WATER EFFICIENT LANDSCAPE WORKSHEET

Reference Evapotranspiration (ETo) 56.40 **ETAF for MAWA** 0.55 (Residential)

Hydrozone # /Planting Description[a]	Plant Factor (PF)	Irrigation Method[b]	Irrigation Efficiency (IE)[c]	ETAF (PF/IE)	Landscape Area (sq. ft.)	ETAF x Area	Estimated Total Water Use (ETWU)[d]
Regular Landscape Areas							
shrub zones A-1, A-2, A-9, A-10, A-11, A-13, & A-15	0.50	drip	0.81	0.62	11,787	7,276	254,425
shrub zones A-5 & A-8	0.20	drip	0.81	0.25	5,030	1,242	43,429
tree zones A-3 & A-12	0.50	drip	0.81	0.62	480	296	10,361
tree zones A-6 & A-14	0.20	drip	0.81	0.25	280	69	2,418
pool and spa	0.80	n/a	1.00	0.80	2,040	1,632	57,068
				Totals	19,617	10,515	367,700
Special Landscape Areas							
turf zones A-4 & A-7			1	4,634	4,634	162,042
(recreational active			1				
play areas)			1				
			Totals	4,634	4,634	162,042	
					ETWU Total		**529,742**
					Maximum Allowed Water Allowance (MAWA)[e]		**539,324**

[a] Hydrozone #/Planting Description
E.g.
1.) front lawn
2.) low water use plantings
3.) medium water use planting

[b] Irrigation Method
overhead spray
or drip

[c] Irrigation Efficiency
0.75 for spray head
0.81 for drip

[d] ETWU (Annual Gallons Required)
= Eto x 0.62 x ETAF x Area
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year.

[e] MAWA (Annual Gallons Allowed) = (Eto) (0.62) [(ETAF x LA) + ((1-ETAF) x SLA)]
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year, LA is the total landscape area in square feet, SLA is the total special landscape area in square feet,
and ETAF is .55 for residential areas and 0.45 for non-residential areas.

ETAF Calculations

Regular Landscape Areas

Total ETAF x Area	10,515
Total Area	19,617
Average ETAF	**0.54**

All Landscape Areas

Total ETAF x Area	15,149
Total Area	24,251
Sitewide ETAF	**0.62**

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

Eto data for city of Fontana
from city of Fontana plan check comments

8/24/16

DRIPLINE INSTALLATION NOTES

1. ALL DRIPLINE, FITTINGS, FILTERS, PRESSURE REGULATORS, AIR VACUUM RELIEF VALVES, AND FLUSH VALVES SHALL BE FURNISHED BY THE MANUFACTURER LISTED IN THE LEGEND; AND SHALL BE INSTALLED AS PER THE LEGEND, THE DETAILS, AND THE MANUFACTURERS' RECOMMENDATIONS. NO SUBSTITUTIONS WILL BE ACCEPTED.

2. DRIPLINE SHALL GENERALLY BE LAID OUT AS FOLLOWS:
   A. DRIPLINE IS INSTALLED AROUND THE ENTIRE EDGE OF THE AREA TO BE IRRIGATED.
      (1) DISTANCES FROM THE EDGE OF THE IRRIGATED AREA ARE:
         (a) 2-4" NEXT TO ASPHALT, CONCRETE PAVING, OR "HARDSCAPE".
         (b) 2-4" OUTSIDE OF UNCONTAINED LANDSCAPES.
      (2) AT CORNERS, THE DRIPLINE MAY BE CURVED, DOWN TO A MINIMUM RADIUS OF 15 INCHES. FOR CORNERS SHARPER THAN THIS, ELBOWS (OR TEES, AS APPLICABLE) SHALL BE USED.
   B. DRIPLINE IS INSTALLED THROUGHOUT THE ENTIRE AREA TO BE IRRIGATED, AND IS CONNECTED WITH TEES TO THE DRIPLINE LAID AROUND THE EDGE.
      (1) ON FLAT GROUND (LESS THAN 3%):
         (a) DRIPLINE SHALL GENERALLY RUN PARALLEL TO THE LONGEST SIDE OF THE AREA TO BE IRRIGATED.
         (b) DRIPLINES SHALL BE EVENLY SPACED AT A DISTANCE NOT TO EXCEED THE ON-CENTER (O.C.) SPACING INDICATED IN THE LEGEND.
      (2) ON SLOPES (3% OR STEEPER):
         (a) DRIPLINE SHALL GENERALLY RUN PARALLEL TO CONTOUR LINES, NOT UP AND DOWN THE SLOPE.
         (b) DRIPLINES SHALL BE SPACED AT 125% OF ON-CENTER SPACING ON THE LOWER ONE-THIRD OF THE SLOPE.
   C. THE RESULTING GRID OF DRIPLINE SHALL BE A "CLOSED LOOP" SYSTEM, EXCEPT IN NARROW AREAS WHICH ARE ONLY WIDE ENOUGH FOR ONE DRIPLINE.

