

8369

W.C.		Distb. Date-By 4-3-84 and	Job Order No. PM4-23-3870-23XYT
Activity Accounting No. 6-7001	F/SFC 4M1	Program/Budget	Facility No. G-3 RANGE & OP-5 G-22
Appropriation 174 1106	Subhead 2720	Approval Document	AC/S Fac. Proj. No. 4547
Allotment/Project	CAC 7430	Requester ACS/FAC	Reg. No. FAC/REAL/wh 6280/LTR DTD 3/9/84
WGC	Type Of Work 05 NEW WORK	Sketch/Plan Attached <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Special Instr.

For Further Information Contact:
 MAJ. BARNETSON / MR. ALEXANDER Ph# 3034/3035 / MSGT MOSES Ph# 5211

General Job Description
 EXPEDITE, WORK TO START 4-5-84
 REPAIR G-3 RANGE AND OP-5

NOTE: WORK MUST BE COMPLETED BY 26 APRIL 1984 - EDD WILL SWEEP AREA,
 (2) COST OF GRAVEL INCLUDES COST OF DELIVERY TO SITE (3) CONTACT ON SLOW FAX, JVILLE TO
 SPREAD FERTILIZER & LIME IN OPEN FIELD. (4) NOTIFY OPERATIONS OF SIGNIFICANT CHANGES

AC/S Fac. Projects:
 The Authorized Funded Cost of _____ Will Not Be Exceeded Without Prior Approval Of AC/S Fac.
 Starting Date: _____ Complete By: _____ Completed Date: _____

Phase No.	Work Center	Breakdown of Work Description	Summary of Estimates					
			Est. Hrs.	Work Center	Labor Hours	Labor Cost	Mat. Cost	Total Est. Cost
1	72	DRUM CHOP APPROX. 40 ACRES OF TREES & BUSHES. PUSH LARGE TREES TO SIDE IN WINDROW. PUSH UP FIRING BERM AS PER SKETCH. PER. LT. REDMOND. REPAIR OP-5 ROAD AS PER SKETCH. HAUL IN CLAY TYPE SOIL OF MOUND AND COMPACT. ADD 4" LIFT OF GRAVEL ON ALL ROADS AND COMPACT. SLOPE LEFT SIDE.	314	72	314 252	4782		4782
				71	158 127	1882	9774	11656
				72	EQUIP	chg	481	481
				73	VEH	chg	328	328
2	71	CONTACT SHOP PLANNER TO HAVE	158					

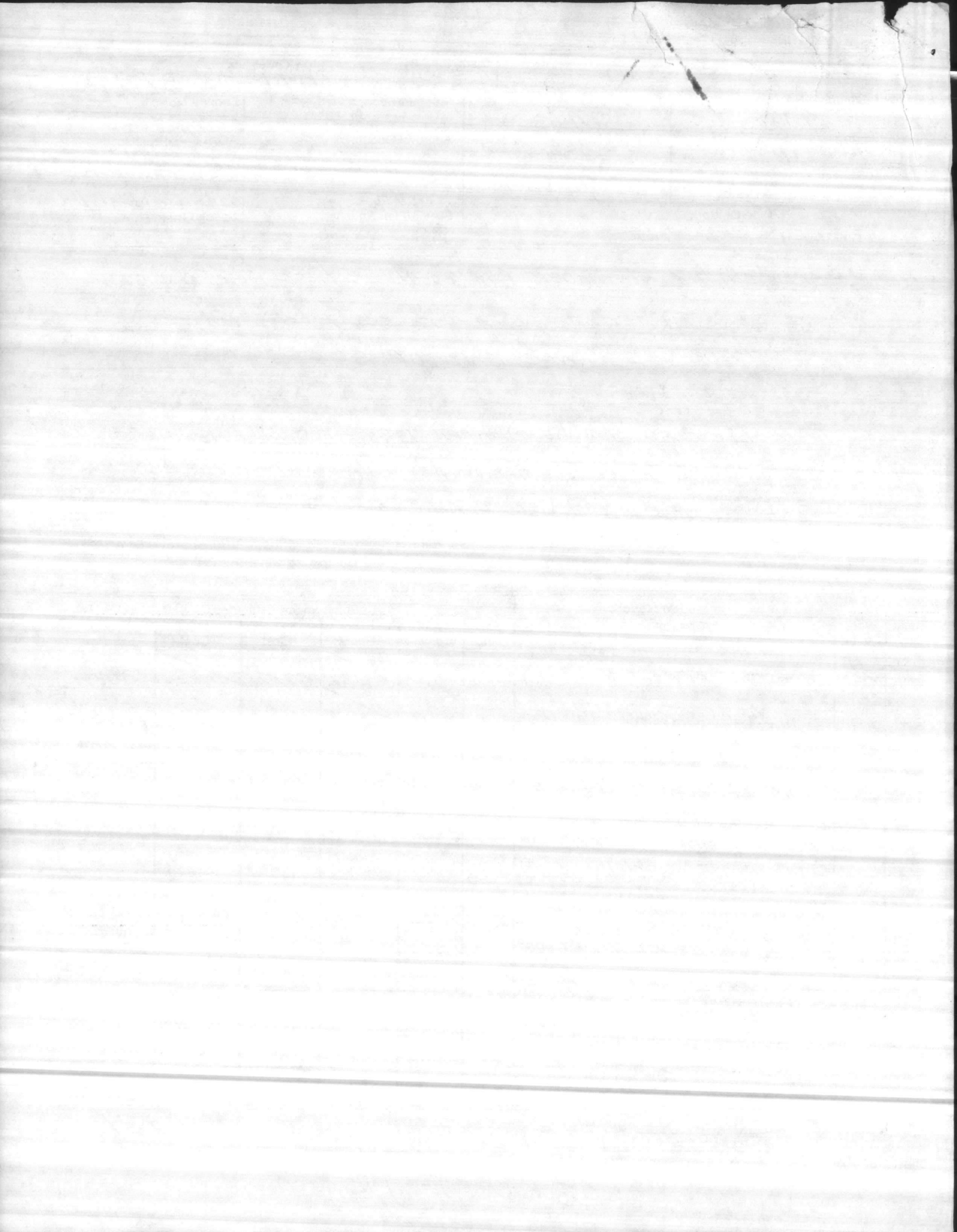
For Continuation See Sheets 2 Thru 2

Prepared By: Turner Reviewed By: Shan

Authorized By (Signature): Shan Date: 4-2-84

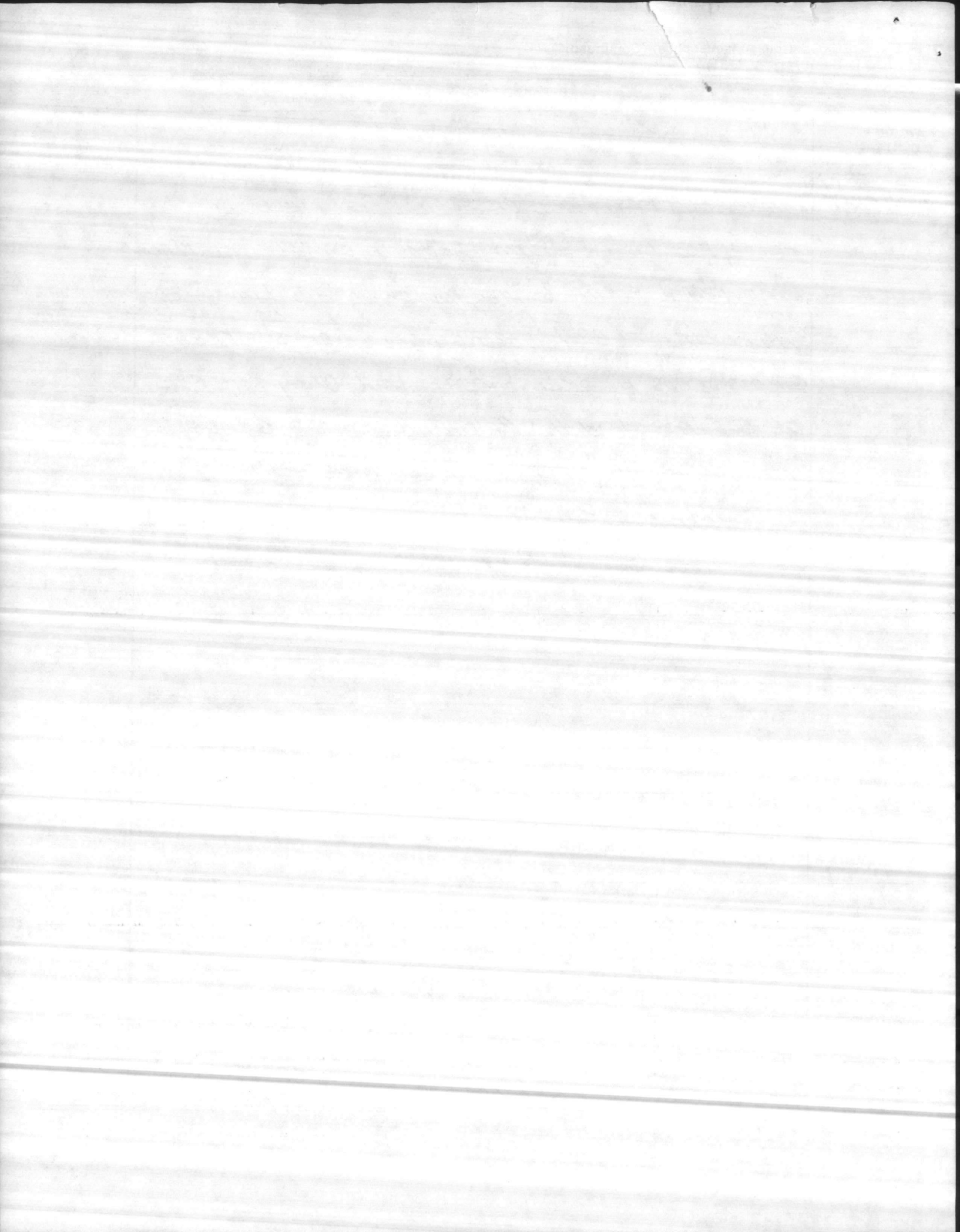
TOTALS 472 6664 10583 17247

3RD F, 521



BREAKDOWN OF WORK

WORK CENTER	DESCRIPTION	EST. HOURS
71 Cont	LIME AND FERTILIZER SPREAD IN OPEN FIELD by ON SLOW FCX AFTER DRUM CHOPPING COMPLETED. PLACE STRAW OVER FIRING BERM & MULCH IN SOIL. LIME, SEED AND FERTILIZE BOTH FIRING BERM & OP-5. SPREAD GRASS SEEDS IN OPEN AREA. HAUL CLAY SOIL FOR OP-5 & ASSIST WITH SPREADING SOIL & GRAVEL. USE BALES OF STRAW TO CONTROL POLLUTION IN JUMPING RUN CREEK. Sh# 6-10	
JOB ORDER NO.	3870	FACILITY NO. G-3 & OP-5



MAINTENANCE COST ESTIMATE WORKSHEET
 MCBCL 11011 (REV. 1-81)

01-5

DATE 3/19/84	REQ. NO. FAC LTR	UNIT ACS FAC	BLDG. NO. G-3 RANGE	NATURE OF WORK / CLEAR RANGE, CONSTRUCT MOUND & REPAIR OP-5	WORK CENTER 72
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AMOUNT	MATERIEL REQUIRED	SIZE	UNIT	UNIT COST	TOTAL COST	FOR SUPPLY USE ONLY
14	DOZER W/DRUM CHOP		HR	9.79	137.06	
16	LOADER, FRONT END		HR	4.76	76.16	
8	GRADER, MOTOR		HR	8.93	71.44	
16	DOZER (IN BARROW PIT)		HR	8.93	142.88	
8	LOW BED @ 6.43	VEH	CHG	51.44		

108	MAN HOURS @	WG-8	PER HOUR	14.18	TOTAL MAN DAYS	TOTAL MATERIEL	Equip chg	422.54	J.O. SERIAL NO. AM4-23-3870-2372T
206	MAN HOURS @	WG-10	PER HOUR	15.78		TOTAL LABOR		4782.12	
314	TOTAL MAN HOURS					TOTAL LABOR AND MATERIEL	Equip chg	5209.66	
					39.25				

REMARKS: NOTE: LT. REDMOND WILL GIVE LOCATION OF FIRING BERM.

SLOPE ROAD TO TOP OF MOUND ON THE LEFT SIDE - ASPHALT SWALE WILL BE INSTALLED.

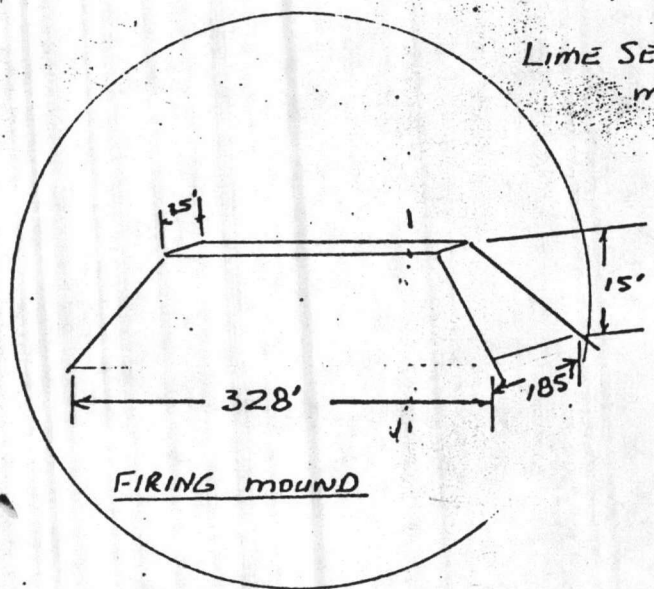
OTHER WORK CENTERS INVOLVED 71	SIGNATURE OF P & E G.D. Turner	DATE 3/30/84
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LIME AND FERTILIZE
THIS AREA WITH CONTRACTOR
AFTER DRUM CHOPPED

OVER SEED ALL AREA TO CON-
TROLL EROSIONS.

LIME SEED & FERTILIZE
MOUND



FIRING MOUND

ADD 8"-10" OF CLAY SOIL
BASE WITH 4" LIFT OF
GRAVEL

LIME SEED & FERTILIZE
BY HAND

CORRECT EROSION
PROBLEM

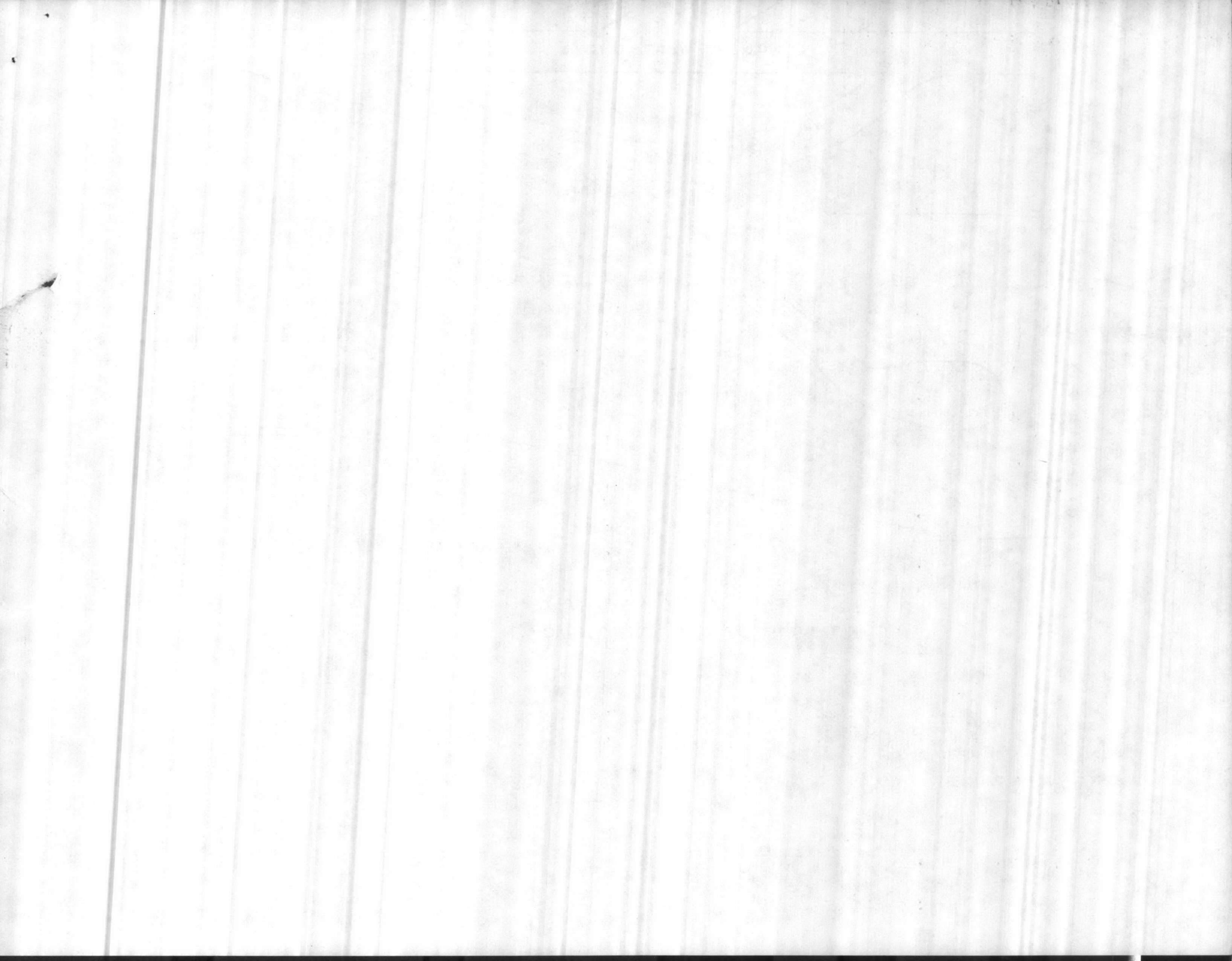
OP-5

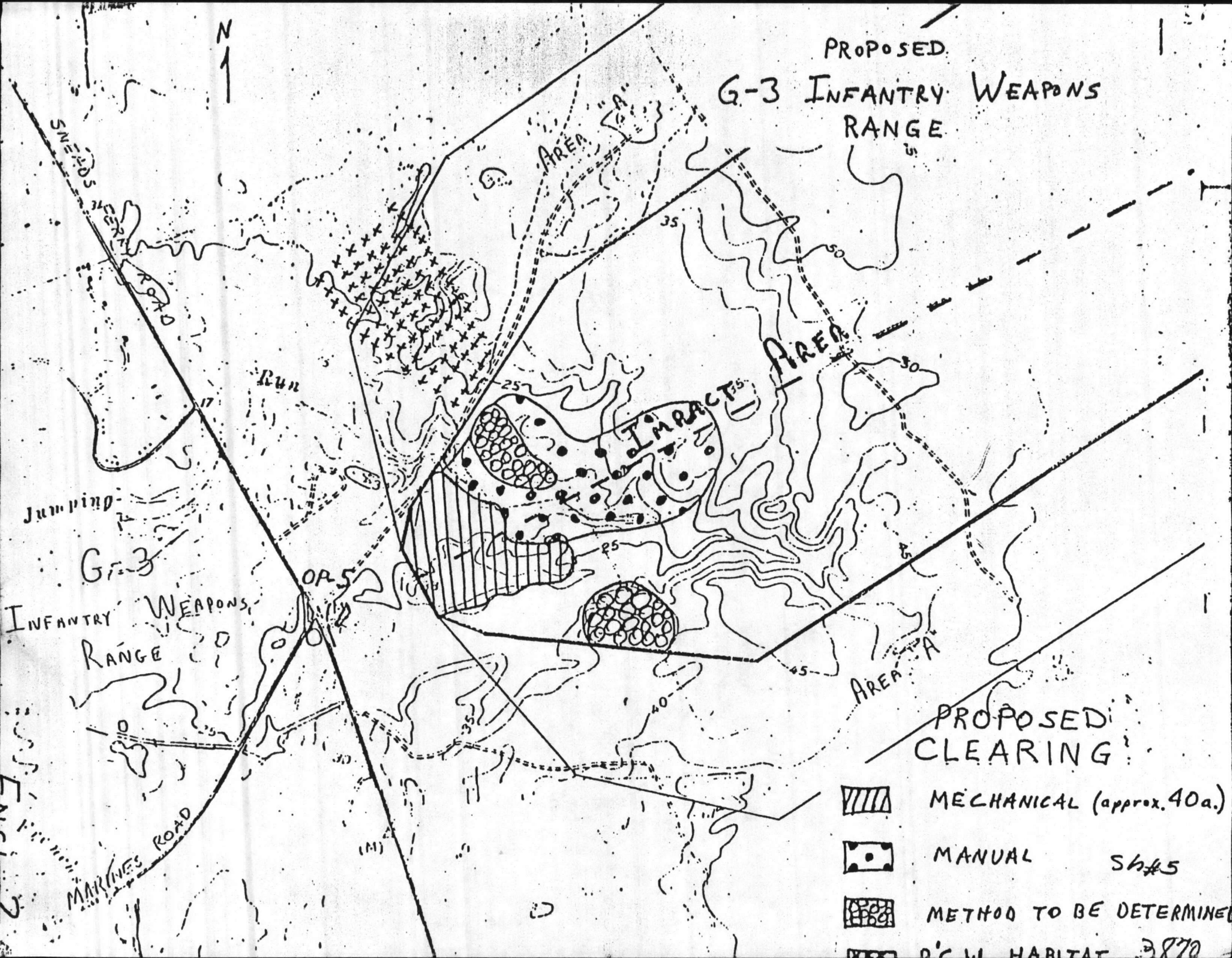
GRAVEL AREA/ROAD

SNEAD FERRY ROAD

SH#4

2970







MAINTENANCE COST ESTIMATE WORKSHEET
 MCBCL 11011 (REV. 1-81)

