

SCOPE OF WORK

REPLACE IRRIGATION SATELLITE CONTROLLERS FORT LOGAN NATIONAL CEMETERY, DENVER, CO 80235

- A. The Contractor: Shall provide all labor, supervision, tools, transportation, equipment, and materials necessary to replace seventeen (17) irrigation system satellite controllers at Fort Logan National Cemetery, as described herein.
- B. Existing Irrigation System Components: Pedestal mounted Rain Bird ESP-SAT satellite controllers (25 each) located throughout the entire cemetery connected to a Rain Bird SiteControl central controller (software version 5.0, Windows 7 OS) located in the Maintenance Building.
- C. The Work: The Work shall include, but shall not be limited to the following (not necessarily in the order indicated):
1. COORDINATE AND SCHEDULE THE REPLACEMENT OF EACH INDIVIDUAL CONTROLLER WITH THE COR TO MINIMIZE THE DISRUPTION OF THE DAILY IRRIGATION SCHEDULE OF THE CEMETERY.
 2. Remove and turnover to the COR the seventeen (17) each, existing Rain Bird Model ESP-SAT irrigation controllers (**#1 thru #17**) and the pedestals as specified below and as indicated on project drawings.
 3. Remove the existing TRC Commander wireless cards and antenna from each of the satellite controllers and pedestals and turn over to the COR.
 4. Provide all necessary labor, tools, equipment, and materials to install seventeen (17) each, new replacement Rain Bird Model ESP-SAT controllers (two-wire, latest version) compatible with the existing Rain Bird SiteControl central controller software (Version 5.0) as indicated on the project drawings and specifications.
 5. Provide all necessary labor, tools, equipment, and materials to install seventeen (17) new TRC Commander wireless cards with new antennas onto the new replacement satellite controllers. The location and mounting of the TRC Commander wireless cards and antennas are to be approved by the COR prior to installation. If the wireless cards are to be mounted outside of the Rain Bird ESP-SAT enclosure, provide a protective, electrically isolated enclosure for the wireless card inside the pedestal. Provide two (2) new, hand-held remote controls compatible with the TRC Commander wireless cards. Test the function and operation of the wireless cards for each satellite controller with both hand-held remote controls with the COR. The COR shall verify the proper operation of the remote control of each satellite controller prior to acceptance.
Antenna Installation Best Practices: Use only high-quality antenna and cable connectors, do not loop excess coax cable into a coil as this will cause RF radio frequency choke and reduce the signal range. If the antenna cable cannot lie loose, wrap the antenna cable into a yarn-like skein of about 12 to 16 inches, or loosely route it back and forth in an “S” configuration.
 6. Provide all necessary materials to install new replacement stainless steel pedestals for Satellite Controller numbers **11, 14, 15, 16, and 17** as indicated on the project drawings and specifications. Replacement pedestals shall match or exceed the existing pedestal dimensions and configuration (top mount with hinged access cover) and be fully compatible with the Rain Bird ESP-SAT controller installation.
 7. Where the satellite controller locations have multiple 110/120 VAC power supply wiring and ground wiring located inside the existing pedestals, remove and/or terminate the wiring for electrical safety and place in a separate in-ground electrical box. Electrical power wiring in these locations shall be identified and placed in a separate in-ground electrical box.

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8. Remove the exterior electrical box and wiring from Controller #14 and safely terminate the 110/120 VAC power feed to the external box. Do not re-install the exterior electrical box onto the new replacement pedestal enclosure.
9. Provide, install, and utilize new electrical terminal blocks for all control wiring in all pedestals.
10. Inspect and test the existing grounding system for each replacement satellite controller. It is the contractor's responsibility to ensure grounding at the controller meets the controller manufacturer's specifications for grounding protection. Contractor shall install additional grounding protection or repair/replace the existing grounding system if it does not meet the manufacturer's requirements or the National Electrical Code.
11. Inspect all the existing concrete bases prior to installing the new satellite controllers. Replace any existing concrete bases that are damaged and will not allow a secure mounting of the pedestals that meet the manufacturer's requirements. New concrete bases shall be a minimum of 6" thick with 3,000 PSI concrete.
12. Inspect all the mounting of all pedestals to the concrete bases and the existing mounting bolts/anchors. Remove all loose, damaged, or corroded mounting bolts/anchors and replace with new bolts/anchors. This work may require repositioning of the anchor bolts or of the pedestal itself.
13. The replacement satellite controller installation shall be in accordance with the contract drawings, specifications, and following schedule:

REPLACEMENT CONTROLLER SCHEDULE

<u>Controller No./Stations/Location</u>	<u>Current Active Zones</u>	<u>Inactive Zones</u>	<u>New Replacement Controller Station Capacity</u>
1 - 24 Station, Section H, SW corner	22	2	ESP-24SAT-2S
2 - 24 Station, Section H, SW corner	22	2	ESP-24SAT-2S
3 - 24 Station, Section H, SW corner	22	2	ESP-24SAT-2S
4 - 24 Station, Section Q, SW corner	21	3	ESP-24SAT-2S
5 - 24 Station, Section Q, SW corner	19	5	ESP-24SAT-2S
6 - 24 Station, Section Q, SW corner	22	2	ESP-24SAT-2S
7 - 24 Station, Section MC, SW corner	23	1	ESP-24SAT-2S
8 - 24 Station, Northeast of PIC Bldg	24	0	ESP-24SAT-2S
9 - 24 Station, Section S, East/Logan Blvd	13	11	ESP-24SAT-2S
10 - 24 Station, Section T1, S-SW	10	14	ESP-24SAT-2S
11 - 24 Station, South Wall - Storage Bldg	24	0	ESP-24SAT-2S w/new pedestal
12 - 24 Station, Section 25, NE corner	17	7	ESP-24SAT-2S
13 - 24 Station, Section 3, NE corner	22	2	ESP-24SAT-2S
14 - 40 Station, Section 14, SW corner	38	2	ESP-40SAT-2S w/new pedestal
15 - 40 Station, Section 11, SW corner	34	6	ESP-40SAT-2S w/new pedestal
16 - 24 Station, Between Sections 6 & 7	24	0	ESP-24SAT-2S w/new pedestal
17 - 24 Station, Between Sections 6 & 7	21	3	ESP-24SAT-2S w/new pedestal

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14. Contractor shall set-up, program, and adjust the satellite controllers and the SiteControl central controller software to match the existing irrigation system programming and watering schedule and as directed by the Contracting Officer's Representative (COR).
15. Test all new components and final installation for full functionality and satisfactory workmanship. Prior to final acceptance the contractor shall demonstrate and document the continuous fault free operation of the complete irrigation system for a minimum period of two consecutive weeks. A fault is cause to restart the test for another minimum period of two consecutive weeks. All completed work and testing shall be verified and approved as completed satisfactory by the COR. The warranty period will start with the satisfactory approval of all components and testing by the COR.
16. The contractor shall furnish and install all new irrigation equipment. Refurbished or used irrigation equipment will not be allowed.
17. The contractor personnel doing the actual satellite controller replacements shall be licensed and/or certified Rain Bird technicians and show proof thereof to the COR. The contractor shall program the controllers and coordinate the operation of the controllers with the central control system with the assistance and supervision of an authorized Rain Bird controller/central control system representative.
18. Contractor shall have the authorized Rain Bird controller/central control system representative conduct classes for cemetery maintenance personnel in the instruction of programming, care and maintenance of the satellite controller and central control system. Provide a minimum of 4 hours of training including documentation to a minimum of two (2) cemetery staff on the new satellite controllers and their interface with the existing central control system software. The contractor shall supply to the cemetery a minimum of two (2) copies each of the satellite controller user's manual and the maintenance & repair manual. Turn over the two (2) new, hand-held remote controls compatible with the TRC Commander wireless cards to the COR.
19. Haul away & dump debris and waste to an approved disposal site.
20. Thoroughly clean up the work area at the end of each day's work, and at completion of the project. Leave premises clean and free of waste, scrap, used equipment, or other material intentionally or incidentally delivered to the site by Contractor or Contractor's personnel.
21. Temporary protection against damage for portions of existing structures and grounds where work is to be done, materials handled and equipment moved and/or relocated.
22. The Contractor shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work site not to be removed and do not unreasonably interfere with the work required under this contract. The Contractor shall only remove trees when specifically authorized to do so, and shall avoid damaging vegetation that will remain in place. If any limbs or branches of trees are broken during contract performance, or by the careless operation of equipment, or by workmen, the Contractor shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Contracting Officer.
23. The Contractor shall protect from damage all existing improvements and utilities at or near the work site and on adjacent property of a third party, the locations of which are made known to or should be known by the Contractor. The Contractor shall repair any damage to those facilities, including those that are the property of a third party, resulting from failure to comply with the requirements of this contract or failure

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to exercise reasonable care in performing the work. If the Contractor fails or refuses to repair the damage promptly, the Contracting Officer may have the necessary work performed and charge the cost to the Contractor.

