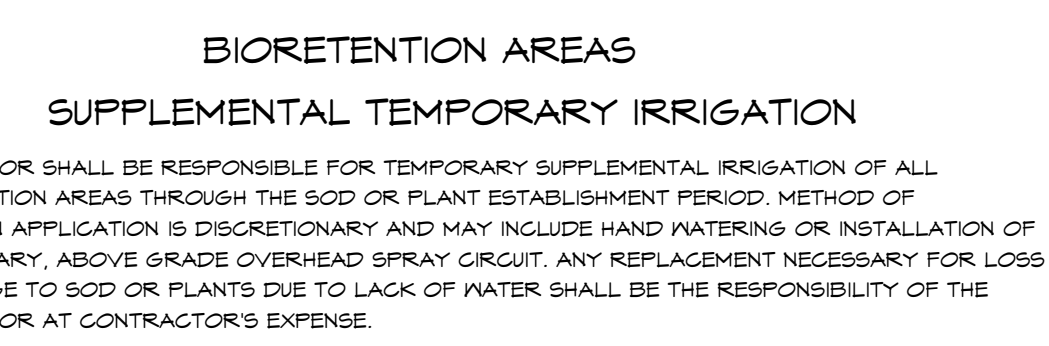


THESE DRAWINGS COMPLY WITH THE CRITERIA OF THE ORDINANCE. ORDINANCE REQUIREMENTS HAVE BEEN APPLIED FOR THE EFFICIENT USE OF WATER IN THE IRRIGATION DESIGN PLAN AND THE LANDSCAPE DESIGN PLAN."



1. ALL SPRINKLER HEADS SHALL BE SET PERPENDICULAR TO FINISH GRADE OF THE AREA TO BE IRRIGATED UNLESS OTHERWISE NOTED ON THE PLANS.
2. THE SPRINKLER SYSTEM DESIGN IS BASED ON THE MINIMUM STATIC PRESSURE OF 38 PSI AT THE VALVES AND THE MINIMUM FLOW FROM THE IRRIGATION DRAINAGES AT THE POINT OF CONNECTION. THE IRRIGATION CONTRACTOR SHALL VERIFY WATER PRESSURE PRIOR TO CONSTRUCTION OF THE IRRIGATION SYSTEM. IF THE WATER PRESSURE SHOWN ON THE DRAWINGS DIFFERS FROM THE ACTUAL PRESSURE READING AT THE IRRIGATION POINT OF CONNECTION, THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY. IN THE EVENT PRESSURE DIFFERENCES ARE NOT REPORTED PRIOR TO THE START OF CONSTRUCTION, THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR THE FULL CORRECTION OF PRESSURE DIFFERENCES NECESSARY.
3. THE LOCATION OF THE CONTROLLER TO BE VERIFIED BY OWNER. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR CONNECTING ALL PROPOSED STATIONS TO THE CONTROLLER. CONTROLLER TO BE CONFIGURED TO OPERATE 4 STATIONS. CONTROLLER SHALL BE HUNTER X-6000-M WITH GM-600 EXPANSION MODULE.
4. THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR THE LATEST EDITION OF THE UNIFORM BUILDING CODE.
5. THIS DESIGN IS DIAGRAMMATIC. ALL PIPING, VALVES, ROOT BARRIERS, ETC. SHOWN WITHIN PAVED AREAS ARE FOR DESIGN CLARIFICATION ONLY. INSTALL PIPING AND VALVES IN PLANTING AREAS WHERE POSSIBLE, AND LOCATE ELECTRIC CONTROL AND QUICK COUPLING VALVES IN GROUND COVER/SHRUB AREAS, 6" TO 12" AWAY FROM PLANTING.
6. THE IRRIGATION CONTRACTOR SHALL FLUSH AND ADJUST ALL SPRINKLER HEADS TO OPTIMUM PERFORMANCE AND TO PREVENT OVER SPRAY ON WALKS, ROADWAYS, AND/OR BUILDINGS. THIS SHALL INCLUDE SELECTING THE BEST DEGREE OF ARC TO FIT THE EXISTING SITE CONDITIONS AND THROTTLING THE FLOW CONTROL AT EACH VALVE TO OBTAIN THE OPTIMUM OPERATING PRESSURE FOR EACH SYSTEM.
7. THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR FULLY FAMILIARIZE THEMSELVES WITH ALL GRADE DIFFERENCES, LOCATION OF WALLS, STRUCTURES, AND UTILITIES. THE IRRIGATION CONTRACTOR SHALL EXERCISE EXTREME CARE, AND BE RESPONSIBLE FOR ANY DAMAGE IN EXCAVATING AND WORKING NEAR UTILITIES.
8. CONTRACTOR SHALL COORDINATE ALL WORK WITH THE GENERAL CONTRACTOR AND OTHER SUB-CONTRACTORS REGARDING THE LOCATION AND THE INSTALLATION OF PIPE SLEEVES THROUGH EXISTING UNDER ROADWAYS AND NEAR STRUCTURES. PRIOR TO CONSTRUCTION, CONTACT ALL APPLICABLE AGENCIES AND U.S.A. AT 1-800-842-2444 TO FIELD LOCATE ALL EXISTING UTILITIES.
9. FIELD ADJUSTMENTS MAY BE REQUIRED TO PROVIDE OPTIMUM OPERATING EFFICIENCY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE LANDSCAPE ARCHITECT TO REVIEW FIELD ADJUSTMENTS PRIOR TO INSTALLATION. IN THE EVENT THAT NO CONTACT IS MADE WITH THE LANDSCAPE ARCHITECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REVISIONS.
10. SLEEVE ALL IRRIGATION PIPE AND CONTROL WIRES UNDER STREETS AND CONCRETE WALKWAYS WITH THE PROPER SIZE CLASS 300 P.V.C PIPE TO DEPTH AS SPECIFIED.
11. FOR ADDITIONAL INFORMATION, SEE PROJECT DATA AND SPECIFICATIONS.
12. ALL WORK SHALL CONFORM TO ALL APPLICABLE CITY OF SANTA ROSA CONSTRUCTION STANDARDS.
13. NO GALLVANIZED IRON PIPE OR FITTING SHALL BE ALLOWED.
14. A BALL VALVE IN A SEPARATE ROUND VALVE BOX IS TO BE INSTALLED IMMEDIATELY UPSTREAM FROM EACH REMOTE CONTROL VALVE OR GROUP OF VALVES. VALVE SHALL BE SIZED TO MANLINE SPLIT AT THE VALVE. SEE DETAIL.
15. INSTALL 3" WIDE DETECTABLE TAPE (45° DTP, AS MANUFACTURED BY T. CHRISTY). TAPE SHALL BE INSTALLED 6" ABOVE THE IRRIGATION MAIN.
16. INSTALL ALL IRRIGATION SCHEDULING BENLICH MUNCH, INSTALL ALL TURNB'S 3" BELLOV GRADE, PARALLEL, AT 12" ON CENTER, TO INDICATE THE IRRIGATION STANES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS TO SECURE TURNS TO GROUND.
17. A SIGNED CERTIFICATE OF COMPLETION IS REQUIRED PRIOR TO FINAL ACCEPTANCE BY THE CITY OF SANTA ROSA IF THE INSTALLATION OF THE LANDSCAPE DOES MEET OR SUBSTANTIALLY COMPLY WITH THE APPROVED LANDSCAPE ARCHITECT'S CERTIFICATE OF COMPLETION. THE CERTIFICATE OF COMPLETION SHALL NOT BE SIGNED OR APPROVED BY THE LANDSCAPE ARCHITECT OF RECORD.

