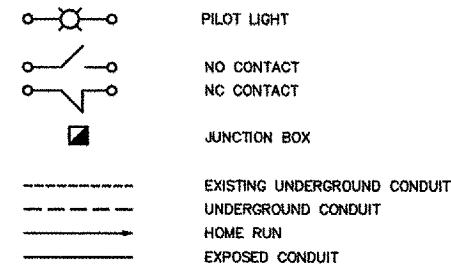


**ELECTRICAL LEGEND**

**SYMBOLS**

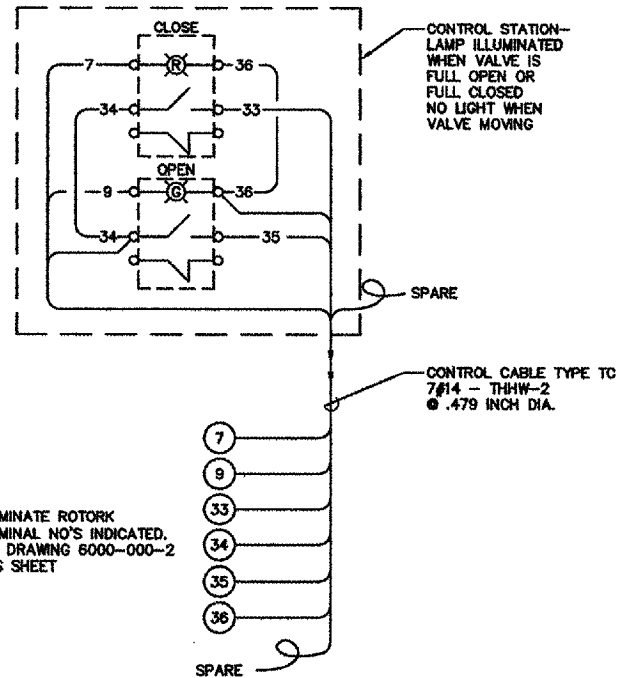


**ABBREVIATIONS**

CKT, CCT	CIRCUIT
CP	CONTROL PANEL
DWG	DRAWING
GRD, G	GROUND
GRS	GALVANIZED RIGID STEEL
HH	HAND HOLE
J	JUNCTION BOX
KVA	KILOVOLT AMPERE
KW	KILOWATT
NO	NORMALLY OPEN
NC	NORMALLY CLOSED
PNL	PANEL
PVC	POLY VINYL CHLORIDE
SW	SWITCH
U.N.O.	UNLESS NOTED OTHERWISE
V	VOLT
XMFR	TRANSFORMER
WP	WATER PROOF

