PROJECT DATA

PROPERTY ADDRESS

2579 HOME AVE AND

2600 HILLCREST AVE (PROPOSED)

HAYWARD, CA 94542

SCOPE OF WORK

THE WORK INCLUDES GRADING THE EXISTING VACANT LOT AND BUILDING A NEW SINGLE-FAMILY RESIDENCE AND ATTACHED ADU UNIT, DRIVEWAYS AND GARAGES. THE MAIN RESIDENCE WILL BE ON HILLCREST AVENUE, WHILE THE ADU WILL HAVE ITS FRONTAGE ON HOME AVENUE.

PLANNING INFORMATION

RS, SINGLE-FAMILY RESIDENTIAL ZONING DISTRICT:

LOT SIZE: 9301 SQ FT

2-STORY OVER BASEMENT AND NO. OF STORIES:

2-STORY ADU

SETBACKS/YARD REQUIREMENTS:

DESCRIPTION	AREA	<u>ALLOWABLE</u>	<u>EXISTING</u>	<u>NEW</u>
FRONT SETBACK	НОМЕ	20'	N/A	29'-8 MIN
	HILLCREST	20'	N/A	20'-8" MIN
REAR SETBACK		15'	N/A	N/A
SIDE SETBACK	10% HOME	6'-6"	N/A	6'-9" MIN
	10% HILLCREST	6'-9"	N/A	11'-7" MIN
BUILDING HEIGHT		30'	N/A	30' MAX
LOT COVERAGE		40%	N/A	33%

BUILDING INFORMATION

OCCUPANCY TYPE: R3/U CONSTRUCTION TYPE: VB FIRE SPRINKLERS: REQUIRED

FLOOR AREA:

DESCRIPTION	FLOOR	PROPOSED	<u>TOTALS</u>
ADU - CONDITIONED	1ST FLOOR	94	
	2ND FLOOR	1102	
	SUBTOTAL	1196	
ADU - UNCONDITIONED	DECK	138	
	STORAGE	55	
	SUBTOTAL	193	
ADU - GROSS AREA	TOTAL		1389
MAIN HOUSE - CONDITIONED	1ST FLOOR	2063	
	2ND FLOOR	1714	
	SUBTOTAL	3777	
MAIN HOUSE - UNCONDITIONED	GARAGE - HILLCREST	459	
	GARAGE - HOME	720	
	DECKS	1081	
	STORAGE	72	
	SUBTOTAL	2332	
MAIN HOUSE - GROSS AREA	TOTAL		6109
TOTAL - GROSS AREA	GRAND TOTAL		7498

<u>CODES</u>

2019 CALIFORNIA BUILDING CODE (CBC)

2019 CALIFORNIA RESIDENTIAL CODE (CRC) 2019 CALIFORNIA ELECTRICAL CODE (CEC)

2019 CALIFORNIA MECHANICAL CODE (CME)

2019 CALIFORNIA PLUMBING CODE (CPC)

2019 CALIFORNIA FIRE CODE (CFC)

2019 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS (CBEES)

APPLICABLE HAYWARD MUNICIPAL CODES

2019 CALIFORNIA GREEN BUILDING CODE

PROJECT DIRECTORY

OWNER

Brad Switzer Trust 24709 Broadmore Ave. Havward CA 94544 E: Vortexbrad@gmail.com T: 510-909-1085

DESIGNER

SF Modern 751 Laurel Street #940 San Carlos CA 94070 Contact: Bich-Khoi Do E: bk@sfmodern.com T: 650-281-4832

SURVEYOR Advanced Development 1360 Harriet Ave Campbell, CA 95008 Contact: Jacob Saidian T: 408-891-1689 E: jsaidian2@gmail.com

GEOTECHNICAL ENGINEER

Gray Geotech 3234 Alta Lane Layfayette, CA 94549 Contact: Joe Gray T: 925-999-6254

E: joe@graygeotech.com

LANDSCAPE ARCHITECT Jon Nelson

23585 Summit Road Los Gatos, CA 95033 Contact: Jon Nelson

E: CNDEV@aol.com

ARBORIST

T: 408-591-08 73

Kielty Arborist Services P.O. Box 6187 San Mateo, CA 94403 Contact: Kevin Kielty T:650-515-9783

STRUCTURAL ENGINEER

E: kkarbor0476@yahoo.com

IDS Engineering

6280 West Las Positas Blvd.

Suite 201 Pleasanton CA, 94588

Contact: Steve Fedewa P: 925.399.7001

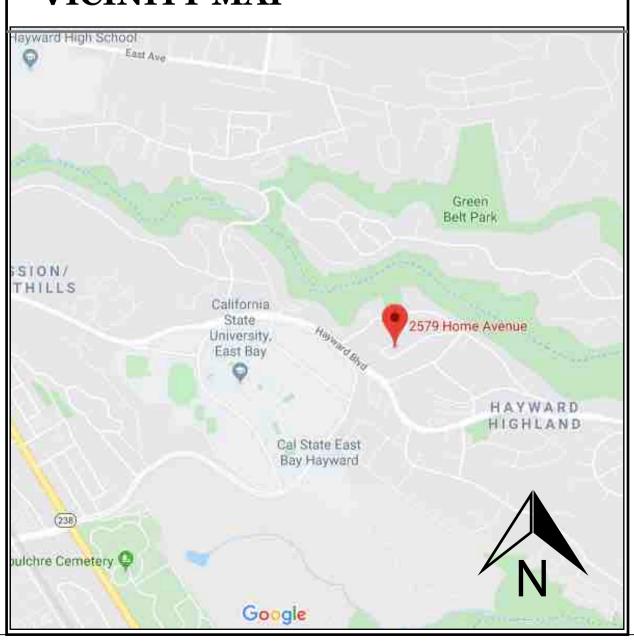
D: 925.413.3378 F: 925.461.2367

E: stevef@ids-eng.net

SYMBOLS

DETAIL MARKER **ELEVATION MARKER** SECTION MARKER $D \stackrel{1}{4.07} B$ INTERIOR ELEVATION MARKER **REVISION MARKER** DOOR SYMBOL WINDOW SYMBOL **BREAK LINE ELEVATION LINE**

VICINITY MAP



DRAWING INDEX

ARCHITECTURAL

TITLE SHEET

SITE PLAN - EXISTING

SITE PLAN - PROPOSED

ROOF PLAN - PROPOSED

1ST FLOOR: ADU FLOORPLAN - PROPOSED

2ND FLOOR: ADU FLOORPLAN - PROPOSED

1ST FLOOR: MAIN HOUSE PLAN - PROPOSED

2ND FLOOR: MAIN HOUSE PLAN - PROPOSED

EXTERIOR ELEVATIONS - PROPOSED

EXTERIOR ELEVATIONS - PROPOSED

VERSION COMPARISON

COLOR RENDERINGS - PROPOSED

SURVEY

TOPOGRAPHICAL & BOUNDARY SURVEY

CIVIL ENGINEERING

GRADING PLAN

UTILITY & DRAINAGE PLAN

SLOPE CALCULATION

LANDSCAPING

LANDSCAPING PLAN

IRRIGATION PLAN L-2

PLANTING NOTES. WATER & MAINTENANCE

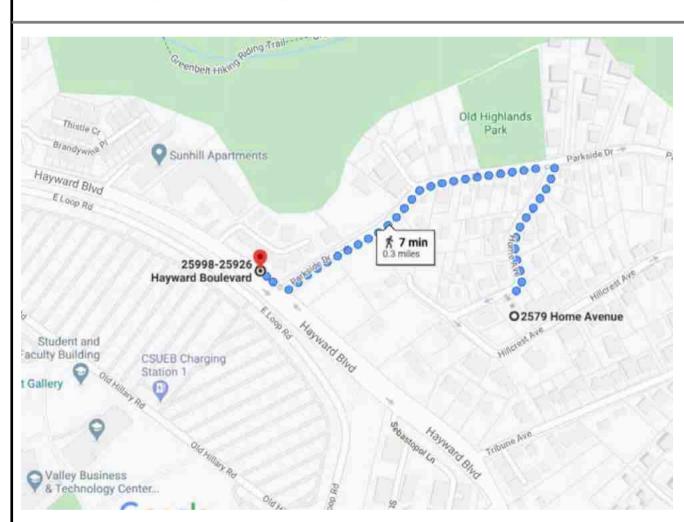
GEOTECHNICAL REPORT

See separate Geotechnical Report by Gray Geotech

ARBORIST REPORT

See separate Arborist Report by Kielty Arborist Services

TRANSIT INFO



DISTANCE TO NEAREST PUBLIC BUS STATION: .3 MILES HAYWARD BLVD X PARKSIDE DR

GENERAL NOTES

- 1. ALL CONSTRUCTION SHALL CONFORM TO CURRENT HAYWARD CODES AND ANY OTHER GOVERNING CODES, AMENDMENTS, RULES, REGULATIONS, ORDINANCES, LAWS, ORDERS, APPROVALS, ETC. THAT ARE REQUIRED BY APPLICABLE PUBLIC AUTHORITIES. IN THE EVENT OF CONFLICT THE MOST STRINGENT REQUIREMENTS SHALL APPLY.
- 2. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR CHECKING CONTRACT DOCUMENTS, FIELD CONDITIONS, AND DIMENSIONS FOR ACCURACY AND CONFIRMING THE WORK CAN BE BUILT OR DEMOLISHED AS SHOWN BEFORE PROCEEDING WITH THE WORK. IF THERE ARE ANY QUESTIONS REGARDING THESE OR OTHER COORDINATION QUESTIONS, THE GENERAL CONTRACTOR IS RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE DESIGNER BEFORE PROCEEDING WITH THE WORK IN QUESTION OR RELATED WORK.
- 3. ANY ERRORS, OMISSIONS OR CONFLICTS FOUND IN THE VARIOUS PARTS OF THE CONSTRUCTION DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER BEFORE PROCEEDING WITH THE WORK.
- 4. CONTRACTOR SHALL THOROUGHLY EXAMINE THE PREMISES AND SHALL BASE HIS BID ON THE EXISTING CONDITIONS, NOTWITHSTANDING ANY INFORMATION SHOWN OR NOT SHOWN ON THE DRAWINGS.

GENERAL NOTES (CONT'D)

- CONTRACTOR TO MAINTAIN ALL PROPER WORKMAN'S COMPENSATION AND LIABILITY INSURANCE THROUGHOUT THE DURATION OF PROJECT.
- 6. SUBSTITUTIONS, REVISIONS OR CHANGES MUST HAVE PRIOR APPROVAL OF DESIGNER.
- DURING THE BIDDING AND NEGOTIATION PERIOD THE GENERAL CONTRACTOR AND SUBCONTRACTOR(S) SHALL CONFIRM IN WRITING APPROX. ONSITE DELIVERY DATES FOR ALL CONSTRUCTION MATERIALS AS REQUIRED BY THE CONSTRUCTION DOCUMENTS AND SHALL NOTIFY THE DESIGNER IN WRITING OF ANY POSSIBLE CONSTRUCTION DELAYS

AFFECTING OCCUPANCY THAT MAY ARISE DUE TO THE AVAILABILITY OF THE SPECIFIED PRODUCT.

- 8. ALL WORK SHALL BE PERFORMED SUCH THAT DAMAGE TO EXISTING LANDSCAPE AND/OR PERSONAL PROPERTY IS PREVENTED OR MINIMIZED.
- 9. CONTRACTOR SHALL TAKE MEASURES TO PROTECT ADJACENT PROPERTIES. USE VISQUEEN, PLYWOOD, ETC. TO MINIMIZE NOISE, DUST, ETC.

10. IN THE EVENT THAT FOUNDATION MIGHT AFFECT ADJACENT PROPERTIES. CONTRACTOR SHALL TAKE ALL APPROPRIATE STEPS TO NOTIFY THE PROPERTY OWNER OF THE CONDITION, AND TO ADEQUATELY PROTECT THE ADJACENT STRUCTURE.

- 11. WRITTEN DIMENSIONS REFER TO FACE OF FINISH OR CENTER-LINE UNLESS OTHERWISE NOTED. EXTERIOR WALLS ARE DIMENSIONED TO FACE OF SHEATHING, U.O.N.
- 12. DIMENSIONS ARE TO TOP OF FINISHED FLOOR, SLAB OR DECK IN SECTION OR ELEVATION, UNLESS OTHERWISE NOTED.
- 13. "SIM." OR "SIMILAR" MEANS COMPARABLE CHARACTERISTICS FOR THE ITEM NOTED. VERIFY DIMENSIONS AND ORIENTATION ON PLAN.
- 14. "TYP." OR "TYPICAL" MEANS IDENTICAL FOR ALL SIMILAR CONDITIONS UNLESS NOTED OTHERWISE.
- 15. DIMENSIONS NOTED "CLR" OR "CLEAR" ARE MINIMUM REQUIRED DIMENSIONS AND CLEARANCES MUST BE ACCURATELY MAINTAINED.
- 16. CONTRACTOR TO VERIFY DIMENSIONS AND CONDITIONS IN FIELD. IF CONDITIONS ARE SIGNIFICANTLY DIFFERENT THAN REPRESENTED IN DRAWINGS, VERIFY CONDITIONS WITH DESIGNER.
- 17. ALL MATERIALS & EQUIPMENT TO BE NEW UNLESS OTHERWISE NOTED.
- 18. ALL MATERIALS & EQUIPMENT TO BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
- 19. WINDOW AND DOOR SIZES ARE NOMINAL DIMENSIONS. REFER TO MANUFACTURER'S SPECIFICATIONS FOR ACTUAL ROUGH OPENINGS.
- 20. WHERE LOCATIONS OF WINDOWS AND DOORS ARE NOT DIMENSIONED, THEY SHALL BE CENTERED IN THE WALL OR PLACED TWO STUD WIDTHS FROM ADJACENT WALL AS INDICATED ON DRAWINGS, UNLESS OTHERWISE NOTED.
- 21. ALL CHANGES IN FLOOR MATERIAL SHALL OCCUR AT CENTERLINE OF DOOR OR FRAMED OPENING, UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
- 22. SEALANT, CAULKING, FLASHING, ETC, LOCATIONS SHOWN ON DRAWINGS ARE INTENDED TO BE INCLUSIVE. FOLLOW MANUFACTURER'S INSTALLATION RECOMMENDATIONS AND STANDARD INDUSTRY AND BUILDING PRACTICES.
- 23. ALL ATTICS, RAFTER SPACES, SOFFITS, CRAWL SPACES, ETC. TO BE FULLY VENTILATED PER APPLICABLE CODE.
- 24. PROVIDE WOOD BLOCKING FOR ALL TOWEL BARS, ACCESSORIES, ETC.
- 25. MEET ALL CALIFORNIA ENERGY CONSERVATION REQUIREMENTS INCLUDING BUT NOT LIMITED TO:
 - MIN. WALL INSULATION IN FRAMED EXTERIOR WALLS R-13