IRRIGATION LEGEND					
SYMBOL	EQUIPMENT	MANUFACTURER	MODEL	REMARKS	
	STREAM BUBBLER: 6" POP-UP	HUNTER	PROS-06-CV-R-PPRS30-MSBN-25Q	THREE WELL BUBBLER, AIM AT ROOF BALL; 1 PER TREE	
	ROOF WATERING SYSTEM	HUNTER	RZW9-18-25-CV	1 PER TREE	
	NORMALLY CLOSED MANUAL VALVE	HUNTER	ICV-101S	INSTALL DOWNSTREAM FROM BACKFLOW PREVENTER	
	REMOTE CONTROL VALVE: TREE BUBBLER	HUNTER	ICV-101G-AS-ADJ	THREE BUBBLER CIRCUIT VALVE; SEE PLAN FOR SIZE	
	REMOTE CONTROL VALVE: DRIP CIRCUIT	HUNTER	IC2101A-F-25, IC2-101-25	DRIP CIRCUIT VALVE	
	6 STATION BASE CONTROLLER (2 WIRE CONFIGURATION)	HUNTER	IC-600S-85	MOUNT ON PANEL AT EYE LEVEL	
	DUAL DECODER MODULE	HUNTER	DUAL -1, DUAL -2, DUAL -S		
	DUAL SURGE ARRESTOR	HUNTER	DUAL -S		
	DUAL DECODER OUTPUT MODULE	HUNTER	DUAL -48M		
	SOLAR EVINC SENSOR (WIRELESS)	HUNTER	WES-SEN	MOUNT AT ROOF LINE ABOVE CONTROLLER LOCATION	
	R.P. BACKFLOW PREVENTER - 1"	RESCO	860U		
	BACK FLOW PREVENTER ENCLOSURE	LE MEUR	BF 18" X 30" X 30"	INSTALL PER MANUF. SPECS	
	QUICK COUPLER W COVER	CHAMPION	QC4-075V	SEE PLAN FOR SIZE	
	BALL VALVE IN VALVE BOX	WATTS	B6400 SERIES	MATCH MAINLINE SIZE; REFER TO DETAIL	
	AUTOMATIC LINE FLUSH VALVE	HUNTER	AFV-T	INST. IN 6" VALVE BOX @ END OF CIRCUIT	
	AIR RELIEF VALVE	HUNTER	AVR-075	INST. IN 6" VALVE BOX @ HIGH POINT OF CIRCUIT	
	PIPE AND WIRE	PVC	CL 200	SEE PLAN FOR SIZE	
	SUB SURFACE BIOSWALE IRRIGATION	HUNTER	ECOMAT 17MM	INSTALL 4" BELOW GRADE ALL BIOSWALE AREAS	
	POLY TO PVC CONNECTOR W COMPRESSION FITTING		SEE DETAIL GL3.3		
	LANDSCAPE DRIPLINE	RAINBIRD	XFS-06-12-XH	INSTALL 3" BELOW GRADE @ SPACING SHOWN	
	MAINLINE	PVC	SCH 40 (1-1/2" AND SMALLER)		
	LATERAL	PVC	SCH 40		
	FLOW SENSOR	CST	FSI-110-000	INSTALL AT POINT OF CONNECTION REFER TO CIVIL DRAWINGS	
	WATER METER				
	VALVE STATION AND SEQUENCE				
	ELECTRIC CONTROL VALVE SIZE				
	FLOW RATE IN GALLONS PER MINUTE				

