

PWO:403:BJD:mkt
11000
16 JUL 1982

From: Commanding General
To: Commandant of the Marine Corps (Code LFS-3)
Subj: Collateral Equipment Requirements for MCON Projects to outfitted
in FY-83

Ref: (a) CIE ltr LFS-3/5/slg 7100 of 29 Jun 1982
(b) MCO 10160.86
(c) Phonecon btwn Mr. G. Jones (PubNks, MCB, CLIC) and Mr. R. Oliver
(Code LFS-3, CMC) of 14 Jul 1982

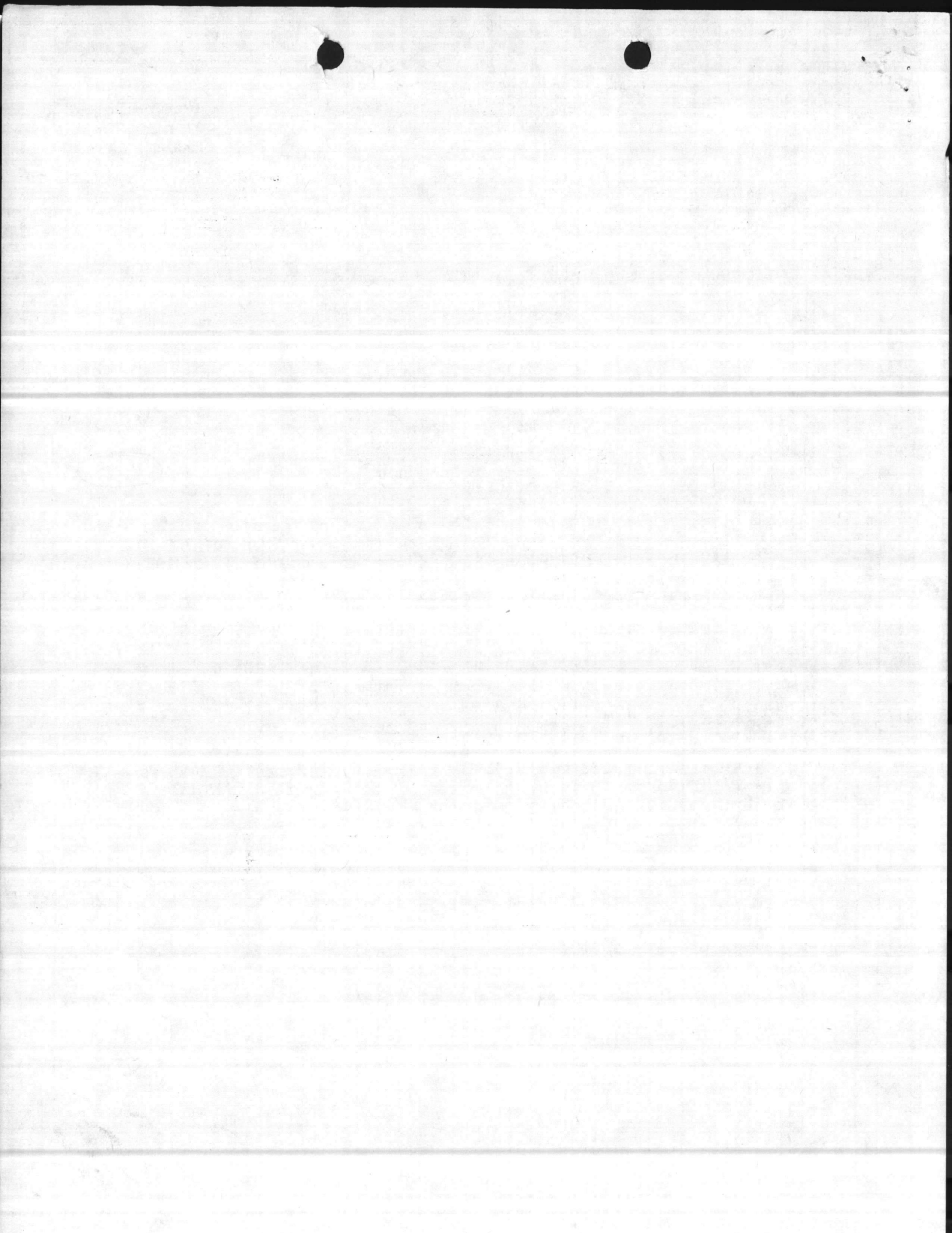
Encl: (1) LANTDIV Form 11010/6 (Collateral Equipment Requirements) for P-175,
Elec/Comm Mnt Shop, of 23 Apr 82
(2) LANTDIV Form 11010/6 for P-414, UEPH, of 13 Apr 82
(3) LANTDIV Form 11010/6 for P-506, Fld Mnt Shop (Para), of 7 May 1982
(4) LANTDIV Form 11010/6 for P-526, Combat Veh Mnt Shop, of 7 May 1982
(5) LANTDIV Form 11010/6 for P-697, Dining Fac Mod, of 24 Nov 1980

1. Reference (a) requested validation and certification of the collateral equipment listings for each MCON project to be outfitted in FY-83. Accordingly, enclosures (1) through (5) have been validated and are forwarded for continued processing. Further, in compliance with reference (b), I hereby certify that the requested item/items are not available from excess or surplus within the local command or geographic location and that procurement action is in full compliance with Federal Property Management Regulations, sections 101-25, 104, 101-26.101, and 101-43.3.

2. As discussed during reference (c), the collateral equipment listing for Project P-697 (enclosure 5) is in the process of being updated and will be forwarded by separate correspondence as soon as possible.

K. P. MILLICE, JR.
By direction

Blind copy to (w/o encls)
AC/S Fac
AC/S Log



COLLATERAL EQUIPMENT REQUIREMENT (Initial Outfitting)

SND LANTDIV 4-11010/6 (NEW 2-79)

DATE 23 APR 1982

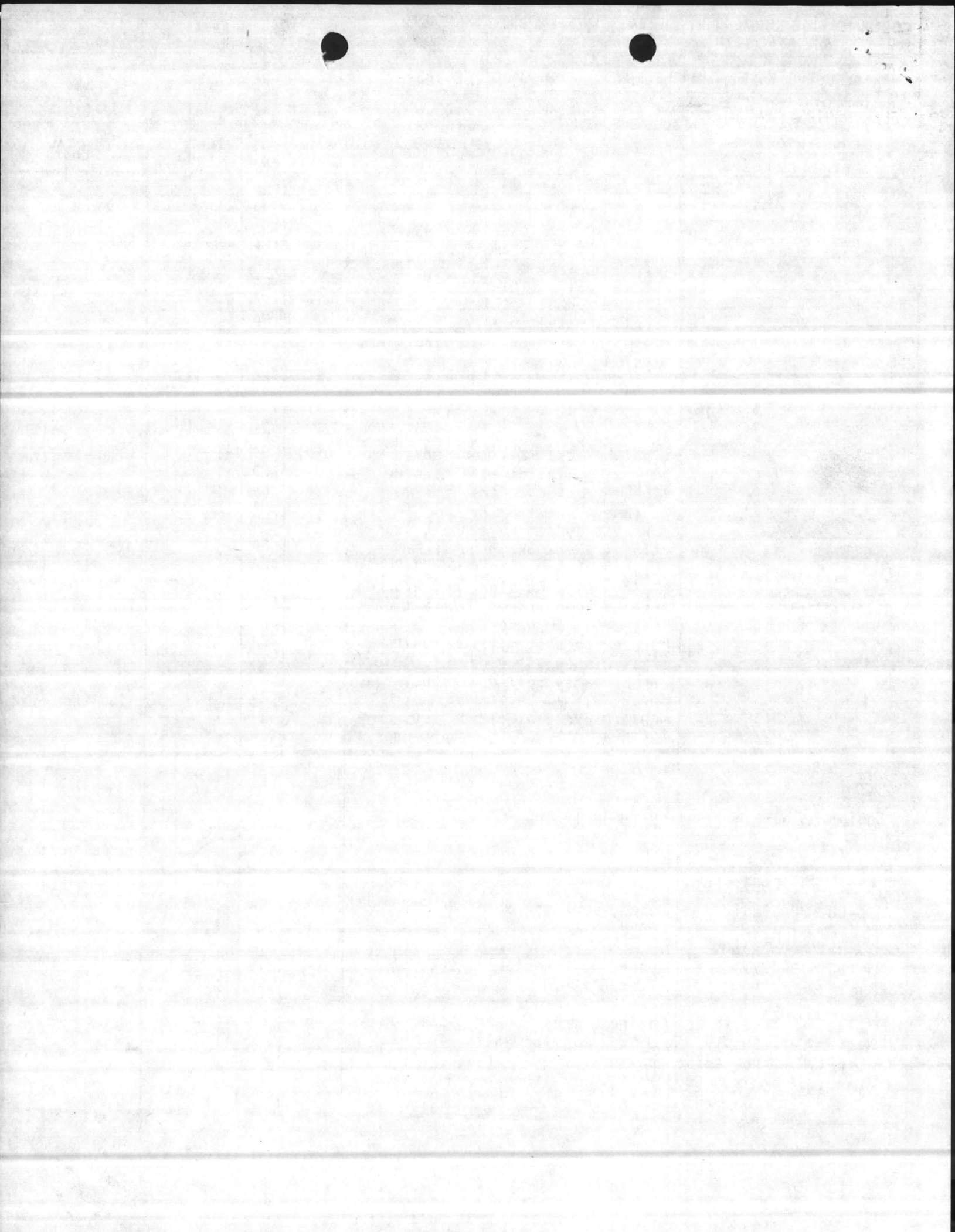
1. ACTIVITY (Name and Location)
MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

2. PROJECT TITLE
ELECTRONICS/COMMUNICATIONS MAINTENANCE SHOP (DIV HQ BN)

P. NO.
P-175

COG. SYMBOL AND FED. STOCK NO. OR OTHER SOURCE	ITEM/EQUIPMENT DESCRIPTION	QUAN- TITY	UNIT OF ISSUE	UNIT PRICE	TOTAL COST
1. <u>BUILT-IN EQUIPMENT TO BE MCON FUNDED</u>	*Air-conditioning, heating, and ventilating systems *Plumbing system *Steam system (interior) *Compressed air system *Sprinkler system *Telephone, intercom & fire alarm system *Drinking water coolers *Crane, overhead - 5 ton capacity *Lockers *Locker-room benches, 6' long *Chalkboards, wall mounted *Board, bulletin, wall mounted *Counter, dispatchers *Blinds, Venetian *Exhaust system, overhead, fractional HP, 208V, 3 phase *Deluge shower, w/eye wash, CW *Acid resistant sink, CW, w/bench *Exhaust hood (over) w/fraction HP, 120V, 1 phase fan *Grounding system, electronic *Pass window, 4' wide, w/counter & "B" label roll down shutter w/fusible link *60/400 cycle electrical system with AC/DC power bus bar and transformers		EA		
	*Equipment with associated installation cost.				
2. <u>EXPENSE ITEMS</u>					
7195-00-926-5939	Bench, work portable, 48"x28"x34"H	20	EA	154.58	3,092
4910-00-543-7771	Bench, work portable, automotive, 72"x28"x34"H	10	EA	356.00	3,560
9765T1 McMaster-Carr Supply Company, P.O. Box 4355 Chicago, Illinois 60680	Cabinet, tray top acid storage 37"wx21-11/16"Dx31"H, for use in battery or acid areas. Acid resistant without eye wash.	6	EA	398.00	2,388

ENCL (1)



COLLATERAL EQUIPMENT REQUIREMENT (Initial Outfitting)

5ND LAN DIV 4-11010/6 (NEW 2-79)

DATE

23 APR 1982

1. ACTIVITY (Name and Location)

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

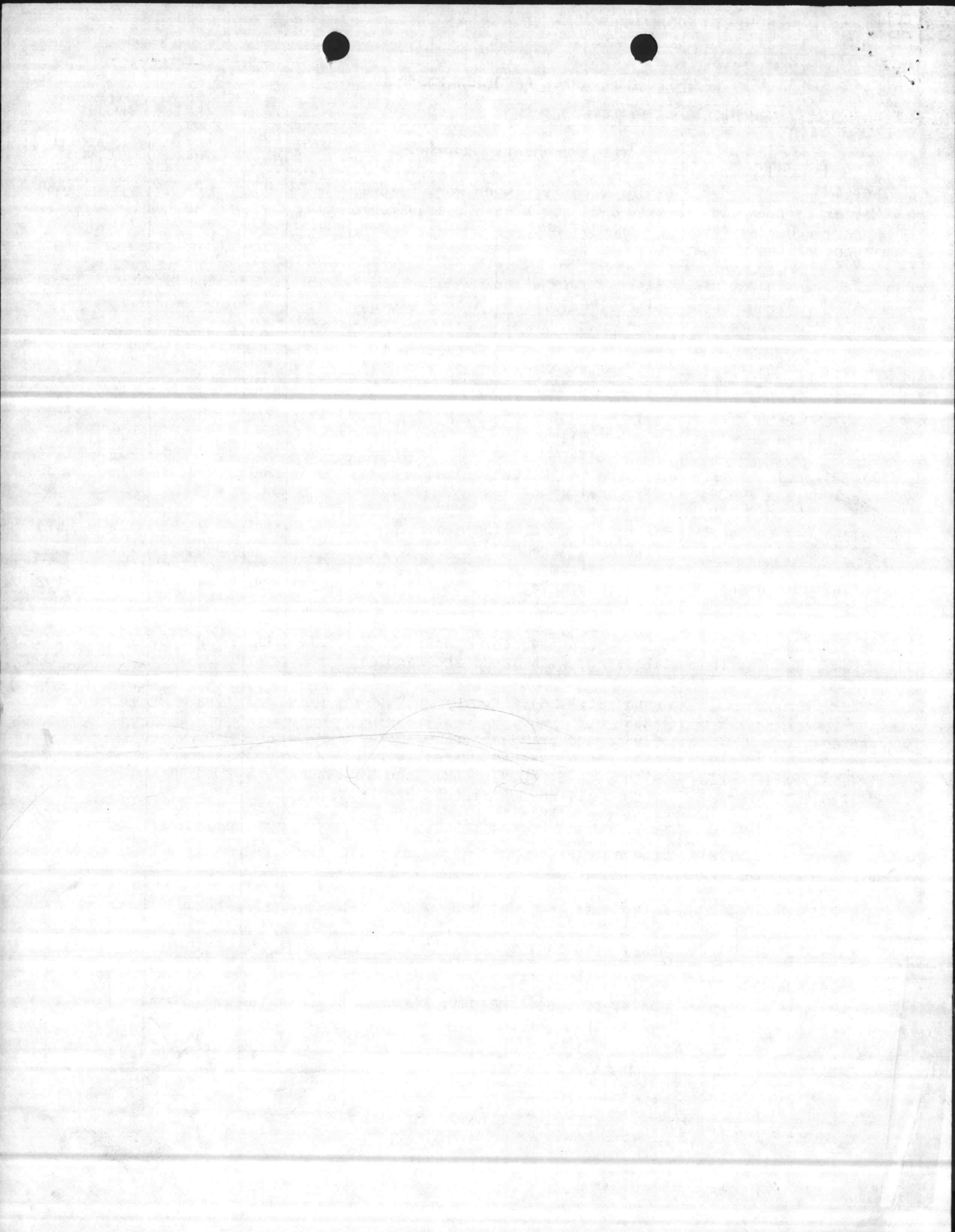
2. PROJECT TITLE

ELECTRONICS/COMMUNICATIONS MAINTENANCE SHOP (DIV HQ BN)

P. NO.

P-175

COG. SYMBOL AND FED. STOCK NO. OR OTHER SOURCE	ITEM/EQUIPMENT DESCRIPTION	QUAN- TITY	UNIT OF ISSUE	UNIT PRICE	TOTAL COST
5150T14 McMaster-Carr Supply Company, P.O. Box 4355 Chicago, Illinois 60680	Cabinet, parts, 18 drawer, welded steel, 11"x5½"x2-5/8", adjustable cross dividers.	5	EA	135.92	680
98-444 with 18-909 Bins AKRO MILS, Akron, Ohio 44309	Storage-go-round, parts bins, 31"wx31"Dx60"H, 45 drawer storage	4	EA	900.00	3,600
6130-00-882-6724	Charger, battery, 6 and 12 volts, 2.2KW	4	EA	385.52	1,542
26-s-32850-258 Federal Prison Systems	Shelving, 24"Dx36"Wx87"H, Type A closed, Class III	30	EA	93.05	2,792
7125-331-8401 Federal Prison Systems	Shelving, 18"Dx108"Wx87"H, Class III	26	EA	93.45	2,430
Carolina Office Supply T5-2307	Board, bulletin, alum frame, 4'x6', 1½" frame	7	EA	82.00	574
Carolina Office Supply T5-80E	Easel, portable, 29"x40", expandable to 70"	2	EA	96.00	192
26-s-32879-152 Federal Prison Systems	Doors, security, for storage shelving, with locks and handles	10	PR	33.10	331
438-EN-10L with Model L Rack Pressteel Co., 9705 Garvey Ave., Elmonte, Calif. 91733 TEL: 213- 283-1225 Sales Rep: Mr. Boyde Lowery	Bench, work, electronic, 96"Lx36" Wx35½"D, plywood with pressweld #10 top covering, 5 drawers at each end, lockable, steel, wired with 18 AWG, 400HZ, 60HZ, and 28VDC, all on 20A circuit breakers, separate with pilot indicator.	15	EA	1,390.00	20,850
OP - Heywood Wakefield, Mod. #HC-7730-PABS-PP	Student chairs	32	EA	44.00	1,408
GSA - 7110-00-149-1630	Desk, flat top, dbl ped	3	EA	225.00	675
GSA - 7110-00-149-1628	Desk, flat top, single ped	9	EA	186.00	1,674
GSA - 7110-00-082-6229	Chair, rotary, tilting seat & back, adj. seat height, w/arms, w/casters	17	EA	58.00	986
GSA - 7110-01-015-1361	Desk, single ped, for desk attachment	9	EA	192.00	1,728



COLLATERAL EQUIPMENT REQUIREMENT (Initial Outfitting)

5ND LANTDIV 4-11010/6 (NEW 2-79)

DATE

23 APR 1982

1. ACTIVITY (Name and Location)

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

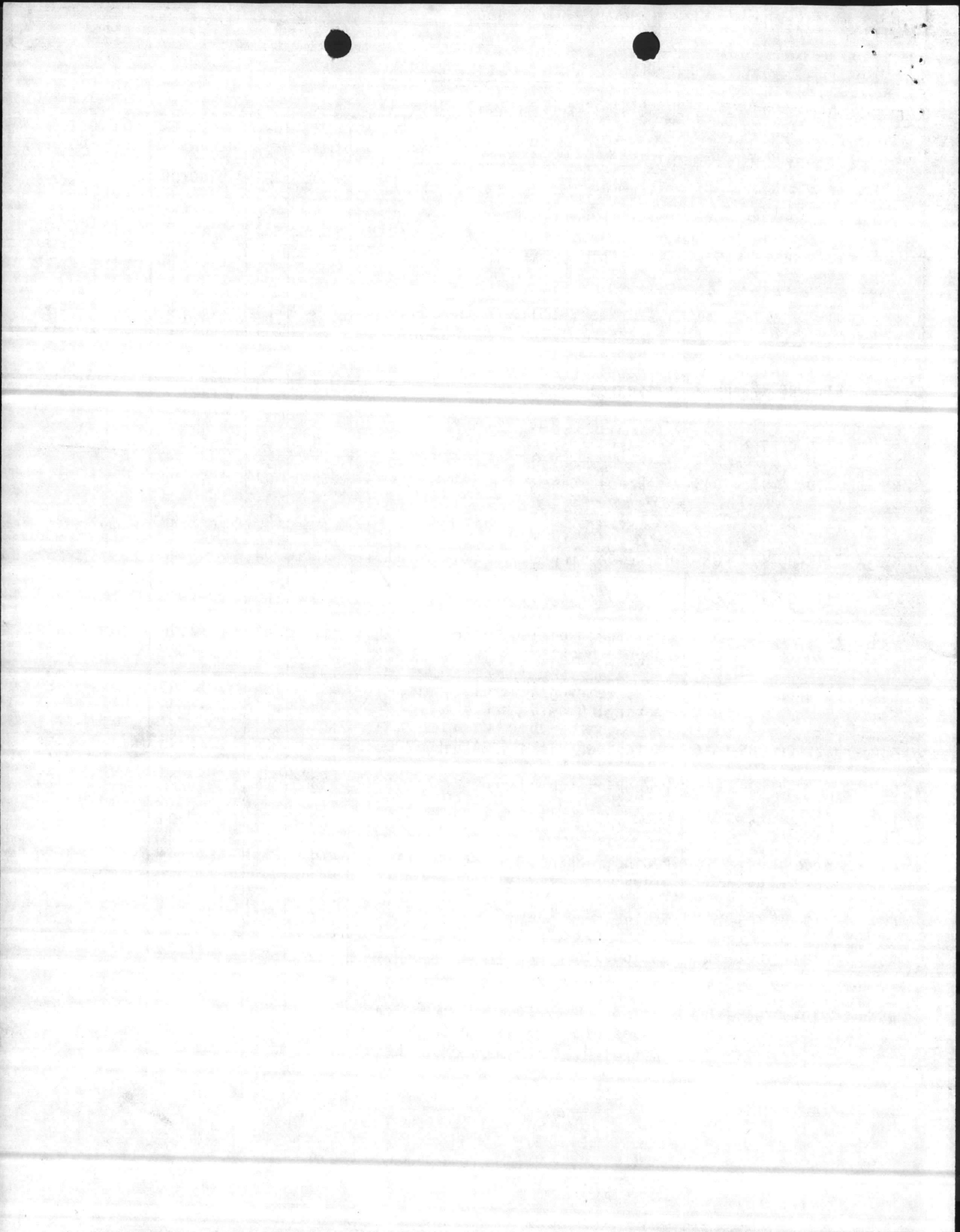
2. PROJECT TITLE

ELECTRONICS/COMMUNICATIONS MAINTENANCE SHOP (DIV HQ BN)

P. NO.

P-175

COG. SYMBOL AND FED. STOCK NO. OR OTHER SOURCE	ITEM/EQUIPMENT DESCRIPTION	QUAN- TITY	UNIT OF ISSUE	UNIT PRICE	TOTAL COST
GSA - 7110-01-016-6580	Desk attachment	9	EA	140.00	1,260
GSA - 7110-00-958-8044	Chair, secretarial, rotary	9	EA	48.00	432
GSA - 7110-00-685-5534	Stand, office machine, 2 drop leaves	5	EA	78.00	390
OP - IBM	Typewriter, IBM Selectric II, carbon ribbon, 10 & 12 pitch Model 833	5	EA	781.00	3,905
GSA - 7110-00-497-2012	Filing cabinet, 5 drawer, legal size	7	EA	190.00	1,330
GSA - 7125-00-764-6129	Cabinet, storage, dbl door	9	EA	146.00	1,314
GSA - 7110-00-112-0045	Bookcase, base	10	EA	25.00	250
GSA - 7110-00-831-7430	Bookcase, section, w/o doors	42	EA	20.60	865
GSA - 7110-00-471-4039	Bookcase, top	10	EA	5.90	59
GSA - 7110-00-782-3503	Chair, straight, w/o arms	50	EA	32.00	1,600
GSA - 7195-00-242-3503	Costumer, wearing apparel, 4 double hooks	12	EA	31.50	378
GSA - 7195-00-004-6716	Rack, wearing apparel, contem- porary, 6 metal hangers	5	EA	37.50	188
GSA - 7520-00-285-5416	Wastepaper basket, 24 gauge steel	20	EA	2.70	54
OP -	Draperies & hardware	13	PR	90.00	1,170
6230-00-682-3423	Desk lamp	20	EA	43.00	860
OP - Monroe	Adding machine, Monroe, Model 1405	5	EA	286.00	1,430
GSA - 7110-00-143-0821	Table, gen. purpose	7	EA	101.00	707
NSN - 4210-00-202-7858	Extinguisher, Fire, 15 lb. CO ₂ , cartridge-operated, Class B/C	10	EA	100.74	1,007
NSN - 4210-00-965-1111	Extinguisher, Fire, dry chemical, Class B/C, CO ₂ gas cartridge- operated, 20 lb cap, Ansul Brand	9	EA	91.81	826



COLLATERAL EQUIPMENT REQUIREMENTS (Initial Outfitting)

5ND LAN DIV 4-11010/6 (NEW 2-79)

DATE

23 APR 1982

1. ACTIVITY (Name and Location)

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

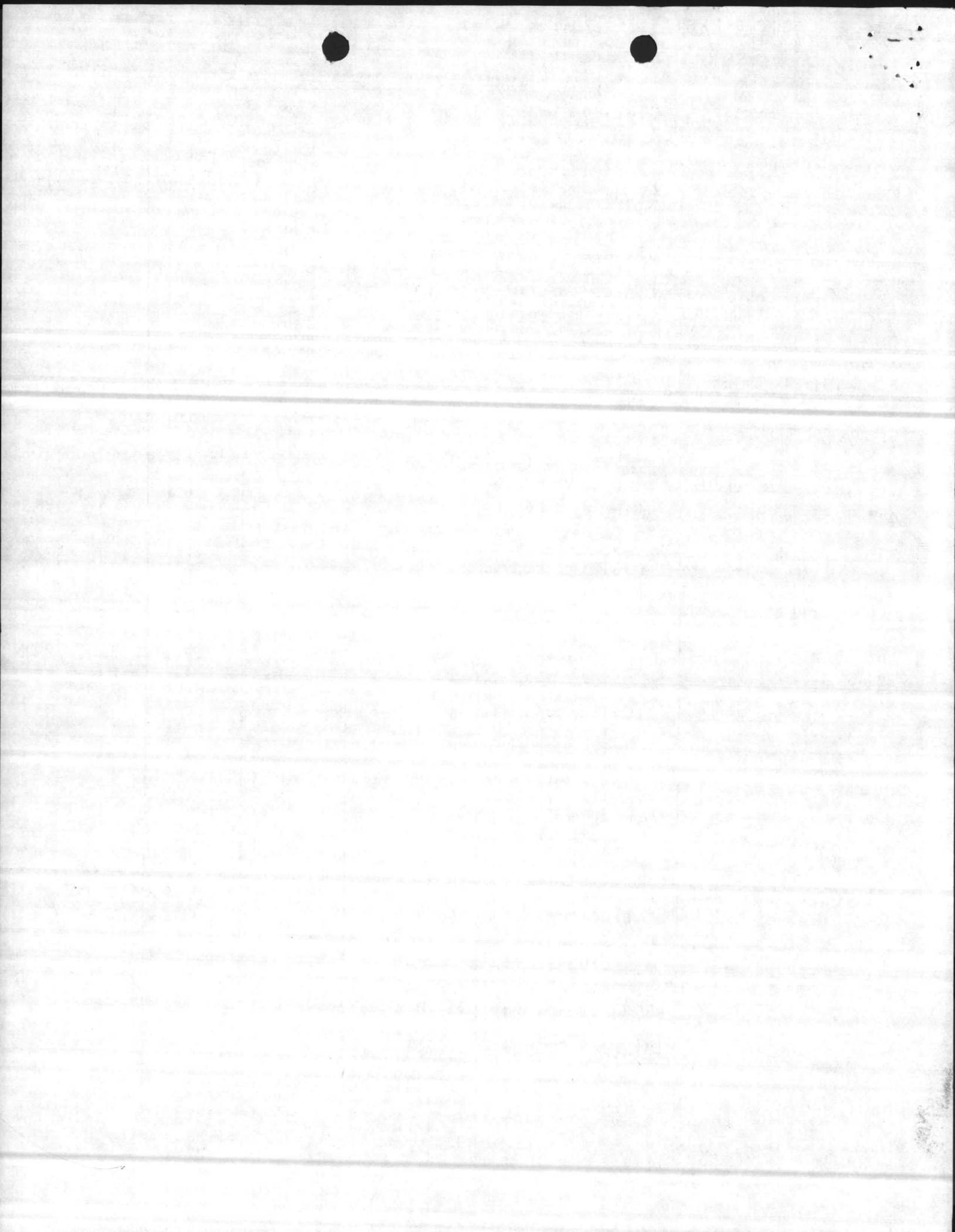
2. PROJECT TITLE

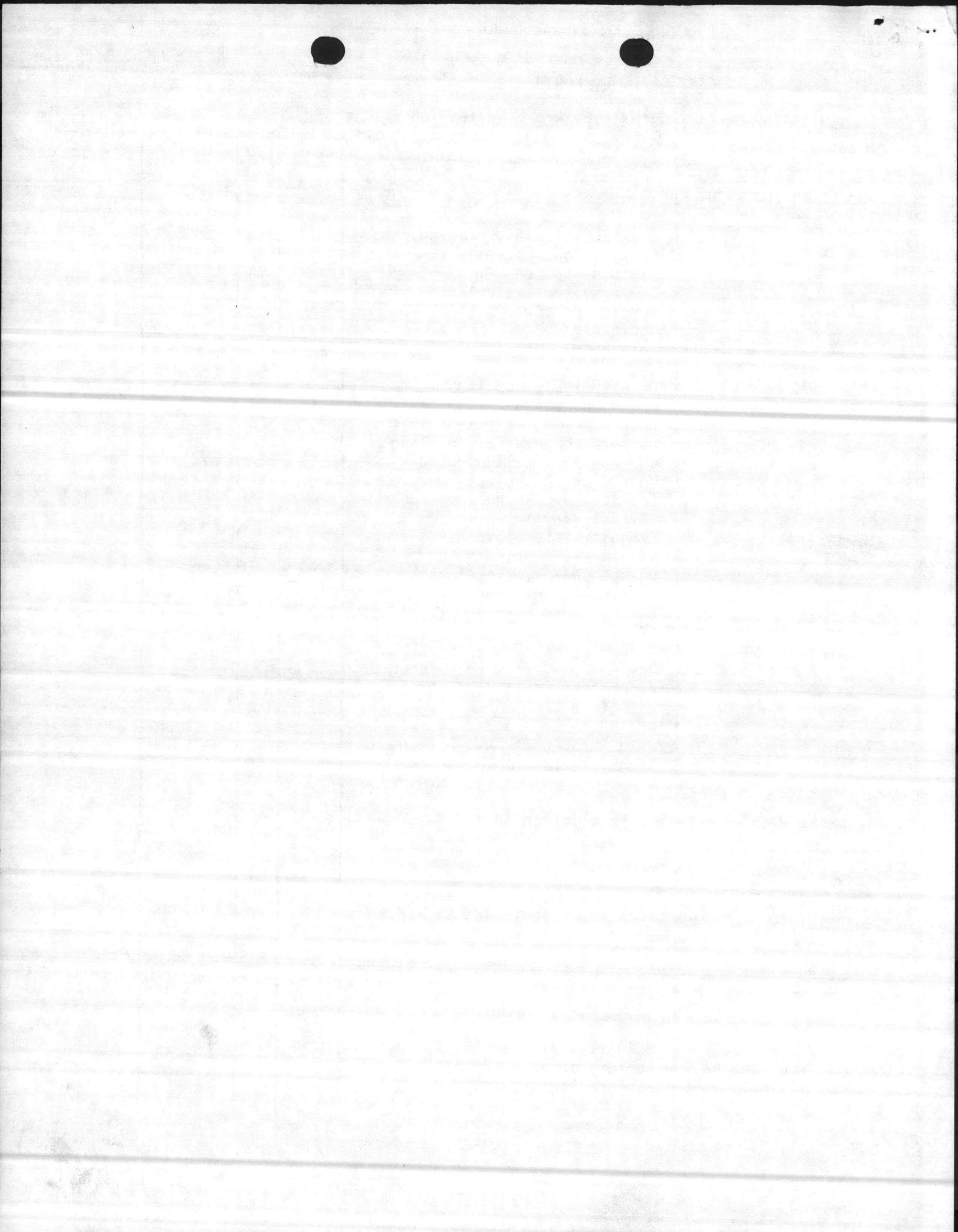
ELECTRONICS/COMMUNICATIONS MAINTENANCE SHOP (DIV HQ BN)

P. NO.

P-175

COG. SYMBOL AND FED. STOCK NO. OR OTHER SOURCE	ITEM/EQUIPMENT DESCRIPTION	QUAN- TITY	UNIT OF ISSUE	UNIT PRICE	TOTAL COST
NSN - 4210-00-720-1815	Extinguisher, fire, 2½ gal. air expelled water, Class A, stainless steel	11	EA	27.00	297
	TOTAL EXPENSE ITEMS				66,824
	Shipping, packing, handling, installation charges, & contingencies - 10%				6,682
3. INVESTMENT ITEMS:	None				
4. APA EQUIPMENT:	None				
5. TRAINING EQUIPMENT:	(LOCALLY FUNDED)				
NSN - 6730-00-423-999	Projector, movie	2	EA	744.00	1,488
OP - Mod 389B Da-Lite Screen Co. 3100 St. Rd., Box 137 Warsaw, Indiana 46580 219/267-8101	Screen, movie, Picture King, 84"x84", glass beaded	2	EA	126.42	253
OP - GS-03S-81003, Mod 389B, Da-Lite Screen Co 3100 St. Rd., Box 137 Warsaw, Indiana 46580 219/267-8101	Projector, overhead, specialist	2	EA	203.00	406
	TOTAL TRAINING EQUIPMENT				2,147
	Shipping, packing, handling, installation charges & contingencies - 10%				214
6. SUMMARY	EXPENSE COST				\$73,720
	GRAND TOTAL			\$13,506	\$73,720
	USABLE COMPLETION DATE: MAY 1983				
	IMMEDIATE FUNDING REQUESTED				





1. ACTIVITY (Name and Location)

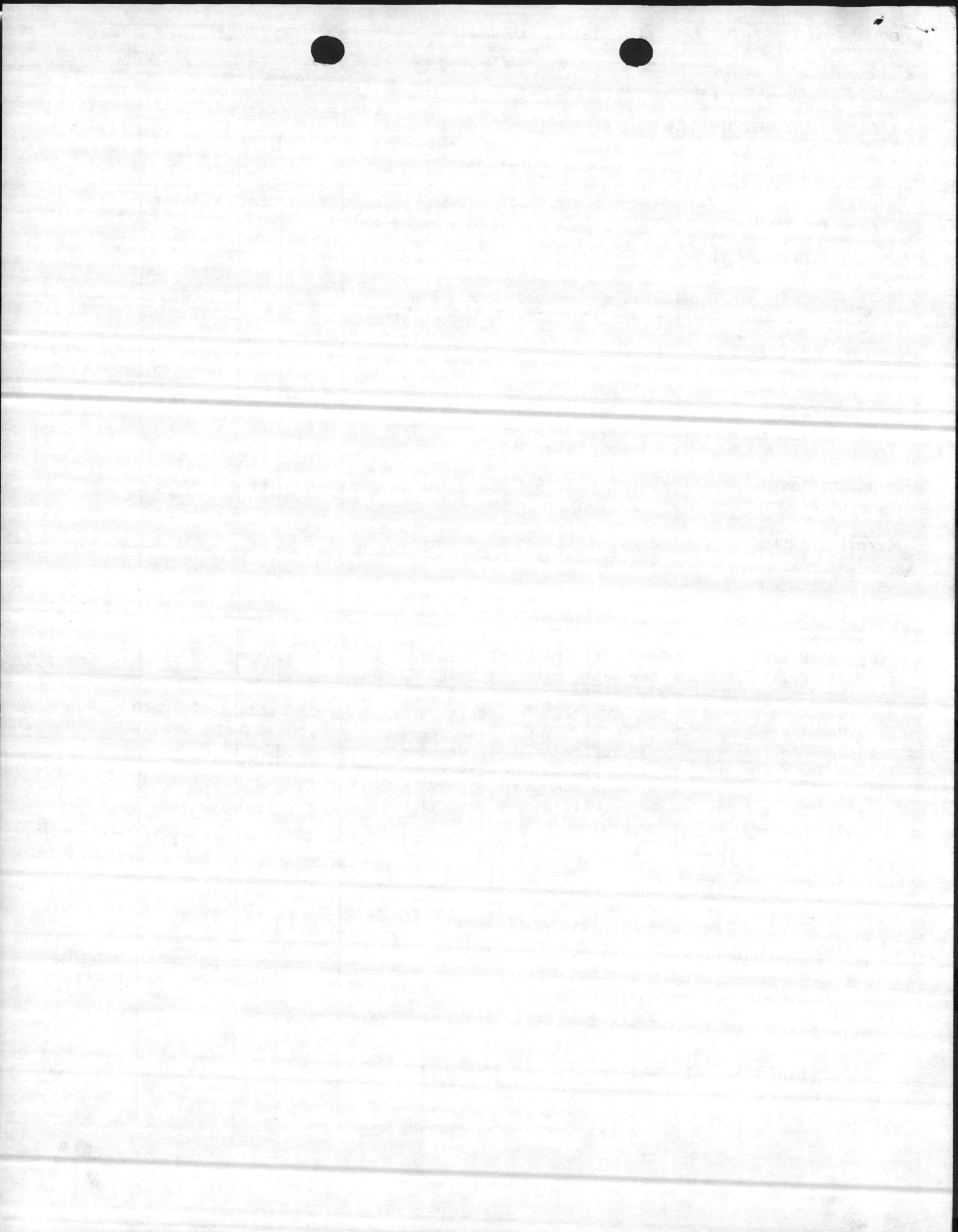
MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

