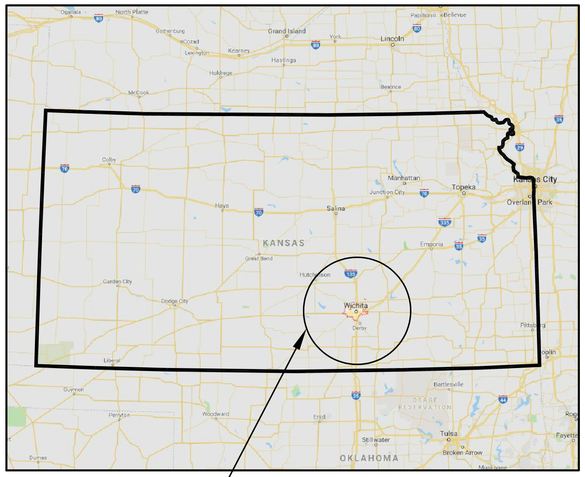
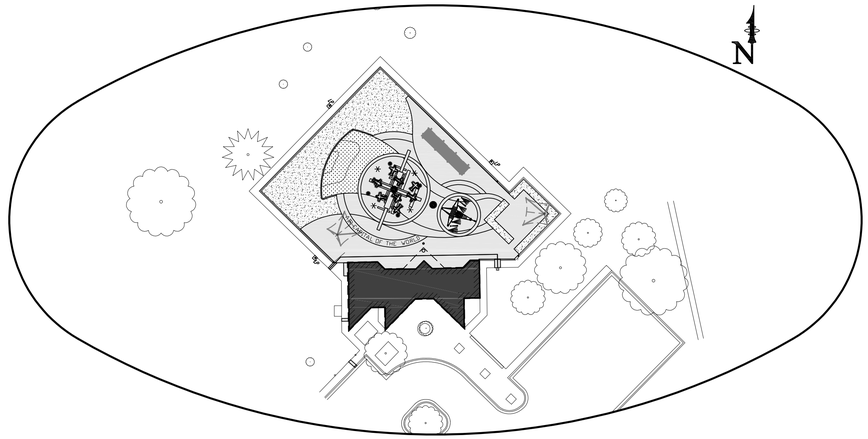
WICHITA, KANSAS
Spray Ground
BOSTON PARK
2020

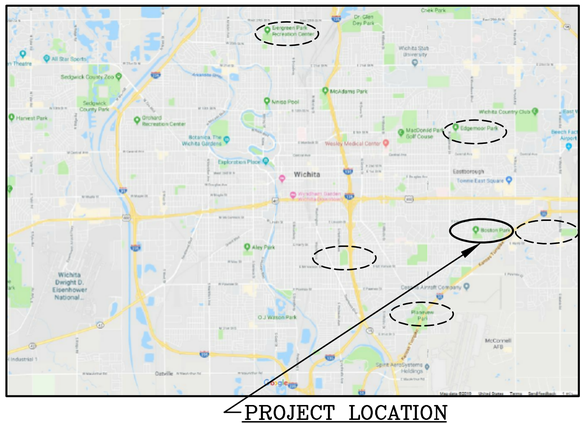
CITY OF WICHITA
Project Number 482-11014
OCA Number 796064



PROJECT AREA



SPRAY GROUND LAYOUT



PROJECT LOCATION
6655 East Zimmerly Street
Wichita, KS 67207

SHEET INDEX

AQUATICS
Waters Edge Aquatic Design
11205 West 79th Street
Lenexa, KS 66214
Tel (913) 438-4338
www.WeDesignPools.com

SITE-CIVIL
PEC - Professional Engineering Consultants
303 South Topeka
Wichita, KS 67202
Tel (316) 262-2691
www.PEC1.com

LANDSCAPE ARCHITECT
Landworks Studio
102 South Cherry Street, 2nd Floor
Olathe, KS 66061
Tel (913) 780-6707
www.LandworksStudio.com

BUILDING ARCHITECT
Urban Prairie Architectural Collaborative, P.C.
4523 Mercier
Kansas City, MO 64111
Tel (816) 304-7416
www.UrbanPrairieKC.com

MECHANICAL-ELECTRICAL-PLUMBING
Hoss & Brown Engineers, Inc.
11205 West 79th Street
Lenexa, KS 66214
Tel (913) 362-9090
www.H-BE.com

DATE: 02-21-20 | ISSUE: CONSTRUCTION DOCUMENTS | WEAD JOB #: 18-512

GRADING AND STORM WATER POLLUTION PREVENTION NOTES

1. Contractor shall be responsible for utilizing best management practices for retaining all debris and silt on site, and to take measures to minimize erosion and keep from migrating off site.

2. Suggested location for sediment fence and/or erosion control fabric for disturbed areas. Fence shall be located at all down hill slopes of disturbed areas.

   a. Fence shall be cleaned when its effectiveness has been diminished to one-third of its capacity.

   b. Provide erosion control measures on all slopes of excavations and stock piles throughout construction.

   c. Maintain maximum slope of 3:1 except for below grade excavations.

3. Disturbed area: 0.50 acres

   a. Qualified personnel shall inspect disturbed areas of the construction site that have not been finally stabilized at least once every 7 calendar days and within 24 hours of the end of a storm event that is ½" or greater.

   b. All building material wastes shall be removed from the site.

   c. Off site vehicle tracking of sediment wastes shall be minimized and cleaned up within a 24-hr period.

POOL DEMO NOTES

Pool Floor Removal. It is acceptable to remove the existing and/or wall as required for new piping, provided that the subsequent subgrade is prepared as required. Saw cutting will not be required for the drainage holes in the pool floors.

Pool Walls. It is acceptable to remove the entire pool wall as required for new piping, provided that the subsequent subgrade is prepared as required.

POOL AREA KEY NOTES – EXISTING DEMOLITION

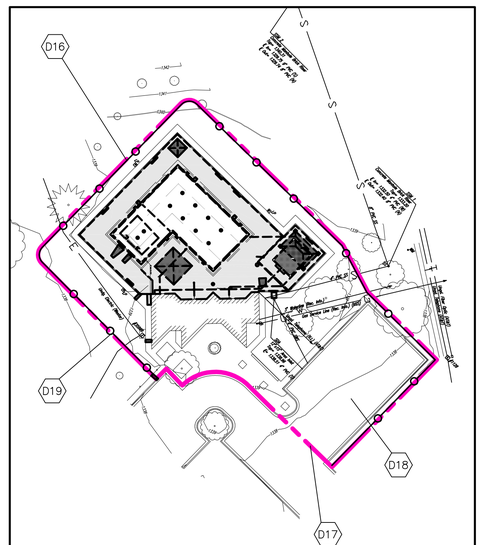
Contractor shall verify all existing dimensions and report any discrepancies

EXISTING ITEMS

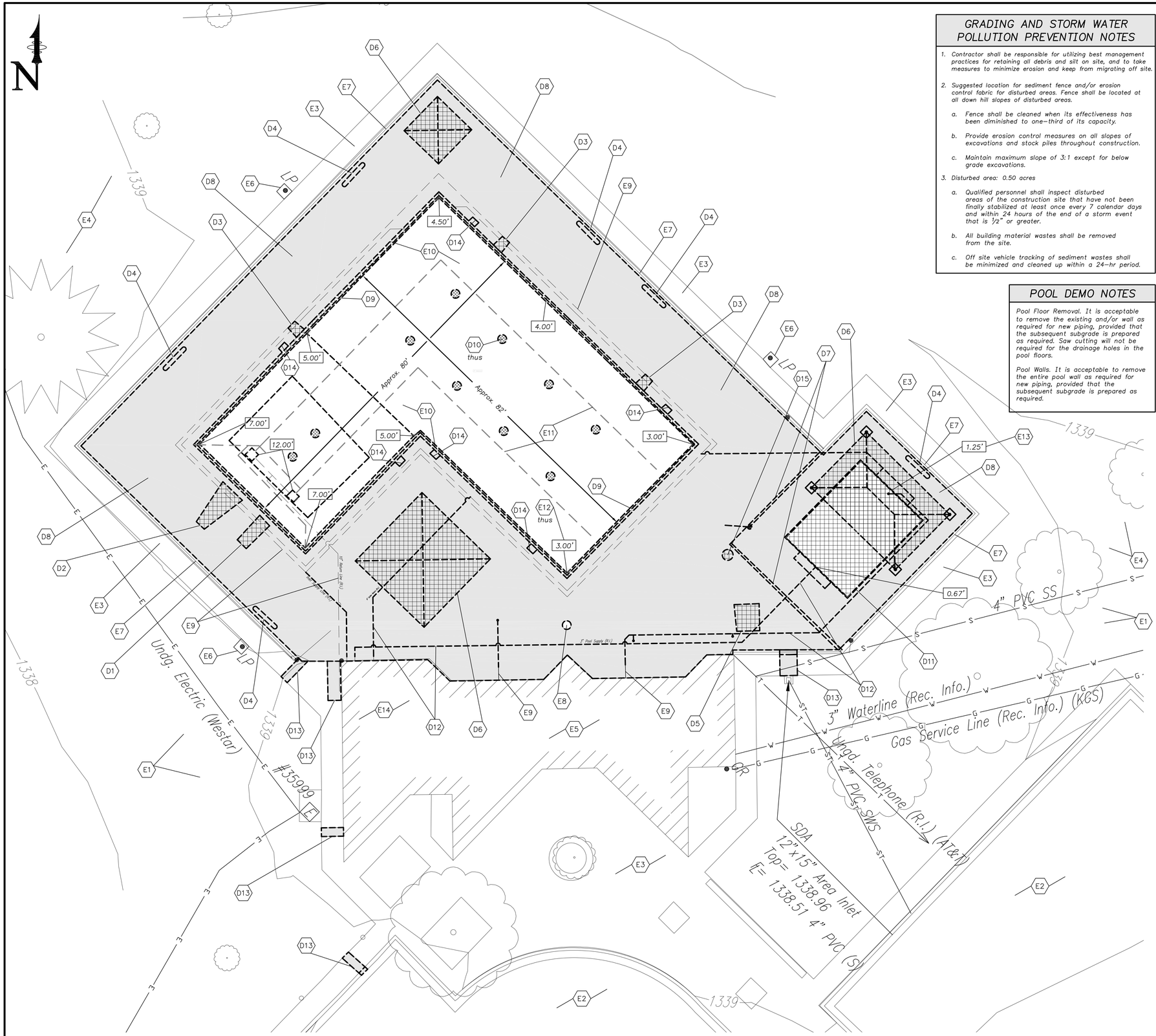
- E1 Existing utilities shall be protected
- E2 Existing parking lot shall be protected
- E3 Existing sidewalk shall be protected
- E4 Existing trees shall be protected
- E5 Existing bathhouse shall be protected
- E6 Existing light pole shall be protected
- E7 Existing 6'-0" tall chain link fence and 12" wide concrete strip of pool deck shall be protected
- E8 Existing building column shall be protected
- E9 Existing pool piping may remain if it does not interfere with new construction ~ Exposed open ends shall be capped
- E10 Existing pool floor & walls shall be protected ~ See Detail A-SP-PM2
- E11 Existing underdrain pipe shall be protected
- E12 Existing approximate pool water depths (6" freeboard)
- E13 Existing approximate wading pool water depths (6" freeboard)
- E14 Existing Filter Area ~ See Sheet SP-F1

DEMOLITION ITEMS

- D1 Remove existing 1 meter diving stand, protect and deliver to Owner
- D2 Remove existing 3 meter diving stand, protect and deliver to Owner
- D3 Remove existing lifeguard chair
- D4 Remove existing bench, protect and deliver to Owner
- D5 Remove existing table, protect and deliver to Owner
- D6 Remove existing sunshade, protect and deliver to Owner
- D7 Remove existing 4'-0" tall chain link fence
- D8 Remove existing pool deck ~ See Detail A-SP-PM2
- D9 Remove existing portions of pool wall ~ See Detail A-SP-PM2
- D10 Remove existing portions of pool floor to allow for drainage ~ See Detail A-SP-PM2
- D11 Remove existing wading pool
- D12 Remove existing piping as required for new construction ~ Exposed open ends shall be capped
- D13 Remove existing sidewalk and curb/gutter to allow for piping
- D14 Remove existing grab rails, protect and deliver to Owner
- D15 Remove existing trash can, protect and deliver to Owner
- D16 Construction limits
- D17 Construction access
- D18 Construction staging
- D19 Suggested silt fence location



B EXISTING POOL DEMO PLAN
Scale: 1"=60'



A EXISTING POOL DEMO PLAN
Scale: 3/32"=1'-0"

waters edge AQUATIC DESIGN
11205 W. 79th St.
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H&B HOSS & BROWN ENGINEERS

WICHITA, KANSAS
Spray Ground
BOSTON PARK

CITY OF WICHITA

Seal: JEFF A. BARTLEY LICENSED 15116 KANSAS PROFESSIONAL ENGINEER

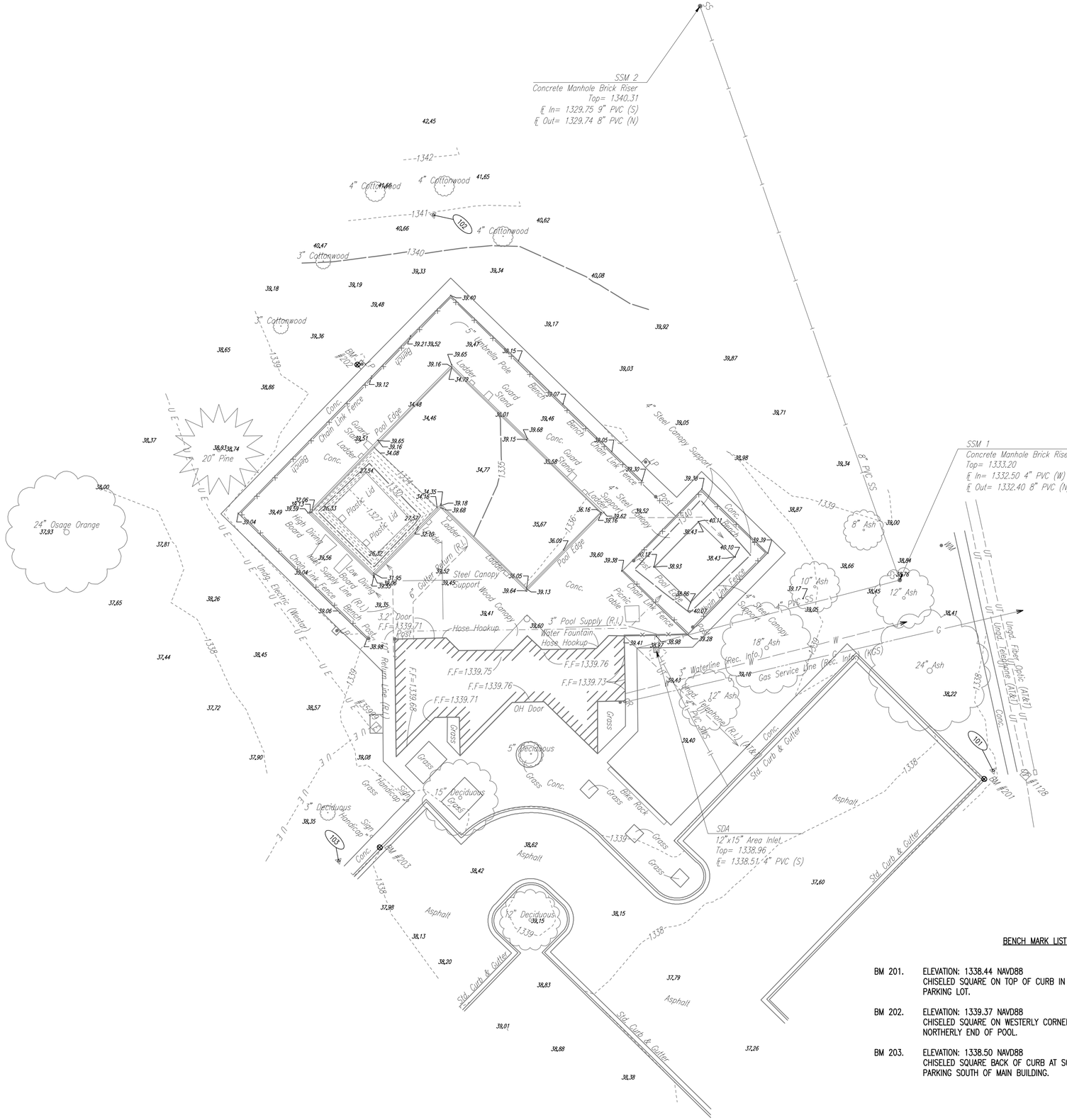
Jeff Bartley-ENGINEER
LICENSE #15116

Date: 02-21-20	Job #: 18-512
Drawn: SRS	Checked: JAB

Issue: CONSTRUCTION DOCUMENTS

EXISTING POOL DEMO PLAN

SP-D1



0 20 40

SCALE IN FEET

LEGEND

- Coniferous Tree
- Deciduous Tree
- BM — Benchmark
- LP — Light Pole
- Electric Box
- Post — Gate Post
- GR — Gas Riser Pipe
- Monument
- SS — Sanitary Sewer Manhole
- Telephone Box
- FH — Fire Hydrant
- WM — Water Meter
- WV — Water Valve
- 39.60 — Existing Spot Elevation
- 1340 — Major Contour
- 1339 — Minor Contour
- Flowline
- U E — U E — Buried Electric
- Sanitary Sewer
- Storm Sewer
- UT — UT — Buried Telephone
- W — Buried Waterline
- G — Buried Gas Line
- Fence Types

BENCH MARK LIST ⊕ BM #201

BM 201. ELEVATION: 1338.44 NAVD88
CHISELED SQUARE ON TOP OF CURB IN EASTERLY CORNER OF POOL PARKING LOT.

BM 202. ELEVATION: 1339.37 NAVD88
CHISELED SQUARE ON WESTERLY CORNER OF LIGHT POLE BASE ON NORTHERLY END OF POOL.

BM 203. ELEVATION: 1338.50 NAVD88
CHISELED SQUARE BACK OF CURB AT SOUTHERLY TRANSITION HANDICAP PARKING SOUTH OF MAIN BUILDING.

CONTROL POINTS (101)

CP-101. N: 1,678,841.0710, E: 1,671,882.9610
#4 BAR W/ CP CAP.
5.05' W-SW TO CHISLED SQUARE AT E CORNER OF POOL PARKING LOT.
13.20' SE TO TELEPHONE BOX #1128.
20' E TO W BACK OF CURB.

CP-102. N: 1,679,060.1720, E: 1,671,662.3770
#4 BAR W/ CP CAP.
32.90' S TO FENCE CORNER AT N END OF POOL.
66.10' W-SW TO CHISELED SQUARE ON LIGHT BASE.
29.30' SE TO 4" COTTONWOOD.

CP-103. N: 1,678,805.4890, E: 1,671,625.0280
#4 BAR W/ CP CAP.
3.00' SE TO BACK OF SIDEWALK RUNNING NE-SW.
16.20' E-NE TO HANDICAP SIGN BASE.
52.00' N TO ELECTRIC BOX PAD #35999.

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WICHITA, KANSAS
Spray Ground
BOSTON PARK

CITY OF WICHITA

Seal:

Name-ENGINEER
LICENSE #####
Date: 10-16-19 Job #: 18-512
Drawn: Checked:
Issue: PERMIT REVIEW

EXISTING CONDITIONS

SV-01

Saved 08-13-2019 7:47:25 AM by RFT
Plot Scale 1:245.2402 10-16-2019 11:27:14 AM by RFT
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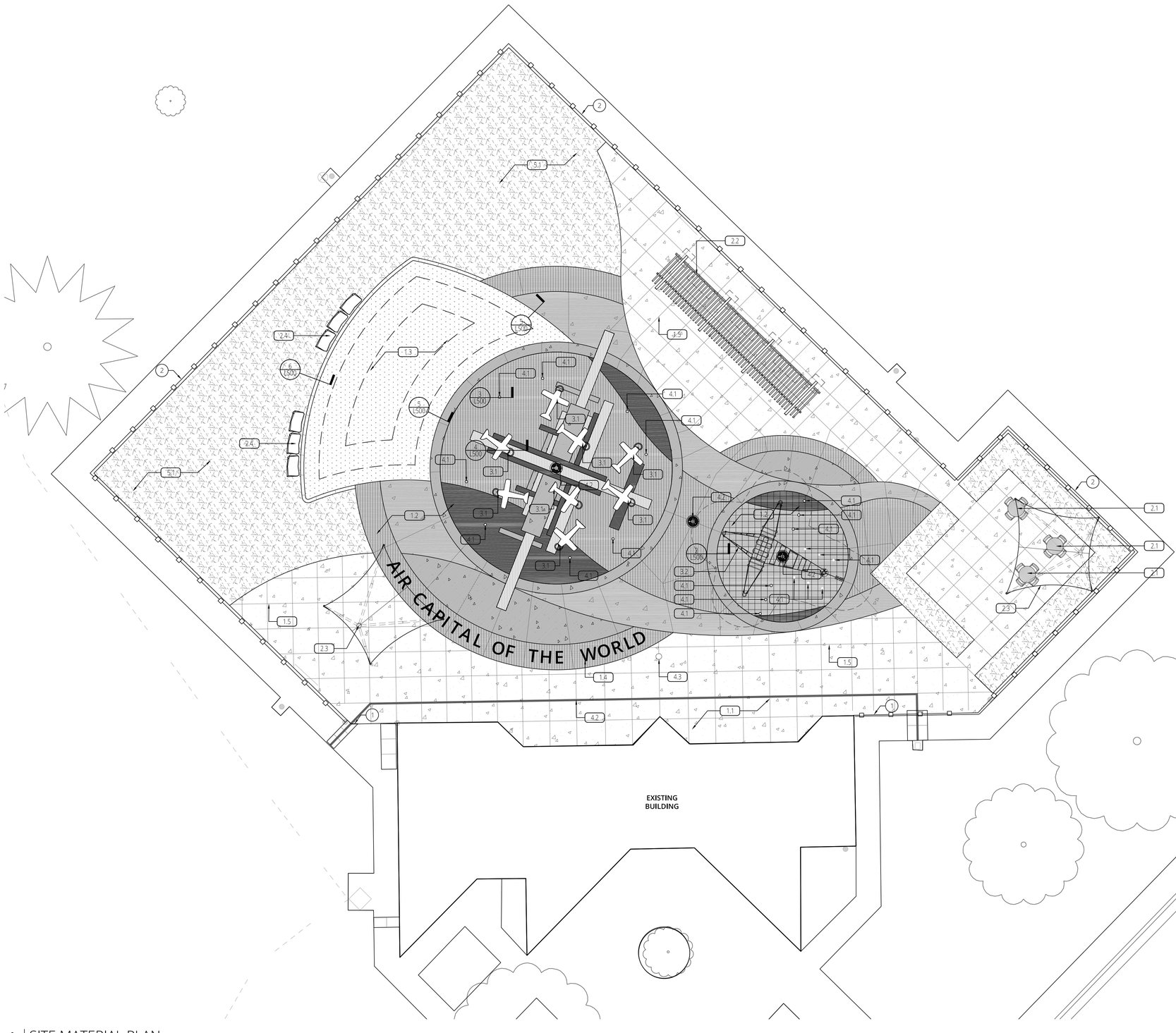

1 SITE MATERIAL PLAN
SCALE = 1" = 10'

GRAPHIC SCALE 10'

NORTH

GRAPHIC LEGEND

- CITY STANDARD CONCRETE PAVEMENT
- COLORED CONCRETE - DAVIS COLORS - WESTERN GOLD 5844
- COLORED CONCRETE - DAVIS COLORS - EUROBLUE 418
- COLORED CONCRETE - DAVIS COLORS - PEWTER 860
- COLORED CONCRETE - DAVIS COLORS - SILVERSMOKE 8084
- COLORED CONCRETE - DAVIS COLORS - OUTBACK 677
- DURASPLASH RUBBERIZED SURFACE - BLUE COLORED
- DURASPLASH RUBBERIZED SURFACE - LIGHT BLUE COLORED
- ARTIFICIAL TURF - GREEN
- WOOD CHIP MULCH, MEDIUM SHRED, NO COLOR

SITE MATERIAL KEYNOTES:

1.0	PAVEMENTS / SURFACING / WALLS	DETAIL	SPEC
1.1	CITY STD. CONCRETE PAVEMENT	1/500	CITY STD.
1.2	DECORATIVE PAVEMENT	2/L500	32 18 16
1.3	ARTIFICIAL TURF	5/L500	32 18 13
1.4	STAINED CONCRETE LETTERS	7/L500	32 13 16
1.5	CONCRETE JOINTING	SP DRAWINGS	CITY STD.
2.0	SITE FURNISHINGS	DETAIL	SPEC
2.1	ROUND TABLE W/ CHAIRS - BY OWNER	N.I.C.	N.I.C.
2.2	MILLENNIUM TRELLIS W/ BENCH SWINGS	9/L500	N/A
2.3	VISOR SHADE STRUCTURE - TENSILE SHADE	12/L500	N/A
2.4	LIMESTONE BLOCK SEATING	8/L500	N/A
3.0	PLAY EQUIPMENT	DETAIL	SPEC
3.1	"PLANE" - VORTEX	SP DRAWINGS	13 14 20
3.2	CUSTOM COROCORD15 PLANE - KOMPAN	11/L500	11 68 00
4.0	AQUATIC / SPRAYGROUND	DETAIL	SPEC
4.1	SPRAY NOZZLE HEAD	SP DRAWINGS	13 14 20
4.2	DRAIN GRATE	SP DRAWINGS	13 11 92
4.3	ACTIVATION BOLLARD	SP DRAWINGS	13 14 20
5.0	PLANTING / LANDSCAPE	DETAIL	SPEC
5.1	WOOD CHIP MULCH	N/A	CITY STD.

