GENERAL NOTES

1. CODES AND REGULATIONS — ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE FOLLOWING CODES, AS WELL AS ALL APPLICABLE STATE CODES & LOCAL CITY ORDINANCES,
2019 CALIFORNIA BUILDING CODE (C.B.C.)
2019 CALIFORNIA RESIDENTIAL CODE (C.R.C.)
2019 CALIFORNIA ELECTRICAL CODE (C.E.C.)
2019 CALIFORNIA PLUMBING CODE (C.P.C.)
2019 CALIFORNIA MECHANICAL CODE (C.M.C.)
2019 CALIFORNIA FIRE CODE (C.F.C.)
2019 CALIFORNIA ENERGY CODE (C.E.C.)
2019 CALIFORNIA GREEN CODE (C.G.C.)
NOTHING ON THE DRAWINGS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES & REGULATIONS.

2. SITE VERIFICATION — GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL EXAMINE THOROUGHLY THE SITE AND SATISFY THEMSELVES AS TO THE CONDITIONS TO WHICH THE WORK IS TO BE PERFORMED. THE CONTRACTOR SHALL VERIFY AT THE SITE ALL MEASUREMENTS AFFECTING HIS WORK, AND SHALL BE RESPONSIBLE FOR THE CORRECTNESS OF THE SAME. NO EXTRA COST TO THE OWNER WILL BE ALLOWED RESULTING FROM HIS NEGLIGENCE TO EXAMINE OR FAILURE TO DISCOVER CONDITIONS AFFECTING HIS WORK.

3. MEASUREMENTS — CONTRACTOR SHALL VERIFY ALL DIMENSIONS SHOWN ON THE DRAWINGS BY TAKING FIELD MEASUREMENTS; FOR PROPER FIT AND ATTACHMENT OF ALL PARTS IS REQUIRED. SHOULD THERE BE ANY DISCREPANCIES, IMMEDIATELY. REPORT TO THE ARCHITECT IN WRITING PRIOR TO COMMENCEMENT OF ANY RELATED WORK. IN THE EVENT OF THE CONTRACTOR'S FAILURE TO DO SO, THE CONTRACTOR SHALL BE FULLY AND SOLELY RESPONSIBLE FOR THE CORRECTION OR ADJUSTMENT OF ANY SUCH RELATED WORK OR ERRORS.

4. DIMENSIONS — DO NOT SCALE THESE DRAWINGS. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DRAWINGS.

5. DISCREPANCIES — MINOR DISCREPANCIES BETWEEN THE DRAWINGS AND ACTUAL CONDITIONS ARE TO BE EXPECTED. CONDITIONS REQUIRING CLARIFICATION SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IMMEDIATELY.

6. MANUFACTURER'S SPECIFICATIONS — CONTRACTOR AND ALL SUBCONTRACTORS SHALL INSTALL OR APPLY, AND PROTECT ALL PRODUCTS, MATERIALS, PROCESSES, METHODS, COATINGS, EQUIPMENT, APPLIANCES, HARDWARE, SOFTWARE, ETC. IN STRICT ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS, DETAILS & INSTRUCTIONS, TYPICAL. ALL MANUALS OR INSTRUCTIONS PROVIDED BY THESE MANUFACTURER'S FOR PROPER OPERATION AND MAINTENANCE OF THE ABOVE ARE TO BE DELIVERED TO THE OWNER AT THE COMPLETION AND FINAL INSPECTION OF THE PROJECT.

7. WINDOWS AND DOORS — CONTRACTOR SHALL VERIFY THE QUANTITY, ROUGH OPENINGS AND TYPES OF DOORS AND WINDOW AND DOOR SCHEDULES IN RELATION TO FRAMING PER FIELD PRIOR TO ORDERING. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IMMEDIATELY.

8. CALGREEN STANDARDS — ALL ADHESIVES, SEALANTS, CAULKS, PAINTS, COATINGS, AND AEROSOL PAINT CONTAINERS MUST REMAIN ON THE SITE FOR FIELD VERIFICATION BY THE BUILDING INSPECTOR. PER CGBSC SEC. 4.504.2.4

PRIOR TO FINAL INSPECTION, A LETTER SIGNED BY THE GENERAL CONTRACTOR OR THE OWNER/BUILDER (FOR ANY OWNER/BUILDER) PROJECTS MUST BE PROVIDED TO THE COUTY OF SANTA CLARA BUILDING OFFICIAL CERTIFYING THAT ALL ADHESIVES, SEALANTS, CAULKS, PAINTS, COATINGS, AEROSOL PAINTS, AEROSOL COATINGS, CARPET SYSTEMS (INCLUDING CARPETING, CUSHION AND ADHESIVE), RESILIENT FLOORING SYSTEMS, AND COMPOSITE WOOD PRODUCTS INSTALLED ON THIS PROJECT ARE WITHIN THE EMISSION LIMITS SPECIFIED IN CGBSC SECTION 4.504.

AREA TABULATIONS

1. SITE AREA

GROSS AREA :	= 13.41 AC.
NET AREA :	= 13.28 AC.

2. FLOOR AREA

LOWER FLOOR AREA :	=	1,428 SQ. FT.
UPPER FLOOR AREA :	=	2,484 SQ. FT.
UPPER FLOOR AREA DBL. COUNTED:	=	276 SQ. FT.
TOTAL CONDITIONED FLOOR AREA :	**=**	**4,188 SQ. FT.**
LOWER FLOOR CABANA/ KITCHEN:	=	353 SQ. FT.
UPPER FLOOR AREA PORCH & BALCONY:	=	67 SQ. FT.
UPPER FLOOR AREA DBL.COUNTED @ BALCONY	=	6 SQ. FT.
GARAGE AREA :	=	602 SQ. FT.
TOTAL UNCONDITIONED FLOOR AREA :	**=**	**1,028 SQ. FT.**
TOTAL FLOOR AREA:	**=**	**5,216 SQ. FT.**

CONSULTANT DIRECTORY

ARCHITECT
METRO DESIGN GROUP
CONTACT :TOM SLOAN A.I.A.
1475 S. BASCOM AVE. # 208
CAMPBELL, CALIFORNIA 95008
(408) 871-1071 PHONE

CIVIL ENGINEER
HANNA - BRUNETTI ASSOCIATES.
CONTACT: AMANDA MUSY - VERDEL
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GILROY, CA 95020
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GEOTECHNICAL ENGINEER
UPP GEOTECHNOLOGY
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CAMPBELL, CA 95008
(408) 866-5436 PHONE
(408) 941-6824 FAX

SEPTIC SYSTEM ENGINEER
S.R. HARTSELL, R.E.H.S.
P.O. BOX 342
PACIFICA, CA 94044
(650) 888-2419 PHONE
srhartsell@gmail.com

TOPO SURVEY & BOUNDARIES
ALPHA LAND SURVEYS, INC.
A. BRODIE FRENCH, PSL 9301
4444 SCOTTS VALLEY DR #7
SCOTTS VALLEY, CA 95066
(831) 229-2032 CELL
(831) 438-4453 OFFICE

PROJECT INFORMATION

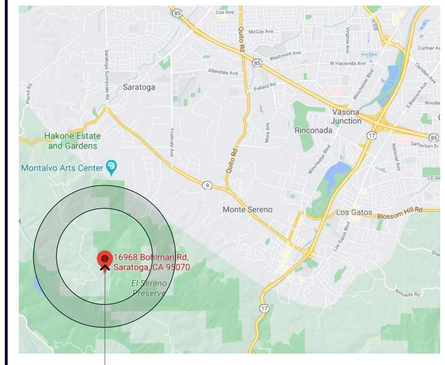
PROPERTY OWNERS	ANTHONY & ANNA NATASHA SINAPI
PHONE:	(669) 400-6406
MAILING ADDRESS	19982 LANARK LANE SARATOGA CA, 95070
PROJECT ADDRESS	16968 BOHLMAN ROAD SARATOGA, CA 95070
SITE GROSS AREA	13.41 AC
SITE NET AREA	13.28 AC
A.P.N.	517-30-013
TRACT MAP:	317-30 , PARCEL B
ZONING	HS-d1 -sr (100%)
SETBACK REQUIREMENTS	REQUIRED: FRONT: 30', SIDE: 30', REAR: 30', SCENIC ROAD: 100' — PROPOSED: FRONT: 30'-5", SIDE: 30'-0"; 70'-4", REAR: +/- 1,085'
LOCATED WITHIN DESIGNATED WILDLAND URBAN INTERFACE FIRE AREA	YES
MAX HEIGHT	ALLOWED: 35' — PROPOSED: 30.56'
CONSTRUCTION TYPE	V-B
OCCUPANCY	R-3/U
STORIES	3 — 2
FIRE SPRINKLERS	REQUIRED (NFPA-13D)
EXISTING USE	RESIDENTIAL, VACANT LOT

SHEET INDEX

ARCHITECTURAL INDEX

CIVIL

VICINITY MAP



PROJECT DESCRIPTION

APPLICATION FOR DESIGN REVIEW TIER II FOR A NEW RESIDENCE ON A VACANT LOT.
PROJECT DEVELOPMENT INCLUDES NEW DRIVEWAY, WALKWAYS, PATIOS, WATER STORAGE AND SEPTIC SYSTEM.
TWO OAK TREES, ONE FIR TREE AND EIGHT BAY TREES ARE PROPOSED TO BE REMOVED.

METRO DESIGN GROUP
ARCHITECTURE· PLANNING· INTERIORS

1475 S. BASCOM AVE SUITE 208
CAMPBELL, CA 95008
(408)871-1071 phone
www.metroarchitects.com

PROJECT NAME

SINAPI RESIDENCE

16968 BOHLMAN ROAD
SARATOGA, CA 95070
APN 517-30-013

REVISIONS

LICENSED ARCHITECT
THOMAS J. SLOAN
C20278
EXP. 10/31/21
STATE OF CALIFORNIA

COVER SHEET

DATE : 7/27/2022
SCALE : AS-NOTED
DRAWN BY : D.Z. T.S.
CHECKED BY : TS
ARCHITECT : TOM SLOAN
PROJECT NO : 20695

SHEET NUMBER

A-0.0

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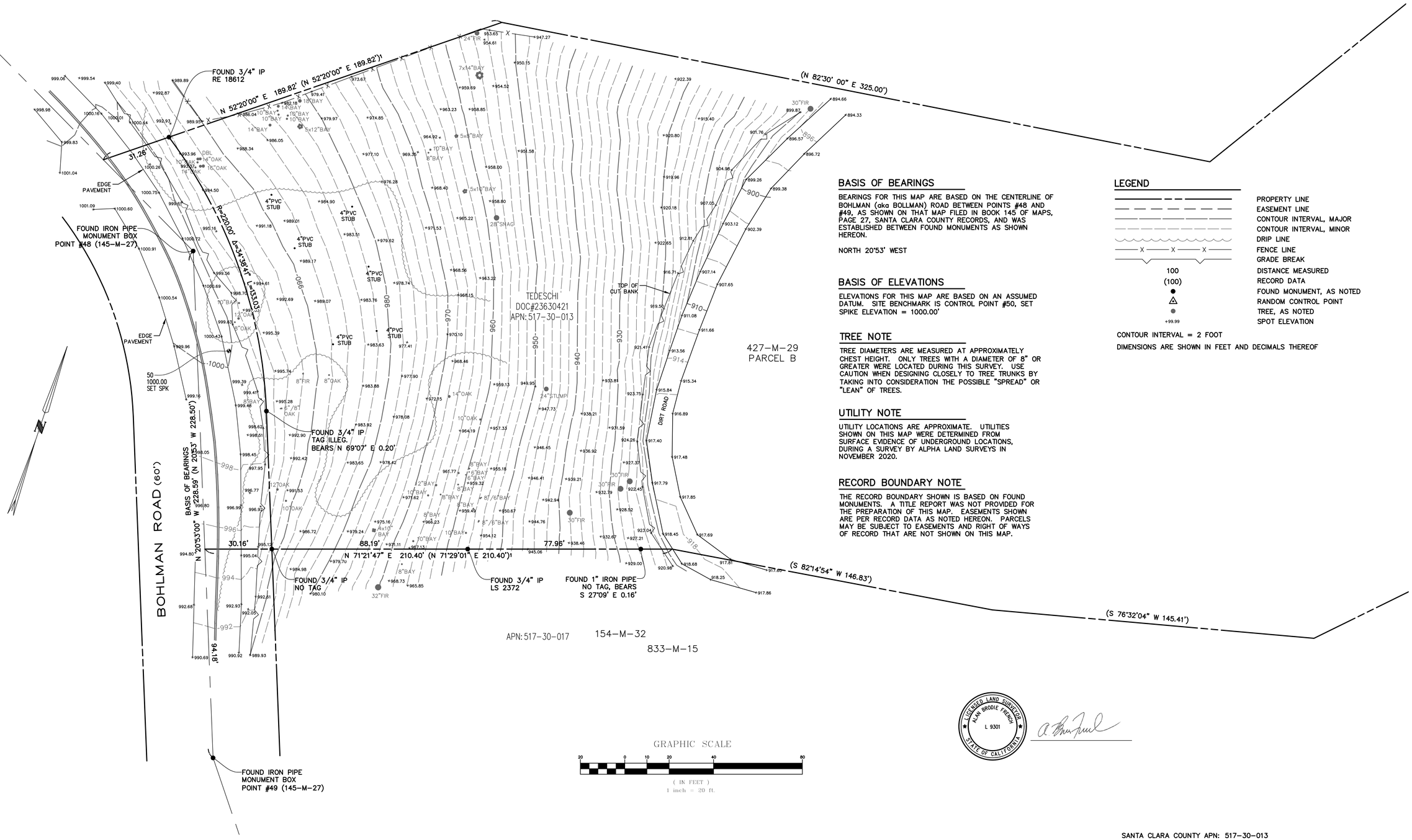


BASIS OF BEARINGS

BEARINGS FOR THIS MAP ARE BASED ON THE CENTERLINE OF BOHLMAN (aka BOLLMAN) ROAD BETWEEN POINTS #48 AND #49, AS SHOWN ON THAT MAP FILED IN BOOK 145 OF MAPS, PAGE 27, SANTA CLARA COUNTY RECORDS, AND WAS ESTABLISHED BETWEEN FOUND MONUMENTS AS SHOWN HEREON.

NORTH 20°53' WEST

BASIS OF ELEVATIONS

ELEVATIONS FOR THIS MAP ARE BASED ON AN ASSUMED DATUM. SITE BENCHMARK IS CONTROL POINT #50, SET SPIKE ELEVATION = 1000.00'

TREE NOTE

TREE DIAMETERS ARE MEASURED AT APPROXIMATELY CHEST HEIGHT. ONLY TREES WITH A DIAMETER OF 8" OR GREATER WERE LOCATED DURING THIS SURVEY. USE CAUTION WHEN DESIGNING CLOSELY TO TREE TRUNKS BY TAKING INTO CONSIDERATION THE POSSIBLE "SPREAD" OR "LEAN" OF TREES.

UTILITY NOTE

UTILITY LOCATIONS ARE APPROXIMATE. UTILITIES SHOWN ON THIS MAP WERE DETERMINED FROM SURFACE EVIDENCE OF UNDERGROUND LOCATIONS, DURING A SURVEY BY ALPHA LAND SURVEYS IN NOVEMBER 2020.

RECORD BOUNDARY NOTE

THE RECORD BOUNDARY SHOWN IS BASED ON FOUND MONUMENTS. A TITLE REPORT WAS NOT PROVIDED FOR THE PREPARATION OF THIS MAP. EASEMENTS SHOWN ARE PER RECORD DATA AS NOTED HEREON. PARCELS MAY BE SUBJECT TO EASEMENTS AND RIGHT OF WAYS OF RECORD THAT ARE NOT SHOWN ON THIS MAP.

LEGEND

———	PROPERTY LINE
— — —	EASEMENT LINE
	CONTOUR INTERVAL, MAJOR
	CONTOUR INTERVAL, MINOR
	DRIP LINE
——X——X——	FENCE LINE
	GRADE BREAK
100	DISTANCE MEASURED
(100)	RECORD DATA
●	FOUND MONUMENT, AS NOTED
⚠	RANDOM CONTROL POINT
●	TREE, AS NOTED
+99.99	SPOT ELEVATION

CONTOUR INTERVAL = 2 FOOT

DIMENSIONS ARE SHOWN IN FEET AND DECIMALS THEREOF

GRAPHIC SCALE

20 0 10 20 40 80

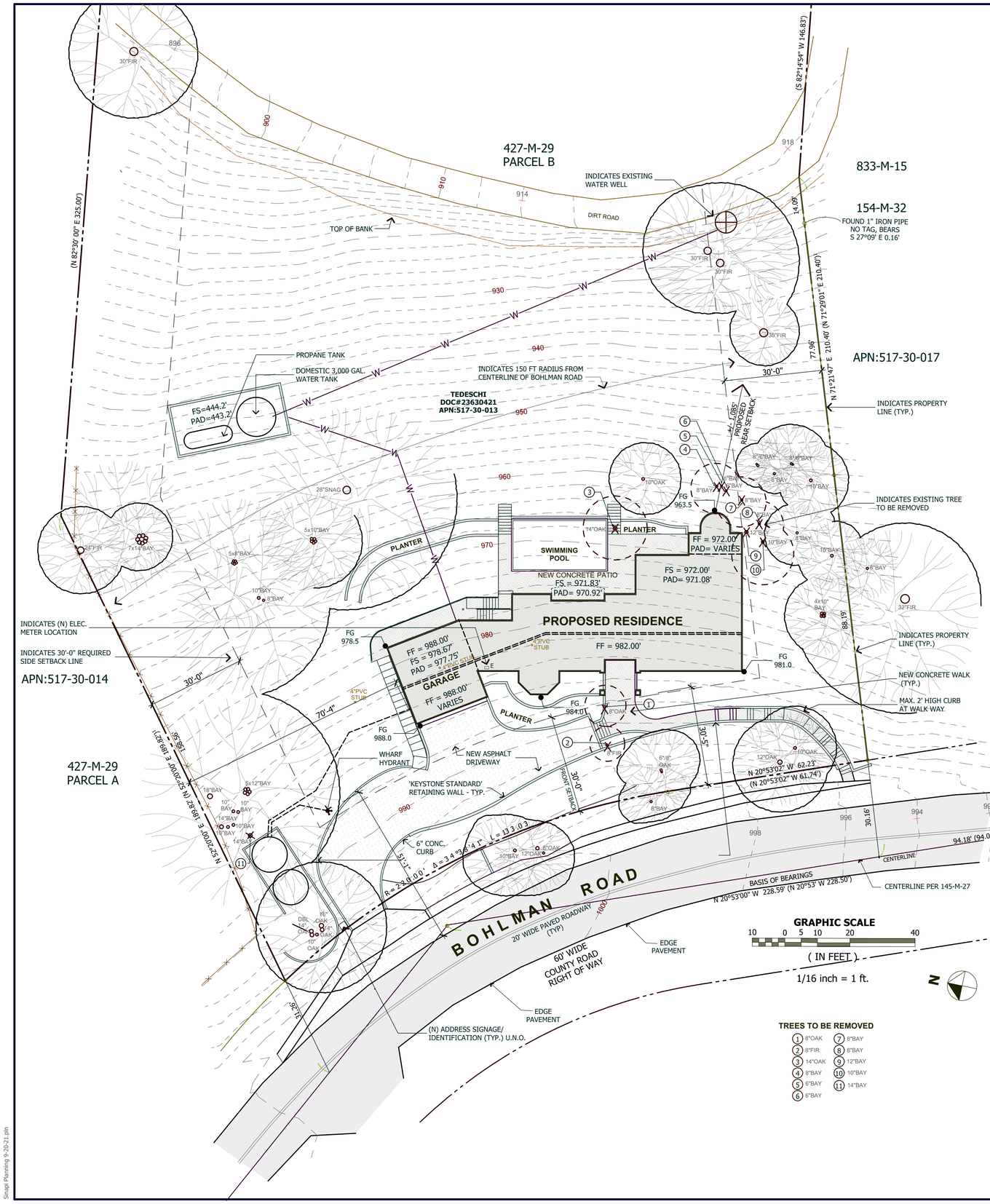
(IN FEET)
1 inch = 20 ft.

LICENSED LAND SURVEYOR
ALAN BRODIE FRENCH
L 9301
STATE OF CALIFORNIA

SANTA CLARA COUNTY APN: 517–30–013

ALPHA LAND SURVEYS, INC.

4444 SCOTTS VALLEY DR. #7 SCOTTS VALLEY, CA 95066 (831) 438–4453	P.O. BOX 1146 MORGAN HILL, CA 95038 (831) 438–4453	TOPOGRAPHIC MAP OF A PORTION OF 16968 BOHLMAN ROAD SARATOGA, CALIFORNIA	SHEET 1 C-1.0 OF ONE
1" = 20'	DATE: 11/16/20	JOB#: 2020–176	



TREES TO BE REMOVED

①	8"OAK	⑦	8"BAY
②	8"FIR	⑧	8"BAY
③	14"OAK	⑨	12"BAY
④	8"BAY	⑩	10"BAY
⑤	6"BAY	⑪	14"BAY
⑥	6"BAY		

BOUNDARY PLAT N.T.S.

VICINITY MAP

PROJECT SITE

AREA TABULATIONS

1. SITE AREA

GROSS AREA :	=	13.41 AC.
NET AREA :	=	13.28 AC.

2. FLOOR AREA

LOWER FLOOR AREA :	=	1,428 SQ. FT.
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GARAGE AREA :	=	602 SQ. FT.
TOTAL UNCONDITIONED FLOOR AREA :	**=**	**1,028 SQ. FT.**
TOTAL FLOOR AREA:	**=**	**5,216 SQ. FT.**

3. IMPERVIOUS AREA

BUILDING FOOTPRINT :	=	3,098 SQ. FT.
CONCRETE PATIO, WALKS :	=	1,548 SQ. FT.
SWIMMING POOL:	=	497 SQ. FT.
DRIVEWAY:	=	2,082 SQ. FT.
TOTAL AREA :	**=**	**7,225 SQ. FT.**

'KEYSTONE STANDARD' RETAINING WALL DETAILS

Note:
When site conditions require, wrap drainage tile in 3/4" aggregate and filter fabric with drainage composite or aggregate back drain system, as directed by geotechnical engineer.

Typical Reinforced Wall Section
Standard III Unit - Near Vertical Setback

Note:
When site conditions require, wrap drainage tile in 3/4" aggregate and filter fabric with drainage composite or aggregate back drain system, as directed by geotechnical engineer.

Typical Reinforced Tiered Wall Section
Standard III Unit - Near Vertical Setback

METRO
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ARCHITECTURE· PLANNING· INTERIORS

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PROJECT NAME

SINAPI RESIDENCE

16968 BOHLMAN ROAD
SARATOGA, CA 95070
APN 517-30-013

REVISIONS

LICENSED ARCHITECT
THOMAS J. SLOAN
C20278
EXP. 10/31/21
STATE OF CALIFORNIA

SITE PLAN

BOUNDARY PLAT
AREA TABULATIONS
VICINITY MAP
GRADING QUANTITIES

DATE : 7/27/2022
SCALE : AS NOTED
DRAWN BY : D.Z. T.S.
CHECKED BY : TS
ARCHITECT : TOM SLOAN
PROJECT NO : 20695

SHEET NUMBER

A-1.0

20 ' WIDE STORM DRAIN EASEMENT - PER B 315 O.R. 690

(9) - 24" BOX
CALIFORNIA BAY LAUREL
UMBELLULARIA CALIFORNICA

(9) - 24" BOX
COAST LIVE OAK
QUERCUS AGRIFOLIA

DENOTES LINE 100 FEET AWAY FROM PROPOSED RESIDENCE FOR FIRE SAFETY ZONE / DEFENSIBLE SPACE

DIRT ROAD

INDICATES EXISTING TREE TO BE REMOVED

PROPOSED RESIDENCE

GARAGE

SWIMMING POOL

PLANTER

(18) - 1 GALLON
CALIFORNIA YARROW
(ACHILLEA MILLEFOLIUM)

BOHLMAN ROAD

30'-0"

10'-0"

30'-0"

GRAPHIC SCALE

10 0 5 10 20 40

(IN FEET)

1/16 inch = 1 ft.

