

Fried

BASE MAINTENANCE DEPARTMENT
Marine Corps Base
Camp Lejeune, North Carolina 28542

MAIN/FEC/clm
11000
1 November 1978

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

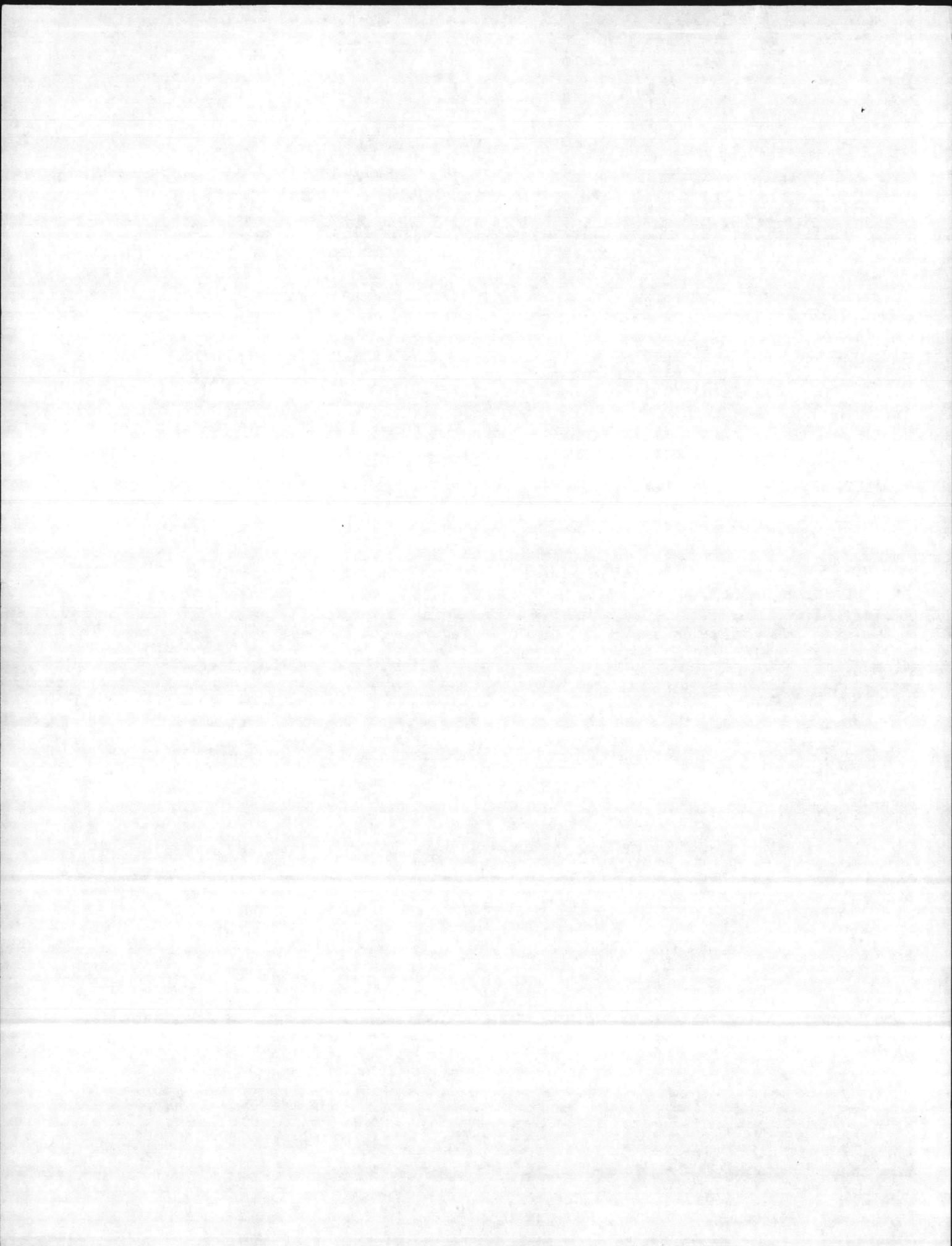
Subj: Supplemental Information Requested by Congress for Fiscal Year
1980 Military Construction Program

Ref: (a) AC/E, Fac memo FAC:ACA:mkc 11013 of 19 Oct 1978

Encl: (1) M, N, and P Costs for Project P-613, BEQ Replacement

1. As requested in reference (a), backup information is provided as enclosure (1).
2. All estimates are based on FY 79 figures and reflect costs associated with an individual H-Type barracks.

R. M. DILLON
By direction



~~200~~ ~~200~~ ~~200~~ *Seen*
M 10/20

OCT 20 UNITED STATES MARINE CORPS
Marine Corps Base
Camp Lejeune, North Carolina 28542

FAC:ACA:mkc
11013
19 Oct 1978

MEMORANDUM

From: Assistant Chief of Staff, Facilities
To: Public Works Officer

Subj: Supplemental Information Requested by Congress for Fiscal Year
1980 Military Construction Program

Encl: (1) CMC ltr LFF-1-LAW:bab of 12 Oct 1978

1. Enclosure (1) is forwarded for action.
2. By copy hereof, the Base Maintenance Officer is requested to provide all necessary backup information for M, N and P costs and outstanding pollution violations, as discussed in enclosure (1).
3. By copy hereof, the Assistant Chief of Staff, Manpower is requested to provide information concerning outstanding OSHA violations.
4. In view of the 15 November 1978 due date, expeditious coordination and action are requested.

T. R. Baisley
T. R. BAISLEY

Copy to:
AC/S, Manpower
BMaintO

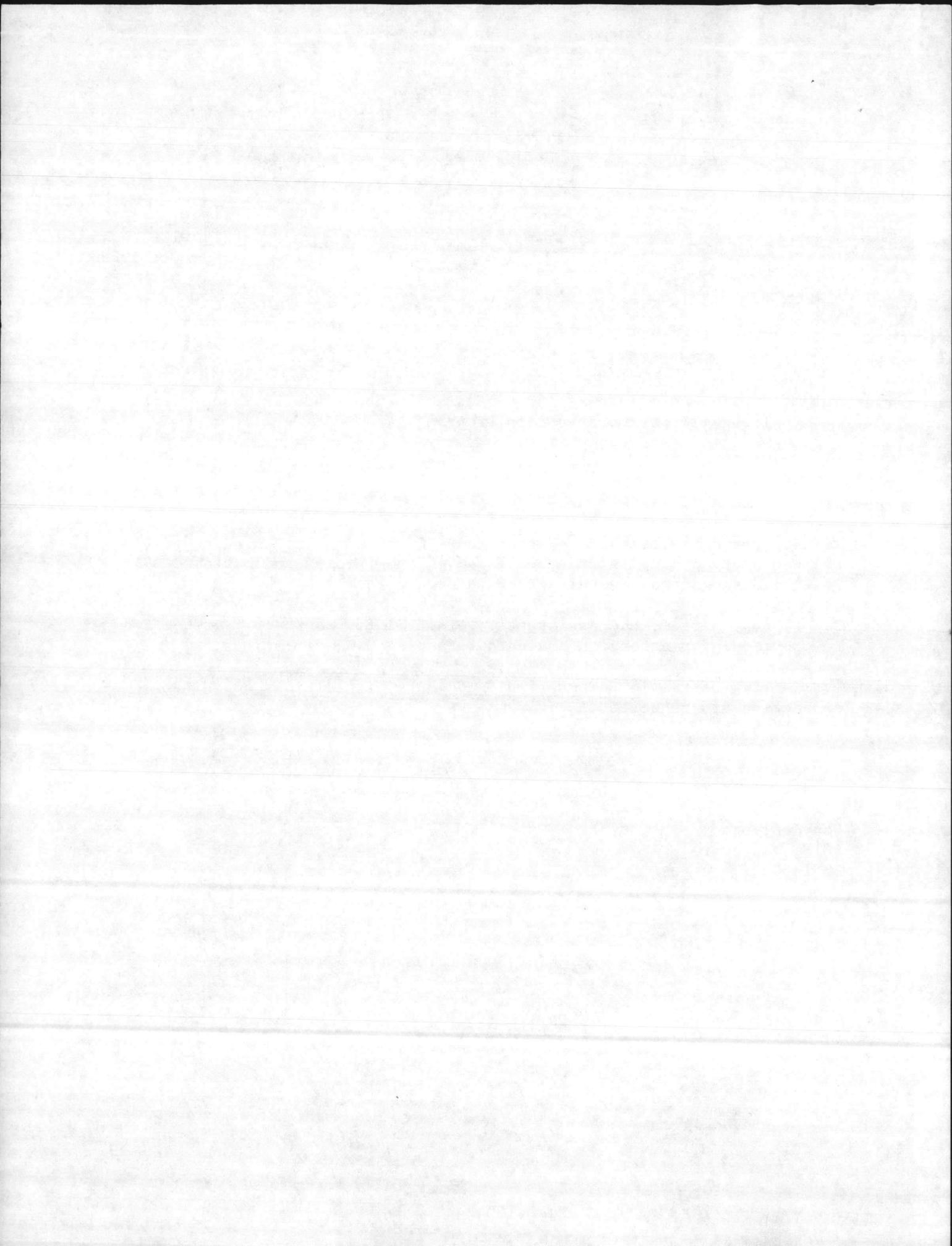
230 Action

200/280
Who will do the work on P-132?
Talk to B. Blake to insure there
is no confusion and that
it does indeed get done by
somebody.

1430 HRS
24 Oct 78

MCAS(H) / EWB

Mrs Black will send copy to BA
P 170 DELETED FOLDER





DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
WASHINGTON, D.C. 20380

IN REPLY REFER TO
LFF-1-LAW:bab

12 OCT 1978

From: Commandant of the Marine Corps
To: Distribution List

Subj: Supplemental Information Requested by Congress for
Fiscal Year 1980 Military Construction Program

- Encl: (1) Extract of House Appropriations Committee
Report for Fiscal Year 1979 Military
Construction, HR 95-1246
1390 → (2) Sample of DD Form 1390 and Instructions for
Supplemental Information
1391 → (3) Sample of DD Form 1391 and Instructions for
Supplemental Information
(4) Fiscal Year 1980 Marine Corps Military
Construction Program

1. The House Appropriations Committee has established significant new requirements for information in support of military construction projects, as shown in enclosure (1). The Office of the Secretary of Defense has decided to provide the requested information to the House Appropriations Committee and any of the other three committees that wish to receive it. In view of the extent of the data gathering and analysis involved, it is considered essential that this effort commence immediately in preparation for the Fiscal Year 1980 Congressional budget submission in January 1979.

2. Activity commanders are therefore requested to develop the following information:

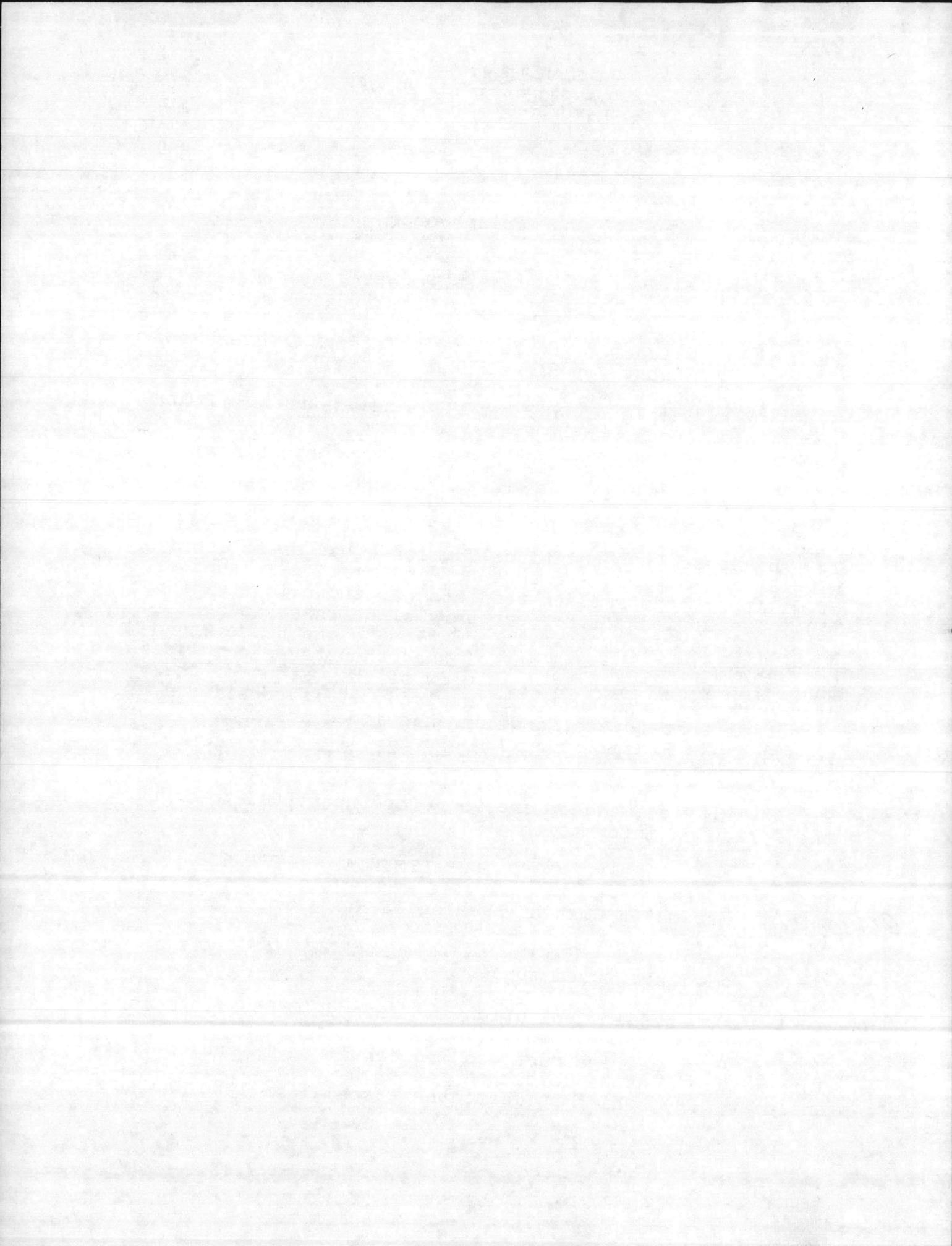
DD FORM 1390 SUPPLEMENTAL INFORMATION *encl(2)*

CMC A. Estimated Cost of Backlog of Real Property Maintenance
(see notes).

MCB B. Similar unused space.

MCB C. Outstanding pollution and safety (OSHA) violations.

