
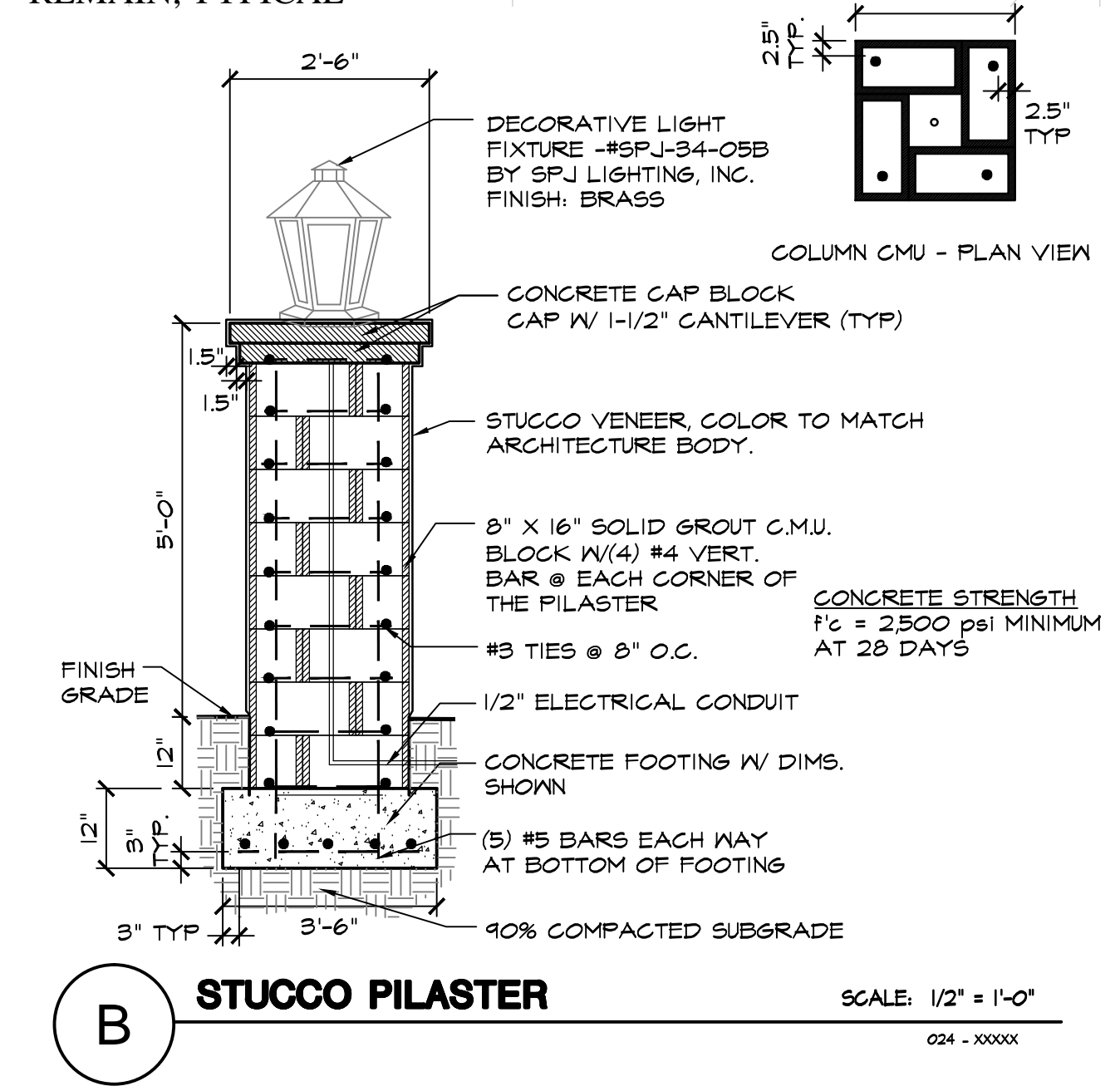
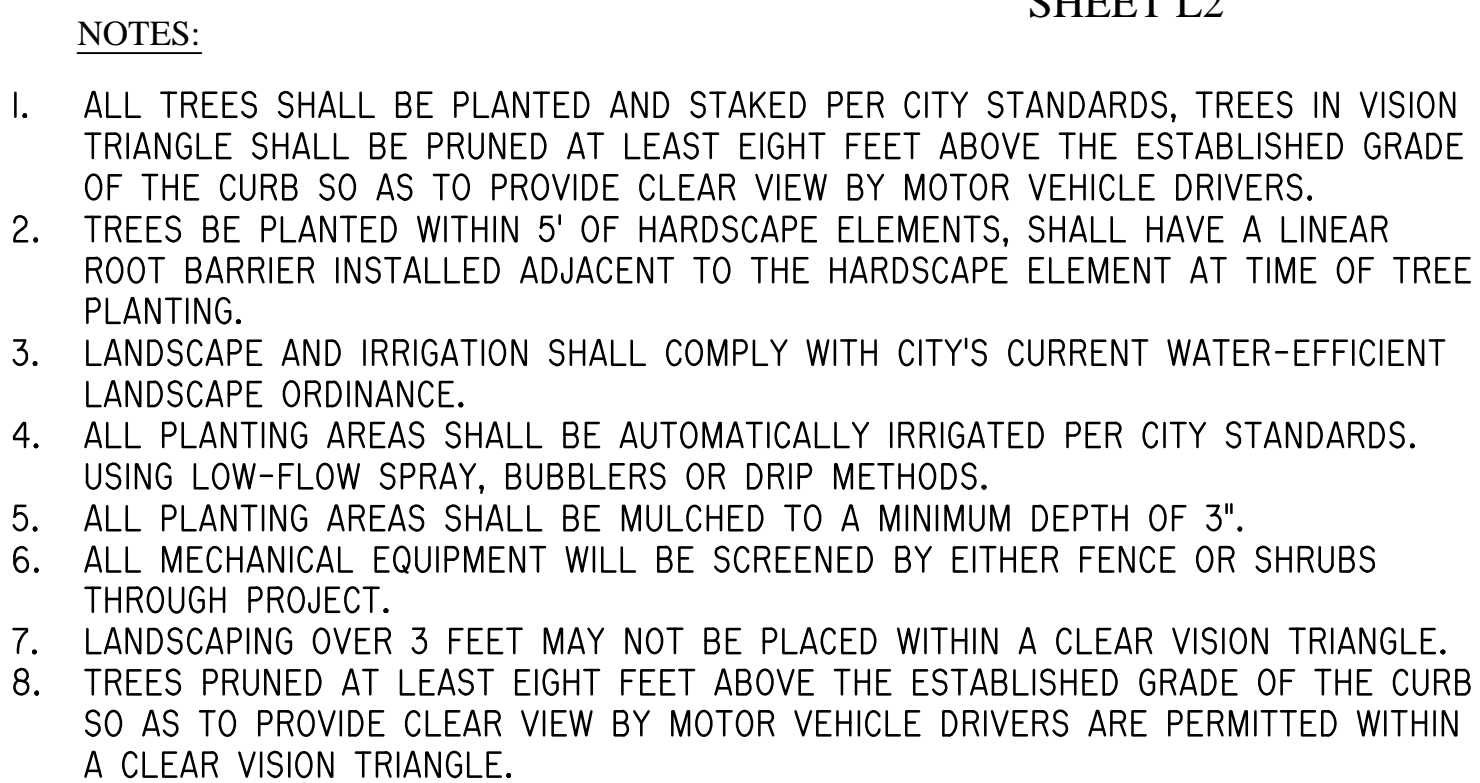
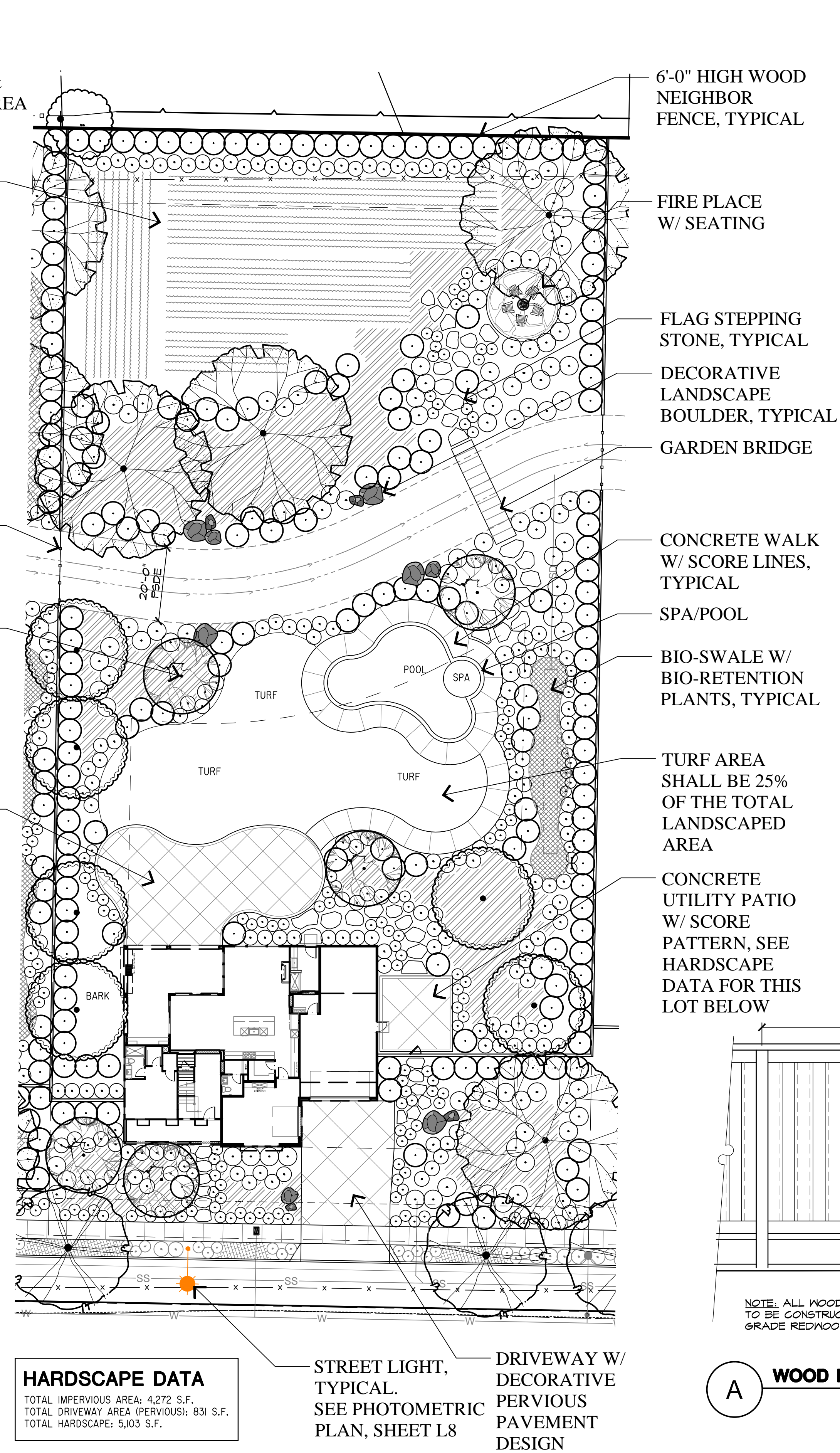
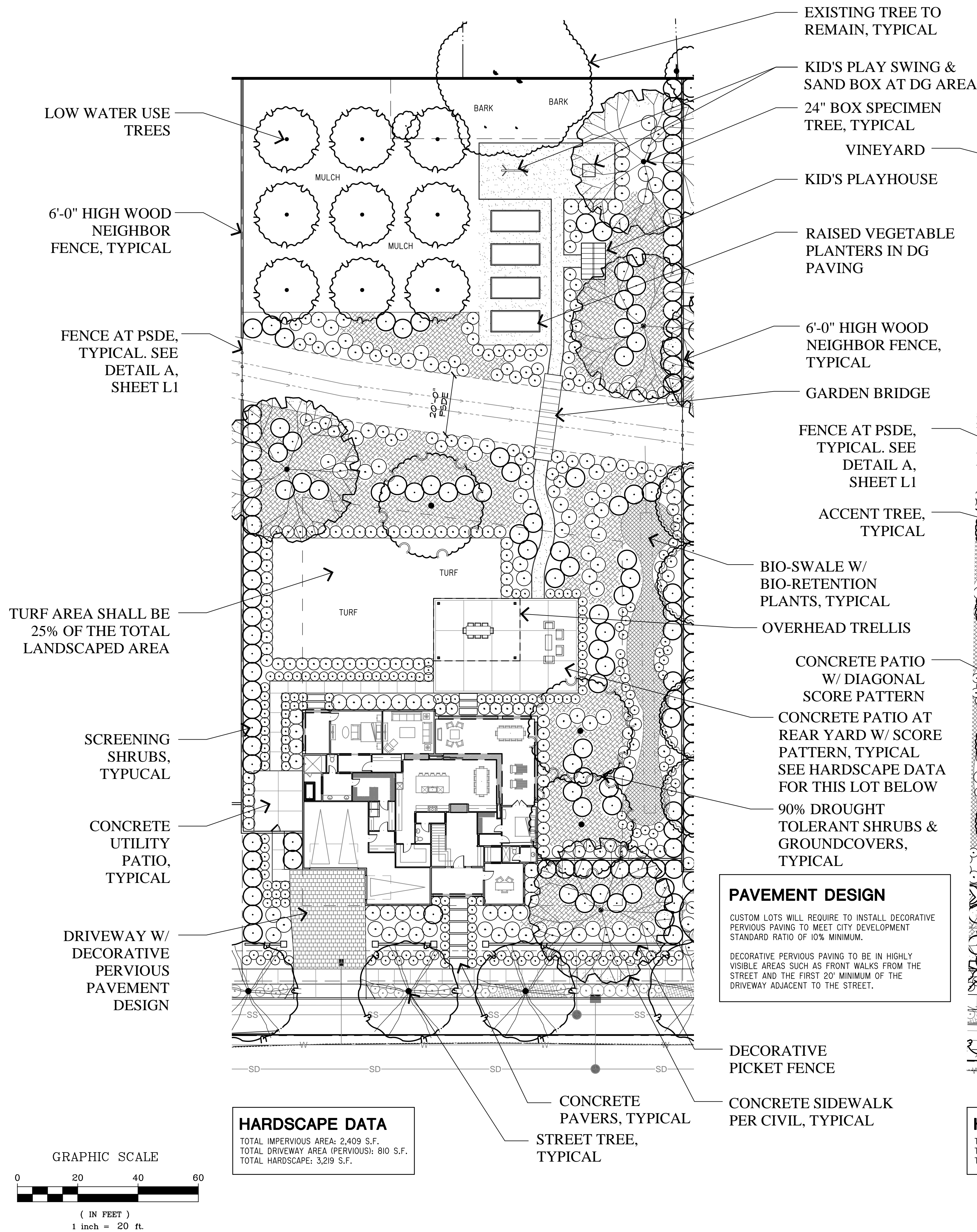




