FOUR STAR INDUSTRIAL PARK
Henderson & Webster Counties, Kentucky

PLANS FOR NEW 1,000,000 GALLON TANK

ENGINEER:  BRIGHTON ENGINEERING COMPANY
201 BRIGHTON PARK BOULEVARD
FRANKFORT, KENTUCKY 40601

GEOTECHNICAL:  QORE PROPERTY SCIENCES
13005 MIDDLETOWN INDUSTRIAL BLVD., SUITE D
LOUISVILLE, KENTUCKY 40223
1.0 MILLION GALLON ELEVATED x 70' DIAMETER x 40'-0" HEAD RANGE

NOTES:

1. All welding to be in accordance with AWS D100-86.
2. All plates to be rolled or formed to the proper radius.
3. Tank is to be grooved after erection, Min. 1".
4. The tank welds shall be examined in accordance with AWS D100-86 Section VIII.
5. Tank to be painted in accordance with project specifications.
6. All accessories shall be field located and/or oriented.
7. All plate materials to be ASTM A36 or A283 Gr.C.
8. All steel pressure pipe to be ASTM A60.
9. All structural steel to be ASTM A36.
10. All members shown are minimum.
11. Equivalent member sections may be used for pipe columns, struts, and bracing rods subject to prior notification by the contractor and approval in writing by Brighton Engineering.
NOTE 1: ALL BUTT WELDED JOINTS TO BE FULL FUSION JOINTS.

PITTSBURG TANK & TOWER CO.
ELEVATED DIVISION, INC.
HENDERSON, KY

TANK CONTAINER DIMENSIONS

TANK SECTION DIMENSIONS

1000M x 70' TORO ELEVATED TANK
FOUR STAR INDUSTRIAL PARK, HENDERSON
PLAN OF BOWL PLATES INSIDE

RISER CONE TENSION RING

RISER BELOW

RISER CONE

PLS. BP-1

COLUMNS

3/4" BOWL INSERT PLATES, (9) REQ'D.

PLS. BP-2

SEE NOTE 1

TYP.

27 PCS. MK BP-1

7/16" PLATE

36 PCS. MK BP-2

3/8" PLATE

18 PCS. MK BP-3

7/16" PLATE

35'-0" INSIDE RADIUS

SPRING LINE

14'-0" KG

15'-0" BOWL RADIUS

2'-0"

PLS. BP-3

TENSION RING

RISER CONE

CL

BOWL SECTION DIMENSIONS

NOTE 1: ALL BUTT WELDED JOINTS TO BE
FULL FUSION JOINTS.
MULTIPLE SECTIONS MAY BE ASSEMBLED
AND WELDED IN THE SHOP.

PITTSBURG TANK & TOWER CO.
ELEVATED DIVISION, INC.
HENDERSON, KY.

REVISIONS

10000 M x 90 T ELEVATED TANK
FOUR STAR INDUSTRIAL PARK, HENDERSON

C4
Plan of Roof Plates

24" sq. manway (painters)

20" vent

3" straight neck

SEE NOTE 1 TYP.

4 pcs. mk rp-3
1/4" plate

56 pcs. mk rp-1
1/4" plate

28 pcs. mk rp-2
1/4" plate

21.553 total inside height

35'-0" inside radius

25.553 rad.

17.861 kr.

4766.4 cm. radius

ROOF SECTION DIMENSIONS

NOTE 1: ALL BUTT WELDED JOINTS TO BE FULL FUSION JOINTS. MULTIPLE SECTIONS MAY BE ASSEMBLED AND WELDED IN THE SHOP.

PITTSBURG TANK & TOWER CO.
ELEVATED DIVISION, INC.
HENDERSON, KY

ROOF PLAN & DIMENSIONS

<table>
<thead>
<tr>
<th>NO.</th>
<th>REV.</th>
<th>DATE</th>
<th>BY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1-14-00</td>
<td>D.G.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10000m x 70' TORO ELEVATED TANK
FOUR STAR INDUSTRIAL PARK, HENDERSON

C5
INSTALL MIDWAY BETWEEN (2) COLUMNS
NOTE:
1. COVER ERECTED SUCH THAT THE TOP WILL OPEN FLAT AGAINST ROOF TOWARDS CENTER LINE OF TANK.

HANDLE DETAIL
(1) REQ'D/EACH

CORNER WELD TYP.
(BODY & COVER)

END COVER PLATE DETAIL
(4) REQ'D/EACH

CORNER WELD TYP.
(BODY & COVER)

BODY SIDE PLATE DETAIL
(4) REQ'D/EACH

HINGE BAR MK-B1 DETAIL
(4) REQ'D/EACH

FURNISH (2) MANWAYS FOR PROJECT

PITTSBURG TANK & TOWER CO.
ELEVATED DIVISION, INC.
HENDERSON, KY

REV/DAT/NO.
1 1-14-02 49
2
3
4 
5

24" SQUARE ROOF HATCH

1000M x 70' TORD ELEVATED TANK
FOUR STAR INDUSTRIAL PARK, HENDERSON

FILE A24502M
2/REV/EIC.
19 1/2" DIA. HOLE FOR VENT

1/4" FLANGE X 24" I.D.
 x 29" O.D.

FURNISH 1/8" NEOPHRENNE
GASKET. FABRICATE TO
MATCH COVER PLATE TO FLANGE

1/4" PLATE X 29" O.D.

