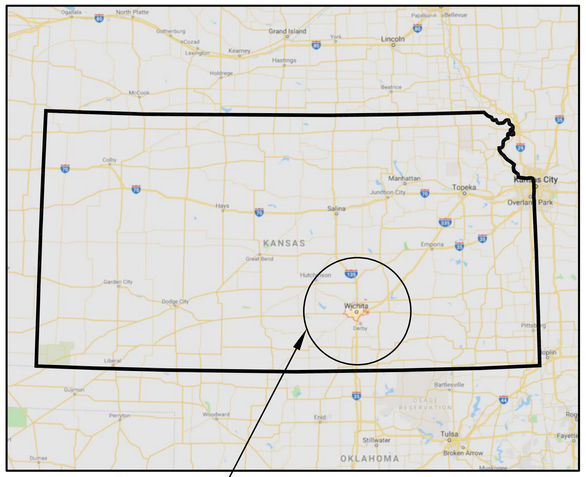
WICHITA, KANSAS

Pool Improvements

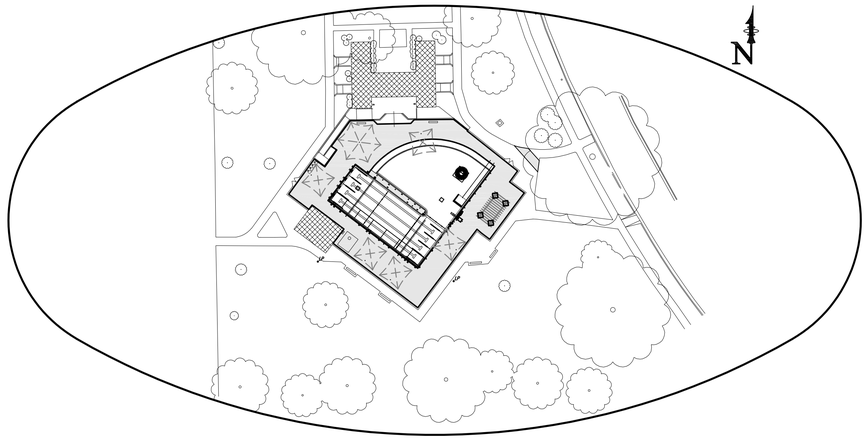
COLLEGE HILL PARK

2021

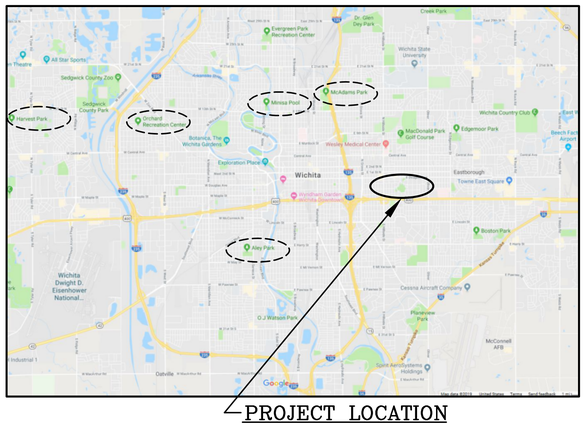
CITY OF WICHITA	
Project Number	482-11046
Org. Code	44002018
Munis Number	R8020



PROJECT AREA



POOL LAYOUT



PROJECT LOCATION
304 South Circle Drive
Wichita, KS 67218

SHEET INDEX

JEFF A. BARTLEY LICENSED 15116 KANSAS PROFESSIONAL ENGINEER

AQUATICS
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11205 West 79th Street
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Wichita, KS 67202
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BUILDING ARCHITECT
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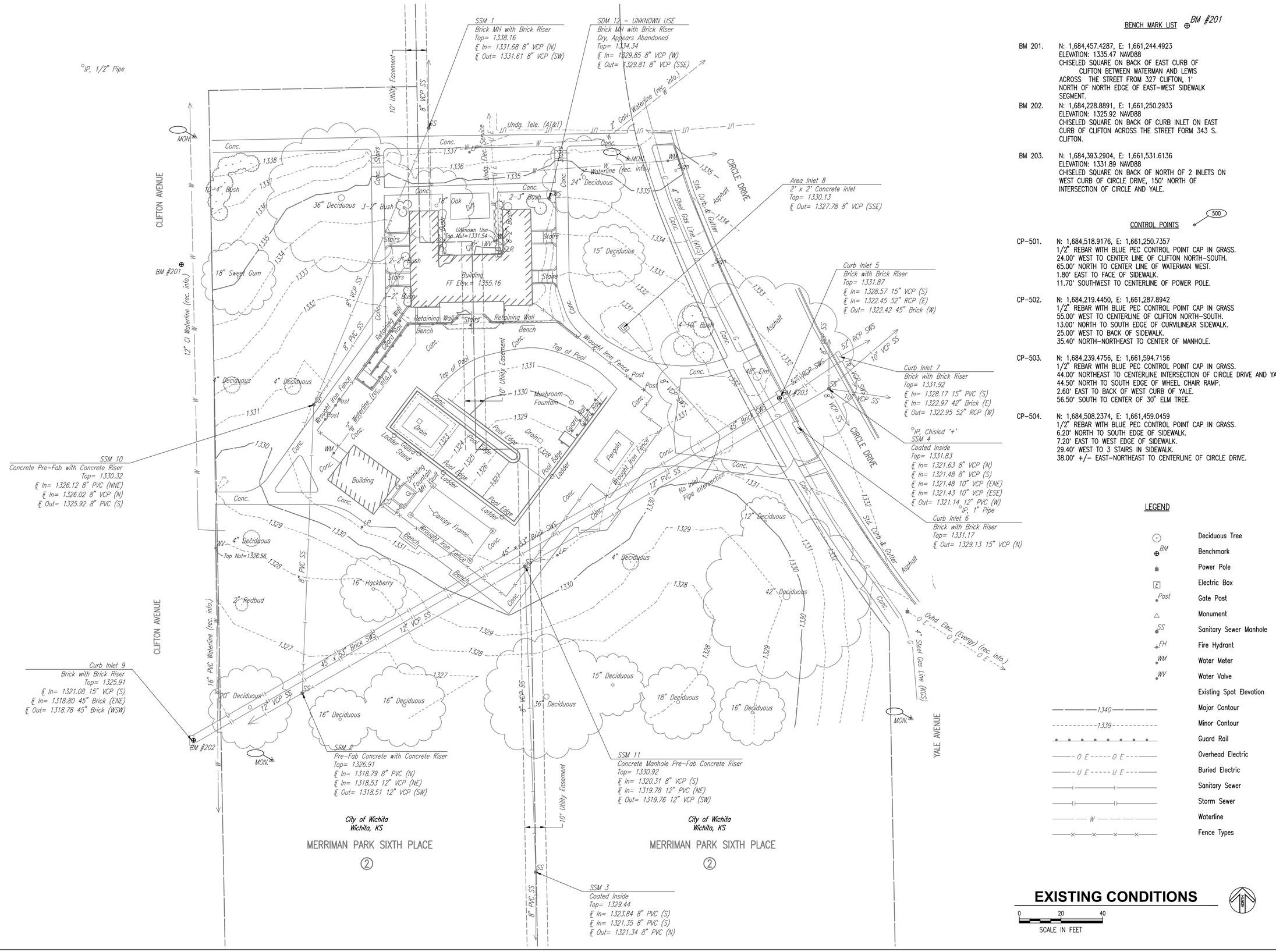
DATE: 10-21-21	ISSUE: CONSTRUCTION DOCUMENTS	WEAD JOB #: 18-512



BENCH MARK LIST ⊕ BM #201

BM 201. N: 1,684,457.4287, E: 1,661,244.4923
ELEVATION: 1335.47 NAVD88
CHISELED SQUARE ON BACK OF EAST CURB OF CLIFTON BETWEEN WATERMAN AND LEWIS ACROSS THE STREET FROM 327 CLIFTON, 1' NORTH OF NORTH EDGE OF EAST-WEST SIDEWALK SEGMENT.

BM 202. N: 1,684,228.8891, E: 1,661,250.2933
ELEVATION: 1325.92 NAVD88
CHISELED SQUARE ON BACK OF CURB INLET ON EAST CURB OF CLIFTON ACROSS THE STREET FORM 343 S. CLIFTON.

BM 203. N: 1,684,393.2904, E: 1,661,531.6136
ELEVATION: 1331.89 NAVD88
CHISELED SQUARE ON BACK OF NORTH OF 2 INLETS ON WEST CURB OF CIRCLE DRIVE, 150' NORTH OF INTERSECTION OF CIRCLE AND YALE.

CONTROL POINTS

CP-501. N: 1,684,518.9176, E: 1,661,250.7357
1/2" REBAR WITH BLUE PEC CONTROL POINT CAP IN GRASS.
24.00' WEST TO CENTER LINE OF CLIFTON NORTH-SOUTH.
65.00' NORTH TO CENTER LINE OF WATERMAN WEST.
1.80' EAST TO FACE OF SIDEWALK.
11.70' SOUTHWEST TO CENTERLINE OF POWER POLE.

CP-502. N: 1,684,219.4450, E: 1,661,287.8942
1/2" REBAR WITH BLUE PEC CONTROL POINT CAP IN GRASS
55.00' WEST TO CENTERLINE OF CLIFTON NORTH-SOUTH.
13.00' NORTH TO SOUTH EDGE OF CURVILINEAR SIDEWALK.
25.00' WEST TO BACK OF SIDEWALK.
35.40' NORTH-NORTHEAST TO CENTER OF MANHOLE.

CP-503. N: 1,684,239.4756, E: 1,661,594.7156
1/2" REBAR WITH BLUE PEC CONTROL POINT CAP IN GRASS.
44.00' NORTHEAST TO CENTERLINE INTERSECTION OF CIRCLE DRIVE AND YALE.
44.50' NORTH TO SOUTH EDGE OF WHEEL CHAIR RAMP.
2.60' EAST TO BACK OF WEST CURB OF YALE.
56.50' SOUTH TO CENTER OF 30" ELM TREE.

CP-504. N: 1,684,508.2374, E: 1,661,459.0459
1/2" REBAR WITH BLUE PEC CONTROL POINT CAP IN GRASS.
6.20' NORTH TO SOUTH EDGE OF SIDEWALK.
7.20' EAST TO WEST EDGE OF SIDEWALK.
29.40' WEST TO 3 STAIRS IN SIDEWALK.
38.00' +/- EAST-NORTHEAST TO CENTERLINE OF CIRCLE DRIVE.

LEGEND

- Deciduous Tree
- BM — Benchmark
- Power Pole
- Electric Box
- Post — Gate Post
- Monument
- SS — Sanitary Sewer Manhole
- FH — Fire Hydrant
- WM — Water Meter
- WV — Water Valve
- Existing Spot Elevation
- Major Contour
- Minor Contour
- Guard Rail
- O E — Overhead Electric
- U E — Buried Electric
- Sanitary Sewer
- Storm Sewer
- W — Waterline
- Fence Types

EXISTING CONDITIONS

0 20 40
SCALE IN FEET

NORTH

waters edge AQUATIC DESIGN
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WICHITA, KANSAS
Pool Improvements
MERRIMAN PARK
COLLEGE PARK

CITY OF WICHITA

Seal: CHARLES W. BROOKSHER LICENSED 09/14/2021 LS-1281 KANSAS LAND SURVEYOR

Charles Brooksher-Licensed Surveyor LICENSE #1281	
Date: 05-20-19	Job #: 18-512
Drawn:	Checked:
Issue: DESIGN DEVELOPMENT	

EXISTING CONDITIONS

SV-01

Water's Edge Aquatic Design © 2019

Saved 04-10-2020 9:06:46 AM by RRT
Plot Scale 1:245.2402 09-14-2021 10:37:08 AM by ###
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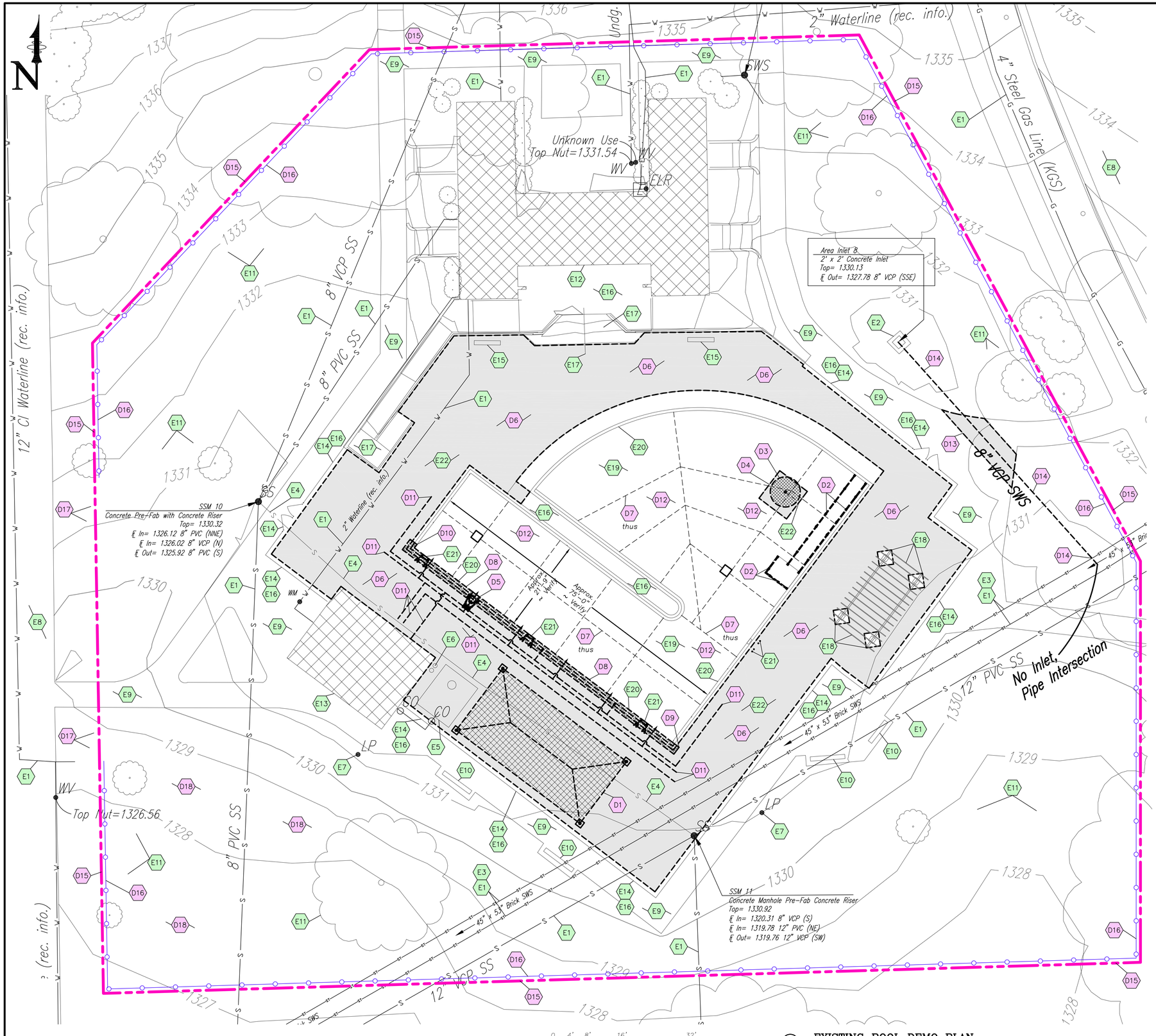

A EXISTING POOL DEMO PLAN
Scale: 3/32"=1'-0"

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 storm water inlet shall be protected
- E3 Existing storm water brick structure shall be protected ~ Contractor shall locate and use extreme caution
- E4 Existing sanitary sewer shall be protected ~ Contractor shall verify actual existence and location for draining backwash pit
- E5 Existing backwash pit shall be protected
- E6 Existing drinking fountain shall be protected
- E7 Existing light pole shall be protected and remain in service
- E8 Existing road with curb and gutter shall be protected ~ If damaged, replace with new to meet or exceed existing
- E9 Existing sidewalk shall be protected ~ See Detail A–SP–PM2 ~ If damaged, replace with new to meet or exceed existing
- E10 Existing bench shall be protected
- E11 Existing tree shall be protected
- E12 Existing bathhouse shall be protected ~ See Architectural Sheets for select demo
- E13 Existing filter building shall be protected ~ See Filter Area Sheets for select demo
- E14 Existing fence shall be protected ~ See Detail A–SP–PM2
- E15 Existing bench shall be removed and protected for reinstallation
- E16 Existing deck shall be protected ~ See Detail A–SP–PM2
- E17 Existing steps, ramp, and rails shall be protected
- E18 Existing gazebo and footings shall be protected
- E19 Existing pool structure shall be protected ~ See Detail A–SP–PM2
- E20 Existing pool gutter PVC grating shall be removed and protected for reinstallation ~ See Detail A–SP–PM2
- E21 Existing grab rails shall be removed and protected for reinstallation ~ See Detail A–SP–PM2
- E22 Existing pool piping shall be protected ~ See Detail A–SP–PM2

DEMOLITION ITEMS

- D1 Remove existing shade structure and footings
- D2 Remove existing pool ramp rails for improvements
- D3 Remove existing vertical water feature for improvements
- D4 Remove existing partial pool floor at water feature for improvements
- D5 Remove existing lifeguard chair
- D6 Remove existing deck for improvements ~ See Detail A–SP–PM2
- D7 Remove existing sealant from pool floor and wall joints for improvements
- D8 Remove existing partial pool wall for improvements ~ See Detail A–SP–PM2
- D9 Remove existing pool wall to Southeast corner
- D10 Remove existing pool wall to approximately 12" past Northwest corner, up to existing construction joint
- D11 Remove existing partial pool piping for improvements ~ See Sheet SP–PM1
- D12 Remove existing pool floor and wall paint by sandblasting to bare concrete for improvements
- D13 Remove existing sidewalk for drainage improvements
- D14 Remove existing drain pipe for drainage improvements ~ Use extreme caution at existing brick structure
- D15 Construction limits
- D16 Suggested silt fence location
- D17 Construction access
- D18 Construction staging

EXISTING CONDITIONS

Existing conditions are shown to the best ability, using existing plans. Contractor shall notify Engineer if any discrepancies are discovered.

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Jeff Bartley–ENGINEER
LICENSE #15116