NOTES: Detailed instructions are contained in enclosure (2). Information must be developed for each activity listed in enclosure (4), which reflects the Fiscal Year 1980 Marine



Subj: Supplemental Information Requested by Congress for
Fiscal Year 1980 Military Construction Program

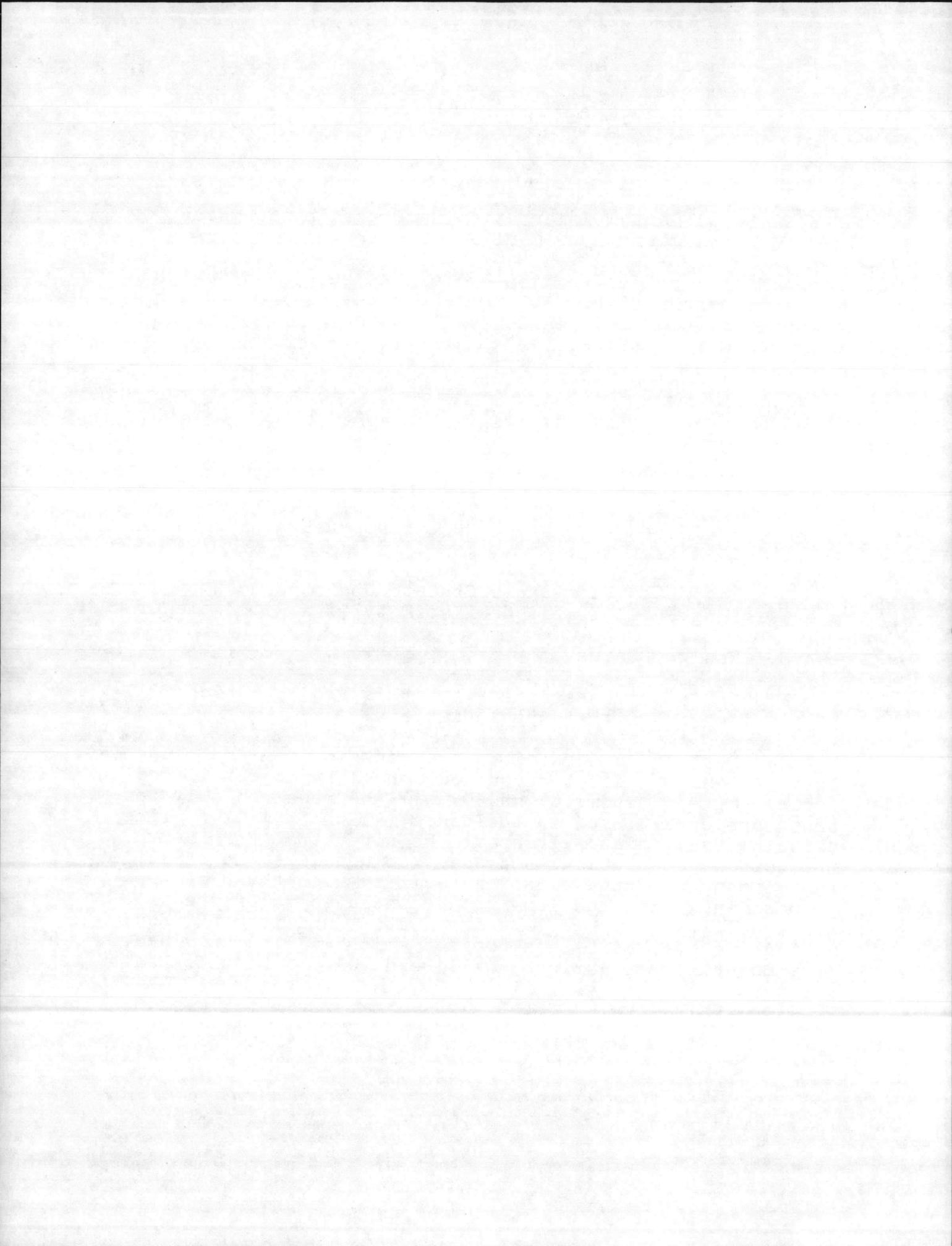
Corps Military Construction Program as submitted to OSD
on 22 September 1978. Item A, Estimated Cost of Backlog
of Real Property Maintenance, will be developed by Head-
quarters Marine Corps.

DD FORM 1391 SUPPLEMENTAL INFORMATION

Encl(3)

- all listed* (A) Estimated Annual Cost to Operate the Proposed Facility.
- all listed* (B) Number of Additional Personnel Necessary to Carry
Out the Function of the Proposed Facility.
- Replacement the Proj's* (C) Estimated Life-Cycle Cost to Operate and Maintain
the Proposed Facility. *BOQ*
- Replacement the Proj's* (D) Estimated Life-Cycle Cost to Operate and Maintain
the Existing Facility, if New Facility is a Replacement.
- CMC* → E. Design Status.
- CMC* → F. Equipment Associated with this Project which will
be provided from Other Appropriations.

NOTES: Detailed instructions are contained in enclosure (3).
Items A. and B. will be required for each project listed in
enclosure (4). Items C. and D. will be required only for
those projects listed in enclosure (4) which will replace
existing facilities. It should be noted that for item D.,
the cost of any actions necessary to equalize the capability
and life span of the existing facility with those of the
proposed new construction must be included to insure true
comparability. Item (E.), Design Status, and item (F.), Equip-
ment Associated with this Project which will be provided
from Other Appropriations, will be developed by this Head-
quarters.

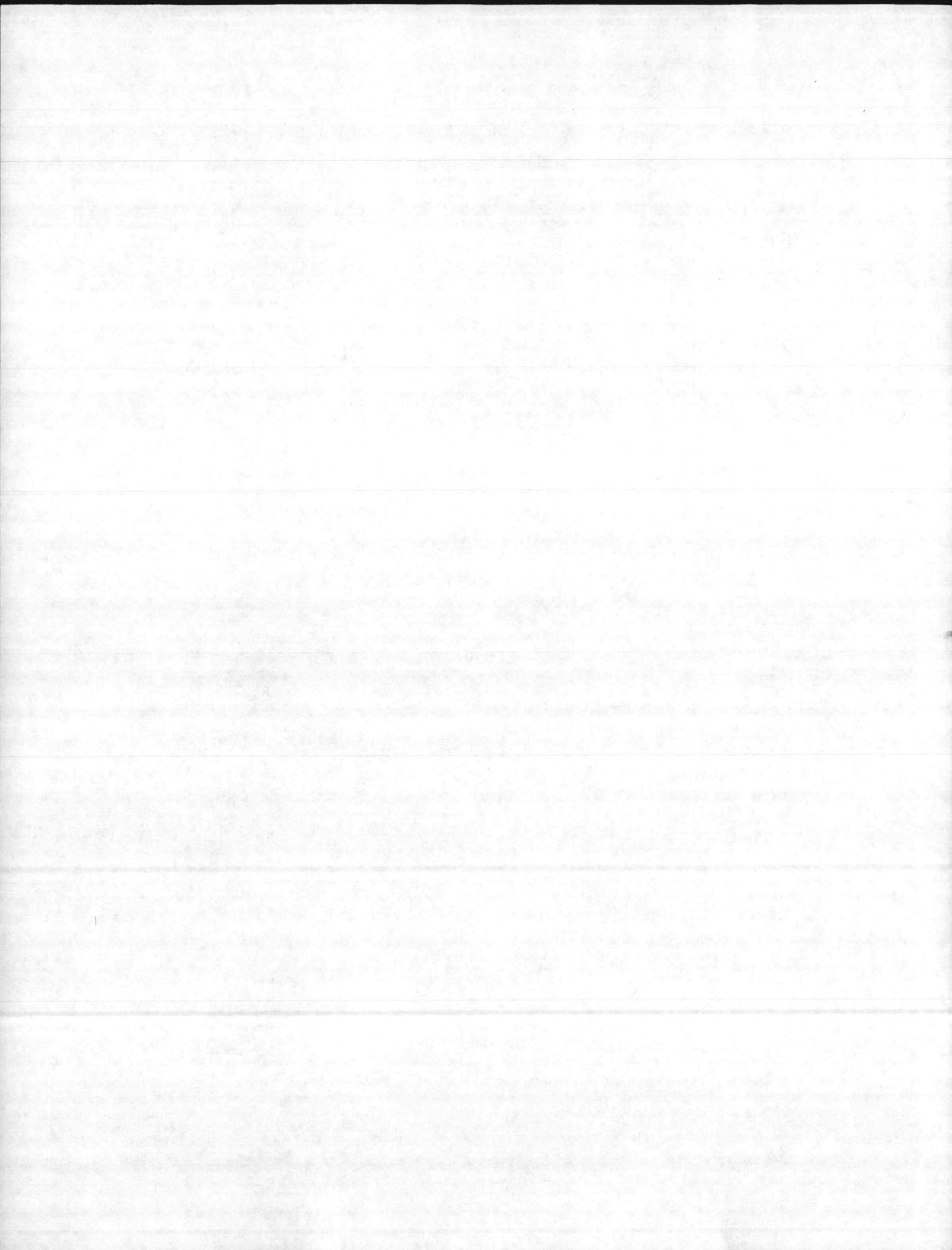


Subj: Supplemental Information Requested by Congress for
Fiscal Year 1980 Military Construction Program

3. The foregoing information is to be submitted to reach
Headquarters Marine Corps (LFF) not later than 15 November
1978. ←

A. E. Scribner
A. E. SCRIBNER
By Direction

Distribution:
COMCABWEST
CG MCAS El Toro
CG MCDEC Quantico
CG MCB Camp Pendleton
CG MCLSBPAC Barstow
COMCABEAST
CG MCAS Cherry Point
CG MCB Camp Lejeune
CG MCB 29 Palms
CG MCB Camp Butler
COMMARCORBASESPAC
CO MCAS(H) New River
CO MCAS Yuma
CO MCAS Kaneohe Bay
CO MCAS(H) Santa Ana
CO MCAF Camp Pendleton



MILITARY CONSTRUCTION APPROPRIATION BILL, 1979

JUNE 1, 1978.—Committed to the Committee of the Whole House on the state of the Union and order to be printed

Mr. McKAY, from the Committee on Appropriations, submitted the following

REPORT

(To accompany H.R. 12927)

The Committee on Appropriations submits the following report in explanation of the accompanying bill making appropriations for military construction and family housing for the Department of Defense for the fiscal year ending September 30, 1979.

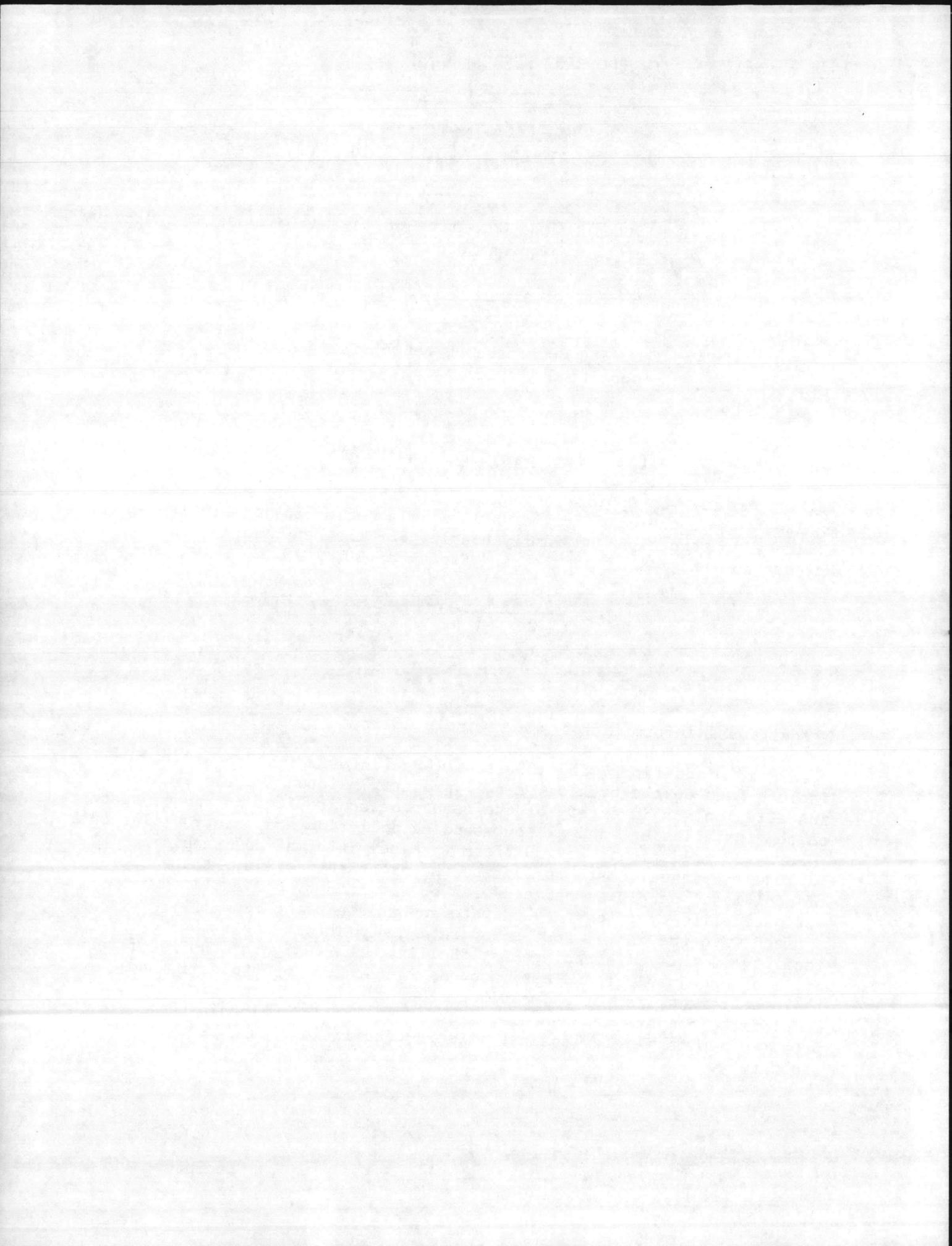
PAGE 4

Additional information is to be included in the justification forms, as follows:

1390 Form 1390 additions: The 1390 form (base information) should include data on the backlog of real property maintenance for each installation, an inventory of the number of square feet of unused space on the installation, and all outstanding pollution and safety violations.

1391 Form 1391 addition: The 1391 form (project information) should include the annual costs to operate the proposed facility, the number of additional people associated with or required by the facility, the estimated life-cycle cost to operate and maintain the facility, a comparison with the annual cost to operate and maintain the existing facility if this is a replacement facility, the design status as of January 1 of each project and estimated design status on October 1, and the procurement list of all equipment associated with the project. The cumulative, comparative annual costs to operate and maintain the proposed new facilities against existing facilities shall be included separately.

