
WATER PLAY SYSTEMS

PART 1 GENERAL**1.1 Related Work**

- .1 All Division 1 Specification Sections
- .2 Section [02311](#) Site Grading
- .3 Section [02701](#) Aggregate Materials
- .4 Section [03300](#) Cast-In-Place Concrete

1.2 Scope of Work

- .1 This Work includes the complete supply and installation by Resicom complete with related electrical, mechanical and drainage systems. The installation of the waterplay features and systems must be undertaken by qualified installers with a minimum of five (5) years experience and employed by Resicom. System includes the water play features, water play feature footings, activator bollards, in-ground chambers, manifolds, PLC controllers, and water supply lines from manifold to the water play features;
- .2 The Work includes installation, initial start-up testing and adjustments, and full instruction to the Owner;
- .3 Provide one (1) initial start-up test, one (1) full instruction course, and one (1) winterization training session. All operations manuals and spare parts are to be delivered to the Owner.

1.3 Measurement for Payment

- .1 Payment for the water play system will be "Allowance" as indicated in the Bid Document – Price Schedule, including: all labour, materials and equipment and all incidentals required to complete the installation as shown on the Contract Document drawings and specified herein.

1.4 References

- .1 Electrical to Provincial Code and Municipal Standards;
- .2 Mechanical to Provincial Code and Municipal Standards.

1.5 Submittals

- .1 Submit shop drawings and product cut sheets for:
 - .1 All components by Resicom (or approved alternate) water play system including water play features, activators, manifold, in-ground chambers and valves;

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.2 Vortex Smart Touch – Touch Screen controllers (or approved alternate);

.3 Footings for all water play features that have been structurally certified by a Professional Engineer licensed in the Province of Ontario.

.2 Submit shop drawing schematics of plumbing and electrical systems for water plays and mechanical room. Schematics to clearly illustrate any proposed deviations from design schematics;

.3 Submit ESA documents from local electrical inspector certifying grounding and electrical connections prior to backfilling Work.

1.6 Schedule

.1 Schedule ordering of all water play features, mechanical and electrical components to ensure availability.

1.7 Permits

.1 The Contractor is to obtain and pay for permits as may be required for the water play system.

1.8 Delivery, Storage and Handling

.1 Contractor shall check all materials delivered to the sites for damage and to ensure that materials conform to the specifications. Contractor shall protect materials at all times. Damaged goods will be rejected and not approved for installation.

PART 2 PRODUCTS**2.1 Controller**

.1 17 Solenoid, Touch Screen PLC Water Play Controller and enclosure as supplied by Resicom tel. (519) 212-1730;

2.2 Water Play Equipment

.1 Water play equipment to be by Resicom as follows:

PART 3 - EXECUTION**3.1 Water Play**

.1 Following preparation of rough grade, layout features for the

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approval of the Consultant;

- .2 Install water play features in accordance with the manufacturer's instructions and specifications true to line and grade and in accordance with approved shop drawings and structural footing details. Install all water lines and water manifold in accordance with approved mechanical schematics. All joint welds are to be water tight. The water line as illustrated is schematic. Final layout of water lines are to be approved on site by the Consultant. The routing and placement of all poly pipe conduit shall ensure that the 160PSI water line can feed direct from the below grade vault to the point of connection. Contractor's pricing shall reflect same.
- .3 Pressure test to the satisfaction of the Consultant, all water lines and connections prior to final concrete pour;
- .4 Items for casting into concrete to be handed to appropriate trade with manufacturer's setting template. Adjust height of items with adjustment screws to ensure drainage away or to feature as indicated on the grading plan;
- .5 Earth Bonding and Grounding: all water play products are to be equipped with a grounding lug and are to be grounded against a lightning strike as per article 680 of the N.E.C. Bonding to be inspected and approved by ESA prior to backfilling and the installation of concrete surfaces.
- .6 Install all equipment with winterizing plugs and replace with nozzles after surfacing Work is complete.

3.2 Quality Control

- .1 Quality assurance shall include foundation soil inspection;
- .2 Quality assurance shall also include observation of the construction of the water play for general conformance with the design drawings and specifications;
- .3 All mechanical and electrical installations shall be inspected for conformance with specifications and codes and by their respective agencies: such reports shall be provided to the Consultant;
- .4 Pressure test system to the satisfaction of the Consultant prior to hard surface installations;

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3.3 Acceptance

- .1 Following installation of the water play systems, the Consultant will require that the water play be successfully run for a continuous period of eight (8) hours;
- .2 Arrange for system set-up and fine tuning of features and PLC programming with the Owner;
- .3 Provide one (1) initial start-up test, one (1) full instruction course, and one (1) winterization training session. All operations manuals and spare parts are to be delivered to the Owner.

3.4 Warranty

- .1 The period of warranty shall extend twenty-four (24) months past the date of Substantial Performance of the Work.

3.5 Basis Payment

- .1 Payment for this item shall be included in the Bid Document – Price Schedule and shall be full compensation for the provision and installation of all materials, labour and things necessary to complete the Work.

END OF SECTION - 02861