.F.N.O:2 W/ R-38 INSULATION& 1" MINIMUM VENTED AIR SPACE O/1 PERM MINIMUM VAPOR BARRIER O/ 5/8" TYPE "X" GYPSUM BOARD CEILING.

TYP. ROOF AT FLAT CEILINGS

COMPOSITION SHINGLES (CLASS "A" FIRE RATING) O/ 30 LB. BUILDING PAPER O/ 1/2" CDX PLYWOOD O/2X8 RAFTERS D.F.N.O:2 O/ VENTILATED ATTIC O/ 2X6 CEILING JOISTS W/ R-38 INSULATION& 1" MINIMUM VENTED AIR SPACE O/1 PERM MINIMUM VAPOR BARRIER O/ 5/8" GYPSUM BOARD CEILING.

TYP. NEW WALL

7/8" STUCCO (3 COATS) O/ 2 LAYERS GRADE "D" BLDG. PAPER O/5/8" CLASS" X" GYPSUM SHEATING O/ 2X6 @ 16"O.C. STUDS W/R-15 INSUL. O/ 1/2" GYPSUM BOARD



1 PROPOSED SIDE ELEVATION
1/4" = 1'

PROPOSED EAST ELEVATIONS
1/4"=1'0"

THE NFRC LABEL WHICH STATES THE REQUIRED U-VALUE AND SGHC FOR ALL FENESTRATION PRODUCTS SHALL NOT BE REMOVED PRIOR TO INSPECTION OR REMOVAL BY A BUILDING INSPECTOR, AND SHALL REFLECT THE VALUES LISTED IN THE ENERGY REPORT.
(2016 CRC R308.1)

THIS HABITABLE SPACE WILL BE PROVIDED WITH A HEATING SYSTEM CAPABLE OF MAINTAINING A MINIMUM INDOOR TEMPERATURE 68F AT A POINT 3' ABOVE THE FLOOR AND 2' FROM EXTERIOR WALLSIN A ALL NEW HABITABLE ROOMS AT THE DESIGN TEMPERATURE. (2016 CRC R303.9).

ADDITIONS, ALTERATIONS OR IMPROVEMENTS REQUIRE NON- COMPLIENT PLUMNING FIXTURES WITHIN THE RESIDENCE BE REPLACED WITH WATER CONSERVING PLUMBING FIXTURES. COPY OF THE "WATER CONSERVING PLUMBING FIXTURES- CERTIFICATE OF COMPLIANCE " CAN BE FOUND AT THE BUILDING AND SAFETY DIVISION. CIVIL CODE 1101.4.

REVISIONS

BY

PROJECT FOR
ALEX LUBIVY
16391 AZTEC RIDGE DR.,
LOS GATOS,CA, 95030

NATALIA AMATUNI
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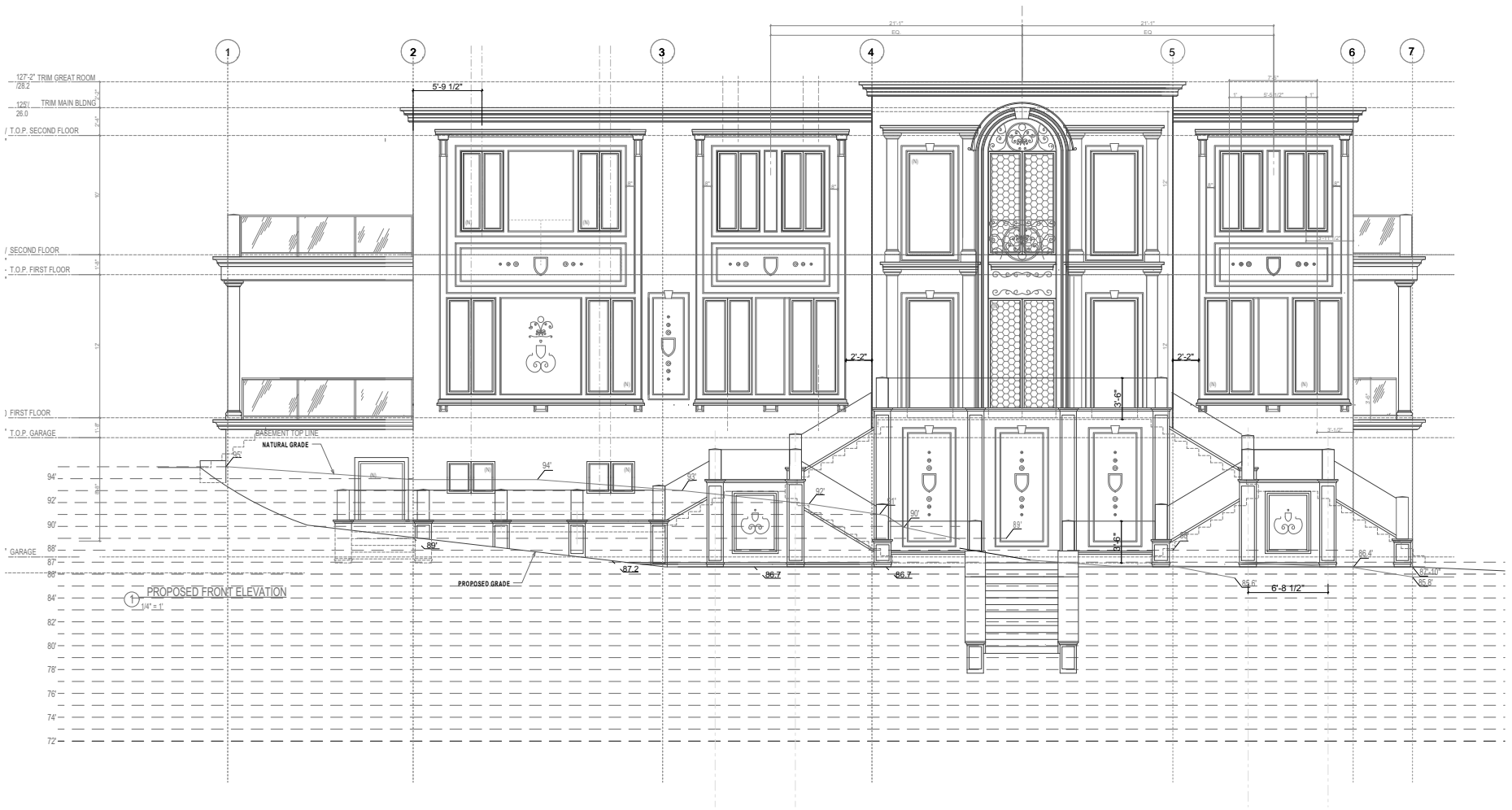

1 PROPOSED FRONT ELEVATION
1/4" = 1'

PROPOSED SOUTH ELEVATION
1/4"=1'0"

REVISIONS

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PROJECT FOR
ALEX LUBIVY
16391 AZTEC RIDGE DR.,
LOS GATOS,CA, 95030

NATALIA AMATUNI
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PROJECT NO.

DATE

A 8 OF

SHEET NUMBER

PROPOSED NORTH ELEVATIONS
1/4"=1'0"

REVISIONS

BY

PROJECT FOR
ALEX LUBIVY
16391 AZTEC RIDGE DR.,
LOS GATOS,CA, 95030

NATALIA AMATUNI
n.amatuni@gmail.com
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PROJECT NO.

DATE

A 9 OF

SHEET NUMBER

PROPOSED WEST ELEVATIONS
1/4"=1'0"

REVISIONS

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PROJECT FOR
ALEX LUBIVY
16391 AZTEC RIDGE DR.,
LOS GATOS,CA, 95030

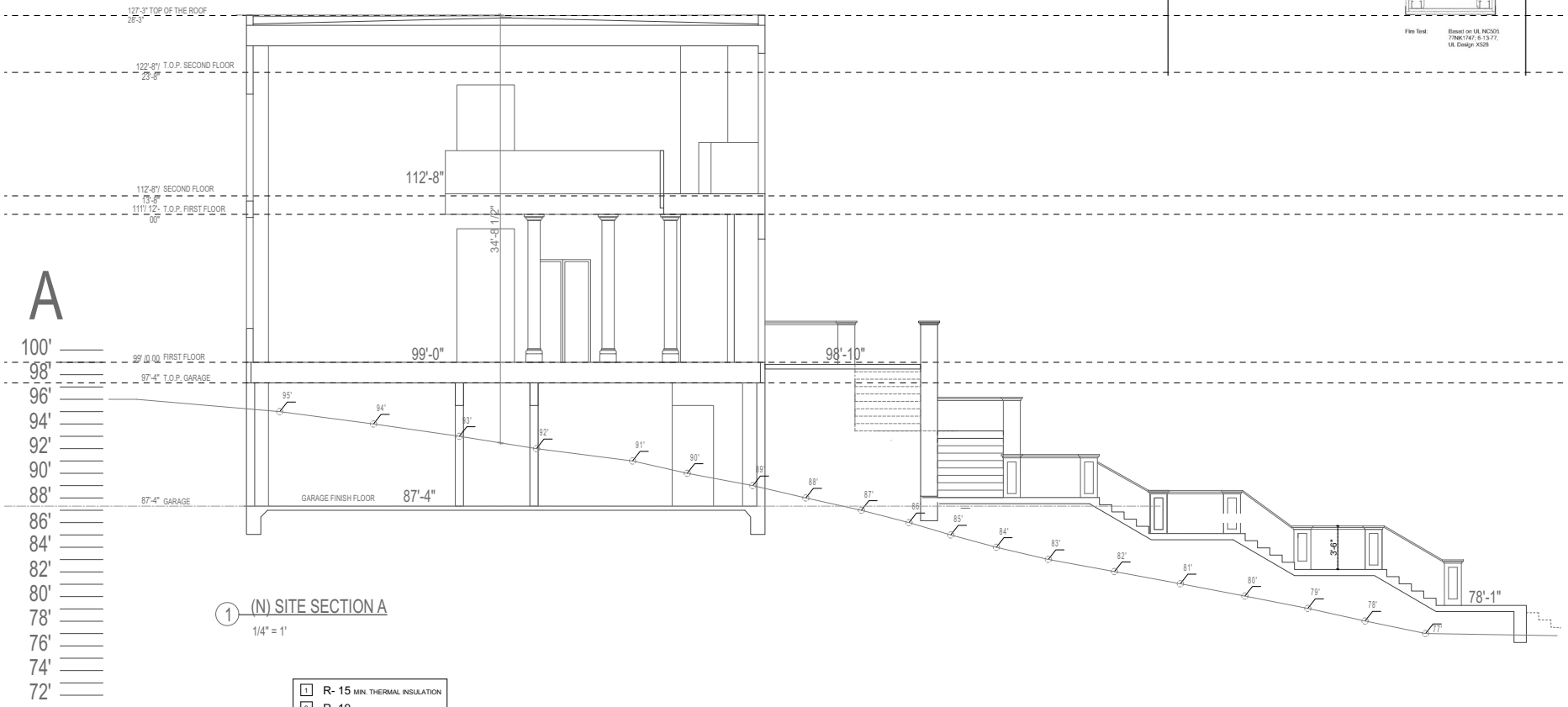
NATALIA AMATUNI
n.amatuni@gmail.com
408 4200411

PROJECT NO.

DATE

A 10OF

SHEET NUMBER



1 (N) SITE SECTION A

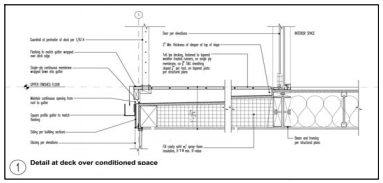
1/4" = 1'

1	R- 15 MIN. THERMAL INSULATION
2	R- 19 MIN. THERMAL INSULATION
3	R- 30 MIN. THERMAL INSULATION

(E) CONCRETE FOOTING

(N) CONCRETE FOOTING

A



1 Detail at deck over conditioned space

SECTION A-A
1/4"=1'0"

COLUMNS, NONCOMBUSTIBLE

GA FILE NO. CM 1033 | GENERIC | 1 HOUR FIRE

GYPSUM WALLBOARD, STEEL STUDS

Base layer ½" type X gypsum wallboard applied to 1¾" steel studs located at each corner of W10x49 column with 1" Type S drywall screws 24" o.c. **Face** layer ½" type X gypsum wallboard applied with 1¾" Type S drywall screws 24" o.c. Metal cornerbead applied to all corners with 1" Type S drywall screws 12" o.c. in each flange. Joint compound 1/16" thick applied over cornerbead.

Horizontal joints staggered 24" between layers.

Fire Test: Based on UL NC505 77NK1747; 6-13-77. UL Design XS28

REVISIONS

BY

PROJECT FOR
ALEX LUBIVY
16391 AZTEC RIDGE DR.,
LOS GATOS,CA, 95030

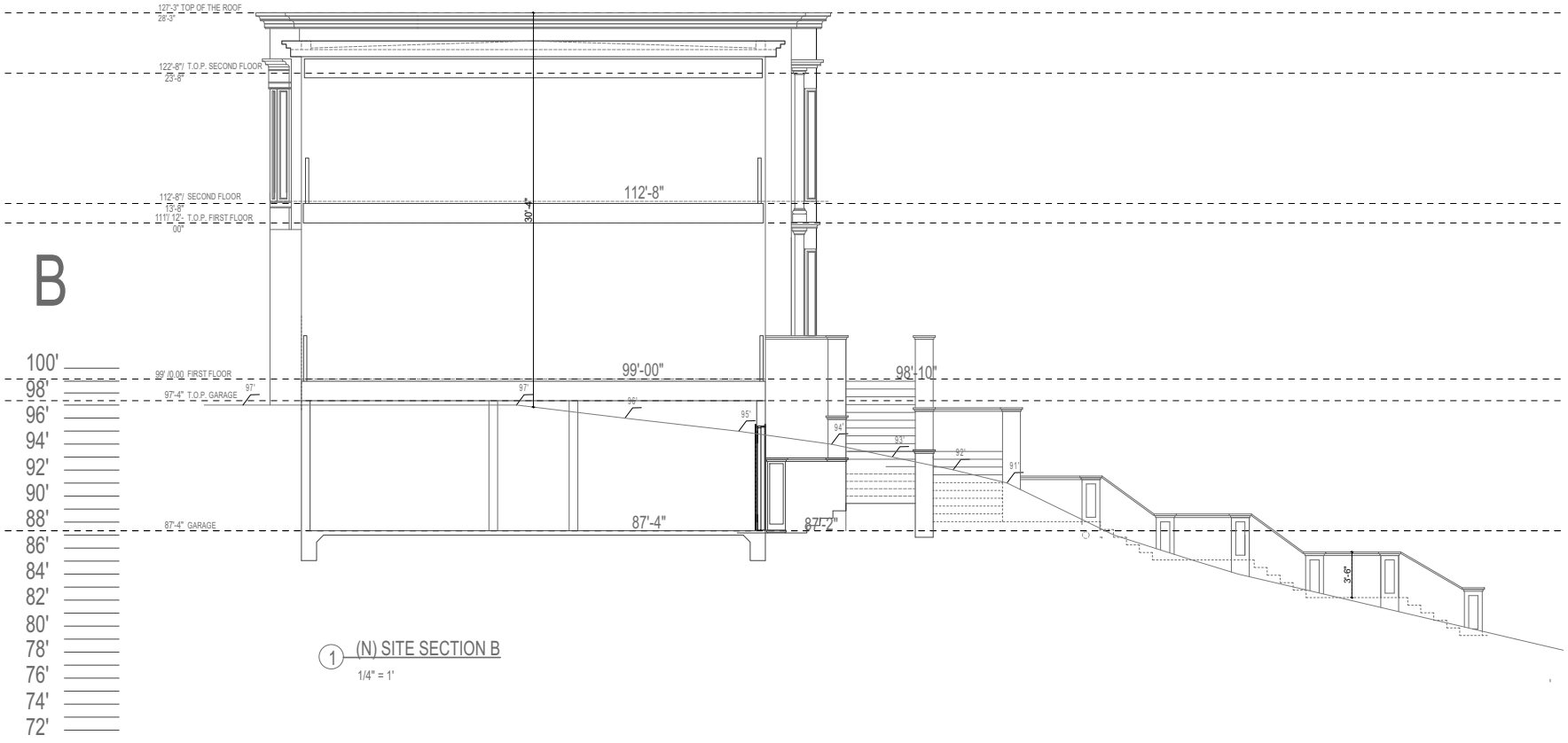
NATALIA AMATUNI
n.amatuni@gmail.com
408 4200411

PROJECT NO.

DATE

A 11 OF

SHEET NUMBER



1 (N) SITE SECTION B

1/4" = 1'

STAIRWAY AND GUARD RAIL NOTES:

STAIRWAY SHALL BE NOT LESS THAN 36" IN WIDTH.
RISERS SHALL BE NO GREATER THAN 7 3/4".
TREADS SHALL BE MIN. 10" FROM NOSING TO NOSING
A NOSING MEASURING 3/4" MIN TO 1 1/4" MAX REQUIRED ON STAIRS WHERE TREAD DEPTH IS LESS THAN 11".
MIN. HEADROOM CLEARANCE IS 6'8".

OPENINGS FOR REQUIRED GUARDS ON THE SIDES OF STAIR -BETWEEN BALUSTERS OR BETWEEN POST AND BALUSTER- SHALL NOT ALLOW A 4" DIAMETER SPHERE TO PASS THROUGH.

THE SPACE BETWEEN THE FINISHED FLOOR AND THE BOTTOM RAIL MUST NOT EXCEED 4 INCHES.

THE BALUSTRADE MUST BE ABLE TO WITHSTAND 200 POUNDS OF FORCE OF PRESSURE AT ANY POINT.

THE MINIMUM BALUSTRADE HEIGHT IS 42 INCHES

TRIM SHALL NOT REDUCE THE REQUIRED WIDTH BY MORE THAN 3 1/2 INCHES. HANDRAILS MAY PROJECT FROM EACH SIDE OF A STAIRWAY A DISTANCE OF 3 1/2 INCHES INTO THER EQUIRED WIDTH.

PROVIDE 42" MIN. HIGH GUARD RAILS AT BALCONIES AND PORCHES AT HIGHT GREATER THAN 30" FINISHED GRAGE WHICH IS MEASURED AS MUCH AS 3' OUT.

SECTION B-B
1/4"=1'0"

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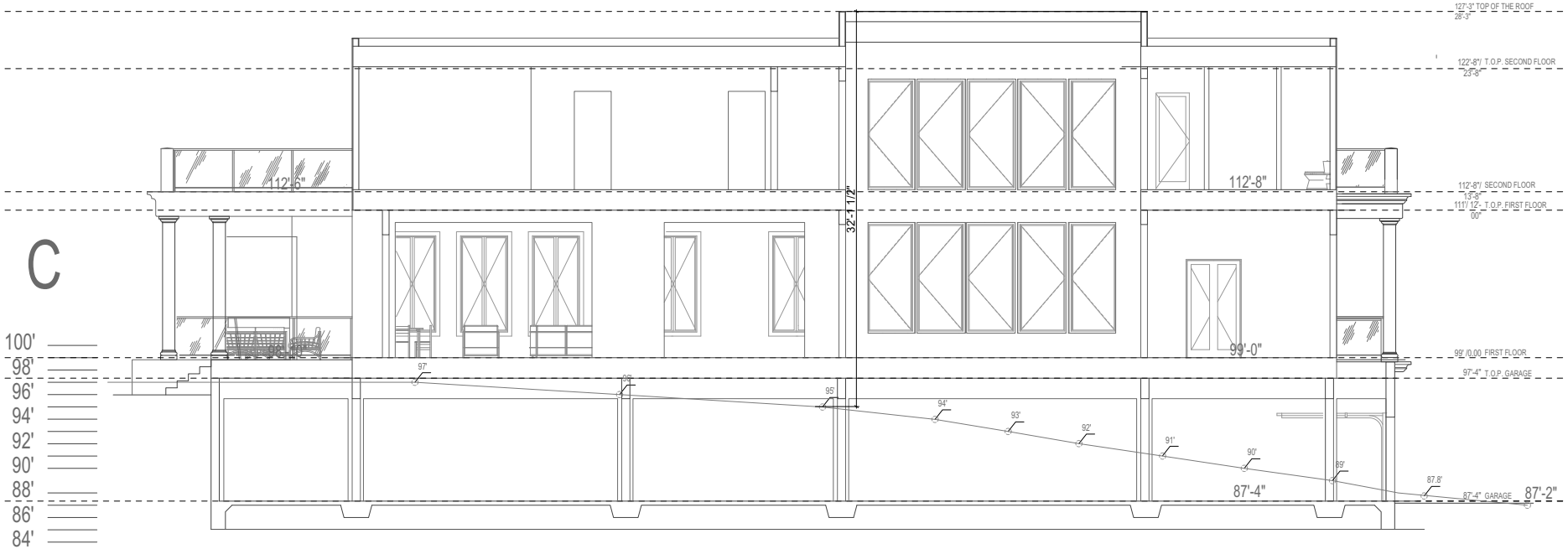
SHEET NUMBER



1 (N) SITE SECTION C

1/4" = 1'

SECTION C-C
1/4"=1'0"

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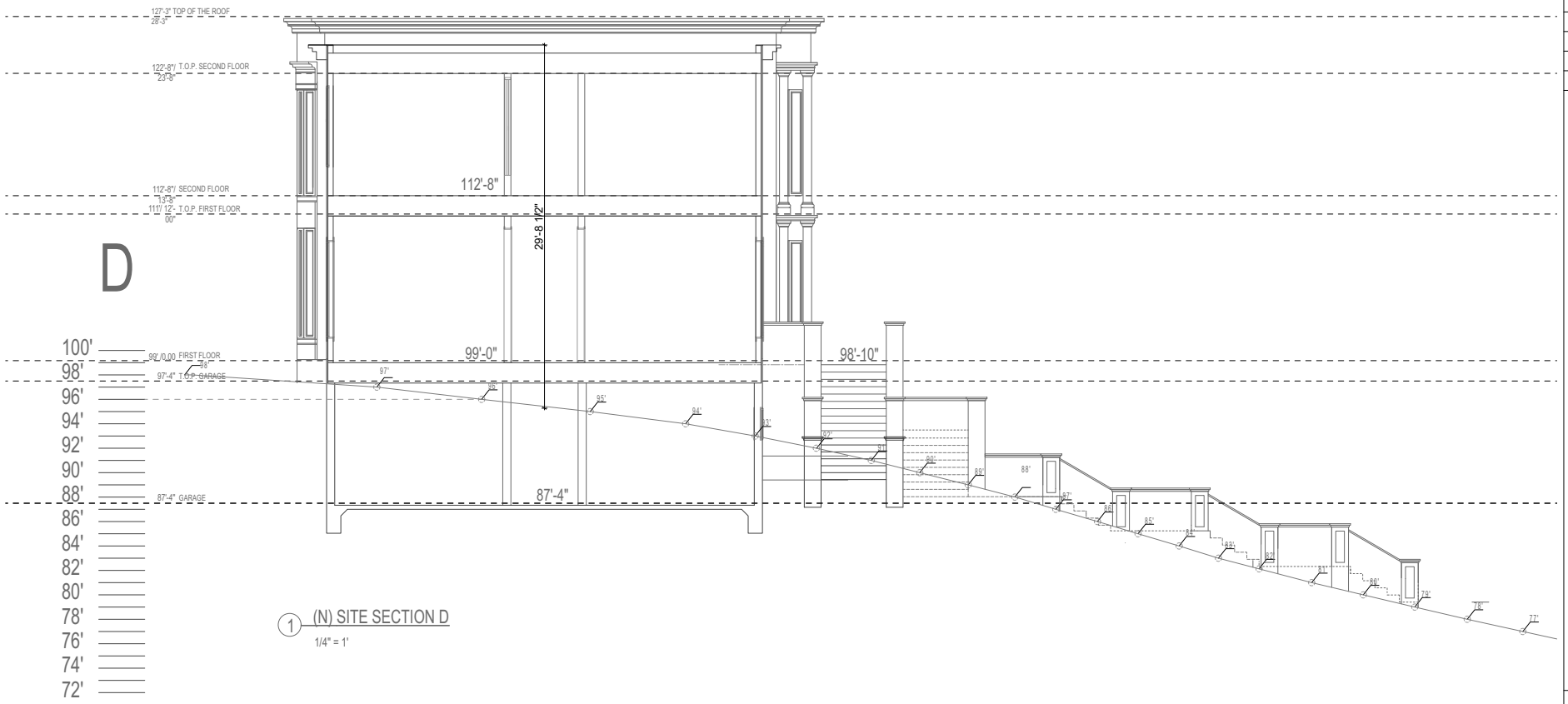
PROJECT NO.

