City of Temiskaming Shores
Request for Proposal
RS-RFP-005-2022
Rotary Splash Pad Installation

City of Temiskaming Shores
P.O. Box 2050
325 Farr Drive
Haileybury, Ontario
P0J 1K0

Contents

COVID-19 Statement

The health and safety of our residents, employees, visitors and service providers is our highest priority. By responding to this RFP, Bidders undertake to follow the provincial and/or municipal requirements (including physical distancing, use of personal protective equipment, etc.) that may prevail while performing within the scope of this Proposal.

1. Objective

This Request for Proposals (RFP) is an invitation for qualified companies to submit proposals to complete construction of the Temiskaming Shores and Area Rotary Splash Pad for the City of Temiskaming Shores.

2. Background

Located at the head of Lake Temiskaming, Temiskaming Shores is located in North-eastern Ontario, near the Quebec border. Temiskaming Shores has a population of approximately 9,920, according to the 2016 census. The City of Temiskaming Shores is governed by a seven-member Council comprised of six (6) Councillors and one (1) Mayor. The City also has various Committees of Council, with members appointed by Council.

3. Definitions

3.1 **City**: means the Corporation of the City of Temiskaming Shores.

3.2 **Proponent(s)/ Bidder(s):** means all persons, partnerships or corporations who respond to the RFP and includes their heirs, successors and permitted assigns.

3.3 **Request for Proposal;** means this Request for Proposal (RFP) document including all schedules, parts and attachments, as issued by the City, including any addenda or amendments made to it after initial issue.

3.4 **Successful Proponent/ Bidder:** means the Proponent/Bidder whose RFP submission is/are accepted to who has/have agreed to supply the goods and/or services, as outlined herein.

4. Submission

Submissions must be in a ***.pdf format*** and submitted electronically to:

tenders@temiskamingshores.ca

Subject Line: RS-RFP-005-2022 **"**Rotary Splash Pad Installation**"**

Addressed to: Kelly Conlin, Clerk

Proponents will receive an automatic email response to indicate that the submission has been received, and to contact the Municipal Clerk for submission opening details. Contact the Clerk at 705-672-3363 ext. 4116 or at clerk@temiskamingshores.ca, should the Proponent not receive an email from the tenders@temiskamingshores.ca email account.

The closing date for the submission of Proposals will be at **2:00 p.m. local time on October 20, 2022.**

- Late Proposals will not be accepted;
- Proposals by fax will not be accepted;
- Proposals by mail will not be accepted;
- Partial Proposals are not accepted;
- The City reserves the right to accept or reject any or all Proposals;
- The lowest priced Proposal will not necessarily be accepted;
- The City reserves the right to request clarification or supplementary information concerning a Proposal from any Proponent;
- The City reserves the right to enter into negotiations with a Proponent and any changes to the Proposals that are acceptable to both parties will be binding;
- The City reserves the right to confirm with the Proponent, a third party or references (whether provided in the Proposal or not), confirmation of any information provided by the Proponent in their Proposal.
- The Proposals shall be valid for 60 (days) days from submission date.

The Form of Proposal must be signed in the space provided on the form, with the signature of the Bidder or responsible official of the firm bidding. If a joint Bid is submitted, it must be signed and addressed on behalf of both of the Bidders. Any alterations or cross-outs must be initialed in ink by the Bidder. Failure to do so may result in the rejection of the Bidder's Proposal by the City.

Line items and total contract price must be clearly indicated. The Bid must not be restricted by a statement added to the Proposal form or by a covering letter, or by alterations to the Proposal form, as supplied by the City of Temiskaming Shores unless otherwise provided herein.

H.S.T. Tax will be applicable to the supply of labour and equipment.

The City will not be held responsible for Proponent or third-party costs, claims, direct or indirect damages caused by the City exercising its rights reserved in this Section or otherwise expressed or implied in this RFP.

5. Questions

Any questions with respect to the specifications are to be directed to:

Mathew Bahm
Director of Recreation
City of Temiskaming Shores
325 Farr Drive
Temiskaming Shores, ON P0J 1K0

Phone: 705) 672-3363 ext. 4106
Email: mbahm@temiskamingshores.ca

It will be the Proponent's responsibility to clarify any details in question not mentioned in this Proposal before presenting the submission. Questions relating to this proposal must be received by **October 11, 2022 at 4:00 p.m. local time.**

To ensure fairness to all Proponents, any and all questions that require clarification or that may materially alter this RFP document will be responded to and shared with other Proponents via an addendum, as described herein. Questions received after this date and time will not receive a response. Proponents are notified that any errors or omissions in the proposal may render the proposal invalid.

6. Mandatory Site Meeting

A mandatory site meeting for interested bidders is scheduled to take place at the proposed site on **Thursday September 29, 2022 at 2:00pm local time**.

The site is located at 200 Fleming Drive in New Liskeard Ontario with parking available.

7. RFP Schedule

The RFP process will be governed according to the following schedule. Although every attempt will be made to meet all dates, the City reserves the right to modify any or all dates at its sole discretion:

Release of RFP:	September 14, 2022
Mandatory Site Meeting:	September 29, 2022
Deadline for Submitting Questions:	October 11, 2022
Deadline for Responding to Questions:	October 13, 2022
RFP Proposal Submission deadline:	October 20, 2022
Final Selection and Notification:	November 16, 2022 (Estimated)
Mandatory Completion Date	June 30, 2023

8. Scope of Work

General Scope: The successful proponent will provide services to complete the installation of the Temiskaming Shores Rotary Splash Pad. General tasks necessary for completion include:

1. Site preparation
2. Concrete footing and spray feature bases installation
3. Plumbing installation to all spray features
4. Finished concrete slab installation
5. Installation of all spray features
6. Landscaping

The City has already completed necessary site prep work including installation of underground drainage, insulation and compacted granular material as per the geotechnical report completed by EXP in December 2018 (Appendix 01). Further, the City has completed the necessary water and sewer service extensions to the site as shown on Appendix 03. The City has completed the design and purchase of the splash pad components from Waterplay including necessary design and installation documents (Appendix 04). Lastly, the City has completed an engineered design of the splash pad footings and reinforced concrete slab available as Appendix 05.

Specific Scope of Work:

Site Preparation

1. Remove 130mm of compacted granular A material from the entirety of the proposed splash pad footprint. Store material on site for reuse around footings, plumbing and as fill under final topsoil grading around site as required. Any excess material shall be removed and stockpiled on City of Temiskaming Shores' property approximately 800m from the site.
2. Install supplied Waterplay® Below Grade Utility Cabinet as per manufacturer's instructions at location identified on Appendix 03.

Concrete (1)

3. Install forms and rebar for Concrete Stage 1 as per engineered design (Appendix 05).
4. Set required anchor hardware for Waterplay bases prior to completing Stage 1 footings.
5. Complete concrete pour for Stage 1 as per engineered design and notes (Appendix 05).
6. Install Waterplay feature bases onto stage 1 footings as per Appendix 05 and Appendix 04 ensuring 25mm of non-shrink between base and Stage 1 footing.

Plumbing

7. Complete required excavation for water supply lines and drain lines to and from the splash pad, lift station and below grade utility cabinet.
8. Supply and install connection of 150mm splash pad drain lines and to the pre-cut opening within the lift station (existing). Contractor is also required to connect the existing 150mm drain tile to the new 150mm drain line before emptying into the existing lift station.
9. Install water supply lines (40mm or 25mm HDPE as required) from below grade utility cabinet to each Waterplay base. Backfill with sand to appropriate depth as per engineered drawing and manufacturer's instructions. Ensure that waterlines have positive drainage from aquatic spray features to low-point drain within the cabinet.
10. Connect water supply from City curb stop to splash pad manifold. (water supply line has been previously installed from curb stop to below grade utility cabinet location).
11. Test all plumbing connections.

Electrical

12. Connect splash pad controller within below grade utility cabinet to outdoor electrical panel.
13. Complete electrical connections within the below grade utility cabinet and connections to the splash pad activators as per the manufacturer's recommendations (Appendix 04).

Concrete (2)

14. Install forms and rebar for reinforced concrete slab as per engineered drawing (Appendix 05) and spray feature manufacturer's instructions (Appendix 04). Should there be any discrepancies between the engineer

drawings within Appendix 05 and the manufacturer instructions within Appendix 04, the drawings within Appendix 05 shall prevail.

15. Install forms and complete concrete pour for 19m x 2m x 0.1m walkway from splash pad to Spurline building walkway as indicated on Appendix 03. A base of compacted granular A to a depth of 300mm, shall be used as the base of the walkway.

Splash Pad Features

16. Install spray pad features (supplied by City of Temiskaming Shores) onto element bases as per instructions provided by manufacturer (Appendix 04).
17. Test system features and programming as per instructions from manufacturer (Appendix 04).

Landscaping

18. Topsoil and sod are required to be placed around splash pad and walkway to ensure smooth transition between disturbed surfaces, final installations, and existing surfaces. Approximate area of topsoil and sod to be added, excluding concrete splash pad is 830m^2. Total volume of topsoil required is 150m^3. Final grading and placement of topsoil and sod to be coordinated with City of Temiskaming Shores and the successful proponent.
19. Remove culvert and temporary roadway to site
20. Ensure site is returned to the owner clean of any debris and garbage.

Administrative

21. Provide as-built drawing in .pdf format upon completion of work at the site.

Final elevation of the splash pad shall be (181.79m) +/- variation due to 2% drainage sloping on the finished surface of the splash pad.

9. Proposal Requirements

Each proposal shall follow the format described herein:

1. Transmittal letter that will include the name, title, address, and phone number of the primary contact for the proposal.
2. Statement of Qualifications
    a. Qualification summary of the company
    b. Qualification summary of and list of the staff intended for the project
    c. Description of similar projects
3. References. Descriptions of up to three similar assignments completed by the project manager. Include the name of the client, contact person, and telephone number.
4. Project approach.
    a. Provide a scope of work
    b. Provide a drawing of the proposed work
    c. Provide a project execution plan with schedule
5. A discussion of proposed additions or modifications to the work scope included in this request.

10. Proposal Evaluation

Proposals will be evaluated on the basis of the information provided by the Proponent; additional clarification may be requested if necessary. The City is not obliged to seek clarification of any aspect of a proposal.

Representatives from the City will evaluate each of the proposals received in accordance with the evaluation criteria as set out below. The City of Temiskaming Shores reserves the right in its evaluation of the proposal to consider all pertinent criteria whether or not such criteria are contained in the Request for Proposal. The City reserves the right to enter into further discussions in order to obtain information that will allow them to reach a decision with a Proponent, and to waive irregularities and omissions if, in doing so, the best interest of the Municipalities respectively will be served.

The evaluation criteria will be as follows:

CITY PROPOSAL EVALUATION CRITERIA	**WEIGHT**	**POINTS**	**MAXIMUM TOTAL POINTS**
Qualifications and Performance on Similar Projects (30%)			
Past ability to complete projects within timelines and budgets	15	10	150
Stability and reputation of firm	5	10	50
Qualifications of technical staff	5	10	50
Qualifications of senior staff / manager	5	10	50
Proposed Manager and Support Team (15%)			
Experience in directing / involvement with similar projects	5	10	50
Specialized expertise	5	10	50
Availability of key staff	5	10	50
Completeness and Schedule (25%)			
Methodology and Schedule for delivery of services	10	10	100
Understanding of proposed services to be provided	10	10	100
Quality assurance program	5	10	50
Estimated Fees and Disbursements (30%)			
Cost estimates are evaluated for completeness with the lowest scored 10 points, next 8 points, etc. If more than 5 proposals are received, then only the 5 lowest bids are to receive points, and the remaining higher bids will be given 0.25 points. Prices within a small differential will be scored as equal.	30	10	300
Total Score			**1000**

11. Goods, Materials and Equipment Suitable for Use

The Bidder warrants that any goods, materials, articles or equipment to be supplied under or pursuant to any official order or Agreement based on this RFP, that is or are to be made or used for a particular purpose, will be fit and suitable for that purpose.

The Successful Bidder may be required to provide written documentation that all materials or equipment offered in a Bidder's Proposal meet all applicable Municipal, Provincial and Federal Government standards, legislation and laws.

12. Amendments

The City at its discretion reserves the right to revise this RFP up to the final date for the deadline for receipt of proposals. The City will issue changes to the RFP Documents by addendum only. No other statement, whether oral or written, made by the City will amend the RFP Documents. The City will make every effort to issue all addenda no later than the seventh (7^{th}) day prior to the closing date. If an addendum is issued within seven days of the closing date, the bid submission date will be moved accordingly.

The Proponent shall not rely on any information or instructions from the City or a City representative except the RFP Documents, and any addenda issued pursuant to this Section.

The Proponent is solely responsible to ensure that it has received all addenda issued by the City. The Proponent shall acknowledge receipt of all addenda on the Form of Proposal. Failure to complete the acknowledgement may result in rejection of the proposal.

The City makes no promise or guarantee that addenda will be delivered by any means to any Proponent. By submitting a proposal submission in response to this RFP, the Proponent acknowledges and agrees that the addenda shall be posted on www.temiskamingshores.ca and it is the sole responsibility of the proponent to check this web site for said addenda. The City reserves the right to withdraw or cancel this Request for Proposal without notice.

13. Proposal Withdrawal or Amendment

Proponents may amend or withdraw their proposal, provided such withdrawal or amendment is received prior to the closing deadline. A Bidder who has already submitted a Proposal may submit a further Proposal at any time up to the official closing time; the last Proposal received shall supersede and invalidate all Proposals previously submitted by the Bidder for this RFP. A bid may be withdrawn at any time up to the official closing time by letter on original letterhead bearing the same signature as in the bid submission.

14. Right to Accept or Reject Submissions

The City does not bind itself to accept any proposal and may proceed as it, in its sole discretion, determines, following receipt of the proposals. The City reserves the right to accept any proposal in whole or in part or to discuss with any respondent different or additional terms to those envisaged in this RFP or in such respondent's proposal.

The City reserves the right to:

1. Accept or reject any or all of the proposals;
2. If only one proposal is received, elect to reject it;
3. Reject as informal any proposal that is received late or is incomplete or otherwise fails to comply with the requirements of the RFP;
4. Elect not to proceed with the projects as it so determines in its sole and absolute discretion; and/ or
5. To waive irregularities and formalities at its sole and absolute discretion.

15. Solicitation

If any director, officer, employee, agent or other representative of a Proponent makes any representation or solicitation to any Mayor, Councillor, officer or employee of the City with respect to the RFP, whether before or after submission of the proposal, the City shall be entitled to reject or not accept the RFP submission.

16. Subcontracting

The Successful Bidder hereby understands and agrees that any or all Subcontractors/ Carriers hired to perform within the scope of this Proposal are subject to all terms and conditions stated within, including and not limited to insurance requirements, and the Successful Bidder shall be held accountable.

The Successful Bidder shall ensure that all Subcontractors/ Carriers selected have experience in the Subcontract work described within the Proposal documents, and that they will execute their work with competence and within the required time frame.

The City reserves the right to reject a proposed Subcontractor/ Carrier for reasonable cause. Upon such rejection, the Bidder will be required to propose an alternate Subcontractor/ Carrier and to identify any resulting change to the Bid Price. This change can affect the status of the low Bid, and may result in a different Bid becoming low.

A list of Sub-Contractors that the Contractor proposes to employ in completing the required work outlined in this Proposal shall be included in the documents submitted. The Contractor shall not show “Own Forces” in their list of proposed Subcontractors, except where the Bidder’s intent is to employ the Bidder’s own qualified on-staff personnel to perform such work.

17. Independent Contractor Status of Proponent; Declaration of Conflicts

The Proponent fully acknowledges that in providing a Proposal, it provides such as an independent contractor and for the sole purpose of potentially providing services and/or goods to the City. The Proponent’s attention is drawn to the provisions of the Occupational Health & Safety Act 2010.

Neither the Proponent nor any of its personnel are engaged as an employee, servant or agent of the City. Any potential conflicts of interest in which a Proponent may have with the City or any employee of the City will be identified and described in detail in the proposal of each proponent (Conflict of Interest Declaration).

18. Insurance (from the Successful Proponent only)

The successful Proponent shall, at their own expense within 10 days of notification of acceptance and prior to the commencement of work, obtain, maintain and provide evidence of until the termination of the Agreement or otherwise stated, the following:

Commercial General Liability

The Successful Proponent shall maintain and pay for Comprehensive General Liability Insurance with coverage limits of no less than Two Million Dollars ($2,000,000.00) inclusive per occurrence for bodily injury, death and damage to property including loss of use.

The policy shall include City of Temiskaming Shores as an additional insured and containing a cross liability clause.

All insurance policies referenced in this Section shall be maintained in good standing throughout the duration of the Agreement, and cannot be cancelled or permitted to lapse unless the insurer notifies the City in writing at least 30 days prior to the effective date of cancellation or expiry. The City reserves the right to request such higher limits of insurance or other types of policies appropriate to the work as the City may reasonably require.

19. Workplace Safety and Insurance Board (WSIB) (from the successful Proponent only)

The Successful Proponent shall, at their own expense within 10 days of notification of acceptance and prior to the commencement of work, obtain, maintain and provide evidence of until the termination of the Agreement or otherwise stated, a Certificate of good standing from the Workplace Safety & Insurance Board.

The onus is on the Successful Proponent to comply with all applicable local and territorial standards and regulations, in effect and applicable by law in Ontario, Canada.

20. AODA Compliance

The Bidder shall comply with the provisions of the Accessibility for Ontarians with Disabilities Act, 2005, and the Regulations thereunder with regard to the provision of its goods or services contemplated herein to persons with disabilities. Without limitation, if applicable, pursuant to section 6 of Ontario Regulation 429/07, Accessibility Standards for Customer Service, made under the Accessibility for Ontarians with Disabilities Act, 2005, the Bidder shall ensure that all of its employees, agents, volunteers, or others for whom it is at law responsible, receive training about the provision of its goods and services to persons with disabilities. The Bidder acknowledges that pursuant to the Accessibility for Ontarians with Disabilities Act, 2005, the City of Temiskaming Shores must, in deciding to purchase goods or services through its procurement process, consider the accessibility for persons with disabilities to such goods or services.

21. Freedom of Information

Upon submission, all proposals become the property of the City and will not be returned to the proponents. Proponents must be aware that the City is a public body subject to the provisions of the Municipal Freedom of Information and Protection of Privacy Act. The City may, at any time,

make public the names and bid prices of all respondents. Proposals will be held in confidence by the City, subject to the provisions of the Municipal Freedom of Information and Protection of Privacy Act, or unless otherwise required by law.

Any proprietary or confidential information contained in the proposal should be clearly identified.

22. Nature of Request for Proposal

This RFP does not constitute an offer of any nature or kind whatsoever by the City to the Proponent.

23. Preparation of Proposals

All costs and expenses incurred by the Proponent relating to its Proposal will be borne by the Proponent. The City is not liable to pay for such costs and expenses, or to reimburse or to compensate the Proponent in any manner whatsoever for such costs and expenses under any circumstances, including the rejection of any or all proposals or the cancellation of this RFP.

24. Finalizing Terms

This RFP will not constitute a binding agreement but will only form the basis for the finalization of the terms upon which the City and the Successful Proponent will enter into the contract documentation and does not mean that the Successful Proponent's proposal is necessarily totally acceptable in the form submitted. After the selection of the Successful Proponent's proposal, the City has the right to negotiate with the Successful Proponent and, as part of that process, to negotiate changes, amendments or modifications to the Successful Proponent's proposal without offering the other proponents, the right to amend their proposals.

25. Commitment to Negotiate

The Successful Proponent shall execute any documentation, drafted in accordance with the terms of the Successful Proponent's proposal and any subsequent negotiations, within thirty (30) days of the date of notification of the Successful Proponent's selection.

Proponents not initially selected as the Successful Proponent hereby commit themselves, subject to notification by the City to execute documentation as aforesaid up to sixty (60) days following the date of submission of their proposals.

26. Agreement

A written agreement, prepared by the City shall be executed by the City and the Successful Proponent if the terms are mutually agreeable to all Parties. There is no guarantee that City Council will enter into any Agreement.

Any agreement resulting from this Request for Proposal shall be governed by and interpreted in accordance with the laws of the Province of Ontario.

27. Performance

Any undue delays in the execution of the work and/or costs incurred by the City due to inefficiencies in performance on behalf of the Successful Proponent shall be deemed to be the responsibility of that Proponent and as such, any and all costs, as deemed appropriate and reasonable compensation for the City, will be assessed to the Successful Proponent.

28. Conflict Resolution

This Agreement is based upon mutual obligation of good faith and fair dealing between the parties in its performance and enforcement. Accordingly, both parties, with a commitment to honesty and integrity, agree to the following:

1) That each will function within the laws and statutes that apply to its duties and responsibilities; that each will assist in the other's performance; that each will avoid hindering the other's performance; that each will work diligently to fulfil its obligations; and that each will cooperate in the common endeavour of the contract;
2) Both parties to this Agreement shall attempt to resolve all claims, disputes and other matters in question arising out of or relating to this Agreement or breach thereof first through negotiations between the Successful Proponent's representative and the City or representative by means of discussions built around mutual understanding and respect;
3) Failing resolution by negotiations, all claims, disputes and other matters in question shall attempt to be resolved through mediation, under the guidance of a qualified mediator;
4) Failing resolution by mediation, all claims, disputes and other matters in question shall be referred to arbitration;
5) No person shall be appointed to act as mediator or arbitrator who is in any way interested, financially or otherwise, in the conduct of the work on the Project or in the business or other affairs of either the City or the Successful Proponent;
6) The award of the arbitrator shall be final and binding upon the parties;
7) The provisions of the Arbitration Act, 1991 S.O. 1991, Chapter 17 shall apply.

29. Cancellation

Nothing herein shall be construed as giving the Proponent the right to carry out the terms and requirements of the tasks contemplated under this RFP or the Agreement beyond the time when such services become unsatisfactory to the City. In the event that the Proponent shall be discharged before all the services contemplated hereunder have been completed, or the services are for any reason terminated, stopped or discontinued because of the inability of the Proponent to serve under this Agreement, the Proponent shall be paid only goods and/or services which shall have been satisfactorily completed at the time of termination.

Should the City or the Successful Proponent wish to terminate the Agreement, he/she shall provide written notice of the termination not less than 90 days from the date of termination. Failure to maintain the required documentation during the term of the Agreement may result in suspension of the work activities and/or cancellation of the contract.

30. Indemnification

The Successful Proponent shall indemnify and hold harmless the City, its elected and other officials, officers, employees, agents, servants, representatives, and volunteers from and against any and all liability, loss, claims, demands, legal proceedings, expenses, including but not limited to legal expenses (hereinafter collectively referred to as the “Claims”), when the Claims arise wholly or in part, directly or indirectly, as a result of any wrongful, blameworthy, or negligent acts or omissions, or breach of any terms of this Agreement by the Successful Proponent, or its officers, directors, employees, sub-contractors, agents, representatives or volunteers in the course of providing services pursuant to this Agreement.

This indemnity shall survive the termination, completion, or expiry of this Agreement, and in particular any risk that further Claims against the City are made after the termination, completion, or expiry of this Agreement, such risk is assumed entirely by the Successful Proponent.

31. Unenforceable Provisions

Should any provision of this document be deemed unenforceable by a court of law, all other provisions shall remain in effect.

32. Force Majeure

It is understood and agreed that the Successful Proponent shall not be held liable for any losses resulting if the fulfillment of the terms of the Agreement shall be delayed or prevented by wars, acts of public enemies, strikes, fires, floods, acts of God, or for any other cause not within the control of the Successful Proponent and which by the exercise of reasonable diligence, the Successful Proponent is unable to prevent. Should the performance of any contract be delayed or prevented herein set forth, the Successful Proponent agrees to give immediate written notice and explanation of the cause and probable duration of any such delay and to provide written notice as to when Contract obligations resume. In any case, such delay shall not exceed the length of time of the interruption/disruption.

33. Errors & Omissions

It is understood, acknowledged and agreed that while this Proposal includes specific requirements and specifications, and while the City has used considerable efforts to ensure an accurate representation of information in this proposal, the information is not guaranteed by the City to be comprehensive or exhaustive. Nothing in the proposal is intended to relieve the Proponents from forming their own opinions and conclusions with respect to the matters addressed in the proposal. There will be no consideration of any claim, after submission of proposals, that there is a misunderstanding with respect to the conditions imposed by the Proposal and/or Agreement.

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Form of Proposal

Proponent's submission of bid to the Corporation of the City of Temiskaming Shores

Stipulated Bid Price

We/I, _____
(Registered Company Name/Individuals Name)

Of, _____
(Registered Address and Postal Code)

Phone Number: _____ Email: _____

We/I hereby offer to enter into an agreement for the services, as required in accordance to the Proposal for a price of (must be CDN funds and without HST):

Total Fee Proposal exclusive of HST:	**$**

Acknowledgement of Addenda

I/We have received and allowed for ADDENDA NUMBER _____ in preparing my/our proposal.

Bidder's Authorized Official: _____

Title: _____

Signature: _____

Date: _____

Form 1 to be submitted.

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Non-Collusion Affidavit

I/ We _____ the undersigned am fully informed respecting the preparation and contents of the attached Proposal and of all pertinent circumstances respecting such bid.

Such bid is genuine and is not a collusive or sham bid.

Neither the bidder nor any of its officers, partners, owners, agents, representatives, employees or parties of interest, including this affiant, has in any way colluded, conspired, connived or agreed directly or indirectly with any other Bidder, firm or person to submit a collective or sham bid in connection with the work for which the attached bid has been submitted nor has it in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other bidder, firm or person to fix the price or prices in the attached bid or of any other Bidder, or to fix any overhead, profit or cost element of the bid price or the price of any bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against the City of Temiskaming Shores or any person interested in the proposed bid.

The price or prices proposed in the attached bid are fair and proper and not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

The bid, quotation or proposal of any person, company, corporation or organization that does attempt to influence the outcome of any City purchasing or disposal process will be disqualified, and the person, company, corporation or organization may be subject to exclusion or suspension.

Dated at: _____ this _____ day of _____ , 2022.

Bidder's Authorized Official: _____

Title: _____

Signature: _____

Date: _____

Form 2 to be submitted.

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Conflict of Interest Declaration

Please check appropriate response:

☐ I/We hereby confirm that there is not nor was there any actual perceived conflict of interest in our Proposal submission or performing/providing the Goods/Services required by the Agreement.

☐ The following is a list of situations, each of which may be a conflict of interest, or appears as potentially a conflict of interest in our Company's Proposal submission or the contractual obligations under the Agreement.

List Situations:

In making this Proposal submission, our Company has / has no *(strike out inapplicable portion)* knowledge of or the ability to avail ourselves of confidential information of the City (other than confidential information which may have been disclosed by the City in the normal course of the RFP process) and the confidential information was relevant to the Work/Services, their pricing or quotation evaluation process.

Dated at: _____ this _____ day of _____ , 2022.

Signature: _____

Bidder's Authorized Official: _____

Title: _____

Company Name: _____

Form 3 to be submitted.

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List of Proposed Sub-Contractors

A list of Sub-Contractors that the Contractor proposes to employ in completing the required work outlined in this Proposal must be included in the Proposal documents submitted.

Name	Address	Component

I / We verify that the information provided above is accurate and that the individuals are qualified, experienced operators capable of completing the work outlined in this Proposal document.

Dated at: _____ this _____ day of _____ , 2022.

Signature: _____

Bidder's Authorized Official: _____

Title: _____

Company Name: _____

Form 4 to be submitted.

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Appendix 01 – EXP Geotechnical Report

December 14, 2018

EXP Services
New Liskeard, ON

Attn: Nolan Dombroski, P.Eng.
Via Email: nolan.dombroski@exp.com

Re: SUD-01801063-00 Geotechnical Recommendations
Proposed Splashpad
New Liskeard, ON

The following letter has been drafted to address the geotechnical review of the proposed splash pad, to be located in downtown New Liskeard and provide additional recommendations for the proposed project.

Field Review

EXP attended the site on November 29, 2018 to witness a series of test pits being excavated by the Town of New Liskeard.

Three (3) test pits were excavated at the locations shown on Drawing A-1 in Appendix A. Details of the soils encountered during the field investigation are summarized on the attached test pit logs in Appendix B. The logs include textural descriptions of the subsoil and indicate the soil boundaries inferred from non-continuous sampling and observations during the field investigation. These boundaries reflect approximate transition zones for the purpose of geotechnical design and should not be interpreted as exact planes of geological change. When reading this report, the explanatory notes and definitions provided in Figures B-1A and B-1B in Appendix B should be referenced.

Topsoil was encountered at the surface of the test pits. Topsoil was noted to range in thickness frorm 150 to 200 mm. Underlying the topsoil was fill. The fill consisted of a silty clay with some sand, mixed wood, steel, bricks, and wires. The fill was brown to grey in colour and moist. The fill extended to depths ranging from 1.8 to 2.1 m below grade.

Underlying the fill was a layer of peat. The peat soils were noted to be 200 mm thick. The peat was black in colour and wet. Underlying the peat in test pits TP-1 and TP2 was native silty sand. The silty sand was grey in colour, wet, dilatant and considered to be in a loose state.

Underlaying the peat in test pit TP-3 and the silty sand in TP-1 and TP-2 was a native silty clay. The silty clay, contained trace sand, was grey in colour, moist, and soft to very soft. The silty clay extended to the termination depths of the test pits ranging from 2.7 to 3.0 m below existing grade.

Groundwater was encountered at all three (3) locations. Groundwater was noted to range from 1.5 to 2.0 m below existing grade.

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Foundation Recommendations

Splash pads are typically constructed as a slab-on-grade with thickened areas to support the load of various fixtures and equipment. The pad will be exposed to freezing conditions and will not be heated. As such, insulation will be required below the foundation. It is further anticipated that no significant grade raises are proposed for the design of the splash pad.

Provided the following recommendations are followed, the foundations/slab can be designed to support a net allowable bearing capacity of 50 kPa.

Prior to placement of fill, the entire subgrade within the construction footprint must be stripped of all organics, fills, peat or other deleterious materials, including tree's and their roots, down to undisturbed native soils. Given the groundwater elevations, significant dewatering will likely be required to achieve the final excavation depth. Dewatering must be completed to lower the groundwater table to a minimum of 1.0 m below the excavation depth.

The excavation must extend laterally a minimum of 2.0 m beyond the foundation edges, at the native subgrade level to allow for the construction of the engineered fill pad as well as for placement of frost protection insulation. The native subgrade is to be cut to design grade and the exposed subgrade must be reviewed by a geotechnical representative from EXP prior to placement of any new materials. Any soft areas must be further excavated and replaced with a Granular 'A' material in accordance with OPSS 1010. The entire subgrade must be properly shaped and graded to allow a minimum of 2% grade from the centre of the splash pad to the outer edges. Due to the fine-grained subgrade soils at the site, the subgrade surface must not be left exposed beyond the day of construction.

Once the subgrade is approved by EXP, the construction of the pad can proceed. The entire approved subgrade must be covered with a non-woven geotextile filter cloth, including the excavation side slopes. The geotextile is to consist of a Terrafix 270R or approved equivalent. The geotextile must be placed with a minimum overlap of 0.6 m at the joints. A biaxial geogrid consisting of a TBX 2000 should be then be placed along the base of the excavations. The geogrid must further be placed with a minimum overlap of 0.6 m at the joints.

Once the geotextile and geogrid have been placed, upfill below the proposed insulation footprint is to consist of Granular "B" Type II (OPSS 1010) extending laterally to the edge of the insulation footprint. The Granular "B" Type II is to be compacted to 100% of the Standard Proctor Maximum Dry Density (SPMDD).

Insulation can then be placed over the Granular "B" Type II fill pad. Insulation should consist of rigid extruded polystyrene, have a minimum compressive strength of 200 kPa, and an R-Value of 5 for every 25.4 mm of thickness, (i.e. Styrofoam SM). Any exposed insulation is to be protected against sunlight and physical damage with a minimum of 0.3 m of earth cover protection. The insulation is to be a minimum of 150 mm thick and is to be placed in layers, with joints butted tightly together and staggered. The insulation must be placed below the entire foundation at a minimum grade of 2% from the centre of the proposed splash pad, extending laterally a minimum of 2.0 m from all foundation edges. A final review of the insulation placement must be completed by a geotechnical representative from EXP.

Engineered fill above the insulation should consist of Granular "A" (OPSS 1010). A minimum of 200 mm of engineered fill is to be established between the insulation and the thickened portions of the slab-on-grade. The engineered fill will be thicker than 200 mm below the non-thickened portions of the slab-on-grade. The Granular "A" must be placed in maximum 150 mm thick lifts and compacted to 100% SPMDD within 2% of optimum moisture content.

As the pad is to be used for water entertainment, it is imperative that any water seeping into the underlying granular material be collected and drained to prevent any potential frost heaves during winter conditions. It is recommended that perforated drainage tiles be placed below the foundation, overtop of the insulation. Drainage tile are to consist of rigid 100 mm diameter perforated pipe leading to a positive sump or outlet (sloped at a minimum of 2%). The pipe is to be surrounded with a minimum of 100 mm of pea gravel (19 mm Diam. Clearstone), which is then to be completely wrapped with non-woven geotextile (Terrafix 270R). Drainage tiles are to be placed in parallel rows, maximum 3.0 m on centre, and must also include a perimeter drainage tile at the edge of the Granular "A" fill above the insulation.

We trust that the information contained herein meets your requirements. Should you have any questions or concerns please do not hesitate to contact the undersigned.

Sincerely,
EXP Services Inc.

LICENSED PROFESSIONAL ENGINEER
Y Beauparlant
100060114
PROVINCE OF ONTARIO

Yves Beauparlant, P.Eng.
Manager, Earth and Environmental Services
Northeastern Ontario

Ian MacMillan, P.Eng.
Senior Geotechnical Engineer

APPENDIX A

KEYPLAN - N.T.S.

LEGEND

EXP TEST PIT

— NOTES —

1) The boundaries and soil types have been established only at Test Hole locations. Between Test Holes, they are assumed and may be subject to considerable error.
2) Do not use Test Hole elevations for design purposes.
3) Soil samples will be retained in storage for 3 month and then destroyed unless client advises that an extended time period is required.
4) Quantities should not be established from the information provided at the Test Hole locations.
5) This drawing forms part of the report, project number as referenced, and should be used only in conjunction with this report.

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REVISIONS		
No.	DESCRIPTION	DATE

CLIENT: THE CITY OF TEMISKAMING SHORES

PROJECT: PROPOSED SPLASH PAD
NEW LISKEARD, ON

PROJECT NO.: NWL-01801063-00

TITLE:

TEST PIT LOCATION PLAN

DATE	SCALE:	DWG NO.
DECEMBER, 2018	NTS	A-1

APPENDIX B

Notes on Sample Descriptions

1. All sample descriptions included in this report follow the International Society for Soil Mechanics and Foundation Engineering (ISSMFE), as outlined in the Canadian Foundation Engineering Manual. Note, however, that behavioral properties (i.e. plasticity, permeability) take precedence over particle gradation when classifying soil. Please note that, with the exception of those samples where a grain size analysis has been made, all samples are classified visually. Visual classification is not sufficiently accurate to provide exact grain sizing or precise differentiation between size classification systems.

UNIFIED SOIL CLASSIFICATION

CLAY (PLASTIC) TO	FINE	MEDIUM	CRS.	FINE	COARSE
SILT (NONPLASTIC)	SAND			GRAVEL	

EQUIVALENT GRAIN DIAMETER IN MILLIMETRES

ISSMFE SOIL CLASSIFICATION

CLAY	SILT			SAND			GRAVEL			COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE	FINE	MEDIUM	COARSE		

2. Fill: Where fill is designated on the borehole log it is defined as indicated by the sample recovered during the boring process. The reader is cautioned that fills are heterogeneous in nature and variable in density or degree of compaction. The borehole description may therefore not be applicable as a general description of site fill materials. All fills should be expected to contain obstruction such as wood, large concrete pieces or subsurface basements, floors, tanks, etc., none of these may have been encountered in the boreholes. Since boreholes cannot accurately define the contents of the fill, test pits are recommended to provide supplementary information. Despite the use of test pits, the heterogeneous nature of fill will leave some ambiguity as to the exact composition of the fill. Most fills contain pockets, seams, or layers of organically contaminated soil. This organic material can result in the generation of methane gas and/or significant ongoing and future settlements. Fill at this site may have been monitored for the presence of methane gas and, if so, the results are given on the borehole logs. The monitoring process does not indicate the volume of gas that can be potentially generated nor does it pinpoint the source of the gas. These readings are to advise of the presence of gas only, and a detailed study is recommended for sites where any explosive gas/methane is detected. Some fill material may be contaminated by toxic/hazardous waste that renders it unacceptable for deposition in any but designated land fill sites; unless specifically stated the fill on this site has not been tested for contaminants that may be considered toxic or hazardous. This testing and a potential hazard study can be undertaken if requested. In most residential/commercial areas undergoing reconstruction, buried oil tanks are common and are generally not detected in a conventional geotechnical site investigation.

3. Till: The term till on the borehole logs indicates that the material originates from a geological process associated with glaciation. Because of this geological process the till must be considered heterogeneous in composition and as such may contain pockets and/or seams of material such as sand, gravel, silt or clay. Till often contains cobbles (75 to 200 mm) or boulders (over 200 mm). Contractors may therefore encounter cobbles and boulders during excavation, even if they are not indicated by the borings. It should be appreciated that normal sampling equipment cannot differentiate the size or type of any obstruction. Because of the horizontal and vertical variability of till, the sample description may be applicable to a very limited zone; caution is therefore essential when dealing with sensitive excavations or dewatering programs in till materials.

Notes On Soil Descriptions

4. The following table gives a description of the soil based on particle sizes. With the exception of those samples where grain size analyses have been performed, all samples are classified visually. The accuracy of visual examination is not sufficient to differentiate between this classification system or exact grain size.

Soil Classification		Terminology	Proportion
Clay and Silt	<0.060 mm	"trace" (e.g. Trace sand)	1% to 10%
Sand	0.060 to 2.0 mm	"some" (e.g. Some sand)	10% to 20%
Gravel	2.0 to 75 mm	adjective (e.g. sandy, silty)	20% to 35%
Cobbles	75 to 200 mm	"and" (e.g. and sand)	35% to 50%
Boulders	>200 mm		

The compactness of Cohesionless soils and the consistency of the cohesive soils are defined by the following:

Cohesionless Soil		Cohesive Soil		
Compactness	**Standard Penetration Resistance "N" Blows / 0.3 m**	**Consistency**	**Undrained Shear Strength (kPa)**	**Standard Penetration Resistance "N" Blows / 0.3 m**
Very Loose	0 to 4	Very soft	<12	<2
Loose	4 to 10	Soft	12 to 25	2 to 4
Compact	10 to 30	Firm	25 to 50	4 to 8
Dense	30 to 50	Stiff	50 to 100	8 to 15
Very Dense	Over 50	Very Stiff	100 to 200	15 to 30
		Hard	>200	>30

5. **ROCK CORING**

Where rock drilling was carried out, the term RQD (Rock Quality Designation) is used. The RQD is an indirect measure of the number of fractures and soundless of the rock mass. It is obtained from the rock cores by summing the length of the core covered, counting only those pieces of sound core that are 100 mm or more length. The RQD value is expressed as a percentage and is the ratio of the summed core lengths to the total length of core run. The classification based on the RQD value is given below.

RQD Classification	RQD (%)
Very Poor Quality	<25
Poor Quality	25 to 50
Fair Quality	50 to 75
Good Quality	75 to 90
Excellent Quality	90 to 100

$$\text{Recovery Designation \% Recovery} = \frac{\text{Length of Core Per Run}}{\text{Total Length of Run}} \times 100$$

Log of Test Pit TP-1

Project No. NWL-01801063-00 | Figure No. B-2

Project: Proposed Splash Pad | Sheet No. 1 of 1

Location: New Liskeard, Ontario

599848 mE: 5262106 mN

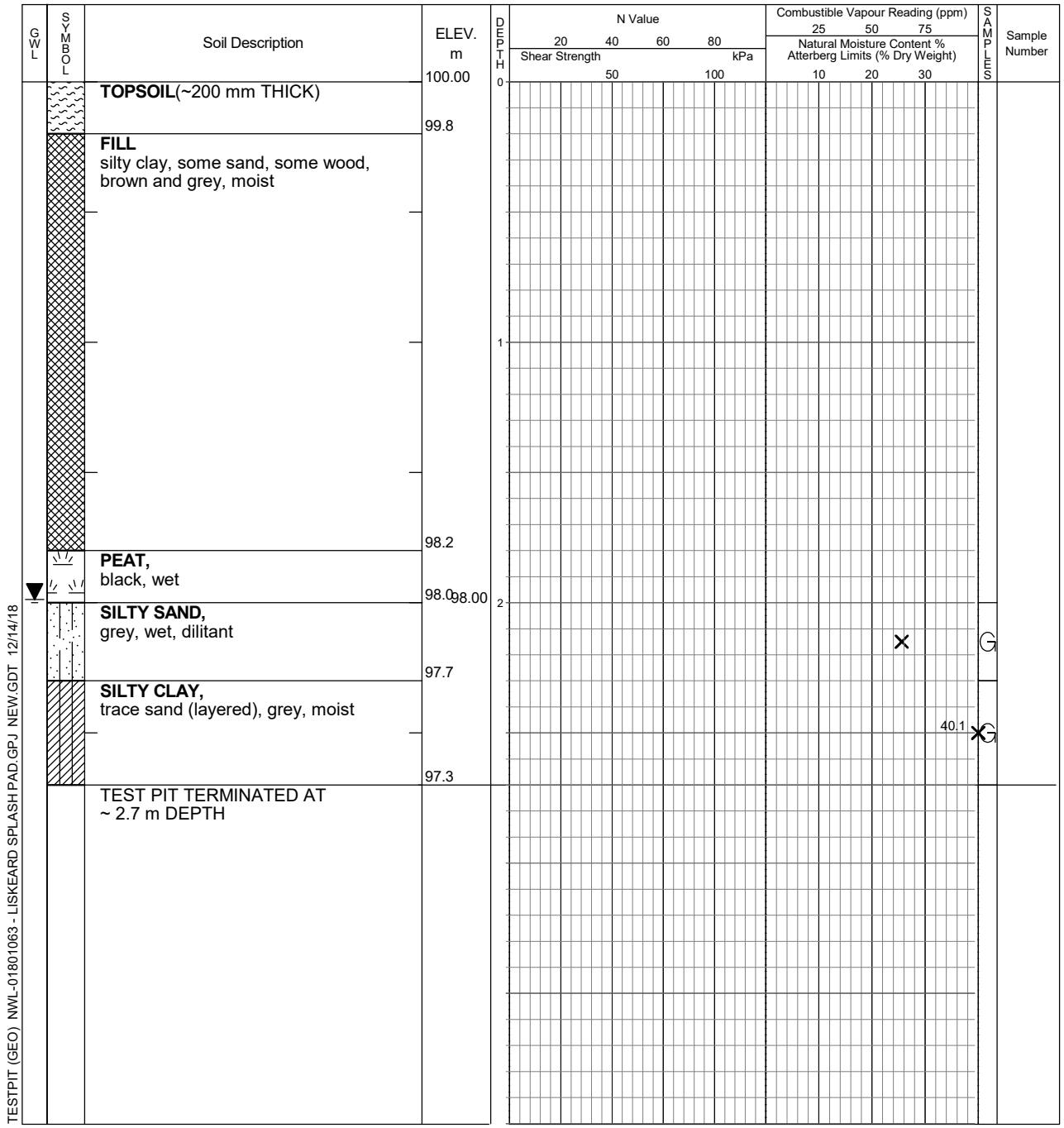
Date Excavated: November 29, 2018

Excavator Type: Case 580 Back-Hoe

Datum: Local (100.0 m)

Grab Sample G
Penetrometer
Field Vane Test S

Combustible Vapour Reading □
Natural Moisture ×
Plastic and Liquid Limit
Undrained Triaxial at % Strain at Failure ⊕



TESTPIT (GEO) NWL-01801063 - LISKEARD SPLASH PAD.GPJ NEW.GDT 12/14/18

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Test Pit data requires interpretation assistance from EXP before use by others.

See Figures B-1A and B-1B for Notes on Sample Description

Time	Water Level (m)	Depth to Cave (m)
Upon Completion	2.0	2.1

Log of Test Pit TP-2

Project No. NWL-01801063-00 | Figure No. B-3

Project: Proposed Splash Pad | Sheet No. 1 of 1

Location: New Liskeard, Ontario

599875 mE: 5262098 mN

Date Excavated: November 29, 2018

Excavator Type: Case 580 Back-Hoe

Datum: Local (100.0 m)

Grab Sample G
Penetrometer
Field Vane Test S

Combustible Vapour Reading □
Natural Moisture ×
Plastic and Liquid Limit
Undrained Triaxial at % Strain at Failure ⊕

GWL	SYMBOL	Soil Description	ELEV. m	DEPTH	N Value / Shear Strength kPa	Combustible Vapour Reading (ppm) / Natural Moisture Content % / Atterberg Limits (% Dry Weight)	SAMPLES	Sample Number
		TOPSOIL(~150 mm THICK)	100.00	0	20 40 60 80 / 50 100	25 50 75 / 10 20 30		
			99.9					
		FILL silty clay, some sand, some wood, some steel, some bricks, brown and grey, moist		1				
▼			98.50					
			98.2					
		PEAT, black, wet	98.0					
		SILTY SAND, grey, wet, dilitant	97.7	2				
		SILTY CLAY, trace sand (layered), grey, moist	97.3					
		TEST PIT TERMINATED AT ~ 2.7 m DEPTH						

TESTPIT (GEO) NWL-01801063 - LISKEARD SPLASH PAD.GPJ NEW.GDT 12/14/18

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Test Pit data requires interpretation assistance from EXP before use by others.

See Figures B-1A and B-1B for Notes on Sample Description

Time	Water Level (m)	Depth to Cave (m)
Upon Completion	1.5	2.1

Log of Test Pit TP-3

Project No. NWL-01801063-00 | Figure No. B-4

Project: Proposed Splash Pad | Sheet No. 1 of 1

Location: New Liskeard, Ontario

599854 mE: 5262073 mN

Date Excavated: November 29, 2018

Excavator Type: Case 580 Back-Hoe

Datum: Local (100.0 m)

Grab Sample G
Penetrometer
Field Vane Test S

Combustible Vapour Reading □
Natural Moisture ×
Plastic and Liquid Limit ⊢○
Undrained Triaxial at % Strain at Failure ⊕

GWL	SYMBOL	Soil Description	ELEV. m	DEPTH
		TOPSOIL(~200 mm THICK)	100.00	0
		FILL silty clay, some sand, some wood, some wires, some bricks, some steel, brown and grey, moist	99.8	
▼			98.50	1
			97.9	2
		PEAT, black, wet	97.7	
		SILTY CLAY, trace sand (layered), grey, moist	97.0	3
		TEST PIT TERMINATED AT ~ 3.0 m DEPTH		

N Value
20 40 60 80
Shear Strength kPa
50 100

Combustible Vapour Reading (ppm)
25 50 75
Natural Moisture Content %
Atterberg Limits (% Dry Weight)
10 20 30

SAMPLES | Sample Number

TESTPIT (GEO) NWL-01801063 - LISKEARD SPLASH PAD.GPJ NEW.GDT 12/14/18

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Test Pit data requires interpretation assistance from EXP before use by others.

See Figures B-1A and B-1B for Notes on Sample Description

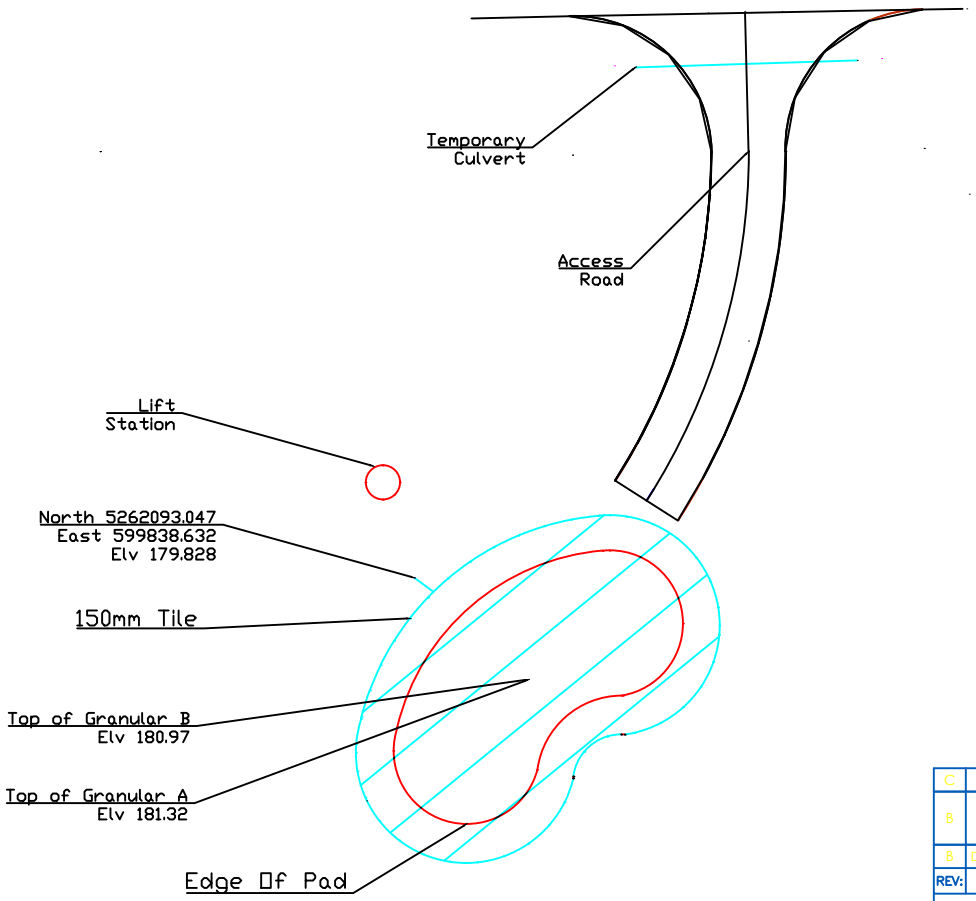
Time	Water Level (m)	Depth to Cave (m)
Upon Completion	1.5	2.4

City of Temiskaming Shores

RS-RFP-005-2022

Rotary Splash Pad

Appendix 02 – Site Preparation As-Built



REV:	DESCRIPTION:	BY:	DATE:
C			
B			
B	Draft	MQ	1/18/2022

AMENDMENTS:

SITE: Temiskaming Shores	2022/1 DRAWING NO.		0 PROJECT NO.	1/18/22 DATE.
TITLE: Splash Pad	1:50, 1:100 SCALE AT A4.	MQ DRAWN.	CHECKED.	A REVISION.

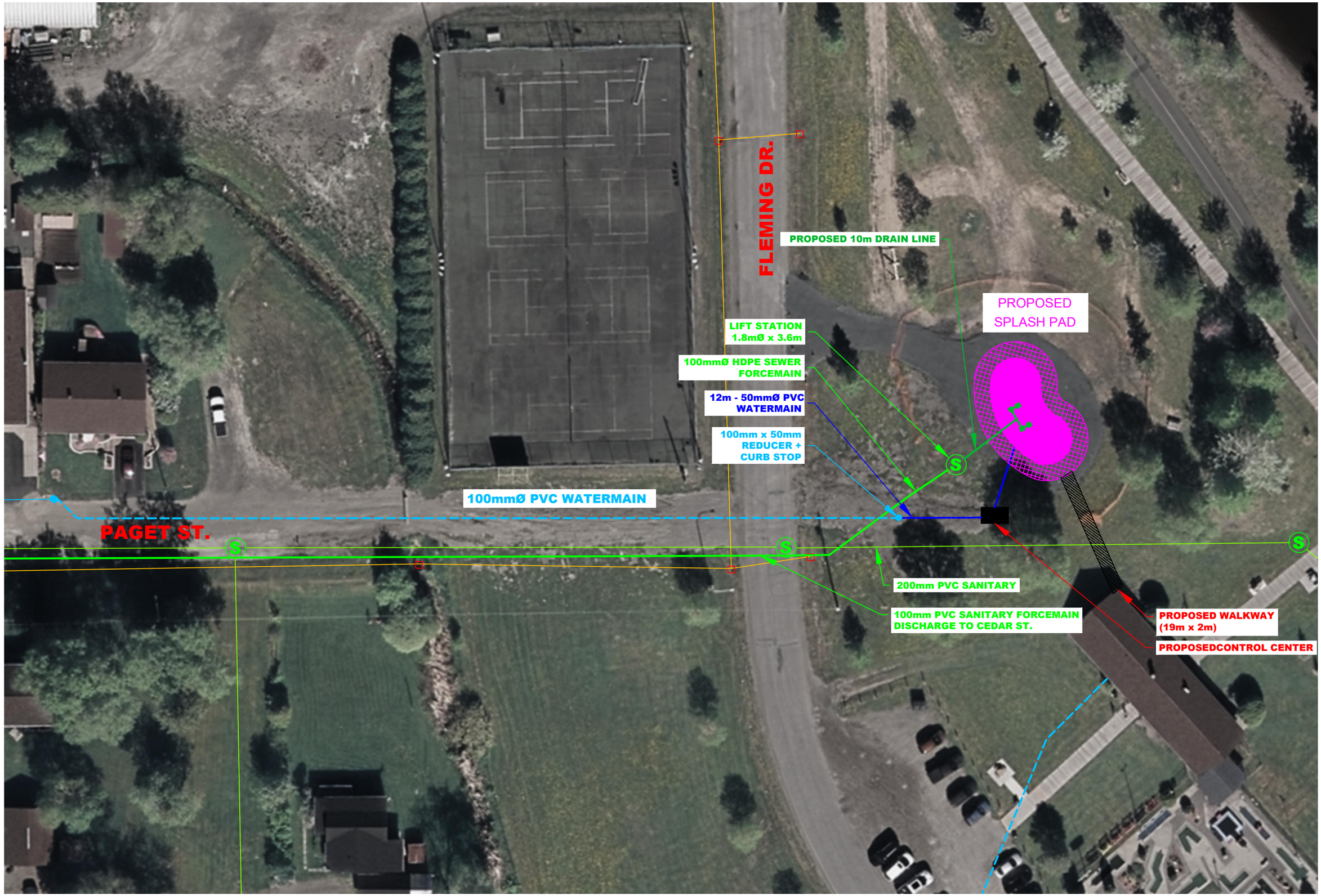
Pedersen Construction
177246 Bedard Road
New Liskeard, ONT, P0J1P0

City of Temiskaming Shores

RS-RFP-005-2022

Rotary Splash Pad

Appendix 03 - Water and Sewer Services Plan


FLEMING DR.
PROPOSED 10m DRAIN LINE
PROPOSED
SPLASH PAD
LIFT STATION
1.8mØ x 3.6m
100mmØ HDPE SEWER
FORCEMAIN
12m - 50mmØ PVC
WATERMAIN
100mm x 50mm
REDUCER +
CURB STOP
100mmØ PVC WATERMAIN
PAGET ST.
200mm PVC SANITARY
100mm PVC SANITARY FORCEMAIN
DISCHARGE TO CEDAR ST.
PROPOSED WALKWAY
(19m x 2m)
PROPOSEDCONTROL CENTER

City of Temiskaming Shores
RS-RFP-005-2022
Rotary Splash Pad

Appendix 04 – Waterplay Manual and Installation Documents

Temiskaming Shores, Temiskaming, ON

PROJECT MANUAL

Registration Number: ORD-14059

NOTE:
Detailed footing design and installation information is included in Appendix 05 of this RFP. Information contained within this document regarding footings has been provided by Waterplay as general information.

It has been included for completeness only and should not be followed without approval by the owner.

In all instances with conflicting information between this document and Appendix 05,

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p 250.712.3393 tf 800.590.5552 e info@waterplay.com | www.waterplay.com

December 4, 2020

The Temiskaming Shores, Temiskaming, ON Project Manual outlines various details for your park including: layout plans, components specifications, and a troubleshooting section to help you through any problems that may arise. Waterplay prides itself on durability and dependability; our products are designed to provide you with years of trouble-free use.

With regular maintenance you can minimize down time and ensure a trouble-free start-up each year. Please take the time to familiarize yourself with this Manual, particularly the *Waterplay Owner's Manual* for instructions on regular park maintenance.

Waterplay's Project Support Team is available to help with any concerns or questions you may have. Please contact us Monday to Friday from 7:30am-5:00pm Pacific Standard Time, on our toll free number 1.800.590.5552, or via email at support@waterplay.com.

With sincere thanks for your business,

Jeff Scobie

Project Support Specialist

Temiskaming Shores, Temiskaming, ON

Project Manual Contents

Waterplay Operation & Installation Manual

Drawing Set

Mechanical Workbook

Component Specifications

Component Footing Details

Potable / WTS by Others Controller Manual/Wiring Diagram

Waterplay Warranty Information

Temiskaming Shores, Temiskaming, ON

Waterplay Operation & Installation Manual

The guide used for general installation guidelines, park operation, recommended maintenance, and startup/winterization procedures.

waterplay®

OPERATIONS & INSTALLATION MANUAL

CONTACT INFORMATION

For additional information please contact Waterplay® Solutions Corp. (Waterplay):

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Kelowna, BC Canada
V1Y 7G6

TELEPHONE (Mon – Fri 7:00 a.m. to 5 p.m. Pacific Time)

1-800-590-5552 in North America
01-250-712-3393 International

EMAIL

support@waterplay.com

ONLINE

www.waterplay.com

IMPORTANT INFORMATION

NOTICE: Waterplay aquatic play features require installation by qualified personnel. Use of non-qualified trades' people or use of non-approved parts will void the Waterplay Warranty.

For Waterplay aquatic play features to be considered for warranty, all guidelines outlined within this document must be followed, in addition to your project being registered directly with Waterplay online at http://www.waterplay.com/en/park-registration/

Prior to commencing installation be sure to read through this entire document including all other project specific documents.

Waterplay aquatic feature maintenance is the responsibility of the owner. It is recommended a maintenance log be kept documenting water quality (if using a water treatment system) and all performed maintenance. See suggested inspection check lists, water quality log, and maintenance section for guidelines on how to maintain Waterplay aquatic features, in addition to keeping your Waterplay Warranty valid. These documents may be called on if warranty issues arise.

NOTICE: When receiving Waterplay shipments inspect all items for damage and quantity immediately. Failure to do so could result in costly repair or replacement costs at the expense of the owner/installer.

When receiving any shipments from Waterplay be sure to inform the driver of any discrepancies and report as indicated on the shipping documentation when signing for receipt of goods. All claims must be reported within 48 hours of receipt of goods. Claims reported outside of this time cannot be guaranteed. If nothing has been noted on the Bill of Lading a claim may not be accepted. If you are unable to inspect the shipment at time of receipt you must note on the Bill of Lading "Subject to inspection".

OWNER'S MANUAL CONTENTS

1.0 General

The following information provides direction on the installation, maintenance and general operation of Waterplay aquatic play features. If additional information is needed that was not included, please contact Waterplay directly.

For Waterplay aquatic play features to be considered for warranty, all guidelines outlined within this document must be followed, in addition to your project being registered directly with Waterplay.

Project registration can be done online http://www.waterplay.com/en/park-registration/. Registration will confirm your warranty has been validated and Waterplay has all information required to ensure important aquatic play feature maintenance and useful operating information is communicated to the appropriate parties. Registration will require your Project Registration number (ORD-####) that can be found on the front page of your Project Manual. This binder is an electronic document containing your project specific details, and is available through your dealer, or by emailing Waterplay directly at support@waterplay.com.

If the project includes a Waterplay smartPLAY™ Controller or Water Treatment System (WTS), please reference the Waterplay smartPLAY™ Controller Setup Guide or the WTS Operations & Maintenance Manual for additional information.

2.0 Project Completion

At the end of construction, the owner should have the following items in their possession.

2.1 Documentation

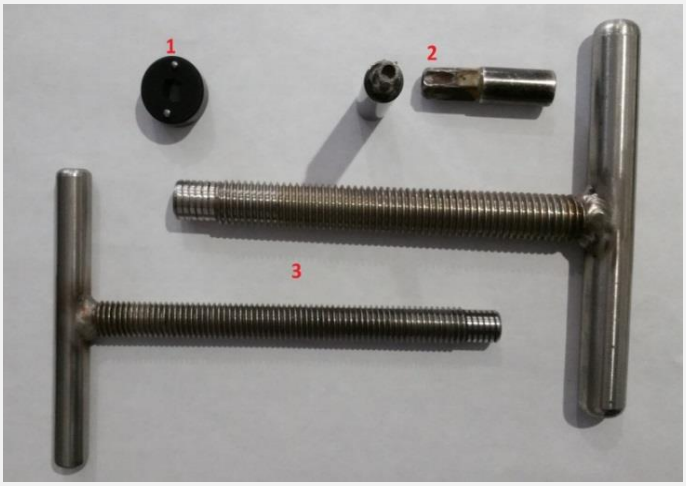
- Accurate "as built" construction plans from the onsite engineer, detailing changes (if applicable) from the original layout.
- WTS Operations & Maintenance Manual (if applicable).
- Electronic document titled "Project Manual" that includes the following documents:
  - Project Drawing Set – These drawings are used as a general overview of the park layout and not to be used for park construction. These are not to be confused with "For Construction" drawings to be issued by your local engineer.

- Mechanical Workbook – Shows the recommended component water flow and valve sequencing.
- Waterplay Operations & Installation Manual – Used as general guidelines to the operation, maintenance, trouble shooting, and installation details of Waterplay aquatic play features.
- Component Specifications – Provides a general description of each component purchased.
- smartPLAY™ Controller Setup Guide / Wiring Diagram (if applicable) – A guide to the controller wiring and use of your Waterplay aquatic play features controller.
- Waterplay Warranty Information – Information on the requirements and coverage of your Waterplay aquatic play features.

Note: Park Registration is required to activate your warranty, see section 1.

2.2 Maintenance and Service Items

- Touch-up paint
- All spare nozzles and nozzle blanks (winter covers)
- Feature maintenance tools such as:
  - ¾" Spray Jet Tool (item #1), used for removing ¾" nozzles.
  - Torx Security Bits (item #2) #H27, #H45 and #H55, used for removing security bolts on features.
  - "T" tools (item #3), 5/16", 1/2" and 5/8" threaded tool used for removing 2-1/2" nozzles, 5" nozzles, and 6" nozzles.



- Additional service tools and replacement parts can be purchased from Waterplay.

3.0 Safety Inspections

It is the responsibility of the owner/operator to inspect the aquatic play area daily, with more thorough inspections conducted weekly and monthly or mid-season. This will assist in limiting the number of safety issues that arise. Waterplay has included recommended check lists, located in the appendix of this document, for these inspections. These checklists are meant as a starting point, each aquatic play pad owner is responsible for developing their own site-specific inspection procedure.

Please view our how to videos online at http://www.waterplay.com/en/spring-start/ for additional information and maintenance tips, or simply scan the QR code with your smart phone.

4.0 Winterization and Shut Down Procedures

4.1 Winterization and Shut Down

Waterplay aquatic play features must be correctly winterized and shut down to prevent damage to components, supply lines, controllers, and manifolds during colder months or long periods of inactivity. This typically includes draining the main supply line, manifold, and all feature lines by low point drain (if installed) or blowing them out with compressed air. All components and lines must be free of water. Failure to do so could result in ice damage and costly repair costs.

- See recommended aquatic play pad check list “Winterization and Shut Down” provided in the appendix.

4.2 Spring Startup Procedures

Waterplay aquatic play features must be correctly commissioned after long periods of shut down to prevent damage to components, supply lines, controllers, and manifolds.

- See recommended aquatic play pad check list “Spring Startup Inspection” provided in the appendix.

5.0 NOZZLES

5.1 General

Waterplay features will be shipped with blank nozzles that should remain installed until construction and concrete work is complete. The blank nozzles are also used for pressure testing and winterization or shutdown periods. After park construction and pressure testing is complete the blank nozzles can be removed to flush out the lines, prior to installing the performance nozzles.

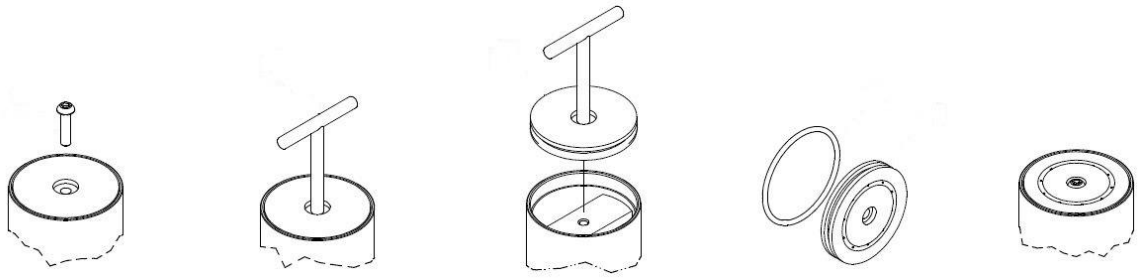
> Be sure to store the blank nozzles in a safe place during the operating season as they are required to be re-installed for winterization or shut down periods

- Plans should be made to inspect the nozzle outlets on a regular basis to ensure the fittings are secure and all orifices are free of debris.
- Park operators need to frequently monitor water pressures as it's critical that water pressures are kept at a safe discharge rate.
- Nozzle removal/exchange should be conducted in the morning as a temperature rise will cause expansion of the nozzle making it difficult to remove.

5.2 Nozzles Replacement (3/4")

- Ensure the water is turned off from the manifold and pressure has been relieved in the system.
- Remove nozzle blank using supplied two pin ¾" Jet Spray tool (See section 2.2.).
- Apply thread lubricant to nozzle threads and insert by hand into nozzle socket in a clockwise direction. Use ¾" Jet Spray tool to tighten nozzle until snug.
- Nozzle should fit flush with component.
- Do not over tighten as this could damage the nozzle.

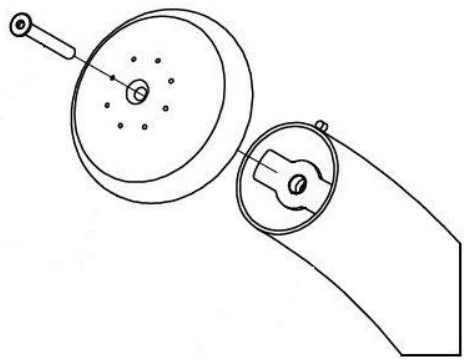
5.3 Nozzles Replacement (1-1/2", 2-1/2", 5", and 6")



- Ensure the water is turned off from the manifold and pressure has been relieved in the system.
- Remove bolt (center of nozzle) using supplied maintenance tools (See section 2.2.).
- Remove nozzle blank using supplied "T" tool (See section 2.2.). Simply start threading "T" tool into the hole where the bolt was. The nozzle will begin to work its way out as the "T" tool spins. Continue rotating "T" tool until the nozzle has been completely removed. It is important to not pull up on the "T" tool to try and remove the nozzle, as this could cause damage.
- Insert specified nozzle and ensure O-ring is sitting properly and has been lubricated. Apply an anti-seize compound to bolt(s) and tighten until nozzle is fully seated in nozzle chamber.
- Nozzle should fit flush with component.
- Do not over tighten as this could damage the nozzle.

5.4 Bobble Nozzle Replacement

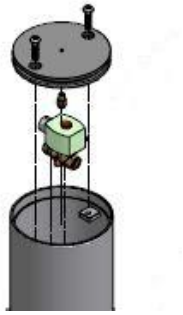
- Ensure the water is turned off from the manifold and pressure has been relieved in the system.
- Remove bolt (center of nozzle) using supplied Torx Security Bit (See section 2.2.).



- Pull off existing Bobble nozzle and attach replacement by lining up the orientation tab and sealing groove with the feature.
- Apply an anti-seize compound to bolt and tighten until nozzle is fully seated in the sealing groove.
- Do not over tighten as this could damage the nozzle.
- Bobble nozzles don't typically come with a winter blank, in this case for pressure testing it as advised to use the playPHASE base cover plate to pressure test prior to installing the feature.

5.5 Pop-It Ground Spray Nozzles (if applicable)

- Pop-It nozzles are removed the same as the nozzles in section 5.3 above except they have two security bolts and require two "T" tools (See section 2.2.) to be removed.
- Pop-It ground sprays do not include winter blanks so care needs to be made during installation not to damage the performance nozzle. These nozzles can be left in for winter months however, it is imperative the supply line and pop it valve have the water blown out. Additionally, the SMC tubing must be disconnected and the canister drain must be free of debris. See the Pop-It specification sheet for further information.



- If the Pop-It valve is not pulsing correctly it may have debris stuck inside the valve. This can be cleaned out by taking apart the valve and flushing clean.

6.0 SMARTPLAY™ CONTROLLER AND ACTIVATOR OPERATION

For complete instructions on running the controller please review the smartPLAY™ Controller Setup Guide. This will discuss how to navigate the controller functions, connect an activator, and activate the park features. This guide is included within the Project Manual.

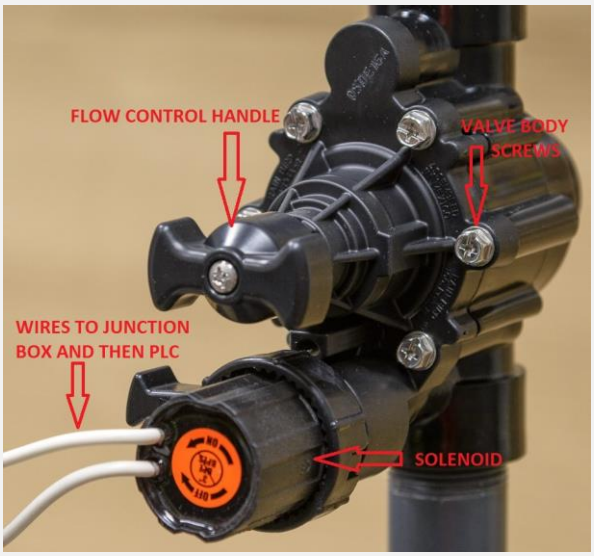
7.0 SOLENOID VALVES

7.1 Manually Turning On and Off

- "Rotating to the "ON" position will open the valve and will stay open until it's manually turned to the "OFF" position,
- Rotating to the "OFF" position will manually close the valve and allow for the controller to electronically turn the valve on and off.
- To run the park electronically with the controller all valves must be in the "OFF" position.
- To electronically control the valves see the Waterplay smartPLAY™ Controller Guide.

7.2 Setting the Feature Flow:

- With the controller and pump on electronically, activate the corresponding valve output using the controller Valve Test screen, or manually rotate the solenoid counter clockwise to the "ON" position. You should hear water flowing through the valve.
- Increase or decrease the flow through the component by turning the flow control handle.
- Adjust accordingly to set the desired display for the component.
- Re-engage the solenoid body clockwise to the "OFF" position, or turn off the output using the controller Valve Test/Auto screen if this is how it was opened.
- Flow may need to be re-adjusted during standard park operation if features are sequenced as this can affect the flow.



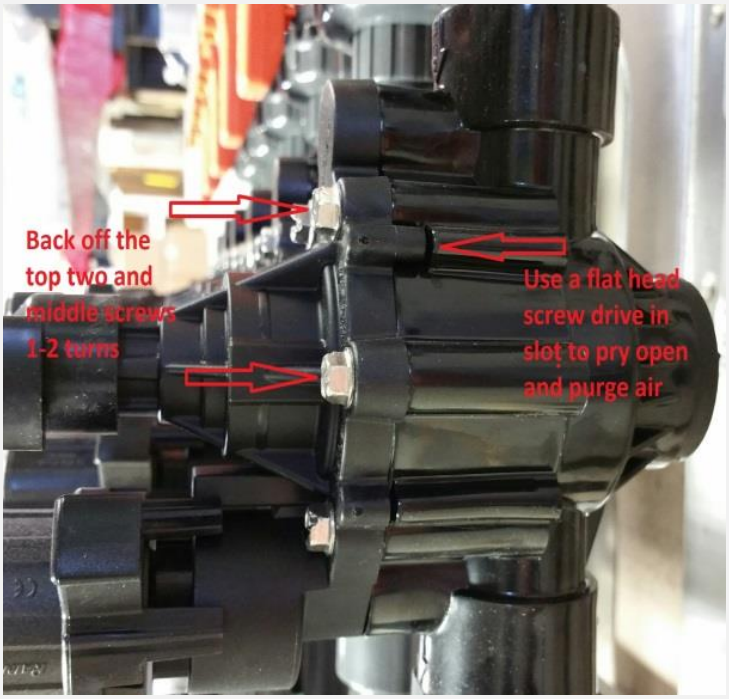
7.3 Cleaning the Valves:

- Isolate the solenoid valve from the manifold by closing the supply to the valve and if possible the supply to the manifold.
- Drain the leg the valve is connected to.

- Remove the solenoid valve by rotating counter clockwise and inspect the O-ring for debris, damaged or twisting.
- Unscrew the six screws on the valve body and remove the diaphragm, and spring.
- Check for any debris on the filter screen and or diaphragm inside.
- Be sure not to lose any small items like the internal spring, or bolts.
- Reassemble the valve.

7.4 Water Hammer:

If the valve appears to be vibrating excessively and sounds of water hammer are present (a pulsing thud or ticking noise), this usually means air is trapped in the valve. This can be fixed by loosening the top two and middle two valve body screws one to two full turns. If required use a flat head screw driver to pry the valve body and valve top open. This will allow the air to purge and some water to shoot out as well.



8.0 Component Care and Maintenance

Caution:

- Test new cleaning products on a small inconspicuous area to check for adverse effects.
- Do not use power washers or electric polisher on decal products.
- Review product manufacturer instructions for specific details.
- Cleaning products are available for purchase from Waterplay.

8.1 Environmental Considerations

8.1.1 Water Quality:

For projects that utilize a Water Treatment System, Waterplay requires a maintenance log be kept with the minimum daily measurements: ORP, PH and Combined Chlorine etc. Total Dissolved Solids should be measured weekly. The maintenance log needs to be recorded for the life of the Waterplay equipment. This will ensure a corrosive environment is not created due to a chemical imbalance, thus shortening the working life of Waterplay aquatic play features and components.

Shocking of sanitizer will result in the rapid decay of powder coated products. The passive layer of stainless steel will also decay, resulting in potential rust issues that are not covered under warranty. See U005 Waterplay Warranty Policy for full details.

Features installed in pool environments require excellent control of water chemistry. Features immersed in water require extra attention to cleaning as this produces a harsh environment for the features.

For potable parks, hard water deposits will collect over time on the components. How quickly this occurs will depend on the municipal water quality.

8.1.2 Air Quality:

Indoor aquatic facilities should take careful consideration into planning sufficient air turnover rates and humidity control, to prevent premature decay of powder coat and Stainless Steel.

Industrial fallout should be considered for any outdoor play area located near an industrial area, as there is the possibility of airborne contaminates coming from heavy equipment, carbon steel equipment, industrial exhaust etc. Increased maintenance intervals for cleaning the components will be required to prevent premature decay of powder coat and Stainless Steel.

Outdoor play areas located near train tracks may also experience fallout from brake dust and train track wear. In these instances increased maintenance intervals for cleaning the components will be required to prevent premature decay of powder coat and Stainless Steel.

8.2 Powder Coat and Fiberglass

8.2.1 Regular Cleaning

- Use a mild soap and clean water with a microfiber cloth to wipe down features. Waterplay recommends SlideRenu - Slide Soap or similar product.
- The frequency can be adjusted dependent on the surrounding environment and spray park water quality. Adjust cleaning schedule as needed to keep a clean shiny park.

8.2.2 Heavy Cleaning

- If there are signs of water staining conduct a more thorough cleaning using a detergent or high PH degreaser. Waterplay recommends SlideRenu - Slide Detergent or similar product.
- Use a soft brush or clean microfiber to scrub the feature.
- Follow product directions for dilution and soak time if required.
- If hard water mineral deposits, oxidation, and scale start forming on the features, use a scale remover with a non-scratch pad to remove. Waterplay recommends SlideRenu – Calcitrol or similar product. Rinse features with water thoroughly when finished.

8.2.3 Polishing

- To remove any scrapes or scratches use a polishing compound with an electric polisher. Thoroughly clean and dry the feature prior to starting as described above.
- Apply polishing compound evenly and be sure not to use excessive force or stay in one spot to long, this will cause fading and deterioration of the finished surface. Waterplay recommends SlideRenu - Slide Polish or similar product.
- Let polishing compound haze over or dry, then wipe with a clean cloth.

- Once polishing is complete, wax will need to be applied to restore a glossy finish. See below for wax process. If polishing does not remove powder coat scratches, see Touch up Paint Procedure.

8.2.4 Waxing

- Apply wax on a regular basis to protect and prevent fading from UV, weather exposure and environmental contaminants. This will assist in keeping a shiny new appearance. Waterplay recommends SlideRenu - Slide Wax or similar product.

- Wax is applied using a clean cloth by hand or using an electric polisher. Evenly distribute wax and wipe off with a clean cloth after the wax has hazed over or dried.

- If using electric polisher be sure not to use excessive force or stay in one spot too long as this will cause fading and deterioration of the finish surface.

8.2.5 Touch Up Paint

- Protect the area from potential spillage and overspray. Allow product to fully dry each step.

- Clean the area with a damp cloth.

- Wet sand the area with 600 grit (or finer).

- Mask the area only requiring the primer, where metal is exposed.

- Apply a light coat of primer. Repeat as necessary.

- Remove the masking, wet sand the area and feather the sides around the primed area leaving the mid area slightly raised. Clean the area with water and a damp cloth, then let dry.

- For final painting, remove all masking and apply a smooth light coat spraying slightly beyond the area. Repeat process until the primer is not visible. Take time to ensure paint does not run and us multiple light coats allowing paint to dry between each coat.

Touch Up Paint Procedure

8.3 Brushed Stainless Steel (Grades 304/316)

8.3.1 Regular Cleaning

- Components should be rinsed with fresh water daily; this will wash away accumulated contaminants and chemicals.
- Components should also be wiped down bi-weekly with a soft cloth or sponge, in the direction of the grain.

8.3.2 Heavy Cleaning (surface rust and pitting)

In the event Waterplay features exhibit signs of surface corrosion, the corrosion should be removed as soon as possible to prevent further damage caused by pitting. Waterplay recommends E-NOX CLEAN, a high strength stainless steel cleaner or similar product.

- Apply the cleaner to the contaminated brushed stainless feature, let sit (minimum one day), and then rinse and wipe with a wet cloth or sponge.

- If chemically cleaning the feature does not work on its own, a non-scratching Scotch-Brite pad can be used in the direction of the grain as a more abrasive method of cleaning.

- Do not use steel wool as this can scratch the surface of the stainless steel and contaminate the feature with carbon steel.

8.4 Acrylic Panels

- Wash panels with clean water and remove any loose grime with a clean wet microfiber cloth or pressure washer at low pressure. Clean cloth often to prevent small particles from scratching the panel. Never use Ammonia, window cleaners or other chemical sprays on acrylic.

- SlideRenu Calcitrol can be used to remove calcium buildup.

- If the panels are etched, have small scratches; a polish can be used to buff out the etching or scratches. Waterplay recommends SlideRenu - Slide Polish or a similar product.

- To reduce the frequency of cleaning in the future, the panels can be coated with a layer of good quality car wax, or a hydrophobic compound. Do not use silicone based waxes. Waterplay recommends SlideRenu's SlideWax or SlideGloss.

- Water quality, surrounding environment and how frequent panels are rinsed with fresh water will determine how often the panels need to be cleaned.

8.5 HDPE Components

Rinse with clean water to remove loose debris, a soft bristle brush and/or pressure washer at low pressure can aid in debris removal, then clean with a mild detergent and water, rinse well with clean water to remove any detergent residue.

8.6 Before and After Photos

8.6.1 Aluminum Dumping Bucket

After Cleaning | After Calcitrol/Polishing/Waxing

8.6.2 Fiberglass Slide Flume

After Cleaning

After Polishing/Waxing

After Cleaning

After Polishing/Waxing

8.6.4 Stainless Steel Column (brushed finish)

After Cleaning

After E-Nox Clean

9.0 SHIPMENT RECEIVING

When receiving any shipment from Waterplay be sure to inspect the shipment and inform the driver immediately of any damage or missing items. Report as indicated on the shipping documentation when signing for receipt of goods. If nothing has been noted on the Bill of Lading a claim may not be accepted. If you are unable to inspect the shipment at time of receipt you must note on the Bill of Lading "Subject to inspection". All claims must be reported within 48 hours of receipt of goods. Claims reported outside of this time cannot be guaranteed.

9.1 Inspect for Damage

Waterplay takes photos of all major project orders prior to shipping from our manufacturing facility. These photos are sent along with your notice of shipment and are a valuable tool for helping you inspect your goods upon receipt. When opening the truck or container, compare immediately to the way it look when it shipped from our site. If it is significantly different, it should be an indication that something changed on route. Also, be careful to ensure that you are receiving the complete number of items as noted on the Bill of Lading and in the photos.

- Inspect the component wrapping to look for tears, cuts or smudges.

Waterplay component wrapping as placed in truck for shipment.

Component wrapping at destination indicating shipping damage.

- Inspect shock watch stickers to ensure all clear.

Shock Watch - Ok

Shock Watch – Not Ok

9.2 Inspect for Accuracy

- Confirm the correct number of items has been received; this includes spray features, anchor hardware, DEX Bases, fasteners, nozzles blanks (installed for shipping and pressure testing) and performance nozzles (shipped loose for install after park construction).
- Review shipping documents and compare to original order.
- If you are unable to inspect the shipment at time of receipt you must note on the Bill of Lading “Subject to Inspection”.

9.3 Report Discrepancies

- If found, indicate damage or missing items on Bill of Lading at time of receiving.
- Contact the transport company indicating your way bill number and request an inspection. This will initiate the claim.
- Contact Waterplay’s Project Support within 48 hours and send a copy of the Bill of Lading with recorded damage and or missing items, as well as the shipping provider’s claim number.
- Provide photos of the damage prior to unwrapping and after, to both Waterplay and the shipping provider.

9.4 Storage

- Components should be stored indoors out of the elements with protective wrapping in place.

- If protective wrapping becomes damp it should be removed as this could cause discoloration and fading of the feature finish coat and void the Waterplay Warranty.

10.0 INSTALLATION - GENERAL

The following information is provided to ensure that the installation of Waterplay features is done correctly and the resulting facility is a success. It is the responsibility of the park owner and general contractor to ensure all aspects of the construction is performed by skilled personnel under the direct full-time supervision of the corresponding licensed tradesperson.

Waterplay feature installation must be conducted in accordance with Waterplay guidelines and installation details provided for each feature, acceptable construction practices, local codes, and authorities having jurisdiction (AHJ). When required, approval by the engineer of record should be documented.

To ensure a smooth installation always plan ahead, the following list covers some key points and items to be verified or discussed prior to proceeding with the installation:

- Ensure all required approvals and permits are in place from local authorities such as health, building, by-law, etc.

- Obtain approved “For Construction” drawings from local engineer(s). This should include at minimum; site grading, plumbing, electrical, footing and final slab requirements. If conflicting information is found in documents, local codes will govern. Verify with project engineer regarding any changes.

- Ensure all applicable trades people review “For Construction” drawings and other installation documents prior to allowing work to commence.

- Confirm that the feature shipment has been thoroughly inspected for missing items or damaged goods, and any concerns duly noted on the Bill of Lading and communicated to the shipper and Waterplay. It is imperative the any findings are duly noted at time of receipt and that Waterplay is notified within 48 hours of receipt of goods.

- Verify that the finished surface will conform to local codes and follows designed grading plans approved by the local engineer or AHJ.

11.0 Installation - Splash Pad Design Considerations

- Waterplay recommends a minimum overspray zone of 2.44m (8ft.) to help avoid damage to surrounding areas and keep pedestrian traffic from getting wet. Overspray zone must include a positive drainage slope to the splash pad drains. If the overspray is sloped away from the splash pad this has the potential for flooding and damaging the surrounding landscape. Areas with frequent high winds may need a larger overspray zone. See Waterplay Pad Concept Layout drawing.

- Slopes (main splash pad and overspray areas) are to provide positive drainage to the drains, Slope grades are subject to local engineer's approval. Be sure not to have any low points around features or ground sprays as pooling will affect feature performance.

- All splash pad electrical products that have specified drainage connections must be connected correctly. Failure to do so will result in premature failure of electrical components. Electrical connections must be completed in a water tight manor.

12.0 Installation - Site Preparation

Contact local "Call Before You Dig" groups to obtain all required information and approvals prior to beginning site work.

12.1 Site Survey

- Locate the spray pad within the intended area and complete site layout.

- Verify all required distances are maintained from property lines.

- Suggested backfill of trenches is 6" (150mm) of sand below the pipes and 8" (200mm) above.

- Suggested backfill of the spray pad area is 6" (150mm) of base coarse aggregate.

12.2 Excavate

- Excavate to intended depths and slopes, maintaining tolerances per the spray pad design.

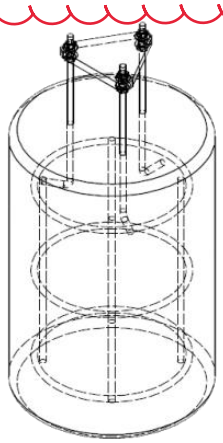
- Comply with local codes, safety regulations and authorities having jurisdiction.

Detailed footing design and installation information is included in Appendix 05 of this RFP. Information contained within this document has been provided by Waterplay as general information. It has been included for completeness only and should not be followed without approval by the owner.

13.0 INSTALLATION - FOOTINGS

13.1 Footing Type

Component specification sheets for the facility's components are shipped with the anchor hardware. All footing details provided are only recommendations and must be confirmed with local engineer prior to commencing work. Please reference the "For Construction" drawings (provided by local engineer) to ensure the footing details are as per your local codes.



13.2 Footing Location

- Confirm each footing excavation is correctly located, oriented and at the proper elevation to the other components.
- Excavate to the specified depth.

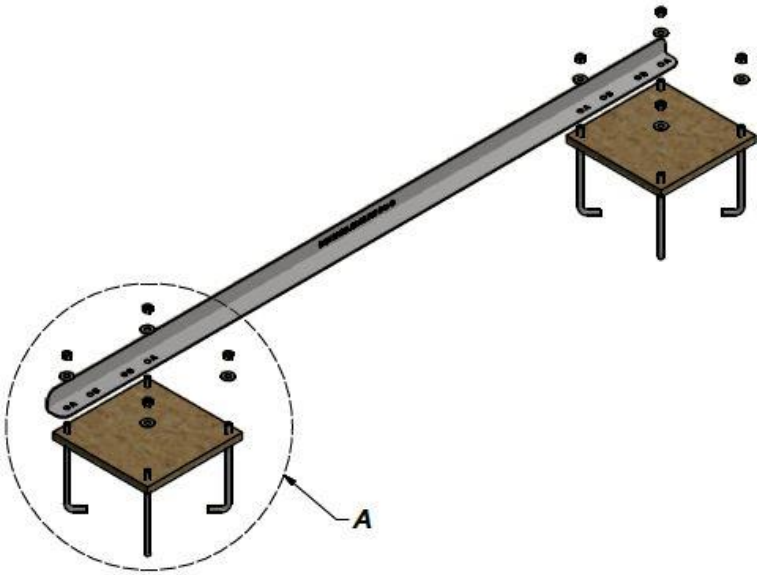
13.3 Footing Reinforcement

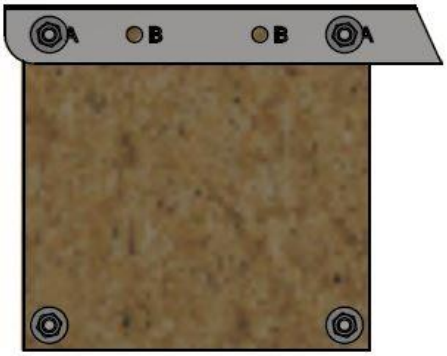
- Construct forms and place the required reinforcement.
- Maintain specified minimum cover around reinforcement.
- Electrically ground the footing reinforcement according to local codes and regulations.

13.4 Anchor Hardware

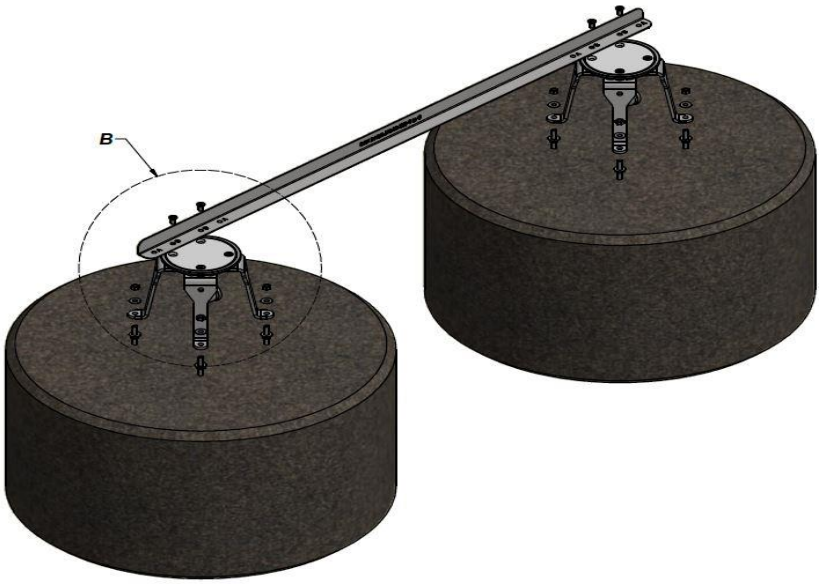
- Secure hardware wooden templates with anchor hardware to forms for feature or playPHASE™ base attachment.
- Confirm orientation is correct.
- Allow 2" (50mm) clearance between top of concrete footing and bottom of template. Please refer to local codes and specifications for proper embedment depths.

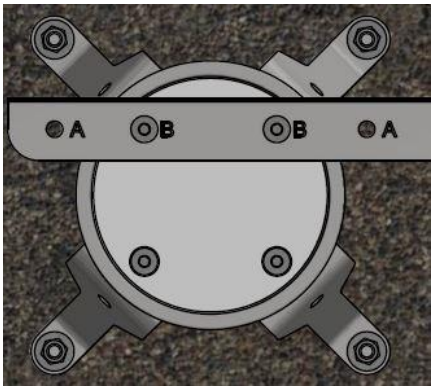
- Double footed features require a jig between footings for correct bolt locations as well as center to center spacing.
- Holes labelled “A” are to be used to set the spacing of the anchors bolts
- Holes labelled “B” are for the flange fasteners to ensure the bases are level with one another.





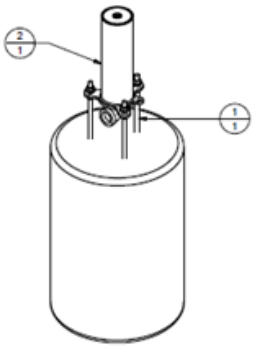
Detail A: Anchor hardware through Jig Holes “A”



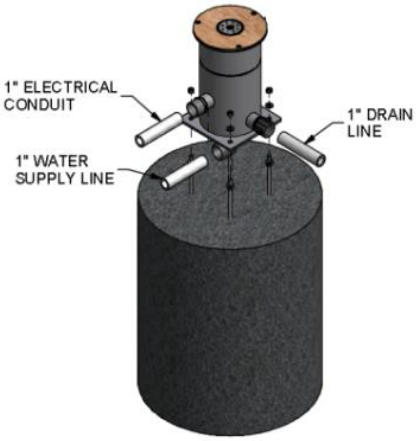


Detail B: playPHASE hardware through Jig Holes “B”

14.0 INSTALLATION - FEATURE AND PLAYPHASE™



- Ensure concrete footings have set (as per local specifications) and are ready for embedded feature or playPHASE™ base installation.
- Remove the top nuts, washers, footing templates and footing forms from the concrete footing.
- Keep the nuts and washers for component or playPHASE™ placement.
- Install each component and playPHASE™ base on the assigned footing anchor bolts. Confirm correct orientation of each component to prevent water spray to undesired or dry areas.



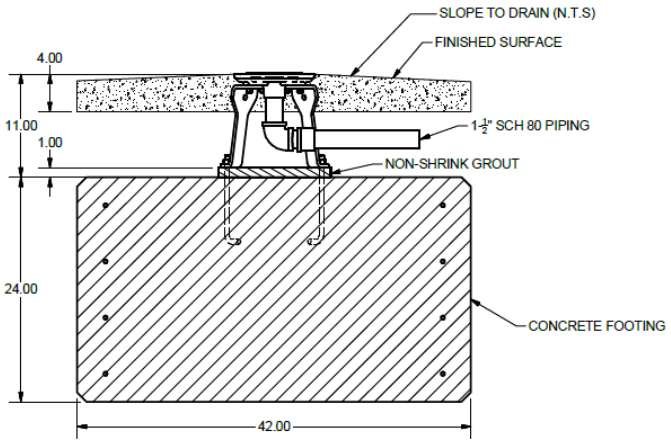
- Complete final elevation adjustments with bottom nuts on J-bolts. Use the second nut to secure in place.
- Ensure that the tops of the bases (including cover plate) are adjusted to be flush and level with the final finished grade of the spray pad.