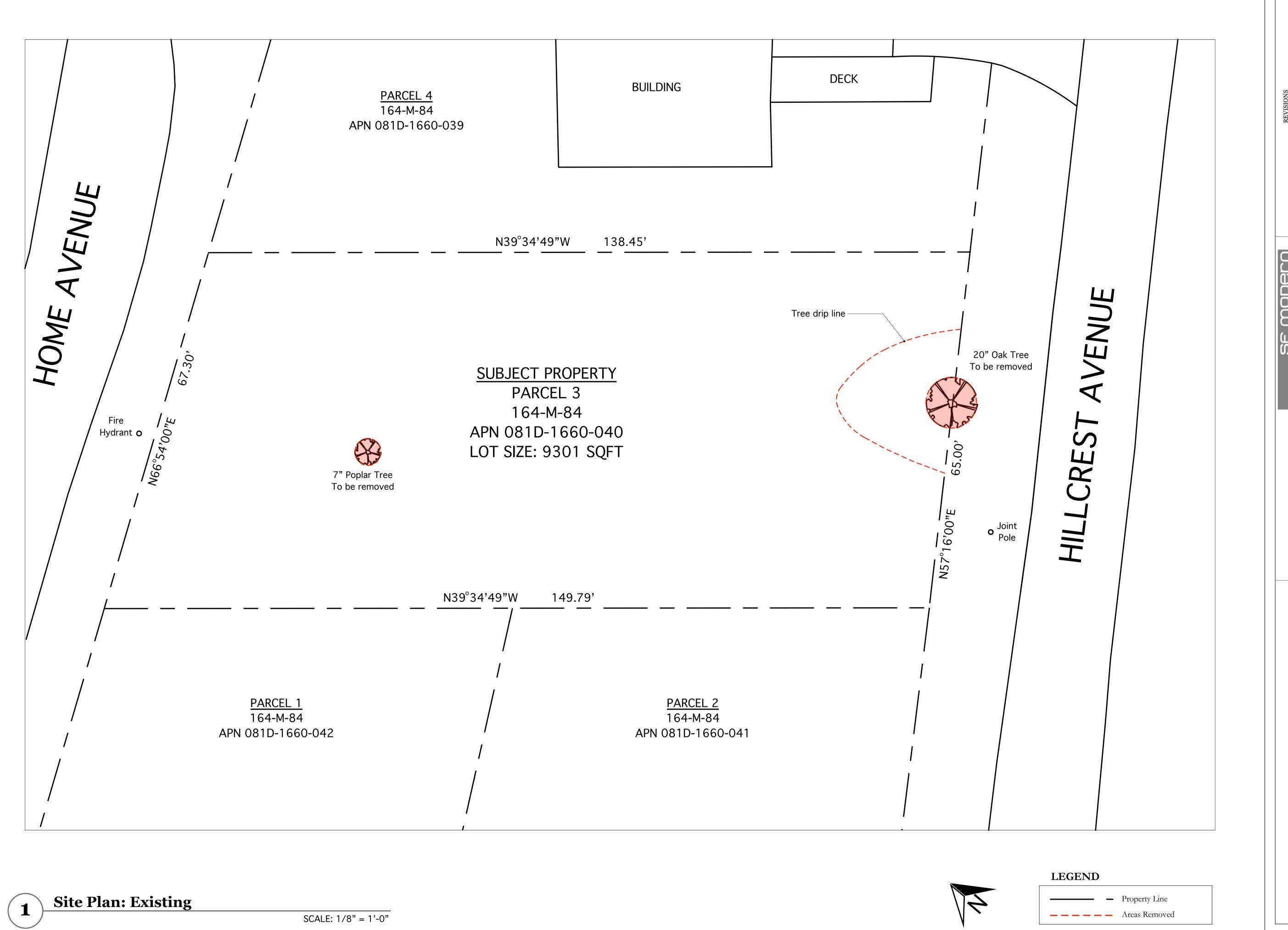
E. INFILTRATION CONTROL:

A. MIN. ROOF/CEILING INSULATION R-19

- MIN. FLOOR INSULATION OVER CRAWL/UNOCCUPIED SPACES R-13 D. ALL INSULATION TO MEET CEC QUALITY STANDARDS
 - DOORS AND WINDOWS WEATHER-STRIPPED.
 - 2. EXHAUST SYSTEMS DAMPENED. 3. DOORS AND WINDOWS CEC CERTIFIED AND LABELED.
- 4. ALL JOINTS AND PENETRATIONS CAULKED AND SEALED. F. DUCTS CONSTRUCTED AND INSTALLED PER UMC.
- G. ELECTRICAL OUTLET PLATE GASKETS SHALL BE INSTALLED ON ALL RECEPTACLES, SWITCHES AND ELECTRICAL BASES ON EXTERIOR WALLS.
- 26. SMOKE ALARMS ARE TO BE INSTALLED IN ALL SLEEPING ROOMS. SMOKE ALARMS SHALL BE HARDWIRED TO 110V HOUSE WIRING AND WIRED TOGETHER IN SERIES. MINIMUM ONE ALARM PER STORY. REFER TO PLANS FOR LOCATIONS.
- 27. GENERAL CONTRACTOR IS TO COORDINATE INSTALLATION OF NOT IN CONTRACT ITEMS WITH OTHER TRADES.
- 28. LOCATION/SPECIFICATION OF SAFETY GLAZING (TEMPERED GLASS) ARE SOLE RESPONSIBILITY OF CONTRACTOR. ALL DOORS WITH GLAZING AND ALL GLAZING OF WINDOWS WITHIN 24" OF EDGE OF ANY DOOR SHALL BE TEMPERED GLASS (UBC SECTION 2406)

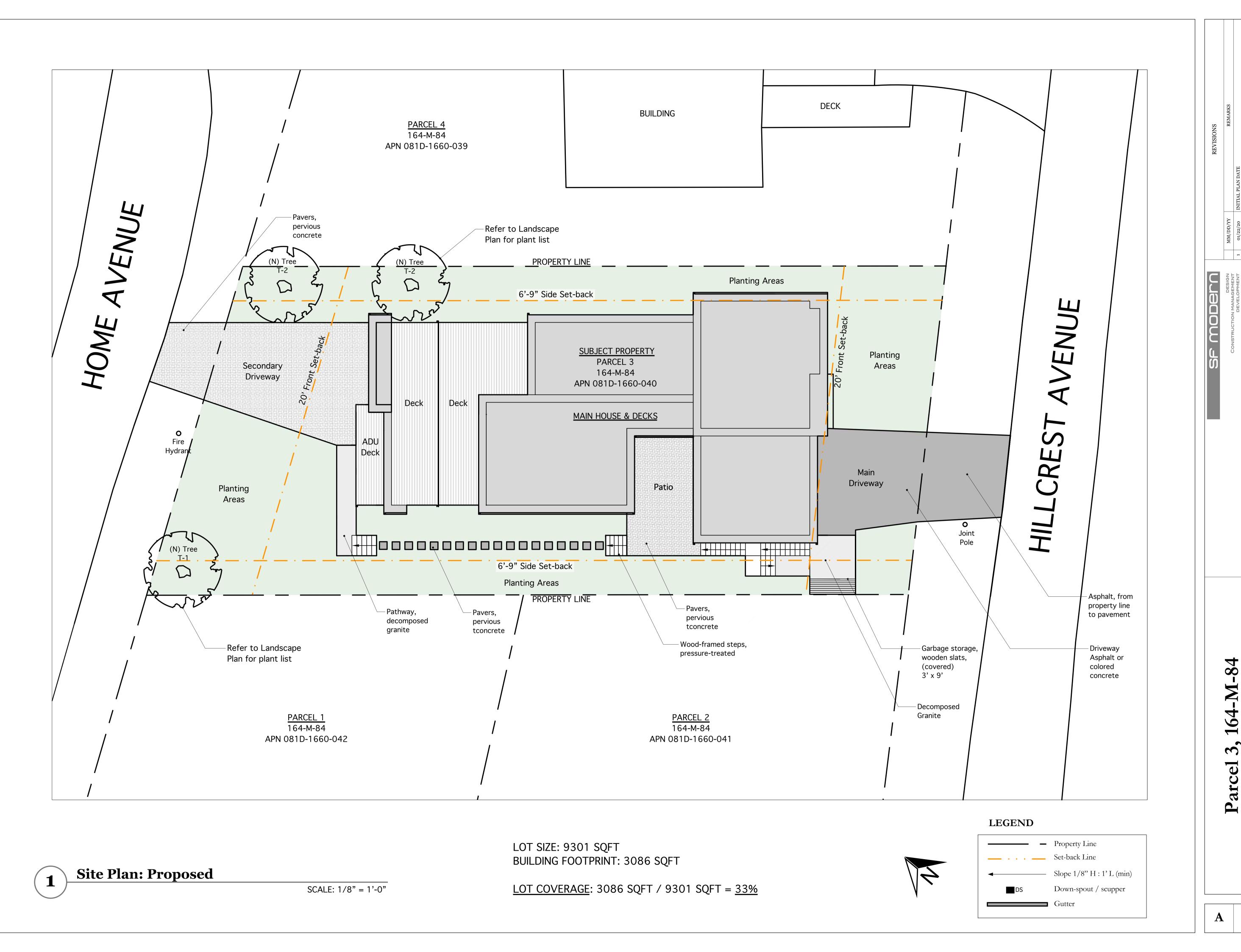
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1 2 8 4 2 BICH-KHOI DO | bk@sfmodern.com | 650-281-4832 751 Laurel Street, #940, San Carlos CA 94070 164-M-84 Existing **Parcel**