DP-5

DATE 3/9/84	REQ. NO. FAC LTR	UNIT FAC ACS	BLDG. NO. G-3 RANGE	NATURE OF WORK / CLEAR RANGE, CONSTRUCT MOUND & RETAIN DP-5	WORK CENTER 71
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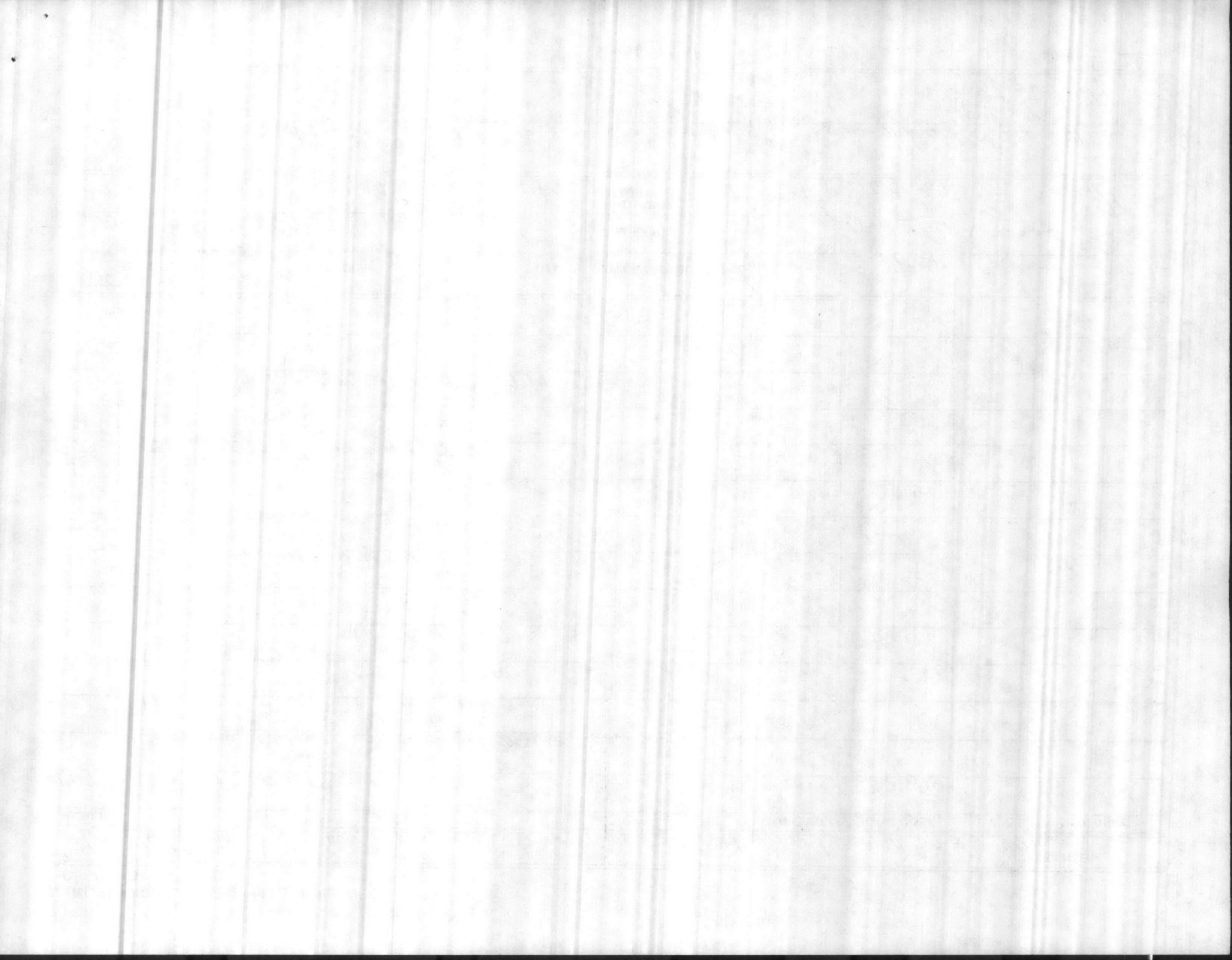
AMOUNT	MATERIEL REQUIRED	SIZE	UNIT	UNIT COST	TOTAL COST	FOR SUPPLY USE ONLY
469	GRAVEL "ABC"		TN	7.10	3329.90	
	<u>SCREEN SIZE OPENING</u>	<u>PERCENT PASSING</u>				
	1 1/2"	100				
	1"	75-97				
	1/2"	55-79				
	#9	35-55				
	#10 ABRASION NO MORE 55% LOSS	25-45				
	#40 SOUNDNESS NO MORE 15% LOSS	14-30				
	#200	4-12				
5 5/8	EAST COAST LIMESTONE, INC					
	RT. 1 - BOX 9A					
	MAPLE HILL, N.C. 28454 Ph #259-9114					

52 MAN HOURS @ W6-2 PER HOUR 9.26	TOTAL MAN DAYS	TOTAL MATERIEL	9773.91	J.O. SERIAL NO. 3870
26 MAN HOURS @ W6-6 PER HOUR 12.59		TOTAL LABOR	1882.46	
80 MAN HOURS @ W6-7 PER HOUR 13.42		TOTAL LABOR AND MATERIEL	11656.37	
158 TOTAL MAN HOURS		19.75		

REMARKS:

CONSTRUCT ROAD TO TOP OF MOUND TO SLOPE TO LEFT SIDE OF ROAD - ASPHALT SWALE WILL BE INSTALLED.

OTHER WORK CENTERS INVOLVED 72	SIGNATURE OF P & E A.D. Turner	DATE 3/30/84
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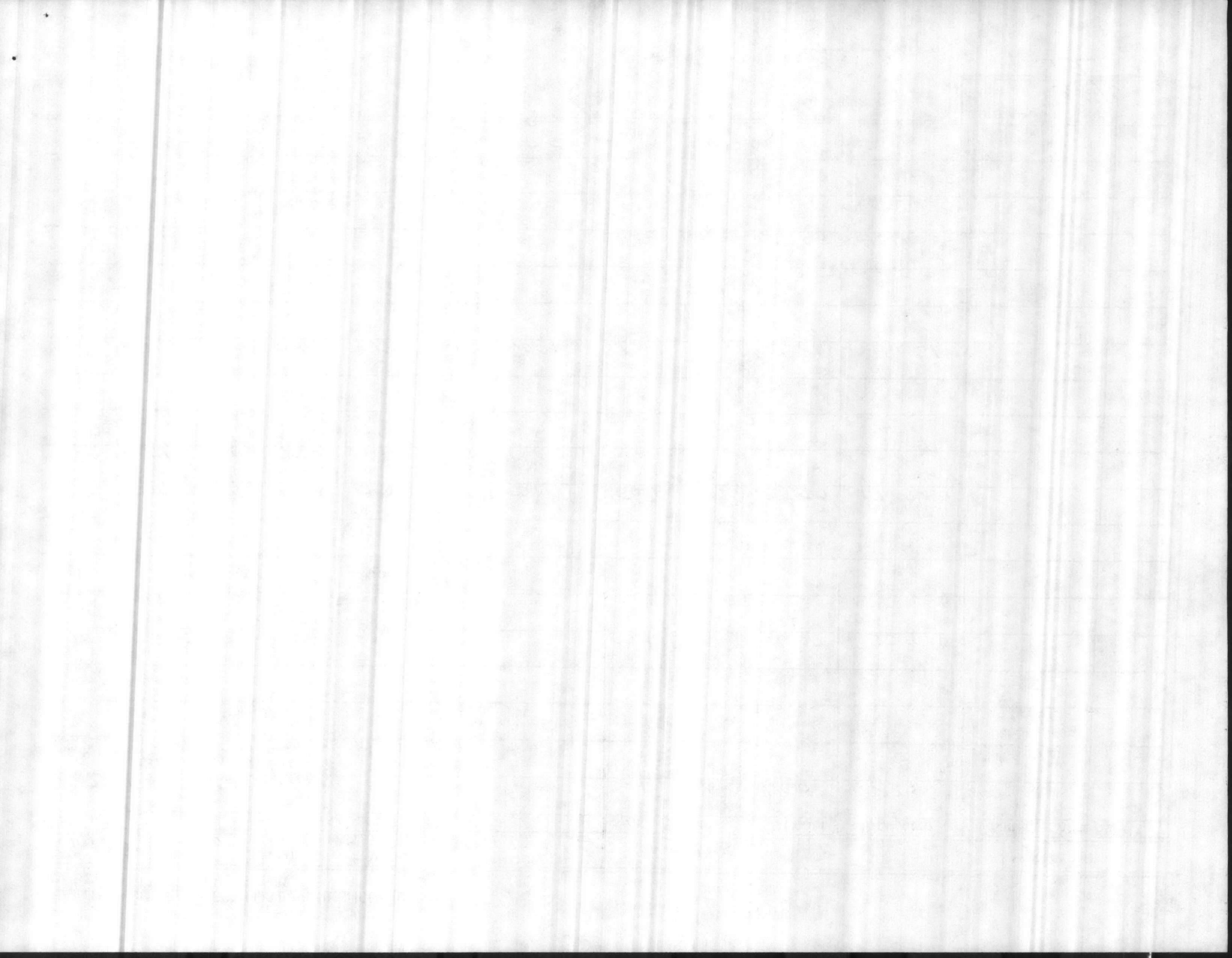
MAINTENANCE COST ESTIMATE WORKSHEET (Cont'd)
 MCBCL 11011/1 (REV. 1-81)

DP-5

DATE 3/9/84	REQ. NO. FAC LTR	UNIT FAC ACS	BLDG. NO. G-3 Range	NATURE OF WORK G-3 & DP-5	WORK CENTER 77
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AMOUNT	MATERIAL REQUIRED	SIZE	UNIT	UNIT COST	TOTAL COST	FOR SUPPLY USE ONLY
122	LIME AGRICULTURE (MATERIAL TO BE SPREAD by hand)	50lb	bg	1.50	183.00	
5 5/8	ONSLow FCX, JACKSONVILLE, N.C.					
14	RYE GRASS SEED (MATERIAL TO BE SPREAD by hand)	50lb	bg	16.00	224.00	
5 5/8	ONSLow FCX, JACKSONVILLE, N.C.					
13	BERMUDA GRASS SEED (HILLED)	50lb	bg	137.50	1787.50	
5 5/8	ONSLow FCX, JACKSONVILLE, N.C.					
31	FERTILIZE 88-8 8720-00-C90-0001	50lb	bg	3.21	99.51	
215	WHEAT STRAW	40lb	BALE	2.00	430.00	
5 5/8	ONSLow FCX, JACKSONVILLE, N.C.					

J.O. SERIAL NO.
3870

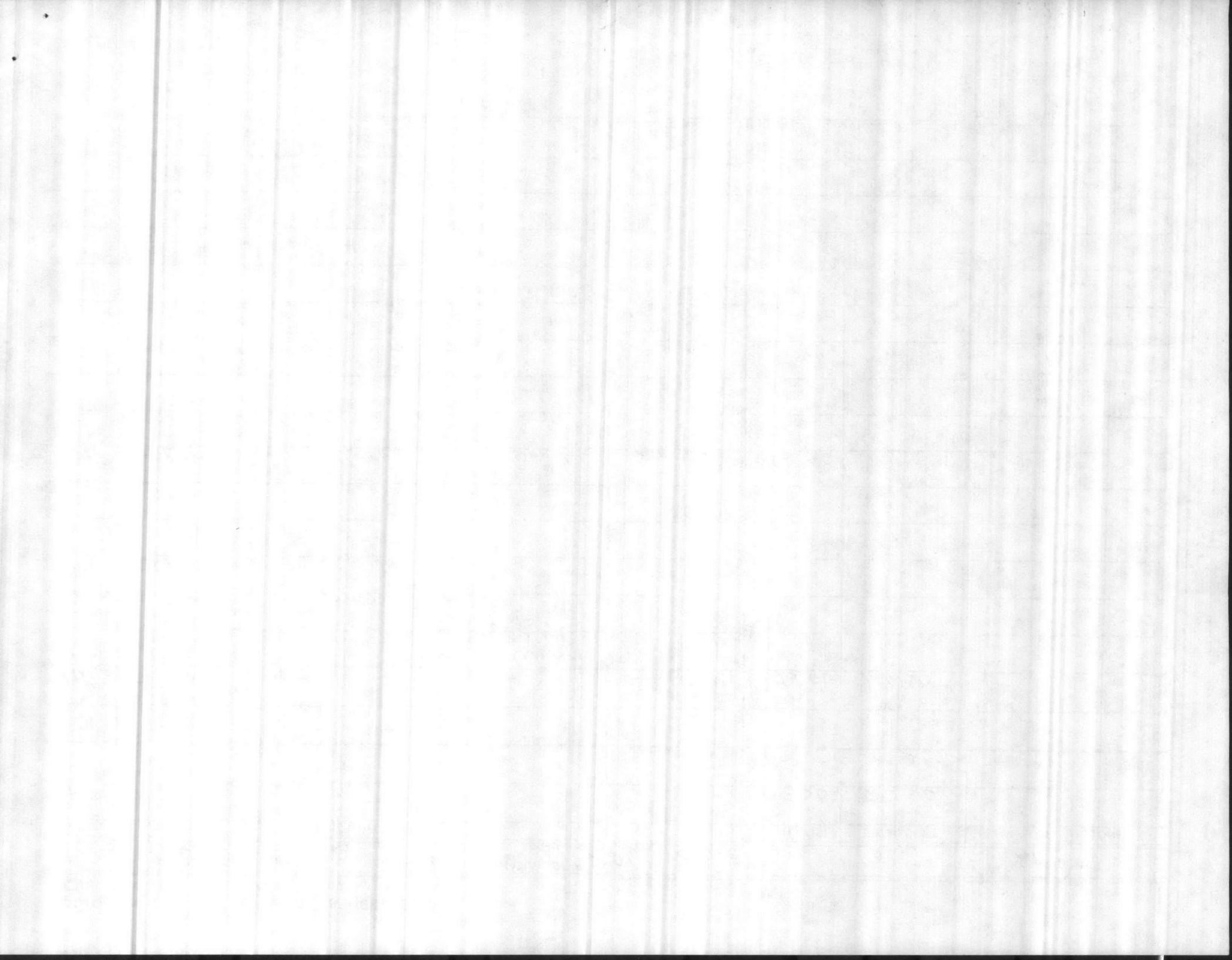


MAINTENANCE COST ESTIMATE WORKSHEET (Cont'd)
 MCBCL 11011/1 (REV. 1-81)

OP-5

DATE	REQ. NO.	UNIT	BLDG. NO.	NATURE OF WORK			WORK CENTER	
3/9/84	FAC LTR	ACS FAC	G-3 Range	Seed & lime & fert.			71	
AMOUNT	MATERIEL REQUIRED			SIZE	UNIT	UNIT COST	TOTAL COST	FOR SUPPLY USE ONLY
80	LIME AGRICULTURE				TN	28.00	2240	
10	FERTILIZER 8-8-8				TN	148.00	1480	
	(Contracted) ABOVE MATERIAL IS TO BE SPREAD BY ONSLOW FCX. AT ONE APPLICATION.							
5 1/2	ONSLOW FCX, JACKSONVILLE, N.C.							
26	FIELD TRACTOR W/SPREADER TO LIME & FERTILIZER MOUNT & OP-5 @ 2.06			EQUIP	CHG	53.56		
8	CARGO TRUCK @ 2.23			VEH	CHG	17.84		
80	DUMP TRUCK @ 3.24			VEH	CHG	259.20		

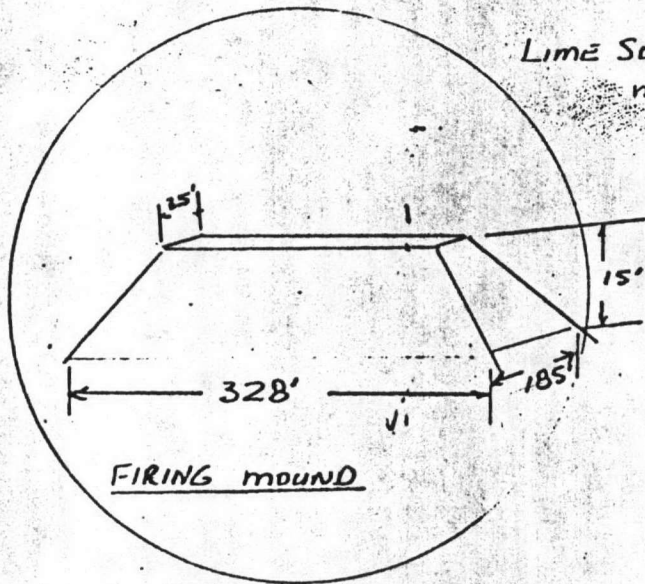
J.O. SERIAL NO. 3870.
 SHEET 8



LIME AND FERTILIZE
this AREA with contractor
AFTER DRUM CHOPPED

OVERSEED ALL AREA TO CON-
TROLL EROSIONS.

LIME SEED & FERTILIZE
MOUND



ADD 8"-10" OF CLAY SOIL
BASE WITH 4" LIFT OF
GRAVEL

LIME SEED & FERT.
BY HAND

OP-5

CORRECT EROSION
PROBLEM

GRAVEL AREA/ROAD

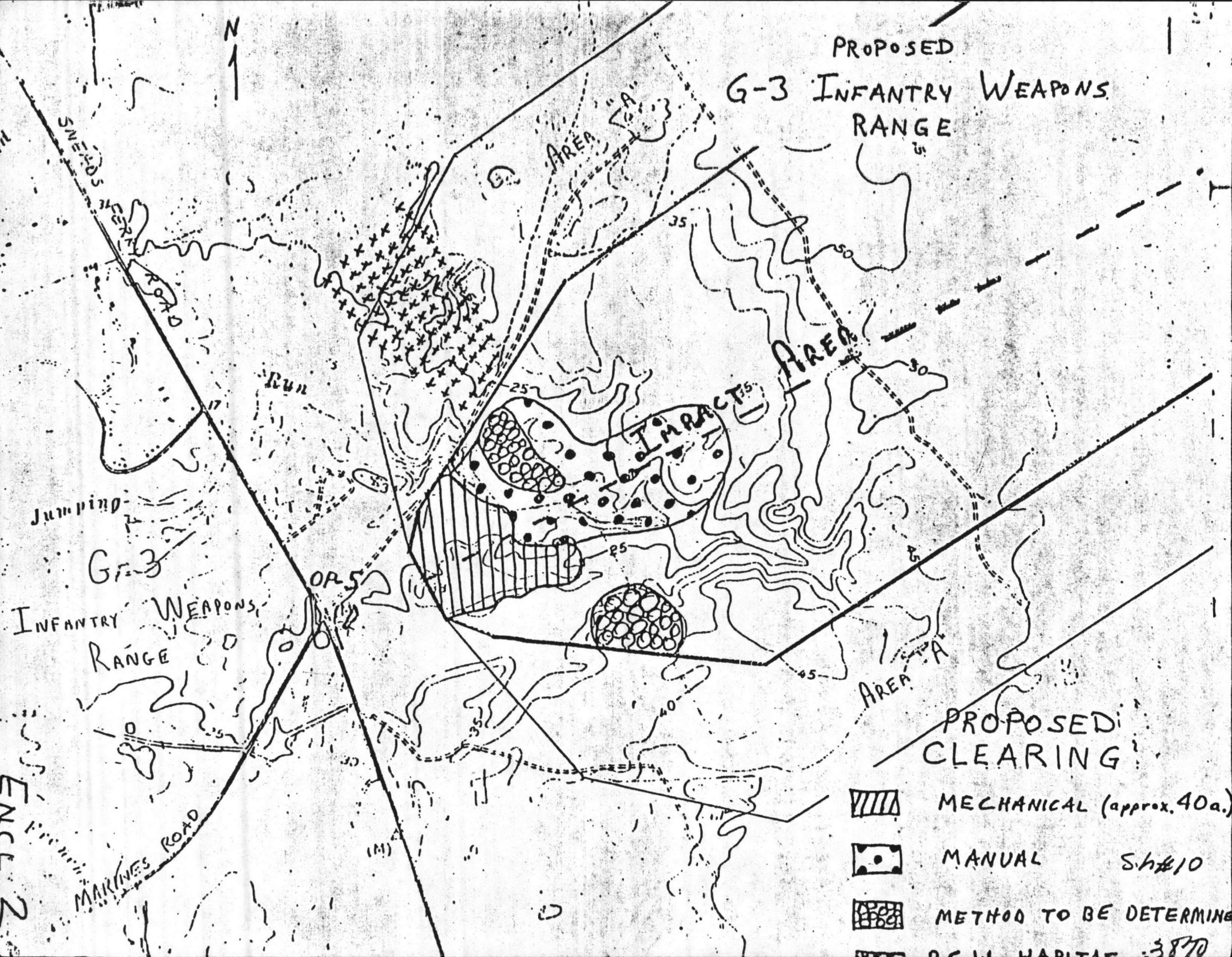
SNEAD FERRY ROAD

Sh# 9

2870



PROPOSED
G-3 INFANTRY WEAPONS
RANGE



SNEEDS ROAD

JUMPING

G-3
INFANTRY WEAPONS
RANGE

MARINES ROAD

Run

OR 5

AREA A

IMPACT AREA

AREA B

AREA A

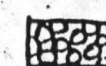
PROPOSED
CLEARING



MECHANICAL (approx. 40a.)

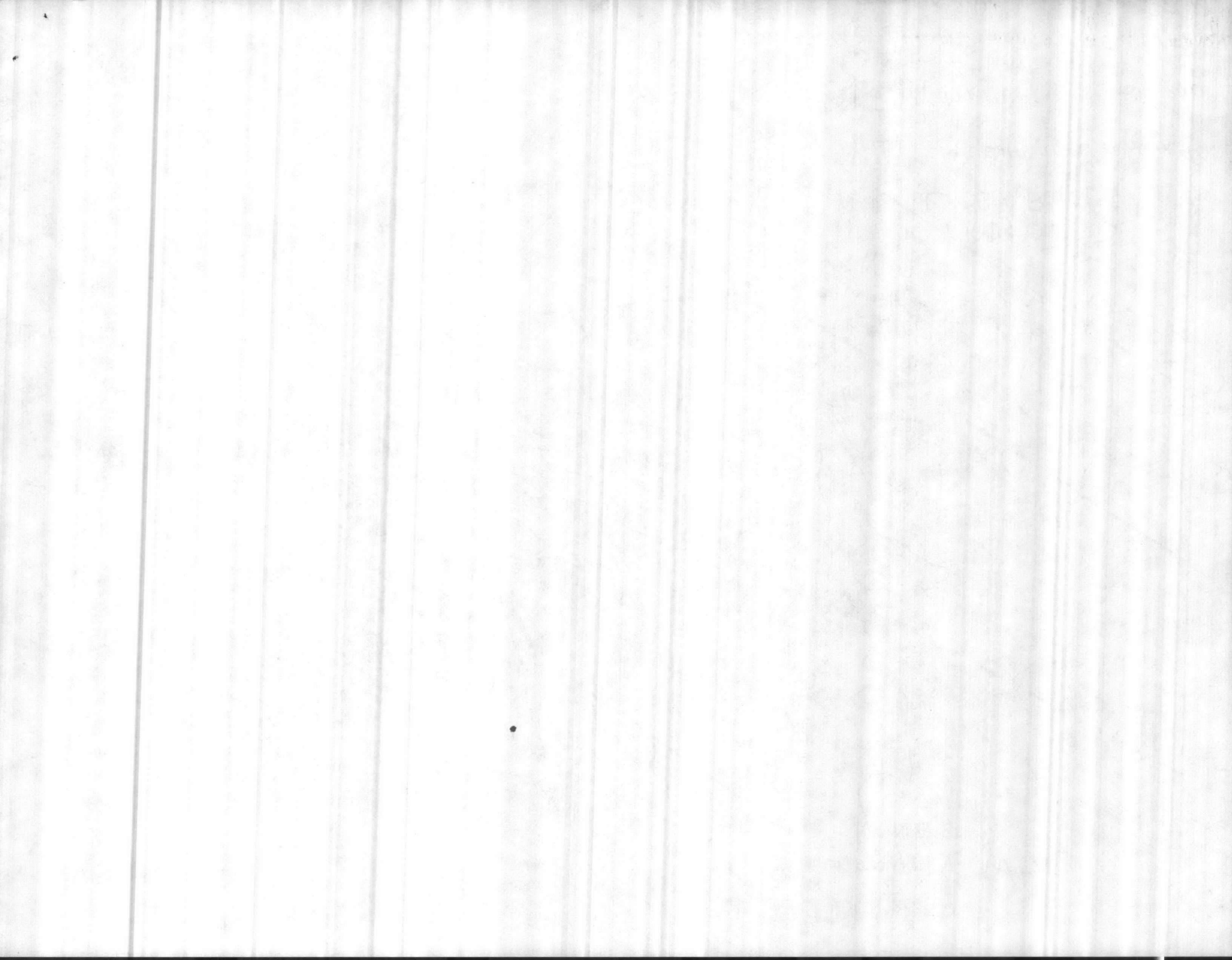


MANUAL S#10



METHOD TO BE DETERMINED

3870



JOB PHASE CALCULATION SHEET

WORK SITE

G-3 Range & OP-5

INSTRUCTION: This form should be used for both EPS and NON-EPS estimates.

