

- HYDRANT NOTES:**
- 1.) HYDRANT TO BE PLUMB
 - 2.) TRAFFIC FLANGE HEIGHT TO BE ABOVE FINISH GRADE AS RECOMMENDED BY MANUFACTURER.
 - 3.) ALL HYDRANTS TO BE COVERED WITH BURLAP BAGS UNTIL HYDRANTS ARE IN SERVICE AND UNDER OPERATION BY THE OWNER.
 - 4.) CHECK PIPE AND HYDRANT GRADE PRIOR TO INSTALLATION.
 - 5.) HYDRANT DRAINS TO BE PLUGGED IF IN HIGH GROUND WATER.
 - 6.) HYDRANTS TO BE SET ON 6" 3/4" STONE BED W/ PRECAST THRUST BLOCKS STONE 1" UP BARREL W/ FABRIC AND PLASTIC OVER TOP.

HYDRANT WITH VALVE DETAIL
NOT TO SCALE

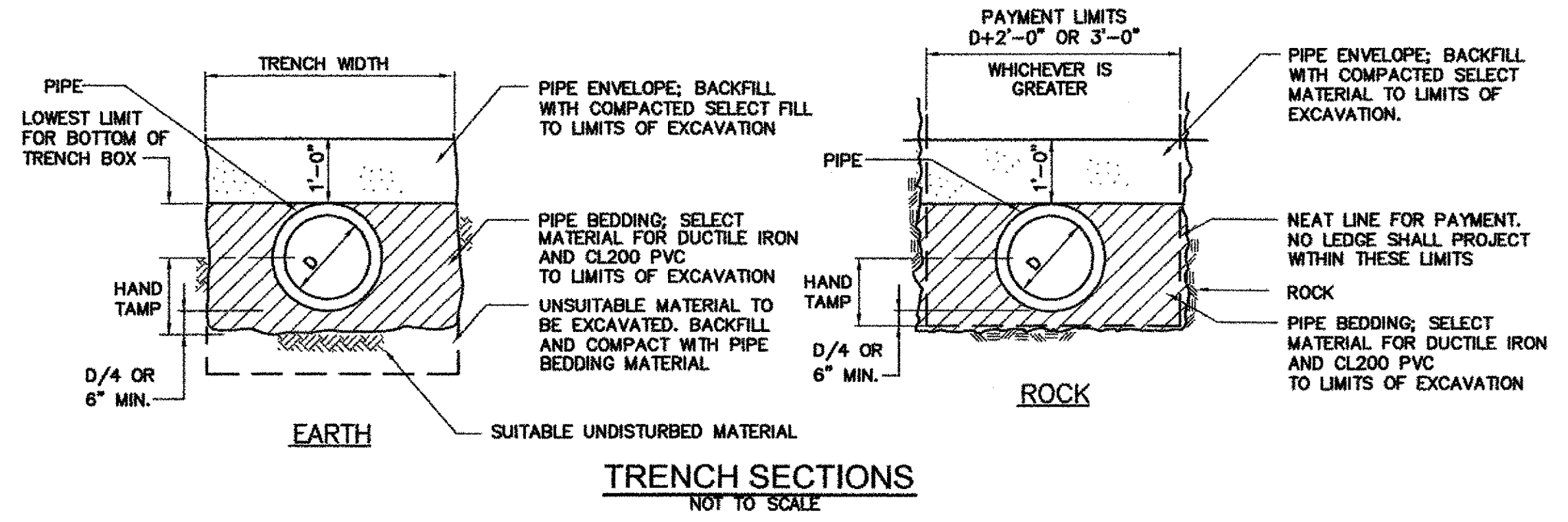
AVG. TEST PRESSURE (PSI)	GPH/1000 LF OF PIPE							
	2" PIPE	3" PIPE	4" PIPE	6" PIPE	8" PIPE	10" PIPE	12" PIPE	14" PIPE
200	0.21	0.32	0.43	0.64	0.85	1.06	1.28	1.48
175	0.20	0.30	0.40	0.59	0.80	0.99	1.19	1.39
150	0.19	0.28	0.37	0.55	0.74	0.92	1.10	1.29
125	0.17	0.25	0.34	0.50	0.67	0.84	1.01	1.18
100	0.15	0.23	0.30	0.45	0.60	0.75	0.90	1.05
80	0.14	0.20	0.27	0.41	0.54	0.68	0.81	0.95
60	0.12	0.13	0.23	0.35	0.47	0.59	0.70	0.82