TREES TO BE REMOVED

1 8"OAK	7 8"BAY
2 8"FIR	8 8"BAY
3 14"OAK	9 12"BAY
4 8"BAY	10 10"BAY
5 8"BAY	11 14"BAY
6 6"BAY	

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PROJECT NAME

SINAPI RESIDENCE

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SARATOGA, CA 95070
APN 517-30-013

REVISIONS

LICENSED ARCHITECT
THOMAS J. SLOAN
C20278
EXP. 10/31/21
STATE OF CALIFORNIA

LANDSCAPE PLAN

DATE : 7/27/2022
SCALE :
DRAWN BY : TS
CHECKED BY : TS
ARCHITECT : TOM SLOAN
PROJECT NO : 20695

SHEET NUMBER

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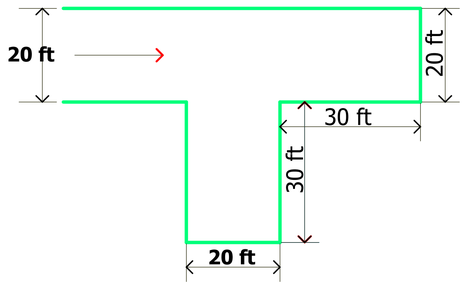
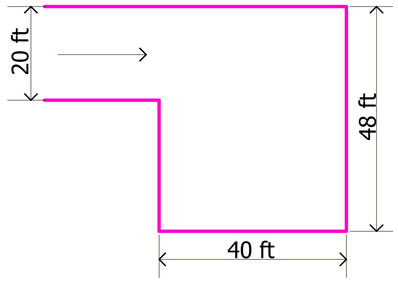


"B"



"D"

STANDARD DETAILS & SPECIFICATIONS

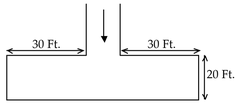
SUBJECT: Acceptable Turnarounds for Driveways For One- and Two-Family Dwellings

Spec. No.	CFMO SD16
Rev. Date:	N/A
Eff. Date:	04/08/1981
Approved By:	J. Saunders
Page:	1 of 1

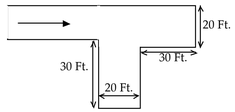
SCOPE

This standard is applicable to required turnarounds for driveways for new or expanded one- and two-family dwellings and/or associated structures where any portion of the protected structure(s) is in excess of 150 feet from the centerline of a public or private roadway (measured by an approved route around the exterior of the building). Specifications contained in this Standard apply to all properties located within unincorporated Santa Clara County.

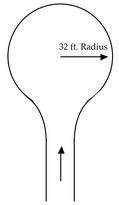
Turnaround "A"



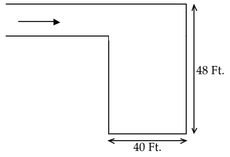
Turnaround "B"



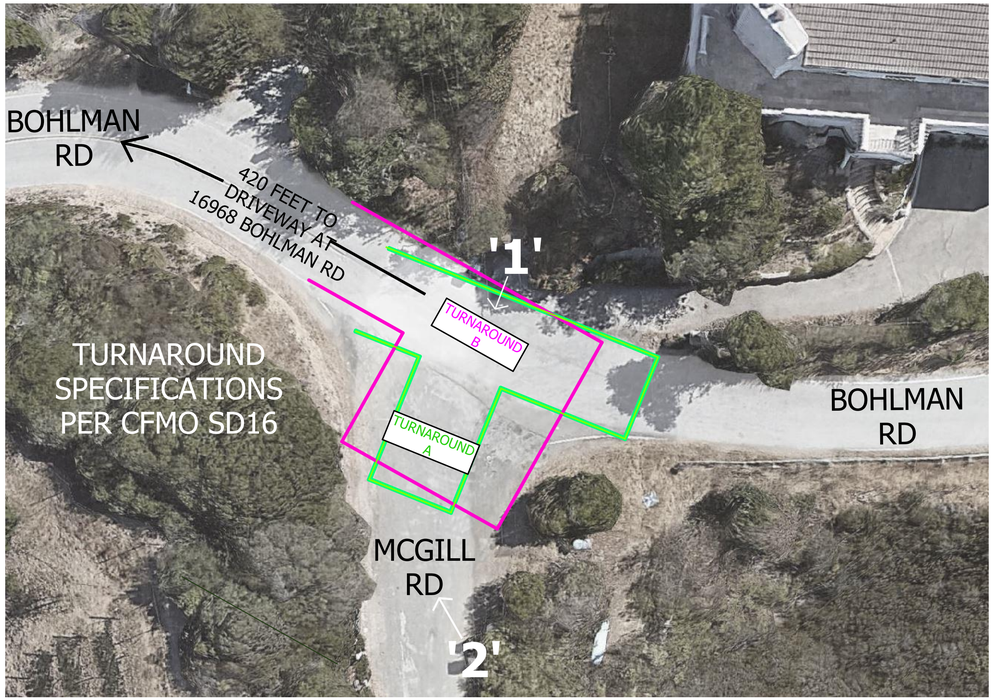
Turnaround "C"



Turnaround "D"



SANTA CLARA COUNTY FIRE MARSHAL'S OFFICE
70 W. Hedding St., East Wing, 7th Floor • San Jose • CA 95110 • (408) 299-5763



SITE PLAN

1/16" = 1'-0"

TURNAROUND PLANS

1/16" = 1'-0"

'1'

'2'

PHOTOS

VICINITY MAP

METRO DESIGN GROUP
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PROJECT NAME

SINAPI RESIDENCE

16968 BOHLMAN ROAD
SARATOGA, CA 95070
APN 517-30-013

REVISIONS

LICENSED ARCHITECT
THOMAS J. SLOAN
C20278
EXP. 10/31/21
STATE OF CALIFORNIA

DATE : 7/27/2022
SCALE :
DRAWN BY : TS
CHECKED BY : TS
ARCHITECT : TOM SLOAN
PROJECT NO : 20695

SHEET NUMBER

A-1.2

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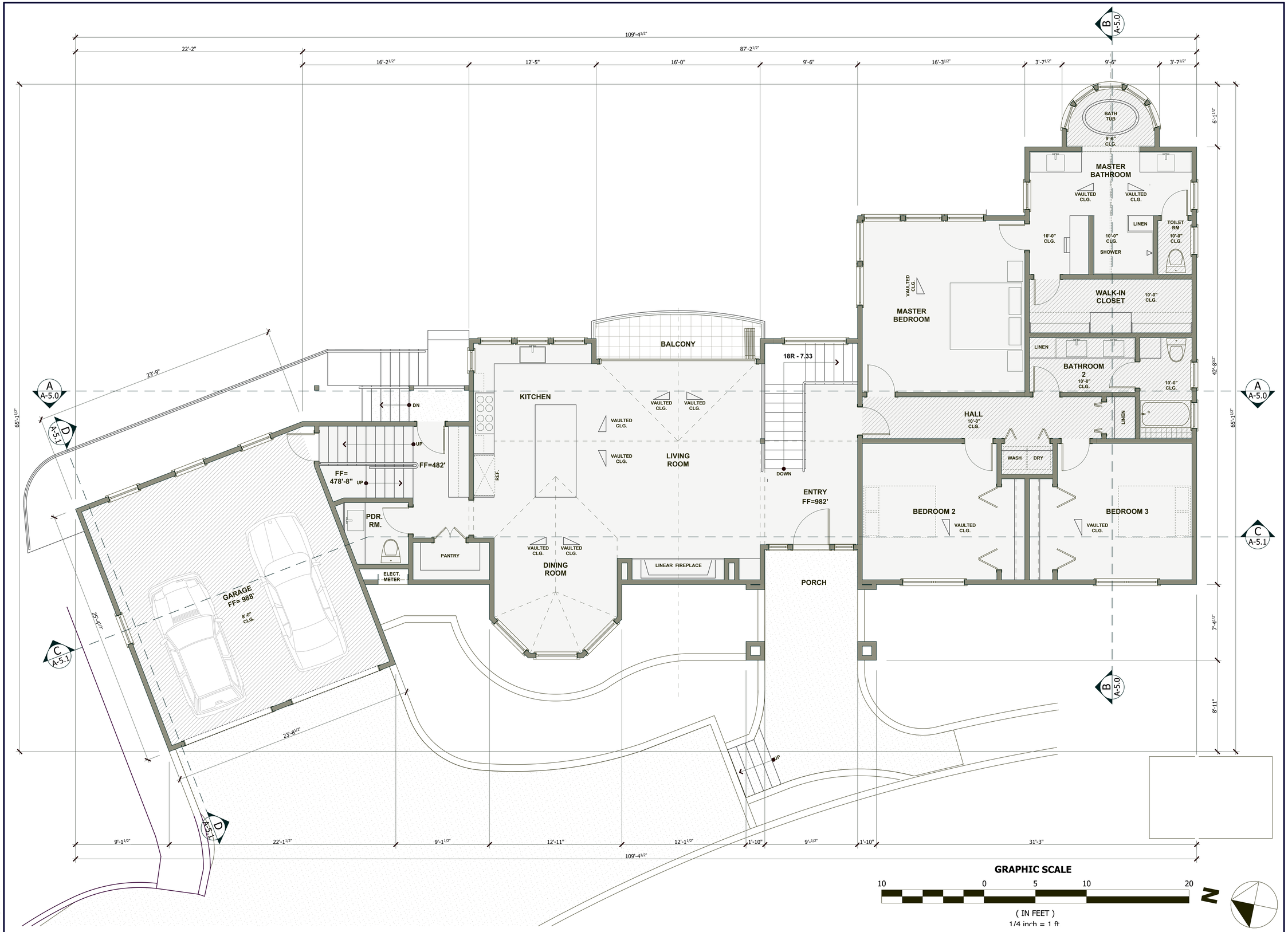

GRAPHIC SCALE

10 0 5 10 20

(IN FEET)
1/4 inch = 1 ft

N

METRO DESIGN GROUP
ARCHITECTURE· PLANNING· INTERIORS

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PROJECT NAME

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SARATOGA, CA 95070
APN 517-30-013

REVISIONS

LICENSED ARCHITECT
THOMAS J. SLOAN
C20278
EXP. 10/31/21
STATE OF CALIFORNIA

MAIN FLOOR PLAN

DATE :	7/27/2022
SCALE :	1/4" = 1'- 0"
DRAWN BY :	TS
CHECKED BY :	TS
ARCHITECT :	TOM SLOAN
PROJECT NO :	20695

SHEET NUMBER

A-2.0

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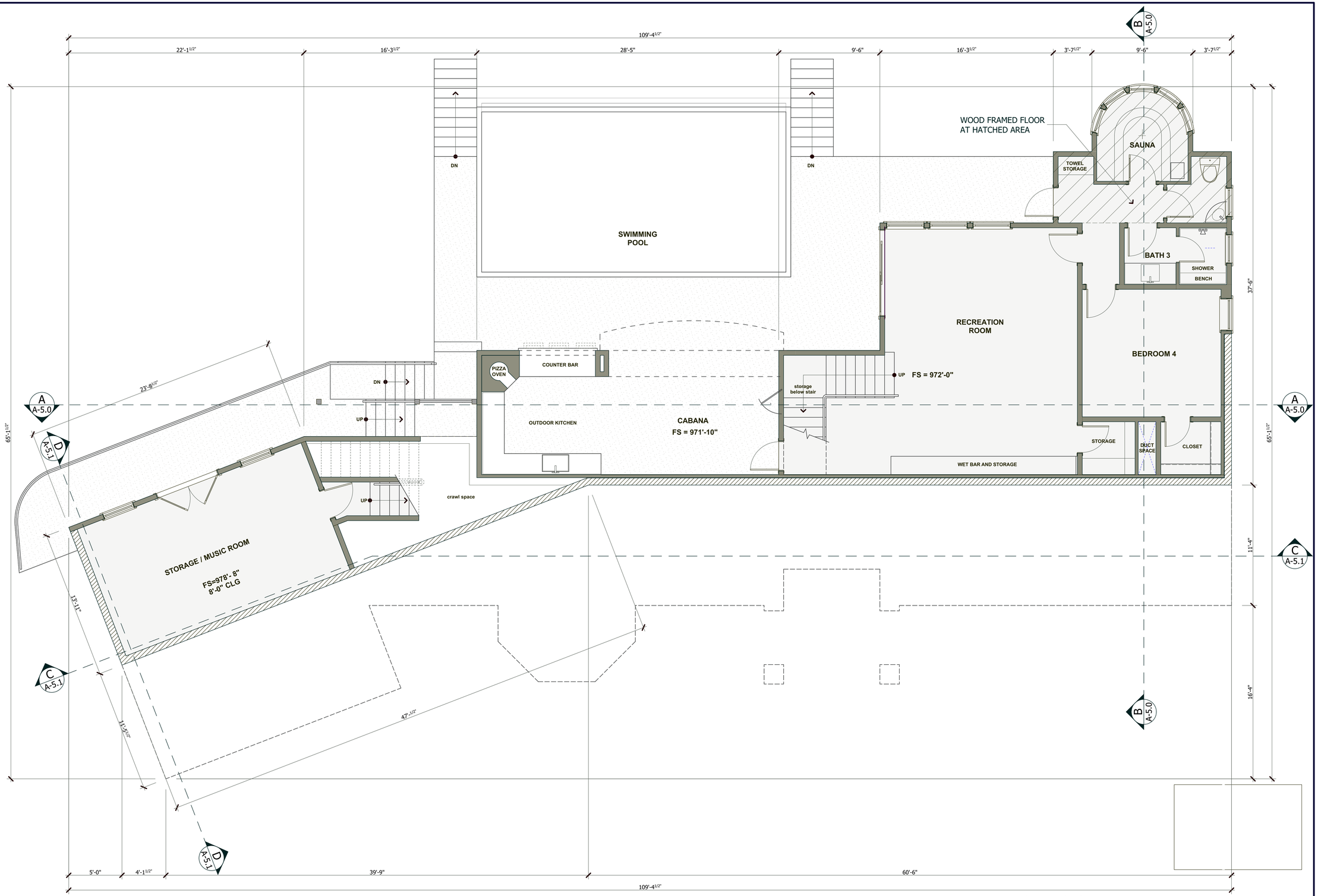

GRAPHIC SCALE

10 0 5 10 20

(IN FEET)

1/4 inch = 1 ft.

N

METRO DESIGN GROUP

ARCHITECTURE· PLANNING· INTERIORS

1475 S. BASCOM AVE SUITE 208
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PROJECT NAME

SINAPI RESIDENCE

16968 BOHLMAN ROAD
SARATOGA, CA 95070
APN 517-30-013

REVISIONS

LICENSED ARCHITECT
THOMAS J. SLOAN
C20278
EXP. 10/31/21
STATE OF CALIFORNIA

UPPER FLOOR PLAN

DATE	: 7/27/2022
SCALE	: 1/4" = 1'- 0"
DRAWN BY	: TS
CHECKED BY	: TS
ARCHITECT	: TOM SLOAN
PROJECT NO	: 20695

SHEET NUMBER

A-2.1

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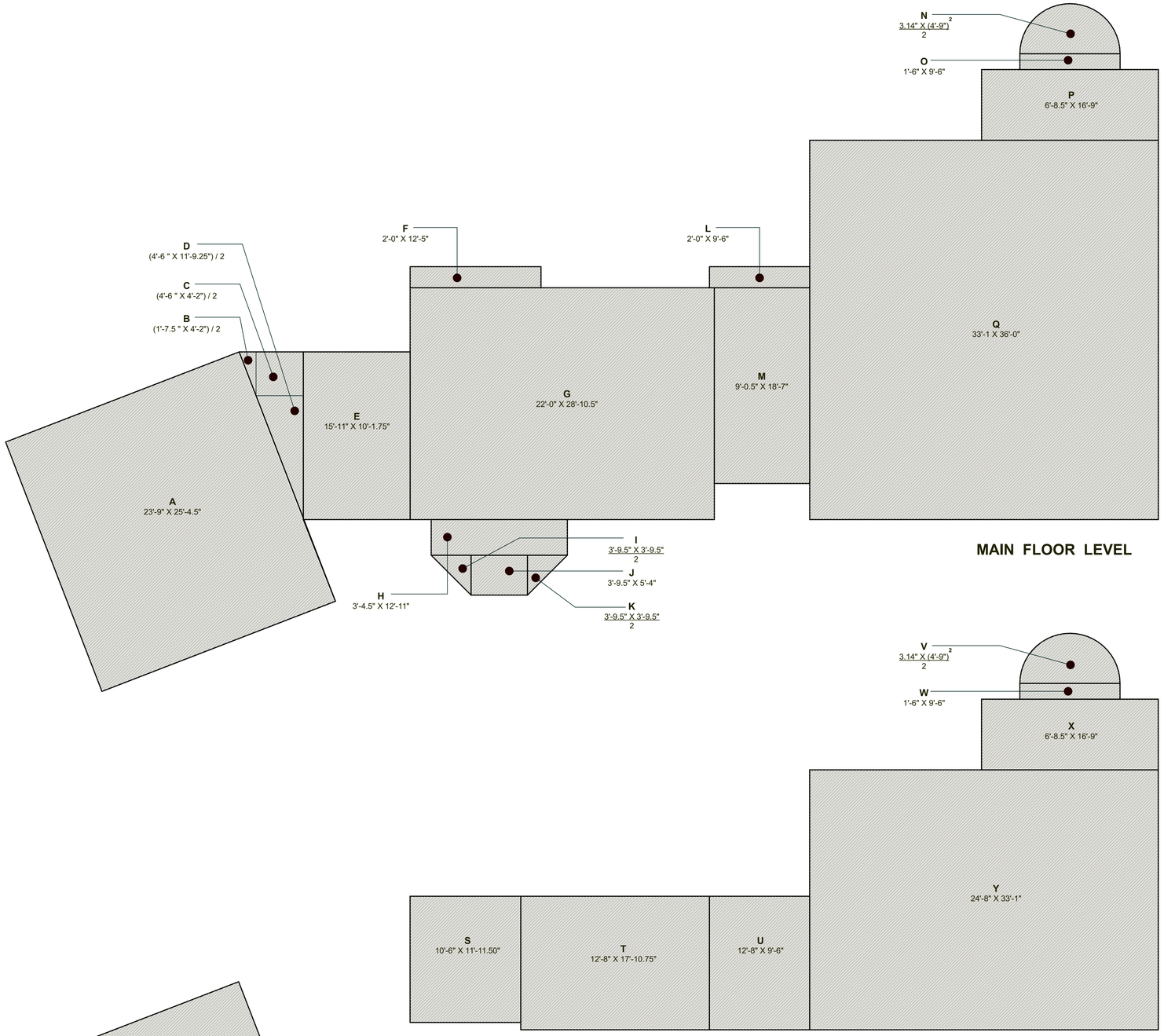
Sinapi Planning 9-20-21.pln



TABULATIONS		
ID		AREA
A	23.75 X 25.38	598.71 sq ft
B	(1.63 X 4.17) / 2	3.32 sq ft
	SUBTOTAL	**602.03 sq ft**
C	(4.5 " X 4.17) / 2	18.63 sq ft
D	(4.5 X 11.77) / 2	26.06 sq ft
E	15.92 X 10.15	161.29 sq ft
F	2 X 12.42	24.83 sq ft
G	22 X 28.88	635.00 sq ft
H	3.38 X 12.92	43.76 sq ft
I	3'-9.5" X 3'-9.5" / 2	7.16 sq ft
J	3.79 X 5.33	20.24 sq ft
K	3.79 X 3.79 / 2	7.16 sq ft
L	2 X 9.5	19.03 sq ft
M	9.04 X 18.58	168.21 sq ft
N	(3.14) X (4.75) / 2	35.49 sq ft
O	1.5 X 9.5	14.26 sq ft
P	6.71 X 16.75	112.49 sq ft
Q	33.08 X 36	1,190.90 sq ft
	SUBTOTAL	**2,483.61 sq ft**
R	13.90 X 23.71	329.45 sq ft
	SUBTOTAL	**329.45 sq ft**
S	10.5 X 11.96	125.74 sq ft
T	12.67 X 17.90	226.75 sq ft
	SUBTOTAL	**352.49 sq ft**
U	12.67 X 9.5	120.56 sq ft
V	3.14 X 4.75 / 2	35.46 sq ft
W	1.5 X 9.5	14.25 sq ft
X	6.71 X 16.75	112.47 sq ft
Y	24.67 X 33.08	816.10 sq ft
	SUBTOTAL	**1,098.84 sq ft**

METRO DESIGN GROUP

ARCHITECTURE· PLANNING· INTERIORS

1475 S. BASCOM AVE SUITE 208
CAMPBELL, CA 95008
(408)871-1071 phone
www.metroarchitects.com

PROJECT NAME

SINAPI RESIDENCE

16968 BOHLMAN ROAD
SARATOGA, CA 95070
APN 517-30-013

REVISIONS

LICENSED ARCHITECT
THOMAS J. SLOAN
C20278
EXP. 10/31/21
STATE OF CALIFORNIA

MAIN & LOWER FLOOR PLAN

TABULATIONS

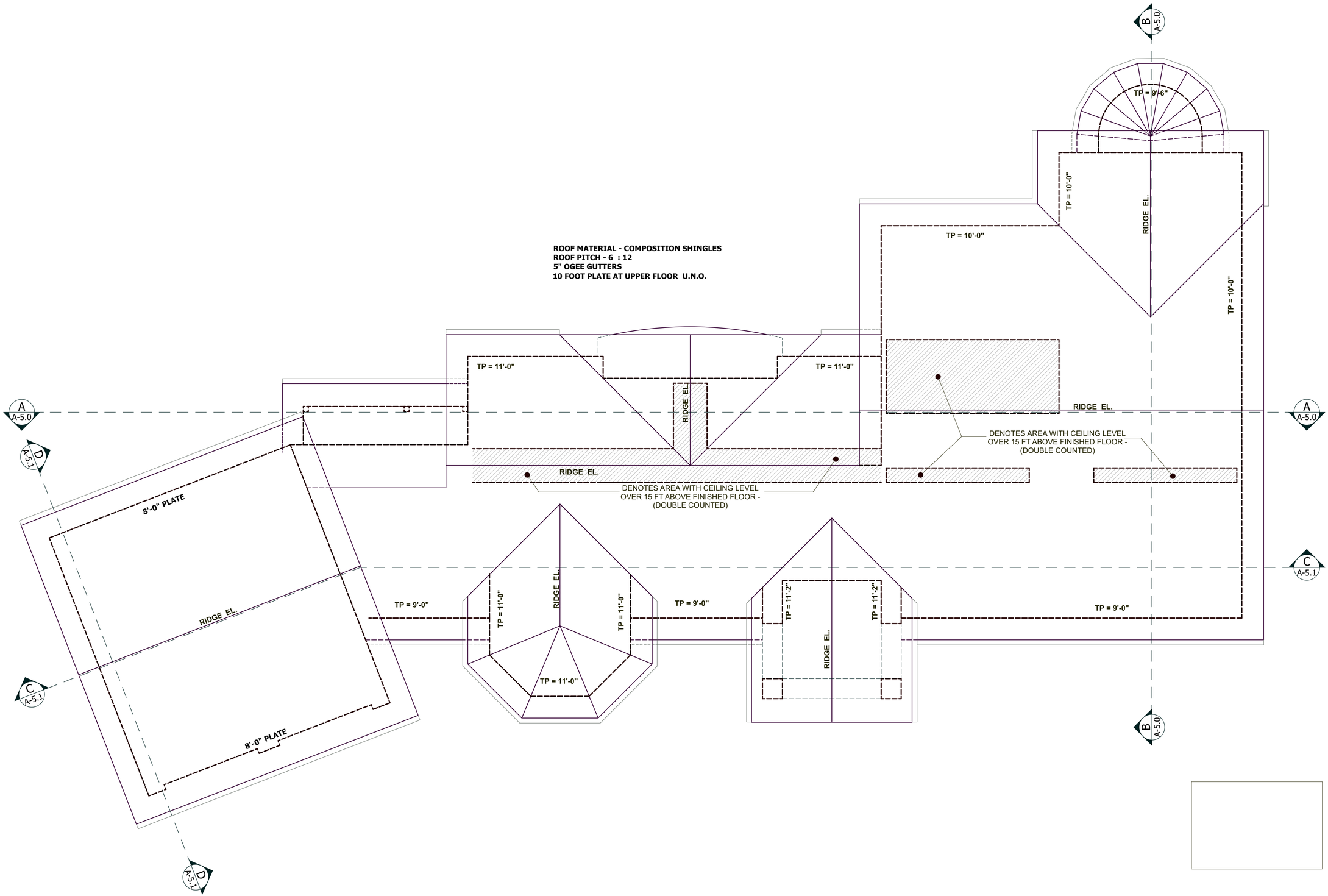
DATE : 7/27/2022
SCALE : 3/16" = 1'- 0"
DRAWN BY : TS
CHECKED BY : TS
ARCHITECT : TOM SLOAN
PROJECT NO : 20695

SHEET NUMBER

A-2.2

7/27/2022 4:22 PM
Sinapi Planning 9-20-21.pln

ROOF MATERIAL - COMPOSITION SHINGLES
ROOF PITCH - 6 : 12
5" OGEE GUTTERS
10 FOOT PLATE AT UPPER FLOOR U.N.O.



