



Procurement #: 48996>

CITY OF PROVIDENCE, RHODE ISLAND

Department: Parks

RFP Title: SPLASHPAD IMPROVEMENTS AT JOSLIN PARK

Opening Date: 05/19/2025

Addendum #: 2

Issue Date: 05/02/2025

The purpose of this addendum is:

See attached

Providence City Hall
25 Dorrance Street
Providence, RI 02903



WENDY NILSSON
Superintendent of Parks

BRETT P. SMILEY
Mayor

Addendum # 2

SPLASHPAD IMPROVEMENTS AT JOSLIN PARK

MAY 2, 2025

Total Pages Including Cover (7 Pages)

Acknowledge Addenda on Bid Form

**** BID DUE DATE MONDAY, MAY 19TH, 2025 AT 2:15PM ****

Attachments:

1. Addendum Cover Sheet (1 Page)
2. Revised Planting Plan L-7 (1 page)
3. Vortex P&E Plan (4 pages)
4. Vortex Cabinet Detail (1 page)

Questions/Clarifications:

1. Vortex P&E Plan attached, note that command center cabinet is larger than shown on Parks Plans, so concrete pad will have to be larger, (3'-2" x 9'-10" detail attached)
2. Q: Will the Aqua Tile be in the same pattern as the Base Bid Paint?
A: No, the tile will be in an offset grid pattern using 3-colors, the tiles will only need to be trimmed at the edges.
3. Q: Is there a product specified for the paint?
A: The Basis-of-Design product is Benjamin Moore INSL-X Chlorinated Rubber Swimming Pool Paint, but any equal chlorinated rubber pool paint is acceptable.
4. On Page 6 of the RFP, where it asks for *Total Amount* of Bid, please include the allowance.
5. Items #38 and #40 in the Base Bid Unit Prices (page 19) are not in the project, these can be crossed out on the bid form.

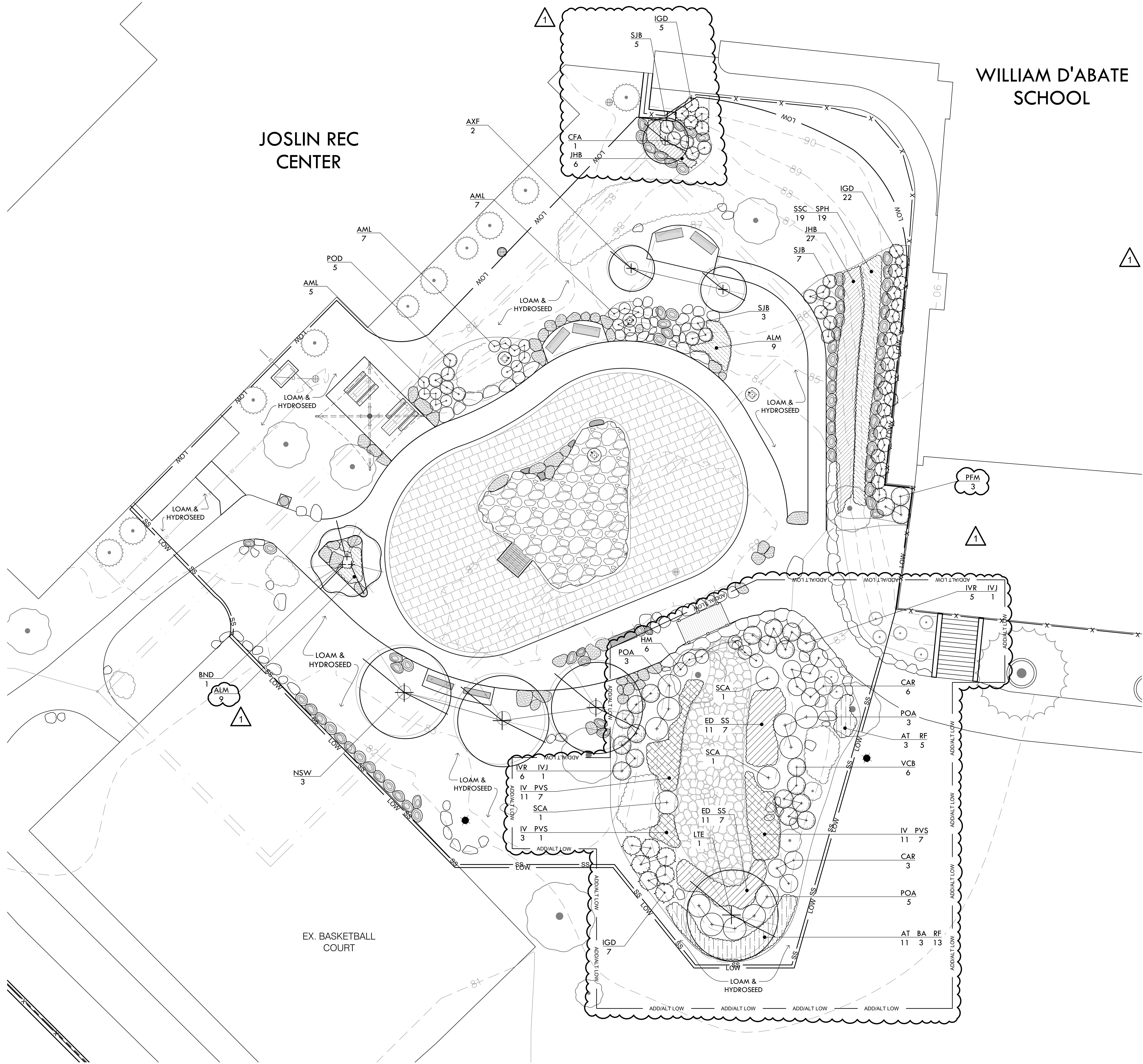
PROVIDENCE PARKS DEPARTMENT
1000 Elmwood Avenue, Providence, RI 02905
Phone: 401-680-7201



WENDY NILSSON
Superintendent of Parks

BRETT P. SMILEY
Mayor

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1000 Elmwood Avenue, Providence, RI 02905
Phone: 401-680-7201



WILLIAM D'ABATE
SCHOOL

PLANT SCHEDULE - BASE BID				
KEY	QTY	BOTANICAL NAME COMMON NAME	SIZE	NOTES
TREES				
AXF	2	Acer x Freemanii Freeman Hybrid Maple	2.5-3" Cal	LIMB TO 7'
BND	1	Betula nigra 'Dura-Heat' River Birch	10-12' Clump	Multi-Stem
CFA	1	Cornus florida 'Appalachian Snow' White Flowering Dogwood	2-2.5" Cal	Specimen
NSW	3	Nyssa sylvatica 'Wildfire' Wildfire Tupelo Tree	2.5-3" Cal	LIMB TO 7'
SHRUBS				
AML	19	Aronia melanocarpa 'Lowscape Mound' Groundcover Chokeberry	#3 CONT.	36" O.C.
IGD	27	Ilex glabra 'Densa' Densa Dwarf Inkberry	#3 CONT.	36" O.C.
JHB	33	Juniperus horizontalis 'Bar Harbor' Bar Harbor Spreading Juniper	#3 CONT.	30" O.C.
PFM	3	Potentilla fruticosa 'Mango Tango' Orange Potentilla	#2 CONT.	48" O.C.
POD	5	Physocarpus opulifolius 'Donna May' Dwarf Crimson Ninebark	#3 CONT.	36" O.C.
SJB	15	Spiraea japonica 'Double Play Big Bang' Double Play Spirea - Pink	#3 CONT.	36" O.C.
PERENNIALS, GROUNDCOVERS, & GRASSES				
ALM	18	Allium 'Millenium' Re-Blooming Allium	#1	24" O.C.
SPH	19	Sporobolus heterolepis Prairie Dropseed	#1	27" O.C.
SSC	19	Schizachyrium scoparium 'Carousel' Dwarf Little Bluestem	#1	27" O.C.