DATE

A 13OF

SHEET NUMBER



1 (N) SITE SECTION D

1/4" = 1'

SECTION D-D
1/4"=1'0"

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PROJECT NO.

DATE

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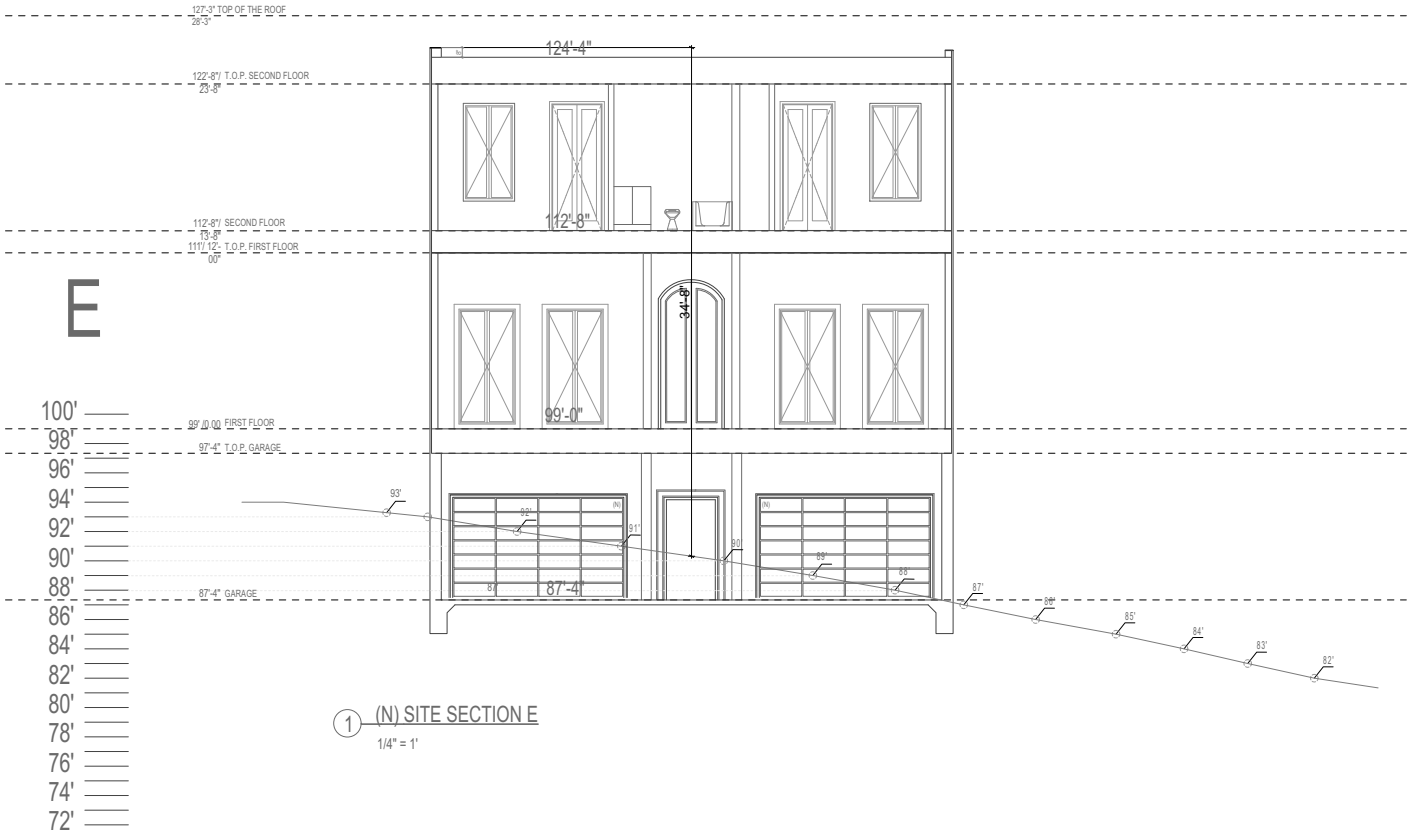
SHEET NUMBER



1 (N) SITE SECTION E

1/4" = 1'

SECTION E-E
1/4"=1'0"

REVISIONS

BY

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PROJECT NO.

DATE

A 15OF

SHEET NUMBER

AIA California

2019 CALIFORNIA GREEN BUILDING STANDARDS CODE

RESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2020, Includes August 2019 Supplement)

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

Y | N/A | RESPON. PARTY

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.

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
DIVISION 4.1 PLANNING AND DESIGN
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 minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent protective device.

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.

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.

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.

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.

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.

4.303.2 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.

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.

2019 CALIFORNIA GREEN BUILDING STANDARDS CODE
RESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2020, Includes August 2019 Supplement)

AIA California

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

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 trichloroethylene), except for aerosol products, as specified in Subsection 2 below.

2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than 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 LIMIT[1,2]

(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 COATINGS[2,3]

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 COATINGS[1]	120
MAGNESITE CEMENT COATINGS	450
MASTIC TEXTURE COATINGS	100
METALLIC PIGMENTED COATINGS	500
MULTICOLOR COATINGS	250
PRETREATMENT WASH PRIMERS	420
PRIMERS, SEALERS, & UNDERCOATERS	100
REACTIVE PENETRATING SEALERS	350
RECYCLED COATINGS	250
ROOF COATINGS	50
RUST PREVENTATIVE COATINGS	250
SHELLACS	
CLEAR	730
OPAQUE	550
SPECIALTY PRIMERS, SEALERS & UNDERCOATERS	100
STAINS	250
STONE CONSOLIDANTS	450
SWIMMING POOL COATINGS	340
TRAFFIC MARKING COATINGS	100
TUB & TILE REFINISH COATINGS	420
WATERPROOFING MEMBRANES	250
WOOD COATINGS	275
WOOD PRESERVATIVES	350
ZINC-RICH PRIMERS	340

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

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

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

TABLE 4.504.5 - FORMALDEHYDE LIMITS[1]

MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION

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

1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE 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 testing and product requirements of at least one of the following:

1. Carpet and Rug Institute's Green Label Plus Program.
2. California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers" Version 1.1, February 2010 (also known as Specification 01350).
3. NSF/ANSI 140 at the Gold level.
4. Scientific Certifications Systems Indoor Advantage™ Gold.

4.504.3.1 Carpet cushion. All carpet cushion installed in the building interior shall meet the requirements of the Carpet and Rug Institute's Green Label program.

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 comply with one or more of the following:

1. Products compliant with 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 1.1, February 2010 (also known as Specification 01350), certified as a CHPS Low-Emitting Material in the Collaborative for High Performance Schools (CHPS) High Performance Products Database.
2. Products certified under UL GREENGUARD Gold (formerly the Greenguard Children & Schools program).
3. Certification under the Resilient Floor Covering Institute (RFCI) FloorScore program.
4. Meet 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 1.1, February 2010 (also known as Specification 01350).

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 curing, 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.

COUNTY OF SANTA CLARA

2019 CALGREEN RESIDENTIAL CHECKLIST (MANDATORY)

County Amendments to CALGreen are in Italics.

- Designer to cross out items that are not applicable to the project.

- Installer or designer shall verify all applicable requirements have been satisfied and sign and date each row. County Inspectors will verify completion signatures and supporting documentation DURING CONSTRUCTION.

			APPLICANT TO COMPLETE Plan Check Review Data		Installer or Designer Verification	
ITEM #	CALGreen CODE SECTION	REQUIREMENT	REFERENCE SHEET	Note or Detail No.	Date	Installer or Designer Signature
PLANNING AND DESIGN: MANDATORY REQUIREMENTS						
1	4.106.2	A plan is developed and implemented to manage storm water drainage during construction.	CG-2	NOTE 1		
2	4.106.3	Construction plans indicates how site grading or a drainage system will manage all surface water flows to keep water from entering buildings.	CG-2	NOTE 2		
3	4.106.4.1	For new dwellings *and the **rebuild** of existing dwellings that include a panel upgrade or construction between panel and parking area,* a raceway to a dedicated 208/240-volt branch circuit meeting the requirements, is installed.	CG-2	NOTES 3 & 4		
ENERGY EFFICIENCY: MANDATORY REQUIRMENTS						
4	4.201.1	Building meets or exceeds the requirements of the California Building Energy Efficiency Standards.	T24 SHEETS			
WATER EFFICIENCY & CONSERVATION: MANDATORY REQUIREMENTS						
5	4.303.1	Plumbing Fixtures (water closets and urinals) and fittings (faucets and showerheads) installed in residential buildings comply with CALGreen Sections 4.303.1.1 through 4.303.1.4.4.	CG-2	NOTE 5		
6	4.303.2	Plumbing fixtures and fittings required in CALGreen Section 4.303.1 are installed in accordance with the CPC and meet the applicable referenced standards.	CG-2	Note 6		
7	4.304.1	Outdoor potable water use in landscape areas comply with a local water efficient landscape or the current California DWR MWELO, whichever is more stringent.	CG-2	Note 7		
8	4.305.1	For new dwellings where disinfected tertiary recycled water is available, installation of recycled water supply system is required per CPC chapter 15.	CG-2	Note 8		

			APPLICANT TO COMPLETE Plan Check Review Data		Installer or Designer Verification	
ITEM #	CALGreen CODE SECTION	REQUIREMENT	REFERENCE SHEET	Note or Detail No.	Date	Installer or Designer Signature
MATERIAL CONSERVATION & RESOURCE EFFICIENCY: MANDATORY REQUIREMENTS						
9	4.406.1	Annular spaces around pipes, electric cables, conduits or other openings in plates at exterior walls are protected against the passage of rodents by closing such openings with cement mortar, concrete masonry or similar method acceptable to the County of Santa Clara.	CG-2	Note 9		
10	4.408.1	Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste. Submit either a Construction Waste management plan (CALGreen 4.408.2) or Utilize a waste management company (CALGreen 4.408.3).	CG-2	Note 10		
11	4.408.5	Documentation is provided to County of Santa Clara which demonstrates compliance with CALGreen sections 4.408.2 or 4.408.3.	CG-1 CG-2	Construction Waste Management Forms Note 11		
12	4.410.1	An operation and maintenance manual is placed in the building at the time of final inspection.	CG-2	Note 12		
ENVIRONMENTAL QUALITY: MANDATORY REQUIREMENTS						
13	4.503.1	Any installed gas fireplace is a direct-vent sealed-combustion type. Any installed woodstove or pellet stove comply with US EPA Phase II emission limits where applicable.	CG-2	Note 13		
14	4.504.1	Duct openings and other related air distribution component openings are covered during construction until final startup of the HVAC equipment.	CG-2	Note 14		
15	4.504.2.1	Adhesives, sealants and caulks are compliant with VOC and other toxic compound limits.	CG-1 CG-2	Table 4.504.1 Table 4.504.2 Note 15		
16	4.504.2.2	Architectural paints and coatings are compliant with VOC limits.	CG-1 CG-2	Table 4.504.3 Note 16		
17	4.504.2.3	Aerosol paints and coatings are compliant with product weighted MIR limits for ROC and other toxic compounds.	CG-2	Note 17		
18	4.504.2.4	Documentation are provided to the County of Santa Clara to verify that compliant VOC limit finish materials have been used.	CG-2	Note 18		
19	4.504.3	Carpet and carpet systems meet the applicable testing and product requirements.	CG-1 CG-2	Table 4.504.1 Note 19		
20	4.504.4	80 percent of floor area receiving resilient flooring comply with applicable standards.	CG-2	Note 20		
21	4.504.5	Hardwood plywood, particleboard and medium density fiberboard composite wood meet formaldehyde limits.	CG-1 CG-2	Table 4.504.5 Note 21		

			APPLICANT TO COMPLETE Plan Check Review Data		Installer or Designer Verification	
ITEM #	CALGreen CODE SECTION	REQUIREMENT	REFERENCE SHEET	Note or Detail No.	Date	Installer or Designer Signature
ENVIRONMENTAL QUALITY: MANDATORY REQUIREMENTS (Continued)						
22	4.504.5.1	Documentation is provided to the County of Santa Clara to verify composite wood meets applicable formaldehyde limits.	CG-2	Note 22		
23	4.505.2	Vapor retarder and capillary break is installed at slab-on-grade foundations.	CG-2	Note 23		
24	4.505.3	Moisture content of building materials used in wall and floor framing do not exceed 19% prior to enclosure and is checked before enclosure. Insulation products are dry prior to enclosure.	CG-2	Note 24		
25	4.506.1	Each bathroom is mechanically ventilated and comply with applicable requirements.	CG-2	Note 25		
26	4.507.2	Heating and air-conditioning systems are sized, designed, and equipment is selected by using one of the methods listed.	CG-2	Note 26		
INSTALLER AND SPECIAL INSPECTOR QUALIFICATIONS: MANDATORY REQUIREMENTS						
27	702.1	HVAC system installers are trained and certified in the proper installation of HVAC systems.	CG-2	Note 27		
28	702.2	If required by County of Santa Clara, owner or owner's agent shall employ special inspector who are qualified and able to demonstrate competence in the discipline they are inspecting.	CG-2	Note 28		
29	703.1	Documentation used to show compliance with this code may include construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to County of Santa Clara which show substantial conformance.	CG-2	Note 29		

TABLE 4.504.5
FORMALDEHYDE LIMITS[1]
Maximum Formaldehyde Emissions in Parts per Million

PRODUCT	CURRENT LIMIT
Hardwood plywood veneer core	0.05
Hardwood plywood composite core	0.05
Particleboard	0.09
Medium density fiberboard	0.11
Thin medium density fiberboard[2]	0.13

1. Values in this table are derived from those specified by the California Air Resources Board, Air Toxics Control Measure for Composite Wood as tested in accordance with ASTM E1333. For additional information, see *California Code of Regulations*, Title 17, Sections 93120 through 93120.12.
2. Thin medium density fiberboard has a maximum thickness of $^5/_{16}$ inch (8 mm).

TABLE 4.504.1
ADHESIVE VOC LIMIT[1, 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 adhesive	100
Rubber floor adhesives	60
Subfloor adhesives	50
Ceramic tile adhesives	65
VCT and asphalt tile adhesives	50
Drywall and panel adhesives	50
Cove base adhesives	50
Multipurpose construction adhesives	70
Structural glazing adhesives	100
Single-ply roof membrane adhesives	250
Other adhesives not specifically listed	50
SPECIALTY APPLICATIONS	
PVC welding	510
CPVC welding	490
ABS welding	325
Plastic cement welding	250
Adhesive primer for plastic	550
Contact adhesive	80
Special purpose contact adhesive	250
Structural wood member adhesive	140
Top and 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 Nonporous Porous	 250 775
Modified bituminous	500
Marine deck	760
Other	750

TABLE 4.504.3
VOC CONTENT LIMITS FOR ARCHITECTURAL COATINGS[2, 3]
Grams of VOC per Liter of Coating,
Less Water and Less Exempt Compounds

COATING CATEGORY	VOC LIMIT
Flat coatings	50
Nonflat coatings	100
Nonflat-high gloss coatings	150
SPECIALTY COATINGS	
Aluminum roof coatings	400
Basement specialty coatings	400
Bituminous roof coatings	50
Bituminous roof primers	350
Bond breakers	350
Concrete curing compounds	350
Concrete/masonry sealers	100
Driveway sealers	50
Dry fog coatings	150
Faux finishing coatings	350
Fire resistive coatings	350
Floor coatings	100
Form-release compounds	250
Graphic arts coatings (sign paints)	500
High temperature coatings	420
Industrial maintenance coatings	250
Low solids coatings[1]	120
Magnesite cement coatings	450
Mastic texture coatings	100
Metallic pigmented coatings	500
Multicolor coatings	250
Pretreatment wash primers	420
Primers, sealers, and undercoaters	100
Reactive penetrating sealers	350
Recycled coatings	250
Roof coatings	50
Rust preventative coatings	250
Shellacs Clear Opaque	 730 550
Specialty primers, sealers and undercoaters	100
Stains	250
Stone consolidants	450
Swimming pool coatings	340
Traffic marking coatings	100
Tub and 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 and including 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, February 1, 2008. More information is available from the Air Resources Board.

Construction Waste Management (CWM) Plan

Fill out the form including diversion rate and facility names and addresses

Project Name: ______________________________

Job #: ______________________________

Project Manager: ______________________________

Waste Hauling Company: ______________________________

Contact Name: ______________________________

Legend:
- Hauling Company
- Sorting Facility Name and Location
- Disposal Service Company

All Subcontractors shall comply with the project's Construction Waste Management Plan.
All Subcontractor foremen shall sign the CWM Plan Acknowledgment Sheet.

Subcontractors who fail to comply with the Waste Management Plan will be subject to backcharges or withholding of payment, as deemed appropriate. For instance, Subcontractors who contaminate debris boxes that have been designated for a single material type will be subject to backcharge or withheld payment, as deemed appropriate.

1. The project's overall rate of waste diversion will be ____ %.
2. This project shall generate the least amount of waste possible by planning and ordering carefully, following all proper storage and handling procedures to reduce broken and damaged materials and reusing materials whenever possible. The majority of the waste that is generated on this jobsite will be diverted from the landfill and recycled for other use.
3. Spreadsheet 1, enclosed, identifies the waste materials that will be generated on this project, the diversion strategy for each waste type and the anticipated diversion rate.
4. Waste prevention and recycling activities will be discussed at the beginning of weekly subcontractor meetings. As each new subcontractor comes on-site, the WMP Coordinator will present him/her with a copy of the CWM Plan and provide a tour of the jobsite to identify materials to be salvaged and the procedures for handling jobsite debris. All Subcontractor foremen will acknowledge in writing that they have read and will abide by the CWM Plan. Subcontractor Acknowledgment Sheet enclosed. The CWM Plan will be posted at the jobsite trailer.
5. Salvage: Excess materials that cannot be used in the project, nor returned to the vendor, will be offered to site workers, the owner, or donated to charity if feasible.
6. ____________________ will provide a commingled drop box at the jobsite for most of the construction waste. These commingled drop boxes will be taken to ______________________________. The average diversion rate for commingled waste will be ____%. As site conditions permit, additional drop boxes will be used for particular phases of construction (e.g., concrete and wood waste) to ensure the highest waste diversion rate possible.
7. In the event that the waste diversion rate achievable via the strategy described in (6) above, is projected to be lower than what is required, then a strategy of source-separated waste diversion and/or waste stream reduction will be implemented. Source separated waste refers to jobsite waste that is not commingled but is instead allocated to a debris box designated for a single material type, such as clean wood or metal.

   Notes:
   1. Waste stream reduction refers to efforts taken by the builder to reduce the amount of waste generated by the project to below four (4) pounds per square foot of building area.
   2. When using waste stream reduction measures, the gross weight of the product is subtracted from a base weight of four (4) pounds per square foot of building area. This reduction is considered additional diversion and can be used in the waste reduction percentage calculations.
8. ____________________ will track and calculate the quantity (in tons) of all waste leaving the project and calculate the waste diversion rate for the project. ____________________ will provide Project Manager with an updated monthly report on gross weight hauled and the waste diversion rate being achieved on the project. ____________________ monthly report will track separately the gross weights and diversion rates for commingled debris and for each source-separated waste stream leaving the project. In the event that ____________________ does not service any or all of the debris boxes on the project, the ____________________ will work with the responsible parties to track the material type and weight (in tons) in such debris boxes in order to determine waste diversion rates for these materials.
9. In the event that Subcontractors furnish their own debris boxes as part of their scope of work, such Subcontractors shall not be excluded from complying with the CWM Plan and will provide ____________________ weight and waste diversion data for their debris boxes.
10. In the event that site use constraints (such as limited space) restrict the number of debris boxes that can be used for collection of designated waste the project Superintendent will, as deemed appropriate, allocate specific areas onsite where individual material types are to be consolidated. These collection points are not to be contaminated with non-designated waste types.
11. Debris from jobsite office and meeting rooms will be collected by ______________________________ . ____________________ ____________________ will, at a minimum, recycle office paper, plastic, metal and cardboard.

Construction Waste Management (CWM) Worksheet

Project Name: ______________________________

Job Number: ______________________________

Project Manager: ______________________________

Waste Hauling Company: ______________________________

Construction Waste Management (CWM) Plan

WASTE MATERIAL TYPE	DIVERSION METHOD: COMMINGLED AND SORTED OFF SITE	DIVERSION METHOD: SOURCE SEPARATED ON SITE	PROJECTED DIVERSION RATE
Asphalt			
Concrete			
Shotcrete			
Metals			
Wood			
Rigid insulation			
Fiberglass insulation			
Acoustic ceiling tile			
Gypsum drywall			
Carpet/carpet pad			
Plastic pipe			
Plastic buckets			
Plastic			
Hardiplank siding and boards			
Glass			
Cardboard			
Pallets			
Job office trash, paper, glass & plastic bottles, cans, plastic			
Alkaline and rechargeable batteries, toner cartridges, and electronic devices			
Other:			
Other:			
Other:			
Other:			

Construction Waste Management (CWM) Acknowledgment

Note: This sample form may be used to assist in documenting compliance with the waste management plan.

Project Name: ______________________________

Job Number: ______________________________

Project Manager: ______________________________

Waste Hauling Company: ______________________________

CWM Plan Acknowledgment

The Foreman for each new Subcontractor that comes on site is to receive a copy of the Construction Waste Management Plan and complete this Acknowledgment Form.

I have read the Waste Management Plan for the project; I understand the goals of this plan and agree to follow the procedures described in this plan.

DATE	SUBCONTRACTOR COMPANY NAME	FOREMAN NAME	SIGNATURE

Project Information

CALGreen One or Two Family Residential Project Mandatory Requirements
County of Santa Clara

CG-1

03/30/2020

CALGREEN 2019 NOTES – MANDATORY REQUIREMENTS:

1. 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. SEE CALGREEN 4.106.2 FOR FURTHER DETAILS.

2. CONSTRUCTION PLANS SHALL INDICATE HOW THE SITE GRADING OR DRAINAGE SYSTEM WILL MANAGE ALL SURFACE WATER FLOWS TO KEEP WATER FROM ENTERING BUILDINGS. SWALES, WATER COLLECTION AND DISPOSAL SYSTEMS, FRENCH DRAINS, WATER RETENTION GARDENS, AND OTHER MEASURES CAN BE USED. EXCEPTION: ADDITIONS AND ALTERATIONS NOT ALTERING THE DRAINAGE PATH.

