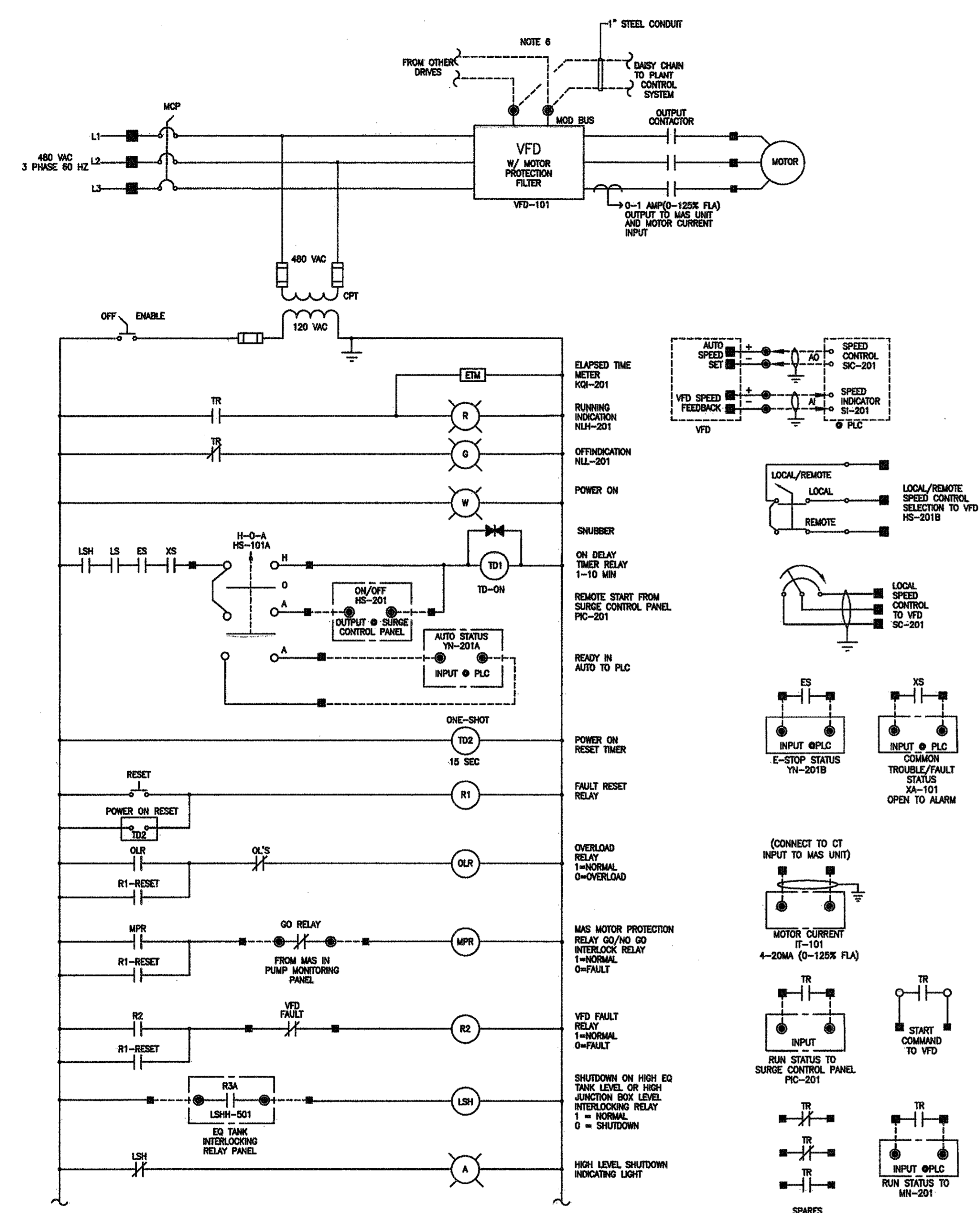