PLANT SCHEDULE - ADD/ALTERNATE #3				
KEY	QTY	BOTANICAL NAME COMMON NAME	SIZE	NOTES
TREES				
LTE	1	Liriodendron tulipifera 'Emerald City' Emerald City Tulip Tree	2.2-5" Cal	LIMB TO 7'
SHRUBS				
CAR	9	Clethra alnifolia 'Ruby Spice' Pink Summersweet Clethra	#3 CONT.	48" O.C.
IGD	7	Ilex glabra 'Densa' Densa Dwarf Inkberry	#3 CONT.	48" O.C.
IVJ	2	Ilex verticillata 'Jim Dandy' Male Winterberry	#3 CONT.	48" O.C.
IVR	11	Ilex verticillata 'Red Sprite' Dwarf Winterberry	#3 CONT.	48" O.C.
POA	11	Physocarpus opulifolius 'Amber Jubilee' Dwarf Crimson Ninebark	#3 CONT.	5' O.C.
SCA	3	Sambucus canadensis 'Adams' American Elderberry	#3 CONT.	
VCB	6	Vaccinium corymbosum 'Bluecrop' Highbush Blueberry	#3 CONT.	48" O.C.
PERENNIALS, GROUNDCOVERS, & GRASSES				
AT	14	Asclepias tuberosa Orange Butterfly Weed	#1	30" O.C.
BA	3	Baptisia australis False Indigo	#1	30" O.C.
ED	22	Eupatorium dubium Joe-Pye Weed	#1	30" O.C.
HM	6	Hibiscus moscheutos Swamp Rose Mallow	#1	36" O.C.
IV	25	Iris versicolor Blue Flag Iris	#1	30" O.C.
PVS	15	Panicum virgatum 'Shenandoah' Red Switchgrass	#1	30" O.C.
RF	18	Rudbeckia fulgida Black-Eyed Susan	#1	30" O.C.
SS	14	Schizachyrium scoparium Little Bluestem	#1	30" O.C.

NOTE: ALL PLANTING BEDS TO HAVE 3" BARK MULCH INSTALLED AFTER PLANTING

SEED MIX:	
LAWN/DISTURBED AREAS - MODIFIED ENDOPHYTE ENHANCED MIX	
Improved Perennial Ryegrass	30%
Turf Type Tall Fescue	30%
Chewings Fescue	35%
Dutch White Clover	5%
Seeding Rate: 7 lb/1,000 sf	
Available from: Allen's Seed Store - 693 S County Trail Exeter, RI 02822 Phone: 401.294.2722	



PROVIDENCE
PARKS DEPARTMENT
DALRYMPLE BOATHOUSE
ROGER WILLIAMS PARK
PROVIDENCE, RI 02905



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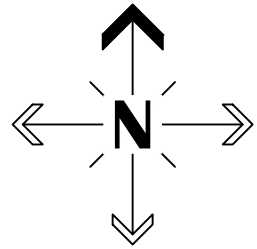
PROJECT:

Splashpad
Improvements at
Joslin Park
60 Kossuth St
Providence, RI

REVISIONS:

Date	Issued For:
5/2/25	Addendum 2

NORTH ARROW



SCALE

0 5' 10' 20'
SCALE: 1"=10'

DRAWING INFO

DATE ISSUED: 4/7/25
PROJECT NO.: JOSL.22.01
DRAWN BY: SG/SH
CHECKED BY: MG

SHEET TITLE

Planting Plan

L-7

7 OF 11

FILE: JOSL.22.01.SPLASHPAD-PLANS-2025.dwg

SPECIFICATIONS FOR CONSTRUCTION

1 GENERAL NOTES

- 1.1 THESE DESIGN DOCUMENTS WERE PREPARED BY 'VORTEX AQUATIC STRUCTURES INTERNATIONAL' FOR THE USE OF THEIR CLIENT ONLY. THE MATERIAL USED AND IDENTIFIED IN THEM REFLECTS VORTEX AQUATIC STRUCTURES INTERNATIONAL'S BEST JUDGMENT IN LIGHT OF THE INFORMATION AVAILABLE AT THE TIME OF PREPARATION. FOR THE PURPOSE OF THESE DESIGN DOCUMENTS, 'VORTEX AQUATIC STRUCTURES INTERNATIONAL' IS SYNONYMOUS WITH 'VORTEX'.
- 1.2 VORTEX ACCEPTS NO RESPONSIBILITY FOR DAMAGES, IF ANY, SUFFERED BY ANY THIRD PARTY AS A RESULT OF DECISIONS MADE OR ACTIONS BASED ON THESE DESIGN DOCUMENTS WITHOUT THE PREVIOUS CONSULTATION TO VORTEX.
- 1.3 ALL WORK, MATERIALS AND THEIR ASSEMBLIES SHALL CONFORM TO THE STANDARDS, REGULATIONS AND CODES CURRENTLY IN FORCE FOR ALL TRADES, AISC, ACNOR, EN, OR IBC.
- 1.4 THESE DESIGN DOCUMENTS DO NOT INDICATE THE METHOD OR MEANS OF CONSTRUCTION. WHEN APPLICABLE, THE CONTRACTORS SHALL SUPERVISE AND DIRECT ALL THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES AND SEQUENCES AS PER STANDARD BEST PRACTICES.
- 1.5 DO NOT SCALE DRAWINGS.
- 1.6 USE ONLY THOSE MARKED "ISSUED FOR CONSTRUCTION".
- 1.7 THE CONTRACTOR SHALL REVIEW THESE DESIGN DOCUMENTS AND REPORT ANY CONFLICTS OR OMISSIONS TO THE VORTEX IMMEDIATELY.
- 1.8 TEMPORARY SUPPORTS, WHICH WILL BE REQUIRED DURING CONSTRUCTION, SUCH AS FORMWORK, BRACING, SHORING, ETC. ARE NOT SHOWN ON THESE DRAWINGS AND ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT ALL SAFE CONSTRUCTION PROCEDURES ARE FOLLOWED.
- 1.9 THE FOLLOWING SPECIFICATIONS ARE VORTEX'S MINIMUM RECOMMENDATIONS TO OBTAIN A QUALITY PRODUCT. THE CONTRACTOR SHALL FOLLOW THE LOCAL CODES IF MORE RESTRICTIVE.
- 1.10 ALL SEEFLOW COMPONENTS TO BE SNUG-TIGHT ONLY. USING POWER TOOLS OR TIGHTEN HARDWARE FULLY-TENSIONED CAN PRODUCE CRACKING ON THE PLASTIC.

2 EXCAVATION

- 2.1 ANY SHORING OR TEMPORARY SHORING NOT SHOWN ON DRAWINGS WILL BE EXECUTED, IN A SAFE MANNER, BY THE GENERAL CONTRACTOR.
- 2.2 IT IS THE RESPONSIBILITY OF OTHERS TO VERIFY THE EXISTENCE OF ANY UNDERGROUND SERVICES ETC.
- 2.3 IF AVAILABLE, REFER TO SOIL REPORT FOR BACKFILL REQUIREMENTS. ALL BACKFILL (FOR SLAB ON GRADE, ETC.) MUST BE DONE IN ACCORDANCE WITH THE RECOMMENDATIONS OF A QUALIFIED PROFESSIONAL. USE ONLY FREE DRAINING, GRANULAR, MINERAL, INERT AND NON- REACTIVE FILL.

3 FOUNDATIONS

- 3.1 REFER TO SOIL REPORT FOR RECOMMENDATIONS.
- 3.2 ALL FOOTINGS SHALL REST ON A HOMOGENEOUS LAYER OF UNDISTURBED SOIL OR ENGINEERED BACKFILL WITH A MINIMUM ALLOWABLE BEARING CAPACITY OF 100KPA (2000 PSF) AND MAXIMUM DIFFERENTIAL SETTLEMENT OF 19 MM (0.75"). ALL ORGANIC MATERIAL SHALL BE REMOVED.
- 3.3 IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE SOIL AT ALL FOOTING LOCATIONS BE VERIFIED BY A QUALIFIED SOILS EXPERT BEFORE POURING FOOTINGS TO ENSURE FOOTINGS REST ON APPROPRIATE STRATA.
- 3.4 WHEN APPLICABLE, FOLLOW GEOTECHNICAL EXPERT RECOMMENDATIONS FOR ALL EXTERIOR FOOTINGS TO ENSURE FROST PROTECTION.