3. NEW CONSTRUCTION SHALL COMPLY WITH CALGREEN SECTION 4.106.4.1 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:

A. WHERE COUNTY OF SANTA CLARA HAS DETERMINED EV CHARGING AND INFRASTRUCTURE ARE NOT FEASIBLE.
B. ACCESSORY DWELLING UNITS (ADU) AND JUNIOR ACCESSORY DWELLING UNITS (JADU) WITHOUT ADDITIONAL PARKING FACILITIES.

4. 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 MINIMUM DEDICATED BRANCH CIRCUIT AND SPACE(S) RESERVED TO PERMIT INSTALLATION OF A BRANCH CIRCUIT OVERCURRENT PROTECTIVE DEVICE. THE RACEWAY TERMINATION LOCATION SHALL BE PERMANENTLY AND VISIBLY MARKED AS "EV CAPABLE".

THE SERVICE PANEL OR SUB-PANEL CIRCUIT DIRECTORY SHALL IDENTIFY THE OVER CURRENT 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".

5. ALL NONCOMPLIANT PLUMBING FIXTURES 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 BUILDING AND INSPECTION DIVISION. 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.

A. 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.
B. 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.
C. WHEN A SHOWER IS SERVED BY MORE THAN ONE SHOWERHEAD, THE COMBINED FLOW RATE OF ALL SHOWER-HEADS AND/OR OTHER SHOWER OUTLETS CONTROLLED BY A SINGLE VALVE SHALL NOT EXCEED 1.8 GALLONS PER MINUTE AT 80 PSI, OR THE SHOWER SHALL BE DESIGNED TO ALLOW ONLY ONE SHOWER OUTLET TO BE IN OPERATION AT A TIME. A HAND-HELD SHOWER SHALL BE CONSIDERED A SHOWERHEAD.
D. 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.
E. 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.

6. 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.

7. 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.

8. NEWLY CONSTRUCTED RESIDENTIAL DEVELOPMENTS, WHERE DISINFECTED TERTIARY RECYCLED WATER IS AVAILABLE FROM A MUNICIPAL SOURCE TO A CONSTRUCTION SITE, MAY BE REQUIRED TO HAVE RECYCLED WATER SUPPLY SYSTEMS INSTALLED, ALLOWING THE USE OF RECYCLED WATER FOR RESIDENTIAL LANDSCAPE IRRIGATION SYSTEMS. SEE CHAPTER 15 OF THE CALIFORNIA PLUMBING CODE.

9. 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 COUNTY OF SANTA CLARA.

10. RECYCLE AND/OR SALVAGE FOR REUSE A MINIMUM OF 65 PERCENT OF THE NONHAZARDOUS CONSTRUCTION AND DEMOLITION WASTE IN ACCORDANCE WITH CALGREEN SECTION 4.408.2 OR 4.408.3.

A. A CONSTRUCTION WASTE MANAGEMENT PLAN IS PROVIDED. THE CONSTRUCTION WASTE MANAGEMENT PLAN SHALL BE UPDATED AS NECESSARY AND SHALL BE AVAILABLE DURING CONSTRUCTION FOR EXAMINATION BY THE COUNTY OF SANTA CLARA.
   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 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.
B. A WASTE MANAGEMENT COMPANY CAN BE UTILIZED IF APPROVED BY THE COUNTY OF SANTA CLARA. SEE CALGREEN 4.408.3 FOR FURTHER .DETAILS

11. DOCUMENTATION SHALL BE PROVIDED TO THE COUNTY OF SANTA CLARA WHICH DEMONSTRATES COMPLIANCE WITH NOTE 10.

12. AT THE TIME OF FINAL INSPECTION, A MANUAL, COMPACT DISC, WEB-BASED REFERENCE OR OTHER MEDIA ACCEPTABLE TO THE COUNTY OF SANTA CLARA INCLUDES ALL OF THE REQUIRED INFORMATION, SHALL BE PLACED IN THE BUILDING. SEE CALGREEN 4.410.1 FOR DETAILS OF REQUIRED INFORMATION.

13. 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 SANTA CLARA COUNTY ORDINANCES AND BAY AREA AIR QUALITY MANAGEMENT DISTRICT REGULATION 6, RULE 3.

14. 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 COUNTY OF SANTA CLARA TO REDUCE THE AMOUNT OF WATER, DUST AND DEBRIS, WHICH MAY ENTER THE SYSTEM.

15. ADHESIVES, SEALANTS AND CAULKS USED ON THE PROJECT SHALL MEET THE REQUIREMENTS OF CALGREEN TABLES 4.504.1 OR 4.504.2 AS REPRODUCED ON SHEET CG-1. SUCH PRODUCTS ALSO SHALL COMPLY WITH THE RULE 1168 PROHIBITION ON THE USE OF CERTAIN TOXIC COMPOUNDS (CHLOROFORM, ETHYLENE DICHLORIDE, METHYLENE CHLORIDE, PERCHLOROETHYLENE AND TRICHLOROETHYLENE), EXCEPT FOR AEROSOL PRODUCTS, AS SPECIFIED BELOW.

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.

16. ARCHITECTURAL PAINTS AND COATINGS SHALL COMPLY WITH VOC LIMITS AS SHOWN IN TABLE 4.504.3 SHEET CG-1. 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 NON-FLAT-HIGH GLOSS VOC LIMIT IN TABLE 4.504.3, SHEET CG-1 SHALL APPLY.

17. 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.

18. VERIFICATION OF COMPLIANCE WITH NOTES 15, 16, AND 17 SHALL BE PROVIDED AT THE REQUEST OF THE COUNTY OF SANTA CLARA.

19. ALL CARPET INSTALLED IN THE BUILDING INTERIOR SHALL MEET THE TESTING AND PRODUCT REQUIREMENTS OF ONE OF THE FOLLOWING:

A. CARPET AND RUG INSTITUTE'S GREEN LABEL PLUS PROGRAM.
B. CALIFORNIA DEPARTMENT OF PUBLIC HEALTH, "STANDARD METHOD FOR THE TESTING AND EVALUATION OF VOLATILE ORGANIC CHEMICAL EMISSIONS FROM INDOOR SOURCES USING ENVIRONMENTAL CHAMBERS," VERSION 1.1, FEBRUARY 2010 (ALSO KNOWN AS SPECIFICATION 01350.)
C. NSF/ANSI 140 AT THE GOLD LEVEL.
D. SCIENTIFIC CERTIFICATIONS SYSTEMS INDOOR ADVANTAGE GOLD.

ALL CARPET CUSHION INSTALLED IN THE BUILDING INTERIOR SHALL MEET THE REQUIREMENTS OF THE CARPET AND RUG INSTITUTE'S GREEN LABEL PROGRAM. ALL CARPET ADHESIVE SHALL MEET THE REQUIREMENTS OF TABLE 4.504.1, SHEET CG-1.

20. WHERE RESILIENT FLOORING IS INSTALLED, AT LEAST 80 PERCENT OF FLOOR AREA RECEIVING RESILIENT FLOORING SHALL COMPLY WITH ONE OR MORE OF THE FOLLOWING:

A. PRODUCTS COMPLIANT WITH 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 1.1, FEBRUARY 2010 (ALSO KNOWN AS SPECIFICATION 01350), CERTIFIED AS A CHPS LOW-EMITTING MATERIAL IN THE COLLABORATIVE FOR HIGH PERFORMANCE SCHOOLS (CHPS) HIGH PERFORMANCE PRODUCTS DATABASE.
B. PRODUCTS CERTIFIED UNDER UL GREENGUARD GOLD (FORMERLY THE GREENGUARD CHILDREN & SCHOOLS PROGRAM).
C. CERTIFICATION UNDER THE RESILIENT FLOOR COVERING INSTITUTE (RFCI) FLOORSCORE PROGRAM.
D. MEET 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 1.1, FEBRUARY 2010 (ALSO KNOWN AS SPECIFICATION 01350).

21. HARDWOOD PLYWOOD, PARTICLEBOARD AND MEDIUM DENSITY FIBERBOARD COMPOSITE WOOD PRODUCTS USED ON THE INTERIOR OR EXTERIOR OF THE BUILDING SHALL MEET THE REQUIREMENTS FOR FORMALDEHYDE AS SPECIFIED IN TABLE 4.504.5 SHEET CG-1.

22. VERIFICATION OF COMPLIANCE WITH NOTE 21 SHALL BE PROVIDED AT THE REQUEST OF THE COUNTY OF SANTA CLARA.

23. CONCRETE SLAB FOUNDATIONS REQUIRED TO HAVE A VAPOR RETARDER BY CBC, CHAPTER 19 OR CONCRETE SLAB-ON-GROUND FLOORS REQUIRED TO HAVE A VAPOR RETARDER BY CRC CHAPTER 5, SHALL COMPLY WITH FOLLOWING REQUIREMENT:

A CAPILLARY BREAK SHALL BE INSTALLED IN COMPLIANCE WITH AT LEAST ONE OF THE FOLLOWING:

A. A 4-INCH-THICK BASE OF 1/2 INCH OR LARGER CLEAN AGGREGATE SHALL BE PROVIDED WITH A VAPOR RETARDER IN DIRECT CONTACT WITH CONCRETE AND A CONCRETE MIX DESIGN, WHICH WILL ADDRESS BLEEDING, SHRINKAGE, AND CURLING, SHALL BE USED.
B. A SLAB DESIGN SPECIFIED BY THE LICENSED DESIGN PROFESSIONAL.

24. 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. 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.

25. EACH BATHROOM SHALL BE MECHANICALLY VENTILATED AND SHALL COMPLY WITH THE FOLLOWING:

A. FANS SHALL BE ENERGY STAR COMPLIANT AND BE DUCTED TO TERMINATE OUTSIDE THE BUILDING.
B. UNLESS FUNCTIONING AS A COMPONENT OF A WHOLE HOUSE VENTILATION SYSTEM, FANS MUST BE CONTROLLED BY A HUMIDITY CONTROL.
   1. HUMIDITY CONTROLS SHALL BE CAPABLE OF ADJUSTMENT BETWEEN A RELATIVE HUMIDITY RANGE OF ≤ 50 PERCENT TO A MAXIMUM OF 80 PERCENT. A HUMIDITY CONTROL MAY UTILIZE MANUAL OR AUTOMATIC MEANS OF ADJUSTMENT.
   2. A HUMIDITY CONTROL MAY BE A SEPARATE COMPONENT TO THE EXHAUST FAN AND IS NOT REQUIRED TO BE INTEGRAL.

26. HEATING AND AIR-CONDITIONING SYSTEMS SHALL BE SIZED, DESIGNED AND HAVE THEIR EQUIPMENT SELECTED USING THE FOLLOWING METHODS:

A. THE HEAT LOSS AND HEAT GAIN IS ESTABLISHED ACCORDING TO ANSI/ACCA 2 MANUAL J—2016 (RESIDENTIAL LOAD CALCULATION), ASHRAE HANDBOOKS OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.
B. DUCT SYSTEMS ARE SIZED ACCORDING TO ANSI/ACCA 1 MANUAL D—2016 (RESIDENTIAL DUCT SYSTEMS), ASHRAE HANDBOOKS OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.
C. SELECT HEATING AND COOLING EQUIPMENT ACCORDING TO ANSI/ACCA 3 MANUAL S—2014 (RESIDENTIAL EQUIPMENT SELECTION) OR OTHER EQUIVALENT DESIGN SOFTWARE OR METHODS.

27. 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.

28. IF REQUIRED BY THE COUNTY OF SANTA CLARA, 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 COUNTY OF SANTA CLARA FOR THE PARTICULAR TYPE OF INSPECTION OR TASK TO BE PERFORMED. SPECIAL INSPECTORS SHALL BE INDEPENDENT ENTITIES WITH NO FINANCIAL INTEREST IN THE MATERIALS OR THE PROJECT THEY ARE INSPECTING FOR COMPLIANCE WITH THIS CODE.

29. 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 COUNTY OF SANTA CLARA 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 IN THE APPLICATION CHECKLIST.

Project Information

CALGreen One or Two Family Residential Project Mandatory Requirements
County of Santa Clara

CG-2

03/30/2020

COUNTY OF SANTA CLARA
General Construction Specifications

GENERAL CONDITIONS

1. ALL CONSTRUCTION WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE SOILS AND/OR GEOTECHNICAL REPORT PREPARED BY ENVIRONMENTAL HEALTH CONSULTING, P.O. BOX 2, REDWOOD CITY, CA 94064, TEL 650 293-1045, PROJECT NO. SR 860149 AND DATED MAY 7, 2019, THIS REPORT IS SUPPLEMENTED BY: 1) THESE PLANS AND SPECIFICATIONS, 2) THE COUNTY OF SANTA CLARA STANDARD DETAILS. 3) THE COUNTY OF SANTA CLARA STANDARD SPECS, 4) STATE OF CALIFORNIA STANDARD DETAILS, 5) STATE OF CALIFORNIA STANDARD SPECIFICATIONS. IN THE EVENT OF CONFLICT THE FORMER SHALL TAKE PRECEDENCE OVER THE LATTER. THE PERFORMANCE AND COMPLETION OF ALL WORK MUST BE TO THE SATISFACTION OF THE COUNTY.
2. DEVELOPER IS RESPONSIBLE FOR INSTALLATION OF THE IMPROVEMENTS SHOWN ON THESE PLANS AND HE OR HIS SUCCESSOR PROPERTY OWNERS ARE RESPONSIBLE FOR THEIR CONTINUED MAINTENANCE.
3. DEVELOPER SHALL BE RESPONSIBLE FOR CORRECTION OF ANY ERRORS OR OMISSIONS IN THESE PLANS. THE COUNTY SHALL BE AUTHORIZED TO REQUIRE DISCONTINUANCE OF ANY WORK AND SUCH CORRECTION AND MODIFICATION OF PLANS AS MAY BE NECESSARY TO COMPLY WITH COUNTY STANDARDS OR CONDITIONS OF DEVELOPMENT APPROVAL.
4. DEVELOPER SHALL OBTAIN ENCROACHMENT PERMITS FROM THE SANTA CLARA VALLEY WATER DISTRICT AND CALIFORNIA DEPARTMENT OF TRANSPORTATION WHERE NEEDED. COPIES OF THESE PERMITS SHALL BE KEPT AT THE JOB SITE FOR REVIEW BY THE COUNTY'S INSPECTOR.
5. DEVELOPER SHALL REMOVE OR TRIM ALL TREES TO PROVIDE AN UNOBSTRUCTED FIFTEEN (15) FOOT VERTICAL CLEARANCE FOR ROADWAY AREA.
6. THIS PLAN AUTHORIZES THE REMOVAL OF ONLY THOSE TREES WITH TRUNK DIAMETERS GREATER THAN 12 INCHES MEASURED 4.5 FEET ABOVE THE GROUND THAT ARE SHOWN TO BE REMOVED UNLESS AN AMENDED PLAN IS APPROVED OR A SEPARATE TREE REMOVAL PERMIT IS OBTAINED FROM THE PLANNING OFFICE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT REMOVAL OF ADDITIONAL TREES HAS BEEN PERMITTED.
7. DEVELOPER SHALL PROVIDE ADEQUATE DUST CONTROL AS REQUIRED BY THE COUNTY INSPECTOR.
8. ALL PERSONS MUST COMPLY WITH SECTION 4442 OF THE PUBLIC RESOURCES CODE AND SECTION 13005 OF THE HEALTH AND SAFETY CODE RELATING TO THE USE OF SPARK ARRESTERS.
9. UPON DISCOVERING OR UNEARTHING ANY BURIAL SITE AS EVIDENCED BY HUMAN SKELETAL REMAINS OR ARTIFACTS, THE PERSON MAKING SUCH DISCOVERY SHALL IMMEDIATELY NOTIFY THE COUNTY CORONER AT (4008) 454-2520 AND LAND DEVELOPMENT ENGINEERING OFFICE AT (408) 299-5730. NO FURTHER DISTURBANCE OF THE SITE MAY BE MADE EXCEPT AS AUTHORIZED BY THE LAND DEVELOPMENT OFFICE IN ACCORD WITH PROVISIONS OF THIS ORDINANCE (COUNTY ORDINANCE CODE SECTION B6-18).
10. THESE PLANS ARE FOR THE WORK DESCRIBED IN THE SCOPE OF WORK ONLY. A SEPARATE PERMIT WILL BE REQUIRED FOR THE SEPTIC LINE CONSTRUCTION.
11. ANY DEVIATION FROM THESE APPROVED PLANS SHALL BE RE-APPROVED IN WRITING BY THE COUNTY ENGINEER PRIOR TO CONSTRUCTION.

CONSTRUCTION STAKING

1. THE DEVELOPER'S ENGINEER IS RESPONSIBLE FOR THE INITIAL PLACEMENT AND REPLACEMENT OF CONSTRUCTION GRADE STAKES. THE STAKES ARE TO BE ADEQUATELY IDENTIFIED, LOCATED, STABILIZED, ETC. FOR THE CONVENIENCE OF CONTRACTORS. LATERAL OFFSET OF STAKES SET FOR CURBS AND GUTTERS SHALL NOT EXCEED 2 1/2 FEET FROM BACK OF CURB.
2. ANY PROPERTY LINE STAKES OR ROAD MONUMENTS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY DEVELOPER'S ENGINEER AND LICENSED LAND SURVEYOR.
3. PROPERTY LINE STAKING MUST BE PERFORMED BY THE PROJECT ENGINEER OR LAND SURVEYOR TO ESTABLISH OR RE-ESTABLISH THE PROJECT BOUNDARY AND SHALL BE INSPECTED BY THE COUNTY INSPECTOR PRIOR TO THE BEGINNING OF THE WORK.
4. PROPER CONSTRUCTION STAKES SHALL BE SET IN THE FIELD BY THE PROJECT ENGINEER OR LAND SURVEYOR AND VERIFIED BY THE COUNTY INSPECTOR PRIOR TO THE COMMENCEMENT OF GRADING.

CONSTRUCTION INSPECTION

1. CONTRACTOR SHALL NOTIFY PERMIT INSPECTION UNIT, SANTA CLARA COUNTY PRIOR TO COMMENCING WORK AND FOR FINAL INSPECTION OF WORK AND SITE.
2. THE COUNTY REQUIRES A MINIMUM OF 24 HOURS ADVANCE NOTICE FOR GENERAL INSPECTION, 48 HOURS FOR ASPHALT CONCRETE INSPECTION.
3. INSPECTION BY SANTA CLARA COUNTY SHALL BE LIMITED TO INSPECTION OF MATERIALS AND PROCESSES OF CONSTRUCTION TO OBSERVE THEIR COMPLIANCE WITH PLANS & SPECIFICATIONS BUT DOES NOT INCLUDE RESPONSIBILITY FOR THE SUPERINTENDENT OF CONSTRUCTION, SITE CONDITIONS, EQUIPMENT OR PERSONNEL. CONTRACTOR SHALL NOTIFY THE COUNTY LAND DEVELOPMENT INSPECTOR AT PHONE (408) 299-6868 AT LEAST 24 HOURS PRIOR TO COMMENCING WORK AND FOR FINAL INSPECTION OF WORK AND SITE.
4. DEVELOPER AND/OR HIS AUTHORIZED REPRESENTATIVE MUST SUBMIT WRITTEN REQUEST FOR FINAL INSPECTION AND ACCEPTANCE. SAID REQUEST SHALL BE DIRECTED TO THE INSPECTION OFFICE NOTED ON THE PERMIT FORM.
5. THE CONTRACTOR SHALL PROVIDE TO THE COUNTY CONSTRUCTION INSPECTOR WITH PAD ELEVATION AND LOCATION CERTIFICATES, PREPARED BY THE PROJECT ENGINEER OR LAND SURVEYOR, PRIOR TO COMMENCEMENT OF THE BUILDING FOUNDATION.

SITE PREPARATION (CLEARING AND GRUBBING)

1. EXISTING TREES AUTHORIZED FOR REMOVAL, ROOTS, AND FOREIGN MATERIAL IN AREAS TO BE IMPROVED WILL BE REMOVED TO AN AUTHORIZED DISPOSAL SITE AS FOLLOWS:
   A) TO A MINIMUM DEPTH OF TWO FEET BELOW THE FINISHED GRADE OF PROPOSED ROADWAYS (EITHER PRIVATE OR TO BE DEDICATED TO PUBLIC USE)
   B) FROM AREAS AFFECTED BY THE PROPOSED GRADING EXCEPT WHERE NOTED ON THE PLANS.
2. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO MOVE OR RELOCATE UTILITY POLES AND OTHER OBSTRUCTIONS IN THE WAY OF CONSTRUCTION.

UTILITY LOCATION, TRENCHING & BACKFILL

1. CONTRACTOR SHALL NOTIFY USA (UNDERGROUND SERVICE ALERT) AT 1-800-277-2600 A MINIMUM OF 24 HOURS BEFORE BEGINNING UNDERGROUND WORK FOR VERIFICATION OF THE LOCATION OF UNDERGROUND UTILITIES.
2. ACCURATE VERIFICATION AS TO SIZE, LOCATION, AND DEPTH OF EXISTING UNDERGROUND CONDUITS OR FACILITIES SHALL BE THE INDIVIDUAL CONTRACTORS RESPONSIBILITY. PLAN LOCATIONS ARE APPROXIMATE AND FOR GENERAL INFORMATION ONLY.
3. ALL UNDERGROUND INSTALLATIONS SHALL BE IN PLACE AND THE TRENCH BACKFILLED AND COMPACTED BEFORE PLACING AGGREGATE BASE MATERIAL OR SURFACE STRUCTURES. SURFACING MAY BE DONE IF THE UTILITY COMPANY CONCERNED INDICATES BY LETTER THAT IT WILL BORE. UNLESS SPECIFICALLY AUTHORIZED BY THE COUNTY, GAS AND WATER MAINS SHALL BE INSTALLED OUTSIDE THE PAVED AREAS.
4. TRENCH BACKFILL IN EXISTING PAVEMENT AREAS SHALL BE SAND MATERIAL IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE SPECIFICATIONS. THE STRUCTURAL SECTION FOR TRENCH REPLACEMENT SHALL CONSIST OF NOT LESS THAN 12 INCHES OF APPROVED AGGREGATE BASE MATERIAL COMPACTED TO A RELATIVE COMPACTION OF AT LEAST 95% AND 4 INCHES OF HOT ASPHALT CONCRETE PLACED IN TWO LIFTS. TRENCH RESTORATION FOR HIGHER TYPE PAVEMENTS SHALL BE MADE IN KIND OR AS DIRECTED BY THE COUNTY.
5. TRENCH BACKFILL IN NEW CONSTRUCTION AREAS SHALL BE SAND MATERIAL COMPACTED TO A RELATIVE COMPACTION OF AT LEAST 90%. THE REQUIREMENT FOR SELECT MATERIAL MAY BE WAIVED BY COUNTY IF THE NATIVE SOIL IS SUITABLE FOR USE AS TRENCH BACKFILL BUT THE COMPACTION REQUIREMENTS WILL NOT BE THEREBY WAIVED.
6. BACKFILL AND TRENCH RESTORATION REQUIREMENTS SHALL APPLY AS MINIMUM STANDARDS TO ALL UNDERGROUND FACILITIES INSTALLED BY OTHER FIRMS OR PUBLIC AGENCIES.

