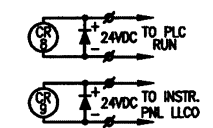


CONTROL DIAGRAM LEGEND	
SYMBOL	DESCRIPTION
●	DOOR MOUNTED DEVICE
▲	DEVICE MOUNTED REMOTE FROM CONTROL
■	DEVICE MOUNTED REMOTE FROM STARTER UNIT BUT IN MCC
#	TERMINAL FOR CONNECTION OF EXTERNAL CIRCUITS
— —	NORMALLY CLOSED CONTACTS
—/—	NORMALLY OPEN CONTACTS
CPT	CONTROL POWER TRANSFORMER
HAND/OFF/AUTO	3 POSITION SELECTOR SWITCH
— — —	MOTOR SPACE HEATER
(M)	MOTOR CONTACTOR
(CR)	CONTROL RELAY
(TR)	TIMING RELAY
— —	FUSE
STOP	"STOP" PUSH BUTTON
START	"START" PUSH BUTTON
STOP	EMERGENCY "STOP" MUSHROOM BUTTON
TR1	TIMED CONTACTS
T*STAT	THERMOSTAT
LS	LIMIT SWITCH
FS	FLOAT SWITCH
— —	AUDIBLE ALARM
— —	PUSH-TO-TEST PILOT LIGHT LETTER INDICATES COLOR



PUMP	MOTOR	COMMENTS
1	160 HP, 190 FLA, 1.15 SF, CODE G CT RATIO: 300:5	
2	160 HP, 190 FLA, 1.15 SF, CODE G CT RATIO: 300:5	
3	35 HP, 39 FLA, 1.15 SF, CODE G CT RATIO: 100:5	



- NOTES:
- ALL MOTORS SHALL BE 1.15 SF CODE G OR LESS.
  - DUAL CONTACT E-STOP.
  - SOFT STARTER SHALL BE RATED 125% CONTINUOUS OF MOTOR FLA AND 500% FOR 30 SECONDS.
  - BYPASS CONTACTOR SHALL BE RATED FOR FULL VOLTAGE STARTING DUTY.
  - STARTER ASSEMBLY SHALL BE RATED FOR 42,000 RMS SYMMETRICAL.
  - PROVIDE SETPOINT CONFIGURATION, STARTUP SERVICES AND TRAINING.

This record drawing is a compilation of the sealed engineering drawing for this project; modified by addenda, change orders and information furnished by the contractor. The information shown on the record drawings that was provided by the contractor or others not associated with the design engineer cannot be verified for accuracy or completeness. This original sealed drawings are on file at the offices of Birkhoff, Hendricks & Carter, L.L.P.  
BY PAC DATE 03/06/12

CONTINUED

CONTROL SCHEMATICS - PUMPS

**BIRKHOFF, HENDRICKS & CARTER, L.L.P.**  
 PROFESSIONAL ENGINEERS  
 Texas Firm F526  
 11910 Greenville Ave., Suite 600  
 Dallas, Texas 75243 (214) 361-7900



THESE DOCUMENTS ARE FOR BIDDING, CONSTRUCTION, AND PERMIT PURPOSES.  
 DATE: 5-28-2010  
 McCREARY & ASSOCIATES, INC.  
 Consulting Engineers  
 Dallas, Texas FIRM No. F-338

**CITY OF ROCKWALL, TEXAS**  
 SQUABBLE CREEK LIFT STATION  
 CONTROL SCHEMATICS

BHC PROJECT NO. 2007-110 SHEET NO. E03  
 MAY 2010

These plans and related specifications were prepared for construction of this specific project only. Reuse of these documents is not permitted without authorization of Birkhoff, Hendricks & Carter, L.L.P.