



Building Data Summary

Project ID:	Residence *****
Location:	*****
Scope of Work:	Landscaping
Date:	



Item #	Ref. Sheet #	Item Description	Unit	Quantity	Wastage	Quantity w/ Wastage	Unit Material Cost	Total Material Cost	Unit Manhour	Hourly Wage	Unit Labor Cost	Total Labor Cost	Sub Cost	Total Trade Cost
75		Blonde Ambition Blue Grama - 1 Gal	EA	97	0%	97	\$ 9.65	\$ 936.05	0.152	\$ 62.85	\$ 9.55	\$ 926.66	\$ 1,862.71	
76		Foothill Sedge - 1 Gal	EA	96	0%	96	\$ 5.25	\$ 504.00	0.152	\$ 62.85	\$ 9.55	\$ 917.11	\$ 1,421.11	
77		Canyon Prince Giant Wild Rye - 1 Gal	EA	8	0%	8	\$ 14.00	\$ 112.00	0.188	\$ 62.85	\$ 11.82	\$ 94.53	\$ 206.53	
78		Stonecrop - Flat	EA	61	0%	61	\$ 9.98	\$ 608.78	0.120	\$ 62.85	\$ 7.54	\$ 460.06	\$ 1,068.84	
79		Copertone Stonecrop - 1 Gal	EA	32	0%	32	\$ 8.95	\$ 286.40	0.320	\$ 62.85	\$ 20.11	\$ 643.58	\$ 929.98	
80		Blue Chalksticks - 4" Pot	EA	52	0%	52	\$ 13.20	\$ 686.40	0.288	\$ 62.85	\$ 18.10	\$ 941.24	\$ 1,627.64	
81		Fred Ives Graptoveria - 1 Gal	EA	46	0%	46	\$ 12.00	\$ 552.00	0.255	\$ 62.85	\$ 16.04	\$ 737.81	\$ 1,289.81	
<b>Subtotal (Demolition and Site Work )</b>								<b>\$ 79,524</b>				<b>\$ 46,333</b>		<b>\$ 125,857</b>

												<b>PROJECTED COST</b>	<b>\$ 134,048.4</b>	
												<b>INSURANCE</b>	<b>3%</b>	<b>\$ 4,021.5</b>
												<b>CONTINGENCY</b>	<b>5%</b>	<b>\$ 6,702.4</b>
												<b>OVERHEAD AND PROFIT</b>	<b>15%</b>	<b>\$ 20,107.3</b>
												<b>TAX</b>	<b>6.50%</b>	<b>\$ 5,169.1</b>
												<b>SUGGESTED BID</b>	<b>\$ 170,049</b>	

**Note:**  
 1. Please verify the equipment's and their prices with owner.  
 2. Online sources are used for pricing.  
 3. Prices can vary depending upon field conditions.



# LANDSCAPE PLANS FOR RESIDENCE

## GENERAL NOTES

- ADJUST ANY VALVE CANS, VAULT FRAMES AND COVERS, MANHOLE FRAMES AND COVERS TO FINISH GRADE (TYP. FOR ALL UTILITY SURFACE FEATURES FOR THIS PROJECT) SEE LAYOUT & CIVIL GRADING PLANS
- CONTRACTOR SHALL BE RESPONSIBLE FOR BEING FAMILIAR WITH ALL UNDERGROUND UTILITIES, PIPES, AND STRUCTURES, AND MARK LOCATION ON SITE WHERE TRENCHING OR EXCAVATION IS TO OCCUR AND PROTECT ALL UTILITIES WITHIN SCOPE OF WORK AREA. CONTRACTOR SHALL TAKE SOLE RESPONSIBILITY FOR COST INCURRED DUE TO DAMAGE AND REPLACEMENT OF SAID UTILITIES. CONFIRM LOCATION WITH OWNER AND COORDINATE WITH GRADING AND LAYOUT PLANS.
- CONTRACTOR SHALL CONSTRUCT AND MAINTAIN PERIMETER EROSION CONTROL AND PROTECT ALL STORM DRAIN INLETS FOR THIS SCOPE OF WORK PER CIVIL ENGINEER'S EROSION CONTROL PLANS.
- ALL CONSTRUCTION AND INSTALLATION OF LANDSCAPE AND HARDSCAPE ITEMS SHALL BE PER LOCAL CODES AND ORDINANCES.
- ALL PAVED AREAS AND FINISH GRADE AREAS SHALL SLOPE TO DRAIN. REFERENCE CIVIL ENGINEER'S GRADING PLAN.
- WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DRAWINGS. ALL DIMENSIONS SHALL BE VERIFIED AGAINST EXISTING CONDITIONS AND ALL DISCREPANCIES REPORTED TO THE LANDSCAPE ARCHITECT.
- CONTRACTOR SHALL READ AND UNDERSTAND THE PROJECT SPECIFICATIONS ACCOMPANYING THESE PLANS PRIOR TO BIDDING. FAILURE TO ADHERE TO THE SPECIFICATIONS DURING CONSTRUCTION WILL RESULT IN A DELAY OF THE PROJECT AT THE CONTRACTOR'S RISK. CONTRACTOR IS RESPONSIBLE FOR ANY LOSS DUE TO A DELAY. CONTRACTOR SHALL NOT ALTER THE DESIGN OR LAYOUT OF THIS PROJECT IN ANY WAY WITHOUT THE CONSENT OF THE LANDSCAPE ARCHITECT AND OWNER.

## DEMOLITION NOTES:

- CONTRACTOR SHALL CONFIRM LOCATION OF ALL EXISTING UTILITIES AND WATER LINES ON SITE AND PROTECT ALL UTILITIES AND INFRASTRUCTURE WITHIN SCOPE OF WORK AREA. CONFIRM LOCATION WITH OWNER. CALL UNDERGROUND SERVICE ALERT AT LEAST TWO WORKING DAYS BEFORE TRENCHING, GRADING, OR EXCAVATING.
- CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES AS PRESCRIBED ON GRADING PLAN.
- CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY REGARDING DISCREPANCIES BETWEEN PLAN AND FIELD CONDITIONS.
- PROTECT EXISTING PLANT MATERIAL IN AREAS WHERE GRADE OR SURFACE IS NOT TO BE ALTERED. PROTECT EXISTING SITE FURNISHINGS INCLUDING BUT NOT LIMITED TO ALL BOULDERS, LIGHTING FIXTURES, IRRIGATION VALVES, BOXES, AND WIRING, UTILITY VAULTS, AND ELECTRICAL JUNCTION BOXES.
- ADJUST VALVE CANS, VAULT FRAMES AND COVERS, MANHOLE FRAME AND COVER TO FINISH GRADE AS REQUIRED. TYP. FOR ALL UTILITY SURFACE FEATURES FOR THIS PROJECT. SEE GRADING AND LAYOUT PLANS.
- CONTRACTOR SHALL DISPOSE OF ALL MATERIALS.

