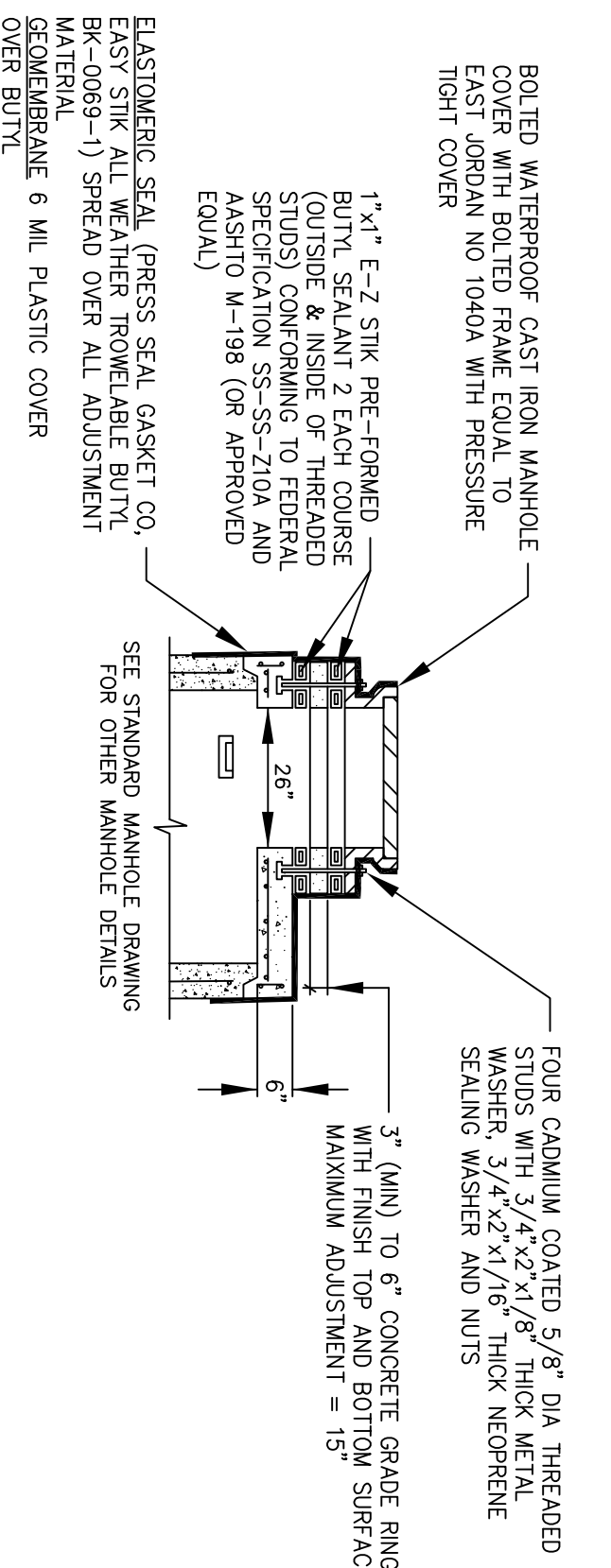
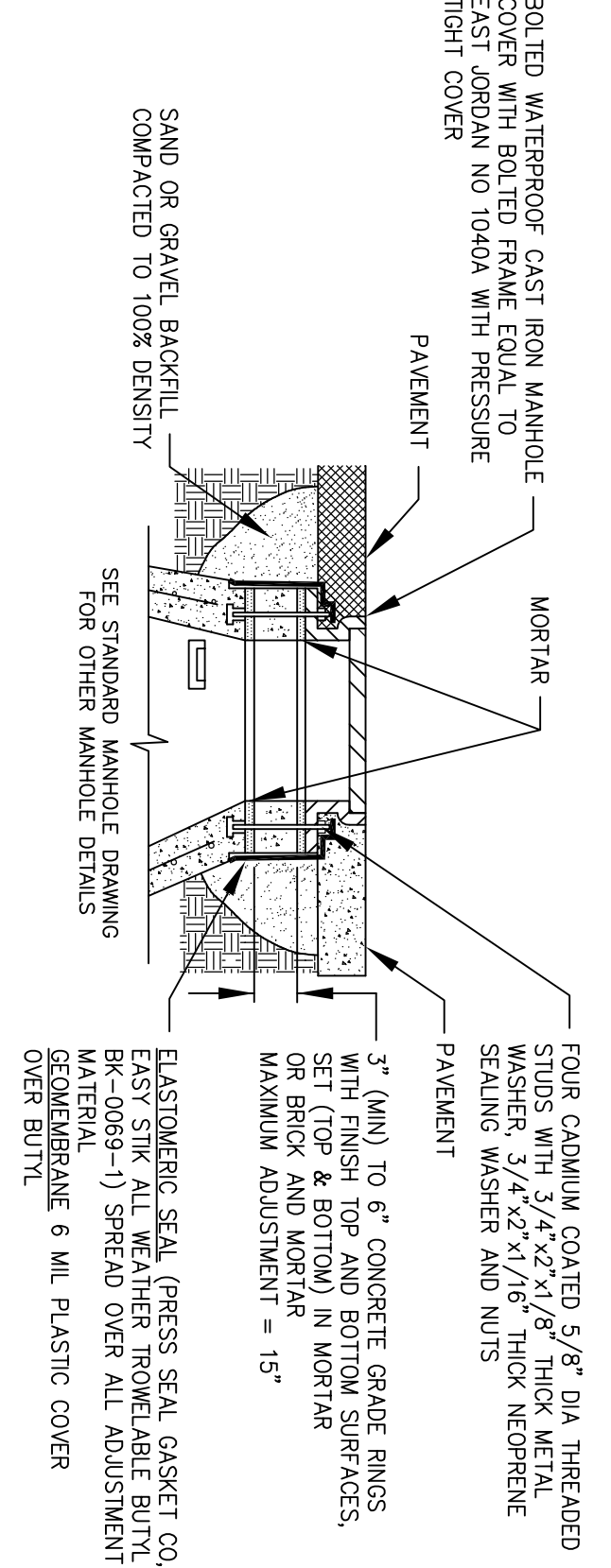


