

SECTION XXXX

INTAKE SCREENS

PART 1. GENERAL

1.1 SUMMARY

- A. Provide intake screen(s) as specified herein and as shown on the drawings.

1.2 RELATED SECTIONS

- A. Section XXXX – Submittals

1.3 SUBMITTALS

- A. Submit in accordance per Section XXXX.
- B. Submit shop drawings, manufactures data and literature in accordance with Section XXXX prior to manufacturing screens.
- C. Intake Screens: Submit drawings showing screen diameter length, outlet size and slot opening, materials of construction and assembly weight.

1.3 WARRANTY

- A. Manufacturing Warranty Period: One year from acceptance and furnish owner items found to be defective within the one year period.

1.4 QUALITY ASSURANCE

- A. Intake Screen: Screens shall be manufactured by an ISO 9000 Certified company, fabricated by ASME Section IX Certified welders and the manufacture shall provide evidence of experience in having supplied at least five assemblies of similar designs which have been in successful service for at least three years.

PART 2. PRODUCTS

2.1 INTAKE SCREENS

- A. Manufacture: Hendrick Screen Company, P.O. Box 22075, Owensboro, Kentucky 42304-2075, (270) 685-5138, fax (270) 685-1729.
- B. Construction: Intake Screen shall be cylindrical with circumferential slots that widen toward the inside of the cylinder. The screen surface wire shall be Hendrick Wedge Wire cross-wire welded to an appropriate support member so as to provide necessary strength with minimal hydraulic resistance. The screen shall include an internal Flow Collector pipe designed to ensure a uniform flow distribution through the screen slots during water intake. Screen shall be equipped with **X inch** pipe size internal air burst manifold assembly. Screen shall be equipped with a truncated cone debris deflector on one end.
- C. Wire and Slot: The surface wire shall be Hendrick Screen Co. No. **XXX** Wedge wire. The screen slot opening shall be **XXX** inches. The open area for this slot opening shall be **XX%**. Slot size shall be controlled and continuously monitored during manufacture.
- D. Capacity: The intake screen capacity shall be **XXXXXX** GPM at a **maximum** local through slot velocity, due to water removal not to exceed **0.5 feet per second** and the screen manufacturer must provide actual test data. At the design flow rate, the pressure drop through the surface of the clean screen shall not exceed 0.1 psi. The total pressure drop through the Tee assembly shall not exceed 1.0 foot of water. Hydraulic calculation verifying compliance to these criteria shall be provided upon request.
- E. Strength: Screen shall be capable of withstanding a differential hydrostatic pressure in excess of **XX** pounds per square inch or a working depth of **XX** feet of water. The design stress when determining strength shall be two thirds of the yield stress. Strength calculation verifying compliance to these criteria shall be provided upon request.
- F. Materials and Fittings: The wire and supports shall be **XXX** stainless steel or copper nickel alloy. The remainder of the assembly shall be manufactured of corrosion resistant metal, AISI type **304** or **316** stainless steel. The main outlet shall be a **XX**-inch plate flange with a bolt pattern equal to AWWA C-207, Table 1, Class B. The airburst cleaning connection shall be through a **X** inch ANSI Class 150 raised face slip on flange.

END OF SECTION