Enclosure (1)



(SAMPLE)

DD FORM 1390 SUPPLEMENTAL DATA
FY 1979 MILITARY CONSTRUCTION PROGRAM

Navy
COMPONENT

MCAS Cherry Point NC
INSTALLATION/LOCATION

Marine Corps
COMMAND

(\$000)

CMC

- A. ESTIMATED COST OF BACKLOG OF REAL
PROPERTY MAINTENANCE (BMAR):
- Permanent Facilities
 - Temporary Facilities

3,186
(3,090)
(96)

MCB

- B. SIMILAR UNUSED SPACE:

Real Property Categories

Quantity/Unit
of Measure

171-XX Training Buildings

0

211-XX Maintenance - Aircraft

5,614 SF

214-XX Maintenance - Automotive

8,893 SF

800-XX Energy Conservation

N/A

MCB

- C. OUTSTANDING POLLUTION AND SAFETY (OSHA) VIOLATIONS:

1. Air Pollution

0
(\$000)

2. Water Pollution

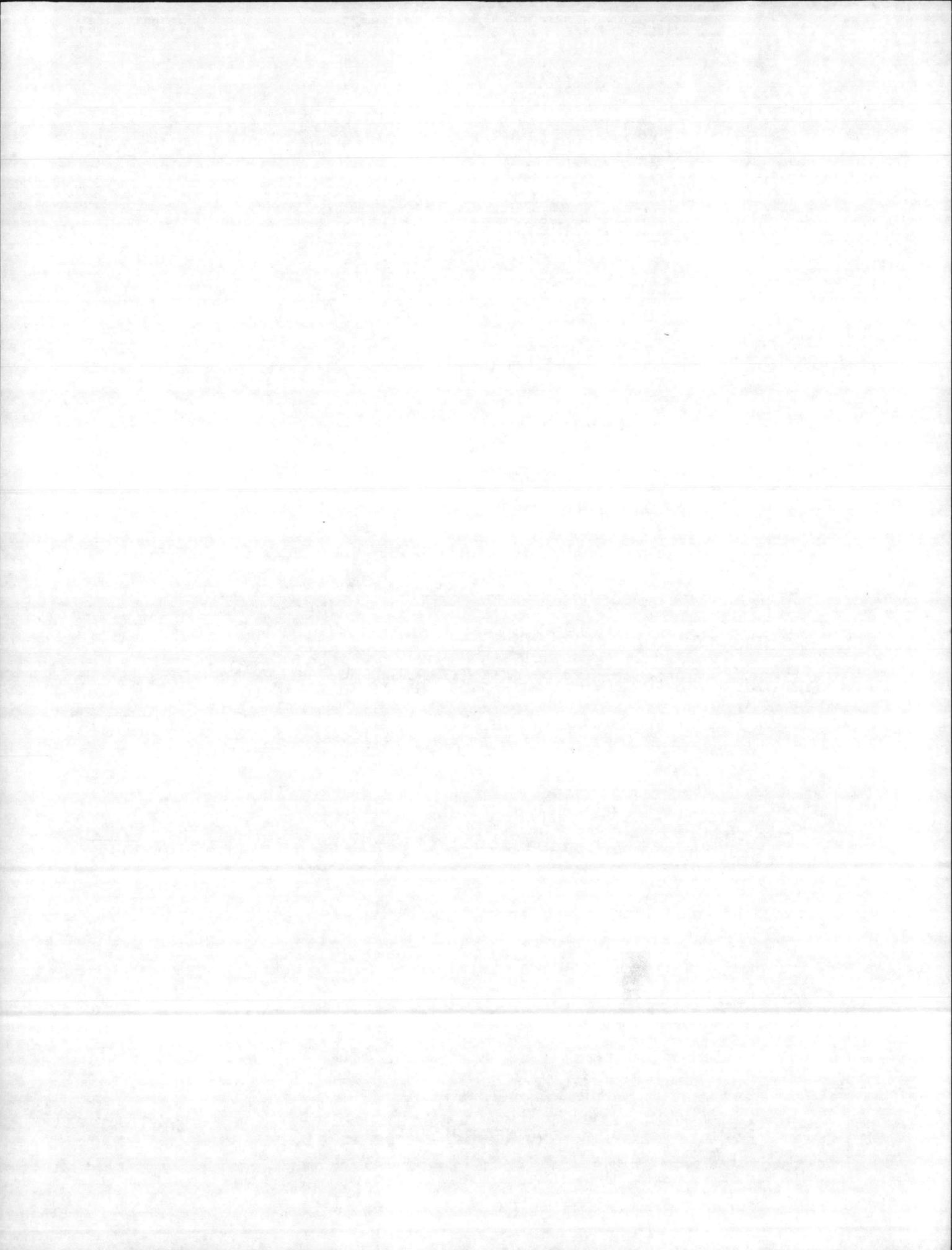
0
(\$000)

3. Safety & Occupational Health

0
(\$000)

(SAMPLE)

Enclosure (2)



INSTRUCTIONS FOR PREPARATION OF DD FORM 1390
SUPPLEMENTAL JUSTIFICATION DATA IN SUPPORT OF
ANNUAL MILITARY CONSTRUCTION PROGRAMS

A. ESTIMATED COST OF BACKLOG OF REAL PROPERTY MAINTENANCE
(BMAR)

Source: Headquarters Marine Corps

B. SIMILAR UNUSED SPACE. Indicate the total area in square feet of unused space in facilities at the installation having three-digit category codes which correspond to those of the projects included in the budget request. For use by Marine Corps witnesses during hearings, provide brief explanation why the vacant space in each three-digit category code cannot be used to satisfy or reduce the requirement to be met by the projects requested in the same category code. If vacant space is to be used for any purpose in the future, or is to be demolished, explain.

Source: Activity Commander

C. OUTSTANDING POLLUTION AND SAFETY (OSHA) VIOLATIONS

(1) Air Pollution

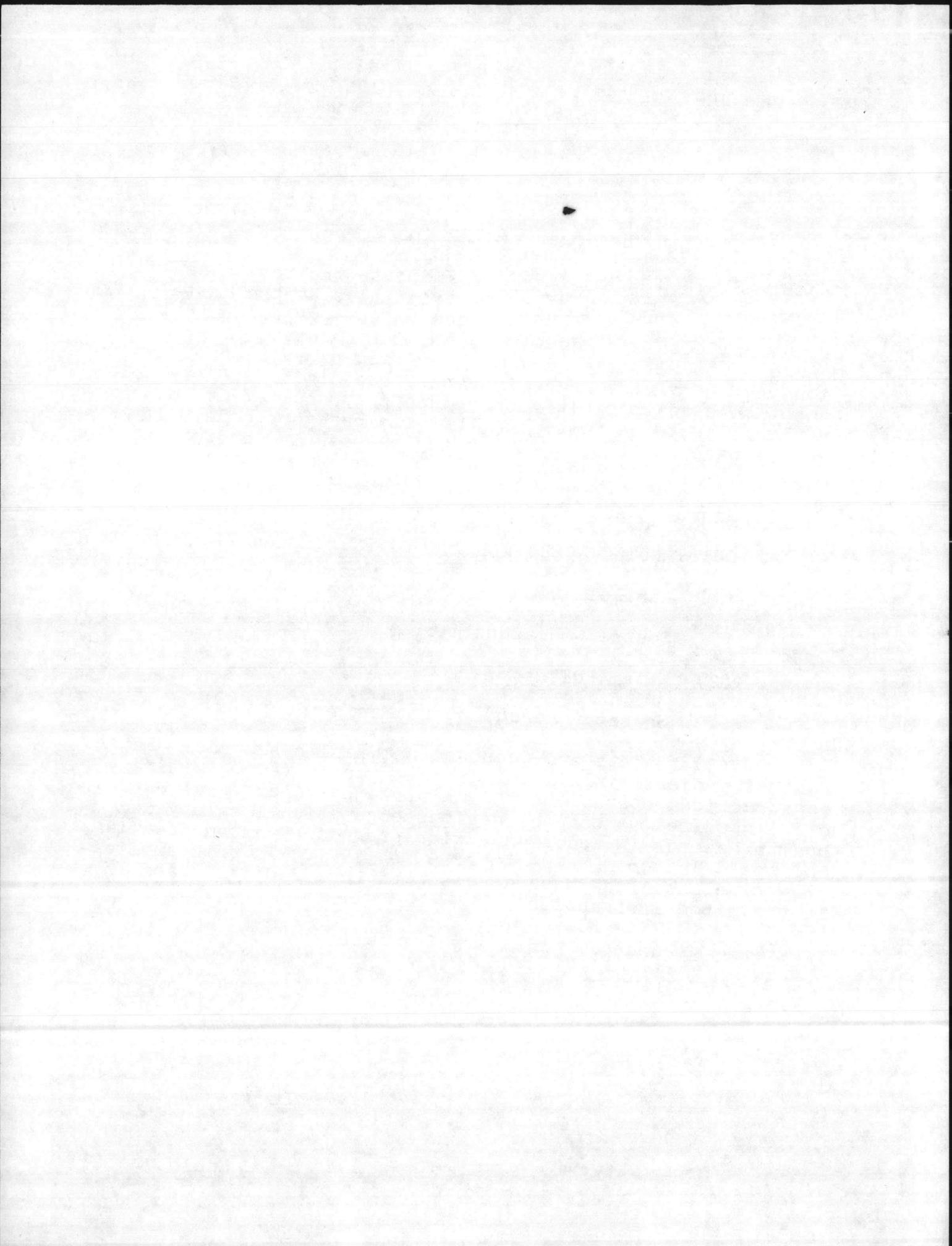
Source: Headquarters Marine Corps

(2) Water Pollution

Source: Headquarters Marine Corps

(3) Safety and Occupational Health Hazards. Enter cost of projects in all funding categories (e.g., Military construction, operations and maintenance, industrial fund, etc.) required to correct serious occupational safety and health hazards in accordance with procedures authorized in CMC speed letter MPN-70-mdm of 9 Feb 1977. In this application, include those hazards assigned Hazard Codes I and II in the cited instruction.

Source: Activity Commander ✓



3. INSTALLATION AND LOCATION MARINE CORPS BASE CAMP PENDLETON, CALIFORNIA	
4. PROJECT TITLE AUTOMOTIVE MAINTENANCE FACILITY	5. PROJECT NUMBER P-001

SUPPLEMENTAL DATA

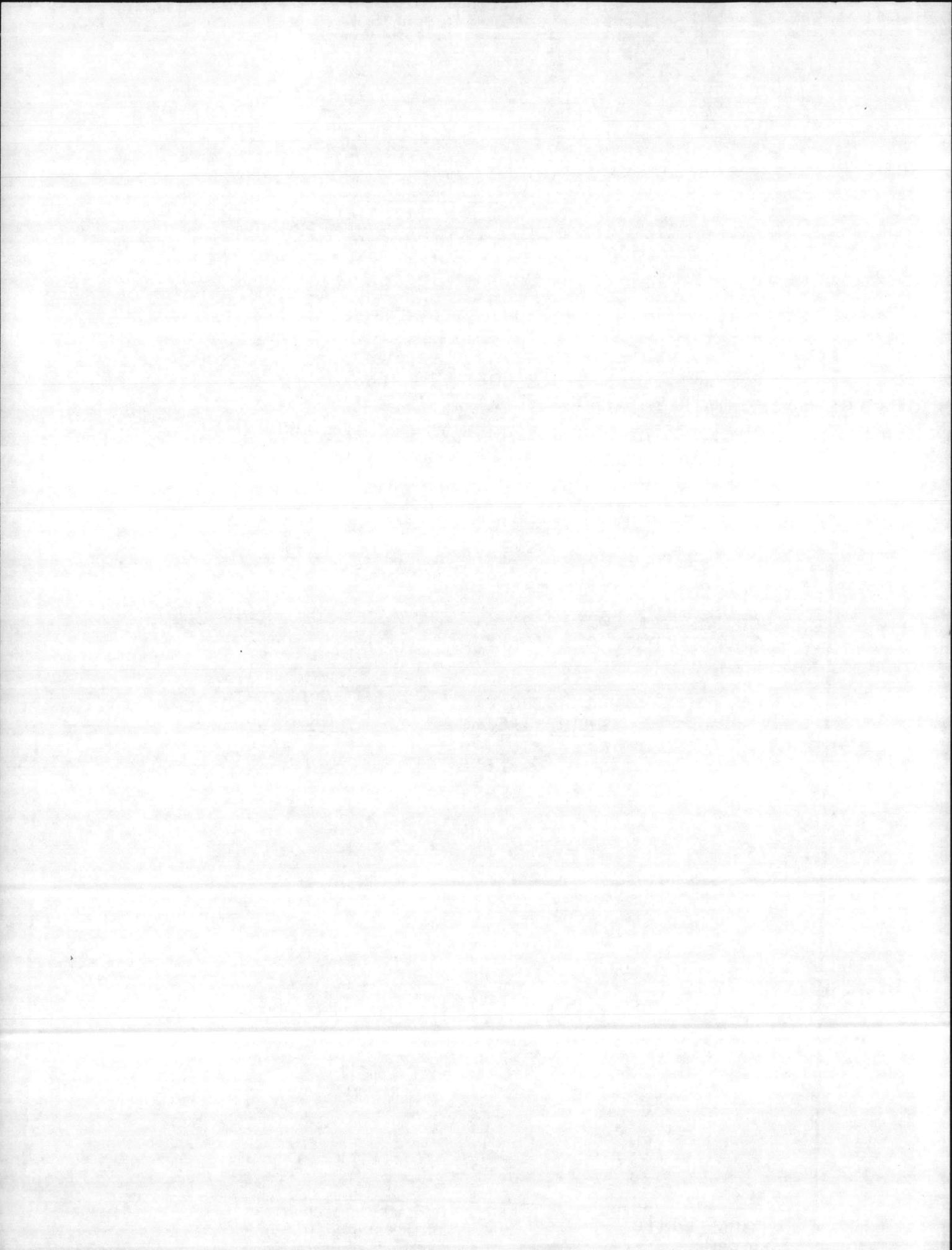
- A. ESTIMATED ANNUAL COST TO OPERATE THE PROPOSED FACILITY 10
(\$000)
- B. NUMBER OF ADDITIONAL PERSONNEL NECESSARY TO CARRY OUT THE FUNCTION OF THE PROPOSED FACILITY 0
(PEOPLE)
- C. ESTIMATED LIFE-CYCLE COST TO OPERATE AND MAINTAIN THE PROPOSED FACILITY 96
(\$000)
- D. ESTIMATED LIFE-CYCLE COST TO OPERATE AND MAINTAIN THE EXISTING FACILITY IF NEW FACILITY IS A REPLACEMENT 111
(\$000)
- E. DESIGN STATUS (ESTIMATED):

 - 1. As of January 1, 1978 35
 - 2. As of October 1, 1978 100

- F. EQUIPMENT ASSOCIATED WITH THIS PROJECT WHICH WILL BE PROVIDED FROM OTHER APPROPRIATIONS:

<u>EQUIPMENT NOMENCLATURE</u>	<u>PROCURING APPROPRIATION</u>	<u>FISCAL YEAR APPROPRIATED OR REQUESTED</u>	<u>COST (\$000)</u>
-------------------------------	--------------------------------	--	---------------------

- NONE -



INSTRUCTIONS FOR PREPARATION OF DD FORM 1391
SUPPLEMENTAL JUSTIFICATION DATA IN SUPPORT OF
ANNUAL MILITARY CONSTRUCTION PROGRAMS

The following data shall be provided for each facility in the program using the standard DD Form 1391c and the format shown in the preceding sample. All costs, regardless of their time of occurrence, are in budget year dollars (i.e., Fiscal Year 1980 dollars for Fiscal Year 1980 Supplemental Data). See attachment A to this enclosure for annual escalation rates to be used in adjusting Military Construction and O&M, MC costs from year of occurrence to Fiscal Year 1980 costs.

NOTE: Sections A, B, and E are to be completed for all project proposals. Sections C and D are to be completed only for project proposals which represent replacement facilities.