**SKETCH OF MINIMUM MANHOLE REQUIREMENTS FOR LOCAL SANITARY SEWER EXTENSION ON 8\"/>**

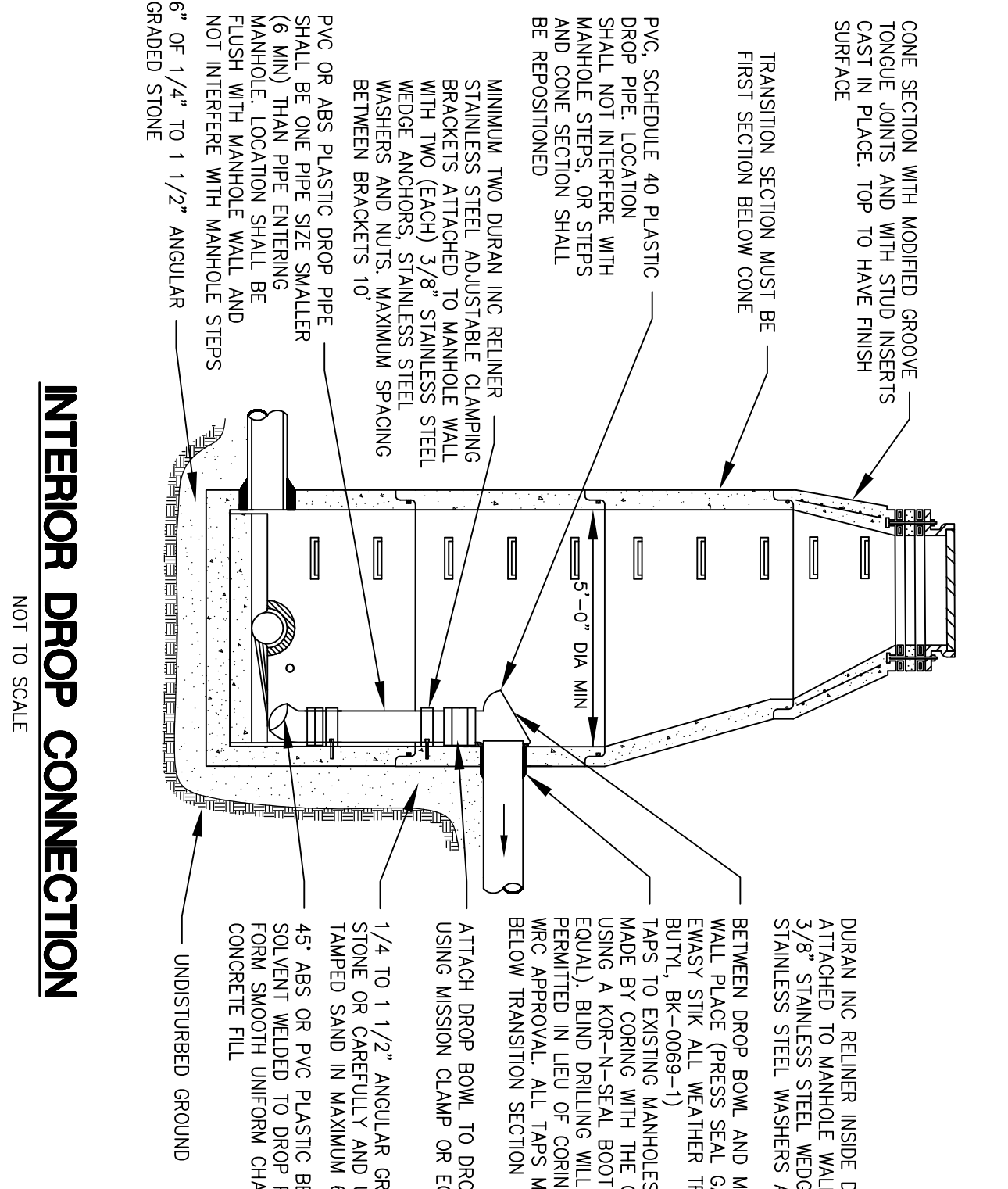
NOT TO SCALE