A

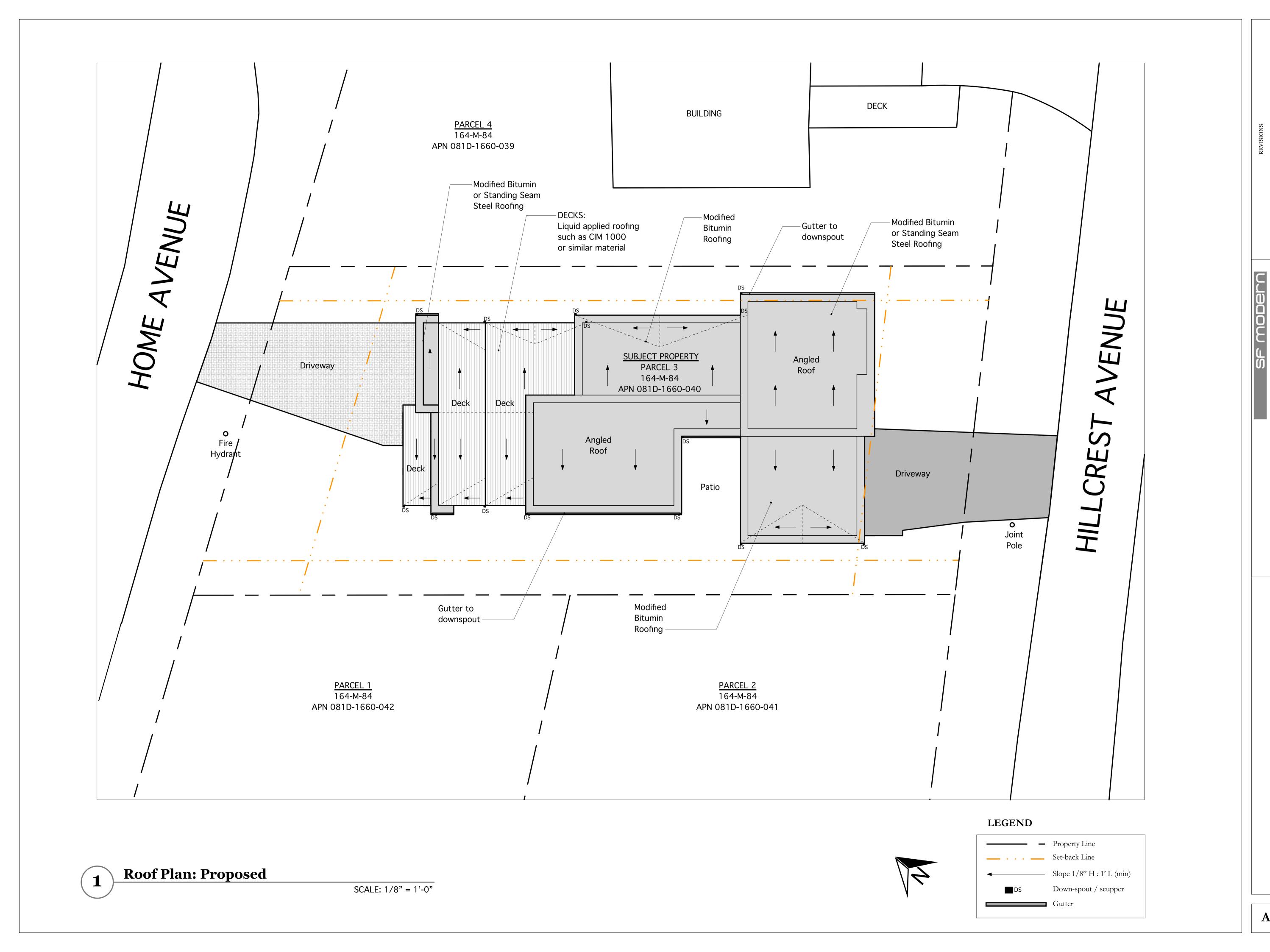


Plan

Proposed

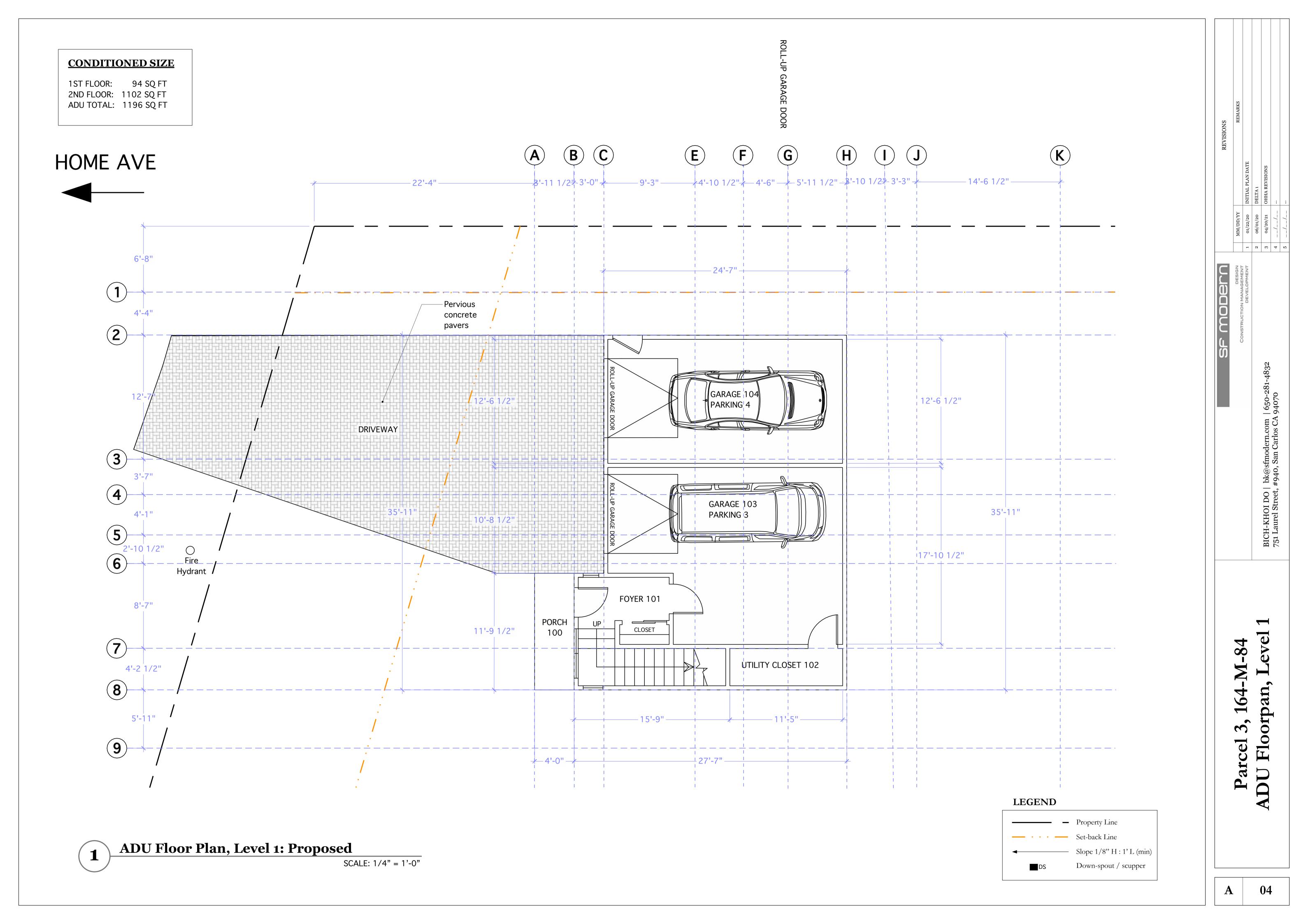
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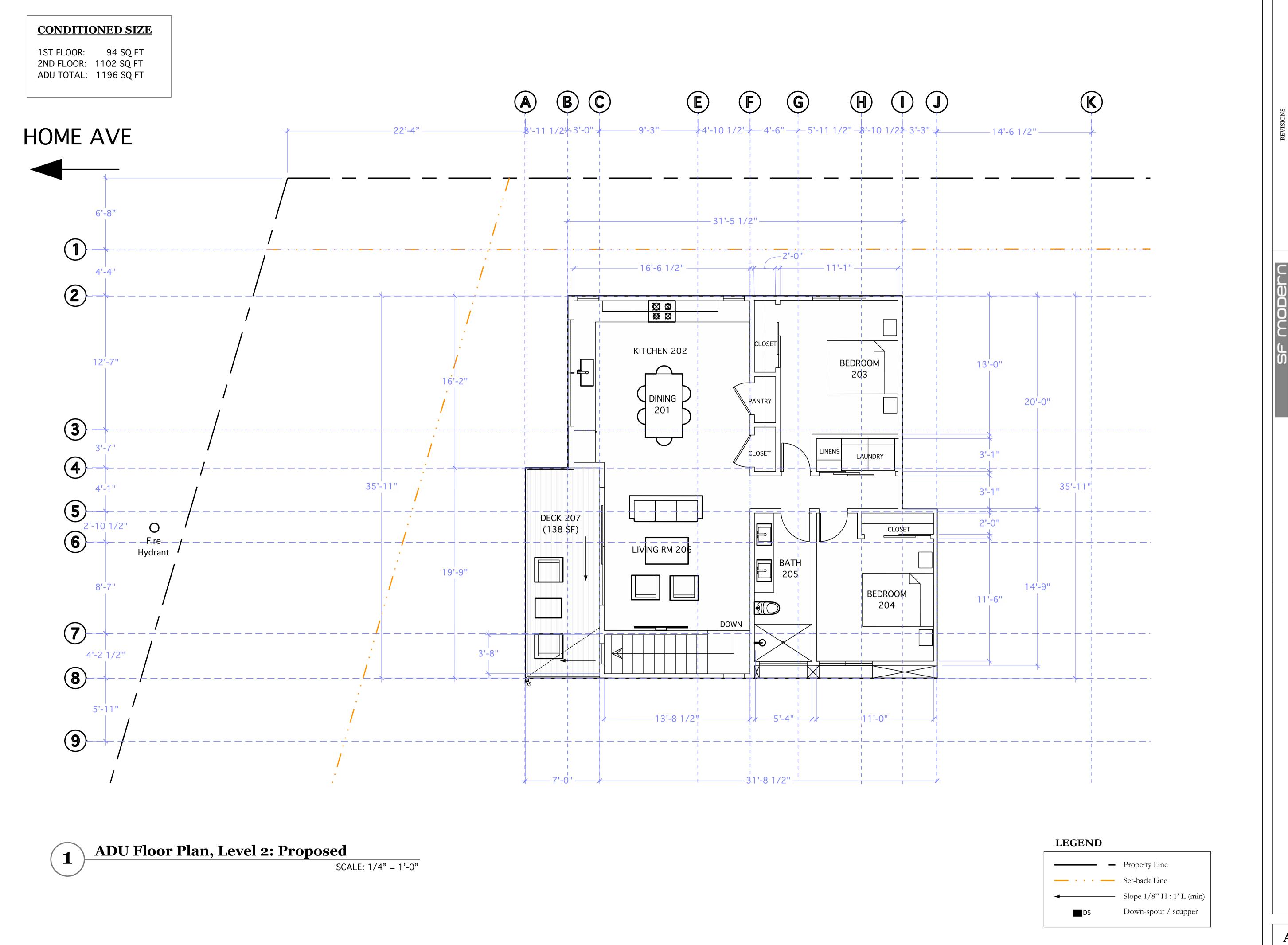
BICH-KHOI DO | bk@sfmodern.com | 650-281-4832 751 Laurel Street, #940, San Carlos CA 94070