BOTANICAL NAME	COMMON NAME	SIZE	WATER USE
EXISTING TREE TO BE REMOVED			
EXISTING TREE TO REMAIN			
STREET TREES			
ARBUTUS 'MARINA'	MARINA MADRONE	24" BOX	LOW
PISTACIA CHINENSIS	CHINESE PISTACHE	24" BOX	LOW
LAURUS ' SARATOGA'	SARATOGA LAUREL	24" BOX	LOW

SYMBOL	BOTANICAL NAME	COMMON NAME	WATER USE
<b>TREES</b>			
SEE FOLLOWING PRELIMINARY TREE LEGEND ON THIS SHEET			
<b>SHRUBS - RIGHT-OF-WAY AREA</b>			
ARC "P.M."	ARCTOSTAPHYLOS "PACIFIC MIST"	MANZANITA	LOW
CIS "SUN"	CISTUS X PULVERULENTUS "SUNSET"	MASANTA ROCK ROSE	LOW
LAM "MON"	LANTANA MONTEVEGENSE	TRAILING LANTANA	LOW
LOM "BRE"	LOMANDRA LONGIFOLIA "BREEZE"	DWARF MAT RUSH	LOW
<b>SHRUBS - BIO-RETENTION AREA</b>			
ACH MIL	ACHILLEA MILLEFOLIUM	COMMON YARROW	LOW
CHO TEC	CHONDRLOPETALUM TECTORUM	CASE RUSH	LOW
DIE IRI	DIETES IRIODIODES	FORTNIGHT LILY	LOW
RHA CAL	RHAMNUS CALIFORNIA "EVE CASE"	COFFEEBERRY	LOW
<b>GROUNDCOVERS</b>			
	MYOPORUM PARVIFOLIUM 1 GALLON • 60" O.C.	MYOPORUM	LOW





## CONCEPTUAL LANDSCAPE STATEMENT

REGIONAL AND MICRO-CLIMATE CONDITIONS, SOLAR ORIENTATION AND SOIL CONDITIONS WILL BE TAKEN INTO ACCOUNT WITH REGARDS TO PLANT SELECTION AND PLACEMENT. THE PLANT PALETTE PROVIDES MANY PLANTS WITH VARYING GROWTH HABITS, PREFERENCES AND TOLERANCES, SO SELECTION OF JUST THE RIGHT PLANT SHOULD NOT BE DIFFICULT. ALL PROPOSED SHRUBS AND GROUNDCOVER PLANTS ARE RATED AS LOW WATER USE TO PROMOTE THE DROUGHT TOLERANT DESIGN.

BY SPECIFYING PLANTS WHICH REQUIRE LITTLE TO NO PRUNING, THE GREEN WASTE WILL BE REDUCED. PLANTS SELECTED WILL COMPLEMENT THE ARCHITECTURE.

ENTRYWAYS AND PICTURE WINDOWS WILL BE FRAMED BY SPECIMEN SHRUBS AND NODES WILL HAVE ACCENT PLANTINGS. PLANT SPECIES WHICH ENHANCE THE ARCHITECTURAL ELEVATIONS SHALL BE USED. FOR EXAMPLE, NARROW UPRIGHT SHRUBS ARE PROPOSED AT THE SIDES OF THE GARAGE DOOR. TALLER SHRUBS WILL ALSO BE LOCATED AT SOLID BUILDING SURFACES AND FENCES, WHILE LOWER SHRUBS WILL BE LOCATED WHERE GROUND LEVEL WINDOWS AND ARCHITECTURAL FEATURES OCCUR, AND AT CORNERS TO MAINTAIN SITE LINE DISTANCES. A DIVERSE USE OF PLANT SPECIES WILL DISPLAY VARIOUS TEXTURES, FORMS, FOLIAGE COLOR, AND FLOWERS; WILL CREATE A BEAUTIFUL LANDSCAPE TO CONTRIBUTE AESTHETICALLY TO THE SURROUNDING NEIGHBORHOODS.

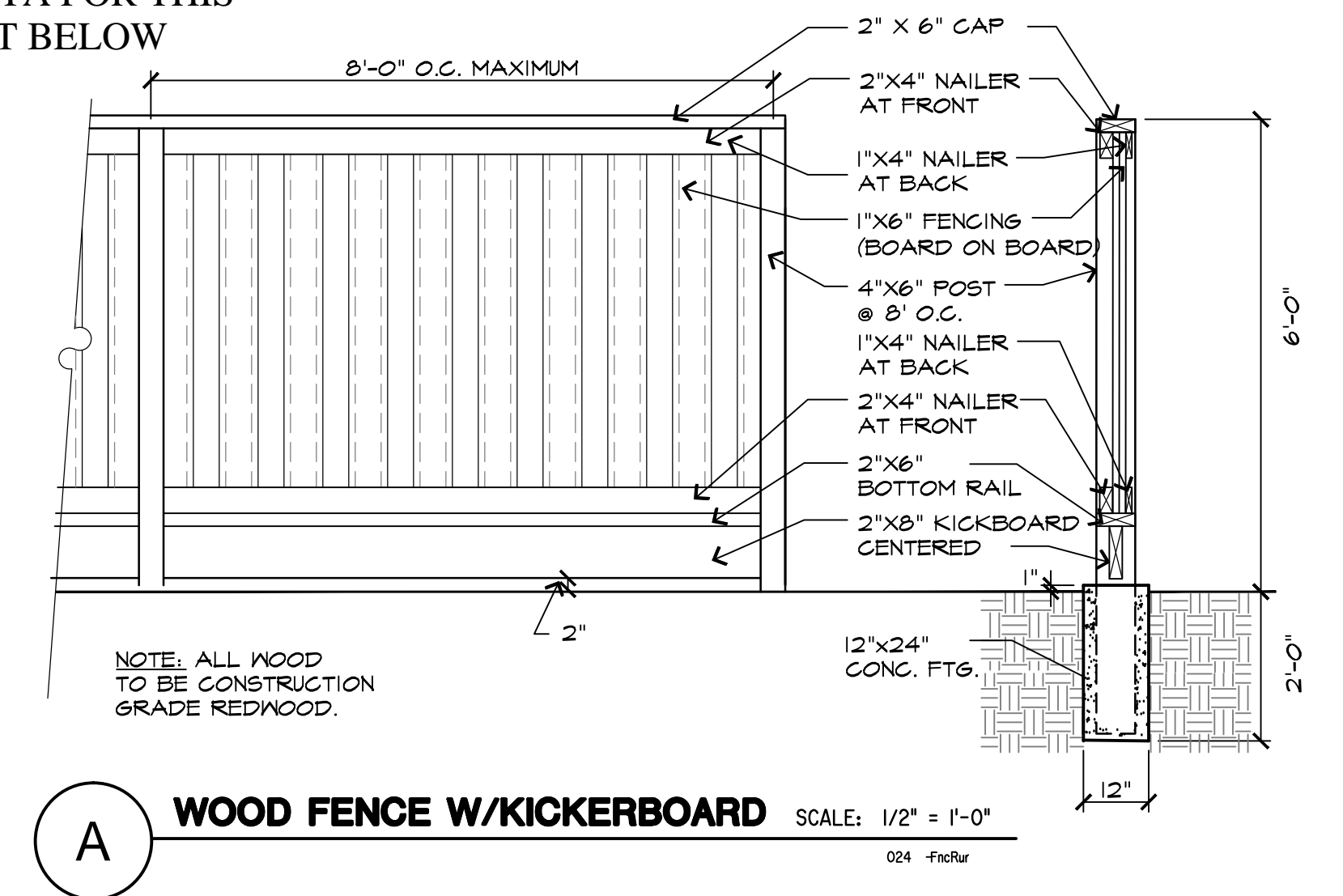
A MAJORITY OF TREE'S THROUGHOUT THE PROJECT ARE PLACED TO MINIMIZE BUILDING BULK AND MASS. THE TREES HAVE BEEN SELECTED TO HAVE NON-INVASIVE ROOT SYSTEMS, AND PLACED WITH ADEQUATE SETBACKS TO ENSURE NO CONFLICT WITH UTILITIES AND HARDSCAPE, OR CONFLICT WITH ANY SITE LINE DISTANCES. ROOT BARRIERS WILL BE INSTALLED ON ALL TREES NEAR PAVING AND UTILITIES. WHERE FEASIBLE, TREES HAVE BEEN PLACED TO MITIGATE SOLID BUILDING SURFACES AND FENCES.

THE IRRIGATION SYSTEM WILL USE WEATHER-BASED CONTROLLERS TO CONSERVE THE USE OF WATER. THE PLANTING AREAS WILL BE IRRIGATED USING DRIP IRRIGATION METHODS. THE TREES WILL BE ON SEPARATE VALVES AND WILL BE IRRIGATED WITH BUBBLERS. SHRUBS WILL BE HYDROZONED ACCORDING TO THEIR WATER REQUIREMENTS AND MICROCLIMATES.

