



**WATER SERVICE INFORMATION** WATER METER REF. NO. 'A'  
 TYPE OF SOURCE: POTABLE  
 SERVICE LINE SIZE \*\*: 2"  
 WATER METER SIZE \*\*: 2"  
 BACKFLOW PREVENTER SIZE \*\*: 2"  
 (\*\* PER STREET and/or WATER IMPROVEMENT PLANS)  
 METER ADDRESS: TRADEWINDS DRIVE  
 METER STATION POINT: TRADEWINDS DRIVE  
 EXISTING WATER PRESSURE: 77 - 80 PSI  
 MINIMUM OPERATING PRESSURE: 68 PSI  
 PEAK IRRIGATION DEMAND: 45 GPM

**IRRIGATION LEGEND**

**TREE BUBBLERS**

RAIN BIRD	RWS-B-C-1401-P w/ RWS SOCK & PURPLE GRATE	BUBBLER	REMARKS	30 PSI
SYMBOL	DESCRIPTION	NOZZLE	GPM	EACH SYMBOL REPRESENTS 1 TREE & 2 RWS SYSTEMS
	PRE-ASSEMBLED DEEP ROOT WATERING SYSTEM	1401	0.25 (each)	INSTALL 2 RWS SYSTEMS FOR EACH TREE SYMBOL

**OVERHEAD IRRIGATION**

HUNTER	PROS-06-PRS40-CV-R 6" POP-UP SPRINKLER HEAD	45°-105°	90°-210°	210°-270°	360°	40 PSI
NOZZLE	DESCRIPTION	COLOR	RADIUS	T	GPM	DETAIL
HUNTER	MP ROTATOR 1000 (female)	MAROON / LT.BLUE / OLIVE	8 - 14'		0.4	0.6

**HUNTER I-20 MPR-25 (RED) MATCHED PRECIPITATION RATE NOZZLES 35 PSI**

ROTOR	MODEL NO.	RADIUS	Q	GPM	RADIUS	T	GPM	RADIUS	H	GPM	RADIUS	F	GPM	DETAIL
6" POP-UP	I-20-06-R	18 - 24'	Ⓞ	0.9	18 - 24'	Ⓟ	1.2	18 - 24'	Ⓢ	1.7	18 - 24'	Ⓣ	3.3	F-14

**HUNTER I-20 MPR-30 (GREEN) MATCHED PRECIPITATION RATE NOZZLES 35 PSI**

ROTOR	MODEL NO.	RADIUS	Q	GPM	RADIUS	T	GPM	RADIUS	H	GPM	RADIUS	F	GPM	DETAIL
6" POP-UP	I-20-06-R	23 - 30'	Ⓢ	1.2	23 - 30'	Ⓣ	1.6	23 - 30'	Ⓤ	2.6	23 - 30'	Ⓥ	5.1	F-14

**HUNTER I-20 MPR-35 (BEIGE) MATCHED PRECIPITATION RATE NOZZLES 35 PSI**

ROTOR	MODEL NO.	RADIUS	Q	GPM	RADIUS	T	GPM	RADIUS	H	GPM	RADIUS	F	GPM	DETAIL
6" POP-UP	I-20-06-R	28 - 34'	Ⓥ	1.7	28 - 34'	Ⓤ	2.2	28 - 34'	Ⓥ	3.3	28 - 34'	Ⓥ	6.6	F-14

**DRIP IRRIGATION**

SYMBOL	MFR.	MODEL NUMBER	COLOR	DESCRIPTION	EMITTERS	GPH.	GPM.	PSI	DETAIL
	TORO	RGF-212-E	PURPLE	DL2000 PRESSURE COMP. DRIPLINE w/ ROOTGUARD	12" O.C.	0.53 GPH.	0.86 / 100'	15 - 60	H-30, H-31
	TORO	RGF-218-E	PURPLE	DL2000 PRESSURE COMP. DRIPLINE w/ ROOTGUARD (FACTORY PRE-ASSEMBLED)	18" O.C.	0.53 GPH.	0.59 / 100'	15 - 60	H-13
	TORO	T-EHP1645	PURPLE	BLUE STRIPE BLANK DRIPLINE TUBING	1/2" MPT x DRIPLINE				PER MFR.
	TORO	T-FAM16		1" O.C.-EZE PVC TO DRIPLINE MALE ADAPTER					H-30
	TORO	T-FTV16		1" O.C.-EZE PVC TO DRIPLINE ADAPTER TEE					H-13, H-31
	TORO	T-YD-500-34		AIR VACUUM RELIEF VALVE (1/2" MPT)					H-14, 30, 31
	(APPROVED)			SCH. 40 PVC BALL VALVE (THREADED) FOR MANUALLY FLUSHING DRIPLINES					D-4
(no symbol)	TORO	T-DL-MP9		POP-UP OPERATION INDICATOR					INSTALL 1 ON EACH DRIPLINE ZONE, AT THE CONTROL VALVE

