# ALSTON RESIDENCE

415 FAIRFAX AVE., SAN MATEO, CA 94402


NDG
NYHUS DESIGN GROUP

Architecture · Planning

1555 Old Bayshore Highway, Suite 120
Burlingame, California 94010
Tel: 650.242.1553




| Revisions | Date |
|---|---|
| Neighborhood Meeting | 8/4/21 |
| Planning Review | 10/26/21 |
| 1 Response to Comments | 3/3/22 |
| 2 Response to Comments | 4/18/22 |

The
Alston
Residence

415 Fairfax Ave.
San Mateo, CA

Drawing Title

Cover
Sheet

Scale NA

Date 10/13/2021

Drawn By

Job Number 20-128

Drawing Number

A001

# ALSTON RESIDENCE

415 FAIRFAX AVE., SAN MATEO, CA 94402

## PROJECT DESCRIPTION

A NEW 3,910 SF HOUSE ON THIS LOT. IT WILL INCLUDE A PARTIAL SECOND FLOOR AREA, NEW POOL, AND ATTACHED ADU. THE STYLE OF THE HOME IS TO BE A TRANSITIONAL HOME WITH WOOD SIDING, ASPHALT SHINGLE ROOFING AND A STONE BASE. IT WILL INCLUDE 4 BEDROOMS AND 5.5 BATHS IN THE MAIN HOUSE AND ADU. ATTACHED ADU TO BE 798 SF.

1

A FIRE SPRINKLER SYSTEM SHALL BE INSTALLED THROUGHOUT THE DWELLING IN ACCORDANCE WITH NDPA 13D. FIRE SPRINKLER PLANS SHALL BE A DEFERRED SUBMITTAL. THE FIRE SPRINKLER PLANS ARE SUBJECT TO REVIEW AND APPROVAL BY THE FIRE MARSHAL PRIOR TO ISSUANCE OF A FIRE SPRINKLER PERMIT.

PV SOLAR SYSTEM IS REQUIRED AND WILL BE A DEFERRED SUBMITTAL BY OTHERS.


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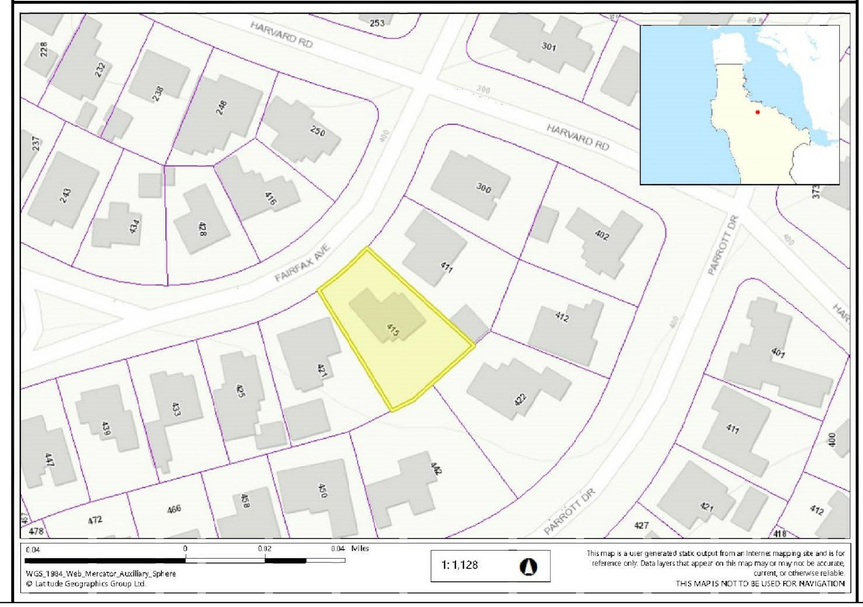
## SITE REFERENCE PHOTOS

1 300 HARVARD RD | 411 FAIRFAX AVE | 415 FAIRFAX (SUBJECT PROPERTY) | 421 FAIRFAX AVE | 425 FAIRFAX AVE

2 428 FAIRFAX AVE | 416 FAIRFAX AVE | 250 HARVARD RD

## LOCATION MAP




## PROJECT STATISTICS

APPLICANT/ PROPERTY OWNER:
GENE AND NICOLE ALSTON

PROJECT ADDRESS:
415 FAIRFAX AVE
SAN MATEO, CA 94402

A.P.N.:
034-033-100

ZONING:
R1B

LOT AREA:
10,558 S.F.

OCCUPANCY:
R3/U

CONSTRUCTION TYPE:
TYPE VB

NUMBER OF STORIES:
2 + GARAGE

AUTO. SPRINKLER:
YES

| F.A.R. CALCULATION (SQ.FT.) | EXISTING | PROPOSED |
|---|---|---|
| MAIN HOUSE | | |
| GROUND FLOOR: | 1525 | 1,811 |
| SECOND FLOOR: | 795 | 1,629 |
| ATTACHED GARAGE: | 292 | 470 |
| FRONT PORCH: | 46 | 57 |
| FRONT PORCH EXEMPTION: | -46 | -57 |
| ATTACHED ADU (NOT COUNTED TOWARDS FAR) | | 798 |
| TOTAL FLOOR AREA: | 2,612 | 3,910 |
| PERCENT OF LOT AREA: MAX FAR (50% X 6000) + (20% X 4558) = 3,911 SF | 24.74% | 37.02% |

1

TOTAL GARAGE PARKING STALLS (MIN. 10' X 18'): 2
TOTAL UNCOVERED PARKING STALLS (TANDEM NOT PERMITTED) 1

LIST OF ALL HERITAGE TREES INCLUDING SPECIES & SIZE:
33 IN COAST LIVE OAK
15 IN BIRCH
16 IN BIRCH
47 IN COAST LIVE OAK
16 IN LONDON PLANE
16 IN LONDON PLANE

CUBIC YARDS OF SOIL DISTURBANCE: 0 C.F.

| PARKING CALCULATION (SQ.FT.) | EXISTING | PROPOSED |
|---|---|---|
| TOTAL FLOOR AREA | 2,612 | 3,910 |
| DEDUCT COVERED PARKING | (292) | (470) |
| TOTAL: | 2,320 | 3,440 |

3,000 SQ.FT. - 3,749 SQ. FT. = 2 COVERED; 1 UNCOVERED PARKING SPACES REQUIRED
NOTE: PARKING SPACES NOT ALLOWED IN FRONT OR SIDE YARD SETBACKS

APPLICABLE CODES

All work performed by the Contractor shall conform to the following codes:

2019 California Residential Code
2019 California Plumbing Code
2019 California Green Building Code
2019 California Energy Code
2019 California Fire Code
California State Titles 19 and 24
2019 California Building Code
2019 California Existing Building Code
2019 Mechanical Code.
2019 Electrical Code.
The latest edition of the Uniform Housing Code.

Also, any additional City of San Mateo Municipal Code requirements.



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The Alston Residence

415 Fairfax Ave.
San Mateo, CA

Drawing Title
Project Data & Reference Photos

Scale NA

Date 10/13/2021

Drawn By

Job Number 20-128

Drawing Number

A002

415 FAIRFAX AVE RENDERS

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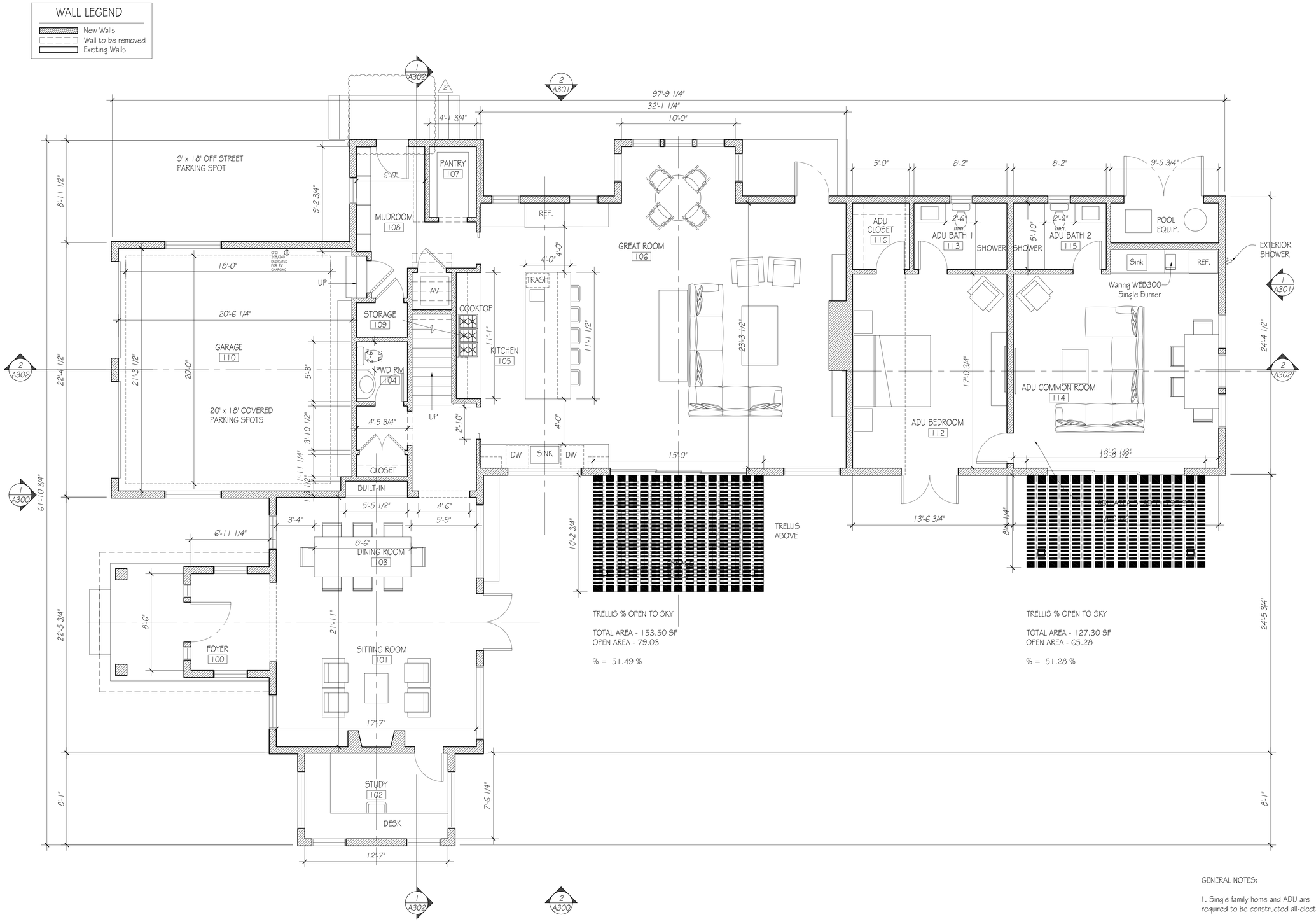


GENERAL NOTES:

1. Single family home and ADU are required to be constructed all-electric

1 Proposed First Floor Plan
1/4" = 1'-0"

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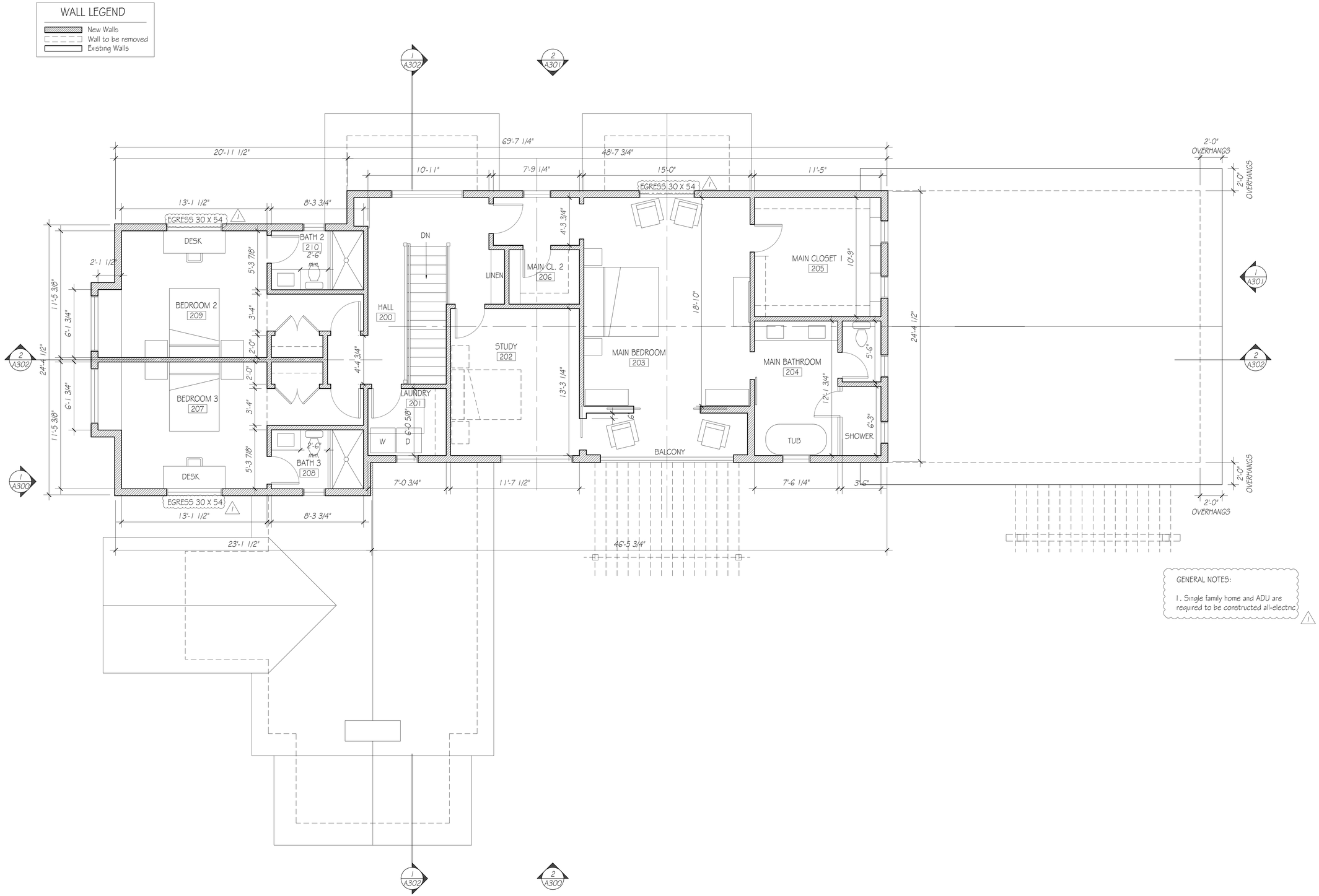
The Alston Residence
415 Fairfax Ave.
San Mateo, CA

Drawing Title: Proposed First Floor Plan
Scale: 1/4" = 1'-0"
Date: 10/13/21
Drawn By:
Job Number: 20-128
Drawing Number: A200




1 Proposed Second Floor Plan
1/4" = 1'-0"

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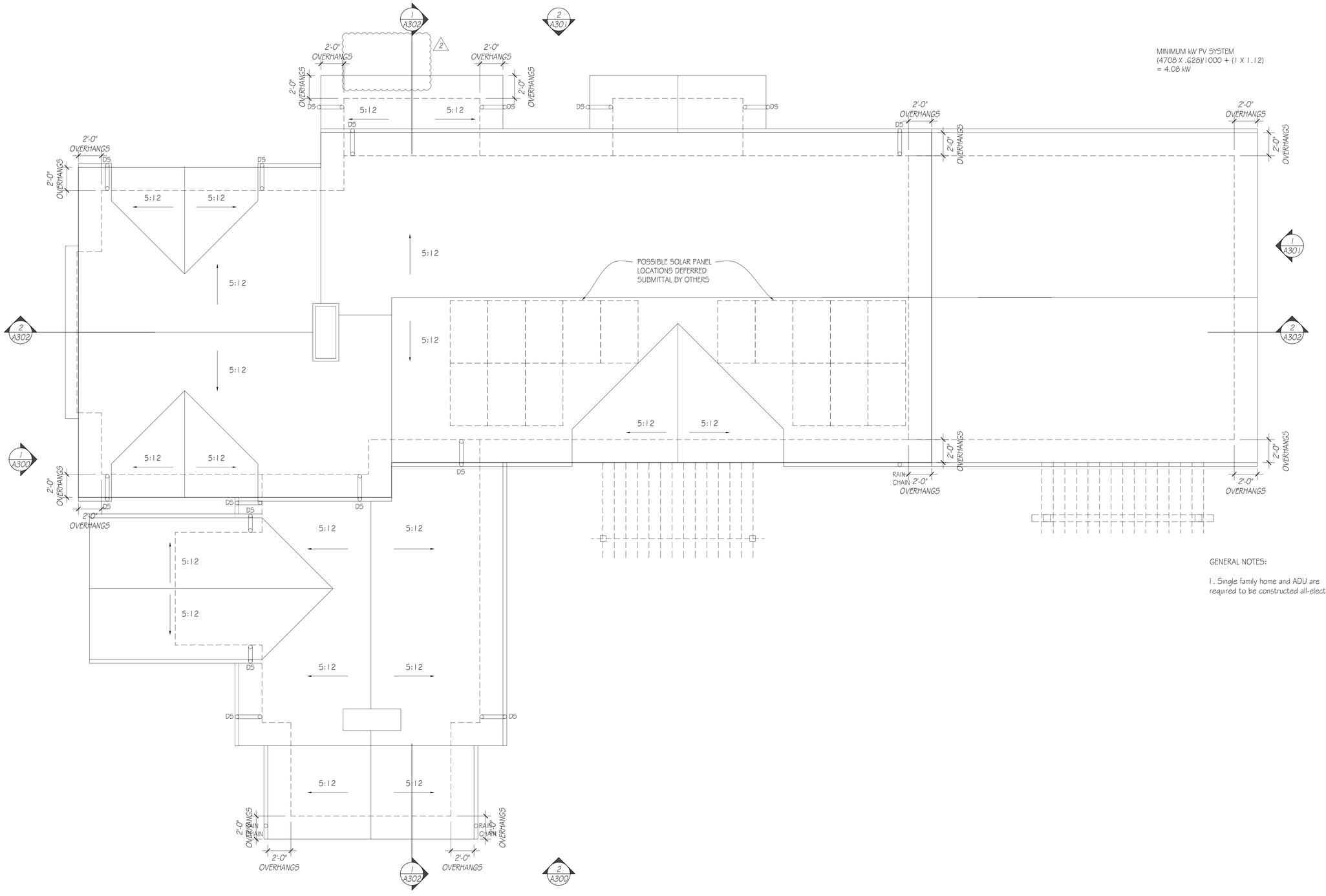
The Alston Residence
415 Fairfax Ave.
San Mateo, CA

Drawing Title
Proposed Second Floor Plan

Scale 1/4" = 1'-0"
Date 10/13/21
Drawn By
Job Number 20-128
Drawing Number
A201




GENERAL NOTES:

1. Single family home and ADU are required to be constructed all-electric

1 Proposed Roof Plan
1/4" = 1'-0"

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Architecture · Planning
1555 Old Bayshore Highway, Suite 120
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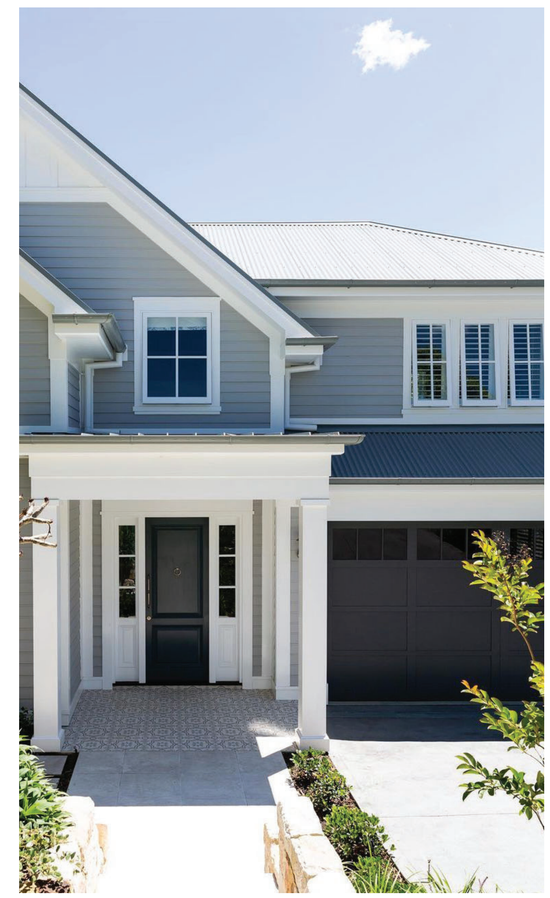
The Alston Residence
415 Fairfax Ave.
San Mateo, CA

Drawing Title: Proposed Roof Plan
Scale: 1/4" = 1'-0"
Date: 10/13/21
Drawn By:
Job Number: 20-128
Drawing Number: A202







INSPIRATIONAL IMAGES

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301 JACKSON ST

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NYHUS | DESIGN | GROUP

301 JACKSON ST (FAIRFAX SIDE)

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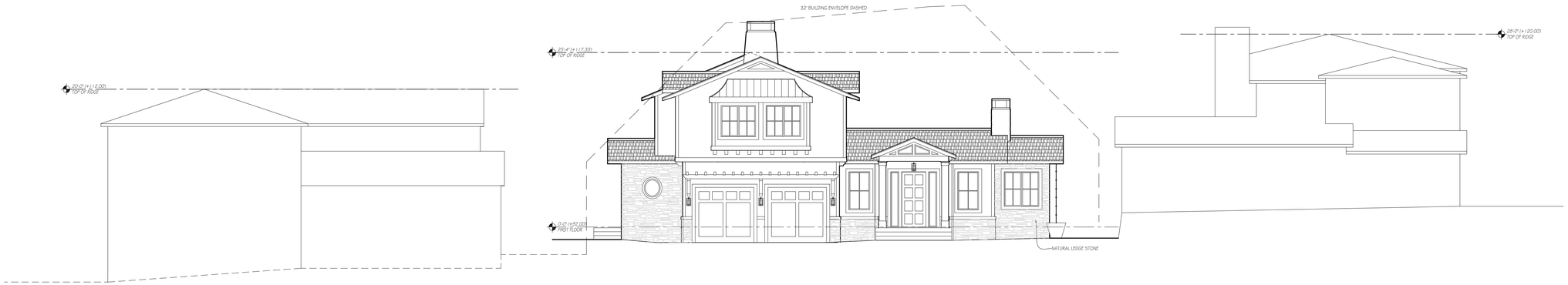
NYHUS | DESIGN | GROUP




1 Proposed Front Elevation and Neighbor's Relative Ridge Heights

1/8" = 1'-0"

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The
Alston
Residence

415 Fairfax Ave.
San Mateo, CA

Drawing Title

Exterior
Elevations

Scale 1/4" = 1'-0"

Date 10/13/21

Drawn By

Job Number 20-128

Drawing Number

A300.1

439 FAIRFAX AVE

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415 FAIRFAX AVE RENDERS

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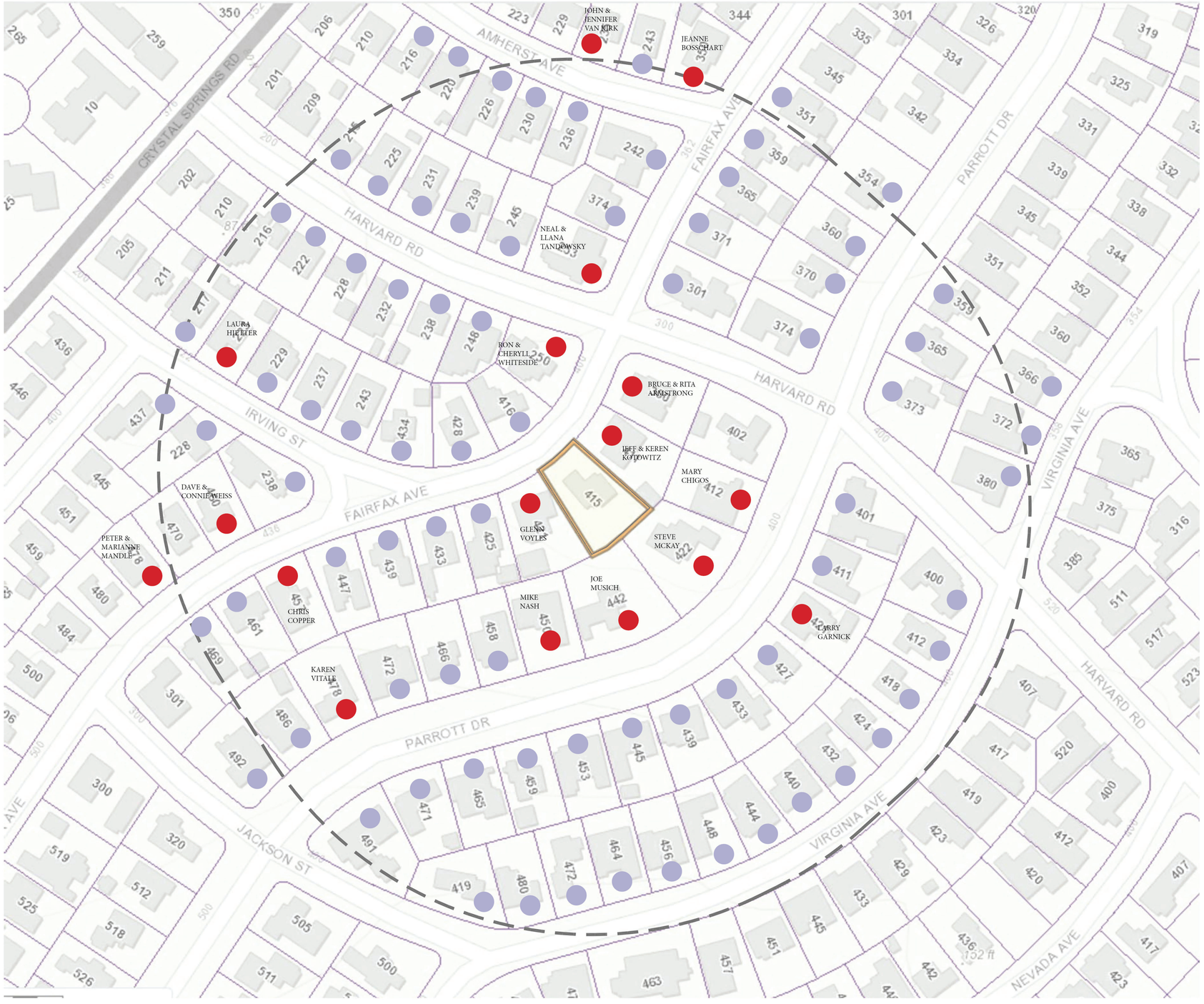
# NEIGHBORHOOD INPUT DATA REVIEW GRAPHIC




-NEIGHBOR COMMENTS RECIEVED BY APPLICANT

-NEIGHBORS WITH NO COMMENTS OR INPUT

-RESIDENT COMMENTS RECIEVED BY APPLICANT OUTSIDE 500 FT RADIUS

-KEITH WEBER

-PAMELA MCCARTHY HUDSON

-KIM RANDICK (462 NEVADA)

-MARTHA MOORE

-RODGER & SUSAN OSER (533 EDINBURGH)

-PETER & ANNE SORTWELL

-BRIAN HAVERTY (646 ALHAMBRA)

-KEN & LINDA HERZ (210 CASTILLION)

-BRIAN & LISA MAH (316 FRANKLIN)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The Alston Residence

415 Fairfax Ave.
San Mateo, CA

Drawing Title: Neighbor Graphic

Scale: NA

Date: 8/11/21

Drawn By:

Job Number: 20-128

Drawing Number: 1

A004

| # | RESIDENTS | ADDRESS | HOUSE FLOOR AREA (SF) | LOT SIZE (SF) | FLOOR AREA / LOT SIZE % |
|---|---|---|---|---|---|
| 1 | JOE MUSICH | 442 PARROTT DR | 3,860 | 14,000 | 27.57 |
| 2 | NEAL & ILANA TANDOWSKY | 253 HARVARD RD | 2,827 | 9,720 | 29.08 |
| 3 | GLENN VOYLES | 421 FAIRFAX AVE | 3,040 | 10,410 | 29.2 |
| 4 | CHRIS COOPER | 457 FAIRFAX AVE | 2,320 | 7,797 | 29.76 |
| 5 | CONNIE WEISS & DAVE COHEN | 460 FAIRFAX AVE | 2,254 | 7,280 | 30.96 |
| 6 | JEANNE BOSSCHART | 350 FAIRFAX AVE | 2,840 | 8,973 | 31.65 |
| 7 | STEVE MCKAY | 422 PARROTT DR | 4,127 | 13,000 | 31.75 |
| 8 | LARRY GARNICK | 421 PARROTT DR | 2,930 | 9,104 | 32.18 |
| 9 | PETER & MARIANNE MANDLE | 478 FAIRFAX AVE | 2,210 | 6,795 | 32.52 |
| 10 | GENE & NICOLE ALSTON | 415 FAIRFAX AVE | 3,440 | 10,558 | 32.58 |
| 11 | RON & CHERYL WHITESIDE | 250 HARVARD RD | 2,640 | 8,102 | 32.58 |
| 12 | MIKE NASH | 450 PARROT DR | 3,180 | 9,600 | 33.13 |
| 13 | JOHN & JENNIFER VAN KIRK | 235 AMHERST AVE | 2,310 | 6,960 | 33.19 |
| 14 | KAREN VITALE | 478 PARROTT DR | 3,730 | 10,800 | 34.54 |
| 15 | MARY CHIGOS | 412 PARROTT DRIVE | 3,430 | 8,624 | 39.77 |
| 16 | JEFF & KEREN KOTOWITZ | 411 FAIRFAX AVE | 4,020 | 9,539 | 42.14 |
| 17 | RITA & BRUCE ARMSTRONG | 300 HARVARD RD | 3,600 | 8,364 | 43.04 |
| 18 | LAURIE & RANDY HIETTER | 223 IRVING ST | 3,520 | 7,440 | 47.31 |

NEIGHBORHOOD SIZE ANALYSIS

NYHUS | DESIGN | GROUP

## PLANT LIST

1/25/22

ALSTON RESIDENCE, 415 FAIRFAX AVENUE

| SYM | SCIENTIFIC NAME | COMMON NAME | QTY | SIZE | GROWTH | WUCOLS | * |
|---|---|---|---|---|---|---|---|
| **TREES** | | | | | | | |
| A | Acer Dissectum 'Red Dragon' | Acer Dissectum 'Red Dragon' | 2 | 24" BOX | SLOW | M | |
| B | Tristaniopsis laurina (std) | Swamp Myrtle | 1 | 36" BOX | MOD. | M | |
| C | Lagerstroemia indica 'Tuscarora' (std) | Crape Myrtle | 1 | 15 GAL | FAST | L | |
| D | Laurus nobilis 'Saratoga' (std) | Grecian Laurel | 25 | 36" BOX | MOD. | L | |
| △1 E | Acer rubrum | Red Maple | 1 | 36" BOX | FAST | M | |
| **SHRUBS / PERENNIALS** | | | | | | | |
| 1 | Azalea 'Dwarf' | Azalea 'dwarf' | 4 | 5 GAL | MOD. | L | |
| 2 | Geranium incanum 'Pink' | Cranesbill | 36 | 1 GAL | FAST | M | |
| 3 | Euonymus japonicus 'Microphyllus' | Boxleaf Euonymus | 63 | 1 GAL | MOD. | L | |
| 4 | Phormium 'Green Wave' | Flax | 14 | 5 GAL | MOD. | L | |
| 5 | Heuchera 'Sanguinea Key Lime Pie' | Coral Bells | 57 | 1 GAL | MOD. | M | |
| 6 | Rhododendron 'Southern Indica' | Southern Indica Azalea | 14 | 5 GAL | MOD. | M | |
| 7 | Citrus spp. 'Dwarf' 'Lime' | Citrus | - | 5 GAL | MOD. | M | |
| 8 | Camellia sasanqua | Sasanqua Camellia | 4 | 5 GAL | MOD. | M | |
| 9 | Woodwardia fimbnata | Giant Chain Fern | 6 | 5 GAL | MOD. | M | |
| 10 | Pittosporum tenuifolium 'Golf Ball' | Pittosporum | 7 | 5 GAL | MOD. | M | |
| 11 | Pieris japonica 'Forest Flame' | Japanese Pieris | 4 | 15 GAL | SLOW | M | |
| 12 | Hydrangea macrophylla 'Endless Summer' | Hydrangea | 3 | 15 GAL | MOD. | M | |
| 13 | Loropetalum chinense 'Razzleberry' | Fringe Flower | 9 | 15 GAL | MOD. | L | |
| 14 | Rosa 'Iceberg' | Iceberg Rose | 20 | 5 GAL | FAST | M | |
| 15 | Pittosporum tenuifolium 'Marjone Channon' | Pittosporum | 12 | 15 GAL | MOD. | M | |
| 16 | Camellia japonica | Camellia | 6 | 15 GAL | MOD. | M | |
| 17 | Lavandula angustifolia 'Hidcote' | English Lavender | 8 | 1 GAL | MOD. | L | |
| **VINES** | | | | | | | |
| V-1 | Trachelospermum jasminoides 'Espalier' | Star Jasmine | 10 | 15 GAL | MOD. | M | |
| V-2 | Camellia japonica 'Espalier' | Camellia | - | 15 GAL | MOD. | M | |
| **GROUNDCOVERS** | | | | | | | |
| G-1 | Lippia nodiflora | Kurapia | 1,190 sf | ROLLS | MOD. | L | |
| **LAWN** | | | | | | | |
| | Bolero Plus Blend, *Delta Bluegrass Co. (800) 637-8873* | | 294 sf | ROLLS | SLOW | - | H |
| | **lawn not included in calculations, see area calcs* | | | | | | |
| | | TOTAL QTY: | 1,497 | L & VL QTY: | 1,314 | 87.8% | |
| | | | VL | 0 sf | | 0 qty | |
| | | | L | 0 sf | | 1,314 qty | |
| | | | M | 0 sf | | 183 qty | |
| | NON-TURF IRRIGATED AREA: | 0 | H | 0 sf | | 0 qty | |

## CITY OF SAN MATEO- TREE EVALUATION SCHEDULE

3/1/2022

PROJECT: ALSTON RESIDENCE- 415 FAIRFAX AVENUE SM

| REF | SPECIES NAME | FATE | SPECIES VALUE % | CONDITION VALUE % | LOCATION VALUE% | CALIPER 0.35 inches | | .70 if in allowable building area | 1.25 if heritage tree | LU VALUE |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | QUERCUS AGRIFOLIA | REMOVE | 100% | 60% | 50% | 0.35 | 33.1 | 0.70 | 1.25 | 24.83 |
| 2 | BETULA PENDULA | SAVE | 80% | 55% | 50% | 0.35 | 14.5 | 1.00 | ### | 9.11 |
| 3 | BETULA PENDULA | SAVE | 80% | 50% | 50% | 0.35 | 15.9 | 1.00 | 1.25 | 11.36 |
| 4 | QUERCUS AGRIFOLIA | SAVE | 100% | 55% | 50% | 0.35 | 47.1 | 1.00 | 1.25 | 46.26 |
| 5 | PLATANUS ACERAFOLIA | SAVE | 60% | 45% | 50% | 0.35 | 15.7 | 1.00 | 1.25 | 7.57 |
| 6 | PLATANUS ACERAFOLIA | SAVE | 60% | 45% | 50% | 0.35 | 15.7 | 1.00 | 1.25 | 7.57 |
| 7 | YUCCA PALM SPP | REMOVE | 60% | 50% | 50% | 0.35 | 13.0 | 1.00 | ### | 5.57 |
| | | | | | | | | TOTAL LU | VALUE | 112.27 |

△2

ALSTON RESIDENCE
415 FAIRFAX AVE

PA#: 2021-066

## Required Tree Planting

Required Trees:

As per the requirements of the Zoning Code, Section 27.71 – Landscape, all projects must have a minimum ratio of **1 tree per 400 square feet** of landscaped area. Existing trees that are a minimum of 6 inch diameter may count toward this total. Any trees with a 6 inch or greater diameter that are being removed must be replaced with an equivalent value of trees. Values are to be determined as stated in Section 27.71.180 of the zoning code and recorded on the Tree Evaluation Schedule and/or any required arborist report.