IT IS OUR INTENT TO SPECIFY IN THE LANDSCAPE CONSTRUCTION DOCUMENTS THE USE OF RECYCLED MATERIALS SUCH AS RECYCLED WOOD MULCH, INGREDIENTS WITHIN THE CONCRETE, FORMWORK, SITE FURNITURE, ETC. IT IS OUR INTENT TO STOCKPILE THE TOPSOIL FOR RE-USE, UNLESS SOIL TESTS DEEM THE SOIL INADEQUATE AND RECOMMEND IMPORTED SOIL. WE INTEND TO RECYCLE A MINIMUM OF 50% OF THE LANDSCAPE CONSTRUCTION AND GREEN WASTES.

## NOTES:

1. PER CITY OF MORGAN HILL MUNICIPAL CODE 18.84.060, 90% PLANTS & TREES SHALL BE DROUGHT TOLERANT
2. TURF SHALL BE 25% OR LESS OF THE TOTAL LANDSCAPED AREA PER CITY OF MORGAN HILL MUNICIPAL CODE 18.84.060
3. DROUGHT-TOLERANT GRASS SPECIES SHALL BE USED EXCLUSIVELY.
4. SEPARATE LANDSCAPE WATER METERS FOR LANDSCAPE AREAS EXCEEDING FIVE THOUSAND SQUARE FEET
5. EQUIPMENT SUCH AS UTILITY METERS, BACKFLOW PREVENTION DEVICES, IRRIGATION CONTROL VALVES, TRANSFORMERS AND PULL BOXES SHALL BE SCREENED WITH WOOD SCREEN OR SCREENING SHRUBS SO AS NOT TO BE VISIBLE FROM THE PUBLIC RIGHT-OF-WAY OR COMMON AREAS.
6. ANY TURF AREAS SHALL BE IRRIGATED BY OVERHEAD SPRAY WITH A PRECIPITATION RATE LESS THAN 3/4 OF AN INCH PER HOUR.



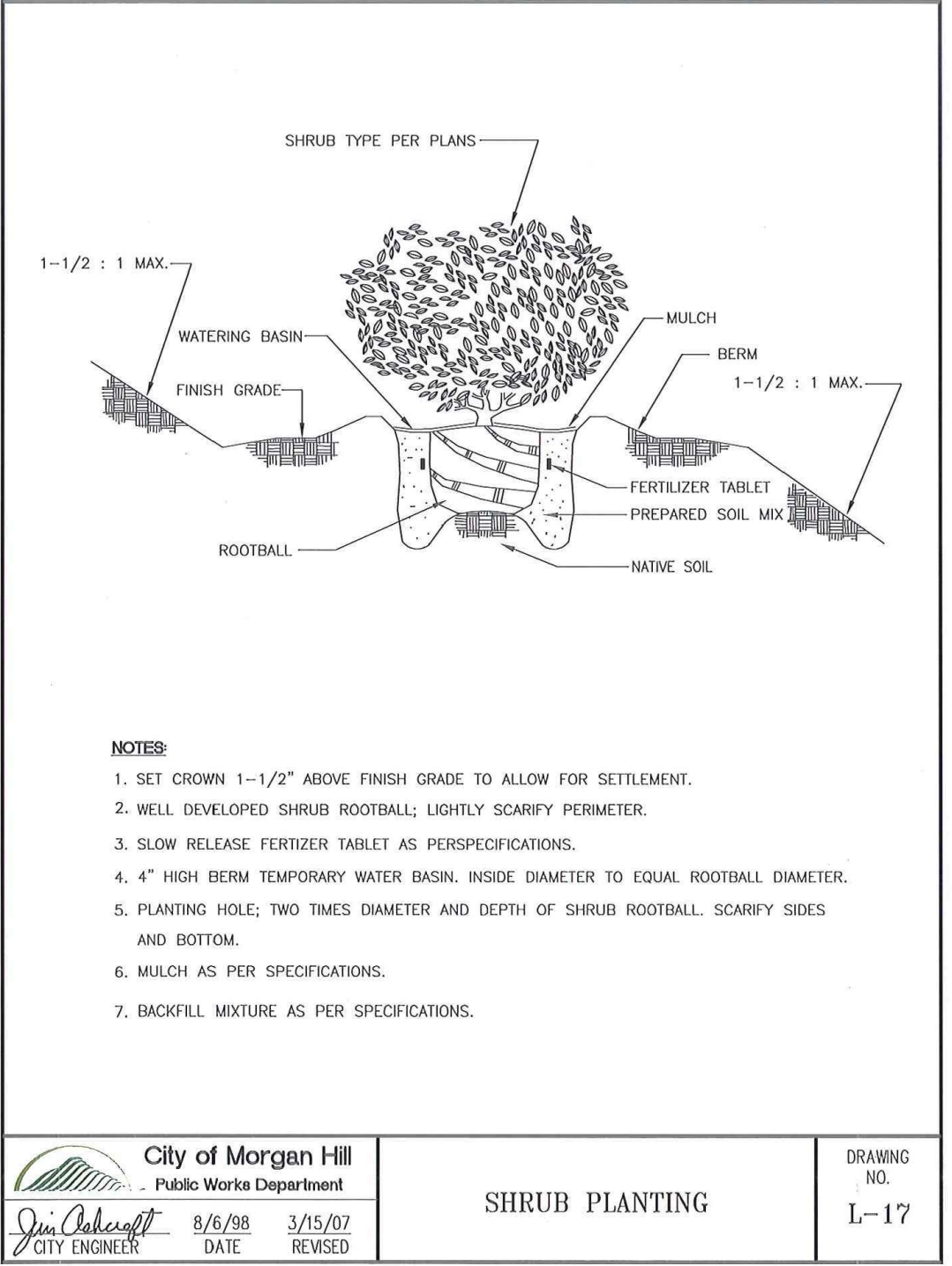
**LANDSCAPE ARCHITECTURE**  
**LAND PLANNING**  
1615 BONANZA STREET  
SUITE 314  
WALNUT CREEK, CA 94596  
TEL: 925.938.7377  
www.ripleydesign.com

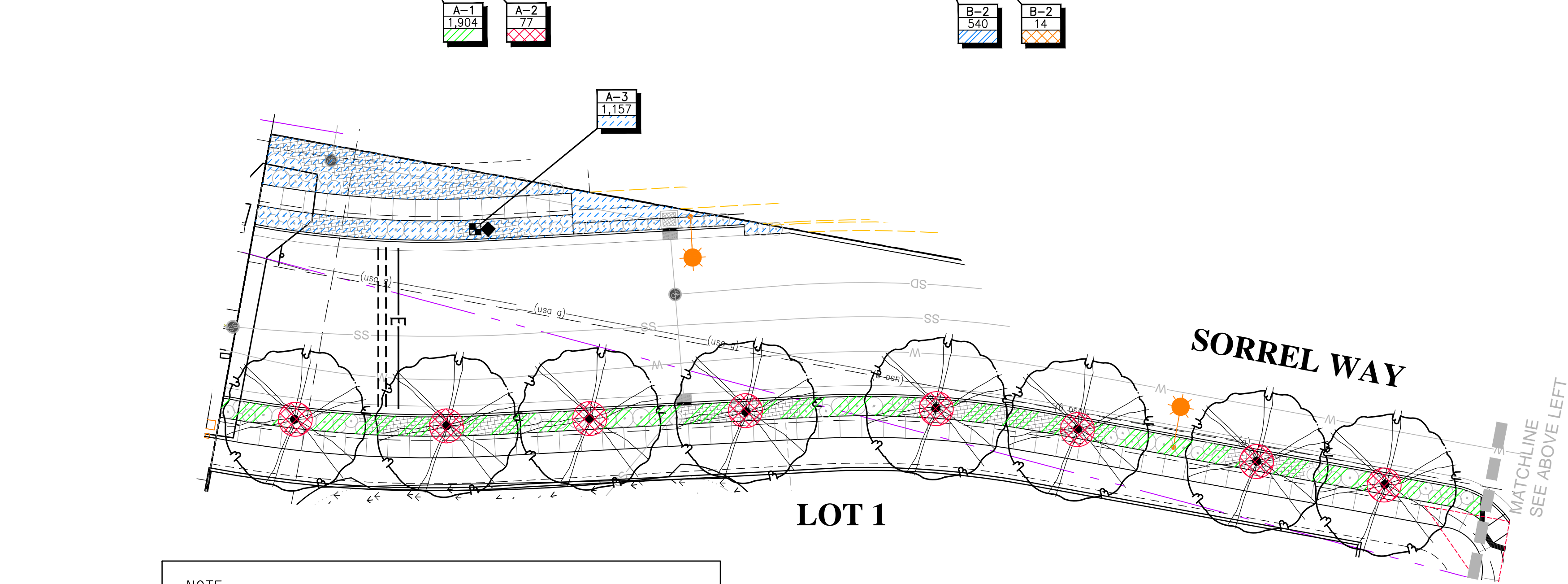
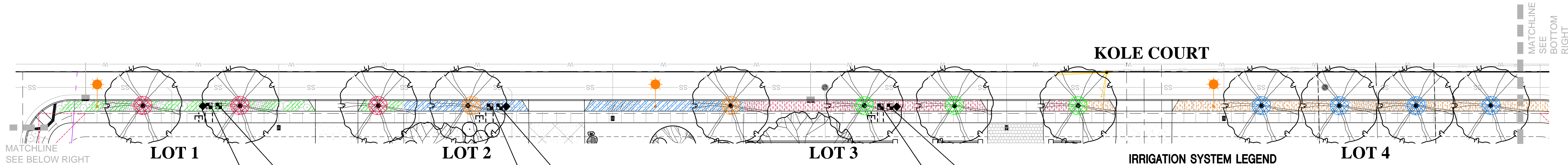
**Serene Hills LLC.**  
22251 Poppy Drive  
Cupertino, CA 95014  
TEL: 408.396.2706

**SERENE HILLS**  
Morgan Hill, California  
September 12, 2023

**Preliminary Landscape  
Typical Lot Plans**

**L2**





### HYDROZONES

NAME	TYPE	WATER USE	DESCRIPTION
A-1	DRIP	LOW	SHRUBS - LOT 1 R.O.W. AREA
A-2	BUBBLER	LOW	TREES - LOT 1 R.O.W. AREA
A-3	DRIP	LOW	SHRUBS - LOT 1 R.O.W. AREA
B-1	DRIP	LOW	SHRUBS - LOT 2 R.O.W. AREA
B-2	BUBBLER	LOW	TREES - LOT 2 R.O.W. AREA
C-1	DRIP	LOW	SHRUBS - LOT 3 R.O.W. AREA
C-2	BUBBLER	LOW	TREES - LOT 3 R.O.W. AREA
D-1	DRIP	LOW	SHRUBS - LOT 4 R.O.W. AREA
D-2	BUBBLER	LOW	TREES - LOT 4 R.O.W. AREA
E-1	DRIP	LOW	SHRUBS - LOT 4 R.O.W. AREA
E-2	BUBBLER	LOW	TREES - LOT 4 R.O.W. AREA

I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM ACCORDINGLY FOR THE EFFICIENT USE OF WATER IN THE IRRIGATION DESIGN PLAN.

