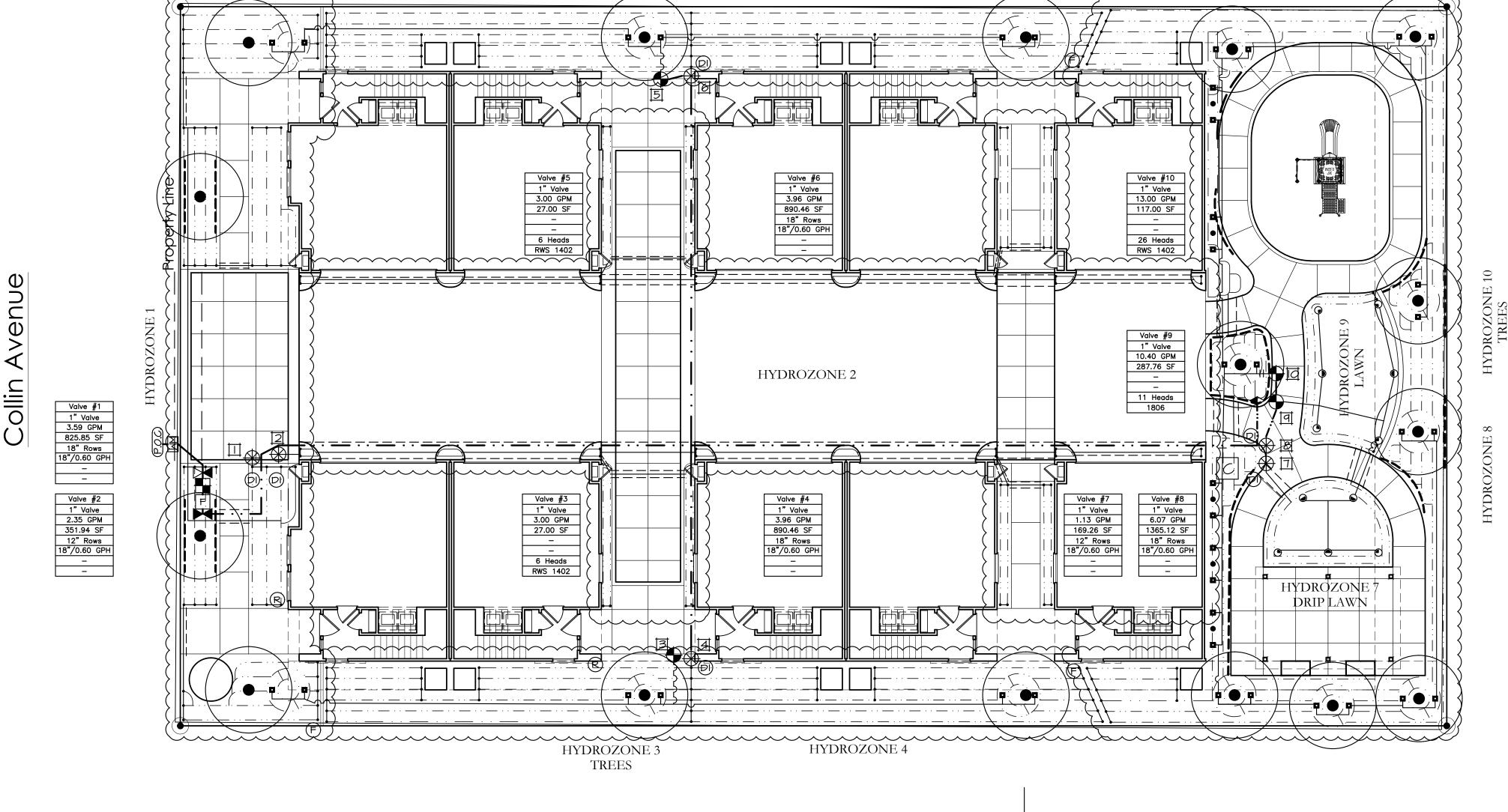
IRRIGATION NOTES

- 1. THE IRRIGATION SYSTEM IS DESIGNED FOR 20 GPM WITH STATIC PRESSURE OF 70 PSI AT POINT OF CONNECTION.
- The Irrigation Contractor shall verify water pressure prior to construction. Report any difference between the water pressure indicated on the drawings and the actual pressure reading at the irrigation point of connection to the Owner's authorized representative.
- This design is diagrammatic. All piping, valves, etc. shown within paved areas is for design clarification only and shall be installed in planting areas where possible. Avoid any conflicts between the irrigation system, planting and architectural features.
- Do not willfully install the irrigation system as shown on the drawings when it is obvious in the field that obstructions, grade differences or differences in the area dimensions exist that might not have been considered in the engineering. Such obstructions or differences should be brought to the attention of the Landscape Architect. The Contractor shall assume full responsibility for any revisions necessary.
- 4. It is the responsibility of the Irrigation Contractor to familiarize himself with all grade differences, location of walls, retaining walls, etc. He shall coordinate his work with the General Contractor and other Subcontractors for the location and the installation of pipe sleeves through walls, under roadways, paving, structures, etc.
- Due to the scale of the drawings, it is not possible to indicate all offsets, fittings, sleeves, etc., which may be required. The Contractor shall carefully investigate the structural and finished conditions affecting all of his work and plan his work accordingly, furnishing such fittings, etc., as may be required to meet such conditions. Drawings are generally diagrammatic and indicative of the work to be installed. The work shall be installed in such a manner as to avoid conflicts between irrigation systems, planting, and architectural features.
- 6. Each controller shall have its own independent ground wire.
- 7. Valve locations shown are diagrammatic. Install in planting areas where possible.
- 8. All valve control wires shall be a minimum No. 14 AWG copper UL approved for direct burial in ground. Size wiring per controller and valve manufacturer's recommendations. Connect wires as detailed per manufacturer's specifications.
- 9. Splicing of 24 volt wires will not be permitted except in valve boxes. Leave a 24" coil of excess wire at each splice and 100 feet of center along wire run. Tape wire in bundles 10 feet on center. No taping permitted inside sleeves.

- 10. Install a spare control wire of a different color along the entire main line. Loop 36" excess wire into each single valve box and into one valve box in each group of valves.
- 11. When SPRAY SPRINKLERS are used in the project:
- A. The Contractor shall flush and adjust all sprinkler heads for optimum performance and to prevent over spray onto walks, roadways and /or buildings as much as possible. This shall include selecting the best degree of arc to fit the existing site conditions and to throttle the flow control at each valve to obtain the optimum operating pressure and to prevent misting for each
- B. The Contractor shall ensure sprinkler heads are set perpendicular to finish grade of the area to be irrigated unless otherwise designated on the plans.
- C. The Contractor shall install a Rain Bird SAM pop-up body (integral check valve) or a King Bros. CV series check valve on shrub risers in lieu of Schedule 80 coupling at locations where low head drainage will cause erosion and excess water use.
- D. The Contractor shall make field adjustments to the system at locations of vertical obstructions (street lights, trees, fire hydrants, etc.) that interfere with the spray pattern of sprinkler heads so as to prevent proper coverage. Adjustments shall be made by installing a quarter, third or half circle head at the sides of the obstruction so as to provide proper coverage. The contractor shall not use variable arc nozzles. All adjustments shall be made at no additional cost to the
- E. In planting areas 4'-0" wide and narrower, and in all lawn areas, 6" pop-up bodies shall be used. In all other spray zones use 12" pop-up bodies. Bubblers are to be installed on Sch. 80
- 12. When DRIPLINE is used in the project:
- A. The Contractor shall install as indicated on the drawings.
- B. Use only Teflon tape on all threaded locations.
- C. Dripline can be installed with the emitters facing up, down or sideways. D. Cap or plug all openings as lines have been installed to prevent intrusion of materials that
- would obstruct the pipe and leave in place until removal is necessary for completion of
- E. Thoroughly flush all water lines before installing Air Relief Valves.
- 13. Notify Architect of any aspects of layout which will provide incomplete or insufficient water coverage of plant material and do not proceed until his instructions are obtained.
- 14. In addition to the sleeves and conduits shown on the drawings, the Irrigation Contractor shall be responsible for the installation of sleeves and conduits of sufficient size under all paved
- 15. All lateral piping beneath paved areas shall be Schedule 40 PVC pipe.

HYDROZONE 5

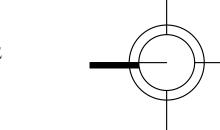
- 16. Where it is necessary to excavate adjacent to existing trees, the Contractor shall use all possible care to avoid injury to trees, and tree roots. Excavation in areas where two (2) inch and larger roots occur shall be done by hand. Roots two (2) inches and larger in diameter shall be wrapped in a plastic bag and secured with a rubber band. Trenches adjacent to tree should be closed within twenty-four (24) hours; where this is not possible, the side of the trench adjacent to the tree shall be kept shaded with burlap or canvas.
- 17. Install valve boxes 12" from and perpendicular to walk, curb, lawn, building or landscape feature. At multiple valve box groups, each box shall be an equal distance from the walk, curb, lawn, etc. and each box shall be 12" apart. Short side of valve box shall be parallel to walk, curb, lawn, etc.
- 18. All wire connections to be made in valve box with water tight connectors per manufacturers directions. Wire splices shall not be permitted unless approved by the Owners Representative or the Landscape Architect. Wire splice locations must be indicated on "As-Builts" per the Specifications.
- 19. Irrigation Contractor to notify all local jurisdictions for inspection and testing of installed back flow prevention device.
- 20. Prior to trenching, call Underground Service Alert, (1-800) 227-2600.
- 21. Remote Control Legend: attach a laminated, typewritten legend inside each controller door stating the areas covered by each remote control valve. Valves, or adjacent piping in the valve box are to be labeled with an indelible marker with the appropriate number corresponding to the controller legend for easy identification.



HYDROZONE 6

IRRIGATION PLAN

SCALE: 1" = 10' - 0"



GRAPHIC SCALE

0 5'

IRRIGATION LEGEND

SYMBOL MFG DESCRIPTION MODEL NO. DETAIL Rain Bird Remote Control Valve PEB DTL-1/5 Rain Bird Drip Control Zone Kit Flow = 0.20 - 10.00 GPM XCZLF-100-PRF DTL-2/8 Rain Bird XFS Dripline XFS-06-18 DTL-2/1 Rain Bird Air Relief Valve AR Valve Kit DTL-2/6 Rainbird Sub-Surface Drip Operation Indicator - 1 Per Drip Zone Nibco Full Port PVC Ball valve in valve box for manual flushing Not Shown Nibco Ball valve - one at each valve manifold Febco BPDI GuardShack Enclosure BPDI FrostGuard Insulated Blanket FG Rain Bird Master Valve PEB DTL-1/11 Rain Bird Flow Sensor FS100B DTL-1/11 Rain Bird Flow Sensor FS100B DTL-1/11 Hunter Irrigation Controller Confirm location MODEL NO. DETAIL THE OFFICE OF JEFFREY F. GAME THE OFFICE OF JEFFREY F. GAME JEFFREY F. GAME	
Quarter Half Rain Bird 1800 SAM PRS U-12Q 30 0.65 DTL-1/7 Deep Root Bubbler Rain Bird 1800 SAM PRS U-12H 30 1.30 DTL-1/7 Deep Root Bubbler Rain Bird RWS-B 1402 30 0.50 DTL-1/4 SYMBOL MFG DESCRIPTION MODEL NO. DETAIL Rain Bird Remote Control Valve PEB DTL-1/5 Rain Bird Drip Control Zone Kit Flow = 0.20 - 10.00 GPM XCZLF-100-PRF DTL-2/8 Rain Bird Air Relief Valve AR Valve Kit DTL-2/6 Rainbird Air Relief Valve AR Valve Kit DTL-2/6 Rainbird Sub-Surface Drip Operation Indicator - 1 Per Drip Zone Rill Port PVC Ball valve in valve box for manual flushing Not Shown Nibco Ball valve - one at each valve manifold Febco 1" Pressure Vacuum Breaker BPD1 GuardShack Enclosure BPD1 FrostGuard Insulated Blanket For StGuard Insulated	
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Hunter Irrigation Controller PCC-1200 DTL-1/1 Confirm location	
Confirm location	
Water Meter 1"	
Water Meter 1"	
Sleeving under pavement Double Line Size	
Valve No. Valve Size GPM SF or LF Spacing Emitter/flow # of Heads Body Type Valve Callout & Tag	

These drawings are not final and shall not be used for construction purposes until signed by effrey F. Gamboni, Landscape Architect #2702 These plans and all contained thereon are an

SYMBOL	DESCRIPTION	MODEL NO.	G.P.M.
	- Main Line	SCH 40 PVC 1-1/4" size unless otherwise noted	
	- Lateral Line	3/4" SCH 40 PVC Pipe	0 - 8 GPM
	- Lateral Line	1" SCH 40 PVC Pipe	8 - 12
	- Lateral Line	1-1/4" SCH 40 PVC Pipe	12 - 22

NOTES

- All remote control valves to be placed in individual valve boxes in planting areas, not in lawn areas.
- All lawn sprinklers to be 6" pop up sprays. Plan is diagrammatic for purposes of graphic clarity.

IRRIGATION LINE SIZING

- Design of system based on max. demand of 20 gpm with 70 psi at point of connection. Contractor to verify prior to construction and notify Landscape Architect if there is a discrepancy.
- 5. In planting areas where pop-up sprays are specified, if the area is less
- than 4' wide use 6" pop ups. If it is wider than 4' use 12" pop ups.
- See Irrigation Details Sheet DTL-1 and D. See Irrigation Notes Sheet

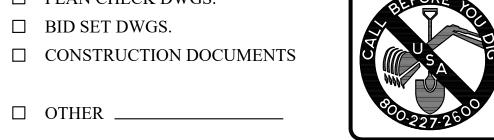
DATE 04 DECEMBER 20 DRAWN BY:

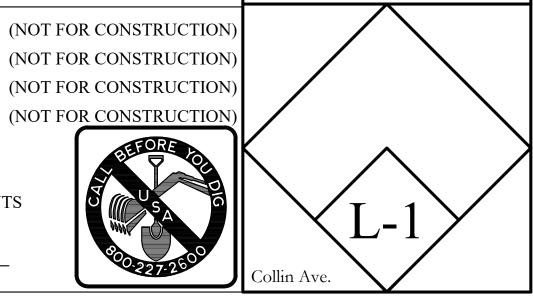
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JEFFREY F. GAMBON CHECKED BY:

DRAWING STATUS

- ☐ INFORMATION DWGS. ☐ PRELIMINARY DWGS.
- ☐ DESIGN DEVELOP. DWGS. (NOT FOR CONSTRUCTION)
- ☐ CHECK SET
- ☐ PLAN CHECK DWGS.