Landscape Area: 4,431 sq. ft. ÷ 400 = 11 (a)

Number of existing trees with a 6 inch or greater diameter **to be preserved:** 5 (b)

Landscape Unit (LU) value of trees **to be removed** from the Tree Evaluation Schedule: 30.4 (c)

Minimum LU value to be replaced and/or met through payment of in-lieu fees: **[a – b + c = d]** 36.4 (d)

New Trees:

A minimum number of trees equivalent to (a), above, must be planted (or existing on the site). In order to make up the required LU value from the removal of trees, additional or larger trees may be planted. If the LU value shown at (e) is not equal or greater than (d), then an in-lieu fee must be paid to the City's street tree planting fund at the rate defined annually in the City's Comprehensive Fee Schedule for each deficient LU.

**New Trees Being Planted**

| Quantity | Size | LU Value | Total LU Value |
|---|---|---|---|
| 1 | 15 gallon | 1 | 1 |
| 2 | 24 inch box | 2 | 4 |
| 27 | 36 inch box | 3 | 81 |
| | 48 inch box | 4 | |

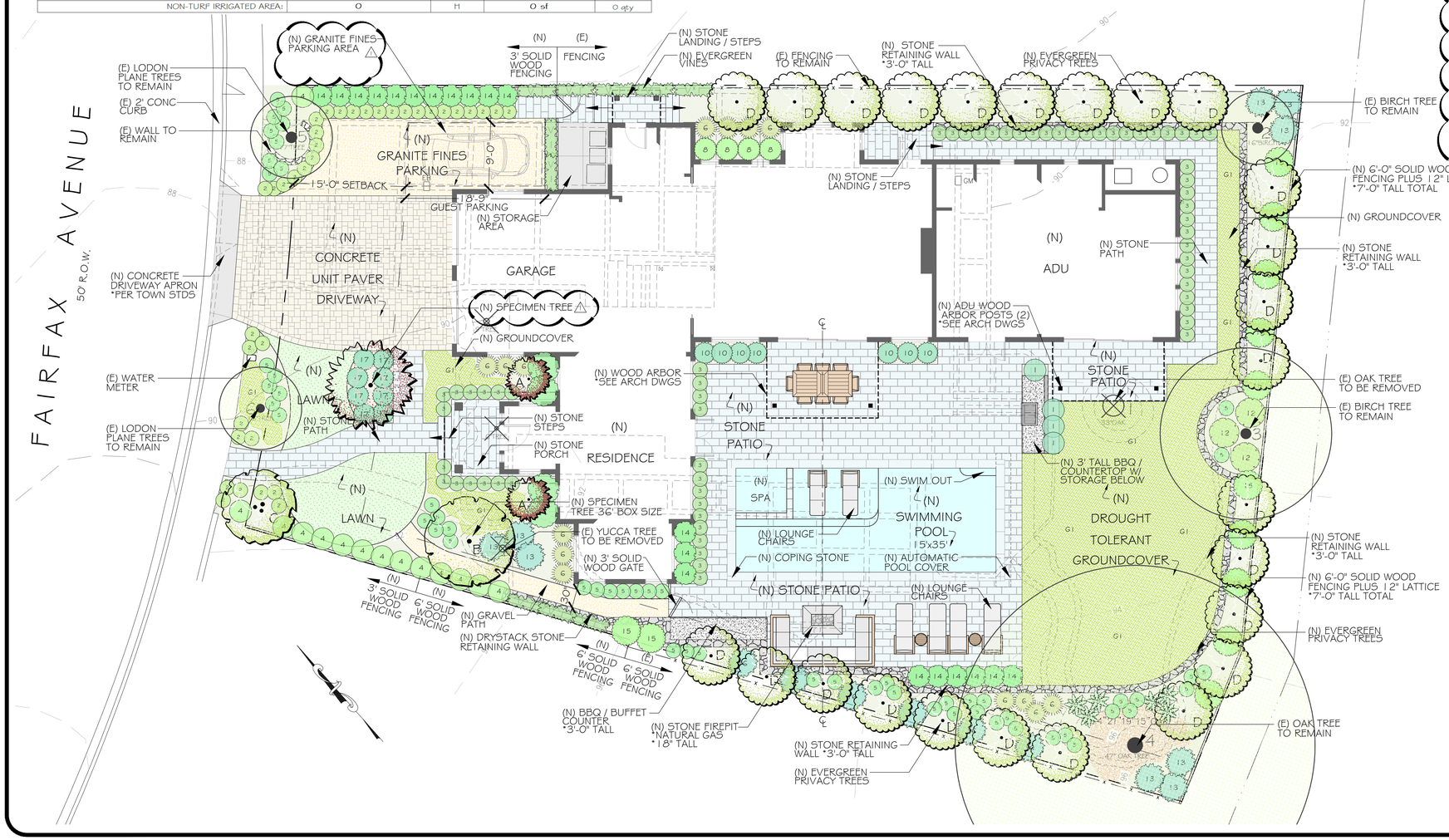
**Total LU Value of new trees being proposed:** 86 (e)

Fees Owed to the City Street Tree Planting Fund:

If (d) is greater than (e), there will be an LU value deficit calculated as follows:

**[d – e =** — **x (the annually defined $ per LU value] = $**—

Q:\CDD\Planning\FORMS\Trees Preservation & Site Development\Required Tree Planting Form.doc




GENERAL NOTES

1. CONTRACTOR SHALL OBTAIN ALL PERMITS NECESSARY TO COMPLETE PROPOSED WORK PER CITY REQUIREMENTS.
2. CONTRACTOR SHALL VERIFY ON SITE ALL GRADES, PROPERTY LINES, EASEMENTS, SETBACKS, UTILITIES, SITE IMPROVEMENTS, WATERPROOFING AND UNDERGROUND PIPING BEFORE CONSTRUCTION BEGINS. THE LANDSCAPE ARCHITECT ASSUMES NO LIABILITY FOR DISCREPANCIES BETWEEN THE PLANS AND ACTUAL FIELD CONDITIONS. ALL DISCREPANCIES OR PROBLEMATIC SITE CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT.
3. WORK WITHIN THE RIGHT OF WAY IS SUBJECT TO INSPECTION AND APPROVAL BY THE CITY. CONTRACTOR SHALL OBTAIN AN ENCROACHMENT PERMIT FROM PUBLIC WORKS DEPARTMENT PRIOR TO WORK WITHIN THE RIGHT OF WAY. THIS WORK MAY INCLUDE LANDSCAPING IN THE RIGHT OF WAY, NEW CURB DRAINS, AND PARKING STRIP.
4. FINISHED GRADES SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES AND SHALL BE PROPERLY INSTALLED TO PREVENT ANY STANDING WATER. ALL HARDSCAPE SHALL HAVE A MINIMUM GRADE OF 2% UNLESS NOTED OTHERWISE. JUTE MESH EROSION CONTROL NETTING SHALL BE USED ON ALL 3:1 OR GREATER SLOPES & STAKED APPROPRIATELY.
5. CONTRACTOR SHALL PROVIDE PROTECTION FOR EXISTING TREES BY INSTALLING TEMPORARY FENCING AROUND THE TREES AS CLOSE AS POSSIBLE TO THE DRIPLINE. IN THE EVENT THAT TREE ROOTS OVER 6" ARE DISCOVERED, THE LANDSCAPE ARCHITECT SHOULD BE CONTACTED.
6. CONTRACTOR SHALL REFER TO ARCHITECTURAL, CIVIL & OTHER ENGINEERING DRAWINGS / DOCUMENTS FOR WORK IN RELEVANT AREAS.
7. THE LANDSCAPE ARCHITECT MAY MAKE SITE OBSERVATIONS DURING CONSTRUCTION BUT SHALL NOT BE UTILIZED TO SUPERVISE CONSTRUCTION ONSITE.
8. THIS PLAN IS NOT A SURVEY OR CONSTRUCTION DOCUMENT. IT IS CONCEPTUAL IN NATURE AND SHOULD BE USED FOR PLANNING PURPOSES.

PLANTING NOTES

1. LANDSCAPE CONTRACTOR SHALL VERIFY PLANT AND SOD QUANTITIES PRIOR TO SUBMITTING BID FOR WORK.
2. ALL PLANT MATERIAL SHALL COMPLY WITH THE LATEST STANDARDS OF NURSERY STOCK, PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION.
3. PLANT MATERIAL CANNOT BE GUARANTEED AS DEER RESISTANT DUE TO CHANGING HABITS OF DEER.
4. ALL PLANTING AREAS SHALL BE COVERED WITH A LAYER OF BARK MULCH TO A MINIMUM DEPTH OF 2 INCHES, WITH A CHIP SIZE OF NO LESS THAN ONE INCH. A 2 INCH LAYER OF GREENWASTE MULCH UNDER THE BARK MULCH IS RECOMMENDED.
5. SOIL AMENDMENTS SHALL BE USED AS NECESSARY. SOIL AMENDMENT SHALL BE FREE OF DEBRIS. ROCKS LARGER THAN ONE INCH DIAMETER WILL NOT BE PERMITTED. SOIL AMENDMENTS ARE NOT PERMITTED IN TYPICAL NATIVE PLANT LANDSCAPE AREAS.
6. PLANTING HOLES SHALL GENERALLY BE 2x - 3x THE SIZE OF THE ROOT BALL. THE WALLS AND BASES OF PLANT HOLES SHALL BE SCARIFIED. HOLES SHALL BE BACKFILLED WITH 5% ORGANIC COMPOST & 95% EXISTING SOIL. PLANTING HOLES OF NATIVE PLANT MATERIAL SHOULD BE INOCULATED WITH MYCORRHIZAL FUNGI, PER MANUFACTURER'S SPECS.
7. TREES SHALL BE STAKED WITH TWO PRESSURE TREATED 2" DIA. POLES. TREE TRUNK SHALL BE SECURED WITH TWO RUBBER TIES OR STRAPS FORMING A FIGURE-EIGHT BETWEEN TRUNK AND STAKE.
8. RESIDUAL WEED PRE-EMERGENT SHALL BE APPLIED BY THE CONTRACTOR AS NECESSARY. APPLICATION SHALL BE ACCORDING TO MANUFACTURER'S INSTRUCTIONS.
9. LAWN SHALL NOT BE INSTALLED ON SLOPES GREATER THAN 25%. ALL TURF AREAS SHALL BE FERTILIZED AT TIME OF INSTALLATION.

# LANDSCAPE PLAN

SCALE: 1/8" = 1'-0"

REVISIONS

| | | |
|---|---|---|
| △1 | 01/24/2022 | M.C. |
| △2 | 02/15/2022 | M.C. |


michael callan landscape architect
88 Marsh Road #4314
San Anselmo, CA 94960
650-372-9290
Fax: 650-372-9299
mike@michaelcallan.com

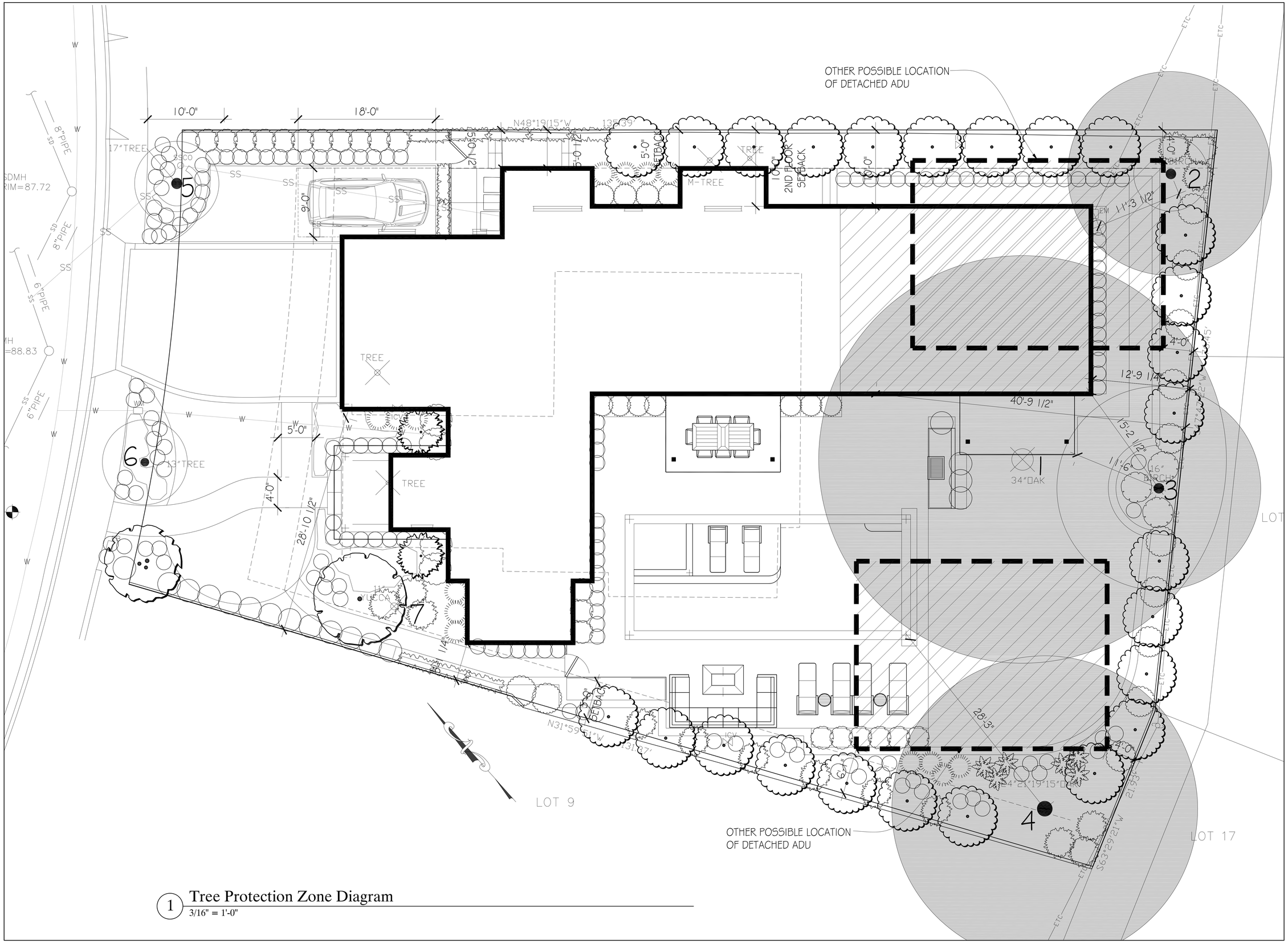

REGISTERED LANDSCAPE ARCHITECT
MICHAEL D CALLAN
No. 4024
1/31/2022
STATE OF CALIFORNIA

ALSTON RESIDENCE
415 FAIRFAX AVENUE SAN MATEO, CALIFORNIA

DATE: MARCH 2, 2022

TITLE: LANDSCAPE PLAN

SHEET NO: L1.0




1 Tree Protection Zone Diagram
3/16" = 1'-0"

NDG
NYHUS DESIGN GROUP
Architecture · Planning
1555 Old Bayshore Highway, Suite 120
Burlingame, California 94010
Tel: 650.242.1553



| Revisions | Date |
|---|---|
| Neighborhood Meeting | 8/4/21 |
| Planning Review | 10/26/21 |
| 1 Response to Comments | 3/3/22 |
| 2 Response to Comments | 4/18/22 |

The
Alston
Residence

415 Fairfax Ave.
San Mateo, CA

Drawing Title
Tree Protection
Zone Diagram

Scale 3/16" = 1'-0"

Date

Drawn By

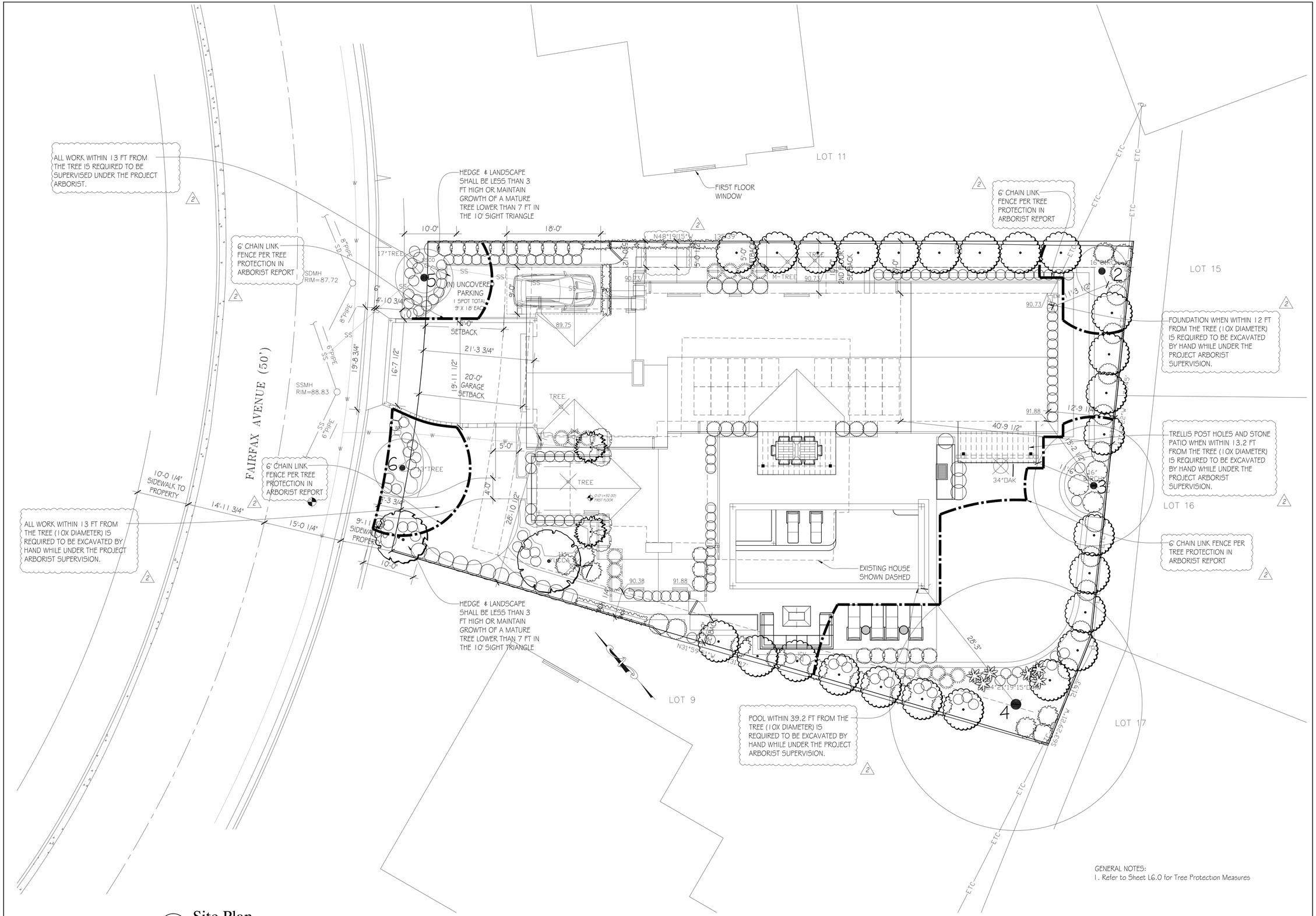
Job Number 20-128

Drawing Number

A102

415 FAIRFAX AVE RENDERS

NDG
NYHUS | DESIGN | GROUP




1 Site Plan
1/8" = 1'-0"

NDG
NYHUS DESIGN GROUP

Architecture · Planning

1555 Old Bayshore Highway, Suite 120
Burlingame, California 94010
Tel: 650.242.1553



| Revisions | Date |
|---|---|
| Neighborhood Meeting | 8/4/21 |
| Planning Review | 10/26/21 |
| 1. Response to Comments | 3/3/22 |
| 2. Response to Comments | 4/18/22 |

The Alston Residence

415 Fairfax Ave.
San Mateo, CA

Drawing Title: Proposed Site Plan

Scale: 1/8" = 1'-0"

Date: 10/13/21

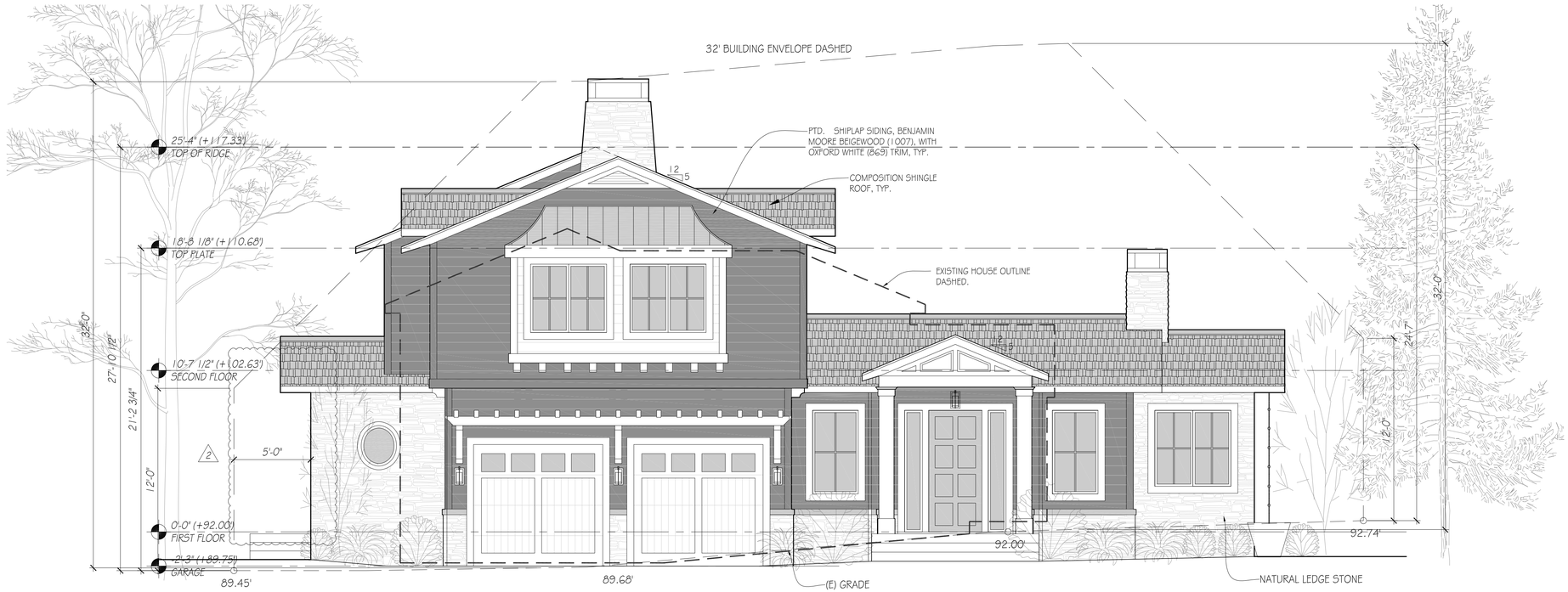
Drawn By:

Job Number: 20-128

Drawing Number: A100

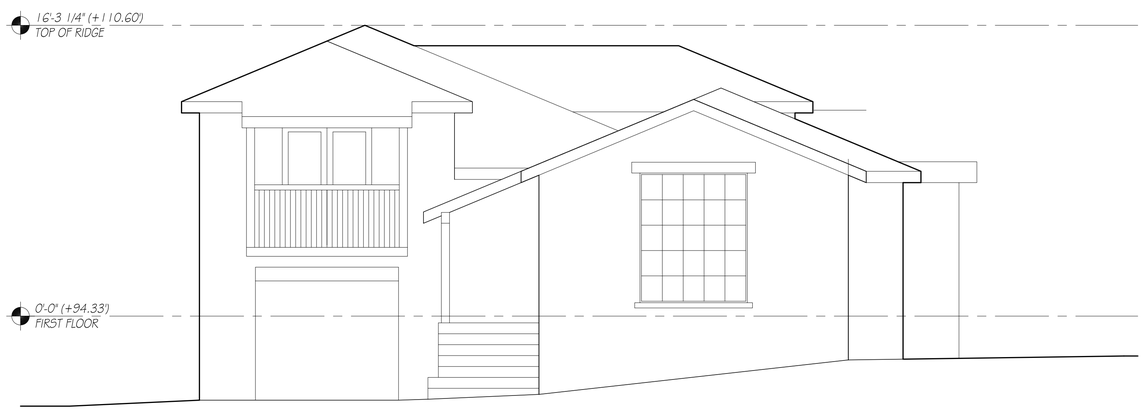
415 FAIRFAX AVE RENDERS

NDG
NYHUS | DESIGN | GROUP




1 Proposed Front Elevation (Northwest)
1/4" = 1'-0"

2




2 (E) Front Elevation (Northwest)
1/4" = 1'-0"

NDG
NYHUS DESIGN GROUP
Architecture · Planning
1555 Old Bayshore Highway, Suite 120
Burlingame, California 94010
Tel: 650.242.1553



| Revisions | Date |
|---|---|
| Neighborhood Meeting | 8/4/21 |
| Planning Review | 10/26/21 |
| 1 Response to Comments | 3/3/22 |
| 2 Response to Comments | 4/18/22 |

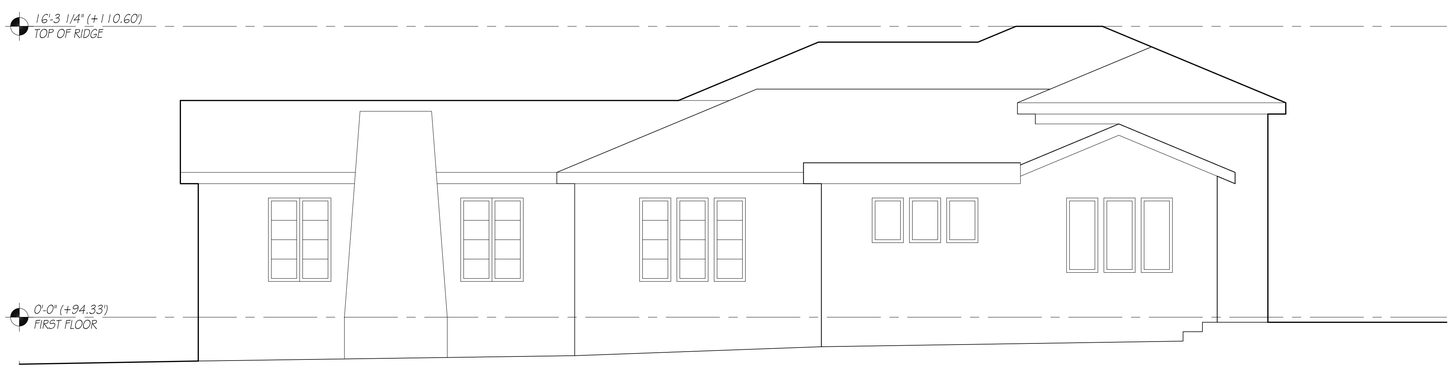
The Alston Residence
415 Fairfax Ave.
San Mateo, CA

Drawing Title
Exterior Elevations

Scale 1/4" = 1'-0"
Date 10/13/21
Drawn By
Job Number 20-128
Drawing Number
A300


1 Proposed Side Elevation (Southwest)
1/4" = 1'-0"

2




2 (E) Side Elevation (Southwest)
1/4" = 1'-0"

NDG
NYHUS DESIGN GROUP
Architecture · Planning
1555 Old Bayshore Highway, Suite 120
Burlingame, California 94010
Tel: 650.242.1553

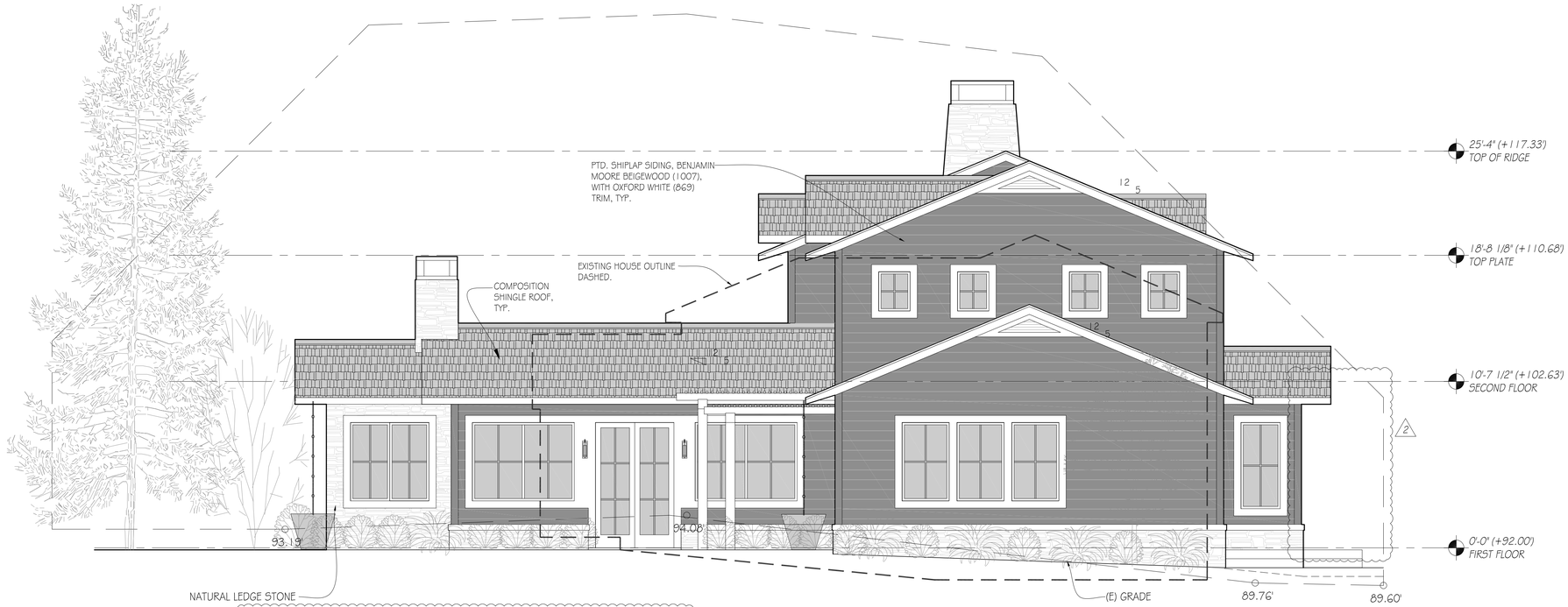


| Revisions | Date |
|---|---|
| Neighborhood Meeting | 8/4/21 |
| Planning Review | 10/26/21 |
| 1 Response to Comments | 3/3/22 |
| 2 Response to Comments | 4/18/22 |