2. PROJECT TITLE

ELECTRONICS/COMMUNICATIONS MAINTENANCE SHOP (DIV HQ BN)

P. NO.
 P-175

COG. SYMBOL AND FED. STOCK NO. OR OTHER SOURCE	ITEM/EQUIPMENT DESCRIPTION	QUAN- TITY	UNIT OF ISSUE	UNIT PRICE	TOTAL COST
5150T14 McMaster-Carr Supply Company, P.O. Box 4355 Chicago, Illinois 60680	Cabinet, parts, 18 drawer, welded steel, 11"x5¼"x2-5/8", adjustable cross dividers.	5	EA	135.92	680
98-444 with 18-909 Bins AKRO MILS, Akron, Ohio 44309	Storage-go-round, parts bins, 31"wx31"Dx60"H, 45 drawer storage	4	EA	900.00	3,600
6130-00-882-6724	Charger, battery, 6 and 12 volts, 2.2KW	4	EA	385.52	1,542
26-s-32850-258 Federal Prison Systems	Shelving, 24"Dx36"Wx87"H, Type A closed, Class III	30	EA	93.05	2,792
7125-331-8401 Federal Prison Systems	Shelving, 18"Dx108"Wx87"H, Class III	26	EA	93.45	2,430
Carolina Office Supply T5-2307	Board, bulletin, alum frame, 4'x6', 1¼" frame	7	EA	82.00	574
Carolina Office Supply T5-80E	Easel, portable, 29"x40", expandable to 70"	2	EA	96.00	192
26-s-32879-152 Federal Prison Systems	Doors, security, for storage shelving, with locks and handles	10	PR	33.10	331
438-EN-10L with Model L Rack Pressteel Co., 9705 Garvey Ave., Elmonte, Calif. 91733 TEL: 213- 283-1225 Sales Rep: Mr. Boyde Lowery	Bench, work, electronic, 96"Lx36" Wx35½"D, plywood with pressweld #10 top covering, 5 drawers at each end, lockable, steel, wired with 18 AWG, 400HZ, 60HZ, and 28VDC, all on 20A circuit breakers, separate with pilot indicator.	15	EA	1,390.00	20,850
OP - Heywood Wakefield, Mod. #HC-7730-PABS-PP	Student chairs	32	EA	44.00	1,408
GSA - 7110-00-149-1630	Desk, flat top, dbl ped	3	EA	225.00	675
GSA - 7110-00-149-1628	Desk, flat top, single ped	9	EA	186.00	1,674
GSA - 7110-00-082-6229	Chair, rotary, tilting seat & back, adj. seat height, w/arms, w/casters	17	EA	58.00	986
GSA - 7110-01-015-1361	Desk, single ped, for desk attachment	9	EA	192.00	1,728



COLLATERAL EQUIPMENT REQUIREMENTS (Initial Outfitting)
5ND LANTDIV 4-11010/6 (NEW 2-79)

DATE
23 APR 1982

1. ACTIVITY (Name and Location)

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

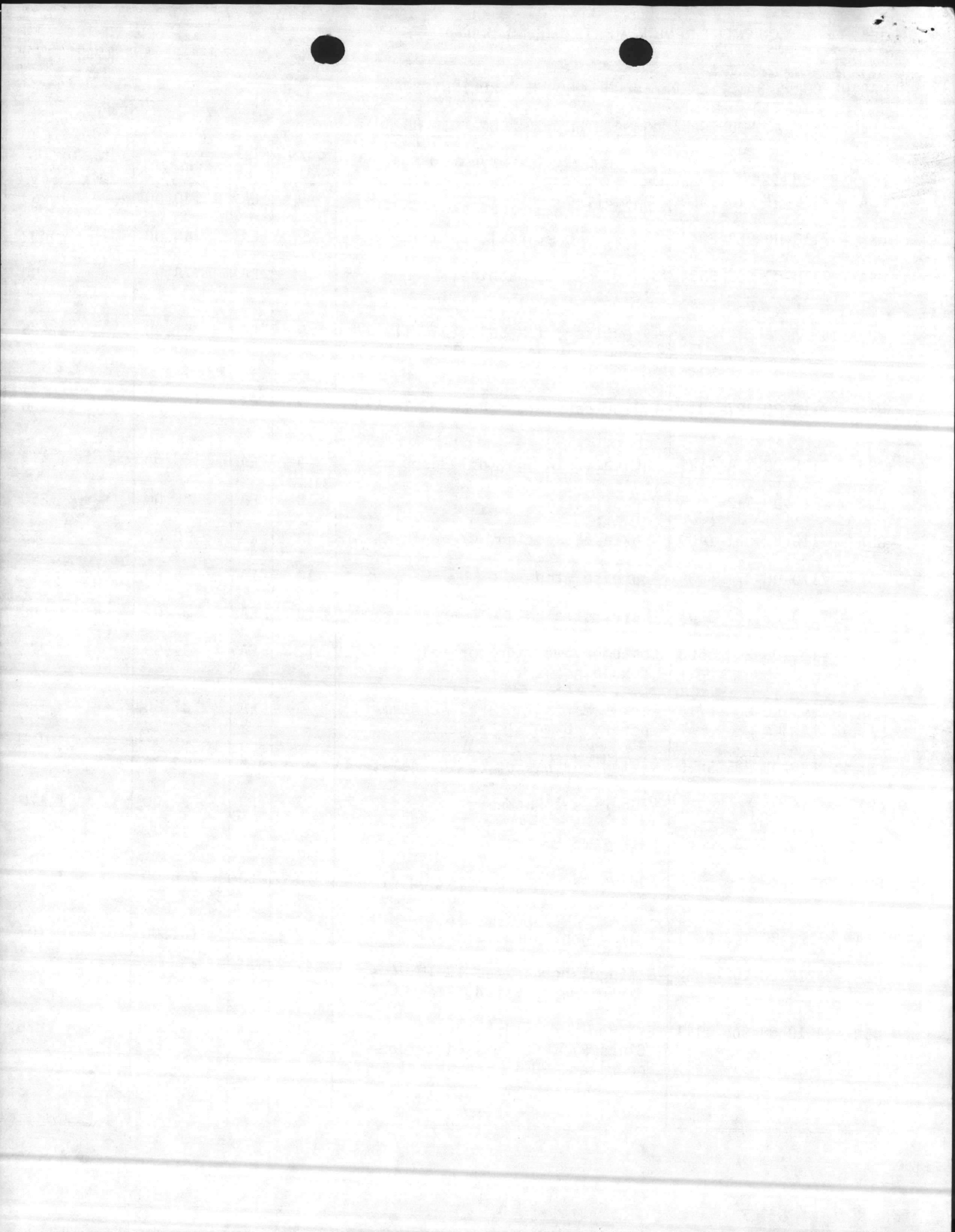
2. PROJECT TITLE

ELECTRONICS/COMMUNICATIONS MAINTENANCE SHOP (DIV HQ BN)

P. NO.

P-175

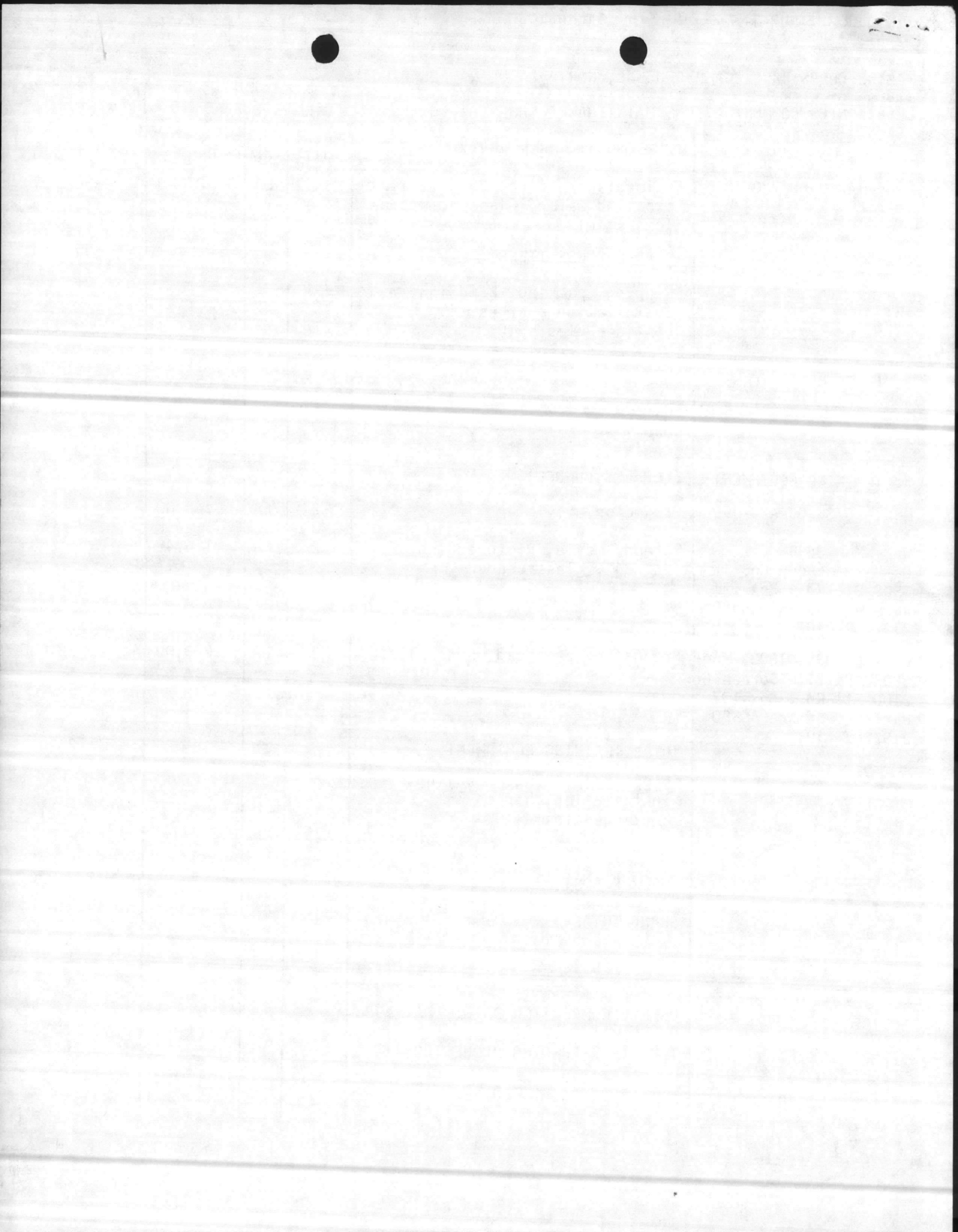
COG. SYMBOL AND FED. STOCK NO. OR OTHER SOURCE	ITEM/EQUIPMENT DESCRIPTION	QUAN- TITY	UNIT OF ISSUE	UNIT PRICE	TOTAL COST
GSA - 7110-01-016-6580	Desk attachment	9	EA	140.00	1,260
GSA - 7110-00-958-8044	Chair, secretarial, rotary	9	EA	48.00	432
GSA - 7110-00-685-5534	Stand, office machine, 2 drop leaves	5	EA	78.00	390
OP - IBM	Typewriter, IBM Selectric II, carbon ribbon, 10 & 12 pitch Model 833	5	EA	781.00	3,905
GSA - 7110-00-497-2012	Filing cabinet, 5 drawer, legal size	7	EA	190.00	1,330
GSA - 7125-00-764-6129	Cabinet, storage, dbl door	9	EA	146.00	1,314
GSA - 7110-00-112-0045	Bookcase, base	10	EA	25.00	250
GSA - 7110-00-831-7430	Bookcase, section, w/o doors	42	EA	20.60	865
GSA - 7110-00-471-4039	Bookcase, top	10	EA	5.90	59
GSA - 7110-00-782-3503	Chair, straight, w/o arms	50	EA	32.00	1,600
GSA - 7195-00-242-3503	Costumer, wearing apparel, 4 double hooks	12	EA	31.50	378
GSA - 7195-00-004-6716	Rack, wearing apparel, contem- porary, 6 metal hangers	5	EA	37.50	188
GSA - 7520-00-285-5416	Wastepaper basket, 24 gauge steel	20	EA	2.70	54
OP -	Draperies & hardware	13	PR	90.00	1,170
6230-00-682-3423	Desk lamp	20	EA	43.00	860
OP - Monroe	Adding machine, Monroe, Model 1405	5	EA	286.00	1,430
GSA - 7110-00-143-0821	Table, gen. purpose	7	EA	101.00	707
NSN - 4210-00-202-7858	Extinguisher, Fire, 15 lb. CO ₂ , cartridge-operated, Class B/C	10	EA	100.74	1,007
NSN - 4210-00-965-1111	Extinguisher, Fire, dry chemical, Class B/C, CO ₂ gas cartridge- operated, 20 lb cap, Ansul Brand	9	EA	91.81	826



1. ACTIVITY (Name and Location)
 MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

2. PROJECT TITLE
 ELECTRONICS/COMMUNICATIONS MAINTENANCE SHOP (DIV HQ BN) P. NO. P-175

COG. SYMBOL AND FED. STOCK NO. OR OTHER SOURCE	ITEM/EQUIPMENT DESCRIPTION	QUAN- TITY	UNIT OF ISSUE	UNIT PRICE	TOTAL COST
NSN - 4210-00-720-1815	Extinguisher, fire, 2½ gal. air expelled water, Class A, stainless steel	11	EA	27.00	297
	TOTAL EXPENSE ITEMS				66,824
	Shipping, packing, handling, installation charges, & contingencies - 10%				6,682
3. <u>INVESTMENT ITEMS:</u>	None				
4. <u>APA EQUIPMENT:</u>	None				
5. <u>TRAINING EQUIPMENT:</u>	(LOCALLY FUNDED)				
NSN - 6730-00-423-999	Projector, movie	2	EA	744.00	1,488
OP - Mod 389B Da-Lite Screen Co. 3100 St. Rd., Box 137 Warsaw, Indiana 46580 219/267-8101	Screen, movie, Picture King, 84"x84", glass beaded	2	EA	126.42	253
OP - GS-03S-81003, Mod 389B, Da-Lite Screen Co 3100 St. Rd., Box 137 Warsaw, Indiana 46580 219/267-8101	Projector, overhead, specialist	2	EA	203.00	406
	TOTAL TRAINING EQUIPMENT				2,147
	Shipping, packing, handling, installation charges & contingencies - 10%				214
6. <u>SUMMARY</u>	EXPENSE COST				\$73,720
	GRAND TOTAL				\$73,720
	USABLE COMPLETION DATE: MAY 1983				
	IMMEDIATE FUNDING REQUESTED				



ASSISTANT CHIEF OF STAFF, FACILITIES
HEADQUARTERS, MARINE CORPS BASE

1	20	
2	04	CB
3	408	CE 1/4/81
4	29	EFK
5	2H	

DATE 2-30-81

TO:

BASE MAINT 2H DIR, QUARTERS & HOUSING

PUBLIC WORKS 04 DIR, BOQ/BSQ

COMM-ELECT 0 BASE FIRE CHIEF

MOTOR TRANSPORT 0

ATTN: _____

① Attached is forwarded for info/action.

File p. 175

~~X~~ Please initial, or comment, and return all papers to this office.

③ Your file copy.

*S. E. Pruitt
Sey dis*

"LET'S THINK OF A FEW REASONS
WHY IT CAN BE DONE"





DEPARTMENT OF THE NAVY
ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORFOLK, VIRGINIA 23511

80-0082
P-175
TELEPHONE NO.

444-7521
IN REPLY REFER TO:

09A21E:MLB
N62470-78-C-3902

24 MAR 1981

Clark Tribble Harris and Li, Architects, P.A.
Architects and Engineers
121 West 7th Street
Charlotte, North Carolina 28202

Re: Contract N62470-78-C-3902, Electronics/Communications
Maintenance Shop, Marine Corps Base, Camp Lejeune, North
Carolina

Gentlemen:

During Mr. Falkenbury's visit to this office several weeks ago, he presented a number of questions concerning pertinent design information for the referenced project. The following is the sequential response to these questions:

1. What distribution class should be used for underground steam distribution?

Response: Per this Command's Code 411, soil borings indicate a summer water table of 9'-0" below grade. For all steam underground distribution which is to be installed at less than 8'-0" below grade distribution Class C, should be specified. For distribution expected to be greater than 8'-0" below, a Class B should be used. The entire distribution system to building should be of one classification based on worst case, relative to grade elevation at boring location.

2. What steam pressure is available?

Response: Per Mr. T. Hatcher, Marine Corps Base, Camp Lejeune's Utilities Director, steam pressure at designated site location 156 psig maximum, 150 psig average. Use 60 psig design discharge pressure for condensate return pump.

3. Does this Command have any profile drawings for existing steam distribution?

Response: Steam distribution profile drawings are not available at this Command. The A&E will have to acquire drawings from the Marine Corps Base, Camp Lejeune's Public Works. If not available, pertinent invert elevations will have to be obtained by A&E during the course of site investigation.

4. Can you provide any information on RF shielding?

Response: NAVFAC guide specifications TS-13765 and TS-13766 are forwarded as enclosures (1) and (2) for use by the A&E in providing RF shielded enclosures for those areas as designated by the user Activity. Any questions which arise regarding the same, should be directed to this Command' Code 404 through the Project Manager.

10-10-10



5. Are acid waste tanks required for battery storage areas?

Response: The user Activity should be consulted to confirm whether facility operations will require the disposal of any battery acid waste. If required, this Command's Code 403 should be advised so that acid waste tank details can be compiled and forwarded.

6. What security measures are required for the crypto vault?

Response: The user Activity must be contacted by the A&E to determine the security measures necessary for the crypto vault. The criteria, enclosures (3) and (4), are forwarded for your use in determining the class of vault required and design characteristics.

7. What are the design conditions to be maintained in the technical shop and crypto vault (dry bulb (°F) relative humidity)?

Response: The user Activity must be contacted to determine whether any special process design criteria is required for technical shop/crypto vault dry bulb - °F/relative humidity. If not, the A&E should provide comfort conditioning in accordance with this Command's Guide for Architect-Engineer Firms.

8. A list is required of all heat producing equipment (including equipment being serviced) for the technical shop and crypto vault.

Response: The user Activity should be consulted to provide a listing of all equipment heat loads which will impact building load calculations.

If you have any questions regarding the above response, please contact Mr. M. L. Bryant, P. E., Project Manager, telephone 444-7521, area code 804.

Sincerely yours,

A. G. BRYANT, JR., P.E.
Head, CONUS Branch
Acquisition Project Management Office
By direction of the Commander

Encl:

- (1) NAVFAC Guide Specification TS-13765
- (2) NAVFAC Guide Specification TS-13766
- (3) OPNAVINST 5510.1F (Chapter 11)
- (4) Physical Security of Classified Material, Chapter 11

Blind copy to: (w/o encls)
✓ MARCORB CAMLEJ

By direction of the Commandant
Administration Project Management Office
Head, COMSEC Branch
A. G. REYNOLDS, JR., Chief

PLANNING BRANCH INTERNAL ROUTE SLIP

B. BRILEY BB /date: 11/20
C. W. BARNES _____ /date: _____
G. JONES _____ /date: _____
L. HONEYCUTT _____ /date: _____
V. MARSHBURN _____ /date: _____

COMMENTS:

PED for P-175,
Comments, if any,
due prior to
12 Dec

RETURN TO BARBARA FOR FILING/ACTION



11

ASSISTANT CHIEF OF STAFF, FACILITIES
HEADQUARTERS, MARINE CORPS BASE

DATE 17 Nov 80

TO:

BASE MAINT O

DIR, FAMILY HOUSING

PUBLIC WORKS O

DIR, BACHELOR HOUSING

COMM-ELECT O

BASE FIRE CHIEF

MOTOR TRANSPORT O

ATTN: _____

	ROUTING ORDER	INT
1	10	W 11/18
2	20	T 11/18
3	04	TRA.
A-4	408	
5		
	ORIG	INT

1. Attached is forwarded for info/action

2. Please initial, or comment, and return all papers to this office.

3. Your file copy.

VR

al Austin

"LET'S THINK OF A FEW REASONS
WHY IT CAN BE DONE"



RECEIVED
18 NOV 1980
PUBLIC WORKS DEPT.
CAMP LEISURE, N.C.



DEPARTMENT OF THE NAVY
ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORFOLK, VIRGINIA 23511

P-175
TELEPHONE NO.
444-7521

IN REPLY REFER TO:

09A21E:MLB
11010/MARCORB CAMLEJ

13 November 1980

From: Commander, Atlantic Division, Naval Facilities Engineering Command
To: Commander, Naval Facilities Engineering Command (Code 05)

Subj: FY 1982 Project Engineering Documentation (PED) for Project P-175,
Electronics/Communications Maintenance Shop, Marine Corps Base, Camp
Lejeune, North Carolina

Ref: (a) NAVFACENGCOM ltr 0512A/WBS of 26 Oct 1979
(b) NAVFACENGCOM Instruction 11010.14M
(c) NAVFACENGCOM Instruction 11010.44C

Encl: (1) Subject PED (10 copies)
(2) Detailed Engineering Cost Estimate Sheets (2 copies)
(3) Witness Data Sketch (2 copies)

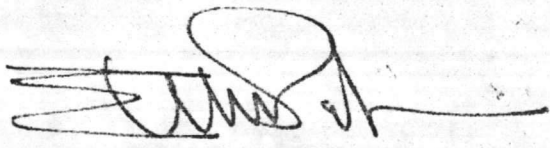
1. As requested by reference (a), enclosures (1), (2), and (3), prepared in accordance with reference (b), are submitted.

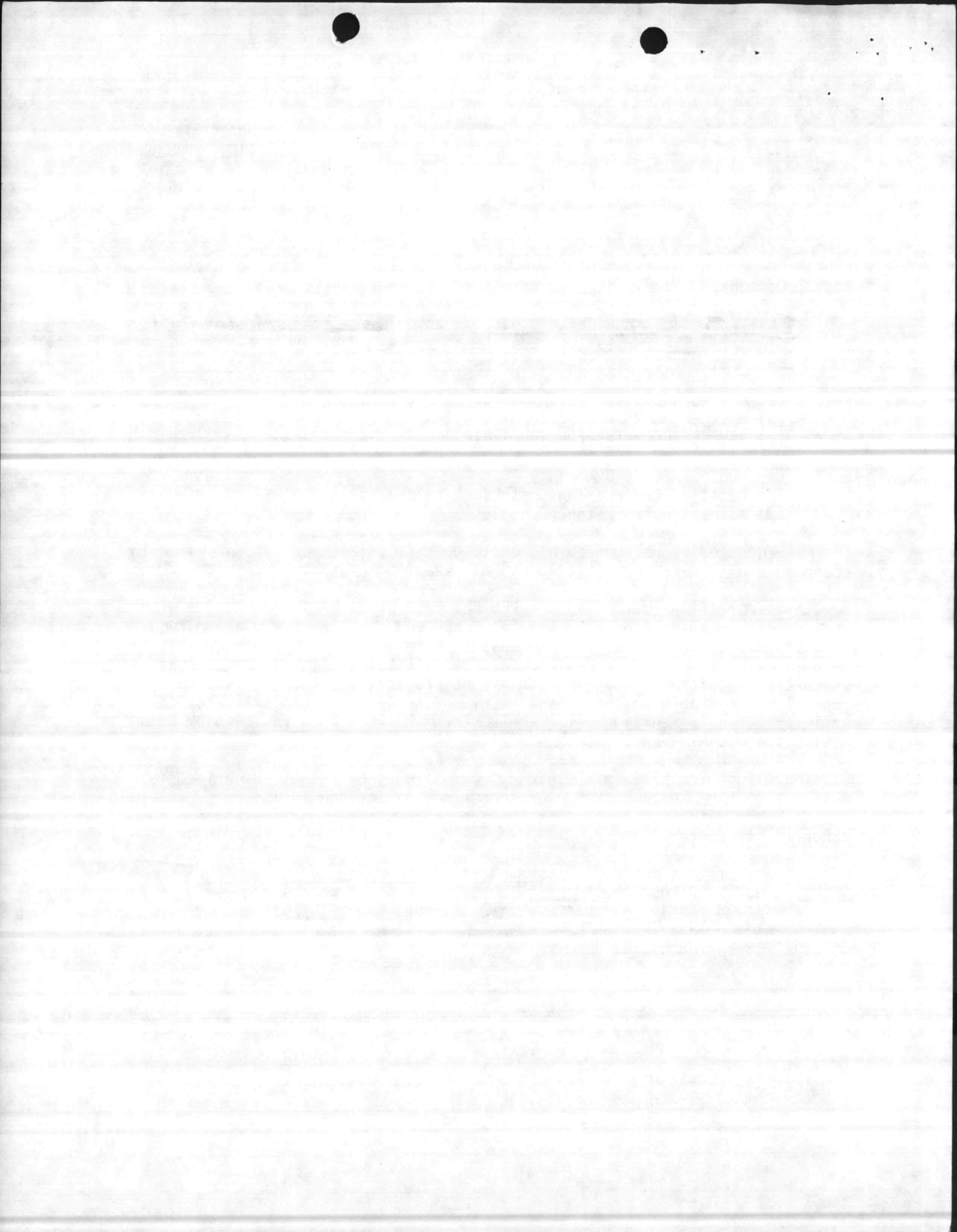
2. It is certified that: (a) the PED has been prepared in accordance with the reference (b) Instruction; (b) project scope and cost are the minimum required to satisfy the operational requirements and are supported by current SFPS documentation in accordance with reference (c); (c) utilities are adequate to support the additional load imposed by the project; (d) the facility design is generally acceptable to the Activity Commanding General, and satisfies the Activity's requirements; and (e) the DD Form 1391 has been reviewed by both the Activity and LANTNAVFACENGCOM.

3. The slight increase in the project budget cost over that authorized for design \$1,900,000 vice \$1,800,000 is attributable to the inclusion of solar domestic hot water and demolition of five quonset buildings (metal) and one concrete structure.

4. By copy of this letter the Commandant of the Marine Corps and the Commanding General, Marine Corps Base, Camp Lejeune, North Carolina are requested to provide any comments directly to NAVFACENGCOM (Attention Code 05) with a copy to LANTNAVFACENGCOM (Attention Code 09A2). If no comments are submitted within 30 days, concurrence will be assumed.

→ 12 Dec
Copy to:
CMC (w/2 copies encl (1))
→ MARCORB CAMLEJ (w/2 copies encl (1))


E. W. MCLAUGHLIN
By direction



FOR OFFICAL USE ONLY

1 JULY 1980

DEPARTMENT OF THE NAVY

PROJECT ENGINEERING DOCUMENTATION

**ELECTRONICS / COMMUNICATIONS
MAINTENANCE SHOP**

(P-175)

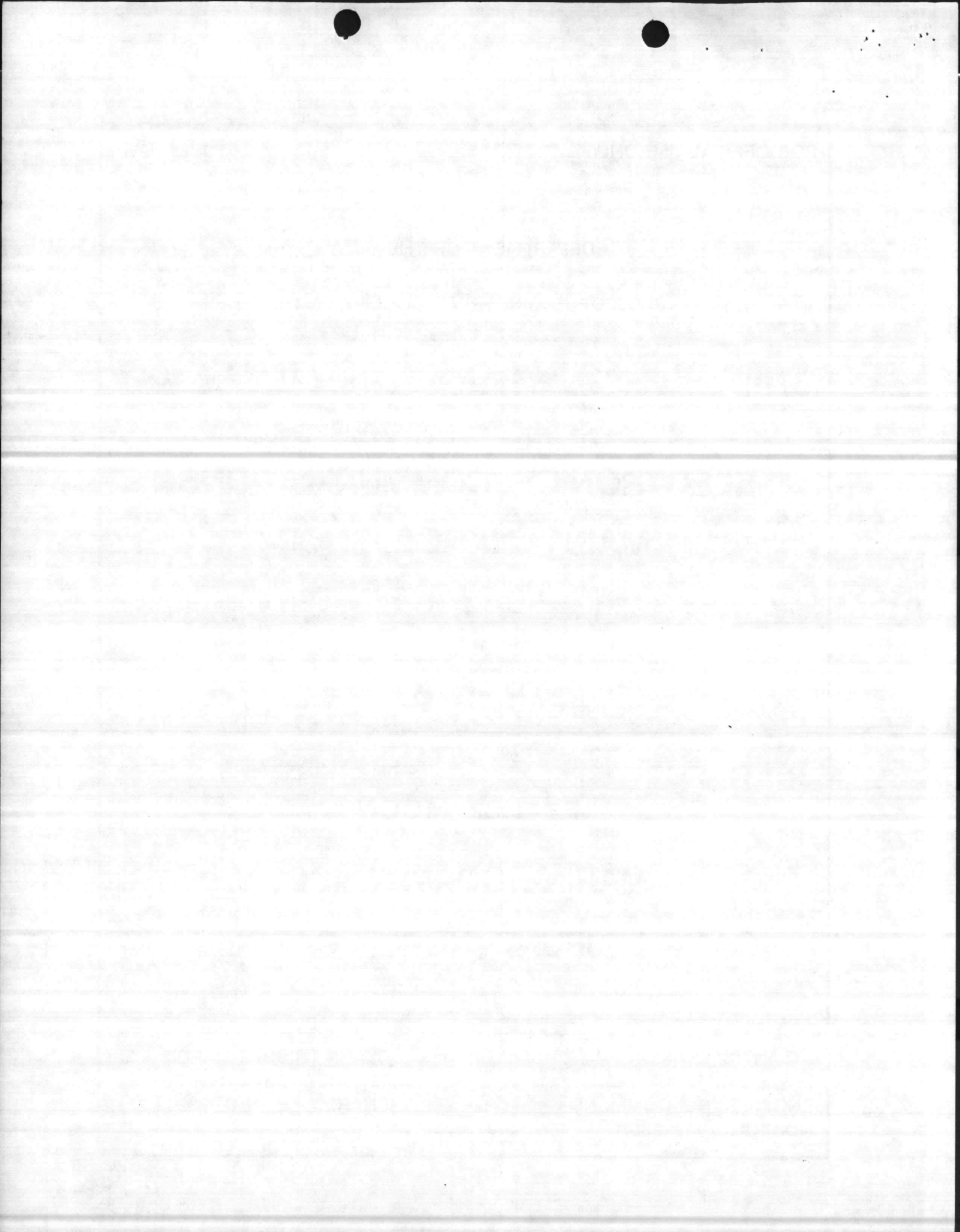
FY 1982 MCON

MARINE CORPS BASE

CAMP LEJEUNE, NORTH CAROLINA

ADMINISTERED BY:
ATLANTIC DIVISION
NAVAL FACILITIES
ENGINEERING COMMAND
NORFOLK, VA. 23511

PREPARED BY:
CLARK TRIBBLE HARRIS & LI
121 WEST 7th STREET
CHARLOTTE, N. C. 28202

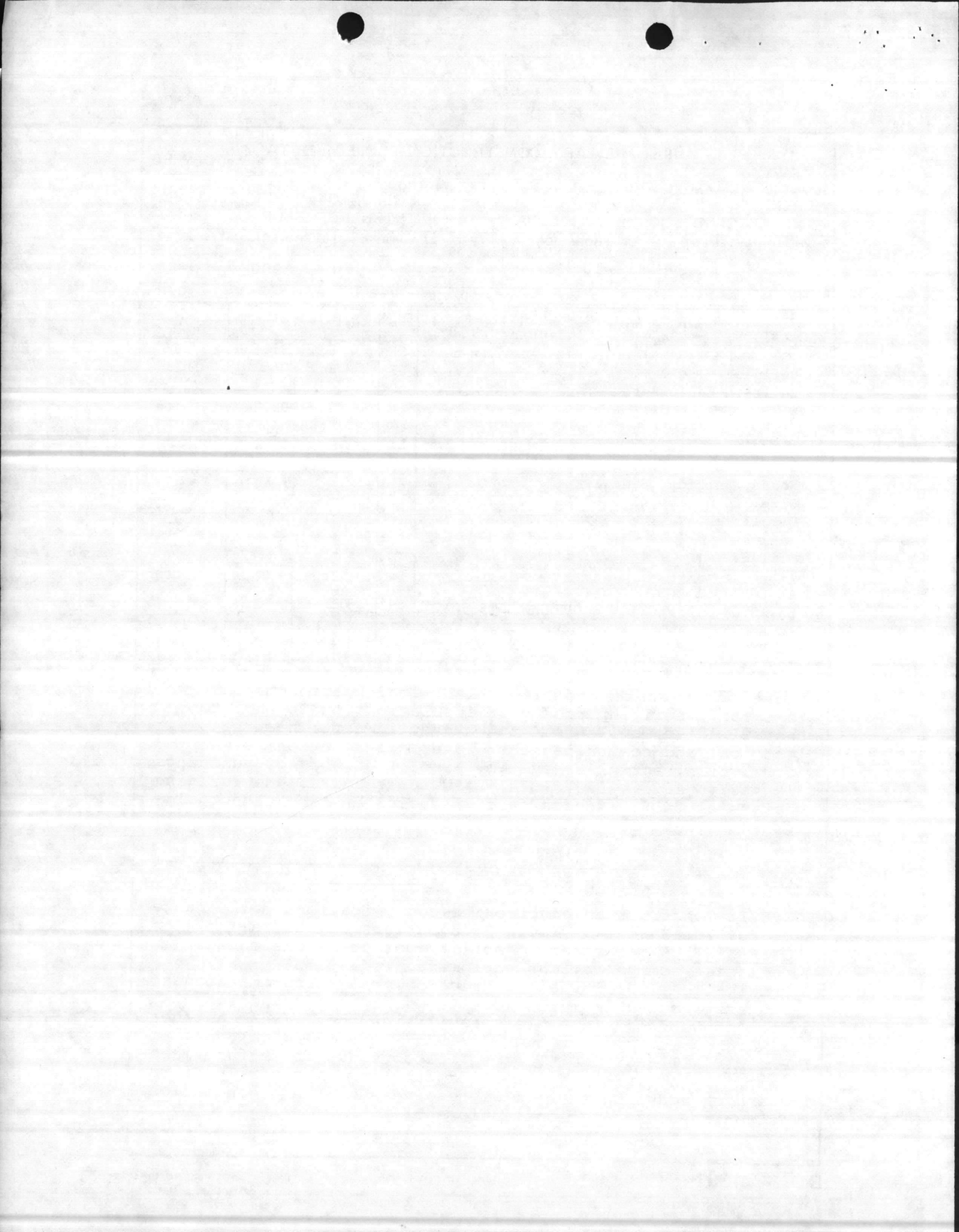


1. COMPONENT NAVY		FY 1981 MILITARY CONSTRUCTION PROJECT DATA		2. DATE 1 JULY 80	
3. INSTALLATION AND LOCATION MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA			4. PROJECT TITLE ELECTRONICS/COMMUNICATIONS MAINTENANCE SHOP		
5. PROGRAM ELEMENT -	6. CATEGORY CODE 217-10	7. PROJECT NUMBER P-175	8. PROJECT COST (\$000) 1900		

