

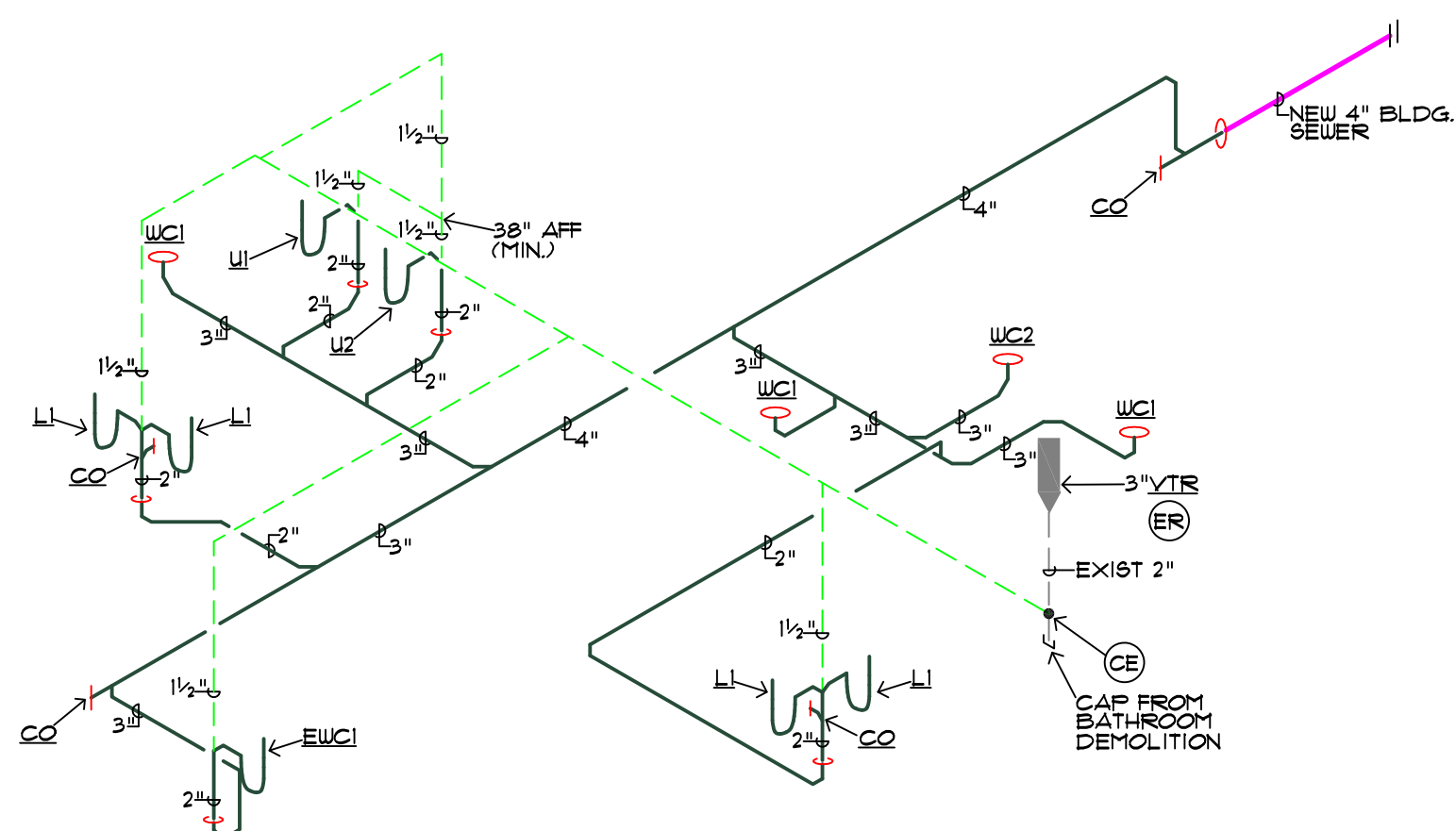
## FIXTURE SCHEDULE

TAG	DESCRIPTION	MAKE & MODEL
WC1	BARRIER FREE TANK WATER CLOSET	AMERICAN STANDARD MODEL 2027/214 ELONGATED TANK WATER CLOSET WITH TANK MODEL (LEFT OR RIGHT TRIP LEVER) 4266-014-LEFT/4266-804-RIGHT ELONGATED BOUL WITH A MATCHING MODEL 9309-10 ELONGATED OPEN FRONT SEAT MAX WATER CONSUMPTION + 1.6 GPF
WC2	TANK WATER CLOSET	AMERICAN STANDARD MODEL 2018/214 ELONGATED TANK WATER CLOSET WITH TANK MODEL (LEFT OR RIGHT TRIP LEVER) 4266-014-LEFT/4266-804-RIGHT ELONGATED BOUL WITH A MATCHING MODEL 9309-10 ELONGATED OPEN FRONT SEAT MAX WATER CONSUMPTION + 1.6 GPF