MAMA AND ETNU CALCULATIONS						
I)	Maximum Applied Netter Adjusted Area: MAMA = ETO ((0.82) (0.95) LA ₁) + (0.45 X BLA ₁)					
	phone: 0.82 = Annual Net Reference Depreciation (inches) 0.45 = ET Adjustment Factor (Commercial) 0.95 = ET Adjustment Factor (Residential) LA ₁ = Landscaped Area Square Feet BLA ₁ = Commercial Area Square Feet 0.92 = Conversion factor (10 sq.yards per square foot) 0.45 = Portion of the landscape area identified as Special Landscape Areas (square feet) 0.45 = the additional ET Adjustment Factor for Special Landscape Area ((0 - 0.85) + 0.45) (Commercial) 0.95 = the additional ET Adjustment Factor for Special Landscape Area ((0 - 0.45) + 0.95) (Residential)					
	Commercial (%) or Residential (%)	C				
A)	Net Depreciation Calculation					
	Local Reference ETO	(45.51)				
	21.71% (Annual Rainfall)	X	.26	+ 6.76 (Effective Rainfall)		
	Net Depreciation Calculation + Annual ETO - Effective Rainfall				=	33.73
B)	Adjusted Landscape Area Calculation					
	35.81 sf (Landscape Area)	X	0.45 Adjustment Factor	=	16.18 sf	11 sf
	0.00 sf (Specie Landscape Area)	X	0.95 Adjustment Factor	=	0.00 sf	
	Sum of Adjusted Landscape Area				=	16.18 sf
MAMA	ETU	X .62	X	16.18 sf	+	366.98' gal/yf
A)	Estimated Total Water Needs					
	Net Depreciation Calculation					
	Adjusted Landscape Calculation + Annual ETO - Effective Rainfall					
	Adjusted Landscape Area Calculation					
	0.00 sf	X	1.1	=	0.00 sf	
	Very Low Water Use	X	1.3	=	4.46851 sf	
	31.56 sf Low Water Use	X	1.6	=	2.54191 sf	
	4.246 sf Moderate Water Use	X	9.9	=	6.94 sf	
	81.10 sf High water use / Inter Feature	X	1.6	=	12.9201 sf	
2025-210	Sum of Adjusted Landscape Areas				=	12.9201 sf
ETPU +	56.75	X .62	X	12.924 sf	/	0.80
	irrigation Efficiency Factor					
	square footage of Landscape on drip					
	square footage of Landscape on spray					
	Total Square Footage of Landscape					
	Adjusted Irrigation Efficiency Factor					

DETAIL HYDROZONE TABLE					
ID	Method	Potter Use	Potter Use Value	Hydrozone Area in Sq	% of Landscape
1P	Sub-surface Drilling	Low	0.3	3,207.46 sf	0.8%
2P	Sub-surface Drilling	Low	0.3	3,207.46 sf	0.8%
2D	Sub-surface Drilling	Low	0.3	2,681.66 sf	1.1%
3P	Sub-surface Drilling	Low	0.3	424.85 sf	0.1%
4P	Overhead Sprink	Low	0.6	1,111.96 sf	0.3%
4D	Ecg-Mg	Moderate	0.6	2,580.59 sf	0.8%
5P	Sub-surface Drilling	Low	0.3	3,174.32 sf	0.8%
6P	Sub-surface Drilling	Low	0.3	1,029.33 sf	0.3%
10P	Overhead Sprink	Moderate	0.6	620.51 sf	1.3%
11P	Sub-surface Drilling	Low	0.3	1,309.33 sf	0.4%
12D	Sub-surface Drilling	Low	0.3	1,285.81 sf	3.1%
13P	Sub-surface Drilling	Low	0.3	1,309.33 sf	0.4%
14D	Sub-surface Drilling	Low	0.3	1,528.11 sf	4.3%
15P	Sub-surface Drilling	Low	0.3	1,528.11 sf	4.3%
16P	Ecg-Mg	Low	0.3	2,754.78 sf	7.1%
17P	Sub-surface Drilling	Low	0.3	1,314.22 sf	1.3%
18D	Sub-surface Drilling	Low	0.3	2,324.33 sf	6.9%
20P	Root Altering System	Moderate	0.6	460.51 sf	0.4%
21P	Root Altering System	Moderate	0.6	460.51 sf	0.4%
22P	Root Altering System	Low	0.3	480.51 sf	0.3%
23P	Root Altering System	Low	0.3	480.51 sf	0.3%
24P	Root Altering System	Low	0.3	480.51 sf	0.3%
25P	Root Altering System	Low	0.3	423.87 sf	7.2%
26P	Root Altering System	Low	0.3	423.87 sf	7.2%
27P	Water Feeding	High	0.8	81.50 sf	0.2%

