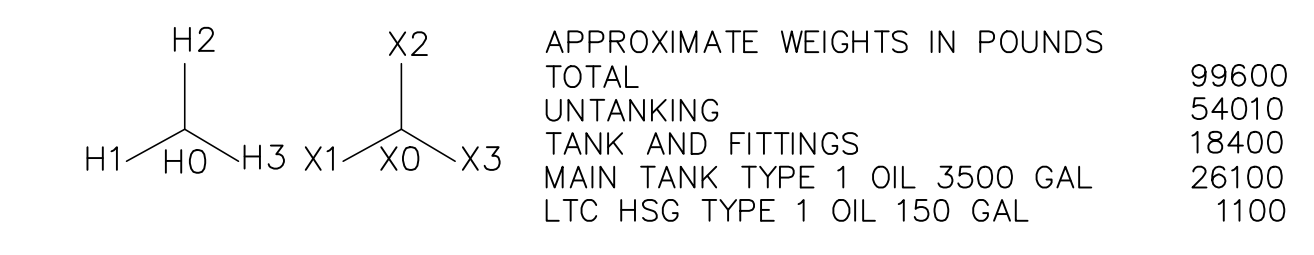


CAUTION! INSTRUCTION BOOK INSIDE BOX BEFORE INSTALLING OR OPERATING READ INSTRUCTIONS

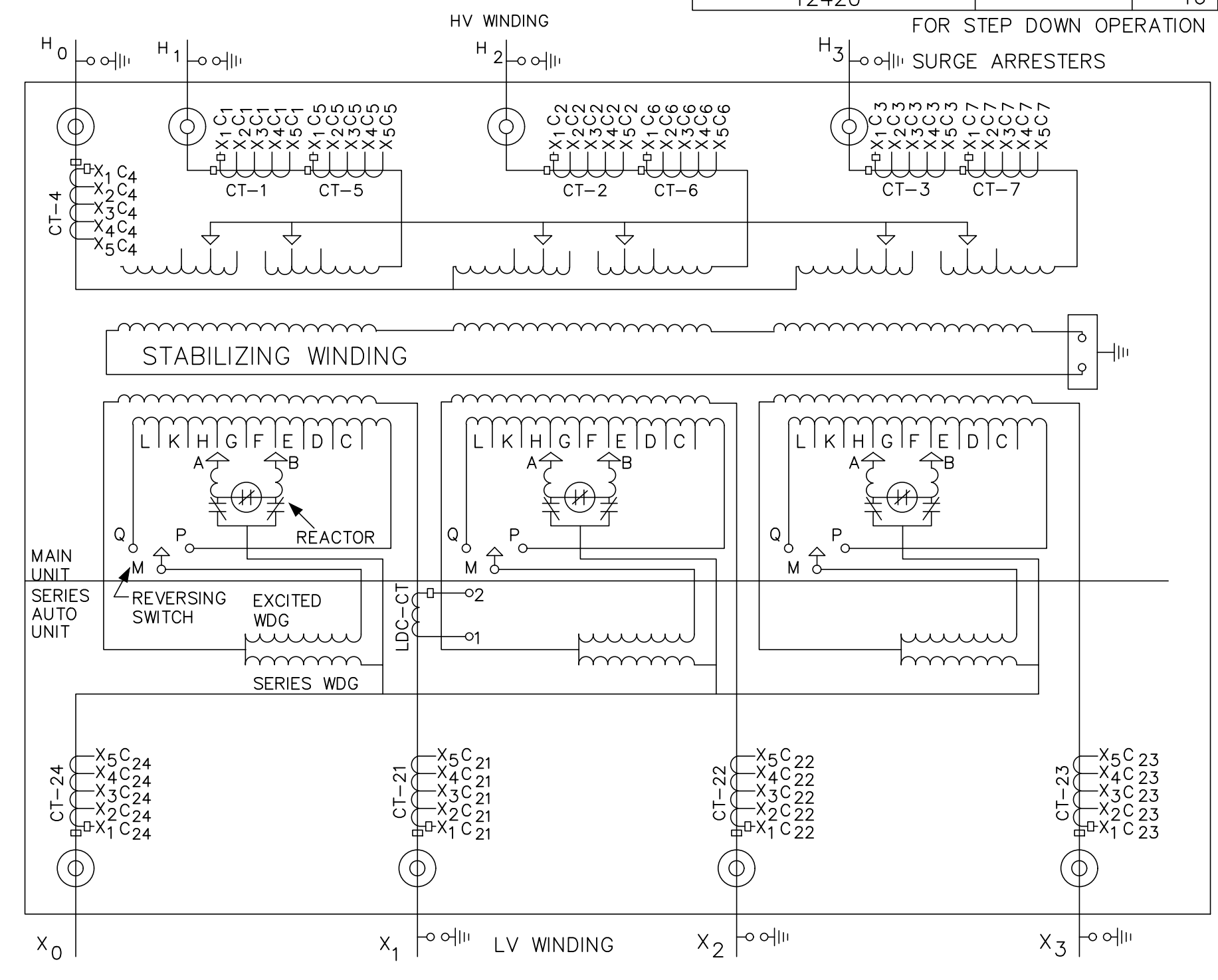
VOLTAGE RATING 67000Y/38680-13800Y/7970  
 KVA RATING 12000 CONTINUOUS 55 C RISE SELF COOLED  
 KVA RATING 16000 CONTINUOUS 55 C RISE FORCED AIR  
 KVA RATING 17920 CONTINUOUS 65 C RISE FORCED AIR