15.0 INSTALLATION - FEATURE GROUNDING

- Loop ground wire for all components and playPHASE™ bases together on a continuous circuit to a grounding rod (or as per your local electrical codes) with a UL/CSA approved lug nut or grounding tab (supplied by others).
- Grounding requirements are to be approved by the local engineer of record before commencing work.

16.0 Installation - Grouting

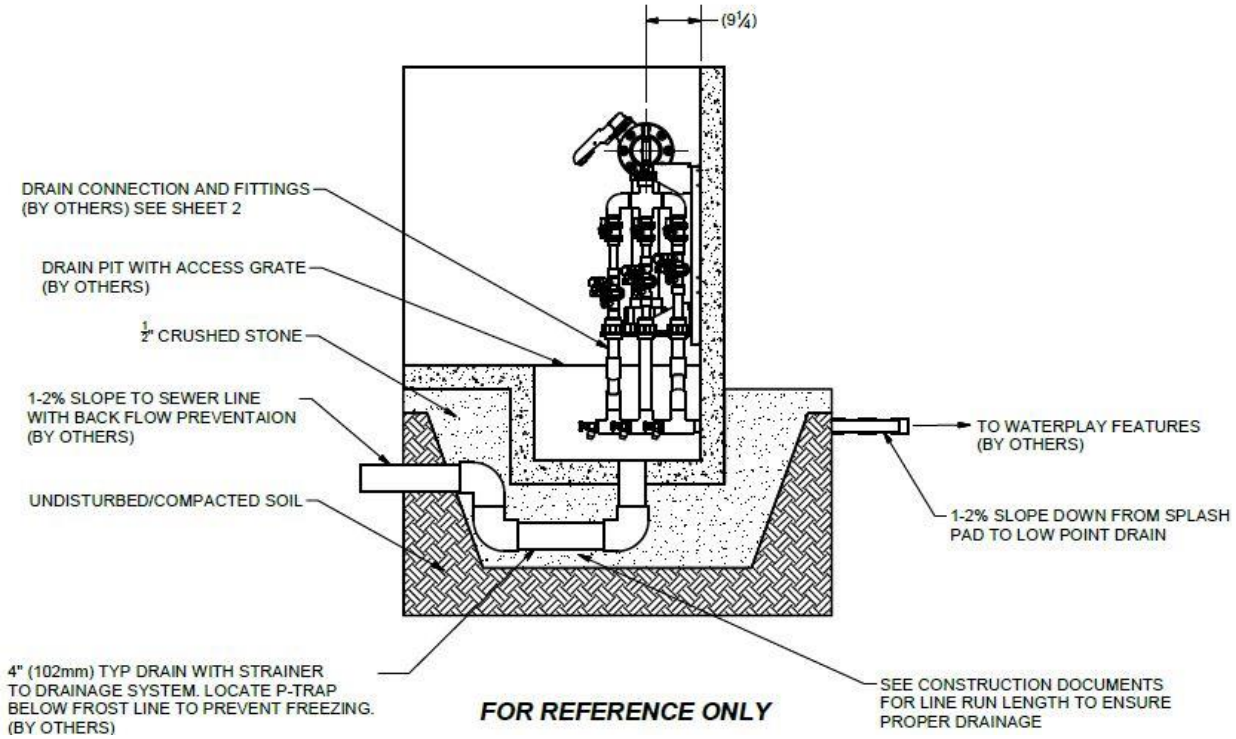
- It is recommended that a self-leveling, non-shrink cementitious grout is used to fill the void between the footing and the feature base or playPHASE™ feet.
- Build wood forms if required around component base to accept grout.
- Let set as per manufacturer's recommendations.



PLAYPHASE BASE SECTION DETAIL

17.0 INSTALLATION - MANIFOLD

- Reference the “For Construction” drawings for manifold location.
- Waterplay manifold systems are pre-engineered and fabricated for each park. The manifolds include solenoids valves, shut-off valves, and unions. Each solenoid valve is pre-programmed through the smartPLAY™ Controller with water conscious sequencing.
- Once installed, it is the contractor’s responsibility to ensure a qualified electrician and plumber to connect the final assembly.
- Where the manifold is supplied by others, refer to piping and valve schedule information as indicated on the “For Construction” documentation.
- Installation of ball valves, hose bibs and unions will allow for servicing and winterizing.
- Low point drainage (gravity drainage) of components is required to ensure no problems with freezing in the lines. Typically, the manifold is designed to be the low point in the system but if not, a low point drainage system can be located between the manifold and the spray pad as per section 18.



- Consult local codes to determine if any additional equipment is required such as a back flow preventer, pressure regulating valve, and or water meter.

Any additional equipment must be approved by the local engineer of record before commencing work.

18.0 Installation - Park Drainage

Drain placement is to be approved by the local engineer of record before commencing work. Always follow manufacturer's specifications, local codes, labor safety laws, and authority having jurisdiction.

18.1 Spray Park Drainage

- Size drain lines to ensure water volume is discharged from the spray pad without allowing an accumulated depth of water as this could cause suction at drain covers.
- Grate openings need to be sized to local codes.
- To prevent water accumulation should one drain become blocked, facilities should have a second identical drain. Drains should be placed a minimum of 3'-0" (914 mm) apart.
- If code requires, provide an air gap for physical separation between the sewer system and park drain line.
- Drain lines need to be accessible for periodic clean out and flushing.

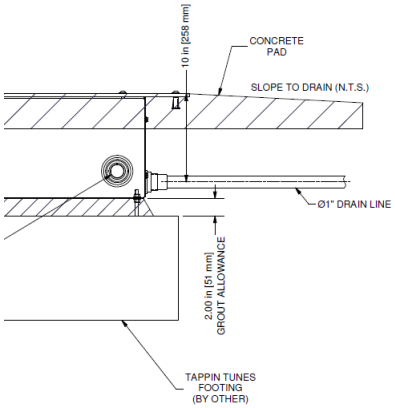
- Temporarily cap all unfinished pipe lines to prevent rodent & debris entry.
- If installing a water treatment system, ensure the holding tank is installed at the specified elevation and ensure a positive drainage slope in the drain line

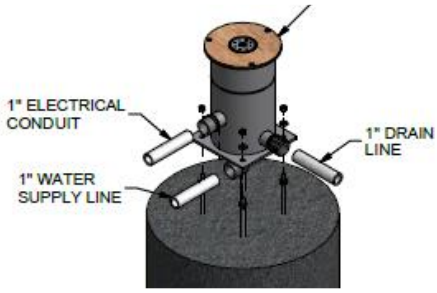
to the holding tank inlet. Refer to “For Construction” drawings as provided by your local engineer/architect for details.

- All connections to local sewer (or return in a recirculated system) must meet local code requirements.

18.2 Condensate Drainage for Electrical Features

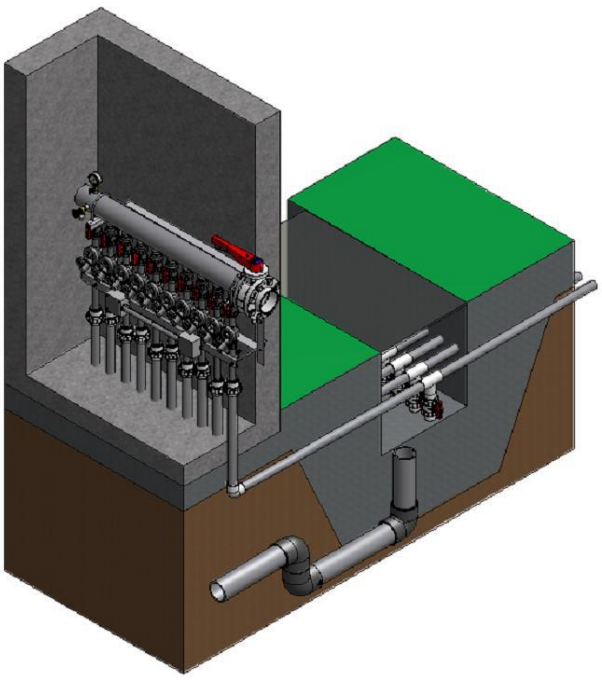
Some features with electrical wiring include a drainage hub at the base of the feature. These drain lines must be connected to a sewer drain or large drain pit. Failure to do so will result in moisture damage to the electrical components.

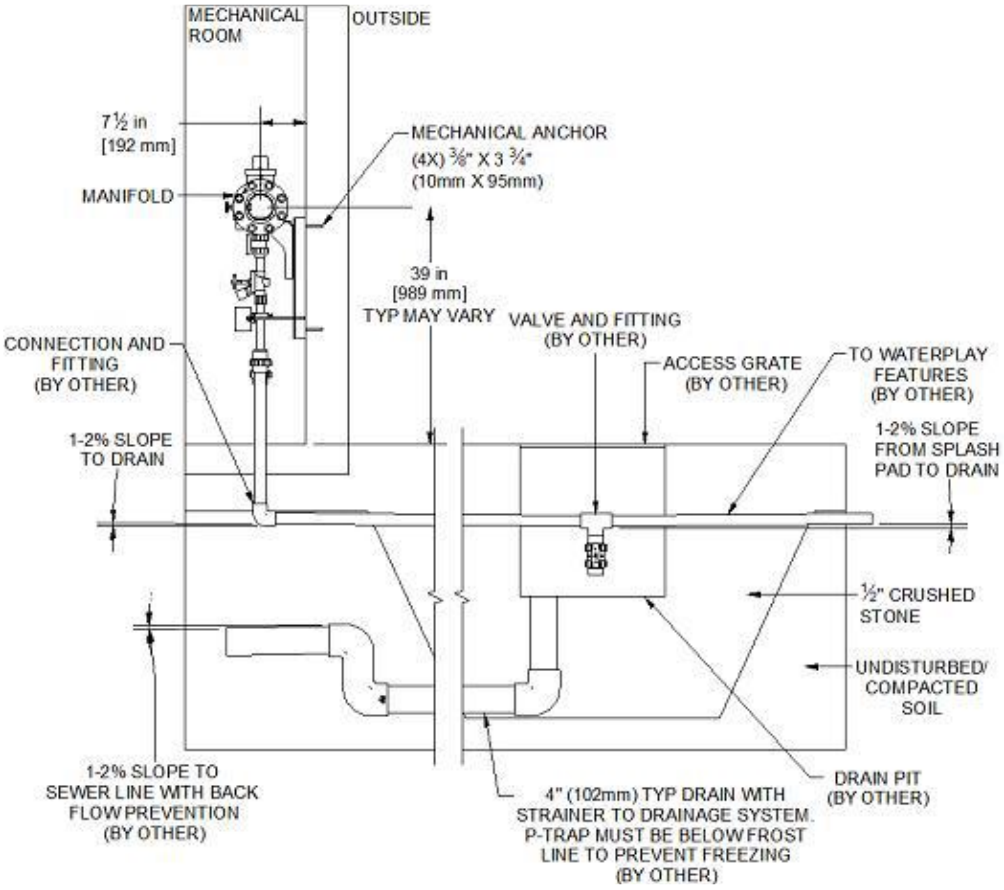




19.0 Installation - Supply Line Low Point Drainage

Low point drainage (gravity drainage) of components is required to ensure no issues with freezing water in the lines during winter months in cold climates. Typically, the manifold is designed to be at the low point in the system but if not, a low point drainage system can be located between the manifold and the aquatic play pad, that drains to a drain pit (French drain) or is connected to sewer. If no low point drainage is included in the design of the system, the lines will need to be blown out with compressed air for winterizing and shut down periods.





20.0 Installation - Trenching & Piping

All supply/drain line slopes and diameters are to be approved by the local engineer of record prior to commencing work.

20.1 Trenching

- Excavate trenches as per the "For Construction" drawings to ensure drainage, piping, electrical conduit, and layout details are as per local codes.

20.2 Piping

- Whenever possible use loops and center split piping to ensure even water distribution to features sharing the same supply line.
- Prior to connecting Waterplay features to supply lines be sure to complete the following:

- Complete final connections to drains, manifold, and sanitary services.
- Remove any temporary caps at the end of component lines, if applicable.
- Flush all lines to purge debris utilizing the manifold as the source. This may need to be done several times to ensure the lines are clear of all debris capable of causing issues with performance nozzles and final water display.

- Complete component connections as required for a water tight seal.

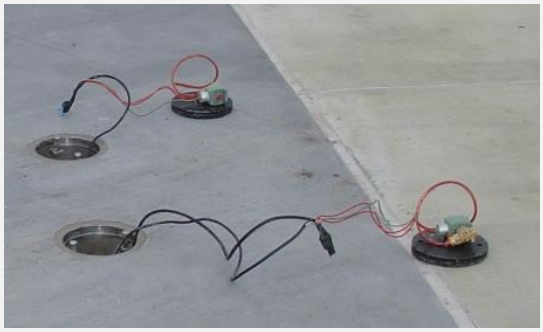
21.0 Installation - Pressure Testing

Be aware that some components cannot be pressure tested as there is no way to disable the flow, thus you will need to pressure test the lines prior to connecting these components. Please note that Waterplay supplied components have been pressure tested prior to shipping. Pressure testing to be completed prior to installing performance nozzles.

- Once all piping connections are complete and winter nozzles blanks installed, pressure test the piping network at 70 psi or as specified by the engineer.
- Slowly apply pressure and inspect all plumbing for leaks.
- Release the line pressure by carefully opening the hose bib on the manifold.
- Make any necessary repairs to areas that leak, and re-test as required until all leaks have been repaired.
- If your installation includes any Puddle features make sure to remove the winter cover and insert the ¼-20 x 0.75 Bolt in the water outlet, when pressure testing. Pressure testing with the winter cover in place will cause damage to the cover and bolts.

- When using PVC Waterplay recommends pressure testing using water and not compressed air. Compressed air can be dangerous and cause shattering of pipes.

22.0 Installation - Electrical



- Electrical work must be done by a licensed Electrician as per local and national codes.
- For full controller set up see the smartPLAY Controller Setup Guide and wiring schematic supplied by Waterplay.
- Install the specified conduits from the GFI circuit breaker at the main panel to the controller, from the controller to the activator(s), and from the controller to any applicable components.

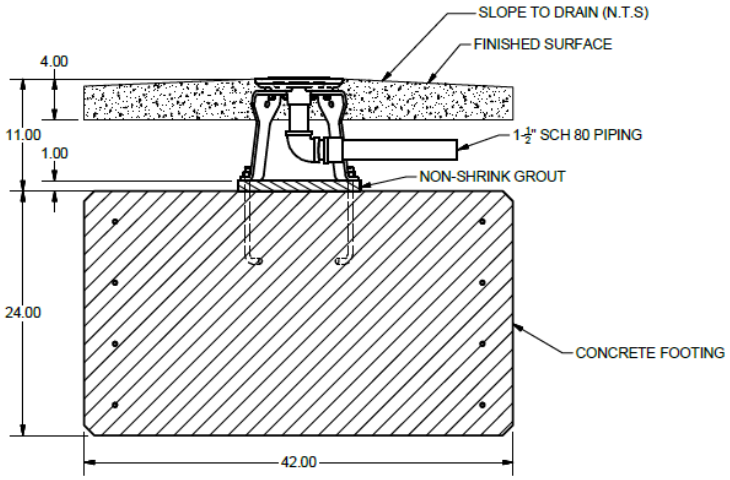
- Pull and connect the necessary conductors from the controller to the activator and applicable components as indicated in the controller manual and wiring schematic.
- Pull and connect specified conductors from the GFI circuit breaker panel to the controller as indicated in the controller manual and wiring schematic.
- On the controller terminal strip, connect each valve to the assigned terminal as indicated from the mechanical workbook and wiring schematic (e.g. Valve 1 connects to Out1 and 24V-2).
- Test all electrical features prior to securing final cover plates.

23.0 Installation - Final Component Preparations

- Tape off ground spray or playPHASE™ component bolt heads to ensure concrete will not cure on them.

- Place closed cell foam around the base of all features/playPHASE™ flanges where the concrete will cure. This is used to create an expansion gap and allow for caulking to seal the concrete to the flange and help prevent cracking.

- If installing features with flush ground panels such as Lily Pads or Action Plates, be sure to properly secure the provided templates prior to pouring the concrete. Ensure there is a coating of concrete release agent for ease of removal once the concrete has cured. Prior to the concrete curing, form a shallow V-Groove (approx. ¼", 6.25mm) around the perimeter of the template, this will reduce the chance of the concrete edge cracking.



PLAYPHASE BASE SECTION DETAIL

24.0 Installation - Final Pad Area Preparation

Suggested backfill is to be approved by local engineer of record before commencing work.

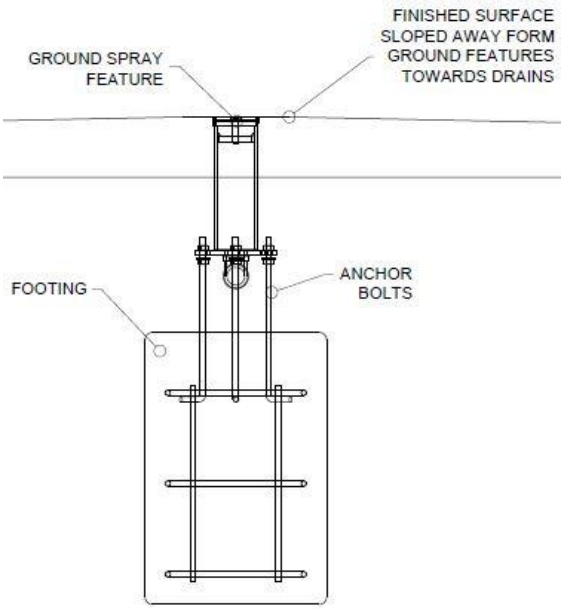
- Backfill trenches – suggested backfill is 6” (150mm) of sand below the pipes and 8” (200mm) above.
- Backfill the aquatic pad area. Suggested backfill 6” (150mm) of base coarse aggregate.
- Place spray pad forms in preparation for pouring final slab.
- Confirm finished base for conformity with inspection elevations & sections.
- Confirm ground spray elevations correspond with final grade elevation.
- Place a moisture barrier between the base and concrete.

- Install slab reinforcement mesh, or reinforcing steel as specified by local Engineer(s).
- Conduct a final pressure test to ensure piping was not damaged when backfilling and compacting the base.

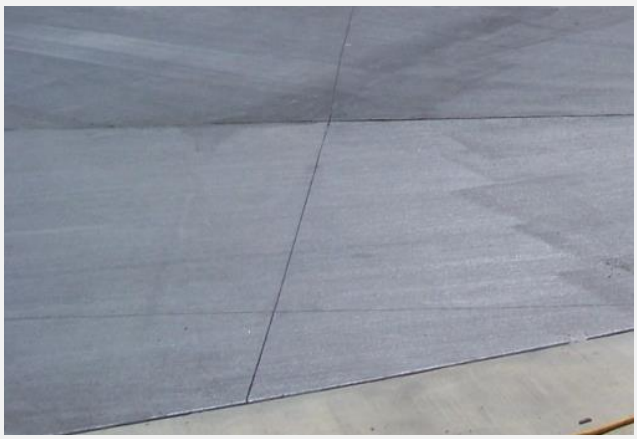
25.0 Installation – Concrete Pad Pour

For other finish surfacing such as pour-in-place rubber, refer to manufacturer's written specifications, if required adjust height of concrete slab below to ensure correct height for features.

- Ensure the correct slope is maintained from pad surface to drains as per the "For Construction" drawings. This includes the overspray area as well.
- Eliminate low point collection areas that could create pooling around nozzles affecting the spray display as well creating a slip hazards.
- Establish expansion control joints as required.
- Ensure finished grade of concrete is flush with the top of each ground spray, playPHASE flange, and ground panels (or leave enough space for additional surfacing if required).

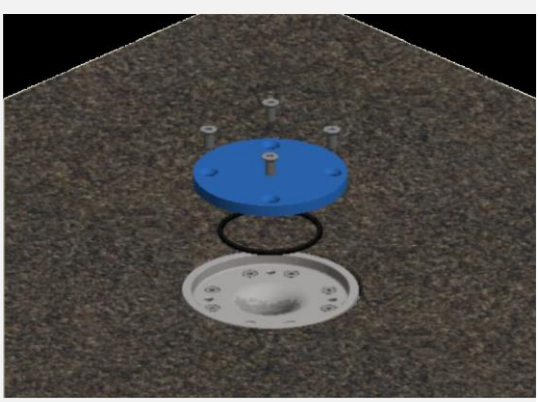


- Apply a light broom finish to create a textured surface, providing good traction for little wet feet.
- Clean ground sprays, above ground features and all nozzles of concrete splatter once the concreted has cured enough to allow foot access.
- Remove closed cell protective foam once concrete has set and apply a bead a caulking around the base of the feature or playPHASE base.



26.0 Installation - playPHASE™ Base Features

- Remove playPHASE winter cover plate including O-ring.
- Install the ship loose feature gasket.
- Peel up feature protective wrappings approximately 16” (400mm) to allow for access to flanges and bolt holes.
- Leave remaining protective wrap in place until construction is complete.
- Place features on specified playPHASE base
- Verify the feature spray is correctly oriented.
- Tighten down all bolts for a secure watertight installation.



27.0 Installation – Performance Nozzles

- Remove the nozzle blanks and save them as these will be used for winterization and shutdown periods.
- Flush the system to purge all debris that could clog the performance nozzles and or alter the water spray.
- Install the performance nozzles as identified for each feature.
- Adjust nozzles to achieve desired spray effect.
- For nozzle replacement details see section 5.0.
- Nozzle removal/exchange should be conducted in the morning as a temperature rise will cause expansion of the nozzle making it difficult to remove.

28.0 Installation – Final Items

- Remove remaining protective wrap.
- Clean excess concrete splatter, loose debris, and foreign materials from the pad and features.
- Apply joint sealer to create a moisture barrier between the concrete and the components.
- Install graphic panels, cannon tops, flower petals and palm leaves (if applicable).

- Do final inspection of components for any damage. If cleaning, polishing, or touch up paint is required, proceed as noted in section 9 Components Care and Maintenance.

- Apply a coat of wax to components as this will help keep a high-gloss finish. This only applies to powder coated or fiberglass components and not brushed stainless steel finish.
- Wax or a hydrophobic coating can be applied to acrylic panels to reduce the speed of calcium and dirt buildup. Waterplay recommends SlideRenu's; SlideWax and SlideGloss.
- Remove all construction material and debris from spray area.
- Post required signage and warnings
- Turn on the water!

29.0 COMMISSIONING SERVICES

Waterplay Commissioning services can be arranged for an additional fee in advance of park opening if needed. Please work with Waterplay's Project Support team to coordinate timelines. Typically, 4 weeks notification is required. Commissioning can only take place once the installation and construction is complete.

30.0 TROUBLESHOOTING

If problems occur during initial startup and pressure testing, see troubleshooting table below.

No.	Problem or Symptom	Possible Cause	Remedy
1	No water flows to features	Controller power OFF	Verify main power & front door switch are ON.
		Incorrect valve type	Replace with 24VAC 0.25A valves.
		Blown fuse(s)	Replace blown fuse(s) from terminal strip (see Controller Wiring Diagrams for locations & type of fuses).
		Water supply interrupted	Investigate water supply source and verify all valves are in correct position. Verify manual valves from header are in the open position. Disengage solenoids and verify water flows.
		Controller programmed incorrectly	Reprogram clock for time, date & operation time. Verify component sequence settings are correct. Test operation of aquatic facility with the controller's TEST mode

No.	Problem or Symptom	Possible Cause	Remedy
2	One (or more) zones do not run	One or more zones are wired incorrectly	Verify valve wiring is completed as per the wiring diagram (Diagram in Controller manual) and piping plan. Test operation of aquatic facility with the controller's TEST mode to determine which component is out of sequence and correct wiring as required. Call Waterplay @ 1-800-590-5552 for assistance.
		Solenoid Valve Failed	Check controller fuses. Verify 24AC power at solenoid valve.
		Manual Valve Closed	Verify manual valve from header is in the open position.
		Nozzle or Pipe Blockage	Verify that distribution piping and the component nozzle(s) is not blocked with debris.
3	System stops running, or stops running periodically	Loose wiring	Verify all wire connections are tight.
		Program has come to the end of the sequence	Normal operation is to stop after 5 minute duration. Test program by touching activation device.

No.	Problem or Symptom	Possible Cause	Remedy
4	Water sprays continuously	Solenoid valves in manually open position	Set control valve(s) to automatic by closing manual operator (rotate clockwise).
		Activator sensitivity set too high (LED on sensor &/or PLC is on constantly)	Adjust (reduce) sensitivity on sensor by rotating adjustment screw. Adjust so that light turns on when hand is placed on sensor and light turns off when hand is removed.
		System in Test Mode (one or more component may be spraying)	When TEST is finished, push BACK button to exit TEST screen (valves which were open will now close).
		Dirt or debris in valve body keeping valve open	Clean Solenoid valve screen and diaphragm.
		Faulty control valve or solenoid	Test solenoid valve manually. If the valve won't operate manually it is defective & requires replacement. Swap suspect valve (or solenoid) with a properly operating one to isolate problem, replace valve (or solenoid) as necessary. Check wiring drawings.
		Power connected directly to transformer (ON/OFF switch & fuse are then bypassed)	Rewire power connection according to Section 1 of Instruction Manual.

No.	Problem or Symptom	Possible Cause	Remedy
5	Activator does not start the facility	Activator sensitivity not adjusted correctly	Adjust sensitivity of activator sensor. Adjust so that light turns on when hand is placed on sensor and light turns off when hand is removed.
		Activator sensor not wired correctly	Verify sensor wiring is correct. Check wiring drawings.
6	Buckets do not return to upright position	Bushing seized up with grime and water build up.	Clean bushings and shaft with Calcitriol and clean water.
		Bushings are loose or not sitting correctly	Secure bushings or contact Waterplay for replacement bushings.
		Excessive Pressure or flow	Reduce pressure to 10 psi. Adjust flow so that bucket tips every 15 – 20 seconds.
7	Water spray height varies or drops off	Supply pressure fluctuation	Investigate water supply source. Did sequence grouping change?
8	Blown fuses	Incorrect fuse	Replace with fuse type specified in controller drawings.
		Incorrect sensor wiring	Rewire according to controller drawings.

No.	Problem or Symptom	Possible Cause	Remedy
9	No inputs or outputs or power light showing in PLC	Controller power OFF	Verify main power & front door switch are ON.
		Faulty Transformer	Contact electrician to test transformer.
		Blown fuse	Replace fuse(s).
		Damaged PLC	Contact Waterplay @ 1-800-590-5552.
10	Touch screen is blank	Loose wire connection	Verify all wire connections are tight.
		PLC is OFF	Ensure PLC power and run light are on.
		Controller power OFF	Verify main power & front door switch are ON.
		Blown fuse	Replace fuse(s).
11	Interactive sound component not working	No light on the MP3 player	Refer to the wiring schematic. Check PLC out put on the expansion module. Check wiring from E-series controller terminal to the interactive panel (SND+, SND- & V-, V2). Check fuse. Check the relay.

No.	Problem or Symptom	Possible Cause	Remedy
	Interactive sound component not working cont.	No sound	Check for memory card. Check speaker balance (R or L). Check Volume setting. Clean flow switches, push buttons, and sensors.
		Excessive Pressure or flow	Reduce flow so that the water is about 5 ft. (1524mm). Fully cover the nozzle and wait for the sound. Continue to reduce height and cover again if still not working.
12	How to change sounds		Use a card reader to view the memory card on the computer. Find MP3 sounds (watch for copyright laws). Save Name sounds with the pre-fix 001_name, 002_name into a file. Copy MODE.txt on the card (that is the program) to the same file. Format card. Reload new sounds and MODE.txt onto card.

APPENDIX A–INSPECTION LISTS (7 PAGES)

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Aquatic Play Pad
Routine Inspection Checklist

The following suggested routine inspection is a recommended starting point. These items are typically addressed on either a daily or weekly schedule depending on the park. Each aquatic play pad owner is responsible for developing their own site specific inspections.

If you require any replacement parts or manuals please contact Waterplay as early as possible using our toll free number 1-800-590-5552 or +1 250-712-3393, or by email at support@waterplay.com.

INSPECTION INFORMATION	
Facility Name:	
Inspection by:	Date:

GENERAL
☐ the manifold and controller are inaccessible to the public and locked
☐ litter receptacles are empty
☐

SURFACE
☐ area is free of obstructions and trip hazards
☐ aquatic play pad is free of litter debris and clean (sweep and/or hose down if required)
☐

DRAINAGE
☐ grates are securely anchored and free of debris allowing for good water flow
☐ there are no finger or toe entrapment possibilities
☐

COMPONENT AND WATER FEATURES
☐ there are no visible clothing entanglement hazards
☐ component water displays are as expected (if not, valves and/or nozzles may need cleaning)
☐ overspray of the components does not reach the surrounding landscape
☐ nozzles spray at a safe pressure
☐ clean/rinse features regularly to prolong finish
☐ inspect all features for signs of vandalism
☐ inspect rotating features for signs of wear or damage from misuse
☐ features with rotating hubs should be dissasembled and greased when the turning resistance increases
☐ ensure screws are kept tight on all features
☐

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Aquatic Play Pad
Routine Inspection Checklist

WATERPLAY RECIRCULATING SYSTEMS
☐ visually inspect system for water leaks
☐ check water level in holding tank is normal
☐ check pump strainer basket, clean as required
☐ check controller logs for alarms which may indicate reoccurring problems
☐ check CO2 tank and chlorine feeder chemical levels
☐ verify ORP and PH controller calibration vs manual test results
☐ monitor pump pressure, flow, temperature and noise for changes that might indicate required maintenance
☐ ensure there is <8-10psi differential (above start-up / clean pressure) measured across the sand filter(s)
☐ test CO2 monitor to ensure gas leak would be detected
☐ if applicable, confirm that the strainer basket at the diverter valve is clean
☐ refer to the WTS Operations and Maintenance Manual for further details (available from Waterplay)
☐ clean chemical sensors if inconsistent readings and increased need to calibrate pH is observed
☐

CONCERNS REQUIRING CORRECTIVE ACTION AND/OR PARTS THAT NEED TO BE ORDERED
☐
☐
☐
☐

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Aquatic Play Pad
Spring Startup Inspection

The following checklist is a recommended starting point. Each aquatic play pad owner is responsible for developing their own site specific inspection procedure. Maintenance contracts with qualified contractors is recommened when internal resources are not suitable. Refer to Operations and Installation Manual for more detailed information.

If you require any replacement parts or manuals please contact Waterplay as early as possible using our toll free number 1-800-590-5552 or +1 250-712-3393, or by email at support@waterplay.com.

INSPECTION INFORMATION	
Facility Name:	
Inspection by:	Date:

GENERAL
☐ the manifold and controller are inaccessible to the public and locked
☐ litter receptacles are empty
☐

SURFACE
☐ area is free of obstructions and trip points
☐ surface is free of damage and deterioration
☐ inspect caulking around components, re-apply if required
☐ pad surface is free of litter and debris, clean pad surface with pressure washer if required
☐

DRAINAGE
☐ the drains are still smooth and flush with the final grade
☐ drains are clear and no water is able to accumulate on the pad
☐

COMPONENT AND WATER FEATURES
☐ inspect all coatings, fiberglass parts and graphics for wear and tear
☐ remove hard water stains to prolong coating life and restore finish (recommend Calcitrol)
☐ ensure there are no sharp points, protrusions or projections
☐ features with rotating hubs are dissasembled and friction surfaces/o-rings are greased
☐ moving parts are inspected for wear and tear (i.e. rotating hubs, dumping buckets) replace if required
☐ moving parts are securely fastened according to their assembly instructions
☐ anti seize has been applied to fasteners and fasteners are secured to the proper torque
☐ Mega Soaker pillow block bearings are greased
☐ ground spray nozzle O-rings are lubricated
☐ nozzle orifices are clean
☐ winter blank nozzles replaced with performance nozzles
☐ ground sprays are still flush with final grade
☐ replace all feature drain plugs if left out during winter
☐

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Aquatic Play Pad
Spring Startup Inspection

CONTROLLER, MANIFOLD, ACTIVATORS
☐ verify current day and time (24 hour clock)
☐ verify hours of operation
☐ run controller in test mode to ensure all solenoid valves are working as intended, clean if required
☐ test all activators to ensure that the controller is receiving an input
☐ verify that when running in program sequence, the facility is operating as intended
☐ if sound features installed, confirm that the MP3 player has the sound card and operates as expected
☐ confirm that the electrical connections are water tight and free from corrosion
☐
WATER FLOWS AND PRESSURE
☐ flush manifold and components with nozzles removed to ensure no debris has built up over the winter
☐ nozzle displays are as per Waterplay specification sheets
☐ overspray of the components does not reach the surrounding landscape
☐ nozzles spray at a safe pressure
☐
WATER MANAGEMENT SYSTEMS
☐ inspect and clean holding tank and fill with clean water
☐ ensure C02 tank is full, and chlorine pucks are available on site
☐ close low point drains and replace all drain plugs (pump(s), sand filter(s), etc.)
☐ set sand filter multi-port valve(s) (if applicable) to filter mode
☐ if UV applies, ensure lamp and quartz sleeves are installed and electric connections to the module are tight
☐ replace pump strainer baskets that were stored for winter
☐ calibrate chemical probes
☐ fill pump strainer baskets and ensure water level does not drop in 20 minutes
☐ set dynamic bypass valve (if applicable) in "auto" position
☐ test system alarms (i.e. low pressure, chemical, UV)
☐ secure the WTS housing and equipment hatches from the public
☐ if applicable, confirm that the diverter valve is in the correct position
☐ refer to the WTS Operations and Maintenance Manual for further details (available from Waterplay)
☐

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Aquatic Play Pad
Spring Startup Inspection

CONCERNS REQUIRING CORRECTIVE ACTION AND/OR PARTS THAT NEED TO BE ORDERED
☐
☐
☐
☐

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Aquatic Play Pad
Winterization and Shutdown

The following checklist is a recommended starting point. Each aquatic play pad owner is responsible for developing their own site specific inspection procedure. Maintenance contracts with qualified contractors is recommened when internal resources are not suitable. Refer to Operations and Installation Manual for more detailed information.

If you require any replacement parts or manuals please contact Waterplay as early as possible using our toll free number 1-800-590-5552 or +1 250-712-3393, or by email at support@waterplay.com.

INSPECTION INFORMATION

Facility Name:

Inspection by: | Date:

GENERAL

- ☐ aquatic play pad is free of litter and debris
- ☐ litter receptacles are empty
- ☐ fences and gates have been inspected to ensure that the area is secure
- ☐ the manifold and controller are inaccessible to the public and locked
- ☐

DRAINAGE

- ☐ grates are securely anchored
- ☐ water drains through to sewer with no accumulation in the drain lines
- ☐

WATERLINES AND MANIFOLD

- ☐ the main line is shut off and drained
- ☐ manifold has been drained completely
- ☐ individual component supply lines:
  - ☐ have been drained completely using low point drainage
  - ☐ hose bibs are in open position
  - ☐ solenoids on manifold are in the open position
  - ☐ compressed air has been used to assist in clearing water from the system (recommended)
  - ☐ RV antifreeze has been introduced to any low points not able to be drained completely
- ☐

COMPONENTS

- ☐ detachable facades have been removed for seasonal storage, including but not limited to:
  - ☐ cannon heads
  - ☐ graphics panels
  - ☐ buckets
  - ☐ flower petals
- ☐ if applicable, remove pop-it valves and store in a secure location
- ☐ remove all performance nozzles and install nozzle blanks (only after lines are cleared of water)
- ☐ remove feature low point drain plugs if applicable
- ☐ coatings, fiberlgass and graphics have been cared for as per Waterplay Owners and Installation Manual
- ☐

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Aquatic Play Pad
Winterization and Shutdown

CONTROLLER
☐ turn off controller
☐ shut off power to the controller
☐

WATER MANAGEMENT SYSTEMS
☐ drain holding tank, some water may need to be left in the tank to prevent the tank from lifting in high groundwater conditions.
☐ backwash and drain sand filter(s) (leave drain cap off)
☐ depress multi-port valve (if applicable) and rotate valve top between any two positions
☐ manually turn Jandy valves (if applicated) between any two positions
☐ drain pump(s), manifold and UV (if applicable) by removing the drain plugs
☐ empty chemical tanks and store or dispose of chemicals per local regulations
☐ remove and store chemical probes in soaking caps with storage solution or potable water
☐ if UV applies, ensure lamp and quartz sleeves are stored above freezing temperatures
☐ remove, clean, and store pump strainer basket(s) in a secure location
☐ leave dynamic bypass valve (if applicable) in "open" position
☐ secure the WTS housing and equipment hatches from the public
☐ refer to the WTS Operations and Maintenance Manual for further details (available from Waterplay)
☐

CONCERNS REQUIRING CORRECTIVE ACTION AND/OR PARTS REQUIRED BEFORE SPRING
☐
☐
☐
☐

APPENDIX B–WATER QUALITY LOG (2 PAGES)

DATE	TIME	Measurements						UV	SAND FILTER PRESSURE				Notes: Maintenance/Alarms	INITIALS
		pH	ORP (mV)	Combined Chlorine (ppm)	TDS (ppm)	Hardness (ppm)	Total Alkalinity (ppm)	UV Output (Mj)	#1	#2	#3	#4		

INDEX

pH	Measurement of how acidic/basic water is, the range is 0-14 with 7 being neutral. WP Recommends between 7.0 and 8.0
ORP	Oxidation-Reduction Potential. ORP measures the oxidizing power of the sanitizer (ability to kill germs and bacteria). WP recommends between 650 and 850mv
Combined Chlorine	Residual chlorine may combine with nitrogen containing substances (such as urine or sweat) and produce chloramines. WP recommends < 1 PPM
TDS	Total Dissolved Solids is a combination of all the dissolved minerals, body oils, and other similar dissolved materials in the water. WP recommends < 1000 PPM
Hardness	Hardness is the level of calcium dissolved in the water. WP recommends between 150 and 400 ppm
Total Alkalinity	Total Alkalinity (TA) is a measure of water's resistance to change in pH, WP recommends 80 to 120 ppm.

CAUTIONS

pH	High pH may result in scaling, calcium buildup, cloudy water, irritated eyes/nose/skin, drop in disinfection potential of chlorine. Low pH may result in eroding of grouting or plaster, corroding of metals, rapid dissipation of chlorine, irritated eyes/nose/skin
ORP	Too low of an ORP reading will mean the pool does not have adequate sanitizer and bacterial growth or other unwanted reactions may occur. Too high of an ORP reading means there is too much sanitizer, an odor may be present and there is potential for irritation of the eyes/nose/skin
Combined Chlorine	Combined chlorine should always be minimized. Too much combined chlorine will result in an odor and eye or skin irritations. Combined chlorine is not an effective disinfectant.
TDS	High TDS will reduce the effectiveness of sanitizer. May contribute to corrosion, scale formation and other maintenance issues.
Hardness	Hardness can contribute to dull cloudy water, scale formation, corrosion of the components and equipment.
Total Alkalinity	Total Alkalinity can cause the pH to become unstable and difficult to maintain. Will contribute to cloudy water and decrease disinfectant effectiveness.

r: 180321

Temiskaming Shores, Temiskaming, ON

Waterplay Drawing Set

A detailed look at the components used, their placement, and suggested plumbing.

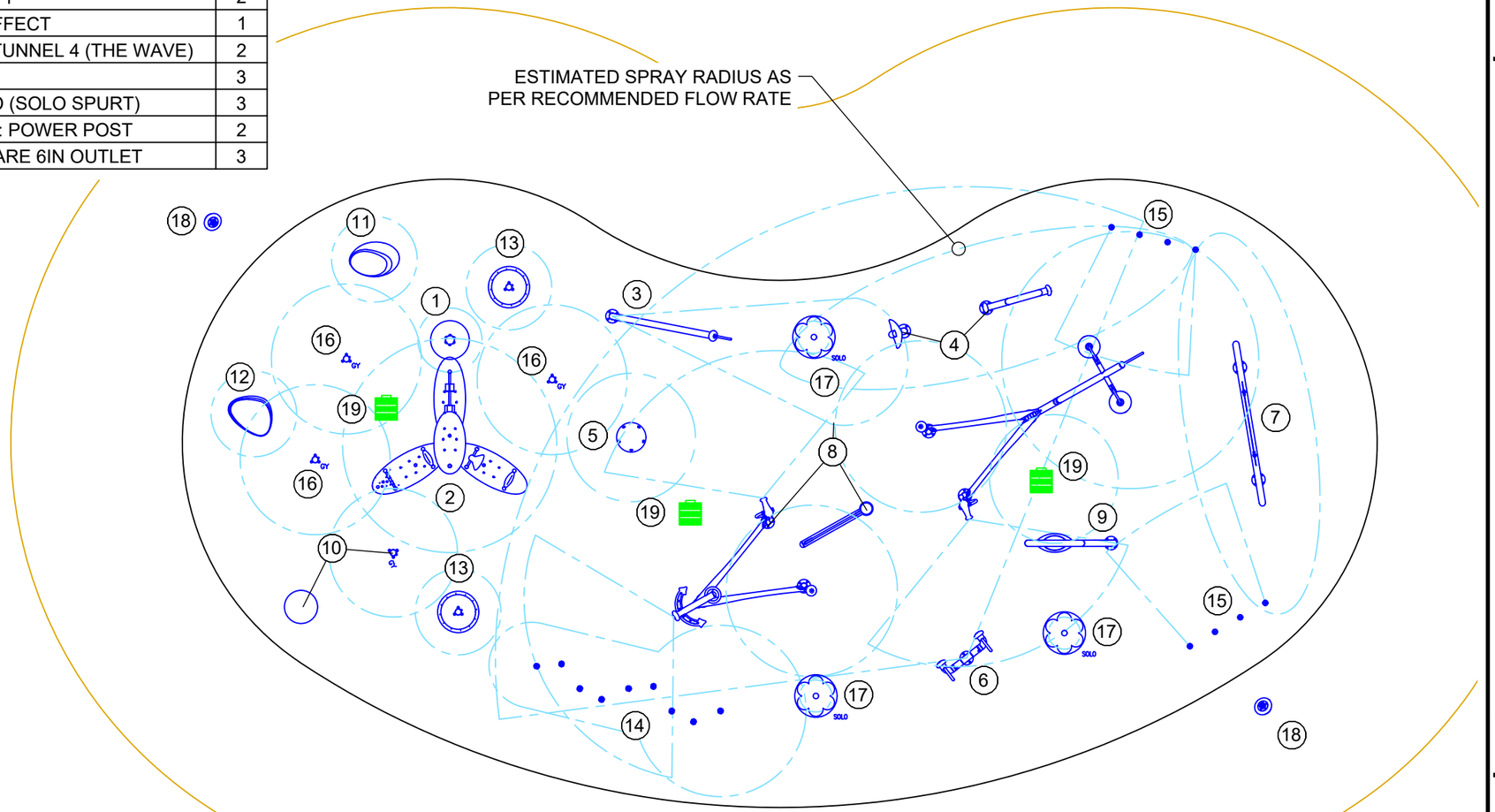
NOTE:
Detailed footing design and installation information is included in Appendix 05 of this RFP. Information contained within this document regarding footings has been provided by Waterplay as general information.

It has been included for completeness only and should not be followed without approval by the owner.

In all instances with conflicting information between this document and Appendix 05, the information within Appendix 05 shall take precedence.

ITEM	SKU	COMPONENT NAME	QTY
1	0010-3859	FS BASIN	1
2	0010-4592	FS WATERFALL 3	1
3	0010-0584	FS FISHIN POLE	1
4	0010-0591	FS ANCHORS AWAY	1
5	0010-0512	FS SPINNY SQUIRT	1
6	0010-0414	FS TEAM BLASTER	1
7	0010-2321	FS O-RIGINAL	1
8	0010-3704	FS SCHOONER 1	1
9	0010-1421	FS AQUA-DROP	1
10	0010-2399	FS BOINGO 1 W/ GROUND SPRAY	1
11	0010-7472	FS SURF STONE 2	1
12	0010-7473	FS SURF STONE 3	1
13	0010-7466	GS PUDDLE 1	2
14	0010-7498	GS TEAM EFFECT	1
15	0010-7496	GS SPRAY TUNNEL 4 (THE WAVE)	2
16	0010-7478	GS GEYSER	3
17	0010-7491	GS LILY PAD (SOLO SPURT)	3
18	0010-1854	ACTIVATOR: POWER POST	2
19	DRA-00007	DRAIN SQUARE 6IN OUTLET	3

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



METRIC | 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:	SHEET
WATERPLAY CONCEPTUAL LAYOUT	1/4

SCALE:	DRAWN BY:	DATE:	REV #:
1:75	JS	APR 12/21	0

NOT FOR CONSTRUCTION PURPOSES

TEMISKAMING SHORES
TEMISKAMING, ON

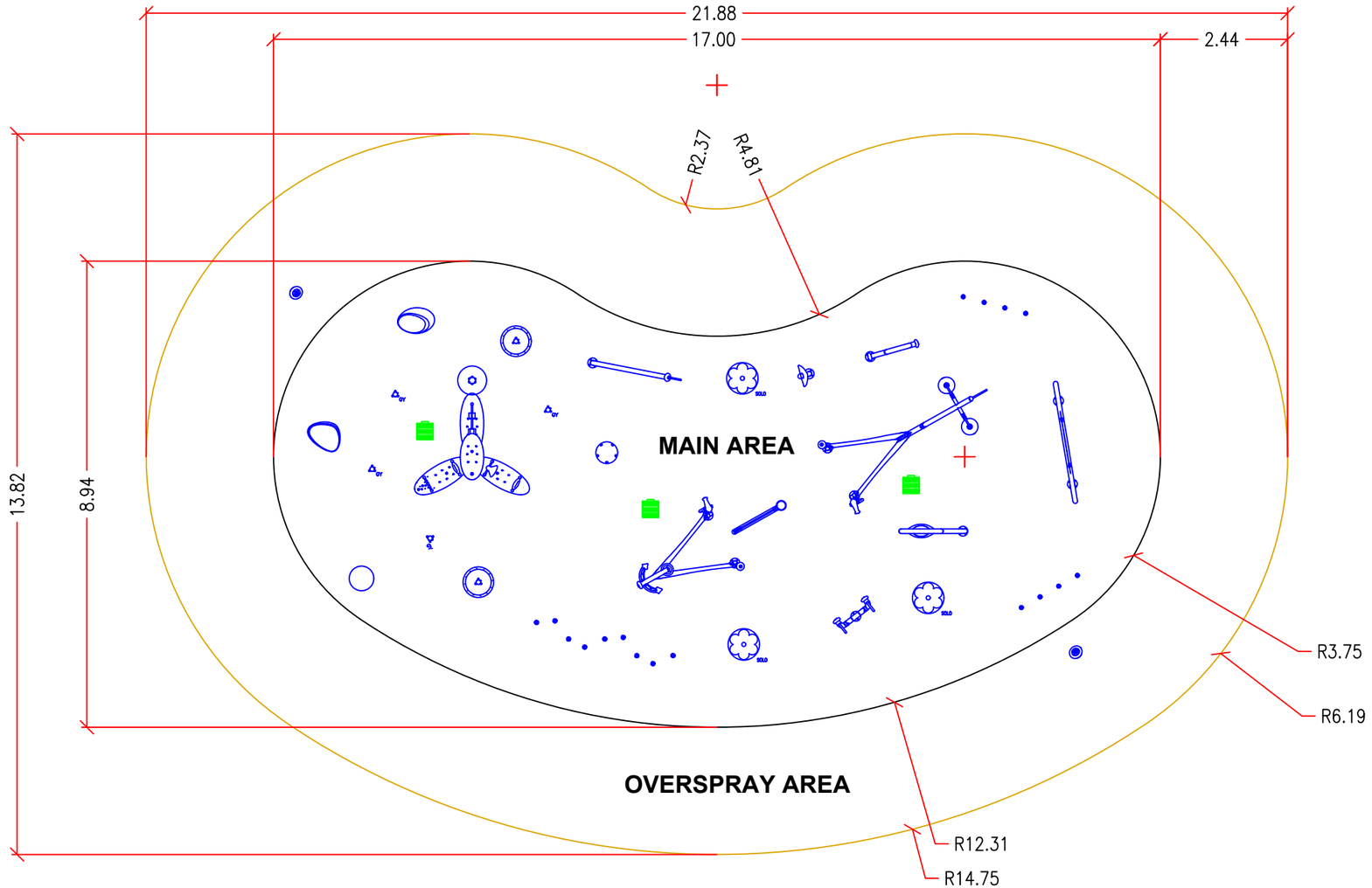
REV	DESCRIPTION	REV'D BY	REV DATE

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

4/13/2021 3:30:12 PM Temiskaming Shores, Temiskaming, ON_Apr1221.dwg

NOTES:

1. MAIN AQUATIC PLAY PAD AREA: 120 SQ. METERS
   TOTAL AREA, INCLUDING OVERSPRAY ZONE: 245 SQ. METERS
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%).



METRIC	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 #:
1:100	JS	APR 12/21	0

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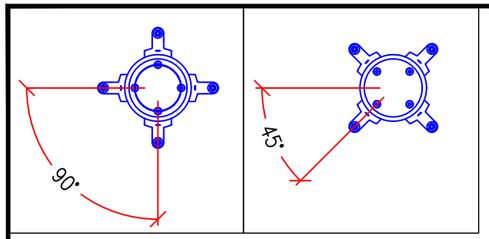
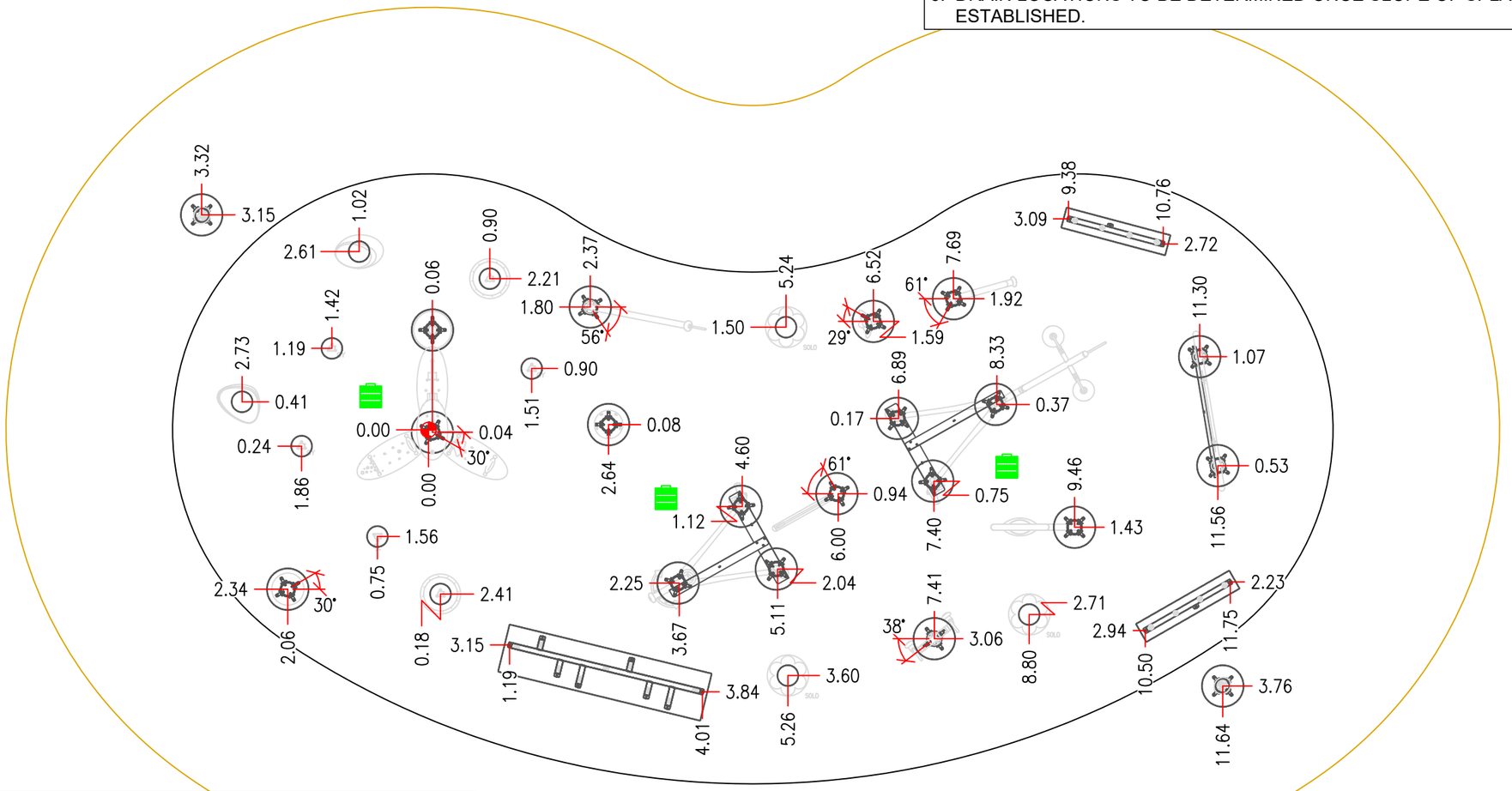


NOTES:
1. ALL DIMENSIONS MEASURED FROM DIMENSION ORIGIN (0,0) TO CENTRE OF FOOTING.
2. REFER TO FOOTING DETAILS FOR EACH WATER STRUCTURE.
3. LOCATE, SIZE AND SPECIFY QUANTITY OF DRAINS TO PREVENT STANDING WATER.
4. GROUND ALL COMPONENTS TOGETHER WITH GROUNDING WIRE AND BASE PLATE GROUNDING LUG.
5. ANGLES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



NOTE:
ROTATIONAL ANGLES SHOWN HERE ARE TYPICAL. USE SUPPLIED JIGS FOR CENTRE TO CENTRE SPACING OF FOOTINGS AND PLAYPHASE BASE ORIENTATIONS.
- 0010-5570 - O-RIGINAL
- 0010-1977 X 2 - SCHOONER 1

METRIC	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:	SHEET
WATERPLAY COMPONENT PLACEMENT	3/4

SCALE:	DRAWN BY:	DATE:	REV #:
1:75	JS	APR 12/21	0

NOT FOR CONSTRUCTION PURPOSES

TEMISKAMING SHORES
TEMISKAMING, ON

REV	DESCRIPTION	REV'D BY	REV DATE

waterplay Solutions Corp.
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EMAIL info@waterplay.com

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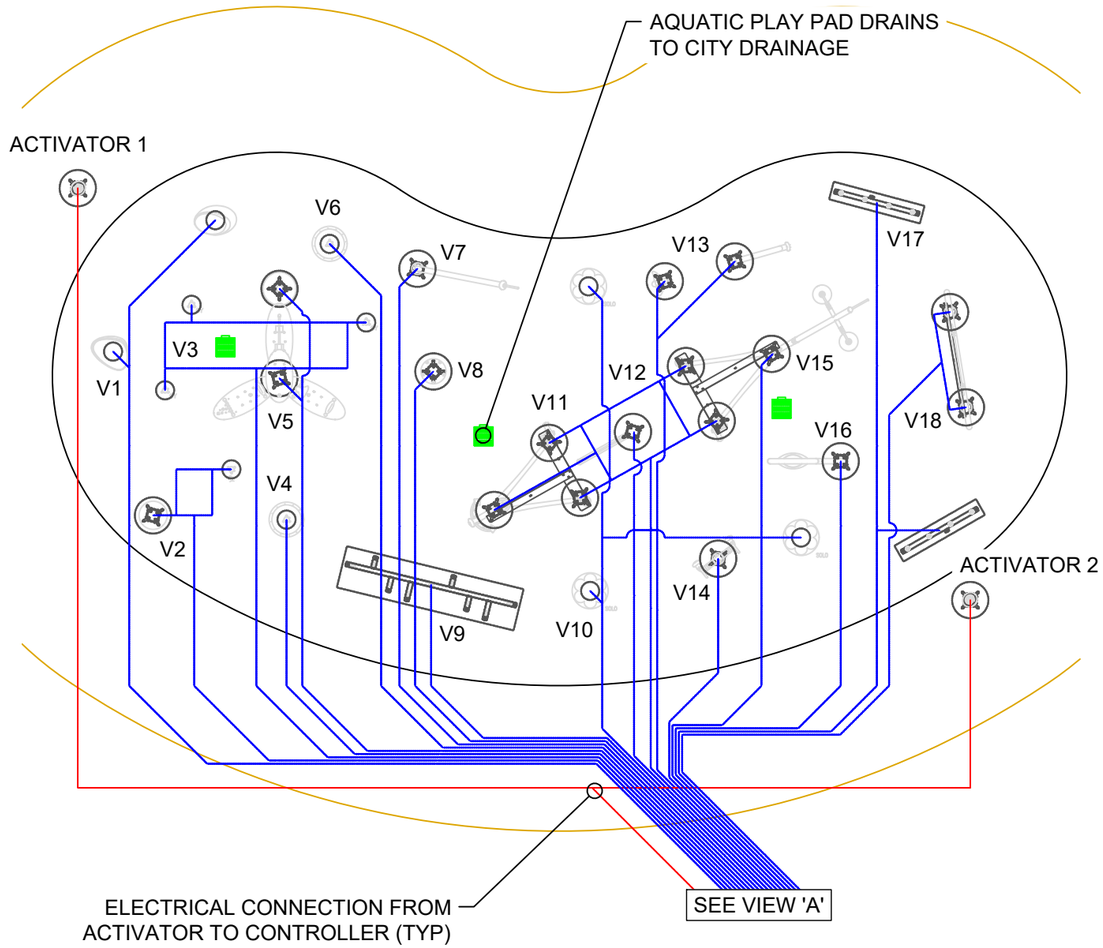
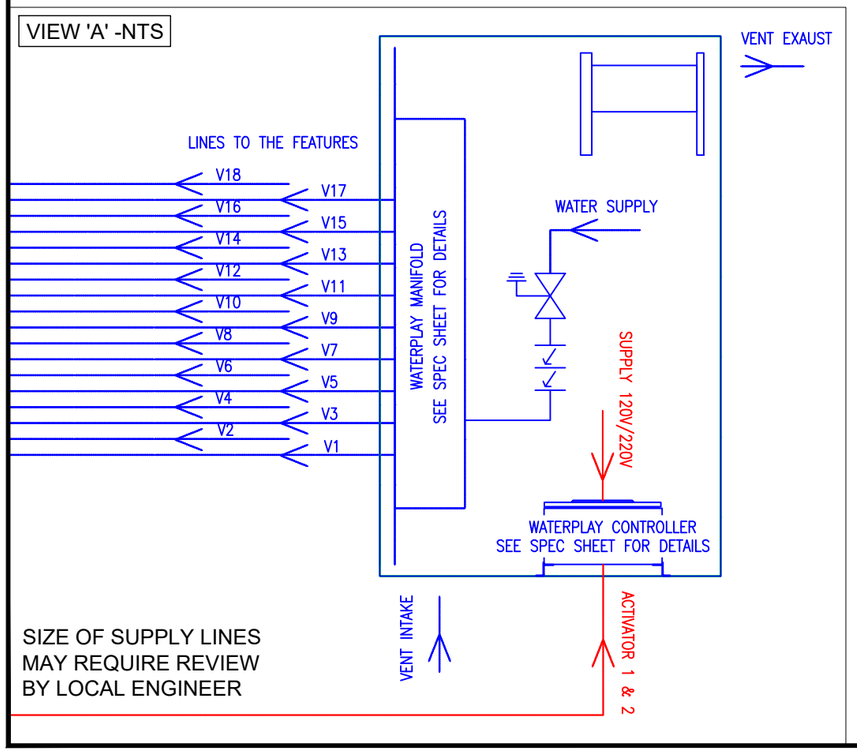
LEG #	COMPONENT NAME	QTY/LEG	LPM	LINE SIZE FROM MANIFOLD
1	FS: COMBO (SURF STONE 2/3)	1	38	40 mm
2	FS: BOINGO 1 W/ GROUND SPRAY	1	8	25 mm
3	GS: GEYSER	3	68	40 mm
4	GS: PUDDLE 1	1	11	25 mm
5	FS: COMBO (WATERFALL 3/BASIN)	1	19	25 mm
6	GS: PUDDLE 1	1	11	25 mm
7	FS: FISHIN' POLE	1	26	25 mm
8	FS: SPINNY SQUIRT	1	2	25 mm
9	GS: TEAM EFFECT	1	38	40 mm
10	GS: LILY PAD (SOLO SPURT)	3	11	25 mm
11	FS: ANCHOR CANNON/CARRONADE/BOBBLE NOZZLE	1	114	40 mm
12	FS: SCHOONER 1 - SAIL AWAY 1	1	15	25 mm
13	FS: ANCHORS AWAY	1	15	25 mm
14	FS: TEAM BLASTER	1	30	25 mm
15	FS: SCHOONER 1 - STREAMER	1	42	40 mm
16	FS: AQUA-DROP	1	38	40 mm
17	GS: SPRAY TUNNEL 4 (THE WAVE)	2	114	40 mm
18	FS: O-RIGINAL	1	38	40 mm

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. LPM IN VALVE TABLE IS FOR LOW FLOW NOZZLES @ 103 KPA (15 PSI) NOZZLE PRESSURE.
7. WATERPLAY CONTROLLER CONFIGURED FOR A POTABLE WATER SUPPLY.





METRIC | 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:	SHEET
WATERPLAY PIPING SCHEMATIC	4/4

SCALE:	DRAWN BY:	DATE:	REV #:
1:100	JS	APR 12/21	0

NOT FOR CONSTRUCTION PURPOSES

TEMISKAMING SHORES
TEMISKAMING, ON

REV	DESCRIPTION	REV'D BY	REV DATE

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EMAIL info@waterplay.com

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Temiskaming Shores, Temiskaming, ON

Waterplay Mechanical Workbook

A look at feature flow rates and the program your controller reads to run your park.

Controller	Potable	**Temiskaming Shores, Temiskaming, ON**	
Water Distribution	Below Ground (Integrated)	**Valve Assignment by Waterplay**	
Diverter Strainer System	No		
UV System	No	**Date:**	**13-Apr-2021**
Controller Upgrade	Yes	**Created by:**	**Jeff S**
Installation Area	Canada	**Number of Activators:**	**2**

Component Selection				Nozzle Information per Component									Recommended Flow Rate		Recommended Pressure		*Minimum Line Size	
				Nozzle 1			Nozzle 2			Nozzle 3								
Leg #	Part Number	Component Name	QTY	PN	Nozzle 1	Qty Noz 1	PN	Nozzle 2	Qty Noz 2	PN	Nozzle 3	Qty Noz 3	[gpm]	[lpm]	[psi]	[kPA]	[in]	[mm]
1	0010-74XX	FS: COMBO (SURF STONE 2/3)	1	-	Open Flow	23	-	Open Flow	6				10	38	5	34	1.5 in	40 mm
2	0010-2399	FS: BOINGO 1 W/ GROUND SPRAY	1	NOZ-08001	2.5" - 8 Hole	1			0				2	8	1	7	1.0 in	25 mm
3	0010-7478	GS: GEYSER	3	NOZ-08001	2.5" - 8 Hole	1			0				18	68	5	34	1.5 in	40 mm
4	0010-7466	GS: PUDDLE 1	1	0002-9545	Nozzle Quarter Plate, Puddle 1	4			0				3	11	10	69	1.0 in	25 mm
5	0010-459X	FS: COMBO (WATERFALL 3/BASIN)	1	-	Open Flow	1	-	Open Flow	1				20	76	8	55	1.5 in	40 mm
6	0010-7466	GS: PUDDLE 1	1	0002-9545	Nozzle Quarter Plate, Puddle 1	4			0				3	11	10	69	1.0 in	25 mm
7	0010-0584	FS: FISHIN' POLE	1	0010-0413	Mushroom Top Nozzle	1	NOZ-08092	3/4" - Magnif-eye	5				7	26	7	48	1.0 in	25 mm
8	0010-0512	FS: SPINNY SQUIRT	1	NOZ-08092	3/4" - Magnif-eye	5			0				1	2	6	41	1.0 in	25 mm
9	0010-7498	GS: TEAM EFFECT	1	NOZ-08001	2.5" - 8 Hole	1	NOZ-08026	2.5" - Team Spray	8				10	38	2	10	1.5 in	40 mm
10	0010-7491-7	GS: LILY PAD (SOLO SPURT)	3	NOZ-08031	2.5"- Solo Spurt	1			0				3	11	4	28	1.0 in	25 mm
11	0010-3704-1	FS: ANCHOR CANNON/CARRONADE/BOBBLE NOZZLE	1	0010-0413	Mushroom Top Nozzle	5			0				30	114	7	48	1.5 in	40 mm
12	0010-3704-4	FS: SCHOONER 1 - SAIL AWAY 1	1	NOZ-08089	3/4"- Fan Spray	5			0				4	15	5	34	1.0 in	25 mm
13	0010-0591	FS: ANCHORS AWAY	1	0010-0413	Mushroom Top Nozzle	2	NOZ-08092	3/4" - Magnif-eye	3				4	15	6	41	1.0 in	25 mm
14	0010-0414	FS: TEAM BLASTER	1	0010-0413	Mushroom Top Nozzle	2			0				8	30	20	138	1.0 in	25 mm
15	0010-3704-5	FS: SCHOONER 1 - STREAMER	1	-	Sneaky Soaker Arm	2			0				11	42	3	21	1.5 in	40 mm
16	0010-1421	FS: AQUA-DROP	1	-	Open Flow	1			0				10	38	7	48	1.5 in	40 mm
17	0010-7496	GS: SPRAY TUNNEL 4 (THE WAVE)	2	NOZ-08020	2.5" - Wave	4			0				30	114	3	21	1.5 in	40 mm
18	0010-2321	FS: O-RIGINAL	1	NOZ-08002	3/4" Fan Spray-Hi	5			0				10	38	6	41	1.5 in	40 mm
		Total PlayPHASE Bases:	18	Note: This number does **NOT** include activators							**Maximum Flow:**		**184**	**695**				

*based on a maximum pipe velocity of 8 fps

Notes: Max sequence flow to be less than 80gpm.

Controller	Potable
Water Distribution	Below Ground (Integrated)
Revision Date	13-Apr-2021
Step Duration	25

Temiskaming Shores, Temiskaming, ON
Valve Assignment by Waterplay

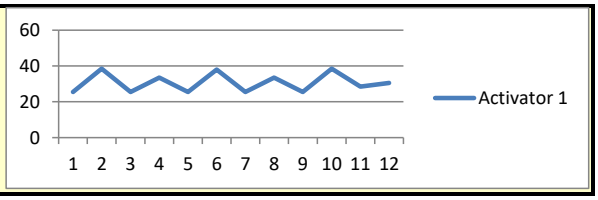
Activator 1: Power Post

Leg #	Out #	Pop-It	Component Name	1	2	3	4	5	6	7	8	9	10	11	12
1	1		FS: COMBO (SURF STONE 2/3)	1		1		1		1		1		1	
2	2		FS: BOINGO 1 W/ GROUND SPRAY	1		1		1		1		1		1	
3	3		GS: GEYSER		1				1				1		
4	4		GS: PUDDLE 1	1		1	1	1		1	1	1		1	1
5	5		FS: COMBO (WATERFALL 3/BASIN)		1		1		1		1		1		1
6	6		GS: PUDDLE 1				1				1			1	
7	7		FS: FISHIN' POLE				1				1				1
8	8		FS: SPINNY SQUIRT	1	1	1	1	1		1	1	1	1	1	1
9	9		GS: TEAM EFFECT	1		1		1		1		1		1	
10	10		GS: LILY PAD (SOLO SPURT)												
11	11		FS: ANCHOR CANNON/CARRONADE/BOBBLE NOZZLE												
12	12		FS: SCHOONER 1 - SAIL AWAY 1												
13	13		FS: ANCHORS AWAY												
14	14		FS: TEAM BLASTER												
15	15		FS: SCHOONER 1 - STREAMER												
16	16		FS: AQUA-DROP												
17	17		GS: SPRAY TUNNEL 4 (THE WAVE)												
18	18		FS: O-RIGINAL												
			Step Flow Rate [gpm]	26	39	26	34	26	38	26	34	26	39	29	31
			Step Flow Rate [lpm]	97	146	97	127	97	144	97	127	97	146	108	115

146	[lpm]	Max Flow-rate	[gpm]	39
116	[lpm]	Average Flow-rate	[gpm]	31

Sequence Duration [sec]	300

Notes:



Controller	Potable
Water Distribution	Below Ground (Integrated)
Revision Date	13-Apr-2021
Step Duration	25

Temiskaming Shores, Temiskaming, ON
Valve Assignment by Waterplay

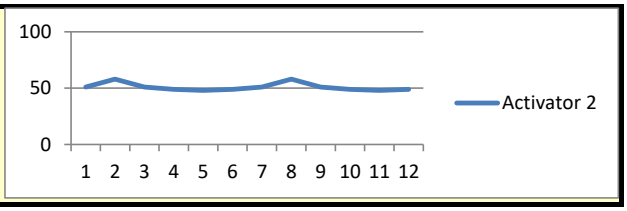
Activator 2: Power Post

Leg #	Out #	Pop-It	Component Name	1	2	3	4	5	6	7	8	9	10	11	12
1	1		FS: COMBO (SURF STONE 2/3)												
2	2		FS: BOINGO 1 W/ GROUND SPRAY												
3	3		GS: GEYSER												
4	4		GS: PUDDLE 1												
5	5		FS: COMBO (WATERFALL 3/BASIN)												
6	6		GS: PUDDLE 1												
7	7		FS: FISHIN' POLE												
8	8		FS: SPINNY SQUIRT												
9	9		GS: TEAM EFFECT												
10	10		GS: LILY PAD (SOLO SPURT)	1		1				1		1			
11	11		FS: ANCHOR CANNON/CARRONADE/BOBBLE NOZZLE	1	1	1				1	1	1			
12	12		FS: SCHOONER 1 - SAIL AWAY 1				1	1	1				1	1	1
13	13		FS: ANCHORS AWAY				1	1	1				1	1	1
14	14		FS: TEAM BLASTER	1	1	1				1	1	1			
15	15		FS: SCHOONER 1 - STREAMER				1		1				1		1
16	16		FS: AQUA-DROP	1	1	1					1	1			
17	17		GS: SPRAY TUNNEL 4 (THE WAVE)				1	1	1				1	1	1
18	18		FS: O-RIGINAL		1			1		1	1			1	
			Step Flow Rate [gpm]	51	58	51	49	48	49	51	58	51	49	48	49
			Step Flow Rate [lpm]	193	220	193	185	182	185	193	220	193	185	182	185

220	[lpm]	Max Flow-rate	[gpm]	58
193	[lpm]	Average Flow-rate	[gpm]	51

Sequence Duration [sec]	300

Notes:



Temiskaming Shores, Temiskaming, ON
Valve Assignment by Waterplay

Controller	Potable		
Water Distribution	Below Ground (Integrated)		
Diverter Strainer System	No		
UV System	No	**Revision Date**	13-Apr-2021
Controller Enclosure Upgrade	Yes	**WP Project Support**	Jeff S
Installation Area	Canada	**Number of Activators**	2

Leg #	Component Name	QTY
1	FS: COMBO (SURF STONE 2/3)	1
2	FS: BOINGO 1 W/ GROUND SPRAY	1
3	GS: GEYSER	3
4	GS: PUDDLE 1	1
5	FS: COMBO (WATERFALL 3/BASIN)	1
6	GS: PUDDLE 1	1
7	FS: FISHIN' POLE	1
8	FS: SPINNY SQUIRT	1
9	GS: TEAM EFFECT	1
10	GS: LILY PAD (SOLO SPURT)	3
11	FS: ANCHOR CANNON/CARRONADE/BOBBLE NOZZLE	1
12	FS: SCHOONER 1 - SAIL AWAY 1	1
13	FS: ANCHORS AWAY	1
14	FS: TEAM BLASTER	1
15	FS: SCHOONER 1 - STREAMER	1
16	FS: AQUA-DROP	1
17	GS: SPRAY TUNNEL 4 (THE WAVE)	2
18	FS: O-RIGINAL	1

Leg #	Component Name	QTY

	Sequenced flow rates for each activator				
	[gpm]		Step Duration	[lpm]	
	Ave Flow	Max Flow		Ave Flow	Max Flow
Activator 1	31	39	25	116	146
Activator 2	51	58	25	193	220
Activator 3	0	0	25	0	0
Activator 4	0	0	25	0	0
Activator 5	0	0	25	0	0
Activator 6	0	0	25	0	0
Activator 7	0	0	25	0	0
Activator 8	0	0	25	0	0
Activator 9	0	0	25	0	0
Activator 10	0	0	25	0	0
Maximum Sequenced Park Flow		**97**			**365**
Maximum Possible Park Flow		**184**			**695**

Temiskaming Shores, Temiskaming, ON

Waterplay Component Specifications

An individual look at each of the components used in your park including:

Activators

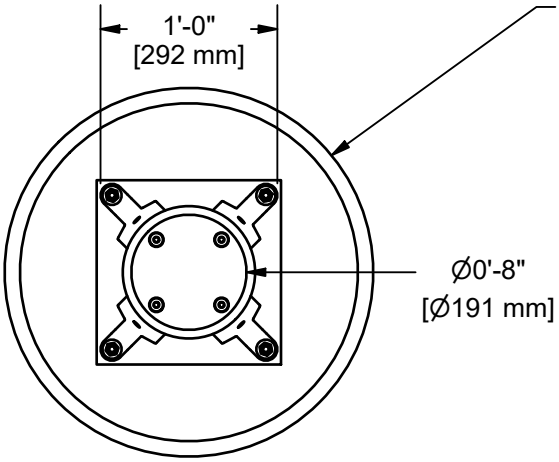
Aquatic Features

Water Management System

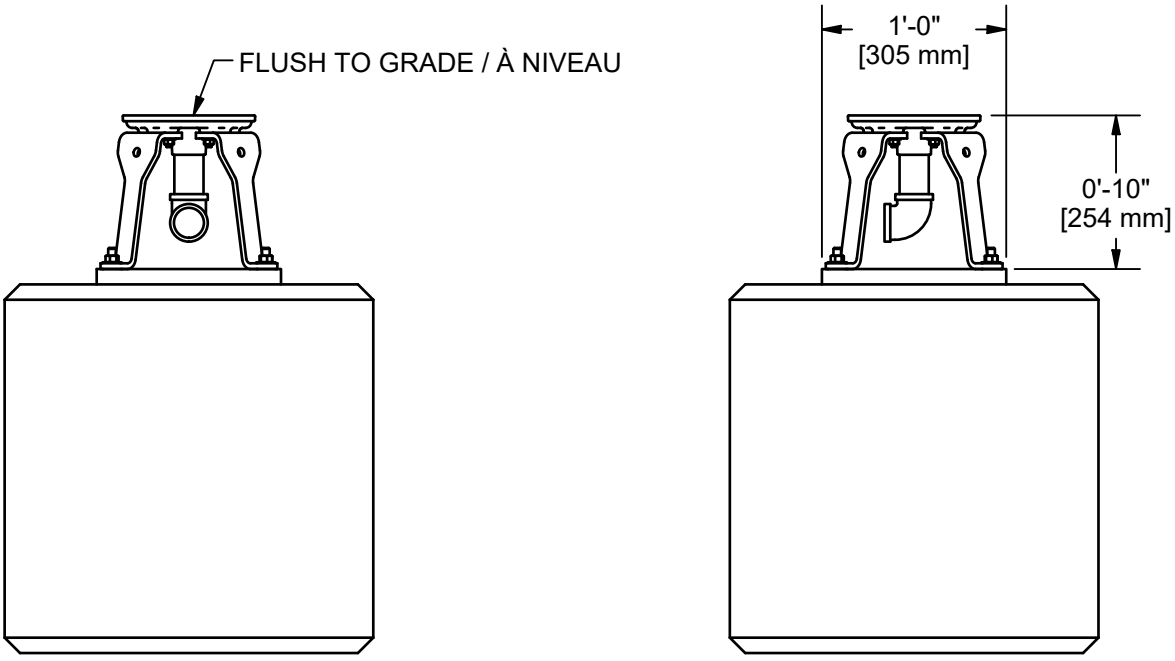
PLAYPHASE BASE

0010-0507

LIST OF MATERIALS / LISTE DE MATÉRIAUX (IF / SI APPLICABLE)	
BASE MATERIAL / MATÉRIEL	304 STAINLESS STEEL / ACIER INOXYDABLE



RECOMMENDED FOOTING / BASE DE BÉTON CONSEILLÉ (BY OTHER / PAR D'AUTRE). REFER TO FEATURE SPEC PAGE FOR DETAILS / CONSULTER LA PAGE TECHNIQUE DU JEU POUR LES DÉTAILS



FOOTING BY OTHER, REFER TO LOCAL CODE /
BASE DE BÉTON PAR D'AUTRE, RÉFÉRER AU CODE LOCAL

INLET / ENTRÉE	1-1/2" F-NPT
ELECTIRCAL / ÉLECTRIQUE	-
DRAIN	-

RECOMMENDED SPRAY AREA / ZONE D'ASPERSION POTENTIELLE			FLOW RATE / DÉBIT D'EAU	
R (ft/mm)	**L** (ft/mm)	**W** (ft/mm)	GPM/LPM	PSI/kPa
-/-	-/-	-/-	-/-	-/-
NOZZLES / BUSES		-	MASS: 27.5 lbmass	

COMPONENT INCLUDES: (IF REQUIRED) / INCLUS AVEC LE JEU (SI REQUISE)
-SERVICE TOOLS / OUTILS
-SPRAY NOZZLES / BUSES DE PERFORMANCE

DIMENSIONAL ACCURACY / PRÉCISION DIMENSIONELLE +/- 1" [25mm]

INITIAL:

DRAWING ID: **0010-0507**

SHEET: 1
OF: 1

waterplay
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-712-3393 F: 250-861-4814
E: design@waterplay.com W: waterplay.com

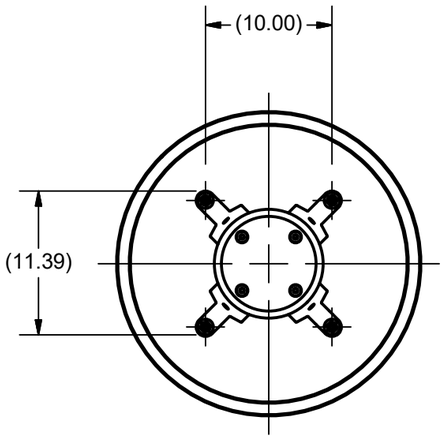
NOTE: REFER TO THE COMPONENT WRITTEN SPECIFICATION DOCUMENT FOR COMPLETE PRODUCT SPECIFICATIONS. WATERPLAY RESERVES THE RIGHT TO CHANGE THIS SPECIFICATION WITHOUT NOTICE.

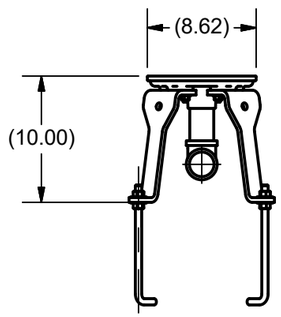
REFEREZ VOUS AU DOCUMENT DE SPÉCIFICATION ÉCRIT POUR LES DÉTAILS COMPLET DU PRODUIT. WATERPLAY A LE DROIT DE CHANGER CES DERNIERS SANS PRÉAVIS.

ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0002-7637	A	ELBOW SS 1.5" NPT SR 90	AISI 304	1
2	0010-2436	B	PLAYPHASE PRE-ASSY		1
3	FTC-02205	A	NIPPLE SS 1.5" NPT X 4.0"	AISI 304	1
4	NUT-02004		NUT, HEX, 1/2-13	SST	8
5	PTM-02015	A	ANCHOR BOLT, 1/2-13 X 9.00LG	AISI 304	4
6	TPW-03002	A	ANCHOR BOLT TEMPLATE	PARTICLE BOARD	1
7	WAS-02013		WASHER, FLAT, 1/2 (1.25 OD)	SST	8

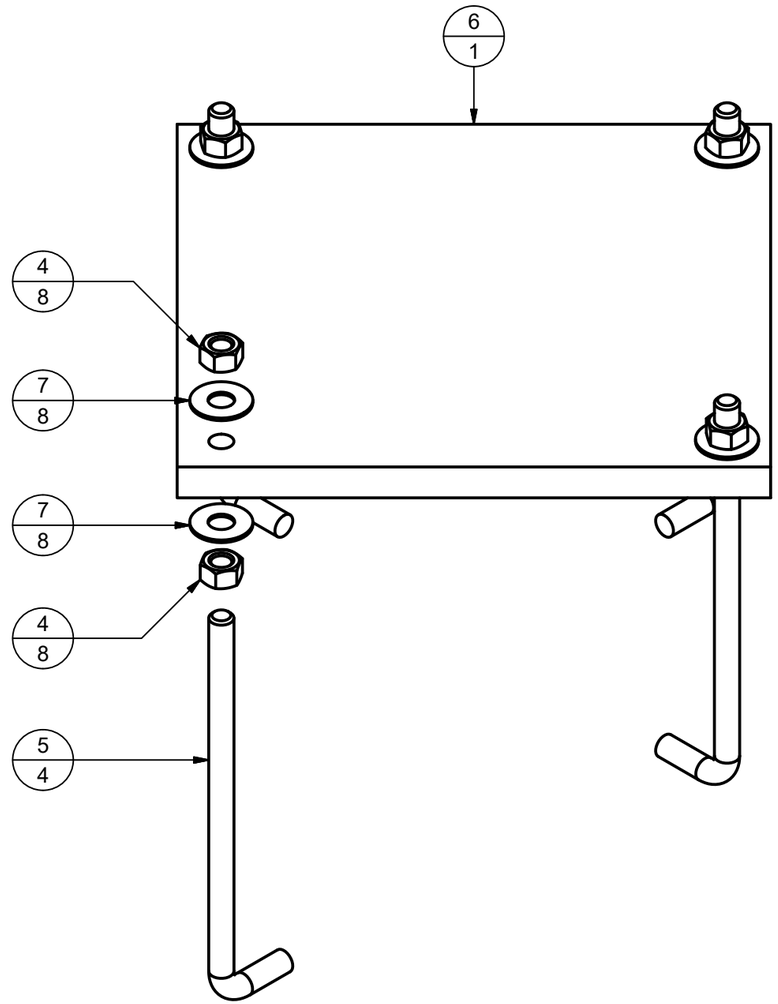
NOTE:
- FOOTING IS FOR ILLUSTRATIVE PURPOSES ONLY
- REFER TO COMPONENT SPEC PAGE FOR DETAILS

REV	DESCRIPTION	DATE
A	INITIAL RELEASE	5/25/2016
B	UPDATED INSTALL DETAIL	7/12/2019
C	REVISED BOM	10/10/2019





ANCHOR HARDWARE



NOTES:
1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS

TORQUE VALUES UNLESS NOTED
1/4-20....63 in-lbs 1/2-13....37 ft-lbs
3/8-16....201 in-lbs

MASS: 27.5 lbmass

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

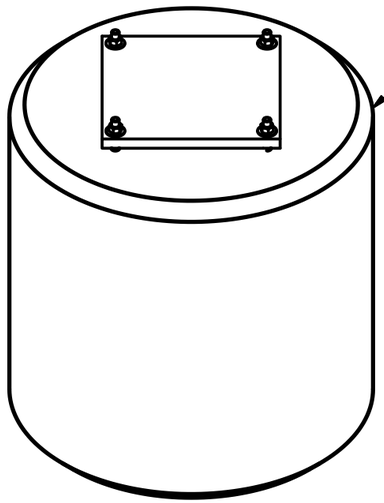
THIRD ANGLE PROJECTION

DESIGNED: NICMAY
DRAWN: NICMAY
CHECKED: JASMAY
DATE: 5/24/2016

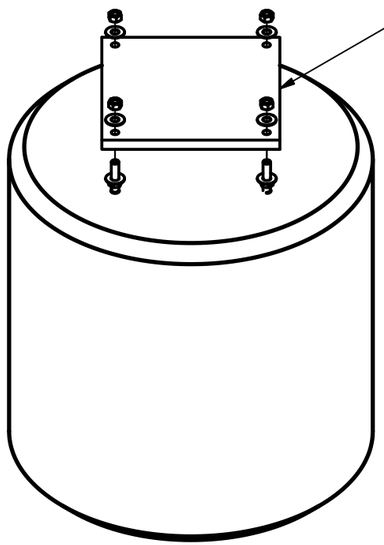
PLAYPHASE INSTALL

PLAYPHASE

DWG ID: **0010-0507** | REV: **C** | SIZE: B | SCALE: NTS | SHEET: 1 | OF: 4

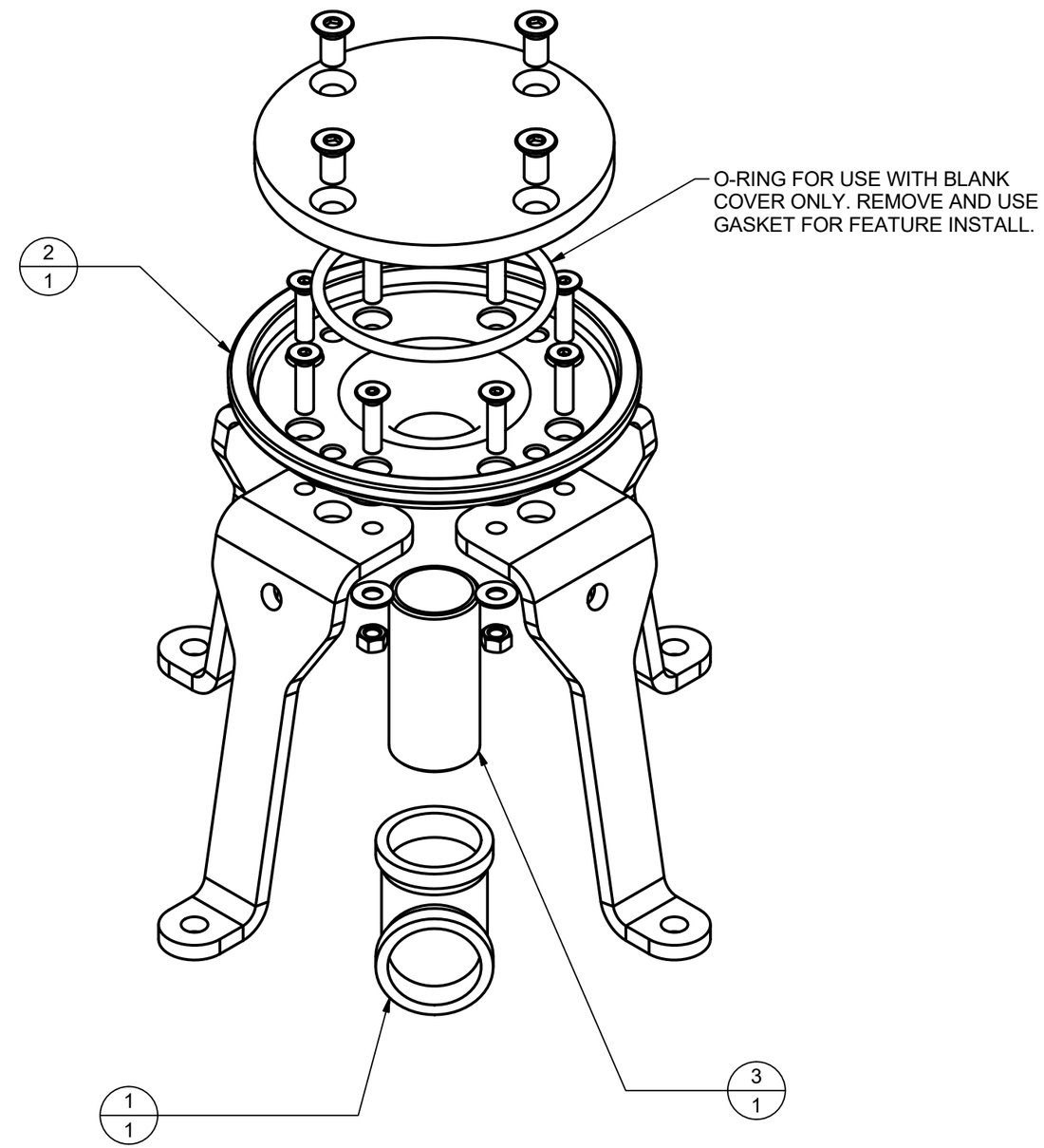


RECOMMENDED FOOTING
(BY OTHER)



REMOVE FOOTING TEMPLATE PRIOR
TO INSTALLING PLAYPHASE BASE

PLAYPHASE ASSEMBLY

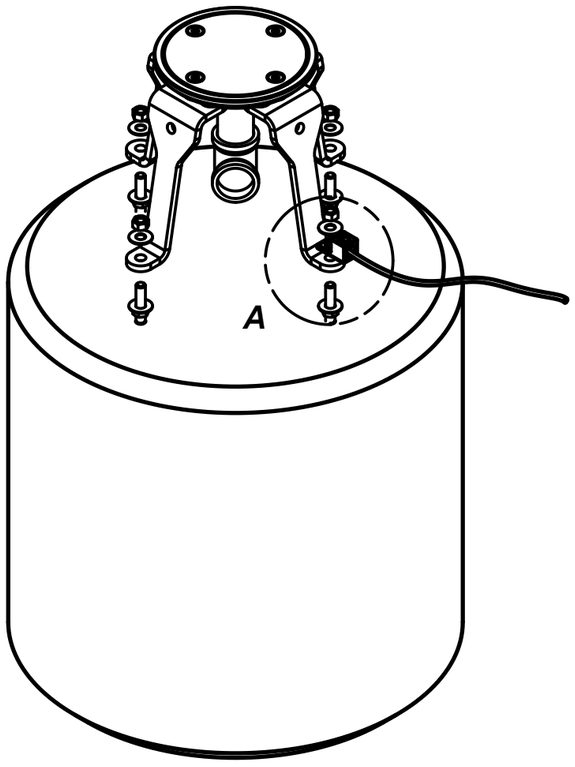


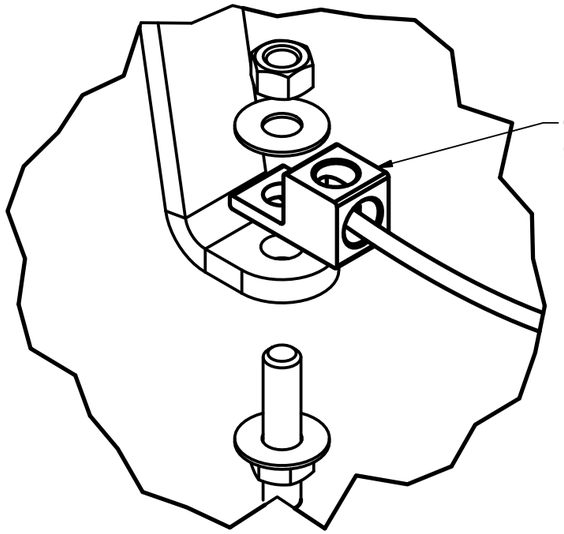
USE IN CONJUNCTION WITH SHEET NO. 1

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

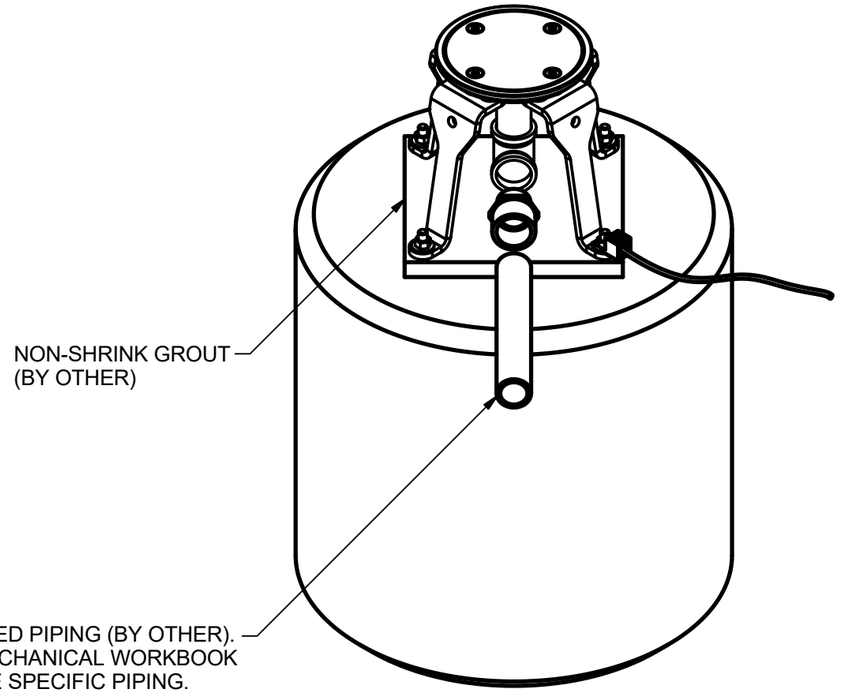
THIRD ANGLE PROJECTION	DWG ID:	REV:	SIZE:	SCALE:	SHEET:
	0010-0507	C	B	NTS	2 OF: 4

PLAYPHASE INSTALL





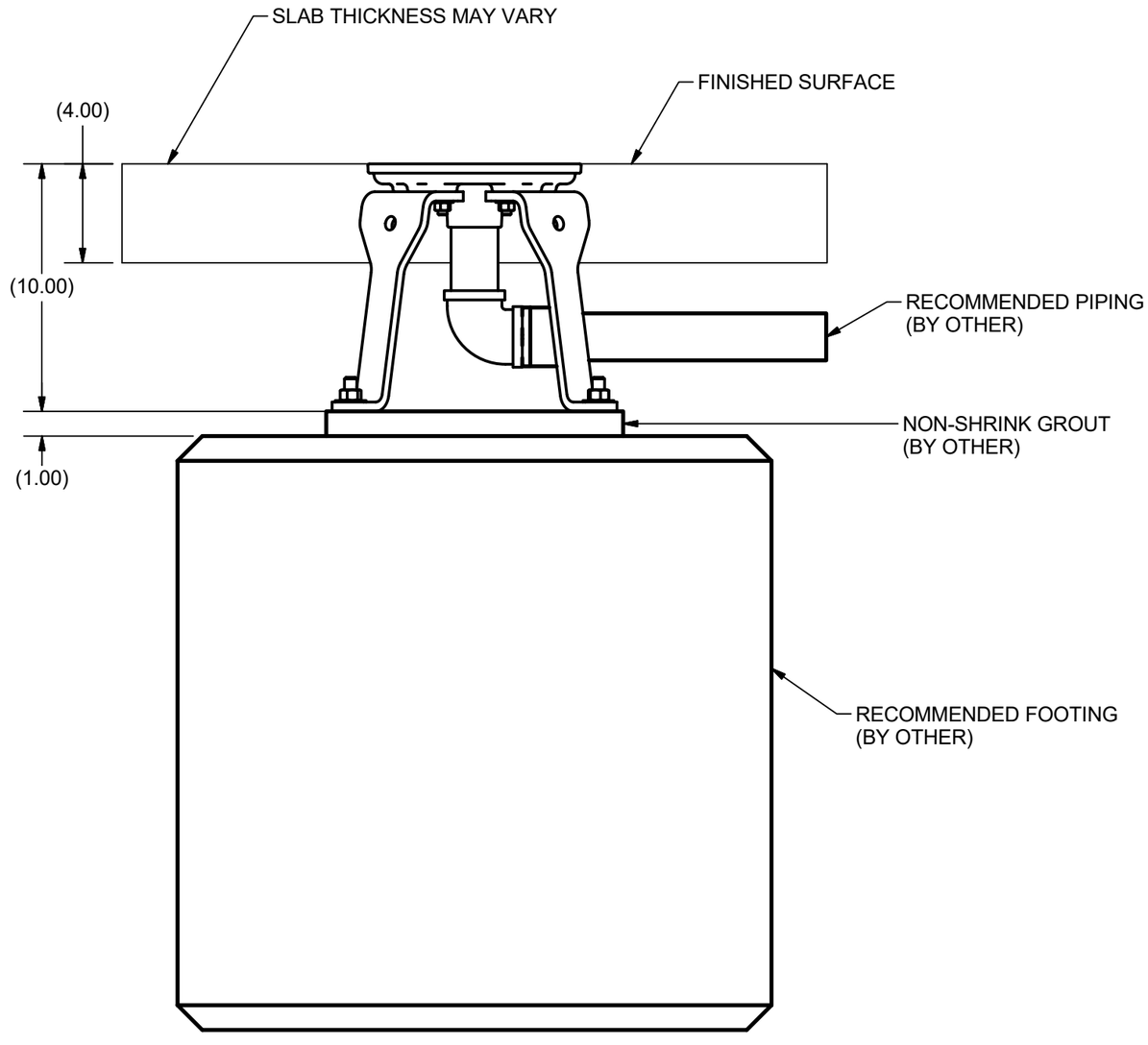
DETAIL A



USE IN CONJUNCTION WITH SHEET NO. 1

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

THIRD ANGLE PROJECTION	DWG ID:	REV:	SIZE:	SCALE:	SHEET:
	0010-0507	C	B	NTS	3 OF: 4



USE IN CONJUNCTION WITH SHEET NO. 1

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

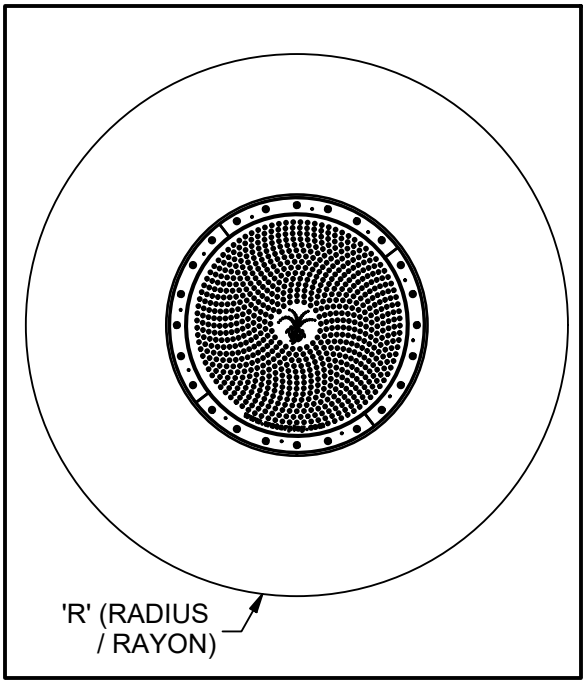
THIRD ANGLE PROJECTION	DWG ID:	REV:	SIZE:	SCALE:	SHEET:
	0010-0507	C	B	NTS	4 OF: 4

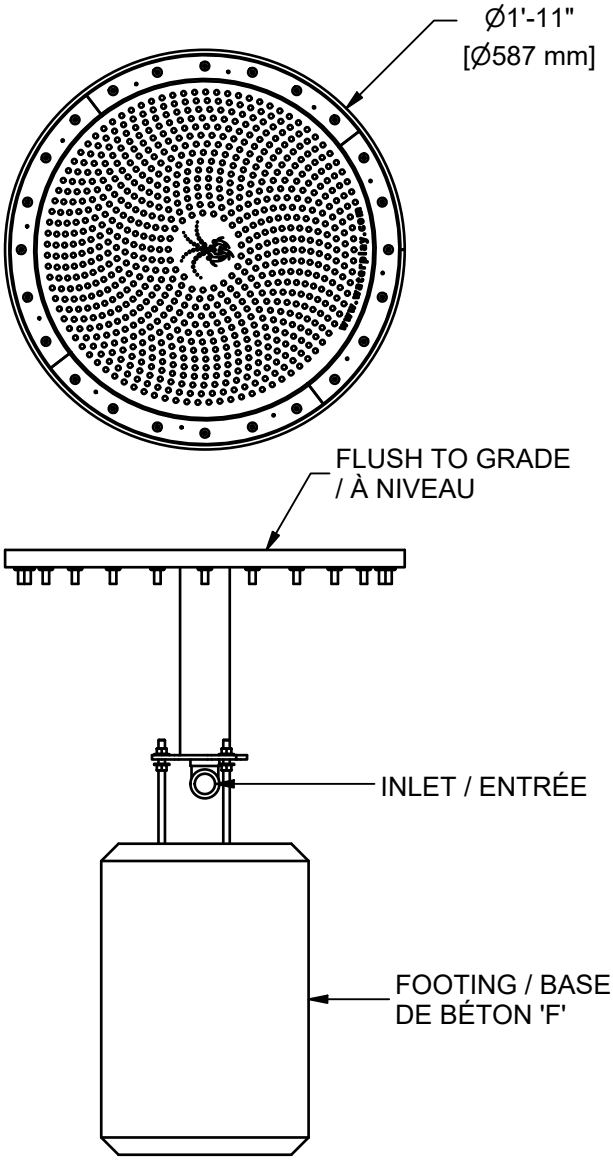
GS PUDDLE 1

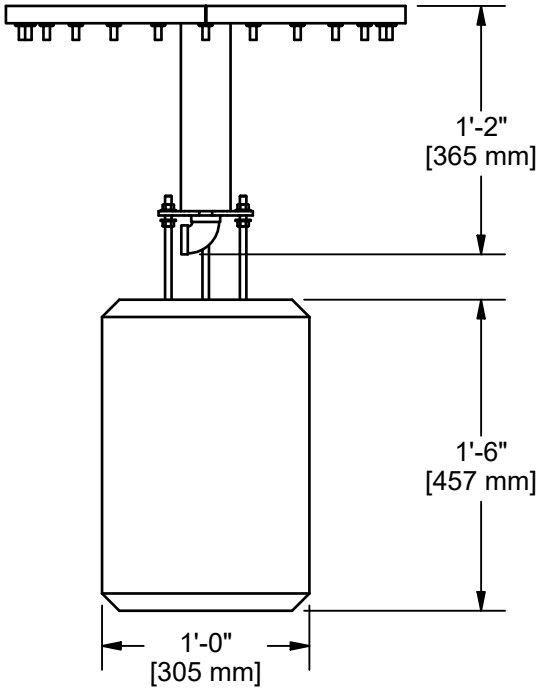
0010-7466

LIST OF MATERIALS / LISTE DE MATÉRIAUX (IF / SI APPLICABLE)	
BASE MATERIAL / MATÉRIEL	304 STAINLESS STEEL / ACIER INOXYDABLE
NOZZLES / BUSES	304 STAINLESS STEEL / ACIER INOXYDABLE
PANELS / PANNEAUX	URETHANE / URÉTHANE

***IMPACT SPRAY AREA / ZONE D'ASPERSION* D'IMPACT**







DESCRIPTION	SIZE / TAILLE	QTY / QTÉ
INLET / ENTRÉE	1" F-NPT	1
ELECTIRCAL / ÉLECTRIQUE	-	-
DRAIN	-	-

FOOTING BY OTHER, REFER TO LOCAL CODE / BASE DE BÉTON PAR D'AUTRES, SE RÉFÉRER AU CODE LOCAL

RECOMMENDED SPRAY AREA / ZONE D'ASPERSION POTENTIELLE			FLOW RATE / DÉBIT D'EAU	
R (ft/mm)	L (ft/mm)	W (ft/mm)	GPM/LPM	PSI/kPa
2/610	-/-	-/-	3/11	10/69
NOZZLES / BUSES		1	MASS: 63.4 lbmass	

COMPONENT INCLUDES: (IF REQUIRED) / INCLUS AVEC LE JEU (SI REQUISE)

-SERVICE TOOLS / OUTILS
-SPRAY NOZZLES / BUSES DE PERFORMANCE

DIMENSIONAL ACCURACY / PRÉCISION DIMENSIONELLE +/- 1" [25mm]

INITIAL:

DRAWING ID: **0010-7466**

SHEET: 1
OF: 1

waterplay
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-712-3393 F: 250-861-4814
E: design@waterplay.com W: waterplay.com

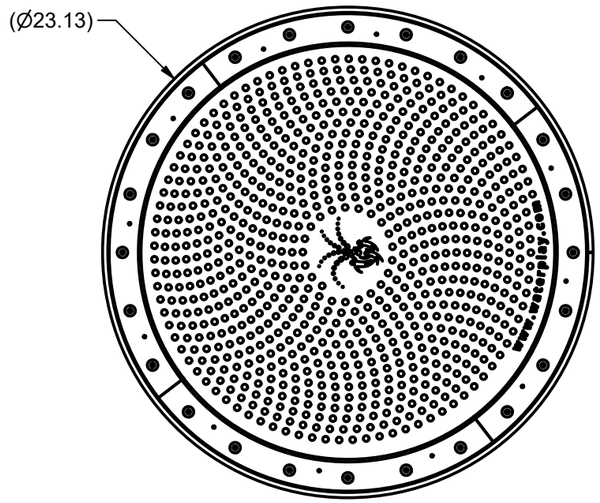
NOTE: REFER TO THE COMPONENT WRITTEN SPECIFICATION DOCUMENT FOR COMPLETE PRODUCT SPECIFICATIONS. WATERPLAY RESERVES THE RIGHT TO CHANGE THIS SPECIFICATION WITHOUT NOTICE.