SUMMARY HYDROZONE TABLE		
PLANT TYPE	AREA	% OF LANDSCAPE
Very Low	0.00	0%
Low	31,505.04	88%
Moderate	4,246.45	12%
High	81.50	0%

PRECIPITATION RATES BY VALVE		
VALVE ID	FLOW IN GPM	PRECIPITATION RATE IN INCHES PER HOUR
10	25.8 GPM	0.97
20	6.7 GPM	0.26
30	14.1 GPM	0.65
40	3.5 GPM	0.34
55	11.2 GPM	0.61
65	2.6 GPM	0.34
75	10.9 GPM	0.41
85	12.5 GPM	0.59
95	2.8 GPM	0.22
105	6.3 GPM	0.91
115	9.5 GPM	0.40
120	1.1 GPM	0.21
130	6.7 GPM	0.37
140	3.8 GPM	0.38
165	25.8 GPM	0.84
175	10.5 GPM	0.71
180	1.1 GPM	0.40
205	6.5 GPM	0.56
209	2.5 GPM	1.10
218	1.5 GPM	1.10
225	0.5 GPM	1.10
235	5.0 GPM	1.10
248	2.0 GPM	1.64
258	1.5 GPM	1.10
268	1.5 GPM	1.10
270	4.5 GPM	1.10
W	2.0 GPM	0.97 21

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IRRIGATION PLAN

**CANINE COMPANIONS
EXPANSION**
2965 DUTTON AVENUE
SANTA ROSA, CA 95407
APN #043-135-031

DATE: 12/21/21
MLA JOB #: 2020-25
SCALE: 1:120
DRAWN: DM

L1

SHEET L1 OF 6

DRAFT IRRIGATION PLAN
FOR BID AND BUDGETARY PURPOSES ONLY

U.S.A NOTE

IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO BE FAMILIAR WITH ALL GRADE REFERENCES, LOCATION OF WALLS, STRUCTURES, AND UTILITIES. THE IRRIGATION CONTRACTOR SHALL EXCAVATE EXISTING EARTH AND RESPONSIBLE FOR ANY DAMAGE IN EXCAVATING AND WORKING NEAR UTILITIES. THE LANDSCAPE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE OTHER SUB-CONTRACTORS FOR THE LOCATION OF UTILITIES AND THE LOCATION OF PIPE SLEEVES UNDER ROADWAYS, AND NEAR STRUCTURES. PRIOR TO CONSTRUCTION, CONTACT ALL APPLICABLE AGENCIES AND U.S.A. AT 1-800-642-2444 OR 1-800-227-2600 TO FIELD LOCATE ALL EXISTING UTILITIES.

TREE PLANTING KEYNOTES

1. ECO-MAT: INSTALL 4" BELOW GRADE IN BIORETENTION AREAS AT 14" OC; LOW WATER USE, TYPICAL
2. 24" DEEP ROOT BARRIER, REFER TO DETAIL SHEET L-3, TYPICAL; DETAIL APPLIES TO ALL TREES WITHIN T OF HARDSCAPE EDGE
3. BIO-FILTRATION SOD, TYPICAL
4. CITY DESIGNATED STREET TREE
5. NEW SECURITY FENCE, TYP.
6. TRANSFORMER
7. TRASH ENCLOSURE
8. DOG RELIEF AREA

THESE DRAWINGS COMPLY WITH THE CRITERIA OF THE ORDINANCE.
ORDINANCE REQUIREMENTS HAVE BEEN APPLIED FOR THE EFFICIENT
USE OF WATER IN THE IRRIGATION DESIGN PLAN AND THE LANDSCAPE
DESIGN PLAN.