EXISTING CONDITIONS NOTES:

1. EXISTING CONCRETE WALKWAYS. TIE INTO SMOOTHLY AND EVENLY. REPLACE ANY CONCRETE DAMAGED BY CONSTRUCTION. SEE CIVIL DRAWINGS.
2. EXISTING FENCE TO REMAIN.

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H&B HOSS & BROWN ENGINEERS

WICHITA, KANSAS
Spray Ground
BOSTON PARK

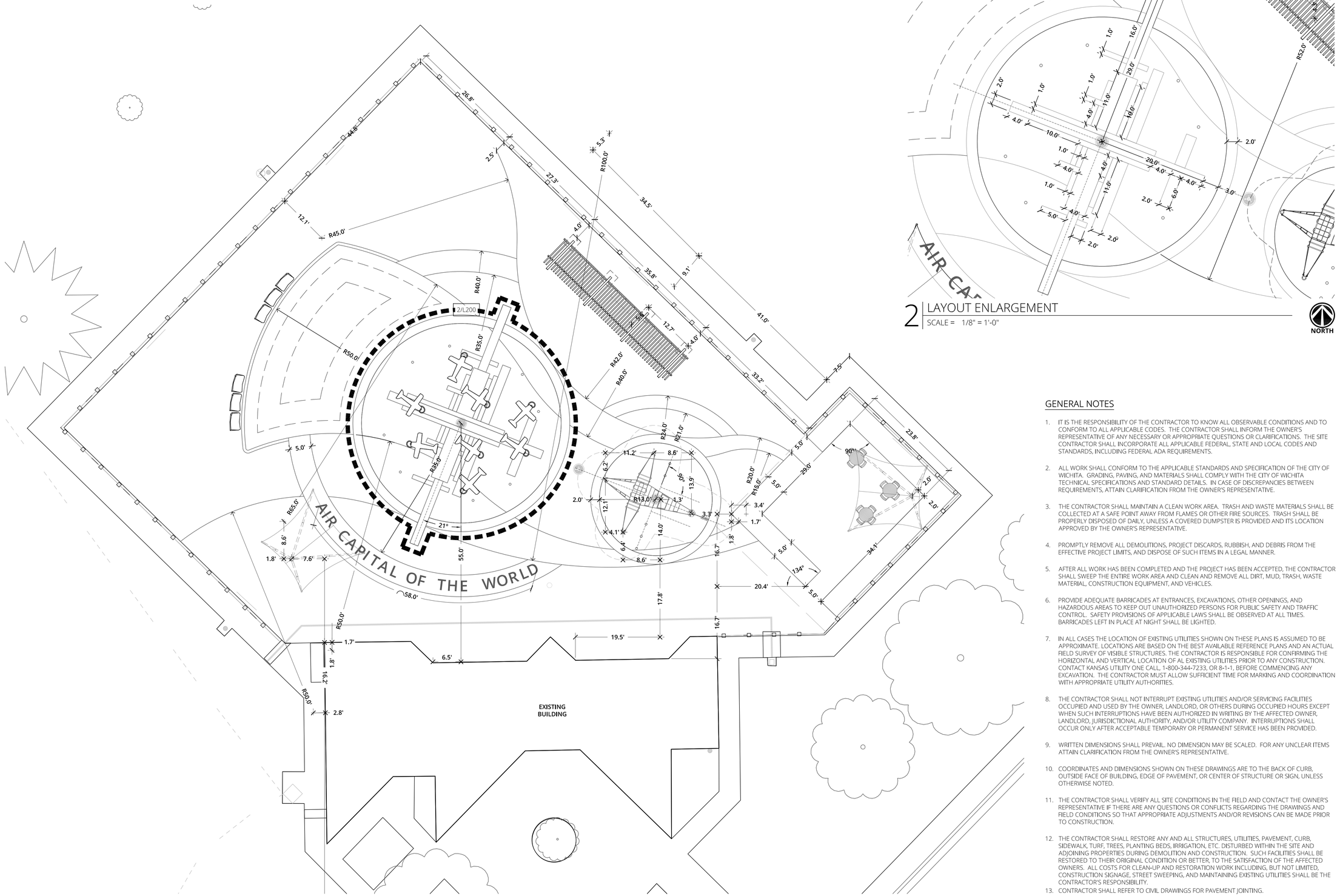
Seal:
BRIAN W. C. STURM LICENSED 2-21-20 KANSAS LANDSCAPE ARCHITECT

Brian Sturm—LSCP. ARCH.
LICENSE #759

Date: 02-21-20 | Job #: 18-512
Drawn: | Checked:
Issue: CONSTRUCTION DOCUMENTS

MATERIALS PLAN

L100



1 SITE LAYOUT PLAN
SCALE = 1" = 10'

2 LAYOUT ENLARGEMENT
SCALE = 1/8" = 1'-0"

GENERAL NOTES

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO KNOW ALL OBSERVABLE CONDITIONS AND TO CONFORM TO ALL APPLICABLE CODES. THE CONTRACTOR SHALL INFORM THE OWNER'S REPRESENTATIVE OF ANY NECESSARY OR APPROPRIATE QUESTIONS OR CLARIFICATIONS. THE SITE CONTRACTOR SHALL INCORPORATE ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES AND STANDARDS, INCLUDING FEDERAL ADA REQUIREMENTS.
2. ALL WORK SHALL CONFORM TO THE APPLICABLE STANDARDS AND SPECIFICATION OF THE CITY OF WICHITA. GRADING, PAVING, AND MATERIALS SHALL COMPLY WITH THE CITY OF WICHITA TECHNICAL SPECIFICATIONS AND STANDARD DETAILS. IN CASE OF DISCREPANCIES BETWEEN REQUIREMENTS, ATTAIN CLARIFICATION FROM THE OWNER'S REPRESENTATIVE.
3. THE CONTRACTOR SHALL MAINTAIN A CLEAN WORK AREA. TRASH AND WASTE MATERIALS SHALL BE COLLECTED AT A SAFE POINT AWAY FROM FLAMES OR OTHER FIRE SOURCES. TRASH SHALL BE PROPERLY DISPOSED OF DAILY, UNLESS A COVERED DUMPSTER IS PROVIDED AND ITS LOCATION APPROVED BY THE OWNER'S REPRESENTATIVE.
4. PROMPTLY REMOVE ALL DEMOLITIONS, PROJECT DISCARDS, RUBBISH, AND DEBRIS FROM THE EFFECTIVE PROJECT LIMITS, AND DISPOSE OF SUCH ITEMS IN A LEGAL MANNER.
5. AFTER ALL WORK HAS BEEN COMPLETED AND THE PROJECT HAS BEEN ACCEPTED, THE CONTRACTOR SHALL SWEEP THE ENTIRE WORK AREA AND CLEAN AND REMOVE ALL DIRT, MUD, TRASH, WASTE MATERIAL, CONSTRUCTION EQUIPMENT, AND VEHICLES.
6. PROVIDE ADEQUATE BARRICADES AT ENTRANCES, EXCAVATIONS, OTHER OPENINGS, AND HAZARDOUS AREAS TO KEEP OUT UNAUTHORIZED PERSONS FOR PUBLIC SAFETY AND TRAFFIC CONTROL. SAFETY PROVISIONS OF APPLICABLE LAWS SHALL BE OBSERVED AT ALL TIMES. BARRICADES LEFT IN PLACE AT NIGHT SHALL BE LIGHTED.
7. IN ALL CASES THE LOCATION OF EXISTING UTILITIES SHOWN ON THESE PLANS IS ASSUMED TO BE APPROXIMATE. LOCATIONS ARE BASED ON THE BEST AVAILABLE REFERENCE PLANS AND AN ACTUAL FIELD SURVEY OF VISIBLE STRUCTURES. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE HORIZONTAL AND VERTICAL LOCATION OF AL EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. CONTACT KANSAS UTILITY ONE CALL, 1-800-344-7233, OR 8-1-1, BEFORE COMMENCING ANY EXCAVATION. THE CONTRACTOR MUST ALLOW SUFFICIENT TIME FOR MARKING AND COORDINATION WITH APPROPRIATE UTILITY AUTHORITIES.
8. THE CONTRACTOR SHALL NOT INTERRUPT EXISTING UTILITIES AND/OR SERVICING FACILITIES OCCUPIED AND USED BY THE OWNER, LANDLORD, OR OTHERS DURING OCCUPIED HOURS EXCEPT WHEN SUCH INTERRUPTIONS HAVE BEEN AUTHORIZED IN WRITING BY THE AFFECTED OWNER, LANDLORD, JURISDICTIONAL AUTHORITY, AND/OR UTILITY COMPANY. INTERRUPTIONS SHALL OCCUR ONLY AFTER ACCEPTABLE TEMPORARY OR PERMANENT SERVICE HAS BEEN PROVIDED.
9. WRITTEN DIMENSIONS SHALL PREVAIL. NO DIMENSION MAY BE SCALED. FOR ANY UNCLEAR ITEMS ATTAIN CLARIFICATION FROM THE OWNER'S REPRESENTATIVE.
10. COORDINATES AND DIMENSIONS SHOWN ON THESE DRAWINGS ARE TO THE BACK OF CURB, OUTSIDE FACE OF BUILDING, EDGE OF PAVEMENT, OR CENTER OF STRUCTURE OR SIGN, UNLESS OTHERWISE NOTED.
11. THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS IN THE FIELD AND CONTACT THE OWNER'S REPRESENTATIVE IF THERE ARE ANY QUESTIONS OR CONFLICTS REGARDING THE DRAWINGS AND FIELD CONDITIONS SO THAT APPROPRIATE ADJUSTMENTS AND/OR REVISIONS CAN BE MADE PRIOR TO CONSTRUCTION.
12. THE CONTRACTOR SHALL RESTORE ANY AND ALL STRUCTURES, UTILITIES, PAVEMENT, CURB, SIDEWALK, TURF, TREES, PLANTING BEDS, IRRIGATION, ETC. DISTURBED WITHIN THE SITE AND ADJOINING PROPERTIES DURING DEMOLITION AND CONSTRUCTION. SUCH FACILITIES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION OR BETTER, TO THE SATISFACTION OF THE AFFECTED OWNERS. ALL COSTS FOR CLEAN-UP AND RESTORATION WORK INCLUDING, BUT NOT LIMITED, CONSTRUCTION SIGNAGE, STREET SWEEPING, AND MAINTAINING EXISTING UTILITIES SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
13. CONTRACTOR SHALL REFER TO CIVIL DRAWINGS FOR PAVEMENT JOINTING.

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Seal:
BRIAN W. C. STURM LICENSED LANDSCAPE ARCHITECT 2-21-20 KANSAS

Brian Sturm–LSCP. ARCH. LICENSE #759

Date: 02-21-20 | Job #: 18-512

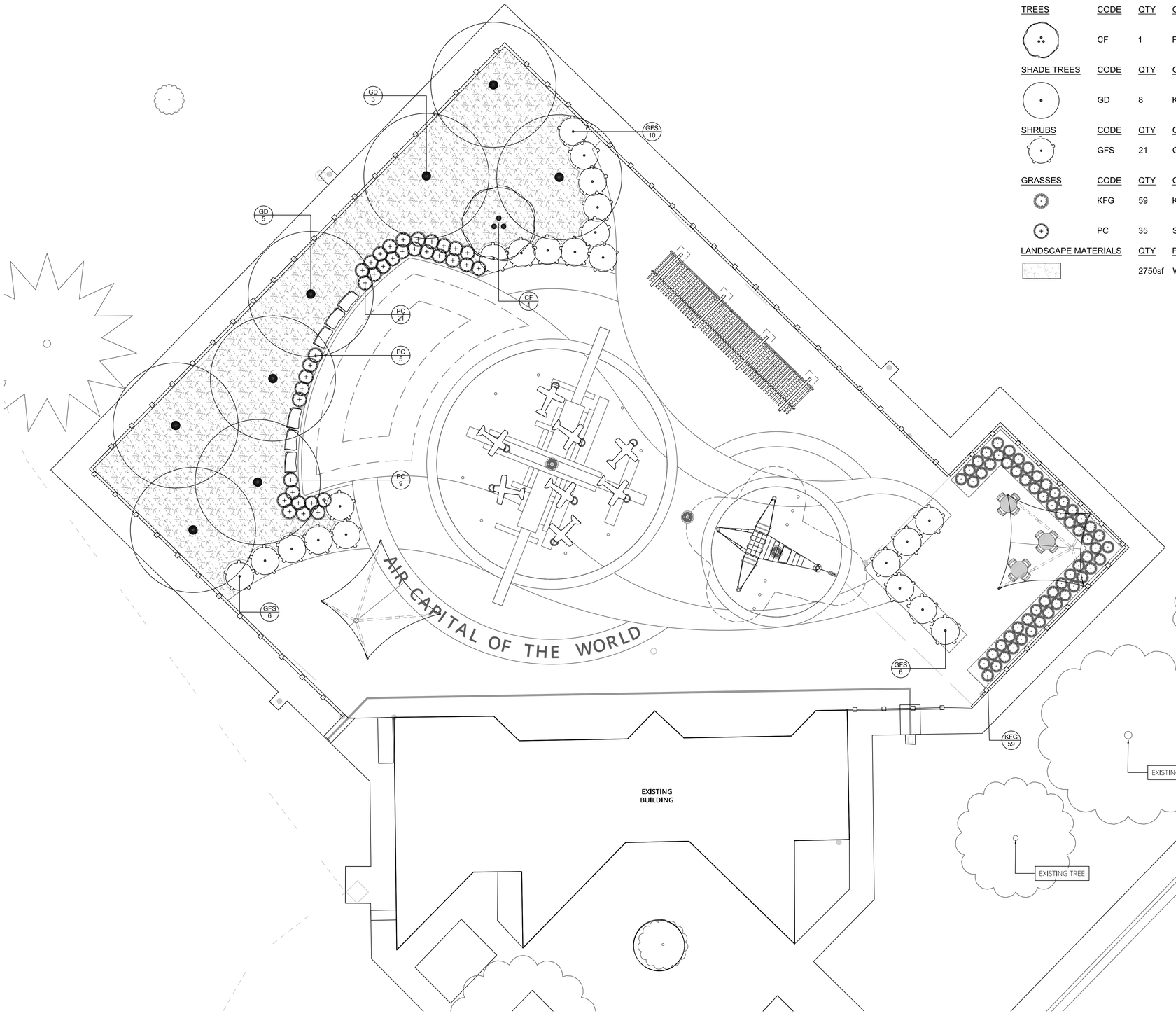
Drawn: | Checked:

Issue: CONSTRUCTION DOCUMENTS

LAYOUT PLAN

L200

Water's Edge Aquatic Design



1 PLANTING PLAN
SCALE = 1" = 10'

PLANT SCHEDULE

TREES	CODE	QTY	COMMON / BOTANICAL NAME	CONT	CAL
	CF	1	Forest Pansy Redbud / Cercis canadensis `Forest Pansy` TM	B & B	Multi
SHADE TREES	**CODE**	**QTY**	**COMMON / BOTANICAL NAME**	**CONT**	**CAL**
	GD	8	Kentucky Coffeetree / Gymnocladus dioica `Espresso`	B & B	3"Cal
SHRUBS	**CODE**	**QTY**	**COMMON / BOTANICAL NAME**	**CONT**	
	GFS	21	Gro Low Fragrant Sumac / Rhus aromatica `Gro Low`	5 gal	
GRASSES	**CODE**	**QTY**	**COMMON / BOTANICAL NAME**	**CONT**	
	KFG	59	Karl Foerster Feather Reed Grass / Calamagrostis x acutiflora `Karl Foerster`	3 gal	
	PC	35	Switch Grass / Panicum virgatum `Cheyenne Sky`	3 gal	
LANDSCAPE MATERIALS		**QTY**	**PRODUCT**		
		2750sf	WOOD CHIP MULCH, MEDIUM SHRED, NO COLOR		

LANDSCAPE NOTES:

1. CONTRACTOR IS RESPONSIBLE FOR THE LOCATION OF ALL UTILITIES IN THE PROJECT AREA AND THEIR PROTECTION DURING THE SCOPE OF WORK. CONTACT KANSAS ONE CALL AT 8-1-1 TO FILE A LOCATE REQUEST PRIOR TO ANY EXCAVATION. ANY DAMAGE TO UTILITIES DURING PLANTING OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR IN A MANNER APPROVED BY THE CITY AND AT NO ADDITIONAL COST TO THE CITY. ANY UTILITIES SHOWN ON THE PLAN ARE FOR REFERENCE ONLY AND MAY OR MAY NOT DEPICT THE ACTUAL LOCATION OF SERVICES.
2. ALL SEEDING, SODDING, PLANTING, AND IRRIGATION OPERATIONS REQUIRED BY THIS PROJECT SHALL CONFORM TO PART 900 (LANDSCAPING AND IRRIGATION) OF THE CITY OF WICHITA STANDARD SPECIFICATIONS.
3. ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES ON CITY PROJECTS SHALL HAVE THE TURF RESTORED TO EXISTING CONDITIONS (OR BETTER), PER THE REQUIREMENTS LISTED IN SECTION 901 OF THE CITY OF WICHITA STANDARD SPECIFICATIONS, UNLESS OTHERWISE INDICATED IN THE PLANS OR SPECIAL PROVISIONS.
4. MATERIAL QUANTITIES SHOWN ON THE PLANTING PLAN TAKE PRECEDENCE OVER QUANTITIES LISTED IN THE PLANT SCHEDULE. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES ON THE PLANTING PLAN PRIOR TO BIDDING. REPORT ANY DISCREPANCIES ON THE PLANTING PLAN TO THE LANDSCAPE ARCHITECT, PRIOR TO PURCHASE AND INSTALLATION OF PLANT MATERIAL.
4. NO MATERIAL SUBSTITUTIONS SHALL BE MADE WITHOUT THE WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT. ALTERNATE MATERIALS OF SIMILAR SIZE AND CHARACTER MAY BE CONSIDERED IF SPECIFIED PLANT MATERIALS CANNOT BE OBTAINED.
5. ALL PLANT MATERIAL SHALL HAVE A NORMAL HABIT OF GROWTH AND SHALL BE SOUND, HEALTHY, VIGOROUS AND FREE FROM DISEASE AND INSECT INFESTATIONS. THE MINIMUM ACCEPTABLE SIZES OF ALL PLANTS, MEASURED BEFORE PRUNING WITH BRANCHES IN NORMAL POSITION, SHALL CONFORM TO THE MEASUREMENTS SPECIFIED ON THE PLAN. ALL PLANT MATERIAL SHALL CONFORM TO THE STANDARDS AS SET FORTH IN THE LATEST EDITION OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1).
6. ALL SEEDING, SODDING, AND PLANTING SHALL OCCUR DURING SEASONAL DATE RANGES SPECIFIED IN PART 900 (LANDSCAPING AND IRRIGATION) OF THE CITY OF WICHITA STANDARD SPECIFICATIONS. PLANTING SHALL ONLY BE PERFORMED WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH LOCALLY ACCEPTED PRACTICE. DEVIATION FROM THE SPECIFIED PLANTING DATES WILL BE PERMITTED ONLY WHEN APPROVED BY THE LANDSCAPE ARCHITECT AND CITY STAFF.
7. ALL PLANT LOCATIONS ARE APPROXIMATE. CONTRACTOR MAY ADJUST, AS NECESSARY, TO AVOID CONFLICTS. THE FOLLOWING APPLIES FOR GENERAL PLANT LOCATIONS:
   a. CREEPING GROUNDCOVER SHALL BE LOCATED A MINIMUM OF 6 INCHES FROM EDGE OF PAVEMENT.
   b. SHRUBS SHALL BE LOCATED A MINIMUM OF 2 FEET FROM EDGE OF PAVEMENT AND 4 FEET FROM BUILDINGS.
   c. TREES SHALL BE LOCATED A MINIMUM OF 5 FEET FROM EDGE OF PAVEMENT.
   d. EQUALLY SPACE ALL PLANTS OF THE SAME SPECIES FOR BEST VIEWING.
8. WATER SHALL BE FURNISHED BY THE CONTRACTOR FOR EXECUTION OF ALL WORK SPECIFIED ON THIS PLAN. THE CONTRACTOR SHALL VERIFY THAT THE WATER AVAILABLE IS SUITABLE FOR IRRIGATION AND FREE FROM INGREDIENTS HARMFUL TO PLANT LIFE. THE CONTRACTOR SHALL WATER ALL PLANT MATERIAL UNTIL FINAL ACCEPTANCE OF THE PROJECT.
9. REMOVE ALL RUBBISH, EQUIPMENT, AND MATERIAL AND LEAVE THE AREA IN A NEAT, CLEAN CONDITION EACH DAY. MAINTAIN PAVED AREAS UTILIZED FOR HAULING EQUIPMENT AND MATERIALS BY OTHER TRADES IN A CLEAN AND UNOBSTRUCTED CONDITION AT ALL TIMES. REMOVE SOIL OR DIRT THAT ACCUMULATES DUE TO PLANTING OPERATIONS EACH DAY.
10. MAINTENANCE OPERATIONS SHALL BEGIN IMMEDIATELY AFTER EACH PLANT IS PANTED AND SHALL CONTINUE AS REQUIRED UNTIL FINAL ACCEPTANCE BY THE LANDSCAPE ARCHITECT AND CITY STAFF. PLANTS SHALL BE KEPT IN A HEALTHY AND GROWING CONDITION BY PRUNING, SPRAYING, AND ANY OTHER NECESSARY OPERATION OF MAINTENANCE. THE CONTRACTOR SHALL INSPECT PLANTS DURING THE MAINTENANCE PERIOD AND NEEDED MAINTENANCE SHALL BE PERFORMED PROMPTLY. MULCHED AREAS SHALL BE KEPT FREE OF WEEDS. THE CONTRACTOR SHALL SUBMIT A WRITTEN SCHEDULE OF PLANT MAINTENANCE FOR APPROVAL BY THE LANDSCAPE ARCHITECT AND CITY STAFF AT THE TIME OF PLANT INSTALLATION. THE SCHEDULE SHALL INCLUDE INSPECTION, WATERING, PRUNING, SPRAYING, AND OTHER NECESSARY MAINTENANCE ACTIVITIES.
11. AT THE CONCLUSION OF PLANT INSTALLATION, THE LANDSCAPE ARCHITECT SHALL CONDUCT AN INSPECTION OF PLANTED MATERIALS IN APRIL. THE PURPOSE OF THIS INSPECTION SHALL BE FOR THE PROVISIONAL ACCEPTANCE OF THE CONTRACT WORK. IF THERE ARE ANY DEFICIENCIES IN THE WORK, THE CONTRACTOR WILL BE NOTIFIED AND THE WORK WILL BE SUBJECT TO REINSPECTION BEFORE FINAL ACCEPTANCE. IF THERE ARE DEAD OR UNHEALTHY PLANTS, THEY SHALL BE REMOVED FROM THE SITE AND REPLACED PRIOR TO MAY 15th.
12. AFTER PROVISIONAL ACCEPTANCE OF THE INITIAL PLANT INSTALLATION BY THE LANDSCAPE ARCHITECT IN MAY, THE CONTRACTOR IS REQUIRED TO PROVIDE ESTABLISHMENT CARE FOR ALL PLANTS PLANTED ON THE PROJECT UNTIL THE FOLLOWING OCTOBER, AT WHICH TIME THE LANDSCAPE ARCHITECT WILL AGAIN INSPECT THE PLANTS. ALL PLANTS FOUND TO BE UNHEALTHY OR DEAD AT THE TIME OF THIS OCTOBER INSPECTION SHALL BE REPLACED. THE CONTRACTOR'S RESPONSIBILITY ENDS AT THE TIME OF INSPECTION FOR ANY PANTS REPLACED OR ACCEPTED IN OCTOBER. DURING THE ESTABLISHMENT MAINTENANCE PERIOD, THE CONTRACTOR SHALL INSPECT THE PLANT MATERIALS TWICE A MONTH FOR WATERING AND OTHER MAINTENANCE NEEDS. CONTRACTOR SHALL KEEP THE PLANTS IN A HEALTHY GROWING CONDITION DURING THE ESTABLISHMENT MAINTENANCE PERIOD B Y PROVIDING THE NECESSARY CARE CONSISTING OF PRUNING, SPRAYING, WATERING, AND ANY OTHER MAINTENANCE TYPE OPERATION REQUIRED. THE MULCHES AREAS AROUND PLANTS SHALL BE KEPT FREE OF WEEDS AND GRASSES FOR THE FULL DURATION OF ANY REQUIRED ESTABLISHMENT MAINTENANCE PERIOD.
13. ALL DEAD AND UNHEALTHY MATERIAL IDENTIFIED AT THE TIME OF ANY SPECIFIED INSPECTION SHALL BE REMOVED FROM THE SITE AND REPLACED WITH PLANTS OF THE SAME TYPE AND SIZE AS ORIGINALLY SPECIFIED. SUCH REPLACEMENTS SHALL BE MADE IN THE SAME MANNER AS SPECIFIED FOR THE ORIGINAL PLANTINGS AND AT NO EXTRA COST TO THE CITY. ALL DEAD AND UNHEALTHY PLANTS SHALL BE REMOVED WITHIN 14 DAYS AFTER THE CONTRACTOR HAS BEEN NOTIFIED THAT THE PLANT MUST BE REPLACED. A PENALTY OF $50 PER PLANT PER DAY WILL BE CHARGED TO THE CONTRACTOR FOR ALL DAYS IN EXCESS OF THE 14 DAYS REQUIRED TO REMOVE ANY PLANT.