**FLAT TOP MANHOLE**

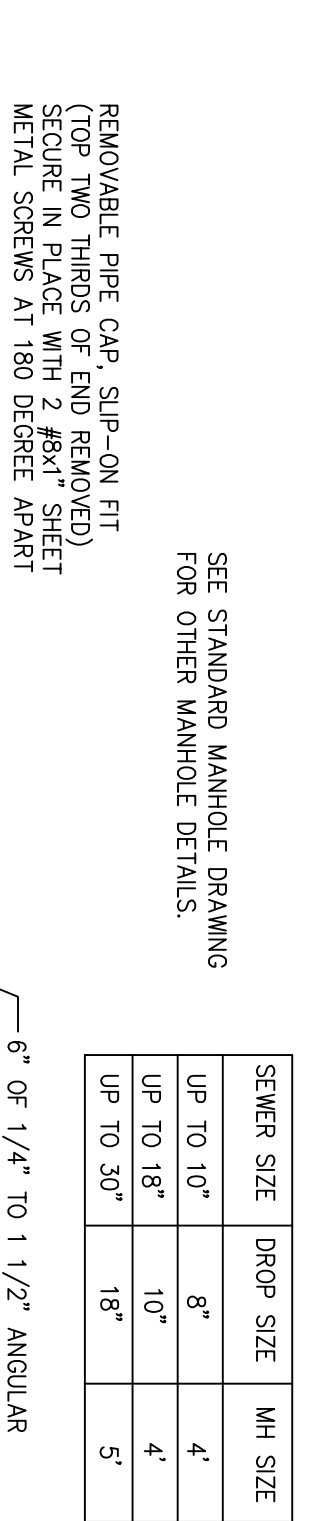


**ADJUSTMENT DETAIL MANHOLE TOPS WITHIN PAVEMENT AREAS**

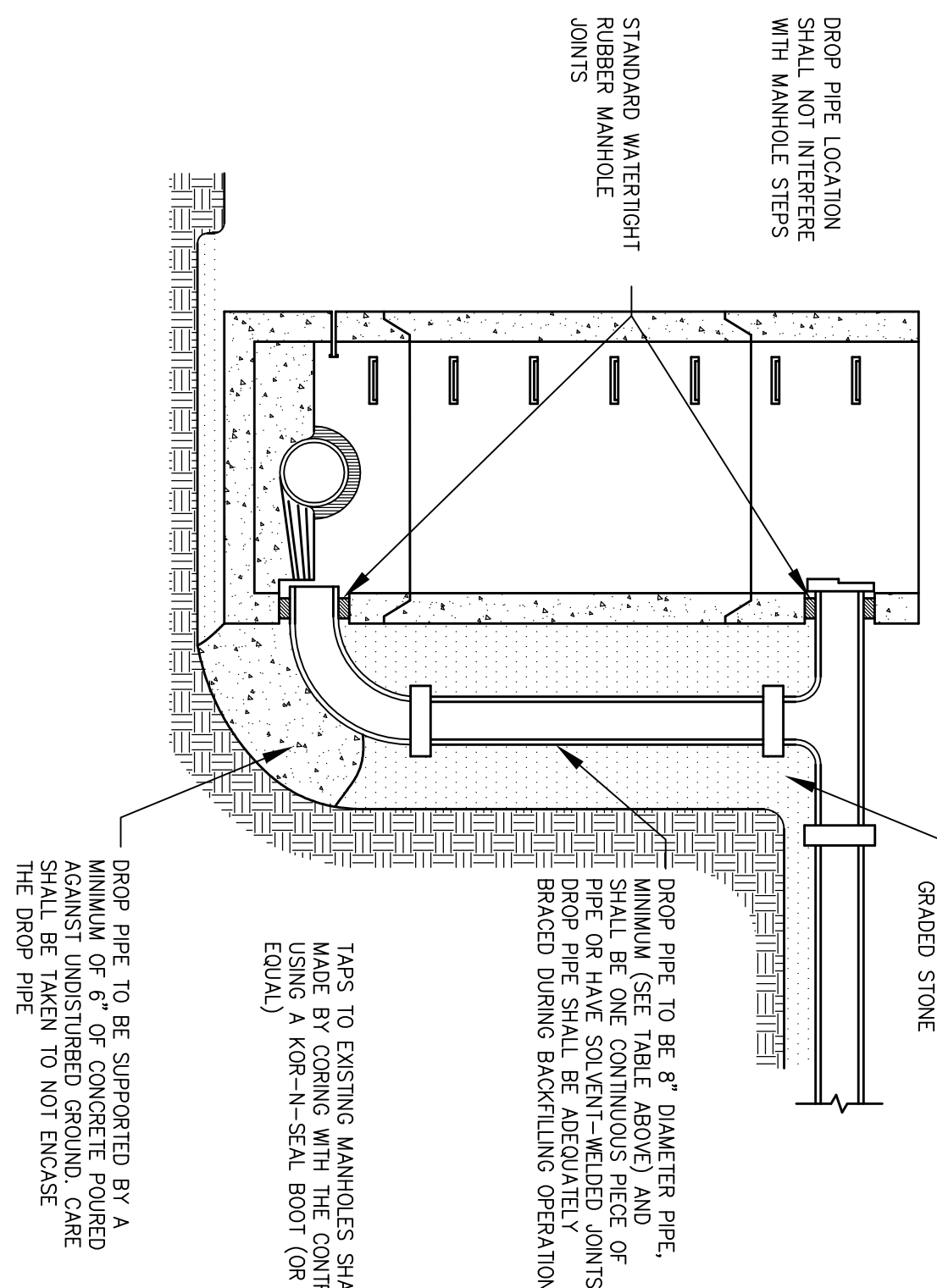


