



NOTICE TO INDUSTRY

Irrigation System

EFFECTIVE Saturday, June 1, 2024

Beginning June 1, 2024, Ordinance 46-23 takes effect regarding irrigation systems, and amends the City of Cape Coral, Florida, Code of Ordinances, Chapter 19 "Water and Sewer Utilities," Article VII, "Water Management," by amending Section 19-90.6, "Completion of installation or substantial modification," Section 19-90.8, "Alternative Compliance," and Section 19-94, "Penalties," regarding irrigation systems and penalties for violations.

The growth of population has given rise to water conservation problems, wastage of sources of water supply, degradation of water quality and quantity in Cape Coral as well as the geographic region in which it is located. With this understanding, the South Florida Water Management District (SWFMD) has found concerns and issued an emergency water shortage order.

It is the intent and purpose to provide means to alleviate such condition by improving the long-term sustainability of the water resources, providing an ongoing water conservation program, increase water use efficiency, and prevent and curtail wasteful water use practices. The City has been a leader in water conservation efforts through the beneficial reuse of reclaimed water from its wastewater reclamation facilities augmented by the city's fresh water canal system for the purposes of outdoor water uses. In a continuing effort to conserve the City's water resources, in the best interests of its citizens, an Emergency Water Conservation Plan has been enacted to a line with SWFMD's order. The location of the current restrictions start within the North East section of Cape Coral between Gator Slough Canal to the North, N.E. Pine Island Rd to the South, Nelson Rd N to the West, and N.E 24th Ave to the East and will be in place until further notice. Please see attached Map.

All new and modified irrigation systems shall be designed to achieve a minimum of 70% efficiency by providing sprinkler head placement and nozzle selection that are within manufacturers specifications. Irrigation systems shall be designed to comply with F.S. Tit. XXVIII, Ch. 373, § 228, and the standards adopted by the City and reference the Florida Building Code, Plumbing Volume, Appendix F.

Design drawings shall be provided for the installation of irrigation systems prior to start of construction of the irrigation system. Design drawings shall be prepared by a licensed professional engineer, licensed plumbing/irrigation contractor or licensed landscape architect. Design drawings for single-family homes may be neatly hand-drawn and to scale. A design drawing shall be required for irrigation systems installed on non-residential, multi-family residential, and residential developments or buildings, and shall contain the following information, in addition to the minimum design criteria per Appendix F, of the Florida Building Code, Plumbing.

- (a) Location, type and size of all components including sprinklers, micro-irrigation, main and lateral piping, master valves, valves, moisture sensors, rain sensors, controllers, pump start relays, backflow prevention devices, pumps, wells, etc.
- (b) The flow rate, application rate (inches per hour), and the manufacturer's specifications for operating pressure for the sprinklers and micro-irrigation within each zone.
- (c) The name, address, phone, email, professional license or certification number of the installation contractor and date of installation.
- (d) Design drawings for non-residential and multi-family residential buildings shall also include pump station size, pump station location, design operating pressure per manufacturer's specifications, and flow rate per zone, precipitation rate per zone, locations of pipe, controllers, valves, sprinklers, sleeves, gate valves, sensors, etc.

For purposes of determining the 70% efficiency standard, the City Building Department will require an **EPA WaterSense certified** smart controller/timer and soil moisture sensors. Alternative components and designs that meet the 70% efficiency standard may be approved by the Development Services Director, or designee.

Property owners who install a smart irrigation system verified by the City Building Department, which meets the >70% water conservation efficiency standard and has a EPA WaterSense certified smart controller/timer and soil moisture sensors installed, shall receive a \$500 cash rebate from the City.

A property owner or licensed irrigation contractor who installs an irrigation system shall conduct final testing and adjustments to achieve design specifications prior to completion of the system. A property owner or licensed irrigation contractor who installs or performs work on an automatic irrigation system shall test for the correct operation of each technology that inhibits or interrupts operation of the system during periods of sufficient moisture. If such devices or switches are not installed in the system or are not in proper operating condition, the property owner or licensed irrigation contractor shall install new ones or repair the existing ones and confirm that each device or switch is in proper operating condition before completing other work on the system.

Please refer to Appendix F, Florida Building Code, Plumbing for the proper installation of the proposed irrigation system along with the Testing & Inspections.

The Testing & Inspections shall occur in 2 phases at a minimum.

