



**SEWER BULKHEADS**

SEWER BULKHEADS SHALL BE CONSTRUCTED OF BRICK OR CONCRETE TO THE SPECIFIED THICKNESS AS SHOWN ON THE PLANS OR AS INDICATED BY THE ENGINEER.

**BRICK BULKHEADS**

THE SURFACE OF CONTACT OF THE SEWER WALL WITH THE BULKHEAD SHALL BE ROUGHENED BY BUSH HAMMERING OR CHISELING AND THEN CLEANED JUST PRIOR TO THE BULKHEAD CONSTRUCTION. SUCH BULKHEADS SHALL BE VERTICAL WITH ALTERNATE HEADER AND STRETCHER COURSES LAID IN MORTAR. VERTICAL JOINTS IN ADJACENT COURSES SHALL BE STAGGERED. BRICK SHALL BE LAID WITH FULL MORTAR JOINTS. ALL AVAILABLE BEARING AREAS SHALL BE COVERED WITH MORTAR SPREAD IN AN EVEN LAYER WITHOUT SPLITTING OR FURROWING, AND ALL VERTICAL AND INTERIOR JOINTS SHALL ALSO BE SOLIDLY FILLED WITH MORTAR. THE COURSES SHALL BE LAID EVEN. BULKHEADS SHALL BE CONSTRUCTED AS PLUMB AS IS PRACTICAL.

**CONCRETE BULKHEADS**

ALL BULKHEADS SHALL BE CONSTRUCTED WITH GRADE "A" CONCRETE TO A THICKNESS AT LEAST ONE-THIRD THE DIAMETER OF THE PIPE BUT IN NO CASE LESS THAN TWELVE INCHES. SEWER WALLS SHOULD BE BRUSH CLEANED BEFORE CONCRETE BULKHEADS ARE POURED. (THAT IS ALL THE SLUDGE AND DEBRIS SHOULD BE OUT OF THE WAY)

DETROIT EDISON COMPANY  
PHONE: 237-8000

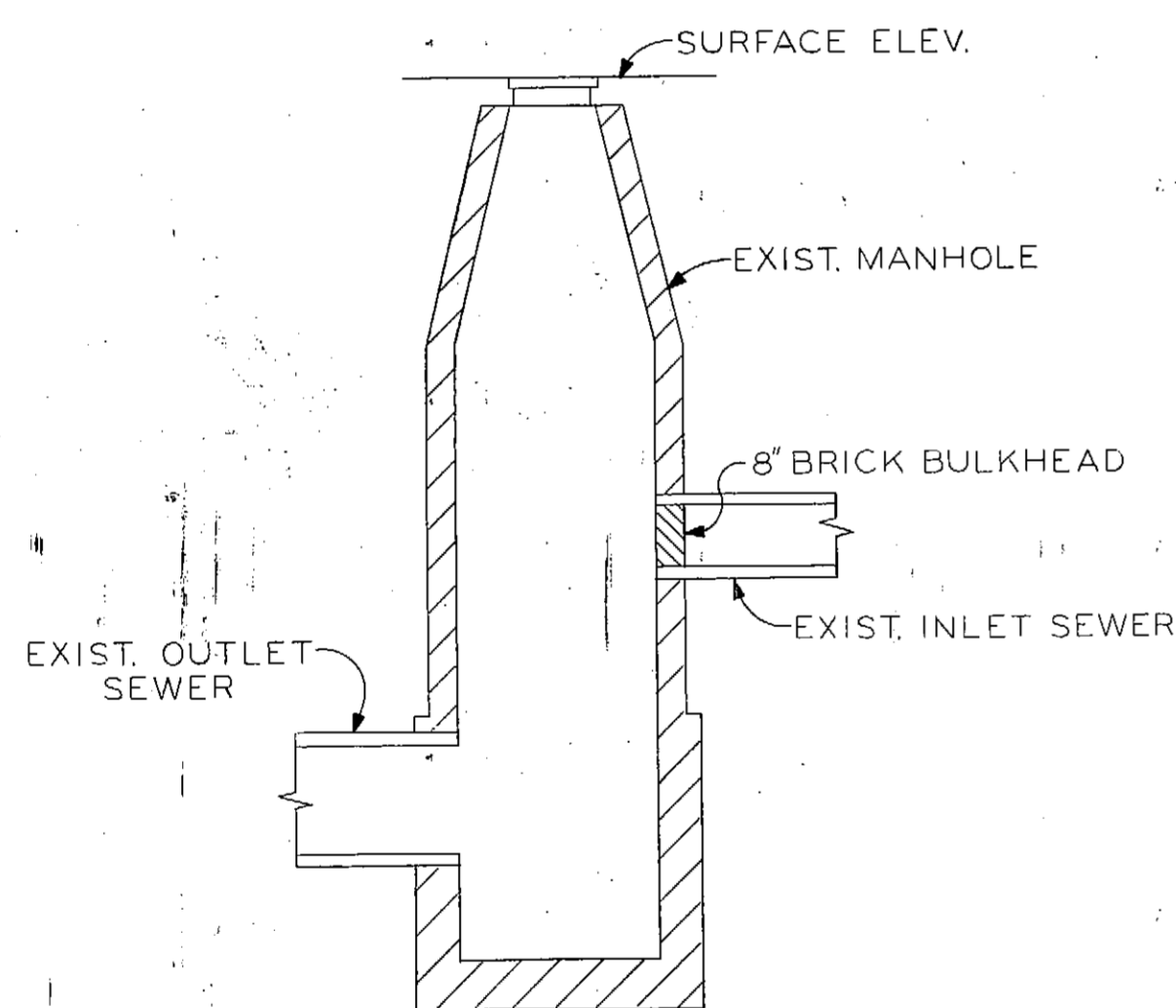
MICHIGAN CONSOLIDATED GAS COMPANY  
PHONE: 965-8000

