

**ATTACHMENT B**  
**ADDITIONAL SPECIAL PROVISIONS**

**Project Information**

This project is being funded by the City of Madison (Owner). All scope items and work listed below AND as required to complete the project shall be accounted for in the Contractors total bid price. Contractor shall minimize disturbance to the existing adjacent public spaces as much as possible. Public access will not be permitted during construction.

**Reference**

The work included in this project scope shall be completed in accordance with the plans. The scope items shall be described in the following section and executed according to the referenced standards. The latest edition of the "State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction" and City Standard Specifications shall serve as the referenced standard. Unless otherwise specified, the City standards shall prevail over WisDOT. Payment terms shall be per Special Provisions below.

**10911 – Mobilization**

Scope: This work shall include the cost of moving in equipment and supplies to the site, the establishment of necessary stockpiles and trailer, perimeter fencing around the edges of the project site, and moving the same off site. This item also includes any permitting, traffic control signage or monitoring, construction staking or layout required by the contractor.

Reference: Section 109.14 of the standard specifications.

Payment: This work will be measured and paid for at the contract lump sum price. This shall include compensation for furnishing, delivering, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work.

**20701 – Terrace Seeding**

**21011 – Construction Entrance**

**21017 – Silt Sock (8-Inch) – Complete**

**21041 – Inlet Protection, Type D – Complete**

**21071 – Erosion Matting, Class II, Type A – Organic**

**30207 – Type H Concrete Curb and Gutter**

**30302 – 5 Inch Concrete Sidewalk**

**30349 – Colored 5-Inch Concrete**

Scope: This work consists of furnishing and installing full depth integral colored concrete pavement including forming and finishing at locations designated on the Plans in accordance with the standard specifications.

Colors shall be from Solomon as specified below:

A – Marigold (#238)

Reference: Article 303 of the standard specifications.

Payment: This work will be measured and paid for at the contract unit price per square foot. This shall include compensation for furnishing, delivering, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work.

#### **40103 – Crushed Aggregate Basecourse Gradation No. 3 (3/4”)**

#### **50441 – 8” Type III Storm Sewer Pipe**

Scope: This work describes furnishing and installing stormwater piping as shown on the plans.

Reference: Article 504 of the standard specifications.

Payment: This work will be measured and paid for at the contract unit price per linear foot. This shall include compensation for furnishing, delivering, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work.

#### **50792 –Storm Sewer Tap**

Scope: This work describes furnishing and installing the inlet connections and all fittings required to connect to existing stormwater structures as shown on the plans.

Reference: Article 507 of the standard specifications.

Payment: This work will be measured and paid for at the contract lump sum price. This shall include compensation for furnishing, delivering, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work.

#### **90000 – Furnish and Install 4” Water Service Lateral**

Scope: This work describes furnishing and installing the 4” water lateral service to the splashpad as shown on the plans. Valves and fittings shall be incidental to this item. The City Utility shall provide the water meter.

Reference: Part VII of the Standard Specifications.

Payment: This work will be measured and paid for at the contract unit price per linear foot This shall include compensation for furnishing, delivering, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work.

#### **90001 - Water Feature Equipment**

Scope: This work consists of furnishing the splashpad equipment (Vortex) as shown on the Plans and details including features, required mechanical systems, manifold, controller, and controller cabinet.

Reference:

Manufacturer Contact:

- Commercial Recreation Specialists, 1807 Liberty Dr. Suite 101, Verona WI, 877-896-8442, [brian@crs4rec.com](mailto:brian@crs4rec.com) or [cameron@crs4rec.com](mailto:cameron@crs4rec.com)
- or pre-approved equivalent.

The water feature equipment and control systems shall be by (Vortex) or approved equal for the project. The Contractor shall be responsible for receiving delivery, offloading, and all installation, tools, materials, etc as required to complete the installation of the products as outlined in the plans, details, and specifications. Work shall include but not be limited to all footings, plumbing, electrical, bonding required to provide a fully operating system as outlined. Any Contractor changes in the plumbing, concrete slab, and/or details shall be coordinated with the manufacturer and A/E. Contractor shall

confirm that all soil conditions meet a minimum of 2,500 PSF load bearing before stone compaction and concrete installation.