4 CONCRETE

- 4.1 ALL CONCRETE MATERIALS, PROCEDURES, TOLERANCES & WORKMANSHIP SHALL CONFORM TO THE LATEST ISSUES OF ACI-318 AND ACI 317 OR ACNOR CAN3-A23.1 & A23.2, DEPENDING ON PROJECT LOCATION.
- 4.2 CONCRETE THAT HAS BEEN IN THE TRUCKS LONGER THAN 2 HOURS SHALL BE REJECTED. DO NOT ADD WATER TO THE CONCRETE IN THE TRUCKS OR ON THE SITE UNDER ANY CIRCUMSTANCES.
- 4.3 USE MAXIMUM 76mm (3") SLUMP, 19mm (3/4") AGGREGATE, UNLESS OTHERWISE-NOTED. USE 5-7% AIR ENTRAINMENT FOR CONCRETE EXPOSED TO WEATHER ONLY.
- 4.4 ALL GROUT SHALL BE NON-SHRINK TYPE WITH A MINIMUM 28 DAYS STRENGTH OF 35.0 MPA (5000 PSI). USE 25 MM (1") GROUT UNDER ALL STEEL COLUMN BASE PLATES.
- 4.5 CONCRETE STRENGTH @ 28 DAYS TO BE:
- 4.5.1 FOUNDATIONS (FOOTINGS): 25.0 MPA (3500 PSI), UNLESS OTHERWISE NOTED.
- 4.5.2 INTERIOR SLAB ON GRADE: 25.0 MPa (3500 PSI), UNLESS OTHERWISE NOTED.
- 4.5.3 EXTERIOR SLAB ON GRADE: 32.0 MPa (4500 PSI), UNLESS OTHERWISE NOTED.
- 4.6 MINIMAL RE-BAR COVER:
- 4.6.1 CONCRETE POURED ON-GRADE = 76mm (3") COVER
- 4.6.2 CONCRETE POURED INTO FORMWORK BUT EXPOSED TO SOIL AND WEATHER FOR REBAR 15m (#4) AND UNDER = 50mm (2") COVER

5 REINFORCING STEEL

- 5.1 DEPENDING ON PROJECT LOCATION, ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615 (BARS 15m (#4) TO BE GRADE 60 WITH SUPPLEMENTARY REQUIREMENTS ON S1.
- BARS SMALLER THAN 15m (#4), TO BE GRADE 40); OR TO ACNOR GRADE G30.12 [FY = 400MPA (60,000 PSI), UNLESS OTHERWISE NOTED].
- 5.2 USE CONCRETE, PLASTIC OR STEEL SUPPORT BARS, AS PER ACI (MANUAL OF STANDARD PRACTICE FOR DETAILING CONCRETE STRUCTURES). THE RE-BAR PLACER MUST REMAIN ON-SITE DURING POURS TO VERIFY CORRECT POSITIONING OF RE-BARS. SLANT UPPER REINFORCING STEEL IN LINE WITH THE SLOPE OF THE SLAB, IF APPLICABLE.
- 5.3 BARS SHALL BE SECURELY WIRED PER LATEST EDITION OF CRSI (RECOMMENDED PRACTICE FOR PLACING REINFORCING BARS).
- 5.4 ALL REINFORCING STEEL IS TO BE KEPT CLEAN AND FREE OF MUD, SNOW, ICE, AND ANY CONTAMINANTS.
- 5.5 VERTICAL AND CONTINUOUS REBAR SHALL BE LAPPED TO DEVELOP FULL TENSILE CAPACITY OF THE BAR. FOR 15M (#4) BARS MINIMUM LAP OF 610mm (24").
- 6 EXTERIOR / INTERIOR SLAB ON GRADE
- 6.1 FOLLOW THE GEOTECHNICAL EXPERT RECOMMENDATIONS FOR PREPARATION OF SOIL BEFORE POURING THE CONCRETE. ALL GRANULAR MATERIAL SHALL BE MOISTENED IMMEDIATELY BEFORE POURING THE CONCRETE. WATER AS NEEDED. DO NOT USE A VAPOR BARRIER.
- 6.2 NO TRUCKS ARE PERMITTED ON THE CONSTRUCTION SITE (OF THE SLAB) AFTER THE FINAL COMPACTION, EITHER BEFORE OR DURING, THE POUR.
- 6.3 SLAB TO BE MINIMUM 6" THICK, REINFORCED WITH 10m (#3) @ 300mm (12") C/C REBAR PLACED IN BOTH DIRECTIONS AT MID-HEIGHT OF THE SLAB, UNLESS OTHERWISE NOTED ON PLANS. FOR ELEVATION/PLAYNUK REQUIREMENT OF THICKENED SLAB/MANIFOLD LOCATION, REFER TO ELEVATION INSTALLATION PACKAGE FOR DETAILS.
- 6.4 REFER TO CONCRETE SECTION FOR MINIMUM COMPRESSIVE STRENGTH AND AIR-ENTRAINMENT REQUIREMENTS.

- 6.5 FINISHING WILL BE MEDIUM BROOM.
- 6.6 CONTROL JOINTS (SAW-CUTS) TO BE LOCATED IN EACH DIRECTION, AT REGULAR INTERVALS, WITH A MAXIMUM DISTANCE OF 3 METERS (10 FEET). SHALL BE MINIMUM 3 MM (1/8") WIDE AND SHALL PENETRATE THE SLAB TO A MINIMUM DEPTH OF 1/3 OF THE THICKNESS OF THE SLAB. CONTROL JOINTS SHOULD BE DONE AS SOON AS POSSIBLE WITHOUT DAMAGING THE CONCRETE, BUT NO LATER THAN 18 HOURS AFTER POURING.
- 6.7 WHEN POSSIBLE AND TO AVOID SHRINKAGE CRACKING, HUMIDITY SHALL BE MAINTAINED FOR 7 DAYS DURING THE CURING PERIOD OF THE SLAB. WATER AND USE POLYETHYLENE CLOTH OR BAG. THE CONCRETE MUST DRY UNIFORMLY.
- 7 CONCRETE WORK IN COLD OR HOT WEATHER (MINIMUM REQUIREMENTS)
- 7.1 COLD WEATHER REQUIREMENTS APPLY WHEN THE MEAN AIR IS LESS THAN 5 DEGREES CELSIUS (40 DEGREES FAHRENHEIT).
- 7.2 GENERAL REQUIREMENTS FOR COLD WEATHER CONCRETE WORK SHALL BE AS PER ACI 306R-88; OR AS PER THE NBC'S LATEST REQUIREMENTS INCLUDING THE LATEST ISSUE OF CSA STANDARD CAN3-A23.1.
- 7.3 ALL SNOW AND ICE SHALL BE REMOVED FROM FORMS AND REBAR WITH STEAM AND COMPRESSED AIR BEFORE POURING. DO NOT USE DE-ICING SALT (CALCIUM CHLORIDE) OR ANY OTHER SALTS UNDER ANY CIRCUMSTANCES.
- 7.4 CONCRETE SHALL HAVE A MINIMUM TEMPERATURE OF 20 DEGREES CELSIUS AND A MAXIMUM TEMPERATURE OF 25 DEGREES CELSIUS WHILE POURING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THESE REQUIREMENTS ARE SATISFIED. ANY CONCRETE THAT DOES NOT CONFORM MUST BE REJECTED.
- 7.5 THE SURFACE OF POURED CONCRETE SHALL BE PROTECTED BY MEANS OF SUITABLE COVERINGS AND INSULATION (TO BE DETERMINED BY TEMPERATURE) DURING THE CURING PROCESS.
- 7.6 GENERAL REQUIREMENTS FOR HOT WEATHER CONCRETE WORK SHALL BE AS PER ACI 305R-99; OR AS PER LOCAL CODE REQUIREMENTS.
- 8 PIPING
- 8.1 WDS CONFIGURATION ARE SCHEMATIC AND MAY BE MOVED OR ADJUSTED ON SITE BY VORTEX CERTIFIED INSTALLER TO ADJUST FOR SITE CONDITIONS
- 8.2 ANY REQUIRED WATER METER ON THE CITY WATER MAIN SHALL BE PROVIDED BY OTHER. BACKFLOW PREVENTER AND PRESSURE REGULATOR WILL BE PROVIDED BY VORTEX.
- 8.3 ALL PIPE LINES TO FEATURES TO HAVE A 1% MINIMUM RECOMMENDED SLOPE FOR PROPER WINTERIZATION.
- 8.4 ALL LINE SIZING (FEATURE CONNECTION TABLE) ASSUMES A MAXIMUM DISTANCE OF 100 FEET BETWEEN THE WATER DISTRIBUTION MANIFOLD AND THE FURTHEST PLAY PRODUCT. DISTANCES ABOVE 100 FEET MAY REQUIRE AN INCREASE IN LINE SIZING. PLEASE CONTACT VORTEX.
- 8.5 QUANTITY AND LOCATION OF DRAINS BASED ON MAXIMUM FLOW FOR THE INDICATED PIPE DIAMETER AT 1% SLOPE. MODIFICATIONS MAY BE REQUIRED DUE TO SPECIFIC SITE CONDITIONS AND LOCAL CODE.

