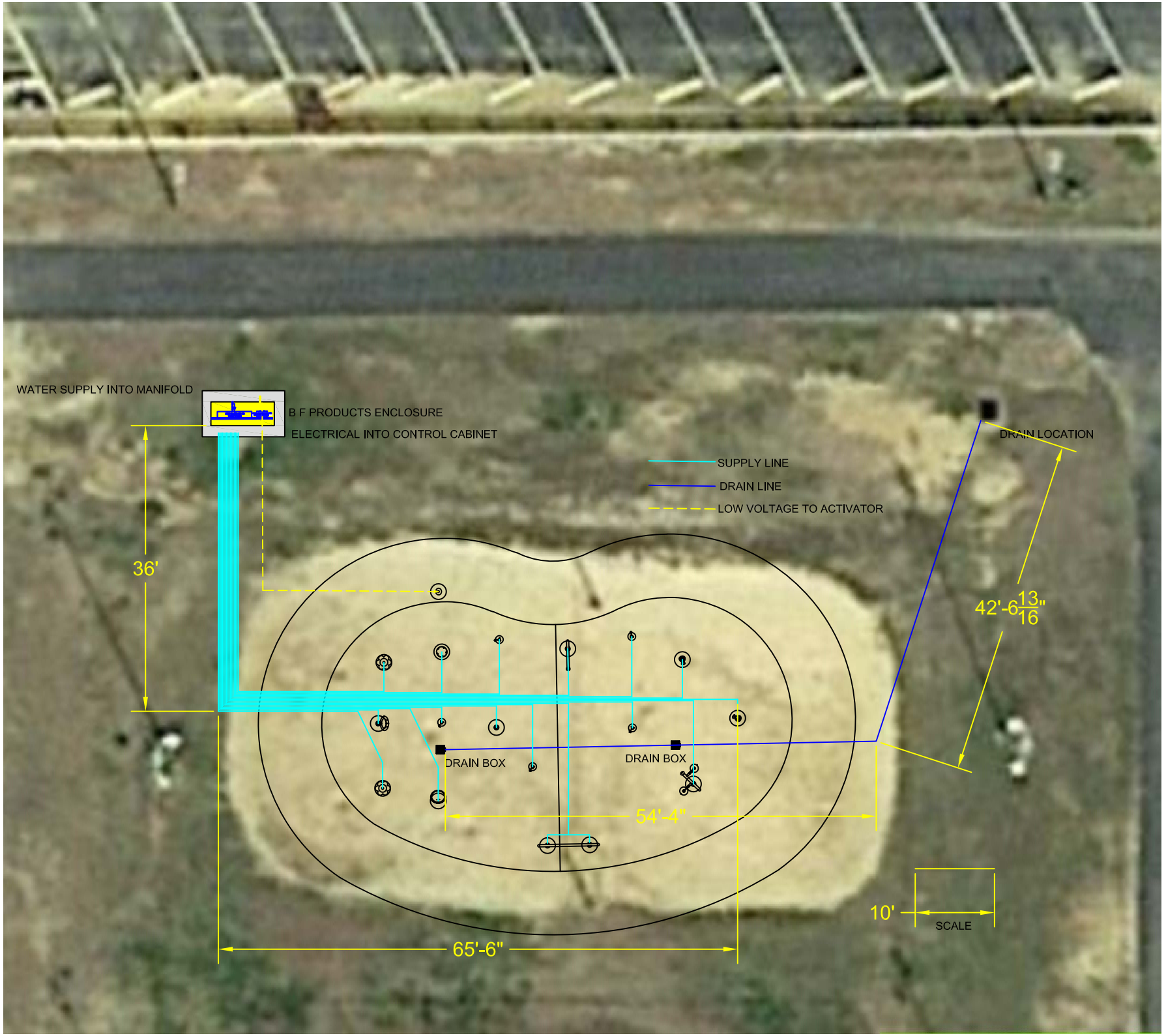


DESIGN LOADS:

REFERENCE: BUILDING CODE OF NORTH CAROLINA (LATEST EDITION)

CLASSIFICATION OF BUILDING:	CATEGORY/USE GROUP II
FLOOR:	100 PSF
WIND:	144 MPH ASD (IN ACCORDANCE WITH ASCE-7)
IMPORTANCE FACTOR:	WIND 1.0 SEISMIC 1.0 SNOW 1.0
EXPOSURE:	C
GROUND SNOW:	10 PSF

LATERAL DESIGN CONTROL:

EARTHQUAKE: ____
WIND: X

CALCULATED WIND BASE SHEARS (FOR MWFRS):

Vx= 16.1 K
Vy= 16.1 K

ANALYSIS PROCEDURE:

EQUIVALENT LATERAL FORCE

SEISMIC DESIGN PARAMETERS:

SPECTRAL RESPONCE ACCELERATION:	Sms= 0.188 Sm1 = 0.143	Sds= 0.125 Sd1 = 0.096
SEISMIC USE GROUP:	I	
SEISMIC DESIGN CATEGORY:	C	
SITE CLASSIFACTION:	D	

BASIC STRUCTURAL SYSTEM: BUILDING FRAME SYSTEM

REPONSE MODIFICATION FACTOR:	Rx= 3 Ry= 3
DEFLECTION AMPLIFICATION FACTOR:	Cdx= 3 Cdy= 3
BUILDING HEIGHT LIMIT, FEET:	H= NL
SEISMIC BASE SHEAR:	V= 20.5 K

FOUNDATIONS

1. PRESUMED SOIL BEARING CAPACITY IS 1500 PSF ON FIRM VIRGIN SOIL OR COMPACTED FILL.
2. FILL MATERIAL SHALL BE FREE OF ROOTS, WOOD OR OTHER ORGANIC MATERIAL.
3. FILL SHALL BE PLACED IN 8 INCH LIFTS AND COMPACTED TO 95 PERCENT OF THE OPTIMUM DENSITY AS DEFINED BY ASTM D-698.
4. PROOFROLLING SHALL BE CONDUCTED FOR BUILDING SUBGRADE USING 10 TON MIN., USING A FULLY LOADED DUMP TRUCK OR OTHER EQUIPMENT APPROVED BY THE OWNERS TESTING AGENCY. PROOFROLLING SHALL BE DONE AFTER A SUITABLE PERIOD OF DRY WEATHER TO AVOID DEGRADING AN OTHERWISE ACCEPTABLE SUBGRADE.

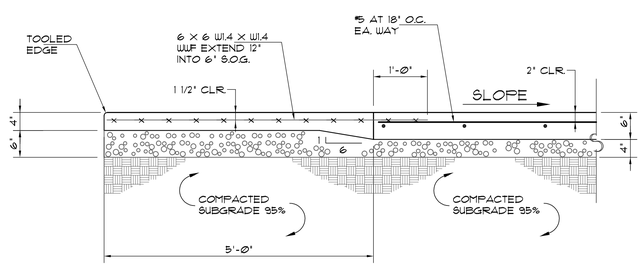
CONCRETE

1. " CJ " DENOTES LOCATION OF CONTROL JOINTS IN SLAB ON GRADE. CONTROL JOINTS IN SLAB ON GRADE SHALL BE SAW CUT.
2. ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH CURRENT ACI BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-14).
3. ALL NORMAL WEIGHT CONCRETE SHALL HAVE ASTM C-33 AGGREGATE WITH MAXIMUM UNIT WEIGHT OF 150 PCF. CONCRETE COMPRESSIVE STRENGTH SHALL BE 3000 PSI AT 28 DAYS, MINIMUM.

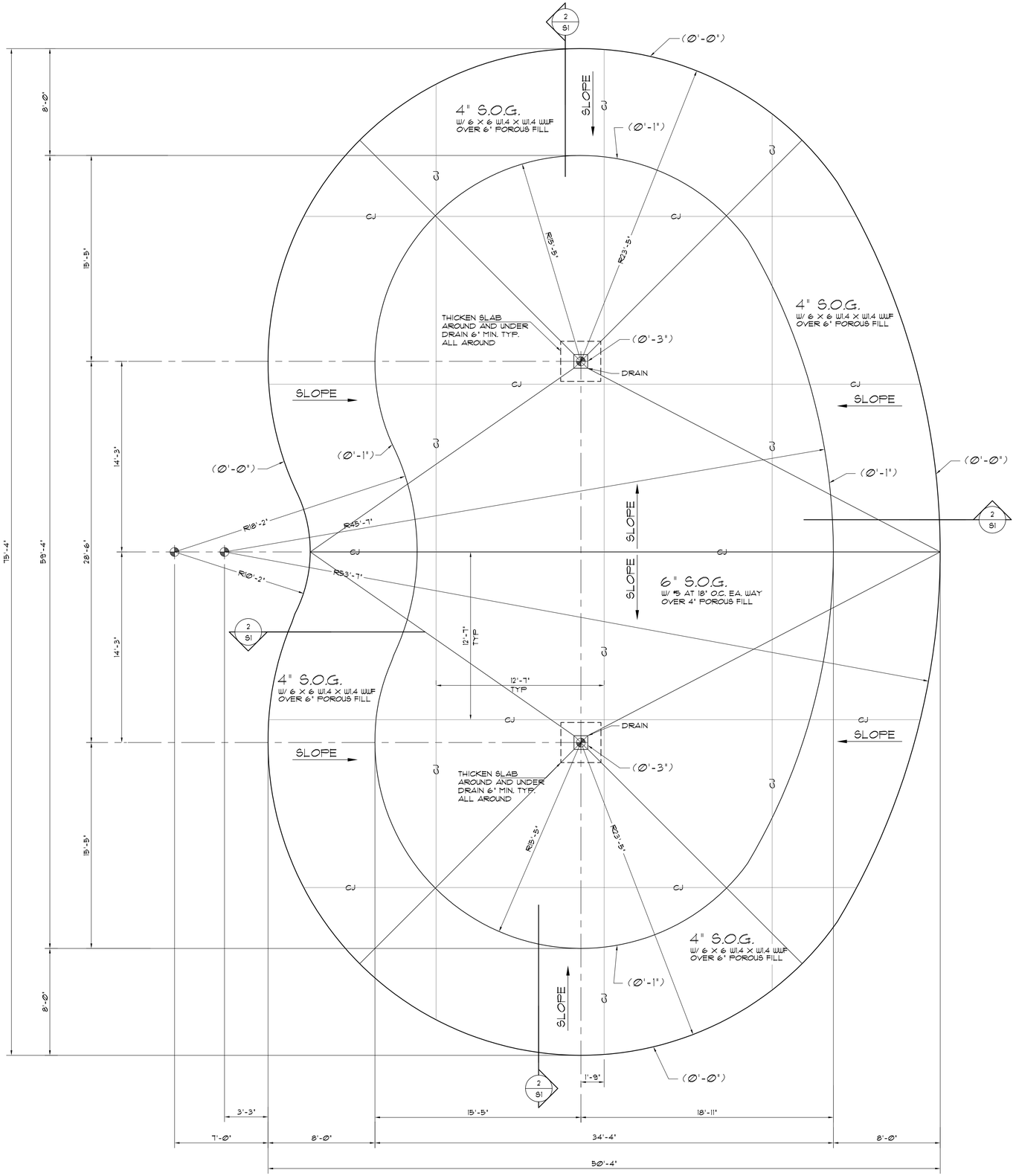
REINFORCING STEEL

1. REINFORCING STEEL SHALL BE NEW BILLET STEEL, DEFORMED BARS CONFORMING TO ASTM A-615, GRADE 60.

GENERAL NOTES | SCALE: 3/4" = 1'-0" | 3



SECTION | SCALE: 3/4" = 1'-0" | 2



FOUNDATION PLAN | SCALE: 1/4" = 1'-0" | 1

Structures INC.
160 Lakeland Road
Mooresville, N.C. 28117
Ph: 704-507-3487
structuresinc2020@gmail.com

