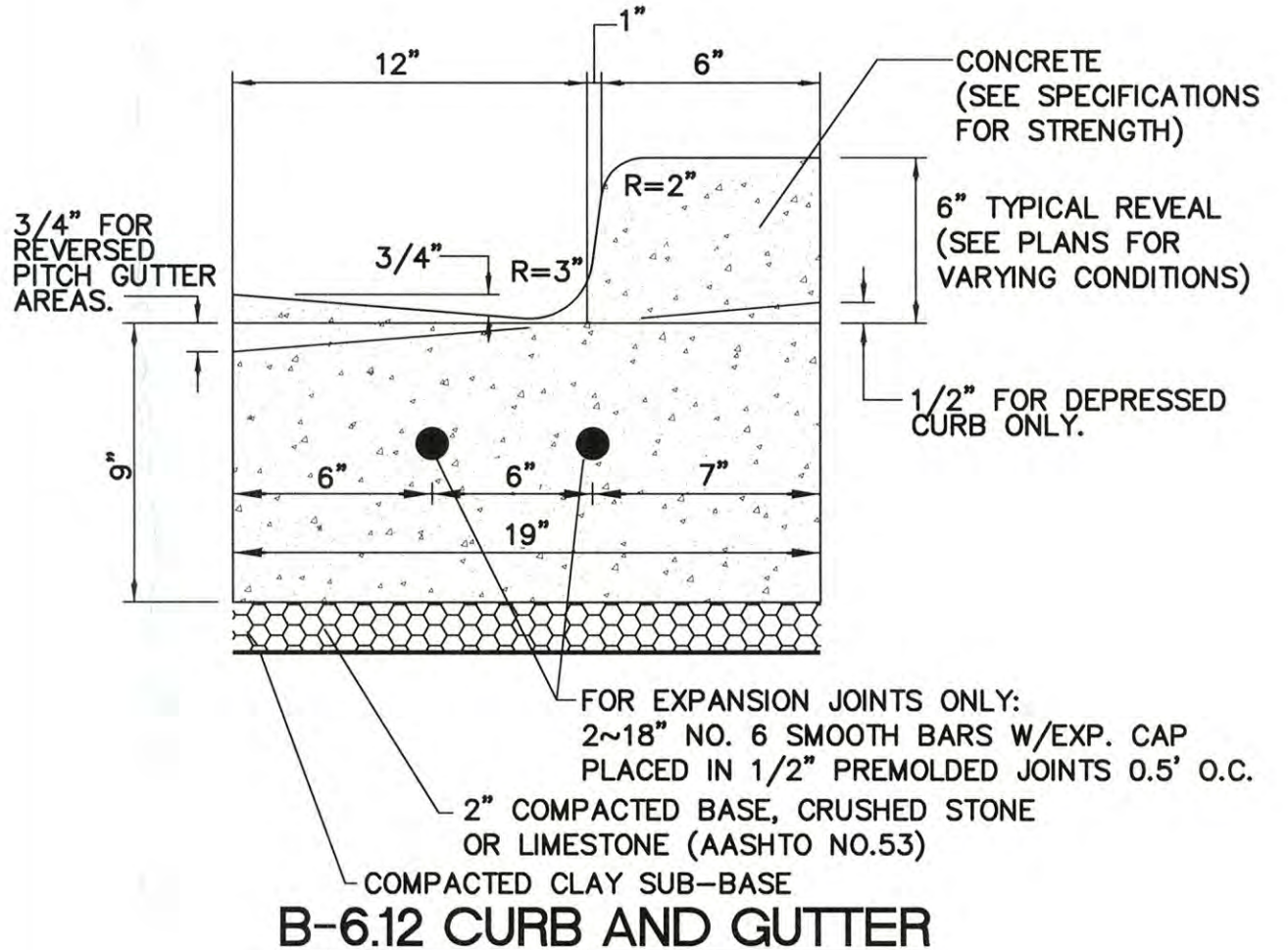
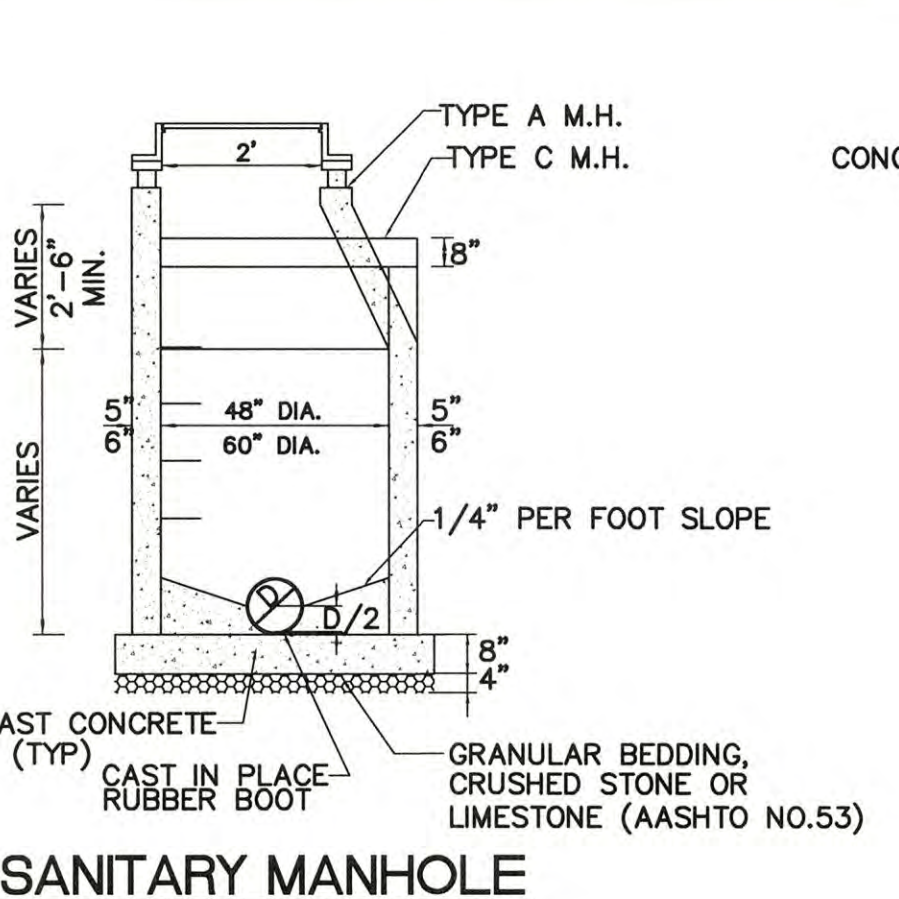
