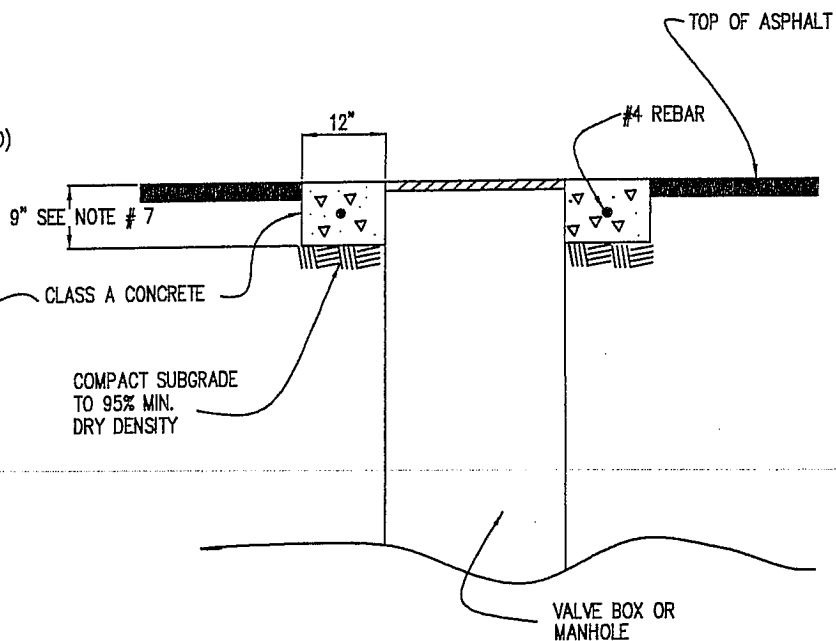
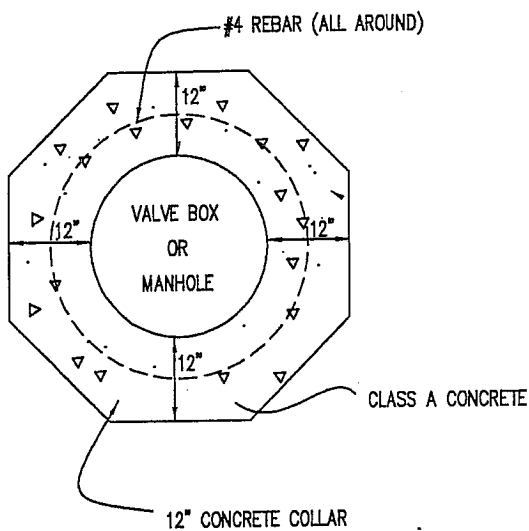


PLAN



SECTION



PLAN
OPTIONAL

NOTES:

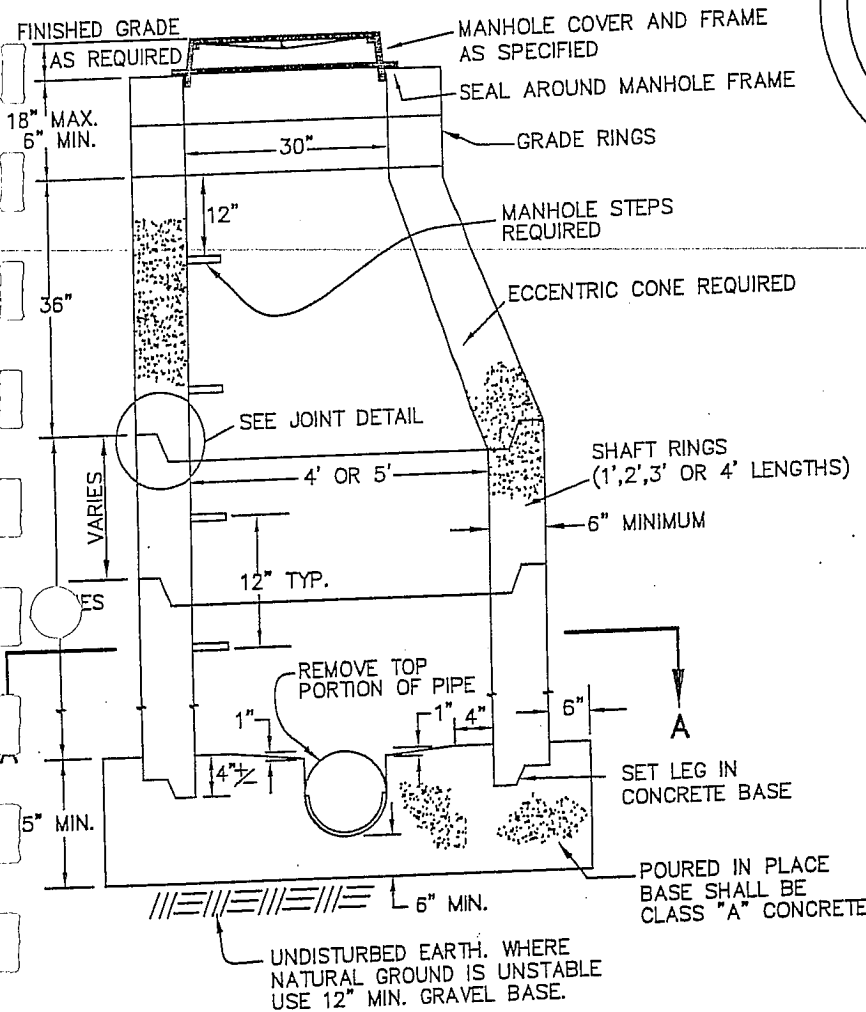
- 1- MANHOLES, VALVE BOXES AND OTHER SIMILAR ITEMS SHALL BE ADJUSTED TO GRADE AFTER PAVING IS COMPLETE.
- 2- THE SURFACE OF THE ADJUSTED RING SHALL MATCH THE GRADE OF THE CONCRETE COLLAR. CONCRETE COLLAR SHALL BE 1/8" - 1/4" LOWER THAN ASPHALT.
- 3- ASPHALT SHALL BE CUT IN STRAIGHT VERTICAL LINES.
- 4- ADJUSTMENTS TO GRADE SHALL BE MADE WITH STANDARD RINGS OR EXTENSIONS OR AS APPROVED BY THE CITY REPRESENTATIVE.
- 5- ALL MANHOLES, VALVE BOXES AND OTHER SIMILAR ITEMS SHALL HAVE CONCRETE COLLAR AS REQUIRED UNLESS OTHERWISE APPROVED.
- 6- 9" THICK COLLARS SHALL BE REINFORCED.
12" THICK COLLARS DO NOT REQUIRE REINFORCEMENT.
- 7- MARK CONCRETE COLLAR ON WATER VALVE BOXES WITH ARROW INDICATING DIRECTION OF FLOW.