CENTER LINE

HATCH HANDLE SEE DETAIL BELOW

BOLT WITH (6) 1/2" DIA.
BOLTS x 1/2" LONG WITH
HEX NUTS

(1) REQ'D. PER MANWAY

(6) 5/8" DIA. HOLES
EQUALLY SPACED
MATCH COVER PLATE TO FLANGE

SECTION THRU MANWAY

COVER PLATE

1/4" PLATE RING x 5 1/2" WIDE x 6'-4 7/8" LONG
ROLL TO 24" I.D.

3/16
FIELD WELD

ROOF PLATES

CUT 24" DIA. HOLE
FOR MANWAY. GRIND INSIDE EDGE SMOOTH

NOTE: QUANTITIES REQUIRED
(1) FOR PROJECT

PITTSBURG TANK & TOWER CO.
ELEVATED DIVISION, INC.
HENDERSON, KY

REV/DAT 24" DIA. VENT/PAINTERS MANWAY

1 10000 M x 70' TORO ELEVATED TANK
FOUR STAR INDUSTRIAL PARK, HENDERSON

4 10/01

5 24 SHEET
TANK SECTION SHOWING OUTSIDE LADDERS

NOTE: LADDERS SHALL BE EQUIPPED WITH CABLE TYPE SAFETY CLIMB DEVICES AS REQUIRED BY THE PROJECT SPECIFICATIONS.
PLAN VIEW COLUMN PIER

ELEV. 100.0' TOP OF PIERS
GRADE ELEV. 99.5'

CHAMFER 1 1/2" x 45°
6" ANCHOR BOLT PROJECTION
COLUMN PIER 5'-0" SQ.
(8) NO. 6 DOWELS MK-E
(5) NO. 4 TIES MK-F
2 x 6 CONSTRUCTION KEYWAY x 2'-6" LONG
NO. 5 BARS @ 12" O.C.
(18) BARS EA. WAY MK-A

SECTION THRU COLUMN PIER

NO. 9 BARS @ 10" O.C.
(18) BARS EA. WAY MK-A

6'-6"
4'-3"
2'-3"
1'-3"

15'-9" SQUARE

COLUMN ANCHOR BOLTS
(9 SETS REQUIRED)

1 1/2" HEX NUTS
6" THREADS
1 1/2" DIA. BAR
HOT ROLLED 36 KSI YIELD
3/8" x 2 1/2" FLAT BARS
x 3'-4" 1/2" LONG
1/2" PLATE x 6" x 6"

(2) 1 1/2" ANCHOR BOLTS

TIES MK-D
(8) DOWELS MK-C

COL. PIER REINF. PLAN VIEW

QUANTITIES: (TOTAL 9 PIERS)
CONCRETE = 165.0 CUBYDS
STEEL = 22729 LBS.
PLAN VIEW RISER PIER

1.1/4" HEX NUTS
4" THREADS
1 1/4" DIA. BAR X 3'-0" LONG
HOT ROLLED 36 KSI YIELD
1/2" PLATE 4" X 4"

(4) 1 1/4" ANCHOR BOLTS ON 8'-0" DIA. BOLT CIRCLE

RISER ANCHOR BOLTS
(4 REQUIRED)

ELEV. 102.0' TOP OF PIER
GRADE ELEV. 99.5'

CHAMFER 1 1/2" X 45
-18" STEEL PIPE SLEEVE X 2'-6" LONG

(10) NO. 11 BARS EQ. SP. MK-G (OVER OPENING)

4" ANCHOR BOLT PROJECTION

RISER PIER 9'-0" SQ.

(9) NO. 6 DOWELS MK-C (3 FACES)

(5) NO. 6 DOWELS MK-E EQSP (3 FACES)
(4) NO. 4 TIE BARS @ 10" OC MK-F
(6) NO. 4 TIES MK-D
NO. 5 BARS @ 20" O.C.
EA. WAY MK-B

QUANTITIES: (TOTAL 1 PIER)
CONCRETE = 69.1 CU YDS
STEEL = 11961 LBS

SECTION THRU RISER PIER

PITTSBURG TANK & TOWER CO.
ELEVATED DIVISION, INC.
HENDERSON, KY

FOUNDATION RISER PIER DETAILS

100x10 40' ELEVATED TANK
FOUR STAR INDUSTRIAL PARK, HENDERSON

REV/BUY
1 12-14-08 B.G.
2 RIO C157 CAT 6 N00004 16-01
3 10/01 L-01
4 1500 RIGS 08/01
5 14-08 L-01
96" OD RISER

1/2" RE PLATE x 28" OD x 16 1/4" ID

18" OD STEEL SLEEVE

FP2 16" FLANGED x MJ ELBOW

RISER PIER

CONCRETE THRUST BLOCK
BY FOUNDATION SUB-CONTRACTOR

16" DUCTILE IRON PIPE
TO EXTERNAL VALVE PIT

SECTION VIEW OF 16" INLET PIPE AT RISER PIER

16" 150# S.O.W.F.

16" x 500" WALL STEEL PIPE
x 6'-6" 3/4" LONG

8'-7 1/4"

INLET PIPE FP3
(1) REQ'D. EACH

16" C.I. FLANGE TO MJ.
90° BASE ELBOW

INLET PIPE FP-2
(1) REQ'D.

NOTE: FURNISH GASKETS & BOLTS AS REQ'D.