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From: Base Maintenance Officer
To: Assistant Chief of Staff, Facilities

Subj: Modifications/Additions to Military Construction Program

Ref: FONECON btwn T. Hatcher, BMaintDept, and AI Austin, Fac, on 8 May 1981

Encl: (1) Expansion of Well Field, Hadnot Point Water Treatment Plant
(2) Water Trunk Main, Holcomb Boulevard and Hadnot Point Water Treatment Plants
(3) Additions to MCON Project P-790, Hadnot Point Sewage Treatment Plant
(4) French Creek Utility Distribution System Expansion

1. As discussed during reference (a), there are a number of utilities projects that need to be added to the subject Military Construction Program:

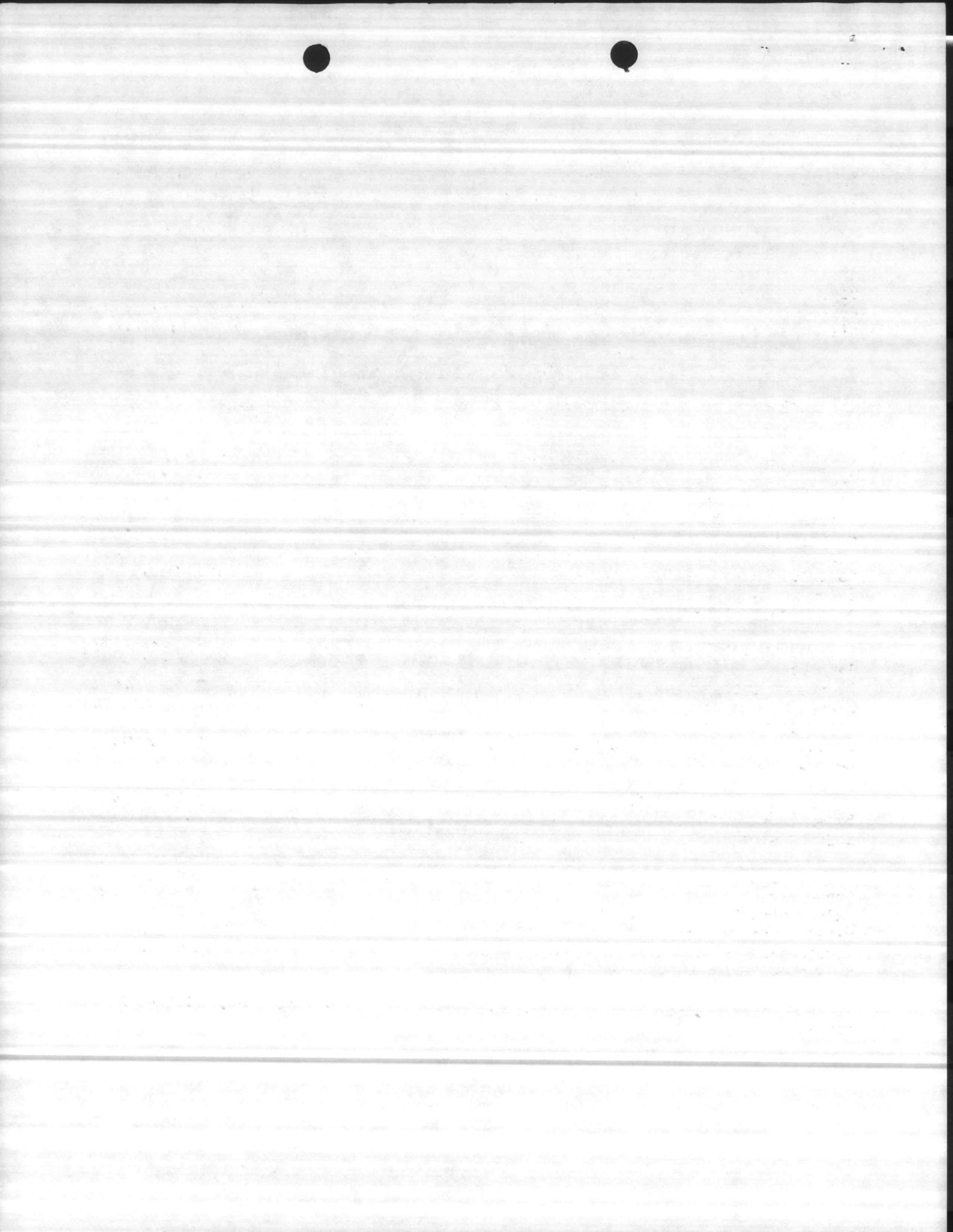
a. Expansion of Well Field, Hadnot Point Water Treatment Plant. A rapid decline in production from the existing well field at the Hadnot Point plant has resulted in significant reduction in raw water availability and the over-pumping of existing producing wells. Approximately 10 new wells, along with associated transport lines, will be required to restore the well field to an acceptable capacity of 150 percent of the plant capacity. Enclosure (1) contains a listing of the elements and associated FY-81 costs for this project.