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WICHITA, KANSAS
Spray Ground
BOSTON PARK

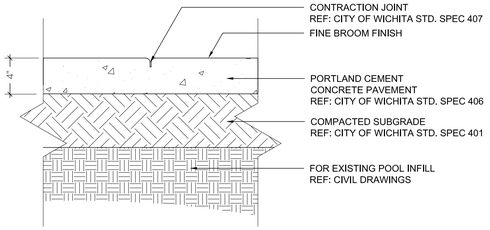
CITY OF WICHITA

Seal: BRIAN W. C. STURM LICENSED 2-21-20 KANSAS LANDSCAPE ARCHITECT

Brian Sturm—LSCP. ARCH. LICENSE #759
Date: 02-21-20 Job #: 18-512
Drawn: Checked:
Issue: CONSTRUCTION DOCUMENTS

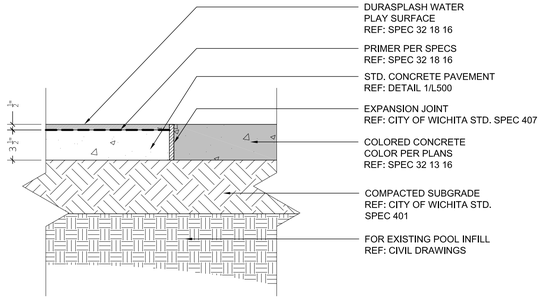
PLANTING PLAN

L400



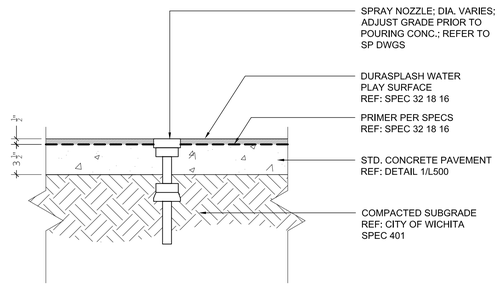
1 STANDARD CONCRETE PAVEMENT

SCALE = 1 1/2" = 1'-0"



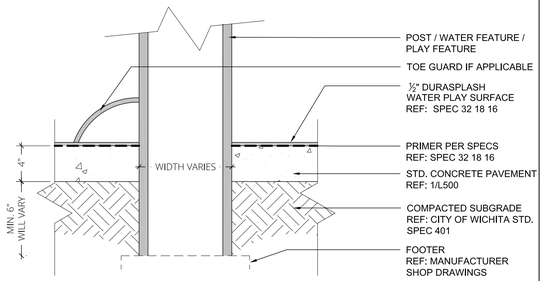
2 RUBBERIZED SURFACING

SCALE = 1 1/2" = 1'-0"



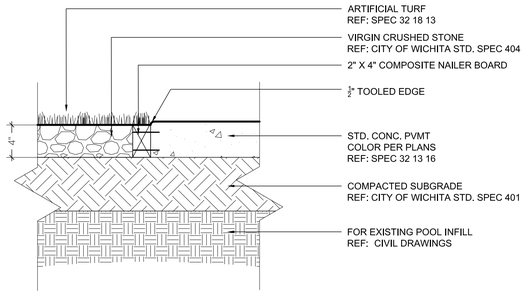
3 RUBBERIZED SURFACING ADJACENT TO NOZZLE

SCALE = 1 1/2" = 1'-0"



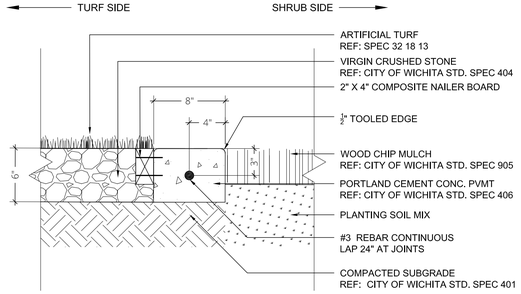
4 RUBBERIZED SURFACE TO POST / PLAY FEATURE

SCALE = 1 1/2" = 1'-0"



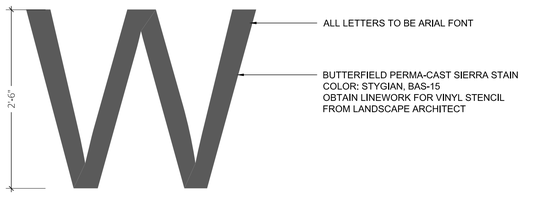
5 ARTIFICIAL TURF ADJACENT STD. CONC. PVMT

SCALE = 1 1/2" = 1'-0"



6 CONCRETE BAND DETAIL

SCALE = 1 1/2" = 1'-0"

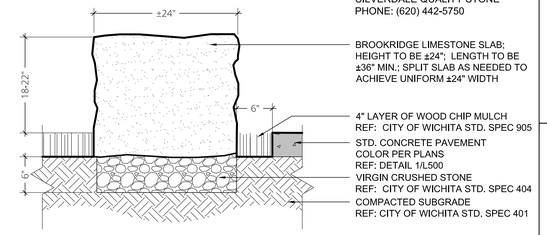


7 STAINED CONCRETE LETTERS

SCALE = 1" = 1'-0"

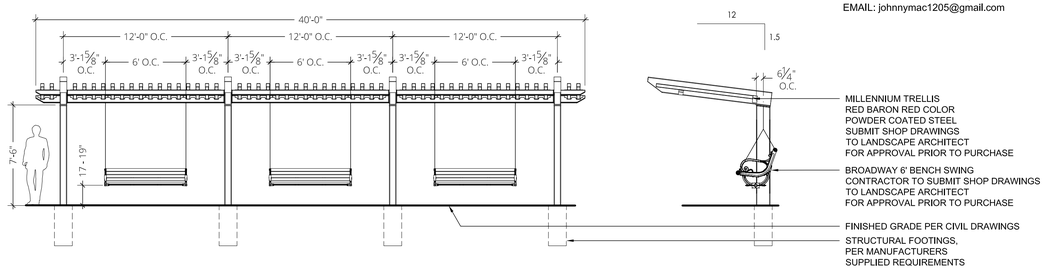
NOTE:
BROOKRIDGE LIMESTONE SLAB
BY HOUSE OF ROCKS
CONTACT: MICKEY HIGDON
EMAIL: mickey@thehouseofrocks.com
PHONE: (913) 432-5990

APPROVED EQUAL:
SILVERDALE QUALITY STONE
PHONE: (620) 442-5750



8 LIMESTONE BLOCK SEATING IN MULCH

SCALE = NOT TO SCALE

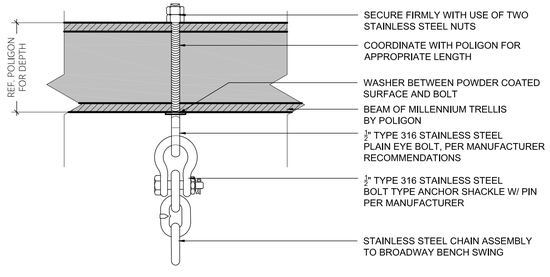


NOTE:
MILLENNIUM TRELLIS (9X40)
BY POLIGON
CONTACT: JOHN McMASTER
RECREATION RESOURCE, INC.
EMAIL: johnnymac1205@gmail.com

9 MILLENNIUM TRELLIS (9X40) ELEVATIONS

SCALE = 3/16" = 1'-0"

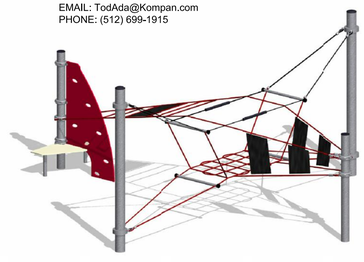
NOTE:
CONTRACTOR TO COORDINATE WITH POLIGON REPRESENTATIVE TO GET
½" HOLES (FOR SWING) PRE-DRILLED PRIOR TO POWDER COATING.



10 BENCH SWING TO TRELLIS CONNECTION

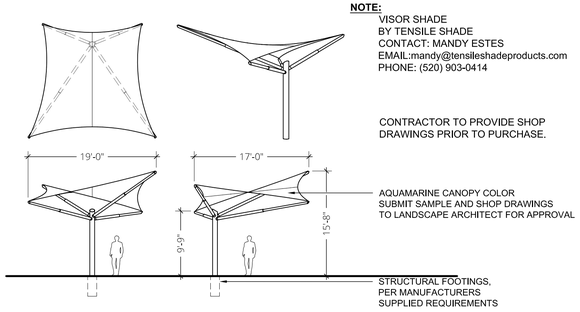
SCALE = 3" = 1'-0"

NOTE:
ROPE HAMMOCK
COR20502
BY KOMPAN
CONTACT: TODD ADAMS
EMAIL: TodAda@Kompan.com
PHONE: (512) 699-1915



11 CUSTOM COROCORD15 PLANE

SCALE = NO SCALE



NOTE:
VISOR SHADE
BY TENSILE SHADE
CONTACT: MANDY ESTES
EMAIL:mandy@tensileshadeproducts.com
PHONE: (520) 903-0414

CONTRACTOR TO PROVIDE SHOP
DRAWINGS PRIOR TO PURCHASE.

12 VISOR SHADE STRUCTURE

SCALE = NOT TO SCALE

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H&B ENGINEERS HOSS & BROWN

WICHITA, KANSAS
Spray Ground
BOSTON PARK

Seal:
BRIAN W. C. STURM LICENSED 759 2-21-20 KANSAS LANDSCAPE ARCHITECT

Brian Sturm-LSCP. ARCH. LICENSE #759

Date: 02-21-20 Job #: 18-512

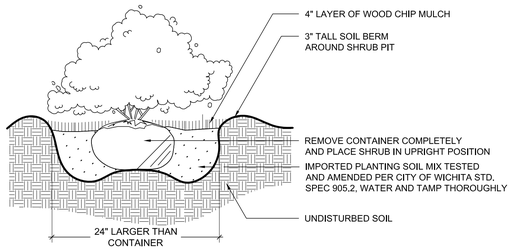
Drawn: Checked:

Issue: CONSTRUCTION DOCUMENTS

SITE DETAILS

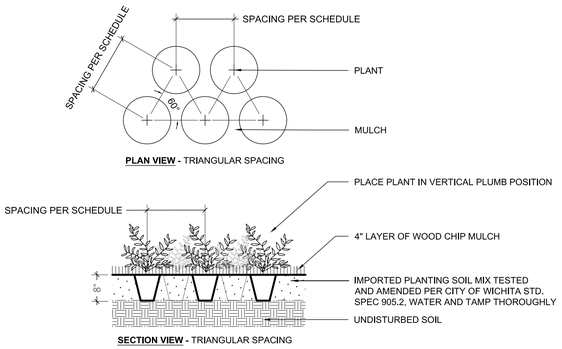
L500

Water's Edge Aquatic Design



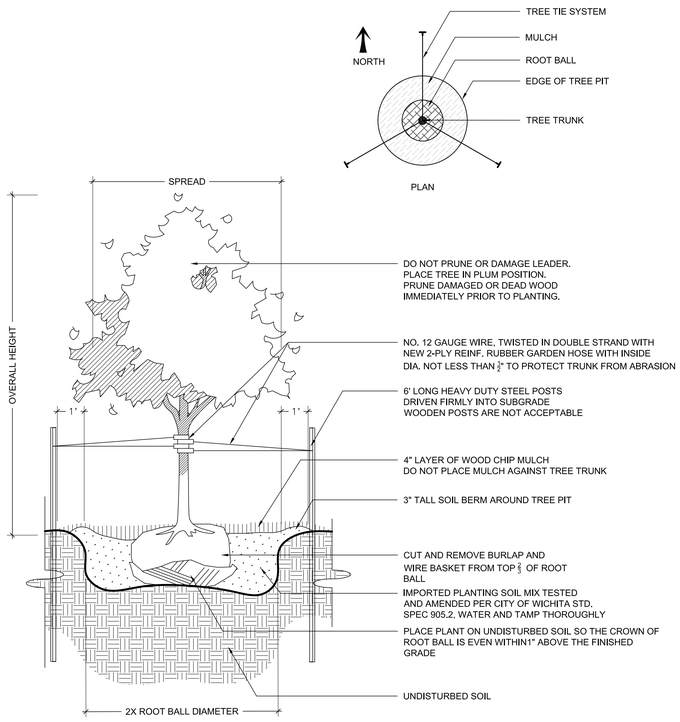
1 SHRUB PLANTING

SCALE = 1/2" = 1'-0"



2 PERENNIAL PLANTING

SCALE = 1/2" = 1'-0"



3 DECIDUOUS TREE PLANTING

SCALE = 3/8" = 1'-0"

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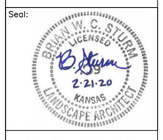
BOSTON PARK

CITY OF WICHITA

Seal:



Brian Sturm–LSCP. ARCH.
LICENSE #759

Date: 02-21-20 | Job #: 18-512

Drawn: | Checked:

Issue: CONSTRUCTION DOCUMENTS

SITE
DETAILS

L501

SPRAY GROUND AREA KEY NOTES

1. Existing parking
2. Existing sidewalk
3. Existing fence with existing concrete strip
4. Existing light pole
5. Existing electric utility
6. Existing gas utility
7. Existing sanitary sewer utility
8. Existing storm sewer utility
9. Existing telephone utility
10. Existing water utility
11. Existing/renovated bathhouse
12. Existing/renovated filter area
13. Existing pool outline
14. Existing pool demo and backfill ~ See Detail A–SP–PM2
15. "Vortex Drain" ~ See Detail B–SP–PM2
16. "Vortex Plane" ~ See Detail C–SP–PM2, and Sheet SP–PM1 data for quantity
17. "Vortex Geyser" ~ See Detail D–SP–PM2, and Sheet SP–PM1 data for quantity
18. "Vortex Jet Stream No. 1" ~ See Detail D–SP–PM2, and Sheet SP–PM1 data for quantity
19. "Vortex Rooster Tail" ~ See Detail D–SP–PM2, and Sheet SP–PM1 data for quantity
20. "Vortex Wave" ~ See Detail D–SP–PM2, and Sheet SP–PM1 data for quantity
21a. "Vortex Bollard Activator" ~ See Detail E–SP–PM2
21b. Rain and wind sensors connected to Vortex controller
22. Saw cut and replace existing sidewalk for spray ground drain piping
23. Deck drain – trench ~ See Detail F–SP–PM2
24. Saw cut and replace existing sidewalk to allow deck drain to drain to daylight
25. Concrete deck ~ See Detail G–SP–PM2
    ~ Deck and drain elevations ~ Deck slopes shall be 1% min. / 2% max.
    ~ Water shall not be allowed to pond in any location
26. Construction joint ~ See Detail G–SP–PM2
27. Expansion joint ~ See Detail G–SP–PM2
28. Isolation joint ~ See Detail G–SP–PM2
29. Saw cut ~ See Detail G–SP–PM2
30. Valley line ~ No joint
31. Concrete deck at existing concrete deck ~ See Detail H–SP–PM2
32. Underdrain ~ See Detail I–SP–PM2
33. Disconnect existing deck drain and reconnect new underdrain to existing bathhouse sanitary sewer pipe
34. Disconnect existing deck drain and cap existing bathhouse sanitary sewer pipe
35. Saw cut and replace existing sidewalk and curb to allow surge pit sump pump discharge to drain to daylight
36. Surge pit sump pump discharge pipe ~ Attach to building and route to curb
37. Sunshade with footing ~ See Landscape Architect Sheets
38. Trellis and swings with footings ~ See Landscape Architect Sheets
39. Plane ~ See Landscape Architect Sheets
40. Deck finish ~ See Landscape Architect Sheets
41. Deck finish ~ See Landscape Architect Sheets
42. Artificial turf ~ See Landscape Architect Sheets
43. Landscape area ~ See Landscape Architect Sheets
44. Existing gate
    ~ Gate shall remain in fixed open position when facility is open to the public
    ~ Provide EXIT sign on stationary post

ABBREVIATIONS

&	And
@	At
°	Degree
ø	Diameter
'	Feet
"	Inches
#	Number
w/	With
w/o	Without
ACI	American Concrete Institute
Addl.	Additional
A.F.F	Above finish floor
Approx.	Approximately
Arch.	Architectural
BFV	Butterfly valve
Bldg.	Building
BM	Benchmark
Clr.	Clear
CMU	Concrete masonry unit
Ctr.	Center
Det.	Detail
Dia.	Diameter
Diag.	Diagonal
Dim.	Dimension
DIP	Ductile iron pipe
E.F.	Each face
E.W.	Each way
Ea.	Each
El.	Elevation or elbow
Elec.	Electrical
Eq.	Equal
Exp.	Expansion
Fipt	Female iron pipe thread
FRP	Fiberglass reinforced plastic
Ft.	Feet
Galv.	Galvanized
GPM	Gallons per minute
H.C.	Handicap
Hi.	High
HOA	Hand Off Automatic
Horiz./H.	Horizontal
HSS	Hollow steel section
I.D.	Inside diameter
Inv. El.	Invert elevation
Jt.	Joint
Lo.	Low
Long.	Longitudinal
Max.	Maximum
Mftr./Mfr.	Manufacturer
Min.	Minimum
Misc.	Miscellaneous
NEC	National Electrical Code
NEMA	National Electrical Manufacturers Association
N.I.C.	Not in contract
N.T.S.	Not to scale
O.C.	On center
O.D.	Outside diameter
Pl.	Plate
PSI	Pounds per square inch
PVC	Polyvinyl chloride
R	Radius
Rad.	Radius
RCP	Reinforced concrete pipe
Rebar	Reinforcing
Recirc.	Recirculation
Ref.	Reference
Reinf.	Reinforcing
Req'd	Required
S.S.	Stainless steel
Sch	Schedule
SDR	Standard dimension ratio
S.F.	Square feet
Soc	Socket
Sq.	Square
Struct.	Structural
T&B	Top and bottom
TDH	Total dynamic head
Thru	Through
Thus	Typical
Trans.	Transverse
Typ.	Typical
Vert./V.	Vertical

SYMBOLS

- Construction Joint
- Expansion Joint
- Isolation Joint
- Saw Cut
- Valley / Ridge Line

Detail — Detail Callout, Detail Name, DETAIL NAME, Scale, Detail Scale

Section Cut — Detail Letter, Sheet, SP-##, Section Cut

Depth/warning marker or note — A

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WICHITA, KANSAS
Spray Ground
BOSTON PARK

CITY OF WICHITA

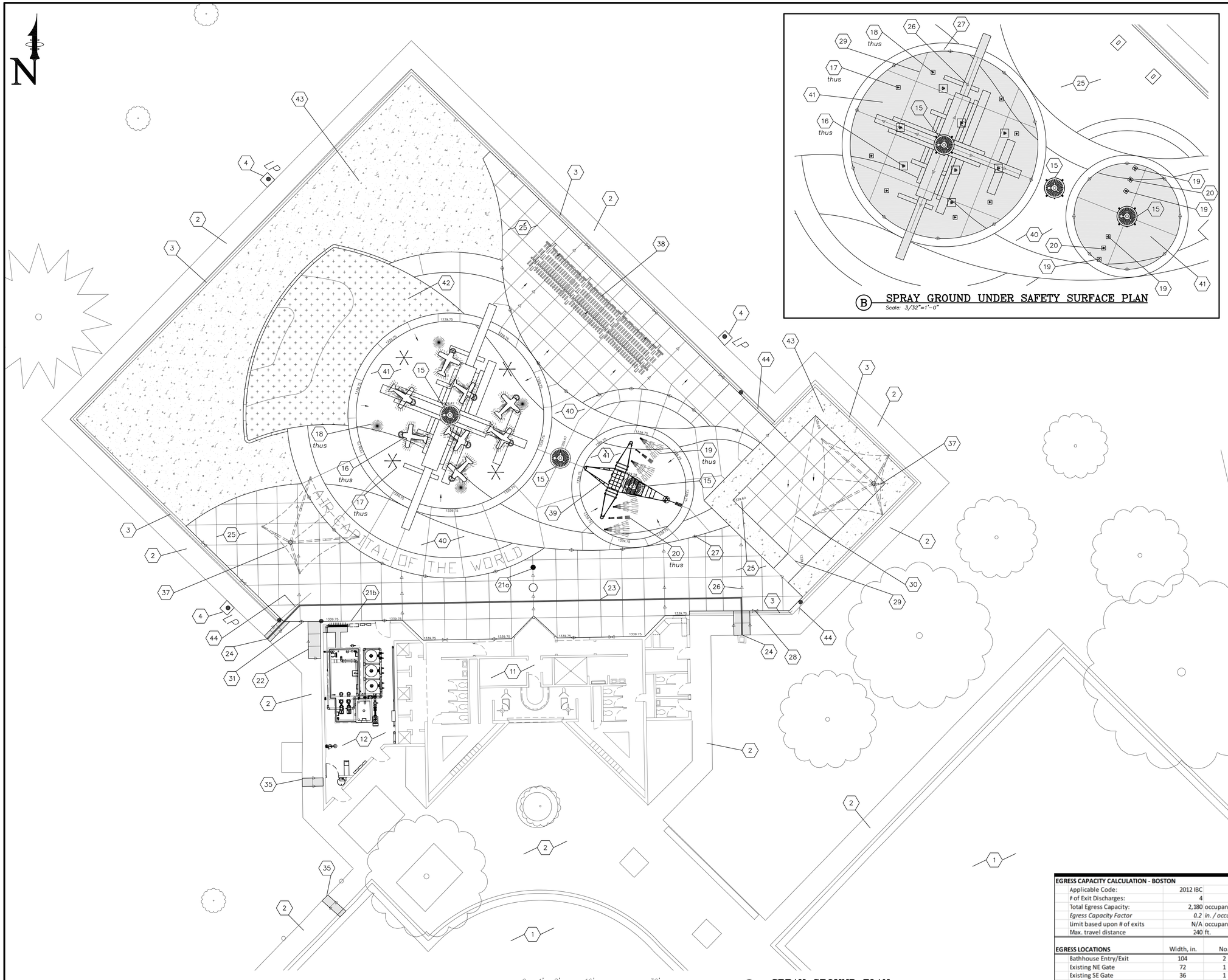
Seal: JEFF A. BARTLEY LICENSED 15116 KANSAS PROFESSIONAL ENGINEER

Jeff Bartley–ENGINEER
LICENSE #15116

Date: 02-21-20 | Job #: 18-512
Drawn: SRS | Checked: JAB
Issue: CONSTRUCTION DOCUMENTS

SPRAY GROUND KEY NOTES AND DATA

SP–P0



A SPRAY GROUND PLAN
Scale: 3/32"=1'-0"

B SPRAY GROUND UNDER SAFETY SURFACE PLAN
Scale: 3/32"=1'-0"

SPRAY GROUND AREA DATA		
Spray Ground Area (all area inside fence)	15,795	S.F.

