

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	PSI
R-VAN-LCS R-VAN-SST	RAIN BIRD R-VAN-STRIP 1806-SAM-P45 TURF ROTARY, 5' X 15' (LCS AND RCS), 5' X 30' (SST) HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 6.0" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR, 1/2" NPT FEMALE THREADED INLET.	30
R-VAN14	RAIN BIRD R-VAN14 1806-SAM-P45 TURF ROTARY, 8'-14" 45°-270° AND 360° HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 6.0" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR, 1/2" NPT FEMALE THREADED INLET.	30
R-VAN18	RAIN BIRD R-VAN18 1806-SAM-P45 TURF ROTARY, 13'-18" 45°-270° AND 360° HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 6.0" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR, 1/2" NPT FEMALE THREADED INLET.	30
R-VAN24	RAIN BIRD R-VAN24 1806-SAM-P45 TURF ROTARY, 17'-24" 45°-270° AND 360° HAND ADJUSTABLE MULTI-STREAM ROTARY W/1800 TURF SPRAY BODY ON 6.0" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR, 1/2" NPT FEMALE THREADED INLET.	30
R-VAN108	RAIN BIRD 1806-PRS-1400 FLOOD BUBBLER 6.0" POPUP WITH PRESSURE REGULATING DEVICE.	30
R-XCZ-100	RAIN BIRD XCZ-100-PRB-COM WIDE FLOW DRIP CONTROL KIT FOR COMMERCIAL APPLICATIONS. 1" BALL VALVE WITH 1" PESB VALVE AND 1" PRESSURE REGULATING 40PSI QUICK-CHECK BASKET FILTER. 0.3GPM TO 20GPM.	
R-MDCFCAP	RAIN BIRD MDCFCAP DRIPLINE FLUSH VALVE CAP IN COMPRESSION FITTING COUPLER.	
R-ARV050	RAIN BIRD ARV050 1/2" AIR RELIEF VALVE, MADE OF QUALITY RUST-PROOF MATERIALS, WITH A 6.0" DRIP VALVE BOX (SEE 7XB Emitter Box). USE WITH INSTALLATION BELOW SOIL. THE VALVE WILL ALLOW AIR TO ESCAPE THE PIPELINE, THUS PREVENTING WATER HAMMER OR BLOCKAGE.	
R-XFS-06-18	AREA TO RECEIVE DRIPLINE RAIN BIRD XFS-06-18 XFS SUB-SURFACE PRESSURE COMPENSATING DRIPLINE W/COPPER SHIELD TECHNOLOGY. 0.6 GPH EMITTERS AT 18" O.C. LATERALS SPACED AT 18" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. UV RESISTANT. SPECIFY XF INSERT FITTINGS.	
R-PEB	RAIN BIRD PEB 1", 1-1/2", 2" PLASTIC INDUSTRIAL VALVES. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION.	
R-WR2-RFC	RAIN BIRD WR2-RFC WIRELESS RAIN AND FREEZE SENSOR COMBO. INCLUDES 1 RECEIVER AND 1 RAIN/FREEZE SENSOR TRANSMITTER.	
IRRI	IRRIGATION LATERAL LINE: PVC CLASS 200 SDR 21 PVC CLASS 200 IRRIGATION PIPE. ONLY LATERAL TRANSITION PIPE SIZES 1" AND ABOVE ARE INDICATED ON THE PLAN, WITH ALL OTHERS BEING 3/4" IN SIZE.	
IRRI-M	IRRIGATION MAINLINE: PVC SCHEDULE 40	
PI-S	PIPE SLEEVE: PVC SCHEDULE 40	
VAL	Valve Callout Valve Number Valve Flow Valve Size	

VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	WIRE	PSI	PSI @ P.O.C.	PRECIP.
1	RAIN BIRD XCZ-100-PRB-COM	1"	AREA FOR DRIPLINE	3.96	14.7	33.15	37.15	0.43 in/h
2	RAIN BIRD PEB	1"	TURF ROTARY	7.92	29.5	32.28		0.56 in/h
3	RAIN BIRD PEB	1-1/2"	TURF ROTARY	6.14	18.3	32.92		0.70 in/h
4	RAIN BIRD XCZ-100-PRB-COM	1"	AREA FOR DRIPLINE	6.14	17.3	35.38		0.43 in/h
5	RAIN BIRD PEB	1"	BUBBLER	15.0	36.9	35.0	35.85	1.83 in/h
6	RAIN BIRD PEB	1-1/2"	TURF ROTARY	20.0	164.7	36.8	38.51	0.58 in/h
7	RAIN BIRD PEB	1-1/2"	TURF ROTARY	22.89	172.2	35.80	38.09	0.52 in/h
8	RAIN BIRD XCZ-100-PRB-COM	1"	AREA FOR DRIPLINE	2.95	10.0	32.35	32.42	0.43 in/h
9	RAIN BIRD PEB	1-1/2"	TURF ROTARY	22.43	74.3	34.77	42.13	0.57 in/h
10	RAIN BIRD PEB	1-1/2"	TURF ROTARY	22.25	336.5	36.21	43.70	0.54 in/h
11	RAIN BIRD PEB	1"	BUBBLER	12.00	482.5	34.87	38.76	2.13 in/h
12	RAIN BIRD PEB	1"	BUBBLER	16.50	487.9	37.60	44.72	1.94 in/h
	Common Wire				531.5			