| DESIGN | DESIGN | MM/DD/YY | MM

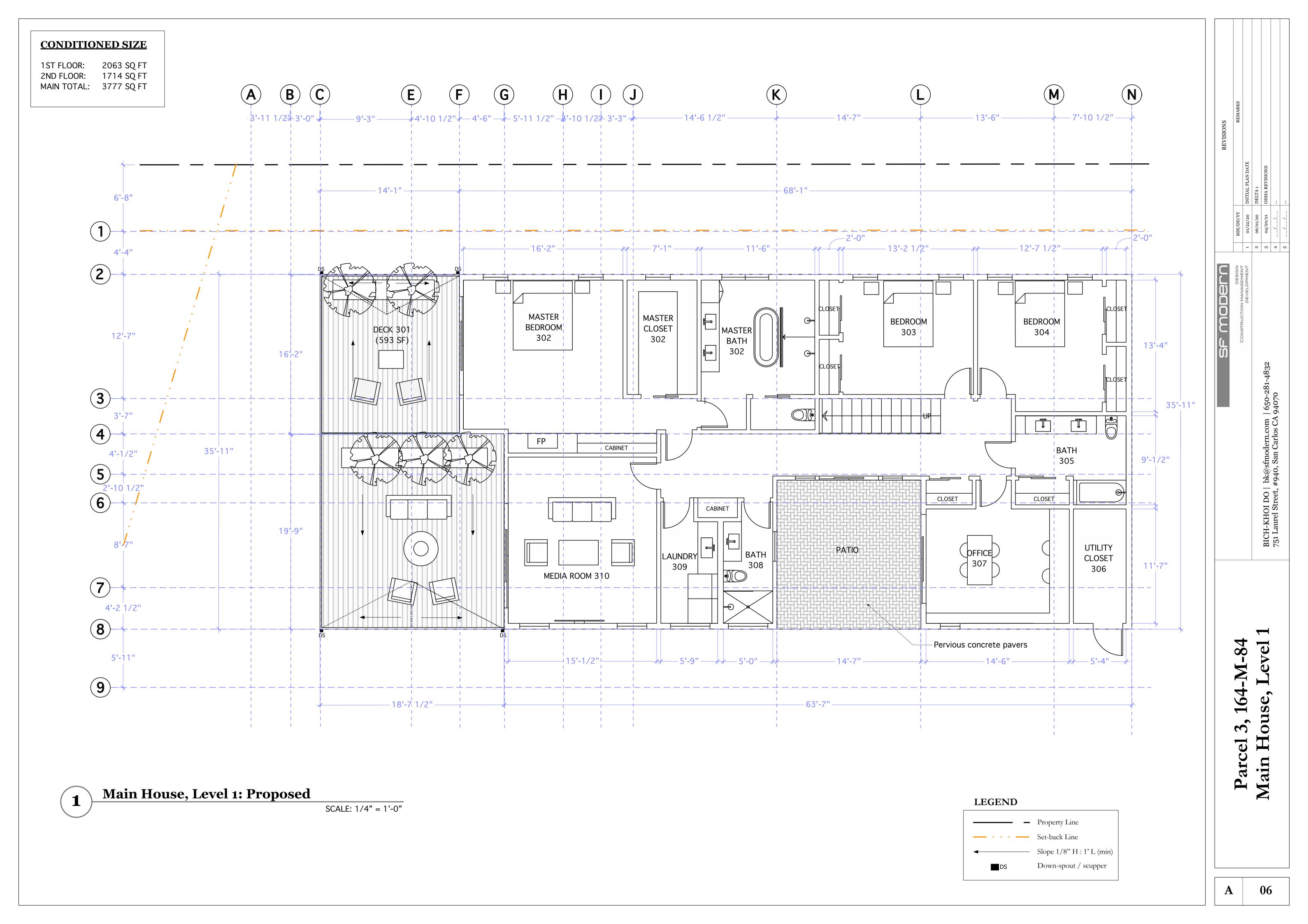
Parcel 3, 164-M-84 Proposed Roof Plan

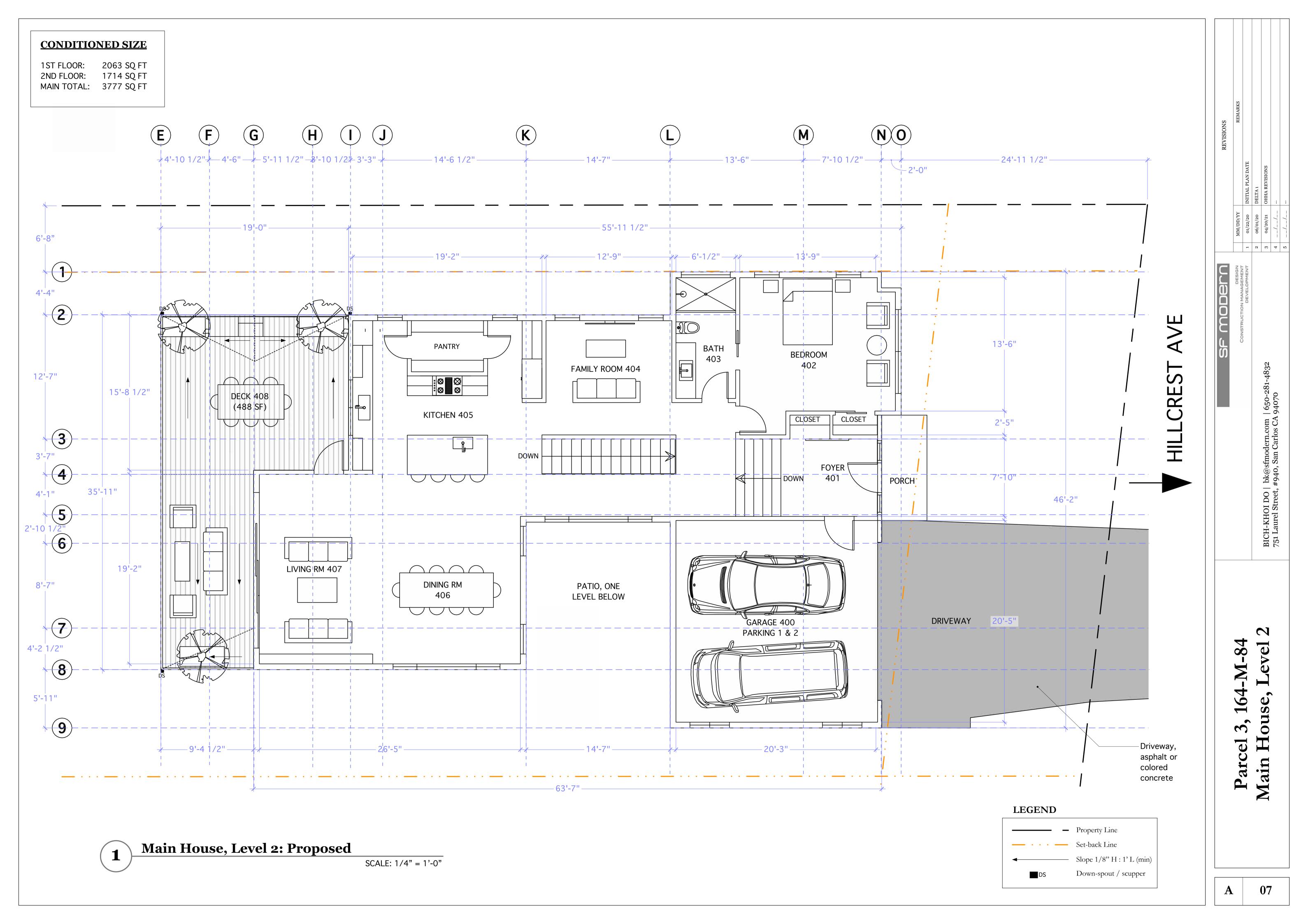


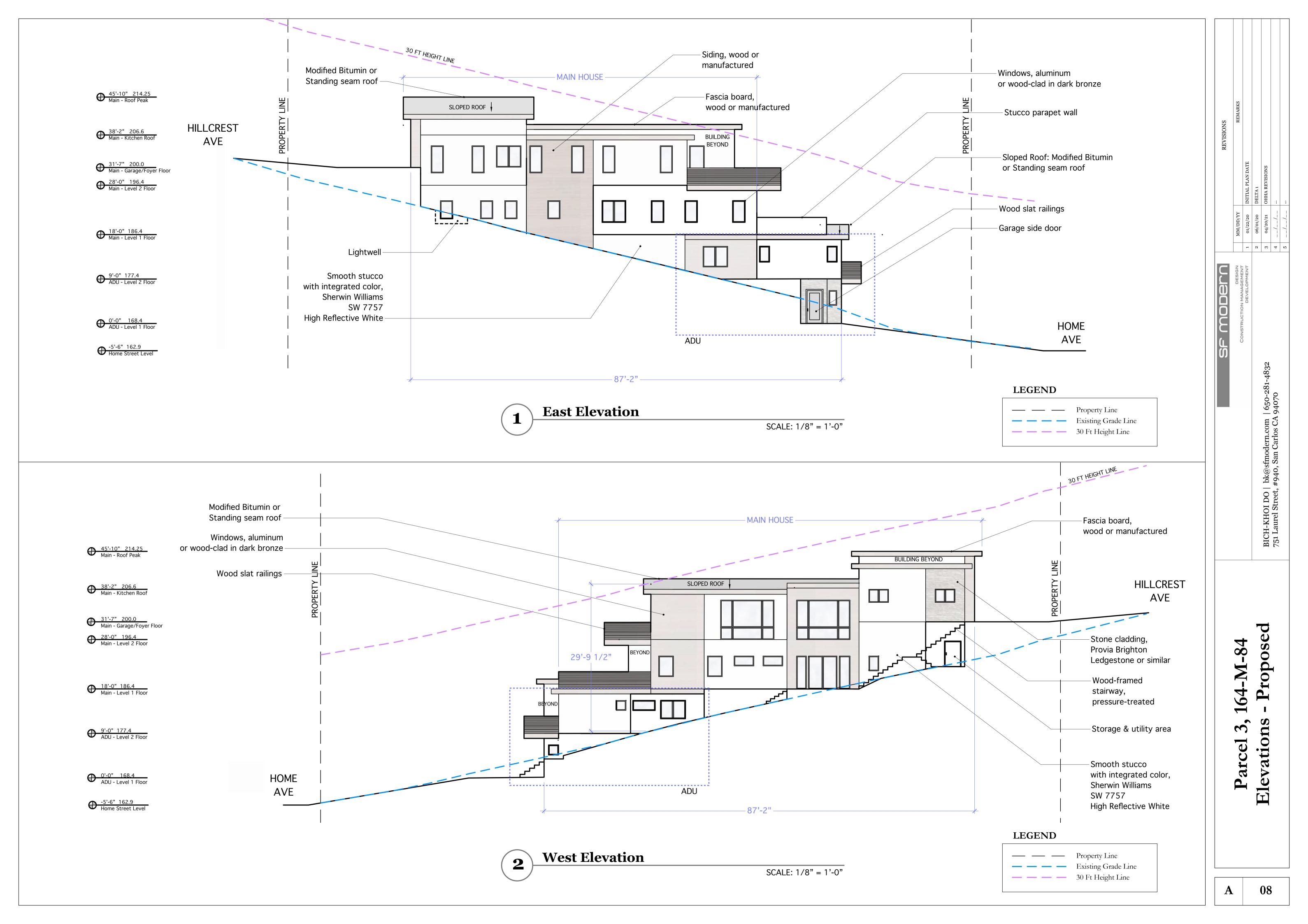


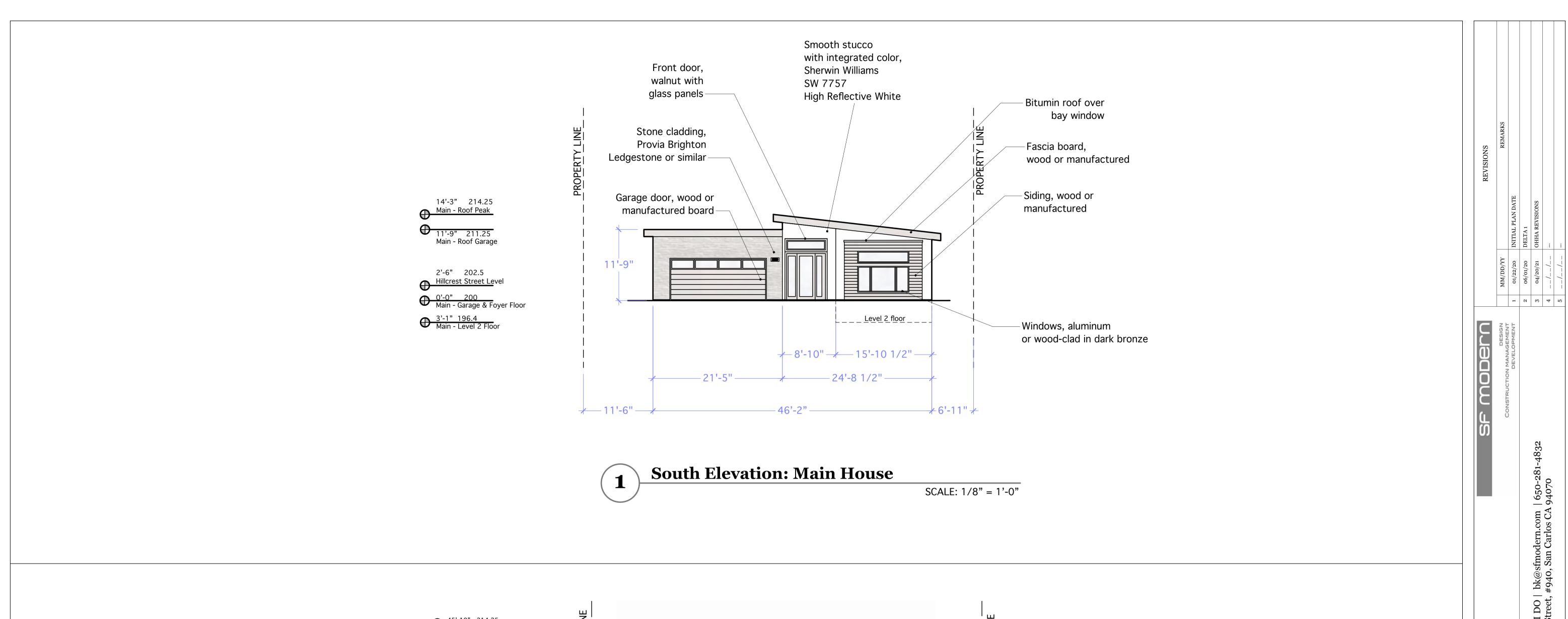
1 2 8 4 7 BICH-KHOI DO | bk@sfmodern.com | 650-281-4832 751 Laurel Street, #940, San Carlos CA 94070 7 evel .M-84 164-ADU Floorpan, **Parcel**

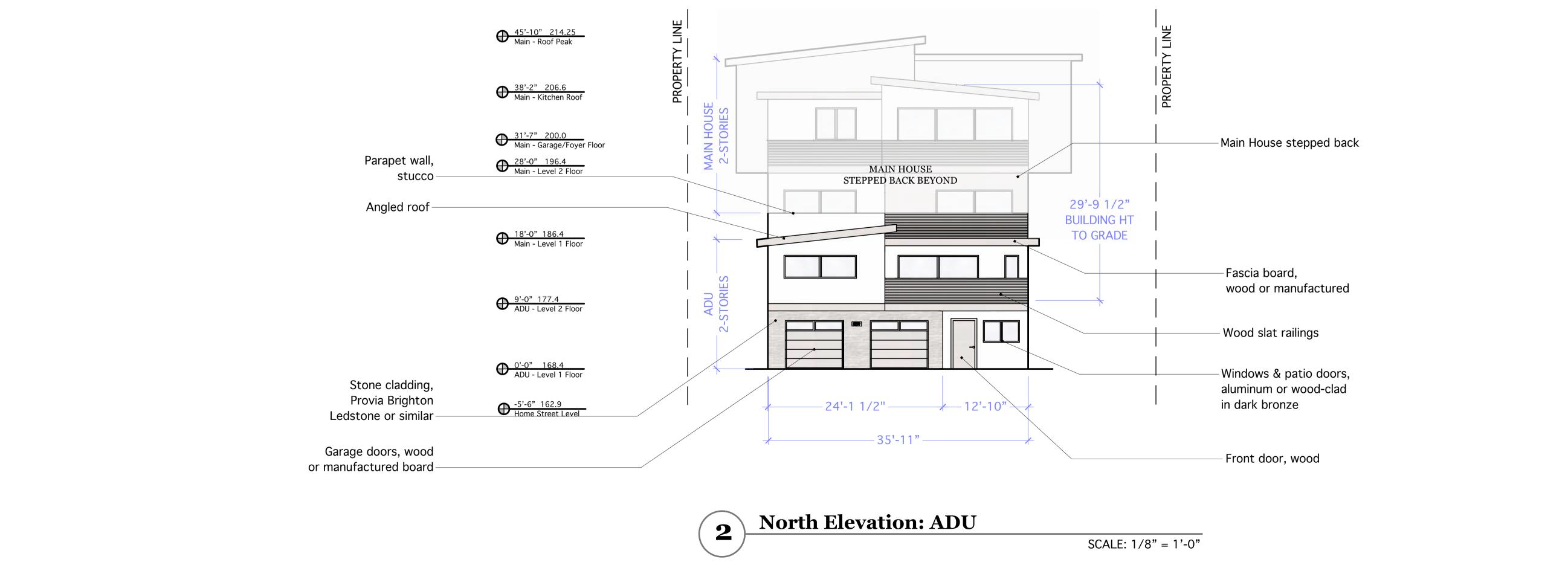
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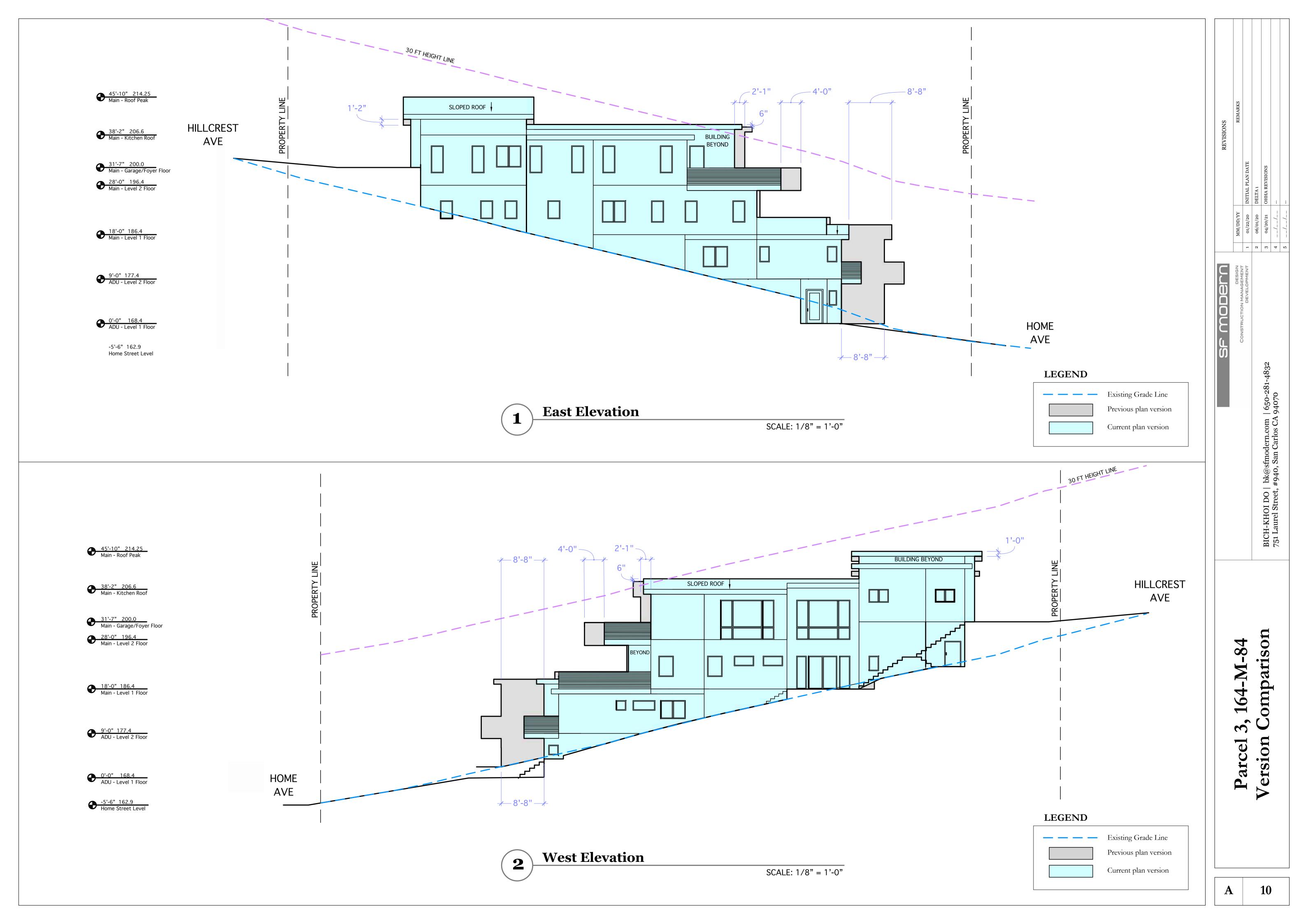


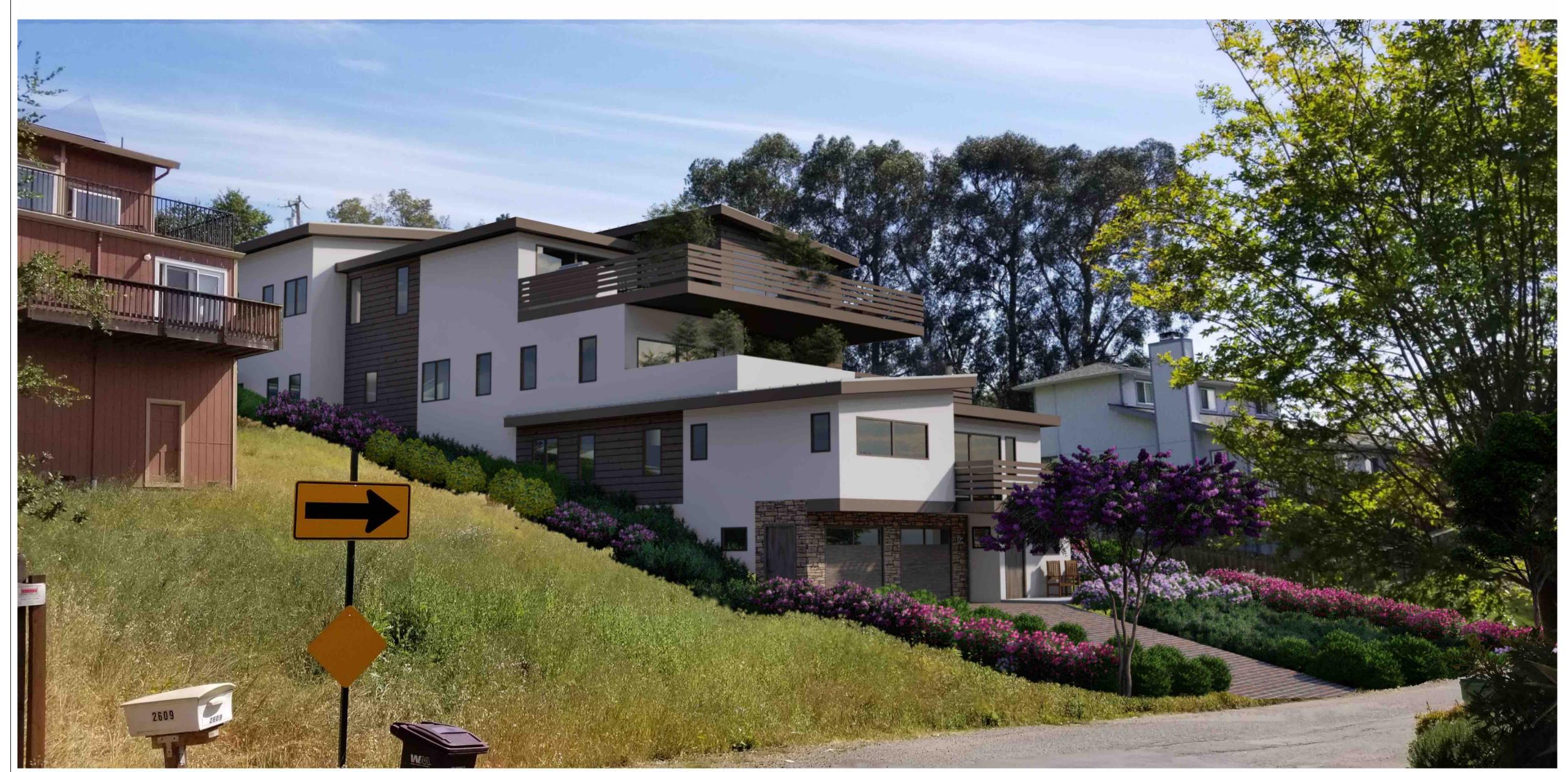




BICH-KHOI DO | bk@sfmodern.com | 650-281-4832 751 Laurel Street, #940, San Carlos CA 94070 Proposed

164-M-84 Elevations **Parcel**

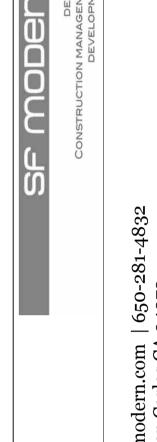




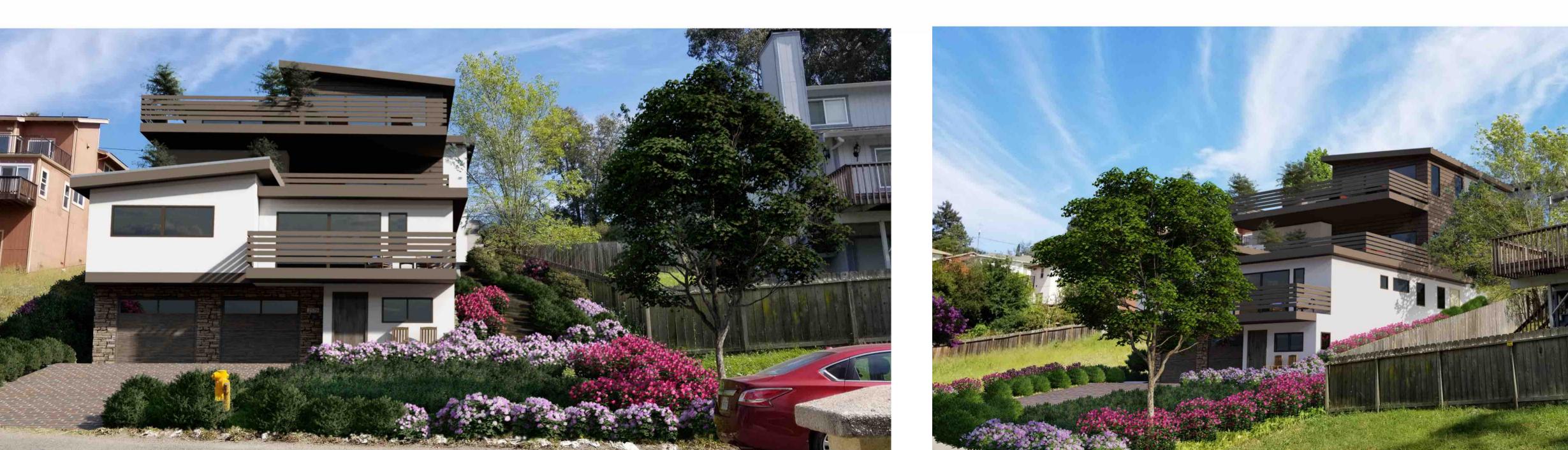
NOTE:

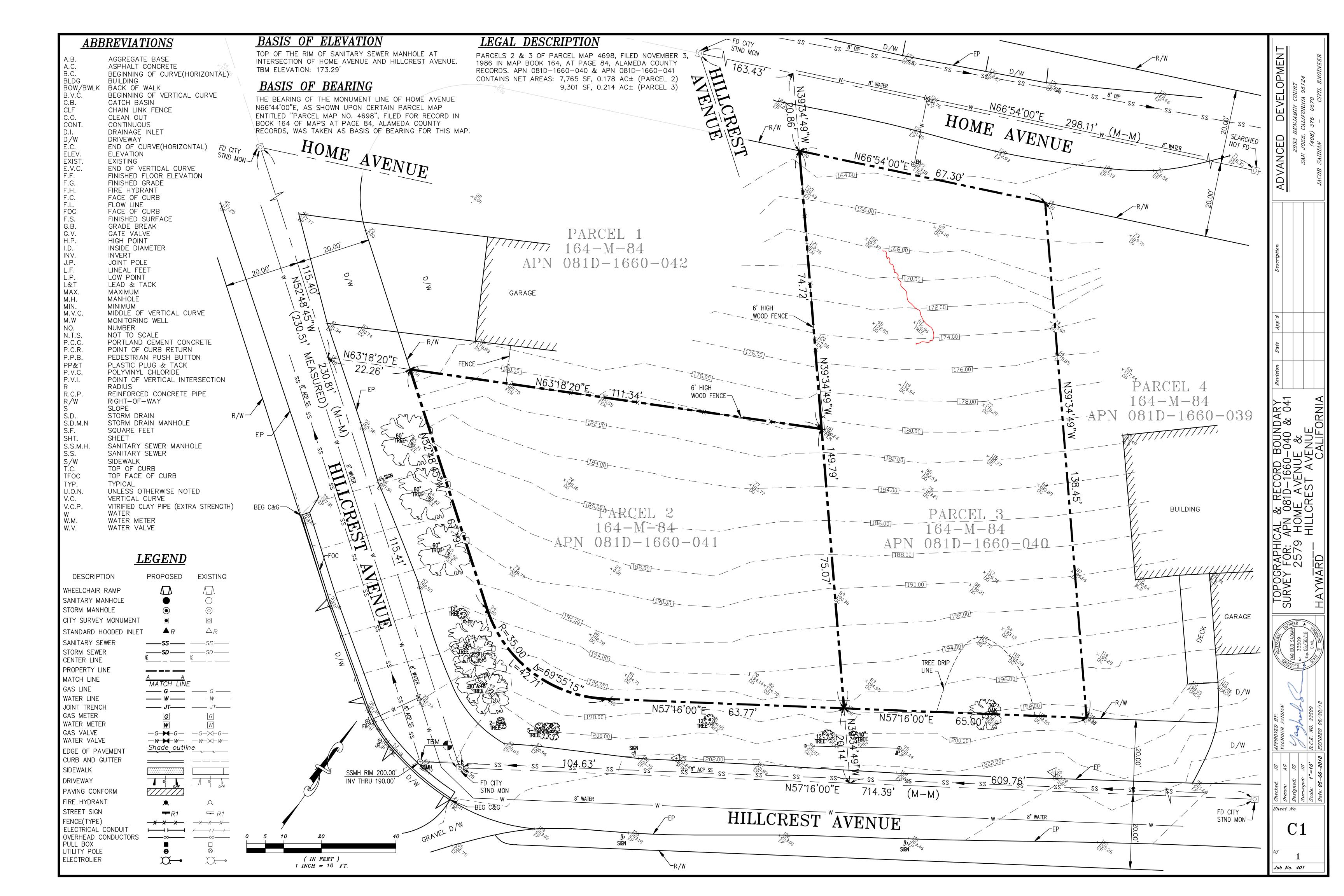
RENDERINGS ARE PROVIDED FOR VISUAL AID. THEY DO NOT REFLECT POST DEVELOPMENT **CONDITIONS WITH** COMPLETE ACCURACY

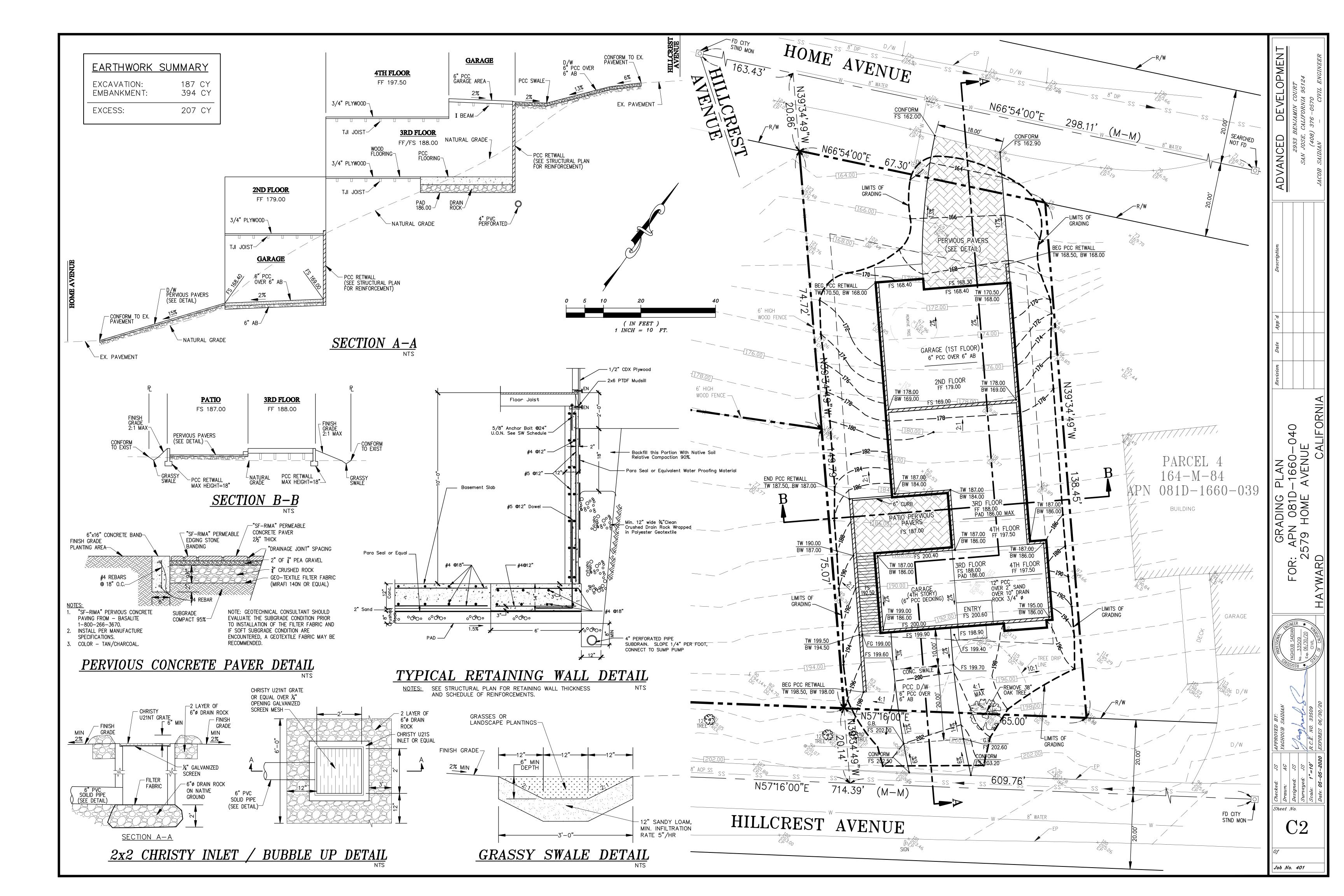
LAST UPDATED 6/1/20

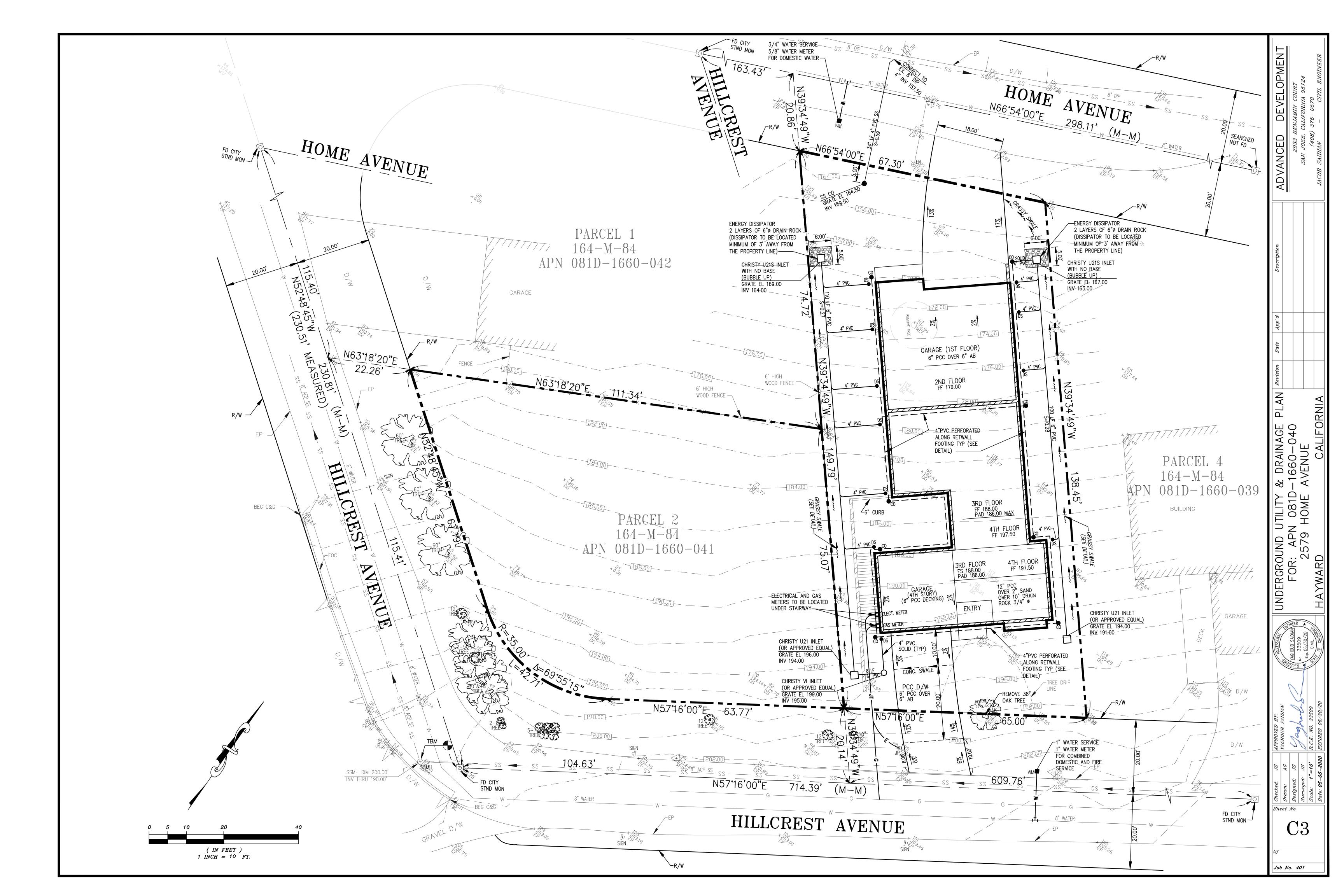












TERMS AND DEFINITIONS REBIDENTIAL WATER BERVICES, ONE AND TWO FAMILY, IT OR SMALLER 1.1. SEPANATE SERVICES: THE DOMESTIC SYSTEM AND BYAND-ALONE FIRE PROTECTION SYSTEM ARE EACH SUPPLIED BY A SEPARATE SERVICE

1.2. COMMINED SERVICE: THE DOMESTIC AND FIRE PROTECTION SYSTEMS SHARE A SINGLE SERVICE LINE AND METER, DOWNSTREAM THE METER. THE LINE MAY SUPPLY A MULTI-PURPOSE SYSTEM OR SPLIT TO SUPPLY SEPARATE DOMESTIC AND STAND-ALONE PIRE PROTECTION SYSTEMS. (DEE FIGURES 2A, 26, 3A & 3B)

RESIDENTIAL FIRS PROTECTION BYSTEMS

2.1. STAND-ALDNE: SEPARATE AND INDEPENDENT FROM THE DOMESTIC SYSTEM.

2.1.1. GLOSED: DOES NOT CONNECT TO ANY DOMESTIC WATER FIXTURES AND CAN ONLY SE DRAINED THROUGH A RELIEF OR DRAIN VALVE. AT A MINIMERA, A DOUBLE CHECK VALVE ASSEMBLY (DOVA) BACKPLOW DEVICE (PER SD-301) IS REQUIRED ON ALL OLOGED SYSTEMS TO PROTECT THE DOMESTIC WATER SUPPLY. (SEE FIGURES 1A & 2A)

2.1.2. FLOW-THRIDUGH; CONNECTS TO ONE OR MORE DOMESTIC WATER FIXTURES SUCH THAT WATER IN THE SYSTEM IS REPLACED UPON USE OF THE FIXTURE(S), FLOW-THROUGH SYSTEMS MUST SE LOOPED OR SINGLE MEANDER, (SEE FIGURES 15 & 25)

2.2. MULTI-PURPOSE, USES THE SAME DISTRIBUTION PIPING WITHIN THE STRUCTURE TO SUPPLY THE DOMESTIC WAYER FIXTURES AND FIRE SPRINGLERS, MULTI-PURPOSE SYSTEMS MUST BE LOOPED OR SINGLE-MEANDER, IF ALLOWED, (SEE FIGURES SA & 5.8)

PIRE SPRINKLER FIFTING LAYOUTS

3.1. BRANDHED: HAS DEAD-ENDS AT SOME SPRINKLER HEADS WHERE WATER COULD STAGNATE (SEE FIGURES 14.4.24)

3.2. LOCKED: HAS NO DEAD-ENDS AND FORMS ONE OR MORE LOCKS SUCH THAT WATER CAN CIRCULATE. (SEE FIGURES 26 & 36) 3.5. BINGLE-MEANDER: ALL OPPINIQUE HEADS ARE CONNECTED IN SERIES BY A SINGLE PIPING RUN. (SEE FIGURES 18 & 2A)

REGISTERED PROFESSIONAL ENGINEER (CIVIL, MECHANICAL, OR FIRE PROTECTION), AND PURIDUANT TO THE CITY'S LATEST ADOPTED CALIFORNIA. CODES & REGULATIONS INCLUDING, BUT NOT LIMITED TO: FIRE CODE (SEC. 903); CA RESIDENTIAL CODE (SEC. R013); NFPA 100; CA PLIMBING CODE (SEC. 803.4.16); CA ELECTRICAL DODE (ART. 780); NFPA 72; AND CA HEALTH & SAPETY DODE 19114.7.

WATER SERVICES, FLOW-THROUGH AND MULTI-PURPOSE SYSTEMS WILL BE REVIEWED BY THE PUBLIC WORKS DEPARTMENT, LITLITIES & ENARGMENTAL SERVICES (UTILITIES). FIRE PROTECTION SYSTEMS WILL BE REVIEWED BY THE FIRE DEPARTMENT, FLOW THROUGH AND MULTIPURPOSE SYSTEMS WILL BE REVIEWED BY BOTH THE BUILDING AND FIRE DEPARTMENTS.

THE DEGIGN WATER PRESSURE FOR ALL FIRE PROTECTION BYSTEMS SHALL BE EITHER A MAXIMUM OF SO PSI OR THE ACTUAL SUPPLY PRESSURE.