MICHIGAN BELL TELEPHONE COMPANY  
PHONE: 372-8703

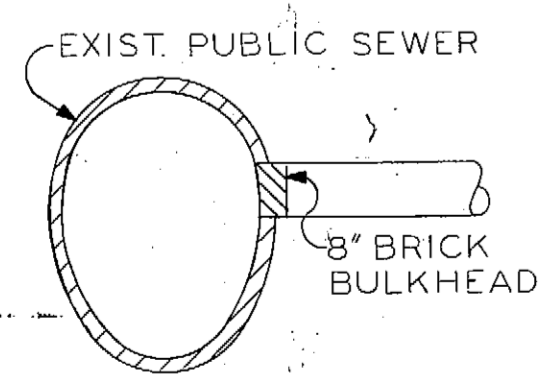
PUBLIC LIGHTING COMMISSION  
PHONE: 875-0972

**GENERAL NOTES**

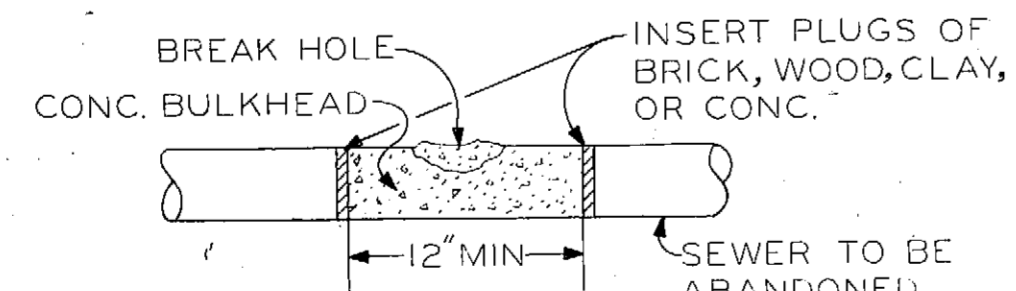
1. IN COMPLIANCE WITH PUBLIC ACT 53 OF THE STATE OF MICHIGAN (EFFECTIVE AUG. 1, 1974) THE CONTRACTOR SHALL NOTIFY IN ADVANCE OF CONSTRUCTION, ALL PUBLIC AND PRIVATE OWNERS HAVING EXISTING FACILITIES IN OR NEAR THE IMMEDIATE WORKING AREA FOR CONVENIENCE THE KNOWN UTILITY OWNERS ARE LISTED ON THIS DRAWING. THIS LISTING DOES NOT, HOWEVER, RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF VERIFYING UTILITY LOCATIONS AND NOTIFYING ALL UTILITY OWNERS AND MISS-DIG. (PHONE: 482-7171 IN AREA CODE 800.)
2. LOCATIONS OF EXISTING CATCH BASIN DRAINS ARE APPROXIMATE.
3. UTILITIES CROSSING THE SEWERS TO BE CONSTRUCTED IN OPEN CUT ARE SHOWN IN PROFILE. ELEVATIONS AND LOCATIONS ARE APPROXIMATE.
4. VERIFY EXISTING INVERT ELEVATIONS PRIOR TO START OF CONSTRUCTION.