## EXISTING PLANT LEGEND

CODE	BOTANICAL NAME	COMMON NAME	WATER USE
CL	COTONEASTER LACTEUS *	RED CLUSTERBERRY	LOW
CS	QUERCUS SEMPERVIRENS *	ITALIAN CYPRESS	LOW
FS	FELICIA SELJOWIANA *	PINEAPPLE GUAVA	LOW
MA	MORUS ALBA *	WHITE MULBERRY	MEDIUM
PA	FERSEA AMERICANA *	AVOCADO	MEDIUM
PE	PITOSPORUM EUGENOIDES	TARATA	MEDIUM
P.H.C.	PHACELIA CANARIENSIS *	CANARY ISLAND DATE PALM	LOW
P.C.	FRUNUS CAROLINIANA	CAROLINA LAUREL CHERRY	MEDIUM
PL	FRUNUS LUCIFOLIA LYON	CATALINA CHERRY	LOW
PY	PHYRACANTHA SPP. CV9	PRETORN	LOW
QA	QUERCUS AGRIFOLIA	COAST LIVE OAK	VERY LOW
SM	SCHNUS MOULLE	CALIFORNIA PEPPER TREE	VERY LOW
SP	SYZYGIUM PUNICULATUM	EUGENA	MEDIUM
SR	SYAGRUS ROMANZOFFIANUM	QUEEN PALM	MEDIUM
FN	ROUS NITIDA *	ROUS *	MEDIUM

\* INDICATES PLANT IS OFF-SITE

## SHEET INDEX

SHEET	DESCRIPTION
L-1	TREE PRESERVATION & DEMOLITION PLAN
L-2	LAYOUT PLAN
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L-4	PLANTING PLAN
L-5	LIGHTING PLAN
L-6.1	CONSTRUCTION DETAILS
L-6.2	IRRIGATION DETAILS
L-6.3	PLANTING DETAILS
L-7	IRRIGATION SPECIFICATIONS
L-8	LANDSCAPE SPECIFICATIONS

## PROJECT INFORMATION

OWNERS: ANNIE & PAUL DE BRUYN KOPS  
 ADDRESS: 1241 E. COTA STREET, SANTA BARBARA, CA 93103  
 APN: 031-190-048

2.0  
5.0  
1.0

RS-6  
R-3  
9,042 SF / .21 AC  
LOW DENSITY RES. 50U/ACRE  
NO

DISIGN TUM

OWNER: ANNIE & PAUL DE BRUYN KOPS  
 2950 PORTO RD, SANTA BARBARA, CA 93108  
 (805) 791-4598  
 PAULDBK@MAC.COM

LANDSCAPE ARCHITECT: TRUE NATURE  
 438 W. QUINTO STREET, SANTA BARBARA, CA 93105  
 CONTACT: KIMBERLY TRUE  
 PHONE: 805-110-2100  
 KIM@TRUENATUREDESIGN.COM

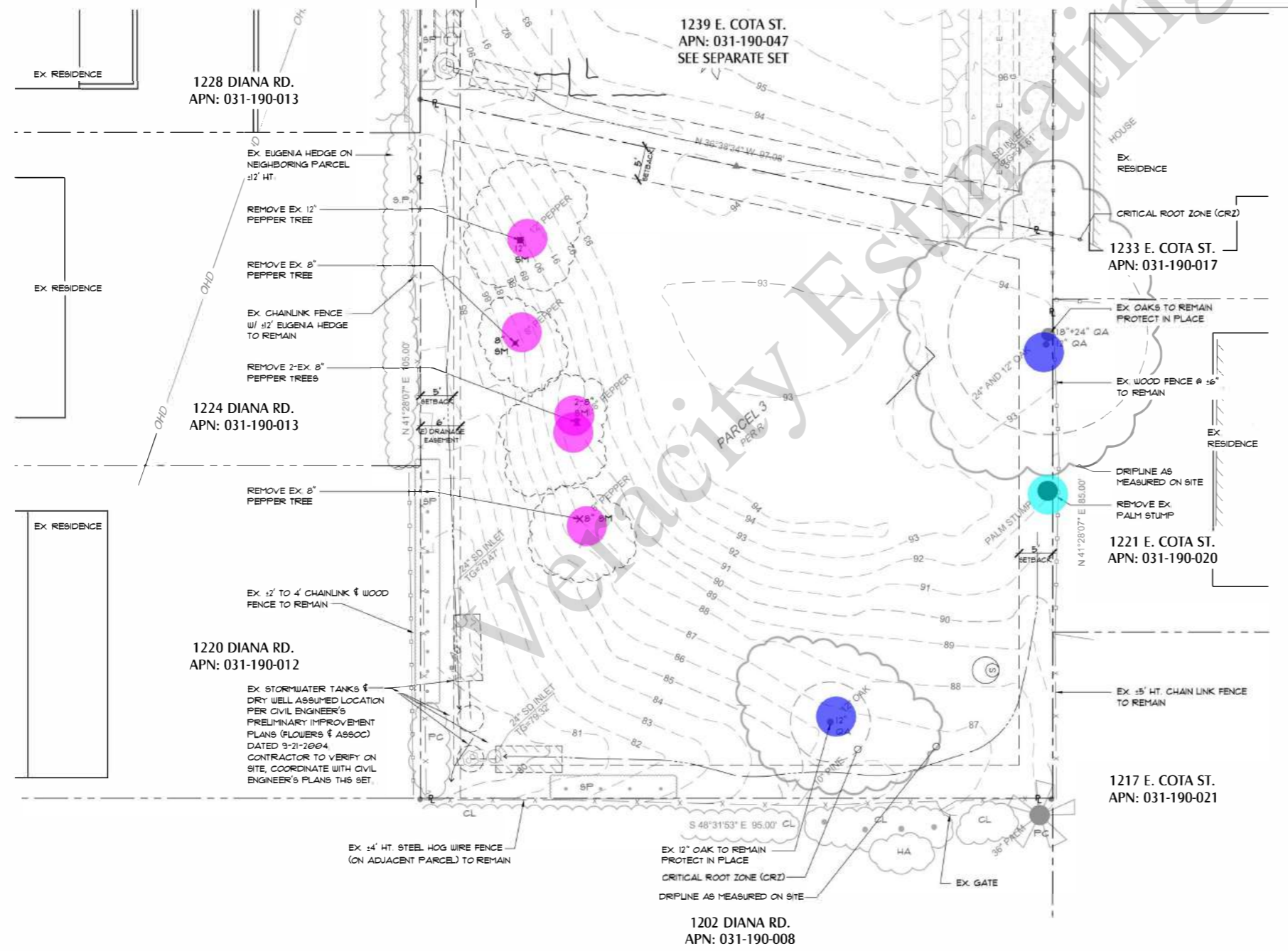
ARCHITECT: JEFF SHELTON  
 519 FIG AVENUE, SANTA BARBARA, CA 93101  
 PHONE: 805-108-2102  
 JEFF@JEFFSHELTONARCHITECT.COM