- 8.6 PRESSURE LINES ARE RECOMMENDED TO BE SCHEDULE 80 PVC OR PEX, AND NON-PRESSURE LINES TO BE SCHEDULE 40, UNLESS OTHERWISE REQUESTED BY LOCAL CODE.
- 8.7 DRAINAGE LINES ARE RECOMMENDED TO BE SDR 35, UNLESS OTHERWISE REQUESTED BY LOCAL CODE.
- 8.8 PIPING SHOULD BE INSPECTED AFTER TRANSPORTATION FOR CUTS, SCRATCHES, GOUGES OR SPLITS; DAMAGED SECTIONS MUST BE DISCARDED OR CUT OUT.
- 8.9 PIPE SHALL BE INSTALLED BELOW THE FROST LEVEL NOT LESS THAN 12" (ASTM F-645) UNLESS OTHERWISE REQUESTED BY LOCAL CODE.
- 8.10 PIPE INSTALLATION MINIMUM COVER SHOULD BE EVALUATED ACCORDING TO ASTM D-2774, UNLESS OTHERWISE REQUESTED BY LOCAL CODE.
- 8.11 SPECIAL CONSIDERATIONS SHOULD BE TAKEN FOR THERMAL CONDITIONS, EXPANSION AND CONTRACTIONS DUE TO TEMPERATURE SHOULD BE EVALUATED BEFORE THE INSTALLATION BY THE CONTRACTOR.
- 8.12 VALVE NUMBER 1 IS LOCATED TO THE LEFT OF THE MANIFOLD FACING THE SOLENOID.
- 8.13 MINIMUM 50 PSI REQUIRED AT THE INLET OF THE BACKFLOW PREVENTER AND PRESSURE REGULATING DEVICE.
- 8.14 MAXIMUM FLOW CAPACITY OF MANIFOLD IS 72 GPM.
- 8.15 TOTAL FLOW OF FEATURE IS 112.5 GPM.
- 8.16 FACTORY MAXIMUM SEQUENCING FLOW IS 58 GPM ACTUAL FLOW MAY VARY DUE TO SITE CONDITIONS.

9 ELECTRICAL

- 9.1 EQUIPMENT BONDING; FEATURES SHALL BE CONNECTED TO AN EQUIPOTENTIAL BONDING GRID WITH A SOLID RIGID COPPER CONDUCTOR, THE MINIMUM SIZE OF BONDING CONDUCTORS NOT BE SMALLER THAN #6 AMERICAN WIRE GAUGE (AWG) (16mm²) COPPER. BOND TO ALL METALLIC PARTS LOCATED IN THE SPLASHPAD/POOL AND TO THE REBAR. TO RUN CONTINUOUS TO THE WATER PUMP AND ELECTRICAL SUPPLY PANELS. SEE ELEVATION INSTALLATION DRAWING FOR BONDING DETAILS (BY OTHER).
- 9.2 GRID STRUCTURE; THE EQUIPOTENTIAL BONDING GRID SHALL COVER THE CONTOUR OF THE WATER BODY AREA AND ANY DECK EXTENDING 3FT (1m). HORIZONTALLY FROM THE INSIDE WALLS OF THE SPLASHPAD/WATER BODY. THE EQUIPOTENTIAL BONDING GRID SHALL BE ARRANGED IN A 12 IN (300mm). BY 12 IN (300mm). NETWORK OF CONDUCTORS IN A UNIFORMLY SPACED PERPENDICULAR GRID PATTERN WITH TOLERANCE OF 4 IN (100mm). A J-JUNCTION BOND CLAMP (DIRECT BURIAL CERTIFIED) CLAMPED TO A REBAR WITH WIRE LOOPED THROUGH CONNECTOR AND CLAMPED TO STEEL AND TO THE SPLASHPAD/POOL PUMP WATER.
- 9.3 ALL ELECTRICAL EQUIPMENT SHALL BE GROUNDED; THE FOLLOWING EQUIPMENT SHALL BE GROUNDED. ALL ELECTRICAL EQUIPMENT LOCATED WITHIN 5FT (1.5 m) OF THE INSIDE WALL OF THE SPECIFIED BODY OF WATER." THIS EQUIPMENT ALSO INCLUDES (BUT NOT LIMITED TO): FEATURES, ELEVATIONS, DRAIN, REBAR, WATER INLET, SKIMMER, LADDER, SLIDES, DIVING STRUCTURE, UNDERWATER LIGHTING, JUNCTION BOXES, AND WATER CIRCULATING/HEATING EQUIPMENT.
- ALL BONDING AND GROUNDING MUST COMPLY WITH NEC, CEC, AND LOCAL CODES.

- 9.4 ALTERNATE MEANS; WHERE STRUCTURAL REINFORCING STEEL IS NOT AVAILABLE OR IS ENCAPSULATED IN A NONCONDUCTIVE COMPOUND, A COPPER CONDUCTOR(S) SHALL BE UTILIZED WHERE THE FOLLOWING REQUIREMENTS ARE MET: (1) AT LEAST ONE MINIMUM 6 AWG BARE SOLID COPPER CONDUCTOR SHALL BE PROVIDED. (2) THE CONDUCTORS SHALL FOLLOW THE CONTOUR OF THE PERIMETER SURFACE. (3) ONLY LISTED SPLICES SHALL BE PERMITTED. (4) THE REQUIRED CONDUCTOR SHALL BE 450 TO 18 TO 24 IN (600mm) FROM THE INSIDE WALLS OF THE POOL. (5) THE REQUIRED CONDUCTOR SHALL BE SECURED WITHIN OR UNDER THE PERIMETER SURFACE (4 IN TO 6 IN (100mm TO 150mm). BELOW THE SUBGRADE.
- 9.5 SPLASHPAD/POOL WATER; WHERE NONE OF THE BONDED PARTS IS IN DIRECT CONNECTION WITH THE POOL WATER, THE POOL WATER SHALL BE IN DIRECT CONTACT WITH AN APPROVED CORROSION-RESISTANT CONDUCTIVE SURFACE THAT EXPOSED NOT LESS THAN 9 IN.2 (5800mm²) OF SURFACE AREA TO THE POOL WATER AT ALL TIMES. THE CONDUCTIVE SURFACE SHALL BE LOCATED WHERE IT IS NOT EXPOSED TO PHYSICAL DAMAGE OR DISLODGE MENT DURING USUAL POOL ACTIVITIES, AND IT SHALL BE BONDED IN ACCORDANCE WITH NEC, CEC, AND LOCAL CODES.