24. Materials and equipment accruing from work removed, or parts thereof, shall be disposed of as follows:
 - a. Items which are to remain property of the Government are to be turned over to the COTR. Items that remain property of the Government shall be removed or dislodged from present locations in such a manner as to prevent damage which would be detrimental to re-installation and reuse.
 - b. Items not reserved shall become property of the Contractor and be removed by Contractor from the cemetery and disposed of in an approved landfill.
25. Remove, cut, alter, replace, patch and repair existing work as necessary to install new work. Existing work to be altered or extended and that is found to be defective in any way, shall be reported to the COTR before it is disturbed. Materials and workmanship used in restoring work, shall conform in type and quality to that of original existing construction, except as otherwise shown or specified.
26. Upon completion of contract, deliver work complete and undamaged. Existing work (mechanical and electrical work, lawns, paving, roads, walks, etc.) disturbed or removed as a result of performing required new work, shall be patched, repaired, reinstalled, or replaced with new work, and refinished and left in as good condition as existed before commencing work.
27. At Contractor's own expense, Contractor shall immediately restore to service and repair any damage caused by Contractor's workmen to existing piping and conduits, wires, cables, etc., of utility services or of fire protection systems and communications systems (including telephone) which are indicated on drawings and which are not scheduled for discontinuance or abandonment.
28. STANDARDS OF EMPLOYEE CONDUCT:
 - a. The National Cemetery Administration honors veterans with a final resting place and lasting memorials that commemorate their service to our Nation. National Cemeteries are national shrines. The standards of work, appearance, and procedures performed by the contractor at this cemetery shall reflect this nations concern for those interred there. Due to the sensitive mission of the cemetery, contractor personnel must exercise and exhibit absolute decorum, composure, and stability at all times.
 - b. Contractor personnel shall be required to adhere to the following standards of dress and conduct, as briefly mentioned here, while performing work in the National Cemetery. These standards and regulations are enforceable under Title 38, U.S.C., Part I, Chapter 9, Section 5901.
 - c. Clothing shall be presentable and suitable to the work while maintaining proper appearance and decorum indicative for a National Shrine. Uniform shirts and hats are preferred. Clothing shall be clean and cleanliness and personal hygiene are imperative. T-shirts and/or tank tops as outer garments are prohibited. Protective/safety clothing and shoes shall meet or exceed OSHA and state requirements.
 - d. Behavior and language must be appropriate, reverent, and respectful at all times.
 - e. Eating and drinking (except water) is prohibited in the work areas and within sight of a committal shelter during a service.
 - f. Use of intoxicating beverages, any tobacco products, and illegal drugs on the Cemetery premises is strictly prohibited.
 - g. Contractor personnel shall not lean, sit, or stand on or against headstones or monuments. No tools, equipment or other items will be placed or leaned on headstones or monuments.
 - h. The Contractor shall be responsible for maintaining satisfactory standards of personnel conduct and work performance and shall administer disciplinary action as required. The Contractor is expected to

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remove any employees from the Cemetery for cause, to include, but not limited to, safety violations, other misconduct in performance of duty under these specifications and/or conduct contrary to the best interests of the Government. If the Contractor fails to act in this regard, or the reason for a removal is immediately required to protect the interests of the Government, the COTR may direct the removal of an employee from the premises. Contractor objections to any such action will be referred to the Contracting Officer (CO) for final resolution; however, the Contractor will first immediately comply with COTR direction pending any CO final resolution at a later time or date. The Contractor will not be due any type of compensation for their costs incurred as a result of an employee being removed for cause; unless the removal is directed by the COTR, and is later found invalid and/or unreasonable by the Contracting Officer.