TREE LEGEND						
SYMBOL	SIZE	BOTANICAL NAME	COMMON NAME	WATER USE PER ACRES /Y	QUANTITY	COMMENTS
TREES						
ARA	#24	Acer rubrum 'Armstrong'	Armstrong Maple	.6	18	
CSI	#24	Celtis sinensis	Chinese Hackberry	.3	4	City Street Tree
LIN	#24	Lagerstroemia indica 'Natchez'	Natchez Crape myrtle	.3	17	
PCK	#24	Pistacia chinensis 'Keith Davey'	Chinese pistache	.3	12	
GLO	#24	Quercus lobata	Valley Oak	.3	9	
UPD	#24	Ulmus parvifolia 'Drake'	Drake's Chinese Elm	.3	23	
BIORETENTION AREAS						
	Sod	Biofiltration Sod	"Biofiltration Sod"	0.3		Delta Bluegrass (CA Natives)

REFER TO SHEET L2.2 FOR ADDITIONAL PLANTING NOTES

PLANTING NOTES

1. ALL GRASS/COVER TO BE SPACED IN A TRIANGULAR PATTERN, CONTRACTOR RESPONSIBLE FOR COMPLETE COVERAGE.
2. SUPPLY AIRDRIFT COVER 21 ORAN TUBES/AS FOLLOWS: 9-15 GAL, 3-9 GAL, 1-1 GAL.
3. ALL PLANTING 2" DBH, THE CONTRACTOR SHALL MAINTAIN AND EQUAL THE HEIGHT OF ROOTBALL.
4. BACKFILL PLANTS TO 2" EXISTING SOIL, 1/3 ORGANIC AMENDMENT
5. ALL PLANTS TO BE SPOTTED IN THE FIELD BY LANDSCAPE ARCHITECT PRIOR TO PLANTING.
6. ALL PLANTING MUST BE INSTALLED IN UNLIMITED AREAS. CONTRACTOR SHALL NOT DAMAGE OR DESTROY ANY EXISTING PLANT MATERIAL OR IRRIGATION. EXISTING PLANT MATERIAL AND IRRIGATION THAT IS DAMAGED SHALL BE REPLACED WITH LIKE, SIZE, QUALITY, ETC BY THE CONTRACTOR AT HIS EXPENSE.
7. THE CONTRACTOR SHALL MAINTAIN THE PLANTING AREAS SURROUNDING THE BUILDINGS COMPACTED SOIL TO BE SUFFICIENTLY EXCAVATED TO ALLOW FOR PROPER ROOT GROWTH AND DRAINAGE OF ALL AREAS. CHECK SOIL FOR PROPER DRAINAGE PRIOR TO PLANTING. AVOID THREATENING COMPACTED SOIL WHERE NECESSARY. DO NOT PLANT IN THE DRAINAGE SLOPES.
8. THE CONTRACTOR SHALL MAINTAIN ALL PLANTING TO MEET THE MINIMUM AND PREVIOUSLY ESTABLISHED IRRIGATION STANDARDS.
9. A SIGNED CERTIFICATE OF COMPLETION IS REQUIRED PRIOR TO FINAL ACCEPTANCE BY THE CITY OF SANTA ROSA. IF THE INSTALLATION OF THE LANDSCAPE DOES MEET OR SUBSTANTIALLY EXCEED WITH THE APPROVED LANDSCAPE CONSTRUCTION DOCUMENTS, THE CERTIFICATE OF COMPLETION MAY NOT BE REQUIRED.

CITY REQUIREMENT OF DOCUMENT OF COMPLIANCE

(ITEMS TO BE INCLUDED WITH CERTIFICATE OF COMPLETION)

- A. PROJECT APPLICANT MUST SUBMIT DOCUMENTATION VERIFYING IMPLEMENTATION OF SOIL ANALYSIS REPORT RECOMMENDATIONS TO THE CITY WITH CERTIFICATE OF COMPLETION.
- B. THE CERTIFICATE OF COMPLETION MUST BE ACCOMPANIED BY AN IRRIGATION AUDIT THAT CONTAINS THE FOLLOWING:
- * OPERATING PRESSURE OF THE IRRIGATION SYSTEM
 - * DISTRIBUTION UNIFORMITY OF OVERHEAD IRRIGATION
 - * PRECIPITATION RATE OF OVERHEAD IRRIGATION
 - * REPORT OF ANY OVERSPRINKS OR BROKEN IRRIGATION EQUIPMENT
 - * IRRIGATION SCHEDULE INCLUDING:
 - 1. PLANT ESTABLISHMENT IRRIGATION SCHEDULE
 - 2. REGULAR IRRIGATION SCHEDULE BY MONTH (SEE ORDINANCE FOR DETAILS)
 - 3. VERIFICATION THAT PLANT ROOTS OF THE IRRIGATION PLAN SHOWING HYDROZONES IS KEPT WITH THE IRRIGATION CONTROLLER FOR SUBSEQUENT MAINTENANCE PURPOSES
 - * ALL LANDSCAPE IRRIGATION AUDITS MUST BE CONDUCTED BY A CITY CERTIFIED LANDSCAPE IRRIGATION AUDITOR OR A THIRD PARTY CERTIFIED LANDSCAPE IRRIGATION AUDITOR.
- C. AN IRRIGATION MAINTENANCE SCHEDULE TIMELINE MUST BE ATTACHED TO THE CERTIFICATE OF COMPLETION AND IRRIGATION AUDIT.
- D. IRRIGATION AUDIT: AN INDEPENDENT EVALUATION OF THE PERFORMANCE OF AN IRRIGATION SYSTEM CONDUCTED BY A CERTIFIED LANDSCAPE IRRIGATION AUDITOR (SEE ORDINANCE FOR DETAILS). THE AUDIT MUST BE CONDUCTED IN A HANDBOOK PROGRAM OR OTHER U.S. EPA WATERSENSE-LABELLED AUDIT PROGRAM.