- 9.6
- IT IS THE CUSTOMER/INSTALLER RESPONSIBILITY 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. CONTROLLER AND/OR CONTROL PANEL NOT TO BE INSTALLED IN DIRECT SUNLIGHT.

- 9.7 WIRING FROM THE CONTROLLER TO EACH ACTIVATOR SHALL BE #22 AWG. A TOTAL OF TWO (2) CONDUCTORS PER ACTIVATOR.CABLE LENGTH UP TO 300' (100m), PROVIDED BY OTHER.
- 9.8 ALL CONNECTIONS TO THE CONTROLLER AND OTHER VORTEX ELECTRICAL PANEL SHALL BE PERFORMED USING AN APPROVED NEMA 4X CONNECTOR.
- 9.10 WIRE FROM MAIN POWER TO VORTEX PANEL TO BE DETERMINED BY OTHERS RESPECTING THE LOCAL CODE.
- 9.11 MAINTAIN A MINIMUM CLEARANCE ZONE OF 36" IN FRONT OF ELECTRICAL PANEL, UNLESS OTHERWISE REQUESTED BY LOCAL CODE.
- 9.12 AS PER ELECTRICAL CONSTRUCTION AND SAFETY CODES: CONTROLLER AND ANY OTHER ELECTRICAL ENCLOSURES MUST BE HARD-WIRED TO A GROUND FAULT CIRCUIT INTERRUPTER (GFCI) FROM THE INPUT POWER SOURCE.
- 9.13 ALL ELECTRICAL WORK SHOULD BE PERFORMED BY A LICENCE ELECTRICIAN IN ACCORDANCE TO LOCAL ELECTRICAL CONSTRUCTION AND SAFETY CODES.
- 9.14 THE MAESTROPRO CONTROL PANEL IS POWERED THROUGH A MAESTROPRO POWER BOX.
- 9.15 THE POWER CABLE TO MAESTROPRO POWER BOX IS SUPPLIED BY OTHER.
- 9.16 THE MAESTROPRO CONTROL PANEL INTEGRATES 24 DIGITAL OUTPUTS WITH 24 VAC AND 12 DIGITAL INPUTS.
- 9.17 FOR REMOTE ACCESS ABILITY, A HARD CONNECTION TO AN EXISTING NETWORK IS REQUIRED USING A CAT 5 CABLE OR A CELLULAR NANO-SIM CARD WITH DATA-PLAN.



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Dover, Delaware
United States 19901
Phone: +1 (877) 586-7839

STAMP

Abbreviations		
A	Architectural	
C	Civil Work	
P	Plumbing Layout	
PD	Plumbing Details	
E	Electrical Layout	
ED	Electrical Details	
FT	Feature Drawings	

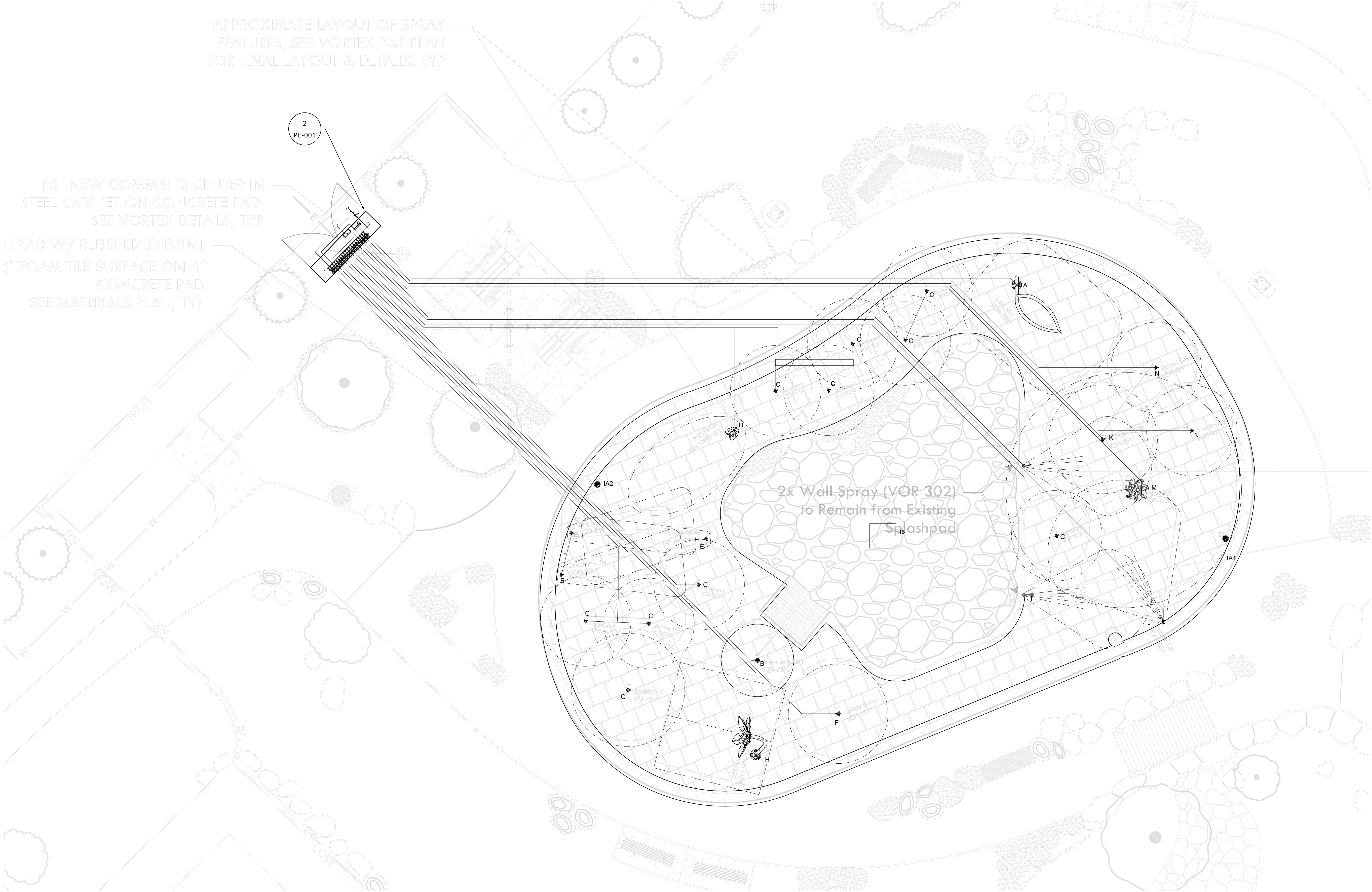
Joslin Spray Park

APPROXIMATE LAYOUT OF SPRAY
FEATURES, SEE VORTEX P&E PLAN
FOR FINAL LAYOUT & DETAILS, TYP

F&I NEW COMMAND CENTER IN
STEEL CABINET ON CONCRETE PAD.
SEE VORTEX DETAILS, TYP

E PAD W/ RUBBERIZED PAINT
3/8" FOAM TILE SURFACE ON 4" CONCRETE PAD
SEE MATERIALS PLAN, TYP

2
PE-001



1
A-002

SITE LAYOUT



VORTEX USA Inc.
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Dover, Delaware
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Joslin Spray Park