IRRIGATION

original, unpublished work and may not be duplicated, published or used in whole or part without prior written consent by Jeffrey F. Gamboni.

DATE REVISION/ SET

PLANTING NOTES

- If a discrepancy between these plans and actual on-site conditions occurs, the Landscape Contractor is to notify the Landscape Architect immediately, before proceeding with his work, for a decision.
- All plants will be inspected for acceptable form and condition by Landscape Architect. Unacceptable plants will be replaced by the Landscape Contractor at no additional cost to the owner. All plants shall be tagged with the name of the plant in accordance with the standards of practice recommended by the American Association of Nurserymen. In all cases, botanical names shall take precedence over common names.
- All plants brought onto the site shall be watered and protected from excessive wind, sun, frost, physical damage and theft until planted.
- . Landscape Architect shall be notified at least two working days prior to estimated time of setting out plants so a mutually acceptable time can be scheduled for final plant placement. All plants shall be placed in approximate locations shown on plans by Landscape Contractor prior to arrival of Landscape Architect. Final adjustments of locations shall be made by Landscape Architect.
- The Landscape Architect reserves the right to make deletions, additions or substitutions in the field as necessary with adjustments in the contract as appropriate.
- 6. Prior to commencement of planting procedures, soil must be inspected for the following: Rough Grading: such that all stones over 1" diameter and pockets of road base, asphalt, gravel and concrete have been removed and planting areas slope toward drains and away from structures.
- Amendment: amendments have been incorporated into the soil per the soils test. Weeds: all weeds have been removed from all planting areas and pernicious weeds have been treated with appropriate herbicides or approved equal.
- All asphalt, base course and other debris are to be removed completely below planting areas. Contractor is responsible for supplying top soil as necessary for all planting areas.
- . In planting areas, the Contractor shall be responsible for 5% surface drainage away from structures for a minimum distance of five feet (5') and 2% minimum positive surface drainage in all other planting areas except where shown.
- Contractor shall furnish and apply the appropriate pre-emergent herbicide at rates prescribed by law and manufacturer's recommendations. 'Best Dimension 270G' or 'Ronstar G' are recommended for ground cover and shrub areas. All pre-emergent herbicides shall be applied by licensed operators under favorable weather conditions. All pre-emergent herbicides shall be approved by the Landscape Architect prior to application.

10. Backfill for shrubs and trees to be:

- 1 CY topsoil 2 CY native topsoil
- 1 CY nitrolized redwood compost
- For acid loving plants see note below.
- 1. For all azaleas, rhododendrons, ternstroemia, gardenia, fuschia, or other acid loving plants backfill soil with 50% peatmoss, making a raised planting bed 6" above surrounding soil level. Fertilize at a rate of 3 lbs. Nitrogen per 1000 SF of planter area. Plant all azaleas and rhododendrons with top of root ball slightly above soil level.
- 2. All other proposed areas shall be rototilled (or hand cultivated under existing trees) to a depth of 6". Take care not to damage roots. Compost at a minimum rate of 4 CY per 1,000 sf of planting area shall be incoporated to a depth of six inches into the soil. The Landscape Contractor to be responsible for obtaining a soils test and providing the appropriate amendments based on the test results for the existing site soil and for imported topsoil. Provide test results with submittals. For purposes of bidding, the following amendments will be used (per 1000 sq. ft.):

-4 yds. Nitrolized or redwood or fir bark compost -200 lbs Gro-Power Plus -40 lbs gypsum

Rototill amendments to a depth of 6" in two directions. Finish grade of turf areas to be one (1) inch below edge of paving. Finish grade of planting areas to be (2) two inches below edge of paving. Water soil thoroughly before planting.

- 3. All pots shall be planted with soil-less mixes that drain well, such as Miracle-Gro Moisture Control Potting Mix. The mix shall contain no bark, bark products, peat or peat products. Drain holes shall be covered with screen, landscape cloth or similar material to prevent the mix from washing out.
- 4. All plants shall be set at such a level that after settling they bear the same relationship to the surrounding finish grade as they bore to the soil line grade in the container, unless otherwise noted.
- 5. It shall be the Landscape Contractor's responsibility to provide adequate drainage of all plantings, sufficient to insure healthy growth.
- 6. All shrubs and trees to have Agri-form or equal 21 gram plant-tabs (20-10-5). Agriform plant tablets to be placed immediately adjacent to root ball at a depth which is between the middle and the bottom of the root ball when backfill is no higher than halfway up the root ball. Rate of application shall be:

1 gallon container: 1 tablet 3 tablets 5 gallon container:

7 tablets 15 gallon container:

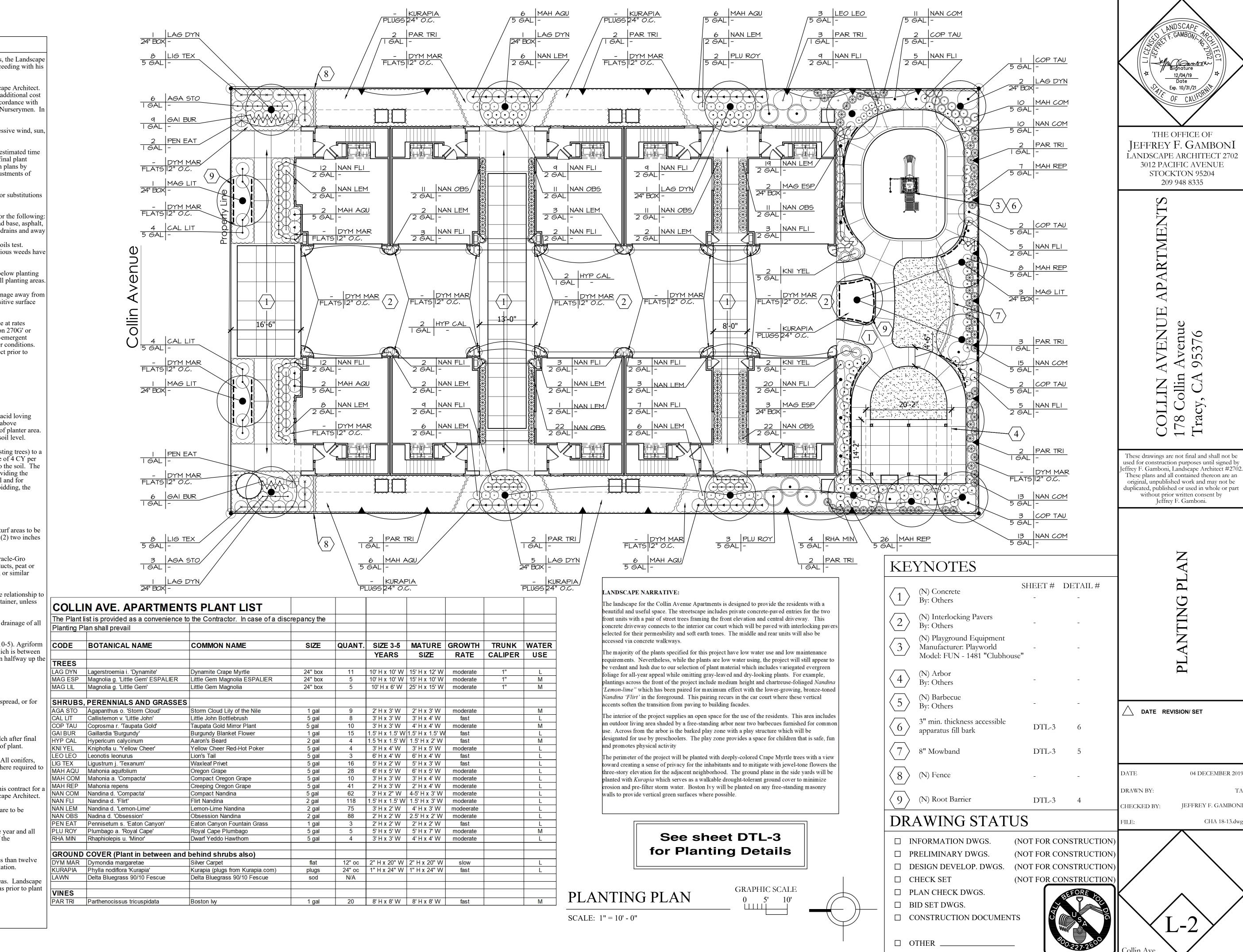
24 inch box: 15 tablets

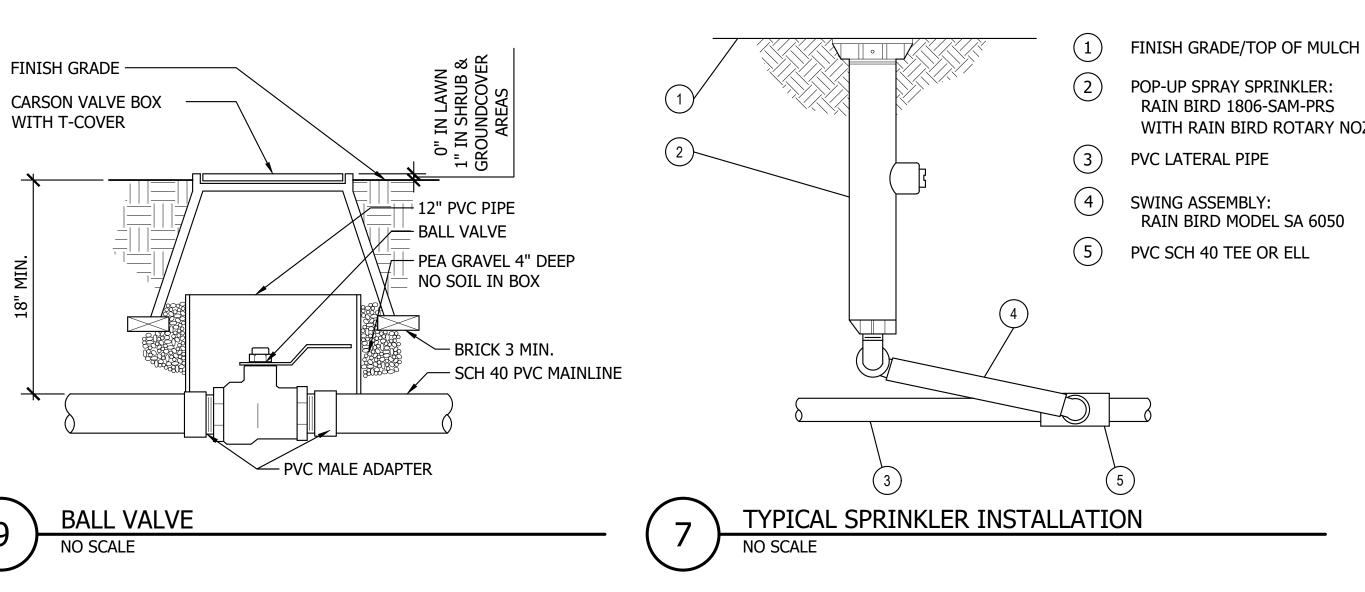
For larger sizes

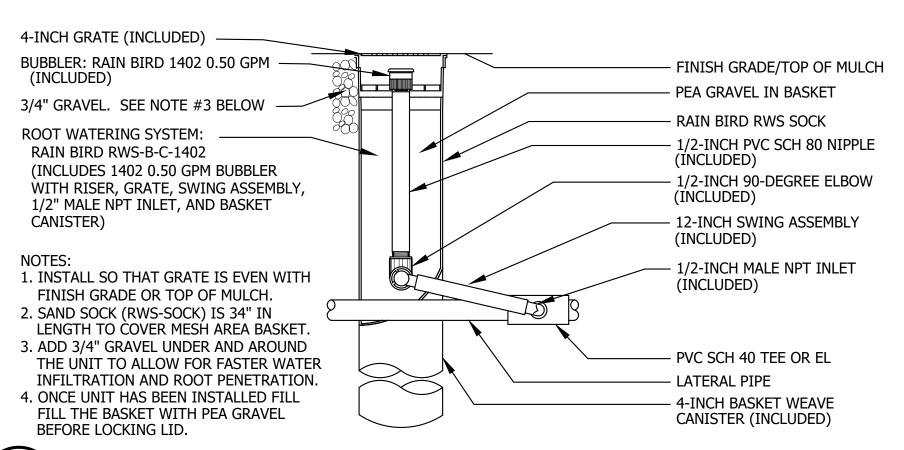
For each 12 - 18 inches of plant height or spread, or for each $\frac{1}{2}$ inch of tree trunk diameter use: 1 tablet for slow growing plants

2 tablets for fast growing plants

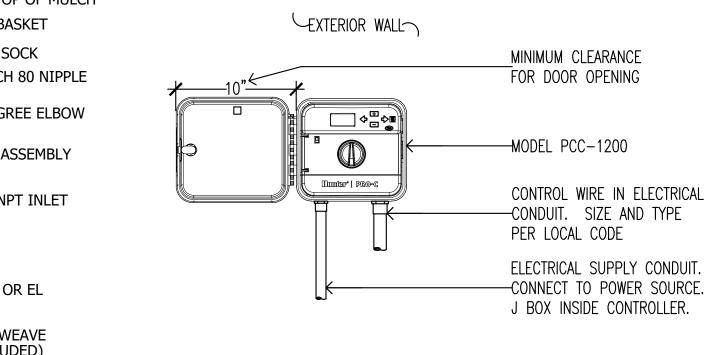
- 17. Cover all planting areas excluding lawn with a 3" depth of approved mulch after final shaping of saucers and dress off neatly. Hold mulch 1" away from base of plant.
- 18. Deciduous and broad-leaved evergreen trees are to be staked per detail. All conifers, boxed specimens and multi-trunk trees are to be guyed per detail only where required to maintain vertical growth and withstand wind.
- 19. The Landscape Contractor shall maintain the entire landscaped area of this contract for a minimum of sixty (60) days commencing after acceptance by the Landscape Architect.
- 20. After planting has been approved by Landscape Architect, all plant tags are to be removed.
- 21. All plants 15 gallon size and over shall be guaranteed for a period of one year and all other plants shall be guaranteed for a period of 6 months after the end of the maintenance period provided that normal care has been provided.
- 22. Contractor to install linear root barrier at all locations where trees are less than twelve (12) feet from curb, walkway, wall or building areas prior to plant installation.
- 23. An automatic irrigation system is to be provided to water all planting areas. Landscape Contractor is to provide adequate coverage for all indicated planting areas prior to plant installation.
- 24. Call Underground Service Alert at (800) 227-2600 prior to excavation.







