ID 1 784 5293

POGGEMEYER DESIGN GROUP, INC. 201 E. Second Street P.O. Box 7040 Defiance, OH 43512 PH. (419) 782-3067 FAX (419) 784-5293

TO: MARC Gerkin	FAX NO.: 599 - 8393
FROM: Pick Weaver	1;
DATE: 10 - 1 - 90	e e
PROJECT NO .: P.S. @ H.C. Hospital	
NO. OF SHEETS INCLUDING COVER SHEET	6
PLEASE CALL JUDI IF ALL PAGES ARE NOT TRANSMIT	TTED OR LEGIBLE. THANK YOU!!
ANY QUESTIONS PLEASE	E CALL
	KICK

E. Riversen E. Riversen

PUMP STATION ON 224 @ H.C. HOSPITAL

ITEM 4 - PUMP STATION (ALTERNATE BIDS FOR PROPOSAL "A" & "B")

4.1. GENERAL - The contractor shall furnish and install one factory-built, automatic pumping station as manufactured by Smith & Loveless, USEMCO, Davco-Defiance, or approved equal. The station shall be complete with all needed equipment factory-installed in a welded steel chamber with welded steel entrance tube and with ladder to provide access, all as shown on the plans and/or described in the specifications.

The principal items of equipment shall include two vertical, close-coupled, motor driven, non-clog sewage pumps; valves; internal piping; central control panel with circuit breakers; motor starters and automatic pumping level controls; lighting; sump pump; ventilator; dehumidifier and all internal wiring.

4.2. OPERATING CONDITIONS

Proposal "A" - Each pump shall be capable of delivering 125 g.p.m. at 30.0 ft. T.D.H. with a speed of 870 R.P.M. and shall have a minimum T.D.H. of 24.3 ft. T.H.D. Each pump shall be driven by a minimum 3.0 H.P. pump and shall be non-overloading within the above range. Additional wiring and/or electrical equipment caused by larger motor requirements shall be included in Contractor's bid.

All openings and passages shall be large enough to permit the passage of a sphere 3" in diameter.

Proposal "B" - All of the specifications for Proposal "A" shall apply to Proposal "B" except that the pumps shall be rated at 22.8 ft. T.D.H. maximum and 16.5 ft. T.D.H. minimum.

4.3. <u>PUMP CHAMBER</u> - The station shall be built by the Manufacturer in two major sections, consisting of the pump chamber and the required section(s) of entrance tube, for ease in shipment and handling. These sections shall be joined at the job site by welding.

The field weld joints shall then be cleaned and heavily costed with epoxy resin, provided by the Manufacturer. The pump chamber shall contain all pumps and other equipment and shall be a vertical cylinder of circular cross-section with shell of ASTM A-36 steel plate. The top and bottom of the station shall be 3/8" thick ASTM A-36 steel plate.

The exterior of the station shall be designed so all welds exposed to ground water after installation are continuous or sealed throughout their length so that water cannot seep between uncoated steel surfaces. In addition, the structure shall be designed so that sharp conners and similar difficult-to-coat conditions are held to an absolute minimum. The thickness of the steel cylinder shall be determined by the structural requirements for the depth of bury involved and shall be a minimum of 1/4". It shall be the responsibility of the Manufacturer to determine the structural requirements of the shell based on the external loads specified on the plans.

Lifting eyes adequate to support the entire weight of the completed chamber shall be provided and welded to the station head. Tie-down holes for anchoring the station to the slab shall be provided in the bottom beams of the station. Tie-down holes shall be provided for anchoring the discharge line at the point it leaves the station. Lifting loops shall be located on the ceiling of the pump station over each pump at an adequate height to permit a hoist to be used for pump disassembly.

A sump with walls of 1/4" structural-grade steel plate shall be provided in the center of the station. Where the steel suction and discharge lines pass through the station walls, they shall be welded to the station shall with a continuous weld.