NORTH CAROLINA PROFESSIONAL SEAL 14668 ENGINEER JAMES R. KUHN

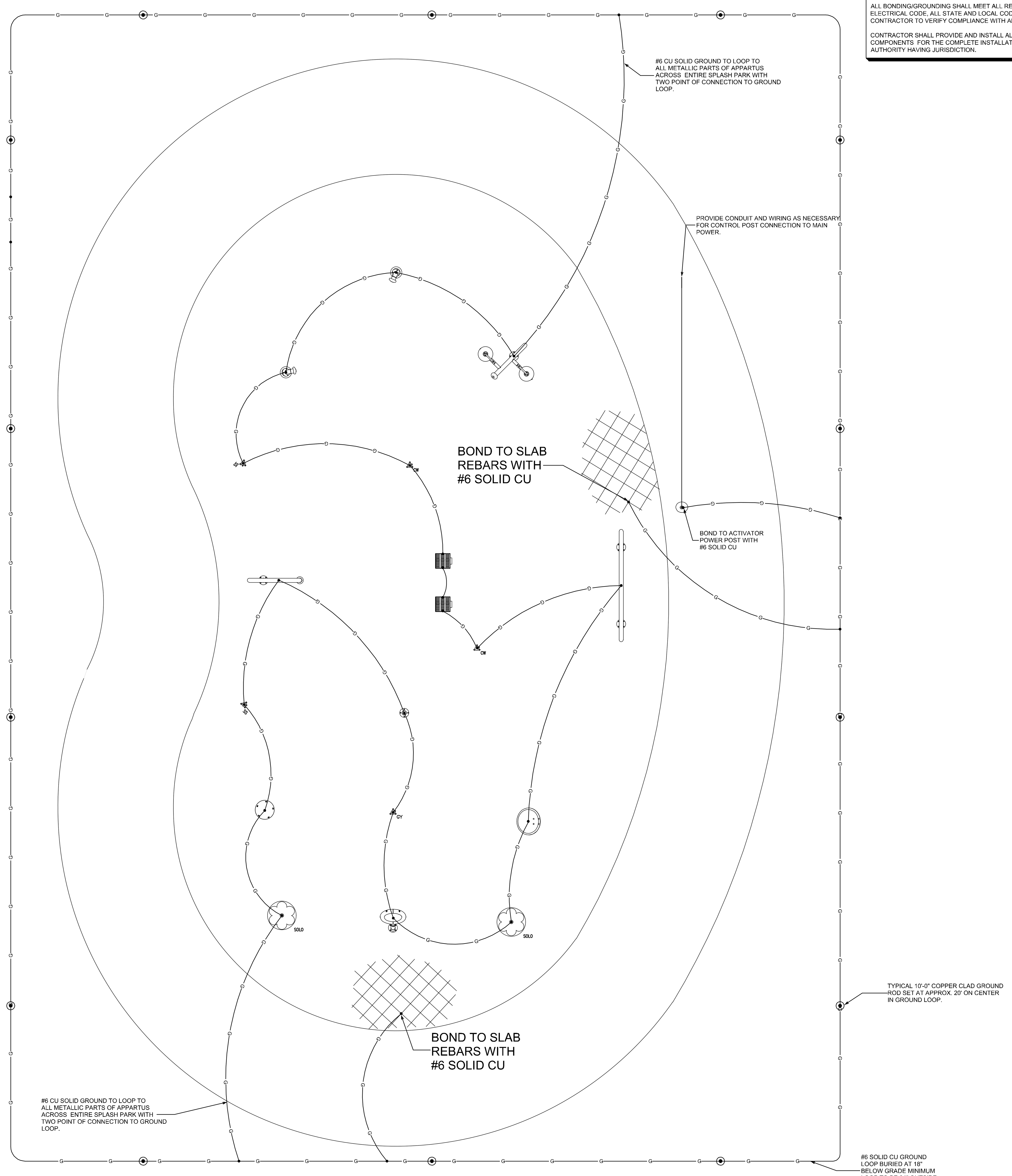
SPLASH PAD
ERWIN, NC
BUILDER: CAROLINA RECREATION

DATE:
FEBRUARY 28, 2020

REVISIONS:

FOUNDATION PLAN

SHEET NUMBER
S1



GENERAL GROUNDING NOTES

ALL BONDING/GROUNDING SHALL MEET ALL REQUIREMENTS OF THE 2017 NATIONAL ELECTRICAL CODE, ALL STATE AND LOCAL CODES AND ORDINANCES. ELECTRICAL CONTRACTOR TO VERIFY COMPLIANCE WITH ALL LOCAL AUTHORITIES.

CONTRACTOR SHALL PROVIDE AND INSTALL ALL ANCILLARY FITTINGS AND UL LISTED COMPONENTS FOR THE COMPLETE INSTALLATION TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION.

1 SPLASHPAD GROUNDING PLAN

SCALE: 1/4"=1'-0"

TCA JOB #20025

"TO THE BEST OF MY KNOWLEDGE, THE PLANS AND SPECIFICATIONS SUBMITTED HEREWITH COMPLY WITH EXISTING INTERPRETATIONS AND PROVISIONS OF THE APPLICABLE BUILDING CODES. THIS DRAWING IS THE PROPERTY OF TODD W. CAREY, PROFESSIONAL ENGINEER, AND IS AN INSTRUMENT OF SERVICE NOT TO BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE WITHOUT THE EXPRESS WRITTEN PERMISSION OF TODD W. CAREY, PROFESSIONAL ENGINEER.

TODD W. CAREY, PE
PROFESSIONAL ENGINEER
SOUTH CAROLINA
REG. NO. 15410
429 CANVASBACK ROAD,
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TODDCAREY.COM

429 CANVASBACK ROAD
MOORESVILLE, NC 28117
PHONE 704-664-9824 | EMAIL todd@toddcarey.com | FAX 704-663-1044
TCA WEBSITE http://www.toddcarey.com

SPLASHPAD GROUNDING AND BONDING PLAN

SPLISH PAD

ERWIN, NC

BUILDER: CAROLINA RECREATION

REV.	DESCRIPTION	BY
1		
2		
3		
4		
5		
6		
7		

CHECKED BY: TWC

DRAWN BY: RPT

DATE: FEBRUARY 19, 2020

GROUNDING AND BONDING

E-1

SHEET 1 OF 1

2/20/2020 8:23:35 AM

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1 Introduction

The Waterwise SmartPLAY Controller automates the supply of water to the spray park components. The controller has many user configurable settings that allow spray parks to customize the control system to meet their needs.

The control panel has a display mounted on the door; this panel is the Human Machine Interface (HMI) which allows the user to setup, test, and monitor the aquatic play pad operation.

The following manual provides instructions on how to navigate through the HMI screens. There are several steps in this manual that will be required for the aquatic play pad to operate in automatic mode.

WARNING

Installation of the control panel and wiring must be done by a qualified electrician and must meet the local electrical code requirements.
Local authorities must inspect and approve the installation.

WARNING

The control panel must be supplied from a dedicated GFCI circuit breaker.

WARNING

Any perforations of enclosure or fittings attached to the enclosure must not compromise the integrity of the enclosure or reduce its rating.

2 Installation

2.1 Controller Location

The control panel must be installed in a secure indoor location that is not accessible to the public. It is important to ensure that only qualified personnel have access to the control panel.

Attention should be paid to the other items that are either stored or operated in the same room as the controller. The storage of chemicals or corrosive materials in the same room as the controller may cause adverse corrosion on electronic controller parts.

Above grade installation is recommended, if below grade installation is required ensure proper drainage and ventilation. In addition to installation in designated mechanical rooms, typical installations methods for the controller include:

		
Below Grade Utility Cabinet	Above Grade Utility Cabinet	Controller Cabinet (controller only)

2.2 Valve Wiring

Wiring from the control panel to the water distribution manifold solenoid valves must be waterproof. Heat-shrink tubing with waterproof lining is recommended for all spliced connections. Site specific wiring diagrams are included in the controller cabinet for each installation.

If you have purchased the Waterplay Below Grade Utility Cabinet or the Waterplay Above Grade Utility Cabinet, the conduit will be pre-installed and the solenoid valves are pre-wired.

If the controller and manifold are shipped separately the wiring of the valves to the controller is the responsibility of the installer, no wire is supplied by Waterplay to complete this process.

Waterplay manifold – wiring to junction boxes by others

2.3 Main Power Connection

Waterplay controllers require a dedicated 120 VAC 15 amp GFCI circuit breaker. Controller can be configured for 220V input power, but must be ordered from Waterplay with that configuration specified. Surge suppressor is recommended on the power supply to the controller.

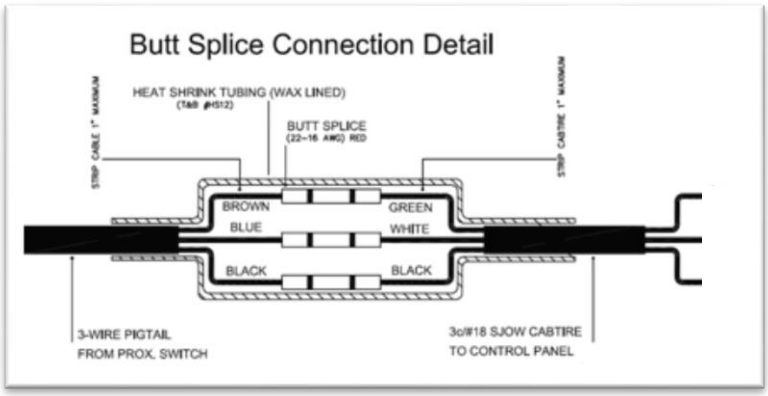
2.4 Activators

Each activator component will have its own installation and assembly drawing. There are two types of activation used in Waterplay activators: proximity and pressure.

If the proximity switch is not installed in the component when the component arrives on site, it is typically located inside the control box or the parts bag for that component.

Run a continuous cable from the controller to the activator in electrical conduit. Provide enough extra cable such that the sensor can be removed from the component, replaced and rewired.