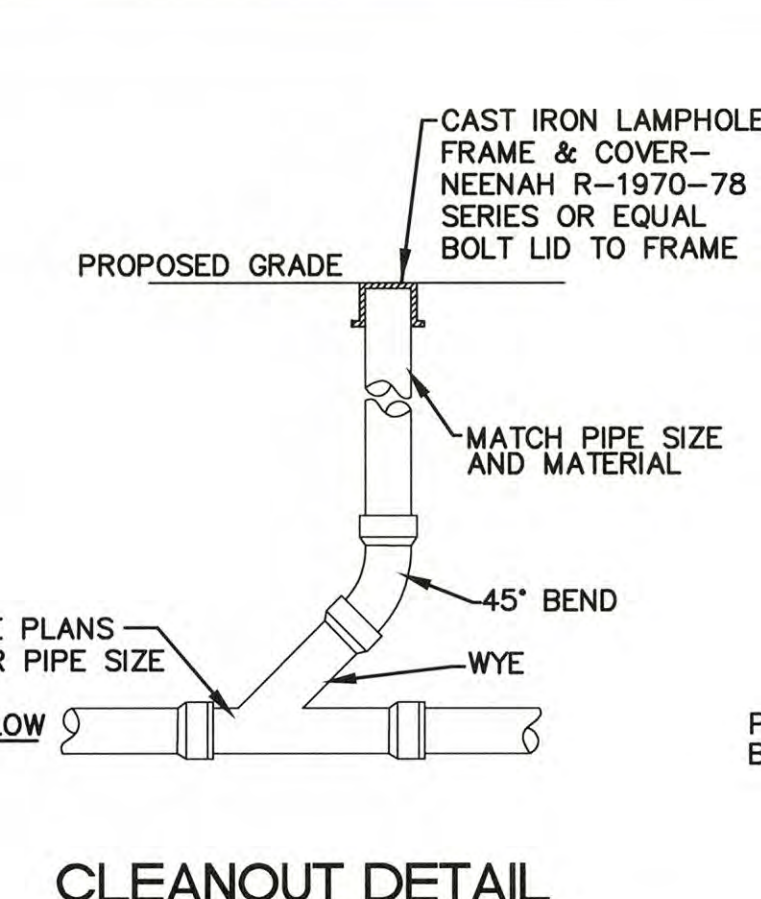
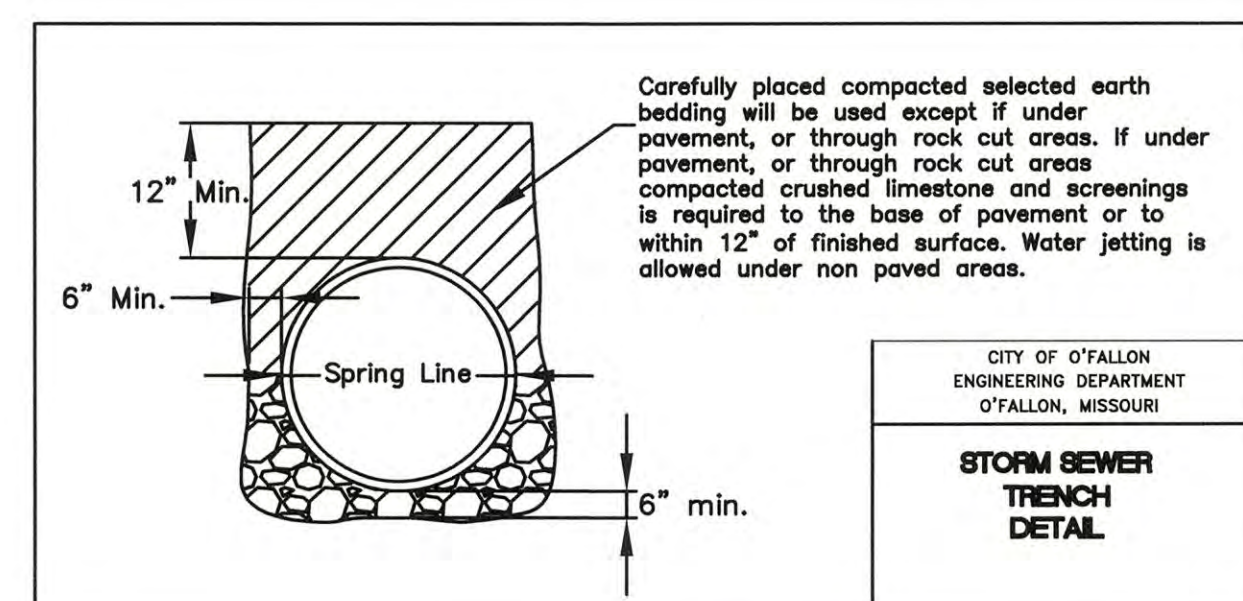
