

EXISTING FILTER AREA DEMO KEY NOTES

1. Existing filter building structure
2. Existing building doors
3. Demo/remove door and partial of existing wall to allow for 6'-0" double door opening ~ Refer to Architectural Sheets for further information
4. Existing pool chemical storage room
5. Salvage all existing related chemical feed systems. Present to Owner for assessment to possibly be reused/reinstalled
6. Approximate location of existing building electrical panels
7. Approximate location of expose plumbing on wall
8. Demo/remove existing pool filter mechanical equipment identified unless other wise noted or needed for complete system
9. Protect/remain existing 6" D.E. pit floor drain
10. Protect/remain existing 4" D.E. pit drain piping and isolation valve
11. Protect/remain existing deep pit sump pump and related valves, piping and related pipe supports
12. Demo/remove existing trash screen to include all related pulley retrieval system
13. Existing hole within wall shall remain
14. Existing 4" - Wading pool drain return abandoned ~ See Sheet D1 for further information
15. Existing 4" - Wading pool drain with isolation valve abandoned
16. Existing 4" - Wading pool end of season drain with isolation valve abandoned ~ See Sheet D1 for further information
17. Protect/remain existing 10" pool gutter return piping ~ See D1 Sheet new piping connection
18. Protect/remain existing 4" pool gutter end of season drain with isolation valve
19. Protect/remain existing 10" pool gutter return with isolation valve
20. Protect/remain existing 6" pool main drain end of season drain with isolation valve
21. Protect/remain existing 8" pool main drain return
22. Protect/remain existing 4" pump pit floor drain piping
23. Demo/remove exposed pool main drain flange connection within pit including valve and piping routed into vertical wall
24. Cap existing small PVC piping within pit wall ~ Cut and plug expose small PVC piping flush with floor
25. Protect remainder of exposed filter return piping within pump pit for reconnection
26. Below grade piping within filter space identified shall remain and be in-situ lined for reuse. See PM1 for reconnection of new piping to existing and continuation
 - a. Protect/remain existing 6" pool return piping
27. Evaluate existing pump pit floor drain condition, replace if necessary.
28. Evaluate existing floor drain piping remove any trash debris within pipe to allow proper drainage of pump pit
29. Salvage existing pump pit sump pump present to Owner for evaluation for re-use or replace
30. Protect/remain existing 3" pool fill line and related piping
31. Protect/remain existing grating over pits
32. Existing access to pump pit abandon
33. Existing pump pit manhole steps remain/abandon
34. Approximate location of existing floor drains, field verify replace if necessary
35. Existing pump pit structure
36. Existing upper wet pit structure
37. Existing shallow drain pit structure
38. Existing 6" drain pit piping
39. Existing deep wet pit structure
40. Protect/remain existing guard rails around pits
41. Existing manhole steps
42. Existing bathroom area beyond

FILTER AREA IMPROVEMENT KEY NOTES

1. 10" Pool gutter return reconnected to existing
2. Construct PVC to DIP transition connection with restrained mechanical joint. See PM1 sheet
3. Existing 10" pool gutter return ~ See D1 Sheet, PM1 sheet for pipe route and connection
4. Existing pool gutter end of season drain ~ See keynote D18-SP-F0
5. Existing pool gutter discharge into wet pit ~ See keynote D19-SP-F0
6. 10" Pool main drain piping ~ See PM1 Sheet continuation
 - a. 10" x 8" Eccentric reducer with flat side down
7. Existing 6" pool main drain end of season drain ~ See keynote (D20) SP-F1
8. 8" PVC elbow
9. Provide cored hole within existing wall
10. Provide link seal fitting around piping
11. Fill annular space around pipe with non shrink grout on wet side of pit
12. 22.5' PVC fitting
13. 8" Float valve
14. Existing opening within wall
15. Existing D.E. pit floor drain
16. Existing low water cut-off switch with baffle ~ Set float at 2'-6" above recirc pump suction
17. Existing 3" pool manual fill line
18. 1" Wet pit mechanical auto fill supply piping tapped from 3" manual fill
19. Mechanical auto fill device with float ~ Set float at 3'-0" above recirc pump suction
20. 1" Mechanical auto fill discharge piping with 6" air gap above pit wall
21. 8" Pool recirc pump suction
22. Isolation Butterfly Valve ~ Lever or handwheel operated valve equipment (pumps, float valve, end of existing pool piping). Provide S.S. operator extension stem for submerged valves
23. Throttling Butterfly Valve ~ Wheel operated valve at supply lines (water features, pool recirc, backwash)
24. Existing pump pit sump pump ~ See keynote D29
25. Inline basket strainer on concrete base ~ Provide 1/2" manual air bleed valve in lid
 - a. Reducing flexible connector- Eccentric with flat side up on pump suction (horizontal). Concentric on pump discharge (vertical). Provide spacer flanges as req'd
 - b. Pump connection ~ See Detail C-SP-F4
26. Pool recirc pump on concrete base ~ See Detail B-SP-F4
27. 6" Pool recirc pump discharge/filter influent piping
28. Pipe saddle
29. Pipe supports - See Details D,E,H-SP-F4
30. Magmeter flowmeter - without remote read-out
31. 6" Filter face piping
32. Filter pressure gauges mounted to filter face piping with S.S. hardware
33. Floor mount pipe support, saddle type
34. 6" Filter backwash piping. Set discharge of piping 3" above drain pit
35. (3) 4'-6" Ø Steel vertical sand filters
36. Air release valve at top of filters with bypass drain line - See Detail G-SP-F5
37. Connection TO Pool Chemical Controller - See Detail C,D-SP-F4
38. Connection TO Pool Calcium Hypochlorite feed system - See Detail B,D-SP-F5
39. Connection FROM Calcium Hypochlorite feed system - See Detail B,D-SP-F5
40. Connection FROM Muriatic feed system - See Detail A,D-SP-F5
41. 6" Filter effluent piping
42. Concrete pipe support - See Detail A-SP-F4
43. PVC to DIP flange connection to 6" existing pool return piping - See PM1 sheet for pipe route and continuation
44. 6" Pool return piping with DIP to PVC connection - See PM1 sheet for pipe route and continuation
45. 6" Water features pump suction
46. Water features pump with integrated basket strainer on concrete base ~ See Detail B-SP-F4
47. 4" Water features pump discharge/return piping ~ See PM1 sheet for continuation
 - a. Filled annular space around return piping at foundation wall penetration
48. PVC ball valve
49. Pool chemical controller and sensor box stacked on wall - See Detail C-SP-F5
 - ~ Provided by Owner (N.I.C)
 - ~ Installed by Contractor
50. Emergency eyewash station
51. Provide 1/4" tempered water supply connection with mixing valve from existing building tempered water supply

