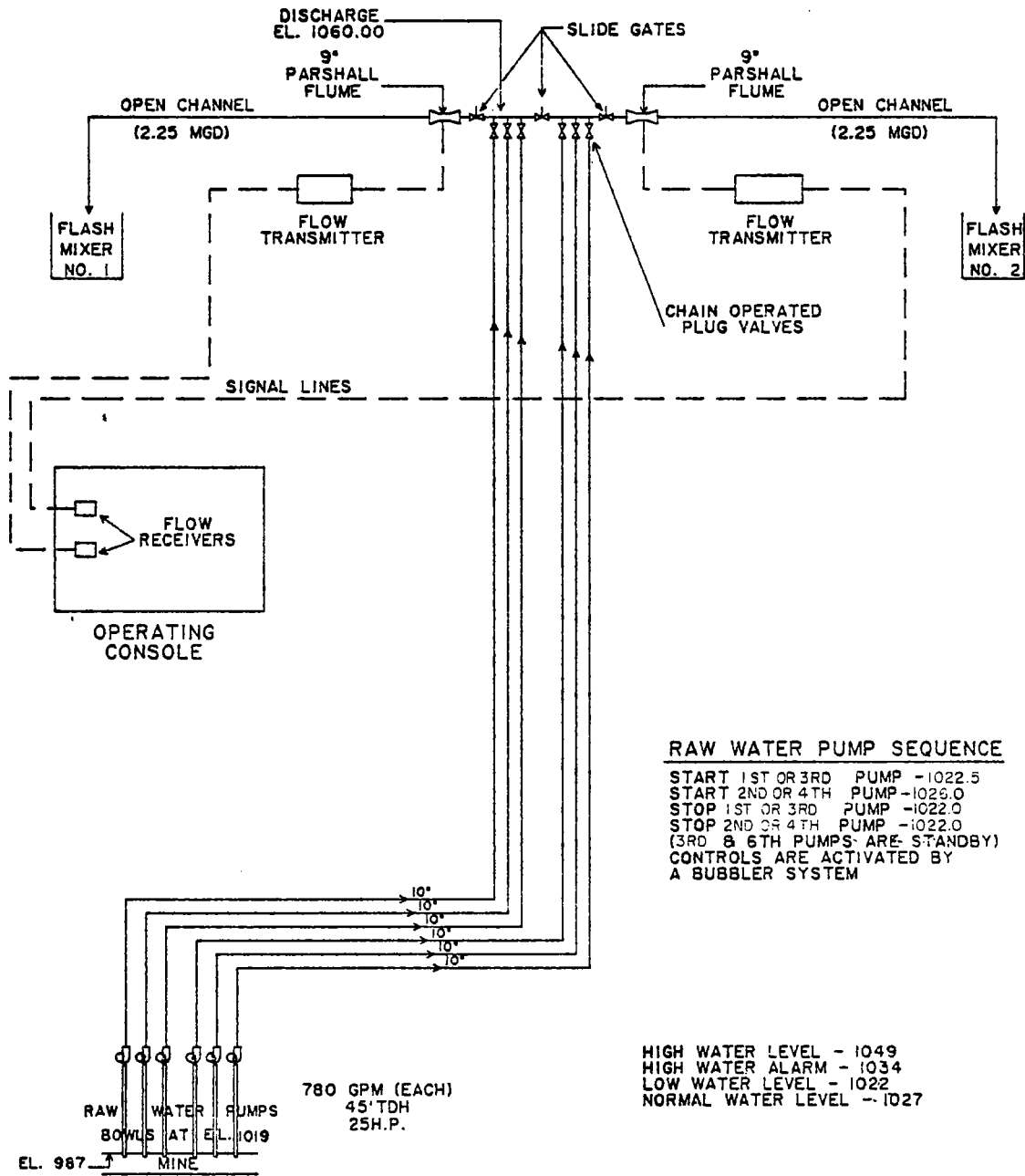


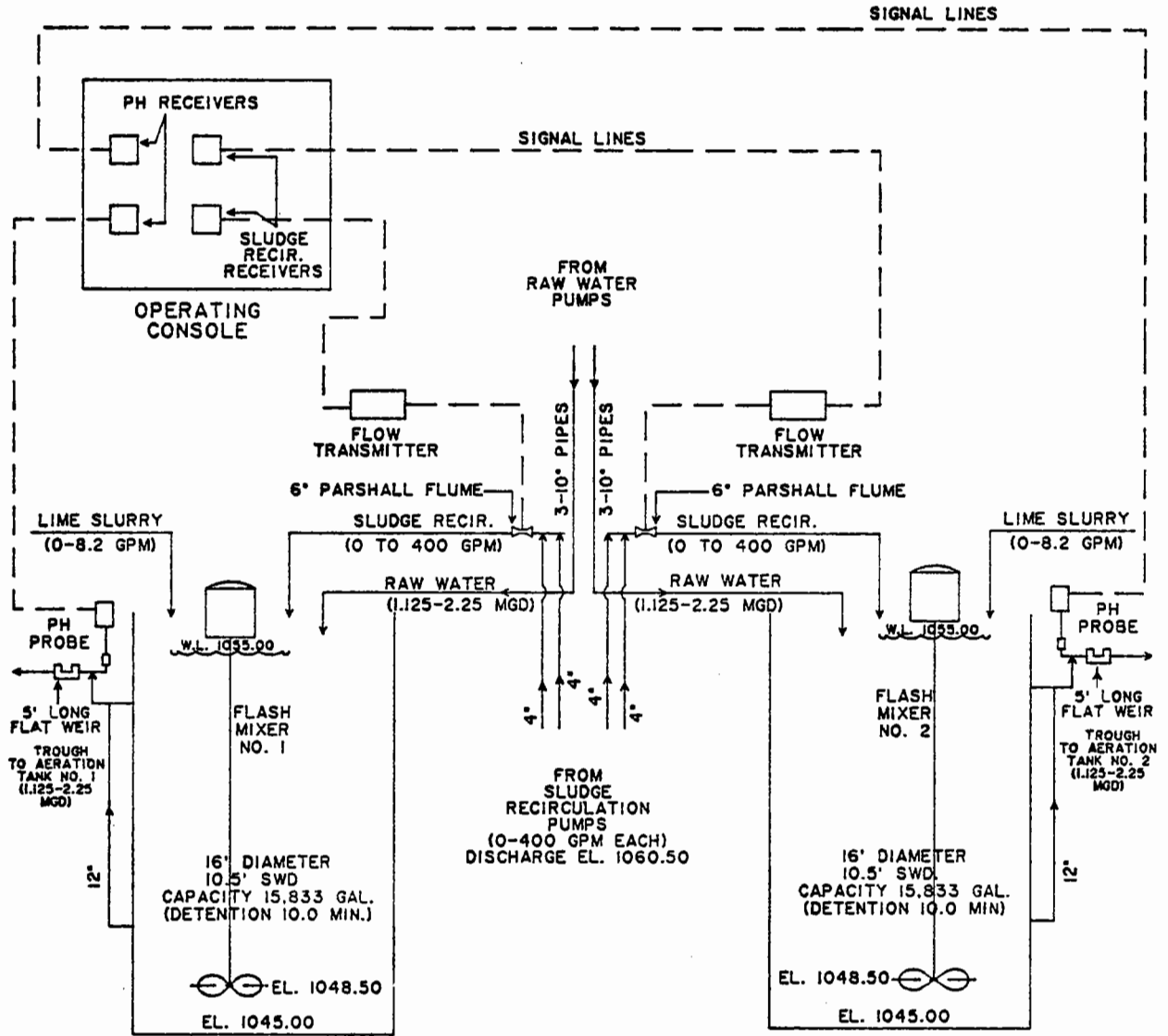
APPENDIX A

SCHEMATICS

## RAW WATER-FLASH MIXER