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

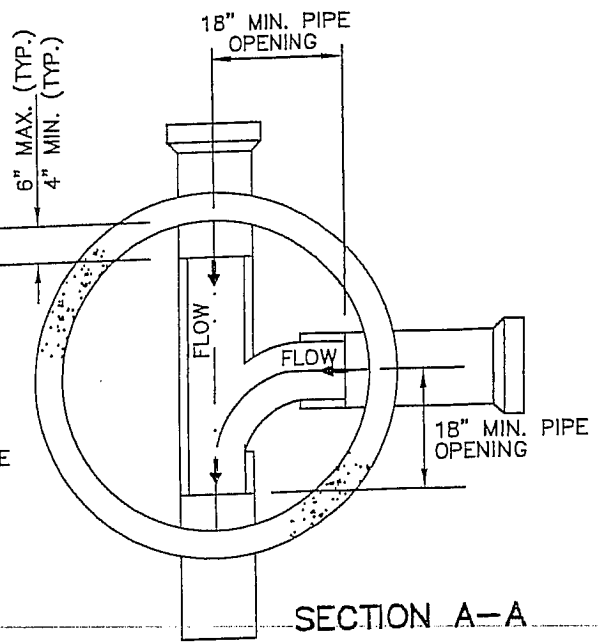
**MANHOLES & VALVE BOXES
CONCRETE COLLAR**

REVISIONS		
DATE	DESCRIPTION	BY

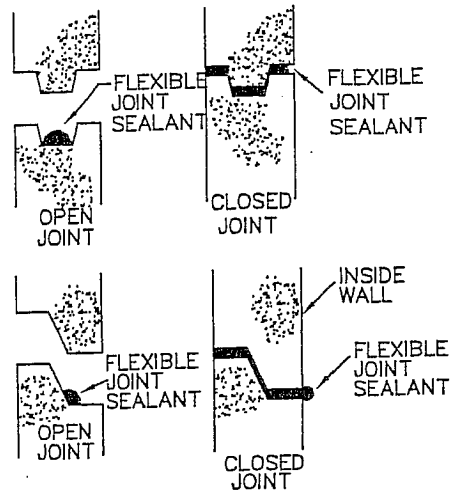
STANDARD DWG. NO.	
171	1 OF 1
APPROVED:	
DATE:	BY: LBB



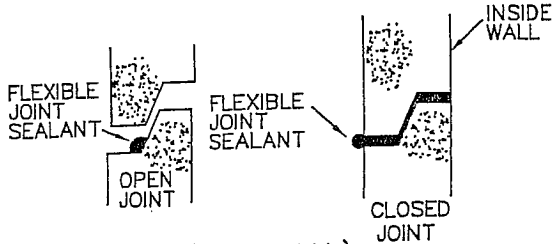
SECTION THRU CENTER



SECTION A-A



(STANDARD)



(OPTIONAL)

JOINT DETAILS

- NOTES:
- 1- SEE DRAWING NO. 220 FOR JUNCTION AND DROP MANHOLE SIZES.
 - 2- PRECAST BASE MAY BE USED, BUT REQUIRES ADVANCED APPROVAL.
 - 3- IF OPTIONAL JOINT IS USED, ALL MANHOLE SECTIONS SHALL BE CLEARLY MARKED ON THE INSIDE AS TO THE MANUFACTURER AND TYPE OF JOINT BEING USED.
 - 4- ALL MANHOLE SECTIONS SHALL BE CLEARLY MARKED ON THE INSIDE AS TO MANUFACTURER AND DATE OF MANUFACTURE.

NO SCALE

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

STANDARD MANHOLE
DETAILS

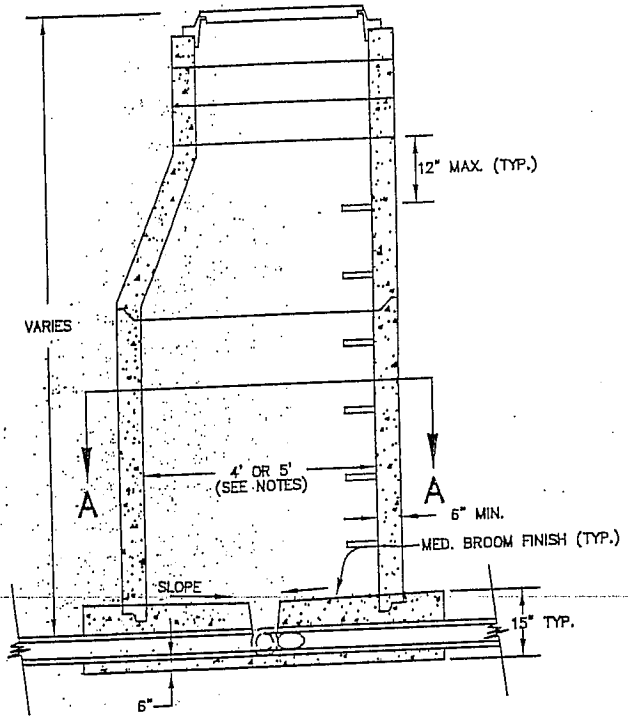
STANDARD DWG. NO.