RETAINING WALLS

1. REINFORCED CONCRETE AND CONCRETE MASONRY UNIT RETAINING WALLS SHALL HAVE FOUNDATION AND REINFORCEMENT INSPECTED BY THE COUNTY ENGINEERING INSPECTOR AND ENGINEER OF RECORD PRIOR TO POURING THE FOUNDATION AND FORMING THE WALL.
2. SEGMENTAL BLOCK RETAINING WALLS SHALL HAVE FOUNDATION AND REINFORCEMENT INSPECTED BY THE COUNTY ENGINEERING INSPECTOR.

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GRADING

1. EXCAVATED MATERIAL SHALL BE PLACED IN THE FILL AREAS DESIGNATED OR SHALL BE HAULED AWAY FROM THE SITE TO A COUNTY APPROVED DISPOSAL SITE. WHERE FILL MATERIAL IS TO BE PLACED ON NATURAL GROUND, IS SHALL BE STRIPPED OF ALL VEGETATION. TO ACHIEVE A PROPER BOND WITH THE FILL MATERIAL, THE SURFACE OF THE GROUND SHALL BE SCARIFIED TO DEPTH OF 6" BEFORE FILL IS PLACED. WHERE NATURAL GROUND IS STEEPER THAN 5:1, IT SHALL BE BENCHED AND THE FILL KEYED IN TO ACHIEVE STABILITY. WHERE NEW FILL IS TO BE PLACED ON EXISTING FILL THE EXISTING FILL SHALL BE REMOVED UNTIL MATERIAL COMPACTED TO 90% RELATIVE COMPACTION IS EXPOSED. THEN THE NEW FILL MATERIAL SHALL BE PLACED AS PER THESE CONSTRUCTION NOTES. FILL MATERIAL SHALL BE PLACED IN UNIFORM LIFTS NOT EXCEEDING 6" IN UNCOMPACTED THICKNESS. BEFORE COMPACTION BEGINS, THE FILL SHALL BE BROUGHT TO A WATER CONTENT THAT WILL PERMIT PROPER COMPACTION BY EITHER 1) AERATING THE FILL IF IT IS TOO WET OR 2) MOISTENING THE FILL WITH WATER IF IT IS TOO DRY. EACH LIFT SHALL BE THOROUGHLY MIXED BEFORE COMPACTION TO ENSURE A UNIFORM DISTRIBUTION OF MOISTURE.
2. EXCESS CUT MATERIAL SHALL NOT BE SPREAD OR STOCKPILED ON THE SITE.
3. SURPLUS EARTH FILL MATERIAL SHALL BE PLACED IN A SINGLE (8" MAX) THICK LAYER COMPACTED TO WITHSTAND WEATHERING IN THE AREA(S) DELINEATED ON THE PLAN.
4. NO ORGANIC MATERIAL SHALL BE PLACED IN ANY FILL. NO TREES SHALL BE REMOVED OUTSIDE OF CUT, FILL OR ROADWAY AREAS.
5. THE UPPER 6" OF SUBGRADE BELOW DRIVEWAY ACCESS ROAD OR PARKING AREA SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY.
6. MAXIMUM CUT SLOPE SHALL BE 2 HORIZONTAL TO 1 VERTICAL. MAXIMUM FILL SLOPE SHALL BE 2 HORIZONTAL TO 1 VERTICAL.

EARTHWORK QUANTITIES

DESCRIPTION	EARTHWORK QTY ALL ALL			EARTHWORK QTY MINUS EXEMPT		MAXIMUM DEPTHS	
	CUT (–)	FILL (+)	EXEMPT	CUT (–)	FILL (+)	CUT (FT)	FILL (FT)
RESIDENCE	714 C.Y.	131 C.Y.	YES	---	---	-8.6 FT	10.0 FT
DRIVEWAY	28 C.Y.	490 C.Y.	NO	28 C.Y.	490 C.Y.	-3.5 FT	8.8 FT
FRONT STAIRS	28 C.Y.	408 C.Y.	NO	36 CY	294 CY	-0.3 FT	9.1 FT
TOTALS ALL:	787 C.Y.	983 C.Y.					
TOTALS MINUS EXEMPT:				64 C.Y.	784 C.Y.		
IMPORT/EXPORT:	55 C.Y.			720 C.Y.			

NOTE: FILL VOLUMES INCLUDE 20% SHRINKAGE.

EXCESS MATERIAL SHALL BE OFF HAULED TO A COUNTY APPROVED DUMP SITE.

7. NOTIFY SOILS ENGINEER TWO (2) DAYS PRIOR TO COMMENCEMENT OF ANY GRADING WORK TO COORDINATE THE WORK IN THE FIELD.
8. ALL MATERIALS FOR FILL SHOULD BE APPROVED BY THE SOILS ENGINEER BEFORE IT IS BROUGHT TO THE SITE.
9. THE UPPER 6" OF THE SUBGRADE SOIL SHALL BE SCARIFIED, MOISTURE CONDITIONED AND COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 95%
10. ALL AGGREGATE BASE MATERIAL SHALL BE COMPACTED TO A MINIMUM 95% RELATIVE COMPACTION.
11. THE GEOTECHNICAL PLAN REVIEW LETTER MUST BE REVIEWED AND APPROVED BY THE COUNTY GEOLOGIST PRIOR TO FINAL APPROVAL BY THE COUNTY ENGINEER FOR BUILDING OCCUPANCY.
12. THE PROJECT GEOTECHNICAL ENGINEER SHALL PERFORM COMPACTION TESTING AND PRESENT THE RESULTS TO THE COUNTY ENGINEERING INSPECTOR PRIOR TO THE CONSTRUCTION OF ANY PAVED AREA.
13. GRADING WORK BETWEEN OCTOBER 15TH AND APRIL 15TH IS AT THE DISCRETION OF THE SANTA CLARA COUNTY GRADING OFFICIAL.
14. TOTAL DISTURBED AREA FOR THE PROJECT ___________________________SF.
15. WDID NO.__________________________.
16. THE INSPECTOR MAY VERIFY THAT A VALID NOTICE OF INTENT (NOI) HAS BEEN ISSUED BY THE STATE AND THAT A CURRENT AND UP TO DATE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS AVAILABLE ON SITE.

TREE PROTECTION

1. FOR ALL TREES TO BE RETAINED WITH A CANOPY IN THE DEVELOPMENT AREA OR INTERFACES WITH THE LIMITS OF GRADING FOR ALL PROPOSED DEVELOPMENT ON SITE, THE TREES SHALL BE PROTECTED BY THE PLACEMENT OF RIGID TREE PROTECTIVE FENCING, CONSISTENT WITH THE COUNTY INTEGRATED LANDSCAPE GUIDELINES, AND INCLUDE THE FOLLOWING:
   A. FENCING SHOULD BE PLACED ALONG THE OUTSIDE EDGE OF THE DRIPLINE OF THE TREE OR GROVE OF TREES.
   B. THE FENCING SHALL BE MAINTAINED THROUGHOUT THE SITE CONSTRUCTION PERIOD AND SHALL BE INSPECTED PERIODICALLY FOR DAMAGE AND PROPER FUNCTION.
   C. FENCING SHALL BE REPAIRED, AS NECESSARY, TO PROVIDE A PHYSICAL BARRIER FROM CONSTRUCTION ACTIVITIES.
   D. SIGNAGE STATING, "WARNING- THIS FENCING SHALL NOT BE REMOVED WITHOUT PERMISSION FROM THE SANTA CLARA COUNTY PLANNING OFFICE (408) 299-5770. COUNTY OF SANTA CLARA TREE PROTECTION MEASURES MAY BE FOUND AT http://www.sccplanning.gov." SHALL BE PLACED ON THE TREE PROTECTIVE FENCING UNTIL FINAL OCCUPANCY.
2. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY, TREE PROTECTIVE FENCING SHALL BE SECURELY IN PLACED AND INSPECTED BY THE LAND DEVELOPMENT ENGINEERING INSPECTOR.
3. SEE EXISTING TREE PROTECTION DETAILS FOR MORE INFORMATION.

ACCESS ROADS AND DRIVEWAYS

1. DRIVEWAY LOCATIONS SHALL BE AS SHOWN ON THE IMPROVEMENT PLANS WITH CENTERLINE STATIONING. THE MINIMUM CONCRETE THICKNESS SHALL BE 6 INCHES THROUGHOUT (WITH A MAXIMUM APPROACH SLOPE OF 1 1/4 INCHES PER FOOT).
2. ALL DRIVEWAY OR COMMON ACCESS ROAD SECTIONS IN EXCESS OF 15 LONGITUDINAL SLOPE MUST BE PAVED WITH A MINIMUM 2-INCH ASPHALT LIFT OR FULL DEPTH CONCRETE LIFT PRIOR TO ANY COMBUSTIBLE FRAMING.
3. THE OWNER AND PRIME CONTRACTOR ARE RESPONSIBLE FOR MAINTAINING PROJECT SITE ACCESS AND NEIGHBORHOOD ACCESS FOR EMERGENCY VEHICLES AND LOCAL RESIDENTS.
4. ROADWAYS DESIGNATED AS NOT COUNTY MAINTAINED ROADS AS SHOWN ON THE PLAN WILL NOT BE ELIGIBLE FOR COUNTY MAINTENANCE UNTIL THE ROADWAYS ARE IMPROVED (AT NO COST TO THE COUNTY) TO THE PUBLIC MAINTENANCE ROAD STANDARDS APPROVED BY THE BOARD OF SUPERVISORS AND IN EFFECT AT SUCH TIME THAT THE ROADWAYS ARE CONSIDERED FOR ACCEPTANCE INTO THE COUNTY'S ROAD SYSTEM.
5. ALL WORK IN THE COUNTY ROAD RIGHT-OF-WAY REQUIRES AN ENCROACHMENT PERMIT FROM THE ROADS AND AIRPORTS DEPARTMENT. EACH INDIVIDUAL ACTIVITY REQUIRES A SEPARATE PERMIT - I.E. CABLE, ELECTRICAL, GAS, SEWER, WATER, RETAINING WALLS, DRIVEWAY APPROACHES, FENCES, LANDSCAPING, TREE REMOVAL, STORM DRAINAGE IMPROVEMENTS, ETC..

STREET LIGHTING

1. PACIFIC GAS & ELECTRIC ELECTROLIER SERVICE FEE SHALL BE PAID BY THE DEVELOPER AND/OR HIS AUTHORIZED REPRESENTATIVE.

SANITARY SEWER

1. THE SANITARY SEWER AND WATER UTILITIES SHOWN ON THESE PLANS ARE NOT PART OF THIS GRADING PERMIT AND ARE SHOWN FOR REFERENCE ONLY.
2. ALL MATERIALS AND METHODS OF CONSTRUCTION OF SANITARY SEWERS SHALL CONFORM TO THE SPECIFICATIONS OF THE JURISDICTION INVOLVED. INSPECTION OF SANITARY SEWER WORK SHALL BE DONE BY SAID JURISDICTION.

PORTLAND CEMENT CONCRETE

1. CONCRETE USED FOR STRUCTURAL PURPOSES SHALL BE CLASS "A" (6 SACK PER CUBIC YARD) AS SPECIFIED IN THE STATE STANDARD SPECIFICATIONS. CONCRETE PLACED MUST DEVELOP A MINIMUM STRENGTH FACTOR OF 2800 PSI IN A SEVEN-DAY PERIOD. THE CONCRETE MIX DESIGN SHALL BE UNDER THE CONTINUAL CONTROL OF THE COUNTY INSPECTOR.

AIR QUALITY, LANDSCAPING AND EROSION CONTROL

1. WATER ALL ACTIVE CONSTRUCTION AREAS AT LEAST TWICE DAILY.
2. COVER ALL TRUCKS HAULING SOIL, SAND, AND OTHER LOOSE MATERIALS OR REQUIRE ALL TRUCKS TO MAINTAIN AT LEAST TWO FEET OF FREEBOARD.
3. PAVE, APPLY WATER THREE TIMES DAILY, OR APPLY (NON-TOXIC) SOIL STABILIZERS ON ALL UNPAVED ACCESS ROADS, PARKING AREAS AND STAGING AREAS AT CONSTRUCTION SITES.
4. SWEEP DAILY (WITH WATER SWEEPERS) ALL PAVED ACCESS ROADS, PARKING AREAS AND STAGING AREAS AT CONSTRUCTION SITES. THE USE OF DRY POWDER SWEEPING IS PROHIBITED.
5. SWEEP STREETS DAILY (WITH WATER SWEEPERS) IF VISIBLE SOIL MATERIAL IS CARRIED ONTO ADJACENT PUBLIC STREETS. THE USE OF DRY POWDER SWEEPING IS PROHIBITED.
6. ALL CONSTRUCTION VEHICLES, EQUIPMENT AND DELIVERY TRUCKS SHALL HAVE A MAXIMUM IDLING TIME OF 5 MINUTES (AS REQUIRED BY THE CALIFORNIA AIRBORNE TOXIC CONTROL MEASURE TITLE 13, SECTION 2485 OF CALIFORNIA CODE OF REGULATIONS (CCR)). ENGINES SHALL BE SHUT OFF IF CONSTRUCTION REQUIRES LONGER IDLING TIME UNLESS NECESSARY FOR PROPER OPERATION OF THE VEHICLE.
7. ALL VEHICLE SPEEDS ON UNPAVED ROADS SHALL BE LIMITED TO 15 MILES PER HOUR.
8. ALL CONSTRUCTION EQUIPMENT SHALL BE MAINTAINED AND PROPERLY TUNED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. ALL EQUIPMENT SHALL BE CHECKED BY A CERTIFIED MECHANIC AND DETERMINED TO BE RUNNING IN PROPER CONDITION PRIOR TO OPERATION.
9. POST A SIGN THAT IS AT LEAST 32 SQUARE FEET MINIMUM 2 INCHES LETTER HEIGHT VISIBLE NEAR THE ENTRANCE OF CONSTRUCTION SITE THAT IDENTIFIES THE FOLLOWING REQUIREMENTS. OBTAIN ENCROACHMENT PERMIT FOR SIGN FROM ROADS DEPARTMENT OR OTHER APPLICABLE AGENCY IF REQUIRED.
   A. 15 MILES PER HOUR (MPH) SPEED LIMIT
   B. 5 MINUTES MAXIMUM IDLING TIME OF VEHICLES
   C. TELEPHONE NUMBER TO CONTACT THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT REGARDING DUST COMPLAINTS. NOTE PHONE NUMBER OF THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT AIR POLLUTION COMPLAIN HOTLINE OF 1-800-334-6367.
10. ALL FILL SLOPES SHALL BE COMPACTED AND LEFT IN A SMOOTH AND FIRM CONDITION CAPABLE OF WITHSTANDING WEATHERING.
11. ALL EXPOSED DISTURBED AREAS SHALL BE SEEDED WITH BROME SEED SPREAD AT THE RATE OF 5 LB. PER 1000 SQUARE FEET (OR APPROVED EQUAL). SEEDING AND WATERING SHALL BE MAINTAINED AS REQUIRED TO ENSURE GROWTH.
12. ALL DITCHES SHALL BE LINED PER COUNTY STANDARD SD8.
13. ALL STORM DRAINAGE STRUCTURES SHALL BE INSTALLED WITH EFFECTIVE ENTRANCE & OUTFALL EROSION CONTROLS E.G. SACKED CONCRETE RIP-RAP. ENERGY DISSIPATERS SHALL BE INSTALLED AT ALL DITCH OUTFALLS. WHERE OUTFALLS ARE NOT INTO AN EXISTING CREEK OR WATER COURSE, RUNOFF SHALL BE RELEASED TO SHEET FLOW.
14. PRIOR TO GRADING COMPLETION AND RELEASE OF THE BOND, ALL GRADED AREAS SHALL BE RESEEDED IN CONFORMANCE WITH THE COUNTY GRADING ORDINANCE TO MINIMIZE THE VISUAL IMPACTS OF THE GRADE SLOPES AND REDUCE THE POTENTIAL FOR EROSION OF THE SUBJECT SITE.
15. PERMANENT LANDSCAPING SHOWN ON THE ATTACHED LANDSCAPE PLAN MUST BE INSTALLED AND FIELD APPROVED BY THE COUNTY PLANNING OFFICE PRIOR TO FINAL APPROVAL BY THE COUNTY ENGINEER, AND FINAL OCCUPANCY RELEASE BY THE BUILDING INSPECTION OFFICE.
16. THE OWNER SHALL PREPARE AND PRESENT A WINTERIZATION REPORT TO THE COUNTY INSPECTOR FOR REVIEW PRIOR TO OCTOBER 15TH OF EVERY YEAR.
17. THE OWNER, CONTRACTOR, AND ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES SHALL INSTALL AND MAINTAIN CONSTRUCTION BEST MANAGEMENT PRACTICES (BMPS) ON THE PROJECT SITE AND WITHIN THE SANTA CLARA COUNTY ROAD RIGHT-OF-WAY THROUGHOUT THE DURATION OF THE CONSTRUCTION AND UNTIL THE ESTABLISHMENT OF PERMANENT STABILIZATION AND SEDIMENT CONTROL TO PREVENT THE DISCHARGE OF POLLUTANTS INCLUDING SEDIMENT, CONSTRUCTION MATERIALS, EXCAVATED MATERIALS, AND WASTE INTO THE SANTA CLARA COUNTY RIGHT-OF-WAY, STORM SEWER WATERWAYS, ROADWAY INFRASTRUCTURE. BMPS SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING;
   A. PREVENTION OF POLLUTANTS IN STORM WATER DISCHARGES FROM THE CONSTRUCTION SITE AND THE CONTRACTOR'S MATERIAL AND EQUIPMENT LAYDOWN / STAGING AREAS.
   B. PREVENTION OF TRACKING OF MUD, DIRT, AND CONSTRUCTION MATERIALS ONTO THE PUBLIC ROAD RIGHT-OF-WAY.
   C. PREVENTION OF DISCHARGE OF WATER RUN-OFF DURING DRY AND WET WEATHER CONDITIONS ONTO THE PUBLIC ROAD RIGHT-OF-WAY.
18. THE OWNER, CONTRACTOR, AND ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES SHALL ENSURE THAT ALL TEMPORARY CONSTRUCTION FACILITIES, INCLUDING BUT NOT LIMITED TO CONSTRUCTION MATERIALS, DELIVERIES, HAZARDOUS AND NON-HAZARDOUS MATERIAL STORAGE, EQUIPMENT, TOOLS, PORTABLE TOILETS, CONCRETE WASHOUT, GARBAGE CONTAINERS, LAYDOWN YARDS, SECONDARY CONTAINMENT AREAS, ETC. ARE LOCATED OUTSIDE THE SANTA CLARA COUNTY ROAD RIGHT-OF-WAY.
19. EROSION CONTROL PLAN IS A GUIDE AND SHALL BE AMENDED AS NECESSARY TO PREVENT EROSION AND ILLICIT DISCHARGES ON A YEAR AROUND BASIS, DEPENDING ON THE SEASON, WEATHER, AND FIELD CONDITIONS. EROSION CONTROL MEASURES IN ADDITION TO THOSE NOTED IN THE PERMITTED PLANS MAY BE NECESSARY. FAILURE TO INSTALL SITE SITE AND SITUATIONALY APPROPRIATE EROSION CONTROL MEASURES MAY RESULT IN VIOLATIONS, FINES, AND A STOPPAGE OF WORK.

STORM DRAINAGE AND STORMWATER MANAGEMENT

1. DEVELOPER IS RESPONSIBLE FOR ALL NECESSARY DRAINAGE FACILITIES WHETHER SHOWN ON THE PLANS OR NOT AND HE OR HIS SUCCESSOR PROPERTY OWNERS ARE RESPONSIBLE FOR THE ADEQUACY AND CONTINUED MAINTENANCE OF THESE FACILITIES IN A MANNER WHICH WILL PRECLUDE ANY HAZARD TO LIFE, HEALTH, OR DAMAGE TO ADJOINING PROPERTY, CONSISTENT WITH NPDES PERMIT CAS612008 / ORDER NO. R2-2009-0047 AND NPDES PERMIT CAS000004/ ORDER NO. 2013-0001-DWQ.
2. DROP INLETS SHALL BE COUNTY STANDARD TYPE 5 UNLESS OTHERWISE NOTED ON THE PLANS. THE DEVELOPER'S ENGINEER SHALL BE RESPONSIBLE FOR THE PROPER LOCATION OF DROP INLETS. WHERE STREET PROFILE GRADE EXCEEDS 6% DROP INLETS SHALL BE SET AT 500 ANGLE CURB LINE TO ACCEPT WATER OR AS SHOWN ON THE PLANS.
3. WHERE CULVERTS ARE INSTALLED THE DEVELOPER SHALL BE RESPONSIBLE FOR GRADING THE OUTLET DITCH TO DRAIN TO AN EXISTING SWALE OR TO AN OPEN AREA FOR SHEET FLOW.
4. UPON INSTALLATION OF DRIVEWAY CONNECTIONS, PROPERTY OWNERS SHALL PROVIDE FOR THE UNINTERRUPTED FLOW OF WATER IN ROADSIDE DITCHES.
5. THE COUNTY SHALL INSPECT UNDERGROUND DRAINAGE IMPROVEMENTS AND STORMWATER MANAGEMENT FEATURES PRIOR TO BACKFILL.

AS-BUILT PLANS STATEMENT

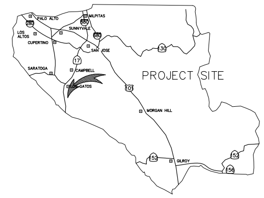
THIS IS A TRUE COPY OF THE AS-BUILT PLANS. THERE (___ WERE) (___ WERE NOT) MINOR FIELD CHANGES - MARKED WITH THE SYMBOL (^). THERE (___WERE) (___ WERE NOT) PLAN REVISIONS INDICATING SIGNIFICANT CHANGES REVIEWED BY THE COUNTY ENGINEER AND MARKED WITH THE SYMBOL △.

DATE ____________ SIGNATURE ____________

NOTE: THIS STATEMENT IS TO BE SIGNED BY THE PERSON AUTHORIZED BY THE COUNTY ENGINEER TO PERFORM THE INSPECTION WORK. A REPRODUCIBLE COPYOF THE AS-BUILT PLANS MUST BE FURNISHED TO THE COUNTY ENGINEER AFTERCONSTRUCTION.

GEOTECHNICAL ENGINEER OBSERVATION

1. A CONSTRUCTION OBSERVATION LETTER FROM THE RESPONSIBLE GEOTECHNICAL ENGINEER AND ENGINEERING GEOLOGIST DETAILING CONSTRUCTION OBSERVATIONS AND CERTIFYING THAT THE WORK WAS DONE IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL AND GEOLOGIC REPORTS SHALL BE SUBMITTED PRIOR TO THE GRADING COMPLETION AND RELEASE OF THE BOND.



COUNTY LOCATION MAP

VICINITY MAP

AZTEC RIDGE DR IMPROVEMENTS LANDS OF LUBIVY

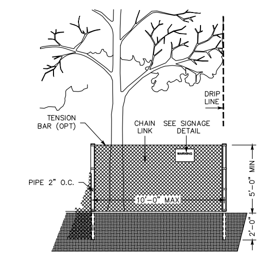
SCOPE OF WORK

1. THE DEVELOPER IS RESPONSIBLE FOR THE INSTALLATION OF THE WORK PROPOSED ON THE EROSION CONTROL PLAN. THE ENGINEER OF RECORD IS RESPONSIBLE FOR THE DESIGN OF THE EROSION CONTROL PLANS AND ANY MODIFICATIONS OF THE EROSION COTROL PLANS TO PREVENT ILLICIT DISCHARGES FROM THE SITE DURING CONSTRUCTION.