3. ON LOOPED DRIPLINE SYSTEMS WITH A SINGLE POINT OF SUPPLY, THE SUPPLY CONNECTION SHALL BE MADE ON THE PERIMETER OF THE LOOP, AND THE CONNECTION SHALL BE LOCATED ON THE OPPOSITE SIDE OF THE LOOP FROM THE FLUSH VALVE.

4. THE IRRIGATION CONTRACTOR SHALL THOROUGHLY FLUSH ALL LATERALS AND DRIPLINES PRIOR TO INSTALLATION OF FLUSH VALVES AND AIR VACUUM RELIEF VALVES.

5. LOCATION OF FLUSH VALVES ON THE PLANS IS DIAGRAMMATIC ONLY. FLUSH VALVES SHALL BE LOCATED AT THE LOWEST POINT IN ELEVATION OPPOSITE THE POINT OF SUPPLY ON LOOPED DRIPLINE SYSTEMS, AND AT THE END OF THE LINE ON SINGULAR RUNS OF DRIPLINE.

6. LOCATION OF AIR VACUUM RELIEF VALVES ON THE PLANS IS DIAGRAMMATIC ONLY. AIR VACUUM RELIEF VALVES SHALL BE LOCATED AT THE HIGHEST POINT IN ELEVATION ON LOOPED OR SINGULAR DRIPLINES.

IRRIGATION NOTES

1. INSTALL ALL EQUIPMENT AS SHOWN IN THE DETAILS AND/OR AS STATED IN THE WRITTEN SPECIFICATIONS PREPARED BY THE LANDSCAPE ARCHITECT AND MANUFACTURER.

2. THIS DESIGN IS DIAGRAMMATIC. ANY EQUIPMENT SHOWN IN PAVED AREAS IS FOR DESIGN CLARIFICATION ONLY, AND IS TO BE INSTALLED WITHIN PLANTED AREAS WHEREVER POSSIBLE.

3. THE IRRIGATION CONTRACTOR SHALL NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM AS INDICATED ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS OR GRADE DIFFERENCES EXIST THAT WERE NOT KNOWN DURING DESIGN. SUCH CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE, OR THE LANDSCAPE ARCHITECT, OTHERWISE THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY NECESSARY REVISIONS.

4. THE SYSTEM DESIGN IS BASED ON THE MINIMUM OPERATING PRESSURE SHOWN AT EACH POINT OF CONNECTION. THE IRRIGATION CONTRACTOR SHALL VERIFY ALL PRESSURES ON SITE PRIOR TO COMMENCING WITH THE INSTALLATION OF THE IRRIGATION SYSTEM.

5. FINAL LOCATION OF AUTOMATIC CONTROLLER TO BE DETERMINED BY THE OWNER'S AUTHORIZED REPRESENTATIVE AND/OR THE LANDSCAPE ARCHITECT.

6. 117 VOLT 60HZ SINGLE PHASE ELECTRICAL POWER OUTLET FOR THE IRRIGATION CONTROLLER IS TO BE PROVIDED BY THE OWNER/DEVELOPER. THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING THE HOOK-UP FROM THE POWER OUTLET TO THE CONTROLLER.