EGRESS CAPACITY CALCULATION - BOSTON

Applicable Code:	2012 IBC			Max Capacity based upon # exits	
# of Exit Discharges:	4			Exits	Max. Occupants
Total Egress Capacity:	2,180 occupants			1	49
Egress Capacity Factor	*0.2 in. / occupant*			2	500
Limit based upon # of exits	N/A occupants			3	1,000
Max. travel distance	240 ft.				
EGRESS LOCATIONS	Width, in.	No.	Total Width, in.	Egress Factor (in./occ.)	Egress Capacity
Bathhouse Entry/Exit	104	2	208	0.2	1,040
Existing NE Gate	72	1	72	0.2	360
Existing SE Gate	36	1	36	0.2	180
Existing SW Gate	120	1	120	0.2	600

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Jeff Bartley–ENGINEER
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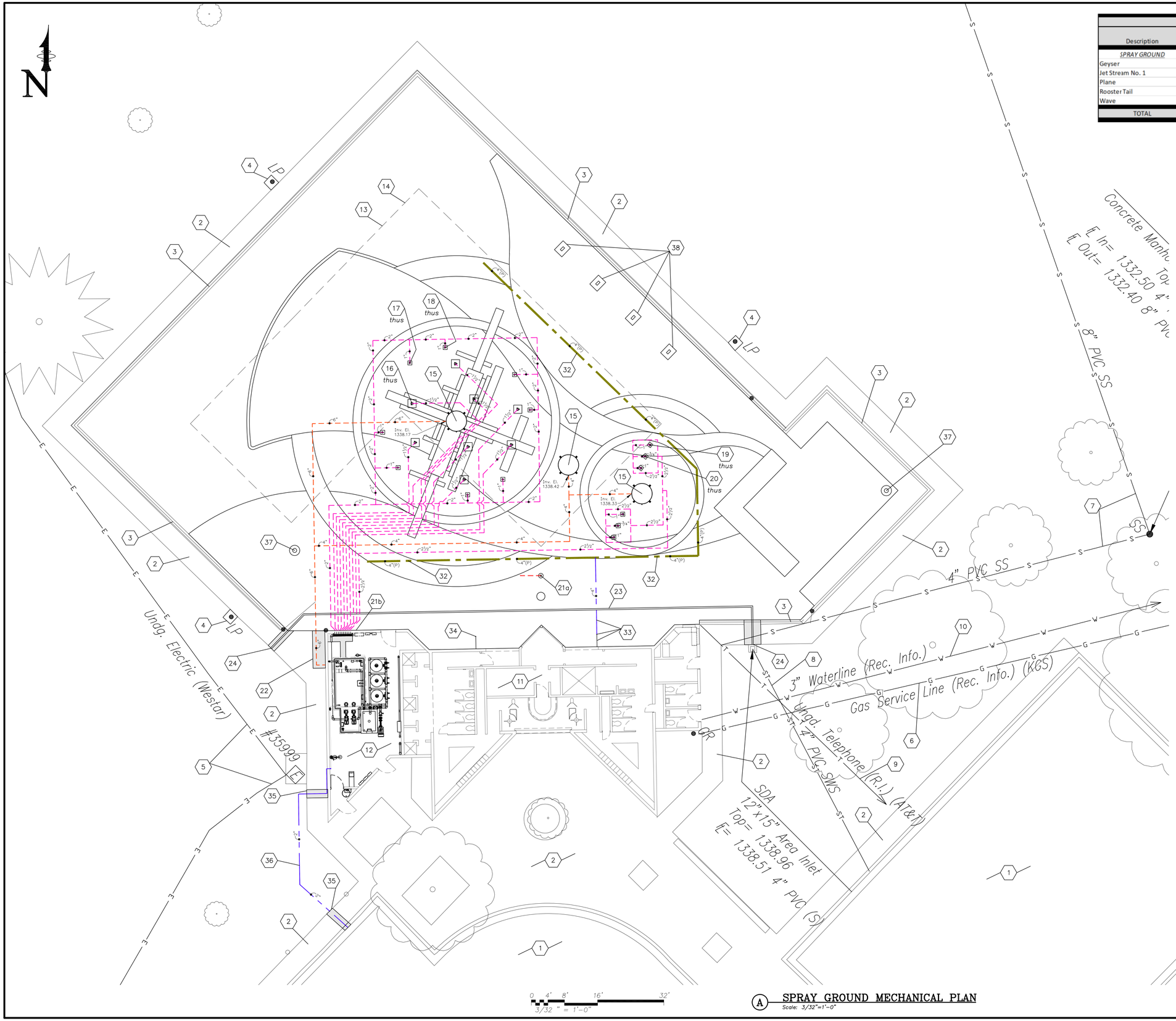
SPRAY GROUND PLAN

SP-P1

WATER FEATURE FLOW DATA										
Description	Flow		Quantity	Total Flow		Pressure		Spray Height	
SPRAY GROUND										
Geyser	10	GPM	4	40	GPM	10	PSI	--	Ft.
Jet Stream No. 1	3	GPM	4	12	GPM	10	PSI	--	Ft.
Plane	14	GPM	8	112	GPM	6	PSI	--	Ft.
Rooster Tail	15	GPM	4	60	GPM	10	PSI	--	Ft.
Wave	8	GPM	2	16	GPM	5	PSI	--	Ft.
TOTAL			22	240	GPM				



A SPRAY GROUND MECHANICAL PLAN
Scale: 3/32"=1'-0"

PIPE TYPE NOTES

- Pool system piping (main drain gutter recirc features) shall be: Sch 80 PVC
- Underdrain shall be: 4" Rigid ~ Indicated as 4"(RP) perforated PVC
- Drain piping shall be: SDR 26 PVC

GENERAL SHEET NOTES

1. All pipes shall slope to drain ~ Slope shall be uniform between Inv. El's. shown, unless otherwise required to prevent piping conflicts
2. Inv. El's at structures, adjacent to equipment (basket strainers, pumps, etc.), are approximate and may vary per mftr. ~ Contractor shall verify
3. All piping through concrete structures shall be cast-in-place ~ No pipe sleeves or coring allowed
4. Coordinate all items with piping ~ Example...fence post footings, shade column footings, etc.
5. Tee fitting sizes shall match that of the largest connecting pipe size

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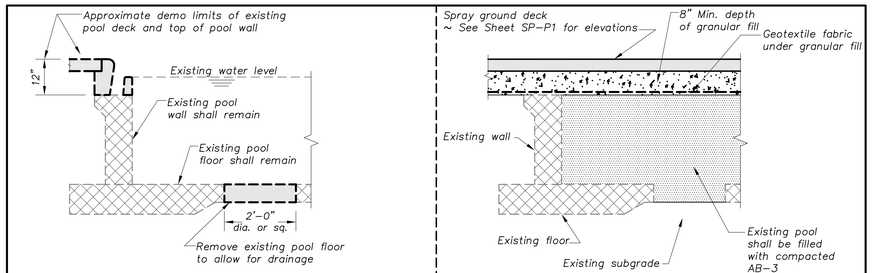
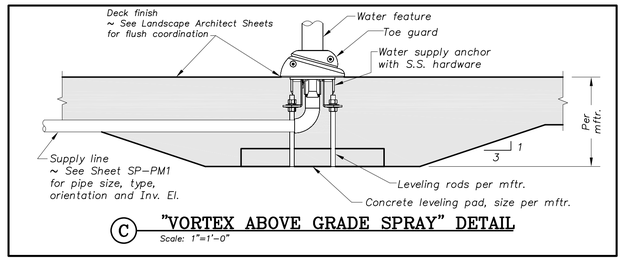
SPRAY GROUND MECHANICAL PLAN

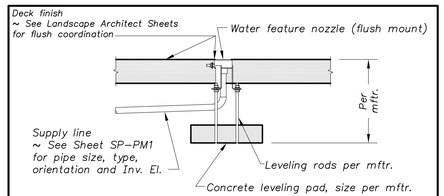
SP-PM1



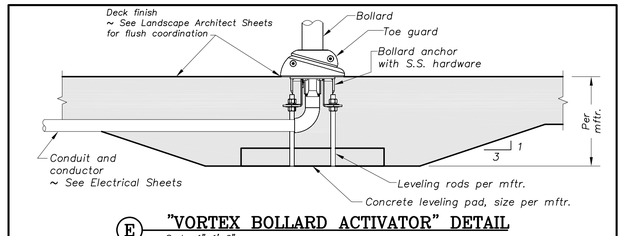
A EXISTING POOL DEMO AND BACKFILL DETAIL
Scale: ½"=1'-0"



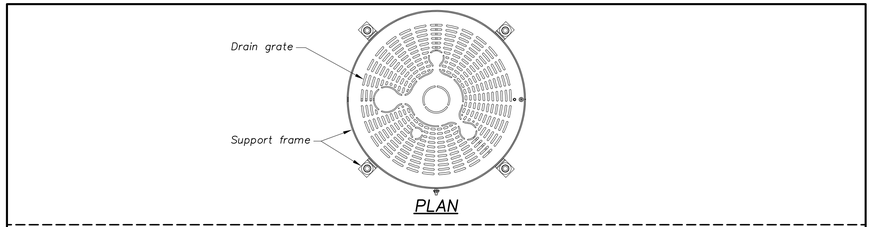
C "VORTEX ABOVE GRADE SPRAY" DETAIL
Scale: 1"=1'-0"



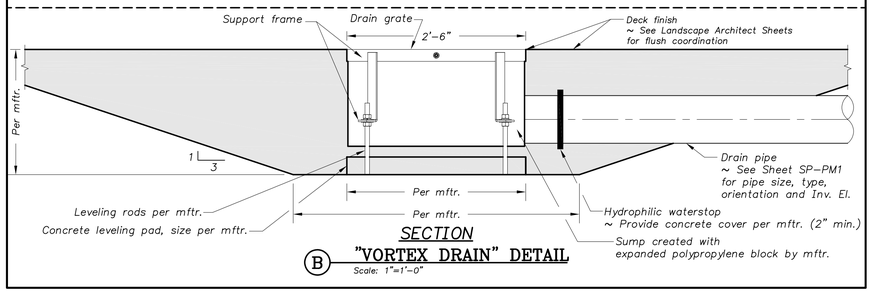
D "VORTEX FLUSH MOUNT SPRAY" DETAIL
Scale: 1"=1'-0"



E "VORTEX BOLLARD ACTIVATOR" DETAIL
Scale: 1"=1'-0"

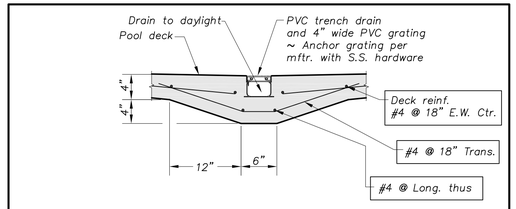


PLAN

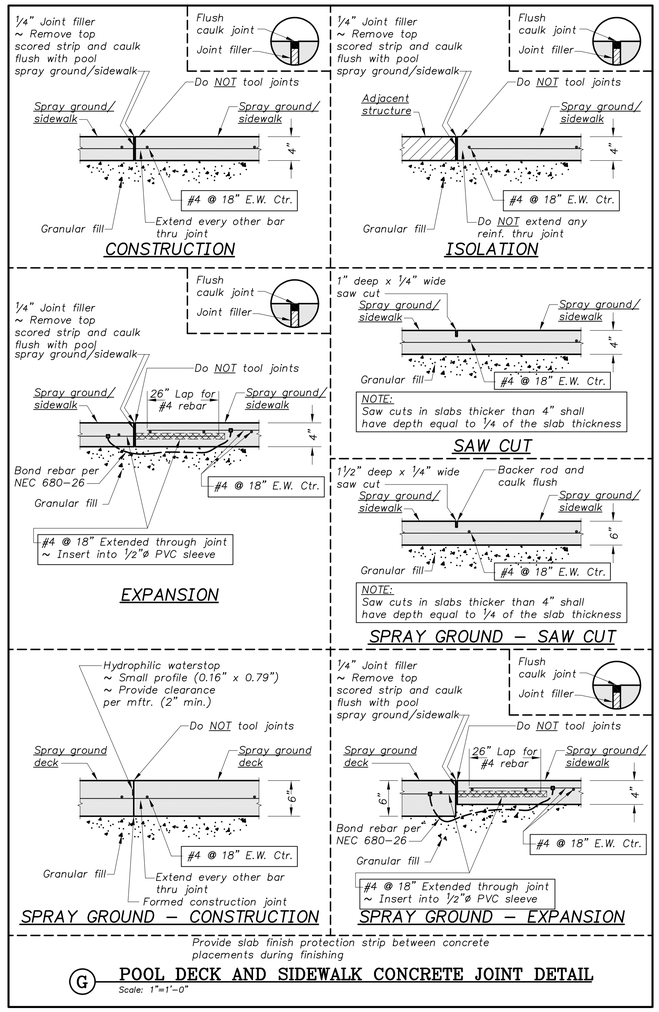


SECTION

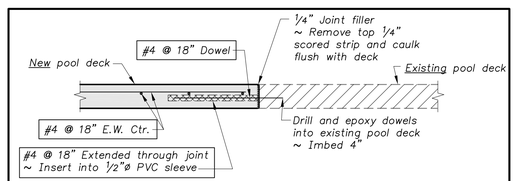
B "VORTEX DRAIN" DETAIL
Scale: 1"=1'-0"



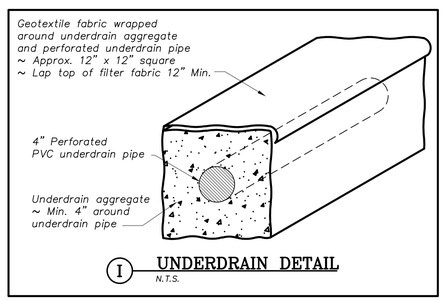
F DECK DRAIN – TRENCH DETAIL
Scale: 1"=1'-0"



G POOL DECK AND SIDEWALK CONCRETE JOINT DETAIL
Scale: 1"=1'-0"



H POOL DECK AT EXISTING POOL DECK JOINT DETAIL
Scale: 1"=1'-0"



I UNDERDRAIN DETAIL
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WICHITA, KANSAS
Spray Ground
BOSTON PARK

CITY OF WICHITA

Seal: JEFF A. BARTLEY LICENSED 15116 KANSAS PROFESSIONAL ENGINEER

Jeff Bartley–ENGINEER
LICENSE #15116

Date: 02-21-20	Job #: 18-512
Drawn: SRS	Checked: JAB
Issue: CONSTRUCTION DOCUMENTS	

SPRAY GROUND DETAILS

SP-PM2

EXISTING FILTER AREA DEMO KEY NOTES

1. Protect existing filter building structure
2. Existing chemical room area
3. Existing filter building doors
4. Demo/remove concrete curbed wall top of backwash drain basin. The entire top of the backwash pit shall be extended vertically with new concrete as shown on Detail B–SP–F1. The intent of the call out for the west part of the backwash pit to be removed in detail A–SP–F1 is for the existing concrete curb on top of the backwash pit to be removed
5. Protect existing pool wet basin structure
6. Demo/remove existing pool filter mechanical equipment identified unless otherwise noted or needed for complete system
7. Protect existing pool backwash drain basin structure
8. Existing backwash floor drain
9. Existing handrails around pits shall be protected during demolition
10. Protect existing pump pit structure
11. Existing electrical "J" boxes
12. Existing pit manhole steps
13. Existing pump pit floor drain
14. Salvage all existing related chemical feed systems. Present to owner for assessment to be reused/reinstalled
15. Protect existing electrical panels
16. Existing ceiling air duct system
17. Salvage existing erosion feeder. Provide to owner for re–use
18. Protect existing 3" domestic water supply
19. Protect existing pool manual fill valve
20. Existing 10" – Pool main drain piping
21. Existing 6" – Pool gutter return piping
22. Demo/remove existing valves at end of piping
23. Existing 4" – Pool return piping – Capped/Abandoned
24. Existing 3" – Wading pool return piping – Capped/Abandoned
25. Demo/remove partial of concrete floor shown for spray ground spray features header piping with laterals – See Detail F–SP–F2
26. Protect existing sump pumps. Demo/remove sump pump discharge piping
27. Protect existing expose piping on CMU wall
28. Existing bathroom area
29. Existing deep wet basin structure

FILTER AREA IMPROVEMENT KEY NOTES

1. Existing 10" piping capped/abandon – See D1 sheet for further information and pipe route
2. Existing 6" piping capped/abandon – See D1 sheet for further information and pipe route
3. Existing 4" piping capped/abandon – See D1 sheet for further information and pipe route
4. PVC cap
5. 6" Spray ground main drain header return piping
6. Provide cored hole within existing wall
7. Provide link seal fitting around pipe
8. Fill annular space around pipe with non shrink grout on wet side of pit
9. Provide (3) 8" cored drilled holes equally space at base of wall to allow end of season drainage from upper basin
10. 6" Spray ground recirc pump suction
11. Isolation Butterfly Valve ~ lever or handwheel operated valve equipment (pumps, float valve, end of existing pool piping). Provide S.S. operator stem for submerged valves
12. PVC reducer
13. Spray ground recirc pump on concrete base ~ See Detail B–SP–F3
14. Grout fill old pump suction penetration
15. Throttling Butterfly Valve ~ Wheel operated valve at supply lines (water features, pool recirc, filter backwash discharge piping)
16. 4" Pump discharge/filter influent piping
17. Mag meter flowmeter
18. Floor mount pipe supports – saddle type
19. Filter pressure gauges mounted to filter face piping with S.S. hardware
20. 4" Filter face piping
21. 4" Filter backwash header piping. Set open end 3" above pit wall
22. 3'–0"ø Spray ground fiber glass filters
23. Air release valves at op of filters with bypass drain line – Se Detail J–SP–F3
24. 4" Filter effluent/UV influent piping
25. UV bypass piping
26. PVC blind flange
27. UV Vessel and Controller (N.I.C.)
28. Connection <u>TO</u> Chemical Controller – See Detail C,D–SP–F4
29. Connection <u>TO</u> Erosion Feeder –See Detail B,D–SP–F4
30. Connection <u>FROM</u> Muriatic Acid feed system – See Detail A,D–SP–F4
31. Erosion feeder discharged into pit B–SP–F4
32. 4" Filter return piping discharged into deep pit
33. Low water cut–off switch with baffle – Set float 18" above recirc pump suction – See Detail H–SP–F3
34. 6" Spray ground water features pump suction piping
35. Spray ground water features pump on concrete base – See Detail B–SP–F3
36. 4" Spray ground – Water feature pump discharge piping
37. Pipe supports – See Details D,E,G–SP–F3
38. 2" Wet pit sump pump end of season discharge piping – See PM1 sheet for pipe orientation and continuation
39. Existing domestic water supply
40. Pipe saddle
41. Mechanical auto fill supply piping
42. Mechanical auto fill device – See Detail I–SP–F3
43. Mechanical auto fill discharge piping I–SP–F3
44. Spray ground – 4" Water features supply header piping – See PM1 sheet for pipe sizes and orientation
45. Spray ground water features laterals core drilled through existing wall foundation wall
46. 2½" "Roster tail and Wave Water" – Spray features header supply piping
47. 1½" "Plane" – Spray features header supply piping
48. 2" "Geyser and Jet Stream" – Spray features header supply piping
49. Ball valve
50. Solenoid valve
51. Spray ground header supply piping PVC cap
52. 2½" Spray ground – Water features end of season header drain piping combined
53. 3" Header drain pipe discharged into pit
54. Spray ground – Features control panel
55. Spray ground – Chemical controller reinstalled or furnished by Owner installed by Contractor
56. Granular fill area
57. Replacement of filter area slab to allow installation of below grade feature supply and drain piping. New slab construction shall include a min. 4" concrete slab with #4 @ 18" O.C. reinforcing. Install expansion joint slip dowels in adjacent existing concrete surfaces. Saw–cut existing filter area floor as needed for straight joints as shown
58. 14" Tall concrete curbed wall around perimeter of existing drain basin – See Detail F–SP–F3
59. Provide 16" Wide x 2" Deep recessed at of wall – See Detail F–SP–F3
60. Hydrophilic water stop at base of curbed wall – See Detail F–SP–F3
61. Emergency eyewash/shower station anchored to floor with S.S. hardware
62. Provide 1" tempered water supply connection with mixing valve from existing bathhouse water supply
63. Existing Erosion feeder re–used
64. Existing pump pit sump pump with new 2" discharge piping discharged into drain basin. Set end of pipe 3" above top of wall
65. Existing deep pit end of season sump pump
66. Muriatic Acid chemical feed system – See Detail A–SP–F4

IMPORTANT NOTE

Pump hoist <u>NOT</u> required at this location

FILTER DATA

Spray Ground	Volume (gallons)	Recirc Rate (GPM)	Filter Size (dia.)	Quantity or Cells	Filter Area Each (s.f.)	Filter Area Total (s.f.)	Filter Loading Rate (gpm/s.f.)	Average Turnover (hours)	Backwash Rate at 15 gpm*s.f. (gpm)	Backwash Time (minutes)	Backwash Volume Each (ga.)	Backwash Volume Total (gal.)
Main	0	240	3.00	3	7.07	21.20	11.32	0.00	106	5	530	1,590

PUMP DATA

Location	Pump Description	Flow (gpm)	TDH (ft.)	TDH (psi)	Shut-off Head (max.) (ft.)	Efficiency +/- 5%	HP	RPM	VFD
Spray Ground	Recirc	250	40	17	85	n/a	5	3,600	Yes
Spray Ground	Water Feature	240	45	19	85	n/a	5	3,600	Yes

MAXIMUM PIPE SUPPORT SPACING (Feet) **

Pipe Size	Sch 80 PVC	Ductile Iron	Copper (L&K)	
½"	4.5	–	5.0	
¾"	4.5	–	5.0	
1"	5.0	–	6.0	
1¼"	5.0	–	7.0	
1½"	5.5	–	8.0	
2"	6.0	–	8.0	
2½"	6.0	–	9.0	
3"	7.0	–	10.0	
4"	7.5	*	12.0	
5"	–	–	13.0	
6"	9.0	*	14.0	
8"	9.5	*	16.0	
10"	10.0	*	18.0	
12"	11.5	*	19.0	
14"	–	*	–	
16"	–	*	–	

* Maximum support spacing of 20 Ft. Provide a minimum of 1 hanger as close as practical to the joint behind the bell, and at changes of direction and branch connections.