1. CLEAR, GRUB AND GRADE THE SITE
2. CONSTRUCTION OF NEW RESIDENCE AND DRIVEWAY
3. CONSTRUCTION OF DRAINAGE FACILITIES
4. UNDERGROUND UTILITIES
5. LANDSCAPING

SURVEY MONUMENT PRESERVATION

1. THE LANDOWNER / CONTRACTOR MUST PROTECT AND ENSURE THE PERPETUATION OF SURVEY MONUMENTS AFFECTED BY CONSTRUCTION ACTIVITIES.
2. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL LOCATE, STAKE, AND FLAG OR OTHERWISE IDENTIFY WITH PAINT OR OTHER MARKINGS ALL PERMANENT SURVEY MONUMENTS OF RECORD AND ANY UNRECORDED MONUMENTS THAT ARE DISCOVERED THAT ARE WITHIN 50 FEET OF THE CONSTRUCTION ACTIVITY.
3. THE LANDOWNER, CONTRACTOR AND/OR ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES THAT WILL OR MAY DISTURB AN EXISTING MONUMENT, CORNER STAKE, OR ANY OTHER PERMANENT SURVEYED MONUMENT SHALL CAUSE TO HAVE A LICENSED LAND SURVEYOR OR CIVIL ENGINEER, AUTHORIZED TO PRACTICE SURVEYING, ENSURE THAT A CORNER RECORD AND/OR RECORD OF SURVEY ARE FILED WITH THE COUNTY SURVEYOR'S OFFICE PRIOR TO DISTURBING SAID MONUMENTS AND RESET PERMANENT MONUMENT(S) IN THE SURFACE OF THE NEW CONSTRUCTION OR SET A WITNESS MONUMENT(S) TO PERPETUATE THE LOCATION IF ANY PERMANENT MONUMENT COULD BE DESTROYED, DAMAGED, COVERED, DISTURBED, OR OTHERWISE OBLITERATED. THE LICENSED LAND SURVEYOR OR CIVIL ENGINEER SHALL FILE A CORNER RECORD OR RECORD OF SURVEY WITH COUNTY SURVEYOR PRIOR TO FINAL ACCEPTANCE OF THE PROJECT BY THE LAND DEVELOPMENT ENGINEERING INSPECTOR.



ABBREVATIONS

AC = ASPHALT CONCRETE
AD = AREA DRAIN
BC = BEGIN CURVE
BS = BOTTOM OF STAIR
BU = BUBBLE UP
BVC = BEGIN VERTICAL CURVE
BRW = BOTTOM OF RETAINING WALL
CB = CATCH BASIN
CL = CENTERLINE
CO = CLEANOUT
DS = DOWNSPOUT WITH SPLASH BOX
EC = END CURVE
ELEV. = ELEVATION
EVC = END VERTICAL CURVE
EX. = EXISTING
F/C = FACE OF CURB
FF = FINISHED FLOOR ELEVATION
FH = FIRE HYDRANT
FL = FLOW LINE
GB = GRADE BREAK
GFF = GARAGE FINISH FLOOR
HP = HIGH POINT
HC = HANDICAP UNIT
INV = INVERT
LP = LOW POINT
PAD = PAD ELEVATION
PCC = PORTLAND CEMENT CONCRETE
PL = PROPERTY LINE
PV = PAVEMENT GRADE
PVC = POLYVINYL CHLORIDE PIPE
PVI = POINT OF VERTICAL INTERSECTION
RCP = REINFORCED CONCRETE PIPE
ROW = RIGHT OF WAY
S=.004> SLOPE
SD = STORM DRAIN
SDMH = STORM DRAIN MANHOLE
SG = SUBGRADE ELEVATION
SS = SANITARY SEWER
SSMH = SANITARY SEWER MANHOLE
STA = STATION
TC = TOP OF CURB
TF = TOP OF FENCE
TRW = TOP OF RETAINING WALL
TS = TOP OF STAIR
TW = TOP OF WALL
VCP = VITRIFIED CLAY PIPE
WM = WATER METER
WV = WATER VALVE

EXISTING TREE PROTECTION DETAILS

1. PRIOR TO THE COMMENCEMENT OF ANY GRADING, TREE PROTECTIVE FENCING SHALL BE IN PLACE IN ACCORDANCE WITH THE TREE PRESERVATION PLAN AND INSPECTED BY A CERTIFIED ARBORIST. THE ARBORIST SHALL MONITOR CONSTRUCTION ACTIVITY TO ENSURE THAT THE TREE PROTECTION MEASURES ARE IMPLEMENTED AND ADHERED TO DURING CONSTRUCTION. THIS CONDITION SHALL BE INCORPORATED INTO THE GRADING PLANS.
2. FENCE SHALL BE MINIMUM 5 FEET TALL CONSTRUCTED OF STURDY MATERIAL (CHAIN-LINK OR EQUIVALENT STRENGTH/ DURABILITY).
3. FENCE SHALL BE SUPPORTED BY VERTICAL POSTS DRIVEN 2 FEET (MIN) INTO THE GROUND AND SPACED NOT MORE THAN 10 FEET APART.
4. TREE FENCING SHALL BE MAINTAINED THROUGHOUT THE SITE DURING THE CONSTRUCTION PERIOD, INSPECTED PERIODICALLY FOR DAMAGE AND PROPER FUNCTION, REPAIRED AS NECESSARY TO PROVIDE A PHYSICAL BARRIER FROM CONSTRUCTION ACTIVITIES, AND REMAIN IN PLACE UNTIL THE FINAL INSPECTION.
5. A SIGN THAT INCLUDES THE WORDS, "WARNING: THIS FENCE SHALL NOT BE REMOVED WITHOUT THE EXPRESSED PERMISSION OF THE SANTA CLARA COUNTY PLANNING OFFICE," SHALL BE SECURELY ATTACHED TO THE FENCE IN A VISUALLY PROMINENT LOCATION.

LEGEND

DESCRIPTION	SYMBOL
BOUNDARY LINE	
LOT LINE	
EASEMENT LINE	
SIDEWALK	
WOOD FENCE	X X
CHAIN LINK FENCE	
RETAINING WALL	
DRIVEWAY DRAIN INLET	
AREA DRAIN	
DROP INLET	
MONUMENT	
FIRE HYDRANT	
ELECTROLIER	
WATER METER	
AC UNIT	
SANITARY SEWER LATERAL	
STORM DRAIN	SD
SANITARY SEWER	SS
STREET LIGHT CONDUITS	SL
WATER	W
JOINT TRENCH	JT
HOUSE SERVICE	SVC
SLOPE ARROW	
EXISTING CONTOUR	100
PROPOSED CONTOUR	100
OVERLAND RELEASE	
DIRECTION OF SURFACE DRAINAGE	
5% SLOPE AWAY FROM BUILDING	>>

COUNTY OF SANTA CLARA DEPT. OF ROADS AND AIRPORTS
ISSUED BY: ____________ DATE: ____________
ENCROACHMENT PERMIT NO. ____________

NO WORK SHALL BE DONE IN THE COUNTY'S RIGHT-OF-WAY WITHUOT AN ENCROACHEMENT PERMIT, INCLUDING THE STAGING OF CONSTRUCTION MATERIAL AND THE PLACEMENT OF PORTABLE TOILETS.

COUNTY OF SANTA CLARA
LAND DEVELOPMENT ENGINEERING & SURVEYING
GRADING / DRAINAGE PERMIT NO. ____________
ISSUED BY: ____________ DATE: ____________

ENGINEER'S STATEMENT

I HEREBY STATE THAT THESE PLANS ARE IN COMPLIANCE WITH ADOPTED COUNTY STANDARDS, THE APPROVED TENTATIVE MAP (OR PLAN) AND CONDITIONS OF APPROVAL PERTAINING THERETO DATED FILE(S) NO. CONDITIONS OF APPROVAL FILE NO. 10725-16DR, DATED 3/31/17

DATE 6/15/21 SIGNATURE [signature]

70829
R.C.E. NO.

6-30-21
EXPIRATION DATE

REGISTERED PROFESSIONAL ENGINEER PORFIRIO OSCAR OSUNA No. 70829 Exp. 6-30-21 CIVIL STATE OF CALIFORNIA

COUNTY ENGINEER'S NOTE

ISSUANCE OF A PERMIT AUTHORIZING CONSTRUCTION DOES NOT RELEASE THE DEVELOPER, PERMITTEE OF ENGINEER FROM RESPONSIBILITY FOR THE CORRECTION OF ERRORS OR OMISSIONS CONTAINED IN THE PLANS. IF, DURING THE COURSE OF CONSTRUCTION, THE PUBLIC INTEREST REQUIRES A MODIFICATION OF (OR DEPARTURE FROM) THE SPECIFICATIONS OF THE PLANS, THE COUNTY SHALL HAVE THE AUTHORITY TO REQUIRE THE SUSPENSION OF WORK, AND THE NECESSARY MODIFICATION OR DEPARTURE AND TO SPECIFY THE MANNER IN WHICH THE SAME IS TO BE MADE.

DATE ____________

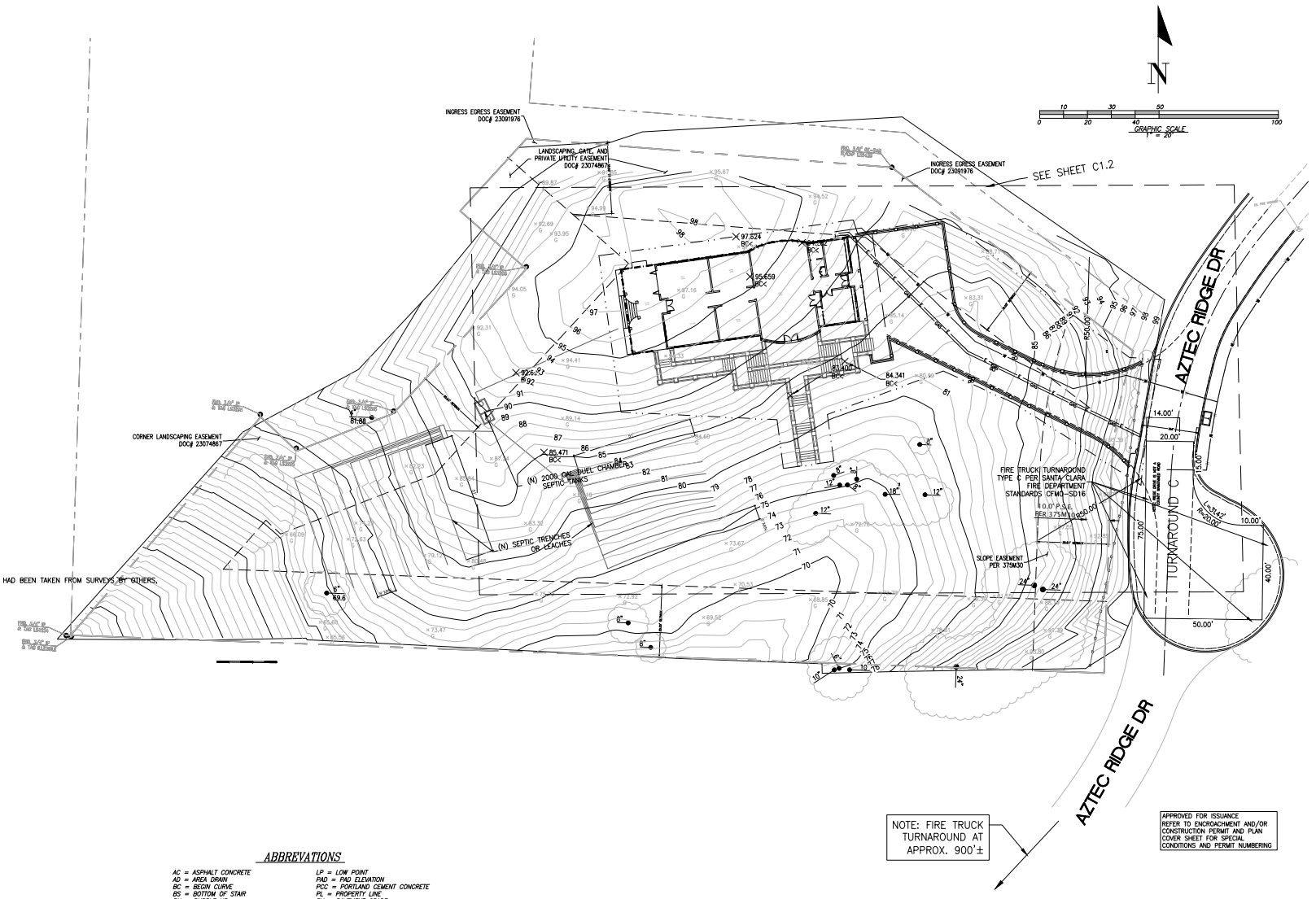
CHRISTOPHER L. FREITAS
42107 3/31/21
R.C.E. NO. EXPIRATION DATE

SHEET INDEX

ENGINEER'S NAME: PORFIRIO OSCAR OSUNA
ADDRESS: 117 BERNAL RD, #70-336
SAN JOSE, CA 95119
PHONE NO. 408-772-4381
EMAIL: info@osunaengineering.com

Revision 1	*APN* 532-26-098	*Sheet* 1 *of* 9
Revision 2	*Co. File*	
Revision 3		

APPLICANT: ____________ ROAD: ____________ COUNTY FILE NO.: _____-__-__-_____



BENCH MARK

ALL TOPOGRAPHIC FEATURES AND ELEVATIONS HAD BEEN TAKEN FROM SURVEYS BY OTHERS, PROVIDED BY THE OWNER

ABBREVATIONS

AC = ASPHALT CONCRETE
AD = AREA DRAIN
BC = BEGIN CURVE
BS = BOTTOM OF STAIR
BU = BUBBLE UP
BVC = BEGIN VERTICAL CURVE
BRW = BOTTOM OF RETAINING WALL
CB = CATCH BASIN
CL = CENTERLINE
CO = CLEANOUT
DS = DOWNSPOUT WITH SPLASH BOX
EC = END CURVE
ELEV. = ELEVATION
EVC = END VERTICAL CURVE
EX. = EXISTING
F/C = FACE OF CURB
FF = FINISHED FLOOR ELEVATION
FH = FIRE HYDRANT
FL = FLOW LINE
GB = GRADE BREAK
GFF = GARAGE FINISH FLOOR
HP = HIGH POINT
HC = HANDICAP UNIT
INV = INVERT
LP = LOW POINT
PAD = PAD ELEVATION
PCC = PORTLAND CEMENT CONCRETE
PL = PROPERTY LINE
PV = PAVEMENT GRADE
PVC = POLYVINYL CHLORIDE PIPE
PVI = POINT OF VERTICAL INTERSECTION
RCP = REINFORCED CONCRETE PIPE
ROW = RIGHT OF WAY
S=.004> SLOPE
SD = STORM DRAIN
SDMH = STORM DRAIN MANHOLE
SG = SUBGRADE ELEVATION
SS = SANITARY SEWER
SSMH = SANITARY SEWER MANHOLE
STA = STATION
TC = TOP OF CURB
TF = TOP OF FENCE
TRW = TOP OF RETAINING WALL
TS = TOP OF STAIR
TW = TOP OF WALL
VCP = VITRIFIED CLAY PIPE
WM = WATER METER
WV = WATER VALVE

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR
CONSTRUCTION PERMIT AND PLAN
COVER SHEET FOR SPECIAL
CONDITIONS AND PERMIT NUMBERING

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

REVISIONS

BY	CITY	DATE

REGISTERED PROFESSIONAL ENGINEER
PORFIRIO OSCAR OSUNA
No. 70829
Exp. 6-30-21
STATE OF CALIFORNIA
CIVIL

10-23-2020

PORFIRIO OSCAR OSUNA
RCE 70829 EXP. 6-30-21

OSUNA ENGINEERING INC.
CONSULTING CIVIL ENGINEERS & LAND SURVEYORS
117 BERNAL RD. STE. 70-336
SAN JOSE, CA 95119
TEL. (408) 772-4381
info@osunoengineering.com

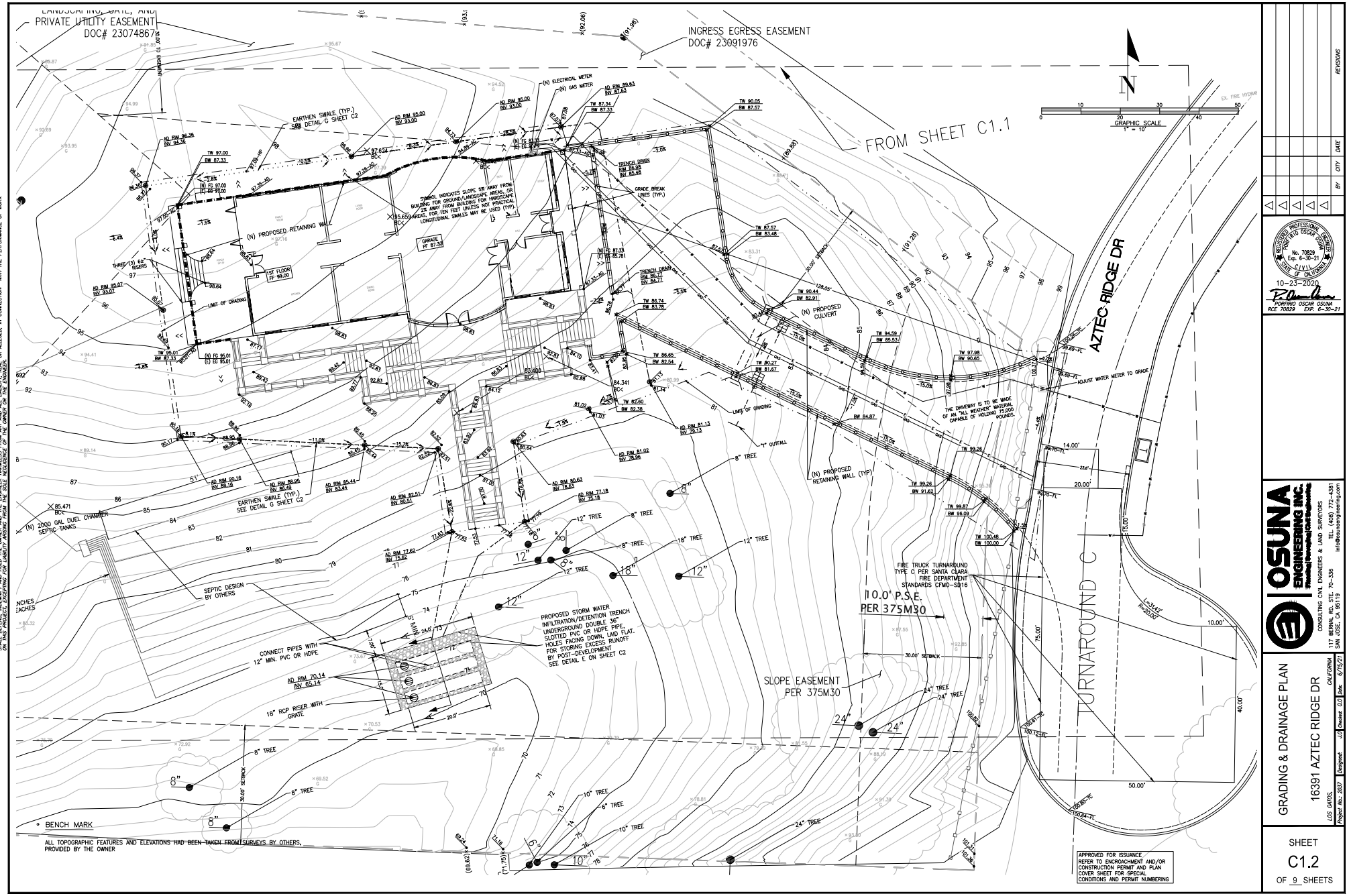
GRADING & DRAINAGE PLAN

16391 AZTEC RIDGE DR

LOS GATOS, CALIFORNIA

Project No.: 2037 | Designed: JO | Drawn: GO | Date: 6/15/21

SHEET
C1.1
OF 9 SHEETS



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BY	CITY	DATE	REVISIONS

REGISTERED PROFESSIONAL ENGINEER PORFIRIO OSCAR OSUNA No. 70829 Exp. 6-30-21 STATE OF CIVIL OF CALIFORNIA

10-23-2020

PORFIRIO OSCAR OSUNA RCE 70829 EXP. 6-30-21

OSUNA ENGINEERING INC.
CONSULTING CIVIL ENGINEERS & LAND SURVEYORS
117 BERNAL RD. STE. 70-336 SAN JOSE, CA 95119
TEL. (408) 772-4381
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GRADING & DRAINAGE PLAN

16391 AZTEC RIDGE DR

LOS GATOS, CALIFORNIA

Project No.: 2037 | Designed: JO | Drawn: GO | Date: 6/15/21

SHEET C1.2 OF 9 SHEETS

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

DESCRIPTION	EARTHWORK QTY. ALL EXEMPT			EARTHWORK QTY. MAXIMUM DEPTHS	
	CUT (-)	FILL (+)	EXEMPT?	CUT (FT)	FILL (FT)
RESIDENCE	714 C.Y.	131 C.Y.	YES	-8.6 FT	10.0 FT
DRIVEWAY	50 C.Y.	550 C.Y.	NO	-3.0 FT	9.3 FT
FRONT STAIRS	36 C.Y.	294 C.Y.	NO	-0.3 FT	9.1 FT
TOTALS *ALL*	800 C.Y.	975 C.Y.			
TOTALS *MINUS EXEMPT*			NO	50 C.Y.	550 C.Y.
IMPORT/(EXPORT)	175 C.Y.			36 C.Y.	294 C.Y.
				86 C.Y.	844 C.Y.
	793 C.Y.				

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR
CONSTRUCTION PERMIT AND PLAN
CHECK FOR ADDITIONAL
CONDITIONS AND PERMIT NUMBERING

SHEET C1.3 OF 9 SHEETS

GRADING & DRAINAGE PLAN
EARTHWORK, CUT & FILL AREAS
16391 AZTEC RIDGE DR

LOS GATOS, CALIFORNIA

Project No.: 2037 | Designed: J.O | Checked: O.O | Date: 6/15/21

OSUNA ENGINEERING INC.
Planning | Surveying | Civil Engineering
CONSULTING CIVIL ENGINEERS & LAND SURVEYORS
117 BERNAL RD. STE. 70-336
SAN JOSE, CA 95119
TEL. (408) 772-4381
Info@osunaengineering.com

REGISTERED PROFESSIONAL ENGINEER
OSCAR OSUNA
No. 70809
Exp. 6-30-22
CIVIL
STATE OF CALIFORNIA

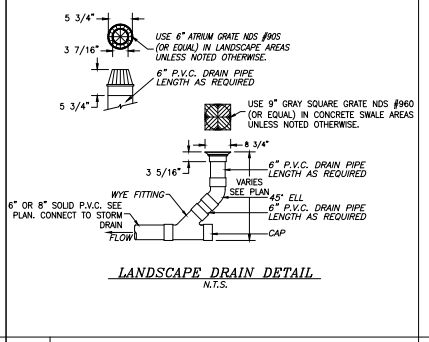
10-23-2020
PREPARED BY: OSCAR OSUNA EXP. 6-30-22

	BY	CITY	DATE	REVISIONS
△				
△				
△				
△				
△				

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; THAT CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

N.T.S.

