

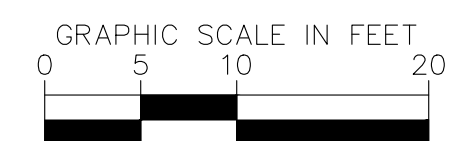


SITE WATER ENGINEERING SERVICES
323 W. DRAKE RD, SUITE 204
FORT COLLINS, COLORADO 80526
Telephone: 970.282.1800

KEITH PROJECT NUMBER	13861.00	STATUS
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STATUS: CONSTRUCTION DOCUMENTS



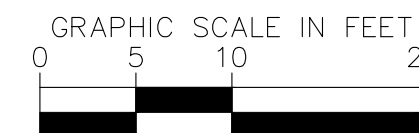


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Plotted by: carla_r0cz79 On 3/27/2025 10:08 AM

Drawing name: C:\Hines Inc Dropbox\Design\Projects\MKSK\Gary Matzner Park\ACAD\IIR-Gary Matzner Park.dwg

STATIS·CONSTRUCTION DOCUMENTS



POP-UP GEAR DRIVEN ROTORS: RAIN BIRD 5006-SAM-R		
PRESSURE: 45 PSI		
NOZZLE	RADIUS	FLOW
1.5	35'	1.54 GPM
2.0	37'	2.07 GPM
2.5	37'	2.51 GPM
3.0	39'	3.09 GPM
4.0	42'	4.01 GPM
5.0	43'	5.09 GPM
6.0	44'	6.01 GPM
8.0	44'	8.01 GPM



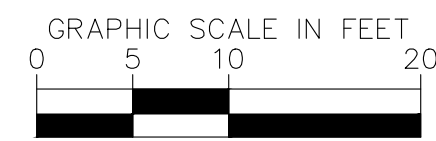
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 IRRIGATION CONTROLLER UNIT — WITH RAINBIRD WR2 RAIN SENSOR
IQ4 CELL CARTRIDGE
RAINBIRD ESP-LXIVM 2 WIRE CONTROLLER

 WEATHER SENSOR: CONTACT WIRES INC FOR WEATHER SENSOR SPECIFICATION

— C — **IRRIGATION CONTROL HINES IN CONDUIT OR WITH WARNING TAPE**

 TREE BUBBLER ASSEMBLY: TWO (Y) RAIN BIRD 1401 BUBBLERS
PRESSURE: 30 PSI
FLOW (GPM): 0.25 PER BUBBLER; 0.50 PER ASSEMBLY

 POP-UP SPRAY SPRINKLER: RAIN BIRD RD1806-S-P30 W/U-SERIES 8 NOZZLE
PRESSURE: 30 PSI RADIUS: 8 FEET
FLOW (GPM): Q-0.26 H-0.52 F-1.05

 POP-UP SPRAY SPRINKLER: RAIN BIRD RD1806-S-P30 W/U-SERIES 10 NOZZLE
PRESSURE: 30 PSI RADIUS: 10 FEET
FLOW (GPM): Q-0.41 H-0.82 F-1.64

 POP-UP SPRAY SPRINKLER: RAIN BIRD RD1806-S-P30 W/U-SERIES 12 NOZZLE
PRESSURE: 30 PSI RADIUS: 12 FEET
FLOW (GPM): Q-0.65 H-1.30 F-2.60

 POP-UP SPRAY SPRINKLER: RAIN BIRD RD1806-S-P30 W/U-SERIES 15 NOZZLE
PRESSURE: 30 PSI RADIUS: 15 FEET
FLOW (GPM): Q-0.92 H-1.85 F-3.70

 POP-UP SPRAY SPRINKLER: RAIN BIRD RD1806-S-P30 W/U SERIES NOZZLE
PRESSURE: 30 PSI RADIUS: 4 FEET X 15 FEET
FLOW (GPM): EST-0.61 SST-1.21

 POP-UP SPRAY SPRINKLER: RAIN BIRD 1812-SAM-PRS W/ FIXED U-SERIES NOZZLES
PRESSURE: 30 PSI RADIUS: AS SHOWN

 POP-UP SPRAY SPRINKLER: RAIN BIRD 1812-SAM-PRS W/ HE-VAN NOZZLES
PRESSURE: 30 PSI RADIUS: AS SHOWN

 POP-UP SPRAY SPRINKLER: RAIN BIRD 1812-SAM-PRS W/ STRIP SERIES NOZZLES
PRESSURE: 30 PSI RADIUS: AS SHOWN

POP-UP GEAR DRIVEN ROTORS: RAIN BIRD 5006-SAM-R			
PRESSURE: 45 PSI			
	NOZZLE	RADIUS	FLOW
▲	1.5	35'	1.54 GPM
▲	2.0	37'	2.07 GPM
▲	2.5	37'	2.51 GPM
▲	3.0	39'	3.09 GPM
▲	4.0	42'	4.01 GPM
▲	5.0	43'	5.09 GPM
▲	6.0	44'	6.01 GPM
▲	8.0	44'	8.01 GPM