CRITICAL ANALYSIS

Generated: 2020-04-30 22:31

P.O.C. NUMBER: 01

Water Source Information:

FLOW AVAILABLE
 Custom Max Flow: 25.00 gpm
 Flow Available: 25.00 gpm

PRESSURE AVAILABLE
 Static Pressure at POC: 50.00 psi
 Pressure Available: 50.00 psi

DESIGN ANALYSIS
 Maximum Station Flow: 22.89 gpm
 Flow Available at POC: 25.00 gpm
 Residual Flow Available: 2.11 gpm

Critical Station: 12
 Design Pressure: 30.00 psi
 Friction Loss: 4.63 psi
 Fittings Loss: 0.46 psi
 Elevation Loss: 0.00 psi
 Loss through Valve: 2.52 psi
 Pressure Req. at Critical Station: 37.60 psi
 Loss for Fittings: 0.65 psi
 Loss for Main Line: 6.47 psi
 Loss for POC to Valve Elevation: 0.00 psi
 Loss for Backflow: 0.00 psi
 Critical Station Pressure at POC: 44.72 psi
 Pressure Available: 50.00 psi
 Residual Pressure Available: 5.28 psi

IRRIGATION DISCLAIMER

THIS DESIGN IS A DIAGRAMmatic representation of the IRRIGATION SYSTEM, AND OTHER EQUIPMENT SHOWN WITHIN PAVED AREAS OR OUT OF PROPERTY BOUNDARIES ARE FOR DESIGN CLARIFICATION ONLY, AND SHALL BE INSTALLED IN PLANTING AREAS WITHIN THE PROPERTY LINES. LIMITS INDICATED ON PLAN. THE IRRIGATION CONTRACTOR SHALL VERIFY THE LOCATION OF ABOVE-GRADE IRRIGATION EQUIPMENT WITH THE OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION, OR IRRIGATION CONTRACTOR MAY BE REQUIRED TO MOVE SUCH ITEMS AT HIS OWN COST.

IRRIGATION CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL FINAL QUANTITIES PER DRAWINGS AND SPECIFICATIONS. ANY QUANTITIES PROVIDED ARE PROVIDED AS A CONVENIENCE TO THE CONTRACTOR ONLY AND SHALL NOT BE CONSIDERED ABSOLUTE.

CONTROLLER NOTE

LOCATE CONTROLLER AT LOCATION SHOWN ON PLAN. VERIFY LOCATION IN FIELD WITH OWNER'S REPRESENTATIVE.

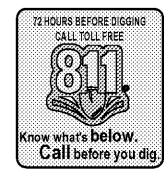
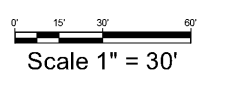
120 VAC POWER TO CONTROLLER LOCATION IS NOT WITHIN THE IRRIGATION CONTRACTOR'S SCOPE OF WORK, AND SHALL BE PROVIDED BY OTHERS. HOOK-UP OF CONTROLLER TO 120 VAC SHALL BE PERFORMED BY THE IRRIGATION CONTRACTOR. IRRIGATION CONTRACTOR SHALL COORDINATE LOCATION OF WIRE SLEEVE PENETRATIONS THROUGH BUILDING WITH OWNER AND GENERAL CONTRACTOR. STATION RUN ORDER SHALL MATCH PLANS.

SLEEVING / WIRING NOTES:

IN ADDITION TO PROVIDING SLEEVES FOR ALL PIPING UNDER ROADWAYS AND WALKWAYS, THE IRRIGATION CONTRACTOR SHALL PROVIDE AND INSTALL SCH. 40 PVC SLEEVES FOR ALL CONTROLLER WIRES OCCURRING UNDER ALL ROADWAYS AND WALKWAYS. SLEEVES FOR CONTROLLER WIRES SHALL BE 2" DIA. AND CONTAIN NO MORE THAN 25 WIRES.

AUTOMATIC DRAIN VALVES AND AIR RELIEF VALVES

INSTALL AUTOMATIC DRAIN VALVES AT THE LOW POINTS OF EACH LATERAL LINE (MIN. 2 PER VALVE) AS PER DETAIL L, SHEET L14. INSTALL AIR RELIEF VALVES ON DRIP SYSTEMS AT THE LOCATIONS SHOWN ON THE PLANS, AS AS PER DETAILS.



NO.	DATE	REVISIONS
1	4/30/2020	ISSUED FOR PERMITS
2	NOVEMBER 2019	CITY COMMENTS
3		
4		
5		
6		
7		
8		

DESIGNED	KB
DRAWN	KB
DATE	NOVEMBER 2019
CHECKED	KB/RM
DATE ISSUED	03/30/2020

MBV ENGINEERING, INC.
 CIVIL, STRUCTURAL, SURVEYING & ENVIRONMENTAL
 1250 W. FAU GALIE BLVD
 MELBOURNE, FLORIDA 32935
 P. 321-253-1510 F. 321-251-9911
 VERO 772-869-0035 FT. PIERCE 772-668-8665
 CAMPTON

IRRIGATION PLAN

CHRISTIAN BROTHERS AUTOMOTIVE REPAIRS

BREVARD COUNTY FLORIDA

EVERGREEN DESIGN GROUP

(800) 680-6630
 2255 Glades Road, Suite 324A
 Boca Raton, FL 33431
 www.EvergreenDesignGroup.com
 LC #26000612

SHEET

LI-1

19-1045