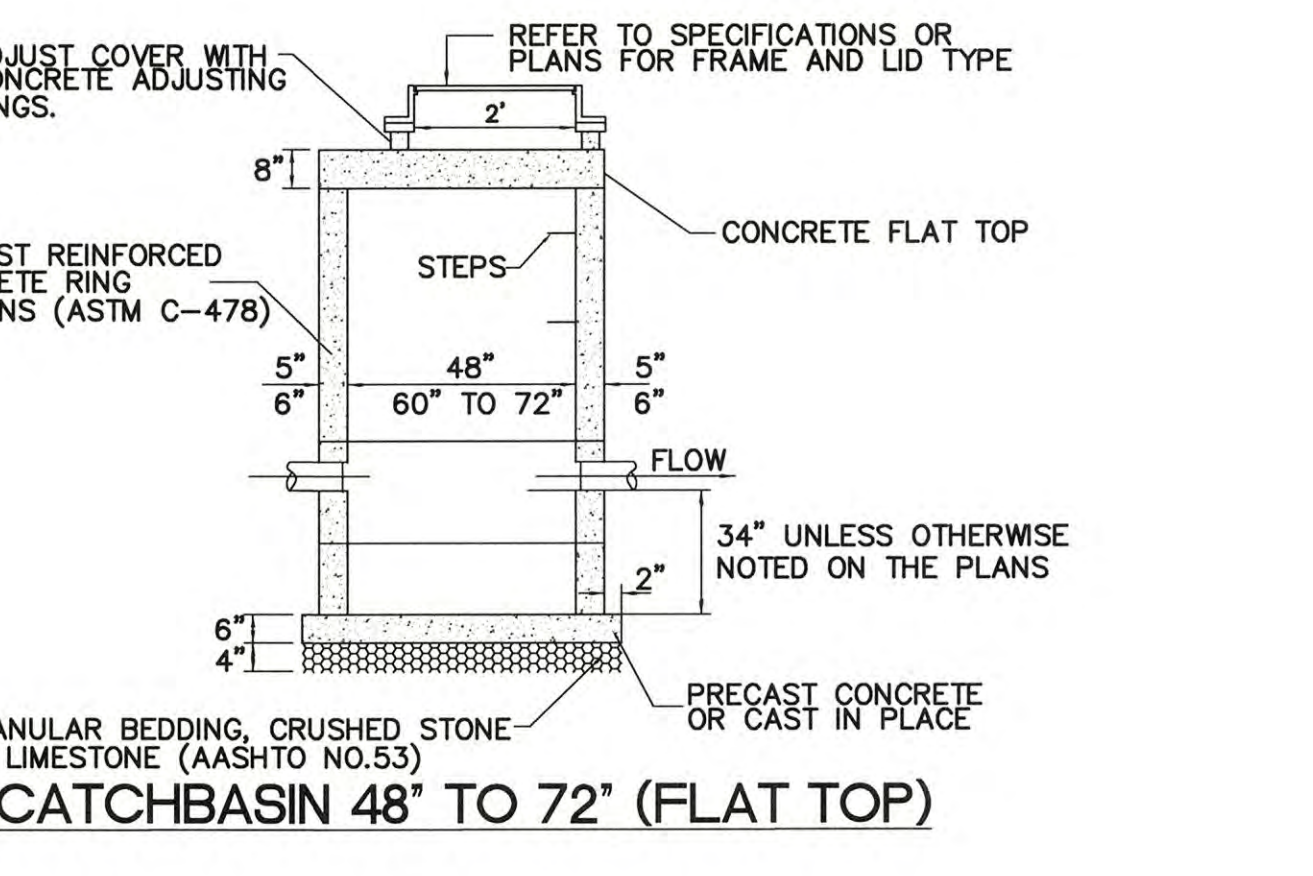
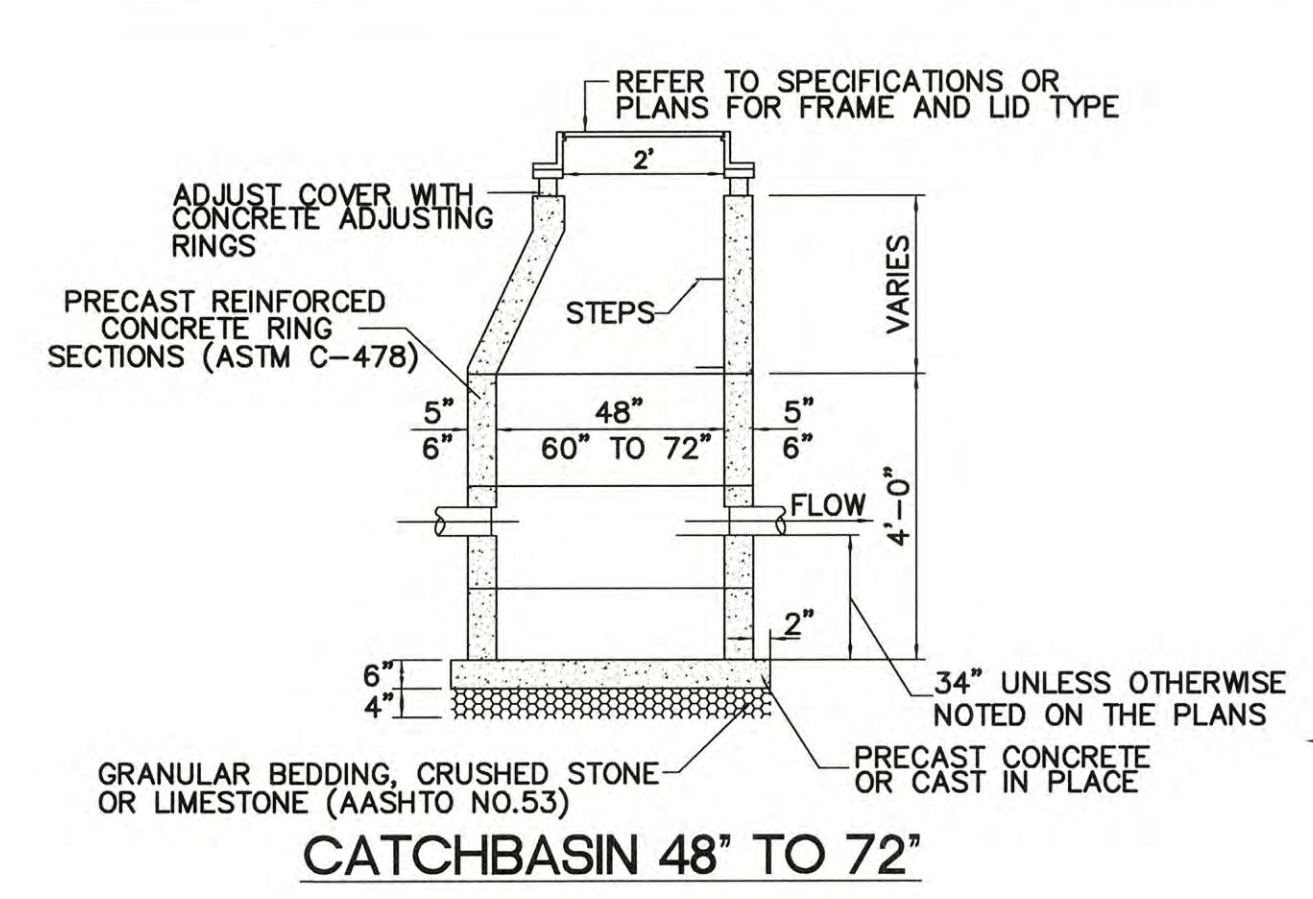


