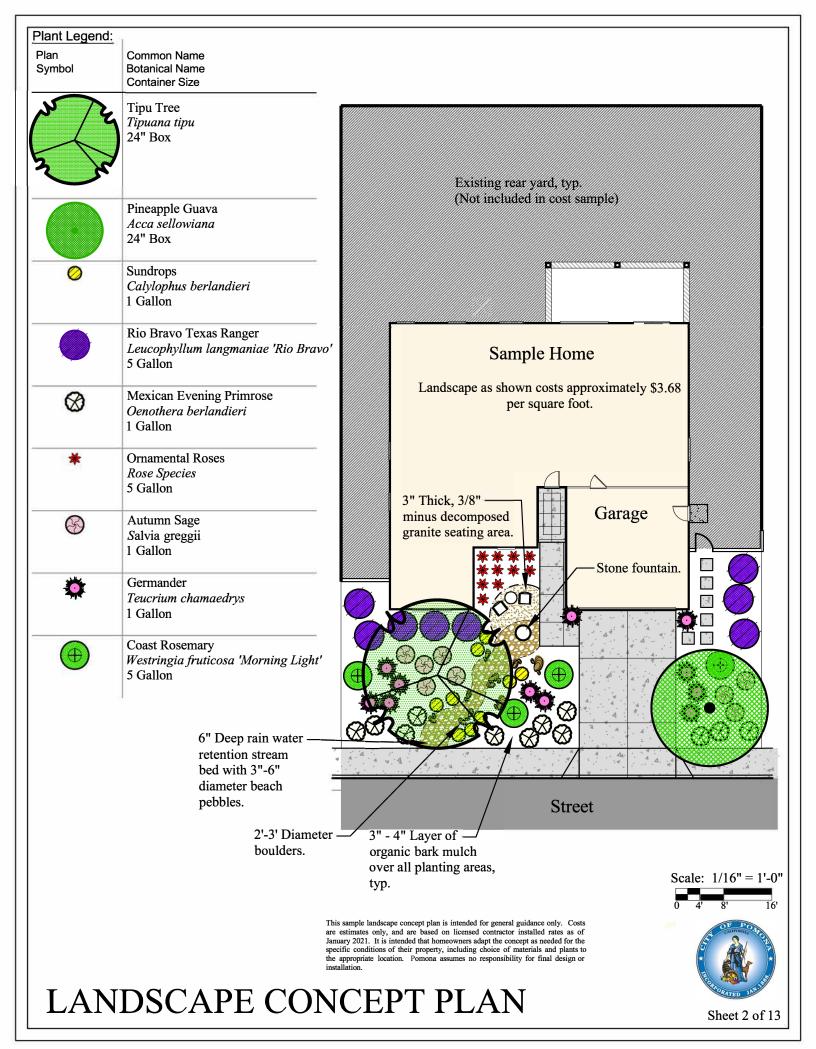
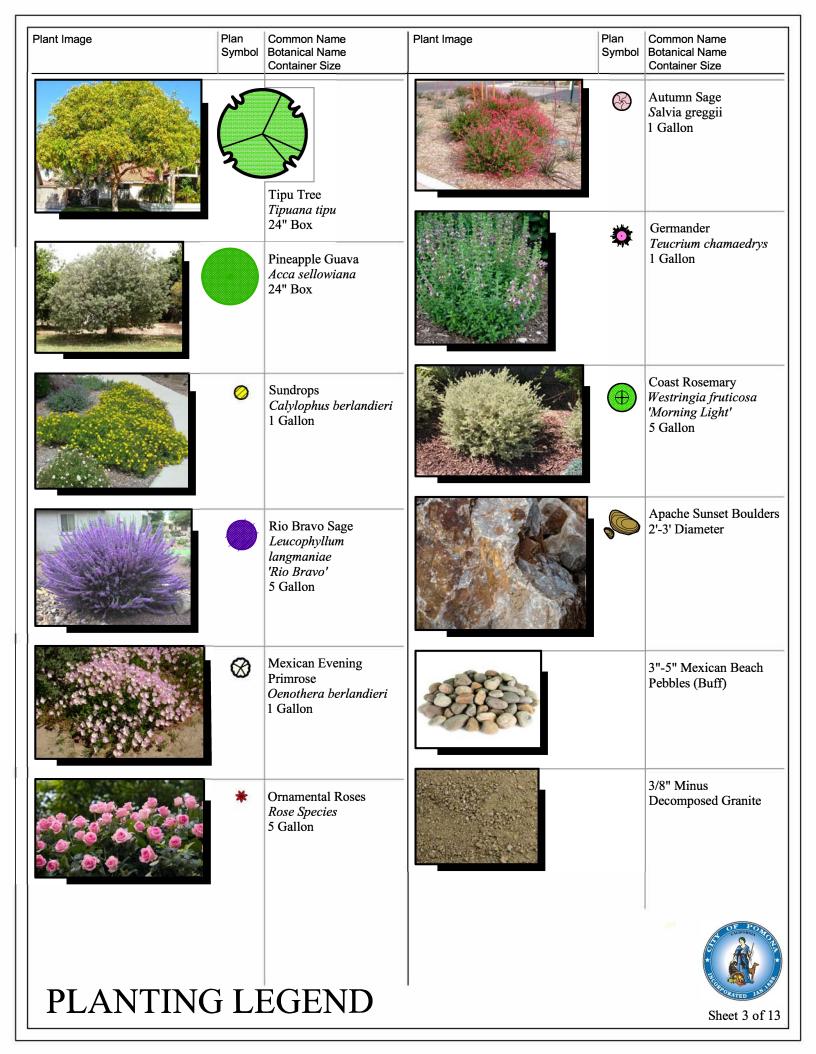