SCHEMATIC

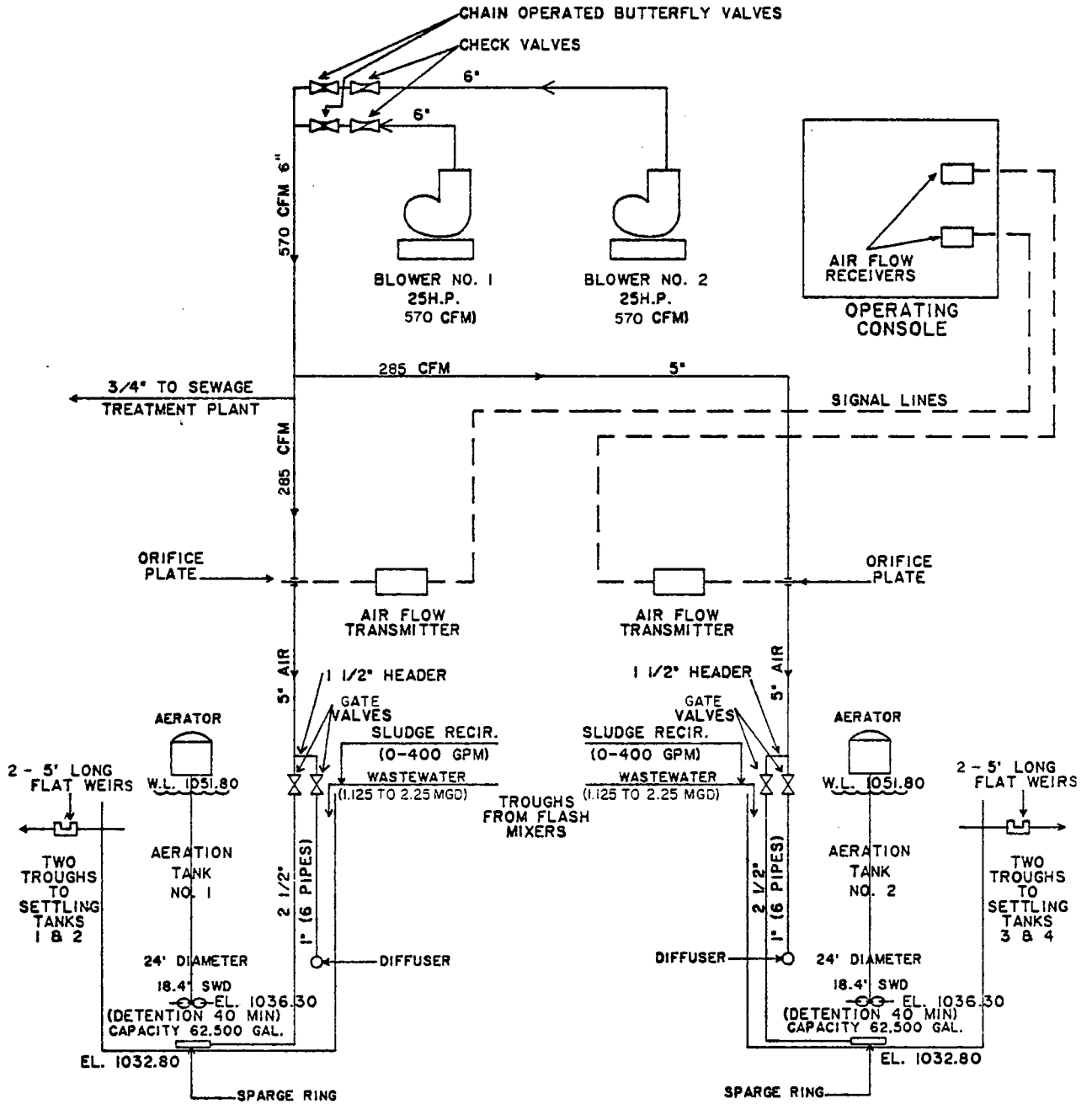


# FLASH MIXING SCHEMATIC

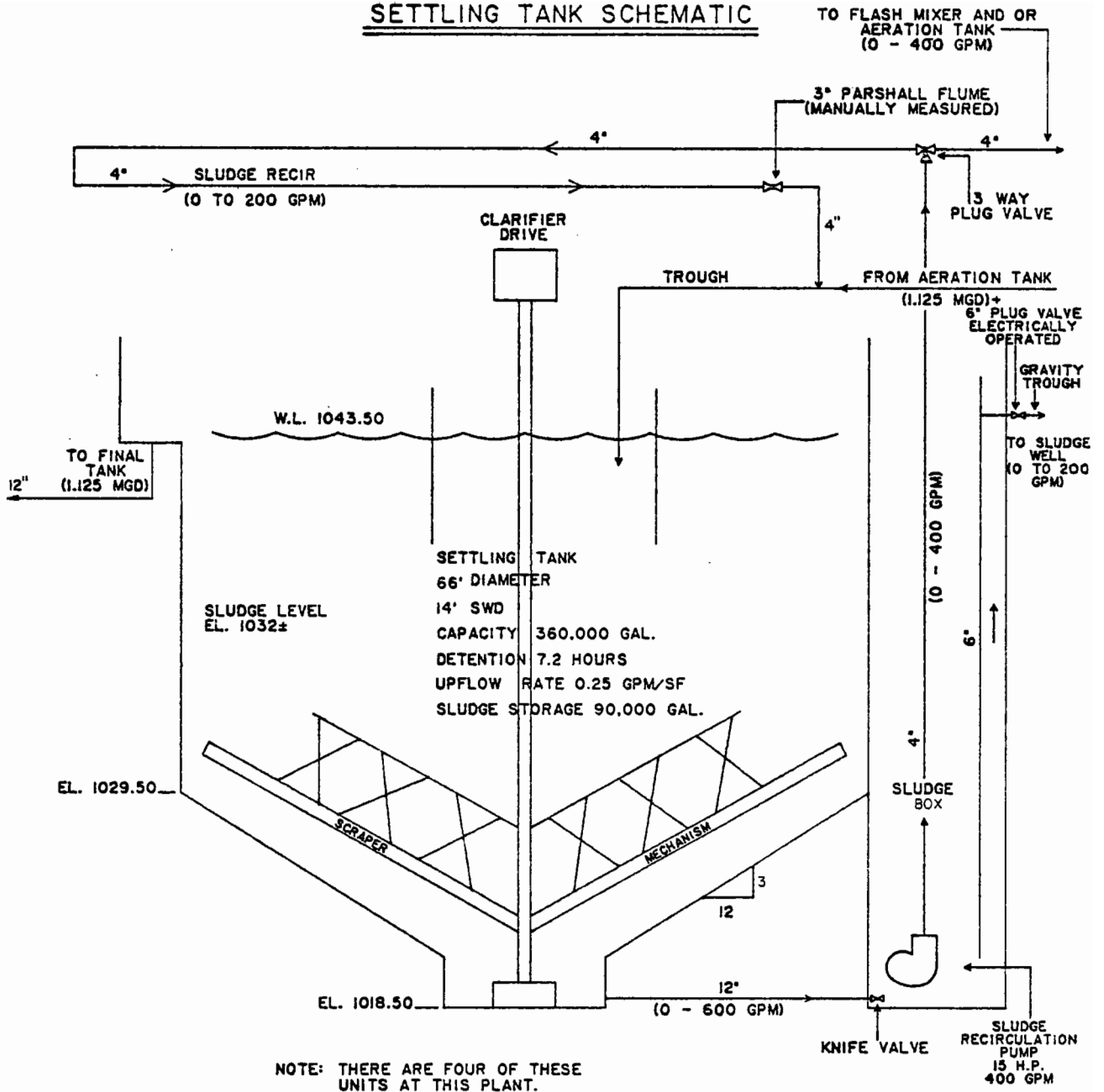


NOTE: FLOW CHANNELS ARE EQUIPPED WITH SLIDE GATES TO ALLOW SLUDGE RECIRCULATION AND RAW WATER FLOWS TO BOTH SIDES OF PLANT AND/OR TO BYPASS FLASH MIXERS