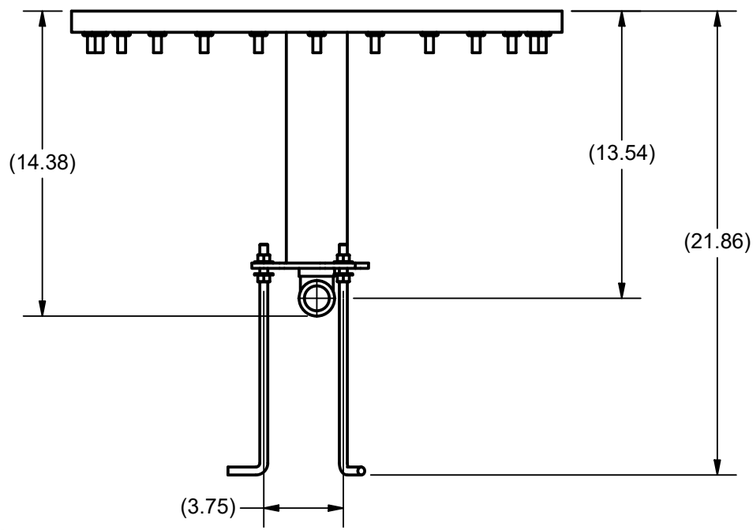
SE RÉFÉRER AU DOCUMENT DE SPÉCIFICATION ÉCRIT POUR LES DÉTAILS COMPLET DU PRODUIT. WATERPLAY A LE DROIT DE CHANGER CES DERNIERS SANS PRÉAVIS.

ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0010-5685	0	PUDDLE CANISTER KIT		1
2	0010-5686	0	PUDDLE 1 NOZZLE KIT		1

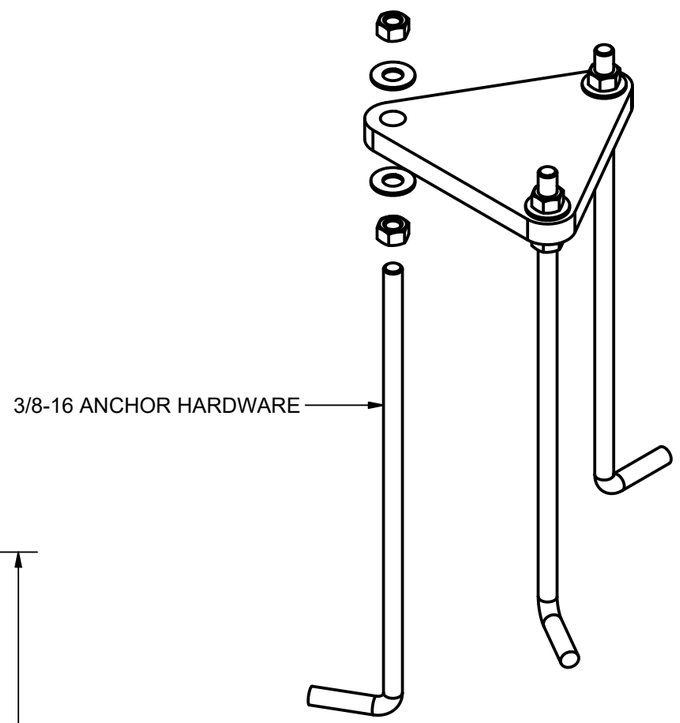
REV	DESCRIPTION	DATE
A	INITIAL RELEASE	9/18/2020

NOTE:
- FOOTING FOR REFERENCE ONLY

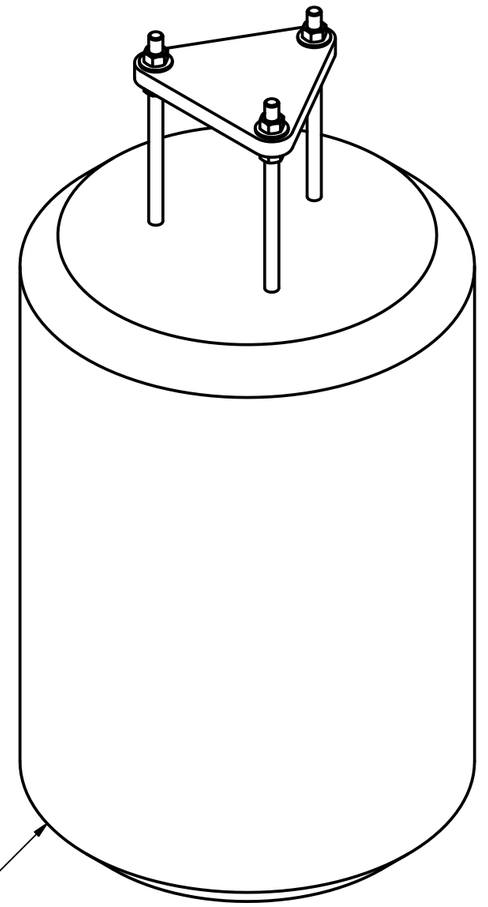




ANCHOR HARDWARE



FOOTING



NOTES:
1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS

TORQUE VALUES UNLESS NOTED
1/4-20....63 in-lbs 1/2-13....37 ft-lbs
3/8-16....201 in-lbs

MASS: N/A

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

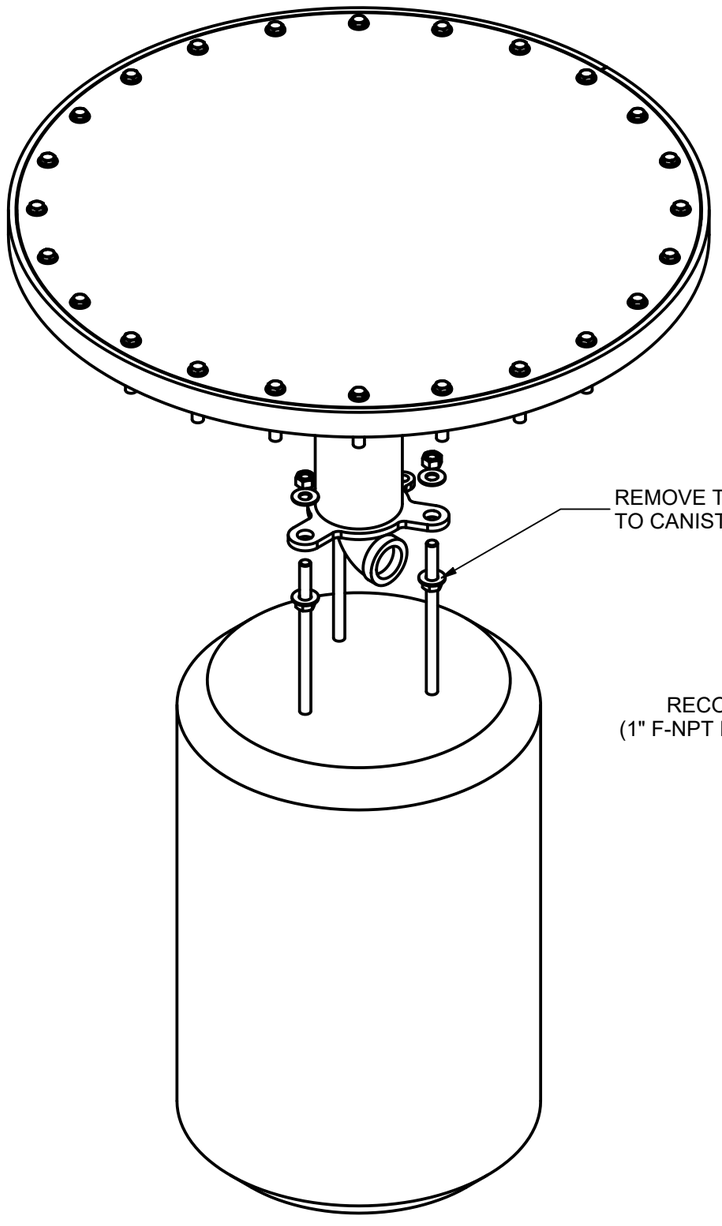
DESIGNED: JASMAY
DRAWN: KYLLUC
CHECKED: JASMAY
DATE: 4/3/2020

GS PUDDLE 1 INSTALL

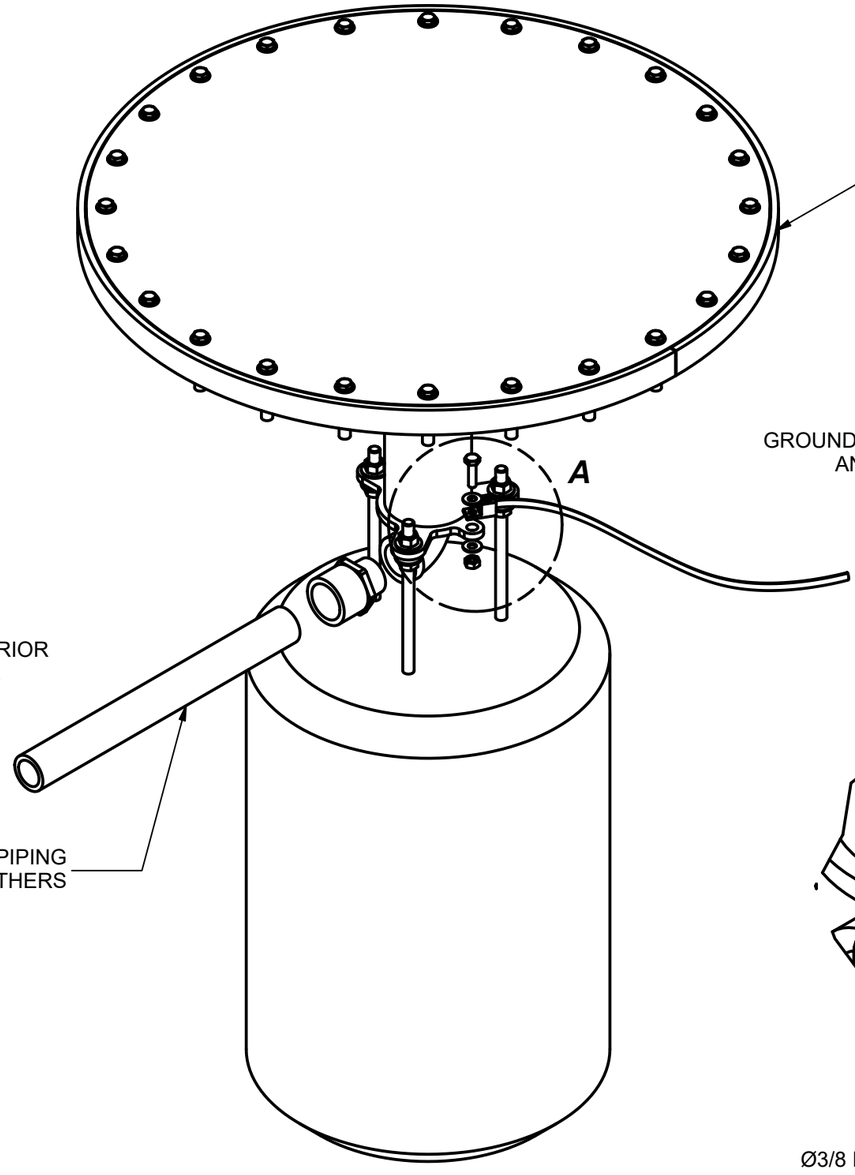
GROUND SPRAYS

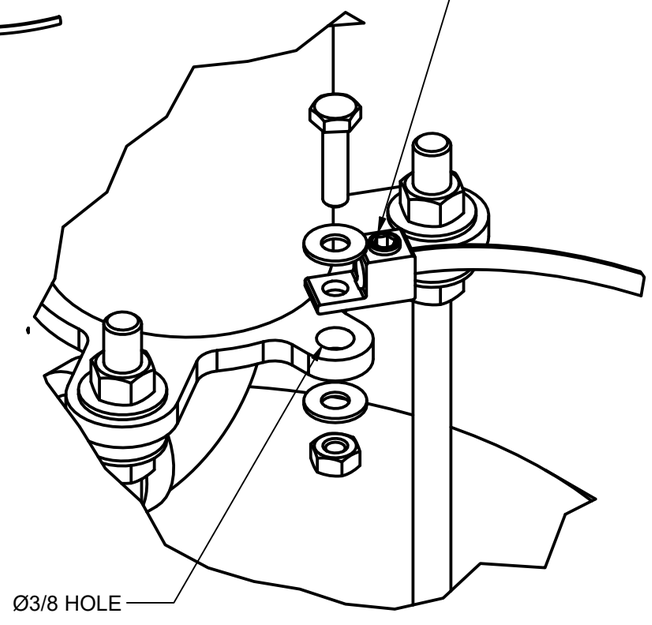
DWG ID: **0010-7466** | REV: **A** | SIZE: B | SCALE: NTS | SHEET: 1 | OF: 4

CANISTER INSTALL



REMOVE TEMPLATE PRIOR
TO CANISTER INSTALL



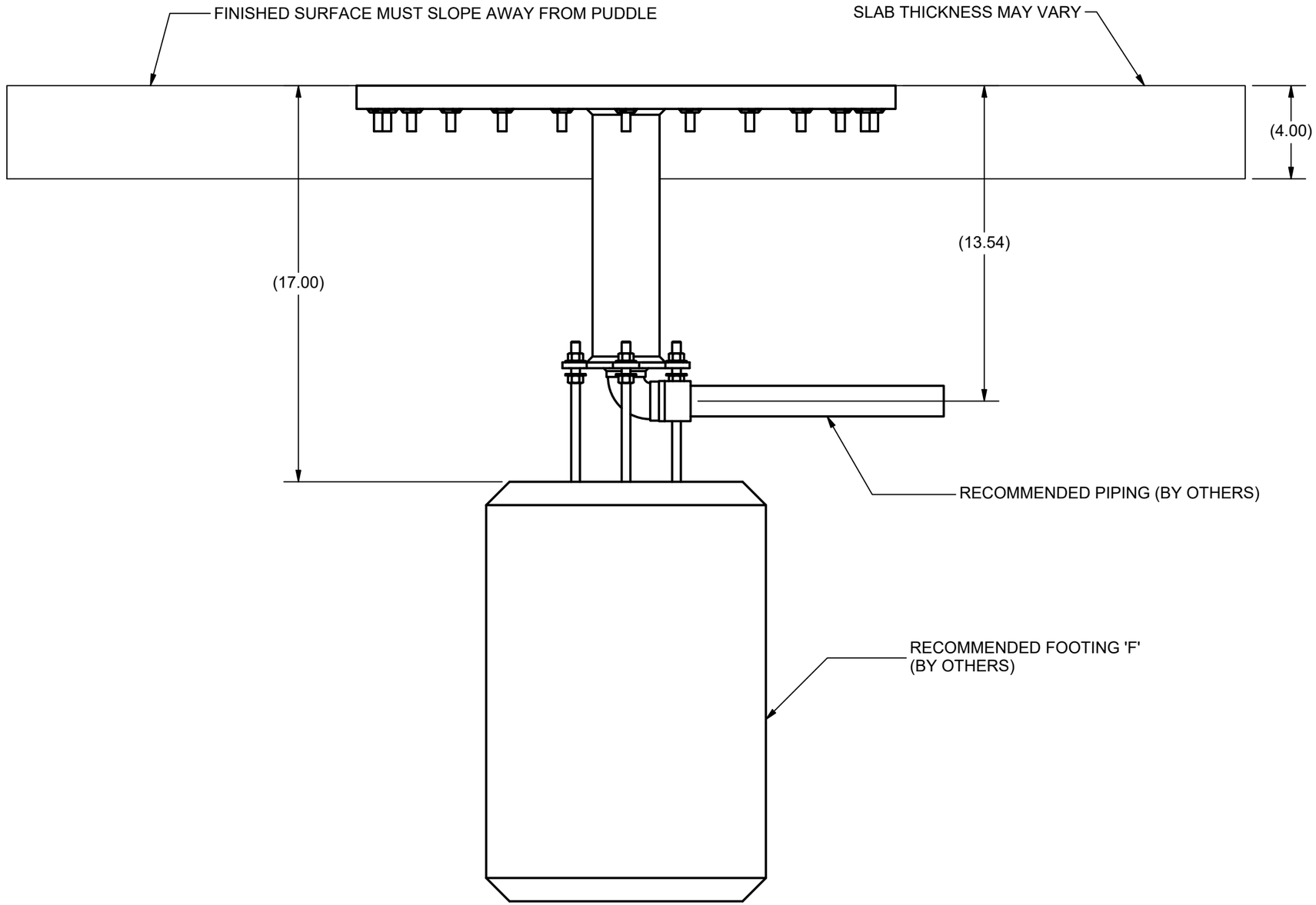


DETAIL A

USE IN CONJUNCTION WITH SHEET NO. 1

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

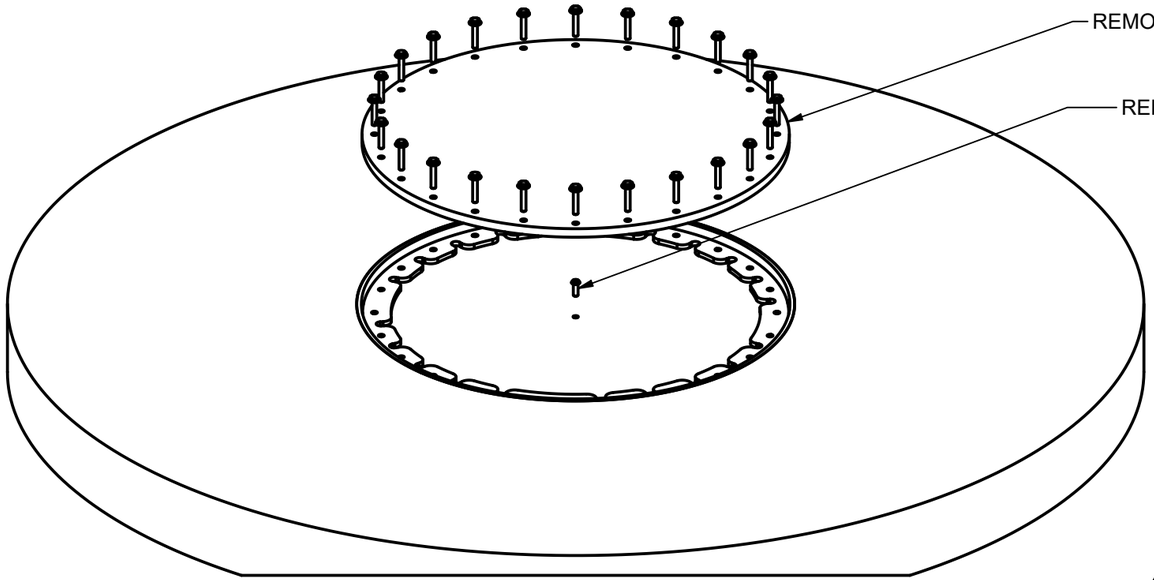
THIRD ANGLE PROJECTION	DWG ID:	REV:	SIZE:	SCALE:	SHEET:
	0010-7466	**A**	B	NTS	2 OF: 4



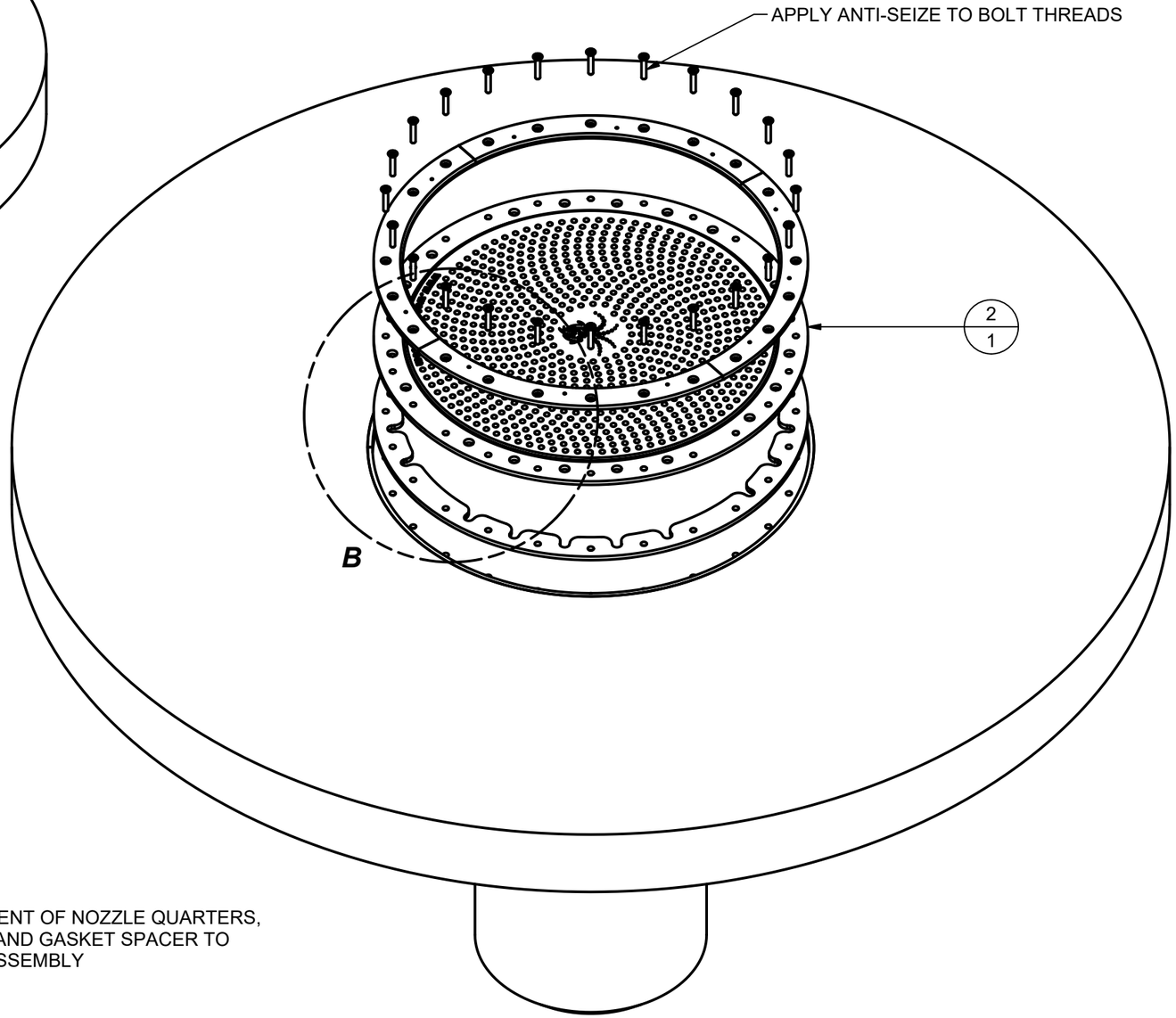
USE IN CONJUNCTION WITH SHEET NO. 1

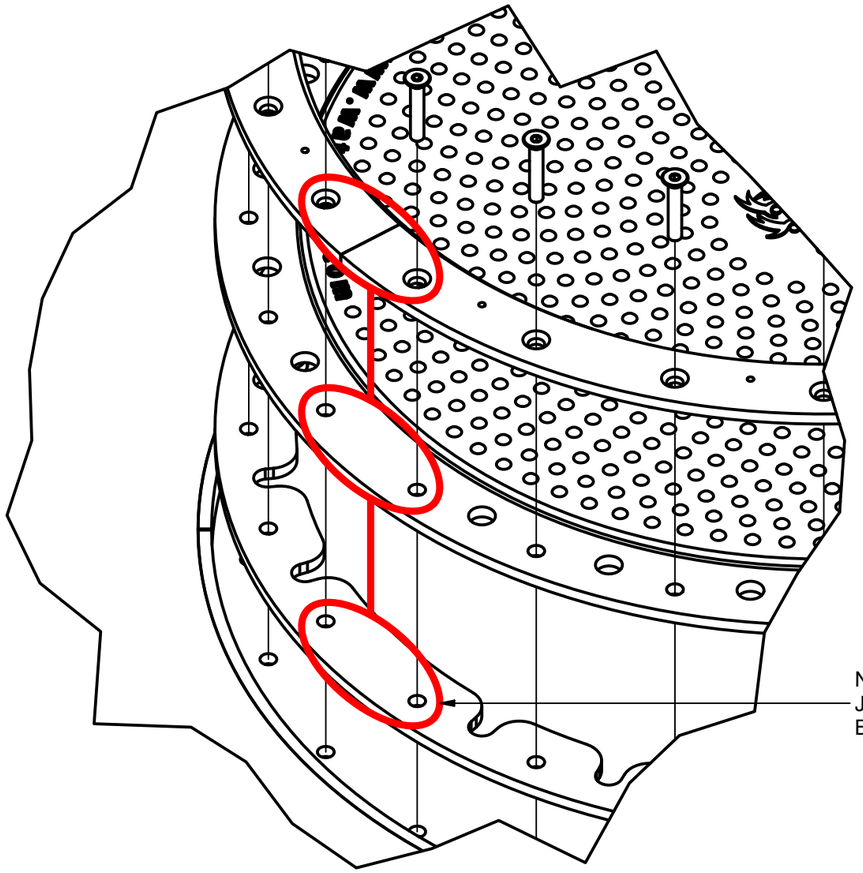
WMi MANUFACTURING CORP.
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-979-7205 F: 250-979-7215

THIRD ANGLE PROJECTION	DWG ID:	REV:	SIZE:	SCALE:	SHEET:
	0010-7466	A	B	NTS	3 OF: 4



NOZZLE KIT INSTALL





DETAIL B

USE IN CONJUNCTION WITH SHEET NO. 1

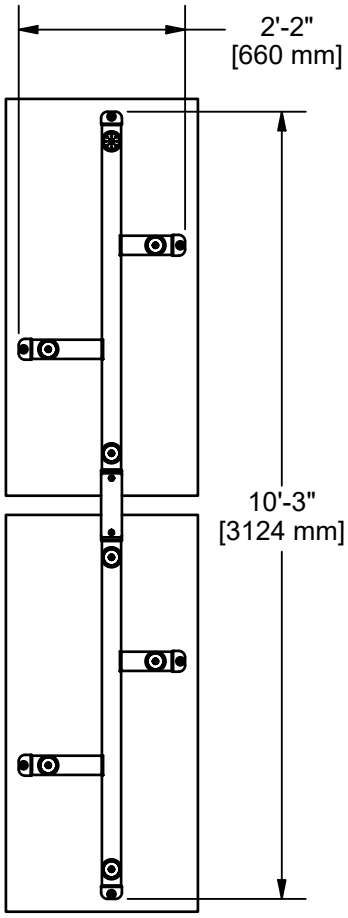
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-979-7205 F: 250-979-7215

THIRD ANGLE PROJECTION	DWG ID:	REV:	SIZE:	SCALE:	SHEET:
	0010-7466	A	B	NTS	4 OF: 4

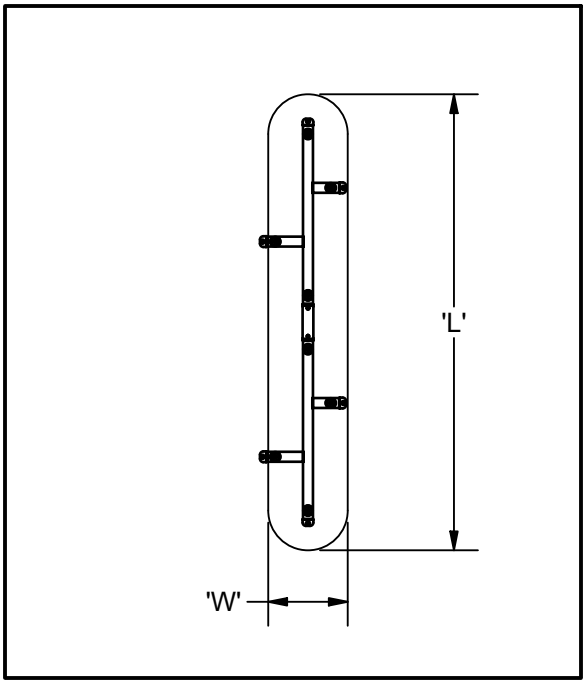
GS TEAM EFFECT

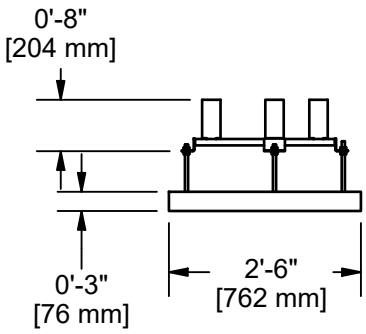
0010-9816

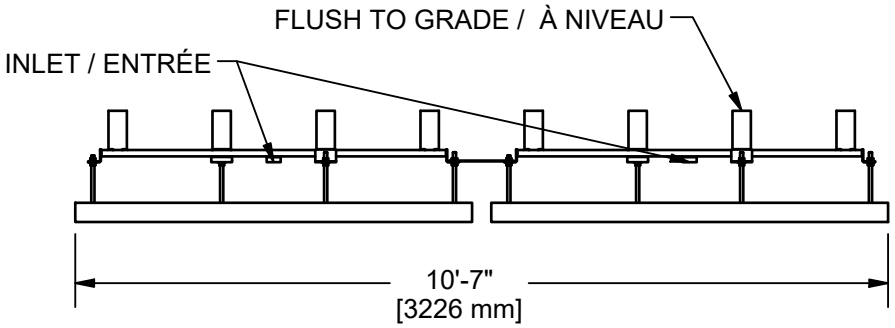
LIST OF MATERIALS / LISTE DE MATÉRIAUX (IF / SI APPLICABLE)	
BASE MATERIAL / MATÉRIEL	304 STAINLESS STEEL / ACIER INOXYDABLE
NOZZLES / BUSES	ACETAL / ACÉTAL



***IMPACT SPRAY AREA / ZONE D'ASPERSION* D'IMPACT**







DESCRIPTION	SIZE / TAILLE	QTY / QTÉ
INLET / ENTRÉE	1-1/2" F-NPT	2
ELECTIRCAL / ÉLECTRIQUE	-	-
DRAIN	-	-

FOOTING BY OTHER, REFER TO LOCAL CODE / BASE DE BÉTON PAR D'AUTRES, SE RÉFÉRER AU CODE LOCAL

RECOMMENDED SPRAY AREA / ZONE D'ASPERSION POTENTIELLE			FLOW RATE / DÉBIT D'EAU	
R (ft/mm)	L (ft/mm)	W (ft/mm)	GPM/LPM	PSI/kPa
-/-	11/3353	2/610	8/30	1/7
NOZZLES / BUSES		8	MASS: 77.3 lbmass	

COMPONENT INCLUDES: (IF REQUIRED) / INCLUS AVEC LE JEU (SI REQUISE)
-SERVICE TOOLS / OUTILS
-SPRAY NOZZLES / BUSES DE PERFORMANCE

DIMENSIONAL ACCURACY / PRÉCISION DIMENSIONELLE +/- 1" [25mm]

INITIAL:

DRAWING ID: **0010-9816**

SHEET: 1
OF: 1

waterplay
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-712-3393 F: 250-861-4814
E: design@waterplay.com W: waterplay.com

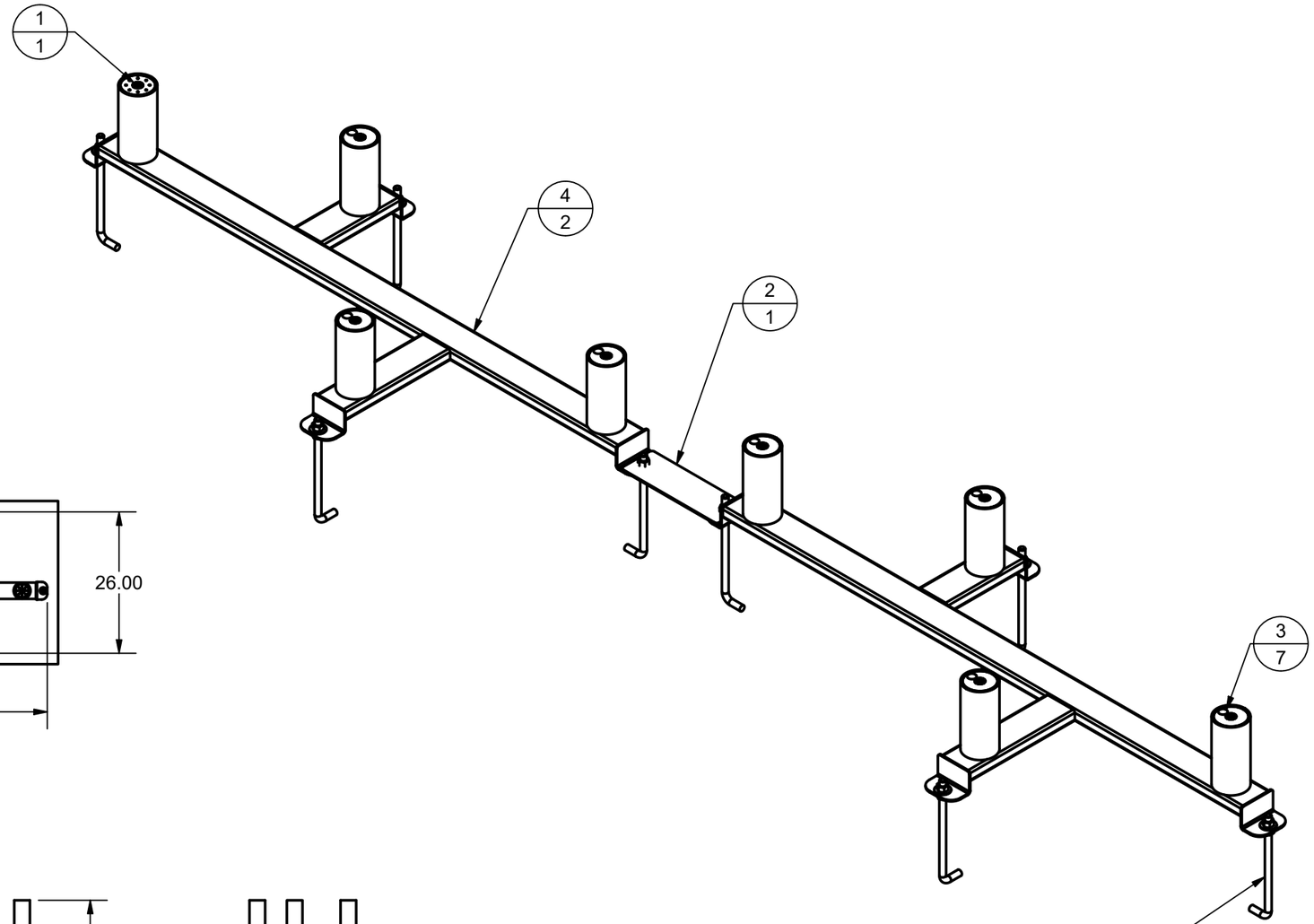
NOTE: REFER TO THE COMPONENT WRITTEN SPECIFICATION DOCUMENT FOR COMPLETE PRODUCT SPECIFICATIONS. WATERPLAY RESERVES THE RIGHT TO CHANGE THIS SPECIFICATION WITHOUT NOTICE.

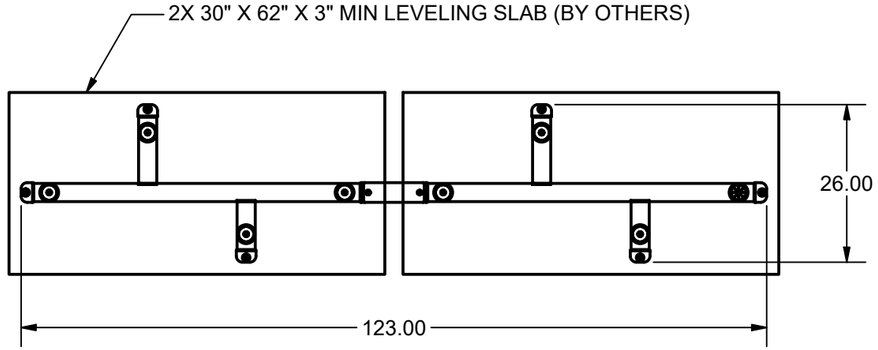
SE RÉFÉRER AU DOCUMENT DE SPÉCIFICATION ÉCRIT POUR LES DÉTAILS COMPLET DU PRODUIT. WATERPLAY A LE DROIT DE CHANGER CES DERNIERS SANS PRÉAVIS.

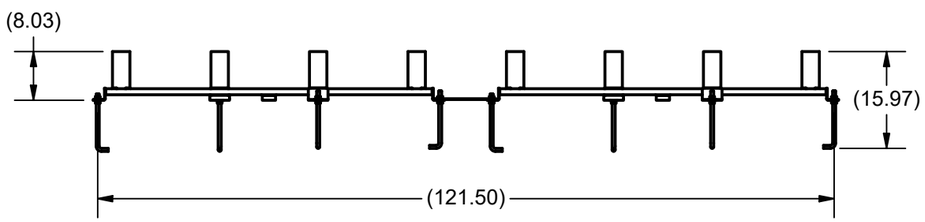
ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0010-5049	A	2.5IN GEYSER NOZZLE KIT		1
2	0010-5705	A	SPACER PLATE	SST	1
3	0010-7507	A	2.5IN TEAM SPRAY NOZZLE KIT		7
4	0010-9814	0	TEAM EFFECT MINI CANISTER KIT		2

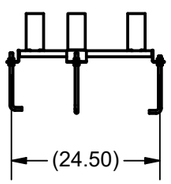
REV	DESCRIPTION	DATE
A	INITIAL RELEASE	4/13/2021

NOTE:
- FOOTING FOR REFERENCE ONLY





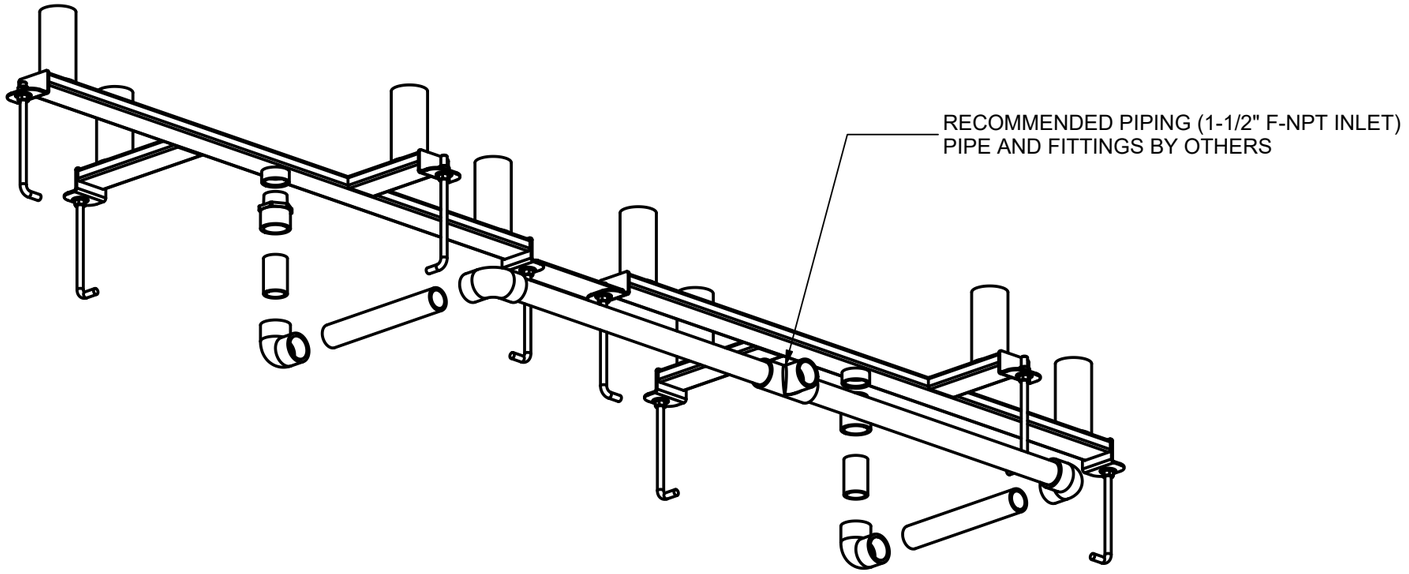


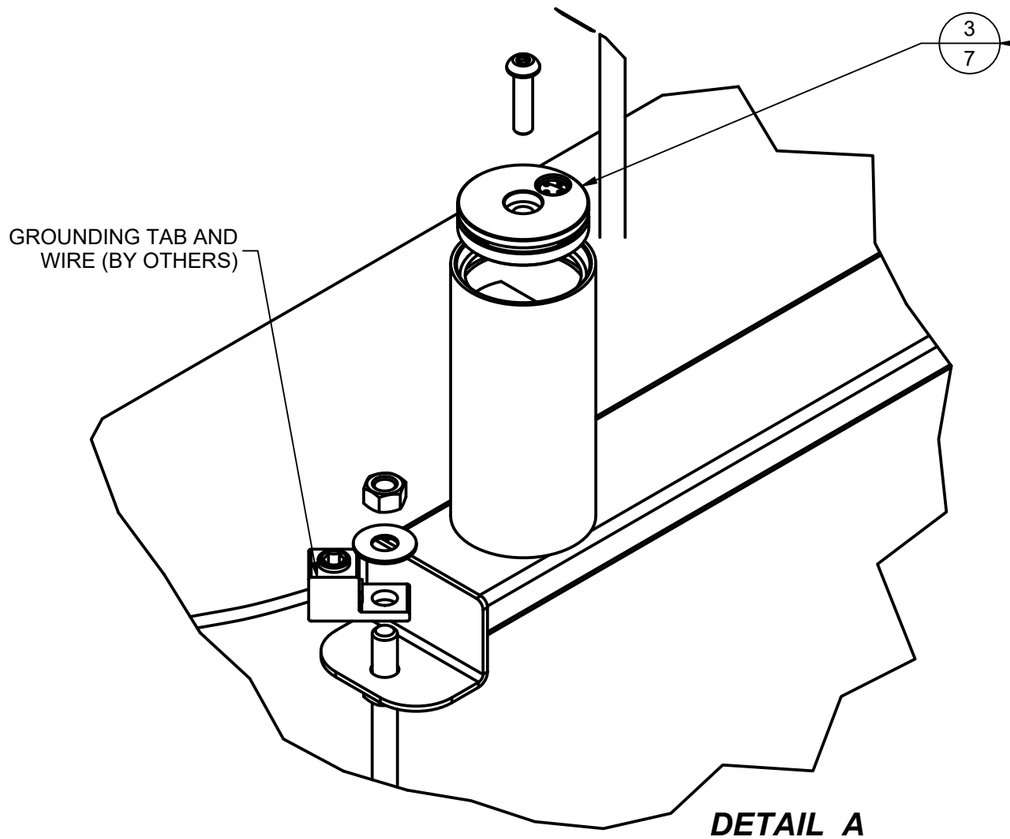


NOTES:
1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS

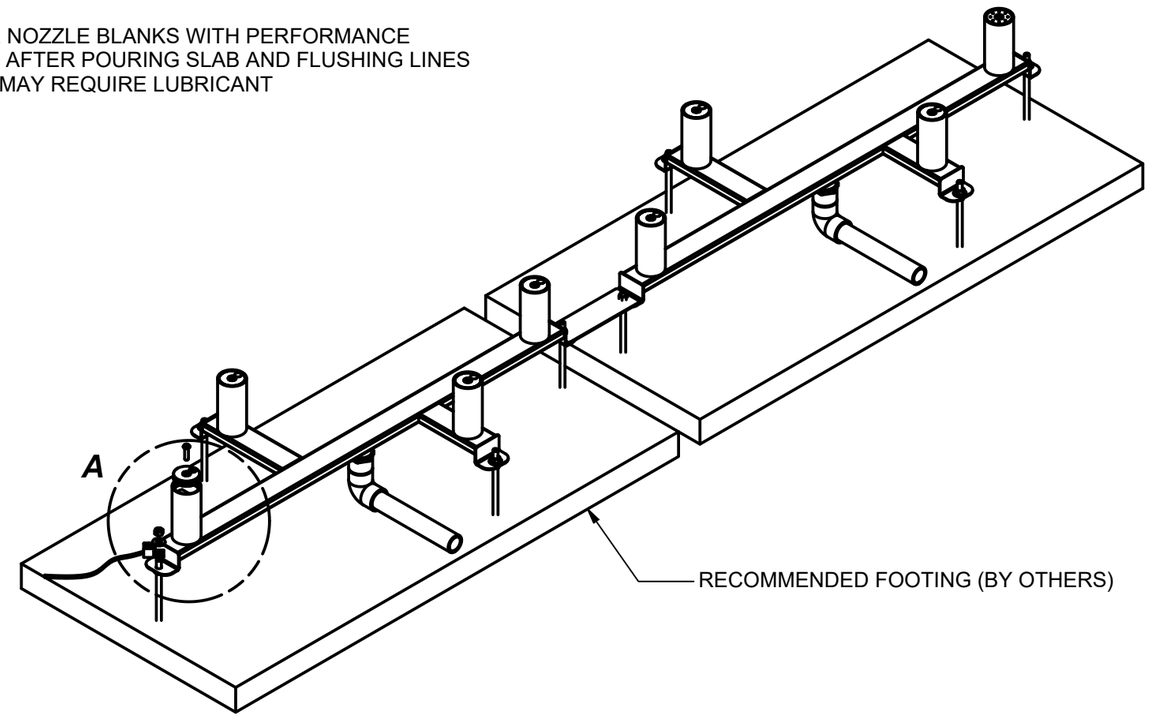
TORQUE VALUES UNLESS NOTED 1/4-20....63 in-lbs 1/2-13....37 ft-lbs 3/8-16....201 in-lbs	MASS: 77.3 lbmass	TOLERANCES UNLESS NOTED .X ±0.5 .XX (>10) ±0.05 .XX (<10) ±0.01 .XXX ±0.005 ANGULAR ±1° SURFACE FINISH 63µ in. ALL DIMENSIONS IN INCHES	DESIGNED: KYLLUC DRAWN: LEVDUB CHECKED: JASMAY	**GS TEAM EFFECT INSTALL** GROUND SPRAYS
ALL PLANS AND DESIGNS AT ALL TIMES REMAIN THE PROPERTY OF THE WMI MANUFACTURING CORPERATION AND CANNOT BE USED OR REPRODUCED WITHOUT WRITTEN PERMISSION.		THIRD ANGLE PROJECTION	DATE: 7/2/2020	DWG ID: 0010-9816 REV: A SIZE: B SCALE: NTS SHEET: 1 OF: 3

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





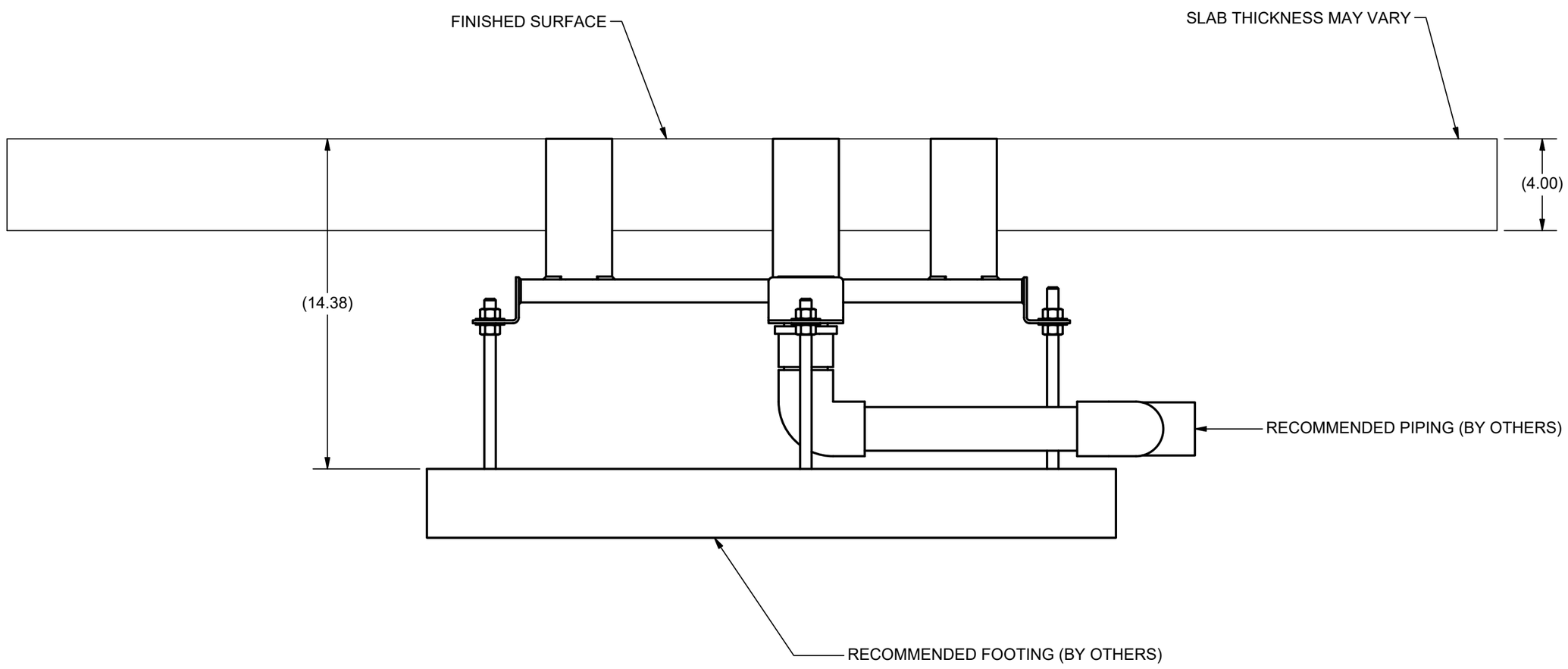
DETAIL A



USE IN CONJUNCTION WITH SHEET NO. 1

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

THIRD ANGLE PROJECTION	DWG ID:	REV:	SIZE:	SCALE:	SHEET:
	0010-9816	A	B	NTS	2 OF: 3



USE IN CONJUNCTION WITH SHEET NO. 1

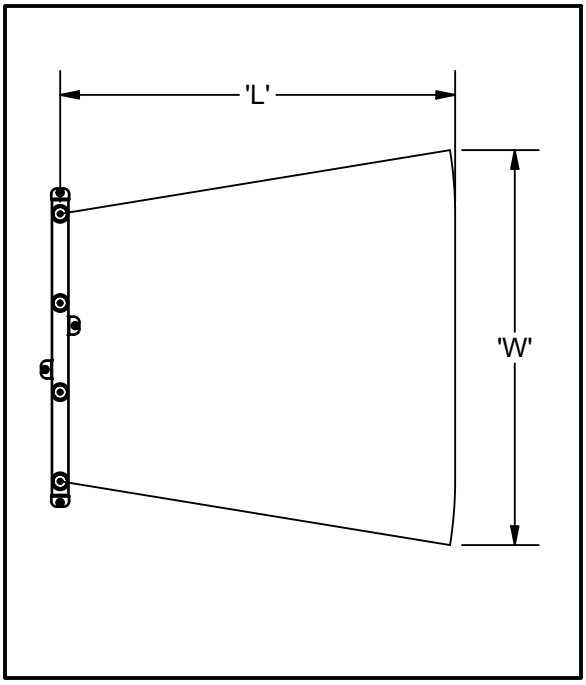
WMi MANUFACTURING CORP.
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-979-7205 F: 250-979-7215

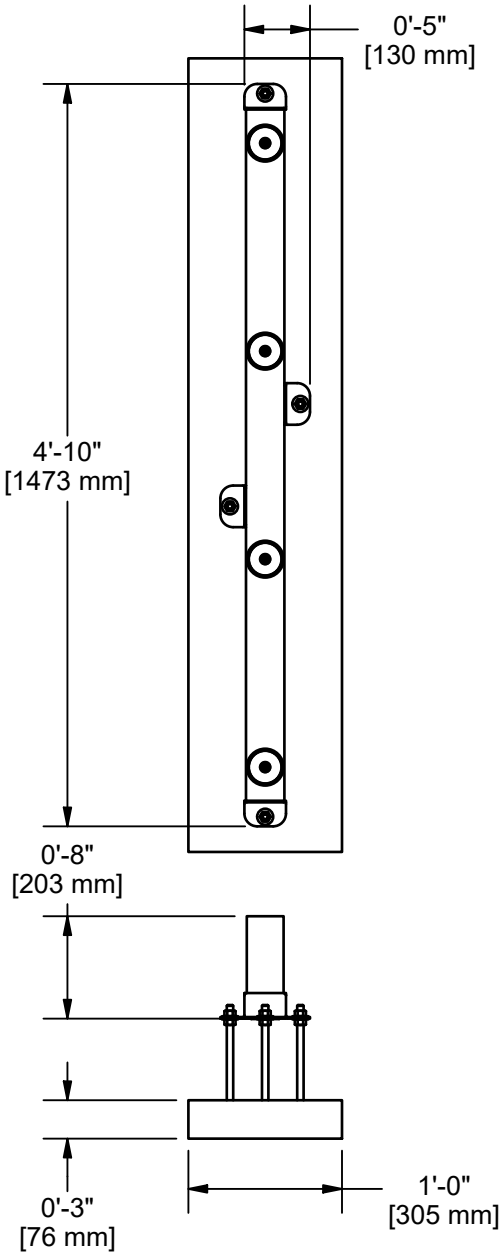
THIRD ANGLE PROJECTION	DWG ID:	REV:	SIZE:	SCALE:	SHEET: / OF:
	0010-9816	A	B	NTS	3 / 3

GS SPRAY TUNNEL 4 — 0010-7496

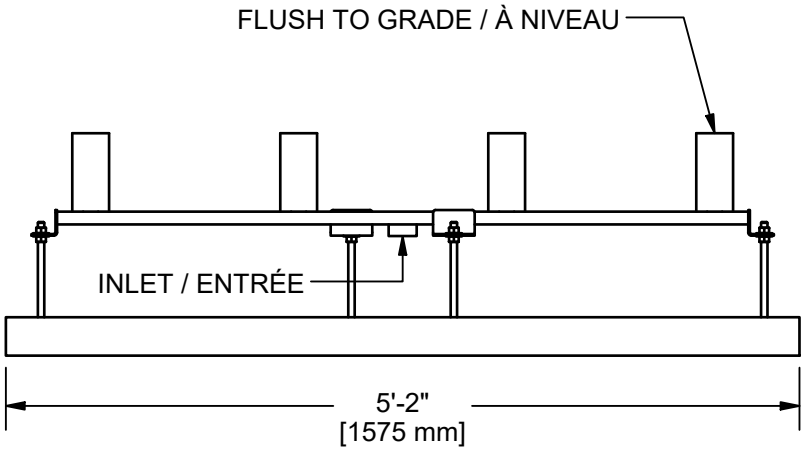
LIST OF MATERIALS / LISTE DE MATÉRIAUX (IF / SI APPLICABLE)	
BASE MATERIAL / MATÉRIEL	304 STAINLESS STEEL / ACIER INOXYDABLE
NOZZLES / BUSES	ACETAL / ACÉTAL

***IMPACT SPRAY AREA / ZONE D'ASPERSION* D'IMPACT**





NOTE: DATA SHOWN FOR SPRAY TUNNEL WITH WAVE NOZZLES. SEE MECHANICAL WORKBOOK FOR PROJECT SPECIFIC NOZZLE SELECTION.



DESCRIPTION	SIZE / TAILLE	QTY / QTÉ
INLET / ENTRÉE	1-1/2" F-NPT	1
ELECTIRCAL / ÉLECTRIQUE	-	-
DRAIN	-	-

FOOTING BY OTHER, REFER TO LOCAL CODE / BASE DE BÉTON PAR D'AUTRES, SE RÉFÉRER AU CODE LOCAL

RECOMMENDED SPRAY AREA / ZONE D'ASPERSION POTENTIELLE			FLOW RATE / DÉBIT D'EAU	
R (ft/mm)	**L** (ft/mm)	**W** (ft/mm)	GPM/LPM	PSI/kPa
-/-	6/1829	6/1829	15/57	3/21
NOZZLES / BUSES		4	MASS: 33.1 lbmass	

COMPONENT INCLUDES: (IF REQUIRED) / INCLUS AVEC LE JEU (SI REQUISE)
-SERVICE TOOLS / OUTILS
-SPRAY NOZZLES / BUSES DE PERFORMANCE

DIMENSIONAL ACCURACY / PRÉCISION DIMENSIONELLE +/- 1" [25mm]

INITIAL:

DRAWING ID: **0010-7496**

SHEET: 1
OF: 1

waterplay
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-712-3393 F: 250-861-4814
E: design@waterplay.com W: waterplay.com

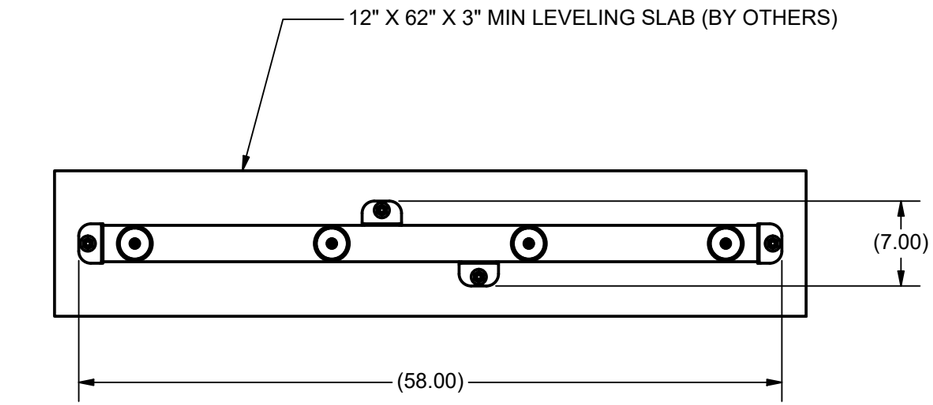
NOTE: REFER TO THE COMPONENT WRITTEN SPECIFICATION DOCUMENT FOR COMPLETE PRODUCT SPECIFICATIONS. WATERPLAY RESERVES THE RIGHT TO CHANGE THIS SPECIFICATION WITHOUT NOTICE.

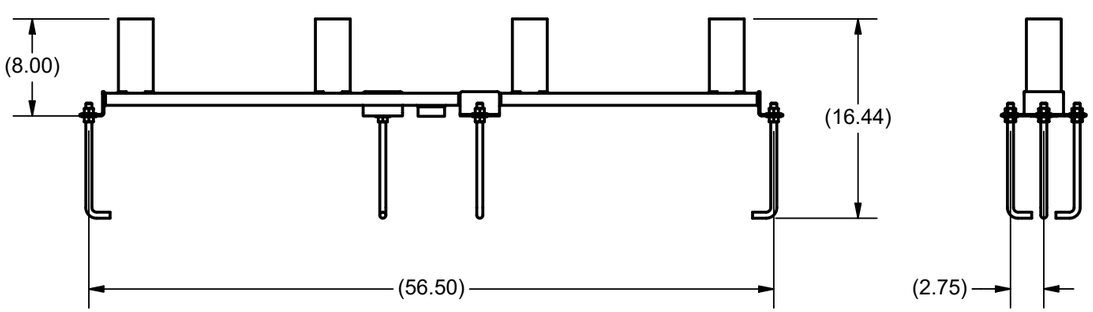
SE RÉFÉRER AU DOCUMENT DE SPÉCIFICATION ÉCRIT POUR LES DÉTAILS COMPLET DU PRODUIT. WATERPLAY A LE DROIT DE CHANGER CES DERNIERS SANS PRÉAVIS.

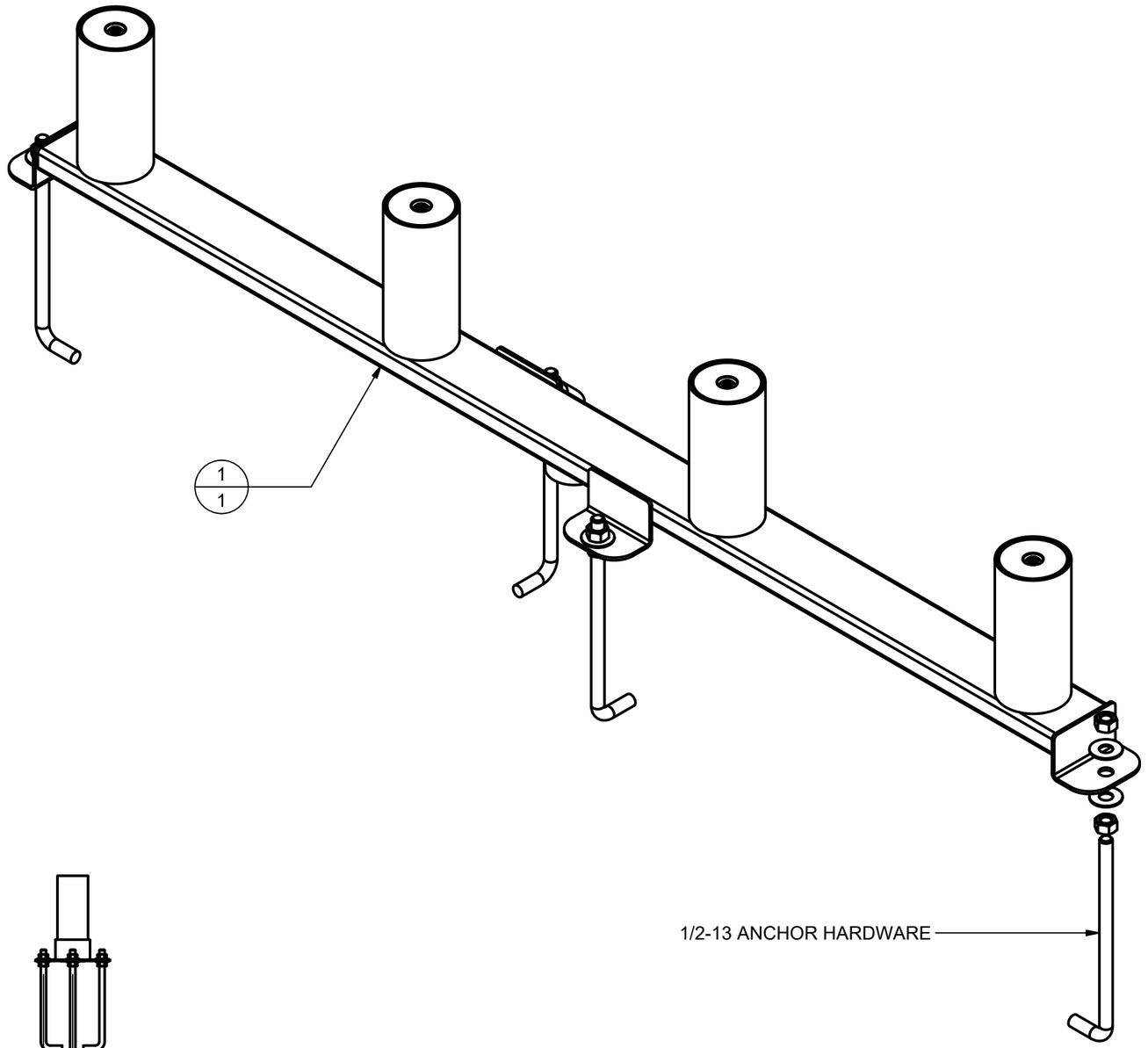
ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0010-5704	B	SPRAY TUNNEL 4 CANISTER KIT		1
2	XXXX-NOZZLE	A	GENERIC 2.5IN NOZZLE KIT		4

REV	DESCRIPTION	DATE
A	INITIAL RELEASE	6/12/2020
B	UPDATED INSTALL DETAILS	1/7/2021

NOTE:
- FOOTING FOR REFERENCE ONLY
- SEE MECHANICAL WORKBOOK FOR PROJECT SPECIFIC NOZZLE SELECTION







NOTES:
1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS

TORQUE VALUES UNLESS NOTED
1/4-20…63 in-lbs 1/2-13…37 ft-lbs
3/8-16….201 in-lbs

MASS: 33.1 lbmass

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

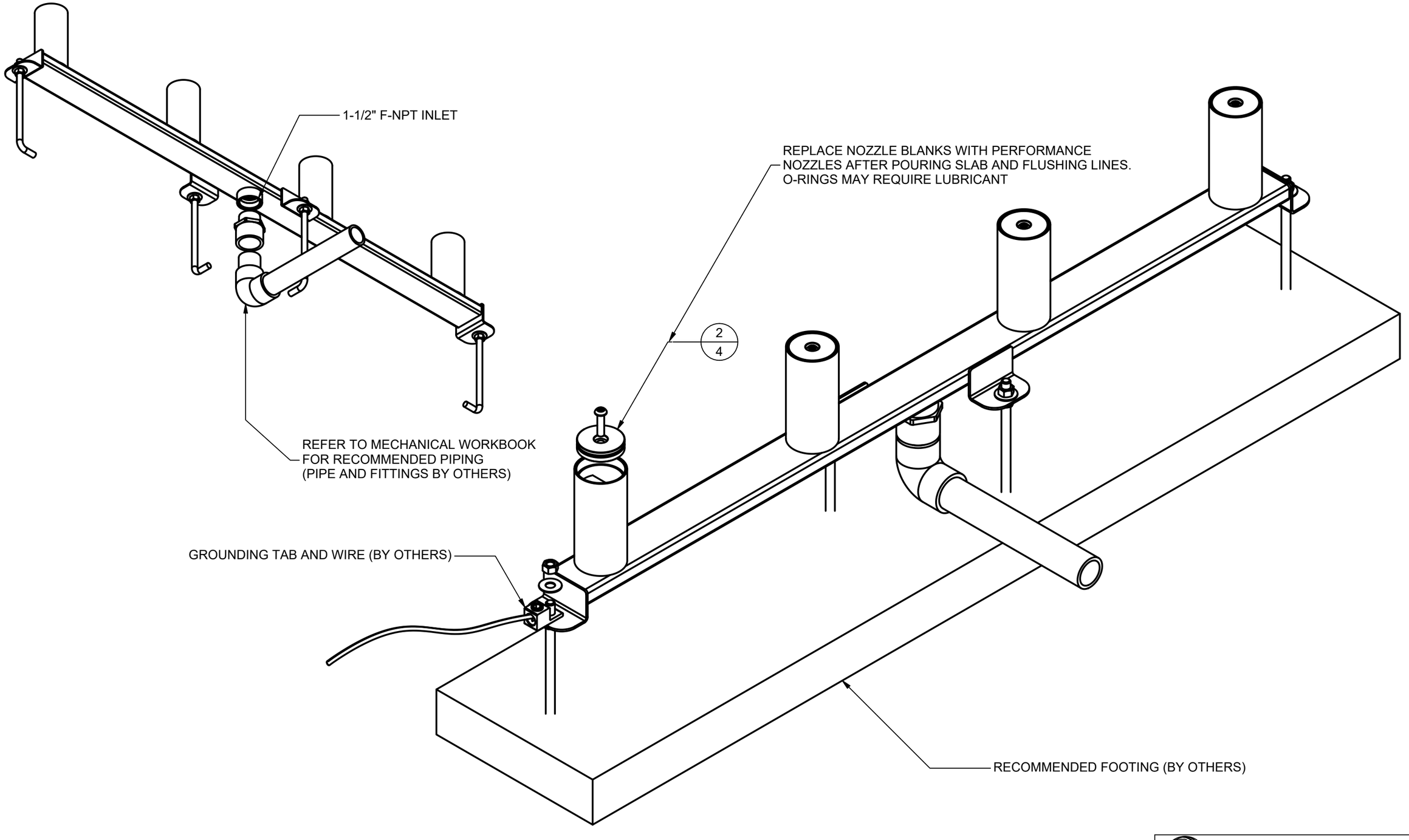
THIRD ANGLE PROJECTION

DESIGNED: KYLLUC
DRAWN: KYLLUC
CHECKED: JASMAY
DATE: 6/11/2020

GS SPRAY TUNNEL 4 INSTALL

GROUND SPRAYS

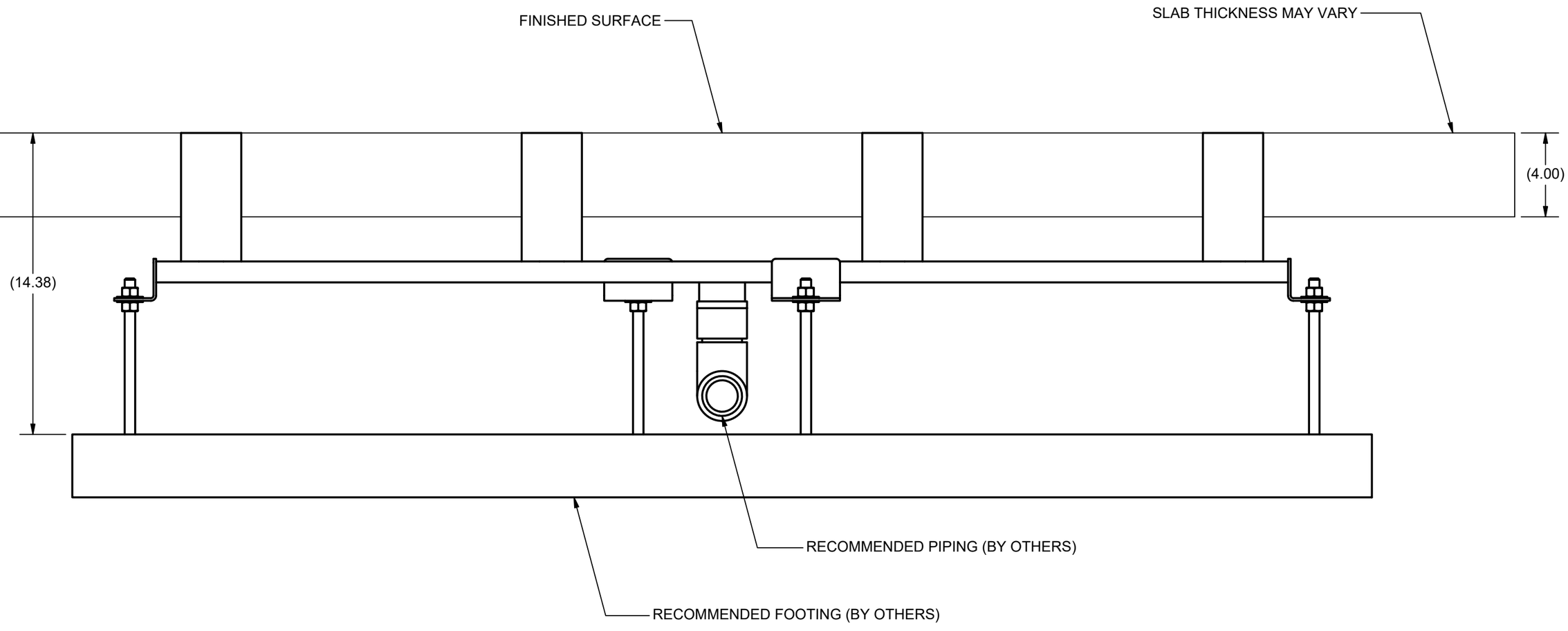
DWG ID: **0010-7496** | REV: **B** | SIZE: B | SCALE: NTS | SHEET: 1 | OF: 3



USE IN CONJUNCTION WITH SHEET NO. 1

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

THIRD ANGLE PROJECTION	DWG ID:	REV:	SIZE:	SCALE:	SHEET:
	0010-7496	B	B	NTS	2 OF: 3



USE IN CONJUNCTION WITH SHEET NO. 1

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

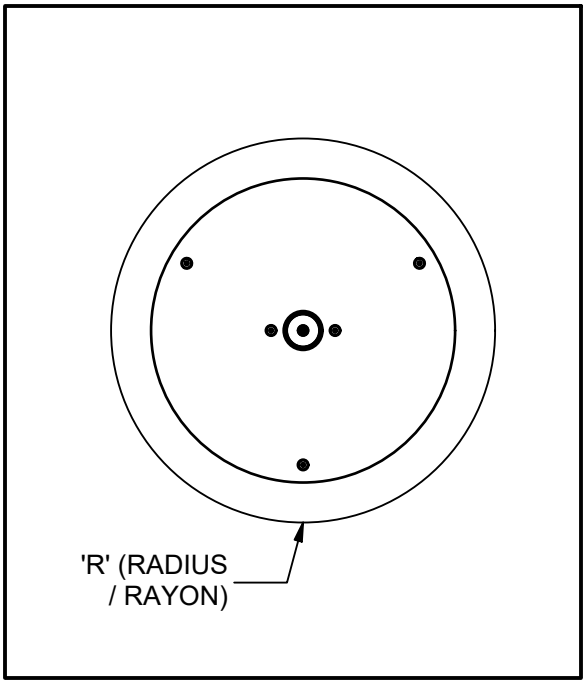
THIRD ANGLE PROJECTION	DWG ID:	REV:	SIZE:	SCALE:	SHEET:
	0010-7496	B	B	NTS	3 OF: 3

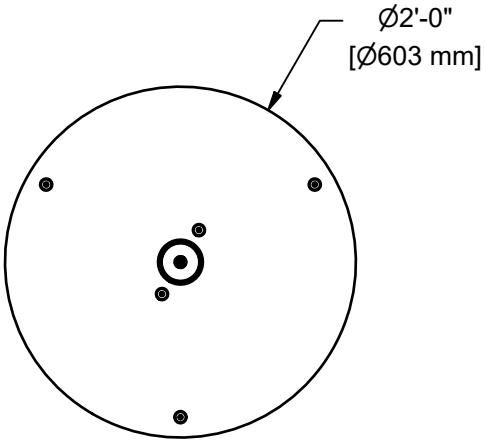
GS LILY PAD

0010-7491

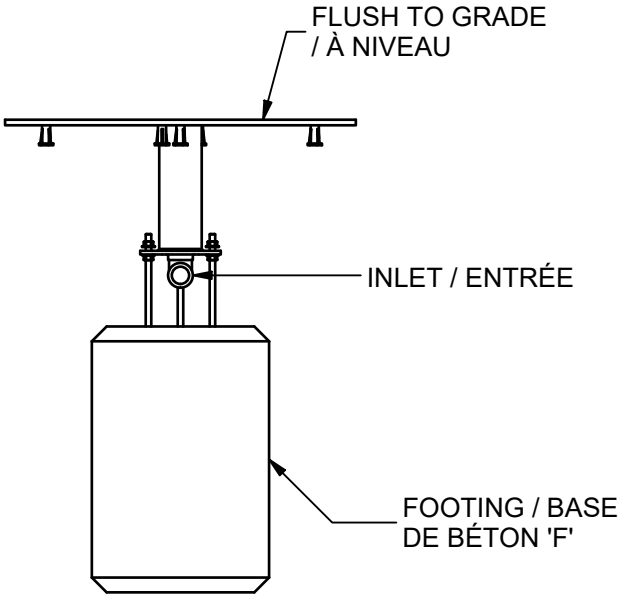
LIST OF MATERIALS / LISTE DE MATÉRIAUX (IF / SI APPLICABLE)	
BASE MATERIAL / MATÉRIEL	304 STAINLESS STEEL / ACIER INOXYDABLE
NOZZLES / BUSES	ACETAL / ACÉTAL
PANELS / PANNEAUX	FIBREGLASS / FIBRE DE VERRE

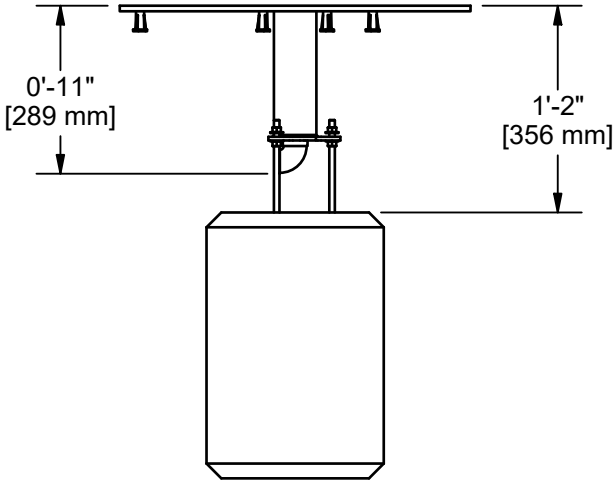
***IMPACT SPRAY AREA / ZONE D'ASPERSION* D'IMPACT**





NOTE: DATA SHOWN FOR LILY PAD WITH TULIP NOZZLE. SEE MECHANICAL WORKBOOK FOR PROJECT SPECIFIC NOZZLE SELECTION.





DESCRIPTION	SIZE / TAILLE	QTY / QTÉ
INLET / ENTRÉE	1" F-NPT	1
ELECTIRCAL / ÉLECTRIQUE	-	-
DRAIN		-

FOOTING BY OTHER, REFER TO LOCAL CODE / BASE DE BÉTON PAR D'AUTRES, SE RÉFÉRER AU CODE LOCAL

RECOMMENDED SPRAY AREA / ZONE D'ASPERSION POTENTIELLE			FLOW RATE / DÉBIT D'EAU	
R (ft/mm)	L (ft/mm)	W (ft/mm)	GPM/LPM	PSI/kPa
1.25/381	-/-	-/-	6/23	0.5/3.45
NOZZLES / BUSES		1	MASS: 22.2 lbmass	

COMPONENT INCLUDES: (IF REQUIRED) / INCLUS AVEC LE JEU (SI REQUISE)

-SERVICE TOOLS / OUTILS
-SPRAY NOZZLES / BUSES DE PERFORMANCE

DIMENSIONAL ACCURACY / PRÉCISION DIMENSIONELLE +/- 1" [25mm]

INITIAL:

DRAWING ID: **0010-7491**

SHEET: 1
OF: 1

waterplay
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-712-3393 F: 250-861-4814
E: design@waterplay.com W: waterplay.com

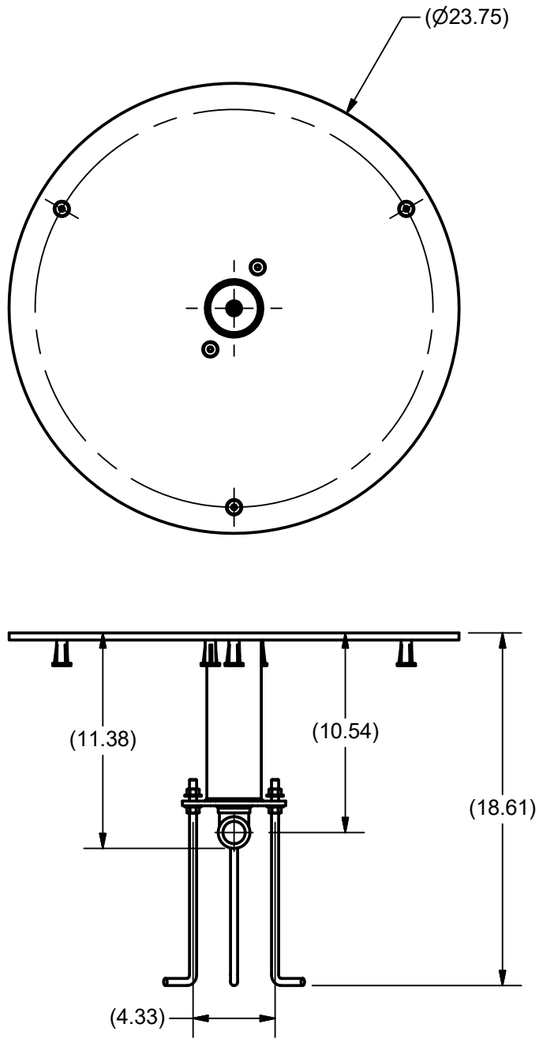
NOTE: REFER TO THE COMPONENT WRITTEN SPECIFICATION DOCUMENT FOR COMPLETE PRODUCT SPECIFICATIONS. WATERPLAY RESERVES THE RIGHT TO CHANGE THIS SPECIFICATION WITHOUT NOTICE.

SE RÉFÉRER AU DOCUMENT DE SPÉCIFICATION ÉCRIT POUR LES DÉTAILS COMPLET DU PRODUIT. WATERPLAY A LE DROIT DE CHANGER CES DERNIERS SANS PRÉAVIS.