**Command Center & Cabinet:** The Command Center shall be a pre-fabricated water distribution system containing piping, valves and electrical wiring, housed in a powder-coated steel enclosure. They shall be factory assembled, water pressure tested, and shall be delivered from the Splashpad equipment manufacturer's facilities. They shall be equipped with threaded connections for the water inlet and slip-on for water outlets. The solenoid valves shall be pre-wired to the controller or to a junction box (when the controller is placed in a remote location). The installer shall provide the plumbing equipment required from the water source to the water inlet or backflow device and pressure regulator if so configured. The installer shall provide the plumbing equipment required from the water outlets to the Splashpad Play Products, as well as adequate drainage ball valves at the low point of each of the Play Product's water distribution lines (if applicable). Should the controller be located remotely, Vortex shall supply 10 feet of wire on the controller and 10 feet of wire on the junction box; if more than 20 feet of wire is required, the installer shall supply the rest of the electrical equipment. The grounding of the junction box shall be done by the installer.

**Water Distribution Manifolds:** Shall be constructed of 3 1/2" outside diameter stainless steel structural tubing with a power coat painted finish. Each water distribution port shall be a 1-1/2" NPT connection. The manifold shall be equipped with a pressure gauge and 1/2 inch (12 mm) hose bibb. All welded joints shall be watertight and pressure tested to 150 psi.

**Solenoid Valves:** There shall be one (1) solenoid valve installed on each of the water distribution ports for the Play Products. They shall be a normally closed 24 VAC 50/60 cycle solenoid actuated globe/angle pattern design. The valve pressure rating shall not be less than 150 psi. The valve body and bonnet shall be constructed of PVC with stainless steel fasteners. The valve shall have a manual override capability (manual open/close control). It shall house a fully encapsulated, one-piece solenoid. Each Solenoid valve shall have an integrated flow control adjustment valve stem for fine tuning of spray effects.

**Piping and Fittings:** All piping and fittings shall be at least schedule 40 PVC. All factory-assembled components, fitting and connections shall be water pressure tested prior to delivery.

**Electrical Enclosures, Conduit, Wiring and Connections:** All electrical wiring shall be # 18 AWG with a 600V rating. All electrical connections, enclosures, and conduit shall be Nema 4x watertight.

**FT MAESTRO™ Controller:** The Maestro Controller shall be sized according to the number of I/O it is required to control. The Maestro Controller shall be factory programmed with spray sequences designed according to the requirements of the project. It shall have the flexibility to user modify the sequences using either a transportable USB Key, with an internet connection or via the Touch screen user interface.

A 24hr/7day user programmable agenda, which shall allow the user to set the operational hours of the facility, shall be incorporated into the Maestro Controller. For any further details about user interface, please refer to the User Guide Manual provided by Vortex.

The operating system shall contain a 120V AC and 100VA to 350VA primary / 24 VAC secondary or 240V AC and 100VA to 350VA primary / 24 VAC secondary transformers with built-in electrostatic shield protection. Transformer's power capacity shall vary according to the Splashpad size.

The operating system shall also contain a universal input 85-264 VAC primary / 12 VDC and 12.5A secondary power supplies with built-in electrostatic shield protection.

The operating system shall be housed in a corrosion resistant NEMA 4X rated enclosure.

The operating system shall have the capacity to receive signals from activation devices, operating on 3 to 24VDC/VAC.

The operating systems shall have the ability to provide a 24VAC auxiliary signal. This signal can be used to trigger a relay for Pumps, Chemical, UV system, or any other item following electrical specification.

The operating system shall have the capacity to operate based on a programmed sequence or based on a randomly generated sequence. In random mode each touch of the activator will generate a new unique sequence.

The operating system shall have the ability to soft-start ramp up the Splashpad to minimize potential water hammer.

The operating system shall have the capacity to operate a Rain Diverter Valve with a 24V AC max 250mA signal to prevent rain water to go into the sewer network when the Splashpad is not in function.

The operating system shall have the ability to control fast acting valves supplied by 24V AC max 1.5A each. For this, reference 33907.X1XX has to be chosen.

The operating system shall have the ability to automatically purge all water lines based on the user selected time and duration (i.e. every day at 5 am). It shall also, be configured to purge all lines after a user defined period of inactivity (i.e. after 4 hours of inactivity).

The operating system shall be supplied with a 10" touch screen user interface with controls for each output, activation device(s), and agenda. These selector settings allow the user to select the operational mode of the components (i.e. Manual, Off and Automatic).