C & D both include P-613

A. ESTIMATED ANNUAL COST TO OPERATE THE PROPOSED FACILITY. Costs will be limited to Maintenance and Repair (M), Utilities (N), and other Engineering Support (P). Does NOT include costs, other than M, N, and P, of the operation to be housed in the facility. (Wages and salaries of personnel who will work in the proposed facility, for example, are not to be included.) Activities will estimate these costs as follows:

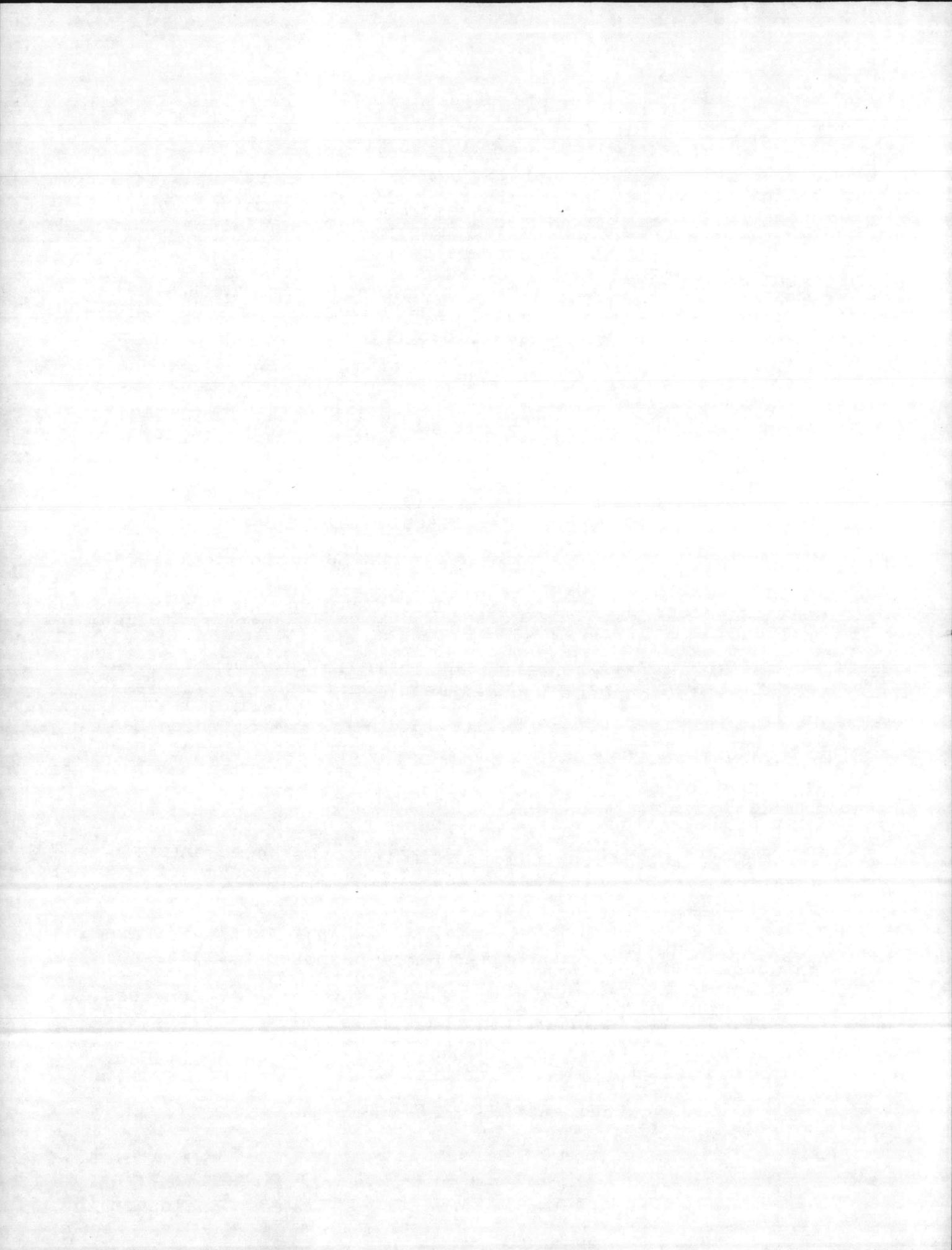
1. Maintenance and Repair (M). The "minimum cost of ownership" concept used in maintenance budgeting will be used. The annual cost of maintenance is determined by multiplying the current plant value by a factor which has been developed for each construction project. (See attachment B to this enclosure). In this case, the "current plant value" used will be the project cost as shown on the DD Form 1391.

2. Utilities (N). Estimate costs based on usage data for similar facilities and the square footage of the proposed facility.

3. Other Engineering Support (P). Estimate based on actual services required for the proposed facility.

NOTE: Only a single figure will be submitted to Congress. For use during hearings, information submitted by activities should provide sufficient detail of calculations and assumptions to permit a well-informed defense of the figure provided.

Source: Activity Commander



B. NUMBER OF ADDITIONAL PERSONNEL NECESSARY TO CARRY OUT THE FUNCTION OF THE PROPOSED FACILITY. Information to be supplied should relate to the question "Can you staff and operate the new facility?" The word "additional" implies an increase in personnel strength figures for the activity as shown on the DD Form 1390. If all necessary personnel will be reassigned from within activity assets to operate the new facility, a "zero" will be shown. Personnel served by a facility are not to be included. (For a new mess hall or BEQ, only the staff to operate the facility is considered, not the number of personnel served meals or provided with berthing. Similarly, in a training facility, instructors and staff are considered, not students.) All Maintenance and Repair (M), Utilities (N) and Other Engineering Support (P) costs (less materials) related to operating net new facilities shall be converted to personnel. Provide for use during hearings a background explanation of figure submitted. BMO

Source: Activity Commander

C. ESTIMATED LIFE-CYCLE COST TO OPERATE AND MAINTAIN THE PROPOSED FACILITY. To be computed only in the case of projects for construction of replacement facilities. Costs will be limited to Maintenance and Repair (M), Utilities (N), and Other Engineering Support (P) estimated as described in section A. above, plus the capital cost of future Military Construction investment, if any. This cost is the net present value of a string of annual M, N, and P costs, and occasional Military Construction investment, if any, over the economic life of the facility, discounted at 10 percent in accordance with MCO 7000.12 (latest addition) and NAVFAC P-442. All costs, regardless of the time of their occurrence are in Fiscal Year 1980 dollars. The discounting technique automatically accounts for normal inflation. Provide explanation of calculation and assumptions, for use during hearings.

Source: Activity Commander

D. ESTIMATED LIFE-CYCLE COST TO OPERATE AND MAINTAIN THE EXISTING FACILITY IF NEW FACILITY IS A REPLACEMENT. To be computed only in the case of projects for construction of replacement facilities. In section C., the estimated life-cycle RPMA and investment costs for the proposed facility were calculated. The intent of this section is to determine for comparison the life-cycle cost of the alternative of continuing the present facility. In order to insure comparability between the costs of the two courses of action, it will be necessary to equalize facility capability and life span between the two alternatives. For example, if the existing facility is too small, it would be necessary to make a Fiscal Year 1980 capital investment by construction m

of an addition or by conversion of other space. The existing facility may be in poor condition, or not in accord with current criteria for habitability or safety, in which case significant Fiscal Year 1980 outlay would be necessary in order to extend its useful life to cover the same period of time as the proposed new facility. It is conceivable in some cases that those prudent actions required to extend the life of the existing facility cannot reasonably be expected to provide enough years of service to equal the economic life of a new facility. In this case, the analysis will include the cost of a suitable replacement facility at the end of the extended economic life of the existing facility, so that the total span of time covered will be the same as the economic life of the new construction alternative. The cost figure to be provided for item D. is thus the net present value of investment costs and recurring RPMA costs necessary to make the existing facility minimally capable of performing the same functions as the new facility over the same period of time. The RPMA costs are determined in the same manner as described in section A, using a Fiscal Year 1980 projection for "Current Plant Value" to determine the annual maintenance (M). All investment costs are also estimated in Fiscal Year 1980 dollars. The discount factor of 10 percent used in calculating net present value automatically accounts for normal inflation. Provide explanation of calculations and assumptions, for use during hearings.

Source: Activity Commanders

E. DESIGN STATUS (ESTIMATED)

Source: Headquarters Marine Corps

F. EQUIPMENT ASSOCIATED WITH THIS PROJECT WHICH WILL BE PROVIDED FROM OTHER APPROPRIATIONS

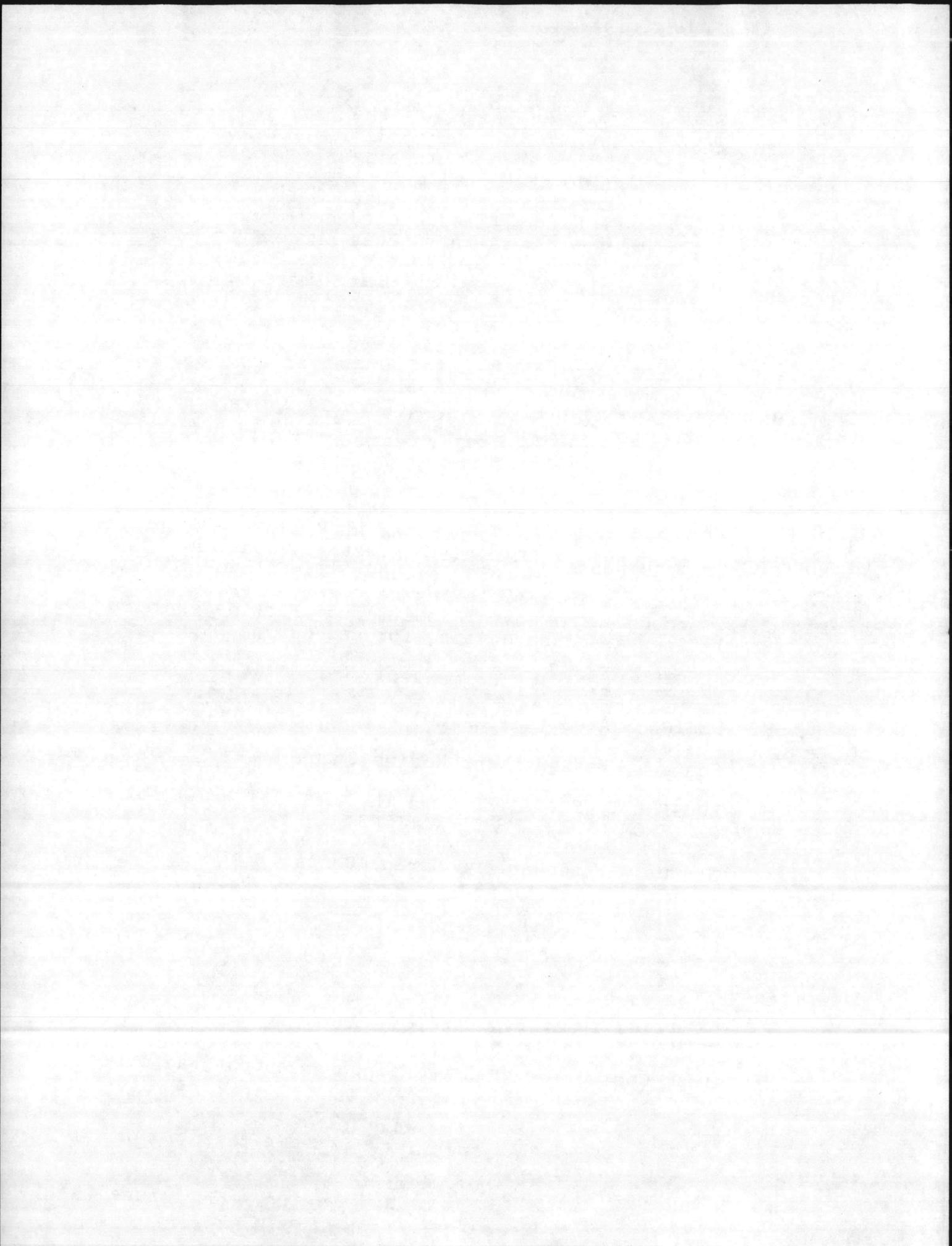
Source: Headquarters Marine Corps

ATTACHMENTS

A. Annual Price Escalation Rates

B. "Minimum Cost of Ownership" Maintenance Cost Factors

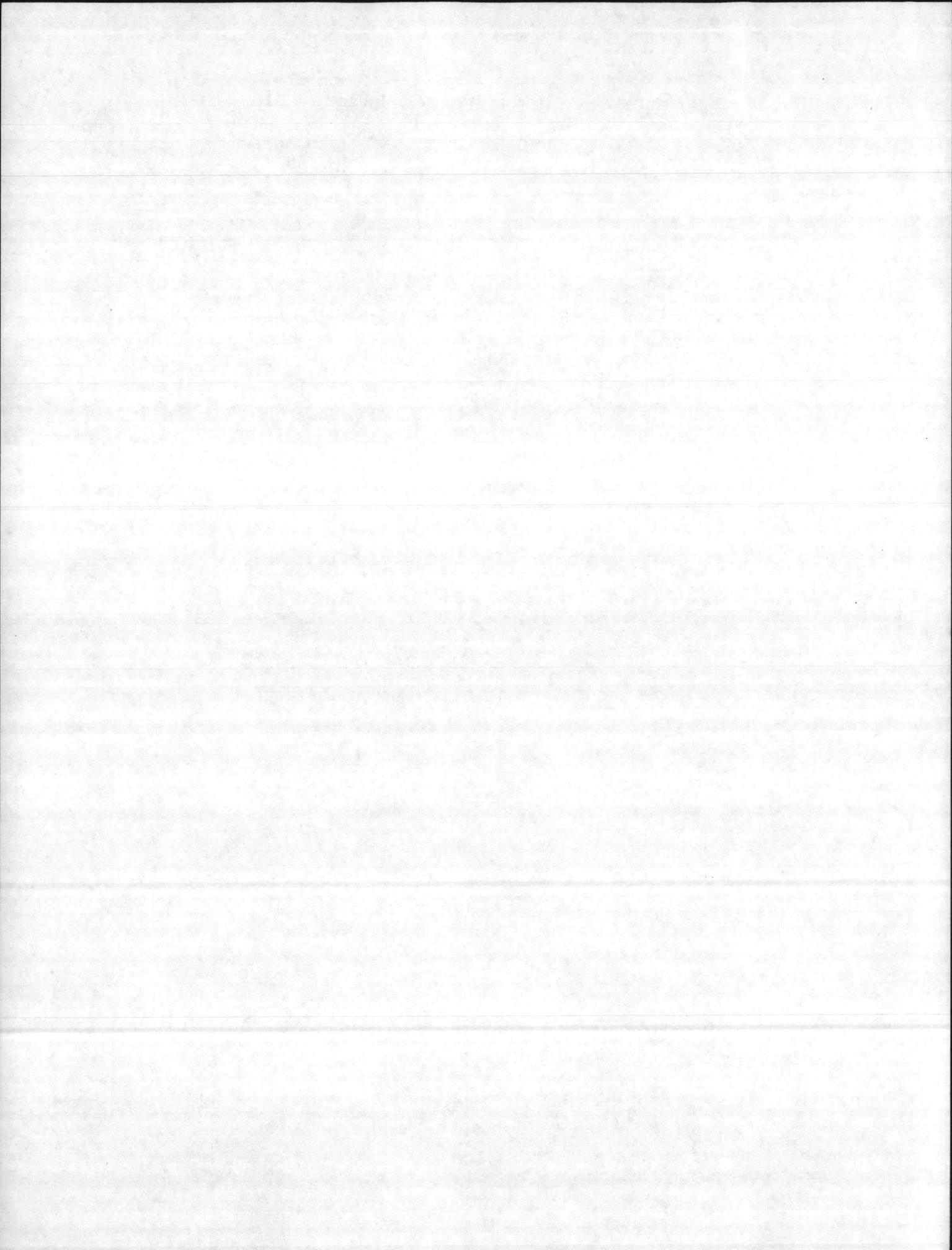
M -
N - oed
P - Garbage
+ Trash
Collection
Pest Control
Ext. Clean-up
E/S - work on
Equipment



