



## TOWN OF BUCKEYE

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Date: June 1, 2011  
To: MAG Specifications and Details Committee  
From: Scott Zipprich, Town of Buckeye Representative  
Subject: Detail 423, 424, 523-1, 523-2  
Case: 11-13

**PURPOSE:** To replace the current manhole frame and cover details with updated details of products that are currently being manufactured. This also includes referencing the proper Class and AASHO references.

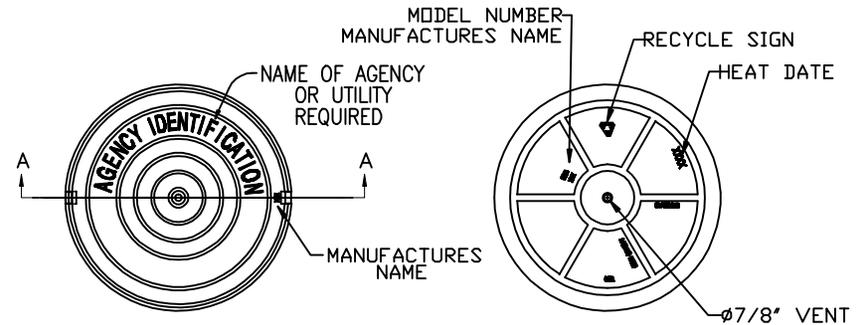
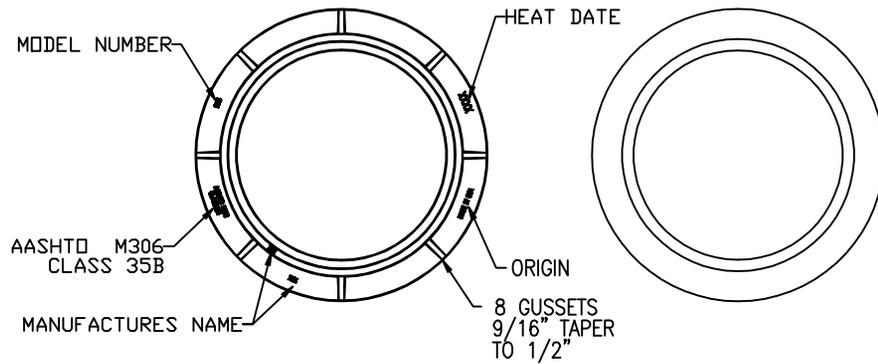
**REVISION:** The revisions will consist of replacement details 423-1, 423-2, 424-1, 424-2, 523-1 and 523-2.

FRAME TOP VIEW

FRAME BOTTOM VIEW

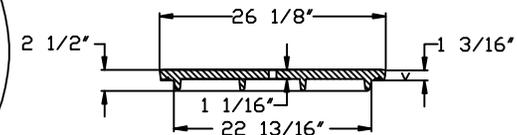
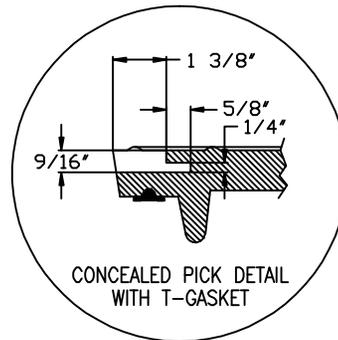
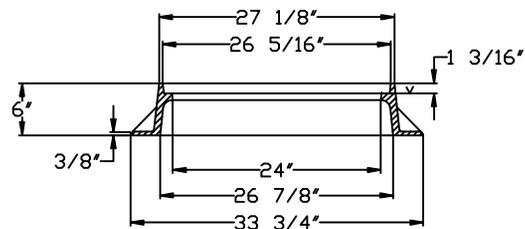
COVER TOP VIEW

COVER BOTTOM VIEW



FRAME WT. (CL. 35) - 130 LBS

COVER WT. (CL. 35) - 188 LBS



24" MANHOLE FRAME AND COVER

NOTE:

LETTERING ON MANHOLE COVER TO CONTAIN NAME OF AGENCY AND UTILITY FOR WHICH MANHOLE IS NEEDED, (I.E. "PHOENIX SANITARY SEWER"), OR AS DIRECTED. THE TOTAL WIDTH OF INDIVIDUAL LETTERS TO BE SUCH THAT LETTERS AND WORDS ARE EQUALLY SPACED AND BALANCED TO FORM A COMPLETE CIRCLE WITH SPACERS BEFORE AND AFTER THE WORD IDENTIFYING THE AGENCY INVOLVED. LETTERS TO BE 2" IN HEIGHT AND RAISED FLUSH W/ TOP OF COVER. TYPE OF LETTERS TO BE SUBMITTED FOR APPROVAL. WEIGHT OF CASTINGS SHALL BE NO MORE THAN 2% LESS THAN THE APPROXIMATE WEIGHT SPECIFIED. CASTINGS SHALL CONFORM TO ASTM A-48, CLASS 35 AND AASHTO M306. THE BEARING SURFACES OF THE FRAMES AND COVERS SHALL BE MACHINED AND THE COVERS SHALL SEAT FIRMLY WITHOUT ROCKING.

DETAIL NO.

423-1



STANDARD DETAIL  
ENGLISH

WATER TIGHT 24" CAST IRON  
MANHOLE FRAME AND COVER

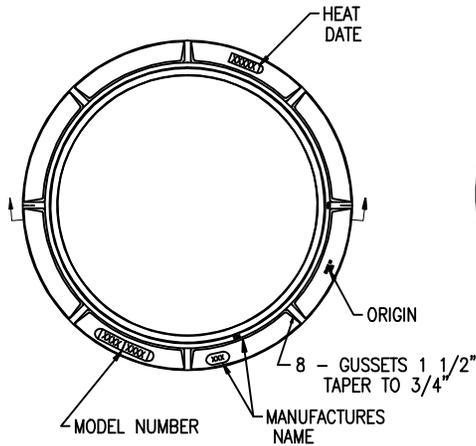
REVISED

05-26-2011

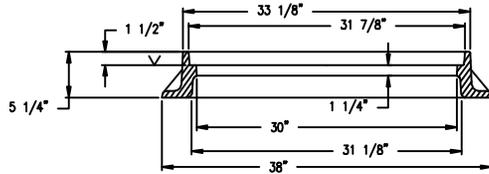
DETAIL NO.

423-1

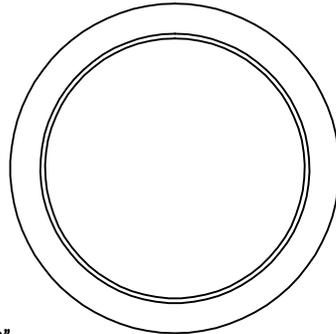
FRAME TOP VIEW



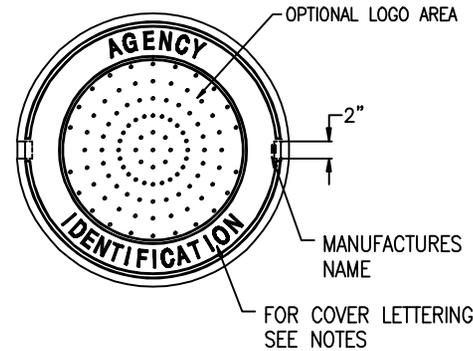
FRAME WT. (CL. 35) - 227 LBS



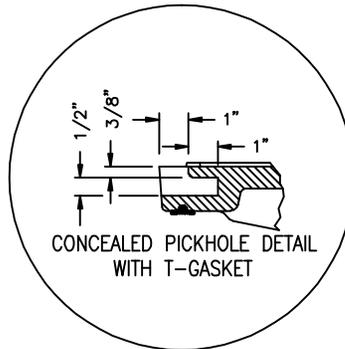
FRAME BOTTOM VIEW



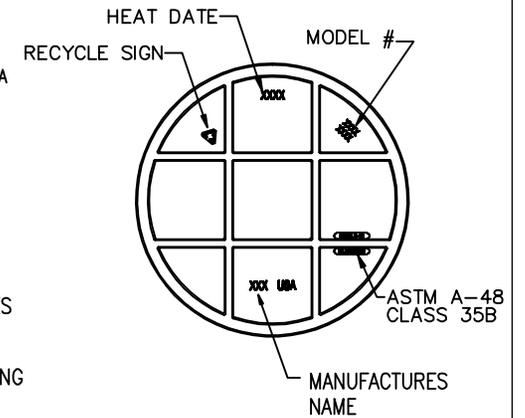
COVER TOP VIEW



COVER WT. (CL. 35) - 210 LBS



COVER BOTTOM VIEW



30" MANHOLE FRAME AND COVER

NOTE:

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DETAIL NO.  
423-2



STANDARD DETAIL  
ENGLISH

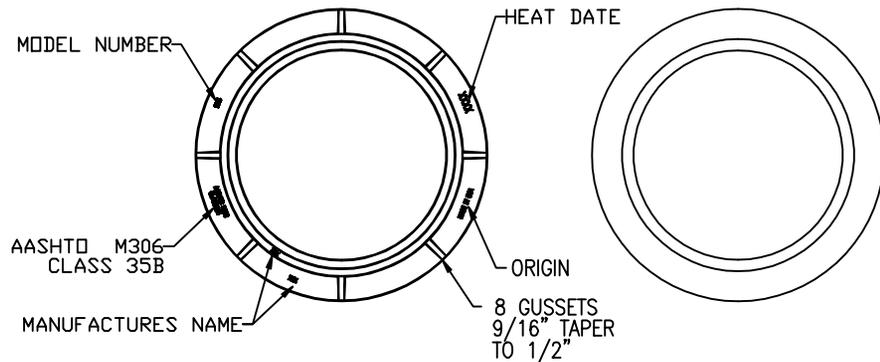
WATER TIGHT 30" CAST IRON  
MANHOLE FRAME AND COVER

REVISED  
05-26-2011

DETAIL NO.  
423-2

FRAME TOP VIEW

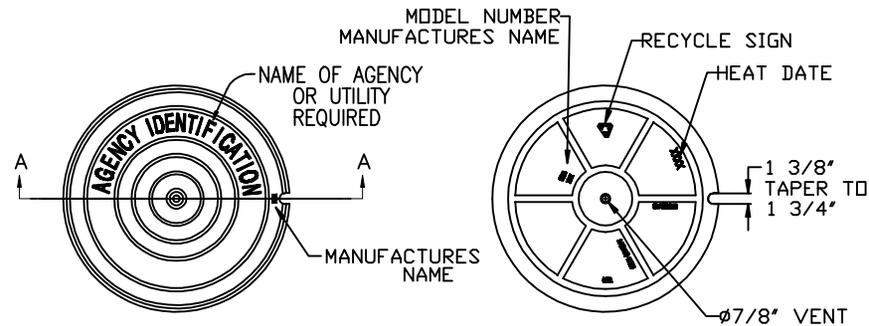
FRAME BOTTOM VIEW



FRAME WT. (CL. 35) - 130 LBS

COVER TOP VIEW

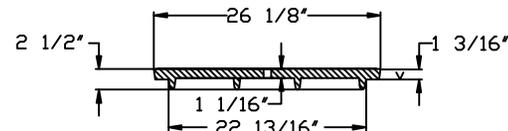
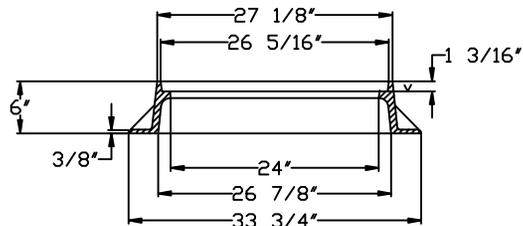
COVER BOTTOM VIEW



TOP VIEW

BOTTOM VIEW

COVER WT. (CL. 35) - 188 LBS



24" MANHOLE FRAME AND COVER

NOTE:

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DETAIL NO.