b. Water Trunk Main, Holcomb Boulevard and Hadnot Point Water Treatment Plants. The trunk main system between the two plants needs to be reinforced. Due to the congested condition and lack of space in the vicinity of the Hadnot Point plant, no major expansion of this plant can occur. Accordingly, all future increases in water requirements for the Hadnot Point area will have to occur at the Holcomb Boulevard plant, which is scheduled for expansion in MCON Project P-785. The trunk system should be sized to allow delivery of approximately 5 million gallons per day from either area to the other in emergency conditions. This can be accomplished by one 24-inch line laid along Holcomb Boulevard. Enclosure (2) contains an element break-down of the project along with FY-81 costs.

Either of the two water system upgrade projects can stand alone as MCON projects. However, combined with MCON Project P-785, Expansion of Holcomb Boulevard Water Treatment Plant, all of the present and future needs of the Hadnot Point area water supply will be satisfied in one project.

2. An update review of MCON Project P-790, Upgrade of the Hadnot Point Sewage Treatment Plant, indicates the need for several additions to the project:

a. Lift Station FC-315 receives sanitary waste from the entire French Creek Area and pumps it directly to the Hadnot Point Sewage Treatment Plant. Both of the 1000 gallons per minute pumps are required to handle peak influent flows into the station. A third 1000 gallons per minute pump is needed to serve as an alternate and as a reserve during periods when the other pumps are down for maintenance or repair.



b. Increasing amounts of grease and oil coming into the Hadnot Point Sewage Treatment Plant is creating operational problems at the plant. Under the present system, the oil and grease that can be skimmed from the primary tanks are pumped into the digesters. The growing volumes of grease and oil have created a requirement for frequent pumping of the digesters, and the increasing presence of oil and grease in other parts of the plant has further hindered plant operation. Project P-996, presently under construction, provides for collection of runoff from various areas of the base, with delivery to the sanitary sewer system. Although oil/water separators are being installed as a part of this project, additional oil residue can be expected to appear at the plant. In order to maintain satisfactory operation of the plant, an oil grease/skimming tank, with automatic skimmers, and a holding tank will be required.

Enclosure (3) contains an element listing of the project along with FY-81 costs.