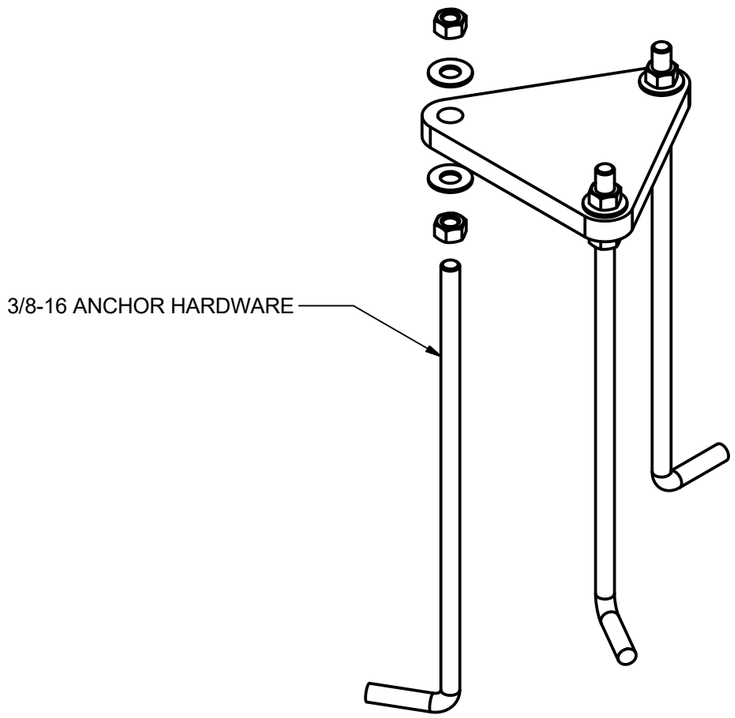
ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0010-5065	A	LILY PAD CANISTER KIT		1
2	0010-5066	A	LILY PAD GRAPHIC PLATE KIT		1
3	XXXX-NOZZLE	A	GENERIC 2.5IN NOZZLE KIT		1

REV	DESCRIPTION	DATE
A	INITIAL RELEASE	9/15/2020

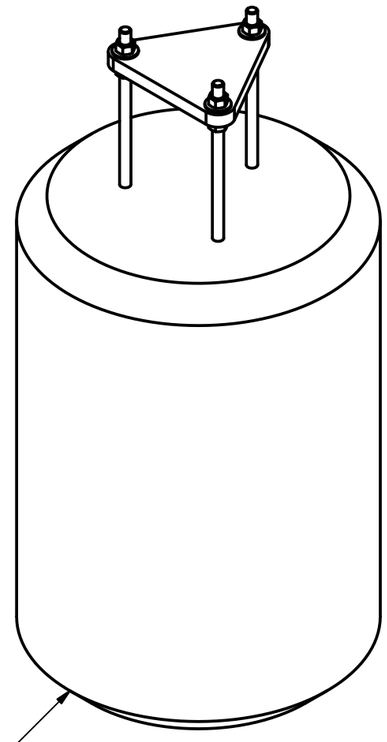
NOTE:
- FOOTING FOR REFERENCE ONLY
- SEE MECHANICAL WORKBOOK FOR PROJECT SPECIFIC NOZZLE SELECTION



ANCHOR HARDWARE



FOOTING



NOTES:
1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS

TORQUE VALUES UNLESS NOTED
1/4-20....63 in-lbs 1/2-13....37 ft-lbs
3/8-16....201 in-lbs

MASS: 22.2 lbmass

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

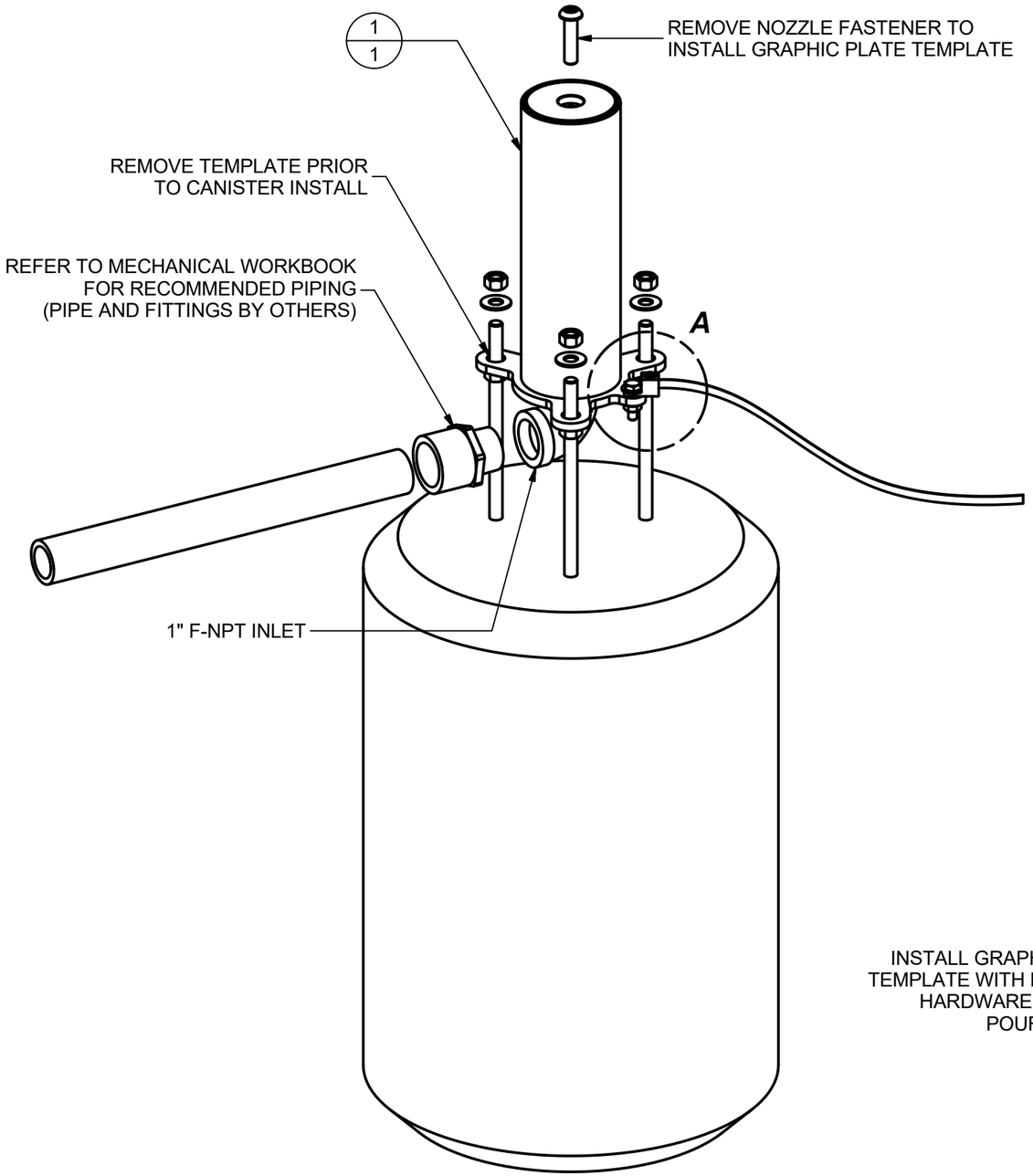
DESIGNED: JAMIRV
DRAWN: MICNEI
CHECKED: JASMAY
DATE: 6/25/2019

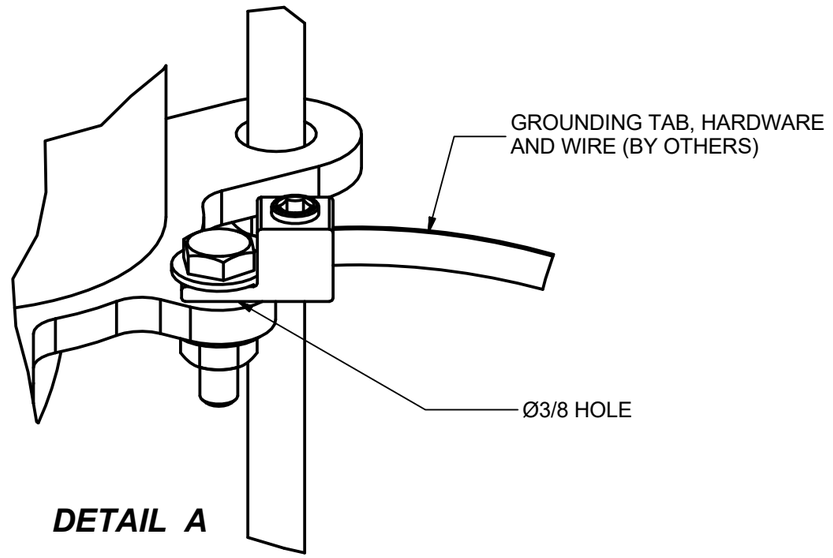
GS LILY PAD INSTALL

GROUND SPRAYS

DWG ID: **0010-7491** | REV: **A** | SIZE: B | SCALE: NTS | SHEET: 1 | OF: 3

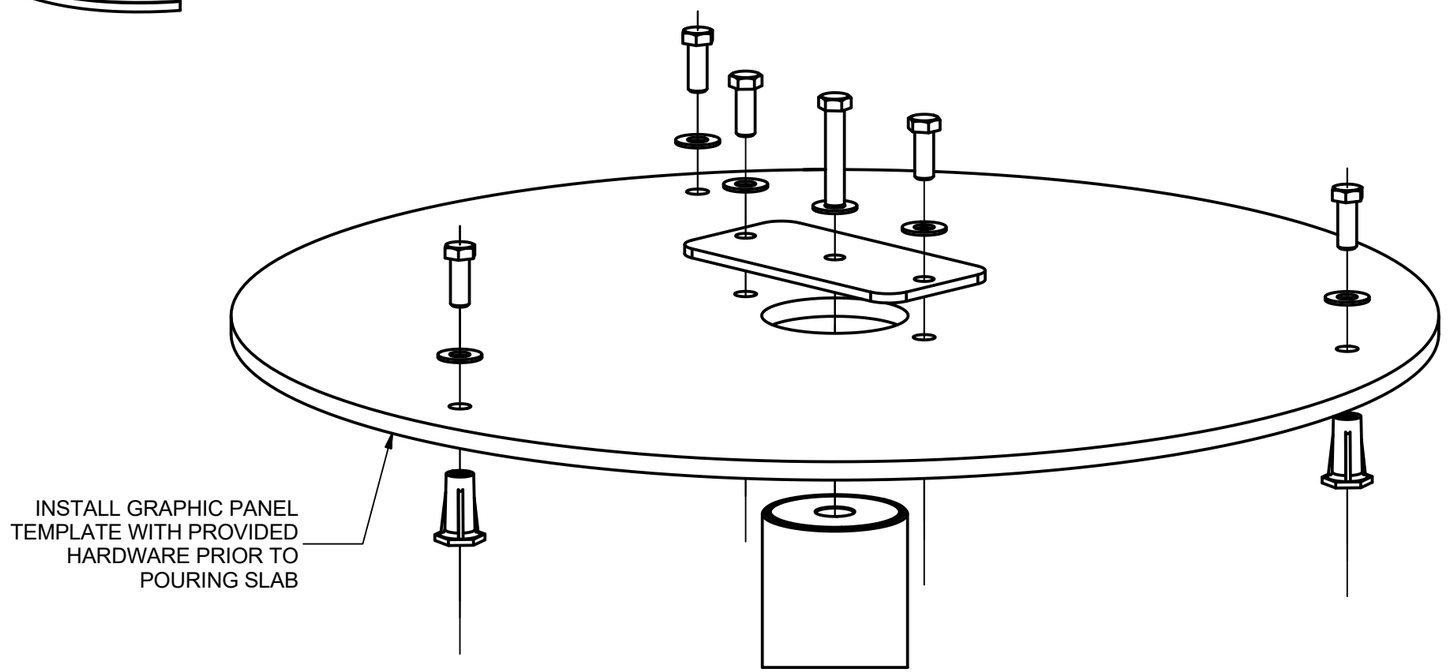
CANISTER INSTALL





DETAIL A

GRAPHIC PANEL TEMPLATE

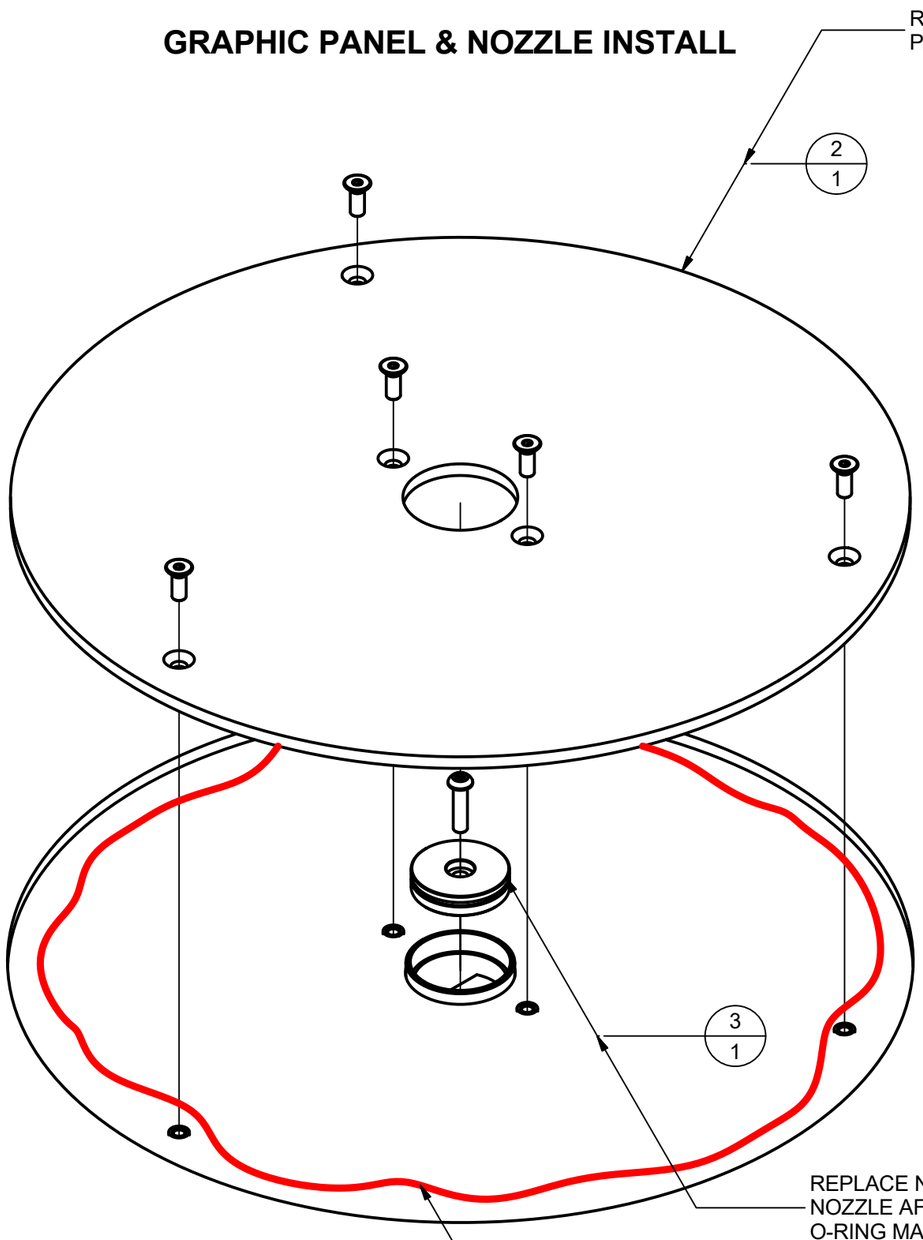


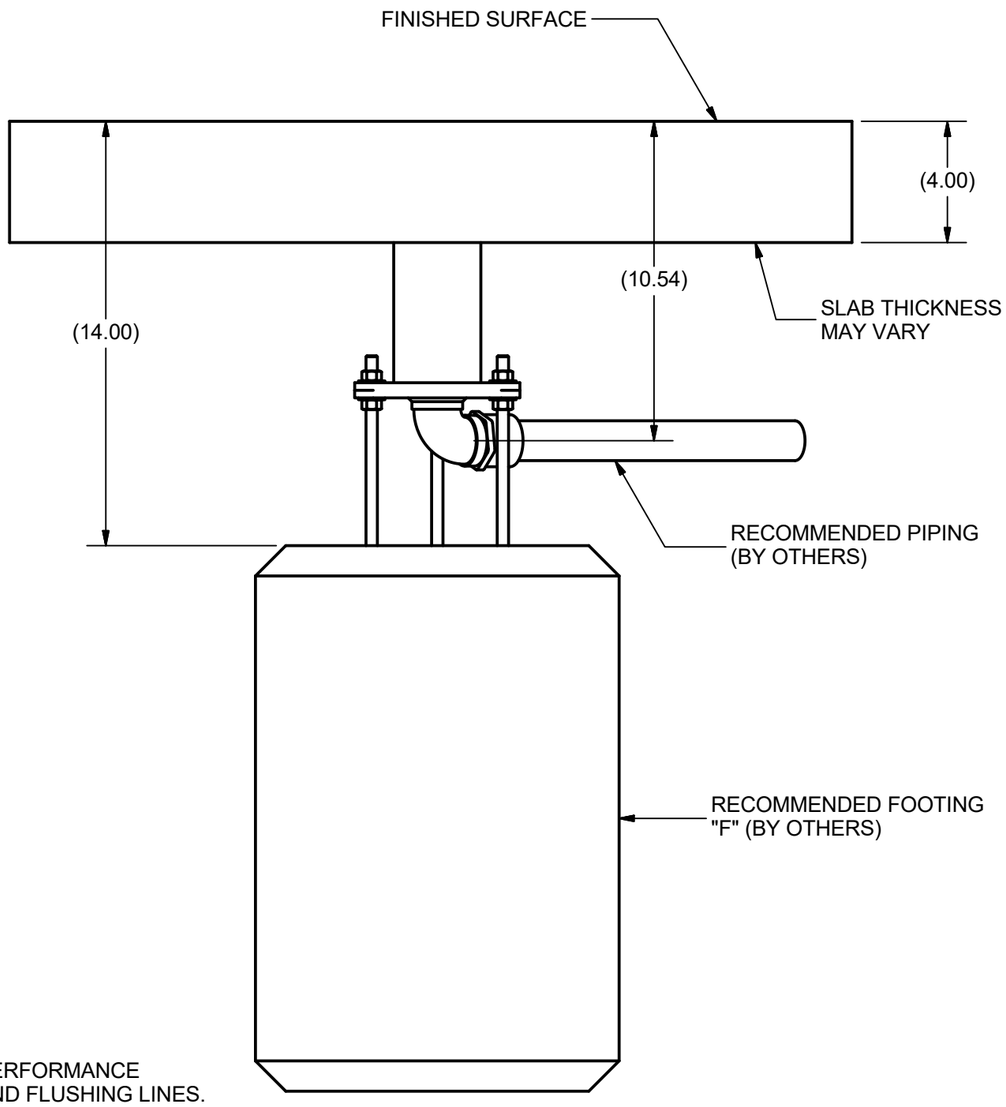
USE IN CONJUNCTION WITH SHEET NO. 1

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

THIRD ANGLE PROJECTION	DWG ID:	REV:	SIZE:	SCALE:	SHEET:
	0010-7491	A	B	NTS	2 OF: 3

GRAPHIC PANEL & NOZZLE INSTALL





USE IN CONJUNCTION WITH SHEET NO. 1

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

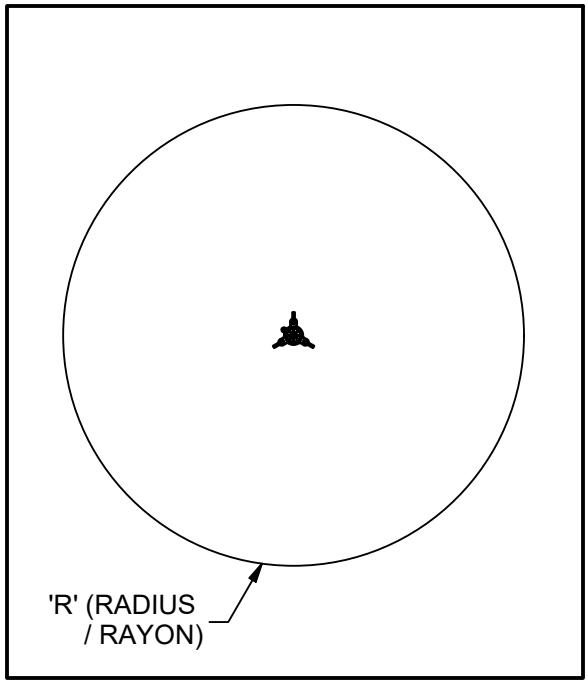
THIRD ANGLE PROJECTION	DWG ID:	REV:	SIZE:	SCALE:	SHEET: / OF:
	0010-7491	A	B	NTS	3 / 3

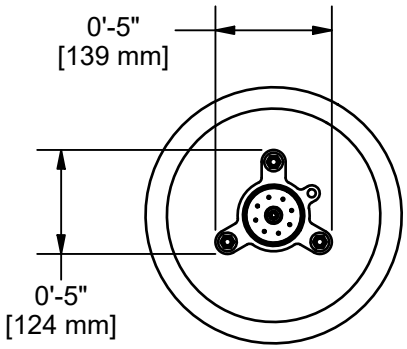
GS GEYSER

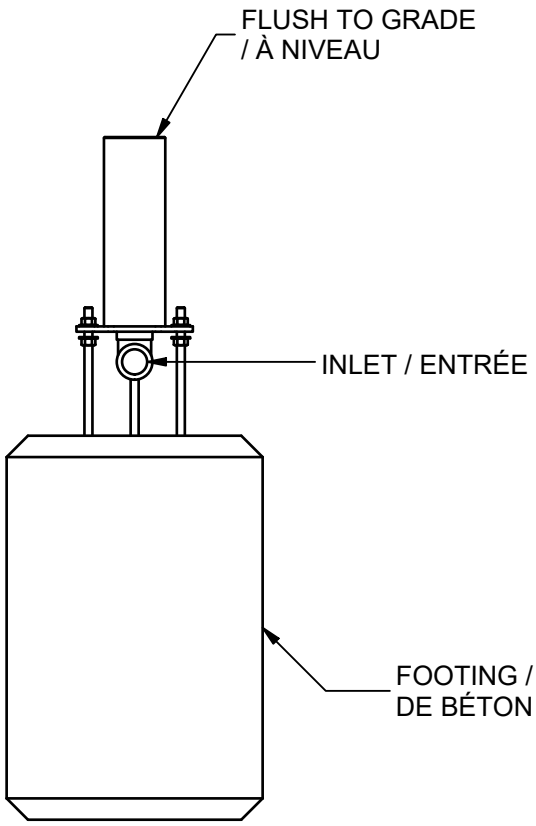
0010-7478

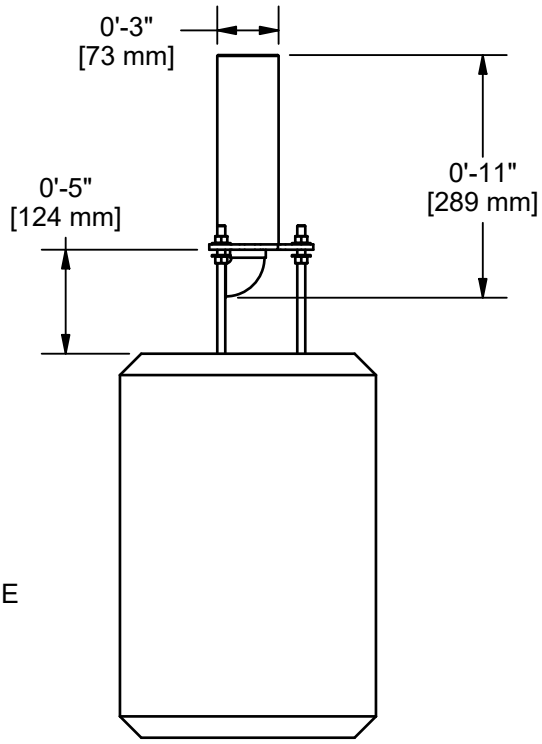
LIST OF MATERIALS / LISTE DE MATÉRIAUX (IF / SI APPLICABLE)	
BASE MATERIAL / MATÉRIEL	304 STAINLESS STEEL / ACIER INOXYDABLE
NOZZLES / BUSES	ACETAL / ACÉTAL

***IMPACT SPRAY AREA / ZONE D'ASPERSION* D'IMPACT**









DESCRIPTION / LA DESCRIPTION	SIZE / TAILLE	QTY / QTÉ
INLET / ENTRÉE	1" F-NPT	1
ELECTIRCAL / ÉLECTRIQUE	-	-
DRAIN	-	-

FOOTING BY OTHER, REFER TO LOCAL CODE / BASE DE BÉTON PAR D'AUTRES, SE RÉFÉRER AU CODE LOCAL

RECOMMENDED SPRAY AREA / ZONE D'ASPERSION POTENTIELLE			FLOW RATE / DÉBIT D'EAU	
R (ft/mm)	**L** (ft/mm)	**W** (ft/mm)	GPM/LPM	PSI/kPa
3.5/1067	-/-	-/-	6/23	5/34
NOZZLES / BUSES		1	MASS: 7.8 lbmass	

COMPONENT INCLUDES: (IF REQUIRED) / INCLUS AVEC LE JEU (SI REQUISE)

-SERVICE TOOLS / OUTILS
-SPRAY NOZZLES / BUSES DE PERFORMANCE

DIMENSIONAL ACCURACY / PRÉCISION DIMENSIONELLE +/- 1" [25mm]

INITIAL:

DRAWING ID: **0010-7478**

SHEET: 1
OF: 1

waterplay
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-712-3393 F: 250-861-4814
E: design@waterplay.com W: waterplay.com

NOTE: REFER TO THE COMPONENT WRITTEN SPECIFICATION DOCUMENT FOR COMPLETE PRODUCT SPECIFICATIONS. WATERPLAY RESERVES THE RIGHT TO CHANGE THIS SPECIFICATION WITHOUT NOTICE.

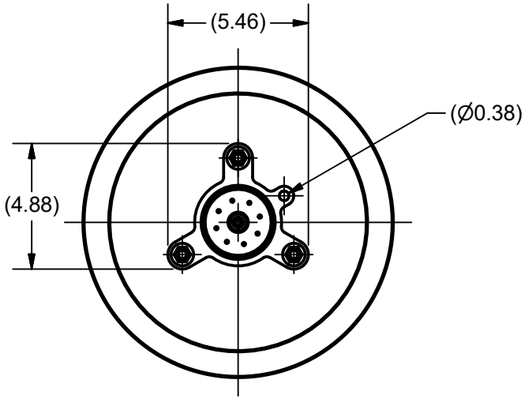
SE RÉFÉRER AU DOCUMENT DE SPÉCIFICATION ÉCRIT POUR LES DÉTAILS COMPLET DU PRODUIT. WATERPLAY A LE DROIT DE CHANGER CES DERNIERS SANS PRÉAVIS.

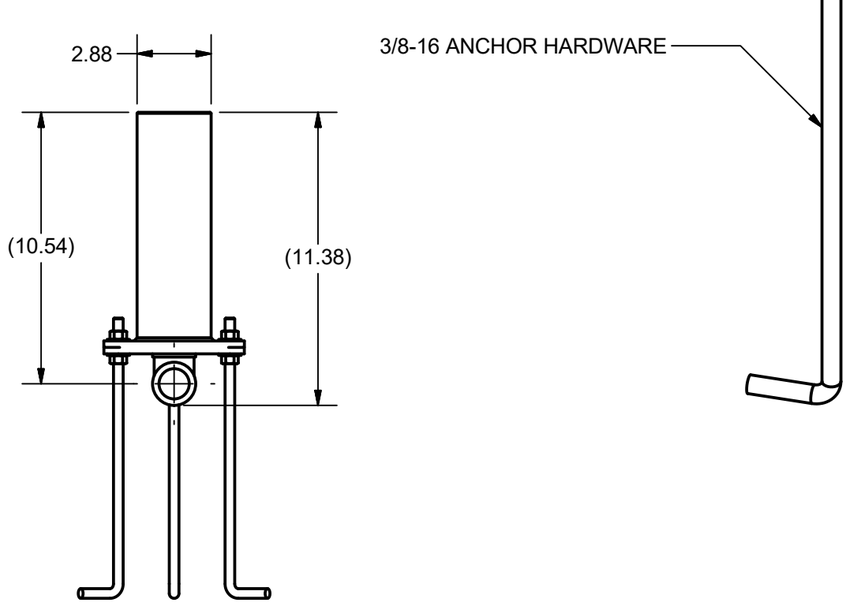
ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0010-4939	A	2.5IN GROUND SPRAY CANISTER KIT		1
2	0010-5049	A	2.5IN GEYSER NOZZLE KIT		1

REV	DESCRIPTION	DATE
A	INITIAL RELEASE	9/15/2020

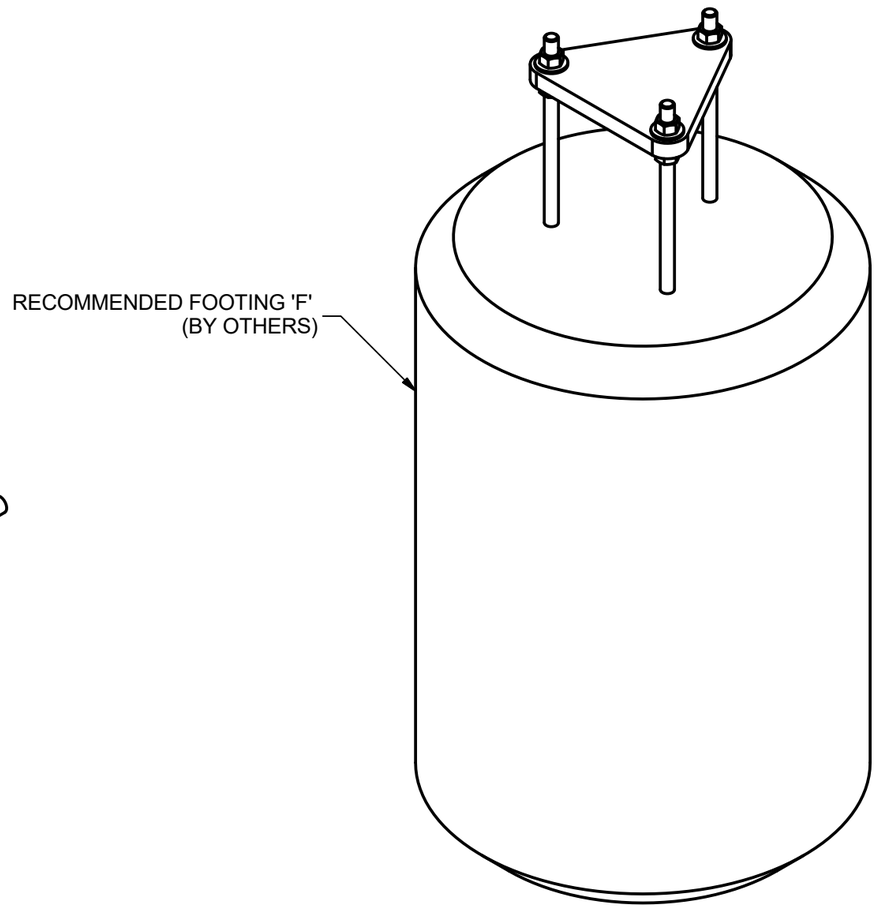
NOTE:
- FOOTING FOR REFERENCE ONLY

ANCHOR HARDWARE





FOOTING



NOTES:
1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS

TORQUE VALUES UNLESS NOTED
1/4-20....63 in-lbs 1/2-13....37 ft-lbs
3/8-16....201 in-lbs

MASS: 7.9 lbmass

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: KYLLUC
DRAWN: JASMAY
CHECKED: NICMAY
DATE: 10/23/2018

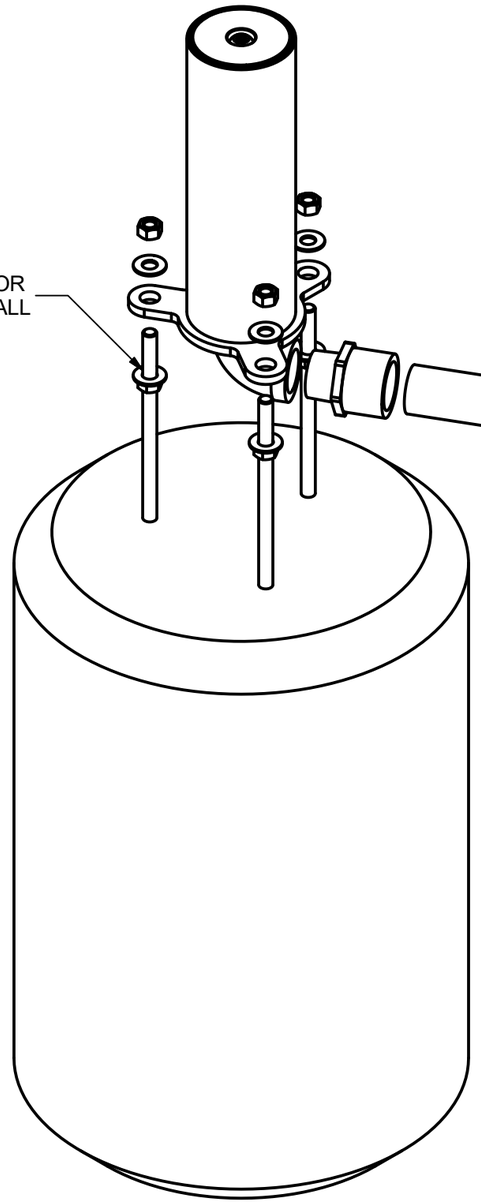
GS GEYSER

GROUND SPRAYS

DWG ID: **0010-7478** | REV: **A** | SIZE: B | SCALE: NTS | SHEET: 1 | OF: 3

CANISTER INSTALL

REMOVE TEMPLATE PRIOR
TO CANISTER INSTALL

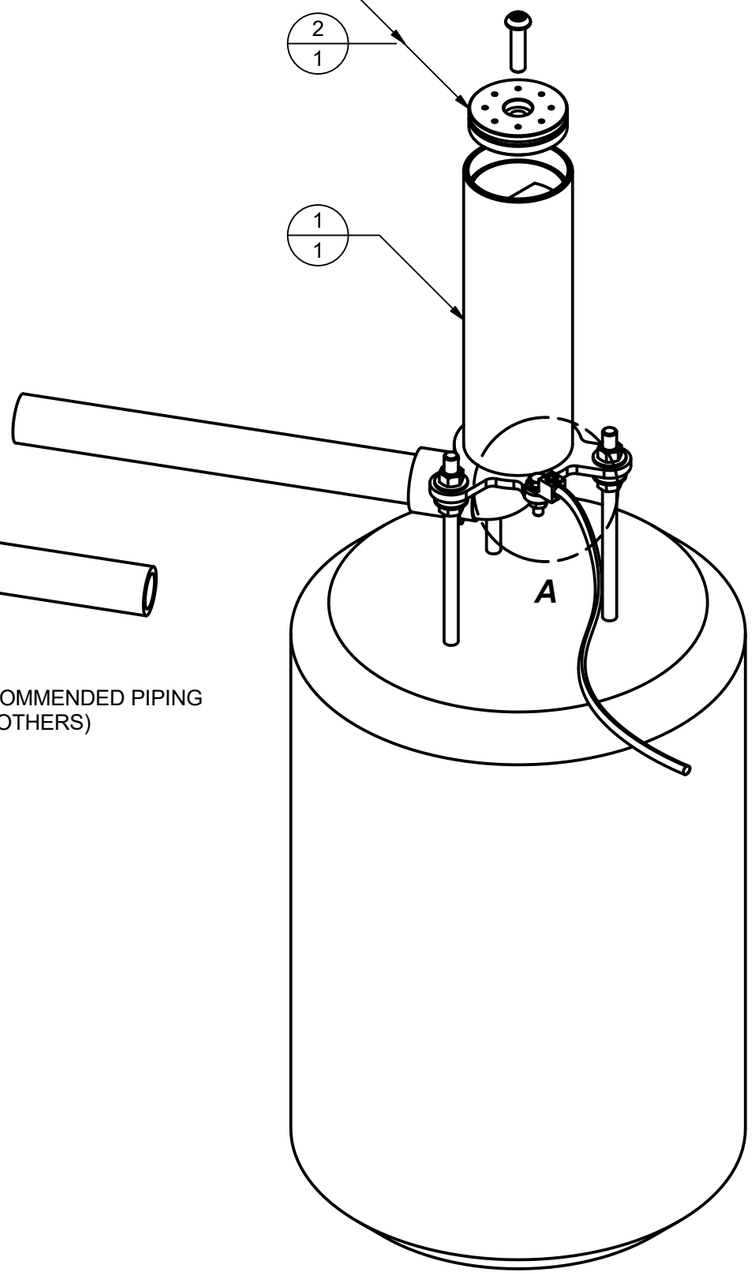


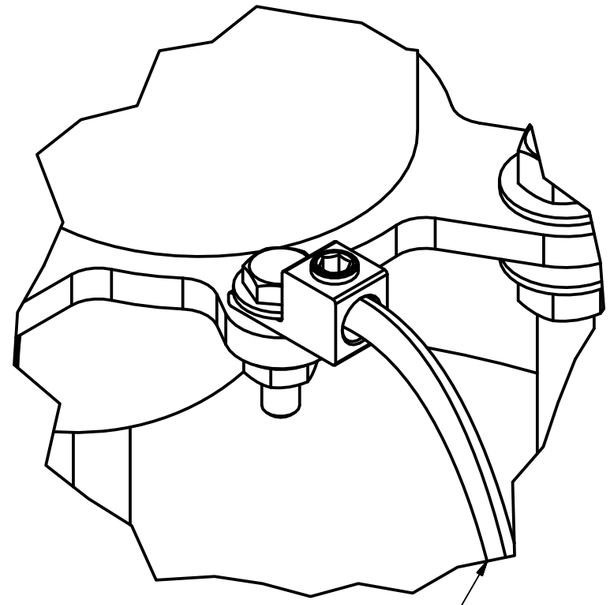
RECOMMENDED PIPING
(BY OTHERS)

REPLACE NOZZLE BLANK WITH PERFORMANCE
NOZZLE AFTER POURING SLAB AND FLUSHING LINES.
O-RING MAY REQUIRE LUBRICANT

2/1

1/1





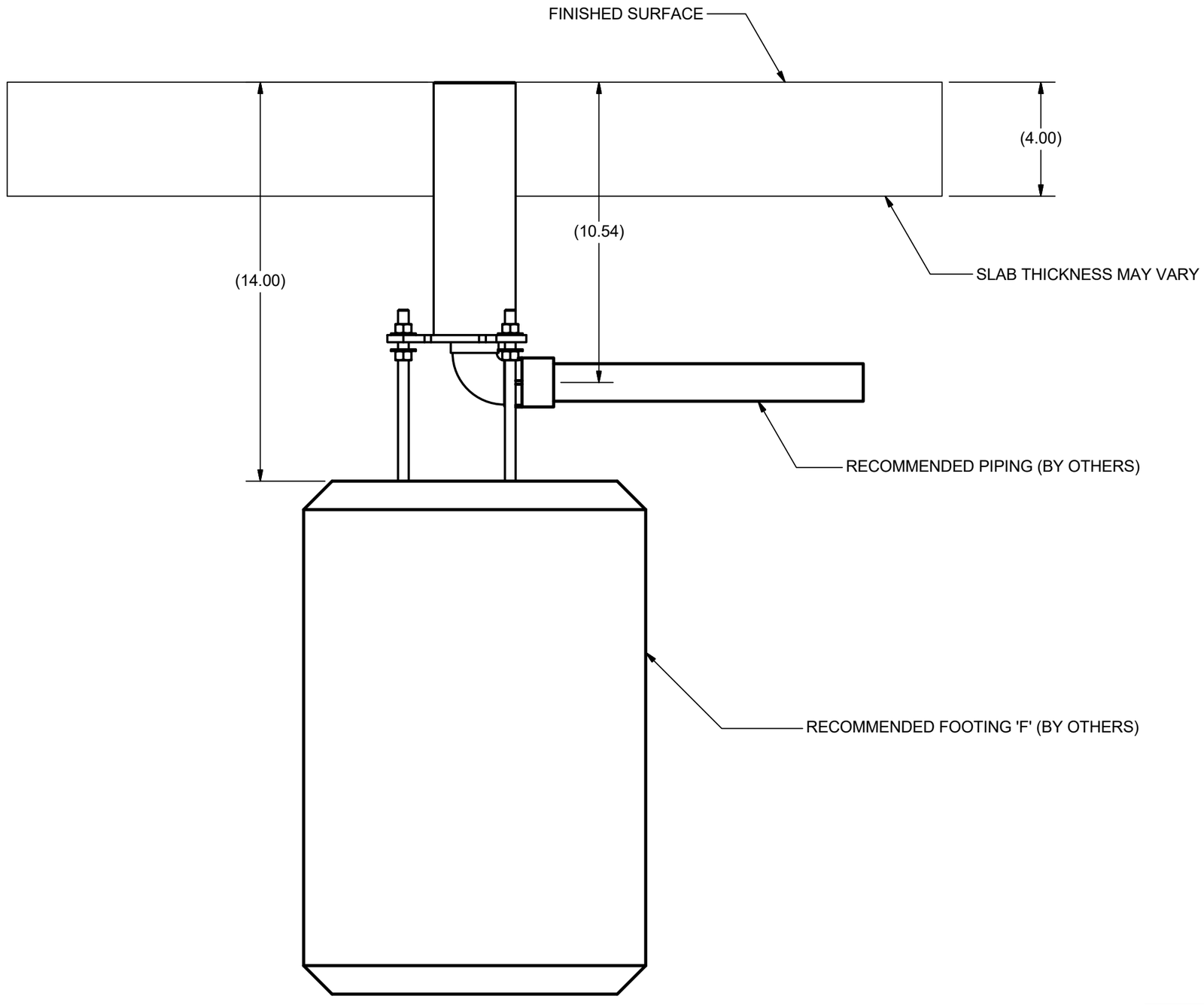
DETAIL A

GROUNDNIG TAB, HARDWARE
AND WIRE (BY OTHERS)

USE IN CONJUNCTION WITH SHEET NO. 1

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

THIRD ANGLE PROJECTION	DWG ID:	REV:	SIZE:	SCALE:	SHEET:
	0010-7478	**A**	B	NTS	2 OF: 3



USE IN CONJUNCTION WITH SHEET NO. 1

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

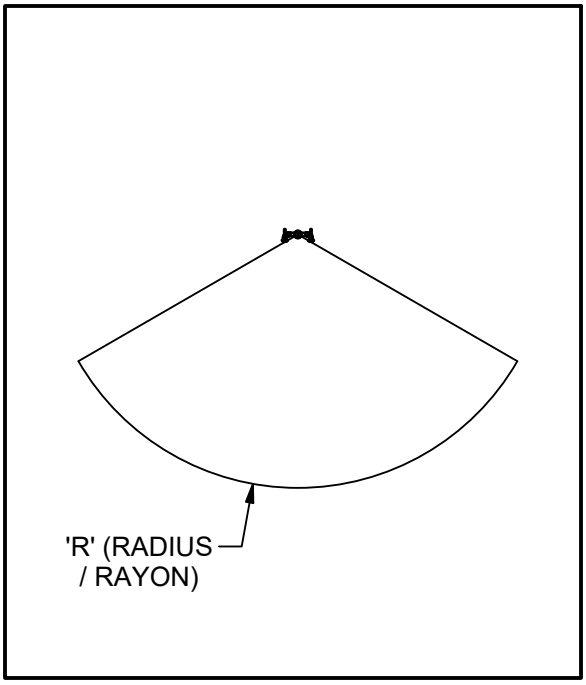
THIRD ANGLE PROJECTION	DWG ID:	REV:	SIZE:	SCALE:	SHEET:
	0010-7478	A	B	NTS	3 OF: 3

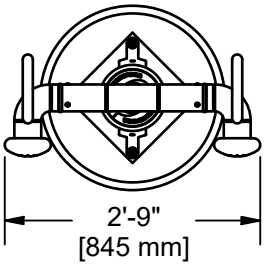
FS TEAM BLASTER

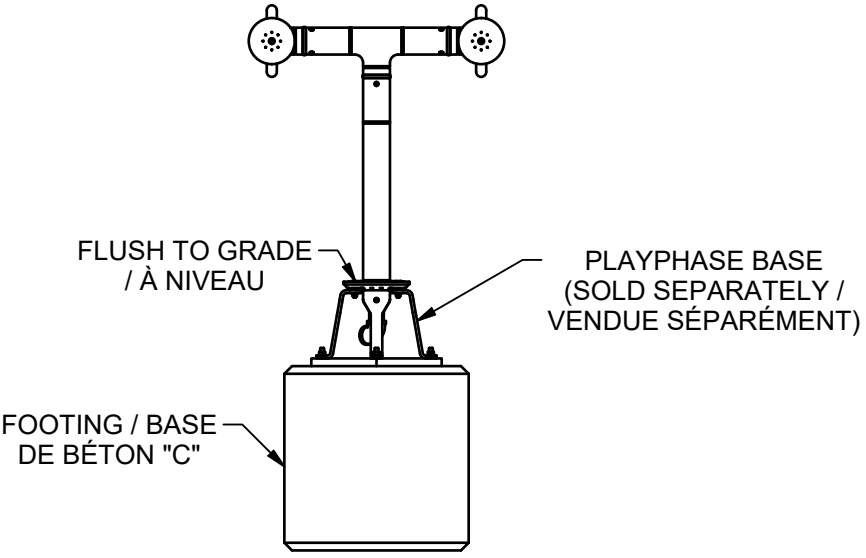
0010-0414

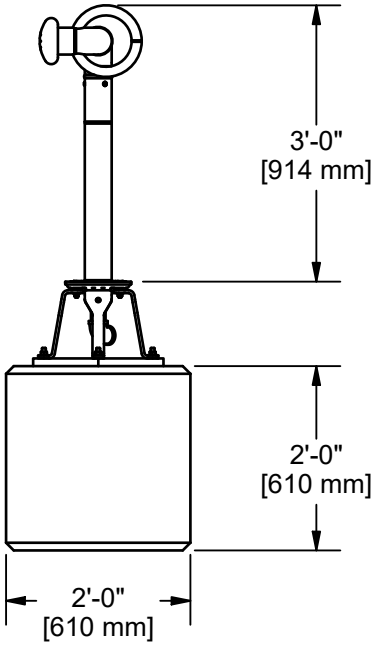
LIST OF MATERIALS / LISTE DE MATÉRIAUX (IF / SI APPLICABLE)	
BASE MATERIAL / MATÉRIEL	304 STAINLESS STEEL / ACIER INOXYDABLE
NOZZLES / BUSES	URETHANE / URÉTHANE

***IMPACT SPRAY AREA / ZONE D'ASPERSION* D'IMPACT**









FOOTING BY OTHER, REFER TO LOCAL CODE / BASE DE BÉTON PAR D'AUTRES, SE RÉFÉRER AU CODE LOCAL

RECOMMENDED SPRAY AREA / ZONE D'ASPERSION POTENTIELLE			FLOW RATE / DÉBIT D'EAU	
R (ft/mm)	**L** (ft/mm)	**W** (ft/mm)	GPM/LPM	PSI/kPa
22/6706	-/-	-/-	8/30	20/138
NOZZLES / BUSES		2	MASS: 49.5 lbmass	

COMPONENT INCLUDES: (IF REQUIRED) / INCLUS AVEC LE JEU (SI REQUISE)

-SERVICE TOOLS / OUTILS
-SPRAY NOZZLES / BUSES DE PERFORMANCE

DIMENSIONAL ACCURACY / PRÉCISION DIMENSIONELLE +/- 1" [25mm]

INITIAL:

DRAWING ID: **0010-0414**

SHEET: 1
OF: 1

waterplay
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-712-3393 F: 250-861-4814
E: design@waterplay.com W: waterplay.com

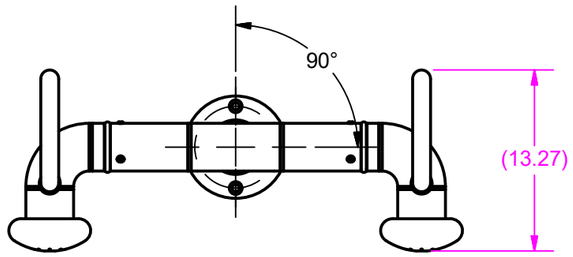
NOTE: REFER TO THE COMPONENT WRITTEN SPECIFICATION DOCUMENT FOR COMPLETE PRODUCT SPECIFICATIONS. WATERPLAY RESERVES THE RIGHT TO CHANGE THIS SPECIFICATION WITHOUT NOTICE.

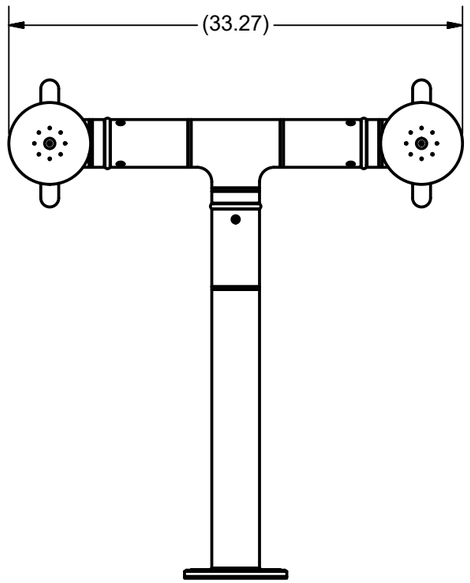
REFEREZ VOUS AU DOCUMENT DE SPÉCIFICATION ÉCRIT POUR LES DÉTAILS COMPLET DU PRODUIT. WATERPLAY A LE DROIT DE CHANGER CES DERNIERS SANS PRÉAVIS.

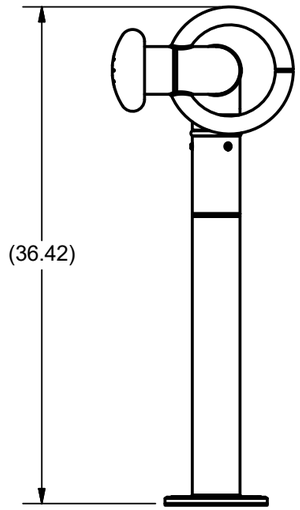
ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0010-0414-A	B	TEAM BLASTER ASSY		1
2	0010-1949	B	PLAYPHASE FLANGE COVER	RUBBER	1
3	FTC-08001	B	GASKET, FLANGE, 3" PIPE	RUBBER	1

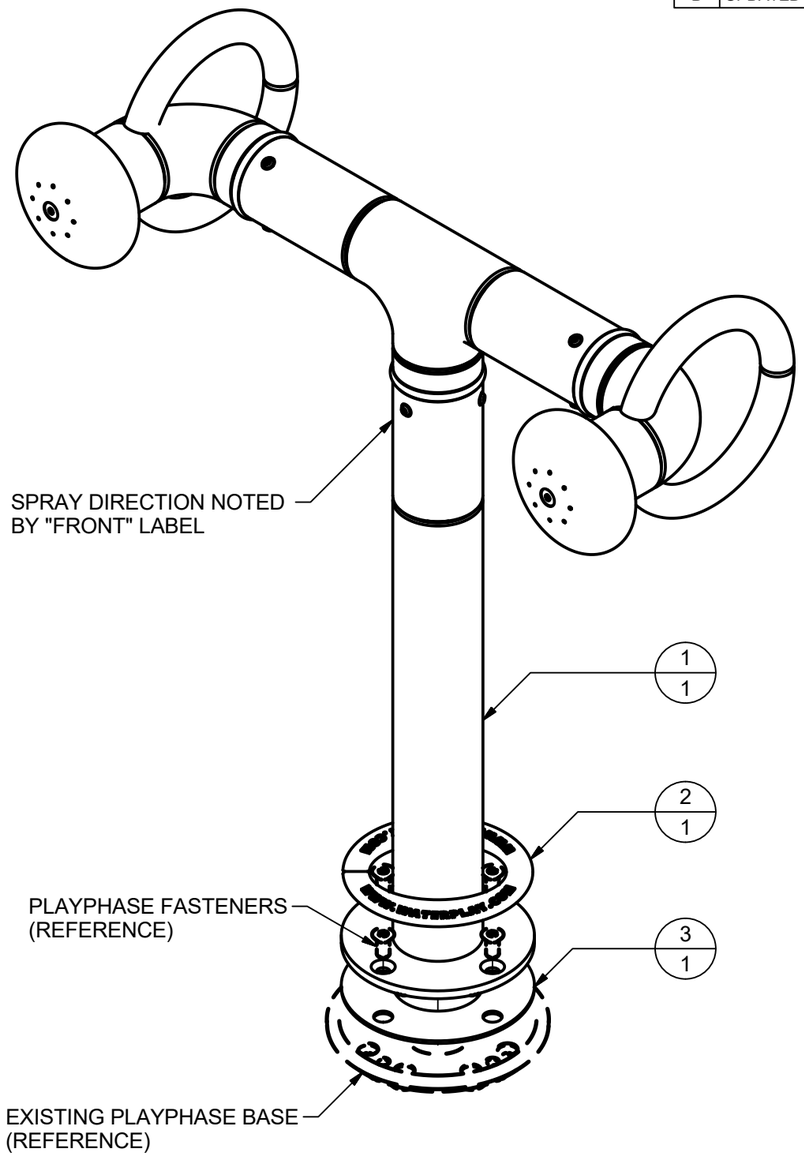
REV	DESCRIPTION	DATE
A	INITIAL RELEASE	2/22/2016
B	UPDATED INSTALL DETAILS	8/26/2019

PLAYPHASE ORIENTATION









NOTES:
1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS

TORQUE VALUES UNLESS NOTED
1/4-20....63 in-lbs 1/2-13....37 ft-lbs
3/8-16....201 in-lbs

MASS: 49.8 lbmass

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: MICNEI
DRAWN: MICNEI
CHECKED: JASMAY
DATE: 5/31/2019

TEAM BLASTER INSTALL

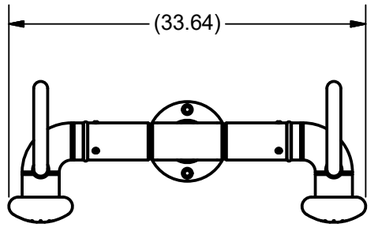
TEAM BLASTER

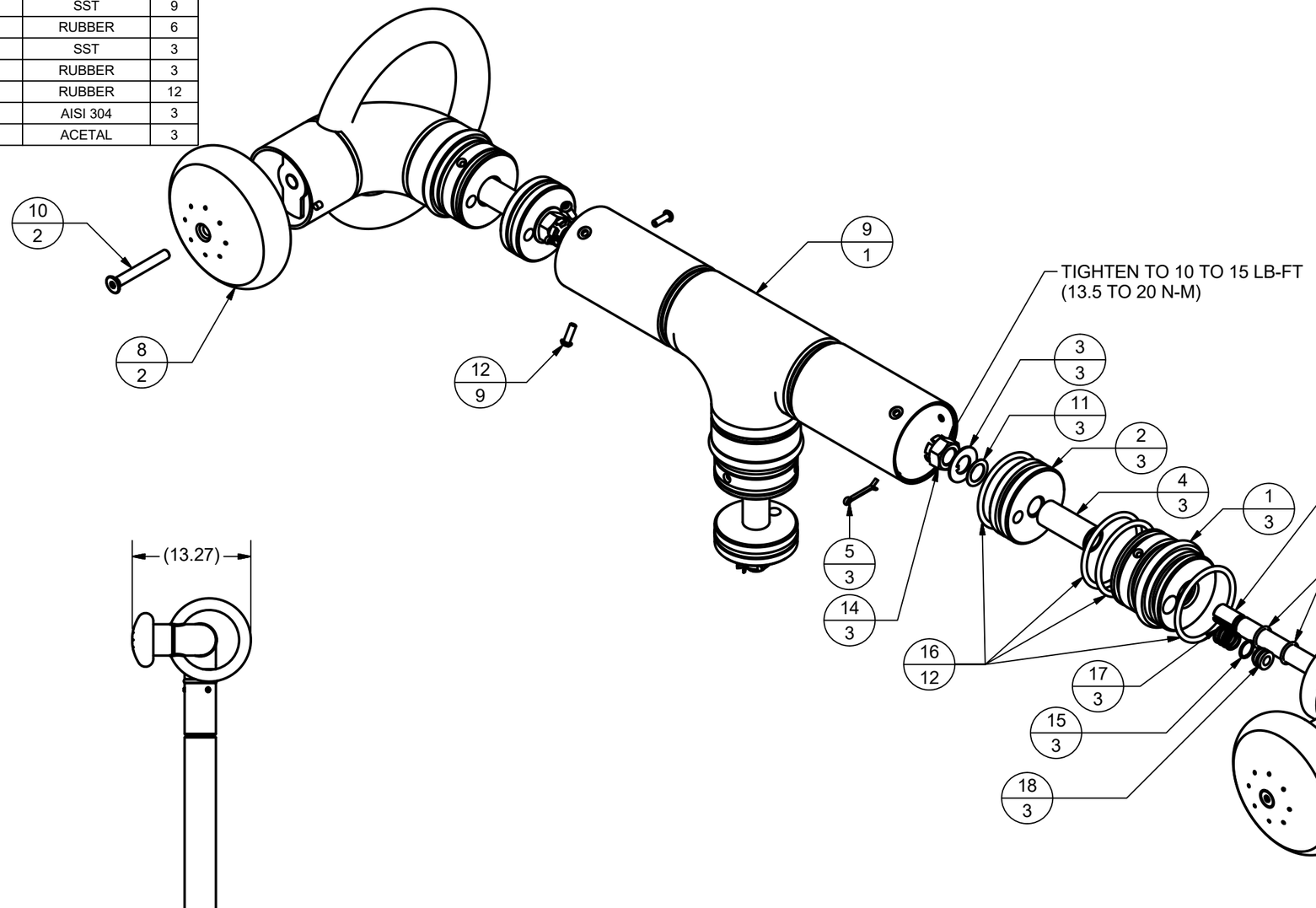
DWG ID: **0010-0414** | REV: **B** | SIZE: B | SCALE: NTS | SHEET: 1 | OF: 1

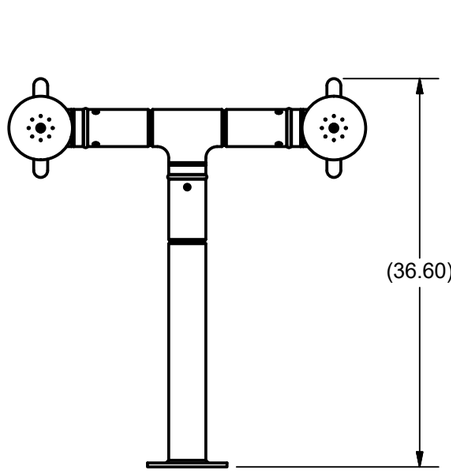
ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0010-0267	D	UPPER REDUCER	ACETAL	3
2	0010-0268	B	LOWER REDUCER	ACETAL	3
3	0010-0274	A	INDEXING WASHER	SST	3
4	0010-0275	A	REDUCER SPACER	PVC	3
5	0010-0292		COTTER PIN, 5/32 X 1.50 LG	AISI 304	3
6	0010-0404	B	CANNON COLUMN WELD ASSY	WELDED SST	1
7	0010-0406	B	BLASTER HEAD WELD ASSY	WELDED SST	2
8	0010-0413	C	BOBBLE NOZZLE	URETHANE	2
9	0010-0415	B	TEE WELD ASSY	WELDED SST	1
10	0010-0458		BOLT, FLAT HD SOC, 3/8-16 X 3.00 LG, PT	SST	2
11	0010-0469		WASHER, SHIM, 3/4 (1.13 OD)	PVC	3
12	0010-0917		BOLT, BUTTON HD CAP, 1/4-20 X 0.75 LG, FT	SST	9
13	0010-5772		O-RING -116, 0.737 ID X 0.103 CS	RUBBER	6
14	NUT-02100		NUT, CASTLE, 3/4-16	SST	3
15	ORG-08016		O-RING -016, 0.614 ID X 0.070 CS	RUBBER	3
16	ORG-08336		O-RING -336, 2.850 ID X 0.210 CS	RUBBER	12
17	PTM-02700	A	SPRING .72 OD X .75 LG, .063D WIRE	AISI 304	3
18	PTM-08112	B	HUB SEALING PUCK	ACETAL	3

REV	DESCRIPTION	DATE
A	UPDATED INSTALL DETAILS	8/26/2019
B	CHANGED HUB BOLTS TO BUTTON HEAD	12/3/2019

NOTES:
- ROTATIONAL HUB ASSEMBLY IS TYPICAL FOR ALL THREE HUBS
- ENSURE MACHINED PARTS ARE CLEAR OF PAINT AND CLEAN
- LUBRICATE O-RINGS WITH WATERPROOF LUBRICANT
- DO NOT OVERTIGHTEN THE CASTLE NUT AS IT AFFECTS THE ROTATIONAL HUB SPINNING RESISTANCE. TOO LITTLE RESISTANCE CAN LEAD TO PART DAMAGE OR CHILD INJURY







NOTES:
1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS

TORQUE VALUES UNLESS NOTED
1/4-20....63 in-lbs 1/2-13....37 ft-lbs
3/8-16....201 in-lbs

MASS: 49.7 lbmass

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

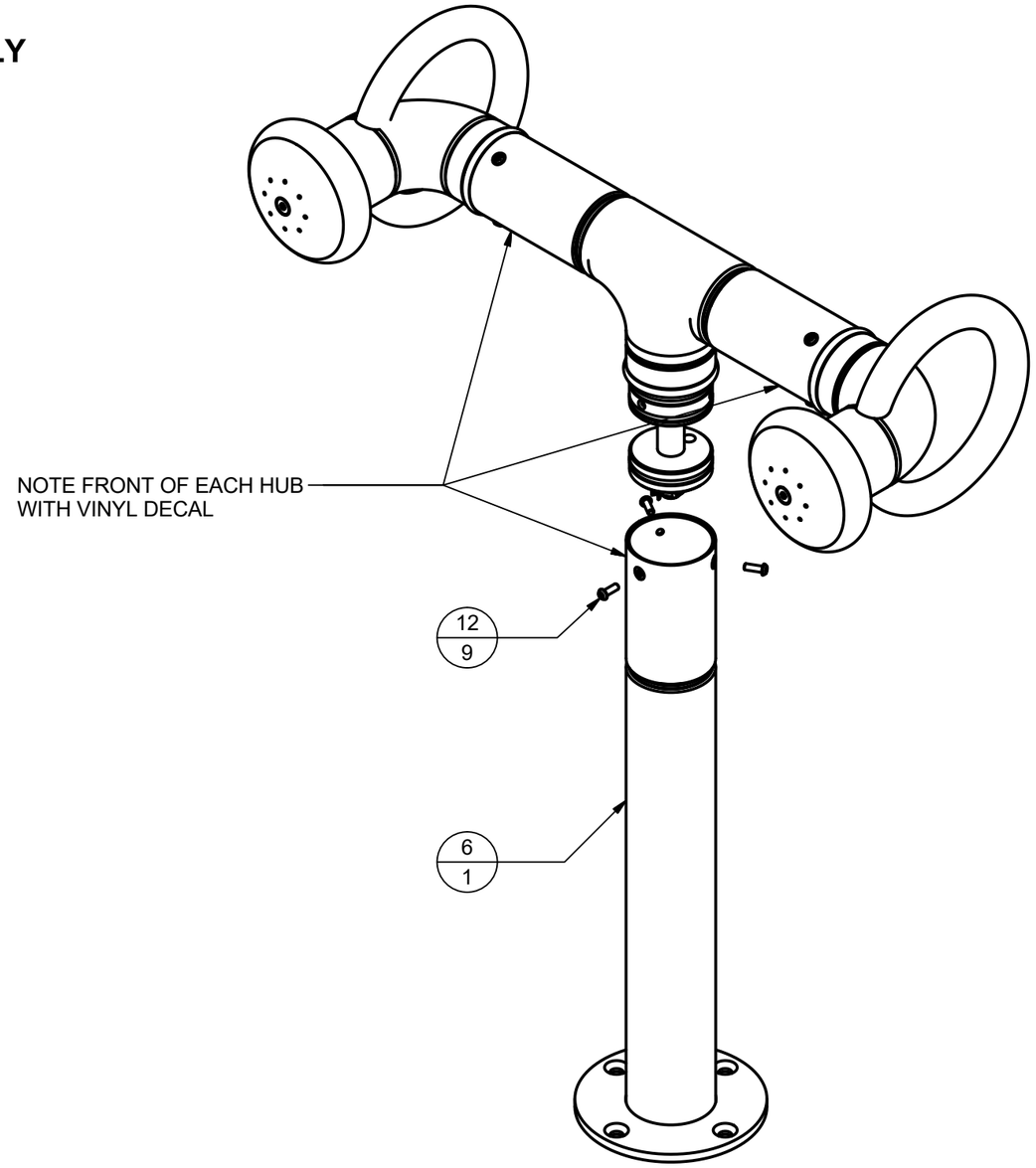
DESIGNED: NICMAY
DRAWN: NICMAY
CHECKED: JASMAY
DATE: 2/22/2016

TEAM BLASTER ASSY

TEAM BLASTER

DWG ID: **0010-0414-A** | REV: **B** | SIZE: B | SCALE: NTS | SHEET: 1 | OF: 2

CANNON BASE ASSEMBLY



USE IN CONJUNCTION WITH SHEET NO. 1

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

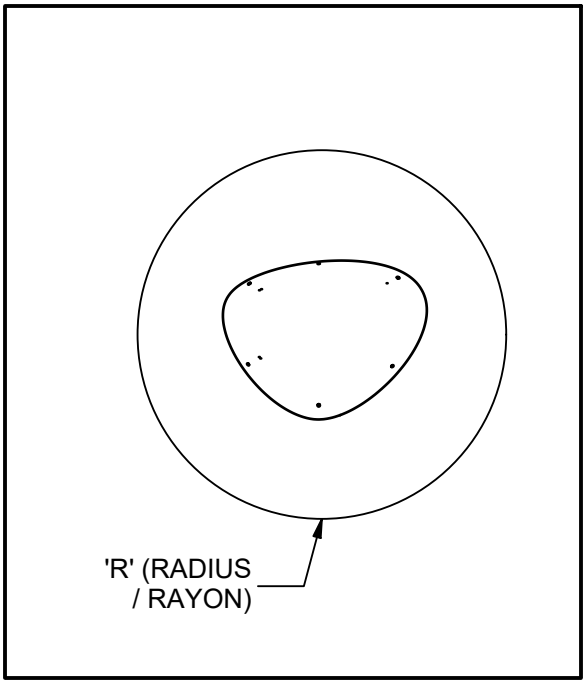
THIRD ANGLE PROJECTION	DWG ID:	REV:	SIZE:	SCALE:	SHEET: / OF:
	0010-0414-A	B	B	NTS	2 / 2

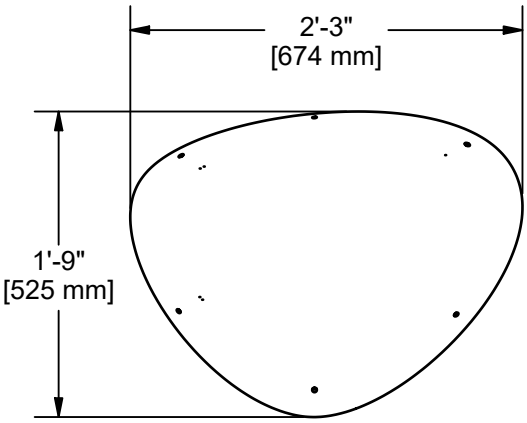
FS SURF STONE 3

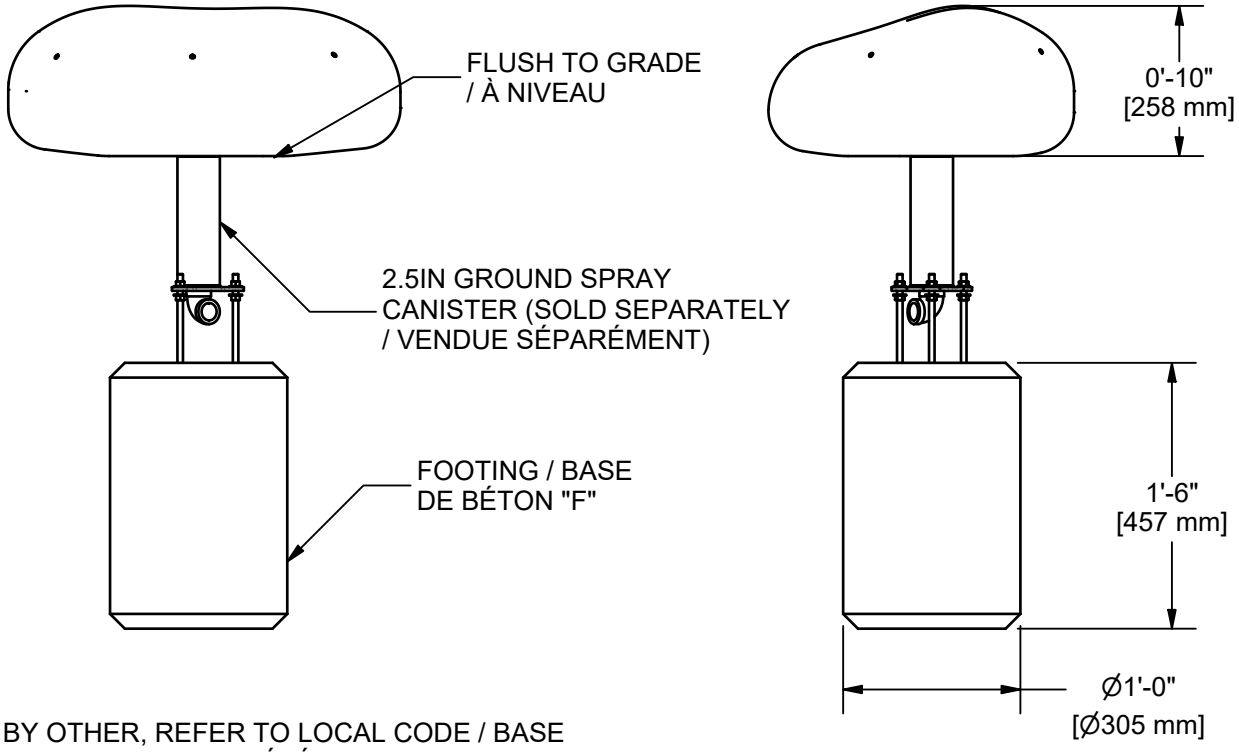
0010-7473

LIST OF MATERIALS / LISTE DE MATÉRIAUX (IF / SI APPLICABLE)	
BASE MATERIAL / MATÉRIEL	304 STAINLESS STEEL / ACIER INOXYDABLE
NOZZLES / BUSES	ACETAL / ACÉTAL
OTHER / AUTRE	CONCRETE / BÉTON

***IMPACT SPRAY AREA / ZONE D'ASPERSION* D'IMPACT**







FOOTING BY OTHER, REFER TO LOCAL CODE / BASE DE BÉTON PAR D'AUTRES, SE RÉFÉRER AU CODE LOCAL

RECOMMENDED SPRAY AREA / ZONE D'ASPERSION POTENTIELLE			FLOW RATE / DÉBIT D'EAU	
R (ft/mm)	**L** (ft/mm)	**W** (ft/mm)	GPM/LPM	PSI/kPa
2/610	-/-	-/-	5/19	5/34
NOZZLES / BUSES		1	MASS: 91.4 lbmass	

COMPONENT INCLUDES: (IF REQUIRED) / INCLUS AVEC LE JEU (SI REQUISE)

-SERVICE TOOLS / OUTILS
-SPRAY NOZZLES / BUSES DE PERFORMANCE

DIMENSIONAL ACCURACY / PRÉCISION DIMENSIONELLE +/- 1" [25mm]

INITIAL:

DRAWING ID: **0010-7473**

SHEET: 1
OF: 1

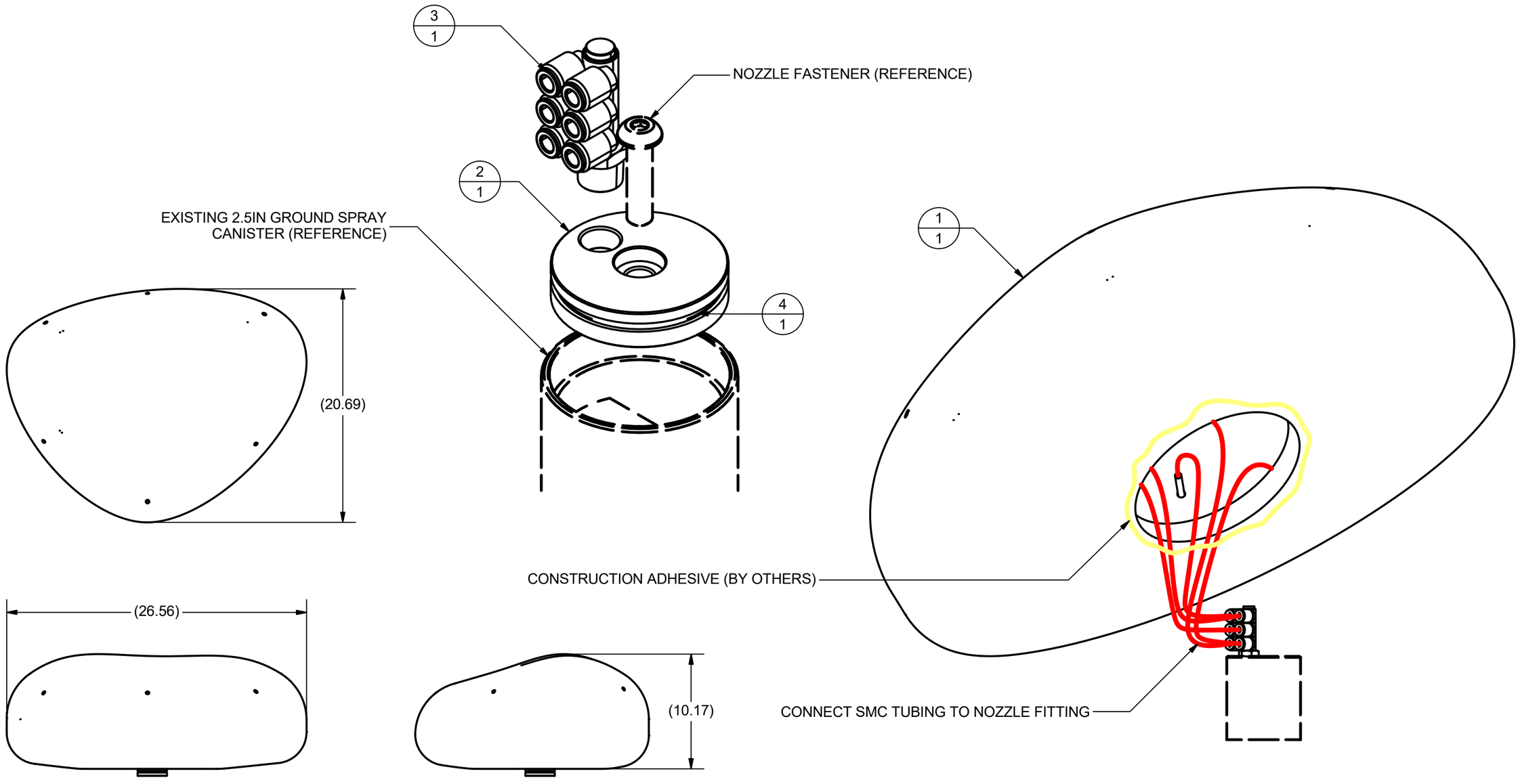
waterplay
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-712-3393 F: 250-861-4814
E: design@waterplay.com W: waterplay.com

NOTE: REFER TO THE COMPONENT WRITTEN SPECIFICATION DOCUMENT FOR COMPLETE PRODUCT SPECIFICATIONS. WATERPLAY RESERVES THE RIGHT TO CHANGE THIS SPECIFICATION WITHOUT NOTICE.

SE RÉFÉRER AU DOCUMENT DE SPÉCIFICATION ÉCRIT POUR LES DÉTAILS COMPLET DU PRODUIT. WATERPLAY A LE DROIT DE CHANGER CES DERNIERS SANS PRÉAVIS.

ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0003-1182	A	SURF STONE #3, CONCRETE WITH TUBING		1
2	0003-1183	A	NOZZLE, 2-1/2", 3/8" NPT HOLE	ACETAL	1
3	FTC-04021	A	T.BRANCH ELBOW 1/4 TUBE X 3/8 NPT	BRASS	1
4	ORG-08036		O-RING -141, 2.300 ID X 0.103 CS	RUBBER	1

REV	DESCRIPTION	DATE
A	INITIAL RELEASE	8/14/2020



NOTES:
1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS

TORQUE VALUES UNLESS NOTED
1/4-20....63 in-lbs 1/2-13....37 ft-lbs
3/8-16....201 in-lbs

MASS: 91.4 lbmass

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: JAMIRV
DRAWN: MICNEI
CHECKED: JASMAY
DATE: 7/5/2019

FS SURF STONE 3

GRASSLANDS

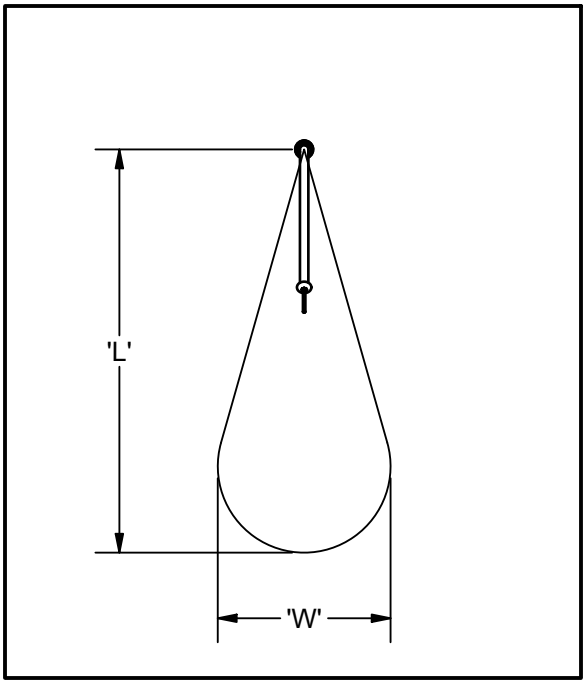
DWG ID: **0010-7473** | REV: **A** | SIZE: B | SCALE: NTS | SHEET: 1 OF: 1

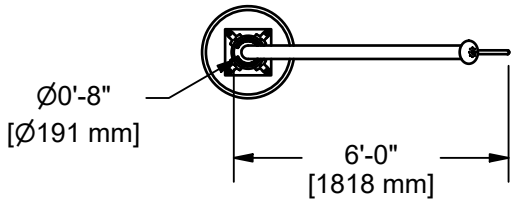
FS FISHIN POLE

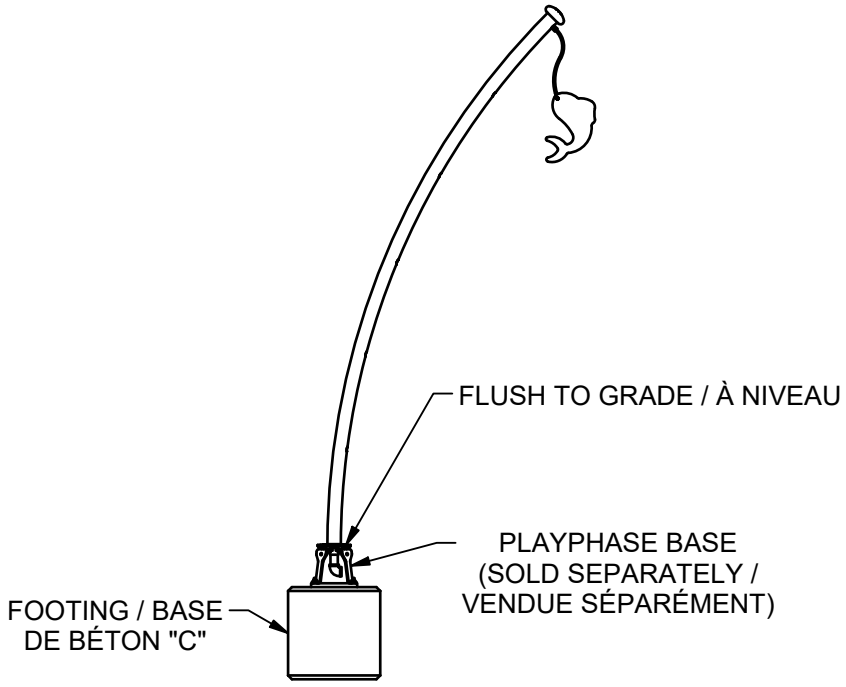
0010-0584

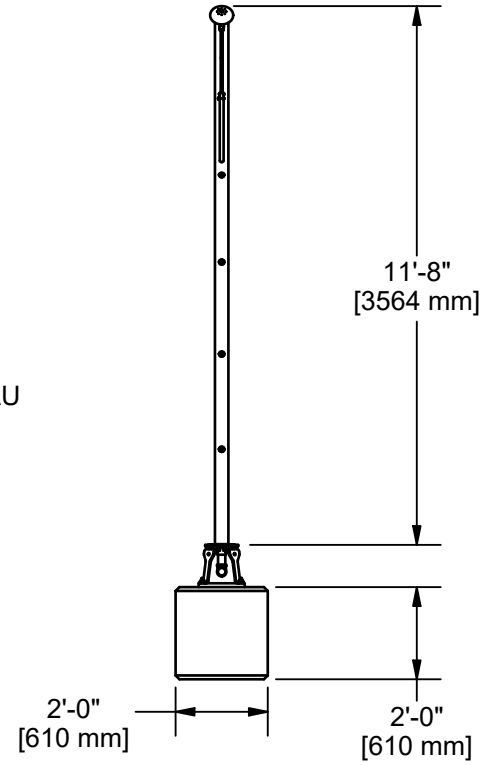
LIST OF MATERIALS / LISTE DE MATÉRIAUX (IF / SI APPLICABLE)	
BASE MATERIAL / MATÉRIEL	304 STAINLESS STEEL / ACIER INOXYDABLE
NOZZLES / BUSES	ACETAL / ACÉTAL, URETHANE / URÉTHANE
PANELS / PANNEAUX	ACRYLIC / ACRYLIQUE

***IMPACT SPRAY AREA / ZONE D'ASPERSION* D'IMPACT**









FOOTING BY OTHER, REFER TO LOCAL CODE / BASE
DE BÉTON PAR D'AUTRES, SE RÉFÉRER AU CODE LOCAL

RECOMMENDED SPRAY AREA / ZONE D'ASPERSION POTENTIELLE			FLOW RATE / DÉBIT D'EAU	
R (ft/mm)	**L** (ft/mm)	**W** (ft/mm)	GPM/LPM	PSI/kPa
-/-	14/4270	6/1830	7/27	7/48
NOZZLES / BUSES		6	MASS: 69.7 lbmass	

COMPONENT INCLUDES: (IF REQUIRED) / INCLUS AVEC LE JEU (SI REQUISE)

-SERVICE TOOLS / OUTILS
-SPRAY NOZZLES / BUSES DE PERFORMANCE

DIMENSIONAL ACCURACY / PRÉCISION DIMENSIONELLE +/- 1" [25mm]

INITIAL:

DRAWING ID: **0010-0584**

SHEET: 1
OF: 1

waterplay
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-712-3393 F: 250-861-4814
E: design@waterplay.com W: waterplay.com

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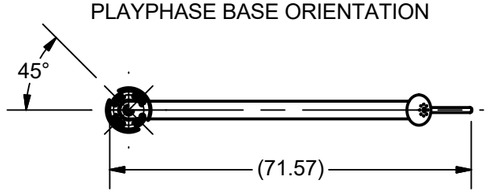
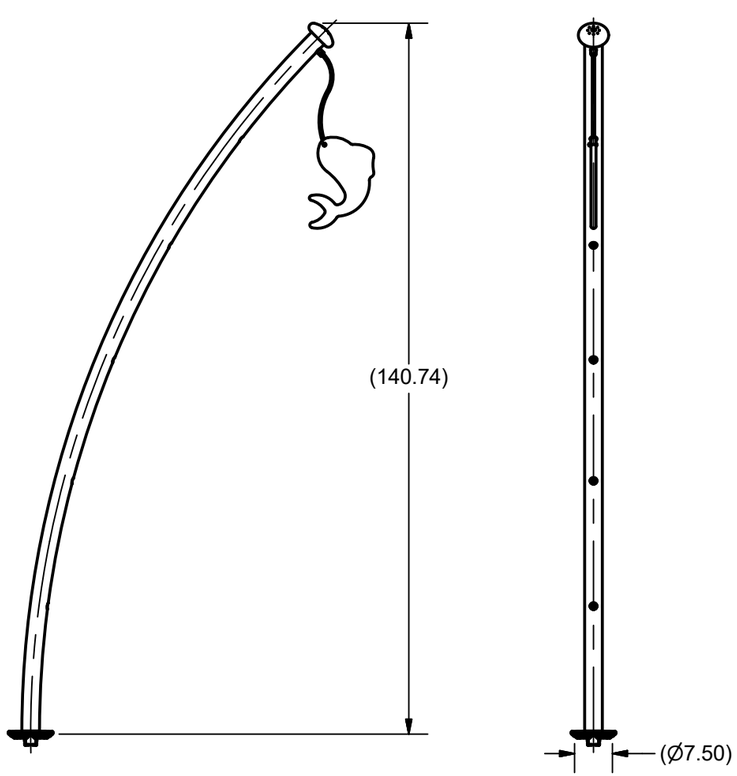
SE RÉFÉRER AU DOCUMENT DE SPÉCIFICATION ÉCRIT POUR LES DÉTAILS COMPLET DU PRODUIT. WATERPLAY A LE DROIT DE CHANGER CES DERNIERS SANS PRÉAVIS.