*Anikka Carpenter*  
ANIKKA H. CARPENTER LANDSCAPE ARCH. #1984

### IRRIGATION SYSTEM LEGEND

SYMBOL	DESCRIPTION	SPECIFICATION	NOZZLE GPM	OPERATING PSI
[Symbol]	IRRIGATION WATER METER	-IRRIGATION WATER METER BY OTHER SECTION OF CONTRACT		
[Symbol]	IRRIGATION SUBMETER	-HUNTER HC-100-FLOW		
[Symbol]	BACKFLOW PREVENTION DEVICE	-WILKINS 975XL2		
[Symbol]	1" MASTER VALVE	-HUNTER ICV-101G-FS		
[Symbol]	ELECTRIC CONTROLLER	-HUNTER-ICORE-IC-600 W/SOLAR SYNC (ET-BASED) OR EQUAL (CONTROLLER TO BE LOCATED IN GARAGE)		
[Symbol]	FLOW SENSOR	-HUNTER FLOW-CLK		
[Symbol]	WEATHER SENSOR	-HUNTER SOLAR-SYNC SENSOR OR EQUAL (INSTALL PER MANUF)		
[Symbol]	REMOTE CONTROL VALVES	-IRRITROL-2500T OR EQUAL		
[Symbol]	REMOTE CONTROL VALVES	-IRRITROL-2500TF/REGULATOR & FILTER OR EQUAL		
[Symbol]	BALL VALVE	-NIBCO-T-560-BR-20-IRR-LINE SIZE		
[Symbol]	BUBBLER (TREE)	-RAIN BIRD-1401	.25	30
[Symbol]	BUBBLER (SHRUB)	-PEPCO-OCTA-BUBBLER (2 GPH)	.27	30
[Symbol]	QUICK COUPLER	-RAINBIRD-44LRC OR EQUAL		
[Symbol]	IRRIGATION SUPPLYLINE- 1"	-1120/SCHEDULE 40 PVC PIPE	-18" COVER	
[Symbol]	IRRIGATION SPRINKLERLINE	-1120/CLASS 200 PVC PIPE	-12" COVER	
[Symbol]	ELECTRICAL CONDUIT	-1120/SCHEDULE 40 PVC PIPE	-24" COVER	
[Symbol]	SLEEVING	-1120/SCHEDULE 40 PVC PIPE	-24" COVER	

NOTE: EQUIVALENT SUBSTITUTIONS ACCEPTABLE

### LANDSCAPE HYDROZONE LEGEND

[Symbol]	HYDROZONE/CONTROLLER STATION NUMBER
[Symbol]	AREA OF COVERAGE (SF)
[Symbol]	HATCH PATTERN OF AREA

### WATER BUDGET CALCULATIONS:

LOW WATER USE SHRUB PLANTING AREA	= 7,826 SF
LOW WATER USE TREE PLANTING AREA	= 273 SF
TOTAL PLANTING AREA	= 8,099 SF
ESTIMATED TOTAL WATER USE:	
ETWU (LOW WATER USE)	= (49.5) X (0.62) X (0.2 X 8,099) = 70,016 GAL/YR
TOTAL ETWU	= 70,016 GAL/YR

MAXIMUM APPLIED WATER ALLOWANCE:  
 (LANDSCAPED AREA) = (49.5) X (0.62) X (0.45 X 8,099) = 111,851 GAL/YR

- ### NOTES:
- IRRIGATION SYSTEMS ARE DESIGNED TO AVOID RUNOFF, LOW HEAD DRAINAGE, OVERSPRAY, AND OTHER SIMILAR CONDITIONS WHERE WATER FLOWS OUTSIDE OF LANDSCAPED AREAS.
  - IRRIGATION CONTROLLER SHALL BE CAPABLE OF PERCENT ADJUSTMENT, MULTIPLE PROGRAMMING, AND RAIN SENSOR.
  - SEPARATED VALVES AND CIRCUITS ARE DESIGNED BASED ON WATER USE AND SUN EXPOSURE.
  - BUBBLE IRRIGATION ARE DESIGNED FOR ALL TREES.
  - STATE-APPROVED BACK FLOW PREVENTION DEVICES SHALL BE INSTALLED ON ALL IRRIGATION SYSTEMS.
  - LANDSCAPING SYSTEMS SHALL BE INSTALLED PRIOR TO FINAL BUILDING PERMIT INSPECTION OR CERTIFICATION OF OCCUPANCY.
  - THE WATERING TIMES MUST BE AFTER 7:00PM AND BEFORE 9:00AM.
  - ALL PARTS OF THE IRRIGATION SYSTEM ARE DESIGNED TO MEET A MINIMUM EFFICIENCY OF 75%.
  - SEPARATE LANDSCAPE WATER METERS SHALL BE INSTALLED FOR LANDSCAPE AREAS EXCEEDING 5,000 SQ FT.
  - IF THE WATER PRESSURE IS BELOW OR EXCEEDS THE RECOMMENDED PRESSURE OF THE SPECIFIED IRRIGATION DEVICES, THE INSTALLATION OF A PRESSURE REGULATING DEVICE IS REQUIRED TO ENSURE THAT THE DYNAMIC PRESSURE AT EACH EMISSION DEVICE IS WITHIN THE MANUFACTURER'S RECOMMENDED PRESSURE RANGE FOR OPTIMAL PERFORMANCE.
  - IF THE STATIC PRESSURE IS ABOVE OR BELOW THE REQUIRED DYNAMIC PRESSURE OF THE IRRIGATION SYSTEM, PRESSURE-REGULATING DEVICES SUCH AS INLINE PRESSURE REGULATORS, BOOSTER PUMPS, OR OTHER DEVICES SHALL BE INSTALLED TO MEET THE REQUIRED DYNAMIC PRESSURE OF THE IRRIGATION SYSTEM.
  - AREAS LESS THAN TEN FEET IN WIDTH IN ANY DIRECTION SHALL BE IRRIGATED WITH SUBSURFACE IRRIGATION OR OTHER MEANS THAT PRODUCES NO RUNOFF OR OVERSPRAY.
  - STATE APPROVED BACKFLOW PREVENTION DEVICES SHALL BE INSTALLED ON ALL IRRIGATION SYSTEMS.

SHRUBS & GROWDCOVERS



LOMANDRA LONGIFOLIA  
'BREEZE'  
DWARF MAT RUSH



CHONDROPETALUM TECTORUM  
CAPE RUSH



RHAMNUS 'EVE CASE'  
COFFEEBERRY



LANTANA 'MONTEVIDENSIS'  
TRAILING LANTANA



DIETES IRIDIOIDES  
FORTNIGHT LILY



ACHILLEA MILLEFOLIUM  
COMMON YARROW

TREES



CISTUS X PULVERULENTUS 'SUNSET'  
MAGENTA ROCKROSE



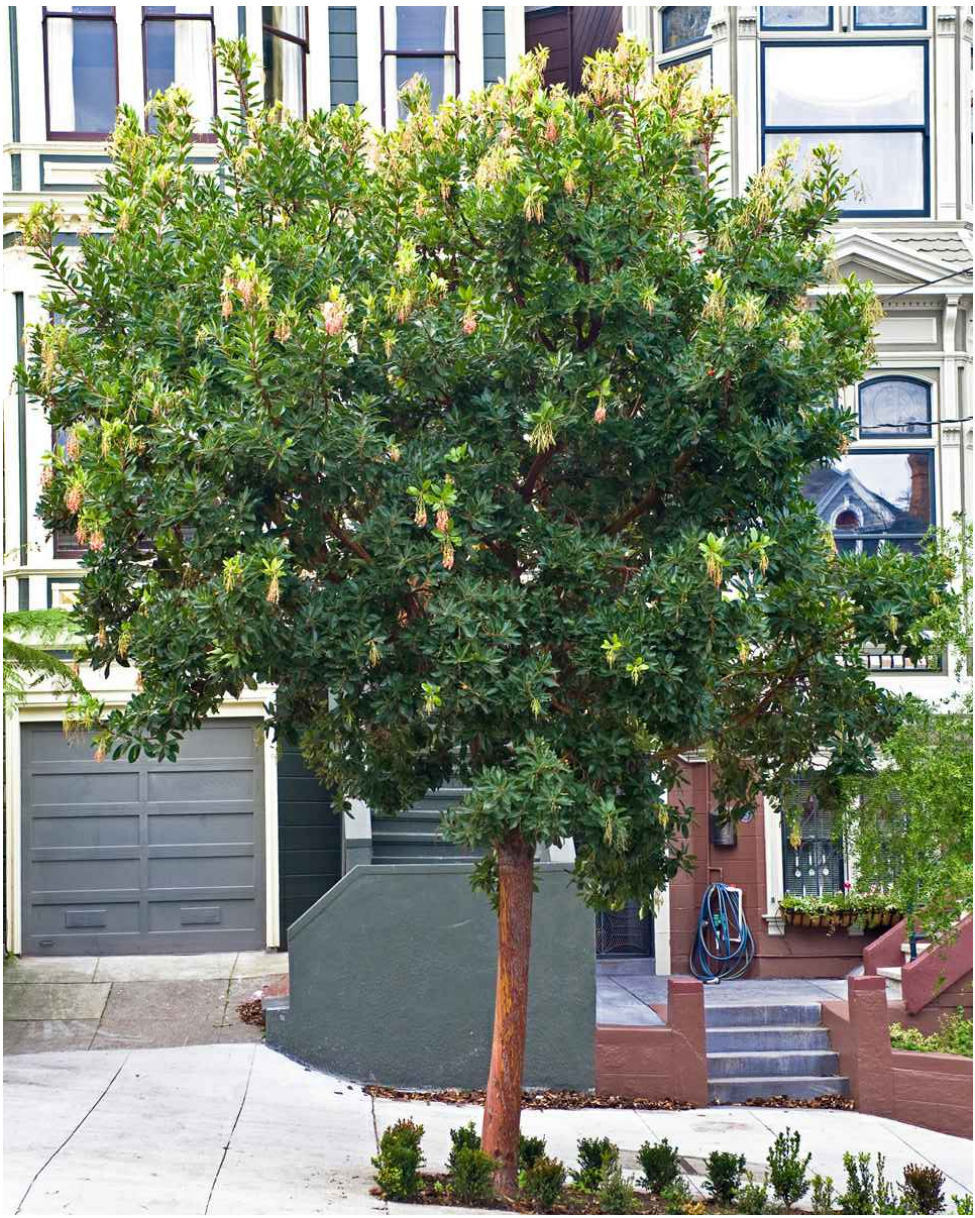
ARCTOSTAPHYLOS 'PACIFIC MIST'  
MANZANITA