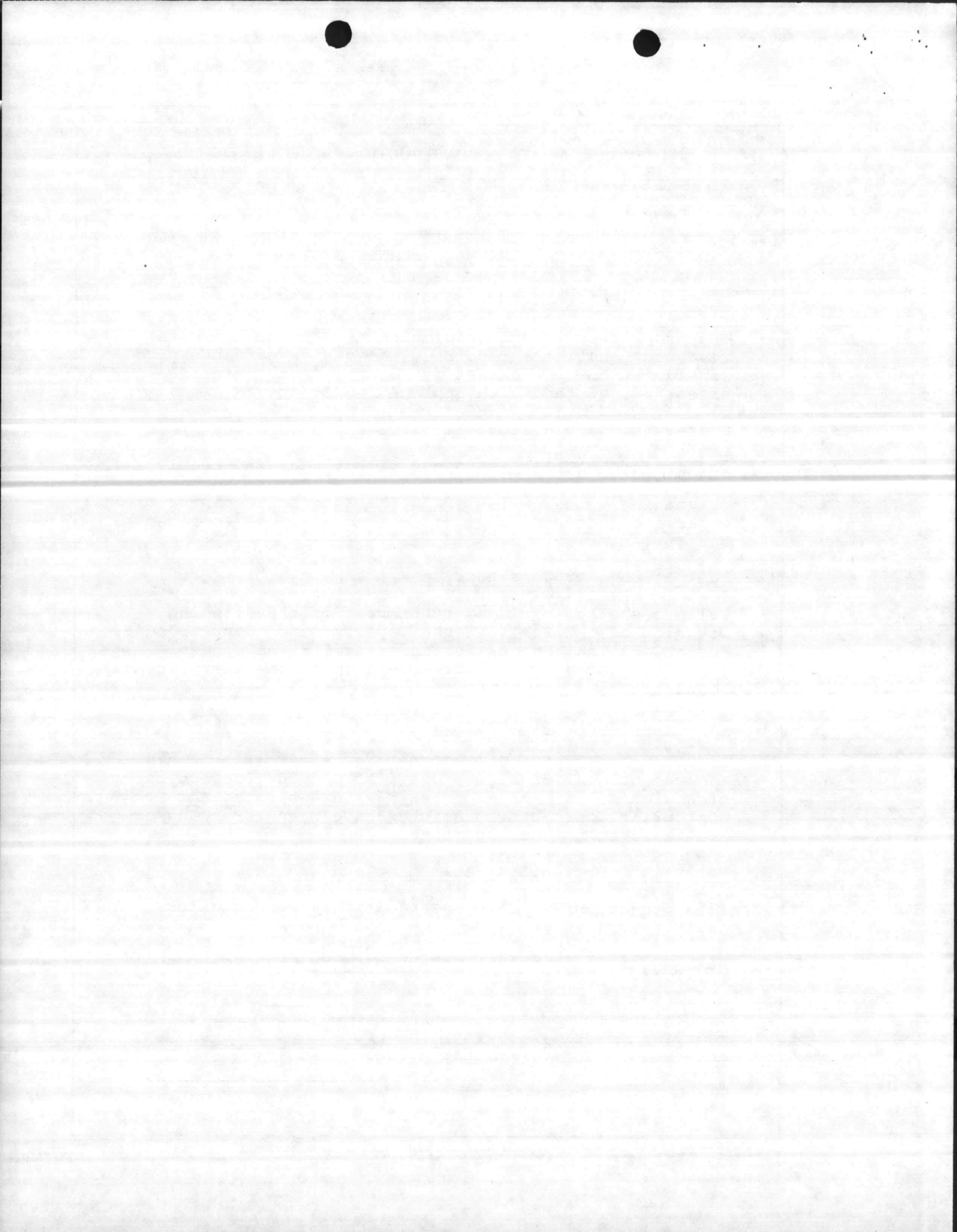
9. COST ESTIMATES						
ESCALATION: 14%		ITEM		BID OPENING DATE: 1 January 1982		
		U/M	QUANTITY	UNIT COST	COST (\$000)	
ELECTRONICS COMMUNICATIONS MAIN. SHOP						
Building		SF	24,818	54.96	1364	
Built-in-Equipment		SF	24,818	50.73	(1259)	
Solar Domestic Hot Water		LS	-	-	(89)	
		SF	168	95.24	(16)	
SUPPORTING FACILITIES						
Utilities		LS	-	-	344	
Roads, Parking, Sidewalks		LS	-	-	(87)	
Site Improvements		LS	-	-	(61)	
Demolition		LS	-	-	(136)	
					(60)	
SUB-TOTAL						
		-	-	-	1708	
CONTINGENCY (5 %)						
		-	-	-	85	
TOTAL CONTRACT COST						
		-	-	-	1793	
SUPERVISION, INSPECTION & OVERHEAD (5.5%)						
		-	-	-	99	
TOTAL REQUEST						
		-	-	-	1822	
TOTAL REQUEST (ROUNDED)						
		-	-	-	1900	
EQUIPMENT PROVIDED FROM OTHER APPROPRIATIONS						
		-	(NON-ADD)	-	(94)	

10. DESCRIPTION OF PROPOSED CONSTRUCTION
Concrete foundation and floor slab; load bearing masonry walls; steel roof; built-up roof over insulation; built-in 5 ton monorail hoist; built-in 4 ton hydraulic lift; heating plant; electrical and communications; water distribution; sewer distribution; sprinkler system. Demolition work of Buildings 1812, 1814, 1822, 1823, 1824; structures S-1825. The building consists of 24,818 square feet of enclosed space. The building has 12.5 tons of air conditioning.

REQUIREMENTS: 175,074 SF. ADEQUATE: 2,349 SF. SUBSTANDARD: 75,504 SF.
PROJECT: Construct an electronics/communications maintenance shop for 2nd Marine Division Headquarters Battalion.
REQUIREMENT: A maintenance facility for organizational electronics/communications equipment.
CURRENT SITUATION: The electronics/communications maintenance shops are located in makeshift, temporary metal and semi-permanent wood/concrete block facilities that were constructed for warehousing.
IMPACT IF NOT PROVIDED: Troops will continue to perform maintenance in the existing makeshift facilities, severely disrupting and/or reducing the combat readiness of the organizational electronics/communications equipment.



1. COMPONENT NAVY	FY 19 ⁸² MILITARY CONSTRUCTION PROJECT DATA	2. DATE 1 JULY 1980
3. INSTALLATION AND LOCATION MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA		
4. PROJECT TITLE ELECTRONICS/COMMUNICATIONS MAINTENANCE SHOP		5. PROJECT NUMBER P-175
<p>A. <u>Environmental Impact</u></p> <p>The project environmental impact assessment has been reviewed, and where required, the design concepts give consideration to eliminating adverse environmental effects consistent with applicable directives.</p> <p>B. <u>Preservation of Historical Sites and Structures</u></p> <p>The project facilities do not directly or indirectly affect a district, site, building, structure, object or setting which is listed in the National Register or otherwise possesses a significant quality of American history.</p> <p>C. <u>Fallout Shelter Construction</u></p> <p>Fallout shelter excluded by request of the Planning Division of the Public Works Department of Camp LeJeune, North Carolina. Spaces for this facility have been provided by the Public Works Department in other recently constructed or proposed facilities.</p> <p>D. <u>Flood Hazards Evaluation</u></p> <p>Requirements of Executive Order No. 11988 (Floodplain Management) and Executive Order No. 11990 (Protection of Wetlands) have been thoroughly investigated and appropriate corrective measures have been taken and/or are included in this project.</p> <p>E. <u>Pollution, Prevention, Abatement and Control</u></p> <p>This project will not cause additional air or water pollution.</p> <p>F. <u>Design for Accessibility of Physically Handicapped Personnel</u></p> <p>Provisions for physically handicapped personnel are not required in this facility. The project will be used by able bodied active military personnel only.</p>		



BUDGET ESTIMATE SUMMARY SHEET FOR P- 175

Title: ELECTRONICS/COMMUNICATIONS MAINTENANCE SHOP Costs Escalated to: 1 JAN 1982

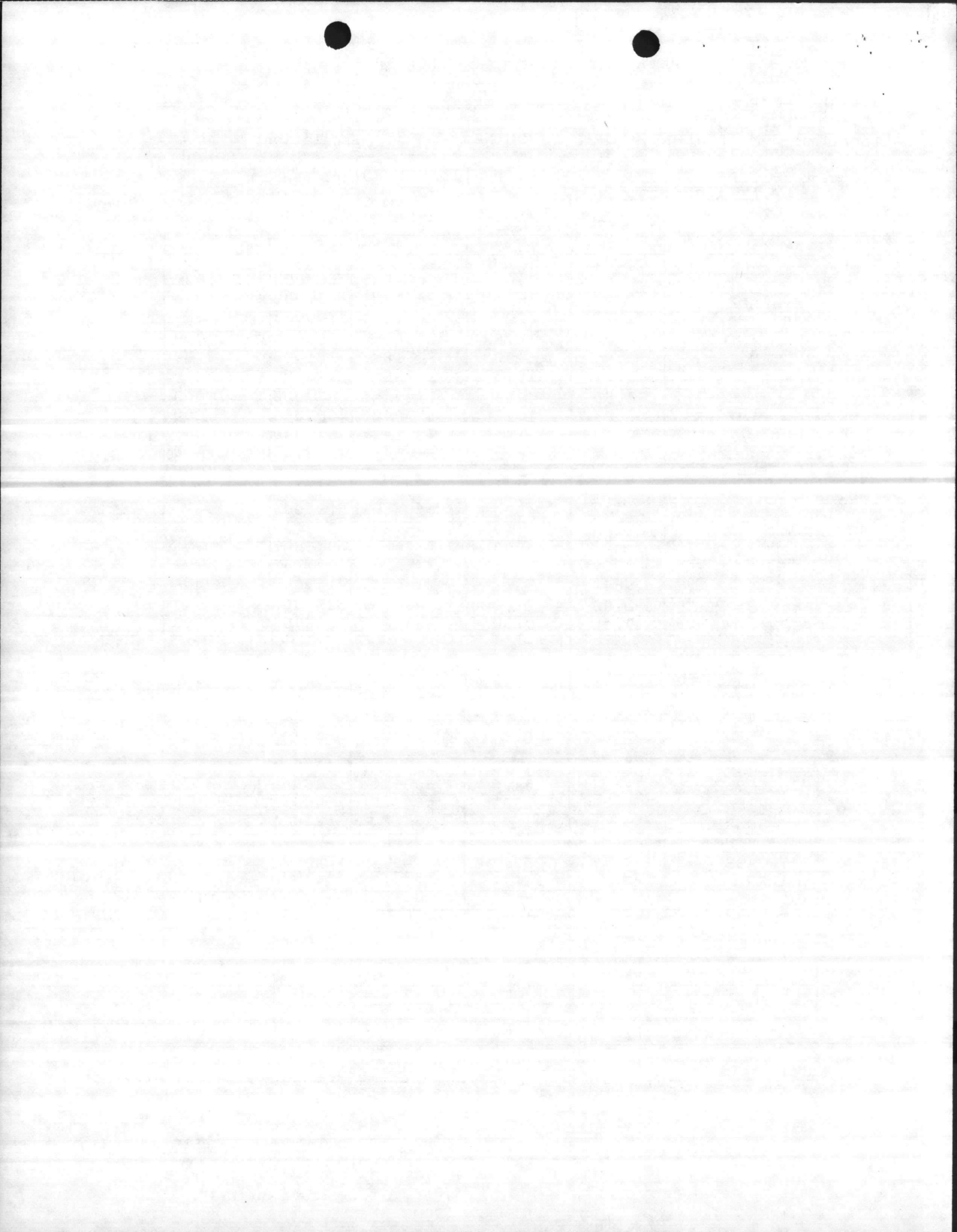
Location: CAMP LEJEUNE, NORTH CAROLINA Escalation: 14%

Prepared by: CLARK TRIBBLE HARRIS & LI ARCHITECTS, P.A. Date: 1 JULY 80 Contingency: 5%

		\$/SF	S/SYS	SYS QUAN	TOTAL	BUILDING	BUILT-IN EQUIPMENT
1	01 FOUNDATION	2.01	2.01	24818sf	50,000	50,000	
2	02 SLAB-ON-GRADE	3.02	3.02	24818sf	75,000	75,000	
3	03 STRUCTURAL FRAME	.12	.12	24818sf	3,000	3,000	
4	04 SUPPORTED FLOORS	1.04	10.83	2400sf	26,000	26,000	
5	05 ROOF SYSTEM	8.90	8.90	24818sf	221,000	221,000	
6	06 EXTERIOR WALLS	5.84	10.54	13756sf	145,000	145000	
7	07 INTERIOR WALLS	3.50	4.99	17424sf	87,000	87,000	
8	08 INTERIOR FINISHES	2.65	1.27	51904sf	66,000	66,000	
9	09 DOORS AND WINDOWS	2.57	914	70 units	64,000	64000	
10	10 SPECIALTIES	4.97	--	--	122,000	122000	
11	11 PLUMBING	1.89	1958	24fixture	47,000	47,000	
12	12 MECHANICAL (HYAC)	4.06	8080	12.5tons	101,000	101 000	
	15 ENGINE EXHAUST SYS	.74	4500	4systems	18,000		18000
	17 SPRINKLER	1.49	1.49	24818sf	37,000		37000
	19 COMPRESSED AIR	.38	9000	1 ea.	9,000		9000
	23 EMCS	.64	761	21 pts.	16,000	16000	
	24 SPECIAL EQUIPMENT	1.00	25,000	1ea.	25,000		25000
	25 ELECTRICAL	9.50	9.50	24818sf	236,000	236000	
	Sub-Total Building	50.73			\$ 348,000	\$* 1,259,000	\$* 89000
	SOLAR D.H.W.		95.24	168 SF	16,000		
1	87 PILING	-	-	-	-	a.	* -
2	50 ELECTRICAL	-	4000	.lea	4000		
3	51 ELECTRICAL SUBSTATION	-	24.00	500 kva	12000	b. 87000	* 87000
4	56 HEAT DISTRIBUTION	-	150	400 LF	60000		
5	61 SANITARY SEWERS	-	33.33	150LF	5000		
6	64 WATER DISTRIBUTION	-	30.00	200LF	6000		
7	75, 76, 77 ROADS,	-	-	-	-		
8	PARKING, WALKS	-	13.44	4537 sy	61000	c.	* 61000
9	79, 80, 81, 82 SITE	-	-	-	-		
10	IMPROVEMENTS	-	-	LS	136000	d.	* 136000
11	83 DEMOLITION	-	-	LS	60000	e.	* 60000
12							
13							
14							
15							
	Sub-Total Supporting Facilities				* \$		344000

Total Estimated Contract Cost: 1 Jan 82	\$ 1708000
Contingency 5 %	\$ 85000
SIOH 5.5%	\$ 99000
Total Budget Cost	\$ 1892000
Rounded	\$ 1900000

*Asteric indicates these totals on 1391.



DESIGN CONCEPTS

ACTIVITY AND LOCATION: MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA

PROJECT TITLE: ELECTRONICS/COMMUNICATIONS
MAINTENANCE SHOP (P-175)

DATE: 1 JULY, 1980

USE OF DEFINITIVES AND PREVIOUS DESIGNS

The definitive drawing supplied was used as a basis for design and was changed only as required by the site conditions and by input from the Activity. The proposed design now meets all the Activity's updated requirements.

SPECIAL DESIGN CHARACTERISTICS

The building is set back from the main service road in order to avoid interference with existing underground utilities. The covered entrance area provides sun control for the Administrative Office Area. The storage areas to the north are gathered together into one long span bay in order to maximize economy of structure. The toilets and mechanical room are centrally located to also maximize economy.

ENERGY CONSERVATION AND SOLAR ENERGY

The mechanical system recommended is to heat and ventilate the non-air conditioned areas utilizing steam unit heaters and to supply the air conditioned spaced with a low pressure VAV system. The initial investment for this system is \$113,000 with a life cycle cost of \$401,000. This represents 8 percent of the total budget.

This building should be assigned bldg. category code 210, as listed on the interim DOD Design Energy Budgets. The building is located in Region 4 which allows an energy consumption of 85,000 BTU/sq.ft./yr. The projected consumption for this facility is 63,173 BTU/sq.ft./yr.

Solar energy is recommended for domestic water heating on this project. Computer studies indicate that an optimum of 68.5 percent of the water heating requirements could be supplied with a payback of 19 years. The solar collectors would be of the double glazed flat plate type with an area of 168 square feet.

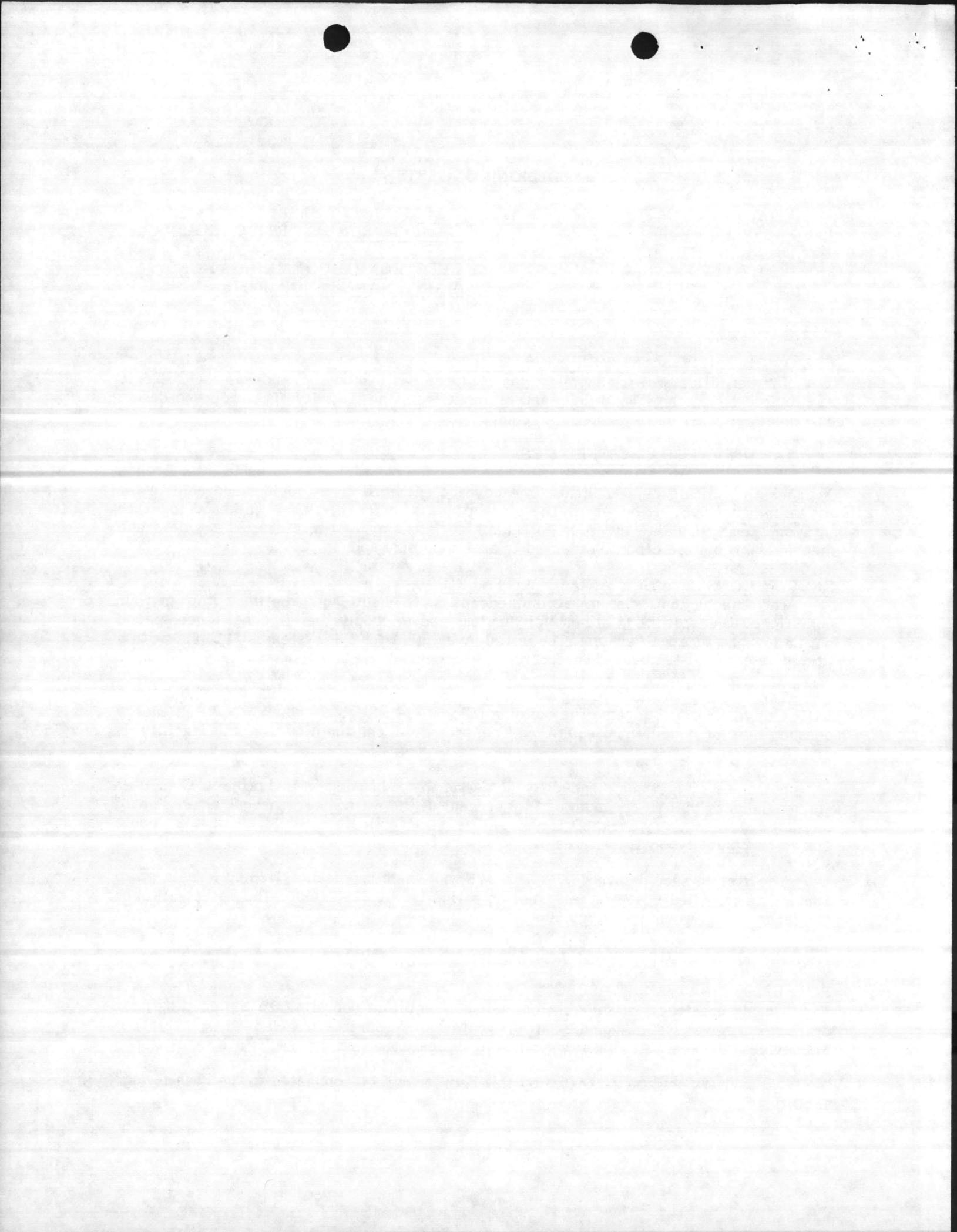
The system should save 26.7×10^6 BTU/yr. which represents \$426.00 (escalated to 1982). The installed cost of the system is estimated at \$18,214.00. The design cost for the solar system would be \$2,000.00.

The system will be connected to the Base EMCS System.

POLLUTION ABATEMENT ASPECTS OF DESIGN

During construction, soil erosion and sedimentation deposits into the existing open drain storm sewer system could exist. Preventative measures will include silt fences, run-off devices, and seeding. These erosion control measures shall meet all state regulations.

All sanitary sewage generated by this Facility will be connected to the Base sewage facility.



SITE APPROVAL

Site approval has been authorized by CMC letter LFF-1 AJR:bab of 6 December, 1979.

ECONOMIC ANALYSIS

The Facility designed is a one-story building with two roof heights to meet all the Activity's requirements and to maximize economies of structure. The overall rectangular shape of the building is compact for ease of construction. The building is of masonry construction including applied metal siding in order to be compatible with existing new on Base Facilities and construction techniques of the area.

The Economic Analysis compared a steel open-web joist system on load bearing walls, a steel framing system, and a precast concrete framing system. The results determined that the masonry load bearing wall with a steel open-web joist framing system was economically justified on a first cost basis.

The mechanical system determined to be most economical is a system of unit heaters for the heated and ventilated areas and a variable air volume system for the air conditioned areas. While this system has a higher first cost than single packaged roof top units, or air to air heat pumps, its life cycle cost provided to be superior. The use of solar energy as a supplementary source for domestic water heating will payback in twenty-one years as determined by the solar study.

SPECIAL ENGINEERING SERVICES

Special Engineering Services include a site survey and soil borings. The site survey consists of a topographic survey of approximately 8.5 acres of land, bound on the west by O Street, on the south by the main service road, on the east by a service road, and on the north by the area surrounding existing Building 1817. The survey includes the location of Building numbers 1814, 1822, 1824, 1812 and structure S-1825, along with an existing concrete wash rack, all of which must be demolished or removed to other locations prior to construction. The foundation investigation has determined that shallow spread footings will be adequate for the structure.

BASE ELECTRONICS SYSTEMS ENGINEERING PLAN (BESEP)

The BESEP is currently being prepared by the Activity.

DEMOLITIONS

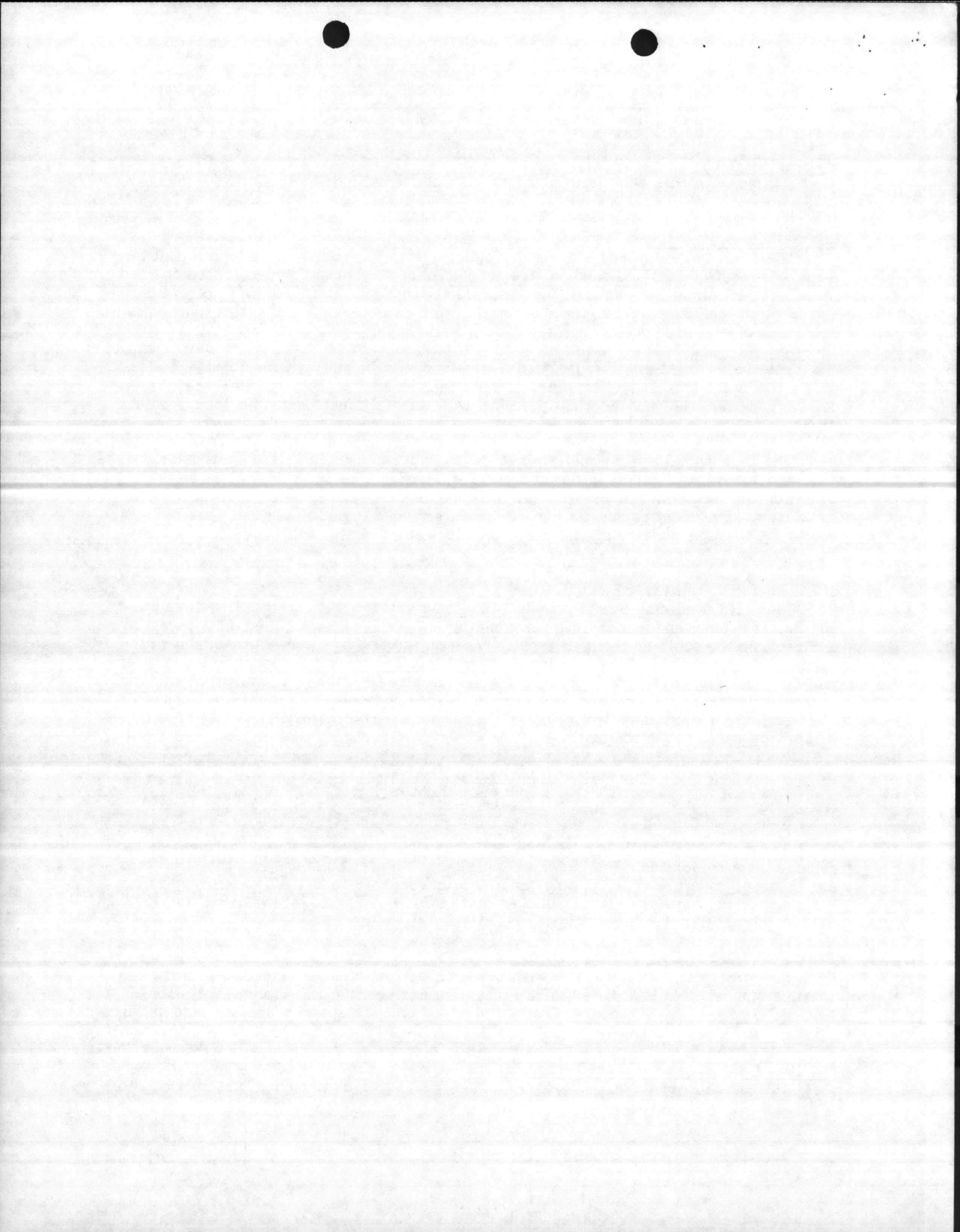
As previously mentioned, several buildings and structures must be removed for relocation or demolished. The buildings are all tin ,quonset buildings and the structures are made of concrete. The buildings and structure numbers and the year in which they were constructed are as follows: Building 1812-1951; Building 1814-1952; Building 1822-1951; Building 1823-1952; Building 1824-1951; and structure 1825-1952.

FIRE PROTECTION

Fire protection is to conform with the requirements of DOD 4270.1M, Construction Criteria Manual; NAVFAC DM-8, Fire Protection Engineering; and applicable sections of National Fire Codes. Wall mounted carbon-dioxide extinguishing units shall be mounted in all shops and storage areas.

OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA)

This building complies with NAVFACINST 11012.136B of 30 September, 1976, to provide a safe and healthy environment for all workers.



SUMMARY OF ENERGY CONSERVATION ANALYSIS

Activity and Location: Marine Corps Base Camp Lejeune, N. C. Project Title: Electronics Communications Maint. Shop (P-175) Date: 1-June, 80

E75 = 1850 x 10⁶ BTUs per year (Total annual energy consumption if constructed in 1975)

E Current = 1485 x 10⁶ BTUs per year (Total annual energy consumption incorporating current criteria)

R = (1 - (E Current/E75)) 100 = 20 % (Percent reduction in energy consumption current year vs. 1975)

ECC = \$ 1,348,000 (Estimated construction cost for current criteria)

Barrels of Oil Equivalent (B.O.E.) = 62.39 *(Barrels of Fuel Oil Saved, Current Design vs 1975)
5,825,400 BTU/B.O.E.

(1) Priority	(2) Description of Measure	(3) 10 ⁶ BTUs Saved/Yr	(4) Life Cycle Cost (\$1000) Expressed as present worth	(5) = (3)/(4)	(6) 10 ⁶ BTUs Consumption/ Yr E	(7) % Energy Reduction of Measure R	(8) (6) Annual Consumption Bldg. Square Footage BTU/SF/yr	(9) Cumul- ative % Reduc- tion	(10) First Cost of Measure (\$1000)	(11) Total Construc- tion Cost (10) + ECC (\$1000)
-----------------	----------------------------------	---	--	------------------	--	--	--	---	---	---

Current Design (Including Mandatory Measures)

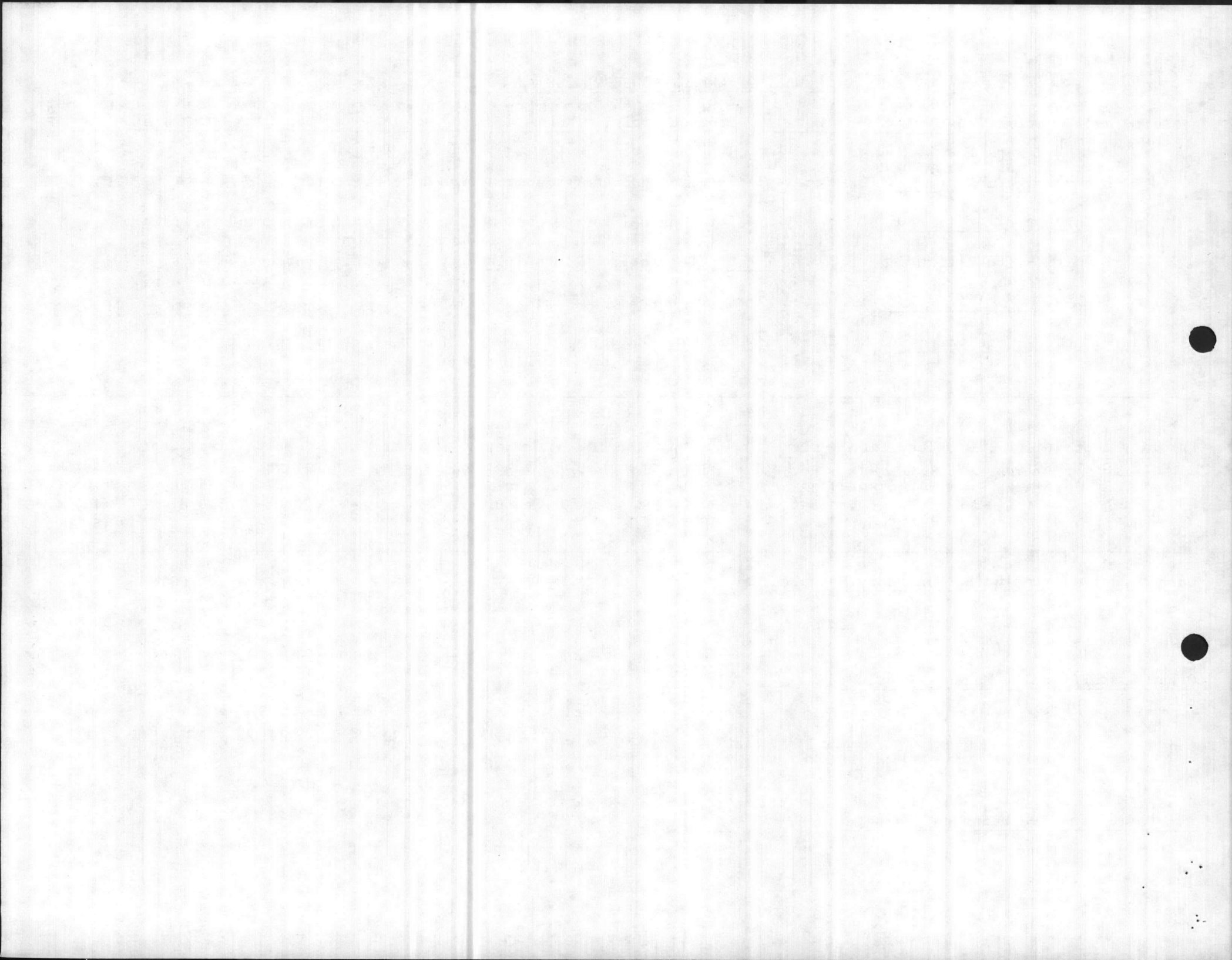
R.					1485	20	64330	20		1348
----	--	--	--	--	------	----	-------	----	--	------

Other Cost Effective Measures Included

R1.	Solar Domestic									
R2.		26.7	11.2	2.38	1458	1.2	63173	21.2	16	1364
R3.										

Non-Cost Effective Measures Evaluated

- R1.
- R2.
- R3.



DATE
1-July, 80

ACTIVITY (Name and Location)

Marine Corps Base, Camp LeJeune, N. C.

PROJECT TITLE

Electronics/Communications Maintenance Shop

P NO.

P-175

DESCRIPTION OF ALTERNATIVES

Alt. A Domestic Water Heating Solar System

168 Ft² flat plate collector and 350 gallon storage tank

Alt. B System without solar

PROJECT COST PROJECTIONS BY ALTERNATIVES

ALTERNATIVE A Solar D.W.H.