1. CRAFT PHASE NO.

2. JOB PHASE NO.

3. JOB IDENTITY NO.

4. DATE

9 MAR. 1984

5. WORK CENTER NO. AND TITLE

71

6. JOB PHASE DESCRIPTION

Construct Range & repair OP-5

7. REFERENCE	8. TASK DESCRIPTION	9. EPS ESTIMATED TIME			10. NON-EPS ESTIMATED TIME
		UNIT HOURS a.	OCCUR-RENCE b.	CRAFT TIME c.	
35-L RT-42	Clear area Approx 40 acres with tractor (Lime & fertilizing by contractor)	16.0	1	16.0	
27- RT-19	OP-5 & Berm by hand Seed area (421' x 2 = 842' x 45 = 37,890 SF + Berm) 67,542 = 105,432 SF ÷ 1000 SF = 105.44 acc	.023	105.44	2.5	
27- RT-19	Fertilizing & lime OP-5 & Berm 105.44 acc x 2 = 210.88 acc	.023	210.88	4.9	
Est	Place straw on jing Berm				16
PWA-2	Hand clay type soil for OP-5 zone 5 405 cy ÷ 5 = 81 loads	.55	81	44.6	
16-F WT-34	assist with spreading gravel 1% by hand 247 cu yd x .01 = 2.47 cy	2.9	1	2.9	
PWA-5	AmH. Seed seed, fertilize & lime 7633 Lb ÷ 100 = 76.33	.11	76.33	8.4	
Est	Install sedimentation control facilities				24

$67,542 \text{ SF} \div 1000 = 67.55$

lime - $90 \text{ LL/P} \times 1000 \text{ SF} \times 67.55 \text{ acc} = 6079 \text{ Lb} \div 50 = 122 \text{ bag}$

fertilizer - $23 \text{ Lb} \text{ P} \div 1000 \text{ SF} \times 67.55 \text{ acc} = \frac{1554 \text{ Lb} \div 50}{7633 \text{ Lb}} = 31 \text{ bag}$

TOTALS (Craft & Estimated Time)

80

40

TOTAL (EPS from Nomograph)

118

TOTAL JOB PHASE TIME

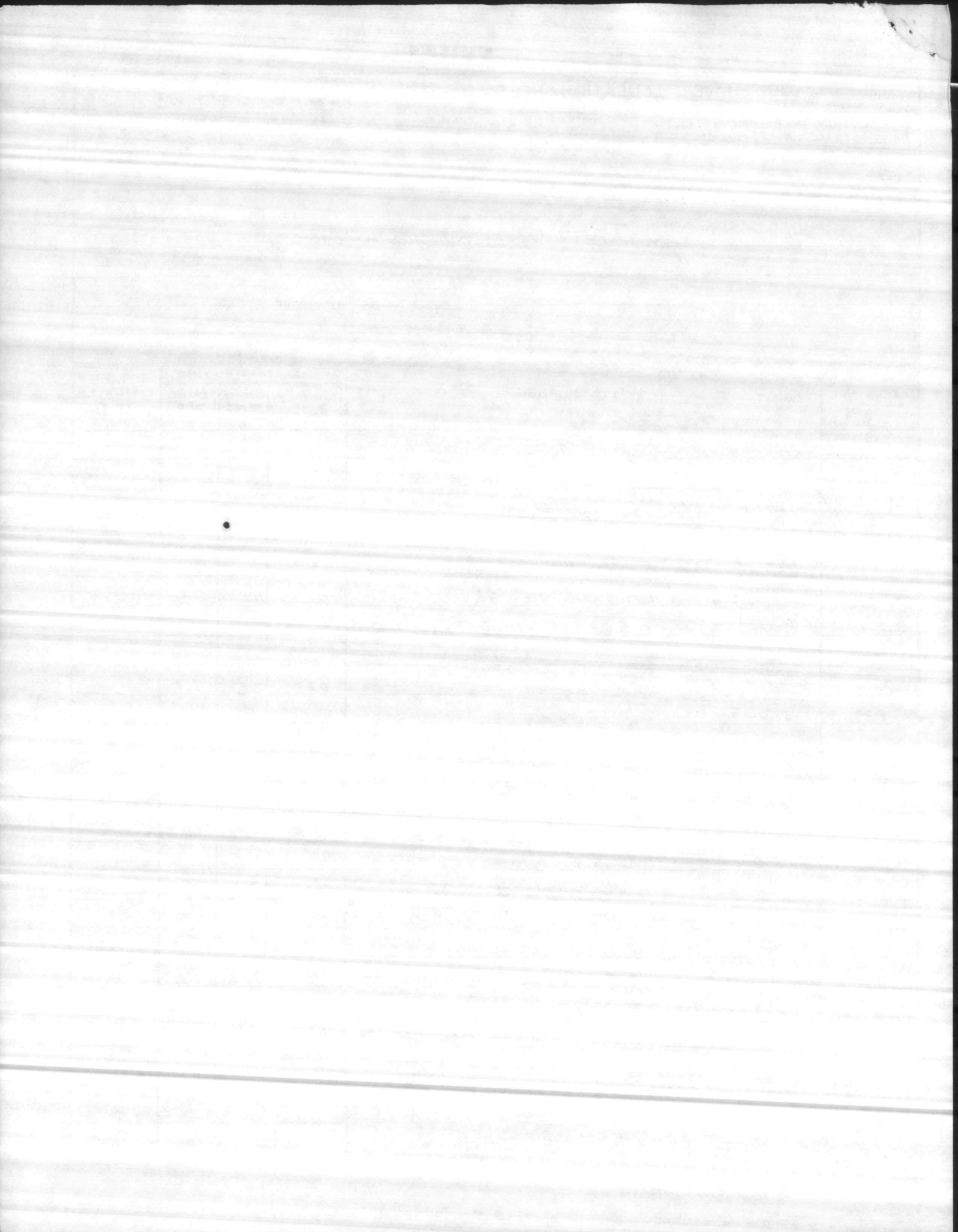
158

DD FORM 1 NOV 78 2167

SN 0102-LF-002-1670

SHEET OF

Control work
Est 40 acc
SP @ K = $20000 \div 2000 = 10 \text{ TONS}$





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

rec'd 28 mar,

IN REPLY REFER TO
 FAC/REA/nh
 6280/1

9 MAR 1984

START WORK 4.5.84

From: Commanding General
 To: Distribution List

Subj: Proposed G-3 Infantry Weapons Range; review of environmental considerations and completion schedule by Environmental Impact Review Board

Ref: (a) BO 11000.1A
 (b) BO 11015.2G
 (c) Liaison mtg btwn 1stLt REDMOND, Range Control; Mr. Cone, BMain Operations; and Maj BARNETSON, AC/S Fac

Encl: (1) AC/S Trng ltr RCTL/HBR/kes over 11000 dtd 11 Jan 84
 (2) Site map, proposed clearing

1. Request that enclosure (1) be reviewed in accordance with references (a) and (b). Enclosure (2) represents the area and proposed clearing techniques. Concurrent with this review, project estimating and planning will proceed. Target date for construction to begin is 5 April, pending the outcome of the Board meeting. Timing for this project is critical in that the G-10 Impact Area must be closed during the EOD sweep and until clearing is complete. All work discussed during reference (c) must be complete by 26 April 1984.

2. A meeting of the subject Board has been scheduled at 0930 on Wednesday, 21 March 1984 in the Conference Room, Building 1 to discuss this proposal.

3. Points of contact for this review are Maj Barnettson and Mr. Alexander, ext 3034/3035, for project planning and environmental review, respectively.

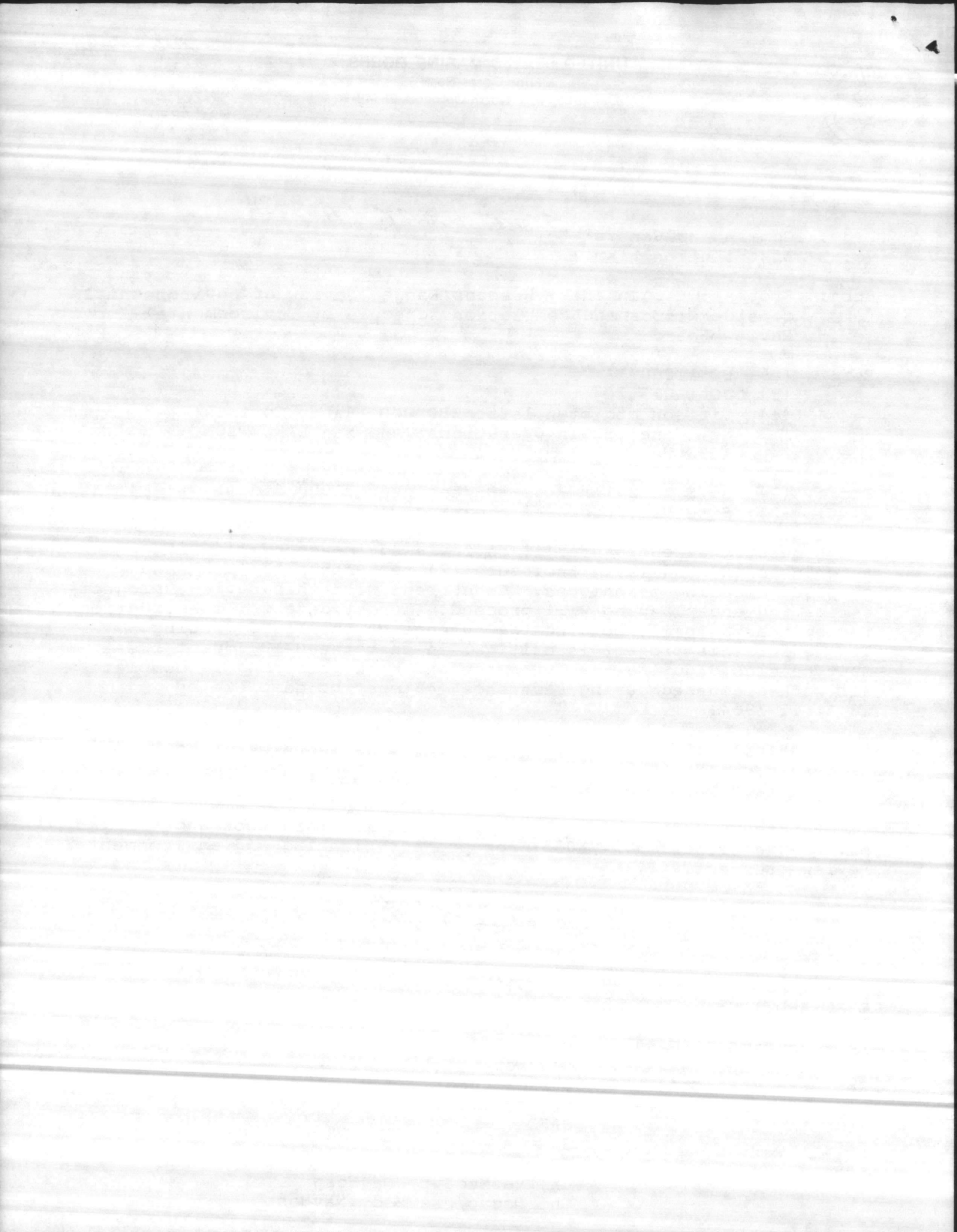
B. W. ELSTON
 By direction

DISTRIBUTION:

(Members)
 Rep, 2d MarDiv (G-4)
 Rep, 2d FSSG (G-4)
 Rep, 6th MAB (G-4)
 Rep, MCAS(H), NR (S-4)
 TFACO
 BMO
 PWO

(Advisors)
 Dir, NREA
 SupvEcologist
 BWildlifeMgr
 BGameProtector
 SAFD
 SJA
 DPDO
 Ch, VetMedSvc, NavHosp
 Ch, Occup/PrevMed, NavHosp

3870





UNITED STATES MARINE CORPS
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA 28542

IN REPLY REFER TO
PCTL/HBR/kes
11000
11 Jan 84

From: Range Control Officer
To: Assistant Chief of Staff, Facilities
Via: Assistant Chief of Staff, Training *12 JAN 84*

Subj: Infantry Weapons Range G-3; request for establishment of
Ref: (a) MCO P3570.1A/AR 385-63
Encl: (1) Map showing Proposed Range
(2) Preliminary Environmental Assessment (PEA)
(3) Description of Proposed Range

1. Introduction of new weapon such as the MK-19, 40mm gun system has established a requirement for Marine Corps Base, Camp Lejeune, North Carolina to provide a live fire training range for use of this weapon system and others, such as the SMAW and Dragon. At the current time no range currently exists that will accommodate the MK-19 Gun System. Because there is also a need for an Infantry Weapons Range on the east side of New River, it is requested the Range G-3 (Infantry Weapons Range) be established to meet these requirements.

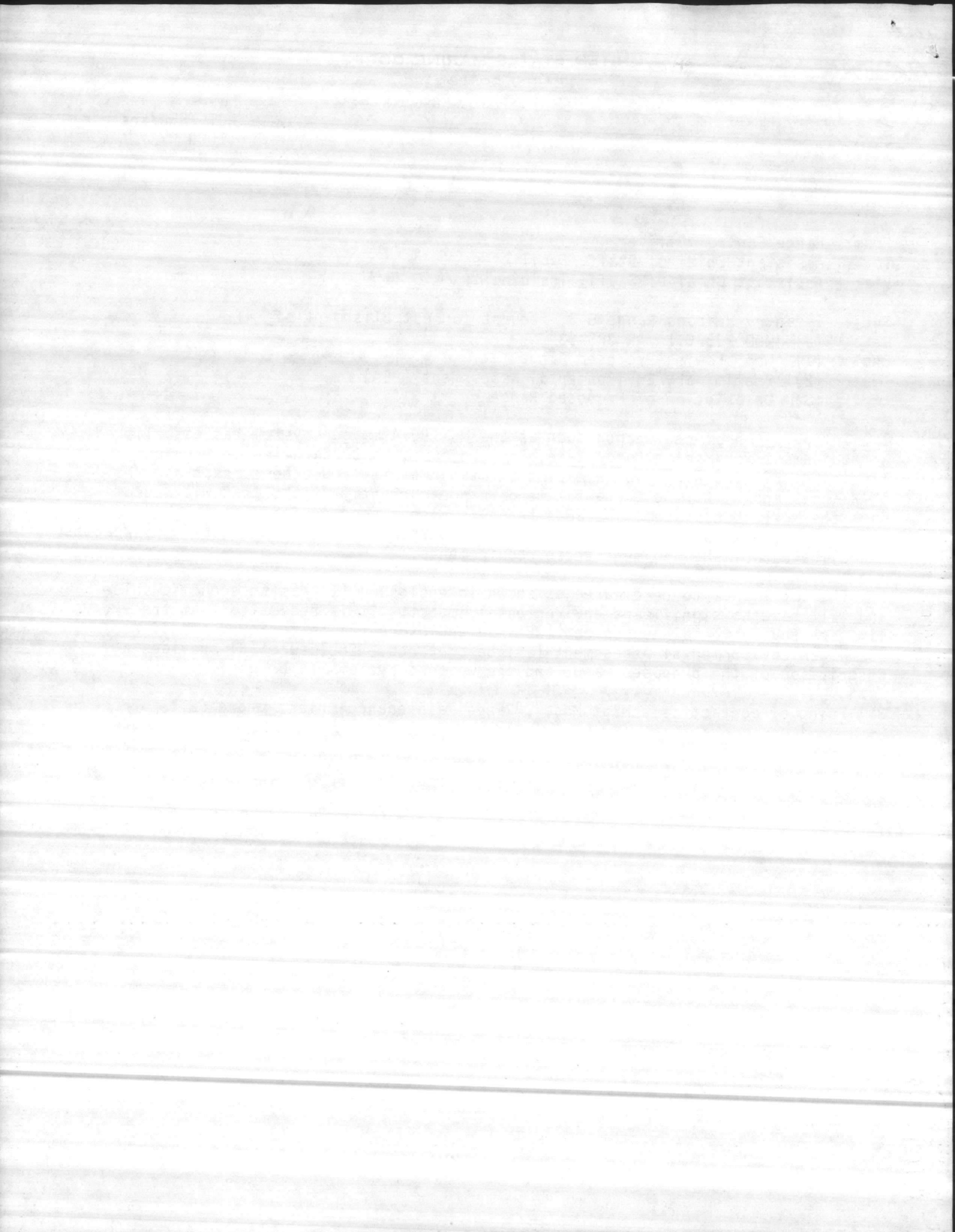
2. The total area to be cleared is shown in enclosure (1) has no economic value and will have no significant environmental impact. It is requested that the Preliminary Environmental Assessment (PEA) in enclosure (2) be reviewed and if necessary, an Environmental Assessment (EA) be prepared. Enclosure (3) provides a description of the proposed range and the weapons systems to be used.

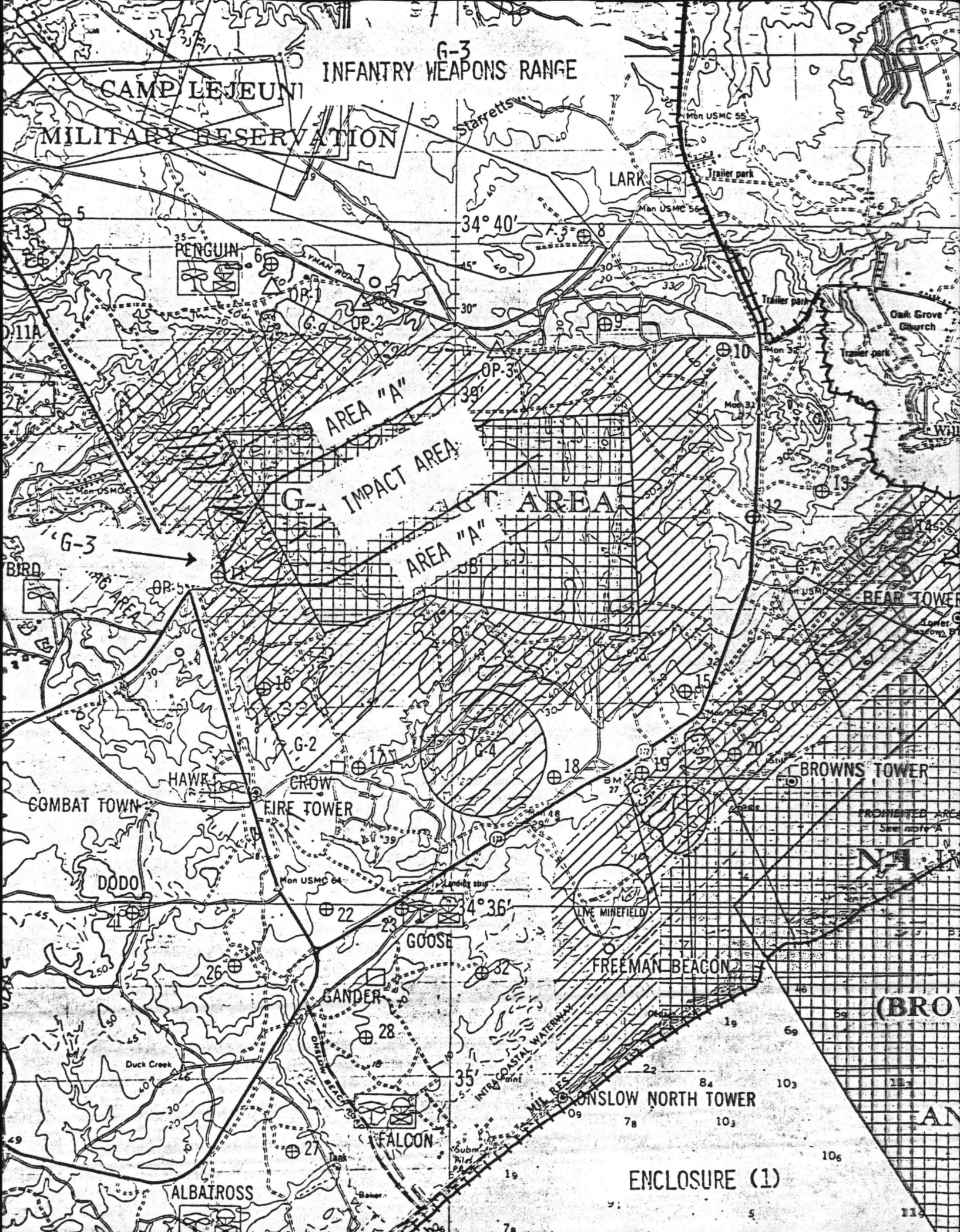
3. Point of contact is: MSgt Moses, Range Maintenance Chief, phone 5211.