Family Gathering
Front Yard Landscape Design

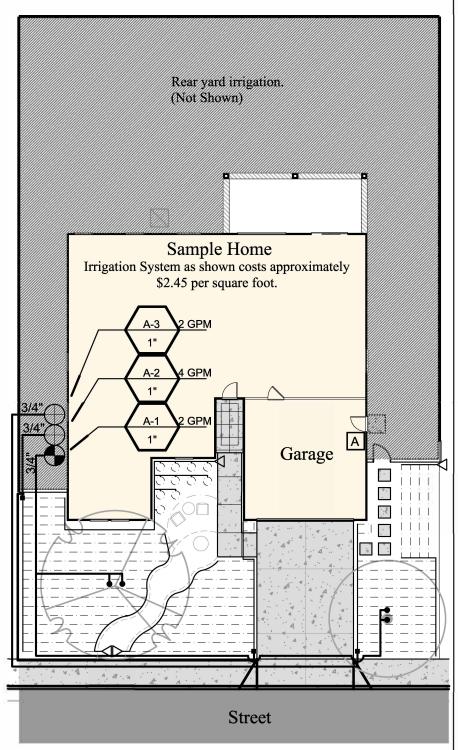


Date: 2/1/2021





#### Irrigation Legend: Plan Description Symbol **Smart Irrigation Controller** Α Replace existing irrigation controller with new smart controller. Install per manufacturers instructions. Anti-syphon Valve Drip Zone Assembly $\bigoplus$ Replace existing irrigation valves if existing valves are leaking, damaged or not properly working. Install a drip valve assembly for drip irrigation. See detail A. Electric Remote Control Anti-syphon Valve ( Replace existing irrigation valves if existing valves are leaking, damaged or not properly working. See detail B. Tree Deep Watering Bubbler Install 2 deep watering bubblers per tree. install per manufacturers instructions. See detail C. Spray to Drip Retrofit Kit Install drip retrofit kit by replacing one of the existing spray bodies located within the new planting area. Install per manufacturers instructions. Cap all other spray bodies so they do not emit water. See detail D. 17mm (5/8") Polyethylene Distribution Tubing This tubing does not have emitters installed inside the tubing. Install distribution tubing at either end of the inline drip tubing to connect the system where irrigation is not needed. 17mm (5/8") In-Line Emitter Polyethylene Tubing Install 0.6 gallon per hour drip line at 18" row spacing in all planted areas. See detail D. Drip Flush Valve Install flush valve at the end of the drip line system to flush debris out of the drip lines. Be sure to flush the system after drip line is first installed. See detail E. PVC Schedule 40 Piping & Fittings Install PVC pipe if existing irrigation piping is damaged or not usable.