- D. Time of Completion: The project shall be completed within 90 calendar days after contract award.
- E. Code Compliance: All work shall be performed in accordance with National, State, and Local Codes including the International Building Code (IBC), the International Mechanical Code (IMC), the International Plumbing Code (IPC), and the National Electrical Code (NEC).
- F. Contractor Quality Control:
- 1) The Job Site Superintendent will: a) Review and approve submittals; b) Inspect the quality of work performed; c) Certify the completed work for payment and other purposes.
 - 2) The Contractor must demonstrate, using persons directly employed by the Contractor, experience with the construction, installation, and maintenance of at least five (5) large scale irrigation systems (6" or larger main lines) having computer controlled centralized control systems with hardwired or radio communications.
 - 3) There is a permanent service organization, maintained or trained by the manufacturer(s), which will render satisfactory service within 24 hours of receipt of notification that service is requested.
- G. Submittals After Award: Submit manufacture's literature for COR review and approval for all new equipment or materials as part of the bid proposal. For example but not limited to: satellite controllers, pedestals, new TRC Commander wireless cards/antennas, electrical components, and Operating and Maintenance manuals (O&M's) for any new equipment provided.
- H. Plans/details:
- 1) Attachment (1): Rain Bird ESP-SAT satellite controller brochure
 - 2) Attachment (2): TRC Irrigation Remote brochure
 - 4) Attachment (3): Typical Pedestal Configuration
 - 5) Drawings: "*Replace Irrigation Satellite Controllers*", Drawing Sheets: X-1, Cover Sheet; L-1, Site Plan; L-2, Existing Conditions
- I. POC: The Contracting Officer's Technical Representative (COR) for this project is: Charles Hutchison, Foreman, Fort Logan National Cemetery.
- J. Project completion: The project site shall be protected and fully restored to a condition equal to that existing prior to the commencement of work.

END OF SCOPE OF WORK

ESP-SAT Series Controllers

Satellite Controller for Maxicom²® or SiteControl

The power of an advanced water-management tool in an easy-to-use package. The ESP-SAT is a commercial-duty controller for the basic or sophisticated user. The ESP-SAT serves as a field satellite controller for the Rain Bird Maxicom² and SiteControl central control systems. It also has all the features and stand-alone capabilities of Rain Bird's ESP-MC controller line. Four programs, a real-time calendar, Rain Bird's exclusive Cycle+Soak™ water management feature, and the best customer satisfaction program in the industry, helping you conserve both water and money.

Features

- Operates as a field satellite controller for the Maxicom² and SiteControl central control systems.
- Advanced contamination-resistant design to assure reliable performance.
- Heavy-duty electrical surge protection.
- 12-hour watering duration for any or all stations to aid in drip compatibility.
- Four programs with eight start times each allow mixed irrigation applications in a single controller.
- Two master valve terminals, one programmable by station, provide better control.
- Programs can overlap to maximize hydraulic capacity and minimize watering time.
- 365-day calendar with leap year intelligence for one-time date and time setting.
- Event day off option to set any day of the month as a non-watering day for all programs.
- Programmable rain delay enables system to stay off for specified period with auto-restart.
- Independent day cycle by program.
- Water budget by program provides adjustments from 0-300% in 1% increments.
- Cycle+Soak by station allows total irrigation run time to be split into usable cycles, minimizing runoff.
- Manual watering by station or program.
- Sensor override switch with LED to indicate when irrigation is suspended.
- Non-volatile, 100-year memory holds program, date, and time during power outages.
- Automatic fault indication identifies electrical shorts, skips shorted stations, and continues watering remaining program.

- Quick-connect terminal strip speeds installation.
- Universal remote ready: pre-installed connectors for addition of remote products.
- Heavy-duty transformer for simultaneous operation of up to nine 24 VAC, 7VA solenoids.
- Battery-programmable controller allows for programming prior to installation.

Stand-Alone Operating Specifications

- Station timing: A, B, C, D: 0 to 2 hours in 1-minute increments; 2 to 12 hours in 10-minute increments
- Automatic starts: 32 starts total, eight per program per day
- Programming schedule: 1. ODD day watering per program; 2. EVEN day watering per program 3. CYCLICAL (1 to 99 days, variable per program; 4. Custom day-of-the-week by program
- Test program: Variable 1 to 99 minutes

Operating Specifications (Central Control Operation)

- Requires a CCU to connect to Maxicom² central controller
- Requires a TWI to connect to SiteControl central controller
- MAXILink™ models have 2 sensor inputs - no decoders required
- 40 station models require 2 CCU channels.