THE SINE SPRINKLER SYSTEM DEMAND FLOW RATE FOR COMBINED SERVICES THAT DO NOT INCLUDE A BACKFLOW DEVICE SHALL INCLUDE AN ADDITIONAL 5 GPM AT THE POINT WHERE THE SYSTEMS ARE CONNECTED (R313.3.5). IF THE TOTAL DEMAND EXCEEDS 160 GPM, THEN THE USE OF A

THE DOMESTIC WATER FIXTURES) THAT A FLOW-THROUGH SYSTEM SUPPLIES SHALL BE A CLOTHES WASHER, DISHWASHER OR TOILET (ALTERNATE FIXTURES MAY BE PROPOSED). THE NUMBER AND KIND OF FIXTURES REQUIRED WILL DEPENDAND UPON THE LAYOUT AND SUSE OF THE SYSTEM AND STRUCTURE, AND BHALL HE DETERMINED BY UTILITIES. AT A MINEMAN, THE SYSTEM SHALL BUIPLY ONE FIXTURE PER FLOOR OF THE RESIDENCE.

4.2 WHERE THE LINE PRESSURE IN THE SPRINIQUE SYSTEM IS GREATER THAN 60 PSI, A PRESSURE REDUCING VALVE (PRV) SHALL BE INSTALLED ON THE SUPPLY CONNECTION TO THE WATER FOTURE(S), THE PRV MUST BE INSTALLED IMMEDIATELY DOWNSTREAM OF THE FIXTURE'S SHIT OFF VALVE AND LIEFT EXPOSED, TO ALLOW FOR MAINTENANCE.

FLOW-THROUGH AND MULTI-PURPOSE SYSTEMS SHALL HAVE LEAD-FREE SPRINKLER HEADS, VALVES AND FITTINGS (CA AS 1985).

IN MULTI-PURPOSE SYSTEMS, IF A WATER SOFTENER OR FILTRATION DEVICE WILL BE USED THAT MAY RESTRICT FLOW OR REDUCE WATER PRESSURE TO THE FIRE SPRINKLERS, THE DEVICE MUST BE INCLUDED IN THE DEILIGN OF THE SYSTEM.

GERYICE AND METER BUING

(I) METERS SHALL BE THE SAME SIZE AS THE SERVICE LINE FROM THE WAYER MAIN.

b) DOMESTIC, IRRIGATION AND FIRE SERVICE LINES SHALL SETTE SAME SIZE OR SMALLER THAN THE METER SIZE. MANIFOLDS THAT SUPPLY "CANCED" METERS ARE NOT ALLOWED TO SUPPLY FIRE PROTECTION SYSTEMS.

DOMESTIC AND IRRIGATION SYSTEMS: THE SIZE OF THE METER, SUPPLY AND SERVICE LINES SHALL BE 8/250 PER 50% OF THE MAXIMUM FLOW RATING OF THE METERS ARE: %"= 15 GPM; %"= 25 GPM; 1"= 40 GPM; 1.6"= 80 GPM; 2"= 100 GPM

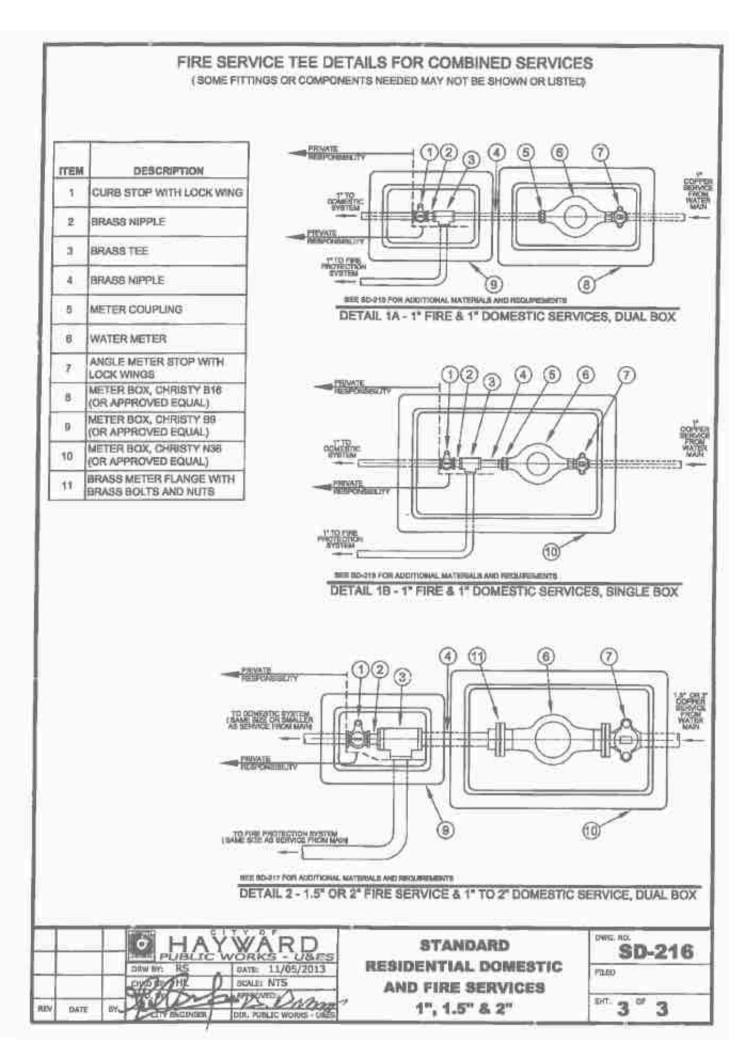
7.2 MILITIPURPOSE AND SEPARATE PIRE SYSTEMS: THE SIZE OF THE METER, SUPPLY AND SERVICE LINES GHALL BE SIZED FER THE MAXIMUM INTERNIT FLOW RATING OF THE METER. PER AWWA, THE MAX INTERNITTENT FLOW RATING OF CIEPLACEMENT METERS ARE:

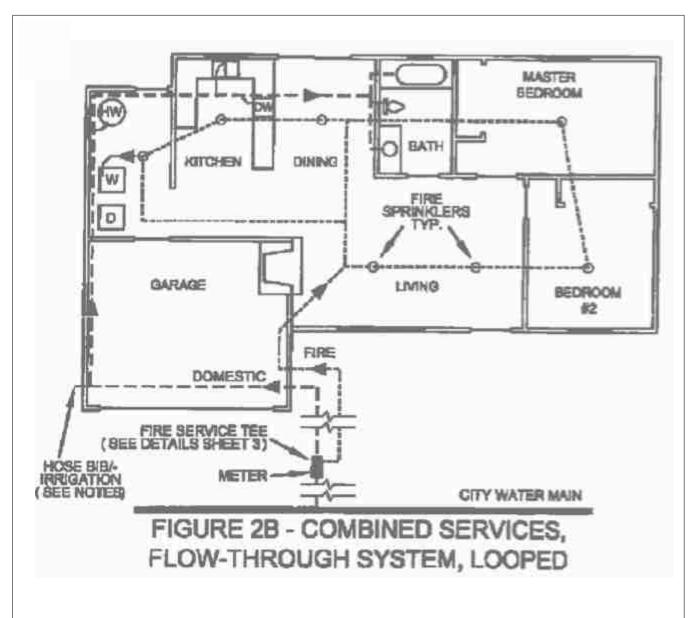
FIRE AND COMBINED SURVICES SHALL CONFORM TO SCI213 FOR 1" SERVICES AND SCI217 FOR 1.5" AND 2" SERVICES EXCEPT AS SPECIFIED HEREIN. OTHERWISE, SERVICE CONNECTIONS 2" AND SMALLER SHALL CONFORM TO STANDARD DETAILS SD-213 THRU SD-216 AND RD-217 THRU SD-216.

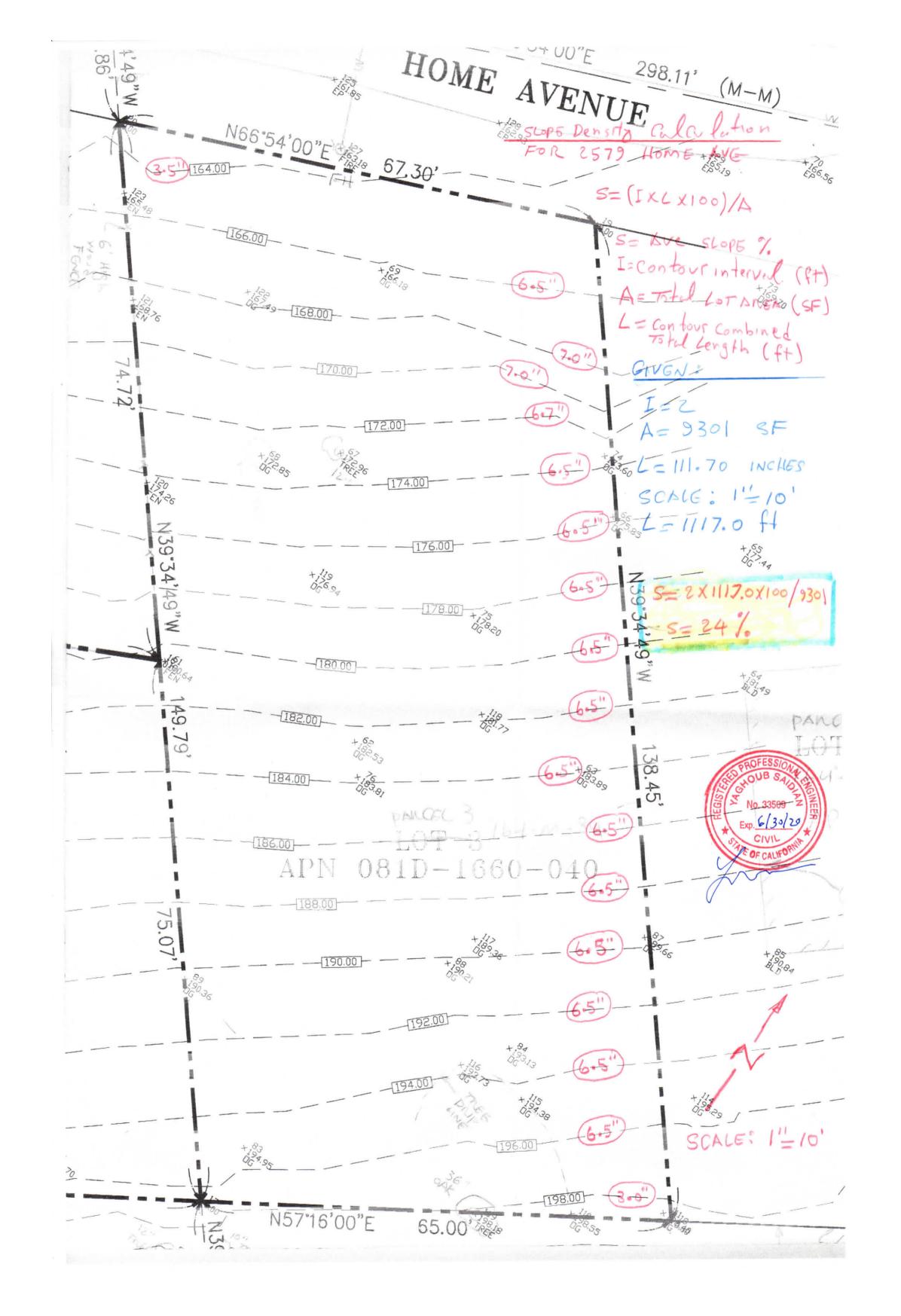
THE WATER DISTRIBUTION SYSTEM (ITEM 817 SHEET 3) WITH THE FOLLOWING TEXT: WARRING, THE WATER SYSTEM FOR THIS HOME SUPPLIES FIRE SPHINGLERS THAT REQUIRE CERTAIN FLOWS AND PRESSURES TO FIGHT A FIRE DEVICES THAT RESTRICT THE FLOW OR DECREASE THE PRESSURE OR AUTOMATICALLY SMUT OFF THE WATER TO THE FIRE SPRINKLER SYSTEM, BUICH AS WATER SOFTENERS, PETRATION SYSTEMS AND AUTOMATIC SHUTOFF VALVES, SHALL NUT BE ADDED TO THIS SYSTEM WITHOUT A REVIEW OF THE FIRE SPRINGLER SYSTEM BY A FIRE PROTECTION SPECIALIST.

STANDARD RESIDENTIAL DOMESTIC AND FIRE SERVICES 1", 1.5" & 2" ^{sir.} 2 ° 3

FIRE SERVICES



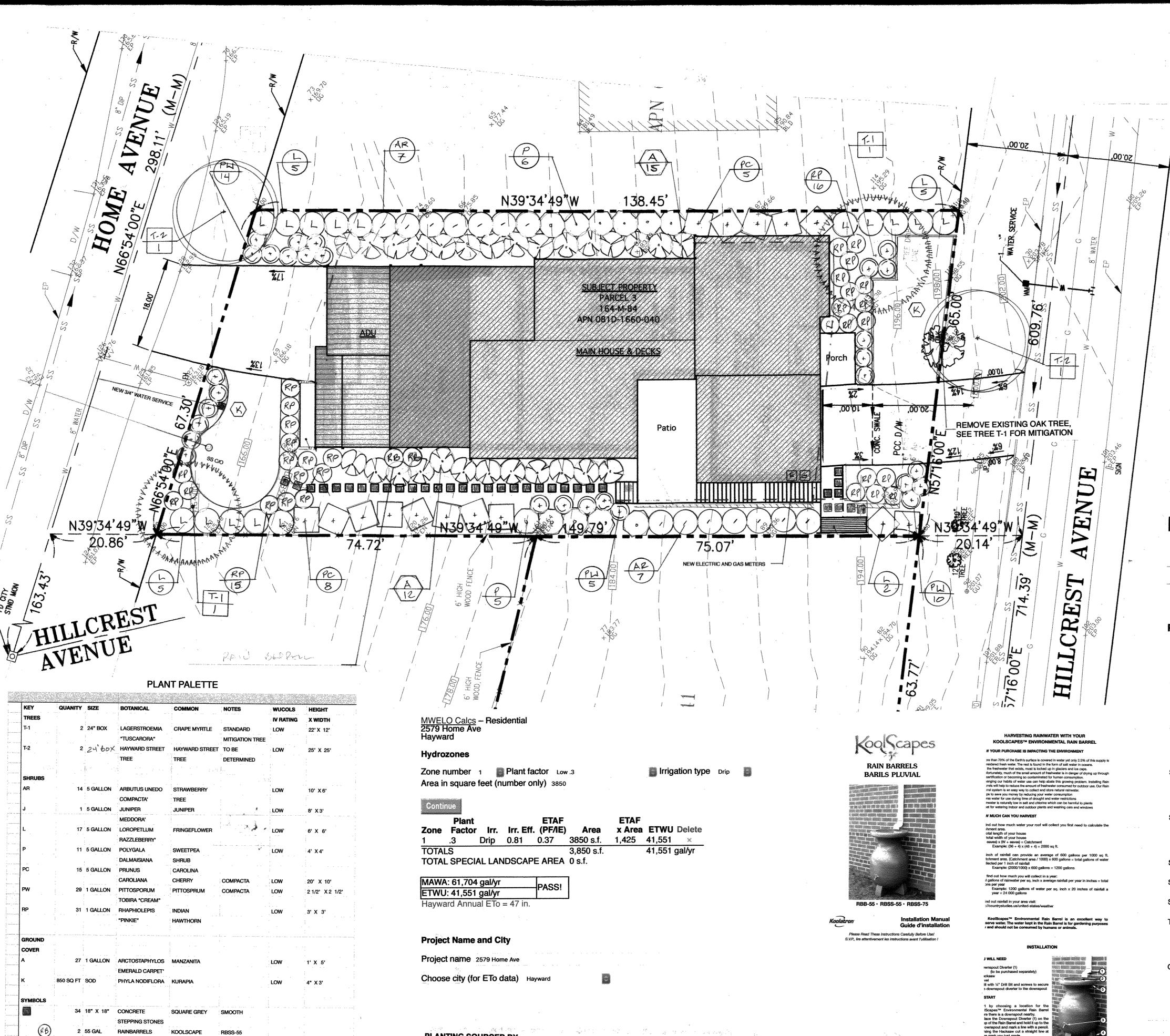




SLOPE CALCULATION

SERVICES

1 2 E 4 T

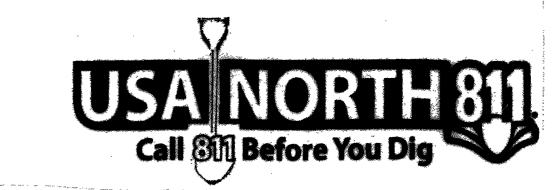


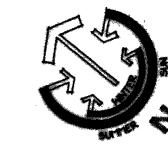
EBMUD- WATER CONSERVING PLANTS AND LANDSCAPES FOR THE BAY AREA

UNIVERSITY OF CALIFORNIA- WATER USE CLASSIFICATION OF LANDSCAPE

SPECIES, CURRENT VERSION WUCOLS IV

SOIL TYPE: CLAY LOAM





BAY-FRIENDLY WATER EFFICIENT LANDSCAPE ORDINANCE AND DOCUMENTATION PACKAGE

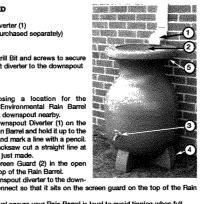
MARCH 28, 2020

University of California Water Use Classification of Landscape Species (WUCOLS IV)