# AERATION AND AERATION TANK SCHEMATIC

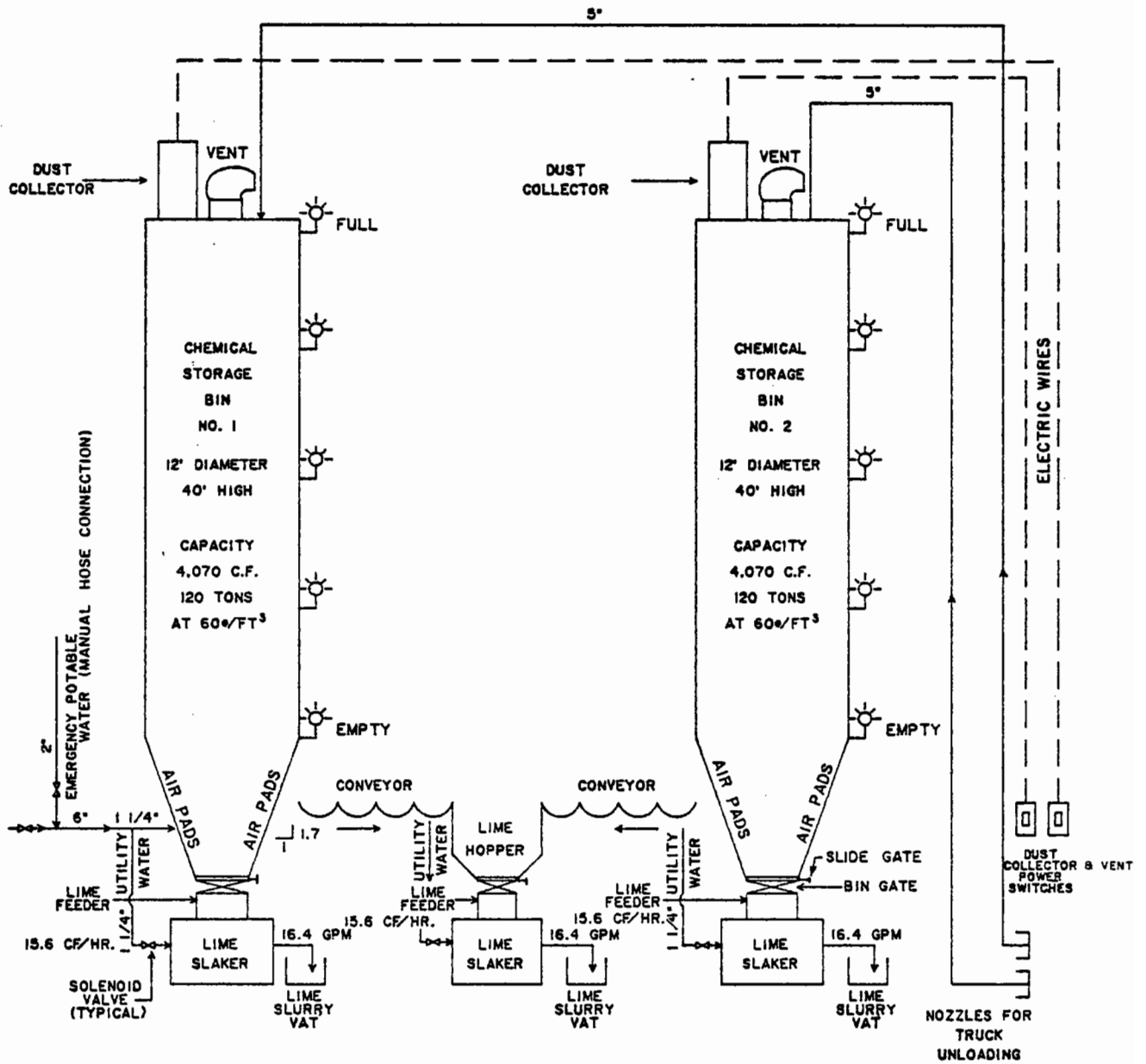


# SETTLING TANK SCHEMATIC

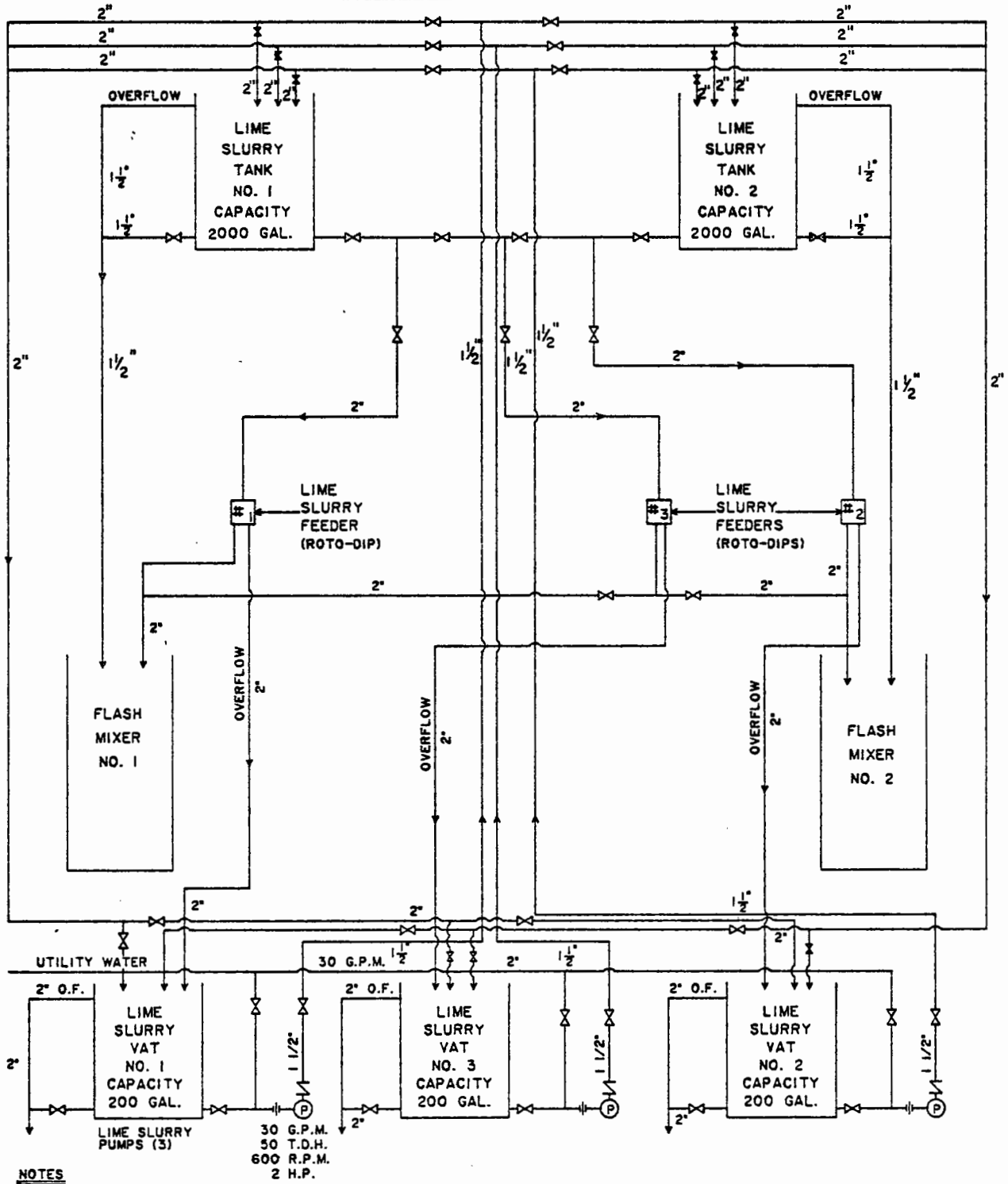


# LIME HANDLING SCHEMATIC

NOTE: DUST COLLECTOR TO BE TURNED ON DURING CHEMICAL STORAGE BIN FILLING AND OFF AT COMPLETION OF FILLING.