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ARCHITECTURE· PLANNING· INTERIORS

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PROJECT NAME

SINAPI RESIDENCE

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SARATOGA, CA 95070
APN 517-30-013

REVISIONS

LICENSED ARCHITECT
THOMAS J. SLOAN
C20278
EXP. 10/31/21
STATE OF CALIFORNIA

ROOF PLAN

DATE	7/27/2022
SCALE	1/4" = 1'- 0"
DRAWN BY	TS
CHECKED BY	TS
ARCHITECT	TOM SLOAN
PROJECT NO	20695

SHEET NUMBER

A-3.0

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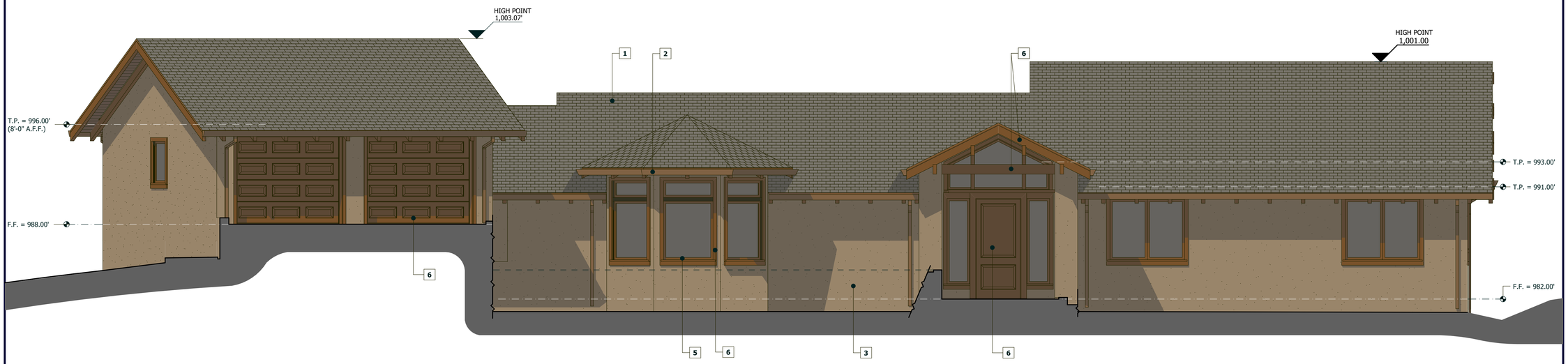
Sinapi Planning 9-20-21.pln



WEST ELEVATION

EAST ELEVATION

EXTERIOR FINISHES

1	ROOF:	CLASS -A 'CERTAINTEED' ASPHALT SHINGLES STYLE - LANDMARK PRO - COLOR- COBBLE STONE LRV 35
2	GUTTERS, DOWNSPOUTS SCUPPERS:	ARCHITECTURAL COPPER LRV 6
3	EXTERIOR WALLS & RETAINING WALLS	LATEX COLOR INTEGRAL STUCCO -MEDIUM TAN COLOR TO MATCH KELLY MOORE KM5716-3 'RODEO ROUNDUP'-LRV 30
4	WAINSCOT:	'BUECHEL STONE' LEDGESTONE - NATURAL STONE VENEER - CINNAMON BARK COLOR LRV 25
5	WINDOWS/EXTERIOR DOORS, EXTERIOR WALLS METAL CLAD	ALUMINUM WOOD CLAD / ALUMINUM CLAD 'DARK BRONZE' ANODIZED ALUMINUM, LRV 5
6	BEAMS, RAFTER TAILS, FASCIA BOARD/ WINDOW & DOOR EXTERIOR CASINGS	CINNAMON STAINED DOUGLAS FIR WOOD/ 'AZEK, BORAL OR SIMILAR' TRIMS PAINTED TO MATCH WOOD COLOR, LRV 15

METRO DESIGN GROUP
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REVISIONS

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THOMAS J. SLOAN
C20278
EXP. 10/31/21
STATE OF CALIFORNIA

EXTERIOR ELEVATIONS

WEST ELEVATION
EAST ELEVATION

DATE : 7/27/2022
SCALE : 1/4" = 1'-0"
DRAWN BY : D.Z. T.S.
CHECKED BY : TS
ARCHITECT : TOM SLOAN
PROJECT NO : 20695

SHEET NUMBER

A-4.0

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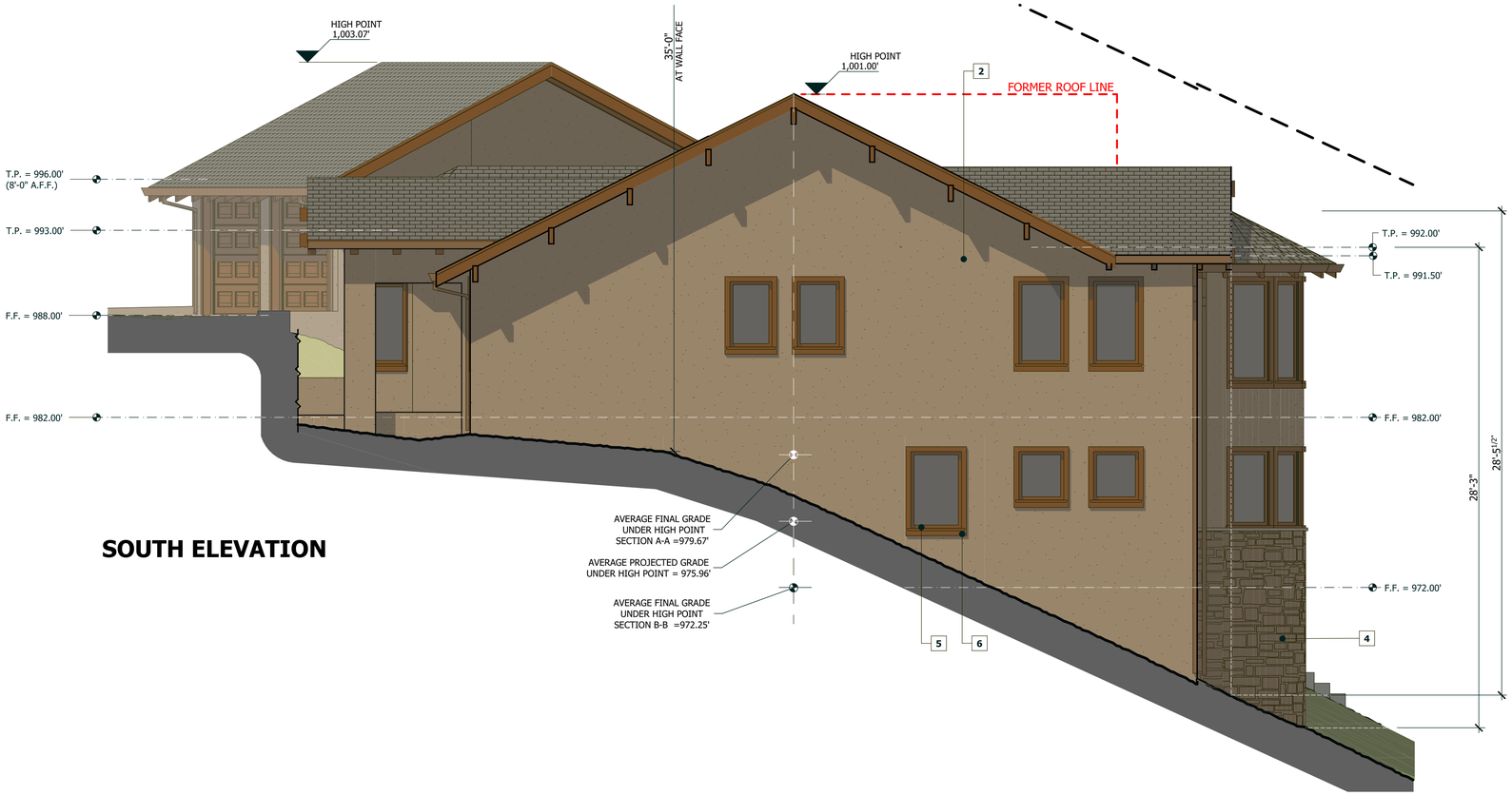
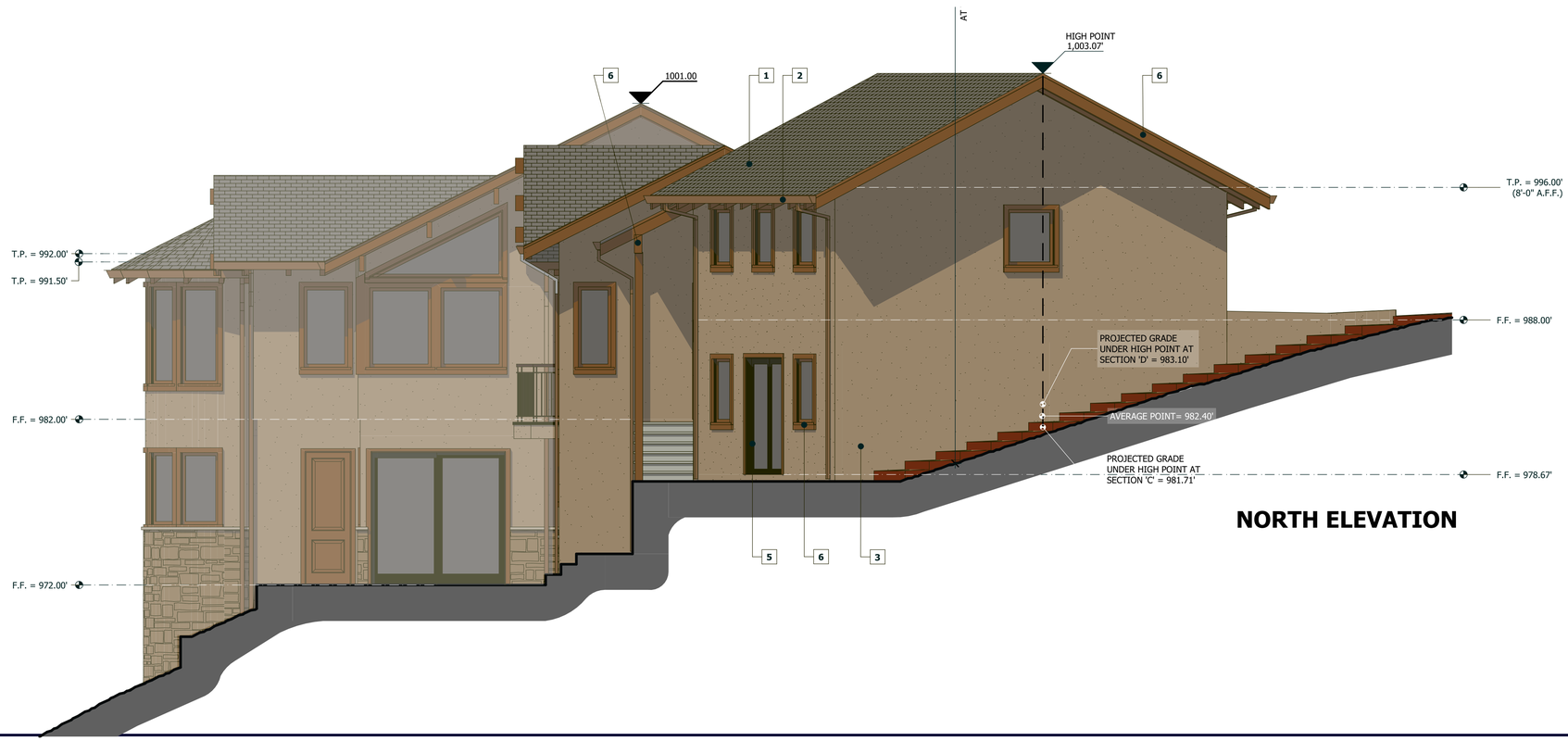
Sinapi Planning 9-20-21.pln



SOUTH ELEVATION



NORTH ELEVATION

EXTERIOR FINISHES

1	ROOF:	CLASS -A 'CERTAINTEED' ASPHALT SHINGLES STYLE - LANDMARK PRO - COLOR- COBBLE STONE LRV 35
2	GUTTERS, DOWNSPOUTS SCUPPERS:	ARCHITECTURAL COPPER LRV 6
3	EXTERIOR WALLS & RETAINING WALLS	LATEX COLOR INTEGRAL STUCCO -MEDIUM TAN COLOR TO MATCH KELLY MOORE KM5716-3 'RODEO ROUNDUP'-LRV 30
4	WAINSCOT:	'BUECHEL STONE' LEDGESTONE - NATURAL STONE VENEER - CINNAMON BARK COLOR LRV 25
5	WINDOWS/EXTERIOR DOORS, EXTERIOR WALLS METAL CLAD	ALUMINUM WOOD CLAD / ALUMINUM CLAD 'DARK BRONZE' ANODIZED ALUMINUM, LRV 5
6	BEAMS, RAFTER TAILS, FASCIA BOARD/ WINDOW & DOOR EXTERIOR CASINGS	CINNAMON STAINED DOUGLAS FIR WOOD/ 'AZEK, BORAL OR SIMILAR' TRIMS PAINTED TO MATCH WOOD COLOR, LRV 15

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THOMAS J. SLOAN
C20278
EXP. 10/31/21
STATE OF CALIFORNIA

EXTERIOR ELEVATIONS

DATE : 7/27/2022
SCALE : 1/4" = 1'-0"
DRAWN BY : D.Z. T.S.
CHECKED BY : TS
ARCHITECT : TOM SLOAN
PROJECT NO : 20695

SHEET NUMBER

A-4.1

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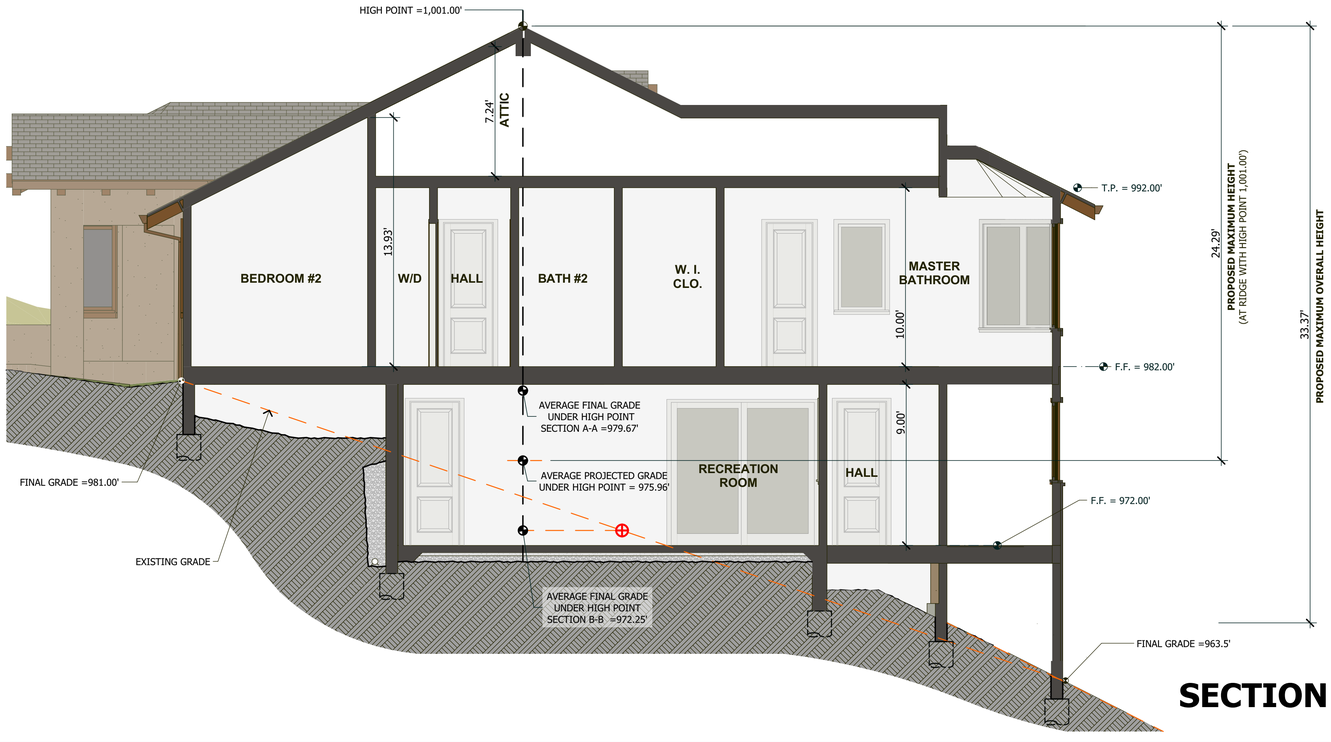
Sinapi Planning 9-20-21.pln

SECTION A-A



SECTION B-B

METRO
DESIGN
GROUP
ARCHITECTURE· PLANNING· INTERIORS

1475 S. BASCOM AVE SUITE 208
CAMPBELL, CA 95008
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PROJECT NAME

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APN 517-30-013

REVISIONS

LICENSED ARCHITECT
THOMAS J. SLOAN
C20278
EXP. 10/31/21
STATE OF CALIFORNIA

PROPOSED SECTIONS

SECTION 'A'
SECTION 'B'

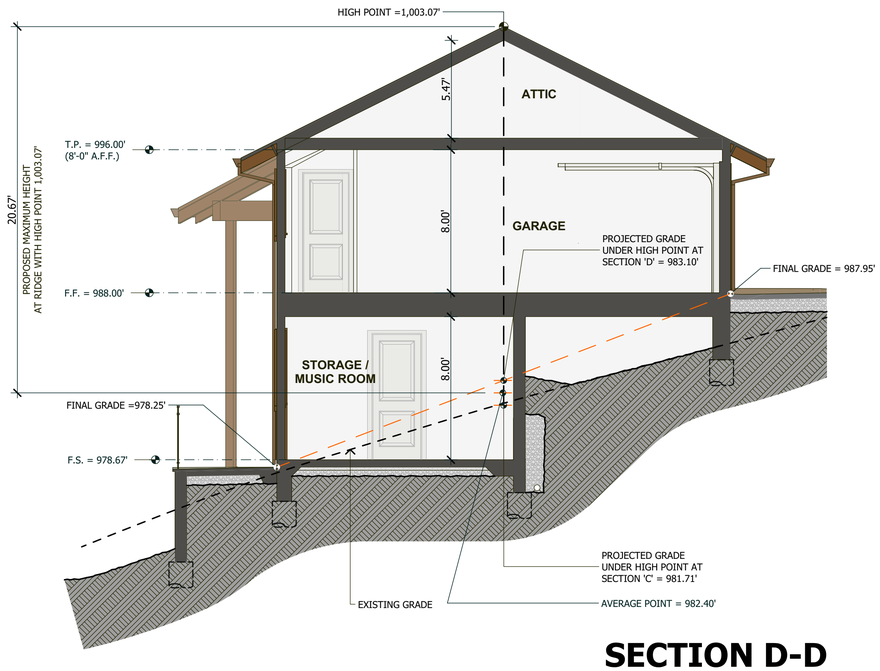
DATE : 7/27/2022
SCALE : 1/4" = 1'-0"
DRAWN BY : D.Z. T.S.
CHECKED BY : TS
ARCHITECT : TOM SLOAN
PROJECT NO : 20695

SHEET NUMBER

A-5.0

7/27/2022 4:22 PM
Sinapi Planning 9-20-21.pln

SECTION C-C



SECTION D-D

METRO
DESIGN
GROUP
ARCHITECTURE· PLANNING· INTERIORS

1475 S. BASCOM AVE SUITE 208
CAMPBELL, CA 95008
(408)871-1071 phone
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PROJECT NAME

SINAPI RESIDENCE

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SARATOGA, CA 95070
APN 517-30-013

REVISIONS

LICENSED ARCHITECT
THOMAS J. SLOAN
C20278
EXP. 10/31/21
STATE OF CALIFORNIA

PROPOSED SECTIONS

SECTION 'C'
SECTION 'D'

DATE : 7/27/2022

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

DRAWN BY : D.Z. T.S.

CHECKED BY : TS

ARCHITECT : TOM SLOAN

PROJECT NO : 20695

SHEET NUMBER

A-5.1

7/27/2022 4:22 PM
Sinapi Planning 9-20-21.pln

leach field layout

TRENCH	LENGTH '	LEACH 1	LEACH 2
A	30	30	
B	30	30	
C	33		33
D	33		33
E	33		33
F	40	40	
TOTALS	199	100	99

irrigation box with inspection riser and clean out at end of each trench

9' trench separation where slope is 35% to 40%

8' trench separation where slope is 30% to 35%

PERK TEST HOLE LOCATIONS

7' trench separation where slope is 30% or less

group of bay trees to be removed if necessary

pressure line 1.5" schedule 40 PVC (typical) setback to cut banks

distribution valve

2 ball valves

1500 gallon pump chamber

1500 gallon septic tank

leach trench inv 981.00

ssco inv 975.00

on float inv 971.00

water supply for tanks

100' setback from well for septic system tanks and leach trenches

F-40' LEACH TRENCH

E-33' LEACH TRENCH

D-33' LEACH TRENCH

C-33' LEACH TRENCH

B-30' LEACH TRENCH

A-30' LEACH TRENCH

P1 P2 P3 P4 P5 P6 P7 P8 P9

SP1 SP2 SP3

PROPOSED POOL DECK 972.0

LOWER FLOOR PAD 978.67

STUB GARAGE FF 988.0 PAD 988.67

HOUSE FF 981.50

DOMESTIC 3,000 GAL TANK FF 944.2 PAD 944.2

PRIVATE CONCRETE WATER STORAGE TANK PAD

BROADMOOR TANK

CONSTRUCT RETAINING WALL

DOMESTIC WATER & GAS LINE

WATER LINE

PRIVATE ROCK RIP-RAP 2 COURSES ROCK SIZE

EXISTING TREES TO BE REMOVED

BUILDING SETBACK

BOHLMAN ROAD

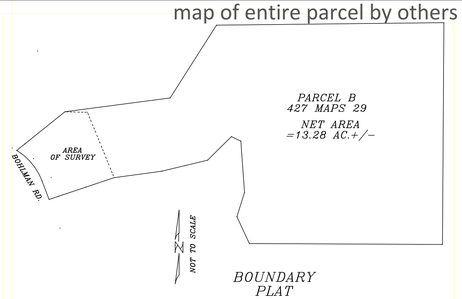
survey by others

Scale 1" = 10'

0 10' 20'

N

map of entire parcel by others



SOIL PROFILE RESULT
CONVENTIONAL SYSTEMS

SR #: 86866-94 DATE OF INSPECTION: 5/10/22

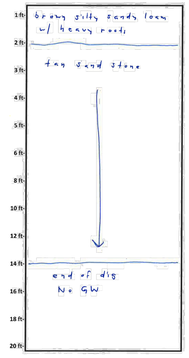
APN #: 517-30-013 OWNER: Sinapi

APPLICANT: Steve Hartzell

SITE ADDRESS: 16968 Bohlman Rd.