**DISTRIBUTION & CONTROL EQUIPMENT**

SYMBOL	MFR.	MODEL NUMBER	DESCRIPTION	REMARKS	DETAIL
	JOHN DEERE	SAG-RM3-24 / 2YR / PMR-CAC / GRN-TECH	CONTROLLER SATELLITE ASSEMBLY 'A'	PRE-ASSEMBLED; INCLUDES 5-YEAR WARRANTY CONTACT ANSON BEATTIE AT (949) 456-1046 FOR BIDDING AND ORDERING ASSISTANCE STAINLESS STEEL TOP ENTRY ENCLOSURE "QUICK PAD" PRE-FORMED SUPPORT BASE 24 STATION	B-12
			CONSISTING OF THE ITEMS LISTED BELOW: SB-16SS GP-16 EAGLE I-CENTRAL CONTROLLER PERMANENTLY MOUNTED REMOTE RECEIVER 2 ADDITIONAL YEARS OF SERVICE GROUNDING ROD KIT #3200RW ELECTRIC MASTER VALVE #FSH-T10-000 FLOW SENSOR in SCH. 40 PVC TEE		B-12
(no symbol)	RAINMASTER	EV-CAB-SEN	2 CONDUCTOR DIRECT BURIAL SHIELDED CABLE	INSTALL IN 1-1/4" SCH. 40 PVC ELECTRICAL CONDUIT	A-21, C-40 A-21, C-43 A-21, C-43

SYMBOL	MFR.	MODEL NUMBER	DESCRIPTION	REMARKS	DETAIL
	FEBCO	825YA-BV-S	REDUCED PRESSURE BACKFLOW PREVENTER	2" w/ STAINLESS STEEL SCREEN Y-STRAINER	C-20
	STRONG BOX	SB80-30SS	"SMOOTH TOUCH" BACKFLOW PREVENTER ENCLOSURE	28" L. 27" H. 14" W. (INSIDE DIMENSIONS)	C-31
	WILKINS	500	PRESSURE REDUCING VALVE (25-75 PSI RANGE)	2", SETTINGS NOTED	D-3
	NBCO	T-580	BRONZE BALL VALVE (THREADED)	LINE SIZE, TO 3" MAX.	D-1
	SUPERIOR	950 DW	ELECTRIC CONTROL VALVE	SIZES NOTED, w/ FLOW CONTROL	A-21, E-10
	RAIN BIRD	XDZ-150-PRB-COM	DRIP ZONE VALVE KIT w/ PRESSURE REGULATING FILTER	1-1/2", 200 MESH, 15 - 40 GPM, 40 PSI	A-21, E-12
	RAIN BIRD	XDZ-100-PRB-R	DRIP ZONE VALVE KIT w/ PRESSURE REGULATING FILTER	1", 200 MESH, 3 - 20 GPM, 40 PSI	A-21, E-12
	RAIN BIRD	XDZ-075-PRF	DRIP ZONE VALVE KIT w/ PRESSURE REGULATING FILTER	3/4", 200 MESH, 0.20 - 5 GPM, 40 PSI	A-21, E-12
	RAIN BIRD	33 DNP w/ PURPLE COVER	QUICK-COUPLING VALVE w/ PURPLE RUBBER COVER	FOR RECYCLED WATER, 3/4", LOCKING COVER	D-10