- NOTES:**
1. ALLOWABLE LEAKAGE BASED ON 18' NOMINAL LENGTHS OF PIPE
 2. FOR SYSTEMS USING 20' NOMINAL LENGTH PIPE MULTIPLY ABOVE CALCULATED GPH BY 0.9 TO ACHIEVE APPROPRIATE LEAKAGE FACTOR.
 3. FOR SYSTEMS USING MULTIPLE PIPE DIAMETERS ALLOWABLE LEAKAGE WILL BE THE SUM OF THE COMPUTED LEAKAGE FOR EACH SIZE.

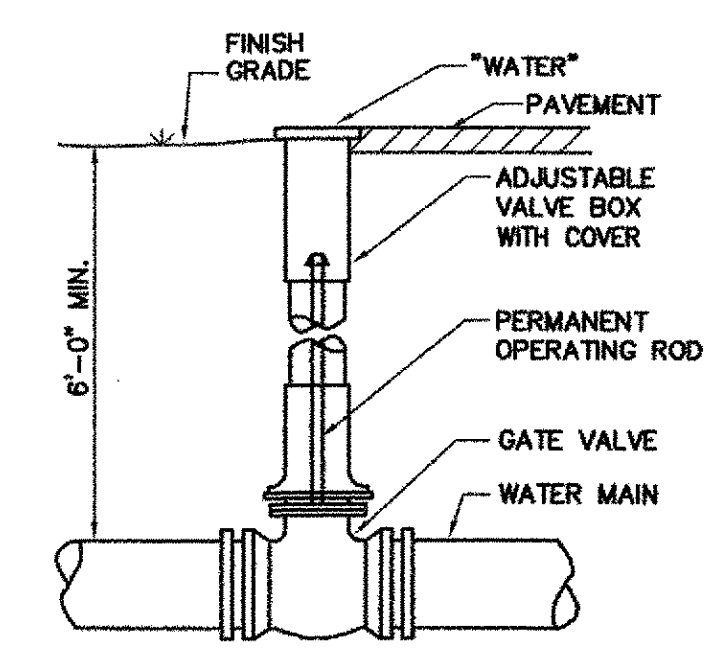
PIPE DISINFECTION					
CHLORINATE WATER FOR DISINFECTION					
DESIRED RESIDUAL CHLORINE CONCENTRATION (mg/L)	LIQUID CHLORINE REQUIRED (POUNDS)	SODIUM HYPOCHLORITE REQUIRED (GALLONS)			CALCIUM HYPOCHLORITE REQUIRED (POUNDS)
		5% AVAILABLE CHLORINE	10% AVAILABLE CHLORINE	15% AVAILABLE CHLORINE	
2.00	1.70	3.90	2.00	1.30	2.60
10.00	8.30	19.40	9.90	6.70	12.80
50.00	42.00	97.00	49.60	33.40	64

DECHLORINATE WATER FOR DISPOSAL				
RESIDUAL CHLORINE CONCENTRATION (mg/L)	CHEMICAL REQUIRED (POUNDS)			
	SULFUR DIOXIDE (SO ₂)	SODIUM BISULFATE (NaHSO ₃)	SODIUM SULFITE (Na ₂ SO ₃)	SODIUM THIOSULFATE (Na ₂ S ₂ O ₄ ·5H ₂ O)
1.00	0.80	1.20	1.20	1.20
2.00	1.70	2.50	2.40	2.40
10.00	8.30	12.50	12.00	12.00
50.00	41.70	62.60	60.00	60.00

- NOTE:**
1. ALL CHEMICAL REQUIREMENTS ARE BASED ON 100,000 GALLONS OF WATER.
 2. EXTENDED OR IMPROPER STORAGE OF CHEMICALS MAY CAUSE A LOSS OF AVAILABLE CHLORINE.