**INTERIOR DROP CONNECTION**

NOT TO SCALE

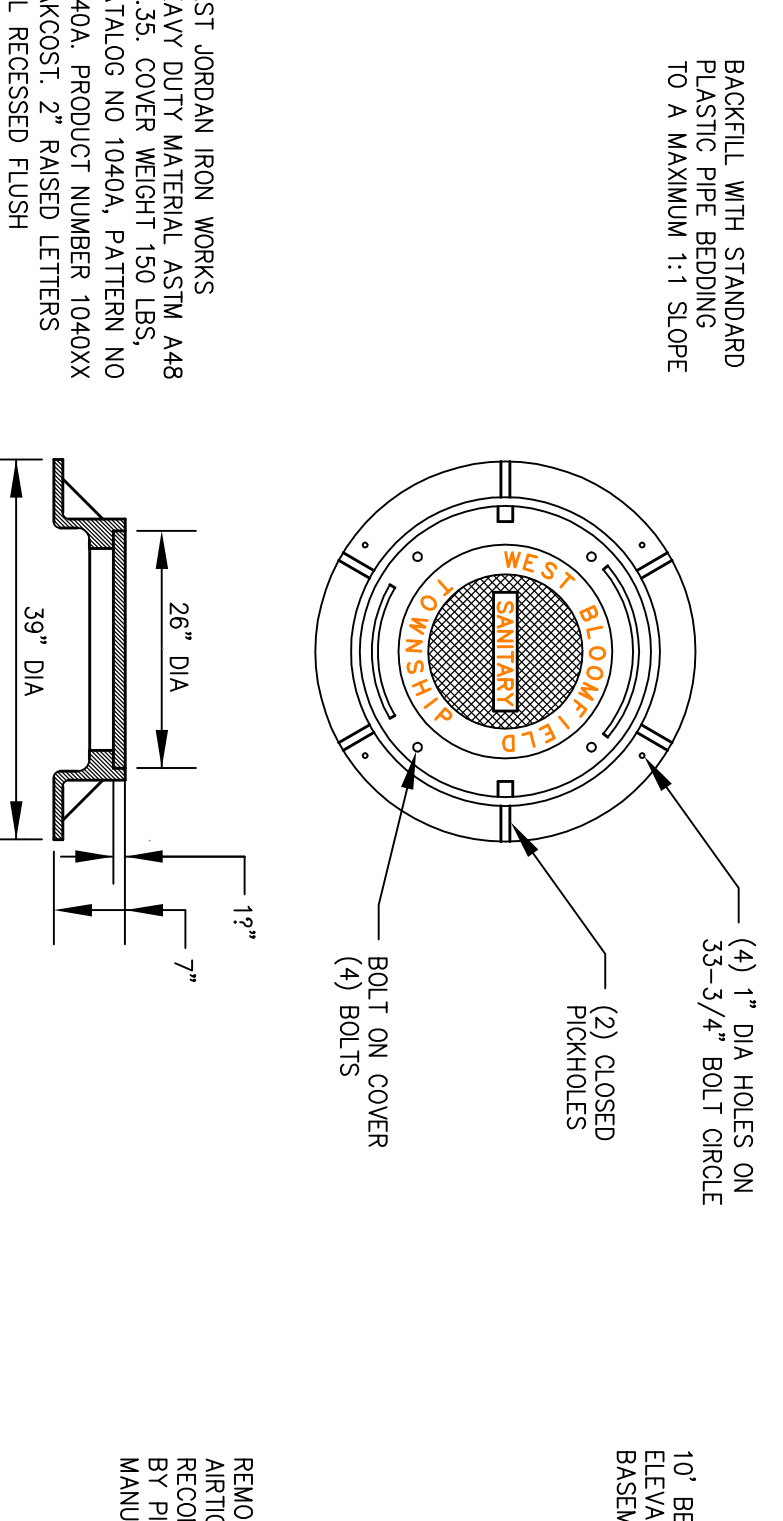


SEWER SIZE	DROP SIZE	MIN. SIZE
UP TO 10"	8"	4"
UP TO 18"	10"	4"
UP TO 30"	18"	5"