** Unless shown or noted otherwise

PIPING NOTES

1. Pipe type shall be Sch 80 PVC unless noted otherwise
2. Refer to Pool Mechanical Sheets for pipe types beyond the building
3. Pipe sizes are identified in inches on the drawings
4. Pipe connection hardware shall be S.S. within Pool Mechanical Room
5. Contractor shall provide and install uniflanges/unions as req'd
6. Sch 80 PVC fittings may be solvent weld or flanged at Contractor's option
7. All piping and fittings at equipment (filters, pumps, valves, etc.) shall be flanged
   ~ PVC flanges at fittings shall be male type as shown
8. Refer to Maximum Pipe Support Spacing Schedule for frequency and spacing of pipe supports
   ~ At minimum, Contractor shall support piping as indicated on schedule which may require more supports than indicated on drawings
9. All hardware shall be S.S.
10. Provide air release valve at all high loops in piping
11. Provide drain valve at all low points in piping
12. All piping through concrete structures shall be cast–in–place
    ~ No pipe sleeves or coring allowed

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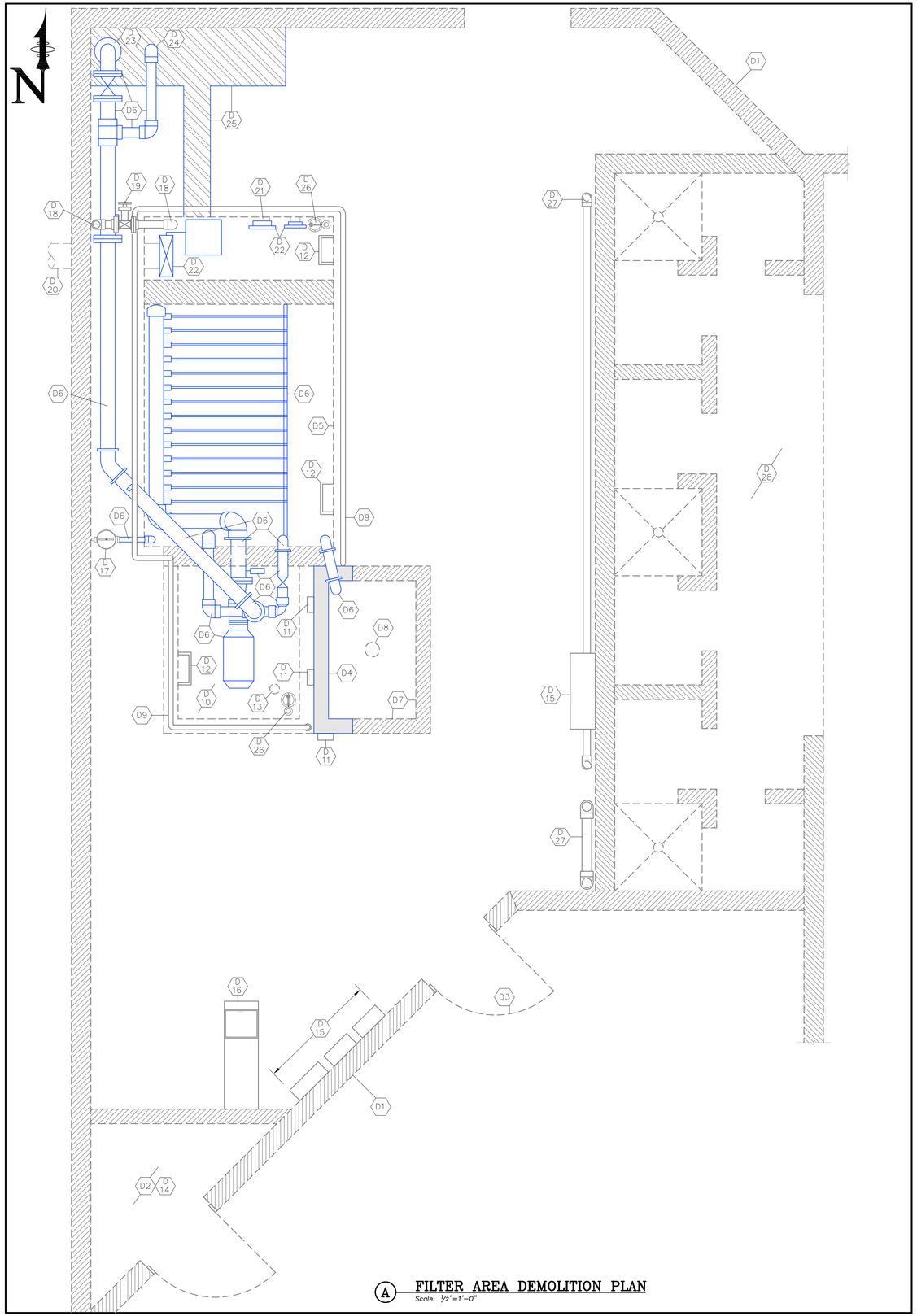
Issue: CONSTRUCTION DOCUMENTS

FILTER AREA IMPROVEMENT DATA AND KEY NOTES

SP–F0



A FILTER AREA DEMOLITION PLAN
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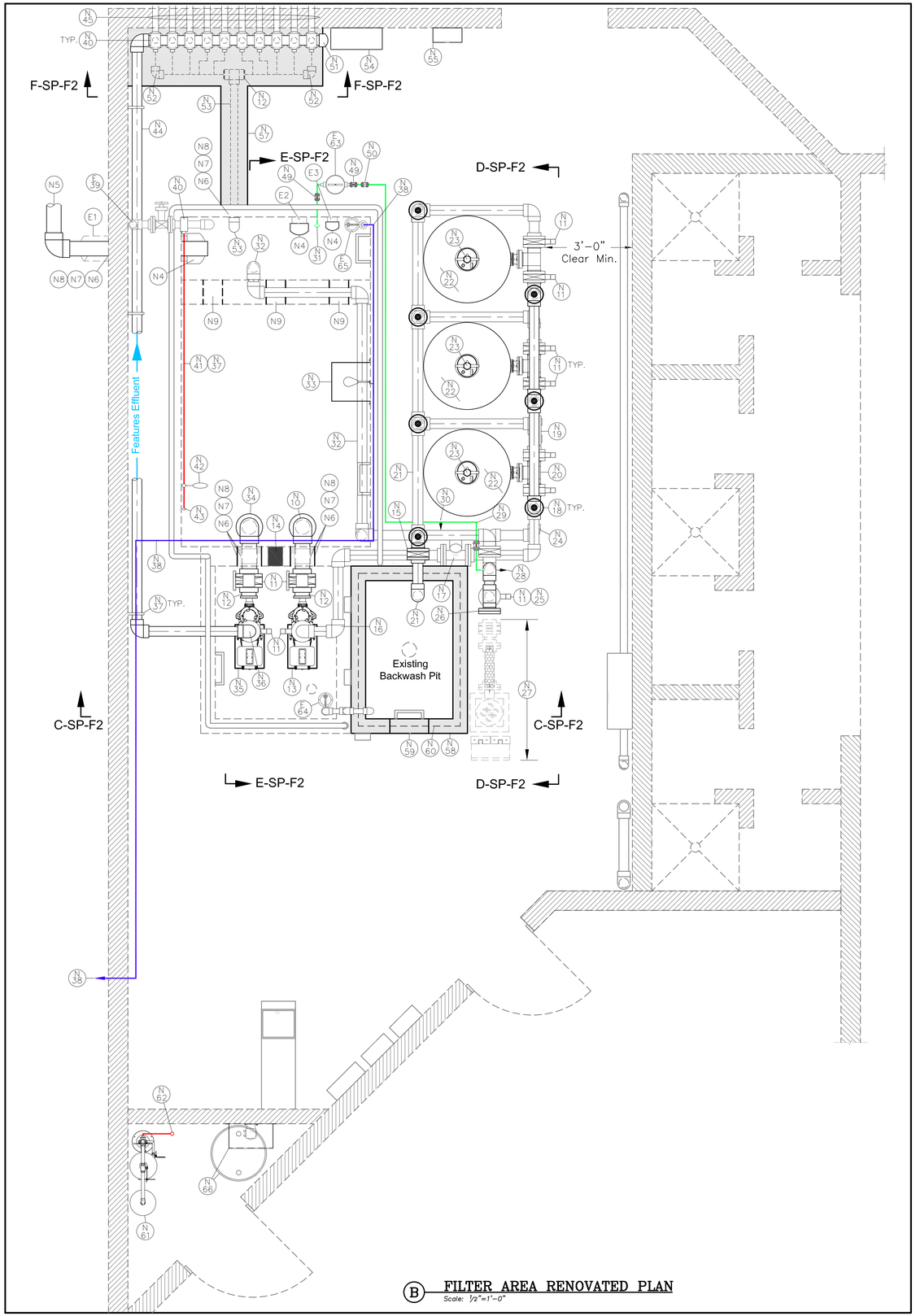

B FILTER AREA RENOVATED PLAN
Scale: 1/2"=1'-0"

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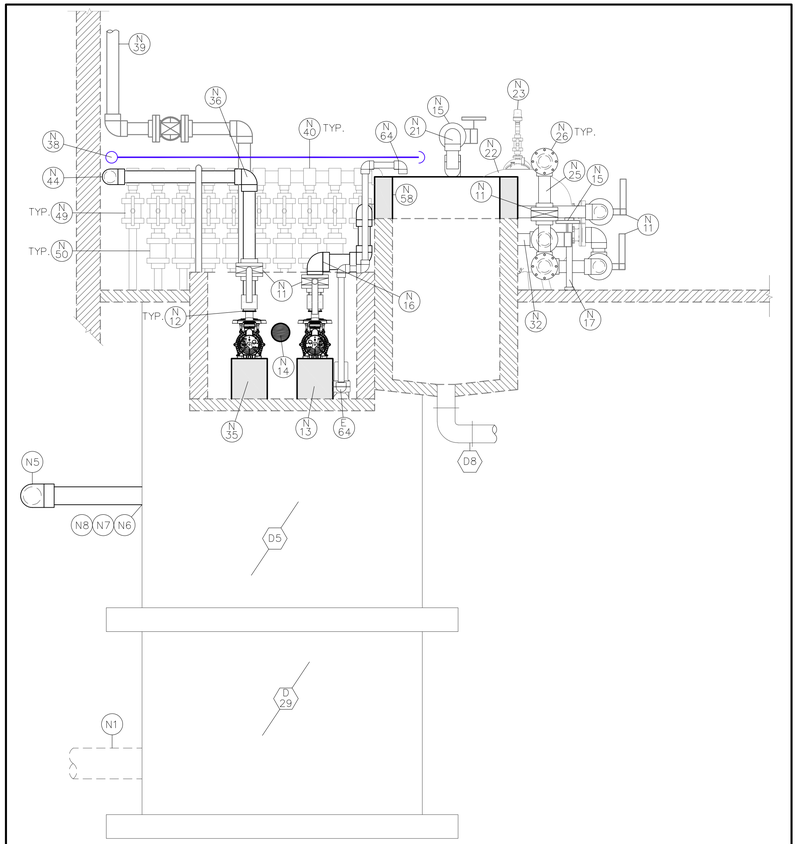
FILTER AREA IMPROVEMENT PLAN

SP-F1



C FILTER AREA IMPROVEMENT SECTION
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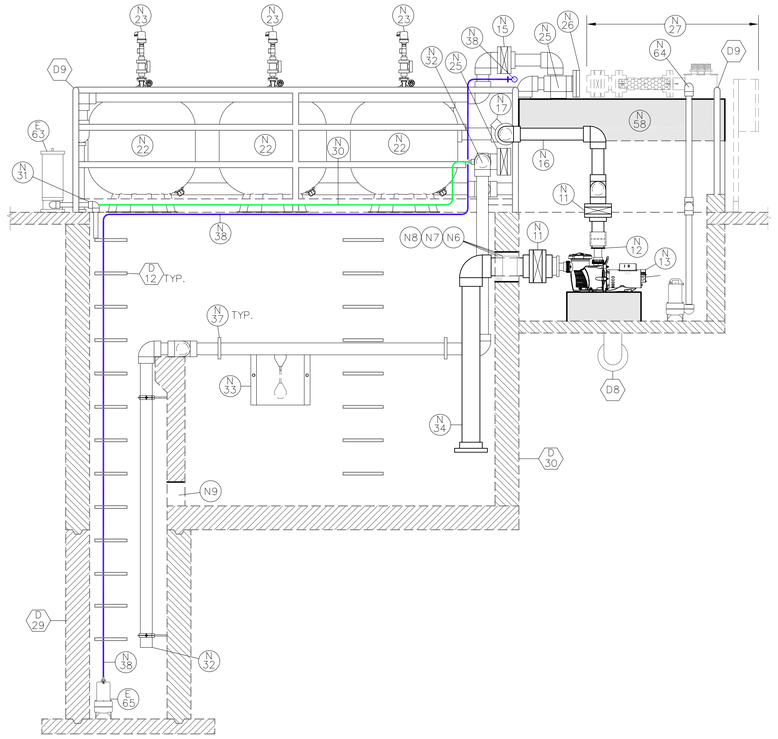

E FILTER AREA IMPROVEMENT SECTION
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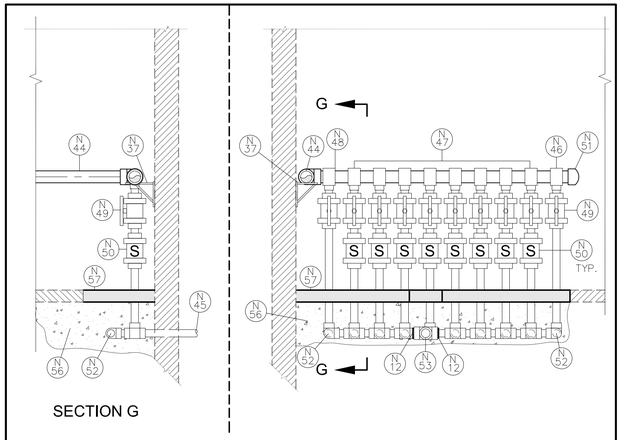

F FILTER AREA IMPROVEMENT SECTION
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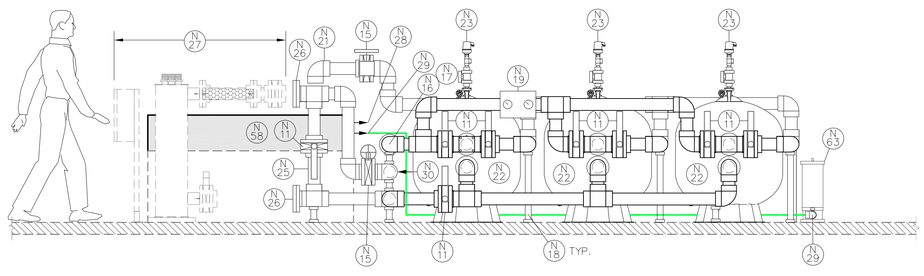

D FILTER AREA IMPROVEMENT SECTION
Scale: 1/2"=1'-0"

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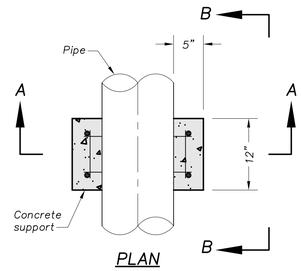
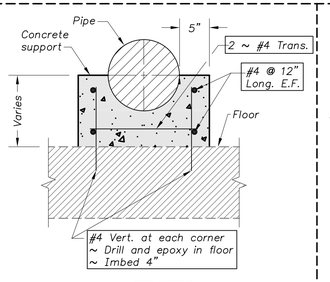
FILTER AREA IMPROVEMENT SECTIONS

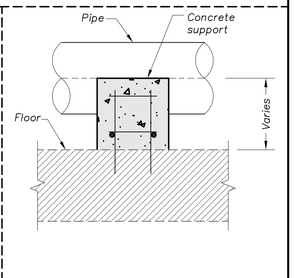
SP-F2



PLAN



SECTION A



SECTION B

A PIPE SUPPORT – CONCRETE DETAIL

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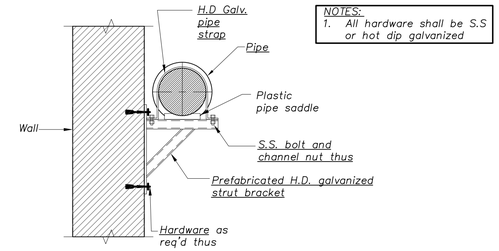
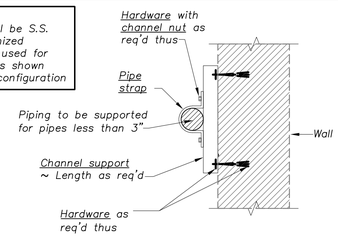


NOTES:
1. All hardware shall be S.S or hot dip galvanized

D PIPE SUPPORT WALL MOUNT BRACKET DETAIL

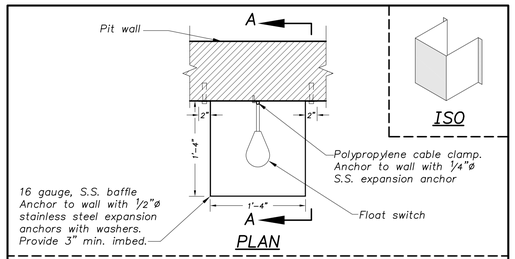
Scale: NTS

NOTES:
1. All hardware shall be S.S. or hot dip galvanized
2. Support may be used for horizontal pipe as shown or vertical pipe configuration

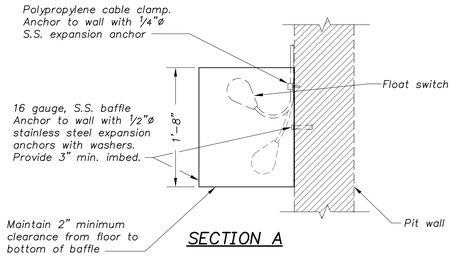


E PIPE SUPPORT WALL MOUNT BRACKET DETAIL

Scale: NTS



PLAN



SECTION A

H FLOAT SWITCH BAFFLE DETAIL

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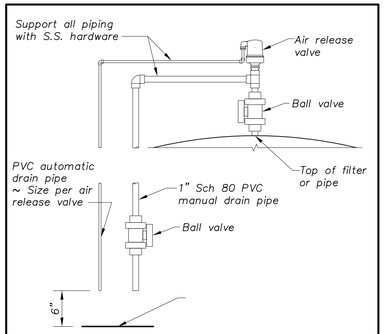
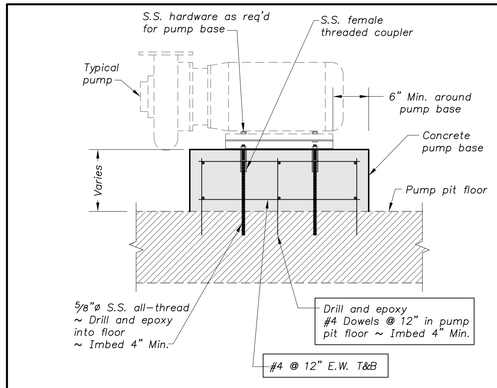


J AIR RELEASE VALVE DETAIL

N.T.S.



B PUMP BASE DETAIL

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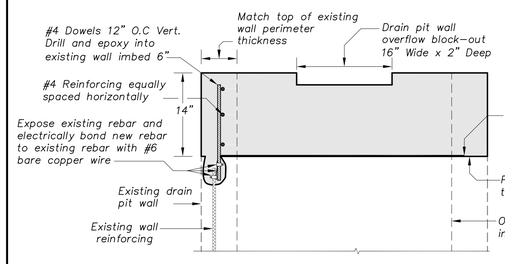

F BACKWASH PIT WALL EXTENSION DETAIL

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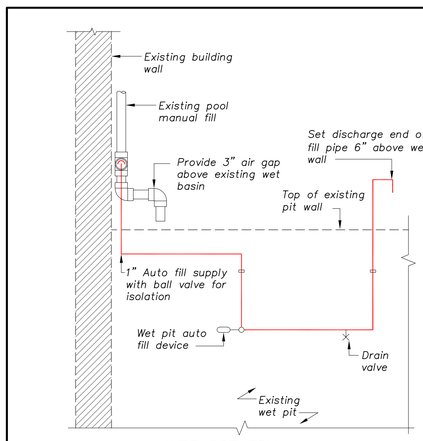
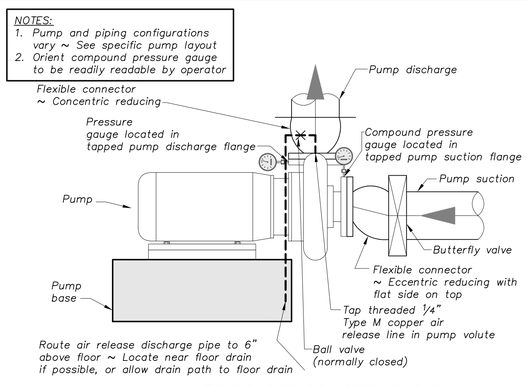


WET PIT FILL SCHEMATIC



C PUMP CONNECTION DETAIL

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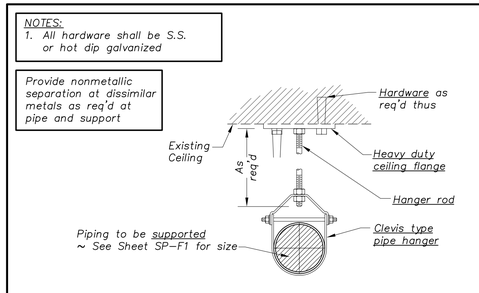
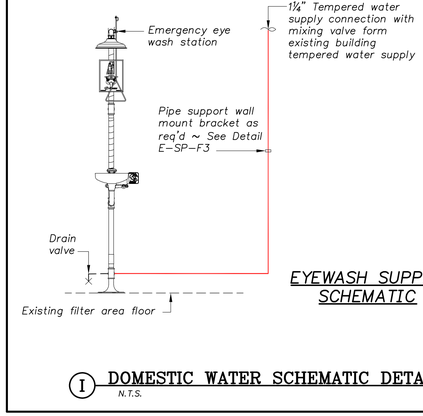


G PIPE SUPPORT – CLEVIS HANGER DETAIL

Scale: 1½"=1'-0"



EYEWASH SUPPLY SCHEMATIC

I DOMESTIC WATER SCHEMATIC DETAIL

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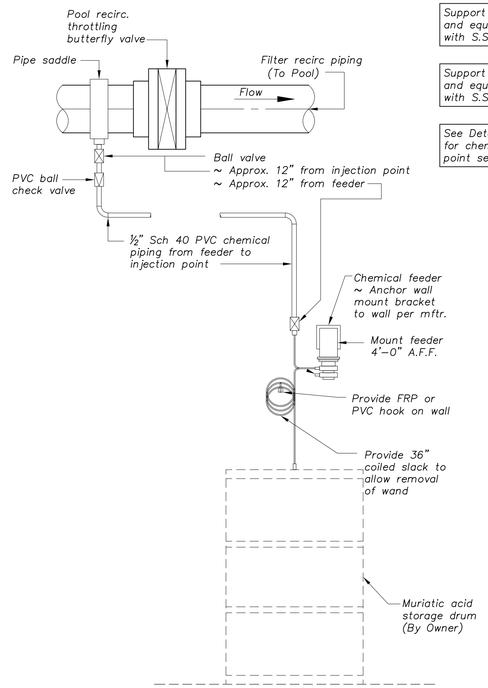
FILTER AREA IMPROVEMENT DETAILS