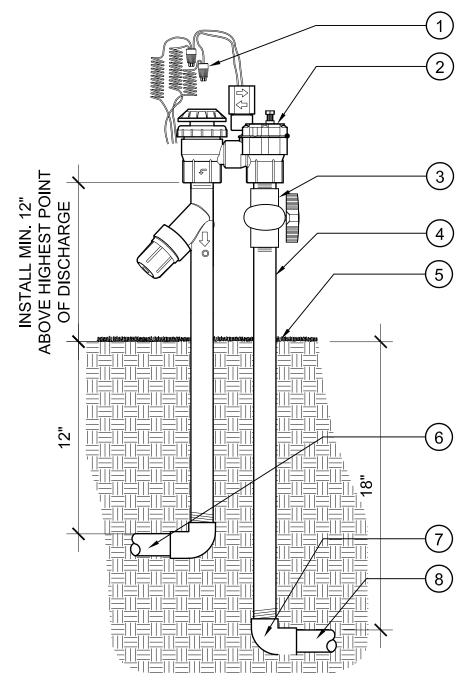
This sample irrigation concept plan is intended for general guidance only. Irrigation emission device layout, piping layout and piping sizes are based upon Landscape Concept Plan. It is intended that homeowners adapt the concept as needed for the specific conditions of their property, including choice of materials, appropriate layout and installation of materials per local codes and manufacturer's recommendations. Pomona

**IRRIGATION CONCEPT PLAN** 



Sheet 4 of 13





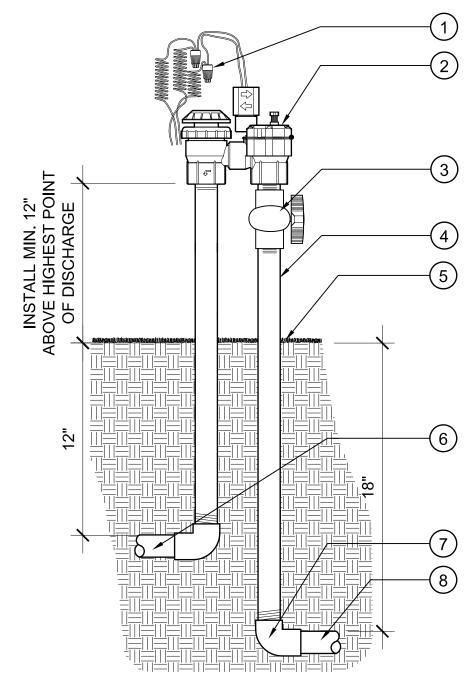
- 1 CONNECT WIRES TO VALVE USING WATER TIGHT CONNECTORS (SEE NOTES)
- (2) ELECTRIC DRIP ZONE CONTROL VALVE
- (3) SCH 40 PVC BALL VALVE (LINE SIZE)
- 4 PVC SCH. 80 NIPPLE (SIZE AS REQUIRED)
- (5) FINISH GRADE

- (6) LATERAL LINE
- 7 FIPT X SLIP ELBOW (LINE SIZE)
- (8) PRESSURE SUPPLY LINE

Scale: 1'' = 1'-0''



### IRRIGATION DETAIL A DRIP ZONE VALVE ASSEMBLY



- 1 CONNECT WIRES TO VALVE USING WATER TIGHT CONNECTORS (SEE NOTES)
- (2) ANTI SIPHON CONTROL VALVE
- (3) SCH 40 PVC BALL VALVE (LINE SIZE)
- PVC SCH. 80 NIPPLE (SIZE AS REQUIRED)
- (5) FINISH GRADE

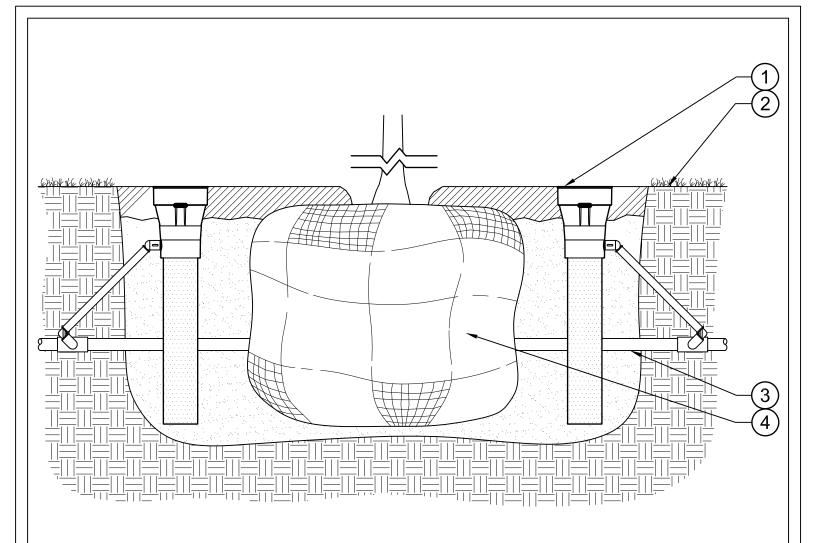
- (6) LATERAL LINE
- 7 FIPT X SLIP ELBOW (LINE SIZE)
- (8) PRESSURE SUPPLY LINE

Scale: 1'' = 1'-0''