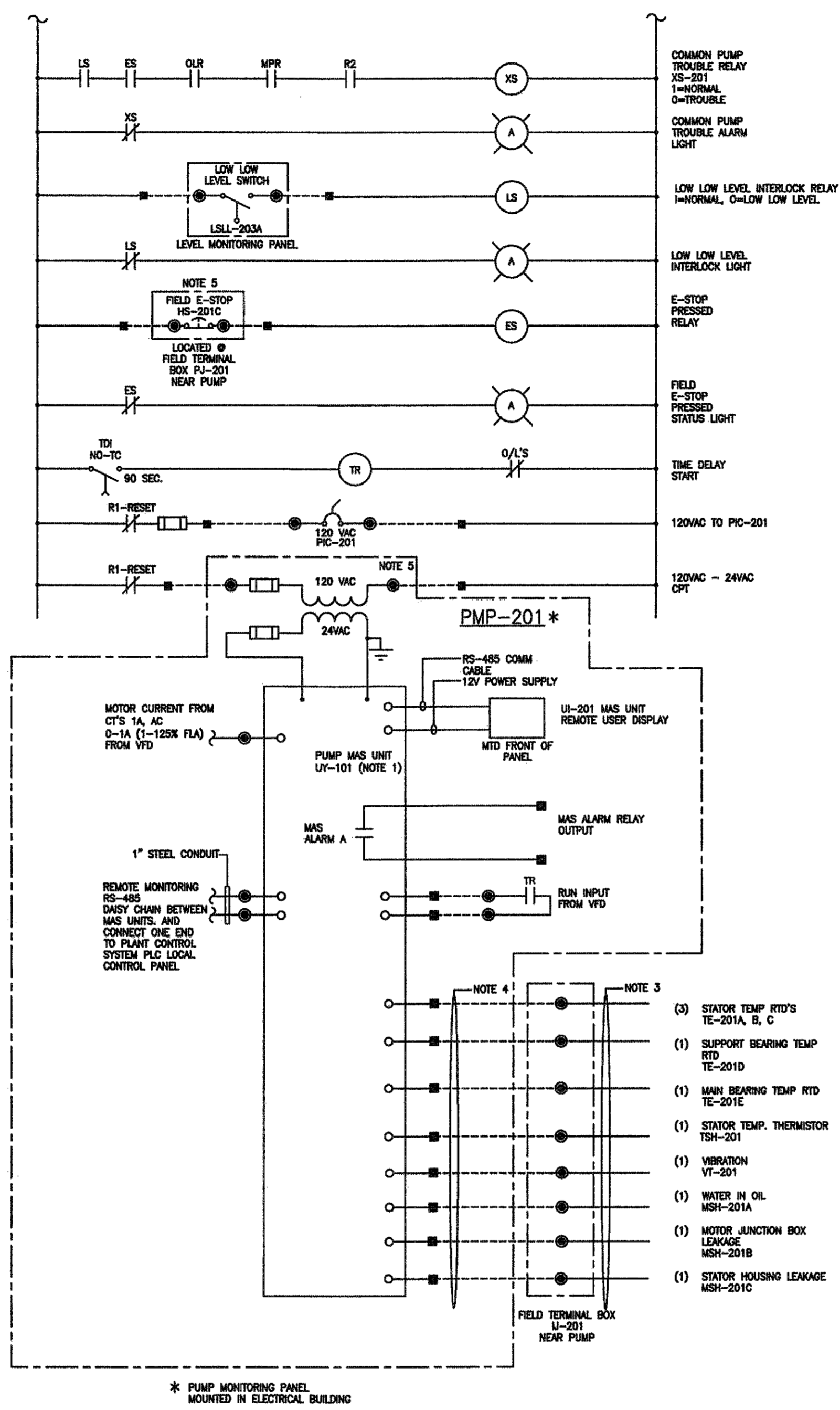