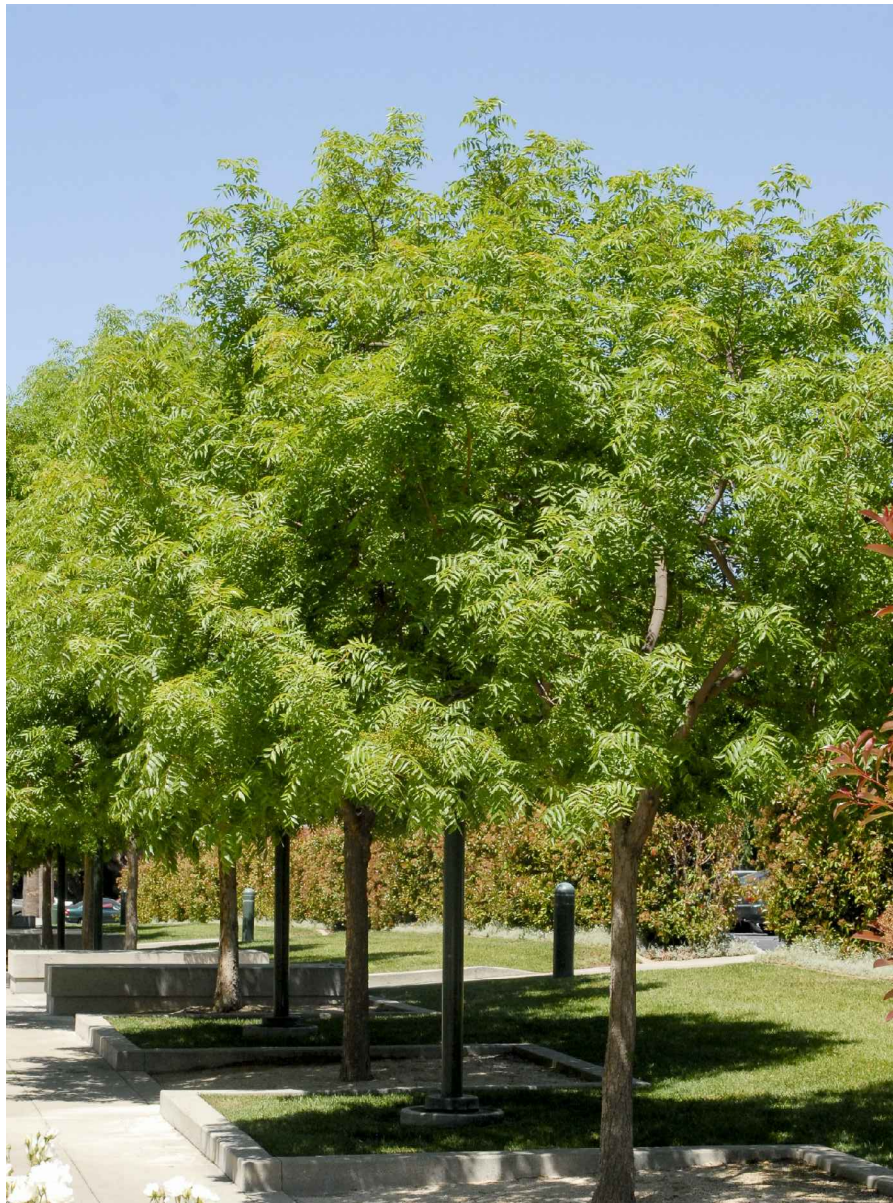
MYOPORUM PARVIFOLIUM  
MYOPORUM



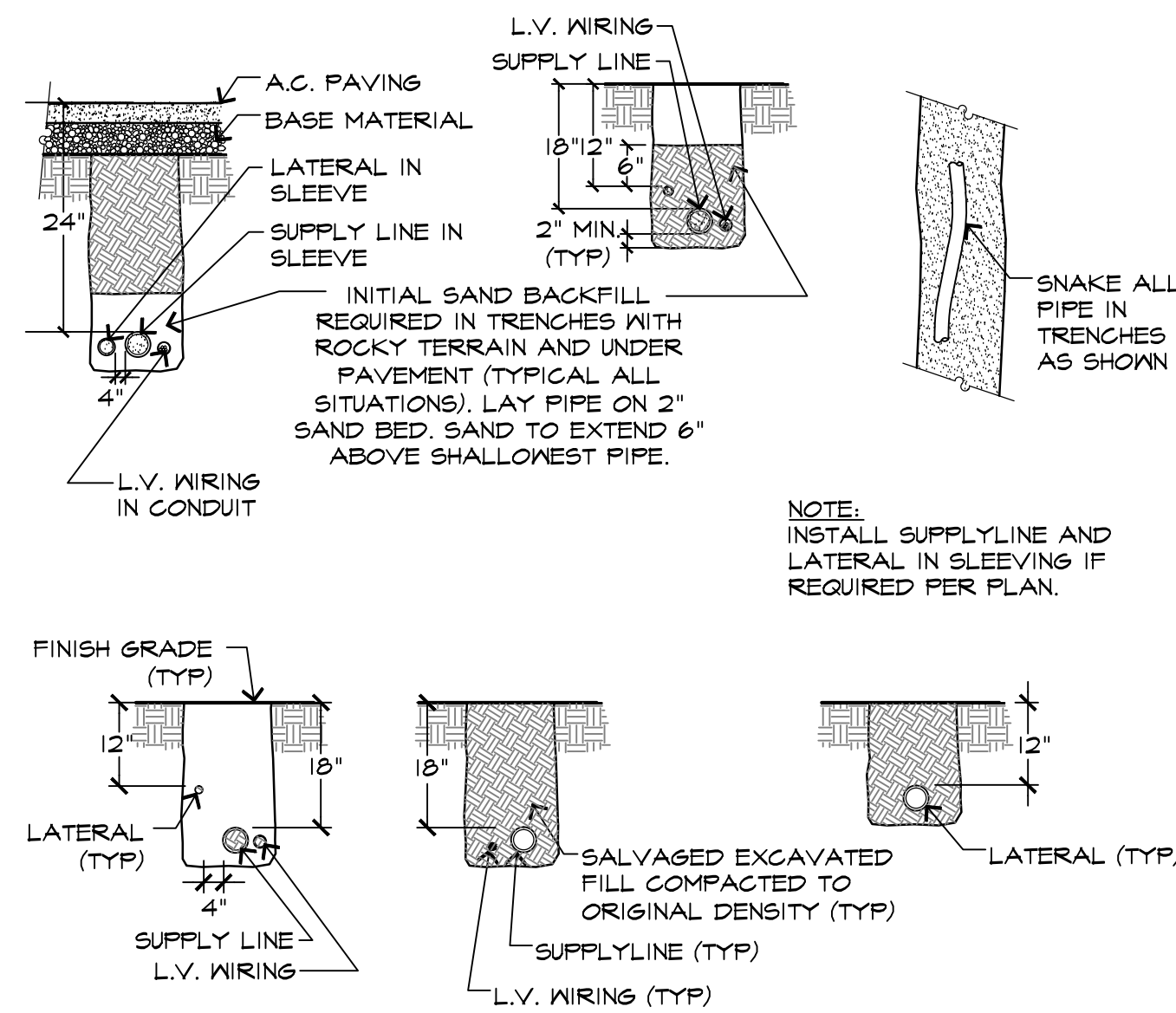
LAURUS 'SARATOGA'  
SARATOGA LAUREL



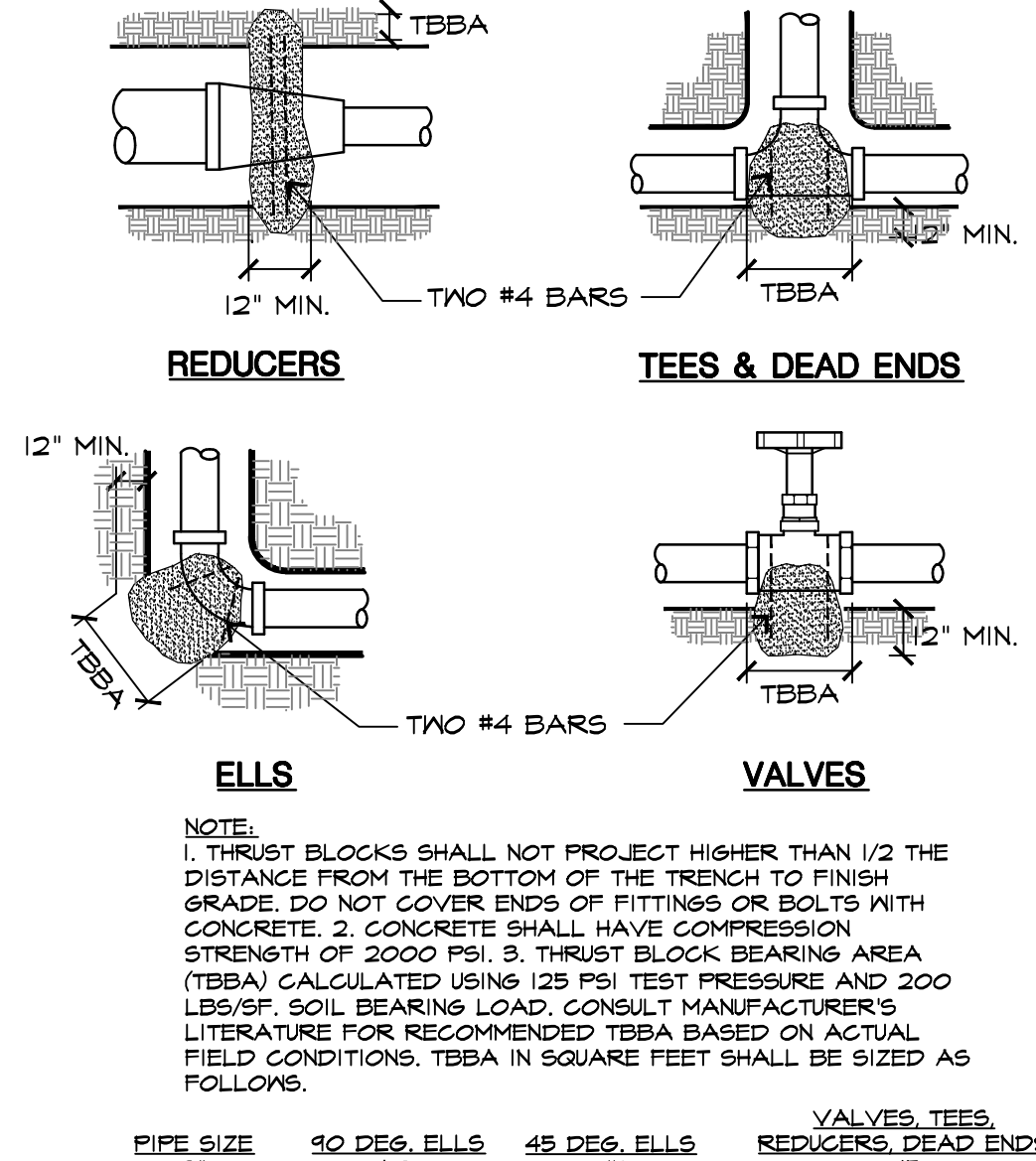
ARBUTUS 'MARINA'  
MARINA MADRONE



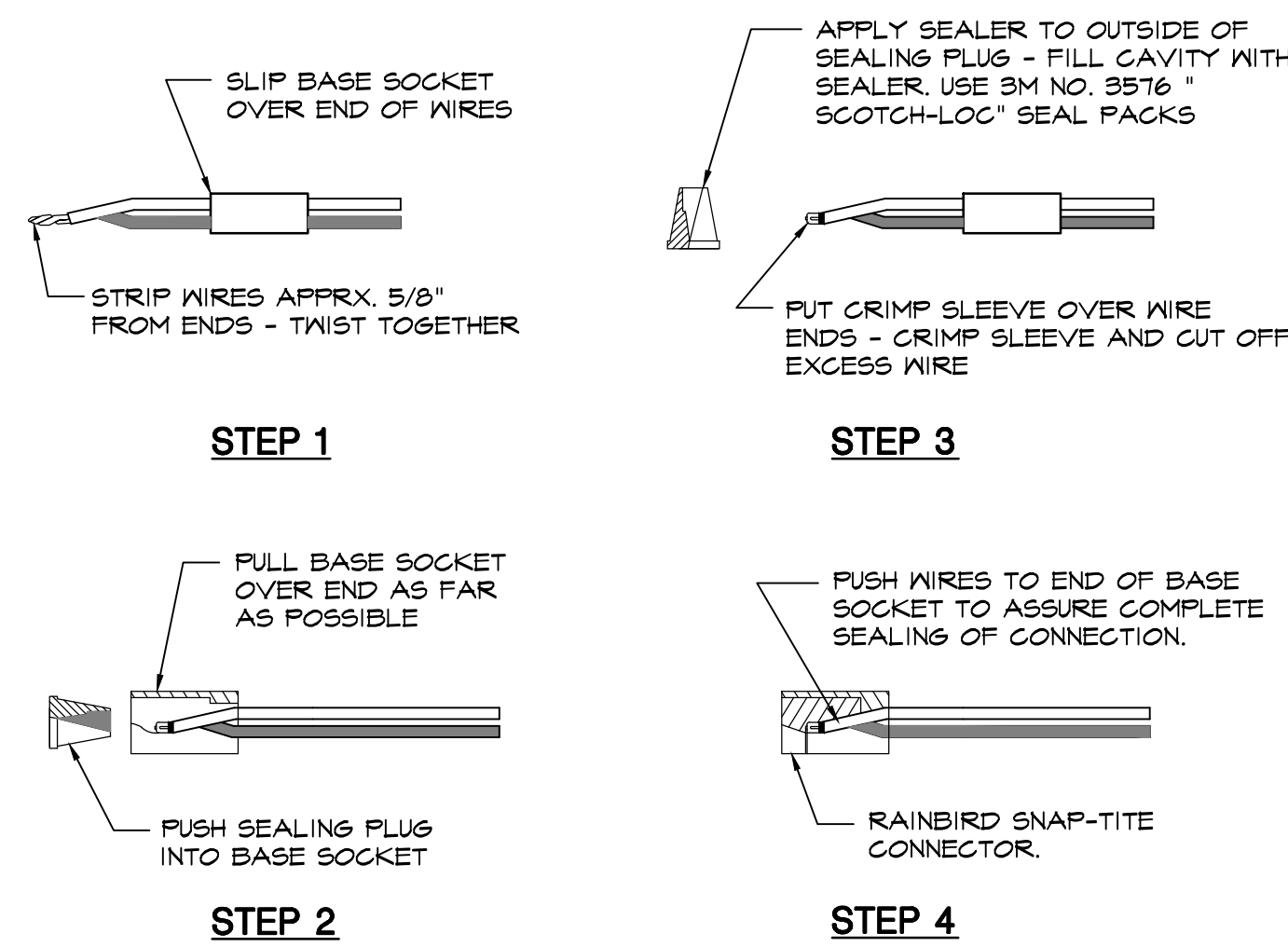
PISTACIA CHINENSIS  