DEEP ROOT BUBBLER



DIRECT BURIAL

LOW VOLTAGE

CONTROL WIRES

SPECIFICATIONS.

10' INTERVALS.

NO SCALE

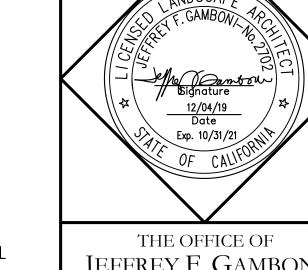
14" X 19"—

VALVE BOX

RECTANGULAR

- QUICK COUPLING

VALVE IN BOX



JEFFREY F. GAMBONI LANDSCAPE ARCHITECT 2702 3012 PACIFIC AVENUE STOCKTON 95204

209 948 8335

VENUE ∞

These drawings are not final and shall not be used for construction purposes until signed b effrey F. Gamboni, Landscape Architect #270 These plans and all contained thereon are an original, unpublished work and may not be duplicated, published or used in whole or part without prior written consent by Jeffrey F. Gamboni.

DATE REVISION/ SET

04 DECEMBER 20

DATE

DRAWN BY:

— 23" X 33" RECTANGULAR VALVE BOX - EDGE OF LAWN, WALK, FENCE, CURB, ETC. TOP VIEW

- CURB, WALK OR

HEADERBOARD

NON-PRESSURE

LINE (LATERAL)

PRESSURE LINE

(MAIN OR

LATERAL)

- 1. CENTER BOX OVER REMOTE CONTROL VALVE TO FACILITATE SERVICING VALVE.
- 2. SET BOXES 1" ABOVE FINISH GRADE OR MULCH COVER IN GROUND COVER/SHRUB AREA AND FLUSH WITH FINISH GRADE IN TURF AREA.
- 3. SET RCV AND VALVE BOX ASSEMBLY IN GROUND COVER/SHRUB AREA WHERE POSSIBLE. INSTALL IN LAWN AREA ONLY IF GROUND COVER DOES NOT EXIST ADJACENT TO LAWN.

FINISH GRADE -

TRENCHING AND BACKFILLING SHALL BE PER STANDARD

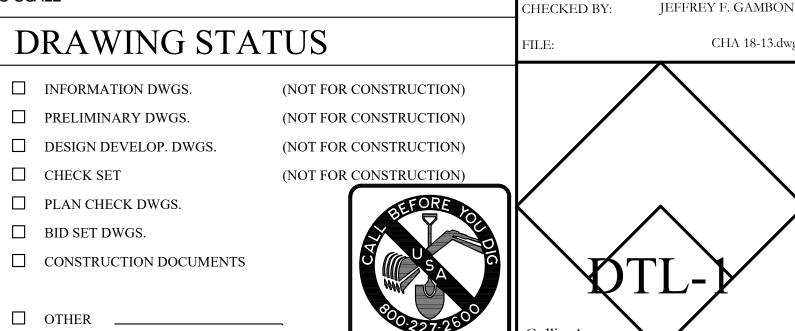
2 MINIMUM BACKFILL RELATIVE COMPACTION SHALL BE 90%.

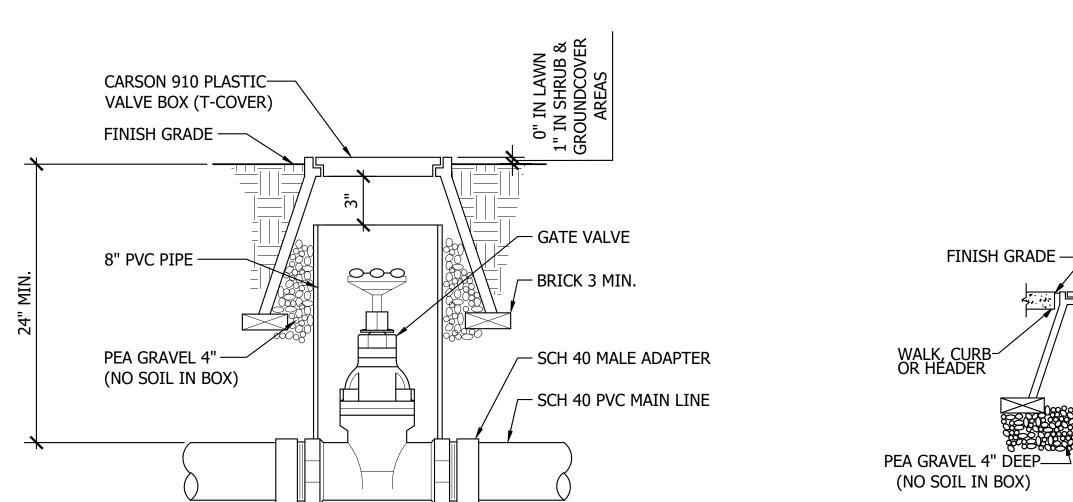
3. BUNDLE CONTROL WIRES TOGETHER AND TAPE TO PIPE AT

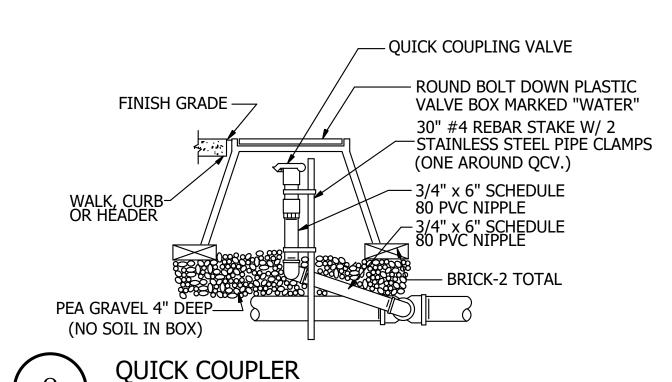
IRRIGATION LINE TRENCHING

- 4. SET BOXES PARALLEL TO EACH OTHER AND PERPENDICULAR TO EDGE. 5. AVOID HEAVILY COMPACTING SOIL AROUND VALVE BOX EDGES TO PREVENT
- COLLAPSE AND DEFORMATION OF VALVE BOX SIDES. 6. VALVE BOXES SHALL HAVE BOLT DOWN LIDS WITH BOLTS INSTALLED.

VALVE BOX INSTALLATION NO SCALE







RAIN BIRD PEB SERIES MASTER VALVE(S)

RAIN BIRD 1806-SAM-PRS

RAIN BIRD MODEL SA 6050

WITH RAIN BIRD ROTARY NOZZLE

36-INCH LENGTH OF COILED WIRE TO CONTROLLER MASTER VALVE CIRCUIT

3.0-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL

BRICK (1 OF 4)

NO SCALE

VALVE BOX WITH COVER - 12-INCH SIZE

FINISH GRADE

RAIN BIRD FS SERIES 150-400P/FS-100A FLOW SENSOR(S) SEE LEGEND.

36-INCH LENGTH OF COILED PE-CABLE TO FLOW SENSING EQUIPMENT AT CONTROLLER ASSEMBLY

SEE FLOW SENSING WIRING DETAIL FOR WIRING DIAGRAM.

CONCENTRIC REDUCER.

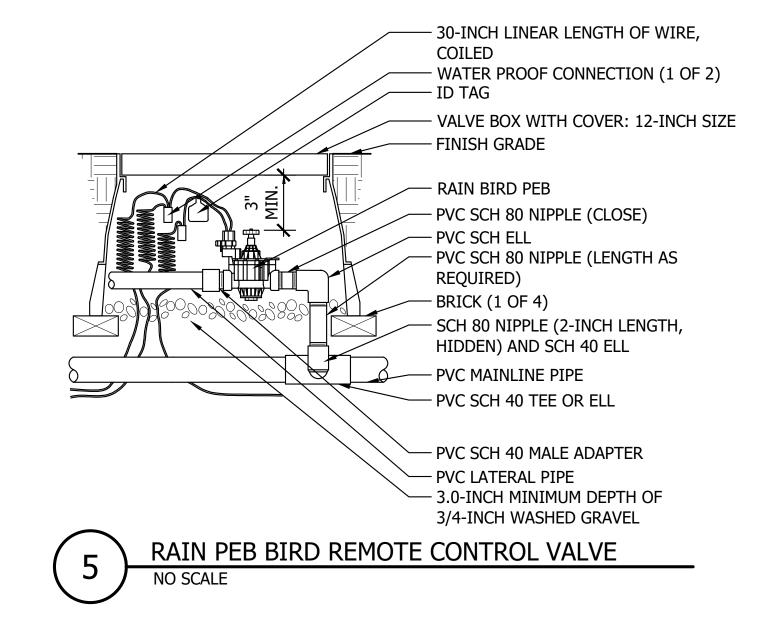
FLOW — 10X DIAMETER → DIAMETER → OF PIPE OF PIPE

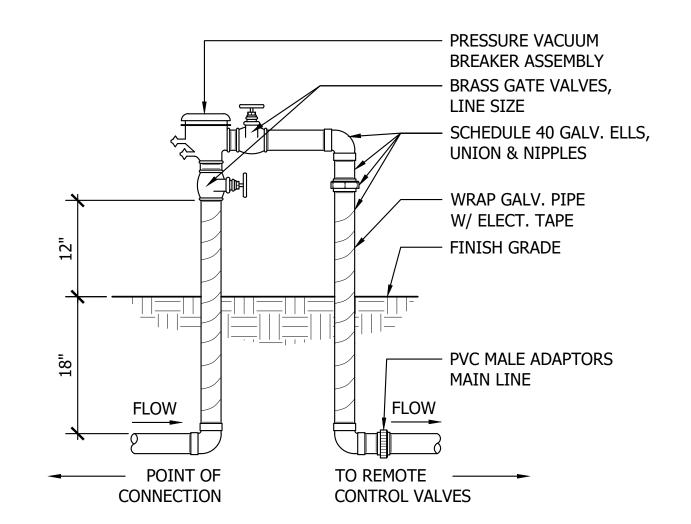
MASTER VALVE/FLOW SENSOR

NO SCALE

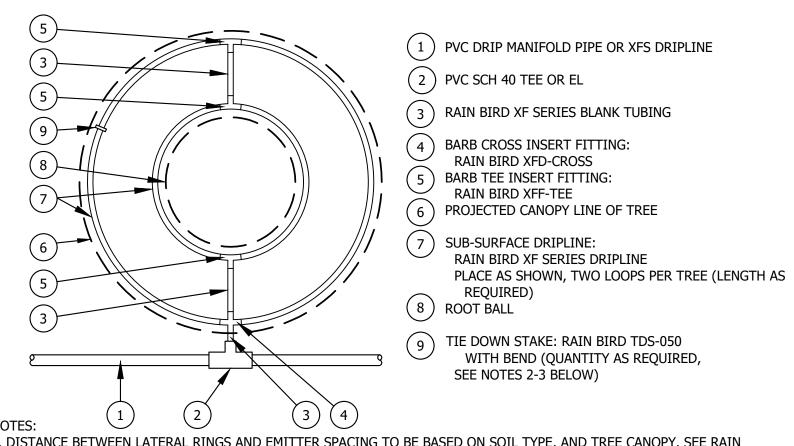
GATE VALVE

NO SCALE







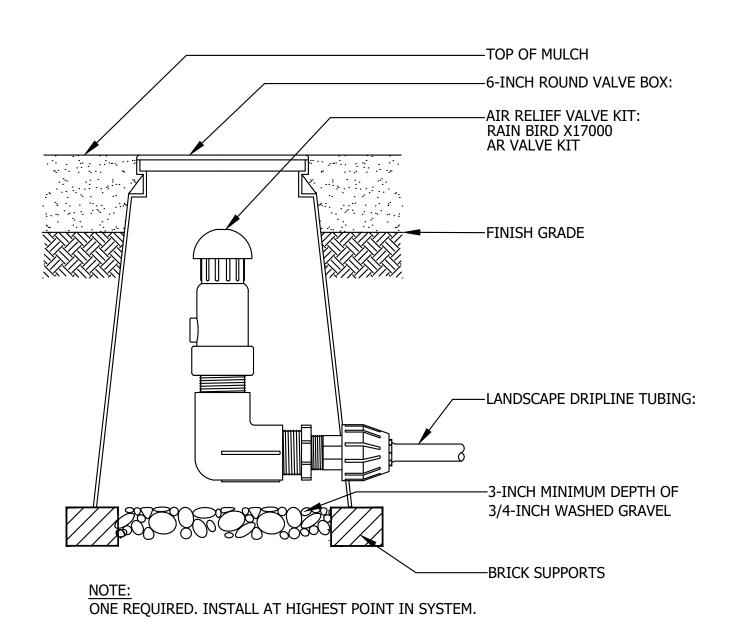


1. DISTANCE BETWEEN LATERAL RINGS AND EMITTER SPACING TO BE BASED ON SOIL TYPE, AND TREE CANOPY. SEE RAIN BIRD XF-SDI DRIPLINE INSTALLATION GUIDE FOR SUGGESTED SPACINGS.