Electrical Specifications

- Input required: 117 VAC ± 10%, 60Hz (International models: 230 VAC ± 10%, 50Hz)
- Output 26.5 VAC, 2.5A
- Station load capacity: Up to two 24 VAC, 7VA solenoid valves per station (up to 4 stations operating simultaneously) plus a master valve or pump start relay
- Diagnostic circuit breaker skips and indicates stations with overloaded circuits
- Battery backup: 9VDC, NiCad rechargeable for programming under battery power and for maintaining active program-in-progress during a power outage
- Heavy-duty electrical surge protection



Dimensions

Metal Wall Mount

- Width: 11⁵/₁₆" (28,7 cm)
- Height: 11¹/₂" (29,2 cm)
- Depth: 6¹/₂" (16,5 cm)

SS Pedestal

- Width: 11¹/₂" (29,2 cm)
- Height: 30" (76,2 cm)
- Depth: 11¹/₂" (29,2 cm)

Models

- ESP-12SAT-2W
- ESP-24SAT-2W
- ESP-40SAT-2W
- ESP-12SAT-2S
- ESP-24SAT-2S
- ESP-40SAT-2S
- ESP-12SAT-LW
- ESP-24SAT-LW
- ESP-40SAT-LW
- ESP-12SAT-LS
- ESP-24SAT-LS
- ESP-40SAT-LS

How To Specify

ESP - 24SAT - 2W

Model
ESP:
(120VAC)
IESP:
(230 VAC)

Mounting
W: Metal Wall Mount
S: Stainless Steel

Satellite Path
2: Two-Wire
L: MAXILink™ Radios

Number of Stations
12SAT: 12 stations
24SAT: 24 stations
40SAT: 40 stations

Specifications

The irrigation system controller shall be of a hybrid type that combines electromechanical and microprocessor-based circuitry capable of fully automatic and manual operation. The controller will be housed in a weatherproof, lockable, 16-gauge seamless steel cabinet suitable for wall mounting or free-standing stainless steel pedestal mounting.

The controller shall operate on a 117 VAC \pm 10% power input and be capable of actuating up to two 24 VAC, 7VA solenoid valves per station plus a master valve or pump start relay. The controller shall be capable of operating four stations plus the master valve simultaneously. Controller output shall be protected against severe electrical surge.

As a stand-alone, the controller shall have four separate irrigation programs (A, B, C, & D) which can have different start times, watering days, day cycles, and station timing. Each program shall have eight start times per day.

The controller shall have _____ stations, with each station capable of an operating time of 0 to 2 hours in one-minute increments and 2 to 12 hours in 10-minute increments. Controller station operation shall be of automatic sequential stacking to avoid overlapping operation unless programmed to overlap.

The controller shall have a 365-day calendar with day-of-the-month OFF feature. Programs will run on an ODD/EVEN day cycle, day-of-the-week ON/OFF cycle, or in cycles from 1 to 99 days. In addition, the controller shall have a programmable rain shut-down from 1 to 99 days.

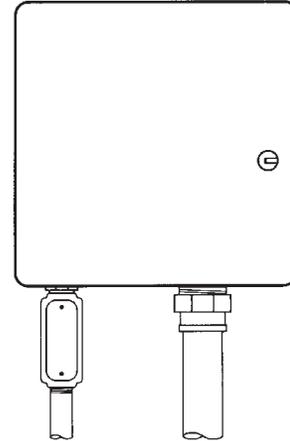
The controller shall have two master valve/remote pump start circuits for use with a master valve to pressurize the system when the irrigation cycle starts or to activate a remote pump start relay to run the pump during the irrigation cycle. One master valve/pump start circuit shall be programmable by station; the other shall function at all times.

The controller shall be capable of being operated manually at any time. A manual single station, a group of stations, or a program can be selected to run for the programmed time without affecting the normal program. This controller shall be capable of running a variable system test program without affecting the normal program.

The controller shall be a Rain Bird ESP-Satellite.

The controller shall have Cycle+Soak™ water management software which is capable of operating each station for a maximum cycle time and a minimum soak time to reduce water run-off and puddling. The maximum cycle time shall not be extended by water budgeting.

The controller shall have an internal non-volatile memory which will retain the irrigation program and the programmed date and time for a minimum of 100 years without power. A 9 VDC rechargeable battery and recharging circuit shall also be included for counting down the program-in-progress during a power outage and shall allow programming of the controller when it is disconnected from the main power supply.



The controller shall indicate when it is operating under central control. It shall also display which channel and station is in operation at such time. There shall be a station status indicator light and a master valve status indicator light. These lights will indicate station operation and circuit integrity. An indicator for sensor status will be found on the front panel along with a switch to suspend sensor operation. This indicator and override will work with a sensor wired to the controller's sensor terminals.