Sheet 7 of 13

IRRIGATION DETAIL B ELECTRIC REMOTE CONTROL VALVE



- 1) TREE ROOT WATERING SYSTEM. (2 PER TREE)
- 2) FINISH GRADE
- (3) PVC LATERAL PIPE
- (4) ROOT BALL

#### NOTES:

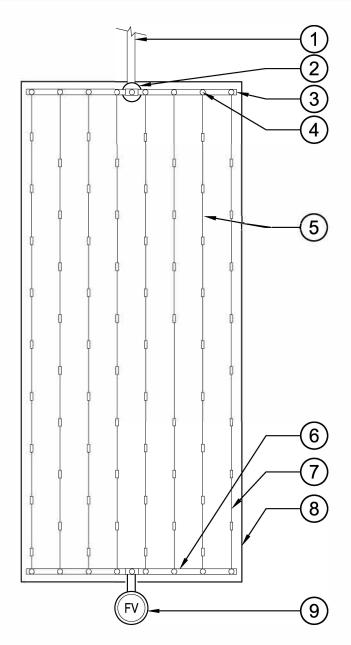
1. INSTALL SAND SOCK IN SANDY SOIL TO HELP PREVENT SOIL INTRUSION.

Scale: Not to Scale



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IRRIGATION DETAIL C TREE DEEP WATERING BUBBLER



- 1 PVC LATERAL LINE FROM ELECTRIC CONTROL VALVE
- (2) SPRAY TO DRIP RETROFIT KIT
- (3) DISTRIBUTION TUBING MANIFOLD
- 4 MANIFOLD TO ELBOW OR TEE CONNECTION
- (5) DRIP LINE EMITTER TUBING
- 6 DISTRIBUTION TUBING FLUSH MANIFOLD
- 7 PERIMETER LATERALS 12" FROM EDGE
- (8) HARDSCAPE EDGE
- MANUAL FLUSH VALVE PLUMBED TO FLUSH AT LOW POINT

#### **PLAN**

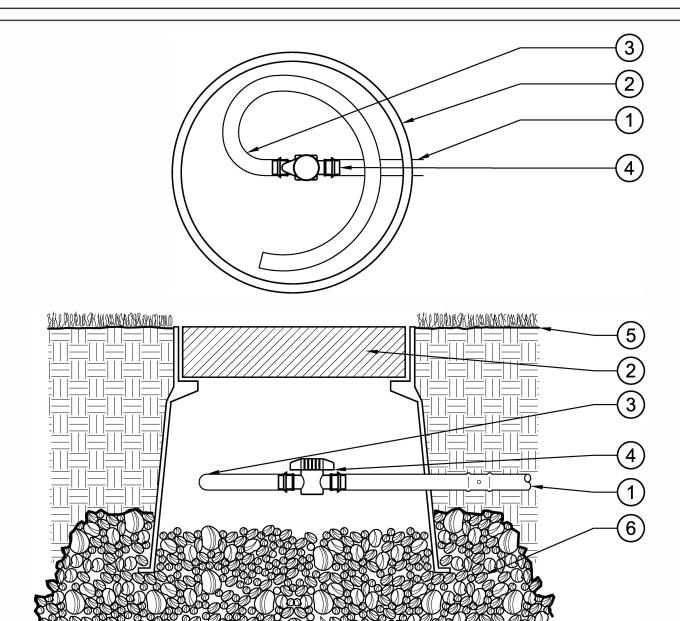
#### NOTES:

- INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- 2. THE TOTAL LENGTH OF ALL INTERCONNECTED DRIP LINE SHALL NOT EXCEED THE MAXIMUM RUN LENGTH PER MANUFACTURER'S SPECIFICATIONS.
- 3. ALL TUBING SHALL BE STAKED DOWN EVERY 36" USING DRIP TUBING STAPLES OR STAKES.
- 4. IT IS RECOMMENDED TO BURY THE DRIP TUBING 4" DEEP WHEN POSSIBLE.

