SECTION 13 11 24 - POOL VALVES

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Butterfly Valves

B. Ball Valves

C. Check Valves

D. Expansion Joint/Flexible Connector

E. Submerged Service Operators

F. Valve Operator Extension

G. Drainage Valves

H. Reducers

1.2 RELATED DOCUMENTS

A. Drawings and Contracting Requirements, including General and Supplementary Conditions and Division 01 - General Requirements, apply to this Section.

1.3 REFERENCES

A. The following latest edition reference specifications, guides and standards shall become part of this Specification as if herein written. If provisions conflict, the more stringent provisions shall apply.
   1. ANSI – American National Standards Institute
   2. ASTM – American Society of Testing Materials

1.4 SUBMITTALS

A. Refer to General Requirements and Division 01.

B. Submit Shop Drawings, clearly indicating make, model, location, type, size, pressure rating, and type of service.

C. Valve charts
   1. Submit two copies of valve charts for each piping system, consisting of isometric Drawings, or piping layouts showing and identifying each valve and describing its function to the Architect/Engineer for approval.
   2. Upon completion of the Work, one copy of each valve chart sealed to rigid backboard with clear lacquer, placed under glass and framed, shall be hung in a conspicuous location in the equipment room.

1.5 SUBSTITUTIONS

A. Refer to General Requirements and Division 01.

1.6 DELIVERY, STORAGE AND HANDLING

A. Refer to General Requirements and Division 01.

1.7 WARRANTIES

A. Standard Manufacturer's Warranty

PART 2 PRODUCTS

2.1 GENERAL

A. All valves 3" and larger shall have epoxy coated body, ductile iron-nylon II coated disc, one piece 416 stainless steel shaft with Buna-N or EPDM seat minimum, 150 PSI rating, or cast aluminum ASTM S12A housing and fully coated with Rilsan on all interior and exterior surfaces. Internal components include EPDM resilient lining, Rilsan coated ductile iron disc and T304 stainless steel shaft. 150 psi rating.

2.2 BUTTERFLY VALVES

A. Butterfly valves 3" - 12" shall be wafer or lug bodies and shall be suitable for use between ANSI 125 and 150 lb. Flanges.

B. Bodies of the flangeless design shall be provided with at least two bolt guides to center the valve in the pipeline.

C. All valves shall be as manufactured by Bray Valve (713) 894-5454, Dominion or equal.

D. All bolts and nuts shall be corrosion resistant zinc plated steel with plated washers to be used when secured to PVC flanges.

2.3 BALL VALVES

A. PVC True Union Ball Valves, Ipex, Asahi, Spears or equal.

2.4 CHECK VALVES

A. ½" thru 2 ½" shall be PVC body, true union, ball type, seal material EPDM as manufactured by Ipex, Asahi Spears or equal as indicated on Contract Drawings.

B. 3" thru 12" shall be cast iron epoxy coated body, bronze split disc, stainless steel fitted and Buna N seal material. Check valve shall be the CVXX style as manufactured by the Metraflex Company, model 5050 manufactured by Cameron Valves & Measurement, Series 8800 by Val-Matic or approved equal.

2.5 SUBMERGED SERVICE OPERATORS

A. Use only approved service operators for the valve requiring underwater operation in the surge tank or in manhole used for pool draining.

2.6 VALVE OPERATOR EXTENSION

A. Extensions shall be stainless steel and by same manufacturer as the valve manufacturer.

2.7 DRAINAGE VALVES

A. Provide min. 3/4" True Union Ball valve on all piping at such a location to allow complete drainage of system.

2.8 REDUCERS

A. Use Eccentric reducers on pump suction lines only, and concentric reducers on pump discharge lines only.

B. Stainless steel body and flanges, T304 materials, ANSI 125# rated flanges.

C. Use Neptune Benson, 15-CNS/15ECS series “or equal”.

D. Provide valves of same manufacturer throughout where possible and practical.

E. Provide valves with manufacturer's name and pressure rating clearly marked on outside of body.

2.9 VALVE LABELS

A. Provide and install 2” round, 1/16” thick, multi-layered valve tags with contrasting lettering with non-corrosive beaded tie on all valves. All labels shall be me labeled in accordance with the valve chart per Section 13 11 14.

PART 3 EXECUTION

3.1 VALVE CONNECTIONS

A. Provide valves suitable for connection to adjoining piping.

B. Valve size shall be the same as the pipe size.

3.2 VALVE USE

A. Pipe sizes 3" - 12" – Butterfly

B. Miscellaneous valves 1/2" – 2-1/2" - PVC True Union Ball Valves

C. All chemical lines and equipment - PVC True Union Ball Valves

3.3 VALVE OPERATORS

A. All butterfly valves shall have gear operators and chain operators as required unless drawings indicate otherwise. Chain operators shall be required on all gear operators located 7’-0” or higher above finished floor

B. Provide extension lengths as necessary to operate submerged or below surface valves and the appropriate valve box access cover.

END OF SECTION