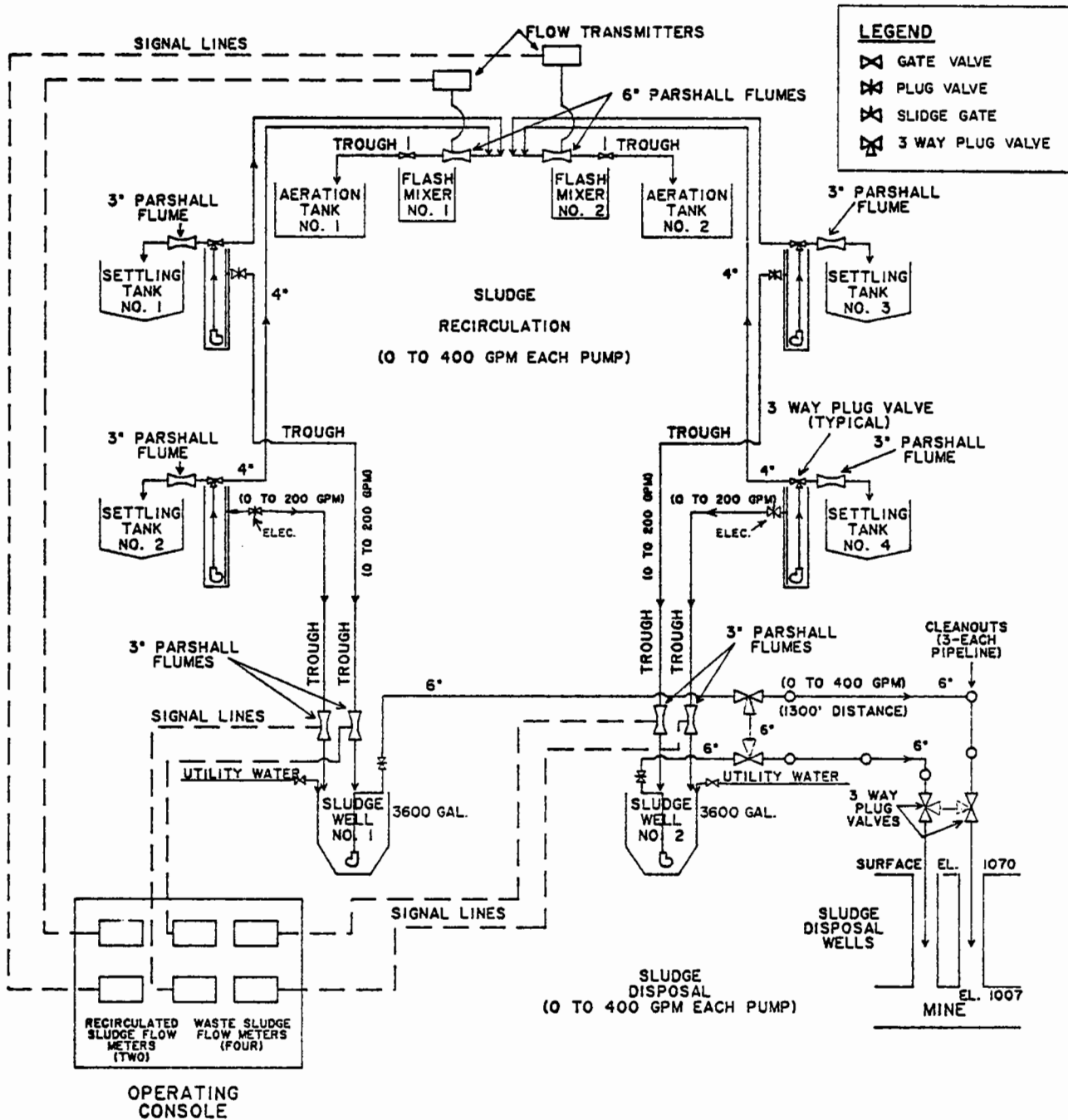
## LIME SLURRY HANDLING SCHEMATIC



**NOTES**

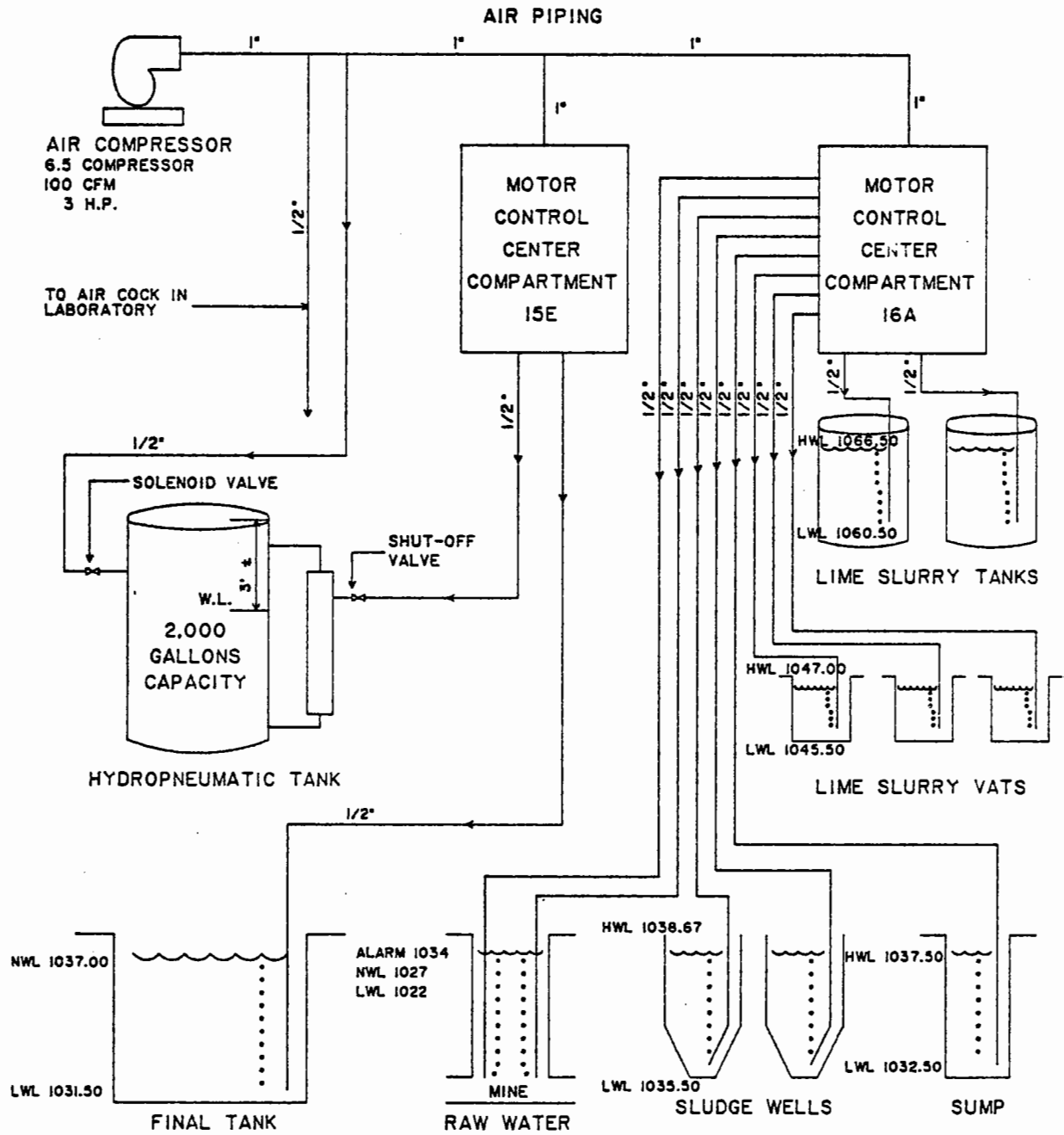
ALL PIPE IS P.V.C. SCHEDULE 40.  
 ALL VALVES ARE P.V.C. PLUG VALVES ABOVE VATS, ALL OTHERS ARE S.S. PLUG VALVES.

