

IRRIGATION WORKSHEET - Residential 1 & 2 Family

SPRINKLERS

[illegible]

CONTROL VALVES

	<u>Qty</u>	<u>Symbol</u>	<u>Description</u>
1			
2			

MAINLINE PIPE

	<u>Qty</u>	<u>Symbol</u>	<u>Description</u>
1			
2			

SLEEPING

	<u>Qty</u>	<u>Symbol</u>	<u>Description</u>
1			
2			

IRRIGATION ACCESSORIES

	<u>Qty</u>	<u>Symbol</u>	<u>Description</u>
1			
2			
3			
4			
5			
6			

SENSORS

	<u>Qty</u>	<u>Symbol</u>	<u>Description</u>
1			
2			

Submittal Package Shall Include:

1. Site plan (Site plan to include site address, scale, north arrow, all structures located on property, setbacks, equipment pads, walkways, driveway, and complete irrigation layout.)
***SITE PLAN MUST BE OF SUFFICIENT CLARITY
2. Irrigation Worksheet
3. Manufacturer specifications, controller, rain sensor, sprinkler heads, etc. along with GPM rating for proper verification of calculations.
4. Owl/Gopher Tortoise Affidavit
5. NOC if valuation is \$5,000.00 or greater

Notes:

1. All water piping is sized to assure that the maximum water velocity does not exceed 5 fps.
2. Recommended systems should be designed to a 80% zone capacity.
 - a) 1" mainline pipe - $15 \text{ gpm} \times 0.8 = 12 \text{ gpm}$
 - b) 1 1/4" mainline pipe - $24 \text{ gpm} \times 0.8 = 20 \text{ gpm}$
3. City approved plans and instruction manuals shall be kept on-site. The "As-Built" and controller manual shall be left on-site after installation. The manual shall include information regarding routine maintenance.
4. A sticker shall be applied to the inside front cover of the controller providing the installer's contact information & warranty.
5. Control valve wiring is U/L listed for burial. Splices are water resisted per manufacturer specifications and in compliance with NFPA 70 - NEC 2020.
6. PVC must have a purple primer that conforms to ASTM F656 and shall be applied to PVC solvent-cemented joints. Solvent cement for PVC purple plastic pipe conforming to ASTM D2564 shall be applied to all joint surfaces.
7. Schedule 40 PVC is required for all static pressurized water lines. PVC purple pipe is mandatory for all non-potable water sources including irrigation systems. Burial depth shall be 12" for all static pressure lines and 6" for all lateral lines.
8. The irrigation system shall be designed to achieve a minimum of 70% distribution uniformity by providing sprinkler head placement and nozzle selection that are within the manufacturer's specifications.
9. Irrigation/sprinkler system risers for all heads shall discharge at least 1 foot (305 mm) away from the structure sidewall.
10. Low Voltage Wire
 - a) All low voltage wire which is directly buried must be labeled for direct burial wire. All wire traveling under any hardscape or roadway must be installed within a separate sleeve from the irrigation lines.
 - b) The size of the electrical control wire shall be in accordance with the valve manufacturer's specifications, based on the solenoid in-rush amperage and the circuit length, considering the number of solenoids operating, on the circuit. Minimum of #14 AWG control wire shall be used on all systems, except single lot individual residential systems. Minimum of #18 AWG control wire shall be used on all single lot individual residential systems.
11. All pop-up spray head bodies in turf areas shall be no less than 6 inches in height for St. Augustine, Zoysia and Bahia and no less than 4 inches in height for Bermuda, Centapede and Seashore Paspalum.
12. Flexible pipe connection required on heads in vehicle traffic area.
13. Manual shut off required on pressurized side of all filters and zone valves.
14. Pipes running parallel to road must be 24" off the edge of pavement.

*****By applying for an irrigation permit the applicant attests the system is designed to comply with F.S. Title XXVIII, Ch. 373, § 228, the City of Cape Coral Code of Ordinance 46-23 and reference the Florida Building Code, Plumbing Volume, Appendix F. 8th Edition (2023) and that the irrigation systems is designed to achieve a minimum of 70% efficiency by providing sprinkler head placement and nozzle selection that are within the manufacturers specifications.**

Site Address: _____

Contractor Name: _____

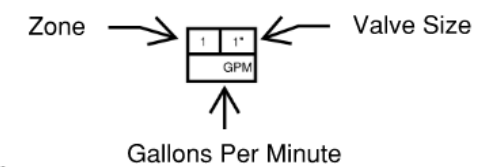
Address: _____

Professional License / Certification Number of the Installation Contractor: _____

Phone #: _____ **Email:** _____

Typical Legend Symbol

-  Sleeve
 Lateral Lines
 Mainline
 Rain Sensor
 Well Location
 Water Supply Connection
 Controller
 Master Valve Assembly
 Solenoid Assembly
 Backflow Device
 1/4 Rotor Spray/Fixed
 1/2 Rotor Spray/Fixed
 3/4 Rotor Spray/Fixed
 Full Rotor Spray/Fixed
 Drip System
 Bubbler
 Microjet
 Ball Valve Emergency shut off



Water Source #1

Meter Size/Reclaim System - Size of Connection (55 psi)*	
Well (65 psi)*	

*Pressures may fluctuate

****To qualify for the EPA WaterSense rebate program the property owner shall install a smart irrigation system, which meets the >70% water conservation efficiency standard and install a EPA WaterSense certified smart controller/timer and soil moisture sensor.**

