## IX.3 MANUFACTURERS DATA AND SPECIFICATIONS

Design information and criteria for the major components of the sludge handling process are listed in tabular form in this Section.

FLOTATION THICKENERS

| | |
|---|---|
| Number of Units | 2 |
| Manufacturer | Envirex, Inc.<br>1901 South Prarie Avenue<br>P.O. Box 1067<br>Waukesha, Wisconsin 53186 |

Steel Flotation Tank Dimensions

| | |
|---|---|
| Length | 45'-2" |
| Width | 9'-6" |
| Height | 8'-6 1/8" |
| Water Depth | 7'-5" |
| Water Surface Area | 350 sq. ft. |
| Solids Loading Rate | 700 lbs./hr. |
| Pressurized Flow Rate | 350 gpm |
| Thickened Sludge Concentration | 5% |
| Solids Capture Rate (w/polymer aid) | 95% |
| Air Supply Rate | 6.25 SCFM |
| Air Supply Pressure | 70-125 psig |
| Polymer Supply Rate | Maximum of 20 gallons/hour of 1/4% polymer solution, against minimum 100 psi |
| Polymer Pump Motor | 115 volts, 60 Hertz, single phase, variable speed adjustment over 0-100% range within $\pm$ 1% while running |
| Polymer Pump Relief | Hydraulic relief valve, minimum set point 150 psig |

## Recycle Pumps

| | |
|---|---|
| Number of Units | 2 |
| Manufacturer | Crane-Deming Co.<br>884 South Broadway<br>Salem, Ohio 44460 |
| Pumping Rate | 350 gpm at 140' TDH |
| Motor Size | 20 HP |
| Motor Speed | 3,500 RPM |
| Motor Power | 3 phase, 60 hertz, 460 volts |

## Recycle Pump Flow Meter

| | |
|---|---|
| Number of Units | 2 |
| Manufacturer | Dieterich Standard Corporation<br>Boulder, Colorado |
| Model Number | Eagle Eye 77B |
| Scale Range | 0 to 5 x 100 gpm |
| Designed to Meter At: | |
| Flow Rate | Maximum 350 gpm |
| Temperature | 55 degrees F. |
| Pressure | 60 psi |

## Recycle Pressure Tank

| | |
|---|---|
| Number of Units | 2 |
| Manufacturer | Rex Chainbelt, Inc.<br>Milwaukee, Wisconsin |
| Dimensions | |
| Diameter | 36" |
| Height | 10'-5 5/8" |
| Connection Piping | 6" diameter |
| Working Pressure | 60 psig |
| Pressure Tank Components Manufactured By: | Magnetrol International, Inc.<br>5300 Belmont Road<br>Downers Grove, Illinois 60515 |

## Recycle Air Control Panel

| | |
|---|---|
| Number of Units | 2 |
| Manufacturer | AMETEK Controls Division<br>Feasterville, Pennsylvania |
| Model Number | PICO7N-21 |

## Recycle Pressure Reduction Valve

| | |
|---|---|
| Number of Units | 2 |
| Manufacturer | ITT Grinell<br>Wrightsville, Pennsylvania |
| Function | Diaphragm Pressure Reducing Valve |
| Size | 3" Diameter |
| Operation | Spring Loaded to Open<br>Air Pressure to Close |
| Control Air Signal | 3-15 psi |

## Surface Skimmer Drive

| | |
|---|---|
| Number of Units | 2 |
| Manufacturer | Winsmith Division of UMC Industries, Inc.<br>Springville, Erie County, New York |
| Model Number | 6 MCTDW |
| Reducer Ratio | 270:1 |
| Speed | 6.39 RPM |
| Motor Manufacturer | Sterling Power Systems, Inc.<br>16752 Armstrong Avenue<br>Irvine, California 92714 |
| Motor Model Number | C-300 |
| Motor Type | Vari-Drive |
| Motor Speed | 460 to 1,840 RPM |
| Motor Size | 1/2 HP |
| Motor Power | 3 phase, 60 hertz, 460 volts |

## Bottom Collector Drive

| | |
|---|---|
| Number of Units | 2 |
| Manufacturer | Winsmith Division of UMC Industries, Inc.<br>Springville, Erie County, New York |
| Model Number | 4 CTDM |
| Reducer Ratio | 1200:1 |
| Speed | 1.44 RPM |
| Motor Manufacturer | Sterling Power Systems, Inc.<br>16752 Armstrong Avenue<br>Irvine, California 92714 |
| Motor Size | 1/4 HP |
| Motor Speed | 1,800 RPM |
| Motor Power | 1 phase, 60 hertz, 120 volts |

## Bottom Screw Conveyor Drive

| | |
|---|---|
| Number of Units | 2 |
| Manufacturer | Winsmith Division of UMC Industries, Inc.<br>Springville, Erie County, New York |
| Model Number | 4 CTDM |
| Reducer Ratio | 37.5:1 |
| Speed | 46 RPM |
| Motor Manufacturer | Sterling Power Systems, Inc.<br>16752 Armstrong Avenue<br>Irvine, California 92714 |
| Motor Size | 1/2 HP |
| Motor Speed | 1,800 RPM |
| Motor Power | 3 phase, 60 hertz, 460 volts |

## Sludge Draw-Off Pumps

| | |
|---|---|
| Number of Units | 2 |
| Manufacturer | Robbins & Myers, Inc.<br>Springfield, Ohio 45501<br>(513) 327-3553 |
| Model | Moyno IEOESI |

| | |
|---|---|
| Flow Rate | 15 gpm @ 25 psi |
| Motor Size | 1 HP |
| Motor Speed | 190 RPM |
| Motor Power | 3 phase, 60 cycle, 460 volts |

SLUDGE HOLDING AND BLENDING TANKS

| | |
|---|---|
| Number of Units | 2 |
| Concrete Tank Dimensions | |
| Length | 32'-0" |
| Width | 32'-0" |
| Depth (Side) | 14'-6" |
| Depth (Center) | 22'-6" |
| Sludge Depth (Side) | Maximum 11'-6" |
| Sludge Storage Volume | 111,200 gals. |

Supernatant Decant (Decant Pipe with Swivel Joint)

| | |
|---|---|
| Number of Units | 2 |
| Manufacturer Swivel Joint | GPE Controls Division of Vapor Corporation<br>6511 Oakton Street<br>Morton Grove, Illinois 60053 |
| Model Number | 95661 |
| Type | 8" diameter Sand and Jurs Swing Joint |
| Winch Manufacturer | Thern, Inc.<br>P.O. Box 347<br>5712 Industrial Park Road<br>Winona, Minnesota 55987 |
| Winch Model Number | 265 |
| Winch Gear Ratio | 20:1 |
| Winch Rope | 40 feet of 3/16" diameter plastic impregnated wire |
| Rope Breaking Strength | 3,500 lbs. |