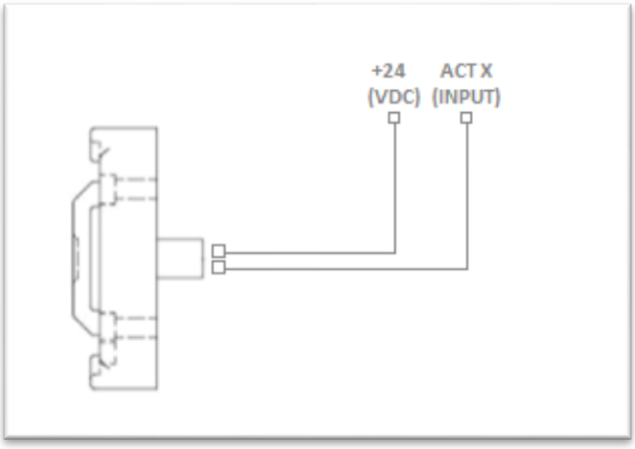
3-Wire Inductive-type proximity switch



- Recommended minimum, up to 200 feet; #18/3 SJOW cable

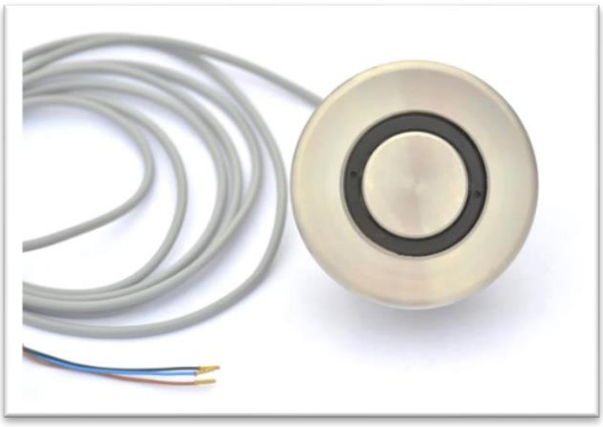
- Thread the proximity sensor into the activator, tighten until hand tight only.

2-Wire Switch



- Recommended minimum, up to 200 feet; #18/2 AWG wire
- Apply a small amount of silicone to the sensor housing on the component
- Activator terminals will be labelled +24 (VDC) and ACTX (input)

3-Wire Switch



- Recommended minimum, up to 200 feet; #18/3 AWG wire
- Push button - Wires to be connected to -24VDC, +24VDC, and activator input.
- See project wiring diagrams for further details

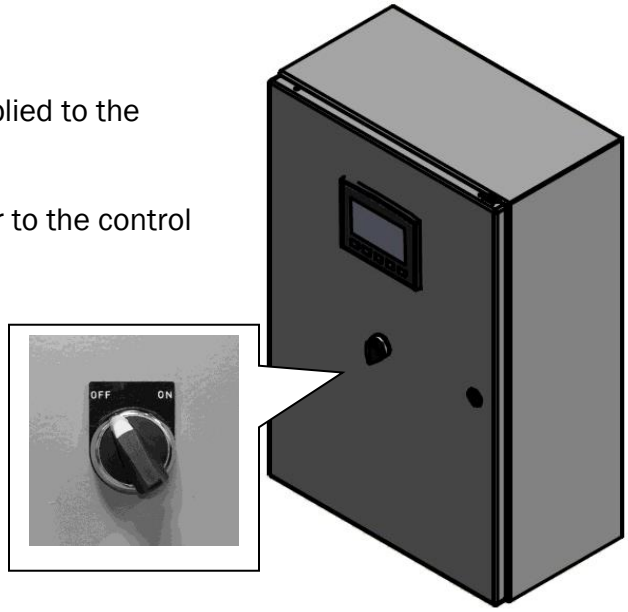
System Power Up

Once all of the wiring is complete, power can be applied to the control panel.

Turn on the GFCI circuit breaker that supplies power to the control panel.

Open fuse #1 and verify inlet voltage is 115 Volts (230 Volts outside of North America). Close fuse #1.

Turn the control panel on by rotating the power switch to the “ON” position.



The panel display will begin its boot up sequence which will take approximately 30 seconds.

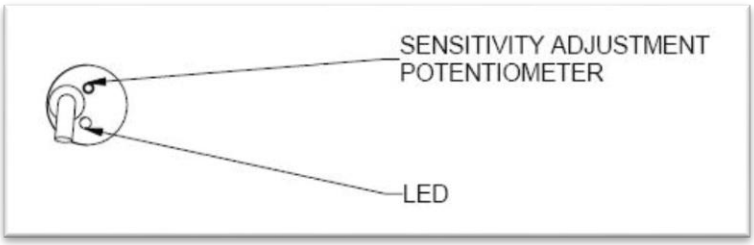
The Home screen displays the park name and order number, date and time as well as contact information for Waterplay, from here you can move to the Main Menu.

2.5 Activator Sensitivity Check (Proximity sensors only)

Pressure sensors do not require sensitivity checks.

Although the activator switch sensitivity is pre-calibrated at the Waterplay factory, it should be checked at this time. Too much sensitivity and the activator may be triggered by water spray; conversely, too little sensitivity and the switch may not properly detect a person’s hand.

Hold the activator cap in one hand, avoiding the area directly above the sensor. Place the other hand directly over the activator switch area. When your hand is on the activator pad the LED light should be on; when your hand is removed from the sensor pad the LED should go off.



If necessary, adjust the sensitivity of the activator switch by turning the potentiometer on the back of the switch. Turning it clockwise will increase sensitivity, and counter-clockwise will decrease sensitivity. Once the proper operation is verified, install the activator cap in the activator component.

Inspection

WARNING	Installation of the control panel and wiring must be done by a qualified electrician and must meet the local electrical code requirements. Local authorities must inspect and approve the installation.

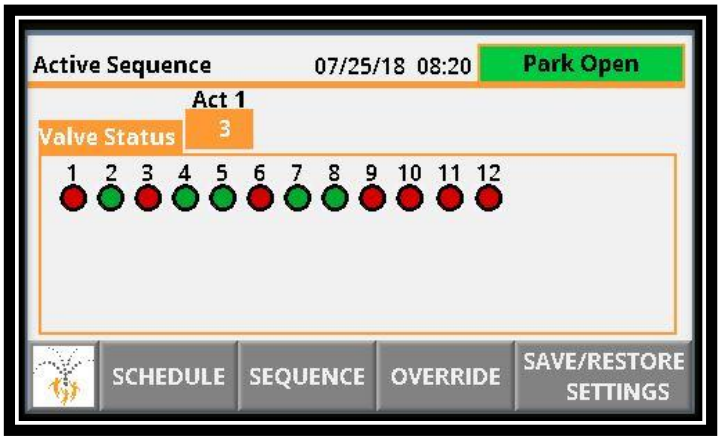
3 Configuration

3.1 Home Screen

Once the controller has been wired and inspected it needs to be configured for automatic operation. Configuration starts from the Waterplay Home Screen. The Park Name, Order Number (ORD-XXXXX) and Waterplay Support Phone number are shown here.

3.2 System Status – Potable Controller

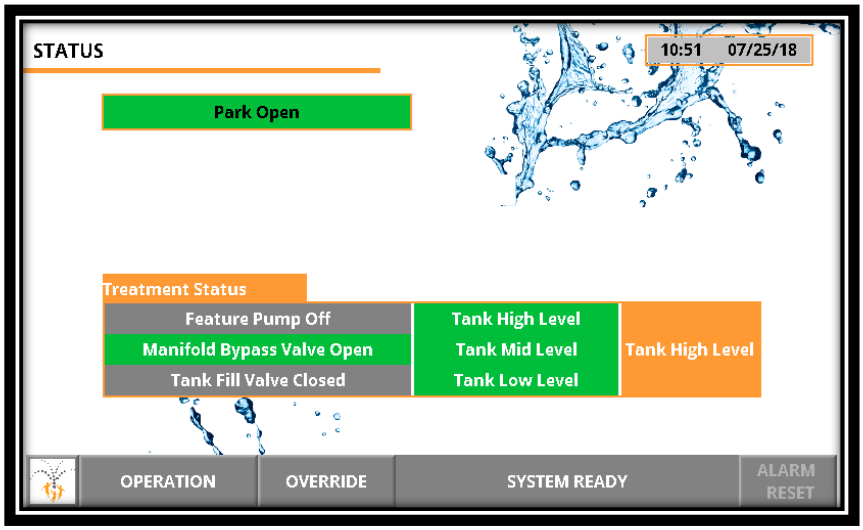
Pressing the  button will bring you to the Active Status screen showing the status of the valves in the active park sequence.



- GREEN shows a valve that is ON
- RED shows a valve that is OFF
- Park Open shows that the park is currently scheduled to be open
- Act #1 Step displays the current step number for that activator
- Press **SAVE/RESTORE SETTINGS** to restore the user or factory Sequence and Schedule

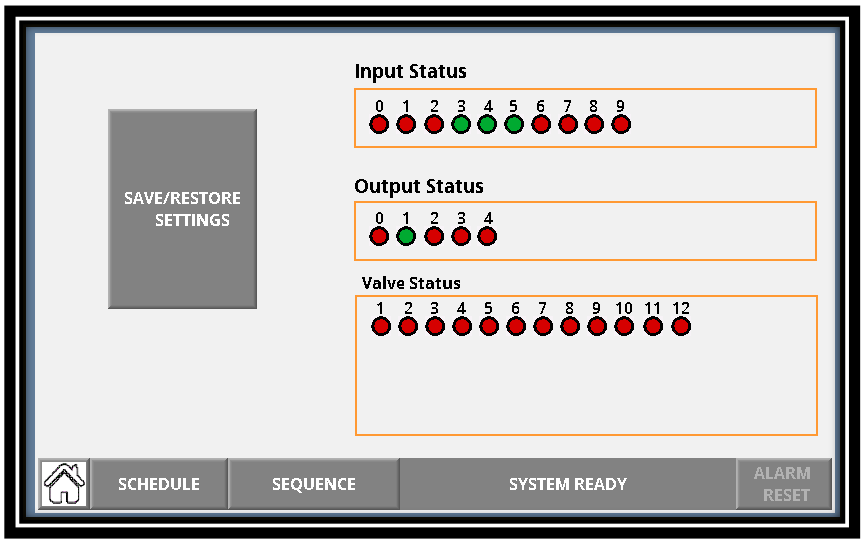
3.3 System Status/Operation – WTS By Others Controller

Pressing the  button will bring you to the Status screen showing the Treatment Status of the standard functionality offered by Waterplay. Please note that some of these funtions may not apply to your project. I.e. if your project has an automatic fill valve and no digital holding tank feedback the Tank High/Mid/Low status is not applicable. Refer to controller wiring diagrams for additional details.



- Items with a GREEN background mean that input/function is active (ON/OPEN)
- Items with a GREY background means that input/function is not active (OFF/CLOSED)
- Park Open shows that the park is currently scheduled to be open.
- The Alarm Reset button will turn RED when an alarm is present, and when pressed will reset the alarm. Alarms should be reset only when the operator understands the reason for the alarm.

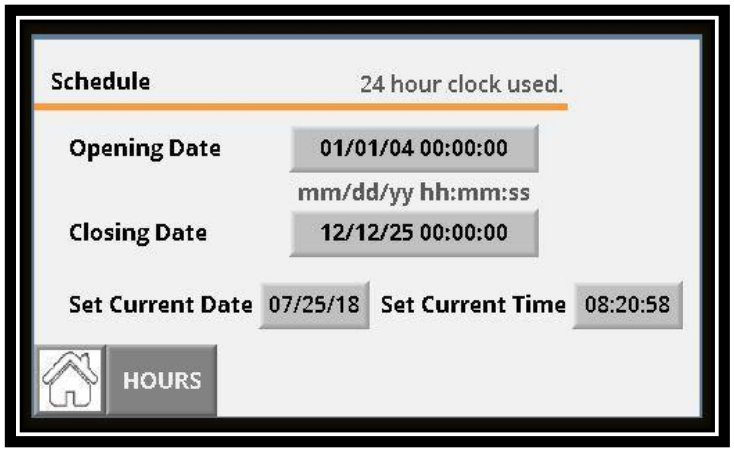
Press the OPERATION button to see the status of Inputs, Outputs and Valves.