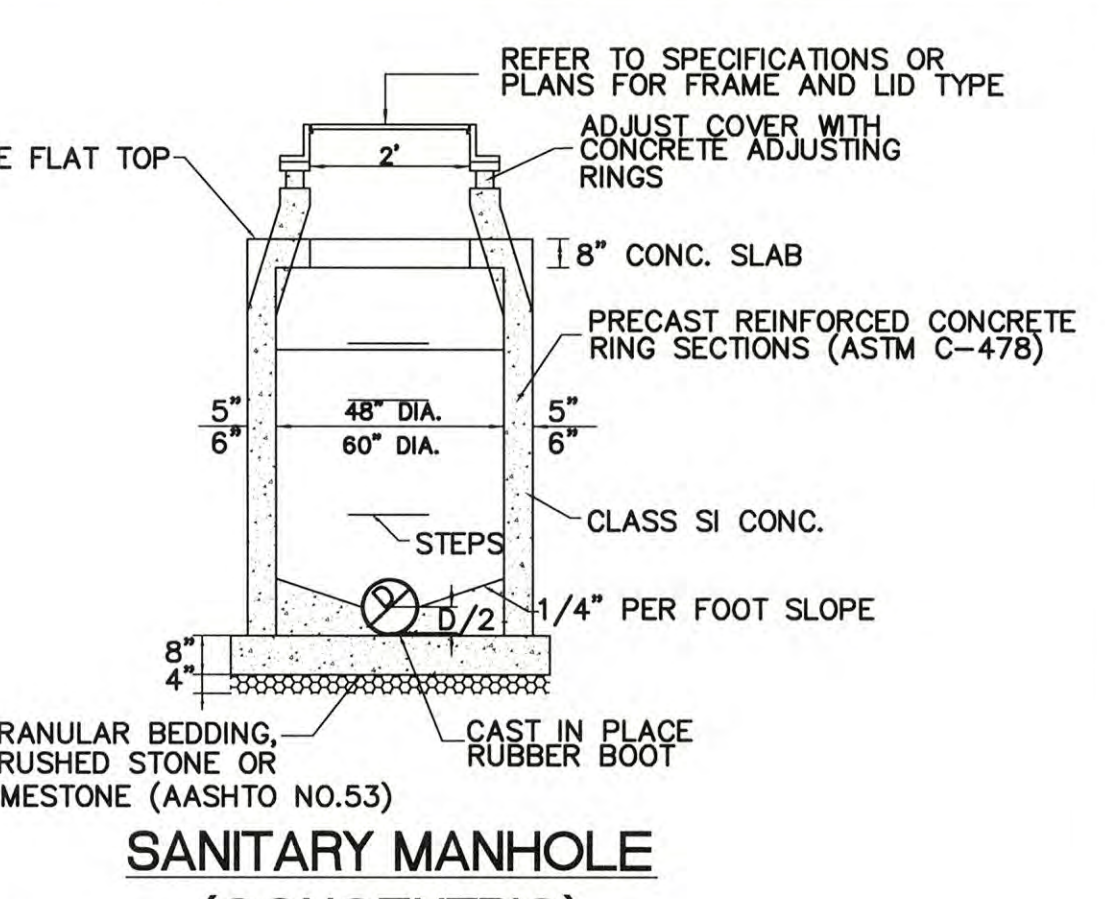
1. PROVIDE TOOLED JOINTS AT 5' O.C.
2. PROVIDE CONTRACTION JOINTS AT 15' O.C.
3. PROVIDE EXPANSION JOINTS AT 45' O.C.
4. ROUND EXPOSED CORNERS WITH 1/2" RADIUS.



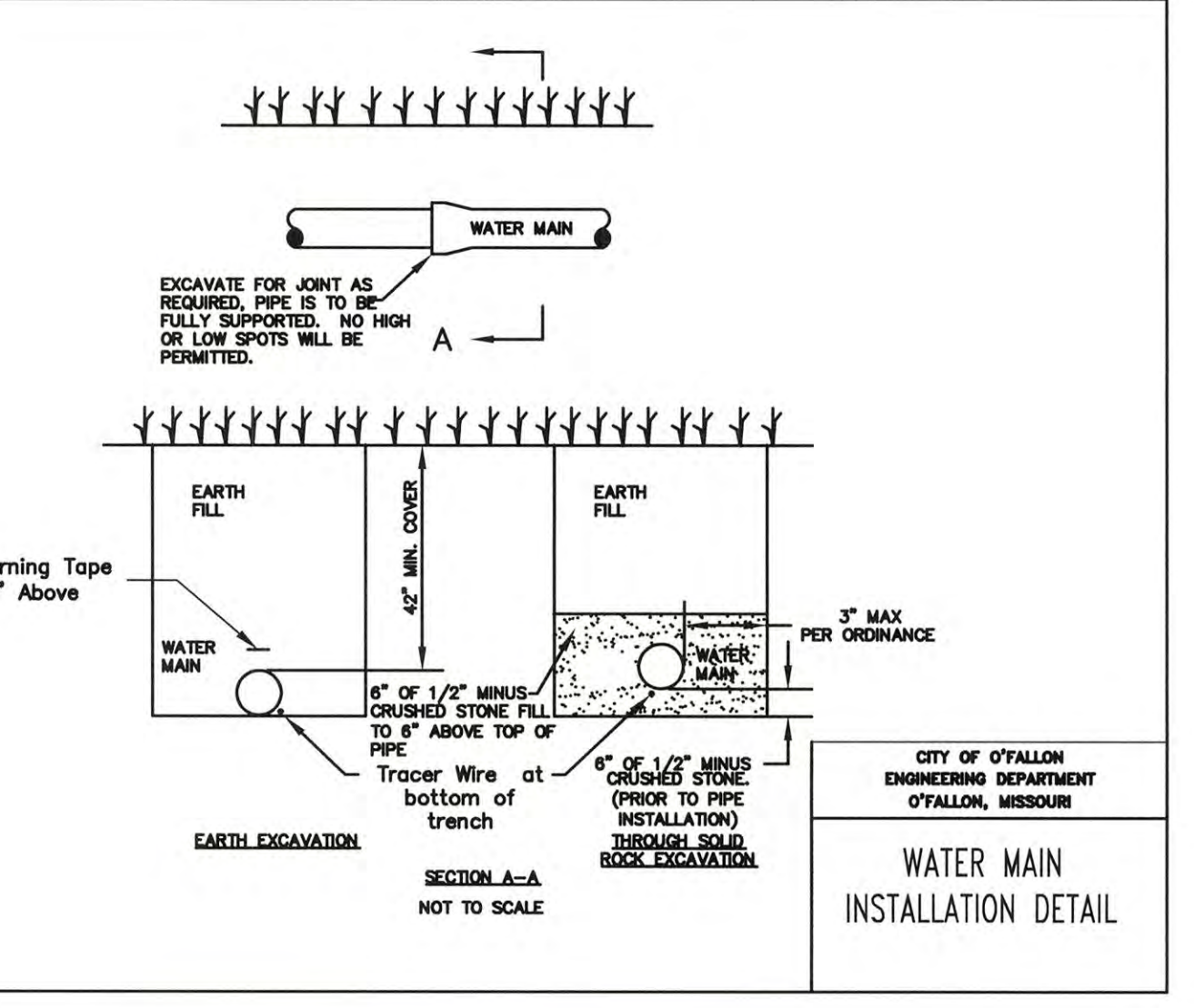
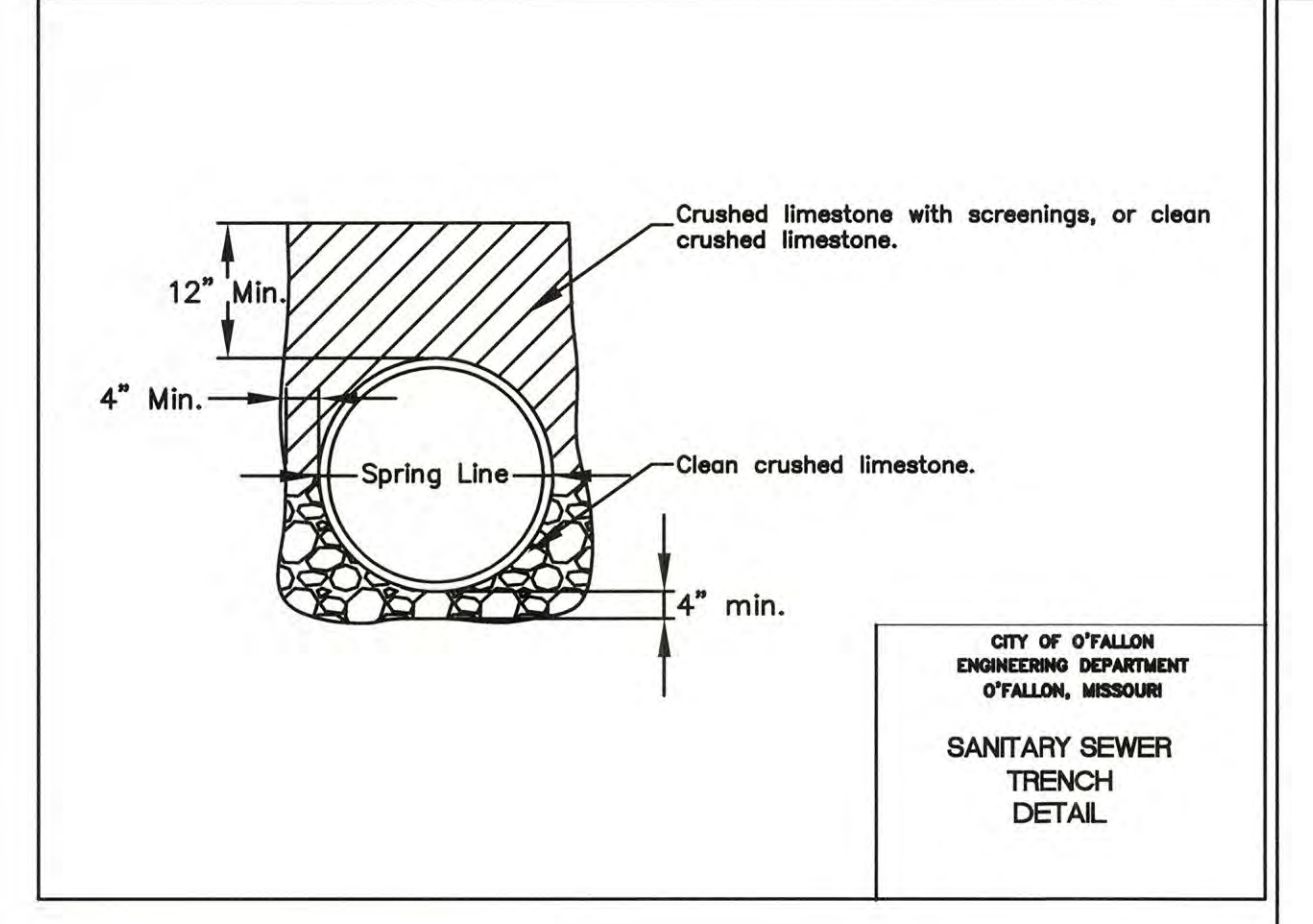
- NOTES:
1. PROVIDE 1/2" EXPANSION JOINTS EVERY 45' O.C.
  2. PROVIDE HAND TOOLED CONTRACTION JOINTS EVERY 15' O.C.
  3. THE MINIMUM LONGITUDINAL CURB SLOPE SHALL BE 0.3%.



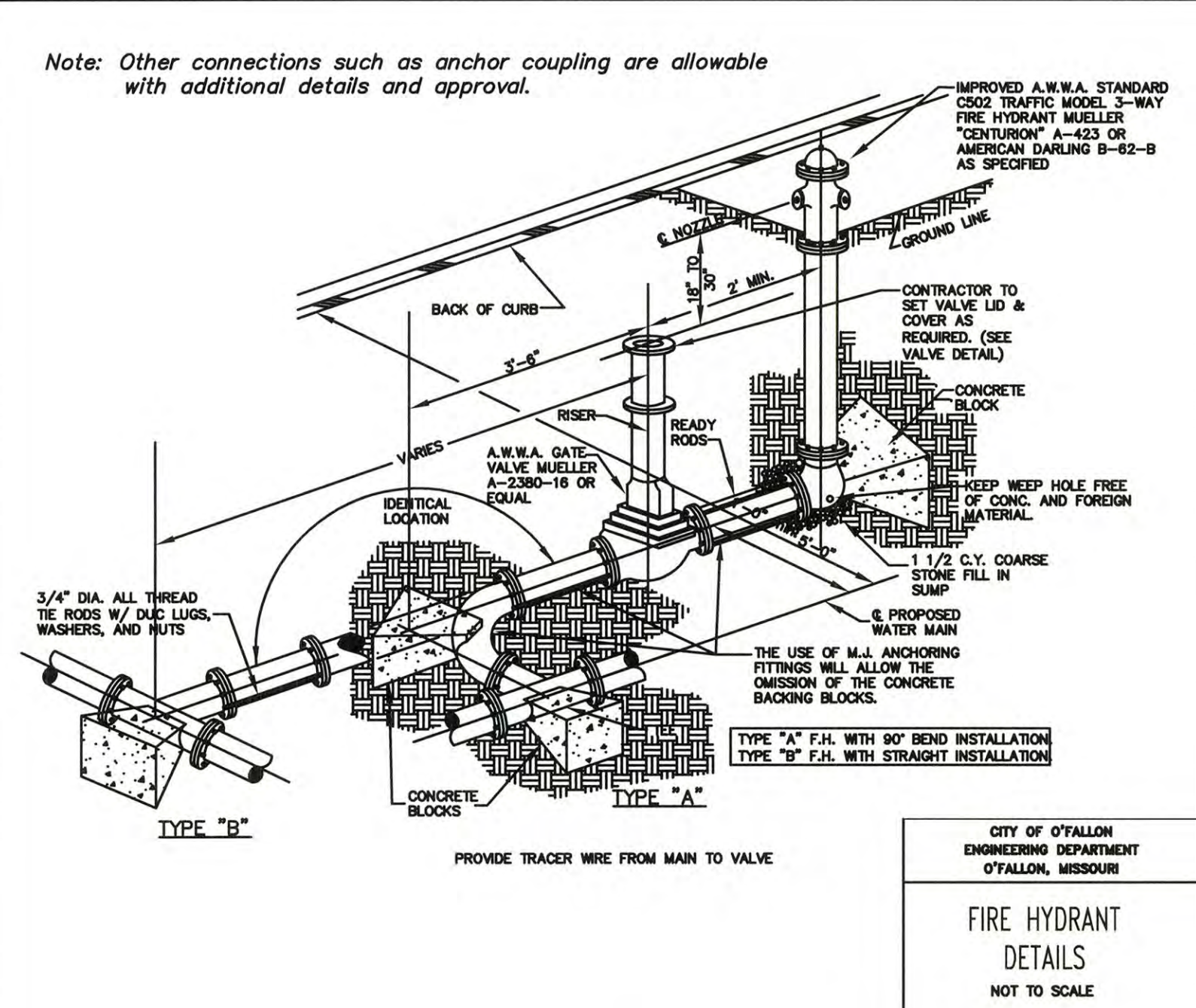