- Plumbing Underground / Rough
- Plumbing Final

Violation of any provision of Code of Ordinances, Chapter 19 within a consecutive 12-month period shall result in the following penalties:

(a) First violation: no fine.

(b) Second violation: \$200 fine.

(c) Third violation: \$350 fine.

(d) Fourth and subsequent violations: \$500 fine. An irrigation dual water customer may also be disconnected and subject to a reconnection fee of \$80. Reconnection of service shall be at the sole discretion of the City Manager or his or her designee.

The City will host a public informational session on the revised irrigation review and inspection standards on Friday, May 10th, 2024 at 9:00 a.m. in City of Cape Coral Council Chambers.

LEGEND

AC. ACRES
CY CALENDAR YEAR
FY FISCAL YEAR
LS LICENSED SURVEYOR
N.E. NORTHEAST
RNG. RANGE
SEC. SECTION
S.F. SQUARE FEET
TWP. TOWNSHIP

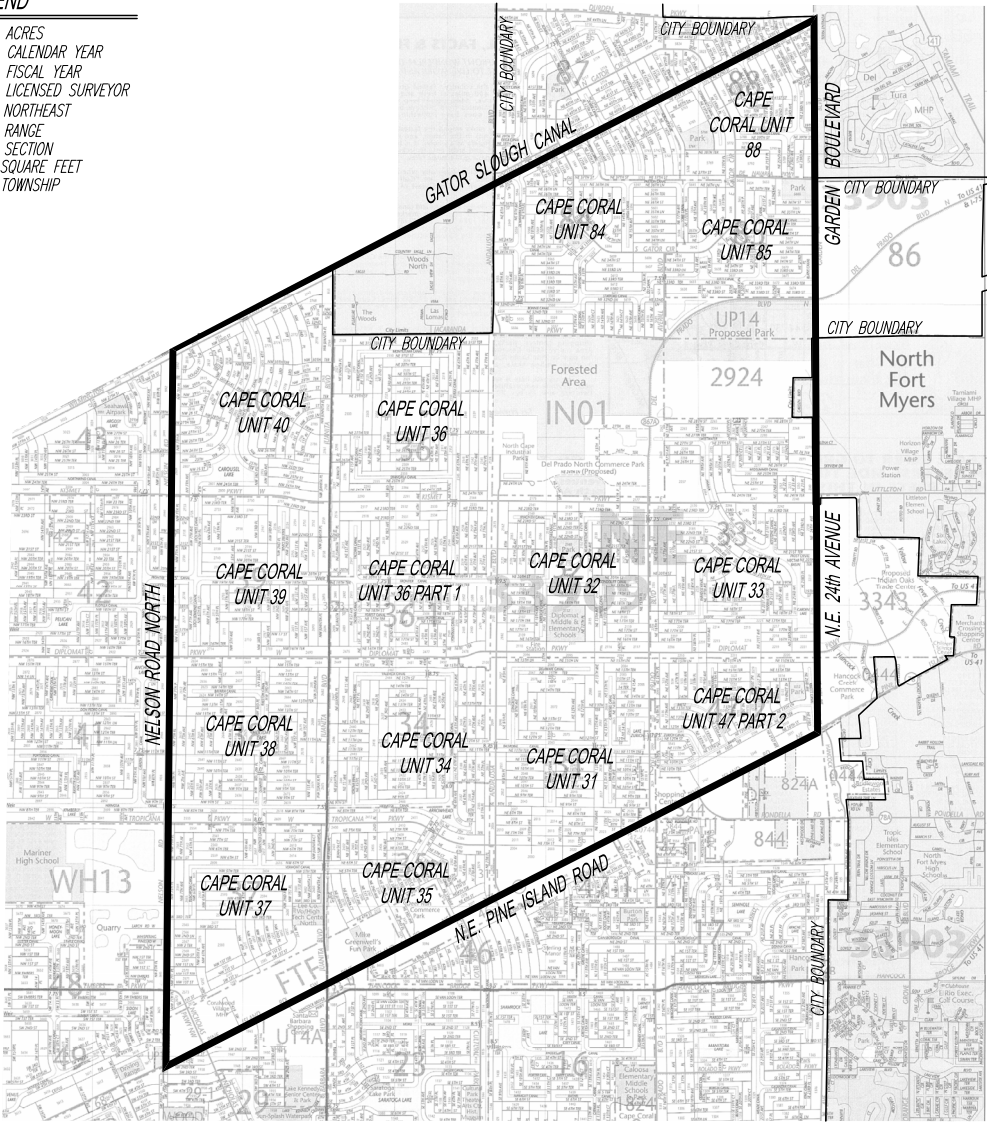
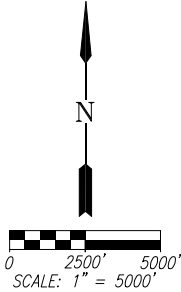