CHINESE PISTACHE



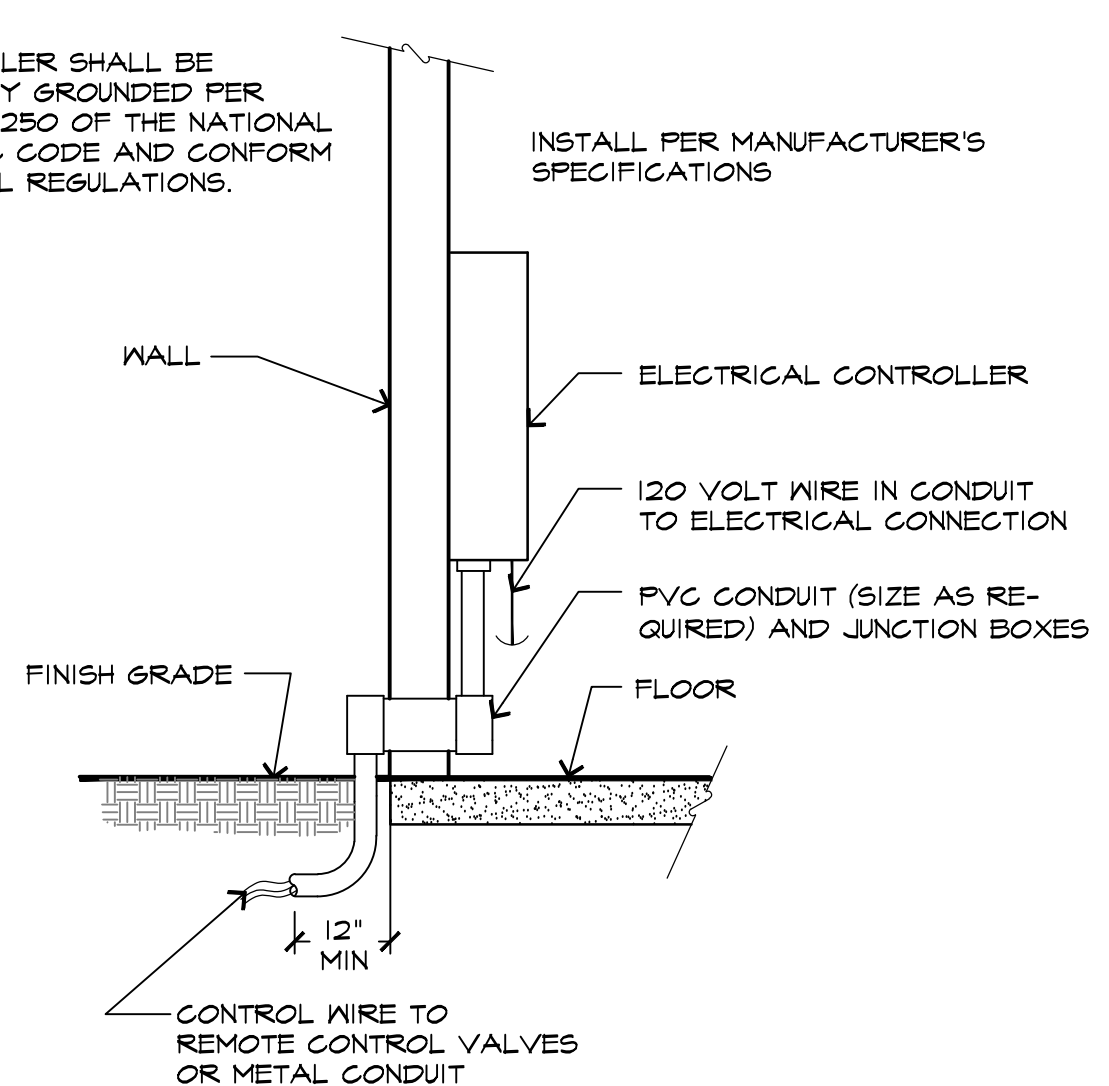
**A TRENCHING DETAILS** SCALE: 1/2" = 1'-0" 024 -



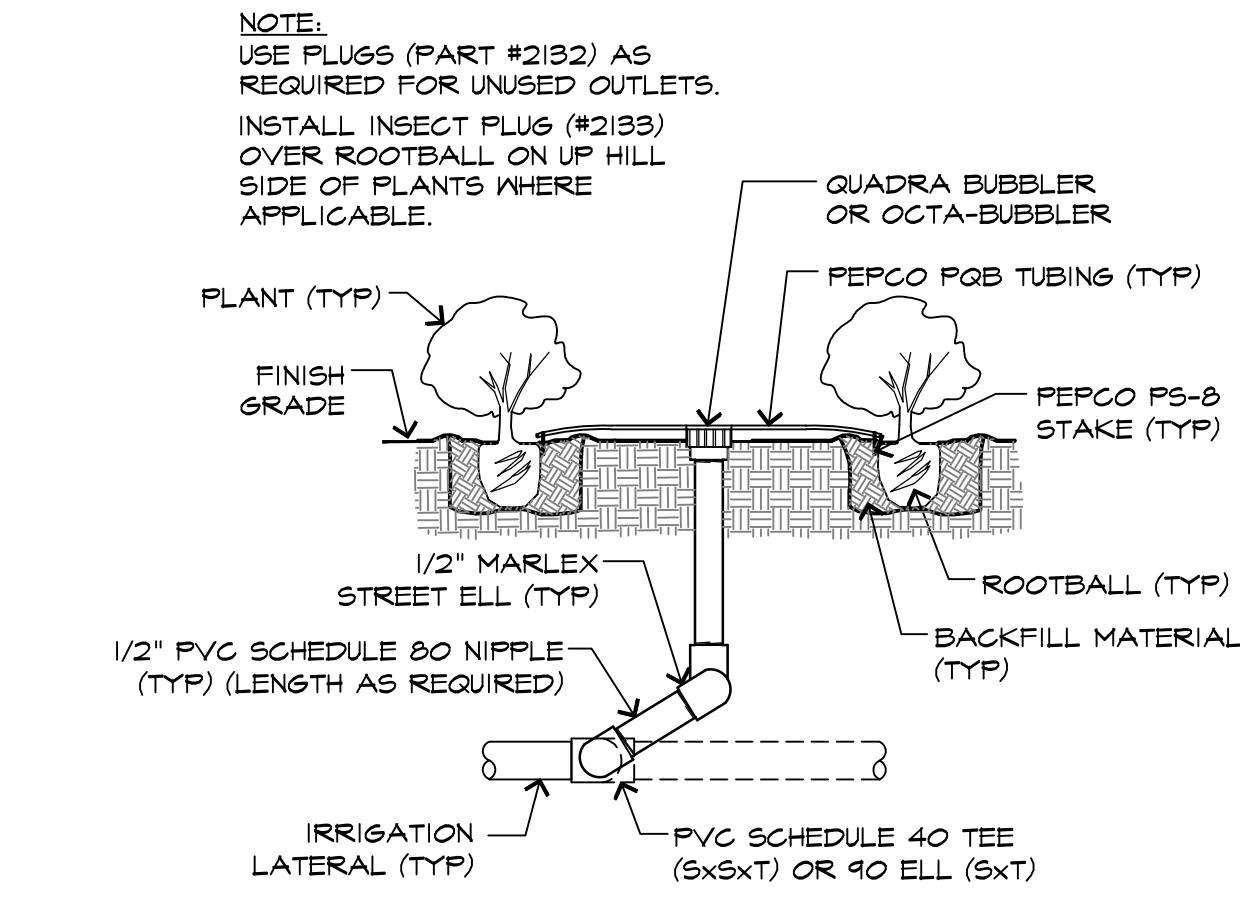
**B THRUST BLOCKING** SCALE: Not To Scale 016 - ThrustBlock



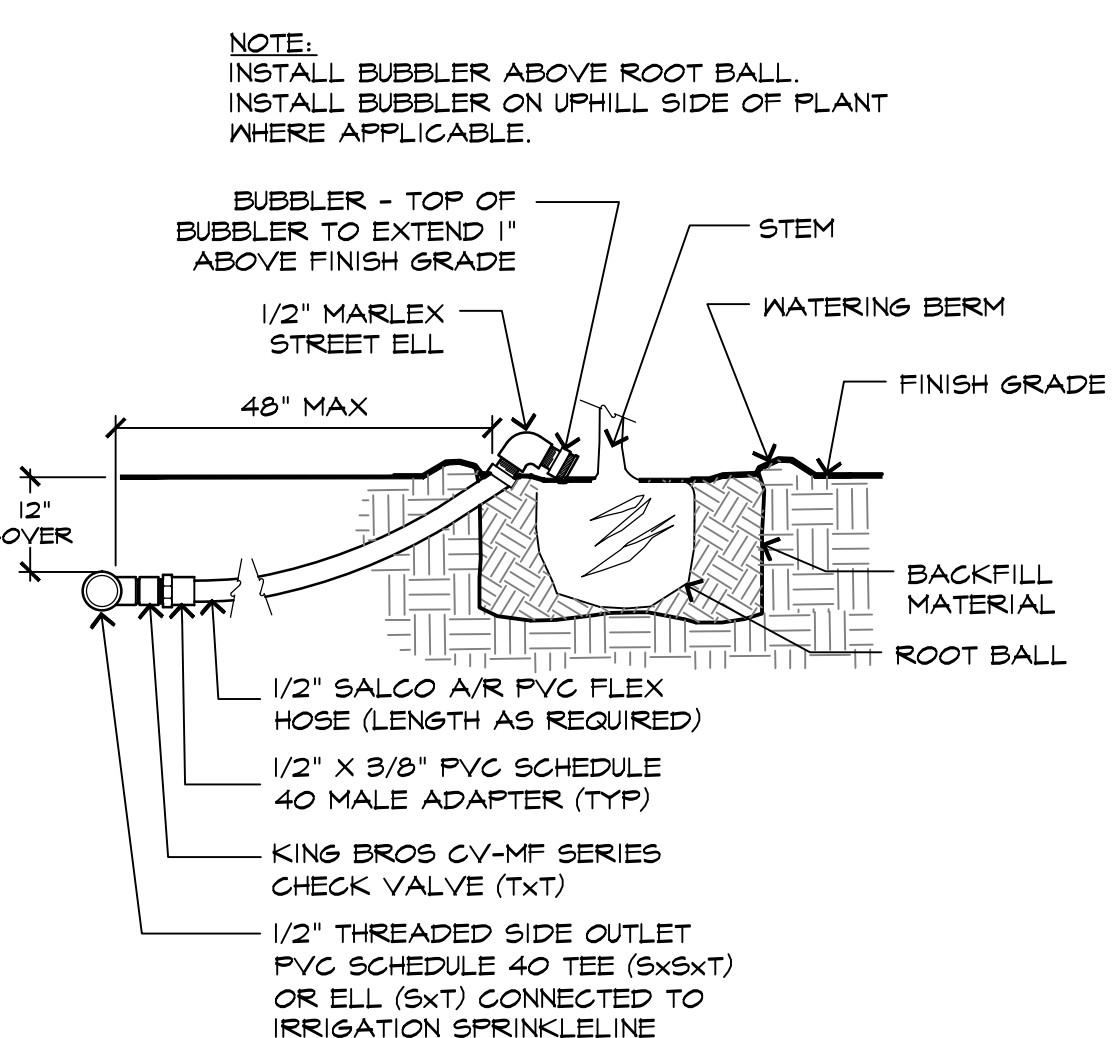
**C WIRE CONNECTION** SCALE: 3/4" = 1'-0" 016 -