Project Location
Providence, RI

Project Number
43840

Version
VC

30/April/2025	Issued for Approval	00	BR
Date	Revision Description	No.	By

Drawing Title

Site Layout

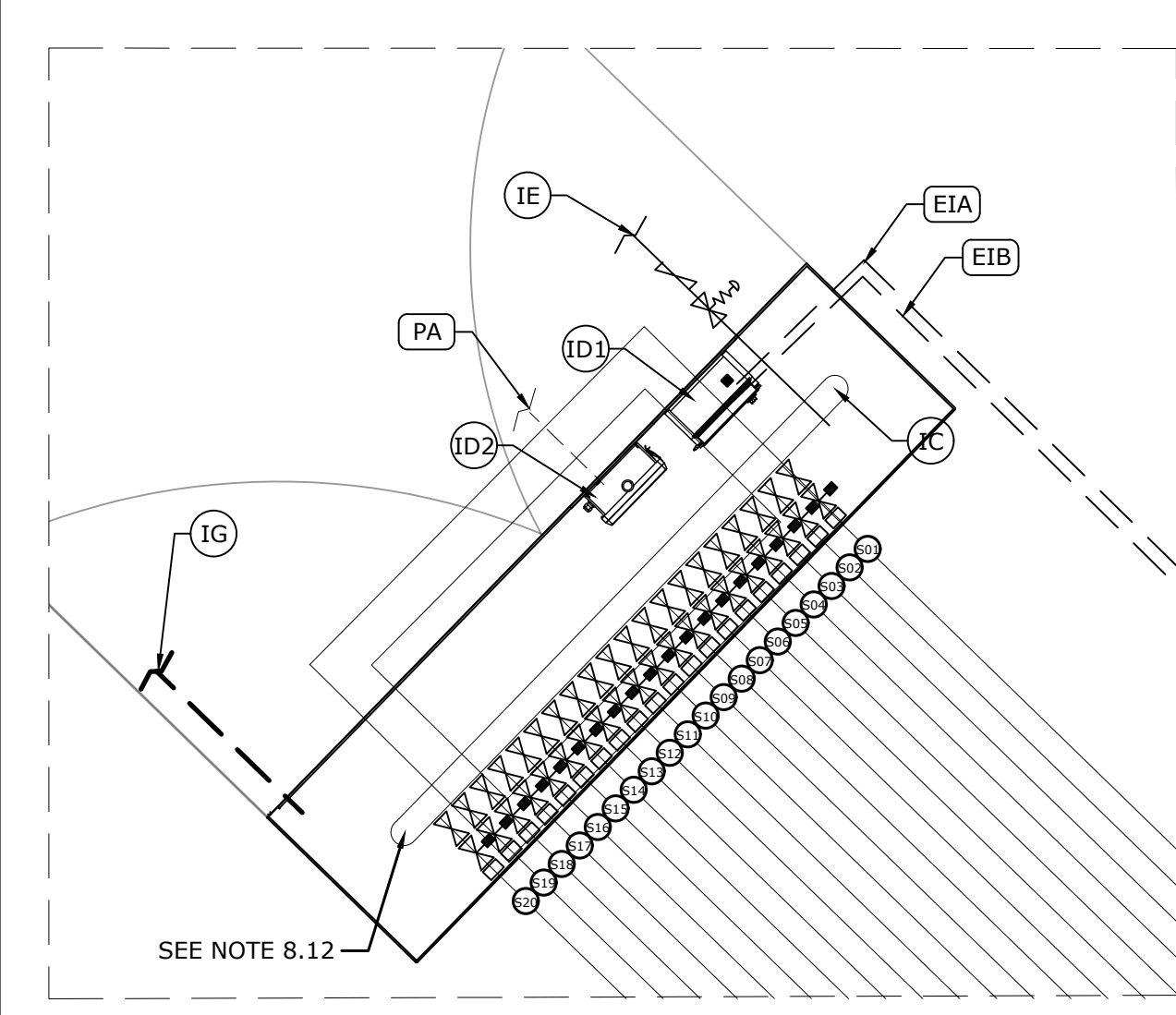
Drawn by
BR




Verified by
DS

Scale
3/16"=1'-0"

Date
30/April/2025

Page #
A-002



Product Legend		
Product Ref.	Product	Qty
IA1,IA2	Activator N°4 VOR 0622	2
IB	Drain (By Other)	1
IC	Water Distribution System ECCC 2.0 Cabinet Command Center	1
ID1	MaestroPRO Controller 24 out/ 12 in VOR-33907.3200	1
ID2	MaestroPRO Power Box VOR-33907.3200	1
IE	2" City Water Line (by Other)	1
IF	6" Drain to Municipal Drain (by Other)	1
IG	4" TYP Drain Line With Strainer Connected to Drainage System. Ensure P-Trap is Below Frost Line to Prevent Freezing. (by Other)	1
	2" Pressure Regulator (by Vortex)	1
	2" Backflow Preventer (by Vortex)	1
	1" Solenoid Valve with Ball Valve & Union (by Vortex)	20

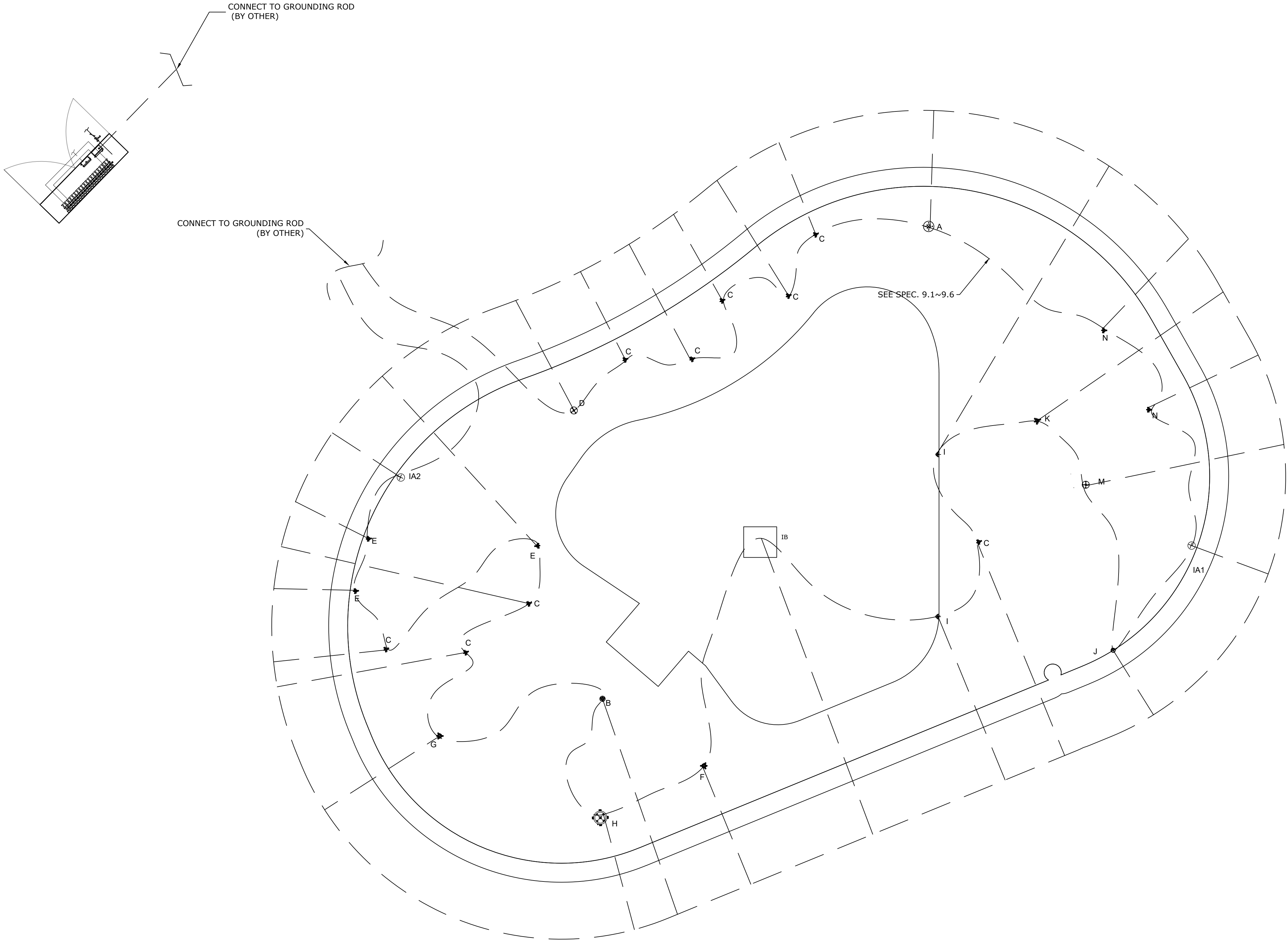
Joslin Spray Park

Page #
PE-001

WATER LINE _____
DRAIN LINE - - - - -
ELECTRICAL LINE — — — — —

SCALE: 3/4"=1'-0"