ISSUE DATE:	03/27/2025
DESIGNED BY:	HINES
DRAWN BY:	HINES
CHECKED BY:	HINES



CLIENT
**VILLAGE OF
PINECREST**
PINECREST PARKS & RECREATION



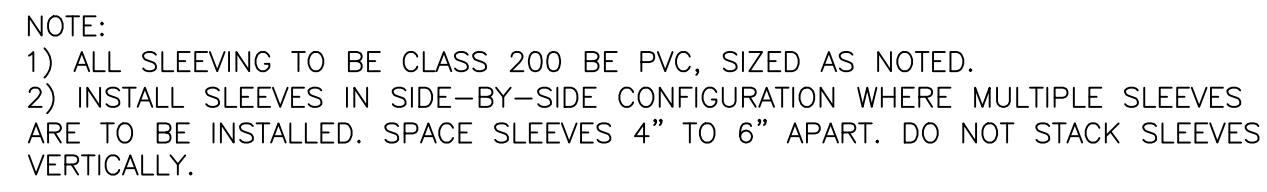
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The technical drawings illustrate the electrode assembly in two views:

- PROFILE VIEW:** Shows the side profile of the electrode. It includes a #6AWG solid bare copper wire connected to an irrigation controller. The wire is secured with a 12" MIN. clamp connection. The electrode is mounted on a 4" x 96" x 1/8" copper grounding plate. The distance from the wire to the plate is 30" MIN. The electrode is positioned 2L from the plate. The electrode sphere of influence is shown as a semi-circle with a radius of L. The electrode is connected to a 5/8" x 10' grounding rod.
- PLAN VIEW:** Shows the top-down view of the electrode. It includes a 4" x 96" x 1/8" copper ground plate. The electrode is positioned 3L from the plate. The electrode is connected to a 5/8" x 10' grounding rod. The electrode sphere of influence is shown as a circle with a radius of L. The electrode is connected to a 5/8" x 10' grounding rod.

- NOTES:
1. INSTALL GROUNDING ROD OR PLATE BASED ON SITE CONDITIONS. DO NOT INSTALL BOTH.
 2. DO NOT INSTALL ANY OTHER WIRING OR CABLES INSIDE THE SPHERE OF INFLUENCE.
 3. INSTALL GROUNDING PLATE AT A MINIMUM OF 30-INCHES BELOW GRADE OR BELOW FROST-LINE, WHICHEVER IS DEEPER.
 4. TYPICAL INSTALLATION SHOWN FOR AN IRRIGATION CONTROLLER CAPACITY OF 64 STATIONS OR LESS, INSTALL AN ADDITIONAL GROUNDING ROD/PLATE PER 64 STATIONS.

NOTES:

1. INSTALL ONLY ONE RCV TO VALVE BOX. LOCATE AT LEAST 12-INCHES FROM AND ALIGN WITH NEARBY WALLS OR EDGES OF PAVED AREAS. GROUP RCV ASSEMBLIES TOGETHER WHERE PRACTICAL.
4. GROUP RCV ASSEMBLIES TOGETHER WHERE PRACTICAL, BUT AVOID GROUPING MORE THAN THREE (3) STANDARD VALVE BOXES TOGETHER IN A SERIES.
5. ARRANGE GROUPED VALVE BOXES IN RECTANGULAR PATTERNS.

NOTES:

1. INSTALL ALL WIRING PER LOCAL ELECTRICAL CODES.
2. INSTALL GROUND ROD WITHIN IRRIGATED TURF AREA. IF IRRIGATED TURF AREA IS NOT IN CLOSE PROXIMITY TO CONTROLLER, INSTALL ONE (1) DRIP EMITTER FROM NEAREST DRIP VALVE IN VALVE BOX HOUSING GROUNDING ROD.

- NOTES:
1. INSTALL ALL WIRING PER LOCAL ELECTRICAL CODES.
 2. INSTALL GROUND ROD WITHIN IRRIGATED TURF AREA. IF IRRIGATED TURF AREA IS NOT IN CLOSE PROXIMITY TO CONTROLLER, INSTALL ONE (1) DRIP EMITTER FROM NEAREST DRIP VALVE IN VALVE BOX HOUSING GROUNDING ROD.

Diagram illustrating the installation of a backflow prevention device. The diagram shows a cross-section of the ground with a finished grade line. Below the grade, a 24-inch layer of crushed stone/gravel is shown. A vertical post/support is installed, with a hose bibb assembly mounted on top. The hose bibb assembly includes a do-not drink indicator and a hose connection. A mainline to the hose bibb assembly is shown entering the gravel layer. The total height of the assembly is labeled as TBD (To Be Determined).

Labels and components shown in the diagram:

- PROVIDE DO-NOT DRINK INDICATOR. ANY WATER DOWNSTREAM FROM THE IRRIGATION BACKFLOW DEVICE IS CONSIDERED NON-POTABLE
- HOSE BIBB
- HOSE CONNECTION
- TBD
- TOTAL HEIGHT BASED ON MODEL #
- POST/SUPPORT AS NEEDED
- FINISHED GRADE
- 24" CRUSHED STONE/GRAVEL
- VALVE BODY
- MAINLINE TO HOSE BIBB ASSEMBLY
- 24"

NOTE: DETAIL IS FOR CONNECTION TO IRRIGATION SYSTEM, WHICH WILL BE WINTERIZED. IF THIS IS INSTALLED ON A NON-WINTERIZED SYSTEM, DEPTH SHALL BE BELOW FROST LINE, PER LOCAL CODES.