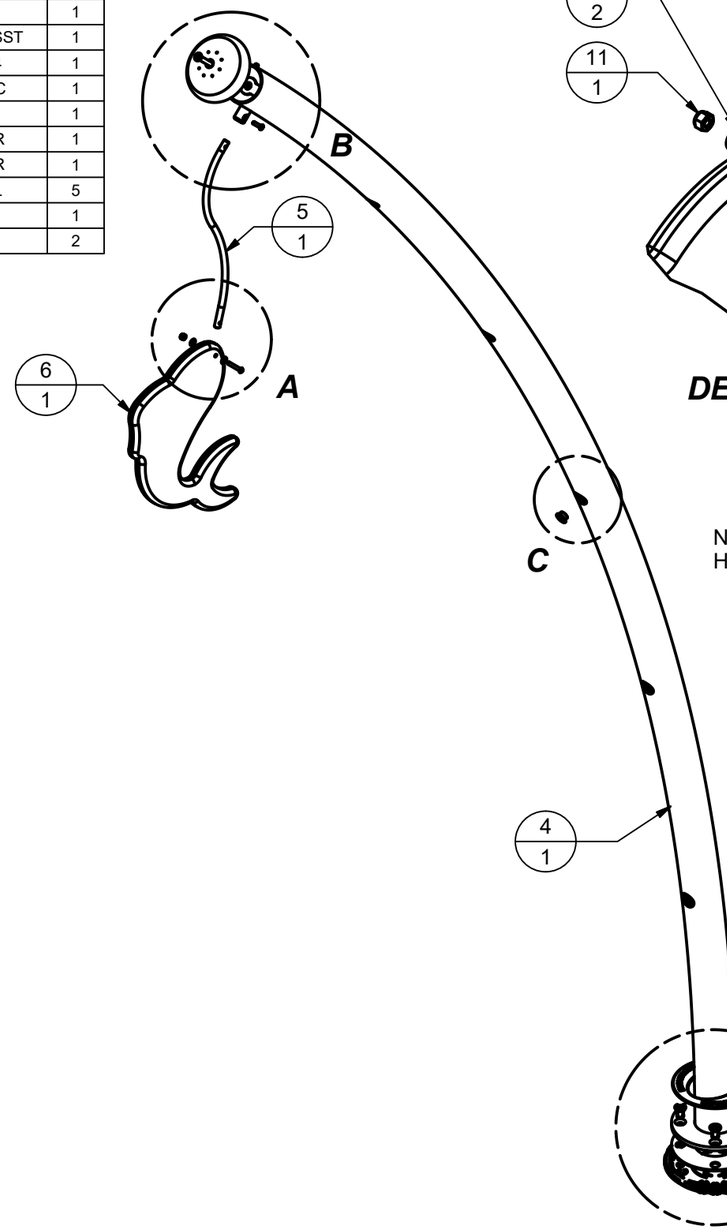
ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0002-8500		BOLT, FLAT HD SOC, 1/4-20 X 1.00 LG, FT	SST	1
2	0010-0413	C	BOBBLE NOZZLE	URETHANE	1
3	0010-0458		BOLT, FLAT HD SOC, 3/8-16 X 3.00 LG, PT	SST	1
4	0010-0585	B	FISHING ROD WELD ASSY	WELDED SST	1
5	0010-0588	A	FISHING LINE	AISI 304	1
6	0010-0589	B	FISH	ACRYLIC	1
7	0010-0924		BOLT, BUTTON HD CAP, 1/4-20 X 1.50 LG, FT	SST	1
8	0010-1949	B	PLAYPHASE FLANGE COVER	RUBBER	1
9	FTC-08001	B	GASKET, FLANGE, 3" PIPE	RUBBER	1
10	NOZ-08092	A	NOZZLE, 3/4", 0.063 X 7 ORIFICE	ACETAL	5
11	NUT-02101		NUT, NYLOCK, 1/4-20	SST	1
12	WAS-02102		WASHER, FLAT, 1/4 (0.63 OD)	SST	2

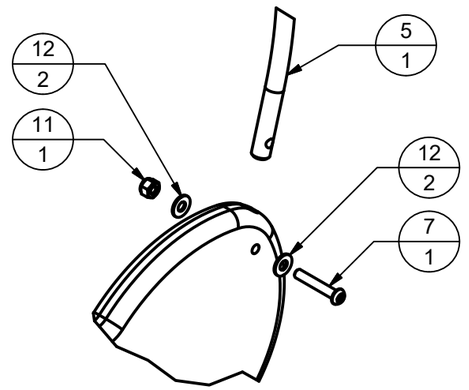
REV	DESCRIPTION	DATE
A	INITIAL RELEASE	9/1/2016
B	UPDATED INSTALL DETAILS	8/27/2019

PLAYPHASE BASE ORIENTATION

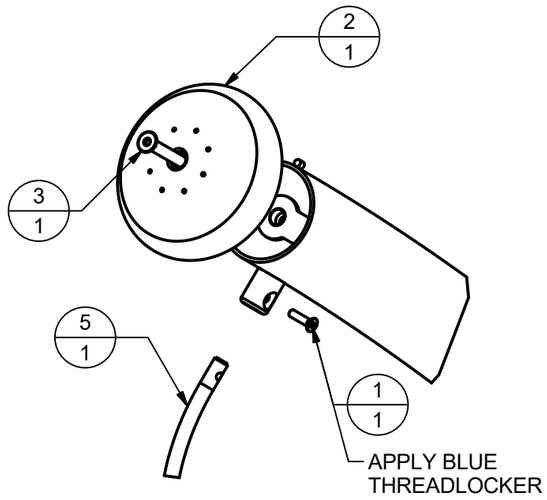




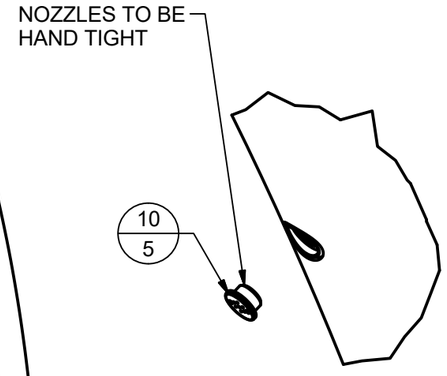




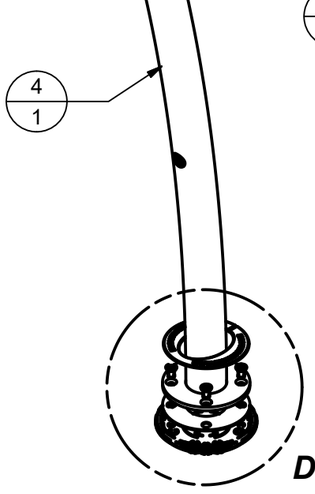
DETAIL A

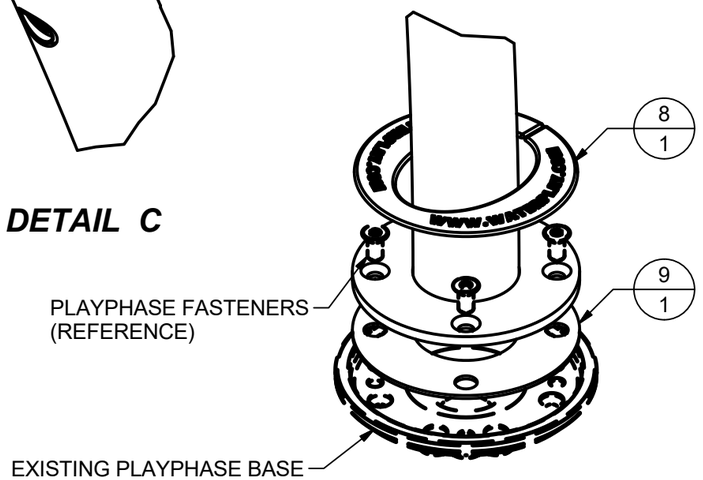


DETAIL B



DETAIL C





DETAIL D

NOTES:

1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS

TORQUE VALUES UNLESS NOTED 1/4-20....63 in-lbs 1/2-13....37 ft-lbs 3/8-16....201 in-lbs	MASS: 69.7 lbmass	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	DESIGNED: NICMAY DRAWN: NICMAY CHECKED: JASMAY
ALL PLANS AND DESIGNS AT ALL TIMES REMAIN THE PROPERTY OF THE WMI MANUFACTURING CORPERATION AND CANNOT BE USED OR REPRODUCED WITHOUT WRITTEN PERMISSION.			
WMI MANUFACTURING CORP 805 CROWLEY AVE. KELOWNA, BRITISH COLUMBIA CANADA, V1Y 7G6 P: 250-979-7205 F: 250-979-7215		THIRD ANGLE PROJECTION	DATE: 8/17/2016

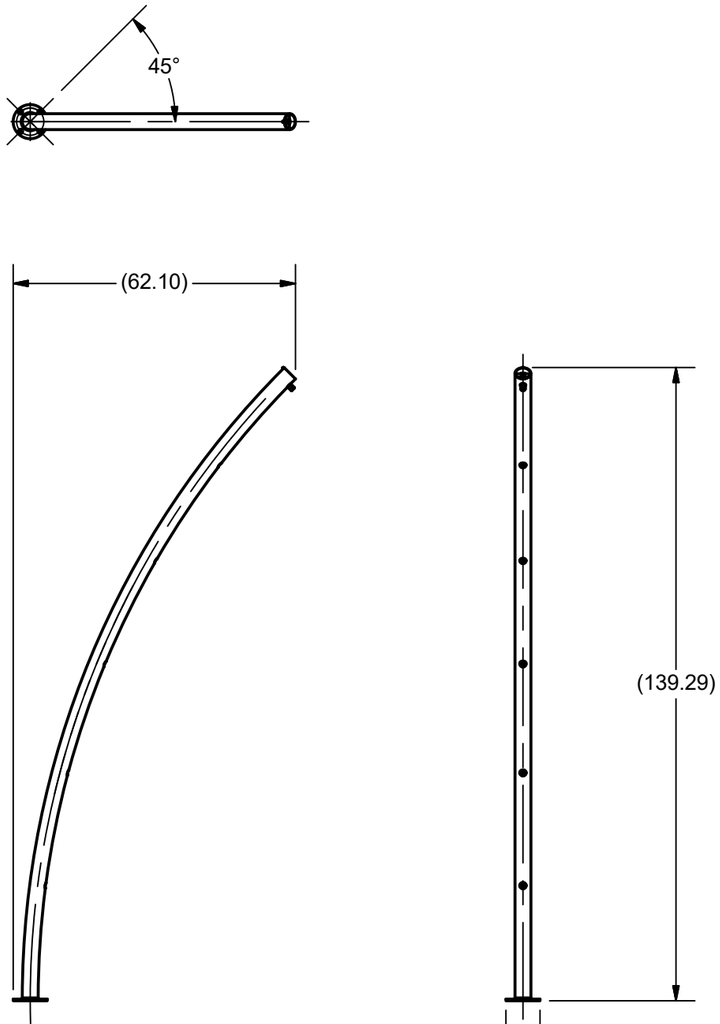
FISHIN' POLE INSTALL

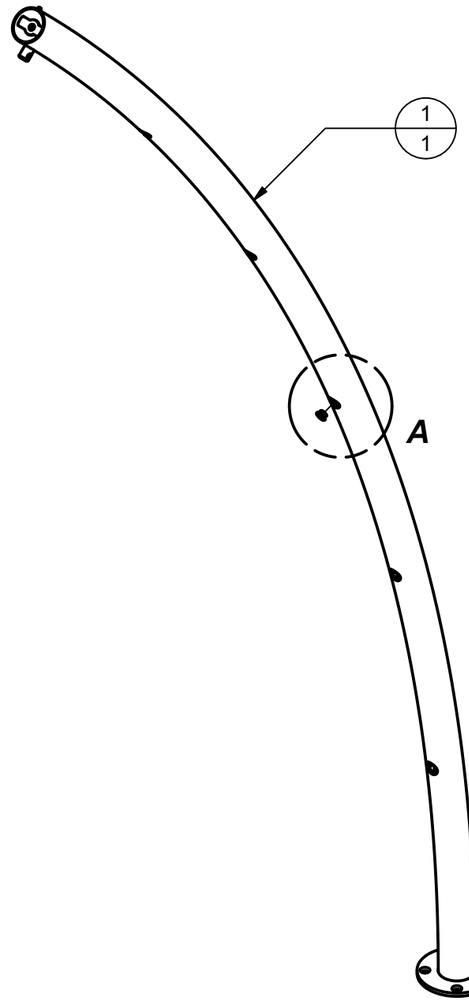
FISHIN' POLE

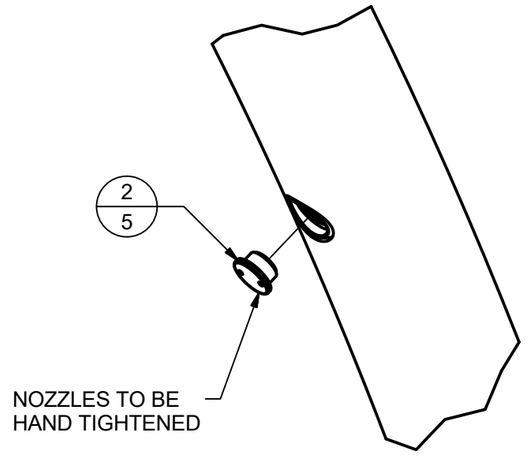
DWG ID:	REV:	SIZE:	SCALE:	SHEET:
0010-0584	**B**	B	NTS	1 OF: 1

ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0010-0585	B	FISHING ROD WELD ASSY	WELDED SST	1
2	NOZ-08090	A	NOZZLE, 3/4", BLANK	ACETAL	5

REV	DESCRIPTION	DATE
A	UPDATED INSTALL DETAILS	8/27/2019







DETAIL A

NOTES:

1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS

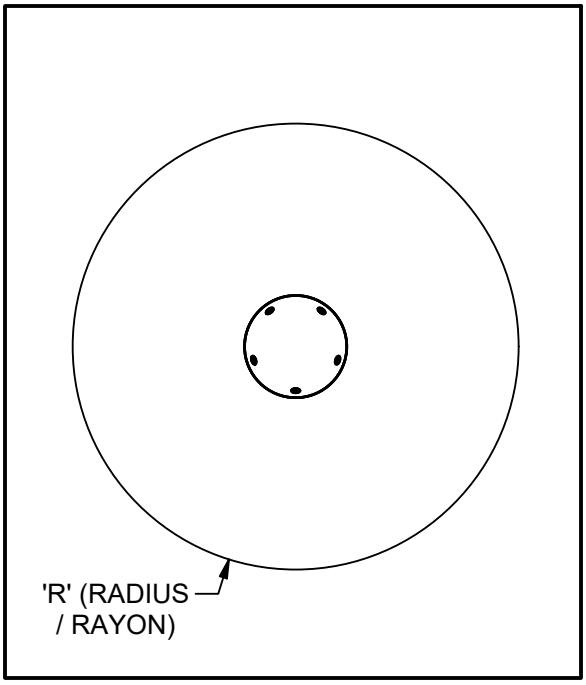
TORQUE VALUES UNLESS NOTED 1/4-20....63 in-lbs 1/2-13....37 ft-lbs 3/8-16....201 in-lbs	MASS: 61.0 lbmass	**TOLERANCES UNLESS NOTED** .X ±0.5 .XX (>10) ±0.05 .XX (<10) ±0.01 .XXX ±0.005 ANGULAR ±1° SURFACE FINISH 63µ in. **ALL DIMENSIONS IN INCHES**	DESIGNED: MICNEI	**FISHIN' POLE ASSY**	
			DRAWN: MICNEI		
WMI MANUFACTURING CORP. 805 CROWLEY AVE. KELOWNA, BRITISH COLUMBIA CANADA, V1Y 7G6 P: 250-979-7205 F: 250-979-7215		THIRD ANGLE PROJECTION	CHECKED: JASMAY	FISHIN' POLE	
			DATE: 6/5/2019	DWG ID: **0010-0584-A** REV: **A** SIZE: B SCALE: NTS SHEET: 1 OF: 1	

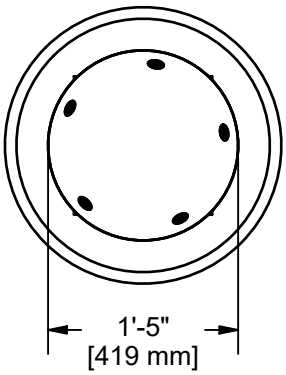
FS SPINNY SQUIRT

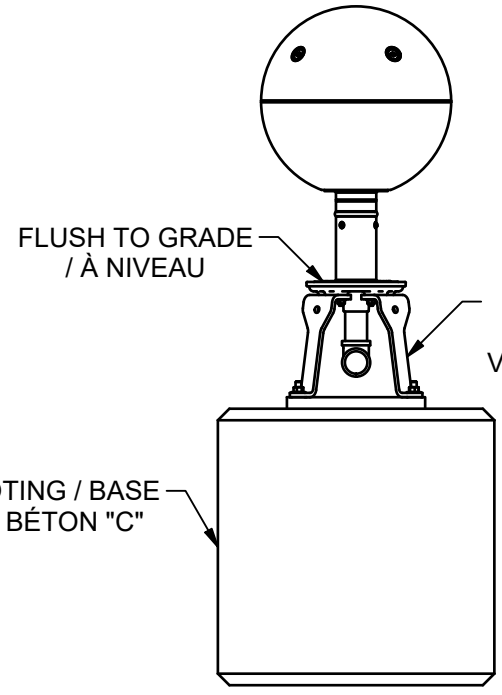
0010-0512

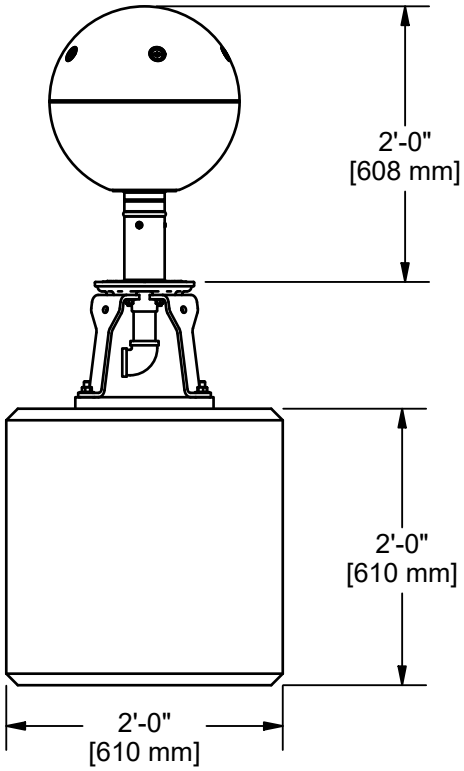
LIST OF MATERIALS / LISTE DE MATÉRIAUX (IF / SI APPLICABLE)	
BASE MATERIAL / MATÉRIEL	304 STAINLESS STEEL / ACIER INOXYDABLE
NOZZLES / BUSES	ACETAL / ACÉTAL

***IMPACT SPRAY AREA / ZONE D'ASPERSION* D'IMPACT**









FOOTING BY OTHER, REFER TO LOCAL CODE / BASE DE BÉTON PAR D'AUTRES, SE RÉFÉRER AU CODE LOCAL

RECOMMENDED SPRAY AREA / ZONE D'ASPERSION POTENTIELLE			FLOW RATE / DÉBIT D'EAU	
R (ft/mm)	**L** (ft/mm)	**W** (ft/mm)	GPM/LPM	PSI/kPa
3/914	-/-	-/-	0.5/2	6/41
NOZZLES / BUSES		5	MASS: 28.0 lbmass	

COMPONENT INCLUDES: (IF REQUIRED) / INCLUS AVEC LE JEU (SI REQUISE)

-SERVICE TOOLS / OUTILS
-SPRAY NOZZLES / BUSES DE PERFORMANCE

DIMENSIONAL ACCURACY / PRÉCISION DIMENSIONELLE +/- 1" [25mm]

INITIAL:

DRAWING ID: **0010-0512**

SHEET: 1
OF: 1

waterplay
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-712-3393 F: 250-861-4814
E: design@waterplay.com W: waterplay.com

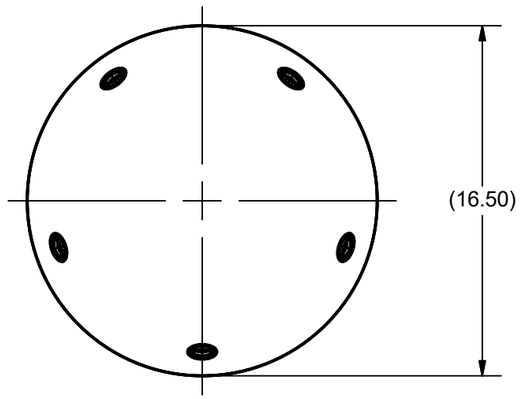
NOTE: REFER TO THE COMPONENT WRITTEN SPECIFICATION DOCUMENT FOR COMPLETE PRODUCT SPECIFICATIONS. WATERPLAY RESERVES THE RIGHT TO CHANGE THIS SPECIFICATION WITHOUT NOTICE.

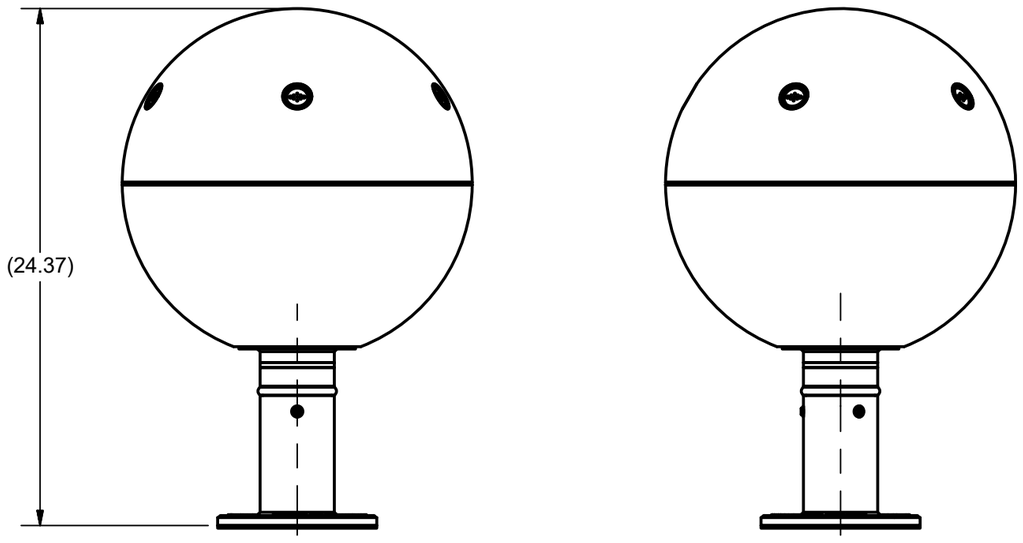
SE RÉFÉRER AU DOCUMENT DE SPÉCIFICATION ÉCRIT POUR LES DÉTAILS COMPLET DU PRODUIT. WATERPLAY A LE DROIT DE CHANGER CES DERNIERS SANS PRÉAVIS.

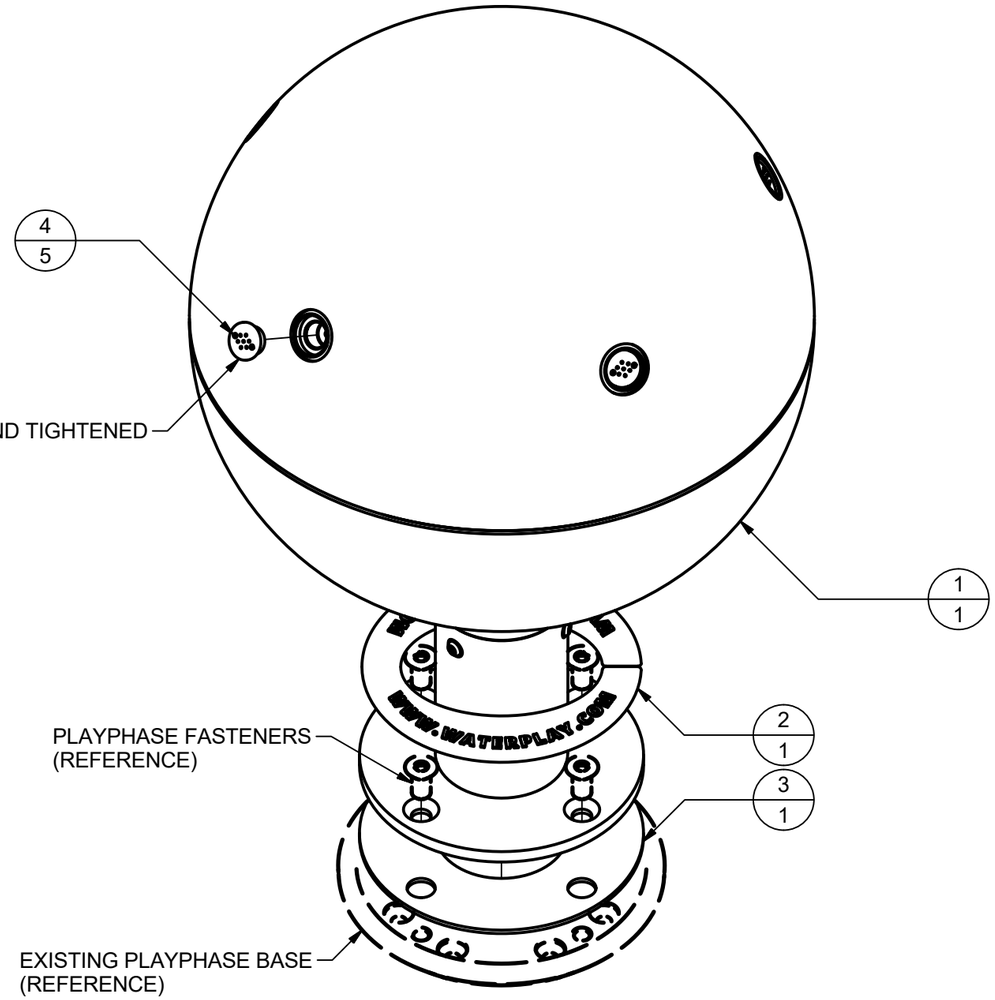
ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0010-0512-A	B	SPINNY SQUIRT ASSY		1
2	0010-1949	B	PLAYPHASE FLANGE COVER	RUBBER	1
3	FTC-08001	B	GASKET, FLANGE, 3" PIPE	RUBBER	1
4	NOZ-08092	A	NOZZLE, 3/4", 0.063 X 7 ORIFICE	ACETAL	5

REV	DESCRIPTION	DATE
A	INITIAL RELEASE	8/30/2016
B	UPDATED INSTALL DETAILS	8/26/2019

FEATURE ROTATES 360 DEGREES.
PLAYPHASE BASE ORIENTATION
IS INCONSEQUENTIAL.







NOTES:
1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS

TORQUE VALUES UNLESS NOTED
1/4-20....63 in-lbs 1/2-13....37 ft-lbs
3/8-16....201 in-lbs

MASS: 27.9 lbmass

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: NICMAY
DRAWN: JASMAY
CHECKED: NICMAY
DATE: 8/25/2016

SPINNY SQUIRT INSTALL

SPINNY SQUIRT

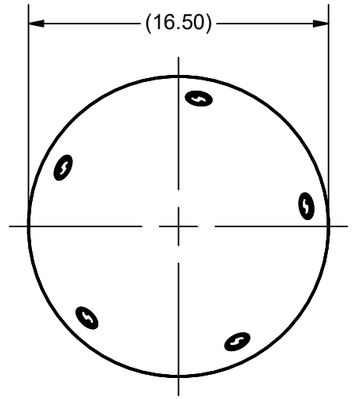
DWG ID: **0010-0512** | REV: **B** | SIZE: B | SCALE: NTS | SHEET: 1 | OF: 1

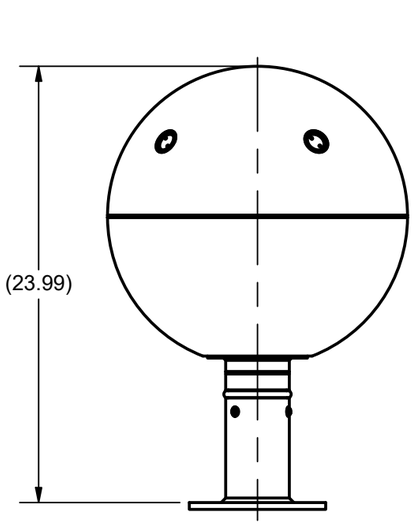
ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0010-0268	B	LOWER REDUCER	ACETAL	1
2	0010-0274	A	INDEXING WASHER	SST	1
3	0010-0275	A	REDUCER SPACER	PVC	1
4	0010-0292		COTTER PIN, 5/32 X 1.50 LG	AISI 304	1
5	0010-0293		BOLT, FLAT HD SOC, 1/4-20 X 0.75 LG, FT	SST	4
6	0010-0469		WASHER, SHIM, 3/4 (1.13 OD)	PVC	1
7	0010-0513	C	BASE COLUMN WELD ASSY	WELDED SST	1
8	0010-0514	C	HEAD SPINDLE WELD ASSY	WELDED SST	1
9	0010-0516	A	HEAD GASKET	RUBBER	1
10	0010-0517	A	HEAD WELD ASSY	WELDED ALU	1
11	0010-0917		BOLT, BUTTON HD CAP, 1/4-20 X 0.75 LG, FT	SST	3
12	0010-3511	B	UPPER REDUCER	ACETAL	1
14	FTC-04003	A	SMC, HALF UNION, 3/8NPT, 1/4 TUBE	BRASS	10
13	FTC-08254	A	TUBE, SMC, 1/4" OD	URETHANE	110.000 in
15	NOZ-08090	A	NOZZLE, 3/4", BLANK	ACETAL	5
16	NUT-02100		NUT, CASTLE, 3/4-16	SST	1
17	ORG-08336		O-RING -336, 2.850 ID X 0.210 CS	RUBBER	4

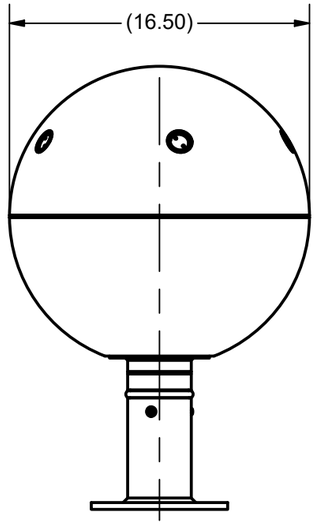
CUT LIST

ITEM	DESCRIPTION	MATERIAL	LENGTH	QTY
13	TUBE, SMC, 1/4" OD	URETHANE	22.000 in	5

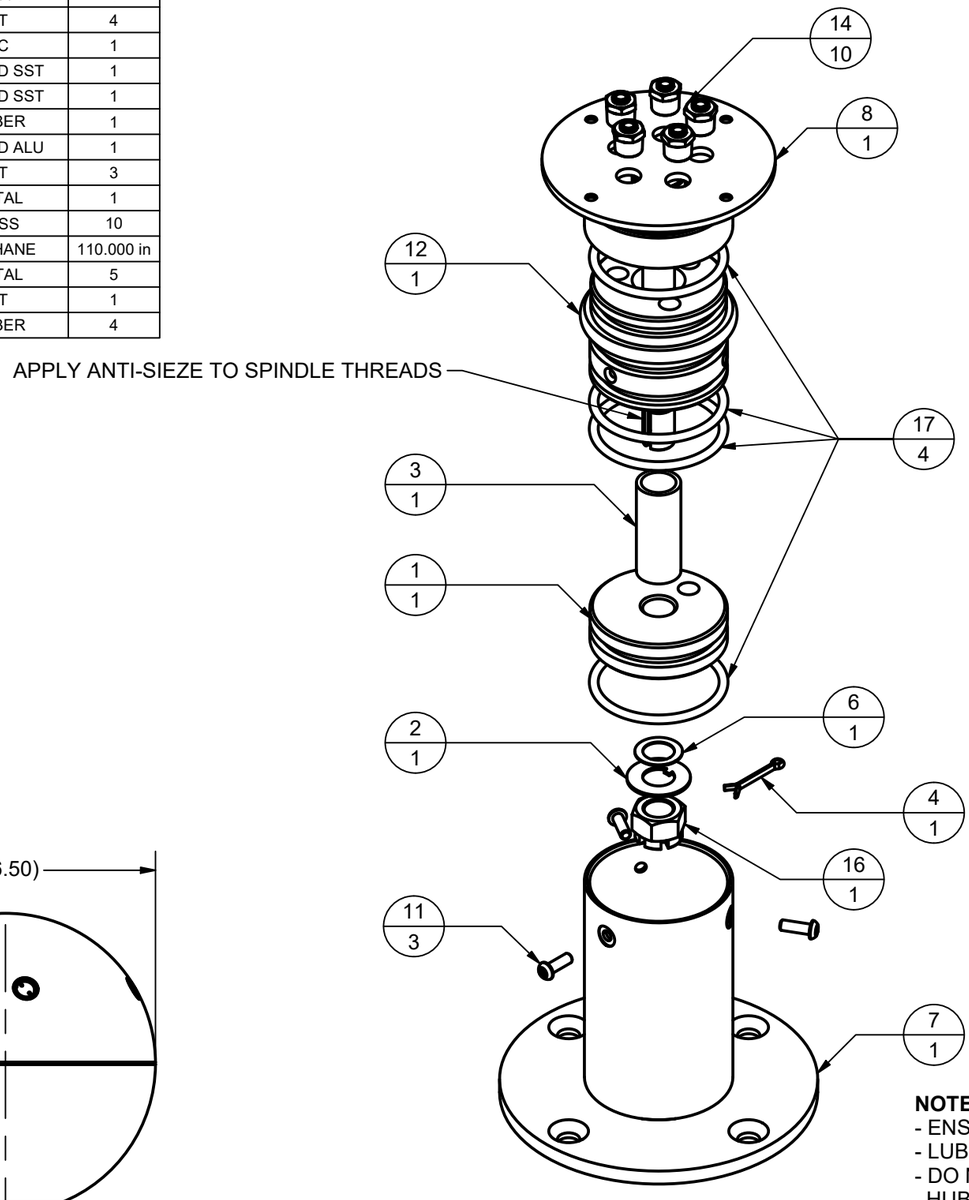
REV	DESCRIPTION	DATE
A	UPDATED INSTALL DETAILS	8/26/2019
B	CHANGED HUB BOLTS TO BUTTON HEAD	11/28/2019







NOTES:
1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS



NOTES:
- ENSURE MACHINED PARTS ARE CLEAR OF PAINT AND CLEAN
- LUBRICATE O-RINGS WITH WATERPROOF LUBRICANT
- DO NOT OVERTIGHTEN THE CASTLE NUT AS IT AFFECTS THE ROTATIONAL HUB SPINNING RESISTANCE. TOO LITTLE RESISTANCE CAN LEAD TO PART DAMAGE OR CHILD INJURY

TORQUE VALUES UNLESS NOTED
1/4-20....63 in-lbs 1/2-13....37 ft-lbs
3/8-16....201 in-lbs

MASS: 27.9 lbmass

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

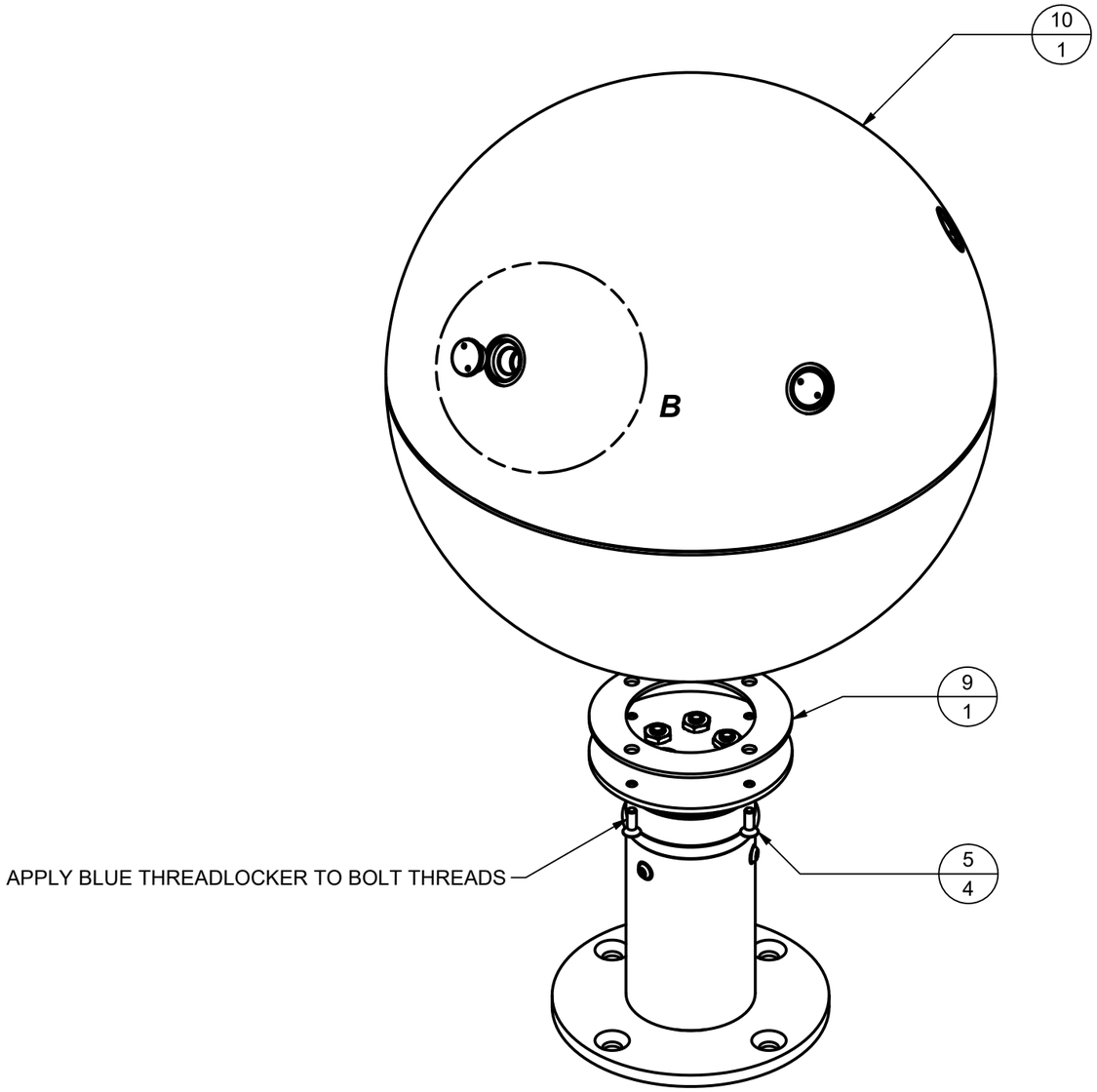
THIRD ANGLE PROJECTION

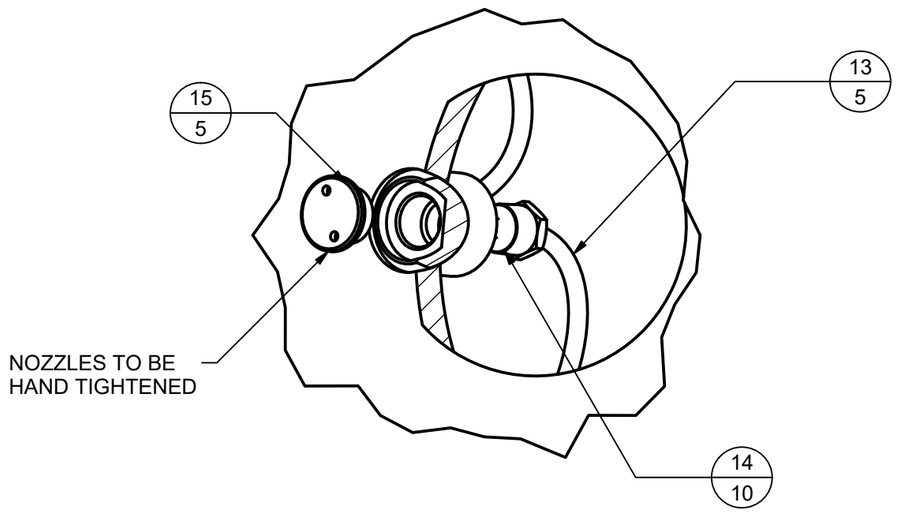
DESIGNED: NICMAY
DRAWN: JASMAY
CHECKED: NICMAY
DATE: 8/25/2016

SPINNY SQUIRT ASSY

SPINNY SQUIRT

DWG ID: **0010-0512-A** | REV: **B** | SIZE: B | SCALE: NTS | SHEET: 1 | OF: 2





DETAIL B

USE IN CONJUNCTION WITH SHEET NO. 1

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

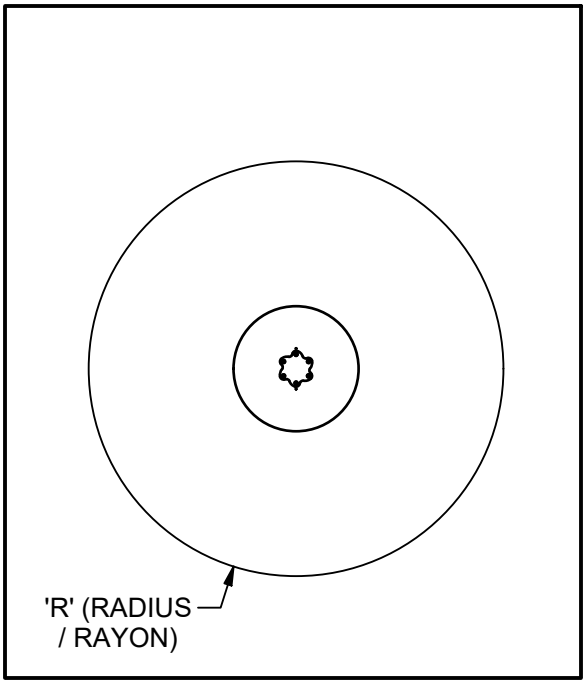
THIRD ANGLE PROJECTION	DWG ID:	REV:	SIZE:	SCALE:	SHEET:
	0010-0512-A	B	B	NTS	2 OF: 2

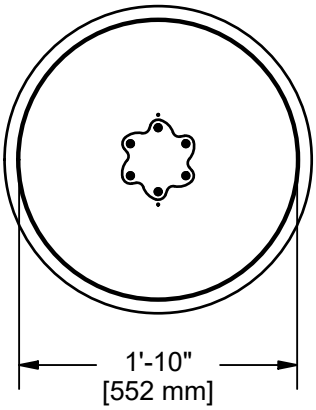
FS BASIN

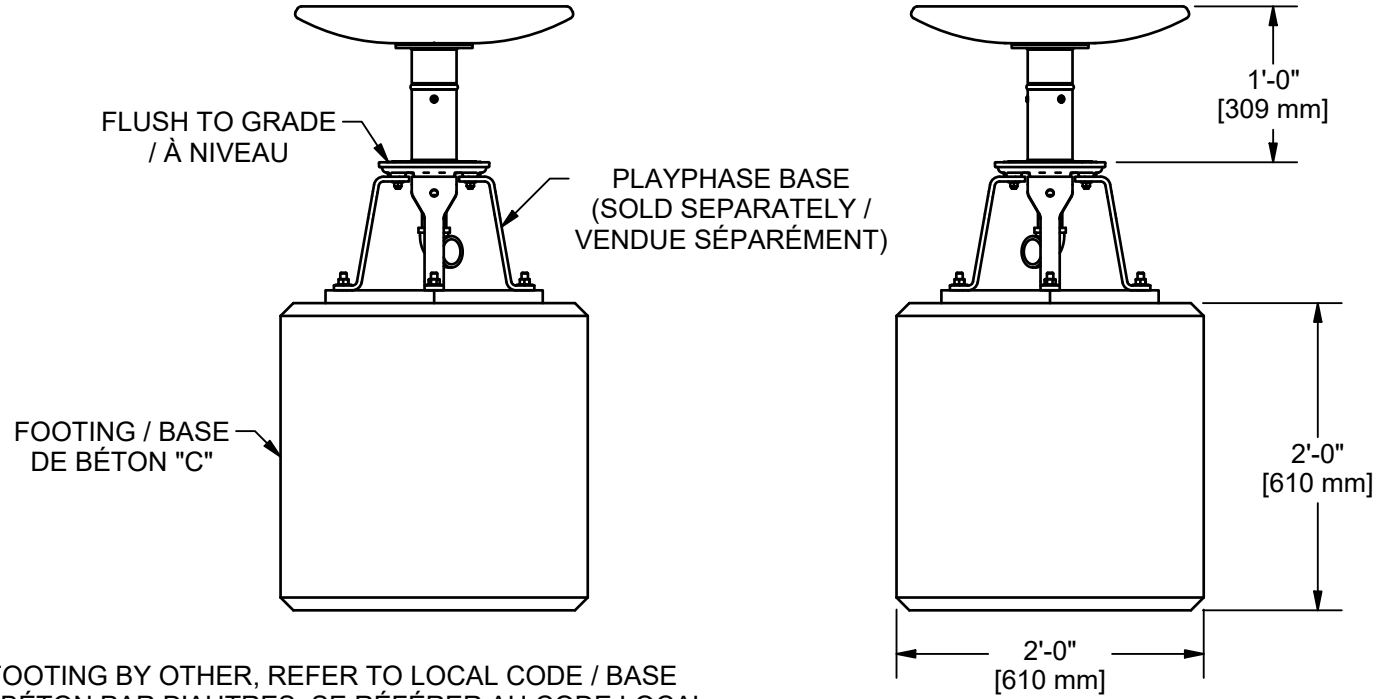
0010-3859

LIST OF MATERIALS / LISTE DE MATÉRIAUX (IF / SI APPLICABLE)	
BASE MATERIAL / MATÉRIEL	304 STAINLESS STEEL / ACIER INOXYDABLE
NOZZLES / BUSES	ACRYLIC / ACRYLIQUE
PANELS / PANNEAUX	ACRYLIC / ACRYLIQUE

***IMPACT SPRAY AREA / ZONE D'ASPERSION* D'IMPACT**







FOOTING BY OTHER, REFER TO LOCAL CODE / BASE DE BÉTON PAR D'AUTRES, SE RÉFÉRER AU CODE LOCAL

RECOMMENDED SPRAY AREA / ZONE D'ASPERSION POTENTIELLE			FLOW RATE / DÉBIT D'EAU	
R (ft/mm)	**L** (ft/mm)	**W** (ft/mm)	GPM/LPM	PSI/kPa
1.5/457	-/-	-/-	5/19	5/34
NOZZLES / BUSES		-	MASS: 31.1 lbmass	

COMPONENT INCLUDES: (IF REQUIRED) / INCLUS AVEC LE JEU (SI REQUISE)

-SERVICE TOOLS / OUTILS
-SPRAY NOZZLES / BUSES DE PERFORMANCE

DIMENSIONAL ACCURACY / PRÉCISION DIMENSIONELLE +/- 1" [25mm]

INITIAL:

DRAWING ID: **0010-3859**

SHEET: 1
OF: 1

waterplay
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-712-3393 F: 250-861-4814
E: design@waterplay.com W: waterplay.com

NOTE: REFER TO THE COMPONENT WRITTEN SPECIFICATION DOCUMENT FOR COMPLETE PRODUCT SPECIFICATIONS. WATERPLAY RESERVES THE RIGHT TO CHANGE THIS SPECIFICATION WITHOUT NOTICE.

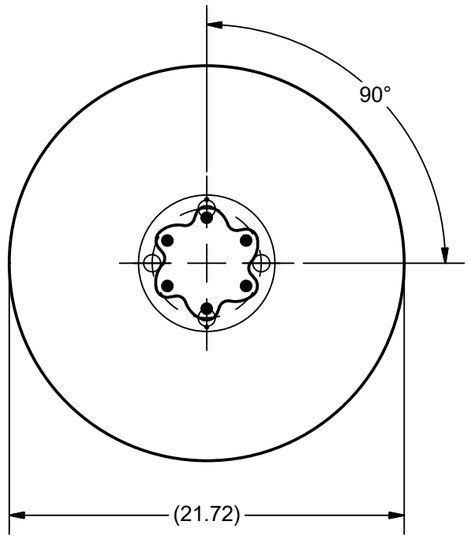
SE RÉFÉRER AU DOCUMENT DE SPÉCIFICATION ÉCRIT POUR LES DÉTAILS COMPLET DU PRODUIT. WATERPLAY A LE DROIT DE CHANGER CES DERNIERS SANS PRÉAVIS.

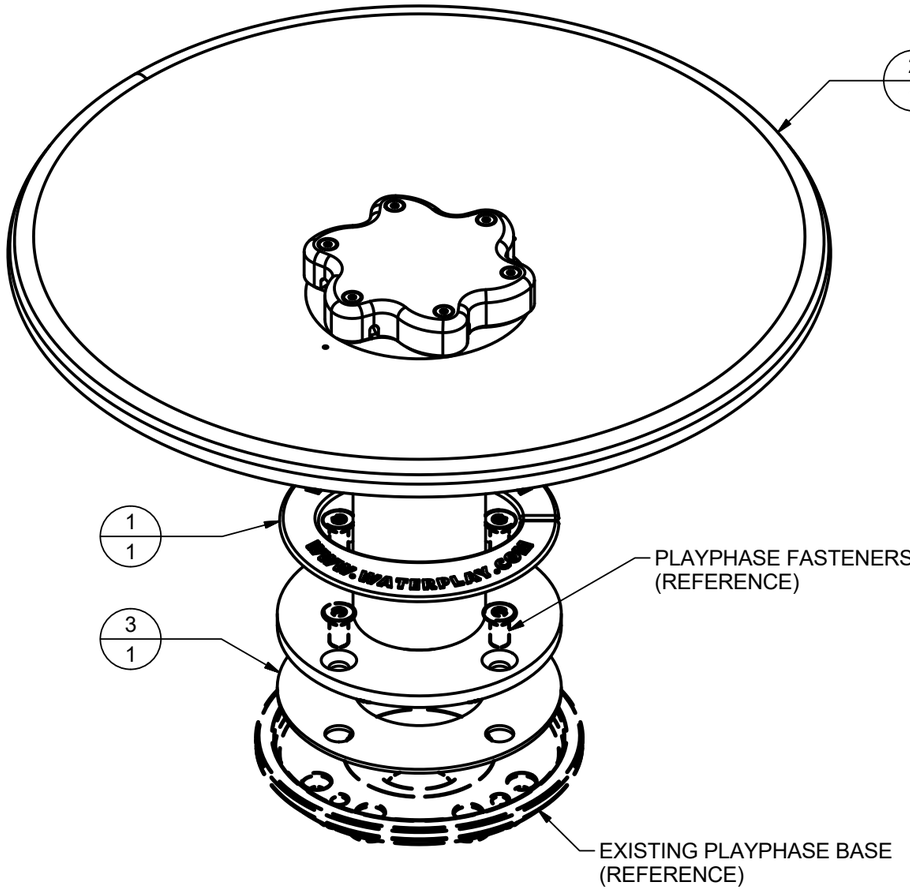
ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0010-1949	B	PLAYPHASE FLANGE COVER	RUBBER	1
2	0010-3859-A	C	BASIN ASSY		1
3	FTC-08001	B	GASKET, FLANGE, 3" PIPE	RUBBER	1

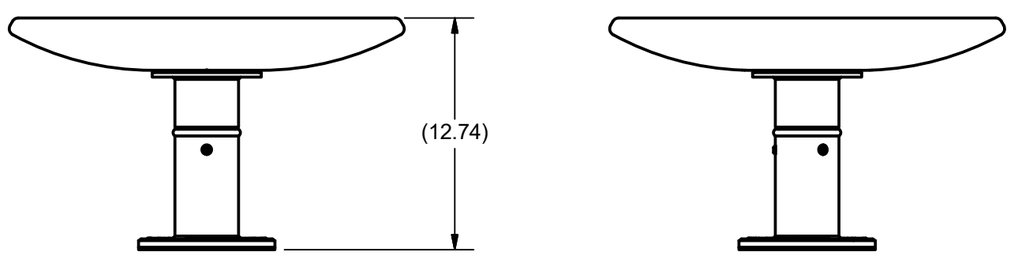
REV	DESCRIPTION	DATE
A		
B	UPDATED INSTALL DETAILS	8/8/2019

NOTE:
DUE TO THE DESIGN, MINIMAL WATER RELEASE FROM THE SAFESPIN™ HUB IS NORMAL.

PLAYPHASE BASE ORIENTATION







NOTES:
1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS

TORQUE VALUES UNLESS NOTED
1/4-20....63 in-lbs 1/2-13....37 ft-lbs
3/8-16....201 in-lbs

MASS: 31.1 lbmass

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: NICMAY
DRAWN: MICNEI
CHECKED: JASMAY
DATE: 7/24/2019

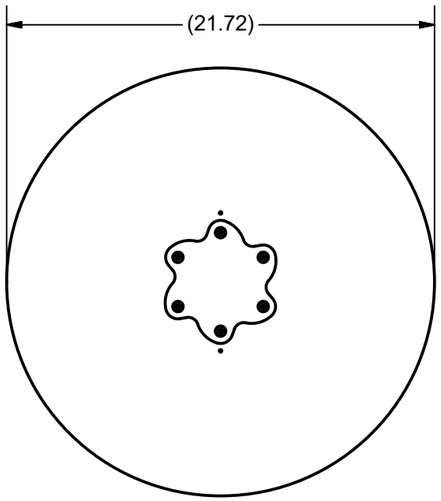
BASIN INSTALL

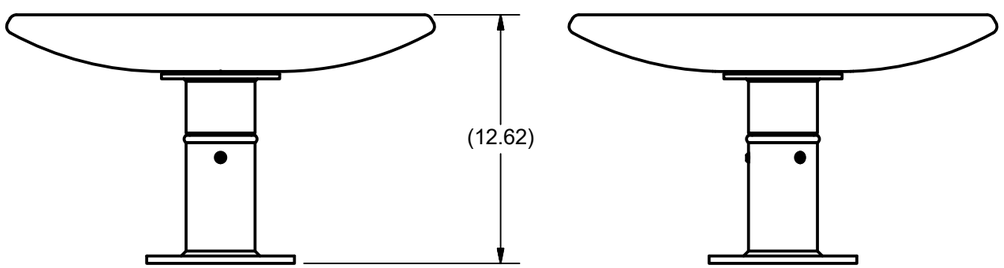
WATERWAYS

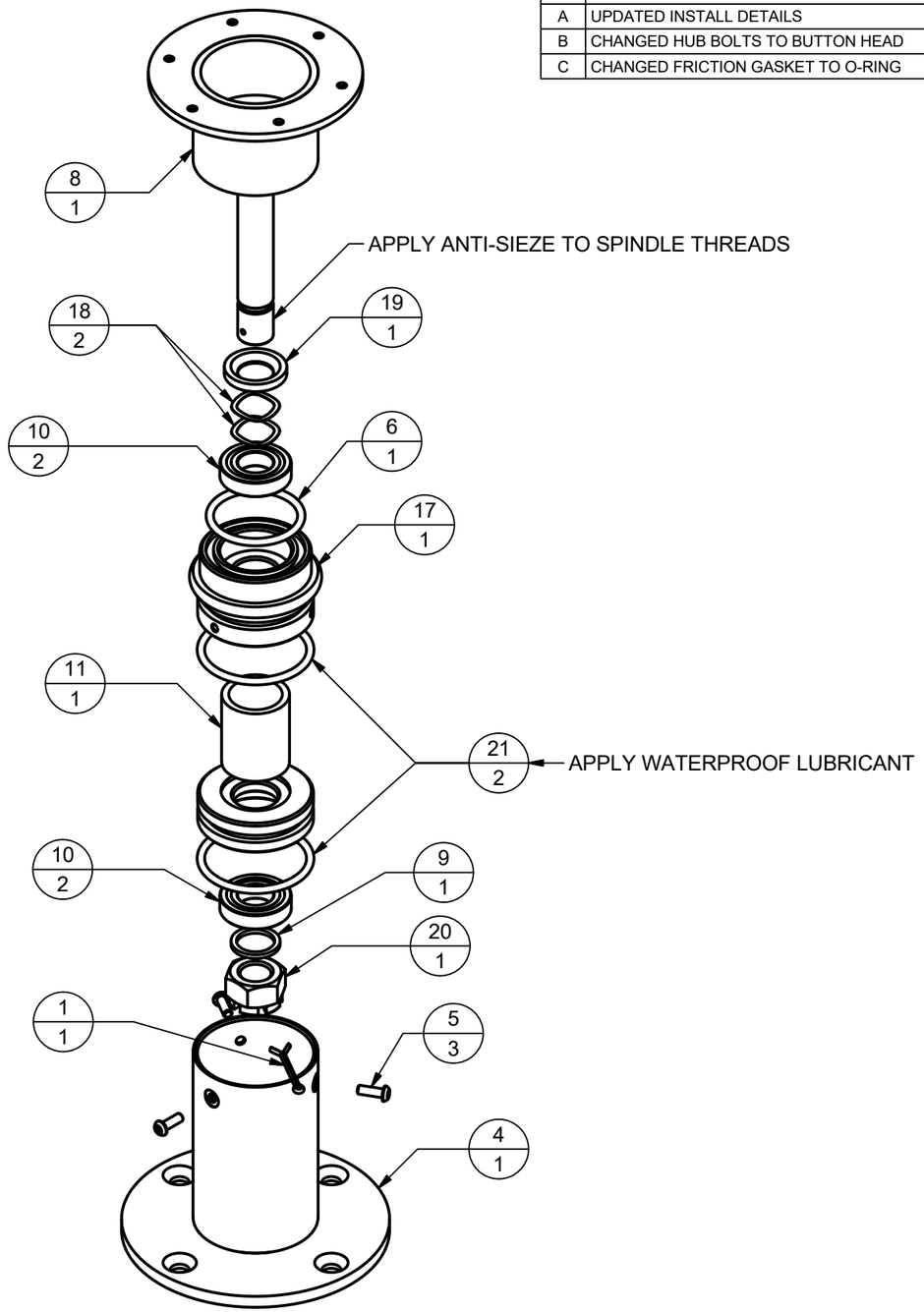
DWG ID: **0010-3859** | REV: **B** | SIZE: B | SCALE: NTS | SHEET: 1 | OF: 1

ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0001-0752		COTTER PIN, 5/32 X 2.00 LG	AISI 304	1
2	0010-0293		BOLT, FLAT HD SOC, 1/4-20 X 0.75 LG, FT	SST	6
3	0010-0504		NUT, COUPLING, 1/4-20 X 0.88 LG	SST	6
4	0010-0513	C	BASE COLUMN WELD ASSY	WELDED SST	1
5	0010-0917		BOLT, BUTTON HD CAP, 1/4-20 X 0.75 LG, FT	SST	3
6	0010-1241		O-RING -332, 2.350 ID X 0.210 CS	RUBBER	1
7	0010-2719		BOLT, FLAT HD SOC, 1/4-20 X 1.50 LG, FT	SST	6
8	0010-3282	B	BEARING HUB WELD ASSY	WELDED SST	1
9	0010-3287	A	SPACER RING	SST	1
10	0010-3288	A	BEARING, BALL, 1.00ID, 2.00OD	SST	2
11	0010-3290	B	REDUCER SPACER PIPE	PVC	1
12	0010-3291	A	LOWER REDUCER	ACETAL	1
13	0010-3293	B	FLANGE GASKET	RUBBER	1
14	0010-3860	B	TABLE BASIN	ACRYLIC	1
15	0010-3861	A	SPRAY STAR GASKET	RUBBER	1
16	0010-3862	A	SPRAY STAR	ACRYLIC	1
17	0010-5040	B	UPPER REDUCER W/FRICTION RING	ACETAL	1
18	0010-5043	A	SPRING, WAVE DISC, 1.05ID 0.10LG	SST	2
19	0010-5809	A	SPINDLE HUB WASHER	ACETAL	1
20	0010-6392		NUT, CASTLE, 1-8	SST	1
21	ORG-08336		O-RING -336, 2.850 ID X 0.210 CS	RUBBER	2

REV	DESCRIPTION	DATE
A	UPDATED INSTALL DETAILS	8/8/2019
B	CHANGED HUB BOLTS TO BUTTON HEAD	12/18/2019
C	CHANGED FRICTION GASKET TO O-RING	2/13/2020



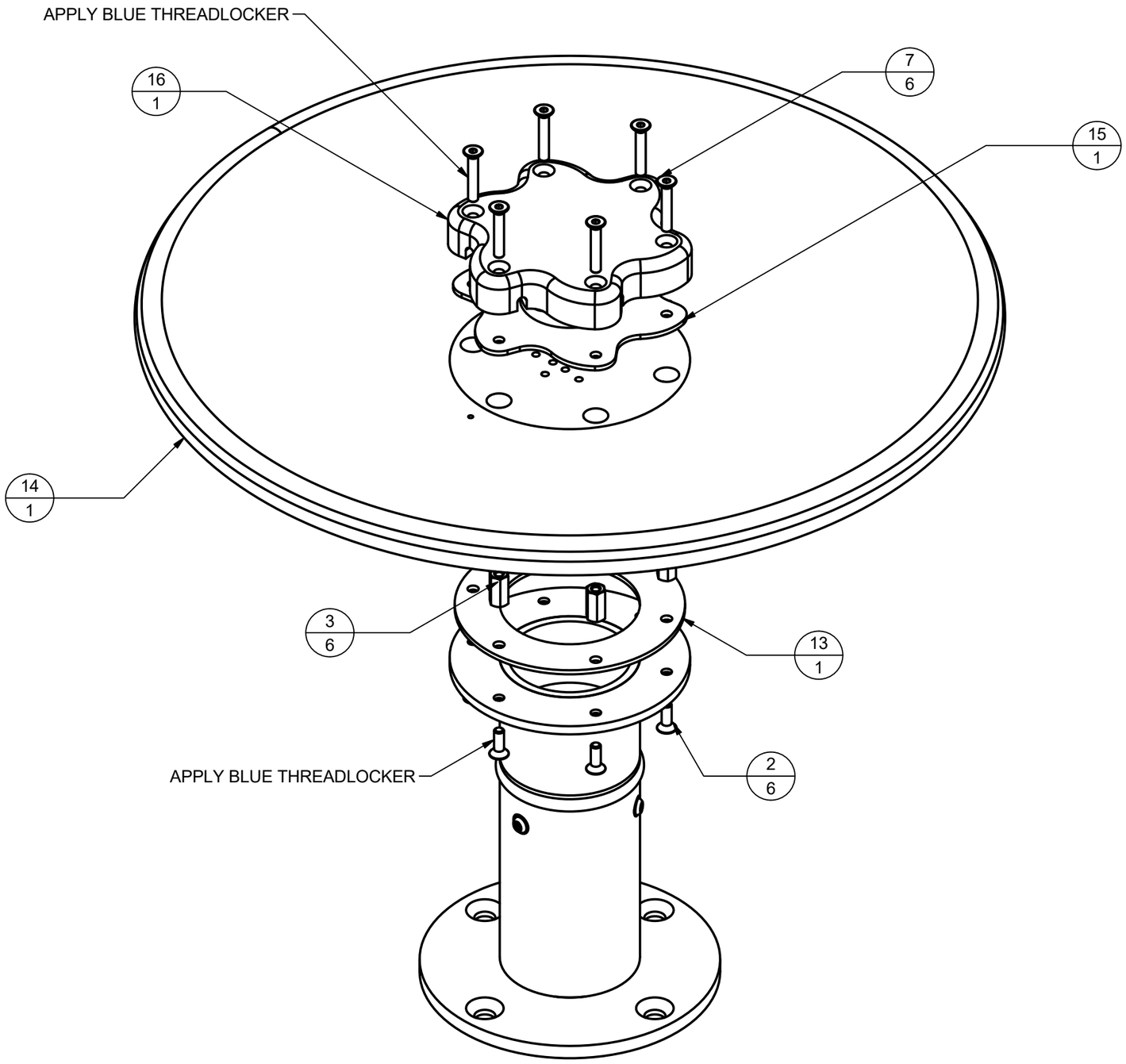




NOTES:

1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS

TORQUE VALUES UNLESS NOTED 1/4-20....63 in-lbs 1/2-13....37 ft-lbs 3/8-16....201 in-lbs	MASS: 31.1 lbmass	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	DESIGNED: NICMAY	**BASIN ASSY**	
ALL PLANS AND DESIGNS AT ALL TIMES REMAIN THE PROPERTY OF THE WMI MANUFACTURING CORPERATION AND CANNOT BE USED OR REPRODUCED WITHOUT WRITTEN PERMISSION.			DRAWN: MICNEI		
805 CROWLEY AVE. KELOWNA, BRITISH COLUMBIA CANADA, V1Y 7G6 P: 250-979-7205 F: 250-979-7215		THIRD ANGLE PROJECTION	CHECKED: JASMAY	WATERWAYS	
			DATE: 7/24/2019	DWG ID: **0010-3859-A**	REV: **C** / SIZE: B / SCALE: NTS / SHEET: 1 / OF: 2



USE IN CONJUNCTION WITH SHEET NO. 1

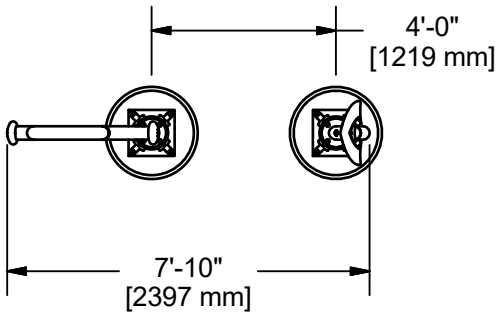
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-979-7205 F: 250-979-7215

THIRD ANGLE PROJECTION	DWG ID:	REV:	SIZE:	SCALE:	SHEET:
	0010-3859-A	C	B	NTS	2 OF: 2

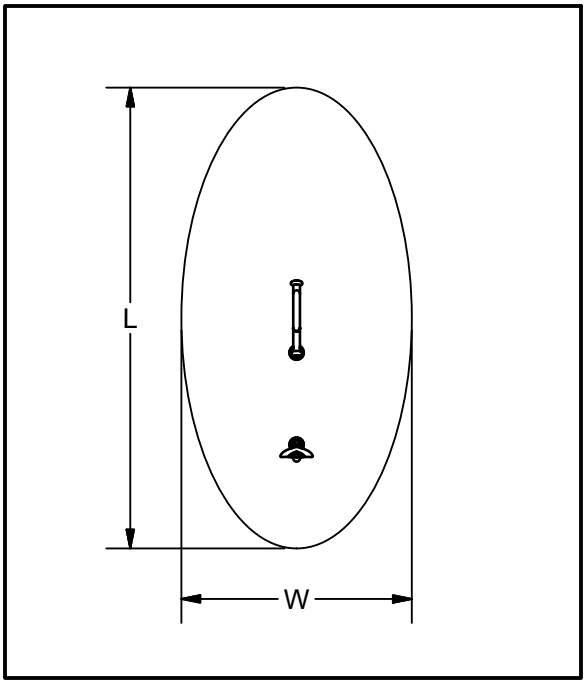
FS ANCHORS AWAY

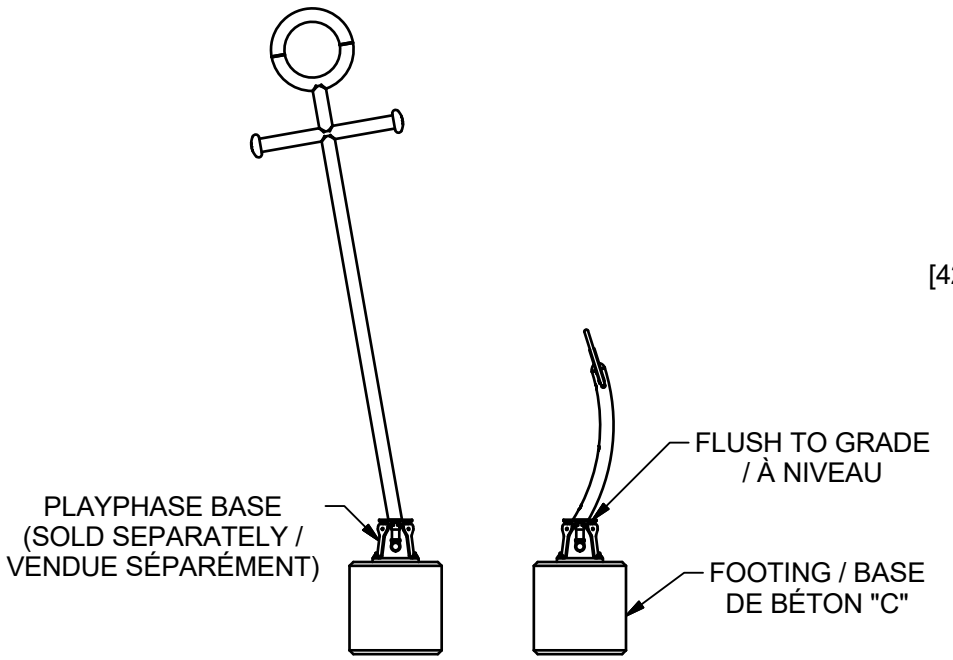
0010-0591

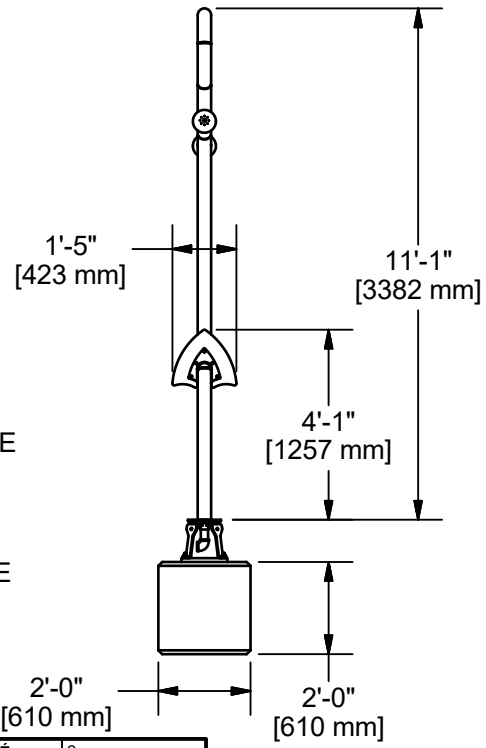
LIST OF MATERIALS / LISTE DE MATÉRIAUX (IF / SI APPLICABLE)	
BASE MATERIAL / MATÉRIEL	304 STAINLESS STEEL / ACIER INOXYDABLE
NOZZLES / BUSES	ACETAL / ACÉTAL, URETHANE / URÉTHANE
PANELS / PANNEAUX	ACRYLIC / ACRYLIQUE, ALUMINUM / ALUMINIUM



SPRAY AREA / ZONE D'ASPERSION







FOOTING BY OTHER, REFER TO LOCAL CODE / BASE DE BÉTON PAR D'AUTRES, SE RÉFÉRER AU CODE LOCAL

PLAYPHASE QTY / QTÉ	2
PLAYPHASE JIG / GABARIT	-

RECOMMENDED SPRAY AREA / ZONE D'ASPERSION POTENTIELLE			FLOW RATE / DÉBIT D'EAU	
R (ft/mm)	**L** (ft/mm)	**W** (ft/mm)	GPM/LPM	PSI/kPa
-/-	20/6096	10/3048	6/23	4/28
NOZZLES / BUSES		5	MASS: 115.6 lbmass	

COMPONENT INCLUDES: (IF REQUIRED) / INCLUS AVEC LE JEU (SI REQUISE)

-SERVICE TOOLS / OUTILS
-SPRAY NOZZLES / BUSES DE PERFORMANCE

DIMENSIONAL ACCURACY / PRÉCISION DIMENSIONELLE +/- 1" [25mm]

INITIAL:

DRAWING ID: **0010-0591**

SHEET: 1
OF: 1

waterplay
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-712-3393 F: 250-861-4814
E: design@waterplay.com W: waterplay.com

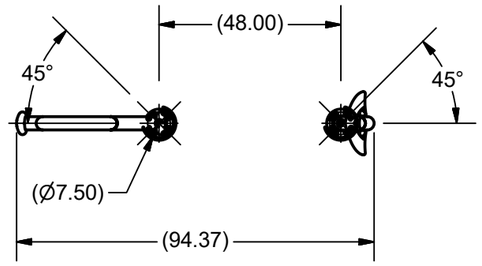
NOTE: REFER TO THE COMPONENT WRITTEN SPECIFICATION DOCUMENT FOR COMPLETE PRODUCT SPECIFICATIONS. WATERPLAY RESERVES THE RIGHT TO CHANGE THIS SPECIFICATION WITHOUT NOTICE.

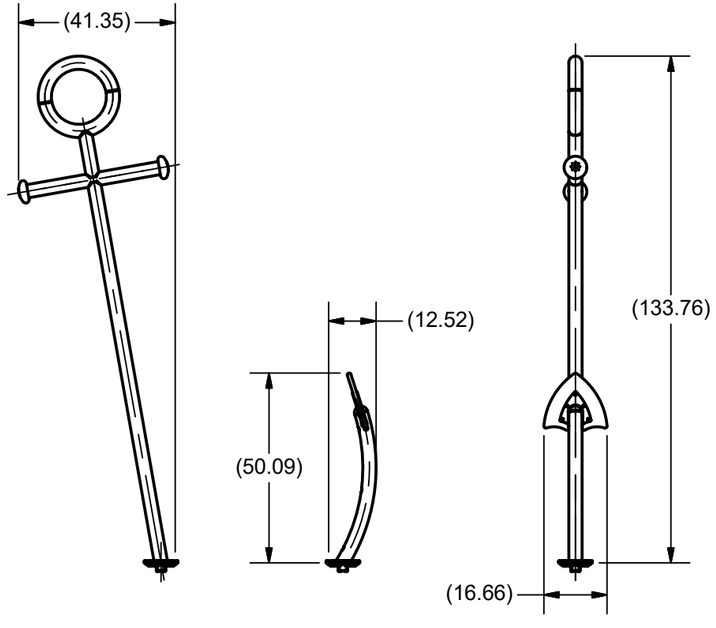
SE RÉFÉRER AU DOCUMENT DE SPÉCIFICATION ÉCRIT POUR LES DÉTAILS COMPLET DU PRODUIT. WATERPLAY A LE DROIT DE CHANGER CES DERNIERS SANS PRÉAVIS.

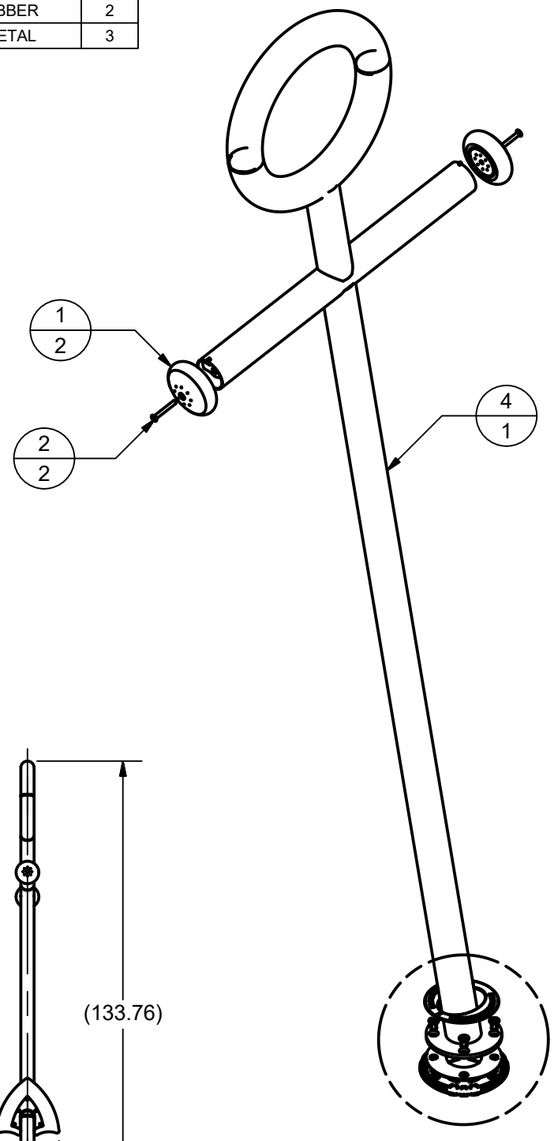
ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0010-0413	C	BOBBLE NOZZLE	URETHANE	2
2	0010-0458		BOLT, FLAT HD SOC, 3/8-16 X 3.00 LG, PT	SST	2
3	0010-0591-A	A	ANCHORS AWAY ASSY		1
4	0010-0592	C	ANCHOR BODY WELD ASSY	WELDED SST	1
5	0010-1949	B	PLAYPHASE FLANGE COVER	RUBBER	2
6	FTC-08001	B	GASKET, FLANGE, 3" PIPE	RUBBER	2
7	NOZ-08092	A	NOZZLE, 3/4", 0.063 X 7 ORIFICE	ACETAL	3

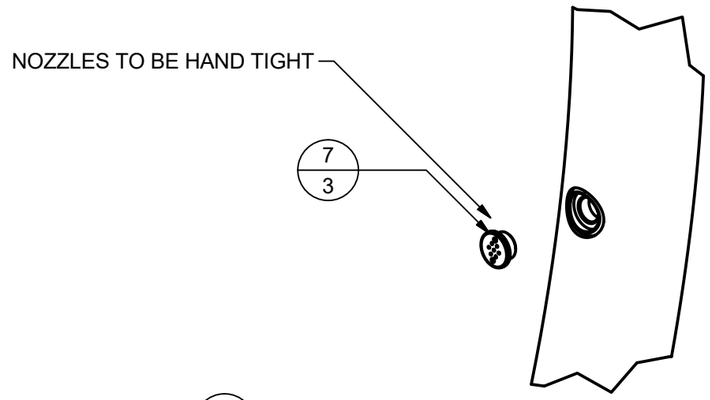
REV	DESCRIPTION	DATE
A	INITIAL RELEASE	8/31/2016
B	CHANGED PANEL TAB	6/19/2018
C	UPDATED INSTALL DETAILS	8/27/2019

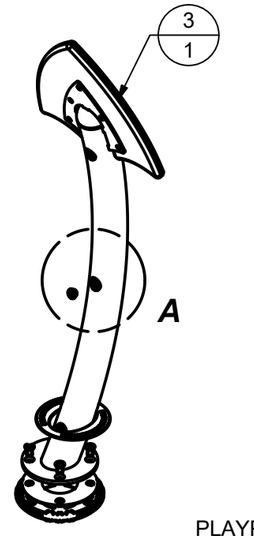
PLAYPHASE BASE ORIENTATION



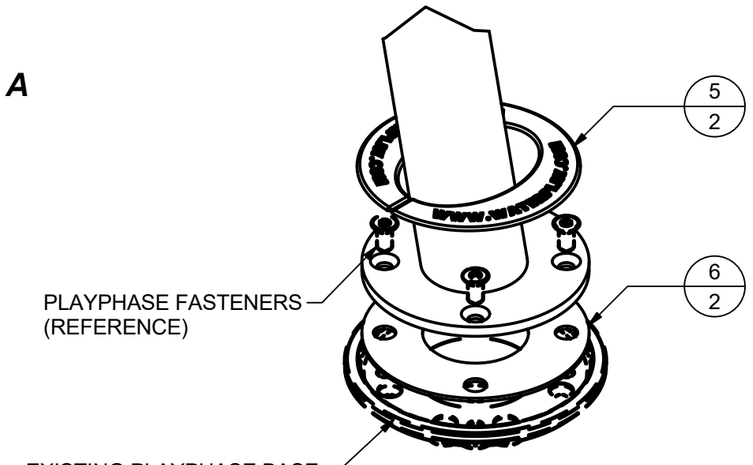








DETAIL A



DETAIL B

NOTES:

1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS

TORQUE VALUES UNLESS NOTED
1/4-20....63 in-lbs 1/2-13....37 ft-lbs
3/8-16....201 in-lbs

MASS: 115.6 lbmass

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: NICMAY
DRAWN: NICMAY
CHECKED: JASMAY
DATE: 8/10/2016

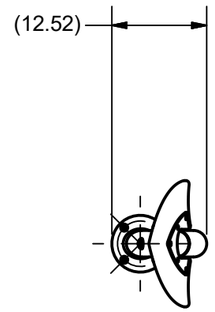
ANCHORS AWAY INSTALL

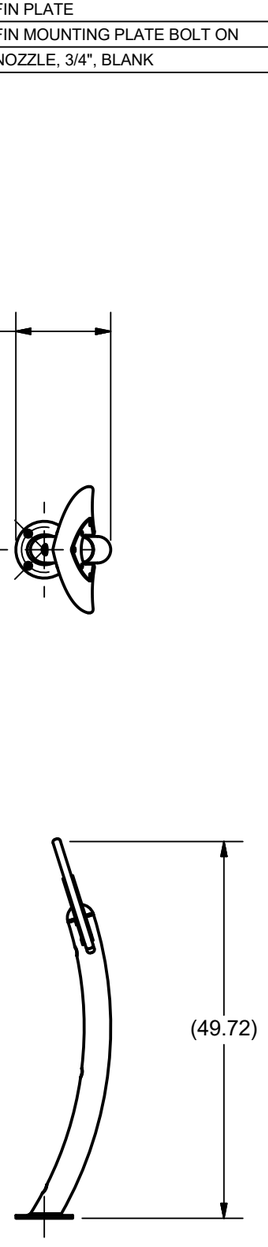
ANCHORS AWAY

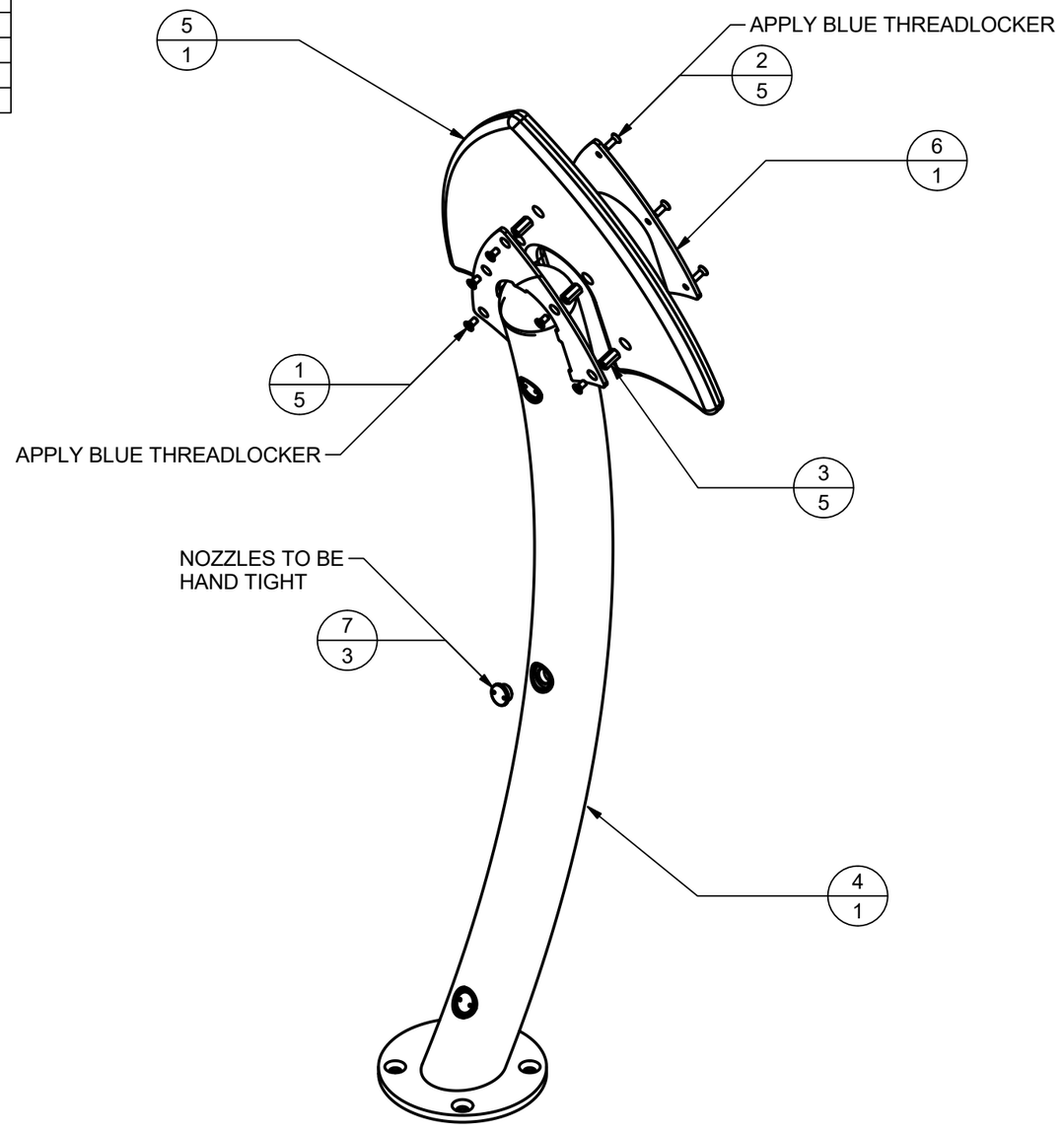
DWG ID: **0010-0591** | REV: **C** | SIZE: B | SCALE: NTS | SHEET: 1 | OF: 1

ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0002-6734		BOLT, FLAT HD SOC, 1/4-20 X 0.50 LG, FT	SST	5
2	0010-0293		BOLT, FLAT HD SOC, 1/4-20 X 0.75 LG, FT	SST	5
3	0010-0504		NUT, COUPLING, 1/4-20 X 0.88 LG	SST	5
4	0010-0597	C	ARM WELD ASSY	WELDED SST	1
5	0010-0600	B	FIN PLATE	ACRYLIC	1
6	0010-4413	A	FIN MOUNTING PLATE BOLT ON	SST	1
7	NOZ-08090	A	NOZZLE, 3/4", BLANK	ACETAL	3

REV	DESCRIPTION	DATE
A	UPDATED INSTALL DETAILS	8/27/2019







NOTES:

1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS

TORQUE VALUES UNLESS NOTED
1/4-20....63 in-lbs 1/2-13....37 ft-lbs
3/8-16....201 in-lbs

MASS: 30.0 lbmass

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: NICMAY
DRAWN: NICMAY
CHECKED: JASMAY
DATE: 8/10/2016

ANCHORS AWAY ASSY

ANCHORS AWAY

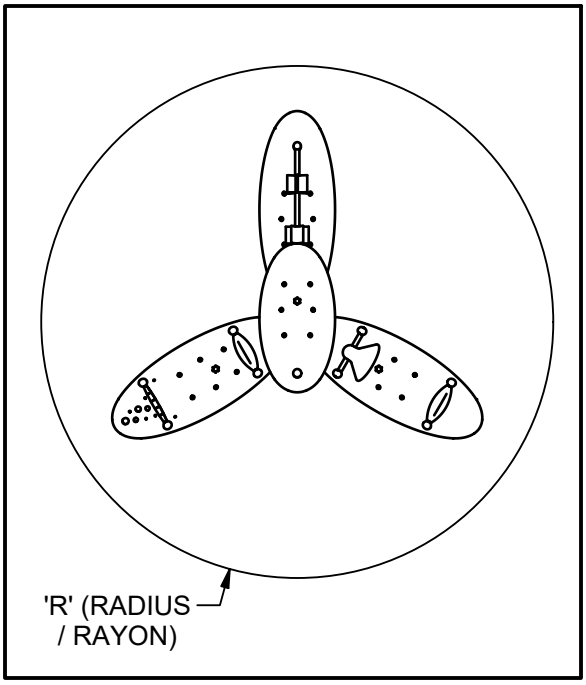
DWG ID: **0010-0591-A** | REV: **A** | SIZE: B | SCALE: NTS | SHEET: 1 | OF: 1

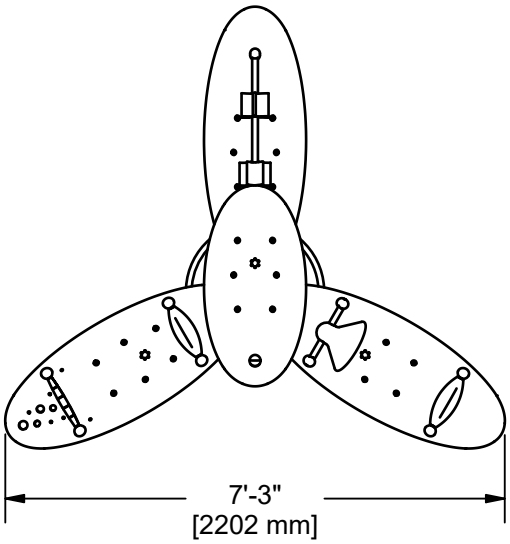
FS WATERFALL 3

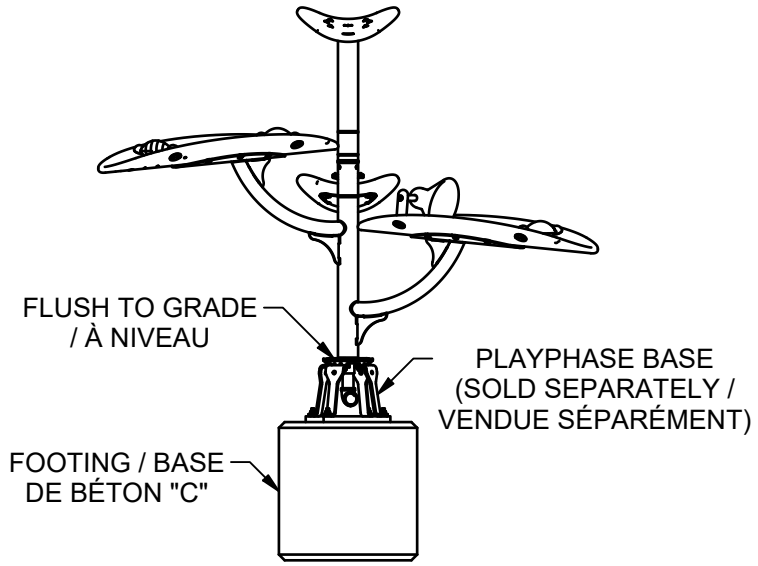
0010-4592

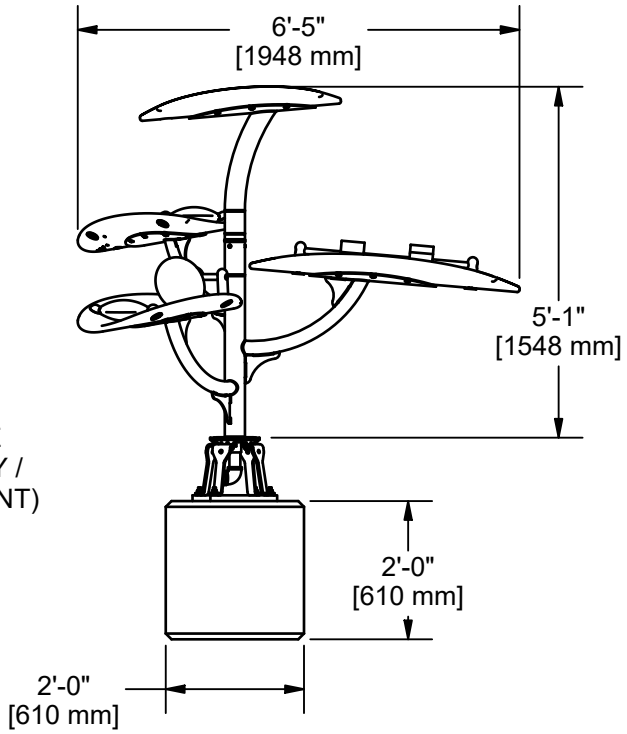
LIST OF MATERIALS / LISTE DE MATÉRIAUX (IF / SI APPLICABLE)	
BASE MATERIAL / MATÉRIEL	304 STAINLESS STEEL / ACIER INOXYDABLE
PANELS / PANNEAUX	ACRYLIC / ACRYLIQUE
OTHER / AUTRE	URETHANE / URÉTHANE

***IMPACT SPRAY AREA / ZONE D'ASPERSION* D'IMPACT**









FOOTING BY OTHER, REFER TO LOCAL CODE / BASE DE BÉTON PAR D'AUTRES, SE RÉFÉRER AU CODE LOCAL

RECOMMENDED SPRAY AREA / ZONE D'ASPERSION POTENTIELLE			FLOW RATE / DÉBIT D'EAU	
R (ft/mm)	**L** (ft/mm)	**W** (ft/mm)	GPM/LPM	PSI/kPa
5/1524	-/-	-/-	15/57	8/55
NOZZLES / BUSES		-	MASS: 233.8 lbmass	

COMPONENT INCLUDES: (IF REQUIRED) / INCLUS AVEC LE JEU (SI REQUISE)

-SERVICE TOOLS / OUTILS
-SPRAY NOZZLES / BUSES DE PERFORMANCE

DIMENSIONAL ACCURACY / PRÉCISION DIMENSIONELLE +/- 1" [25mm]

INITIAL:

DRAWING ID: **0010-4592**

SHEET: 1
OF: 1

waterplay
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-712-3393 F: 250-861-4814
E: design@waterplay.com W: waterplay.com

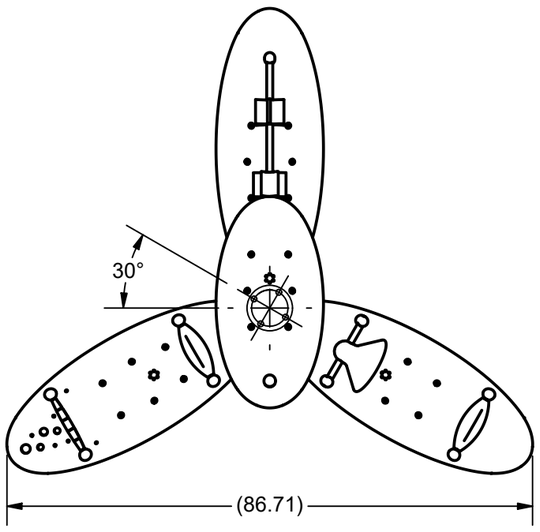
NOTE: REFER TO THE COMPONENT WRITTEN SPECIFICATION DOCUMENT FOR COMPLETE PRODUCT SPECIFICATIONS. WATERPLAY RESERVES THE RIGHT TO CHANGE THIS SPECIFICATION WITHOUT NOTICE.

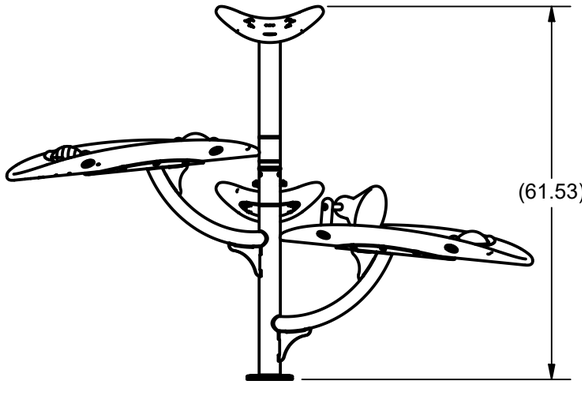
SE RÉFÉRER AU DOCUMENT DE SPÉCIFICATION ÉCRIT POUR LES DÉTAILS COMPLET DU PRODUIT. WATERPLAY A LE DROIT DE CHANGER CES DERNIERS SANS PRÉAVIS.