- GREEN shows an input,output or valve that is ON
- RED shows an input, output or valve that is OFF
- Press **SAVE/RESTORE SETTINGS** to restore the User or Waterplay Sequence and Schedule

3.4 Park Schedule

From the Park Status or Operation screen, pressing the **SCHEDULE** button will take you to the Schedule screen where you can set the park opening/closing date and the current date and time.



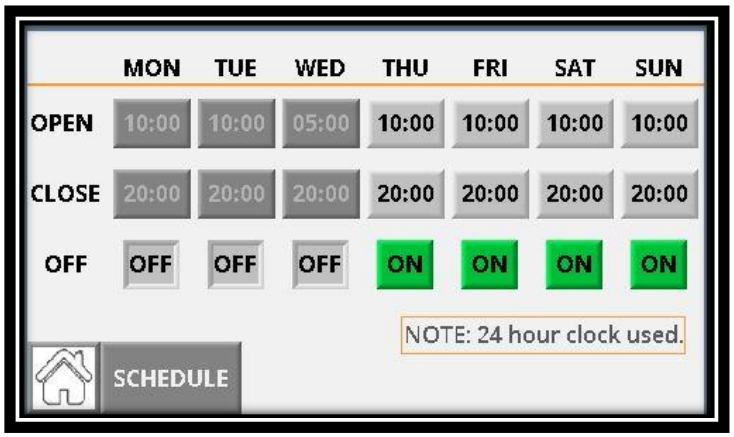
If the following settings are not entered, the park will not operate and will display "PARK CLOSED" on the System Status screen.

- Set Opening Date
- Set Closing Date
- Set Curent Date
- Set Current Time

Note: If either Open or Close date are set to 10th month the date must be changed to 11th month before changing the date to month 1 to 9.

3.5 Operating days and time

From the Schedule Screen, pressing **HOURS** will take you to where the daily hours of operation are set.



- If ON is displayed the park is scheduled to be open
- If OFF is displayed the park is not scheduled to be open

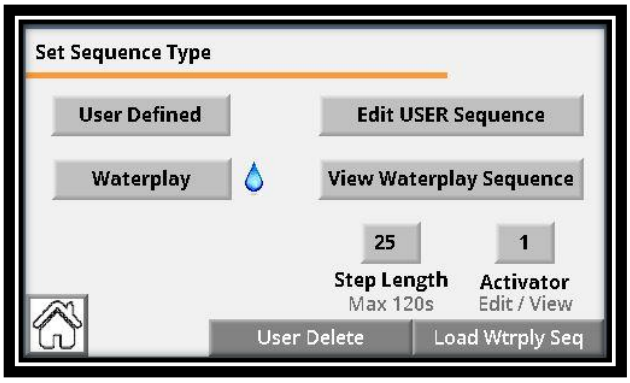
WARNING

The hour of the day must be entered in 24 hour / military time:
8:00 am = 8:00
8:00 pm = 20:00

3.6 Sequence Setup and Step Time

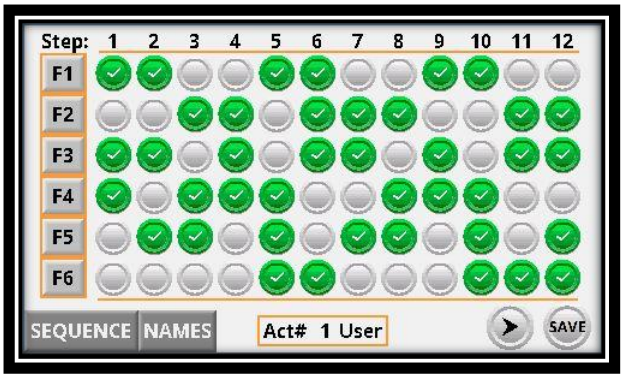
To modify an Activator Sequence, from the System Status page select **SEQUENCE**

As a default **Waterplay** provides a recommended sequence. You can also select **User Defined** sequence to use a customized sequence. The active sequence is denoted by the water drop.



- Set Step Time, the default is 25 seconds and maximum is 120 seconds
- Both sequence types consist of 12 steps
- If more than one activator, select the number to Edit/View that sequence
- You can view the Waterplay sequence, but not make changes to it as that is the factory default.

To customize the User Sequence press **Edit USER Sequence**.



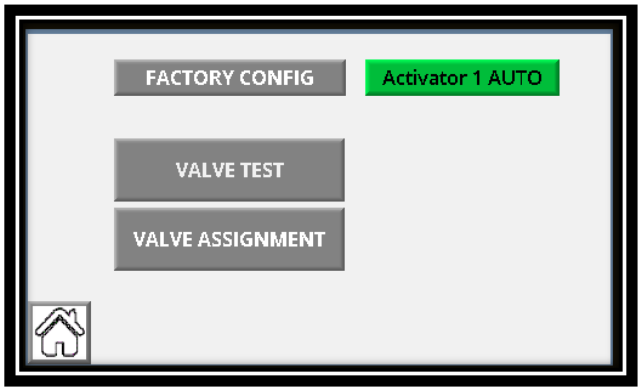
- Indicates output ON
- Indicates output OFF
- Takes you to to the next group of outputs
- Rows for F1, F2, F3, … denote feature numbers
- Columns 1,2,3,… denote sequence step numbers
- Act # refers to activator number being customized
- Hit **SAVE** for the changes to be accepted prior to moving onto the next group of outputs
- Selecting **SEQUENCE** will take you back to the Sequence Setup page
- Selecting **NAMES** will take you to a page where the Component names are shown.

After configuration is complete, it is recommended to hit SAVE USER SETTINGS to avoid loss of user settings if controller is turned off for long periods of time or backup battery becomes discharged.

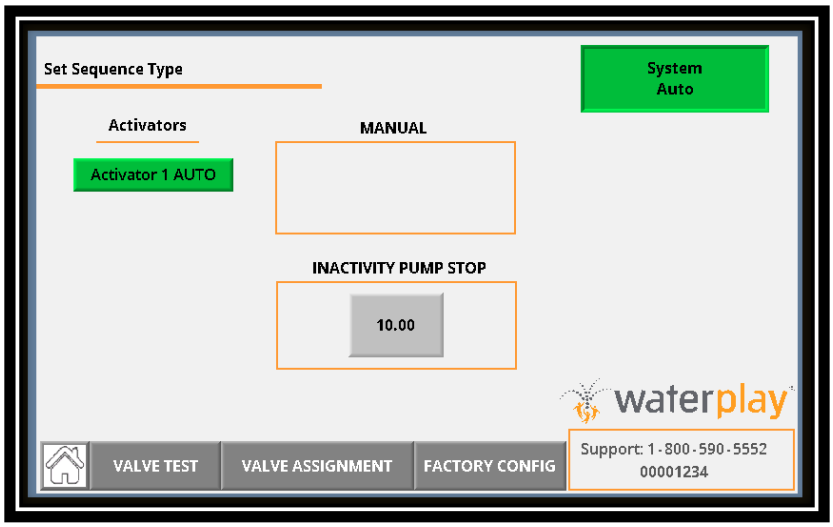
4 Override, Valve Test and Troubleshooting

4.1 Override

For the Potable Controller the Override default screen will look like below.

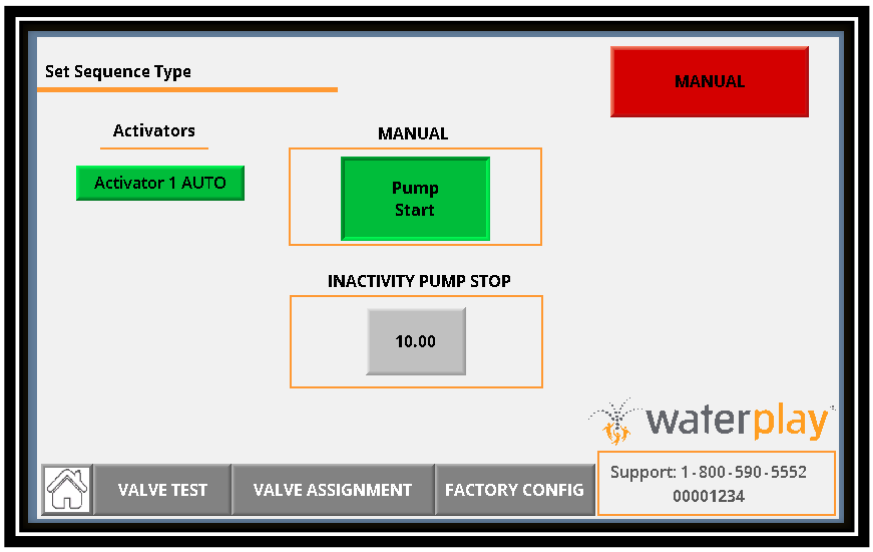


For the WTS By Others Controller the Override default screen will look like below.



- The default conditions should be Auto.
- You can toggle the *Activator Auto* to *Activator ON* which will have the activator sequence repeat during park operating hours. This is helpful if an activator switch is not functioning and the park is expected to be busy.
- The *INACTIVITY PUMP STOP* is the length of time (minutes) that the feature pump (if wired to the Waterplay controller) will continue to run after a park sequence is complete. This avoids frequent pump stop/starts but a bypass valve is required to avoid dead heading the pump.
- **VALVE ASSIGNMENT** and **FACTORY CONFIG** are password protected screens that are not typically required for normal park operation.

For WTS By Others Controllers the user can put the system into MANUAL to Start/Stop/Run the feature pump manually.



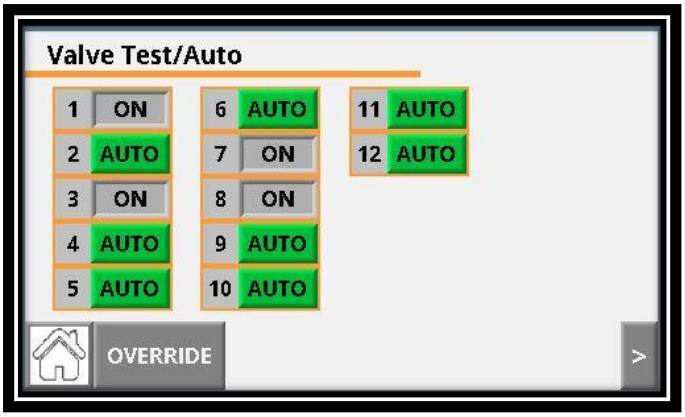
WARNING

The controller will ignore all system alarms in Manual mode. Putting the System in Manual is not recommended unless directed to by Waterplay Support. Damage to the pump or other system components may occur and is not covered under Waterplay Warranty.

4.2 Valve Test

The Valve Test mode in the Waterplay controller allows the valves to be turned on and off indivdually using the outputs of the controller. The Test Mode should be used to test that the correct component is connected to the correct solenoid valve. While in test mode the activators will not start the sequences.

