CAST IRON MANHOLE FRAME & COVER (SOUTH BAY FOUNDRY, 624 FRAME, 106 COVER, STAMPED "STORM" OR APPROVED EQUAL)—MATCH FINISHED GRADE

ASPHALT CONCRETE

CONCRETE COLLAR

PRECAST REINFORCED CONCRETE GRADE RINGS AS REQUIRED

PRECAST REINFORCED CONCRETE MANHOLE CONE

PRECAST REINFORCED CONCRETE MANHOLE PIPE SECTIONS AS REQUIRED

GROUT ALL JOINTS WITH MORTAR

TOP ONE HALF OF PIPE TO BE BROKEN OUT, 3' MIN. LENGTH

STORM DRAIN LINE

CLASS "B" CAST IN PLACE CONCRETE BASE

NOTES
1. PRECAST REINFORCED CONCRETE MANHOLE UNIT SHALL CONFORM TO A.S.T.M. C-478.
2. PIPE JOINT SHALL BE WITHIN 6 INCHES OF OUTER WALLS OF MANHOLE.
3. MANHOLE BASE TO BE TROWELED SMOOTH INSIDE.
4. MANHOLE SHALL BE CLEANED IN ACCORDANCE WITH CITY OF MANTECA SPECIFICATIONS.
5. SHORT CONE TO BE USED ONLY WHEN MANHOLE DEPTH JUSTIFIES.
6. COLLAR SHALL BE CLASS "B" CONCRETE AND CONSTRUCTED 2 1/2 INCHES BELOW FINISHED GRADE.
NOTES
1. PRECAST REINFORCED CONCRETE MANHOLE UNIT SHALL CONFORM TO A.S.T.M. C-478.
2. MANHOLE BASE TO BE TROWELED SMOOTH INSIDE.
3. MANHOLE SHALL BE CLEANED IN ACCORDANCE WITH CITY OF MANTECA SPECIFICATIONS.
4. SHORT CONE TO BE USED ONLY WHEN MANHOLE DEPTH JUSTIFIES.
5. COLLAR SHALL BE CLASS "B" CONCRETE AND CONSTRUCTED 2 1/2 INCHES BELOW FINISHED GRADE.

SEPARATION
MANHOLE
CITY OF MANTECA
PUBLIC WORKS DEPARTMENT

DATE: JAN. 2012
DRAWN BY: S. FOX
CHECKED BY: K. KIM
SCALE: NOT TO SCALE

APPROVED: 3-4-13
DIRECTOR OF PUBLIC WORKS
CAST IRON FRAME AND COVER
SHALL CONFORM TO A.S.T.M.

1" DIA.

1-5/8" SQ. X
1/8" THICK

1 1/2" DIA. (3)
HOLES EQUALLY
SPACED

9/16" RADIUS PICK HOLE

PLAN

SOUTH BAY FOUNDRY
624 FRAME, APPROX. WT. 140 LBS
106 COVER, APPROX. WT. 163 LBS.
OR APPROVED EQUAL FRAME AND COVER.

THE WORD "SEWER" FOR SANITARY SEWER OR
THE WORD "STORM" FOR STORM DRAIN AS
APPROPRIATE SHALL BE EMBOSSED ON
CENTER DISC.

SECTION A-A

1/2"

27"

25 3/4"

25 1/2"

-3/4"

1 1/16"

15/16"

13/16"

MATING SURFACES OF
FRAME & COVER
MACHINED

22 3/8"

23 7/8"

24"

31 1/2"

DATE: JAN. 2012
DRAWN BY: S. FOX
CHECKED BY: K. KIM
SCALE: NOT TO SCALE

MANHOLE FRAME
AND COVER ASSEMBLY
CITY OF MANTECA
PUBLIC WORKS DEPARTMENT

APPROVED: 3-6-13
DIRECTOR OF PUBLIC WORKS
D-3
NOTES
1. EXPOSED SURFACES OF THE FRAMES, HOODS, AND GRATES, WITH THE PARTS ASSEMBLED AND DISASSEMBLED, SHALL BE PAINTED WITH COMMERCIAL QUALITY ASPHALT PAINT AFTER TESTING AND ASSEMBLY, OR GALVANIZED.
2. FRAME, SIDE INLET, AND GRATE SHALL CONFORM TO SOUTH BAY FOUNDRY 645 FRAME, 645-8 HOOD, AND 1903 GRATE WITH CHAIN, OR APPROVED EQUAL.
3. GRATE SHALL BE CHAINED TO FRAME.
4. GRATE SHALL BE DEPRESSED 1" BELOW GUTTER PROFILE GRADE.
5. 24" PIPE BARREL SHALL BE CLASS III R.C.P.
6. 3/4" HOT DIPPED GALVANIZED STEEL BAR.
7. INSTALL STORM DRAIN MARKER PER CITY STANDARD D-7.