ECONOMIC LIFE

25 YRS.

DESCRIPTION AND YEAR	COSTS (\$)		DISCOUNT FACTOR	PRESENT VALUE (\$)
	ONE TIME	RECURRING		
INVESTMENT	18214			18214
OPERATIONS				
MAINTENANCE				
PERSONNEL				
TERMINAL VALUE				
OTHER:				

TOTAL PRESENT VALUE ALTERNATIVE A - \$ 18214

DISCOUNT FACTOR

UNIFORM ANNUAL COST

ALTERNATIVE B Energy Savings

ECONOMIC LIFE

25 YRS.

DESCRIPTION AND YEAR	COSTS (\$)		DISCOUNT FACTOR	PRESENT VALUE (\$)
	ONE TIME	RECURRING		
INVESTMENT		426	69.11	29440
OPERATIONS				
MAINTENANCE				
PERSONNEL				
TERMINAL VALUE				
OTHER:				

TOTAL PRESENT VALUE ALTERNATIVE B - \$ 29440

DISCOUNT FACTOR

UNIFORM ANNUAL COST

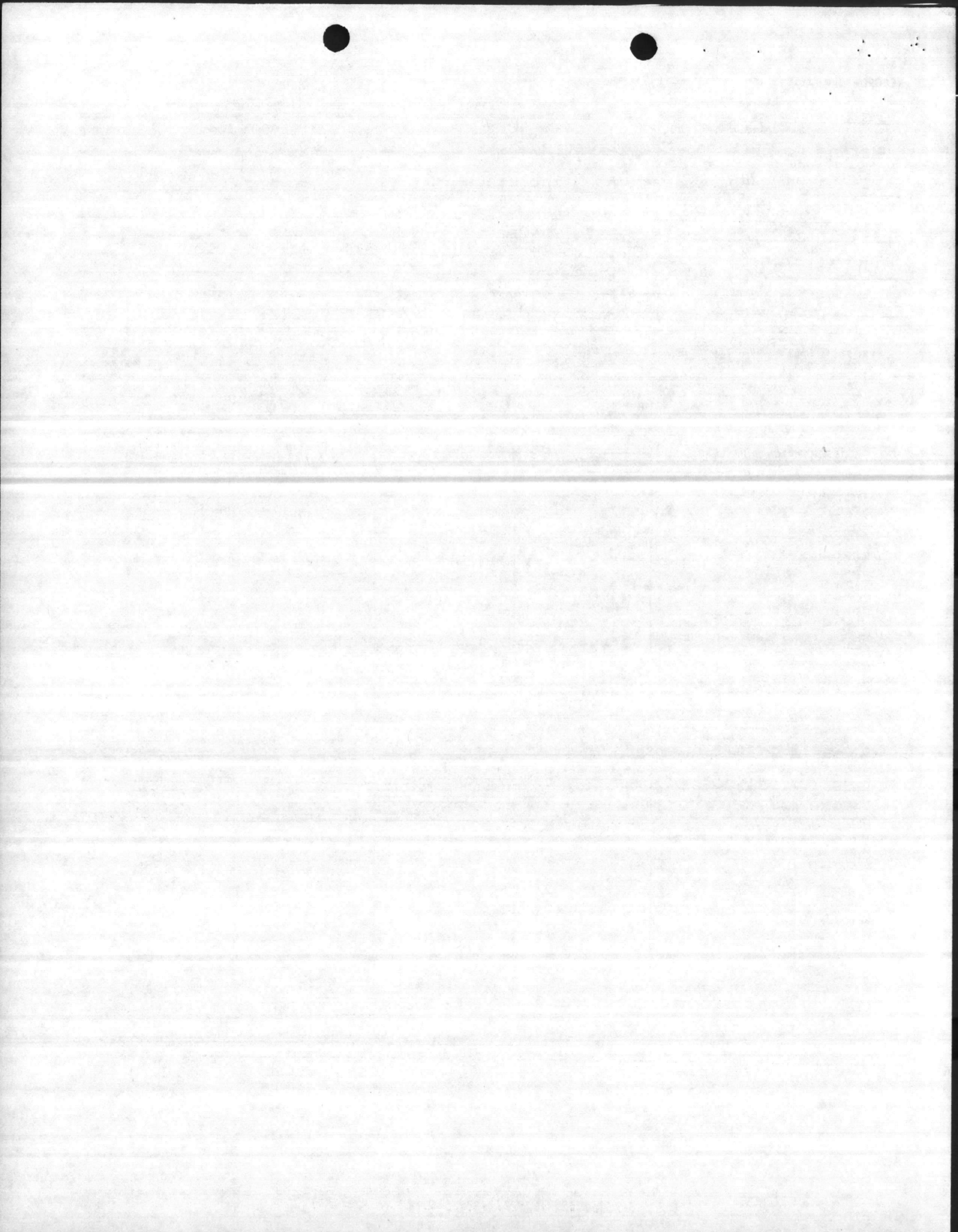
REMARKS

Life Cycle Cost
Alt. A \$18,214
Alt. B -29,440
LCC -11,226

$$S.I.R. = \frac{29,440}{18,214} = 1.61$$

$$PAYBACK = \frac{18,214}{426} = 42.8$$

$$PAYBACK = 19.5 \text{ YEARS}$$



ECONOMIC ANALYSIS OF SHORE FACILITY

DATE
1-July, 80

ACTIVITY (Name and Location)
Marine Corps Base, Camp LeJeune, N. C.

PROJECT TITLE
Electronics Communications Maintenance Shop

DESCRIPTION OF ALTERNATIVES
Alt. A Single Zone Package Units
Alt. B Heat Pumps

P NO.
P-175

PROJECT COST PROJECTIONS BY ALTERNATIVES

ALTERNATIVE A Single Zone Package Units ECONOMIC LIFE 15 YRS.

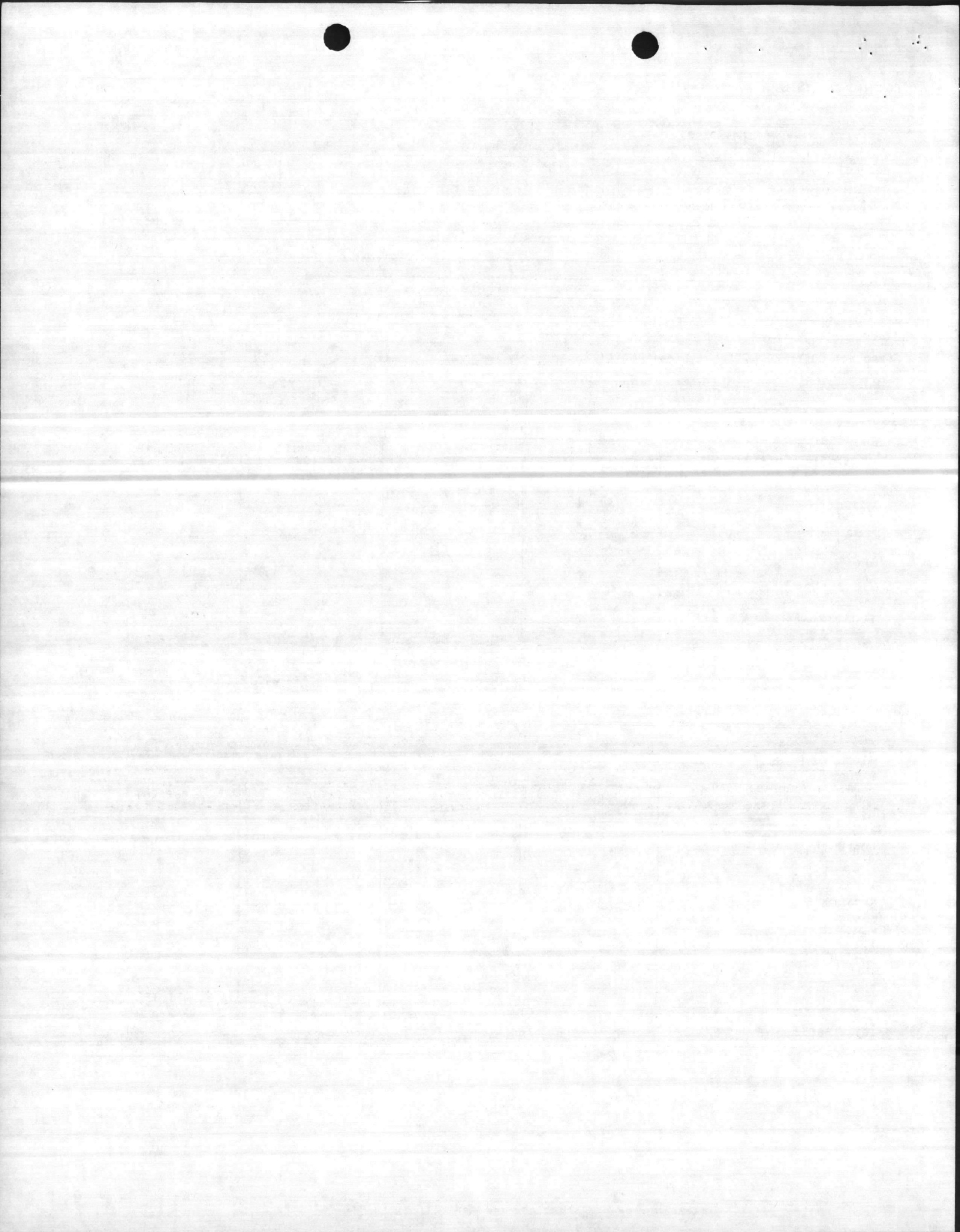
DESCRIPTION AND YEAR	COSTS (\$)		DISCOUNT FACTOR	PRESENT VALUE (\$)
	ONE TIME	RECURRING		
INVESTMENT	107,452			107,452
OPERATIONS				
MAINTENANCE				
PERSONNEL				
TERMINAL VALUE				
OTHER: Electric		23,780	12.278	291,970
Steam		168	13.112	2,203
TOTAL PRESENT VALUE ALTERNATIVE A - \$ <u>401,625</u>			DISCOUNT FACTOR	UNIFORM ANNUAL COST

ALTERNATIVE B Heat Pumps ECONOMIC LIFE 15 YRS.

DESCRIPTION AND YEAR	COSTS (\$)		DISCOUNT FACTOR	PRESENT VALUE (\$)
	ONE TIME	RECURRING		
INVESTMENT	110,775			110,775
OPERATIONS				
MAINTENANCE				
PERSONNEL				
TERMINAL VALUE				
OTHER: Electric		23,621	12.278	290,019
Steam		149	13.112	1,954
TOTAL PRESENT VALUE ALTERNATIVE B - \$ <u>402,748</u>			DISCOUNT FACTOR	UNIFORM ANNUAL COST

REMARKS

Alt. C is selected due to the lowest total present value.



ECONOMIC ANALYSIS OF SHORE FACILITY

DATE
1-July, 80

ACTIVITY (Name and Location)
 Marine Corps Base, Camp LeJeune, N. C.

PROJECT TITLE
 Electronics Communications Maintenance Shop

DESCRIPTION OF ALTERNATIVES
 Alt. C Variable Air Volume

P NO.
 P-175

PROJECT COST PROJECTIONS BY ALTERNATIVES

ALTERNATIVE C VARIABLE AIR VOLUME ECONOMIC LIFE 15 YRS.

DESCRIPTION AND YEAR	COSTS (\$)		DISCOUNT FACTOR	PRESENT VALUE (\$)
	ONE TIME	RECURRING		
INVESTMENT	112,991			112,991
OPERATIONS				
MAINTENANCE				
PERSONNEL				
TERMINAL VALUE				
OTHER: Electric		23,302	12.278	286,102
Steam		149	13.112	1,954

TOTAL PRESENT VALUE ALTERNATIVE A - \$ 401,047 ÷ DISCOUNT FACTOR = UNIFORM ANNUAL COST

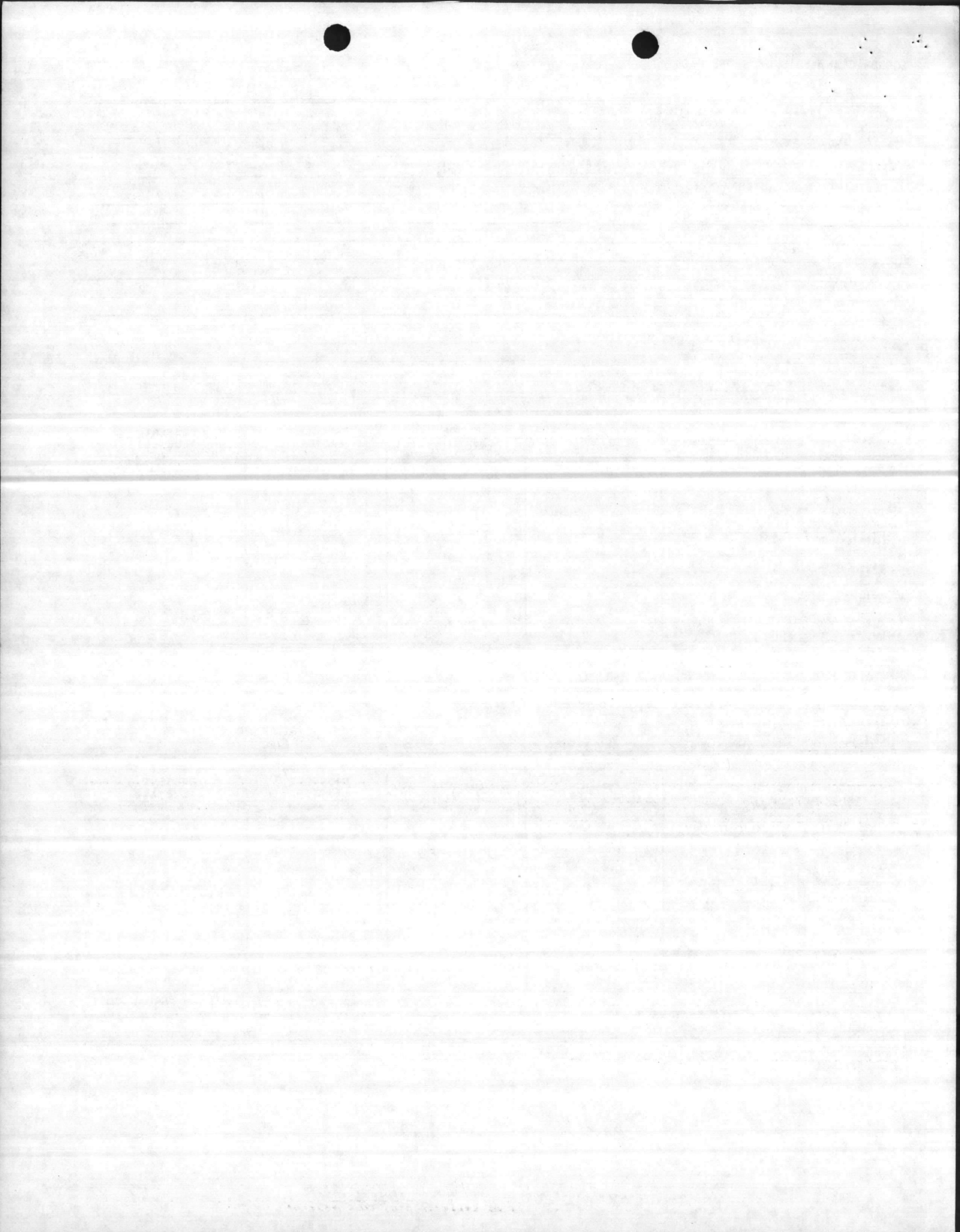
ALTERNATIVE B _____ ECONOMIC LIFE _____ YRS.

DESCRIPTION AND YEAR	COSTS (\$)		DISCOUNT FACTOR	PRESENT VALUE (\$)
	ONE TIME	RECURRING		
INVESTMENT				
OPERATIONS				
MAINTENANCE				
PERSONNEL				
TERMINAL VALUE				
OTHER:				

TOTAL PRESENT VALUE ALTERNATIVE B - \$ _____ ÷ _____ = _____

REMARKS

(Attach separate sheet showing derivation of cost entries)



ECONOMIC ANALYSIS OF FACILITY

DATE

1 July 1980

ACTIVITY (Name and Location)

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA

PROJECT TITLE

ELECTRONICS /COMMUNICATIONS MAINTENANCE SHOP

P NO.

P-175

DESCRIPTION OF ALTERNATIVES

A. LOAD BEARING CMU STEEL ROOF

B. STRUCTURAL STEEL FRAME STEEL ROOF

PROJECT COST PROJECTIONS BY ALTERNATIVES

ALTERNATIVE A LOAD BEARING CMU STEEL ROOF

ECONOMIC LIFE

25

YRS.

DESCRIPTION AND YEAR	COSTS (\$)		DISCOUNT FACTOR	PRESENT VALUE (\$)
	ONE TIME	RECURRING		
INVESTMENT	FOUNDATION			
	CMU LOAD BRG.	506,000		506,000
OPERATIONS	STEEL ROOF			
MAINTENANCE				
PERSONNEL				
TERMINAL VALUE				
OTHER:				

TOTAL PRESENT VALUE ALTERNATIVE A - \$ 506,000 ÷ 9.524 = \$53,129

ALTERNATIVE B STRUCTURAL STEEL FRAME, STEEL ROOF

ECONOMIC LIFE

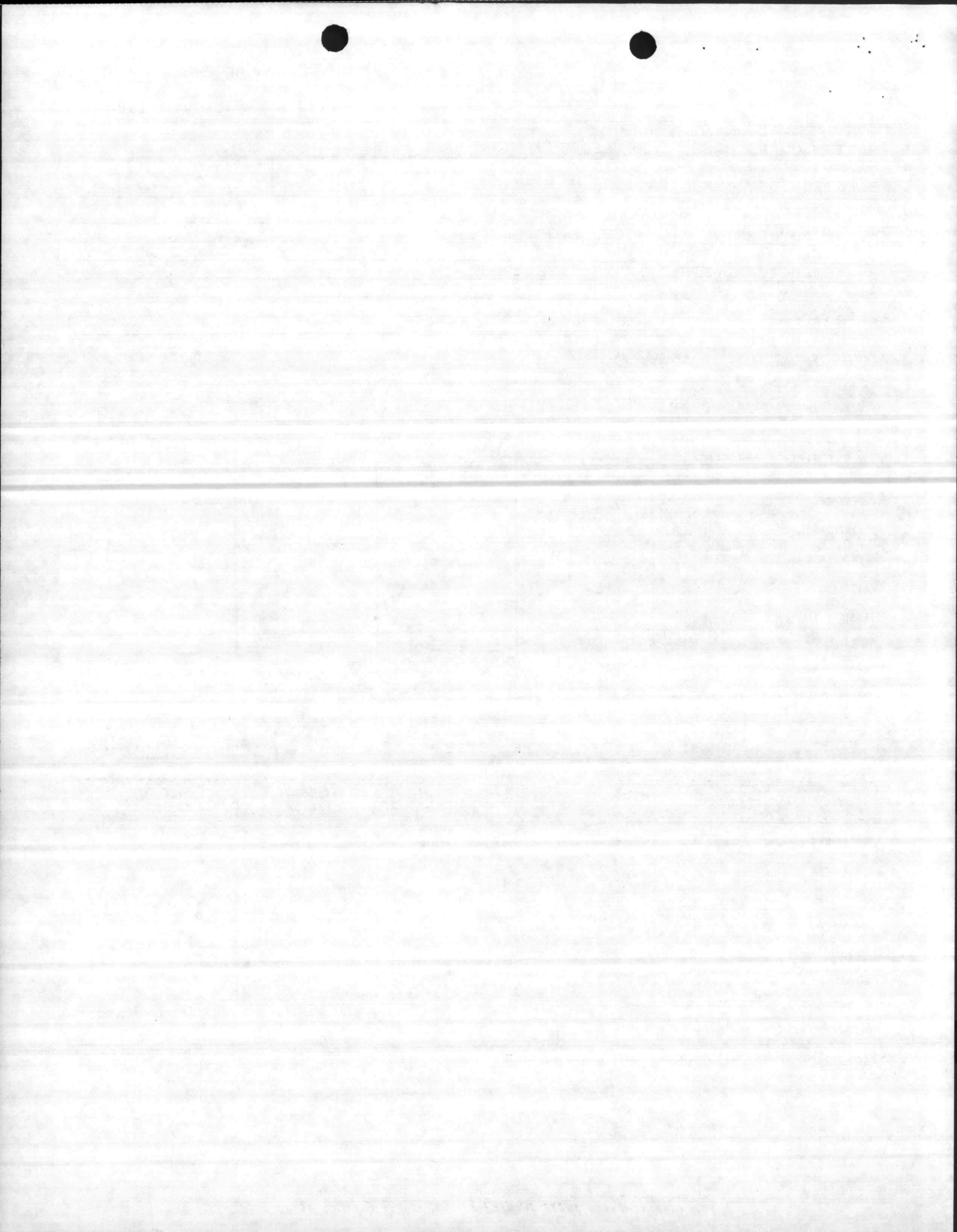
25

YRS.

DESCRIPTION AND YEAR	COSTS (\$)		DISCOUNT FACTOR	PRESENT VALUE (\$)
	ONE TIME	RECURRING		
INVESTMENT	FOUNDATION			
	STRUCTURAL			
OPERATIONS	STEEL FRAME	580,000		580,000
MAINTENANCE	STEEL ROOF			
	CMU WALLS			
PERSONNEL				
TERMINAL VALUE				
OTHER:				

TOTAL PRESENT VALUE ALTERNATIVE B - \$ 580,000 ÷ 9.524 = 60,899

REMARKS



DATE 1 July 1980

ACTIVITY (Name and Location)
MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA

PROJECT TITLE
ELECTRONICS/COMMUNICATIONS MAINTENANCE SHOP

P NO.
P-175

DESCRIPTION OF ALTERNATIVES

C. PC/PS STRUCTURAL FRAME PC/PS ROOF

PROJECT COST PROJECTIONS BY ALTERNATIVES

ALTERNATIVE A PC/PS STRUCTURAL FRAME PC/PS ROOF ECONOMIC LIFE 25 YRS.

DESCRIPTION AND YEAR	COSTS (\$)		DISCOUNT FACTOR	PRESENT VALUE (\$)
	ONE TIME	RECURRING		
INVESTMENT FOUNDATION	683,000			683,000
OPERATIONS STRUCTURAL				
MAINTENANCE PC/PC FRAME				
PERSONNEL CMU WALLS				
TERMINAL VALUE				
OTHER:				

TOTAL PRESENT VALUE ALTERNATIVE A - \$ 683,000 ÷ DISCOUNT FACTOR 9.524 = UNIFORM ANNUAL COST 71,714

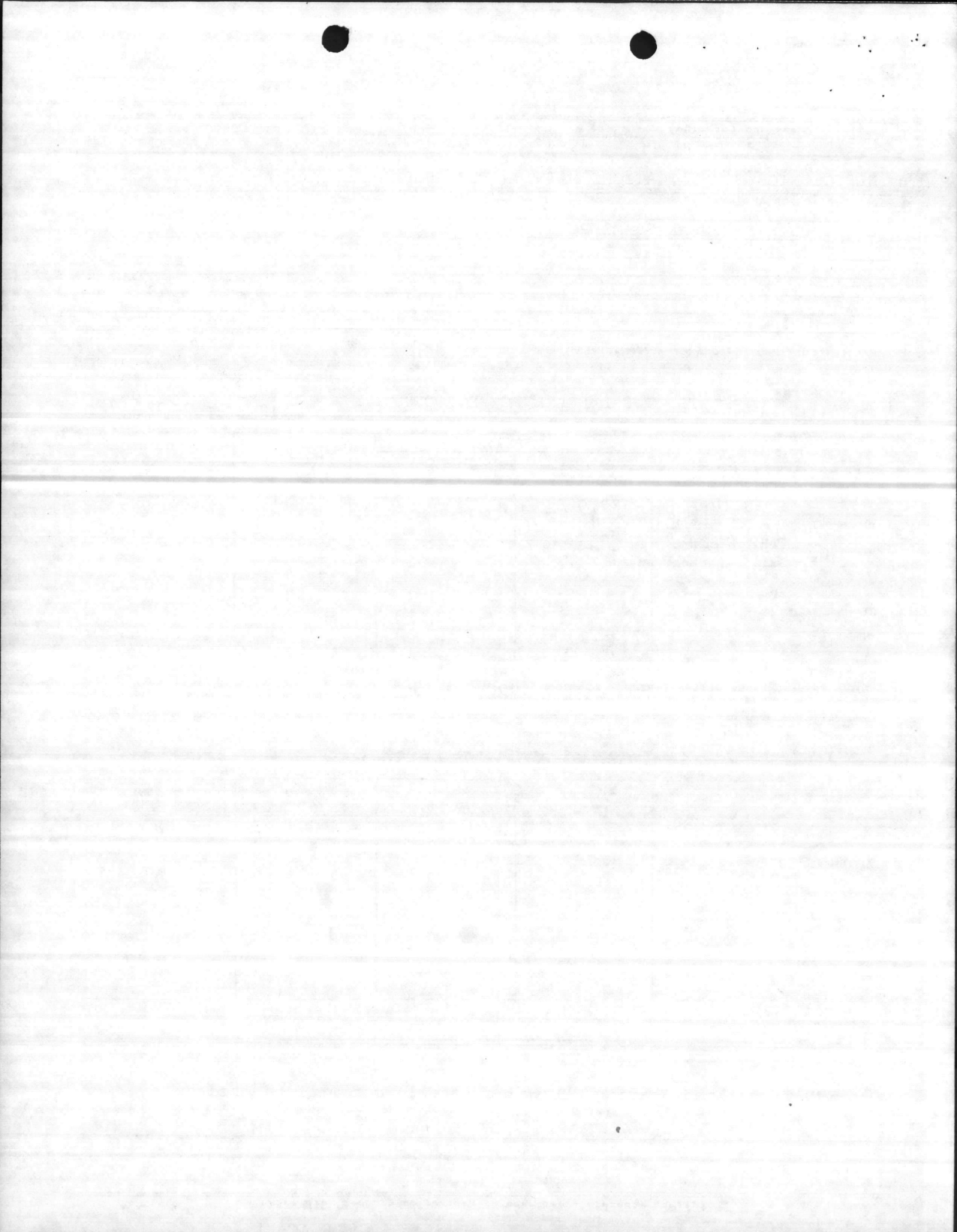
ALTERNATIVE B _____ ECONOMIC LIFE _____ YRS.

DESCRIPTION AND YEAR	COSTS (\$)		DISCOUNT FACTOR	PRESENT VALUE (\$)
	ONE TIME	RECURRING		
INVESTMENT				
OPERATIONS				
MAINTENANCE				
PERSONNEL				
TERMINAL VALUE				
OTHER:				

TOTAL PRESENT VALUE ALTERNATIVE B - \$ _____ ÷ DISCOUNT FACTOR = UNIFORM ANNUAL COST

REMARKS

ALTERNATE A: Load Bearing CMU Walls, steel roof will be used as the structural framing system



COLLATERAL EQUIPMENT REQUIREMENTS (Initial Outfitting)
 SND LAN7DIV 4-11010/6 (9/73)

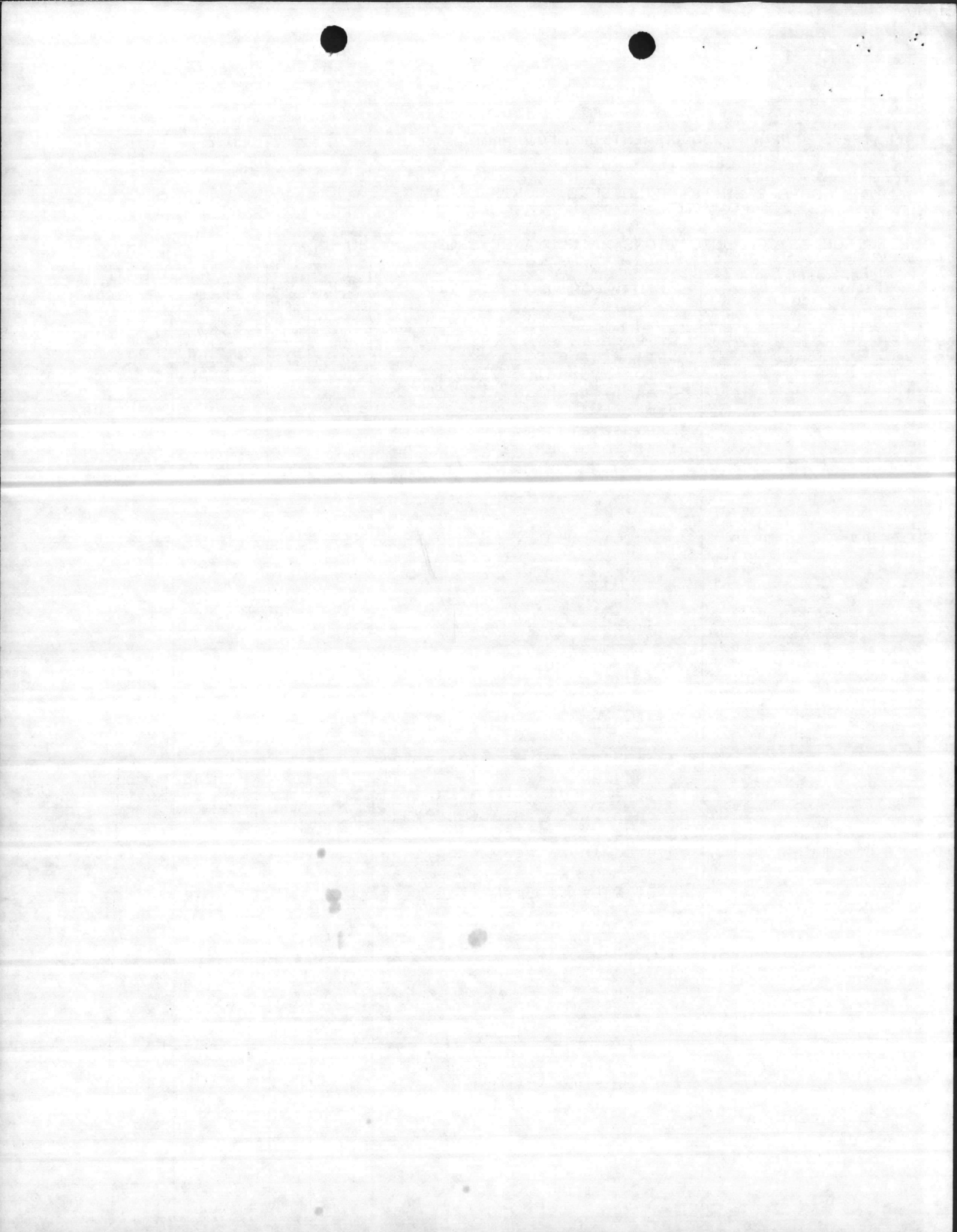
DATE 1 July 1980

1. ACTIVITY (Name and Location)
 MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

2. PROJECT TITLE
 ELECTRONICS/COMMUNICATIONS MAINTENANCE SHOP (DIV HQ BN)

P. NO.
 P-175

COG. SYMBOL AND FED. STOCK NO. OR OTHER SOURCE	ITEM/EQUIPMENT DESCRIPTION	QUAN- TITY	UNIT OF ISSUE	UNIT PRICE	TOTAL COST
1. <u>BUILT-IN EQUIPMENT TO BE MCON FUNDED</u>	*Compressed air system ✓		SYS	9,000	9,000
	*Sprinkler system ✓		SYS	37,000	37,000
	*4-Ton Hydraulic Lift	1	EA	10,000	10,000
	*Crane, overhead - 5 ton ✓ capacity	1	EA	15,000	15,000
	*Exhaust system, overhead, ✓ fractional HP, 208V, 3 phase		SYS	18,000	18,000
	TOTAL BUILT-IN EQUIPMENT				89,000
*Equipment with associated installation cost.					
2. <u>EXPENSE ITEMS</u>	Benches, work, portable, 48" x28"x34"H	15	EA	225	3,375
	Benches, work, portable, 72" x28"x34"H	10	EA	281	2,810
	Benches, work, stationary, 28"Dx34"H, stl top, std, lead covered in battery shop	14	EA	351	4,928
	Parts bins, adj shelving, 14" x24"D	5	EA	132	660
	Grinder, bench 7" w/buffer wheel	1	EA	424	424



COLLATERAL EQUIPMENT REQUIREMENTS (Initial Outfitting)
 SNO LANTDIV 4-11010/6 (NEW 2-79)

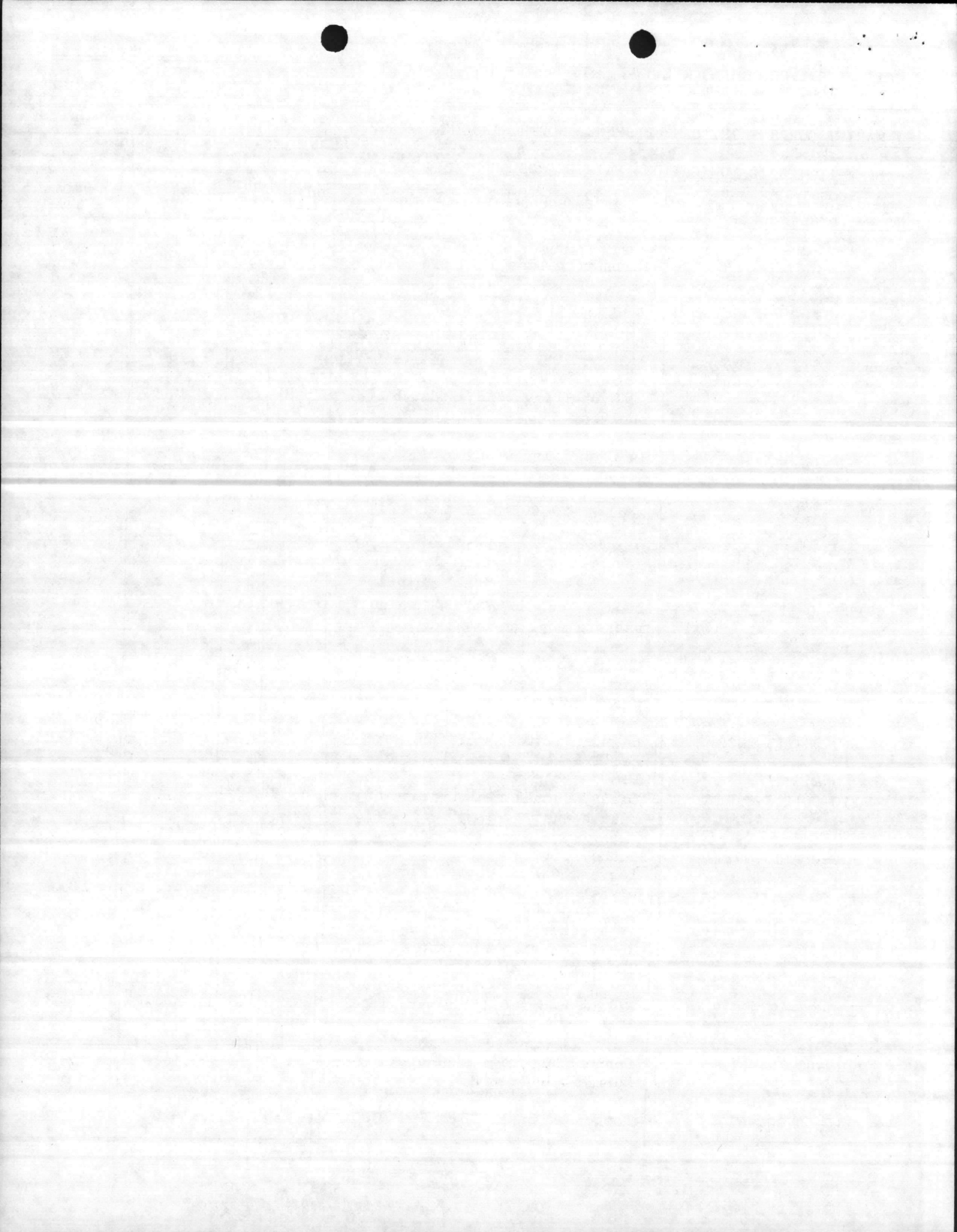
DATE 1 July 1980

1. ACTIVITY (Name and Location)
 MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

2. PROJECT TITLE
 ELECTRONICS/COMMUNICATIONS MAINTENANCE SHOP (DIV HQ BN)

P. NO.
 P-175

COG. SYMBOL AND FED. STOCK NO. OR OTHER SOURCE	ITEM/EQUIPMENT DESCRIPTION	QUAN- TITY	UNIT OF ISSUE	UNIT PRICE	TOTAL COST
	Parts rota bins, 3' dia. multi bin	10	EA	380	3,800
	Battery charger, 6 & 12V selenium type; battery tester, 6 & 12V, 2.2 KW, 208V	3	EA	616	1,848
	12"W shelving w/adj stds. 6 shelves, 36"W & 84"H	20	EA	100	2,000
	14"W shelving w/adj stds	20	EA	176	3,520
	Student chairs, Heywood Wakefield Mod. HC-7730-PABS-PP	32	EA	44	1,408
7110-00-113-2744	Desk, flat top, dbl ped, 60"x30", walnut pattern, top, no overhang	3	EA	248	744
7110-00-113-2817	Desk, flat top, 45"x30" walnut pattern top, no overhang	9	EA	176	1,584
7110-00-113-9482	Chair, rotary, tilting seat & back, adj. seat height, w/arms, w/casters	17	EA	103	1,751
7110-00-113-2832	Desk, flat top, w/attach for sec'l & gen. clerical purposes	9	EA	193	1,737
7110-00-118-8998	Chair, secretarial, rotary adj. seat height, w/arms, w/casters	9	EA	87	783
7110-00-113-0921	Stand, office machine, 2 drop leaves, walnut pattern top, w/casters	5	EA	91	455
	Typewriter, IBM electric 13-12" carriage, carbon ribbon, 10 pitch Model 833	5	EA	781	3,905
7110-00-497-2012	Filing cabinet, 5 drawer, legal size, w/o lock	7	EA	230	1,610
7125-00-764-6121	Cabinet, storage, dbl door, 36"x18"x80-1/16"H	9	EA	152	1,368
7110-00-004-6764	Bookcase, base, 33"x13"x10"H	10	EA	14.30	143