ANNUAL PRICE ESCALATION RATES

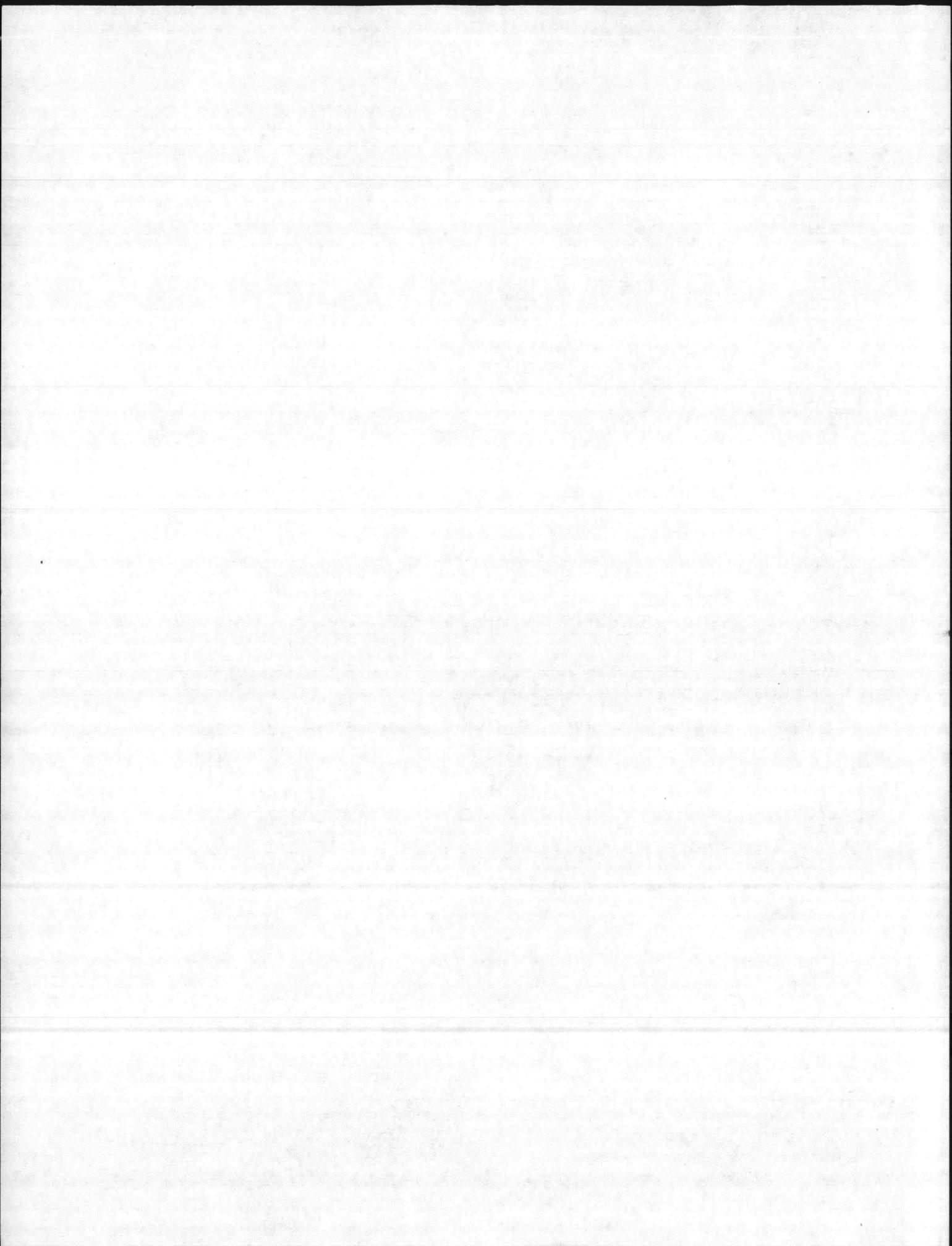
<u>FISCAL YEARS</u>		<u>ANNUAL ESCALATION RATES (PERCENT)</u>	
<u>FROM</u>	<u>TO</u>	<u>MILCON</u>	<u>O&M, MC</u>
1978	1979	7.8	6.3
1979	1980	7.0	6.0
1980	1981	6.5	6.0
1981	1982	6.3	5.6
1982	1983	6.0	5.6
1983	1984	6.0	5.6
Annual Rate Thereafter:		6.0	5.6

Attachment A to
Enclosure (3)



MAINTENANCE FACTORS FOR MARINE CORPS
FISCAL YEAR 1980 MILITARY CONSTRUCTION
PROGRAM

<u>P-NO.</u>	<u>ACTIVITY</u>	<u>MAINTENANCE (M) FACTOR</u>
706	MCAS, CHERRY POINT	.0126
667	MCAS, CHERRY POINT	.0218
610	MCAS, CHERRY POINT	.0102
789	MCAS, CHERRY POINT	.0081
766	MCAS, CHERRY POINT	.0031
761	MCAS, CHERRY POINT	.0140
132	MCAS(H), NEW RIVER	.0126
368	MCAS, YUMA	.0206
369	MCAS, YUMA	.0137
349	MCAS, YUMA	.0115
140	MCB, 29 PALMS	.0160
101	MCB, 29 PALMS	.0257
196	MCB, 29 PALMS	.0198
195	MCB, 29 PALMS	.0139
273	MCAS, KANEOHE BAY	.0224
216	MCAS, KANEOHE BAY	.0219
019	MCAS, KANEOHE BAY	.0152
245	MCAF, CAMP PENDLETON	.0144
182	MCDEC, QUANTICO	.0103
304	MCDEC, QUANTICO	.0086
303	MCDEC, QUANTICO	.0193
106	MCDEC, QUANTICO	.0081
230	MCB, CAMP BUTLER	.0098
613	MCB, CAMP LEJEUNE	.0189
996	MCB, CAMP LEJEUNE	.0081
702	MCB, CAMP LEJEUNE	.0140
704	MCB, CAMP LEJEUNE	.0146
872	MCB, CAMP PENDLETON	.0257
157	MCAS(H), SANTA ANA	.0257
326	MCAS, EL TORO	.0257
117	MCLSBPAC, BARSTOW	.0199



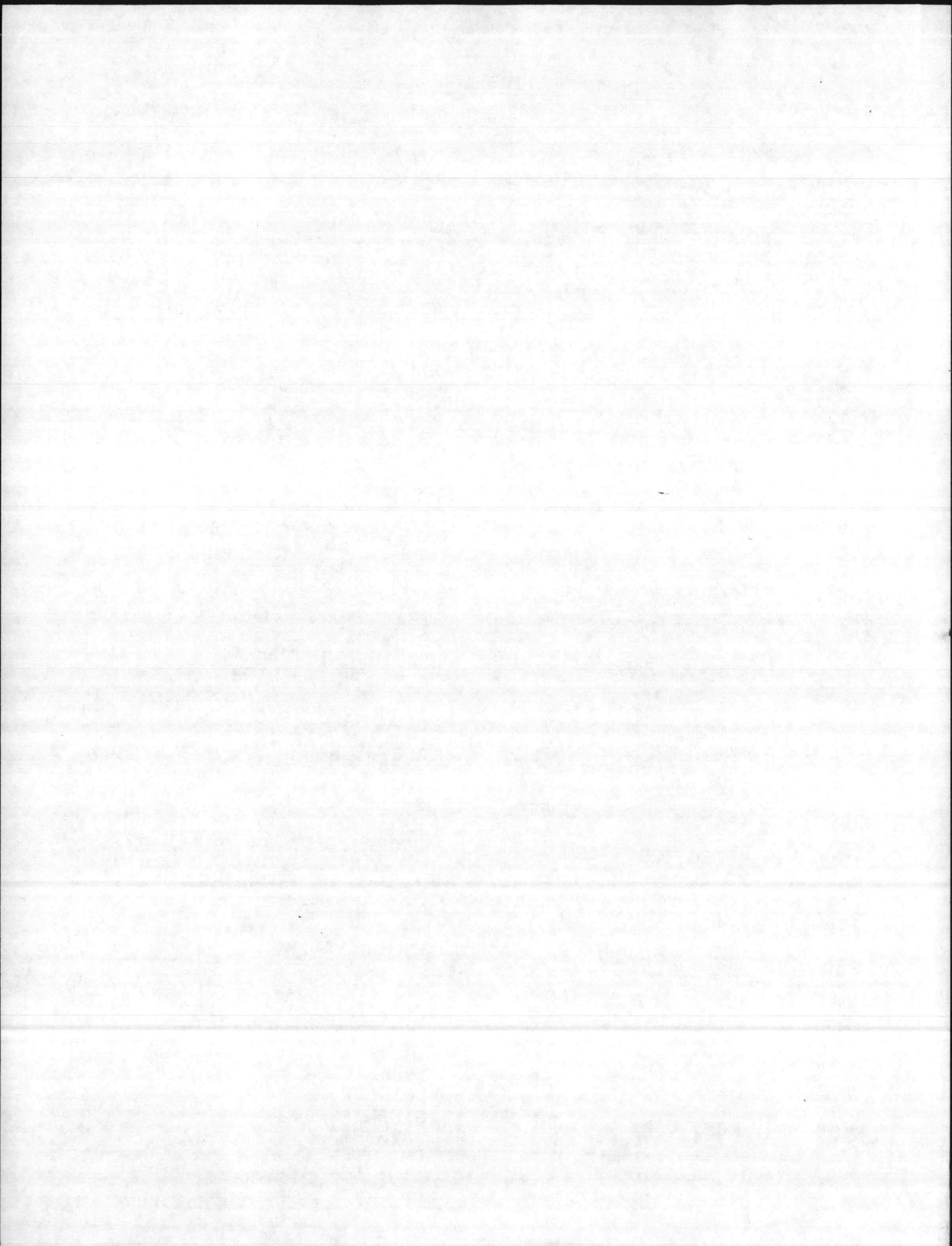
MARINE CORPS MILITARY CONSTRUCTION PROGRAM

FY-1980

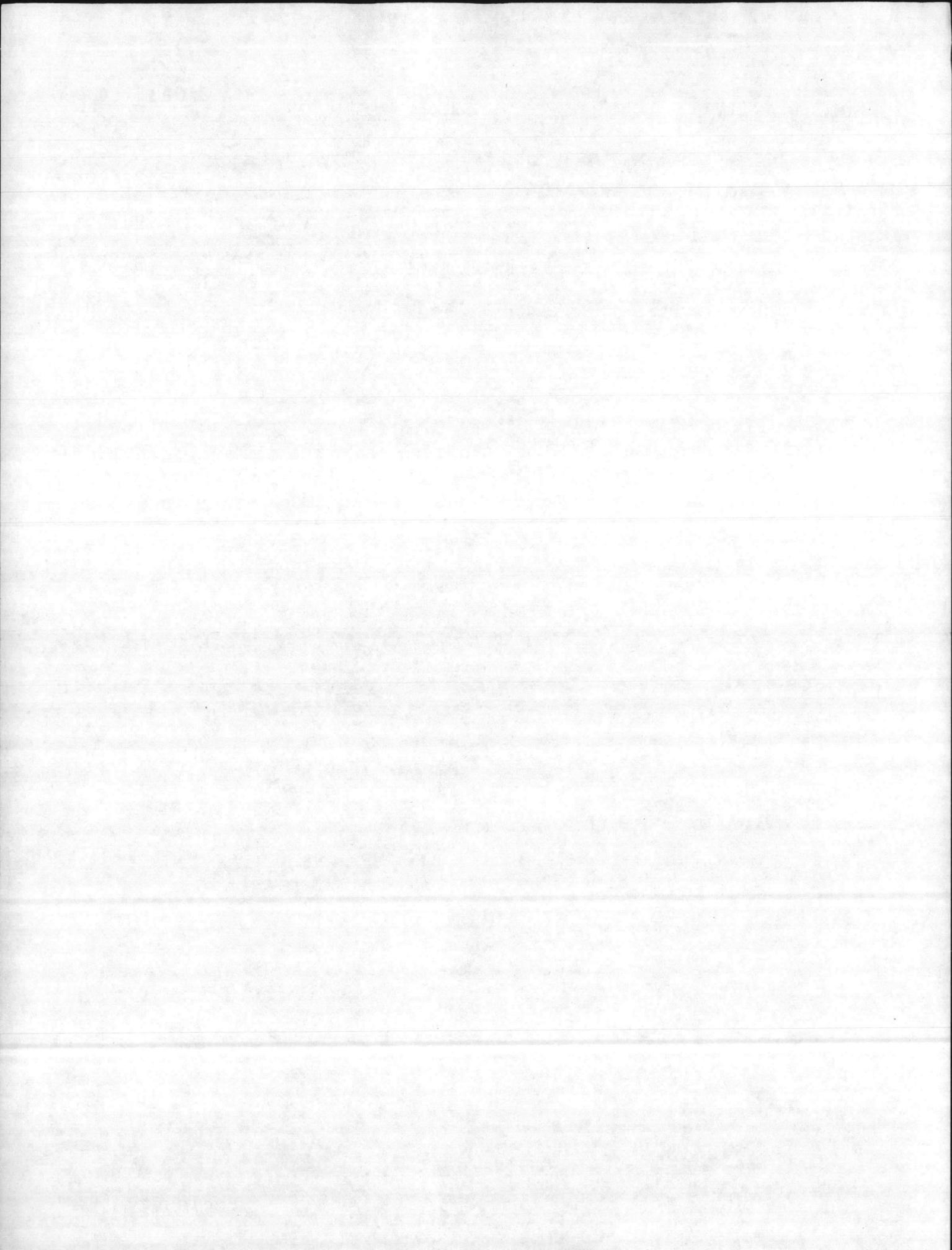
AS SUBMITTED TO OSD 10/22/78

<u>P-NO.</u>	<u>ACTIVITY</u>	<u>PROJECT</u>	<u>COST (\$000)</u>
706	MCAS, CHERRY POINT	ARMORY	715
667	MCAS, CHERRY POINT	H&MS ORD FAC	865
610	MCAS, CHERRY POINT	AIRCRAFT PARK APRONS	3,000
789	MCAS, CHERRY POINT	INDUSTRIAL WASTE COLLECTION & TREAT- MENT	3,650
766	MCAS, CHERRY POINT	BULK LIME STORAGE & HANDLING FACILITY	200
761	MCAS, CHERRY POINT	INSULATION AND STORM WINDOWS	150
132	MCAS(H), NEW RIVER	ARMORY	490
368	MCAS, YUMA	ENGINE SHOP	2,000
369	MCAS, YUMA	AIR-FRAME SHOP	2,000
349	MCAS, YUMA	ORDNANCE HANDLING PAD	5,400
140	MCB, 29 PALMS	FIELD MAINT SHOPS	4,450
101	MCB, 29 PALMS	BEQ MOD (969/57/0)	7,300
196	MCB, 29 PALMS	STEAM AND CONDENSATE SYSTEMS	1,800
195	MCB, 29 PALMS	HEATING, VENTILATION, AIR CONDITIONING	100
273	MCAS, KANEOHE BAY	MAINTENANCE FAC	4,650
216	MCAS, KANEOHE BAY	ALTER HANGAR 103	510
019	MCAS, KANEOHE BAY	GYMNASIUM	2,000
245	MCAF, CAMP PENDLETON	GSE SHOP	1,000
182	MCDEC, QUANTICO	AUTOMATED DATA SYS. FAC	5,200
304	MCDEC, QUANTICO	OCS DINING FAC	1,650
303	MCDEC, QUANTICO	OCS BEQ MOD (450 RCTS)	5,000
106	MCDEC, QUANTICO	WATER DISTRIBUTION	1,800
230	MCB, CAMP BUTLER	DINING FAC MOD	3,650
613	MCB, CAMP LEJEUNE	BEQ (1014/42/9)	14,100
996	MCB, CAMP LEJEUNE	INDUSTRIAL WASTE COLLECTION & TREAT- MENT	8,700
702	MCB, CAMP LEJEUNE	INSULATION & STORM WINDOWS	1,450
704	MCB, CAMP LEJEUNE	STEAM AND CONDENSATE SYSTEMS	410