The controller shall be as manufactured by Rain Bird Corporation, Glendora, California.

Rain Bird Corporation

6991 E. Southpoint Road
Tucson, AZ 85756
Phone: (520) 741-6100
Fax: (520) 741-6522

Rain Bird Technical Services

(800) RAINBIRD (1-800-724-6247)
(U.S. and Canada)

Rain Bird Corporation

970 West Sierra Madre Avenue
Azusa, CA 91702
Phone: (626) 812-3400
Fax: (626) 812-3411

Specification Hotline

800-458-3005 (U.S. and Canada)

Rain Bird International, Inc.

1000 West Sierra Madre Ave.
Azusa, CA 91702
Phone: (626) 963-9311
Fax: (626) 852-7343

The Intelligent Use of Water™
www.rainbird.com

ATTACHMENT (2)



Phone: (800) 275-8558
Fax: (425) 883-4667
www.irrigationremotes.com

Permanent Receiver Card for Rain Bird® ESP MC, or Maxicom Controllers PN: 01060

Designed specifically for the Rain Bird® ESP MC, or Maxicom irrigation controller, this permanent receiver card is the ideal addition to your Rain Bird® ESP MC, or Maxicom irrigation controller. Easy installation and simple operation make it the commercial contractors ultimate labor saving solution for wireless controller operation. The receiver card allows the operator to control operation at any time without having to approach the controller. The TRC Commander Transmitter is the only transmitter designed to operate TRC Irrigation Remotes permanent receiver cards. The TRC Commander Transmitter is a completely portable professional grade wireless transmitter. Backed by a THREE YEAR limited warranty, TRC Irrigation Remotes permanent receiver cards are designed to provide the irrigation professional with years of trouble free service.

Primary Features and Benefits

- The permanent receiver card system for the Rain Bird® ESP MC, or Maxicom Controller will operate up to 40.
- **Silent Running**
Allows remote activation of "Rain-Off Mode". Remotely disable all stations for 1-7 days without reprogramming the controller.
- **Simple Operation**
No complicated valve wire harness (pig-tail) installations. Simple plug and play installation.
- **Three Year Warranty**
Demonstrates our commitment to high quality.
- **Master Valve or Pump disable**
Easily disable the master valve for system maintenance.
- **Multiple Valve Operation**
Operates up to 6 valves and a Master Valve.
- **Two million receiver code combinations**
Eliminates false activation.
- **Automatic Safety Shut Down**
Automatically turns off stations after 20 minutes.
- **Illuminated Power on Indicators**
Red Power and Green Master valve on LED's.



Permanent Receiver Card System for Rain Bird® ESP MC Controllers PN: 01060

TRC Commander Transmitter is the most popular transmitter in the irrigation industry. With a transmitting power of 2 Watts, and the capability of 5 miles range*, the Commander Transmitter is an invaluable tool for any irrigation professional.