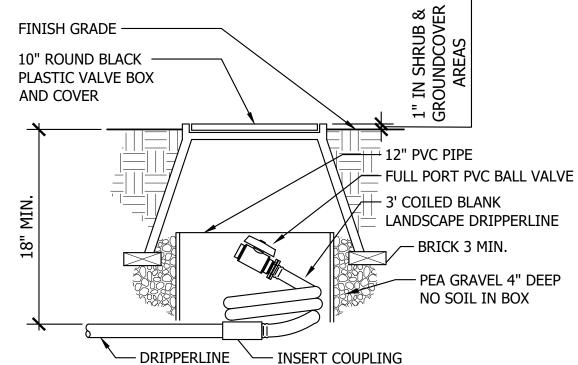
2. PLACE TIE DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY.

3. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE-DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.

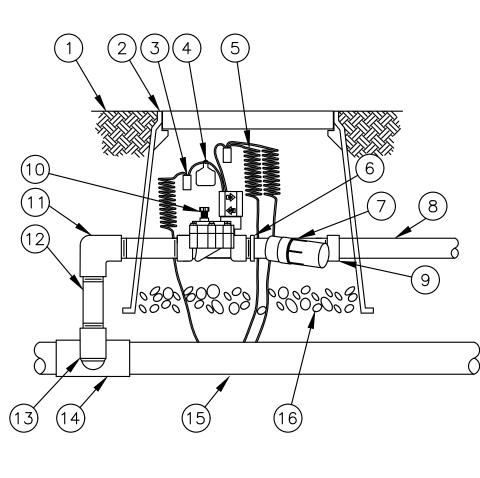
XFS SUB-SURFACE DRIPLINE AROUND TREE NO SCALE



RAIN BIRD AIR RELIEF VALVE



BALL VALVE AT FLUSHING LOCATION



SIDE VIEW

(1) FINISH GRADE

2 ROUND VALVE BOX WITH COVER:

RAIN BIRD VB-10RND 3 WATERPROOF CONNECTION:

RAIN BIRD DB SERIES

4 VALVE ID TAG

5 30-INCH LINEAR LENGTH OF WIRE,

COILED 1" X 34" REDUCING COUPLING

(INCLUDED IN XCZ-100-PRF KIT) (7) PRESSURE REGULATING FILTER: RAIN BIRD PRF-075-RBY (INCLUDED

IN XCZ-LF-100-PRF KIT) (8) LATERAL PIPE

9 PVC SCH 40 FEMALE ADAPTOR OR

(10) REMOTE CONTROL VALVE: RAIN BIRD LFV-100 (INCLUDED IN

XCZ-LF-100-PRF KIT) (11) PVC SCH 40 ELL

(12) PVC SCH 80 NIPPLE (LENGTH AS

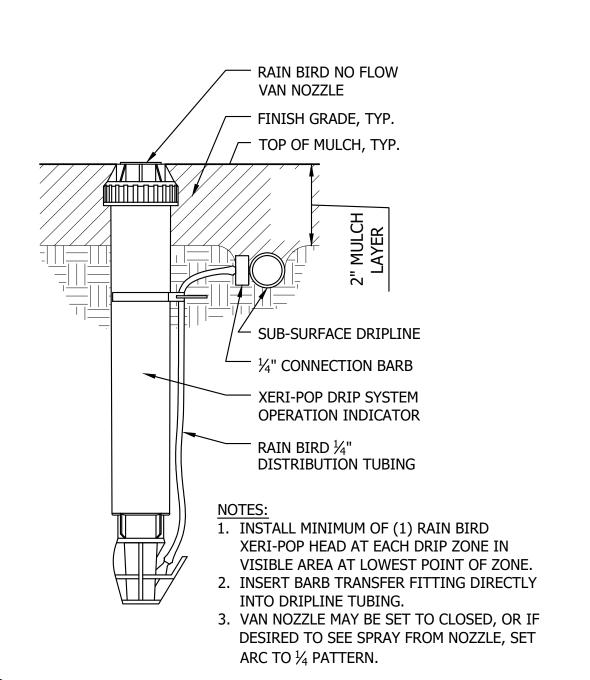
REQUIRED) (13) PVC SCH 80 NIPPLE (2-INCH LENGTH,

HIDDEN) AND PVC SCH 40 ELL) (14) PVC SCH 40 TEE OR ELL

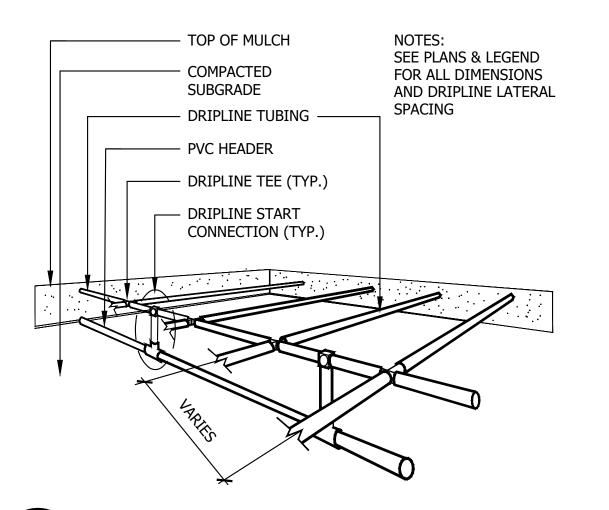
(15) PVC MAINLINE

(16) 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL

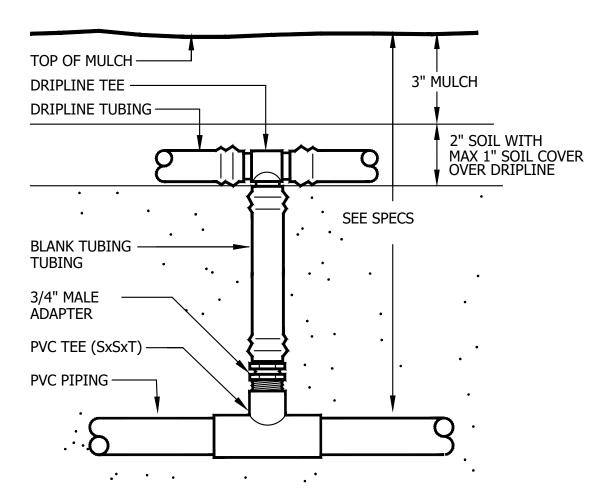
RAIN BIRD XCZLF-100-PRF REMOTE CONTROL VALVE NO SCALE



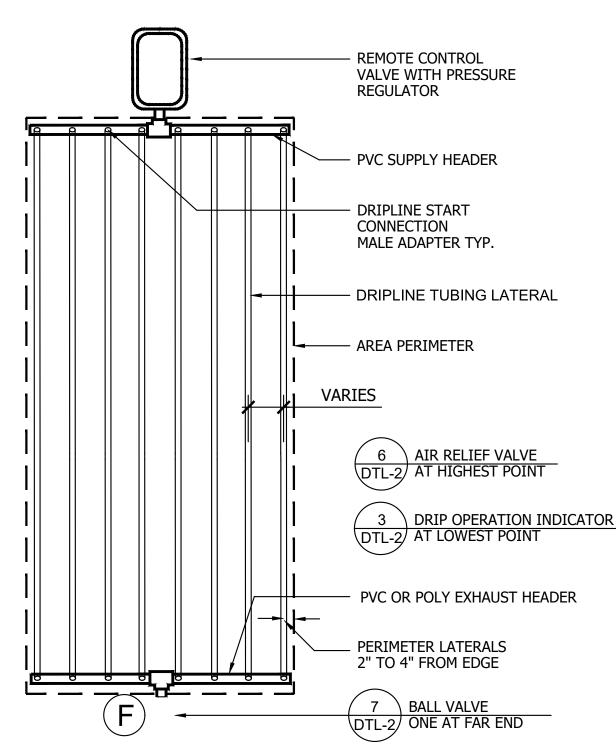
RAIN BIRD SUB-SURFACE DRIP OPERATION **INDICATOR** NO SCALE



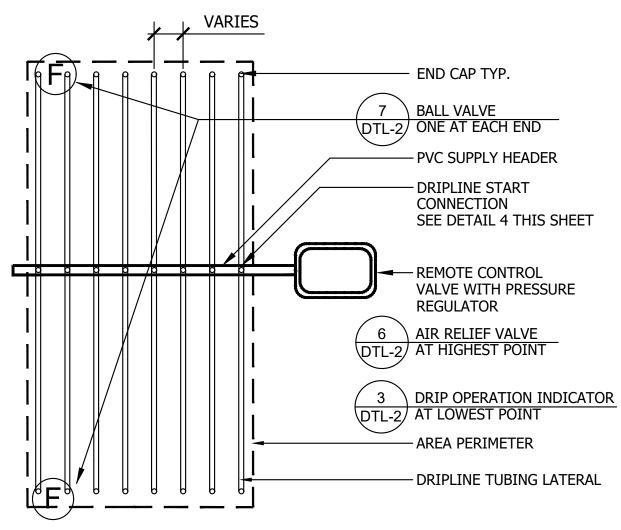
DRIPLINE SUB HEADER INSTALLATION **NO SCALE**



DRIPLINE START CONNECTION (PVC TO TEE) NO SCALE







DRIPLINE CENTER FEED LAYOUT

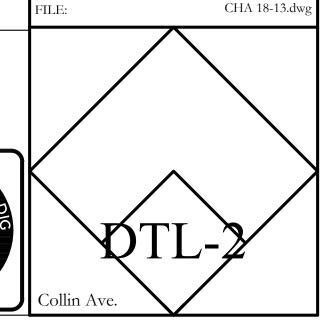
NO SCALE

Signature Exp. 10/31/21 THE OFFICE OF JEFFREY F. GAMBONI LANDSCAPE ARCHITECT 2702 3012 PACIFIC AVENUE STOCKTON 95204 209 948 8335 VENUE COLLIN 78 Colli These drawings are not final and shall not be used for construction purposes until signed by effrey F. Gamboni, Landscape Architect #2702 These plans and all contained thereon are an original, unpublished work and may not be duplicated, published or used in whole or part without prior written consent by Jeffrey F. Gamboni. **DETAIL**

DRAWING STATUS

☐ INFORMATION DWGS.

☐ OTHER



04 DECEMBER 20

JEFFREY F. GAMBON

✓ \ DATE REVISION/ SET

DATE

DRAWN BY:

CHECKED BY:

(NOT FOR CONSTRUCTION) (NOT FOR CONSTRUCTION)

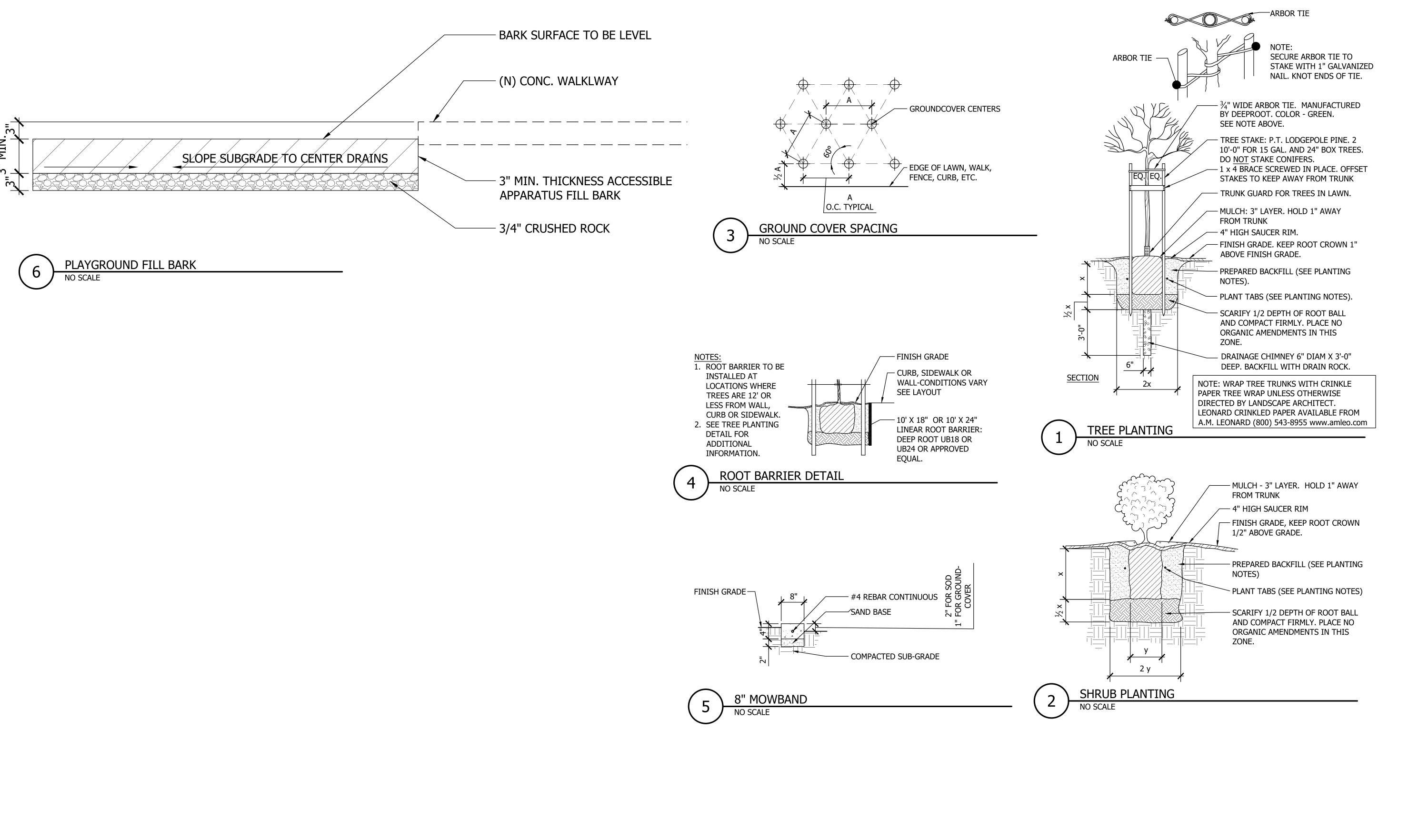
☐ PRELIMINARY DWGS. ☐ DESIGN DEVELOP. DWGS.

☐ CHECK SET ☐ PLAN CHECK DWGS.