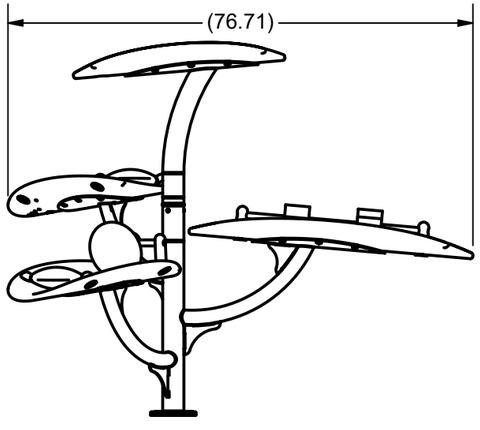
ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0010-1949	B	PLAYPHASE FLANGE COVER	RUBBER	1
2	0010-4248	E	WATER CHANNEL TREE TOP		1
3	0010-4592-A	C	WATERFALL 3 ASSY		1
4	0010-4599	E	WATERWAYS TOP 05		1
5	0010-4600	D	WATERWAYS TOP 06		1
6	0010-4601	D	WATERWAYS TOP 07		1
7	0010-4615	D	WATERFALL 3 WELD ASSY	WELDED SST	1
8	FTC-08001	B	GASKET, FLANGE, 3" PIPE	RUBBER	1

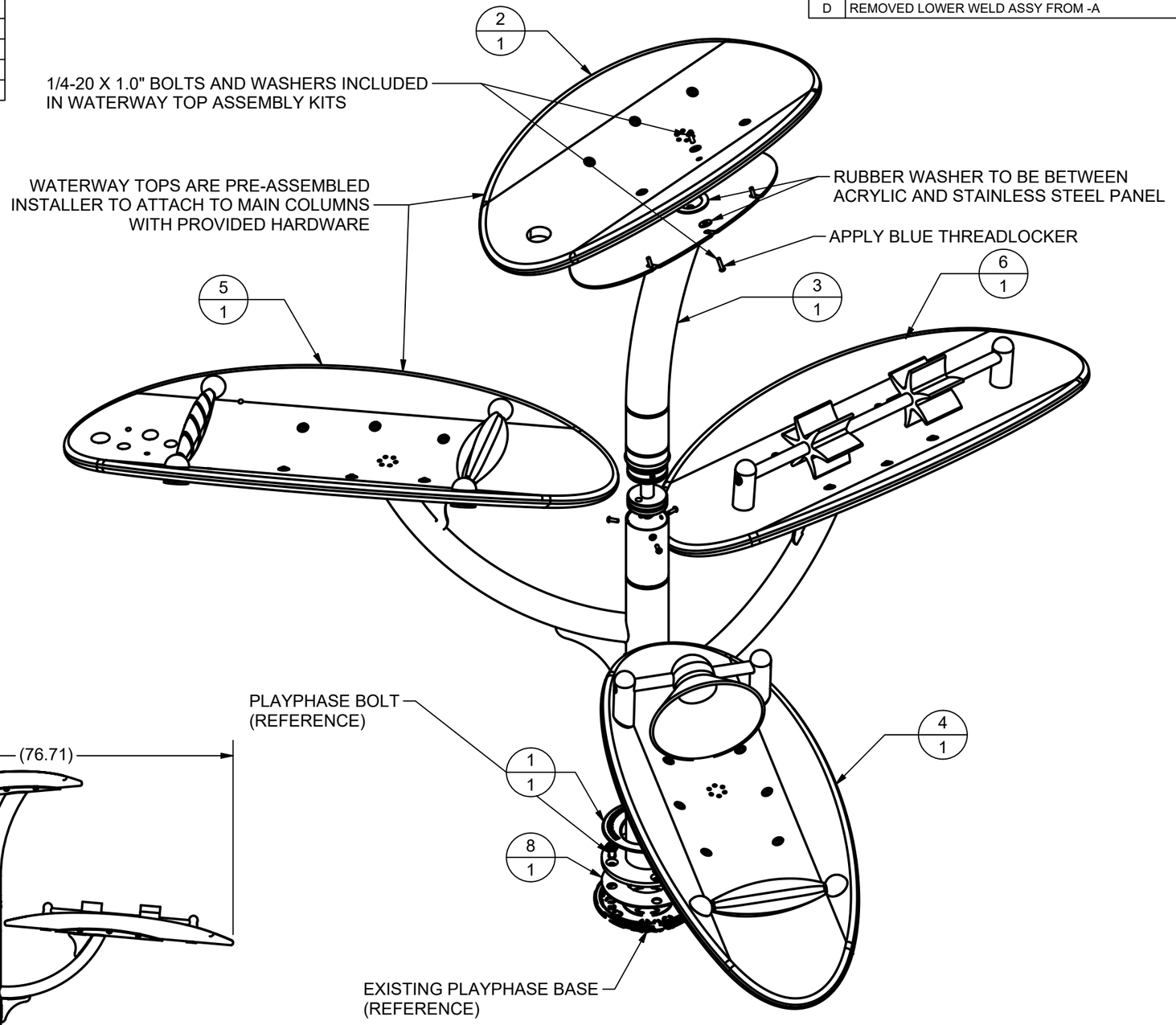
REV	DESCRIPTION	DATE
A	INITIAL RELEASE	9/12/2018
B	ADDED WEIRS	6/27/2019
C	UPDATED INSTALL DETAILS	8/8/2019
D	REMOVED LOWER WELD ASSY FROM -A	11/19/2020

PLAYPHASE BASE ORIENTATION









NOTES:

1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS

TORQUE VALUES UNLESS NOTED
1/4-20....63 in-lbs 1/2-13....37 ft-lbs
3/8-16....201 in-lbs

MASS: N/A

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: JASMAY
DRAWN: MICNEI
CHECKED: JASMAY
DATE: 8/7/2019

WATERFALL 3 INSTALL

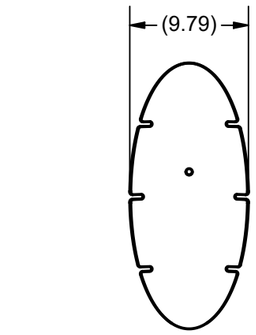
WATERWAYS

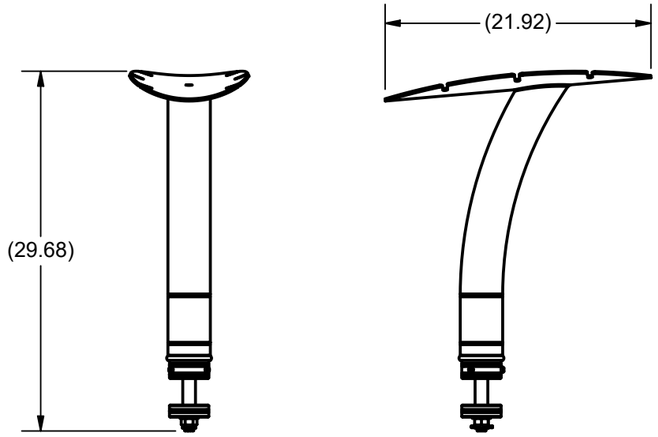
DWG ID: **0010-4592** | REV: **D** | SIZE: B | SCALE: NTS | SHEET: 1 | OF: 1

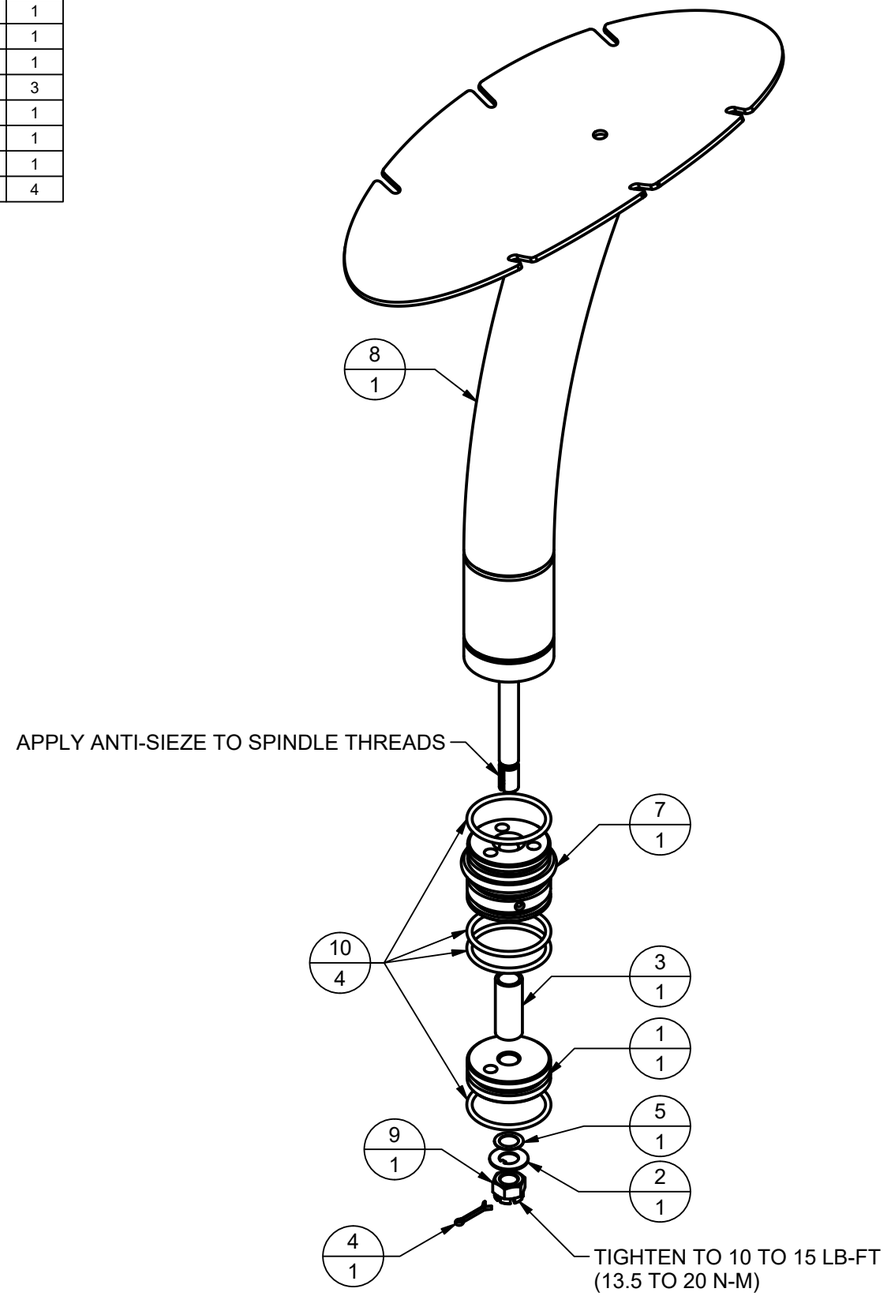
ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0010-0268	B	LOWER REDUCER	ACETAL	1
2	0010-0274	A	INDEXING WASHER	SST	1
3	0010-0275	A	REDUCER SPACER	PVC	1
4	0010-0292		COTTER PIN, 5/32 X 1.50 LG	AISI 304	1
5	0010-0469		WASHER, SHIM, 3/4 (1.13 OD)	PVC	1
6	0010-0917		BOLT, BUTTON HD CAP, 1/4-20 X 0.75 LG, FT	SST	3
7	0010-3511	B	UPPER REDUCER	ACETAL	1
8	0010-4245	F	WATERFALL TOP WELD ASSY	WELDED SST	1
9	NUT-02100		NUT, CASTLE, 3/4-16	SST	1
10	ORG-08336		O-RING -336, 2.850 ID X 0.210 CS	RUBBER	4

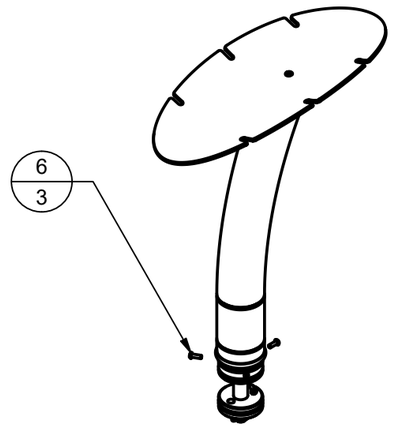
REV	DESCRIPTION	DATE
A	UPDATED INSTALL DETAILS	8/8/2019
B	CHANGED HUB BOLTS TO BUTTON HEAD	11/28/2019
C	REMOVED LOWER WELD ASSY FROM -A	11/19/2020

NOTES:
- ENSURE MACHINED PARTS ARE CLEAR OF PAINT AND CLEAN
- LUBRICATE O-RINGS WITH WATERPROOF LUBRICANT
- DO NOT OVERTIGHTEN THE CASTLE NUT AS IT AFFECTS THE ROTATIONAL HUB SPINNING RESISTANCE. TOO LITTLE RESISTANCE CAN LEAD TO PART DAMAGE OR CHILD INJURY









NOTES:
1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS

TORQUE VALUES UNLESS NOTED
1/4-20....63 in-lbs 1/2-13....37 ft-lbs
3/8-16....201 in-lbs

MASS: 21.4 lbmass

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: JASMAY
DRAWN: MICNEI
CHECKED: JASMAY
DATE: 8/7/2019

WATERFALL 3 ASSY

WATERWAYS

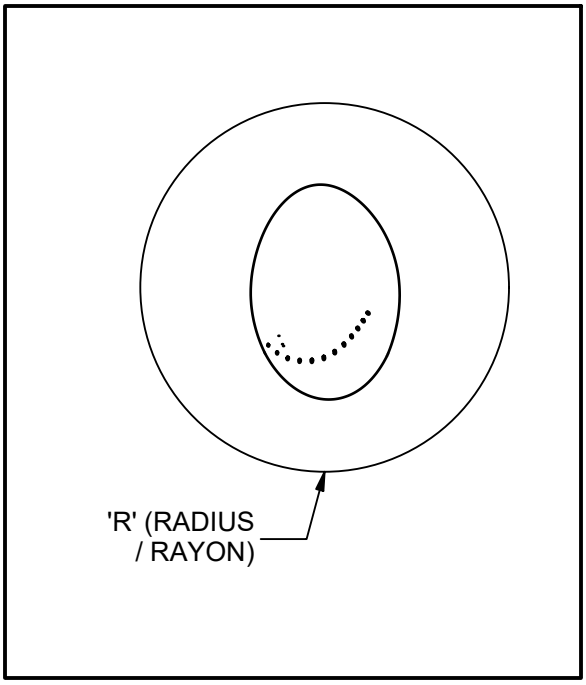
DWG ID: **0010-4592-A** | REV: **C** | SIZE: B | SCALE: NTS | SHEET: 1 | OF: 1

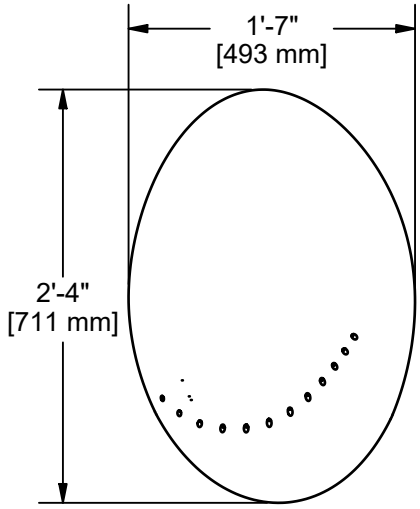
FS SURF STONE 2

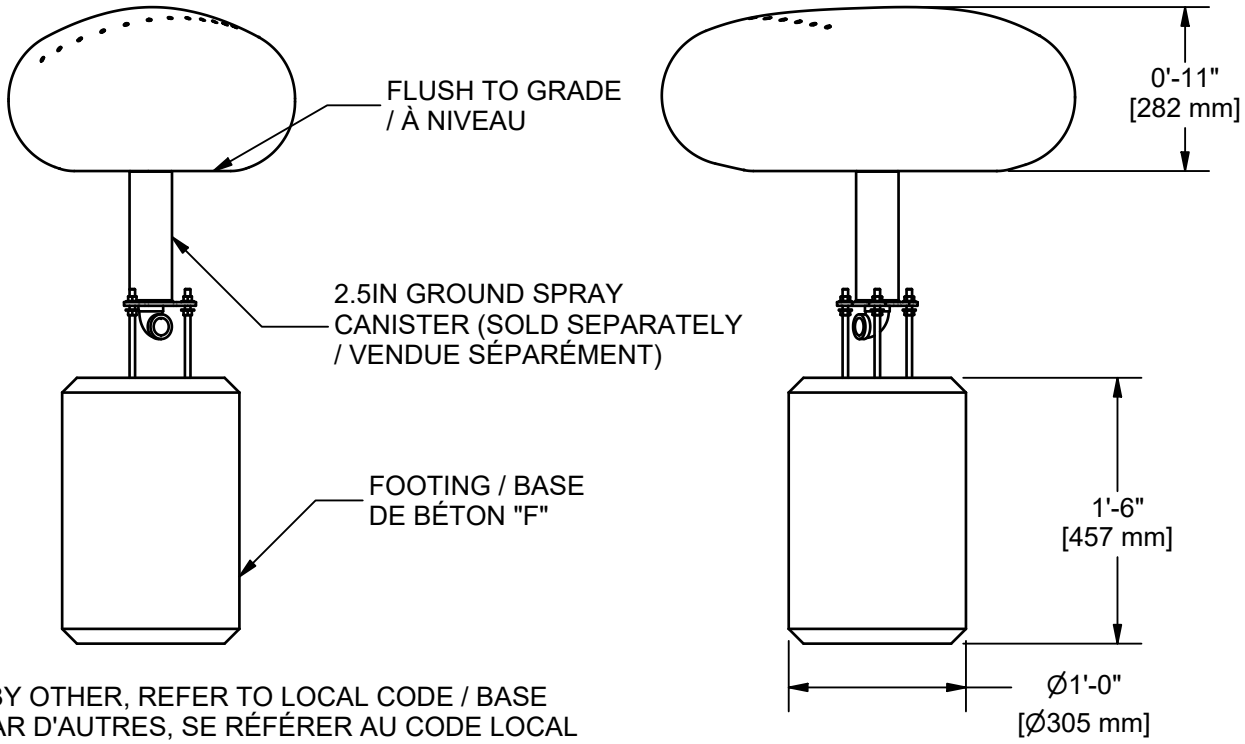
0010-7472

LIST OF MATERIALS / LISTE DE MATÉRIAUX (IF / SI APPLICABLE)	
BASE MATERIAL / MATÉRIEL	304 STAINLESS STEEL / ACIER INOXYDABLE
NOZZLES / BUSES	ACETAL / ACÉTAL
OTHER / AUTRE	CONCRETE / BÉTON

***IMPACT SPRAY AREA / ZONE D'ASPERSION* D'IMPACT**







FOOTING BY OTHER, REFER TO LOCAL CODE / BASE DE BÉTON PAR D'AUTRES, SE RÉFÉRER AU CODE LOCAL

RECOMMENDED SPRAY AREA / ZONE D'ASPERSION POTENTIELLE			FLOW RATE / DÉBIT D'EAU	
R (ft/mm)	**L** (ft/mm)	**W** (ft/mm)	GPM/LPM	PSI/kPa
2/610	-/-	-/-	5/19	5/34
NOZZLES / BUSES		1	MASS: 94.1 lbmass	

COMPONENT INCLUDES: (IF REQUIRED) / INCLUS AVEC LE JEU (SI REQUISE)

-SERVICE TOOLS / OUTILS
-SPRAY NOZZLES / BUSES DE PERFORMANCE

DIMENSIONAL ACCURACY / PRÉCISION DIMENSIONELLE +/- 1" [25mm]

INITIAL:

DRAWING ID: **0010-7472**

SHEET: 1
OF: 1

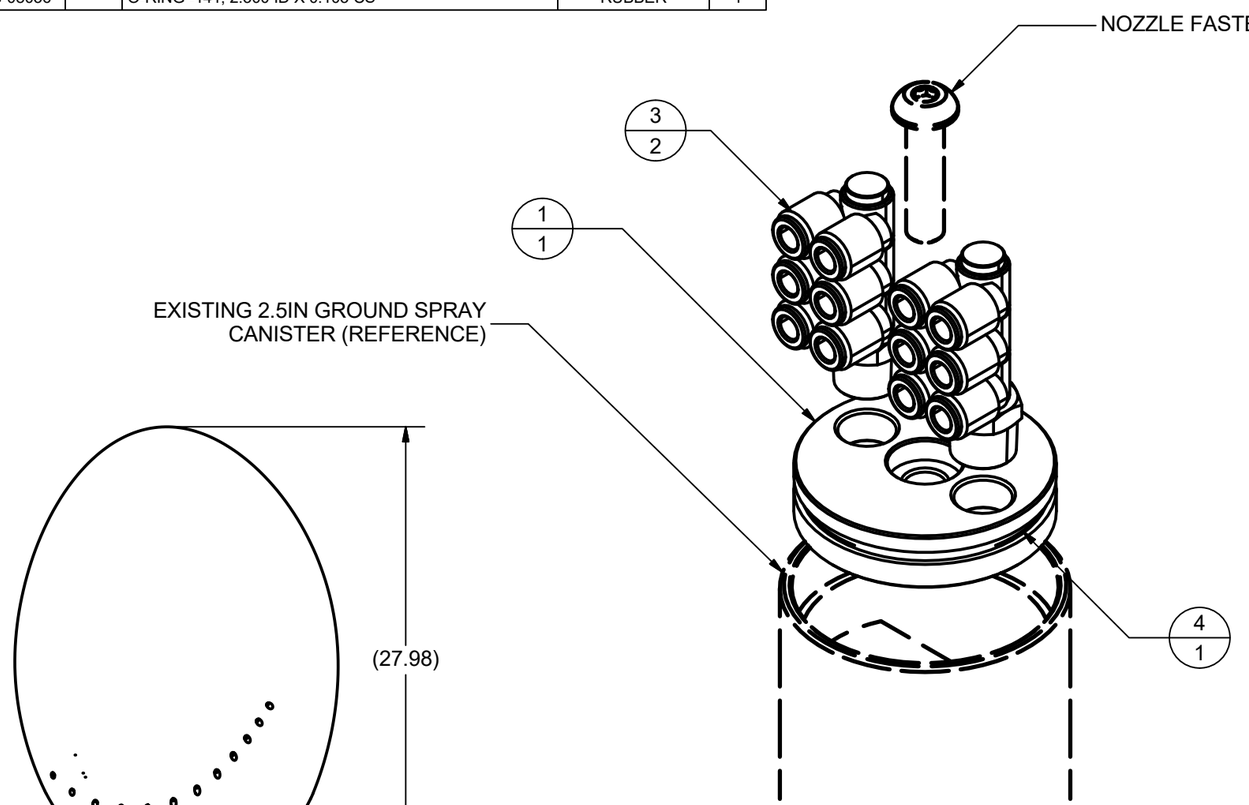
waterplay
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-712-3393 F: 250-861-4814
E: design@waterplay.com W: waterplay.com

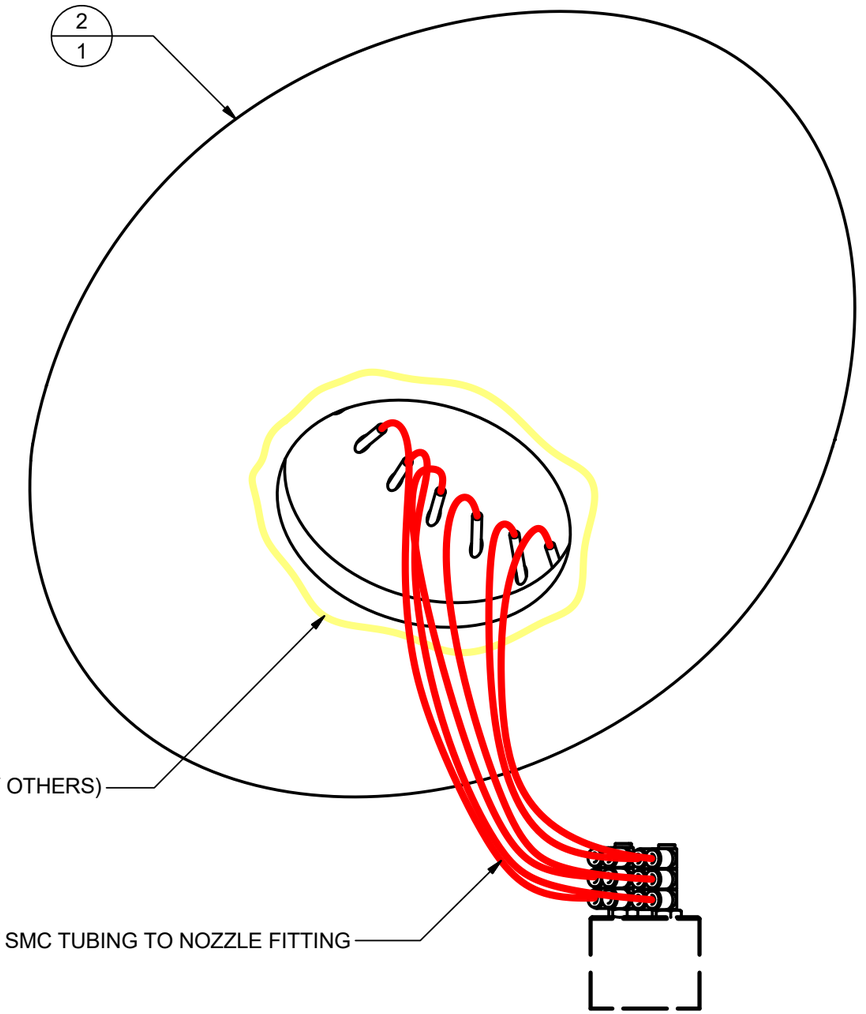
NOTE: REFER TO THE COMPONENT WRITTEN SPECIFICATION DOCUMENT FOR COMPLETE PRODUCT SPECIFICATIONS. WATERPLAY RESERVES THE RIGHT TO CHANGE THIS SPECIFICATION WITHOUT NOTICE.

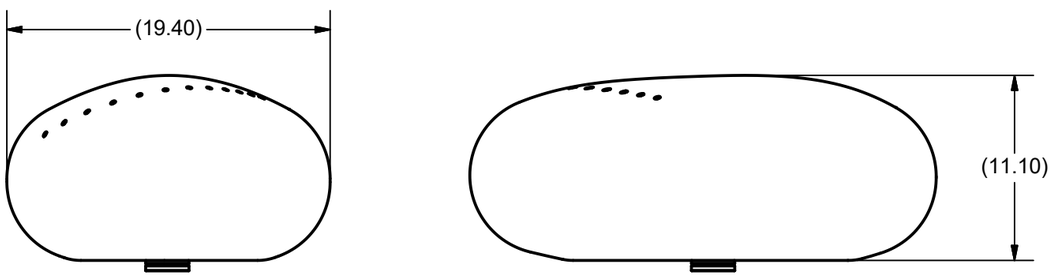
SE RÉFÉRER AU DOCUMENT DE SPÉCIFICATION ÉCRIT POUR LES DÉTAILS COMPLET DU PRODUIT. WATERPLAY A LE DROIT DE CHANGER CES DERNIERS SANS PRÉAVIS.

ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0003-1224	A	NOZZLE, 2-1/2", 2X 3/8" NPT HOLE	ACETAL	1
2	0003-1232	A	SURF STONE #2, CONCRETE WITH TUBING		1
3	FTC-04021	A	T.BRANCH ELBOW 1/4 TUBE X 3/8 NPT	BRASS	2
4	ORG-08036		O-RING -141, 2.300 ID X 0.103 CS	RUBBER	1

REV	DESCRIPTION	DATE
A	INITIAL RELEASE	8/14/2020







NOTES:

1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS

TORQUE VALUES UNLESS NOTED
1/4-20....63 in-lbs 1/2-13....37 ft-lbs
3/8-16....201 in-lbs

MASS: 94.1 lbmass

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: JAMIRV
DRAWN: MICNEI
CHECKED: JASMAY
DATE: 7/5/2019

FS SURF STONE 2

GRASSLANDS

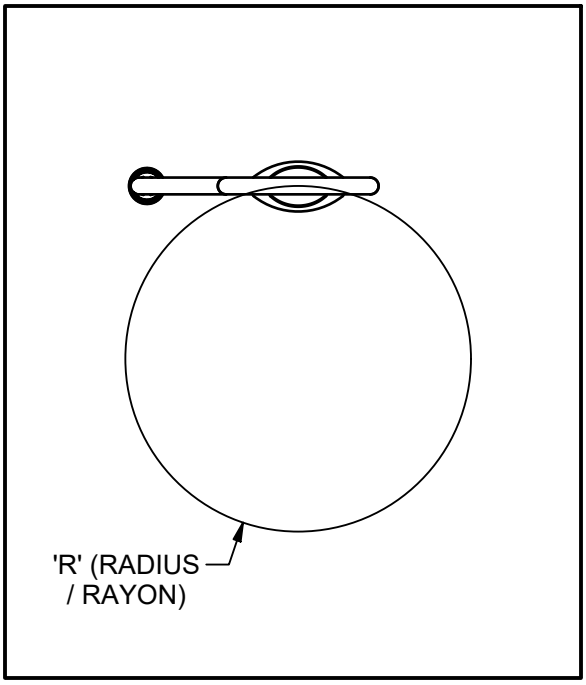
DWG ID: **0010-7472** | REV: **A** | SIZE: B | SCALE: NTS | SHEET: 1 | OF: 1

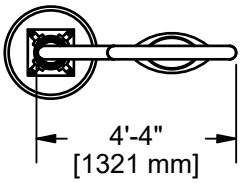
FS AQUA-DROP

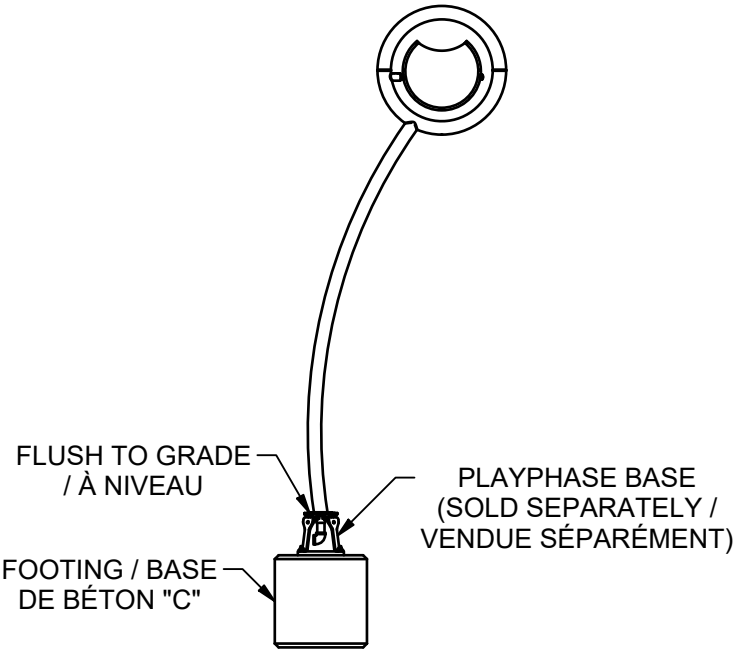
0010-1421

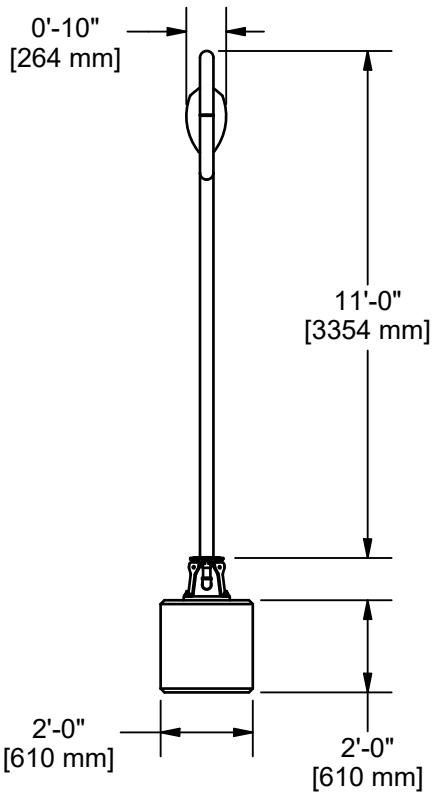
LIST OF MATERIALS / LISTE DE MATÉRIAUX (IF / SI APPLICABLE)	
BASE MATERIAL / MATÉRIEL	304 STAINLESS STEEL / ACIER INOXYDABLE
NOZZLES / BUSES	ACETAL / ACÉTAL, URETHANE / URÉTHANE
PANELS / PANNEAUX	ACRYLIC / ACRYLIQUE, ALUMINUM / ALUMINIUM

***IMPACT SPRAY AREA / ZONE D'ASPERSION* D'IMPACT**









FOOTING BY OTHER, REFER TO LOCAL CODE / BASE DE BÉTON PAR D'AUTRES, SE RÉFÉRER AU CODE LOCAL

RECOMMENDED SPRAY AREA / ZONE D'ASPERSION POTENTIELLE			FLOW RATE / DÉBIT D'EAU	
R (ft/mm)	**L** (ft/mm)	**W** (ft/mm)	GPM/LPM	PSI/kPa
3/914	-/-	-/-	10/38	7/48
NOZZLES / BUSES		-	MASS: 95.8 lbmass	

COMPONENT INCLUDES: (IF REQUIRED) / INCLUS AVEC LE JEU (SI REQUISE)
-SERVICE TOOLS / OUTILS
-SPRAY NOZZLES / BUSES DE PERFORMANCE

DIMENSIONAL ACCURACY / PRÉCISION DIMENSIONELLE +/- 1" [25mm]

INITIAL:

DRAWING ID: **0010-1421**

SHEET: 1
OF: 1

waterplay
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-712-3393 F: 250-861-4814
E: design@waterplay.com W: waterplay.com

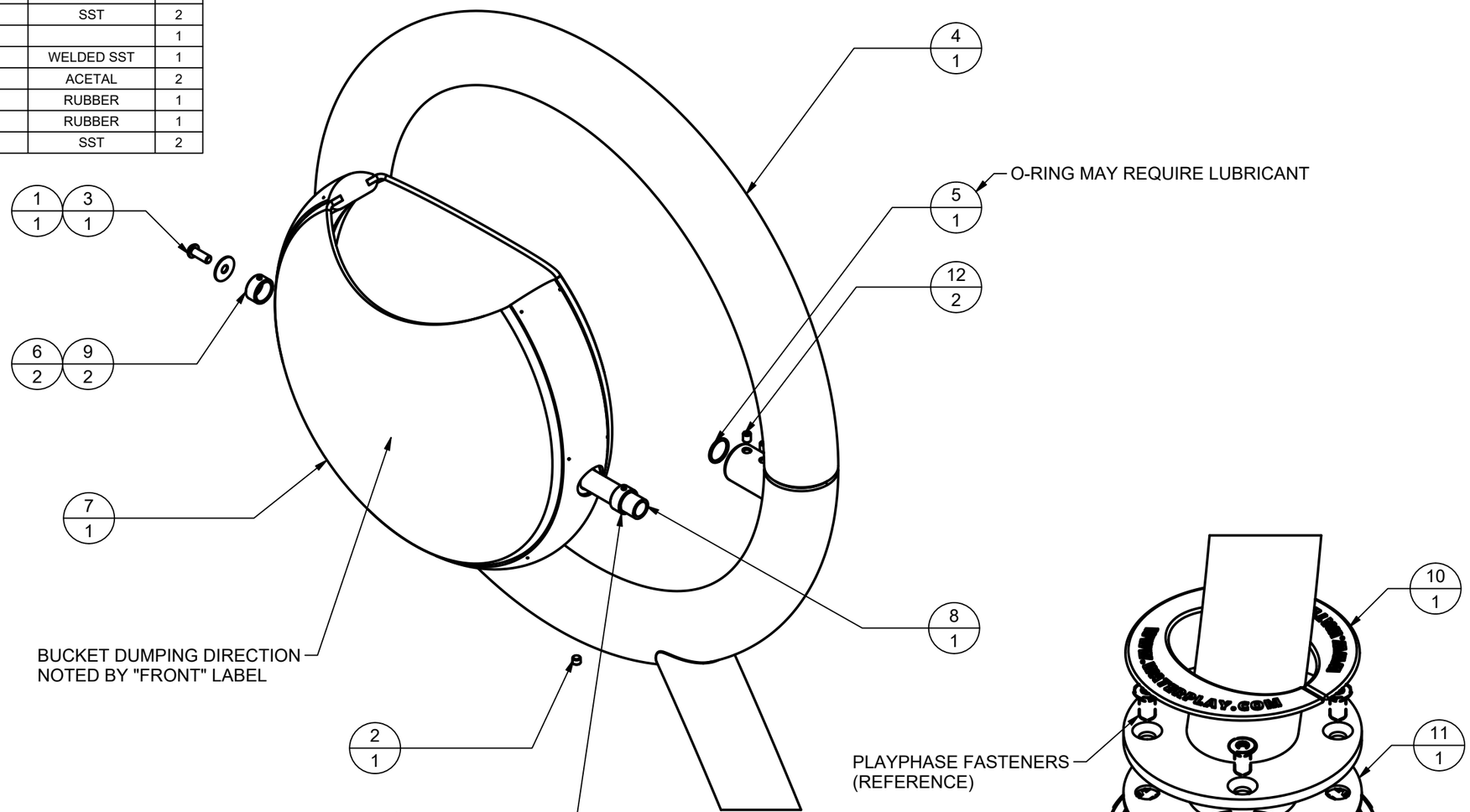
NOTE: REFER TO THE COMPONENT WRITTEN SPECIFICATION DOCUMENT FOR COMPLETE PRODUCT SPECIFICATIONS. WATERPLAY RESERVES THE RIGHT TO CHANGE THIS SPECIFICATION WITHOUT NOTICE.

SE RÉFÉRER AU DOCUMENT DE SPÉCIFICATION ÉCRIT POUR LES DÉTAILS COMPLET DU PRODUIT. WATERPLAY A LE DROIT DE CHANGER CES DERNIERS SANS PRÉAVIS.

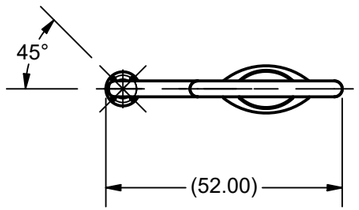
ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0001-1134		WASHER, FLAT, 3/8 (1.25 OD)	SST	1
2	0010-0831		PLUG, PIPE, SOC, 1/8 NPT	NYLON	1
3	0010-1125		BOLT, BUTTON HD CAP, 3/8-16 X 1.00 LG, FT	SST	1
4	0010-1177	C	AQUA-DROP WELD ASSY	WELDED SST	1
5	0010-1180		O-RING -121, 1.049 ID X 0.103 CS	RUBBER	1
6	0010-1185		SET SCREW, CUP POINT, 10-24 X 0.19 LG.	SST	2
7	0010-1254-GEN	A	LITTLE BUBBLES BUCKET ASSY		1
8	0010-1258	A	LITTLE BUBBLES SPINDLE WELD ASSY	WELDED SST	1
9	0010-1261	A	SHAFT COLLAR, 1.00 ID NOM	ACETAL	2
10	0010-1949	B	PLAYPHASE FLANGE COVER	RUBBER	1
11	FTC-08001	B	GASKET, FLANGE, 3" PIPE	RUBBER	1
12	SCR-02135		SET SCREW, CUP POINT, 3/8-16 X 0.50 LG.	SST	2

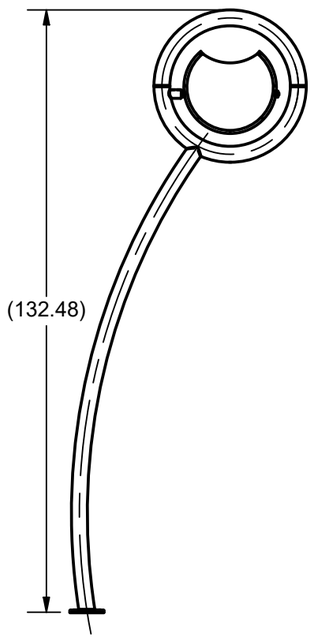
NOTE:
ADJUST FLOW SO THAT BUCKET
DUMPS EVERY 20 TO 30 SECONDS

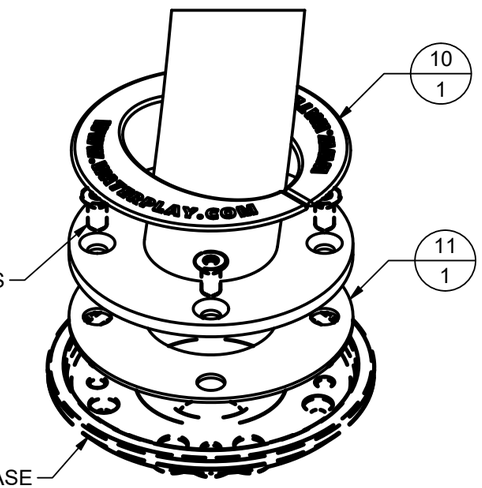
REV	DESCRIPTION	DATE
A	INITIAL RELEASE	6/15/2016
B	UPDATED INSTALL DETAILS	8/28/2019



PLAYPHASE BASE ORIENTATION







NOTES:
1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS

TORQUE VALUES UNLESS NOTED
1/4-20....63 in-lbs 1/2-13....37 ft-lbs
3/8-16....201 in-lbs

MASS: N/A

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: JASMAY
DRAWN: JASMAY
CHECKED: NICMAY
DATE: 6/6/2016

AQUA-DROP INSTALL

CIRQUE

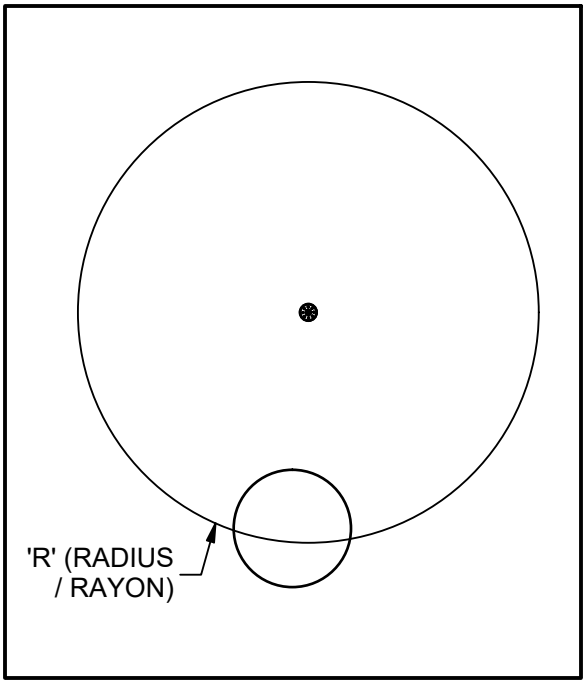
DWG ID: **0010-1421** | REV: **B** | SIZE: B | SCALE: NTS | SHEET: 1 | OF: 1

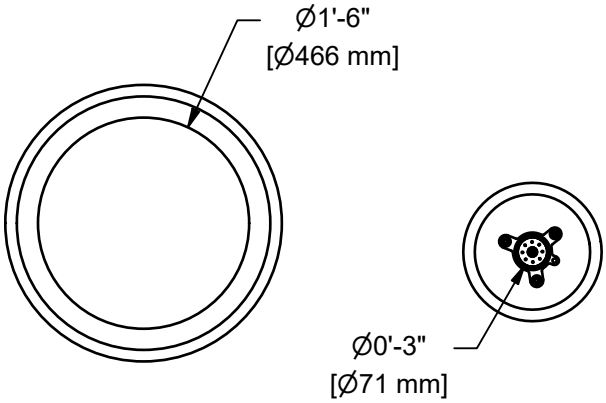
FS BOINGO 1

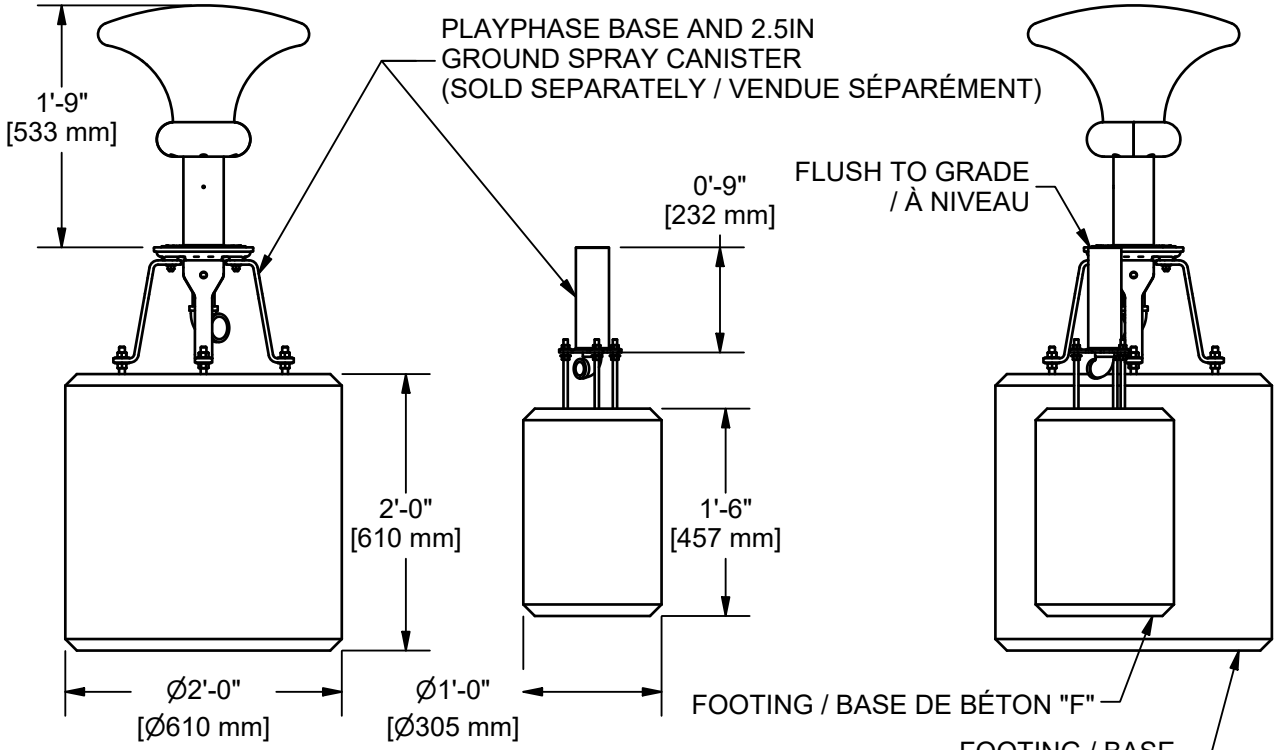
0010-2399

LIST OF MATERIALS / LISTE DE MATÉRIAUX (IF / SI APPLICABLE)	
BASE MATERIAL / MATÉRIEL	304 STAINLESS STEEL / ACIER INOXYDABLE
NOZZLES / BUSES	ACETAL / ACÉTAL
OTHER / AUTRE	POLYPROPYLENE / POLYPROPYLÈNE

***IMPACT SPRAY AREA / ZONE D'ASPERSION* D'IMPACT**







FOOTING BY OTHER, REFER TO LOCAL CODE / BASE DE BÉTON PAR D'AUTRES, SE RÉFÉRER AU CODE LOCAL

RECOMMENDED SPRAY AREA / ZONE D'ASPERSION POTENTIELLE			FLOW RATE / DÉBIT D'EAU	
R (ft/mm)	**L** (ft/mm)	**W** (ft/mm)	GPM/LPM	PSI/kPa
3/914	-/-	-/-	2/8	1/7
NOZZLES / BUSES		1	MASS: 36.7 lbmass	

COMPONENT INCLUDES: (IF REQUIRED) / INCLUS AVEC LE JEU (SI REQUISE)
-SERVICE TOOLS / OUTILS
-SPRAY NOZZLES / BUSES DE PERFORMANCE

DIMENSIONAL ACCURACY / PRÉCISION DIMENSIONELLE +/- 1" [25mm]

INITIAL:

DRAWING ID: **0010-2399**

SHEET: 1
OF: 1

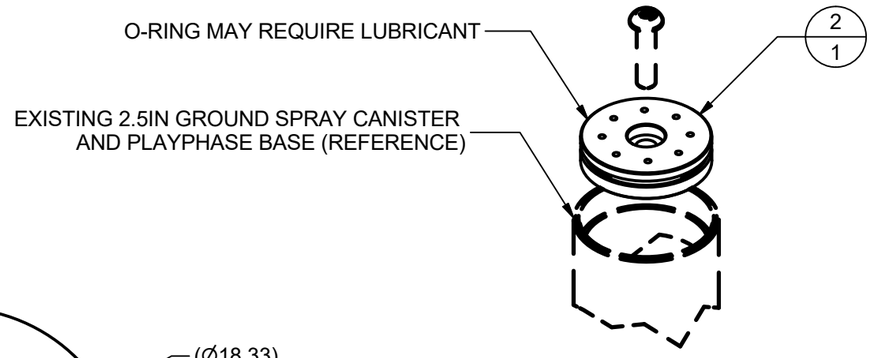
waterplay
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-712-3393 F: 250-861-4814
E: design@waterplay.com W: waterplay.com

NOTE: REFER TO THE COMPONENT WRITTEN SPECIFICATION DOCUMENT FOR COMPLETE PRODUCT SPECIFICATIONS. WATERPLAY RESERVES THE RIGHT TO CHANGE THIS SPECIFICATION WITHOUT NOTICE.

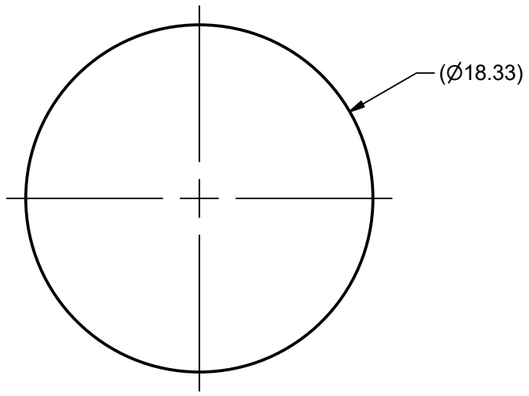
SE RÉFÉRER AU DOCUMENT DE SPÉCIFICATION ÉCRIT POUR LES DÉTAILS COMPLET DU PRODUIT. WATERPLAY A LE DROIT DE CHANGER CES DERNIERS SANS PRÉAVIS.

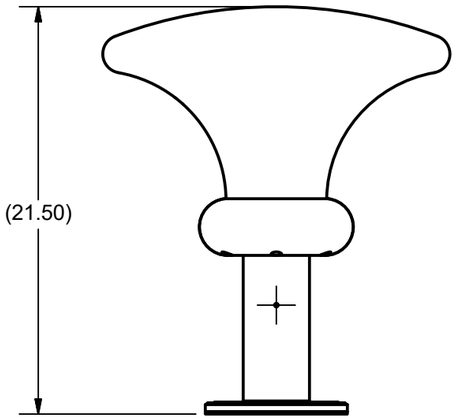
ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0010-1424	A.1	BOINGO		1
2	0010-5049	A	2.5IN GEYSER NOZZLE KIT		1

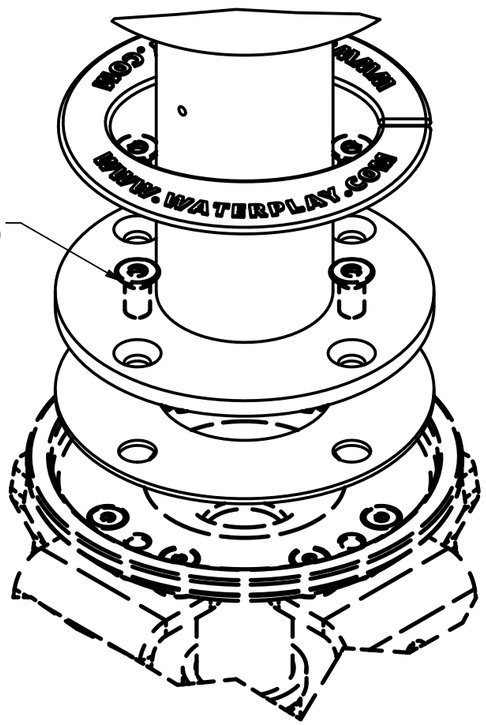
REV	DESCRIPTION	DATE
A	INITIAL RELEASE	9/18/2020



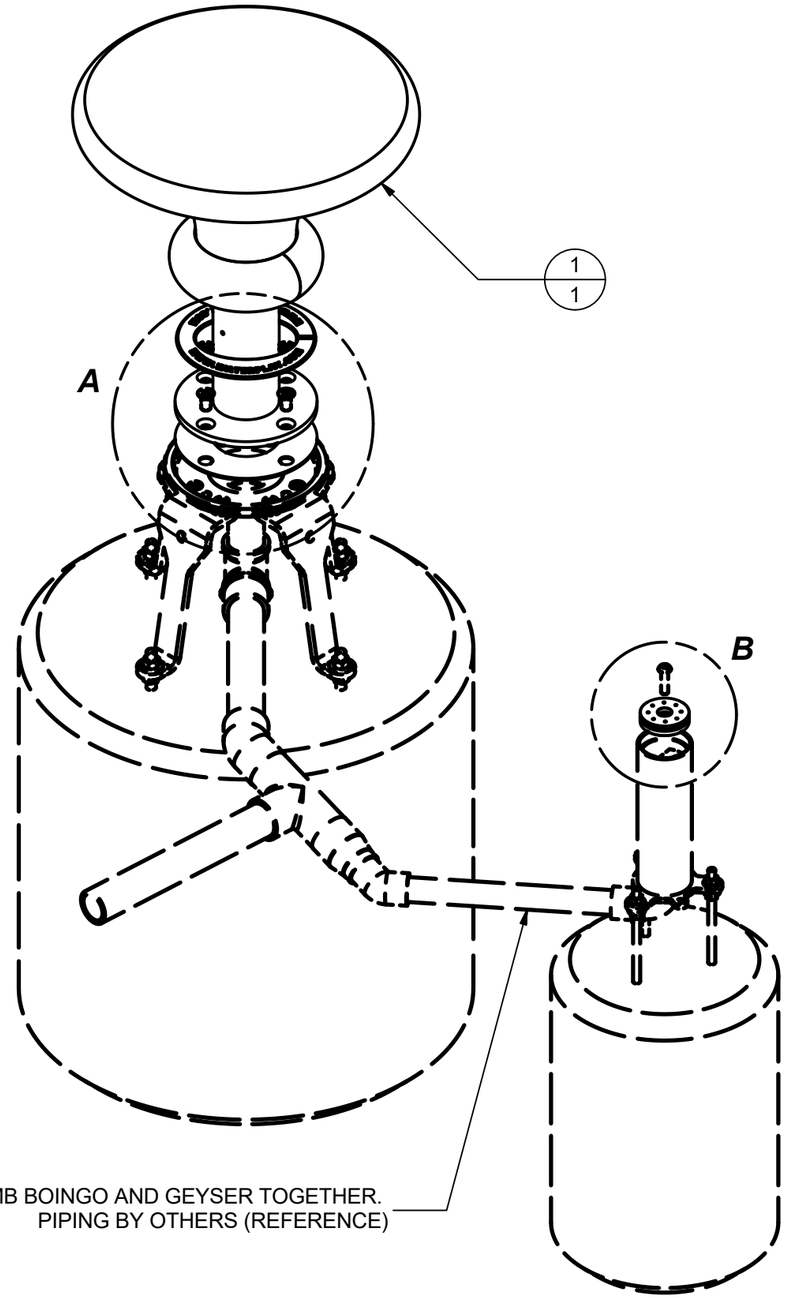
DETAIL B







DETAIL A



NOTES:
1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS

TORQUE VALUES UNLESS NOTED
1/4-20....63 in-lbs 1/2-13....37 ft-lbs
3/8-16....201 in-lbs

MASS: 36.7 lbmass

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: NICMAY
DRAWN: KYLLUC
CHECKED: JASMAY
DATE: 4/16/2020

FS BOINGO 1

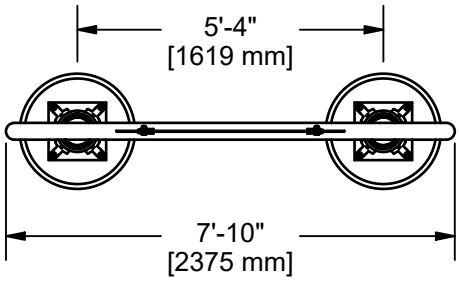
CIRQUE

DWG ID: **0010-2399** REV: **A** SIZE: B SCALE: NTS SHEET: 1 OF: 1

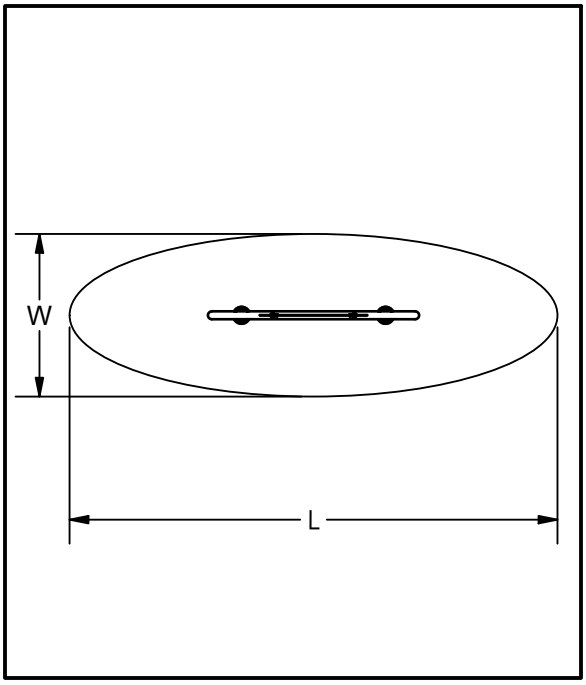
FS O-RIGINAL

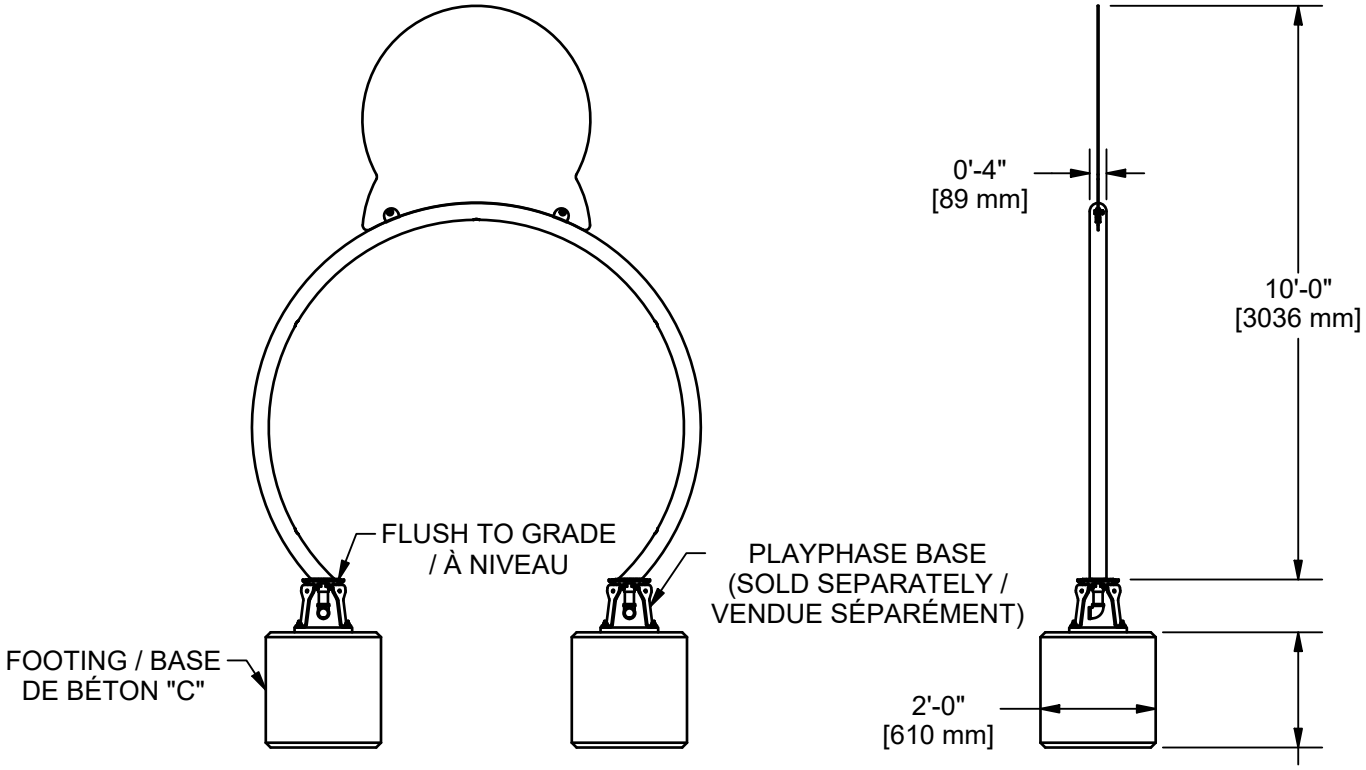
0010-2321

LIST OF MATERIALS / LISTE DE MATÉRIAUX (IF / SI APPLICABLE)	
BASE MATERIAL / MATÉRIEL	304 STAINLESS STEEL / ACIER INOXYDABLE
NOZZLES / BUSES	ACETAL / ACÉTAL
PANELS / PANNEAUX	ALUMINUM / ALUMINIUM



SPRAY AREA / ZONE D'ASPERSION





FOOTING BY OTHER, REFER TO LOCAL CODE / BASE DE BÉTON PAR D'AUTRES, SE RÉFÉRER AU CODE LOCAL

PLAYPHASE QTY / QTÉ	2
PLAYPHASE JIG / GABARIT	0010-5570

RECOMMENDED SPRAY AREA / ZONE D'ASPERSION POTENTIELLE			FLOW RATE / DÉBIT D'EAU	
R (ft/mm)	**L** (ft/mm)	**W** (ft/mm)	GPM/LPM	PSI/kPa
-/-	18/5486	6/1829	10/38	6/41
NOZZLES / BUSES		5	MASS: 121.1 lbmass	

COMPONENT INCLUDES: (IF REQUIRED) / INCLUS AVEC LE JEU (SI REQUISE)

-SERVICE TOOLS / OUTILS
-SPRAY NOZZLES / BUSES DE PERFORMANCE

DIMENSIONAL ACCURACY / PRÉCISION DIMENSIONELLE +/- 1" [25mm]

INITIAL:

DRAWING ID: **0010-2321**

SHEET: 1
OF: 1

waterplay
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-712-3393 F: 250-861-4814
E: design@waterplay.com W: waterplay.com

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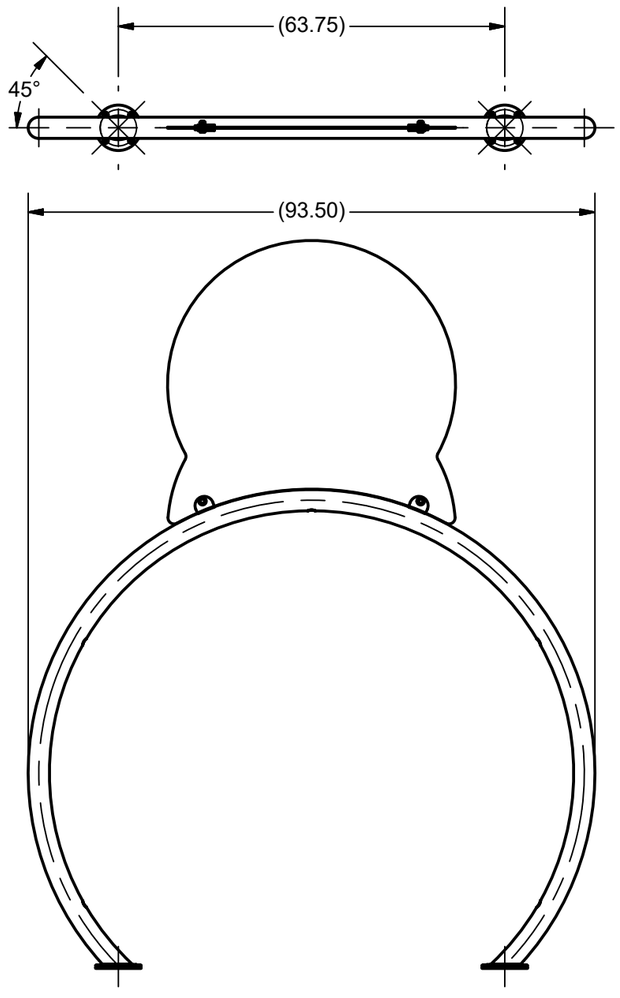
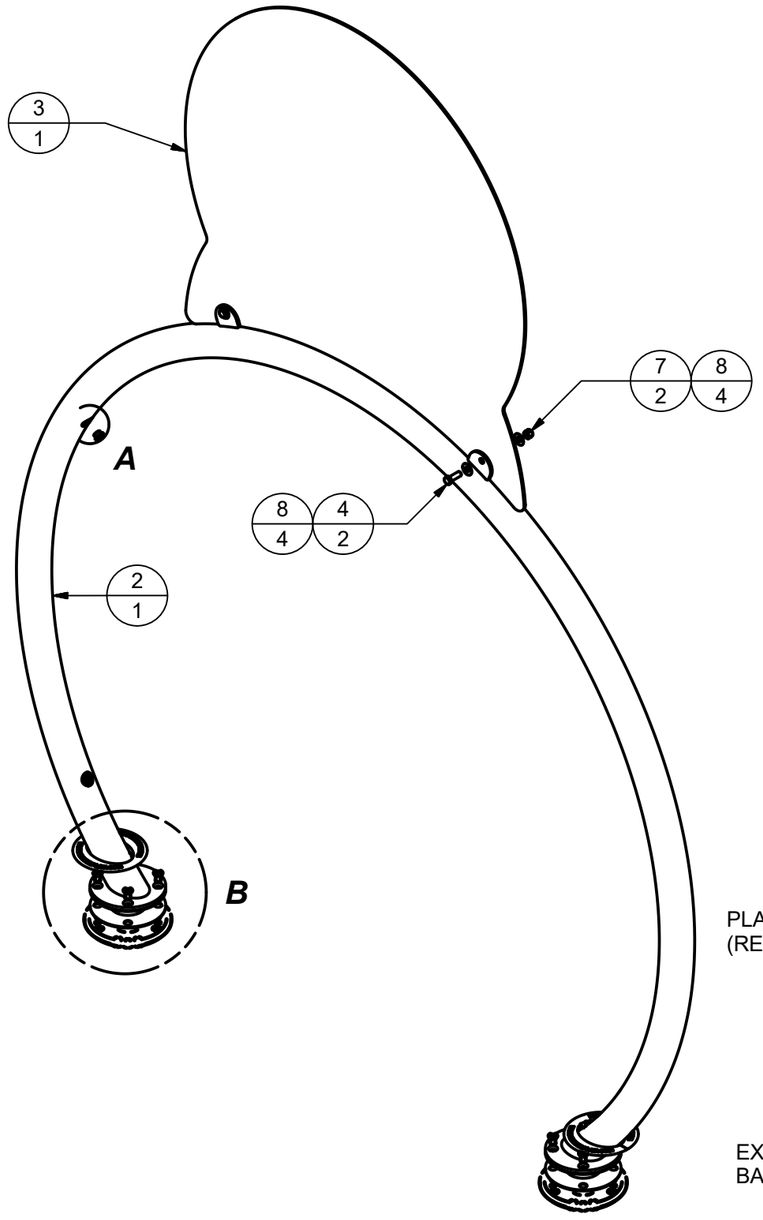
ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0010-1949	B	PLAYPHASE FLANGE COVER	RUBBER	2
2	0010-2322	B	O-RIGINAL WELD ASSY	WELDED SST	1
3	0010-2324	A	O-RIGINAL PANEL	5052-H32	1
4	BLT-02025		BOLT, HEX HD, 1/2-13 X 1.50 LG, FT	SST	2
5	FTC-08001	B	GASKET, FLANGE, 3" PIPE	RUBBER	4
6	NOZ-08002	A	NOZZLE, 3/4" FAN, 0.38 BORE	ACETAL	5
7	NUT-02029		NUT, NYLOCK, 1/2-13	SST	2
8	WAS-02013		WASHER, FLAT, 1/2 (1.25 OD)	SST	4

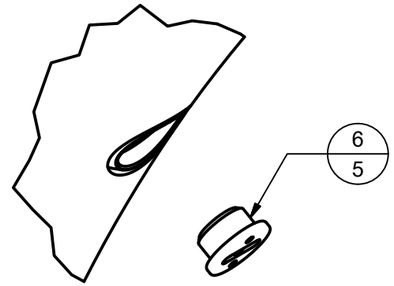
REV	DESCRIPTION	DATE
A	INITIAL RELEASE	11/18/2016
B	UPDATED INSTALL DETAILS	7/15/2019
C	SWITCHED NOZZLES	10/1/2019
D	DOUBLED GASKETS & UPDATED INSTALL DETAILS	4/9/2020

NOTES:
- JIG REQUIRED FOR PLAYPHASE BASE PLACEMENT
- COME-A-LONG OR RATCHET STRAP MAY BE REQUIRED TO ATTACH FEATURE TO BASES
- FOR FURTHER INFORMATION, REFER TO THE INSTALLATION MANUAL

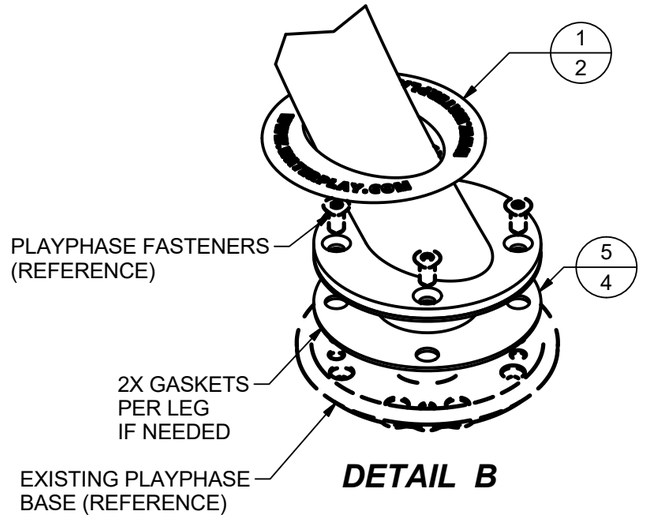
PLAYPHASE BASE ORIENTATION







DETAIL A



DETAIL B

NOTES:
1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS

TORQUE VALUES UNLESS NOTED
1/4-20....63 in-lbs 1/2-13....37 ft-lbs
3/8-16....201 in-lbs

MASS: 121.1 lbmass

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: JASMAY
DRAWN: JASMAY
CHECKED: NICMAY
DATE: 2/29/2016

O-RIGINAL INSTALL

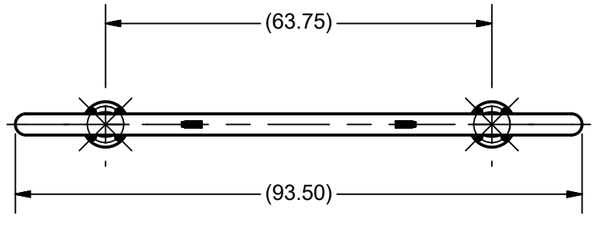
O-RIGINAL

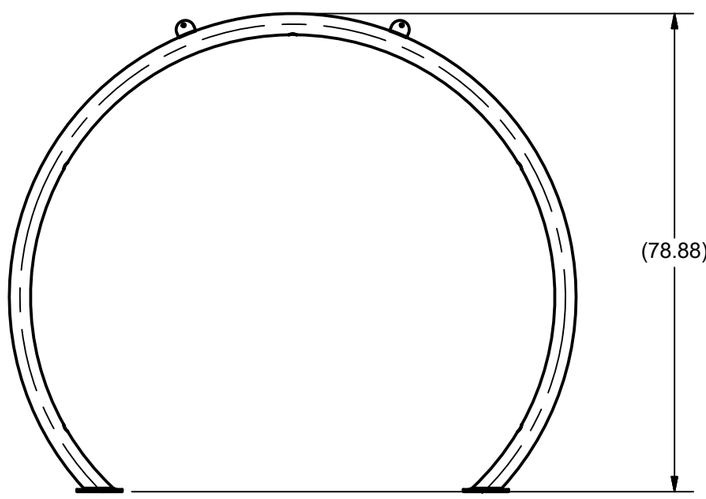
DWG ID: **0010-2321** | REV: **D** | SIZE: B | SCALE: NTS | SHEET: 1 | OF: 1

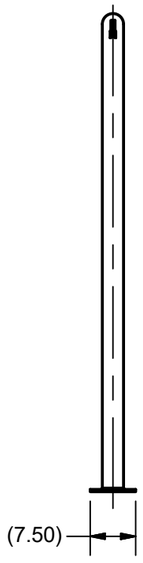
ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0010-2322	B	O-RIGINAL WELD ASSY	WELDED SST	1
2	NOZ-08090	A	NOZZLE, 3/4", BLANK	ACETAL	5

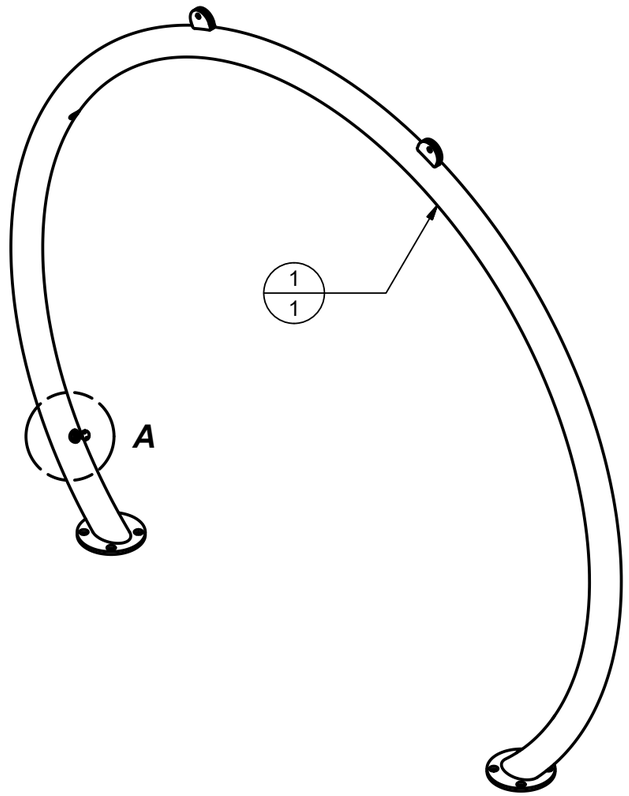
REV	DESCRIPTION	DATE
A	UPDATED INSTALL DETAILS	7/15/2019

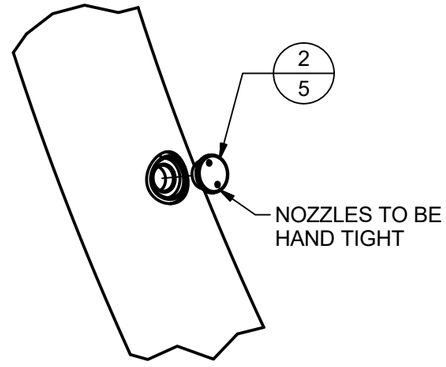
CAUTION:
FEATURE EXCEEDS RECOMMENDED
SINGLE PERSON LIFTING CAPACITY.











DETAIL A

NOTES:
1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS

TORQUE VALUES UNLESS NOTED
1/4-20....63 in-lbs 1/2-13....37 ft-lbs
3/8-16....201 in-lbs

MASS: 88.7 lbmass

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: MICNEI
DRAWN: MICNEI
CHECKED: JASMAY
DATE: 6/10/2019

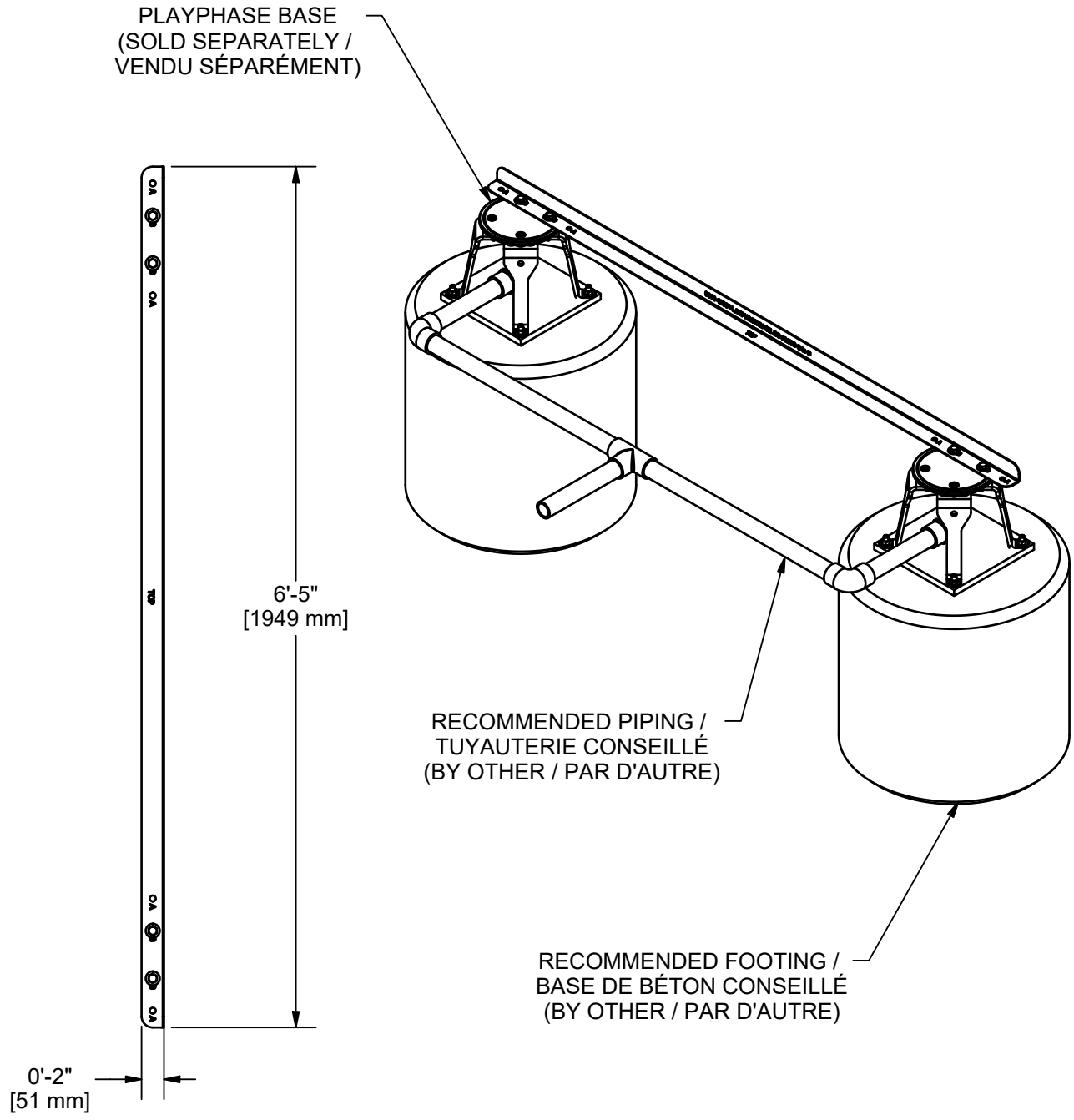
O-RIGINAL ASSY

O-RIGINAL

DWG ID: **0010-2321-A** REV: **A** SIZE: B SCALE: NTS SHEET: 1 OF: 1

JIG EMB INSTALL 63.75 CC

0010-5570



RECOMMENDED SPRAY AREA / ZONE D'ASPERSION POTENTIELLE			FLOWRATE / DÉBIT D'EAU	
R (ft/mm)	**L** (ft/mm)	**W** (ft/mm)	GPM/LPM	PSI/kPa
-/-	-/-	-/-	-/-	-/-
NOZZLES / BUSES		-	MASS: 9.6 lbmass	

COMPONENT INCLUDES: (IF REQUIRED) / INCLUS AVEC LE JEU (SI REQUISE)

-SERVICE TOOLS / OUTILS
-SPRAY NOZZLES / BUSES DE PERFORMANCE

DIMENSIONAL ACCURACY / PRÉCISION DIMENSIONELLE +/- 1" [25mm]

INITIAL:

DRAWING ID: **0010-5570**

SHEET: 1
OF: 1

waterplay
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-712-3393 F: 250-861-4814
E: design@waterplay.com W: waterplay.com

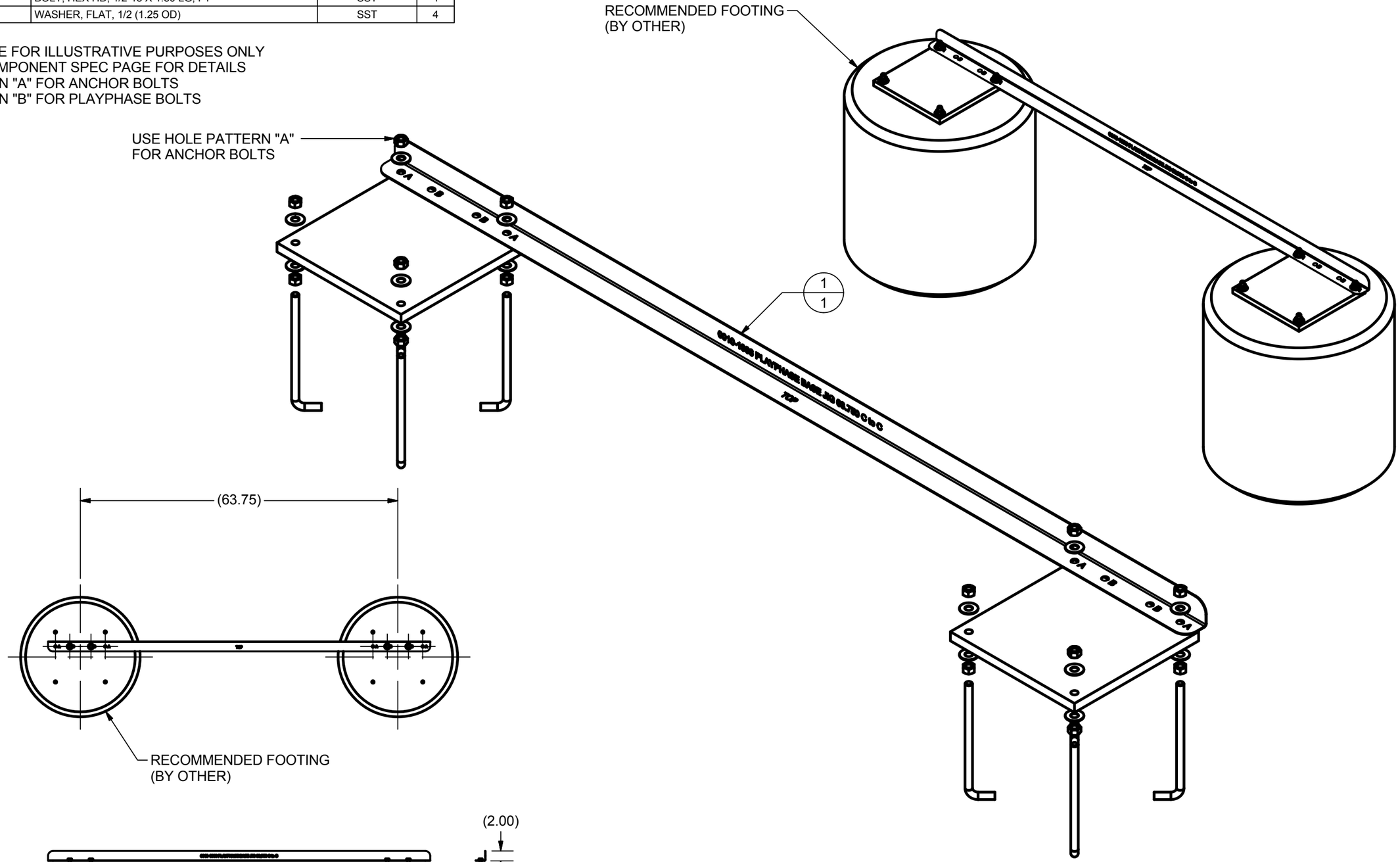
NOTE: REFER TO THE COMPONENT WRITTEN SPECIFICATION DOCUMENT FOR COMPLETE PRODUCT SPECIFICATIONS. WATERPLAY RESERVES THE RIGHT TO CHANGE THIS SPECIFICATION WITHOUT NOTICE.

REFEREZ VOUS AU DOCUMENT DE SPÉCIFICATION ÉCRIT POUR LES DÉTAILS COMPLET DU PRODUIT. WATERPLAY A LE DROIT DE CHANGER CES DERNIERS SANS PRÉAVIS.

ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0010-1966	C	BASE INSTALL JIG, 63.75 C-C	STL	1
2	BLT-02025		BOLT, HEX HD, 1/2-13 X 1.50 LG, FT	SST	4
3	WAS-02013		WASHER, FLAT, 1/2 (1.25 OD)	SST	4

REV	DESCRIPTION	DATE
A	INITIAL RELEASE	7/12/2019

NOTE:
- FOOTINGS ARE FOR ILLUSTRATIVE PURPOSES ONLY
- REFER TO COMPONENT SPEC PAGE FOR DETAILS
- HOLE PATTERN "A" FOR ANCHOR BOLTS
- HOLE PATTERN "B" FOR PLAYPHASE BOLTS



NOTES:
1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS

TORQUE VALUES UNLESS NOTED
1/4-20....63 in-lbs 1/2-13....37 ft-lbs
3/8-16....201 in-lbs

MASS: 9.6 lbmass

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

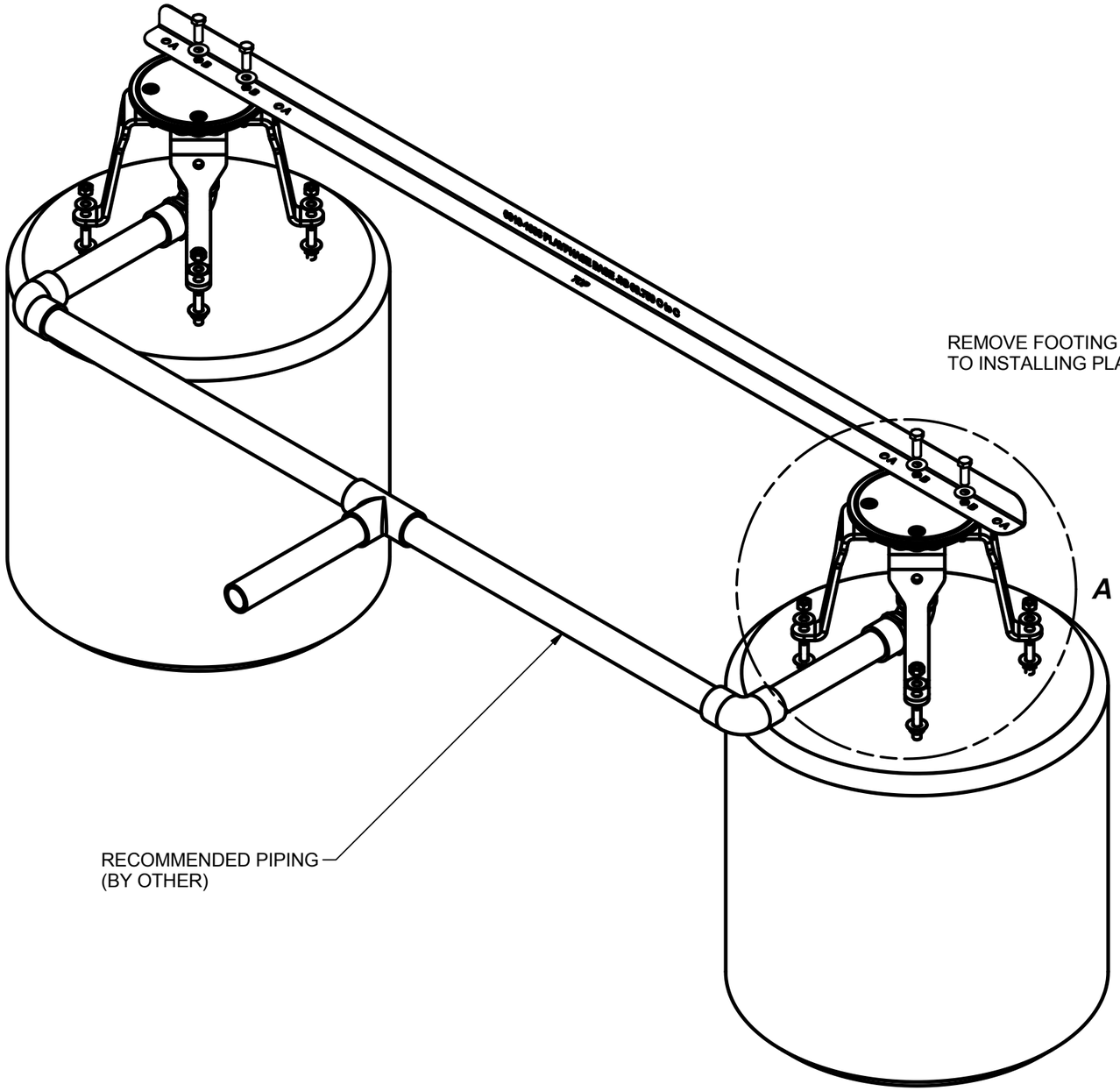
THIRD ANGLE PROJECTION

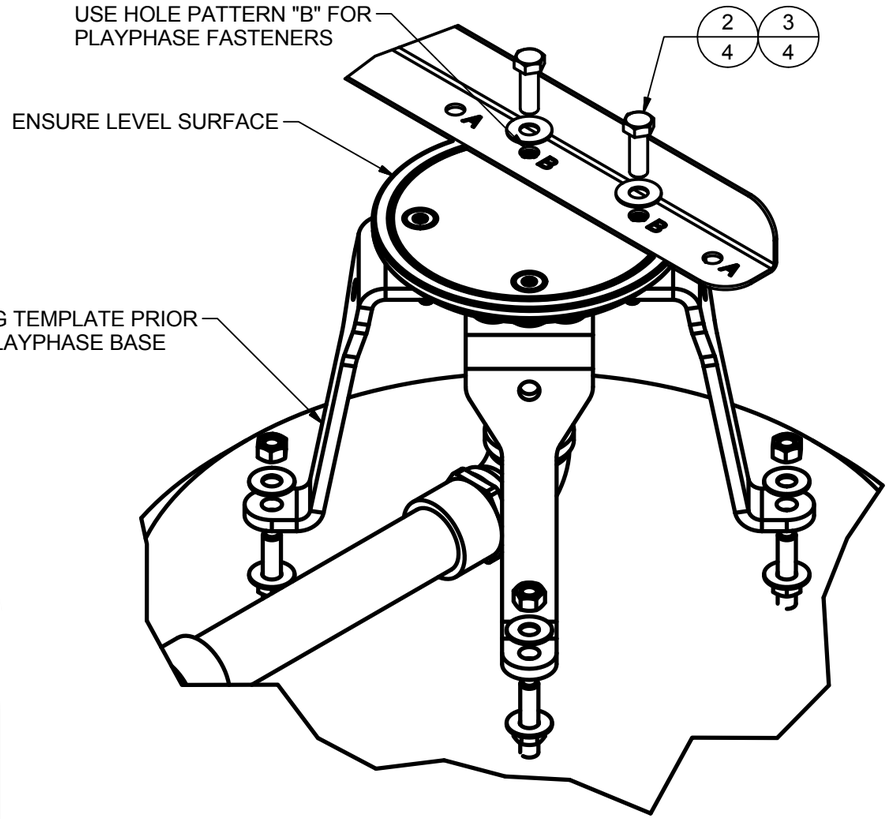
DESIGNED: MICNEI
DRAWN: MICNEI
CHECKED: JASMAY
DATE: 5/21/2019

JIG, EMB INSTALL, 63.75 CC

PLAYPHASE JIGS

DWG ID: **0010-5570** | REV: **A** | SIZE: B | SCALE: NTS | SHEET: 1 | OF: 2





DETAIL A

ENSURE BOTH PLAYPHASE BASES
ARE LEVEL WITH EACH OTHER AND
FLUSH WITH FINAL GRADE

TORQUE VALUES UNLESS NOTED
1/4-20....63 in-lbs 1/2-13....37 ft-lbs
3/8-16....201 in-lbs

MASS: 9.6 lbmass

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: MICNEI
DRAWN: MICNEI
CHECKED: JASMAY
DATE: 5/21/2019

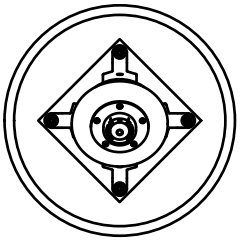
JIG, EMB INSTALL, 63.75 CC

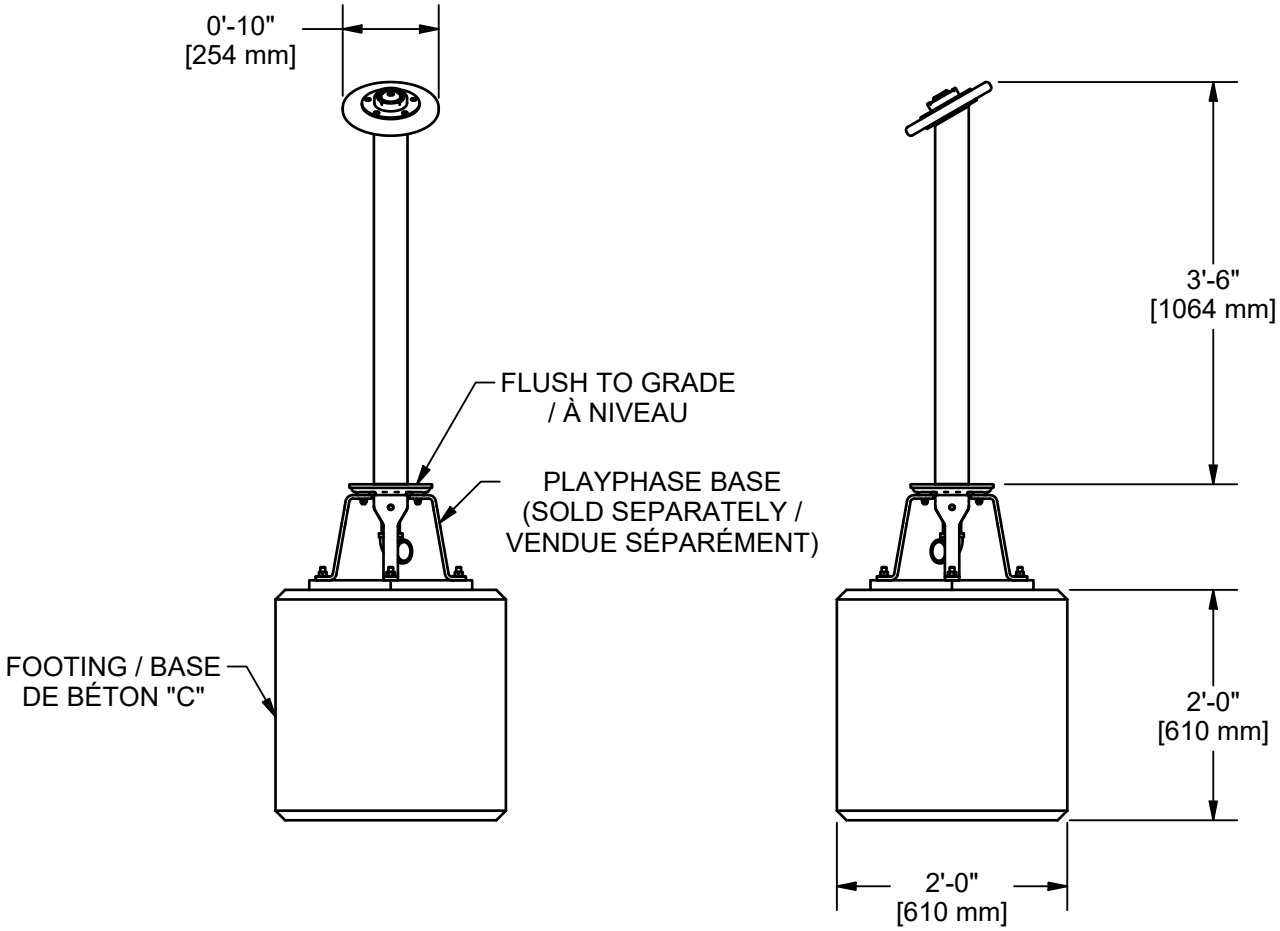
PLAYPHASE JIGS

DWG ID: **0010-5570** | REV: **A** | SIZE: B | SCALE: NTS | SHEET: 2 | OF: 2

ACTIVATOR POWER POST 0010-1854

LIST OF MATERIALS / LISTE DE MATÉRIAUX (IF / SI APPLICABLE)	
BASE MATERIAL / MATÉRIEL	304 STAINLESS STEEL / ACIER INOXYDABLE
NOZZLES / BUSES	ACETAL / ACÉTAL, URETHANE / URÉTHANE
PANELS / PANNEAUX	ACRYLIC / ACRYLIQUE, ALUMINUM / ALUMINIUM





VOLTAGE / TENSION	12-36 VDC
CURRENT / COURANT	350MA
WIRE SIZE / TAILLE DE FIL	MIN. 2 WIRE 18 AWG + GROUND

FOOTING BY OTHER, REFER TO LOCAL CODE / BASE DE BÉTON PAR D'AUTRES, SE RÉFÉRER AU CODE LOCAL

RECOMMENDED SPRAY AREA / ZONE D'ASPERSION POTENTIELLE			FLOW RATE / DÉBIT D'EAU	
R (ft/mm)	**L** (ft/mm)	**W** (ft/mm)	GPM/LPM	PSI/kPa
-/-	-/-	-/-	-/-	-/-
NOZZLES / BUSES		-	MASS: N/A	

COMPONENT INCLUDES: (IF REQUIRED) / INCLUS AVEC LE JEU (SI REQUISE)
-SERVICE TOOLS / OUTILS
-SPRAY NOZZLES / BUSES DE PERFORMANCE

DIMENSIONAL ACCURACY / PRÉCISION DIMENSIONELLE +/- 1" [25mm]

INITIAL:

DRAWING ID: **0010-1854**

SHEET: 1
OF: 1

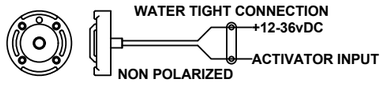
waterplay
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-712-3393 F: 250-861-4814
E: design@waterplay.com W: waterplay.com

NOTE: REFER TO THE COMPONENT WRITTEN SPECIFICATION DOCUMENT FOR COMPLETE PRODUCT SPECIFICATIONS. WATERPLAY RESERVES THE RIGHT TO CHANGE THIS SPECIFICATION WITHOUT NOTICE.