SYMBOL	MFR.	MODEL NUMBER	DESCRIPTION	REMARKS	DETAIL
	(APPROVED)	SCH. 40 PVC (PURPLE)	PRESSURE MAIN LINE (RECYCLED WATER SOURCE): 2 1/2" DIAMETER AND SMALLER	FOR UNDERGROUND INSTALLATION SIZES NOTED	A-1
	(APPROVED)	SCH. 40 PVC (PURPLE)	NON-PRESSURE LATERAL LINE (RECYCLED SOURCE)	FOR UNDERGROUND INSTALLATION; SIZES NOTED (3/4" MIN.)	A-1
	(APPROVED)	SCH. 40 PVC (PURPLE)	NON-PRESSURE LATERAL LINE (RECYCLED SOURCE)	FOR TREE BUBBLER LATERAL LINES; SIZES NOTED (3/4" MIN.)	A-1
	(APPROVED)	SCH. 40 PVC	MAIN LINE SLEEVE	4" DIAMETER EACH	A-3
	(APPROVED)	SCH. 40 PVC	LOW VOLTAGE CONTROL WIRE SLEEVE	2" DIAMETER EACH	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	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 OUTLET OF WATER METER. METER LOCATIONS ARE APPROXIMATE -- IRRIGATION CONTRACTOR SHALL VERIFY IN THE FIELD.
	INDICATES CONTROL VALVE SIZE	ALL VALVE BOXES FOR DISTRIBUTION & CONTROL EQUIPMENT SHALL HAVE PURPLE LIDS.
	INDICATES CONTROLLER STATION NUMBER	
	INDICATES FLOW IN GALLONS PER MINUTE	

**FRICITION LOSS CALCULATION**

WATER METER REF. NO.:	A
VALVE STATION NO.:	A-13
HEAD / BUBBLER / EMITTER ADV	35.00
LATERAL LINE & FITTINGS	2.54
PRESSURE REGULATOR FILTER	
MIN. RCV PRV DIFFERENTIAL CONTROL VALVE	1.89
PRESSURE MAIN LINE	4.14
FLOW SENSOR	0.20
PRESSURE REDUCER	6.59
BACKFLOW PREVENTER	11.60
STRAINER / FILTER	0.45
WATER METER	0.80
SERVICE LINE	0.19
ELEVATION DIFFERENCE CONTINGENCY	
MINIMUM PSI. REQD. (EXISTING PSI.)	63.40
RESIDUAL PSI.	-77.00
	13.60

**FRICITION LOSS CALCULATION**

WATER METER REF. NO.:	A
VALVE STATION NO.:	A-16
HEAD / BUBBLER / EMITTER ADV	35.00
LATERAL LINE & FITTINGS	3.02
PRESSURE REGULATOR FILTER	
MIN. RCV PRV DIFFERENTIAL CONTROL VALVE	2.27
PRESSURE MAIN LINE	5.65
FLOW SENSOR	0.22
PRESSURE REDUCER	7.42
BACKFLOW PREVENTER	11.70
STRAINER / FILTER	0.55
WATER METER	0.90
SERVICE LINE	0.22
ELEVATION DIFFERENCE CONTINGENCY	0.43
MINIMUM PSI. REQD. (EXISTING PSI.)	67.38
RESIDUAL PSI.	-77.00
	9.62

**FRICITION LOSS CALCULATION**

WATER METER REF. NO.:	A
VALVE STATION NO.:	A-21
HEAD / BUBBLER / EMITTER ADV	35.00
LATERAL LINE & FITTINGS	0.84
PRESSURE REGULATOR FILTER	
MIN. RCV PRV DIFFERENTIAL CONTROL VALVE	10.20
PRESSURE MAIN LINE	2.74
FLOW SENSOR	0.12
PRESSURE REDUCER	3.53
BACKFLOW PREVENTER	11.30
STRAINER / FILTER	1.70
WATER METER	0.50
SERVICE LINE	0.07
ELEVATION DIFFERENCE CONTINGENCY	1.73
MINIMUM PSI. REQD. (EXISTING PSI.)	67.73
RESIDUAL PSI.	-77.00
	9.27

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.

NOTE: THOUGH ALL SLEEVES MAY NOT BE GRAPHICALLY INDICATED ON THESE PLANS, THE CONTRACTOR SHALL INSTALL ALL MAIN LINES, LATERAL LINES, AND WIRING UNDER SIDEWALKS AND OTHER PAVING IN SCH. 40 SLEEVES PER THE LEGEND, DETAILS, AND SPECIFICATIONS.

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.

FOR IRRIGATION NOTES, SEE SHEET LI.2

NORTH SCALE: 1" = 20'-0"

03-11-16

REVISIONS

MARK	DATE	DESCRIPTION	BY

DEVELOPMENT SERVICES DEPARTMENT

PARK at SEABRIDGE (TRACT 5266-1)

IRRIGATION PLAN

APPROVED: \_\_\_\_\_ Date \_\_\_\_\_

SCALE: HORIZ. 1" = 20'  
VERT. NA

DRAWN BY: JMS DATE \_\_\_\_\_

CHECKED BY: MS DATE \_\_\_\_\_

SHEET No. 9 OF 18  
DRAWING NUMBER LI.1