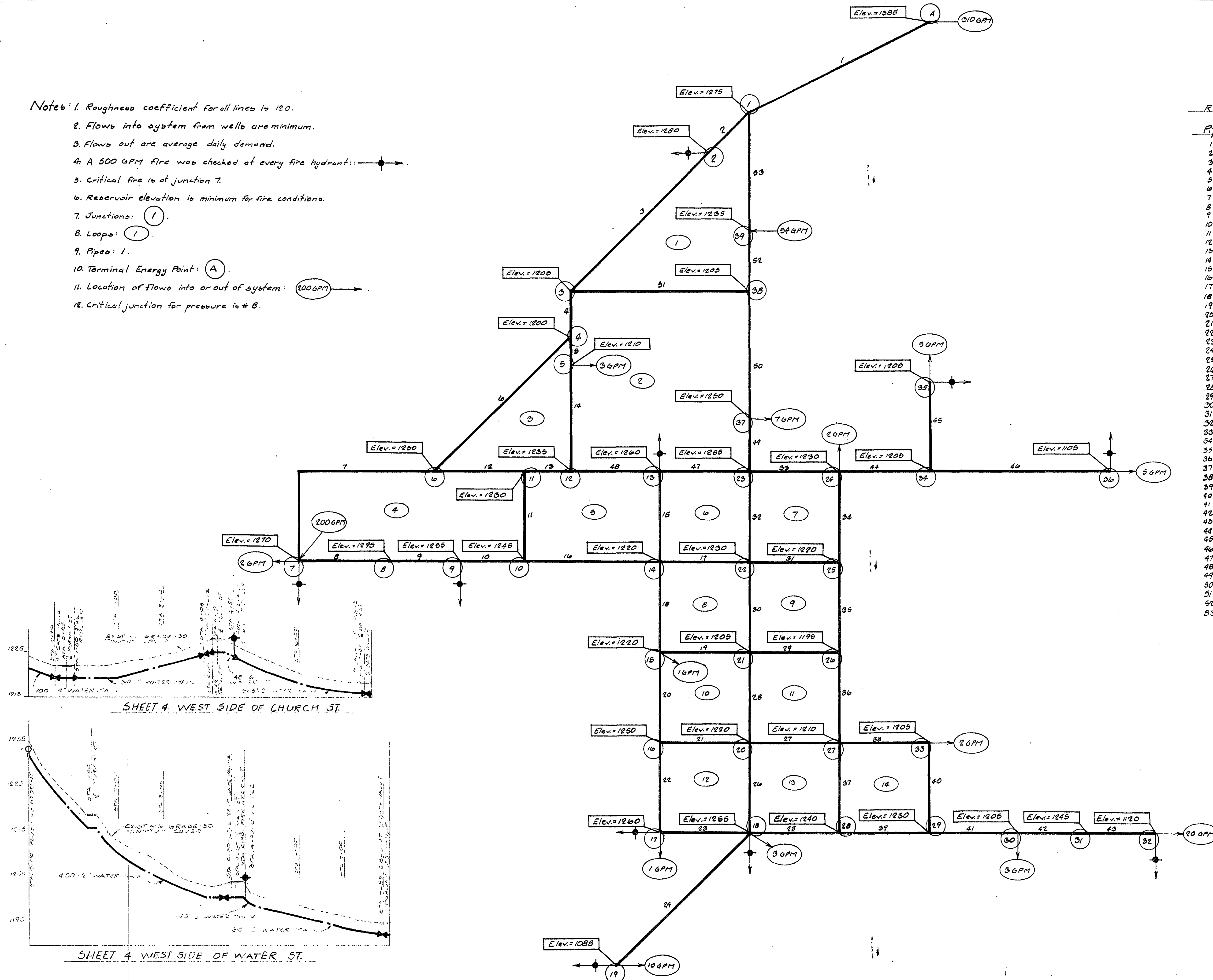


- Notes:
1. Roughness coefficient for all lines is 120.
 2. Flows into system from wells are minimum.
 3. Flows out are average daily demand.
 4. A 500 GPM fire was checked at every fire hydrant.
 5. Critical fire is at junction 7.
 6. Reservoir elevation is minimum for fire conditions.
 7. Junctions: (1).
 8. Loops: (1).
 9. Pipes: 1.
 10. Terminal Energy Point: (A).
 11. Location of flows into or out of system: (200 GPM).
 12. Critical junction for pressure is # 8.

Results of Hardy-Cross Computer Run - Fire at Junction 7

Pipe	Flowrate	Junction	Pressure
1	310.5	1	46.1
2	121.4	2	48.7
3	121.4	3	76.5
4	185.7	4	77.5
5	104.9	5	72.8
6	50.8	6	54.6
7	189.5	7	44.9
8	-142.5	8	34.7
9	-142.5	9	52.3
10	-142.5	10	57.0
11	-87.9	11	43.7
12	-108.7	12	41.8
13	-196.6	13	51.2
14	101.9	14	68.5
15	8.7	15	68.5
16	-54.6	16	55.6
17	-5.6	17	51.3
18	-40.3	18	53.4
19	-4.9	19	127.1
20	-36.4	20	68.6
21	-3.6	21	75.2
22	-32.9	22	64.4
23	-33.9	23	53.6
24	10.0	24	64.4
25	-12.6	25	68.7
26	-34.1	26	
27	0.6	27	
28	-38.2	28	
29	1.1	29	
30	-44.2	30	
31	1.2	31	
32	-51.0	32	
33	46.9	33	
34	34.9	34	
35	36.1	35	
36	37.2	36	
37	28.8	37	
38	9.0	38	
39	14.0	39	
40	7.0	40	
41	20.0	41	
42	20.0	42	
43	20.0	43	
44	10.0	44	
45	5.0	45	
46	5.0	46	
47	-103.4	47	
48	-94.7	48	
49	-201.3	49	
50	-208.3	50	
51	-34.3	51	
52	-242.6	52	
53	188.6	53	



DRAPER - ADEN ASSOCIATES, INC.
ENGINEERS - SURVEYORS - PLANNERS
BLACKSBURG, VIRGINIA

DESIGNED: DJR
DRAWN: DJR
CHECKED: DJR
DATE: October 13, 1976

TOWN OF FINCASTLE
WATER SUPPLY & DISTRIBUTION SYSTEM
HYDRAULIC DATA

REVISIONS:

SCALE: 1" = 100' HORIZONTAL
(PROFILES) 1" = 10' VERTICAL

PLAN N° T-75-193

SHEET
11 OF 15