[Handwritten Signature]
K. W. ZIYZ

3879

ENCL 1





G-3
INFANTRY WEAPONS RANGE

CAMP LEJEUNE

MILITARY RESERVATION

LARK

PENGUIN

AREA "A"

G-3 IMPACT AREA

AREA "A"

Oak Grove Church

Trailer park

Trailer park

Trailer park

Trailer park

Trailer park

Trailer park

Trailer park

Trailer park

Trailer park

Trailer park

Trailer park

Trailer park

Trailer park

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Trailer park

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Trailer park

COMBAT TOWN

HAWK

FIRE TOWER

DODO

GOOSE

FREEMAN BEACON

Duck Creek

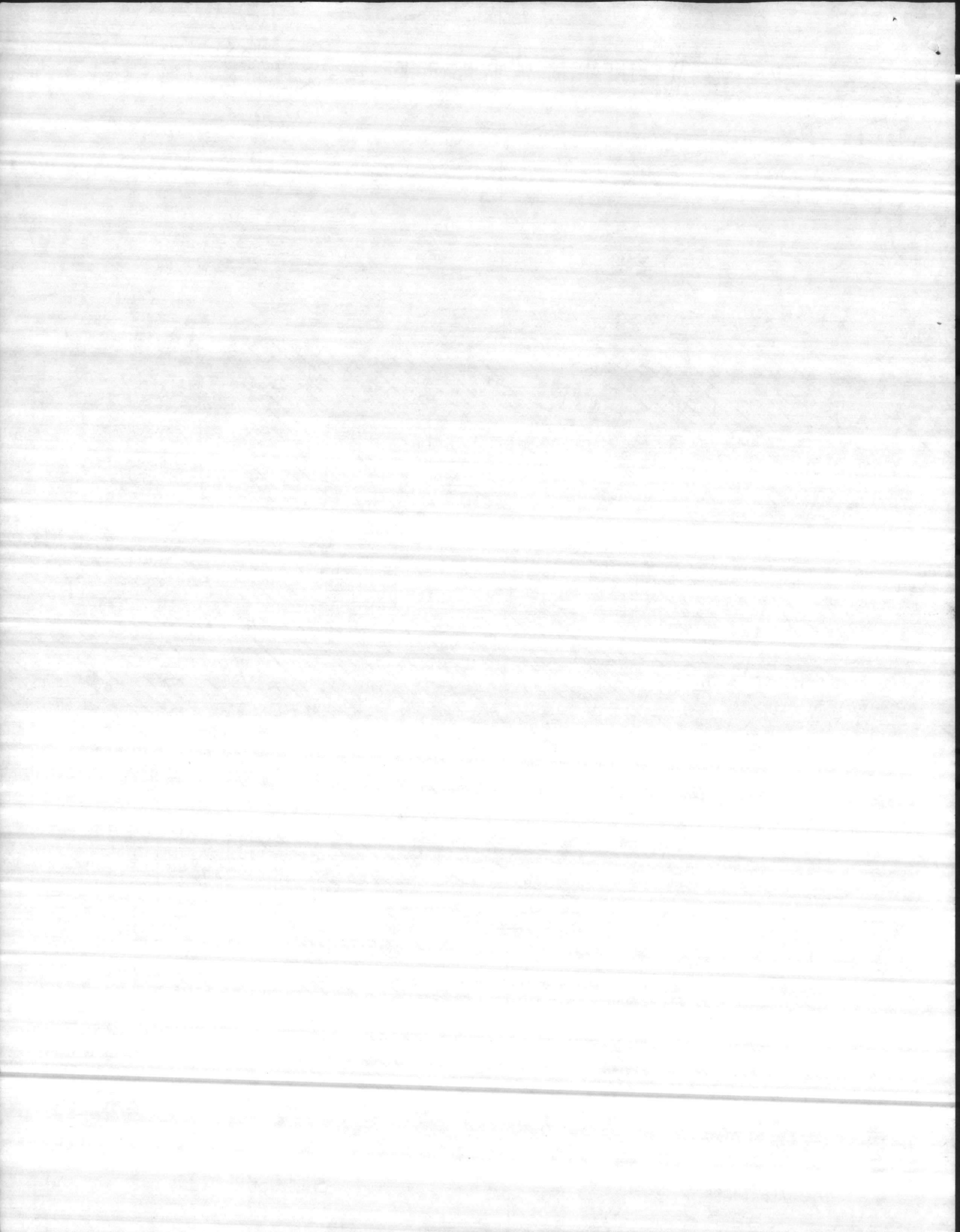
GANDER

FALCON

ALBATROSS

ONSLOW NORTH TOWER

ENCLOSURE (1)



PRELIMINARY ENVIRONMENTAL ASSESSMENT
FOR
G-3 INFANTRY WEAPONS RANGE

1. Enclosures. Map showing proposed range.

2. Purpose and Need

a. The purpose of this proposed action is to provide the Marine Corps Base (MCB), Camp Lejeune, North Carolina with a multi-purpose "Infantry Weapons Range". This range will be used to:

(1) Teach grenade launcher firing techniques and to prepare grenade combat situations.

(2) Teach the skills needed to defeat armored vehicles with light antiarmor weapons.

(3) Teach the techniques of firing flash weapons at point and area targets.

(4) Teach mortar crews and forward observers to maintain technical proficiency in mortar firing.

(5) Teach the techniques of engaging targets with medium and heavy antiarmor weapons.

(6) Teach firing at targets comparable to battlefield ranges developing speed in target engagements, and developing confidence in individual ability.

b. Project Description

(1) This project generally consists of the following:

(a) Removal of brush and trees.

(b) Construction of a firing berm.

(c) Landscaping of the range to establish permanent grasses for erosion control and to facilitate maintenance.

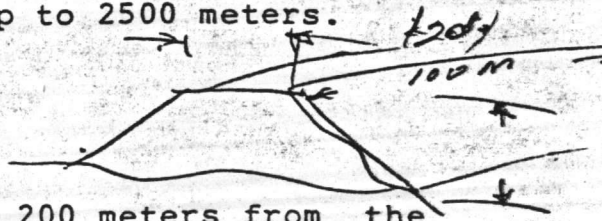
EOD 0558
LT Redmond
Ry Control
establish 3920
5803

c. Site Selection. The site is located on Enclosure (1). The location is currently part of the surface danger area for Range G-10 and will utilize some of the existing targets in the G-10 Impact Area. The site was selected because the terrain allows for visibility of targets at ranges up to 2500 meters.

d. Range Characteristics

Firing Line Width - 100 meters

Target Area Width - 350 meters at 200 meters from the





firing line expanding out to 1200 meters at 960 meters from the firing line.

Minimum Range Depth - 2500 meters

Target Configuration - Static personnel and material targets.

e. Compliance With Environmental Requirements

(1) Air Quality: No emissions are anticipated.

(2) Land Quality: Erosion control measures will be included in the project design. Construction management will provide preventive measures to contain all sediment on site. Reseeding of disturbed areas and vegetative cover on the cleared area will be accomplished within 30 days of completion of construction.

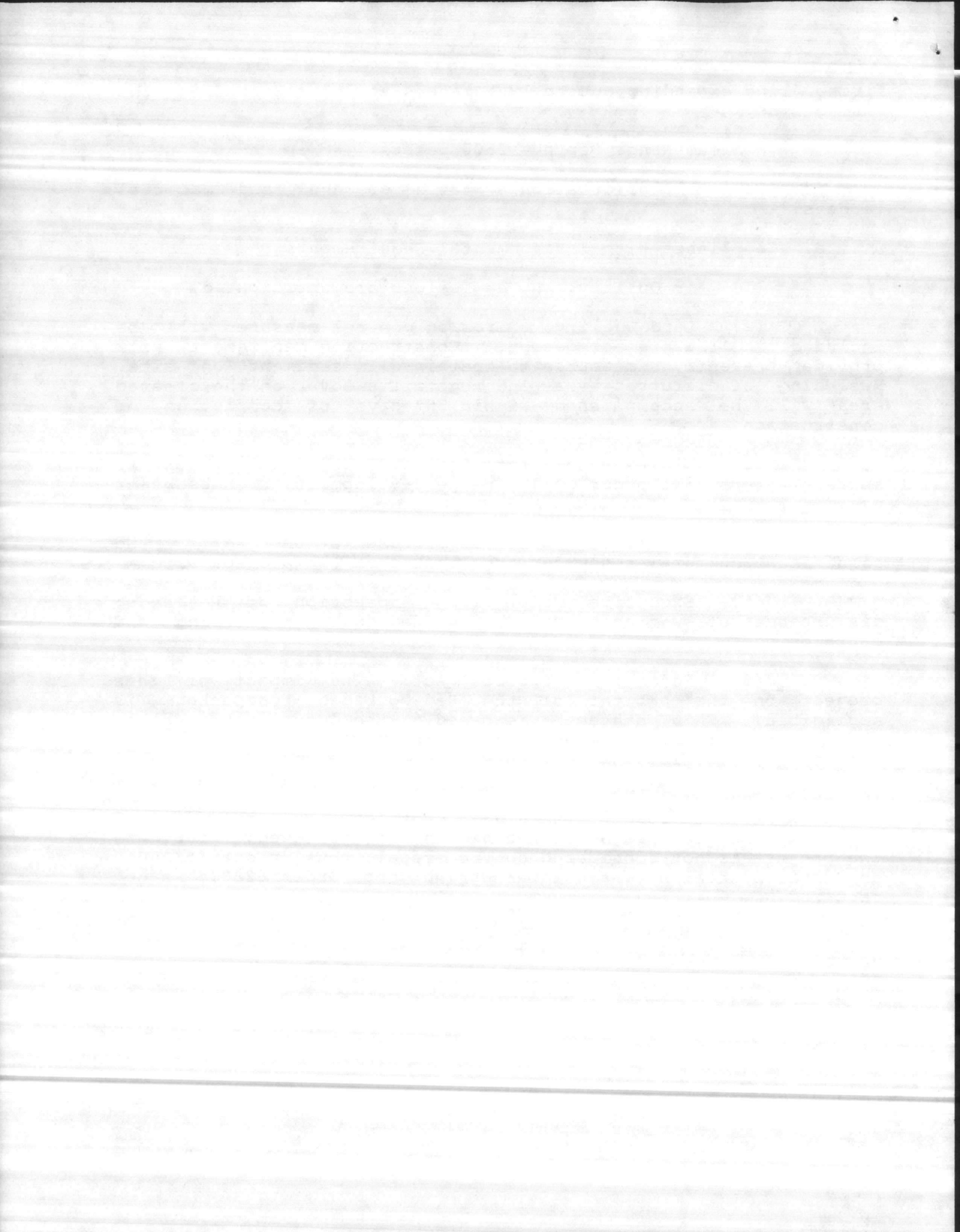
(3) Clean Water Act: No discharge of wastes to surface waters will occur during range development or subsequent use.

(4) National Historic Preservation Act: No significant cultural resources are located on the project site.

(5) Executive Order 11990 Protection of Wetlands: disturbance of wetlands will be avoided during clearing and earthmoving.

(6) Endangered Species Act: The impact of this project on the habitat of the Red-Cockaded Woodpecker is negligible. This statement is based on the determination that the habitat of this species does not occur within the area to be affected by clearing and earthwork.

f. Conclusion. The development for G-3 Infantry Weapons Range will not result in significant environmental impact provided the measures described herein are followed. further, the project is not considered controversial, thus, preparation of an Environmental Assessment per Marine Corps Order 6280.5 is not required.

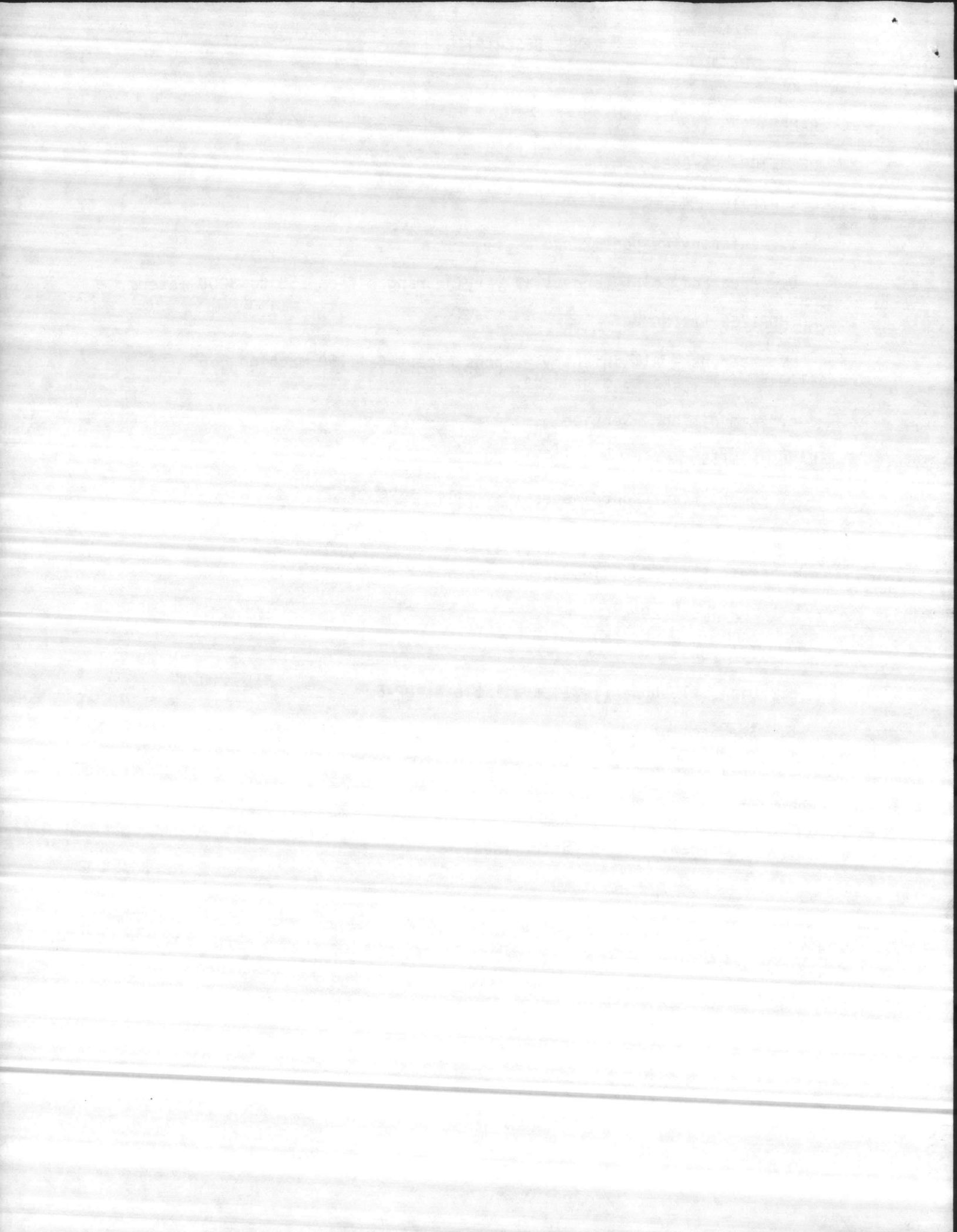


RANGE DESCRIPTION

1. RANGE G-3
2. LOCATION GS 8934
3. DESCRIPTION
 - a. Infantry Weapons Range
 - b. Area and point targets at varying ranges from 150 to 3000 meters.
4. AUTHORIZED FIRING
 - a. Weapons - All infantry weapons except Cal. 50 machine gun 106mm recoilless rifle, and hand grenade.
 - b. Ammunition - Service
5. RANGE LIMITS
 - a. Right Flank Coordinates
Azimuth 91 °G
 - b. Left Flank Coordinates
Azimuth 29 °G
6. COMMUNICATIONS
 - a. Dial telephone (1431) available at OP-5.
 - b. See Section IV.
 - c. Dual communications required.
7. KNOWN INTERFERENCE. None
8. SAFETY EQUIPMENT. To be determined.

Enclosure (3)

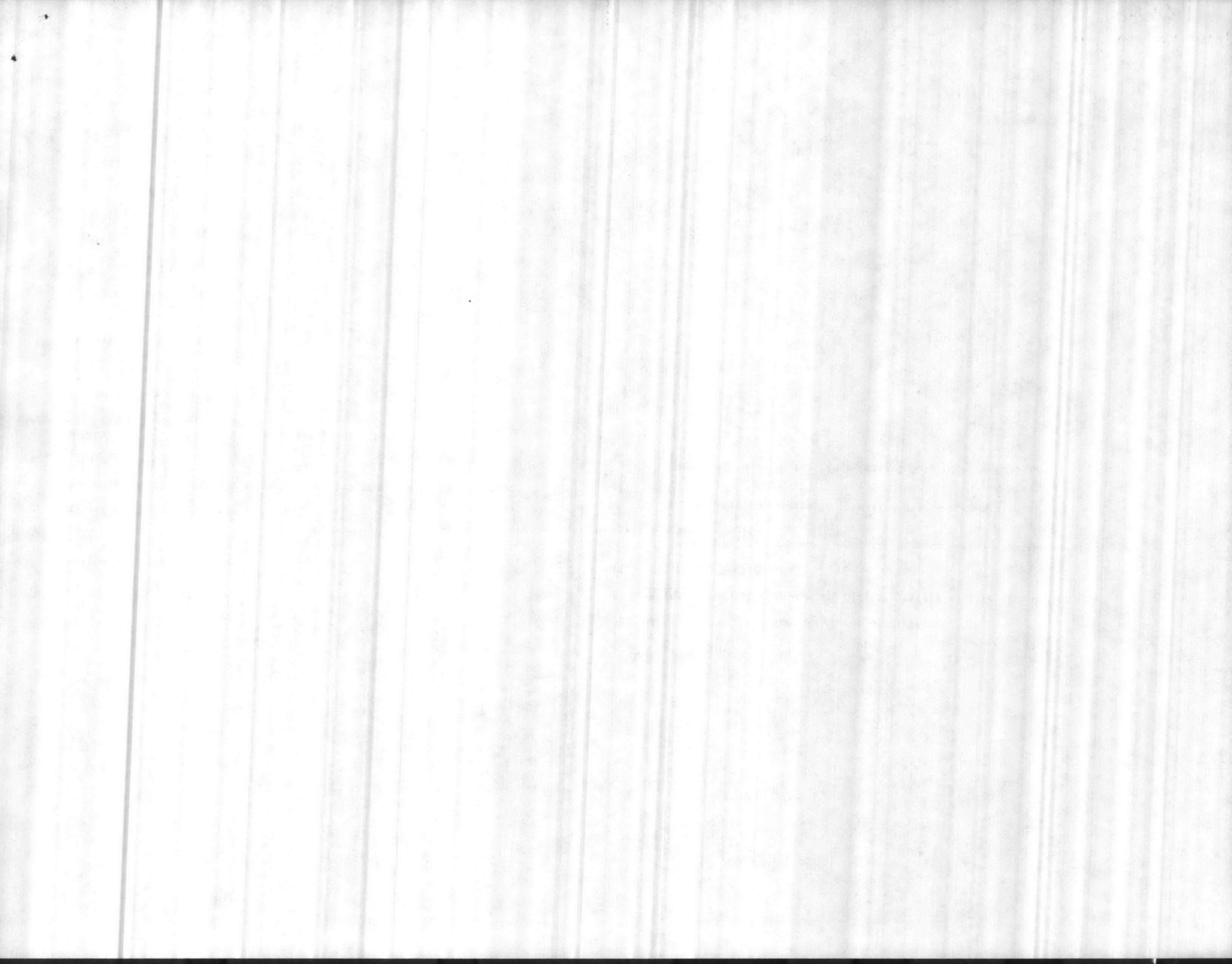
3890
0688



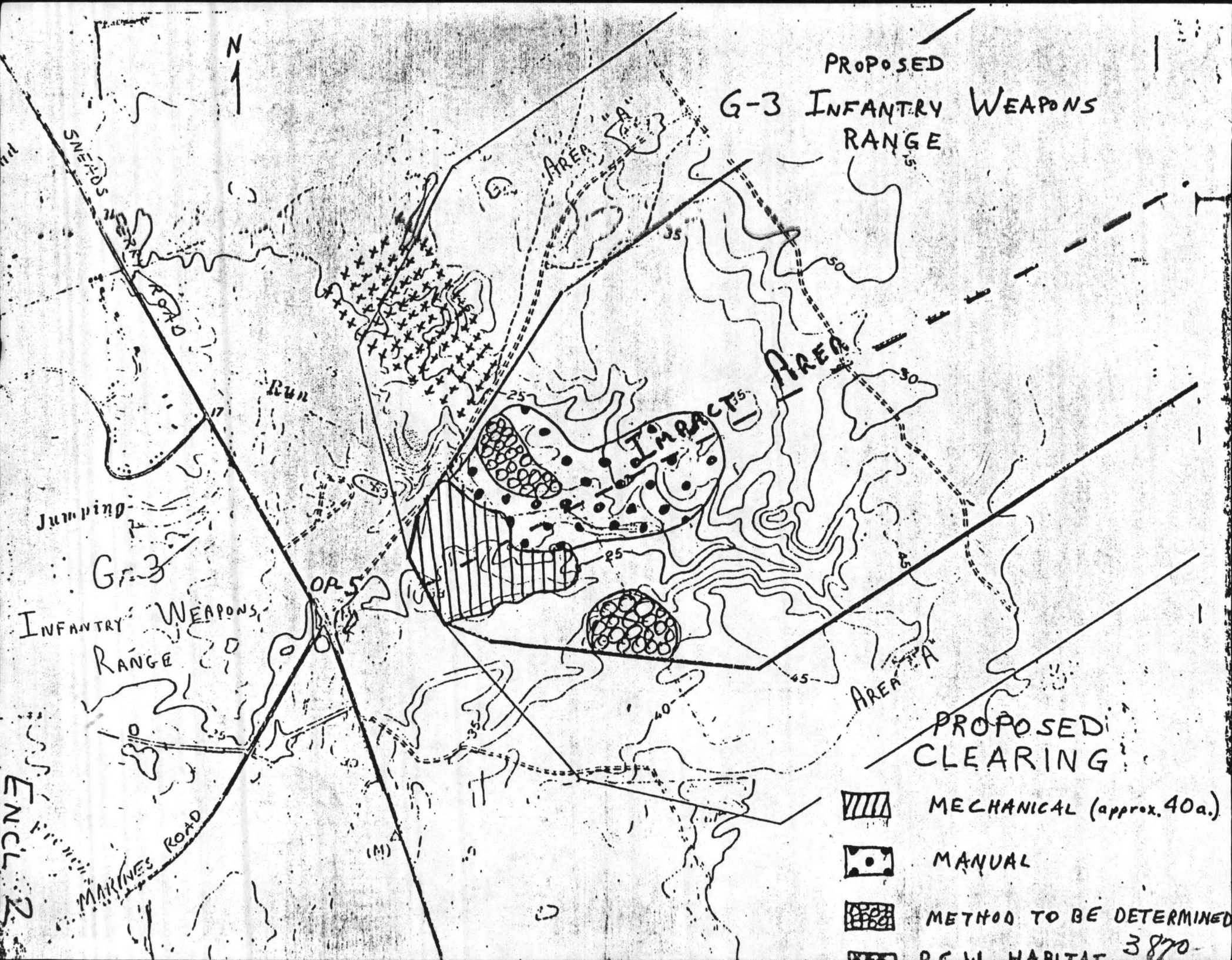
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5. **RANGE LIMITS**
 - a. Right Flank Coordinates
Azimuth 91 °G
 - b. Left Flank Coordinates
Azimuth 29 °G
6. **COMMUNICATIONS**
 - a. Dial telephone (1431) available at OP-5.
 - b. See Section IV.
 - c. Dual communications required.
7. **KNOWN INTERFERENCE.** None
8. **SAFETY EQUIPMENT.** To be determined.





9. **RANGE PERSONNEL** Officer in charge of firing
10. **MEDICAL.** Medical corpsman and military safety vehicle with driver.
11. **SPECIAL INSTRUCTIONS**
 - a. Insure that the minimum ranges for weapons comply with the safety criteria for the system.
 - b. No down-range movement is permitted unless accompanied by EOD personnel.
 - c. Report all duds to the Range Control Duty Officer (3064).