| HV WINDING CONNECTION |         |          |
|-----------------------|---------|----------|
| VOLTS                 | AMP KVA | DIAL POS |
| 70600                 | 147     | 1        |
| 68800                 | 150     | 2        |
| 67000                 | 154     | 3        |
| 65200                 | 159     | 4        |
| 63400                 | 163     | 5        |



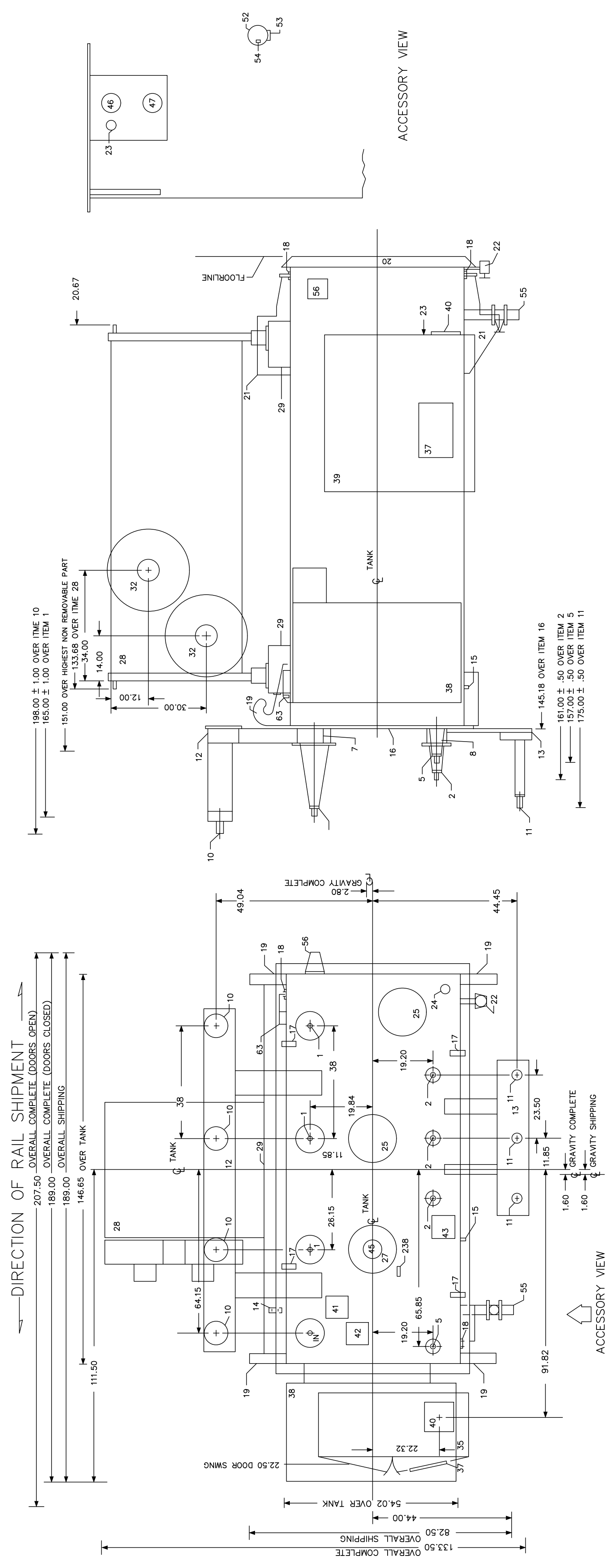
LIQUID LEVEL CHANGES .83 INCH PER 10 C CHANGE IN LIQUID TEMPERATURE.  
 LIQUID LEVEL BELOW TOP SURFACE OF THE HIGHEST POINT OF MANHOLE FLANGE AT 25 C IS 12.1 INCHES.  
 MAXIMUM OPERATING PRESSURE OF LIQUID PRESERVATION SYSTEM 7.5 POUNDS POSITIVE TO 5 POUNDS NEGATIVE.  
 TANK SUITABLE FOR 14.7 POUNDS VACUUM FILLING.  
 LDC-CT IS 800/0.2 AMP.  
 CT'S-1,2,3,5,6,7 ARE 600/5 AMP  
 CT-4 IS 600/5 AMP  
 CT'S-21,22,23 ARE 1200/5 AMP  
 CT-24 IS 1200/5 AMP