SP-F3

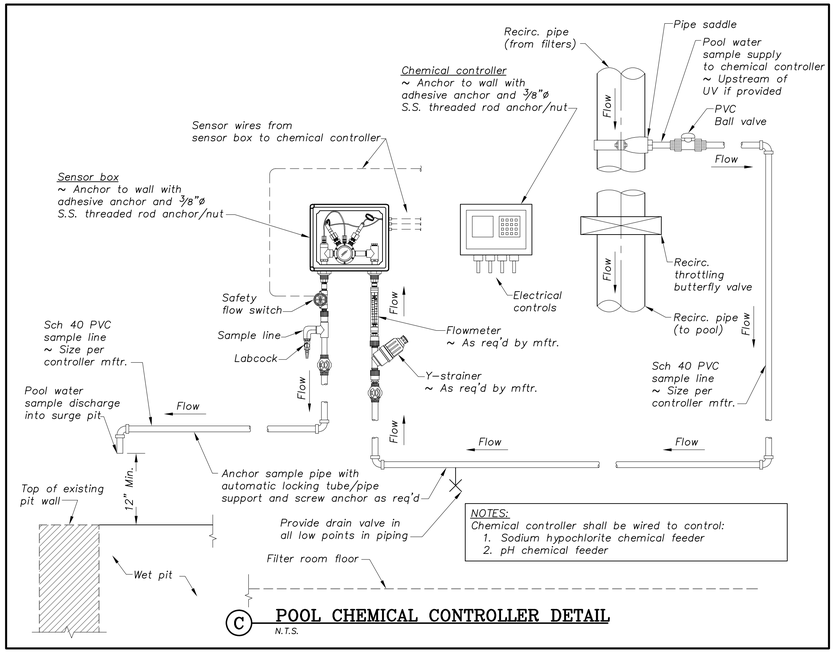


Support all piping and equipment with S.S. hardware

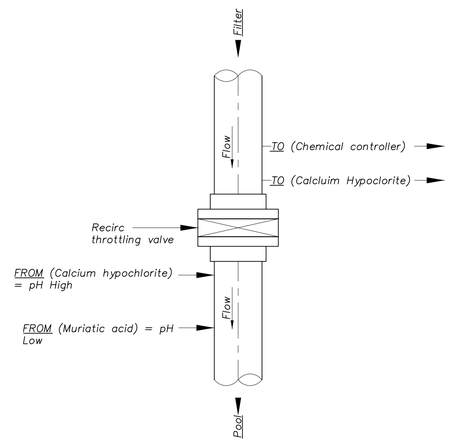
Support all piping and equipment with S.S. hardware

See Detail at right for chemical feed point sequence

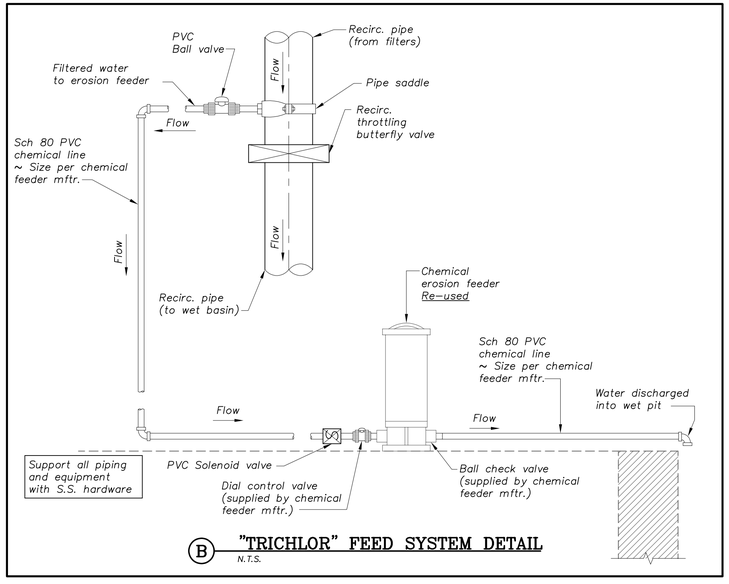
(A) "MURIATIC ACID" FEED SYSTEM DETAIL
N.T.S.



(C) POOL CHEMICAL CONTROLLER DETAIL
N.T.S.



(D) CHEMICAL FEED SEQUENCE DETAIL
N.T.S.



(B) "TRICHLOR" FEED SYSTEM DETAIL
N.T.S.

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H&B HOSS & BROWN ENGINEERS

WICHITA, KANSAS
Spray Ground
BOSTON PARK

CITY OF WICHITA

Seal: JEFF A. BARTLEY LICENSED 15116 KANSAS PROFESSIONAL ENGINEER

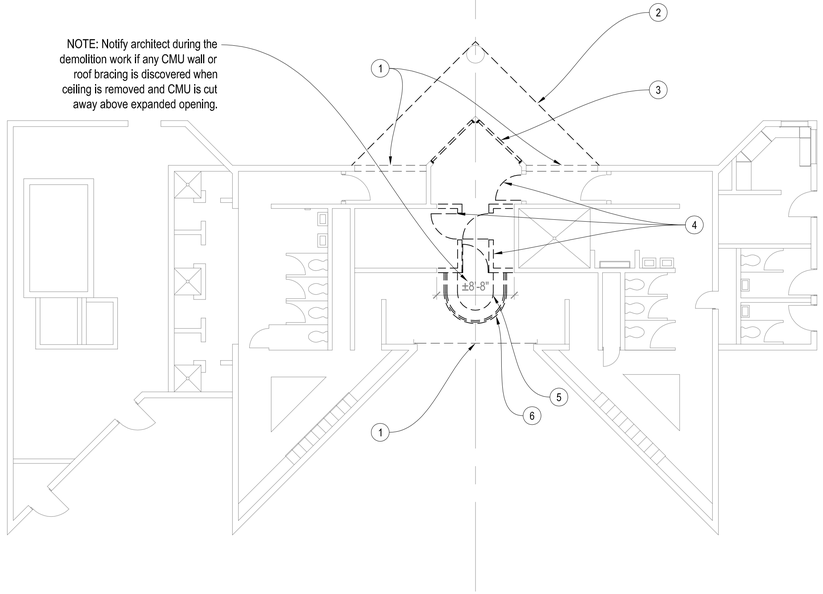
Jeff Bartley-ENGINEER
LICENSE #15116

Date: 02-21-20 | Job #: 18-512
Drawn: CJB | Checked: JAB
Issue: CONSTRUCTION DOCUMENTS

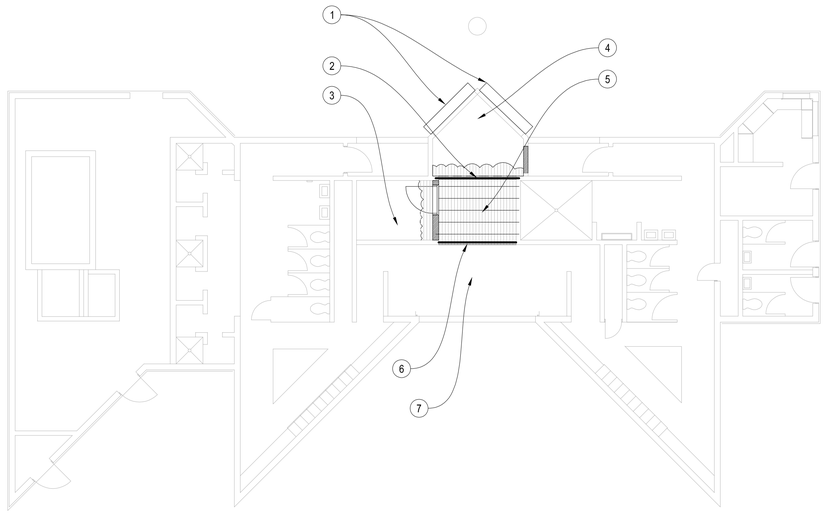
FILTER AREA IMPROVEMENT DETAILS

SP-F4

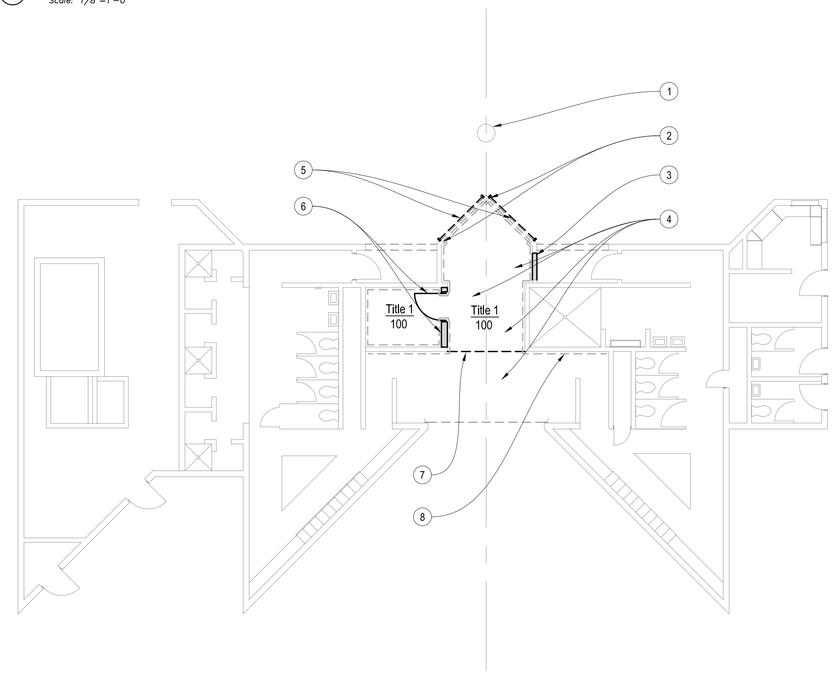
NOTE: Notify architect during the demolition work if any CMU wall or roof bracing is discovered when ceiling is removed and CMU is cut away above expanded opening.



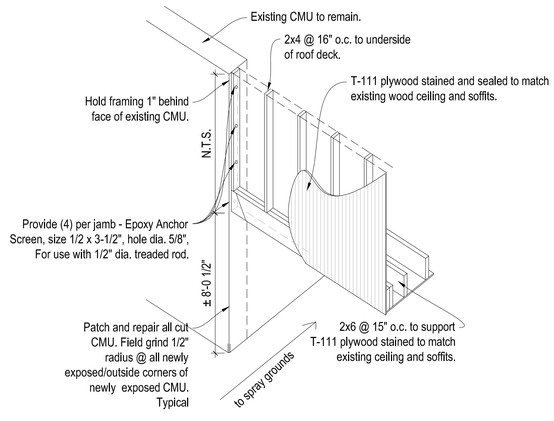
A DEMOLITION PLAN
Scale: 1/8"=1'-0"



B REFLECTED CEILING PLAN
Scale: 1/8"=1'-0"



C FLOOR PLAN
Scale: 1/8"=1'-0"



B NEW SOFFIT/CEILING DETAIL
Scale: NTS

DEMO PLAN KEYNOTES

1. Existing overhead door to remain.
2. Remove redwood trellis and framing above.
3. Remove window and window frame. Surrounding concrete wall and roof structure to remain.
4. Remove non-load bearing CMU walls, doors and frames as indicated.
5. Remove non load bearing CMU up to underside of roof deck above.
6. Remove reception desk.

REFLECTED CEILING KEYNOTES

1. New overhead coiling doors w/painted shrouds. (No manufacture decal or insignia allowed).
2. New (2) 2x6 lintel (bottom of lintel approx 8'-0 1/2" aff) to support new and adjacent/exising ceiling.
3. Existing wood ceiling to remain @ ±8'-0" Patch and repair as req'd.
4. Existing ceiling to remain. ±8'-0"
5. New ceiling. ±8'-0"
6. New (2) 2x10 lintel (bottom of lintel approx 8'-0 1/2" aff) to support 2x4 studs @ 16" o.c. from lintel to underside of roof deck above. Finish exposed face of vertical framing with stained T-111 fur siding (match existing). RE: Detail this sheet.
7. Existing ceiling to remain. (sloped)

FLOOR PLAN KEYNOTES

1. Artist installed Wind Sox by others.
2. Patch, repair and field grind 1/2" radius at all newly exposed concrete and outside corners where frames were removed.
3. New 6" non-load bearing CMU infill. Painted.
4. Patch and repair openings and cut edges of existing CMU and/or conc. floor. Grind smooth any/all offsets or irregularities in floor slab or CMU. Field grind 1/2" radius @ all newly exposed/outside corners of newly exposed CMU. Typical.
5. New overhead coiling door w/ track mounted to exterior face of concrete structure. R.O. ± 6'-8" W x 7'-4" H.
6. New 8'-0" tall non-load bearing CMU wall with 36"x 80" hollow metal door and frame (2" jamb/4" head) and locking hardware. Paint wall, door and frame. Cont. CMU 8" above ceiling.
7. Line of new header above. Re: Detail this sheet.
8. Dashed line indicates extent of wall and door painting required in this scope of work.

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H&B HOSS & BROWN ENGINEERS

WICHITA, KANSAS
Spray Ground
BOSTON PARK

Seal: PAUL C. MINTO LICENSED 3118 KANSAS PROFESSIONAL ARCHITECT Feb 21, 2020

Paul Minto—ARCHITECT LICENSE #3118

Date: 02-21-20 | Job #: 18-512

Drawn: | Checked:

Issue: CONSTRUCTION DOCUMENTS

ARCHITECTURAL PLAN

A-1

SYMBOLS

PIPING

- DIRECTION OF FLOW
- UNION
- FLANGE CONNECTION
- CAP
- ELBOW UP
- ELBOW DOWN
- TEE UP
- TEE DOWN
- PIPE REDUCER
- PIPE GUIDE
- PIPE ANCHOR
- EXPANSION JOINT
- SHUT-OFF VALVE
- CHECK VALVE
- BALANCING VALVE WITH PRESSURE PORTS
- TRIPLE DUTY VALVE
- STRAINER
- STRAINER WITH BLOWOFF
- RELIEF/SAFETY VALVE
- MANUAL AIR VENT
- SOLENOID VALVE
- THREE-WAY CONTROL VALVE
- TWO-WAY CONTROL VALVE
- PRESSURE REDUCING VALVE
- PRESSURE GAUGE
- THERMOMETER
- BACKFLOW PREVENTER
- AIR OUTLET
- OXYGEN OUTLET
- VACUUM OUTLET
- NITROGEN OUTLET
- NITROUS OXIDE OUTLET
- FS-1 FLOOR SINK
- FD-1 FLOOR DRAIN
- RD-1 ROOF DRAIN
- HB-1 HOSE BIBB
- FLOOR/GRADE CLEANOUT
- WALL CLEANOUT
- END OF LINE CLEANOUT

DUCTWORK

- AHU EQUIPMENT TYPE AND NUMBER
- PUMP
- LINEAR SLOT DIFFUSER
- FLEXIBLE DUCT
- NEGATIVE PRESSURE AIR DUCT UP
- NEGATIVE PRESSURE AIR DUCT DOWN
- POSITIVE PRESSURE AIR DUCT UP
- POSITIVE PRESSURE AIR DUCT DOWN
- RISE DUCT RISE OR DROP IN THE DIRECTION OF AIRFLOW
- SQUARE TO ROUND TRANSITION
- ROUND DUCT UP, DOWN
- ELBOW WITH TURNING VANES
- FLEXIBLE CONNECTION
- MANUAL BALANCE DAMPER
- MD MOTORIZED CONTROL DAMPER
- FD FIRE DAMPER
- SD SMOKE DAMPER
- FSD FIRE/SMOKE DAMPER
- SPIN-IN BRANCH DUCT CONNECTOR- WITH DAMPER IF SHOWN
- HIGH EFFICIENCY BRANCH DUCT CONNECTOR- WITH DAMPER IF SHOWN
- SUPPLY AIR DIFFUSER
- DUCT MOUNTED GRILLE/WALL GRILLE
- RETURN GRILLE
- NOISE REDUCING RETURN AIR TRANSFER
- SUPPLY DIFFUSER - THREE-WAY THROW
- SI DIFFUSER, GRILLE, OR REGISTER TYPE
- 100 CFM
- 6" CONNECTION SIZE

POWER EQUIPMENT

- ELECTRICAL DISTRIBUTION PANEL, SWITCHBOARD, OR MOTOR CONTROL
- PANEL BOARD
- LOAD CENTER
- M METER
- J-BOX
- MOTOR
- VFD VARIABLE FREQUENCY DRIVE WITH DISCONNECT
- DISCONNECT SWITCH
- COMBINATION DISCONNECT SWITCH AND MOTOR STARTER
- MAGNETIC MOTOR STARTER OR DECK RECEPTACLE AS NOTED ON PLANS
- VFD VARIABLE FREQUENCY DRIVE
- BELL
- HOME RUN
- SHARED CIRCUIT
- CONCEALED CONDUIT
- CONDUIT BELOW SLAB
- LOW VOLTAGE CABLE
- ONE HOT, ONE NEUTRAL, AND ONE GROUND IN CONCEALED CONDUIT (#12 in 1/2" C. U.N.O.)
- #14'S (WIRE NUMBER INDICATED)
- #16'S (WIRE NUMBER INDICATED)
- EXPOSED CONDUIT
- CONDUIT TURNING DOWN
- CONDUIT TURNING UP
- BARE COPPER BONDING LOOP

FIRE ALARM

- FACP FIRE ALARM CONTROL PANEL
- FAA ANNUNCIATOR PANEL
- FA FIRE ALARM POWER EXTENDER
- P PULL STATION
- K KNOX BOX
- R CONTROL RELAY
- Z1 SIGNAL ZONE ADDRESSABLE MODULE
- Z2 CONTROL ZONE ADDRESSABLE MODULE
- Z3 MONITOR ZONE ADDRESSABLE MODULE
- S1 SINGLE STATION SMOKE DETECTOR
- S2 SMOKE DETECTOR (SUP. RELAY BASE)
- S3 SYSTEM SMOKE DETECTOR
- S BEAM DETECTOR
- H HEAT/THERMAL DETECTOR
- D DUCT SMOKE DETECTOR
- I INDIVIDUAL ADDRESSABLE MONITOR
- MAGNETIC DOOR HOLD
- HORN/STROBE
- STROBE
- SPEAKER/STROBE
- SPEAKER
- HORN
- T VALVE TAMPER SWITCH
- F FLOW SWITCH
- EOL END OF LINE RESISTOR
- PV POST INDICATING VALVE
- FIRE ALARM BELL
- FIREMAN'S PHONE JACK
- SECURITY GUARD FOR DEVICE SHOWN

COMMUNICATIONS

- S SPEAKER HORN-PROJECTION TYPE
- S SPEAKER
- V VOLUME CONTROL (TOP 48" AFF)
- MJ MICROPHONE JACK (TOP 18" AFF)
- SC COMBINATION SPEAKER/CLOCK
- C SYSTEM CLOCK
- ET ELAPSED TIME CLOCK
- IC INTERCOM
- PS POWER SUPPLY
- A AMPLIFIER

SECURITY

- CLOSED CIRCUIT TELEVISION CAMERA
- EL ELECTRIC DOOR LOCK
- DM DOOR MONITOR
- CR CARD READER
- GB GLASS BREAK
- RE REQUEST TO EXIT BUTTON
- SM SECURITY MONITOR
- PB P PANIC BUTTON (D=DESK, W=WALL, F=FLOOR)
- KP KEY PAD

TEMPERATURE CONTROLS

- T AHU-1 TEMPERATURE SENSOR/THERMOSTAT SERVING AHU-1
- H HUMIDITY SENSOR/HUMIDISTAT
- T REMOTE TEMPERATURE SENSOR
- H REMOTE HUMIDITY SENSOR
- CO2 CARBON DIOXIDE SENSOR
- OCC OCCUPANCY SENSOR
- CO CARBON MONOXIDE SENSOR
- SP STATIC PRESSURE SENSOR
- DPT DIFFERENTIAL PRESSURE TRANSMITTER
- FM FLOW METER

PLUMBING

- WASTE LINE-ABOVE GRADE
- GW GREASE WASTE LINE-ABOVE GRADE
- WASTE LINE-BELOW GRADE
- VENT LINE
- DOMESTIC COLD WATER
- DOMESTIC HOT WATER
- T DOMESTIC TEMPERED HOT WATER
- DOMESTIC HOT WATER RECIRC.
- 140 DEGREE DOMESTIC HOT WATER
- 1 VENT THROUGH ROOF NOTE

FIRE PROTECTION

- SPRINKLER HEAT (PENDANT)
- SPRINKLER HEAD (SIDEWALL)
- SPRINKLER HEAD (UPRIGHT)
- FP FIRE PROTECTION PIPING
- SIAMESE CONNECTION

LIGHTING

- LIGHT TRACK WITH LIGHT TYPES AS INDICATED
- WALL WASHER LIGHTING FIXTURE, ARROW INDICATES DIRECTION
- A FLUORESCENT FIXTURE AND TYPE
- EMERGENCY LIGHT FIXTURE
- NIGHT LIGHT FIXTURE
- A LIGHT FIXTURE AND TYPE
- A LIGHT FIXTURE AND TYPE
- WALL MOUNTED FIXTURE
- WALL SCONCE
- WALL MOUNTED FIXTURE
- POLE MOUNTED LIGHT (NUMBER OF HEADS AS SHOWN)
- TENON MOUNTED POLE LIGHT
- IN-GROUND LIGHT FIXTURE
- BOLLARD LIGHT FIXTURE
- EXIT LIGHT CLG. MNTD. (SGL. FACE)
- EXIT LIGHT CLG. MNTD. (DBL. FACE)
- EXIT LIGHT WALL MNTD. (SGL. FACE)
- EXIT/EMERGENCY LIGHT
- EMERGENCY LIGHT
- CEILING FAN
- LIGHT POLE WITH: 1000 WATT FLOODS AND 250 WATT SECURITY FLOODS (QUANTITY TO MATCH PLANS AND SCHEDULE)

WIRING DEVICES & OUTLETS

- SIMPLEX RECEPTACLE
- DUPLEX RECEPTACLE
- GFI GROUND FAULT INTERRUPTER
- WP WEATHERPROOF DUPLEX RECEPTACLE WITH GROUND FAULT INTERRUPTER
- QUAD RECEPTACLE
- HEAVY DUTY RECEPTACLE-NEMA TYPE AS NOTED
- FLOOR MOUNTED DEVICE
- CEILING MOUNTED DEVICE
- ISOLATED GROUND DUPLEX RECEPTACLE
- IG ISOLATED GROUND QUAD RECEPTACLE
- WALL MOUNTED PHONE
- 48 48" CENTER OF DEVICE AT 48" A.F.F.
- DATA OUTLET
- TELEPHONE/DATA OUTLET
- CABLE T.V. OUTLET
- CABLE TRAY
- SURFACE RACEWAY
- S SWITCH, SPST U.N.O.
- S2 SWITCH, DPST
- SF FUSESTAT
- S3 3-WAY SWITCH
- S4 4-WAY SWITCH
- SD DIMMER SWITCH
- SJ JAMB SWITCH
- SM MOTOR RATED SWITCH
- SWP SWITCH WITH WEATHERPROOF COVER
- SK KEYED SWITCH
- TS TIME SWITCH
- PUSH BUTTON
- P PHOTOCELL SWITCH
- M MOTION SENSOR
- O1 OCCUPANCY SENSOR & TAG
- P POWER PACK