Date:	09–27–21	Job #:	18–512
Drawn:	SRS	Checked:	JAB

Issue: CONSTRUCTION DOCUMENTS

EXISTING POOL DEMO PLAN

SP–D1

Water's Edge Aquatic Design © 2021

POOL AREA KEY NOTES

1. Subgrade at new pool floor ~ See Detail C–SP–P2
   ~ Subgrade and backfill to be reviewed and revised as req'd by Engineer after receipt and review of Geotechnical Report
2. Existing subgrade at existing filter area and new pool expansion shall be shored as req'd
3. Subgrade at new pool deck
   ~ Remove existing settled subgrade, recompact, and provide 9" min. depth structural fill geotextile fabric, and 9" min. depth of granular fill, under all new deck
   ~ Subgrade and backfill to be reviewed and revised as req'd by Engineer after receipt and review of Geotechnical Report
4. Existing pool floor ~ See Detail A–SP–PM2
5. Existing pool wall ~ See Detail A–SP–PM2
6. Existing pool deck ~ See Detail A–SP–PM2
7. Existing sidewalk, fence, and pool deck ~ See Detail A–SP–PM2
8. Existing gutter outlet ~ See Detail A–SP–PM2
9. Existing recirc inlet lateral ~ See Detail A–SP–PM2
10a. Existing piping shall be pressure tested and replaced as required per measured quantity/unit cost
10b. Existing main drain piping
11. Existing gutter return piping
12. Existing recirc piping
13. Existing recirc floor inlet
14. Existing feature piping
15. Pool floor ~ See Detail A–SP–PM2
16. Pool wall ~ See Detail A–SP–PM2
17. Pool deck ~ See Detail A–SP–PM2
18. Gutter return piping
19. Recirc piping
20. Feature piping
21. Connection at existing piping to new piping
22. Deep area main drain VGB grate ~ Approx. 24" x 24" ~ Contractor shall verify
    ~ Raised finish with adjacent pool floor
    ~ Anchor per mftr. with S.S. hardware
23. Shallow area main drain VGB grate ~ Approx. 24" x 24" ~ Contractor shall verify
    ~ Flush finish with adjacent pool floor
    ~ Anchor per mftr. with S.S. hardware
24. Existing cup anchor
25. Cup anchor ~ See Detail A–SP–PM2
26. Racing line by Owner (N.I.C.)
27. Buoy line by Owner (N.I.C.)
28. Existing gutter grating shall be reinstalled
29. Gutter grating ~ See Detail A–SP–PM2
30. Tile deck/gutter wall ~ See Detail A–SP–PM2
31. Deck markers ~ See Detail A–SP–PM2 and Legend on Sheet SP–P0
32. Remove existing depth markers and repair deck
33. ADA ramp with handrails ~ See Detail B–SP–PM3
34. Pool floor construction joint ~ See Detail C–SP–PM3
35. Pool floor/wall to existing pool floor/wall ~ See Detail D–SP–PM3
36. Pool floor repair ~ See Detail E–SP–PM3
37. Existing pool construction joints (floor and wall) shall be filled with crystalline repair material
    ~ Grind existing joints to be clean and minimum 1" wide x 1½" deep
38. Existing pool floor and wall cracks shall be filled with crystalline repair material
    ~ Route existing cracks to be clean and minimum 1" wide x 1½" deep
    ~ Base bid quantity shall be 100 l.f.
39. "Vortex Frog No. 5" ~ See Detail F–SP–PM4
40. Pool wall construction joint equally spaced ~ See Detail G–SP–PM4
41. Gutter outlet ~ See Detail I–SP–PM4
42a. Wall inlet fitting with ¾" orifice (orifice only for existing wall inlets) ~ See Detail J–SP–PM4
42b. Wall inlet fitting with ¾" orifice (entire assembly for new wall inlets) ~ See Detail J–SP–PM4
43. (3) Recessed steps, (2) existing grab rails, with deck anchors ~ See Detail K–SP–PM4
44. Existing grab rails shall be reinstalled at existing recessed steps, with new deck anchors
    ~ See Detail K–SP–PM4 similar
45. Existing gazebo and footings
46. Sunshade types
    Base bid
    ~ Mftr. Solar Shade
    ~ Approx. 30' diameter, single post, standard, hexagon
    Alternate bid 1
    ~ Mftr. Solar Shade
    ~ Approx. 30' diameter, single post, custom rolled
    Alternate bid 2
    ~ Mftr. Tensile Shade Products
    ~ Approx. 30' diameter, single post, Trillium
47. Sunshade types
    Base bid
    ~ Mftr. Solar Shade
    ~ Approx. 16' x 16', single post, cantilever, standard, square
    Alternate bid 1
    ~ Mftr. Solar Shade
    ~ Approx. 16' diameter, single post, hexagon, custom alternating high/low arms
    Alternate bid 2
    ~ Mftr. Tensile Shade Products
    ~ Approx. 17' x 19', single post, cantilever, Visor
48. ADA ramp handrail wedge anchor ~ See Detail M–SP–PM4
49. Slip anchor and backstroke stanchion post ~ See Detail M–SP–PM4
50. Backstroke pennant and cable
51. Anchor and starting platform (30" setback and verify 5" freeboard) ~ See Detail M–SP–PM4
52. Anchors only for starting platform storage (verify spacing) ~ See Detail M–SP–PM4
53. Existing portable ADA lift provided by Owner (N.I.C.)
    ~ Contractor shall provide "Secure–It–Kit" deck anchor
54. Pool deck ~ See Detail N–SP–PM4 ~ Deck and drain finish surface elevations
    ~ Deck slopes shall be 1% min. / 2% max.
    ~ Water shall not be allowed to pond in any location
    ~ New deck elevations shall match flush with existing deck/sidewalk elevations
55. Pool deck at gutter elevation ~ Contractor shall verify existing
56. Construction joint ~ See Detail N–SP–PM4
57. Expansion joint ~ See Detail N–SP–PM4
58. Isolation joint ~ See Detail N–SP–PM4
59. Saw cut ~ See Detail N–SP–PM4
60. Valley/ridge line ~ No joint
61. Pool finish ~ See Detail O–SP–PM4
62. Racing floor and wall target ~ See Detail O–SP–PM4
63. Black stripe at main drain grate ~ See Detail O–SP–PM4
64. Warning stripe at 5'–0" water depth on floor and wall ~ See Detail O–SP–PM4
65. Black stripe at ADA ramp landing curb ~ See Detail O–SP–PM4
66. Paint existing backwash manhole lid non–slip white
67. Provide fence gate exit hardware and signage "EXIT" and "ATTENTION: EMERGENCY GATE ONLY"
68. Existing utility – electric
69. Existing utility – gas
70. Existing utility – sanitary sewer
71. Existing utility – sanitary sewer
    ~ Contractor shall verify actual existence and location for draining backwash pit
72. Existing utility – storm water brick structure shall be protected
    ~ Contractor shall locate and use extreme caution
73. Existing storm sewer inlet
74. Provide 12" RCP drain pipe
75. Connect to existing storm sewer brick structure
    ~ Carefully connect at existing penetration and repair
    ~ Angle of inflow shall be 90° or less relative to upstream flow
76. Sidewalk ~ See Detail N–SP–PM4
    ~ Provide #4 @ 18" dowels drilled and epoxied into existing sidewalk ~ Embed 4"
77. Existing utility – water
78. Contractor shall verify existing utility location and clearance at sunshade footing and pool piping
79. Existing bathhouse ~ See Architectural Sheets for improvements
80. Existing filter building ~ See Filter Area Sheets for improvements
81. Existing backwash pit
82. Existing drinking fountain
83. Existing deck, steps, ramp, and rails
84. Existing bench reinstalled

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 (A DETAIL NAME Scale), Detail Scale
- Section Cut: Detail Letter, Sheet (SP–••), Section Cut
- Depth/warning marker or note: A

POOL SURFACE AREA DATA		
Shallow Area	2,415	S.F.
Lap Area	1,682	S.F.
Additional Lap Area	525	S.F.
Total Pool Surface Area	4,622	S.F.
Pool Perimeter	381	L.F.
Concrete Deck Area	6,836	S.F.

POOL VOLUME DATA		
Shallow Area	31,280	Gallons
Lap Area	86,160	Gallons
Additional Lap Area	27,220	Gallons
Total Pool Volume	144,660	Gallons

POOL RECIRC. RATE DATA		
Total Pool Recirc. Rate	600	GPM

POOL PATRON DATA		
Total Patrons (MAHC = 1/20 s.f.)	231	Patrons

"CERAMIC TILE" DEPTH/WARNING MARKERS

1. Ceramic tiles shall be imbedded flush into concrete pool deck
2. Depth markers shall be located at 20'–0" O.C. max. spacing (Depth markers on vertical wall – if req'd – shall be located as indicated on plan)
3. No Diving markers shall be located at 25'–0" O.C. max. spacing
4. Contractor shall verify location of depth markers at proper water depth
5. Do not saw cut thru ceramic tiles
   ~ Saw cuts shall be 6" min. from ceramic tile edge
6. Depth/warning markers on deck shall be placed to be read from deck (not from pool)

- A: 0"
- B: 1'0"
- C: 2'0"
- D: 3'0"
- E: 4'0"
- F: 5'0"
- G: 6'0"
- H: 8'0"
- I: MAX. DEPTH 9'0"
- J: No Diving
- K: ADA Lift
- L: (25 yard backstroke stanchion marker)

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Jeff Bartley–ENGINEER
LICENSE #15116

Date: 09–27–21	Job #: 18–512
Drawn: SRS	Checked: JAB
Issue: CONSTRUCTION DOCUMENTS	

POOL AREA KEY NOTES AND DATA

SP–P0

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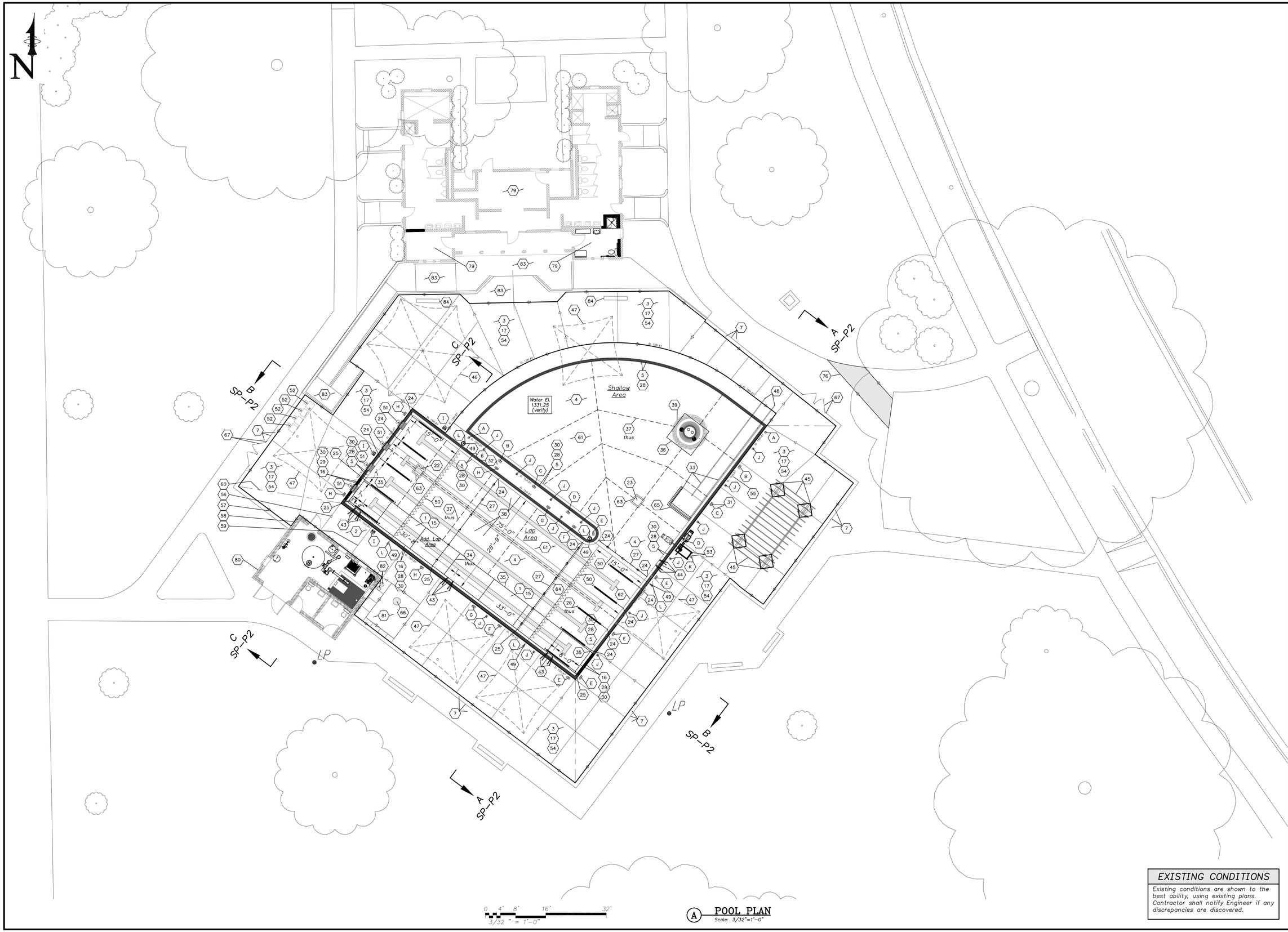

A POOL PLAN
Scale: 3/32"=1'-0"

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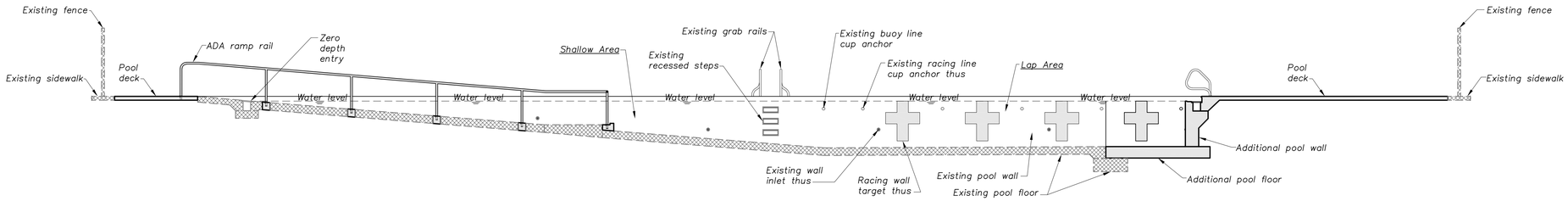
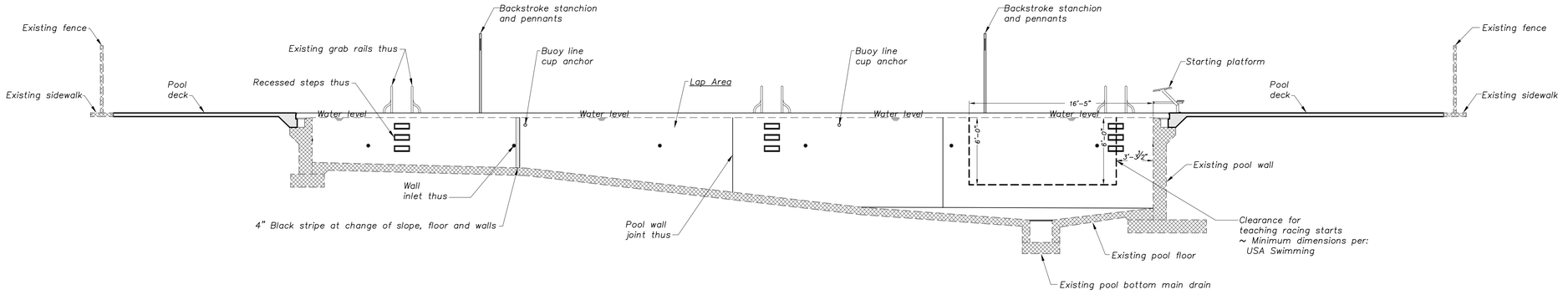
POOL PLAN

SP-P1

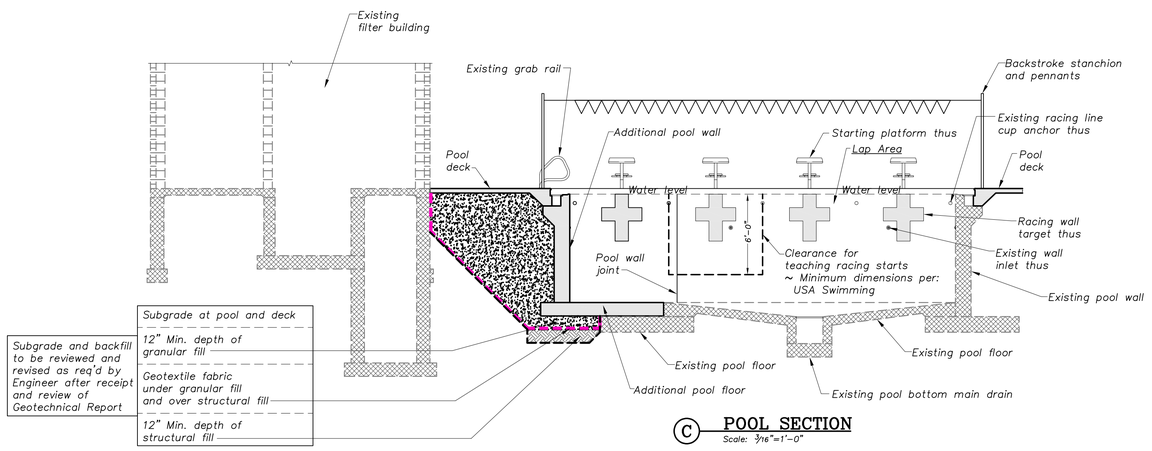
Water's Edge Aquatic Design © 2021



A **POOL SECTION**
Scale: 3/16"=1'-0"



B **POOL SECTION**
Scale: 3/16"=1'-0"



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POOL SECTIONS

SP-P2

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WATER FEATURE FLOW DATA					
Description	Flow	Quantity	Total Flow	Pressure	Spray Height
POOL					
Frog No. 5	100 GPM	1	100 GPM	10 PSI	-- Ft.
TOTAL		1	100 GPM		

PIPE TYPE NOTES

Pool system piping
(main drain gutter recirc features)
shall be: Sch 80 PVC

Area Inlet 8
2' x 2' Concrete Inlet
Top= 1330.13
℄ Out= 1327.78 8" VCP (SSE)

Curb Inlet 5
Brick with Brick Riser
Top= 1331.87
℄ In= 1328.57 15" VCP (S)
℄ In= 1322.45 52" RCP (E)
℄ Out= 1322.42 45" Brick (W)

SSM 10
Concrete Pre-Fab with Concrete Riser
Top= 1330.32
℄ In= 1326.12 8" PVC (NNE)
℄ In= 1326.02 8" VCP (N)
℄ Out= 1325.92 8" PVC (S)

SSM 11
Concrete Manhole Pre-Fab Concrete Riser
Top= 1330.92
℄ In= 1320.31 8" VCP (S)
℄ In= 1319.78 12" PVC (NE)
℄ Out= 1319.76 12" VCP (SW)

Water El. 1331.25 (verify)

Shallow Area

Lap Area

Add. Lap Area

Unknown Use
Top Nut=1331.54

Top Nut=1326.56

12" Cl Waterline (rec. info.)

2" Waterline (rec. info.)

8" VCP SS

8" PVC SS

12" PVC SS

12" VCP SS

4" Steel Gas Line (KGS)

45" x 53" Brick SWS

52" RCP SWS

10" VCP SS

EXISTING CONDITIONS

Existing conditions are shown to the best ability, using existing plans. Contractor shall notify Engineer if any discrepancies are discovered.

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

0 4' 8' 16' 32'
3/32" = 1'-0"

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

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H&B HOSS & BROWN ENGINEERS

CITY OF WICHITA

WICHITA, KANSAS
Pool Improvements
COLLEGE HILL PARK

Seal: JEFF A. BARTLEY — ENGINEER — 15116 — 9/9/21 — KANSAS — PROFESSIONAL ENGINEER

Jeff Bartley-ENGINEER
LICENSE #15116

Date: 09-27-21	Job #: 18-512
Drawn: SRS	Checked: JAB
Issue: CONSTRUCTION DOCUMENTS	

POOL MECHANICAL PLAN

SP-PM1

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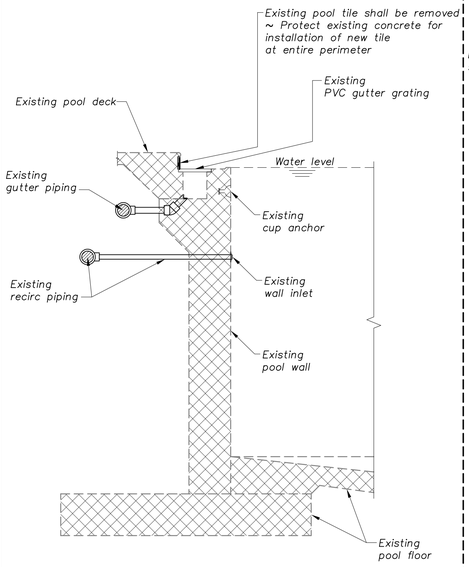
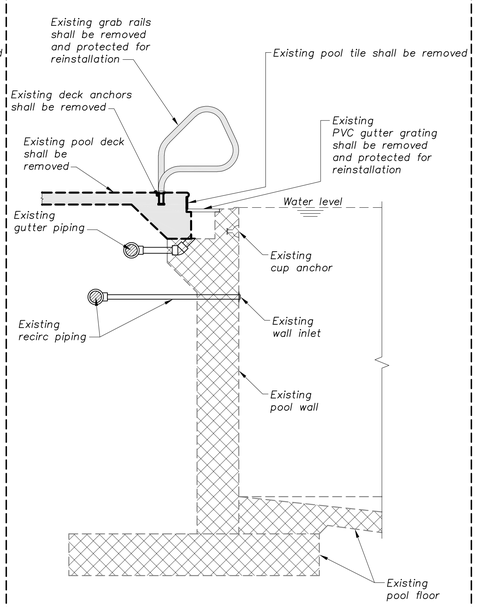
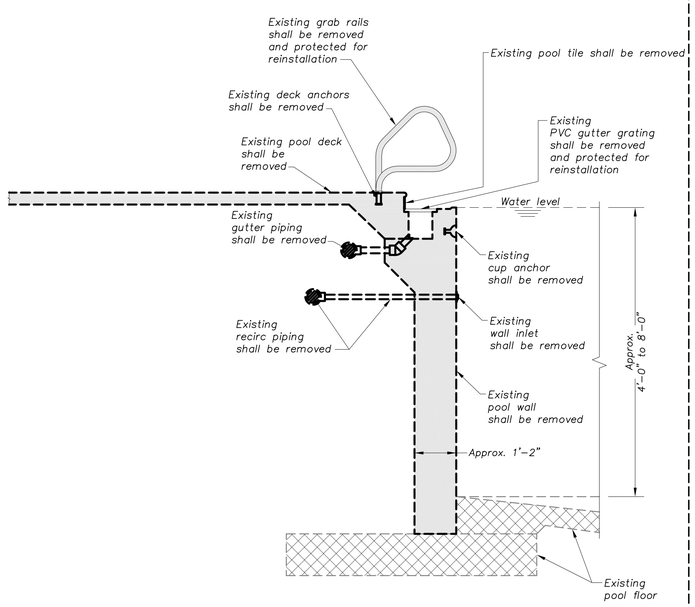