| VOLTS | AMP KVA | MECHANISM |                    | REVERSING SWITCH CONNECTS |
|-------|---------|-----------|--------------------|---------------------------|
|       |         | DIAL POS  | CONNECTS A TO B TO |                           |
| 15180 | 683     | 16        | L L                | M TO P                    |
| 15094 | 685     | 15        | L K                |                           |
| 15007 | 689     | 14        | K K                |                           |
| 14921 | 693     | 13        | K H                |                           |
| 14835 | 687     | 12        | H H                |                           |
| 14749 | 701     | 11        | H G                |                           |
| 14662 | 706     | 10        | G G                |                           |
| 14576 | 710     | 9         | G F                |                           |
| 14490 | 714     | 8         | F F                |                           |
| 14404 | 718     | 7         | F E                |                           |
| 14317 | 723     | 6         | E E                |                           |
| 14231 | 727     | 5         | E D                |                           |
| 14145 | 731     | 4         | D D                |                           |
| 14059 | 736     | 3         | D C                |                           |
| 13972 | 740     | 2         | C C                |                           |
| 13886 | 745     | 1         | C M                | M TO Q                    |
| 13800 |         | N         | M M                |                           |
| 13714 |         | 1         | M L                |                           |
| 13627 |         | 2         | L L                |                           |
| 13541 |         | 3         | L K                |                           |
| 13455 |         | 4         | K K                |                           |
| 13369 |         | 5         | K H                |                           |
| 13282 |         | 6         | H H                |                           |
| 13196 |         | 7         | H G                |                           |
| 13110 |         | 8         | G G                |                           |
| 13024 |         | 9         | G F                |                           |
| 12937 |         | 10        | F F                |                           |
| 12851 |         | 11        | F E                |                           |
| 12765 |         | 12        | E E                |                           |
| 12679 |         | 13        | E D                |                           |
| 12592 |         | 14        | D D                |                           |
| 12506 |         | 15        | D C                |                           |
| 12420 |         | 16        | C C                |                           |



NP 193C9977 ROME, GEORGIA MADE IN U.S.A.