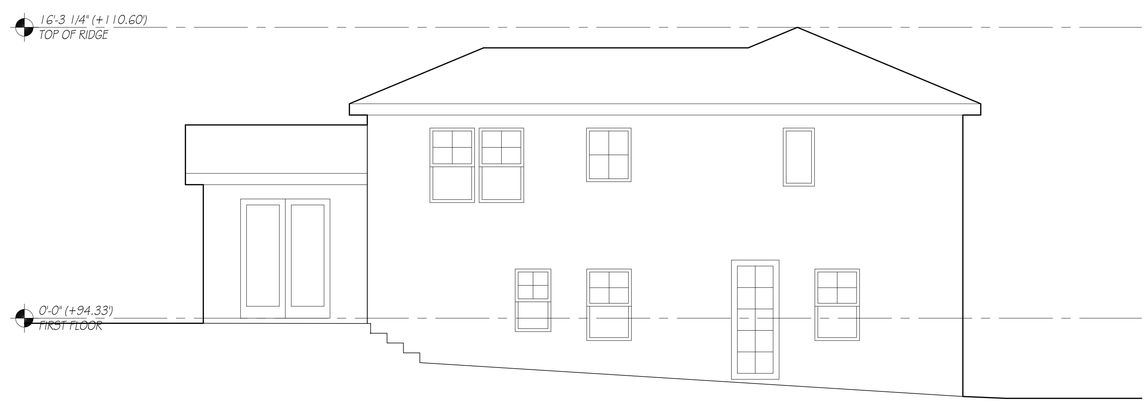
The
Alston
Residence
415 Fairfax Ave.
San Mateo, CA

Drawing Title
Exterior
Elevations

Scale 1/4" = 1'-0"
Date 10/13/21
Drawn By
Job Number 20-128
Drawing Number
A301




1 Proposed Rear Elevation (Southeast)
1/4" = 1'-0"




2 (E) Rear Elevation (Southeast)
1/4" = 1'-0"

NDG
NYHUS DESIGN GROUP
Architecture · Planning
1555 Old Bayshore Highway, Suite 120
Burlingame, California 94010
Tel: 650.242.1553



| Revisions | Date |
|---|---|
| Neighborhood Meeting | 8/4/21 |
| Planning Review | 10/26/21 |
| 1 Response to Comments | 3/3/22 |
| 2 Response to Comments | 4/18/22 |

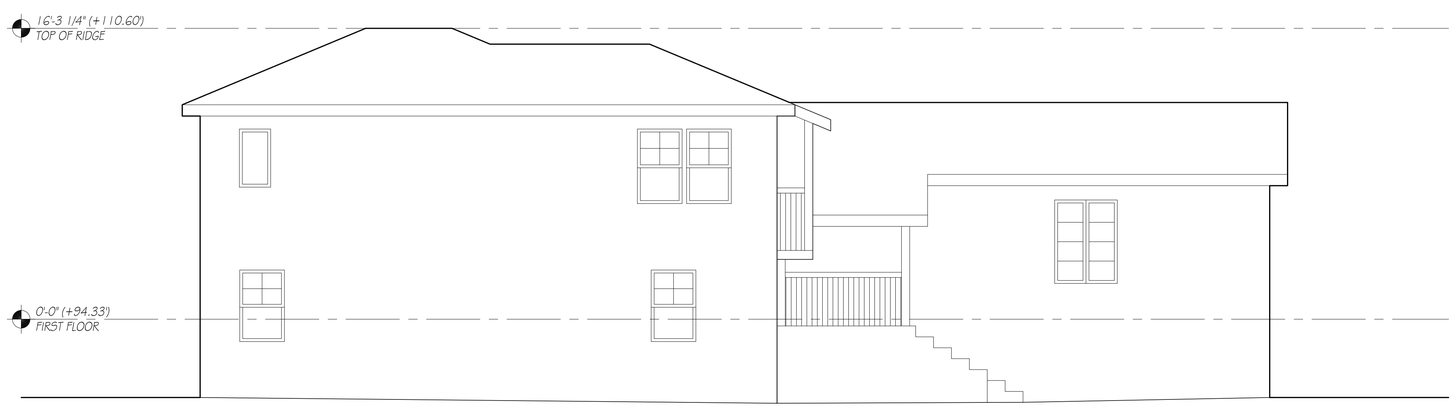
The Alston Residence
415 Fairfax Ave.
San Mateo, CA

Drawing Title
Exterior Elevations

Scale 1/4" = 1'-0"
Date 10/13/21
Drawn By
Job Number 20-128
Drawing Number
A302


1 Proposed Side Elevation (Northeast)
1/4" = 1'-0"

2




2 (E) Side Elevation (Northeast)
1/4" = 1'-0"

NDG
NYHUS DESIGN GROUP
Architecture · Planning
1555 Old Bayshore Highway, Suite 120
Burlingame, California 94010
Tel: 650.242.1553

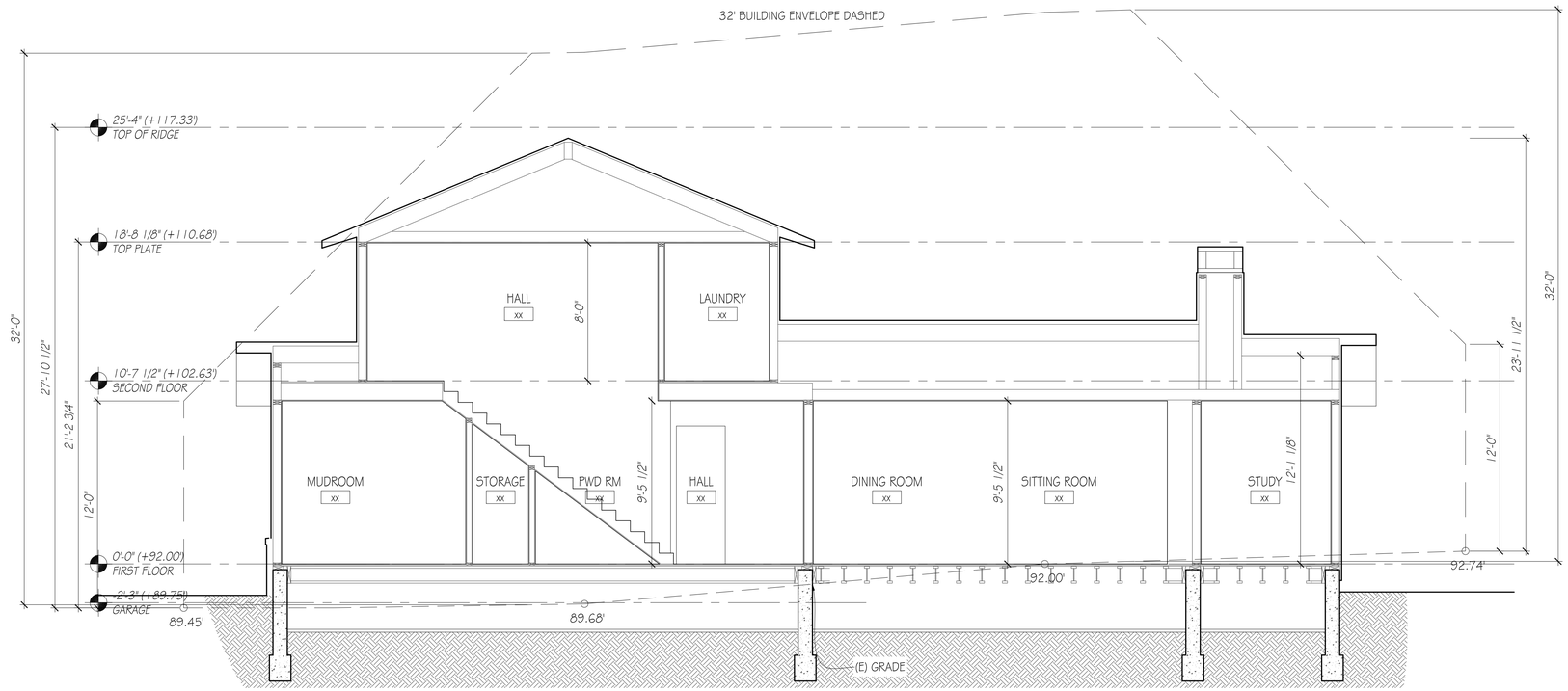


| Revisions | Date |
|---|---|
| Neighborhood Meeting | 8/4/21 |
| Planning Review | 10/26/21 |
| 1 Response to Comments | 3/3/22 |
| 2 Response to Comments | 4/18/22 |

The Alston Residence
415 Fairfax Ave.
San Mateo, CA

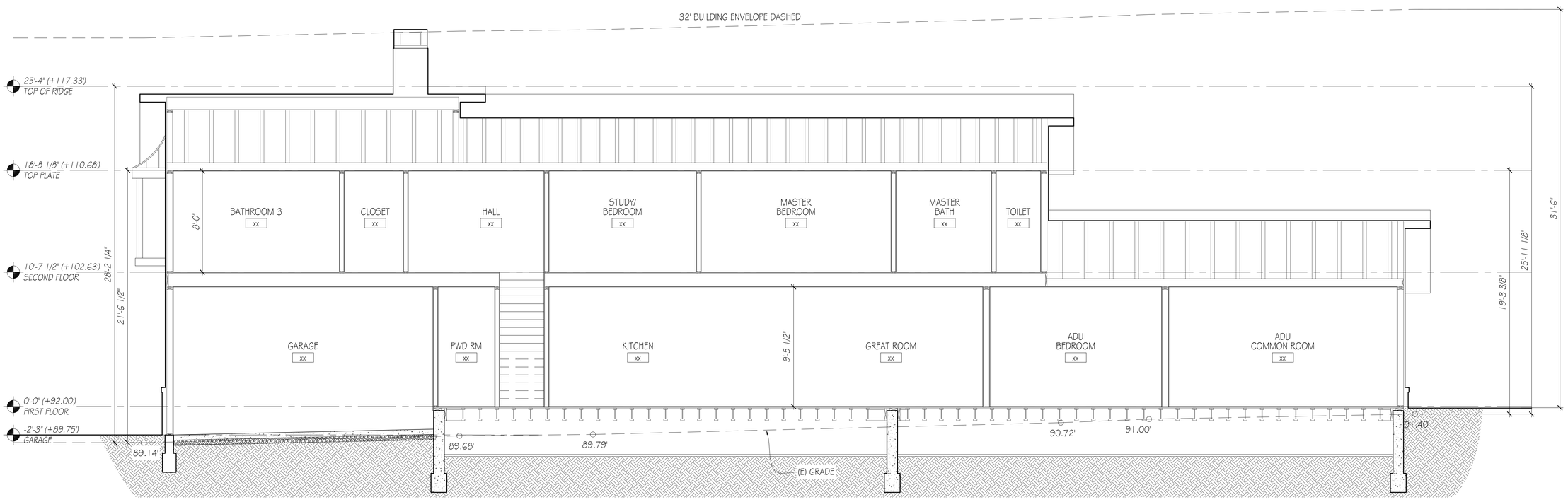
Drawing Title
Exterior Elevations

Scale 1/4" = 1'-0"
Date 10/13/21
Drawn By
Job Number 20-128
Drawing Number
A303




1 Building Section 1

1/4" = 1'-0"




2 Building Section 2

1/4" = 1'-0"


NDG
NYHUS DESIGN GROUP

Architecture · Planning

1555 Old Bayshore Highway, Suite 120
Burlingame, California 94010
Tel: 650.242.1553




| Revisions | Date |
|---|---|
| Neighborhood Meeting | 8/4/21 |
| Planning Review | 10/26/21 |
| 1 Response to Comments | 3/3/22 |

The
Alston
Residence

415 Fairfax Ave.
San Mateo, CA

Drawing Title

Building
Sections

Scale 1/4" = 1'-0"

Date 10/13/21

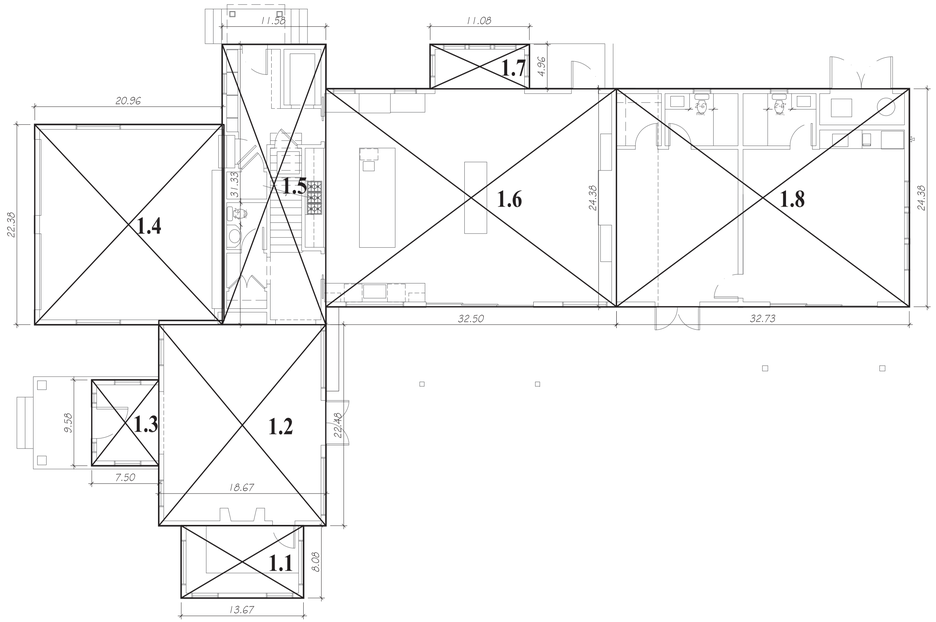
Drawn By

Job Number 20-128

Drawing Number

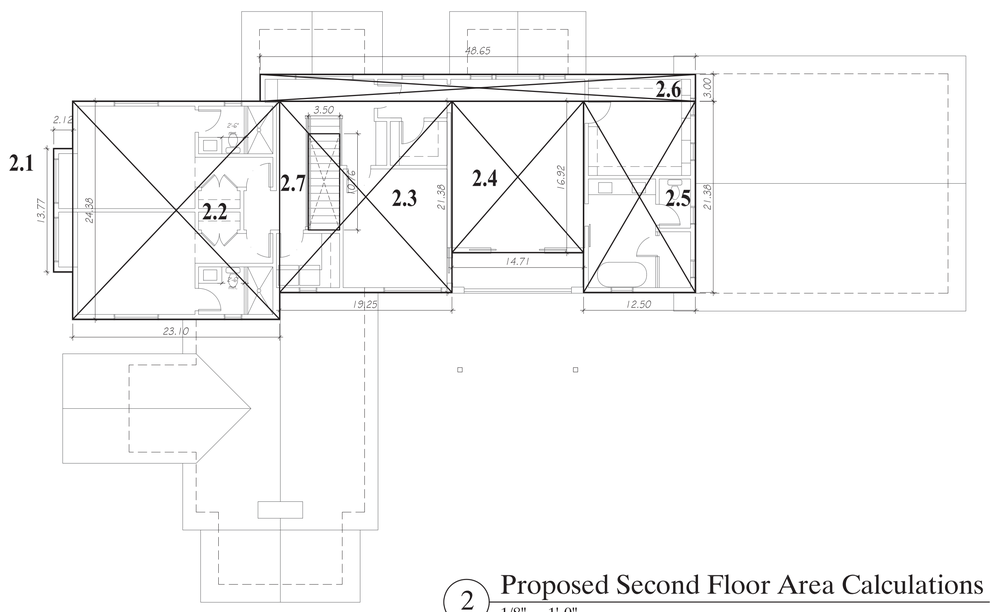
A304

1




1 Proposed First Floor Area Calculations
1/8" = 1'-0"

| | PROPOSED FIRST FLOOR | | PROPOSED SECOND FLOOR |
|---|---|---|---|
| 1.1 | 8.08 X 13.67 = 110.45 sq.ft. | 2.1 | 13.77 X 2.12 = 29.19 sq.ft. |
| 1.2 | 22.48 X 18.67 = 419.70 sq. ft. | 2.2 | 24.38 X 23.10 = 563.18 sq. ft. |
| 1.3 | 9.58 X 7.50 = 71.85 sq. ft. | 2.3 | 21.38 X 19.25 = 411.57 sq. ft. |
| 1.4 | 22.38 X 20.96 = 469.08 sq.ft. | 2.4 | 16.92 X 14.71 = 248.89 sq. ft. |
| 1.5 | 31.33 X 11.58 = 362.80 sq.ft. | 2.5 | 21.38 X 12.50 = 267.25 sq. ft. |
| 1.6 | 24.38 X 32.50 = 792.35 sq.ft. | 2.6 | 3.00 X 48.65 = 145.96 sq. ft. |
| 1.7 | 4.96 X 11.08 = 54.96 sq.ft. | 2.7 | 10.78 X 3.50 = -37.73 sq.ft. (Stair counted on First Floor) |
| 1.8 | 24.38 X 32.73 = 794.96 sq.ft. (ADU not counted towards FAR) | | |
| | | | |
| | SUBTOTAL = 2281.19 sq.ft. | | SUBTOTAL = 1628.31 sq.ft. |




2 Proposed Second Floor Area Calculations
1/8" = 1'-0"

NDG
NYHUS DESIGN GROUP
Architecture · Planning
1555 Old Bayshore Highway, Suite 120
Burlingame, California 94010
Tel: 650.242.1553

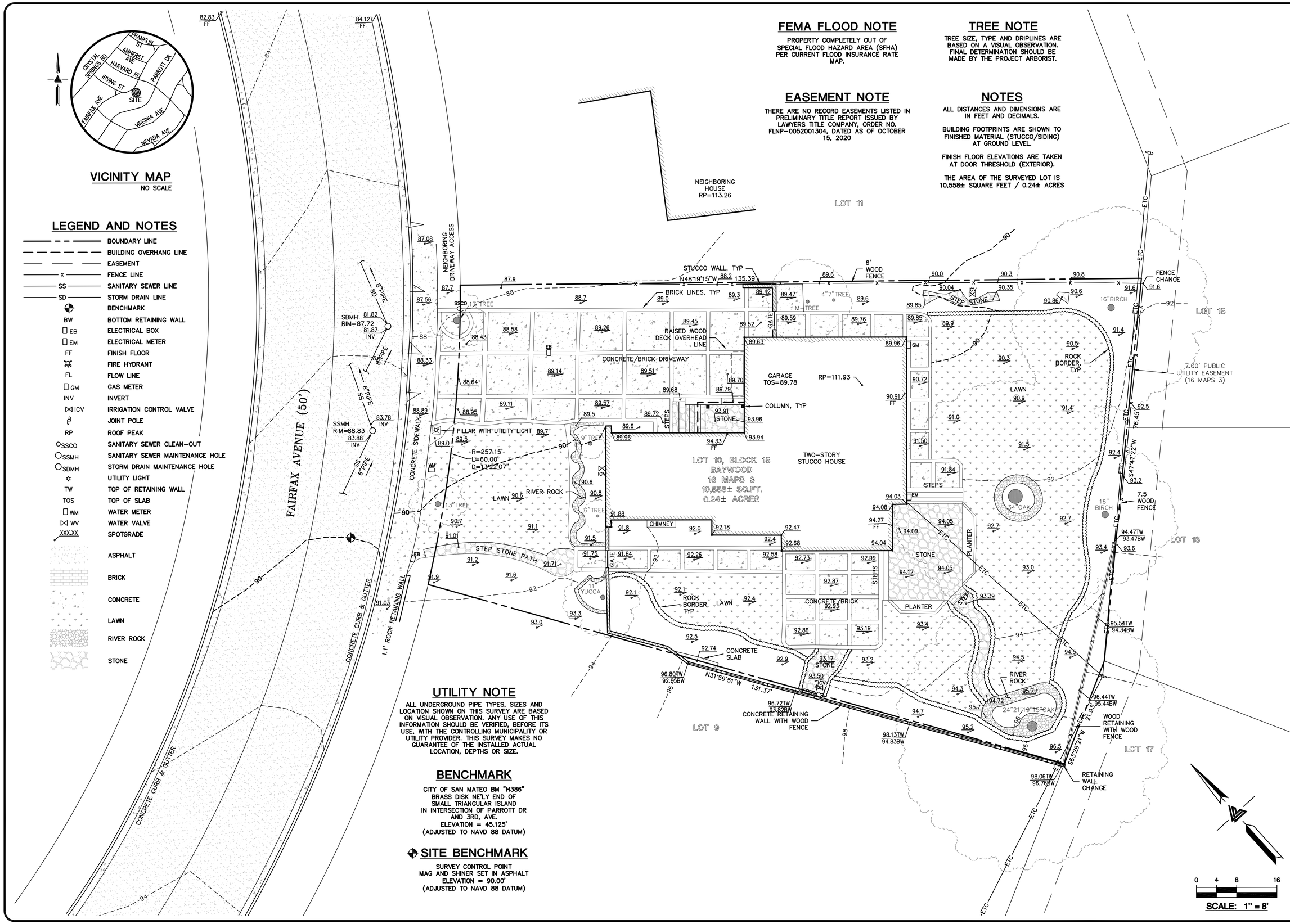


| Revisions | Date |
|---|---|
| Neighborhood Meeting | 8/4/21 |
| Planning Review | 10/26/21 |

The Alston Residence
415 Fairfax Ave.
San Mateo, CA

Drawing Title
Geometric Verification Calculations

Scale 1/8"=1'-0"
Date 10/13/2021
Drawn By
Job Number 20-128
Drawing Number
A003




## VICINITY MAP

NO SCALE

## LEGEND AND NOTES

- BOUNDARY LINE
- BUILDING OVERHANG LINE
- EASEMENT
- FENCE LINE
- SANITARY SEWER LINE
- STORM DRAIN LINE
- BENCHMARK
- BW — BOTTOM RETAINING WALL
- EB — ELECTRICAL BOX
- EM — ELECTRICAL METER
- FF — FINISH FLOOR
- FIRE HYDRANT
- FL — FLOW LINE
- GM — GAS METER
- INV — INVERT
- ICV — IRRIGATION CONTROL VALVE
- JOINT POLE
- RP — ROOF PEAK
- SSCO — SANITARY SEWER CLEAN-OUT
- SSMH — SANITARY SEWER MAINTENANCE HOLE
- SDMH — STORM DRAIN MAINTENANCE HOLE
- UTILITY LIGHT
- TW — TOP OF RETAINING WALL
- TOS — TOP OF SLAB
- WM — WATER METER
- WV — WATER VALVE
- XXX.XX — SPOTGRADE
- ASPHALT
- BRICK
- CONCRETE
- LAWN
- RIVER ROCK
- STONE

## FEMA FLOOD NOTE

PROPERTY COMPLETELY OUT OF SPECIAL FLOOD HAZARD AREA (SFHA) PER CURRENT FLOOD INSURANCE RATE MAP.

## EASEMENT NOTE

THERE ARE NO RECORD EASEMENTS LISTED IN PRELIMINARY TITLE REPORT ISSUED BY LAWYERS TITLE COMPANY, ORDER NO. FLNP-0052001304, DATED AS OF OCTOBER 15, 2020

## TREE NOTE

TREE SIZE, TYPE AND DRIPLINES ARE BASED ON A VISUAL OBSERVATION. FINAL DETERMINATION SHOULD BE MADE BY THE PROJECT ARBORIST.

## NOTES

ALL DISTANCES AND DIMENSIONS ARE IN FEET AND DECIMALS.

BUILDING FOOTPRINTS ARE SHOWN TO FINISHED MATERIAL (STUCCO/SIDING) AT GROUND LEVEL.

FINISH FLOOR ELEVATIONS ARE TAKEN AT DOOR THRESHOLD (EXTERIOR).

THE AREA OF THE SURVEYED LOT IS 10,558± SQUARE FEET / 0.24± ACRES

## UTILITY NOTE

ALL UNDERGROUND PIPE TYPES, SIZES AND LOCATION SHOWN ON THIS SURVEY ARE BASED ON VISUAL OBSERVATION. ANY USE OF THIS INFORMATION SHOULD BE VERIFIED, BEFORE ITS USE, WITH THE CONTROLLING MUNICIPALITY OR UTILITY PROVIDER. THIS SURVEY MAKES NO GUARANTEE OF THE INSTALLED ACTUAL LOCATION, DEPTHS OR SIZE.

## BENCHMARK

CITY OF SAN MATEO BM "H386"
BRASS DISK NE'LY END OF
SMALL TRIANGULAR ISLAND
IN INTERSECTION OF PARROTT DR
AND 3RD, AVE.
ELEVATION = 45.125'
(ADJUSTED TO NAVD 88 DATUM)

## SITE BENCHMARK

SURVEY CONTROL POINT
MAG AND SHINER SET IN ASPHALT
ELEVATION = 90.00'
(ADJUSTED TO NAVD 88 DATUM)

LICENSED LAND SURVEYOR
GREGORY F. BRAZE
No. 7823
STATE OF CALIFORNIA


LEA & BRAZE ENGINEERING, INC.
CIVIL ENGINEERS | LAND SURVEYORS
MAIN OFFICE:
2495 INDUSTRIAL PKWY WEST
HAYWARD, CALIFORNIA 94545
(510) 887-4086
REGIONAL OFFICES:
ROSEVILLE
DUBLIN
SAN JOSE
WWW.LEABRAZE.COM


# 415 FAIRFAX AVENUE
# SAN MATEO
# CALIFORNIA

SAN MATEO COUNTY

APN: 034-033-100

# TOPOGRAPHIC SURVEY

| REVISIONS | BY |
|---|---|
| – | – |
| – | – |
| – | – |
| – | – |
| – | – |

| | |
|---|---|
| JOB NO: | 2201777 |
| DATE: | 2-9-21 |
| SCALE: | 1"=8' |
| FIELD BY: | AO |
| DRAWN BY: | DDR |
| SHEET NO: | SU1 |

1 OF 1 SHEETS

**Building Division**
330 West 20th Avenue
San Mateo, CA 94403
(650) 522 - 7172
www.cityofsanmateo.org

# Water Conservation in Landscaping
## Project Information and Submission Checklist
REVISED 08/22/19

**Project Information**

Site Address / APN: 415 Fairfax Avenue San Mateo, CA 034-033-100

Project Type / Description *(residential, commercial, industrial)*: ADU & House Remodel including Landscaping

Total Landscape Area (sq. ft.): 4,431 Water Supply Type: California Water

**Property Owner Information**

Name: Gene and Nicole Alston

Phone:

Address: 415 Fairfax Avenue San Mateo, CA 94402

Email: genealston@gmail.com

**Applicant Information (if different from property owner)**

Name: Michael Callan~ Landscape Architect

Phone: 650-888-9029

Address: 63 Bovet Road #314 San Mateo, CA 94402

Email: mike@michaelcallan.com

**Submittal Checklist**

| | | Shown on Plans / Page # |
|---|---|---|
| 1. Water Efficient Landscape Worksheet | ☑ | Irrigation L2.0 |
| a. Hydrozone Information Table | ☑ | |
| b. Water Budget Calculations | ☑ | |
| i. Maximum Applied Water Allowance (MAWA) | ☑ | |
| ii. Estimated Total Water Use (ETWU) | ☑ | |
| 2. Soil Management Plan | ☑ | |
| 3. Landscape Design Plan | ☑ | |
| 4. Irrigation Design Plan | ☑ | |

**Signature**

I agree to comply with the requirements of the WELO and submit a complete Landscape Document Package.

Michael Callan — Digitally signed by Michael Callan Date: 2021.10.26 08:30:25 -07'00' — Landscape Plans Preparer Signature Required — 10-26-21 Date



## Water Efficient Landscape Worksheet
**City of San Mateo Reference Evapotranspiration (ETo): 42.8**

| Hydrozone # / Planting Description[a] | Plant Factor (PF) | Irrigation Method[b] | Irrigation Efficiency (IE)[c] | ETAF (PF/IE) | Landscape Area (sq. ft.) | ETAF x Area | Estimated Total Water Use (ETWU)[d] |
|---|---|---|---|---|---|---|---|
| **Regular Landscape Areas** | | | | | | | |
| Low | .3 | Drip | .81 | .37 | 3131 | 1158 | 30,741 |
| Moderate | .5 | Drip | .81 | .61 | 800 | 480 | 12,949 |
| High | .7 | Spray | .75 | .93 | 500 | 465 | 12,339 |
| | | | | | | | |
| | | | | Totals | (A)4431 | (B) 2103 | |
| **Special Landscape Areas** | | | | | | | |
| | | | | 1 | | | |
| | | | | 1 | | | |
| | | | | 1 | | | |
| | | | | Totals | (C) | (D) | |
| | | | | | | ETWU Total | 56,029 |
| | | | | Maximum Allowed Water Allowance (MAWA)[e] | | | 64,668 |

***Hydrozone #/ Planting Description***
*E.g*
*1.) front lawn*
*2.) low water use plantings*
*3.) medium water use planting*

***Irrigation Method***
*overhead spray or drip*

***Irrigation Efficiency***
*0.75 for spray head*
*0.81 for drip*

***ETWU (Annual Gallons Required)***
*= Eto x 0.62 x ETAF x Area*
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year.

***MAWA (Annual Gallons Allowed)** = (Eto) ( 0.62) [ (ETAF x LA)*
+ ((1-ETAF) x SLA)]
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year, LA is the total landscape area in square feet, SLA is the total special landscape area in square feet, and ETAF is .55 for residential areas and .45 for non-residential areas.

**ETAF Calculations**

**Regular Landscape Areas**

| | | |
|---|---|---|
| Total ETAF x Areas | 2103 | (B) |
| Total Area | 4431 | (A) |
| **Average ETAF** | **.47** | **B ÷ A** |

**All Landscape Areas**

| | | |
|---|---|---|
| Total ETAF x Areas | 2103 | (B+D) |
| Total Area | 4431 | (A+C) |
| **Sitewide ETAF** | **.47** | **(B+D) ÷ (A+C)** |

**Average Evapotranspiration Adjustment Factor (ETAF) for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.**



## Soil Management Report Checklist

Site Address / APN: 415 Fairfax Avenue San Mateo, CA 034-033-100

Date Prepared: 10-26-21

**Soil Management Report Submittal Checklist**

| | | Shown on Plans / Page # |
|---|---|---|
| 1. Soil Sample Lab Report | | |
| a. Soil Sampling Conducted at Appropriate Depth for Intended Plants | ☑ | |
| b. Soil Analysis | ☑ | |
| i. Soil Texture | ☑ | |
| ii. Infiltration Rate | ☑ | |
| iii. pH | ☑ | |
| iv. Total Soluble Salts | ☑ | |
| v. Percent Organic Matter | ☑ | |
| vi. Recommendations | ☑ | |
| 2. Soil Management Plan | ☑ | |
| 3. Landscape Design Plan | ☑ | |
| 4. Irrigation Design Plan | ☑ | |

**Signature**

I verify that the Soil Management Report was provided to the person(s) preparing the Landscape Design Plan.