COLLATERAL EQUIPMENT REQUIREMENTS (Initial Outfitting)
 5ND LANTDIV 4-11010/6 (NEW 2-79)

DATE 1 July 1980

1. ACTIVITY (Name and Location)

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

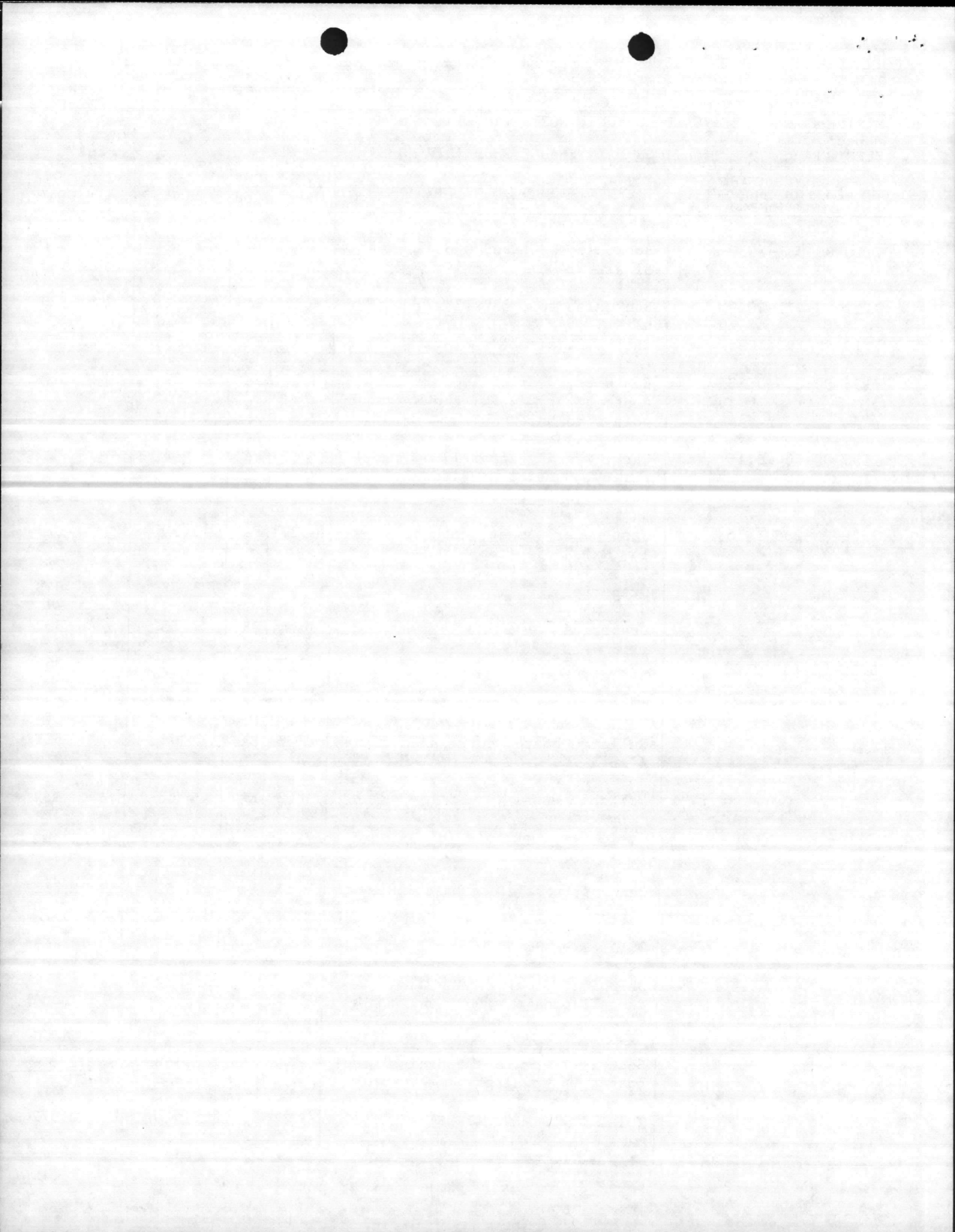
2. PROJECT TITLE

ELECTRONICS/COMMUNICATIONS MAINTENANCE SHOP (DIV HQ BN)

P. NO.

P-175

COG. SYMBOL AND FED. STOCK NO. OR OTHER SOURCE	ITEM/EQUIPMENT DESCRIPTION	QUAN- TITY	UNIT OF ISSUE	UNIT PRICE	TOTAL COST
7110-00-831-7430	Bookcase, section, w/o doors, 31"x12"x14"H	42	EA	32	1,344
7110-00-471-4039	Bookcase, top, 33"x13"x2 $\frac{1}{4}$ "H	10	EA	12	120
7110-00-190-7085	Chair, straight, w/o arms	50	EA	61	3,050
7195-00-004-0652	Costumer, wearing apparel, contemporary, 4 dbl hooks, round pole w/rd base	12	EA	39	468
7195-00-004-6716	Rack, wearing apparel, contem- porary, 6 metal hangers, 78"Hx 30"Lx20"D at base	5	EA	44	220
7520-00-285-5416	Wastepaper basket, dark brown, 14 $\frac{1}{2}$ "Hx13" dia. top	20	EA	5.50	110
	Draperies	9	PR	72	648
	Draperies	4	PR	83	332
6230-00-682-3423	Desk lamp	20	EA	43	860
	Adding machine, Monroe Model 1405	5	EA	286	1,430
	Bulletin board, cork, alum frame, 4'x6'	7	EA	73	511
	Portable easel	2	EA	66	132
7110-00-177-4902	Table, gen. purpose (classroom) 60"x30"x29 $\frac{1}{2}$ "H	7	EA	115	805
	Benches, work electronic, 60 & 400 cycle, 28V	15	EA	1,452	21,780
	TOTAL EXPENSE ITEMS				70,663
	Shipping, packing, handling, installation charges and contingencies -		10%		7,066
3. <u>INVESTMENT ITEMS</u>	Security Rack for Mechanics' tool boxes, 24 openings	4	EA	3,168	12,672
	TOTAL INVESTMENT ITEMS				12,672



COLLATERAL EQUIPMENT REQUIREMENTS (Initial Outfitting)
 5ND LANTDIV 4-11010/6 (NEW 2-79)

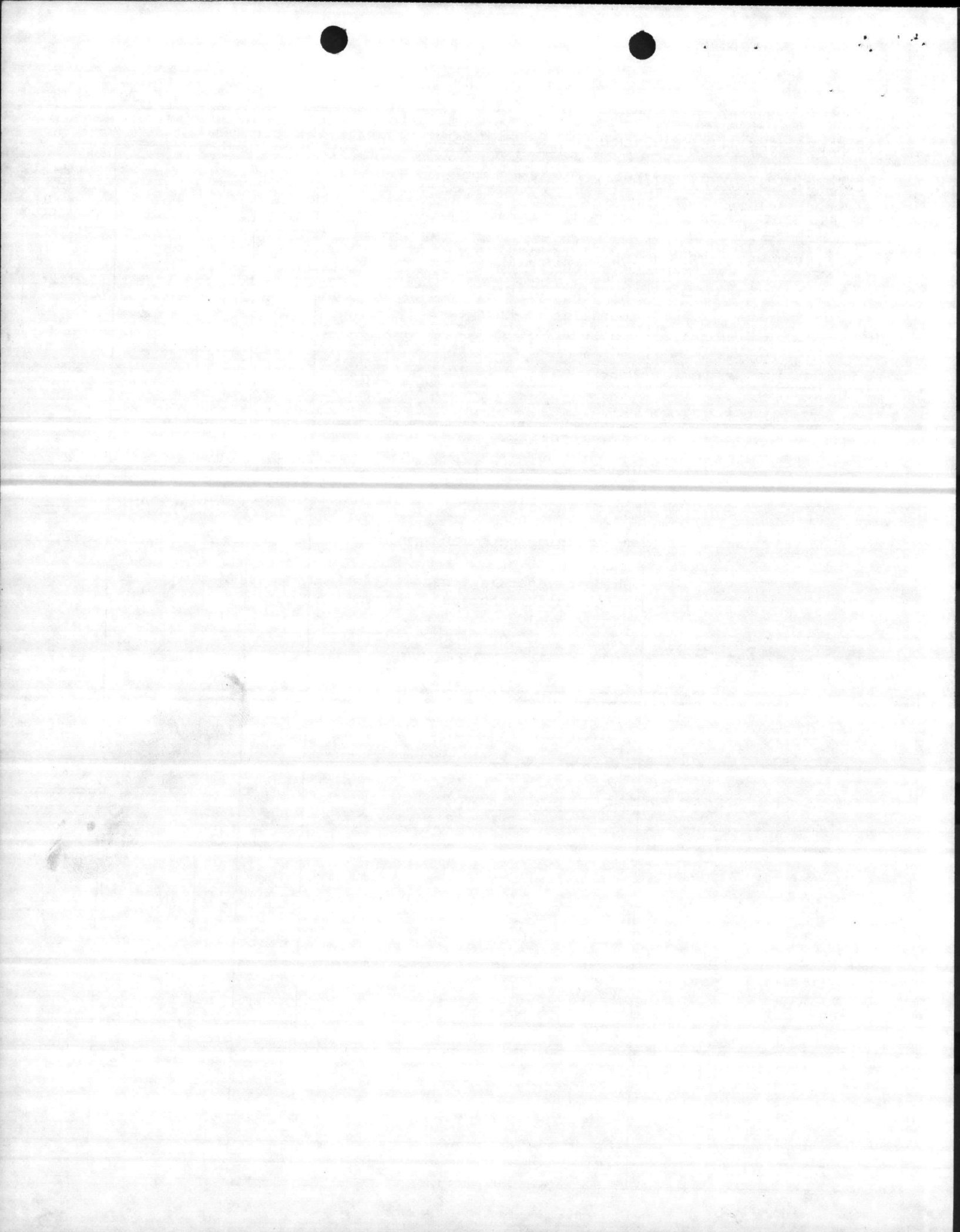
DATE 1 July 1980

1. ACTIVITY (Name and Location)
 MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

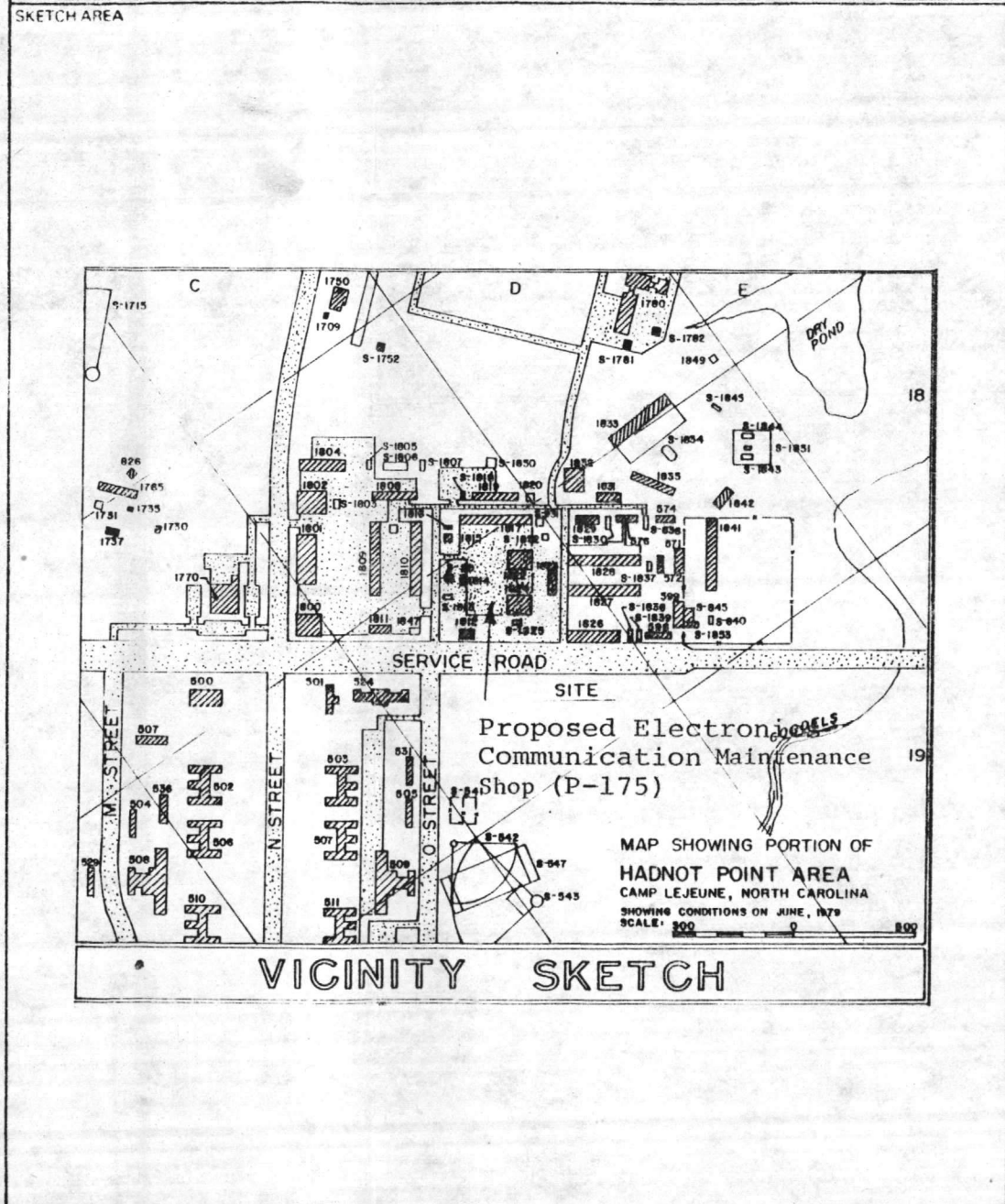
2. PROJECT TITLE
 ELECTRONICS/COMMUNICATIONS MAINTENANCE SHOP (DIV HQ BN)

P. NO.
 P-175

COG. SYMBOL AND FED. STOCK NO. OR OTHER SOURCE	ITEM/EQUIPMENT DESCRIPTION	QUAN- TITY	UNIT OF ISSUE	UNIT PRICE	TOTAL COST
3. <u>INVESTMENT ITEMS</u> (continued...)	Shipping, packing, handling, installation charges & contingencies - 10%				1,267
4. <u>APA EQUIPMENT</u>	None				
5. <u>TRAINING EQUIPMENT</u>	Movie projector	2	EA	693	1,386
	Movie screen	2	EA	132	264
	Overhead projector	2	EA	453	906
	TOTAL TRAINING EQUIPMENT				\$2,556
	Shipping, packing, handling, installation charges & contin- gencies - 10%				255
6. <u>SUMMARY</u>	TOTAL INVESTMENT ITEMS				13,939
	TOTAL TRAINING COST				2,811
	TOTAL BUILT-IN EQUIPMENT				89,000
	EXPENSE ITEMS				77,729
	TOTAL EXPENSE ITEMS				103,379



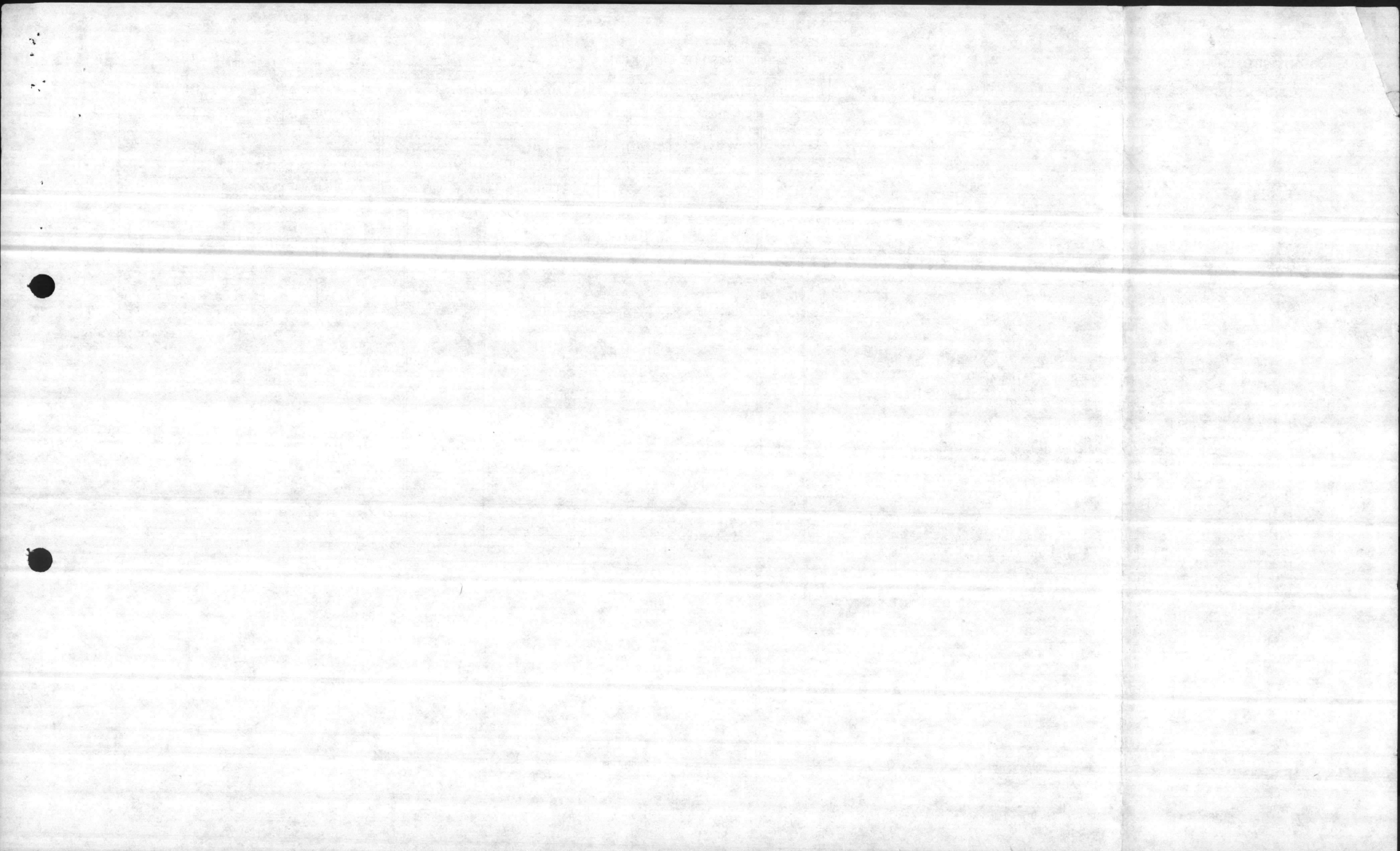
INSTALLATION MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA	PROJECT TITLE ELECTRONICS/COMMUNICATIONS MAINT. SHOP	P- 175	DATE 1 JULY 1980
--	--	---------------	----------------------------



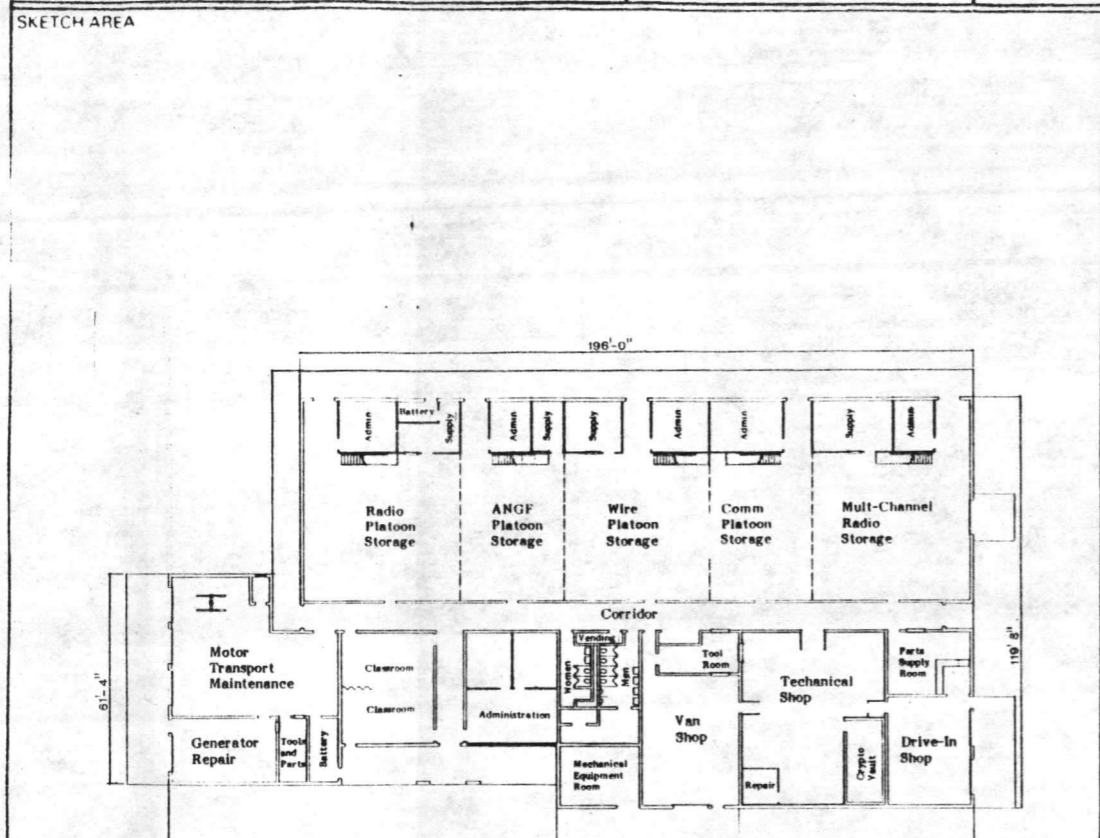
A&EGF	PLANS AND SPECIFICATIONS	CONSTR	DESIGN PROGRESS INFO PROVIDED CONGRESS
NAME AND LOCATION	CLARK TRIBBLE HARRIS AND LI ARCHITECTS, P.A. CHARLOTTE, NORTH CAROLINA	AWARD DATE (Est) JAN 82 MONTHS 14	START DATE: _____ COMPLETION DATE _____ COMPLETE 1 JAN _____ % COMPLETE 1 OCT _____ %
DATES	AWARD JAN 80 35% COMPLETION OCT 80 100% COMPLETION MAY 81	BOD MAR 83	

COMPARATIVE COST DATA			ENGINEERING DATA	
H	OK	L	AREA FACTOR	UNIT COST (\$)
			UNIT COST FOR THIS PROJECT ON DD 1391	
			DOD COST REVIEW GUIDE (ADJUSTED)	
			OTHER PROJECTS IN THIS PROGRAM (ADJUSTED)	
			DD 1391 COST PROJECTION DATA	
			INCREASE - TOTAL	PROJECTION DATES (From - To)
			INCREASE MONTH	INDEX SOURCE
			SITE CONDITION SPECIAL DESIGN CONSIDERATIONS. TECHNICAL PROBLEMS. ETC OTHER THAN SHOWN ON DD 1391	

BUILT-IN EQUIPMENT, FEC DATA, SPECIAL OVERSEAS OVERHEAD COSTS, EXPLANATION OF DEMOLITION



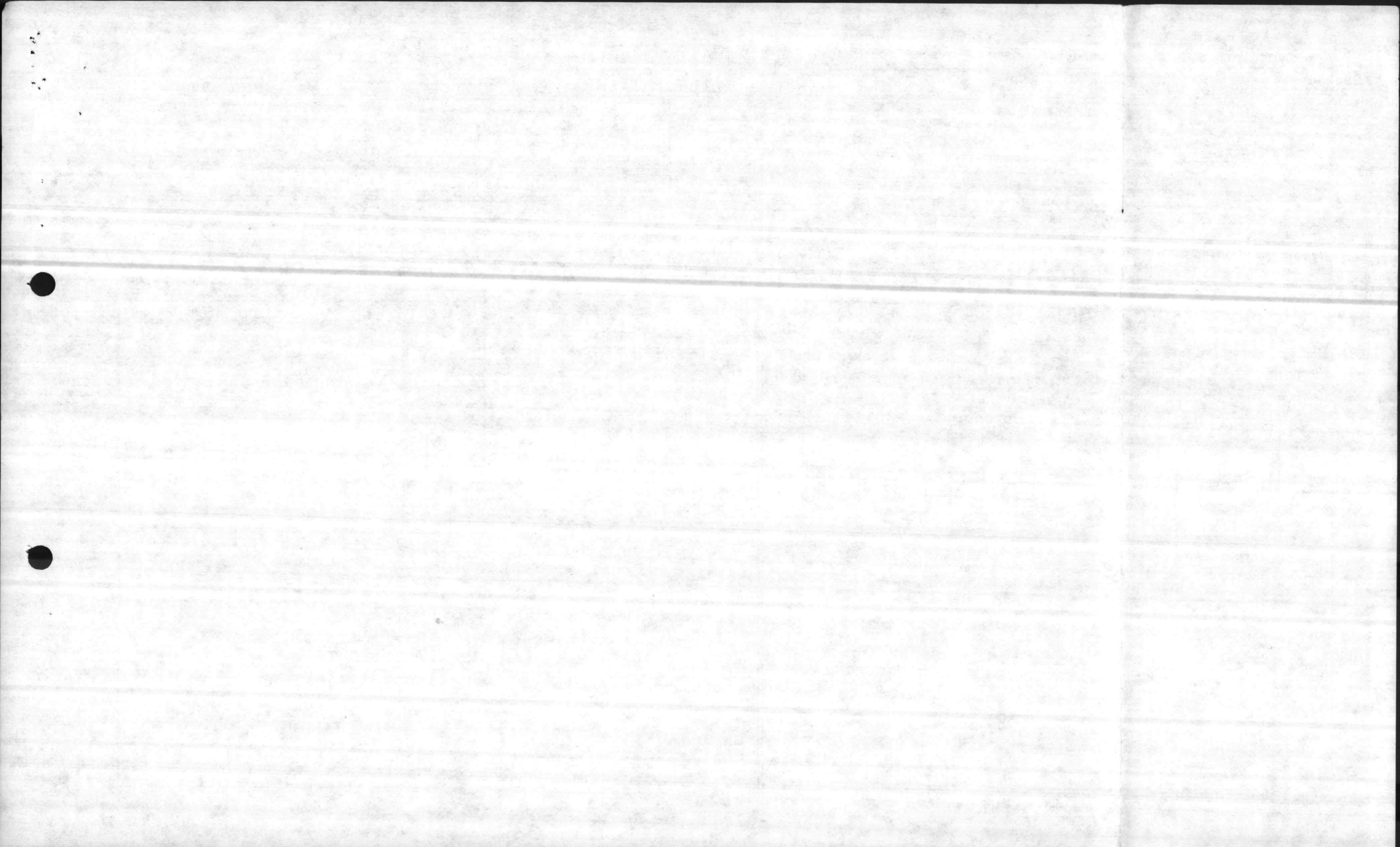
INSTALLATION MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA	PROJECT TITLE ELECTRONICS/COMMUNICATIONS MAINT. SHOP	P. 175	DATE 1 JULY 1980
--	--	---------------	----------------------------



FLOOR PLAN

AGE/GF		PLANS AND SPECIFICATIONS			CONSTR		DESIGN PROGRESS INFO PROVIDED CONGRESS		
NAME AND LOCATION		CLARK TRIBBLE HARRIS AND LI ARCHITECTS, P.A. CHARLOTTE, NORTH CAROLINA			AWARD DATE (Est.) JAN 82		START DATE _____		
DATES		AWARD JAN 80	35% COMPLETION OCT 80	100% COMPLETION MAY 81	MONTHS 14		COMPLETION DATE _____		
					BOD MAR 83		COMPLETE 1 JAN _____ %		
							COMPLETE 1 OCT _____ %		
COMPARATIVE COST DATA					ENGINEERING DATA				
H	OK	L	AREA FACTOR		UNIT COST (\$)		DD 1391 COST PROJECTION DATA		
UNIT COST FOR THIS PROJECT ON DD 1391							INCREASE - TOTAL		PROJECTION DATES (From - To)
DOD COST REVIEW GUIDE (ADJUSTED)							%		
OTHER PROJECTS IN THIS PROGRAM (ADJUSTED)							INCREASE MONTH		INDEX SOURCE
							%		
							SITE CONDITION SPECIAL DESIGN CONSIDERATIONS, TECHNICAL PROBLEMS, ETC. OTHER THAN SHOWN ON DD 1391		

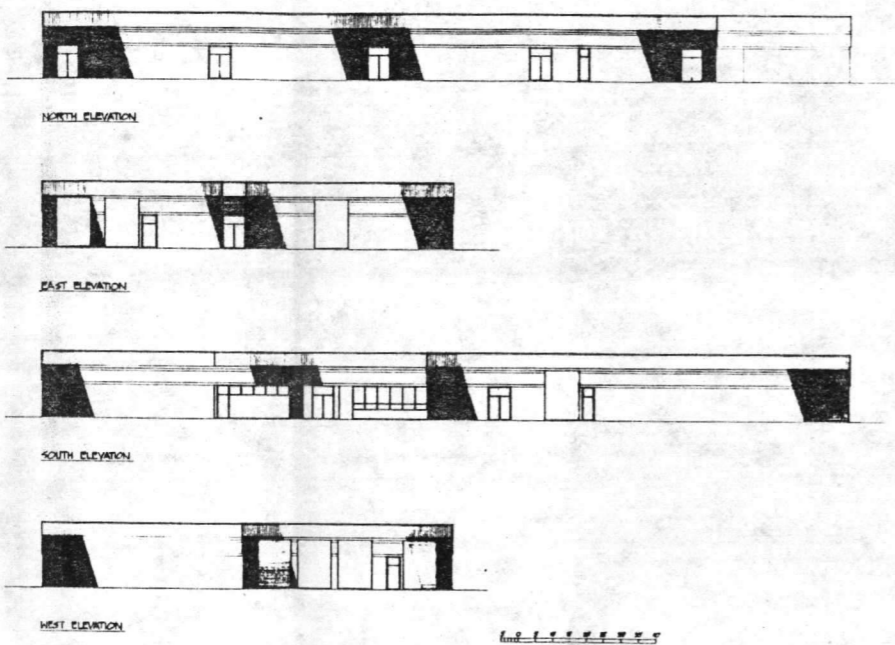
BUILT IN EQUIPMENT, FEC DATA, SPECIAL OVERSEAS OVERHEAD COSTS, EXPLANATION OF DEMOLITION



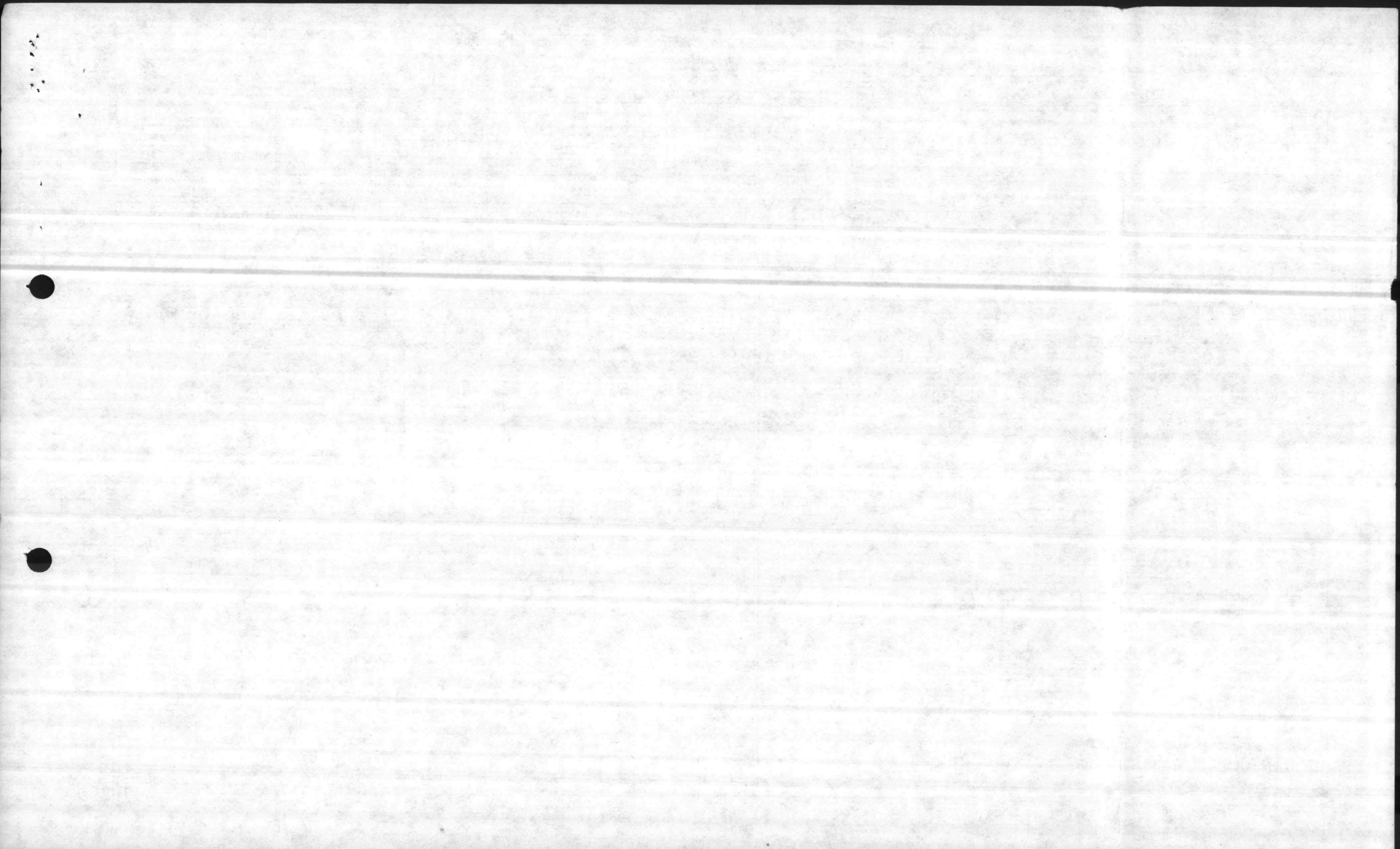
INSTALLATION MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA	PROJECT TITLE ELECTRONICS/COMMUNICATIONS MAINT. SHOP	P- 175	DATE 1 JULY 1980
--	--	--------	----------------------------