7. ALL WIRE FROM THE CONTROLLER TO THE ELECTRIC CONTROL VALVES SHALL BE #14 AWG-UF DIRECT BURIAL COPPER WIRE. PILOT WIRES SHALL BE COLOR CODED BY CONTROLLER AND COMMON GROUND WIRES SHALL BE WHITE WITH IDENTIFYING COLOR STRIPE CODED FOR EACH CONTROLLER. CONTRACTOR SHALL INSTALL (1) EXTRA COLOR CODED COMMON AND (1) EXTRA PILOT WIRE FROM THE CONTROLLER TO THE FARTHEST VALVE(S) FOR FUTURE USE. INSTALL IN COMMON TRENCH WITH MAIN LINE PIPING WHEREVER POSSIBLE. FASTEN WIRES TO UNDERSIDE OF MAIN LINE WITH NYLON WIRE TIES AT 10 FT. INTERVALS. PROVIDE A MINIMUM OF 18" OF COVER WHEN NOT ADJACENT TO MAIN LINE.

8. ALL WIRE CONNECTIONS SHALL BE MADE IN VALVE BOXES WITH APPROVED WATERPROOF WIRE CONNECTORS. WIRE SPLICES WILL NOT BE PERMITTED UNLESS APPROVED BY THE OWNER'S AUTHORIZED REPRESENTATIVE, OR THE LANDSCAPE ARCHITECT. WIRE SPLICES SHALL BE LOCATED ON RECORD DRAWINGS AS PER SPECIFICATIONS.

9. PROVIDE A MINIMUM OF 24" OF COVER OVER ALL PRESSURE MAIN LINE PIPING 3" AND LARGER, 18" OF COVER OVER ALL OTHER PRESSURE MAIN LINE PIPING, AND 12" OVER ALL NON-PRESSURE LATERAL LINE PIPING. PROVIDE A MINIMUM OF 36" COVER OVER ALL SLEEVES UNDER STREETS AND VEHICULAR TRAFFIC AREAS. ALL MAIN LINE PIPING UNDER PAVED AREAS SHALL BE INSTALLED IN SCH. 40 PVC SLEEVES. ALL SLEEVES SHALL BE INSTALLED UNDER PAVED AREAS PRIOR TO PAVING.