Starting at the System Status screen, select **OVERRIDE** which will bring you to the screen below



- AUTO Indicates valve is OFF (default)
- ON Indicates valve is manually ON
- **OVERRIDE** returns to the previous screen
- Refer to the troubleshooting section for further details.

WARNING

If a feature pump is wired to the Waterplay Controller it will turn ON when entering Test Mode.

5 Operation

The spray park will only operate in automatic mode if:

- The power switch on the front of the controller panel is set to “ON”
- The smartPLAY controller is programmed to operate for the current day of the week and time of the day
- The date and time are set correctly
- The controller is not in Test Mode

During automatic operation, a child touches an activator in the spray park and a signal is sent to the Waterwise SmartPLAY controller. When the controller receives the signal, it begins the sequencing associated with that activator. When the sequence is complete, all the valves will close and the Waterwise SmartPLAY controller will wait for the activator to be touched again.

6 Maintenance

6.1 Preventative Maintenance

Control panel should be inspected regularly as part of a routine inspection program to ensure panel is dry and clean.

6.2 Winterizing

Waterplay aquatic play pads must be properly winterized to prevent damage to components, supply lines and manifold. Please refer to Waterplay Operations and Install Manual for further winterization instructions.

Once the park winterizing procedure has been completed, turn the control panel power switch to the “OFF” position. Turn off the dedicated GFI circuit breaker that supplies power to the control panel. Ensure panel doors are closed and secured.

6.3 Spring Start Up

There are a few basic steps that should be taken during spring startup. Please refer to Waterplay Operation and Install Manual for further instructions.

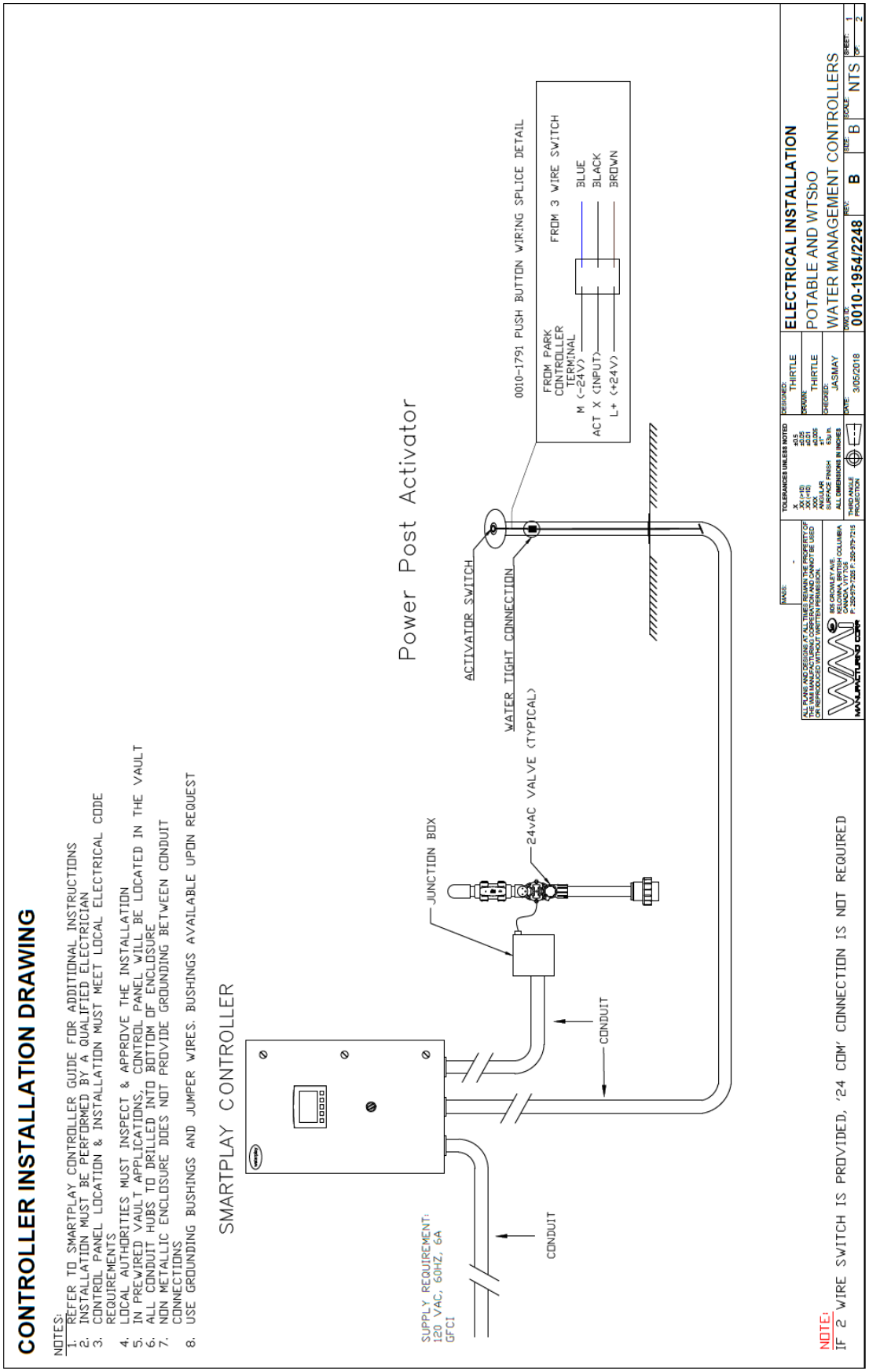
Check to make sure control panel is clean and dry. Turn on the dedicated GFCI circuit breaker that supplies power to the control panel. Turn the control panel power switch to the “ON” position. The control panel is now ready for operation.

Verify clock is properly programmed. If the control panel has been off for a significant period of time (months), the programming will default to the original program when originally received. Use the TEST screen to cycle through the valves and verify the water flow and spray patterns. Exit out of the TEST screen to go back into normal operation. For parks with activators, ensure sensitivity of activators is correctly set. Test that the activators trigger the sequences and that the sequences are still programmed into the controller.

7 Field Wiring Drawings and Instructions

See following pages for field wiring drawings, reprogramming instructions and factory reboot instructions.

7.1 Field Wiring and Installation

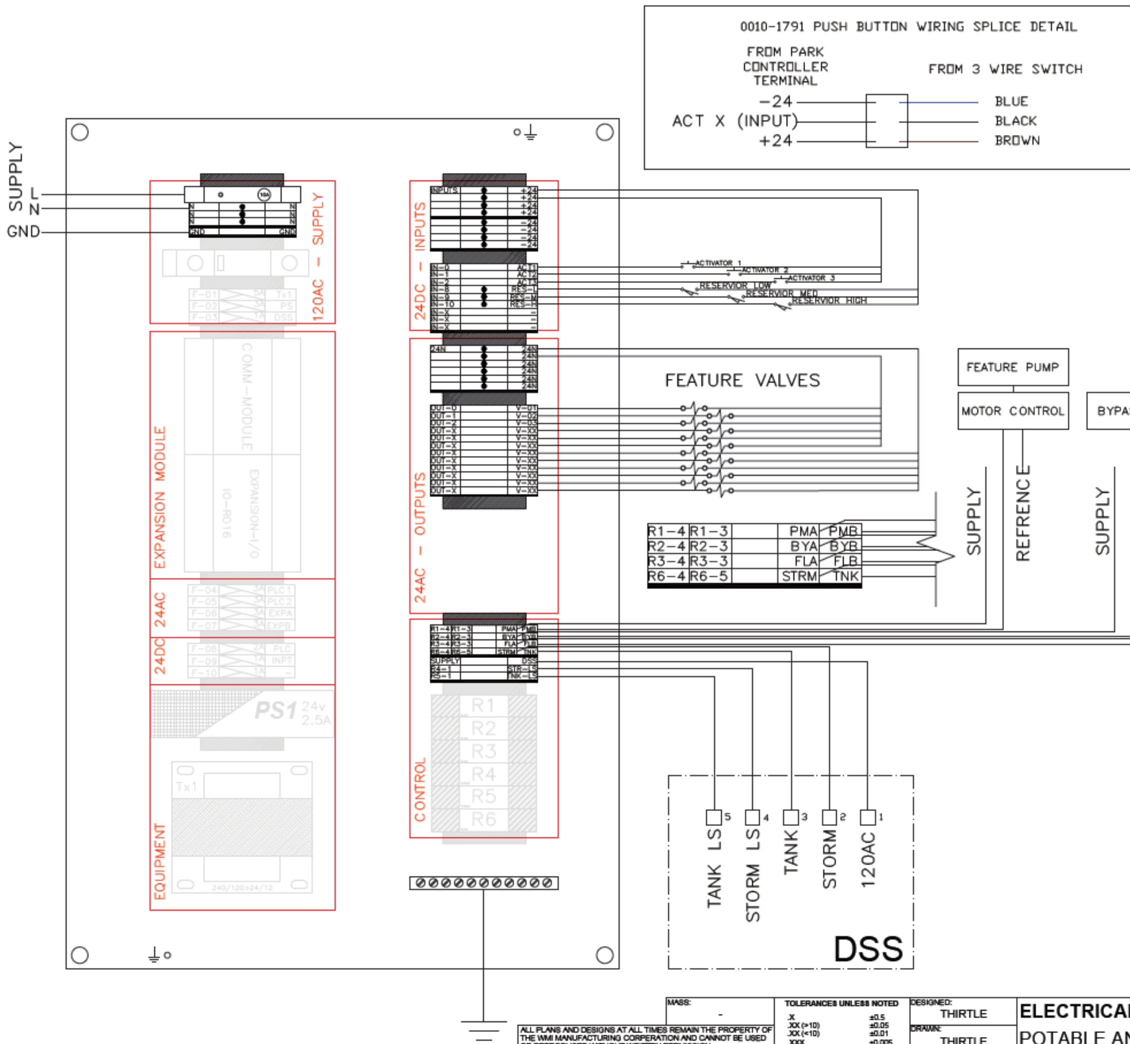


OPERATIONAL NOTES:

1. POTABLE 0010-1954 CONTROLLER DOES NOT CONTAIN ANY CONTROL HARDWARE OR SOFTWARE FOR WATER TREATMENT.
2. 12 VALVE OUTPUTS AND 3 ACTIVATOR INPUTS PROVIDED WITH BASE CONTROLLER.
3. NUMBER OF VALVES AND ACTIVATORS WILL VARY. REFER TO MECHANICAL WORKBOOK FOR PROJECT SPECIFIC DETAILS.
4. VALVE SCHEDULING AND SEQUENCING CONFIGURED IN TOUCH SCREEN HMI.
5. EXPANSION UP TO 48 VALVES, FEATURE PUMP, BYPASS VALVE, TANK FILL VALVE, DIVERTER STRAINER SYSTEM (DSS), RAIN AND WIND SENSORS ARE AVAILABLE.