STRUCTURAL ENGINEER: ASHLEY & VANCE ENGINEERING, INC.  
 210 E. COTA STREET, SANTA BARBARA, CA 93101  
 (805) 962-9366  
 INFO@ASHLEYVANCE.COM

SURVEYOR: WJ SURVEYING, INC.  
 1721 STATE STREET, SUITE 25, SANTA BARBARA, CA 93101  
 (805) 748-3234

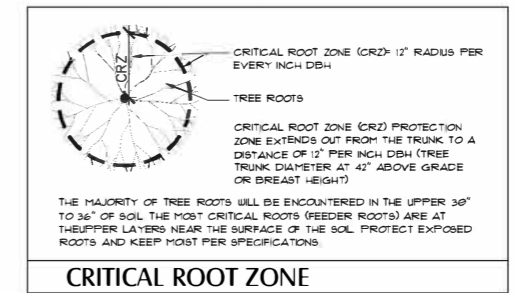
CIVIL ENGINEER: ASHLEY & VANCE ENGINEERING, INC.  
 210 E. COTA STREET, SANTA BARBARA, CA 93101  
 (805) 962-9366  
 INFO@ASHLEYVANCE.COM

- Existing OAK Tree Protect in Place
- Remove 8" Pepper Tree
- Remove Palm Stump



## TREE PROTECTION:

- ALL EXISTING OAK TREES SHALL BE PROTECTED PER P.C. RESOLUTION 018-05 CONDITION A & B. IF ANY TREE IS INADEQUATELY PROTECTED SUCH THAT IT DOES NOT SURVIVE, IT SHALL BE REPLACED AT A THREE TO ONE RATIO WITH 2 1/4" BOX-SIZE TREES. ALL OAKS TO BE PRESERVED AND PROTECTED SHALL BE FENCED DURING CONSTRUCTION AND GRADING. SEE TREE PROTECTION AND DEMOLITION PLAN THIS SET.
- THE USE OF HERBICIDES OR FERTILIZERS SHALL BE PROHIBITED WITHIN THE DRIFLINE OF ANY OAK TREE PER P.C. RESOLUTION 018-05 CONDITION A 1.
- TO AVOID COMPACTION OF SOIL AROUND THE CRITICAL ROOT ZONE OF THE EXISTING OAK TREES TO BE PROTECTED, ALL SPECIFIC OAK TREES ON THE SITE SHOULD BE FENCED WITH AT THE CRITICAL ROOT ZONE WITH 5' HT. HIGH VISIBILITY PLASTIC MESH FENCING ON STEEL T-BAR STAKES DRIVEN INTO THE GROUND MINIMUM OF 18". FENCING SHALL BE IN PLACE PRIOR TO ARRIVAL OF ANY CONSTRUCTION MATERIALS OR EQUIPMENT ON SITE, AND SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION IS COMPLETED AND FINAL APPROVAL IS GIVEN.
- GRADING, TRENCHING AND OTHER GROUND DISTURBANCE ACTIVITIES SHALL OCCUR OUTSIDE OF THE CRITICAL ROOT ZONE (CRZ) OF ALL ON-SITE OAK TREES TO REMAIN. IF TRENCHING MUST OCCUR WITHIN CRZ, IT SHALL BE DONE BY HAND. ANY ROOTS ONE INCH IN DIAMETER OR GREATER ENCOUNTERED DURING GRADING OR TRENCHING SHALL BE CLEANLY CUT.
- CRITICAL ROOT ZONE (CRZ) IS DEFINED AS AN AREA OF 12" FOR EVERY 1" OF TRUNK DIAMETER EXTENDING OUT FROM TRUNK. SEE DETAIL 1 BELOW.
- ONLY TREES DESIGNATED FOR REMOVAL SHALL BE REMOVED.
- ALL TREES NOTED AS "TO BE PROTECTED" SHALL BE FENCED PER NOTES.
- CONSTRUCTION EQUIPMENT STAGING AND STORAGE AREAS SHALL BE LOCATED OUTSIDE OF THE PROTECTED AREA. NO CONSTRUCTION EQUIPMENT SHALL BE PARKED, STORED, OR OPERATED WITHIN THE PROTECTED AREA.
- REFERENCE GRADING PLANS FOR GRADING EXTENTS, EROSION CONTROL MEASURES, AND ADDITIONAL NOTES.



Underground Service Alert

Call: **811**

TWO WORKING DAYS BEFORE YOU DIG

TRUE NATURE  
LANDSCAPE ARCHITECTURE

KIMBERLY TRUE, M.L.A.  
315 Meigs Road Suite A-131  
Santa Barbara, CA 93109  
TrueNatureDesign.com  
805-770-2100

Date: 1/31/2022

Revisions:  
 4/18/2022 City SFDB/BLDG  
 08/16/2022 City SWAMP/PLCK/SFDB  
 02/07/2023 PLCK 1  
 03/16/2023 PLCK 2

TREE PRESERVATION & DEMOLITION PLAN

LANDSCAPE ESTIMATING SERVICES



REGISTERED LANDSCAPE ARCHITECT

NO. 5096

SIGNATURE: 04/30/2025

EXPI. DATE

STATE OF CALIFORNIA

Drawn By: KJT

Sheet: L-1

Of 10

Job No.: 2116

**EXISTING PLANT LEGEND**

CODE	BOTANICAL NAME	COMMON NAME	WATER USE
CL	COTONEASTER LACTEUS *	RED CLUSTERBERRY	LOW
CS	CUPRESSUS SEMPERVIRENS *	ITALIAN CYPRESS	LOW
FS	FELICIA SELLOUANA *	FINEAFFLE GUAVA	LOW
MA	MORUS ALBA *	WHITE MULBERRY	MEDIUM
PA	PERSEA AMERICANA *	AVOCADO	MEDIUM
PE	PITCOFORUM EUGENIODES	TARATA	MEDIUM
P.H.C.	PHOENIX CANARIENSIS *	CANARY ISLAND DATE PALM	LOW
P.C.	PRUNUS CAROLINANA	CAROLINA LAUREL CHERRY	MEDIUM
PL	PRUNUS ILICIFOLIA LYON	CATALINA CHERRY	LOW
PL	PRUNUS ANTHUS SPP. CV8	RESTRORN	LOW
QA	QUERCUS AGRIFOLIA	COAST LIVE OAK	VERY LOW
SM	SCHNUS MOLLE	CALIFORNIA PEPPER TREE	VERY LOW
SF	SYZYGIUM PANICULATUM	EUGENIA	MEDIUM
SR	SYAGRUS ROMANZOFFIANUM	QUEEN PALM	MEDIUM
FN	ROSLINTIDA *	ROSLINTIDA *	MEDIUM