LI	VANITY LAVATORY	AMERICAN STANDARD MODEL 0416/028 AQUALYN VAINITY LAVATORY Commercial ADA, Vitreous China Lavatory - 41 Faucet Centers WITH CHROME FAUCET 892-42809-8492CP FAUCET INSTALL STOP & TRAP WRAP PER ADA REQTS.
UI#2	WALL HUNG URINAL (11" & 24" TO RIM)	AMERICAN STANDARD 6590/525 WALL HUNG URINAL W/ SELECTRONIC FLUSH VALVE (PROVIDE XTRA BATTERIES) INSTALL ONE AT 11" TO RIM "ADA" AND ONE AT 24" TO RIM
EUC1	ELECTRIC WATERCOOLER	ELKAY EZ815C ADA DUAL WATER COOLER
HE1	EXTERIOR HOSE BIBB	WOODFORD 65 FREEZELESS EXTERIOR HOSE BIBB WITH INTEGRAL VACUUM BREAKER

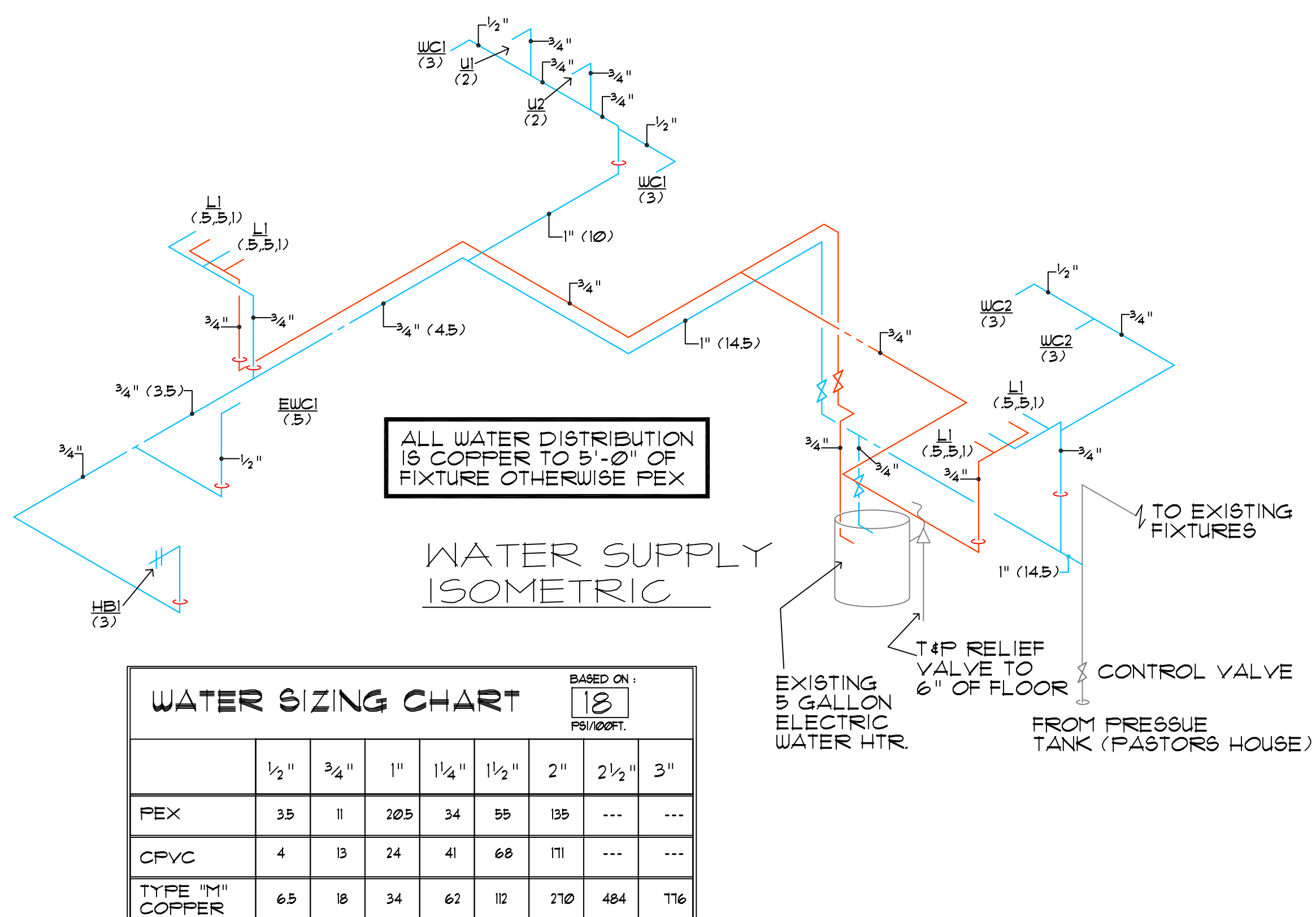
NOTE:  
WATER CLOSET TRIP LEVERS SHALL BE ON THE ACCESSIBLE SIDE OF ALL ADA WATER CLOSERS

