48" DIAMETER VAULTS

NOTE: ON ALL 48", 54", 60 AND 72" VAULT SECTIONS WITH PIPE PASSES, THE
STEPS SHALL BE AT A 60° ANGLE FROM THE
RUN OF THE PIPE PASSES.
NOTE: ON ALL 48", 54", 60" AND 72" VAULT SECTIONS WITH PIPE PASSES, THE STEPS SHALL BE AT A 60° ANGLE FROM THE RUN OF THE PIPE PASSES.

INSTALL 3 LIFTING CABLES ON ALL 48", 54", 60" AND 72" MANHOLE SECTIONS. THE LIFTING CABLES SHALL BE 3/4" WIRE, 5/8" OFFSET AS MANDATED. THEY SHALL NOT BE WITHIN 6" OF THE MANHOLE DRAWING OR AS NEAR TO INTERSECT WITH DECKING OF MANHOLE RISERS OR COVER.

TOP VIEW OF FLAT TOP SECTION

48" X 48" BARREL SECTION

12'-100-15

48" X 32" BARREL SECTION

12'-100-16

48" X 16" BARREL SECTION

12'-100-13

24" X 8" RISER SECTION

12'-100-08

24" X 4" RISER SECTION

12'-100-09

24" X 8" ECCENTRIC CONE SECTION

12'-100-07

48" X 24" ECCENTRIC CONE SECTION

12'-100-07

48" X 12" ELLIPSE TOP SECTION

12'-100-10

26" X 8" RISER SECTION

12'-100-16

26" X 4" RISER SECTION

12'-100-11

METROPOLITAN UTILITY DISTRICT
OMAHA, NEBRASKA

DRAWING 416235

PAGE 3 OF 11

SCALE: NONE
DRAWN BY: W.T.T.

DATE: 5-2001

SIGNER, CHK. BY: 

REVISED DATE: 10-2008
REV. CHK. BY: M.K.M.

...\Dwg 416235 Final.dgn 6/11/2010 8:14:16 AM
**54" DIAMETER VAULTS**

**NOTE:** ON ALL 48", 54", 60" AND 72" VAULT SECTIONS WITH PIPE PASSES, THE STEPS SHALL BE AT A 60° ANGLE FROM THE RUN OF THE PIPE PASSES.

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**LAP JOINT DETAIL**

1%  
4½"  
2½"  
5½"

**LAP JOINT 54" DIAMETER SECTIONS**

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**54" x 16" BARREL SECTION**

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**54" x 12" BARREL SECTION**

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**54" x 48" BARREL SECTION**

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**METROPOLITAN UTILITY DISTRICT**

OMAHA, NEBRASKA

**SCALE:** NONE

**DRAWN BY:** W.J.T.

**DATE:** 3-2001

**ENGINEER CHK. BY:**

**REV. CHK. BY:** M.G.M

**DRAWING 416235**

PAGE 4 OF 11

30", 48", 54", 60" AND 72" PRECAST MANHOLE SECTIONS
NOTE: ON ALL 48", 54", 60 AND 72" VAULT SECTIONS WITH PIPE PASSES, THE STEPS SHALL BE AT A 60° ANGLE FROM THE RUN OF THE PIPE PASSES.
NOTE: ON ALL 48", 54", 60" AND 72" VALSET SECTIONS WITH PIPE PASSES, THE STEPS SHALL BE AT A 60° ANGLE TO THE RUN OF THE PIPE PASSES.

60" x 30" BARREL SECTION
WITH SPECIAL OPENING
FOR BUNKER FILTZ
19-101-06

60" x 32" BOTTOM SECTION
W/ SPECIAL 26" RING BLANK
OUT OF THE JOINT UP
19-101-10

60" x 12½" FLAT TOP SECTION
WITH 16" OPENING
19-101-14

60" x 12½" FLAT TOP SECTION
WITH 16" OPENING
19-101-11

INSTALL LIFTING CABLES ON ALL 48", 54", 60" AND 72" CONCRETE FLAT TOPS. THE LIFTING CABLES SHALL BE 3/8" MIN. INCH DIAMETER. THE CABLES SHALL PASS THROUGH THE HOLES OR Be DRILLED THROUGH THE HOLES. THE CABLES SHALL BE TYPED TO CAPTURE WITH A SUPERIMPOSED MARKER. 72" MANHOLE OPENINGS OR COWS.

60" x 40" BARREL SECTION
19-101-04

60" x 48" BARREL SECTION
19-101-08

60" x 32" BARREL SECTION
19-101-07

60" x 16" BARREL SECTION
19-101-09

TOP VIEW OF FLAT TOP SECTION

METROPOLITAN UTILITY DISTRICT
OMAHA, NEBRASKA

SCALE: NONE
DRAWN BY: JAZ
DATE: 10-2009
ENG'T CHK'D BY:
REV. CHK'D BY: MKM

DRAWING 416235
PAGE 8 OF 11
30", 48", 54", 60" AND 72" PRECAST MANHOLE SECTIONS
NOTE: ON ALL 48", 54", 60, AND 72" VAULT SECTIONS WITH PIPE PASSES, THE STEPS SHALL BE AT A 60° ANGLE FROM THE RUN OF THE PIPE PASSES.
NOTE: ON ALL 48", 54", 60" AND 72" VAULT SECTIONS WITH PIPE PASSES, THE STEPS SHALL BE AT A 60° ANGLE FROM THE RUN OF THE PIPE PASSES.

INSTALL LIFTING CABLES ON ALL 48", 54", 60" AND 72" CONCRETE FLAT TOPS. LIFTING CABLES SHALL BE 5% MIN. AND PLACED AS EVEN AS POSSIBLE. THEY SHALL NOT BE WITHIN 6" OF THE MANHOLE TRIM. SO AS NOT TO INTERFERENCE WITH CLEANOUT OR MANHOLE RISERS OR COVERS.

TOP VIEW OF FLAT TOP SECTION

# DENOTES CHANGE
NOTE: ON ALL REGULATOR VAULT SECTIONS WITH WALL SLEEVES, THE STEPS SHOULD BE AT A 90° ANGLE FROM THE RUN OF THE PIPE SLEEVES.

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60” x 32” SPECIAL BOTTOM SECTION
FOR VAULT W/ WELD SLEEVE 14” x 6’
19-101-24

1” Diameter
LEADING RISER
BOTH SIDES

60” x 32” BOTTOM SECTION
WITHOUT WALL SLEEVES
19-101-20

1” Diameter
LEADING RISER
BOTH SIDES

WALL SLEEVES FOR 60” REGULATOR VAULTS
SCHEDULE NO. OUTLET INCHES
INLET INCHES

- 4"
- 6"

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METROPOLITAN UTILITY DISTRICT
OMAHA, NEBRASKA

DRAWMN BY: JAZ
DATE: 10-2008
ENG’L CHK BY:
REVISED DATE: 10-2008
REVC. CHK. BY: MMOM

30”, 48”, 54”, 60” AND 72” PRECAST
MANHOLE SECTIONS
PAGE 10 OF 11

DRAWING 416238
NOTE: ON ALL REGULATOR VAULT SECTIONS WITH WALL SLEEVES, THE STEPS SHOULD BE AT A 90° ANGLE FROM THE RUN OF THE PIPE SLEEVES.