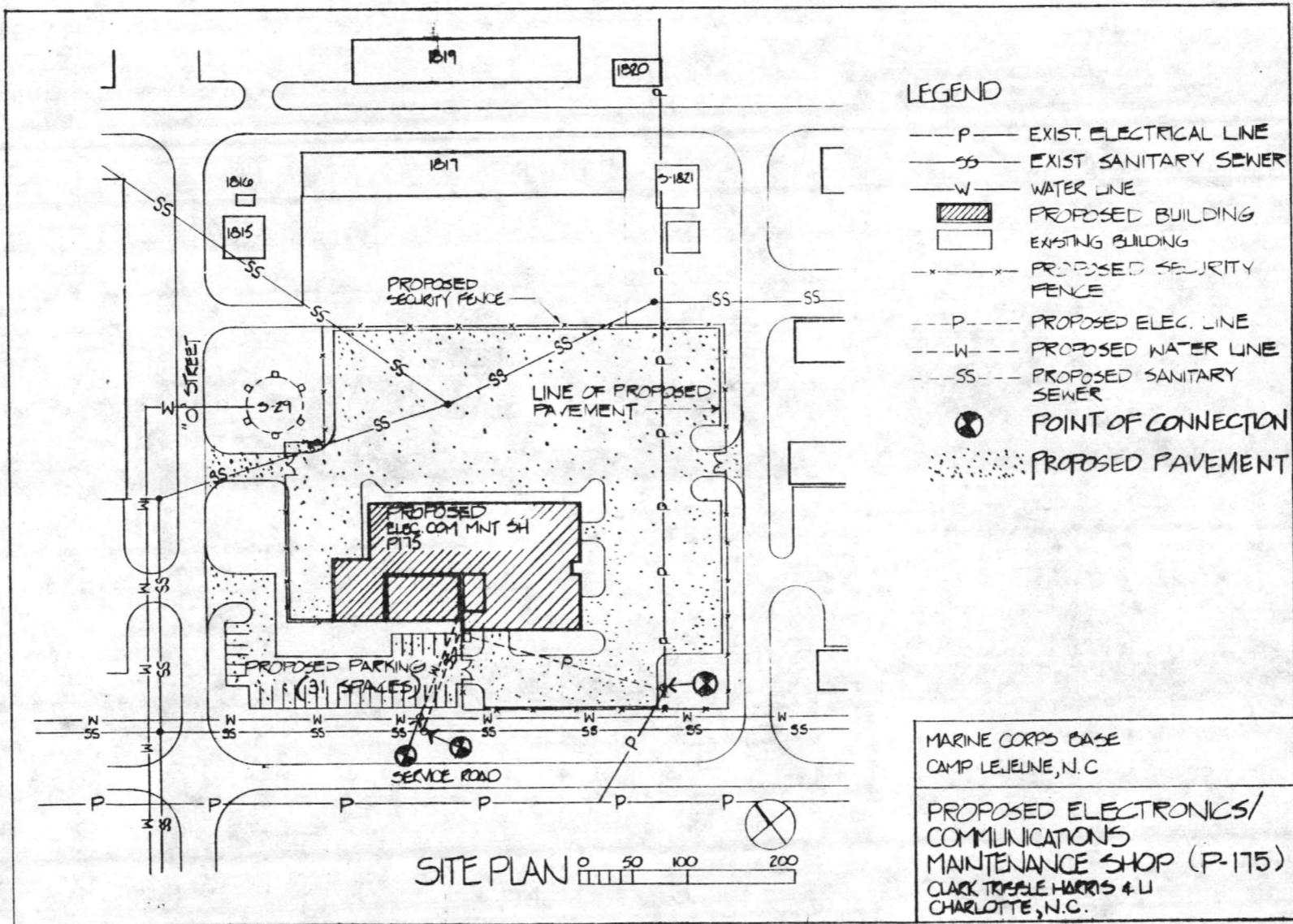
AGE/GF	PLANS AND SPECIFICATIONS	CONSTR	DESIGN PROGRESS INFO PROVIDED CONGRESS
NAME AND LOCATION	CLARK TRIBBLE HARRIS AND LI ARCHITECTS, P.A. CHARLOTTE, NORTH CAROLINA	AWARD DATE (Est) JAN 82 MONTHS 14	START DATE: _____ COMPLETION DATE _____ COMPLETE 1 JAN _____ % COMPLETE 1 OCT _____ %
DATES	AWARD: JAN 80 35% COMPLETION: OCT 80 100% COMPLETION: MAY 81	BOD MAR 83	

COMPARATIVE COST DATA			ENGINEERING DATA	
H	OK	L	AREA FACTOR	UNIT COST (\$)
			UNIT COST FOR THIS PROJECT ON DD 1391	
			DOD COST REVIEW GUIDE (ADJUSTED)	
			OTHER PROJECTS IN THIS PROGRAM (ADJUSTED)	
			DD 1391 COST PROJECTION DATA	
			INCREASE - TOTAL	PROJECTION DATES (From - To)
			INCREASE MONTH	INDEX SOURCE
			SITE CONDITION. SPECIAL DESIGN CONSIDERATIONS. TECHNICAL PROBLEMS. ETC. OTHER THAN SHOWN ON DD 1391	



BUILT IN EQUIPMENT. FEC DATA. SPECIAL OVERSEAS OVERHEAD COSTS. EXPLANATION OF DEMOLITION

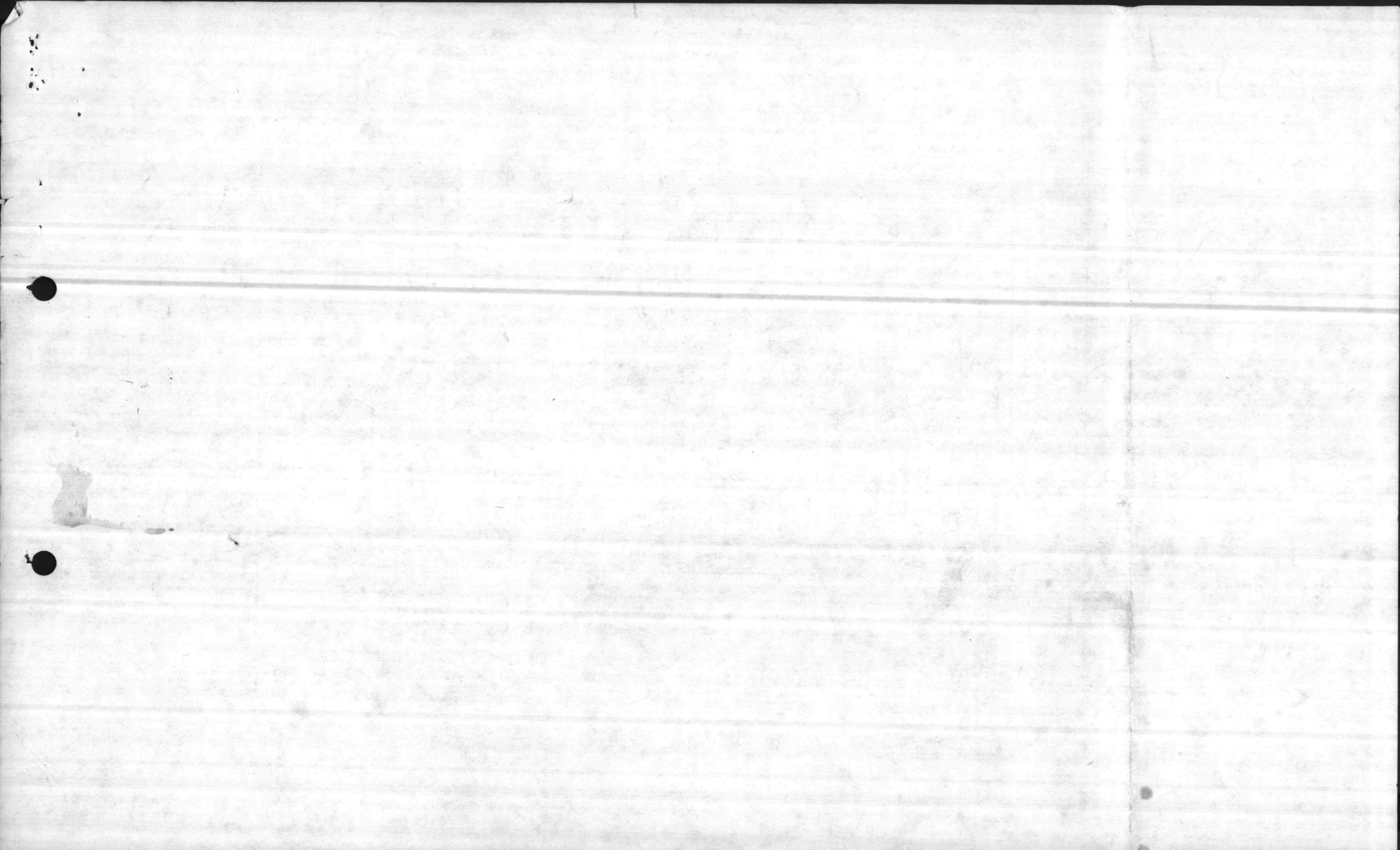




- LEGEND**
- P --- EXIST. ELECTRICAL LINE
 - SS --- EXIST. SANITARY SEWER
 - W --- WATER LINE
 - [Hatched Box] PROPOSED BUILDING
 - [Empty Box] EXISTING BUILDING
 - x-x- PROPOSED SECURITY FENCE
 - P --- PROPOSED ELEC. LINE
 - W --- PROPOSED WATER LINE
 - SS --- PROPOSED SANITARY SEWER
 - ⊗ POINT OF CONNECTION
 - [Dotted Area] PROPOSED PAVEMENT

MARINE CORPS BASE
 CAMP LEJEUNE, N. C.

PROPOSED ELECTRONICS/
 COMMUNICATIONS
 MAINTENANCE SHOP (P-175)
 CLARK TRIPLE HARRIS & LI
 CHARLOTTE, N. C.



ASSISTANT CHIEF OF STAFF, FACILITIES
HEADQUARTERS, MARINE CORPS BASE

DATE 11-25-80

TO:

BASE MAINT O

[PUBLIC WORKS O]

COMM-ELECT O

MOTOR TRANSPORT O

ATTN: _____

DIR, QUARTERS & HOUSING

DIR, BOQ/BSQ

BASE FIRE CHIEF

1. Attached is forwarded for info/action.

FILE 7-175
CW3

12/4/80
BB
CW3
LCH
EGS
VM
EY

2. Please initial, or comment, and return all papers to this office.

	ORIG	INT
1	10	Bill
2	04	TMA
3	20	
4	408	CW3
5		
	ORIG	INT

3. Your file copy

John Austin

"LET'S THINK OF A FEW REASONS
WHY IT CAN BE DONE"

10/1/50

VM

88
CMB
LAK
E-2

LFF-1-AN:apm

20 NOV 1980

From: Commandant of the Marine Corps
To: Commander, Naval Facilities Engineering Command
(Code 05), 200 Stovall Street, Alexandria
Virginia 22332

Subj: FY 1982 Project Engineering Documentation (PED)
for Project P-175, Electronics/Communications
Maintenance Shop, Marine Corps Base, Camp Lejeune,
North Carolina

Ref: (a) COMLANTNAVFACENGCOM ltr 09A21E:MLB
11010/MARCORB CamLej of 13 Nov 1980

1. In response to the reference, the PED for Project P-175, Electronics/Communications Maintenance Shop, has been reviewed and is satisfactory to this Headquarters. The cost increase poses no threat to the project.

2. The site location was approved by CMC letter LFF-1-AJR:bab of 6 December 1979.

EDWARD O. LEROY
By direction

Copy to:

CG MCB Camp Lejeune

COMLANTNAVFACENGCOM (Code 09A2)

CONFIDENTIAL

SECRET

TO: [Illegible]
FROM: [Illegible]
SUBJECT: [Illegible]

[Illegible text block]

[Illegible text block]

[Illegible text block]

[Illegible text block]

PWD:408:EGJ:bb
11000

7 NOV 1980

AOA
EPL

From: Commanding General
To: Commandant of the Marine Corps (LFF)

Subj: Supplemental Information Requested by Congress for FY-82
Military Construction Program; submittal of

Ref: (a) CMC ltr LFF-1-AN:apm of 16 Oct 1980

- Encl: (1) DD Form 1390, Supplemental Data for FY-82 MCON Program
- (2) DD Form 1391c, Supplemental Data for FY-82 MCON Project P-526, Combat Vehicle Maintenance Shop, w/work sheets
- (3) DD Form 1391c, Supplemental Data for FY-82 MCON Project P-175, Communications/Electronics Maintenance Shop, w/work sheets
- (4) DD Form 1391c, Supplemental Data for FY-82 MCON Project P-414, Unaccompanied Enlisted Personnel Housing, w/work sheets
- (5) DD Form 1391c, Supplemental Data for FY-82 MCON Project P-697, Modernize Enlisted Dining Facilities BB-103, 1209, M-424, & 508, w/work sheets

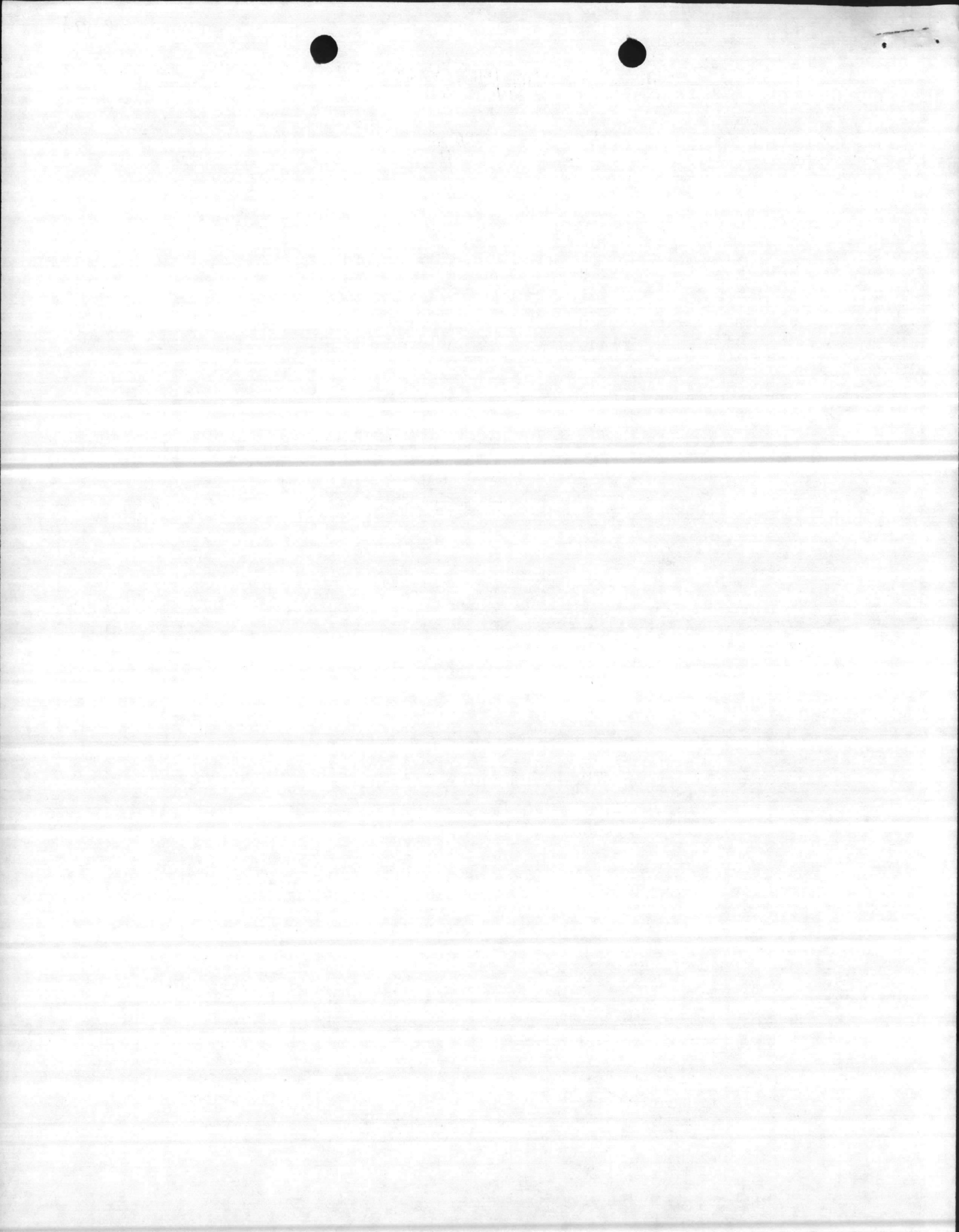
04
20

1. Reference (a) provided guidance for submission of supplemental information for our FY-82 Military Construction Program, as requested by Congress. Accordingly, enclosures (1) through (5) are hereby forwarded for your continuing action.

R. P. MILLICE, Jr.
By direction

Blind copy to: (w/encs)
AC/S, Fac

Return to Planners Branch



DD FORM 1390 SUPPLEMENTAL DATA
 FY-82 MILITARY CONSTRUCTION PROGRAM

B-175

<u>Navy</u> COMPONENT	<u>MCB Camp Lejeune NC</u> INSTALLATION/LOCATION	<u>Marine Corps</u> COMMAND
		(\$000)
A. ESTIMATED COST OF BACKLOG REAL PROPERTY MAINTENANCE (BMAR):		
		<u>*NOTE</u>
	Permanent Facilities: Temporary Facilities:	{ }
B. SIMILAR UNUSED SPACE:		
<u>Real Property Categories:</u>		<u>Quantity/Unit</u> <u>of Measure</u>
214-XX, COMBAT VEHICLE MAINTENANCE SHOP		**0 SF
217-XX, COMMUNICATIONS/ELECTRONICS MAINTENANCE SHOP		***0. SF
721-XX, UNACCOMPANIED ENLISTED PERSONNEL HOUSING		****52,291 SF
722-XX, DINING FACILITY		*****0 SF
C. OUTSTANDING POLLUTION AND SAFETY (OSHA) DEFICIENCIES (\$000):		
1. Air Pollution		*NOTE
2. Water Pollution		*NOTE
3. Safety and Occupational Health		*NOTE

NOTES:

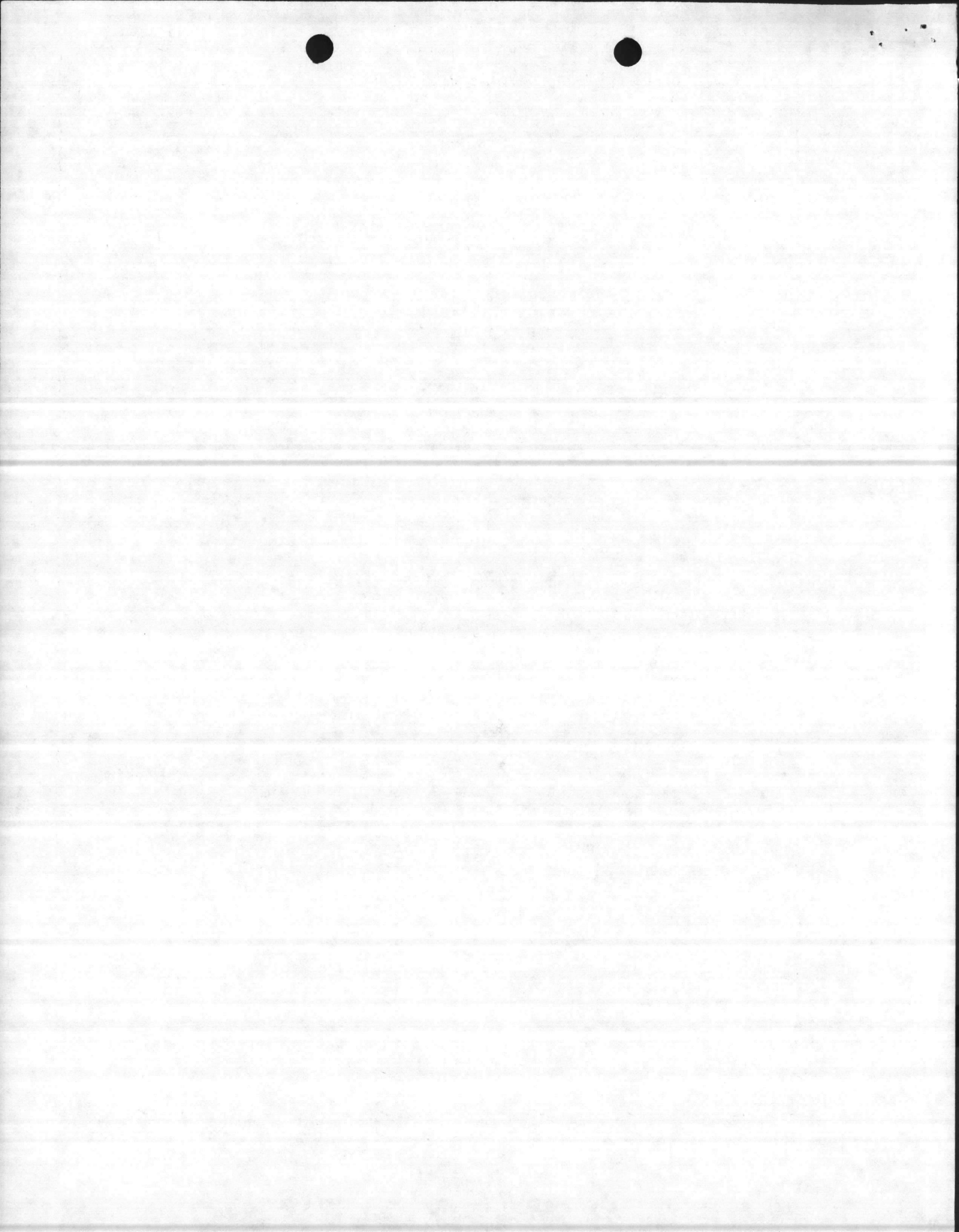
*CMC (Code LFF) will complete.

**Combat Veh Maint Shops (reference P-526) located in substandard WW-II Butler-type metal buildings constructed in 1952 which do not meet the standards used today and cannot be economically rehabilitated.

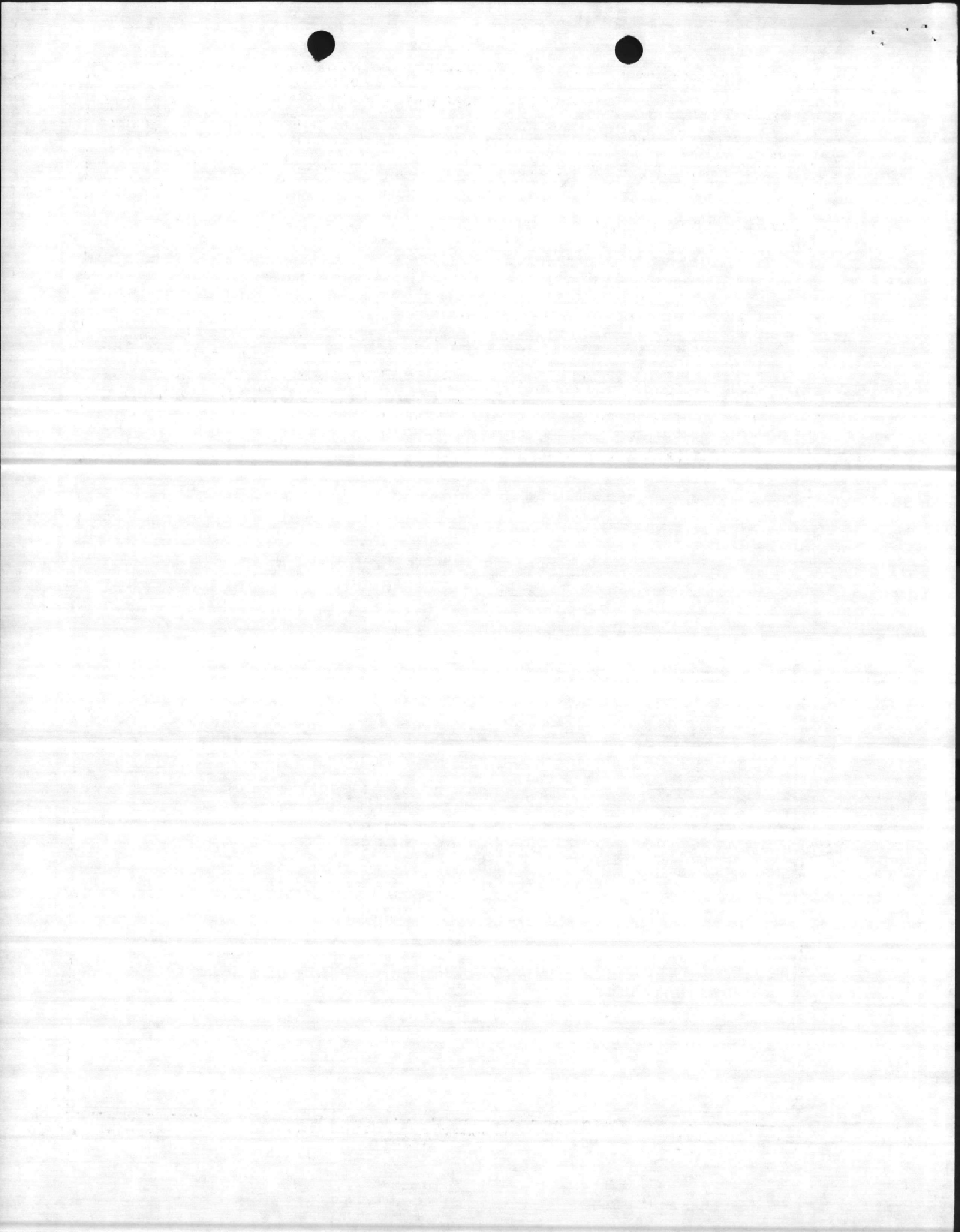
***Comm/Elec Maint Shops (reference P-175) are located in makeshift temporary metal and semi-permanent wood/concrete block facilities that were constructed for warehousing.

****The vacant UEPH facilities were constructed in 1943 as emergency multi-use facilities (Admin, Storage, and UEPH). Construction consists of concrete foundation, concrete slab, masonry walls, wood trusses, and asphalt shingles; minimum electric power and detached toilet facilities.

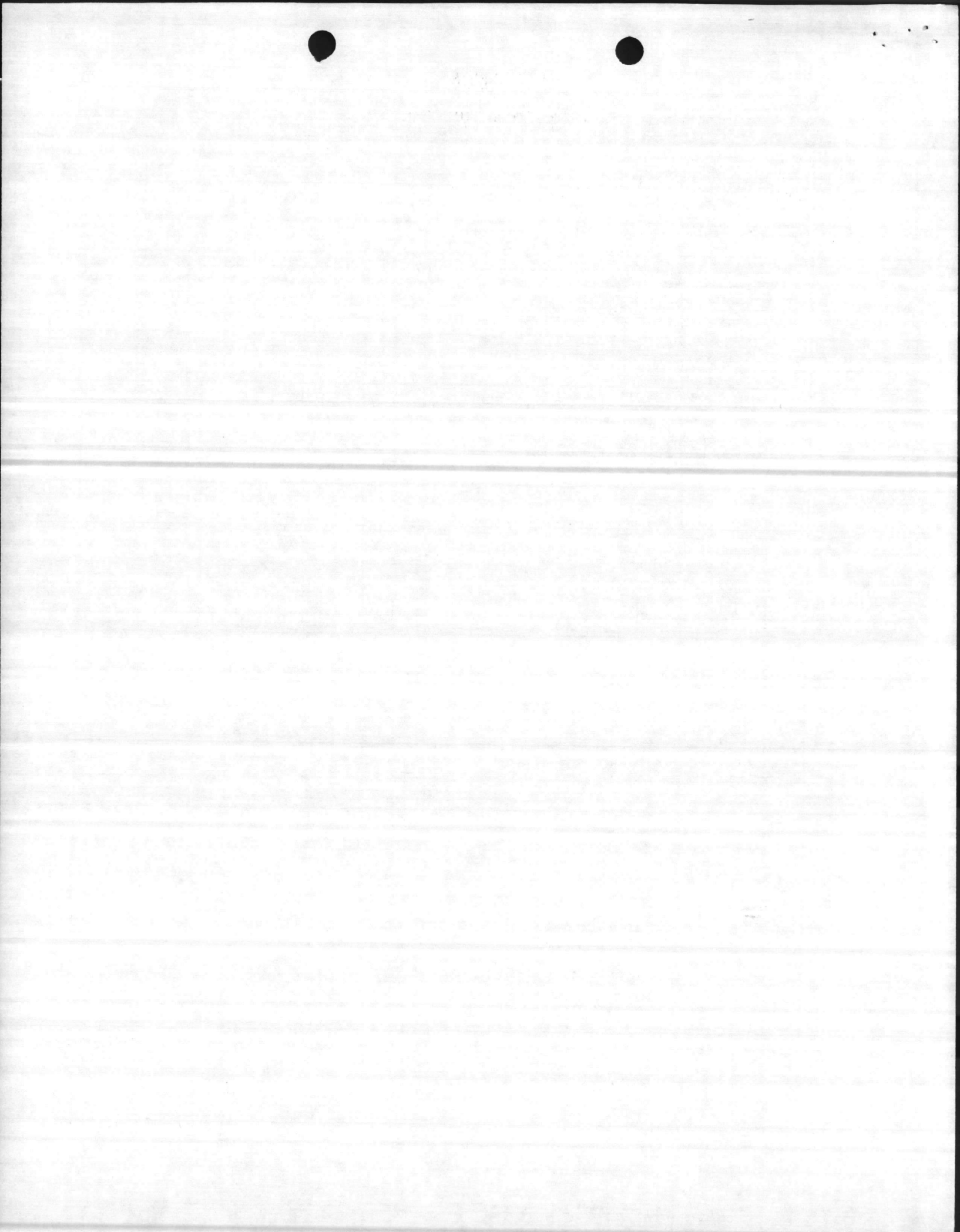
*****The overall appearance, condition, and layout of the existing Dining Facilities being modernized (reference P-697) are inefficient, under-utilized, and do not permit a favorable environment while personnel are dining.



1. COMPONENT <p style="text-align: center;">Navy</p>	FY 19 <u>82</u> MILITARY CONSTRUCTION PROJECT DATA	2. DATE <p style="text-align: center;">5 NOV 1980</p>	
3. INSTALLATION AND LOCATION <p style="text-align: center;">MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542</p>			
4. PROJECT TITLE <p style="text-align: center;">COMMUNICATIONS/ELECTRONICS MAINTENANCE SHOP</p>	5. PROJECT NUMBER <p style="text-align: center;">P-175</p>		
<u>SUPPLEMENTAL DATA</u>			
A. ESTIMATED ANNUAL COST TO OPERATE THE PROPOSED FACILITY.....	42	(\$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.....	*NOTE	(\$000)	
D. ESTIMATED LIFE-CYCLE COST TO OPERATE AND MAINTAIN THE EXISTING FACILITY IF NEW FACILITY IS A REPLACEMENT.....	*NOTE	(\$000)	
E. DESIGN DATA (Estimated): **NOTE			
1. STATUS			
a. Date Design Started.....			
b. Percent Complete as of 1 Jan 19__			
c. Percent Complete as of 1 Oct 19__			
d. Date Design Complete.....			
2. BASIS			
a. Standard or Definitive Design: Yes ___ No ___			
b. Where Design was Most Recently Used: _____			
3. COST (Total) = c = a+b and d+e	(\$000)		
a. Production of Plans and Specifications.....			
b. All Other Design Costs.....			
c. Total.....			
d. Contract.....			
e. In-House.....			
4. CONSTRUCTION START.....	(month and year)		
F. EQUIPMENT ASSOCIATED WITH THIS PROJECT WHICH WILL BE PROVIDED FROM OTHER APPROPRIATIONS: *NCTE			
<u>Equipment Nomenclature</u>	<u>Procuring Appropriation</u>	<u>Fiscal Year Appropriated or Requested</u>	<u>Cost (\$000)</u>
(ALL NOTES ON PAGE 2)			



1. COMPONENT Navy	FY 19 ⁸² MILITARY CONSTRUCTION PROJECT DATA	2. DATE 5 NOV 1980
3. INSTALLATION AND LOCATION MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542		
4. PROJECT TITLE COMMUNICATIONS/ELECTRONICS MAINTENANCE SHOP	5. PROJECT NUMBER P-175	
<p><u>NOTES:</u></p> <p>*Maintenance functions are currently supported in metal (Butler-type) buildings and semi-permanent wood/concrete block facilities that were constructed for warehousing. They are uninsulated, poorly heated, and have inadequate electrical service. There is no practical way that these facilities can be upgraded in order to perform a meaningful life-cycle comparison with the proposed facility.</p> <p>**CMC (Code LFF) will complete.</p>		



WORK SHEETS

P-175, COMMUNICATIONS/ELECTRONICS MAINTENANCE SHOP

A. Annual Maintenance Cost:

Inventory of Like Facilities = 914,462 SF

Cost/Yr of Existing Facilities - \$236,859

Cost/SF = $\frac{\$236,859}{914,462 \text{ SF}} = \$.26/\text{SF}$

Proposed Facility = 24,500 SF

24,500 SF X \$.26 = \$6,370

SOURCE: Base Historical Data

B. Utility Costs:

1. Electricity: 200,230 KWH/YR X .0353/KWH = \$7,068

2. Steam: 1,728,000 LBS/YR X .01007/LB = \$17,401

3. Water & Sewage: 35 gal per pn per day:

(a) Annual Water Cost: 331 pn X 35 gal/day X \$.6438/1000 gal
X 365 days = \$2,722