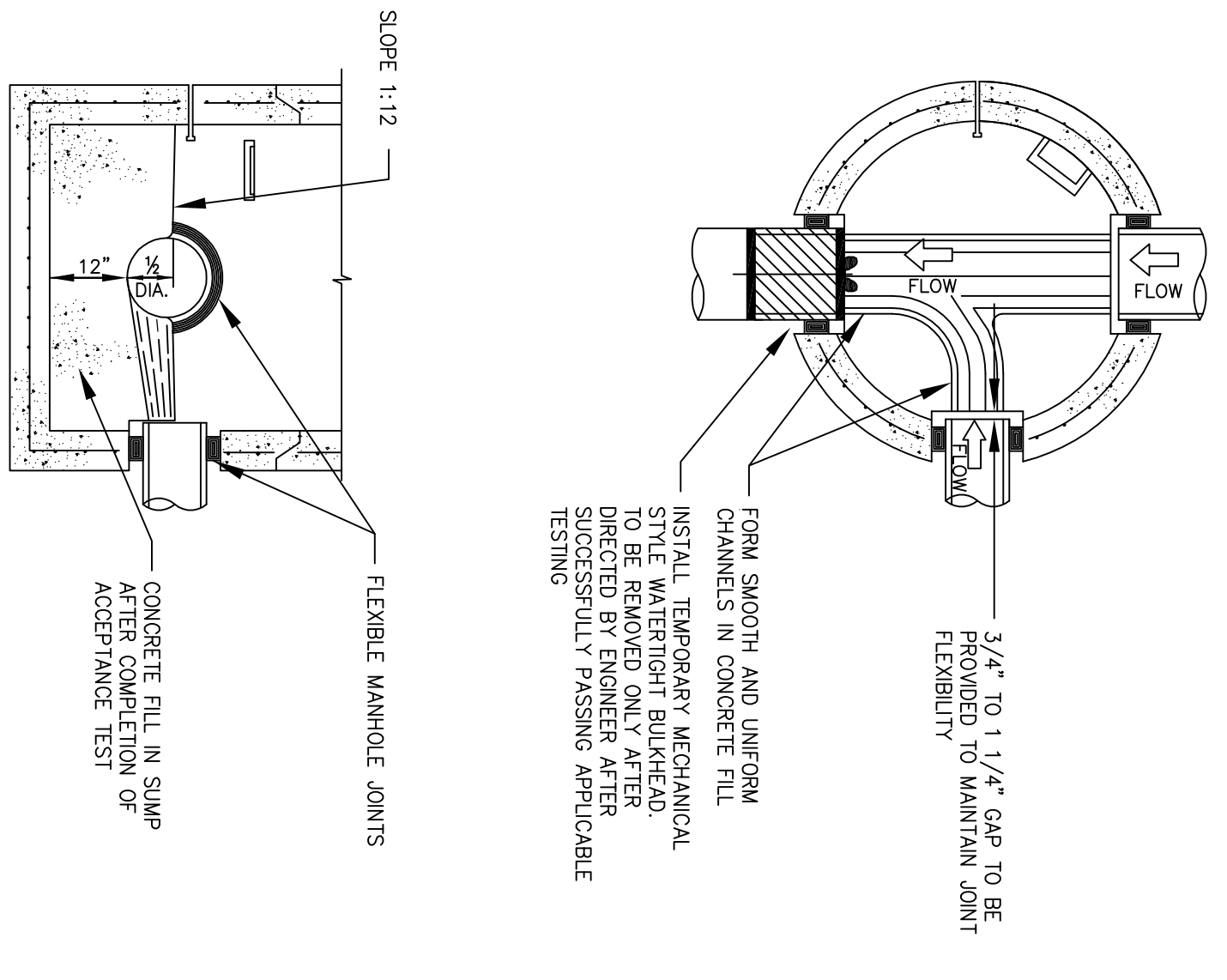
**EXTERIOR DROP MANHOLE CONNECTION**

NOT TO SCALE



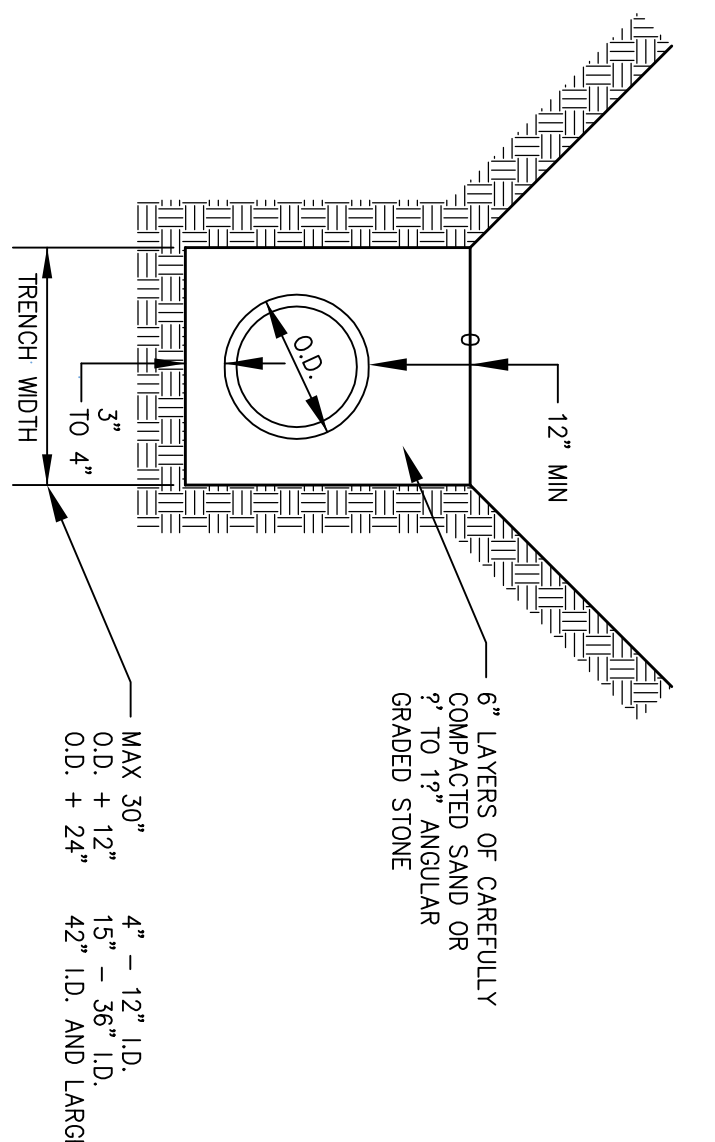
**SPECIAL LETTERED MANHOLE COVER**

NOT TO SCALE



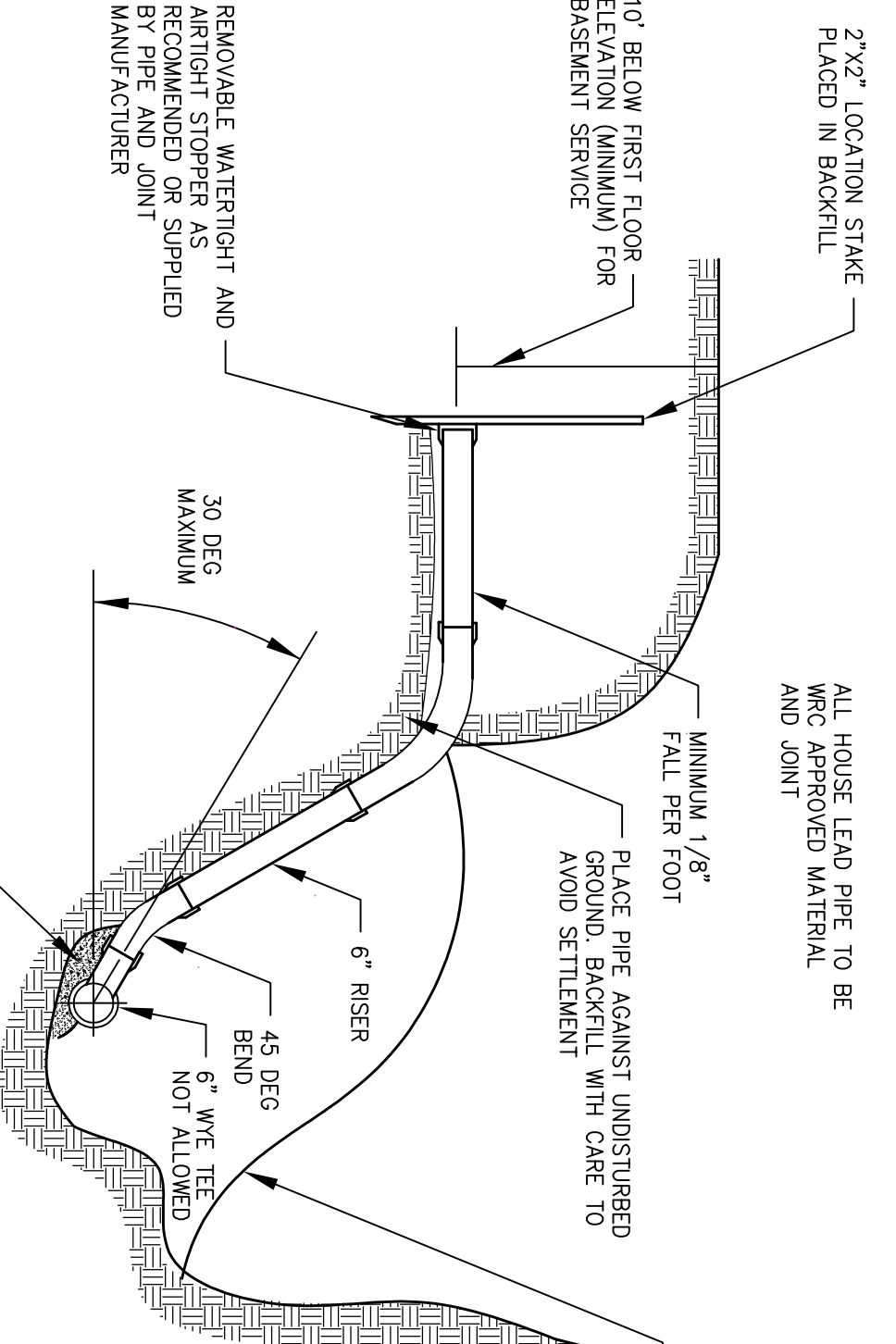
**SUMP MANHOLE FOR TESTING, CLEANING AND DEWATERING**

NOT TO SCALE



**STANDARD BEDDING (CLASS B) FOR LOCAL SANITARY SEWER EXTENSIONS**

NOT TO SCALE



**HOUSE LEAD DETAIL**

NOT TO SCALE

**SANITARY SEWER CONSTRUCTION NOTES**

- ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE LOCAL UNIT OF GOVERNMENT AND THE WATER RESOURCES COMMISSIONER (WRC). ALL SANITARY SEWER CONSTRUCTION SHALL HAVE FULL-TIME INSPECTION SUPERVISED BY WRC PERSONNEL OR PERSONNEL DESIGNATED BY WRC. WRC SHALL BE NOTIFIED IN ADVANCE BY THE LOCAL UNIT OF GOVERNMENT.