# SLUDGE HANDLING SCHEMATIC

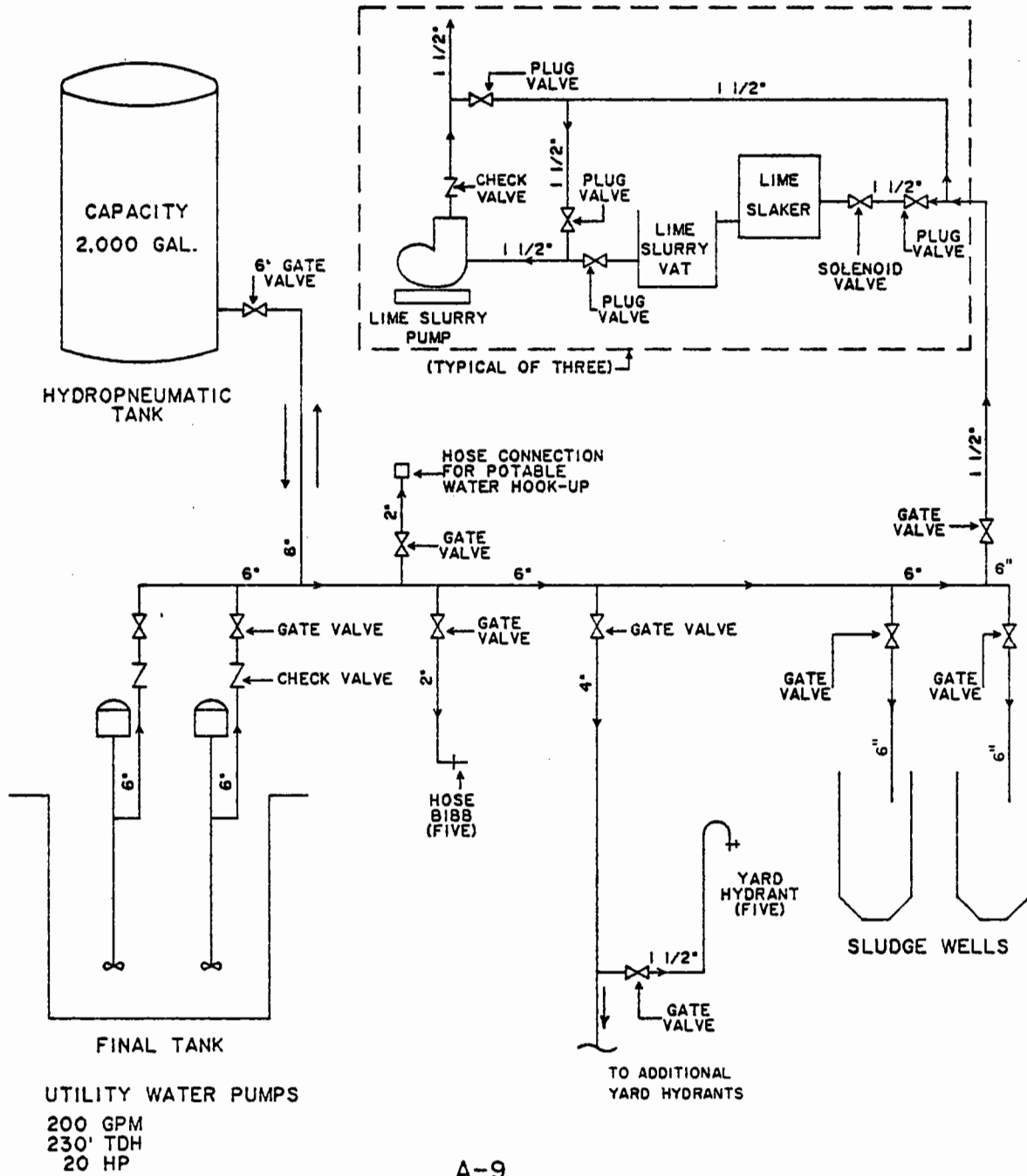




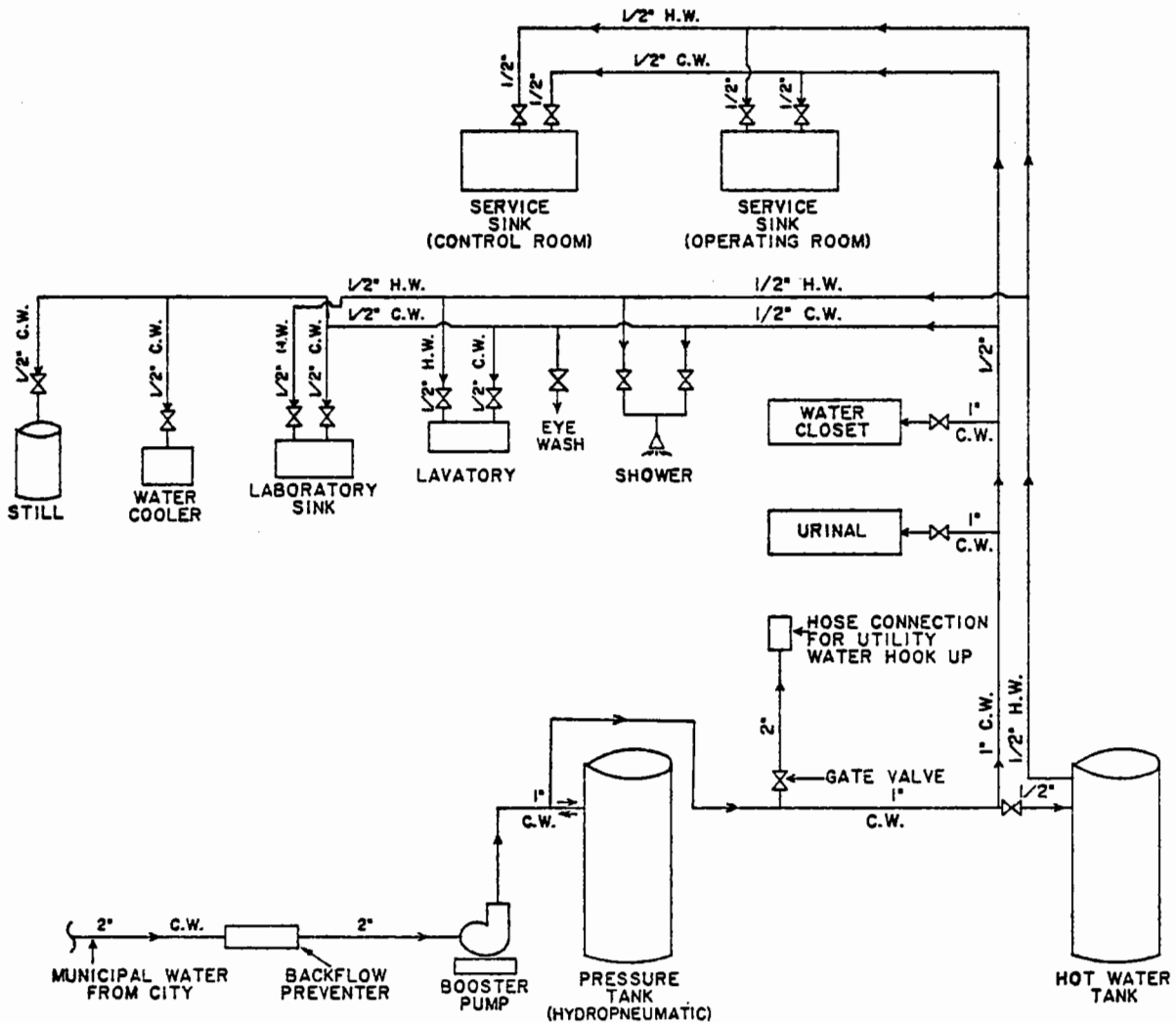
## BUBBLER SCHEMATIC



UTILITY WATER SCHEMATIC



# POTABLE WATER SCHEMATIC

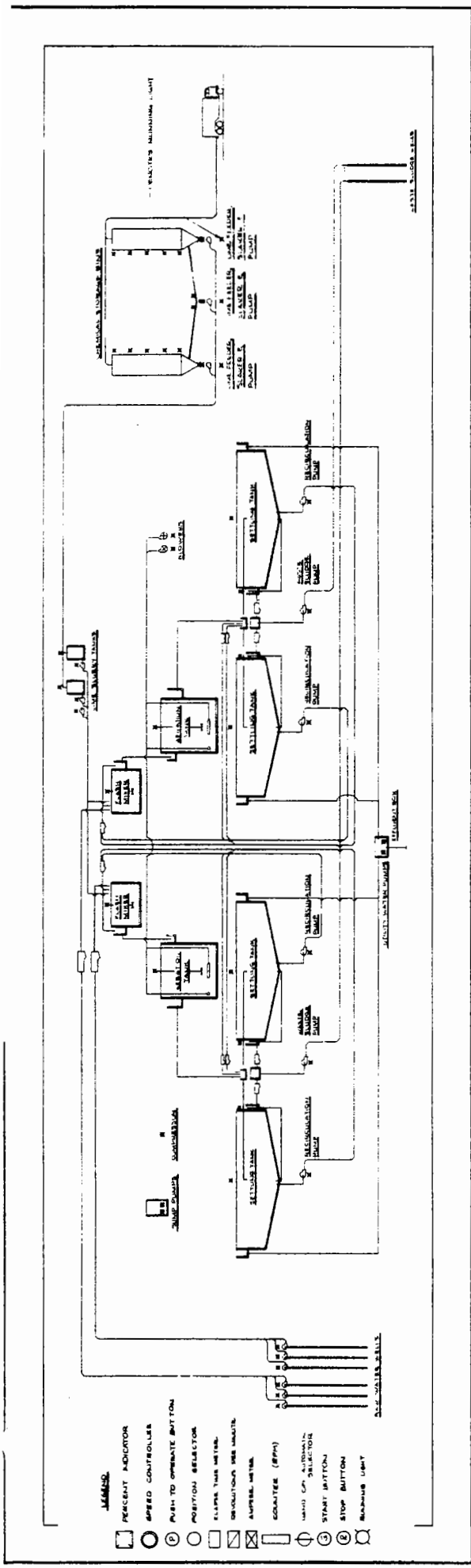


**LEGEND**  
 X - GATE OR GLOBE VALVE  
 H.W. - HOT WATER  
 C.W. - COLD WATER

## TELEPHONE DIALING SCHEMATIC



- MINE HIGH WATER LEVEL AT 1034.00
- SLUDGE WELL NO. 1 HIGH WATER LEVEL AT 1038.67
- SLUDGE WELL NO. 2 HIGH WATER LEVEL AT 1038.67
- FLASH MIXER NO. 1 OUTLET LOW PH AT 6.5
- FLASH MIXER NO. 1 OUTLET HIGH PH AT 8.5
- FLASH MIXER NO. 2 OUTLET LOW PH AT 6.5
- FLASH MIXER NO. 2 OUTLET HIGH PH AT 8.5
- RAW WATER PARSHALL FLUME NO. 1 AT ZERO FLOW
- RAW WATER PARSHALL FLUME NO. 2 AT ZERO FLOW
- WASTE SLUDGE PARSHALL FLUME NO. 1 AT ZERO FLOW
- WASTE SLUDGE PARSHALL FLUME NO. 2 AT ZERO FLOW
- WASTE SLUDGE PARSHALL FLUME NO. 3 AT ZERO FLOW
- WASTE SLUDGE PARSHALL FLUME NO. 4 AT ZERO FLOW
- AIR FLOW SIGNAL NO. 1 AT ZERO FLOW
- AIR FLOW SIGNAL NO. 2 AT ZERO FLOW
- LIME STORAGE BIN NO. 1 AT LOW LEVEL
- LIME STORAGE BIN NO. 2 AT LOW LEVEL
- SLUDGE RECIRCULATION PARSHALL FLUME NO. 1 AT ZERO FLOW
- SLUDGE RECIRCULATION PARSHALL FLUME NO. 2 AT ZERO FLOW