☐ BID SET DWGS. ☐ CONSTRUCTION DOCUMENTS

(NOT FOR CONSTRUCTION)

(NOT FOR CONSTRUCTION)



| Signature | 12/04/19 | Date | Exp. 10/31/21

THE OFFICE OF JEFFREY F. GAMBONI LANDSCAPE ARCHITECT 2702

3012 PACIFIC AVENUE STOCKTON 95204 209 948 8335

APARTMENTS AVENUE COLLIN A 178 Collin J Tracy, CA

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DETAIL

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DATE 04 DECEMBER 203

CHECKED BY:

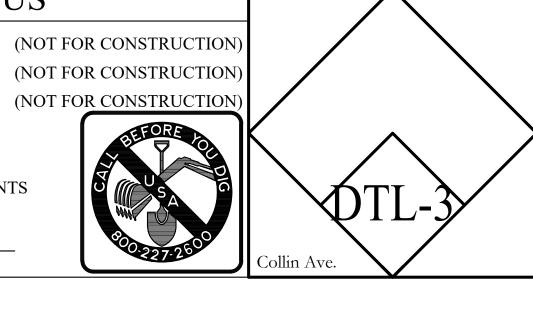
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JEFFREY F. GAMBONI

DRAWING STATUS

- ☐ PRELIMINARY DWGS. ☐ DESIGN DEVELOP. DWGS. (NOT FOR CONSTRUCTION)
- ☐ CHECK SET
- ☐ PLAN CHECK DWGS.
- ☐ BID SET DWGS. ☐ CONSTRUCTION DOCUMENTS
- \square OTHER



PROJECT INFORMATION	
DATE: DECEMBER 4, 2019	
PROJECT APPLICANT:	
PROJECT ADDRESS: 1178 Collin Avenue	
TOTAL LANDSCAPE AREA: 4,962.12 SF	
TOTAL IRRIGATED AREA: 4,962.12 SF	
PROJECT TYPE: NEW, MULTI-FAMILY, PRIVATE	
WATER SUPPLY: Potable, CITY OF TRACY	

CERTIFICATE OF COMPLETION				
This certificate is filled out by the project applicant upon completion of the project				
PROJECT INFORMATON SHEET				
DATE: December 4, 2019				
PROJECT NAME: Collin Avenue apartments				
NAME OF PROJECT APPLICANT:	209-957-9254			
	FAX NO:			
Mark B. Lee	mlee.ljarch@gmail .com			
Lee Jagoe Architecture, Inc	2291 W. March Lane, B200			
Stockton	California 95219			
PROJECT ADDRESS AND LOCATION				
STREET ADDRESS: 178 Collin Avenue	PARCEL, TRACT OR LOT NUMBER:			
CITY: Tracy	214-520-24			
STATE AND ZIP CODE: California, 953376				
PROPERTY OWNER OR HIS/HER DESIGNEE				
C/o Mark B, Lee	TELEPHONE NO:			
	FAX NO:			
TITLE: EMAIL ADDRESS:				
COMPANY:	ADDRESS:			
CITY:	STATE AND ZIP CODE: CA			
PROPERTY OWNER				
"I/WE CERTIFY THAT I/WE HAVE RECEIVED COPIES OF ALL THE DOCUMENTS WITHIN THE LANDSCAPE				
DOCUMENTATION PACKAGE AND THE CERTIFICATE OF COMPLETION AND THAT IT IS OUR RESPONSIBILITY				
TO SEE THAT THE PROJECT IS MAINTAINED IN ACCORDANCE WITH THE LANDSCAPE AND IRRIGATION				
MAINTENANCE SCHEDULE."				

CERTIFICATE OF INSTALLATION				
"I/WE CERTIFY THAT BASED UPON PERIODIC SITE OBSERVATIONS, THE WORK HAS BEEN SUBSTANTIALLY				
COMPLETED IN ACCORDANCE WITH THE ORDINANCE AND THAT THE LANDSCAPE PLANTING AND IRRIGATION				
INSTALLATION CONFORM WITH THE CRITERIA AND SPECIFICATIONS OF THE APPROVED LANDSCAPE				
DOCUMENTATION PACKAGE."				
SIGNATURE*	DATE:			
NAME (PRINT):	TELEPHONE NO:			
	FAX NUMBER:			
TITLE: EMAIL ADDRESS:				
LICENSE # OR CERTIFICATION #:				
COMPANY:	ADDRESS:			
CITY:	STATE AND ZIP CODE:			
*SIGNER OF THE LANDSCAPE DESIGN PLAN, SIGNER OF THE IRRIGATION PLAN OR A LICENSED				
LANDSCAPE CONTRACTOR				

12/4/2019

Mark B. Lee

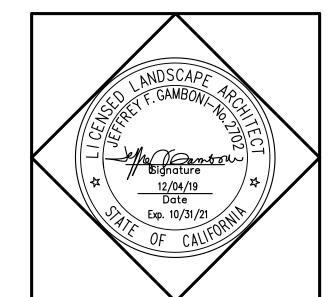
WATER EFFICIENT LANDSCAPE WORKSHEET

Project Name:	Collin Avenu	ue Δnartmei	nts				
r roject ivanie.	Comm Aven	ac Apartifici	163				
Reference Evap	otranspirat	ion (Eto)	48.5				
		(-10)					
Hydrozone#	Plant	Irrigation	Irrigation	ETAF	Landscape	ETAF x Area	Estimate
/Planting	Factor (PF)	Method	Efficiency	(PF/IE)	Area (sf)		Total Wat
Description			(IE)				Use (ETW
Regular Land	scape Are	as					
#1 Shrubs	0.30	drip	0.81	0.37	807.85	299.20	8,997.
#2 Shrubs	0.30	drip	0.81	0.37	351.94	130.35	3,919.
#3 Trees	0.30	spray	0.75	0.40	27.00	10.80	324.
#4 Shrubs	0.30	drip	0.81	0.37	890.46	329.80	9,917.
#5 Trees	0.30	spray	0.75	0.40	27.00	10.80	324.
#6 Shrubs	0.30	drip	0.81	0.37	890.46	329.80	9,917.
#7 Lawn	0.60	drip	0.81	0.74	168.60	124.89	3,755.
#8 Shrubs	0.30	drip	0.81	0.37	1,365.12	505.60	15,203.
#9 Lawn	0.60	spray	0.75	0.80	287.78	230.22	6,922.
#10 Trees	0.30	spray	0.75	0.40	117.00	46.80	1,407.
				Totals	4,933.21	2,018.26	60,689.
Special Lands	scape Area	as					
	0.50	spray	0.75	1.00		0.00	0.
				Totals	0.00	0.00	0.
						EWTU TOTAL	60,689.
			Maximum	Allowed V	Vater Allowa	ance (MAWA)	81,587.
	_						
ETAF Calculations			MAWA (Annual Gallons Allowed) =				
Regular Landscap	oe Areas		(Eto x			ETAF) x SLA))	
Total ETAF x Area	a	2,018.26		ļ	ETAF for resi	dential = 0.55	
Total Area		4,933.21		ETAF	for non-resi	dential = 0.45	
Average ETAF		0.41					
			Averag	ge ETAF for	Regular Lan	dscape Areas	
All Landscape Ar	eas		must b	e 0.55 or b	elow for resi	idential areas	
Total ETAF x Area	a	2,018.26	and 0.4	5 or below	for non-resi	idential areas	
Total Area		4,933.21					
Sitewide ETAF		0.41					

CERTIFICATE OF COMPLIANCE

Landscape Architect 2702

"I have complied with the criteria of the Model Water Efficient Landscape Ordinance and applied them for the efficient use of water in the landscape design plan." Jeffrey F. Gamboni



THE OFFICE OF JEFFREY F. GAMBONI LANDSCAPE ARCHITECT 2702 3012 PACIFIC AVENUE STOCKTON 95204

209 948 8335

AVENUE

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ANDSCAPE

ATE REVISION/ SET

04 DECEMBER 2019

JEFFREY F. GAMBONI

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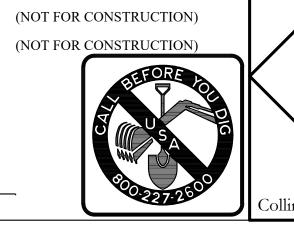
DATE

DRAWN BY:

CHECKED BY:

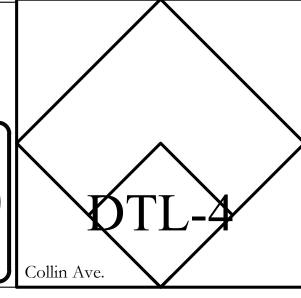
DRAWING STATUS

- ☐ INFORMATION DWGS.
- ☐ PRELIMINARY DWGS.
- ☐ DESIGN DEVELOP. DWGS.
- ☐ CHECK SET
- ☐ PLAN CHECK DWGS.
- ☐ BID SET DWGS.
- ☐ CONSTRUCTION DOCUMENTS
- OTHER __



(NOT FOR CONSTRUCTION)

(NOT FOR CONSTRUCTION)



1.01 SUMMARY

- DESCRIPTION: Irrigation system complete including (but not limited to) the following principal items:
- Trenching and stockpiling excavation materials. Refilling Furnishing materials and installations for complete system including irrigation controller, piping, valves, fittings, sprinkler heads,
- complete coverage Low voltage control wiring from controllers to remote control

dripline, emitters and final adjustment of heads and emitters to insure

- Sleeving. Clean-up. Tests.
- Record Drawings.

1.02 QUALITY ASSURANCE

- A. QUALIFICATIONS: Provide at least one person who shall be present at all times during execution of this portion of the work who shall be thoroughly familiar with the type of equipment and type of materials being installed and the equipment and materials manufacturer's recommended methods of installation and who shall direct all work performed under this Section.
- APPLICABLE CODES: All work and materials shall be in full accordance with the latest rules and regulations of the National Electric Code; the Uniform Plumbing Code, and other applicable State or local laws or regulations. Nothing in these Drawings or Specifications is to be construed to permit work not conforming to these codes.
 - 1. When the Specifications call for materials or construction of a better quality or larger size than required by the above mentioned rules and regulations, the provision of the Specifications shall take precedence over the requirements of the said rules and regulations.
 - 2. The Contractor shall furnish without any extra charge any additional material and labor when required by the compliance with these rules and regulations, though the work not be mentioned in these particular Specifications or shown on the Drawings.
- 3. Protection of persons and property shall be provided throughout the progress of the work. The work shall proceed in such a manner to provide safe working conditions for personnel, users of the site and adjacent property owners. The Contractor shall erect and maintain barricades, guards, warning signs, and lights as necessary or required by OSHA. No unprotected open trenches are permitted overnight.
- 4. Any existing building, equipment, piping, cover and boxes, utilities, sidewalks, landscaping, etc., damaged by the Contractor during the course of his work shall be replaced or repaired by the Contractor in a manner satisfactory to the Owner or his representative, and at the Contractor's own expense, and before the final payment is made. The Contractor shall be responsible for damage caused by leaks in the piping systems being installed by him. He shall repair, at his own expense and to the Owner's satisfaction, any and all damage in a manner satisfactory to the Owner or his representative.
- 5. Contractor shall pay for all testing, licenses, permits and fees
- 6. Electrical work to be performed by Electrical Contractor.

1.03 SUBMITTALS:

- Prior to starting any work, the Contractor shall present to the Owner's Representative the following information: 1. Project name and location
 - Name of Contractor's representative on job and his title
 - Construction Schedule
 - 4. Three copies of a list of all irrigation system materials proposed to be furnished and installed for approval before any materials are delivered to the job site. Show manufacturer's name and catalogue number for each item, furnish complete catalogue cuts and technical data, and furnish the manufacturer's recommendations as to method of installation.
- Upon approval of the Landscape Architect, the manufacturers' recommendations shall become the basis for acceptance or rejection of actual methods of installation used in the work.

1.04 RECORD DRAWINGS

- On a reproducible copy of the Irrigation Plan the Contractor shall daily record any changes to the Plans in order to create an As Built record set. Underground installations shall be indicated with at least two measurements from permanent surface features such as walks or building. Record all utilities encountered in the field.
- Keep record prints and submit reproducible copy to Owner's Representative before final payment shall be made for work installed.
- Supply to Owner's Representative a complete and final valve index including a listing of final valve numbers, sprinkler type, precipitation rate and GPM based on field changes.
- 1.05 OPERATION AND MAINTENANCE DATA: Upon completion, provide two sets of manufacturer's warrantees, guarantees, instruction sheets, parts lists and operational manuals to the Owner's Representative. The final walk-through will not be made until the sets are approved by the Landscape Architect.

1.06 PRODUCT HANDLING

- Protection: Use all means necessary to protect irrigation system materials before, during and after installation and to protect the installed work and materials of all other trades.
- Repla cements: In the event of damage, immediately make all repairs and replacements necessary at no additional cost to the Owner.

PART 2 - PRODUCTS

- 2.01 MATERIALS
 - The materials will be as specified. All materials shall be new. Any deviation from the specifications must first be approved by the Landscape Architect in duplicate. All materials shall be clearly marked by manufacturer on all material containers or certificates of contents for inspection.
 - The Contractor must furnish and install the materials, products or equipment items specified unless the substitution of an equal material, product or equipment item is approved by the Landscape Architect prior to installation. Any credit earned by the substitution must be refunded to the Owner
- 2.02 PIPE
 - Main lines (constant pressure) 2-1/2" and larger shall be PVC 1120 Class 200, with ring-tite fittings. Main lines 2" and smaller shall be Schedule 40 PVC pipe with Type 1, Grade 1 PVC Schedule 40 solvent
 - Lateral lines (non-pressure) 2" and smaller shall be Class 200 PVC pipe with Type 1, Grade 1 PVC Schedule 40 solvent weld fittings.

- Sleeves: All PVC sleeves under pavements and roadways shall be Schedule 40 or Class 315 (2" and larger). Sleeves must be twice the diameter of pipe or wire bundle that will pass through the sleeve. All ring-tite pipe that would pass through sleeves shall be changed to Class 315 solvent weld pipe of the same size. Install a 4" layer of sand under pipe in trench.
- All markings shall face up.
- Solvent and primer for solvent weld joints shall be of make and type approved by manufacturer(s) of pipe and fittings and shall conform to ASTM D-2564. These products shall be maintained at proper consistency throughout use. PVC Primer to be Weld-On 70 or approved equal.
- Pipe joint compound shall be non-hardening, non-toxic materials designed

specifically for use on threaded connections in water carrying pipe.