Michael Callan — Digitally signed by Michael Callan Date: 2021.10.26 10:52:01 -07'00' — Landscape Plans Preparer Signature Required — 10-26-21 Date



## Landscape Design Plan Checklist

Site Address / APN: 415 Fairfax Avenue San Mateo, CA 034-033-100

Date Prepared: 10-26-21

**Landscape Design Plan Submittal Checklist**

| | | Shown on Plans / Page # |
|---|---|---|
| 1. Hydrozone | | |
| a. Delineate and Label each Hydrozone by #, Letter, or Other Method | ☑ | L2.0 |
| b. Identify each Hydrozone as Low, Moderate, High, or Mixed Water Use | ☐ | |
| 2. Identify on Plans: | | |
| a. Recreation Areas | ☑ | L1.0 |
| b. Areas Permanently and Solely Dedicated to Edible Plants | ☑ | |
| c. Areas Irrigated with Recycled Water | ☑ | |
| d. Types of Mulch and Application Depth | ☑ | |
| e. Soil Amendments, Type & Quantity | ☑ | |
| f. Location of Hardscape (Pervious & Non-Pervious) | ☑ | |
| g. Applicable Rain Harvest or Catchment Technologies | ☐ | |
| i. 24-Hour Capacities | ☐ | |
| h. Graywater Systems (if applicable) | | |
| i. Discharge Piping | ☐ | |
| ii. System Components | ☐ | |
| iii. Area(s) of Distribution | ☐ | |
| 3. Stormwater Requirements Checklist (C3) | ☐ | |

**Signature**

The following statement shall be printed on the front page of the Landscape Design Plan along with the signature of person(s)

I have complied with the criteria of the Water Efficient Landscape Ordinance and applied them for efficient use of water in the Landscape Design Plan.

Michael Callan — Digitally signed by Michael Callan Date: 2021.10.26 10:53:18 -07'00' — Landscape Plans Preparer Signature Required — 10-26-21 Date



## Certificate of Completion

**Part 1:** This portion is filled out by the project applicant, landscape architect and / or landscape contractor upon completion of the landscape project, and submitted to the City.

Project Information

**Project Name**

**Site Address**

**APN(s)**

**Applicant Name**

**Phone Number**

**Email Address**

**Street Address**

**Property Owner Name** (if different from applicant)

**Phone Number**

**Email Address**

**Street Address**

Property Owner Signature

"I / we certify that I / we have received copies of all of the documents within the Landscape Documentation Package and the Certificate of Completion, and that it is our responsibility to ensure that the project is maintained in accordance with the Landscape and Irrigation Maintenance Schedule."

Property Owner Signature — Date

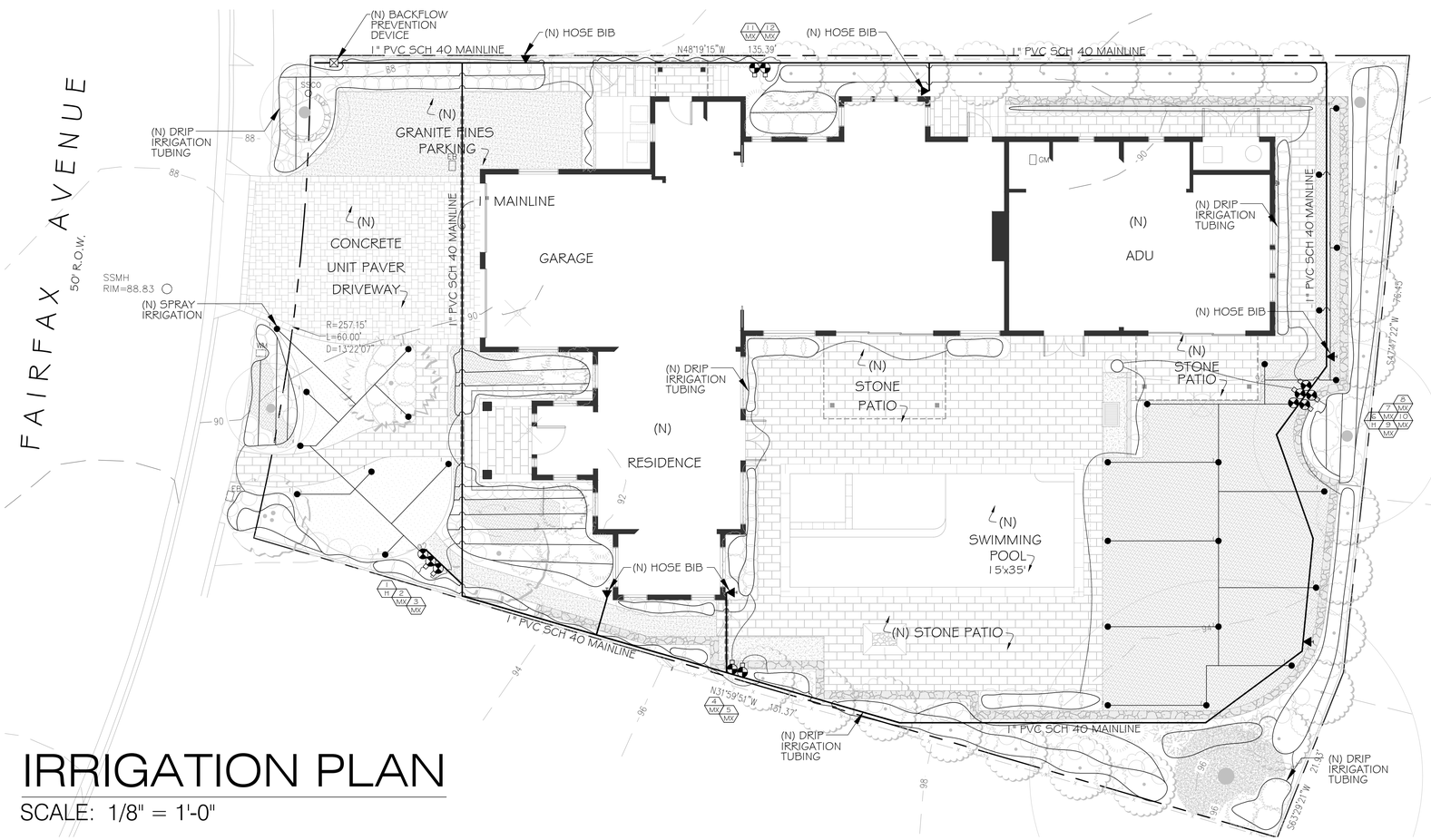
**Part 2:** This portion is signed by the signer of the Landscape Design Plan, Irrigation Design Plan, or by the licensed landscape contractor and submitted to the City following project installation. This means the signer is one or more of the following: a licensed landscape architect, a licensed landscape contractor, a certified irrigation designer, any person authorized to design landscapes and/or an irrigation system.

"I / we certify that based on periodic site observations, the work has been completed in accordance with the Water Efficient Landscape Ordinance and that the landscape planting and irrigation installation conform with the criteria and specifications of the approved Landscape Documentation Package. Significant changes made during construction comply with the ordinance."

Signature — Date

Printed Name — License Number






# IRRIGATION PLAN
SCALE: 1/8" = 1'-0"

## Irrigation Design Plan Checklist

Site Address / APN: 415 Fairfax Avenue San Mateo, CA 034-033-100

Date Prepared: 10-26-21

**Irrigation Design Plan Submittal Checklist**

| | | Shown on Plans / Page # |
|---|---|---|
| 1. Location of Separate Water Meters for Landscaped Areas | ☑ | L2.0 |
| 2. Location, Type and Size of all System Components | | L2.0 & L2.5 |
| a. Controllers | ☑ | |
| b. Main and Lateral Lines | ☑ | |
| c. Valves | ☑ | |
| d. Sprinkler Heads | ☑ | |
| e. Moisture Sensing Devices | ☐ | |
| f. Rain Switches | ☑ | |
| g. Quick Couplers | ☑ | |
| h. Pressure Regulators | ☑ | |
| i. Backflow Prevention Devices | ☑ | |
| 3. For each Station: | | L2.0 |
| a. Flow Rate (gallons per minute) | ☑ | |
| b. Application Rate (inches per hour) | ☑ | |
| c. Design Operating Pressure (pressure per square inch) | ☑ | |

**Signature**

The following statement shall be printed on the front page of the Irrigation Design Plan along with the signature of person(s) authorized to design the landscaping plan:

I have complied with the criteria of the Water Efficient Landscape Ordinance and applied them for efficient use of water in the irrigation design plan.

Michael Callan — Digitally signed by Michael Callan Date: 2021.10.26 10:54:34 -07'00' — Landscape Plans Preparer Signature Required — 10-26-21 Date



## IRRIGATION LEGEND

| SYM | DESCRIPTION | PSI | GPM | REMARKS |
|---|---|---|---|---|
| | IRRIGATION METHOD (SPY: SPRAY DRP: DRIP BUB: BUBBLER SUB: SUB-SURFACE) | | | |
| | WATER USE (VL: VERY LOW L: LOW M: MEDIUM H: HIGH MX: MIXED) | | | |
| T | WEATHERMATIC SMARTLINE SERIES CONTROLLER | - | - | W/ WEATHER STATION |
| | FEBCO 825Y REDUCED PRESSURE ASSEMBLY | 175 max. | - | W/ SHUT-OFF VALVES |
| | SHUT-OFF VALVE | 60-100 | - | BRASS BALL VALVE |
| | HOSEBIB | 60-100 | - | 30" TALL BRASS LINE & FIXTURE |
| | IRRITROL 100 SERIES CONTROL VALVE | 60-100 | - | W/ GLOBE VALVE |
| | FILTER / PRESSURE REGULATOR | - | - | AS NEEDED PER MFR'S SPECS |
| | HUNTER MPR40 BODY W/ MP ROTATOR SERIES | 30-55 | .07-2.63 | (C)-CORNER, (1)-1000 etc. |
| | HUNTER MPR40 BODY W/ MP STRIP SERIES | 30-55 | .14-.55 | (L)-LEFT, (S)-SIDE, (R)-RIGHT |
| | RAINBIRD XERI-POP W/ MPR NOZZLE | 20-50 | .02-.41 | (5)-5 SERIES, (8)-8 SERIES |
| | RAINBIRD XERI-POP W/ SQ NOZZLE | 20-50 | .13-.52 | (Q)-QUARTER, (H)-HALF, (F)-FULL |
| | RAINBIRD XERI-BUBBLER SPIKE *NOT SHOWN | 15-30 | .02-.22 | AS NEEDED, SEE DETAIL |
| | PVC SCH 40 MAINLINE | 60-100 | - | SEE PLAN FOR SIZING |
| | PVC SCH 40 LATERAL PIPING | 30-55 | - | SIZING TBD BY CONTRACTOR |
| | NETAFIM TECHLINE CV DRIPLINE | - | - | SIZING TBD BY CONTRACTOR |
| | NETAFIM TECHLINE CV (SUBSURFACE) | 10-30 | - | INSTALL PER MFR'S SPECS |
| | PVC SCH 40 SLEEVING | - | - | UNDER ALL PAVING / WALLS |

REVISIONS

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650-522-7172
Fax: 650-522-9229
CA LICENSE #2772
mike@michaelcallan.com

REGISTERED LANDSCAPE ARCHITECT
MICHAEL D CALLAN
No. 4076
SIGNATURE
DATE
STATE OF CALIFORNIA

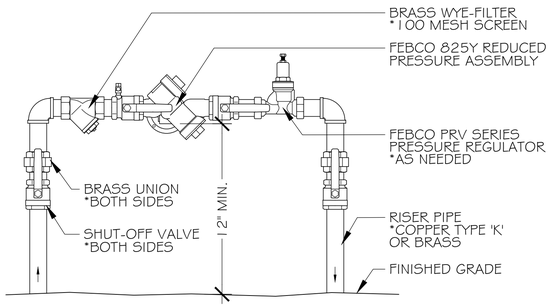
# ALSTON RESIDENCE
415 FAIRFAX AVENUE SAN MATEO, CALIFORNIA

DATE: FEBRUARY 14, 2022

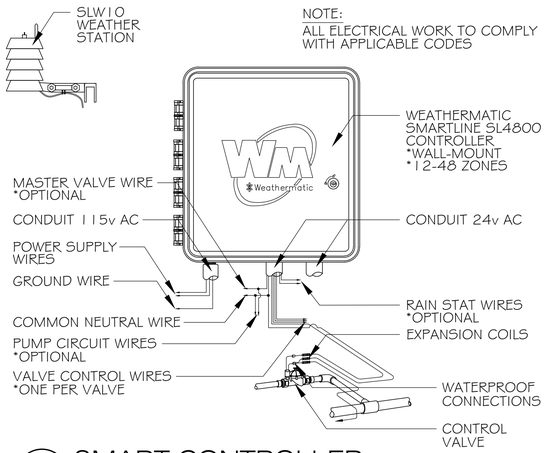
TITLE: IRRIGATION PLAN

SHEET NO: L2.0

NOTE:
REDUCED PRESSURE ASSEMBLY TO BE INSTALLED PER MFR'S SPECS & APPLICABLE CODES



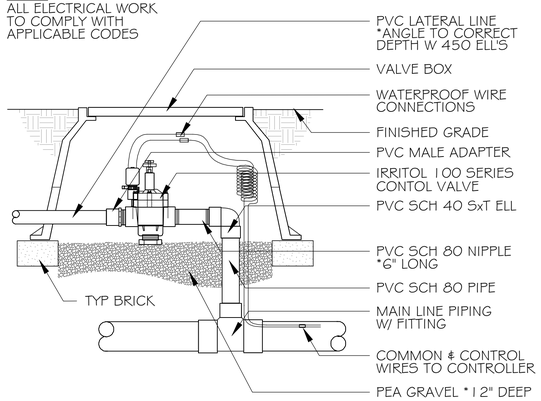

## A REDUCED PRESSURE ASSEMBLY
SCALE: NTS




NOTE:
ALL ELECTRICAL WORK TO COMPLY WITH APPLICABLE CODES

## B SMART CONTROLLER
SCALE: NTS

NOTE:
ALL ELECTRICAL WORK TO COMPLY WITH APPLICABLE CODES




## C CONTROL VALVE
SCALE: NTS

IRRIGATION NOTES

1. THE CONCEPTS ON THE IRRIGATION PLAN ARE SCHEMATIC MINIMUM REQUIREMENTS, THE FULL EXTENT OF WHICH ARE TO BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL MAKE ADJUSTMENTS AS NECESSARY BASED ON ACTUAL SITE CONDITIONS.

2. ALL IRRIGATION SYSTEM COMPONENTS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. MANUFACTURER'S SPECIFICATIONS SUPERSEDE ANY SPECS ON THESE PLANS / DETAILS.

3. IRRIGATION SYSTEM SHALL USE PRESSURE REGULATORS AS NEEDED TO KEEP ALL COMPONENTS WITHIN OPTIMAL PSI RANGE, PER MANUFACTURER'S SPECS.

4. CONTROLLER TYPE SHALL BE A SMART CONTROLLER. RAIN SENSORS AND / OR WEATHER STATIONS ARE RECOMMENDED.

5. CONTROLLER SHALL BE SET TO IRRIGATE BETWEEN THE HOURS OF 8PM AND 10AM. CONTROLLER SHALL BE SET TO IRRIGATE DEEPLY AND LESS FREQUENTLY TO ENCOURAGE DROUGHT RESISTANT ROOT GROWTH. IRRIGATION SCHEDULE TO BE DETERMINED BY AUDITOR / CONTRACTOR.

6. PIPING BETWEEN THE WATER METER AND A REDUCED PRESSURE ASSEMBLY SHALL BE BRASS OR COPPER TYPE 'K'.

7. THE BOTTOM OF THE REDUCED PRESSURE ASSEMBLY SHALL BE INSTALLED MIN. 12" ABOVE THE GROUND.

8. A 100 MESH FILTER SHALL BE INSTALLED ON THE MAINLINE BEFORE THE REDUCED PRESSURE ASSEMBLY.

9. VALVES SHALL BE HOUSED IN WEATHER-PROOF PLASTIC BOXES, WITH LOCKABLE LIDS MARKED WATER.

10. CONTROL WIRE CONNECTIONS SHALL BE MADE WITH WATERPROOF PLASTIC WIRE NUTS.

11. MAIN SUPPLY LINES & FITTINGS SHALL BE PVC SCH 40, SIZE AS NOTED ON PLAN, BURIED 12" - 16" DEEP.

12. LATERAL SUPPLY LINES & FITTINGS SHALL BE PVC SCH 40, SIZE TO BE DETERMINED BY CONTRACTOR, BURIED 9" - 12" DEEP.

13. FLEXIBLE POLY PIPE TO BE ½" -¾", DETERMINED BY CONTRACTOR . ALL ½" FLEXIBLE DISTRIBUTION LINES TO BE A MAXIMUM OF 5'-0" IN LENGTH & ARE TO BE STAKED.

14. BUBBLERS SHALL BE SPACED TO CREATE AN EVEN WET ZONE ABOUT THE SIZE OF THE CANOPY OF ALL NEW SHRUBS, NEW TREES & EXISTING IMMATURE NON-NATIVE TREES. BUBBLERS SHALL BE PLACED TO AVOID AS MUCH AS POSSIBLE IRRIGATING OAK TREES & ANY OTHER EXISTING, MATURE NATIVE OR DROUGHT TOLERANT PLANTS.

15. HOSE BIBS SHALL BE MOUNTED ON GALVANIZED STEEL RISERS 30" ABOVE FINISHED GRADE. SECURE TO A #4 STEEL BAR DRIVEN 18" INTO SOLID GROUND.

16. CHECK VALVES SHALL BE INSTALLED ON ALL DOWNHILL DRIPLINE & DISTRIBUTION LINE.

17. RISER HEIGHT IN LAWN AREAS SHALL BE 4". RISER HEIGHT IN MEADOW AREAS AND OTHER LANDSCAPE AREAS SHALL BE 12". THE RISERS FOR SPRINKLERS ON SLOPES SHALL BE SET APPROXIMATELY PERPENDICULAR TO THE PLANE OF THE SLOPE.

18. IF LOCATION OF A SUPPLY LINE INTERFERES WITH THE DRILLING OF THE PLANT HOLES, THE PLANT HOLES SHALL BE LOCATED AS TO CLEAR THE SUPPLY LINES.

18. ALL LINES SHALL BE THOROUGHLY FLUSHED OUT PRIOR TO ATTACHMENT OF VALVES, SPRINKLERS, EMITTERS, & OTHER TERMINAL FITTINGS.

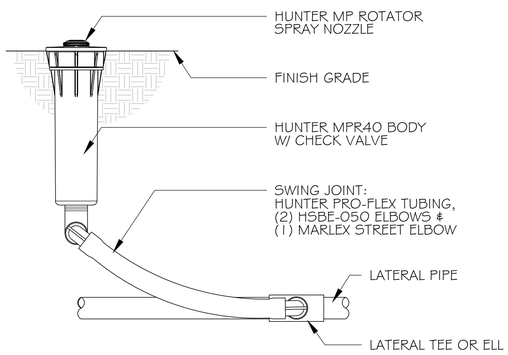
19. THE CONTRACTOR SHALL MAKE FINAL ADJUSTMENTS TO THE IRRIGATION SYSTEM TO ENSURE PROPER COVERAGE AND PREVENT WATER RUN-OFF AND EXCESS SPRAY.

20. ALL SPRAY AND DRIP ZONES TO BE MIN. 5'-0" AND PREFERABLY 10'-0" AWAY FROM OAK TREE TRUNKS.

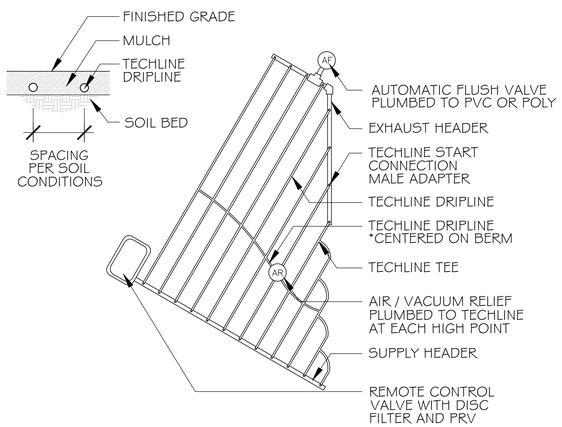
WATER CONSERVATION IN LANDSCAPING ORDINANCE COMPLIANCE

THESE PLANS COMPLY WITH THE CRITERIA OF THE WATER CONSERVATION IN LANDSCAPING ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE AND IRRIGATION DESIGN PLAN.

NOTE:
LAWN SPRAY RISER: 6" POP-UP
MEADOW SPRAY RISER: 12" POP-UP

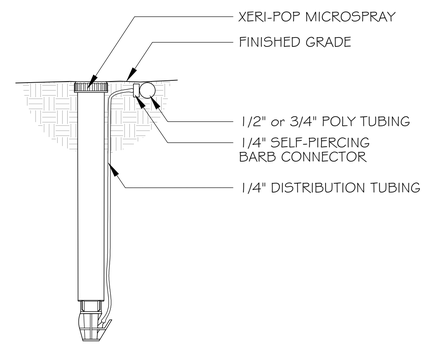



## D SPRAY HEAD & BODY
SCALE: NTS

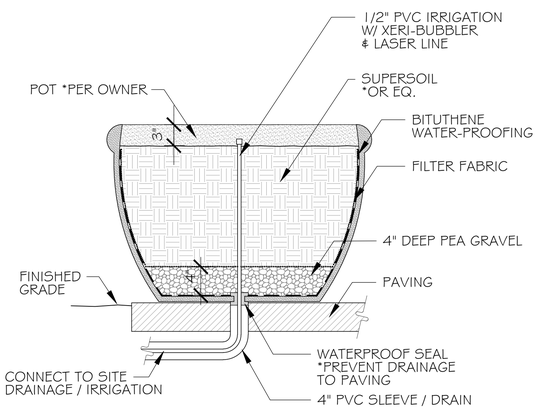



## E DRIPLINE SAMPLE LAYOUT
SCALE: NTS

NOTE:
LAWN SPRAY RISER: 6" POP-UP
MEADOW, SHRUB SPRAY RISER: 12" POP-UP

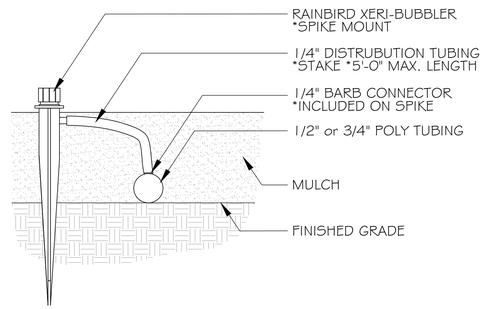



## F POP-UP MICROSPRAY
SCALE: NTS




## I POT IRRIGATION / DRAINAGE
SCALE: NTS

NOTE:
USE RAINBIRD XERI-MAN TOOL TO INSERT BARB INTO POLY TUBING

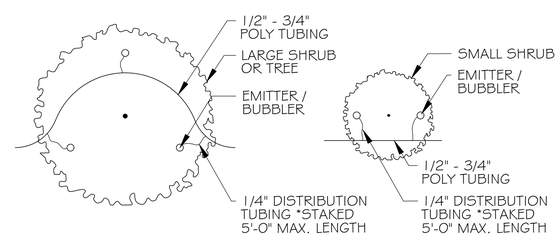



## H SPIKE MOUNT BUBBLERS
SCALE: NTS

NOTES:

1. SPACE EMITTERS TO CREATE AN EVEN WET ZONE ABOUT THE SIZE OF THE CANOPY OF ALL NEW SHRUBS, NEW TREES, & EXISTING IMMATURE NON-NATIVE EXISTING TREES.

2. PLACE EMITTERS AS TO AVOID AS MUCH AS POSSIBLE IRRIGATING OAK TREES & ANY OTHER EXISTING, MATURE NATIVE OR DROUGHT TOLERANT PLANTS.




## G EMITTER SPACING
SCALE: NTS

REVISIONS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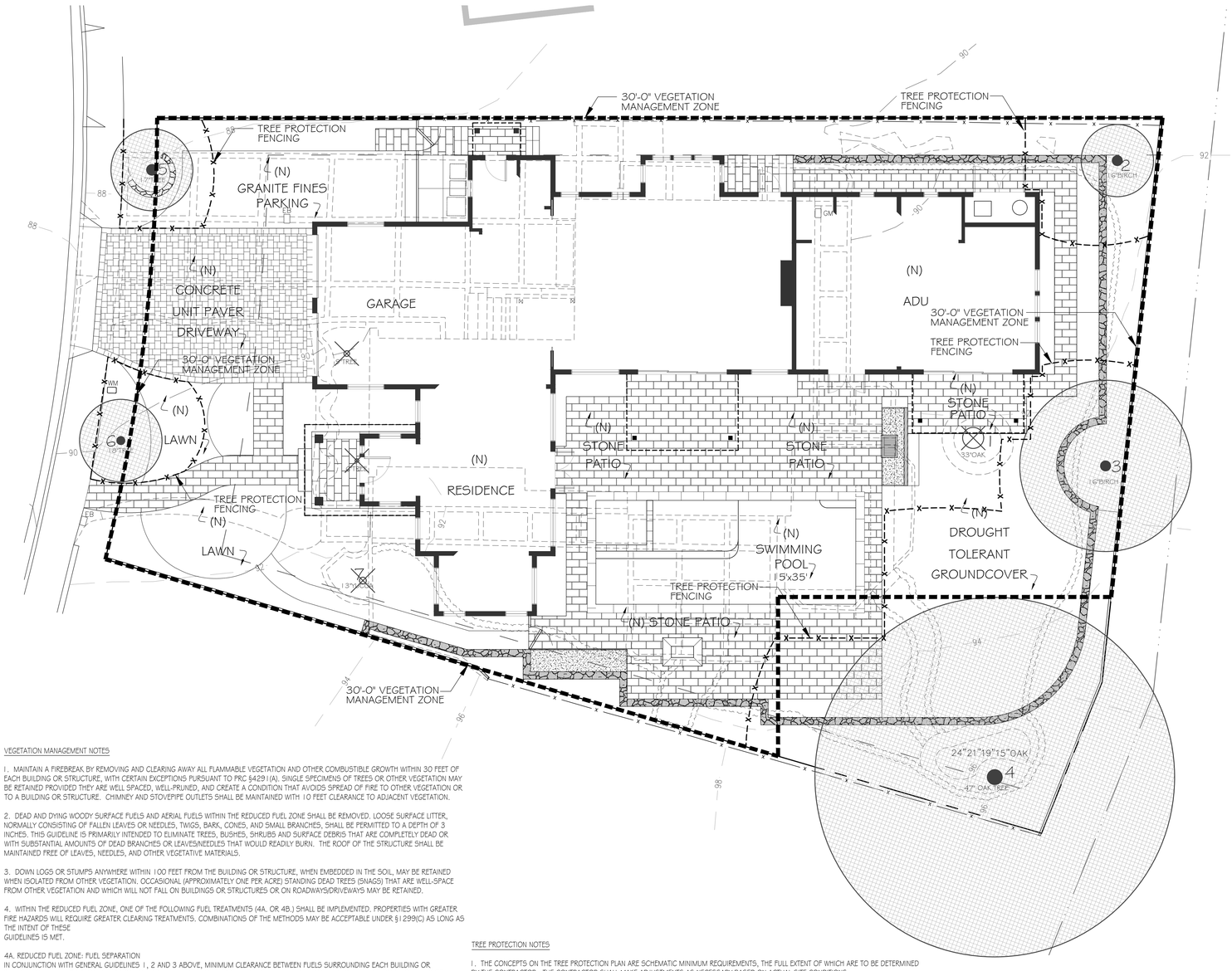
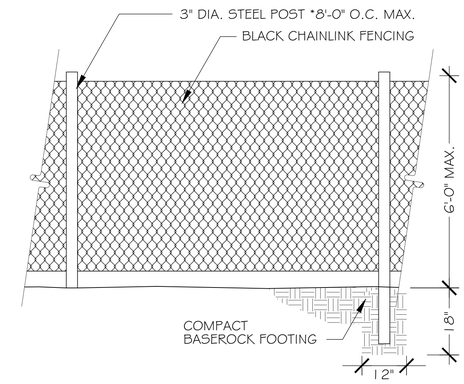
REGISTERED LANDSCAPE ARCHITECT
MICHAEL D CALLAN
No. 4076
SIGNATURE
DATE
STATE OF CALIFORNIA

# ALSTON RESIDENCE
415 FAIRFAX AVENUE SAN MATEO, CALIFORNIA

DATE: SEPTEMBER 00, 2015
TITLE: NOTES / DETAILS
SHEET NO: L2.5




A TREE PROTECTION FENCING
SCALE: NTS

VEGETATION MANAGEMENT NOTES

1. MAINTAIN A FIREBREAK BY REMOVING AND CLEARING AWAY ALL FLAMMABLE VEGETATION AND OTHER COMBUSTIBLE GROWTH WITHIN 30 FEET OF EACH BUILDING OR STRUCTURE, WITH CERTAIN EXCEPTIONS PURSUANT TO PRC §4291(A). SINGLE SPECIMENS OF TREES OR OTHER VEGETATION MAY BE RETAINED PROVIDED THEY ARE WELL SPACED, WELL-PRUNED, AND CREATE A CONDITION THAT AVOIDS SPREAD OF FIRE TO OTHER VEGETATION OR TO A BUILDING OR STRUCTURE. CHIMNEY AND STOVEPIPE OUTLETS SHALL BE MAINTAINED WITH 10 FEET CLEARANCE TO ADJACENT VEGETATION.

2. DEAD AND DYING WOODY SURFACE FUELS AND AERIAL FUELS WITHIN THE REDUCED FUEL ZONE SHALL BE REMOVED. LOOSE SURFACE LITTER, NORMALLY CONSISTING OF FALLEN LEAVES OR NEEDLES, TWIGS, BARK, CONES, AND SMALL BRANCHES, SHALL BE PERMITTED TO A DEPTH OF 3 INCHES. THIS GUIDELINE IS PRIMARILY INTENDED TO ELIMINATE TREES, BUSHES, SHRUBS AND SURFACE DEBRIS THAT ARE COMPLETELY DEAD OR WITH SUBSTANTIAL AMOUNTS OF DEAD BRANCHES OR LEAVES/NEEDLES THAT WOULD READILY BURN. THE ROOF OF THE STRUCTURE SHALL BE MAINTAINED FREE OF LEAVES, NEEDLES, AND OTHER VEGETATIVE MATERIALS.

3. DOWN LOGS OR STUMPS ANYWHERE WITHIN 100 FEET FROM THE BUILDING OR STRUCTURE, WHEN EMBEDDED IN THE SOIL, MAY BE RETAINED WHEN ISOLATED FROM OTHER VEGETATION. OCCASIONAL (APPROXIMATELY ONE PER ACRE) STANDING DEAD TREES (SNAGS) THAT ARE WELL-SPACE FROM OTHER VEGETATION AND WHICH WILL NOT FALL ON BUILDINGS OR STRUCTURES OR ON ROADWAYS/DRIVEWAYS MAY BE RETAINED.

4. WITHIN THE REDUCED FUEL ZONE, ONE OF THE FOLLOWING FUEL TREATMENTS (4A. OR 4B.) SHALL BE IMPLEMENTED. PROPERTIES WITH GREATER FIRE HAZARDS WILL REQUIRE GREATER CLEARING TREATMENTS. COMBINATIONS OF THE METHODS MAY BE ACCEPTABLE UNDER §1299(C) AS LONG AS THE INTENT OF THESE
GUIDELINES IS MET.

4A. REDUCED FUEL ZONE: FUEL SEPARATION
IN CONJUNCTION WITH GENERAL GUIDELINES 1, 2 AND 3 ABOVE, MINIMUM CLEARANCE BETWEEN FUELS SURROUNDING EACH BUILDING OR STRUCTURE WILL RANGE FROM 4 FEET TO 40 FEET IN ALL DIRECTIONS, BOTH HORIZONTALLY AND VERTICALLY. CLEARANCE DISTANCES BETWEEN VEGETATION WILL DEPEND ON THE SLOPE, VEGETATION SIZE, VEGETATION TYPE (BRUSH, GRASS, TREES), AND OTHER FUEL CHARACTERISTICS (FUEL COMPACTION, CHEMICAL CONTENT ETC.). PROPERTIES WITH GREATER FIRE HAZARDS WILL REQUIRE GREATER SEPARATION BETWEEN FUELS. FOR EXAMPLE, PROPERTIES ON STEEP SLOPES HAVING LARGE SIZED VEGETATION WILL REQUIRE GREATER SPACING BETWEEN INDIVIDUAL TREES AND BUSHES (SEE PLANT SPACING GUIDELINES BELOW). GROUPS OF VEGETATION (NUMEROUS PLANTS GROWING TOGETHER LESS THAN 10 FEET IN TOTAL FOLIAGE WIDTH) MAY BE TREATED AS A SINGLE PLANT. GRASS GENERALLY SHOULD NOT EXCEED 4 INCHES IN HEIGHT. HOWEVER, HOMEOWNERS MAY KEEP GRASS AND OTHER FORBS LESS THAN 18 INCHES IN HEIGHT ABOVE THE GROUND WHEN THESE GRASSES ARE ISOLATED FROM OTHER FUELS OR WHERE NECESSARY TO STABILIZE THE SOIL AND PREVENT EROSION. CLEARANCE REQUIREMENTS INCLUDE:

• HORIZONTAL CLEARANCE BETWEEN TREE CANOPIES ON 0%-20% SLOPES SHALL BE 10 FEET, ON 20%-40% SLOPES 20 FEET, AND ON GREATER THAN 40% SLOPES, 30 FEET. HORIZONTAL CLEARANCE BETWEEN SHRUB CANOPIES ON 0%-20% SLOPES SHALL BE 2 TIMES THE SHRUB HEIGHT, ON 20%-40% SLOPES 4 TIMES THE SHRUB HEIGHT, AND ON GREATER THAN 40% SLOPES 6 TIMES THE SHRUB HEIGHT WITH A MINIMUM OF 4 FEET CLEARANCE AND A MAXIMUM ON 40 FEET. HORIZONTAL CLEARANCE HELPS STOP THE SPREAD OF FIRE FROM ONE FUEL TO THE NEXT.