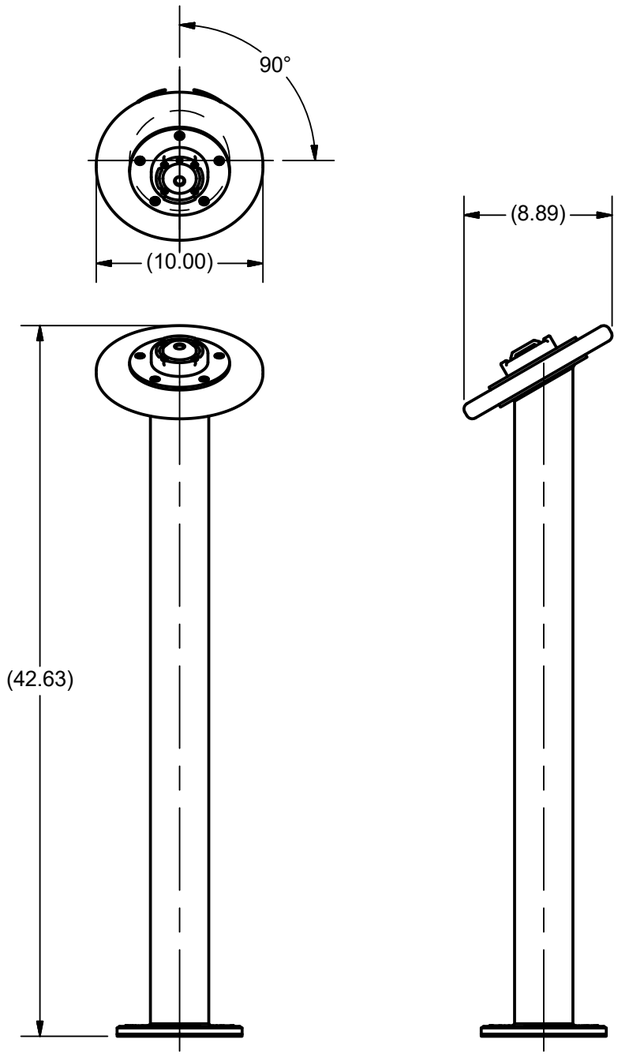
SE RÉFÉRER AU DOCUMENT DE SPÉCIFICATION ÉCRIT POUR LES DÉTAILS COMPLET DU PRODUIT. WATERPLAY A LE DROIT DE CHANGER CES DERNIERS SANS PRÉAVIS.

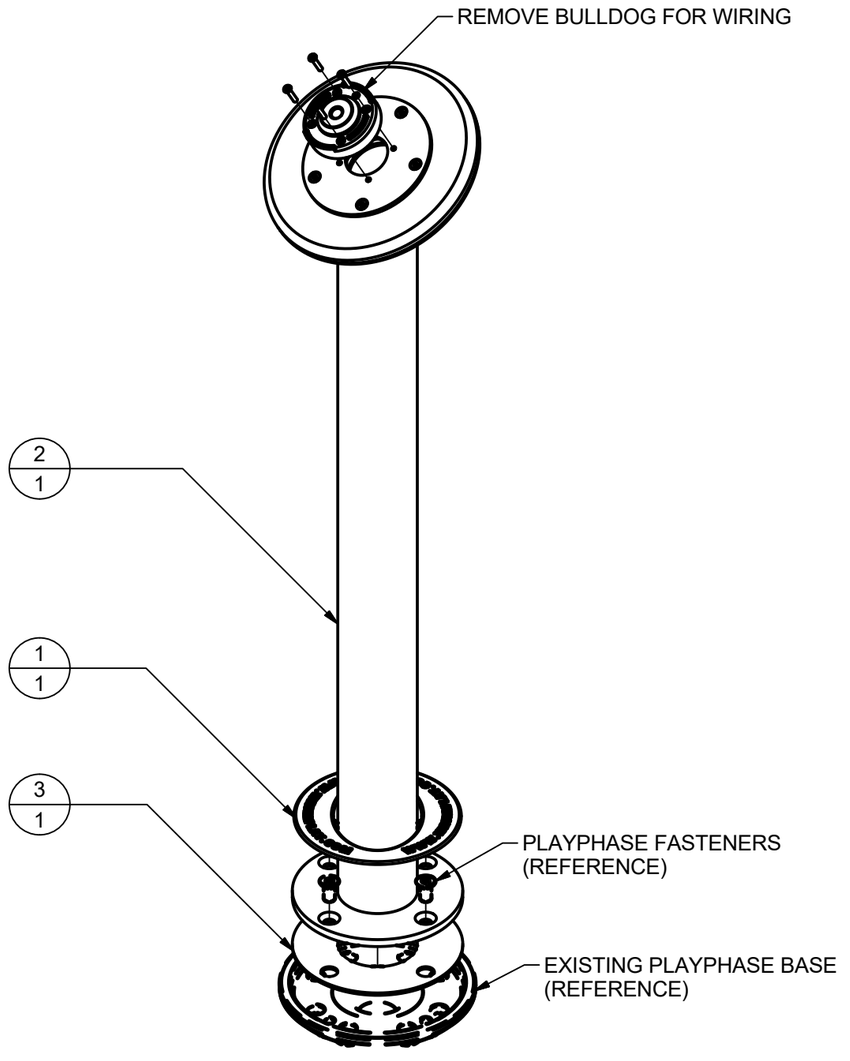
ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0010-1949	B	PLAYPHASE FLANGE COVER	RUBBER	1
2	0010-1854-A	B.1	POWER POST ASSY		1
3	FTC-08001	A	GASKET, FLANGE, 3" PIPE	RUBBER	1

REV	DESCRIPTION	DATE
A	INITIAL RELEASE	9/1/2016
B	ACTIVATOR CHANGED TO BULLDOG	8/22/2018
C	UPDATED INSTALL DETAILS	7/29/2019



PLAYPHASE BASE ORIENTATION





NOTES:
1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS

TORQUE VALUES UNLESS NOTED
1/4-20....63 in-lbs 1/2-13....37 ft-lbs
3/8-16....201 in-lbs

MASS: 24.2 lbmass

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: NICMAY
DRAWN: MICNEI
CHECKED: JASMAY
DATE: 5/2/2019

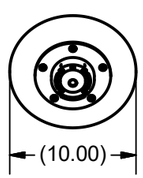
POWER POST INSTALL

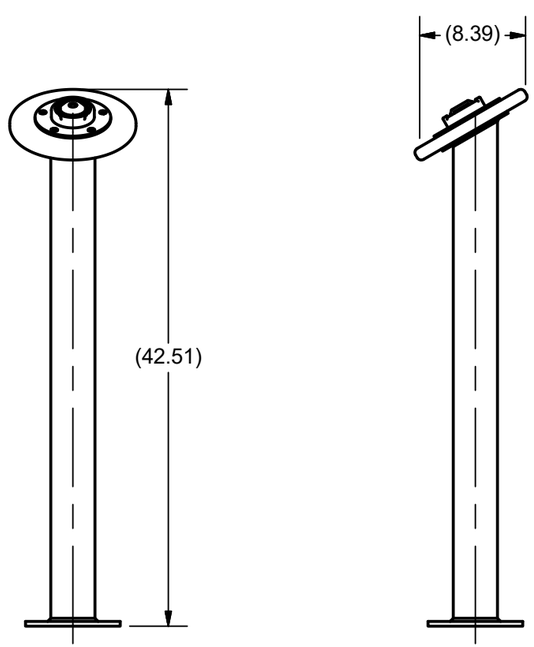
POWER POST

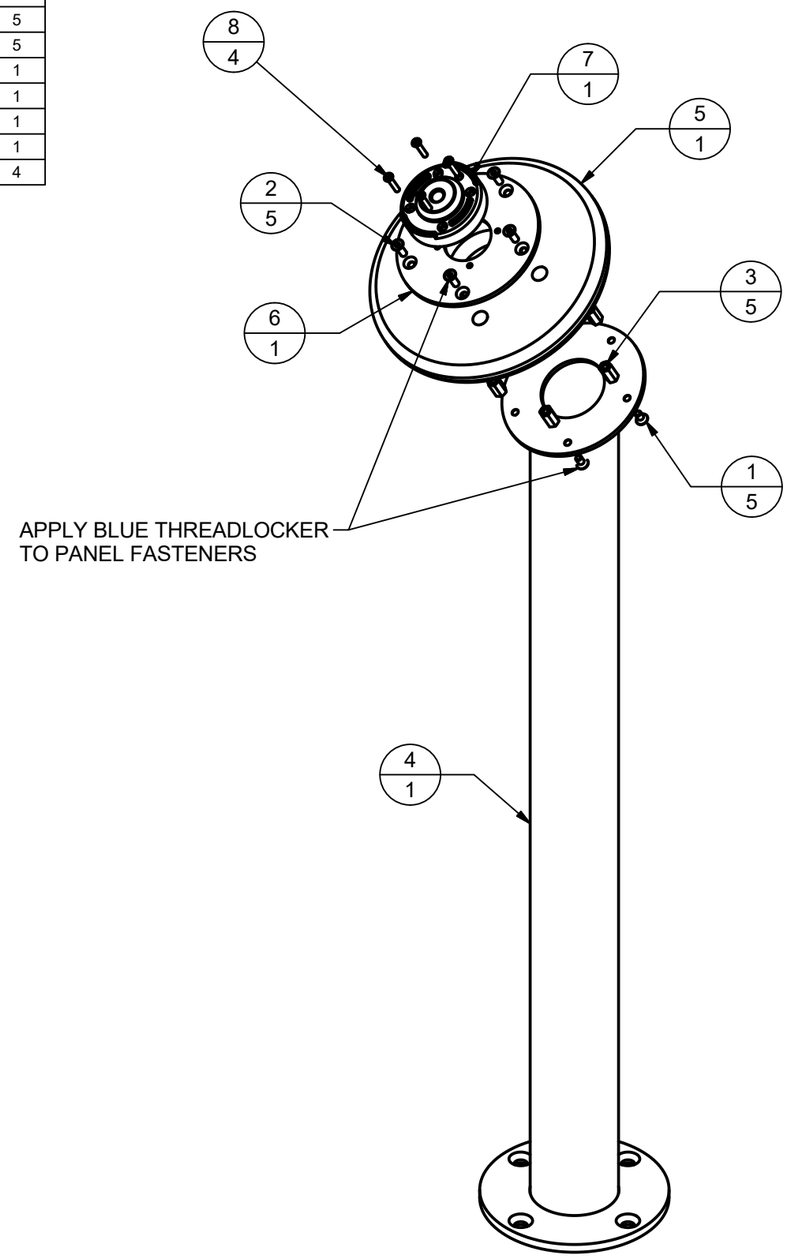
DWG ID: **0010-1854** | REV: **C** | SIZE: B | SCALE: NTS | SHEET: 1 | OF: 1

ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0002-6734		BOLT, FLAT HD SOC, 1/4-20 X 0.50 LG, FT	SST	5
2	0010-0293		BOLT, FLAT HD SOC, 1/4-20 X 0.75 LG, FT	SST	5
3	0010-0504		NUT, COUPLING, 1/4-20 X 0.88 LG	SST	5
4	0010-1416	B	SPROUT WELD ASSY	WELDED SST	1
5	0010-1855	B	ACTIVATOR MOUNTING PANEL	ACRYLIC	1
6	0010-3645	B	BD MOUNTING FLANGE	SST	1
7	PRP-06016	A	BULLDOG SWITCH	Generic	1
8	SBT-02226		BOLT, BUTTON HD CAP, 10-32 X 1.00 LG, FT	SST	4

REV	DESCRIPTION	DATE
A	UPDATED INSTALL DETAILS	7/29/2019







NOTES:
1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS

TORQUE VALUES UNLESS NOTED
1/4-20....63 in-lbs 1/2-13....37 ft-lbs
3/8-16....201 in-lbs

MASS: 24.2 lbmass

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: NICMAY
DRAWN: MICNEI
CHECKED: JASMAY
DATE: 8/25/2016

POWER POST ASSY

POWER POST

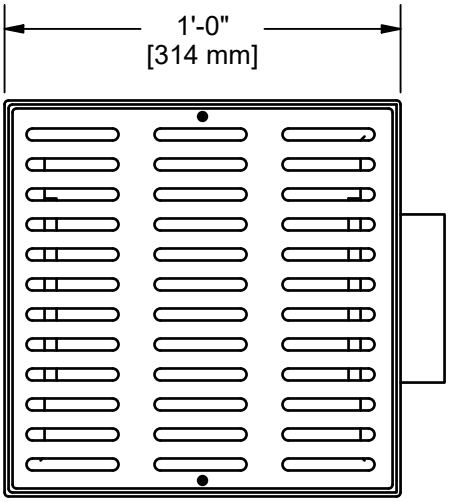
DWG ID: **0010-1854-A** | REV: **A** | SIZE: B | SCALE: NTS | SHEET: 1 | OF: 1

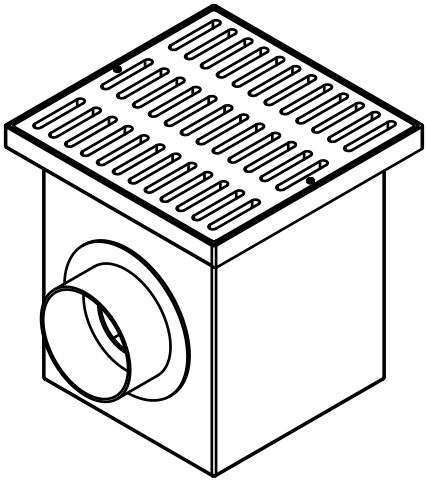
DRAIN SQUARE 6IN OUTLET

DRA-00007

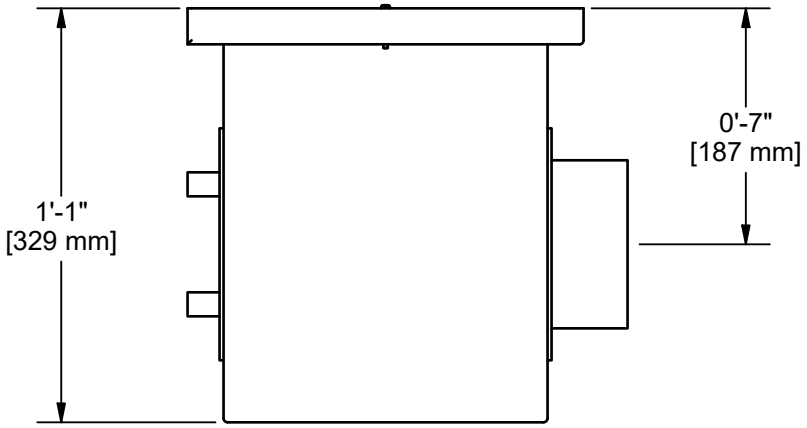
LIST OF MATERIALS / LISTE DE MATÉRIAUX (IF / SI APPLICABLE)	
BASE MATERIAL / MATÉRIEL	304 STAINLESS STEEL / ACIER INOXYDABLE
NOZZLES / BUSES	ACETAL / ACÉTAL, URETHANE / URÉTHANE
PANELS / PANNEAUX	ACRYLIC / ACRYLIQUE, ALUMINUM / ALUMINIUM

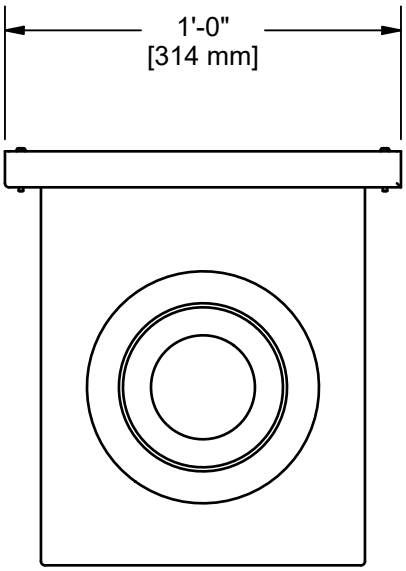
AVAILABLE VERSIONS / VERSIONS DISPONIBLES			
SKU	OUTLET / SORTIE (in.)	CAPACITY / CAPACITÉ (GPM/LPM)	GRATE COLOR / GRILLE COULEUR
DRA-00007	6	66/249	GREY





DRAIN GRATE OPENINGS /
OUVERTURES DE LA GRILLE: 3/8"
TOTAL OPEN AREA OF GRATE /
SURFACE OUVERTE TOTALE: 37.73 SQ IN
GRATE MATERIAL / MATÉRIAU DE LA GRILLE: HDPE/PEHD





POLYPROPYLENE BASIN /
BASIN EN POLYPROPYLÈNE

FOOTING BY OTHER, REFER TO LOCAL CODE / BASE
DE BÉTON PAR D'AUTRES, SE RÉFÉRER AU CODE LOCAL

RECOMMENDED SPRAY AREA / ZONE D'ASPERSION POTENTIELLE			FLOW RATE / DÉBIT D'EAU	
R (ft/mm)	L (ft/mm)	W (ft/mm)	GPM/LPM	PSI/kPa
-/-	-/-	-/-	-/-	-/-
NOZZLES / BUSES		-	MASS: 8.2 lbmass	

COMPONENT INCLUDES: (IF REQUIRED) / INCLUS AVEC LE JEU (SI REQUISE)
-SERVICE TOOLS / OUTILS
-SPRAY NOZZLES / BUSES DE PERFORMANCE

DIMENSIONAL ACCURACY / PRÉCISION DIMENSIONELLE +/- 1" [25mm]

INITIAL:

DRAWING ID: **DRA-00007**

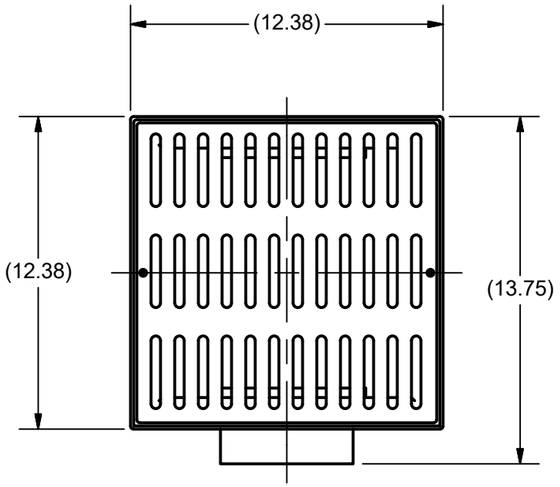
SHEET: 1
OF: 1

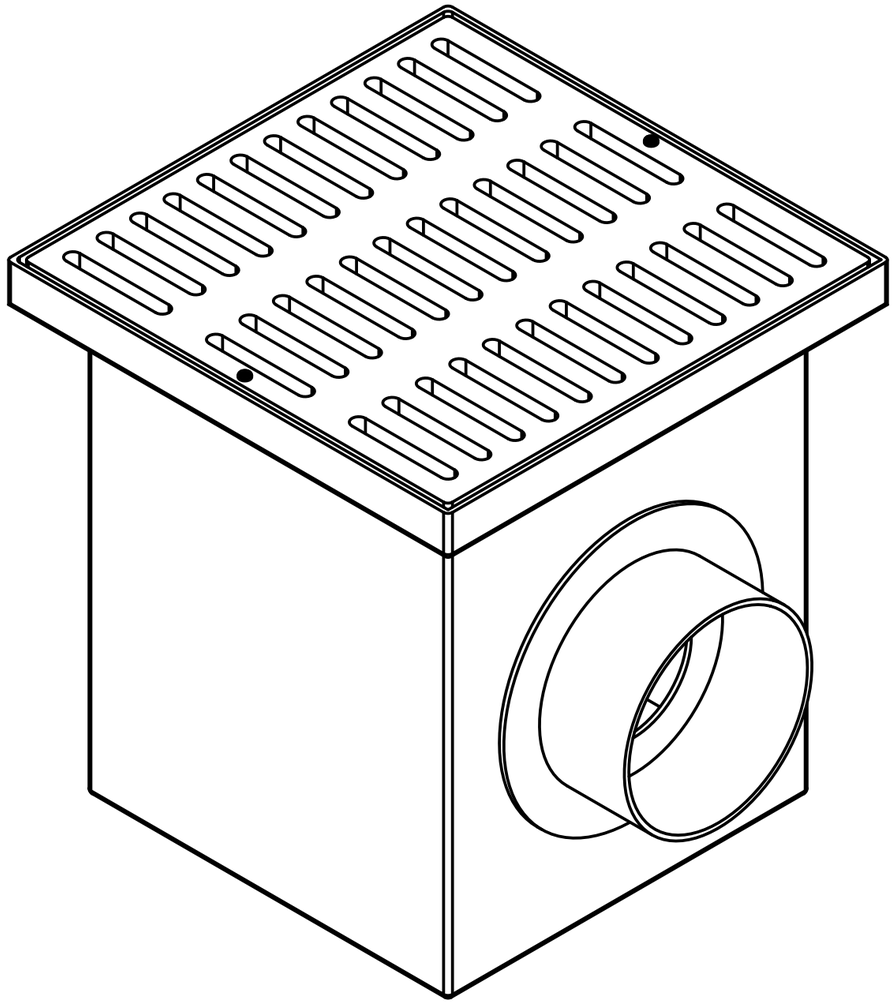
waterplay
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-712-3393 F: 250-861-4814
E: design@waterplay.com W: waterplay.com

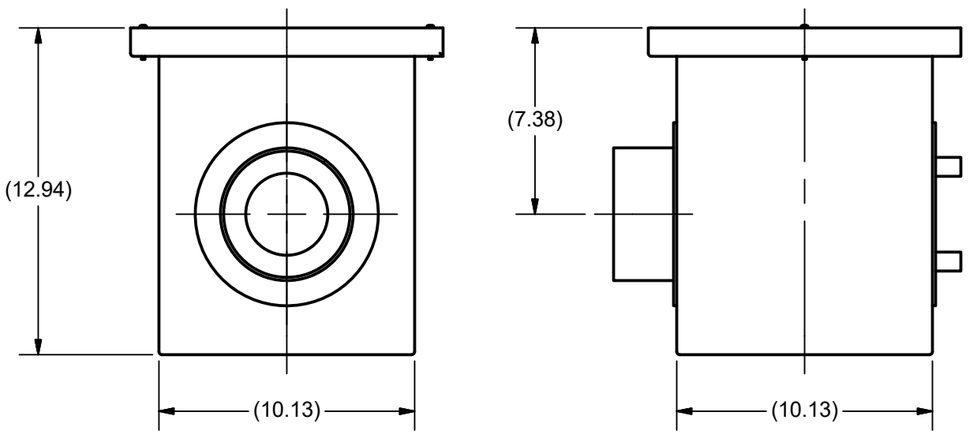
NOTE: REFER TO THE COMPONENT WRITTEN SPECIFICATION DOCUMENT FOR COMPLETE PRODUCT SPECIFICATIONS. WATERPLAY RESERVES THE RIGHT TO CHANGE THIS SPECIFICATION WITHOUT NOTICE.

SE RÉFÉRER AU DOCUMENT DE SPÉCIFICATION ÉCRIT POUR LES DÉTAILS COMPLET DU PRODUIT. WATERPLAY A LE DROIT DE CHANGER CES DERNIERS SANS PRÉAVIS.

REV	DESCRIPTION	DATE
A		3/27/2019







TORQUE VALUES UNLESS NOTED
1/4-20....63 in-lbs 1/2-13....37 ft-lbs
3/8-16....201 in-lbs

MASS: 8.2 lbmass

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

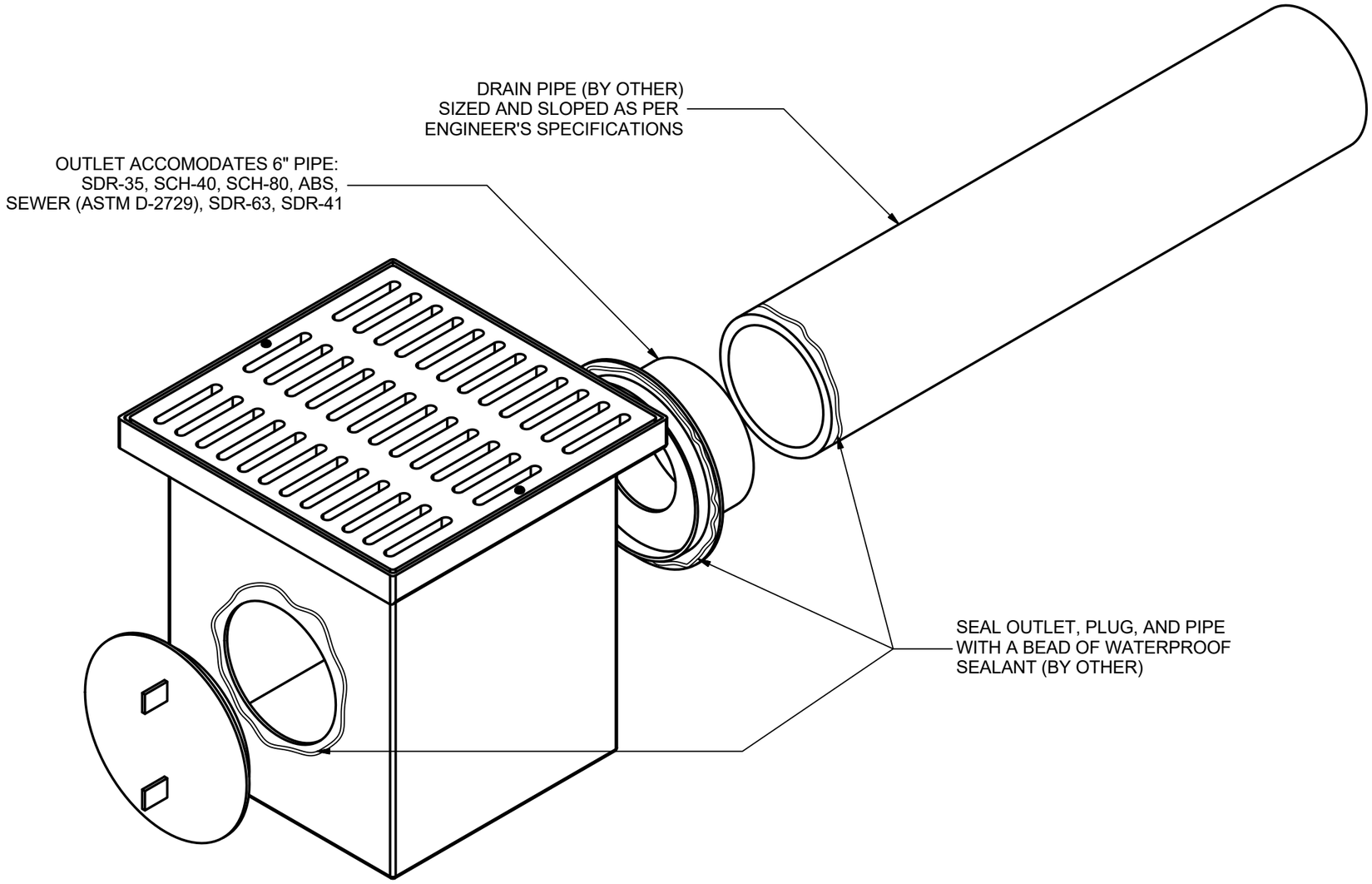
THIRD ANGLE PROJECTION

DESIGNED: STESHO
DRAWN: KYLLUC
CHECKED:
DATE: 2/19/20

DRAIN SQUARE 6IN OUTLET INSTALL

DRAIN

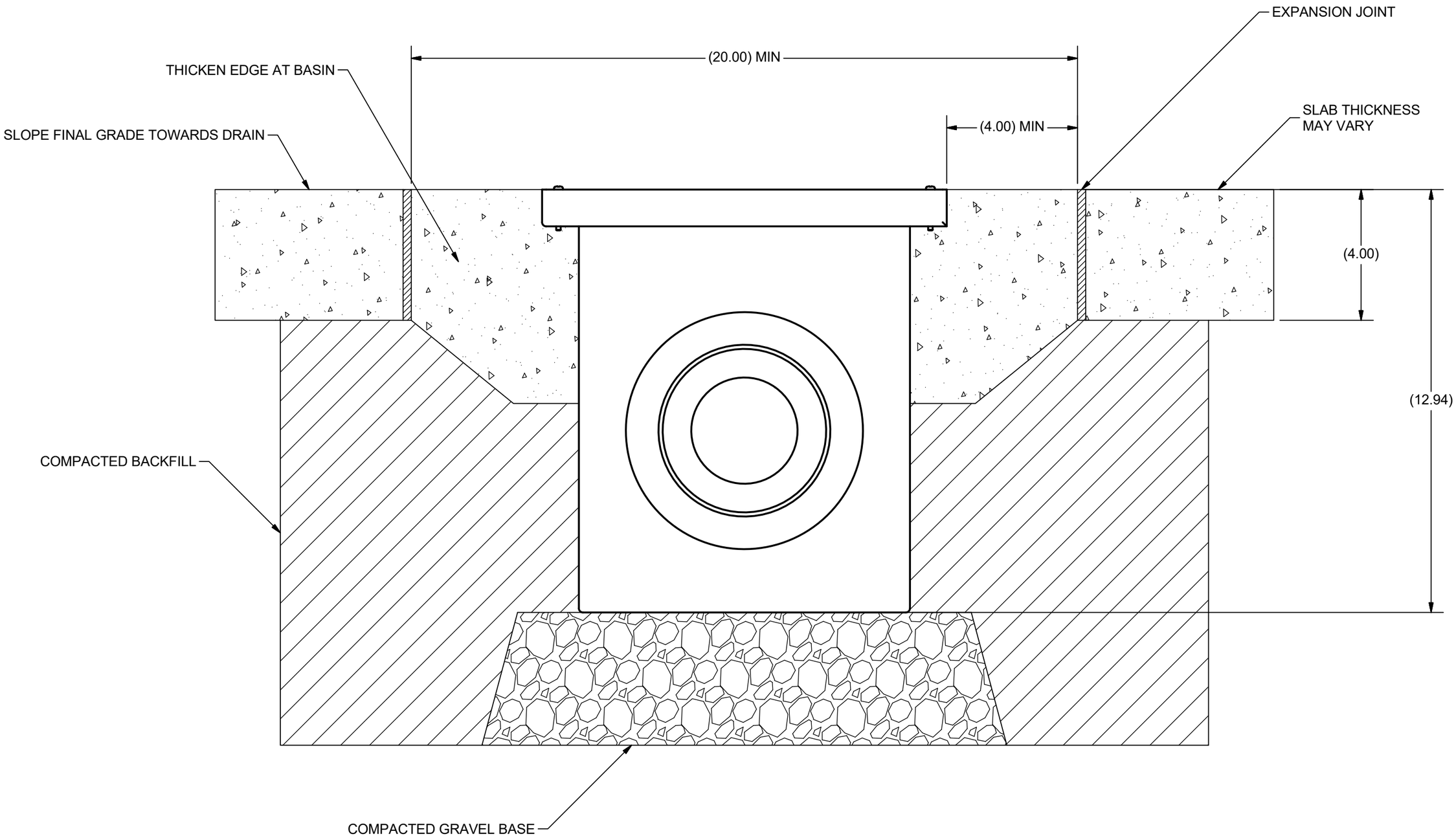
DWG ID: **DRA-00007** | REV: **A** | SIZE: B | SCALE: NTS | SHEET: 1 | OF: 3



USE IN CONJUNCTION WITH SHEET NO. 1

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

THIRD ANGLE PROJECTION	DWG ID:	REV:	SIZE:	SCALE:	SHEET:
	DRA-00007	A	B	NTS	2 OF: 3



USE IN CONJUNCTION WITH SHEET NO. 1

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

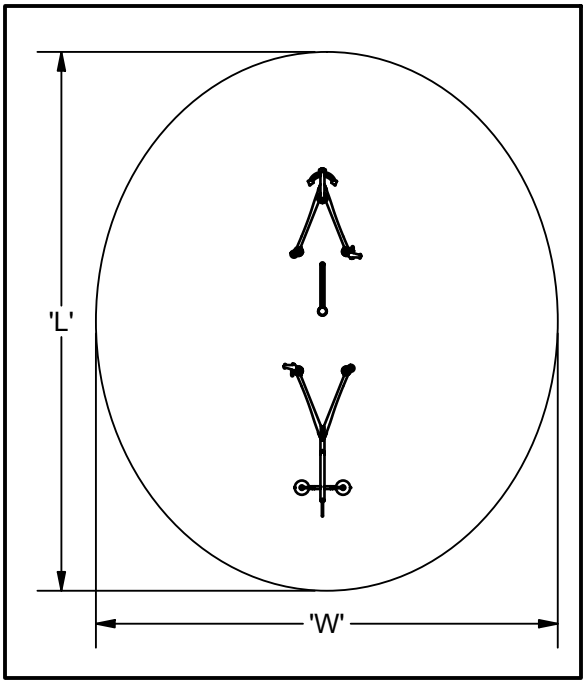
THIRD ANGLE PROJECTION	DWG ID:	REV:	SIZE:	SCALE:	SHEET:
	DRA-00007	A	B	NTS	3 OF: 3

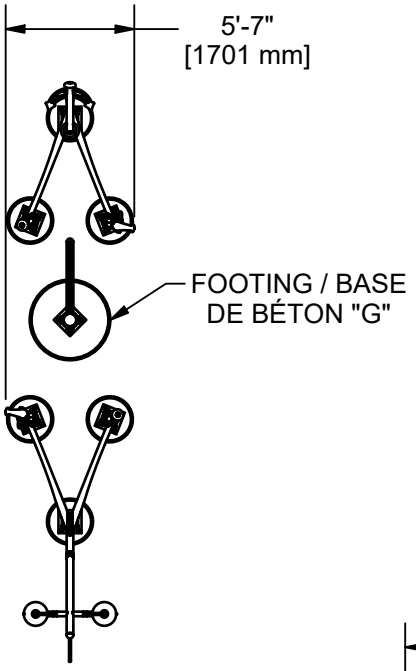
SCHOONER 1

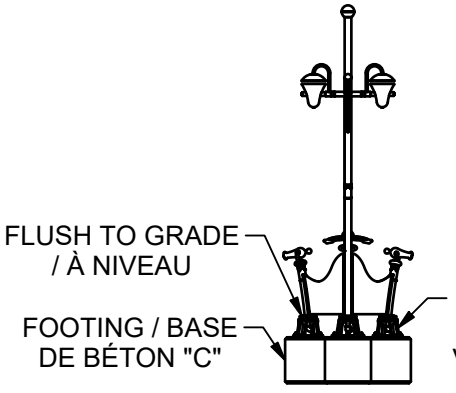
0010-3704

LIST OF MATERIALS / LISTE DE MATÉRIAUX (IF / SI APPLICABLE)	
BASE MATERIAL / MATÉRIEL	304 STAINLESS STEEL / ACIER INOXYDABLE
NOZZLES / BUSES	ACETAL / ACÉTAL, URETHANE / URÉTHANE
PANELS / PANNEAUX	ACRYLIC / ACRYLIQUE
BUCKETS / SEAU	POLYPROPYLENE / POLYPROPYLÈNE

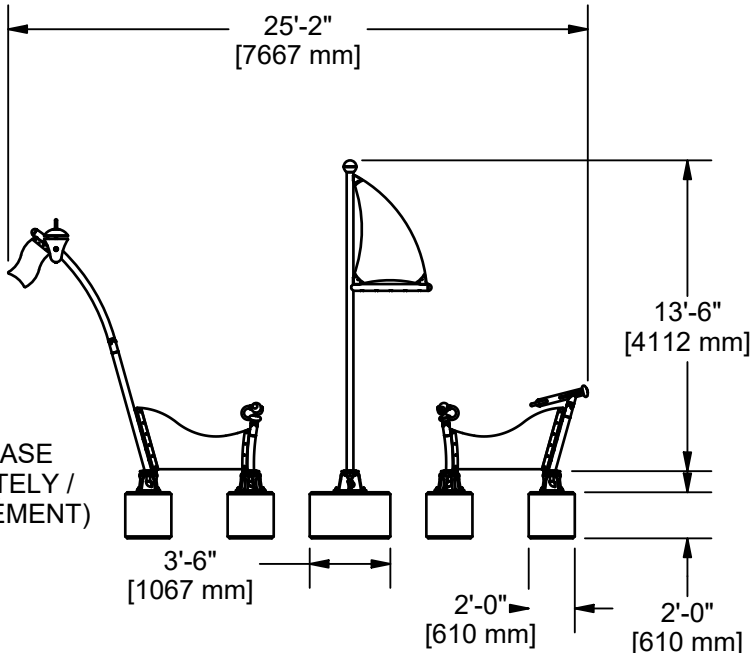
SPRAY AREA / ZONE D'ASPERSION







PLAYPHASE BASE
(SOLD SEPARATELY /
VENDUE SÉPARÉMENT)



FOOTING BY OTHER, REFER TO LOCAL CODE / BASE
DE BÉTON PAR D'AUTRES, SE RÉFÉRER AU CODE LOCAL

PLAYPHASE QTY / QTÉ	7
PLAYPHASE JIG / GABARIT	0010-1977

RECOMMENDED SPRAY AREA / ZONE D'ASPERSION POTENTIELLE			FLOW RATE / DÉBIT D'EAU	
R (ft/mm)	**L** (ft/mm)	**W** (ft/mm)	GPM/LPM	PSI/kPa
-/-	35/10668	30/9144	45/170	7/48
NOZZLES / BUSES		10	MASS: 717.1 lbmass	

COMPONENT INCLUDES: (IF REQUIRED) / INCLUS AVEC LE JEU (SI REQUISE)

-SERVICE TOOLS / OUTILS
-SPRAY NOZZLES / BUSES DE PERFORMANCE

DIMENSIONAL ACCURACY / PRÉCISION DIMENSIONELLE +/- 1" [25mm]

INITIAL:

DRAWING ID: **0010-3704**

SHEET: 1
OF: 1

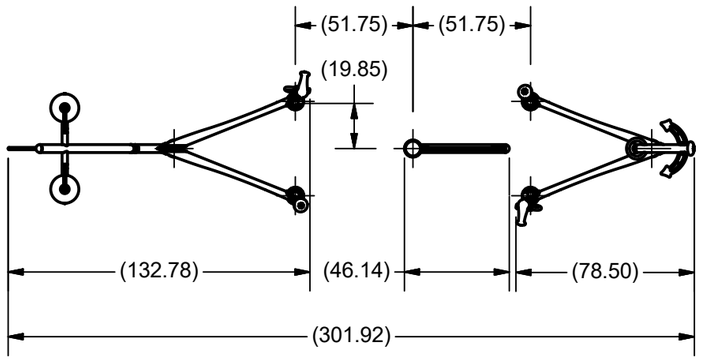
waterplay
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-712-3393 F: 250-861-4814
E: design@waterplay.com W: waterplay.com

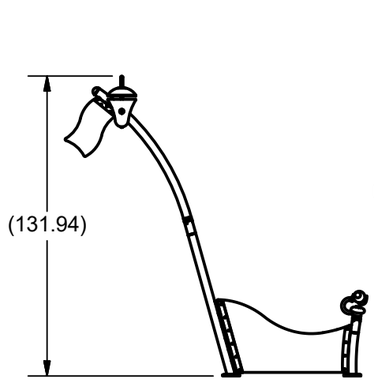
NOTE: REFER TO THE COMPONENT WRITTEN SPECIFICATION DOCUMENT FOR COMPLETE PRODUCT SPECIFICATIONS. WATERPLAY RESERVES THE RIGHT TO CHANGE THIS SPECIFICATION WITHOUT NOTICE.

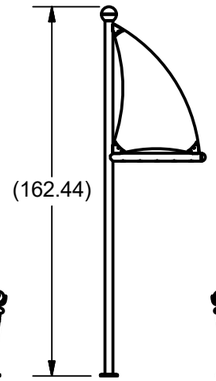
SE RÉFÉRER AU DOCUMENT DE SPÉCIFICATION ÉCRIT POUR LES DÉTAILS COMPLET DU PRODUIT. WATERPLAY A LE DROIT DE CHANGER CES DERNIERS SANS PRÉAVIS.

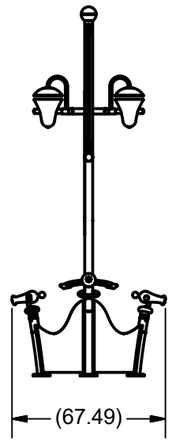
ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0010-0611	B	SAIL AWAY 1 INSTALL		1
2	0010-0937	A	BOBBLE NOZZLE ASSY		2
3	0010-2330	A	CARRONADE ASSY		2
4	0010-2376	A	STREAMER ASSY		1
5	0010-2930	A	ANCHOR CANNON ASSY		1
6	0010-3700	A	CALYPSO TALL FIGUREHEAD INSTALL		1
7	0010-3703	A.1	CALYPSO SHORT FIGUREHEAD INSTALL		1

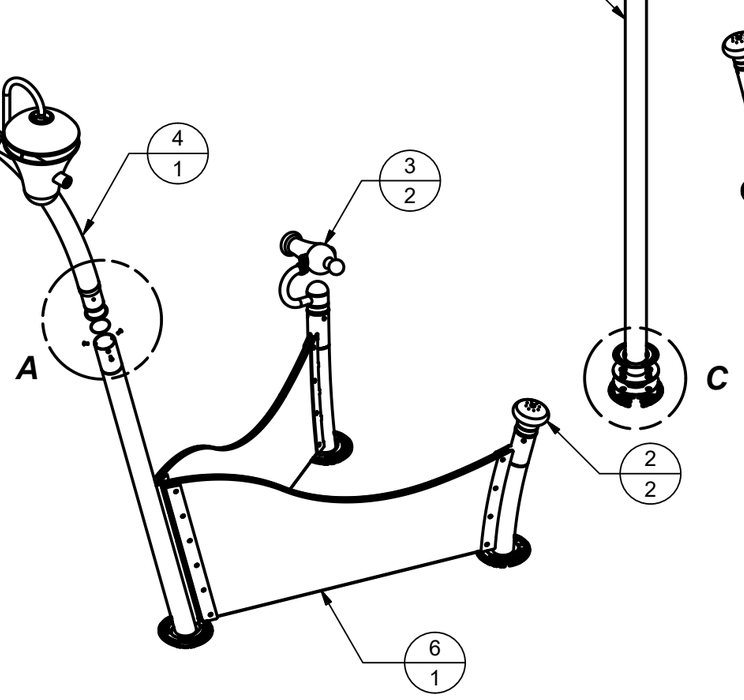
REV	DESCRIPTION	DATE
A		
B	UPDATED INSTALL DETAILS	8/28/2019

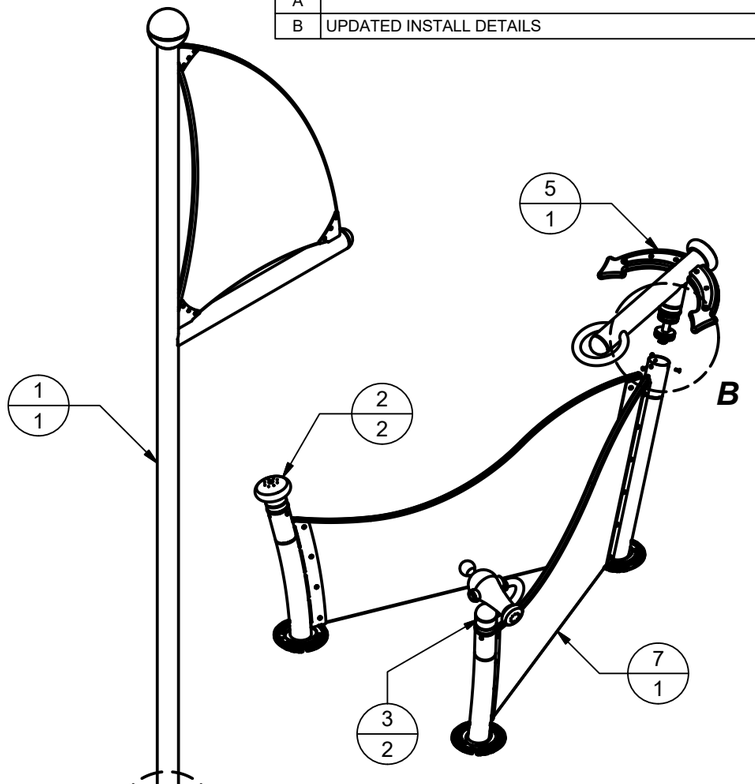








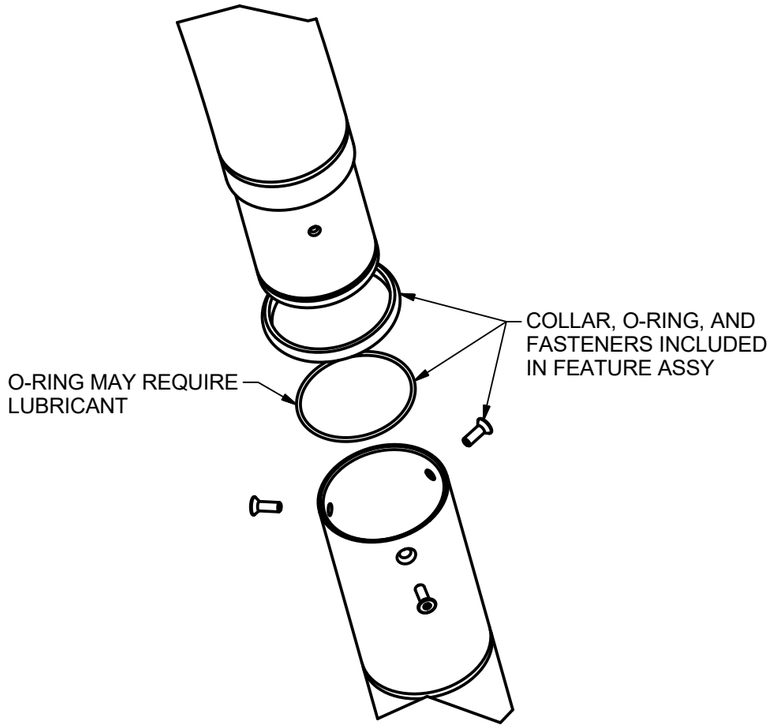




NOTES:
1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS

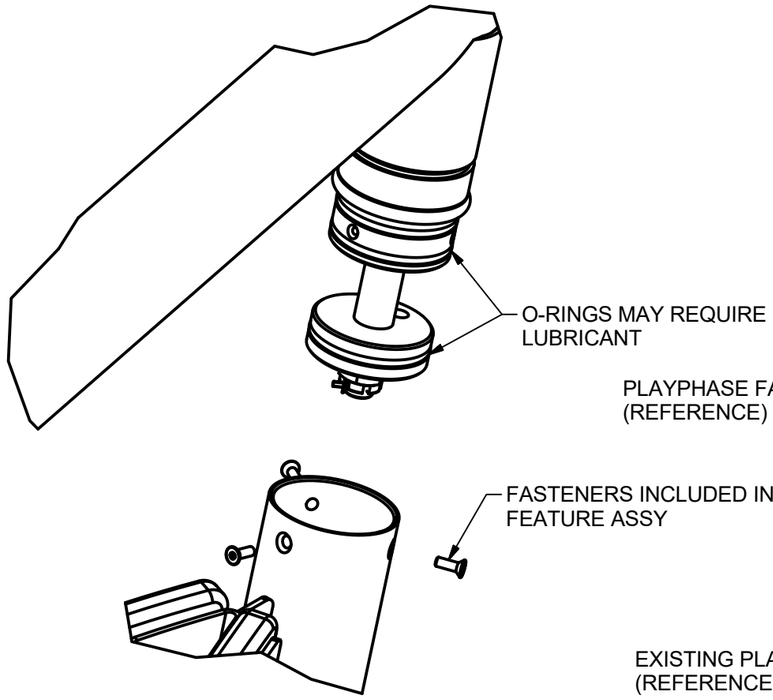
TORQUE VALUES UNLESS NOTED 1/4-20....63 in-lbs 1/2-13....37 ft-lbs 3/8-16....201 in-lbs	MASS: 717.6 lbmass	TOLERANCES UNLESS NOTED .X ±0.5 .XX (>10) ±0.05 .XX (<10) ±0.01 .XXX ±0.005 ANGULAR ±1° SURFACE FINISH 63µ in. ALL DIMENSIONS IN INCHES	DESIGNED: JASMAY	SCHOONER 1 INSTALL	
ALL PLANS AND DESIGNS AT ALL TIMES REMAIN THE PROPERTY OF THE WMI MANUFACTURING CORPERATION AND CANNOT BE USED OR REPRODUCED WITHOUT WRITTEN PERMISSION.			DRAWN: MICNEI	CALYPSO	
WMI MANUFACTURING CORP. 805 CROWLEY AVE. KELOWNA, BRITISH COLUMBIA CANADA, V1Y 7G6 P: 250-979-7205 F: 250-979-7215		THIRD ANGLE PROJECTION	CHECKED: JASMAY	DWG ID: 0010-3704	REV: B / SIZE: B / SCALE: NTS / SHEET: 1 / OF: 2
			DATE: 8/12/2019		

PLAYCONNECT INSTALL TYPICAL
FOR STATIONARY FEATURES



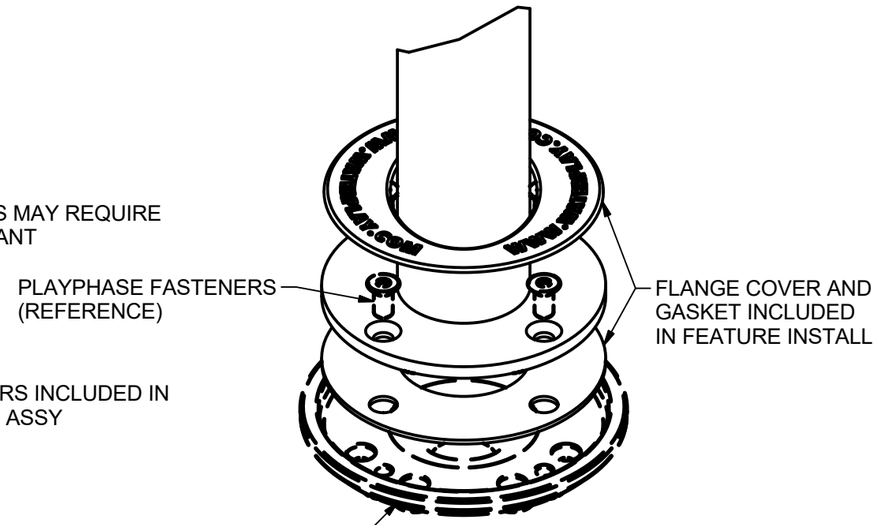
DETAIL A

HUB INSTALL TYPICAL FOR
ROTATIONAL FEATURES



DETAIL B

PLAYPHASE BASE INSTALL
TYPICAL FOR ALL BASES



DETAIL C

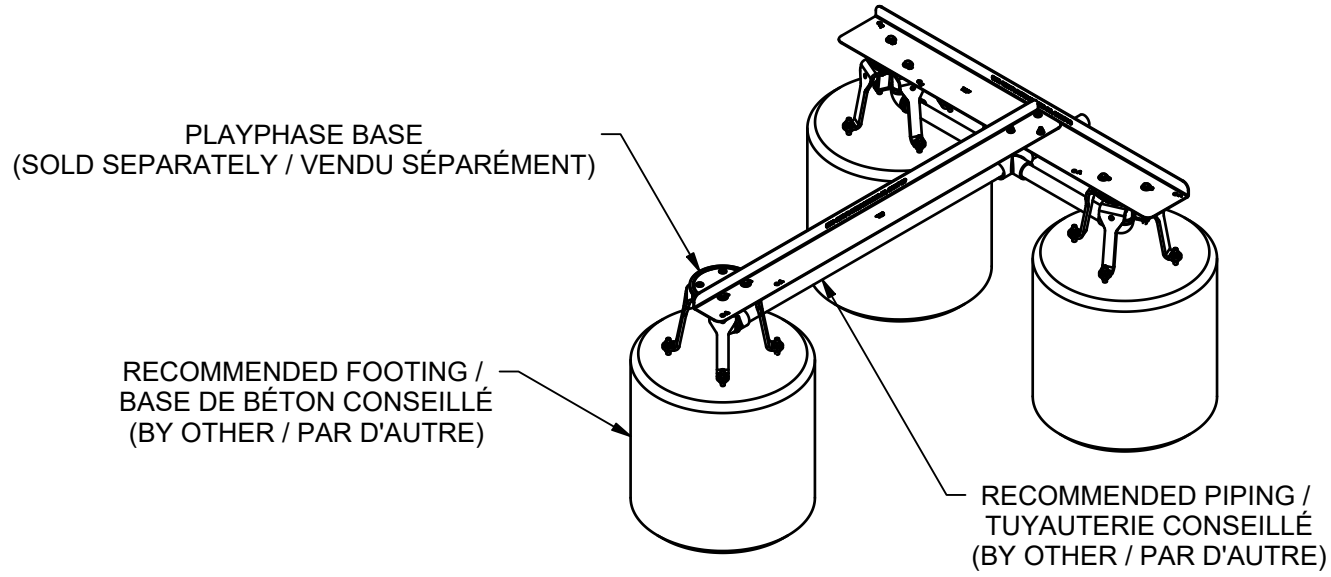
USE IN CONJUNCTION WITH SHEET NO. 1

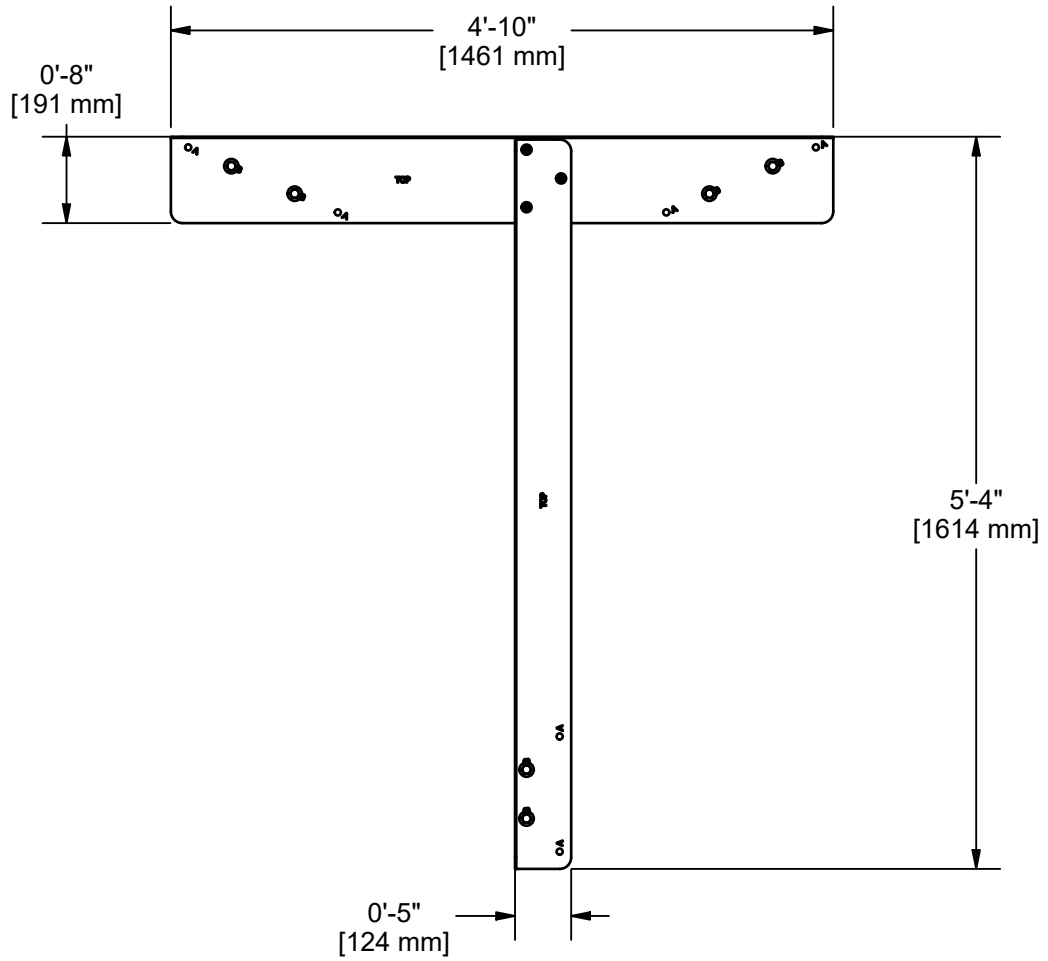
WMi MANUFACTURING CORP
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-979-7205 F: 250-979-7215

THIRD ANGLE PROJECTION	DWG ID:	REV:	SIZE:	SCALE:	SHEET:
	0010-3704	**B**	B	NTS	2 OF: 2

JIG EMB INSTALL CALYPSO

0010-1977





RECOMMENDED SPRAY AREA / ZONE D'ASPERSION POTENTIELLE			FLOWRATE / DÉBIT D'EAU		COMPONENT INCLUDES: (IF REQUIRED) / INCLUS AVEC LE JEU (SI REQUISE)	INITIAL:	
R (ft/mm)	**L** (ft/mm)	**W** (ft/mm)	GPM/LPM	PSI/kPa	-SERVICE TOOLS / OUTILS -SPRAY NOZZLES / BUSES DE PERFORMANCE	DRAWING ID: **0010-1977**	SHEET: 1
-/-	-/-	-/-	-/-	-/-			OF: 1
NOZZLES / BUSES		-	MASS: 30.8 lbmass		**DIMENSIONAL ACCURACY / PRÉCISION DIMENSIONELLE** +/- 1" [25mm]		

waterplay
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-712-3393 F: 250-861-4814
E: design@waterplay.com W: waterplay.com

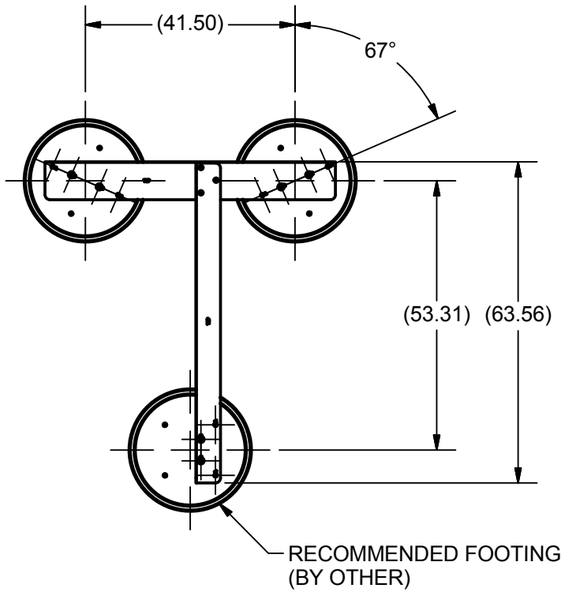
NOTE: REFER TO THE COMPONENT WRITTEN SPECIFICATION DOCUMENT FOR COMPLETE PRODUCT SPECIFICATIONS. WATERPLAY RESERVES THE RIGHT TO CHANGE THIS SPECIFICATION WITHOUT NOTICE.

REFEREZ VOUS AU DOCUMENT DE SPÉCIFICATION ÉCRIT POUR LES DÉTAILS COMPLET DU PRODUIT. WATERPLAY A LE DROIT DE CHANGER CES DERNIERS SANS PRÉAVIS.

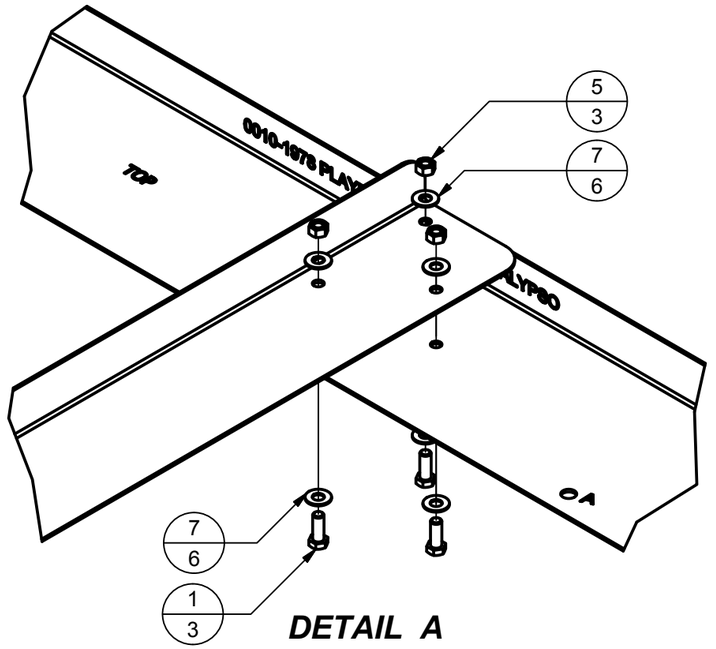
ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0010-0923		BOLT, HEX HD, 3/8-16 X 1.00 LG, FT	SST	3
2	0010-1978	D	CROSS TIE TEMPLATE	STL	1
3	0010-1979	C	EXTENSION TEMPLATE	STL	1
4	BLT-02025		BOLT, HEX HD, 1/2-13 X 1.50 LG, FT	SST	6
5	NUT-02031		NUT, HEX, 3/8-16	SST	3
6	WAS-02013		WASHER, FLAT, 1/2 (1.25 OD)	SST	6
7	WAS-02031		WASHER, FLAT, 3/8 (0.88 OD)	SST	6

REV	DESCRIPTION	DATE
A	INITIAL RELEASE	11/14/2016
B	REVISED LETTERING	5/10/2019
C	UPDATED INSTALL DETAILS	7/12/2019

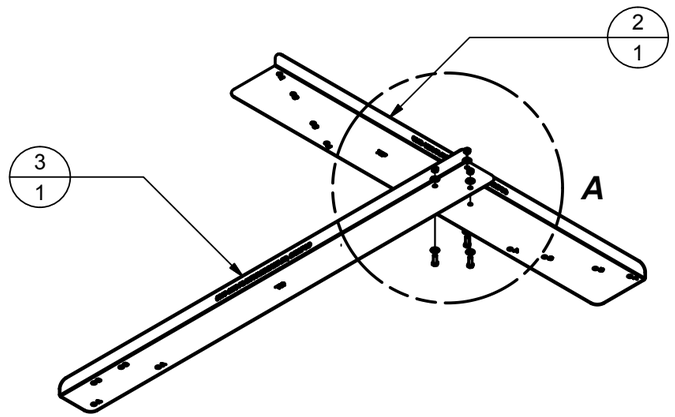
NOTE:
- FOOTINGS ARE FOR ILLUSTRATIVE PURPOSES ONLY
- REFER TO COMPONENT SPEC PAGE FOR DETAILS
- HOLE PATTERN "A" FOR ANCHOR BOLTS
- HOLE PATTERN "B" FOR PLAYPHASE BOLTS

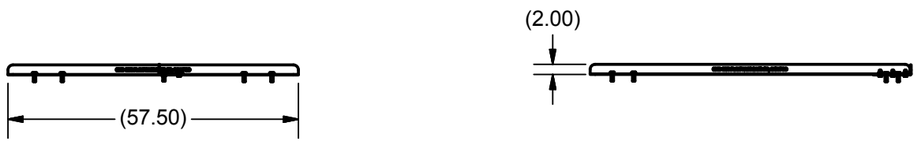


JIG ASSEMBLY



DETAIL A





NOTES:
1. USE ANTI-SEIZE FOR ALL STAINLESS TO STAINLESS THREADED CONNECTIONS

TORQUE VALUES UNLESS NOTED 1/4-20....63 in-lbs 1/2-13....37 ft-lbs 3/8-16....201 in-lbs	MASS: 30.8 lbmass	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	DESIGNED: NICMAY DRAWN: NICMAY CHECKED: JASMAY
ALL PLANS AND DESIGNS AT ALL TIMES REMAIN THE PROPERTY OF THE WMI MANUFACTURING CORPERATION AND CANNOT BE USED OR REPRODUCED WITHOUT WRITTEN PERMISSION.		THIRD ANGLE PROJECTION	DATE: 9/9/2016

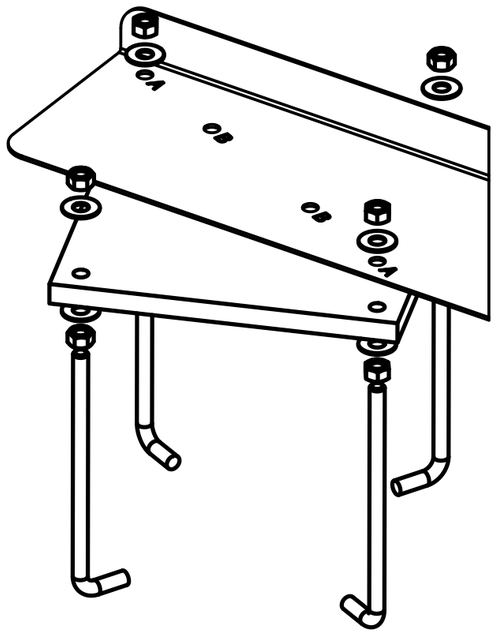
WMI MANUFACTURING CORP
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-979-7205 F: 250-979-7215

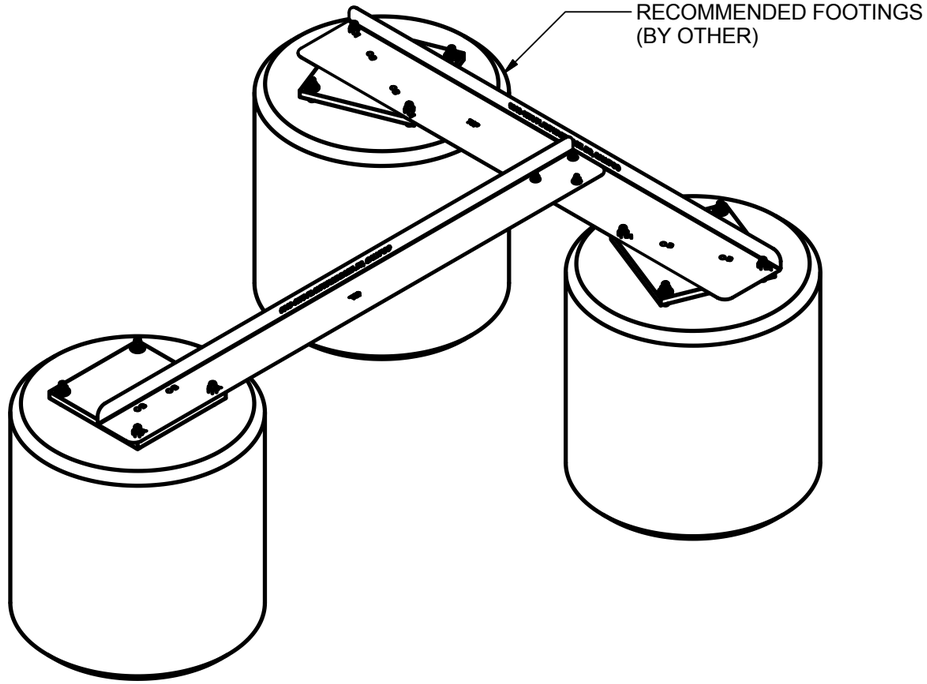
JIG, EMB INSTALL, CALYPSO

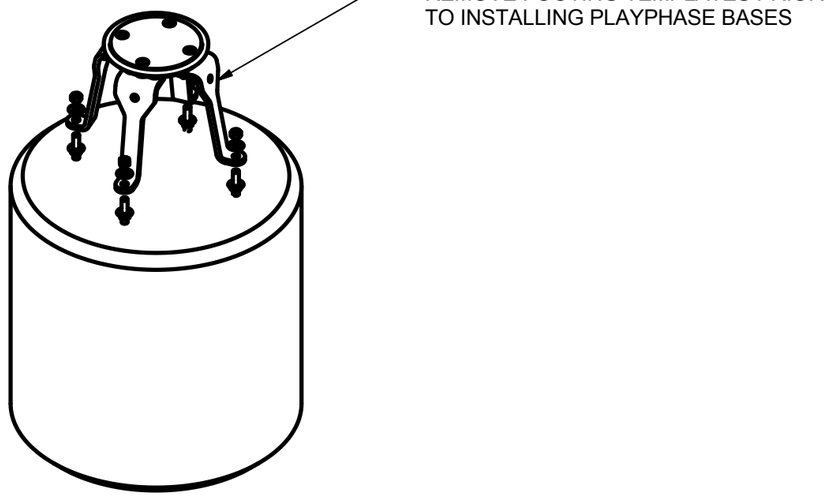
PLAYPHASE JIGS

DWG ID:	REV:	SIZE:	SCALE:	SHEET:
0010-1977	**C**	B	NTS	1 OF: 3

ANCHOR HARDWARE







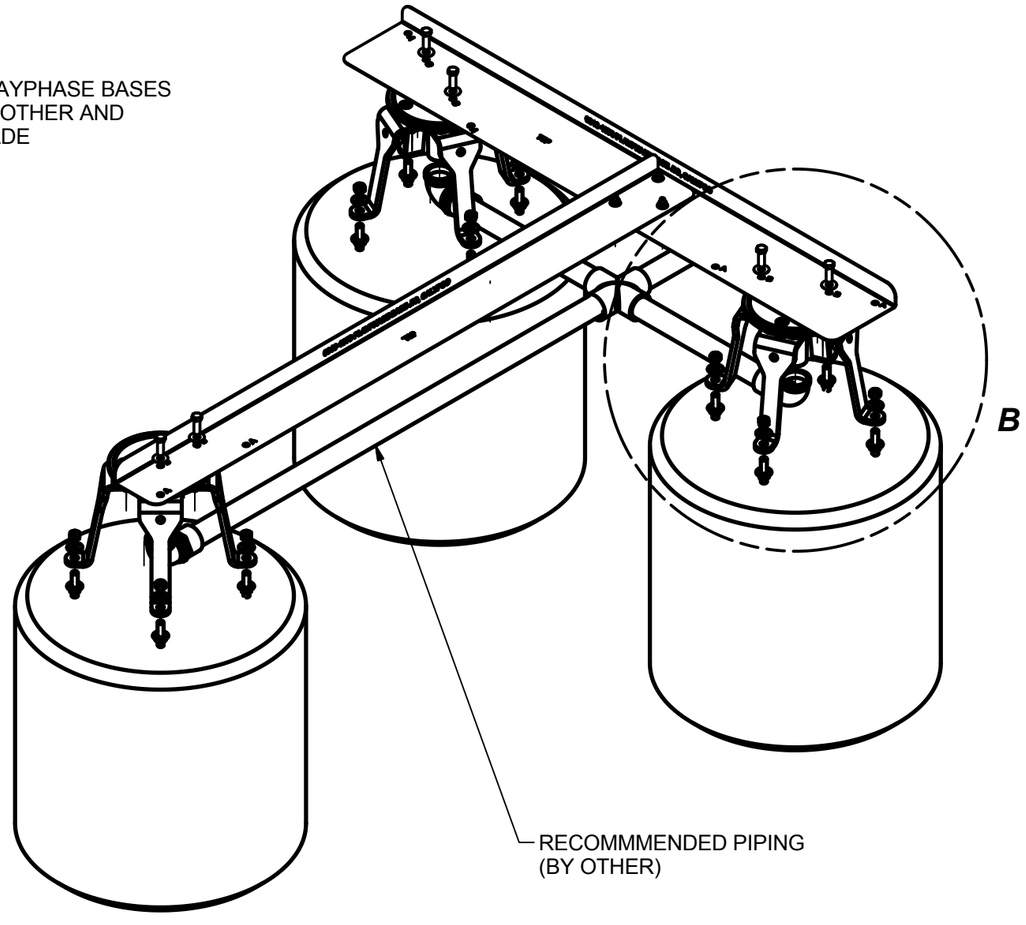
USE IN CONJUNCTION WITH SHEET NO. 1

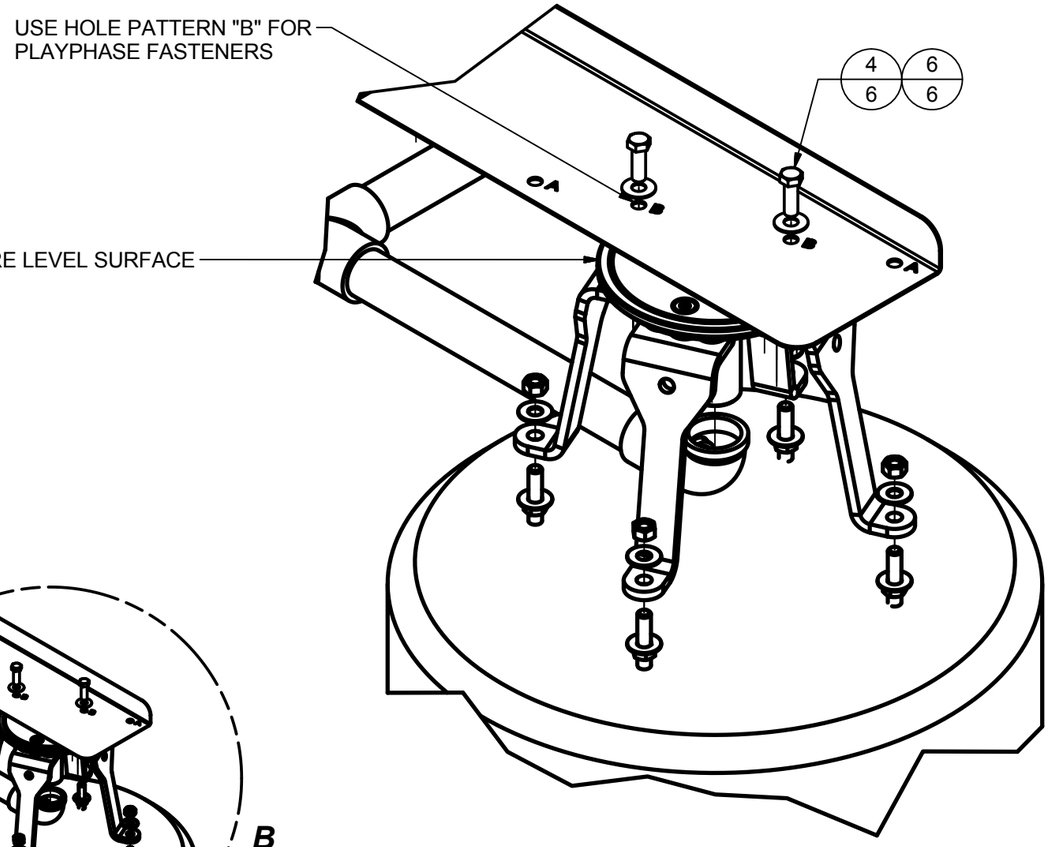
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-979-7205 F: 250-979-7215

THIRD ANGLE PROJECTION	DWG ID:	REV:	SIZE:	SCALE:	SHEET:
	0010-1977	C	B	NTS	2 OF: 3

PLAYPHASE INSTALL

ENSURE ALL THREE PLAYPHASE BASES ARE LEVEL WITH EACH OTHER AND FLUSH WITH FINAL GRADE





DETAIL B

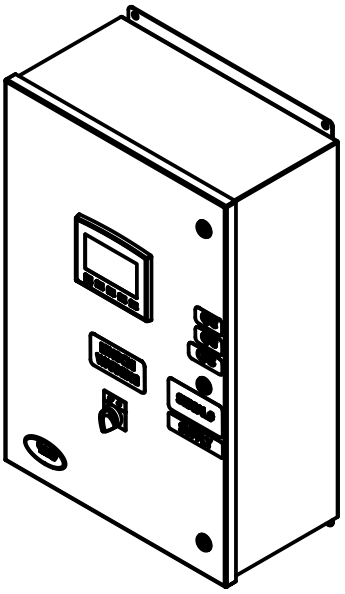
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-979-7205 F: 250-979-7215

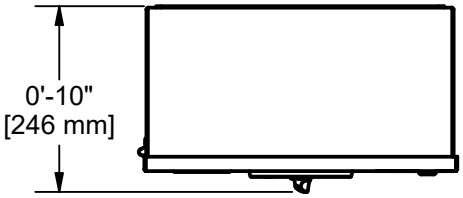
USE IN CONJUNCTION WITH SHEET NO. 1						
THIRD ANGLE PROJECTION	DWG ID: **0010-1977**	REV: **C**	SIZE: B	SCALE: NTS	SHEET: 3	OF: 3

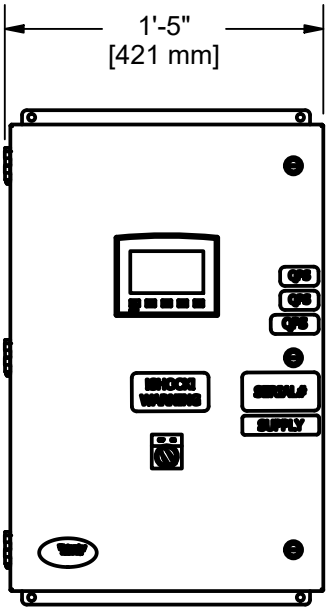
CONTROLLER POTABLE 0010-1954

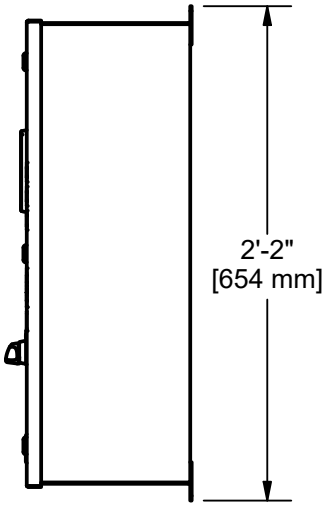
ATTENTION:
IT IS THE RESPONSIBILITY OF THE INSTALLER TO MAKE THE FIELD INSTALLATION NEMA 4 COMPLIANT. THE INSTALLATION MUST COMPLY WITH LOCAL ELECTRICAL CODE REQUIREMENTS AND BE APPROVED BY LOCAL ELECTRICAL INSPECTION AUTHORITIES. CONTROL PANEL NOT TO BE INSTALLED IN DIRECT SUNLIGHT.

ATTENTION:
L'INSTALLATEUR EST RESPONSIBLE D'ASSURER QUE L'INSTALLATION FINALE SUR SITE EST CONFORME AUX RÈGLEMENTS NEMA 4. L'INSTALLATION DOIT ÊTRE CONFORME AUX NORMES D'ÉLECTRICITÉ LOCAUX ET DEVRONT ÊTRE APROUVÉE PAR INSPECTION OFFICIELLE. LE PANNEAU DE CONTRÔLE NE DEVRA PAS ÊTRE INSTALLER À LA PORTÉE DE SOLEIL.









FEATURES:
- INDUSTRIAL GRADE FIELD PROGRAMMABLE PLC, 4IN COLOUR TOUCH
- REMOTE CONTROL VIA INTERNET & SMART PHONE APP
- FEATURE SEQUENCING
- PARK OPERATING DAYS AND HOURS
- TEST MODE
- 12 OUTPUTS (EXPANDABLE UP TO 44 VALVES)

CARACTÉRISTIQUES:
- PLC INDUSTRIEL, PROGRAMMATION DISPONIBLE SUR SITE, TOUCHE COULEUR 4PO
- CONTROLE À DISTANCE VIA INTERNET ET APPLI SMARTPHONE
- SÉQUENCAGE DES JEUX
- HEURES ET JOURS D'OPÉRATIONS DE L'AIRE DE JEU
- MODE TESTE
- 12 SORTIES (EXTENSIBLE JUSQU'À 44 VANNES)

QPS APPROVAL TO: CSA STANDARDS C22.2 No(s) 0, 0.4,14 / CE Code / CSA Model Code SPE 1000 / NEC / UL508A

PANEL RATING	QPS / NEMA 4-4X-12 / IP65	**CLASSEMENT DE PANNEAUX**	
STORAGE TEMPERATURE	-20°C to 60°C (-4°F to 140°F)	**TEMPÉRATURE D'OPÉRATION**	
HUMIDITY	10-90% NON CONDENSING	**HUMIDITÉ**	
POWER REQUIRED	120V 60HZ / 230V 50HZ DEDICATED GFCI 10A	**EXIGENCE D'ÉLECTRICITÉ**	
ACTIVATOR POWER	24VDC	**EXIGENCE D'ÉLECTRICITÉ POUR L'ACTIVATEUR**	
ACTIVATOR WIRE	MIN. 3 WIRE 18 AWG PLUS GROUND	**CÂBLE ÉLECTRIQUE POUR L'ACTIVATEUR**	
VALVE POWER	24VAC, MAX. 0.5A PER CHANNEL	**EXIGENCE D'ÉLECTRICITÉ POUR LA VANNE**	
VALVE WIRE	MIN. #14 AWG, 1N PER VALVE	**CÂBLE ÉLECTRIQUE POUR LA VANNE**	
SUPPLY PRESSURE	-	**PRESSION D'ALIMENTATION**	
DYNAMIC PRESSURE	-	**PRESSION DYNAMIQUE**	

OPTION	SKU
0-12 OUTPUTS	BASE
16 OUTPUT EXPANSION	0010-2244
32 OUTPUT EXPANSION	0010-2245
SURGE SUPPRESSOR	0002-1113
RAIN SENSOR	0000-1565
WIND SENSOR	PRP-06019

INITIAL:

DRAWING ID: **0010-1954** SHEET: 1 OF: 1

waterplay Solutions Corp.
1451B ELLIS STREET
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CANADA, V1Y 2A3
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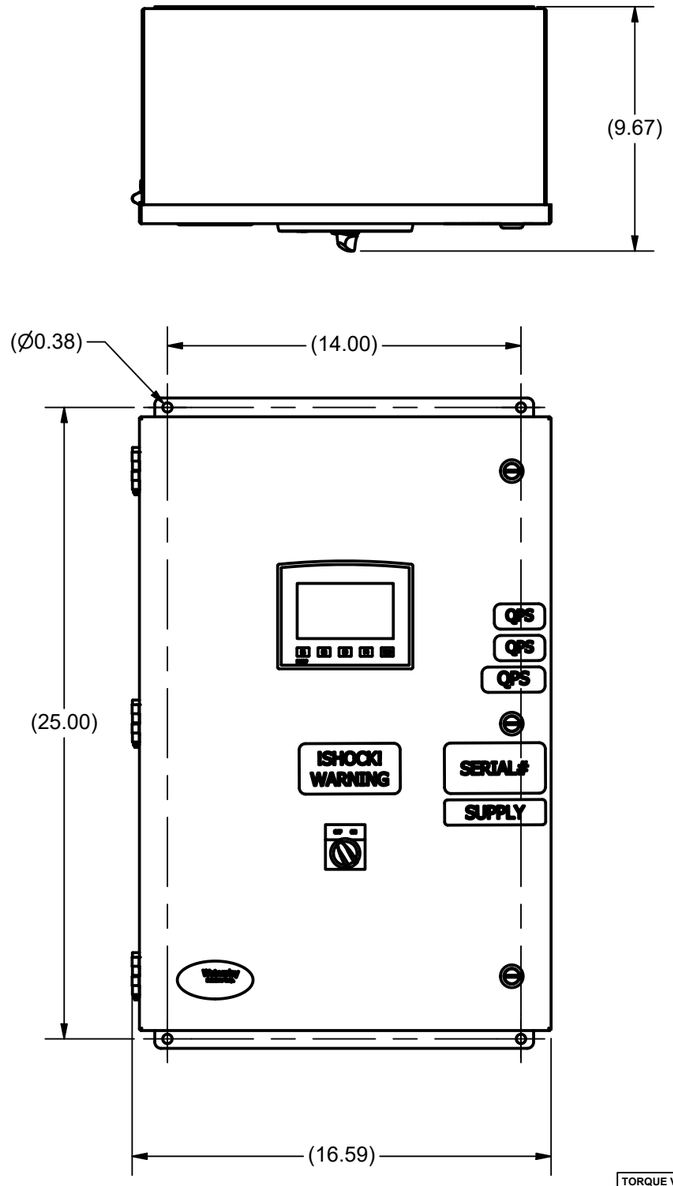
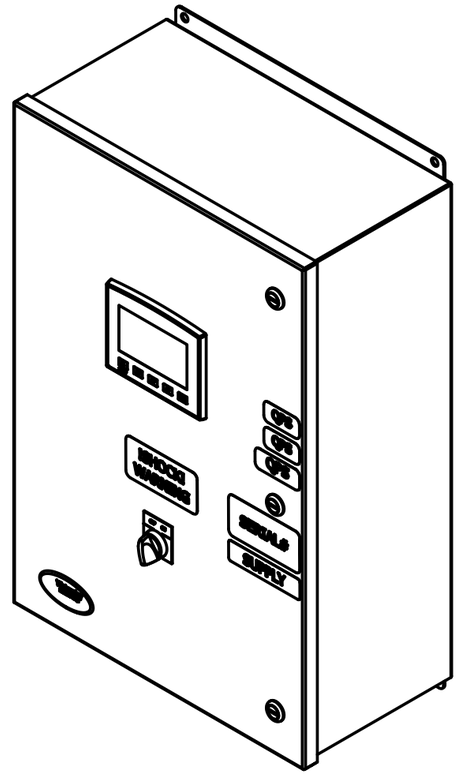
NOTE: REFER TO THE COMPONENT WRITTEN SPECIFICATION DOCUMENT FOR COMPLETE PRODUCT SPECIFICATIONS. WATERPLAY RESERVES THE RIGHT TO CHANGE THIS SPECIFICATION WITHOUT NOTICE.

REFEREZ VOUS AU DOCUMENT DE SPÉCIFICATION ÉCRIT POUR LES DÉTAILS COMPLET DU PRODUIT. WATERPLAY A LE DROIT DE CHANGER CES DERNIERS SANS PRÉAVIS.

ITEM	PART ID	REV	DESCRIPTION	MATERIAL	QTY
1	0010-1954-A	A	POTABLE CONTROLLER ASSEMBLY		1

REV	DESCRIPTION	DATE
A	INITIAL RELEASE	3/23/2021





TORQUE VALUES UNLESS NOTED
1/4-20....63 in-lbs 1/2-13....37 ft-lbs
3/8-16....201 in-lbs

MASS: 53.6 lbmass

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: TYRHIR
DRAWN: TYRHIR
CHECKED: JASMAY
DATE: 2/12/2021

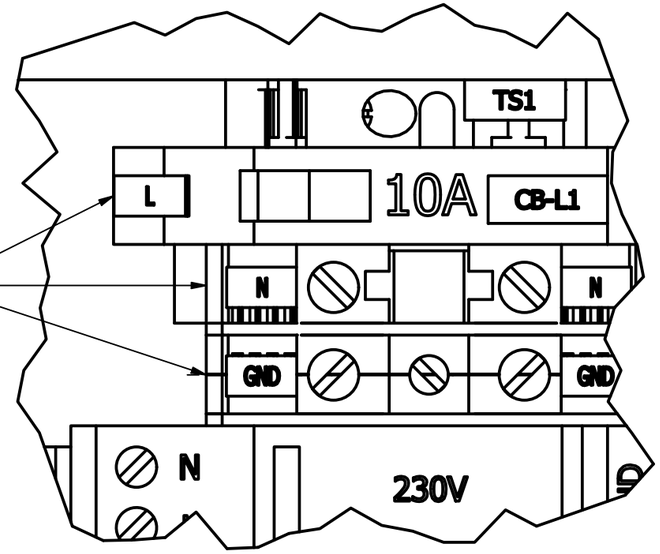
POTABLE CONTROLLER

CONTROLLER
WATER MANAGEMENT

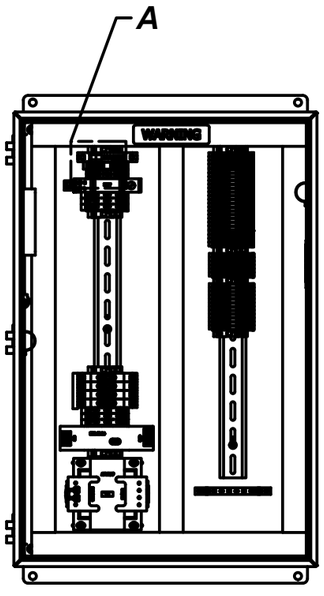
DWG ID: 0010-1954 | REV: A | SIZE: B | SCALE: NTS | SHEET: 1 | OF: 7

CUSTOMER SUPPLIED POWER

ACCEPTS 120VAC OR *230VAC*
50/60 Hz
*TRANSFORMER JUMPER SETTING
DISPLAYED IN WIRING DIAGRAM*



DETAIL A

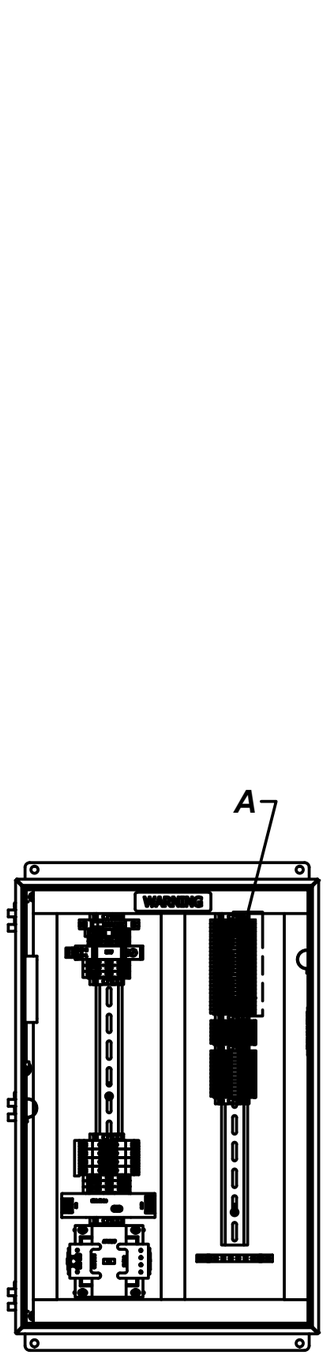


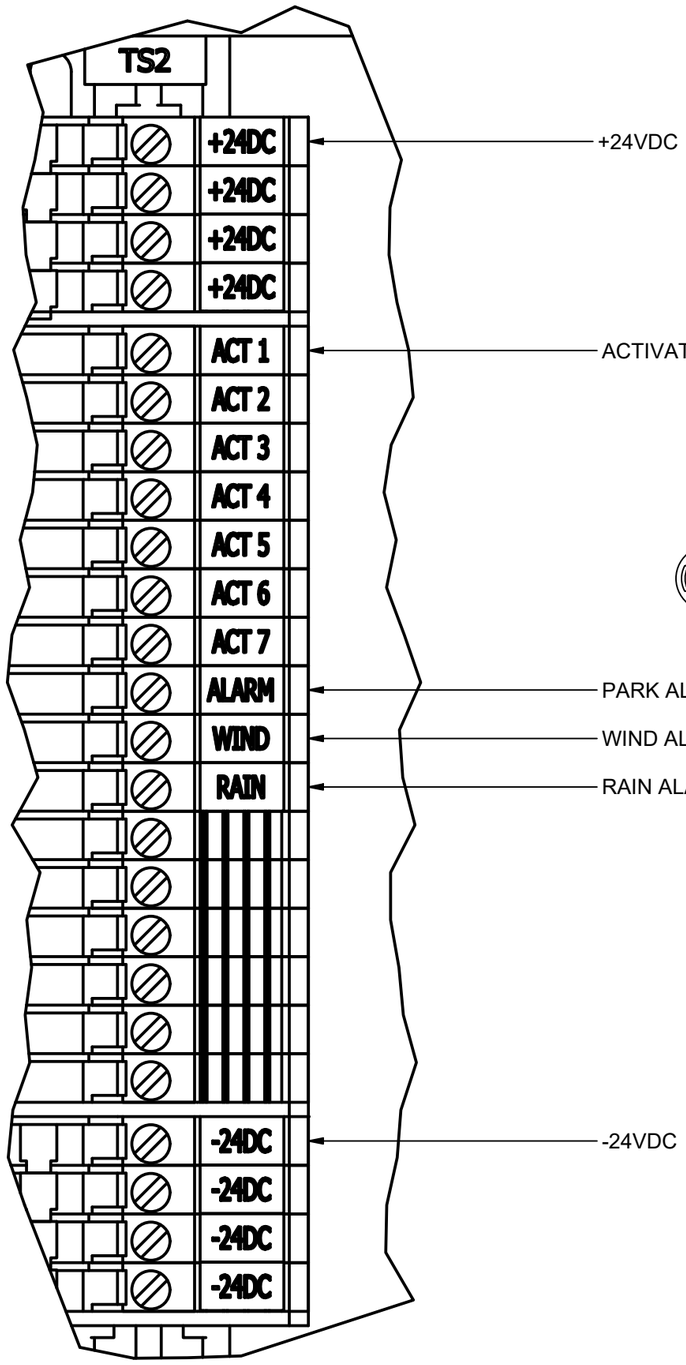
POWER

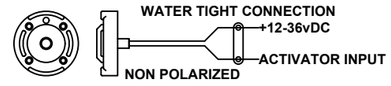
USE IN CONJUNCTION WITH SHEET NO. 1

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

THIRD ANGLE PROJECTION	DWG ID:	REV:	SIZE:	SCALE:	SHEET:
	0010-1954	A	B	NTS	2 OF: 7







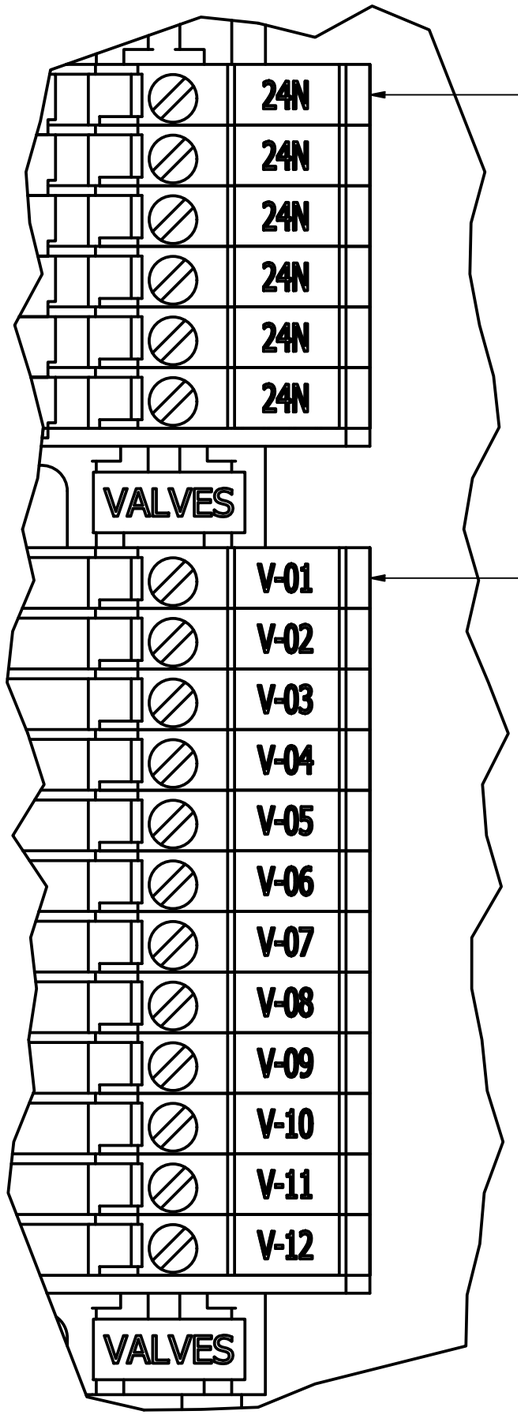
DETAIL A

INPUTS

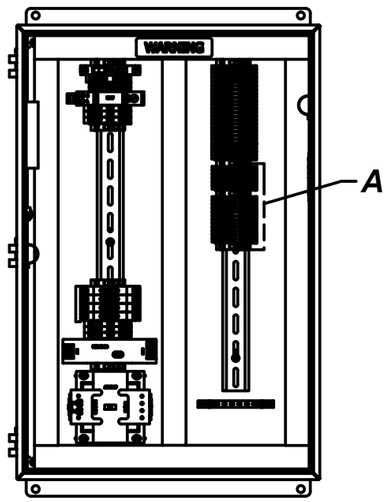
USE IN CONJUNCTION WITH SHEET NO. 1

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

THIRD ANGLE PROJECTION	DWG ID:	REV:	SIZE:	SCALE:	SHEET:
	0010-1954	A	B	NTS	3 OF: 7



MAY NOT BE APPLICABLE FOR ALL CONTROLLERS



DETAIL A

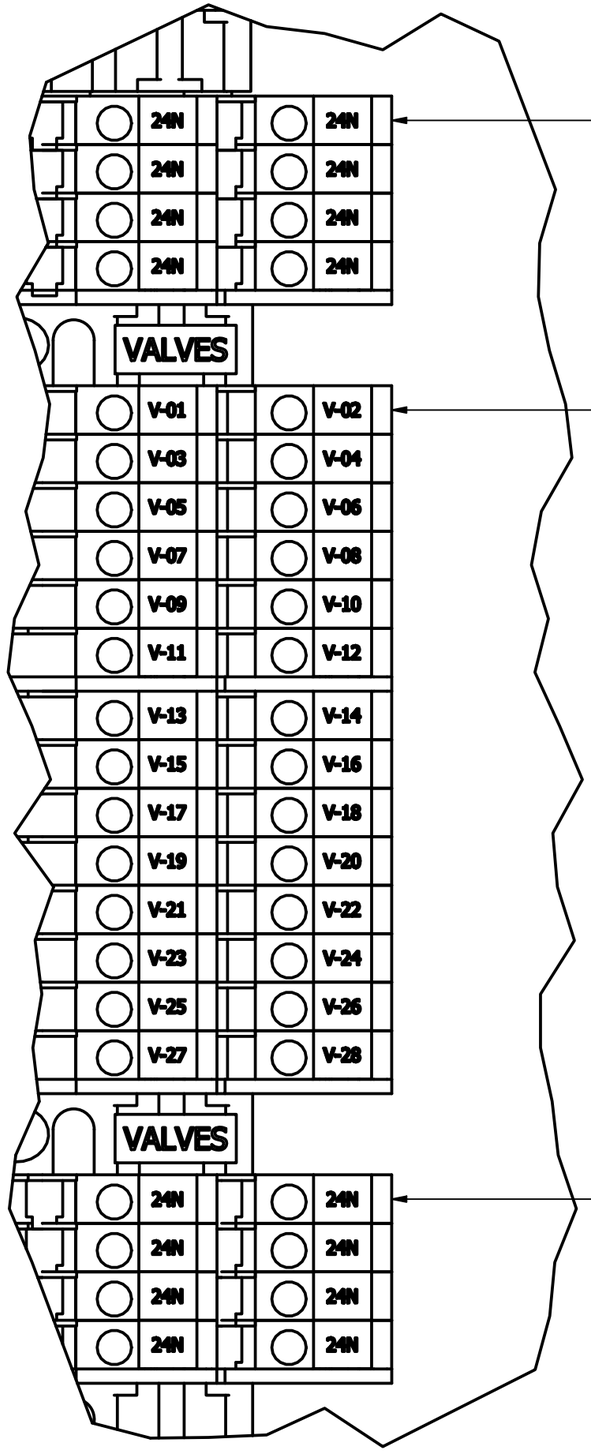
OUTPUTS

USE IN CONJUNCTION WITH SHEET NO. 1

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

THIRD ANGLE PROJECTION	DWG ID:	REV:	SIZE:	SCALE:	SHEET:
	0010-1954	A	B	NTS	4 OF: 7

A



24V NEUTRAL

FEATURE VALVE OUTPUTS (24VAC)

24 NEUTRAL

MAY NOT BE APPLICABLE FOR ALL CONTROLLERS

DETAIL A

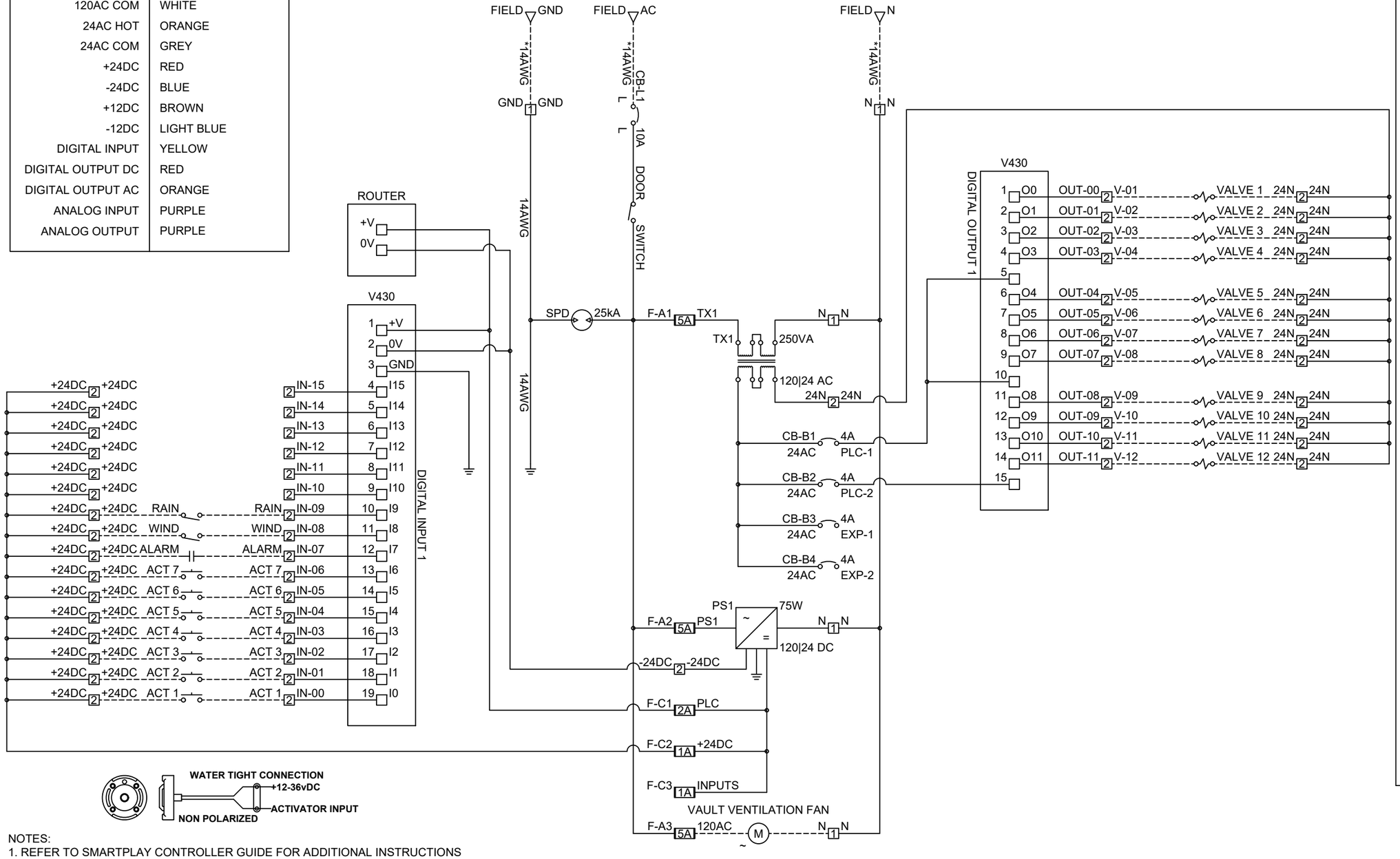
EXP16 OUTPUTS

USE IN CONJUNCTION WITH SHEET NO. 1

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

THIRD ANGLE PROJECTION	DWG ID:	REV:	SIZE:	SCALE:	SHEET:
	0010-1954	A	B	NTS	5 OF: 7

WIRE COLOR CODE	
DESIGNATION	COLOUR
GROUND OR BOND	GREEN
120AC HOT	BLACK
120AC COM	WHITE
24AC HOT	ORANGE
24AC COM	GREY
+24DC	RED
-24DC	BLUE
+12DC	BROWN
-12DC	LIGHT BLUE
DIGITAL INPUT	YELLOW
DIGITAL OUTPUT DC	RED
DIGITAL OUTPUT AC	ORANGE
ANALOG INPUT	PURPLE
ANALOG OUTPUT	PURPLE



ELECTRICAL SYMBOLS	
ENGLISH DESCRIPTION	SYMBOL
PANEL WIRE	
FIELD WIRE	
CONTINUATION	
GROUND OR BOND	
TERMINAL BLOCK	
QUICK CONNECT MALE	
QUICK CONNECT FEMALE	
PUSH BUTTON	
N.O. SWITCH	
N.O. FLOAT SWITCH	
N.O. PRESSURE SWITCH	
N.O. FLOW SWITCH	
N.O. LIMIT SWITCH	
COIL	
N.O. CONTACT	
N.C. CONTACT	
BREAKER	
FUSE	
SURGE SUPPRESSOR	
OVERLOAD	
MOTOR	
SOLENOID VALVE	
LIGHT	
CAPACITOR	
BATTERY	
DIODE	
FLOW METER	
PRESSURE TRANSDUCER	
VFD OR POWER SUPPLY	
DUAL VOLTAGE TRANSFORMER	
TRANSFORMER	
RECTIFIER	

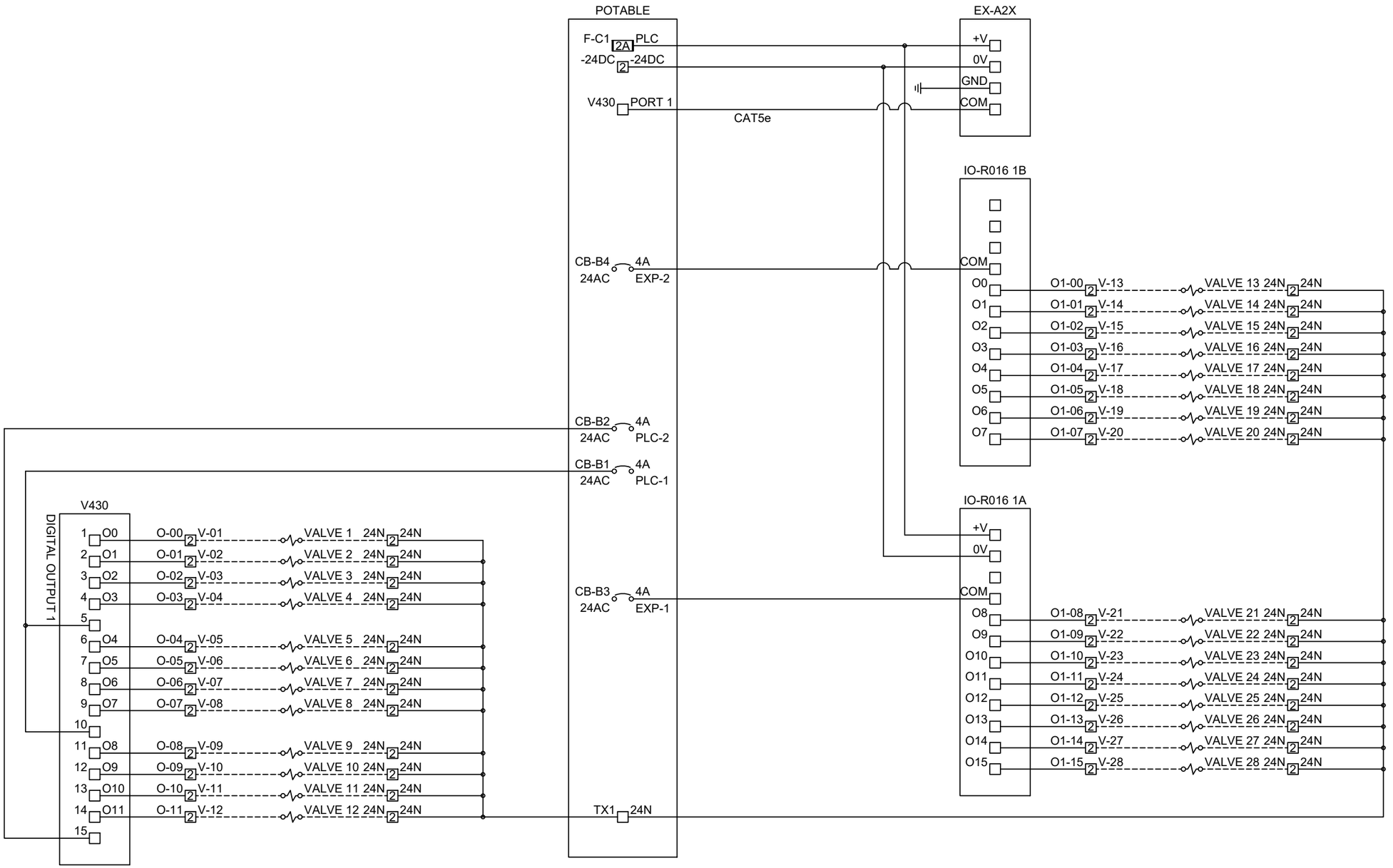
NOTES:
1. REFER TO SMARTPLAY CONTROLLER GUIDE FOR ADDITIONAL INSTRUCTIONS
2. INSTALLATION MUST BE PERFORMED BY A QUALIFIED ELECTRICIAN
3. CONTROL PANEL LOCATION & INSTALLATION MUST MEET LOCAL ELECTRICAL CODE REQUIREMENTS
4. LOCAL AUTHORITIES MUST INSPECT & APPROVE THE INSTALLATION
5. IN PREWIRED VAULT APPLICATIONS, CONTROL PANEL WILL BE LOCATED IN THE VAULT
6. ALL CONDUIT HUBS TO BE DRILLED INTO BOTTOM OF ENCLOSURE
7. NON METALLIC ENCLOSURE DOES NOT PROVIDE GROUNDING BETWEEN CONDUIT CONNECTIONS
8. USE GROUNDING BUSHINGS AND JUMPER WIRES. BUSHINGS AVAILABLE UPON REQUEST

WIRING DIAGRAM

USE IN CONJUNCTION WITH SHEET NO. 1

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

THIRD ANGLE PROJECTION	DWG ID:	REV:	SIZE:	SCALE:	SHEET: / OF:
	0010-1954	A	B	NTS	6 / 7



MAY NOT BE APPLICABLE FOR ALL CONTROLLERS

EXP16 WIRING DIAGRAM

USE IN CONJUNCTION WITH SHEET NO. 1

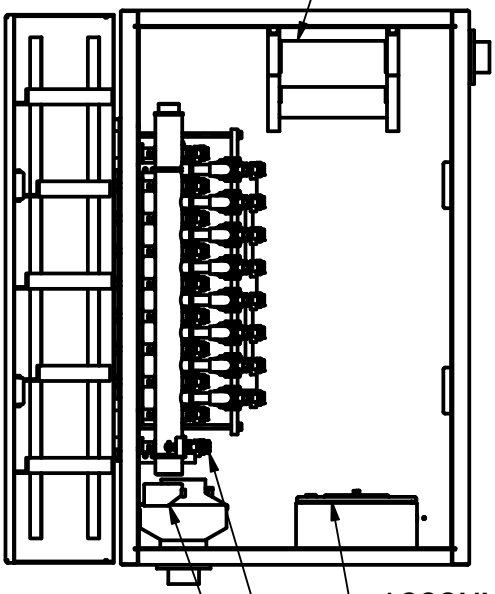
WMi MANUFACTURING CORP
805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-979-7205 F: 250-979-7215

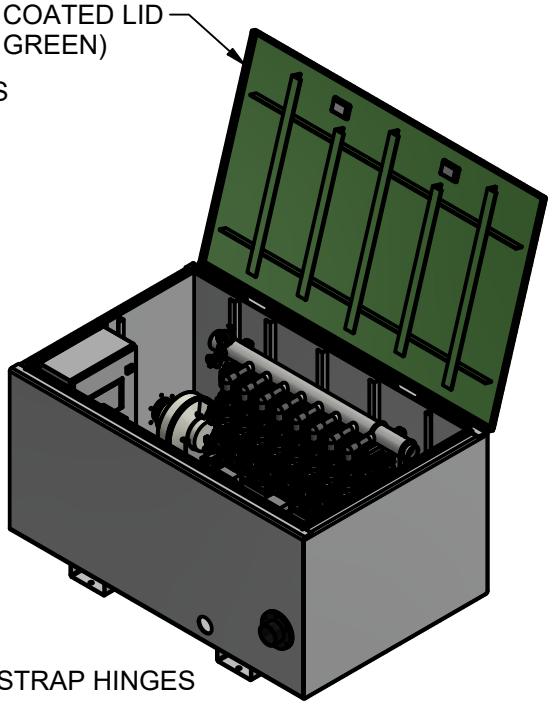
THIRD ANGLE PROJECTION	DWG ID:	REV:	SIZE:	SCALE:	SHEET: / OF:
	0010-1954	A	B	NTS	7 / 7

BG VAULT 18 VALVE

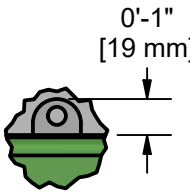
C06-BG018

MANIFOLD & CONTROLLER LAYOUT
MAY NOT BE EXACTLY AS SHOWN



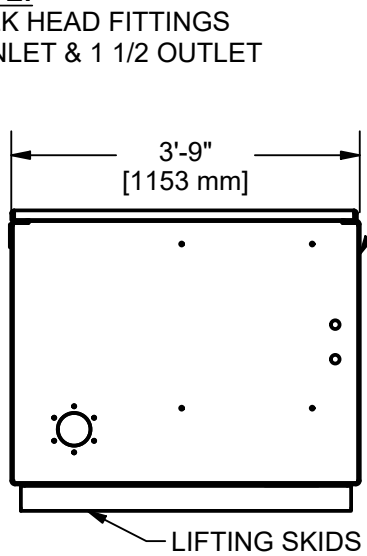


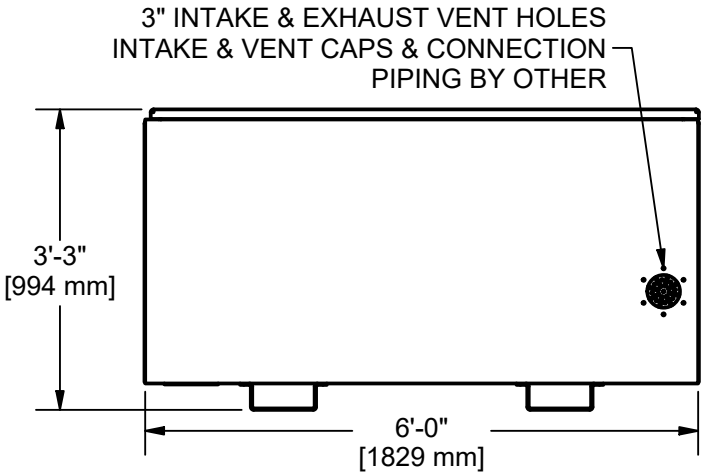
NOTE:
(2) EXTERNAL STRAP HINGES



NOTE:
PADLOCK LATCH STICKS
ABOVE VAULT LID

NOTE:
BULK HEAD FITTINGS
2" INLET & 1 1/2 OUTLET





RECOMMENDED SPRAY AREA / ZONE D'ASPERSION POTENTIELLE			FLOW RATE / DÉBIT D'EAU	
R (ft/mm)	L (ft/mm)	W (ft/mm)	GPM/LPM	PSI/kPa
-/-	-/-	-/-	-/-	-/-
NOZZLES / BUSES		-	MASS: 1842.1 lbmass	

COMPONENT INCLUDES: (IF REQUIRED) / INCLUS AVEC LE JEU (SI REQUISE)
-SERVICE TOOLS / OUTILS
-SPRAY NOZZLES / BUSES DE PERFORMANCE

DIMENSIONAL ACCURACY / PRÉCISION DIMENSIONELLE +/- 1" [25mm]

INITIAL:

DRAWING ID: **C06-BG018**

SHEET: 1
OF: 1

WATERPLAY BY MAKR

REFER TO THE COMPONENT WRITTEN SPECIFICATION DOCUMENT FOR COMPLETE PRODUCT SPECIFICATIONS. WATERPLAY RESERVES THE RIGHT TO CHANGE THIS SPECIFICATION WITHOUT NOTICE.

SE RÉFÉRER AU DOCUMENT DE SPÉCIFICATION ÉCRIT POUR LES DÉTAILS COMPLET DU PRODUIT. WATERPLAY A LE DROIT DE CHANGER CES DERNIERS SANS PRÉAVIS.

805 CROWLEY AVE.
KELOWNA, BRITISH COLUMBIA
CANADA, V1Y 7G6
P: 250-712-3393
F: 250-861-4814
E: design@waterplay.com
W: waterplay.com

Temiskaming Shores, Temiskaming, ON

Waterplay Footing Details

Details of the footings used for the components in your park.

NOTE:
Detailed footing design and installation information is included in Appendix 05 of this RFP. Information contained within this document regarding footings has been provided by Waterplay as general information.

It has been included for completeness only and should not be followed without approval by the owner.

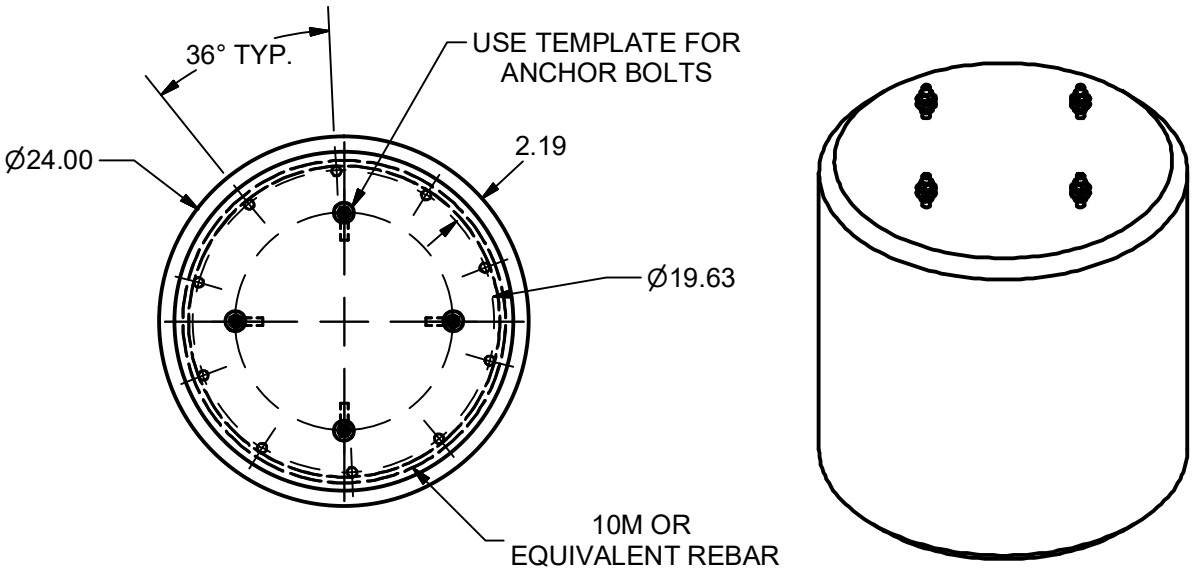
In all instances with conflicting information between this document and Appendix 05, the information within Appendix 05 shall take precedence.

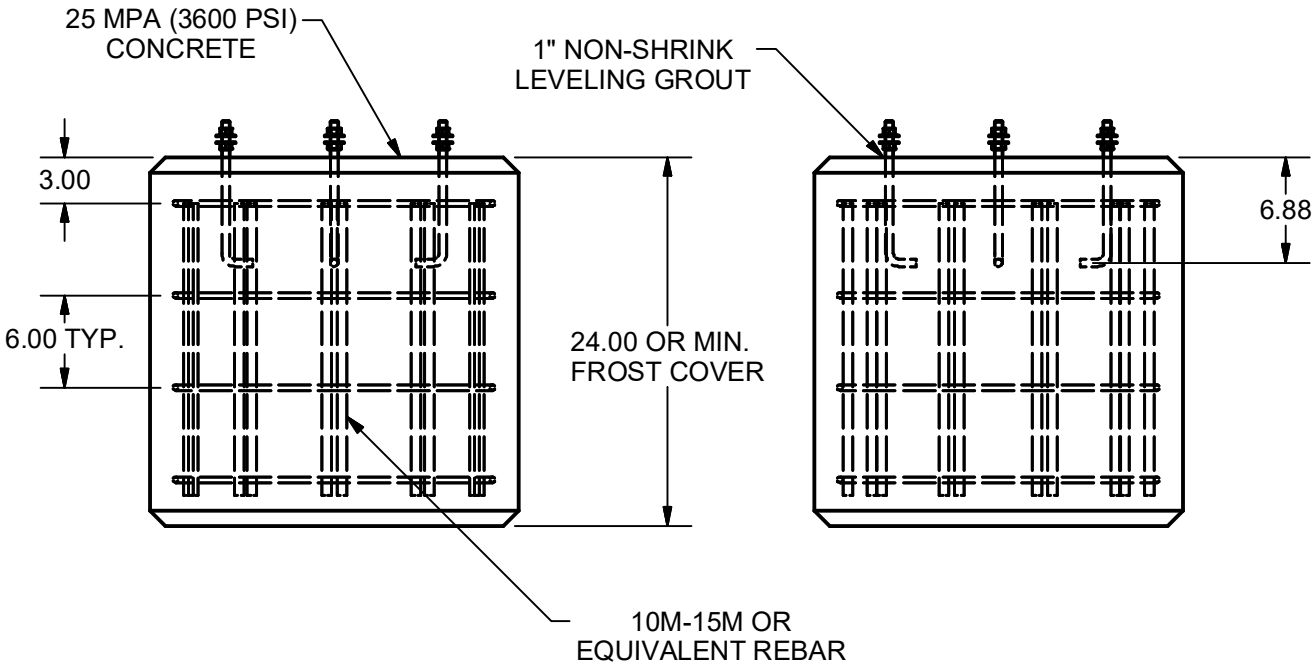
FOOTING C

0002-0273

NOTE:
FOOTING IS A RECOMMENDATION ONLY. CHANGES MAY BE REQUIRED TO MEET WITH LOCAL BUILDING CODES AND PROFESSIONAL PRACTICES.

SOIL BEARING CAPACITY	3000 PSF.
Mmax ULTIMATE	1050 lb.ft





RECOMMENDED SPRAY AREA / ZONE D'ASPERSION POTENTIELLE			FLOW RATE / DÉBIT D'EAU	
R (ft/mm)	L (ft/mm)	W (ft/mm)	GPM/LPM	PSI/kPa
-/-	-/-	-/-	-/-	-/-
NOZZLES / BUSES		-	MASS: 957.8 lbmass	

COMPONENT INCLUDES: (IF REQUIRED) / INCLUS AVEC LE JEU (SI REQUISE)
-SERVICE TOOLS / OUTILS
-SPRAY NOZZLES / BUSES DE PERFORMANCE

DIMENSIONAL ACCURACY / PRÉCISION DIMENSIONELLE +/- 1" [25mm]

INITIAL:

DRAWING ID: **0002-0273**

SHEET: 1
OF: 1

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805 CROWLEY AVE.
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CANADA, V1Y 7G6
P: 250-712-3393 F: 250-861-4814
E: design@waterplay.com W: waterplay.com

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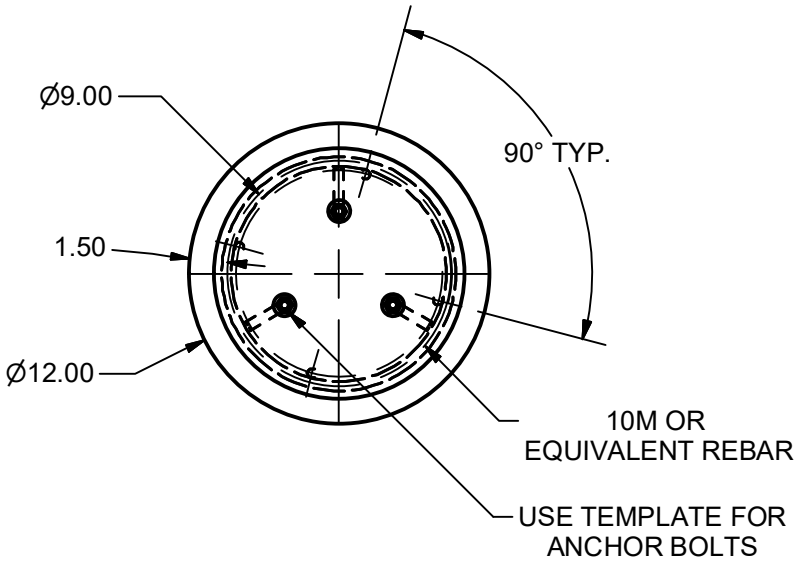
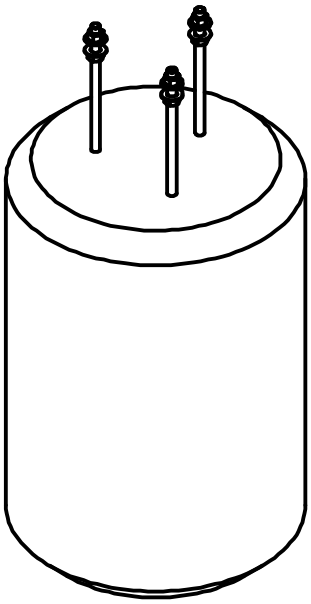
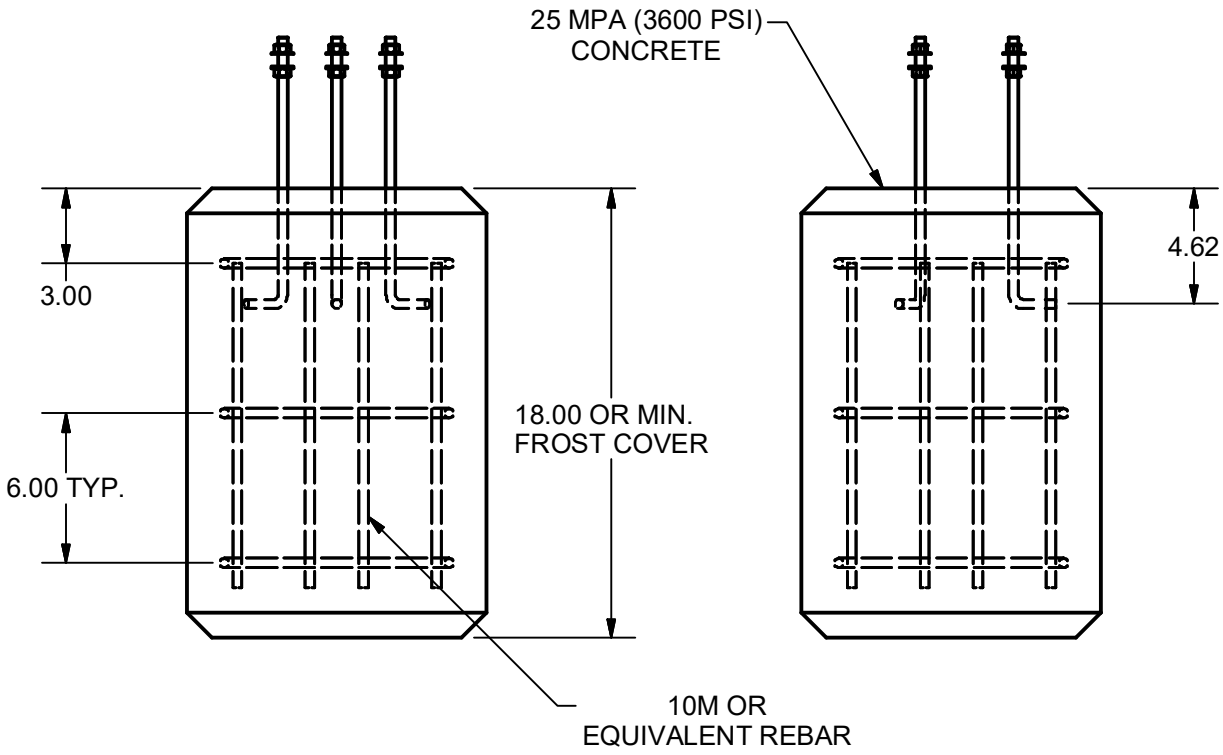
FOOTING F

0002-3904

NOTE:
FOOTING IS A RECOMMENDATION ONLY.
CHANGES MAY BE REQUIRED TO MEET
WITH LOCAL BUILDING CODES AND
PROFESSIONAL PRACTICES







RECOMMENDED SPRAY AREA / ZONE D'ASPERSION POTENTIELLE			FLOW RATE / DÉBIT D'EAU		COMPONENT INCLUDES: (IF REQUIRED) / INCLUS AVEC LE JEU (SI REQUISE)	INITIAL:	
R (ft/mm)	L (ft/mm)	W (ft/mm)	GPM/LPM	PSI/kPa	-SERVICE TOOLS / OUTILS -SPRAY NOZZLES / BUSES DE PERFORMANCE	DRAWING ID: 0002-3904	SHEET: 1
-/-	-/-	-/-	-/-	-/-			OF: 1
NOZZLES / BUSES		-	MASS: 178.2 lbmass		DIMENSIONAL ACCURACY / PRÉCISION DIMENSIONELLE +/- 1" [25mm]		

waterplay
805 CROWLEY AVE.
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CANADA, V1Y 7G6
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Temiskaming Shores, Temiskaming, ON

Waterplay Controller Manual

An informative read on how your controller works.

waterplay®

SMARTPLAY CONTROLLER SETUP GUIDE

Potable / WTS By Others

waterplay®

1.800.590.5552 (USA & CAN) | +1 (250) 712.3393 (INTL)
info@waterplay.com | www.waterplay.com

Contact Information

For additional information please contact Waterplay® Solutions Corp. (Waterplay):

MAILING ADDRESS

805 Crowley Avenue

Kelowna, BC Canada

V1Y 7G6

TELEPHONE (Mon – Fri 7:00 a.m. to 5 p.m. Pacific Time)

1-800-590-5552 in North America

01-250-712-3393 International

EMAIL

parts@waterplay.com

ONLINE

www.waterplay.com

Table of Contents

1.0 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.

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

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.

2.0 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:

Figure 1: Below Grade Utility Cabinet

Figure 2: Above Grade Utility Cabinet

Figure 3: 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.

Figure 4: Waterplay Manifold (Wiring to Junction Boxes by Other)

2.3 Main Power Connection

Waterplay controllers require a dedicated 120 VAC 15-amp GFCI circuit breaker. Controllers 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, providing enough extra cable such that the sensor can be removed from the component, replaced and rewired.

2.4.1 3-Wire Inductive-Type Proximity Switch

Figure 5: 3-Wire Inductive-Type Proximity Switch

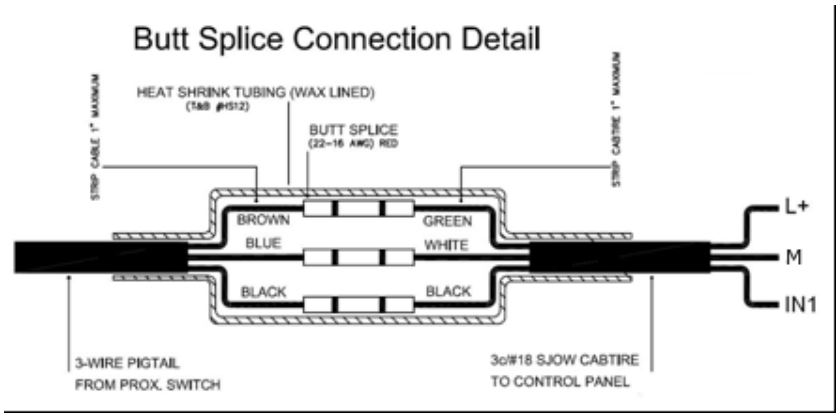


Figure 6: Butt Splice Connection Detail

- Recommended minimum, up to 200 feet; #18/3 SJOW cable
- Thread the proximity sensor into the activator, tighten until hand tight only

2.4.2 2-Wire Switch

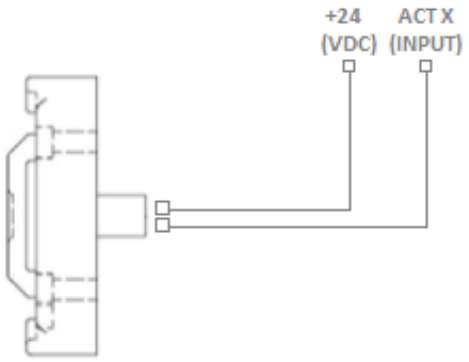


Figure 7: 2-Wire Switch Wiring Diagram

- 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)

2.4.3 3-Wire Switch

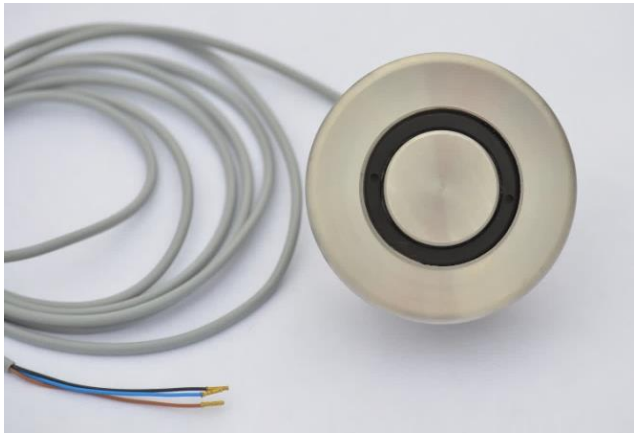


Figure 8: 3-Wire Switch

- 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

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.

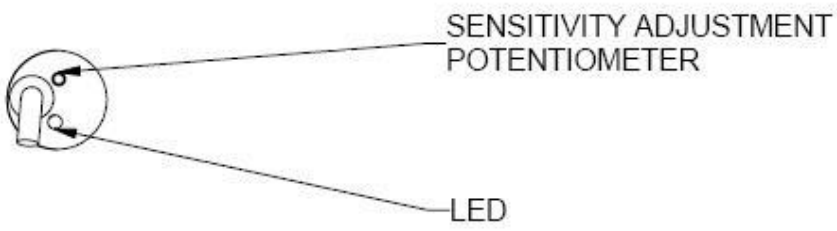


Figure 9: Activator Sensitivity Check

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 counterclockwise will decrease sensitivity. Once the proper operation is verified, install the activator cap in the activator component.

2.6 System Power Up

Once all of the wiring is complete, power can be applied to the control panel. This is done using the following procedure:

1. Turn on the GFCI circuit breaker that supplies power to the control panel.
2. Open fuse #1 and verify inlet voltage is 115 Volts (230 Volts outside of North America). Close fuse #1.
3. Turn the control panel on by rotating the power switch to the “ON” position.

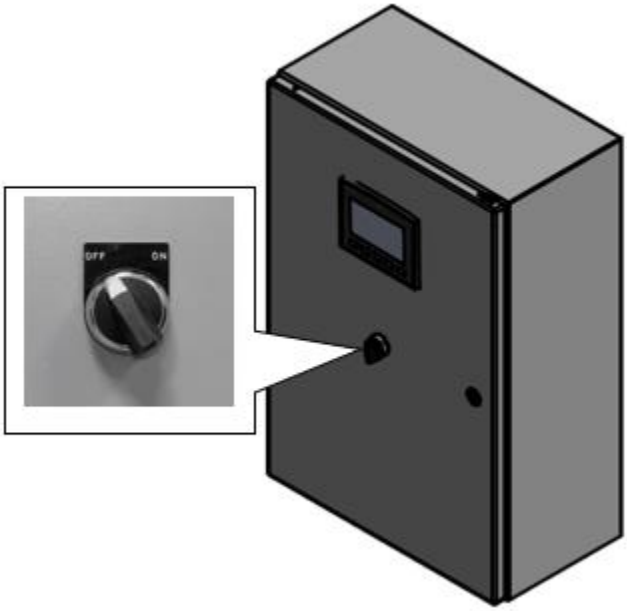


Figure 10: Power Switch on Controller Panel

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.

2.7 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.

3.0 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.

Figure 11: Controller Home Screen

Touching the language button toggles between English, French, or German.

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.

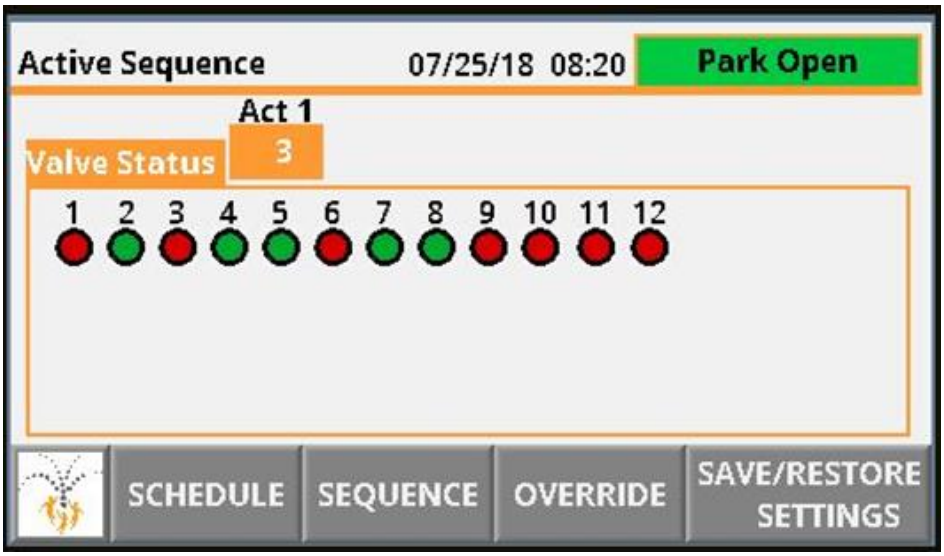


Figure 12: System Status Screen for Potable Controller

- 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 functions may not apply to your project. For example, 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.

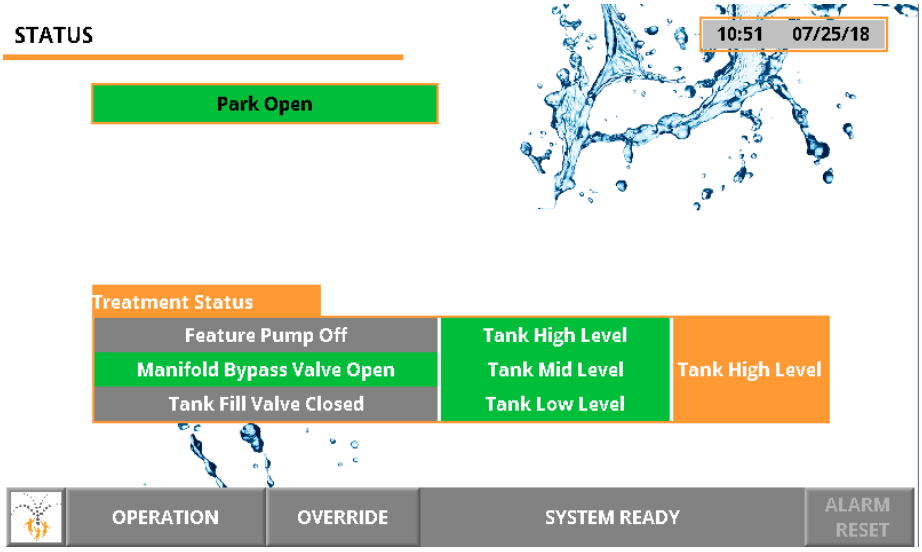


Figure 13: System Status Screen for WTS By Others Controller

- 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/CLOSE)
- 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.

Pressing the **OPERATION** button shows the status of Inputs, Outputs, and Valves.

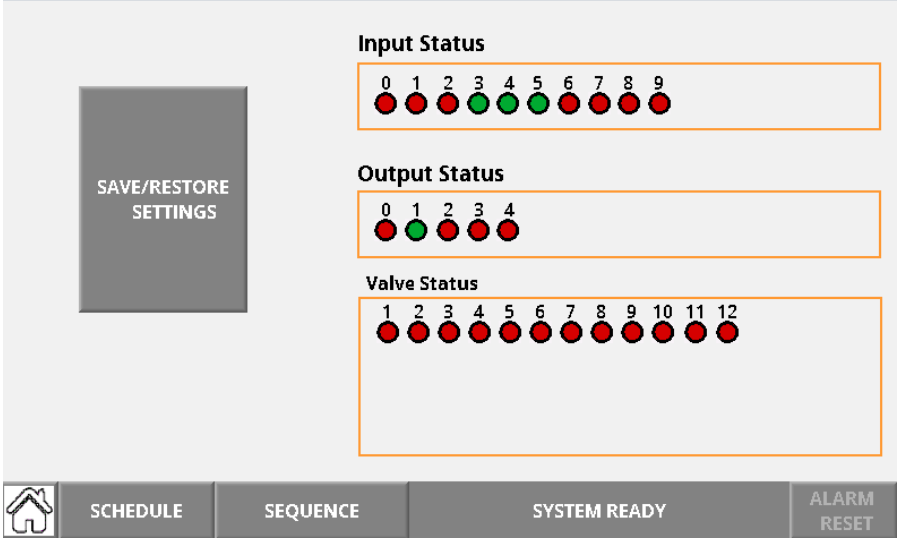


Figure 14: Operation Screen for WTS By Others Controller

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.

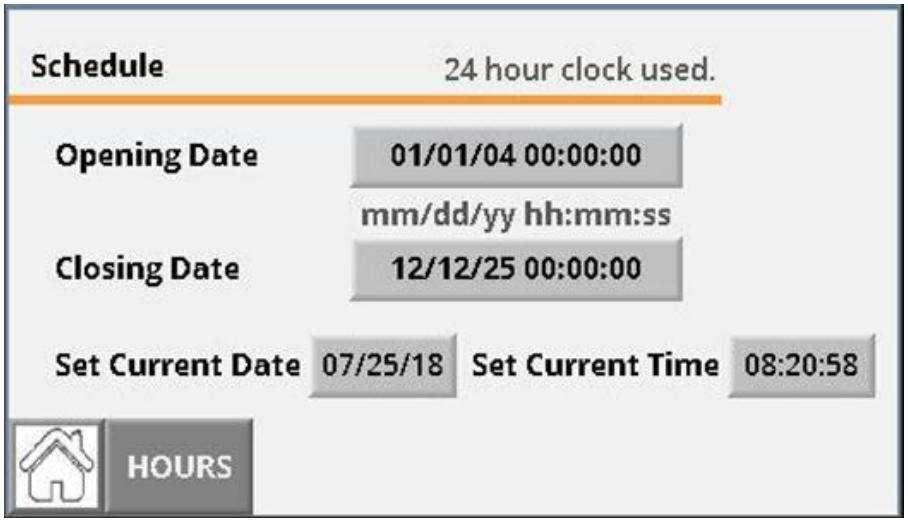


Figure 15: Schedule Screen

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 (Cannot be prior to 2004)
- Set Closing Date (Cannot be later than 2035)
- Set Current 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 & Time

From the Schedule screen, pressing **HOURS** will open the screen where the daily hours of operation are set.

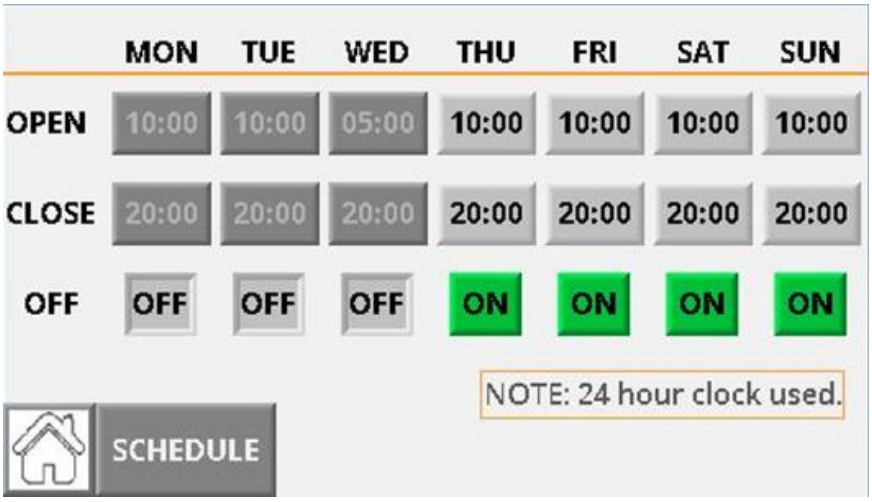


Figure 16: Hours Screen

- If ON is displayed, the park is scheduled to be open
- If OFF is displayed, the park is not scheduled to be open
- The hour of the day must be entered in 24 hour time

If enabled, pressing **NIGHT** will open another screen where the nighttime operation hours can be set. Ensure that no overlap between the day and night schedule is present.

3.6 Sequence Setup & 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.

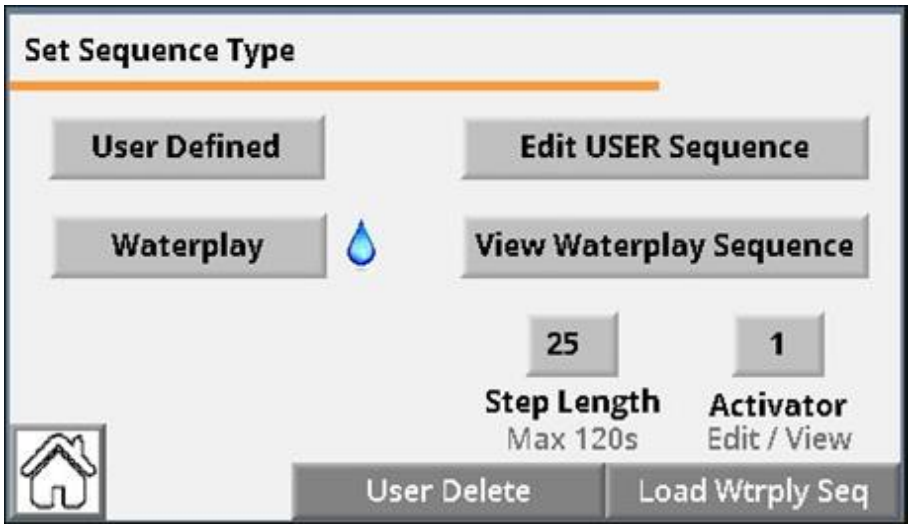


Figure 17: Sequence Setup Screen

- 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.**

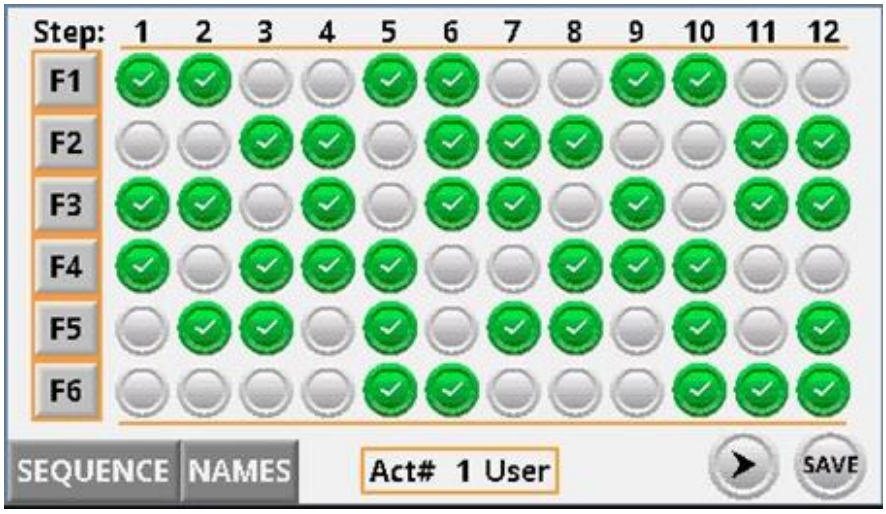


Figure 18: Edit User Sequence Screen

- Indicates output ON
- Indicates output OFF
- Opens 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
- Press **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 press **SAVE USER SETTINGS** to avoid loss of user settings in the even that the controller is turned off for long periods of time or the backup battery becomes discharged.

4.0 Override & Valve Test

4.1 Override

The following figures show the Override default screens for the Potable and WTS By Others Controllers.

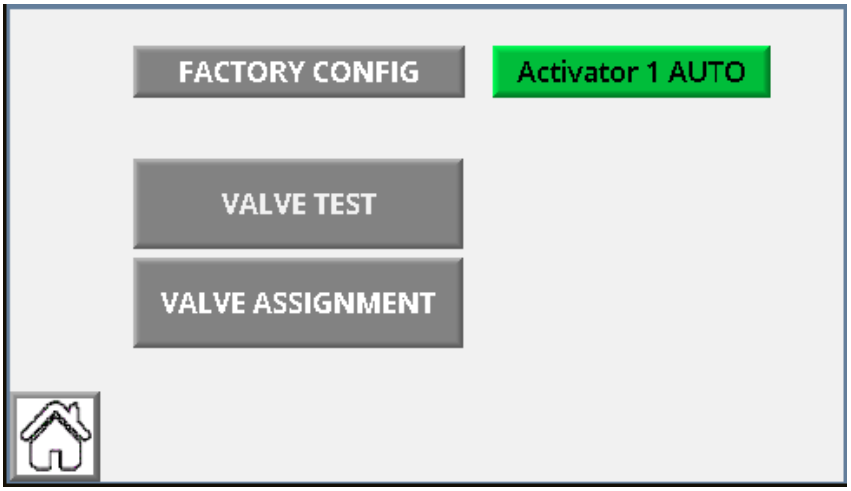


Figure 19: Override Default Screen for Potable Controller

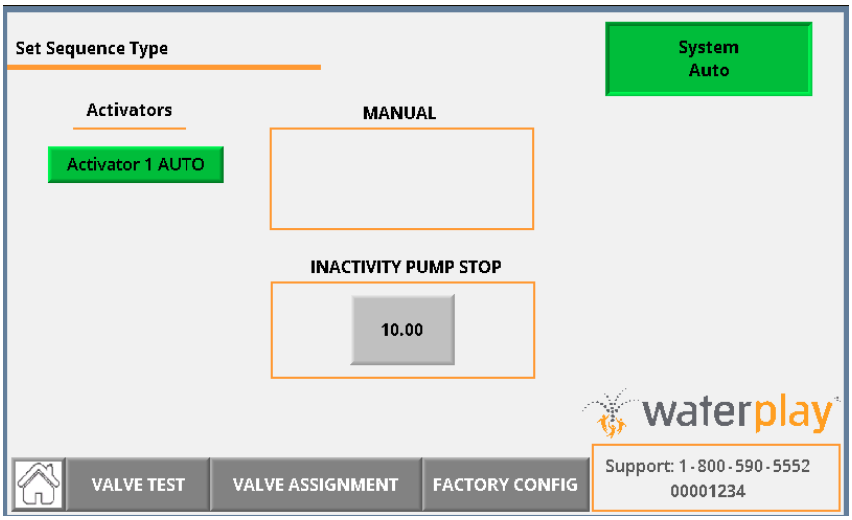


Figure 20: Override Default Screen for WTS By Others Controller

The default conditions should be Auto.

Activators can be toggled from **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, in 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, and Run the feature pump manually.

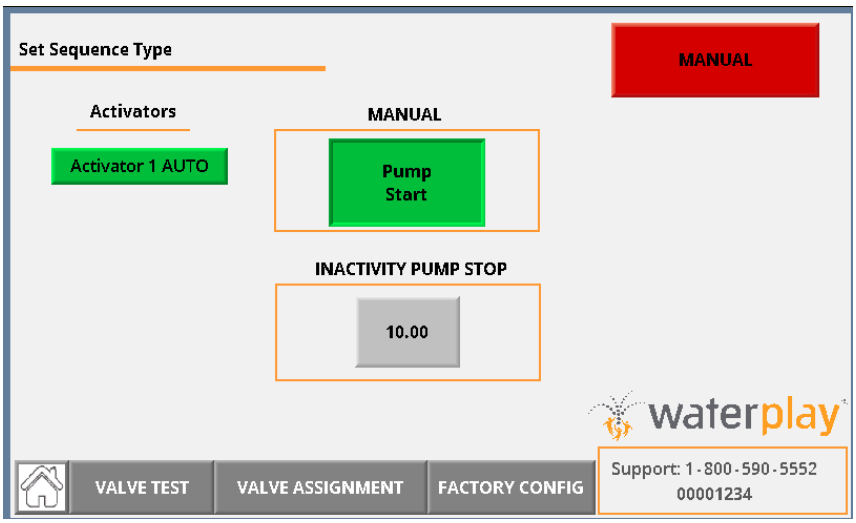
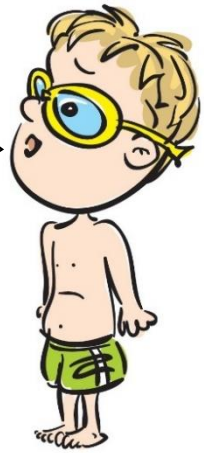


Figure 21: Manual Operation of WTS By Others Controller

⚠CAUTION

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 individually 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**, followed by **VALVE TEST** to open the following screen.

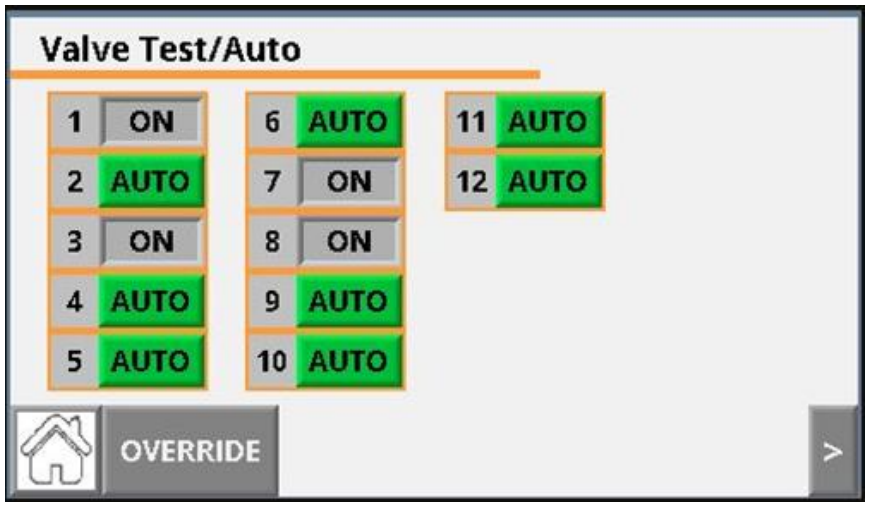


Figure 22: Valve Test Screen

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

5.0 Operation

The spray park will only operate in automatic mode if all of the following are satisfied:

- 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.

6.0 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 Installation 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 start up. Please refer to Waterplay Operation and Installation 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.

7.0 Field Wiring Diagrams

Refer to project specific field wiring diagram in project binder or shipped inside controller.

8.0 Reprogramming Instructions

8.1 Loading a Clone File

1. Remove the micro-SD Card from the Waterplay controller.

Figure 23: Micro-SD Card Located in Controller

2. Connect the card to a computer and load the program.
   Copy the program provided by Waterplay into the SYSTEM folder and rename the file "000XXXXX" where the XXXXX corresponds to an order number and is project specific. Overwrite the existing file if necessary.
3. 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". Then follow the following steps:

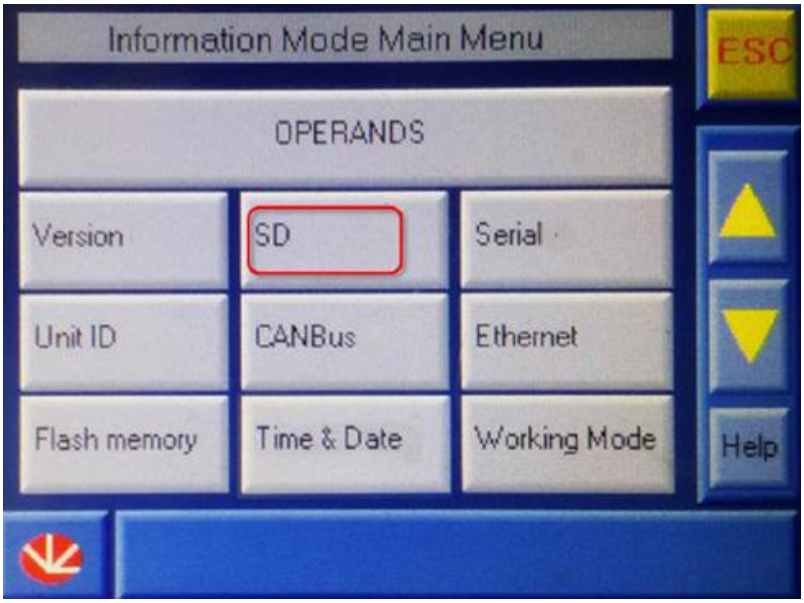


Figure 24: Information Mode Screen

a. Select the “SD” button.
b. Select “Full Clone” and then “Upload to PLC”.
c. Select the latest program file from the full clone screen and press “Send File”.
d. Start Cloning Process, select “Yes”.
e. 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.

User specified settings such as operating hours and sequencing will be reset by the new program. Ensure to double-check all user settings.

8.2 Loading an Application File

1. Remove the micro-SD Card from the Waterplay controller.

Figure 25:Micro-SD Located in Controller

2. Connect the card to a computer and load the program.
    a. Delete any existing files from the “SYSTEM” folder.
    b. Copy the new CXX file, provided by Waterplay, into the “SYSTEM” folder.
    c. Delete any existing files from the “USER_APPS” folder.
    d. Copy the new VXX file, provided by Waterplay, into the “USER_APPS” folder.
3. 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”. Then follow the following steps:

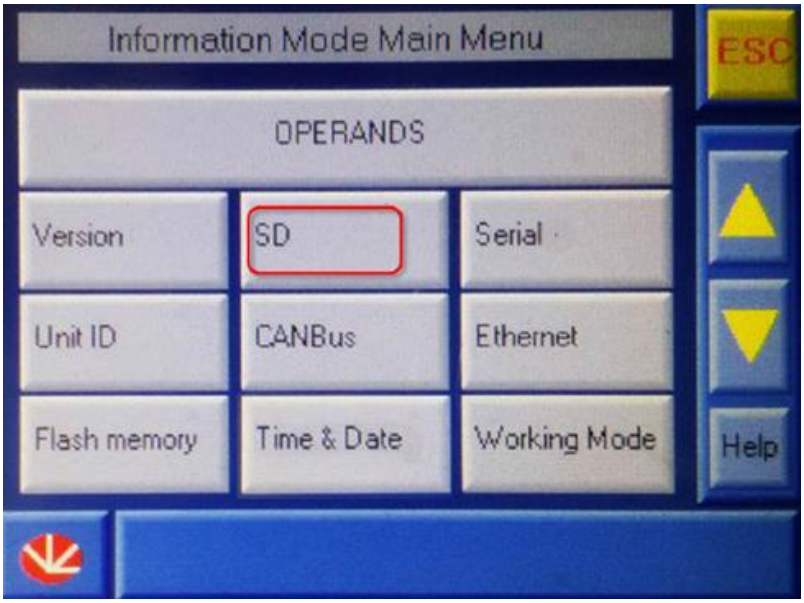


Figure 26: Information Mode Screen

a. Select the “SD” button.
b. Select “Application” and then “Upload to PLC”.
c. Select the application file you saved to the card.
d. This should take approximately 2 minutes.

4. Press the “SAVE/RESTORE SETTINGS” button from the System Status screen (Potable) or the Operation screen (WTS By Others), and press “Save Settings”.

8.3 Factory Reboot Instructions

When powering up the Waterplay controller, if the following “Idle Mode” screen is displayed, a factory reboot is required.

Figure 27: Idle Mode Screen

The most likely causes for this are power interruptions or similar electrical issues causing an operating system problem. Follow these steps to restore proper controller functionality:

1. With the screen showing “Idle Mode”, hold a finger on the touch screen until a prompt appears. Select “Enter Info Mode” and enter the password “1111”.
2. Select “Working Mode”, then “Exit to Factory Reboot”, and push “Yes”. This will result in a red screen.
3. Turn the power off to the PLC for a few seconds, and then back on. The PLC will start up again in “Idle Mode”, but with a slightly different screen. At this screen, hold a finger on the touch screen again until a prompt appears. Select “Enter Info Mode” and enter the password “1111”.

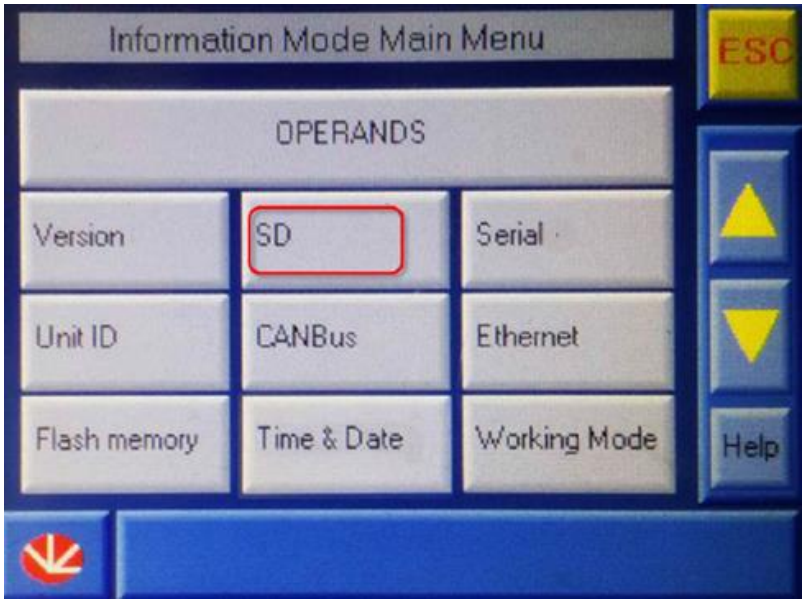


Figure 28: Information Mode Screen

4. Select the “SD” button, then “Full Clone”, and “Upload to PLC”. Select the latest program file listed on the screen and press “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.

User specified settings such as operating hours and sequencing will be reset by the new program. Ensure to double-check all user settings.

9.0 Troubleshooting

There can be many reasons why an aquatic play pad will not operate when the activator is touched. This troubleshooting section will start from the most basic reason and work up from there.

No.	Problem or Symptom	Possible Cause	Remedy
1	No water flows to features	Controller power OFF	Verify main power & front door switch are ON.
		Incorrect valve type	Replace with 24VAC 0.25A valves.
		Blown fuse(s)	Replace blown fuse(s) from terminal strip (see Controller Wiring Diagrams for locations & type of fuses).
		Water supply interrupted	Investigate water supply source and verify all valves are in correct position. Verify manual valves from header are in the open position. Disengage solenoids and verify water flows.

No.	Problem or Symptom	Possible Cause	Remedy
		Controller programmed incorrectly	Reprogram clock for time, date & operation time. Verify component sequence settings are correct. Test operation of aquatic facility with the controller's TEST mode
2	One (or more) zones do not run	One or more zones are wired incorrectly	Verify valve wiring is completed as per the wiring diagram (Diagram in Controller manual) and piping plan. Test operation of aquatic facility with the controller's TEST mode to determine which component is out of sequence and correct wiring as required. Call Waterplay @ 1-800-590-5552 for assistance.
		Solenoid Valve Failed	Check controller fuses. Verify 24AC power at solenoid valve.
		Manual Valve Closed	Verify manual valve from header is in the open position.
		Nozzle or Pipe Blockage	Verify that distribution piping and the component nozzle(s) is not blocked with debris.

No.	Problem or Symptom	Possible Cause	Remedy
3	System stops running, or stops running periodically	Loose wiring	Verify all wire connections are tight.
		Program has come to the end of the sequence	Normal operation is to stop after 5 minute duration. Test program by touching activation device.
4	Water sprays continuously	Solenoid valves in manually open position	Set control valve(s) to automatic by closing manual operator (rotate clockwise).
		Activator sensitivity set too high (LED on sensor &/or PLC is on constantly)	Adjust (reduce) sensitivity on sensor by rotating adjustment screw. Adjust so that light turns on when hand is placed on sensor and light turns off when hand is removed.
		System in Test Mode (one or more component may be spraying)	When TEST is finished, push BACK button to exit TEST screen (valves which were open will now close).
		Dirt or debris in valve body keeping valve open	Clean Solenoid valve screen and diaphragm.

No.	Problem or Symptom	Possible Cause	Remedy
		Faulty control valve or solenoid	Test solenoid valve manually. If the valve won't operate manually it is defective & requires replacement. Swap suspect valve (or solenoid) with a properly operating one to isolate problem, replace valve (or solenoid) as necessary. Check wiring drawings.
		Power connected directly to transformer (ON/OFF switch & fuse are then bypassed)	Rewire power connection according to Section 1 of Instruction Manual.
5	Activator does not start the facility	Activator sensitivity not adjusted correctly	Adjust sensitivity of activator sensor. Adjust so that light turns on when hand is placed on sensor and light turns off when hand is removed.
		Activator sensor not wired correctly	Verify sensor wiring is correct. Check wiring drawings.
		Excessive Pressure or flow	Reduce pressure to 10 psi. Adjust flow so that bucket tips every 15 – 20 seconds.
7	Water spray height varies or drops off	Supply pressure fluctuation	Investigate water supply source. Did sequence grouping change?

No.	Problem or Symptom	Possible Cause	Remedy
8	Blown fuses	Incorrect fuse	Replace with fuse type specified in controller drawings.
		Incorrect sensor wiring	Rewire according to controller drawings.
9	No inputs or outputs or power light showing in PLC	Controller power OFF	Verify main power & front door switch are ON.
		Faulty Transformer	Contact electrician to test transformer.
		Blown fuse	Replace fuse(s).
		Damaged PLC	Contact Waterplay @ 1-800-590-5552.
10	Touch screen is blank	Loose wire connection	Verify all wire connections are tight.
		PLC is OFF	Ensure PLC power and run light are on.
		Controller power OFF	Verify main power & front door switch are ON.
		Blown fuse	Replace fuse(s).

Temiskaming Shores, Temiskaming, ON

Warranty

Outlines conditions and standards.

WATERPLAY® PRODUCT WARRANTY

Waterplay Solutions Corp.® (Waterplay) is committed to delivering the highest quality products on the market. Waterplay features are built with the best materials, to the most stringent manufacturing standards. Our personal pride and construction confidence are backed by the following warranties:

Material Warranty

Stainless Steel Piping & Weldments	25 years
Aluminum Materials	10 years
Acetyl Nozzles, Urethane/HDPE	5 years
Fiberglass, Acrylic** & Polycarbonate Materials	2 years
Stainless Steel Hardware	2 years
Concrete (play features only)	1 year
Decals (out of reach of patrons)	1 year
Netting	1 year

Water Distribution Warranty *(built by Waterplay only)*

Water Distribution Skid	10 years
Water Distribution & Recirculation Equipment	2 years
Electrical Controllers & Activator Switches	2 years
Kiosk Contents & Hardware	2 years

Play Feature Warranty

Sound Components	2 years
Moving Parts	2 years
LED Components	1 year

Play Feature Finish Warranty

Powder Coated	2 years
Painted (Airbrushed Graphics)	2 years

This warranty does not cover any damage caused by accident, improper care, negligence, normal wear and tear, surface corrosion on metal parts, discolored surfaces, natural fading in feature finish over time and other cosmetic issues or failures due to misuse or vandalism. Features installed in indoor aquatic facilities, coastal areas and areas with high heat and humidity will encounter more discoloring and cosmetic issues.

**Acrylic sheets may exhibit crazing (internal micro fractures) around edges and holes. This is considered cosmetic only and does not affect the structural integrity of the product. As such, acrylic parts with crazing will not be covered under warranty.

Waterplay staff and/or appointed service agents are prepared with guidelines for maintenance and rapid response assistance should anything go awry. With our reliable support and quality products, Waterplay takes pride in knowing that our customers have a quality system that runs without interruption. Waterplay offers an option to extend your standard warranty on the control panel to 3, 4 or 5 years. Extended warranty commences at expiration of the standard

2 year warranty period and must be purchased by the time the park is commissioned or within 12 months of goods received on site, whichever comes first.

SAFETY

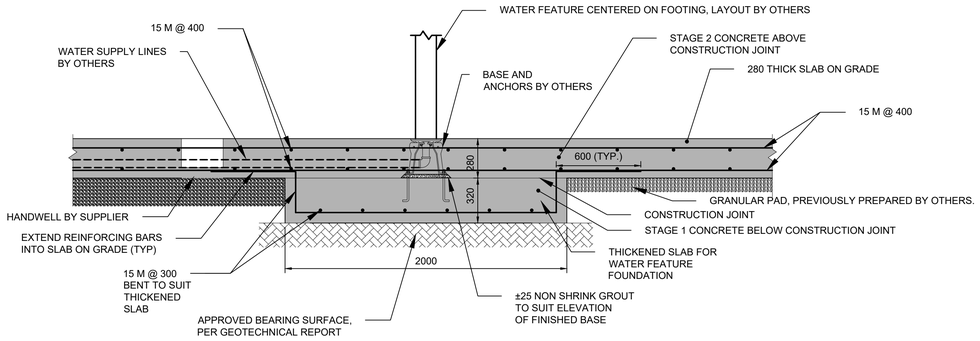
In situations where Waterplay products are utilized for any purpose other than those approved by Waterplay, the customer will be held fully responsible. In addition, Waterplay will not be held responsible for the operation, function, performance, misuse, injuries, or claims resulting from any other products installed within proximity to water structures manufactured by Waterplay.

CONDITIONS

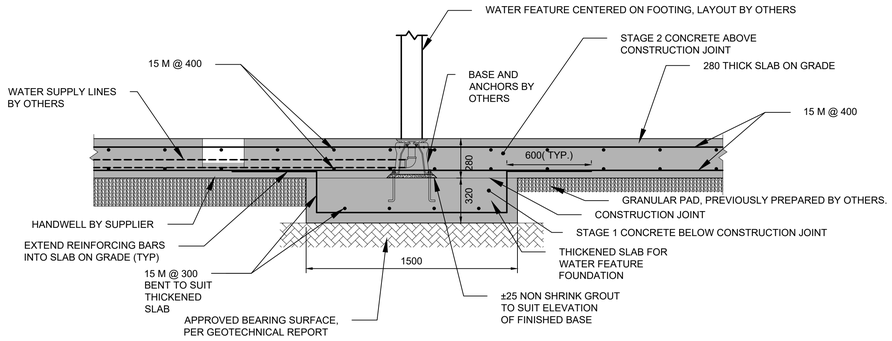
1. Park registration process must be complete prior to a warranty claim being processed http://www.waterplay.com/en/park-registration/
2. All warranties commence upon receipt of goods on site and are only valid if Waterplay equipment is installed in accordance with Waterplay specifications and installation instructions. Waterplay will not cover warranty issues resulting from installation errors.
3. Modifications to Waterplay equipment without prior written approval will void all warranties covered by this document.
4. Warranties are limited to the value of parts and components sold. The client is responsible for the cost of removing and replacing warranted parts/features, the cost for shipping of warranty items to the client site and the return of defect items to Waterplay (if required).
5. All warranty claims against shipping damages or missing parts will be in accordance with the Terms & Conditions of the Purchase Agreement.
6. It is the responsibility of the owner to inspect all aspects of their facility at regular intervals. All maintenance shall be performed in accordance with the Waterplay Owner's Manual and documented in an approved log book.
7. Waterplay does not assume responsibility for damage resulting from extreme weather conditions such as flooding, fires, lightning or any act of force majeure. Waterplay does not warrant defects or damage caused by water supply or quality of utilities nor does it warrant landscaping, site amenities or surfacing in areas where Waterplay products are installed.
8. Any warranty issues are governed by the laws of the province of British Columbia, Canada.
9. Warranty claims will only be processed for accounts considered to be in good standing at the time the claim is made.
10. The foregoing warranties are exclusive and in lieu of all other warranties. There shall be no liability for incidental or consequential damages.
11. Waterplay reserves the right to develop, improve, change or discontinue any product and/or specification without notice and is has no obligation to retrofit these changes into existing parks.
12. Any third party products sold as part of the Waterplay package are subject to the warranty provided by the third party and do not form part of the warranty.

City of Temiskaming Shores
RS-RFP-005-2022
Rotary Splash Pad

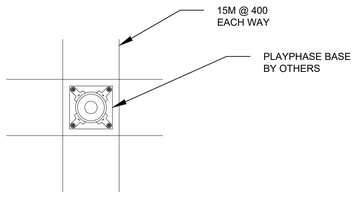
Appendix 05 – Footing Design Plan



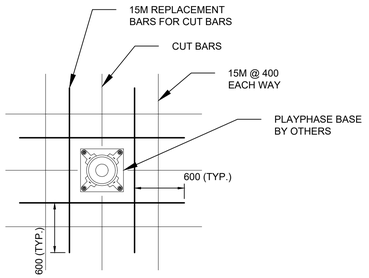
SPLASH PAD FIXTURE FOUNDATION, FOR WATER FEATURES 1.2 m AND TALLER (A-A)
NTS



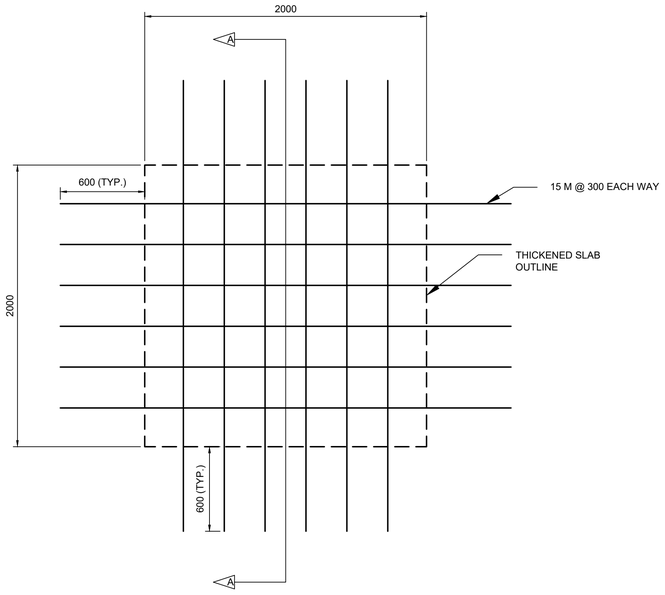
SPLASH PAD FIXTURE FOUNDATION, FOR WATER FEATURES LESS THAN 1.2 m TALL (B-B)
NTS



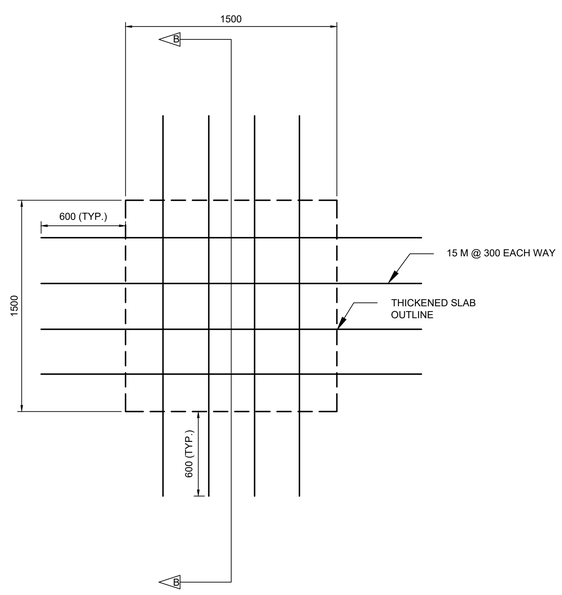
SPLASH PAD PLAN - BAR LAYOUT, TOP MAT
NTS



SPLASH PAD PLAN - BAR LAYOUT, TOP MAT (IF BARS CUT)
NTS



SPLASH PAD PLAN - BAR LAYOUT, BOTTOM MAT 2.0m BASE
NTS



SPLASH PAD PLAN - BAR LAYOUT, BOTTOM MAT 1.5 m BASE
NTS

CAUTION: DO NOT SCALE DRAWINGS.
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DIMENSIONS NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS NOTED OTHERWISE.

DRAWING NOTES:
1. SPLASH PAD WATER FEATURE LAYOUT PROVIDED BY THE CITY OF TEMISKAMING SHORES IN EMAIL DATED SEPT. 28, 2021
2. EXCAVATION AND BACKFILLING TO BE COMPLETED IN ACCORDANCE WITH OPSS MUNI 902 INCLUDING APPENDIX B AND GEOTECHNICAL REPORT DATED OCTOBER 14, 2018, SUD-01801063-00.
3. CONCRETE WORK TO BE COMPLETED IN ACCORDANCE WITH OPSS MUNI 904.
4. USE OF POST-INSTALLED ANCHORS SHALL NOT BE PERMITTED UNLESS PREVIOUSLY APPROVED BY CONTRACT ADMINISTRATOR
5. 2000 BASE TO BE USED FOR LARGE/TALL WATER FEATURES WITH PLAYPHASE BASE INSTALLATIONS (HEIGHT >= 1200).
6. 1500 BASE TO BE USED FOR SMALLER WATER FEATURES (HEIGHT <=1200).
7. CLEAR COVER TO REINFORCING AT BOTTOM OF THICKENED FOOTING SHALL BE 75 mm ± 20 mm
8. CLEAR COVER TO REINFORCING FOR OTHER AREAS CAST AGAINST EARTH SHALL BE 75 mm ± 8 mm
9. ALL REMAINING REINFORCING SHALL HAVE CLEAR COVER OF 60 mm ± 8 mm
10. CONVEY CONCRETE FROM TRUCK TO FINAL LOCATION BY METHODS WHICH WILL PREVENT SEPARATION OR LOSS OF MATERIAL. MAXIMUM HEIGHT OF FREE FALL SHALL BE LIMIT TO 1500 mm CONSOLIDATE CONCRETE WITH ELECTRICAL VIBRATORS
11. WHEN WATER FEATURE FOUNDATIONS OVERLAP, ENSURE THE COMBINED FOOTING AREA IS EQUAL TO THE SUM OF THE FOOTING FOR EACH WATER FEATURE.
12. ENSURE SUB BASE HAS POSITIVE DRAINAGE
13. ALL ENGINEERED FILL SHALL BE PLACED IN MAXIMUM 150mm. THICK LIFTS AND BE COMPACTED TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY WITHIN 2% OF OPTIMUM MOISTURE CONTENT.
14. ENGINEERED FILL:
    14.1. GRANULAR 'A'.....OPSS 1010
15. CAST IN PLACE CONCRETE:
    15.1. EXPOSURE CLASS.....C-1
    15.2. THE MINIMUM 56 DAY COMPRESSIVE STRENGTH TO BE.....35MPa
    15.3. MAXIMUM NOMINAL AGGREGATE SIZE.....20 mm
16. CONCRETE REINFORCING STEEL SHALL BE DEFORMED BARS TO CSA STANDARD G30, 18M92 GRADE 400R.
17. ALL CONCRETE WORK SHALL CONFORM TO THE LATEST EDITIONS CSA A23.1 AND CSA A23.3.
18. REINFORCING BAR DEVELOPMENT LENGTHS AND SPLICES TO CSA STANDARD A23.3 UNO. ALL SPLICES TO BE CLASS 'B' TENSION LAP UNO.
19. EXPOSED CORNERS OF CONCRETE TO HAVE A 20 mm CHAMFER UNO.
20. CURING SHALL CONFORM TO THE LATEST EDITION OF CSA A23.1
21. CONSTRUCTION SEQUENCE:
    21.1. POUR FIRST STAGE CONCRETE FOR ALL FOOTINGS
    21.2. INSTALL BASES PER MANUFACTURER SPECIFICATIONS
    21.3. POUR SECOND STAGE CONCRETE FOR REMAINING FOOTINGS AND SLAB ON GRADE
22. MAXIMUM WATER FEATURE MASS OF 235 lbm (106.6 kg)

No.	DATE (YY/MM/DD)	REVISION	BY
1	10/07/21	ISSUED FOR CONSTRUCTION	MC

CLIENT
CITY OF TEMISKAMING SHORES

PROJECT TITLE
TEMISKAMING SHORES SPLASH PAD

PROJECT No. NWL-21018668

DRAWING TITLE
SPLASH PAD FIXTURE FOUNDATIONS

LICENSED PROFESSIONAL ENGINEER
M. H. CORNELL
100211156
2021-10-07
Rev. 1
PROVINCE OF ONTARIO

DESIGNED	SCALE
MC	AS INDICATED
DRAWN	PLAN No.
ES	21-1229
CHECKED	DRAWING No.
MC	1

EXP Services Inc.
t: 1-705-647-4311 | f: 1-705-647-3111
310 Whitewood Ave. W.
New Liskeard, ON P0J 1P0
Canada
www.exp.com

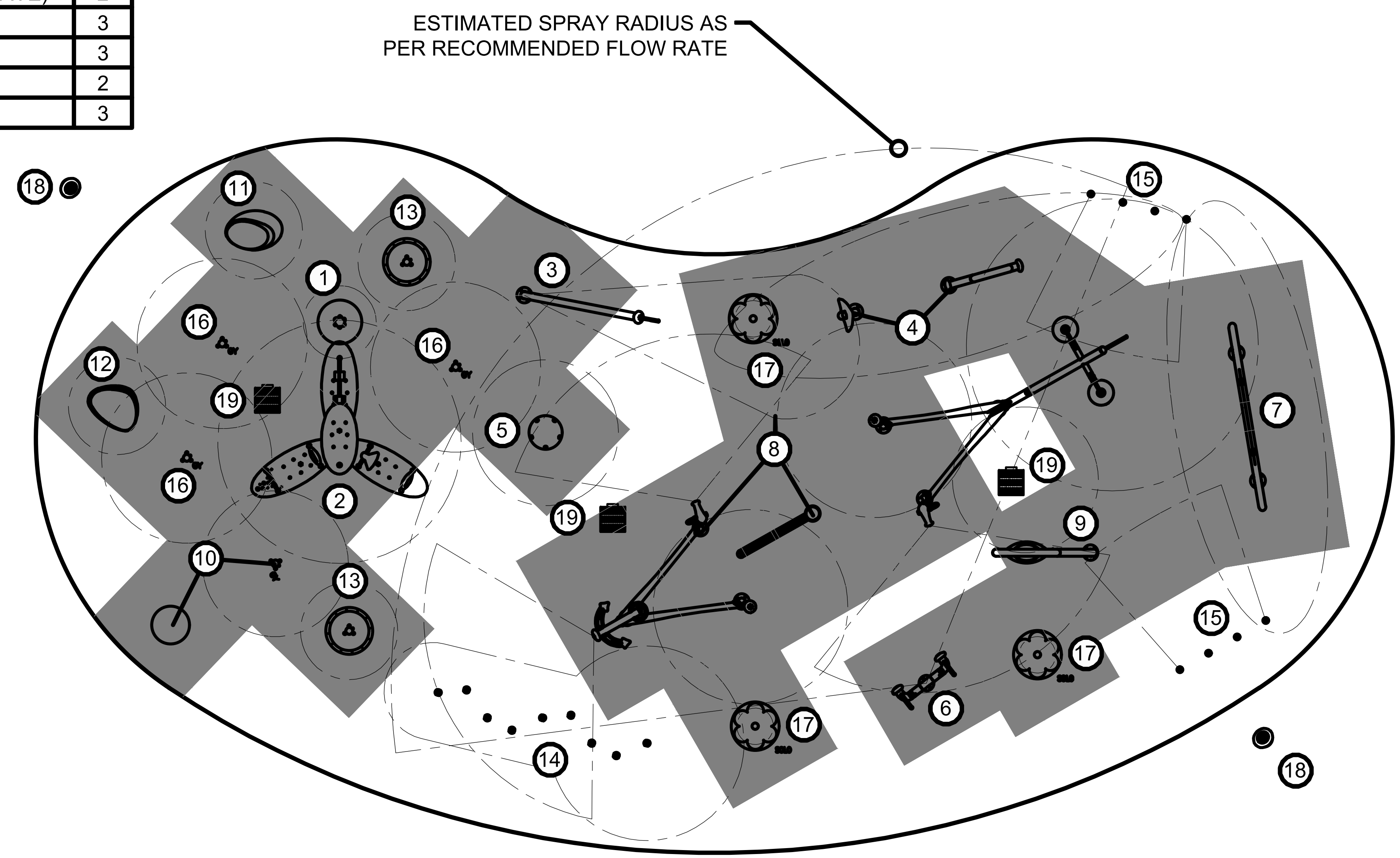
10/7/2021 9:09:56 AM S:\ENGINEERING\PROJECT FILES\2021\NWL-21018668-00 TEM SHORES SPLASH PAD DESIGN\00-PROJECT EXECUTION\2-EXP DRAWINGS\CIVIL\NWL-21018668 SPLASH PAD FOUNDATION DETAILS MC.DWG

ITEM	SKU	COMPONENT NAME	QTY
1	0010-3859	FS BASIN	1
2	0010-4592	FS WATERFALL 3	1
3	0010-0584	FS FISHIN POLE	1
4	0010-0591	FS ANCHORS AWAY	1
5	0010-0512	FS SPINNY SQUIRT	1
6	0010-0414	FS TEAM BLASTER	1
7	0010-2321	FS O-RIGINAL	1
8	0010-3704	FS SCHOONER 1	1
9	0010-1421	FS AQUA-DROP	1
10	0010-2399	FS BOINGO 1 W/ GROUND SPRAY	1
11	0010-7472	FS SURF STONE 2	1
12	0010-7473	FS SURF STONE 3	1
13	0010-7466	GS PUDDLE 1	2
14	0010-7498	GS TEAM EFFECT	1
15	0010-7496	GS SPRAY TUNNEL 4 (THE WAVE)	2
16	0010-7478	GS GEYSER	3
17	0010-7491	GS LILY PAD (SOLO SPURT)	3
18	0010-1854	ACTIVATOR: POWER POST	2
19	DRA-00007	DRAIN SQUARE 6IN OUTLET	3

NOT AN ENGINEERED DRAWING - PROVIDED FOR CONTRACTOR INFORMATION ONLY

LEGEND

- THICKENED SLAB SEE DRAWING NO. 1
- SLAB OUTLINE



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No.	DATE (YY/MM/DD)	REVISION	BY
1	10/07/21	ISSUED FOR CONSTRUCTION	MC

CLIENT: CITY OF TEMISKAMING SHORES

PROJECT TITLE: TEMISKAMING SHORES SPLASH PAD

PROJECT No. NWL-21018668

DRAWING TITLE: SPLASH PAD CONCEPTUAL LAYOUT

DESIGNED	SCALE
TAP	1:75
DRAWN	PLAN No.
EWS	21-1229
CHECKED	DRAWING No.
	2

EXP Services Inc.
t: 1-705-647-4311 | f: 1-705-647-3111
310 Whitewood Ave. W.
New Liskeard, ON P0J 1P0
Canada
www.exp.com

City of Temiskaming Shores

RS-RFP-005-2022

Rotary Splash Pad

Appendix 06 - Site Photos (2022-08-26)