### IRRIGATION DETAIL D EMITTER TUBING LAYOUT



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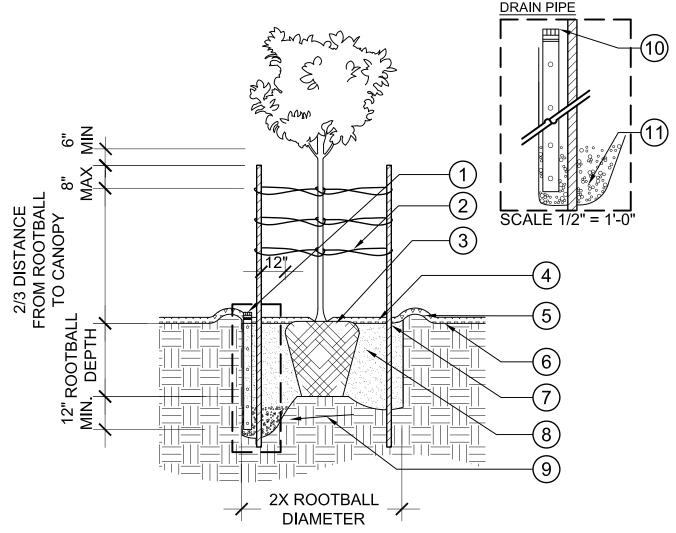
- (1) 17mm EMITTER DRIP LINE TUBING
- 2 6" 8" ROUND VALVE BOX CUT HOLE FOR TUBING
- 3 18" LENGTH OF 17mm DRIP DISTRIBUTION TUBING
- (4) DRIP TUBING ISOLATION BALL VALVE
- (5) FINISH GRADE
- 6 3/4" GRAVEL SUMP IN, UNDER AND AROUND VALVE BOX

## IRRIGATION DETAIL E MANUAL FLUSH VALVE

Scale: 3'' = 1'-0''



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- 4" PVC SCH 40 PERF. PIPE WRAPPED IN FILTER SOCK. (1 PER TREE)
- (2) (6) TREE TIES
- 3 SET TOP OF ROOTBALL 1" ABOVE FINISH GRADE
- 3" LAYER MULCH MATERIAL, PROVIDE 3" CLEARANCE FROM TRUNK
- (5) 6" HIGH WATERING BERM
- (6) FINISH GRADE

- (2) 2" DIAMETER STAKES, USE 3" DIA. STAKES IN HIGH WIND EXPOSURE AREAS
- (8) PLANTING BACKFILL
- 9 SLOPE PLANTING HOLE TO CORNER(S) WITH DRAIN PIPE
- 10 BLACK ROUND DRAIN GRATE CAP, MAX. 1" ABOVE MULCH FINISH SURFACE
- 1 CU FT. OF 3/4" DIAMETER CRUSHED ROCK FOR 15 GAL. AND 24" BOX (2 CU FT. FOR 36" BOX)

#### NOTE:

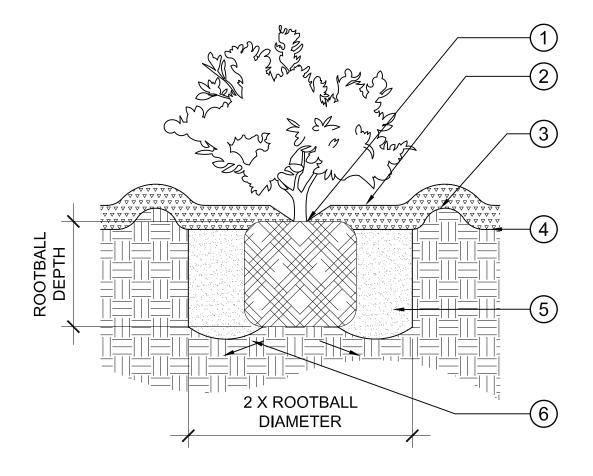
STAKE TREE PERPENDICULAR TO DIRECTION OF PREVAILING WIND.