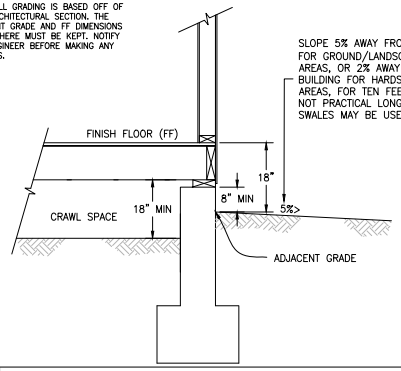
A | NOT USED



LANDSCAPE DRAIN DETAIL
N.T.S.

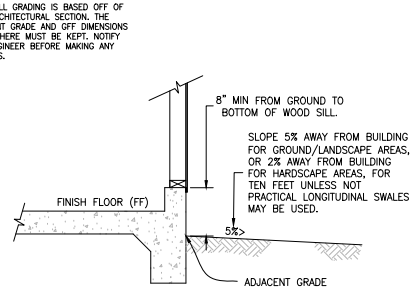
B | AREA DRAIN DETAIL

NOTE: ALL GRADING IS BASED OFF OF THIS ARCHITECTURAL SECTION. THE ADJACENT GRADE AND FF DIMENSIONS SHOWN HERE MUST BE KEPT. NOTIFY THE ENGINEER BEFORE MAKING ANY CHANGES.



C | TYPICAL FOUNDATION/FF/GROUND SECTION

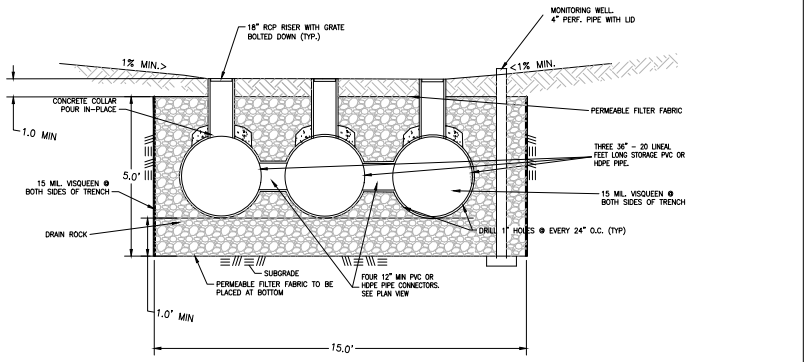
NOTE: ALL GRADING IS BASED OFF OF THIS ARCHITECTURAL SECTION. THE ADJACENT GRADE AND GFF DIMENSIONS SHOWN HERE MUST BE KEPT. NOTIFY THE ENGINEER BEFORE MAKING ANY CHANGES.



N.T.S.

D | TYPICAL FOUNDATION/GFF/GROUND SECTION

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERING

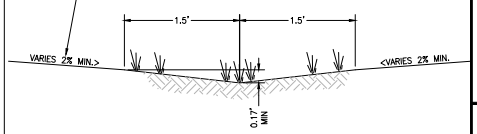


N.T.S.

E | STORM WATER INFILTRATION/DETENTION TRENCH DETAIL

F | NOT USED

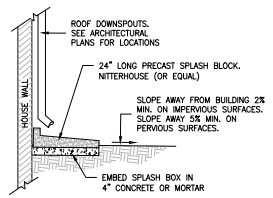
SLOPE 5% AWAY FROM BUILDING FOR GROUND/LANDSCAPE AREAS, OR 2% AWAY FROM BUILDING FOR HARDSCAPE AREAS, FOR TEN FEET UNLESS NOT PRACTICAL LONGITUDINAL SWALES MAY BE USED.



N.T.S.

G | EARTHEN SWALE DETAIL

H | NOT USED



SPLASH BLOCK/DOWNSPOUT DETAIL
N.T.S.

N.T.S.

I | SPLASH BLOCK/DOWNSPOUT DETAIL

NO.	BY	CITY	DATE	REVISIONS
1				
2				
3				
4				
5				

REGISTERED PROFESSIONAL ENGINEER PORFIRIO OSCAR OSUNA No. 70829 Exp. 6-30-21 STATE OF CIVIL CALIFORNIA

10-23-2020

PORFIRIO OSCAR OSUNA
RCE 70829 EXP. 6-30-21

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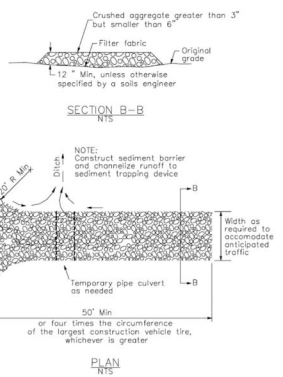
GRADING & DRAINAGE PLAN
CONSTRUCTION DETAILS
16391 AZTEC RIDGE DR
LOS GATOS, CALIFORNIA

Project No.: 2037 | Designed: JO | Drawn: OJ | Date: 6/15/21

SHEET
C2
OF 9 SHEETS

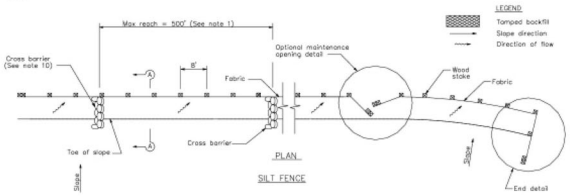
3 Stabilized Construction Entrance/Exit

CASQA Detail TC-1



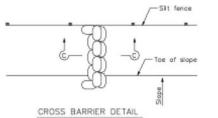
1 Silt Fence

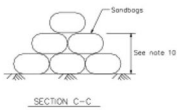
CASQA Detail SE-1



NOTES

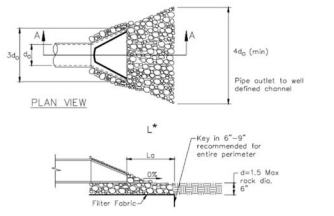
1. Construct the length of each reach so that the change in base elevation along the reach does not exceed 1/3 the height of the linear barrier, in no case shall the reach length exceed 500'.
2. The last 8'–0" of fence shall be turned up slope.
3. Stake dimensions are nominal.
4. Dimension may vary to fit field condition.
5. Stakes shall be spaced at 8'–0" maximum and shall be positioned on downstream side of fence.
6. Stakes to overlap and fence fabric to fold around each stake one full turn. Secure fabric to stake with 4 staples.
7. Stakes shall be driven tightly together to prevent potential flow–through of sediment at joint. The tops of the stakes shall be secured with wire.
8. For end stake, fence fabric shall be folded around two stakes one full turn and secured with 4 staples.
9. Minimum 4 staples per stake. Dimensions shown are typical.
10. Cross barriers shall be a minimum of 1/3 and a maximum of 1/2 the height of the linear barrier.
11. Maintenance openings shall be constructed in a manner to ensure sediment remains behind silt fence.
12. Joining sections shall not be placed at sump locations.
13. Sandbag rows and layers shall be offset to eliminate gaps.





4 Velocity Dissipation Devices

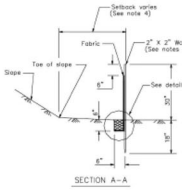
CASQA Detail EC-10

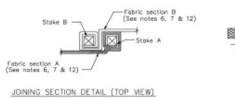


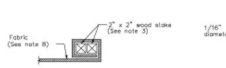
* Length per ABAG Design Standards

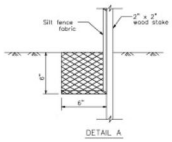
2 Silt Fence

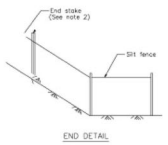
CASQA Detail SE-1

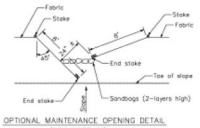












Source for Graphics: California Stormwater BMP Handbook, California Stormwater Quality Association, January 2003.
Available from www.cabmphandbooks.com.

STANDARD BEST MANAGEMENT PRACTICE NOTES

1. Solid and Demolition Waste Management: Provide designated waste collection areas and containers on site away from streets, gutters, storm drains, and waterways, and arrange for regular disposal. Waste containers must be watertight and covered at all times except when waste is deposited. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C3) or latest.
2. Hazardous Waste Management: Provide proper handling and disposal of hazardous wastes by a licensed hazardous waste material hauler. Hazardous wastes shall be stored and properly labeled in sealed containers constructed of suitable materials. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-5 to C-6) or latest.
3. Spill Prevention and Control: Provide proper storage areas for liquid and solid materials, including chemicals and hazardous substances, away from streets, gutters, storm drains, and waterways. Spill control materials must be kept on site where readily accessible. Spills must be cleaned up immediately and contaminated soil disposed properly. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-7 to C-8, C-13 to C-14) or latest.
4. Vehicle and Construction Equipment Service and Storage: An area shall be designated for the maintenance, where on-site maintenance is required, and storage of equipment that is protected from stormwater run-on and runoff. Measures shall be provided to capture any waste oils, lubricants, or other potential pollutants and these wastes shall be properly disposed of off site. Fueling and major maintenance/repair, and washing shall be conducted off-site whenever feasible. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C9) or latest.
5. Material Delivery, Handling and Storage: In general, materials should not be stockpiled on site. Where temporary stockpiles are necessary and approved by the County, they shall be covered with secured plastic sheeting or tarp and located in designated areas near construction entrances and away from drainage paths and waterways. Barriers shall be provided around storage areas where materials are potentially in contact with runoff. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-11 to C-12) or latest.
6. Handling and Disposal of Concrete and Cement: When concrete trucks and equipment are washed on-site, concrete wastewater shall be contained in designated containers or in a temporary lined and watertight pit where wasted concrete can harden for later removal. If possible have concrete contractor remove concrete wash water from site. In no case shall fresh concrete be washed into the road right-of-way. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-15 to C-16) or latest.
7. Pavement Construction Management: Prevent or reduce the discharge of pollutants from paving operations, using measures to prevent run-on and runoff pollution and properly disposing of wastes. Avoid paving in the wet season and reschedule paving when rain is in the forecast. Residue from saw-cutting shall be vacuumed for proper disposal. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-17 to C-18) or latest.
8. Contaminated Soil and Water Management: Inspections to identify contaminated soils should occur prior to construction and at regular intervals during construction. Remediating contaminated soil should occur promptly after identification and be specific to the contaminant identified, which may include hazardous waste removal. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages C-19 to C-20) or latest.
9. Sanitary/Septic Water Management: Temporary sanitary facilities should be located away from drainage paths, waterways, and traffic areas. Only licensed sanitary and septic waste haulers should be used. Secondary containment should be provided for all sanitary facilities. Refer to Erosion & Sediment Control Field Manual, 4th Edition (page C-21) or latest.
10. Inspection & Maintenance: Areas of material and equipment storage sites and temporary sanitary facilities must be inspected weekly. Problem areas shall be identified and appropriate additional and/or alternative control measures implemented immediately, within 24 hours of the problem being identified.

STANDARD EROSION CONTROL NOTES

1. Sediment Control Management:

   Tracking Prevention & Clean Up: Activities shall be organized and measures taken as needed to prevent or minimize tracking of soil onto the public street system. A gravel or proprietary device construction entrance/exit is required for all sites. Clean up of tracked material shall be provided by means of a street sweeper prior to an approaching rain event, or at least once at the end of each workday that material is tracked, or, more frequently as determined by the County Inspector. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages B-31 to B-33) or latest.

   Storm Drain Inlet and Catch Basin Inlet Protection: All inlets within the vicinity of the project and within the project limits shall be protected with gravel bags placed around inlets or other inlet protection. At locations where exposed soils are present, staked fiber roles or staked silt fences can be used. Inlet filters are not allowed due to clogging and subsequent flooding. Refer to Erosion & Sediment Control Field Manual, 4th Edition (pages B-49 to B-51) or latest.

   Storm Water Runoff: No storm water runoff shall be allowed to drain in to the existing and/or proposed underground storm drain system or other above ground watercourses until appropriate erosion control measures are fully installed.

   Dust Control: The contractor shall provide dust control in graded areas as required by providing wet suppression or chemical stabilization of exposed soils, providing for rapid clean up of sediments deposited on paved roads, furnishing construction road entrances and vehicle wash down areas, and limiting the amount of areas disturbed by clearing and earth moving operations by scheduling these activities in phases.

   Stockpiling: Excavated soils shall not be placed in streets or on paved areas. Borrow and temporary stockpiles shall be protected with appropriate erosion control measures(tarps, straw bales, silt fences, ect.) to ensure silt does not leave the site or enter the storm drain system or neighboring watercourse.
2. Erosion Control: During the rainy season, all disturbed areas must include an effective combination of erosion and sediment control. It is required that temporary erosion control measures are applied to all disturbed soil areas prior to a rain event. During the non-rainy season, erosion control measures must be applied sufficient to control wind erosion at the site.
3. Inspection & Maintenance: Disturbed areas of the Project's site, locations where vehicles enter or exit the site, and all erosion and sediment controls that are identified as part of the Erosion Control Plans must be inspected by the Contractor before, during, and after storm events, and at least weekly during seasonal wet periods. Problem areas shall be identified and appropriate additional and/or alternative control measures implemented immediately, within 24 hours of the problem being identified.
4. Project Completion: Prior to project completion and signoff by the County Inspector, all disturbed areas shall be reseeded, planted, or landscaped to minimize the potential for erosion on the subject site.
5. It shall be the Owner's/Contractor's responsibility to maintain control of the entire construction operation and to keep the entire site in compliance with the erosion control plan.
6. Erosion and sediment control best management practices shall be operable year round or until vegetation is fully established on landscaped surfaces.

Project Information

Best Management Practices and Erosion Control Details Sheet 1
County of Santa Clara

BMP-1

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERING

REVISIONS	DATE	CITY	BY

REGISTERED PROFESSIONAL ENGINEER FORTINO OSCAR OSUNA No. 70829 Exp. 6-30-21 CIVIL STATE OF CALIFORNIA
10-23-2020
FORTINO OSCAR OSUNA RCE 70829 EXP. 6-30-21

OSUNA ENGINEERING INC.
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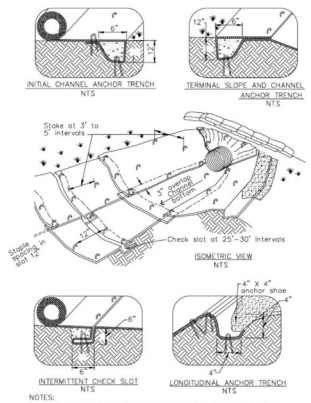
GRADING & DRAINAGE PLAN
COUNTY BMP-1
16391 AZTEC RIDGE DR
LOS GATOS, CALIFORNIA

Project No.: 2037 | Designed: JO | Drawn: GO | Date: 6/15/21

SHEET
C3.1
OF 9 SHEETS

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; THAT CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

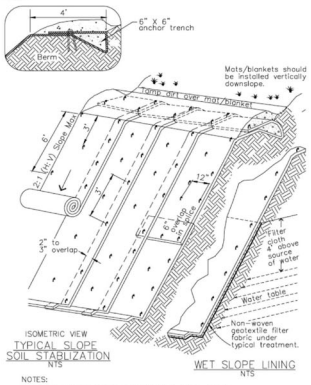
7 Geotextiles and Mats
CASQA Detail EC-7



NOTES:
1. Check slots to be constructed per manufacturers specifications.
2. Staking or stapling layout per manufacturers specifications.
3. Install per manufacturer's recommendations

TYPICAL INSTALLATION DETAIL

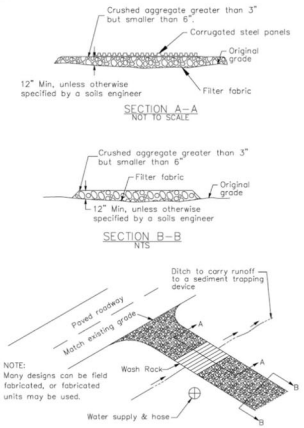
5 Geotextiles and Mats
CASQA Detail EC-7



NOTES:
1. Slope surface shall be free of rocks, clods, sticks and grass. Mats/blankets shall have good soil contact.
2. Lay blankets loosely and stake or staple to maintain direct contact with the soil. Do not stretch.
3. Install per manufacturer's recommendations

TYPICAL INSTALLATION DETAIL

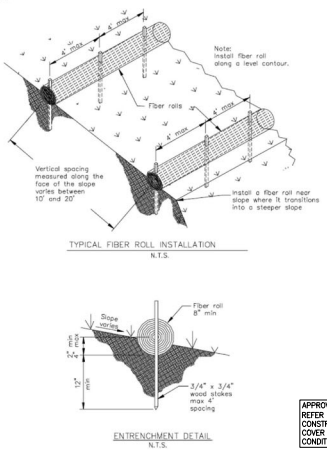
3 Entrance/Outlet Tire Wash
CASQA Detail TC-3



NOTE:
Many designs can be field fabricated, or fabricated units may be used.

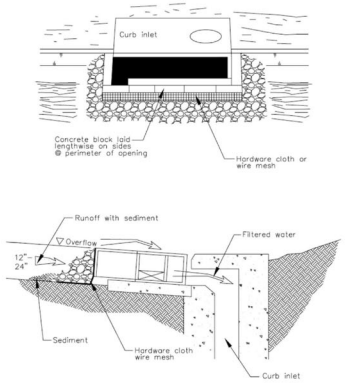
TYPICAL TIRE WASH
NOT TO SCALE

1 Fiber Rolls
CASQA Detail SE-5



APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERING

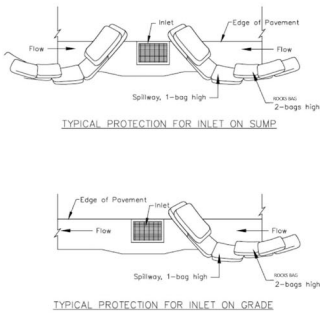
8 Storm Drain Inlet Protection
CASQA Detail SE-10



DI PROTECTION – TYPE 4
NOT TO SCALE

Source for Graphics: California Stormwater BMP Handbook, California Stormwater Quality Association, January 2003.
Available from www.cabmphandbooks.com.

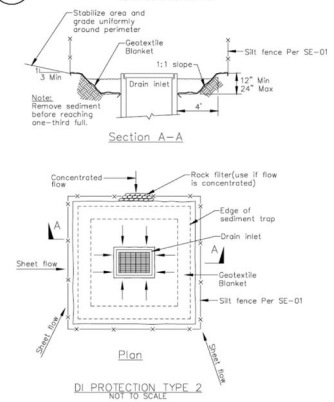
6 Storm Drain Inlet Protection
CASQA Detail SE-10



NOTES:
1. Intended for short-term use.
2. Use to inhibit non-storm water flow.
3. Allow for proper maintenance and cleanup.
4. Bags must be removed after adjacent operation is completed
5. Not applicable in areas with high silts and clays without filter fabric.

DI PROTECTION TYPE 3
NOT TO SCALE

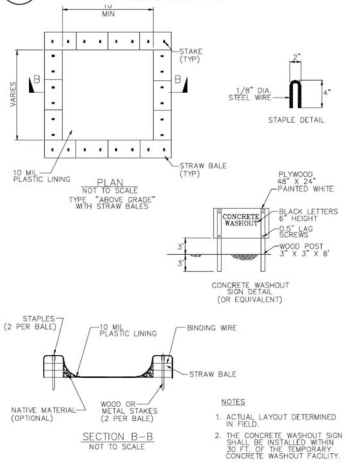
4 Storm Drain Inlet Protection
CASQA Detail SE-10



DI PROTECTION TYPE 2
NOT TO SCALE

Notes
1. For use in cleared and grubbed and in graded areas.
2. Shape basin so that longest inflow area faces longest length of trap.
3. For concentrated flows, shape basin in 2:1 ratio with length oriented towards direction of flow.

