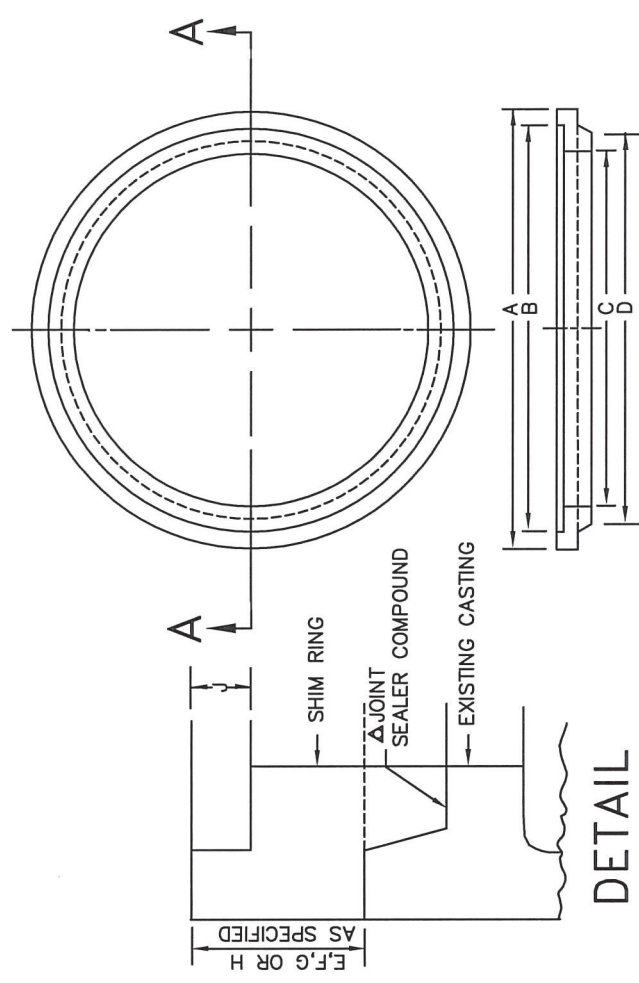


**INSTALLATION OF BRICK AND MORTAR**

1. ALL MANHOLES ADJUSTED WITH BRICK AND MORTAR PRIOR TO MACHINE PAVING ARE PERMITTED TO BE ROUND CUT.
2. IF NEW ADJUSTMENT OF MANHOLE ELEVATES CASTING GREATER THAN 12" ABOVE CORBEL SECTION OF MANHOLE, THAT MANHOLE SHALL BE RECONSTRUCTED IN ACCORDANCE WITH 604.03 OF THE CITY SUPPLEMENT OF THE STATE OF OHIO CONSTRUCTION AND MATERIAL SPECIFICATIONS.
3. IF NEW ADJUSTMENT OF EXISTING MANHOLE IS LESS THAN 12" ABOVE CORBEL, THE CASTING SHALL BE CUT OUT TO TOP OF EXISTING MASONRY.
4. APPLY TACK COAT TO INSIDE EDGE OF CUT AND TO MANHOLE CASTING PRIOR TO PLACING ASPHALT.
5. THE CASTING SHALL THEN BE RAISED WITH A COMBINATION OF WHOLE AND/OR HALF BRICKS AND MORTAR TO DESIRED HEIGHT. THESE ADJUSTMENTS SHALL BE IN ACCORDANCE WITH 604.05 OF THE STATE OF OHIO CONSTRUCTION AND MATERIALS SPECIFICATIONS.
6. A MINIMUM OF TWO LIFTS OF ASPHALT SHALL BE USED FROM BOTTOM OF CUT TO EXISTING STREET PAVEMENT.
7. ADD STORAGE MIX BLACKTOP TO FORM RAMP TO LIP OF CASTING. TAMP FIRMLY. RAMP SHALL BE REMOVED IMMEDIATELY PRIOR TO MACHINE PAVING.
8. ALL MANHOLE FRAMES AND COVERS, OTHER THAN STANDARD, SHALL BE REPLACED WITH STANDARD CASTINGS. (ACC. NO. 49005)

NOTE: BRICK & MORTAR ADJUSTMENT CAN ONLY BE USED WITH SPECIAL PERMISSION FROM MSD OR THEIR REPRESENTATIVES.  
(SEE ACC. NO. 49058-A FOR TYPICAL MANHOLE ADJUSTMENT STANDARD.)