- AT ALL CONNECTIONS TO WRC SEWERS OR EXTENSIONS, AND BEFORE START OF CONSTRUCTION, THE CONTRACTOR MUST OBTAIN A SEWER INSPECTION PERMIT ISSUED BY WRC. GRANTING A SEWER PERMIT CHARGES ARE \$250 PER EACH CONNECTION PLUS \$25 FOR EACH 100 FEET OF SEWER PERMIT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE PERMIT. IF OF FORCE MAIN WITH A MINIMUM PERMIT FEE OF \$250, FAILURE TO PASS ANY TEST SEGMENT WILL RESULT IN AN ADDITIONAL CHARGE TO THE CONTRACTOR FOR EACH RETEST, IN ACCORDANCE WITH THE ABOVE PRICE SCHEDULE. THE CONTRACTOR SHALL ALSO HAVE POSTED WITH WRC A \$5,000 SURETY BOND AND \$500 CASH DEPOSIT. THE CONTRACTOR SHALL NOTIFY THE LOCAL UNIT OF GOVERNMENT AND WRC (248-858-1100) 24 HOURS BEFORE THE START OF CONSTRUCTION. WRC SHALL BE NOTIFIED IN ADVANCE BY THE CONTRACTOR'S PERSONNEL AND MUST BE SCHEDULED BY MAJORITY OR 75% CONSULTANT IN ADVANCE WITH 24 HOUR NOTICE AT 248-858-1110.