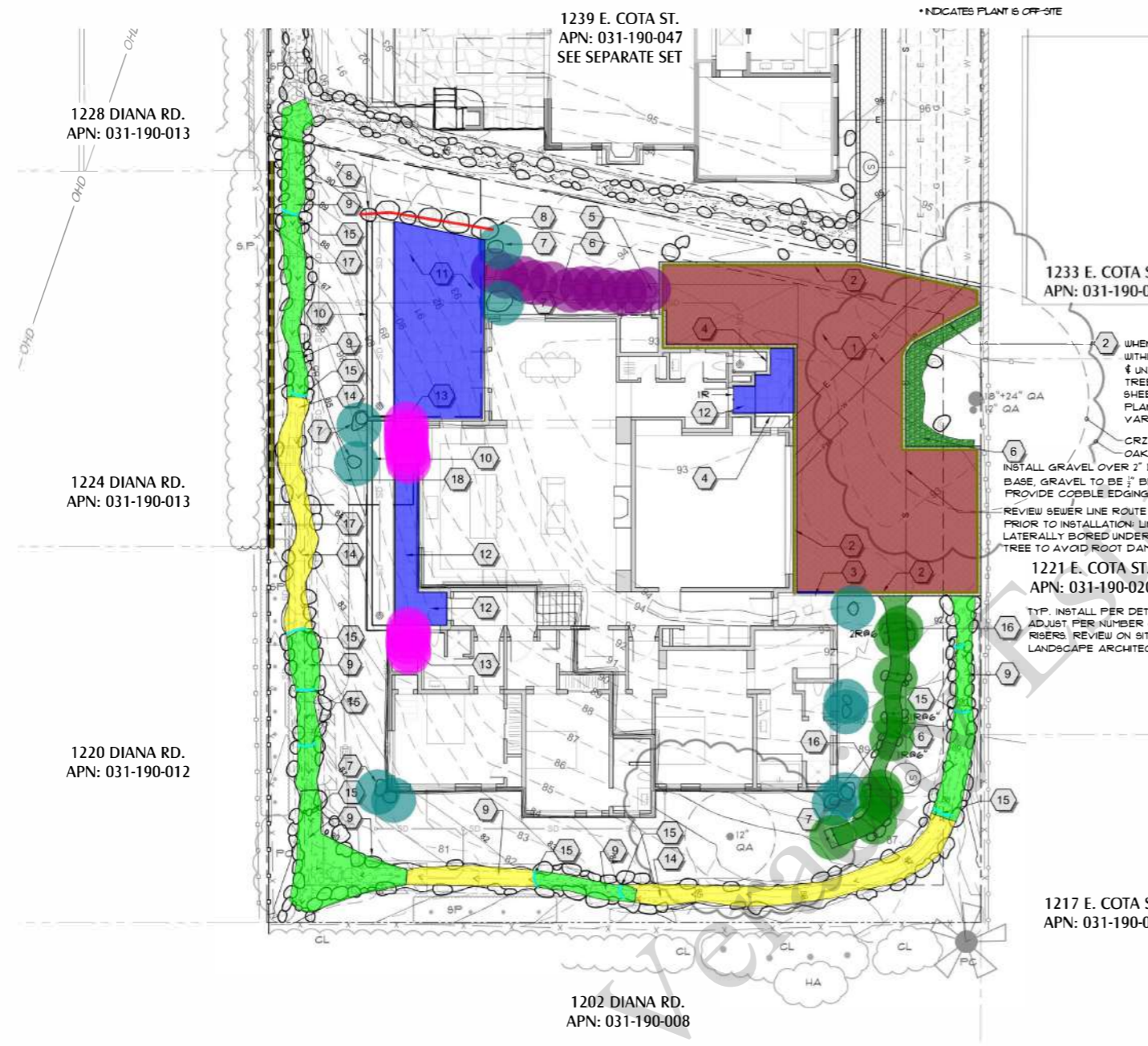
\* INDICATES PLANT IS OFF-SITE

**LAYOUT NOTES**

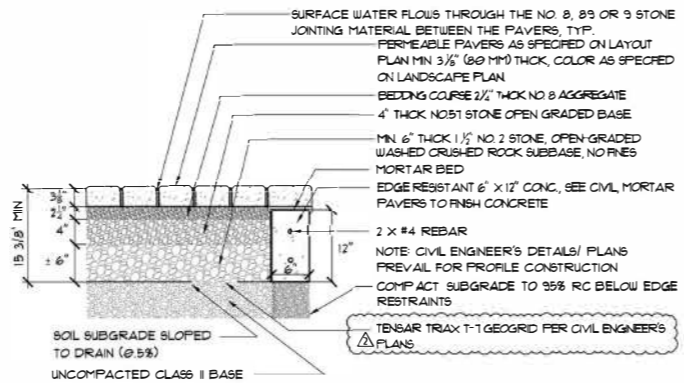
- LOCATION OF FEATURES SHOWN ON DRAWINGS TO BE CONSTRUCTED WHICH ARE NOT SPECIFICALLY DIMENSIONED MAY BE DETERMINED BY SCALE. IN CASE OF DISCREPANCY, CONTACT LANDSCAPE ARCHITECT IMMEDIATELY IN WRITING FOR RESOLUTION PER SPECIFICATIONS.
- OBTAIN A COPY OF THE STRUCTURAL SOILS REPORT FROM OWNER. ADHERE TO ALL APPLICABLE RECOMMENDATIONS. CONTACT LANDSCAPE ARCHITECT FOR DECISION IF DISCREPANCIES ARE NOTED.
- INSTALL FLEXIBLE JOINTS BETWEEN PAVEMENT AND FIXED OBJECTS, BETWEEN NEW PAVING WORK AND EXISTING PAVEMENT, AND BETWEEN DISSIMILAR PAVING MATERIALS. CONTRACTOR SHALL MARK OUT LOCATIONS OF HARDSCAPE FEATURES ON SITE AND REVIEW IN FIELD WITH LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION.