REF	PRODUCT	QTY
A	Leaf N°2 VOR 7657	1
B	Water Jelly N°1 VOR 7010	1
C	Jet Stream N°1 VOR 7512 (Existing)	9
D	Tall Grass N°2 VOR 7264	1
E	Directional Jet N°1 VOR 0305 (Existing)	3
F	Spidey Spray N°2 VOR 7674 (Existing)	1
G	Sparkle N°1 VOR 0324	1
H	Lilium Flower VOR 7273	1
I	Wall Spray VOR 0302 (Existing)	2
J	Rooster Tail VOR 0303	1
K	Fountain Spray N°1 VOR 7513 (Existing)	1
IA1,IA2	Activator N°4 VOR 0622	2
M	Hello N°2 VOR 7237	1
N	Geyser N°1 VOR 0301 (Existing)	2



1

E-003

BONDING LAYOUT

1. REFER TO SPECS ON COVER PAGE
2. COORDINATE THIS DRAWING WITH
ARCHITECTURAL, CIVIL, PLUMBING & ELECTRICAL.

BONDING WIRE -----



VORTEX USA Inc.
3500 South Dupont Highway, Suite EP-101
Dover, Delaware
United States 19901
Phone: +1 (877) 586-7839

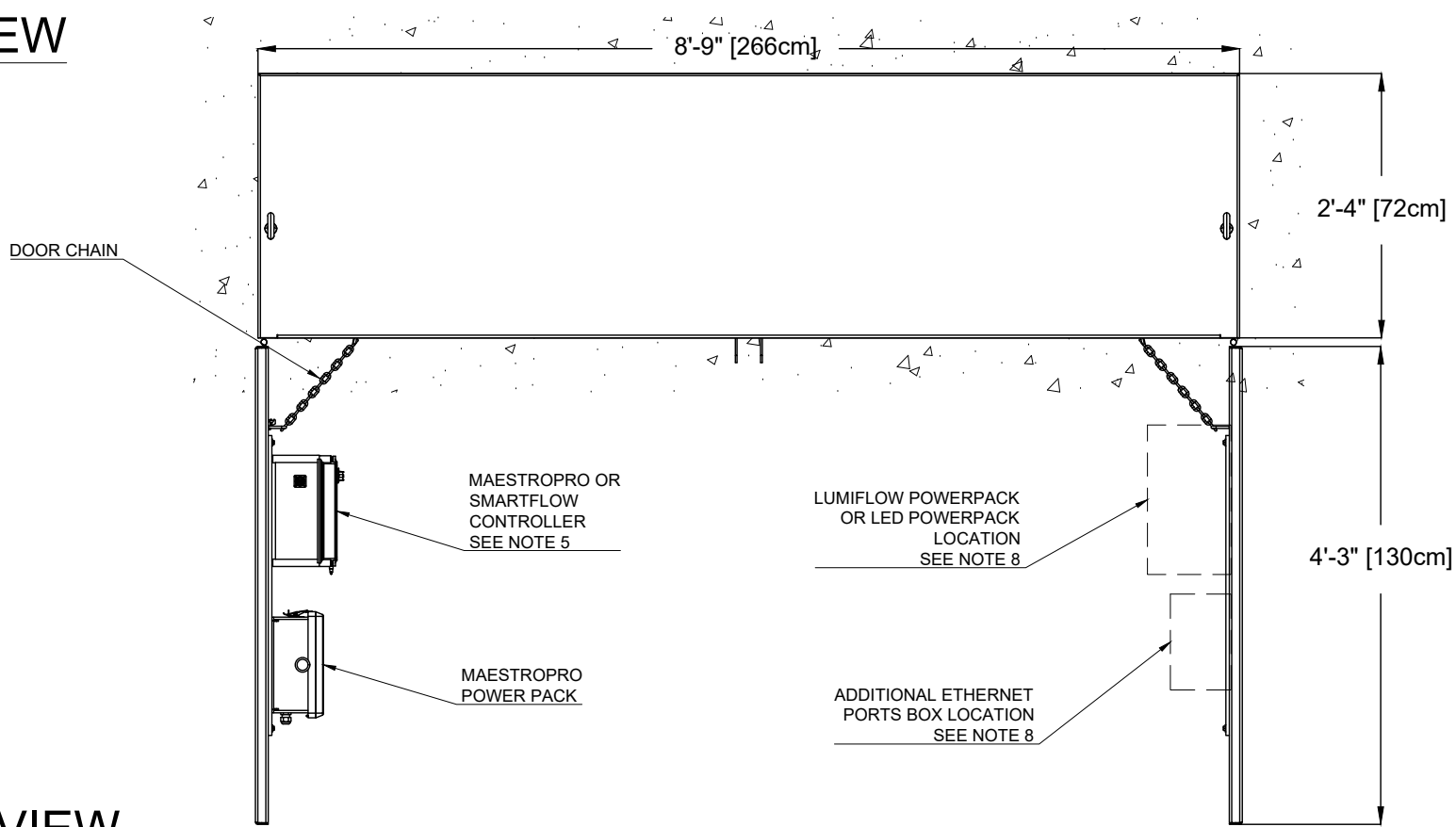
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Joslin Spray Park

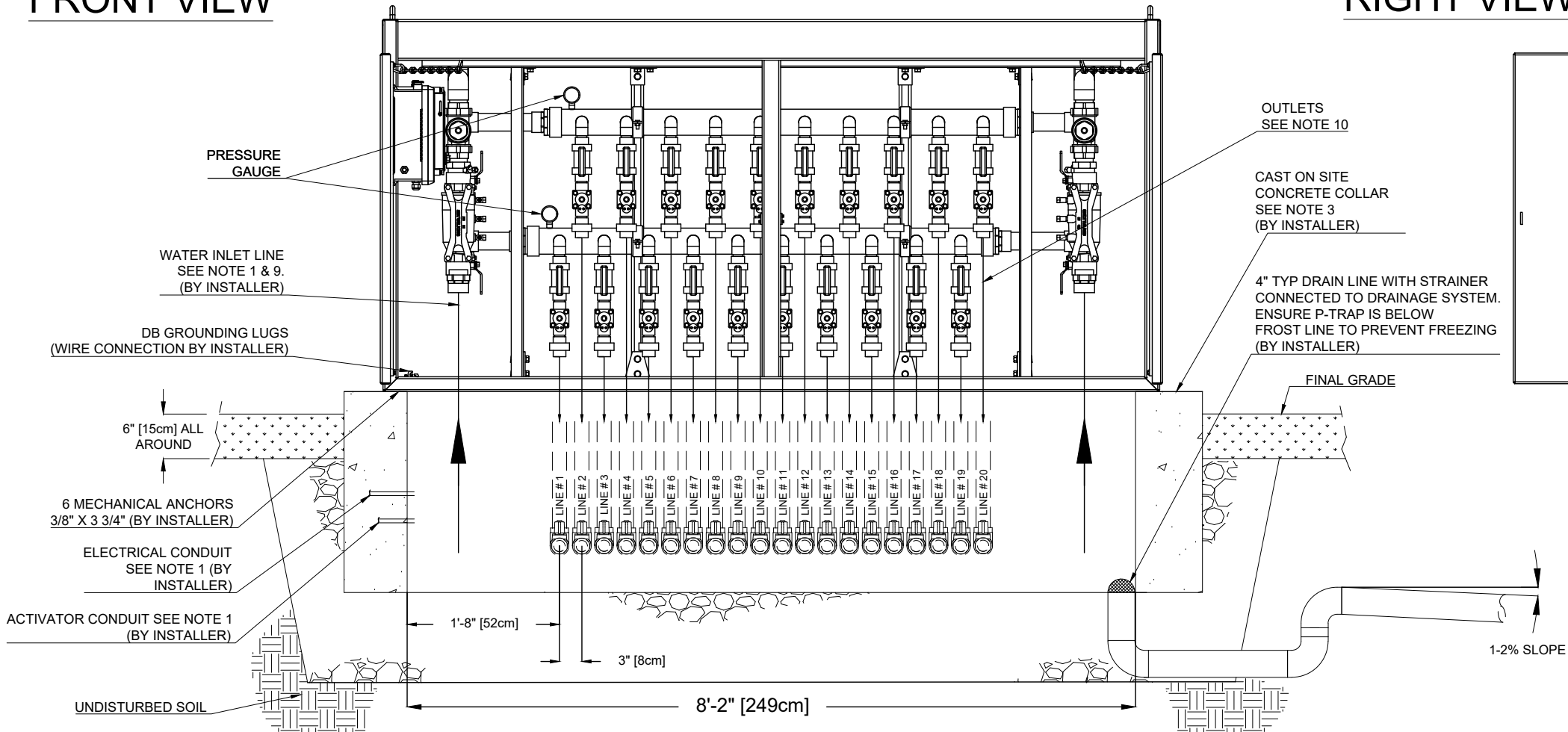
Project Location			
Providence, RI			
Project Number			
43840			
Version			
VC			
30/April/2025	Issued for Approval	00	BR
Date	Revision Description	No.	By
Drawing Title			
Bonding Layout			
Drawn by		Verified by	
BR		DS	
Scale		Date	
3/16"=1'-0"		30/April/2025	
Page #			
E-003			

