

SECTION XXXX

PANEL FISH SCREENS (Sample Specification)

PART 1. GENERAL

1.1 SUMMARY

- A. Provide banded stainless steel fish screen panels as shown and specified, in accordance with the requirements of the Contract Documents and Drawings.

1.2 RELATED SECTIONS

- A. Section XXXX – Submittals

1.3 SUBMITTALS

- A. Submit a Quality Manual showing evidence of being an ISO 9000 certified company.
- B. Submit shop drawings showing compliance with the specifications including tolerances, prior to manufacturing screens.
- C. Submit design calculations, by a registered ENGINEER, including loading conditions, support design, and deflection calculations of the stainless steel screen panels.

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. Fish 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 five similar designs which have been in successful service for at least five years.

PART 2. PRODUCTS

2.1 FISH SCREENS

- A. Manufacture: **Hendrick Screen Company**, P.O. Box 22075, Owensboro, Kentucky 42304-2075, (270) 685-5138, fax (270) 685-1729.
- B. Construction: Fish Screens shall be all welded construction fabricated from Type 304 or 316 stainless steel. The screen surface shall be of smooth wire or bar of a wedge wire shape with inwardly enlarging openings to minimize the likelihood of debris entrapment. Screen wedge wires shall be continuous over the length or width of each panel as specified herein. Splices are not allowed unless specifically approved by the Engineer. Wires shall be welded to the stainless steel support bars sufficient to withstand the specified loading conditions, tolerances and deflection. The wires, supports, backing bars, and banding shall be welded to form a single unit as shown on the drawings. Welds shall be smooth, without burrs or irregularities.
- C. Wire and Slot: The surface wire shall be Hendrick Screen Co. No. **69** Wedge wire. The screen slot opening shall be **.069** inches. The open area for this slot opening shall be **50** %. Slot size shall be controlled and continuously monitored during manufacture. The wire orientation shall be **vertical or horizontal.**
- D. Loading: The screen panels shall be designed for Ultimate Load of **XXX** psf (**XX** ft. hydraulic differential) and a Working Load of **62** psf (**1.0** ft. hydraulic differential). The maximum deflection from under uniform Working Load shall not exceed **1/4-inch**. The maximum allowable stress shall not exceed **80% of Yield** in any member under Ultimate Loads.
- E. Tolerances: Screen shall be designed and fabricated so as to ensure that the completed fish panels are within the tolerances specified herein while under a no load condition: The screen panel shall be flat with horizontal to within 1/8 inch plus or minus. The diagonal dimensions of the screen panels shall be within 1/4 inch plus or minus. Panel length and width shall be within 1/8 inch plus or minus.

END OF SECTION