**REFERENCE NOTES SCHEDULE**

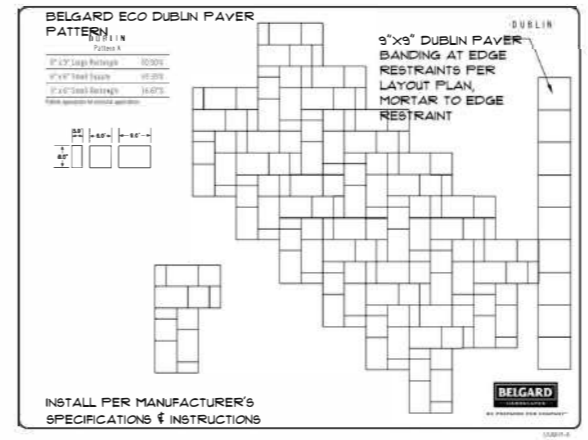
SYMBOL	DESCRIPTION	DETAIL
1	PERMEABLE PAVEMENT DRIVEWAY - BELGARD ECO-DUBLIN PERMEABLE PAVEMENT, MONTECITO COLOR, 3-PIECE MODULAR FIELD & LARGE SQUARE (9" X 9" X 2-3/8") BANDING PER DETAIL. REFERENCE CIVIL ENGINEER'S PLAN FOR SUB-GRADE PREPARATION, PERMEABLE RESERVOIR LAYERS, AND FINISH SURFACE GRADES.	1/L-2 (2) L-2
2	CONCRETE PAVEMENT EDGE BANDING - MORTAR BELGARD ECO-DUBLIN PERMEABLE PAVEMENT, MONTECITO COLOR (9" X 9" X 2-3/8"), TO TOP OF CONCRETE CURB/PAVER EDGE RESTRAINT PER DETAIL. COORDINATE GRADES & STRUCTURAL SECTION/SUBGRADE W/ CIVIL ENGINEER'S PLANS.	1/L-2 (2) L-2
3	CONCRETE PERMEABLE PAVING EDGE RESTRAINT CURB. EXTEND BELOW FLAGSTONE PATIO/LANDING. FLAGSTONE PATIO TO ADJUT PAVEMENT RESTRAINT CURB & FLAGSTONE TO BE MORTARED TO TOP. SEE DETAIL. SEE CIVIL ENGINEER'S PLANS FOR SURFACE GRADES.	1/L-2 (2) L-2
4	RAISED PLANTER PER ARCHITECT'S PLANS (MESA BUFF COLORED BOARD FORMED CONCRETE WITH SWEETWATER FLAGSTONE CAP)	1/L-2
5	SWEETWATER OKLAHOMA FLAGSTONE STEP STONES. INSTALL PER DETAIL ON MORTAR BED.	3/L-6
6	3/8" CRUSHED HANDLEY GRAVEL PATH. PROVIDE SANTA BARBARA SMOOTH ROUND RIVER COBBLE BORDER, 4"-6" DIAM. PER DETAIL. SUBMIT SAMPLE OF BORDER ROCK FOR OWNER APPROVAL.	2/L-6
7	NATIVE SANTA BARBARA SANDSTONE BOULDER.	3/L-6
8	S.B. SANDSTONE BOULDER DRYSTACK RETAINING GARDEN WALL PER DETAIL. SEE CIVIL ENGINEER'S GRADING PLAN.	6/L-6
9	DRY CREEKBED, NATIVE S.B. SANDSTONE BOULDERS, 18" S.B. ROUND RIVER COBBLE, 1/2" ROUND SUNBURST COBBLE, 1/2" S.B. 1" S.B. SIBUCC FLOAT ROCK. ARRANGE ROCK & CONSTRUCT PER DETAIL. LAYOUT BOULDERS IN FIELD W/ LANDSCAPE ARCHITECT. VERIFY SWALE WIDTHS & DEPTH, GRADES, SLOPE, W/ CIVIL ENGINEER'S PLANS. REVIEW CHECK DAM LOCATIONS & ELEVATIONS WITH LANDSCAPE ARCHITECT & CIVIL ENGINEER. CHALK OUT CREEK BED LOCATION ON SITE AND REVIEW WITH LANDSCAPE ARCHITECT PRIOR TO FINAL GRADING AND PLACEMENT OF ROCKS.	6/L-6
10	PLANTER / RETAINING WALL PER ARCHITECT'S PLANS (MESA BUFF COLORED BOARD FORMED CONCRETE WITH SWEETWATER FLAGSTONE CAP) REFERENCE CIVIL ENGINEER'S PLANS FOR WALL HEIGHT & STRUCTURAL DETAILS.	1/L-2
11	SWEETWATER OKLAHOMA FLAGSTONE PATIO. STONE ON MORTAR BED WITH PERMEABLE PEBBLE JOINTS. INSTALL PER DETAIL.	13/L-6
12	SWEETWATER OKLAHOMA FLAGSTONE PATIO WITH MORTARED JOINTS.	1/L-6
13	SWEETWATER OKLAHOMA FLAGSTONE STAIR TREADS WITH CUSTOM TILE RISERS. SEE ARCHITECT'S PLANS FOR STAIR STRUCTURAL DETAILS & CIVIL PLANS FOR GRADES.	3/L-6
14	VEGETATED SWALE. COORDINATE W/ PLANTING PLAN & CIVIL ENGINEER'S GRADING PLAN.	8/L-6
15	STONE WEIR/CHECKDAM. CHECK DAMS 19"-6" S.B. SANDSTONE ROUND RIVER COBBLE.	7/L-6
16	SWEETWATER OKLAHOMA FLAGSTONE STEPS ENGAGED IN S.B. SANDSTONE BOULDERS.	4/L-6



■ Permeable Paver	1,043.0 SQ FT
■ 3/8" Crushed Handley Gravel Path W/ Round River Cob...	148.3 SQ FT
■ 9"x9" Concrete Paver Edge Banding	178.7 FT
■ Concrete Permeable Paving Edge Restraint Curb	5.0 FT
● Sweet Water Oklahoma Flagstone Step Stones	12.0
● Native Santa Barbara Sandstone Boulder	11.0
■ S.B Sandstone Boulder Drystack Retaining Garden Wall	18.1 FT
■ Dry Creekbed, Native S.B. Sandstone Boulders, With S...	402.2 SQ FT
■ Vegetated Swale	258.8 SQ FT
■ Sweet Water Oklahoma Flagstone Patio	434.6 SQ FT
● Sweet Water Oklahoma Flagstone Stair Treads W/ Custom Til...	12.0
■ Stone Weir	24.2 FT
● Sweet Water Oklahoma Flagstone Steps	9.0
■ Retaining /Screen Wall 8'H	51.7 FT



- NOTES**
- AGGREGATE, STONE, AND PAVERS SHALL BE PLACED AND COMPACTED PER MANUFACTURER'S SPECIFICATIONS. PLACE AGGREGATE MATERIALS IN LIFTS AND DENY BY VIBRATION PER PROJECT AND MANUFACTURER'S SPECIFICATIONS.
  - NO. 2 OR 1 1/2" STONE SUBBASE THICKNESS VARIES BASED ON OPI PERMEABLE INTERLOCKING CONCRETE PAVEMENT MANUAL.
  - REFER TO CIVIL ENGINEER'S PLANS FOR FINAL SUB-GRADE AND BASE PROFILE, CONSTRUCTION, GRADES, PERMEABLE PAVERS.