52. Calcium Hypochlorite chemical feed system - See Detail B-SP-F5
53. Muriatic Acid chemical storage drums and feeder system - See Detail A-SP-F5
54. Cut-out removable panel access within existing grating to allow access to pump pit below. Provide proper alignment of removable panel with existing grating supports ~ Field verify and evaluate before creating new panel access to pit below
55. Existing pit handrails
56. Provide drain valve at bottom of pipes at low points. Provide tapped of appropriate fittings to allow release of all water at low points
57. 12" x 4" Thick concrete pad below each filter foot support
58. Drain pit high water float switch with baffle ~ Set float to cut-off 12" below top of pit wall
59. Fill old pipe penetration with non shrink grout after pipe removal
60. 6'-0' Double doors

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 15gpm/s.f. (gpm)	Backwash Time (minutes)	Backwash Volume Each (gal.)	Backwash Volume Total (gal.)
Main	198,390	600	4.50	3	15.90	47.69	12.58	5.51	238	5	1,192	3,577

PUMP DATA									
Location	Pump Description	Flow (gpm)	TDH (ft.)	Shut-off Head (max.) (ft.)	Efficiency +/- 5%	HP	RPM	VFD	
Pool	Recirc	600	65	28	79	82	15	1,800	No
Pool	Water Features	262	35	15	94	n/a	5	3,600	Yes

MAXIMUM PIPE SUPPORT SPACING (feet) **			
Pipe Size	Sch 80 PVC	Ductile Iron	Copper (L&K)
1/2"	4.5	-	5.0
3/4"	4.5	-	5.0
1"	5.0	-	6.0
1 1/4"	5.0	-	7.0
1 1/2"	5.5	-	8.0
2"	6.0	-	8.0
2 1/2"	6.0	-	9.0
3"	7.0	-	10.0
4"	7.5	*	12.0
5"	-	*	13.0
6"	9.0	*	14.0
8"	9.5	*	16.0
10"	10.0	*	18.0
12"	11.5	*	19.0
14"	-	*	-
16"	-	*	-

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

** Unless shown or noted otherwise

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

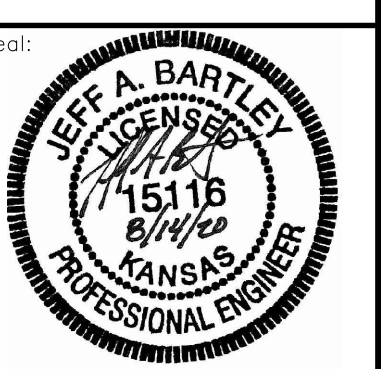


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Kansas STATE CERTIFICATE OF AUTHORITY #E-990



WICHITA, KANSAS
Pool Improvements
MINISA PARK



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LICENSE #15116

Date: 08-14-20 Job #: 18-512

Drawn: CJB Checked: JAB

Issue: CONSTRUCTION DOCUMENTS

FILTR AREA IMPROVEMENT DATA AND KEY NOTES

SP-F0