• VERTICAL CLEARANCE BETWEEN LOWER LIMBS OF AERIAL FUELS AND THE NEAREST SURFACE FUELS AND GRASS / WEEDS SHALL BE 3 TIMES THE HEIGHT OF THE VEGETATION WITH A MINIMUM OF 4 FEET CLEARANCE AND A MAXIMUM ON 40 FEET. VERTICAL CLEARANCE REMOVES LADDER FUELS AND HELPS PREVENT A FIRE FROM MOVING FROM THE SHORTER FUELS TO THE TALLER FUELS.

4B. REDUCED FUEL ZONE: DEFENSIBLE SPACE WITH CONTINUOUS TREE CANOPY
TO ACHIEVE DEFENSIBLE SPACE WHILE RETAINING A STAND OF LARGER TREES WITH A CONTINUOUS TREE CANOPY APPLY THE FOLLOWING TREATMENTS:

• GENERALLY, REMOVE ALL SURFACE FUELS GREATER THAN 4 INCHES IN HEIGHT. SINGLE SPECIMENS OF TREES OR OTHER VEGETATION MAY BE RETAINED PROVIDED THEY ARE WELL-SPACED, WELL-PRUNED, AND CREATE A CONDITION THAT AVOIDS SPREAD OF FIRE TO OTHER VEGETATION OR TO A BUILDING OR STRUCTURE.

• REMOVE LOWER LIMBS OF TREES ("PRUNE") TO AT LEAST 6 FEET UP TO 15 FEET (OR THE LOWER 1/3 BRANCHES FOR SMALL TREES). PROPERTIES WITH GREATER FIRE HAZARDS, SUCH AS STEEPER SLOPES OR MORE SEVERE FIRE DANGER, WILL REQUIRE PRUNING HEIGHTS IN THE UPPER END OF THIS RANGE.

TREE PROTECTION NOTES

1. THE CONCEPTS ON THE TREE PROTECTION PLAN ARE SCHEMATIC MINIMUM REQUIREMENTS, THE FULL EXTENT OF WHICH ARE TO BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL MAKE ADJUSTMENTS AS NECESSARY BASED ON ACTUAL SITE CONDITIONS.

2. PRIOR TO INITIATING ANY CONSTRUCTION ACTIVITY IN THE AREA, INCLUDING GRADING, TEMPORTY PROTECTIVE FENCING SHALL BE INSTALLED AT EACH SITE TREE. FENCING IS IDEALLY LOCATED AT OR BEYOND THE CANOPY DRIPLINE AND AS MUCH DRIPLINE AS POSSIBLE WILL BE PROTECTED BY FENCING.

3. FENCING SHALL BE MINIMUM OF 5' TALL AT ALL LOCATIONS, AD SHALL FORM A CONTINUOUS BARRIER WITHOUT ENTRY POINTS AROUND ALL TREES, OR GROUPS OF TREES. BARRIER TYPE FENCING SUCH AS CHAINLINK IS PREFERRED, AND THE USE OF SIMPLE POST AND CABLE FENCING IS DISCOURAGED. ANY ENCROACHMENT INTO THE DRIPLINE FOR FENCING OR CONSTRUCTION PURPOSES SHOULD BE DISCUSSED AND AGREED UPON IN ADVANCE WITH THE PROJECT ARBORIST.

4. THIS FENCING SHALL SERVE AS A BARRIER TO PREVENT DRIPLINE ENCROACHMENT OF ANY TYPE OF CONSTRUCTION ACTIVITIES AND EQUIPMENT. ACCIDENTAL DAMAGE TO BARK, ROOT CROWN, OR LIMBS MAY INCREASE POTENTIAL FOR FUTURE DECLINE.

5. CONTRACTORS AND SUBCONTRACTORS SHALL DIRECT ALL EQUIPMENT AND PERSONNEL TO REMAIN OUTSIDE THE FENCED AREA AT ALL TIMES UNTIL PROJECT IS COMPLETE, AND SHALL INSTRUCT EMPLOYEES AS TO THE PURPOSE AND IMPORTANCE OF FENCING.

6. A WARNING SIGN SHALL BE POSTED AT EACH TREE INDICATING THE PURPOSE OF THE FENCING.

7. THE PROJECT ARBORIST SHALL BE RESPOSIBLE FOR INSPECTION AND APPROVAL OF THE FENCING PRIOR TO ANY GRADING OPERATIONS.

8. FENCING MUST REMAIN IN PLACE AND SHALL NOT BE REMOVED UNTIL ALL CONSTRUCTION ACTIVITIES ARE COMPLETED. THIS SHALL INCLUDE GRADING AND COMPACTION ACTIVITIES, INSTALLATION OF UNDERGROUND, ALL CONSTRUCTION ACTIVITIES AND ANY OTHER CONSTRUCTION OR ACTIVITY WHICH IS SCHEDULED PRIOR TO LANDSCAPE INSTALLATION.

9. ROOTS OF SINGLE STANDING TREES OFTEN EXTEND UP TO THREE TIMES THE DISTANCE OF THE ACTUAL DRIPLINE AD FUNCTION PRIMARILY IN THE UPTAKE OF NUTRIENTS AND WATER. THE DRIPLINE IS ARBITRARILY ESTABLISHED AS THE MINIMUM ROOT AREA GENERALLY REQUIRED TO PRESERVE TREE HEALTH. AS MUCH AREAS AROUND THE CIRCUMFERENCE OF THE TREE SHOULD HAVE MINIMUM INTRUSION TO FURTHER ENSURE TREE SURVIVAL AND HEALTH.

CONDITIONS OF APPROVAL - TREE PROTECTION / TREE REPLACEMENT

11. RECOMMENDATIONS BY CONSULTING ARBORIST - THE RECOMMENDATIONS CONTAINED IN THE REPORT PREPARED BY THE CONSULTING ARBORIST, INCLUDING THE MITIGATION MEASURES OUTLINED IN THE MITIGATED NEGATIVE DECLARATION REGARDING TREE PRESERVATION, PROTECTION AND REPLACEMENT PLANTINGS, AND ANY MODIFICATIONS IMPOSED THROUGH THE APPROVAL PROCESS, SHALL BE INCORPORATED INTO THE FINAL DESIGN OF THE PROJECT AND WILL BE REVIEWED BY THE PLANNING DIVISION PRIOR TO THE ISSUANCE OF A BUILDING PERMIT AND WILL BE MONITORED BY ROUTINE INSPECTIONS BY THE PLANNING, BUILDING AND PUBLIC WORKS DEPARTMENTS AND THROUGH MONTHLY REPORTS SUBMITTED FOR REVIEW TO THE PLANNING DIVISION BY THE PROJECT ARBORIST AND APPLICANT. (PLANNING, BUILDING, PUBLIC WORKS

12. TREE PROTECITON - THE APPLICANT SHALL PROTECT ALL MAJOR VEGETATION DESIGNATED TO REMAIN FROM DAMAGE DURING CONSTRUCTION. TREE PROTECTION SHALL COMPLY WITH ALL PROVISIONS OF THE HERITAGE TREE ORDINANCE, APPROMED ARBORISTS REPORT, AND ANY REQUIREMENTS IMPOSED BY THE CITY. THE FOLLOWING TREE PROTECTION MEASURES SHALL BE SHOWN ON BUILDING PERMIT DRAWINGS:

A) PROTECTIVE FENCING SHALL BE LOCATED AT THE DRIP LINE OF EXISTING MAJOR VEGETATION TO REMAIN. THIS PROTECTIVE FENCING SHALL BE CONSTRUCTED OF CHAIN LINK IN FOOTINGS AND SHALL REMAIN IN PLACE UNTIL FINAL INSPECTION PER THE ARBORISTS REPORT.

B) ALL RECOMMENDATIONS FOR TREE PRESERVATION - INCLUDING ROOT PRUNING, PRUNING, FERTILIZATION AND MULCHING - CONTAINED IN THE APPROVED ARBORIST REPORT, AND / OR ADDITIONAL REQUIREMENTS IMPOSED BY THE CITY.

IN ADDITION, THE FOLLOWING REQUIREMENTS SHALL BE COMPLIED WITH AT ALL TIMES DURING CONSTRUCTION:

C) OIL, GAS, CHEMICALS, TOPSOIL, CONSTRUCTION MATERIALS, VEHICLES AND EQUIPMENT SHALL NOT BE STORED WITHIN THE DRIP LINE OF TREES THAT ARE DESIGNATED TO BE PRESERVED.

D) SIGNS, WIRES, OR OTHER TYPED OF OBSTRUCTIONS SHALL NOT BE ATTACHED TO TREES.

E) TRENCHING UNDER THE DRIP LINE OF TREES IS TO BE AVOIDED. IF TRENCING IS NECESSARY, TRENCHES ARE TO BE HAND DUG AND MAJOR ROOTS RETAINED.

F) TO MITIGATE THE REMOVAL OF MAJOR VEGETATION AND HERITAGE TREES, REPLACEMENT LANDSCAPING WILL BE PROVIDED. THE SIZE OF PROPOSED PLANTINGS INCLUDE: 50 (15-GALLON TREES), 28 (24-INCH BOX TREES), AND 8 (36-INCH BOX TREES).

ALL TREE PROTECTION MEASURES SHALL BE CONSTRUCTED PRIOR TO ISSUANCE OF A GRADING PERMIT, DEMOLITION PERMIT, OR BUILDING PERMIT. THE APPLICANT SHALL CONTACT THE PLANNING DIVISION TO INSPECT THE TREE PROTECTION MEASURES PRIOR TO ISSUANCE OF ANY PERMITS ON THE PROPERTY. (PLANNING)

13. TREE PROTECTION - THE APPLICANT SHALL PROTECT ALL MAJOR VEGETATION DESIGNATED TO REMAIN FROM DAMAGE DURING CONSTRUCTION. TREE PROTECTION SHALL COMPLY WITH ALL PROVISIONS OF THE HERITAGE TREE ORDINANCE AND SHALL DEMONSTRATE AND INCLUDE THE MITIGATION MEASURES OUTLINED IN THE MITIGATED NEGATIVE DECLARATION REGARDING TREE PRESERVATION, PROTECTION AND REPLACEMENT PLANTINGS ON THE BUILDING PERMIT DRAWINGS. THE MITIGATION MEASURES IN THE REPORT PREPARED BY THE CONSULTING ARBORIST SHALL BE INCORPORATED INTO THE PROJECT PLANS AND WILL BE REVIEWED BY THE PLANNING DIVISION PRIOR TO THE ISSUANCE OF A BUILDING PERMIT AND WILL BE MONITORED BY ROUTINE INSPECTIONS BY THE PLANNING, BUILDING AND PUBLIC WORKS DEPARTMENTS. IN ADDITION, THE PROJECT ARBORIST WILL PROVIDE MONTHLY REPORTS (DURING PRE-DEMOLITION, DEMOLITION AND CONSTRUCTION ACTIVITIES) REGARDING THE HEALTH OF ALL TREES PROPOSED TO BE RETAINED. THESE REPORTS SHALL BE SUBMITTED TO THE CITY OF SAN MATEO PLANNING DIVISION FOR REVIEW. (PLANNING, BUILDING, PUBLIC WORKS)

14. FINANCIAL SECURITIES FOR TREE PRESERVATION - THE APPLICANT SHALL SUBMIT FINANCIAL SECURITIES TO ENSURE THE PRESERVATION OF EXISTING TREES PRIOR TO THE ISSUANCE OF A BUILDING PERMIT. TREE PRESERVATION FEES SHALL BE DETERMINED BY THE LANDSCAPE UNIT (LU) VALUE AT A RATE OF NINETY DOLLARS ($90) PER LU. IN ORDER TO RECLAIM FINANCIAL SECURITIES, THE APPLICANT SHALL REQUEST A FINAL PROJECT INSPECTION BY THE PLANNING DIVISION. IF THE APPLICANT DOES MEET THE OBLIGATIONS UNDER THE TERMS OF THE SECURITIES THAT MONEY SHALL BE USED TO ACCOMPOLISH THE PRESERVATION OF EXISTING TREES. (PLANNING)

15. TREE REPLACEMENT / IN LIEU FEES - THE APPLICANT SHALL PLANT TREES EQUIVALENT TO THE LANDSCAPE UNIT (LU) VALUE OF TREES TO BE REMOVED OR PAY A FEE IN LIEU OF PLANTING TREES AT THE RATE OF NINETY DOLLARS ($90) PER REQUIRED LU PER THE ARBORIST REPORT AND THE MITIGATION MEASURES CONTAINED IN THE MITIGATED NEGATIVE DECLARATION. THE APPLICANT SHALL PAY THE REQUIRED LU FEES PRIOR TO THE ISSUANCE OF A BUILDING PERMIT. THE FEES WILL GO INTO THE CITY'S PRESERVATION FUND TO ENSURE THAT REPLACEMENT PLANTING ARE PLANTED WITHIN THE CITY OF SAN MATEO. (PLANNING, PARKS AND RECREATION)

16. PERMIT FOR REMOVAL OF MAJOR VEGETATION - THE APPLICANT SHALL OBTAIN A SITE DEVELOPMENT PERMIT FROM THE PLANNING DIVISION FOR REMOVAL OF MAJOR VEGETATION (TREES 6" DIAMETER OR LARGER) PRIOR TO THE ISSUANCE OF A GRADING OR BUILDING PERMIT. FEES FOR TREE REMOVAL SHALL BE BASED ON THE NUMBER OF TREES TO BE REMOVED IN ACCORDANCE WITH CITY REGULATIONS. (PLANNING)

17. NO MATERIALS SHALL BE STORED WITHIN THE TREE PROTECTION ZONE;

18. NOTHING SHALL BE ATTACHED TO THE TREES WITHIN THE TPZ;

19. UTILITY SERVICES SHALL NOT BE LOCATED WITHIN THE TPZ;

20. THE PROJECT ARBORIST SHALL BE RETAINED FOR PERIODIC MONITORING OF THE TREES AND PROTECTION MEASURES;

21. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE PROJECT ARBORIST IN A TIMELY MANNER TO HAVE THE PROJECT ARBORIST PRESENT FOR ALL WORK PERFORMED WITHIN THE TPZ OF PROTECTED TREES;

22. NO SELF-PROPELLED EQUIPMENT MAY ENTER THE TPZ;

23. THE PROJECT ARBORIST IS TO MONITOR ALL WORK WITHIN THE TPZ;

24. THE PROJECT ARBORIST IS TO DETERMINE THE IRRIGATION SCHEDULE FOR PROTECTED TREES. THE GENERAL CONTRACTOR IS EXPECTED TO APPLY SUPPLEMENTAL WATER AT THE DIRECTION OF THE PROJECT ARBORIST.

*TPZ: TREE PROTECTION ZONE.

# VEGETATION MANAGEMENT / TREE PROTECTION PLAN

SCALE: 1/8" = 1'-0"

REVISIONS


michael callan landscape architect
88 Bovet Road #414
San Mateo, CA 94402
650-372-9229
Fax: 650-372-9229
mike@michaelcallan.com


REGISTERED LANDSCAPE ARCHITECT
MICHAEL D. CALLAN
No. 4231
3/31/2022
STATE OF CALIFORNIA

ALSTON RESIDENCE
415 FAIRFAX AVENUE SAN MATEO, CALIFORNIA

DATE: APRIL 20, 2022
TITLE: TREE PROTECTION PLAN
SHEET NO: L6.0

Kielty Arborist Services LLC
Certified Arborist WE#10724A
P.O. Box 6187
San Mateo, CA 94403
650- 532-4418

March 2, 2022, Revised April 18th, 2022

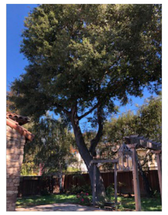
Michael Callan Landscape Architect
Attn: Mr. Michael Callan
63 Bovet Road #314
San Mateo, CA 94402

Site: 415 Fairfax, San Mateo, CA

Dear Mr. Callan,

As requested on Friday, September 10, 2021, I visited the above site for the purpose of inspecting and commenting on the trees. A new construction and landscaping project is planned for this site, and your concern as to the future health and safety of the trees has prompted this visit. Architectural site plans A001 through A004 and A100 through A304 dated 4/18/22, landscape plans L1.0 through L6.0 dated 2/15/22, and civil plans C-0 through C-5 dated 1/19/22 were reviewed for writing this report.

**Method:**
All inspections were made from the ground; the trees were not climbed for this inspection. The trees in question were located on a map provided by you. The trees were then measured for diameter at 54 inches above ground level (DBH or diameter at breast height). The trees were given a condition rating for form and vitality. The trees condition rating is based on 50 percent vitality and 50 percent form, using the following scale.



| | | |
|---|---|---|
| 1 - 29 | Very Poor | |
| 30 - 49 | Poor | |
| 50 - 69 | Fair | |
| 70 - 89 | Good | |
| 90 - 100 | Excellent | |

The height of the trees was measured using a Nikon Forestry 550 Hypsometer. The spread was paced off. Comments and recommendations for future maintenance are provided.

**Oak tree #1 in fair condition. The tree is poorly located and will have to be removed to facilitate the building of the ADU. A large percentage of the tree's roots are located in the ADU area. A large percentage of root zone will need to be removed. The tree's structural integrity would be impacted severely due to the proposed ADU. Tree removal is necessary**



**Survey:**

| Tree# | Species | DBH | CON | HT/SP | Comments |
|---|---|---|---|---|---|
| 1 | Coast live oak *(Quercus agrifolia)* | 33.1 | 60 | 50/45 | Good vigor, fair form, decay on west trunk. **Major impacts** Poor for preservation. **Remove** |
| 2 | Birch *(Betula pendula)* | 14.5 | 55 | 40/35 | Good vigor, fair form, leans west. Good **Minor impacts** for preservation. |
| 3 | Birch *(Betula pendula)* | 15.9 | 50 | 30/35 | Good vigor, poor form, topped for utilities. **Minor impact** Good for preservation |
| 4 | Coast live oak *(Quercus agrifolia)* | 47.1 | 55 | 45/40 | Good vigor, fair form, multi leader **No impacts** Good for preservation |
| 5 | London plane *(Platanus x hispanica)* | 15.7 | 45 | 15/15 | Fair vigor, poor form, pollarded, mildew **No impacts** on leaves. Good for preservation |
| 6 | London plane *(Platanus x hispanica)* | 15.7 | 45 | 15/15 | Fair vigor, poor form, pollarded, mildew on **No impacts** leaves. Good for preservation. |
| 7 | Yucca palm *(Yucca brevifolia)* | 13.0 | 50 | 15/10 | Good vigor, fair form, poor preservation. **Major impacts** **Remove.** |

**Summary:**

The trees on site are a mix of native and imported trees. Two native Coast Live Oak trees were found on site. Trees #1,3, 4, 5, and 6 are "Heritage" trees in the city of San Mateo. The only trees given poor condition ratings are the London Plane trees #5 and #6 due to being pollarded in the past.

**Showing Oak tree #4 in the southern corner of the lot. The oak should not beaffected by the proposed construction.**



**Exploration for ADU location:**

Multiple locations for an ADU were discussed between the Architect and Kielty Arborist Services to find a location with the least number of impacts to the trees while at the same time addressing concerns from the neighbor at 411 Fairfax regarding the ADU. Existing screening trees on the lot would be impacted by any other ADU location. New screening trees are planned on the north side of the lot.

**ADU Location #1 (northeast corner of property)**

Putting the ADU in the northeast corner of the property would involve removing Birch tree #1. The neighbor adjacent to the ADU has expressed an interest in keeping the Birch tree in place for privacy. The neighbor to the north has also expressed concern about how close the ADU is to their property, and moving it any closer than what is shown in the site plan would raise more concerns with the neighbor. This neighbor has a structure on the property line. If the ADU was pushed as far as possible into the northeast side, then a small rootable area for new screening trees would be the result. By pushing the ADU further back to the south (as shown in the plan) a larger rootable area is provided for new screening trees as requested by the neighbor. By having a larger rootable area screening trees are expected to do better when compared to a smaller rootable area with less soil volume. Also, a pathway is desired around the side of the ADU and would further reduce the amount of rootable area for the needed screening trees between the property and neighboring property.

**ADU Location #2 (southeast corner of property)**

Putting the ADU at the southeast corner of the property would involve removing Oak tree #4. This oak tree is well placed on the lot and offers a good amount of screening for the property. Due to the tree's good location on the lot and because the tree is in fair condition, it is recommended to retain this tree over Oak tree #1. Oak tree #1 and Birch tree #3 would also experience root cutting impacts that could lead to tree decline if the ADU was placed on this side of the lot.

**Conclusion:**

The proposed attached ADU location is the best option when taking into consideration the neighbor's concerns, and other tree removals and impacts to the retained trees if the ADU was moved to the south side of the property. The proposed ADU location relieves the neighbor's concerns. Removing Oak tree #1 that is poorly located on the lot and reduces the available buildable space is the best option when looking at other ADU locations and other related tree removals if the ADU was relocated.



**Proposed tree removals:**

Oak tree #1 is proposed for removal. This tree is a "Heritage" tree in the city of San Mateo. The tree is located 8'7" from the proposed ADU. Using the guidelines for determining tree protection zone radius as seen in Best Management Practices, "Managing Trees During Construction" a tree protection multiplication factor of 8x diameter or 22' would be needed for Oak tree #1. The ADU location would have high impacts on the health and stability of the tree. This is the best location for an ADU when looking into other possible locations (see exploration for ADU location on page 3) that would involve removing large screening trees at the property line. This tree meets the following criteria for tree removal as seen in the ordinance: (4)(B) The Necessity to remove the tree or trees in order to allow reasonable economic enjoyment of the property, and (4)(D) Effect of tree Removal on neighborhood. The removal of this oak tree compared to other trees on the lot has the least effect on the neighborhood as other screening trees exist at the property with more screening trees to be plated. The tree will be replaced in accordance with the Administrative Guidelines.

Yucca tree #7 is proposed for removal to facilitate the construction of the home. This tree is not of a "Heritage" size in the city of San Mateo.

**Impacts/recommendations:**

The proposed irrigation plan (L2.0) shows new irrigation lines to be installed for drought tolerant ground cover underneath the dripline of trees #2-5 and for a small turf area near tree #6. The other irrigation areas when close to the trees are proposed to be drip irrigation that will be installed on top of grade with no excavation required. All trenching for irrigation lines when within the dripline of the retained trees is required to be excavated by hand while under the Project Arborist supervision. All roots encountered measuring 1.5" in diameter or larger are recommended to be retained with irrigation lines being tunneled underneath or besides roots in order to reduce the number and size of roots to be cut. Exposed roots are required to be wrapped in burlap and kept moist by spraying down the burlap multiple times a day with water. This will help to avoid root desiccation. Once the trenches have been back filled, they are required to be heavily irrigated. Impacts from the irrigation plan are expected to be non-existent.

Birch tree #2 is located 11'-3 ½" away from the proposed ADU foundation or 9.5x the tree's diameter. At this distance impacts are expected to be minor to non-existent. The foundation when within 12 feet from the tree (10x diameter) is required to be excavated by hand while under the Project Arborist supervision. Any encountered roots measuring 1.5" in diameter or larger are recommended to be shown to the Project Arborist before being cleanly cut. The pathway between the ADU and tree is required to be excavated by hand when within 12' from the tree. Any roots encountered measuring 1.5" or larger are recommended to be retained where possible. All other landscaping items will require direct supervision of the Project Arborist when working within 12' from the tree. Impacts are expected to be minor to nonexistent. During the dry season this tree is recommended to be irrigated weekly within 20 gallons of clean water.



Birch tree #3 is located 15'-2 ½" away from the proposed ADU foundation and is outside the 10x diameter range. No impacts are expected due to the ADU. An arbor is located at 11'6" from the tree. The arbor is to be supported by individual post in the ground. The post holes are required to be excavated by hand when within 13.2' from the tree. Excavation for the stone patio will also required hand excavation under the Project Arborist supervision when within 13.2' from the tree. Roots encountered within the base rock section are recommended to be retained within the base rock layer. Pathway excavation will also require hand excavation under the Project Arborist supervision when within 13.2' from the tree. Roots encountered within the proposed base rock section are recommended to be retained. All other landscaping items will require direct supervision of the Project Arborist when working within 13.2' from the tree. Impacts are expected to be minor. During the dry season this tree is recommended to be irrigated weekly within 20 gallons of clean water.

Coast Live Oak tree #4 is located 28'3" from the proposed pool or 7.2x the tree's diameter. The pool excavation will require the direct supervision of the Project Arborist when working within 39.2' from the tree (10x diameter). All encountered roots will need to be cleanly cut back to the pool wall. The wall of the pool where roots have been cut is recommended to be covered by 3 layers of wetted down burlap to help avoid root desiccation while still exposed. The Oak tree is recommended to be irrigated at 5 feet from the pool cut using 40 gallons of water once the cut has been made. The hardscape work surrounding the pool will also need to be excavated by hand and supervised by the Project Arborist when within 39.2' from the tree. An estimated 15% of the tree's root zone is to be impacted by the proposed construction at 10x the tree's diameter. Impacts are expected to be minor as Oak trees have a good tolerance to construction impacts. All other landscaping items will require direct supervision of the Project Arborist when working within 39.2' from the tree. The tree is recommended to be deep water fertilized as a mitigation measure for the minor impacts.

Pollarded London plane tree #5 is located a few feet away from the proposed driveway and granite fines parking area. The existing driveway has likely helped to reduce root growth in the area of proposed work through compaction. All work within 13' from the tree is required to be supervised by the Project Arborist. Roots encountered within the base rock section measuring 1.5" in diameter or larger are recommended to be retained by packing base rock around roots. The tree is recommended to be irrigated weekly with 10 gallons of water. The proposed sewer line and storm drain/bubble box will require excavation by air spade in combination with hand tools when within 13' from the tree. The lines will need to be tunneled underneath or besides roots where possible to avoid the need to cut roots. Roots measuring 1.5" or larger during this process will need to be wrapped in layers of wetted down burlap to avoid root desiccation. Once the lines have been installed the trenches should be immediately back filled and irrigated. Roots at the bubble box will need to be cleanly cut under the Project Arborist supervision. Impacts are expected to be minor as the tree is pollarded and maintained at a small size. It is recommended to deep water fertilize this tree after construction has been completed.



London plane tree #6 is located a good distance away from the proposed driveway and impacts are expected to be minor. All work within 13' from the tree is required to be done by hand under the Project Arborist supervision. The pathway will need to be supervised by the Project Arborist as it is shown within the 10x diameter zone. Roots encountered within the base rock areas are recommended to be retained where possible by packing rock around roots. Exposed roots are recommended to be kept moist by wrapping roots in layers of wetted down burlap during this process. The water line when within 13' from the tree will require hand excavation under the Project Arborist supervision. Roots encountered in the water line trench are recommended to be retained within the line tunneled underneath or besides roots where possible to avoid root cutting. Once the line has been installed the trench is recommended to be immediately back filled and irrigated. Impacts are expected to be minor as the tree is pollarded and maintained at a small size. It is recommended to deep water fertilize this tree after construction has been completed. The following tree protection plan will help to reduce impacts to the retained trees on site.

**Tree Protection Plan:**
*Tree Protection Zones*
Tree protection zones should be installed and maintained throughout the entire length of the project. Fencing for tree protection zones should be 6' tall, metal chain link material supported by metal 2" diameter poles, pounded into the ground to a depth of no less than 2'. The location of the tree protection fencing is required to be placed at the 10x the diameter of the trees where possible. Where not possible due to approved work, the tree protection should be placed at the edge of the approved work with enough space given for the work to safely take place. No equipment or materials shall be stored or cleaned inside the protection zones. No excavation, grading, soil deposit, drainage and leveling within the dripline unless approved. It is prohibited to dispose oil, gasoline, chemicals, paints, solvents or other materials within the dripline or other areas that may lead to the tree. Areas where tree protection fencing needs to be reduced for access or storage, are required to be mulched with 6" of coarse wood chips with ½ inch plywood laid on top. The plywood boards should be attached together in order to minimize movement. The spreading of chips will help to protect the trees from compaction and will help to improve soil structure. All tree protection measures are required to be installed prior to any construction activity at the site. No signs, wires, or any other object shall be attached to the trees. During the construction of the home, tree protection fencing is recommended to be placed at 10x the diameter of the trees where possible. The landscaping work where shown underneath the dripline of the retained trees is recommended to take place at the end of the project. During the landscaping phase, the trees are recommended to be protected by wrapping the bottom 6 feet of the trunks with 2 inches of orange plastic fencing for buffering overlaid with 2-inch thick wooden slats bound securely by two layers of additional orange fencing (slats shall not be allowed to dig in to the bark). During installation, caution shall be used to avoid damaging any branches. Major limbs may also require wrapping as directed by the City Managing Arborist. Straw wattles may be used as an alternative trunk wrap material. Whenever work must take place within the dripline of protected trees, protect the soil with a temporary layer of material to protect the soil texture and roots, or root buffer. The buffer shall consist of secured geotextile material covering the area to be protected. Cover the geotextile material with 4 to 6 inches of clean wood chips (2-inch unpainted, untreated wood chips or approved equal). Securely install 3/4-inch plywood over the wood chips. The root buffer shall be installed and removed without wheeled equipment touching exposed soil. This may mean some or all the work is done by hand. The Project Arborist shall be present during the installation and removal of root buffers. Existing pavement also works as a root buffer. During the landscaping phase trunk wraps and root buffers will need to be used as described above.



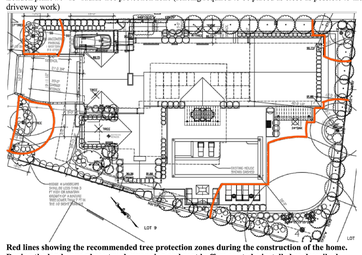
**Tree protection zones at 10x diameter**
Birch tree #2=12' radius tree protection zone (fencing required to be placed as close as possible to ADU)

Birch tree #3=13.2' radius tree protection zone (fencing required to be placed as close as possible to ADU and patio work)

Coast Live Oak #4=39.2' radius tree protection zone (fencing required to be placed as close as possible to the pool and pool hardscape work)

London plane #5=13' radius tree protection zone (fencing required to be placed as close as possible to the driveway work)

London plane #6=13' radius tree protection zone (fencing required to be placed as close as possible to the driveway work)




**Red lines showing the recommended tree protection zones during the construction of the home. During the landscape phase trunk wrapping and root buffers are to be installed as described**

*Root Buffer*
Where tree protection does not cover exposed soil within 10x the diameter of a protected tree, or when a smaller tree protection zone is needed for access, a landscape buffer consisting of secured geotextile material covering the area to be protected. Cover the geotextile material with 4 to 6 inches of clean wood chips (2-inch unpainted, untreated wood chips or approved equal). Securely install 3/4-inch plywood over the wood chips. The root buffer shall be installed and removed without wheeled equipment touching exposed soil. This may mean some or all the work is done by hand. The Project Arborist shall be present during the installation and removal of root buffers. Existing pavement also works as a root buffer.



*Root Cutting*
Any roots to be cut are required to be monitored and documented. Large roots (over 1.5" diameter) or large masses of roots to be cut are required to be inspected by the Project Arborist before being cut. The Project Arborist, at this time, may require irrigation or fertilization of the root zone. All roots needing to be cut are required to be cut clean with a saw or lopper. Roots to be left exposed for a period are required to be covered with 3 layers of burlap and kept moist, by spraying down the burlap multiple times a day. The Project Arborist is required to be on site during any approved excavation when within 10 times the diameter of a protected tree's dripline.

*Grading*
The existing grade level around the trees shall be maintained out to the dripline of the trees when possible. Anytime existing grades are to be changed underneath the dripline of a protected tree by more than 3", special mitigation measures will need to be put into action to reduce impacts to the trees. Aeration will need to be provided to root zones of trees that are to experience fill soil being placed within the tree root zones. Grades shall not be lowered when within 3 times the diameter of a protected tree on site unless approved. Lowering grades will result in roots needing to be cut and is highly discouraged.

*Working under the dripline of a protected tree (Landscape phase)*
Whenever work must take place within the dripline of protected trees it is required to protect the trunk as specified: Wrap the bottom 6 feet of the trunk with 2 inches of orange plastic fencing for buffering overlaid with 2-inch thick wooden slats bound securely by two layers of additional orange fencing (slats shall not be allowed to dig in to the bark). During installation, caution shall be used to avoid damaging any branches. Major limbs may also require wrapping as directed by the City Managing Arborist. Straw wattles may be used as an alternative trunk wrap material. Whenever work must take place within the dripline of protected trees, protect the soil with a temporary layer of material to protect the soil texture and roots, or root buffer. The buffer shall consist of secured geotextile material covering the area to be protected. Cover the geotextile material with 4 to 6 inches of clean wood chips (2-inch unpainted, untreated wood chips or approved equal). Securely install 3/4-inch plywood over the wood chips. The root buffer shall be installed and removed without wheeled equipment touching exposed soil. This may mean some or all the work is done by hand. The Project Arborist shall be present during the installation and removal of root buffers. Existing pavement also works as a root buffer.