CONDUCTED BY: CHECKED BY: R. Chung

HOLE #: 3



HOLE #:

SITE	BOHLMAN ROAD, SARATOGA, CA 95070
hole 1	APN 517 30 013
DATE	11/26/2016
PERFORMED BY:	SR Hartsell
WITNESSED BY:	DARIUS HAGHIGHI, REHS, SANTA CLARA COUNTY
	SOIL PROFILE
DEPTH	DESCRIPITON
0	
1	0-2' dark brown sandy silty loamy clay roots present
2	
3	
4	
5	
6	
7	2-13' tan to light brown sandy silty clay with fractured rock
8	
9	
10	
11	
12	
13	TOTAL DEPTH 13' DRY

SITE	BOHLMAN ROAD, SARATOGA, CA 95070
hole 2	APN 517 30 013
DATE	11/26/2016
PERFORMED BY:	SR Hartsell
WITNESSED BY:	DARIUS HAGHIGHI, REHS, SANTA CLARA COUNTY
	SOIL PROFILE
DEPTH	DESCRIPITON
0	
1	0-1.5' dark brown sillty loamy sandy clay roots present
2	1.5-2' reddish bro9wn sandy clay
3	
4	
5	
6	
7	
8	2-14' yeallow tan sandy alcy with rock fragemtns
9	
10	
11	
12	
13	
14	total depth 14' no water seen

County of Santa Clara - Department of Environmental Health
SOIL PERCOLATION TEST RECORDED MEASUREMENTS

OWNER / APPLICANT: James Harris
LOCATION: Bohlman Road Saratoga
CONTACT PERSON: James Harris
APN 517-30-013
SR#: PLN FILE #:
REHS: S Hartsell
PHONE: 650 888 2419 DATE: 11-15-2016

HOLE # 1		DEPTH 5'					HOLE # 2		DEPTH 5'				
TIME		WATER LEVEL					TIME		WATER LEVEL				
START	FINISH	START	FINISH	Δ MIN	Δ INCH	MPI	START	FINISH	START	FINISH	Δ MIN	Δ INCH	MPI
8	38	24 3/8	21 1/16	30	3 1/16	10	8:02	8:32	24	21 7/8	30	2 1/8	14
8:32	9	23 5/8	22 1/8	30	1	30	8:36	9	23 1/8	22	24	1	24
9	9:30	23 3/8	22 3/8	30	1	30	9:02	9:32	24	23	30	1	30
9:30	10	23 3/8	22 3/8		1	30	9:32	10	23	22 1/8		1	30
10	10:30	23 3/8	22 3/8		1	30	10:00	10:30	24	23 1/8		1	30
							10:30	11	24	23		1	30
							11	11:30	24	22 7/8		1/8	240
							11:30	12	24	22 5/8		2/8	120
							12	12:30	24	22 3/8		2/8	120
							12:30	1	24	22 1/8		2/8	120
							1	1:30	24	21 7/8		2/8	120
							1:30	2	24	21 5/8		2/8	120
							2	2:30	24	21 3/8		2/8	120
							2:30	3	24	21 1/8		2/8	120
							3	3:30	24	20 7/8		2/8	120
							3:30	4	24	20 5/8		2/8	120
							4	4:30	24	20 3/8		2/8	120
							4:30	5	24	20 1/8		2/8	120

HOLE # 3		DEPTH 5'					HOLE # 4		DEPTH 5'				
TIME		WATER LEVEL					TIME		WATER LEVEL				
START	FINISH	START	FINISH	Δ MIN	Δ INCH	MPI	START	FINISH	START	FINISH	Δ MIN	Δ INCH	MPI
8:05	8:35	22 3/8	MT	30	—	—	8:04	8:34	22	19	30	3	10
8:35	9:03	22 1/8	MT	30	—	—	8:34	9:04	22	18 3/8	30	3/8	4.6
9:03	9:33	22	MT	30	—	—	9:04	9:34	22	19	30	3	10
9:33	9:43	22	21 5/8	10	5.5	1.8	9:34	10:04	22	19	30	3	10
9:43	9:51	21 7/8	21 3/8	10	5.5	1.8							
9:51	10:01	21 7/8	21 3/8	10	5.5	1.8							
10:01	10:15	21 3/8	21 1/8	10	5.5	1.8							
10:15	10:25	21 1/8	21	10	5.5	1.8							

HOLE # 5		DEPTH 5'					HOLE # 6		DEPTH 5'				
TIME		WATER LEVEL					TIME		WATER LEVEL				
START	FINISH	START	FINISH	Δ MIN	Δ INCH	MPI	START	FINISH	START	FINISH	Δ MIN	Δ INCH	MPI
8:05	8:35	18 7/8	MT	30	—	—	8:06	8:36	23 7/8	23 3/8	30	1/2	48
8:35	9:05	18 7/8	MT	30	—	—	8:36	9:06	22 7/8	MT	30	—	—
9:05	9:35	18 3/8	MT	30	—	—	9:06	9:36	22 5/8	MT	30	—	—
9:35	9:45	18 3/8	MT	10	—	—	9:36	9:46	22 5/8	22 1/8	10	1/2	9.6
9:45	9:55	18 3/8	MT	10	—	—	9:46	9:56	22 1/8	21 7/8	10	1/2	9.6
9:55	10:05	18 3/8	MT	10	—	—	9:56	10:06	22 1/8	21 7/8	10	1/2	9.6
10:05	10:13	18 3/8	18 1/8	8	5	1.6	10:06	10:13	22 1/8	21 7/8	7	1/2	8.4
10:13	10:19	18	14	6	4	1.25	10:13	10:19	22	21 5/8	6	1/2	7.2
10:19	10:24	18	17 3/8	5	4 7/8	1.2	10:19	10:24	21 7/8	21 5/8	5	1/2	6
10:24	10:30	18	17 3/8	5	4 5/8	1.1	10:24	10:30	21 5/8	21 3/8	6	1/2	7.2

HOLE	1	2	3	4	5	6
Stabilized MPI: R:	30	2.8	9.8	3.3	1.2	1.7
Adjusted Stabilized MPI R=R x1.4	42	3.9	13.7	4.6	1.7	1.9
Average Adjusted Stabilized MPI R=(R,R,y)/# Holes	67.8/6 =		11.3 USE			
# Bedrooms: FOR OFFICE USE ONLY	Tank Size (Gal)			Leach line (Ft)		

These percolation test holes were set up and the test was conducted in accordance with county standards, including the pre-soak. I was on site during the entire test. SR Hartsell, REHS

County of Santa Clara - Department of Environmental Health
SOIL PERCOLATION TEST RECORDED MEASUREMENTS

OWNER / APPLICANT: Sinapi
LOCATION: 16968 Bohlman
CONTACT PERSON: Steve
SR#: 86866-94
REHS: S Hartsell
PHONE: 650 888 2419 DATE: 5-10-22

HOLE # 7		DEPTH 5'					HOLE # 8		DEPTH 5'				
TIME		WATER LEVEL					TIME		WATER LEVEL				
START	FINISH	START	FINISH	Δ MIN	Δ INCH	MPI	START	FINISH	START	FINISH	Δ MIN	Δ INCH	MPI
12:30	1	MT	8in	30	—	—	12:50	1:20	12	10 1/2	30	1 1/2	20
1:0	1:30	9"	MT	30	—	—	1:21	1:51	11	MT	30	—	—
1:30	2:00	9"	7 3/4	30	3.1	10	1:51	2:21	11	9 3/4	30	1 1/4	24
2:00	2:10	9"	7 3/4	10	3.1	3.2	2:21	2:31	11	9 3/4	10	1 1/4	8
2:11	2:21	8 3/4	7 3/4	10	3 1/4	2.8	2:32	2:42	11	9 3/4	10	1 1/4	8
2:21	2:31	9"	7 3/4	10	3 1/4	2.8	2:42	2:52	11	9 3/4	10	1 1/4	8
2:31	2:41	9"	7 3/4	10	3 1/4	2.8	2:53	3:03	11	9 3/4	10	1 1/4	8
2:41	2:51	9"	7 3/4	10	3 1/4	2.8	3:03	3:13	11	9 3/4	10	1 1/4	8
2:51	3:02	9"	7 3/4	10	3 1/4	2.8							

HOLE # 9		DEPTH 5'					HOLE # 10		DEPTH				
TIME		WATER LEVEL					TIME		WATER LEVEL				
START	FINISH	START	FINISH	Δ MIN	Δ INCH	MPI	START	FINISH	START	FINISH	Δ MIN	Δ INCH	MPI
12:21	12	6	MT	30	—	—							
12:3	1:03	6	MT	30	—	—							
1:03	1:33	6	MT	30	—	—							
1:33	2:03	6	MT	10	—	—							
2:03	2:13	6	MT	10	—	—							
2:14	2:24	6	MT	9	—	—							
2:24	2:34	6	MT	10	—	—							
2:36	2:44	5"	MT	8	—	—							
2:45	2:54	5	MT	9	—	—							
2:56	3:01	5	MT	5	—	—							
3:01	3:06	5	4 3/4	5	5/8	.54							
3:06	3:12	4 3/4	4 1/8	6	5/8	.54							
3:10	3:15	4 1/8	3	5	5/8	.64							

HOLE	7	8	9	4	5	6
Stabilized MPI R	2.25	2.6	.55			
Adjusted Stabilized MPI R=R x 1.6	3.15	3.7	.77			
Average Adjusted Stabilized MPI R=(7,8,9)/#Holes	7.64					
# Bedrooms: FOR OFFICE USE ONLY	Tank Size (Gal)			Leach line (Ft)		

holes 3,4,7,8, and 9 are in the proposed leach field are in or close to the propose leach trenches. The stabilized and adjust rates 3.7, 13.7, 4.6, 3.7 and .77 minutes per inch (MPI) respectively. The average rate for these five perk test hoels is 4.55 MPI.

PROJECT DISCUSSION

The property owners (the Sinapi's) want to build their new home on this site. Since there is no public sewer in this area, this plan was developed to show where and how an onsite wastewater treatment and disposal system will be installed on this property to serve the proposed 6 bedroom home.

Percolation testing and soil profiles were perfumed as shown on this page. The soil profiles showed acceptable soils down to a depth of at least 13 feet and no signs of groundwater. The percolation rate rate achieved is 4.55 minutes per Inch (MPI) when calculated per County instructions. Since some of the slope exceeds 30% an alternative system is required and a pressure dosed system will be installed.

At this rate (4.55 MPI) the County allows an application rate of 1.2 gallons per square foot of infiltrative area and 4 square feet of infiltrative area per linear foot of leach trench. Since the slope of he are used is less than 40% a trench separation of 9' on center is used. and leach trench separation is 9' on center.

For a six bedroom home the County requires the septic system have two leach fields each able to handle 675 gallons of wastewater a day, in this case two leach fields each with 141 linear feet of leach trench are required for standard leach trench detail (675 gallons per day/1.2 gallons per square foot of infiltrative area = 563 square feet of infiltrative area per leach field/ 4 square feet of infiltrative area per linear foot of leach trench = 141' of leach trench for each of the two required leach fields). Since this plan utilizes Quick Four High Capacity infiltrator chambers (with a 6.6 Square feet of Infiltrative area per liner foot) the County allows a 30% reduction in trench length99 linear feet are required perk leach field. trench per leach field is 99 linear feet (141 *.7 = 99'). This plans show two leach fields each with at least 99 linear feet of leach trench.

A 1500 gallon septic tank and 1500 gallon pump chamber are also shown.

KEY TO PAGES
1. OVERALL ONSITE SYSTEM PLAN
2. CALCULATIONS AND SELECTED EQUIPMENT
3. SELECTED EQUIPMENT AND SECTIONS
4. ADDITIONAL COUNTY REQUIREMENTS

S.R. HARTSELL, R.E.H.S.
P.O. BOX 342
PACIFICA, CA 94044
srhartsell@gmail.com (650) 888-2419

ONSITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

16968 BOHLMAN ROAD
SARATOGA, CA 95070
APN 517-30-013

MAY 22, 2022

SCALE AS NOTED

BY SRH

PAGE

onsite 1

SS-1

SHALLOW TRENCH PRESSURE DOSED SYSTEM CALCULATIONS

The following calculations were base on the *EPA Design Manual 35, Onsite Wastewater Treatment and Disposal Systems* (manual) and the Washington State Department of Health *Recommended Standards and Guidance for Performance, Application, Design, and Operation & Maintenance Pressure Distribution Systems* (guidelines) published in 2009, and the Santa Clara County Onsite Systems Manual.

System Criteria

Each of the two required leach fields has three laterals, separated by a Orenco distributing valve so that each time the pump is turned on only one of the leach trenches is pressurized. This discussion addresses the parameters of the leach trench that has the highest head (the one farthest from the pump).

1. **All coupling utilize solvent welding.**
2. **The hole diameter selected is 3/16" with a spacing of 2 feet (see table A1).**
3. **The laterals are 1.5" schedule 40 PVC.**
4. **A minimum of 5 feet of head is to be maintained in the system so the orifice discharge rate is .93 gallons per hole (table A2) .**
5. **The total maximum number of orifices in a trench is trench is 21 (40/2 + 1 = 21). Each leach trench requires a minimum flow of gallons per minute (21 *.93 = 19.53 gallon per minute).**
6. **. The minimum dose volume shall be 150 gallons.**

Drill orifice holes carefully and clean any residue from the holes before installing the pipe. Make sure no gravel gets inside the pipe.

PUMP SYSTEM WORKSHEET

Applicant Mr. and Ms. Sinapi Date 5-27-2022
Owner same File No.
Site Address 16968 Bohlman Road City Saratoga APN 517 30 013
Designer (REHS or RCE) Steven Hartsell
Number of bedrooms 6 Total square footage of living space na
Septic tank size 1500 gallon Installed drainfield 199 linear feet Expansion drainfield na

Elevation of highest drainfield (ft) 981
Elevation of pump off (ft) - 971
Total lift (Ft Head) = 10 (A)

TIGHT LINE
Diameter of tight line (inches) 1.5
Length of tight line from pump to upper drainfield (ft) 40' (B)

FITTINGS

No. of Fittings		Pipe Length Equivalent (ft) See chart	Total Pipe Equivalent (ft)
90° standard elbow	X	4	= 16
45° standard elbow	X	2	= 8
90° long radius elbow	X		=
other fittings	X	1	= 3
gate valve (fully open)	X	1	= 3
check valve (conventional swing)	x		=

TOTAL= 30 (C)

Total Length of Pipe = B + C = 70' (D)

CALCULATIONS:

Friction Loss in Pipes and Fittings:
(D/100 ft) x 2.61 (friction loss per chart) = 1.83 (E) Head in Feet
.7

Required Pump Size:
10 (A) + 1.83 (E) = 11.83 (F) Total Pumping Head in Feet
there is an additional head of 5 feet for the distribution valve and 1 feet of r the discharge assembly so the TDH = 17.83
Pump Size:
(F) versus GPM = Pump Size (refer to pump curve)

Pump Model: (Attach Pump Curve)
19.53 GPM at 18 (G) (ft of head: from pump curve) Manufacturer/Model Goulds WE Series model 3885, order number

Required Capacity in Gallons
Dosing Volume 150 gallons
Storage Capacity (1 ½ days) 1012.5 gallons = 1.5 * 675
Pump Displacement 8 gallons
Volume from tank bottle to pump base 5"
Total tank capacity 1500 gallons

Pump Tank Information
Manufacturer Don Chapin Pre-Cast Size 1500 Gallons per inch varies by depth see chart

Dosing volume to achieve minimum of 3 to 5 doses per day at design flow conditions.

Tables A1 and A2 **Washington State Department of Health *Recommended Standards and Guidance for Performance, Application, Design, and Operation & Maintenance Pressure Distribution Systems*** **(guidelines) published in 2009**

Pressure Distribution Systems - Recommended Standards and Guidance
Effective Date: July 1, 2009

Table A-1
Lateral Design Table (continued)

Orifice (inches)	Lateral (inches)	Orifice Spacing (feet)	Maximum Lateral Length (ft) Pipe Material Schedule 40	Class 200	Class 160
3/16	1.25	2	46	54	56
3/16	1.25	2.5	52.5	62.5	62.5
3/16	1.25	3	60	69	72
3/16	1.25	4	72	84	88
3/16	1.25	5	85	95	100
3/16	1.25	6	96	108	114
3/16	1.5	1.5	49.5	55.5	57
3/16	1.5	2	60	68	70
3/16	1.5	2.5	70	77.5	80
3/16	1.5	3	78	87	90
3/16	1.5	4	92	104	108
3/16	1.5	5	110	120	125
3/16	1.5	6	120	138	144
3/16	2	1.5	76.5	81	84
3/16	2	2	92	98	102
3/16	2	2.5	105	112.5	117.5
3/16	2	3	120	129	132
3/16	2	4	144	152	160
3/16	2	5	165	180	185
3/16	2	6	186	198	210
7/32	1	1.5	19.5	24	
7/32	1	2	24	30	
7/32	1	2.5	27.5	35	
7/32	1	3	30	39	
7/32	1	4	36	44	
7/32	1	5	45	55	
7/32	1	6	48	60	
7/32	1.25	1.5	31.5	36	37.5
7/32	1.25	2	38	44	46
7/32	1.25	2.5	42.5	50	52.5
7/32	1.25	3	48	57	60
7/32	1.25	4	60	68	72
7/32	1.25	5	70	80	80

Table A-2

Orifice Discharge Rates (gpm)

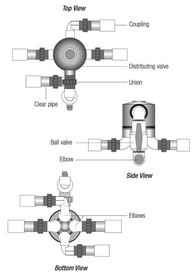
Head (ft)	Orifice Diameter (in) 1/8	5/32	3/16	7/32	1/4
2			0.59	0.80	1.04
3			0.72	0.98	1.28
4			0.83	1.13	1.47
5	0.41	0.64	0.93	1.26	1.65
6	0.45	0.71	1.02	1.38	1.80
7	0.49	0.76	1.10	1.49	1.95
8	0.52	0.81	1.17	1.60	2.08
9	0.55	0.86	1.24	1.69	2.21
10	0.58	0.91	1.31	1.78	2.33

For residuals greater than 10 feet or for orifice diameters greater than 1/4 inch, the equation must be used. This is also true if the residual pressure is not a whole number. For large systems use the equation and verify with Table A-2.

Orenco Technical Data Sheet
Distributing Valves

Applications

Automatic Distributing Valve Assemblies are used to pressurize multiple zone distribution systems including textile filters, sand filters and drainfields.



General

Orenco's Automatic Distributing Valve Assemblies are mechanically operated and sequentially redirect the pump's flow to multiple zones or cells in a distribution field. Valve actuation is accomplished by a combination of pressure and flow. They allow the use of smaller horsepower pumps on large sand filters and drainfields. For example, a large community drainfield requiring 300 gpm (18.93L/sec) can use a six-line valve assembly to reduce the pump flow rate requirement to only 50 gpm (3.14L/sec).

Orenco only warrants Automatic Distributing Valves when used in conjunction with High-Head Effluent Pumps with Biotube® pump vaults to provide pressure and flow requirements, and to prevent debris from fouling valve operation. An inlet ball valve, a section of clear pipe, and a union for each outlet are provided for a complete assembly that is easy to maintain and monitor. Ideal valve location is at the high point in the system. Refer to Automatic Distributing Valve Assemblies (NTP-VA-1) for more information.

Standard Models

V4402A, V4403A, V4404A, V4605A, V4606A, V6402A, V6403A, V6404A, V6605A, V6606A.

Product Code Diagram

V 6 4 03 A

- Assembly
- Discharge connections installed:
  02 = 2 connections
  03 = 3 connections
  04 = 4 connections
  05 = 5 connections
  06 = 6 connections
- Available discharge connections:
  4 = 4 available connections
  6 = 6 available connections
- Inlet/outlet size, in. (mm):
  4 = 1.25 (33)
  6 = 1.50 (40)
- Distributing valve

Materials of Construction

All Fittings	Sch. 40 PVC per ASTM specification
Unions	Sch. 80 PVC per ASTM specification
Ball Valve	Sch. 40 PVC per ASTM specification
Clear Pipe	Sch. 40 PVC per ASTM specification

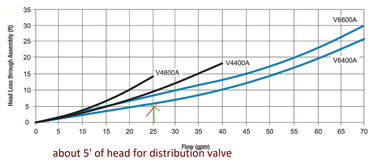
Orenco Technical Data Sheet

Specifications

Model	Inlet Size, in. (mm)	Outlets Size, in. (mm)	Flow Range, gpm (L/sec)	Max Head, ft (m)	Min. Enclosure
V4402A	1.25 (32)	1.25 (32)	10 – 40 (0.63 – 2.52)	170 (51.818)	VB1217
V4403A	1.25 (32)	1.25 (32)	10 – 40 (0.63 – 2.52)	170 (51.818)	VB1217
V4404A	1.25 (32)	1.25 (32)	10 – 40 (0.63 – 2.52)	170 (51.818)	VB1217
V4605A	1.25 (32)	1.25 (32)	10 – 40 (0.63 – 2.52)	170 (51.818)	RR2418
V4606A	1.25 (32)	1.25 (32)	10 – 40 (0.63 – 2.52)	170 (51.818)	RR2418
V6402A	1.50 (38)	1.50 (38)	15 – 100 (0.95 – 6.31)	345 (105.16)	RR2418
V6403A	1.50 (38)	1.50 (38)	15 – 100 (0.95 – 6.31)	345 (105.16)	RR2418
V6404A	1.50 (38)	1.50 (38)	15 – 100 (0.95 – 6.31)	345 (105.16)	RR2418
V6605A	1.50 (38)	1.50 (38)	15 – 100 (0.95 – 6.31)	345 (105.16)	RR2418
V6606A	1.50 (38)	1.50 (38)	15 – 100 (0.95 – 6.31)	345 (105.16)	RR2418

Table 1. Automatic Distributing Valve Assembly Headloss Equations

Model Series	Equation	Operating Range, gpm (L/sec)
V4402A	$H_L = 0.285 \times Q^{1.85}$	10 - 40 (0.63 – 2.52)
V4600A	$H_L = 0.285 \times Q^{1.85}$	10 - 25 (0.63 – 1.57)
V6400A	$H_L = 0.0045 \times Q^2 + 3.5 \times (1 - e^{-0.085})$	15 - 70 (0.95 – 4.42)
V6600A	$H_L = 0.0049 \times Q^2 + 5.5 \times (1 - e^{-0.15})$	15 - 70 (0.95 – 4.42)



about 5' of head for distribution valve

SCOPE OF WORK

The following is a brief summary of work to be done under permits issued by the County of Santa Clara.

1. Install new 1500 gallon septic tank and pump chamber (with traffic rated access risers and lids if needed for the proposed depth of burial check with manufacturer before installation). These tanks must be tested to show they are water tight. This testing is to be done as specified by Environmental Health (EH). EH must witness testing and confirm tanks are "watertight".
2. Install new leach trenches as shown.
3. Install pump and pump accoutrements (splice box, floats, discharge assembly, et cetera).
4. Install control and alarm panel as per manufacturer's directions and as shown.
5. All electrical wiring must be done by a licensed Electrician.
6. Install Monitoring Wells as noted.
7. Calibrate the system to provide adequate squirt at end of each leach trench, confirm the proper operation of all equipment, and have these items verified by the County and system designer.

All material and methods shall comply with Santa Clara County regulations and policies. All work must be inspected and approved before covering it.

Nothing herein should be considered to be a warranty or guarantee of any kind and the designer liability is hereby limited to $500 or the fee paid for the design whichever is less.