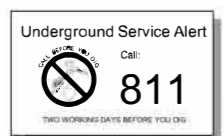


2 BELGARD ECO-DUBLIN PAVEMENT PATTERN 'A' SCALE 1/8"=1'-0"



Date: 1/31/2022  
 Revisions:  
 4/18/2022 City SFDB/BLDG  
 08/16/2022 City SWAMP/PLCK/SDB  
 02/07/2023 PLCK 1  
 03/16/2023 PLCK 2

LAYOUT PLAN



Drawn By: KJT  
 Sheet: L-2  
 Of: 10  
 Job No.: 2116

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

**EXISTING PLANT LEGEND**

CODE	BOTANICAL NAME	COMMON NAME	WATER USE
CL	COTONEASTER LACTEUS *	RED CLUSTERBERRY	LOW
CS	CUPRESSUS SEMPERVIRENS *	ITALIAN CYPRESS	LOW
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MA	MORUS ALBA *	WHITE MULBERRY	MEDIUM
PA	PERSEA AMERICANA *	AVOCADO	MEDIUM
P.E	PITIOSPORUM EUGENIODES	TARATA	MEDIUM
P.H.C.	PHOENIX CANARIENSIS *	CANARY ISLAND DATE PALM	LOW
P.C.	FRAXINUS CAROLINIANA	CAROLINA LAUREL CHERRY	MEDIUM
PI	FRUNUS ILLINOENSIS LYON	CATALINA CHERRY	LOW
PY	PHYRACANTHA SPP., CV.S.	FRETHORN	LOW
QA	QUERCUS AGRIFOLIA	COAST LIVE OAK	VERY LOW
SM	SCHNUS MOLLE	CALIFORNIA PEPPER TREE	VERY LOW
SP	STYZIUM PANICULATUM	EUGENIA	MEDIUM
SR	SYAGRUS POTANZOPFRANUM	QUEEN PALM	MEDIUM
RN	ROBUS NITIDA *	ROB *	MEDIUM

\* INDICATES PLANT IS OFF-SITE

**VALVE SCHEDULE**

NUMBER	MODEL	SIZE	TYPE	GPM	DESIGN PSI	PSI	PSI @ POC	PRECIP
1	HUNTER ICZ101-25	1"	DRIP EMITTER	1.95	20	30.05	48.72	0.89 INH
2	HUNTER ICZ101-25	1"	AREA FOR DRIP EMITTERS	2.14	20	30.46	48.38	0.14 INH
3	HUNTER ICZ101-25	1"	AREA FOR DRIPLINE	1.44	25	35.11	50.06	0.64 INH
4	HUNTER ICZ101-25	1"	AREA FOR DRIP EMITTERS	3.43	20	30.11	51.02	0.64 INH
5	HUNTER ICZ101-25	1"	AREA FOR DRIP EMITTERS	4.94	20	30.65	58.82	1.03 INH
6	HUNTER ICZ101-25	1"	AREA FOR DRIP EMITTERS	6.11	20	32.11	70.24	0.34 INH
7	HUNTER ICZ101-25	1"	AREA FOR DRIP EMITTERS	2.58	20	30.03	41.3	1.26 INH

**CRITICAL ANALYSIS**

WATER SOURCE INFORMATION: III STATIC PSI AT HYDRANT (231 E. COTA) PER CITY OF SANTA BARBARA WATER RESOURCES. REGULATE TO 80 PSI WITH PI REGULATOR PER DETAIL

FLOW AVAILABLE: 50 GPM

WATER METER SIZE: 5/8"

FLOW AVAILABLE: 15 GPM

PRESSURE AVAILABLE: 80.00 PSI

STATIC PRESSURE AT POC: 80.00 PSI

ELEVATION CHANGE: 5.00 FT

SERVICE LINE SIZE: 2"

LENGTH OF SERVICE LINE: 20 FT

PRESSURE AVAILABLE: 78.00 PSI

DESIGN ANALYSIS: MAXIMUM STATION FLOW: 6.71 GPM; FLOW AVAILABLE AT POC: 15 GPM; RESIDUAL FLOW AVAILABLE: 8.23 GPM

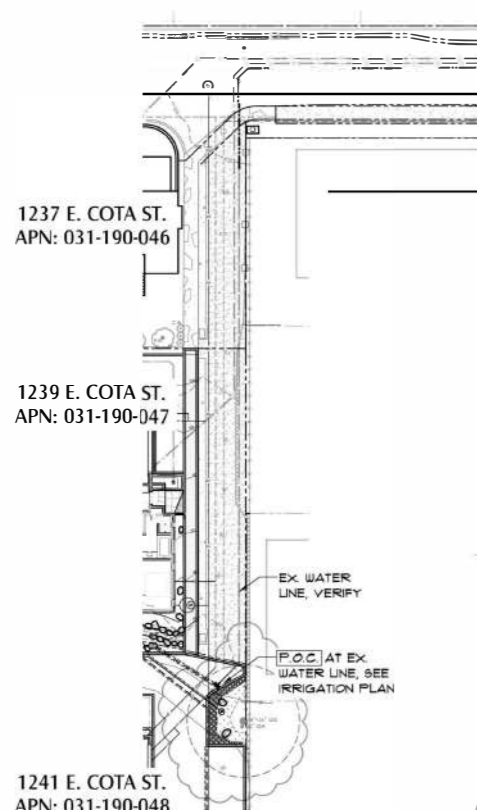
CRITICAL STATION: DESIGN PRESSURE: 20 PSI; FRICTION LOSS: 0.31 PSI; FITNESS LOSS: 0.03 PSI; ELEVATION LOSS: 0 PSI; LOSS THROUGH VALVE: 11.11 PSI; PRESSURE REG. AT CRITICAL STATION: 32.12 PSI; LOSS FOR FITTINGS: 2.94 PSI; LOSS FOR MAIN LINE: 20.42 PSI; LOSS FOR POC TO VALVE ELEVATION: 0 PSI; LOSS FOR BACKFLOW: 11.2 PSI; LOSS FOR MASTER VALVE: 2.68 PSI; LOSS FOR WATER METER: 1.18 PSI; CRITICAL STATION PRESSURE AT POC: 18 PSI; RESIDUAL PRESSURE AVAILABLE: 1.16 PSI