**GENERAL NOTES**

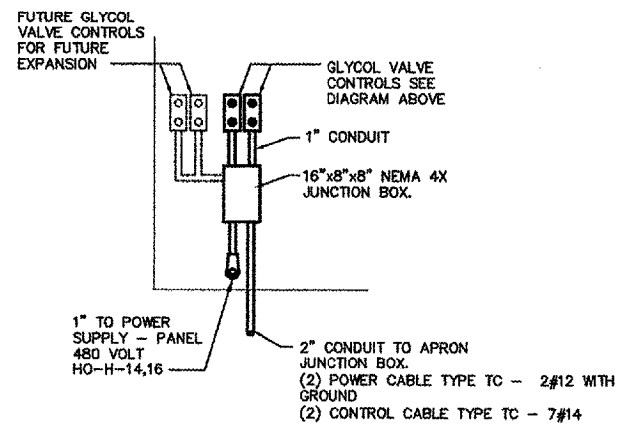
- THE CONTRACTORS SHALL CAREFULLY EXAMINE THE DRAWINGS AND SPECIFICATIONS, VISIT THE SITE OF THE WORK, AND BECOME FULLY ACQUAINTED AS TO ALL CONDITIONS AND MATTERS THAT CAN IN ANY WAY, AFFECT THE WORK OR THE COST. SHOULD CONTRACTOR FIND DISCREPANCIES IN, OR OMISSIONS FROM THE DRAWINGS, SPECIFICATIONS, OR OTHER DOCUMENTS OR BE IN DOUBT AS TO THEIR MEANING, HE IS TO NOTIFY THE VILLAGE AT ONCE, IN WRITING, OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND NEW WORK OR BETWEEN ANY CONTRACT WORK AND THE WORK OF OTHER TRADES PRIOR TO BID, AND OBTAIN CLARIFICATION AS WELL, PRIOR TO SUBMITTING ANY BID. LACK OF SUCH NOTIFICATION SHALL BE CONSTRUED TO INDICATE NO DISCREPANCIES OR CONFLICTS EXIST. ADDITIONAL COMPENSATION WILL NOT BE GRANTED AFTER AWARD OF CONTRACT FOR ANY WORK REQUIRED TO COMPLY WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
- THE CONTRACTORS ARE RESPONSIBLE FOR FURNISHING AND INSTALLING A COMPLETE ELECTRICAL SYSTEM WHERE THERE IS NO MENTION OF THE RESPONSIBLE PARTY FOR A SPECIFIC ITEM TO BE FURNISHED, INSTALLED OR WIRED ON THE ELECTRICAL DRAWINGS, THE ELECTRICAL CONTRACTOR WILL BE RESPONSIBLE COMPLETELY FOR ALL PURCHASES AND LABOR, FOR A COMPLETE OPERATING SYSTEM FOR THIS ITEM.
- THE DRAWINGS INDICATE THE DIAGRAMATIC INTENT, GENERAL CHARACTER, AS WELL AS LOCATIONS OF MATERIALS AND EQUIPMENT. THE WORK IS SHOWN WITH MINOR DETAILS OMITTED FOR THE SAKE OF CLARITY. THE WORK SHALL INCLUDE THESE NECESSARY ITEMS AND THEIR INSTALLATION AT NO ADDITIONAL COST TO THE OWNER.
- ALL CONDUITS THAT ARE INSTALLED BELOW CONCRETE SLABS WITHIN THE PERIMETERS OF THE FOUNDATION WALL SHALL BE P.V.C., SCHEDULE 40 OR SCHEDULE 80.
- OUTSIDE FOUNDATION WALLS, PVC TUBING, SCHEDULE 40 OR SCHEDULE 80 MAY BE PERMITTED FOR USE, IN LIEU OF RIGID HEAVY-WALL GALVANIZED STEEL CONDUIT AND/OR INTERMEDIATE METALLIC CONDUIT ONLY IN AREAS SUCH AS UNDER CONCRETE SLABS AT FINISHED GRADE LEVEL OR BELOW, OR IN LOCATIONS WHERE A CONDUIT SYSTEM IS REQUIRED AND WILL BE IN CONTACT WITH THE EARTH.
- ALL CONNECTORS AND/OR COUPLINGS THAT ARE USED WITH THE INSTALLATION OF RIGID HEAVY-WALL GALVANIZED STEEL CONDUIT OR INTERMEDIATE METALLIC CONDUIT THAT ARE SUBJECT TO ANY TYPE OF WEATHER CONDITIONS OR MOISTURE, OR IN CONTACT WITH THE EARTH, ETC., SHALL BE OF THE COMPRESSION TYPE OR THREAD-ON TYPE.
- ELECTRICAL METALLIC TUBING (EMT) SHALL ONLY BE PERMITTED FOR INSTALLATION WITHIN THE BUILDING PROPER AND IN DRY LOCATIONS AND WHEN CONCEALED BELOW TEN FEET ABOVE FLOOR. EMT SHALL NOT BE INSTALLED IN EXPOSED AREAS WITHIN TEN FEET ABOVE GRADE IN VEHICLE STORAGE AREAS, SHOPS AND THE LIKE WHERE SUSCEPTIBLE TO DAMAGE.
- ALL CIRCUIT BREAKERS SHALL BE OF THE BOLT-ON TYPE.
- ALL OVER-CURRENT PROTECTION DEVICES, SUCH AS CIRCUIT BREAKERS OR FUSE DEVICES.
- ALL CONDUITS ENTERING THE BUILDING SHALL BE SEALED ON THE OUTSIDE TO ELIMINATE TEMPERATURE CHANGE AND CONDENSATION.