THESE DRAWINGS PROVIDE A GENERIC OVERVIEW OF THE INSTALLATION. THEY ARE NOT PROJECT SPECIFIC OR REFLECT ANYCUSTOMIZATION UNLESS NOTED. PLEASE CONTACT VORTEX AQUATIC STRUCTURES INTERNATIONAL FOR MORE DETAILS.

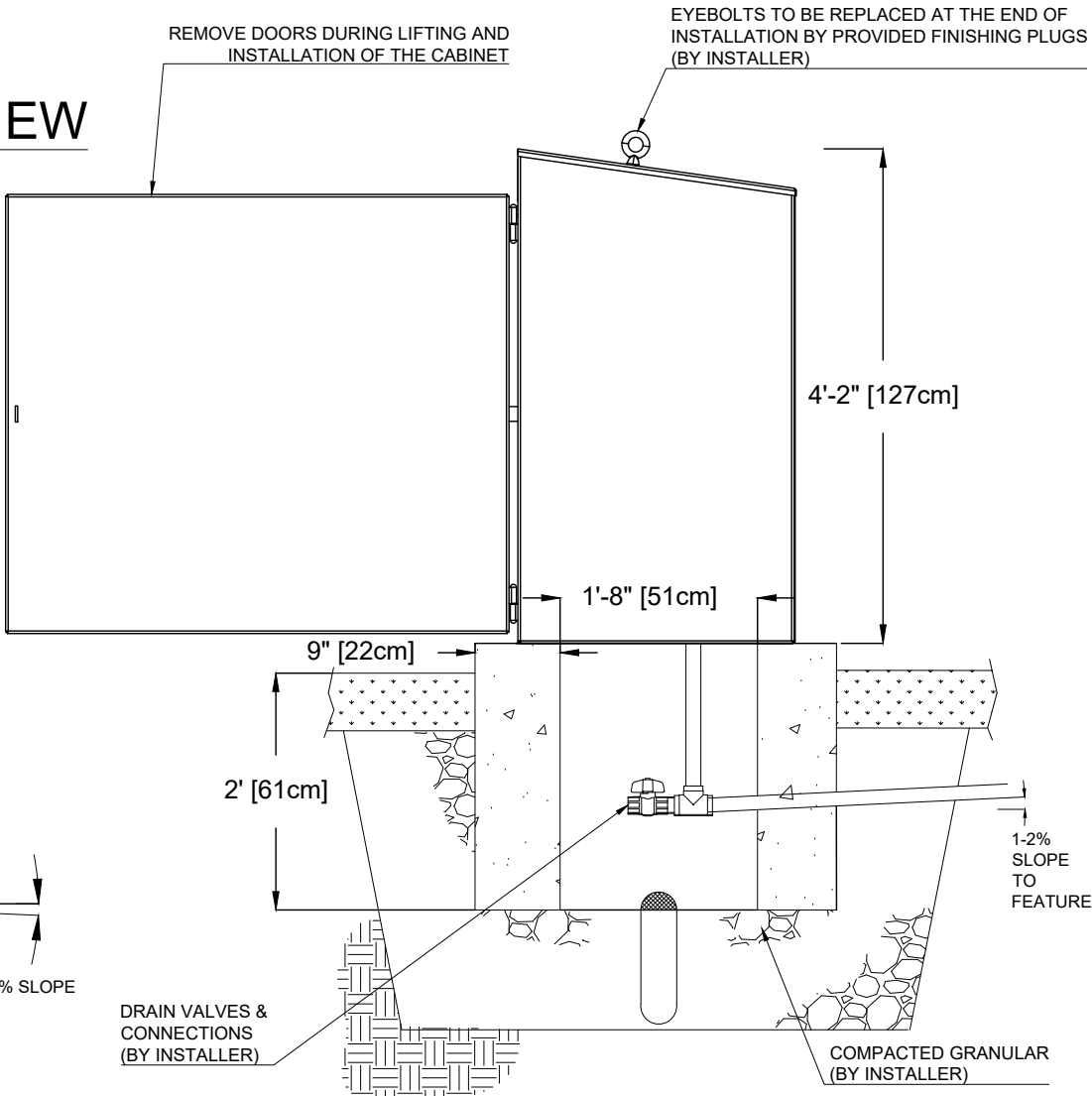
TOP VIEW



FRONT VIEW



RIGHT VIEW



- NOTES:
1. REFER TO P&E DRAWINGS FOR PIPE SIZES AND ELECTRICAL CONNECTIONS
 2. REFER TO PRODUCT SPECIFICATION DOCUMENT FOR ADDITIONAL INFORMATION
 3. CONCRETE SURFACE,VERIFY LOCAL CODES FOR TYPE, THICKNESS & REINFORCEMENTS REQUIREMENTS.
 4. "BY INSTALLER" MAY REFER TO SERVICE PROVIDERS OTHER THAN EQUIPMENT MANUFACTURER. PLEASE REFER TO THE PROJECT SCOPE OF WORK FOR DETAILS OF RESPONSIBILITIES.
 5. IF THE CONTROLLER IS REMOTE LOCATED, CONDUCTORS # 18 AWG AT 10' LONG ARE PROVIDED BY VORTEX. FOR QUANTITY SEE PIPING AND ELECTRICAL SCHEMATIC DETAIL. GROUNDING OF J-BOX DONE BY INSTALLER.
 6. DIRECTION OF FLOW FOR PLUMBING SHALL BE LABELED USING DIRECTIONAL SYMBOLS.
 7. VALVES AND PLUMBING LINES SHALL BE LABELED WITH DESCRIPTION OF SOURCE OR DESTINATION.
 8. OPTIONAL EQUIPMENTS
 9. INLETS CAN BE CONFIGURED TO;
 - 1X2" INLET (WITH OR WITHOUT 2" BFP / PR)
 - 2X2" INLET (WITH OR WITHOUT 2" BFP / PR)
 - 1X3" INLET (WITHOUT 3" BFP / PR)
 - 2X3" INLET (WITHOUT 3" BFP / PR, ONLY AVAILABLE AS CUSTOM UPON CUSTOMER'S REQUEST)
 10. OUTLETS CAN BE A COMBINATION UP TO 20 OF:
 - 1" GATE VALVE
 - 1" BRASS OR PVC SOLENOID VALVE WITH OR WITHOUT BALL VALVE
 - 1" FAST ACTING SOLENOID VALVE
 11. SEE PRODUCT INSTALLATION MANUAL FOR INSTALLATION TIPS

SmartFlow Command Center

PRODUCT NAME: CABINET 11-20 VALVES

DATE: 2022-01-20

SHEET NO: 1/1

11"x17" SHEET SIZE