**IRRIGATION SCHEDULE**

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
[Symbol]	HUNTER ICZ101-25 DRIP CONTROL ZONE KIT, 1" CV GLOBE VALVE W/ HY100 FILTER SYSTEM, PRESSURE REGULATOR 25 FLOW RANGE 2 GPM TO 20 GPM, 15# MESH STAINLESS STEEL SCREEN.	1
[Symbol]	PIPE TRANSITION POINT ABOVE GRADE	1
[Symbol]	PIPE TRANSITION POINT FROM PVC LATERAL TO DRIP TUBING WITH RUBER TO ABOVE GRADE INSTALLATION	1
[Symbol]	HUNTER TS DRIP SPRAY MICRO SPRAY FULL, HALF, AND QUARTER CIRCLE CONFIGURATIONS FUNCTIONS LIKE BIG SPRAYS ON A MICRO LEVEL, FOR COMMERCIAL AND RESIDENTIAL USE OPERATING RANGE 10 PSI TO 30 PSI. TRIO-SPRAY WITH 10-32 THREADS.	1
[Symbol]	AREA TO RECEIVE DRIP EMITTERS FOR 1" DPT-2	2723 SF
[Symbol]	SINGLE-OUTLET, SELF-FLUSHING, PRESSURE COMPENSATING EMITTER, MALE ADAPTER WITH BUG SHIELD, AND COLOR-CODED @ 50GPH=BLUE 1.0GPH=BLACK	1
[Symbol]	EMITTER NOTES: 1.0 GPH EMITTERS (1 ASSIGNED TO EACH FLAT PLANT)	61
[Symbol]	1.0 GPH EMITTERS (1 ASSIGNED TO EACH 4" POT PLANT)	52
[Symbol]	1.0 GPH EMITTERS (2 ASSIGNED TO EACH 1 GAL PLANT)	468
[Symbol]	1.0 GPH EMITTERS (2 ASSIGNED TO EACH 2 GAL PLANT)	2
[Symbol]	1.0 GPH EMITTERS (3 ASSIGNED TO EACH 3 GAL PLANT)	333
[Symbol]	1.0 GPH EMITTERS (3 ASSIGNED TO EACH 5 OR 15 PLANT)	3
[Symbol]	1.0 GPH EMITTERS (3 ASSIGNED TO EACH 15 GAL PLANT)	138
[Symbol]	1.0 GPH EMITTERS (3 ASSIGNED TO EACH 24" BOX PLANT)	5
[Symbol]	1.0 GPH EMITTERS (3 ASSIGNED TO EACH 36" BOX PLANT)	64
[Symbol]	AREA TO RECEIVE DRIPLINE HUNTER HDL-0918-CV HUNTER DRIPLINE W/ 0.9 GPH EMITTERS AT 18" O.C. CHECK VALVE, DARK BROWN TUBING W/ BLACK STRIPING DRIPLINE LATERALS SPACED AT 18" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN INSTALL WITH HUNTER PLO BARBED OR PLO-LOC FITTINGS	2641 LF

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
[Symbol]	BUCKNER-SUPERIOR B4-01 BENT NOSE GARDEN VALVE 3/4" x 3/4" FEMALE NPT HOSE BIBB, RED BRASS	1
[Symbol]	NBCO T-580-56-R-66-LL STAINLESS STEEL BALL VALVE SHUT OFF VALVE	1
[Symbol]	HUNTER BV1 1", 1 1/2", 2", AND 3" BRASS ELECTRIC MASTER VALVE, GLOBE CONFIGURATION WITH NPT THREADED INLET/OUTLET, FOR COMMERCIAL/MUNICIPAL USE	1
[Symbol]	NETARM TLGV050M-B IN LINE CHECK VALVE WITH 1/2" MALE PIPE THREAD, LARGE INLET OPENING, AND PREVENTS BACK FLOW OF WATER AND DRAINAGE OF THE SYSTEM INTO LOW AREAS. FLOW RATE @ 90PSI TO 4.4GPM	1
[Symbol]	FEBCO B25YA 3/4" REDUCED PRESSURE BACKFLOW PREVENTER	1
[Symbol]	HUNTER XC-8000 8 STATION CONTROLLER, RESIDENTIAL USE PLASTIC CABINET, INDOOR, WITH 3 INDEPENDENT PROGRAMS 120 VAC	1
[Symbol]	HUNTER US60-SEN WIRELESS SOLAR RAIN FREEZE SENSOR WITH OUTDOOR INTERFACE, CONNECTS TO HUNTER X-CORE AND ACC. CONTROLLERS, INSTALL AS NOTED INCLUDES GUTTER MOUNT BRACKET. MODULE NOT INCLUDED.	1
[Symbol]	HUNTER HFS-100 FLOW SENSOR FOR USE WITH ACC CONTROLLER, 1" SCHEDULE 40 SENSOR BODY, 24 VAC, 2 AMP	1
[Symbol]	RANBIRD PH015B LANDSCAPE SUB-METER RANBIRD 3/4" LANDSCAPE IRRIGATION METER, 0.50 - 30 GPM, BRASS BODY	1
[Symbol]	WATER METER 5/8" III STATIC PSI AT HYDRANT (231 E. COTA) PER CITY OF SANTA BARBARA WATER RESOURCES. REGULATE TO 80 PSI WITH PRESSURE REGULATOR	1
[Symbol]	IRRIGATION LATERAL LINE PVC SCHEDULE 40	644.5 LF
[Symbol]	IRRIGATION MAINLINE PVC SCHEDULE 40	150.0 LF
[Symbol]	IRRIGATION MAINLINE PVC SCHEDULE 40 EX SERVICE EXISTING WATER SERVICE	408.1 LF
[Symbol]	PIPE SLEEVE PVC CLASS 160 SDR 26 TYPICAL PIPE SLEEVE FOR IRRIGATION PIPE. PIPE SLEEVE SIZE SHALL ALLOW FOR IRRIGATION PIPING AND THEIR RELATED COUPLINGS TO EASILY SLIDE THROUGH SLEEVEING MATERIAL. EXTEND SLEEVES 18 INCHES BEYOND EDGES OF PAVING OR CONSTRUCTION	600.3 LF
[Symbol]	VALVE CALLOUT VALVE NUMBER	
[Symbol]	VALVE FLOW	
[Symbol]	HYDROZONE	
[Symbol]	VALVE SIZE	