*Trenching and Excavation*
Utility service and irrigation lines are required to be placed outside of the tree protection zones. When not possible and trenching for irrigation, drainage, electrical or any other reason is needed, it is required to be done by hand when within 10x the diameter of a protected tree on site. Hand digging and the careful placement of pipes below or besides protected roots will significantly reduce root loss, thus reducing trauma to the tree. All trenches shall be backfilled with native materials and compacted to near its original level, as soon as possible. Trenches to be left open for a period of time, will require the covering of all exposed roots with burlap and be kept moist. The trenches will also need to be covered with plywood to help protect the exposed roots.

*Irrigation*
Imported trees- On a construction site, I require irrigation during winter months, 1 time per month. Seasonal rainfall may reduce the need for additional irrigation. During the warm season, April – November, my requirements are to use heavy irrigation, 2 times per month. This type of irrigation is required to be started prior to any excavation. The irrigation will improve the vigor and water content of the trees. The on-site arborist may adjust the irrigation requirements as needed. The foliage of the trees may need cleaning if dust levels are extreme. Removing dust from the foliage will help to reduce mite and insect infestation. The native oak trees are recommended to only be irrigated during the months of May and September to combat drought stress or if their root zones are to be traumatized.



*Inspections*
The site arborist is required to verify that tree protection fencing has been installed before the start of construction. The city of San Mateo usually requires a letter stating the fencing is in place before any permits are to be granted. The site arborist is required to inspect the site anytime work is to take place within 10 times the diameter of a protected tree on site. It is the contractor's responsibility to contact the site arborist if work is to take place within 10 times the diameter of the protected trees on site. Kielty Arborist Services can be reached at kkarbor0476@yahoo.com or by phone at (650) 515-9783 (Kevin), or (650) 532-4418 (David). The city arborist must be notified if when or/if damage occurs to any Heritage tree on site.

*Damages to trees*
The City Arborist and Project Arborist are required to be notified when or/if damage occurs to any of the "Protected" trees on site, so that proper mitigation measures can be implemented.

*Pruning (*not expected at this time)
Any pruning is required to be documented by the Project Arborist. All pruning is required to be done by a licensed tree care provider. Pruning will need to stay under 25% of the total canopy.

The information included in this report is believed to be true and based on sound arboricultural principles and practices. The owner/applicant, GC, and other contractors are all responsible for knowing and following the guidelines for the preservation of trees.
the owner/applicant, GC, and other contractors are all responsible for knowing and following the guidelines for the preservation of trees. The Arborist report shall contain the signature of the property owner and building permit applicant per the Code
Sincerely,
David Beckham Certified Arborist WE#10724A TRAQ Qualified *David Beckham*

Property owner signature:

Building permit applicant signature:



Kielty Arborist Services
P.O. Box 6187
San Mateo, CA 94403
650-532-4418

**ARBORIST DISCLOSURE STATEMENT**

Arborists are tree specialists who use their education, knowledge, training and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist, or seek additional advice.

Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like a medicine, cannot be guaranteed.

Treatment, pruning, and removal of trees may involve considerations beyond the scope of the arborist's services such as property boundaries, property ownership, site lines, disputes between neighbors, landlord-tenant matters, etc. Arborists cannot take such issues into account unless complete and accurate information is given to the arborist. The person hiring the arborist accepts full responsibility for authorizing the recommended treatment or remedial measures.

*Trees can be managed, but they cannot be controlled. To live near a tree is to accept some degree of risk. The only way to eliminate all risks is to eliminate all trees.*
Arborist: *David Beckham*
David Beckham

Date: April 18th, 2022

REVISIONS

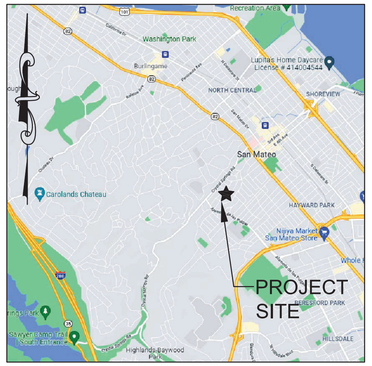
michael callan landscape architect
63 Bovet Road #314
San Mateo, CA 94402
650-372-9290
Fax: 650-372-9291
mike@michaelcallan.com

REGISTERED LANDSCAPE ARCHITECT
MICHAEL D CALLAN
No. 4024
1/31/2022
STATE OF CALIFORNIA

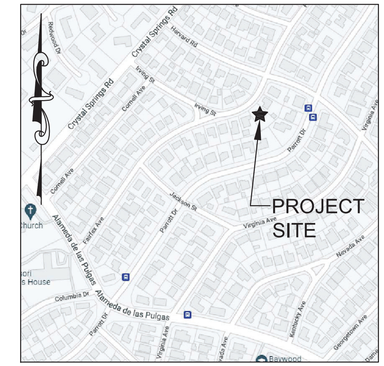
# ALSTON RESIDENCE
415 FAIRFAX AVENUE SAN MATEO, CALIFORNIA

DATE: APRIL 20, 2022
TITLE: NOTES / DETAILS
SHEET NO: L6.5

# ALSTON RESIDENCE
# 415 FAIRFAX AVENUE
## SAN MATEO, CA 94402



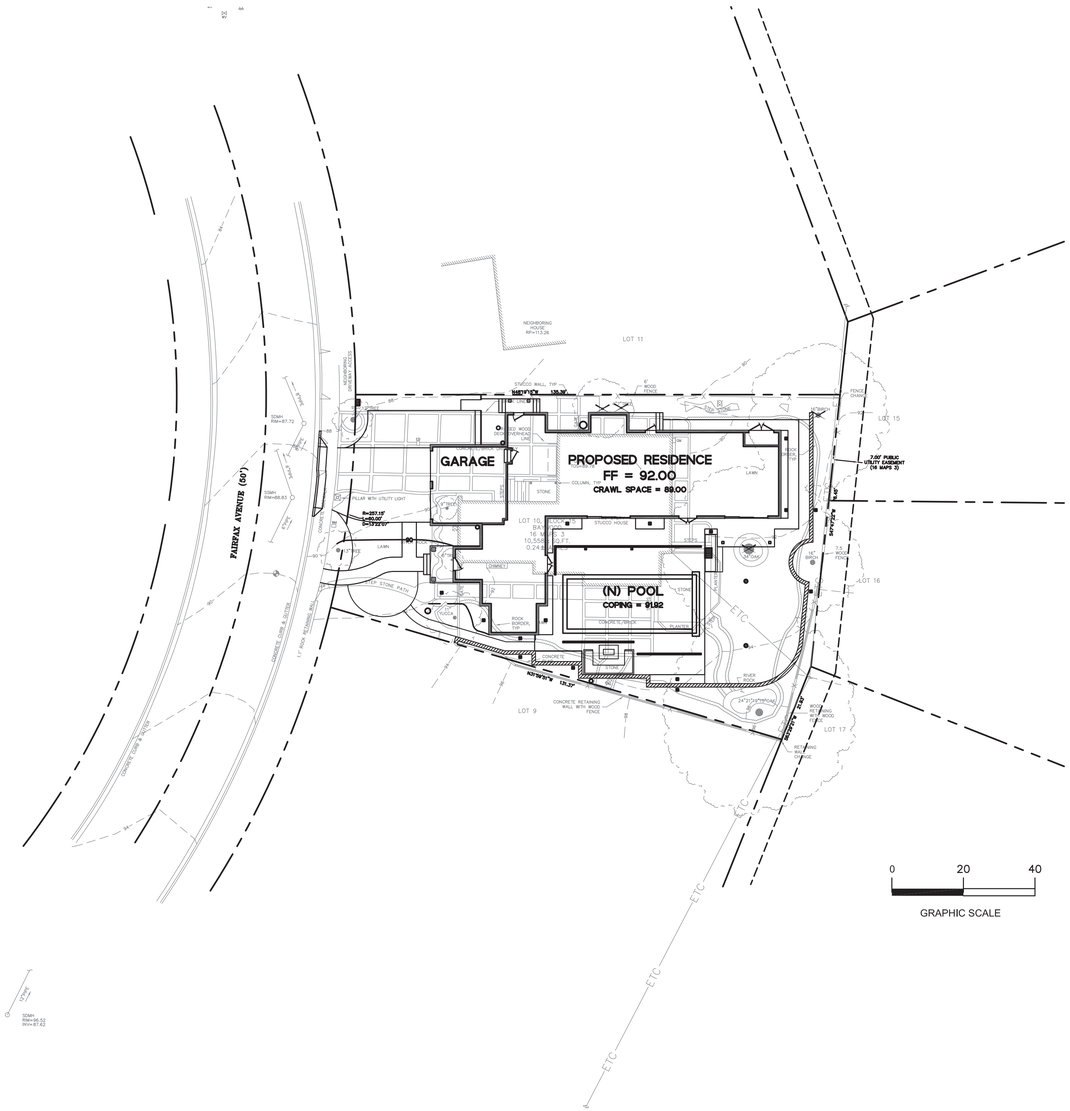

**VICINITY MAP**
N.T.S.




**LOCATION MAP**
N.T.S.

## ABBREVIATIONS

| | |
|---|---|
| AB | AGGREGATE BASE |
| AC | ASPHALT CONCRETE |
| AD | AREA DRAIN |
| ATD | ATRIUM DRAIN |
| BFP | BACK FLOW PREVENTION DEVICE |
| BW | BOTTOM OF WALL ELEVATION |
| CB | CATCH BASIN |
| CL | CENTER LINE |
| CS | CRAWL SPACE ELEVATION |
| CIP | CAST IRON PIPE |
| CONC | CONCRETE |
| DD | DECK DRAIN |
| DDCV | DOUBLE DETECTOR CHECK VALVE |
| DG | DECOMPOSED GRANITE |
| DIP | DUCTILE IRON PIPE |
| DS | ROOF DOWN SPOUT |
| DWY | DRIVEWAY |
| (E) | EXISTING |
| ELEC | ELECTRICAL |
| EM | ELECTRICAL METER |
| EP | EDGE OF PAVEMENT |
| FC | FACE OF CURB ELEVATION |
| FDC | FIRE DEPARTMENT CONNECTION |
| FF | FINISHED FLOOR ELEVATION |
| FG | FINISHED GROUND ELEVATION |
| FL | FLOW LINE ELEVATION |
| FM | FORCE MAIN LINE |
| FS | FINISHED SURFACE ELEVATION |
| FP | FINISHED PAVEMENT ELEVATION |
| FW | FIRE WATER LINE |
| GB | GRADE BREAK |
| GM | GAS METER |
| GR | GRATE ELEVATION |
| GV | GATE VALVE |
| HP | HIGH POINT |
| HW | HEATED WATER LINE |
| INV | PIPE INVERT ELEVATION |
| JT | JOINT TRENCH |
| JP | JOINT POLE |
| LD | LANDSCAPE DRAIN |
| LF | LINEAR FEET |
| LP | LOW POINT |
| (N) | NEW |
| PIV | POST INDICATOR VALVE |
| POC | POINT OF CONNECTION |
| RIM | RIM ELEVATION |
| S | SLOPE |
| SAP | SEE ARCHITECTURAL PLANS |
| SBD | STORM SUB DRAIN |
| SBDCO | STORM SUB DRAIN CLEANOUT |
| SD | STORM DRAIN |
| SDCO | STORM DRAIN CLEANOUT |
| SGR | SEE GEOTECHNICAL REPORT |
| SICB | SIDE INLET CATCH BASIN |
| SLP | SEE LANDSCAPE PLANS |
| SPP | SEE PLUMBING PLANS |
| SS | SANITARY SEWER |
| SSCO | SANITARY SEWER CLEANOUT |
| SSP | SEE STRUCTURAL PLANS |
| TW | TOP OF WALL ELEVATION |
| TYP | TYPICAL |
| VD | PIPE VERTICAL DROP |
| W | DOMESTIC WATER LINE |
| WM | WATER METER |




0 20 40
GRAPHIC SCALE

## LEGEND:

| EXISTING | PROPOSED | |
|---|---|---|
| SS | SS | SANITARY SEWER |
| SD | SD | STORM DRAIN |
| | | STORM SUB-DRAIN (PERFORATED PIPE) |
| | | TRANSITION FROM PERF. PIPE TO SOLID PIPE |
| FM | FM | FORCE MAIN |
| FW | FW | FIRE WATER LINE |
| W | W | DOMESTIC WATER SERVICE |
| IRR | IRR | IRRIGATION SERVICE |
| G | GAS | NATURAL GAS |
| E | E | ELECTRIC |
| JT | JT | JOINT TRENCH |
| X | | FENCE |
| | | CLEAN OUT |
| | | DOUBLE DETECTOR CHECK VALVE |
| | | POST INDICATOR VALVE |
| | | VALVE |
| | | METER BOX |
| | | STREET LIGHT |
| | | AREA DRAIN |
| | | CATCH BASIN |
| | | FIRE HYDRANT |
| | | FIRE DEPARTMENT CONNECTION |
| | | BENCHMARK |
| | | MANHOLE |
| | | SIGN |
| | | DOWNSPOUT |
| | | SPLASH BLOCK |
| | | CONTOURS |
| | | PROPERTY LINE |
| | | SETBACK |
| | | GRASS SWALE |
| | | RETAINING WALL/ BUILDING STEMWALL |
| | | (E) TREE TO BE REMOVED |

## SHEET INDEX



## EARTHWORK QUANTITIES

GROSS QUANTITIES:

| | |
|---|---|
| CUT | 445 C.Y. |
| FILL | 40 C.Y. |
| TOTAL TO BE MOVED | 485 C.Y. |
| BALANCE | 405 C.Y. CUT (OFF-HAUL) |

NET QUANTITIES (BUILDING AND STRUCTURES OMITTED):

| | |
|---|---|
| CUT | 145 C.Y. |
| FILL | 30 C.Y. |
| TOTAL TO BE MOVED | 175 C.Y. |
| BALANCE | 115 C.Y. CUT (OFF-HAUL) |

QUANTITY BREAKDOWN:

| | |
|---|---|
| BUILDINGS: | |
| CUT | 130 C.Y. |
| FILL | 10 C.Y. |
| POOL: | |
| CUT | 170 C.Y. |
| FILL | 0 C.Y. |
| SITE WORK: | |
| CUT | 145 C.Y. |
| FILL | 30 C.Y. |

EARTHWORK QUANTITIES SHOWN ABOVE ARE FOR PLANNING PURPOSES ONLY. CONTRACTOR SHALL CALCULATE THEIR OWN EARTHWORK QUANTITIES, AND USE THEIR CALCULATIONS FOR BIDDING AND COST ESTIMATING PURPOSES.

## HYDROLOGY

| (E) IMPERVIOUS AREA | (N) IMPERVIOUS AREA | REQUIRED STORAGE VOL. | STORAGE VOL. PROVIDED |
|---|---|---|---|
| 4,700 SF | 6,178 SF | 53 CF | 95 CF |

811 CALL BEFORE YOU DIG UNDERGROUND SERVICE ALERT


PRECISION ENGINEERING AND CONSTRUCTION
1331 Old County Road, Suite B
Belmont, CA 94002
T: 650.226.8640
Travis@precision-ec.com


REVISIONS: DATE:

REGISTERED PROFESSIONAL ENGINEER TRAVIS R. LUTZ 73638 CIVIL STATE OF CALIFORNIA

TITLE SHEET
ALSTON RESIDENCE
415 FAIRFAX AVENUE
SAN MATEO, CA 94402

Date: 01/19/2022
Scale: AS SHOWN
Design: AJP
Check: TRL
Drawing Number: C-0
PEC Job No. PEC 21-125

DRAWING NAME: G:\Shared Drives\PEC Project Files\2021\PEC 21-125 - 415 Fairfax Avenue, San Mateo\DWG\PEC 21-125 SHEETS.dwg
PLOTTED BY: Travis Lutz
PLOT TIME: 8:11:38am

## CAUTION:

1. THE LOCATIONS, SIZES AND/OR DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS PLAN WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. THE CONTRACTOR IS CAUTIONED THAT ONLY ACTUAL EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATIONS AND DEPTHS OF SUCH UNDERGROUND UTILITIES. (A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL KNOWN UNDERGROUND UTILITIES). CONTRACTOR SHALL VERIFY LOCATION AND DEPTH PRIOR TO ANY EXCAVATION OR IMPROVEMENT.
2. CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT FOR LOCATION OF UNDERGROUND UTILITIES AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION- PHONE (800) 642-2444. CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES AND SHALL CLEARLY MARK (AND THEN PRESERVE THESE MARKERS) FOR THE DURATION OF CONSTRUCTION OF ALL TELEPHONE, DATA, STREET LIGHT, SIGNAL LIGHT AND POWER FACILITIES THAT ARE IN OR NEAR THE AREA OF CONSTRUCTION PRIOR TO BEGINNING ANY WORK ON THIS SITE.
3. THESE DRAWINGS DO NOT ADDRESS CONTRACTOR MEANS AND METHODS OF CONSTRUCTION OR PROCESSES THAT MAY BE ASSOCIATED WITH ANY TOXIC SOILS IF FOUND ON SITE. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL CITY AND COUNTY STANDARDS AND APPROPRIATE REGULATIONS IF TOXIC SOILS ARE ENCOUNTERED OR SUSPECTED OF BEING CONTAMINATED.

## GENERAL SITE NOTES:

1. CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING ON THIS WORK AND CONSIDER THE EXISTING CONDITIONS AND SITE CONSTRAINTS IN THE BID. CONTRACTOR SHALL BE IN THE POSSESSION OF AND FAMILIAR WITH ALL APPLICABLE GOVERNING AGENCIES STANDARD DETAILS AND SPECIFICATIONS PRIOR TO SUBMITTING OF A BID.
2. THE CONTRACTOR SHALL MAINTAIN ALL SAFETY DEVICES, AND SHALL BE RESPONSIBLE FOR CONFORMANCE TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS LAWS AND REGULATIONS.
3. ALL WORK ON-SITE AND IN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO ALL APPLICABLE GOVERNING AGENCIES STANDARD DETAILS & SPECIFICATIONS.
4. 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, THE CONSULTING ENGINEER AND THE CITY HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE CONSULTING ENGINEER.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING THE JOB SITE AND SHALL TAKE NECESSARY PRECAUTIONS TO PREVENT UNAUTHORIZED PERSONS ON THE JOB SITE BY PROVIDING A CONSTRUCTION FENCE AROUND THE ENTIRE AREA OF DEMOLITION AND CONSTRUCTION, INCLUDING ALL STAGING AND STORAGE AREAS. CONSTRUCTION FENCE SHALL BE A MINIMUM OF A 6' HIGH GALVANIZED CHAIN LINK WITH GREEN WINDSCREEN FABRIC ON THE OUTSIDE OF THE FENCE.
7. EXISTING PEDESTRIAN WALKWAYS, BIKE PATHS AND ACCESSIBLE PATHWAYS SHALL BE MAINTAINED, WHERE FEASIBLE, DURING CONSTRUCTION.
8. IF A CONFLICT ARISES BETWEEN THE SPECIFICATIONS AND THE PLAN NOTES, THE MORE STRINGENT REQUIREMENT SHALL GOVERN.
9. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT BY PGSOILS, INC. DATED NOVEMBER 2021.

## EXISTING CONDITIONS:

1. EXISTING TOPOGRAPHIC SURVEYS PERFORMED BY LEA & BRAZE ENGINEERING ON FEBRUARY 9, 2021 (JOB #2201777). GRADES ENCOUNTERED ON-SITE MAY VARY FROM THOSE SHOWN. CONTRACTOR SHALL REVIEW THE PLANS AND CONDUCT FIELD INVESTIGATIONS AS REQUIRED TO VERIFY EXISTING CONDITIONS AT THE PROJECT SITE.
2. CLIENT AGREES TO HOLD ENGINEER HARMLESS FROM ANY AND ALL OCCURRENCES RESULTING FROM THE INACCURACIES OF THE CLIENT SUPPLIED TOPOGRAPHIC AND/OR BOUNDARY SURVEY (PREPARED BY OTHERS).

## SURVEYOR'S NOTES:

### BENCHMARK:

CITY OF SAN MATEO BM "H386"
BRASS DISK NE'LY END OF SMALL TRIANGULAR ISLAND
IN INTERSECTION OF PARROTT DR AND 3RD, AVE.
ELEVATION = 45.125'
(ADJUSTED TO NAVD 88 DATUM)

### SITE BENCHMARK:

SURVEY CONTROL POINT
MAG AND SHINER SET IN ASPHALT
ELEVATION = 90.00'
(ADJUSTED TO NAVD 88 DATUM)

## RECORD DRAWINGS:

1. THE CONTRACTOR SHALL KEEP UP-TO-DATE AND ACCURATE A COMPLETE RECORD SET OF PRINTS OF THE CONTRACT DRAWINGS SHOWING EVERY CHANGE FROM THE ORIGINAL DRAWINGS MADE DURING THE COURSE OF CONSTRUCTION INCLUDING EXACT FINAL LOCATION, ELEVATION, SIZES, MATERIALS, AND DESCRIPTION OF ALL WORK. RECORDS SHALL BE "REDLINED" ON A SET OF CONSTRUCTION PLAN DRAWINGS. A COMPLETE SET OF CORRECTED AND COMPLETED RECORD DRAWING PRINTS SHALL BE SUBMITTED TO THE OWNER PRIOR TO FINAL ACCEPTANCE .

## SITE MAINTENANCE

1. UPON PROJECT COMPLETION THE OWNER SHALL BE SOLELY RESPONSIBLE TO ROUTINELY INSPECT AND MAINTAIN ALL ON-SITE STORM DRAIN FACILITIES. STORM DRAIN FACILITIES INCLUDE; ROOF GUTTERS AND DOWNSPOUTS, SURFACE DRAINS SEDIMENTATION BASIN, TRENCH DISSIPATER, PUMP(S) AND DISCHARGE POINTS (BUBBLE UP BOX). STORM DRAIN SYSTEM SHALL BE CLEANED AND/OR FLUSHED ON A BIANNUAL BASIS OR AS FOUND NECESSARY.

## DEMOLITION NOTES :

1. PRIOR TO BEGINNING DEMOLITION WORK ACTIVITIES, CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES OUTLINED IN THE EROSION CONTROL PLAN & DETAILS.
2. THE CONTRACTOR SHALL MAINTAIN ALL SAFETY DEVICES, AND SHALL BE RESPONSIBLE FOR CONFORMANCE TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS LAWS AND REGULATIONS.
3. CONTRACTOR IS TO COMPLY WITH ALL LOCAL, STATE AND FEDERAL REQUIREMENTS, INCLUDING BUT NOT LIMITED TO, THE SAFETY AND HEALTH STANDARDS LAWS AND REGULATIONS AND REMOVAL AND DISPOSAL OF HAZARDOUS MATERIAL(S).
4. CONTRACTOR'S BID IS TO INCLUDE ALL VISIBLE SURFACE AND ALL SUBSURFACE FEATURES IDENTIFIED TO BE REMOVED OR ABANDONED IN THESE DOCUMENTS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR A SITE INSPECTION TO FULLY ACKNOWLEDGE THE EXTENT OF THE DEMOLITION WORK.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY AND ALL PERMITS NECESSARY FOR ENCROACHMENT, GRADING, DEMOLITION, AND DISPOSAL OF SAID MATERIALS AS REQUIRED BY PRIVATE, LOCAL AND STATE JURISDICTIONS. THE CONTRACTOR SHALL PAY ALL FEES ASSOCIATED WITH THE DEMOLITION WORK.
7. THE CONTRACTOR SHALL MAINTAIN ALL SAFETY DEVICES, AND SHALL BE RESPONSIBLE FOR CONFORMANCE TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS LAWS AND REGULATIONS.
8. BACKFILL ALL DEPRESSIONS AND TRENCHES FROM DEMOLITION. REMOVAL OF LANDSCAPING SHALL INCLUDE ROOTS AND ORGANIC MATERIALS.
9. REMOVAL OF LANDSCAPING SHALL INCLUDE ROOTS AND ORGANIC MATERIALS TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.
10. THE CONTRACTOR SHALL PROTECT FROM DAMAGE ALL EXISTING IMPROVEMENTS FACILITIES AND STRUCTURES WHICH ARE TO REMAIN. ANY ITEMS DAMAGED BY THE CONTRACTOR OR HIS AGENTS OR ANY ITEMS REMOVED FOR HIS USE SHALL BE REPLACED IN EQUAL OR BETTER CONDITION AS APPROVED BY THE OWNER.
11. COORDINATE ALL UTILITY SHUT-DOWN/DISCONNECT LOCATIONS WITH APPROPRIATE DRAWINGS (ELECTRICAL, MECHANICAL, ARCHITECTURAL, ETC.). CONTRACTOR IS TO SHUT OFF ALL UTILITIES AS NECESSARY PRIOR TO DEMOLITION. CONTRACTOR IS TO COORDINATE SERVICE INTERRUPTIONS WITH THE OWNER. DO NOT INTERRUPT SERVICES TO ADJACENT OFF-SITE OWNERS. ANY EXISTING UNDERGROUND UTILITY LINES TO BE ABANDONED, SHOULD BE REMOVED FROM WITHIN THE PROPOSED BUILDING ENVELOPE AND THEIR ENDS CAPPED OUTSIDE OF THE BUILDING ENVELOPE.
12. THIS PLAN IS NOT INTENDED TO BE A COMPLETE CATALOGUE OF ALL EXISTING STRUCTURES AND UTILITIES. THIS PLAN INTENDS TO DISCLOSE GENERAL INFORMATION KNOWN BY THE ENGINEER AND TO SHOW THE LIMITS OF THE AREA WHERE WORK WILL BE PERFORMED. THIS PLAN SHOWS THE EXISTING FEATURES TAKEN FROM A FIELD SURVEY, FIELD INVESTIGATIONS AND AVAILABLE INFORMATION. THIS PLAN MAY OR MAY NOT ACCURATELY REFLECT THE TYPE OR EXTENT OF THE ITEMS TO BE ENCOUNTERED AS THEY ACTUALLY EXIST. WHERE EXISTING FEATURES ARE NOT SHOWN, IT IS NOT IMPLIED THAT THEY ARE NOT TO BE DEMOLISHED OR REMOVED. THE CONTRACTOR SHALL PERFORM A THOROUGH FIELD INVESTIGATION AND REVIEW OF THE SITE WITHIN THE LIMIT OF WORK SHOWN IN THIS PLAN SET TO DETERMINE THE TYPE, QUANTITY AND EXTENT OF ANY AND ALL ITEMS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DETERMINING THE EXTENT OF EXISTING STRUCTURES AND UTILITIES AND QUANTITY OF WORK INVOLVED IN REMOVING THESE ITEMS FROM THE SITE.

## TREE/PLANT PROTECTION NOTES:

1. PRIOR TO BEGINNING CONSTRUCTION ON SITE, CONTRACTOR SHALL IDENTIFY AND PROTECT EXISTING TREES AND PLANTS DESIGNATED AS TO REMAIN.
2. PROTECT EXISTING TREES TO REMAIN FROM SPILLED CHEMICALS, FUEL OIL, MOTOR OIL, GASOLINE AND ALL OTHER CHEMICALLY INJURIOUS MATERIAL; AS WELL AS FROM PUDDLING OR CONTINUOUSLY RUNNING WATER. SHOULD A SPILL OCCUR, STOP WORK IN THAT AREA AND CONTACT THE CITY'S ENGINEER/INSPECTOR IMMEDIATELY. CONTRACTOR SHALL BE RESPONSIBLE TO MITIGATE DAMAGE FROM SPILLED MATERIAL AS WELL AS MATERIAL CLEAN UP.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ONGOING MAINTENANCE OF ALL TREES DESIGNATED TO REMAIN AND FOR MAINTENANCE OF RELOCATED TREES STOCKPILED DURING CONSTRUCTION. CONTRACTOR WILL BE REQUIRED TO REPLACE TREES THAT DIE DUE TO LACK OF MAINTENANCE.

## HORIZONTAL CONTROL NOTES:

1. ALL DIMENSIONS ON THE PLANS ARE IN FEET OR DECIMALS THEREOF UNLESS SPECIFICALLY CALLED OUT AS FEET AND INCHES.

## PAVEMENT SECTION:

1. SEE STRUCTURAL DRAWINGS FOR BUILDING SLAB SECTIONS AND PAD PREPARATIONS.
2. SEE GEOTECHNICAL REPORT FOR ALL FLATWORK, VEHICULAR PAVEMENT SECTIONS, BASE AND COMPACTION REQUIREMENTS.
3. THE FINAL OR SURFACE LAYER OF ASPHALT CONCRETE SHALL NOT BE PLACED UNTIL ALL ON-SITE IMPROVEMENTS HAVE BEEN COMPLETED, INCLUDING ALL GRADING, AND ALL UNACCEPTABLE CONCRETE WORK HAS BEEN REMOVED AND REPLACED, UNLESS OTHERWISE APPROVED BY THE CITY/COUNTY ENGINEER AND/OR DEVELOPER'S CIVIL ENGINEER.
4. ALL PAVING SHALL BE IN CONFORMANCE WITH SECTION 26 "AGGREGATE BASE" AND SECTION 39 "ASPHALT CONCRETE" PER LATEST EDITION OF CALTRANS STANDARD SPECIFICATIONS.

## GRADING NOTES:

1. PROVIDE POSITIVE SURFACE DRAINAGE AWAY FROM ALL STRUCTURES BY SLOPING THE FINISHED GROUND SURFACE AT LEAST 5%, UNLESS OTHERWISE NOTED ON THE PLANS. SLOPE LANDINGS 2% (1/4" PER FOOT) AWAY FROM, STRUCTURES UNLESS OTHERWISE NOTED ON PLANS. ANY AREAS ON THE SITE NOT CONFORMING TO THESE BASIC RULES DUE TO EXISTING CONDITIONS OR DISCREPANCIES IN THE DOCUMENTS ARE TO BE REPORTED TO THE CIVIL ENGINEER PRIOR TO PROCEEDING WITH PLACEMENT OF BASE ROCK OR FORMWORK FOR CURBS AND/OR FLATWORK.
2. CONTRACTOR SHALL DETERMINE EARTHWORK QUANTITIES BASED ON THE TOPOGRAPHIC SURVEY, THE GEOTECHNICAL INVESTIGATION AND THE PROPOSED SURFACE THICKNESS AND BASE THE BID ACCORDINGLY. IT IS THE CONTRACTORS RESPONSIBILITY TO CONFIRM IF A SEPARATE DEMOLITION CONTRACT HAS BEEN ISSUED TO TAKE THE SITE FROM THE WAY IT IS AT THE TIME OF THE BID TO THE CONDITIONS DESCRIBED IN THESE DOCUMENTS. BRING ANY DIFFERENCES BETWEEN THE STATE IN WHICH THE SITE IS DELIVERED TO THE CONTRACTOR AND THESE DOCUMENTS TO THE ATTENTION OF THE CIVIL ENGINEER.
3. ALL FILL SHALL BE COMPACTED PER THE GEOTECHNICAL REPORT AND THE CONTRACTOR SHALL COORDINATE AND COMPLY WITH THE GEOTECHNICAL ENGINEER TO TAKE THE APPROPRIATE TESTS TO VERIFY COMPACTION VALUES.
4. IMPORT SOILS SHOULD MEET THE REQUIREMENTS OF THE SOILS REPORT AND SPECIFICATIONS.
5. DO NOT ADJUST GRADES ON THIS PLAN WITHOUT PRIOR WRITTEN APPROVAL OF THE CIVIL ENGINEER.
6. SITE STRIPPINGS THAT CONTAIN ONLY ORGANIC MATERIAL (NO DEBRIS TRASH, BROKEN CONC. OR ROCKS GREATER THAN 1" IN DIAMETER) MAY BE USED IN LANDSCAPE AREAS, EXCEPT FOR AREAS IDENTIFIED AS IMPORT TOP SOIL BY THE LANDSCAPE DRAWINGS. EXCESS STRIPPINGS SHALL BE REMOVED FROM SITE.
7. ROUGH GRADING TO BE WITHIN 0.1' AND FINISH GRADES ARE TO BE WITHIN 0.05', HOWEVER CONTRACTOR SHALL NOT CONSTRUCT ANY IMPROVEMENTS THAT WILL CAUSE WATER TO POND OR NOT MEET REQUIREMENTS IN GRADING NOTE #1.
8. THE CONTRACTOR SHALL EXERCISE EXTREME CARE TO CONFORM TO THE LINES, GRADES, SECTIONS, AND DIMENSIONS AS SET FORTH ON THESE PLANS. ALL GRADED AREAS SHALL CONFORM TO THE VERTICAL ELEVATIONS SHOWN WITH A TOLERANCE OF ONE-TENTH OF A FOOT. WHERE GRADED AREAS DO NOT CONFORM TO THESE TOLERANCES, THE CONTRACTORS SHALL BE REQUIRED TO DO CORRECTIVE GRADING, AT NO EXTRA COST TO THE CLIENT.
9. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THE GROUND ELEVATIONS AND OVERALL TOPOGRAPHY OF THE SITE PRIOR TO THE START OF CONSTRUCTION AS TO THE ACCURACY BETWEEN THE WORK SET FORTH ON THESE PLANS AND THE WORK IN THE FIELD. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE CONSTRUCTION MANAGER AND CIVIL ENGINEER IN WRITING PRIOR TO START OF CONSTRUCTION WHICH MAY REQUIRE CHANGES IN DESIGN AND/OR AFFECT THE EARTHWORK QUANTITIES.
10. THE CONTRACTOR SHALL ADJUST TO FINAL GRADE ALL EXISTING MANHOLES, CURB INLETS, CATCH BASINS, VALVES, MONUMENT COVERS, AND OTHER CASTINGS WITHIN THE WORK AREA TO FINAL GRADE IN PAVEMENT AND LANDSCAPE AREAS UNLESS NOTED OTHERWISE.