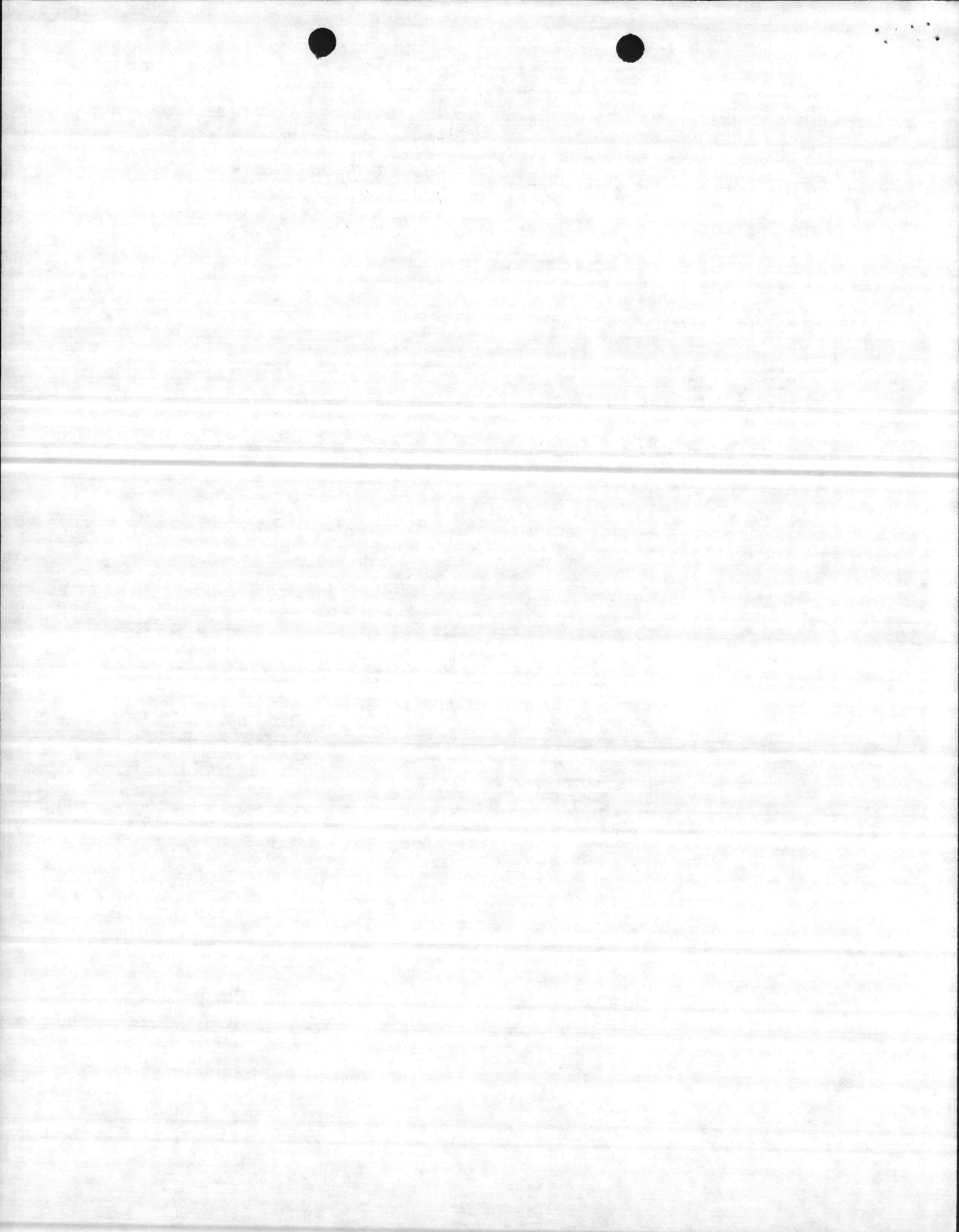
(b) Annual Sewage Cost: 331 pn X 35 gal/day X \$.4673/1000 gal
X 365 days = \$1,976

4. Summary of Utility Costs (Annual):

Electricity:	\$ 7,068
Steam:	\$17,401
Water & Sewage:	<u>\$ 4,698</u>
TOTAL:	\$29,167

C. Other Engineering Support:

Trash Disposal:	\$ 200
Pest Control:	\$ 75
Misc. Services:	<u>\$ 100</u>
TOTAL	\$ 375



WORK SHEETS

P-175, COMMUNICATIONS/ELECTRONICS MAINTENANCE SHOP

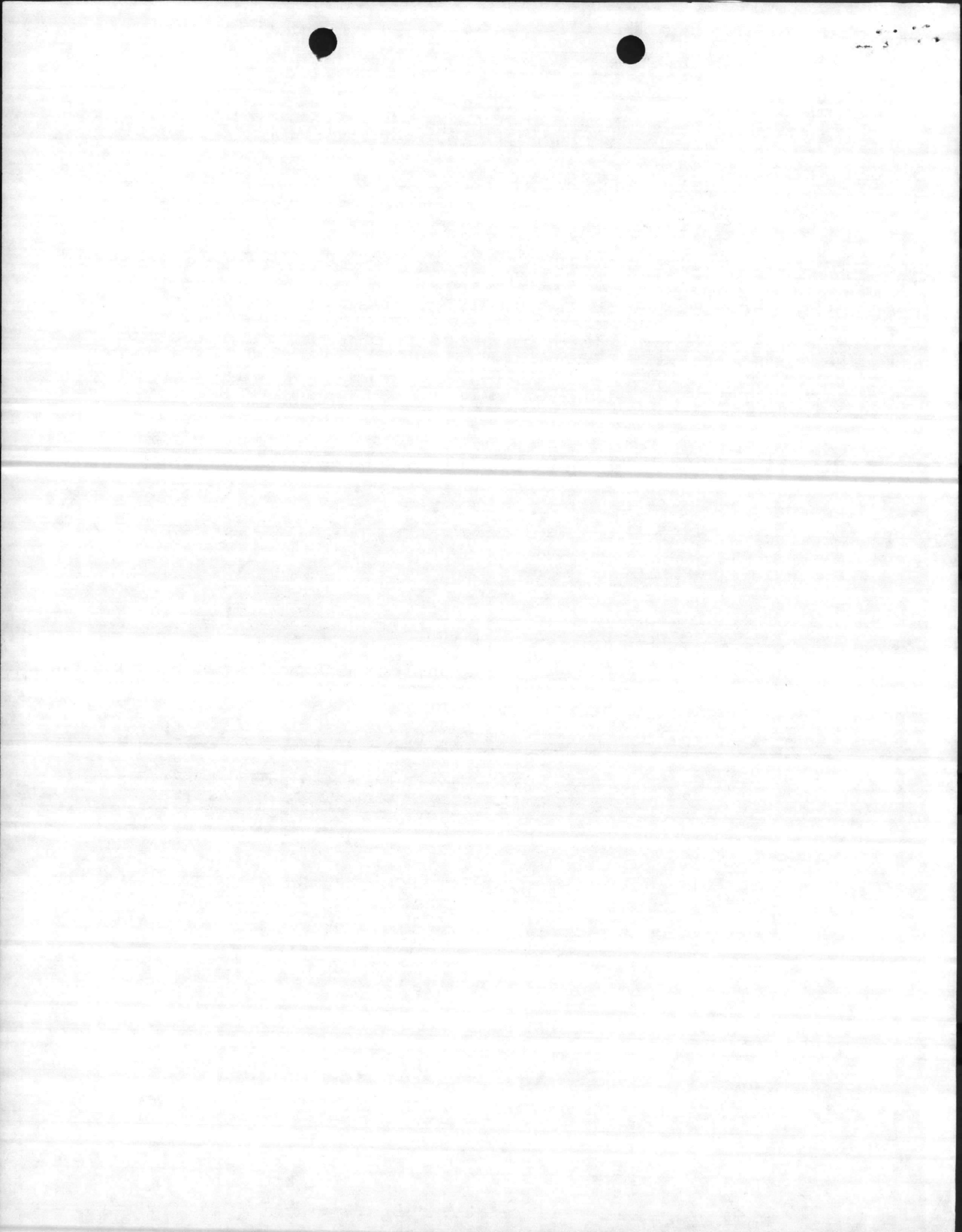
<u>D. Summary of Costs:</u>	<u>(escalated to FY-82)</u>	
Maintenance & Repair:	\$ 6,370	\$ 7,415
Utilities:	\$29,167	\$33,950
Other Engr. Support:	<u>\$ 375</u>	<u>\$ 437</u>
TOTAL:	\$35,912	\$41,802

Escalation Factor for Above:

80-81 = 8.3%

81-82 = 7.5%

EF = 1.083 X 1.075 = 1.164



PLANNING BRANCH INTER ROUTE SLIP

B. BRILEY

Bob

/date:

10/23

C. W. BARNES

PWB

/date:

G. JONES

Exp

/date:

10/30

L. HONEYCUTT

[Signature]

/date:

10/31

V. MARSHBURN

vm

/date:

10/31

COMMENTS:

FILE P-175

PWB

RETURN TO BARBARA FOR FILING/ACTION



22/01

1/10

1/10
1/10

October 20, 1980

The Department of the Navy
Atlantic Division
Naval Facilities Engineering Command
Norfolk, Virginia 33511

Attention: 09821:MLB

Reference: Contract No. N62470-78-B-3902
FY-82, MCON Project P-175,
Electronics Communications Maintenance Shop
Marine Corps Base, Camp LeJeune, N. C.

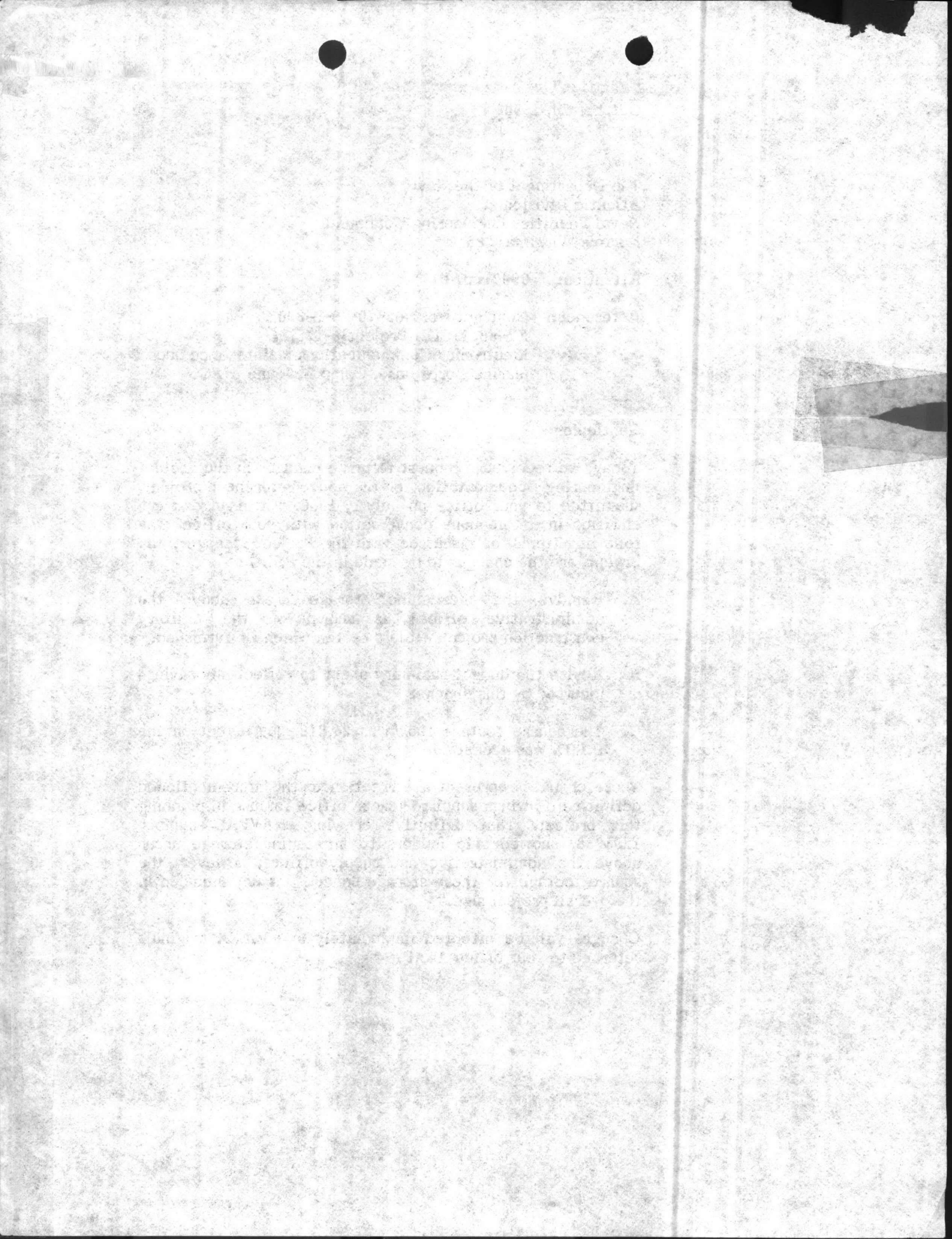
Gentlemen:

Today, we received a request to make changes in the Project Engineering Documentation for the above referenced project, submitted to your office on July 1, 1980. The changes were clarified in a telephone conversation with your office. The following items, as discussed with the Project Manager, Mr. Bryant, are the changes to be made in the P.E.D.:

- A. Remove the mezzanine storage areas above the administrative offices as shown on the military construction project witness sketch which we furnished.
- B. Revise the budget summary sheet to reflect any savings incurred by this change.
- C. The square footage shown as 24,818 square feet on the P.E.D. was acceptable.

These changes represent a correction to the aforementioned definitive drawings supplied to our office for use in planning this project. That definitive drawing, NAVFAC number 1293358, showed ship ladders to mezzanine storage areas above the administrative and supply offices; however, the square footage for these storage spaces was not included in the overall project size.

Changes will be effected immediately and P.E.D. originals returned to your office ASAP.



If we may be of further assistance on this matter, please do not hesitate to contact our office.

Very truly yours,

CLARK TRIBBLE HARRIS AND LI ARCHITECTS, P.A.

S. D. Falkenbury, Jr., P.E.

/dal

cc: Mr. Bill Barnes

80102



P-175

PWD:408;VM:bb
11000

24 SEP 1980

From: Commanding General
To: Commandant of the Marine Corps (LFF-1)
Subj: Economic Analyses on FY-82 MCOM Projects for Camp Lejeune, NC; submission of
Ref: (a) Phonecon fr Mr. A. E. Samuel, HQMC (LFF-1) to Mr. A. C. Austin, MCB, CLNC (office of AC/S, Fac) of 31 Jul 1980
 (b) CMC ltr LFF-1-LAM-tjw 11000/CLNC of 29 Feb 1980
 (c) NAVFAC P-442
Encl: (1) Economic Analysis on Project P-175, Electronics/Communications Maintenance Shop
 (2) Economic Analysis on Project P-414, Unaccompanied Enlisted Personnel Housing
 (3) Economic Analysis on Project P-526, Combat Vehicle Maintenance Shop
 (4) Economic Analysis on Project P-697, Dining Facility Modernization

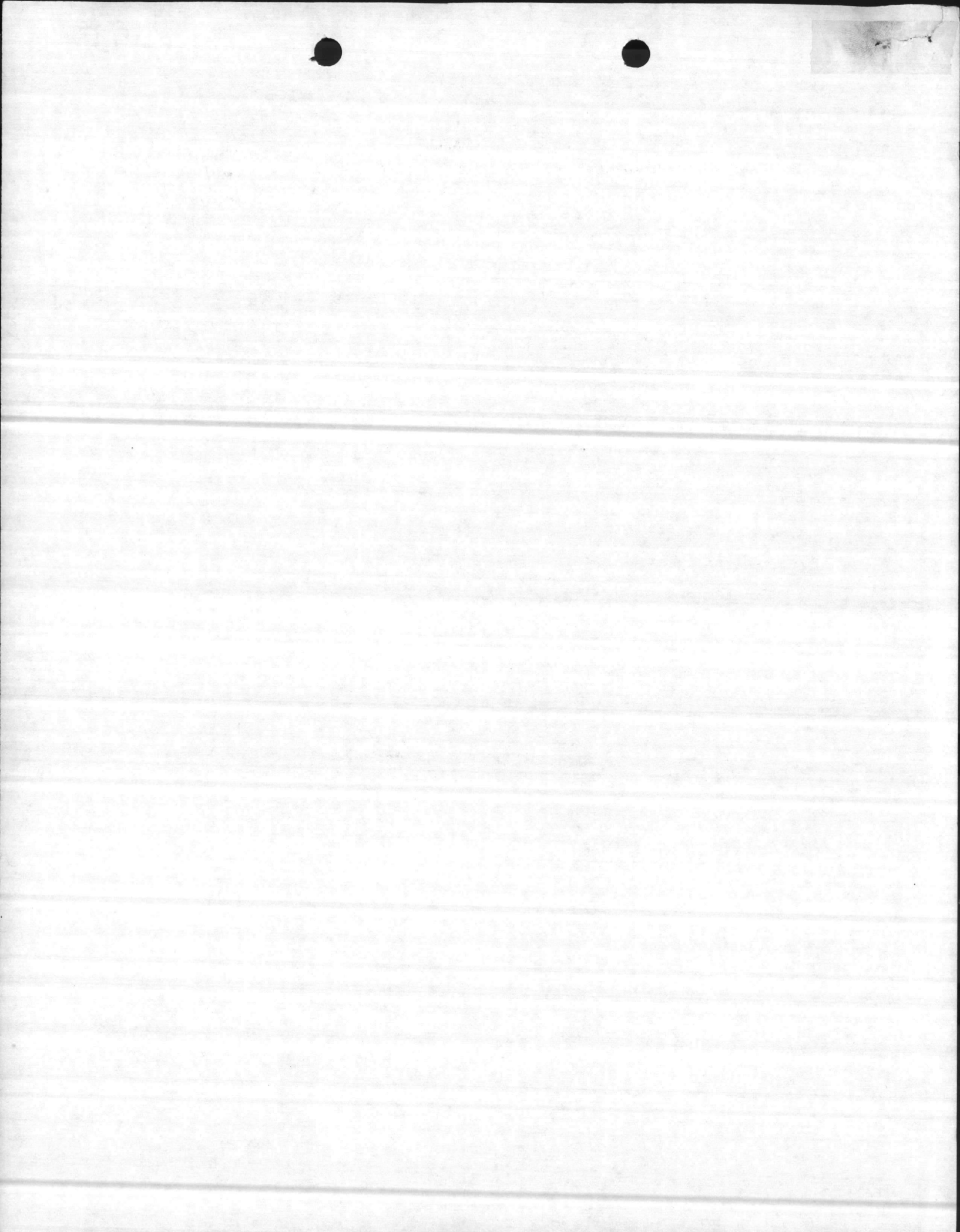
1. In accordance with reference (a) request and the guidelines contained in references (b) and (c), Economic Analyses on FY-82 MCOM projects are hereby submitted as enclosures (1) through (4).

K. P. MILLICE, Jr.
By direction

Blind copy to: (w/encls)
AC/S, Fac

Pls return to Planning Branch

ACB
VMB
04
20



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

10 P 8/5
20 P 8/4
04
408
FAC:AGA/mk
1013
1 Aug 1980

MEMORANDUM

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

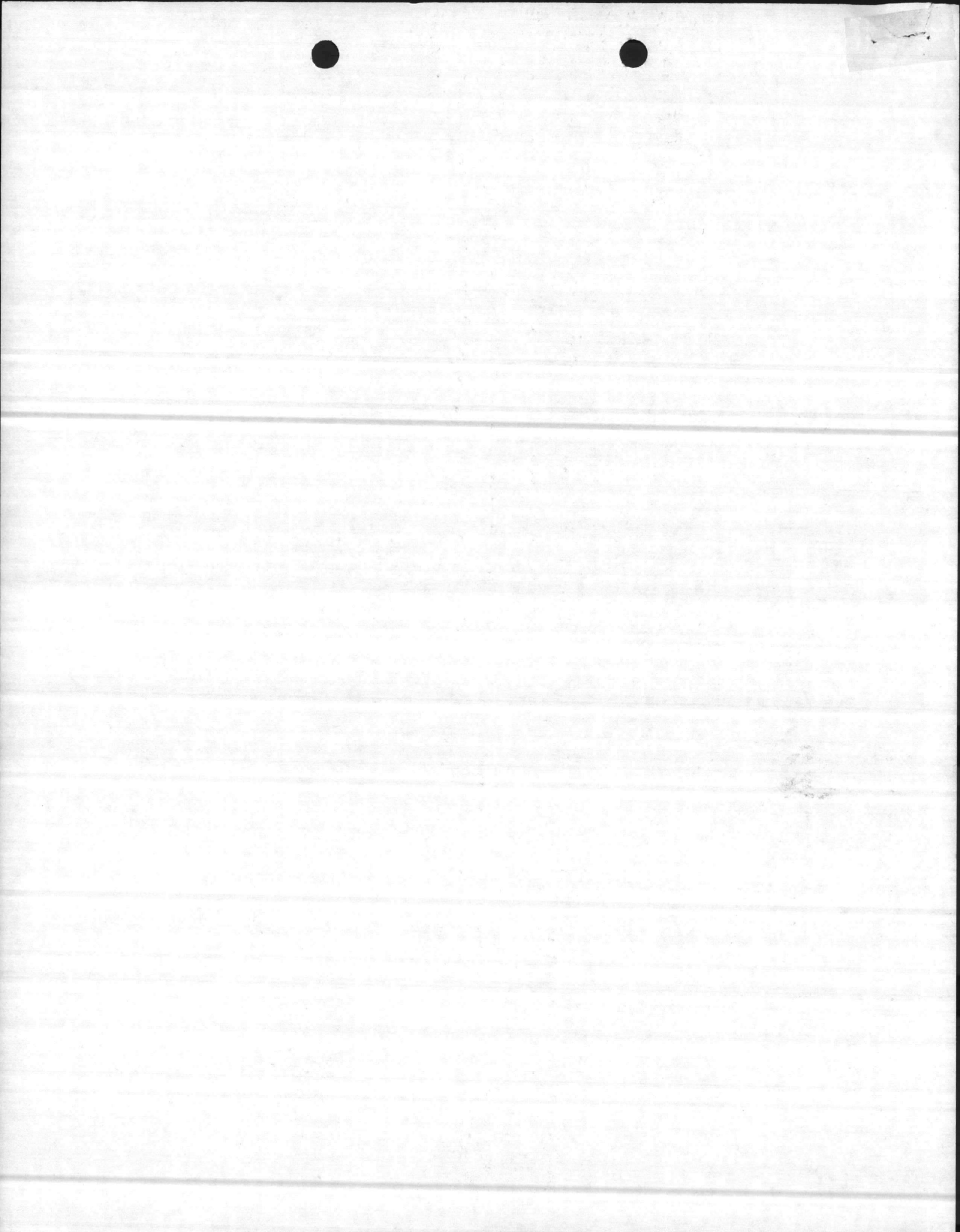
Subj: Economic Analysis

Ref: (a) TelCon fr Mr. A. E. Samuel, HQMC (Code LFF-1) to A. C. Austin,
office of AC/S, Fac
(b) CMC ltr LFF-1:LAW:tjw 11000/CamLej of 29 Feb 1980
(c) NAVFAC INST 11010.32E
(d) NAVFAC P-442

1. During reference (a), Mr. Samuel explained that the review process for FY-1982 Military Construction projects will begin in October 1980, and requested that economic analyses for those projects for Camp Lejeune listed on enclosure (3) to reference (b) be provided.

2. Accordingly, it is requested that correspondence be prepared for my signature by 20 September 1980. References (c) and (d) provide instructions and guidance for economic analyses. A new economic analysis for P-414 is not required; a statement and reference to the previously accomplished (A&E) analysis is sufficient.

K. P. Millice Jr.
K. P. MILLICE Jr.



CMC APPROVED
 MCB CAMP LEJEUNE

~~Previously Submitted~~
 DUG 1-AUG 80

MCON PROGRAM
 (FIXED YEARS)

<u>CC</u>	<u>P-Nº</u>	<u>FACILITY/ORG</u>	<u>COST \$(000)</u>
		FY-81	
(5)	P-536	TANK MAINT.FAC.	\$7,700
	P-611	UEPH (2D.AREA) 5-BoD's	\$17,000
		FY-82	24,700
			2,400
	P-175	E/C MNT.FAC. (HQ.BN.)	\$1,800
	P-528	VE MNT.FAC. (2D.MAR.)	\$2,000
	P-414	UEPH (2D.AREA)	\$10,000
	P-697	DIN. FAC.MOD	\$3,800
			25,300

in Congress

Economic Analysis Required

*NAV Camp
 Testimony
 Data
 Required
 Ed Samuel called
 24 July
 122 Paces given
 testified @ 0930
 on 24 July 80*

*Testimony Required
 for OGD 1 Nov 81*

*Presented to Div of FB working
 level staffs on 23 May 80. They
 will Brief the OCS. Another working
 level conference is scheduled
 for 5 June 80 for concurrence/Modification
 aca*



ECONOMIC ANALYSIS
FOR
MILITARY CONSTRUCTION PROJECT
P-175
ELECTRONICS/COMMUNICATIONS MAINTENANCE SHOP
CAMP LEJEUNE, NORTH CAROLINA

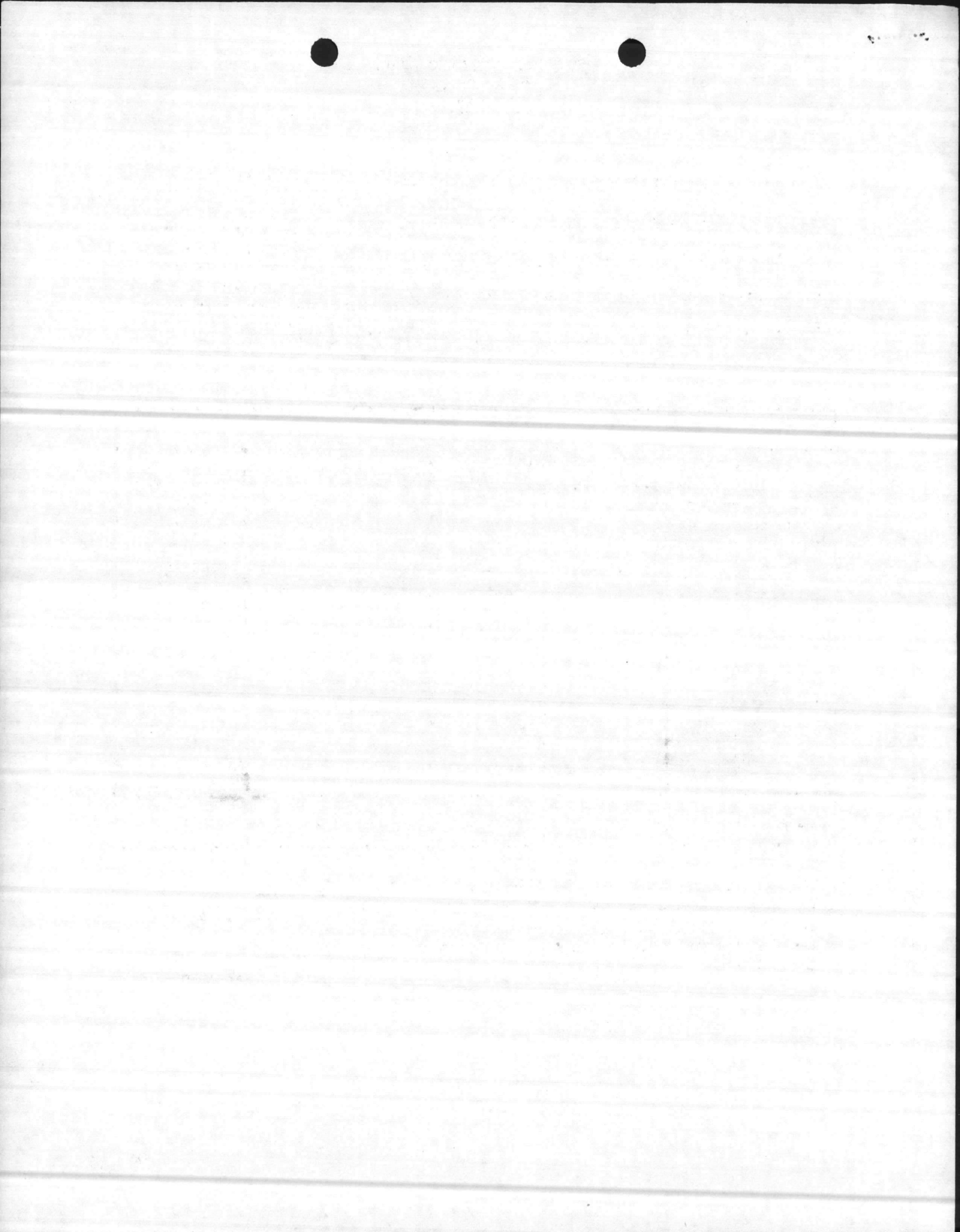
I. BACKGROUND

The analysis investigates the economy of providing an Electronics/Communications Maintenance Shop for Headquarters Battalion, 2d Marine Division. Currently, work is being accomplished in temporary WW-II Butler-type buildings and an old Dining Facility. These facilities are substandard and have never been modified for use as an Electronics/Communications Maintenance Shop.

Analysis is based upon a comparison of annual costs for Modification of Existing Facilities (Alternative A) against Construction of a New Electronics/Communications Maintenance Shop (Alternative B).

II. PRESENT VALUE - SUMMARY

Construction of a new Electronics/Communications Maintenance Shop is economically feasible, as indicated by the attached Analysis. The new shop will be located in the 1800 Area, in compliance with the current Camp Lejeune Master Plan.

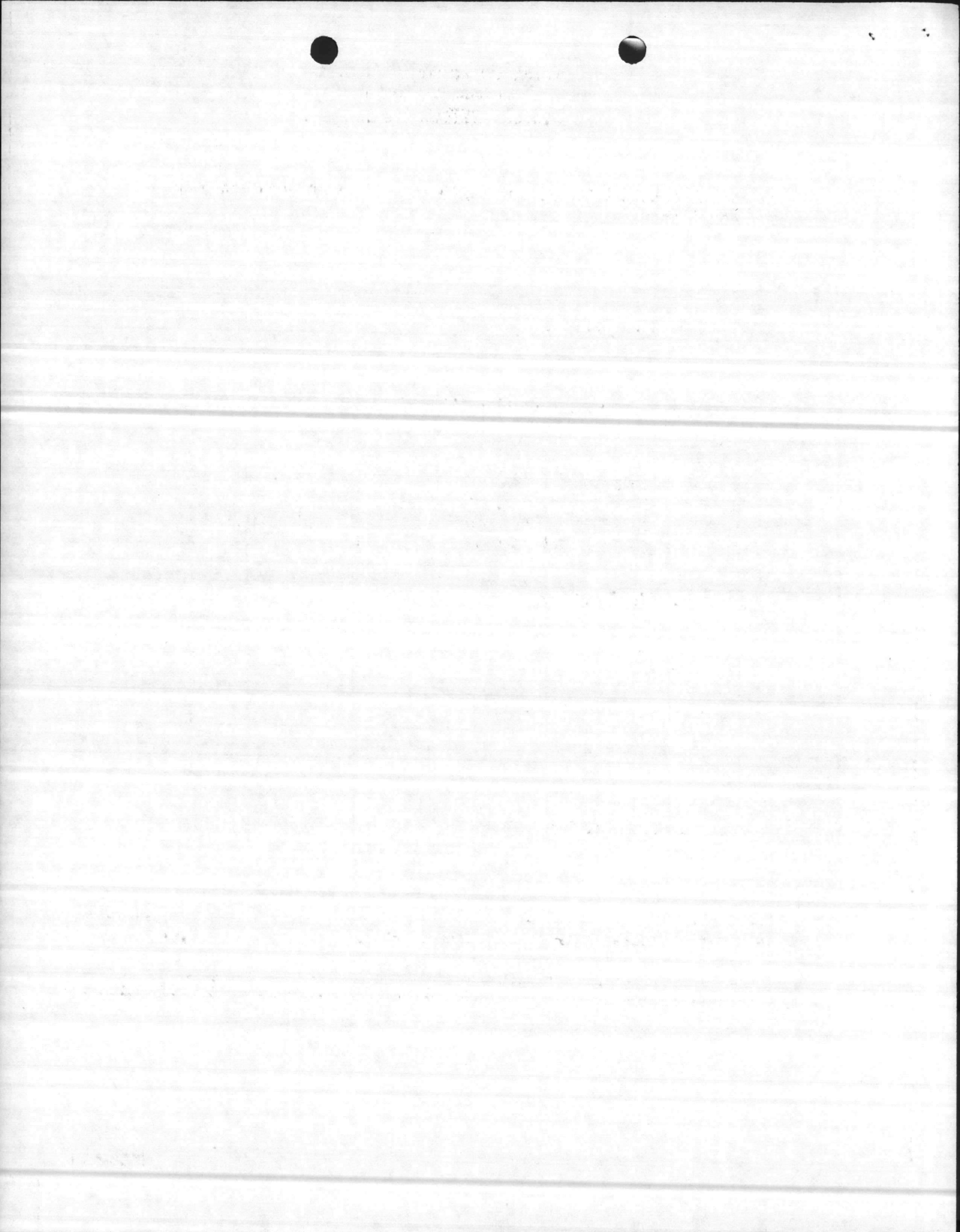


SECONDARY ECONOMIC ANALYSIS
SUMMARY OF COSTS
FORMAT A

1. Submitting Department of the Navy Component: Marine Corps
2. Date of Submission: 23 Sep 1980
3. Project Title: P-175, Electronics/Communications Maintenance Shop
4. Description of Project Objective: Provide adequate facility.
5. Alternative: A 6. Economic Life: 15 years

8. Program/Project Costs						
7. Project Year	a. Non-Recurring		b. Recurring Operations	c. Annual Cost	d. Discount Factor	e. Discounted Annual Cost
	R&D	Investment				
1 2-16		2,000,000	0 26,868	2,000,000 26,868	.954 7.255	1,908,000 194,927
9. TOTALS					7.255	2,102,927

- | | |
|---|------------------|
| 10a. Total Project Cost (discounted) | <u>2,102,927</u> |
| 10b. Uniform Annual Cost (without terminal value) | <u>289,359</u> |
| 11. Less Terminal Value (discounted) | <u>N/A</u> |
| 12a. Net Total Project Cost (discounted) | <u>2,102,927</u> |
| 12b. Uniform Annual Cost (with terminal value) | <u>289,859</u> |



SECONDARY ECONOMIC ANALYSIS
SUMMARY OF COSTS
FORMAT A

13. Source/Derivation of Cost Estimates: (Use as much space as required)

a. Non-Recurring Costs:

1.) Research & Development:

2.) Investment:

NAVFAC P-448, Military Construction Cost Data, and Mean's Building Construction Cost Data, 1980, were used in determining cost estimate.