2 Concrete Waste Management
CASQA Detail WM-8



NOTES
1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

Project Information

Best Management Practices and Erosion Control Details Sheet 2
County of Santa Clara

BMP-2

REVISIONS

BY	CITY	DATE

REGISTERED PROFESSIONAL ENGINEER RODRIGO OSCAR OSUNA No. 70829 Exp. 6-30-21 CIVIL STATE OF CALIFORNIA

10-23-2020

RODRIGO OSCAR OSUNA
RCE 70829 EXP. 6-30-21

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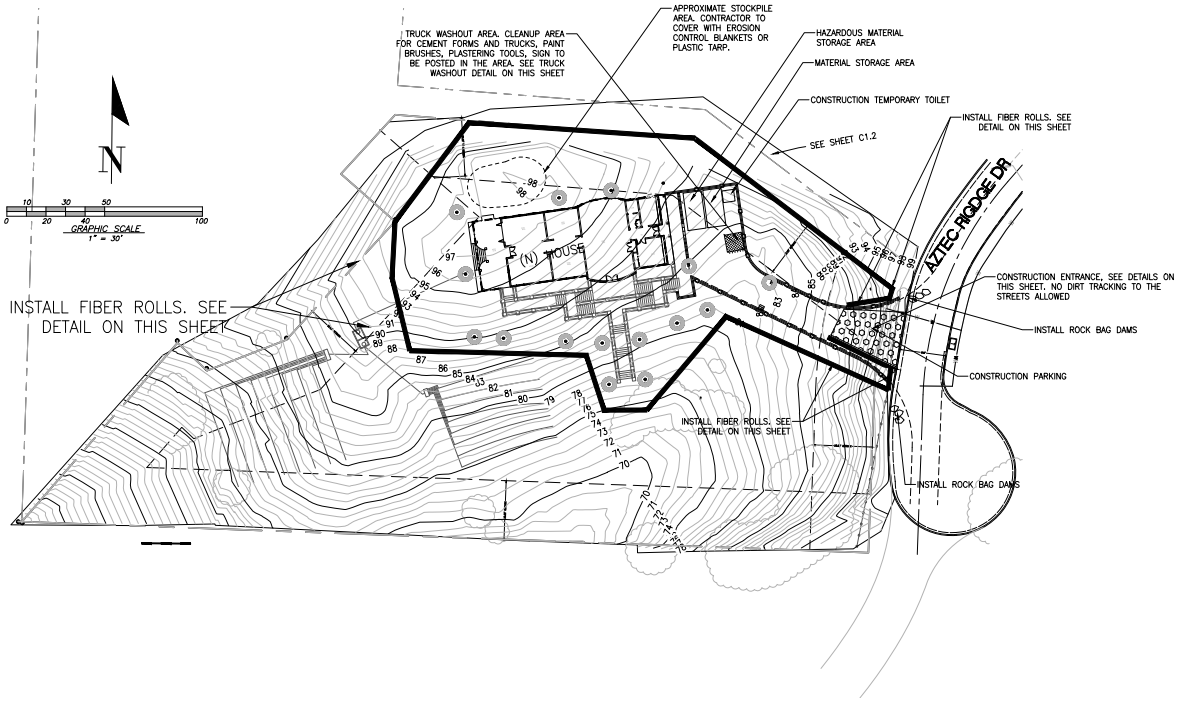
GRADING & DRAINAGE PLAN
COUNTY BMP-2
16391 AZTEC RIDGE DR
LOS GATOS, CALIFORNIA

Project No.: 2037 | Designed: JO | Checked: OO | Date: 6/15/21

SHEET
C3.2
OF 9 SHEETS



EROSION & SEDIMENT CONTROL NOTES

1. NOT USED
2. THE DEVELOPER IS RESPONSIBLE FOR ENSURING THAT ALL CONTRACTORS AND SUBCONTRACTORS ARE AWARE OF ALL STORM WATER QUALITY MEASURES AND IMPLEMENT SUCH MEASURES. FAILURE TO COMPLY WITH THE APPROVED CONSTRUCTION BEST MANAGEMENT PRACTICES WILL RESULT IN THE ISSUANCE OF CORRECTION NOTICES, CITATIONS, AND/OR STOP ORDERS.
3. ANY VEHICLE OR EQUIPMENT WASHING/STEAM CLEANING MUST BE DONE AT AN APPROPRIATELY EQUIPPED FACILITY WHICH DRAINS TO THE SANITARY SEWER. OUTDOOR WASHING MUST BE MANAGED IN SUCH A WAY THAT THERE IS NO DISCHARGE OF SOAPS, SOLVENTS, CLEANING AGENTS OR OTHER POLLUTANTS TO THE STORM DRAINS. WASH WATER SHALL DISCHARGE TO THE SANITARY SEWER, SUBJECT TO REVIEW AND APPROVAL OF UNION SANITARY DISTRICT.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LITTER CONTROL AND SWEEPING OF ALL PAVED SURFACES DURING CONSTRUCTION.
5. THE FACILITIES SHOWN ON THIS PLAN ARE DESIGNED TO CONTROL EROSION AND SEDIMENT DURING THE RAINY SEASON, OCTOBER 1 TO APRIL 15. EROSION CONTROL MEASURES ARE TO BE FUNCTIONAL PRIOR TO OCTOBER 1ST OF ANY YEAR GRADING OPERATIONS HAVE LEFT AREAS UNPROTECTED FROM EROSION.
6. ALL ON-SITE STORM DRAINS SHALL BE CLEANED IMMEDIATELY BEFORE THE START OF THE RAINY SEASON BEGINNING ON OCTOBER 1ST EACH YEAR, SUBJECT TO THE REVIEW OF THE BUILDING/ENGINEERING INSPECTOR.
7. IF RAINY WEATHER BECOMES IMMINENT, GRADING OPERATIONS SHALL BE STOPPED AND EROSION CONTROL MEASURES SHALL BE IMPLEMENTED TO PROTECT DISTURBED AREAS.
8. DURING THE RAINY SEASON, ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT LADEN RUNOFF TO ANY STORM DRAIN SYSTEM.
9. CONSTRUCTION ENTRANCES SHALL BE INSTALLED PER SANTA CLARA COUNTY BMP SHEET 1.
10. INLETS NOT USED IN CONJUNCTION WITH EROSION CONTROL MEASURES ARE TO BE BLOCKED UNLESS THE AREA DRAINED IS UNDISTURBED OR STABILIZED.
11. BORROW AREAS AND TEMPORARY STOCKPILES SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTORL MEASURES TO THE SATISFACTION OF THE COUNTY ENGINEER.
12. NO STRAW BALES OR SILT FENCES SHALL BE USED AS EROSION CONTROL MEASURES. SILT FENCES MAY ONLY BE USED AS A PHYSICAL BARRIER TO PREVENT VEHICULAR AND PEDESTRIAN TRAFFIC FROM USING NON-APPROVED ACCESS POINTS (E.G. – ALONG RIGHT-OF-WAY).
13. ALL DISTURBED AREAS INCLUDING FLAT PADS ARE TO BE TREATED WITH STRAW AND TACKIFIER AT A RATE OF 2 TONS PER ACRE APPROXIMATELY 3 INCHES THICK.

SUPPLEMENTAL EROSION & SEDIMENT CONTROL NOTES

1. SEE STANDARD EROSION & SEDIMENT CONTROL NOTES ABOVE.
2. THE FACILITIES SHOWN ON THIS PLAN ARE DESIGNED TO CONTROL EROSION AND SEDIMENT DURING THE RAINY SEASON, OCTOBER 1 TO APRIL 15. FACILITIES ARE TO BE OPERABLE PRIOR TO OCTOBER 1 OF ANY YEAR. GRADING OPERATIONS DURING THE RAINY SEASON WHICH LEAVE DENUDED SLOPES SHALL BE PROTECTED WITH EROSION CONTROL MEASURES IMMEDIATELY FOLLOWING GRADING ON THE SLOPES.
3. CONSTRUCTION ENTRANCES SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF GRADING. ALL CONSTRUCTION TRAFFIC ENTERING ONTO THE PAVED ROADS MUST CROSS THE STABILIZED CONSTRUCTION ENTRANCE WAYS.
4. CONTRACTOR SHALL MAINTAIN STABILIZED ENTRANCE AT EACH VEHICLE ACCESS POINT TO EXISTING PAVED STREETS. ANY MUD OR DEBRIS TRACKED ONTO PUBLIC STREETS AND/OR PRIVATE ROADS SHALL BE REMOVED DAILY AND AS REQUIRED BY THE COUNTY. TRACKING TO PUBLIC STREETS AND/OR PRIVATE ROADS NOT ALLOWED.
5. INLET PROTECTION SHALL BE INSTALLED AT OPEN INLETS TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAIN SYSTEM. INLETS NOT USED IN CONJUNCTION WITH EROSION CONTROL ARE TO BE BLOCKED TO PREVENT ENTRY OF SEDIMENT.
6. THIS EROSION AND SEDIMENT CONTROL PLAN MAY NOT COVER ALL THE SITUATIONS THAT MAY ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. VARIATIONS AND ADDITIONS MAY BE MADE TO THIS PLAN IN THE FIELD. NOTIFY THE COUNTY REPRESENTATIVE OF ANY FIELD CHANGES.
7. TO PREVENT EROSION, BEFORE SEPTEMBER 20, ALL SLOPES 3:1 OR STEEPER & GREATER THAN 3 FEET HIGH SHALL BE HYDROSEEDED ACCORDING TO THE FOLLOWING OR OTHER MIXTURE APPROVED BY THE COUNTY:

BLANDO BROME	30 LB/ACRE
ANNUAL RYEGRASS	20 LB/ACRE
16-20-0 FERTILIZER	500 LB/ACRE
STRAW MULCH	3000 LB/ACRE

APPROVED FOR ISSUANCE
REFER TO ENCROACHMENT AND/OR CONSTRUCTION PERMIT AND PLAN COVER SHEET FOR SPECIAL CONDITIONS AND PERMIT NUMBERING

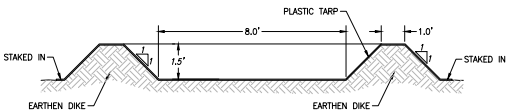
LEGEND

PROPOSED	DESCRIPTION
	SITE BOUNDARY
	STABILIZED CONSTRUCTION ENTRANCE 2"–3" ROCK (MIN)
	FIBER ROLL
	ROCK BAG CHECK DAMS
	INLET PROTECTION

MAINTENANCE NOTES

MAINTENANCE IS TO BE PERFORMED AS FOLLOWS:

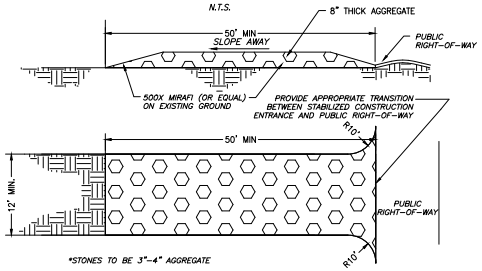
1. REPAIR DAMAGES CAUSED BY SOIL EROSION OR CONSTRUCTION AT THE END OF EACH WORKING DAY.
2. SWALES SHALL BE INSPECTED PERIODICALLY AND MAINTAINED AS NEEDED.
3. SEDIMENT TRAPS, BERMS, AND SWALES ARE TO BE INSPECTED AFTER EACH STORM AND REPAIRS MADE AS NEEDED.
4. SEDIMENT SHALL BE REMOVED AND SEDIMENT TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO A DEPTH OF 1 FOOT.
5. SEDIMENT REMOVED FROM TRAP SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
6. RILLS AND GULLIES MUST BE REPAIRED.



NOTES:
1. PROTECT ALL INLETS IN THE PUBLIC STREETS SURROUNDING THE SITE.
2. ALL ON-SITE LANDSCAPE AREA DRAINS TO BE CAPPED OR PROTECTED UNTIL LANDSCAPING IS FINISHED.

CONCRETE TRUCK WASHOFF AREA

N.T.S.



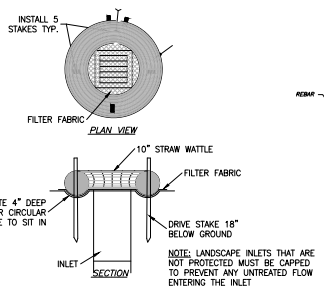
MAINTENANCE:
THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEAN OUT ANY MEASURES USED TO TRAP SEDIMENT.

ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY SHALL BE REMOVED IMMEDIATELY.

WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. THIS SHALL BE DONE AT AN AREA STABILIZED WITH CRUSHED STONE, WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

STABILIZED CONSTRUCTION ENTRANCE

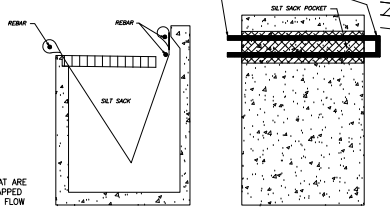
N.T.S.



NOTE: LANDSCAPE INLETS THAT ARE NOT PROTECTED MUST BE CAPPED TO PREVENT ANY UNTREATED FLOW ENTERING THE INLET

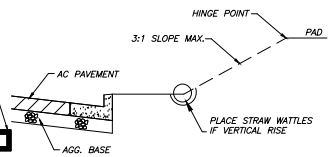
ALTERNATE FIBER ROLL INLET PROTECTION MAY BE USED IN LANDSCAPE AREA DRAINS

N.T.S.



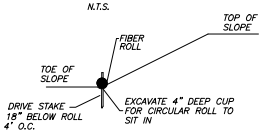
CALIFORNIA MODIFIED SILT SACK

REED & GRAHAM, INC. (OR EQUAL)
BEFORE & AFTER STREETS ARE PAVED



FRONT YARD SLOPE DETAIL AFTER STREET ARE PAVED

N.T.S.



FIBER ROLL INSTALLATION DETAIL

N.T.S.

CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

REVISIONS | BY | CITY | DATE

REGISTERED PROFESSIONAL ENGINEER PORFIRIO OSCAR OSUNA No. 70829 Exp. 6-30-21 CIVIL STATE OF CALIFORNIA

10-23-2020

PORFIRIO OSCAR OSUNA RCE 70829 EXP. 6-30-21

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info@osunoengineering.com

GRADING & DRAINAGE PLAN
EROSION CONTROL
16391 AZTEC RIDGE DR
LOS GATOS, CALIFORNIA

Project No.: 2037 | Designed: JO | Drawn: GO | Date: 6/15/21

SHEET C4 OF 9 SHEETS

Notes for Figure 6H-6—Typical Application 6 Shoulder Work with Minor Encroachment

Guidance:

1. *All lanes should be a minimum of 10 feet in width as measured to the near face of the channelizing devices.*
2. *The treatment shown should be used on a minor road having low speeds. For higher-speed traffic conditions, a lane closure should be used.*

Option:

3. For short-term use on low-volume, low-speed roadways with vehicular traffic that does not include longer and wider heavy commercial vehicles, a minimum lane width of 9 feet may be used.
4. Where the opposite shoulder is suitable for carrying vehicular traffic and of adequate width, lanes may be shifted by use of closely-spaced channelizing devices, provided that the minimum lane width of 10 feet is maintained.
5. Additional advance warning may be appropriate, such as a ROAD NARROWS sign.
6. Temporary traffic barriers may be used along the work space.
7. The shadow vehicle may be omitted if a taper and channelizing devices are used.
8. A truck-mounted attenuator may be used on the shadow vehicle.
9. For short-duration work, the taper and channelizing devices may be omitted if a shadow vehicle with activated high-intensity rotating, flashing, oscillating, or strobe lights is used.
10. Vehicle hazard warning signals may be used to supplement high-intensity rotating, flashing, oscillating, or strobe lights.

Standard:

11. Vehicle-mounted signs shall be mounted in a manner such that they are not obscured by equipment or supplies. Sign legends on vehicle-mounted signs shall be covered or turned from view when work is not in progress.

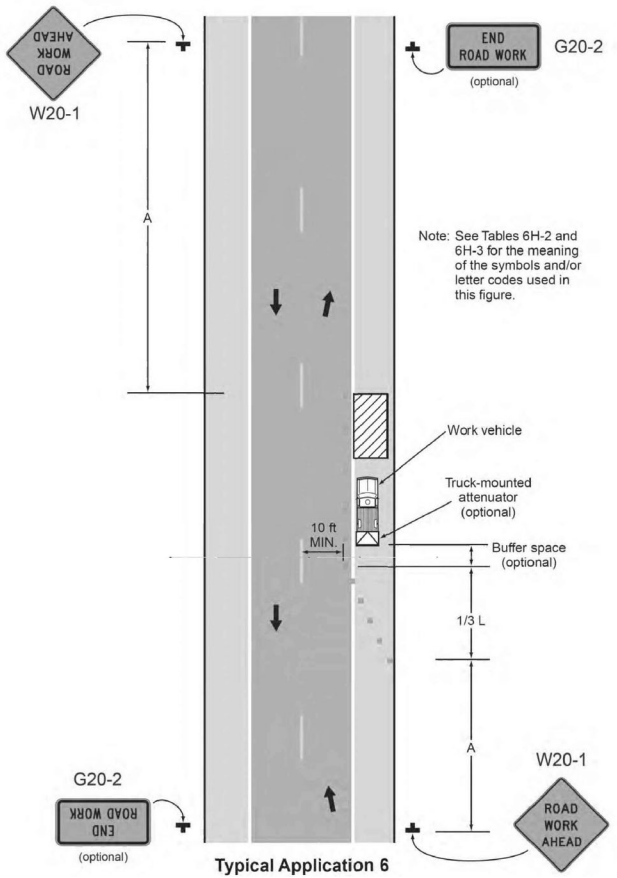
12. Shadow and work vehicles shall display high-intensity rotating, flashing, oscillating, or strobe lights.

13. Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights.

Guidance:

14. *All advance warning signs should be placed so that the path of travel for bicycles is not blocked, while maintaining visibility for road users.*
15. *When existing accommodations for bicycle travel are disrupted or closed in a long-term duration project (see Section 6G.02) and the roadway width is inadequate for allowing bicyclists and motor vehicles to travel side by side, the Bicycle Warning (W11-1) sign and the SHARE THE ROAD (W16-1P) plaque should be used to advise motorists of the presence of bicyclists in the travel way lanes.*
16. *Except for short durations and mobile operations, when a highway shoulder is occupied and bicyclists would be sharing a lane with vehicular traffic, as a result of the TTC zone, speed reduction countermeasures should be used to reduce traffic speeds in the TTC zone. Refer to Sections 6C.01 and 6D.03.*
17. *Except for short durations and mobile operations, when a highway shoulder is occupied and bicyclists would be sharing a lane with vehicular traffic, as a result of the TTC zone, before narrowing the outside lane other measures such as widening the outside shoulder to allow bicyclists and motor vehicles to travel side by side through the TTC zone should be considered.*
18. *If traffic volumes make it feasible, the two left lanes should be merged into one lane to avoid using the shoulder as a traveled way lane and allowing continued use for emergency purposes and bicycle travel.*
19. *When existing accommodations for bicycle travel are disrupted or closed in a long-term duration project (see Section 6G.02) and the roadway width is inadequate for allowing bicyclists and motor vehicles to travel side by side, a separate path should be considered for bicyclists.*

Figure 6H-6. Shoulder Work with Minor Encroachment (TA-6)



NO.	REVISIONS	BY	DATE	APP'D

COUNTY OF SANTA CLARA ROADS AND AIRPORTS DEPARTMENT

DESIGNED	5-2015 DATE	SUBMITTED:	APPROVED:
DRAWN	5-2015 DATE		
CHECKED	5-2015 DATE		

STANDARD TRAFFIC CONTROL PLANS - LOCAL
SHOULDER WORK

DRAWING No. TCP

SHT No. OF

WORK ORDER No. XX	ADVERTISEMENT DATE:	CONTRACT No.	FILE No.	Scale

REVISIONS | BY | CITY | DATE

REGISTERED PROFESSIONAL ENGINEER PORFIRIO OSCAR OSUNA No. 70829 Exp. 6-30-21 STATE OF CIVIL OF CALIFORNIA

10-23-2020

PORFIRIO OSCAR OSUNA RCE 70829 EXP. 6-30-21

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GRADING & DRAINAGE PLAN
TRAFFIC CONTROL PLAN
16391 AZTEC RIDGE DR
LOS GATOS, CALIFORNIA

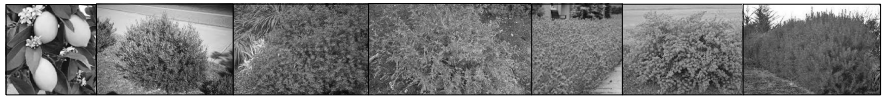
Project No.: 2037 | Designed: JO | Checked: OO | Date: 6/15/21

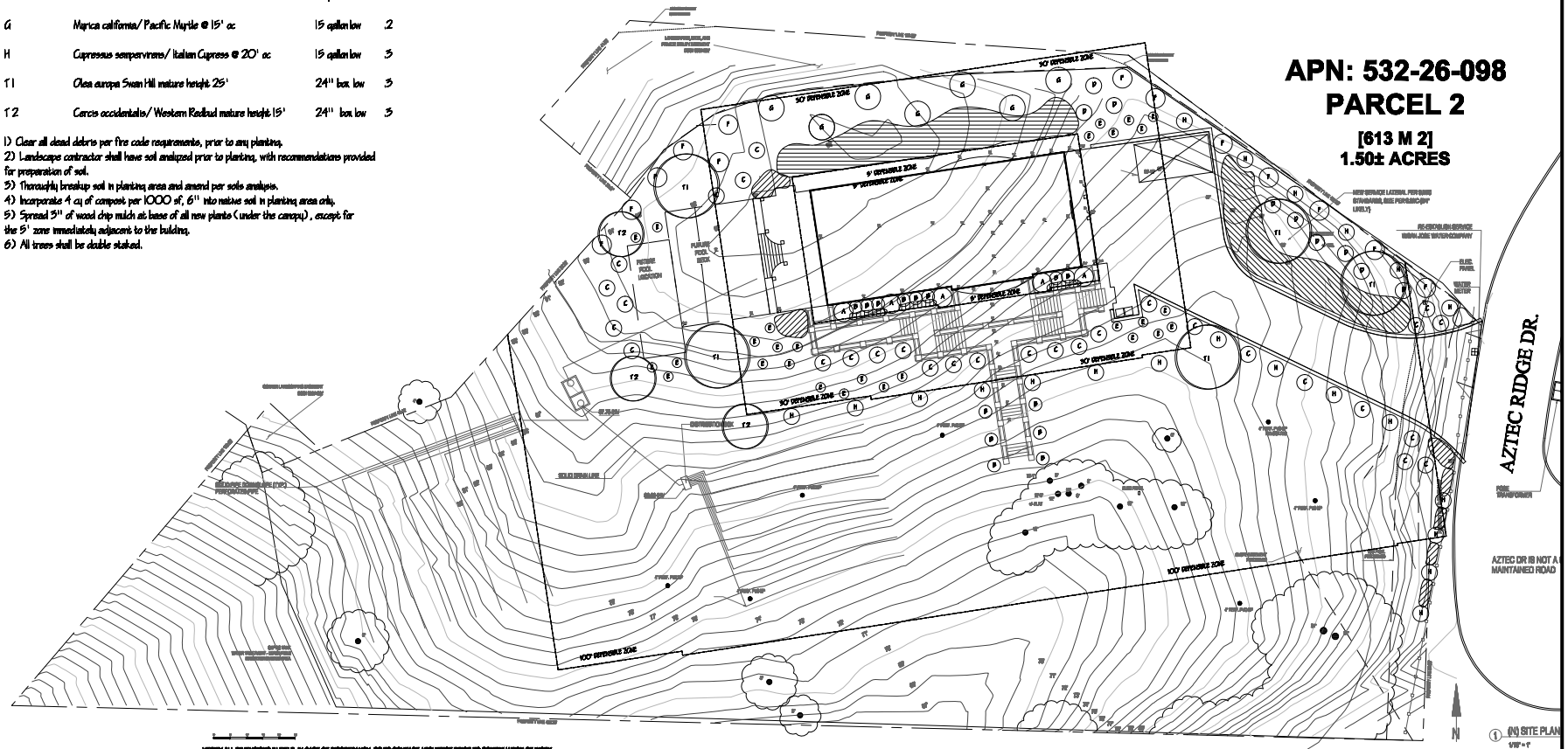
SHEET C5 OF 9 SHEETS

PLANT LEGEND

Symbol	Species	Size	Water	WUCOLS
	Ceanothus gloriosus porrectus @ 5' oc	1 gallon	low	.2
	Delosperma nubigenum/ Hardy Yellow Ice Plant @ 30" oc	1 gallon	low	.3
	Tillandsia violacea @ 36" oc	1 gallon	low	.3
	Echeveria @ 18" oc	1 gallon	low	.3
A	Citrus - Dwarf Meyer Lemon	5 gallon	special	.5
B	Olea Little Ollie/ Dwarf Olive	5 gallon	low	.3
C	Cistus Sunset/ Rockrose @ 8' oc	5 gallon	low	.3
D	Epilobium canum/ California Fuschia	5 gallon	low	.3
E	Lavandula Munstead/ Lavendar	5 gallon	low	.3
F	Ceanothus Blue Jeans @ 12' oc	5 gallon	low	.2
G	Myrica californa/ Pacific Myrtle @ 15' oc	15 gallon	low	.2
H	Cupressus sempervirens/ Italian Cypress @ 20' oc	15 gallon	low	.3
T1	Olea europa Swan Hill mature height 25'	24" box	low	.3
T2	Cercis occidentalis/ Western Redbud mature height 15'	24" box	low	.3

1) Clear all dead debris per fire code requirements, prior to any planting.
2) Landscape contractor shall have soil analyzed prior to planting, with recommendations provided for preparation of soil.
3) Thoroughly breakup soil in planting area and amend per soils analysis.
4) Incorporate 4 cy of compost per 1000 sf, 6" into native soil in planting area only.
5) Spread 3" of wood chip mulch at base of all new plants (under the canopy) , except for the 5' zone immediately adjacent to the building.
6) All trees shall be double staked.





VERIFY ALL DIMENSIONS IN FIELD, IN CASE OF DISCREPANCY, GO TO CONTACT ARCHITECT PRIOR TO CONTINUATION OF WORK.