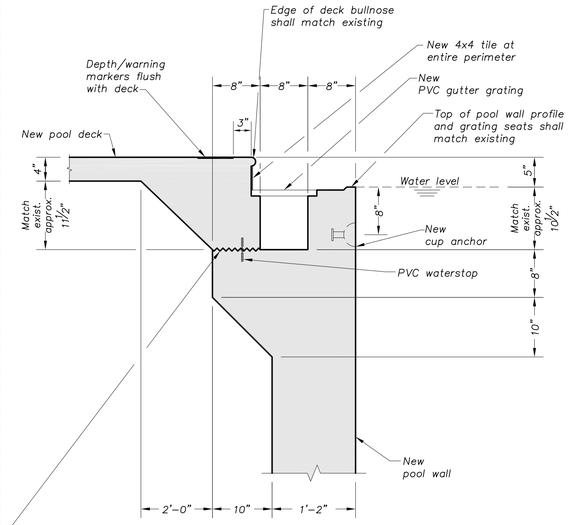
POOL DECK – EXISTING REMAIN
POOL WALL – EXISTING REMAIN



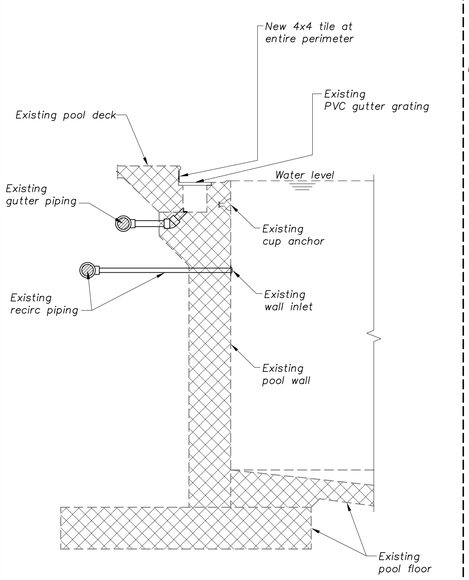
POOL DECK – EXISTING REMOVE
POOL WALL – EXISTING REMAIN



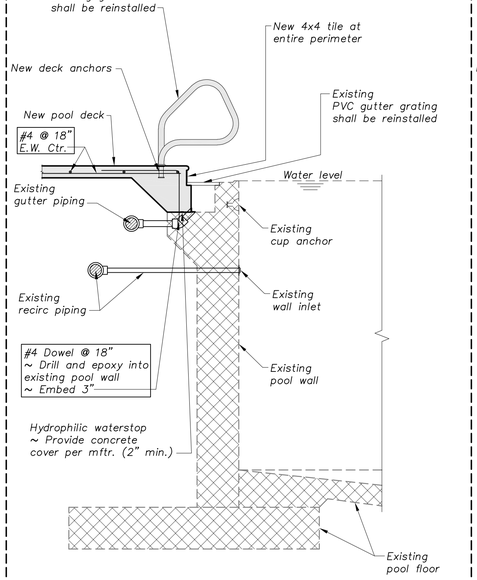
POOL DECK – EXISTING REMOVE
POOL WALL – EXISTING REMOVE



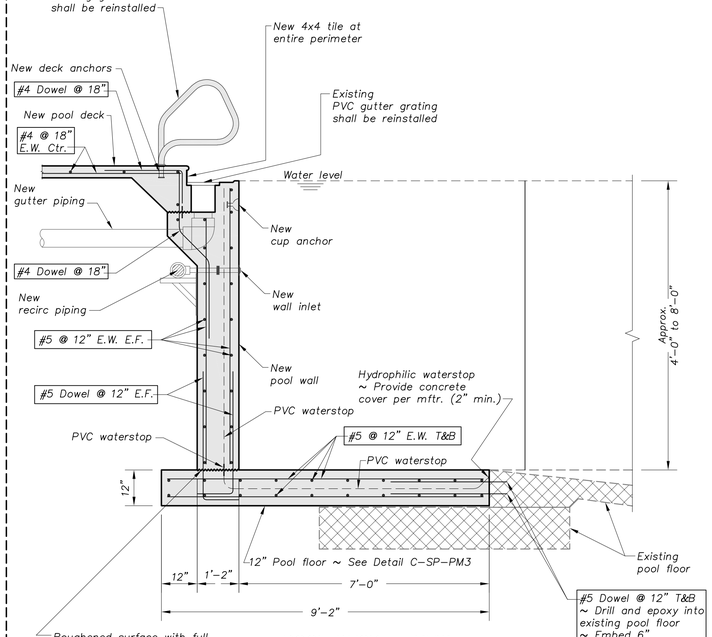
GUTTER WALL SECTION
Scale: 1"=1'–0"



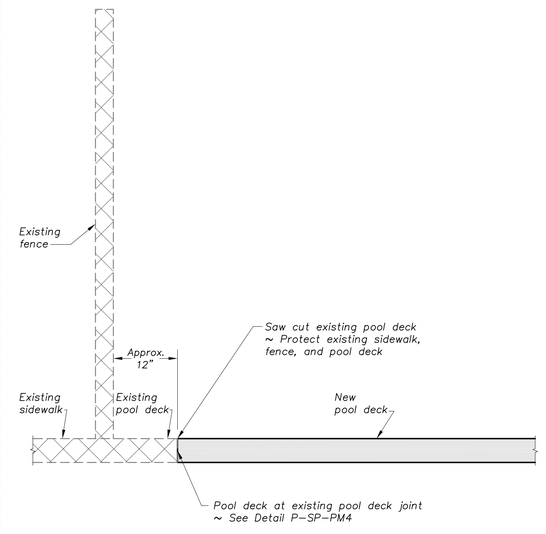
POOL DECK – EXISTING REMAIN
POOL WALL – EXISTING REMAIN



POOL DECK – NEW
POOL WALL – EXISTING REMAIN



POOL DECK – NEW
POOL FLOOR AND WALL – NEW



EXISTING POOL DECK AT NEW POOL DECK SECTION
Scale: 1"=1'–0"

Ⓐ POOL FLOOR AND WALL DETAILS
Scale: ½"=1'–0"

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WICHITA, KANSAS
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Seal: JEFF A. BARTLEY LICENSED PROFESSIONAL ENGINEER 15116 KANSAS

Jeff Bartley–ENGINEER
LICENSE #15116

Date: 09–27–21	Job #: 18–512
Drawn: SRS	Checked: JAB
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POOL AREA DETAILS

SP–PM2

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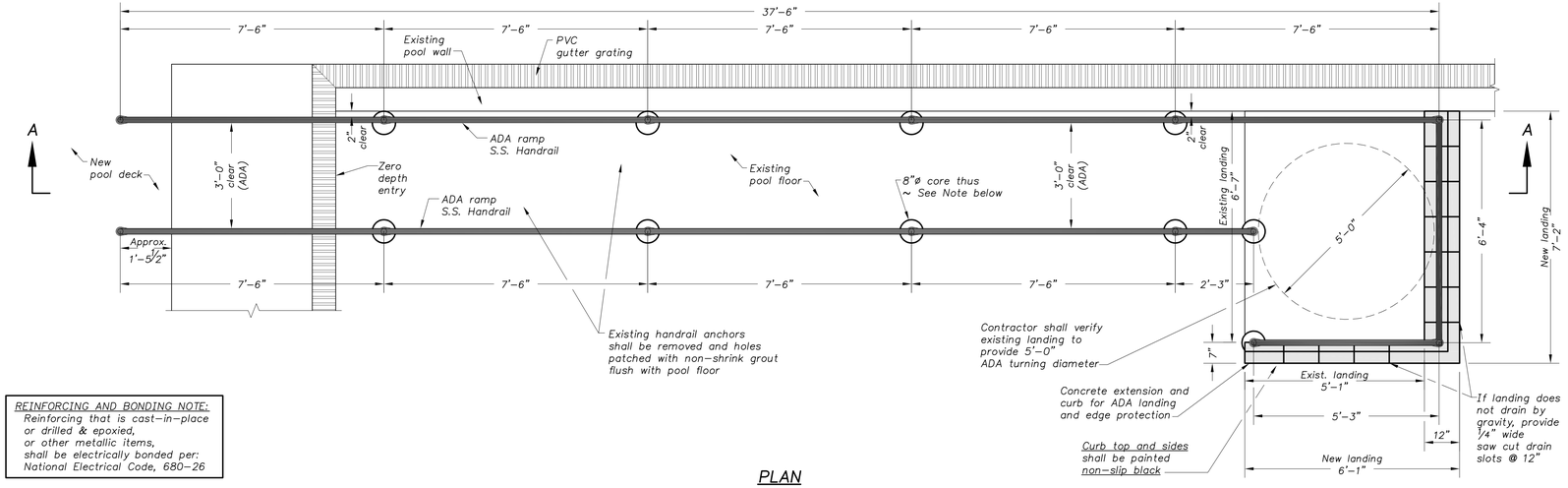
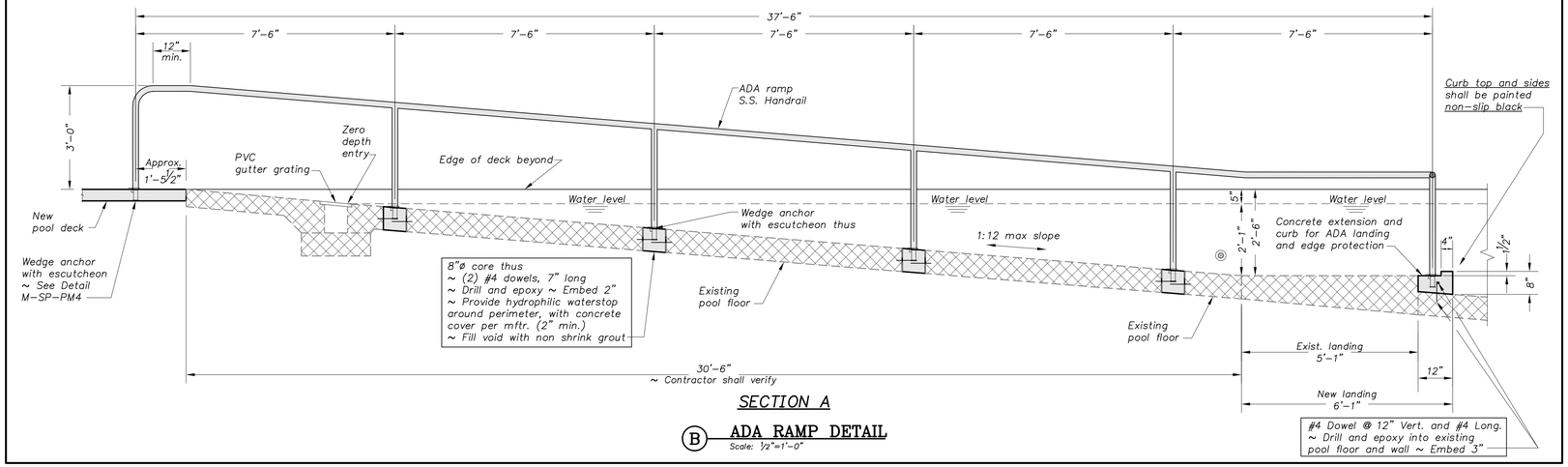


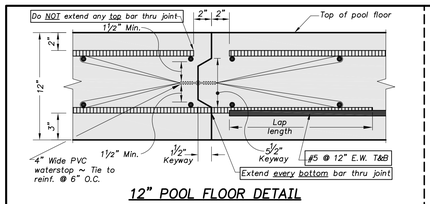
REINFORCING AND BONDING NOTE:
Reinforcing that is cast-in-place or drilled & epoxied, or other metallic items, shall be electrically bonded per: National Electrical Code, 680-26

PLAN

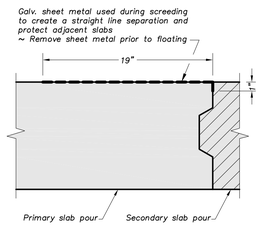


SECTION A

B ADA RAMP DETAIL
Scale: ½"=1'-0"



12" POOL FLOOR DETAIL

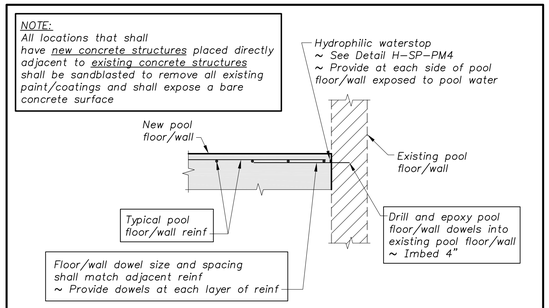


SLAB FINISH PROTECTION STRIP

NOTE: Do NOT tool joints

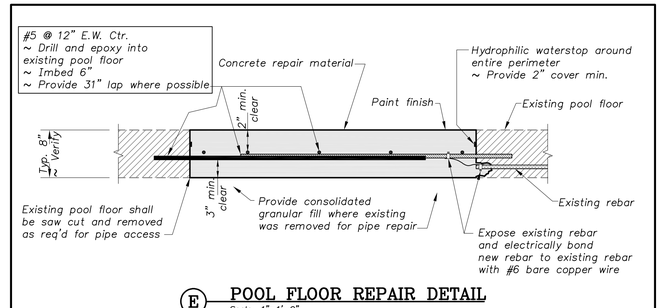
C POOL FLOOR DETAILS
Scale: 1½"=1'-0"

NOTE:
All locations that shall have new concrete structures placed directly adjacent to existing concrete structures shall be sandblasted to remove all existing paint/coatings and shall expose a bare concrete surface



POOL FLOOR/WALL AT EXISTING POOL FLOOR/WALL JOINT DETAIL

D
Scale: ½"=1'-0"



E POOL FLOOR REPAIR DETAIL
Scale: 1"=1'-0"

LAP LENGTH SCHEDULE

BAR SIZE	LAP LENGTH	HOOK LENGTH
#3	19"	7"
#4	26"	10"
#5	31"	12"
#6	37"	15"
#7	54"	17"
#8	62"	19"

NOTES:
1. Bar lap length of smaller diameter bar shall be used when splicing different size bars.
2. Lap splices shall be wired in contact.
3. Tabulated values are based on 4000 psi, normal weight concrete with Grade 60 reinf.

CONCRETE PROTECTION FOR REINFORCEMENT

CONDITION	MIN. COVER (INCHES)
Concrete cast against and permanently exposed to earth, subgrade, or granular fill	3"
Formed or top surfaces exposed to weather, submerged, or in contact with earth, including stirrups, ties, or spirals	2"
Formed concrete not exposed to earth, liquids, or weather:	
Slabs, walls, and joists	1½"
Beams and columns primary reinforcement, ties, stirrups, and spirals	1½"

NOTES:
1. The above minimum concrete cover shall be provided for reinforcement unless noted otherwise.
2. Placing reinforcement tolerances:
   a. For members less than or equal to 8" Tolerance = (±⅜")
   b. For members greater than 8" Tolerance = (±½")

GENERAL SHEET NOTES

1. All El.'s shown (-)x.xx', are distances down from indicated Water El.
2. All El.'s shown (+)x.xx', are distances up from indicated Water El.
3. Form savers may be used at Contractor's option
4. Hold waterstop 1½" clear Min. from reinforcing. Tie to reinforcing/tie rod @ 6" O.C.
5. All form ties shall be 1½" deep, cone snap type

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POOL AREA DETAILS

SP-PM3

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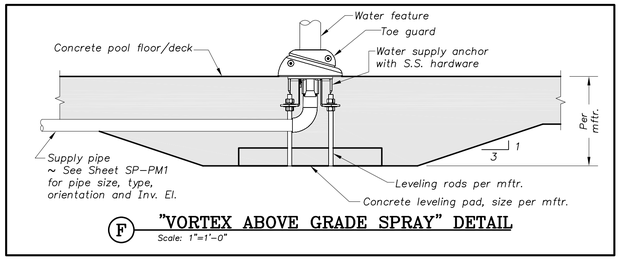
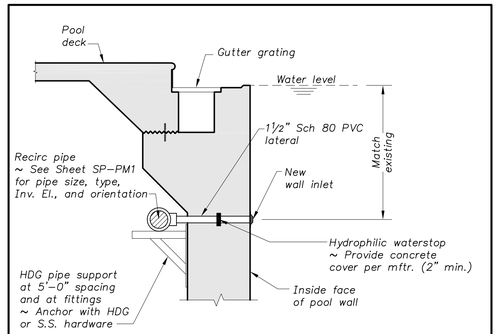
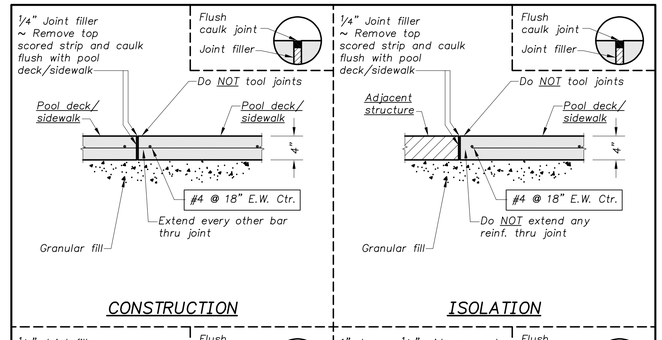


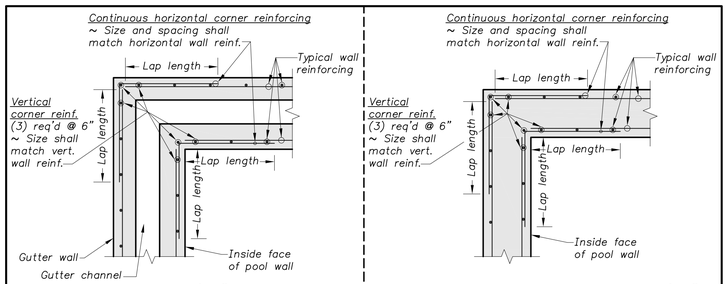
F "VORTEX ABOVE GRADE SPRAY" DETAIL
Scale: 1"=1'-0"

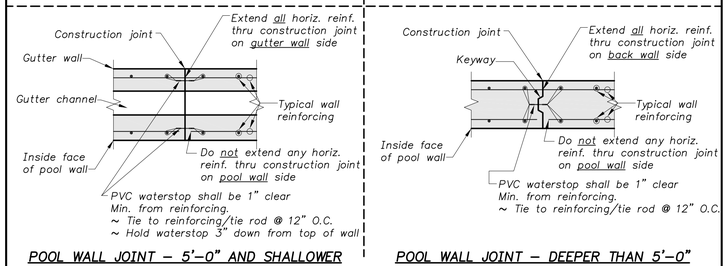


J WALL INLET DETAIL
Scale: ¾"=1'-0"

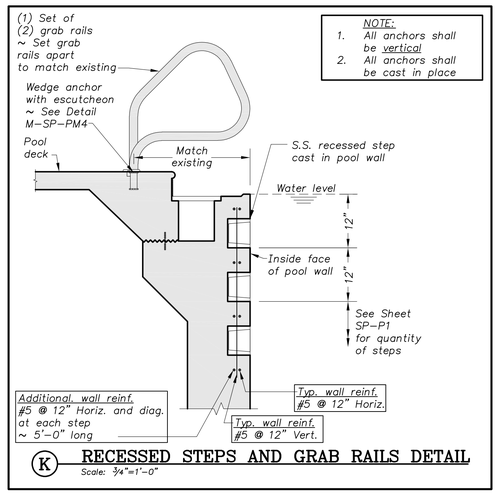


N POOL DECK AND SIDEWALK CONCRETE JOINT DETAIL
Scale: 1"=1'-0"

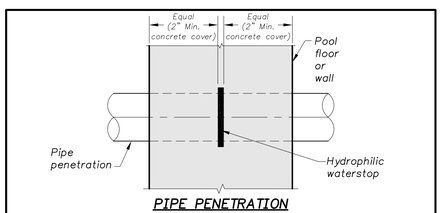




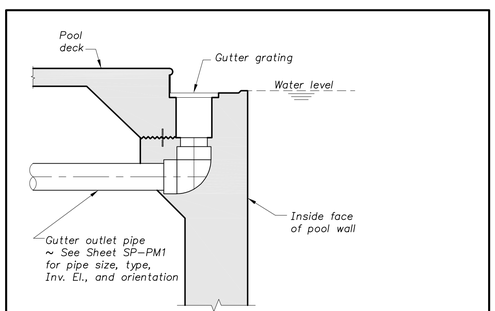
G POOL WALL REINFORCING DETAILS
Scale: ½"=1'-0"



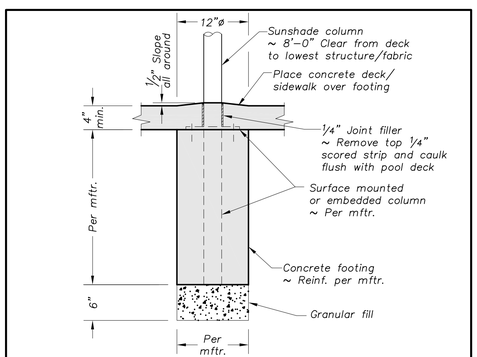
K RECESSED STEPS AND GRAB RAILS DETAIL
Scale: ¾"=1'-0"



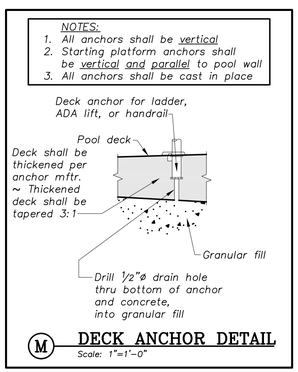
H HYDROPHILIC WATERSTOP DETAIL
Scale: 1"=1'-0"



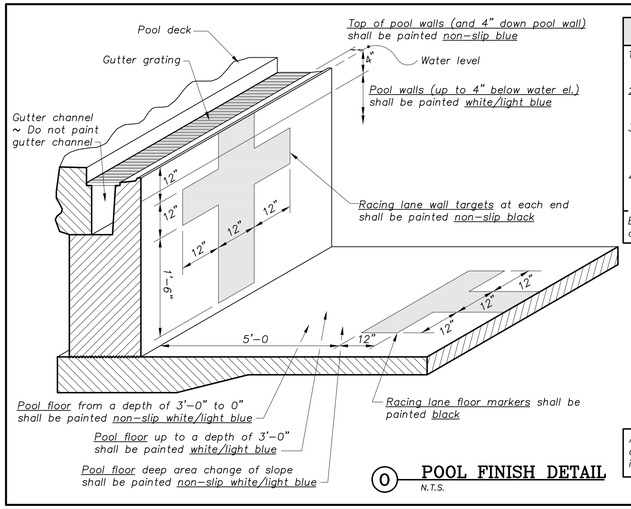
I GUTTER OUTLET DETAIL
Scale: ¾"=1'-0"



L DECK SUNSHADE – FOOTING DETAIL
Scale: 1"=1'-0"



M DECK ANCHOR DETAIL
Scale: 1"=1'-0"



O POOL FINISH DETAIL
N.T.S.

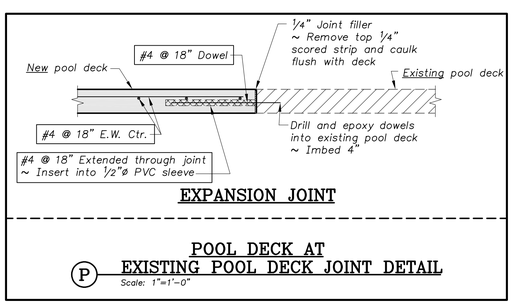
POOL FINISH NOTES

1. Pool basin ~ See Detail at Left
2. Stripe (4" wide) around main drain grate shall be painted black
3. Warning stripe (4" wide) at 5'-0" depth on pool floor and walls shall be painted black ~ Non-slip black on floor
4. ADA ramp landing curb ~ See Detail B-SP-PM3 for finish

Exposed formed surfaces shall have a grout cleaned finish.