EXHIBIT 1



DESCRIPTION

LANDS WITHIN THE CITY OF CAPE CORAL, BOUNDED ON THE WEST BY NELSON ROAD NORTH; ON THE NORTH BY GATOR SLOUGH CANAL; ON THE EAST BY GARDEN BOULEVARD AND N.E. 24th AVENUE; AND ON THE SOUTH BY PINE ISLAND ROAD. SAID LANDS INCLUDE ALL OF THE PLATTED CAPE CORAL UNITS 31, 32, 33, 34, 35, 36, 36 PART 1, 37, 38, 39, 40, 47 PART 2, 84, 85, AND 88; DEL PRADO NORTH COMMERCE PARK, AND UN-PLATTED LANDS.

SURVEYORS NOTES:

- 1) THIS IS AN EXHIBIT, THE PURPOSE OF THIS EXHIBIT IS TO DEPICT THE VISUAL REPRESENTATION OF THE PROPERTIES SHOWN HEREON.
- 2) THIS IS NOT A SURVEY.
- 3) APPROXIMATE TOTAL AREA = 11,643 ACRES +/-

SHEET 1 OF 1

MID-HAWTHORN AQUIFER EXHIBIT		LANDS IN TOWNSHIPS 43 S. & 44 S., RANGES 24 E. & 25 E.		CITY OF CAPE CORAL, LEE COUNTY, FLORIDA		SURVEY NO.: 2024-008		DRAWING NUMBER: CC-24-008.BMG	
PUBLIC WORKS DEPARTMENT		815 NICHOLAS PARKWAY EAST, CAPE CORAL, FL 33909		PHONE: (239) 574-0701		CALCULATED BY: KC		CHECKED BY: EA	
PROJECT NUMBER: 2024-008		FY - SURVEY WORK ORDER NUMBER: 24-008		SCALE: 1"=500'		DRAWN BY: KC		APPROVED: MW	

7/29/24 Addendum

1. Updates to the Irrigation Permit are now live on CSS. Do NOT use any previously saved drafts, templates, or bookmarks
2. For additional information on Irrigation Permit requirements, please refer to the applicable guidelines, forms, and examples on the Permit Document Center. Examples are also included on the following pages
3. Only the follow types of contractors may apply for an irrigation permit:
 - a. Certified Plumbing Contractor
 - b. Certified Specialty Contractor – Irrigation
 - c. Registered Plumbing Contractor (until FL State expiration)
 - d. Registered Specialty Contractor – Irrigation (until FL State expiration)
 - e. Owner/Builder per [FL State Statute Section 489.103\(7\)\(c\)](#)

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Lawn Irrigation Guidelines - Residential

ATTENTION: If irrigation system is connected to a reclaimed or non-potable water source, purple piping must be used for the entire system per Florida Building Code.

Description: Use this permit type for residential (1 or 2 family homes) lawn irrigation installation.

License Requirements:

- Certified Plumbing Contractor
- Certified Specialty Contractor – Irrigation
- Registered Plumbing Contractor (until FL State expiration)
- Registered Specialty Contractor – Irrigation (until FL State expiration)
- Owner/Builder per [FL State Statute Section 489.103\(7\)\(c\)](#)

Documents required at Application:

For Owner/Builder:

- **Picture ID**
 - Must present in person
- **Paper miscellaneous application (for in person only)**
 - If applying online via CSS, select “Irrigation – Residential”
- **Site Plan with irrigation layout**
- **Irrigation Worksheet**
- **Irrigation Manufacturer’s Specs**
- **Burrowing Owl/Gopher Tortoise Affidavit**
 - Must be Notarized
- **Owner/Builder Affidavit**
 - Must be Notarized
- **NOC if valuation is \$5000 or greater:**
 - May be submitted after application, but before the 1st inspection
 - Must be Notarized
 - Must be recorded and certified by Lee County. If only recorded, then a NOC Affidavit is also required

For Registered Contractors online:

- **Apply on CSS:**
 - Select “Irrigation - Residential”
- **Site Plan with irrigation layout**
- **Irrigation Worksheet**
- **Irrigation Manufacturer’s Specs**
- **Burrowing Owl/Gopher Tortoise Affidavit**
 - Must be Notarized
- **NOC if Valuation is \$5000 or greater:**
 - May be submitted after application, but before the 1st inspection
 - Must be Notarized
 - Must be recorded and certified by Lee County. If only recorded, then a NOC Affidavit is also required



Lawn Irrigation Guidelines - Residential

Reviews:

- Plumbing Review
- Environmental Review (if Owl or Gopher Tortoise are present)

Inspections:

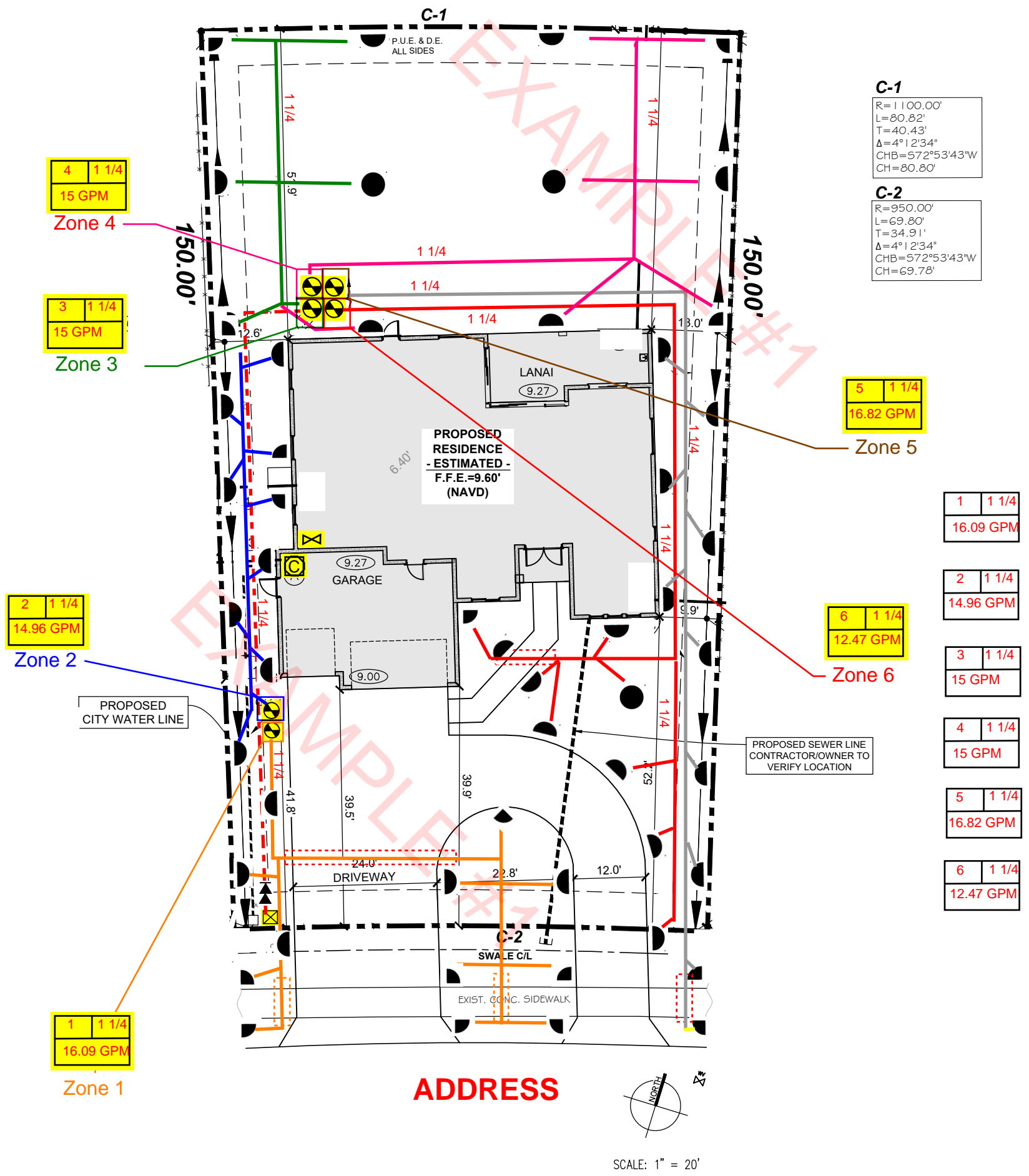
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|---|------|
| ○ BLD – Notice of Commencement (NOC) | 1 |
| ○ UTL - Kit A / Meter Install | 1 |
| ○ If using reclaimed (Dual) or potable (City) water | |
| ○ BLD – Plumbing Rough | 7 |
| ○ BLD – Plumbing Final | 1000 |
| ○ UTL – Dual Water | 1000 |
| ○ Only if using reclaimed (Dual) water | |
| ○ UTL - Potable Irrigation Hook Up | 1000 |
| ○ Only if using potable (City) water | |