MASTER PLANTING PLAN
1/16" = 1'-0"

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REVISED 2/16/21
REVISED 2/25/21
REVISED 6/21/21

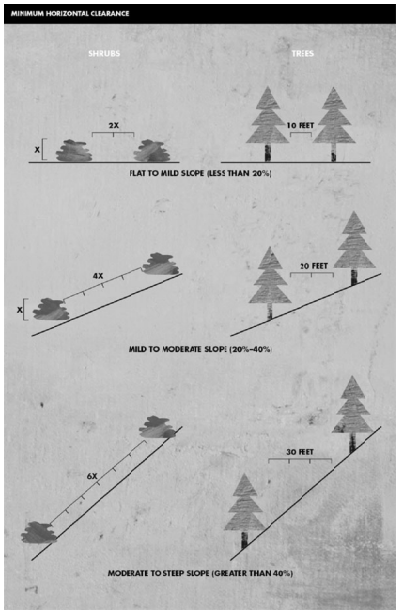
REGISTERED LANDSCAPE ARCHITECT
EXPIRATION DATE: 08/30/2023
STATE OF CALIFORNIA

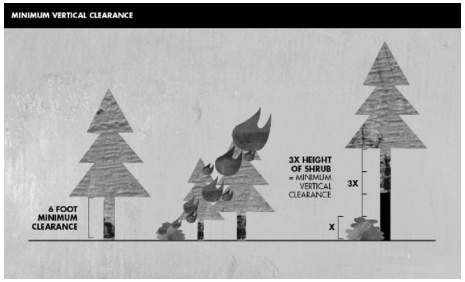
LUBIVY RESIDENCE

for:
ALEXANDER LUBIVY
16391 AZTEC RIDGE ROAD
LOS GATOS, CA. 95030

MASTER PLANTING PLAN

date: 2/15/21
scale: NOTED
drawn by: W.JH
job no. 202108
sheet
L1
of sheets





Maintain a vertical clearance between shrubs and trees. Example: A five foot shrub is growing near a tree. 3x5 = 15 feet of clearance needed between the top of the shrub and the lowest tree branch.

Plant and Tree Spacing

1) The spacing between grass, shrubs, and trees is crucial to reduce the spread of wildfires. The spacing needed is determined by the type and size of brush and trees, as well as the slope of the land. For example, a property on a steep slope with larger vegetation requires greater spacing between trees and shrubs than a level property that has small, sparse vegetation.

Vertical Spacing

1) Maintain and remove all tree branches at least 6 feet from the ground.
2) Verify placement of plant material in field. Additional space shall be allowed between shrubs and trees to reduce the ladder effect for a wildfire.

To determine the proper vertical spacing between shrubs and the lowest branches of trees, use the formula this sheet.

5' Zone

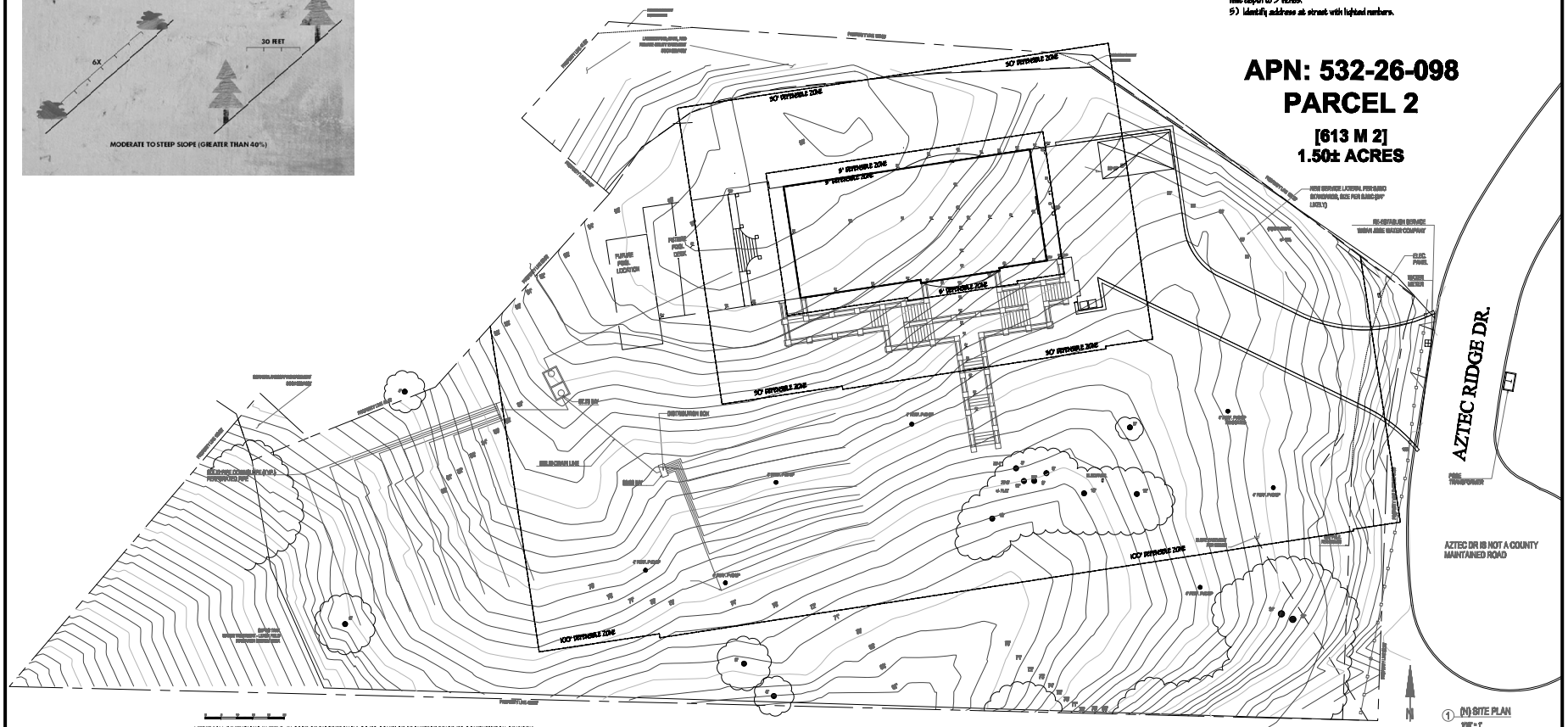
This zone represents the initial 5' away from the building.
1) Limit planting within the first 5' of the house.
2) No tall plants (10'+) shall be located here.
3) No organic mulch shall be placed in this area.

Zone 1

Zone 1 extends 30 feet from buildings, structures, decks, etc.
1) Remove all dead plants, grass and woods (vegetation).
2) Remove dead or dry leaves, pine needles, etc. from yard, roof and rain gutters.
3) Remove branches that hang over roof and keep dead branches 10 feet away from the chimney.
4) Trim trees regularly to keep branches a minimum of 10 feet from other trees.
5) Relocate wood piles to Zone 2.
6) Remove or prune flammable plants and shrubs near windows.
7) Remove vegetation and items that could catch fire from around and under decks.
8) Create a separation between trees, shrubs and items that could catch fire, such as patio furniture, wood piles, swing sets, etc.
9) Locate trees outside of this zone.
10) Provide adequate lighting along driveway for fire truck and firefighter access.

Zone 2

Zone 2 extends 100 feet out from buildings, structures, decks, etc.
1) Cut or mow annual grass down to a maximum height of 4 inches.
2) Create horizontal space between shrubs and trees. (See diagram)
3) Create vertical space between grass, shrubs and trees. (See diagram)
4) Remove fallen leaves, needles, twigs, bark, cones, and small branches. Limit depth to 3 inches.
5) Identify address at street with lighted numbers.



VERIFY ALL DIMENSIONS IN FIELD, IN CASE OF DISCREPANCY, GO TO CONTACT ARCHITECT PRIOR TO CONTINUATION OF WORK.

WILDFIRE DEFENSE PLAN
1/16" = 1'-0"

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REVISED 2/25/21
REVISED 6/21/21

REGISTERED LANDSCAPE ARCHITECT
EXPIRATION DATE: 08/30/2023
STATE OF CALIFORNIA

LUBIVY RESIDENCE

for:
ALEXANDER LUBIVY
16391 AZTEC RIDGE ROAD
LOS GATOS, CA. 95030

FIRE DEFENSE PLAN

date: 2/15/21
scale: NOTED
drawn by: WJH
job no. 202108
sheet L 2
of sheets

California Water Efficient Landscape Worksheet

Reference Evapotranspiration (ET_o) 43.9 | Project Type: Residential | 0.55

Hydrozone # / Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (Sq. Ft.)	ETAF x Area	Estimated Total Water Use (ETWU)[d]
Regular Landscape Areas							
#1 low water	0.3	Drip	0.81	0.37	1800	667	18145
#2 medium water	0.5	Drip	0.81	0.62	270	167	4536
#3 low water	0.3	Drip	0.81	0.37	1105	409	11139
#4 low water	0.3	Drip	0.81	0.37	1250	463	12601
#5 low water	0.3	Drip	0.81	0.37	2215	820	22329
#6 low water	0.3	Drip	0.81	0.37	2725	1009	27470
			0.75	0.00		0	0
			0.75	0.00		0	0
			0.75	0.00		0	0
			0.75	0.00		0	0
			0.75	0.00		0	0
			0.75	0.00		0	0
			0.75	0.00		0	0
			0.75	0.00		0	0
			0.75	0.00		0	0
			0.75	0.00		0	0
			0.75	0.00		0	0
			0.75	0.00		0	0
				Totals	9365	3535	96221
Special Landscape Areas							
				1		0	0
				1		0	0
				1		0	0
				1		0	0
				Totals	0	0	0
						ETWU Total	96221
						Maximum Allowed Water Allowance (MAWA)[e]	140193

[redacted]

[a] Hydrozone # / Planting Description e.g.
1.) Front lawn
2.) Low water use planting
3.) Medium water use planting

[b] Irrigation Method
1.) Overhead Spray
2.) Drip

[c] Irrigation Efficiency
1.) 0.75 for Overhead Spray
2.) 0.81 for Drip

[d] ETWU (Annual Gallons Required) =
Eto x 0.62 x ETAF x Area
Where 0.62 is a conversion factor to change acre-inches per acre per year to gallons per square foot per year

[e] MAWA (Annual Gallons Allowed) =
(Eto) (0.62) [(ETAF x LA) + ((1-ETAF) x SLA)]
Where 0.62 is a conversion factor to change acre-inches per acre per year to gallons per square foot per year, LA is the total regular landscape area in square feet, SLA is the total special landscape area in square feet, and ETAF is 0.55 for residential areas and 0.45 for non-residential areas

0.45	Non-Residential
0.55	Residential
0.81	Drip
0.75	Overhead

ETAF Calculations

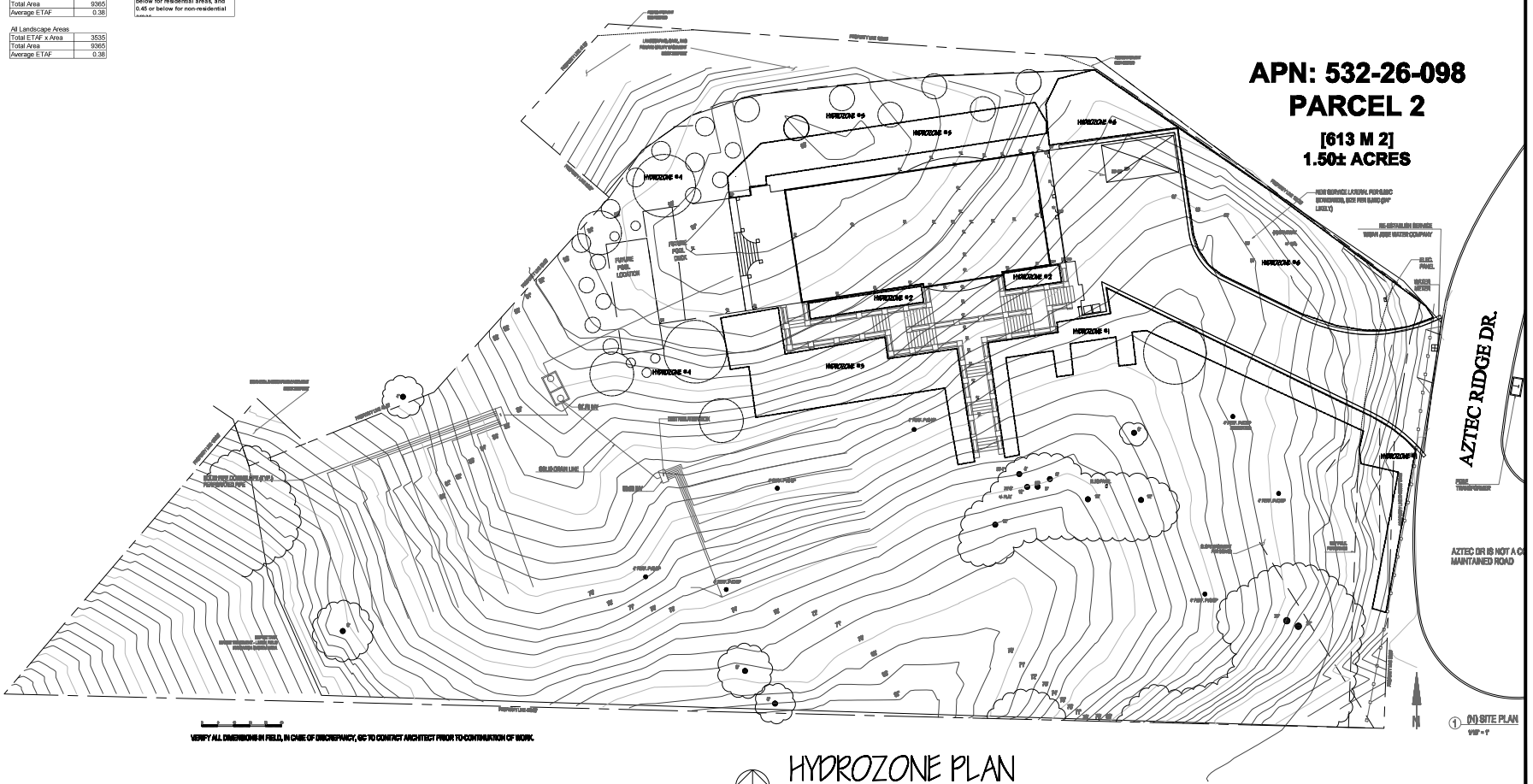
Regular Landscape Areas

Total ETAF x Area	3535
Total Area	9365
Average ETAF	0.38

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

All Landscape Areas

Total ETAF x Area	3535
Total Area	9365
Average ETAF	0.38



VERIFY ALL DIMENSIONS IN FIELD, IN CASE OF DISCREPANCY, GC TO CONTACT ARCHITECT PRIOR TO CONTINUATION OF WORK.

HYDROZONE PLAN
1/16" = 1'-0"

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REVISED 2/16/21
REVISED 2/25/21
REVISED 6/21/21

REGISTERED LANDSCAPE ARCHITECT
EXPIRATION DATE: 08/30/2023
STATE OF CALIFORNIA

LUBIVY RESIDENCE

for:
ALEXANDER LUBIVY
16391 AZTEC RIDGE ROAD
LOS GATOS, CA. 95030

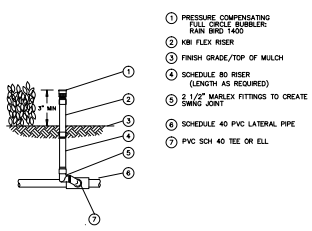
HYDROZONE PLAN

date: 2/15/21
scale: NOTED
drawn by: WJH
job no. 202108
sheet L 3
of sheets

IRRIGATION LEGEND

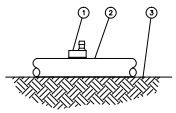
- C — Hunter I-Core 18 station controller with Solar Sync and rain sensor
- WM — Separate 1 1/2" sub meter for irrigation only. Include 1" Hunter master valve and flow sensor to detect any leaks in system
- Febco #825 Y - 2" reduced pressure backflow preventer, included lockable vandal resistant cover
- ------- Schedule 40 pvc mainline - 2" - min. depth 18"
- Rainbird 1" PEB series control valves with in line pressure reducer set to 35 psi and Y filter for drip and bubbler circuits
- ——— Schedule 40 pvc lateral lines - 3/4" unless noted- min. depth 12"
- Rainbird pressure compensating emitters - qpgh - 2 emitters/ one gallon 3/ five gallon 1/ fifteen gallon
- Rainbird #1400 series bubbler for trees 0.25 gpm max. - 1 per shrub, 2 per tree - provide check valves below bubblers at ground level, install with flush and valve in valve box with cap
- (1) Control valve number

1) Verify water and electrical services for point of connection.
2) Verify site water pressure of 75 psi at point of connection and 65 psi working pressure - notify architect prior to construction if found to be different.
3) Verify electrical source and placement of controller with owner in garage.
4) Contractor shall provide all necessary safety precautions throughout construction. This shall include signage and barriers.
5) Verify operation of system before backfilling trenches. Drip line to be secured to grade with stakes at base of each plant and covered with final mulch.
6) System layout is diagrammatic, actual field conditions will dictate final layout, addition of drip line, etc.
7) Verify control wire placement and access under pavement and extension of additional wires.
8) Verify rain sensor placement in field.
9) Contractor shall be responsible for setting and monitoring irrigation system to apply adequate water for establishment, but to eliminate runoff and soil saturation.
10) Contractor to submit maintenance and irrigation schedule to Owner at completion of installation and maintenance/ warranties period.
11) Contractor shall verify location of all underground utilities prior to any trenching or excavation.
12) Verify and coordinate installation of sleeving and/ or mainline and control wire conduit access under all pavement.



1. PRESSURE COMPENSATING FULL CIRCLE BUBBLER: RAIN BIRD 1400
2. KBI FLEX RISER
3. FINISH GRADE/TOP OF MULCH
4. SCHEDULE 80 RISER (LENGTH AS REQUIRED)
5. 2 1/2" MARLEX FITTINGS TO CREATE SWING JOINT
6. SCHEDULE 40 PVC LATERAL PIPE
7. PVC SCH 40 TEE OR ELL

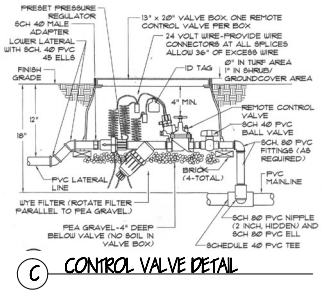
A PRESSURE COMPENSATING FULL-CIRCLE BUBBLER 1400 SERIES ON RISER — N.T.S.



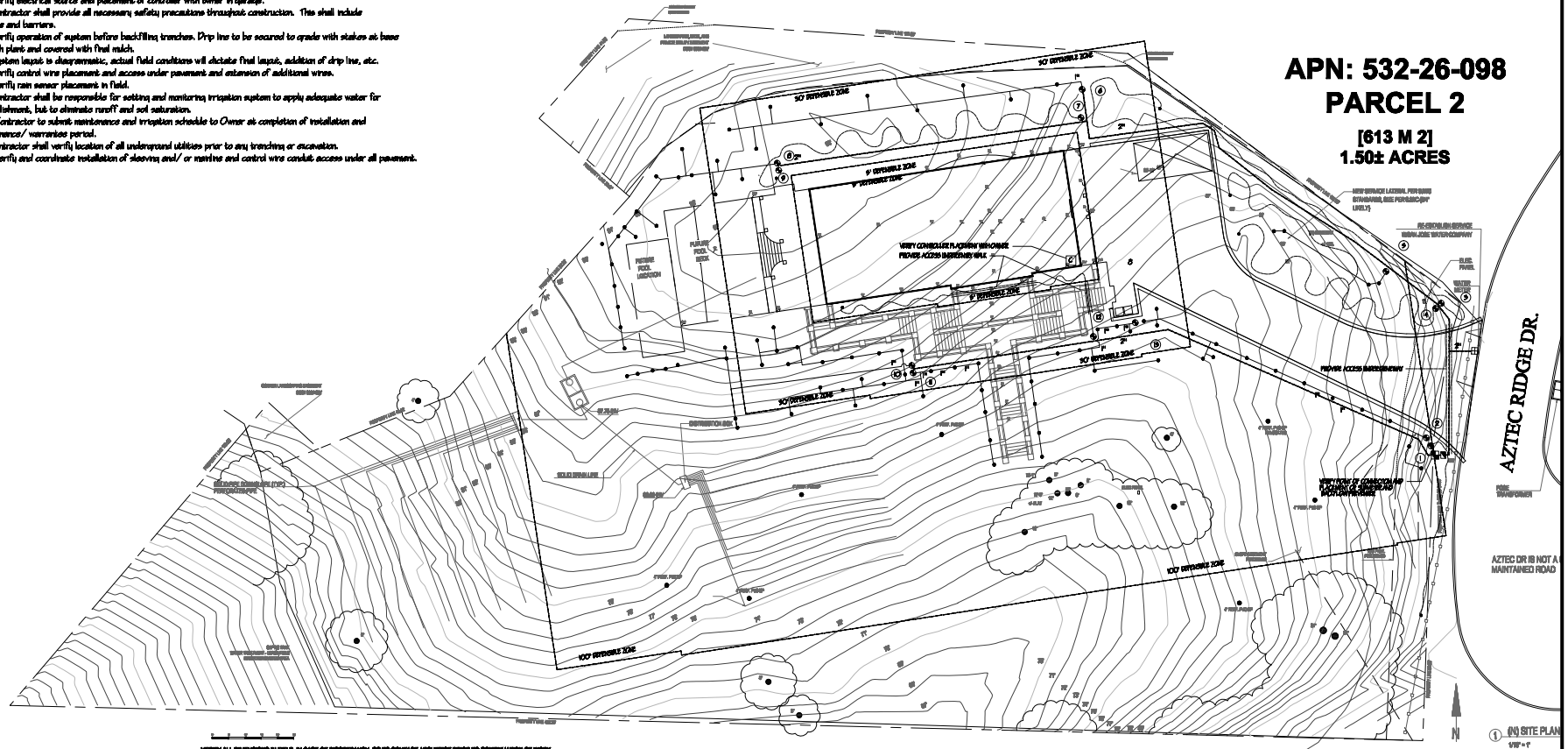
1. SINGLE-OUTLET BARB INLET X BARB OUTLET EMITTER: RAIN BIRD XERI-BUG EMITTER
2. 5/8" POLYETHYLENE TUBING: RAIN BIRD 17 SERIES TUBING OR RAIN BIRD XT-700 XERI-TUBE OR RAIN BIRD XBS BLACK STRIPE TUBING
3. FINISH GRADE

NOTES:
1. USE RAIN BIRD XERIMAN TOOL XM-TOOL TO INSERT EMITTER DIRECTLY INTO 5/8" POLYETHYLENE TUBING.
2. RAIN BIRD XERI-BUG BARB X BARB EMITTERS ARE AVAILABLE IN THE FOLLOWING MODELS: XB-05PC 0.5 GPH XB-10PC 1.0 GPH XB-20PC 2.0 GPH

B XERI-BUG INTO 1/2-INCH TUBING OPTION 1 — N.T.S.



C CONTROL VALVE DETAIL



VERIFY ALL DIMENSIONS IN FIELD, IN CASE OF DISCREPANCY, GO TO CONTACT ARCHITECT PRIOR TO CONTINUATION OF WORK.

(1) (N) SITE PLAN
1/16" = 1'

IRRIGATION PLAN
1/16" = 1'-0"

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REVISED 6/21/21

REG. JEFFREY HEID LANDSCAPE ARCHITECT — EXPIRATION DATE: 08/30/2023 — STATE OF CALIFORNIA

LUBIVY RESIDENCE

for:
ALEXANDER LUBIVY
16391 AZTEC RIDGE ROAD
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IRRIGATION PLAN

date: 2/25/21
scale: NOTED
drawn by: WJH
job no. 202108
sheet L 4
of sheets