## SECTION 17400 – PROVISIONAL

## SOFTWARE CONTROL BLOCK DESCRIPTIONS

***Provisional Specification Summary:***

*1.1 - Replace this section as shown below.*
*3.2 - Replace this section and all corresponding subsections with a new section and subsections as shown below..*

***(Update text as shown.)***

1.1 SCOPE. This section provides functional descriptions of the PLC software requirements for the Secondary Clarifiers RAS Pumps and MCC Improvements as indicated in the Contact Documents.

3.2 SPECIFIC SOFTWARE FUNCTIONAL DESCRIPTIONS FOR THE SECONDARY CLARIFIERS RAS PUMPS AND MCC IMPROVEMENTS. This section specifically describes the reprogramming necessary to delete or modify existing I/O points and add new I/O points as indicated in 17300SCH. It is the intent of this section to also supplement, where applicable, other sections of Division 17, and, therefore, information described in this section may amplify, modify, and supersede, as the case may be, other sections of this Division. If a conflict should appear, the CONTRACTOR shall solicit the ENGINEER for written clarification.

3.2.01 Existing I/O Points. Make the following changes to existing I/O points for each clarifier:

- Change the “Sludge Blanket Density” analog input to “RAS Density”.
- Change the “RAS Pump Seal Leak Detected” digital input to “RAS Pump Seal Water Low Flow.”
- Change the “RAS Pump Thrust Bearing High Temperature Switch” digital input to “RAS Pump Bearing High Temperature”.
- Delete the “RAS Wet Well Level” analog input.
- Change the range of the “RAS Pump Motor Power” analog input from 0 to 60 KW to 0 to 100KW.
- Delete the Influent Valve “Flow VLV Open Cmd” digital output.
- Delete the Influent Valve “Flow VLV Close Cmd” digital output.

3.2.02 New Digital Inputs. Provide programming and alarm screen indication for each clarifier for the following new digital inputs:

- Motor Vibration High
- Building Gas Alarm
- Building HDVU Alarm
- Building Smoke Alarm

3.2.03 New Analog Outputs.

- Reprogram the existing Influent Valve control algorithms from digital open and close output signals to an analog 4-20 mA position control signal for all clarifiers.

- Reprogram the existing RAS pump speed control algorithms from digital speed increase and decrease output signals to an analog 4-20 mA speed control signal for the following clarifiers: B1, B2, B8, B9, B10 and B14.

End of Provisional Section

*Provisional Specifications—which are issued separately from the Master Specifications on a per contract basis—shall supersede and govern over all other specifications or contract documents. All other wording in the Master Specifications that is not specifically stated to be modified in the Provisional Specifications shall remain in effect as is. The Provisional Specification Summary is included to clarify and/or highlight changes.*