

MILT MCLEOD

PROJECT NAME: **CAFÉ EXPRESS (NORTH LAMAR)**
 PROJECT NUMBER: **9206**

DATE: **3/19/2010**
 DESIGNER: _____
 CHECKED BY: _____

COLD WATER CALCULATIONS (FOR BUILDING INTERIOR PIPING)

FIXTURE	NUMBER REQUIRED		DEMAND WEIGHT FIXTURE UNITS		FIXTURE UNIT SUBTOTALS		REMARKS
	PRIVATE	PUBLIC	PRIVATE	PUBLIC	PRIVATE	PUBLIC	
Bathtub			2				
Bedpan washer							
Bidet			2				
Combo sink and tray			3				
Dental unit or cuspidor							
Dental lavatory			1				
Drinking fountain			1				
Kitchen sink			2				
Lavatory	6		1		6		
Laundry tray (1/2 cmpts.)			2				
Shower, each head			2				
Sink, service	1		2		2		
Urinal:							
Pedestal							
Wall lip		1					
Stall							
with Flush tank							
Wash sink, circular or multiple (each set of faucets)							
Water closet:							
Flushometer-tank			3				
Flushometer valve	5		6		30		
Flush tank			3				
Hose Bibb	2		3		6		
Vending machines			1				
Three Compartment Sink	2		4		8		
Single Compartment Sink	7		2		14		
Two Compartment Sink			3				
Ice Machine	1		3		3		
Coffee Maker	3		2		6		
Trap Primer			1				
Island HB			3				
					75		

TOTAL BUILDING FIXTURE UNITS **75**

FLOW RATE (gpm) =	FT	FV
CALCULATED PIPE SIZE =	38	62
BLDG. SPLY MAIN (in) =	2.11	2.54
VELOCITY (fps) =	2-1/2"	3"
	3.49	3.92

SIZE	F.T. F.U	F.V. F.U
1/2"	1	-
3/4"	6	-
1"	13	-
1-1/4"	26	-
1-1/2"	54	13
2"	175	76
2-1/2"	431	295
3"	748	700

BUILDING INTERIOR PIPING

MAIN PRESSURE AT 5'-0" MARK	50 PSI
TOTAL LENGTH OF PIPE	175 FEET
20% OF TOTAL PIPE LENGTH	35 FEET
EQUIVALENT LENGTH OF PIPE (20%)	500 FEET
PRESSURE REQ. AT FURTHEST FIX.	40 PSI
NET PEASURE AVAILABLE FOR LOSS	10 PSI
LOSS PER 100' OF PIPE	2 PSI