220 1 OF 1

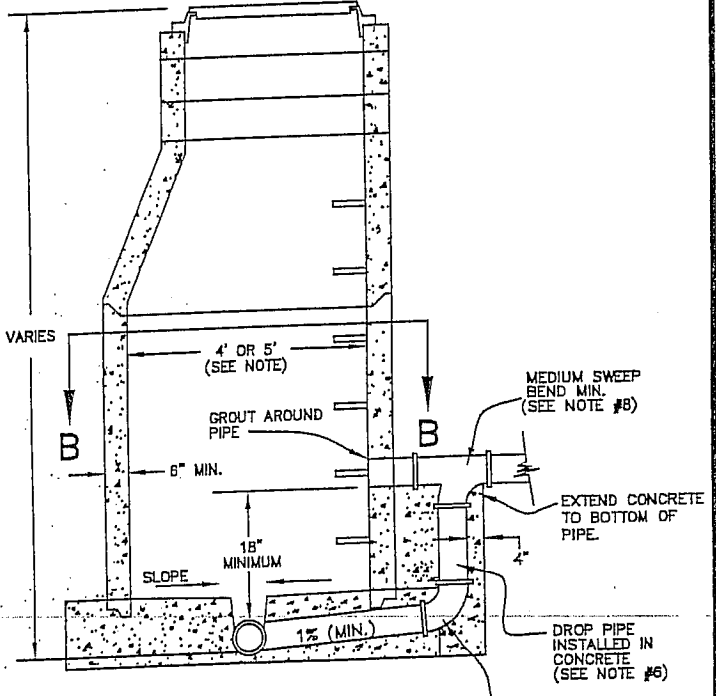
APPROVED: *[Signature]*

DATE: 9/09 BY: LBB

REVISIONS		
DATE	DESCRIPTION	BY
7-2004	ADDED NOTE 4	LBB



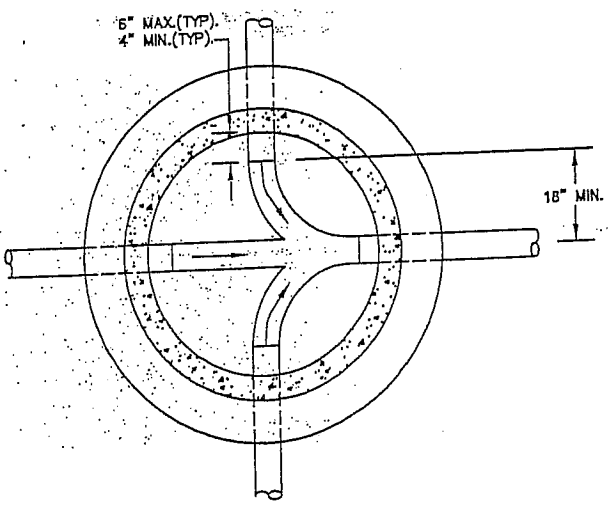
TYPICAL JUNCTION MANHOLE
(SECTION THRU CENTER)



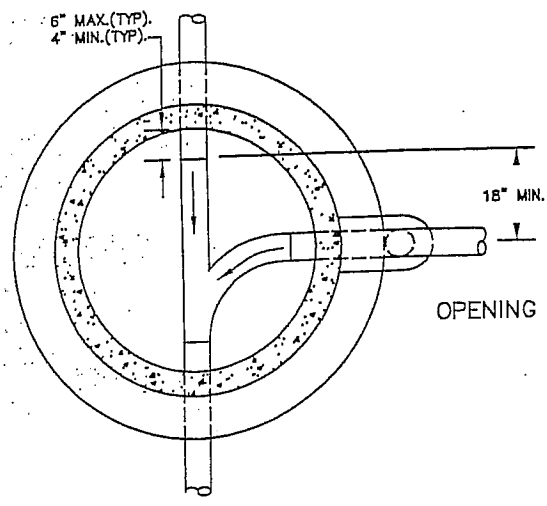
TYPICAL DROP MANHOLE
(SECTION THRU CENTER)

NOTES:

- 1- FOR SEWER PIPES LESS THAN 12-INCH DIAMETER USE 4-FOOT DIAMETER MANHOLE.
- 2- FOR SEWER PIPES WITH 12-INCH OR GREATER DIAMETER USE 5-FOOT DIAMETER MANHOLE.
- 3- WHEN THE SUM OF ALL PIPE SIZES CONNECTED TO THE MANHOLE TOTALS 24 INCHES OR GREATER USE A 5-FOOT DIAMETER MANHOLE.
- 4- WHEN SEWER DEPTH IS 12 FEET OR GREATER USE A 5-FOOT DIAMETER MANHOLE.
- 5- SEE DRAWING NO. _____ FOR ADDITIONAL DETAILS.
- 6- VERTICAL DROP PIPE AND FITTINGS SHALL BE THE SAME SIZE AS THE INCOMING SEWER PIPE.
- 7- NO LATERALS SHALL BE INSTALLED DIRECTLY INTO MANHOLES UNLESS PRIOR APPROVAL BY CITY REPRESENTATIVE.
- 8- BENDS CAN BE 45° OR 90° - (90° IS SHOWN) ALL OTHER REQUIREMENTS ARE THE SAME.



SECTION A-A



SECTION B-B

NO SCALE

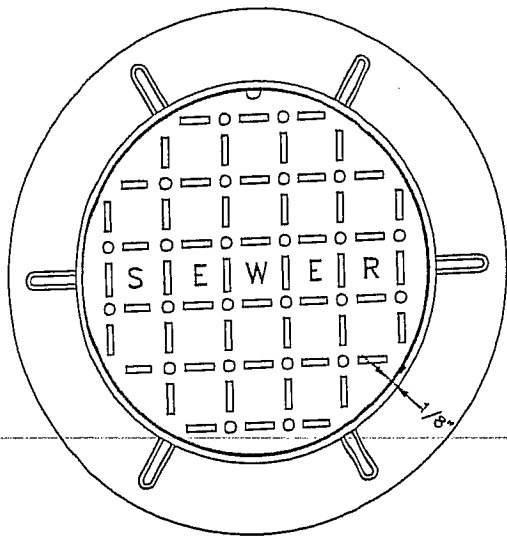
CITY OF ST. GEORGE ENGINEERING DEPARTMENT

**JUNCTION & DROP MANHOLE
DETAILS**

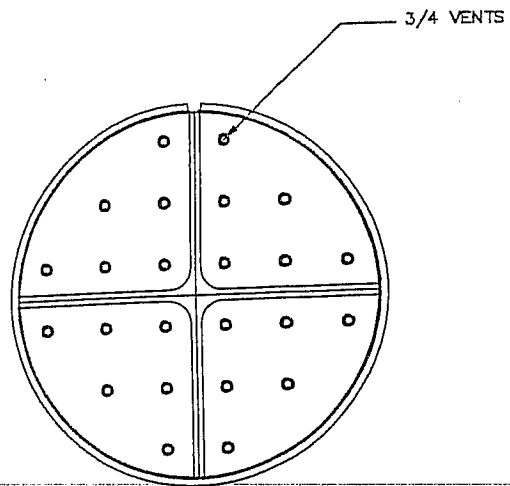
STANDARD DWG. NO.
221 | 1 OF 1

REVISIONS		
DATE	DESCRIPTION	BY
B-2004	REVISED DROP/ADDED NOTES 7-B	LBB

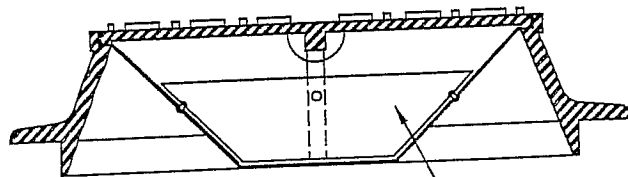
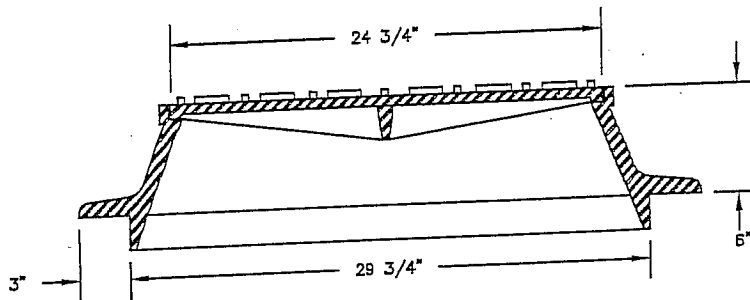
APPROVED: *[Signature]*
DATE: 9/09 | BY: LBB



PLAN OF COVER & RING



BOTTOM VIEW OF COVER



SECTIONS

DUST PAN
ALUMINUM OR GALVANIZED
(WHERE REQUIRED)

NOTES:

- 1- FOR SANITARY SEWER SEE DETAIL NO. 224.
- 2- USE OF MANHOLE TO BE CLEARLY MARKED ON EACH LID. E.G. "STORM SEWER".
- 3- MUST MEET HS-20 LOADING.