- NO SEWER INSTALLATION SHALL HAVE AN INFILTRATION EXCEEDING 100 GALLONS PER INCH PER LINEAL FOOT OF SEWER PER 100 GALLONS PER INCH DIAMETER PER LINEAL FOOT. TESTS IN LIEU OF INFILTRATION TESTS SHALL BE AS SPECIFIED IN THE WATER RESOURCES COMMISSIONER STANDARDS. ONLY PIPE AND PIPE JOINTS APPROVED BY WRC MAY BE USED FOR SANITARY SEWER CONSTRUCTION.
- LOCATED IN THE FIRST MANHOLE UPSTREAM FROM THE POINT OF ALL CONNECTIONS TO AN EXISTING WRC SEWER, OR EXTENSION THERE-TO, A TEMPORARY 12-INCH DEEP SUMP SHALL BE PROVIDED IN THE FIRST MANHOLE ABOVE THE CONNECTION WHICH WILL BE FILLED IN AFTER SUCCESSFUL COMPLETION OF ANY ACCEPTANCE TEST UP TO THE STANDARD FLEET TEST. THE SUMP SHALL BE 18 INCH DEEP AND 18 INCH DIAMETER. A DRAINAGE BURDISH SHALL BE PROVIDED ON THE DOWNSTREAM SIDE OF THE SUMP MANHOLE.
- AT ALL TIMES WHEN LAYING OF NEW PIPE IS NOT ACTUALLY IN PROGRESS, THE UPSTREAM END OF THE PIPE SHALL BE CLOSED BY TEMPORARILY PLACING BRICKS OR BY PLUGGING THE END OF THE PIPE. THE BRICKS OR PLUG SHALL NOT BE REMOVED UNTIL THE DANGER OF WATER ENTERING THE PIPE HAS PASSED.