Scale: 1/4'' = 1'-0''



Sheet 11 of 13

PLANTING DETAIL F TREE INSTALLATION



- 1 SET TOP OF ROOTBALL 1" ABOVE FINISH GRADE
- (2) 3" LAYER MULCH MATERIAL
- (3) 3" HIGH WATERING BERM

- 4) FINISH GRADE
- (5) PLANTING BACKFILL
- 6 SLOPE PLANTING HOLE TO CORNERS

Scale: 1'' = 1'-0''



Sheet 12 of 13

PLANTING DETAIL G SHRUB INSTALLATION

Opinion of Probable Costs						
PROJECT TITLE	Labor Rate:	\$30.00				
Family Gathering Spot Typical Front Landscape Design	Tax Rate:	0.0775				As of 1/18/2021
ITEM DESCRIPTION	QUANTITY	UNIT	MAT	ERIAL COSTS TOTAL MATERIALS COST	TOTAL LABOR COST	TOTAL LABOR AND MATERIALS
Irrigation	1			0001	0001	WINTER CITY (CO
Valves						
Electric control valve - 1" w/ fittings	1	EA	\$47.63	\$51.32	\$60.00	\$111.32
Drip Valve Assembly- 1"	2	EA	\$66.61	\$143.54	\$180.00	\$323.54
Standard Controllers with Sensor		LA	Ψ00.01	ψ1 <del>4</del> 3.5 <del>4</del>	Ψ100.00	Ψ020.04
Hydrawise Smart Irrigation Controller (12 station)	1	EA	\$190.90	\$205.69	\$120.00	\$325.69
Supplemental Trees Irrigation	<del>                                     </del>	L/\	ψ130.30	Ψ200.00	Ψ120.00	ψ020.00
Deep Watering Tube Bubbler Assembly	4	EA	\$39.95	\$51.80	\$180.00	\$352.18
Supplemental Drip on Grade		LA	ψυσ.συ	ψ51.00	Ψ100.00	ψ332.10
Spray to Drip Conversion Kit	3	EA	\$21.05	\$68.04	\$135.00	\$203.04
Drip Tubing Header	198	LF	\$0.20	\$42.67	\$178.20	\$220.87
In Line Drip Emitter Tubing	710	LF	\$0.50	\$382.51	\$639.00	\$1,021.51
Flush Valve Assembly w/ Valve Box	3	EA	\$8.82	\$28.51	\$135.00	\$163.51
Pipe at 12" Depth		L/\	ψ0.02	Ψ20.01	Ψ100.00	ψ100.01
Non- Pressure Lateral Line- Class 200 3/4" with fittings.	312	LF	\$0.07	\$23.53	\$936.00	\$959.53
TOTAL IRRIGATION COSTS			¥3.3.	997.63	2,563.20	3,681.21
Planting				001.00	_,000:_0	0,001.21
Tree Support						
Staking (8' long)	4	EA	\$3.25	\$14.01	\$33.00	\$47.01
4" Perf. PVC Tree Drain Tubes w/Drain Cap	2	EA	\$26.88	\$57.93	\$30.00	\$87.93
Ground Preparation				, , , , , , , , , , , , , , , , , , , ,	*	*
Clear of Existing Landscape Area and Fine Grading	1,500	SF	\$0.00	\$0.00	\$900.00	\$900.00
Mulching (Recycled Organic)	1,337	SF	\$0.20	\$288.12	\$401.10	\$689.22
Inert Material						
Boulders	19	EA	\$45.00	\$921.26	\$855.00	\$1,776.26
Cobble	113	SF	\$0.60	\$73.05	\$33.90	\$106.95
Decomposed Granite	50	SF	\$0.45	\$24.24	\$15.00	\$39.24
Miscellaneous Items						
Recirculating Fountain	1	EA	\$400.00	\$431.00	\$120.00	\$551.00
Shrubs						
1 gallon shrubs	40	EA	\$5.75	\$247.83	\$120.00	\$367.83
5 gallon shrubs	23	EA	\$10.00	\$247.83	\$172.50	\$420.33
Trees	1					
24 " box trees- multi trunk	2	EA	\$175.00	\$377.13	\$150.00	\$527.13
TOTAL PLANTING COSTS				2,682.39	2,830.50	5,512.89
TOTAL COSTS				3,680.02	5,393.70	9,194.11
PRICE PER SQUARE FEET OF LANDSCAPE	1,500	SQ.FT.		•		\$6.13

# TYPICAL IRRIGATION AND PLANTING COSTS