1

Minimum Vertical Separation Distance to Ground Water for Alternative OWTS (feet)[1]

Type of OWTS	Percolation Rate (MPI)	Vertical Separation to Groundwater (feet)[1] 2"	3"	5'	8"
• Conventional Trench w/ Supplemental Treatment	1-5			X	X
	6-30		X		
	31-120				
• Shallow Pressure Distribution (PD)	1-5			X	
• At-Grade	6-120				

FROM SANTA CLARA COUNTY MANUAL

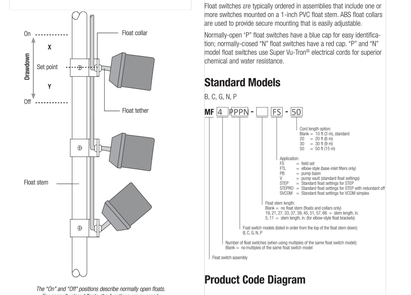
Table 1. Standard Wastewater Application Rates - Septic Tank Effluent

Percolation Rate (MPI)	Application Rate (gpd/ft²)	Percolation Rate (MPI)	Application Rate (gpd/ft²)
1 to 5	1.20	51	0.41
6	1.12	52	0.40
7	1.04	53	0.40
8	0.96	54	0.39
9	0.88	55	0.38
10	0.80	56	0.38
11	0.78	57	0.37
12	0.77	58	0.36
13	0.75	59	0.36

FROM SANTA CLARA COUNTY MANUAL

Table 3-1.
Wastewater Design Flows for
Single Family Residences and Second Units

No. of Bedrooms	Design Flow (gal/day)
1	150
2	300
3	450
4	525
5	600
6	675
>6	+ 75 per bedroom

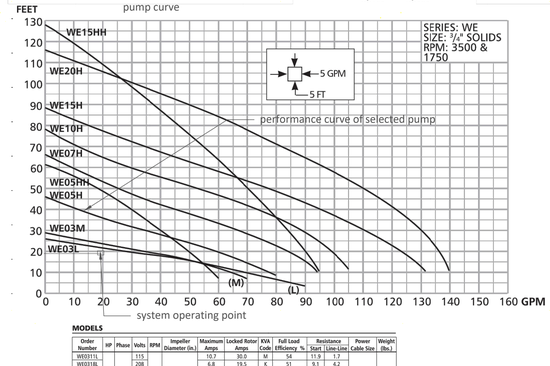


pump chamber volume

interpolated form 2000 gallon tank volumes

depth from bottom inches	tank volume per inch gallons	float function and elevation
0		
1	25.65975	
2	51.44175	
3	77.346	
4	103.37325	
5	129.5235	
6	155.79675	
7	182.193	
8	208.713	
9	235.3575	
10	262.125	off, tank volume 262
11	289.017	
12	316.0335	
13	343.1745	
14	370.44	
15	397.83075	
16	425.34675	timer on, tank volume 425.4
17	452.988	
18	480.75525	timer override
19	508.6485	
20	536.66775	alarm
21	564.813	
22	593.085	
23	621.483	
24	650.0085	
25	678.6615	
26	707.44125	
27	#VALUE!	
28	765.38475	
29	794.54775	
30	823.83975	
31	853.26	
32	882.8085	
33	912.486	
34	942.2925	
35	972.228	
36	1002.29325	
37	1032.48825	
38	1062.813	
39	1093.26825	
40	1123.854	
41	1154.5695	
42	1185.41625	
43	1216.3935	
44	1247.50275	
45	1278.7425	
46	1310.11425	
47	1341.618	
48	1373.25375	
49	1405.0215	
50	1436.92125	
51	1468.9545	
52	1501.1205	
53	1533.41925	
54	1565.8515	
55	1598.41725	
56	1631.1165	
57	1663.95	
58	1696.91775	
59	1730.019	
60	1763.256	
61	1796.62725	outlet level

FEET pump curve



MODELS

Order Number	HP	Phase	Volts	RPM	Impeller Diameter (in.)	Maximum Amps	Locked Rotor Amps	KVA Code	Full Load Efficiency %	Resistance Start	Resistance Line-Line	Power Cable Size	Weight (lbs.)
WE0311L	0.33	1	115	1750	5.38	10.7	30.0	M	54	11.9	1.7	16/3	56
WE0318L			208			6.8	19.5	K	51	9.1	4.2		
WE0312L			230			4.9	14.1	L	53	14.5	8.0		
WE0311M			115	3450		10.2	30.0	M	54	11.9	1.7		
WE0318M			208			6.8	19.5	K	51	9.1	4.2		
WE0312M			230			4.9	14.1	L	53	14.5	8.0		
WE0511M			115	3450	3.56	14.5	46.0	M	54	7.5	1.0	14/3	60

Simplex Control Panels

Submittal Data Sheet

Orenco Systems® Incorporated
1-800-348-9843

Applications

S series control panels are a popular choice for a simplex motor and alarm system. These panels include a motor contactor, which increases system life by reducing the load requirements on the input switches. S series panels also have a separate "on" and "off" controls for the motor and can accommodate motors up to 1 hp at 120 VAC or 3 hp at 240 VAC.

General

Standard features include circuit breakers, an automatic/manual/off toggle switch, and an audible/visual alarm with auto reset. Other standard and optional features are listed on page 2. Any input sensor with contacts can be used. Listed per UL 508; a UL-Canada listing is available.

Standard Models

S1, S2

Nomenclature

S 1 PTCT

- Indicates selected options (see page 2).
- Indicates voltage
  1 = 120 VAC
  2 = 240 VAC

Specifications

Feature	Specification(s)
Panel Enclosure:	Measures 11.5" high x 9.3" wide x 5.4" deep. NEMA 4X rated. Constructed of UV resistant fiberglass; hinge and latch are stainless steel.
S1 Panel Ratings:	120 VAC, 3/4 hp, 14 amps, single phase, 60 Hz.
S2 Panel Ratings:	240 VAC, 2 hp, 14 amps, single phase, 60 Hz.

Simplex Control Panels (continued)

Standard Features

Feature	Specification(s)
Motor-Start Contactor	120 VAC: 16 FLA, 1 hp, 60 hz; 2.5 million cycles at FLA (10 million at 50% of FLA). 240 VAC: 16 FLA, 3 hp, 60 hz; 2.5 million cycles at FLA (10 million at 50% FLA).
Pump Circuit Breaker	20 amps, OFF/ON switch. Single pole 120 VAC, double pole 240 VAC. DIN rail mounting with thermal magnetic tripping characteristics.
Controls Circuit Breaker	10 amps, OFF/ON switch. Single pole 120V. DIN rail mounting with thermal magnetic tripping characteristics.
Toggle Switch	Single pole-double throw HOA switch rated at 20 amps.
Audible Alarm	95 dB at 24", warble-tone sound.
Audible Alarm Silence Relay	120 VAC, automatic reset. DIN rail mount.
Visible Alarm	7/8" diameter red lens, "Push-to-silence." NEMA 4X, 1-watt LED, 120 VAC.

Optional Features

Feature	Specification(s)	Product Code Adder
Intrinsically Safe Control Relays	120 VAC. Listed per UL 698A, for Class 1 Div. 1, groups A, B, C, D hazardous locations. Larger enclosure required.	IR
Programmable Timer	120 VAC, Repeat cycle from 0.05 seconds to 30 hours. Separate variable controls for OFF & ON time periods.	PT
Redundant Off Relay	120 VAC, provides a secondary off. Sounds alarm on low level condition. DIN rail mount.	RO
Heater	Anti-condensation heater. Self-adjusting; radiates additional wattage as temperature drops.	HT
Disconnect Switch	Single pole-single throw, 20 amps, motor rated at 1 hp.	DS
Elapsed Time Meter	120 VAC, 7-digit, non-resettable. Limit of 99,999 hours; accurate to 0.01 hours.	ETM
Event Counter	120 VAC, 8-digit, non-resettable.	CT
Pump Run Light	7/8" green lens. NEMA 4X, 1-watt LED, 120 VAC.	PRL

Orenco SYSTEMS Technical Data Sheet
Float Switch Assemblies

Applications

Float switches are used to signal liquid level positions for alarm and pump control applications. Orenco float switch assemblies can be mounted in pump vaults, effluent screens, pump basins, and risers.

The "On" and "Off" positions describe normally open floats. For normally closed floats, the functions are reversed.

General

All models listed are UL listed and CSA certified for use in water or sewage. Non-mercury float switches (models B, C, N, and P) are used where components containing mercury are prohibited.

Float switches are typically ordered in assemblies that include one or more switches mounted on a 1-inch PVC float stem. ABS float collars are used to provide secure mounting that is easily adjustable.

Normally-open "P" float switches have a blue cap for easy identification; normally-closed "N" float switches have a red cap. "P" and "N" model float switches use Super Vu-Tron® electrical cords for superior chemical and water resistance.

Standard Models

B, C, G, N, P

MF 4 PPPN - ☐ FS - 50

- Cord length option: Blank = 10 ft (3 m), standard 20 = 20 ft (6 m) 35 = 35 ft (10 m) 50 = 50 ft (15 m)
- Application: FS = field set FTL = elbow style (base vited filters only) PR = pump basin STD = Standard float settings STDP = Standard float settings for STEP STDRO = Standard float settings for STEP with redundant off SVOW = Standard float settings for VCOM simplex
- Float stem length: 4 = 4 in. stem (floats and collars only) 10, 21, 27, 33, 51, 76, 45, 51, 57, 99 = stem length, in. 5, 11 = stem length, in. (for elbow-style float brackets)
- Float switch models (listed in order from the top of the float stem down): B, C, G, N, P
- Number of float switches (when using multiples of the same float switch model): Blank = no multiples of the same float switch model.
- Float switch assembly

Product Code Diagram

When ordering float switch assemblies, remember to list float switches from the top of the float stem down. An "MFPBN-" nomenclature indicates one "P" switch at the top of the stem, one "B" in the middle of the stem, and one "N" switch at the bottom of the stem; an "MF2FN-" indicates "F" switches at the top and middle of the stem, and one "N" switch at the bottom of the stem.

Materials of Construction

Float housing	Impact-resistant, noncorrosive PVC plastic for use in liquids up to 140° F (60° C)
Float cord, P and N models	Flexible 2-conductor (UL, CSA) SJOOW; Super Vu-Tron® Supreme, yellow
Float cord, All other models	Flexible 2-conductor (UL, CSA) SJOW; water-resistant (CPE); neoprene coating
Float collar	ABS

Orenco SYSTEMS Technical Data Sheet

Signal- and Motor-Rated Float Switch Matrix

Float	State[a]	Type	IR[b]	Volts	Amps	hp	Tether	X	Y	Drawdown[c]
Signal-rated mechanical floats[a] (for control switch applications)										
P Model[a]	Normally open	Mechanical	Yes	n/a	n/a	n/a	2.00 in.	1.50 in.	0.50 in.	2.00 in.
N Model[a]	Normally closed	Mechanical	Yes	n/a	n/a	n/a	2.00 in.	1.50 in.	0.50 in.	2.00 in.
Motor-rated floats[a] (for pump switch applications)										
B Model	Normally open	Mechanical	No	120V	13A	1/2 hp	2.00 in.[b]	2.50 in.	1.50 in.	4.00 in.
				240V	13A	1 hp	3.00 in.	3.00 in.	1.50 in.	4.50 in.
							4.00 in.	3.25 in.	1.50 in.	4.75 in.
C Model	Normally open	Mechanical	No	120V	13A	1/2 hp	2.00 in.	3.00 in.	2.50 in.	5.50 in.
				240V	15A	2 hp	3.00 in.[b]	3.50 in.	3.00 in.	6.50 in.
							4.00 in.	4.00 in.	3.50 in.	7.50 in.
							5.00 in.	4.00 in.	4.00 in.	8.50 in.
							6.00 in.	5.25 in.	4.25 in.	9.50 in.
G Model	Normally open	Mercury	Yes	120V	15A	3/4 hp	2.00 in.	1.50 in.	3.00 in.	4.50 in.
				240V	15A	2 hp	3.00 in.[b]	1.75 in.	3.00 in.	4.75 in.
							4.00 in.	2.00 in.	3.50 in.	5.50 in.

a. Suitable for use with VCOM and MVP.
b. Standard tether length

Notes

[a] State: normally open or normally closed
The default state of a float — normally open or normally closed — refers to the contact positions in the float when the float is resting (down). Float switches have an internal contact. The terms "normally open" (N/O) and "normally closed" (N/C) refer to the state of the float switch contact in the down position. A normally open float switch has an open contact (off) in the down position. A normally closed float switch has a closed contact (on) in the down position. Different panel functions require different types of float switches. Most applications require float switches that are normally open. One notable exception is the redundant off and low-level alarm function that requires a normally closed float switch, except with MVP and VCOM panels.

[b] Intrinsically safe relays
Approved for use with intrinsically safe, Class I, Division 1 applications, where reliable float switch operation with very low current is required.

[c] Drawdown
Drawdown (in inches) refers to the difference in liquid level between a float switch's activation and deactivation points. Drawdown can be altered by adjusting the tether length of the float switch cord. When selecting float switches, keep in mind that any float switch that can directly start and stop a pump (one that has no motor contactor in the control panel) should have a drawdown capability to avoid rapid cycling of the pump.

Signal-rated floats explained
Every float has a maximum amount of current it can handle. Exceeding these limits may cause premature failure. Signal-rated or "control" floats are used to activate pump control panels and alarms. Only low-amperage signals pass through these float switches, hence the float switch is "signal-rated." All Orenco panels that use motor contactors can use signal-rated float switches. In some systems, a float switch is used to directly start and stop a pump. In this application, the current that is running the pump passes through the float switch as well, and the float switch must be "motor-rated." In most instances, a motor-rated float switch can be used as a signal float switch.

S.R. HARTSELL, R.E.H.S.
P.O. BOX 342
PACIFICA, CA 94044
shartsell@gmail.com (650) 888-2419

ONSITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

16968 BOHLMAN ROAD
SARATOGA, CA 95070
APN 517-30-013

MAY 22, 2022

SCALE AS NOTED

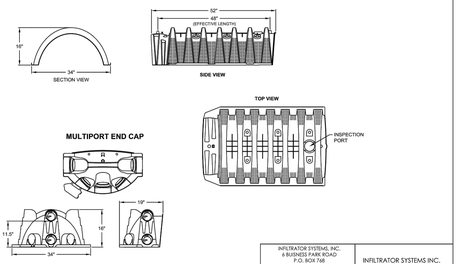
BY SRH

PAGE

onsite 2

SS-2

INFILTRATOR SYSTEMS INC.
QUICK4 HIGH CAPACITY
CHAMBER DETAIL



INFILTRATOR SYSTEMS, INC. 6 BUSINESS PARK ROAD P.O. BOX 768 OLD SAYBROOK, CT 06475 PH. (800) 221-4436 FX. (860) 577-7001 WWW.INFILTRATORSYSTEMS.COM	INFILTRATOR SYSTEMS INC. QUICK4 HIGH CAPACITY CHAMBER DETAIL
Scale NOT TO SCALE	Checked BCP
Date 08/08/2007	Q4_HCTECH
Drawn By: KJB	Sheet 1 Of 1

Installation Instructions for Quick4™ Pressure Distribution Systems

INFILTRATOR water technologies

Before You Begin

Quick4™ Standard and Quick4™ Equalizer® 36 chambers can only be installed according to state and/or local regulations. Contact your local regulator for specific requirements. Soil and site conditions must be approved prior to installation. Conduct a thorough site evaluation to determine proper sizing and siting of the system before installation.

These guidelines must be followed during installation:

- ☐ Avoid direct contact with chambers when using construction equipment. Chambers require a 12-inch minimum of compacted cover to support a wheel load rating of 16,000 lbs/axle or equivalent to an H-10 AASHTO load rating.
- ☐ Only drive across the trenches when necessary. Never drive wheeled machinery over chambers.
- ☐ Avoid stones larger than 3 inches in diameter in backfill. Remove stones this size or larger that are in contact with chambers.

Installing the Chambers and End Caps

1. To allow pressure laterals to drain after each dose, drill a hole in the bottom of the pipe at the end of the pressure line. Place the snap-off splash plate or a paving block at the bottom of the trench to protect the infiltrative surface from erosion.

2. With a hole saw, drill out the appropriate diameter hole to accomodate the pressure lateral pipe.

3. Insert the pressure lateral pipe into the end cap's drilled opening and slide it into the manifold pipe. Glue the pressure lateral pipe to the manifold pipe.

4. With the pressure lateral pipe through the end cap, place the inlet end of the first chamber over the back edge of the end cap.

Note: Health Departments may: require a wet-run pressure check be done prior to chamber installation when the pipe is laying on the ground. Check with your local Health Department for the proper procedure.

5. (Method A) Secure the pressure lateral pipe to the top of the first chamber with a plastic pipe strap at the outlet end of the unit. Slide the strap up through a slot in the chamber top, down through the other slot, and cinch the two ends around the pipe.

6. (Method B) With the holes pointing up, stabilize the pressure lateral pipe on the ground to prevent it from moving.

7. Lift and place the next chamber onto the previous one at a 45-degree angle. Line up the chamber end between the connector hook and locking pin at the top of the first chamber. Lower it to the ground to engage the interlocks.

8. (Method A) Secure the lateral pipe to the top of the next chamber once in place. Follow the same method in Step 5.

9. Continue interlocking chambers and securing the pipe until the trench is completed.

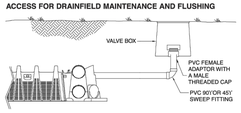
10. Before attaching the final end cap, remove the tongue of the connector hook on the last chamber with a pair of pliers.

11. Insert the pressure lateral pipe through the hole in the final end cap and slide the end cap towards the last chamber. Lift the end cap over the modified connector hook and push straight down to secure it to the chamber.

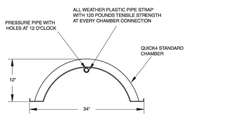
Note: If cleanout extensions are required, use a hole saw to cut a hole in the end cap at the proper elevation so that the lateral pipe can extend. For clean- out access, a 90-degree elbow that extends to the soil's surface can be attached to the lateral pipe.

12. If installing multiple rows of chambers, follow Steps 1-9 to lay the next row of chambers parallel to the first. Keep a minimum separation distance between each row of chambers as required by local code.

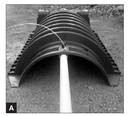
ACCESS FOR DRAINFIELD MAINTENANCE AND FLUSHING



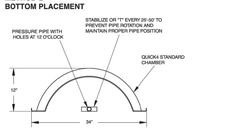
METHOD A
TOP PLACEMENT



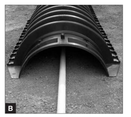
Advantages of Method A
- Pipe and orifice placed closer to the chamber dome offer improved distribution.
- Pipe positioned at the top of the chamber places it well above effluent.
- Plastic pipe hanger easily secures pipe in place.



METHOD B
BOTTOM PLACEMENT



Advantages of Method B
- Pipe resting on the trench bottom allows easy installation and maintenance.
- Stabilizing "T's" keep pipe level.
- System promotes efficient pressure checks.
- Pipe resting on the trench bottom allows easier inspec- tion if monitoring ports are installed.



Infiltrator Water Technologies Limited Warranty

(a) The structural integrity of each chamber, end cap, wedge and other accessory manufactured by Infiltrator ("Units"), when installed and operated in a leachfield of an onsite septic system in accordance with Infiltrator's instructions, is warranted to the original purchaser ("Holder") against defective materials and workmanship for one year from the date that the septic permit is issued for the septic system containing the Units; provided, however, that if a septic permit is not required by applicable law, the warranty period will begin upon the date that installation of the septic system commences. To exercise its warranty rights, Holder must notify Infiltrator in writing at its Corporate Headquarters in Old Saybrook, Connecticut within fifteen (15) days of the alleged defect. Infiltrator will supply replacement Units for Units determined by Infiltrator to be covered by this Limited Warranty. Infiltrator's liability specifically excludes the cost of removal and/or installation of the Units.

(b) THE LIMITED WARRANTY AND REMEDIES IN SUBPARAGRAPH (a) ARE EXCLUSIVE. THERE ARE NO OTHER WARRANTIES WITH RESPECT TO THE UNITS, INCLUDING NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

(c) This Limited Warranty shall be void if any part of the chamber system is manufactured by anyone other than Infiltrator. The Limited Warranty does not extend to incidental, consequential, special or indirect damages. Infiltrator shall not be liable for penalties or liquidated damages, including loss of production and profits, labor and materials, overhead costs, or other losses or expenses incurred by the Holder or any third party. Specifically excluded from Limited Warranty coverage are damage to the Units due to ordinary wear and tear, alteration, accident, misuse, abuse or neglect of the Units; the Units being subjected to vehicle traffic or other conditions which are not permitted by the installation instructions; failure to maintain the minimum ground covers set forth in the installation instructions; the placement of improper materials into the system containing the Units; failure of the Units or the septic system due to improper siting or improper sizing, excessive water usage, improper grease disposal, or improper operation; or any other event not caused by Infiltrator. This Limited Warranty shall be void if the Holder fails to comply with all of the terms set forth in this Limited Warranty.

Further, in no event shall Infiltrator be responsible for any loss or damage to the Holder, the Units, or any third party resulting from installation or shipment, or from any product liability claims of Holder or any third party. For this Limited Warranty to apply, the Units must be installed in accordance with all site conditions required by State and local codes; all other applicable laws; and Infiltrator's installation instructions.

(d) No representative of Infiltrator has the authority to change or extend this Limited Warranty. No warranty applies to any party other than the original Holder.

* * * * * * *

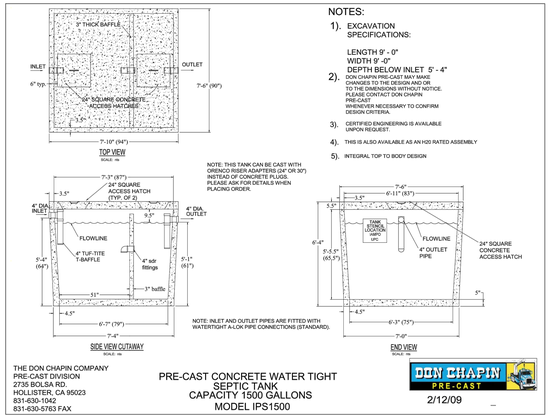
The above represents the standard Limited Warranty offered by Infiltrator. A limited number of States and counties have different warranty requirements. Any purchaser of Units should contact Infiltrator's Corporate Headquarters in Old Saybrook, Connecticut, prior to such purchase, to obtain a copy of the applicable warranty, and should carefully read that warranty prior to the purchase of Units.

Distributed By:

INFILTRATOR water technologies
4 Business Park Road • P.O. Box 768
Old Saybrook, CT 06475
860-577-7000 • FAX 860-577-7001
1-800-221-4436

Q04 0813SI

septic tank



NOTES:
1). EXCAVATION SPECIFICATIONS:
LENGTH 9' - 0"
WIDTH 9' -0"
DEPTH BELOW INLET 5' - 4"
2). DON CHAPIN PRE-CAST MAY MAKE CHANGES TO THE DESIGN AND OR TO THE DIMENSIONS WITHOUT NOTICE. PLEASE CONTACT DON CHAPIN PRE-CAST WHEN IT IS NECESSARY TO CONFIRM DESIGN CRITERIA.
3). CERTIFIED ENGINEERING IS AVAILABLE UNPON REQUEST.
4). THIS IS ALSO AVAILABLE AS AN H20 RATED ASSEMBLY
5). INTEGRAL TOP TO BODY DESIGN

THE DON CHAPIN COMPANY
PRE-CAST DIVISION
2735 BOLSA RD.
HOLLISTER, CA 95023
831-630-1042
831-630-5763 FAX

PRE-CAST CONCRETE WATER TIGHT
SEPTIC TANK
CAPACITY 1500 GALLONS
MODEL IPS1500

DON CHAPIN PRE-CAST
2/12/09

pump chamber

NOTES:
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PRE-CAST CONCRETE WATER TIGHT
HOLDING/PUMP TANK
CAPACITY 1500 GALLONS
MODEL IPS1500H

DON CHAPIN PRE-CAST
2/3/10

Z - Z TRENCH CROSS SECTIONS

S.R. HARTSELL, R.E.H.S.
P.O. BOX 342
PACIFICA, CA 94044
shartsell@gmail.com (650) 888-2419

ONSITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

16968 BOHLMAN ROAD
SARATOGA, CA 95070
APN 517-30-013

MAY 22, 2022

SCALE AS NOTED

BY SRH

PAGE

onsite 3

SS-3

source Washington State Department of Health, Pressure Distribution Systems

Operation and Maintenance

The systems must be monitored and maintained at a frequency commensurate with the site, soil, system complexity and use patterns. As a minimum, the items in 3.1 - 3.5 be inspected at six months and then yearly, after the system is put into use. The system designer will perform the first inspection before the system is put into use and record the initial data in a construction record. Refer to the system construction record for initial readings and settings. This pressure distribution systems must be inspected and / or serviced on a yearly basis, which shall include but not be limited to the following:

3.1. Evaluate Drainfield

3.1.1. for indications of surfacing effluent.
3.1.2. for appropriate vegetation, landscaping impacts, ponds, etc.
3.1.3. for absence of heavy traffic.
3.1.4. for inappropriate building.
3.1.5. for impervious materials or surfaces.
3.1.6. for abnormal settling or erosion.