Fees:

- | | |
|--------------------------|----------------|
| • <u>Lawn Irrigation</u> | <u>\$49.51</u> |
| • <u>Surcharge</u> | <u>NO</u> |

Expiration:

- Six (6) months for existing house
- Five (5) years if with New Construction
- Two (2) years if using a Private Provider



IRRIGATION WORKSHEET

SPRINKLERS			
Zone	Qty	Type	Description
1	7	1/4 SPRAY	Hunter Pro-Spray Fixed Nozzle 15 Black
1	5	1/2 SPRAY	Hunter Pro-Spray Fixed Nozzle 15 Black
2	2	1/4 SPRAY	Hunter Pro-Spray Fixed Nozzle 15 Black
2	7	1/2 SPRAY	Hunter Pro-Spray Fixed Nozzle 15 Black
3	2	1/4 SPRAY	Hunter SRM-04 Nozzle 3.0
3	3	1/2 SPRAY	Hunter SRM-04 Nozzle 3.0
3	1	Full	Hunter SRM-04 Nozzle 3.0
4	2	1/4 SPRAY	Hunter SRM-04 Nozzle 3.0
4	3	1/2 SPRAY	Hunter SRM-04 Nozzle 3.0
4	1	Full	Hunter SRM-04 Nozzle 3.0
5	2	1/4 SPRAY	Hunter Pro-Spray Fixed Nozzle 15 Black
5	8	1/2 SPRAY	Hunter Pro-Spray Fixed Nozzle 15 Black
6	1	1/4 SPRAY	Hunter Pro-Spray Fixed Nozzle 12 Green
6	7	1/2 SPRAY	Hunter Pro-Spray Fixed Nozzle 12 Green
6	1	Full	Hunter Pro-Spray Fixed Nozzle 12 Green

CONTROL VALVES

Line	Qty	Symbol	Description
1	6	N/A	Hunter PGV 151 B
2	N/A	N/A	

MAINLINE PIPE

	Qty	Symbol	Description
1	1	N/A	1 1/4"
2			

SLEEVING

	Qty	Symbol	Description
1	5	Sleeve	3" under sidewalk and driveway
2			

IRRIGATION ACCESSORIES

	Qty	Symbol	Description
1	1	Controller	Hunter Pro-C Water Sense
2			
3			
4			
5			

SENSORS

	Qty	Symbol	Description
1	1	Rain Sensor	Hunter Rain-Clik
2			

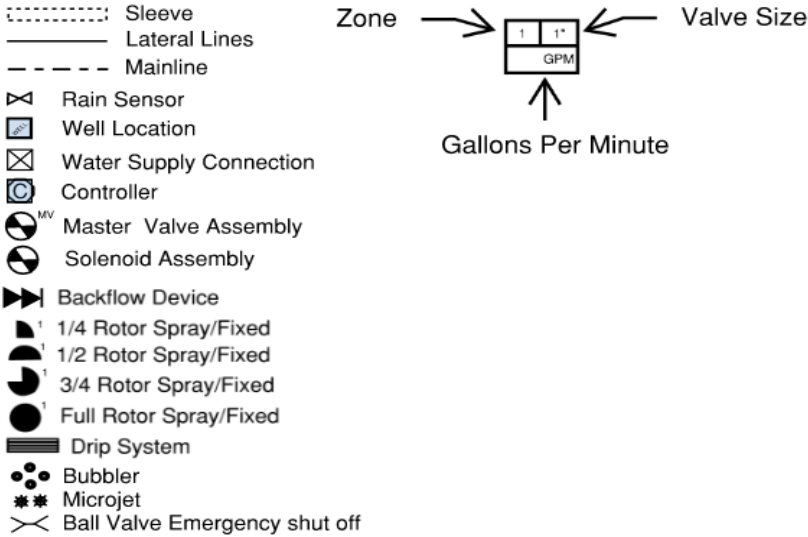
Submittal Package Shall Include:

1. Site plan with irrigation layout
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 gpm x 0.8 = 12 gpm
 - b) 1 1/4" mainline pipe - 24 gpm x 0.8 = 20 gpm
3. City approved plans and instruction manuals shall be kept on-site during the installation of the irrigation system. 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 NEC 70 - 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 systems shall be designed to comply with F.S. Tit. XXVIII, Ch. 373, § 228, and the standards adopted by the City of Cape Coral and reference the Florida Building Code, Plumbing Volume, Appendix F. 8th Edition (2023)
10. Irrigation/sprinkler system risers for all heads shall discharge at least 1 foot (305 mm) away from the structure sidewall.
11. 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 pipe and 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 single strand control wire shall be used on all systems, except single lot individual residential systems. Minimum of #18 AWG single strand control wire shall be used on all single lot individual residential systems.
12. 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.
13. Flexible pipe connection required on heads in maintenance vehicle traffic area.
14. Manual shut off required on pressurized side of all filters and zone valves.
15. Pipes running parallel to road must be 24" off the edge of pavement.

Typical Legend Symbol



Water Source #1

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

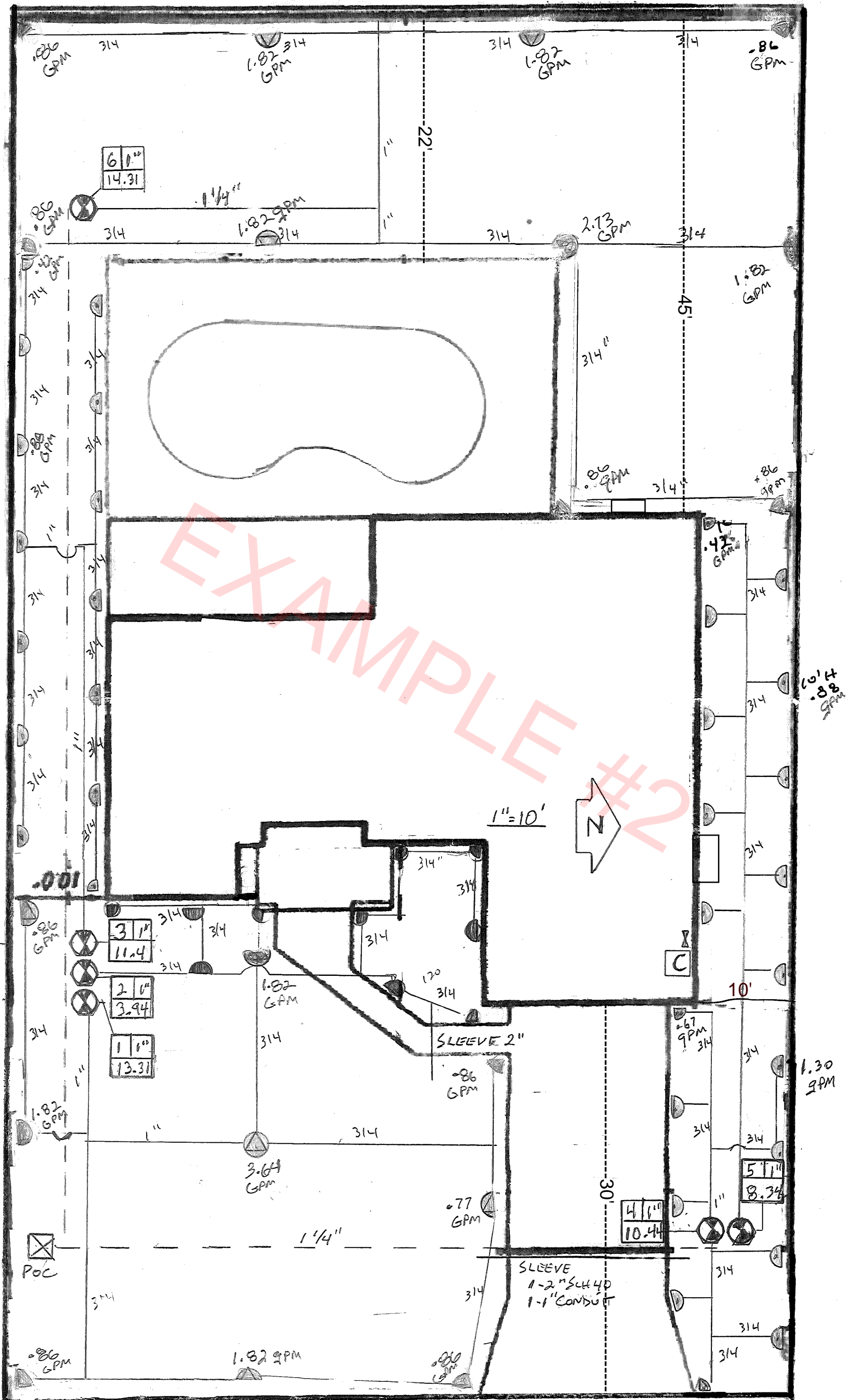
*Pressures may fluctuate

EXAMPLE #1



Name, Address, Phone, Email, Phone Number, Professional License or Certification	Site Address: 1234 Cape Coral Blvd. Cape Coral 33990
Number of the Installation Contractor: ABC 123, LLC 123 Main St Cape Coral, FL 33915 License #123456 Phone # 123-456-7890 Email: ABC123@yahoo.com	Site plan to include site address, scale, north arrow, all structures located on property, setbacks, equipment pads, walkways, driveway, and complete irrigation layout.

80.00'



EXAMPLE #2 ADDRESS

IRRIGATION WORKSHEET

SPRINKLERS			
Zone	Qty	Type	Description
1	8	Rotary MP 3000	Hunter Pros - 06
1	1	Rotary MP 2000	Hunter Pros - 06
2	2	Spray 8' Quarter	Hunter Pros - 06
2	2	Spray 8' Half	Hunter Pros - 06
2	4	Spray 10' Quarter	Hunter Pros - 06
2	2	Spray 10' Half	Hunter Pros - 06
