

7) Solenoid Decoders

Solenoid decoders shall be as provided by aQUAMONIX (Rainman) as specified on the project drawing.

8) 2-WIRE Cable

Solenoid control cable shall be a Aquamonix (Rainman) approved 2-Wire cable.

9) Low Voltage Cables

Solenoid valve control cables shall be Tyflo multi-strand copper conductors sheathed in polyethylene or polypropylene suitable for direct burial. Cable sizes shall be:

- a) Common Wires: Minimum of 2.5mm² conductor or as specified.
- b) Active Wires: 1.5mm² if less than 400 metres in total length, or 2.5mm² if greater than 400 metres in total length.
- c) Larger size cable may be used to ensure the reliable operation of solenoid valves.

A different colour of active wire shall be used for each solenoid valve with an individual cable being installed to each valve. Common wire shall be black. Spare wires are to be terminated in 910 Valve Box.

10) Wire Connectors

All wire joints and connections to control valves are to be Rainbird DBR-Y gel filled waterproof connector. Alternative sealant kits shall not be used unless authorised by the City's Representative.

11) Conduit

All conduits shall be a minimum of 25mm MD conduit. Long radius bends are to be installed for all conduit changes of direction including entry to valve boxes.

12) Cable pits

All cable pits shall be FCO5 size to be plastic with P2 concrete reinforced lids.

13) Backflow Device

Where the irrigation system is connected to mains water supply, a Water Corporation approved backflow device is to be installed.

14) Pipe Sleeves

Pipe sleeves shall be a minimum of Class PN9 PVC SWJ sized as specified.

15) Bolts and Nuts

All bolts, nuts and washers shall be in accordance with *AS1110.1:2015*, *AS1110.2:2015*, *AS1111.1:2015*, *AS1111.2:2015*, *AS1112.1-2000*, *AS1112.2-2000*, *AS1112.3:2015* and *AS1112.4-2000* and hot dipped galvanised in accordance with *AS1214-1983*. Bolts, nuts and washers shall be of similar material. Washers shall be fitted to all bolts and shall be tapered where necessary to give the heads and nuts of bolts a satisfactory bearing surface. The threaded portion of each bolt shall project through the nut by at least one full thread and not more than a distance equal to the bolt diameter.