424-1



STANDARD DETAIL  
ENGLISH

24" CAST IRON  
MANHOLE FRAME AND COVER

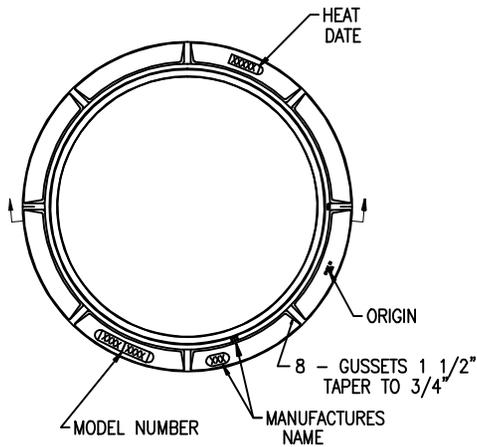
REVISED

05-26-2011

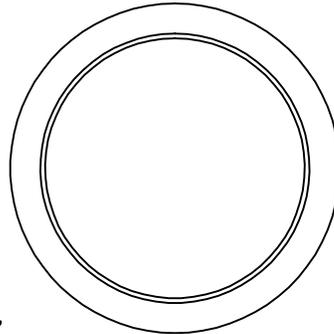
DETAIL NO.

424-1

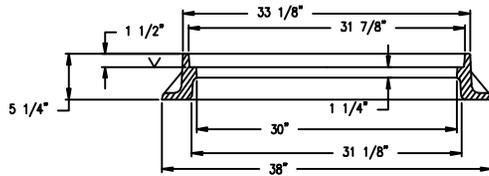
FRAME TOP VIEW



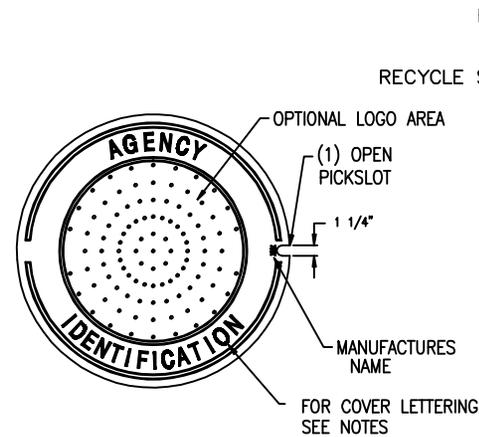
FRAME BOTTOM VIEW



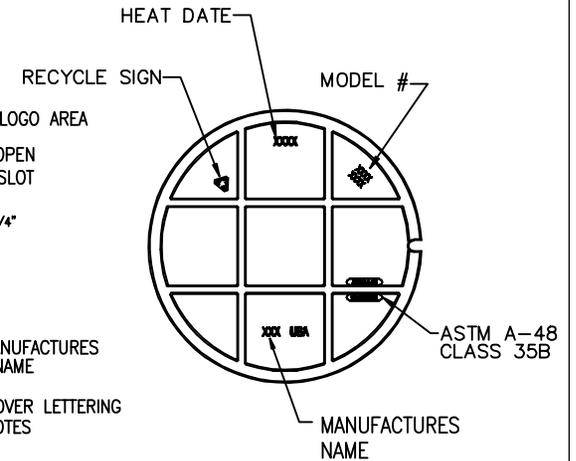
FRAME WT. (CL. 35) - 227 LBS



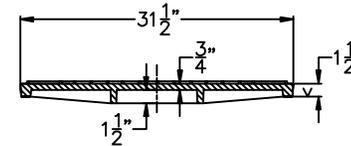
COVER TOP VIEW



COVER BOTTOM VIEW



COVER WT. (CL. 35) - 210 LBS



30" MANHOLE FRAME AND COVER

NOTE:

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DETAIL NO.  
424-2



STANDARD DETAIL  
ENGLISH

30" CAST IRON  
MANHOLE FRAME AND COVER

REVISED  
05-26-2011

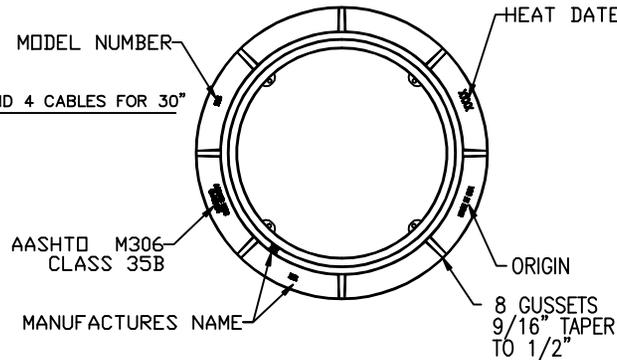
DETAIL NO.  
424-2

BOTH 24" AND 30" FRAMES TO BE ANCHORED AS FOLLOWS:

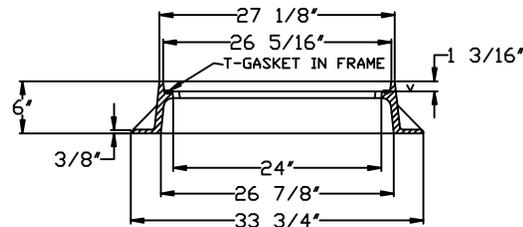
1. 1/2" HOLE IN FILLET.
2. 1/4" STAINLESS STEEL CABLE. SECURE WITH CABLE CLAMPS
3. 1/2"x9" HOOK AND EYE TURNBUCKLE.
4. 1/2" EYE BOLT WITH 1" DIA. EYE.
5. TRIPLE WRAP TURNBUCKLES AND CABLE CLAMPS WITH 1" WIDE TAPE, SAFE-T-CLAD, F.O.S. 655, OR APPROVED EQUAL.

FOR ANCHORING INSTALL 3 CABLES FOR 24" AND 4 CABLES FOR 30"

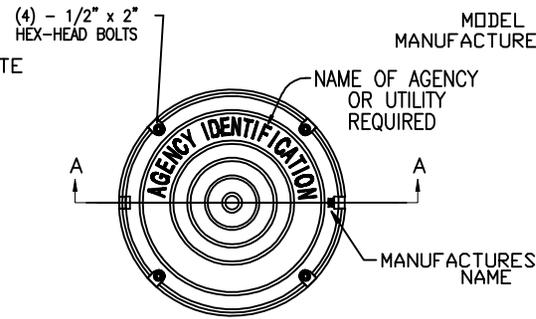
FRAME TOP VIEW



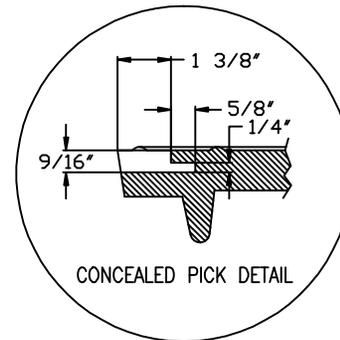
FRAME WT. (CL. 35) - 130 LBS



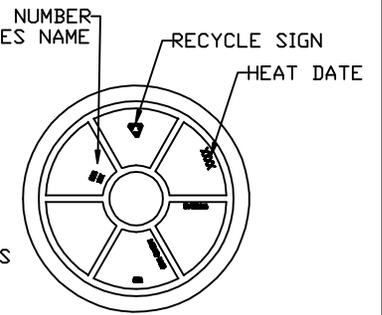
COVER TOP VIEW



TOP VIEW

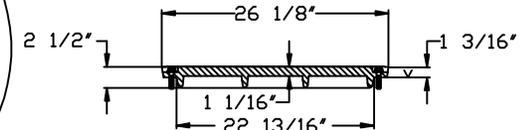


COVER BOTTOM VIEW



BOTTOM VIEW

COVER WT. (CL. 35) - 188 LBS



## 24" PRESSURE MANHOLE FRAME AND COVER

### NOTE:

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FRAME AND COVER TO BE DRILLED AND TAPPED IN SETS.

FOR ANCHORING INSTALL 3 CABLES FOR 24" AND 4 CABLES FOR 30"

DETAIL NO.