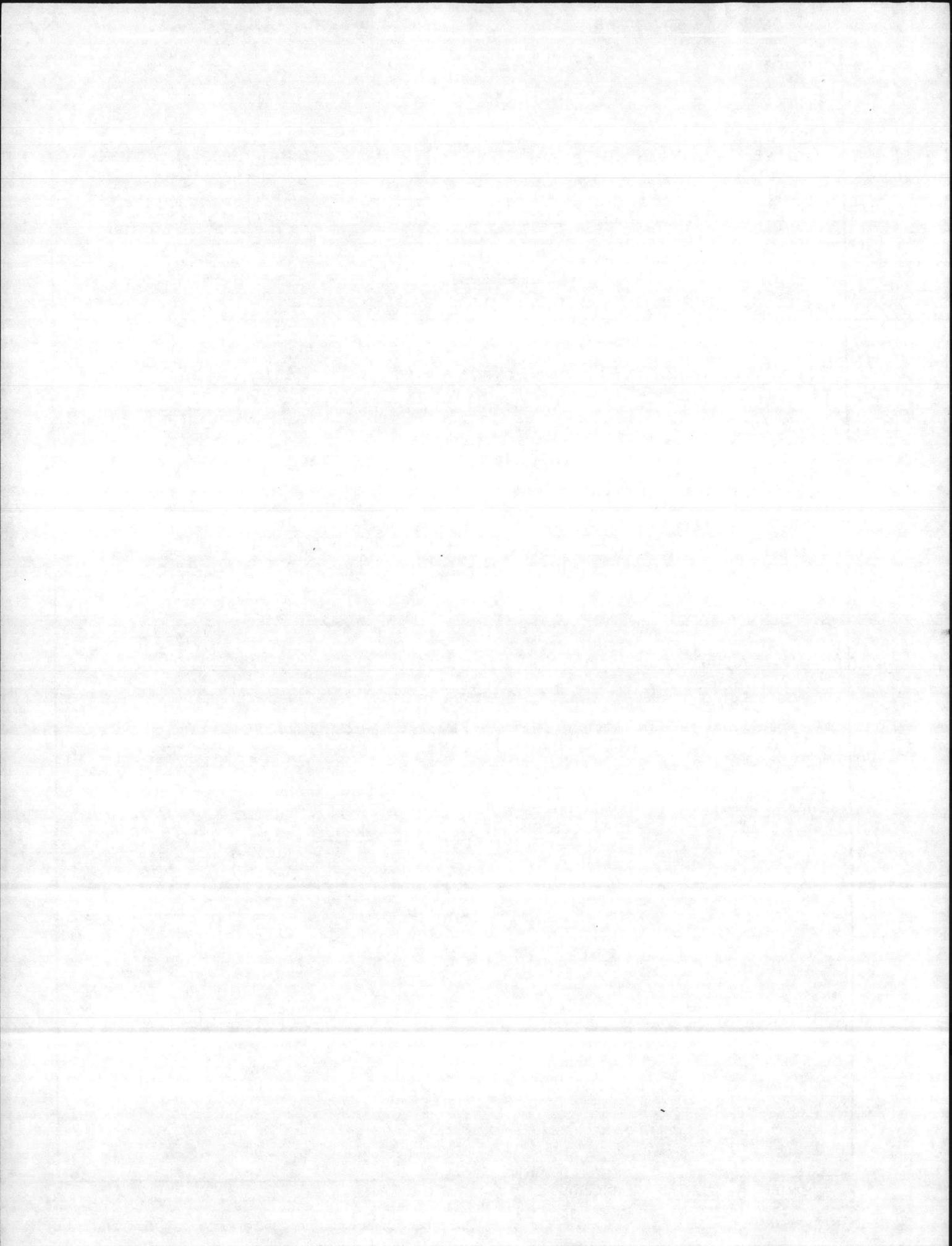
Enclosure (4)



<u>P-NO.</u>	<u>ACTIVITY</u>	<u>PROJECT</u>	<u>COST (\$000)</u>
872	MCB, CAMP PENDLETON	BEQ (1014/36/28)	13,000
157	MCAS(H), SANTA ANA	BEQ (157/84/15)	2,800
326	MCAS, EL TORO	BEQ (117/74/261)	9,700
117	MCLSBPAC, BARSTOW	STEAM DISTRIB SYS	3,800



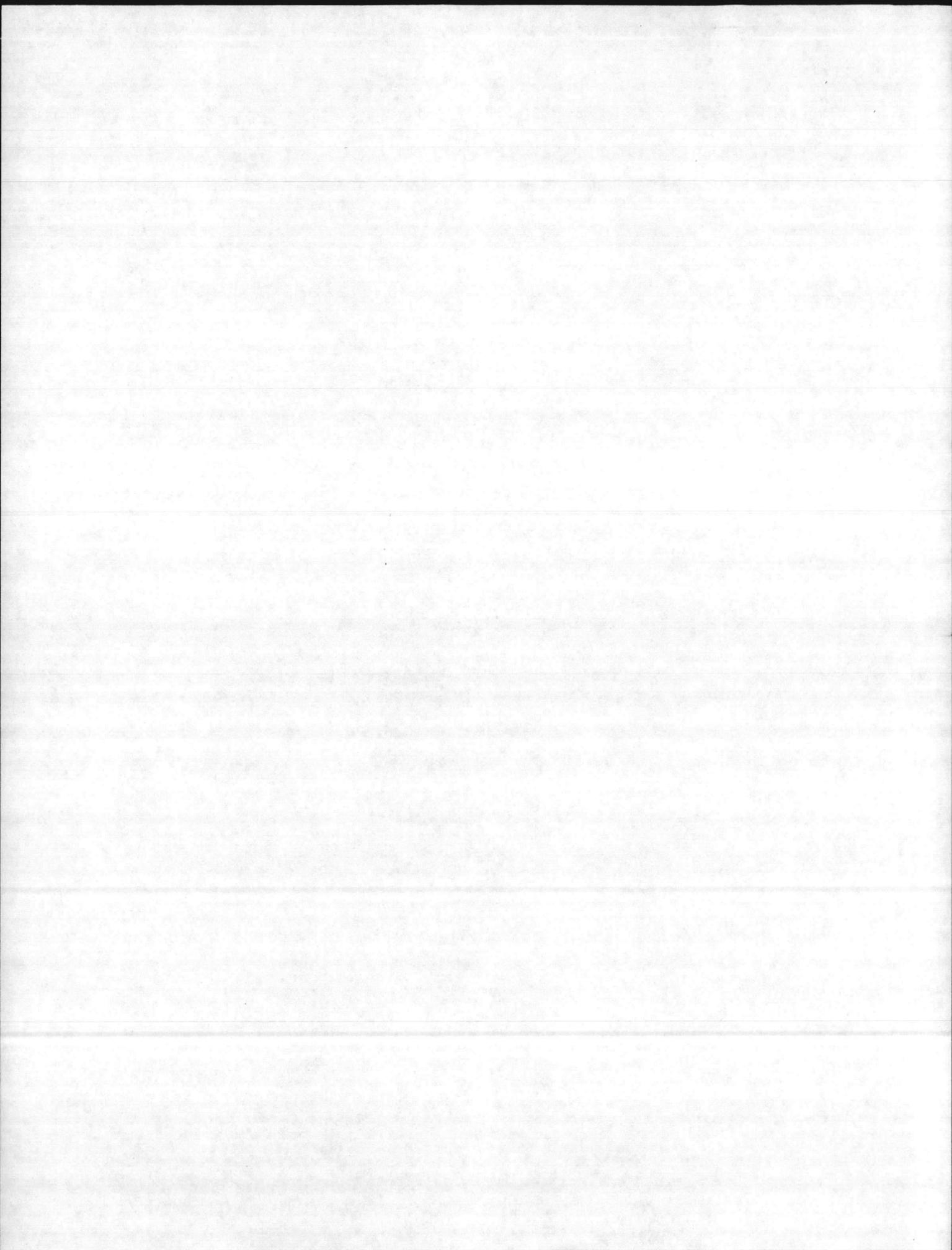
1. COMPONENT NAVY	FY 19 ⁸⁰ MILITARY CONSTRUCTION PROJECT DATA	2. DATE
3. INSTALLATION AND LOCATION MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542		
4. PROJECT TITLE <i>BEG (104/42/9)</i>	5. PROJECT NUMBER <i>F613</i>	
<u>SUPPLEMENTAL DATA</u>		
<i>AC</i>	A. ESTIMATED ANNUAL COST TO OPERATE THE PROPOSED FACILITY	_____ (\$000)
<i>AC</i>	B. NUMBER OF ADDITIONAL PERSONNEL NECESSARY TO CARRY OUT THE FUNCTION OF THE PROPOSED FACILITY	_____ <i>0</i> (PEOPLE)
<i>AC</i>	C. ESTIMATED LIFE-CYCLE COST TO OPERATE AND MAINTAIN THE PROPOSED FACILITY.....	_____ (\$000)
<i>AC</i>	D. ESTIMATED LIFE-CYCLE COST TO OPERATE AND MAINTAIN THE EXISTING FACILITY IF NEW FACILITY IS A REPLACEMENT...	_____ (\$000)
<i>CMD</i>	E. DESIGN STATUS (ESTIMATED):	_____ %
	1. As of <i>1 JANUARY 1978</i>	
	2. As of <i>1 OCTOBER 1978</i>	
<i>CMD</i>	F. EQUIPMENT ASSOCIATED WITH THIS PROSPECT WHICH WILL BE PROVIDED FROM OTHER APPROPRIATIONS:	
<u>EQUIPMENT</u>	<u>PROCURING</u>	<u>FISCAL YEAR</u>
<u>NOMENCLATURE</u>	<u>APPROPRIATION</u>	<u>APPROPRIATED</u>
		<u>OR REQUESTED</u>
		<u>COST</u>
		<u>(\$000)</u>

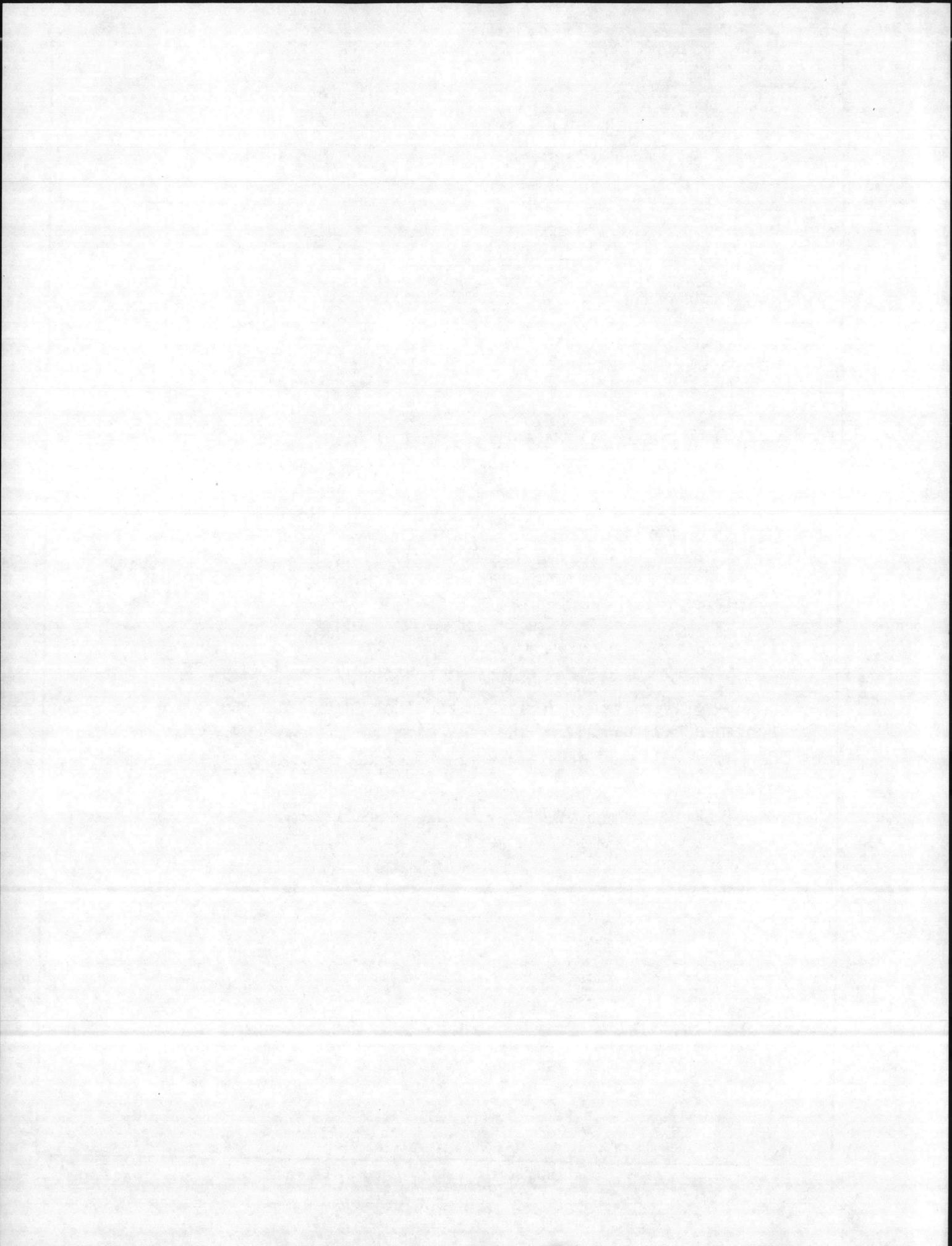


11/11/1910 (1) 14/100 0.0189

14/100 0.0189 266

2. 1910 (N)