2.03 IRRIGATION DRIPLINE

To be XFS Dripline manufactured by Rain Bird. See Legend for model number.

- Sch 80 PVC as shown in the irrigation details.
- Sch 80 PVC for valves and quick couplers per details.
- Pop-up sprinklers: 3-way swing joints with marlex fittings. Pop-up Rotors: 3-way swing joints with marlex fittings.

See Irrigation Legend for model numbers.

2.05 CONTROLLERS AND ENCLOSURES

- Provide and install automatic irrigation controller at approximate location shown on Drawings. The exact location will be determined on the site by the Landscape Architect and the Owner.
- All electric components shall be properly grounded according to manufacturer's

2.06 REMOTE CONTROL WIRE

- Control wire shall be solid copper 600 volt AC, type UF-AWG, ULapproved for direct burial in ground and continuously marked with manufacturer's name, wire size and identification.
- Lead wires: No.14, color other than white Control wire: No.12, white.

2.07 VALVE BOXES

- Boxes for remote control valves to be Carson Box 1419 or 1220 with bolt down T-cover with penta-head bolt or accepted equal. Box body shall have knock-outs.
- Boxes for quick-coupler and gate valves to be Carson Box 910 with bolt-down lid and penta-head bolt.
- Where applicable, valve boxes shall be placed in a neat, orderly fashion, no closer than 12" apart. Round valve boxes, 10" diameter, to be used for quick coupler or gate valves only.
- 2.08 SPRINKLER HEADS: Sprinkler heads shall be as listed on the Drawings or accepted equal. Install PRS screens as noted on the Drawings or as required to eliminate overspray.

2.09 VALVES

- Remote Control Valves: Control Zone Kit for drip irrigation and PEB series by RAIN BIRD or accepted equal. See Plan and Legend for sizing and model number.
- Ball Valves: Bronze body ball valve by Nibco or accepted equal.
- Gate Valves: Bronze body gate valves by Nibco or accepted equal.
- Quick-Coupling Valves: 33 DRC and 33DK valve key with swivel hose ell SH-0 all by Rain Bird or accepted equal.

2.10 SPLICE PACKS

Model no. DBY and DBR (for multiple splice wires) manufactured by 3M Company or accepted equal.

- 2.11 BACKFLOW PREVENTER Pressure Vacuum Breaker by Febco. See Legend for model number.
 - Enclosure to be Guard Shack manufactured by BPDI (602) 788-5411 or accepted equal. Color to be dark green. Provide and install Frost Guard insulated blanket for RP assembly

Provide and install lockable powder coated metal enclosure for RP assembly.

manufactured by BPDI (602) 788-5411

2.12 MISCELLANEOUS INSTALLATION MATERIALS

- Provide any and all additional equipment called for by the drawings or as necessary for a complete and proper irrigation system installation. Install additional sprinkler heads as necessary to provide complete coverage by the irrigation system without additional charge to the Owner.
- Provide to the Owner at completion of the Maintenance Period, an amount equal to 5% of quantity used: sprinkler bodies, nozzles, risers, dripline, emitters, couplings, polyflex risers and stakes used in construction of the system for use as replacement parts, and all operating and servicing keys, screwdrivers, emitter punch and wrenches required for complete maintenance and operation of all heads, dripline and valves. Include tools necessary for complete disassembly of all heads and valves.
- All other materials, not specifically described but required for a complete and proper irrigation system installation, shall be new, first quality of their respective kinds, and subject to the approval of the Landscape Architect.

PART 3 - EXECUTION

3.01 PREPARATION

- Scheduling: Notify the Project Inspector prior to start of work and or continuance of work in this Section. If Contractor should start work or continue work and fail to notify the Project Inspector, work shall be removed and replaced by Contractor at no cost to the Owner.
- Examination: Examine conditions of work in place before beginning work; report
- Measurements: Take field measurements; report variance between plan and field dimensions.
- Storage: Keep PVC pipe flat during delivery and storage. Protect from exposure to sun. Cap openings against entry by foreign matter.
- Protection: Maintain warning signs, shoring and barricades as required. Prevent injury to, or defacement of, existing improvements. At Contractor's expense, repair or replace items damaged from installation operations.

3.02 SURFACE CONDITIONS

- EXISTING SITE CONDITIONS
 - Locations of existing utilities and other improvements shown on the Construction Documents are approximate. Existing conditions shall be verified. Contractor shall hire an underground surveying company to locate underground utilities prior to any trenching. Contractor shall be responsible for all repairs to any damaged underground utilities. Should any utilities be encountered, their position must be recorded on the Record Drawings and any repair required must becompleted by the Contractor. The Contractor shall be held responsible for any damages caused to existing services.
 - Contractor shall verify the location of all underground utilites pror to trenching operations. Contact USA (i.e., Underground Service Alert) at (800) 227-2600 at least 48 hours prior to start of excavation and trenching.

- 3. Prior to starting irrigation work, placement of topsoil must be completed. Notify Project Inspector of irregularities if any.
- Verify that the irrigation system is installed in strict accordance with all pertinent codes and regulations, the original design, the
- referenced standards, and the manufacturers' recommendations. DISCREPANCIES:
- 1. In the event of discrepancy, immediately notify the Landscape
- Do not proceed with installation in areas of discrepancy until all such discrepancies have been fully resolved.

3.03 FIELD MEASUREMENTS

- Make all necessary measurements in the field to ensure precise fit of items in accordance with the original design.
- 3.04 TRENCHING AND BACKFILLING Perform all trenching and backfilling necessary for this portion of the

Work, strictly conforming to the requirements for trenching and

backfilling described in these Specifications. 3.05 BORE AND JACK

The Contractor is responsible for all undercrossings of conduit and piping. The existing concrete walkways shall not be cut. The Contractor shall dig a sending and receiving pit on either side of the road and "drill/bomb" under the concrete walkways. These water/air processes shall permit the installation of all required sleeves under concrete. The Contractor is then responsible for backfill and compaction per the Specifications.

3.06 INSTALLATION OF PIPING

- A. Preparation: Schedule and coordinate placement of materials and equipment in a manner to effect the earliest completion of work in conformance with construction and progress schedule.
- Sleeving: Organize the location of sleeves with other trades as required. Extend sleeves 12" beyond farthest edge of pavement or curb. Provide removable non-decaying plug at ends of sleeves to prevent entrance of earth. Stake sleeve end locations.
- Handling, storage and assembly: 1. The Contractor is cautioned to exercise care in handling, loading, unloading, and storing PVC pipe. Beds on which materials are
- stored must be full length of pipe to avoid damage. PVC pipe and fittings shall be especially protected from direct sunlight. Any section of pipe that has been dented or damaged shall not be used in the work.
- 2. Handling, assembly of pipe, fittings and accessories shall be accomplished by skilled tradesmen. Interior of pipes, fittings and accessories shall be kept clean at all times. Close ends of pipe immediately after installation and leave closure in place until removal is necessary for completion of installation. Bending of pipe is not permitted.

Layout:

- Provide pipe sleeves of appropriate size and location. Layout work as accurately as possible in accordance with
- diagrammatic drawings. Review site conditions during layout to avoid trenching close to
- existing tree locations. Where site conditions do not permit locating piping, valves and heads where shown, notify Landscape Architect immediately and
- determine relocation in joint conference. Run pipe lines and automatic control wiring in common trenches wherever practical. The drawings are generally diagrammatic to the extent that swing joints, offsets and all fittings are not shown. The Contractor shall be responsible for full and complete coverage of all irrigated areas and shall make any necessary adjustments at no additional cost to the Owner. If discrepancies are found, the Contractor shall notify

the Owner's Representative before proceeding.

E. Excavating and trenching:

- 1. All trenches shall be open vertical construction, sufficiently wide to provide ample working space and depths as specified. PVC pipe may be made up on the surface, then laid in the trench.
- Make trenches for pipe lines deep enough to provide minimum cover from finish grade as follows:
- 24" minimum cover over pipe lines located under vehicular
- 18" minimum cover over main lines to control valves and quick coupling valves;
- 18" minimum cover over control wires from controller to 12" minimum cover over RCV-controlled lines to sprinkler
- 4" 6" cover over dripline. 3. Contractor shall be responsible for installing all irrigation features to their finished grade and at depths indicated. All rough grading and or finish grading shall be completed and/or accommodated

head or dripline.

- before trenching commences. 4. Restore surfaces, existing underground installations, etc., damaged or cut as result of excavations, to original condition in manner approved by Landscape Architect.
- 5. All underground utilities to be located by Contractor prior to excavation. Where other utilities interfere with irrigation, trenching and pipe work; adjust the trench depth as necessary. Note locations of all utilities encountered on As-Builts.

F. Assembling pipe lines:

1. All pipe shall be assembled free from dirt and pipe scale. Field cut ends shall be reamed only to full pipe diameter with rough edges

and burrs removed. 2. Rubber Ring Seal Joint:

- a. Use factory made male end or prepare field-cut male end to exact specifications of factory made end.
- Lubricate male end according to manufacturer's instructions and insert male end to specified depth. Use hands only when

Carefully clean bell or coupling and insert rubber ring without

lubricant. Position ring carefully according to the manufacturer's

- inserting PVC pipe. Thrust blocks shall be provided whenever and wherever necessary to resist system pressure on ring-tite pipe, and any and all fittings, couplings, valves, etc. during testing when the trenches are open as well as during the normal operation of the system. The postioning of these blocks is not shown on the plans and is the responsibility of the Contractor to locate and install. Blocks shall be concrete and the size and size shall be based on an average soil safe bearing load of 1000 pounds per
- square foot. Form thrust blocks in such a manner that concrete comes in contact only with the fittings. Thrust blocks shall be between solid soil and the fitting.

Solvent weld joint:

Prepare joint by first making sure the pipe end is square, then deburring the pipe end and cleaning pipe and fitting of dirt, dust and moisture prior to applying solvent.

- Thrust blocks shall be provided whenever and wherever necessary to resist system pressure on ring-tite pipe, and any and all fittings, couplings, valves, etc. during testing when the trenches are open as well as during the normal operation of the system. The postioning of these blocks is not shown on the plans and is the responsibility of the Contractor to locate and install. Blocks shall be concrete and the size and size shall be based on an average soil safe bearing load of 1000 pounds per
- square foot. Form thrust blocks in such a manner that concrete comes in contact only with the fittings. Thrust blocks shall be between solid soil and the fitting.

4. Threaded joint:

- Field-threading of plastic pipe or fitting is not permitted. Factory-made nipples shall be used wherever possible. Field-cut threads in metallic pipe will be permitted only where absolutely necessary. When field threading galvanized pipe, cut threads accurately on axis with sharp dies.
- On PVC to metal connections, the Contractor shall work the metal connection first. A non-hardening pipe dope (Permatex No. 2 or approved equal) shall be used on all threaded PVC to metal joints and light wrench pressure is all that should be required. Where threaded PVC connections are required, use
- threaded PVC adapters into which the pipe may be welded. Utilize Teflon tape on threaded PVC connections. Cap or plug openings as pipeline is assembled to prevent entrance
- of dirt or obstruction. Remove caps or plugs only when necessary to continue assembly Where pipe or control wires pass through sleeves, provide
- removable non-decaying plug at ends of sleeve to prevent entrance Trenches shall be padded with sand if the soil is extremely rocky.
- PVC pipe should never be laid when there is water in the trench or when the temperature is 32 degrees F or below. Snake pipe from side to side of trench bottom to allow expansion
- The Contractor is responsible for the installation of necessary sleeves and conduits of sufficient size under all paved areas where required.

Dripline: Install all dripline as indicated on drawings. Use only Teflon tape on

- all threaded locations Dripline can be installed with the water outlets facing up, down or sideways. If any water outlets are too close to fixed improvements
- they should be capped off with a dripper plug ring. When design-operating pressure exceeds 50 psi or maximum stated system pressure for the dripline, whichever is less, stainless steel pipe clamps shall be used. Slip clamps over tubing before slipping tubing over barbed insert fitting. Place clamp between the first and second ridge of the barbed fittings and crimp the "ear" of the clamp tightly. Crimp the "ear" twice to ensure proper seating.
- Cap or plug all openings as soon as lines have been installed to prevent the intrusion of materials that would obstruct the pipe. Leave in place until removal is necessary for completion of installation.

G. Remote Control Valves: All RCV's to be located at grade in specified valve boxes and

Thoroughly flush all water lines before installing valves.

- placed one per valve box. Layout of valve piping shall provide ample clearance between the edge of the box, the ground and other valves to allow for easy removal of any valve.
- Base of valve box to be filled with gravel to a 3-inch depth. See RCV detail.
- Locate valves no closer than 12 inches from walk edges and building walls.

Thoroughly flush all water lines before installing valves.

- H. Automatic Control Wiring: 1. Run wire under main lines wherever possible. Tie wires in bundles with pipe wrapping tape at 10 foot intervals and allow slack for
- contraction between strappings. Loop a minimum of two (2) feet of extra wire into a 1-1/2 -inch diameter coils at all valve connections (both control wire and
- Connections shall be made by crimping bare wires with brass

Locate all splices at valve locations or in valve boxes.

connectors and sealing with epoxy resin sealer packs. Splicing will be permitted only on runs exceeding 2500 feet.

Where control lines pass under paving or are not laid under main line, they shall pass through Schedule 40 electrical PVC conduit.

- Automatic Controller: 1. Connect control wires to controller in sequential arrangement according to assigned identification number of valve. Control lines shall be labeled at controller with permanent non-fading labels
- indicating identification number of valve controlled. See Plan and Details for location of the controller. Confirm location with Owner and Owner's Representative. Perform final

wiring per manufacturer's recommendations.