CITY REQUIRED NOTES

1. UPON COMPLETION OF INSTALLATION, CONTRACTOR SHALL SUBMIT TO THE ENGINEERING DEPARTMENT SERVICES INSPECTION A COMPLETED AND SIGNED "CERTIFICATE OF COMPLETION" STATING THE PROJECT HAS BEEN INSTALLED AS DESIGNED.
2. THE CERTIFICATE OF COMPLETION SHALL BE ACCOMPANIED BY AN IRRIGATION AUDIT, IRRIGATION SCHEDULE AND A MAINTENANCE SCHEDULE, AS DESCRIBED IN THE CITY ORDINANCE.
3. A FINAL CITY INSPECTION SHALL BE PERFORMED THE INSTALLATION CONTRACTOR SHALL ATTEND THIS INSPECTION AND MAKE ALL REQUIRED REPAIRS AND ADJUSTMENTS TO ACHIEVE APPROVAL AND COMPLETION FROM THE CITY. TO SCHEDULE AN INSPECTION, CONTACT ENGINEERING DEPARTMENT SERVICES AT (707) 545-4611.
4. A MINIMUM OF 8" OF NON-MECHANICALLY COMPACTED SOIL SHALL BE AVAILABLE FOR WATER ABSORPTION AND ROOT GROWTH IN PLANTED AREAS.
5. INCORPORATE COMPOST OR NATURAL FERTILIZER INTO THE SOIL TO A MINIMUM DEPTH OF 6" AT A MINIMUM RATE OF 5 CUBIC YARDS PER 1000 SQUARE FEET OR PER SPECIFIC AMENDMENT RECOMMENDATIONS FROM A SOIL LABORATORY REPORT.
6. A MINIMUM 5" LAYER OF MULCH SHALL BE APPLIED ON ALL EXPOSED SOIL SURFACES OF PLANTING AREAS EXCEPT IN TUFF AREAS, GREENING OR ROOTING GROUNDCOVERS OR DIRECT SEEDING APPLICATIONS.

TREE & BIORETENTION PLAN



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TREE & BIOPRETENTION

CANINE COMPANIONS EXPANSION

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APN #043-135-031

DATE: 12/21/21
MLA JOB #: 2020-25
SCALE: 1:120
DRAWN: DM

L2.1

SHEET L2 OF 5

USA NOTE
IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR TO BE FAMILIAR WITH ALL
GRADE DIFFERENCES, LOCATION OF MAJLS, STRUCTURES, AND UTILITIES. THE IRRIGATION
CONTRACTOR SHALL EXERCISE EXTREME CARE, AND BE RESPONSIBLE FOR ANY DAMAGE IN
EXCAVATING AND WORKING NEAR UTILITIES. THE LANDSCAPE CONTRACTOR SHALL
COORDINATE ALL WORK WITH THE OTHER SUB-CONTRACTORS FOR THE LOCATION OF
UTILITIES AND THE INSTALLATION OF PIPE SLEEVES THROUGH MAJLS UNDER ROADWAYS, AND
NEAR STRUCTURES. PRIOR TO CONSTRUCTION, CONTACT ALL APPLICABLE AGENCIES AND
U.S.A. AT 1-800-842-2444 OR 1-800-327-2602 TO FIELD LOCATE ALL EXISTING UTILITIES.

SHRUB PLANTING KEYNOTES

1. 3" DEEP MULCH, ALL LANDSCAPE AREAS
2. WATER FEATURE
3. 6' SQUARE TREE GRATES
4. 5' SQUARE TREE GRATES
5. NEW SECURITY FENCE, TYP.
6. BIO-FILTRATION SOD, TYPICAL
7. DOG RELIEF AREA