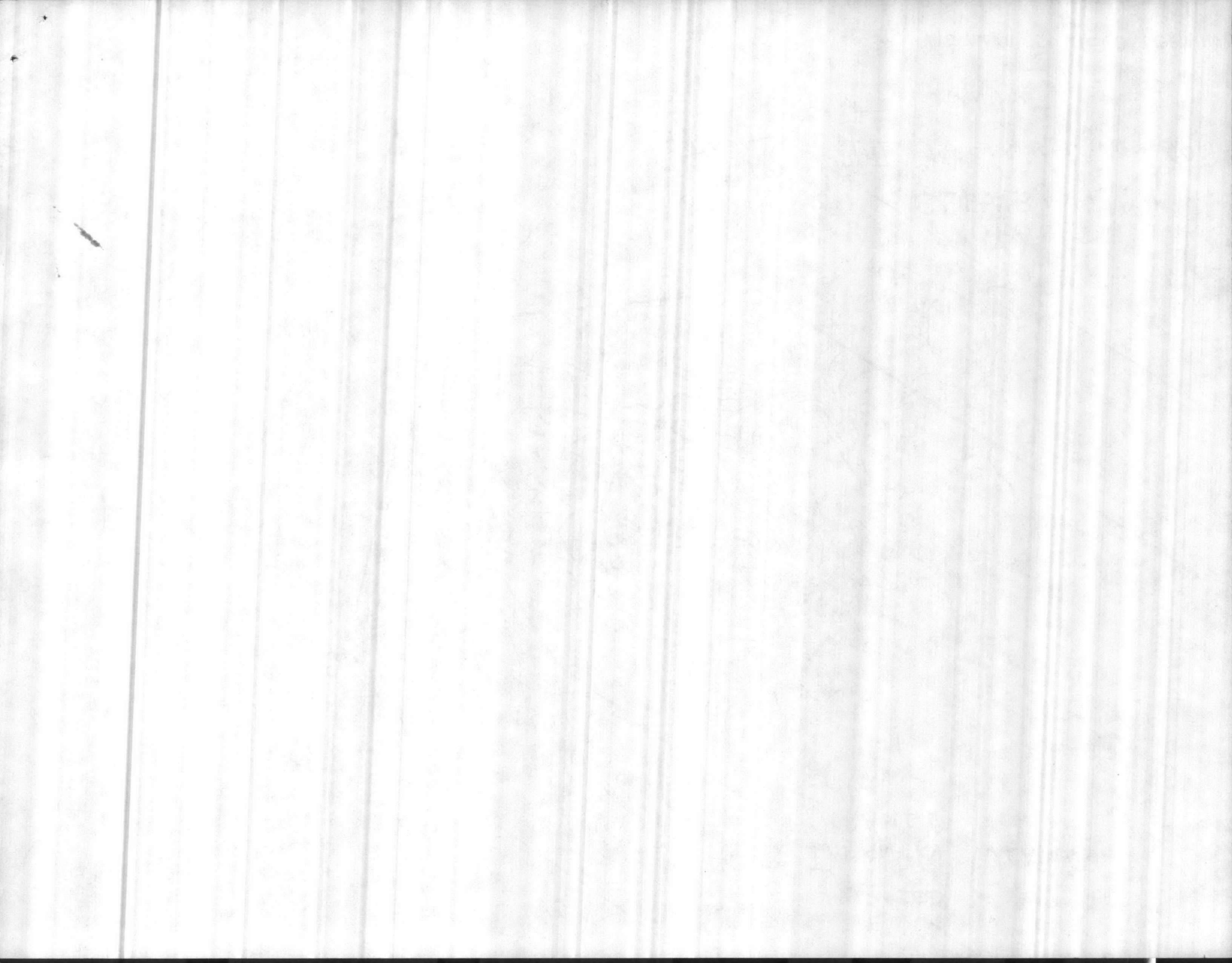


PROPOSED
G-3 INFANTRY WEAPONS
RANGE



PROPOSED
CLEARING

-  MECHANICAL (approx. 40a.)
-  MANUAL
-  METHOD TO BE DETERMINED
-  BGM HABITAT 3870



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

P&E
ju

FAC/JGF/nh
11014

8 APR 1984

From: Commanding General
To: Base Maintenance Officer

Subj: New Work (Minor Construction); authorization for

Ref: (a) MCO P11000.5E

Encl: (1)

1. The minor construction project for work at the G-3 range
is approved.

Expenditure of funds is as indicated below, and will not be exceeded without prior approval for amendment by this Headquarters.

		FAC PROJECT NUMBER <u>4547</u>	
<u>FUNDED COST</u>		<u>UNFUNDED COST</u>	
Category "R" Funds	<u>17,247</u>	Military Labor	_____
Other	_____	Other	_____
TOTAL	<u>17,247</u>	TOTAL	_____

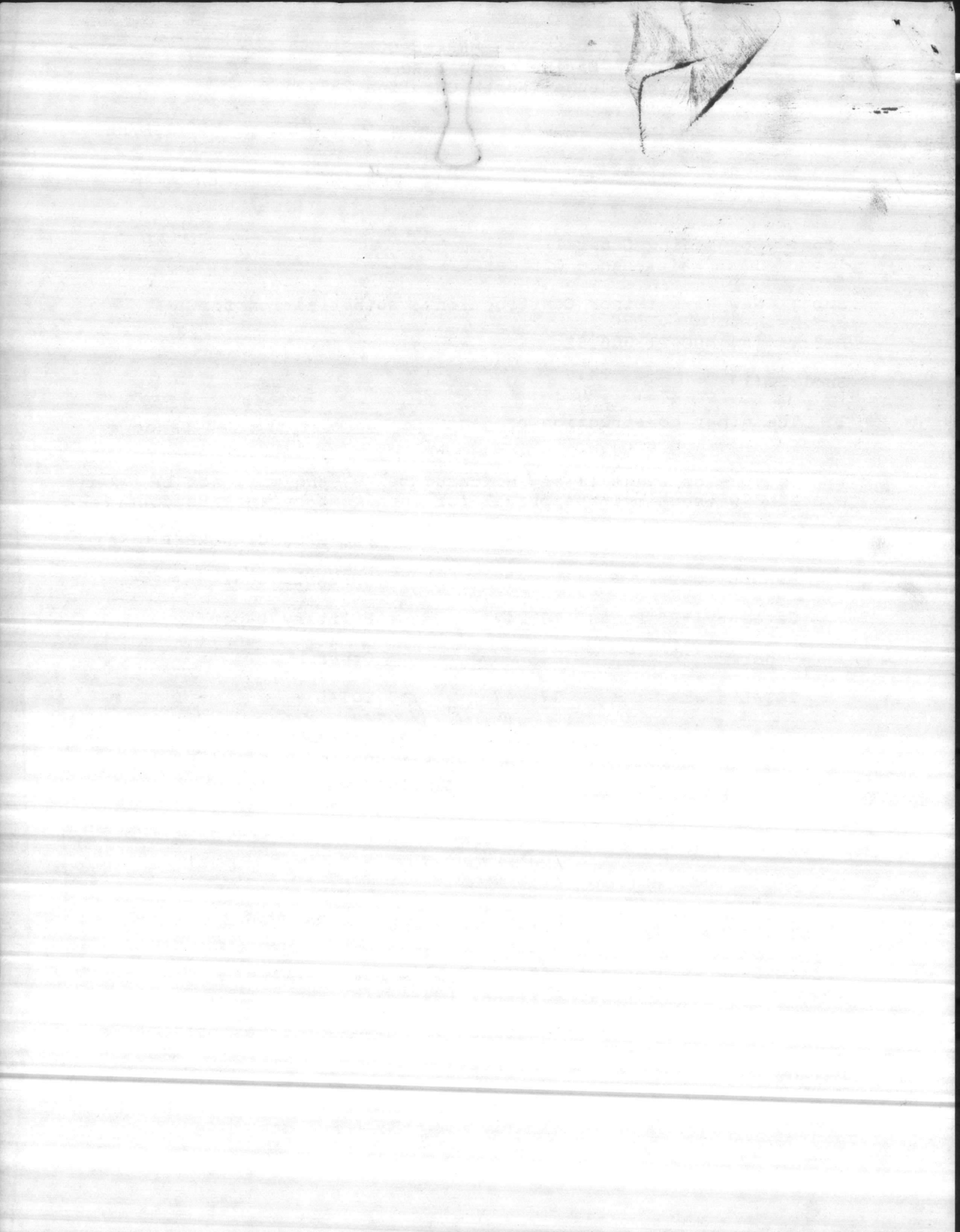
J. G. Fitzgerald
J. G. FITZGERALD
By direction

Copy to:
AC/S, Trng

FIRST ENDORSEMENT

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

1. The J.O.N./Contract# assigned to this Facilities project is _____ and will be scheduled for completion/awarding during the _____ quarter of FY- _____.



NATURAL RESOURCES AND ENVIRONMENTAL AFFAIRS
Marine Corps Base
Camp Lejeune, North Carolina 28542

Date

From: Director
To:

Subj:

G 10 du fact

Charing info



4031
 4031

W.C.		Distb. Date-By	Job Order No.
Activity Accounting No.	F/SFC	Program/Budget	Facility No.
Appropriation	Subhead	Approval Document	6-10 IMPACT AREA AC/S Fac. Proj. No.
Allotment/Project	CAC	Requester	Reg. No. FAC/REA/HF
WGC	Type Of Work	Sketch/Plan Attached	Special Instr.
05	NEW WORK	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	542012 4/5/84

For Further Information Contact:
 MSGT. MOSES PH# 5211 / LT REDMOND PH# 0558

General Job Description
 CLEAR G-10 IMPACT AREA OF TREES AND BUSHES.
 APPROX. 821.78 ACRES

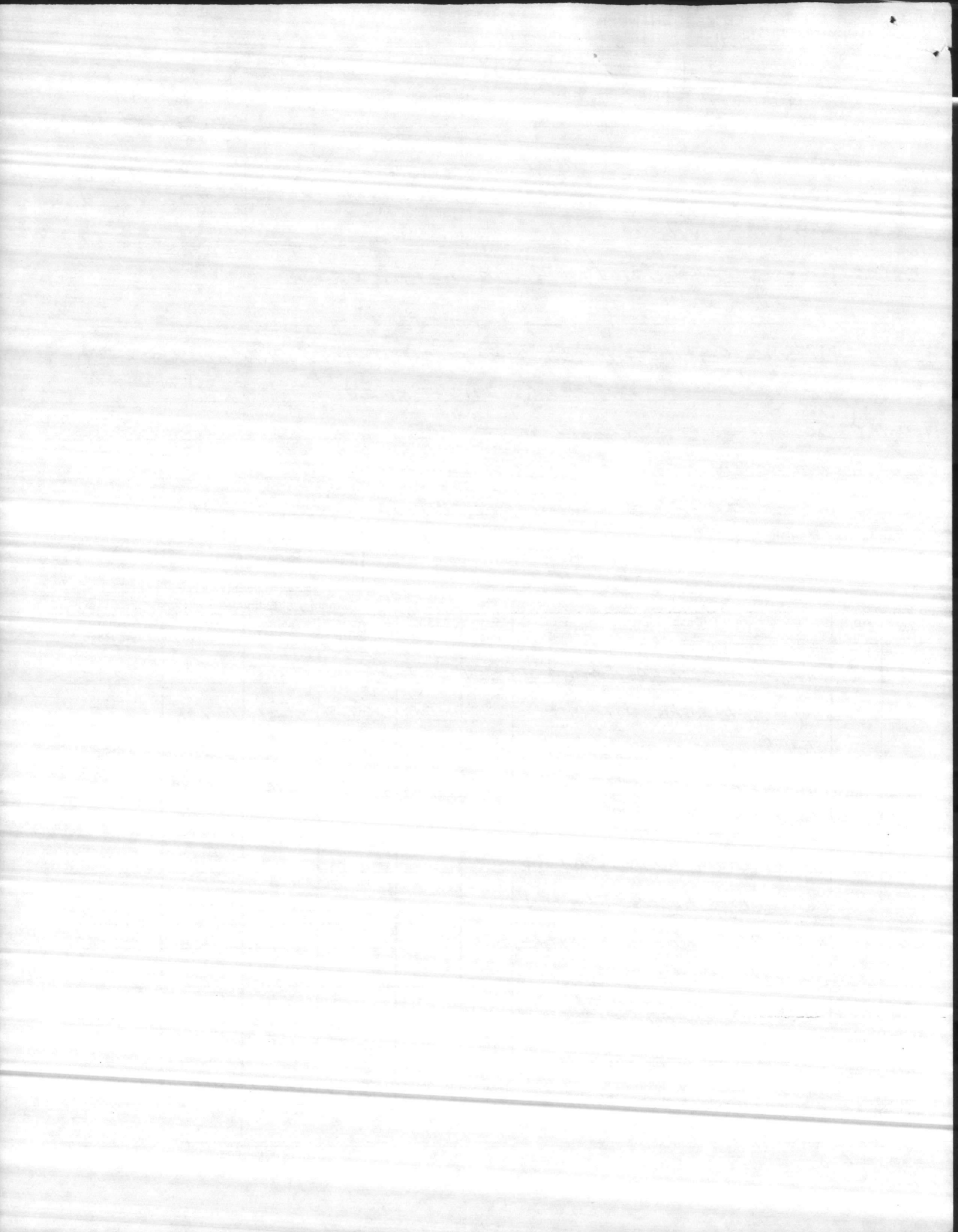
- NOTE: (1) FDD WILL SWEEP AREA PRIOR TO OPERATION.
 (2) SEEDING, LIMING & FERTILIZING WILL BE DONE IN-HOUSE.
 (3) NOTIFY OPERATIONS OF SIGNIFICANT CHANGES.

AC/S Fac. Projects:
 The Authorized Funded Cost of _____ Will Not Be Exceeded Without Prior Approval Of AC/S Fac.
 Starting Date: _____ Complete By: _____ Completed Date: _____

Breakdown of Work			Summary of Estimates					
Phase No.	Work Center	Description	Est. Hrs.	Work Center	Labor Hours	Labor Cost	Mat. Cost	Total Est. Cost
1	72	DRUM CHOP IMPACT AREA OF	2554	72	2044	40225		40225
		ALL SMALL BUSHES & TREES		71	263	3651	13731	17382
		WITHIN AREA MARKED. USE		72	EQUIP	CHG	10538	10538
		WIDE TRACK TRACTOR, (MUD		73	VEH	CHG	575	575
		FLATS & WATER HOLES) PUSH						
		TREES DOWN & WIND ROW BACK						
		FILL STUMPS HOLES. SHA 3&4						
2	71	DISK AREA WHERE POSSIBLE,	328					
		INSTALL POLLUTION SCREENS						
		ALONG COWHEAD CREEK,						

For Continuation See Sheets 2 Thru 2

Prepared By: <i>Turner</i>	Reviewed By:	TOTALS	2882	43876	24844	68720
Authorized By (Signature):		Date:				



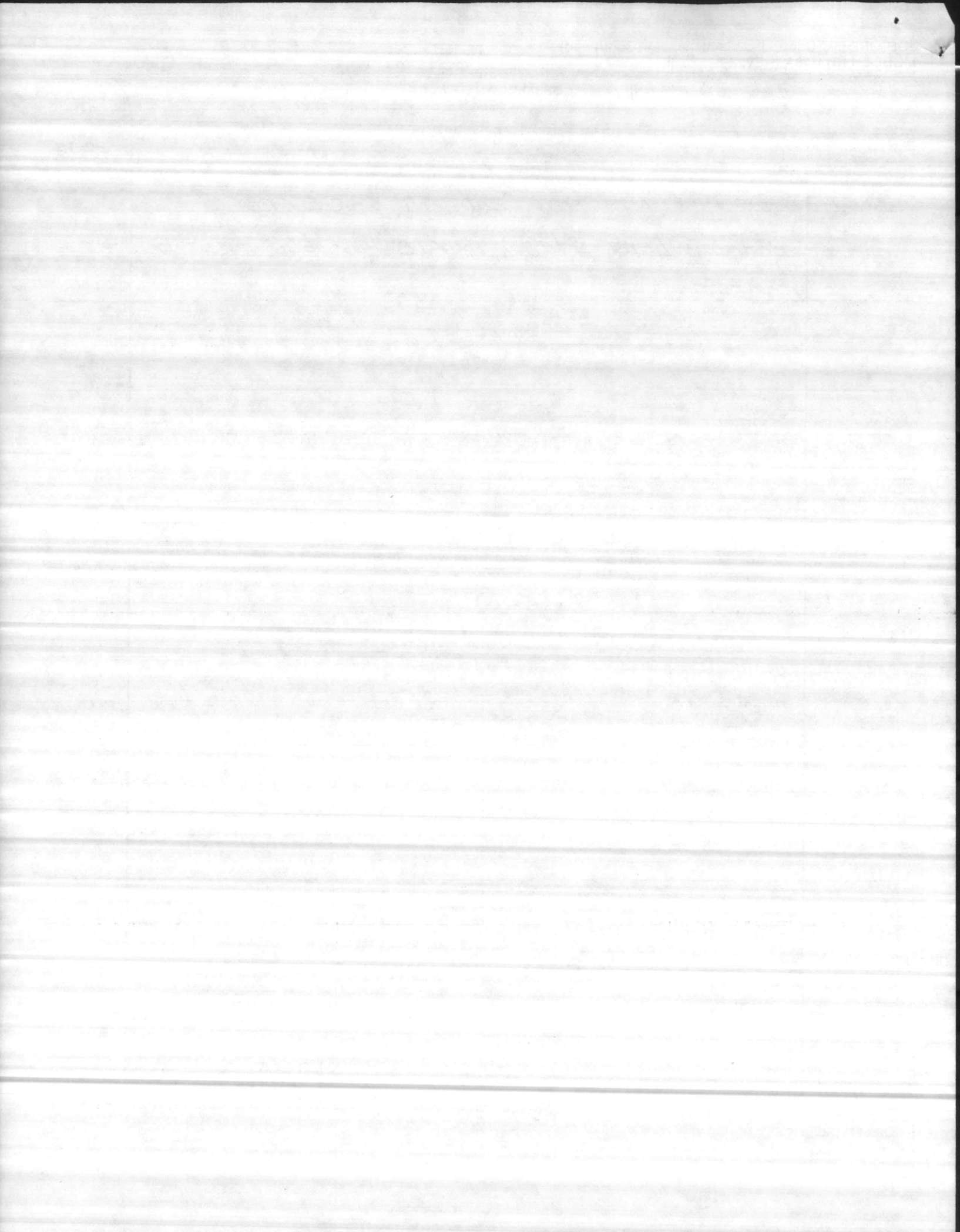
BREAKDOWN OF WORK

WORK CENTER	DESCRIPTION	EST. HOURS
71 Cont	LIME, FERTILIZE AND SEED ALL BARE AREAS.	
	SPREAD WHEAT STRAW IN ALL POSSIBLE EROSION	
	AREAS.	
	SH# 5-7	

JOB ORDER NO.

FACILITY NO.

G-10



MAINTENANCE COST ESTIMATE WORKSHEET
 MCBCL 11011 (REV. 1-81)

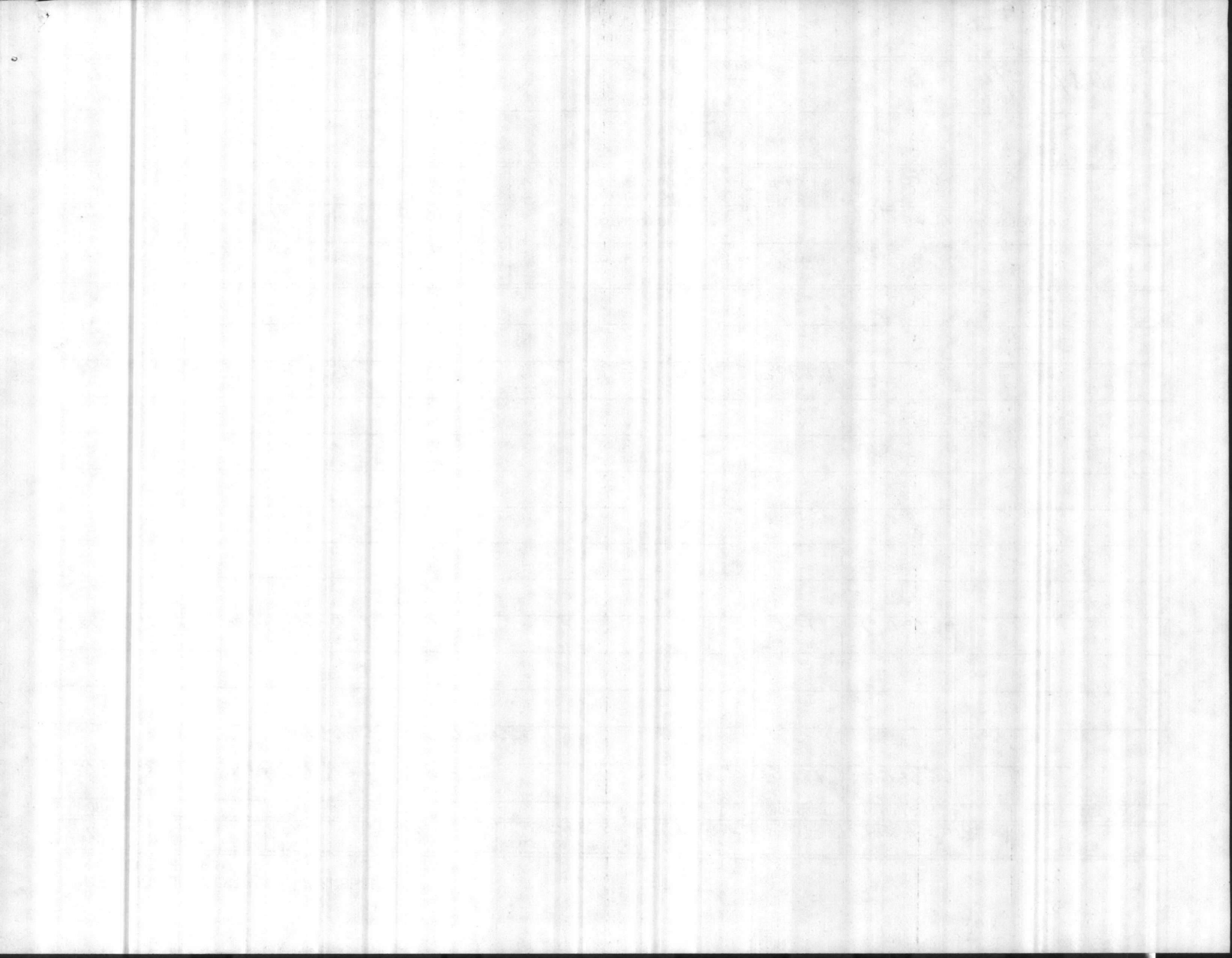
DATE 4/5/84	REQ. NO. LTR	UNIT FAC	BLDG. NO. G-10	NATURE OF WORK / CLEAR IMPACT AREA OF TREES & BUSHES	WORK CENTER 72
----------------	-----------------	-------------	-------------------	---	-------------------

AMOUNT	MATERIEL REQUIRED	SIZE	UNIT	UNIT COST	TOTAL COST	FOR SUPPLY USE ONLY
417	DOZER WITH DRUM CHOPPER TD 15 LOW PRESSURE TRACKS		HR.	10.31	4299.27	
836	DOZER WITH K-G BLADE		HR	7.26	6069.36	
48	LOW BED @ 6.43	VER	CHG	308.64		

48	MAN HOURS @ W6-8 PER HOUR 14.18	TOTAL MAN DAYS	TOTAL MATERIEL EQUIP CHG	10368.63	J.O. SERIAL NO.
2506	MAN HOURS @ W6-10 PER HOUR 15.78		TOTAL LABOR	40225.32	
2554	TOTAL MAN HOURS		TOTAL LABOR AND MATERIEL EQUIP CHG	50593.95	
		319			

REMARKS:

OTHER WORK CENTERS INVOLVED 71	SIGNATURE OF P & E <i>H. Turner</i>	DATE 4/25/84
-----------------------------------	--	-----------------



IMPROVEMENT OF 6-10 IMPACT AREA

34° 40'