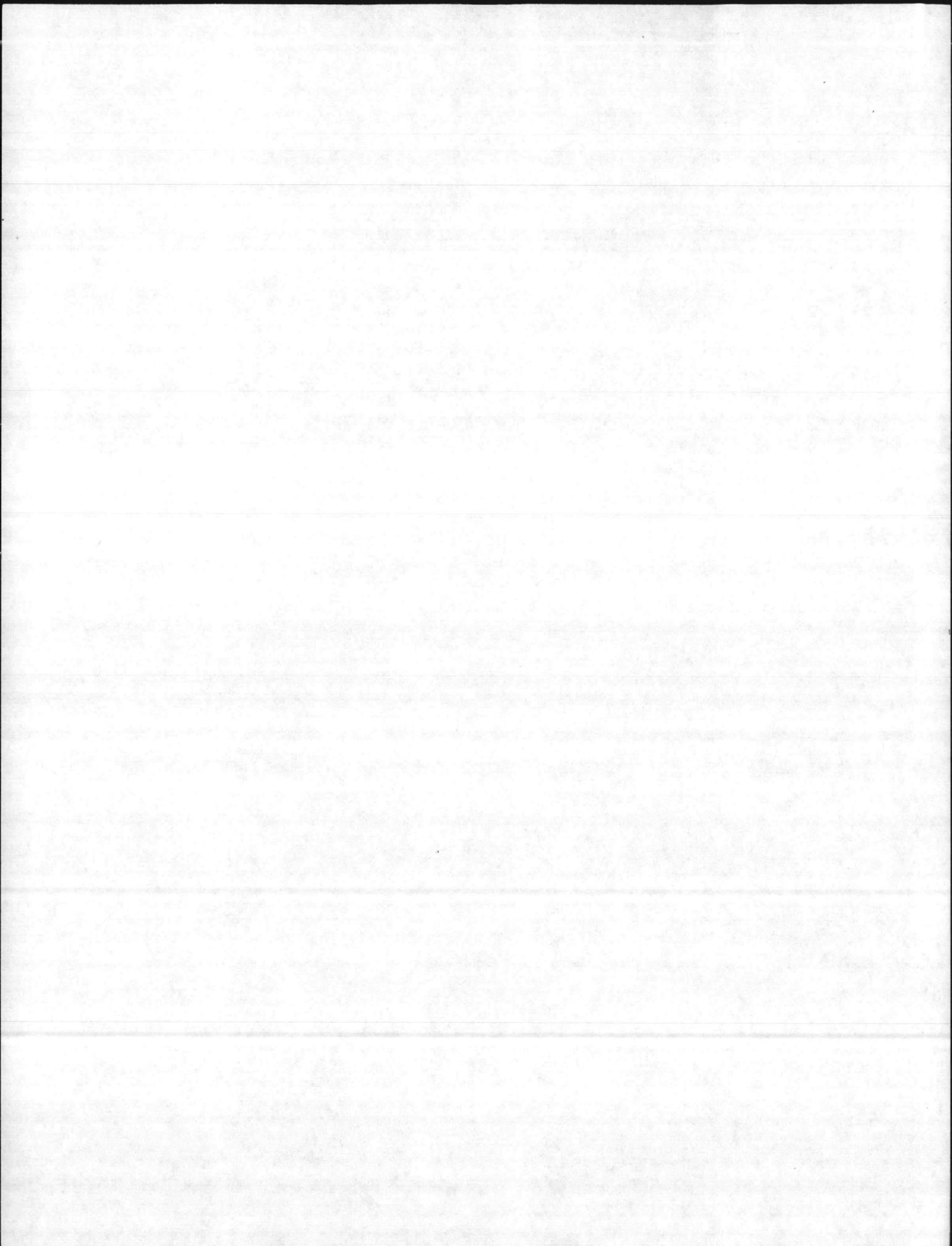




Page 100
2002 Water Control
P. 100/1000

1. Name of person (M)
(10/10/10) 1/10/10 10/10/10, 10/10/10
10/10/10 = 10

2. Name (M)

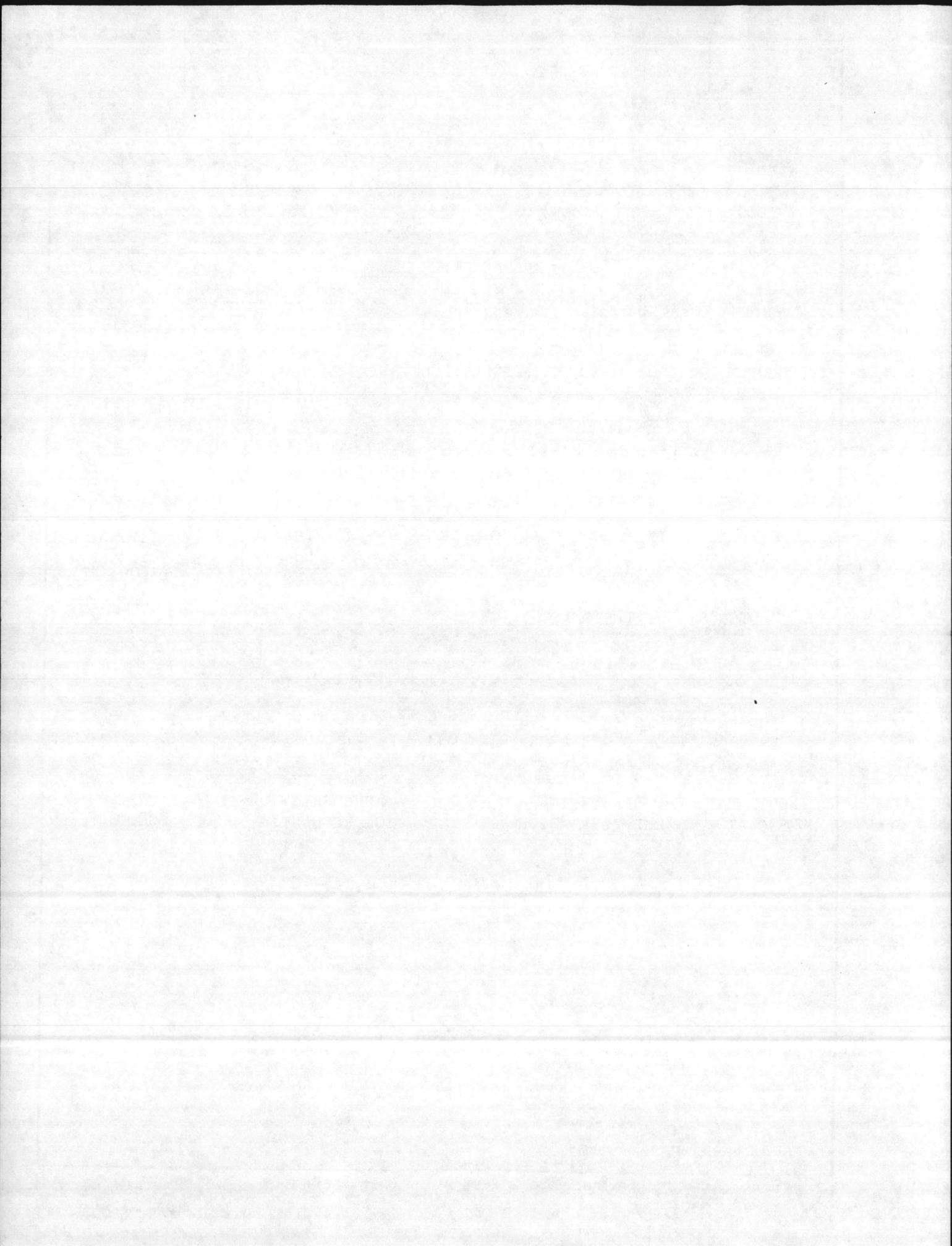


1. COMPONENT NAVY	FY 19 ⁸⁰ 79 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
3. INSTALLATION AND LOCATION MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542		
4. PROJECT TITLE <i>INSTALLATION & STORM WINDING</i>	5. PROJECT NUMBER <i>P 712</i>	

SUPPLEMENTAL DATA

- A. ESTIMATED ANNUAL COST TO OPERATE THE PROPOSED FACILITY _____ (\$000)
- B. NUMBER OF ADDITIONAL PERSONNEL NECESSARY TO CARRY OUT THE FUNCTION OF THE PROPOSED FACILITY 0 (PEOPLE)
- C. ESTIMATED LIFE-CYCLE COST TO OPERATE AND MAINTAIN THE PROPOSED FACILITY..... _____ (\$000)
- D. ESTIMATED LIFE-CYCLE COST TO OPERATE AND MAINTAIN THE EXISTING FACILITY IF NEW FACILITY IS A REPLACEMENT... _____ (\$000)
- E. DESIGN STATUS (ESTIMATED): _____ %
1. As of *JANUARY 1978*.....
2. As of *1 OCTOBER 1978*.....
- F. EQUIPMENT ASSOCIATED WITH THIS PROSPECT WHICH WILL BE PROVIDED FROM OTHER APPROPRIATIONS:

<u>EQUIPMENT</u> <u>NOMENCLATURE</u>	<u>PROCURING</u> <u>APPROPRIATION</u>	<u>FISCAL YEAR</u> <u>APPROPRIATED</u> <u>OR REQUESTED</u>	<u>COST</u> <u>(\$000)</u>
---	--	--	-------------------------------



MEMORANDUM & STORM WINDS

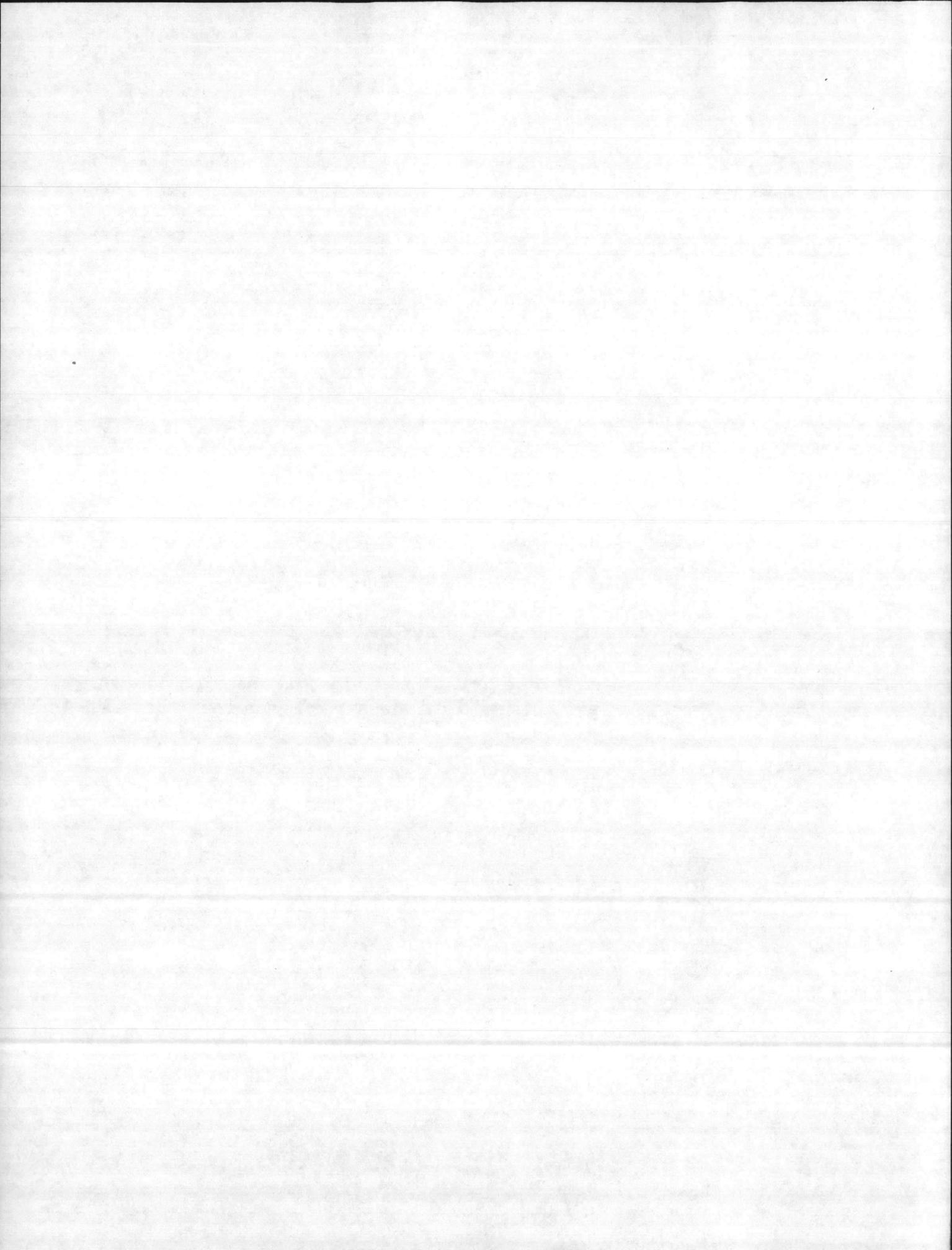
1. MEMORANDUM & STORM WINDS (M)

COST (COST), 1955

ANNUAL FUND: 0140

$$1955 \times 0140 = 20$$

2. UTILITIES (M)



1. COMPONENT NAVY	FY 19 ⁸⁰ 79 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
----------------------	--	---------

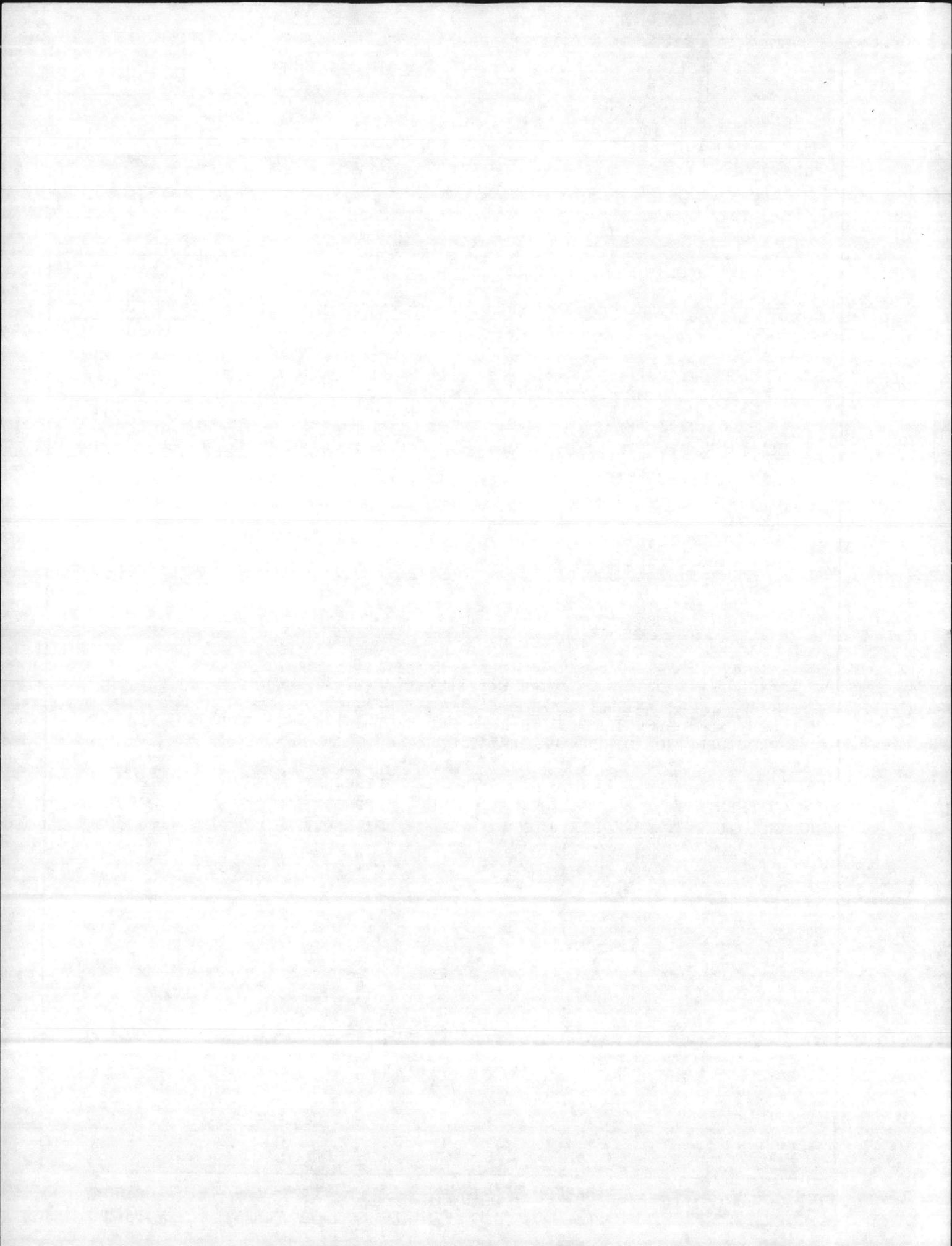
3. INSTALLATION AND LOCATION
MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

4. PROJECT TITLE <i>STEAM AND CONDENSATE SYSTEMS</i>	5. PROJECT NUMBER <i>P-704</i>
---	-----------------------------------

SUPPLEMENTAL DATA

- A. ESTIMATED ANNUAL COST TO OPERATE THE PROPOSED FACILITY _____ (\$000)
- B. NUMBER OF ADDITIONAL PERSONNEL NECESSARY TO CARRY OUT THE FUNCTION OF THE PROPOSED FACILITY 0 (PEOPLE)
- C. ESTIMATED LIFE-CYCLE COST TO OPERATE AND MAINTAIN THE PROPOSED FACILITY..... _____ (\$000)
- D. ESTIMATED LIFE-CYCLE COST TO OPERATE AND MAINTAIN THE EXISTING FACILITY IF NEW FACILITY IS A REPLACEMENT... _____ (\$000)
- E. DESIGN STATUS (ESTIMATED): _____ %
 - 1. As of *15 JANUARY 1978*.....
 - 2. As of *15 FEBRUARY 1978*.....
- F. EQUIPMENT ASSOCIATED WITH THIS PROSPECT WHICH WILL BE PROVIDED FROM OTHER APPROPRIATIONS:

<u>EQUIPMENT NOMENCLATURE</u>	<u>PROCURING APPROPRIATION</u>	<u>FISCAL YEAR APPROPRIATED OR REQUESTED</u>	<u>COST (\$000)</u>
-------------------------------	--------------------------------	--	---------------------