All colors indicated are approximate and will be selected by Owner and included in project color schedule

Contractor shall provide (3) coats of each color



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

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POOL AREA DETAILS

SP-PM4

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D* EXISTING FILTER AREA DEMO KEY NOTES

1. 10" Pool main drain return – Protect/remain exposed piping within surge pit
2. Protect/remain – 6" Pool gutter return
3. Demo/remove – Main drain float valve and related hardware
   a. Field verify – Location of valve stem operator wheel. Evaluate/reuse existing cored hole for new operator stem if possible. If existing hole is not reusable, fill–in existing hole with non shrink grout after valve stem removal
4. Demo/remove – 6" Recirc pump suction
5. Demo/remove – Recirc pump inline basket strainer and related valves
6. Demo/remove – Recirc pump on concrete base
7. Demo/remove – Recirc pump vertical discharge piping to filter
8. Demo/remove – Pool filter mechanical equipment identified unless otherwise noted or needed for complete operation of pool system
9. Cut/remove – Partial of 6" pool return supply floor stub up. Allow enough length of piping to remain for reconnection for new filter system
   a. 6" Pool return piping. See sheet SP–PM1 for continuation
10. Protect/remain – 6" Features pump suction piping and related valve for reconnection
11. Demo/remove – Features pump and inline basket strainer
12. Cut/remove – Partial of 6" features supply return. Allow enough length of piping to remain for reconnection for new pump if possible
13. Demo/remove – Pump pit stairs
14. 6" Features supply return. See SP–PM1 sheet for continuation
15. Protect/remain filter backwash floor sink
16. 8" Below grade filter backwash piping routed over to backwash pit
17. 8" Below grade sanitary sewer piping
18. Approximate location and connection of 4" drain line from backwash pit to existing sanitary sewer. Field verify
19. Protect/remain – Existing drinking fountains
20. Protect/remain – 3" Below grade drinking fountain drain line, discharged into pump pit sump pump area
21. Protect/remain – 6" Vent piping connection from backwash pit.
22. Protect/remain – 2" Vent piping connection from backwash pit
23. Demo/removed – Existing pump pit sump pump to include related valves and piping
24. Demo/removed – Existing surge pit sump pump to include related valves and piping
25. Demo/removed – Existing manhole sump pump to include related valves and piping
26. Protect – Existing filter area manhole
27. Demo/remove – Surge pit cover grating to include corroded access hatch frame and related hardware
28. Demo/remove – Acid feeder and related piping
29. Demo/remove – Chlorine feeder and related piping
30. Demo/remove – Wall mounted emergency eyewash station
31. Approximate location of exposed plumbing piping on wall
32. Approximate location of domestic water header drain piping and hose bibb connection discharge into pump pit sump basin
33. Approximate location of surge pit manual fill discharge with air gap above floor
34. Approximate location domestic water supply to drink fountains
35. Approximate location of electrical pump control panels on wall
36. Protect/remain – Existing pump pit covered grating to include guardrails and related grating supports
37. Existing surge and pump pit walls and floors
38. Existing building bathroom areas and related equipment
39. Existing exterior backwash pit structure
40. Existing building walls

N* FILTER AREA IMPROVEMENT KEY NOTES

1. 10" New pool gutter return – See Sheet SP–PM1 for pipe route and connection
2. 10" Existing main drain return – See Sheet SP–PM1 for pipe route and connection
3. Isolation butterfly valve
4. 8" Main drain float valve
5. Provide S.S. operator extension stem with nut at top of extension for submerged valves.
   ~ Support extension guide as req'd. Anchor with S.S. expansion anchors
   ~ Provide T handle valve key to be used
   ~ Gear operator shall NOT be submerged in water
6. Provide cored hole for operator stem if existing hole cannot be reused.
7. Surge pit low water cut–off switch with baffle ~ Set float at 24" above recirc pump suction
8. 16"x16"x16" CMU block step mortared in place
9. 8" New recirc pump suction piping
10. 6" Existing features pump suction piping
11. Throttling Butterfly Valve ~ Wheel operated valve at supply lines (water features, pool recirc, backwash)
12. New surge pit sump pump with related valves and discharge piping
13. New pump pit sump pump with related valves and discharge piping
14. Check valve
15. Pipe saddle
16. ¾" End of season drain piping route over to sump area
17. New recirc pump on concrete base – See Detail B–SP–F4
    a. 6" Pool recirc pump discharge/filter influent piping
18. Magmeter flowmeter – Rotate display for easy reading
    ~ Provide signage by magmeter ~ Recirc rate = ___GPM ~ Backwash rate = ___GPM
19. Pipe support – See Details D,E,H–SP–F4
20. 6" filter face piping with valve linkage system
21. Filter pressure gauges mounted to filter face piping with S.S. hardware
22. 6'–0" ø Steel vertical dual cell filter
    ~ Furnished by Owner (N.I.C) (Filter, face piping, valves, gauges, media, etc)
    ~ Installed by Contractor
23. Air release valve with bypass drain line – See Detail I–SP–F4
24. 6" Filter backwash piping. Set discharge of piping 3" above floor sink
25. 6" Filter effluent piping
26. Connection TO Pool Chemical Controller – See Details C,D–SP–F5
    a. Connection TO Calcium Hypochlorite feed system – See Details B,D–SP–F5
    b. Connection FROM Chemical controller routed over to pool fill funnel – See Detail C–SP–F5
27. Connection FROM Acid Feeder System – See Details A,D–SP–F5
28. Connection FROM Calcium Hypochlorite feed system – See Details B,D–SP–F5
29. Floor mount pipe support, saddle type
30. Flanged connection to existing piping
31. 6" Pool return piping – See PM1 sheet for continuation
32. Inline basket strainer on concrete base ~ Provide ½" manual air bleed valve in lid
33. Reducing flexible connector – Eccentric with flat side up on pump suction (horizontal). Concentric on pump discharge (vertical). Provide spacer flanges as req'd
34. Pump connection – See Detail C–SP–F4
35. Features pump on concrete base ~ See Detail B–SP–F4
    a. 3" Features pump suction/discharge
36. 6" Existing water features pump discharge/return piping – See PM1 sheet for continuation
37. Pool chemical controller and sensor box – See Detail C–SP–F5
    ~ Furnished by Owner (N.I.C)
    ~ Installed by Contractor
38. Calcium Hypochlorite chemical feed system – See Detail B–SP–F5
39. Muriatic Acid chemical storage drums and feeder system – See Detail A–SP–F5
40. Outline of ventilation suction piping down low – Refer to MEP Sheet for further information
41. 4" CMU block walls alcove area for chemical storage match existing exterior wall height
42. Emergency eyewash station
43. Water supply to emergency eyewash station– Refer to MEP Sheet
44. Water heater – Refer to MEP Sheets for further information
45. Provide cored hole into slab for funnel stand pipe. Fill annular space around stand pipe with non shrink grout
46. 8"x 6" Funnel stand pipe cored drilled into slab – Set top of funnel 16" above pump pit curb wall
47. 2" Pool manual fill with 3" air gap above funnel
48. 1" Wet pit mechanical auto fill supply piping tapped from 3" manual fill
49. Mechanical auto fill device with float ~ Set float at 30" above recirc pump suction
50. 1" Mechanical auto fill discharge piping with 6" air gap above pit wall
51. Ball valve
52. Eccentric reducer on pump suction with flat side on top/Concentric reducer on pump discharge
53. Provide 1½" thick FRP grating covering over surge pit access
54. Provide S.S. hinges to include S.S. hardware per mftr.
55. Guardrail with safety chain – See Detail G–SP–F4
56. Floor socket pump hoist anchor
57. Manhole steps @ 16" O.C.
58. New manhole sump pump with related valves and discharge piping
59. Drain valve at low point
60. Pipe sleeve penetration – See Detail J–SP–F4

FILTER DATA

Pool	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 (gal.)	Backwash Volume Total (gal.)
Main	144,660	600	6.00	2	28.26	56.52	10.62	4.02	424	5	2,120	4,239

PUMP DATA

Location	Pump Description	Flow (gpm)	TDH (ft.)	TDH (psi)	Shut-off Head (max.) (ft.)	Efficiency +/- 5%	HP	RPM	VFD
Pool	Recirc	600	60	26	83	80	15	1,800	See MEP
Pool	Water Features	100	34	15	--	--	5	2,500	Integral

*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. Pipe type shall be CPVC for all piping downstream of pool heaters
3. Refer to Pool Mechanical Sheets for pipe types beyond the building
4. Pipe sizes are identified in inches on the drawings
5. Pipe connection hardware shall be S.S. within Pool Mechanical Room
6. Contractor shall provide and install uniflanges/unions as req'd
7. Sch 80 PVC fittings may be solvent weld or flanged at Contractor's option
8. All piping and fittings at equipment (filters, pumps, valves, etc.) shall be flanged
   ~ PVC flanges at fittings shall be male type as shown
9. 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
10. All pipe supports shall be 316 S.S. or FRP
11. All hardware shall be S.S.
12. Provide air release valve at all high loops in piping
13. All piping shall slope to drain by gravity
14. Provide drain valve at all low points in piping
15. Provide drain valve at normally closed solenoid valve or check valve, or provide true unions, to allow for winter drainage
16. All piping through concrete structures shall be cast–in–place
    ~ No pipe sleeves or coring allowed
17. Provide compound pressure gauge on all pump suctions
18. Provide pressure gauge on all pump discharges

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CITY OF WICHITA

Seal: JEFF A. BARTLEY LICENSED PROFESSIONAL ENGINEER 15116 9/9/21 KANSAS

Jeff Bartley–ENGINEER
LICENSE #15116

Date: 09–27–21 | Job #: 18–512
Drawn: CJB | Checked: JAB
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FILTER AREA IMPROVEMENT KEY NOTES AND DATA

SP–F0

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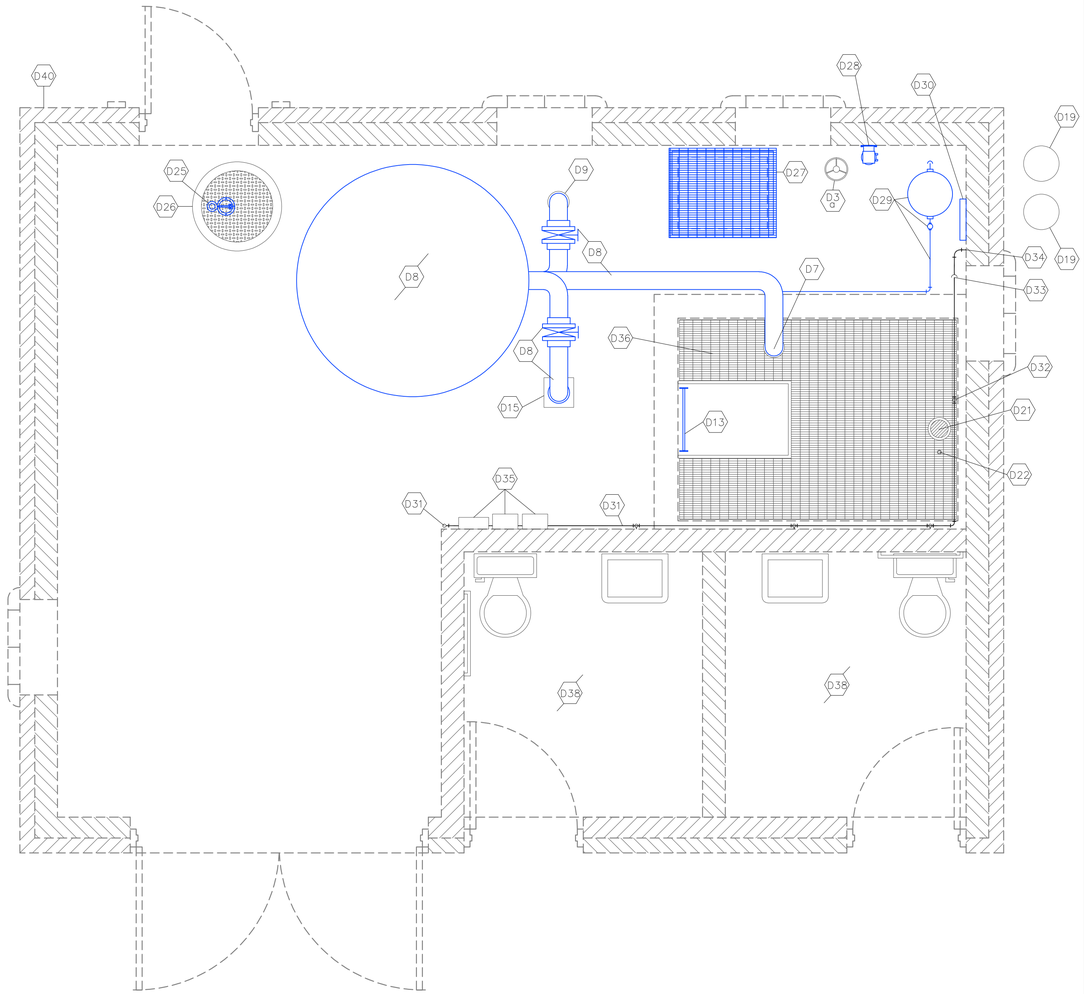
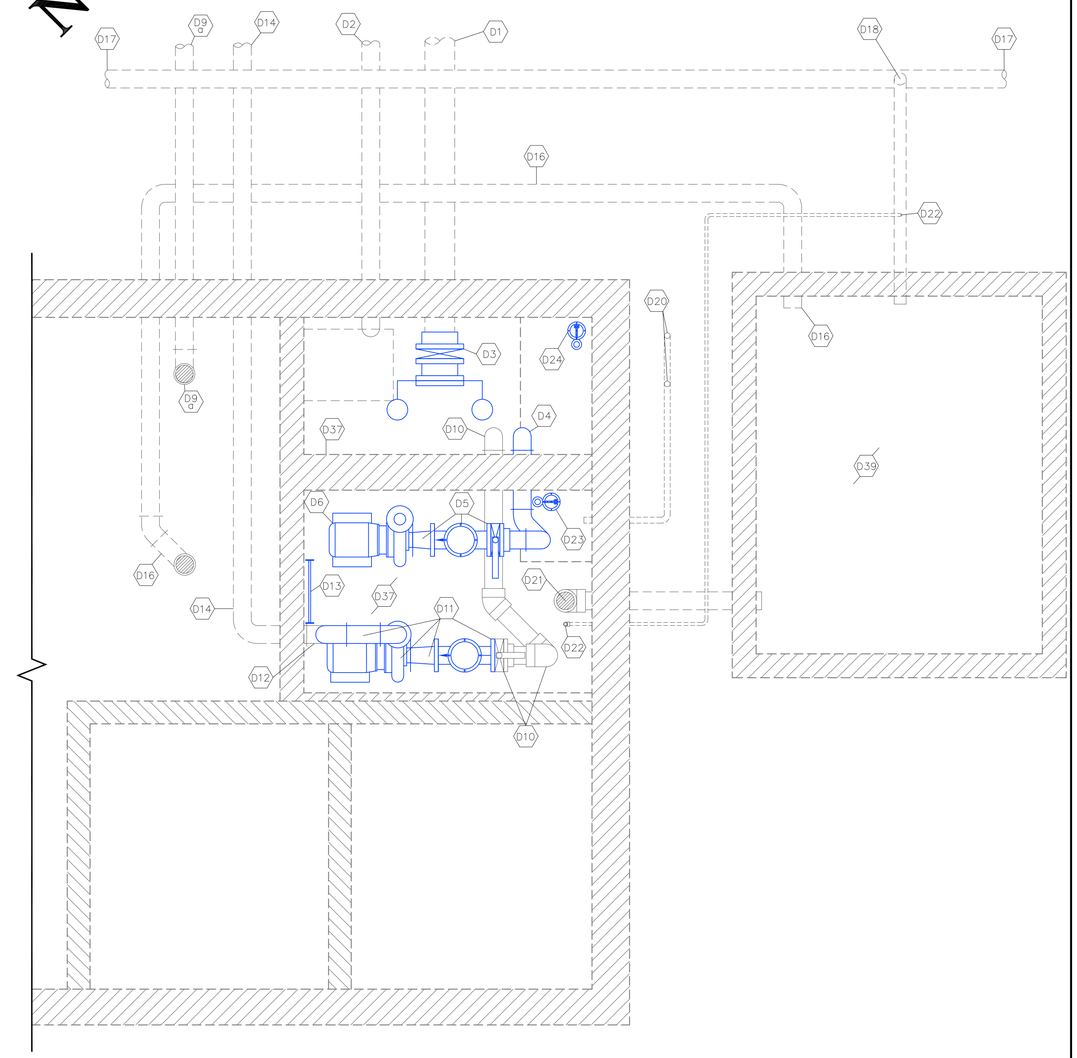


A EXISTING FILTER AREA DEMO PLAN
Scale: ½"=1'-0"



B EXISTING FILTER AREA DEMO PLAN SECTION
Scale: ½"=1'-0"

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FILTER AREA DEMO PLAN AND PLAN SECTION

SP-F1

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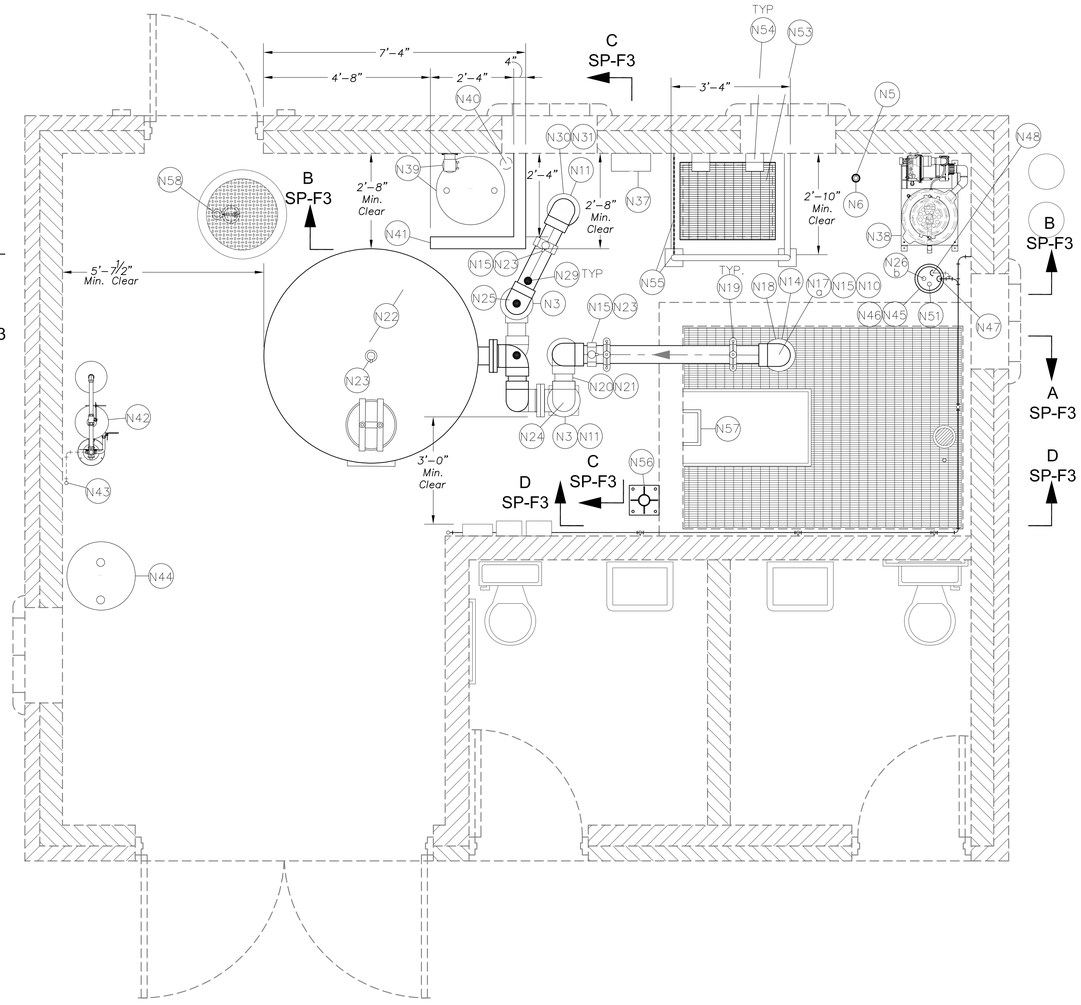
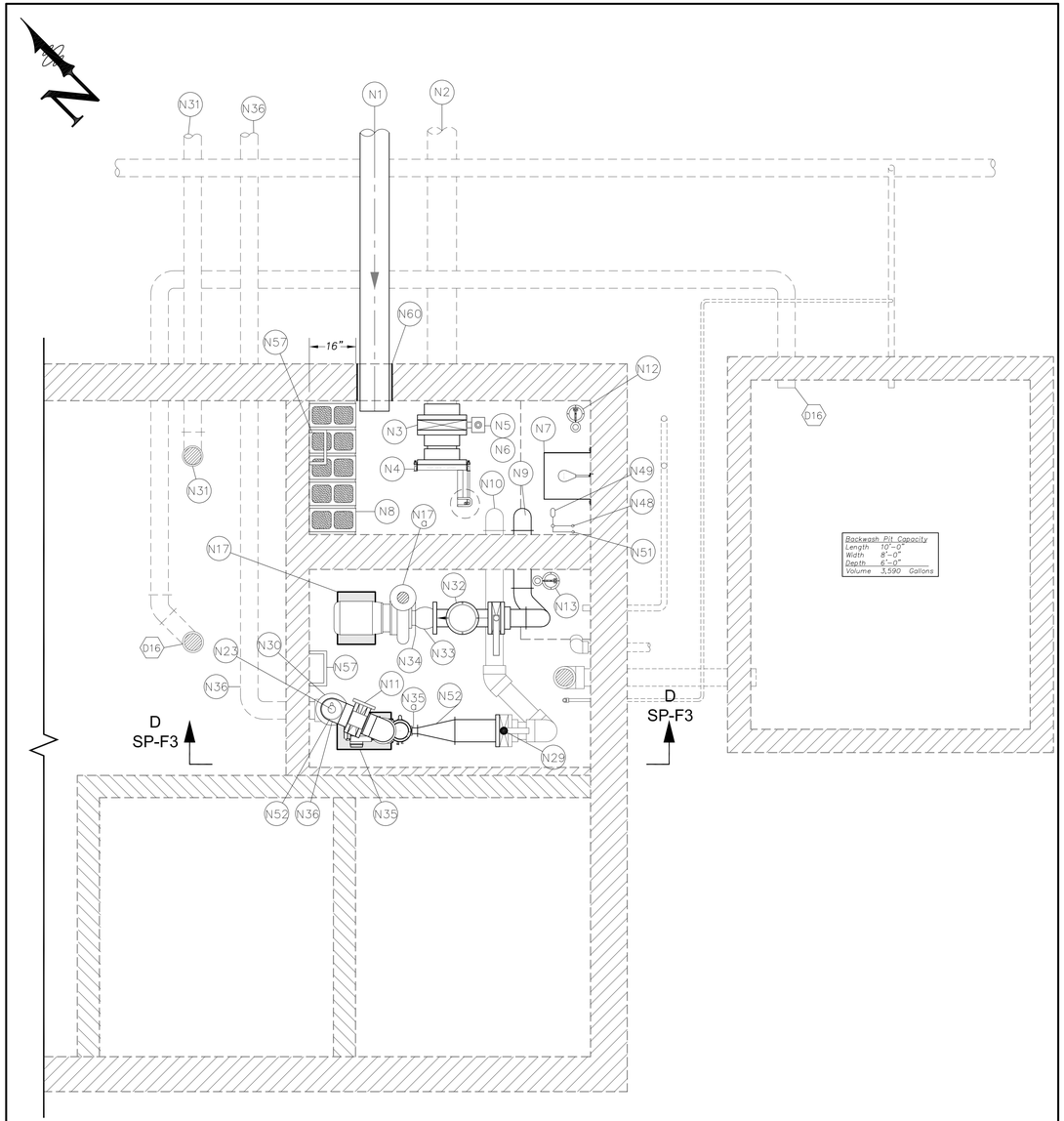