Remote connection: if remote connection ability is required, the operating system shall be connected to internet. If there is no way to make a hard connection to an existing network, then Vortex can provide a pre-set 5G Cellular Router (sold separately) for any 5G covered location.

With additional connectivity kit (44900.0007R01), Maestro Controller shall have the ability to be controlled remotely through internet thanks to a 5G Cellular router. To perform this type of connection the area where the Splashpad™ and Maestro controller needs to be covered by a local mobile phone network.

Payment: This work will be measured and paid for at the contract lump sum price. This shall include compensation for furnishing, delivering, and for all labor, equipment, and incidentals necessary to complete this item of work.

## **90002 – Shade Structures**

Scope: This work consists of furnishing and installing the shade structures as shown on the Plans. This item shall include pier footings.

Reference: Shade Structure: Shade Systems Single Post Umbrella with pier mounted column. Structure is 16' DIA with 9' eave. Model U1609PM. Final colors to be verified by owner prior to fabrication.

Manufacturer Contact:

Commercial Recreation Specialists, 1807 Liberty Dr. Suite 101, Verona WI, 877-896-8442,  
[brian@crs4rec.com](mailto:brian@crs4rec.com) or [cameron@crs4rec.com](mailto:cameron@crs4rec.com)

- or pre-approved equivalent.

Provide stamped Engineered Drawings for structure and footings.

Provide shop drawings and receive approval.

**FOOTINGS:** The structures shall be set on prepared footings sized as shown, anchor bolts to be provided by manufacturer. The manufacturers engineer shall review and confirm design footings to

the minimum values identified in IBC Table 1804.2 Allowable Foundation and Lateral Pressure. The contractor must use appropriate construction practices for the specific site conditions.

Payment: This work will be measured and paid for at the contract price per each. This shall include compensation for furnishing, delivering, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work. This shall also include stamped engineered drawings and calculations.

### **90003 – Tables**

Scope: This work consists of furnishing and installing the picnic tables as shown on the Plans.

Reference: Belson Round 3-Seat Coated Steel Pedestal Table, surface mount. Model TRDP463S-ES. Final colors to be verified by owner prior to fabrication.

Manufacturer Contact:

Belson Outdoors, [www.belson.com](http://www.belson.com), 1800-323-5664

- or pre-approved equivalent.

Provide shop drawings and receive approval.

Payment: This work will be measured and paid for at the contract price per each. This shall include compensation for furnishing, delivering, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work.

### **90004 – Demolition**

Scope: This work consists of removing and disposing of miscellaneous items at the locations designated on the Plans and where directed by the A/E. Items include but are not limited to saw cutting, clearing and grubbing, tree protection, curb and gutter removal, pavement removal, abandoning and removing utilities, and miscellaneous item removals. Full depth sawcuts shall be performed at all pavement removal limits.

Payment: This work will be measured and paid for at the contract lump sum price. This shall include compensation for furnishing, delivering, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work.

### **90005 – Colored 5-Inch Reinforced Concrete**

Scope: This work consists of furnishing and installing full depth integral colored concrete pavement including forming, reinforcing, and finishing at locations designated on the Plans in accordance with the standard specifications. All concrete within the splashpad and overspray zone and as indicated on plans and details shall be sealed with a non-slip coating such as Shark-Grip Slip Resistant Additive per manufacturers recommendations. A 2'x2' mock-up with brooming, each color, and sealant must be provided prior to installation for A/E review. Waste from mock-ups may be used for below grade footings.

Colors shall be from Solomon as specified below:

A – Marigold (#238)

B – Terra Cotta (#413)

Reference: Article 303 of the standard specifications.

Payment: This work will be measured and paid for at the contract unit price per square foot. This shall include compensation for furnishing, delivering, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work.

**90006 – Mill & Overlay Asphalt Pavement**

Scope: This work describes constructing asphalt pavement and pavement patching in accordance with the details shown in the plans and as hereinafter provided.

Reference: Article 403 of the Standard Specifications.

Payment: This work will be measured and paid for at the contract unit price per ton. This shall include compensation for furnishing all materials, including preparing, sawing, hauling, mixing, placing, shaping, compacting, asphaltic materials and for all labor, equipment, tools and incidentals necessary to complete this item of work.