SHRUB AND GROUNDCOVER LEGEND

SYMBOL	SIZE	BOTANICAL NAME	COMMON NAME	WATER USE PER MUSCLE IV	QUANTITY	COMMENTS
AHA	#5	Arctostaphylos densiflora 'Harmony'	Harmony Manzanita	.3	20	
ADH	#5	Arctostaphylos densiflora 'Howard McMinn'	Vine Hill Manzanita	.3	22	
GSU	#1	Cistus 'Sunset'	Sunset Rock Rose	.3	25	
LCP	#5	Loropetalum chinense 'Pipa's Red'	Pipa's Red Chinese Fringe Flower	.3	55	
LCH	#5	Loropetalum chinense 'Razzeberry'	Razzeberry Fringe Flower	.3	21	
FAB	#1	Perovskia atriplicifolia 'Blue Spire'	Russian Sage	.3	26	
PTN	#5	Pittosporum tobira 'Wheeler's Dwarf'	Wheeler's Dwarf Japanese Mock Orange	.3	64	
RIC	#5	Raphiolepis indica 'Clara'	Clara Indian Hawthorn	.3	43	
SLE	#5	Salvia leucantha	Mexican Bush Sage	.3	9	
SJI	#1	Salvia x jamensis 'Ignition Purple'	'Ignition Purple' Salvia	.3	16	
SRU	#5	Sarcococca congestifolia	Fragrant Sweet Box	.3	22	
XCD	#5	Xylosma congestum 'Compacta'	Shiny Xylosma	.3	33	
Perennial						
NFW	#1	Nepeta x faassenii 'Walker's Low'	'Walker's Low' Catmint	.3	25	
SGC	#1	Salvia 'Celestial Blue'	Purple Sage	.3	15	
Groundcover						
	#1	Cotoneaster dammeri 'Coral Beauty'	Coral Beauty Cotoneaster	.3	40	6' OC, Triangular Spacing
Lawn						
Ornamental Grass						
	#1	Bouteloua gracilis 'Blonde Ambition'	Blonde Ambition Ornamental Grass	.3	424	30' OC, Triangular Spacing
	#1	Festuca mairei	Atlas Fescue	.3	273	24' OC, Triangular Spacing
	#1	Muhlenbergia dubia	Pine Muhly	.3	307	48' OC, Triangular Spacing
Other						
		Mulch: Fir Bark 1-1/2" Minus	Medium Walk-On Bark			3" Depth, All Landscape Areas
		Linear Root Barrier	Root Solutions, or Equal			24" Depth, Continuous
See Detail						

PLANTING NOTES

1. ALL GROUND COVER TO BE SPACED IN A TRIANGULAR PATTERN. CONTRACTOR RESPONSIBLE FOR COMPLETE COVERAGE.
2. SUPPLY ASRIFORM 21 GRAM TABLETS AS FOLLOWS: 5-15 GAL., 3-5 GAL., 1-1 GAL.
3. DIG PLANTING HITS 2 TIMES THE DIAMETER AND EQUAL THE HEIGHT OF ROOTBALL.
4. BACKFILL HITS WITH 2/3 EXISTING SOIL, 1/3 ORGANIC AMENDMENT.
5. ALL PLANTS TO BE SPOTTED IN THE FIELD BY LANDSCAPE ARCHITECT PRIOR TO PLANTING.
6. WHEN LANDSCAPING IN EXISTING PLANTED AREAS, CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE OR DESTROY ANY EXISTING PLANT MATERIAL OR IRRIGATION. EXISTING PLANT MATERIAL AND IRRIGATION THAT IS DAMAGED SHALL BE REPLACED WITH LIKE, SIZE, QUALITY, ETC. BY THE CONTRACTOR AT HIS EXPENSE.
7. SPECIAL ATTENTION IS TO BE PAID TO THE PLANTING AREAS SURROUNDING THE BUILDINGS. COMPACTED SOIL IS TO BE SUFFICIENTLY EXCAVATED TO ALLOW FOR PROPER ROOT GROWTH AND DRAINAGE OF ALL AREAS. CHECK SOIL FOR PROPER DRAINAGE PRIOR TO PLANTING. AUGER THROUGH COMPACTED SOIL WHERE NECESSARY. DO NOT PLANT IN THE DRAINAGE SVALES.
8. ALL CONSTRUCTION IS TO BE PER ALL APPLICABLE AND PREVAILING CITY OF SANTA ROSA CONSTRUCTION STANDARDS.
9. A SIGNED CERTIFICATE OF COMPLETION IS REQUIRED PRIOR TO FINAL ACCEPTANCE BY THE CITY OF SANTA ROSA. IF THE INSTALLATION OF THE LANDSCAPE DOES MEET OR SUBSTANTIALLY COMPLY WITH THE APPROVED LANDSCAPE CONSTRUCTION DOCUMENTS, THE CERTIFICATE OF COMPLETION WILL NOT BE SIGNED OR APPROVED BY THE LANDSCAPE ARCHITECT OF RECORD.