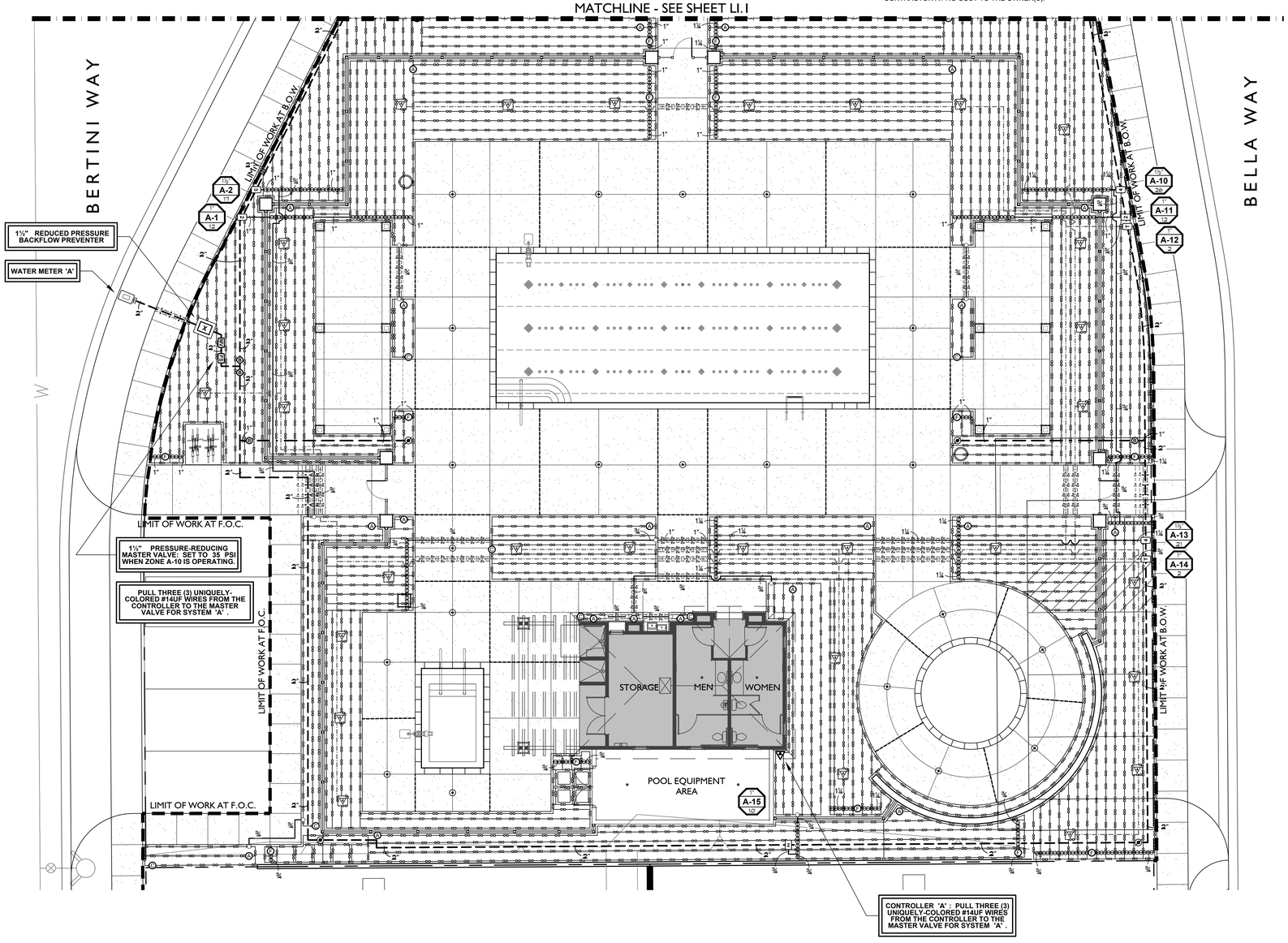
10. THE IRRIGATION CONTRACTOR SHALL FLUSH ALL LINES AND ADJUST ALL HEADS FOR MAXIMUM PERFORMANCE AND TO PREVENT OVERSPRAY ONTO ALL WALKS, WALLS, FENCES, DRIVES, AND BUILDINGS AS MUCH AS POSSIBLE. THIS WORK SHALL INCLUDE SELECTING THE BEST DEGREE OF ARC TO FIT ANY EXISTING SITE CONDITIONS.

11. THE IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ANTI-DRAIN VALVES AS REQUIRED BY FIELD CONDITIONS TO PREVENT DAMAGE AND EROSION DUE TO EXCESSIVE LOW HEAD RUNOFF.

12. UPON COMPLETION OF THE JOB, THE CONTRACTOR IS TO PROVIDE THE OWNER WITH A SEPIA MYLAR OF THE RECORD IRRIGATION PLANS.

13. THE SYSTEM SHALL BE FULLY GUARANTEED FOR A PERIOD OF ONE YEAR. ANY DEFECTIVE MATERIAL OR POOR WORKMANSHIP SHALL BE REPLACED OR CORRECTED BY THE IRRIGATION CONTRACTOR AT NO COST TO THE OWNER(S).

MATCHLINE - SEE SHEET LI.1



IRRIGATION LEGEND

UNDERGROUND TREE BUBBLERS

RAIN BIRD	RWS-B-C-1401 w/ RWS SOCK	BUBBLER		REMARKS	20-90 PSI
SYMBOL	DESCRIPTION	NOZZLE	GPM	EACH SYMBOL REPRESENTS 1 TREE & 2 'RWS' SYSTEMS	DETAIL
	PRE-ASSEMBLED DEEP ROOT WATERING SYSTEM	1401	0.25 (each)	**INSTALL 2 'RWS' SYSTEMS FOR EACH TREE SYMBOL**	F-53