- ALL BUILDING LEADS AND RISERS SHALL BE SIX INCH SPP 2.5 ABS PIPE WITH CHEMICALLY FIRED JOINTS OR AN APPROVED EQUIV. PIPE AND JOINTS. BUILDING LEADS TO BE FURNISHED WITH REMOVABLE AIRTIGHT AND WATER-TIGHT STOPPERS.
- ALL RIGID SEWER PIPE SHALL BE INSTALLED IN CLASS "B" BEDDING OR BETTER. ALL FLEXIBLE, SEMI-FLEXIBLE, OR COMPOSITE SEWER PIPE SHALL BE INSTALLED IN COMFORMANCE TO WRC SPECIFICATIONS.
- ALL NEW MANHOLES SHALL HAVE WRC APPROVED FLEXIBLE, WATER-TIGHT SEALS WHERE PIPES PASS THROUGH WALLS. MANHOLES SHALL BE 0\"/>

WEST BLOOMFIELD TOWNSHIP  
4550 WALNUT LAKE ROAD  
WEST BLOOMFIELD MICHIGAN 48325-0130

SANITARY SEWER NOTES AND DETAILS

SCALE:	NONE REV.	7/7/09 BY: SJA	SHEET NO.
DATE DRAWN:	4/7/99 REV.	GM REV.	1 OF 1
APPR. BY:	NMG REV.		
DRAWN BY:			