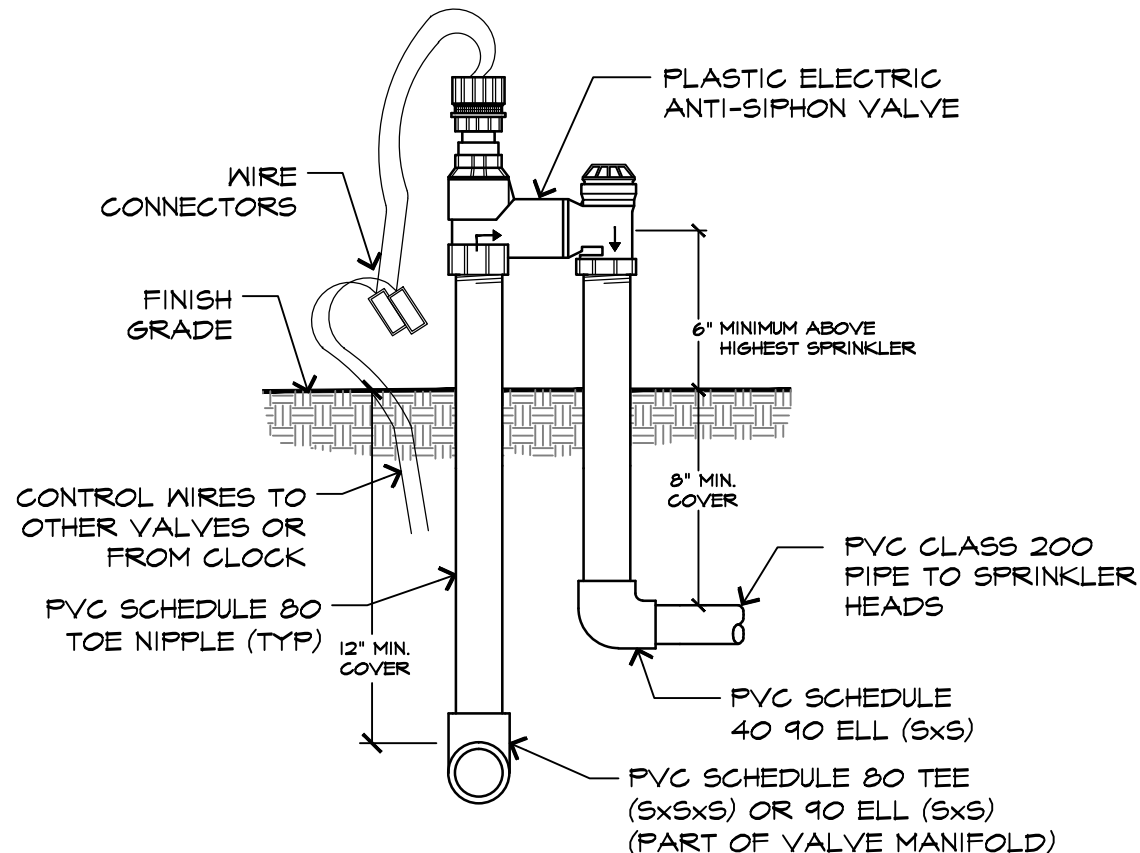
**D WALL MOUNT CONTROLLER INSTALLATION** SCALE: Not To Scale 024 - WallController



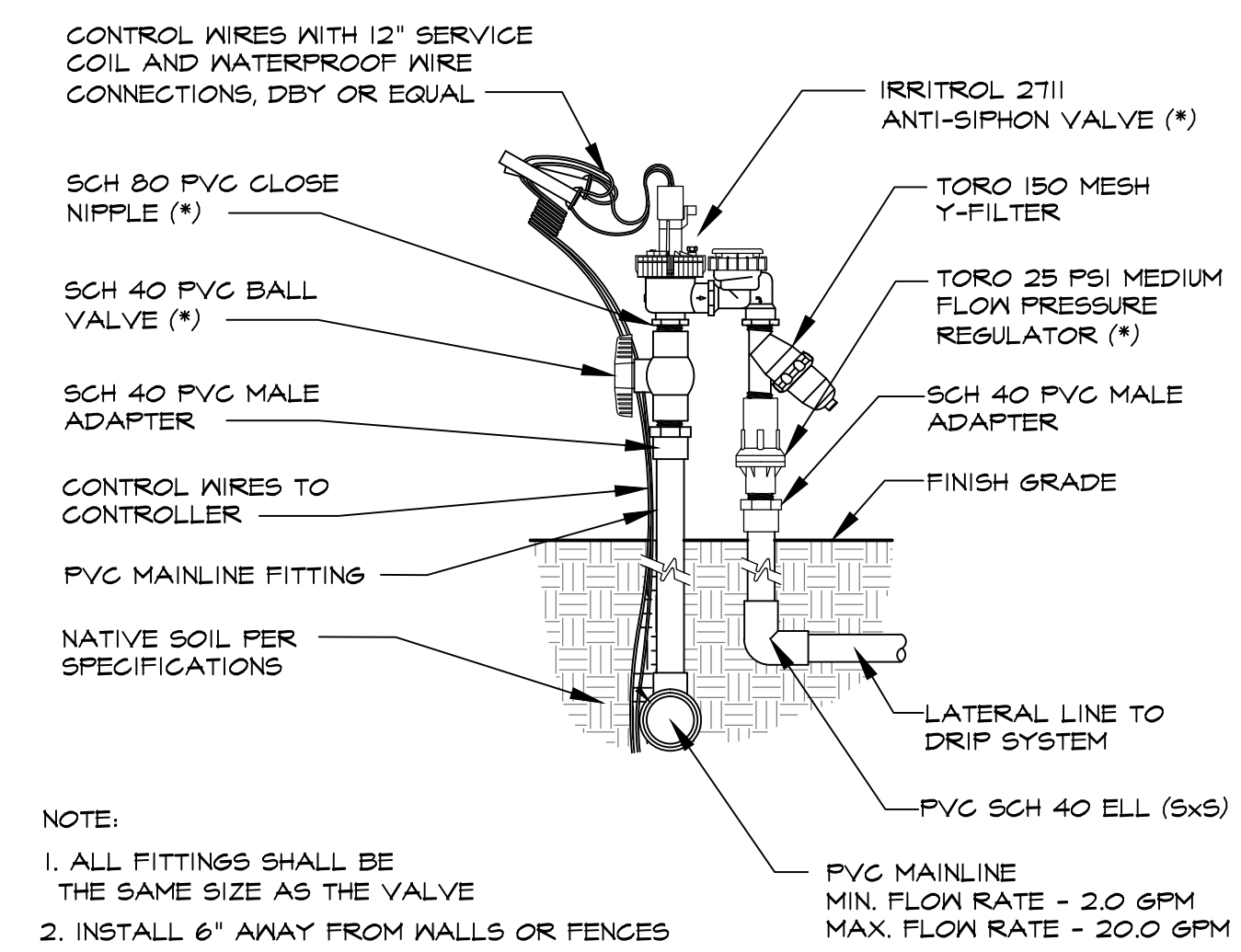
**E OCTA-BUBBLER OR QUADRA-BUBBLER INSTALLATION** SCALE: 1/2" = 1'-0" 024 -



**F BUBBLER INSTALLATION FOR TREES IN GC/BARK AREAS** SCALE: Not To Scale 024 - BblTrees

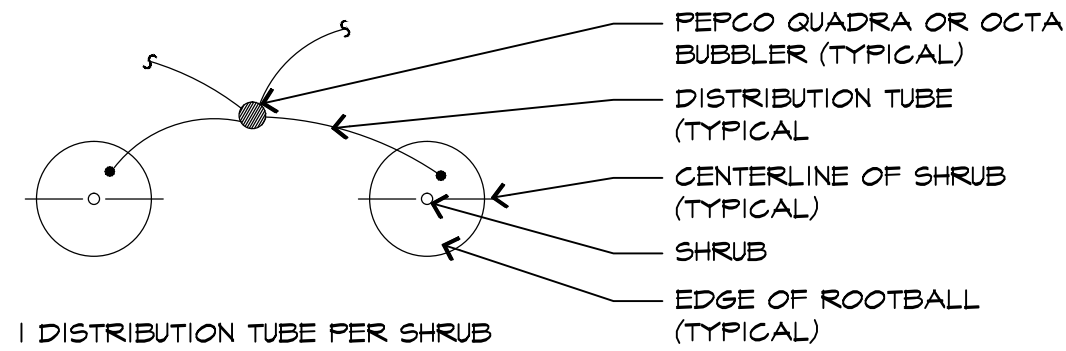


**G ELECTRIC ANTI-SIPHON VALVE INSTALLATION** SCALE: Not To Scale 024 - AntiSiphonValve



**H ANTI-SIPHON VALVE DRIP** SCALE: NOT TO SCALE 006 - DRIPANTI-SIPHON

- NOTES:
1. MAXIMUM LENGTH OF DISTRIBUTION TUBE FROM EMITTER BODY TO OUTLET LOCATION SHALL NOT EXCEED TEN (10) FEET
  2. EMITTER OUTLETS SHALL BE AS FOLLOWS:
    - (i) 2-GPH EMITTER PER 1 GAL. LOW WATER USE SHRUB
    - (i) 2-GPH EMITTER PER 1 GAL. MEDIUM WATER USE SHRUB
    - (i) 2-GPH EMITTER PER 5 GAL. LOW WATER USE SHRUB
    - (i) 2-GPH EMITTER PER 5 GAL. MEDIUM WATER USE SHRUB