## STORM DRAIN NOTES:

1. USE DETECTABLE METALIZED WARNING TAPE APPROXIMATELY 6" BELOW THE SURFACE. TAPE SHALL BE A BRIGHT COLOR AND IMPRINTED WITH "CAUTION-BURIED STORM DRAIN LINE BELOW".
2. PRIVATE STORM DRAIN LINE 4-INCH THROUGH 12-INCH IN NON-TRAFFIC AREAS SHALL BE INSTALLED WITH A MINIMUM OF EIGHTEEN (18) INCHES OF COVER AND SHALL BE POLYVINYL CHLORIDE (PVC) SDR 35. ALL DIRECTION CHANGES SHALL BE MADE WITH WYE CONNECTIONS, 22.5° ELBOWS, 45° ELBOWS OR LONG SWEEP ELBOWS, 90° ELBOWS AND TEE's ARE PROHIBITED.
3. PRIVATE STORM DRAIN LINE 4-INCH THROUGH 12-INCH WITHIN VEHICULAR TRAFFIC AREAS SHALL BE INSTALLED WITH A MINIMUM OF EIGHTEEN (18) INCHES OF COVER AND SHALL BE POLYVINYL CHLORIDE (PVC) SDR 35 PIPE. ALL DIRECTION CHANGES SHALL BE MADE WITH WYE CONNECTIONS, OBTUSE ELBOWS OR LONG SWEEP ELBOWS, 90° ELBOWS AND TEE's ARE PROHIBITED.
4. PAINT THE TOP OF THE CURBS ADJACENT TO EACH CATCH BASIN INSTALLED UNDER THIS WORK OR ADJACENT TO THIS SITE WITH THE WORDS "NO DUMPING". WORDING TO BE BLUE 4" HIGH LETTERS ON A PAINTED WHITE BACKGROUND.
5. ALL AREA DRAINS AND CATCH BASINS GRATES WITHIN PEDESTRIAN ACCESSIBLE AREAS SHALL MEET ADA REQUIREMENTS.
6. DRAINS SHOWN ON CIVIL PLANS ARE NOT INTENDED TO BE THE FINAL NUMBER AND LOCATION OF ALL DRAINS. PLACEMENT AND NUMBER OF LANDSCAPING DRAINS ARE HIGHLY DEPENDENT ON GROUND COVER TYPE AND PLANT MATERIAL. CONTRACTOR SHALL ADD ADDITIONAL AREA DRAINS AS NEEDED AND AS DIRECTED BY THE LANDSCAPE ARCHITECT/OWNER.
7. WHERE FEASIBLE ALL DOWNSPOUTS SHALL DISCHARGE TO A SPLASHBLOCK OR IMPERVIOUS SURFACE AND FLOW TO LANDSCAPED FEATURES BEFORE ENTERING THE DRAINAGE SYSTEM. USE OF AREA DRAINS (RATHER THAN DIRECT CONNECTION TO DRAINAGE SYSTEM) TO COLLECT ROOF/SURFACE WATER IS STRONGLY ENCOURAGED IN CONFORMANCE WITH COUNTYWIDE C.3 REQUIREMENTS. OTHERWISE, DOWNSPOUTS SHALL BE CONNECTED TO THE STORM DRAIN SYSTEM WITH 4" PVC SDR 35 PIPE WHERE SHOWN ON PLANS. SEE ARCHITECTURE PLANS FOR EXACT LOCATION OF THE DOWN SPOUTS.
8. CONTRACTOR SHALL INSTALL RAIN GUTTER GUARDS OR WIRE MESH ON ALL ROOF GUTTERS TO REDUCE THE AMOUNT TO LEAVES AND DEBRIS FROM ENTERING THE STORM DRAIN SYSTEM.
9. CONTRACTOR TO COORDINATE ANY VENT WELL DRAINS AND RAT SLAB DRAINS WITH PERIMETER SUB-DRAIN SYSTEM. SEE ARCHITECTURAL PLANS FOR VENT WELL LOCATIONS. SEE STRUCTURAL PLANS FOR FOUNDATION AND RAT SLAB.
10. INSTALL SEPARATE SUB-DRAIN SYSTEM BEHIND RETAINING WALLS PER GEOTECHNICAL REPORT AND CONNECT TO STORM DRAIN SYSTEM AT SUMP PUMP.

## GENERAL UTILITY SYSTEM NOTES :

1. UNDERGROUND UTILITIES OR STRUCTURES ARE SHOWN IN THEIR APPROXIMATE LOCATIONS AND EXTENT BASED UPON FIELD OBSERVATION ONLY. NO GUARANTEE IS MADE TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. THE CONTRACTOR SHALL VERIFY THE TYPE, SIZE, LOCATION AND DEPTH OF ALL THE UTILITIES AND CROSSINGS TO ENSURE THEY ARE CORRECT AS SHOWN. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN EXCAVATING AND SHALL PROTECT ALL EXISTING UTILITIES FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS.
2. CONTRACTOR SHALL PREPARE AN ACCURATE COMPOSITE UTILITY PLAN THAT TAKES INTO ACCOUNT THE ACTUAL LOCATIONS OF EXISTING UTILITIES AS DETERMINED DURING THE DEMOLITION WORK, AND ALL PROPOSED UTILITIES SHOWN ON THE CIVIL, ELECTRICAL, JOINT TRENCH AND FIRE SPRINKLER DRAWINGS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING APPROPRIATE UTILITIES AND REQUESTING VERIFICATION OF SERVICE POINTS, FIELD VERIFICATION OF LOCATION, SIZE, DEPTH, ETC. FOR ALL THEIR FACILITIES AND TO COORDINATE WORK SCHEDULES.
4. CONTRACTOR SHALL REPLACE ALL COVERS AND GRATE LIDS FOR MANHOLES, VAULTS, CATCH BASINS, ETC., WITH VEHICULAR-RATED STRUCTURES IN ALL TRAFFIC ACCESSIBLE AREAS.
5. TRENCHES SHALL NOT BE LEFT OPEN OVERNIGHT IN EXISTING PUBLIC STREET AREAS. CONTRACTOR SHALL BACKFILL TRENCHES, OR PLACE STEEL PLATING WITH ADEQUATE CUTBACK TO PREVENT SHIFTING OF STEEL PLATE AND/OR HOT-MIX ASPHALT REQUIRED TO PROTECT OPEN TRENCHES AT THE END OF THE WORKING DAY.
6. ALL TRENCHES SHALL BE BACK FILLED PER THE SPECIFICATIONS WITH APPROPRIATE TESTS BY THE GEOTECHNICAL ENGINEER TO VERIFY COMPACTION VALUES.
7. CLEAN OUTS, CATCH BASINS, MANHOLES, AREA DRAINS AND UTILITY VAULTS ARE TO BE ACCURATELY LOCATED BY THEIR RELATIONSHIP TO THE BUILDING, FLATWORK, ROOF DRAINS, AND/OR CURB LAYOUT, NOT BY THE LENGTH OF PIPE SPECIFIED IN THE DRAWINGS (WHICH IS APPROXIMATE). CONTRACTOR SHALL STAKE LOCATIONS OF ABOVE GROUND UTILITY EQUIPMENT (BACKFLOW PREVENTOR, TRANSFORMER, UTILITY METERS, ETC.) AND MEET WITH OWNER TO REVIEW LOCATION PRIOR TO INSTALLATION.
8. CATHODIC PROTECTION MAY BE REQUIRED ON ALL METALLIC FITTINGS AND ASSEMBLIES THAT ARE IN CONTACT WITH THE SOIL, IF RECOMMENDED BY THE GEOTECHNICAL REPORT. CONTRACTOR IS RESPONSIBLE TO FULLY ENGINEER AND INSTALL THIS SYSTEM AND COORDINATE ANODE AND TEST STATION LOCATIONS WITH PROJECT MANAGER AND HOME OWNER.
9. ALL UTILITY SYSTEMS (SANITARY SEWER, STORM DRAIN, WATER SYSTEM, ETC.) ARE DELINEATED IN A SCHEMATIC MANNER ON THESE PLANS. CONTRACTOR IS TO PROVIDE ALL FITTINGS, ACCESSORIES AND WORK NECESSARY TO COMPLETE THE UTILITY SYSTEM SO THAT IT IS FULLY FUNCTIONING FOR THE PURPOSE INTENDED.
10. CONTRACTOR SHALL VERIFY ALL EXISTING INVERT ELEVATIONS FOR STORM DRAIN AND SANITARY SEWER CONSTRUCTION PRIOR TO COMMENCEMENT OF ANY WORK. ALL WORK FOR STORM AND SANITARY SEWER INSTALLATION SHALL BEGIN AT THE DOWNSTREAM CONNECTION POINT TO ALLOW FOR ANY NECESSARY ADJUSTMENTS TO BE MADE PRIOR TO THE INSTALLATION OF THE ENTIRE LINE. IF THE CONTRACTOR FAILS TO BEGIN AT THE DOWNSTREAM CONNECTION POINT AND WORKS UP STREAM, HE SHALL PROCEED AT HIS OWN RISK AND BE RESPONSIBLE FOR ANY ADJUSTMENTS NECESSARY. CONTRACTOR SHALL VERIFY LOCATION OF SANITARY SEWER LATERAL WITH OWNER PRIOR TO CONSTRUCTION.
11. CONTRACTOR SHALL UNCOVER AND EXPOSE ALL EXISTING UTILITIES WHERE THEY ARE TO BE CROSSED ABOVE OR BELOW BY THE NEW FACILITY BEING CONSTRUCTED IN ORDER TO VERIFY THE GRADE AND TO ASSURE THAT THERE IS SUFFICIENT HORIZONTAL AND VERTICAL CLEARANCE. BRING ANY DISCREPANCIES TO THE ATTENTION OF THE CIVIL ENGINEER PRIOR TO INSTALLATION.
12. VERTICAL SEPARATION REQUIREMENTS:

    A MINIMUM OF SIX (6) INCHES VERTICAL CLEARANCE SHALL BE PROVIDED BETWEEN CROSSING UTILITY PIPES, EXCEPT THAT THE MINIMUM VERTICAL CLEARANCE BETWEEN WATER AND SANITARY SEWER PIPELINES SHALL BE 12 INCHES AND ALL NEW WATER PIPES SHALL BE TYPICALLY INSTALLED TO CROSS ABOVE/OVER EXISTING SANITARY SEWER PIPELINES.

    WHERE NEW WATER PIPELINES ARE REQUIRED TO CROSS UNDER EXISTING AND/OR NEW SANITARY SEWER PIPELINES, THE MINIMUM VERTICAL SEPARATION SHALL BE 12 INCHES. WATER LINE PIPE ENDS SHALL BE INSTALLED NO CLOSER THAN 10' MINIMUM HORIZONTAL DISTANCE FROM CENTERLINE OF UTILITY CROSSINGS, WHERE FEASIBLE.

    HORIZONTAL SEPARATION REQUIREMENTS:

    A MINIMUM HORIZONTAL SEPARATION BETWEEN NEW PIPELINES AND ANY EXISTING UTILITIES SHALL BE 5' FEET, EXCEPT THAT THE MINIMUM HORIZONTAL SEPARATION FOR WATER AND SANITARY SEWER PIPELINES SHALL BE 10' MINIMUM, UNLESS OTHERWISE NOTED. WHERE WATER LINES HAVE TO CROSS SANITARY SEWER LINES, DO SO AT A 90° ANGLE AND WATER LINES SHALL BE A MINIMUM OF 12" ABOVE TOP OF SANITARY SEWER LINES.

    A MINIMUM HORIZONTAL SEPARATION BETWEEN NEW PIPELINES AND JOINT TRENCH SHALL BE 5 FEET.

## SANITARY SEWER NOTES:

1. USE DETECTABLE METALIZED WARNING TAPE APPROXIMATELY 6" BELOW THE SURFACE. TAPE SHALL BE A BRIGHT COLOR AND IMPRINTED WITH "CAUTION-BURIED SANITARY SEWER LINE BELOW".
2. ALL SEWER WORK SHALL BE IN CONFORMANCE WITH THE CITY OR APPROPRIATE SANITARY SEWER DISTRICT.
3. PUBLIC AND PRIVATE SANITARY SEWER MAIN AND SERVICE LINE 4-INCH THROUGH 8-INCH WITH A MINIMUM OF TWENTY FOUR (24) INCHES OF COVER SHALL BE POLYVINYL CHLORIDE (PVC) SDR 26 GREEN SEWER PIPE AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION D 3034-73 WITH GLUED JOINTS. ALL DIRECTION CHANGES SHALL BE MADE WITH WYE CONNECTIONS, 22.5° ELBOWS or 45° ELBOWS, 90° ELBOWS AND TEE's ARE PROHIBITED.
4. ALL LATERALS SHALL HAVE A CLEANOUT AT FACE OF BUILDING, AT THE PROPERTY LINE AND AS SHOWN ON PLANS PER THE CITY STANDARD OR APPROPRIATE SANITARY SEWER DISTRICT.
5. IF (E) SEWER LATERAL IS TO BE USED, CONTRACTOR SHALL CONDUCT WATER PRESSURE TEST AND A VIDEO INSPECTION ON THE ENTIRE SECTION OF EXISTING LATERAL FROM HOUSE TO SEWER MAIN. CONTRACTOR SHALL PERFORM ANY NECESSARY CLEANING AND/OR REPAIRS WITHIN THE LATERAL AND AT THE CONNECTION.

## WATER SYSTEM NOTES:

1. USE DETECTABLE METALIZED WARNING TAPE APPROXIMATELY 6" BELOW THE SURFACE. TAPE SHALL BE A BRIGHT COLOR AND IMPRINTED WITH "CAUTION-BURIED WATER LINE BELOW".
2. ALL WATER SERVICE CONNECTIONS, INCLUDING BUT NOT LIMITED TO WATER VALVES TEMPORARY AND PERMANENT AIR RELEASE VALVES AND BLOW OFF VALVES, SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY/COUNTY OR APPLICABLE WATER DISTRICT STANDARDS.
3. CONTRACTOR SHALL SIZE AND INSTALL ALL NEW DESIGN BUILD DOMESTIC IRRIGATION AND FIRE WATER LINE(S) IN ACCORDANCE WITH THE LATEST EDITION OF THE UNIFORM/CALIFORNIA PLUMBING AND FIRE CODES. (ALL FIXTURE UNIT COUNTS SHALL BE REVIEWED AND APPROVED BY THE CITY'S BUILDING AND/OR WATER DEPARTMENT PRIOR TO CONSTRUCTION.)
4. ALL WATER LINES SHALL BE INSTALLED WITH 36" MINIMUM COVER.
5. PUBLIC AND PRIVATE WATER MAIN AND WATER SERVICE LINE4" THROUGH 12-INCH SHALL BE POLYVINYL CHLORIDE (PVC) AND SHALL MEET AWWA C900, RATED FOR 200 PSI CLASS PIPE WITH EPOXY COATED DUCTILE IRON FITTINGS AND FUSION EPOXY COATED GATE VALVES. ALL JOINTS SHALL BE FACTORY MANUFACTURED WITH BELL AND SPIGOT ENDS AND RUBBER GASKETS.
6. ALL WATER LINES 2" OR SMALLER SHALL BE TYPE K COPPER WITH SILVER BRAZED JOINTS. CONTRACTOR TO VERIFY PRESSURES FROM EXISTING LINES ARE ADEQUATE TO SERVICE BUILDINGS AS SPECIFIED BY THE PLUMBING PLANS.
7. CONNECTIONS TO THE EXISTING WATER MAIN SHALL BE APPROVED BY THE APPLICABLE WATER DISTRICT STANDARDS. THE CONTRACTOR SHALL PAY THE ACTUAL COSTS OF CONSTRUCTION. THE CONTRACTOR SHALL PERFORM ALL EXCAVATION, PREPARE THE SITE, FURNISH ALL MATERIALS, INSTALL TAPPING TEE, VALVE AND ALL THRUST BLOCKS, BACKFILL, RESTORE THE SURFACE, AND CLEAN UP. THE APPLICABLE WATER DISTRICT STANDARDS WILL PROVIDE THE CONTRACTOR WITH A LIST OF APPROVED CONTRACTORS FOR MAKING WET TAPS.
8. ALL WATER VALVES SHALL BE CLUSTERED, UNLESS OTHERWISE DIRECTED BY THE CITY/COUNTY OR APPLICABLE WATER DISTRICT.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COLLECTING AND DELIVERING WATER SAMPLES FOR ANALYSIS TO A CITY/COUNTY/APPLICABLE WATER DISTRICT APPROVED LAB.
10. ALL ON AND OFF-SITE LANDSCAPE IRRIGATION SYSTEMS SHALL BE IN ACCORDANCE WITH THE LANDSCAPE ARCHITECTURAL PLANS AND SPECIFICATIONS AND SHALL BE CONNECTED TO THE EXISTING AND/OR NEW WATER SYSTEM AND METERED ACCORDINGLY.
11. INSTALL CITY/COUNTY/APPLICABLE WATER DISTRICT APPROVED PRESSURE REGULATOR AND REDUCED BACKFLOW PREVENTOR ON WATER LINE AT ENTRANCE TO BUILDING. REFERENCE PLUMBING PLANS FOR MORE DETAIL.

## FIRE PROTECTION NOTES:

1. CONTRACTOR SHALL INSTALL THE DESIGN BUILD FIRE SERVICE LINE, BACKFLOW PREVENTOR, SPRINKLERS AND EQUIPMENT IN ACCORDANCE WITH THE FIRE PROTECTION CONSULTANT'S PLANS, SPECIFICATIONS, LATEST EDITION OF THE UNIFORM/CALIFORNIA FIRE CODE AND CITY/TOWN STANDARDS.
2. THE UNDERGROUND FIRE PROTECTION SYSTEM INSTALLER SHALL PREPARE SHOP DRAWINGS SHOWING ALL INFORMATION REQUIRED BY THE LOCAL FIRE MARSHAL, INCLUDING ANGLES, THRUST BLOCKS, VALVES, FIRE HYDRANTS, PIV's, FDC's, BACKFLOW ASSEMBLIES, FLEXIBLE CONNECTIONS, VAULTS, ETC.
3. SHOP DRAWINGS SHALL BE SUBMITTED TO THE LOCAL FIRE MARSHAL, THE RATING AGENCY AND THE PROJECT MANAGER, ALLOWING TIME FOR REVIEW AND ACCEPTANCE, PRIOR TO START OF WORK.
4. THE UNDERGROUND FIRE PROTECTION SYSTEM INSTALLER SHALL OBTAIN ALL APPROVALS AND PERMITS PRIOR TO ORDERING MATERIALS, FABRICATING SYSTEMS OR ANY INSTALLATION.
5. GENERAL CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS AND EQUIPMENT LOCATIONS. RISER LOCATIONS ARE SHOWN ON ARCHITECTURAL AND PLUMBING DRAWINGS AND ARE TO BE COORDINATED WITH ACTUAL FIELD CONDITIONS.

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| DATE: | REVISIONS: |
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TRAVIS R. LUTZ
73638
CIVIL

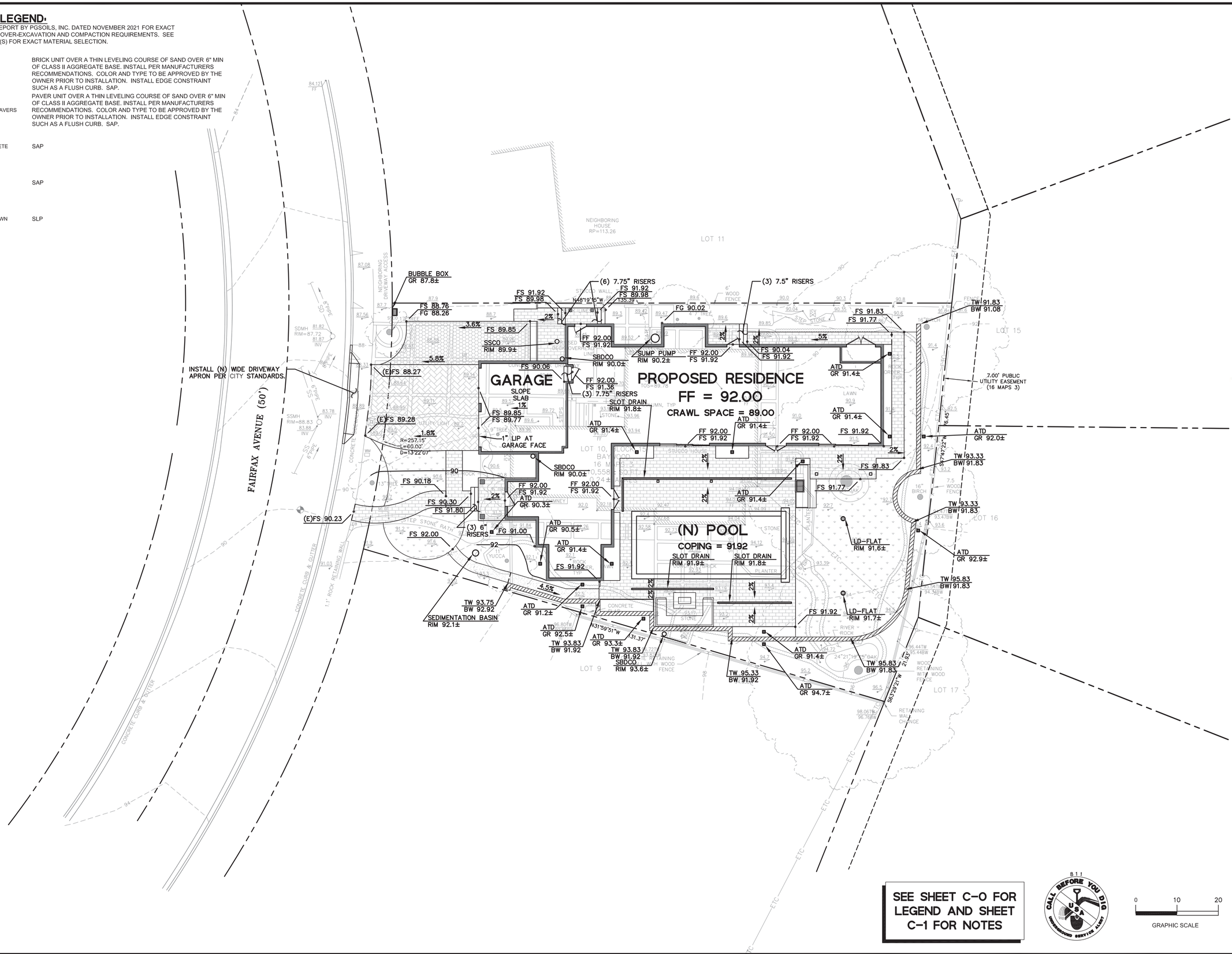
NOTES SHEET
ALSTON RESIDENCE
415 FAIRFAX AVENUE
SAN MATEO, CA 94402

Date: 01/19/2022
Scale: NONE
Design: AJP
Check: TRL
Drawing Number: C-1
PEC Job No. PEC 21-125

## PAVEMENT LEGEND:

SEE GEOTECHNICAL REPORT BY PGSOILS, INC. DATED NOVEMBER 2021 FOR EXACT PAVEMENT SECTIONS, OVER-EXCAVATION AND COMPACTION REQUIREMENTS. SEE ARCHITECTURAL PLAN(S) FOR EXACT MATERIAL SELECTION.

| | |
|---|---|
| STONE | BRICK UNIT OVER A THIN LEVELING COURSE OF SAND OVER 6" MIN OF CLASS II AGGREGATE BASE. INSTALL PER MANUFACTURERS RECOMMENDATIONS. COLOR AND TYPE TO BE APPROVED BY THE OWNER PRIOR TO INSTALLATION. INSTALL EDGE CONSTRAINT SUCH AS A FLUSH CURB. SAP. |
| CONCRETE PAVERS | PAVER UNIT OVER A THIN LEVELING COURSE OF SAND OVER 6" MIN OF CLASS II AGGREGATE BASE. INSTALL PER MANUFACTURERS RECOMMENDATIONS. COLOR AND TYPE TO BE APPROVED BY THE OWNER PRIOR TO INSTALLATION. INSTALL EDGE CONSTRAINT SUCH AS A FLUSH CURB. SAP. |
| GRASSCRETE | SAP |
| DG | SAP |
| GRASS/LAWN | SLP |





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REVISIONS:

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CIVIL
STATE OF CALIFORNIA

# GRADING PLAN
## ALSTON RESIDENCE
## 415 FAIRFAX AVENUE
## SAN MATEO, CA 94402

| | |
|---|---|
| Date: | 01/19/2022 |
| Scale: | 1" = 10' |
| Design: | AJP |
| Check: | TRL |
| Drawing Number: | C-2 |
| PEC Job No. | PEC 21-125 |

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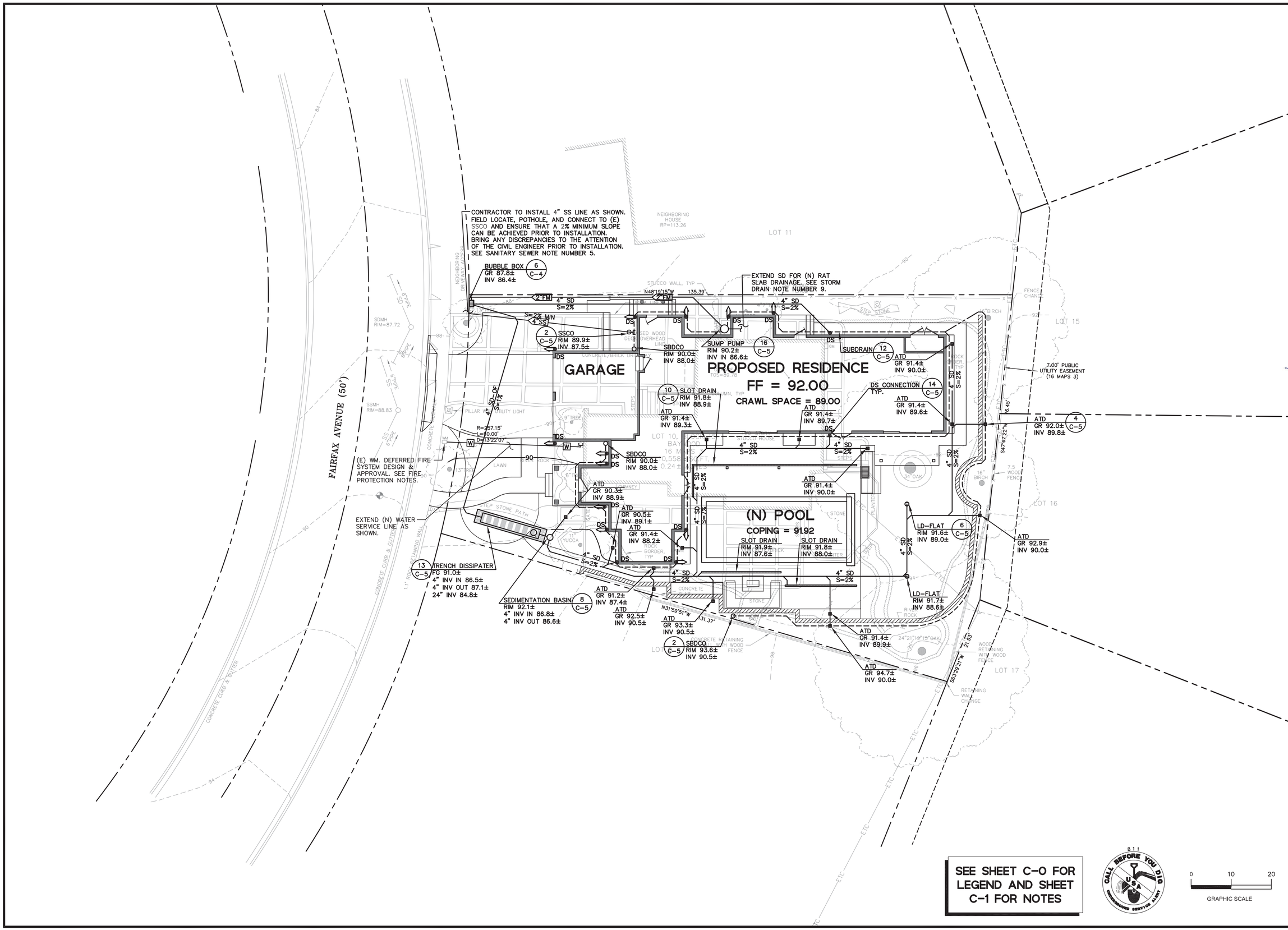
PLOTTED: 8:11AM

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# UTILITY PLAN
## ALSTON RESIDENCE
## 415 FAIRFAX AVENUE
## SAN MATEO, CA 94402

| | |
|---|---|
| Date: | 01/19/2022 |
| Scale: | 1" = 10' |
| Design: | AJP |
| Check: | TRL |
| Drawing Number: | C-3 |
| PEC Job No. | PEC 21-125 |

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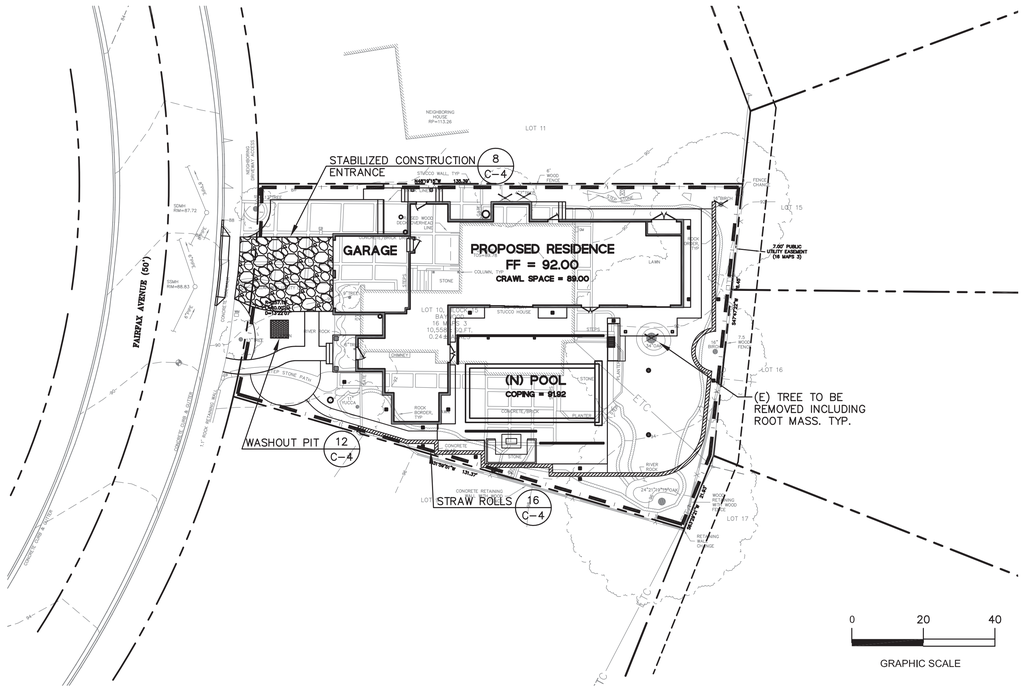
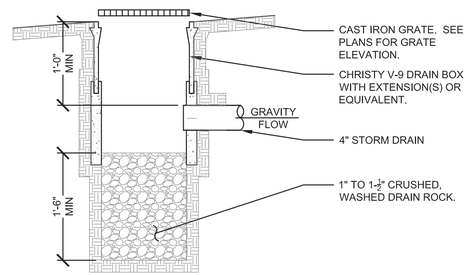
PLOTTED: 8:11AM

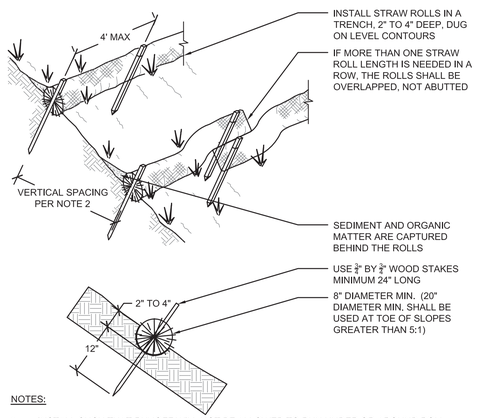



## 6 BUBBLE BOX

SCALE : 1"=1'-0"

BUBBLE BOX-012-*MSTR



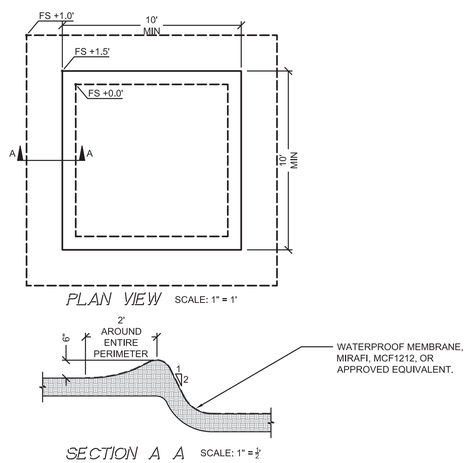

NOTES:

1. INSTALL SUCH THAT RUNOFF WILL NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL. TURN ENDS UP SLOPE TO PREVENT RUNOFF FROM GOING AROUND ROLL.
2. SPACE STRAW ROLLS AS FOLLOWS:
   - SLOPE OF 4:1 OR FLATTER = 20 FEET APART
   - SLOPE BETWEEN 4:1 AND 2:1 = 15 FEET APART
   - SLOPE OF 2:1 OR GREATER = 10 FEET APART
3. INSPECT AND REPAIR STRAW ROLLS AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE.
4. IN LIEU OF STRAW ROLL INSTALLATION AROUND PROJECT PERIMETER, CONTRACTOR HAS OPTION TO PRESERVE A NATURAL VEGETATED BUFFER 3 FOOT MINIMUM IN WIDTH OR A 6 INCH HIGH BERM.