RAIN BIRD	RWS-B-C-1401 w/ RWS SOCK	BUBBLER **		REMARKS	5-50 PSI
SYMBOL	DESCRIPTION	TORO **	GPH	EACH SYMBOL REPRESENTS 1 TREE & 2 'RWS' SYSTEMS	DETAIL
	PRE-ASSEMBLED DEEP ROOT WATERING SYSTEM	LF40-PC	4.0 (each)	**INSTALL 2 'RWS' SYSTEMS FOR EACH TREE SYMBOL**	F-53

**** IMPORTANT: THE CONTRACTOR SHALL REMOVE ALL RAIN BIRD #1401 0.25 GPM BUBBLERS IN THESE DEEP ROOT WATERING SYSTEMS AND REPLACE WITH TORO #LF-40PC 4.0 GPH BUBBLERS PRIOR TO INSTALLATION.**

8/2/16

DRIP IRRIGATION

SYMBOL	MFR.	MODEL NUMBER	COLOR	DESCRIPTION	EMITTERS	GPH.	GPM.	PSI.	DETAIL
	TORO	RGP-212	BLACK	DL2000 PRESSURE COMP. DRIPLINE w/ ROOTGUARD (FACTORY PRE-ASSEMBLED)	12" O.C.	0.53 GPH.	0.88 / 100'	15 - 60	H-1, H-11
					INSTALL ROWS AT 12" O.C. THROUGHOUT TURF AREAS INSTALL DRIPLINE 4" BELOW FINISH GRADE IN TURF AREAS				
	TORO	RGP-418	BLACK	DL2000 PRESSURE COMP. DRIPLINE w/ ROOTGUARD (FACTORY PRE-ASSEMBLED)	18" O.C.	1.02 GPH.	1.13 / 100'	15 - 60	H-1, H-11
					INSTALL ROWS AT 18" O.C. THROUGHOUT SHRUB AREAS INSTALL DRIPLINE 6" BELOW FINISH GRADE IN SHRUB AREAS				
	TORO	T-EHD1645	BLACK	BLUE STRIPE BLANK DRIPLINE TUBING	USE AS NEEDED FOR AIR/VACUUM RELIEF LATERAL LINES				H-21
	TORO	T-FTF16		DRIPLINE ADAPTER TEE (1/2" FIPT x DRIPLINE)	FOR AREAS <4 GPM., USE ONE PVC FILL RISER ("EDGE FEED")				H-2
	TORO	T-FTF16		DRIPLINE ADAPTER TEE (1/2" FIPT x DRIPLINE)	FOR AREAS >4 GPM., USE A PVC MANIFOLD OF FILL RISERS				H-12, H-13
	TORO	T-FJ216		MANUAL FLUSH CAP (DRIPLINE x 3/4" MHT w/ CAP)					H-3
	TORO KING BROS.	T-FJ216 WLT-S		MANUAL FLUSH CAP (3/4" FHT) w/ SCH. 40 PVC BALL VALVE (SLIP)	CAP ONLY; THE DRIPLINE INSERT FITTING IS NOT USED 3/4"				H-15
	TORO	T-YD-500-34		AIR VACUUM RELIEF VALVE (1/2" MIPT)	INSTALL IN #T-FTF16 TEE IN A 6" ROUND VALVE BOX				H-20, H-21
	KING BROS. TORO	KC2-0500-T T-YD-500-34		DRIPLINE TUBING SPRING CHECK VALVE w/ AIR RELIEF SCH. 40 PVC SPRING CHECK VALVE (FIPT x FIPT) AIR VACUUM RELIEF VALVE (1/2" MIPT)	CHECKS 2 PSI. (4 FT. OF HEAD 1/2"; INSTALL IN-LINE w/ 2 #T-FAM16 MALE ADAPTERS INSTALL IN #T-FTF16 TEE IN A 6" ROUND VALVE BOX				H-22
(no symbol)	TORO	T-DL-MP9		POP-UP OPERATION INDICATOR	INSTALL 1 ON EACH DRIPLINE ZONE, AT THE CONTROL VALVE				