**90007 – 3 Inch Storm Sewer Pipe**

Scope: This work describes furnishing and installing stormwater piping as shown on the plans.

Reference: Article 504 of the standard specifications.

Payment: This work will be measured and paid for at the contract unit price per linear foot. This shall include compensation for furnishing, delivering, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work.

**90008 – 6 Inch Storm Sewer Pipe**

Scope: This work describes furnishing and installing stormwater piping as shown on the plans.

Reference: Article 504 of the standard specifications.

Payment: This work will be measured and paid for at the contract unit price per linear foot. This shall include compensation for furnishing, delivering, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work.

**90009 – Storm Sewer Structure**

Scope: This work describes furnishing and installing the storm sewer yard drain and all fittings required as shown on the plans.

Reference: Article 504 of the standard specifications.

Payment: This work will be measured and paid for at the contract price per each. This shall include compensation for furnishing, delivering, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work.

**90010 – 12 Inch Yard Inlet**

Scope: This work describes furnishing and installing the storm sewer yard drain and all fittings required as shown on the plans.

Reference: Article 507 of the standard specifications.

Payment: This work will be measured and paid for at the contract price per each. This shall include compensation for furnishing, delivering, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work.

**90011 – 18 Inch Yard Inlet**

Scope: This work describes furnishing and installing the storm sewer yard drain and all fittings required as shown on the plans.

Reference: Article 504 of the standard specifications.

Payment: This work will be measured and paid for at the contract price per each. This shall include compensation for furnishing, delivering, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work.

#### **90012 – Water Service Connection and Fittings**

Scope: This work describes furnishing and installing the connection for the water lateral service to the splashpad, tapping into to the existing main, shut-off valve, valve box, tee, hydrant and valve with valve box, safe water sample, etc. as shown on the plans. Valves, valve boxes, fittings, tracer wire, etc shall be incidental to this item.

Reference: Part VII of the Standard Specifications.

Payment: This work will be measured and paid for at the contract lump sum price. This shall include compensation for furnishing, delivering, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work.

#### **90013 – Electrical Service Connection**

Scope: This work consists of furnishing and installing any cables and conduits, bonding, and miscellaneous work to connect a new electrical service to the new splashpad controller shown on the plans. **The City will provide an electrical service to the new splashpad cabinet location for final connection by the contractor.** This item includes coordination with City electrician.

Reference: Electrical power conductors, conduits, bonding, and receptacles to be installed in compliance with NEC 70 in a neat and clean manner. All efforts shall be made to locate devices in a neat and orderly manner such as to not draw attention to them. A/E shall be consulted prior to installation to confirm manner and location of component placement. All components shall be rated for outdoor wet-use operation.

Payment: This work will be measured and paid for at the contract lump sum price. This shall include compensation for furnishing, delivering, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work.

#### **90014 – Earthwork**

Scope: This work consists of stripping and stockpiling of topsoil, excavating, filling, grading, importing new fill, compacting, preparation of sub-grade, disposal of excess materials, temporary drainage, and related earthwork for the project.

Reference: Article 201 and 202 of the standard specifications.

Payment: This work will be measured and paid for at the contract lump sum price. This shall include compensation for furnishing, delivering, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work.

#### **90015 – Water Feature Plumbing Installation**

Scope: This work consists of furnishing and installing the splashpad equipment (bases, features, deck drains, controller, manifold and cabinet), furnishing and installing the splashpad plumbing systems as shown on the Plans and details, furnishing and installation of all required electrical connections, low-voltage electrical and piping, and distribution plumbing. This item also includes the concrete foundation wall and bottom, sump crock, and offloading and storage of the equipment. Piping from the deck drains shall be covered under separate bid items. Contractor shall furnish record drawings of all splashpad piping and electrical systems and provide to owner at substantial completion.

Reference: Per Technical Specification Section 323900.10 and all State and Local Code Requirements.

Contractor Experience: Contractor (or sub-contractor) shall provide evidence and reference of at least two completed splashpad pool, or fountain within the past three (3) years within 100 miles of the project location. A/E shall reserve right to contact references.

Payment: This work will be measured and paid for at the contract lump sum price. This shall include compensation for furnishing, delivering, installing, maintenance, and removal of materials, and for all labor, equipment, and incidentals necessary to complete this item of work.