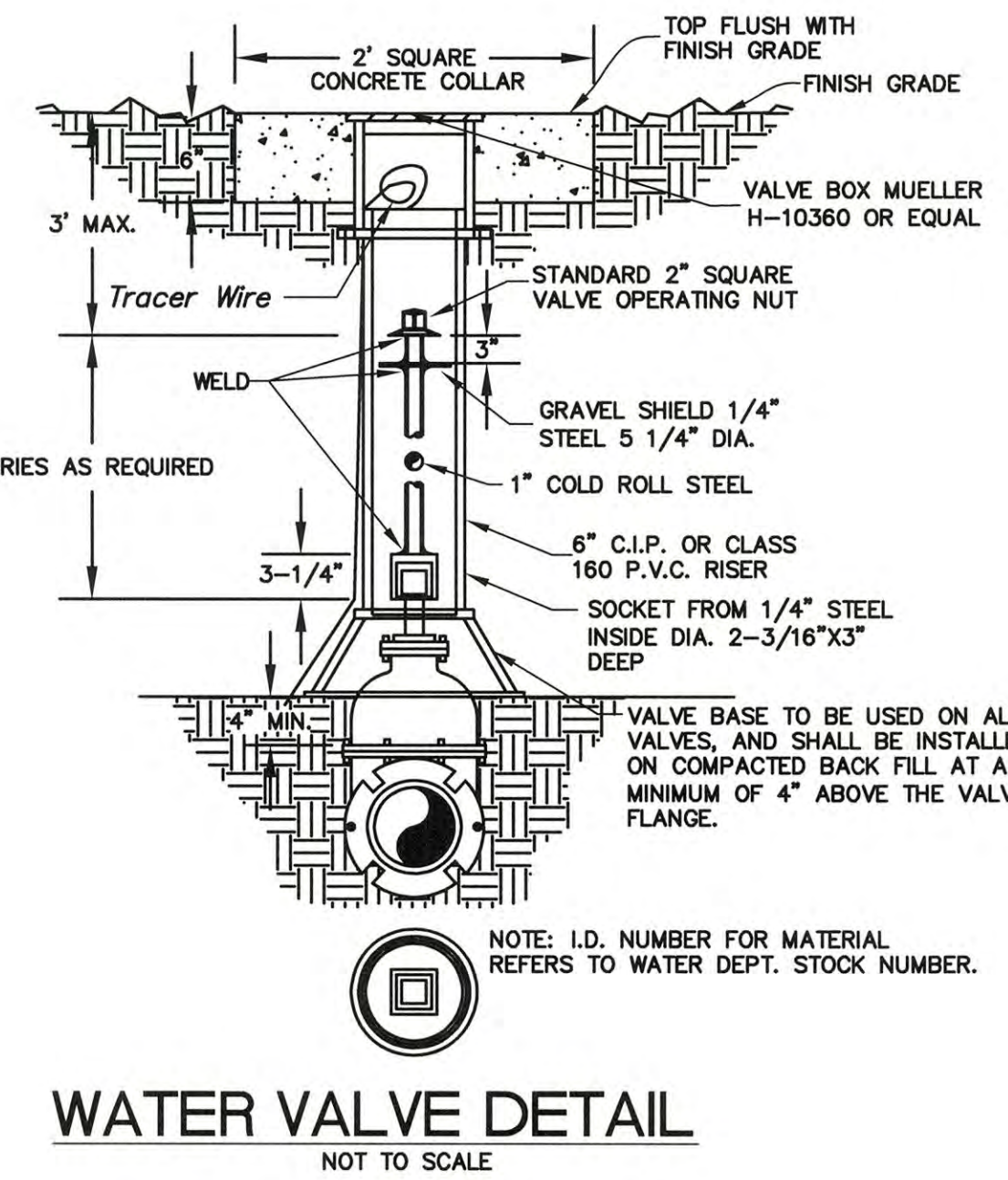
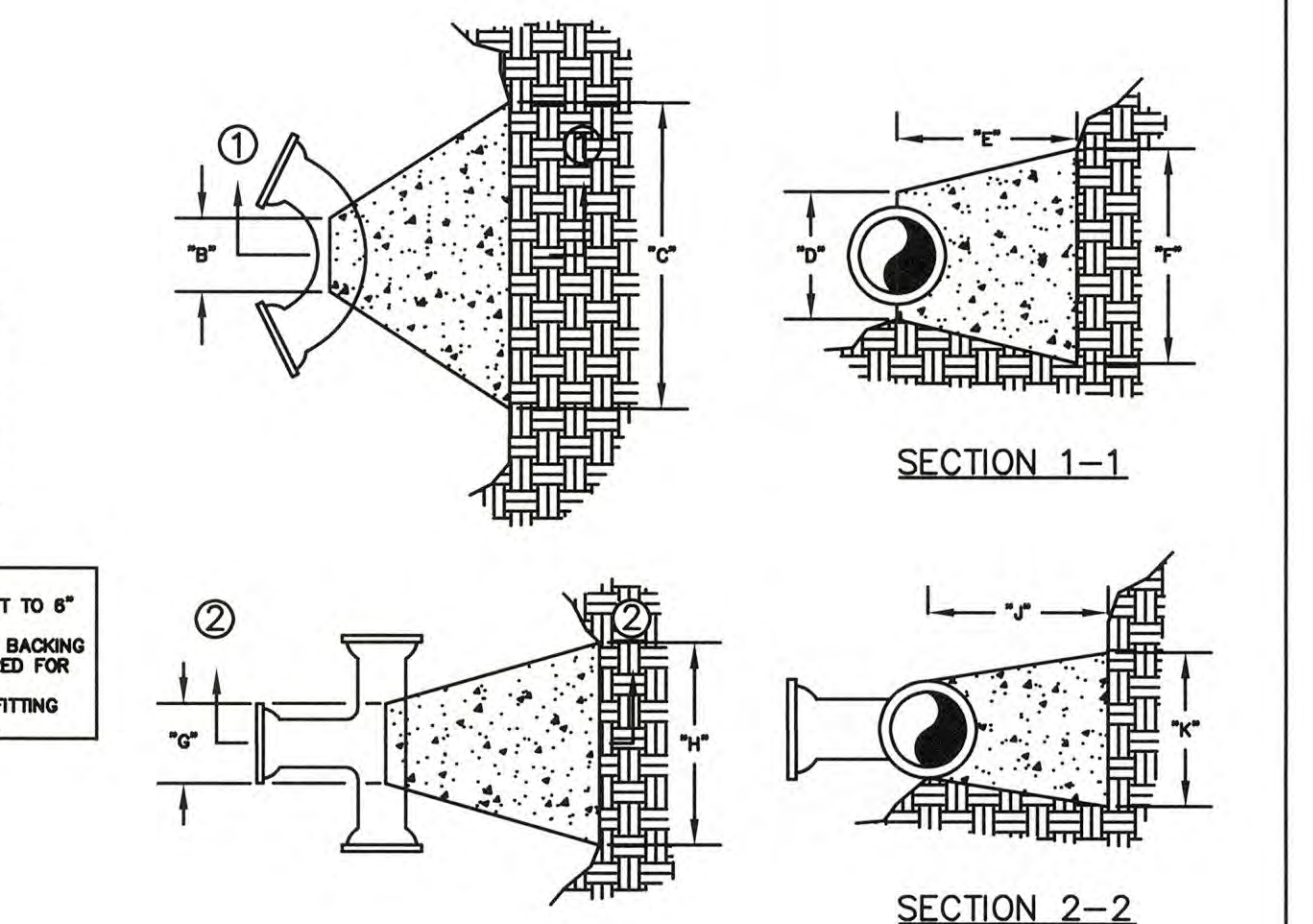
- NOTES:
1. PROVIDE EXTERNAL CHIMNEY SEAL ON ALL SANITARY MANHOLES.
  2. USE TYPE A UNLESS SPECIFIED IN SEWER CALLOUT.
  3. OUTSIDE OF SANITARY MANHOLE SHALL BE MOISTURE PROOFED WITH TWO COATS OF BITUMINOUS MATERIAL.



- NOTES:
1. PROVIDE EXTERNAL CHIMNEY SEAL ON ALL SANITARY MANHOLES.
  2. USE TYPE A UNLESS SPECIFIED IN SEWER CALLOUT.
  3. OUTSIDE OF SANITARY MANHOLE SHALL BE MOISTURE PROOFED WITH TWO COATS OF BITUMINOUS MATERIAL.