FIXTURE	DRAIN	C.W.	H.W.	REMARKS
LAVATORY	1 1/2"	1/2"	1/2"	PROVIDE STOPS
WC-TANK	3"	1/2"	-	PROVIDE STOPS
SINK	1 1/2"	1/2"	1/2"	PROVIDE STOPS
MOP SINK	3"	3/4"	3/4"	PROVIDE STOPS
WATER COOLER	1 1/4"	1/2"	1/2"	PROVIDE SHUT-OFF
HOSE BIBB	TO FLOOR DRAIN	SEE ISOM	PROVIDE STOP	
FLOOR DRAIN	3"	-	-	

GENERAL NOTES:  
ALL FIXTURES MUST COMPLY WITH ADA REQUIREMENTS.  
ALL PLUMBING WORK SHALL COMPLY WITH STATE AND LOCAL CODES.



WASTE & VENT ISOMETRIC  
SCALE: NONE



ALL WATER DISTRIBUTION IS COPPER TO 5'-0" OF FIXTURE OTHERWISE PEX

	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"
PEX	35	11	205	34	55	135	...	...
CPVC	4	13	24	41	68	111	...	...
TYPE "M" COPPER	65	18	34	62	112	210	484	716

## SPECIFICATION

- The Plumbing Contractor shall provide all piping fixtures, fittings, etc. to provide a complete plumbing system.
- All work shall comply with all general and supplementary conditions, project requirements, and instruction to bidders which are part of the architectural specifications.
- The Plumbing Contractor is required to visit the premises, take measurements, inspect existing conditions, and obtain such first-hand information necessary to submit a bid. No extras will be allowed because of the Contractor's misunderstanding of work involved.
- The Plumber shall obtain all permits and pay all fees. The Contractor shall comply with all state and local codes.
- All cutting and patching required for the plumbing work shall be the responsibility of the Plumbing Contractor. No beam or structural member may be cut without approval from architect.
- All waste and vent piping shall be PVC-DWV with solvent weld joints.
- All above ground water piping shall be ASTM B88 type "M" copper piping with no lead solder joints, or "PEXA" UPONOR plastic piping.
- The Contractor shall insulate all above ground water and rain conductor piping with 1/2" Armaflex II pipe insulation.
- Provide and install APOLLO series 10-200 ball valves or an approved equal ball valve. The use of gate valves is not acceptable.
- Disinfect all domestic water piping per the state code.
- Excavate to a depth of 3 inches below bottom of pipe and provide sand fill to bottom of pipe. Install piping and back fill to a level 6 inches above pipe with pea gravel. Back fill with excavated material to grade in 6 inch compacted lifts.
- Install an electric water heater of size & capacity as noted on the drawings. Mount water heater near ceiling. Water heater shall be UL listed and shall be equipped with a state approved T&P relief valve.
- The Contractor shall guarantee his work for a period of one year after acceptance of his work by the owner.