2.5"

3.5"

Hard Pan

- J. Thrust Blocks: 1. Provide thrust blocks at all changes in size or direction of pipe. Bends, reducers, plugs and the opposite side of Tee branches require thrust blocks. Size of thrust blocks is determined by the working pressure, size and type of fitting and the soil conditions present at the jobsite. To calculate area of concrete thrust block in contact with soil first calculate total thrust by size and type of fitting from Table 1 and multiply thrust/100 by system pressure divided by 100. Divide total thrust by bearing capacity of soil in excavation (from Table 2) to determine area (in square feet) of thrust block required to be in contact with the undisturbed soil. For reducers, subtract small opening plug thrust from large opening plug
 - thrust to calculate thrust/100. 2. The thrust block should be constructed of concrete having a compressive strength of 2000 psi or more. The size of the thrust block should be adequate to prevent pipe movement at the point of thrust.
 - 3. The thrust block should be hand dug in undistrubed soil and framed with soil or wood to hold freshly poured concrete. The earth - bearing surfaces should be undisturbed. Before pressurizing the line, ensure that adequate time is allowed for the concrete blocks to set.

751

1,114

1,841

3,990

5,000

379

562

928

2,012

TABLE 1 - THRUST/100 TABLE (Pounds per 100 psi) Size Tees, Plugs 513 259

531

1,302

2,822

TABLE 2 - SOIL BEARING CAPACITY	
Soil Type	Safe Bearing Load (lbs per square foot)
Soft clay	1,000
Sand	2,000
Sand and gravel	3,000
Sand and gravel cemented with clay	4,000

- Perform test as specified. Remake any faulty joints with all new materials. Use of cement or caulking to seal leaks is absolutely prohibited.
- All work must be inspected and approved prior to covering. Notify Owner's Representative 3 days prior to filling trenches. Backfill material shall be the earth excavated from the trenches, free from rocks, concrete chunks, and other foreign or coarse
- materials. Carefully select backfill that is to be placed next to plastic pipe to avoid any sharp objects which may damage the pipe. All pipe under asphalt paving shall be backfilled with 4 inches of clean sand on all sides of pipe. Pipe shall have a uniform bearing for the entire length of each pipe line to prevent uneven settlement.
- Wedging or blocking of pipe will not be permitted. Place backfill materials in 6-inch layers and compact mechanically
- to a minimum compaction of 90 percent of original soil density. Dress off all areas to finish grades and remove excess soil, rocks or
- debris remaining after backfill is completed. If settlement occurs along trenches, and adjustments in pipes, valves and sprinkler heads, soil, sod or paving are necessary to bring the system, soil, sod or paving to the proper level or the permanent grade, the Contractor, as part of the work under this Contract, shall make all adjustments without extra cost to the

M. Sprinkler heads and quick coupler valves:

- Thoroughly flush lines before installing heads and quick coupler valves. Operate system at full pressure until all rust, scale and sand is removed. Divert water to prevent ponding or damage to finished work.
- Locate heads and guick coupler valves as shown in the Drawings
- Adjust sprinkler heads for proper distribution and trim. Install lawn heads at finish grade in lawn areas.
- If the irrigation plan does not allow for the proper distribution of water to all plant material, make appropriate field changes of sprinkler nozzle type or sprinkler body location. Add additional
- sprinkler bodies where required. Locate as shown on construction drawings, except where existing conditions prohibit. Sprinkler head spacing shall not exceed the maximum shown on the construction drawings. Coverage shall be as good or better than shown on the construction drawings.

3.07 TESTING AND INSPECTION:

- A. VISUAL INSPECTION: Pipe shall be homogenous throughout and free from visual cracks, holes or foreign materials. Inspection shall be made by Contractor on each length of pipe. All materials are subject to impact test at the discretion of the Owner's Representative.
- B. HYDROSTATIC TESTING OPEN TRENCH:
- Request the presence of the Landscape Architect in writing at least 3 days in advance of testing.
- Testing to be accomplished at the expense of the Contractor and in the presence of the Landscape Architect.
- Center load piping with backfill to prevent arching or slipping under pressure. No fittings shall be covered. Apply the following test after weld plastic pipe joints have cured at least 24 hours and the risers have been capped:
- psi minimum. Main lines and sub-mains will be approved if test pressure is maintained for six (6) hours. The Contractor shall

Test live (constant pressure) and QCV lines hydrostatically at 100

- make tests and repairs as necessary until conditions are met. Test RCV-controlled lines with water at line pressure for two (2) hours and visually inspect for leaks. Retest after correcting defects. Test to determine that all sprinkler heads function according to manufacturer's data and give full coverage according to intent of Construction Documents. Replace any sprinklers not functioning
- as specified with ones that do or otherwise correct system to provide satisfactory performance. The Contractor shall make adjustments in head locations and adjust heads for radius and arc to provide optimum coverage and to minimize spraying onto cars, pavement (where overspray is not

intended), building or adjacent areas. C. INSPECTION:

The Contractor shall be subject to inspections at any and all times by the authorized representative of the Landscape Architect and the Owner. 3.08 GUARANTEE

A. It shall be the responsibility of the irrigation Contractor to fill and repair

all depressions and replace all necessary planting due to the settlement of irrigation trenches for 12 months following completion and acceptance of job. B. The Contractor shall also guarantee all materials, equipment and workmanship furnished by him to be free of all defects of workmanship and materials and shall agree to replace at his expense, at any time within one year after installation is accepted, any and all defective parts that may be found. If any materials or hardware are replaced during that period, the

guarantee shall be extended for the material or hardware for an additional

12 month period.

3.09 INSTRUCTIONS A. System Layout: Provide reduced prints of record document irrigation plans, laminated in 4 mil. plastic, of size to fit controller door. Enlarge remote control valve designations as necessary for legibility. Color code areas covered by each station. Afix plans to inside of controller door and complete legend provided by manufacturer with

B. Maintenance personnel: After the system has been completed, inspected and approved, instruct the Owner's maintenance personnel in the operation and maintenance of the irrigation system and demonstrate the contents of the manual furnished.

3.10 CLEANING

A. Contractor shall maintain cleanliness in all areas of his operation, and will be held responsible for immediate removal of all debris in these areas. Keep premises free from accumulation of waste and rubbish. Daily, and at the completion of work, remove surplus materials, rubbish and debris. The site must be maintained in a clean and safe condition.

3.11 FINAL WALK THROUGH

waterproof ink.

- A. Request the presence of the Landscape Architect 3 days prior to the final walk through. B. At this time the system will be demonstrated by the Contractor and a punch list will be prepared by the Landscape Architect indicating the final
 - items that must be completed prior to final payment. END OF SECTION 02441

GAMBON Selho Damtow Signature Exp. 10/31/21 OF CAN

THE OFFICE OF IEFFREY F. GAMBONI LANDSCAPE ARCHITECT 2702 3012 PACIFIC AVENUE STOCKTON 95204 209 948 8335

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These drawings are not final and shall not be used for construction purposes until signed b effrey F. Gamboni, Landscape Architect #2702 These plans and all contained thereon are an original, unpublished work and may not be duplicated, published or used in whole or part without prior written consent by Jeffrey F. Gamboni.

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DATE REVISION/ SET

DATE 04 DECEMBER 20

JEFFREY F. GAMBON

DRAWN BY:

CHECKED BY:

Collin Ave

CHA 18-13.dv

PLANTING, SECTION 02900

PART 1 - GENERAL

SUMMARY 1.01

- DESCRIPTION:
- Soil tests of planting soil
- Import top soil, amendments and mulch Fertilizing
- Trees, shrubs, ground covers and mulch installation
- Maintenance

1.02 QUALITY ASSURANCE

- REFERENCE STANDARDS: American National Standards Institute (ANSI):
- ANSI Z60.1 American Standard for Nursery Stock
- B. Provide a qualified and experienced planting foreman who shall be present at all times during execution of this portion of the work, who shall be thoroughly familiar with the type of materials being installed and the best methods for their installation and who shall direct the planting work, to be done by qualified and experienced planting workers. All products shall be used in strict conformance with manufacturers' recommendations. Nothing in these specifications and/or drawings should be construed to the contrary. Carefully read and follow all labels and warnings.
- All plants shall have been grown in nurseries which have been inspected by the State or by the County Horticultural inspector and have complied with all regulations thereof; this requirement does not prohibit use of plant materials grown outside of the State, provided such plant materials and shipments meet all requirements of the State Department of Agriculture.
- Inspections: All plant materials shall meet the specifications of Federal, State and County laws requiring inspection for plant diseases and insect infestations. All plants shall be true to name, and all plants shall be tagged with the name of the plant in accordance with the standards of practice recommended by the American Association of Nurserymen. In all cases, botanical names shall take precedence over common names.
- Volatile Organic Compounds (VOC): Use only products in compliance with VOC content limits required state and local regulations.

1.03 SUBMITTALS

- Submit to the Landscape Architect a complete list of all plants and product data for approval before any materials are delivered to the job site. Submittals will include: complete data on source, size and quality; and demonstrate complete conformance with the requirements of this Section. This shall in no way be construed as permitting substitution for specific items described in the drawings or these specifications unless the substitution has been approved in advance by the Landscape Architect.
- In the event specified plants or plant materials will not be available for installation within the scheduled work period, submit proof to the Architect at time of Materials List submittal and secure the Landscape Architect's approval of all proposed substitutions at least thirty (30) days prior to starting work.
- Soil Amendments and Fertilizers: Submit manufacturer's catalog cuts and guaranteed analysis of all soil amendments and fertilizers specified by the results of the soil analysis.
- Tree staking material
- Root barrier: Manufacturer's catalog cut sheet.

1.04 RECORD DRAWINGS

During the course of the installation record all changes made to the planting layout during installation. Submit at the end of the Maintenance Period.

1.05 SOILS TESTS

At least 45 days prior to commencement of planting operations, submit to an approved laboratory sufficient samples of planting soil and top soil to be imported for analysis of plant growth suitability and for recommendations on required fertilizers, amendments, mixing ratios, planting techniques and fertilizer application during the maintenance period. Soil test to be paid for by Contractor and results sent to the Landscape Architect.

1.06 CERTIFICATES

Certificates required by law shall accompany all shipments. Upon completion of the installation, deliver certificates to the Landscape Architect.

1.07 PRODUCT HANDLING

Deliver all items to the site in their original containers with all labels intact and legible at time of Landscape Architect's inspection. Remove all labels after approval by Landscape Architect. Immediately remove from the site all plants which are not true to name and all materials which do not comply with the provisions of this Section of these specifications. Use all means necessary to protect plant materials before, during and after installation and to protect the installed work of all other trades.

1.08 REPLACEMENTS

In the event of damage or rejection, immediately make all repairs and replacements necessary for the approval of the Landscape Architect and at no additional cost to the Owner.

1.09 CLOSEOUT

- A. Maintenance Data: Provide Manufacturer's instructions.
- Replacement Guarantee: Replace plants not alive and in satisfactory growing condition, as determined by the Architect, within one week without additional cost to the Owner. Replace plants damaged or destroyed by any action, including but not limited to vandalism, theft, neglect or natural disaster during maintenance period.
- Maintenance Period: Period begins after the work is accepted in writing by the Architect.
- Duration of Period:
- General: Continuously maintain landscaped areas shown, until final acceptance.
- 2. Duration: Ninety calendar days. Improper maintenance or poor condition of any planting at the termination of the scheduled maintenance period may cause postponement of the final completion date.
- Final acceptance: At expiration of the maintenance period, request final inspection. Upon acceptance the Architect will certify, in writing, the successful completion of the landscape Maintenance Period.

PART 2 -PRODUCTS

2.01 TOPSOIL

- A. Topsoil shall be stockpiled on site. Topsoil shall not be excessively acid or alkaline nor contain toxic substances which may be harmful to plant growth. Topsoil shall be without admixture of subsoil and shall be clean and reasonably free from clay, lumps, stones, roots, debris or other similar substances one (1) inch or more in diameter or other objects which might be a hindrance to planting operations.
- B. Before any imported topsoil is incorporated into the planting mix, the Contractor shall submit a 2-pound sample typical of the topsoil to be used from each source along with the soils test analysis for inspection and approval. Spreading of topsoil may begin upon approval. The approved sample shall be stored on the site until the supply source is exhausted or until no more topsoil is required.

2.02 FERTILIZERS

- Application rates are pre-determined by soils tests.
- Slow release fertilizer for trees and shrubs shall be Agriform 20-10-5 21-gram planting tablets placed during backfilling. Refer to 3.03 G.

2.03 SOIL AMENDMENTS:

Provide amendments based on soil test results. Evenly spread and thoroughly incorporate amendments by rototiller to a depth of 4 to 6 inches. For purposes of bidding the following amendments will be used (per 1000 sq. ft.): 4 vards Nitrolized or redwood fir bark compost 200 lbs. Gro-Power Plus

2.04 MULCH

Premium grade shredded bark 3/4" to 1 1/2" diameter. Furnish in bulk.

- Tree Stakes shall be lodgepole pine, 10' x 2" diameter with chamfered top. Apply no paint or stain to stakes.
- Tree ties shall be ArborTie manufactured by Deep Root Corp.
- Color: green. Installation shall be as detailed on drawings.

40 lbs. gypsum

Guys: Duckbill or equal.

2.06 ROOT BARRIER 24" x 10' linear root barrier by Deep Root Corp. or approved equal to be installed at all locations where trees are less than twelve (12) feet from any sidewalk, curb, wall or building.

2.07 PLANT MATERIALS

- Quality and size: Graded per ANSI Z60.1. All plants shall have a habit of growth that is normal to the species, be sound, healthy, vigorous and free from insect pests, plant diseases, sun scalds, fresh abrasions of the bark, excessive abrasions, insect damage, wind burn of foliage and other objectionable disfigurements. All plants shall be sturdy and well "hardened-off." All plants shall have normally well developed branch systems and vigorous and fibrous root systems which are not root or pot bound. All plants not conforming to the requirements herein specified shall be marked as rejected and be immediately removed from the site of the work and replaced with new plants at the Contractor's expense.
- All plants shall be of the species, variety, size, age and condition as specified herein, or as shown on the drawing. Under no condition will there be any substitution of plants or sizes for those listed on the accompanying plans, except with the written consent of the Landscape Architect.
- Container stock shall have grown in the containers in which they are delivered for at least 6 months. Samples must be shown to prove no root bound condition. All proposed 15 gallon size trees shall have a minimum of 1" caliper. Canned stock shall be removed carefully from cans. No container plants that have cracked or broken balls of earth when taken from the container shall be planted. No plant shall be bound with wire or rope at any time as to damage the bark or break branches.
- Quantities necessary to complete the work shown on the drawings shall be furnished. Any discrepancies in the quantities given in the Plant List shall not entitle the Contractor to additional remuneration. The Landscape Architect reserves the right to make substitutions and deletions in the planting scheme which he deems necessary as the work progresses on the site. Such substitutions, additions and deletions shall be accompanied by an equitable adjustment of the Contract Price when necessary. All plant materials acquired through additions or substitutions shall be subject to all conditions and guarantees as herein specified. Plants delivered to the site shall be adequately protected from sun and wind and watered as required.
- The Contractor shall be responsible for inspections of plant materials required by the State, Federal and County authorities and shall pay for and provide the necessary certificates.