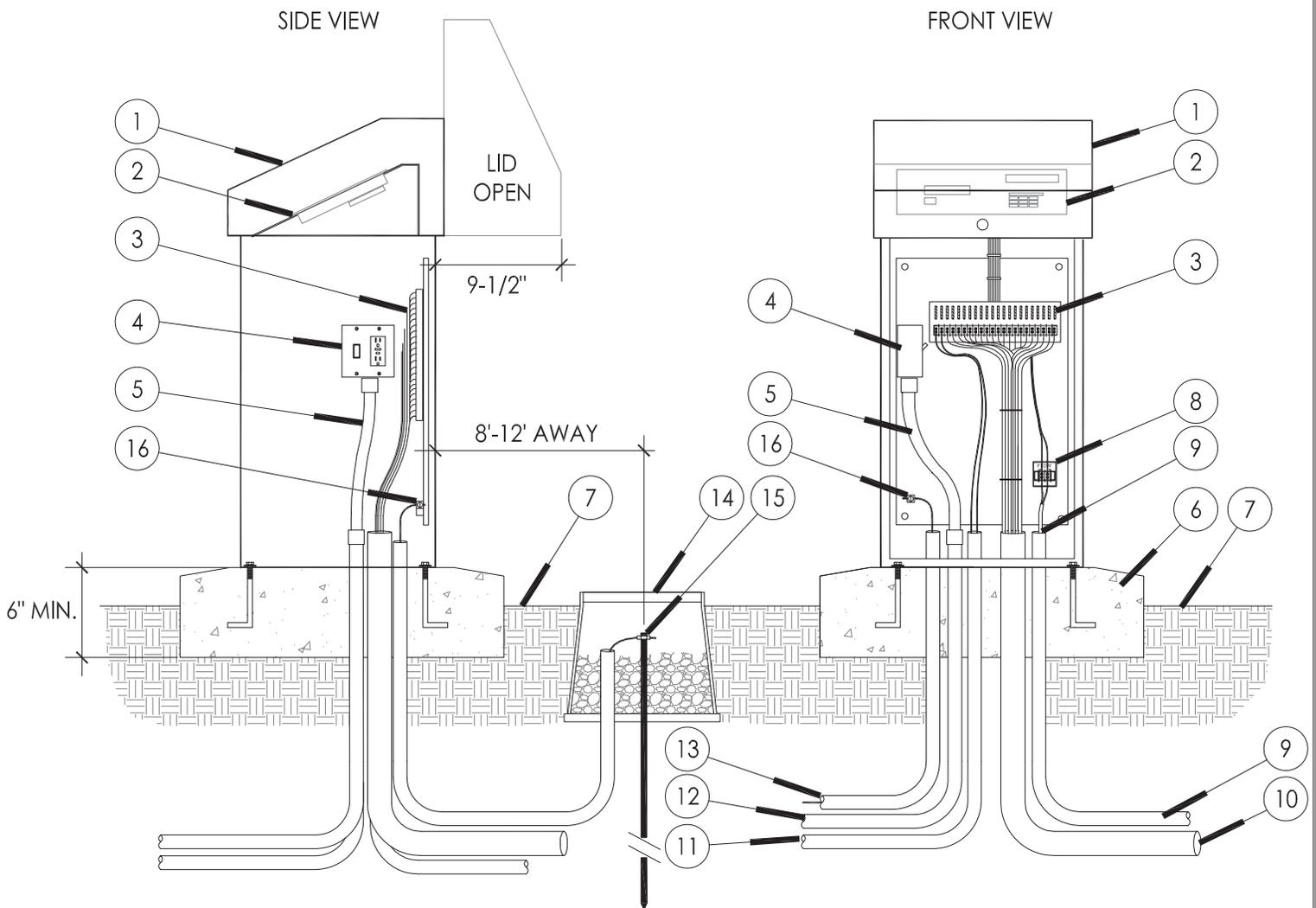
System Contents

01060 receiver card system Includes:

- 01060 Receiver Card
- 8" Tuned antenna
- Top Mount antenna base kit
- Commander System Manual

*The Range of all Radio products is dependant on local conditions and antenna selection/location.

Note: 01060 Receiver Card is NOT compatible with the Par®, Par Plus®, or SAT® controllers.



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| <p>1 STRONGBOX STAINLESS STEEL NEMA 3R RAINPROOF ENCLOSURE (UL LISTED).</p> <p>2 SATELLITE ASSEMBLY.</p> <p>3 TERMINAL STRIP FOR VALVE WIRES.</p> <p>4 POWER SWITCH / GFCI RECEPTACLE.</p> <p>5 ELECTRICAL FLEX CONDUIT FOR POWER.</p> <p>6 6" MIN THICK, CONCRETE PAD WITH ANCHOR BOLTS PER MANUFACTURER RECOMMENDATIONS.</p> <p>7 FINISHED GRADE.</p> <p>8 FLOW SENSOR TERMINAL BOARD.</p> | <p>9 CONDUIT AND SWEEP ELL WITH FLOW SENSOR CABLE.</p> <p>10 CONDUIT AND SWEEP ELL FOR LEAD WIRES.</p> <p>11 CONDUIT AND SWEEP ELL FOR MASTER VALVE WIRES.</p> <p>12 CONDUIT AND SWEEP ELL FOR 110 VAC POWER LINE.</p> <p>13 CONDUIT AND SWEEP ELL FOR GROUND WIRE.</p> <p>14 10" ROUND VALVE BOX AROUND GROUND ROD. FILL WITH 3/4" CRUSHED ROCK.</p> <p>15 5/8" X 8' GROUND ROD WITH #6 GROUND WIRE AND CLAMP. LOCATE 8'-12' FROM ENCLOSURE.</p> <p>16 #6 GROUND WIRE SECURED TO BACKBOARD GROUNDING TERMINAL.</p> |
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TOP ENTRY ENCLOSURE - CONCRETE PAD

ATTACHMENT (3)