F  
E  
D  
C  
B  
A



**DIVERSION PUMPS (P-201,202,203,301,302,303) - VARIABLE SPEED**

THE ELEMENTARY CONTROL DIAGRAM IS SHOWN FOR P-201. ALL DEVICES ARE LOCATED IN VFD UNLESS NOTED OTHERWISE. EXTERNAL INTERFACES AND WIRING BETWEEN LOCAL CONTROL PANELS, PLC, AND/OR OTHER DEVICES HAVE BEEN SHOWN ONLY. THE INTERNAL INTERFACES AND WIRING INSIDE THE PANELS, PLC, ETC., ARE NOT SHOWN. THE CONTROL DIAGRAM IS TYPICAL AND APPLICABLE TO THE EQUIPMENT INDICATED IN THE TABLE BELOW.



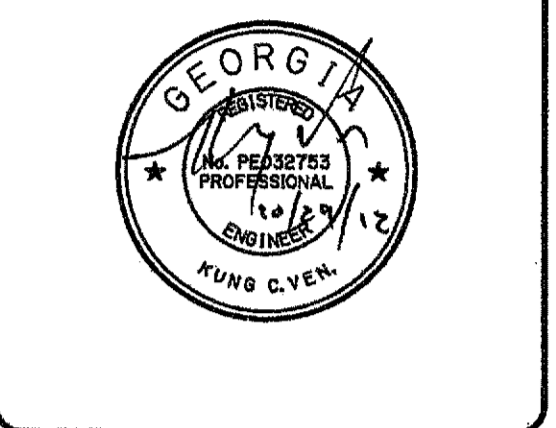
\* PUMP MONITORING PANEL MOUNTED IN ELECTRICAL BUILDING

- NOTES:**
- EQUIPMENT TO BE FURNISHED BY PUMP MANUFACTURER.
  - EXCEPT AS NOTED, ALL EQUIPMENT AND DEVICES TAG NUMBERS ON THIS DRAWING SHALL BE PREFIXED WITH XX FOR PUMP STATION PLANT AREA DESIGNATION.
  - PREFAB MULTICONDUCTOR CABLE FURNISHED BY PUMP SUPPLIER AND TERMINATED IN FIELD TERMINAL BOX.
  - MULTICONDUCTOR 25/C SHIELDED CABLE SIMILAR TO OLFLEX 190CY OR APPROVED EQUAL PROVIDED BY CONTRACTOR.
  - PUMP MONITORING PANEL SHALL BE SEPARATE FROM VFD CABINET AND SUPPLIED BY PUMP VENDOR. 120VAC SINGLE PHASE CONTROL POWER SHALL BE PROVIDED FROM VFD TO POWER THE MAS UNIT AND ITS FRONT PANEL DISPLAY.
  - EACH VFD AND RVSS DRIVE TO BE PROVIDED WITH A MOD BUS TYPE NETWORK INTERFACE. EACH DRIVE TO BE DASH CHAINED TOGETHER IN ONE INCH STEEL CONDUIT TO THE PLANT CONTROL SYSTEM.
  - EACH DIVERSION PUMP WILL BE FURNISHED WITH A SURGE CONTROL PANEL, PLANT CONTROL SYSTEM MONITOR AND CONTROL AND THE SURGE CONTROL PANEL. HOWEVER, THE SURGE CONTROL PANEL SHALL DIRECTLY CONTROL THE VFD DRIVE.

- REFERENCE DRAWINGS:**
- E3-101 MAIN SWGR & MCC ONE LINE DIAGRAM
  - E3-102 DIVERSION PUMP STATION ELECTRICAL PLANS
  - E3-103 DIVERSION PUMP STATION ELECTRICAL ROOM
  - I-102 DIVERSION WET WELL #1
  - I-103 DIVERSION WET WELL #2

- LEGEND**
- MAS MONITOR AND STATUS PUMP PROTECTOR
  - DCS CONNECTION TO FOXBORO DCS WIRING CABINET
  - PLC PLC CONNECTION TO PLC I/O POINT INSIDE LOCAL CONTROL PANEL
  - VFD VARIABLE FREQUENCY DRIVE
  - CONNECTION AT FIELD DEVICE AS NOTED
  - \* EQUIPMENT OR DEVICE FURNISHED BY PUMP MANUFACTURERS AS NOTED
  - CONNECTION AT VFD