A FILTER AREA IMPROVEMENT PLAN
Scale: ½"=1'-0"



B FILTER IMPROVEMENT PLAN SECTION
Scale: ½"=1'-0"

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FILTER AREA IMPROVEMENT PLAN AND PLAN SECTION

SP-F2

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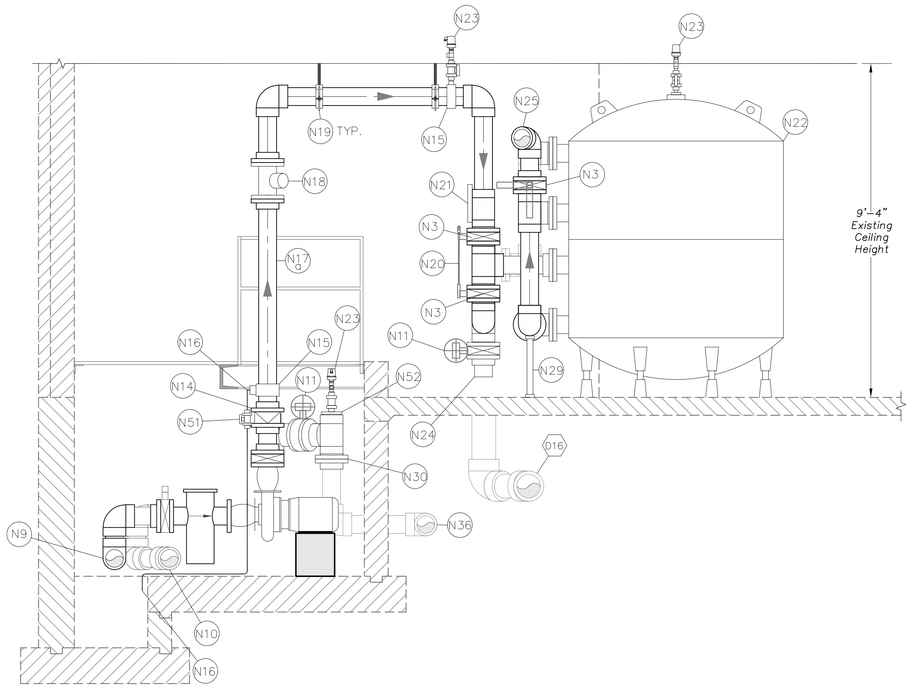

A FILTER AREA IMPROVEMENT SECTION
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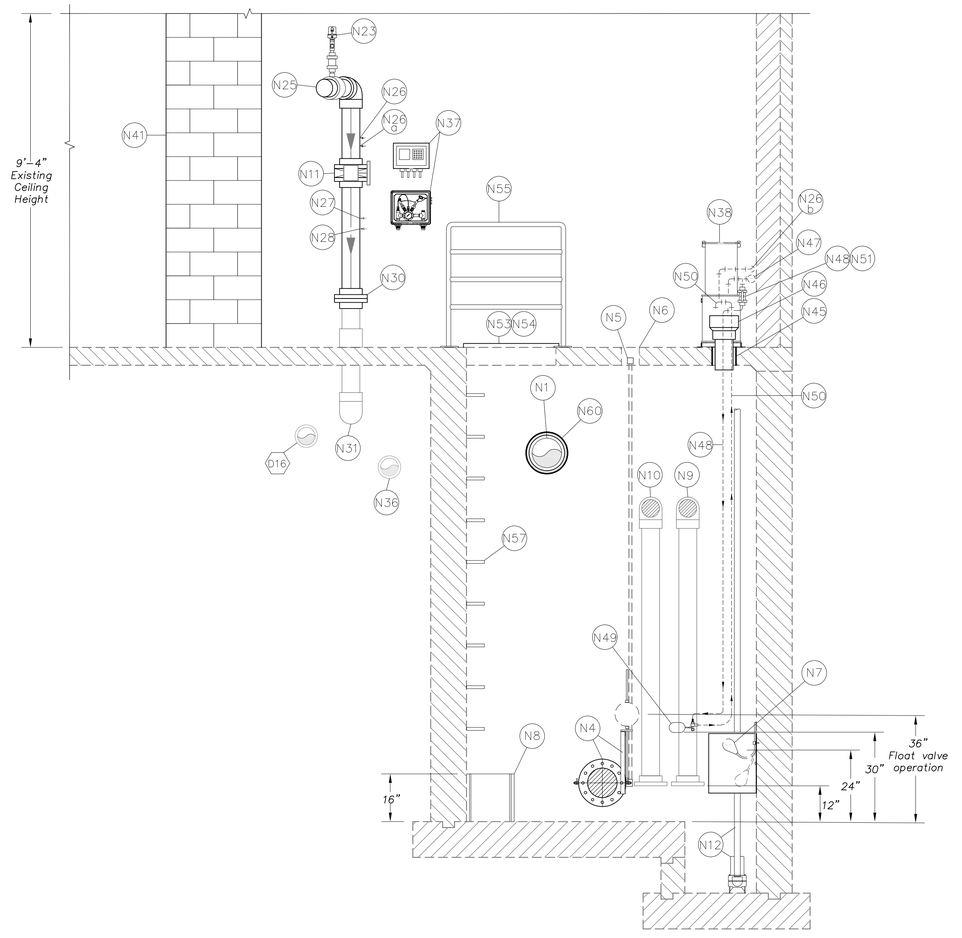

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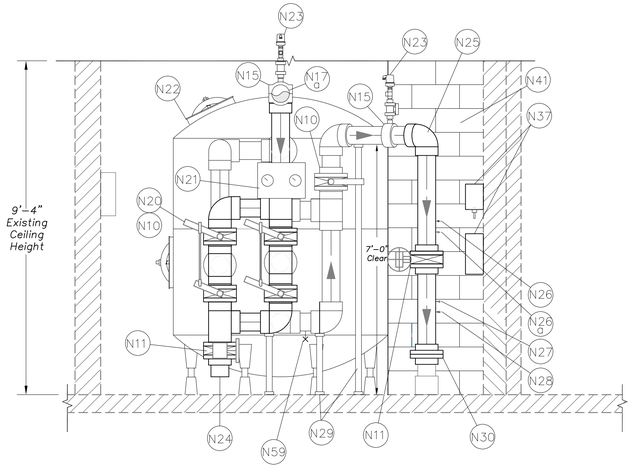
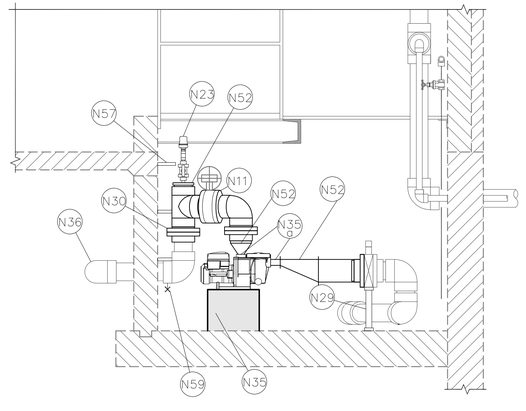


C FILTER AREA IMPROVEMENT SECTION
Scale: 1/2"=1'-0"



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

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FILTER AREA IMPROVEMENT SECTIONS

SP-F3

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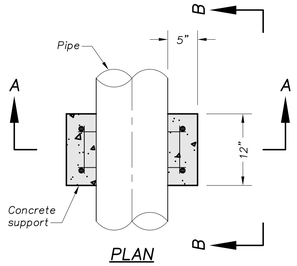
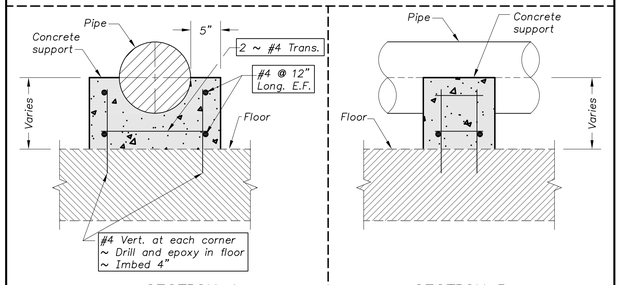


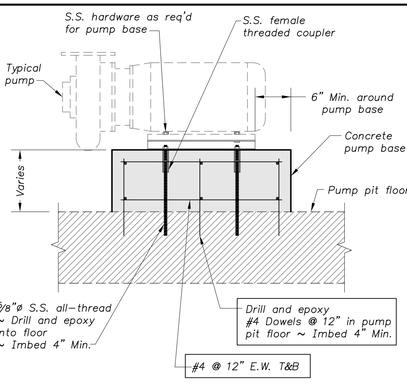
PLAN



SECTION A

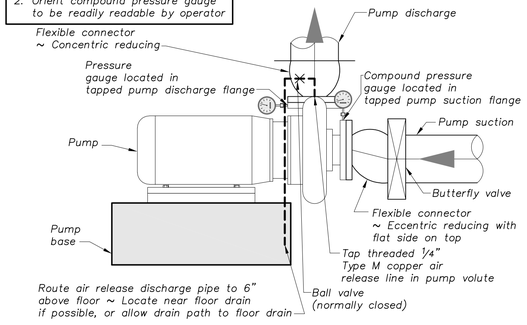
SECTION B

A PIPE SUPPORT – CONCRETE DETAIL
Scale: 1"=1'–0"

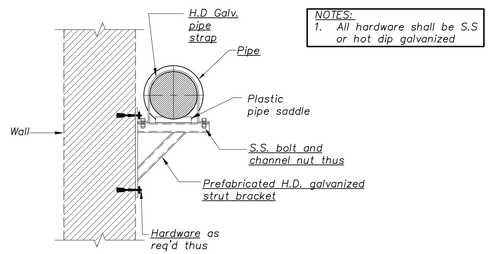


B PUMP BASE DETAIL
Scale: 1"=1'–0"

NOTES:
1. Pump and piping configurations vary ~ See specific pump layout
2. Orient compound pressure gauge to be readily readable by operator



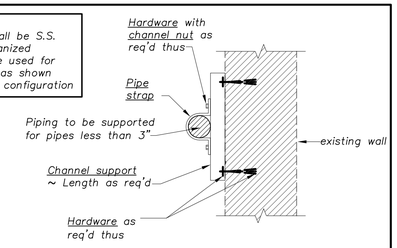
C PUMP CONNECTION DETAIL
Scale: 1"=1'–0"



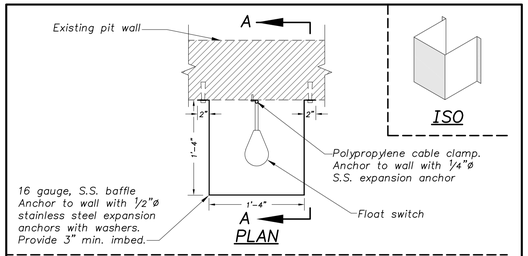
NOTES:
1. All hardware shall be S.S or hot dip galvanized

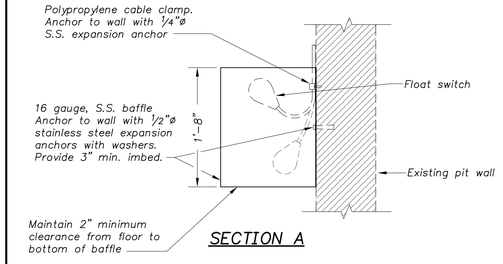
D PIPE SUPPORT WALL MOUNT BRACKET DETAIL
Scale: NTS

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

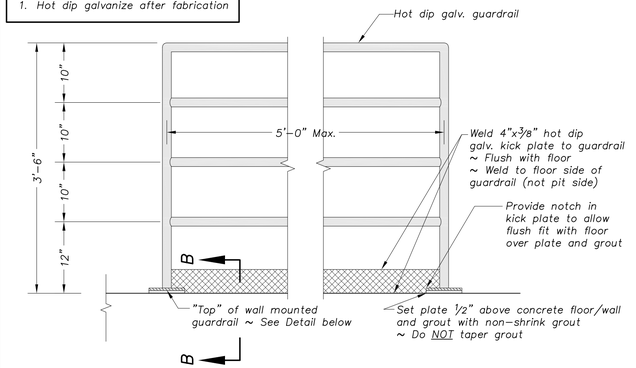


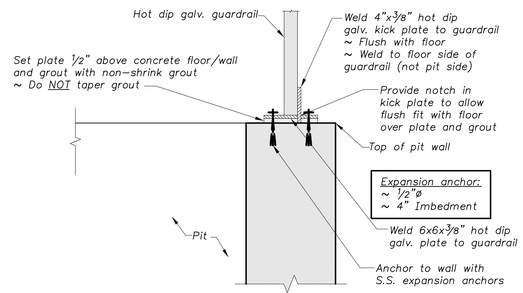


SECTION A

F FLOAT SWITCH BAFFLE DETAIL
Scale: 1"=1'–0"

NOTES:
1. Hot dip galvanize after fabrication



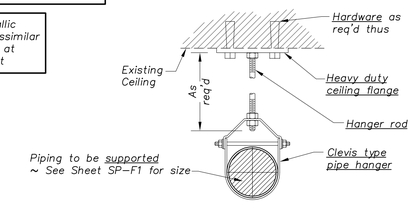


"TOP" OF WALL MOUNTED – SECTION B
Scale: 1 1/2"=1'–0"

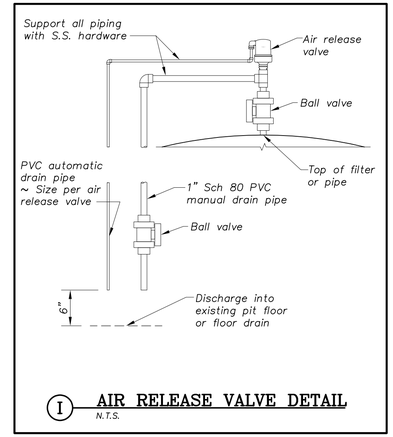
G GUARDRAIL DETAIL
Scale: 1"=1'–0"

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

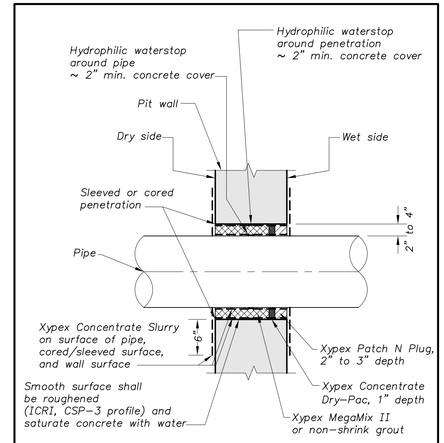
Provide nonmetallic separation at dissimilar metals as req'd at pipe and support



H PIPE SUPPORT – CLEVIS HANGER DETAIL
Scale: 1 1/2"=1'–0"



I AIR RELEASE VALVE DETAIL
N.T.S.



J PIPE SLEEVED PENETRATION DETAIL
Scale: 1"=1'–0"

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Jeff Bartley–ENGINEER LICENSE #15116

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FILTER AREA IMPROVEMENT DETAILS

SP–F4

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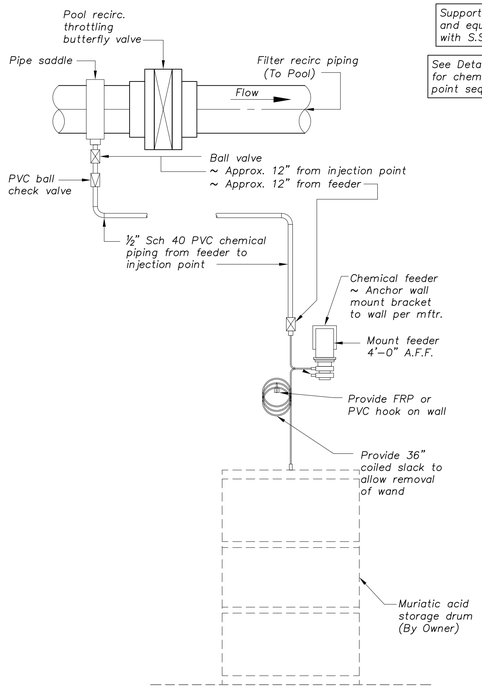
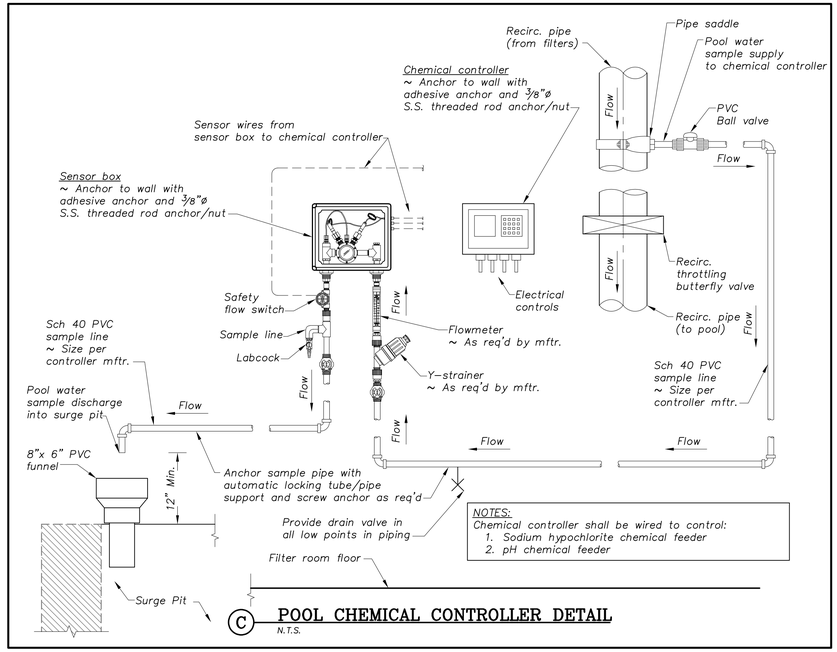
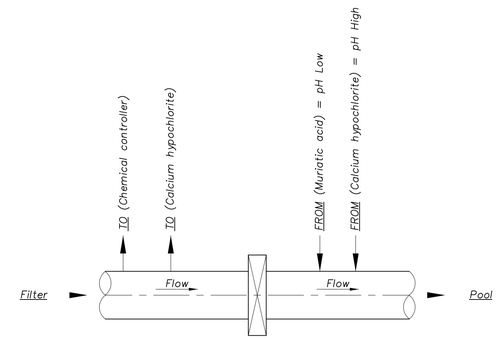


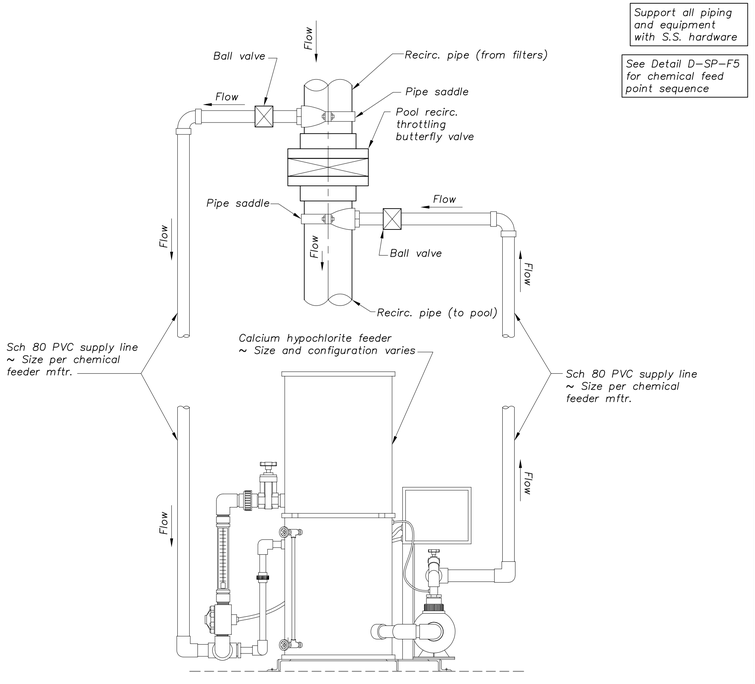
A "MURIATIC ACID" FEED SYSTEM DETAIL
N.T.S.