ABBREVIATIONS

A	AMPS; AIR (COMPRESSED)
A/C	AIR CONDITIONING
AF	AMPERE FUSE
AFC	ABOVE FINISHED CEILING
AFEA	AREA FOR EVACUATION ASSISTANCE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
AIC	AMPERE INTERRUPTING CURRENT
AL	ALUMINUM
APD	AIR PRESSURE DROP
ATS	AUTOMATIC TRANSFER SWITCH
AV	ACID VENT
AW	ACID WASTE
AWG	AMERICAN WIRE GAUGE
BCU	BLOWER COIL UNIT
BFP	BACKFLOW PREVENTER
BHP	BRAKE HORSEPOWER
BFF	BELOW FINISHED FLOOR
BOD	BOTTOM OF DUCT
BOP	BOTTOM OF PIPE
BOS	BOTTOM OF STRUCTURE
BTUH	BRITISH THERMAL UNITS PER HOUR
C	CONDUIT
CT	CURRENT TRANSFORMER
CATV	CABLE TELEVISION SYSTEM
CAV	CONSTANT AIR VOLUME
CCTV	CLOSED CIRCUIT TELEVISION
CD	CONDENSATE DRAIN
CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
CH	CHILLER
CO	CLEANOUT, CARBON MONOXIDE
CO2	CARBON DIOXIDE
CT	COOLING TOWER
CTR	COOLING TOWER RETURN
CTS	COOLING TOWER SUPPLY
CU	COPPER, CONDENSING UNIT
CUH	CABINET UNIT HEATER
CW	COLD WATER
CWR	CHILLED WATER RETURN
CWS	CHILLED WATER SUPPLY
D	DRAIN
DDC	DIRECT DIGITAL CONTROL
DFU	DRAINAGE FIXTURE UNITS
DN	DOWN
DPDT	DOUBLE-POLE, DOUBLE-THROW
DPST	DOUBLE-POLE, SINGLE-THROW
DX	DIRECT EXPANSION
EAT	ENTERING AIR TEMPERATURE
E/C	ELECTRICAL CONTRACTOR
EDB	ENTERING DRY BULB
EF	EXHAUST FAN
EJ	EXPANSION JOINT
ESFR	EARLY SUPPRESSION FAST RESPONSE
ESP	EXTERNAL STATIC PRESSURE
ETR	EXISTING TO REMAIN
EWB	ENTERING WET BULB
EWC	ELECTRIC WATER COOLER
FAA	FIRE ALARM ANNUNCIATOR
FACP	FIRE ALARM CONTROL PANEL
FBO	FURNISHED BY OTHERS
FCO	FLOOR CLEANOUT
FCU	FAN COIL UNIT
FD	FIRE DAMPER, FLOOR DRAIN
FF	FINISHED FLOOR
FGCO	FINISHED GRADE CLEANOUT
FL	FLOW LINE
FLA	FULL LOAD AMPS
F/C	FIRE PROTECTION CONTRACTOR
FTU	FAN TERMINAL UNIT
FVNR	FULL VOLTAGE, NON-REVERSING
G	NATURAL GAS
G/C	GENERAL CONTRACTOR
GFI	GROUND FAULT INTERRUPTER
GND	GROUND
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GW	GREASE WASTE
HB	HOSE BIBB
HCR	HOT/CHILLED WATER RETURN
HCS	HOT/CHILLED WATER SUPPLY
HD	HEAD, HUB DRAIN
HOA	HAND-OFF-AUTOMATIC
HP	HEAT PUMP
HPC	HIGH PRESSURE CONDENSATE
HPR	HEAT PUMP RETURN
HPS	HEAT PUMP SUPPLY, HIGH PRESSURE STEAM, HIGH PRESSURE SODIUM
HSTAT	HUMIDISTAT
HTG	HEATING
HTR	HEATER
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
ID	INSIDE DIAMETER
IE	INVERT ELEVATION
IG	ISOLATED GROUND
IN. WC	INCHES OF WATER COLUMN
INC.	INCANDESCENT
kcmil	1000 CIRCULAR MILS
KV	KILOVOLT
KVA	KILOVOLT-AMPS
KVAR	KILOVOLT-AMPS REACTIVE
KW	KILOWATT
KWH	KILOWATT-HOUR
L	LAVATORY
LAT	LEAVING AIR TEMPERATURE
LDB	LEAVING DRY BULB
LF	LINEAR FEET
LP	LOW PRESSURE
LPC	LOW PRESSURE STEAM CONDENSATE
LPG	LIQUIFIED PETROLEUM GAS (PROPANE)
LPS	LOW PRESSURE STEAM
LRA	LOCKED ROTOR AMPS
LWB	LEAVING WET BULB
LWT	LEAVING WATER TEMPERATURE
MBH	1000 BTU PER HOUR
M/C	MECHANICAL CONTRACTOR
MCA	MINIMUM CIRCUIT AMPACITY
MCC	MOTOR CONTROL CENTER
MCM	1000 CIRCULAR MILS
MD	MOTORIZED DAMPER
MDP	MAIN DISTRIBUTION PANEL
MFR	MANUFACTURER
MH	MANHOLE/METAL HALIDE
MLO	MAIN LUGS ONLY
MPC	MEDIUM PRESSURE CONDENSATE
MPS	MEDIUM PRESSURE STEAM
MS	MOTOR STARTER
MSB	MAIN SWITCHBOARD
MTD	MOUNTED
MAU	MAKE-UP AIR UNIT
N	NITROGEN
N/A	NOT APPLICABLE
NC	NOISE CRITERIA
NFPH	NON-FREEZE WALL HYDRANT
NIC	NOT IN CONTRACT
NO	NITROUS OXIDE
N/O N/C	NORMALLY OPEN, NORMALLY CLOSED

O	OXYGEN
OA	OUTSIDE AIR
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
ORD	OVERFLOW ROOF DRAIN
PA	PIPE ANCHOR
PCWR	PRIMARY CHILLED WATER RETURN
PCWS	PRIMARY CHILLED WATER SUPPLY
PCR	PUMPED CONDENSATE RETURN
PD	PRESSURE DROP (FEET OF WATER)
PH	PHASE
PHWR	PRIMARY HEATING WATER RETURN
PHWS	PRIMARY HEATING WATER SUPPLY
PNL	PANEL
PRV	PRESSURE REDUCING VALVE
PS	PULSE START
PSI	POUNDS PER SQUARE INCH
PSIA	POUNDS PER SQUARE INCH-ABSOLUTE
PSIG	POUNDS PER SQUARE INCH-GAUGE
PT	POTENTIAL TRANSFORMER
QTY	QUANTITY
R	REFRIGERANT
RA	RETURN AIR
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
REV	REVISION
RF	RETURN FAN
RH	RELATIVE HUMIDITY
RLA	RUNNING LOAD AMPS
RPM	REVOLUTIONS PER MINUTE
RTU	ROOF TOP UNIT
S	SINK, STEAM
SA	SUPPLY AIR
SAN	SANITARY SEWER
SCWR	SECONDARY CHILLED WATER RETURN
SCWS	SECONDARY CHILLED WATER SUPPLY
SD	SMOKE DAMPER, STORM DRAIN
SF	SUPPLY FAN
SHWR	SECONDARY HEATING WATER RETURN
SHWS	SECONDARY HEATING WATER SUPPLY
SPST	SINGLE-POLE SINGLE-THROW
SP	STATIC PRESSURE
SQFT	SQUARE FOOT/SQUARE FEET
S/S	START/STOP
SS	SERVICE SINK, STAINLESS STEEL
ST	STORM DRAIN, SOUND TRAP, STEAM TRAP
STC	SOUND TRANSMISSION CLASS
STM	STEAM
SW	SOFT WATER
SWBD	SWITCHBOARD
T	TEMPERED WATER
TG	TEMPERATURE GAUGE
TDH	TOTAL DYNAMIC HEAD
TSP	TOTAL STATIC PRESSURE
TSTAT	THERMOSTAT
TL	TWISTLOCK
TU	TERMINAL UNIT
TR	TEMPERED WATER RETURN
UF	UNDER FLOOR
UG	UNDER GROUND
UH	UNIT HEATER
UL	UNDERWRITERS LABORATORIES, INC.
UNO	UNLESS NOTED OTHERWISE
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VACUUM
VAC	VOLTS ALTERNATING CURRENT
VAV	VARIABLE AIR VOLUME
VCP	VITRIFIED CLAY PIPE
VD	VOLUME DAMPER
VFD	VARIABLE FREQUENCY DRIVE
VTR	VENT THROUGH ROOF
W	WATER SERVICE, WATTS
WB	WET BULB
WCO	WALL CLEANOUT
WC	WATER COLUMN, WATER CLOSET
WH	WALL HYDRANT
WPD	WATER PRESSURE DROP
WP	WEATHERPROOF
WT	WATERTIGHT, WEIGHT
XFMR	TRANSFORMER
XP	EXPLOSION-PROOF

GENERAL

- HEAVY LINEWEIGHT INDICATES NEW WORK
- CONNECT NEW TO EXISTING
- LIGHT AND SCREENED LINEWEIGHT INDICATES EXISTING-TO-REMAIN
- DARK AND DASHED LINEWEIGHT INDICATES DEMOLITION WHEN SHOWN ON DEMOLITION PLAN OR NOTED
- 2 CONSTRUCTION NOTE
- 2 REVISION NUMBER
- M201 SECTION CUT THROUGH DRAWING
- M201 AREA OF ENLARGEMENT
- 1 M201 PLAN NUMBER; SHEET WHERE ENLARGED PLAN IS DRAWN

THIS IS A MASTER LEGEND. NOT ALL SYMBOLS, ABBREVIATIONS, ETC. ARE USED ON THE DRAWINGS.

THE SYMBOLS ON THIS SHEET SHALL APPLY TO MECHANICAL AND ELECTRICAL SHEETS.

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H&B Project Number: 1820529

WICHITA, KANSAS
Spray Ground
BOSTON PARK

CITY OF WICHITA

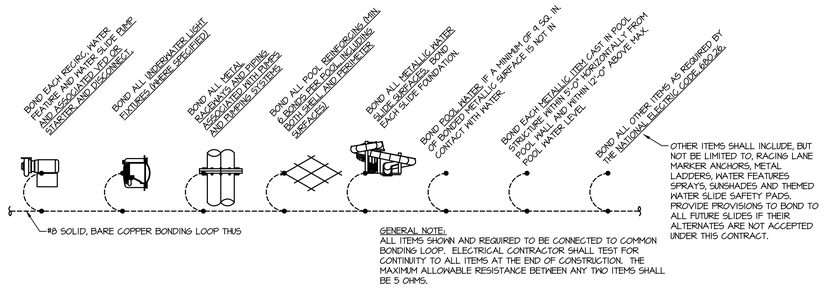
Seal: CASEY STEINER LICENSED PROFESSIONAL ENGINEER KANSAS

CASEY JOHN STEINER
LICENSE #19423

Date: 2-21-20 | Job #: 1820529
Drawn: CDW | Checked: MST
Issue: CONSTRUCTION DOCUMENTS

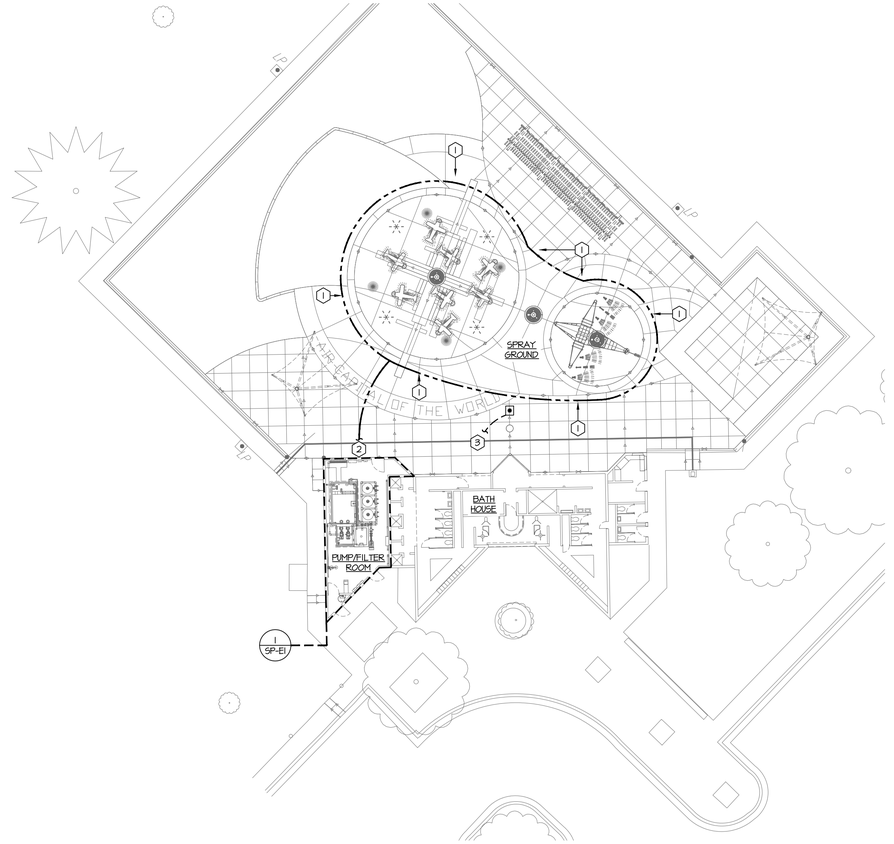
SYMBOLS & ABBREVIATIONS

SP-ME1



2 Equipotential Bonding Schematic

Scale: None



1 MEP Site Plan

Scale: 1" = 20'-0"

GENERAL NOTES:

THE FOLLOWING NOTES SHALL APPLY TO ALL WORK SHOWN ON SHEETS SP-ME1, SP-ME2, SP-M1, SP-E1, SP-E2, AND SP-E3 AND SHALL SUPERSEDE REQUIREMENTS DEFINED IN SPECIFICATIONS:

A. UNLESS NOTED OTHERWISE, ALL CONDUITS SHALL BE SCHEDULE 40 PVC WITH BARE COPPER GROUND WIRE. ALL CONDUIT SHALL BE RUN PARALLEL OR PERPENDICULAR TO THE BUILDING SURFACES. ALL EMPTY CONDUIT SYSTEMS SHALL BE PROVIDED WITH PULL STRINGS.

B. ALL POWER WIRES AND CABLES SHALL BE COPPER, #12 AWG, UNLESS NOTED OTHERWISE. WIRE SHALL BE CODE TYPE THHN OR THWN.

C. JUNCTION, PULL, RECEPTACLE, AND LIGHT FIXTURE BOXES SHALL BE PVC.

D. ALL FLUSH WIRING DEVICES SHALL BE PROVIDED WITH JUMBO PASS & SEYMOUR STAINLESS STEEL COVER PLATES. COVER PLATES FOR WIRING DEVICES IN SURFACE BOXES SHALL BE STAINLESS STEEL UTILITY BOX COVERS, RAISED 1/4".

E. PROVIDE THE LIGHT FIXTURES AS SCHEDULED. MATERIAL, TRIM, EQUIPMENT OR SERVICES NECESSARY TO COMPLETE THE INSTALLATION OF THESE FIXTURES, BUT NOT SPECIFICALLY MENTIONED, SHALL BE FURNISHED AS THOUGH SPECIFIED.

F. ALL ELECTRICAL EQUIPMENT AND INSTALLATION SHALL MEET THE REQUIREMENTS OF NEC ARTICLE 680. ALL EQUIPMENT IN AND AROUND THE POOL SHALL BE UL LISTED AND APPROVED FOR POOL USE.

G. FOR ALL ELECTRICAL ENCLOSURES, PANELS, MCC, TRANSFORMERS, ETC., PROVIDE BLACK PHENOLIC PLASTIC TAGS WITH WHITE LETTERING. TAGS SHALL CLEARLY DESCRIBE CONTENTS OF ENCLOSURE OR FUNCTION OF DEVICE AND SHALL BE MECHANICALLY FASTENED TO THE ENCLOSURE. ADHESIVE FASTENING SHALL NOT BE ACCEPTABLE.

H. ALL ELECTRICAL EQUIPMENT IN ENCLOSED PUMP PITS AND FILTER AREAS SHALL BE IN NEMA-4 ENCLOSURES. ALL EXTERIOR ELECTRICAL EQUIPMENT SHALL BE NEMA-3R ENCLOSURES. ALL ELECTRICAL EQUIPMENT IN DEDICATED MECHANICAL/ ELECTRICAL ROOMS SHALL BE NEMA-1. THIS NOTE SHALL APPLY UNLESS NOTED OTHERWISE ON DRAWINGS.

I. ALL BELOW GRADE CONDUITS ON SITE SHALL BE ROUTED IN GRANULAR FILL OR LOWER, AND NOT WITHIN THE CONCRETE DECK.

(E) ELECTRICAL PLAN NOTES:

1. #8 SOLID BARE COPPER SPRAYGROUND BONDING LOOP. BOND ALL METALLIC ITEMS AS REQUIRED BY THE NATIONAL ELECTRIC CODE, 680.26. INSTALL BONDING LOOP 48" (+/- 6") FROM INSIDE FACE OF SPRAYGROUND AND NO DEEPER THAN 12" BELOW THE FINISHED DECK ELEVATION. SEE DETAIL #2/SP-ME2 FOR FURTHER INFORMATION.
2. EXTEND #8 BONDING WIRE INTO FILTER AREA OR PUMP PIT AND BOND TO PUMPS.
3. PROVIDE (1) 3/4" SCHEDULE 40 PVC CONDUIT WITH (2) #12 CONTROL CONDUCTORS BELOW GRADE TO FILTER/PUMP AREA AND CONNECT TO VORTEX SMARTFLOW LOGIC5 CONTROLLER. REFER TO ELECTRICAL PLAN ON SHEET SP-E1 FOR CONTINUATION.

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WICHITA, KANSAS
Spray Ground
BOSTON PARK

CITY OF WICHITA

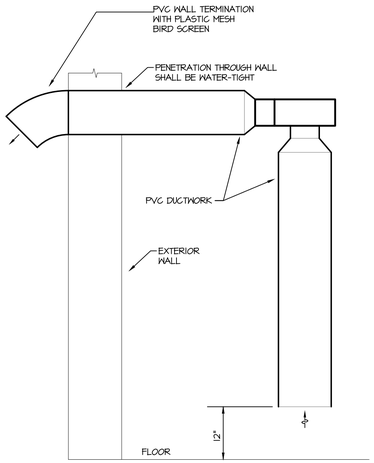
Seal: CASEY STEINER LICENSED KANSAS PROFESSIONAL ENGINEER 2/20/20

CASEY JOHN STEINER
LICENSE #19423

Date: 2-21-20	Job #: 1820529
Drawn: CDW/JEM	Checked: MST
Issue: CONSTRUCTION DOCUMENTS	

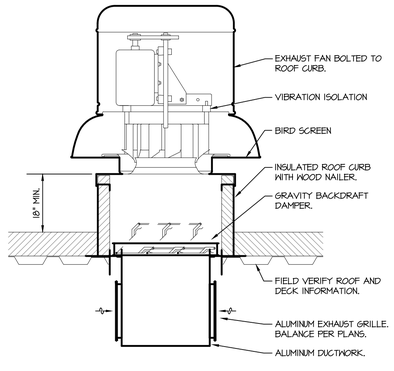
MEP SITE PLAN

SP-ME2



3 Chemical Exhaust Fan Detail

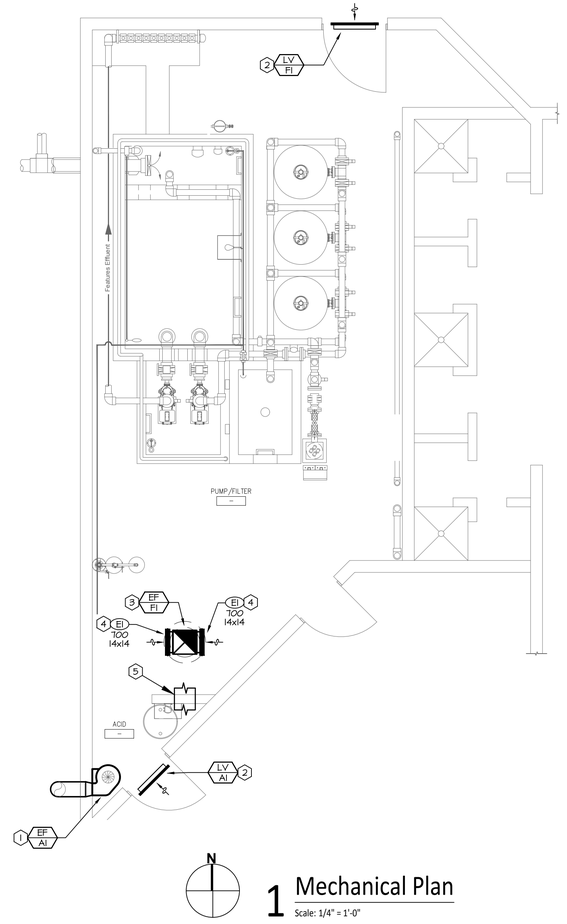
Scale: Not to Scale



NOTES:
1. DUCT SIZES SHALL BE AS INDICATED ON THE PLANS.
2. PROVIDE ROOF CURB OF SUFFICIENT HEIGHT TO PROVIDE A MINIMUM 18" CLEARANCE FROM THE TOP OF THE CURB TO THE FINISHED ROOF.
3. BOTTOM OF ROOF CURB SHALL MATCH THE SLOPE OF THE ROOF SO THAT THE TOP OF ROOF CURB IS LEVEL. ATTACH FAN TO CURB PER MANUFACTURER'S RECOMMENDATIONS.
4. PROVIDE ROOFING AND FLASHING PER ARCHITECTURAL AND ROOF MANUFACTURER'S REQUIREMENTS.
5. CURB INSTALLATION SHALL NOT VOID ROOF WARRANTY. COORDINATE ROOF WARRANTY WITH OWNER.

2 Roof Exhaust Fan Detail

Scale: Not to Scale



1 Mechanical Plan

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

GENERAL NOTES:

A. THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF THE WORK. PROVIDE SHEET METAL SYSTEMS COMPLETE AND PER APPLICABLE CODES INCLUDING ALL NECESSARY OFFSETS, FITTINGS AND SPECIAL RADIUS OR MITRED ELBOWS WHICH ARE REQUIRED DUE TO SPACE CONSTRAINTS OR OTHER CONDITIONS.

B. COORDINATE THE INSTALLATION OF THE DUCTWORK AND EQUIPMENT WITH THE WORK OF ALL OTHER TRADES. VERIFY ALL CLEARANCES PRIOR TO THE FABRICATION OF ANY SYSTEM COMPONENTS.

C. DUCTWORK SHALL NOT BE LOCATED OVER ELECTRICAL EQUIPMENT OR PANELS. PROVIDE THE CODE REQUIRED WORKING CLEARANCE AROUND ALL ELECTRICAL EQUIPMENT AND PANELS.

D. PROVIDE ALL MISCELLANEOUS SUPPORTING STEEL, ETC. FOR THE PROPER INSTALLATION OF ALL MECHANICAL SYSTEMS.

E. COORDINATE FLOOR, WALL, ROOF PENETRATIONS, LOUVER SIZES, PAD LOCATIONS, ETC. WITH THE ARCHITECTURAL TRADES.

F. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS AND WALL ELEVATIONS FOR EXACT LOCATION OF GRILLES, REGISTERS, AND DIFFUSERS.

G. ALL DUCTWORK DIMENSIONS INDICATE THE INSIDE CLEAR DIMENSION.

6 PLAN NOTES:

1. PROVIDE CENTRIFUGAL FAN AS SCHEDULED MOUNTED HIGH IN CHEMICAL ROOM. PROVIDE 12" PVC PIPE DOWN TO APPROXIMATELY 12" AFF. JOG DUCTWORK TO BE TIGHT AGAINST WALL TO ALLOW FOR REMOVAL OF CHEMICAL CONTAINERS WHEN REQUIRED. DISCHARGE DUCTWORK SHALL HAVE FLEXIBLE CONNECTION. PROVIDE 10" PVC PIPE AND ROUTE TO EXTERIOR WALL. PROVIDE 10" PVC WALL TERMINATION WITH PLASTIC BIRD MESH GRILLE, SIMTECH PROCESS SYSTEMS MODEL #1006-445-100 OR EQUAL. COORDINATE EXACT LOCATION WITH ARCHITECTURAL ELEVATIONS.
2. PROVIDE DOOR LOUVER AS SCHEDULED. REFER TO ARCHITECTURAL PLANS FOR SPECIFIC LOUVER LOCATION.
3. PROVIDE ROOF-MOUNTED FAN AS SCHEDULED. EXTEND ALUMINUM DUCTWORK DOWN APPROXIMATELY 2'-0" INTO THE SPACE. EXISTING ROOF PENETRATION SHALL BE UTILIZED. ENLARGE AS REQUIRED.
4. PROVIDE ALUMINUM EXHAUST GRILLE AS SCHEDULED APPROXIMATELY 0'-2" ABOVE THE BOTTOM OF THE EXHAUST DUCT.
5. REMOVE EXISTING DUCTWORK THROUGH WALL AND UP TO CEILING. REMOVE EXISTING FAN AS REQUIRED. INFILL CMU WALL.