**SECTION A-A SECTION A-A**

CASTING MANHOLE	DIMENSIONS IN INCHES									
	A	B	C	D	E	F	G	H	J	
MATERIAL - ASTM DESIGNATION: A-48, CLASS 40 CAST IRON	26	24	2 1/2	2 3/4	1 1/2	2	2 1/2	3	1	

**INSTALLATION OF SHIM RING\***

1. CLEAN CASTING WITH WIRE BRUSH.
  2. INSERT SHIM AND CHECK FIT.
  3. IF SHIM DOES NOT FIT PROPERLY, CASTING SHALL BE ADJUSTED BY USING BRICK AND MORTAR.
  4. REMOVE SHIM AND APPLY JOINT SEALER COMPOUND TO CASTING SEATING SURFACE.
  5. INSERT SHIM ON CASTING - STACKING OF RINGS SHALL NOT BE PERMITTED.
  6. USE PAVING BREAKER TO CUT OUT AROUND CASTING, 6"W. X 1 1/2"D.
  7. ADD STORAGE MIX BLACKTOP TO CUT AND FORM RAMP TO LIP OF CASTING. TAMP FIRMLY. RAMP SHALL BE REMOVED IMMEDIATELY PRIOR TO MACHINE PAVING.
  8. ALL MANHOLE FRAMES AND COVERS, OTHER THAN STANDARD, SHALL BE REPLACED WITH STANDARD CASTINGS. (ACC. NO. 49005)
- \* IN ACCORDANCE WITH 706.10 OF THE STATE OF OHIO CONSTRUCTION AND MATERIALS SPECIFICATION.

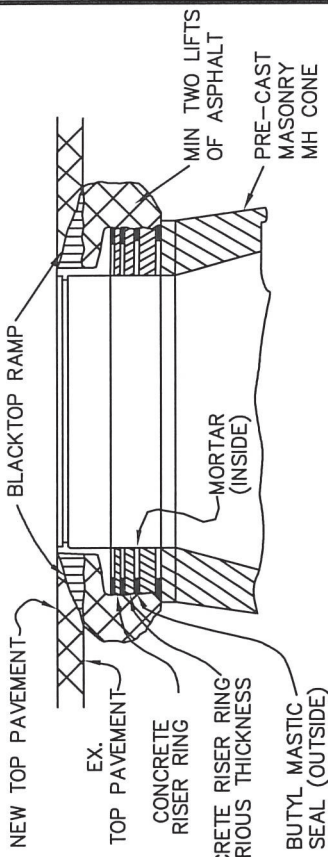
THE  
METROPOLITAN SEWER DISTRICT  
OF  
GREATER CINCINNATI

**SANITARY MANHOLE ADJUSTMENT  
USING BRICK AND MORTAR  
PRIOR TO MACHINE PAVING**

NO SCALE DATE: MAY 2016

APPROVED: *P. Anstett*  
SEWERS CHIEF ENGINEER

(FORMERLY ACC. NO. 53941)