3.2. Evaluate Laterals

3.2.1. for residual pressure at the distal ends. Confirm that it is the same as those recorded on the construction record. If not the same, laterals and orifices need to be cleaned.
3.2.2. for equal flows in each lateral.
3.2.3. for need for cleaning. Clean laterals and orifices as necessary.

3.3. Measure Pump Run Time per Cycle and Drawdown

Compare these values with those recorded in the construction record. If not the same,evaluate the system for improperly set timer control, float switches, clogged laterals, plugged orifices.

3.4. Test Alarms

Test alarms for proper functioning (high and low liquid level).

Pressure Distribution Systems - Recommended Standards and Guidance
Effective Date: July 1, 2012
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3.5. Evaluate Septic Tank and Pump Chamber

3.5.1. for sludge and scum accumulations; pump when the sludge and scum thickness total 1/3 of the depth of the tank.
3.5.2. for clogging, damage, and proper placement of outlet baffle screen. Clean each time it is inspected or as needed to avoid clogging.
3.5.3. for signs of leaking in tanks and risers. Repair or replace if necessary.
3.5.4. for risers and lids being above grade and having lids that are secure.
3.5.5. for properly functioning of floats. Movement should not be restricted. Floats should be positioned correctly and provide positive instrumentation signals.

Some additional notes:

1. Designer is required to submit final letter that system works per plan and was installed per plan.
2. Designer is required to submit final as-built drawing to the County.
3. Dosing needs to be 3-5 times daily.
4. **Thrust Blocking**

All pipes and fittings called out in this plan are to be solvent welded at joints and or fittings.
According to Larry Workman on page 28 of ***Plastic Piping Systems*** published in 2011 by the Plastic Pipe and Fitting Association, 800 Roosevelt Road, Building C, Suite 312, Glen Ellyn, Illinois 60137 no thrust blocking is needed for solvent welded plastic pipe.

5. The leach trenches for this septic system shown in this plan are on slopes that exceed 20&. the County requires a geotech report as described in Attachment D;

ATTACHMENT D

Geotechnical Report & Engineering Installation Plan Requirements for:

- « Slopes Exceeding 20%
- « Reduction of Horizontal Setbacks

When it is proposed to install an OWTS on slopes over 20% the County OWTS Ordinance, Code Section B11-83, requires that it be demonstrated "through a geotechnical report and complete engineering installation plan ... that use of the subsurface dispersal system will not permit sewage effluent to surface, degrade water quality, create a nuisance, affect soil stability, or present a threat to the public health or safety. The geotechnical report shall include, but not be limited to, soil percolation rates, contours, soil depth, seasonal groundwater elevation(s), location of all existing or proposed ground cuts, rock formations, soil stability, drainage, and other data as determined by the director and the County geologist."
Also, under Section B11-67(i)(6) regarding horizontal setback distances between the dispersal field and cut banks, embankments, steep slopes and unstable land masses, the Code allows for reduction of the required setback distance "...in accordance with recommendations provided in a geotechnical report by a registered civil engineer or professional geologist...".
The following are the minimum requirements for the preparation of the geotechnical report and engineering installation plan pertaining to the above provisions of the Code.

1. The geotechnical report must be prepared by a state registered civil engineer or a professional geologist certified as an engineering geologist or having similar geotechnical expertise as determined by the County geologist. The engineering installation plan must be prepared by a state registered civil engineer, professional geologist, or registered environmental health specialist. The report and plan may be prepared by different authorized professionals.
2. Engineering Installation Plan Requirements:

a) The plan must be wet-stamped by the designer and initialed or signed.
b) The plan must include cross section(s) through the dispersal field that show dispersal line depths and details, and any benching that will be necessary to install the system.
c) Any OWTS proposed for installation on slopes between 30% and 40% shall require the use of pressure distribution methods, designed in accordance with applicable guidelines in Part 4 of the Onsite Systems Manual.
d) Any OWTS proposed for installation on slopes between 40% and 50% shall require the use of subsurface drip dispersal methods, designed in accordance with applicable guidelines in Part 4 of the Onsite Systems Manual.
e) The plan must include an erosion control plan, incorporating measures consistent with guidelines and requirements contained in Division C12, Chapter III of the Santa Clara County Code (County Grading Ordinance).
f) The plan shall incorporate applicable recommendations contained in the geotechnical report regarding the avoidance or mitigation of slope stability concerns, including, as applicable, recommended horizontal setback distance(s) from cut banks, embankments, steep slopes, or any identified unstable land mass within 100 feet the dispersal field.

3. Geotechnical Report Requirements:

a) The report must specifically reference the engineering installation plan. If, at some future date, the dispersal field is appreciably modified an amended report must be submitted that references the modified plan.
b) The geotechnical report must discuss the geology, slope stability and seismic hazards, soils, groundwater, drainage, percolation rate, topography, cuts, vegetation and other pertinent site features.
c) The report shall include any recommendations deemed appropriate or necessary to mitigate potential slope stability, drainage or seepage concerns associated with either the installation or on-going operation of the proposed OWTS, including, as applicable, recommended horizontal setback(s) from any cut banks, embankments, steep slopes or any identified unstable land mass.
d) The report must state specifically in the conclusion that the proposed OWTS will not (or other wording such as not likely to, risk is very low, etc.):
1) Permit sewage effluent to surface
2) Degrade water quality
3) Affect soil stability
4) Present a threat to the public health or safety
5) Create a public nuisance
e) The geotechnical report shall be wet-stamped and signed by the responsible licensed professional.

NOTE:
Property owner will need to get an annual operating permit from Santa Clara County Environmental Health. The system will need to be checked by a qualified professional twice a year for the first, four years then annually. The property Owner will be required to have a maintenance contract with a qualified service professional. If there is water in the inspection wells, samples will need to be taken of this water and analyzed by a qualified analytical laboratory for E. coli bacteria on a regular basis.

S.R. HARTSELL, R.E.H.S.
P.O. BOX 342
PACIFICA, CA 94044
srhartsell@gmail.com (650) 888-2419

ONSITE WASTEWATER TREATMENT & DISPOSAL SYSTEM

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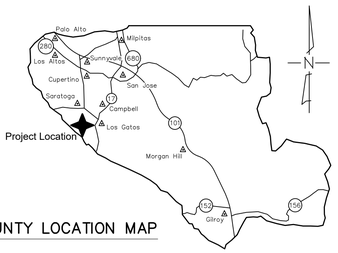
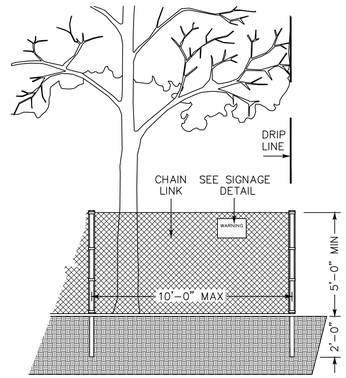
SS-4





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 ______________________ AND DATED _____________ 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 (408) 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.
5. IN ACCORDANCE WITH THE CALIFORNIA PROFESSIONAL LAND SURVEYORS' ACT (BUSINESS AND PROFESSIONS CODE) CHAPTER 15 SECTIONS 8771 AND 8725.1, CALIFORNIA PENAL CODE 605, AND CALIFORNIA GOVERNMENT CODE 27581, ANY PERSON PERFORMING CONSTRUCTION ACTIVITIES THAT WILL OR MAY DISTURB AN EXISTING ROADWAY/STREET MONUMENT, PROPERTY CORNER, OR ANY OTHER PERMANENT SURVEYED MONUMENT AND/OR AS SHOWN ON THIS TENTATIVE MAP SHALL ENSURE THAT A CORNER RECORD AND/OR RECORD OF SURVEY ARE FILED WITH THE OCUNTY SURVEYOR OFFICE PRIOR TO DISTURBING SAID MONUMENTS. ALL DISTURBED OR DESTROYED MONUMENTS SHALL BE RESET AND FILED IN COMPLIANCE WITH SECTION 8771.

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 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.

REVISED 11-26-14

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.

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.

LOCATION	CUT (C.Y.)	FILL (C.Y.)	VERT. DEPTH
RESIDENCE	±473	±28	±10.5/±4.4
DRIVEWAY	±200	±175	±8.6/±6.4
YARD	±225	±98	±9.8/±5.1
TANK PAD	±29	±66	±4.9/±6.6
TOTAL	±927	±367	

NOTE: FILL VOLUMES INCLUDE 10% 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 23,285 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

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 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) 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.

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.

COUNTY OF SANTA CLARA DEPT. OF ROADS AND AIRPORTS

ISSUED BY: ____________ DATE: ________________

ENCROACHMENT PERMIT NO. ____________________

COUNTY OF SANTA CLARA
LAND DEVELOPMENT ENGINEERING & SURVEYING

GRADING/DRAINAGE PERMIT NO. ________________

ISSUED BY: __________ DATE: ______________

NO WORK SHALL BE DONE IN THE COUNTY'S RIGHT-OF-WAY WITHOUT AN ENCROACHMENT PERMIT, INCLUDING THE STAGING OF CONSTRUCTION MATERIAL AND THE PLACEMENT OF PORTABLE TOILETS.

ENGINEER'S STATEMENT

I HEARBY 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.

DATE ____________ ____________________ 69278
R.C.E. NO.

AMANDA JOY MUSY-VERDEL
NO. 69278

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 ______________ ______________________________
DARRELL K.H. WONG

R.C.E. NO. 63958 - EX 9/30/2022

VICINITY MAP
NO SCALE

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 CONTROL PLANS TO PREVENT ILLICIT DISCHARGES FROM THE SITE DURING CONSTRUCTION.
2. A CONSTRUCTION OBSERVATION LETTER FROM THE RESPONSIBLE GEOTECHNICAL ENGINEER AND CERTIFIED ENGINEERING GEOLOGIST DETAILING CONSTRUCTION OBSERVATIONS AND CERTIFYING THAT THE WORK WAS DONE IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL AND GEOLOGICAL REPORTS SHALL BE SUBMITTED PRIOR TO GRADING COMPLETION AND RELEASE OF BOND.

3. CLEAR AND GRUB BUILDING PAD AND DRIVEWAY.
4. BUILDING PAD AND DRIVEWAY GRADING.
5. INSTALL WATER TANKS
6. INSTALL WHARF FIRE HYDRANT
7. INSTALL STORM DRAIN SYSTEM

SEPARATE PERMIT:
1. CONSTRUCT DRIVEWAY APPROACH
2. INSTALL SEPTIC SYSTEM
3. CONSTRUCT RETAINING WALL

SHEET INDEX

ENGINEER'S NAME: HANNA & BRUNETTI

ADDRESS: 7651 EIGLEBERRY STREET, GILROY CA 95020

PHONE NO. 408 842-2173
FAX NO. 408 842-3662

PRELIMINARY
IMPROVEMENT PLANS

FOR THE
HOME GRADING AND DRAINAGE
ON THE LANDS OF SINAPI
16968 BOHLMAN ROAD, LOS GATOS

PARCEL B, AS SHOWN ON THAT CERTAIN PARCEL MAP
FILED OCTOBER 3, 1978 IN BOOK 427 OF MAPS, AT PAGE 29
SANTA CLARA COUNTY, CALIFORNIA
A.P.N.: 517-30-013

JUNE 2022
NO SCALE

Revision 1 Date	APN 517-30-013	Sheet 1 of 8
Revision 2 Date		
Revision 3 Date	Co. File X	

APN 517-30-016
WOLFF

APN 517-30-014
KEITH

APN 517-30-017
BRANDWAJN

APN 517-30-018
NG

N 89°22'13" E 696.26'

N 32°31'00" E 264.84'

N 82°30'00" E 325.00'

N 52°20'00" E 158.23'

20' WIDE STORM DRAIN EASEMENT
PER B 315 O.R. 690

STORM DRAIN EASEMENT
PER 427 M 29

LIMITS OF PROPOSED
DEVELOPED AREA

FD 3/4" IP
RE 18612

FD IRON PIPE
IN MON BOX

R=220.00'
Δ=34°39'47"
L=133.03'

FD 3/4" IP
OPEN

S 22°53'02" E
62.23'

FD IRON PIPE
IN MON BOX

N 7°39'01" E 180.37'

FD 3/4" IP
LS 2372

FD 3/4" IP
OPEN

S 82°14'54" W 146.83'

FD 1" IP
OPEN

S 76°32'04" W 145.41'

S 45°16'41" W 102.68'

N 64°34'02" W
32.18'

N 4°03'15" W 157.63'

N 17°17'13" E 78.36'

N 24°54'50" W 90.74'

N 89°44'46" W 592.34'

S 0°22'40" W 678.78'

Average Slope of Proposed Developed Area

$$S = \frac{I \times L}{A} \times 100$$

S = the average slope in percent (%)
I = the contour interval in feet = 2 ft
L = the sum length of contour lines in feet = 4,355
A = the area in sq. ft. = 23,311

$$S = \frac{2 \times 4355}{23311} \times 100 = 37.3\%$$

BASIS OF BEARINGS:

BEARINGS FOR THIS MAP ARE BASED ON THE CENTERLINE OF BOHLMAN (aka BOLLMAN) ROAD BETWEEN POINTS #48 AND #49, AS SHOWN ON THAT MAP FILED IN BOOK 145 OF MAPS, PAGE 27, SANTA CLARA COUNTY RECORDS, AND WAS ESTABLISHED BETWEEN FOUND MONUMENTS AS SHOWN HEREON.

NORTH 20°53' WEST

BENCHMARK:

ELEVATIONS FOR THIS MAP ARE BASED ON AN ASSUMED DATUM. SITE BENCHMARK IS CONTROL POINT #50, SET SPIKE ELEVATION = 1000.00'

FLOOD ZONE:

PANEL NUMBER: 060337-06085C0360H
REVISION DATE: MAY 18, 2009
COMMUNITY NAME: SANTA CLARA COUNTY

PROJECT LOCATED IN ZONE D

AN AREA OF UNDETERMINED BUT POSSIBLE FLOOD HAZARDS.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

LEGEND

EXISTING	PROPOSED	
480	484	CONTOUR ELEVATION
(8")	(8")	WATER MAIN
(50')	(50')	(length) LF (size) SD @ S=(grade) STORM DRAIN
(55')	(55')	(length) LF (size) SS @ S=(grade) SANITARY SEWER
□	■	DROP INLET
◎	◉	MANHOLE
⊕	⊕	FIRE HYDRANT
⊗	⊗	WATER VALVE
		VERTICAL CURB
		JOINT TRENCH
		RETAINING WALL
		DRAINAGE SWALE
	SS	SEWER LATERAL
	×	TREE TO BE REMOVED
		ROCK RIP-RAP

ABBREVIATIONS

AC	ASPHALT CONCRETE	EP	EDGE OF PAVEMENT	P.S.E.	PUBLIC SERVICE EASEMENT
AB	AGGREGATE BASE	ER	END OF RETURN	P.S.D.E.	PRIVATE STORM DRAIN EASEMENT
AD	AREA DRAIN	ESMT	EASEMENT	P.S.S.E.	PRIVATE SANITARY SEWER EASEMENT
AGG	AGGREGATE	(E)	EXISTING	P.U.E.	PUBLIC UTILITY EASEMENT
BC	BEGINNING OF CURVE	EX.	EXISTING	PVI	POINT OF VERTICAL INTERSECTION
BPD	BACKFLOW PREVENTER DEVICE	FF	FINISH FLOOR	PVC	POLYVINYL CHLORIDE PIPE
BLDG	BUILDING	FG	FINISH GRADE	R	RADIUS
BOC	BACK OF CURB	FH	FIRE HYDRANT	RCP	REINFORCED CONCRETE PIPE
BO	BLOW OFF		FLOWLINE	R/W	RIGHT OF WAY
BOT	BOTTOM	FOC	FACE OF CURB	RWL	RAINWATER LEADER
BOW	BACK OF WALK		GAS LINE	S	SLOPE
BW	BOTTOM OF WALL	GM	GAS METER	SD	STORM DRAIN PIPE
BWF	BARBWIRE FENCE	GB	GRADE BREAK	SS	SANITARY SEWER PIPE
CATV	CABLE TELEVISION	GUY	GUY WIRE FOR POLE	STM	STORM DRAIN MANHOLE
CB	CATCH BASIN	GV	GATE VALVE	SS MH	SANITARY SEWER MANHOLE
C&G	CURB & GUTTER	HDPE	HIGH DENSITY POLYETHYLENE	SP	SERVICE POLE
CI	CURB INLET	HMA	HOT MIX ASPHALT	STD	STANDARD
CL	CENTERLINE	HP	HIGH POINT	SQ	SQUARE
CMP	CORRUGATED METAL PIPE	INV	INVERT OF PIPE	SW	SIDEWALK
CMU	CONCRETE MASONRY UNIT	IP	IRON PIPE	T	TELEPHONE LINE
CO	CLEAN OUT	JP	JOINT POLE	TBM	TEMPORARY BENCHMARK
CONC	CONCRETE	JT	JOINT TRENCH	TC	TOP OF CURB
CONST	CONSTRUCTION	LF	LINEAR FEET	TCM	TREATMENT CONTROL MEASURES
DDCV	DOUBLE DETECTOR CHECK VALVE ASSEMBLY	LP	LOW POINT	TFC	TOP FACE OF CURB
		MAX	MAXIMUM	TG	TOP OF GRATE
DI	DROP INLET	MIN	MINIMUM	TOB	TOP OF BANK
DIP	DUCTILE IRON PIPE	N.I.C.	NOT IN CONTRACT	TOE	TOE OF BANK
DMA	DRAINAGE MANAGEMENT AREA	(N)	NEW	TW	TOP OF WALL
DS	DOWNSPOUT	OHU	OVERHEAD UTILITY	TYP	TYPICAL
DWY	DRIVEWAY	(P)	PROPOSED	W	WATER LINE
E	ELECTRIC LINE	PB	PULL BOX	WM	WATER METER
EC	END OF CURVE	PCC	PORTLAND CONCRETE CEMENT	WV	WATER VALVE
EG	EXISTING GRADE	PL	PROPERTY LINE		
ELEV	ELEVATION	PRC	POINT REVERSE CURVE		

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

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

APN 517-17-025 MIDPENINSULA REGIONAL OPEN SPACE DISTRICT

PLAN # ____
SHEET ____ OF ____

REVISIONS:

DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1910
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
OFFICE (408) 842-2173 • FAX (408) 842-3662
EMAIL: ENGINEERING @ HANNABRUNETTI.COM

DATE: JUNE 2022
HORIZ. SCALE: 1"=40'
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY: ____
DRAWN BY: T.M.

date: ____ 22
Hanna – Brunetti

Amanda Joy Musy-Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEL
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Site Plan

Lands of Sinapi - 16968 Bohlman Road - apn 517-30-013

UNINCORPORATED
JUNE 2022

SANTA CLARA COUNTY
CALIFORNIA

SHEET 2 OF 8

JOB NO. 22022

PLAN # _____
SHEET _____ OF _____

SEE SHEET 4
MATCH LINE

SEE SHEET 4
MATCH LINE

N 71°29'01" E 180.37'

N 52°20'00" E 158.23'

S 20°53'02" E 62.23'

BOHLMAN ROAD

PROPANE TANK

PROVIDE 6" CONCRETE OVER 6" BASEROCK TANK PAD

DOMESTIC 3,000 GAL TANK FF 944.2 PAD 943.2

TW 944.2
BW 940.1
4.1' HIGH

940.1±

TW 948.2
BW 944.2
4' HIGH

948.2±

TW 948.0
BW 944.2
3.8' HIGH

EX 948.0±

CONSTRUCT RETAINING WALL

DOMESTIC WATER & GAS LINE

WATER SUPPLY LINE FOR TANKS

SEPTIC SYSTEM DESIGN BY:
S.R. HARTSELL, R.E.H.S.
P.O. BOX 342
PACIFICA, CA 94044
EMAIL: SRHARTSELL@GMAIL.COM
TELE: 650 888-2419

SEPTIC SYSTEM DESIGN BY:
S.R. HARTSELL, R.E.H.S.
P.O. BOX 342
PACIFICA, CA 94044

PROVIDE ROCK RIP-RAP
4-6" DIA ROCK SIZE
2 COURSES

3.0'
5.0'
INV 955.4

9 LF 4" PVC @ S=0.083

EX 960.2±
INV 956.15

50 LF 24" HDPE @ S=0.003

EX 960.2±
INV 956.3

9 LF 6" PVC @ S=0.34

41 LF 6" PVC @ S=0.017

EXISTING TREES TO BE REMOVED

DI(V1)
TG 961.8
INV 957.0

TW 969.1
BW 967.8
1.5' HIGH

TW 969.1
BW 966.4
2.7' HIGH

TW 969.0
BW 967.0
2' HIGH

TW 969.0
BW 966.5
3.5' HIGH

FG 969.04

TW 971.9
BW 970.6
1.1' HIGH

FG 971.94

CONSTRUCT RETAINING WALL

2:1 SLOPE OR FLATTER TYPICAL

TW 971.3
END WALL

TW 971.9
END WALL

DOMESTIC WATER & GAS LINE

PROPOSED POOL
DECK 972.0

9 LF 6" PVC @ S=0.46

INV 970.0
-1.7%

TG 969.0
INV 965.8
-0.5%

FG 971.88

FG 972.00

TRENCH DRAIN – TG 971.95

TC 971.95

CONSTRUCT RETAINING WALL

LOWER FLOOR
FF 972.0
PAD 971.08

FG 971.3

53 LF 6" PVC @ S=0.40

30.0'
BUILDING SETBACK

TW 978.3
BW 972.0
6.3' HIGH

FG 978.30

CONSTRUCT RETAINING/FOUNDATION WALL

HOUSE
FF 982.0

FG 981.50

FG 981.3

LOWER FLOOR
FF 978.67
PAD 977.75

GARAGE
FF 988.0
PAD 986.7

FG 981.0

TW 978.4
END WALL

DI(V1)
TG 980.6
INV 978.9

DI(V1)
TG 980.7
INV 979.0

21 LF 6" PVC S=0.005

17 LF 6" PVC S=0.005

18 LF 6" PVC S=0.011

33 LF 6" PVC @ S=0.009

14 LF 6" PVC @ S=0.009

DI(V1)
TG 980.7
INV 978.8

DI(V1)
TG 984.0
INV 979.0

TW 985.0
BW 981.0
4' HIGH

TW 987.5
BW 985.0
2.5' HIGH

FG 981.22

FG 981.27

FG 981.44

FG 981.29

FG 981.38

FG 981.57

CONSTRUCT RETAINING WALL

TW 981.7
END WALL

TW 988.8
BW 986.8
2' HIGH

2:1 SLOPE OR FLATTER TYPICAL

TW 989.6
BW 987.6
2' HIGH

TW 988.4
BW 981.7
6.7' HIGH

TW 988.2
BW 984.0

TW 992.0
BW 990.0
2' HIGH

TW 995.5
BW 994.0
1.5' HIGH

TW 992.0
END WALL

FG 995.51

FG 995.25

EX RETAINING WALL

EP 994.95

EP 995.29±
CONFORM

EP 997.93

EP 998.45±
CONFORM

EP 996.84±
CONFORM

EP 999.53

EP 999.48±
CONFORM

EP 1000.15

EP 1000.43±
CONFORM

SAWCUT 12" FROM EX EDGE OF PAVEMENT
CONSTRUCT FRONTAGE IMPROVEMENTS
PER COUNTY STD B/4A

EX RETAINING WALL TO REMAIN

SAWCUT 12" FROM EX EDGE OF PAVEMENT
CONSTRUCT COUNTY STD DWY APPROACH
PER COUNTY STD B/4.
CONFORM TO EX EDGE OF PAVEMENT
TYPICAL

EP 1000.71±
CONFORM

EP 1000.73±
CONFORM

EP 1000.74±
CONFORM

EP 1000.69±
CONFORM

EP 1000.36±
CONFORM

AC 1000.37

AC 1000.36

EP 1000.19

TW 992.2
END WALL

TW 996.5
BW 992.0
4.5' HIGH

TW 988.0
BW 984.9
3.1' HIGH

FG 991.00

CONSTRUCT RETAINING WALL

PROVIDE 6" CONCRETE OVER 6" BASEROCK TANK PAD

FIRE 5,000 GAL TANK FF 992 PAD 991

FIRE 5,000 GAL TANK FF 992 PAD 991

TW 992.0
BW 987.4
4.6' HIGH

TW 992.0
BW 986.3
5.7' HIGH

FG 986.30

TW 990.0
BW 984.3
5.7' HIGH

TW 991.5
BW 988.0
2.5' HIGH

TW 991.0
BW 988.8
1.2' HIGH

TW 991.7
END WALL

TW 996.2
END WALL

TW 991.0
BW 985.8
4.7' HIGH

TW 990.5
BW 985.8
4.7' HIGH

TW 991.0
BW 988.0
4.4' HIGH

F&I WHARF FH
ELEV. 992± PER
COUNTY STDS

TC 995.21
FL 994.71

TC 994.97
FL 994.47

TC 996.55
FL 996.05

TC 997.29
FL 996.79

TC 997.66
FL 997.16

TC 992.67
FL 992.17

TC 993.04
FL 992.54

AC 991.62

AC 988.99

AC 987.75

AC 987.51

AC 986.67

AC 985.73

AC 984.33

AC 988.32

TG 987.46

FG 988.26

TC 988.82
FL 988.32

TC 990.12
FL 989.62

38.2'

R=15'

R=38'

R=10'

R=220.00' Δ=34°38'41" L=133.03

CONSTRUCT 6" HIGH CURB

TC 990.42
FL 989.92

PC 0+33.66

20.0'

40.1'

14.0'

16'

0.00

TRENCH DRAIN

30 LF 6" PVC S=0.030

TG 986.00
INV 983.0

PT: 1+09.51

PRC: 0+60.31

30.0'
BUILDING SETBACK

2:1 SLOPE OR FLATTER TYPICAL

CONSTRUCT RETAINING WALL

CONSTRUCT 6" HIGH CURB

DBL 74" OAK

MONUMENT #48 (145-M-27)

FOUND 3/4" IP
BEARS N 69°02' W
0.40' FROM PROP. COR.