Plant Search Database

Plants to export: 9

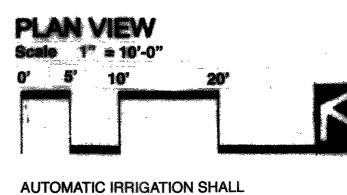
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Туре	Photo	Botanical Name	Common Name	Wa Us
STN		Arctostaphylos manzanita cvs.	manzanita cvs. e.g.Dr Hurd, St. Helena	Lo
S		Rhaphiolepis indica & cvs	Indian hawthorne	Lov
ST		Arbutus unedo	strawberry tree	Lov
STN		Prunus ilicifolia lyonii	Catalina cherry	Lov
S	N/A	Polygala X dalmaisiana	sweet pea shrub	Lov
ST	N/A	Pittosporum tobira and cvs.	mock orange	Lov
S	N/A	Loropetalum chinense & cvs.	fringe flower	Lov
TA		Lagerstroemia spp., hybrids and cvs.	crape myrtle	Lov



arres. Sing the Level ensure your Rain Barrel is level to avoid tipping when full. nsure that the spigot (3) is inserted into the fitting in the bottom front of the ain Barrel - turn in clock wise direction until it is sealed tight. nsure that the drain plug (4) is also sealed tight by also turning it in clock wise. CARE AND MAINTENANCE

KoolScapes™ Environmental Rain Barrel needs little care. ere is an overflow spout (5) in the back to prevent water from overflowing out stop of the Rain Barrel. To divert the water away from your home simply ach a backwash hose to the overflow spout and run through your garden or yn for slow watering.

so if you get a lot of rainfall in your area you may want to have several rainfall in your area you may want to have several rainfall. rrels to harvest the rainwater. To connect another Rain Barrel you will need to ach tubing to the overflow spout and secure with a clamp. Connect the other d of the tubing to the overflow spout of the second rain barrel and secure with ake sure to drain the water before winter in the areas where the temperatures op below freezing.



COVER 100% OF PLANTED AREA

juniper

Low

3.28.2020 1" = 10'-0"

PRINTED ON CLEARPRINT 1000H

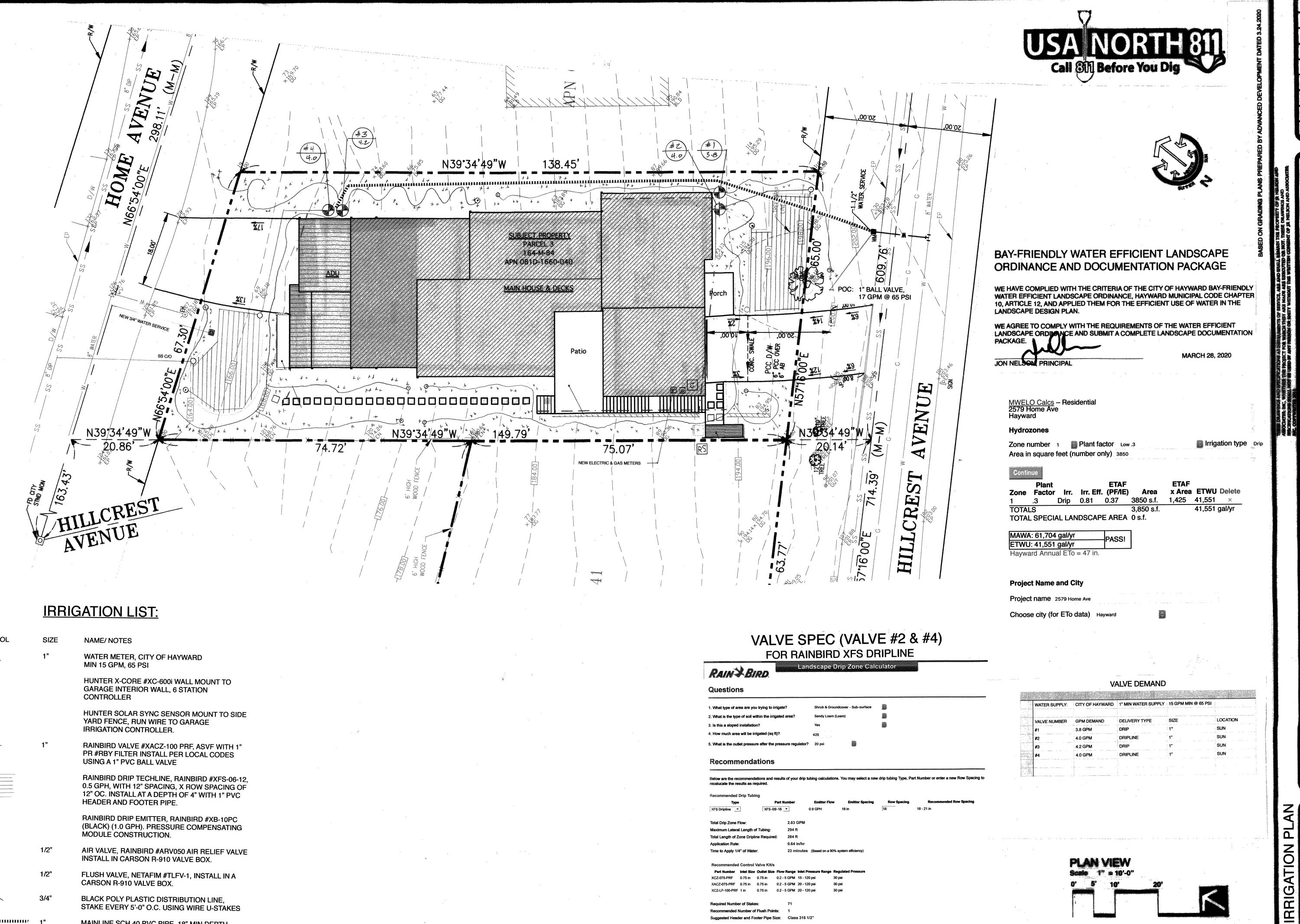
24" BOX TREES LOW WATER USE

15 GALLON TREES LOW WATER USE

5 GALLON SHRUBS LOW WATER USE

1 GALLON GROUND LOW WATER USE

2 LOW



Air relief to be installed at all high points within the zone - refer to the XF Series design guide for recommendations

SYMBOL

RS

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MAINLINE SCH 40 PVC PIPE, 18" MIN DEPTH

5.5.2020 ADD UTILITY ME

AUTOMATIC IRRIGATION SHALL

COVER 100% OF PLANTED AREA

3.28.2020 1" = 10'-0"

PLANTING NOTES

THE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK.

PRIOR TO BIDDING AND QUOTING COSTS FOR THIS PROJECT THE LANDSCAPE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH ALL EXISTING CONTROLS, PIPING, WIRING AND ANY NEEDED IMPROVEMENTS THAT ARE REQUIRED TO COMPLETE BOTH THE AUTOMATIC IRRIGATION AND LANDSCAPING SHOWN ON THIS PLANSET. SEVERAL TREES AND SHRUBS WILL BE REMOVED, OTHERS WILL BE SAVED IF AT ALL POSSIBLE. PLEASE REVIEW THIS PLAN THROUGHLY BEFORE BIDDING AND START OF IRRIGATION AD PLANTING OPERATIONS

ALL WORK TO BE PERFORMED BY PERSONS FAMILIAR WITH THIS TYPE OF WORK AND UNDER THE SUPERVISION OF A QUALIFIED PLANTING FOREMAN.

ALL WORK PERFORMED NEAR SIDEWALKS, DRIVEWAYS, ROADS, OR TEMPORARY WALKWAYS SHALL BE FENCED OFF TO PREVENT ANY ACCESS OTHER THAN LANDSCAPE CONTRACTORS PERSONAL, ALL WALKWAYS SHALL BE SWEPT DOWN WHEN NEEDED TO PROMOTE A SAFE WORKPLACE.

ALL LANDSCAPED AREAS SHALL RECEIVE AN AUTOMATIC IRRIGATION SYSTEM WHICH WILL WATER 100% OF PLANTED AREAS WITH A MINIMUM OF RUNOFF TO STREETS AND SIDEWALKS. IRRIGATION WILL ADJUSTED TO ELIMINATE OVER AND UNDER SPRAY ON ALL BUILDINGS, FENCES AND CARS. THIS SYSTEM SHALL BE SET TO WATER LANDSCAPED AREAS DURING THE NIGHT TIME OR AS EARLY IN THE MORNING AS POSSIBLE TO REDUCE WATER LOST TO EVAPORATION (10 PM UNTIL 6:00 AM ONLY) IRRIGATION CONTROLLER SHALL ALSO HAVE A RAIN SENSOR INSTALLED TO OVERRIDE THE AUTOMATIC SYSTEM.

ALL PLANTING AREAS AND TREE/ SHRUB PLANTING HOLES SHALL BE FREE FROM ROCKS AND CONSTRUCTION DEBRIS LARGER THAN 2" IN DIAMETER.

ALL LANDSCAPED AREAS SHALL HAVE NITRIFIED REDWOOD SAWDUST ROTOTILLED INTO THE TOP 6" OF SOIL. THE APPLICATION RATE WILL BE 6 CUBIC YARDS OF NITRIFIED SAWDUST PER 1000 SQUARE FEET OF AREA. THIS AMOUNTS TO A 2" LAYER OF SAWDUST INCORPORATED AS SOIL AMENDMENT INTO THE EXISTING SOIL.

FINISH SOIL GRADE SHALL BE 1" BELOW TOP OF PAVING, CURBS OR SIDEWALKS. LANDSCAPE CONTRACTOR SHALL ENSURE POSITIVE SURFACE DRAINAGE AWAY FROM BUILDING FOUNDATIONS IN All AREAS...

THE PLANT MATERIAL LOCATIONS ARE DIAGRAMATIC AND SUBJECT TO CHANGE IN THE FIELD AS DIRECTED BY THE LANDSCAPE PLANNER. LAYOUT PLANTS ACCORDING TO THE PLAN SO THAT PLANTS ARE PROPERLY SPACED FOR FUTURE GROWTH. MINOR ADJUSTMENTS MAY BE NECESSARY DUE TO VARIATIONS IN SITE CONDITIONS (EX: MAILBOXES, UTILITIES, LIGHT FIXTURES, DRAINAGE STRUCTURES).

ALL PLANT MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE CURRENT AMERICAN STANDARDS OF NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMAN.

ALL TREES AND SHRUBS SHALL HAVE AGRIFORM 21 GRAM FERTILIZER TABLETS INSTALLED INTHE BACKFILL AND ROOT ZONE OF PLANTS. TABLET APPLICATION RATE SHALL BE 15 GALLON MATERIAL WILL GET 3 TABLETS, 5 GALLON MATERIAL 2 TABLETS, AND ALL 1 GALLON STOCK WILL GET 1 TABLET.

THE PLANT COUNT IS FOR THE CONTRACTORS CONVENIENCE, IN CASE OF DISCREPANCY, THE PLAN SHALL

ALL GROUNDCOVER AND LANDSCAPED BEDS SHALL RECEIVE A 3" DEPTH OF SMALL SIZE WOOD MULCH CONSISTING OF FIRBARK OR DYED RECYCLED WOOD FIBER. IF RECYCLED WOOD CHIP IS USED ALL MATERIAL SHALL BE CERTIFIED FROM THE SUPPLIER TO CONTAIN NO CHEMICAL, PAINT, LEAD OR OTHER HAZARDOUS

THE EXCEPTION TO THIS NOTE CONCERNING THE MULCH IS AREAS THAT WILL BE GETTING KURAPIA GROUNDCOVER FROM SOD. THIS AREA WILL NOT BE MULCHED, WILL ONLY GET SOIL ADMENDMENT, AND FINISH GRADING PRIOR TO FERTILIZER APPLICATION AND GROUNDCOVER INSTALLATION.

ALL TREES TO BE STAKED AS NOTED, STREET TREE INSTALLATION SHALL HAVE VESPRO 18" TREE ROOT CONTROL INSTALLED. VINES SHALL TO TYED BACK TO SUPPORT THE LONG RANGE GROWTH OF THE PLANT.

CONTRACTOR SHALL APPLY ONE APPLICATION OF "RONSTAR" PRE-EMERGENT WEED CONTROL TO ALL PLANTED AREAS. THE PRE-EMERGENT WEED CONTROL SHALL BE APPLIED USING THE MANUFACTURES RECOMMENDED RATE

CONTRACTOR SHALL PERFORM A 30 DAY LANDSCAPE MAINTENANCE PERIOD BEGINNING FROM THE DATE OF FINAL PLANT INSTALLATION, APPLICATION OF WEED CONTROL AND FINAL PROJECT CLEANUP.

THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL LANDSCAPE PLANTING FOR A PERIOD OF 6 MONTHS FROM THE THE DATE OF FINAL PLANT INSTALLATION, APPLICATION AND LANDSCAPE MAINTENANCE PERIOD.

CONSTRUCTION DETAIL PLANS.



Results

Note: Schedules are based upon at most 3 separate days per week to comply with current watering restrictions. For more information about the restrictions please click here (http://www.sjwater.com/news/topic/water_conservation_rules_in_effect/).