FD

IMPACT AREA
TO BE
CLEARED

PHASE I

PHASE II

BEAR TOWER

FIRE TOWER

G

DODO

HP

GG

MAN BASE

BROW

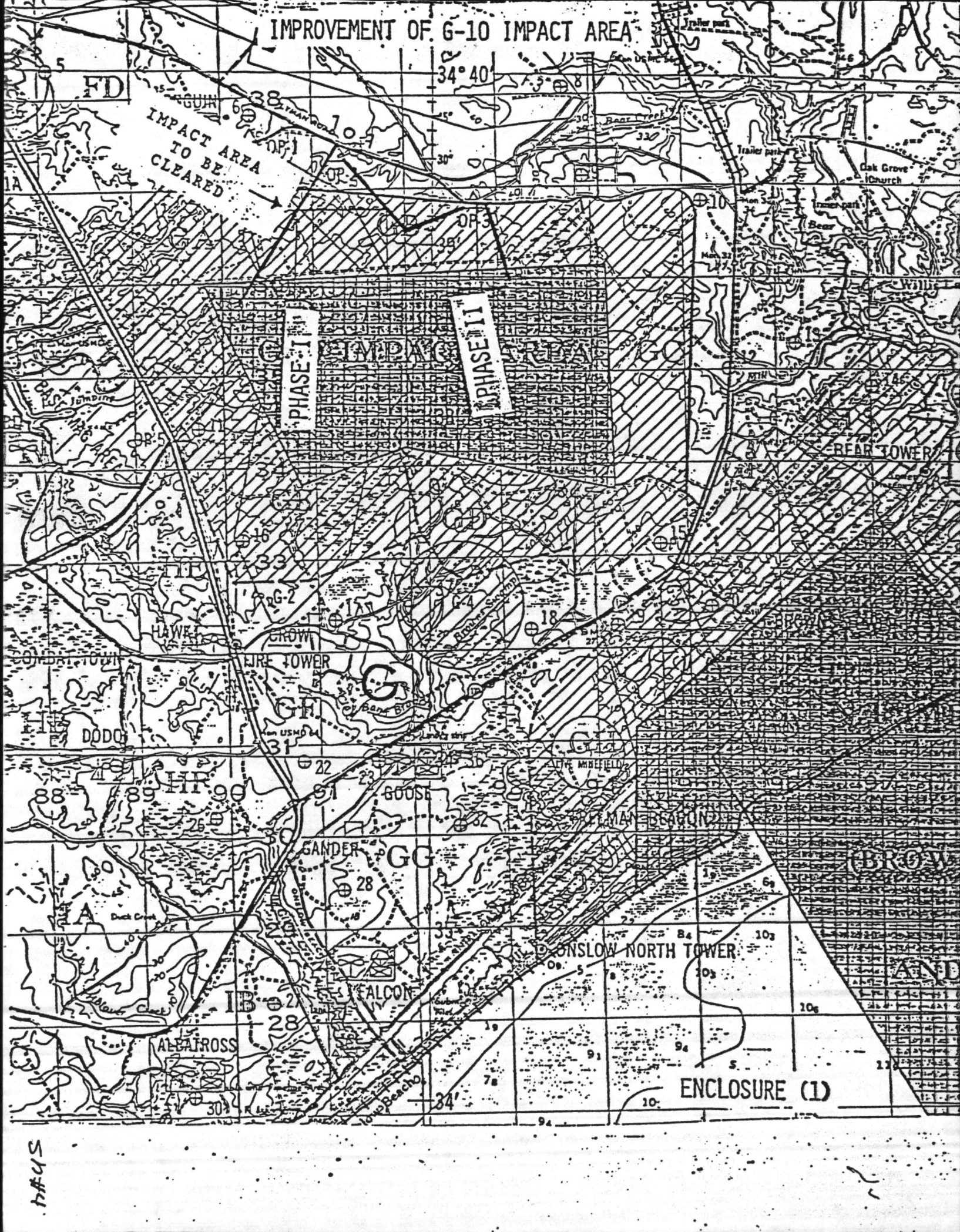
DONSLON NORTH TOWER

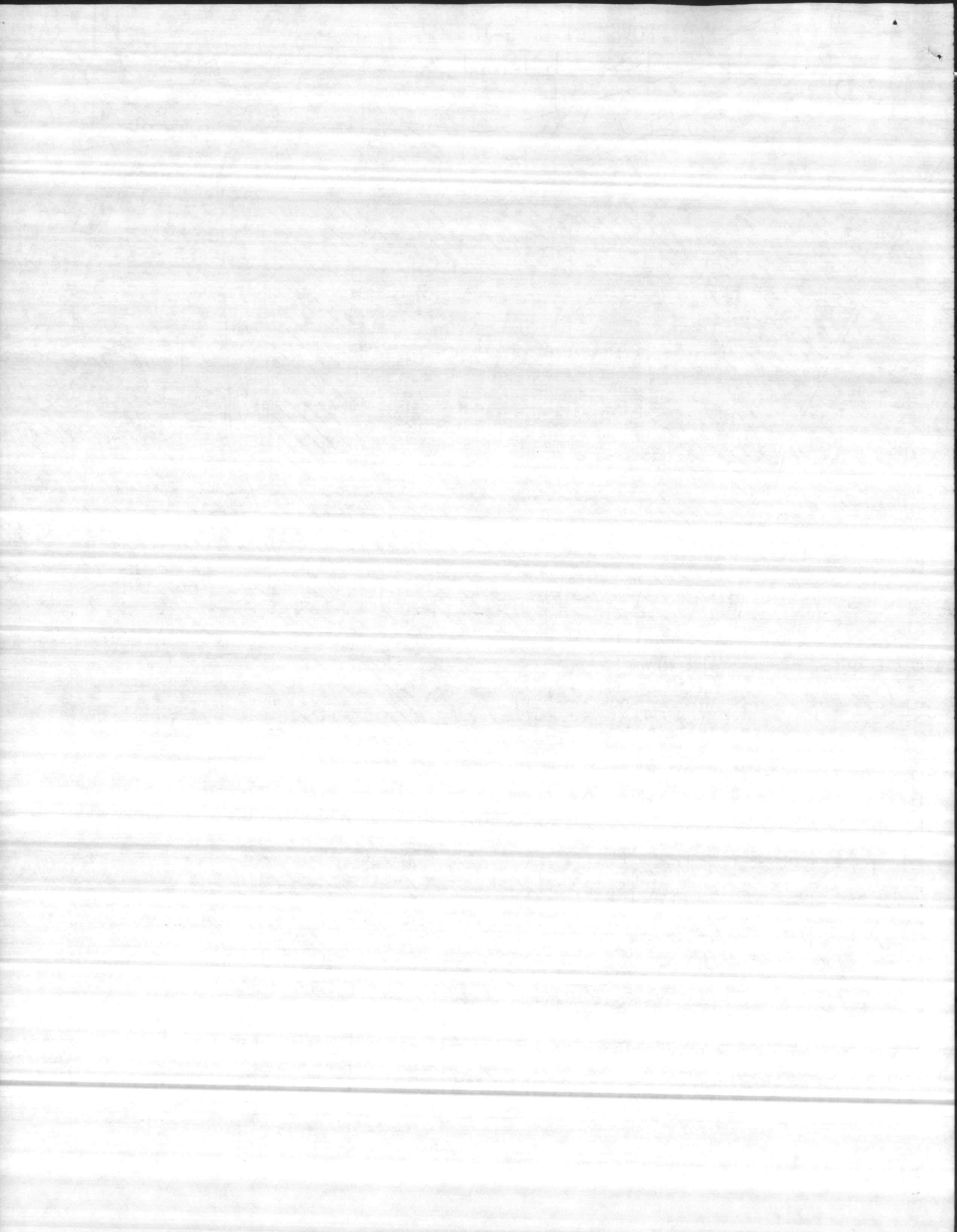
FALCON

ALBATROSS

ENCLOSURE (1)

1744





JOB PHASE CALCULATION SHEET

WORK SITE

G-10 IMPACT AREA

INSTRUCTION: This form should be used for both EPS and NON-EPS estimates.

1. CRAFT PHASE NO.

2. JOB PHASE NO.

3. JOB IDENTITY NO.

4. DATE

LTR

4/5/84

5. WORK CENTER NO. AND TITLE

72

6. JOB PHASE DESCRIPTION

Scale 1-50000 = 948.56 Acres

aerial photo = 695.

Clear area of trees

$1643.56 \div 2 = 821.78$

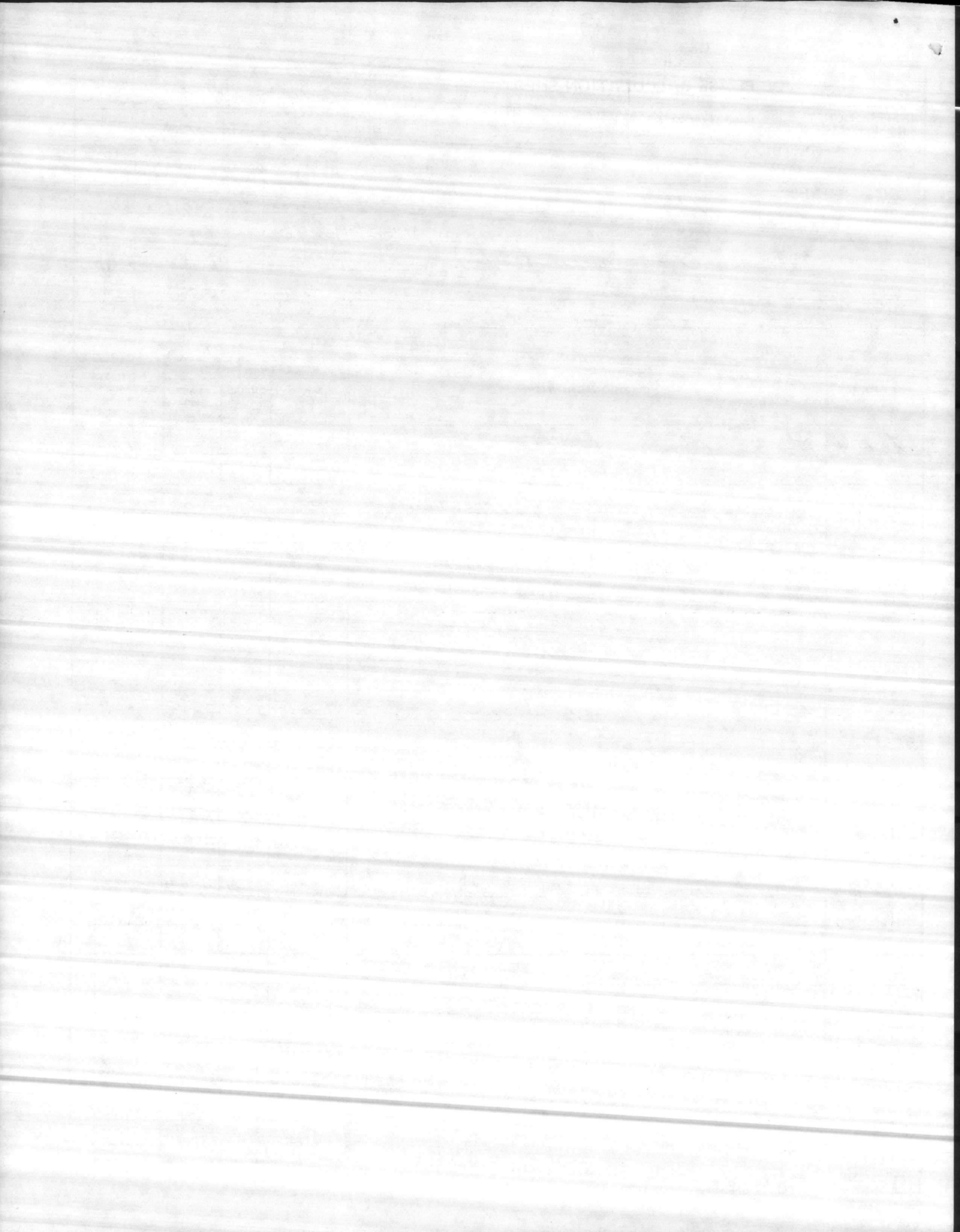
821.78 Acres

7. REFERENCE	8. TASK DESCRIPTION	9. EPS ESTIMATED TIME			NON-EPS ESTIMATED TIME 10.
		UNIT HOURS a.	OCCUR-RENCE b.	CRAFT TIME c.	
lat	Load dryer on lowbed				1
DWA-2	Haul dryer to field zone 5+4 = 1.0 drum chop area ^{approx} 821.78 Acres lat. 2/3 to be drum chopped 547.8 Acres 1/3 to be pushed stump/trees & Wind-row 274 Acres	1.0	2	2.0	
33-	drum chopped. 547.8 Acres	1.350	547.8	739.6	
RT-37	remove trees & (wind-row) 274 Acres 43,560 SF per acre X .1111 = 4839.5 sy per acre 274 Acres X 4839.5 = 1326027.4 sy \div 1000 sy = 1326.0 ac.				
Table 8	Clearing trees and load with dryer	.7	1326	928.2	
New Docks P-905					

TOTALS (Craft & Estimated Time) 1670

TOTAL (EPS from Nomograph) 2554

TOTAL JOB PHASE TIME 2554



MAINTENANCE COST ESTIMATE WORKSHEET
 MCBCL 11011 (REV. 1-81)

DATE 4/5/84	REQ. NO. LTR	UNIT FAC	BLDG. NO. C-10	NATURE OF WORK CLEAR IMPACT AREA OF TREES & BUSHES	WORK CENTER 71
----------------	-----------------	-------------	-------------------	---	-------------------

AMOUNT	MATERIEL REQUIRED	SIZE	UNIT	UNIT COST	TOTAL COST	FOR SUPPLY USE ONLY
1830	FERTILIZE 8-8-8 8720-00-C90-0001	50Lb	69	3.21	5874.30	
3660	LIME (AGRICULTURE)	50Lb	69	1.25	4575.00	
25	WHEAT STRAW	40Lb	bale	2.00	50.00	
1	HOG WIRE 4" X 4" MESH	26" High 330' Length	RL	49.95	49.95	
5 5/8	FOR ABOVE MATERIAL					
	ONSLOW FCX, JACKSONVILLE, N.C.					

164	MAN HOURS @	WG-2	PER HOUR	9.26	TOTAL MAN DAYS	TOTAL MATERIEL		
82		WG-6		12.59		TOTAL LABOR		
82		WG-7		13.42		TOTAL LABOR AND MATERIEL		
328	TOTAL MAN HOURS				41			17382.31

REMARKS:

OTHER WORK CENTERS INVOLVED

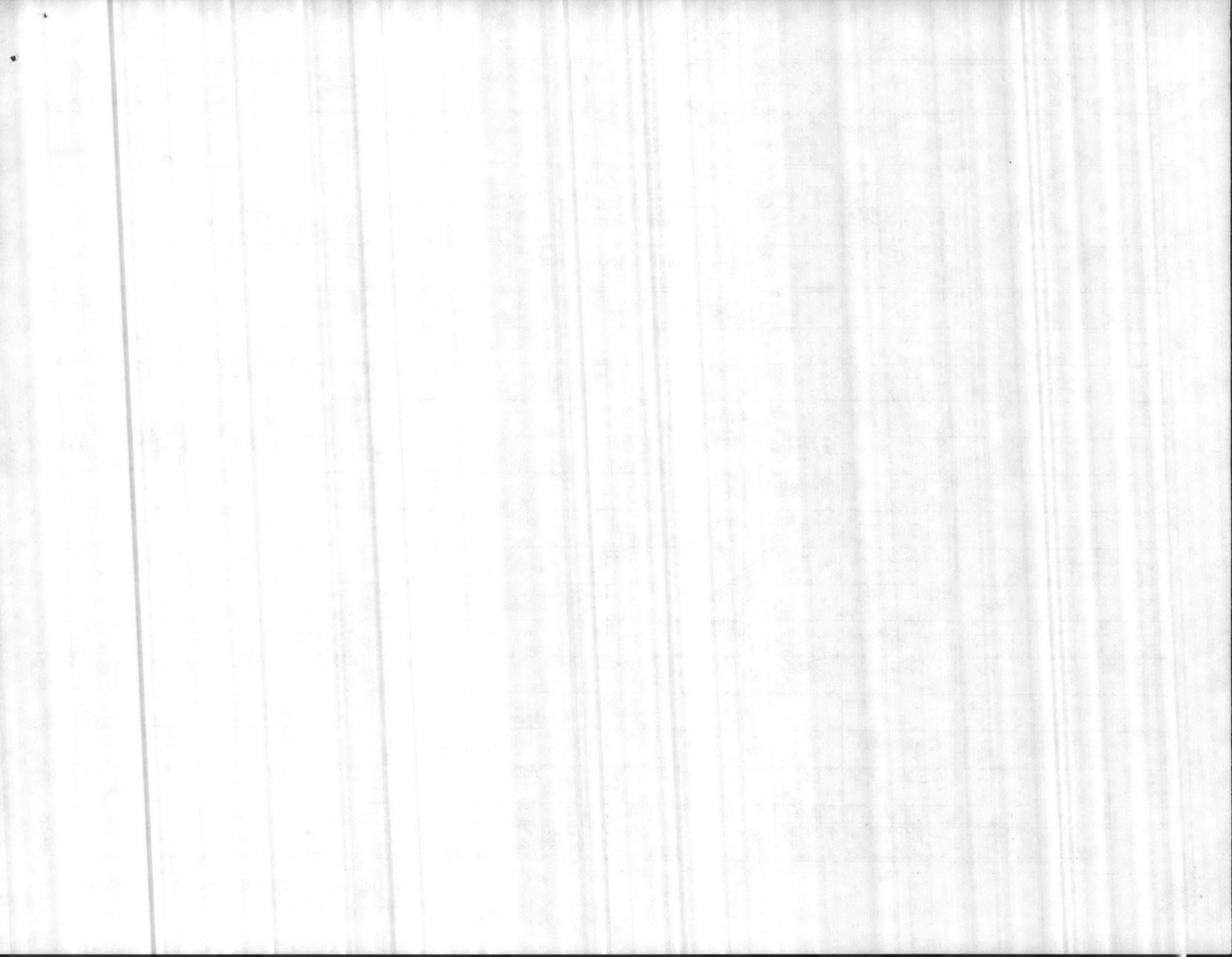
72

SIGNATURE OF P & E

[Signature]

DATE

4/26/84



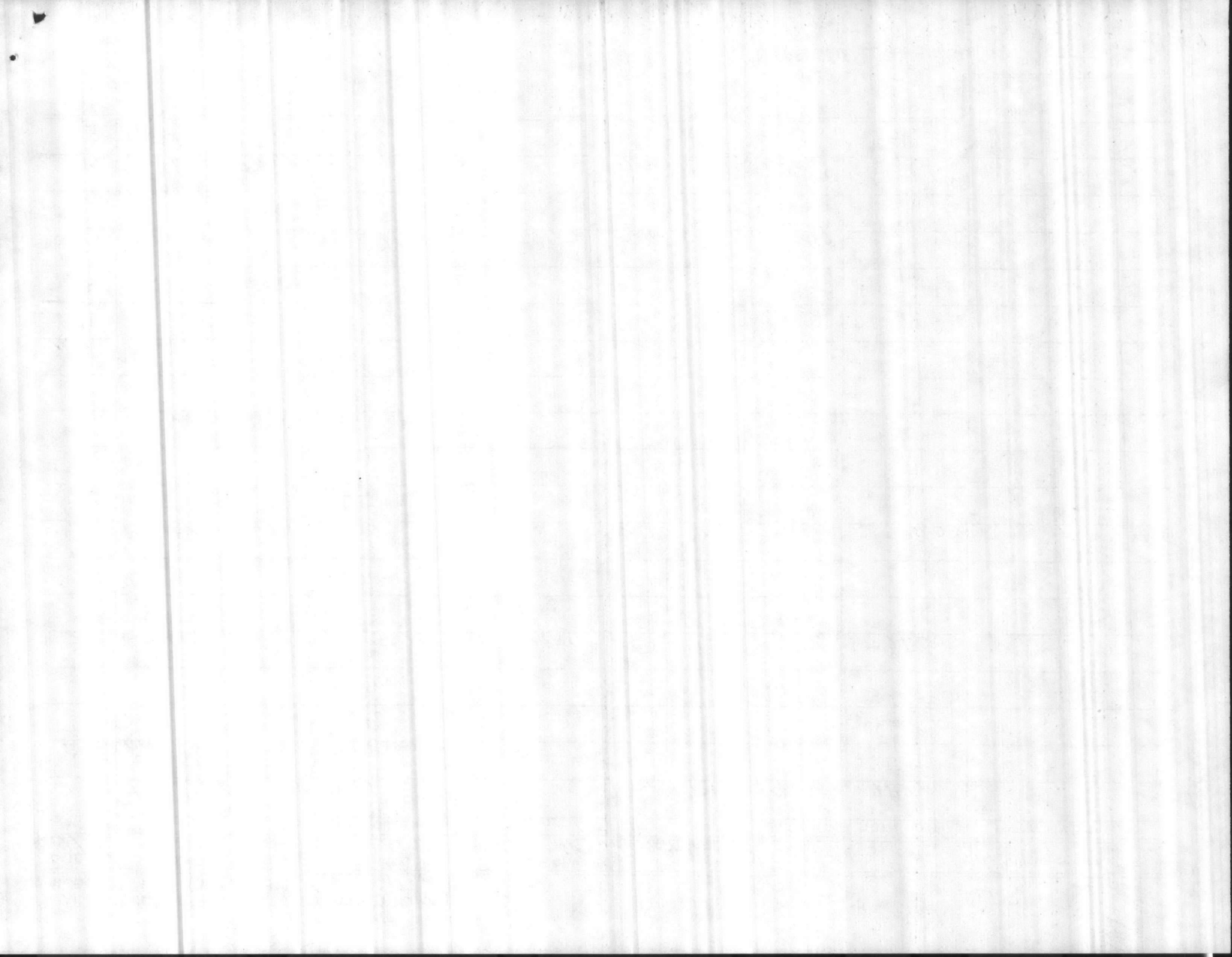
MAINTENANCE COST ESTIMATE WORKSHEET (Cont'd)
 MCBCL 11011/1 (REV. 1-81)

RANGE

DATE 4/15/84	REQ. NO. LTR	UNIT FAC	BLDG. NO. G-10	NATURE OF WORK CLEAR IMPACT AREA	WORK CENTER 71
-----------------	-----------------	-------------	-------------------	-------------------------------------	-------------------

AMOUNT	MATERIEL REQUIRED	SIZE	UNIT	UNIT COST	TOTAL COST	FOR SUPPLY USE ONLY
2	BURLAP 40" HIGH	100YRD	RL	90.00	180.00	
5 5/8	ONSLOW P.C., JACKSONVILLE, N.C.					
20	GALVANIZED NAILS 5315-00-161-8834	#6	Lb	.58	11.60	
92	PENSACOLA BAHIA GRASS SEED	50LB	LG	32.50	2990.00	
5 5/8	R.E. LAMBERT SEED CO. ROUTE 1 BOX 492 CAMDEN, ALABAMA 36726					
82	TRACTOR, WHEEL, W/LILLY, SPREADER	EQUIP	CHG	168.92		
	DISK @ 2.06					
82	DUMP TRUCK @ 3.24	VEH	CHG	265.68		

J.O. SERIAL NO.