- LIME SLURRY VAT NO. 1 LOW LIQUID LEVEL AT 1045.50
- LIME SLURRY VAT NO. 2 LOW LIQUID LEVEL AT 1045.50
- LIME SLURRY VAT NO. 3 LOW LIQUID LEVEL AT 1045.50
- ELECTRICAL UTILITY POWER AT ZERO
- SETTLING TANK NO. 1 SCRAPER TORQUE HIGH
- SETTLING TANK NO. 2 SCRAPER TORQUE HIGH
- SETTLING TANK NO. 3 SCRAPER TORQUE HIGH
- SETTLING TANK NO. 4 SCRAPER TORQUE HIGH
- SUMP HIGH WATER LEVEL AT 1037.50
- HYDROPNEUMATIC TANK AT ZERO PRESSURE
- LIME SLURRY TANK NO. 1 LOW LIQUID LEVEL AT 1061.70
- LIME SLURRY TANK NO. 2 LOW LIQUID LEVEL AT 1061.70



GRAPHIC DISPLAY

<p>RAW WATER PUMPS 1,2,3</p> <p>RECORDER</p> <p>TOTALIZER</p>	<p>RAW WATER PUMPS 4,5,6</p> <p>RECORDER</p> <p>TOTALIZER</p>	<p>FLASH MIXERS 1,2,3</p> <p>RECORDER</p> <p>TOTALIZER</p>	<p>LINE SLURRY PUMPS 1,2,3</p> <p>RECORDER</p> <p>TOTALIZER</p>	<p>UTILITY WATER PUMPS 1,2,3</p> <p>RECORDER</p> <p>TOTALIZER</p>	<p>CONVEYOR 1,2</p> <p>RECORDER</p> <p>TOTALIZER</p>	<p>BLOWER 1,2</p> <p>RECORDER</p> <p>TOTALIZER</p>	<p>LINE BIN AERATOR 1,2</p> <p>RECORDER</p> <p>TOTALIZER</p>	<p>LINE BIN AERATOR 3</p> <p>RECORDER</p> <p>TOTALIZER</p>