SPECIFIC NOTES TO WATER TREATMENT SYSTEM BY OTHER CONTROLLER (0010-2248):

1. DRY CONTACT FOR PUMP CONTROL CLOSES IF SYSTEM IS ACTIVATED AND REMAINS CLOSED FOR 2 MINUTES AFTER SEQUENCE IS FINISHED IF WATER LEVEL CONDITIONS ARE SATISFIED. THIS TIME IS ADJUSTABLE FROM THE SETUP MENU IF APPLICABLE.
2. DRY CONTACT FOR BYPASS CONTROL CLOSES IMMEDIATELY WHEN SEQUENCE IS FINISHED AND REMAINS CLOSED UNTIL PARK SEQUENCE OR PURGE CYCLE ARE ACTIVATED IF APPLICABLE.
3. FLOAT LEVEL CONTROL COMES BYPASSED WITH FACTORY INSTALLED JUMPERS BETWEEN HIGH, MID, LOW INPUTS AND L+. REMOVE JUMPERS AND WIRING TO +24 TO USE HOLDING TANK INPUTS IF APPLICABLE.
4. DSS HARDWARE INCLUDED IF APPLICABLE AND IS ADJUSTED IN OVERRIDE MENU.
5. IF THE WATER LEVEL DROPS BELOW THE LOW LEVEL FLOAT THE SYSTEM WILL BECOME INACTIVE UNTIL THE PARK OPERATOR RESETS THE ALARM.
6. TEST MODE IS FUNCTIONAL AS LONG AS THE WATER LEVEL IS ABOVE THE LOW LEVEL FLOAT IF APPLICABLE.



DESIGNATION	COLOR
GROUND / BOND	GREEN
120AC HOT	BLACK
120AC COM	WHITE
24AC HOT	ORANGE
24AC COM	GREY
+24DC	RED
-24DC	BLUE
+12DC	BROWN
-12DC	LIGHT BLUE
DIGITAL IN	YELLOW
DIGITAL OUT DC	RED
DIGITAL OUT AC	ORANGE
ANALOG IN	PURPLE
ANALOG OUT	PURPLE

MASS: -

WMI MANUFACTURING CORP. 805 CROWLEY AVE. KELOWNA, BRITISH COLUMBIA CANADA, V1Y 7G6 P: 250-979-7205 F: 250-979-7215

TOLERANCES UNLESS NOTED: .X ±0.5; .XX (>10) ±0.05; .XX (<10) ±0.01; .XXX ±0.005; ANGULAR ±1°; SURFACE FINISH 63μ in. ALL DIMENSIONS IN INCHES. THIRD ANGLE PROJECTION

DESIGNED: THIRTLE
DRAWN: THIRTLE
CHECKED: JASMAY
DATE: 5/23/2018

ELECTRICAL INSTALLATION
POTABLE AND WTSbO
WATER MANAGEMENT CONTROLLERS

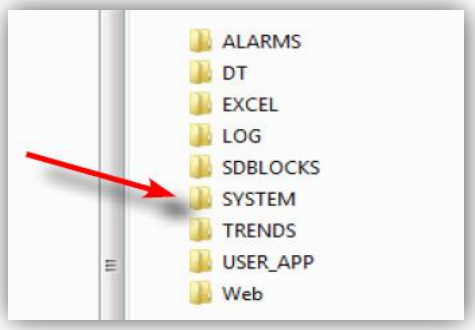
DWG ID: 0010-1954/2248 | REV: B | SIZE: B | SCALE: NTS | SHEET: 2 OF: 2

7.2 Reprogramming Instructions

Step 1: **Remove Micro SD Card from the Waterplay controller:**

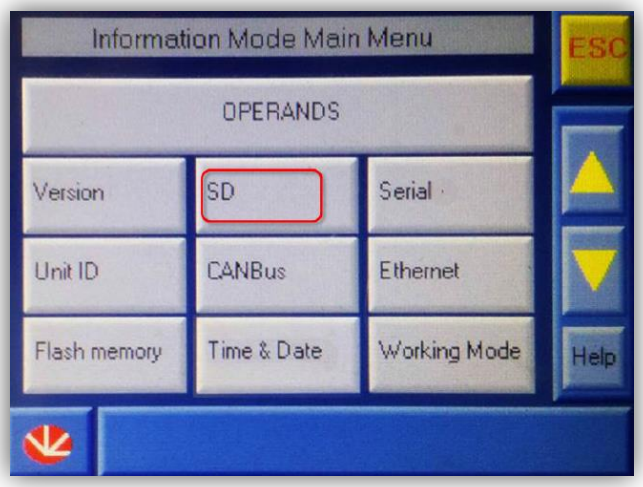
Step 2: **Connect card to computer, load program:**

Place into the SYSTEM folder. The new file is named 0000XXXX (the X will correspond to an order number and is project specific). If prompted to overwrite the existing file, click 'Yes'.



Step 3: Upload program to PLC

Insert the micro SD back into the controller. With power on, hold a finger on the touch screen until a prompt appears. Select "Enter info Mode", and enter the password "1111". Follow these steps:



Select the "SD" button.

Select "Full Clone" and then "Upload to PLC"

Next, select the latest program file from the full clone screen and hit "send file".

Start Cloning Process, select "Yes"

The screen should then say "Unitronics" and will take a few minutes to upload. You can see the PLC loading files at the bottom right of the screen. The home screen for the waterpark will appear when complete. The program has now been loaded.

Note – User specified settings such as operating hours and sequencing will be reset by the new program, so it is best practice to double-check all user settings. Refer to the SmartPlay controller guide for assistance with this process. Waterplay Support is available at 1-800-590-5552.

7.3 Factory Reboot Instructions

When powering up the Waterplay controller, if you enter the "Idle Mode" screen below, a factory reboot is required. The most likely causes for this are power interruptions or similar electrical issues causing an operating system problem.

Below are the steps required to restore the proper controller functionality.

Step 1:

With the screen on showing "Idle Mode" you need to put your finger on the screen and hold it there for a few seconds.

A blue menu will pop up... push the "Enter Info Mode" button on the screen.

It will prompt you for a password... type in "1111" and push "enter"

Step 2:

Push the "Working Mode" button

Push the "Exit to Factory Boot"

Push "Yes"

This will take you to a red screen.

Step 3:

Turn the power off to the PLC for a few seconds and then back on. It will start up again in Idle mode (slightly different screen).

Once again hold your finger on the screen until the blue menu pops up.

Push the "Enter Info Mode" button

Type in the password again "1111" and push "enter"

Step 4:

Select the “SD” button.

Select “Full Clone”

Select “Upload to PLC”

Select the latest program file listed on the clone screen and hit “send file”.

Start Cloning Process, select “Yes”

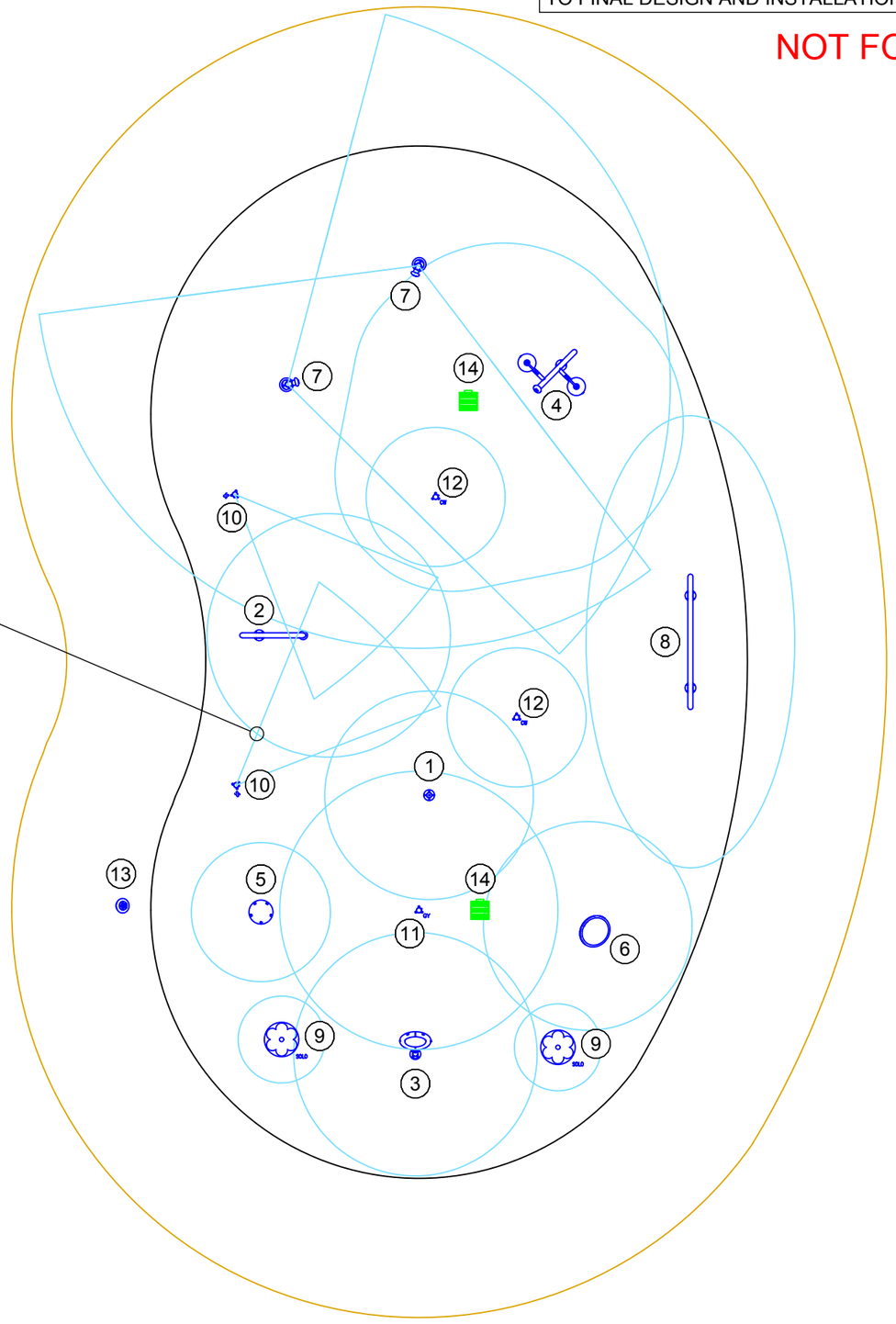
The screen should then say “Unitronics” and will take a few minutes to upload. You can see the PLC loading files at the bottom right of the screen. The home screen for the waterpark will appear when complete. The program has now been loaded.

Note – User specified settings such as operating hours and sequencing will be reset by the new program, so it is best practice to double-check all user settings. Refer to the SmartPlay controller guide for assistance with this process. Waterplay Support is available at 1-800-590-5552.

ITEM	SKU	COMPONENT NAME	QTY
1	0010-0485	FS FUN-BRELLA	1
2	0010-0764	FS CURVY CANE	1
3	0010-0497	FS MAGNIF-EYE	1
4	0010-1476	FS SNEAKY SOAKER 2	1
5	0010-0512	FS SPINNY SQUIRT	1
6	0010-0526	FS USO	1
7	0010-0403	FS SPLASH BLASTER	2
8	0010-0369	FS WATER-O	1
9	C02-347	GS LILY PAD (SOLO SPURT)	2
10	C02-340	GS STEADY STREAM	2
11	C02-312	GS GEYSER	1
12	C02-309	GS CHARLOTTES WEB	2
13	0010-1854	ACTIVATOR: POWER POST	1
14	DRA-00007	DRAIN SQUARE 6IN OUTLET	2

LOCAL REGULATIONS MAY REQUIRE THE USE OF IMPACT ATTENUATING SURFACES FOR SOME INSTALLATIONS - CHECK LOCAL CODES PRIOR TO FINAL DESIGN AND INSTALLATION.