FOUND 3/4" IP
BEARS N 69°02' W
0.40' FROM PROP. COR.

FOUND 3/4" IP
RE: 996.92

EDGE PAVEMENT

EDGE PAVEMENT

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

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

REVISIONS:

DATE	DESCRIPTION	BY:

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EMAIL: ENGINEERING @ HANNABRUNETTI.COM

DATE: JUNE 2022
HORIZ. SCALE: 1"=10'
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY: _____
DRAWN BY: T.M.

date: _____ 22
Hanna – Brunetti

Amanda Joy Musy-Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEL
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Preliminary Grading & Drainage Plan

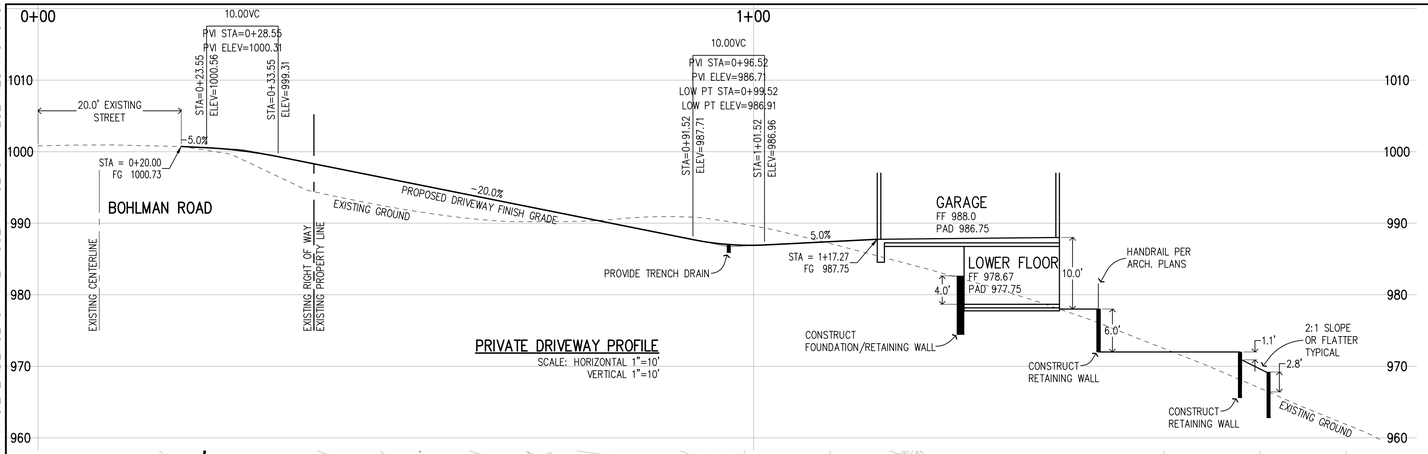
Lands of Sinapi - 16968 Bohlman Road - apn 517-30-013

UNINCORPORATED
JUNE 2022

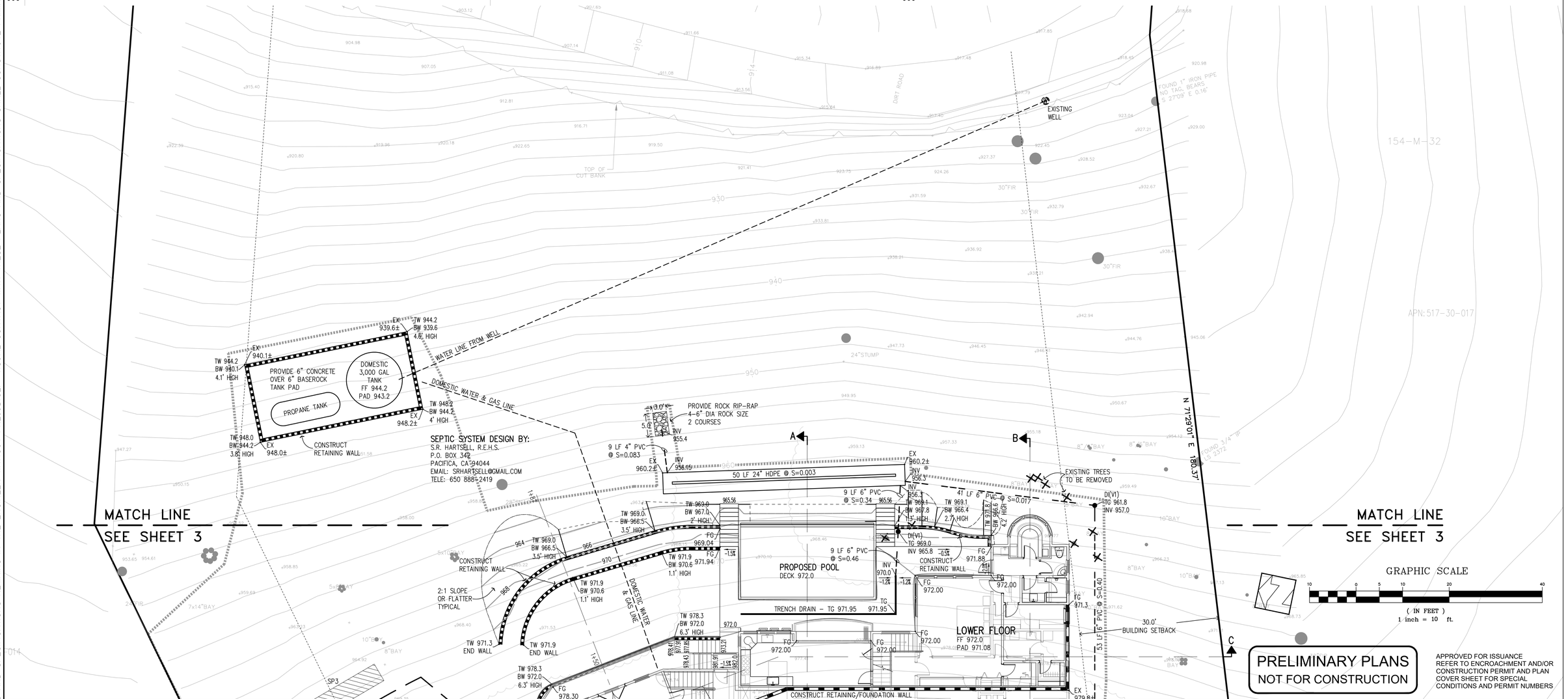
SANTA CLARA COUNTY
CALIFORNIA

SHEET 3 OF 8

JOB NO. 22022



PRIVATE DRIVEWAY PROFILE
SCALE: HORIZONTAL 1"=10'
VERTICAL 1"=10'



GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

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

PLAN # ____
SHEET ____ OF ____

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UNINCORPORATED
JUNE 2022

SANTA CLARA COUNTY
CALIFORNIA

SHEET 4 OF 8

JOB NO. 22022

PROJECT NOTES:

1. THE LOCATION OF THE BUILDING PADS AND/OR FOUNDATIONS ARE TO BE ESTABLISHED BY A PERSON AUTHORIZED TO PRACTICE LAND SURVEYING. A LETTER SIGNED AND SEALED BY THAT AUTHORIZED PERSON, STATING THAT HE/SHE HAS LOCATED THE BUILDING CORNERS, AND THEIR LOCATIONS CONFORM TO COUNTY BUILDING SETBACK REQUIREMENTS PER THE APPROVED BUILDING PLANS IS REQUIRED TO BE SUBMITTED TO THE COUNTY ENGINEER.
2. 'THIS PLAN AUTHORIZES THE REMOVAL OF ONLY THOSE TREES WITH TRUNK DIAMETERS GREATER THAN 12 INCHES MEASURED 4.5 FEET ABOVE GROUND WHICH ARE SHOWN TO BE REMOVED. ANY OTHER SUCH TREES ARE NOT 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.'
3. NO TREES ARE TO BE REMOVED
4. PRIOR TO GRADING COMPLETION AND RELEASE OF BOND, ALL GRADED AREAS SHALL BE RESEEDED IN CONFORMANCE WITH THE COUNTY GRADING ORDINANCE TO MINIMIZE THE VISUAL IMPACTS OF THE GRADED SLOPES AND REDUCE THE POTENTIAL FOR EROSION ON THE SUBJECT SITE.
5. BOTH DRAINFIELDS MUST BE STAKED AND STRUNG PRIOR TO APPROVAL OF THE SEPTIC DESIGN TO VERIFY THAT THE PROPOSED SEPTIC DESIGN WILL ACTUALLY FIT INTO THE PROPOSED LEACHFIELD AREA, AND CONFORM TO ALL REQUIRED SETBACKS.
6. IF ARCHAEOLOGICAL RESOURCES OR HUMAN REMAINS ARE DISCOVERED DURING CONSTRUCTION, WORK SHALL BE HALTED WITHIN 50 METERS (150 FEET) OF THE FIND UNTIL IT CAN BE EVALUATED BY A QUALIFIED ARCHAEOLOGIST. IF THE FIND IS DETERMINED TO BE SIGNIFICANT, APPROPIATE MITIGATION MEASURES SHALL BE FORMULATED AND IMPLEMENTED.
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. IN THE EVENT THAT ARCHEOLOGICAL FEATURES SHOULD BE DISCOVERED AT ANY TIME DURING THE GRADING, SCRAPING OR EXCAVATION, ALL WORK SHOULD BE HALTED IN THE VICINITY OF THE FIND AND AN ARCHAEOLOGIST SHOULD BE CONTACTED IMMEDIATELY TO EVALUATE THE DISCOVERED MATERIAL TO ASSESS ITS AREAL EXTENT, CONDITION, AND SCIENTIFIC SIGNIFICANCE. IF THE DISCOVERED MATERIAL IS DEEMED POTENTIALLY SIGNIFICANT, A QUALIFIED ARCHAEOLOGIST SHOULD MONITOR ANY SUBSEQUENT ACTIVITY IN THE PROXIMITY.
10. IN THE EVENT THAT HUMAN SKELETAL REMAINS ARE ENCOUNTERED, THE APPLICANT IS REQUIRED BY COUNTY ORDINANCE NO. 86-18 TO IMMEDIATELY NOTIFY THE COUNTY CORONER. UPON DETERMINATION BY THE COUNTY CORONER THAT THE REMAINS ARE NATIVE AMERICAN, THE CORONER SHALL CONTACT THE CALIFORNIA NATIVE AMERICAN HERITAGE COMMISSION, PURSUANT TO SUBDIVISION (c) OF SECTION 7050.5 OF THE HEALTH AND SAFETY CODE AND THE COUNTY COORDINATOR OF INDIAN AFFAIRS. NO FURTHER DISTURBANCE OF THE SITE MAY BE MADE EXCEPT AS AUTHORIZED BY THE COUNTY CHAPTER. IF ARTIFACTS ARE FOUND ON THE SITE A QUALIFIED ARCHAEOLOGIST SHALL BE CONTACTED ALONG WITH THE COUNTY PLANNING OFFICE. NO FURTHER DISTURBANCE OF THE ARTIFACTS MAY BE MADE EXCEPT AS AUTHORIZED BY THE COUNTY PLANNING OFFICE.
11. THESE PLANS ARE FOR THE WORK DESCRIBED IN THE SCOPE OF WORK ONLY. A SEPARATE PERMIT WILL BE REQUIRED FOR THE SEPTIC LINE CONSTRUCTION.
12. UPPER 6" OF THE SUBGRADE SOIL SHALL BE SCARIFIED, MOISTURE CONDITIONED AND COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 95%.
13. ALL AGGREGATE BASE MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 95% RELATIVE COMPACTION.
14. ROADWAYS DESIGNATED AS NOT COUNTY MAINTAINED ROADS AS SHOWN ON THIS PLAN WILL NOT BE ELIGIBLE FOR COUNTY MAINTENANCE UNTIL THE ROADWAYS ARE IMPROVED (AT NO COST TO THE COUNTY) TO 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.
15. AN APPROVED RESIDENTIAL FIRE SPRINKLER SYSTEM COMPLYING WITH FIRE MARSHAL STANDARD CFMO-SP6 IS REQUIRED TO BE INSTALLED THROUGHOUT THE STRUCTURE.
16. ALL NEW ON-SITE UTILITIES, MAINS AND SERVICES SHALL BE PLACED UNDERGROUND AND EXTENDED TO SERVE THE PROPOSED RESIDENCE.
17. A CONSTRUCTION OBSERVATION LETTER FROM THE RESPONSIBLE GEOTECHNICAL ENGINEER AND CERTIFIED ENGINEERING GEOLOGIST DETAILING CONSTRUCTION OBSERVATIONS AND CERTIFYING THAT THE WORK WAS DONE IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL AND GEOLOGICAL REPORTS SHALL BE SUBMITTED PRIOR TO GRADING COMPLETION AND RELEASE OF BOND.
18. ALL ROOF RUNOFF SHALL BE DIRECTED TO LANDSCAPED OR NATURAL AREAS AWAY FROM BUILDING FOUNDATIONS, TO ALLOW FOR STORM WATER INFILTRATION INTO THE SOIL AND SHEET FLOW.

NOTE TO CONTRACTOR

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 ENGINEER.

NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING SURVEY MONUMENTS AND OTHER SURVEY MARKERS DURING CONSTRUCTION. ALL SUCH MONUMENTS OR MARKER'S DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

WHERE THE FIRM OF HANNA & BRUNETTI DOES NOT PROVIDE CONSTRUCTION STAKES, SAID FIRM WILL ASSUME NO RESPONSIBILITY WHATSOEVER FOR IMPROVEMENTS CONSTRUCTED THEREFROM.

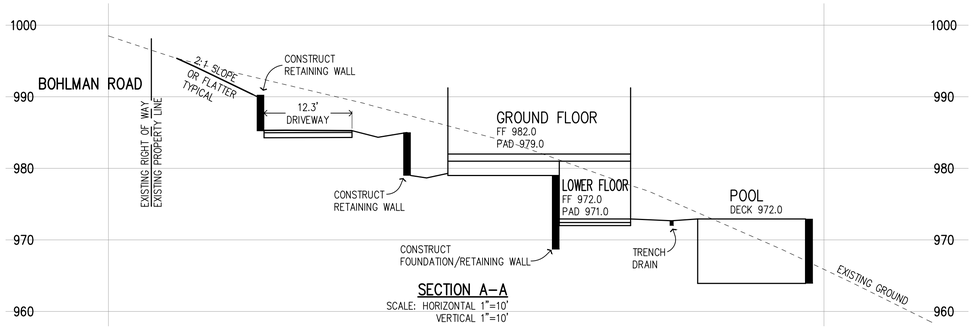
CONTRACTOR TO VERIFY:

CONTRACTOR TO VERIFY PRIOR TO CONSTRUCTION OF BUILDING PAD, THE STRUCTURAL SECTION OF FOUNDATION TO DETERMINE BUILDING PAD ELEVATION.

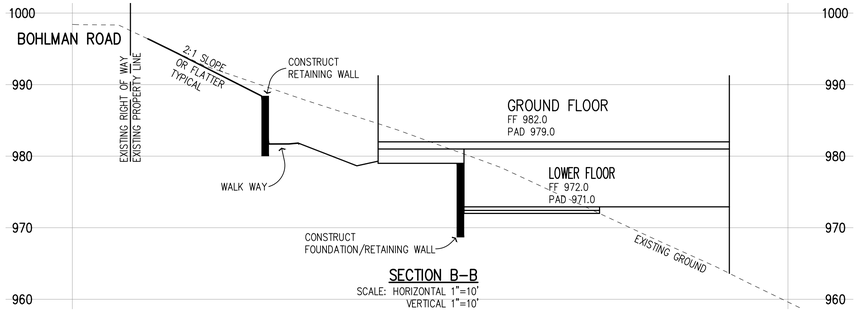
SEE SOILS REPORT AND/OR STRUCTURAL PLANS TO DETERMINE THE ELEVATION OF THE BUILDING FINISH FLOOR AND PAD.

THESE QUANTITIES DO NOT INCLUDE ANY SHRINKAGE, SUBSIDENCE, OVER-EXCAVATION, OR ANY SPECIAL CONDITIONS OR REQUIREMENTS THAT MAY BE SPECIFIED IN THE GEOTECHNICAL INVESTIGATION REPORT. THESE QUANTITIES IN THE AREA FOR PERMIT PURPOSES ONLY. ALL CONTRACTORS BIDDING ON THIS PROJECT SHOULD MAKE THEIR OWN DETERMINATION OF EARTHWORK QUANTITIES PRIOR TO SUBMITTING A BID.

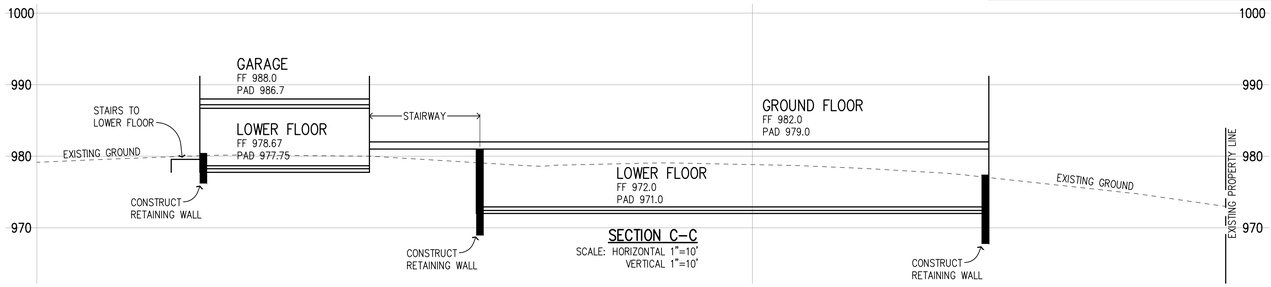
EXCESS MATERIAL SHALL BE OFF-HAULED. IF LOCATION IS WITHIN THE COUNTY A SEPERATED PERMIT SHALL BE REQUIRED.



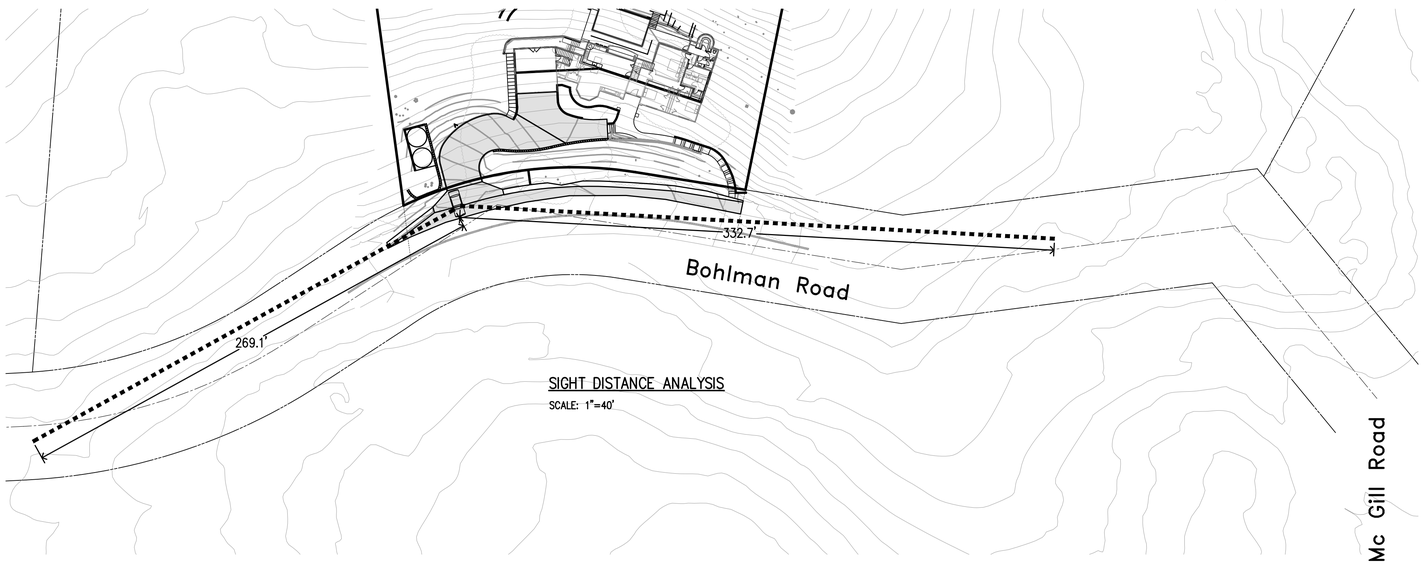
SECTION A-A
SCALE: HORIZONTAL 1"=10'
VERTICAL 1"=10'



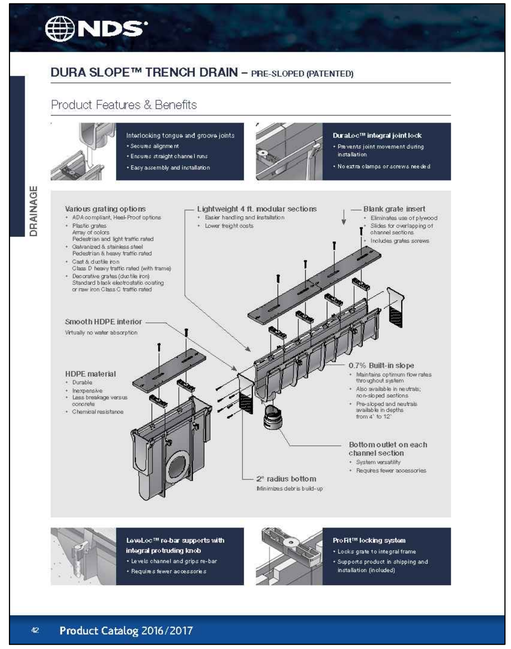
SECTION B-B
SCALE: HORIZONTAL 1"=10'
VERTICAL 1"=10'