8/24/16

DISTRIBUTION & CONTROL EQUIPMENT

SYMBOL	MFR.	MODEL NUMBER	DESCRIPTION	REMARKS	DETAIL
A	HUNTER HUNTER STRONG BOX	IC-1800-SS WSS-SEN SRSE	I-CORE CONTROLLER 'A' w/ STAINLESS CABINET WIRELESS SOLAR-SYNC SENSOR SOLAR SYNC COVER	18 STA. (w/ 2 ICM-600 MODULES), WALL MOUNT INSTALL ONE FOR EACH CONTROLLER PER MFR. INSTALL ONE FOR EACH SOLAR-SYNC	B-3 B-21
B	HUNTER HUNTER STRONG BOX	IC-600-PED-SS WSS-SEN SRSE	I-CORE CONTROLLER 'B' w/ STAINLESS PEDESTAL WIRELESS SOLAR-SYNC SENSOR SOLAR SYNC COVER	6 STA., PEDESTAL MOUNT INSTALL ONE FOR EACH CONTROLLER PER MFR. INSTALL ONE FOR EACH SOLAR-SYNC	B-10 B-21
FS	CREATIVE SENSOR TECHNOLOGY	FSI-TI10-000	FLOW SENSOR in SCH. 40 PVC TEE (SLIP x SLIP)	1", 240 PSI. MAX., 0.86-52 GPM. FLOW INSTALL IN SEPARATE 12"x18" VALVE BOX; MAIN LINE SHALL BE 1" DIA. FOR 10" UPSTREAM & 5" DOWNSTREAM OF TEE	A-21, C-43
X	FEBCO STRONG BOX	825YA-BV SBBC-22SS	REDUCED PRESSURE BACKFLOW PREVENTER "SMOOTH TOUCH" BACKFLOW PREVENTER ENCLOSURE	1-1/2" 20" L., 27" H., 14" W. (INSIDE DIMENSIONS)	C-20 C-31
MV	GRISWOLD GRISWOLD	2230E (normally closed,epoxy coated) 2-2AA	PRESSURE REDUCING MASTER VALVE (10-125 PSI.) WATER PRESSURE GAUGE KIT	1-1/2", SETTINGS NOTED REMOVE SCHRADER VALVE & REPLACE w/ KIT	A-21, C-40
	NIBCO	T-580	BRONZE BALL VALVE (THREADED)	LINE SIZE. TO 3" MAX.	D-1
	HUNTER	ICV	0.25 GPM. TREE BUBBLER ZONE CONTROL VALVE	1", w/ FLOW CONTROL	A-21, E-10
1	HUNTER TORO	ICV T-ALFD75150-L	4 GPM. TREE BUBBLER ZONE CONTROL VALVE DISC Y-FILTER	1", w/ FLOW CONTROL 3/4", 150 MESH, 0 - 25 GPM.	A-21, E-12
1	HUNTER TORO SENNINGER	ICV T-ALFD75150-L PRL-20	DRIP ZONE CONTROL VALVE w/ FILTER & REGULATOR: DISC Y-FILTER PRESSURE REGULATOR	1", w/ FLOW CONTROL 3/4", 150 MESH, 0 - 25 GPM. 20 PSI. @ 0.1 - 8 GPM., 3/4" FIPT	A-21, E-13
2	HUNTER TORO SENNINGER	ICV T-ALFD10150-L PMR-MF-20	DRIP ZONE CONTROL VALVE w/ FILTER & REGULATOR: DISC Y-FILTER PRESSURE REGULATOR	1", w/ FLOW CONTROL 1", 150 MESH, 0 - 35 GPM. 20 PSI. @ 2 - 20 GPM., 3/4" FIPT	A-21, E-13
3	HUNTER TORO SENNINGER	ICV T-ALFD10150-L PR-HF-20	DRIP ZONE CONTROL VALVE w/ FILTER & REGULATOR: DISC Y-FILTER PRESSURE REGULATOR	1-1/2", w/ FLOW CONTROL 1", 150 MESH, 0 - 35 GPM. 20 PSI. @ 10 - 32 GPM., 1-1/4" FPT x 1" FPT	A-21, E-13
4	HUNTER TORO SENNINGER	ICV T-ALFD15150-L PR-HF-20	DRIP ZONE CONTROL VALVE w/ FILTER & REGULATOR: DISC Y-FILTER PRESSURE REGULATOR	1-1/2", w/ FLOW CONTROL 1-1/2", 150 MESH, 0 - 80 GPM 20 PSI. @ 10 - 32 GPM., 1-1/4" FPT x 1" FPT	A-21, E-13
	RAIN BIRD	33DLRC	QUICK-COUPLING VALVE w/ YELLOW RUBBER COVER	FOR POTABLE WATER, 3/4", LOCKING COVER	D-10
	(APPROVED) (APPROVED)	SCH. 40 PVC CL. 315 PVC	PRESSURE MAIN LINE (POTABLE WATER SOURCE): 1-1/2" DIAMETER AND SMALLER 2" DIAMETER TO 3" DIAMETER	FOR UNDERGROUND INSTALLATION SIZES NOTED SIZES NOTED	A-1
	(APPROVED)	CL. 200 PVC	NON-PRESSURE LATERAL LINE (POTABLE SOURCE)	FOR UNDERGROUND INSTALLATION; SIZES NOTED (3/4" MIN.)	A-1
	(APPROVED)	CL. 200 PVC	NON-PRESSURE LATERAL LINE (POTABLE SOURCE)	3/4"; FOR ALL TREE BUBBLER ZONE LATERAL LINES	A-1
	(APPROVED)	SCH. 40 PVC	MAIN LINE SLEEVE	DIAMETER AS NOTED IN THE SLEEVE SYMBOL ON THE PLAN	A-3
	(APPROVED)	SCH. 40 PVC	LOW VOLTAGE CONTROL WIRE SLEEVE	DIAMETER AS NOTED IN THE SLEEVE SYMBOL ON THE PLAN	A-3, A-20
	(APPROVED)	SCH. 40 PVC	LATERAL LINE SLEEVE	SIZE: TWO TIMES THE SIZE OF THE LINE BEING SLEEVED	A-3