IMPROVEMENT OF G-10 IMPACT AREA

34° 40'

FD

IMPACT AREA
TO BE
CLEARED

PHASE I

PHASE II

Dak Grove Church

BEAR TOWER

FIRE TOWER

G

HR

GG

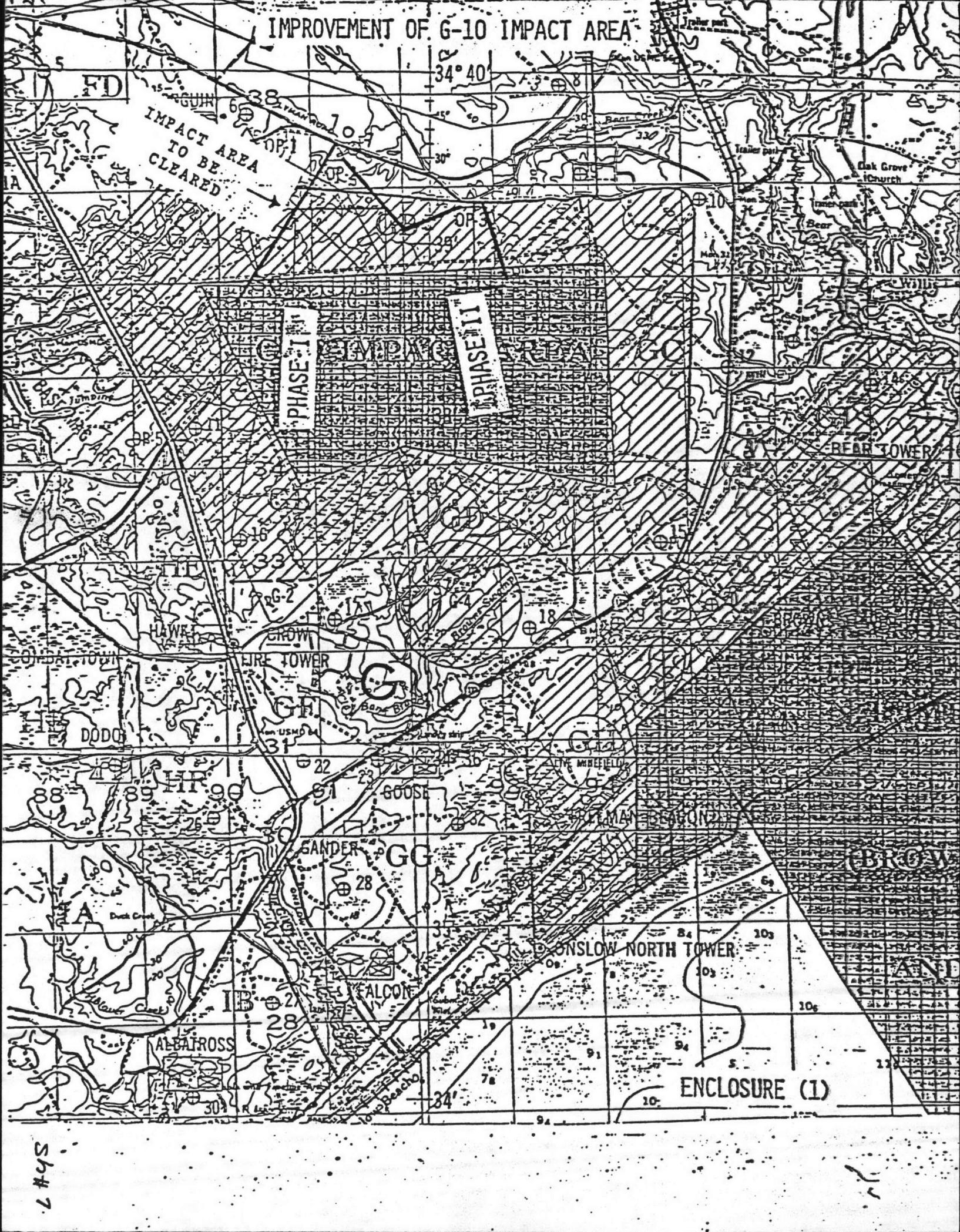
ONSLOW NORTH TOWER

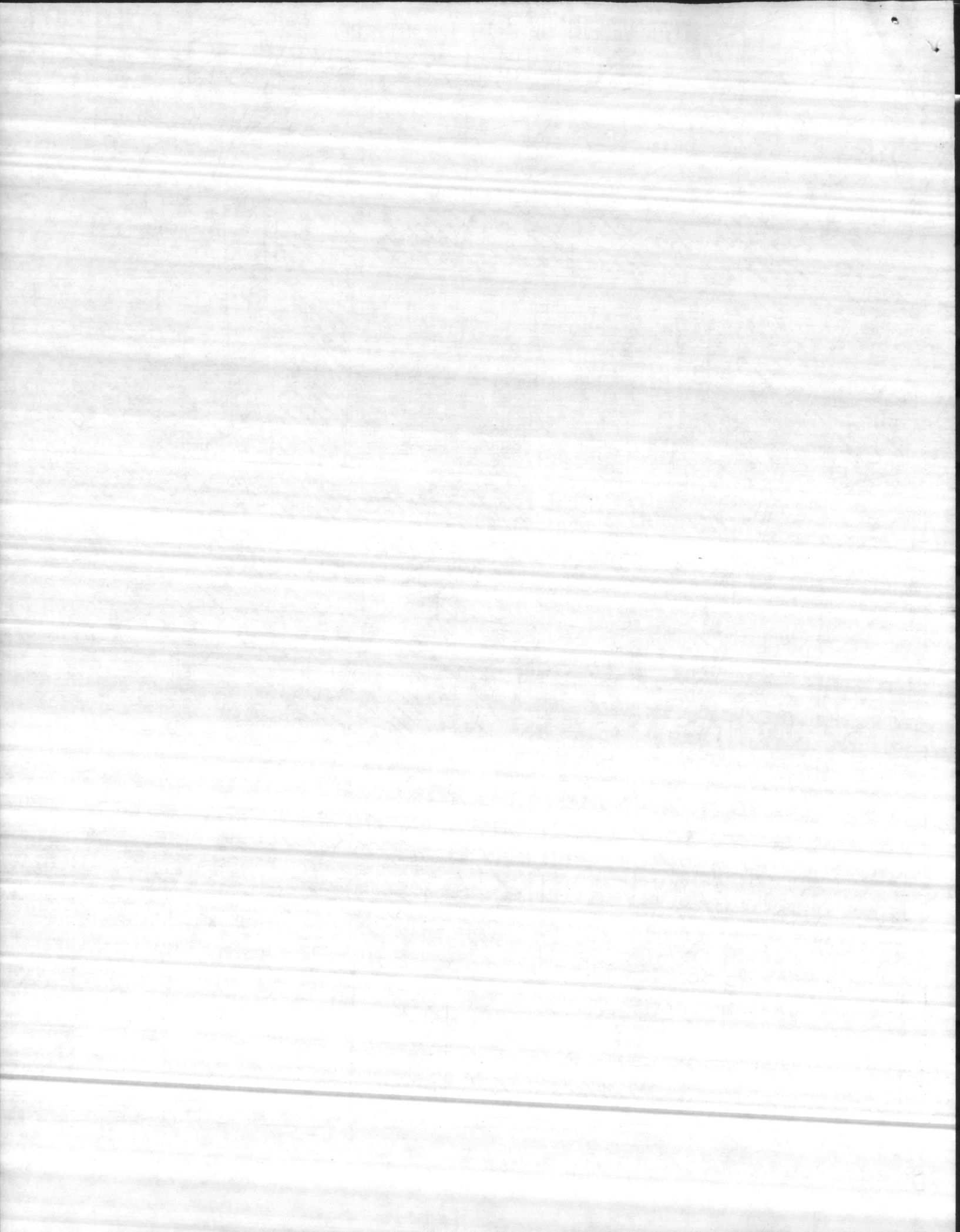
ALBATROSS

FALCON

ENCLOSURE (I)

L # 45





JOB PHASE CALCULATION SHEET

WORK SITE

6-10 Impact

INSTRUCTION: This form should be used for both EPS and NON-EPS estimates.

1. CRAFT PHASE NO.

2. JOB PHASE NO.

3. JOB IDENTITY NO.

4. DATE

LTR

4/5/84

5. WORK CENTER NO. AND TITLE

71

6. JOB PHASE DESCRIPTION

Prepare erosion control

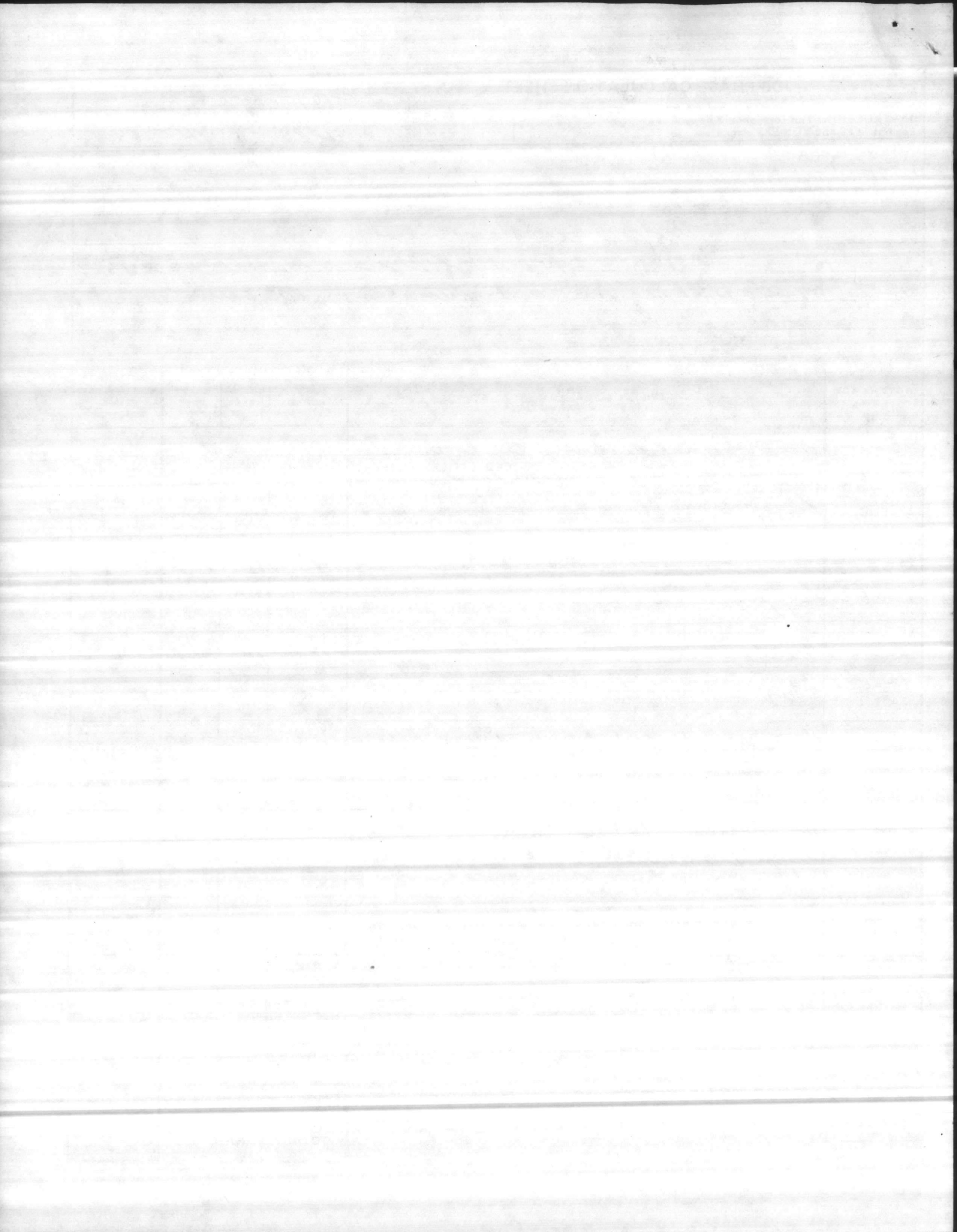
274 acres of ground pushed up trees,

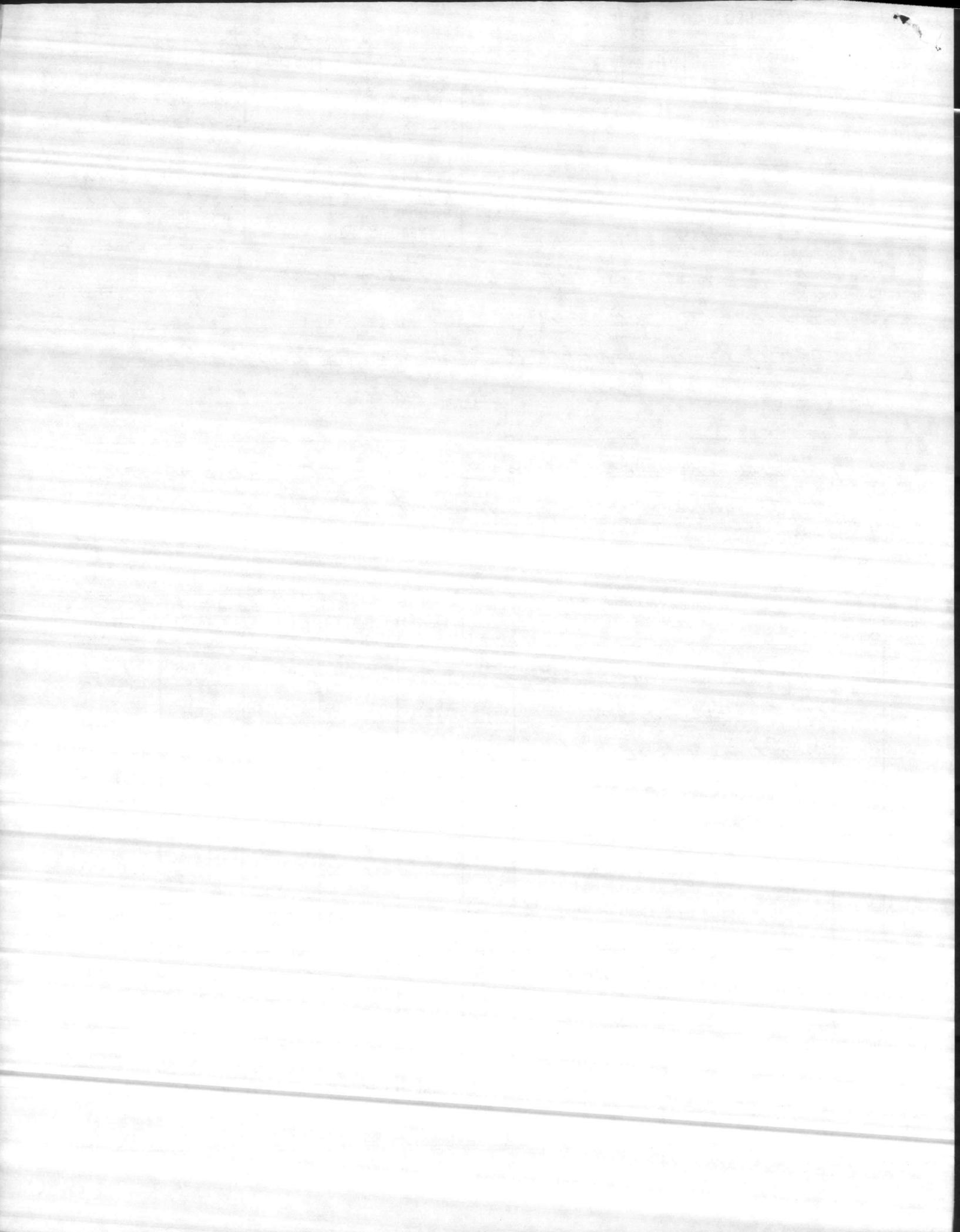
estimated 2/3 will require soil restoration 183 acres

7. REFERENCE	8. TASK DESCRIPTION	9. EPS ESTIMATED TIME			10. NON-EPS ESTIMATED TIME
		UNIT HOURS a.	OCCUR-RENCE b.	CRAFT TIME c.	
35- RT-42	seed areas disturbed by dozers 183 acres - time include loading in hopper (w.c.c.)	.183	183	33.5	
35- RT-42	lime areas - time include loading in hopper	.183	183	33.5	
35- RT-42	fertilize areas - time include loading in hopper	.183	183	33.5	
PWA-5	Load seed, lime & fert on truck (91500 + 183000 + 4575 Lbs = 279075 Lbs ÷ 100 = 2790.75)	.04	2790.75	111.7	
AWA-2	Haul material to field zone 4 approx 28 trips	.75	28	12.6 224.8	
Est	Install pollution abatement devices				16

183 X 500 LB P/A = 91500 LBS ÷ 50 LB BAG = 1830 Bags
 1.5 Tons p/acre X 183 = 91.5 TONS X 2000 LBS = 183000 ÷ 50 = 3660 B
 25 LBS P/A X 183 = 4575 LB ÷ 50 = 92 Bags

TOTALS (Craft & Estimated Time)	225	16
TOTAL (EPS from Nomograph)	312	
TOTAL JOB PHASE TIME	328	





MAINTENANCE COST ESTIMATE WORKSHEET
 MCBCL 11011 (REV. 1-81)

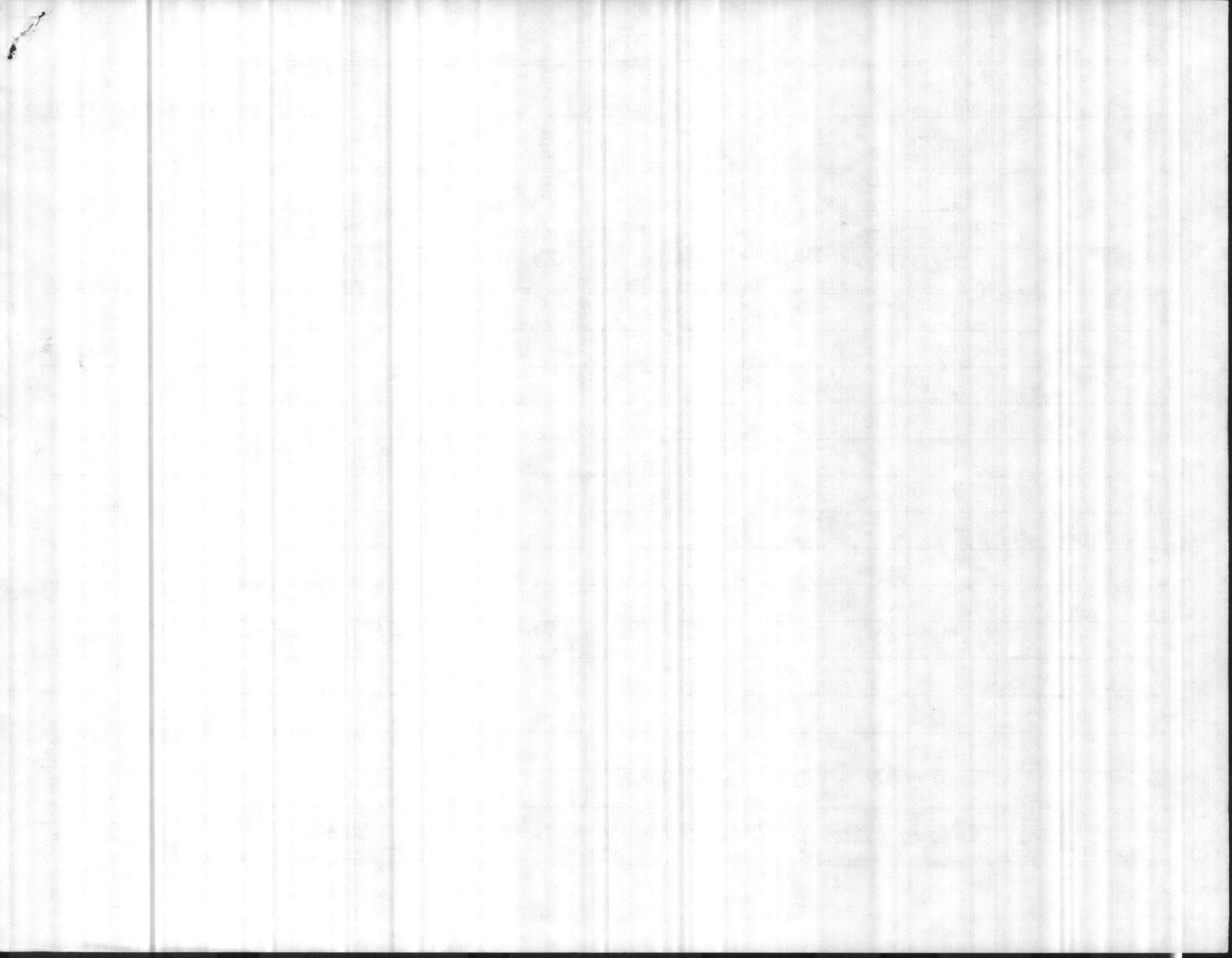
DATE: 4/5/84 REQ. NO. LTR UNIT FAC BLDG. NO. G-10 NATURE OF WORK / clear impact area of trees & bushes WORK CENTER 72

AMOUNT	MATERIEL REQUIRED	SIZE	UNIT	UNIT COST	TOTAL COST	FOR SUPPLY USE ONLY
1800	LUMBER 2" X 8"	2" X 8 X 12	BF	.37	666.00	
<u>S/S</u>	<u>ASKEN'S, JACKSONVILLE, N.C.</u>					
30	NAILS 20P. 5315-00-753-3P86		LB	.40	12.00	

MAN HOURS @	PER HOUR	TOTAL MAN DAYS	TOTAL MATERIEL	678.00	J.O. SERIAL NO.
MAN HOURS @	PER HOUR		TOTAL LABOR	—	
TOTAL MAN HOURS			TOTAL LABOR AND MATERIEL	678.00	

REMARKS:

OTHER WORK CENTERS INVOLVED: 71 SIGNATURE OF P & E: [Signature] DATE: 6/6/84



3 May

Co br
Ingr
Name

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



IN REPLY REFER TO
FAC/REA/hf
5420/2
5 APR 1984

From: Chairman, Environmental Enhancement/Impact Review Board
To: Distribution List
Subj: Environmental Enhancement/Impact Review Board; meeting of
Ref: (a) BO 11015.2G
(b) BO 11000.1A
Encl: (1) Improvement of G-10 Impact Area
(2) Proposed Clearing of K-211 Range and K-2 Impact Area
(3) P-465, Loading/Unloading Apron
(4) P-335, Runway Centerline Lighting
(5) P-495, Helicopter Internal Stores Storage
(6) P-211, Ground Support Equipment Facility
(7) P-498 & P-499, Interim GSE Facilities
(8) Improvements to Artillery Firing Positions

1. In accordance with the provisions of reference (a), a meeting of the subject Board is scheduled in the Conference Room of Building 1 at 0930, Thursday, 12 April 1984. Advisors to the Board are invited to attend the meeting.

2. The Board will review the preliminary environmental assessments as provided in enclosures (1) through (8) and provide recommendations on environmental significance to action sponsors. Members and advisors knowing of other agenda items should notify the Chairman at ext. 3034/5925 as soon possible prior to the meeting.