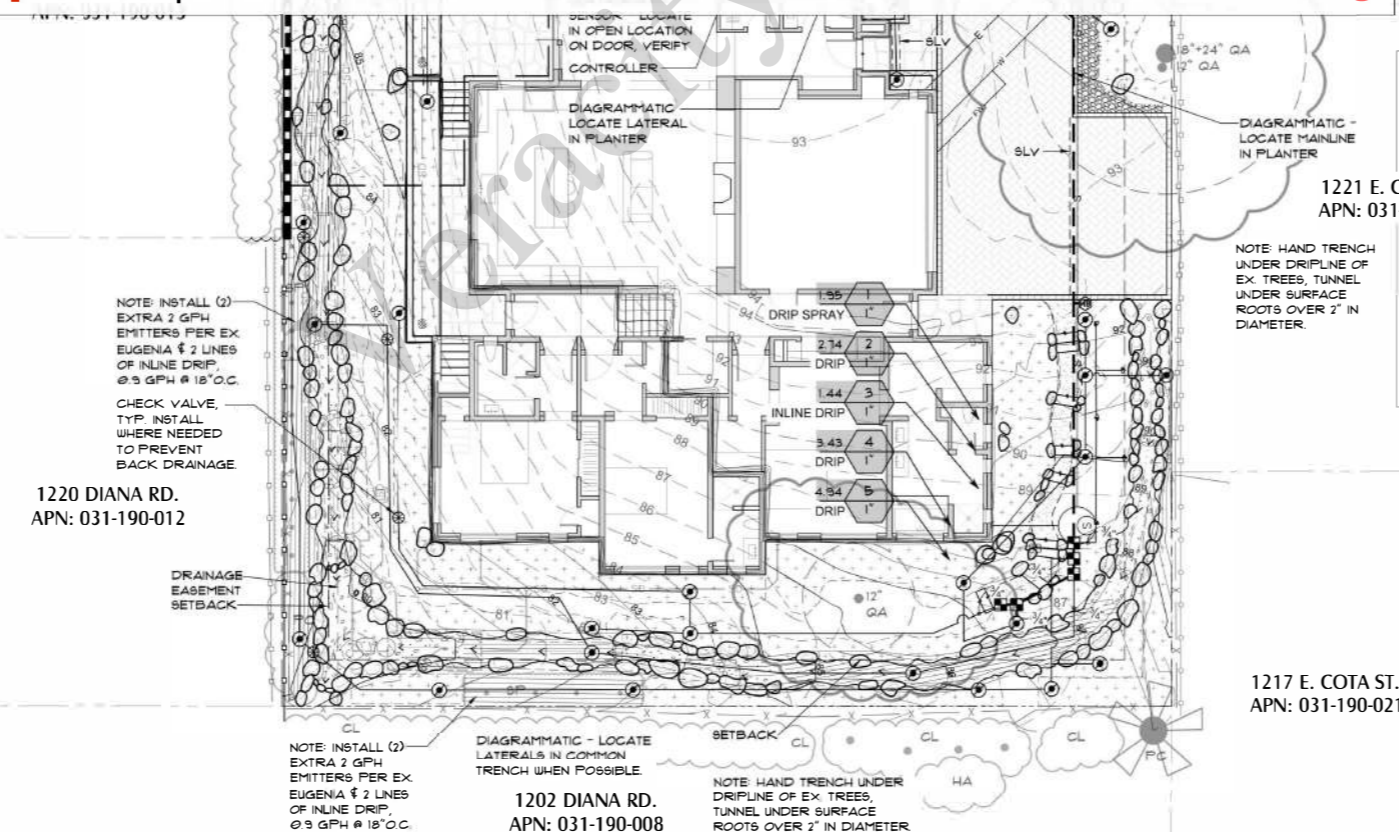
**EQUIPMENT QUANTITY NOTE:**  
IRRIGATION EQUIPMENT QUANTITY COUNTS ARE FOR CONVENIENCE PURPOSES ONLY. CONTRACTOR IS RESPONSIBLE TO CONFIRM ALL EQUIPMENT QUANTITIES AND REQUIRED ACCESSORY MATERIALS PRIOR TO FINAL BID AND INSTALLATION.



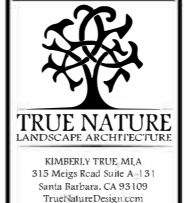
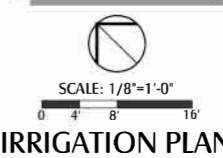
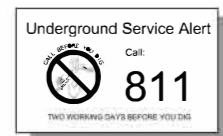
- 1" ICV Globe Valve W/ 1" Hy100 Filter System
- Pipe Transition
- Micro Spray Full, Half & Quarter Circle Configuration
- 3/4"x3/4" Female NPT Hose Bibb, Red Brass
- 3/4" Ball Valve Shut-Off Valve
- 1", 1-1/2", 2" & 3" Brass Electric Master Valve
- 3/4" Check Valve W/ 1/2" Male Pipe Thread
- 3/4" Reduced Pressure Backflow Preventer
- 8 Station Controller
- Wireless Solar, Rain Freeze Sensor W/ Outdoor Interface & Gutter Mount
- Flow Sensor
- 5/8" Water Meter W/ Pressure Regulator
- 3/4" Irrigation & Sub Meter
- 3/4" PVC Irrigation Lateral Pipe 667 LF
- 3/4" PVC Irrigation Main Pipe 196 LF
- PVC Pipe Sleeve 100 LF

**IRRIGATION NOTES**

- SYSTEM DESIGN BASED ON THE FOLLOWING:
  - A. III STATIC PRESSURE AT 1231 E. COTA ST. ACCORDING TO CITY OF SANTA BARBARA WATER RESOURCES
  - B. 2" MATERIAL COPPER SERVICE LINE
  - C. 5/8" WATER METER
  - D. AVAILABLE GPM @ IS
- IRRIGATION LINES DIAGRAMMATIC FIELD CONDITIONS PREVAIL CONTRACTOR SHALL SURVEY PROPOSED LINE TRENCH LOCATIONS AND SUGGEST ALTERNATE LAYOUT TO ACHIEVE DESIGN INTENT AS FIELD CONDITIONS DICTATE
- LOCATION OF LINES AND VALVES IS DIAGRAMMATIC ONLY. LOCATE IN PLANTING AREAS WHEREVER POSSIBLE.
- VERIFY DIMENSIONS AND MAKE ADJUSTMENTS IN SYSTEM AS REQUIRED TO PROVIDE COMPLETE HEAD TO HEAD OR DRIP IRRIGATION COVERAGE TO ALL PLANTINGS
- CONTRACTOR SHALL VERIFY POINT OF CONNECTION WITH OWNER'S WATER METER EXISTING ON SITE. TIE INTO EX. 2" POTABLE LINE. AFTER METER WITH LINE SIZE BALL VALVE. WATER METER INSTALL NEW BACKFLOW PREVENTER AFTER IRRIGATION P.O.C. AS SHOWN. REFERENCE CIVIL ENGINEER'S PLANS THIS SET.
- REFER TO WRITTEN SPECIFICATIONS ACCOMPANYING THESE PLANS
- HAND TRENCH UNDER DRIP LINE OF EXISTING TREES. ADJUST LINE LOCATIONS TO AVOID DAMAGING EXISTING TREE ROOTS. DO NOT CUT ROOTS OVER 2" IN DIAMETER.
- ALL PIPE (PRESSURE AND NON-PRESSURE LINES) UNDER PAVING (ASPHALT, CONCRETE, ETC) SHALL BE INSTALLED IN MINIMUM OF 24" BELOW TOP OF PAVING IN CLASS 160 PVC SLEEVES.
- CONTROLLER - EXTERIOR WALL MOUNT PER DETAILS LINE TO GROUND IN CONDUIT. CONNECT TO ELECTRICAL SOURCE PROVIDE BATTERIES
- LOCATE WEATHER STATION PER PLAN. VERIFY LOCATION WITH OWNER PRIOR TO INSTALLATION.
- CONTRACTOR SHALL CONTINUOUSLY MAINTAIN A CLEAN JOB SITE. SLEEP HARDSCAPE AT THE END OF EACH DAY. DEPOSE OF TRASH IN TRASH CANS - NO LITTERING SHALL OCCUR ON JOB SITE.
- ALL POTS SHALL BE HAND WATERED



NOTE: SEE SHEET L-4 FOR LANDSCAPE COMPLIANCE CHECKLIST



Date: 1/31/2022  
Revisions: 4/18/2022 City SFDB/BLDG; 08/16/2022 City SWAMP/PLCA/SFDB; 02/07/2023 PLCK 1; 03/10/2023 PLCK 2

IRRIGATION PLAN

**LANDSCAPE ESTIMATING SERVICES**



Drawn By: KJT  
Sheet: L-3  
Of 10  
Job No.: 2116