SYMBOL	DESCRIPTION	REMARKS
	WATER METER	**1-1/2"** POTABLE WATER METER (BY OTHERS) (WATER METERS ARE INSTALLED UNDER SEPARATE CONTRACT PER THE STREET and/or WATER IMPROVEMENT PLANS)
	POINT OF CONNECTION (P.O.C.) FOR IRRIGATION SYSTEM	CONNECT TO CUSTOMER SERVICE SHUT-OFF VALVE (INSTALLED BY OTHERS) ON OUTLET OF WATER METER. METER LOCATIONS ARE APPROXIMATE -- IRRIGATION CONTRACTOR SHALL VERIFY IN THE FIELD.
	SCHEDULE 40 PVC CAP	CAP PIPE FOR FUTURE USE. MARK LOCATION ON SITE. NOTE LOCATION ON RECORD DRAWINGS USING MEASUREMENTS FROM FIXED OBJECTS.
SIZE STA.# GPM	INDICATES CONTROL VALVE SIZE INDICATES CONTROLLER STATION NUMBER INDICATES FLOW IN GALLONS PER MINUTE	

8/2/16

THIS DESIGN IS DIAGRAMMATIC. ANY EQUIPMENT SHOWN IN PAVED AREAS IS FOR DESIGN CLARIFICATION ONLY, AND IS TO BE INSTALLED WITHIN PLANTED AREAS WHEREVER POSSIBLE.

WHENEVER ANY ITEM OF "DISTRIBUTION & CONTROL EQUIPMENT" IS SIZED SMALLER THAN THE MAIN LINE OR LATERAL LINE PIPING ON WHICH IT IS PLACED, THE REDUCTION IN PIPE SIZE SHALL ONLY OCCUR AT THE THREADED FITTING WHICH ADAPTS THE PIPE TO THE PIECE OF EQUIPMENT.