523-2



STANDARD DETAIL  
ENGLISH

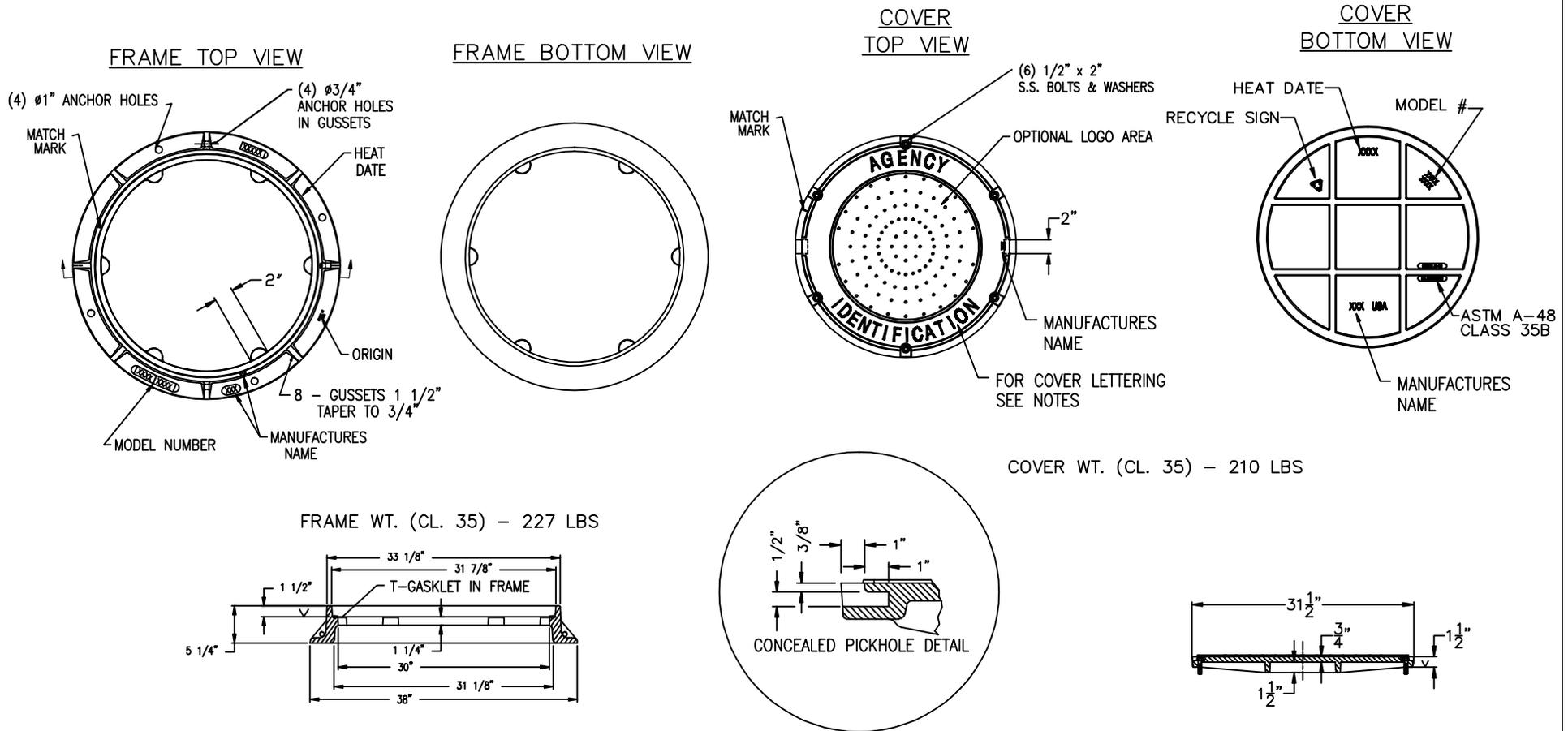
WATER TIGHT 24" CAST IRON  
PRESSURE MANHOLE FRAME AND COVER

REVISED

05-26-2011

DETAIL NO.

523-2



### 30" PRESSURE MANHOLE FRAME AND COVER

**NOTE:**

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DRILL AND TAP (6) 1/2" x 2" BOLTS AND S.S. WASHERS. COVER AND FRAME MUST BE MATCH MARKED, DRILLED AND TAPPED IN SETS. DIM.'S, WEIGHTS LETTERING AND MATERIALS SHALL CONFORM TO DET. 424. REFER TO 523-2 FOR INSTALLATION PROCEDURES.

DETAIL NO. 523-3	<b>MARICOPA ASSOCIATION of GOVERNMENTS</b>	STANDARD DETAIL ENGLISH	WATER TIGHT 30" CAST IRON PRESSURE MANHOLE FRAME AND COVER	REVISED 05-26-2011	DETAIL NO. 523-3
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