TERMINATE ROTORK TERMINAL NO'S INDICATED. SEE DRAWING 6000-000-2 THIS SHEET

**CONTROL STATION WIRING DIAGRAM (TYP. OF TWO)**

NOT TO SCALE

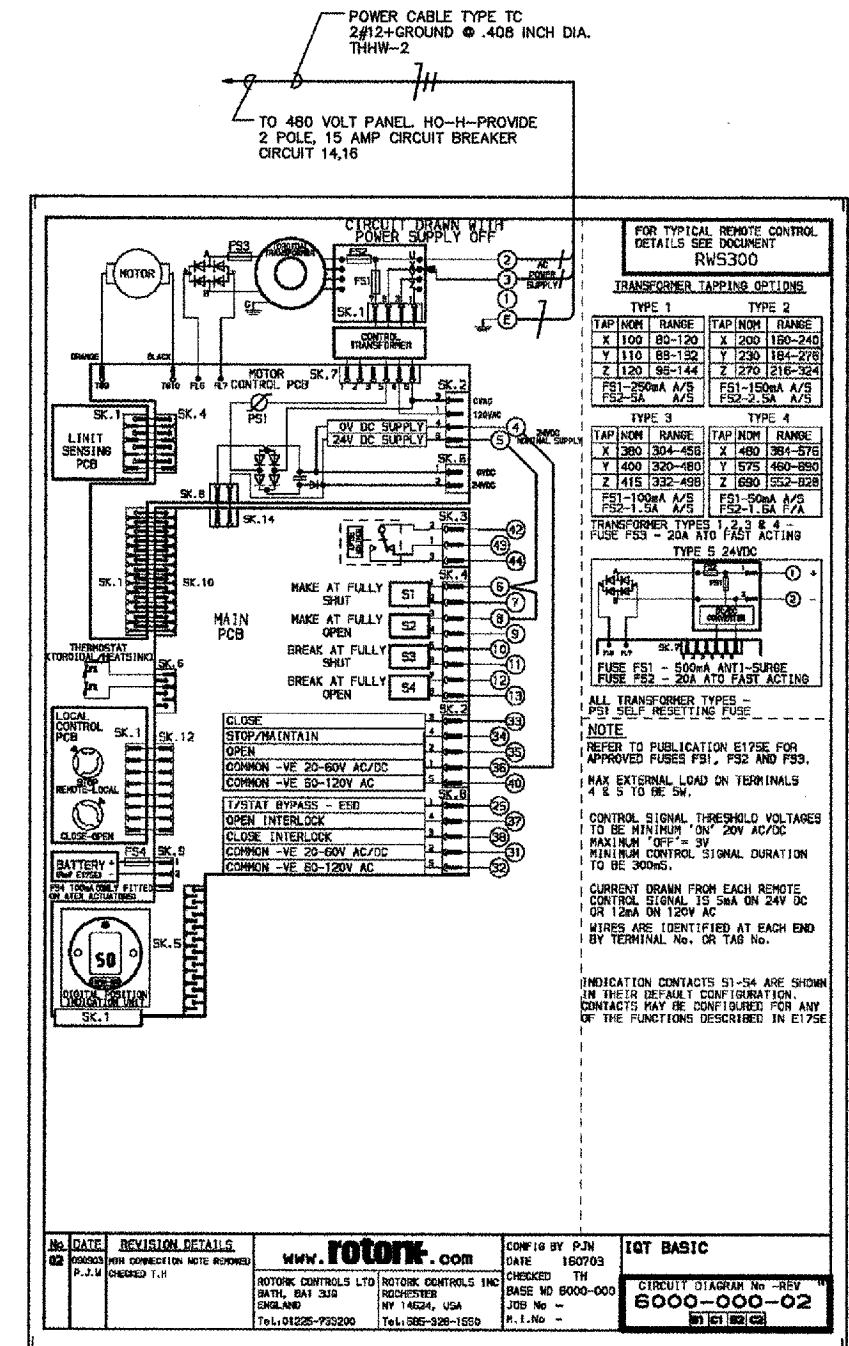


**CONTROL PANEL DETAIL**

NOT TO SCALE

**CONTROL STATION BILL OF MATERIALS**

ITEM NO.	QTY	UNIT	DESCRIPTION	PART NUMBER
1	1	EA	DIECAST NEMA 4/13 BOX	AB-800T-2TZ
2	1	EA	MOMENTARY PUSHBUTTON GREEN ILLUMINATED - GUARDED	AB-800T-QAH24G
3	1	EA	MOMENTARY PUSHBUTTON RED ILLUMINATED - GUARDED	AB-800T-QAH24R
4	1	EA	LEGEND PLATE "OPEN"	AB-800T-X531
5	1	EA	LEGEND PLATE "CLOSED"	AB-800T-X502



FOR TYPICAL REMOTE CONTROL DETAILS SEE DOCUMENT RWS300

TRANSFORMER TAPPING OPTIONS

TYPE 1		TYPE 2	
TAP/NO	RANGE	TAP/NO	RANGE
X 100	80-120	X 200	180-240
Y 110	88-132	Y 230	184-276
Z 120	96-144	Z 270	216-324

TRANSFORMER TYPES 1, 2, 3 & 4

TYPE 3		TYPE 4	
TAP/NO	RANGE	TAP/NO	RANGE
X 380	304-456	X 480	384-576
Y 400	320-480	Y 575	460-690
Z 415	332-498	Z 690	552-828

FUSE F53 - 20A ATO FAST ACTING  
FUSE F51 - 500mA ANTI-SURGE  