CURB INLET TYPE I

CITY OF MANTECA
PUBLIC WORKS DEPARTMENT

DATE: JAN. 2012
DRAWN BY: S. FOX
CHECKED BY: K. KIM
SCALE: NOT TO SCALE

APPROVED: 3-6-13
DIRECTOR OF PUBLIC WORKS
NOTES
1. EXPOSED SURFACES OF THE FRAME, HOOD, AND GRATE, WITH THE PARTS ASSEMBLED AND DISASSEMBLED, SHALL BE PAINTED WITH COMMERCIAL QUALITY ASPHALT PAINT AFTER TESTING AND ASSEMBLY, OR GALVANIZED.
2. FRAME, SIDE INLET, AND GRATE SHALL CONFORM TO SOUTH BAY FOUNDRY 1904 FRAME, 1902 HOOD, AND 1904 GRATE WITH CHAIN, OR APPROVED EQUAL.
3. PRECAST CONCRETE INLET MAY BE USED SUBJECT TO THE WRITTEN APPROVAL OF THE DIRECTOR OF PUBLIC WORKS.
4. INLET WALLS MAY BE POURED TO AN ELEVATION NOT LESS THAN 2' BELOW TOP OF CURB. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FRAME IN AND POUR THE UPPER 2' OF THE INLET MONOLITHICALLY WITH THE CURB AND GUTTER.
5. MINIMUM WALL THICKNESS TO BE 6", IF TOP OF CURB TO FLOW LINE OF PIPE EXCEEDS 4", WALL THICKNESS TO BE 8" MIN.
6. CALTRANS 'GO' INLET SHALL BE INSTALLED IN ARTERIAL ROADS.
7. 3/4" HOT-DIPPED GALVANIZED STEEL BAR.
8. INSTALL STORM DRAIN MARKER PER CITY STANDARD D-7.

CURB INLET TYPE II

CITY OF MANTECA
PUBLIC WORKS DEPARTMENT

DATE: JAN. 2012
DRAWN BY: S. FOX
CHECKED BY: K. KIM
SCALE: NOT TO SCALE

APPROVED: 3-6-15
DIRECTOR OF PUBLIC WORKS

D-5
NOTE
GRATE SHALL BE GALVANIZED AFTER FABRICATION.

STORM DRAIN BASIN
INLET/OUTLET STRUCTURE
CITY OF MANTECA
PUBLIC WORKS DEPARTMENT

DATE: JAN. 2012
DRAWN BY: S. FOX
CHECKED BY: K. KIM
SCALE: NOT TO SCALE

APPROVED: 3-6-13
DIRECTOR OF PUBLIC WORKS

D-6
NOTES
1. ALL STORM DRAIN INLETS SHALL BE MARKED "NO DUMPING – DRAINS TO RIVER."
2. STORM MARKERS AND ADHESIVE MUST BE PURCHASED FROM THE CITY OF MANTECA.
3. ALTERNATE MARKERS MUST BE APPROVED BY THE DIRECTOR OF PUBLIC WORKS.

INSTALLATION
1. READ THE ADHESIVE’S CAUTIONARY STATEMENT AND FIRST AID PROCEDURES BEFORE BEGINNING INSTALLATION AS IT IS EXTREMELY FLAMMABLE.
2. MARKERS SHALL BE INSTALLED ON THE CURB AND CENTERED ON THE GRATE AS SHOWN ABOVE.
3. APPLICATION SURFACE MUST BE FLAT.
4. CLEAN APPLICATION SURFACE WITH WIRE BRUSH. SURFACE MUST BE CLEAN, DRY AND FREE OF ANY LOOSE DEBRIS.
5. APPLY ADHESIVE TO THE BACK OF THE MARKER. START 1/8" IN FROM THE OUTSIDE EDGE APPLYING AN EVEN BEAD AROUND THE ENTIRE EDGE AND THEN SPIRAL INWARD TOWARD THE CENTER AS SHOWN ABOVE.
6. PLACE MARKER ON APPLICATION SURFACE. PUSH DOWN HARD WITH A TWISTING MOTION FORCING ADHESIVE OUT FROM THE EDGE. IT IS IMPORTANT THAT ADHESIVE SEALS THE ENTIRE OUTER EDGE OF THE MARKER.