## 16 STRAW ROLL

SCALE : 3/4"=1'-0"

STRAW ROLL-016-*MSTR



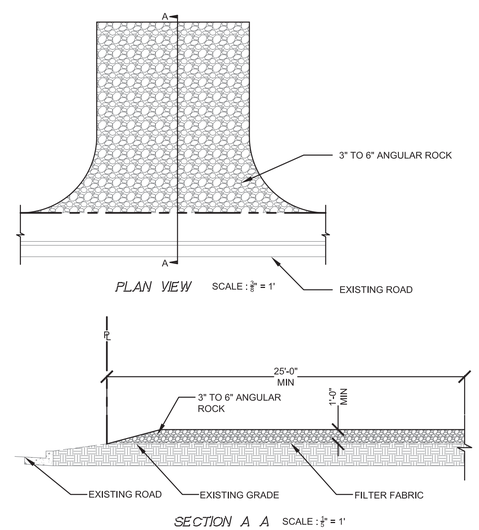

NOTES:

1. LOCATE AWAY FROM STORM DRAIN INLETS, DRAINAGE FACILITIES, OR WATERCOURSES. DO NOT DISCHARGE WASH WATER TO STORM DRAINS OR WATERCOURSES.
2. BERM UP EDGES AS SHOWN IN SECTION A-A TO CONTAIN WASH WATERS AND TO PREVENT RUNON AND RUNOFF.
3. IF WASH WATER REACHES WITHIN 3" OF THE TOP OF BERM, CONTRACTOR SHALL UTILIZE SUMP PUMP AND DESILTING BASIN TO REMOVE SEDIMENT LADEN WASH WATER.

## 12 TEMPORARY WASHOUT PIT

SCALE : AS SHOWN

WASHOUT PIT-024-*MSTR




NOTES:

1. PROVIDE A FANNED STABILIZED CONSTRUCTION ENTRANCE TO ACCOMMODATE THE TURNING RADIUS OF CONSTRUCTION EQUIPMENT ON AND OFF THE PUBLIC STREET.

## 8 GRAVEL CONSTRUCTION ENTRANCE

SCALE : AS SHOWN

TEMP GRAV CONST ENT-060-*MSTR

## EROSION AND SEDIMENT CONTROL NOTES:

1. ALL EROSION CONTROL MATERIALS, INCLUDING SILT FENCE(S), FIBER ROLL(S) AND STABILIZED CONSTRUCTION ENTRY, SHALL BE FURNISHED AND INSTALLED BY CONTRACTOR BY SEPTEMBER 15TH AND SHALL REMAIN IN PLACE UNTIL THE PERMANENT LANDSCAPING GROUND COVER AND FLATWORK IS INSTALLED. CONTRACTOR SHALL CONTINUOUSLY MONITOR THESE MEASURES, FOLLOWING AND DURING ALL RAIN EVENTS, TO ENSURE THEIR PROPER FUNCTION.
2. BMP'S AS OUTLINED IN THE CALIFORNIA STORMWATER QUALITY ASSOCIATION'S (CASQA) BMP HANDBOOK, JANUARY 2015, OR THE LATEST EDITION, SHALL APPLY DURING THE CONSTRUCTION OF THE PROJECT. ALL CONSTRUCTION IMPROVEMENTS SHALL ADHERE TO NPDES (NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM) BEST MANAGEMENT PRACTICES FOR SEDIMENTATION PREVENTION AND EROSION CONTROL TO PREVENT DELETERIOUS MATERIALS OR POLLUTANTS FROM ENTERING THE TOWN/CITY STORM DRAIN SYSTEMS AND PUBLIC RIGHT OF WAYS. ADDITIONAL MEASURES MAY BE REQUIRED IF DEEMED APPROPRIATE BY TOWN/CITY INSPECTORS.
3. SEDIMENTS AND OTHER MATERIALS MUST BE RETAINED ON SITE AND MAY NOT BE TRANSPORTED FROM THE SITE VIA VEHICLE TRAFFIC, SHEET FLOW, SWALES, AREA DRAINS, NATURAL DRAINAGE COURSES, OR WIND. THE CONTRACTOR SHALL INSTALL A STABILIZED CONSTRUCTION ENTRANCE PRIOR TO THE INCEPTION OF ANY WORK ONSITE AND MAINTAIN IT FOR THE DURATION OF THE CONSTRUCTION PROCESS SO AS TO INHIBIT SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC RIGHT-OF-WAY. ACCIDENTAL DEPOSITIONS MUST BE SWEPT UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
4. STOCKPILES OF EARTH AND OTHER CONSTRUCTION RELATED MATERIALS MUST BE PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND OR WATER. COVER STOCKPILED MATERIAL WITH PLASTIC UNTIL THE MATERIAL IS REMOVED FROM THE SITE.
5. CONTRACTOR SHALL MAINTAIN ADJACENT STREETS IN A NEAT, CLEAN, DUST FREE AND SANITARY CONDITION AT ALL TIMES AND TO THE SATISFACTION OF THE TOWN/CITY AND HOME OWNER. THE ADJACENT STREET SHALL BE KEPT CLEAN OF DEBRIS, WITH DUST AND OTHER NUISANCE BEING CONTROLLED AT ALL TIMES. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY CLEAN UP ON ADJACENT STREETS AFFECTED BY THEIR CONSTRUCTION, METHOD OF STREET CLEANING SHALL BE BY DRY SWEEPING.
6. THE CONTRACTOR SHALL PROTECT DOWN SLOPE DRAINAGE COURSES, STREAMS AND STORM DRAINS WITH ROCK FILLED SAND BAGS, TEMPORARY SWALES, SILT FENCES, AND EARTH BERMS IN CONJUNCTION WITH PROPERLY INSTALLED INLET FILTERS.
7. THE CONTRACTOR IS RESPONSIBLE FOR ALL DUST CONTROL MEASURES AND FOR OBTAINING ALL REQUIRED DUST CONTROL PLANS, APPROVALS AND PERMITS. THE CONTRACTOR SHALL DEMONSTRATE DUST SUPPRESSION MEASURES, SUCH AS REGULAR WATERING, WHICH SHALL BE IMPLEMENTED TO REDUCE EMISSIONS DURING CONSTRUCTION AND GRADING IN A MANNER MEETING THE APPROVAL OF THE TOWN/CITY.
8. THE CONTRACTOR SHALL PROVIDE SUFFICIENT DUST CONTROL FOR THE ENTIRE PROJECT SITE AT ALL TIMES AND SHALL IMPLEMENT WATER TRUCKS AS NEEDED TO CONTROL DUST. ALL PORTIONS OF THE SITE SUBJECT TO BLOWING DUST SHALL BE WATERED AS OFTEN AS DEEMED NECESSARY BY THE TOWN/CITY IN ORDER TO INSURE PROPER CONTROL OF BLOWING DUST FOR THE DURATION OF THE PROJECT. IN THE EVENT THAT THE CONTRACTOR NEGLECTS TO USE ADEQUATE MEASURES TO CONTROL DUST, THE HOME OWNER RESERVES THE RIGHT TO TAKE WHATEVER MEASURES ARE NECESSARY TO CONTROL DUST AND CHARGE THE COST TO THE CONTRACTOR.
9. ALL DEBRIS BINS SHALL BE COVERED AT THE END OF EACH WORKING DAY WITH WATERTIGHT COVER TO MITIGATE BLOWING TRASH/DEBRIS AND LEACHING DUE TO RAINFALL.
10. CONTRACTOR SHALL ASSUME THE CONCEPTS ON THE EROSION CONTROL PLAN, WHICH ARE SCHEMATIC MINIMUM REQUIREMENTS, THE FULL EXTENT OF WHICH ARE TO BE DETERMINED BY THE CONTRACTOR AT THE TIME OF CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR THE EXACT DESIGN AND EXTENT OF THE EROSION CONTROL SYSTEM SO THAT IT WORKS WITH THE INTENDED USE AND MANAGEMENT OF THE CONSTRUCTION SITE.
11. ALL EROSION CONTROL FACILITIES SHALL BE INSPECTED BY THE CONTRACTOR AT THE CONCLUSION OF EACH WORKING DAY AND SHALL MAKE NECESSARY REPAIRS PRIOR TO ANTICIPATED STORMS AND AT REASONABLE INTERVALS DURING STORMS OF EXTENDED DURATION. REPAIRS TO DAMAGED FACILITIES SHALL BE MADE IMMEDIATELY UPON DISCOVERY.
12. FOLLOWING EACH STORM AND AS NEEDED, THE CONTRACTOR SHALL REMOVE ANY ACCUMULATION OF SILT OR DEBRIS IN THE STREET AND FROM THE EROSION CONTROL SEDIMENT BASINS AND SHALL CLEAR THE OUTLET PIPES OF ANY BLOCKAGES.
13. NECESSARY EROSION CONTROL MATERIALS SHALL BE AVAILABLE ON SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID INSTALLATION AND REPLACEMENT OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
14. ANY SLOPES WITH DISTURBED SOILS OR DENUDED OF VEGETATION MUST BE STABILIZED SO AS TO INHIBIT EROSION BY WIND AND WATER. PROTECT UNDISTURBED AREAS FROM CONSTRUCTION IMPACTS USING VEGETATIVE BUFFER STRIPS, SEDIMENT BARRIERS OR FILTERS, DIKES, MULCHING OR OTHER MEASURES SEEN APPROPRIATE.
15. ALL TRUCKS HAULING SOIL, SAND, AND OTHER LOOSE MATERIALS SHALL BE COVERED WITH TARPAULINS OR OTHER EFFECTIVE COVERS.
16. WHEEL WASHERS SHALL BE USED AS NEEDED TO CLEAN ALL TRUCKS AND EQUIPMENT LEAVING THE CONSTRUCTION SITE. IF WHEEL WASHERS CANNOT BE INSTALLED, TIRES OR TRACKS OF ALL TRUCKS AND EQUIPMENT SHALL BE WASHED OFF BEFORE LEAVING THE CONSTRUCTION SITE.
17. FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS MUST BE STORED IN ACCORDANCE WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS MUST BE CLEANED UP IMMEDIATELY USING DRY METHODS AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT BE WASHED INTO THE DRAINAGE SYSTEM. CALL 911 IN CASE OF A HAZARDOUS SPILL.
18. EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC RIGHT-OF-WAY OR ANY OTHER DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL THEY CAN BE DISPOSED OF AS SOLID WASTE. NEVER CLEAN MACHINERY, EQUIPMENT OR TOOLS INTO A STREET, GUTTER OR STORM DRAIN.
19. TRASH AND CONSTRUCTION RELATED SOLID WASTES MUST BE DEPOSITED INTO A COVERED RECEPTACLE TO PREVENT CONTAMINATION AND DISPERSAL BY WIND.
20. UPON SATISFACTORY COMPLETION OF THE WORK, THE ENTIRE WORK SITE SHALL BE CLEANED BY THE CONTRACTOR AND LEFT WITH A SMOOTH AND NEATLY GRADED SURFACE FREE OF CONSTRUCTION WASTE, RUBBISH, AND DEBRIS OF ANY NATURE.
21. SITE CONDITIONS AT TIME OF PLACEMENT OF EROSION CONTROL MEASURES WILL VARY. THE CONTRACTOR SHALL ADJUST EROSION CONTROL MEASURES AS THE SITE CONDITIONS CHANGE AND AS THE NEED OF CONSTRUCTION SHIFT TO PREVENT EROSION AND SEDIMENTATION FROM LEAVING SITE
22. PLANS SHALL BE DESIGNED TO MEET THE C.3 REQUIREMENTS OF THE MUNICIPAL REGIONAL STORMWATER NPDES PERMIT ("MRP") CAS612008.
23. THE CONTRACTOR MUST INSTALL ALL EROSION AND SEDIMENTATION CONTROL MEASURES PRIOR TO THE INCEPTION OF ANY WORK ONSITE AND MAINTAIN THE MEASURES UNTIL THE COMPLETION OF ALL LANDSCAPING.
24. ALL EXPOSED SLOPES THAT ARE NOT VEGETATED SHALL BE HYDROSEEDED. IF HYDROSEEDING IS NOT USED OR IS NOT EFFECTIVE BY OCTOBER 1, THEN OTHER IMMEDIATE METHODS SHALL BE IMPLEMENTED, SUCH AS EROSION CONTROL BLANKET. HYDROSEEDING SHALL BE IN ACCORDANCE WITH THE PROVISION OF SECTION 20 "EROSION CONTROL AND HIGHWAY PLANTING" OF THE STANDARD SPECIFICATION OF THE STATE OF CALIFORNIA OF TRANSPORTATION, AS LAST REVISED.
25. THE CONTRACTOR SHALL PROVIDE SECONDARY CONTAINMENT FOR PORTABLE TOILETS.

SEE SHEET C-0 FOR LEGEND AND SHEET C-1 FOR NOTES

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REGISTERED PROFESSIONAL ENGINEER
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CIVIL
STATE OF CALIFORNIA

# EROSION AND SEDIMENT CONTROL PLAN
ALSTON RESIDENCE
415 FAIRFAX AVENUE
SAN MATEO, CA 94402

Date: 01/19/2022
Scale: AS SHOWN
Design: AJP
Check: TRL
Drawing Number: C-4
PEC Job No. PEC 21-125

811 CALL BEFORE YOU DIG USA UNDERGROUND SERVICE ALERT

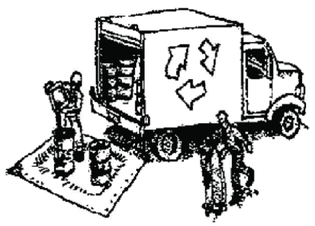
DRAWING NAME: C:\Users\travis\PEC Project Files\2021\PEC 21-125 - 415 Fairfax Avenue, San Mateo\Dwg\PEC 21-125 SHEETS.dwg
PLOTTED ON: 8/10/2022
PLOTTED BY: Brian Ng

SAN MATEO COUNTYWIDE
Water Pollution Prevention Program
Clean Water. Healthy Community.

# Construction Best Management Practices (BMPs)

Construction projects are required to implement the stormwater best management practices (BMP) on this page, as they apply to your project, all year long.

## Materials & Waste Management



**Non-Hazardous Materials**

- ❑ Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or if not actively being used within 14 days.
- ❑ Use (but don't overuse) reclaimed water for dust control.

**Hazardous Materials**

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

**Waste Management**

- ❑ Cover waste disposal containers securely with tarps at the end of every work day and during wet weather.
- ❑ Check waste disposal containers frequently for leaks and to make sure they are not overfilled. Never hose down a dumpster on the construction site.
- ❑ Clean or replace portable toilets, and inspect them frequently for leaks and spills.
- ❑ Dispose of all wastes and debris properly. Recycle materials and wastes that can be recycled (such as asphalt, concrete, aggregate base materials, wood, gyp board, pipe, etc.)
- ❑ Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.

**Construction Entrances and Perimeter**

- ❑ Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
- ❑ Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking. Never hose down streets to clean up tracking.

## Equipment Management & Spill Control

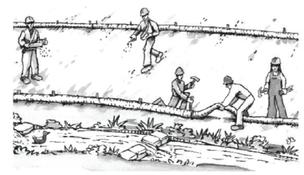
**Maintenance and Parking**

- ❑ Designate an area, fitted with appropriate BMPs, for vehicle and equipment parking and storage.
- ❑ Perform major maintenance, repair jobs, and vehicle and equipment washing off site.
- ❑ If refueling or vehicle maintenance must be done onsite, work in a bermed area away from storm drains and over a drip pan or drop cloths big enough to collect fluids. Recycle or dispose of fluids as hazardous waste.
- ❑ If vehicle or equipment cleaning must be done onsite, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or surface waters.
- ❑ Do not clean vehicle or equipment onsite using soaps, solvents, degreasers, or steam cleaning equipment.

**Spill Prevention and Control**

- ❑ Keep spill cleanup materials (e.g., rags, absorbents and cat litter) available at the construction site at all times.
- ❑ Inspect vehicles and equipment frequently for and repair leaks promptly. Use drip pans to catch leaks until repairs are made.
- ❑ Clean up spills or leaks immediately and dispose of cleanup materials properly.
- ❑ Do not hose down surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags).
- ❑ Sweep up spilled dry materials immediately. Do not try to wash them away with water, or bury them.
- ❑ Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- ❑ Report significant spills immediately. You are required by law to report all significant releases of hazardous materials, including oil. To report a spill: 1) Dial 911 or your local emergency response number, 2) Call the Governor's Office of Emergency Services Warning Center, (800) 852-7550 (24 hours).

## Earthmoving



- ❑ Schedule grading and excavation work during dry weather.
- ❑ Stabilize all denuded areas, install and maintain temporary erosion controls (such as erosion control fabric or bonded fiber matrix) until vegetation is established.
- ❑ Remove existing vegetation only when absolutely necessary, and seed or plant vegetation for erosion control on slopes or where construction is not immediately planned.
- ❑ Prevent sediment from migrating offsite and protect storm drain inlets, gutters, ditches, and drainage courses by installing and maintaining appropriate BMPs, such as fiber rolls, silt fences, sediment basins, gravel bags, berms, etc.
- ❑ Keep excavated soil on site and transfer it to dump trucks on site, not in the streets.

**Contaminated Soils**

- ❑ If any of the following conditions are observed, test for contamination and contact the Regional Water Quality Control Board:
  - Unusual soil conditions, discoloration, or odor.
  - Abandoned underground tanks.
  - Abandoned wells
  - Buried barrels, debris, or trash.

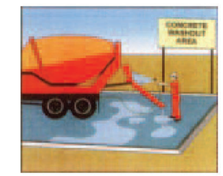
## Paving/Asphalt Work

- ❑ Avoid paving and seal coating in wet weather or when rain is forecast, to prevent materials that have not cured from contacting stormwater runoff.
- ❑ Cover storm drain inlets and manholes when applying seal coat, tack coat, slurry seal, fog seal, etc.
- ❑ Collect and recycle or appropriately dispose of excess abrasive gravel or sand. Do NOT sweep or wash it into gutters.
- ❑ Do not use water to wash down fresh asphalt concrete pavement.

**Sawcutting & Asphalt/Concrete Removal**

- ❑ Protect nearby storm drain inlets when saw cutting. Use filter fabric, catch basin inlet filters, or gravel bags to keep slurry out of the storm drain system.
- ❑ Shovel, abosorb, or vacuum saw-cut slurry and dispose of all waste as soon as you are finished in one location or at the end of each work day (whichever is sooner!).
- ❑ If sawcut slurry enters a catch basin, clean it up immediately.

## Concrete, Grout & Mortar Application

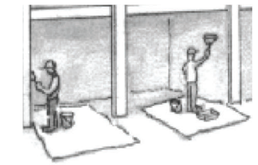



- ❑ Store concrete, grout, and mortar away from storm drains or waterways, and on pallets under cover to protect them from rain, runoff, and wind.
- ❑ Wash out concrete equipment/trucks offsite or in a designated washout area, where the water will flow into a temporary waste pit, and in a manner that will prevent leaching into the underlying soil or onto surrounding areas. Let concrete harden and dispose of as garbage.
- ❑ When washing exposed aggregate, prevent washwater from entering storm drains. Block any inlets and vacuum gutters, hose washwater onto dirt areas, or drain onto a bermed surface to be pumped and disposed of properly.

## Landscaping

- ❑ Protect stockpiled landscaping materials from wind and rain by storing them under tarps all year-round.
- ❑ Stack bagged material on pallets and under cover.
- ❑ Discontinue application of any erodible landscape material within 2 days before a forecast rain event or during wet weather.

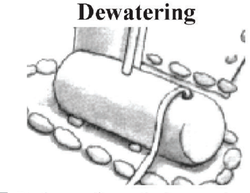
## Painting & Paint Removal



**Painting Cleanup and Removal**

- ❑ Never clean brushes or rinse paint containers into a street, gutter, storm drain, or stream.
- ❑ For water-based paints, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain.
- ❑ For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids as hazardous waste.
- ❑ Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash.
- ❑ Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury, or tributyltin must be disposed of as hazardous waste. Lead based paint removal requires a state-certified contractor.

## Dewatering



- ❑ Discharges of groundwater or captured runoff from dewatering operations must be properly managed and disposed. When possible send dewatering discharge to landscaped area or sanitary sewer. If discharging to the sanitary sewer call your local wastewater treatment plant.
- ❑ Divert run-on water from offsite away from all disturbed areas.
- ❑ When dewatering, notify and obtain approval from the local municipality before discharging water to a street gutter or storm drain. Filtration or diversion through a basin, tank, or sediment trap may be required.
- ❑ In areas of known or suspected contamination, call your local agency to determine whether the ground water must be tested. Pumped groundwater may need to be collected and hauled off-site for treatment and proper disposal.

**Storm drain polluters may be liable for fines of up to $10,000 per day!**

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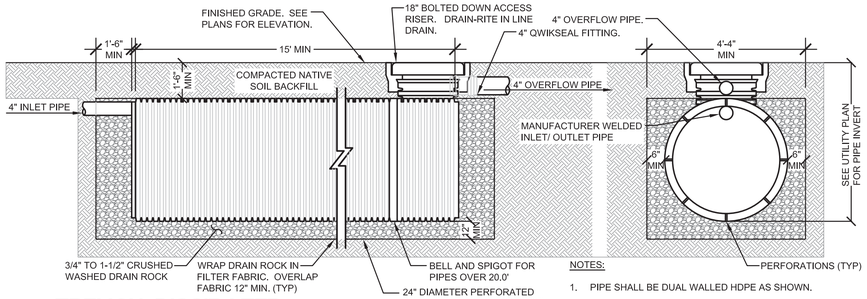
DATE:
REVISIONS:

REGISTERED PROFESSIONAL ENGINEER
TRAVIS R. LUTZ
73638
CIVIL
STATE OF CALIFORNIA

BEST MANAGEMENT PRACTICES
ALSTON RESIDENCE
415 FAIRFAX AVENUE
SAN MATEO, CA 94402

Date: 01/19/2022
Scale: NONE
Design: AJP
Check: TRL
Drawing Number: C-4.1
PEC Job No. PEC 21-125



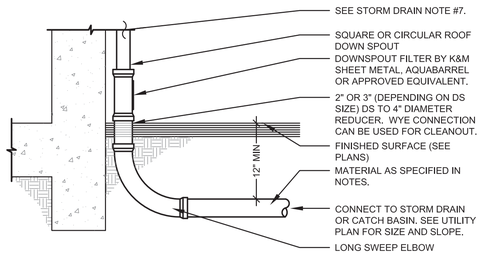

NOTES:

1. PIPE SHALL BE DUAL WALLED HDPE AS SHOWN.

## 13 TRENCH DISSIPATER

SCALE : 3/8"=1'-0"

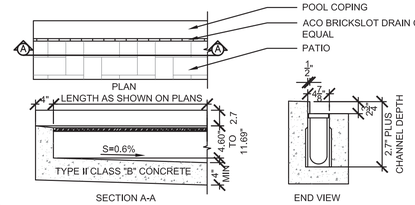
DETENTION TANK-S24-*MSTR




## 14 DOWNSPOUT CONNECTION

SCALE : 3/4"=1'-0"

DS CONNECT-016-*MSTR

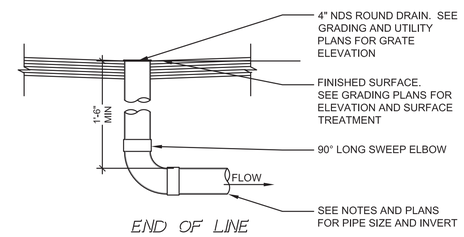


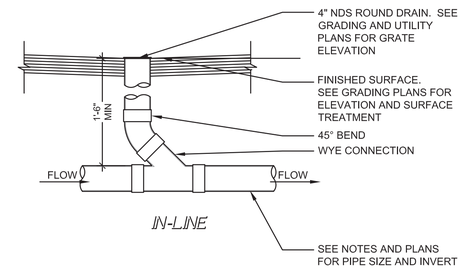

NOTE:
ACO BRICKSLOT 0.6% SLOPED CHANNELS IN METER LENGTHS AND 30 DEPTHS WHICH CONNECT TO CREATE CONTINUOUSLY SLOPING RUN. HALF METER CHANNELS AND NEUTRAL SLOPING CHANNELS ARE ALSO AVAILABLE. INSTALL PER MANUFACTURERS RECOMMENDATIONS.

## 10 ACO BRICKSLOT TRENCH DRAIN

SCALE : 3/4"=1'-0"

BRICKSLOT TRENCH DRAIN-016-*MSTR

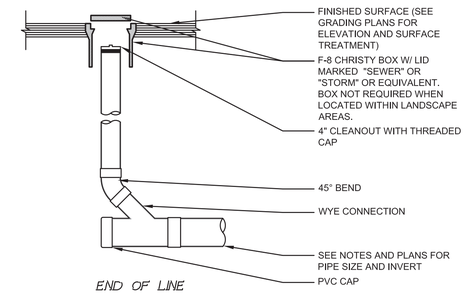


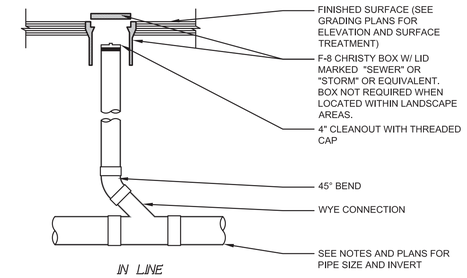




## 6 LANDSCAPE DRAIN - FLAT

SCALE : 1"=1'-0"

LAND DRAIN FLAT-012-*MSTR

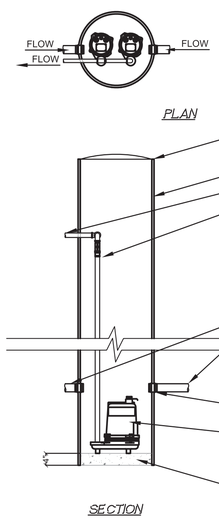



## 2 CLEANOUT NON-TRAFFIC RATED

SCALE : 3/4"=1'-0"

CLEANOUT RES-016-*MSTR



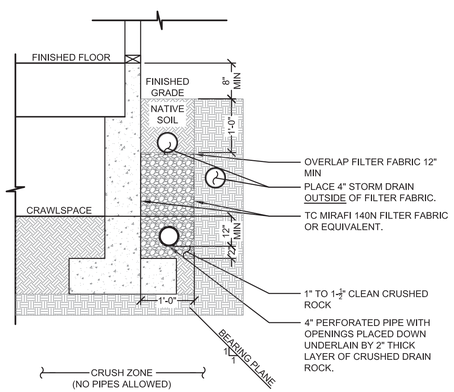

NOTES:

1. INSTALL PUMP PER MANUFACTURER'S RECOMMENDATIONS.
2. CONTRACTOR SHALL SUPPLY A COMPLETELY SELF-CONTAINED DUPLEX MOTOR CONTROL PANEL FOR THE ALTERNATING LEED/LAG PUMP SYSTEM. THE CONTROL PANEL SHALL PROVIDE SHORT CIRCUIT AND OVERLOAD PROTECTION FOR THE PUMPS.
3. PROVIDE FLOAT SENSORS AND HIGH-WATER ALARM PER MANUFACTURER'S RECOMMENDATIONS.
4. CONNECT SUMP PUMPS TO BATTERY BACKUP / GENERATOR FOR A CONTINUOUS POWER SUPPLY TO ALL PUMPS.

## 16 DUAL SUMP PUMP

SCALE : 3/8"=1'-0"

DUAL SUMP PUMP-032-*MSTR



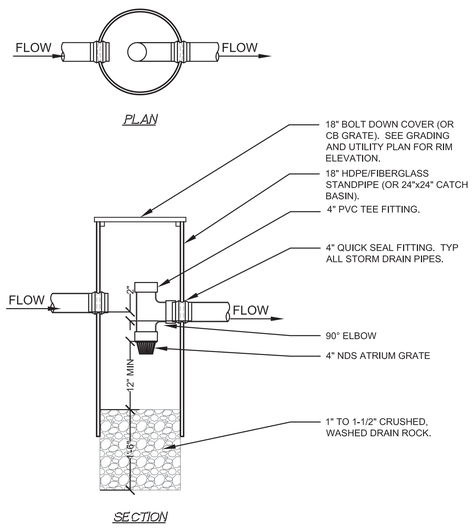

NOTES:

1. PROVIDE A MINIMUM SLOPE OF 0.5% ON SUB-DRAIN TRENCH AND PIPE. SEE PLANS FOR CLEANOUT LOCATIONS AND INVERT ELEVATIONS.
2. NEVER LOCATE ANY UTILITY TRENCH BELOW THE BEARING PLANE OF THE BUILDING FOUNDATION. SUB-DRAIN SYSTEM MAY NEED TO BE MOVED AWAY FROM THE BUILDING FACE IN ORDER TO MAINTAIN SLOPE WHILE ALSO AVOIDING THE FOUNDATION BEARING PLANE.
3. SEE GEOTECHNICAL REPORT FOR ALL COMPACTION RECOMMENDATIONS. GEOTECHNICAL ENGINEER SHALL INSPECT AND APPROVE THE FINAL INSTALLATION OF THE SUB-DRAIN SYSTEM.
4. SEE STRUCTURAL PLANS FOR FOOTING AND FOUNDATION DESIGN.

## 12 SUB-DRAIN

SCALE : NO SCALE

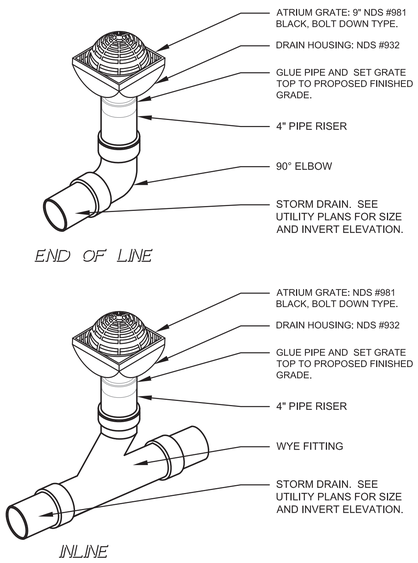
SUB-DRAIN.DTG.*MSTR




## 8 SEDIMENT BASIN

SCALE : 3/4"=1'-0"

SED BASIN-016-*MSTR




## 4 SQUARE ATRIUM DRAIN

SCALE : 1"=1'-0"

SQUARE ATRIUM DRAIN-012-*MSTR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DATE:

REVISIONS:

REGISTERED PROFESSIONAL ENGINEER
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STATE OF CALIFORNIA

# DETAIL SHEET
ALSTON RESIDENCE
415 FAIRFAX AVENUE
SAN MATEO, CA 94402

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|---|---|
| Date: | 01/19/2022 |
| Scale: | AS SHOWN |
| Design: | AJP |
| Check: | TRL |
| Drawing Number: | C-5 |
| PEC Job No. | PEC 21-125 |

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