FRICTION LOSS CALCULATION	
WATER METER REF. NO.:	A
VALVE STATION NO.:	A-4
HEAD / BUBBLER / EMITTER	20.00
LATERAL LINE & FITTINGS	1.01
PRESSURE REGULATOR	5.00
FILTER	2.52
MIN. RCV PRV DIFFERENTIAL	
CONTROL VALVE	1.50
PRESSURE MAIN LINE	1.23
FLOW SENSOR	0.13
PRESSURE REDUCER	1.18
BACKFLOW PREVENTER	11.40
STRAINER / FILTER	
WATER METER	1.60
SERVICE LINE	0.18
ELEVATION DIFFERENCE	2.60
CONTINGENCY	
MINIMUM PSI. REQ'D.	48.35
(EXISTING PSI.)	-58.00
RESIDUAL PSI.	9.65

6/2/16

FRICTION LOSS CALCULATION	
WATER METER REF. NO.:	A
VALVE STATION NO.:	A-8
HEAD / BUBBLER / EMITTER	20.00
ADV	
LATERAL LINE & FITTINGS	0.24
PRESSURE REGULATOR	5.00
FILTER	1.60
MIN. RCV PRV DIFFERENTIAL	
CONTROL VALVE	1.50
PRESSURE MAIN LINE	0.86
FLOW SENSOR	0.10
PRESSURE REDUCER	1.00
BACKFLOW PREVENTER	11.20
STRAINER / FILTER	
WATER METER	0.80
SERVICE LINE	0.09
ELEVATION DIFFERENCE	3.47
CONTINGENCY	2.29
MINIMUM PSI. REQ'D.	48.15
(EXISTING PSI.)	-58.00
RESIDUAL PSI.	9.85

8/23/16

FRICTION LOSS CALCULATION	
WATER METER REF. NO.:	A
VALVE STATION NO.:	A-10
HEAD / BUBBLER / EMITTER	20.00
ADV	
LATERAL LINE & FITTINGS	1.35
PRESSURE REGULATOR	5.00
FILTER	2.29
MIN. RCV PRV DIFFERENTIAL	
CONTROL VALVE	1.50
PRESSURE MAIN LINE	1.42
FLOW SENSOR	0.13
PRESSURE REDUCER	1.06
BACKFLOW PREVENTER	11.30
STRAINER / FILTER	
WATER METER	1.40
SERVICE LINE	0.15
ELEVATION DIFFERENCE	1.73
CONTINGENCY	2.37
MINIMUM PSI. REQ'D.	49.70
(EXISTING PSI.)	-58.00
RESIDUAL PSI.	8.30

8/23/16

WATER SERVICE INFORMATION	WATER METER REF. NO. 'A'
TYPE OF SOURCE:	POTABLE
SERVICE LINE SIZE **:	2"
WATER METER SIZE **:	1½"
(** PER STREET and/or WATER IMPROVEMENT PLANS)	
METER ADDRESS:	BERTINI WAY
METER STATION POINT:	BERTINI WAY
EXISTING WATER PRESSURE:	58 PSI.
MINIMUM OPERATING PRESSURE:	50 PSI.
PEAK IRRIGATION DEMAND:	28 GPM.

0 4' 8' 16'
SCALE: 1/8" = 1'-0" NORTH

Issued For:

06.1.16	1ST CITY SUBMITTAL
6.21.2016	CLIENT REVISIONS
8.24.2016	2ND CITY SUBMITTAL

Revisions:

1

MJS LANDSCAPE ARCHITECTURE
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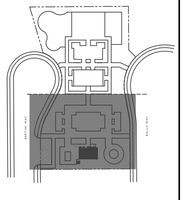
Newport Beach, CA 92663
949.675.9964
mjs-la.com

PROJECT:
SUMMIT PARK and RECREATION AREA TR 18825 LOT 'D' & LOT 'A' PARK H.O.A.
Fontana, CA

CLIENT:
STRATHAM HOMES
2210 Dupont Drive, Suite 300
Irvine, CA
92612

STAMP:
LICENSED LANDSCAPE ARCHITECT MARIANNA SCHAFTINGER 3237 Signature 03-31-18 Expiration Date 08-24-16 STATE OF CALIFORNIA



KEY MAP

Drawn By: WRD
Checked By: MJS
Plan Date: AUGUST 24, 2016
Scale: 1/8" = 1'-0"

Title:
IRRIGATION PLAN

Sheet No.:
LI.2

Plan Status:
2nd CITY SUBMITTAL

SUMMIT TR 18825/ 18825-1/ 18915 FONTANA