C POOL CHEMICAL CONTROLLER DETAIL
N.T.S.



D CHEMICAL FEED SEQUENCE DETAIL
N.T.S.



B "CALCIUM HYPOCHLORITE" FEED SYSTEM DETAIL
N.T.S.

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FILTER AREA IMPROVEMENT DETAILS

SP–F5

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Model Building/Design Codes Used:

2018 International Building Code
2015 Uniform Plumbing Code
2018 International Fire Code
2018 International Mechanical Code
2020 National Electrical Code.
City Municode

Proposed Project Description:

This project entails the renovation of the bath house building at the pool in the College Hill Neighborhood of Wichita, KS. The scope of the Urban Prairie's work covers the bath house only. The surrounding site improvements, swimming pool and filtration systems have been designed by others.

The proposed bath house building shall be for seasonal use only and will need to be winterized by the Owner when the potential for frost occurs. The majority of the building is not and will not be heated.

Occupancy Classification:
The bathhouse building is intended for use in outdoor activities: Classified as: Assembly (A-5)

Type of Construction:
Construction type: Type V-B
Note: the building will NOT have a fire suppression system

Building Areas and Heights:
Allowable building area: Unlimited
Allowable building heights: 40'-0" / unlimited # stories

Actual building area:
Bathhouse (A-5): 1,594 gross sq. ft.
Total: 1,594sq.ft.
Actual building heights: 9'-4"± / one story

Signage:
Install "no-smoking" signs at all public and employee entrances. Also provide ANSI/ADA compliant signage per signage schedule

Fire Extinguishers:
Fire extinguishers to be provided and installed per NFPA 10

Occupant Loads:

Boys Shower room 001:	75 sf / 15 net sf/occupant	= 5 occupants [existing]
Boys Locker room 002:	352 sf / 15 net sf/occupant	= 23 occupants [existing]
Corridor 003:	116 sf / 100 gross sf/occupant	= 2 occupants [existing]
Main Entry 004:	191 sf / 100 gross sf/occupant	= 2 occupants [existing]
Storage 005:	65 sf / 100 gross sf/occupant	= 1 occupants [existing]
Girls Locker room 006:	328 sf / 15 net sf/occupant	= 22 occupants [existing]
Girls Shower room 007:	76 sf / 15 net sf/occupant	= 5 occupants [existing]
Family Change Room 008:	97 sf / 15 net sf/occupant	= 7 occupants
Lifeguard room 009:	91 sf / 100 gross sf/occupant	= 1 occupants

Total Bath house building occupancy: = 68 occupants

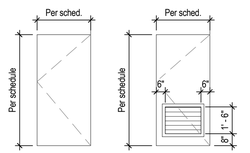
Max occupancy for groups **A**, B, E, F, M, and **U** with one exit or exit doorway: 49

Door and Frame Schedule

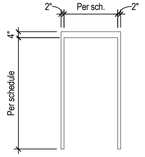
Door Number	Door			Frame	Hardware				Remarks/Notes
	Type	Width	Height	Type	Lockset function	Closer	Wall/Floor Stop	Exit Device	
008	B	3' - 0"	6' - 8"	A	Priv	X	X	--	F.V exist masonry opening
009	A	3' - 0"	6' - 8"	A	Priv	X	X	--	F.V exist masonry opening
FB01	Match Exist	8' - 0"	6' - 8"	Match Exist					Reuse existing deadbolt hardware and door pulls.
FB02	ETR	3' - 0"	6' - 8"	ETR					Existing door, frame, and hardware to Remain
FB03	ETR	3' - 0"	6' - 8"	ETR					Existing door, frame, and hardware to Remain
FB04	Match Exist	3' - 0"	6' - 8"	Match Exist					Reuse existing deadbolt hardware and door pulls.

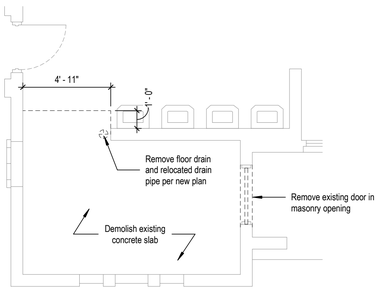
NOTES
1. Doors, frames and hardware to match building standard and the handles to comply with ADA standards and IBC 2018.
2. All new hollow metal door frames to receive bitumous coating at all unexposed portion of the frame for added corrosion resistance prior to installation.

DOOR TYPES

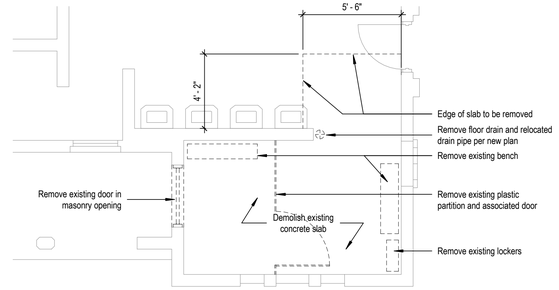


FRAME TYPES

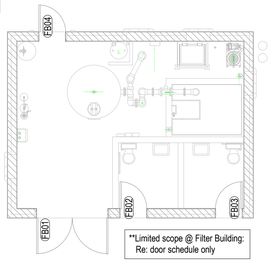




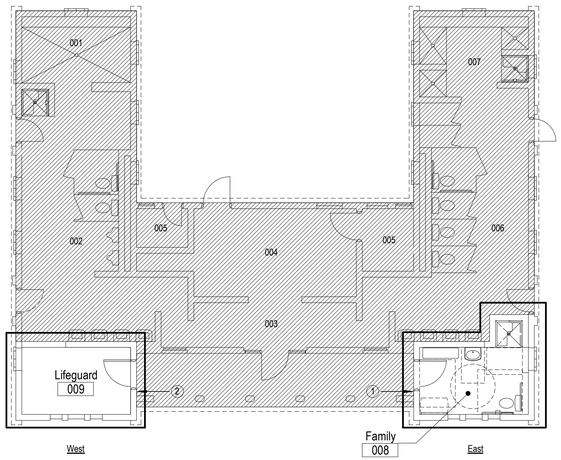
7 — 1/4" = 1'-0" — Demolition Plan - West



8 — 1/4" = 1'-0" — Demolition Plan - East



6 — 1/8" = 1'-0" — Filter Building



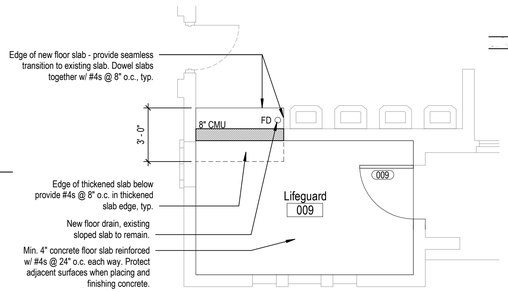
2 — 1/8" = 1'-0" — Key Plan

NORTH

Signage Materials:

- 1/8" acrylic, color as selected from manufacturer's standard color range
- 1/32" raised lettering, color as color as selected from manufacturer's standard color range
- Mechanically fastened w/ stainless steel masonry anchor screws
- Provide Sample for approval from owner & architect

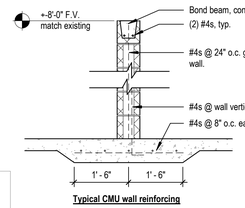
3 — 3" = 1'-0" — Signage Legend



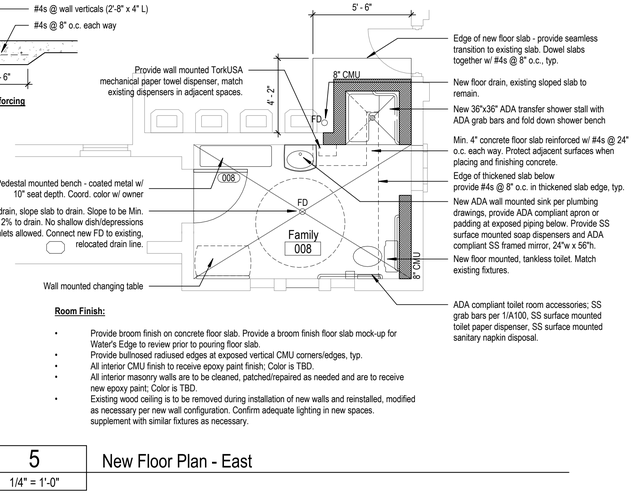
Room Finish:

- Provide broom finish on concrete floor slab. Provide a broom finish floor slab mock-up for Water's Edge to review prior to pouring floor slab.
- Provide bullnosed radiused edges at exposed vertical CMU corners/edges, typ.
- All interior CMU finish to receive epoxy paint finish; Color is TBD.
- All interior masonry walls are to be cleaned, patched/repaired as needed and are to receive new epoxy paint; Color is TBD.
- Existing wood ceiling is to be removed during installation of new walls and reinstalled, modified as necessary per new wall configuration. Confirm adequate lighting in new spaces. supplement with similar fixtures as necessary.

4 — 1/4" = 1'-0" — New Floor Plan - West



Typical CMU wall reinforcing



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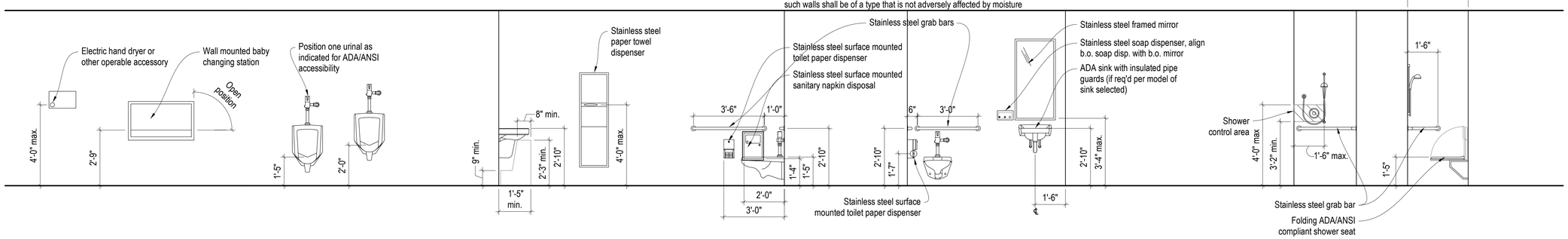
- Existing wood ceiling is to be removed during installation of new walls and reinstalled, modified as necessary per new wall configuration. Confirm adequate lighting in new spaces. supplement with similar fixtures as necessary.

5 — 1/4" = 1'-0" — New Floor Plan - East

Note: per IBC 1210.2, walls within 2 feet of urinals and water closets shall have a smooth, hard, nonabsorbent surface, to a height of 4 feet above the floor, and except for structural elements, the materials used in
such walls shall be of a type that is not adversely affected by moisture



1 — 3/8" = 1'-0" — ADA Interior Elevations Mounting Heights

waters edge AQUATIC DESIGN
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Lenexa, KS 66214
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KANSAS STATE CERTIFICATE OF AUTHORITY #E-390
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ARCHITECTURAL URBAN PRAIRIE COLLABORATIVE, PC
H&B HOSS & BROWN ENGINEERS

WICHITA, KANSAS
Spray Ground
COLLEGE HILL

Seal: PAUL C. MINTO LICENSED 3118 KANSAS PROFESSIONAL ARCHITECT
Paul Minto
LICENSE #3118

Date: 17 Sept. 2021	Job #: 00000
Drawn: BK	Checked: PM
Issue: CONSTRUCTION DOCUMENTS	

Bathhouse Floor Plans

A100

Waters Edge Aquatic Design © 2021

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
- CO FLOOR/GRADE CLEANOUT
- CO WALL CLEANOUT
- CO END OF LINE CLEANOUT

DUCTWORK

- AHU EQUIPMENT TYPE AND NUMBER
- PUMP
- LINEAR SLOT DIFFUSER
- FLEXIBLE DUCT
- NEGATIVE PRESSURE AIR DUCT UP
- 12"x 12" NEGATIVE PRESSURE AIR DUCT DOWN
- POSITIVE PRESSURE AIR DUCT UP
- 12"x 12" 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
- MD 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 100 6" DIFFUSER, GRILLE, OR REGISTER TYPE / CFM / 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.)
- #14/5 (WIRE NUMBER INDICATED)
- #16/5 (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
- SG 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
- GR 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.
- 140 140 DEGREE DOMESTIC HOT WATER
- 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
- GFC 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
- ISOLATED GROUND QUAD RECEPTACLE
- W 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 COOL 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
NFWH	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
- 1 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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Kansas STATE CERTIFICATE OF AUTHORITY #E-990

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10950 Hickman Drive
Shawnee, Kansas 66217
913.362.9090 | mail@hb-me.com
H&B PROJECT NUMBER : 192029
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WICHITA, KANSAS
Spray Ground
COLLEGE HILL PARK

CITY OF WICHITA

Seal: CASEY STEINER LICENSED PROFESSIONAL ENGINEER KANSAS — 10/20/21

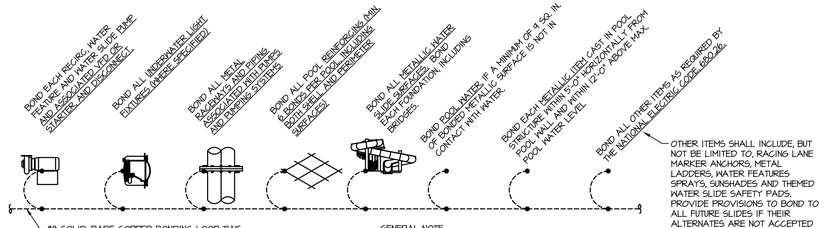
CASEY JOHN STEINER
LICENSE #19423

Date:	10-20-21	Job #:	18-512
Drawn:	CDW	Checked:	CJS
Issue:	CONSTRUCTION DOCUMENTS		

SYMBOLS & ABBREVIATIONS

SP-ME1

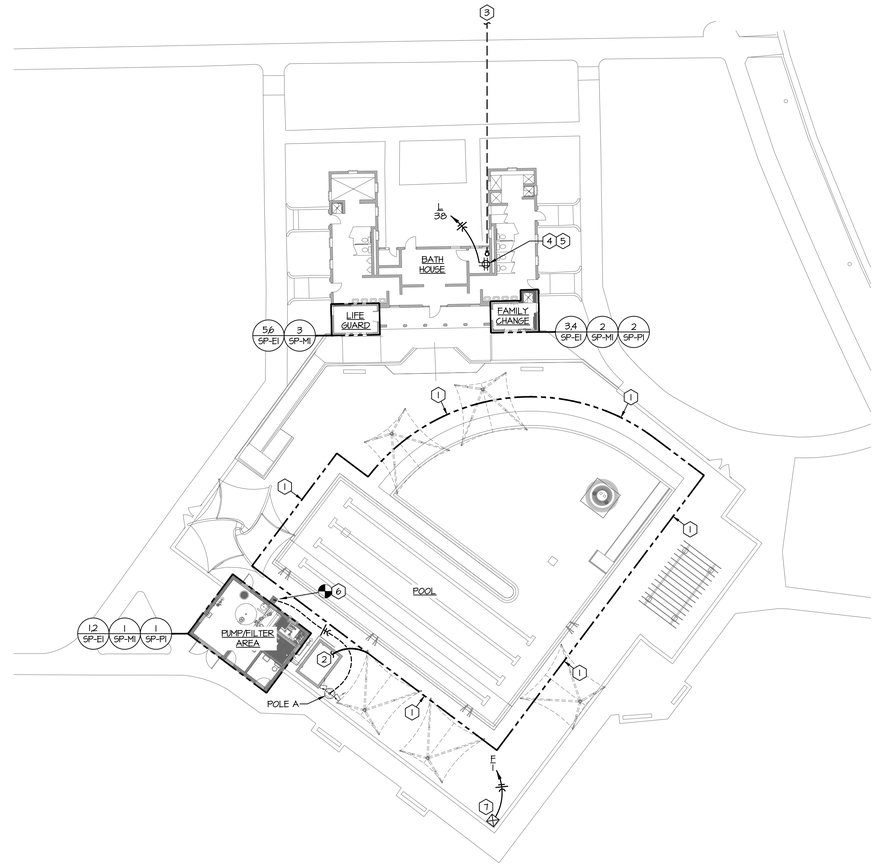
Water's Edge Aquatic Design © 2021



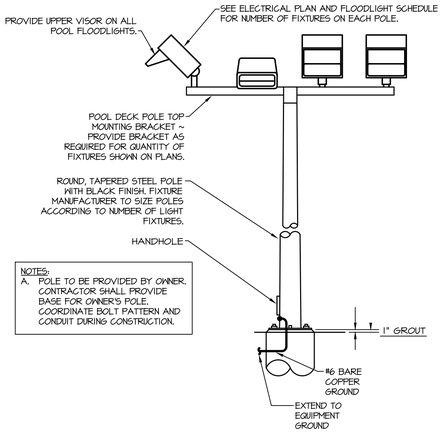
OTHER ITEMS SHALL INCLUDE, BUT NOT BE LIMITED TO, RACING LANE MARKER ANCHORS, METAL LADDERS, WATER FEATURES SPRAYS, SUNSHADES AND THEMED WATER SLIDE SAFETY PADS. PROVIDE PROVISIONS TO BOND TO ALL FUTURE SLIDES IF THEIR ALTERNATES ARE NOT ACCEPTED UNDER THIS CONTRACT.

GENERAL NOTE:
ALL ITEMS SHOWN AND REQUIRED TO BE CONNECTED TO COMMON BONDING LOOP. ELECTRICAL CONTRACTOR SHALL TEST FOR CONTINUITY TO ALL ITEMS AT THE END OF CONSTRUCTION. THE MAXIMUM ALLOWABLE RESISTANCE BETWEEN ANY TWO ITEMS SHALL BE 5 OHMS.

2 Equipotential Bonding Schematic
Scale: None

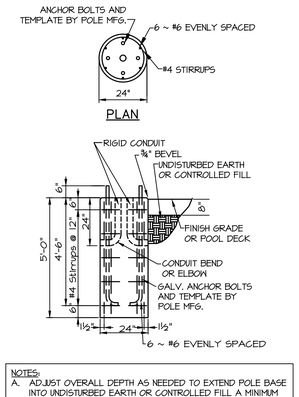


1 MEP Site Plan
Scale: 1" = 20'-0"



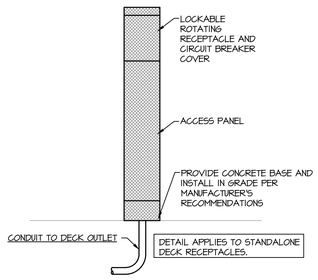
NOTES:
A. POLE TO BE PROVIDED BY OWNER. CONTRACTOR SHALL PROVIDE BASE FOR OWNER'S POLE. COORDINATE BOLT PATTERN AND CONDUIT DURING CONSTRUCTION.

4 Pool Floodlight Pole Detail
Scale: None



NOTES:
A. ADJUST OVERALL DEPTH AS NEEDED TO EXTEND POLE BASE INTO UNDISTURBED EARTH OR CONTROLLED FILL A MINIMUM OF 5'-0".
B. POLE MANUFACTURER SHALL PROVIDE FOR ALL FORCES CREATED BY LIGHT FIXTURES AND ASSOCIATED SUPPORTS AND DEVICES.
C. NO FIELD MODIFICATIONS TO THE POLE WILL BE ALLOWED WITHOUT WRITTEN PERMISSION FROM THE MANUFACTURER.
D. ROUTE FEEDER THROUGH POLE BASE AND POLE TO OUTLET PANEL.

3 Pool Floodlight Pole Base Detail
Scale: None



5 Pedestal Deck Receptacle Detail
Scale: None

GENERAL NOTES:

THE FOLLOWING NOTES SHALL APPLY TO ALL WORK SHOWN ON SHEETS SP-ME1, SP-ME2, SP-MI, SP-PI, SP-EI, 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.