SECTION C-C
SCALE: HORIZONTAL 1"=10'
VERTICAL 1"=10'



SIGHT DISTANCE ANALYSIS
SCALE: 1"=40'



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

PLAN # _____
SHEET _____ OF _____

REVISIONS:		
DATE	DESCRIPTION	BY:

HANNA-BRUNETTI
EST. 1910
CIVIL ENGINEERS • LAND SURVEYORS
CONSTRUCTION MANAGERS
7651 EIGLEBERRY STREET • GILROY • 95020 • CALIFORNIA
OFFICE (408) 842-2173 • FAX (408) 842-3662
EMAIL: ENGINEERING @ HANNABRUNETTI.COM

DATE: JUNE 2022
HORIZ. SCALE: 1"=20'
VERT. SCALE: NONE
DESIGNED BY: AM
CHECKED BY: _____
DRAWN BY: T.M.

date: _____ 22
Hanna – Brunetti

Amanda Joy Musy-Verdel
R.C.E. # 69278

REGISTERED PROFESSIONAL ENGINEER
AMANDA JOY MUSY-VERDEL
NO. 69278
CIVIL
STATE OF CALIFORNIA

REFERENCES

Sections, Details & Notes

Lands of Sinapi - 16968 Bohlman Road - apn 517-30-013

UNINCORPORATED
JUNE 2022

SANTA CLARA COUNTY
CALIFORNIA

SHEET 5 OF 8
JOB NO. 22022

LEGEND

- PROVIDE CONSTRUCTION ENTRANCE/EXIT PER DETAIL TC-1
- PROVIDE FIBER ROLL SLOPE PROTECTION PER DETAIL SE-5
- PROVIDE STORM DRAIN INLET PROTECTION PER DETAIL SE-10

EROSION CONTROL NOTES

1. EROSION CONTROL MEASURES SHALL BE EFFECTIVE FOR CONSTRUCTION DURING THE RAINY SEASON; OCTOBER 15 THROUGH APRIL 15.
2. NO STORM WATER RUNOFF SHALL BE ALLOWED TO DRAIN INTO THE EXISTING AND/OR PROPOSED UNDERGROUND STORM SYSTEM UNTIL SUITABLE EROSION CONTROL MEASURES ARE FULLY IMPLEMENTED. NO STORM WATER RUNOFF SHALL BE ALLOWED TO ENTER THE STORM DRAIN SYSTEM THAT IS NOT CLEAR, AND FREE OF SILTS.
3. A FIBER ROLL BARRIER PER "DETAIL SE-5" SHALL BE INSTALL ALONG THE PERIMETER OF THE PROJECT SITE. THE LOCATION OF THE FIBER ROLL ALONG THE PERIMETER SHALL BE ADJUSTED TO ELIMINATE SEDIMENT LADEN RUNOFF FROM LEAVING THE SITE. A FIBER ROLL SHALL ALSO BE REQUIRED AROUND THE PERIMETER OF ANY STOCKPILE OR OTHER SITE OF BARE, LOOSE EARTH.
4. ALL STORM DRAIN MANHOLES, CATCH BASINS, AND/OR DROP INLETS THAT ARE TO ACCEPT STORM WATER SHALL HAVE INLET PROTECTION MEASURES PER DETAIL SE-10. STORM WATER RUNOFF SHALL BE DIRECTED TO THESE INLETS ONLY. STORM DRAIN CATCH BASINS THAT ARE NOT COMPLETE, SHALL BE BLOCKED OFF COMPLETELY.
5. THE NAME, ADDRESS, AND 24 HOUR TELEPHONE NUMBER OF THE PERSON RESPONSIBLE FOR THE IMPLEMENTATION OF THE EROSION CONTROL PLAN SHALL BE PROVIDED TO THE COUNTY.
6. PRIOR TO GRADING, AN ENTRANCE SHALL BE CONSTRUCTED, CONSISTING OF A MINIMUM OF 50 LF OF DRAIN ROCK, 3" IN DIAMETER, PLACED OVER MIRAFI 500X (OR EQUAL) PER DETAIL TC-1. THE ENTRANCE SHALL CONFORM TO "CONSTRUCTION ENTRANCE DETAIL TC-1". THERE SHALL BE ONLY ONE ENTRANCE/EXIT POINT TO THE SITE DURING THE RAINY SEASON. THE LOCATION SHALL BE AS SHOWN ON THESE PLANS, OR AT A LOCATION APPROVED BY THE COUNTY.
7. ALL AREAS OF BARE, TURNED OR DISTURBED EARTH SHALL BE STABILIZED BY USE OF HYDROSEED PER THE TABLE BELOW. ALL STOCKPILES, AND/OR BORROW AREAS SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTROL MEASURES SUCH AS A PERIMETER SILT FENCE, AND OTHER METHODS TO PREVENT ANY EROSION OR SILTS MIGRATION. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED. CHANGES TO THE EROSION CONTROL PLAN SHALL BE MADE TO MEET FIELD CONDITIONS, BUT ONLY WITH THE APPROVAL OF, OR AT THE DIRECTION OF THE COUNTY INSPECTOR. THE STORM DRAIN SYSTEM SHALL MAINTAIN A FORM OF DRAIN INLET PROTECTION UNTIL COUNTY ACCEPTS THE FINAL STREET IMPROVEMENTS. THE DRAIN INLET PROTECTION SHALL BE MAINTAINED, EFFECTIVE AND SUBJECT TO COUNTY INSPECTOR'S APPROVAL.
8. ALL PAVED STREET, AND AREAS ADJACENT TO THE SITE SHALL BE KEPT CLEAR OF EARTH MATERIALS AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO ELIMINATE SEDIMENT LADEN RUNOFF FROM ENTERING THE STORM DRAIN SYSTEM.
9. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSPECT AND REPAIR ALL EROSION CONTROL FACILITIES AT THE END OF EACH DAY DURING THE RAINY SEASON. ANY DAMAGED STRUCTURAL MEASURES ARE TO BE REPAIRED BY END OF THE DAY. TRAPPED SEDIMENT IN "SD INLETS" (AND OTHER EROSION CONTROL MEASURES) SHALL BE REMOVED TO MAINTAIN TRAP EFFIENCY. REMOVED SEDIMENT SHALL BE DISPOSED BY SPREADING ON SITE, WHERE IT WILL NOT MIGRATE.
10. IT IS THE RESPOSIBILITY OF THE CONTRACTOR TO PREVENT THE FORMATION OF AIRBORNE DUST NUISANCE AND SHALL BE RESPOSIBILE FOR ANY DAMAGE RESULTING FROM A FAILURE TO DO SO.
11. ALL DRAIN SWALES SHALL BE PER DETAIL EC-9.
12. INCOMPLETE GRADING SHALL NOT BE ALLOWED. CONTRATOR SHALL MAINATIN A DRAIN PATH AS SHOWN ON THIS PLAN. SAID DRAIN PATH SHALL BE MAINTAINED LINED DRAIN SWALES, AND INLET PROTECTION AT A MINIMUM. IF PONDING DOES OCCUR ON THE SITE AFTER GRADING, THE WATER MUST BE FREE AND CLEAR OF SEDIMENT PRIOR TO DISCHARGE TO THE STORM DRAIN SYSTEM. THIS REQUIREMENT MAY NECESSITATE THE USE OF NATURAL AND/OR MECHANICAL DESILTING METHODS, SUBJECT TO APPROVAL BY THE COUNTY INSPECTOR.
13. F THESE EROSION CONTROL MEASURE PROVE INADEQUATE, STRAW MULCH, TACKIFIER, AND ADDITIONAL HYDROSEEDING MAY BE REQUIRED.

HYDROSEED TABLE

ITEM	LBS/ACRE
COMMON BARLEY	45
ANNUAL RYEGRASS	45
CRIMSON CLOVER	10
FERTILIZER 7-2-3	400
FIBER MULCH	2000
TACKIFIER	100

14. ALL GRADING WORK BETWEEN OCTOBER 15th AND APRIL 15th IS AT THE DISCRETION OF THE SANTA CLARA COUNTY BUILDING OFFICIAL.
15. PROVIDE SHRUBS AND/OR TREES REQUIRED ON SLOPES GREATER THAN 15 FEET IN VERTICAL HEIGHT.
16. THE OWNER/OWNER'S CONTRACTOR, AGENT, AND/OR ENGINEER SHALL INSTALL AND MAINTAIN THROUGHOUT THE DURATION OF CONSTRUCTION AND UNTIL THE ESTABLISHMENT OF PERMANENT STABILIZATION AND SEDIMENT CONTROL WITHIN THE SANTA CLARA COUNTY MAINTAINED ROAD RIGHT OF WAY AND ANY PORTION OF THE SITE WHERE STORM WATER RUN-OFF IS DIRECTLY FLOWING INTO THE SANTA CLARA COUNTY MAINTAINED ROAD RIGHT OF WAY BEST MANAGEMENT PRACTICES (BMP'S) TO PREVENT CONSTRUCTION MATERIALS, EXCAVATED MATERIALS, WASTE MATERIALS, AND SEDIMENT CAUSED BY EROSION FROM CONSTRUCTION ACTIVITIES ENTERING THE STORM DRAIN SYSTEM, WATERWAYS, AND ROADWAY INFRASTRUCTURE. BMP'S SHALL INCLUDE, BUT NOT LIMITED TO, THE FOLLOWING PRACTICES APPLICABLE TO THE PUBLIC ROAD AND EXPRESSWAY FACILITIES:
    - A) REDUCTION 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 PUBLIC ROAD RIGHT OF WAY.
    - C) PREVENTION OF DISCHARGE OF WATER RUNOFF DURING DRY AND WET WEATHER CONDITIONS ONTO PUBLIC ROAD RIGHT OF WAY
17. THE OWNER/OWNER'S CONTRACTOR, AGENT, AND/OR ENGINEER 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 MAINTAINED ROAD RIGHT OF WAY AND ANY PORTION OF THE SITE WHERE STORM WATER RUN-OFF IS DIRECTLY FLOWING INTO THE SANTA CLARA COUNTY MAINTAINED ROAD RIGHT OF WAY SHALL HAVE SEASONALLY APPROPRIATE BMP'S INSTALLED AND MAINTAINED AT ALL TIMES.

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

PLAN # _____
SHEET _____ OF _____

REVISIONS:

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REFERENCES

Erosion Control Plan

Lands of Sinapi - 16968 Bohlman Road - apn 517-30-013

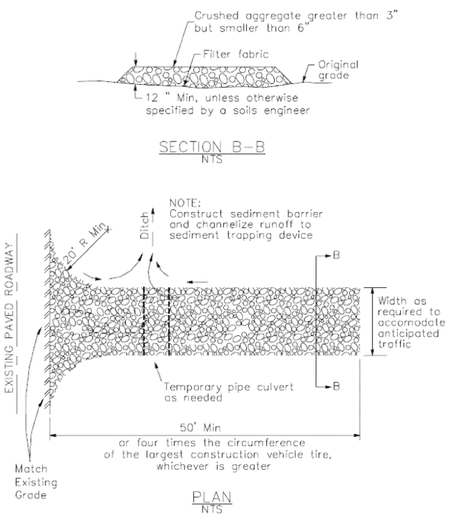
UNINCORPORATED
JUNE 2022

SANTA CLARA COUNTY
CALIFORNIA

SHEET 6 OF 8
JOB NO. 22022

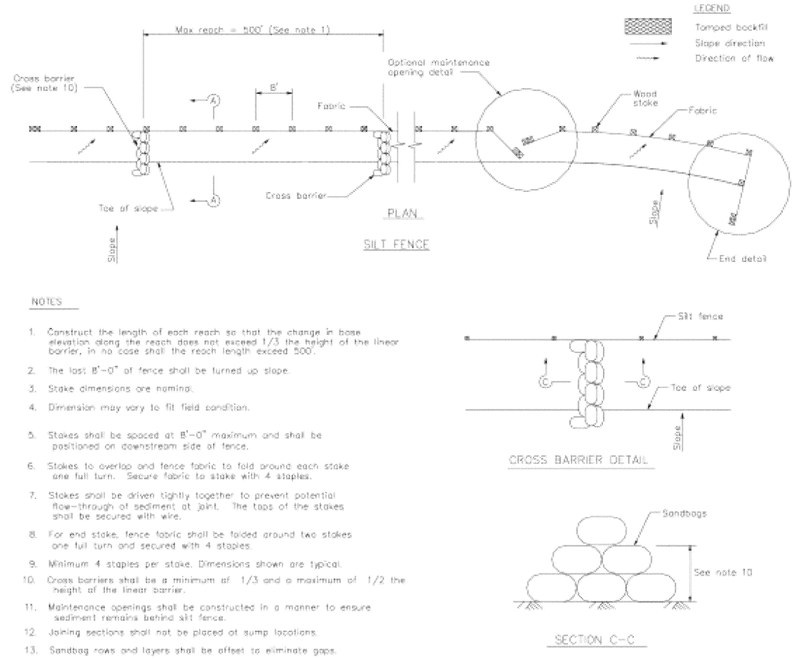
3 Stabilized Construction Entrance/Exit

CASQA Detail TC-1



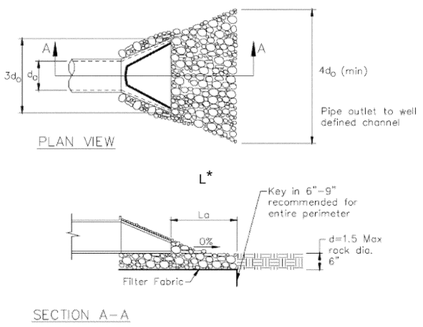
1 Silt Fence

CASQA Detail SE-1



4 Velocity Dissipation Devices

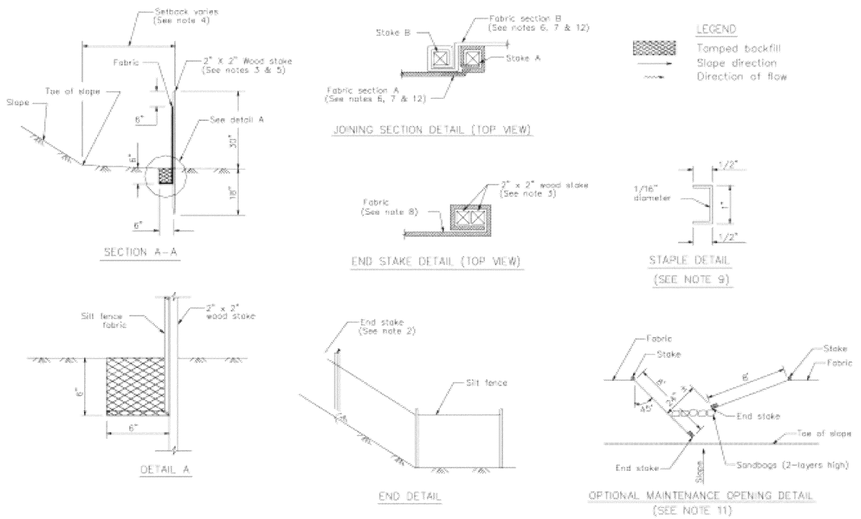
CASQA Detail EC-10



* 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.

IMPROVEMENT PLANS

FOR THE
HOME GRADING AND DRAINAGE
ON THE LANDS OF SINAPI
16968 BOHLMAN ROAD, LOS GATOS

PARCEL B, AS SHOWN ON THAT CERTAIN PARCEL MAP
FILED OCTOBER 3, 1978 IN BOOK 427 OF MAPS, AT PAGE 29
SANTA CLARA COUNTY, CALIFORNIA
A.P.N.: 517-30-013

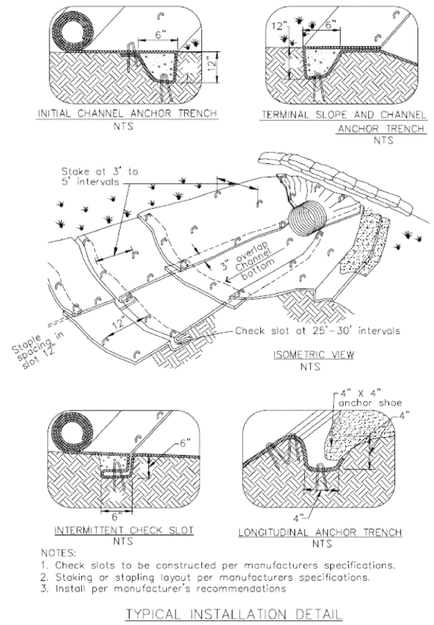
Project Information

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

BMP-1

7 Geotextiles and Mats

CASQA Detail EC-7

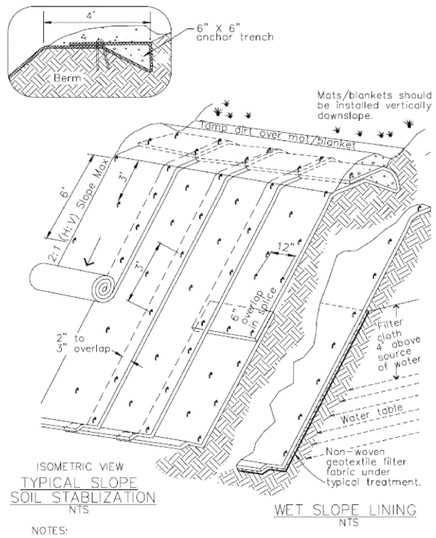


NOTES:
1. Check slots to be constructed per manufacturers specifications.
2. Staking or stapling layout per manufacturers specifications.
3. Install per manufacturer's recommendations

TYPICAL INSTALLATION DETAIL

5 Geotextiles and Mats

CASQA Detail EC-7

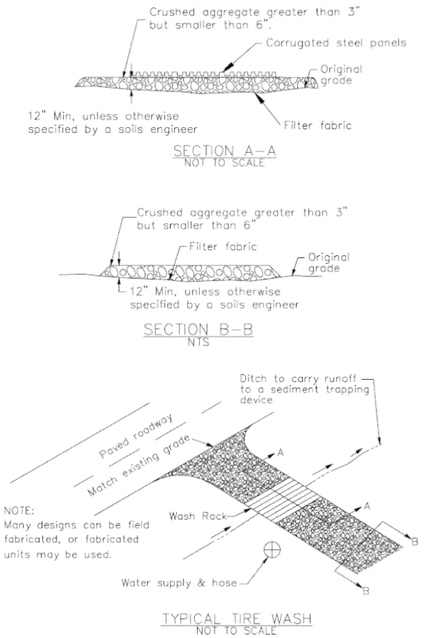


NOTES:
1. Slope surface shall be free of rocks, clods, sticks and grass. Mats/blankets shall have good soil contact.
2. Lay blankets loosely and stake or staple to maintain direct contact with the soil. Do not stretch.
3. Install per manufacturer's recommendations

TYPICAL INSTALLATION DETAIL

3 Entrance/Outlet Tire Wash

CASQA Detail TC-3

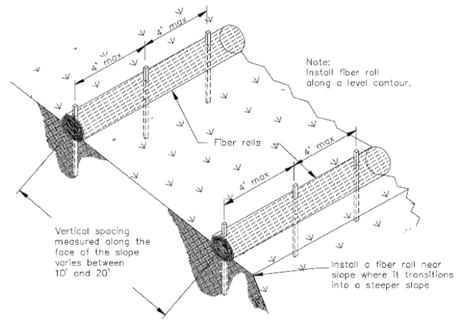


NOTE:
Many designs can be field fabricated, or fabricated units may be used.

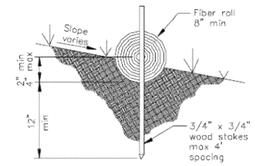
TYPICAL TIRE WASH
NOT TO SCALE

1 Fiber Rolls

CASQA Detail SE-5



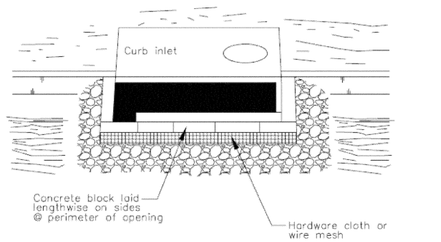
TYPICAL FIBER ROLL INSTALLATION
N.T.S.

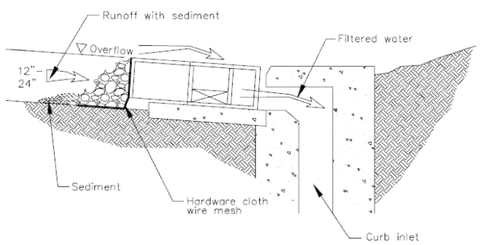


ENTRENCHMENT DETAIL
N.T.S.

8 Storm Drain Inlet Protection

CASQA Detail SE-10

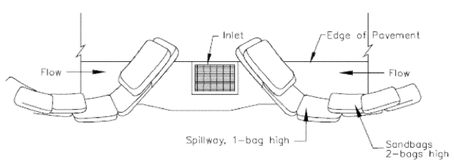




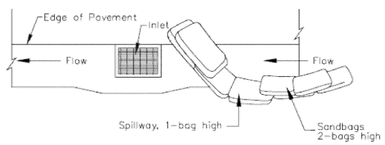
DI PROTECTION – TYPE 4
NOT TO SCALE

6 Storm Drain Inlet Protection

CASQA Detail SE-10



TYPICAL PROTECTION FOR INLET ON SUMP



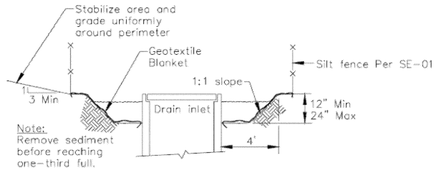
TYPICAL PROTECTION FOR INLET ON GRADE

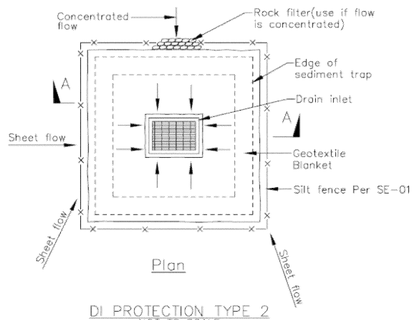
NOTES:
1. Intended for short-term use.
2. Use to inhibit non-storm water flow.
3. Allow for proper maintenance and cleanup.
4. Bags must be removed after adjacent operation is completed
5. Not applicable in areas with high silts and clays without filter fabric.

DI PROTECTION TYPE 3
NOT TO SCALE

4 Storm Drain Inlet Protection

CASQA Detail SE-10



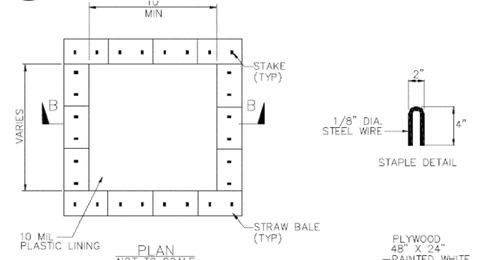


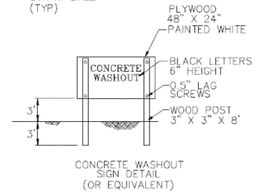
DI PROTECTION TYPE 2
NOT TO SCALE

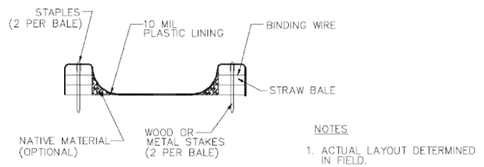
Notes
1. For use in cleared and grubbed and in graded areas.
2. Shape basin so that longest inflow area faces longest length of trap.
3. For concentrated flows, shape basin in 2:1 ratio with length oriented towards direction of flow.

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.

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

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PARCEL B, AS SHOWN ON THAT CERTAIN PARCEL MAP
FILED OCTOBER 3, 1978 IN BOOK 427 OF MAPS, AT PAGE 29
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A.P.N.: 517-30-013

Project Information

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

BMP-2