7.204 Steam and Condensate Systems

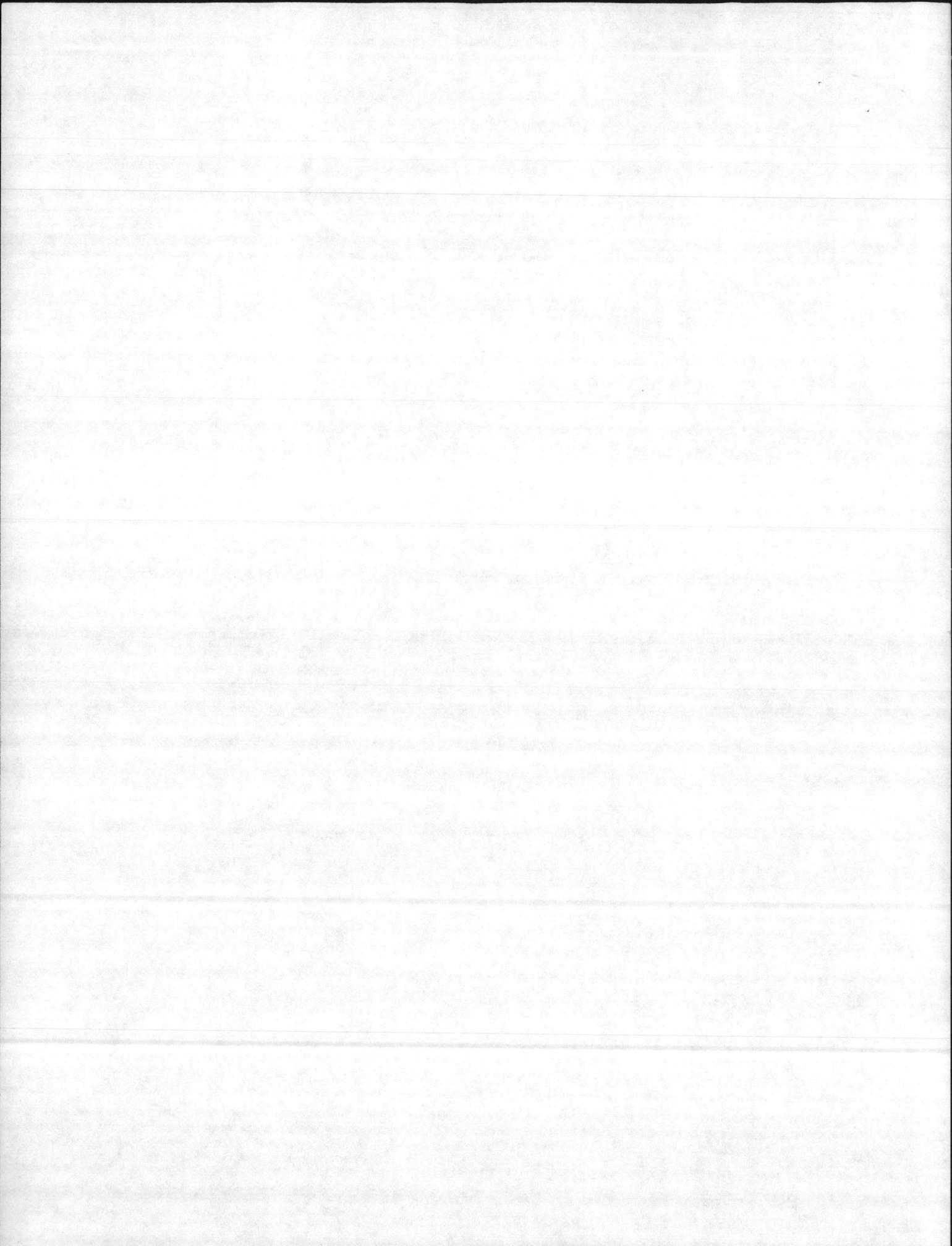
1. Maintenance & Repair (M)

Cost (M) 410

Mount Factor: 0.0146

$$410 \times 0.0146 = 10$$

2. UTILITIES (M)



PROJECT P-613
BACHELOR ENLISTED QUARTERS

M. Maintenance and Repair

$$\begin{aligned}\text{Annual maintenance} &= \text{Current plant value} \times \text{Maintenance factor} \\ &= \$1,166,000 \times .0189 \\ &= \$ 22,037 \text{ per facility}\end{aligned}$$

FY 79 outlays required to correct existing maintenance discrepancies and meet current criteria for habitability and safety:

Building 105	-	\$23,185
Building 109	-	\$24,905
Building BB-11	-	\$34,408
Building BB-12	-	\$46,747
Building BB-13	-	\$39,098
Building BB-14	-	\$47,179

No investment costs for construction, conversion or replacement are provided.

N. Utilities (Ref NAVDOCKS P-75, Vol II)

1. Heating load (steam)

Assume standard structure, no insulation, brick veneer, wall heat transfer coefficient of $U = .25$

$$\text{Volume} = 26,602 \text{ ft}^2 \times 10 \text{ ft} = 266,020$$

$$\begin{aligned}\text{Annual heat load} &= 1.76 \text{ lb of steam}/1000 \text{ ft}^3/\text{degree day} \\ &\times 266,020 \text{ ft}^3 \times 2347 \text{ degree days} = 1,098,854 \text{ lb of steam}\end{aligned}$$

$$\text{Annual cost} = 1099 \text{ (1000 lb steam)} \times \$5.64 \text{ per 1000 lb} = \$6,198$$

2. Water heating load

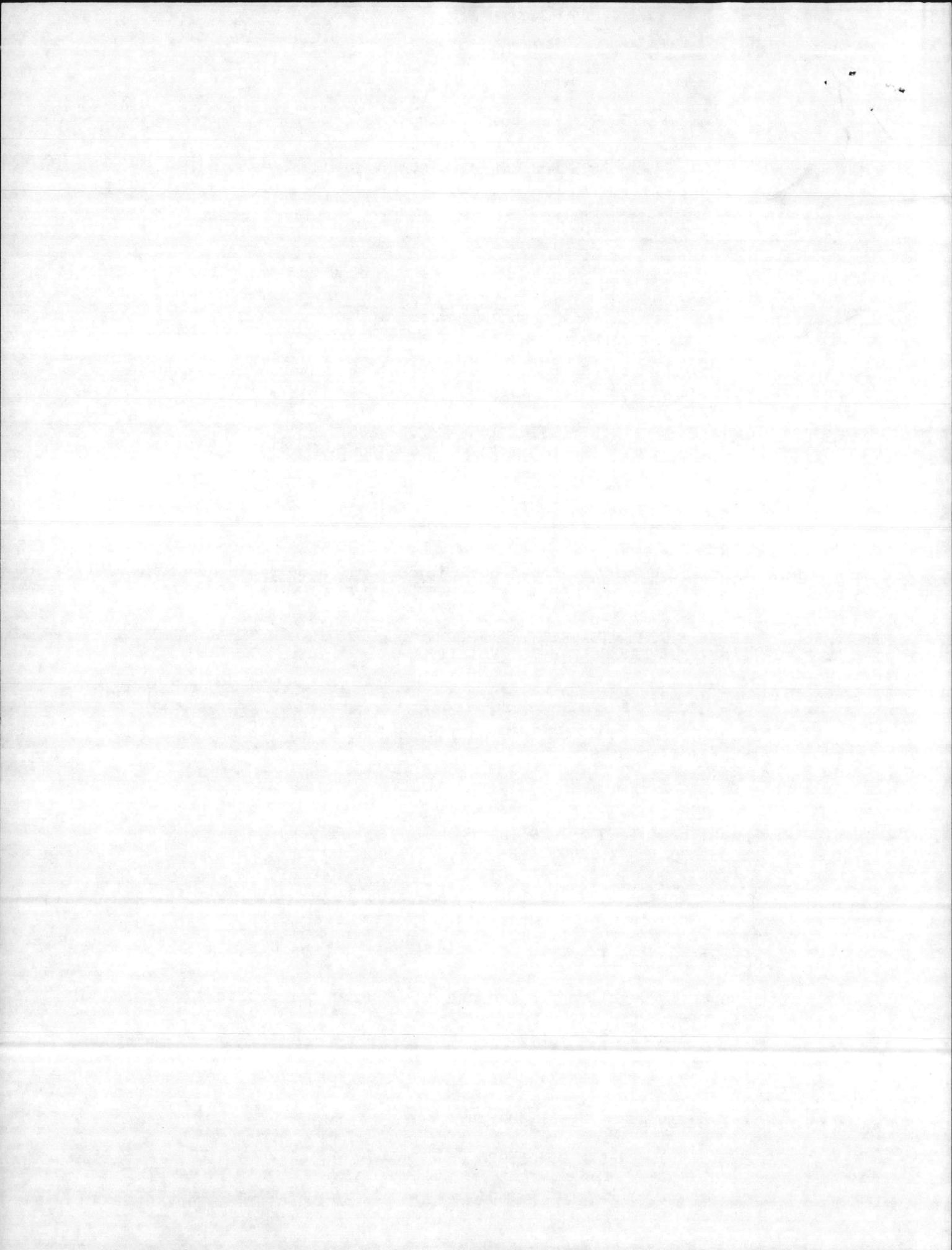
Assume: 20 gallon per man per day 288 men per barracks

Temperature differential = 110 degrees - 60 degrees = 50 degrees

$$\text{HW (day)} = 288 \text{ men} \times 20 \frac{\text{gal}}{\text{day}} \times \frac{\text{BTU}}{(\text{lb})(\text{F degrees})} \times 50 \text{ degrees (dt)}$$

$$\times 8.34 \text{ lb/gal} = 2,401,920 \frac{\text{BTU}}{\text{day}}$$

$$\text{HW (year)} = 365 \times 2,401,920 \frac{\text{BTU}}{\text{day}}$$



$$= 876,700,800 \text{ BTU/yr}$$

$$= \frac{876,700,800 \text{ BTU/yr}}{1100 \text{ BTU/lb steam}}$$

$$= 797,000 \text{ lb steam}$$

$$= 797 (1000 \text{ lb steam})$$

$$\text{Annual cost} = 5.64 \text{ per } 1000 \text{ lb} \times 797 (1000 \text{ lb})$$

$$= \$4,495$$

3. Electrical load

a. Lighting and small loads

Assume: 1.5 w/ft² and 2300 hr. of operation per year

$$L_{\text{KWH}} = 1.5 \text{ w/ft}^2 \times 26,602 \text{ ft}^2 \times 2300 \text{ hr/yr} \times \frac{1}{1000} \frac{\text{KWH}}{\text{KW}}$$

$$= 91,777 \text{ KWH}$$

b. Cooling load

Assume: 50 tons of A/C and 2750 hr. of operation per year

$$C_{\text{KWH}} = 50 \text{ tons} \times 1.4 \text{ KW/ton} \times 2750 \text{ hr} = 192,500 \text{ KWH}$$

$$\text{Total electrical} = 91,777 \text{ KWH} + 192,500 \text{ KWH} = 290,277 \text{ KWH}$$

$$\text{Total annual cost} = 290,277 \text{ KWH} \times 3.54/\text{KWH} = \$10,160$$

4. Water and sewage cost

Assume: 50 gallons per man per day

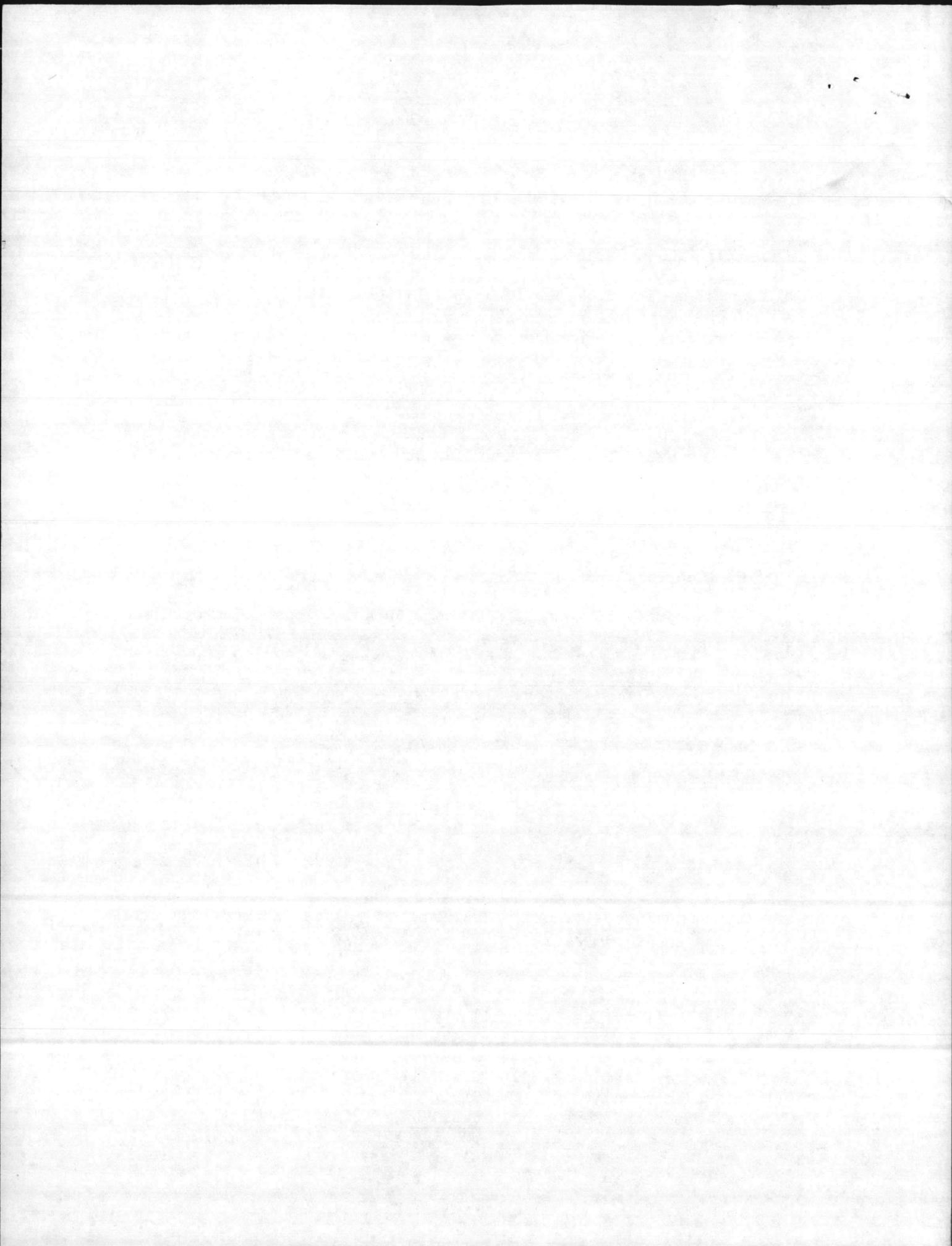
$$\text{a. Annual water cost} = 288 \text{ men} \times 50 \text{ gal/day} \times \$.61/1000 \text{ gal} \times 365 \text{ day} = \$3,206$$

$$\text{b. Annual sewage cost} = 288 \text{ men} \times 50 \text{ gal/day} \times \$.47/1000 \text{ gal} \times 365 \text{ days} = \$2,470$$

$$\text{Total } \$5,676.$$

Total Utility Cost (Annual)

Heating	\$ 6,198
Water Heating	\$ 4,495
Electrical Load	\$10,160
Water and Sewage	\$ 5,676
Total	\$26,529 per facility



P. Other Engineering Support

Trash disposal	\$ 871.
Pest Control	\$ 566.
Miscellaneous Service	\$ 880.
	<u>\$2317</u> per facility