EXHAUST FAN SCHEDULE

MARK	MANUFACTURER	MODEL	CFM	S.P.	DRIVE	RPM	WATTS	HP	V/PH	NOTES
EF-A1	FANAM	CBI-200	650	0.5	DIRECT	1725	-	1/4	120/1	1
EF-F1	LOREN COOK	135G1TDEG	1,400	0.75	DIRECT	1325	302	3/4	120/1	2

NOTES:
1. FAN HOUSING AND WHEEL SHALL BE CONSTRUCTED OF POLYPROPLYENE.
2. PROVIDE FAN WITH ECM SPEED CONTROL IN THE FAN HOUSING.

LOUVER SCHEDULE

MARK	MANUFACTURER	MODEL	SERVICE	SIZE W x H (IN.)	AIRFLOW CFM	MIN. FREE AREA (S.F.)	MAX. PD INCHES WC	NOTES
LV-A1	ACTIVAR	1400 SERIES	INTAKE	24x18	500	1	-	1,2
LV-F1	ACTIVAR	1400 SERIES	INTAKE	28x28	1,400	2.8	-	1

PLAN NOTES:
1. PROVIDE INSECT SCREEN
2. PROVIDE BACK OF LOUVER WITH BAKED ENAMEL FINISH.

GENERAL NOTES:
A. PROVIDE MOUNTING FRAME TO MATCH CONSTRUCTION.
B. CUSTOM COLOR TO BE SELECTED BY ARCHITECT DURING THE SUBMITTAL PROCESS.
C. PROVIDE ALL FASTENERS, HANGERS, AND ASSOCIATED DEVICES REQUIRED FOR COMPLETE INSTALLATION.

GRILLE, REGISTER, & DIFFUSER SCHEDULE

MARK	MANUFACTURER	MODEL	SERVICE	FACE SIZE	NECK SIZE	DAMPER	NOTES
EI	TITUS	8F	EXHAUST	AS NOTED	AS NOTED	YES	1

NOTES:
1. GRILLE AND ALL FASTENERS SHALL BE ALUMINUM.

GENERAL NOTES (APPLY TO ALL ABOVE):
A. MAXIMUM NC OF 30 FOR ALL GRILLES, REGISTERS, AND DIFFUSERS.
B. WHERE NOT NOTED, DIFFUSER NECK SIZE SHALL BE THE SAME AS THE BRANCH DUCT SIZE.

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Spray Ground
BOSTON PARK

CITY OF WICHITA

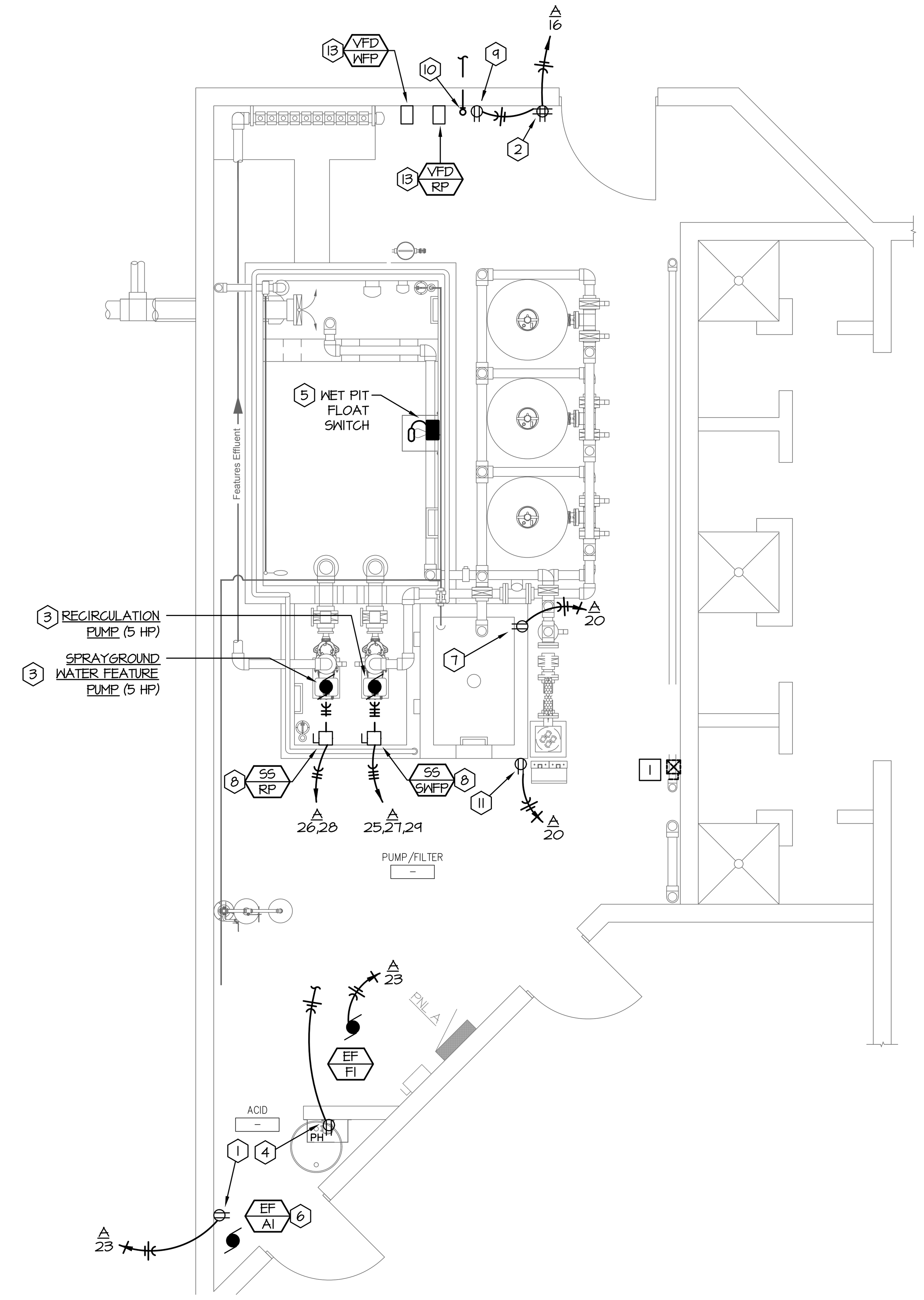
Seal: CASEY STEINER LICENSED KANSAS PROFESSIONAL ENGINEER 2-21-20

CASEY JOHN STEINER
LICENSE #19423

Date: 2-21-20 | Job #: 1820529
Drawn: CDW | Checked: MST
Issue: CONSTRUCTION DOCUMENTS

MECHANICAL PLANS, DETAILS & SCHEDULES

SP-M1



1 Electrical Plan

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

GENERAL NOTES:

A. THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND INDICATE THE GENERAL EXTENT OF THE WORK. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL PULL BOXES, JUNCTION BOXES AND INCIDENTAL MATERIALS AND LABOR FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM.

B. ELECTRICAL CONTRACTOR SHALL DERATE CONDUCTORS AS REQUIRED BY THE N.E.C. WHEN GROUPED IN COMMON RACEWAYS.

C. COORDINATE THE EXACT LIGHT FIXTURE LOCATIONS WITH THE ARCHITECTURAL DRAWINGS.

D. ALL WIRES RUN BELOW GRADE, IN CONCRETE THAT IS IN DIRECT CONTACT WITH THE EARTH, OR MASONRY THAT IS IN DIRECT CONTACT WITH THE EARTH SHALL BE WET LOCATION LISTED.

E. ALL RECEPTACLES SHALL BE GFI PROTECTED UNLESS NOTED OTHERWISE. AT CONTRACTOR'S OPTION, GFI BREAKERS OR RECEPTACLES MAY BE USED. RECEPTACLES SERVING CONCESSIONS REFRIGERATION EQUIPMENT, CHEMICAL CONTROLLERS, AND EXHAUST FANS SHALL NOT BE GFI PROTECTED.

F. WHERE PHONE, DATA OR PHONE/DATA OUTLETS ARE SHOWN ON PLANS, CONTRACTOR SHALL PROVIDE A BACKBOX AND CONDUIT WITH PULL STRING BACK TO AN ACCESSIBLE LOCATION AT TELEPHONE BOARD FOR FUTURE WIRING INSTALLATION BY OWNER.

G. ANY INTERRUPTION OF EXISTING SERVICES AND/OR EQUIPMENT SHALL BE PERFORMED AT A TIME APPROVED IN ADVANCE BY THE OWNER'S REPRESENTATIVE SO AS NOT TO INTERFERE WITH THE PRESENT BUILDING OPERATION.

H. REMOVE ALL ELECTRICAL ITEMS ON THE SITE AND IN THE FILTER, PUMP, AND CHEMICAL AREAS NO LONGER REQUIRED AFTER THE RENOVATION. THIS SHALL INCLUDE BUT IS NOT LIMITED TO PUMPS, FILTERS, STARTERS, FEEDERS, AND CONTROLS.

DEMO PLAN NOTES:

1. REMOVE PUMP MOTOR STARTERS AND ALL ELECTRICAL FEEDERS.

PLAN NOTES:

1. EXHAUST FAN RECEPTACLE. COORDINATE EXACT HEIGHT AND LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
2. CHEMICAL CONTROLLER RECEPTACLE. PROVIDE ENGRAVED COVERPLATE DENOTING POOL SERVED AND CHEMICAL CONTROLLER.
3. ROUTE ALL FEEDERS BELOW GRADE BETWEEN VFD AND PUMP MOTOR. REFER TO VFD SCHEDULE FOR PUMP POWER INFORMATION.
4. PH FEEDER RECEPTACLE. CONNECT CIRCUIT TO CHEMICAL CONTROLLER. SEE CIRCULATION PUMP CONTROL SCHEMATIC ON SHEET SP-E2 FOR MORE INFORMATION. PROVIDE ENGRAVED COVERPLATE DENOTING POOL SERVED AND PH FEEDER.
5. PROVIDE ZOELLER SWITCH-MATE PIGGYBACK VARIABLE LEVEL FLOAT SWITCH (VLFS). FLOAT SHALL BE NORMALLY OPEN (NO) OR NORMALLY CLOSED (NC) PER NOTES, BE RATED FOR 13A AT 115V, AND SHALL NOT CONTAIN MERCURY. COORDINATE MOUNTING HEIGHT WITH POOL ENGINEERS. INSTALL PER MANUFACTURER'S INSTRUCTIONS.
6. PROVIDE 6'-0" NEMA PLUG AND COORDINATE FOR EXHAUST FAN.
7. PROVIDE 120V OUTLET FOR FLOW METER. MOUNT ON UNISTRUT AT APPROXIMATELY 48" AFF.
8. PROVIDE PUMP SAFETY SWITCH AT APPROXIMATELY 48" AFF. CONDUIT TO PUMP SHALL BE BELOW GRADE AND STUB UP AT PUMP. COORDINATE INSTALLATION WITH POOL CONTRACTOR.
9. PROVIDE 120V OUTLET FOR VORTEX SMARTFLOW CONTROLLER.
10. PROVIDE (1) 3/4" SCHEDULE 40 PVC CONDUIT WITH (2) #12 CONTROL CONDUCTORS OUT TO WATER FEATURES ACTIVATION BOLLARD. REFER TO SITE PLAN ON SHEET SP-ME2 FOR CONTINUATION.
11. PROVIDE 120V OUTLET FOR UV EQUIPMENT. MOUNT ON UNISTRUT AT APPROXIMATELY 48" AFF.
12. ROUTE POWER THROUGH VFD PRIOR TO MAKING ELECTRICAL PANEL CONNECTION.

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Spray Ground
BOSTON PARK

Seal:

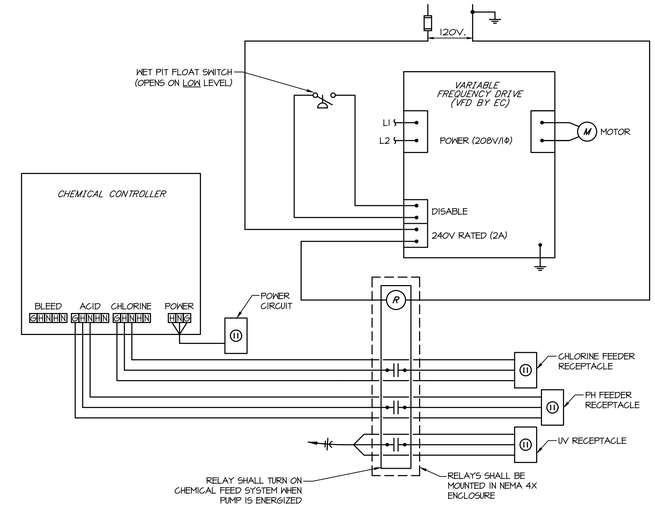
CASEY STEINER LICENSED KANSAS PROFESSIONAL ENGINEER

CASEY JOHN STEINER
LICENSE #19423

Date: 2-21-20	Job #: 1820529
Drawn: CDW	Checked: MST
Issue: CONSTRUCTION DOCUMENTS	

ELECTRICAL PLAN

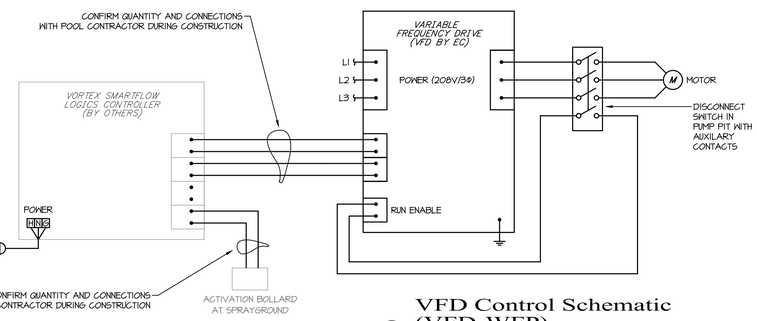
SP-E1



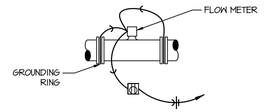
RECIRCULATION PUMP GENERAL NOTES:

A. PROVIDE RELAYS, RECEPTACLES, AND CONTROLS FOR EACH CHEMICAL CONTROLLER / RECIRCULATION PUMP.

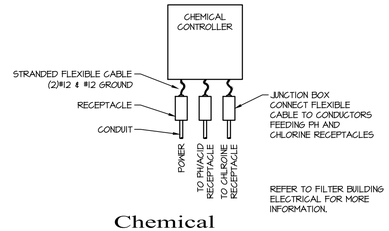
1 Recirculation Pump Control Schematic (VFD-RP)
Scale: None



2 VFD Control Schematic (VFD-WFP)
Scale: None



3 Flow Meter Grounding Detail
Scale: None



4 Chemical Controller Schematic
Scale: None

ELECTRICAL CONTRACTOR IS TO PROVIDE POOL PUMP CONTROLS. POOL PUMP CONTROLS, FLOAT SWITCHES, STARTERS, VFDS AND SWITCHES ARE NOT PROVIDED BY THE POOL CONTRACTOR.

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ELECTRICAL DETAILS

SP-E2

VARIABLE FREQUENCY DRIVE SCHEDULE

MARK	DESCRIPTION	VOLTAGE	HP	LOAD	OCPD AMPS	POLES	NEMA ENCL.	CONDUCTORS	NOTES
VFD-RP	RECIRCULATION PUMP	208/1	5	6,720	60	2	4X	(2) #8 & #10G. IN 3/4" C.	-
VFD-WFP	WATER FEATURE PUMP	208/3	5	6,015	40	3	4X	(3) #10 & #10G. IN 3/4" C.	-

GENERAL NOTES (APPLIES TO ALL ABOVE):

A. VFD SHALL BE DANFOSS, MODEL #VLT OR EQUIVALENT APPROVED BY ENGINEER PRIOR TO BID. CONTRACTOR SHALL VERIFY VFD CLEARANCES PRIOR TO ORDERING. ALTERNATE DRIVE MANUFACTURERS WILL NOT BE ACCEPTED WITHOUT WRITTEN APPROVAL FROM ENGINEER.
B. OCPD AMPACITIES ARE LISTED FOR FUSES/CIRCUIT BREAKER.
C. VFD SHALL HAVE INTEGRAL FUSED DISCONNECT.

SAFETY SWITCH SCHEDULE

SAFETY SWITCH TAG	DESCRIPTION	VOLTS	HP	DISC. AMPS	FUSE AMPS	NEMA TYPE	POLE/ WIRES	CONDUCTORS	NOTES
SS-RP	RECIRCULATION PUMP	240	5	60	-	3R	2/2	SEE VARIABLE FREQUENCY DRIVE SCHEDULE	1
SS-WFP	WATER FEATURE PUMP	600	5	60	-	3R	3/3	SEE VARIABLE FREQUENCY DRIVE SCHEDULE	1

GENERAL NOTES (APPLIES TO ALL ABOVE):

A. SAFETY SWITCHES SHALL BE HEAVY DUTY.

NOTES:

1. PROVIDE DISCONNECT WITH AUXILARY CONTACTS FOR INTERCONNECTION WITH VFD.

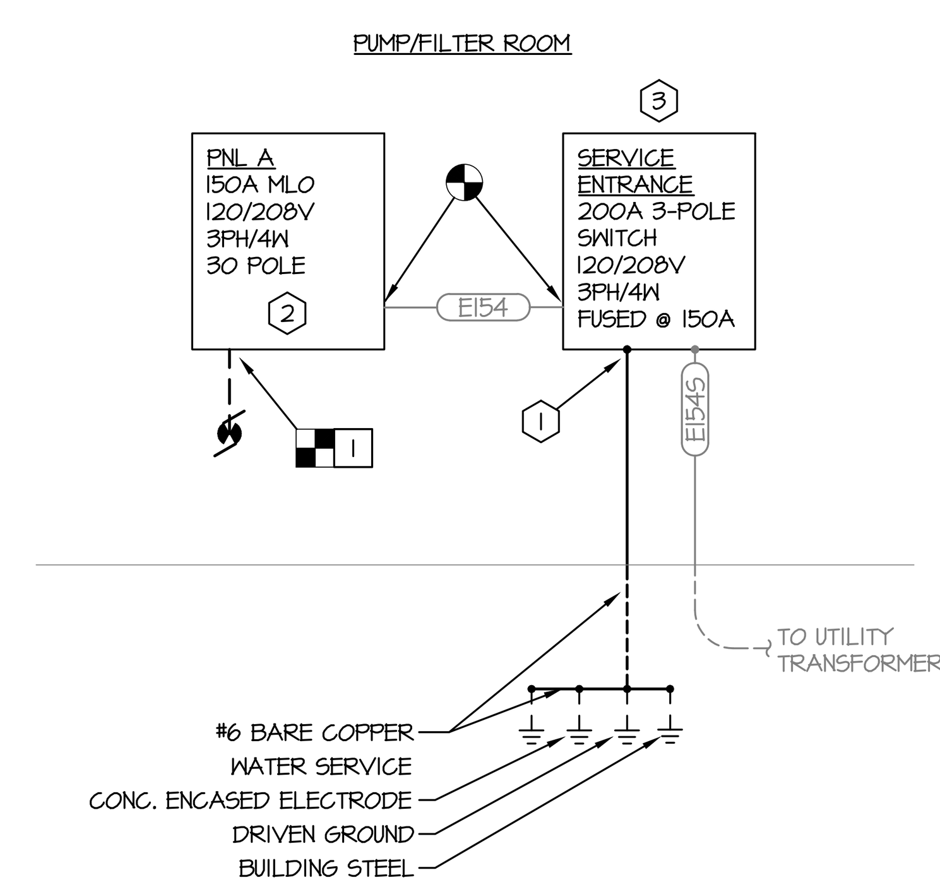
PANEL A (EXISTING)

DESCRIPTION: 150A MLO — 100% Neutral Bus — NEMA 3R Enclosure
10 kAIC RATING

VOLTAGE: 120/208V, 3PH, 4 WIRE
TOTAL CONNECTED LOAD: 36kW= 99A
DEMANDED LOAD CONTINUOUS: 40kW= 110A

	NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO	
	1	1200	BLDG LTS	1	20	A	30	1	GFCI W. SIDE	1080	2	
	3	1100	BLDG LTS	1	20	B	20	1	BLDG RCPT + LTS	1500	4	
	5	1000	BLDG LTS	1	20	C	20	1	LTS COIL	180	6	
	7	1650	POPCORN MACHINE	2	20	A	20	1	BLDG RCPT	1080	8	
	9	1650				B	20	1	TRASH PUMP #1	800	10	
	11	1800	RCPT FOOD COUNTER	1	20	C	20	1	TRASH PUMP #2	800	12	
	13	1500	LTS PUMP ROOM	1	20	A	20	1	BACKWASH PUMP	800	14	
	15	1080	RCPT BELOW PANEL	1	20	B	20	1	RCPT - CHEM CONTROLLER	180	16	
	17	1080	EAST OUTSIDE GFI	1	20	C	20	1	WEST OUTSIDE LT	1500	18	
	19	1000	VENDING MACH. RCPT	1	20	A	20	1	RCPT - FLOW METER / UV	360	20	**
	21	1000	VENDING MACH. RCPT	1	20	B	-	-	SPACE	-	22	
*	23	500	EXHAUST FANS	1	20	C	-	-	SPACE	-	24	
	25	2005	PUMP - SPRAYGROUND	3	40	A	60	2	PUMP - RECIRCULATION	3360	26	**
	27	2005	WATER FEATURES (5 HP)			B			(5 HP)	3360	28	**
	29	2005				C	20	1	SPARE	0	30	*

* PROVIDE NEW BREAKER AS INDICATED.
** PROVIDE NEW GFI BREAKER AS INDICATED.



1 Electrical Riser Diagram
Scale: None

RISER DEMO WORK NOTES:

1. MOTOR, STARTER, & FEEDER - DISCONNECT MOTOR, MOTOR STARTER, AND FEEDERS ASSOCIATED WITH EXISTING PUMP. PREPARE PANEL FOR INSTALLATION OF NEW CIRCUIT BREAKERS.

RISER NEW WORK NOTES:

1. GROUNDING - VERIFY SERVICE ENTRANCE EQUIPMENT IS GROUND PER THE GROUNDING ELECTRODE SYSTEM REQUIREMENTS SET FORTH IN NEC 250.50.
2. PANEL A - CONTRACTOR SHALL PROVIDE NEW 150A MLO, 120/208V, 10KAIC, 30 POLE REPLACEMENT NEMA 1 PANELBOARD. THE CONTRACTOR SHALL SALVAGE THE PANEL BOX AND RE-USE IF IN ACCEPTABLE CONDITION. EXISTING FEEDERS SHALL BE RE-USED.
3. SERVICE ENTRANCE - CONTRACTOR SHALL PROVIDE NEW 200A, 120/208V. 10KAIC SERVICE-RATED FUSIBLE DISCONNECT SWITCH WITH 150A FUSES.

FEEDER SCHEDULE:

E154 (4)#1/0 & #6 GROUND IN 2" CONDUIT

E154S (4)#1/0 IN 2" CONDUIT

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ELECTRICAL DETAILS AND RISER DIAGRAM

SP-E3