BENDS	1/2"	3/4"	1"	1 1/4"
8"-11 1/4"	8"	10"	12"	24"
8"-22 1/2"	8"	10"	12"	24"
8"-40"	8"	10"	12"	24"
8"-80"	8"	10"	12"	24"
8"-11 1/4"	8"	10"	12"	24"
8"-22 1/2"	8"	10"	12"	24"
8"-40"	8"	10"	12"	24"
8"-80"	8"	10"	12"	24"
12"-11 1/4"	8"	10"	12"	24"
12"-22 1/2"	8"	10"	12"	24"
12"-40"	8"	10"	12"	24"
12"-80"	8"	10"	12"	24"
16"-11 1/4"	10"	12"	24"	28"
16"-22 1/2"	10"	12"	24"	28"
16"-40"	10"	12"	24"	28"
16"-80"	10"	12"	24"	28"
20"-11 1/4"	10"	12"	24"	28"
20"-22 1/2"	10"	12"	24"	28"
20"-40"	10"	12"	24"	28"
20"-80"	10"	12"	24"	28"
24"-11 1/4"	10"	12"	24"	28"
24"-22 1/2"	10"	12"	24"	28"
24"-40"	10"	12"	24"	28"
24"-80"	10"	12"	24"	28"
30"-11 1/4"	10"	12"	24"	28"
30"-22 1/2"	10"	12"	24"	28"
30"-40"	10"	12"	24"	28"
30"-80"	10"	12"	24"	28"



**PROJECT DETAILS #1**

DATE: 5/23/19  
 REVISIONS: BID SET 6/10/19, PERMIT SET 6/13/19, NO REVISIONS 7/19/19  
 Prepared For: DXU ARCHITECTS, 412 South Wells, 2nd Floor, Chicago, IL 60607  
 OBERWEIS RESTAURANT, 1816 Highway K, O'Fallon, St. Charles County, Missouri, 63366  
 Prepared By: Watermark Engineering Resources, Ltd.  
 WATERMARK ENGINEERING RESOURCES, LTD.  
 MISSOURI STATE CERTIFICATE OF AUTHORITY #00605012  
 DATE: 7/19/19  
 EXP: 11/30/19  
 JEFFREY C. MILLER  
 NUMBER PE-2016015595  
 JEFFREY C. MILLER - ENGINEER  
 MO# 2016015595  
 CHECKED BY: J.MILLER  
 DESIGN BY: M.HANSEN  
 DRAWN BY: K.P., M.H.  
 DATE: MAY 23, 2019  
 SCALE: NONE  
 PROJECT NO.: 18-085  
 PROJECT DETAILS #1  
 C-10