



APPROX. L.F. 187'

| STRESS ANALYSIS DATA | |
|----------------------|--|
| MATERIAL | |
| LOADS | |
| RESTRAINTS | |
| ANALYSIS | |
| DESIGN | |
| CONSTRUCTION | |
| OPERATION | |
| MAINTENANCE | |
| REPAIRS | |

| STRESS ANALYSIS DATA | |
|----------------------|--|
| MATERIAL | |
| LOADS | |
| RESTRAINTS | |
| ANALYSIS | |
| DESIGN | |
| CONSTRUCTION | |
| OPERATION | |
| MAINTENANCE | |
| REPAIRS | |

| TYPE | GLUE | RESTRAINT | ANCHOR |
|------------------------|------|-----------|--------|
| SPRING HANGER | | | |
| RIGID HANGER | | | |
| DIRECTION OF RESTRAINT | | | |
| DIRECTION OF EXPANSION | | | |
| ANCHOR | | | |

- NOTES:
- ALL PIPING TO BE FABRICATED AND INSTALLED IN ACCORDANCE WITH SPECIFICATIONS 7220-30-20.
 - FOR MATERIAL SPECIFICATIONS OF PIPE, VALVES AND FITTINGS, SEE PIPING CLASS SHEET (1) NO. M-481.
 - FOR PIPING AND INSTRUMENT DIAGRAMS SEE DOC. M-417 OR M-5 A M-417 SH-1A.
 - FOR INSTRUMENT LIST SEE M-483.
 - FOR INSTRUMENT CONNECTION DETAIL SEE DRAWING M-483.
 - NO ALLOWANCE HAS BEEN MADE FOR WELD JOISTS OR GASKETS AND ALL PIPING IS ASSUMED TO BE SUPPORTED IN THE CORRECT POSITION UNLESS OTHERWISE NOTED ON THE DRAWING.
 - FOR PIPING SYSTEM COORDINATE DRAWING(S) THIS AREA SEE M-38 OR M-5, M-39 OR M-2.
 - FOR CORRELATION SEE DOC. M-581.
 - PIPE STRESS ANALYSIS PROVIDED WITH A METHOD OF DETERMINING NUMBER OF PIPES TO FORM THE INITIAL PIPE STRESS.
 - FOR PIPING AND INSTRUMENT SYMBOLS SEE DOC. M-400 THREE SHEETS.
 - FIELD WELD JOISTS WHERE SPECIFICALLY INDICATED ARE INDICATED (WJ).
 - FOR VENTS AND DRAINS SEE DRAWING M-482. VENTS AND DRAINS ARE INDICATED BY AND (D).
 - ALL FACE TO FACE AND END TO END DIM. OF FRAMES SHOWN ARE FOR AS-BUILT UNLESS OTHERWISE NOTED.
 - INDICATES REACTOR BUILDING SECTION WALL PENETRATION.
 - INDICATES PLUMB OR WALL PENETRATION.
 - HANGERS INDICATED (2) THIS ISO ARE DETAIL DESIGNED EXCEPT AS INDICATED (3) FOR GAINWELL OR (3) FOR GIBBERT COMMONWEALTH.

| REV. | DESCRIPTION | CHK. | DATE |
|------|-------------------------------------|------|------|
| 1 | REVISED TO REFLECT REV. 11 OF M-150 | | |
| 2 | REVISED TO REFLECT REV. 10 OF M-150 | | |
| 3 | REVISED TO REFLECT REV. 9 OF M-150 | | |
| 4 | REVISED TO REFLECT REV. 8 OF M-150 | | |
| 5 | REVISED TO REFLECT REV. 7 OF M-150 | | |
| 6 | REVISED TO REFLECT REV. 6 OF M-150 | | |
| 7 | REVISED TO REFLECT REV. 5 OF M-150 | | |
| 8 | REVISED TO REFLECT REV. 4 OF M-150 | | |
| 9 | REVISED TO REFLECT REV. 3 OF M-150 | | |
| 10 | REVISED TO REFLECT REV. 2 OF M-150 | | |
| 11 | REVISED TO REFLECT REV. 1 OF M-150 | | |

BECHTEL
ANN ARBOR, MICHIGAN

MIDLAND PLANT UNITS 1 & 2
CONSUMERS POWER COMPANY

HANGER ISOMETRIC
COMPONENT COOLING WATER SYSTEM
C.R.M. SUPPLY UNIT-2

JOB NO. 7220 DRAWING NO. H-517 SH-10(C) 7

| REV. | DESCRIPTION | CHK. | DATE |
|------|-----------------|------|------|
| 1 | STRESS APPROVAL | | |

30X

10/21/61
C. J. ...
CONTRACTOR'S USE ONLY

POOR ORIGINAL

77
11
8.5"
8.5"
11"
17"

77
11
8.5"
8.5"
11"
17"

RIDS

811220332