3	2	Spray 10' Quarter	Hunter Pros - 06
3	12	Spray 10' Half	Hunter Pros - 06
4	2	Spray 12' Quarter	Hunter Pros - 06
4	7	Spray 12' Half	Hunter Pros - 06
5	1	Spray 10' Quarter	Hunter Pros - 06
5	9	Spray 10' Half	Hunter Pros - 06
6	10	Rotary MP 3000	Hunter Pros - 06

CONTROL VALVES

Line	Qty	Symbol	Description
1	6	N/A	Hunter PGV 151 B
2	N/A	N/A	

MAINLINE PIPE

	Qty	Symbol	Description
1	1	N/A	1 1/4"
2			

SLEEVING

	Qty	Symbol	Description
1	2	Sleeve	2" sleeve under driveway and sidewalk
2			

IRRIGATION ACCESSORIES

	Qty	Symbol	Description
1	1	Controller	Hunter Pro-C Water Sense
2			
3			
4			
5			

SENSORS

	Qty	Symbol	Description
1	1	Rain Sensor	Hunter Rain-Clik
2			

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3. Manufacturer specifications, controller, rain sensor, sprinkler heads, etc. along with GPM rating for proper verification of calculations.
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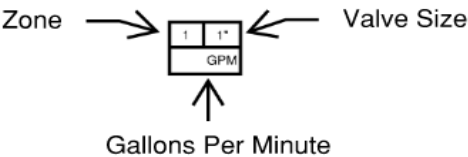
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10. Irrigation/sprinkler system risers for all heads shall discharge at least 1 foot (305 mm) away from the structure sidewalk.
11. Low Voltage Wire

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 pipe and 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 single strand control wire shall be used on all systems, except single lot individual residential systems. Minimum of #18 AWG single strand control wire shall be used on all single lot individual residential systems.
12. 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.
13. Flexible pipe connection required on heads in maintenance vehicle traffic area.
14. Manual shut off required on pressurized side of all filters and zone valves.
15. Pipes running parallel to road must be 24" off the edge of pavement.

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)*	X
Well (65 psi)*	

*Pressures may fluctuate



Name, Address, Phone, Email, Phone Number, Professional License or Certification	
Number of the Installation Contractor:	Site Address: 1234 Cape Coral Blvd. Cape Coral 33990
ABC 123, LLC 123 Main St Cape Coral, FL 33915 License #123456 Phone # 123-456-7890	Site plan to include site address, scale, north arrow, all structures located on property, setbacks, equipment pads, walkways, driveway, and complete irrigation layout.