NOT FOR CONSTRUCTION PURPOSES



11 x 17 plot

FOR INFORMATION PURPOSES ONLY. LOCAL LANDSCAPE ARCHITECT, ENGINEER &/OR APPROPRIATE AUTHORITIES HAVING JURISDICTION MUST COMPLETE ALL PARK LAYOUT, MECHANICAL & ELECTRICAL DESIGN PRIOR TO CONSTRUCTION.

DESIGNED BY:
WATERPLAY SOLUTIONS CORP

DWG NAME:
WATERPLAY CONCEPTUAL LAYOUT

SHEET
1/4

SCALE:	DRAWN BY:	DATE:	REV #:
1/8" = 1'-0"	AS	JAN 29/19	1

PATH
SPLASHMAIN\FLDREDIR$\

FOLDER:
JEFF.SCOBIE\DESKTOP\TEMP DWG FOLDER\E

SPLASH PAD
ERWIN, NC

REV	DESCRIPTION	REV'D BY	REV DATE
1	COMPLETED FINAL LAYOUT	JS	MAY 12/20

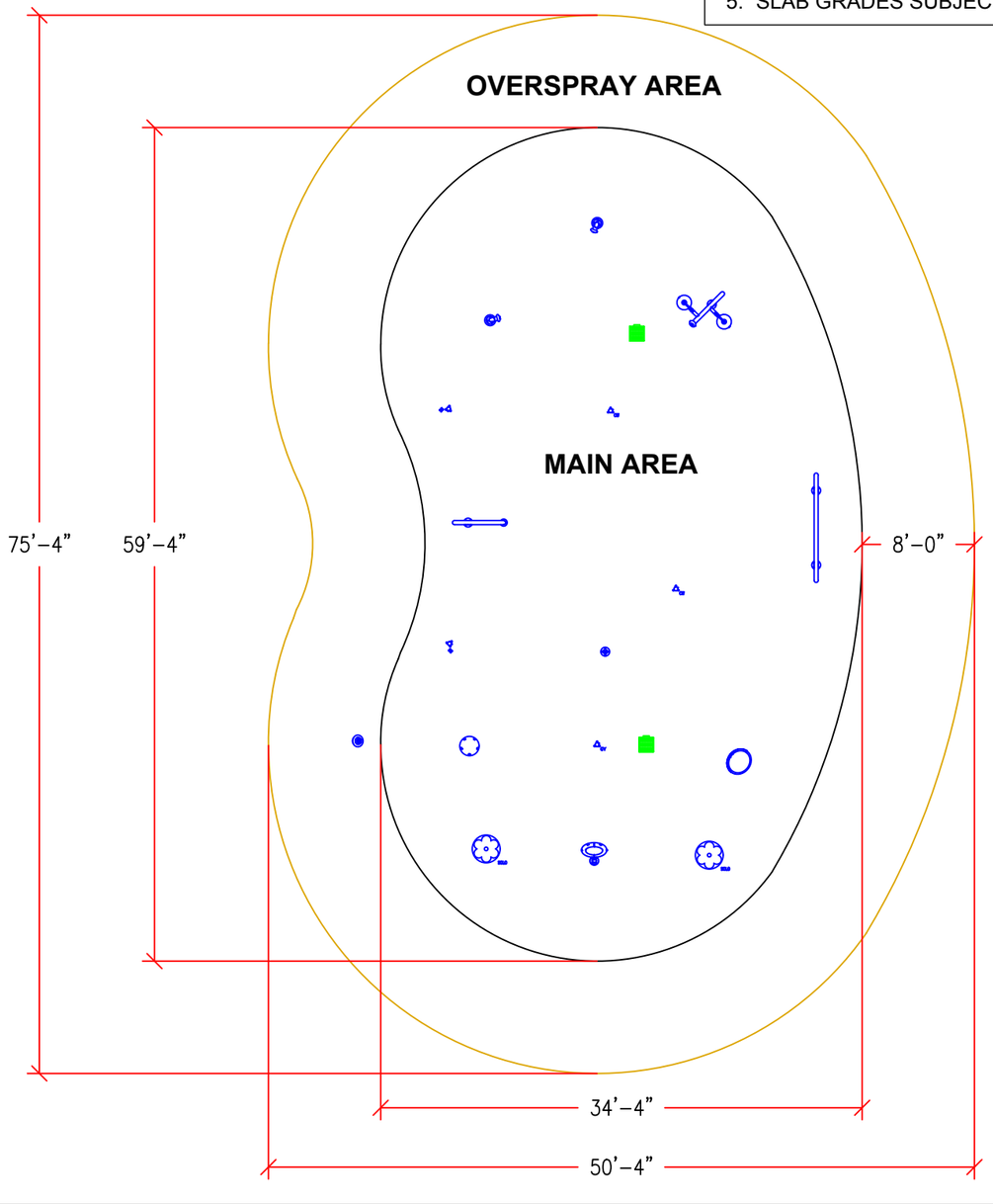
waterplay Solutions Corp.
805 CROWLEY AVE, KELOWNA BC, CANADA V1Y 7G6
TEL. (250) 712-3393 FAX (250) 861-4814
EMAIL info@waterplay.com

Splash Pad, Erwin, NC_May1220.dwg 5/12/2020 3:58:56 PM

NOT FOR CONSTRUCTION PURPOSES

NOTES:

1. MAIN AQUATIC PLAY PAD AREA: 1662 SQ. FT.
   TOTAL AREA, INCLUDING OVERSPRAY ZONE: 3111 SQ. FT.
2. TO AVOID POTENTIAL DAMAGE TO SURROUNDING SOFTSCAPE AND TO KEEP PEDESTRIAN TRAFFIC FROM GETTING WET, WATERPLAY RECOMMENDS A MINIMUM OVERSPRAY OF 2.44 METRES (8'). FOR AREAS WITH HIGH WINDS, A LARGER OVERSPRAY ZONE MAY BE REQUIRED.
3. GRADE SURROUNDING OUTSIDE PERIMETER LANDSCAPE TO PROVIDE ADDITIONAL DRAINAGE AWAY FROM OVERSPRAY PAD.
4. SLOPES (INCLUDING MAIN AND OVERSPRAY AREAS) TO PROVIDE POSITIVE DRAINAGE TO DRAINS. IF CODE REQUIRES THAT THERE BE A ZONE SLOPING AWAY FROM THE MAIN AREA, WATERPLAY RECOMMENDS AN ADDITIONAL DRY ZONE TO MEET THAT REQUIREMENT.
5. SLAB GRADES SUBJECT TO ENGINEER APPROVAL (NOTE ADA MAX CROSS SLOPE GRADE IS 2%).



11 x 17 plot

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DESIGNED BY:
WATERPLAY SOLUTIONS CORP

DWG NAME:	SHEET
WATERPLAY PAD CONCEPT LAYOUT	2/4

SCALE:	DRAWN BY:	DATE:	REV #:
3/32" = 1'-0"	AS	JAN 29/19	1

PATH
SPLASHMAIN\FLDREDIR$\

FOLDER:
JEFF.SCOBIE\DESKTOP\TEMP DWG FOLDER\E

SPLASH PAD
ERWIN, NC

REV	DESCRIPTION	REV'D BY	REV DATE
1	COMPLETED FINAL LAYOUT	JS	MAY 12/20

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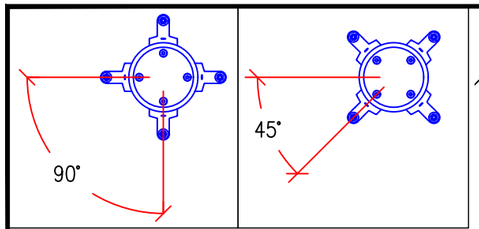
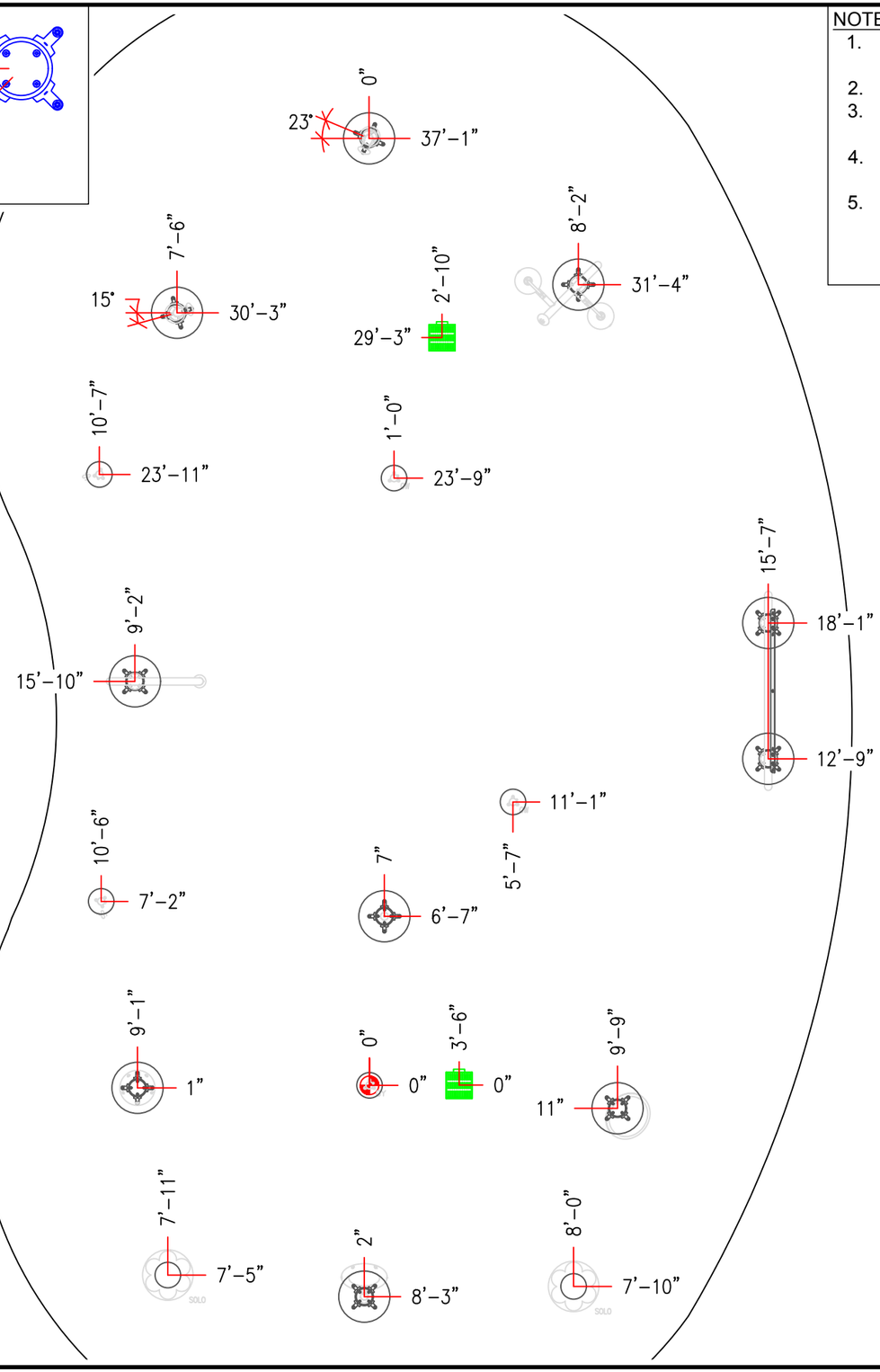
805 CROWLEY AVE, KELOWNA BC, CANADA V1Y 7G6
TEL. (250) 712-3393 FAX (250) 861-4814
EMAIL info@waterplay.com





NOTES:

1. ALL DIMENSIONS MEASURED FROM DIMENSION ORIGIN (0,0) TO CENTRE OF FOOTING.
2. REFER TO FOOTING DETAILS FOR EACH WATER STRUCTURE.
3. LOCATE, SIZE AND SPECIFY QUANTITY OF DRAINS TO PREVENT STANDING WATER.
4. GROUND ALL COMPONENTS TOGETHER WITH GROUNDING WIRE AND BASE PLATE GROUNDING LUG.
5. ANGLES NOTED, REFERENCE ORIENTATION OF THE PLAYPHASE BASE FLANGE FASTENERS AS THEY RELATE TO THE X-Y PLANE. FOR ANGLES NOT INDENTIFIED, FASTENERS ARE TO BE INSTALLED ALONG X- PLANE.