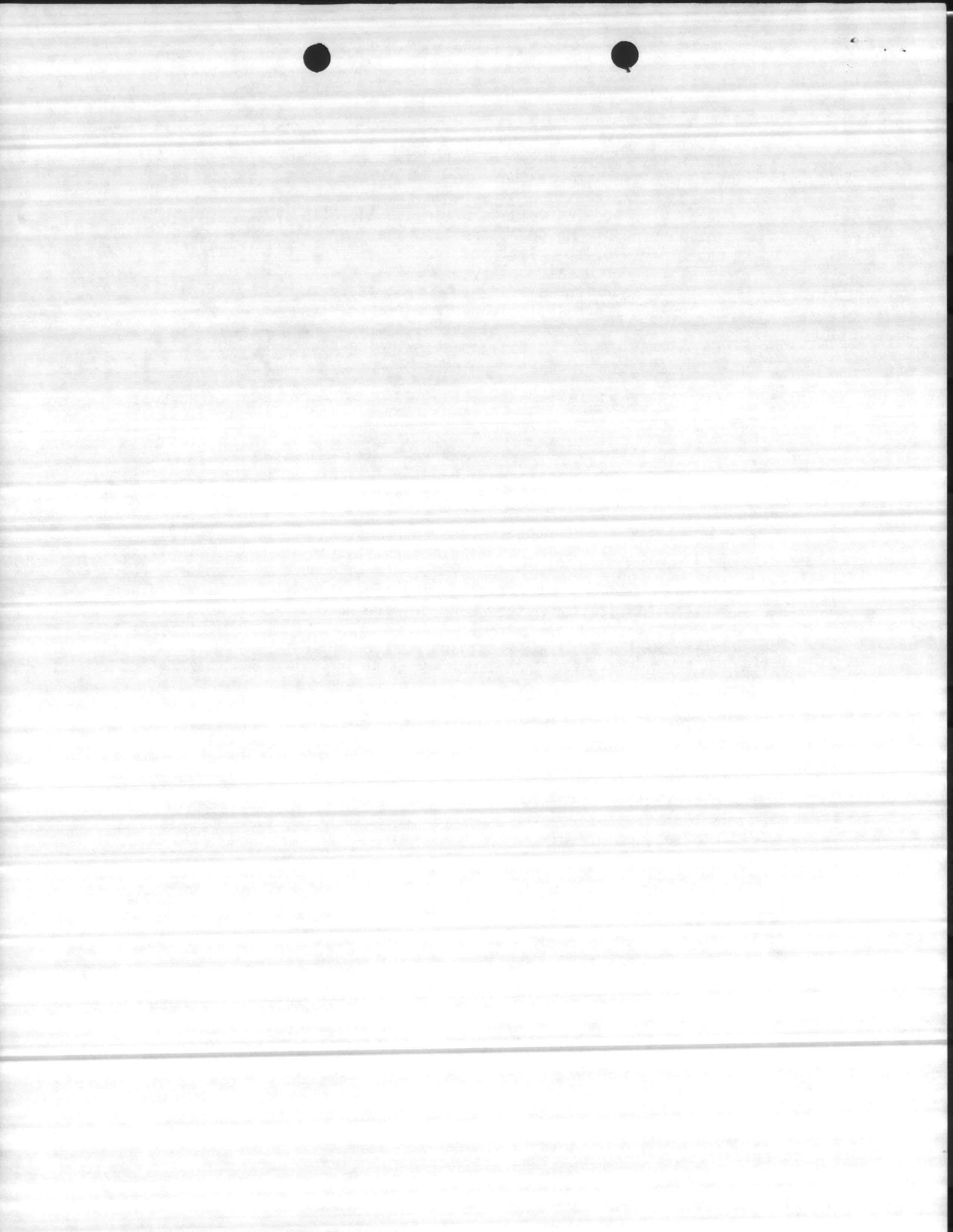
4. The final area that needs to be reviewed for project development is the French Creek Area. Based on the proposed development between FY-82 and FY-87, 21 buildings will be added to the existing utility distribution system, creating a level of demand that cannot be met by the existing distribution system. Further complicating the situation is the possibility of construction of a new plant for burning solid waste and waste wood. A feasibility study by J. E. Serrine Company, Contract No. 80-B-3801, for construction of the plant is presently underway. Based on known proposed construction and the need for spare capacity for future expansion, the following utility system upgrades are needed:

a. Steam Distribution System. Provision must be made for a new 10-inch steam line parallel to the existing 10-inch line from Building 1700, Central Heating Plant, to the French Creek Area, and a condensate return piping system from the French Creek Area to the existing 6-inch condensate return line. In order to provide utility service to the proposed development between Main Service Road and Sneads Ferry Road, an 8-inch steam line and a 4-inch condensate return line will be required.

b. Water Distribution System. The existing water distribution system should be expanded and looped within the French Creek Area to provide adequate domestic and industrial water supply, and fire protection.

c. Sanitary Sewer System. Gravity sewage collection systems for each of the French Creek areas where construction is to occur will be required. To meet the future growth, three new lift stations must be constructed, and the capacity of existing station FC-203 must be increased to handle the increased flow. A new combination 6-inch, 10-inch gravity line to existing FC-315 will be required to provide discharge from FC-203.

Enclosure (4) contains an element breakdown of the project along with FY-81 costs.



50 For additional information on subject additions to the MCON Program, contact Terry Hatcher, Director, Utilities Division, ext. 5161.