6 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 18"-24" FROM INSIDE FACE OF POOL AND 4"-6" 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 TWO (2) 2" CONDUITS WITH PULL STRING FOR DATA. ROUTE TO SERVICE PEDESTAL. COORDINATE PROVIDER AND EXACT LOCATION OF CONDUIT STUB-UP WITH OWNER DURING CONSTRUCTION.
4. PROVIDE WALL-MOUNTED NEMA 3R ENCLOSURE FOR IT EQUIPMENT AND PROVIDE DEDICATED CIRCUIT TO QUAD RECEPTACLE WITHIN ENCLOSURE. COORDINATE REQUIRED ENCLOSURE SIZE WITH INTERNET SERVICE PROVIDER. ENCLOSURE SHALL BE LARGE ENOUGH TO ACCOMMODATE ISP EQUIPMENT AND AN 8-PORT SWITCH. CONFIRM ENCLOSURE LOCATION AND MOUNTING HEIGHT WITH OWNER.
5. PROVIDE (1) CAT6 PLENUM RATED DATA CABLE WITHIN 3/4" C. FROM IT ENCLOSURE TO THE CHEMICAL CONTROLLER IN THE PUMP/FILTER AREA, TO WIRELESS ACCESS POINTS TO ALLOW FOR PUBLIC WI-FI, AND TO POINT OF SALE STATIONS. CONDUIT SHALL BE ROUTED CLEANLY. CONFIRM LOCATIONS AND ROUTING WITH OWNER PRIOR TO CONSTRUCTION. CABLE SHALL BE BLUE 23/4 SOLID CU CAT6 PLENUM RATED DATA CABLE BY SOUTHWIRE, MODEL 56418044 OR EQUAL.
6. CONTRACTOR SHALL PROVIDE CONNECTION TO EXISTING EXTERIOR LIGHT FIXTURES. POLE LIGHT FIXTURES SHALL OPERATE ON THE SAME SCHEDULE AS THE EXISTING BUILDING EXTERIOR LIGHTING. CONFIRM THE CIRCUIT IS ROUTED THROUGH THE EXISTING LIGHTING CONTACTOR AND PHOTOCELL LOCATED IN THE BATHHOUSE. FEEDER SHALL BE (2)#8 & #10G. IN 1" CONDUIT.
7. DECK RECEPTACLE - PROVIDE PEDESTAL MOUNTED POWER OUTLET PANEL TYPICAL OF SQUARE D SERVICE PACK 11C WITH (2) 20A, 120V RECEPTACLES. ENCLOSURE SHALL BE NEMA-3R. AND RECEPTACLE SHALL BE GFI PROTECTED. REFERENCE PEDESTAL DECK RECEPTACLE DETAIL ON THIS SHEET FOR MORE INFORMATION. FEEDER SHALL BE (2)#4 & #10G. IN 1" CONDUIT.

FLOODLIGHT FIXTURE SCHEDULE

POLE	MANUF.	MODEL	340W HEAD	600W HEADS	TOTAL HEADS	BALLAST TYPE	VOLTS	MOUNTING	EMERG BUTTON	DECK RCPT	SPEAKER HOLE	MIC HOLE	ANTENNA HOLE	TOTAL WATTS	NOTES
A	LITHONIA	HLFI-P4-40K-WFL-MVOLT-15-UBV	2	0	2	ELECTRONIC	UNV	POLE MOUNTED	NO	NO	NO	NO	NO	680	-

NOTES:

GENERAL NOTES (APPLIES TO ALL ABOVE):
A. FLOODLIGHT HEADS TO BE YOKE MOUNTED ON 30' POLES. POLES SHALL BE BLACK IN COLOR, CONSULT POOL DESIGNER TO VERIFY COLOR PRIOR TO ORDERING.
B. ALL FLOODLIGHTS ON POLE SHALL HAVE MANUFACTURER'S UPPER VISOR.
C. FIXTURES SHALL BE AIMED AT 45 DEGREES DOWN FROM THE HORIZONTAL PLANE.
D. 340W HEADS ARE SECURITY FIXTURES.

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WICHITA, KANSAS
Spray Ground
COLLEGE HILL PARK

CITY OF WICHITA

Seal:
CASEY STEINER LICENSED PROFESSIONAL ENGINEER KANSAS
10/20/21

CASEY JOHN STEINER
LICENSE #19423

Date: 10-20-21 | Job #: 18-512
Drawn: CDW | Checked: CJS
Issue: CONSTRUCTION DOCUMENTS

MEP SITE PLAN

SP-ME2

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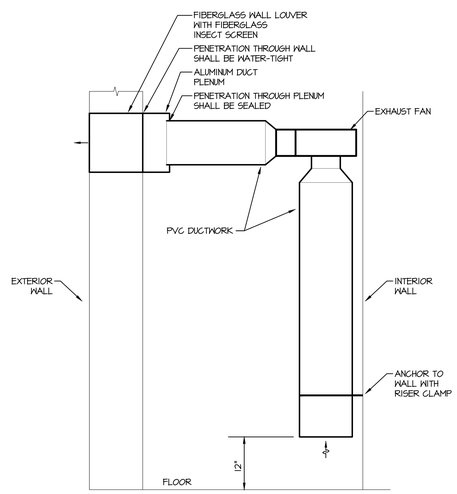
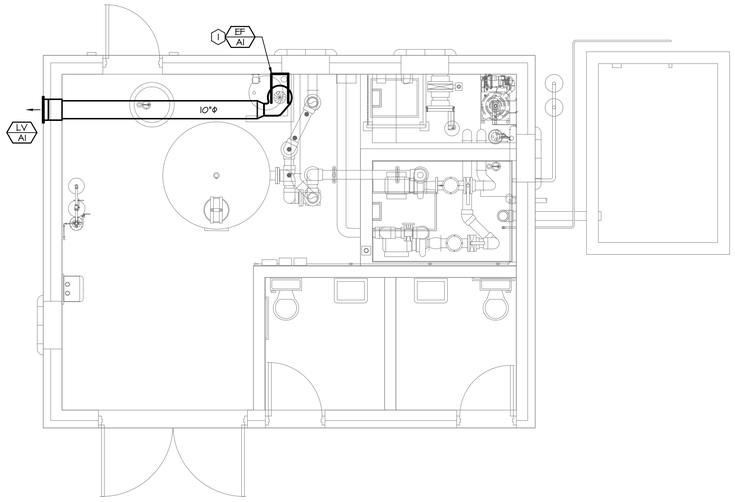


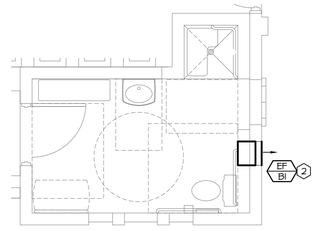
3 Chemical Exhaust Fan Detail

Scale: Not to Scale



1 Filter Room Mechanical Plan

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



2 Family Change 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. ALL DUCTWORK DIMENSIONS INDICATE THE INSIDE CLEAR DIMENSION.

6 PLAN NOTES:

1. PROVIDE CENTRIFUGAL FAN AS SCHEDULED MOUNTED HIGH IN CHEMICAL ROOM. PROVIDE 10" PVC PIPE DOWN TO APPROXIMATELY 8' AFF. JOG DUCTWORK TO BE TIGHT AGAINST WALLS IN CORNER TO ALLOW FOR REMOVAL OF CHEMICAL CONTAINERS WHEN REQUIRED. DISCHARGE DUCTWORK SHALL HAVE FLEXIBLE CONNECTION. PROVIDE 10" PVC DISCHARGE PIPE AND EXTEND TO LOUVER AS HIGH AS POSSIBLE. COORDINATE INSTALLATION OF INTAKE DUCTWORK WITH POOL ENGINEER.
2. PROVIDE CINDER BLOCK FAN AS SCHEDULED MOUNTED APPROXIMATELY 8' AFF. FAN SHALL BE ORIENTED TO EXHAUST AIR FROM THE ROOM. THE FAN SHALL BE PROVIDED WITH MANUFACTURER'S SPEED CONTROLLER AND SECOND GRILLE. FAN SHALL OPERATE WITH ROOM LIGHTING. COORDINATE INSTALLATION WITH THE ELECTRICAL CONTRACTOR.

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	1,2
EF-B1	COOK	CBF	200	0.4	DIRECT	-	82	-	120/1	3,4

NOTES:

1. FAN HOUSING AND WHEEL SHALL BE CONSTRUCTED OF POLYPROPLYENE.
2. PROVIDE FAN WITH MANUFACTURER'S DISCONNECT SWITCH
3. PROVIDE FAN WITH MANUFACTURER'S SPEED CONTROLLER.
4. PROVIDE FAN WITH MANUFACTURER'S SECOND GRILLE.

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	RUSKIN	SF640	EXHAUST	18x18	650	0.65	0.20	1

PLAN NOTES:

1. PROVIDE FIBERGLASS LOUVER WITH FIBERGLASS INSECT SCREEN.

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.

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MECHANICAL PLAN, DETAILS & SCHEDULES

SP-M1

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PLUMBING FIXTURE SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	MODEL	TRIM	CONNECTIONS CW	HW	TW	W	V	NOTES
WC-1	ADA FLOOR MOUNTED WATER CLOSET WITH 1.6 GPF MANUAL FLUSH VALVE	AMERICAN STANDARD	MADERA 2854.016	FLUSH VALVE: MODEL 6047.161 (INCLUDED)	1-1/2"	--	--	4"	2"	5
		CRANE	HYMONT 3HT01	CHURCH 9500C OPEN FRONT SEAT						
		TOTO	CT705ELN	TOTO SC534 OPEN FRONT SEAT						
L-1	ADA WALL HUNG LAVATORY	AMERICAN STANDARD	LUCERNE 0355.012	FAUCET: F-1	--	--	--	1-1/2"	1-1/2"	2, 3, 5
		CRANE	HARWICH 1-412	GRID STRAINER						
				CONCEALED ARM CARRIER						
SH-1	ADA SURFACE MOUNTED AIR CONTROL SINGLE TEMPERATURE METERING	ACORN ENGEERING	456BADA-W-PBH	SURFACE MOUNT SOAP DISH SUPPLY COVER TO CEILING	--	--	1/2"	2"	1-1/2"	1, 5
F-1	ADA HANDS FREE LAVATORY FAUCET	TOTO	TEL105-DI0E	0.5 GPM, SELF-GENERATING BATTERY, GRID STRAINER, COVERPLATE	--	--	1/2"	--	--	5
FD-1	7" ROUND FLOOR DRAIN	WADE	1100STD	NICKEL BRONZE STRAINER DEEP SEAL TRAP	--	--	--	2"	2"	4
		ZURN	Z-415							
		SMITH	2005							
MV-1	THERMOSTATIC MIXING VALVE ASSE 1017, 1069	LEONARD	XL-690-LF	20F TO 240F THERMOMETER CONTROL LOCKING DEVICE 0.5 GPM MINIMUM FLOW	1"	1"	1-1/4"	--	--	4
RP-1	RECIRCULATION PUMP RECIRCULATION PUMP	BELL & GOSSETT	ECOCIRC 20-18	1/12 HP, 120V STRAP-ON AQUASTAT 2.5 GPM, 15' HEAD	--	--	3/4"	--	--	4
		ARMSTRONG	ASTRO 250							
		TACO	008							

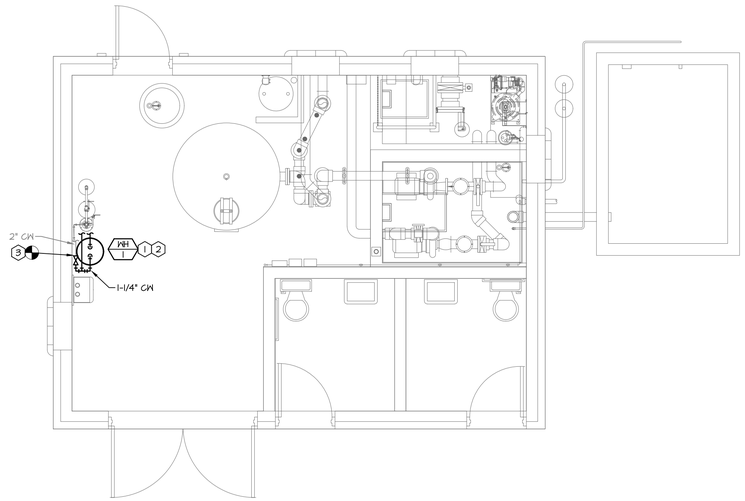
NOTES:
1. PROVIDE WINTERIZATION VALVE FOR SHOWER FIXTURES.
2. FAUCET HOLES TO MATCH FAUCET SPECIFIED.
3. MOUNT WITH HANDICAPPED RECEPTOR RIM 34" ABOVE FLOOR.
4. PIPE SIZE AS SHOWN ON DRAWING.
5. FIXTURE ASSEMBLY MUST BE APPROVED BY AND INSTALLED PER ADA.

GENERAL NOTES:
A. PROVIDE INSULATION KIT ON ALL ADA FIXTURES WITH EXPOSED TRAP AND SUPPLIES.

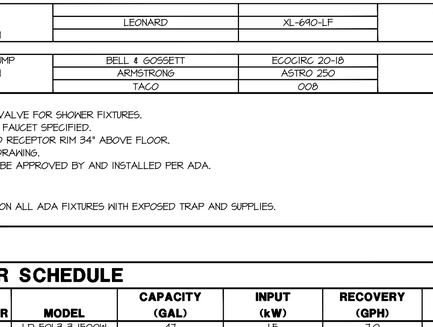
WATER HEATER SCHEDULE

MARK	MANUFACTURER	MODEL	CAPACITY (GAL)	INPUT (kW)	RECOVERY (GPH)	V/PH	NOTES
WH-1	BRADFORD WHITE	LD-50L3-3-1500W	47	1.5	7.0	120/1	
WH-2	BRADFORD WHITE	LD-50L3-3-1500W	47	1.5	7.0	120/1	

GENERAL NOTES (APPLIES TO ALL ABOVE):
A. PROVIDE ASME PRESSURE AND TEMPERATURE RELIEF VALVE.
B. PROVIDE DIELECTRIC CONNECTIONS AT WATER HEATER.

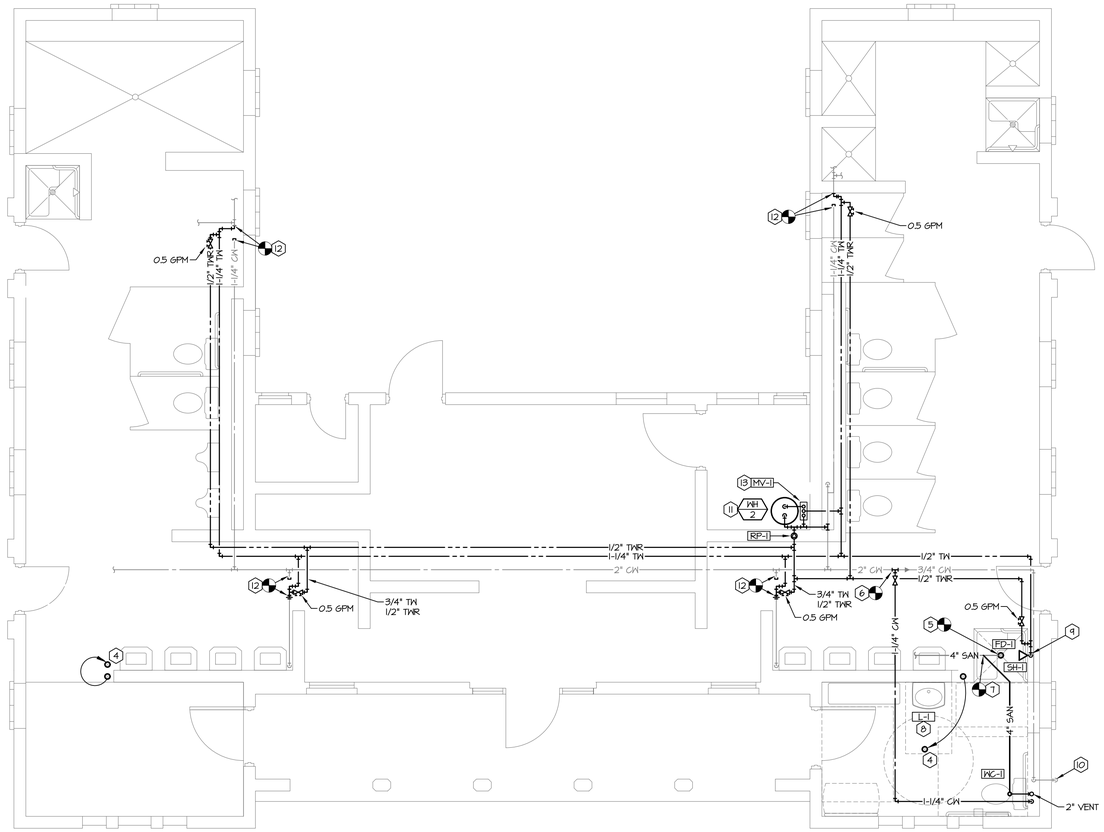


2 Filter Room Plumbing Plan
Scale: 1/4" = 1'-0"



NOTES:
1. PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. REFER TO FLOOR PLANS FOR PIPE SIZES. SET HEATER THERMOSTAT AT 140F. PROVIDE CLEARANCES RECOMMENDED BY MANUFACTURER.

4 Water Heater Detail
Scale: Not to Scale



N

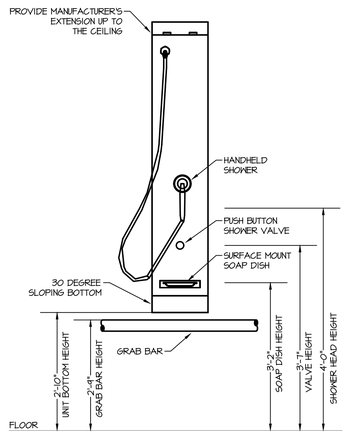
3 Bathhouse Plumbing Plan
Scale: 1/4" = 1'-0"

GENERAL NOTES:

A. THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF THE WORK. PROVIDE PLUMBING SYSTEMS COMPLETE AND PER APPLICABLE CODES INCLUDING ALL NECESSARY COMPONENTS AND OFFSETS WHICH ARE REQUIRED DUE TO SPACE CONSTRAINTS OR OTHER CONDITIONS.
B. REFER TO THE ARCHITECTURAL PLANS FOR THE EXACT LOCATIONS OF PLUMBING FIXTURES.
C. COORDINATE THE INSTALLATION OF PLUMBING AND PIPING WITH THE WORK OF ALL OTHER TRADES.
D. PIPING SHALL NOT BE LOCATED OVER ELECTRICAL EQUIPMENT OR PANELS. PROVIDE THE CODE REQUIRED WORKING CLEARANCE AROUND ALL ELECTRICAL EQUIPMENT AND PANELS.
E. PROVIDE SUPPLEMENTARY STEEL AS REQUIRED FOR THE PROPER SUPPORT OF ALL PLUMBING SYSTEMS.
F. COORDINATE THE SHUT DOWN OF ANY EXISTING SERVICES AND/OR EQUIPMENT WITH THE OWNER'S REPRESENTATIVE.
G. PLUMBING VENT PIPING THROUGH THE ROOF SHALL BE LOCATED A MINIMUM OF 10'-0" AWAY FROM ANY FRESH AIR INTAKE LOCATION AND A MINIMUM OF 18" CLEAR FROM THE INSIDE FACE OF THE PARAPET.
H. PROVIDE THE CODE REQUIRED CLEARANCE FOR ALL CLEANOUTS INSTALLED IN SANITARY WASTE AND VENT PIPING.
I. SLOPE ALL DOMESTIC WATER PIPING TO LOW POINTS IN THE SYSTEM AND PROVIDE DRAINS TO ALLOW COMPLETE DRAINING FOR WINTER SHUT-DOWN. INSTALL AIR VALVE AT DISCHARGE OF BACKFLOW PREVENTER FOR SYSTEM BLOW-OUT. AT PROJECT CLOSE-OUT, PLUMBING CONTRACTOR SHALL PROVIDE INSTRUCTIONS TO OWNER FOR COMPLETE WINTERIZATION OF SYSTEM, INCLUDING REMOVAL OF BACKFLOW PREVENTION ASSEMBLY, MANUAL WATER REMOVAL FROM RISER TO BELOW FROST-LINE AND WINTERIZATION OF TRAPS. THESE INSTRUCTIONS SHALL BE PROVIDED IN BOTH WRITTEN FORM, AND PERFORMED ON-SITE IN THE PRESENCE OF AN OWNER'S REPRESENTATIVE.
J. ALL CIRCUIT SETTERS IN HOT WATER RECIRCULATION LOOPS ARE TO BE SET FOR 0.5 G.P.M. UNLESS NOTED OTHERWISE.

(#) PLAN NOTES:

1. PROVIDE WATER HEATER SUSPENDED FROM THE NEW STRUCTURE DIRECTLY OVER THE EMERGENCY EYEWASH/SHOWER STATION OR LOCATED IMMEDIATELY ADJACENT. PROVIDE 1" HOT AND COLD WATER CONNECTION TO EMERGENCY MIXING VALVE AND SET THE OUTLET TEMPERATURE TO TO DEG F. WATER HEATER TEMPERATURE SHALL BE SET TO 140 DEG F.
2. EXTEND DRAIN LINES FROM WATER HEATER TO CONCRETE PLUME ON EXTERIOR OF BUILDING, PLAN SOUTH OF THE WATER HEATER. THE DRAIN LINES SHALL BE ADJACENT TO THE SUMP PUMP DISCHARGE LINE.
3. PROVIDE NEW DOMESTIC COLD WATER LINE AS SHOWN AND MAKE CONNECTION TO NEW WATER HEATER.
4. RELOCATE EXISTING FLOOR DRAIN AS SHOWN TO ALLOW FOR THE NEW WALL TO BE BUILT. EXTEND SANITARY AND VENT LINES AS REQUIRED.
5. PROVIDE COMBINATION FLOOR DRAIN W/ CLEANOUT AS SCHEDULED. CONNECT TO EXISTING 4" SANITARY LINE IN THE IMMEDIATE VICINITY. EXTEND SANITARY AND VENT LINES AS REQUIRED.
6. PROVIDE NEW DOMESTIC COLD WATER LINE AS SHOWN AND MAKE CONNECTION TO NEW WATER CLOSET. PIPING SHALL BE LOCATED IN THE ATTIC.
7. PROVIDE NEW SANITARY LINE AS SHOWN AND MAKE CONNECTION TO NEW WATER CLOSET. PROVIDE VENT AS SCHEDULED AND ROUTE ADJACENT TO NEW DOMESTIC COLD WATER LINE IN THE ATTIC BEFORE CONNECTING INTO THE EXISTING VENT SYSTEM.
8. PROVIDE LAVATORY AS SCHEDULED. MAKE CONNECTIONS TO EXISTING WATER, VENT, AND WASTE LINES WITHIN WALL THAT SERVE THE EXISTING LAVATORIES OPPOSITE OF THE WALL.
9. PROVIDE SHOWER AS SCHEDULED. MAKE CONNECTION TO NEW TEMPERED WATER LINE ABOVE SHOWER.
10. RELOCATE EXISTING WINTERIZATION VALVE TO ACCESSIBLE LOCATION OR PROVIDE ACCESS PANEL TO ALLOW FOR ACCESS. ENCLOSURE SHALL BE LOCKED AND LABELED "WINTERIZATION VALVE ACCESS PANEL".
11. PROVIDE WATER HEATER ABOVE CEILING. DRAIN LINES SHALL BE EXTENDED TO NEAREST EXISTING WOMENS SHOWER STALL AND SHALL INDIRECTLY DRAIN APPROXIMATELY 0'-6" AFF. WATER HEATER TEMPERATURE SHALL BE SET TO 140 DEG F. PROVIDE ISOLATION VALVES FOR ALL PIPES CONNECTED TO THE WATER HEATER.
12. AT THIS APPROXIMATE LOCATION, MODIFY THE COLD WATER PIPING AS SHOWN SO THAT THE EXISTING PIPING THAT SERVES THE FIXTURES DOWNSTREAM ARE CONNECTED TO THE NEW TEMPERED WATER LINE. PROVIDE TEMPERED WATER RECIRCULATION LINE AND CIRCUIT SETTER AS SHOWN. CAP COLD WATER LINE ABOVE CEILING AS SHOWN.
13. PROVIDE MIXING VALVE ABOVE CEILING. MIXING VALVE OUTLET TEMPERATURE SHALL BE SET TO 110 DEG F.