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

MANHOLE FRAME & COVER
DETAILS

STANDARD DWG. NO.

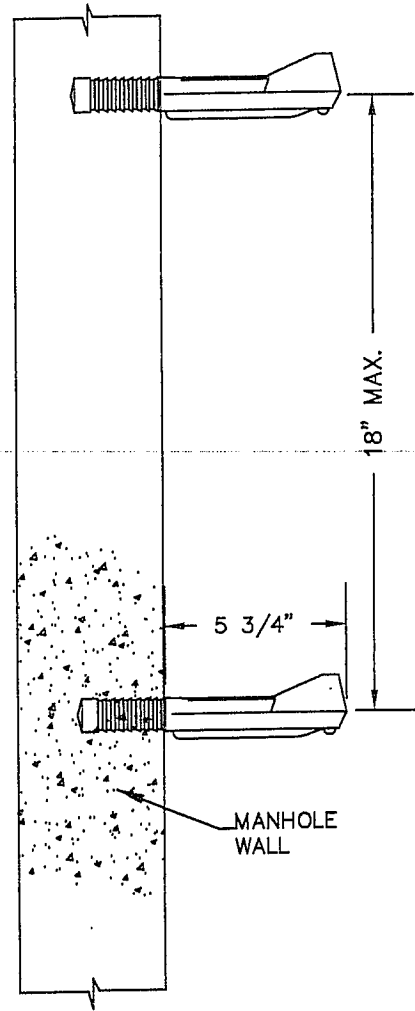
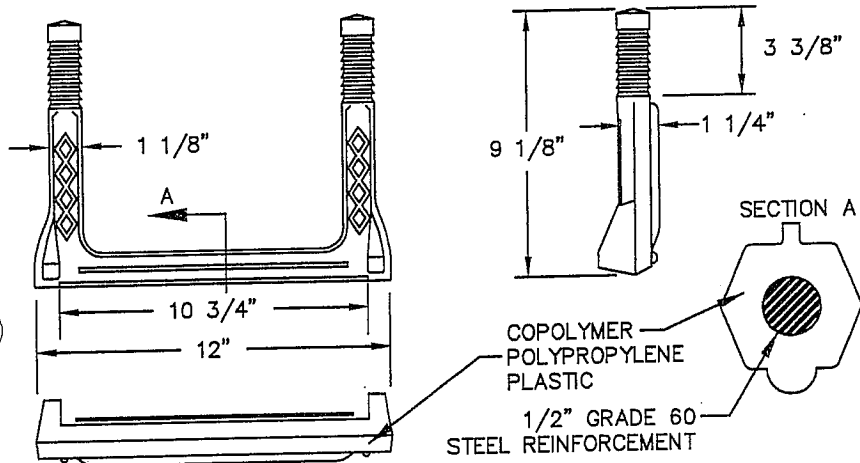
222 | 1 OF 1

APPROVED: *[Signature]*

DATE: 9/09

BY: LBB

REVISIONS		
DATE	DESCRIPTION	BY
8-2004	ADDED NOTES	LBB



MANHOLE STEPS

NOTES:

- 1- INSTALL STEPS PER MANUFACTURERS RECOMMENDATIONS.
- 2- STEPS SHALL BE ALIGNED VERTICALLY.

CITY OF ST. GEORGE ENGINEERING DEPARTMENT

MANHOLE STEP DETAILS

REVISIONS		
DATE	DESCRIPTION	BY

STANDARD DWG. NO.	
223	1 OF 1
APPROVED:	
DATE:	BY: LBB