2579 HOME AVENUE HAYWARD, CALIFORNIA

Settings: Low Water Plants, Loam, Drip-Emitter Line, Sloped Area

Controller Settings

Month	Jan	Feb	Mar	Apr	May	Jun	Jul*	Aug	Sep	Oct	Nov	Dec
	1	1	1	2	2	2	2	3	2	1	2	1
	6	9	19	13	17	19	20	12	14	19	5	5
	1	1	1	1	1	1	1	1	1	1	1	1
	99 - 150		316 - 474		566 - 849		666 - 999	600 - 899	466 - 699			

* If your irrigation controller has a "Seasonal Adjust % Feature" we suggest that you program your controller to the July recommendations and then adjust as suggested below:

San Jose - Seasonal / Budget Adjustments

50% 20%

Seasonal / Budget Adjust % Feature is used to make global run time changes without reprogramming the entire

WATER AND LANDSCAPE EFFICIENCY CHECKLIST

IRRIGATION POINTS:

- MANUAL SHUTOFF OF ENTIRE IRRIGATION SYSTEM WITHIN 10'-0" OF POINT OF CONNECTION.. EXISTING POC IS A 1" AND 1" SIZE. SYSTEM DESIGNED FOR A MINIMUM OF STATIC PRESSURE OF 65 PSI, PRODUCING 17 GPM AT WATER METER.
- 2. ALL DRIP EMITTERS ARE DESIGNED FOR MATCHED PRECIPITATION RATES THROUGHOUT ALL VALVES AND SYSTEMS.
- IRRIGATION WATER AUDIT SHALL BE PERFORMED UPON PROJECT COMPLETION.
- SITE IS PRIMARILY FLAT, NOT SLOPED, REDUCING ANY RUNOFF CONDITIONS.
- DRIP EMITTERS AND BUBBLERS ARE ALL DESIGNED TO CURRENT ANSI STANDARDS FOR THE MOST EFFICIENT IRRIGATION.
- AUTOMATIC IRRIGATION CONTROLLER IS DESIGNED USING REDUCING CARBON IMPACT, DESIGNED WITH NON-VOLATILE MEMORY ALLOWING FOR FULL MEMORY IF SYSTEM IS SHUT-OFF FOR ANY REASON.
- AUTOMATIC IRRIGATION IS CONTROLLED BY A SOLAR SYNC SENSOR PROVIDING POSITIVE CLOCK SHUT-OFF IN A RAIN EVENT.
- EACH AUTOMATIC IRRIGATION VALVE HAS ITS OWN INDIVIDUAL BALL VALVE SHUT-OFF LOCATED A EACH VALVE BOX LOCATION, THIS ALLOWS FOR QUICK POSITIVE CONTROL OF EACH CONTROL VALVE.
- 9. ALL DRIP VALVES HAVE ACCU-SYNC #40 PRESSURE REDUCING VALVES ATTACHED TO ELIMINATE ANY MISTING OR BLOWOUTS OF DRIP EMITTERS. AND MAINTAIN A CONSTANT PRESSURE OF 40 PSI OR LESS.
- 10. SYSTEM DESIGNED USING DRIP EMITTER IRRIGATION. POPUP SPRAY HEADS ARE USED IN ONLY A VERY LIMITED WAY ON THIS PROJECT. THIS PROMOTES HEALTHY PLANT GROWTH, AND REDUCES OVERALL WATER USE.
- 11. A MASTER VALVE IS INSTALLED BETWEEN THE BACKFLOW PREVENTION VALVE AND THE FIRST AUTOMATIC VALVE TO REDUCE WATER LOSS DUE TO MAINLINE PIPE
- 12. BACKFLOW PREVENTION UNIT IS TO BE INSTALLED PER LOCAL CODES, UPON INSTALLATION UNIT SHALL HAVE BACKFLOW TEST GIVEN TO ASSURE COMPLIANCE.

PLANTING ITEMS

- 13. PROJECT IS NOT DESIGNED WITH ANY FORM OF NOXIOUS OR INVASIVE TREES. SHRUBS OR GROUNDCOVER.
- 14. HEAVY AMOUNTS OF WOOD MULCH CHIPS IN LANDSCAPE AREAS, 3" DEPTH IN GENERAL PLANTING BEDS . THIS DEPTH OF MULCH WILL REDUCE WEED GROWTH AND IRRIGATION WATER EVAPORATION AT EMITTER SITE.
- 15. HEAVY USE OF SOIL ADMENDMENTS IN PLANTING AREAS ALLOWS FOR BETTER PLANT GROWTH AND REDUCED AMOUNTS OF IRRIGATION WATER. THE MIX SHOWN ON PLAN IS DOUBLE THE AMOUNT OF ORGANIC MATERIAL REQUIRED BY THE CURRENT STATE STANDARD.

SOIL ADMENDMENT WILL BE: 6 CUBIC YARDS OF NITROFIED REDWOOD COMPOST PER 1,000 SQUARE FEET OF LANDSCAPED AREA. THIS WILL BE ROTOTILLED INTO THE TOP 6 " OF TOPSOIL. ADDITIONAL SOIL ADMENDMENT NOTES ARE SHOWN ON SHEET L-6

16. ALL PLANTING IS DERIVED FROM THE MOST CURRENT WULCOS IV

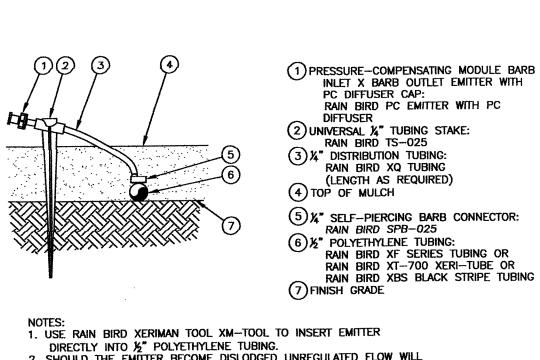
COLOR, DECORATIVE WATER FEATURES OR VEGETABLE GARDENS.

IRRIGATION TO WATER RAPIDLY GROWING PLANTINGS.

SOFTWARE AND FROM THE LATEST EAST BAY MUNICIPAL UTILITY DISTRICT PLANTING RECOMMENDATIONS TITLED "LOW WATER USE PLANTINGS".

17. LANDSCAPE PLANTINGS FEATURE NO LAWN SOD OR ANNUAL FLOWER

- 18. ALL FERTILIZER REQUIRED WILL BE ORGANIC, SLOW RELEASE VARIETY. THIS WILL REDUCE THE NITROGEN SPIKE AND SUBSEOUENT INCREASED
- 19. ALL PLANTINGS USED ARE RELATIVELY LOW WATER USE MATERIAL. PLANT PALETTE WATER RATIO IS 100% LOW WATER USE PLANTINGS NO HIGH USE NURSERY MATERIAL INCLUDED SUCH AS FLOWER/ GARDEN OR WATER FEATURE USE INCORPORATED IN DESIGN OF THIS PROJECT.



DIRECTLY INTO 1/2" POLYETHYLENE TUBING.

2. SHOULD THE EMITTER BECOME DISLODGED UNREGULATED FLOW WILL

OCCUR.

3. RAIN BIRD PC BARB X BARB EMITTERS ARE AVAILABLE IN THE 4. PC DIFFUSER CAPS ARE AVAILABLE IN BOTH BLACK AND PURPLE

PRESSURE COMPENSATING MODULE WITH PC DIFFUSER CAP FROM BARB CONNECTOR 1-13-10 INTO 1/2" TUBING WITH 1/4' TUBING. STAKE AND BUG CAP - OPTION 3

LANDSCAPE AND IRRIGATION MAINTENANCE SCHEDULE

SHRUB AND GROUNDCOVER AREAS:

- · All weeds shall be removed as they appear. Additional weed control shall be initiated as necessary to maintain a weed free condition.
- Shrub and ground cover shall be fertilized as little as possible while still keeping them healthy. It might be necessary to fertilize 1 to 2 times a year after the danger of frost has passed in the Spring and possibly again in the Fall. Application to be 1 pound of actual nitrogen per 1,000 square feet using a 16-16-16 slow release formula material. Where possible use organic fertilizers whenever possible. Native ground cover such as Manzanita doesn't want much fertilizer if any. DO NOT USE OR APPLY ANY FORM OF FERTILIZER IN THE EXISTING OAK TREE DRIPLINE.
- Trim and edge as necessary to restrict growth from encroaching on sidewalks, irrigation
- components, or other adjacent areas. • Thin, shape and head back all shrubs only as needed, but check them at least annually.
- All shrubs with a leaf size exceeding 2 inches shall be selectively pruned with hand clippers. • Maximize plant size. Encourage shrubs to completely fill in planting beds. Shrubs shall have a
- natural branching habit and form at all times. • Maintain shrubs at driveways and entrances to a height that will ensure safe vehicular access and
- Prune at the proper time of year for each species to promote new growth and flowering.
- Irrigate as necessary to maintain adequate growth and reasonable appearance.
- Spot check soil moisture with a soil sampling probe weekly. • Control pests, including rodents and snails, to provide a healthy environment for plants and public.

All trimming of trees on the property is to be discussed with the Owner prior to commencement of work

- and may require guidance and/ or skills of a certified arborist. • Trim, shape and selectively prune to maintain a safe, reasonable appearance. Trees shall be allowed to grow to the full genetic height and habit (trees shall not be topped). Trees shall shall be maintained standard arboriculture practices.
- Control pest and diseases as needed. Report occurrences to the Owner.
- Tag and report any trees that show stress or weakness or trees that are in danger of uprooting patios or endangering building to the Owner assign as they are detected.
- Remove all dead, diseased or damaged branches back to a side branch. • Stake and support trees when necessary. Check all trees and remove unnecessary tree guy wires at
- least annually.
- All guys and ties shall be checked frequently to avoid girdling
- Maintain watering basins on young trees through the second year of establishment if they have drip
- Fertilized ornamental trees each April with deep root feeding and a 3 to 4 month, water soluble, 10-15-15 slow release fertilizer at recommended rates for the individual planting. DON'T FERTILIZE MATURE OAK TREES.
- Irrigate as required as required to maintain adequate growth and appearance

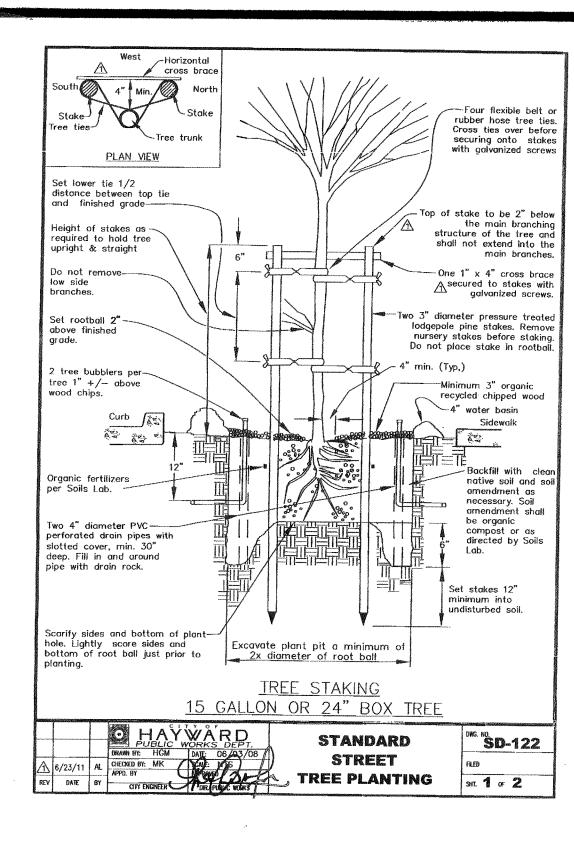
Irrigation System Maintenance:

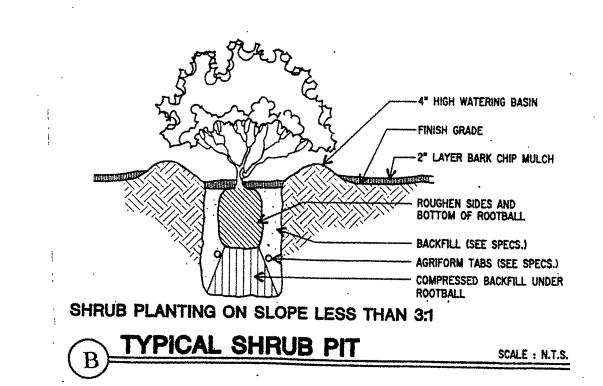
It is the responsibility of the landscape maintenance crew or the homeowner if there is no maintenance company to maintain the complete sprinkler and irrigation system in an operable condition at all times. This includes, but is not limited to, pressure regulators, basket strainers, back flow devices, pump systems, main pressure lines, lateral lines, clocks, valves, drip emitters, and sprinkler heads.

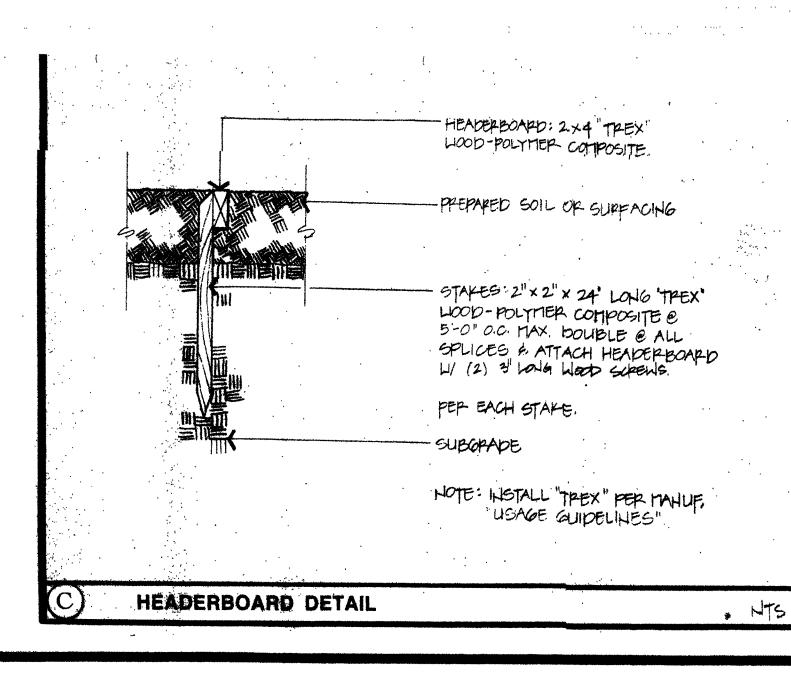
- Annually, during the month of February, a detailed Irrigation System Check shall be performed. A report on all necessary and suggested repairs shall be submitted to the homeowner or property
- All systems are to be operationally checked monthly by running each zone a minimum of two
- Keep valves in adjustment to prevent excessive flow velocity, slow or rap closure, excessive preside, and water hammer.
- Check and record the water supply static pressure annually. Differences in the sprinkler systems design operating pressure and actual available water pressure can affect operation and efficiency.
- Annual backflow device certification tests for all devices shall be completed once a year when notified and as required by the water department or supplier, and the results submitted to the owner and the water department supplier. Monthly, the devices shall be visually checked for failure. Water meter readings are to be taken monthly and recorded in a water usage log to help determine if there
- Check all irrigation control clocks once a month to ensure that timers are still programmed correctly and are receiving ET data. Adjust water application settings of timers only if automatic ET irrigation controller shows error. Verify appropriate operation duration and frequency and start time. Irrigate only at night between 10:00 PM and 8 AM. Reprogram the ET based automatic controllers two months after the establishment period and of any new planting installations.
- At the beginning of the rainy season and monthly during the rainy season, make sure a rain sensor is still properly installed, set at one forth of an inch or less, and not sheltered by walls, shrubs or other plants. All irrigation systems must be turned off during periods of rain.
- Repair and adjust all sprinkler heads to maintain proper coverage on an as needed and ongoing basis. Adjust irrigation system components whenever irrigation water falls or runs onto hard surfaces such as sidewalks, streets or driveways. (There are no sprinkler heads on this job because there is only drip irrigation).
- General plant health, due to under or over watering and vandalism to irrigation materials shall be reported monthly.
- Verify that sprinkler coverage is properly adjusted. Check the nozzle, arc, radius level and attitude with respect to slope. Make sure all heads pop-up completely and fully retract when the water is turned off. Check for sprinklers blocked by grass, plants or other obstacles. If the spray is blocked, remove the obstacle or move the sprinkler head. Make sure sprinklers are vertical and flush with the soil grade. (There are no sprinkler heads on this job because there is drip irrigation).
- Check drip zone emitters for debris and assure proper operation.
- Clean out Y-filters of drip valve assemblies and flush drip lines, if excessive dirt or mineral
- Identify pipeline and valve leaks, and low head drainage problems. Make repairs immediately. Signs of leakage include green and soggy areas, often around spray heads and hose bibs.
- size in irrigation plan, to maintain correct design pressure after repairs. Test all repairs. Winterize sprinkler sprinkler systems if freezing is to be expected by removing all the water from the irrigation system in order in order to prevent cracked pipes, broken heads and other problems.

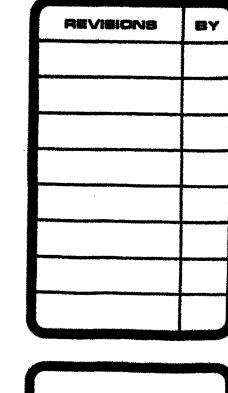
Repair or replace broken hardware and pipes with matching, original equipment. Refer to pipe

Identify your priorities during water limited situations such as various stages of drought. These priorities shall be summarized and reported to the home or property owner annually.









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1.17.2019 AS NOTED

HAYWARD