FUSE F52 - 20A ATO FAST ACTING

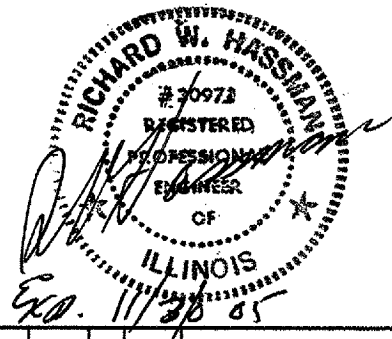
NOTE: REFER TO PUBLICATION E175E FOR APPROVED FUSES F51, F52 AND F53. MAX EXTERNAL LOAD ON TERMINALS 4 & 5 TO BE 5W.

CONTROL SIGNAL THRESHOLD VOLTAGES TO BE MINIMUM "ON" 24V AC/DC. MAXIMUM "OFF" = 3V. MINIMUM CONTROL SIGNAL DURATION TO BE 300ms.

CURRENT DRAWN FROM EACH REMOTE CONTROL SIGNAL IS 5mA ON 24V DC OR 125mA ON 120V AC.

WIRES ARE IDENTIFIED AT EACH END BY TERMINAL NO. OR TAG NO.

INDICATION CONTACTS S1-S4 ARE SHOWN IN THEIR DEFAULT CONFIGURATION. CONTACTS MAY BE CONFIGURED FOR ANY OF THE FUNCTIONS DESCRIBED IN E175E.



REV.	DATE	BY	APPR.	DESCRIPTION	PLOT FILE

DESIGNED BY: RWH  
DRAWN BY: CS  
CHECKED BY: RWH  
DATE: 6/10/05



ACTIVATE GLYCOL COLLECTION SYSTEM

1075 Eastgate Drive  
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PH 618-624-2628  
FAX 618-624-2730



**GENERAL NOTES, LEGEND, ABBREVIATIONS, ELECTRICAL DETAILS, AND DIAGRAMS**

DWG. FILE NAME: 84723-E-08  
SHEET NO.: 8