

ADOPTED AS STANDARD DESIGN BY
CITY OF WICHITA, KANSAS

CITY OF WICHITA KANSAS SEWER DEPT.

FOUNDRY 1992

CHECKERED PATTERN TOP

CLOSED PICKHOLE (SEE DETAIL)

PICKHOLE

2"

1"

1-3/8"

1"

TOP VIEW

1. MANHOLE CASTINGS SHALL BE MANUFACTURED USING GOOD QUALITY GRAY IRON CONFORMING TO CLASS 30 A.S.T.M. DESIGNATION. ALL DIMENSIONS AND WEIGHTS SHOWN ON THE DETAILED DRAWINGS SHALL BE CONSIDERED AS MINIMUM REQUIREMENTS AND ANY DEVIATIONS FROM THE DIMENSIONS SHOWN MUST BE SPECIFICALLY APPROVED. THE FINISHED CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE DISTORTIONS OR OTHER DEFECTS.
2. MANHOLE CASTINGS SHALL WEIGH A MINIMUM OF 180 POUNDS ON THE SOLID COVER AND 240 POUNDS ON THE MANHOLE RING. THIS IS A TOTAL OF 420 POUNDS ON A RING AND COVER SET. CASTINGS WEIGHING LESS THAN THE MINIMUM SPECIFICATIONS WILL NOT BE ACCEPTED.
3. MANHOLE CASTINGS SHALL BE MANUFACTURED SUCH THAT A COVER MANUFACTURED BY ANY ONE FOUNDRY WILL FIT INTERCHANGEABLY INTO A FRAME MANUFACTURED BY ANOTHER FOUNDRY AND STILL MEET ALLOWABLE CLEARANCES AND NON-ROCKING REQUIREMENTS. THIS WILL REQUIRE MANUFACTURING OF THE MATCHING FACES ON THE COVER AND THE FRAME TO CLOSE TOLERANCES.
4. THE OUTSIDE CIRCUMFERENCE OF THE VERTICAL FACE OF THE COVER AND THE INSIDE CIRCUMFERENCE OF THE VERTICAL FACE IN THE FRAME RECESS SHALL BE MANUFACTURED TO TOLERANCES SUCH THAT THE CLEARANCE BETWEEN THE COVER AND FRAME WILL NOT EXCEED 1/8" AT ANY POINT AROUND THE CIRCUMFERENCE OF THE COVER. THE SEATING SURFACES BETWEEN THE COVER AND FRAME SHALL BE MACHINED SUCH THAT THESE SEATING SURFACES SHALL MAKE FULL CONTACT FOR THEIR FULL CIRCUMFERENCE TO PRECLUDE THE COVER FROM ROCKING IN THE FRAME.
5. THE MANHOLE FRAME AND COVER SHALL BE MARKED WITH LETTERING INDICATING THE NAME OF THE MANUFACTURER AND THE YEAR WHEN THE COVER OR FRAME WAS CAST. THE COVER SHALL BE FURTHER IDENTIFIED WITH REGARDS TO OWNERSHIP USING LETTERS AT LEAST 1 INCH IN HEIGHT. THIS IDENTIFICATION SHALL BE "CITY OF WICHITA SEWER DEPARTMENT". THE WORD DEPARTMENT MAY BE ABBREVIATED. THE TEXTURE OF THE TOP SURFACE OF THE COVER SHALL BE MANUFACTURED IN A CHECKERED PATTERN DESIGN AS INDICATED ON THE DRAWINGS. SMOOTH BLOCKOUTS SHALL BE UTILIZED TO HIGHLIGHT THE LETTERING ON THE COVER SURFACE. THE TOTAL AREA OF SMOOTH SURFACE BLOCKOUT SHALL NOT EXCEED THE AREA AS INDICATED ON THE DRAWING. POSITIONING OF SMOOTH BLOCKOUTS AND LETTERING MAY VARY FROM THAT SHOWN ON THE DETAILED DRAWING.

2'-2" Dia.

1/16"

7/8"

2'-0"

MACHINED FINISHED SEAT

5/8"

1'-3/8"

8"

3/4"

1/2"

3/4"

2'-2-1/2"

2'-8"

2'-11-1/2"

1'-1/2"

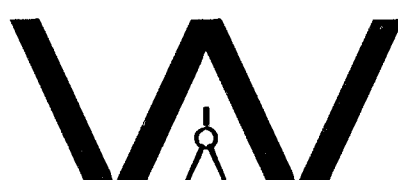
Unfin. 1 1/8"

Fin. 7/8"

SECTION 4-4

Technical drawing of a rectangular box with the following dimensions and features:

- Top width: $2'-2''$ Dia.
- Top left corner chamfer: $1/16''$ and $7/8''$.
- Top right corner chamfer: $7/8''$.
- Top surface: $2'-0''$ with three downward arrows.
- Right side: $8''$ height.
- Right side chamfer: $3/4''$ and $1/2''$.
- Bottom right corner chamfer: $5/8''$.
- Bottom width: $2'-2'-1/2''$.
- Bottom left corner chamfer: $4'-1/2''$.
- Bottom surface: $2'-11'-1/2''$ with two upward arrows.
- Internal features:
 - Left side: $12/16''$ with an upward arrow.
 - Center: $7/8''$ with an upward arrow.
 - Right side: $1''$ with a downward arrow.
- Label: *MACHINED FINISHED SEAT* with an arrow pointing to the top right corner.

THE CITY OF WICHITA  CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202 (316) 268-4501 (316) 268-4114 FAX	<i>MANHOLE FRAME AND COVER</i> PROJECT NUMBER <i>483-84185</i> OCA # <i>744185</i> DATE MAR 96 SHEET 5 OF 11
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