1 ADA Shower Detail
Scale: Not to Scale

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CASEY JOHN STEINER
LICENSE #19423

Date: 10-20-21 | Job #: 18-512
Drawn: CDW | Checked: CJS
Issue: CONSTRUCTION DOCUMENTS

PLUMBING PLANS, DETAILS & SCHEDULES

SP-P1

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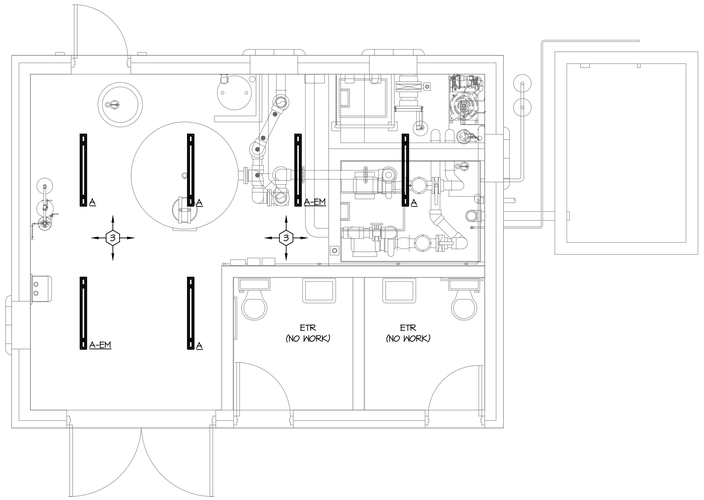
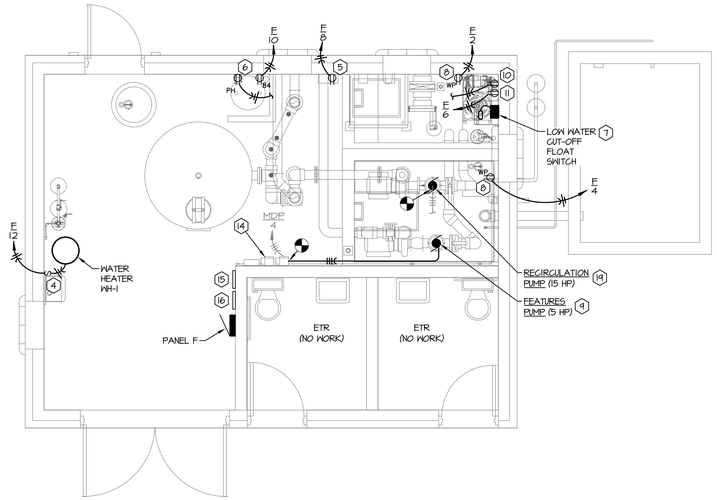


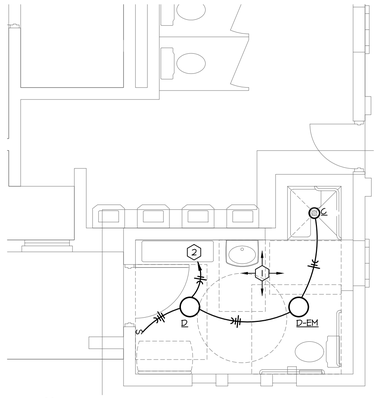
2 Filter Room Lighting Plan

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



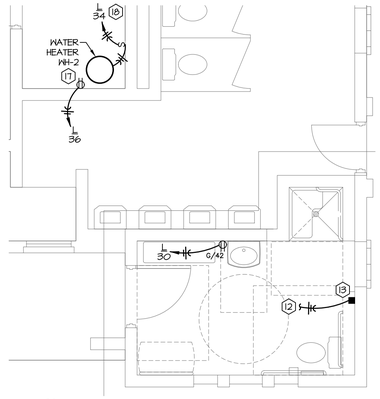
1 Filter Room Power Plan

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



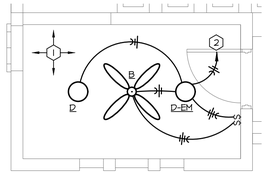
N 4 Family Change Lighting Plan

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



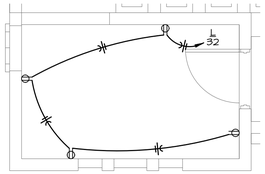
N 3 Family Change Power Plan

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



N 6 Lifeguard Room Lighting Plan

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



N 5 Lifeguard Room Power 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.

6 PLAN NOTES:

1. REMOVE EXISTING LIGHT FIXTURES IN THIS SPACE. RETAIN CIRCUITING FOR CONNECTION TO NEW FIXTURES.
2. CONNECT NEW LIGHT FIXTURES TO EXISTING CIRCUIT RETAINED DURING DEMOLITION. -EM FIXTURES SHALL BE CONNECTED TO A "HOT" CONDUCTOR. MODIFY NEW CIRCUIT AS REQUIRED.
3. REPLACE EXISTING LIGHT FIXTURES IN THIS SPACE WITH FIXTURES AS SCHEDULED. RETAIN EXISTING CONTROLS. -EM FIXTURES SHALL BE CONNECTED TO A "HOT" CONDUCTOR. MODIFY NEW CIRCUIT AS REQUIRED.
4. PROVIDE 120V/1PH POWER TO NEW WATER HEATER LOCATED ABOVE/ADJACENT TO EMERGENCY EYEWASH/SHOWER STATION. PROVIDE TOGGLE SWITCH DISCONNECT
5. CHEMICAL CONTROLLER RECEPTACLE. PROVIDE ENGRAVED COVERPLATE DENOTING POOL SERVED AND CHEMICAL CONTROLLER. ROUTE FEEDER BETWEEN CHEMICAL RECEPTACLE AND CHEMICAL CONTROLLER.
6. PH FEEDER RECEPTACLE. CONNECT CIRCUIT TO CHEMICAL CONTROLLER. SEE CIRCULATION PUMP CONTROL SCHEMATIC ON SHEET SP-E2 FOR MORE INFORMATION. PROVIDE ENGRAVED COVERPLATE DENOTING PH FEEDER.
7. PROVIDE ZOELLER SNITCH-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.
8. PROVIDE SUMP PUMP RECEPTACLE AS REQUIRED. RECEPTACLE SHALL BE ABOVE FLOOD RIM OF PIT.
9. ROUTE FEEDER BETWEEN PUMP MOTOR/DRIVE AND EXISTING DISCONNECT. FEEDER SHALL BE ROUTED CLEANLY AND SHALL NOT BE ROUTED ACROSS THE FLOOR.
10. CHLORINE 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 CHLORINE FEEDER.
11. CHLORINE FEEDER CONSTANT POWER RECEPTACLE. PROVIDE ENGRAVED COVERPLATE DENOTING POOL SERVED AND CHLORINE FEEDER. COORDINATE EXACT HEIGHT OF RECEPTACLE WITH MANUFACTURER.
12. EXHAUST FAN POWER SHALL BE ROUTED THROUGH NEW WALL. EXHAUST FAN SHALL BE INTERLOCKED WITH THE ROOM LIGHTING. COORDINATE EXACT HEIGHT AND LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
13. INSTALL FAN SPEED CONTROLLER IN AN ACCESSIBLE LOCATION ABOVE THE CEILING. COORDINATE A 200 CFM EXHAUST RATE WITH THE MECHANICAL CONTRACTOR.
14. MODIFY EXISTING PUMP MOTOR STARTER WIRING AND INTEGRATE INTO NEW CONTROLS AND PUMP START/STOP STATION AS DETAILED ON SHEET SP-E2.
15. PUMP START/STOP STATION - PROVIDE PUMP START/STOP STATION. REFERENCE RECIRCULATION PUMP CONTROL SCHEMATIC ON SHEET SP-E2 FOR ADDITIONAL INFORMATION. CONTROL STATION SHALL BE CENTERED 4'-6" AFF.
16. LOW WATER RESET STATION - PROVIDE LOW WATER PUMP RESET STATION. REFERENCE FLOAT SWITCH SCHEMATIC ON SHEET SP-E2 FOR ADDITIONAL INFORMATION. CONTROL STATION SHALL BE CENTERED 4'-6" AFF.
17. PROVIDE RECEPTACLE FOR RECIRCULATION PUMP ABOVE CEILING.
18. PROVIDE 120V/1PH POWER TO NEW WATER HEATER LOCATED ABOVE CEILING. PROVIDE TOGGLE SWITCH DISCONNECT.
19. PROVIDE CONNECTION BETWEEN REPLACEMENT RECIRCULATION PUMP AND EXITING FEEDER. REFER TO ELECTRICAL RISER DIAGRAM FOR MORE INFORMATION.

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H&B PROJECT NUMBER : 192029

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Spray Ground
COLLEGE HILL PARK

CITY OF WICHITA

Seal:
CASEY STEINER LICENSED KANSAS PROFESSIONAL ENGINEER
10/20/21

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ELECTRICAL PLAN

SP-E1

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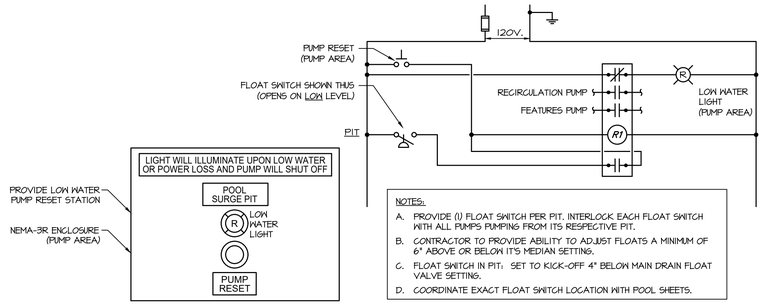
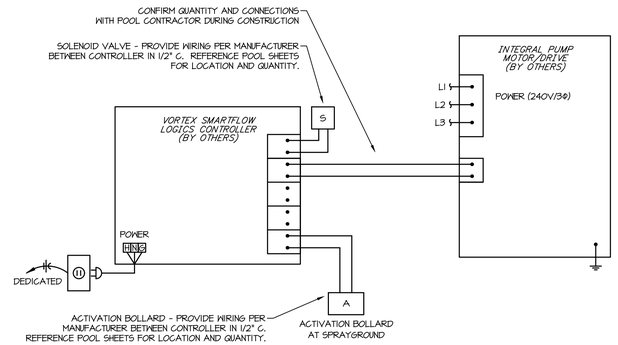
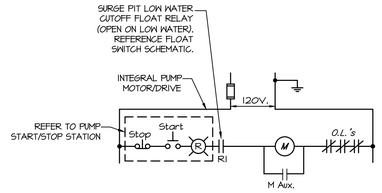


LOW WATER CUT-OFF FLOAT SWITCH CONTROLS

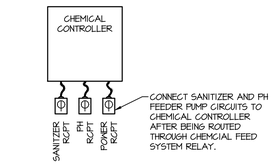
3 Float Switch Schematic
Scale: None



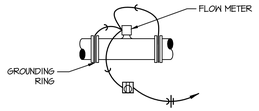
1 Features Pump Control Schematic
Scale: None



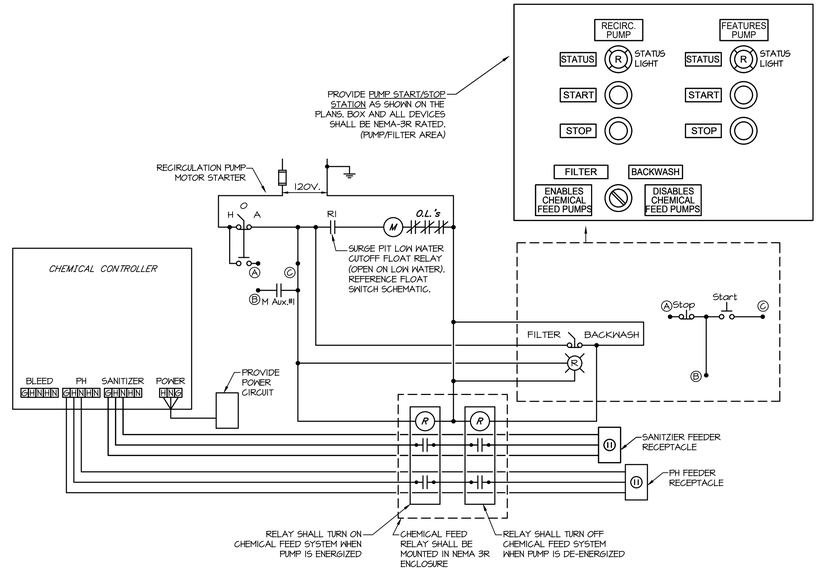
4 Features Pump Start/Stop Control Schematic
Scale: None



5 Chemical Controller Schematic
Scale: None



6 Flow Meter Grounding Detail
Scale: None



2 Recirculation Pump Control 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

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LIGHT FIXTURE SCHEDULE

MARK	MANUFACTURER	MODEL	LAMP DATA			VOLTS	MOUNTING	TOTAL WATTS	DESCRIPTION	NOTES
			LUMENS	TYPE	COLOR (K)					
A	WILLIAMS	96-4-L40/840-HIAFR-WET/I-DRV-UNV	4000	LED	4000K/82CRI	UNV	SURFACE	40	4" DEEP ENCLOSED INDUSTRIAL, 4FT	1
A-EM	WILLIAMS	96-4-L40/840-HIAFR-EM/I0NC-WET/I-DRV-UNV	4000	LED	4000K/82CRI	UNV	SURFACE	40	4" DEEP ENCLOSED INDUSTRIAL, 4FT, EM	1
B	MINKA AIRE	F474L-WH	-	-	-	120	SURFACE	54	52" DIA. WET LOCATION CEILING FAN	2
C	JUNO	JSF-5IN07LM-35K-90CRI-120FRPC-WH-EBX	700	LED	3500K/90 CRI	120	SURFACE	10	5" SURFACE MOUND LED DISC	
D	JUNO	JSF-13IN16LM-35K-90CRI-120FRPC-WH-EBX	1800	LED	3500K/90 CRI	120	SURFACE	20	13" SURFACE MOUND LED DISC	
D-EM	JUNO	JSF-13IN16LM-35K-90CRI-MVOLTZT-WH-EL	1800	LED	3500K/90 CRI	UNV	SURFACE	20	13" SURFACE MOUND LED DISC W/ EM	

NOTES:

1. FIXTURE SHALL BE WET LISTED.
2. FAN SHALL BE NON-LIT. PROVIDE MANUFACTURER LIGHT CAP AND WALL CONTROLLER.

GENERAL NOTES (APPLIES TO ALL ABOVE):

A. ALL LIGHT FIXTURES SCHEDULED AND SHOWN ON THE PLANS WITH AN "EM" TAG SUFFIX SHALL HAVE AN INTEGRAL EMERGENCY DRIVER.

B. CONTRACTOR SHALL VERIFY CEILING TYPE PRIOR TO ORDERING ALL FIXTURES.

PANEL F

DESCRIPTION: 100A MCB, 100% Neutral Bus, NEMA 3R Enclosure — **VOLTAGE: 120/240V, 1PH, 3 WIRE**

10 kAIC RATING — **TOTAL CONNECTED LOAD: 6kW= 24A** — **DEMANDED LOAD CONTINUOUS: 6kW= 25A**

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
1	3000	DECK RECEPTACLE	1	50	A	20	1	RCPT - SUMP	180	2
3	0	SPARE	1	20	B	20	1	RCPT - SUMP	180	4
5	0	SPARE	1	20	A	20	1	RCPT - CHEM FEEDER	180	6
7	0	SPARE	1	20	B	20	1	RCPT - CHEM CONTROLLER	180	8
9	0	SPARE	1	20	A	20	1	RCPT - GENERAL/EXHAUST	500	10
11	0	SPARE	1	20	B	20	1	WH-1	1500	12

PANEL L (EXISTING)

DESCRIPTION: 225A MLO, 100% Neutral Bus, NEMA 1 Enclosure — **VOLTAGE: 120/240V, 1PH, 3 WIRE**

80 kAIC RATING — **TOTAL CONNECTED LOAD: 23kW= 96A** — **DEMANDED LOAD CONTINUOUS: 26kW= 107A**

NO	LOAD (W)	LOAD DESCRIPTION	P	AMP SIZE	PH	AMP SIZE	P	LOAD DESCRIPTION	LOAD (W)	NO
1	800	RECEPTACLES	1	20	A	20	1	LIGHTS	1000	2
3	800	RECEPTACLES	1	20	B	20	1	LIGHTS	1000	4
5	600	RECEPTACLES	1	20	A	20	1	LIGHTS	1000	6
7	800	RECEPTACLES	1	20	B	20	1	EXTERIOR LIGHTS	1200	8
9	1200	VENDING	1	20	A	20	1	EXTERIOR LIGHTS	1200	10
11	1200	VENDING	1	20	B	20	1	SITE FIXTURES	1000	12
13	600	FLUSH VALVE XFM	1	20	A	20	1	SPARE	0	14
15	600	FLUSH VALVE XFM	1	20	B	20	1	LIGHTS PUMP RM	800	16
17	800	RECEPTACLES	1	20	A	20	1	SPARE	0	18
19	600	FLUSH VALVE XFM	1	20	B	20	1	RP-1	900	20
21	600	TTB	1	20	A	20	1	RP-2	900	22
23	0	SPARE	1	20	B	20	1	RP-3	1200	24
25	0	SPARE	1	20	A	20	1	SPARE	0	26
27	0	SPARE	1	20	B	20	1	WH-1	1500	28
29	0	SPARE	1	20	A	20	1	RCPT - FAMILY CHANGE	180	30
31	0	SPARE	1	20	B	20	1	RCPT - LIFE GUARD	720	32
33	0	SPARE	1	20	A	20	1	WH-2	1500	34
35	0	SPARE	1	20	B	20	1	RECIRC PUMP RP-1	180	36
37	0	SPARE	1	20	A	20	1	IT EQUIPMENT	180	38
39	0	SPARE	1	20	B	20	1	SPARE	0	40
41	0	SPARE	1	20	A	20	1	SPARE	0	42

1 Electrical Riser Diagram
Scale: None

FEEDER SCHEDULE:

UTILITY	FEEDER BY UTILITY
E404	(4)#500KCM IN 4" CONDUIT
E203	(3)#3/0, #6 GROUND IN 2" CONDUIT
E224	(4)#4/0, #4 GROUND IN 2-1/2" CONDUIT
E15HP	(3)#2, #6 GROUND IN 1-1/2" CONDUIT
ET5HP	(3)#6, #10 GROUND IN 1" CONDUIT
103	(3)#1, #8 GROUND IN 1-1/2" CONDUIT

⑨ RISER NEW WORK NOTES:

1. GROUNDING - VERIFY SERVICE ENTRANCE EQUIPMENT IS GROUND PER THE GROUNDING ELECTRODE SYSTEM REQUIREMENTS SET FORTH IN NEC 250.50. ANY BARE GROUNDING ELECTRODE CONDUCTOR THAT IS OXIDIZED SHALL BE REPLACED WITH AN INSULATED GROUNDING ELECTRODE CONDUCTOR IN SCHEDULE 80 PVC CONDUIT.
2. FEATURES PUMP/VFD - PROVIDE FEEDER FOR PUMP WITH INTEGRAL VFD AND CONNECT TO EXISTING DISCONNECT/STARTER. FEEDER SHALL BE (3)#10, #10G, IN 1/2" CONDUIT.
3. PANEL F - CONTRACTOR SHALL PROVIDE 100A MCB, 120/240V, 10KAIC, 12 POLE NEMA 3R LOAD CENTER. FEEDER SHALL BE ROUTED BELOW GRADE BETWEEN THE BATHHOUSE AND FILTER BUILDING.
4. RECIRCULATION PUMP - PROVIDE CONNECTION TO REPLACEMENT RECIRCULATION PUMP WITH EXISTING FEEDER. VERIFY FEEDER IS AT LEAST (3)#6 AND #8G, IN 1-1/4" CONDUIT.
5. GROUNDING - GROUND PER THE GROUNDING ELECTRODE SYSTEM REQUIREMENTS SET FORTH IN NEC 250.50.

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ELECTRICAL DETAILS AND RISER DIAGRAM

SP-E3

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