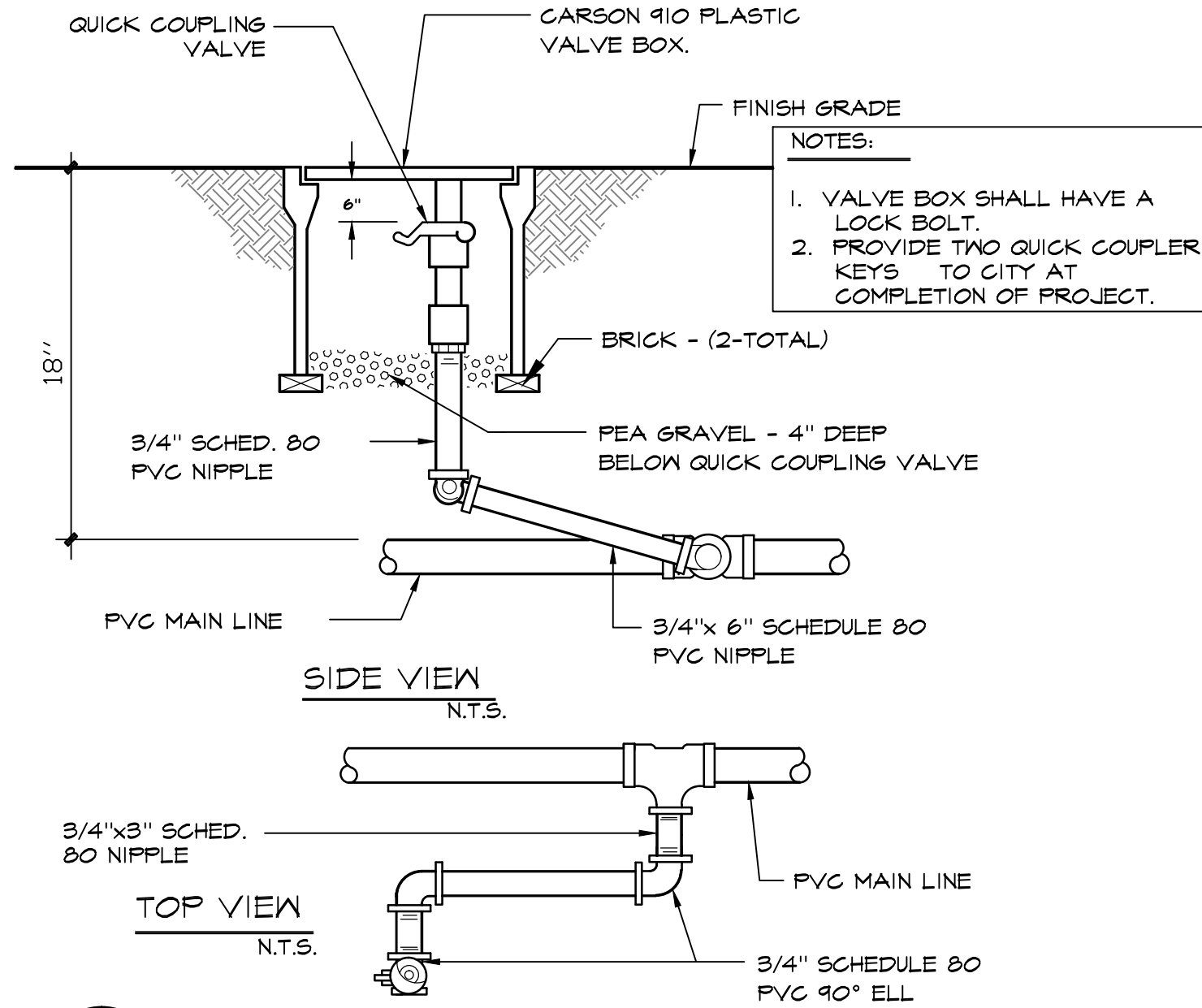


I

EMITTER TUBE PLACEMENT

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

016 -

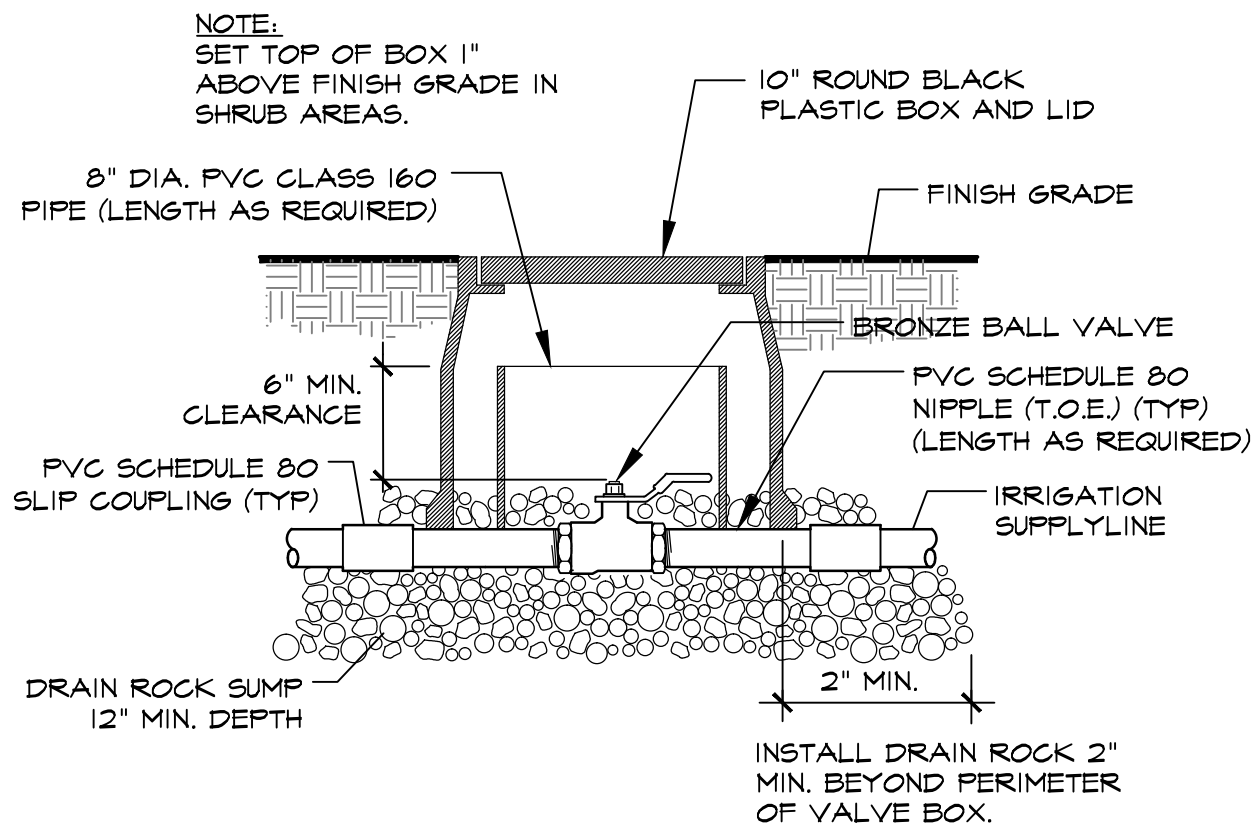


J

QUICK COUPLER VALVE

SCALE: 1/2" = 1'-0"

024 -

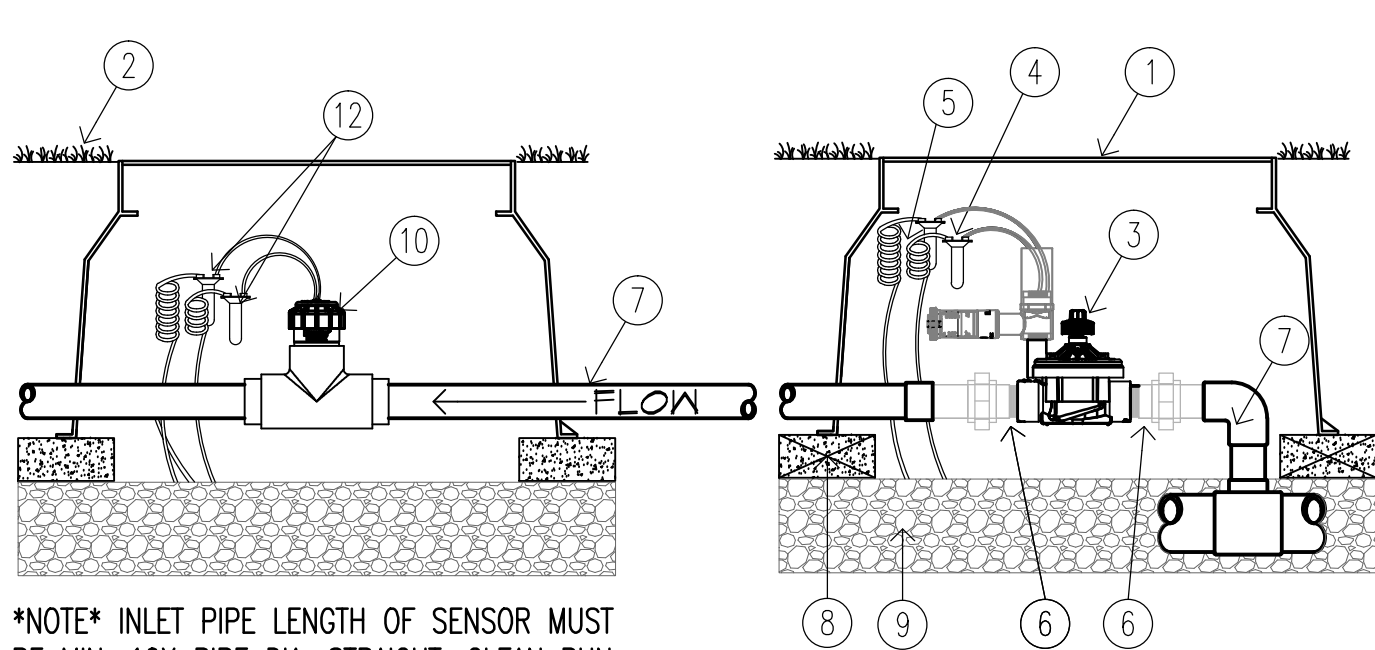


K

BALL VALVE

SCALE: NOT TO SCALE

016 - Ball Valve\_16



- 1 STANDARD VALVE BOX  
 2 FINISH GRADE  
 3 REMOTE CONTROL VALVE  
 REFER TO IRRIGATION LEGEND  
 4 WATERPROOF CONNECTORS (2)  
 5 18-24" COILED WIRE  
 6 SCH 80 T.O.E. NIPPLE  
 7 MAIN LINE PIPE & FITTINGS  
 8 BRICK SUPPORTS (4)  
 9 3/4" MINUS WASHED GRAVEL
- 10 FLOW SENSOR  
 11 MIN. 18/2 WIRE TO INTERFACE PANEL.  
 MAXIMUM WIRE DISTANCE RUN OF 1,000'  
 12 PRESSURE REGULATOR - ACCU SYNC AS-ADJ

FCT FITTING SELECTION

FCT100	1 INCH	SCH. 40
FCT150	1.5 INCH	SCH. 40
FCT158	1.5 INCH	SCH. 80
FCT200	2 INCH	SCH. 40
FCT208	2 INCH	SCH. 80
FCT300	3 INCH	SCH. 40
FCT308	3 INCH	SCH. 80
FCT400	4 INCH	SCH. 40

- NOTES:
1. VALVE BOX SHALL BE SET 1" ABOVE GRADE.
  2. WHEN PLASTIC VALVES ARE USED, THE CARSON VALVE BOX SHALL HAVE AN EMS DEVICE IN THE COVER TO FACILITATE DETECTION BY A METAL DETECTOR. HOT STAMP TOP OF VALVE BOX WITH CORRESPONDING VALVE NUMBER AT CONTROLLER. ATTACH CHRISTY ID MARKER OR EQUAL TO VALVE IN BOX.
  3. ONLY ONE (1) VALVE PER BOX .
  4. PROVIDE DS-400 DRI-SPLICE WIRE CONNECTION AT ALL SPLICES.
  5. CONTROL WIRE SHALL BE SIZED A MINIMUM OF #14 U.L. APPROVED.

L

MASTER VALVE/FLOW SENSOR INSTALLATION

SCALE: 1 1/2" = 1'-0"

008 -



LANDSCAPE ARCHITECTURE  
LAND PLANNING  
1615 BONANZA STREET  
SUITE 314  
WALNUT CREEK, CA 94596  
TEL: 925.938.7377  
www.ripleydesign.com

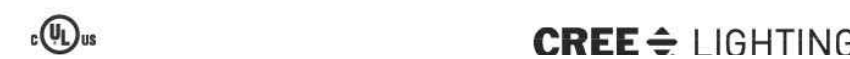
Serene Hills LLC.  
22251 Poppy Drive  
Cupertino, CA 95014  
TEL: 408.396.2706

SERENE HILLS  
Morgan Hill, California  
September 12, 2023

Preliminary Landscape  
Irrigation Details

Calculation Summary (Footcandles calculated using predicted lumen values @ 50K hrs of operation)						
Label	Units	Avg	Max	Min	Avg/Min	Max/Min
CalcPts	Fc	0.62	1.3	0.0	N.A.	N.A.

\*\*\* CUSTOMER TO VERIFY ORDERING INFORMATION AND CATALOGUE NUMBER PRIOR TO PLACING ORDER \*\*\*



USA: [creeighting.com](http://creeighting.com) (800) 234-6800  
Canada: [creeighting-canada.com](http://creeighting-canada.com) (800) 473-1234

**CREE**  **LIGHTING**



illumination results shown on this lighting design are based on project parameters provided to Cree Lighting used in conjunction with luminaire test procedures conducted under laboratory conditions. Actual project conditions differing from these design parameters may affect field results. The customer is responsible for verifying dimensional accuracy along with compliance with any applicable electrical, lighting or energy code.

Filename: 221007BW1CIS.AGI

Date:10/7/2022