SOIL ANALYSIS REPORT

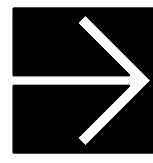
(REQUIRED BY CITY OF SANTA ROSA):

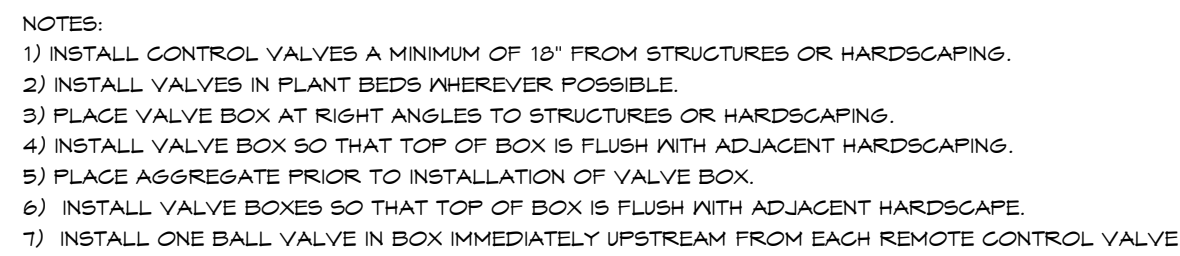
IN ORDER TO REDUCE RUNOFF AND ENCOURAGE HEALTHY PLANT GROWTH,
A SOIL ANALYSIS REPORT SHALL BE COMPLETED BY THE PROJECT
APPLICANT, OR THEIR DESIGNEE, AS FOLLOWS:

- 1) SUBMIT SOIL SAMPLES TO A LABORATORY FOR ANALYSIS AND RECOMMENDATIONS.
(A) SOIL SAMPLING SHALL BE CONDUCTED IN ACCORDANCE WITH LABORATORY PROTOCOL, INCLUDING PROTOCOLS REGARDING ADEQUATE SAMPLING DEPTH FOR THE INTENDED PLANTS.
- 2) THE SOIL ANALYSIS SHALL INCLUDE:
(A) SOIL TEXTURE;
(B) INFILTRATION RATE DETERMINED BY LABORATORY TEST OR SOIL TEXTURE INFILTRATION RATE TABLE;
(C) PH;
(D) TOTAL SOLUBLE SALTS;
(E) SODIUM;
(F) PERCENT ORGANIC MATTER; AND
(G) RECOMMENDATIONS.
- 3) IN PROJECTS WITH MULTIPLE LANDSCAPE INSTALLATIONS (I.E. PRODUCTION HOME DEVELOPMENTS) A SOIL SAMPLING RATE OF 1 IN 1 LOTS OR APPROXIMATELY 15% WILL SATISFY THIS REQUIREMENT. LARGE LANDSCAPE PROJECTS SHALL SAMPLE AT A RATE EQUIVALENT TO 1 IN 1 LOTS.
- 4) THE SOIL ANALYSIS REPORT SHALL BE MADE AVAILABLE, IN A TIMELY MANNER, TO THE PROFESSIONALS PREPARING THE LANDSCAPE DESIGN PLANS AND IRRIGATION DESIGN PLANS TO MAKE ANY NECESSARY ADJUSTMENTS TO THE DESIGN PLANS.
- 5) IF A GRADING PERMIT IS REQUIRED, THE SOIL ANALYSIS REPORT SHALL BE SUBMITTED TO THE CITY WITH THE CERTIFICATE OF COMPLETION. IF A GRADING PERMIT IS NOT REQUIRED, THE SOIL ANALYSIS REPORT SHALL BE SUBMITTED TO THE CITY WITH THE LANDSCAPE DOCUMENTATION PACKAGE.
- 6) THE PROJECT APPLICANT, OR HIS/HER DESIGNEE, SHALL SUBMIT DOCUMENTATION VERIFYING IMPLEMENTATION OF SOIL ANALYSIS REPORT RECOMMENDATIONS TO THE CITY WITH CERTIFICATE OF COMPLETION.

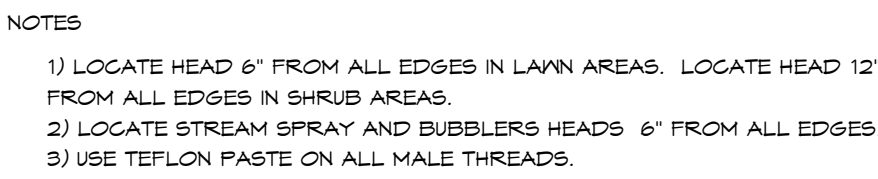
SHRUB AND GROUNDCOVER PLAN

Scale: 1" = 20'-0"





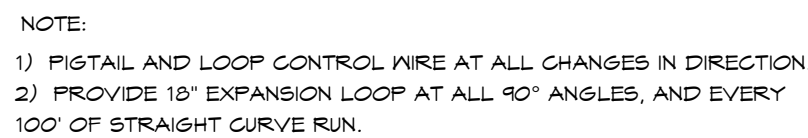
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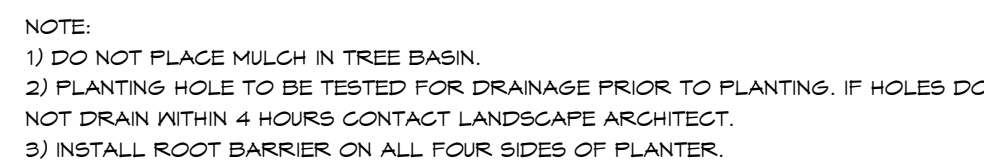
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