PLUMBING CALCULATIONS		STATE OF WISCONSIN					
EXISTING FIXTURES							
QTY.	FIXTURE TYPE	SEWER VALU	TOTAL FIXT.	SEWER CW	WATER HW	TOTAL CW	WATER HW
4	TANK WATER CLOSET	6	24	3	0	3	12
1	URINALS	2	2	2	0	2	2
3	LAVATORY	1	3	0.5	0.5	1	1.5
1	SERVICE SINK	2	2	2	2	3	2
1	WATER COOLER	1	1	0.5	0	0.5	0.5
2	1-COMP HAND SINK	2	4	1	1	1.5	2
1	2" FLOOR DRAIN	2	2				
0	CATCH BASIN	4	0				
		HOSE BIBBS					
1	HOSE BIBBS 1/2"	0	3	0	3	3	0
14 TOTAL ADDED SANITARY LO		38	TOTAL WATER LO:		23	5.5	26.5
						17GPM	

PLUMBING CALCULATIONS		STATE OF WISCONSIN					
NEW ADDED FIXTURES							
QTY.	FIXTURE TYPE	SEWER VALU	TOTAL FIXT.	SEWER CW	WATER HW	TOTAL CW	WATER HW
4	TANK WATER CLOSET	6	24	3	0	3	12
2	URINALS	2	4	2	0	2	4
4	LAVATORY	1	4	0.5	0.5	1	2
0	SERVICE SINK	2	0	2	2	3	0
1	WATER COOLER	1	1	0.5	0	0.5	0.5
0	1-COMPARTMENT SINK	2	0	1.5	1.5	2	0
1	2" FLOOR DRAIN	2	2				
0	CATCH BASIN	4	0				
		HOSE BIBBS					
1	HOSE BIBBS 1/2"	0	3	0	3	3	0
13 TOTAL ADDED SANITARY LO		35	TOTAL WATER LO:		21.5	2	23.5
						17GPM	

WATER CALCULATION WORK SHEET			
INFORMATION REQUIRED TO CALCULATE WATER SERVICE SIZE			
1	DEMAND OF BLDG IN GALS PER MINUTE	50	WFU 28 GPM
2	DIFFERENCE IN ELEVATION FROM MAIN TO METER (OR WELL TANK)	1	FT
3	WATER METER SIZE	NONE	0
4	LENGTH FROM MAIN TO BLDG CONTROL VALVE (OR WELL TANK)	0	FT
5	LOW PRESSURE AT MAIN IN ST. (OR AT WELL TANK)	PRESS. TANK	50 PSI
CALCULATE WATER SERVICE PRESSURE LOSS			
6	LOW PRESSURE AT MAIN IN STREET (OR WELL TANK) SEE ITEM #5 ABOVE	50	PSI
7	WATER SERVICE DIAMETER IS 0 PIPING MATL IS 0	0	PSI
8	DETERMINE PRESSURE GAIN OR LOSS DUE TO ELEVATION (MULTIPLY VALUE #2 ABOVE BY 0.434)	0.43	PSI
9	AVAILABLE PRESSURE AFTER BLDG CONTROL VALVE	49.57	PSI
CALCULATE THE PRESSURE AVAILABLE FOR UNIFORM LOSS (VALUE OF "A")			
B	AVAILABLE PRESSURE AFTER BLDG CONTROL VALVE (FROM #9 ABOVE)	49.57	PSI
C	PRESSURE LOSS OF WATER METER	0	PSI
D	PRESSURE AT CONTROLLING FIXTURE CONTROLLING FIXTURE IS U1	15	PSI
E	DIFFERENCE IN ELEV BETWEEN BLDG CONTROL VALVE AND CONTROLLING FIXTURE IN FEET 8 X 0.434 =	3.472	PSI
F	PRESSURE LOSS DUE TO WATER TREATMENT DEVICE WATER TREATMENT DEVICE IS FUTURE SOFT	12	PSI
G	DEVELOPED LENGTH FROM BLDG CONTROL VALVE TO CONTROLLING FIXTURE IN FT 45 X 1.5 =	67.5	FT
WATER DISTRIBUTION MATERIAL IS PEX/COPPER			
A	PRESSURE AVAILABLE FOR UNIFORM LOSS "A" =	29	PSI/100FT