**INSTALLATION OF CONCRETE RINGS AND MORTAR**

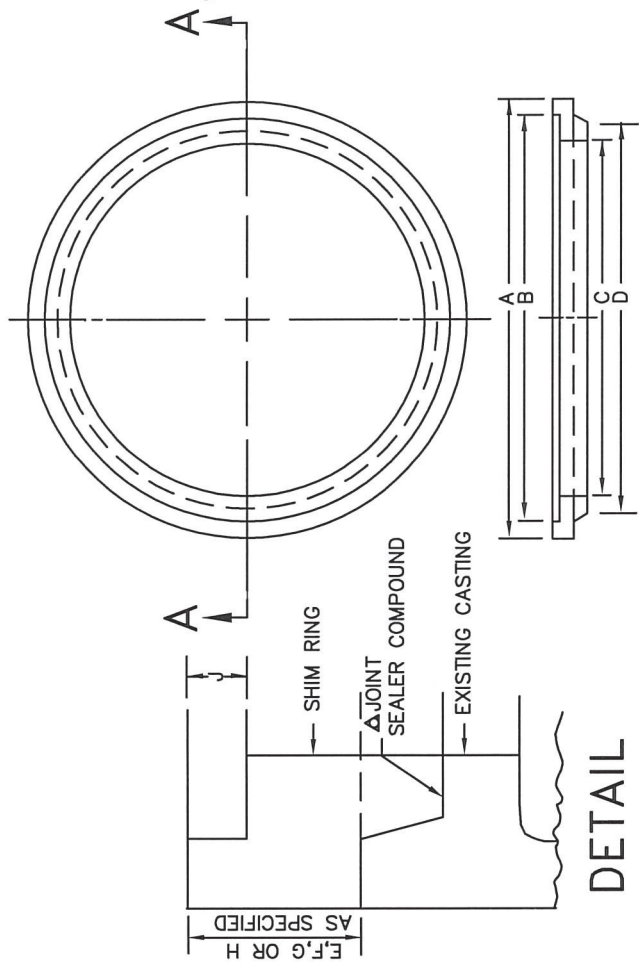
1. ALL MANHOLES ADJUSTED WITH CONCRETE RINGS AND MORTAR PRIOR TO MACHINE PAVING ARE PERMITTED TO BE ROUND CUT.
2. IF NEW ADJUSTMENT OF MANHOLE ELEVATES CASTING GREATER THAN 12" ABOVE CONE SECTION OF MANHOLE, THAT MANHOLE SHALL BE RECONSTRUCTED IN ACCORDANCE WITH 604.03 OF THE CITY SUPPLEMENT OF THE STATE OF OHIO CONSTRUCTION AND MATERIAL SPECIFICATIONS.
3. IF NEW ADJUSTMENT OF EXISTING MANHOLE IS LESS THAN 12" ABOVE CONE, THE CASTING SHALL BE CUT OUT TO TOP OF EXISTING MASONRY.
4. APPLY TACK COAT TO INSIDE EDGE OF CUT AND TO MANHOLE CASTING PRIOR TO PLACING ASPHALT.
5. THE CASTING SHALL THEN BE RAISED WITH A COMBINATION OF CONCRETE RISER RINGS AND MORTAR TO DESIRED HEIGHT. THESE ADJUSTMENTS SHALL BE IN ACCORDANCE WITH 604.05 OF THE STATE OF OHIO CONSTRUCTION AND MATERIALS SPECIFICATIONS.
6. A MINIMUM TWO LIFTS OF ASPHALT SHALL BE USED FROM BOTTOM OF CUT TO EXISTING STREET PAVEMENT.
7. ADD STORAGE MIX BLACKTOP TO FORM RAMP TO LIP OF CASTING. TAMP FIRMLY. RAMP SHALL BE REMOVED IMMEDIATELY PRIOR TO MACHINE PAVING.
8. ALL MANHOLE FRAMES AND COVERS, OTHER THAN STANDARD, SHALL BE REPLACED WITH STANDARD CASTINGS. (ACC. NO. 49005)
9. CONCRETE RISER SHALL HAVE A MINIMUM OF 1-#3 CONTINUOUS REINFORCING BAR IN CENTER.

NOTE: IF THE MANHOLE IS NOT PRECAST, THEN BRICK AND MORTAR SHALL BE PERMITTED.

THE  
METROPOLITAN SEWER DISTRICT  
OF  
GREATER CINCINNATI

**SANITARY MANHOLE ADJUSTMENT WITH  
PRECAST CONCRETE RING & MORTAR  
PRIOR TO MACHINE PAVING**

NO SCALE DATE: MAY 2016  
APPROVED: *P. Plumb*  
SEWERS CHIEF ENGINEER



**SECTION A-A SECTION A-A**

CASTING MANHOLE	DIMENSIONS IN INCHES									
	A	B	C	D	E	F	G	H	J	
	26	24	21 1/2	23 3/4	1 1/2	2	2 1/2	3	1	

MATERIAL - ASTM DESIGNATION: A-48, CLASS 40 CAST IRON

**INSTALLATION OF SHIM RING\***

1. CLEAN CASTING WITH WIRE BRUSH.
  2. INSERT SHIM AND CHECK FIT.
  3. IF SHIM DOES NOT FIT PROPERLY, CASTING SHALL BE ADJUSTED BY USING CONCRETE RING AND MORTAR.
  4. REMOVE SHIM AND APPLY JOINT SEALER COMPOUND TO CASTING SEATING SURFACE.
  5. INSERT SHIM ON CASTING - STACKING OF RINGS SHALL NOT BE PERMITTED.
  6. USE PAVING BREAKER TO CUT OUT AROUND CASTING, 6"W. X 1 1/2"D.
  7. ADD STORAGE MIX BLACKTOP TO CUT AND FORM RAMP TO LIP OF CASTING. TAMP FIRMLY. RAMP SHALL BE REMOVED IMMEDIATELY PRIOR TO MACHINE PAVING.
  8. ALL MANHOLE FRAMES AND COVERS, OTHER THAN STANDARD, SHALL BE REPLACED WITH STANDARD CASTINGS. (ACC. NO. 49005)
- \* ONLY TO BE USED WITH SPECIAL PERMISSION FROM MSD OR THEIR REPRESENTATIVE

(ALTERNATE FOR ACC. NO. 49058)