FROM GE DRAWING #93C9977 SHT



- APPROXIMATE WEIGHT IN POUNDS
- |                   |       |
|-------------------|-------|
| TANK AND FITTINGS | 54000 |
| OIL (MAIN)        | 18400 |
| OIL (LV)          | 26100 |
| TOTAL             | 98500 |
- HEIGHT REQUIRED FOR UNTANKING = 278 INCHES UNLESS OTHERWISE SPECIFIED. ALL DIMENSIONS ARE TO FLOORLINE AND ARE EXPRESSED IN INCHES
- NEUTRAL BUSHING FOR HV WINDING, TYPE "U" CAT NO. 1780698B
  - BUSHING FOR HV WINDING, TYPE "U" CAT NO. 1780698B
  - NAMEPLATE CHANGERS (OUTLINE 147056547)
  - TERMINAL BOX FOR LOAD TAP CHANGER
  - USER'S 10x10 DRILL PLATE (REMOVABLE) IN
  - OUTLET HOUSING 1 FOR CURRENT TRANSFORMER LEADS
  - OUTLET HOUSING 2 FOR CURRENT TRANSFORMER LEADS
  - PRESSURE RELIEF VALVE WITH ALARM CONTACTS AND VISUAL INDICATOR
  - LIQUID LEVEL GAGE WITH ALARM CONTACTS AND VISUAL INDICATOR
  - GROUND STUD FOR LV SA
  - COVER (WELDED) USING COVER (1.50 OPENING)
  - GROUND BLOCK (ANSI STANDARD)
  - LIFTING LUG FOR LIFTING COMPLETELY FILLED TRANSFORMER (SEE FIG. 20)
  - JACK BOSS (SEE FIG. 21)
  - 1/2 INCH NPT FEMALE VALVE, 3/8S TYPE
  - TOP FILTER PRESS VALVE, GLOBE TYPE (1 INCH NPT FEMALE)
  - VACUUM FILLING CONNECTION (2.00 INCH NPT MALE)
  - MANHOLE 19.5 INCH DIA. OPENING
  - FOR CORE GROUND ACCESSIBILITY
  - MANIFOLD FOR RADIATORS, WITH DRAIN AND VENT PROVISIONS
  - NEUTRAL BUSHING FOR HV WINDING, TYPE "U" CAT NO. 1780698B
  - BUSHING FOR HV WINDING, TYPE "U" CAT NO. 1780698B
  - WITH A 1.125-1.25x1.25 INCH STD. CAT NO. 157A995108
  - WITH A 1.125-1.25x1.25 INCH STD. CAT NO. 157A995108
  - NEUTRAL BUSHING FOR LV WINDING, TYPE "A" CAT NO. 157A995108
  - ADAPTER FOR LV BUSHING
  - HYDRANT/STATION SA, CAT NO. 157A995108
  - SUPPORT FOR LV SA (REMOVABLE)
  - SUPPORT FOR LV SA (REMOVABLE)
  - GROUND STUD FOR LV SA
  - COVER (WELDED) USING COVER (1.50 OPENING)
  - GROUND BLOCK (ANSI STANDARD)
  - LIFTING LUG FOR LIFTING COMPLETELY FILLED TRANSFORMER (SEE FIG. 20)
  - JACK BOSS (SEE FIG. 21)
  - 1/2 INCH NPT FEMALE VALVE, 3/8S TYPE
  - TOP FILTER PRESS VALVE, GLOBE TYPE (1 INCH NPT FEMALE)
  - VACUUM FILLING CONNECTION (2.00 INCH NPT MALE)
  - MANHOLE 19.5 INCH DIA. OPENING
  - FOR CORE GROUND ACCESSIBILITY
  - MANIFOLD FOR RADIATORS, WITH DRAIN AND VENT PROVISIONS

|      |     |            |                       |
|------|-----|------------|-----------------------|
| ENG. | RAS |            |                       |
| DR   | RAS |            |                       |
| CK   | PKM | 6/28/2005  | RECORD DRAWINGS       |
| APP  | PKM | 06/16/2004 | BIDS AND CONSTRUCTION |
|      |     | 06/07/2004 | 30% OWNER REVIEW      |
|      |     | DATE       | ISSUED FOR            |

GRP ENGINEERING INC.  
 GRAND RAPIDS, MICHIGAN, 616-942-7183  
 PETOSKEY, MICHIGAN, 231-439-9683

TRAVERSE CITY LIGHT AND POWER  
 CASS ROAD SUBSTATION  
 TRAVERSE CITY, MICHIGAN  
 TRANSFORMER NO.1 - NAMEPLATE & OUTLINE DIAGRAM

|                |            |
|----------------|------------|
| PROJECT NUMBER | 04-0033.01 |
| DRAWING NUMBER | 866        |

FROM GE DRAWING #49D8644 SHT