F. H. MOUNT

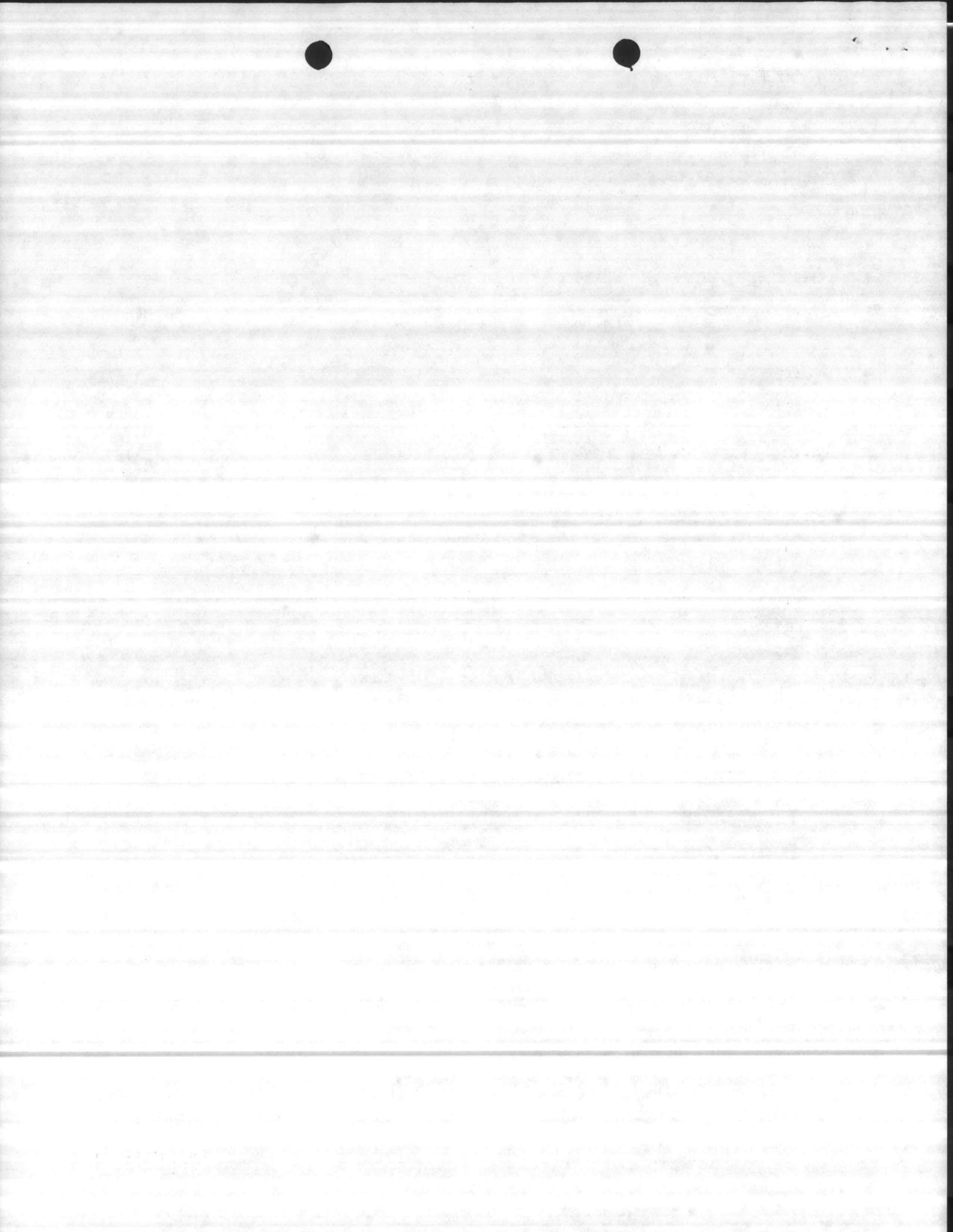
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555,000 X 10 = 555,000

100,000

1,100,000

11,000,000



Expansion of Well Field - Hadnot Point Water Treatment Plant

Wells - 10 required

| | | | |
|------------|----|--------------|---------------------------|
| Site Work | \$ | 4,240 | |
| Well | | 28,620 | |
| Building | | 7,950 | |
| Pump | | 8,480 | |
| Piping | | 5,830 | |
| Electrical | | <u>3,710</u> | |
| Total | | | \$58,830 X 10 = \$588,300 |

Raw Water Lines

| | | |
|-----------------------|--------------|----------------|
| 12" (5000 LF) | 159,000 | |
| 8" (13000 LF) | 275,600 | |
| Valves, appurtenances | <u>8,480</u> | <u>443,080</u> |

| | |
|--------------------|----------------|
| Total Construction | 1,031,380 |
| SIOH (5.5%) | 56,726 |
| Contingency (10%) | <u>108,810</u> |

| | |
|-------------|--------------------|
| Total CWE | 1,196,916 |
| Design (6%) | 71,815 |
| Total | <u>\$1,268,731</u> |



Water Trunk Main - Holcomb Boulevard
and
Hadnot Point Water Treatment Plants

| | | |
|--------------------------------|---------------|------------------|
| 24" line (26000 LF) | \$ 1,433,120 | |
| Valves (7 each) | 23,744 | |
| Connections to existing system | 53,000 | |
| Creek Crossing (400 LF) | <u>84,800</u> | |
| Total Construction | | \$ 1,594,664 |
| SIOH (5.5%) | | 87,707 |
| Contingency (10%) | | <u>168,237</u> |
| Total CWE | | <u>1,850,608</u> |
| Design (6%) | | <u>111,036</u> |
| Total | | \$ 1,961,644 |