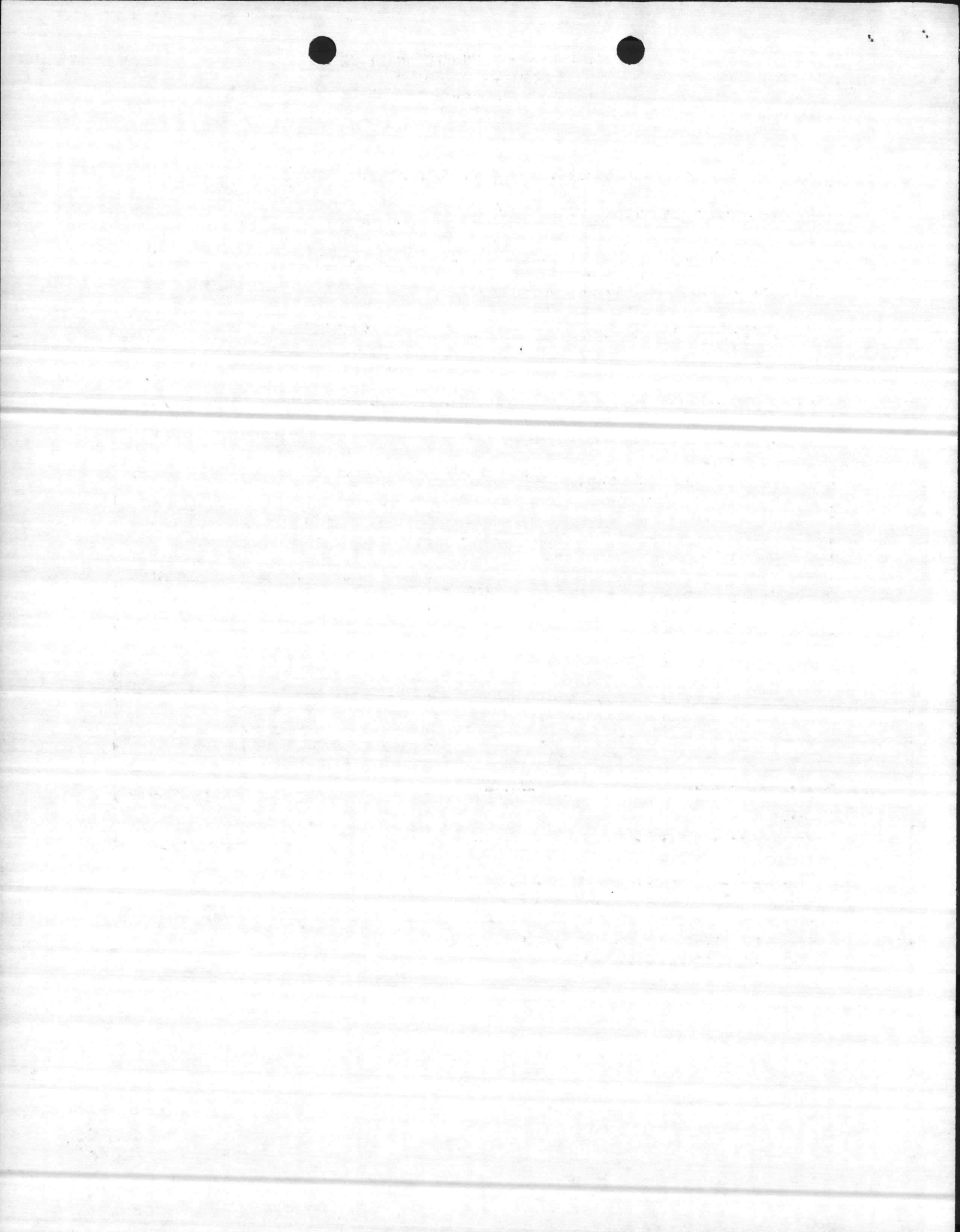
b. Recurring Cost(s):

See Attachment "A"

c. Net Terminal Value:

d. Other Considerations:

14. Name & Title of Principal Action Officer	Date
V. POBBIELSKI, CDR, CEC, USN Public Works Officer	23 Sep 1980

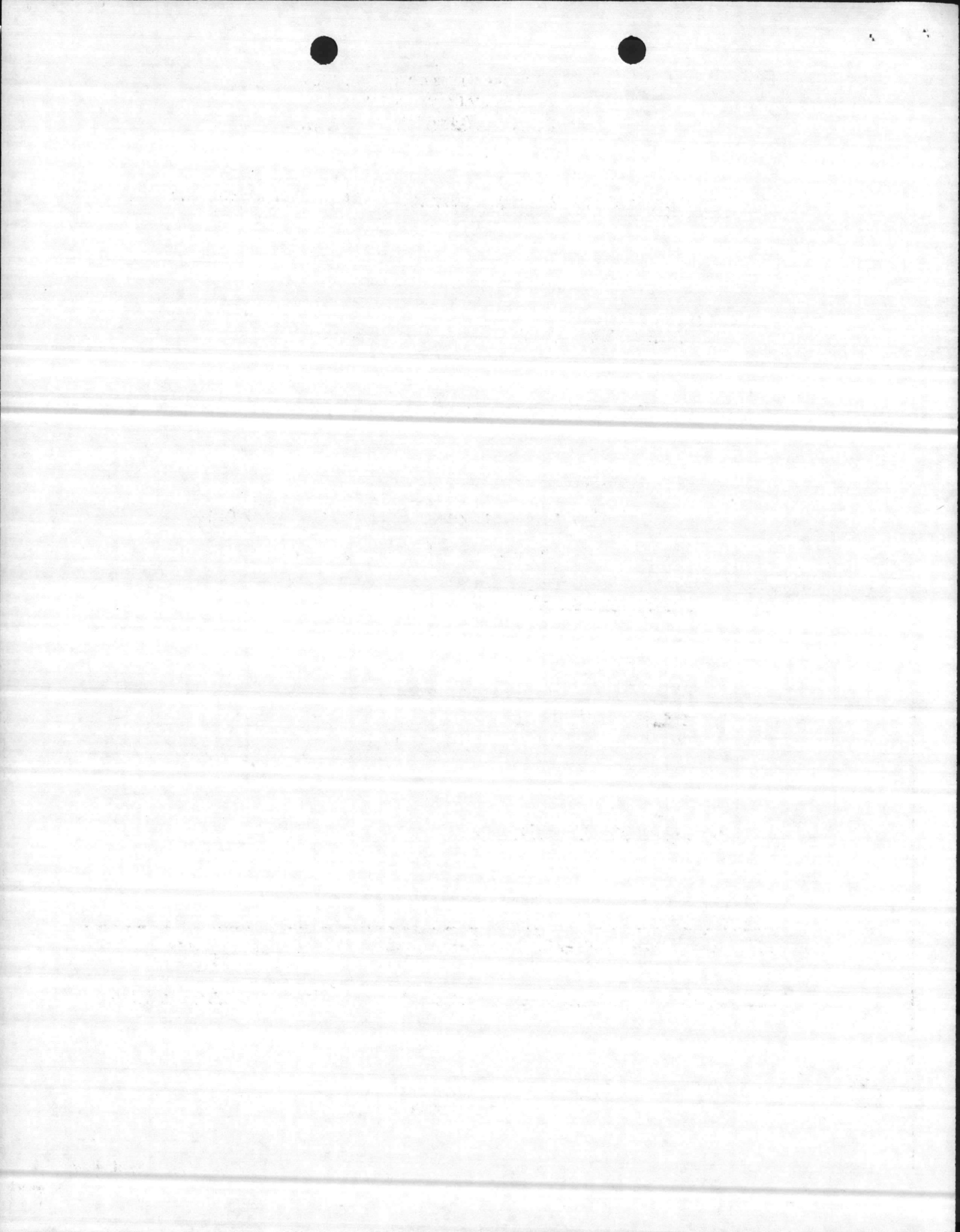


SECONDARY ECONOMIC ANALYSIS
SUMMARY OF COSTS
FORMAT A

1. Submitting Department of the Navy Component: Marine Corps
2. Date of Submission: 23 Sep 1980
3. Project Title: P-175, Electronics/Communications Maintenance Shop
4. Description of Project Objective: Provide adequate facilities.
5. Alternative: B 6. Economic Life: 25 years

8. Program/Project Costs						
7. Project Year	a. Non-Recurring		b. Recurring Operations	c. Annual Cost	d. Discount Factor	e. Discounted Annual Cost
	R&D	Investment				
1 2-26	0	1,900,000	0 26,868	1,900,000 26,868	.954 8.658	1,812,600 232,623
9. TOTALS					8.658	2,045,223

10a. Total Project Cost (discounted)	2,045,223
10b. Uniform Annual Cost (without terminal value)	<u>236,223</u>
11. Less Terminal Value (discounted)	N/A
12a. Net Total Project Cost (discounted)	<u>2,045,223</u>
12b. Uniform Annual Cost (with terminal value)	<u>236,223</u>



SECONDARY ECONOMIC ANALYSIS
SUMMARY OF COSTS
FORMAT A

13. Source/Derivation of Cost Estimates: (Use as much space as required)

a. Non-Recurring Costs:

1.) Research & Development:

2.) Investment:

Military Construction Project P-175: \$1,900,000

Source: DD Form 1391 for Project P-175.

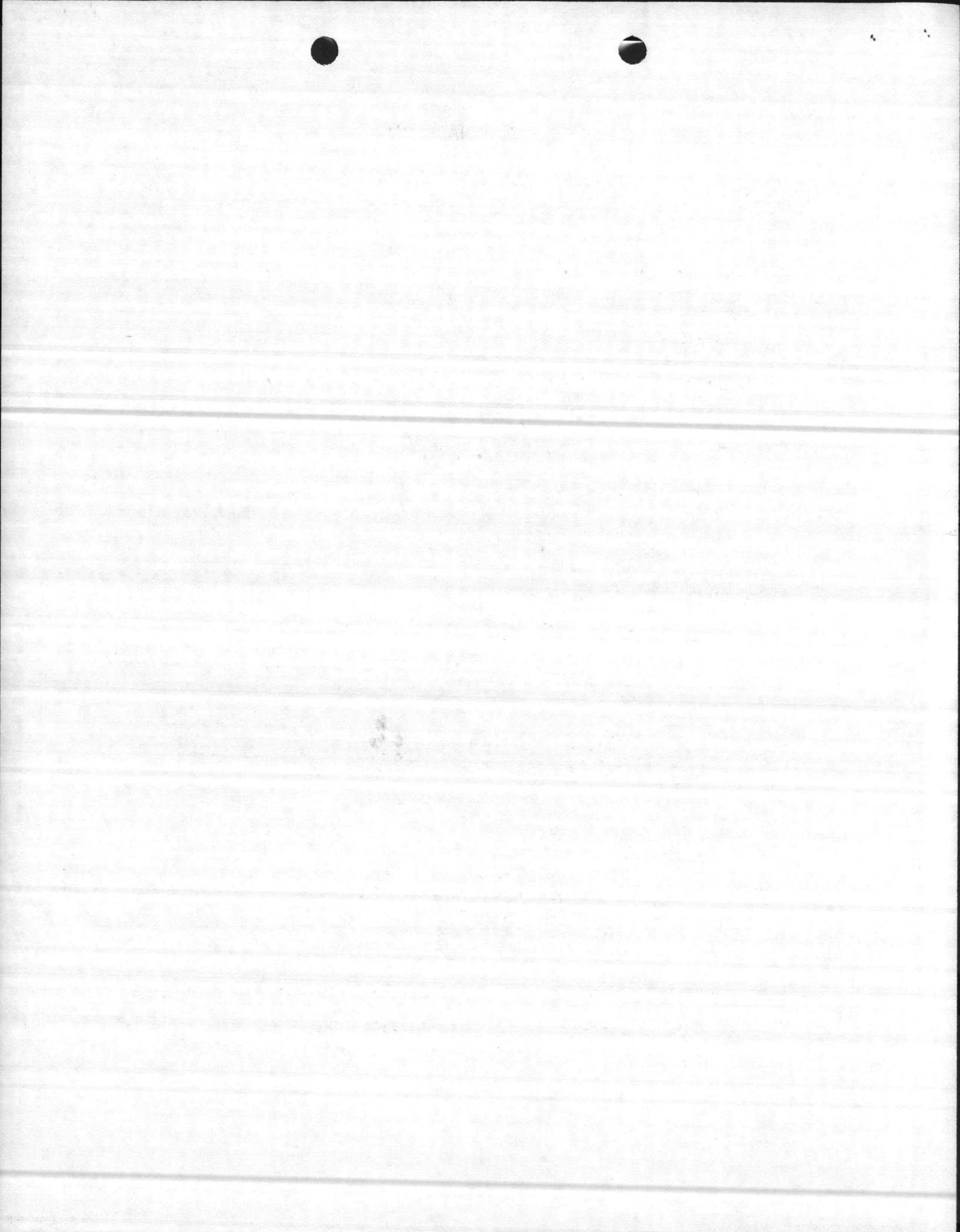
b. Recurring Cost(s):

See Attachment A

c. Net Terminal Value:

d. Other Considerations:

14. Name & Title of Principal Action Officer	Date
V. PODBIELSKI, CDR, CEC, USN, Public Works Officer	23 Sep 1980



ATTACHMENT "A"

RECURRING COSTS:

Maintenance: \$2400/yr

Source: Base Historical Data

Utilities:

Steam Consumption

$$\begin{aligned} \text{Heating \#/hr} &= .96\#/1000 \text{ cf} = (.96\#) (2600 \text{ sf}) (16 \text{ ft})/1000 \text{ cf} \\ &= 400\#/hr \\ &= 1728000\#/heating \text{ season} \end{aligned}$$

$$\text{Heating Costs} = (1728000\#) (\$10.07/1000\#) = \$17400$$

Source: Utilities Conservation Program Survey Manual and NAVFAC P-272, Part 1, Volume 2.

Electrical

$$\text{Lighting Load: } (26000 \text{ sf}) (3 \text{ w/sf}) = 78 \text{ kw}$$

$$\text{Air Conditioning: } (13000 \text{ sf})/(400 \text{ sf/ton}) (1.3 \text{ kw/ton}) = 9.75 \text{ kw}$$

Demand:

$$\begin{aligned} \text{Lighting @ 100\%} &= 78.0 \text{ kw} \\ \text{A/C @ 65\%} &= 6.4 \text{ kw} \\ \text{Equip @ 50\%} &= \underline{12.5 \text{ kw}} \end{aligned}$$

$$\text{TOTAL: } 96.9 \text{ kw}$$

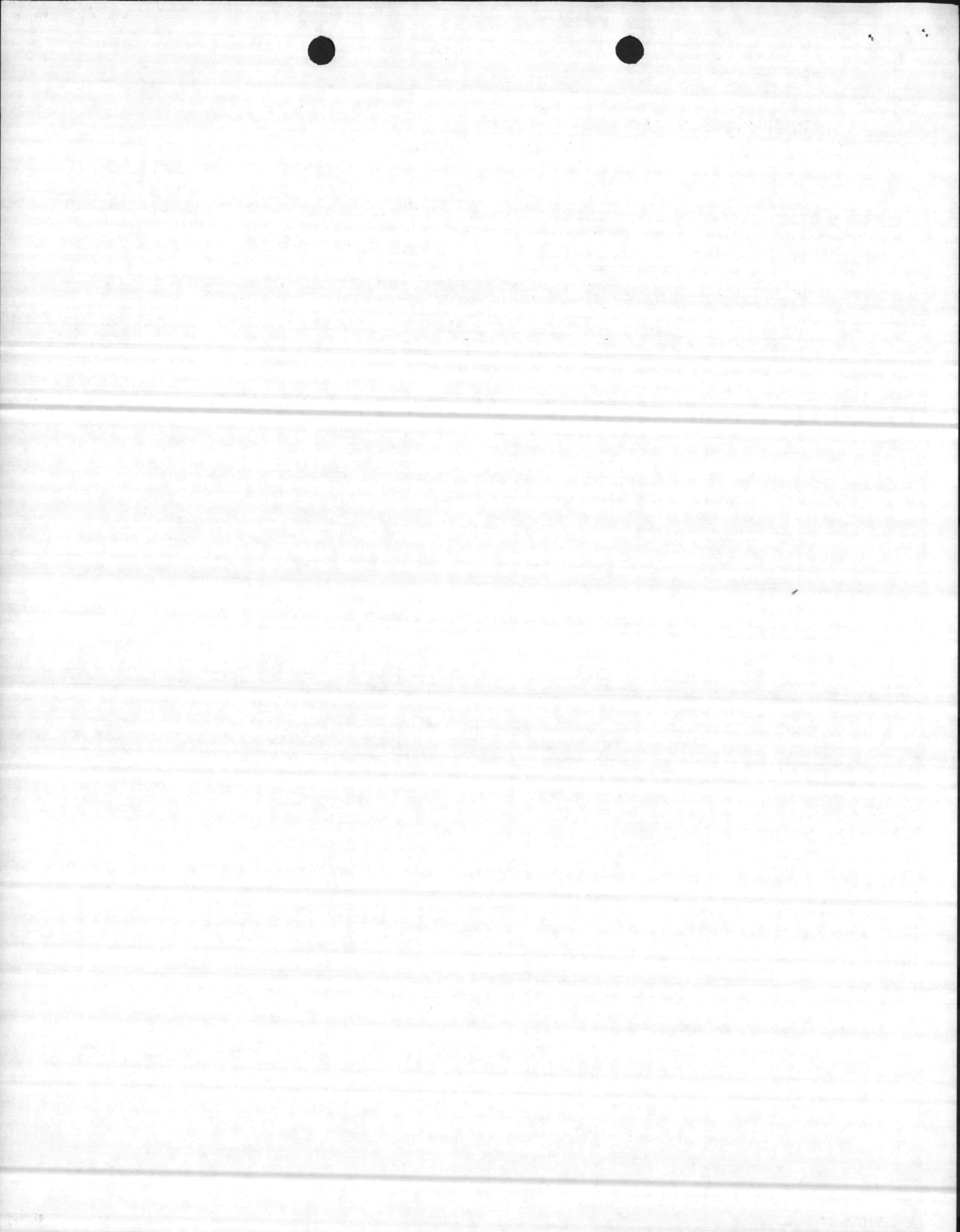
Year Consumption:

$$\begin{aligned} 78 \text{ kw} \times 2200 \text{ hrs} &= 173,800 \text{ kwh} \\ 6.4 \text{ kw} \times 1200 \text{ hrs} &= 7,680 \text{ kwh} \\ 12.5 \text{ kw} \times 1500 \text{ hrs} &= \underline{18,750 \text{ kwh}} \end{aligned}$$

$$\text{TOTAL: } 200,230 \text{ kwh}$$

$$\text{Electrical Costs} = (200270 \text{ kwh}) (\$.0353/\text{kwh}) = \$7068/\text{yr}$$

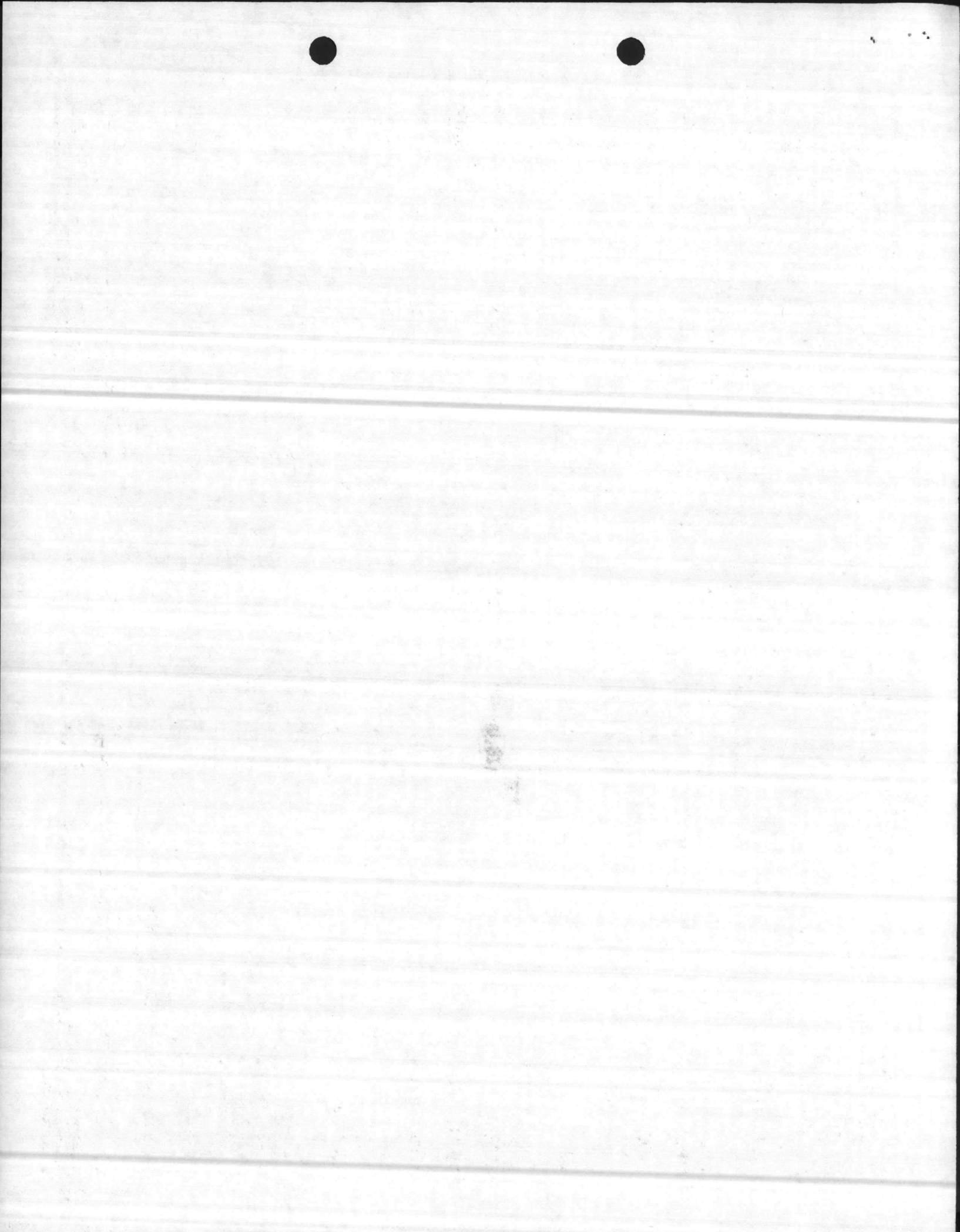
Source: Electrical Design Manual, Volume 4.



TOTAL RECURRING COSTS:

Maintenance:	\$2,400
Utilities:	<u>\$24,468</u>
TOTAL:	\$26,868/yr

Note: For comparison purposes, recurring costs were considered to be the same for both Alternatives.



COST ESTIMATE

DATE PREPARED
19 SEP 1980

SHEET 1 OF 3

ACTIVITY AND LOCATION
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA 28542

CONSTRUCTION CONTRACT NO.

IDENTIFICATION NUMBER
P-175

ESTIMATED BY
V. Marshburn

CATEGORY CODE NUMBER
217-10

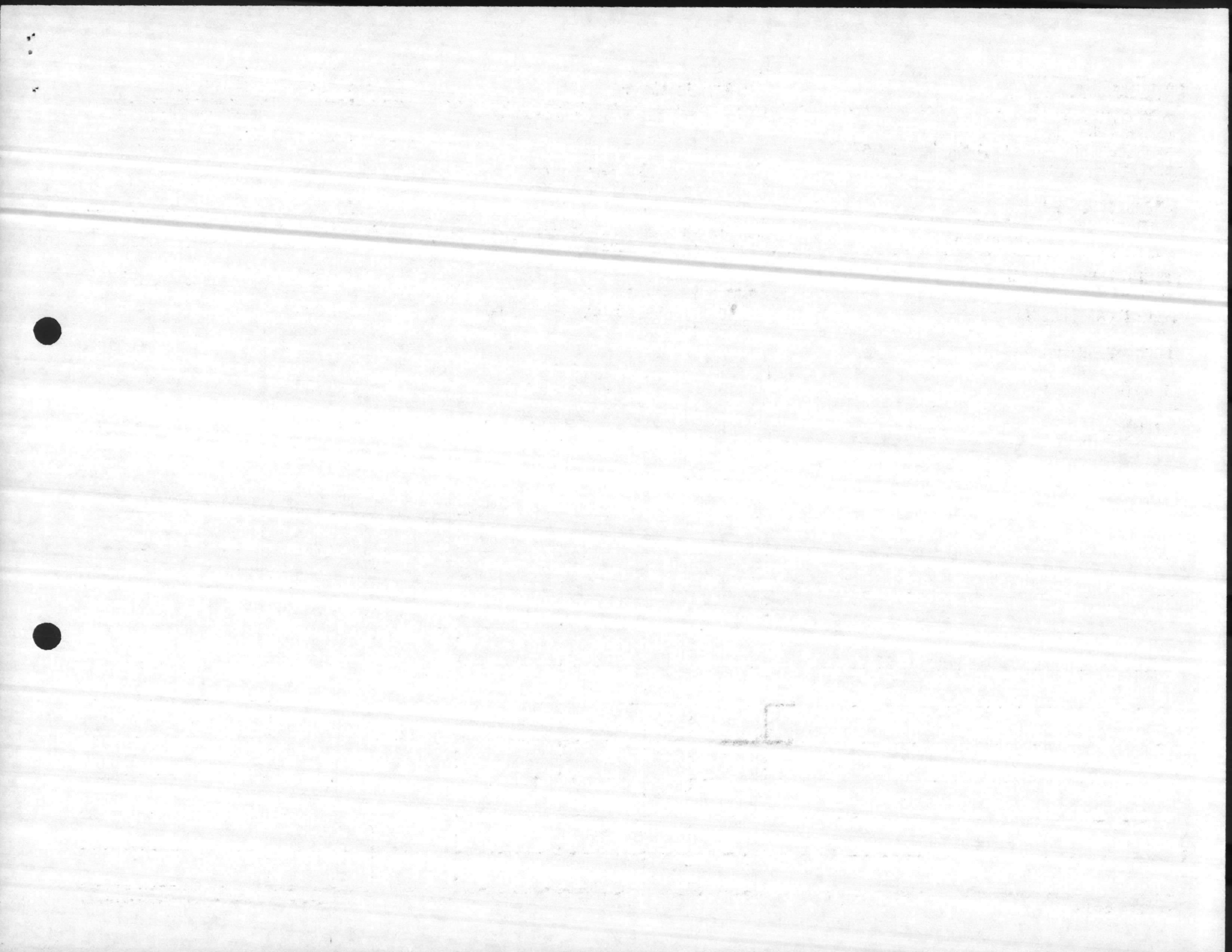
PROJECT TITLE
ALTERNATIVE "A"

STATUS OF DESIGN
 PED 30% 100% FINAL Other (Specify)

JOB ORDER NUMBER

ITEM DESCRIPTION	QUANTITY		MATERIAL COST		LABOR COST		ENGINEERING ESTIMATE	
	NUMBER	UNIT	UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL
DEMOLITION	22,459	SF	3.65	81,975	6.85	153,844	10.50	235,819
STRUCTURAL REINFORCEMENT	1	LS	-	25,000	-	30,000	-	55,000
FOUNDATION	25	CY	65	1,625	150	3,750	-	5,375
SLAB	22	CY	65	1,430	150	3,300	-	4,730
STRUCTURAL FRAMING	1	LS	-	3,000	-	2,000	-	5,000
INTERIOR WALLS	18,000	SF	1.25	22,500	2.75	49,500	4.00	72,000
INTERIOR FINISH	48,248	SF	2.50	120,620	1.75	84,434	4.25	205,054
WINDOWS & DOORS	1	LS	-	35,000	-	20,000	-	55,000
SPECIALTIES (VAULT)	1	LS	-	75,000	-	8,000	-	83,000
PLUMBING	1	LS	-	50,000	-	40,000	-	90,000
HVAC	1	LS	-	50,000	-	25,000	-	75,000
EXHAUST SYSTEM	1	LS	-	80,000	-	5,000	-	85,000
SPRINKLER SYSTEM	1	LS	-	10,000	-	12,000	-	22,000
COMPRESSED AIR SYSTEM	1	LS	-	4,000	-	2,000	-	6,000
MONITORING AND CONTROL SYSTEM	1	LS	-	5,000	-	3,000	-	8,000
SPECIAL EQUIPMENT (HYDRAULICS)	2	EA	4,000	8,000	3,500	7,000	-	15,000
ELECTRICAL SYSTEM	1	LS	-	80,000	-	45,000	-	125,000

ENCL (1)



COST ESTIMATE

DATE PREPARED
19 SEP 1980

SHEET **2** OF **3**

ACTIVITY AND LOCATION
**MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA 28542**

CONSTRUCTION CONTRACT NO.

IDENTIFICATION NUMBER
P-175

ESTIMATED BY
V. Marshburn

CATEGORY CODE NUMBER
217-10

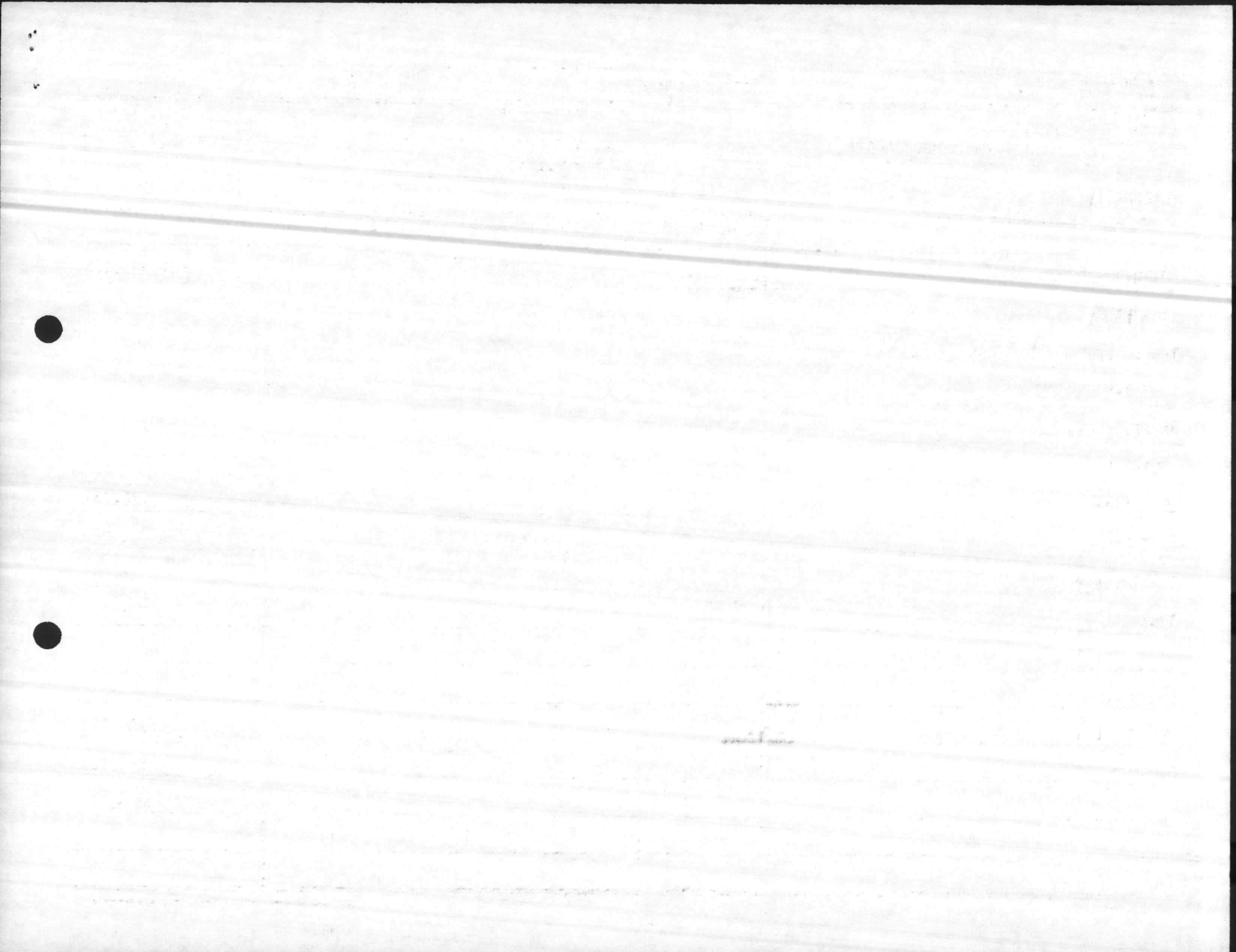
PROJECT TITLE
ALTERNATIVE "A"

STATUS OF DESIGN
 PED
 30%
 100%
 FINAL
 Other (Specify) _____

JOB ORDER NUMBER

ITEM DESCRIPTION	QUANTITY		MATERIAL COST		LABOR COST		ENGINEERING ESTIMATE	
	NUMBER	UNIT	UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL
EXTERIOR ELECTRICAL	1	LS	-	6,000	-	3,000	-	9,000
ELECTRICAL SUBSTATION	1	EA	8,000	8,000	-	1,500	-	9,500
ROADS, PARKING, SIDEWALK	1	LS	-	25,000	-	11,000	-	36,000
SITE IMPROVEMENT	1	LS	-	16,000	-	6,000	-	22,000
SUBTOTAL				708,150		515,328		1,223,478

ENCL (1)



COST ESTIMATE

DATE PREPARED
19 SEP 1980

SHEET **3** OF **3**

ACTIVITY AND LOCATION
**MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA 28542**

CONSTRUCTION CONTRACT NO.

IDENTIFICATION NUMBER
P-175

ESTIMATED BY
V. Marshburn

CATEGORY CODE NUMBER
217-10

PROJECT TITLE

STATUS OF DESIGN
 PED 30% 100% FINAL Other (Specify) _____

JOB ORDER NUMBER

ALTERNATIVE "A"

ITEM DESCRIPTION	QUANTITY		MATERIAL COST		LABOR COST		ENGINEERING ESTIMATE	
	NUMBER	UNIT	UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL
SUBTOTAL				708,150		515,328		1,223,478
OVERHEAD (15%)								183,521
TAXES, INS., S.S. (12% OF LABOR)								61,839
SUBTOTAL								1,468,838
PROFIT (10%)								146,883
SUBTOTAL								1,615,721
BOND (1%)								16,157
SUBTOTAL								1,631,878
CONTINGENCY (5%)								81,593
SUBTOTAL								1,713,471
SIQH (5.5%)								94,240
SUBTOTAL								1,807,711
DESIGN COSTS								180,771
SUBTOTAL								1,988,482
							SAY:	2,000,000

ENCL ()



COST ESTIMATE

DATE PREPARED
19 SEP 1980

SHEET 1 OF 2

ACTIVITY AND LOCATION
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA

CONSTRUCTION CONTRACT NO.

IDENTIFICATION NUMBER
P-175

ESTIMATED BY
V. Marshburn

CATEGORY CODE NUMBER
217-10

PROJECT TITLE

ALTERNATIVE "B"

STATUS OF DESIGN
 PED 30% 100% FINAL Other (Specify) _____

JOB ORDER NUMBER

ITEM DESCRIPTION	QUANTITY		MATERIAL COST		LABOR COST		ENGINEERING ESTIMATE	
	NUMBER	UNIT	UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL
FOUNDATION	27,735	SF					1.80	50,000
SLAB ON GRADE	27,735	SF					2.74	76,000
STRUCTURAL FRAME	27,735	SF					.11	3,000
SUPPORTED FLOORS	2,831	SF					9.54	27,000
ROOF SYSTEM	27,735	SF					7.79	216,000
EXTERIOR WALLS	13,756	SF					10.54	145,000
INTERIOR WALLS	17,424	SF					4.99	87,000
INTERIOR FINISH	51,904	SF					1.27	66,000
DOORS AND WINDOWS	73	EA					876.71	64,000
SPECIALTIES	27,735	SF					4.29	119,000
PLUMBING	62	EA					1,677	104,000
MECHANICAL (HVAC)	12	TN					9,333.77	112,000
ENGINE EXHAUST SYSTEM	4	EA					4,500	18,000
SPRINKLER	27,735	SF					1.15	32,000
COMPRESSED AIR	1	EA					9,000	9,000
EMCS	20	EA					600	12,000
SPECIAL EQUIPMENT	1	EA					25,000	25,000

ENCL (1)

24
10
4

COST ESTIMATE

DATE PREPARED
19 SEP 1980

SHEET 2 OF 2

ACTIVITY AND LOCATION
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA

CONSTRUCTION CONTRACT NO.

IDENTIFICATION NUMBER

P-175

ESTIMATED BY
V. Marshburn

CATEGORY CODE NUMBER

217-10

PROJECT TITLE

ALTERNATIVE "B"

STATUS OF DESIGN

PED 30% 100% FINAL Other (Specify) _____

JOB ORDER NUMBER

ITEM DESCRIPTION	QUANTITY		MATERIAL COST		LABOR COST		ENGINEERING ESTIMATE	
	NUMBER	UNIT	UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL
ELECTRICAL	27,735	SF					5.80	161,000
SUBTOTAL BUILDING								1,326,000
ELECTRICAL	1	EA					38,000	38,000
ELECTRICAL SUBSTATION	300	KVA					43.33	121,000
HEAT DISTRIBUTION	400	LF					150	60,000
SANITARY SEWERS	200	LF					20	4,000
WATER DISTRIBUTION	200	LF					30	6,000
ROADS, PARKING, WALKS	4,537	SY					13.44	61,000
SITE IMPROVEMENTS	1	LS					-	136,000
DEMOLITION	7	EA					8,571.42	60,000
SUBTOTAL SUPPORTING FACILITIES								378,000
TOTAL EST. CONTRACT COST								1,704,000
CONTINGENCY - 5%								85,000
SIOH - 5.5%								98,000
TOTAL BUDGET COST								1,887,000
							SAY:	1,900,000

ENCL (1)

10