2.08 PRE-EMERGENT HERBICIDE

Contractor shall furnish and apply the appropriate pre-emergent herbicide at rates prescribed by law and manufacturer's recommendations. "Best Dimension 270G" or "RONSTAR G" are recommended for ground cover and shrub areas. All pre-emergent herbicides shall be applied by license operators under favorable weather conditions. All pre-emergent herbicides shall be approved by the Landscape Architect prior to application.

2.09 POTTING MIX

All pots shall be planted with soil-less mixes that drain well, such as Miracle-Gro Moisture Control Potting Mix. The mix shall contain no bark, bark products, peat or peat products.

EXECUTION

3.01 SURFACE CONDITIONS

- Inspection: Prior to all work of this section, carefully inspect the installed work of all other trades and verify that all such work is complete to the point where this installation may properly commence. Verify that work performed under Section 02441 - IRRIGATION SYSTEMS has been satisfactorily completed. Verify that planting may be completed in accordance with the original design and referenced standards.
- Discrepancies: In the event of discrepancy, immediately notify the Landscape Architect. Do not proceed with installation in areas of discrepancy until all such discrepancies have been fully resolved.

C. Protection:

- General: Use temporary barricades as required; minimize dust, provide safe working conditions for personnel.
- Existing Construction: Protect existing construction, work of other trades, and other
- Existing utilities: Protect existing utilities within construction area; repair damage as
- Landscaping: Protect landscape work and materials from damage by other trades and by the public. Maintain protection during installation and maintenance period.

3.02 WORKING OF TOPSOIL:

- Rough grading: prior to commencement of planting procedures soil must be inspected to ensure that all stones over 1" in diameter, pockets of road base, asphalt, gravel and concrete have been removed.
- Weeds: remove all weeds from planting areas and treat pernicious weeds with appropriate herbicides or approved equal.
- C. Amendments: broadcast ammendments as recommended by the Soil Test. Rototill to incorporate soil amendment and fertilizer into the top 6" of the soil profile. Within the dripline of existing trees do not rototill deeper than 4". Thoroughly soak soil to allow for settling before finish grading.
- D. Fine grading: rake surface and bring all areas to a smooth, even grade with all ridges and depressions removed. Regrade all areas not acceptable to the Landscape Architect. In planting areas the Contractor shall be responsible for 5% surface drainage away from structures for a minimum distance of five feet (5') and 2% minimum positive surface drainage in all other planting areas except where shown. Planting areas shall slope towards drains. Any areas with insufficient drainage shall be regraded at no extra cost. Finished grade shall be 1-inch below adjacent paving or curbs.

3.03 PLANTING TREES AND SHRUBS:

- A. General: Plant nursery stock immediately after delivery to the site and approval by the Landscape Architect. Regularly water all nursery stock in containers and place them in a cool area protected from sun and drying winds. Landscape Architect shall be notified at least two working days prior to estimated time of setting-out plants so a mutually acceptable time can be scheduled for final plant placement. All plants shall be placed in approximate locations shown on plans by Landscape Contractor prior to arrival of Landscape Architect. Final adjustments of locations shall be made by Landscape Architect. The Landscape Architect reserves the right to make deletions, additions or substitutions in the field as necessary with adjustments in the contract as appropriate. Plant List is for the convenience of the Contractor. In case of any discrepancy, the drawings shall govern. Determine which areas to be planted are on sloped or flat areas. Review planting details for appropriate action.
- B. Excavation: Excavate holes with vertical sides, taking care to prevent cave-in of sides. Holes shall be 1-1/2 times the root ball height and twice the width. Scarify bottom and sides of the holes prior to placing plants to eliminate an interface or glazed soil surfaces. Place no ammended soil beneath rootball.
- C. Fill all tree holes with water and, if water has not percolated out so that no water remains after 30 minutes, provide drain holes filled with gravel sufficient to insure percolation of all water within 30 minutes as indicated in Tree Planting Detail. Auger bore drain, penetrating a minimum of one foot into original undisturbed soil. Angle of borings to be as close to vertical as possible. Sides of drain holes shall be scarified. Backfill drain holes with 3/4" drain rock or coarse gravel.
- D. Planting Operations: Do not permit rollers, bulldozers, trucks or other heavy equipment to pass over underground utilities, heating and electrical conduits, etc. Maintain all trench and grade stakes set by others until their removal is approved by the Owner. Before excavation, plants in containers shall be placed as indicated in the planting plan. The Landscape Architect shall check locations of all plants in the field and indicate the exact position before the actual planting operations commence. No planting shall occur under unfavorable weather conditions or if soil is too wet or too dry. Compact scarified soil under the root ball before planting so that the crown of the root ball after final settlemen will be stabilized at 1/2 inch above the surrounding finished grade. Cut encircling roots and loosen edge and sides of root ball. Place no amended soil under the rootball.
- E. Acid loving plants: For all azaleas, rhododendrons, ternstroemia, gardenia, fuschia or other acid loving plants, backfill soil with 50% peatmoss, making a raised planting bed 6" above surrounding soil level. Fertilize at a rate of 3 lbs. Nitrogen per 1000 SF of planter area. Plant all azaleas and rhododendrons with top of root ball slightly above soil level.
- Refer to Tree and Shrub Planting Details. Shrub and tree backfill shall be:
 - 1 CY Topsoil
 - 2 CY Native topsoil
 - 1 CY Nitrolized Redwood Compost or approved equal
- G. Thoroughly mix and place around sides of root ball. Agriform 21 gram plant tabs (20-10-15) to be placed immediately adjacent to root ball at a depth which is between the middle and the bottom of the root ball when backfill is no higher than halfway up the root ball. Rate of application shall be:

1 tablet 1 gallon container: 3 tablets 5 gallon container: 7 tablets 15 gallon container

15 tablets 24 inch box For larger sizes

For each 12 - 18 inches of plant height or spread, or for each 1/2 inch of tree trunk diameter use: 1 tablet for slow growing plants 2 tablets for fast growing plants

- When plant pits have been backfilled approximately 2/3 their depth, water thoroughly with a hose before installing remainder of planting mixture to top of pit. When backfilling is partially completed, extra care shall be taken to see that planting mix is worked around the root ball to eliminate air pockets. Backfilling shall be completed by a gentle tamping process.
- A mound of earth shall be formed as directed around each tree/shrub so as to produce a shallow basin to retain water and located on the backfill such that water will be forced through the root ball. Water into place with a dilute solution of vitamin B1 according to manufacturer's recommendations.
- Staking: All trees of 15 gallons or larger shall be securely staked with two (2) tree stakes, 5 gallon single staked, and one stake per trunk at multiple-trunk trees. Stakes shall be driven vertically 2 feet into firm ground and shall be fastened securely with rubber protected tree ties as directed. The tie shall be sufficiently large enough to allow at least two years growth of the tree trunk. At multiple-trunk trees, install one stake per trunk. Staking shall be done immediately after planting. Plants shall stand plumb after staking in accordance with the drawings.
- Mulching: Apply the approved mulch to a depth of three inches evenly spread over the entire planted area. Cover all exposed soil areas. Hold mulch 1" away from base of plant.
- L. After planting has been approved by Landscape Architect, all plant tags are to be removed.

APPLICATION OF PRE-EMERGENT HERBICIDE:

Apply pre-emergent herbicide within the time frame recommended by the manufacturer following application recommendations and good horticultural practice to insure maximum effect of herbicide.

3.05 PLANTING GROUND COVER:

- Planting: Plant ground cover areas as shown on drawings. Rooted cuttings grown in flats shall remain in those flats until transplanting. The soil in flats shall contain sufficient moisture so it will not fall apart when lifting plants. Each plant shall be planted in a manner that will insure a minimum of disturbance to its root system Finish grades for groundcover areas shall be 2 inches below top of adjacent paving, headers, curbs or walls unless otherwise indicated.
- Cut plants from flats and plant in individual holes at specified spacing. Gently break up the bottom of roots when planting from cell packs. Take care that groundcover plants are not buried more deeply than level of the crown in the flat.
- All plants shall be immediately watered soon after planting to avoid drying-out before entire planting area is soaked to the full depth of the roots. The contractor shall be responsible to keep plants moist after planting.
- Protection: Protect all planted areas by erecting temporary fences, barriers, signs, etc., as necessary to prevent trampling.

Prune plants only at time of planting and according to standard horticultural practice to preserve the natural character of the plant and to accomplish its use in the landscape design. Remove all dead wood, suckers and broken or badly bruised branches. Remove only dead, broken or rubbing branches on flowering specimen trees and shrubs. Use only clean, sharp pruning tools.

HERBICIDES, INSECTICIDES, AND DISEASE CONTROL CHEMICALS: Applied by a licensed pest control agency, record chemicals used on Project, identifying date of use, material and rate of application. Verify compliance with California EPA requirements.

3.08 MAINTENANCE:

- A. Maintain all planting, starting with the planting operations and continuing for 90 calendar days after all planting is complete and approved by the Landscape Architect. Refer to 1.09.
- Work included: Maintenance shall include all watering, mowing, weeding, cultivating, spraying, and pruning necessary to keep the plant materials in a healthy growing condition and to keep the planted areas neat and attractive throughout the maintenance period. Maintenance to also include all trash removal.
- Replace plants damaged or destroyed by any action, including but not limited to vandalism, theft, neglect or natural disaster during maintenance period.
- During the maintenance period a minimum of two applications of time release fertilizer will be required for the new lawn. Assume 6 lbs. per 1000 sq. ft. of 16-6-8 pelletized fertilizer approximately 30 days apart.
- Fine tuning of irrigation system shall be completed during the plant maintenance period such that the water requirements of all plants are met, yet not exceeded. Provide all equipment and means for proper application of water to those planted areas not equipped with an irrigation system.
- Check entire irrigation system weekly for proper operation as specified in Section 02441 -IRRIGATION SYSTEM. Flush out laterals as required and adjust heads as necessary for complete coverage.
- Program and adjust irrigation controller as necessary due to seasonal variations and progress of the establishment period.
- H. Control weeds by manual removal and, if necessary, with selective herbicides applied by a licensed Pest Control Operator.
- Fine tuning of grading and drainage shall be completed during the maintenance period so as to prevent any standing water and erosion. All gullies, if any, shall be filled to prevent
- Construct or remove water basins around each plant, depending on time of year.
- Restake and re-tie trees as necessary to maintain erect stature.

INSPECTION: 3.09

- A. In addition to normal progress inspections, schedule and conduct the following formal inspections, giving the Landscape Architect at least five working days prior notice of readiness for inspection.
- Establishing Maintenance Period: A preliminary inspection to determine the condition of the plants shall be made upon completion of all planting and any minor deficiencies noted. Upon approval of the above by the Landscape Architect, the specified maintenance period shall begin. The Maintenance Period shall not begin until the planting has been approved by the Landscape Architect.
- Final Inspection: Shall be held at the end of the maintenance period, providing all deficiencies have been corrected. If these deficiencies have not been corrected by the end of the maintenance period, the contractor shall continue maintenance at his own expense beyond the specified period until such time as all deficiencies have been corrected and at which time the Final Inspection will be held. When the final inspection has been made and the work approved by the Owner and/or Landscape Architect in writing, it shall be considered finished and at this time turned over to the Owner for subsequent maintenance.

3.10 GUARANTEE AND REPLACEMENT:

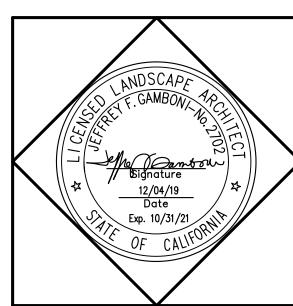
- A. Guarantee that all plants of 15 gallon size and over planted under this contract shall be in a good, healthy and flourishing condition at the end of one year from the date of acceptance as defined herein. All other plant material shall be guaranteed to be in good, healthy and flourishing condition of active growth at the end of 6 months from the date of acceptance. Any delay in the completion of work in the planting operations which extends the planting into more than one planting season shall extend the guarantee period correspondingly. Replace without cost to the Owner as soon as weather conditions permit all dead plants and all plants not in a vigorous, thriving conditions as determined by the Landscape Architect. The plants shall be free of dead branches and dead branch tips and with foliage of normal density, size and color. Except for failure beyond the control of the Contractor such as neglect, vandalism and the like, replacement of comparable quality and size shall be made. Replacements shall continue to be made until each plant has successfully established itself for the required guarantee period.
- 3.11 CLEAN-UP:

All areas shall be kept in a neat and orderly condition at all times. Prior to final acceptance, clean-up and remove all materials and debris from the entire landscaped area.

3.12 ACCEPTANCE:

Partial acceptance: The landscaping work will be accepted by the Landscape Architect upon the satisfactory completion of all work, including maintenance, but exclusive of the replacement of plant material as described above in paragraph 3.10 Guarantee and Replacement.

* End Section 02900 *



THE OFFICE OF **IEFFREY F. GAMBONI** LANDSCAPE ARCHITECT 2702 3012 PACIFIC AVENUE

STOCKTON 95204

209 948 8335

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These drawings are not final and shall not be used for construction purposes until signed b effrey F. Gamboni, Landscape Architect #2702 These plans and all contained thereon are an original, unpublished work and may not be duplicated, published or used in whole or part without prior written consent by Jeffrey F. Gamboni.

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DATE REVISION/ SET

DATE

04 DECEMBER 20

DRAWN BY: JEFFREY F. GAMBONI CHECKED BY:

