

**ADDENDUM 1**

December 12, 2024

**To All Bidders:**

This Addendum is to add technical specification and reference drawings to the bid set in regards to Vortex being the manufacture of the slide. **You must indicate receipt of Addendum 1, submitted with your proposal.**

The Bidder hereby acknowledges that they have reviewed the following addenda:

Addendum No:     1     \_\_\_\_\_

Date: \_\_\_\_\_

Submitted by:

\_\_\_\_\_  
Name/Title

\_\_\_\_\_  
Company

**END OF ADDENDUM 1**



**R. E. WARNER**

ENGINEERS | ARCHITECTS | SURVEYORS

**December 11, 2024**

City of Mentor, Ohio  
6000 Heisley Road  
Mentor, Ohio 44060

**ADDENDUM No. (01)**

To Technical Specifications and Drawings For


**Mentor New Slide Addition**

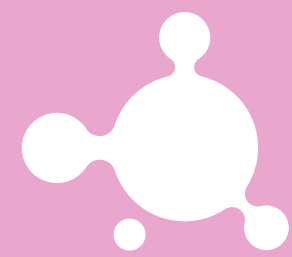
R.E. Warner & Associates Inc. Project: 11224

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Vortex will be responsible for the delivery of a complete slide with all its components, relative to the slide itself. This does not include the aquatic equipment, such as pumps, piping, etc.

Vortex, as the selected vendor, will be responsible for the design, manufacturing, and delivery of the 3-flume slide and all associated support framework, platforms and stairs. Vortex will also provide structural design for the foundations; however, the Contractor is responsible for the foundation construction. Coordination between the Contractor and Vortex is vital during construction to ensure proper installation on site can be achieved. Procurement of the slide from Vortex is in process by the owner directly and will be received by the slide contractor. Contractor to include installation of the slide in their quote but not the materials. Contractor to coordinate with Vortex directly via Ryan Eccles at Vortex email: REccles@vortex-intl.com phone number: 312.405.0139 cell phone number: 312.405.0139



 **VORTEX**

**City of Mentor - OH, USA**

Version A - FP 01

**1. CAD FILE USED FOR THIS PROPOSAL:**

(NONE PROVIDED)

FOR INDOOR APPLICATIONS, HEIGHTS HAVE BEEN REVIEWED FOR CONFORMITY TO DESIGN CONDITIONS AND APPROVED.

- APPROVED AS SHOWN
- REVISE & RESUBMIT WITH NEW CAD DRAWING (include new DWG file when returning for edit)

**2. COLORS AND LAYOUT DESIGN:**

- APPROVED AS SHOWN
- APPROVED AS NOTED
- REVISE & RESUBMIT AS NOTED

PROPOSAL WAS REVIEWED FOR DESIGN CONFORMITY TO CONTRACT DOCUMENTS PROVIDED IN RFP. CONTRACTOR/CLIENT REPRESENTATIVE IS RESPONSIBLE FOR REVIEW & COMPLIANCE WITH ALL CONTRACT DOCUMENTS INCLUDING, BUT NOT LIMITED TO; DIMENSIONS, CLEARANCES, QUANTITIES, CONSTRUCTION DETAILS AND COORDINATION WITH OTHER CONTRACTORS.

\_\_\_\_\_  
BY

\_\_\_\_\_  
DATE

**Stamp**

**Notes:**

**Foundation drawings are preliminary and should not be used for construction until approved by the structural engineer to come up with the drawings for construction.**

**RFP. Contractor/Client to slope pool deck to meet elevations as noted in this document.**

**Project Name: City of Mentor**

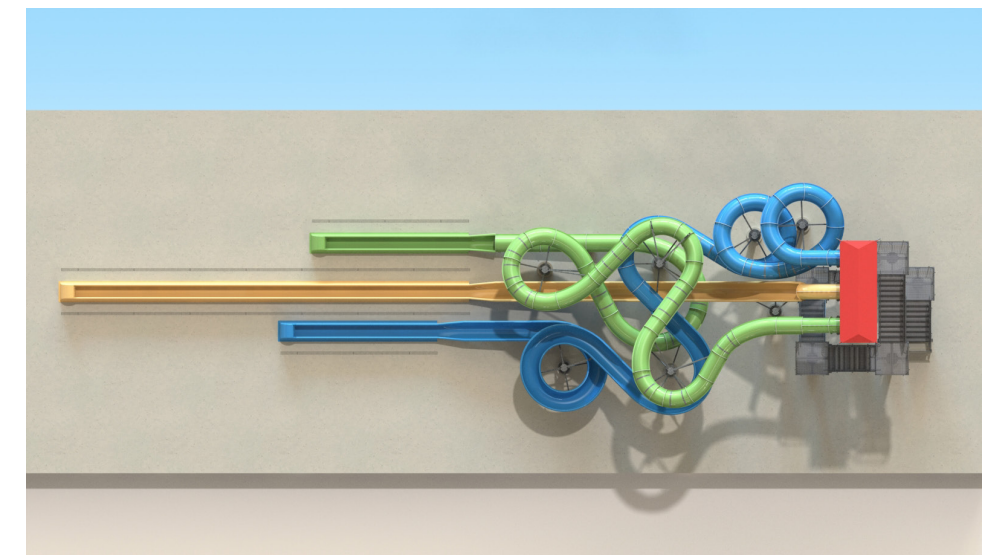
**Location: Mentor, OH , USA**

**Version: A - FP 01**

**Project ID: 42612**



Colors used shown on pages 8 & 9. Color options shown on pages 10 & 11.







Water  
moves  
us





**We understand how every drop, stream, and splash shapes the world around us. By harnessing the transformative power of water, Vortex creates play experiences for children to develop, communities to flourish, and businesses to thrive. We exist to leave an impact—one that lasts long after families are dried off.**



8,000

Projects  
worldwide

50

Countries  
served

100+

Awards  
& honors

## Why choose Vortex?

### Our diverse expertise

To foster a rich understanding of your unique needs, our design team draws its talent from many disciplines. Engineers, creative designers, childhood development specialists, and water choreography experts tackle new projects from all exciting angles. Our multidisciplinary approach oversees countless variables including water management, accessibility, and (most importantly) play.

### Our superior quality

Every Vortex project is engineered on-site to ensure the highest quality and safety standards. We use stainless and galvanized steel sourced from North America and are vertically integrated for maximum quality control. Manufactured and tested in our Montreal headquarters, products are designed to last and require little maintenance.

### Our boots on the ground

We put a lot of stock into local representation. Every collaboration begins by getting to know the families you're servicing and thinking creatively about how we can help them grow. We ensure that no matter where you're situated, our customer service and expert guidance come equipped with an intuitive understanding of what sets your facility apart.





All 3D renders shown are for illustration purposes only. Actual colors, textures and finishes may differ from renders.  
Waterslides shown in PrecisionRide™ finish.

Platform / Stair treads shown in and only available in Gray



City of Mentor - OH, USA  
Version A - FP 01

FORMAL PROPOSAL  
View 1





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Waterslides shown in PrecisionRide™ finish.

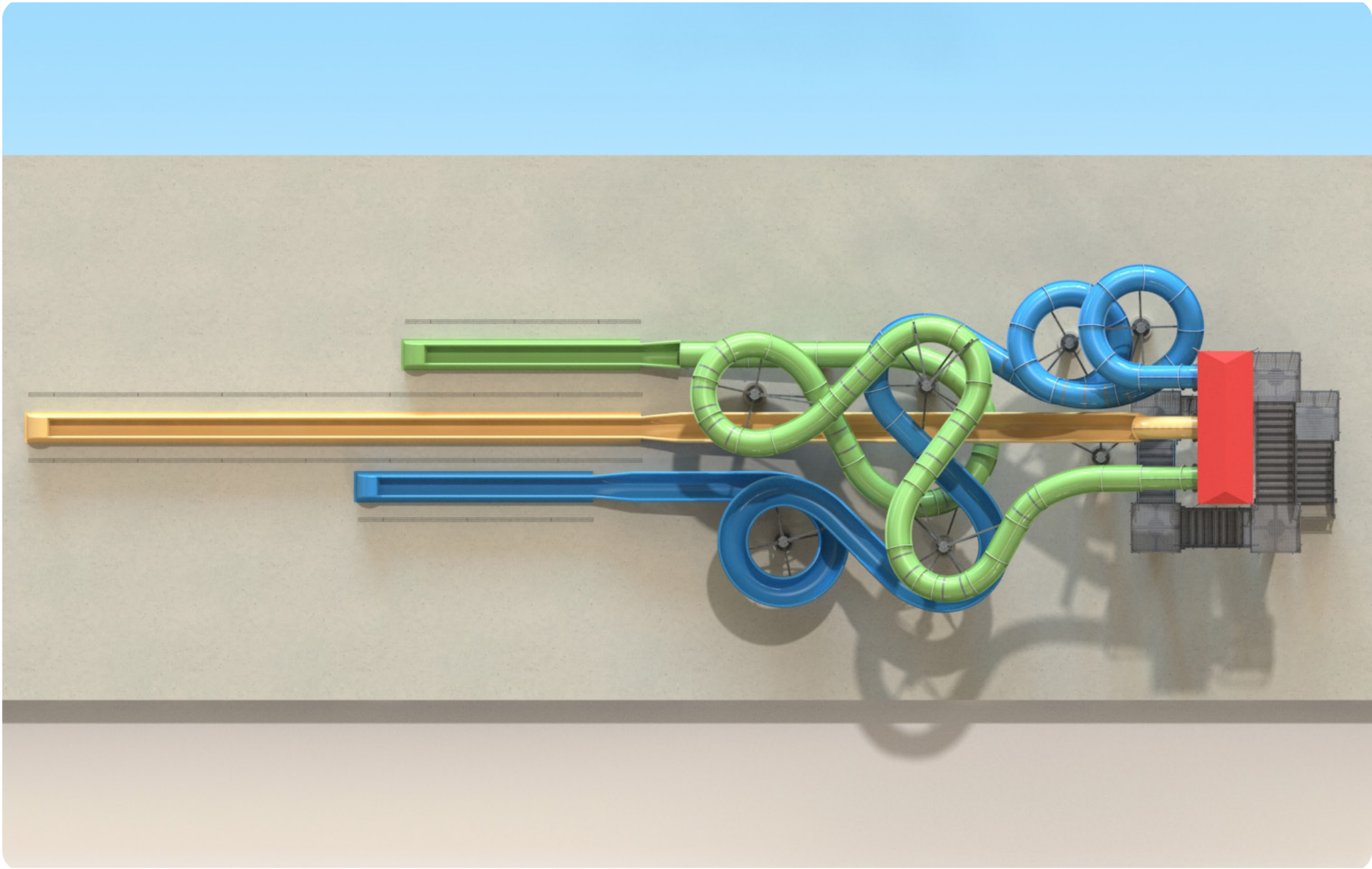
Platform / Stair treads shown in and only available in Gray



City of Mentor - OH, USA  
Version A - FP 01

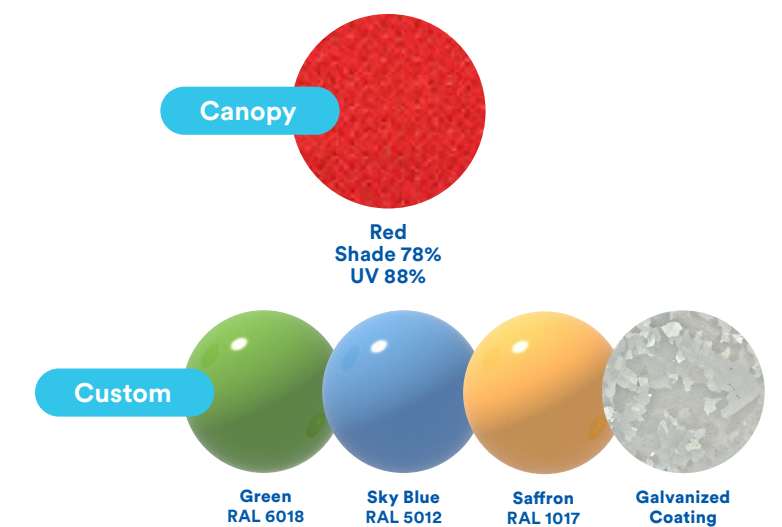
FORMAL PROPOSAL  
View 2





## Waterslide Features

- 1 Closed to Open Flume PrecisionRide™ Speed Slide
- 1 Closed to Open Flume PrecisionRide™ Body Slide
- 1 Closed Flume PrecisionRide™ Body Slide
- ✓ Integrated natural light translucent bands on close tube slide providing a unique sliding experience without the complete darkness effect!
- ✓ Model BSS-3303-64008 waterslide ride paths
- ✓ PrecisionRide™ - Superior appearance with a glossy finish inside and out
- ✓ Big Splash Slides - Ride paths engineered with higher intensity for maximum thrills!
- ✓ All steel is hot dipped galvanized for superior corrosion resistance
- ✓ Sustainable low water flow requirements



# WATERSLIDES & COMPONENTS

## WATERSLIDES

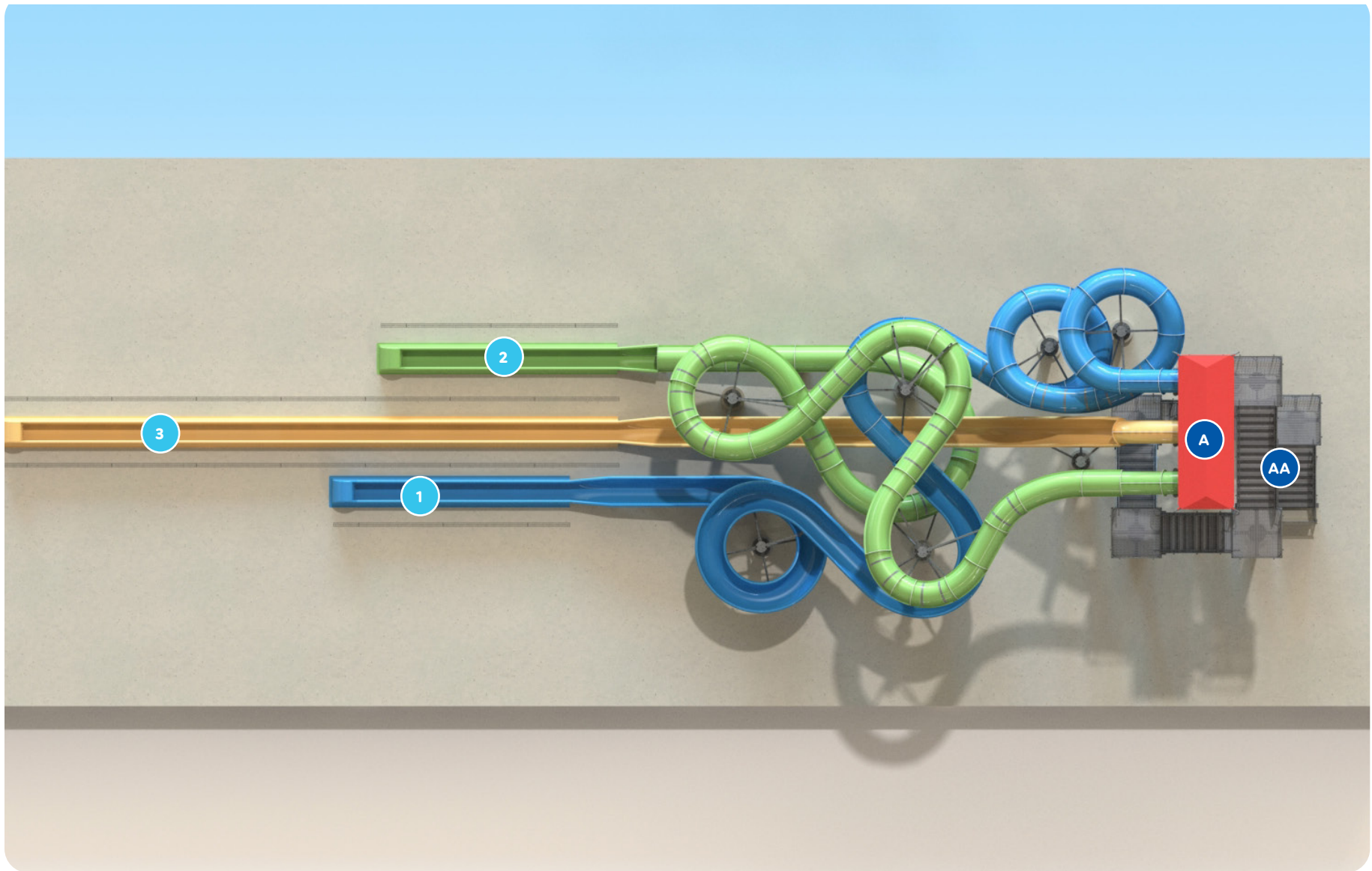
		RAL 4006	RAL 3000	RAL 2011	RAL 1017	RAL 1023	RAL 6029	RAL 6018	RAL 6025	RAL 6021	RAL 6019	RAL 6027	RAL 5024	RAL 5012	RAL 5017	RAL 5003	RAL 8024	RAL 9003	RAL 1015	RAL 7040	RAL 9017	Custom
1	Closed to Open Flume PrecisionRide™ Body Slide	Fiber:	+	●	●	●	●	●	●	●	●	●	●	●	●	○	○	○	○	○	○	○
2	Closed Flume PrecisionRide™ Body Slide	Fiber:	+	●	●	●	●	●	●	●	●	●	●	●	●	○	○	○	○	○	○	○
3	Closed to Open Flume PrecisionRide™ Speed Slide	Fiber:	+	●	●	●	●	●	●	●	●	●	●	●	●	○	○	○	○	○	○	○

## STRUCTURES COMPONENTS

		Red	Mulberry	Electric Purple	Atomic Orange	Arizona	Terra-Cotta	Desert Sand	Cinnamon	Laguna Blue	Sunflower Yellow	Chocolate	Royal Blue	Zesty Lime	Black	Navy Blue	Olive	Silver	Turquoise	Rain Forest	White	
A	Canopy	Fabric:	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○

## STRUCTURES COMPONENTS

		RAL 4006	RAL 3000	RAL 2011	RAL 1017	RAL 1023	RAL 6029	RAL 6018	RAL 6025	RAL 6021	RAL 6019	RAL 6027	RAL 5024	RAL 5012	RAL 5017	RAL 5003	RAL 8024	RAL 9003	RAL 1015	RAL 7040	RAL 9017	Galvanized	
AA	Tower	Platform Paint:	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○
		Guard/Handrail Paint:	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○
		Column Paint:	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	○



+ An additional fee will apply.  
\* Platform / Stair treads shown in and only available in Gray



## Fiberglass Flume Colors 1

Same color inside & outside of the flume section

Applicable to all waterslide types:  
PrecisionRide™ & Classic



\* An additional fee will apply.

## Waterslide Elements Color Application

- 1 Fiberglass Flume : Fiberglass Flume colors
- 2 Platform & Stair Frame : Steel colors
- 3 Columns & Support Arms : Steel colors
- 4 Guardrails & Handrails : Steel colors
- 5 Canopy : Canopy colors (shown on next page)
- 6 Stair Treads (top of steps and platform): Only available in light grey

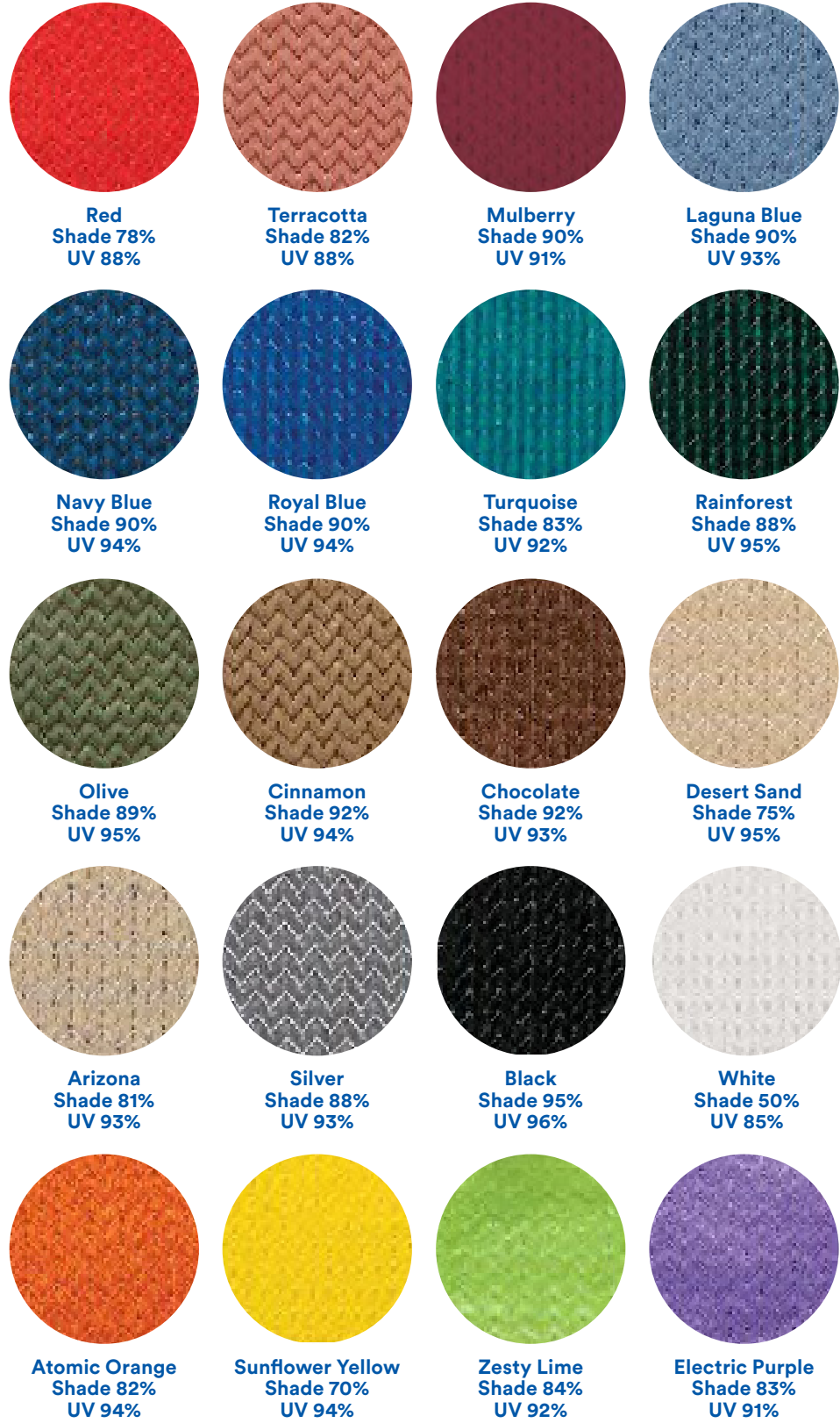


## Steel colors 2 3 4



\*\*\*For outdoor projects only

Canopy Fabric Colors 5



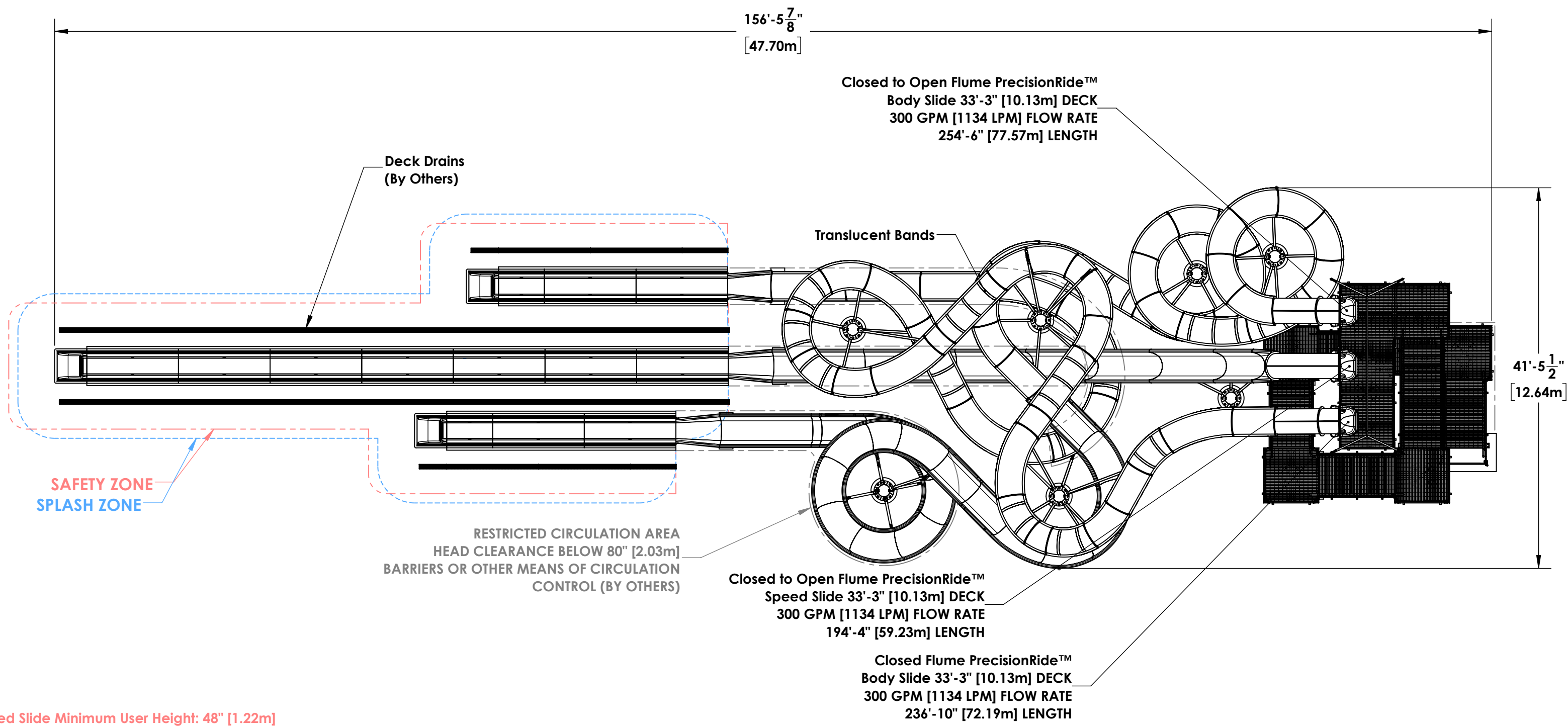
Color Combination Examples





\* Slide height is from finished pool deck to finished tower platform.  
 \* Deck drains run parallel to runout.  
 \* Vault Design NOT by Vortex.

**IMPORTANT**  
 Client to provide Vortex with CAD and/or "As Built" drawings to establish the pool deck slope. If this is impossible, client will need to provide site dimensions that identify various depths at the tower-slide structure location.  
  
 Failure to provide this information will cause delays in completing the submittal documents, fabrications drawings and may delay product delivery. Inaccurate information may cause additional site work at client's expense.  
  
 This proposal was made using CAD file: NONE PROVIDED



\* Speed Slide Minimum User Height: 48" [1.22m]  
 \* All other waterslides Minimum User Height: 42" [1.07m]

**PRELIMINARY - NOT FOR CONSTRUCTION**  
 THE DIMENSIONS CONTAINED HERE IN ARE A RESULT OF INITIAL SITE INFORMATION THAT WAS PROVIDED DURING THE PRELIMINARY DESIGN PROCESS. WHILE EVERY ATTEMPT HAS BEEN MADE TO ASSURE ACCURACY, FINAL CONSTRUCTION DRAWING DIMENSIONS MAY VARY.

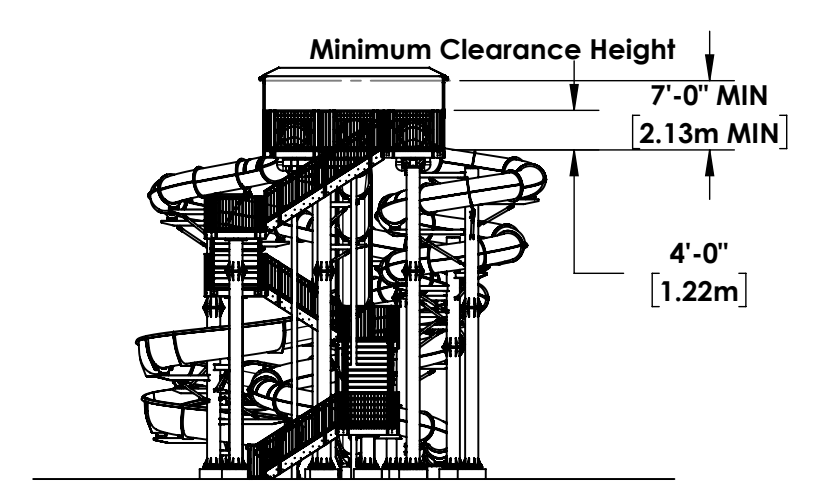
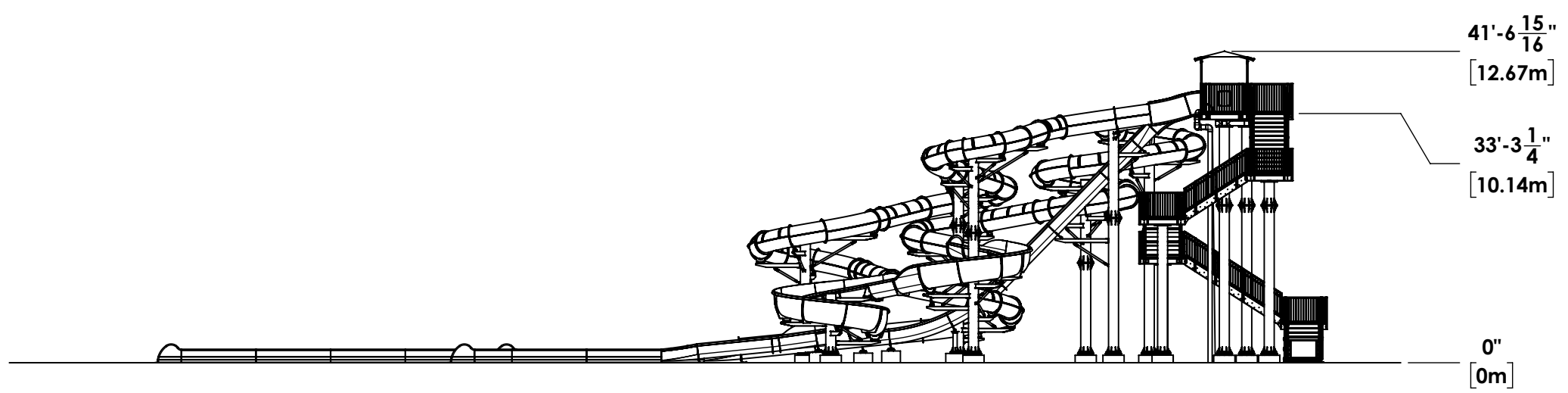
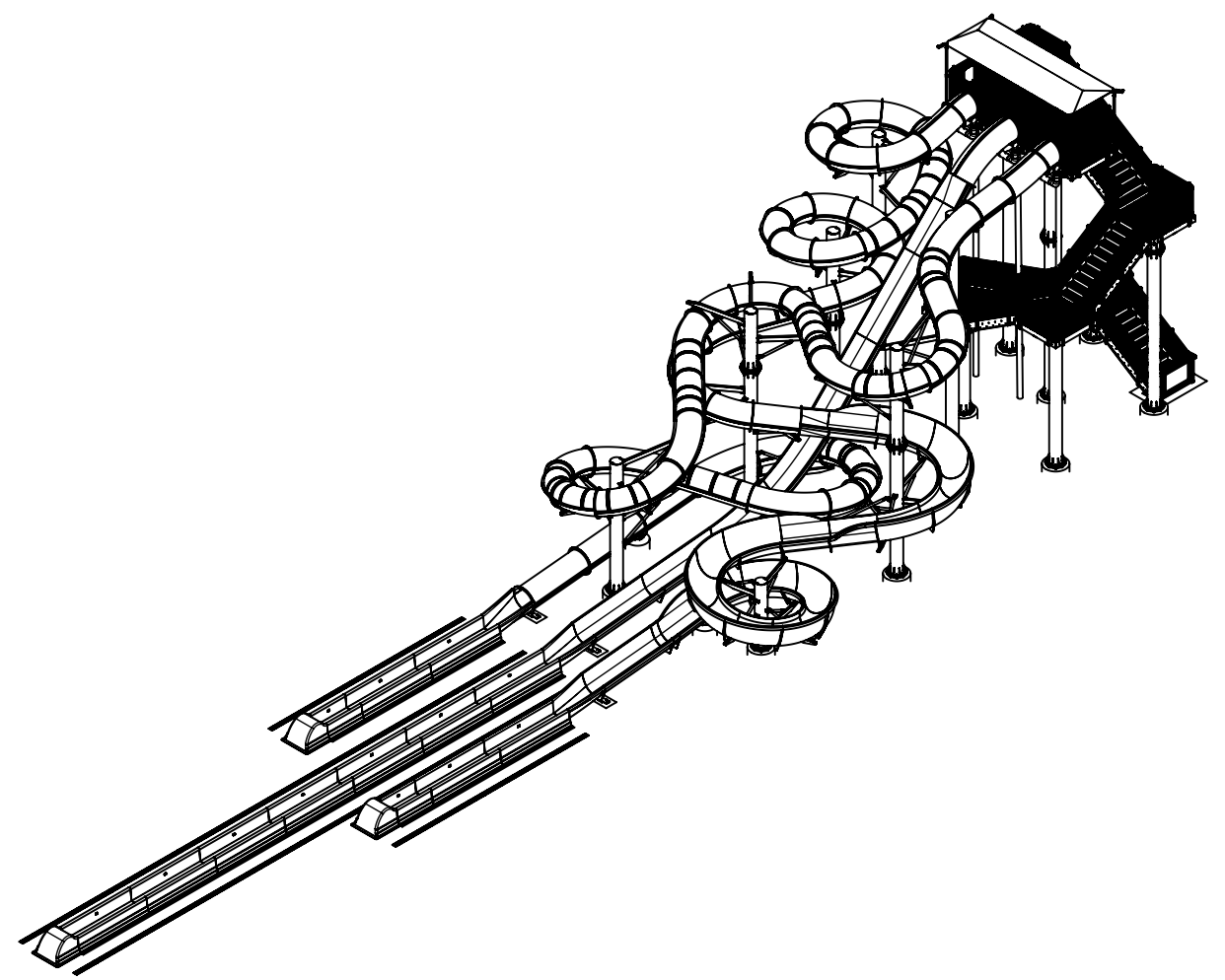
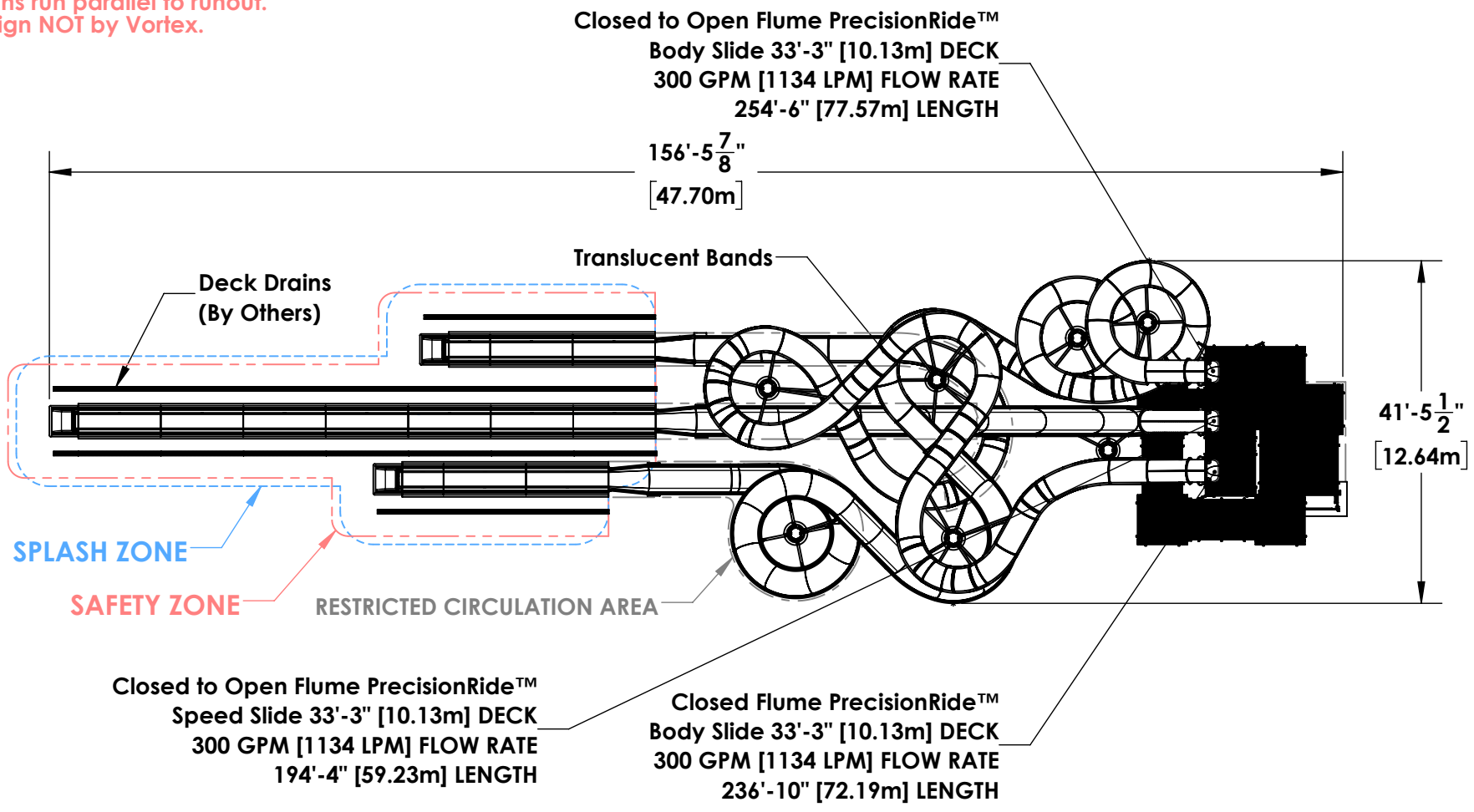


City of Mentor - OH, USA  
 Version A - FP 01

FORMAL PROPOSAL  
 Plan



\* Slide height is from finished pool deck to finished tower platform.  
 \* Deck drains run parallel to runoff.  
 \* Vault Design NOT by Vortex.



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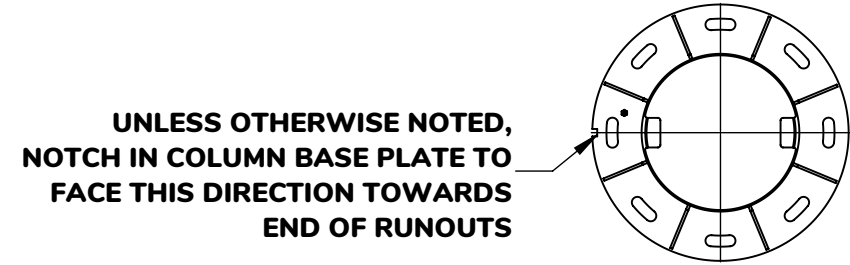


City of Mentor - OH, USA  
 Version A - FP 01

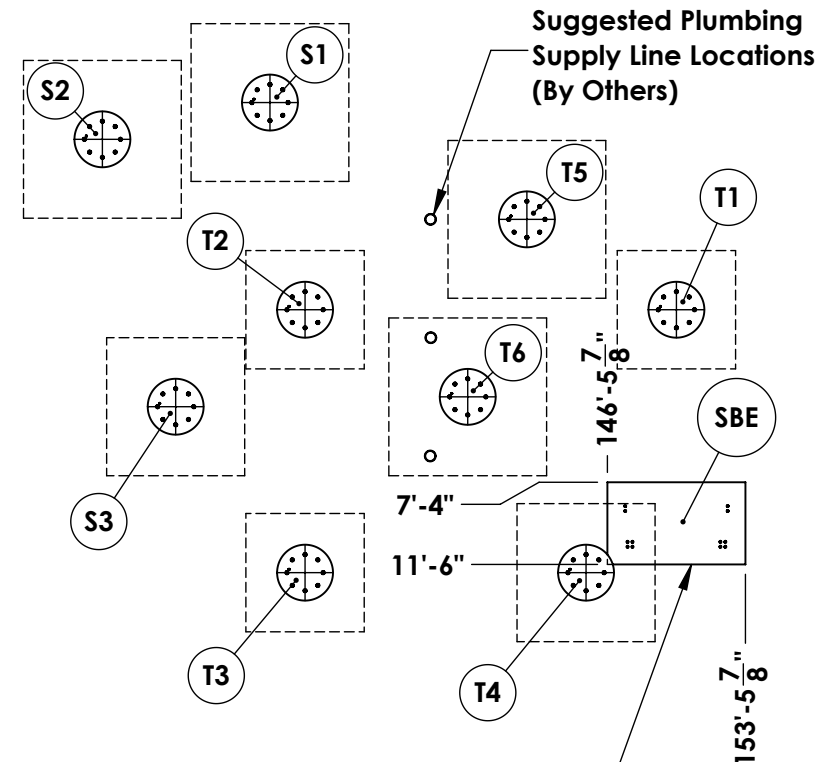
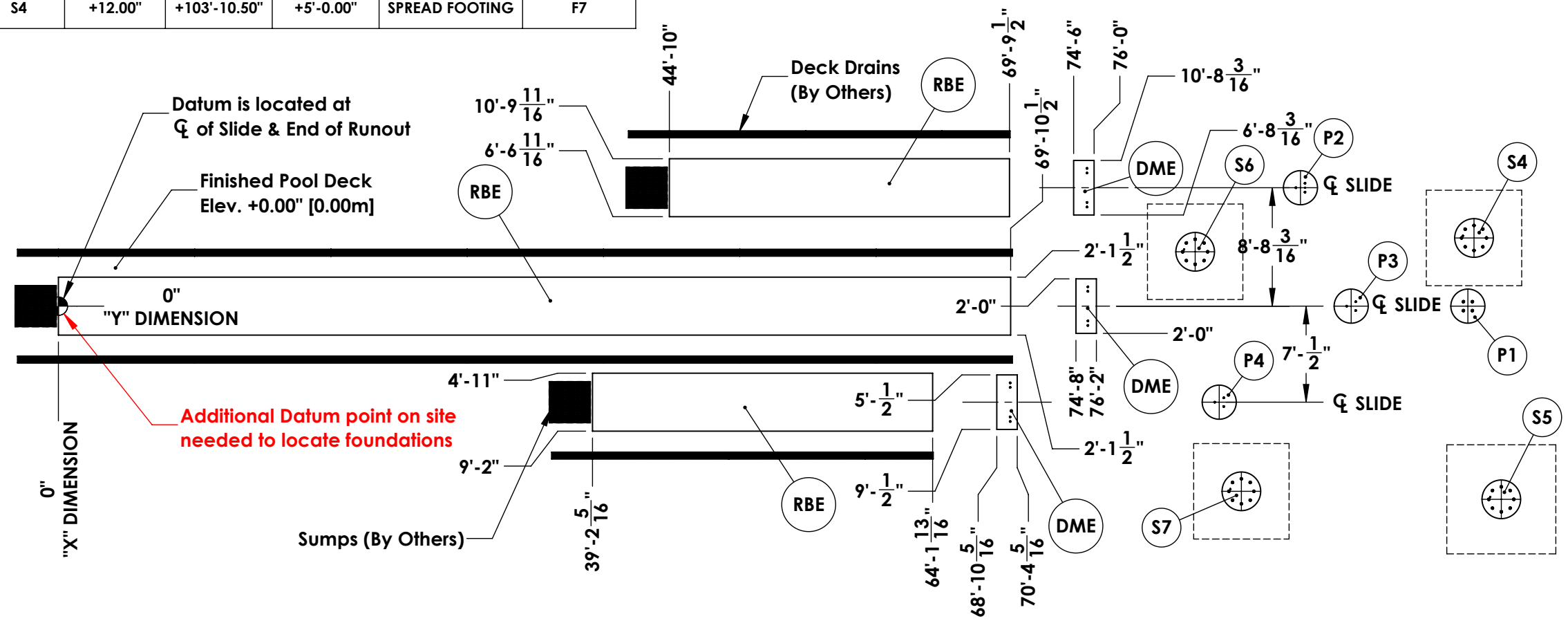
FORMAL PROPOSAL  
 Schematic Drawing

FOUNDATIONS (By Others)						FOUNDATIONS (By Others)					
COLUMN LOCATION	T.O.C. ELEVATION	"X" DIMENSION	"Y" DIMENSION	FOUNDATION TYPE	FOUNDATION MARK	COLUMN LOCATION	T.O.C. ELEVATION	"X" DIMENSION	"Y" DIMENSION	FOUNDATION TYPE	FOUNDATION MARK
SBE	+0.00"	SEE DWG	SEE DWG	THICKENED SLAB	SBE	S5	+12.00"	+105'-10.56"	-14'-2.00"	SPREAD FOOTING	F8
T1	+12.00"	+149'-11.88"	+1'-5.00"	SPREAD FOOTING	F6	S6	+12.00"	+83'-5.00"	+3'-11.81"	SPREAD FOOTING	F7
T2	+12.00"	+131'-1.94"	+1'-5.00"	SPREAD FOOTING	F6	S7	+12.00"	+86'-9.69"	-13'-6.94"	SPREAD FOOTING	F7
T3	+12.00"	+131'-1.94"	-11'-11.00"	SPREAD FOOTING	F6	P1	+14.88"	+103'-5.13"	+0.00"	PIER	P30
T4	+12.00"	+145'-4.88"	-11'-11.00"	SPREAD FOOTING	F7	P2	+15.44"	+91'-1.69"	+8'-8.19"	PIER	P30
T5	+12.00"	+142'-4.94"	+6'-0.00"	SPREAD FOOTING	F8	P3	+18.81"	+94'-10.38"	+0.00"	PIER	P30
T6	+12.00"	+139'-4.94"	-3'-0.00"	SPREAD FOOTING	F8	P4	+16.75"	-85'-2.19"	-7'-0.50"	PIER	P30
S1	+12.00"	+129'-4.56"	+11'-11.06"	SPREAD FOOTING	F8	DME	+0.00"	SEE DWG	SEE DWG	THICKENED SLAB	DME
S2	+12.00"	+120'-10.63"	+10'-0.69"	SPREAD FOOTING	F8	RBE	+0.00"	SEE DWG	SEE DWG	THICKENED SLAB	RBE
S3	+12.00"	+124'-7.19"	-3'-6.00"	SPREAD FOOTING	F7						
S4	+12.00"	+103'-10.50"	+5'-0.00"	SPREAD FOOTING	F7						

T.O.C. = TOP OF CONCRETE ELEVATION TAKEN FROM FINISHED POOL DECK WHICH IS ASSUMED TO BE "0.00" [0.00m].  
DME = DECK MOUNTING ELEVATION  
SBE = STAIR BEARING ELEVATION  
RBE - RUNOUT BEARING ELEVATION



**TYPICAL COLUMN ORIENTATION DETAIL**



Finished pool deck to be sloped according to local pool code to meet Stair Bearing Elevation

**CUSTOMER TO ADAPT SLOPE OF POOL DECK TO SBE ELEVATION NOTED IN THIS DRAWING.**

**PRELIMINARY - NOT FOR CONSTRUCTION**

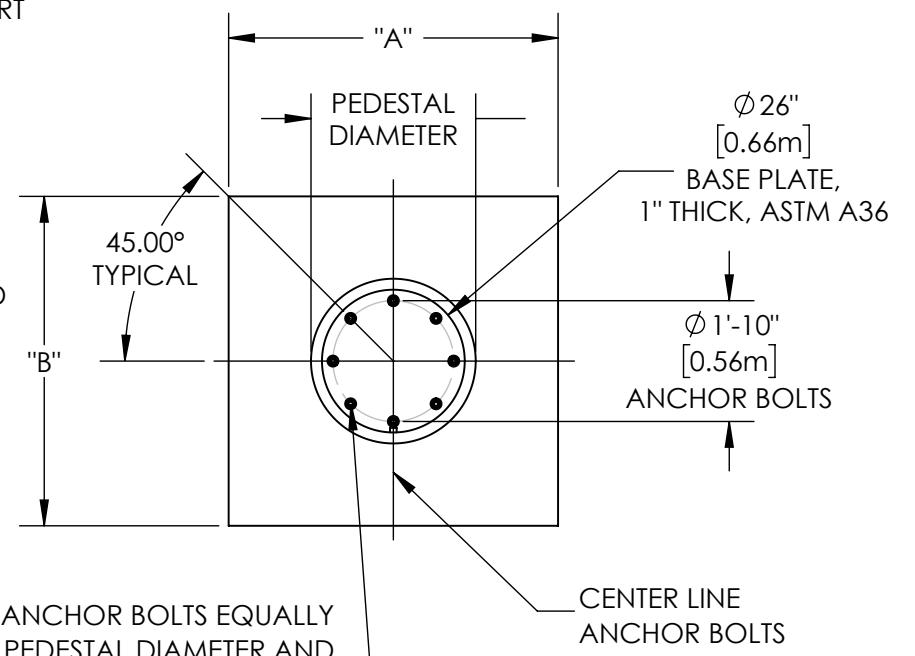
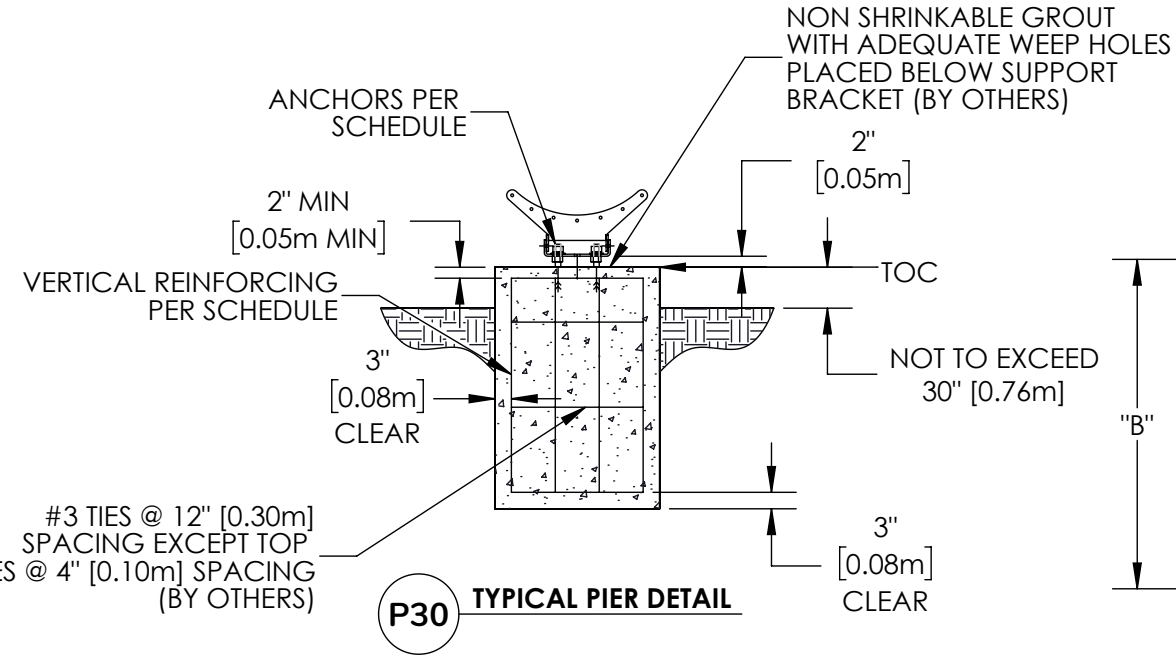
THE DIMENSIONS CONTAINED HERE IN ARE A RESULT OF INITIAL SITE INFORMATION THAT WAS PROVIDED DURING THE PRELIMINARY DESIGN PROCESS. WHILE EVERY ATTEMPT HAS BEEN MADE TO ASSURE ACCURACY, FINAL CONSTRUCTION DRAWING DIMENSIONS MAY VARY.



City of Mentor - OH, USA  
Version A - FP 01

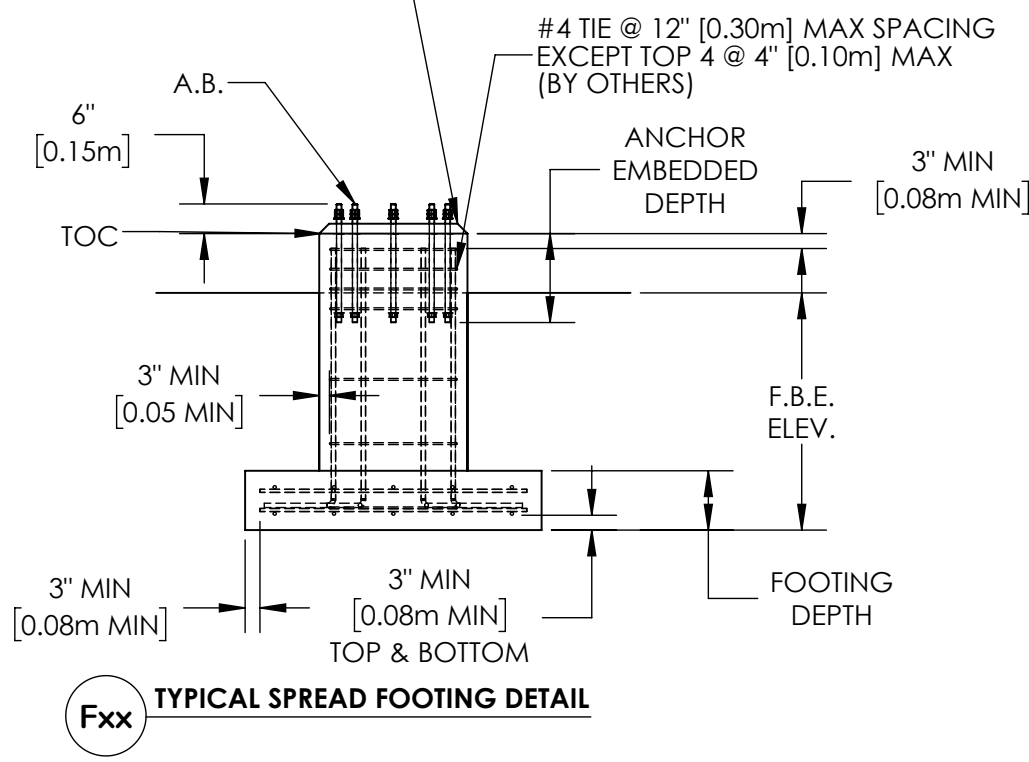
**NOTES**

1. ALL QUANTITIES, SIZES AND LOCATIONS ARE PRELIMINARY AND WILL VARY WITH FINAL DESIGN.
2. PRELIMINARY SIZES ARE BASED ON SOIL BEARING CAPACITY OF 2000 PSF, 100 MPH WIND SPEED (3 SEC. GUST) AND EXPOSURE CLASS C.
3. UNDERSIDE OF FOOTING, [F6 - F10], IS AT 6 FEET [1.83m] BELOW FINISHED GRADE. CONCRETE PEDESTAL 1 FOOT [0.30m] ABOVE FINISHED GRADE.
4. UNDERSIDE OF PIER FOOTING, [P30], IS AT 4 FEET [1.22m] BELOW FINISHED GRADE. ELEVATION ABOVE FINISHED GRADE WILL VARY.
5. VORTEX WILL NOT BE RESPONSIBLE FOR ANY ADDITIONAL COSTS AS A RESULT OF FINAL DESIGN VARYING FROM PRELIMINARY FOUNDATIONS.



Ø 1" [25mm] ANCHOR BOLTS EQUALLY SPACED (VARIABLE PEDESTAL DIAMETER AND NO. OF ANCHORS ACCORDING TO DESIGN REQUIREMENTS) USE TEMPLATE TO MAINTAIN ANCHOR BOLT ALIGNMENT DURING CONCRETE POUR. ANCHOR BOLTS AND TEMPLATES PROVIDED BY VORTEX AQUATIC STRUCTURES

2" [50mm] NON SHRINKABLE GROUT WITH ADEQUATE WEEP HOLES PLACED BELOW COLUMN (NOT BY VORTEX CREW)



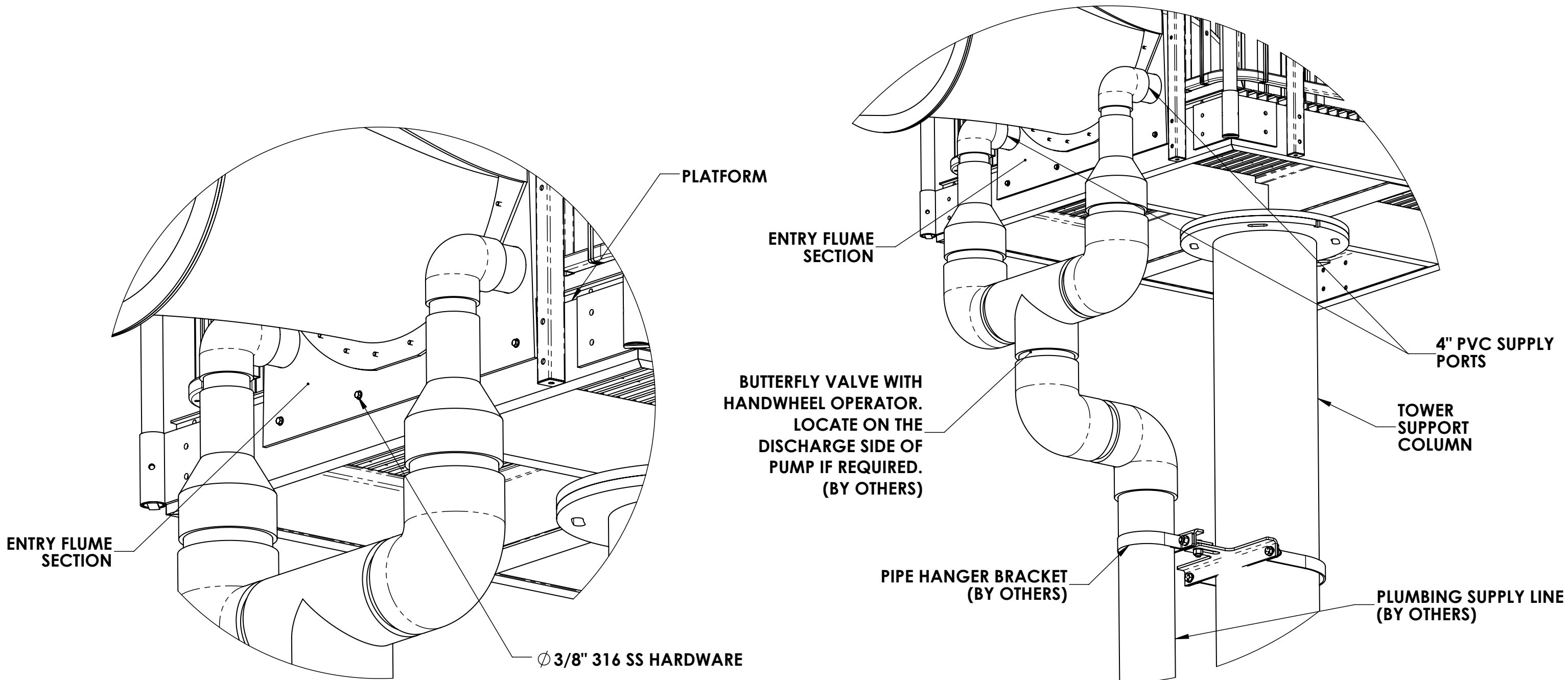
**PRELIMINARY FOOTING SCHEDULE**

FOUNDATION MARK	DIMENSION "A" X "B" X THICKNESS	FOOTING REINFORCING	PEDESTAL DIAMETER	PEDESTAL REINFORCEMENT
F6	6'-0" X 6'-0" X 18" [1.83m X 1.83m X 0.46m]	#6 @ 12" [0.30m] OC E.W. T+B	34" [0.86m]	(8) #7 VERTICAL W/ 14" [0.36m] HOOK
F7	7'-0" X 7'-0" X 18" [2.13m X 2.13m X 0.46m]	#6 @ 12" [0.30m] OC E.W. T+B	34" [0.86m]	(8) #7 VERTICAL W/ 14" [0.36m] HOOK
F8	8'-0" X 8'-0" X 20" [2.44m X 2.44m X 0.51m]	#6 @ 12" [0.30m] OC E.W. T+B	34" [0.86m]	(8) #7 VERTICAL W/ 14" [0.36m] HOOK
F9	9'-0" X 9'-0" X 20" [2.74m X 2.74m X 0.51m]	#6 @ 12" [0.30m] OC E.W. T+B	34" [0.86m]	(8) #7 VERTICAL W/ 14" [0.36m] HOOK
F10	10'-0" X 10'-0" X 20" [3.05m X 3.05m X 0.51m]	#6 @ 12" [0.30m] OC E.W. T+B	34" [0.86m]	(8) #7 VERTICAL W/ 14" [0.36m] HOOK
P30	N/A	N/A	30" [0.76m]	(6) #7 VERTICAL
SBE	4'-2" X 7'-0" X 8" [1.27m X 2.13m X 0.46m]	#5 @ 12" [0.30m] OC E.W. MID-DEPTH	N/A	N/A
DME	1'-6" X 4'-0" X 8" [0.46m X 1.22m X 0.20m]	#4 @ 6" [0.15m] OC E.W. MID-DEPTH	N/A	N/A
RBE	4'-3" X VARIES X 8" [1.30m X VARIES X 0.20m]	#4 @ 6" [0.15m] OC E.W. MID-DEPTH	N/A	N/A

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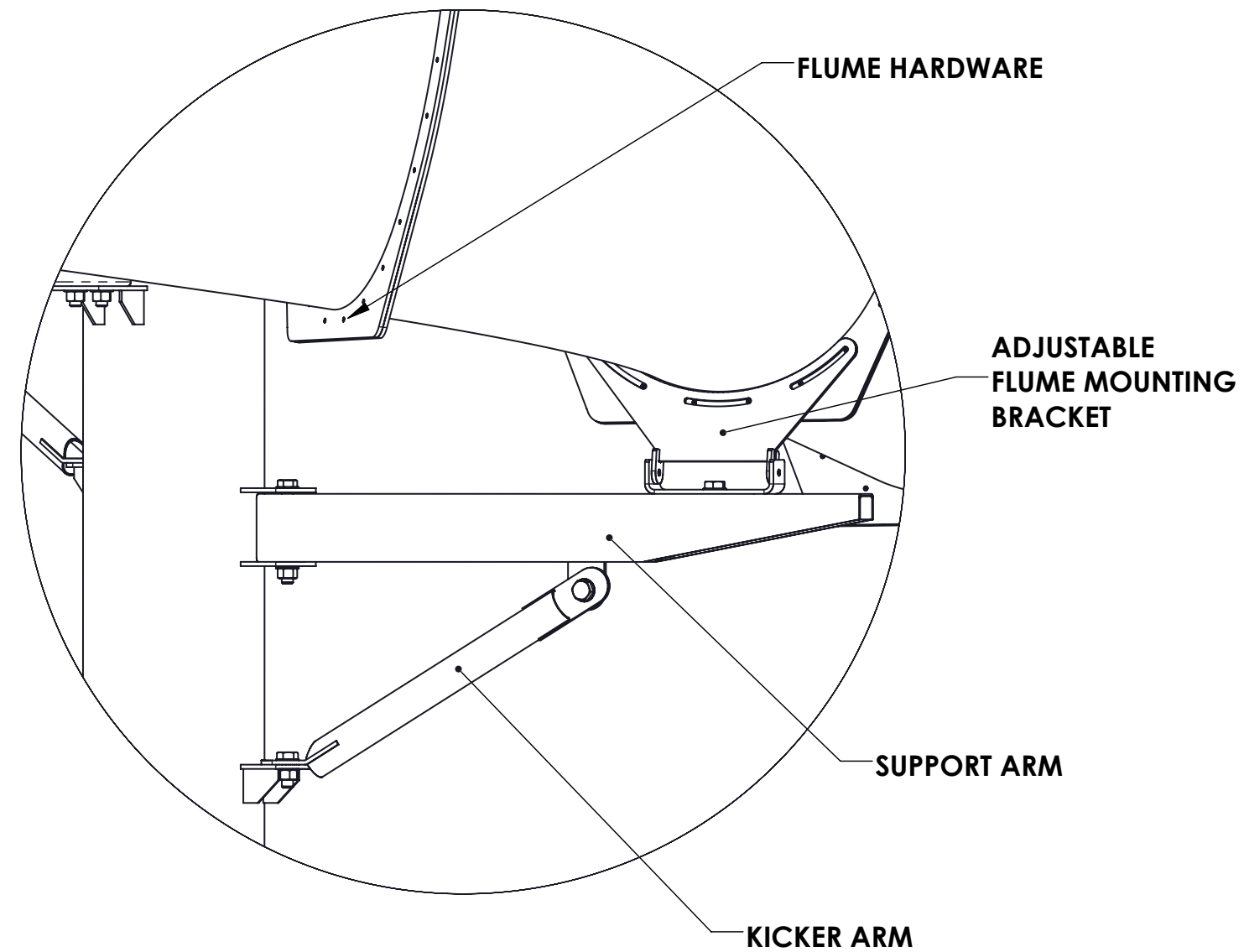
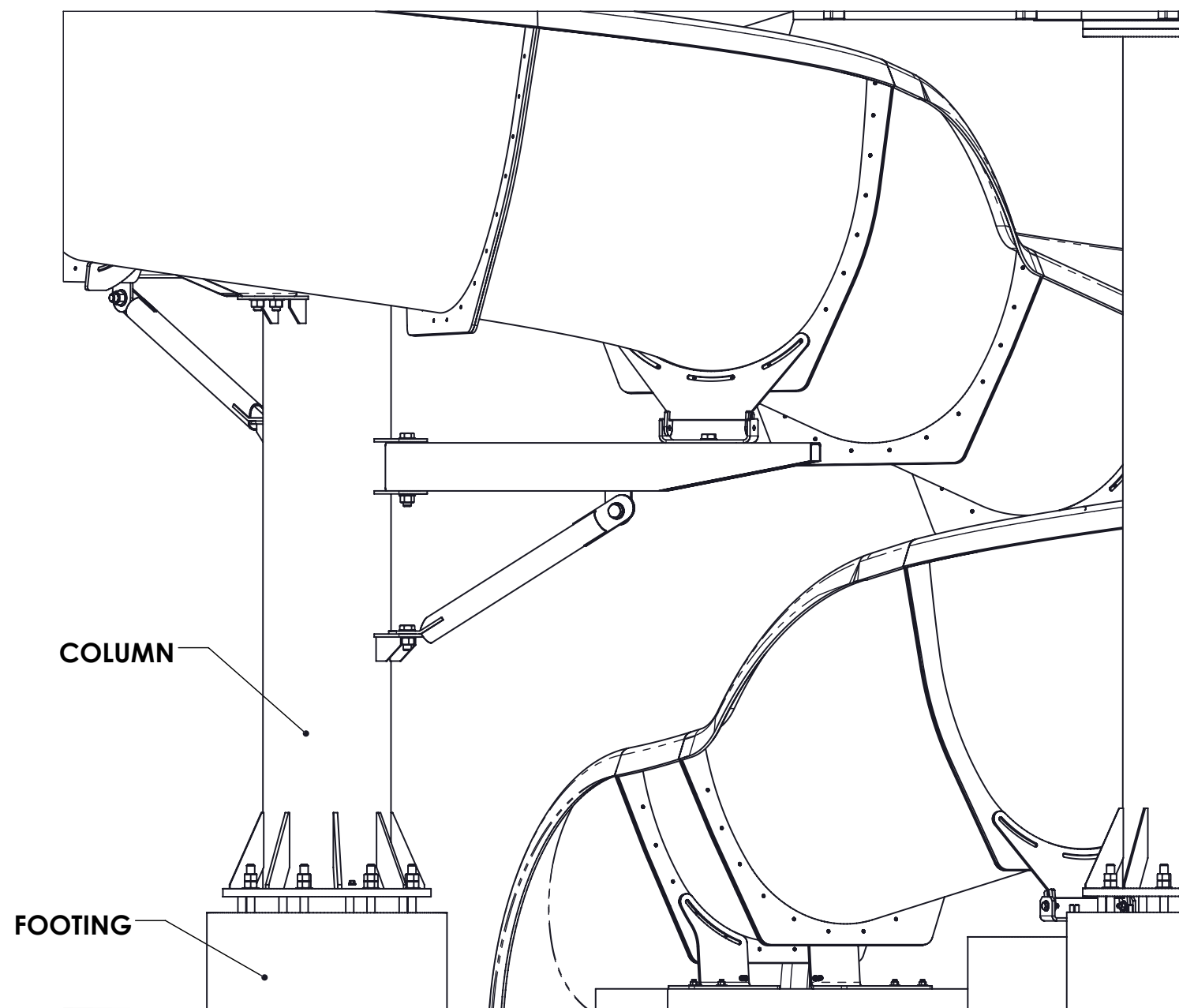


**PLUMBING TO BE ADEQUATELY SUPPORTED W/HANGERS TO PREVENT WEIGHT STRESS ON ENTRY SECTION (BY OTHERS)**

**PLUMBING PIPE SIZE BASED ON FLOW RATE REQUIREMENTS. CALIBRATED MEANS OF FLOW MEASUREMENT (E.G. FLOW METER) REQUIRED (BY OTHERS)**

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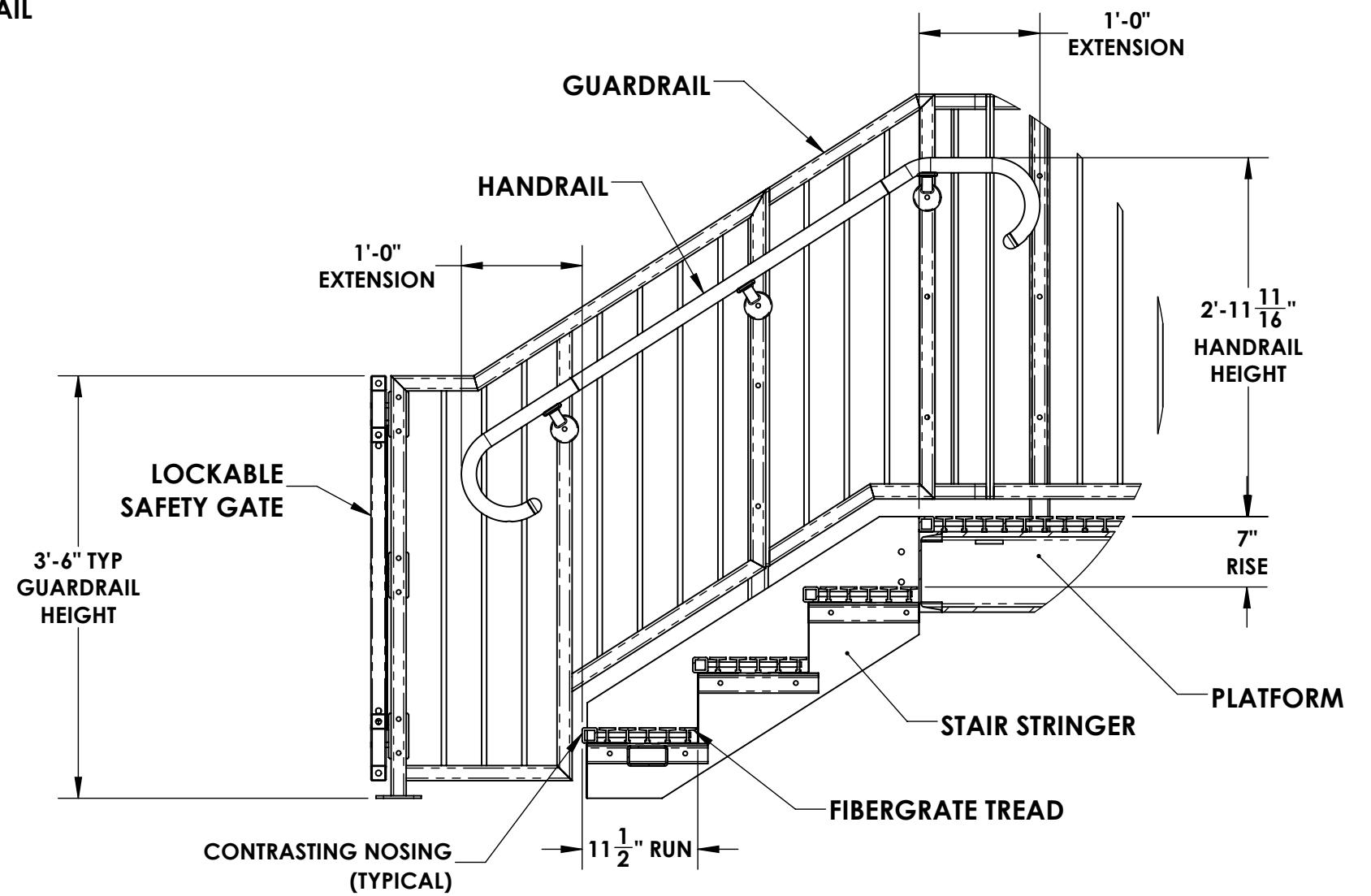
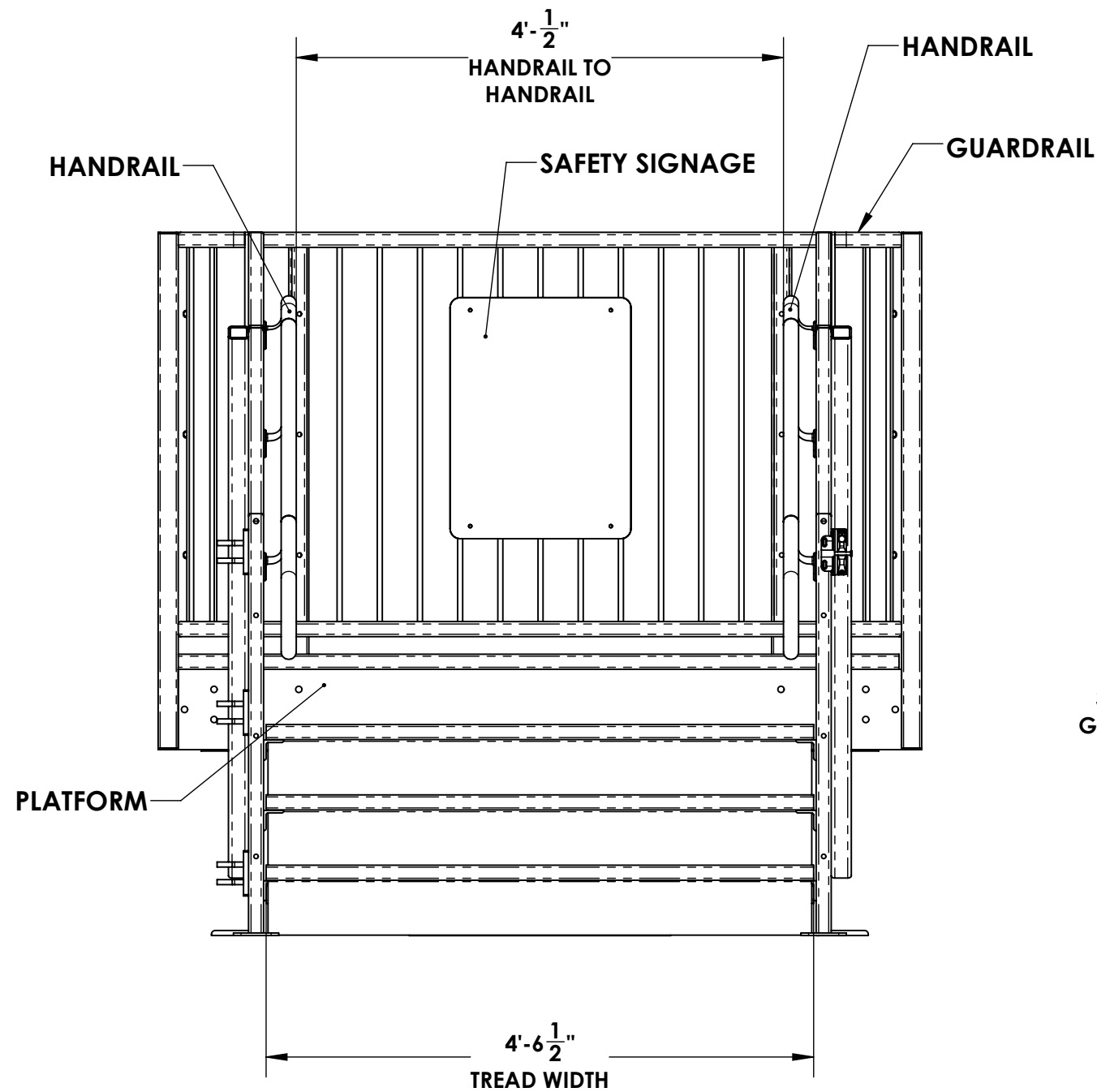


\*FLUME LAYOUT MAY NOT REPRESENT ACTUAL SLIDE PROPOSED

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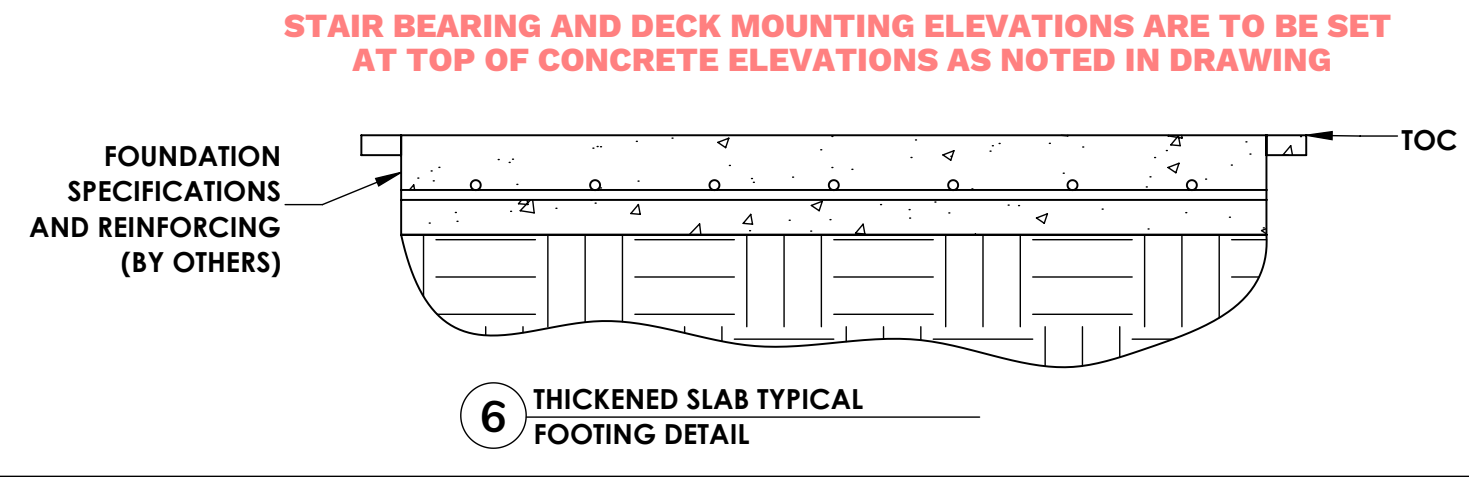
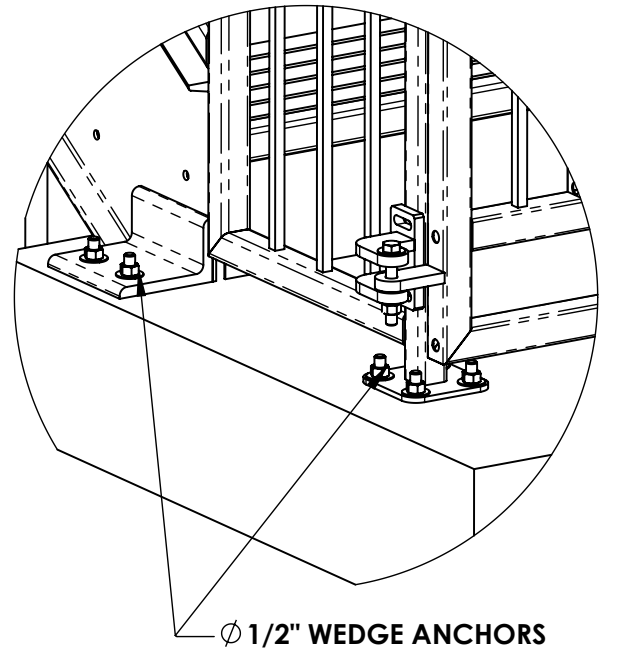
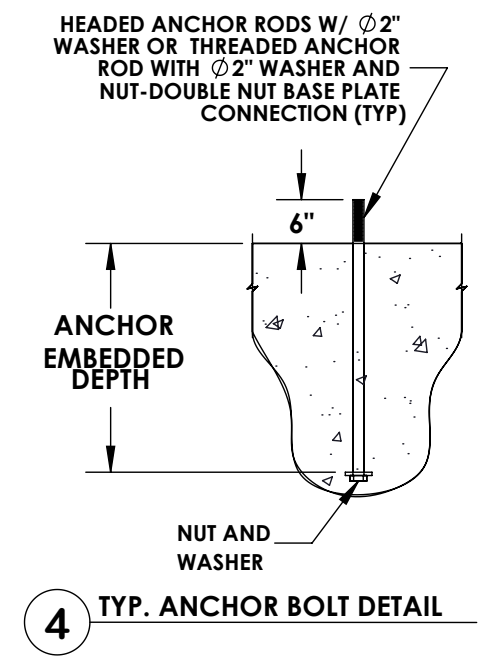
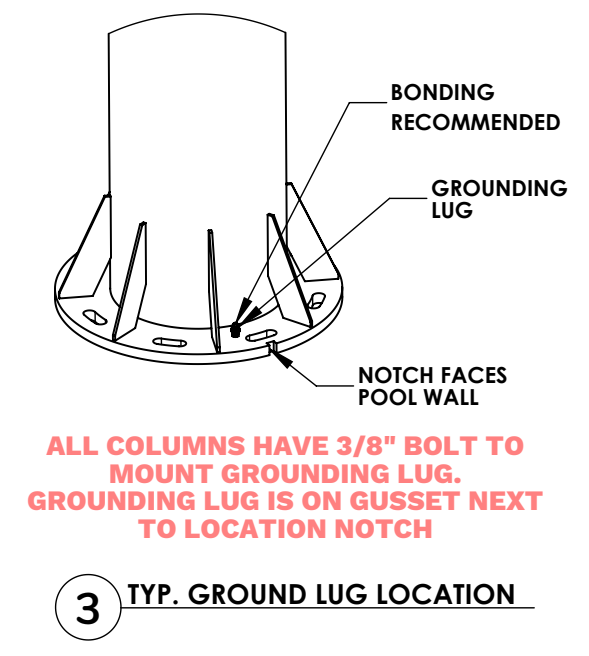
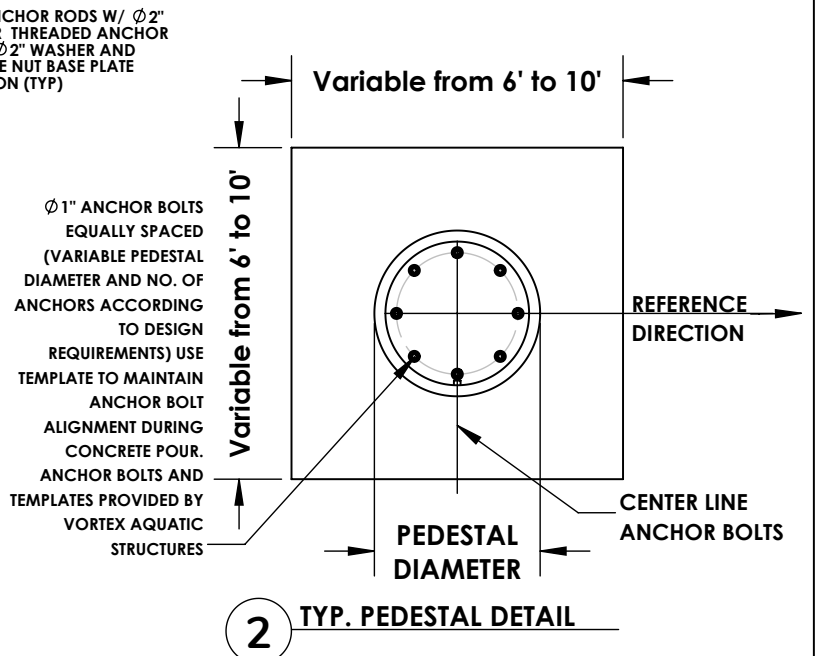
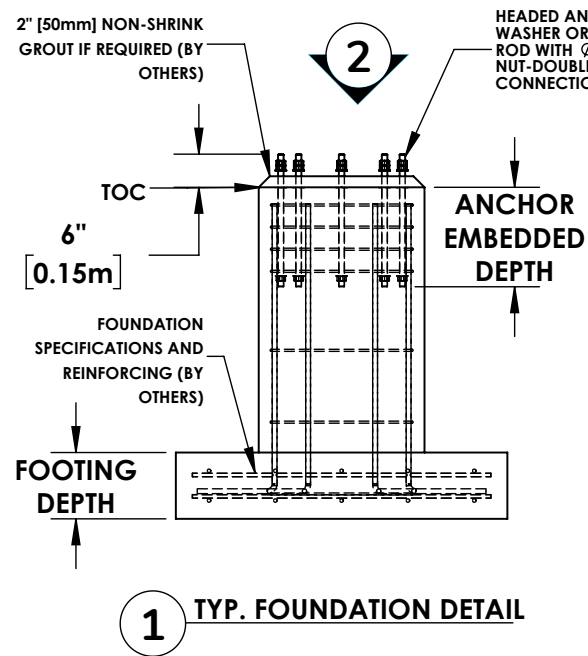
**\*STAIR LAYOUT MAY NOT REPRESENT ACTUAL STAIRS PROPOSED**

**PRELIMINARY - NOT FOR CONSTRUCTION**

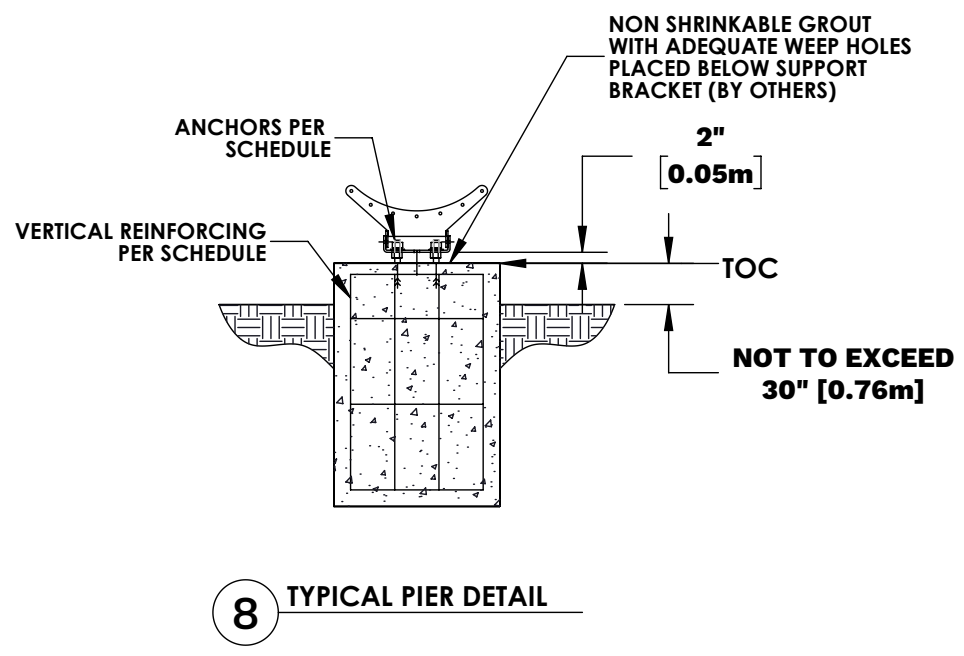
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**GENERAL SPECIFICATIONS:**

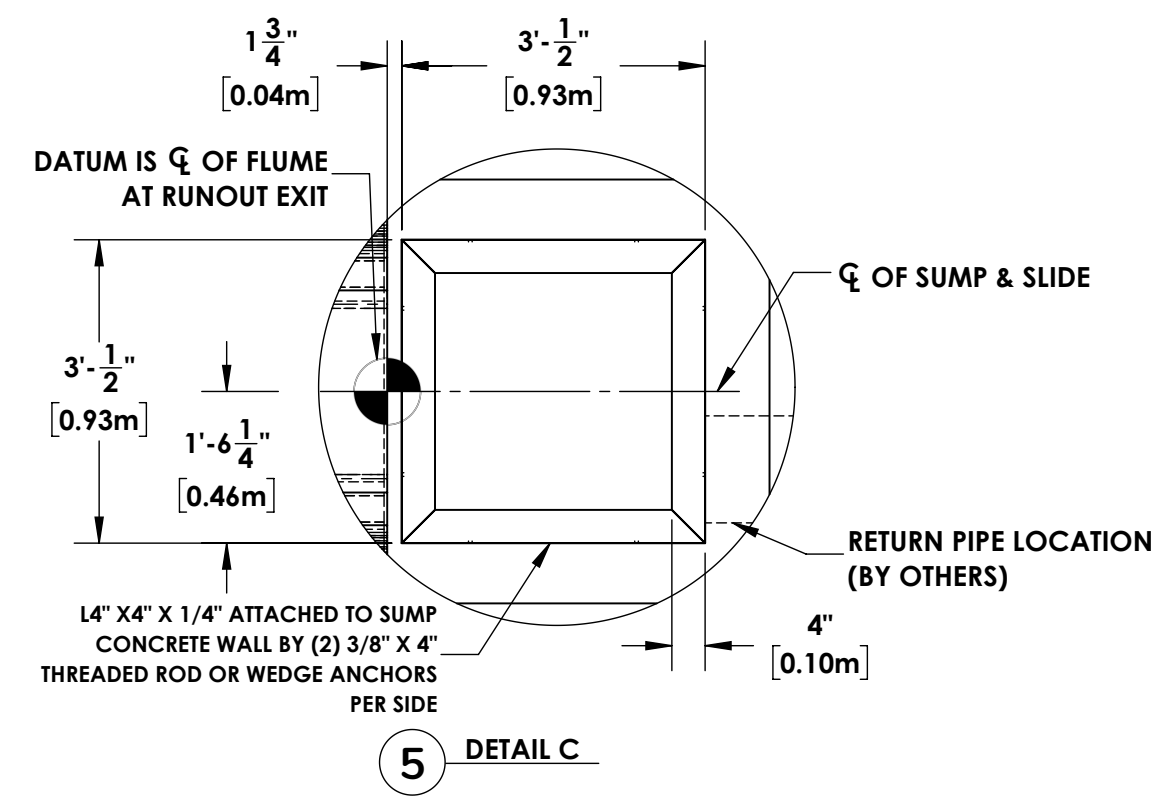
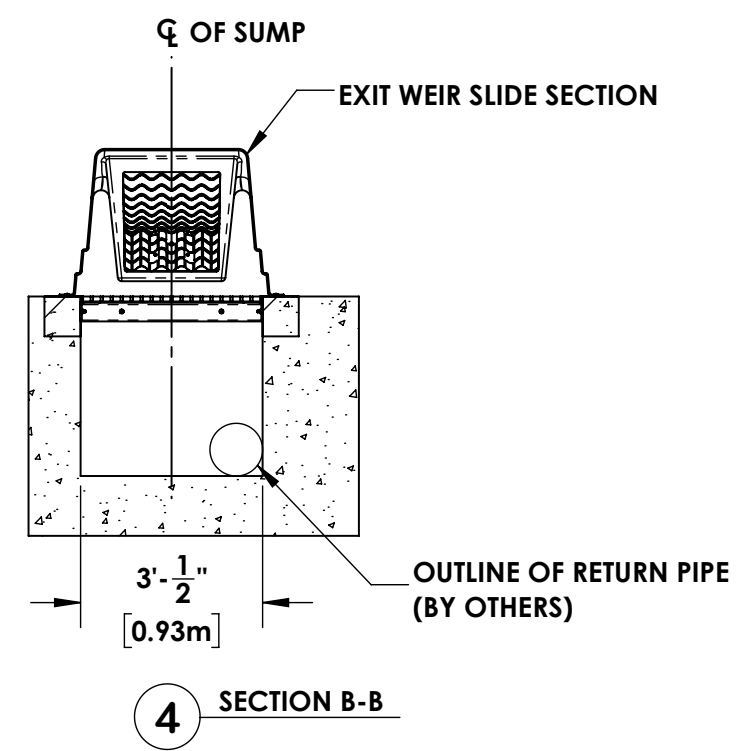
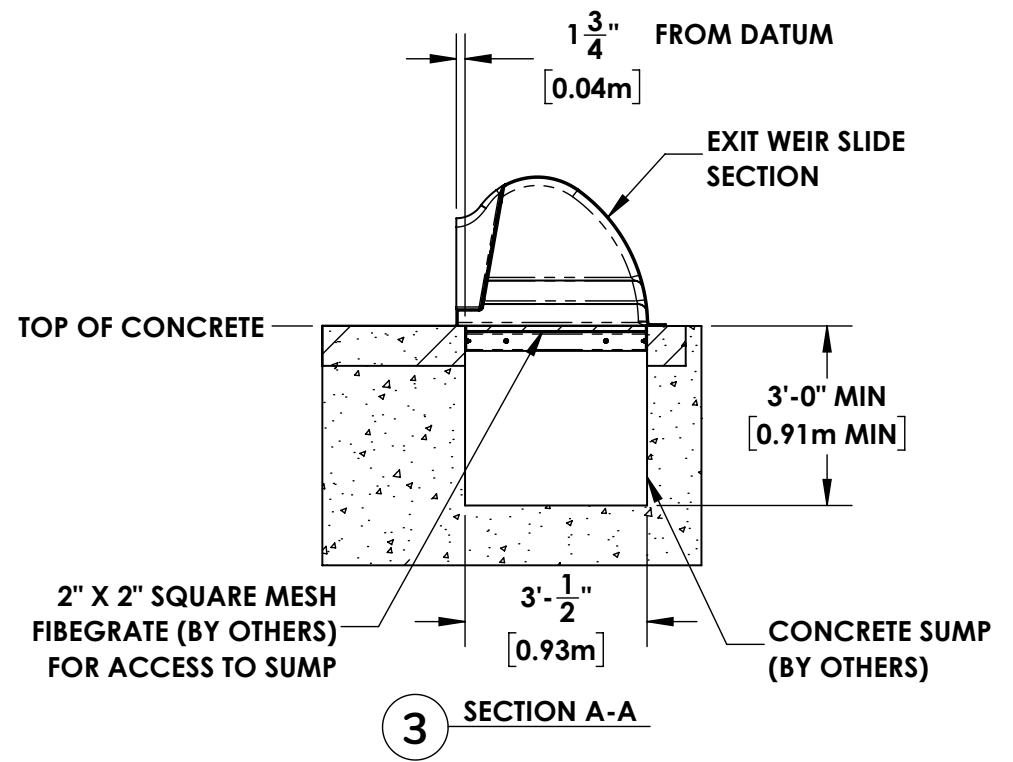
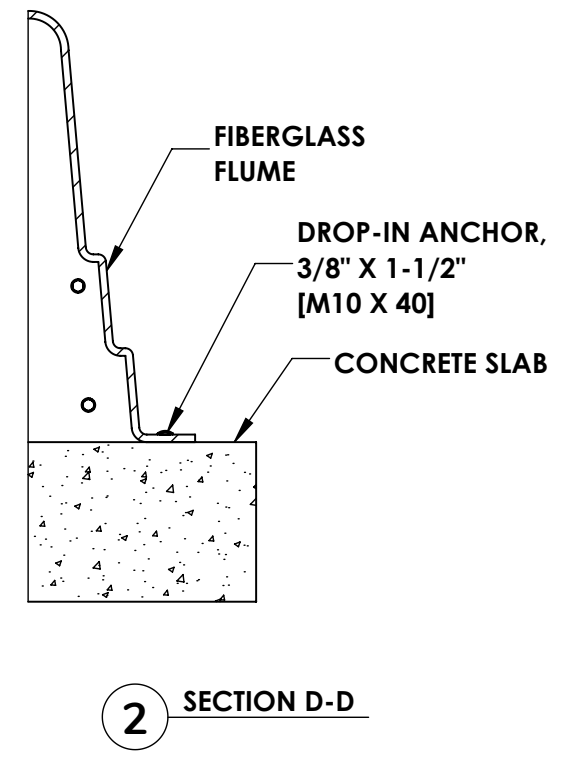
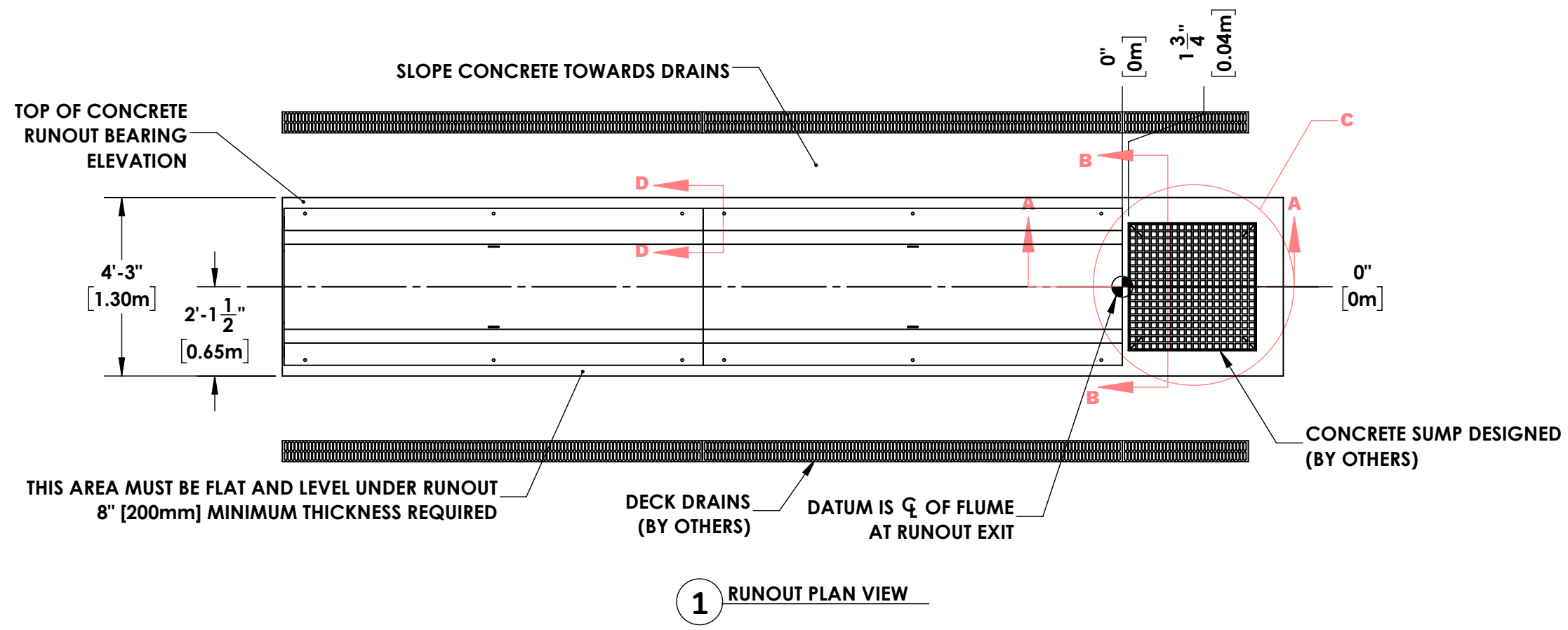
1. THESE DETAILS ARE GENERIC AND PROVIDE AN OVERVIEW OF THE SCOPE OF WORK DURING CONSTRUCTION/INSTALLATION. REFER TO THE PROJECT FINAL CONSTRUCTION DRAWINGS FOR INFORMATION SPECIFIC TO YOUR PROJECT.
2. DESIGN OF CONCRETE WORK, BY OTHERS. WE RECOMMEND AS A MINIMUM:
  - MIN. CONCRETE STRENGTH  $f'_c = 3600\text{psi (25Mpa) @ 28 DAYS}$
  - AIR-ENTRAINED CONCRETE (IN REGIONS SUBJECTED TO FREEZE AND THAW)
  - VERIFY LOCAL CODES AND STANDARDS FOR OTHER LOCAL REQUIREMENTS
3. DO NOT SCALE DRAWINGS.
4. FOR FURTHER DETAILS AND INFORMATION, REFER TO THE INSTALLATION, OPERATION AND MAINTENANCE MANUALS IF APPLICABLE.



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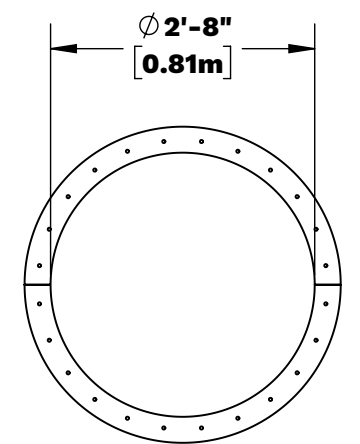
**PRELIMINARY - NOT FOR CONSTRUCTION**  
 THE DIMENSIONS CONTAINED HERE IN ARE A RESULT OF INITIAL SITE INFORMATION THAT WAS PROVIDED DURING THE PRELIMINARY DESIGN PROCESS. WHILE EVERY ATTEMPT HAS BEEN MADE TO ASSURE ACCURACY, FINAL CONSTRUCTION DRAWING DIMENSIONS MAY VARY.



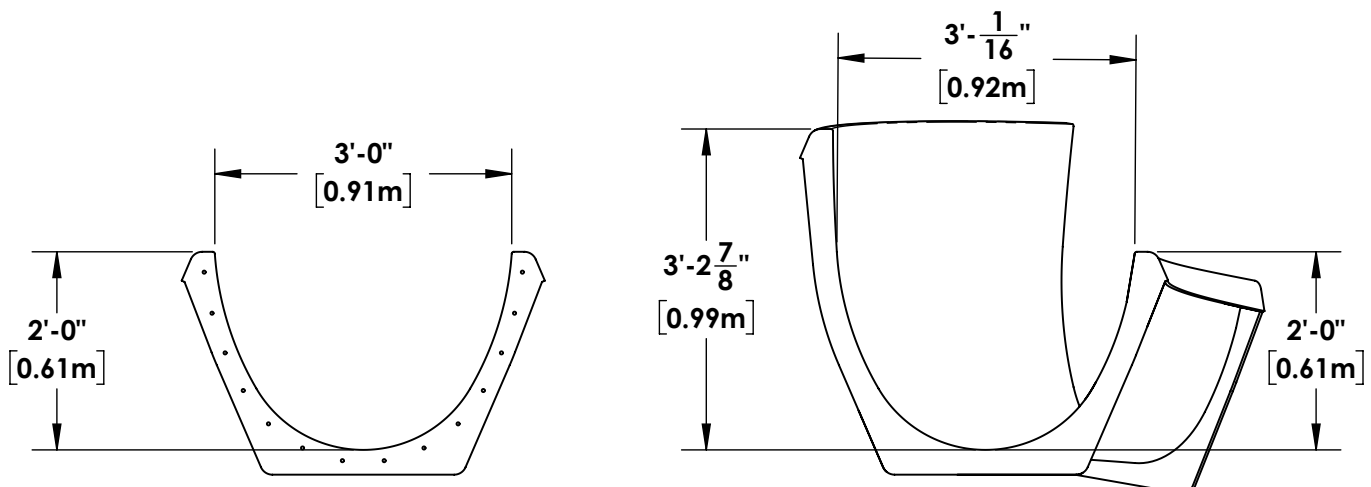
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32" Closed Flume  
PrecisionRide™  
Standard Profile

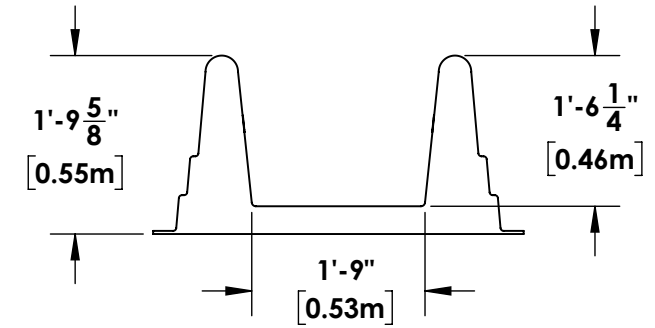


Standard Profile  
● Integrated Highwall

36" Open Flume  
PrecisionRide™

Curve Section Profile  
● Integrated Highwall Riser

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Slide Runout  
Classic  
Standard Profile

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# PrecisionRide™ & Classic Waterslides & Structures - Simplified Materials Specifications

1. Slide sections – PrecisionRide LRTM process: PrecisionRide™ series by Vortex, 36-inch (91.4 cm) Open Flume and 32-inch (81.3 cm) Closed tube fiberglass slides shall be manufactured using a Light Resin Transfer Molding (LRTM) system providing unprecedented precision, dependable manufacturing quality and low environmental impact. At least 90% of all fiberglass flume parts are to be LRTM with both sides having a 600-grit surface finish or better. Standard flume sections shall comply with minimum material requirements of ASTM F2376. Finish surface shall be high quality isophthalic polyester colored gelcoat and resin shall be premium quality promoted low profile polyester providing good resistance to osmosis blistering. All glass reinforcement shall be E Glass type or better. Interior and exterior of the fiberglass flume to have a minimum 0.018 to 0.20-inch (0.45 to 0.50 mm) gelcoat thickness.
2. Slides sections – Classic Hand Lay-up process: All 22-inch (55.9 cm) Kiddie Slide, 30,75-inch (78.1 cm) Open flume and 31,625-inch (80.3 cm) Close flume slide section shall be manufactured with an open mold hand lay-up process using high quality isophthalic polyester colored gelcoat and a polyester resin system with isophthalic and orthophthalic resins. Fiberglass reinforcements shall be continuous roving chop fibers, woven roving and shall be “E” glass type. Standard flume section shall comply with minimum material requirements of ASTM F2376. Interior of the fiberglass flume (riding surface) to have a minimum 0.018 to 0.20-inch (0.45 to 0.50 mm) gelcoat thickness with a 600-grit smooth finish. Exterior faces to be coated with a color urethane UV protective coating.
3. Joints, Connections, and Seams: Flume to flume joints shall be fastened with 3/8-inch stainless steel hardware. Flume to support system connections shall be made with stainless steel hardware. Fiberglass joint connections shall be made using waterproof non-shrink caulking with suitable adhesion to fiberglass.
4. Flume Structural Support System: Structural steel support columns, arms, and cross bracing as required by the design, shall be designed for bolt-up installation. Connection hardware and yokes, as required by the design, shall be stainless steel, nuts, bolts, and washers.
5. Waterslide Tower and Stairway System: Tower columns, cross-bracing, tension rods, stairway supports, stairway sections, railings and guardrails shall be hot-dipped galvanized steel and designed and prefabricated for bolt-up installation. A hinged gate located at the base of the waterslide tower shall be included. Railings and Guardrails infill shall be welded square bar pickets. The outer frame/ring of the railings and guardrails shall be hot-dip galvanized steel. Grabrails or handrails shall be hot-dip galvanized 1,66 inch (4.2 cm) outside diameter steel pipe, except for spiral handrail which shall be fabricated of 1,5 inch (3.8 cm) outside diameter stainless steel tubing.
  - a. Traditional straight stair system: Stair treads, landings and deck surfaces shall be pultruded pedestrian fiberglass grating 1,5” (38.1 mm) thick with a light gray color non-slip surfacing with 18% openings providing a comfortable walking surface. Fiberglass grating shall be non-corrosive, low maintenance and fire retardant according to ASTM E84.
  - b. Spiral stair system: Stair treads and intermediate landing surfaces shall be 3/8” (9.5 mm) thick one-piece molded solid composite panels with a light gray color non-slip surfacing providing a comfortable walking surface. Fiberglass grating shall be non-corrosive, low maintenance and fire retardant according to ASTM E84. Upper deck surfaces shall be pultruded pedestrian fiberglass grating 1,5” (38.1 mm) thick with a light gray color non-slip surfacing with 18% openings providing a comfortable walking surface. Fiberglass grating shall be non-corrosive, low maintenance and fire retardant according to ASTM E84.
6. Structural Systems: Structural supports, tower and walkway systems shall be designed for: Seismic zone [as required per location of the project], Wind speed [according to project location], Snow load [according to project location] and Live load [according to project or default live load of 100 pounds per square foot].
7. Pipe Columns: All pipe columns shall meet the requirements of ASTM A500, Grade B, minimum Fy = 42,000 psi, ASTM A53 Grade C or ASTM A252 Grade 3.
8. Tubing: All rectangular or square tubing shall meet the requirements of ASTM A500, Grade B, minimum Fy = 46,000 psi.
9. Bolts and Nuts: Where required all high strength bolts shall meet the requirements of ASTM A325.
10. Anchor bolts: All anchor bolts shall be hot-dip galvanized steel and shall meet the requirements of ASTM A36.
11. Protective Coatings and Colors: All steel support structure to be factory prepared, protected and coated for maximum corrosion protection. All steel components shall be hot-dip galvanized steel standard according to ASTM A123. Optional top coat color coating using a multi-step process including a zinc-rich primer and a heat-cured polyester powder coating SuperDurable grade top coat compliant with AAMA 2604 for weathering resistance of architectural exterior applications shall be available for outdoor applications and standard for indoor applications. Color coating shall be emitting no VOC's and shall be free of phthalates, isocyanates, halogens and heavy metals.
12. Safety signage: Sign shall be durable, non-corrosive, rigid plastic or aluminum material suitable for exterior installations.
13. Platform cover / Canopy: Platform cover structural frame members shall use same materials and steel protection as slide structure. Bolts and nuts shall be stainless steel per ASTM F593, Alloy Group 1 or 2. Platform cover shall be designed for Live loads: 10 pounds per square foot, Wind design speed: 80 miles per hour, Snow load: 5 pounds per square foot. Shade fabric shall be made of high-density polyethylene with ultraviolet additives and a fire rating Class I (flame spread index of 15 and smoke developed index of 15).
14. Safety Craftsmanship: All waterslides and their structure shall be designed and manufactured in accordance with Vortex Quality Management System registered under ISO 9001:2015, international industry safety standards ASTM F2376, European safety standard EN 13451-8 and EN 1069-1 according to the project requirements.





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