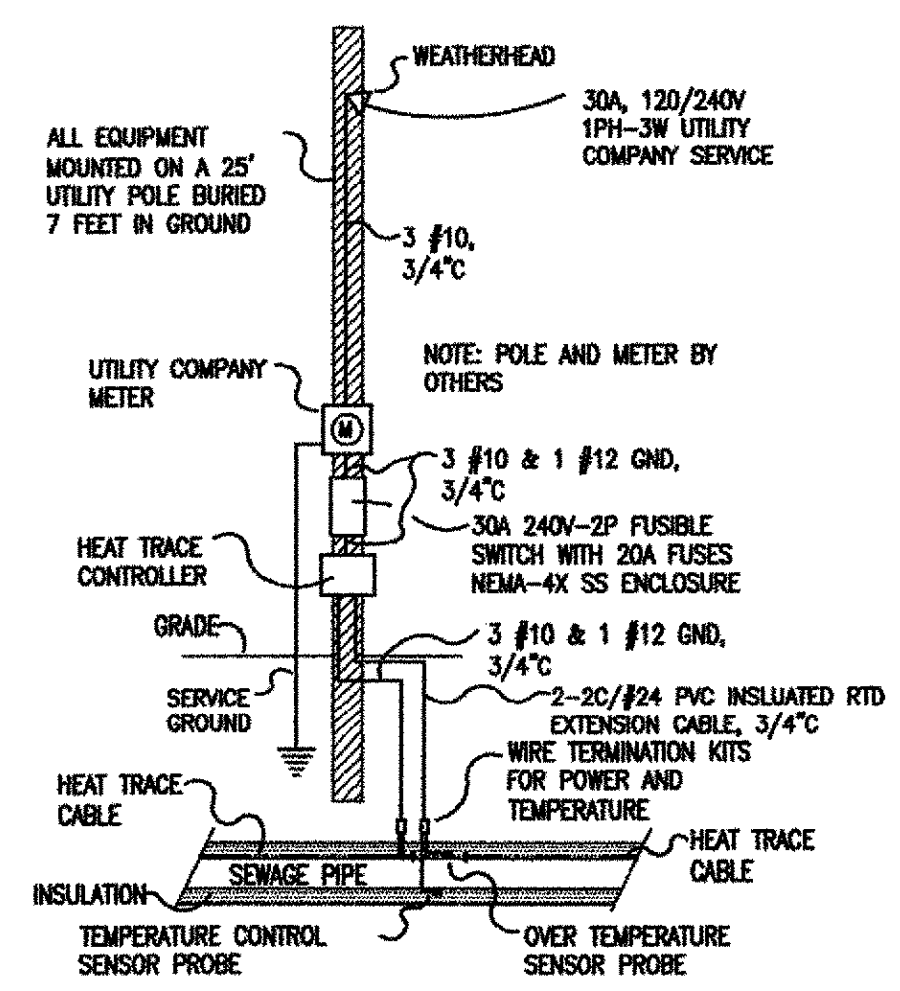


TRENCH SECTIONS
NOT TO SCALE



BURIED GATE VALVE DETAIL
NOT TO SCALE

NOTE:
UNLESS OTHERWISE INDICATED ALL GATE VALVES SHALL HAVE PERMANENTLY INSTALLED OPERATING RODS TERMINATING AT LEAST 24" AND NOT MORE THAN 36" BELOW THE TOP OF THE VALVE BOX.



ELECTRICAL HEAT TRACE DETAIL
NOT TO SCALE

DATE	
REVISIONS	
NO.	
MISCELLANEOUS DETAILS	
BRIDGE #61, TH #3	
TOWN OF BARTON, VILLAGE OF ORLEANS, VERMONT	
DRAWN: EAE	LEACH ENGINEERING CONSULTANTS, P.A.
CHK'D: NPS	36 EASTERN AVENUE, SUITE 6
APP'D: GAL	ST. JOHNSBURY, VERMONT 05819
DATE: 08/14/06	PHONE: (802) 748-9009
SCALE: AS SHOWN	FAX: (802) 748-9023
LEC-4	
BARTON BRO 1449(29)	
SHEET 47 OF 84	

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