<p>RECIRCULATED SLUDGE FLOW 1</p> <p>RECORDER</p> <p>TOTALIZER</p>	<p>RECIRCULATED SLUDGE FLOW 2</p> <p>RECORDER</p> <p>TOTALIZER</p>	<p>AIR FLOW 1</p> <p>RECORDER</p> <p>TOTALIZER</p>	<p>AIR FLOW 2</p> <p>RECORDER</p> <p>TOTALIZER</p>	<p>WATER LEVEL</p> <p>RECORDER</p> <p>TOTALIZER</p>	<p>FLASH MIXER 1</p> <p>RECORDER</p> <p>INDICATOR</p>	<p>FLASH MIXER 2</p> <p>RECORDER</p> <p>INDICATOR</p>	<p>LINE SLURRY MIXERS 1,2,3</p> <p>RECORDER</p> <p>INDICATOR</p>	<p>LINE SLURRY MIXERS 1,2,3</p> <p>RECORDER</p> <p>INDICATOR</p>

INSTRUMENTATION

<p>RAW WATER PUMPS 1,2,3</p> <p>1 2 3</p>	<p>RAW WATER PUMPS 4,5,6</p> <p>1 2 3</p>	<p>FLASH MIXERS 1,2,3</p> <p>1 2 3</p>	<p>LINE SLURRY PUMPS 1,2,3</p> <p>1 2 3</p>	<p>UTILITY WATER PUMPS 1,2,3</p> <p>1 2 3</p>	<p>CONVEYOR 1,2</p> <p>1 2</p>	<p>BLOWER 1,2</p> <p>1 2</p>	<p>LINE BIN AERATOR 1,2</p> <p>1 2</p>	<p>LINE BIN AERATOR 3</p> <p>1 2 3</p>
<p>RECIRCULATED SLUDGE FLOW 1</p> <p>1 2 3</p>	<p>RECIRCULATED SLUDGE FLOW 2</p> <p>1 2 3</p>	<p>AIR FLOW 1</p> <p>1 2 3</p>	<p>AIR FLOW 2</p> <p>1 2 3</p>	<p>WATER LEVEL</p> <p>1 2 3</p>	<p>FLASH MIXER 1</p> <p>1 2 3</p>	<p>FLASH MIXER 2</p> <p>1 2 3</p>	<p>LINE SLURRY MIXERS 1,2,3</p> <p>1 2 3</p>	<p>LINE SLURRY MIXERS 1,2,3</p> <p>1 2 3</p>

OPERATIONS