WASTE WATER PUMP TAG NO.	VFD TAG NO.	E-STOP	H-C-A VFD	REMOTE ON/OFF FROM SURGE CONTROL	RUN STATUS	READY IN AUTO	TROUBLE STATUS	MOTOR CURRENT	MAS UNIT	REMOTE DISPLAY	STATOR RTD'S	SUPPORT BEARING RTD'S	MAIN BEARING RTD'S	STATOR TEMP THERMISTOR	VIBRATION	WATER IN OIL	MOTOR LEAKAGE	STATOR HOUSING LEAKAGE	FIELD TERMINAL BOX	ELAPSED TIME METER	TROUBLE RELAY	SPEED INDICATOR	SPEED CONTROL @ PLC	LOCAL SPEED CONTROL	LOCAL/REMOTE SELECTOR SWITCH (SC)	RUNNING INDICATION	OFF INDICATION	E-STOP INPUT @ PLC	(FROM LEVEL MONITORING PANEL) LOW LEVEL INTERLOCK	FROM LEVEL INTERLOCKING PANEL HIGH LEVEL SHUTDOWN SEE E7-805	SURGE CONTROL PANEL
DIVERSION PUMP P-201	VFD-201	HS-201	HS-201A	HS-201	MN-201	YN-201A	XA-101	IT-201	UY-201	UI-201	TE-201A,B,C	TE-201D	TE-201E	TSH-201	VT-201	MSH-201A	MSH-201B	MSH-201C	U-201	KQI-201	XS-201	SI-201	SC-201	SC-201	HS-201B	NLH-201	NLL-201	YL-201B	LSLL-203A	R3A LSH-501	PIG-201
DIVERSION PUMP P-202	VFD-202	HS-202	HS-202A	HS-202	MN-202	YN-202A	XA-202	IT-202	UY-202	UI-202	TE-202A,B,C	TE-202D	TE-202E	TSH-202	VT-202	MSH-202A	MSH-202B	MSH-202C	U-202	KQI-202	XS-202	SI-202	SC-202	SC-202	HS-202B	NLH-202	NLL-202	YL-202B	LSLL-203B	R3B LSH-501	PIG-202
DIVERSION PUMP P-203	VFD-203	HS-203	HS-203A	HS-203	MN-203	YN-203A	XA-203	IT-203	UY-203	UI-203	TE-203A,B,C	TE-203D	TE-203E	TSH-203	VT-203	MSH-203A	MSH-203B	MSH-203C	U-203	KQI-203	XS-203	SI-203	SC-203	SC-203	HS-203B	NLH-203	NLL-203	YL-203B	LSLL-203C	R3C LSH-501	PIG-203
DIVERSION PUMP P-301	VFD-301	HS-301	HS-301A	HS-301	MN-301	YN-301A	XA-301	IT-301	UY-301	UI-301	TE-301A,B,C	TE-301D	TE-301E	TSH-301	VT-301	MSH-301A	MSH-301B	MSH-301C	U-301	KQI-301	XS-301	SI-301	SC-301	SC-301	HS-301B	NLH-301	NLL-301	YL-301B	LSLL-303A	R4A LSH-501	PIG-301
DIVERSION PUMP P-302	VFD-302	HS-302	HS-302A	HS-302	MN-302	YN-302A	XA-302	IT-302	UY-302	UI-302	TE-302A,B,C	TE-302D	TE-302E	TSH-302	VT-302	MSH-302A	MSH-302B	MSH-302C	U-302	KQI-302	XS-302	SI-302	SC-302	SC-302	HS-302B	NLH-302	NLL-302	YL-302B	LSLL-303B	R4B LSH-501	PIG-302
DIVERSION PUMP P-303	VFD-303	HS-303	HS-303A	HS-303	MN-303	YN-303A	XA-303	IT-303	UY-303	UI-303	TE-303A,B,C	TE-303D	TE-303E	TSH-303	VT-303	MSH-303A	MSH-303B	MSH-303C	U-303	KQI-303	XS-303	SI-303	SC-303	SC-303	HS-303B	NLH-303	NLL-303	YL-303B	LSLL-303C	R4C LSH-501	PIG-303



PEACHTREE CREEK SOUTH FORK RELIEF STORAGE AND PUMPING STATION

DEPARTMENT OF WATERSHED MANAGEMENT

CITY OF ATLANTA

REV	DATE	REVISION DESCRIPTION
0	10/28/12	100 PERCENT BID PACKAGE

THIS LINE \_\_\_\_\_ IS ONE INCH LONG WHEN PLOTTED FULL SCALE

THIS DRAWING MUST BE USED IN CONJUNCTION WITH THE APPLICABLE OR GOVERNING TECHNICAL SPECIFICATIONS AND OTHER CONTRACT DOCUMENTS.

PROJECT NO: FC-6260

DATE: OCTOBER 2012

RESP PROF: KCV DESIGNER: AWP CHECKER: BLB

SHEET TITLE

ELECTRICAL

03 - DIVERSION FACILITY PUMP STATION

ELEMENTARY CONTROL

VFD

SHEET NO. E3-602 REV. 0