NOTES:
ROTATIONAL ANGLES SHOWN HERE ARE TYPICAL. USE SUPPLIED JIGS FOR CENTRE TO CENTRE SPACING OF FOOTINGS AND PLAYPHASE BASE ORIENTATIONS.
- 0010-5570 - WATER-O

NOT FOR CONSTRUCTION PURPOSES

11 x 17 plot

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DESIGNED BY:
WATERPLAY SOLUTIONS CORP

DWG NAME:	SHEET
WATERPLAY COMPONENT PLACEMENT	3/4

SCALE:	DRAWN BY:	DATE:	REV #:
3/16" = 1'-0"	JS	MAY 12/20	1

PATH
SPLASHMAIN\FLDREDIR$\

FOLDER:
JEFF.SCOBIE\DESKTOP\TEMP DWG FOLDER\E

SPLASH PAD
ERWIN, NC

REV	DESCRIPTION	REV'D BY	REV DATE
1	COMPLETED FINAL LAYOUT	JS	MAY 12/20

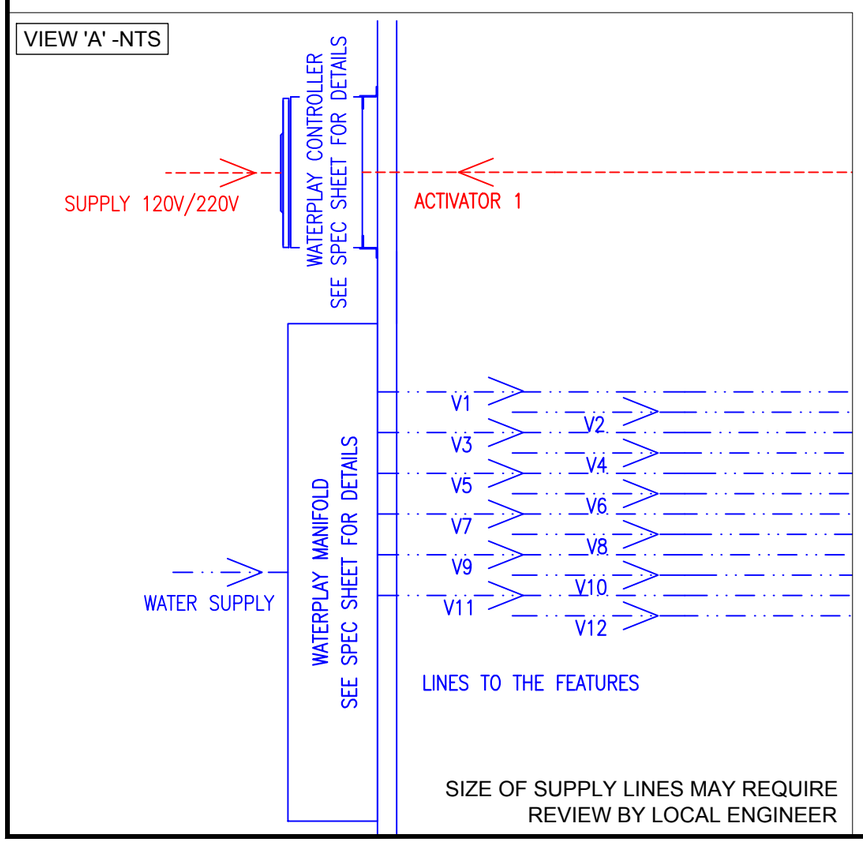
waterplay Solutions Corp.
805 CROWLEY AVE, KELOWNA BC, CANADA V1Y 7G6
TEL. (250) 712-3393 FAX (250) 861-4814
EMAIL info@waterplay.com

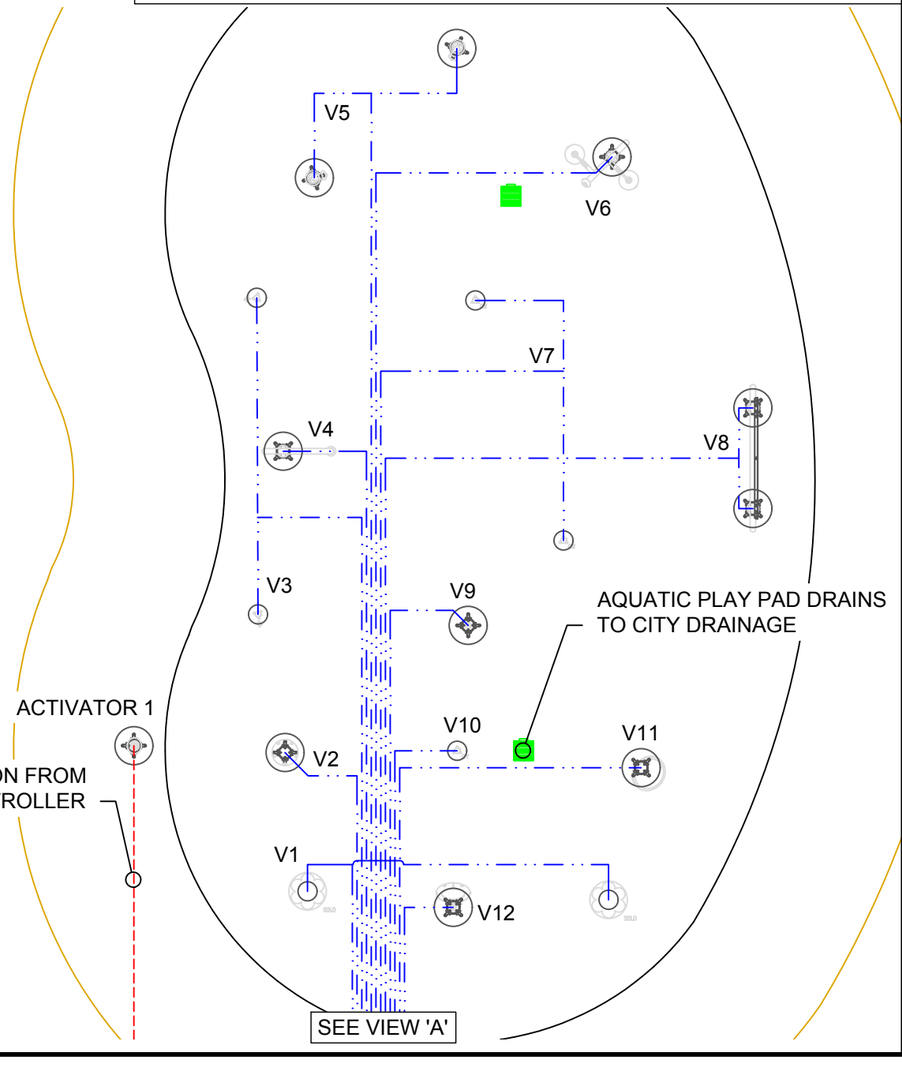
LEG #	COMPONENT NAME	QTY/LEG	GPM	LINE SIZE FROM MANIFOLD
1	GS: LILY PAD (SOLO SPURT)	2	2	1.0 in
2	FS: SPINNY SQUIRT	1	1	1.0 in
3	GS: STEADY STREAM	2	2	1.0 in
4	FS: CURVY CANE	1	6	1.0 in
5	FS: SPLASH BLASTER	2	14	1.5 in
6	FS: SNEAKY SOAKER 2	1	12	1.5 in
7	GS: CHARLOTTES WEB	2	6	1.0 in
8	FS: WATER-O	1	10	1.5 in
9	FS: FUN-BRELLA	1	14	1.5 in
10	GS: GEYSER	1	6	1.0 in
11	FS: U.S.O.	1	10	1.5 in
12	FS: MAGNIF-EYE	1	4	1.0 in

NOT FOR CONSTRUCTION PURPOSES

NOTES:

1. THIS IS A PRELIMINARY SCHEMATIC, SITE PIPING MUST BE DETERMINED AND MEASURED ON-SITE. APPROVED PIPING DETAILS TO BE DETERMINED BY LOCAL AUTHORITIES.
2. WATER LINES MUST HAVE POSITIVE DRAINAGE FROM AQUATIC PLAY FEATURES TO VAULT OR LOW POINT FOR WINTERIZING AND MAINTENANCE.
3. PRESSURE CONTROL AND BACKFLOW PREVENTER SHALL BE INSTALLED AT MAIN WATER SOURCE UPSTREAM FROM MANIFOLD VALVES, AS DETERMINED BY LOCAL AUTHORITIES.
4. WATER SUPPLY PRESSURE REQUIRED TO THE MANIFOLD IS 138-207 KPA (20-30 PSI) DYNAMIC FOR PROPER DISPLAY.
5. EQUIPMENT SHALL BE EASILY ACCESSIBLE BY STAFF AND SECURED FROM PUBLIC.
6. GPM IN VALVE TABLE IS FOR LOW FLOW NOZZLES @ 103 KPA (15 PSI) NOZZLE PRESSURE.
7. WATERPLAY CONTROLLER CONFIGURED FOR A POTABLE WATER SUPPLY.





11 x 17 plot

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DESIGNED BY: WATERPLAY SOLUTIONS CORP

DWG NAME:	SHEET
WATERPLAY PIPING SCHEMATIC	4/4

SCALE:	DRAWN BY:	DATE:	REV #:
1/8" = 1'-0"	JS	MAY 12/20	1

PATH: SPLASHMAIN\FLDREDIR$\

FOLDER: JEFF.SCOBIE\DESKTOP\TEMP DWG FOLDER\E

REV	DESCRIPTION	REV'D BY	REV DATE
1	COMPLETED FINAL LAYOUT	JS	MAY 12/20

SPLASH PAD
ERWIN, NC

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