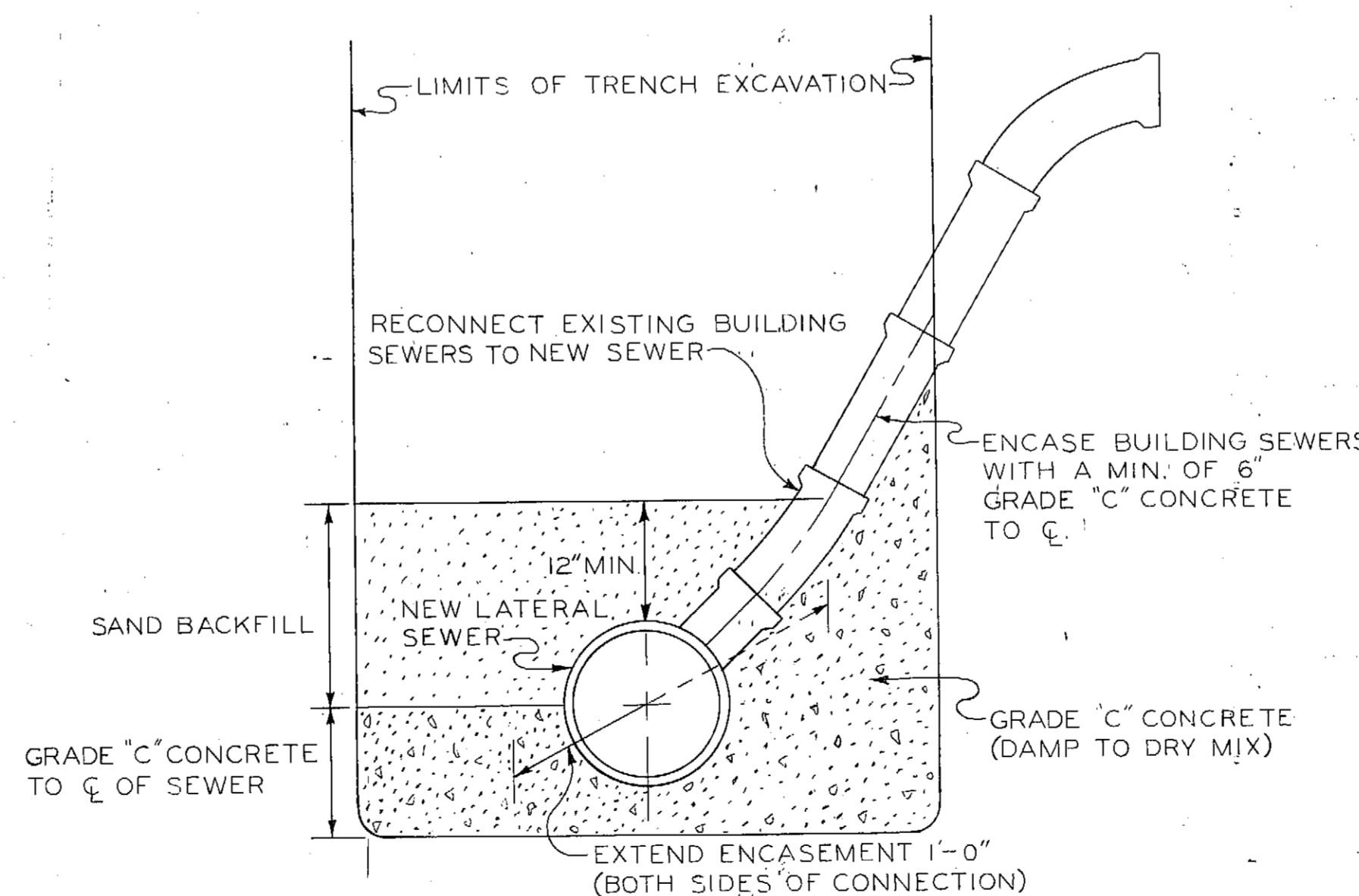
BULKHEAD CONSTRUCTED FROM WITHIN MANHOLE  
NO SCALE



TYPICAL CROSS SECTION OF BULKHEAD CONSTRUCTED FROM WITHIN THE SEWER  
NO SCALE



TYPICAL DETAIL OF BULKHEAD CONSTRUCTED AND POURED FROM OUTSIDE SEWER AFTER EXCAVATING TO SEWER DEPTH  
NO SCALE



DETAIL OF WYE CONNECTION  
NO SCALE

DESIGNED BY		APPROVED		STREET PAVEMENT REMOVAL ON PARKVIEW		CITY OF DETROIT		M.D.P.H. PERMIT NO.	
DRAWN BY <i>William Baker Jr.</i>		<i>Emilio...</i>		PAVING OF PONTIAC AND MISCELLANEOUS CONSTRUCTION		WATER AND SEWERAGE DEPARTMENT		FED. REF. NO.	
CHECKED BY <i>DWD</i>		<i>D. S...</i>		KERCHEVAL - McCLELLAN PROJECT		ENGINEERING DIVISION		CONTRACT NO.	
CO-OR.		APRVD. DATE		SCALE AS SHOWN		SECTION MAP		WORK ORDER NO.	
REVISIONS		ENGINEER - WATER SYSTEM		DATE OCT. 4, 1979		TOWN		5-136-7316	
		DIRECTOR				RANGE		D-7904274-2	
						SECTION		LS. 7316 DWG. #2152-2	
						PORTION CODE		SHEET 14 OF 14 SHEETS	