M. G. Lilley
M. G. LILLEY

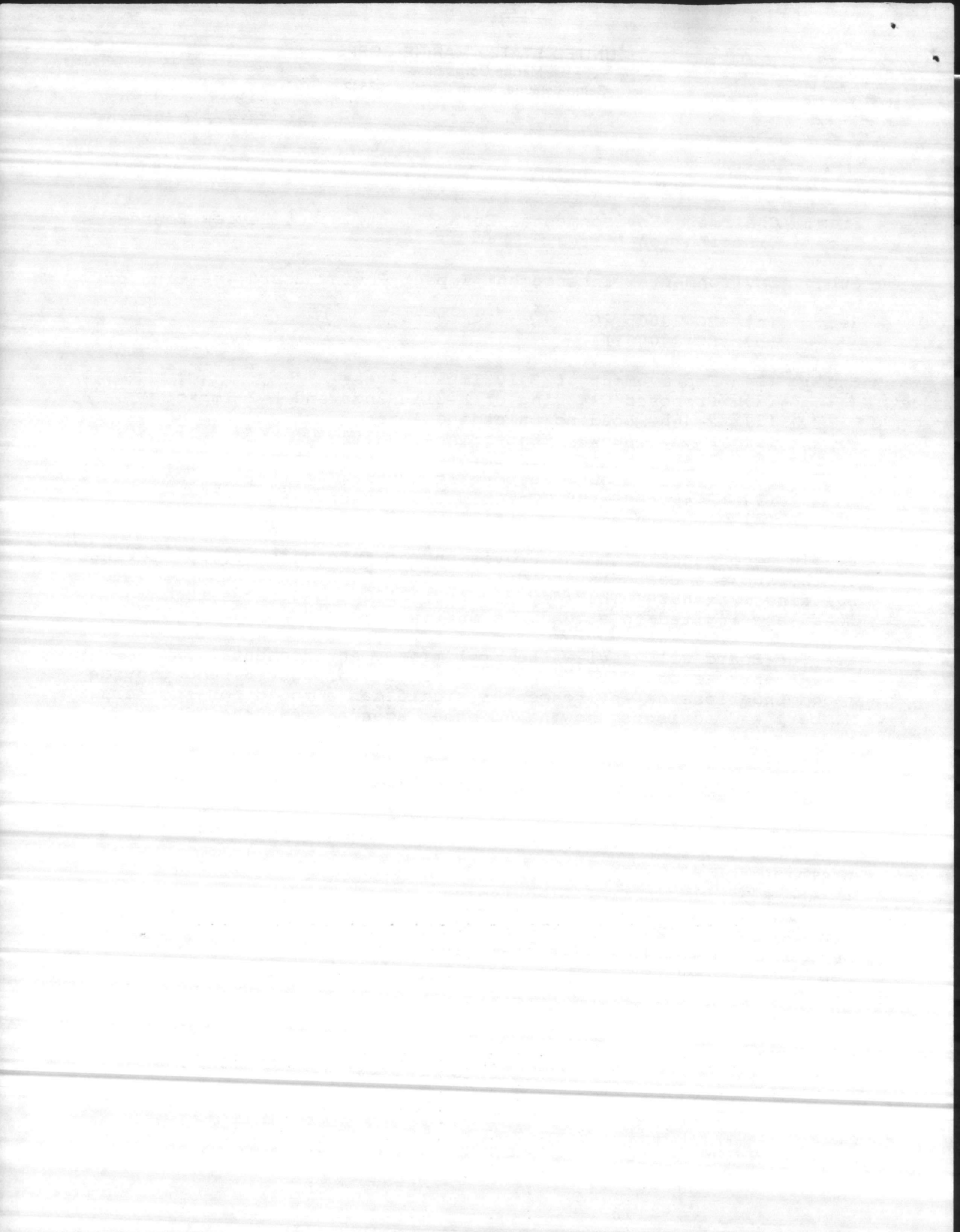
DISTRIBUTION:

(Members)

- Rep, 2d MarDiv (G-4)
- Rep, 2d FSSG (G-4)
- Rep, 6th MAB (G-4)
- Rep, MCAS(H),NR (S-4)
- TFACO
- BMO
- PWO

(Advisors)

- Dir, NREA
- SupvEcologist
- BWildlifeMgr
- BGameProtector
- SAFD
- SJA
- DPDO
- Ch, VetMedSvc, NavHosp
- Ch, Occup/PrevMed, NavHosp



PRELIMINARY ENVIRONMENTAL ASSESSMENT

FOR

RANGE G-10



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

IN REPLY REFER TO
RCTL/HBR/vec
11000
26 Mar 84

1. Enclosure. Map showing proposed range improvements.

2. Purpose and Need. The purpose of this proposed action is to return the G-10 Impact Area to its original condition when it was first constructed. This action will provide the Marine Corps Base, Camp Lejeune, North Carolina with a range for air delivered ordnance, direct fire ordnance, and indirect fire ordnance to teach Marines the skills necessary for combat situations.

3. Project Description. The project consists of clearing trees and brush as indicated in the enclosure and landscaping of the range to establish permanent grasses for erosion control and to facilitate maintenance.

4. Site Selection. The sites are located on enclosure (1) and allows for visibility of target areas.

5. Range Characteristics. A common impact area is used for all types of mortars, artillery rounds, and missiles. Targets consist of personnel, vehicle, and material targets supplemented by surveyed natural terrain features.

6. Compliance With Environmental Requirements

a. Air Quality: No emissions are anticipated.

b. Land Quality: Erosion control measures will be included in the project design. Construction management will provide preventive measures to contain all sediment on site. Reseeding of disturbed areas and vegetative cover on the cleared area will be accomplished within 30 days of completion of construction.

c. Clean Water Act: No discharge of wastes to surface waters will occur during range development or subsequent use.

d. National Historic Preservation Act: No significant cultural resources are located on the project site.

e. Executive Order 11990 Protection of Wetlands: Disturbance of wetlands will be avoided during clearing and earthmoving.

f. Endangered Species Act: The impact of this project on the habitat of the Red-Cockaded Woodpecker has been determined to be negligible. This statement is based on the determination that the habitats of the species does not occur within the area to be affected by clearing and earthwork.

From: Range Control Officer
To: Assistant Chief of Staff, Facilities
Via: Assistant Chief of Staff, Training *Towards recommending approval*
of the enclosed PEA

Subj: Improvement of G-10 Impact Area; request for

Ref: (a) MCO 3570.1A

Encl: (1) Map Showing Range
(2) Preliminary Environmental Assessment (PEA)

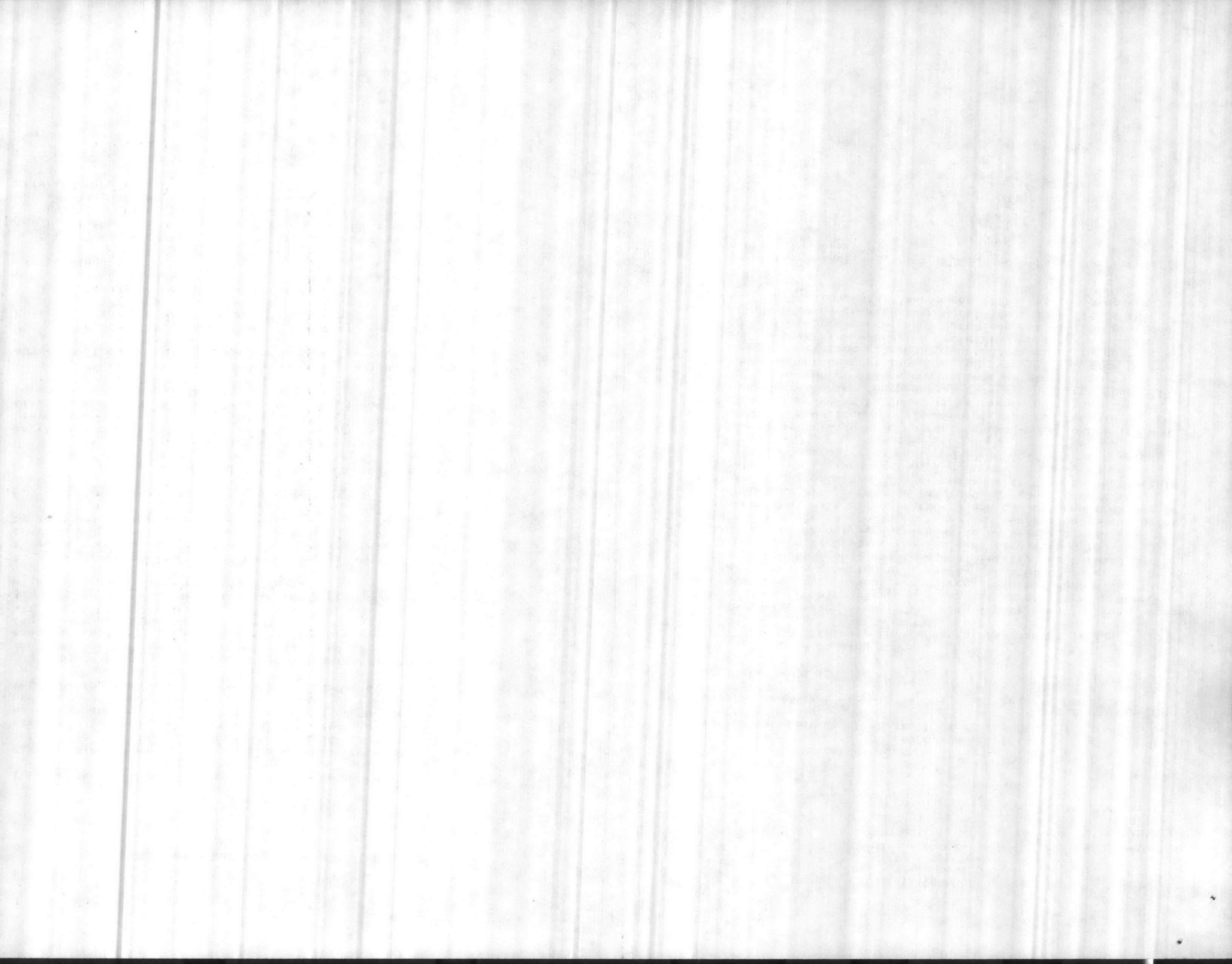
1. The G-10 Impact Area is the main impact area for Camp Lejeune and is used for air delivered ordnance, direct fired ordnance, and indirect fired ordnance. Current refurbishment plans for G-10 call for the clearing of trees in front of OP-5 for use as a Infantry Weapons Range and to aid visibility for Forward Observers from OP-5 observing indirect fire into G-10. Visibility of target areas within the G-10 Impact Area has deteriorated due to growth of trees and vegetation to the point that less than half of the target areas can be seen from any OP. In accordance with reference (a), and in order to meet the training requirements of tenant commands at Camp Lejeune, it is requested that the vegetation, i.e. trees, etc..., obscuring visibility of target area in the G-10 Impact Area be removed.

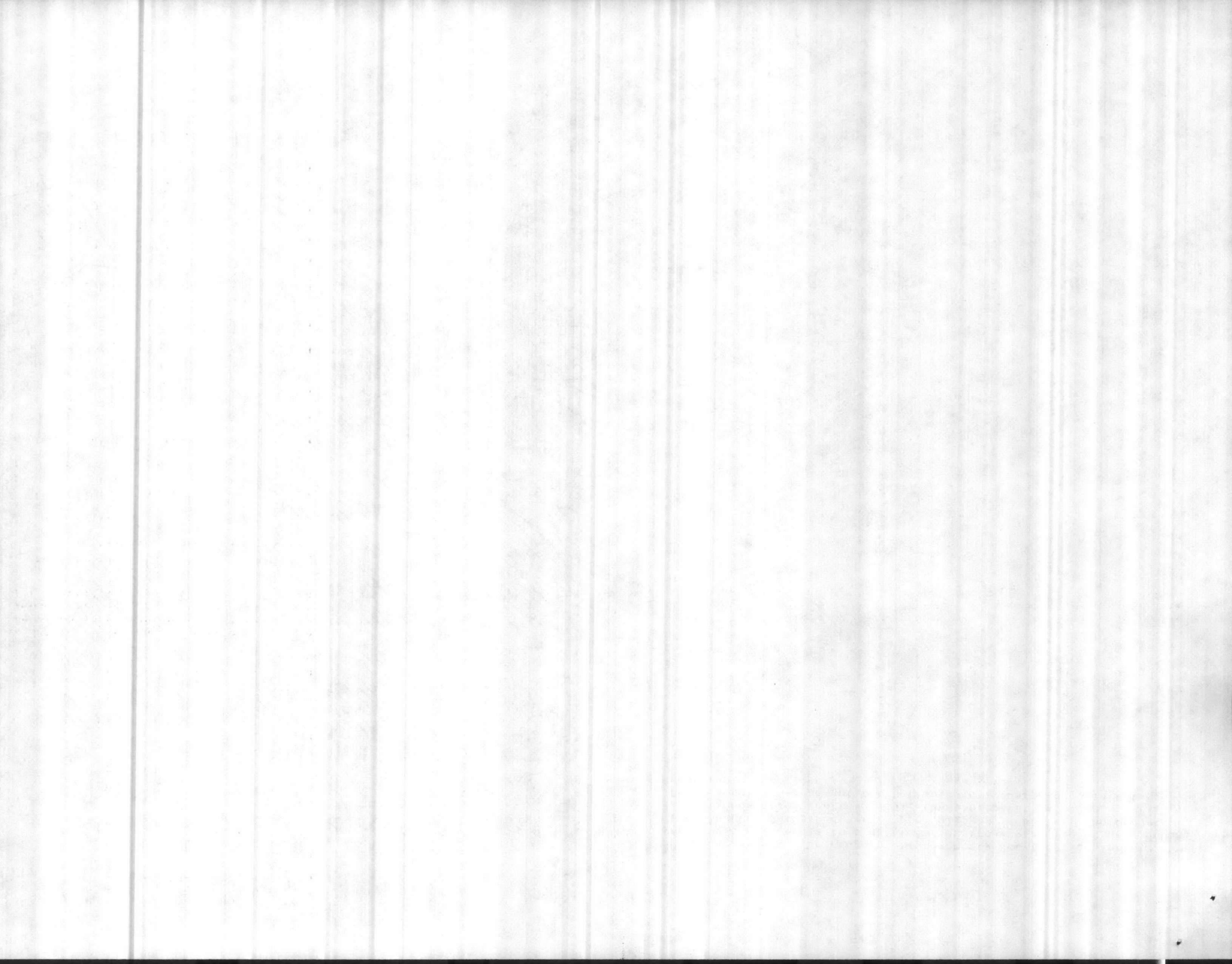
2. The total area to be cleared is shown in enclosure (1) and will have no significant environmental impact. Because of the amount of clearing to be done, it is recommended that the clearing operation be done in phases as shown in enclosure (1). Scheduling of the clearance phases must be planned so as to have the least impact on training. An EOD sweep of the area to be cleared of vegetation will be conducted prior to the commencement of each phase of the operation. Clearing of trees could be accomplished by heavy equipment. EOD support will be provided for all down range construction work. Enclosure (2) is the Preliminary Environmental Assessment (PEA) for the proposed range improvement.

3. Point of contact is: MSgt ROSES, Range Maintenance Chief, phone extension 5211/3542.

[Handwritten Signature]
K. W. ITZ

ENCLOSURE





PRELIMINARY ENVIRONMENTAL ASSESSMENT
FOR
K-211 M203/MK-19 40MM GRENADE RANGE

1. Enclosures. Map showing proposed range.

2. Purpose and Need. The purpose of this proposed action is to provide the Marine Corps Base (MCB), Camp Lejeune, North Carolina with a range in the Verona Loop Area to teach grenade launcher firing techniques and to prepare grenadiers for combat situations. It can handle the M-203 grenade launcher, M-79 grenade launcher, MK-19 40MM machine gun, and all types of rifle grenades and launchers.

3. Project Description. The project consists of clearing trees and brush as indicated in the enclosure and landscaping of the range to establish permanent grasses for erosion control and to facilitate maintenance.

4. Site Selection. The site is located on enclosure (1). The location is currently part of the surface danger area for the K-2 Impact Area. The site was selected because the terrain allows for visibility at ranges up to 2200 meters.

5. Range Characteristics

- a. Number of Firing Positions - 6
- b. Firing Line Width - 30 meters
- c. Target Area Width - 150 meters at 400 meters from the firing line expanding out to 300 meters at 2200 meters from the firing line.
- d. Minimum Range Depth - 2200 meters
- e. Firing Point Configuration - Concrete cinder block wall.
- f. Target configuration - Static personnel and material targets.

6. Compliance with Environmental Requirements

- a. Air Quality: No emissions are anticipated
- b. Land Quality: Erosion control measures will be included in the project design. Construction management will provide preventive measures to contain all sediment on site. Reseeding of disturbed areas and vegetative cover on the cleared area will be accomplished within 30 days of completion of construction.
- c. Clean Water Act: No discharge of wastes to surface waters will occur during range development or subsequent use.
- d. National Historic Preservation Act: No significant cultural resources are located on the project site.

Enclosure (2)



UNITED STATES MARINE CORPS
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA 28542

IN COPY REFER TO
RCTL/HBR/ves
11000
30 January 1984

From: Range Control Officer
To: Assistant Chief of Staff, Facilities
Via: Assistant Chief of Staff, Training *W*

Subj: Improvement of 40MM Grenade Range K-211; request for

Ref: (a) MCO 3570.1A

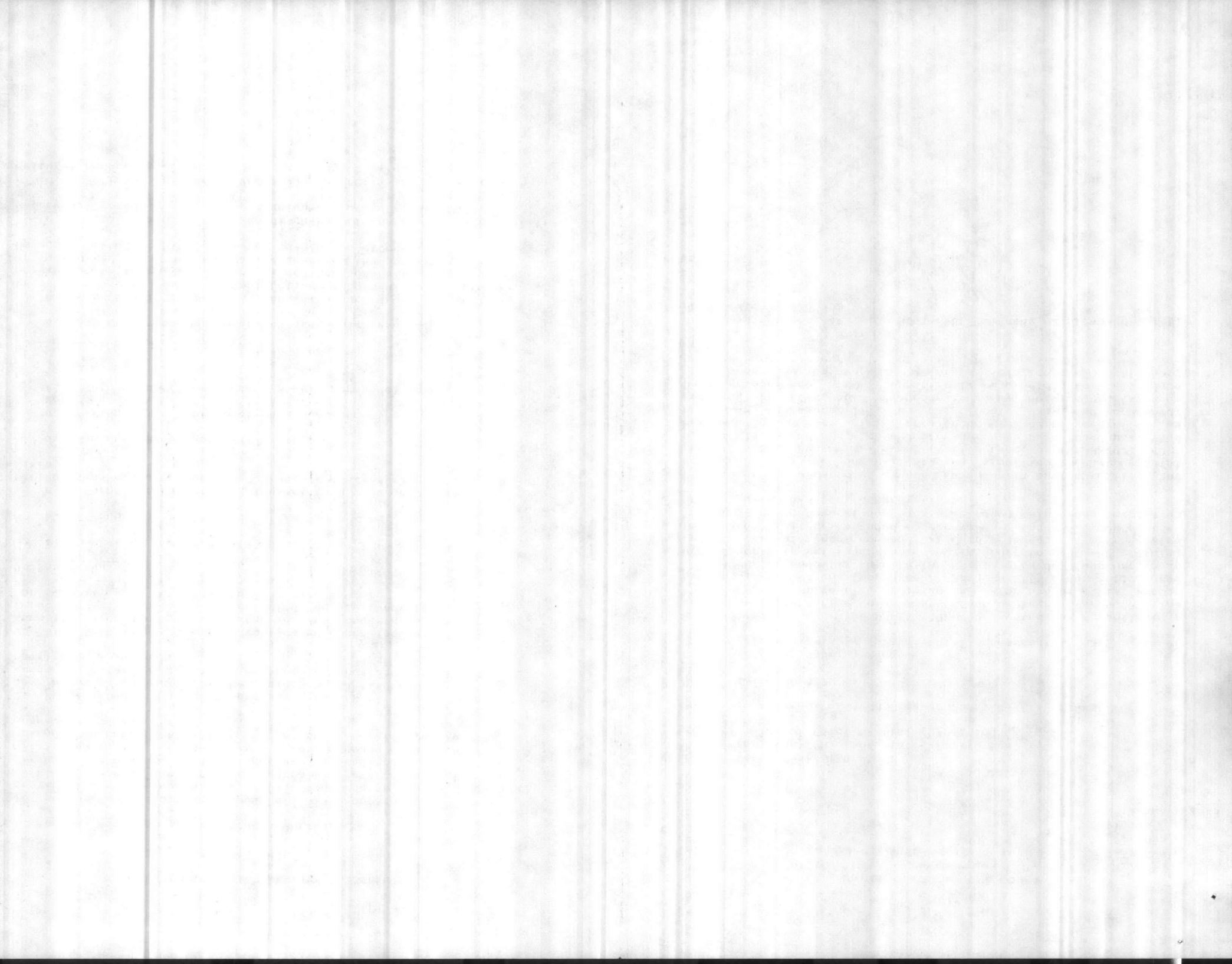
Encl: (1) Map Showing Range
(2) Preliminary Environmental Assessment (PEA)

1. Introduction of the MK-19, 40MM gun system has established a requirement for Marine Corps Base, Camp Lejeune, North Carolina to provide a live fire training range for use of this weapon system in the Verona Loop area. Range K-211 is currently used for 40MM grenade firing with the M-203 grenade launcher. In accordance with reference (a), and in order to meet the training requirements of tenant commands at Camp Lejeune, it is requested that Range K-211 be expanded to accommodate the MK-19 gun system. The Commanding General has been briefed on this range expansion and has given his tacit approval.

2. The total area to be cleared is shown in enclosure (1), has no economic value and will have no significant environmental impact. Because the maximum effective range of the M-203, 40MM system is 400 meters, no dud grenades have been found past 500 meters. An EOD sweep of the area to be cleared of vegetation, as shown in enclosure (1), has not located any dud ordnance. Clearing of trees could be accomplished by heavy equipment from Base Maintenance. EOD support will be provided for all down range construction work. Enclosure (2) is the Preliminary Environmental Assessment (PEA) for the proposed range improvement.

3. Point of contact is: NSgt NOSES, Range Maintenance Chief, phone ext 5211/3542.

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K. W. TIT





PRELIMINARY ENVIRONMENTAL ASSESSMENT

FOR

RANGE K-2

1. Enclosure. Map showing proposed range.
2. Purpose and Need. The purpose of this proposed action is to provide the Marine Corps Base, Camp Lejeune, North Carolina with a range in the Verona Loop Area to teach Marines the skills necessary for combat situations.
3. Project Description. The project consists of clearing trees and brush as indicated in the enclosure and landscaping of the range to establish permanent grasses for erosion control and to facilitate maintenance.
4. Site Selection. The site is located on enclosure (1). The location is currently part of the surface danger area for the K-2 Impact Area. The site was selected because the terrain allows for visibility at ranges up to 2800 meters.
5. Range Characteristics. A common impact area is used for all types of mortars, artillery rounds, and dragon missiles. Targets consist of personnel, vehicle, and material targets supplemented by surveyed natural terrain features.
6. Compliance with Environmental Requirements.
 - a. Air Quality: No emissions are anticipated.
 - b. Land Quality: Erosion control measures will be included in the project design. Construction management will provide preventive measures to contain all sediment on site. Reseeding of disturbed areas and vegetative cover on the cleared area will be accomplished within 30 days of completion of construction.
 - c. Clean Water Act: No discharge of wastes to surface waters will occur during range development or subsequent use.
 - d. National Historic Preservation Act: No significant cultural resources are located on the project site.
 - e. Executive Order 11990 Protection of Wetlands: Disturbance of wetlands will be avoided during clearing and earthmoving.
 - f. Endangered Species Act: The impact of this project on the habitat of any endangered species has been determined to be negligible. This statement is based on the determination that no endangered species are known to live in the area to be affected by clearing and earthwork.

ENCLOSURE (2)



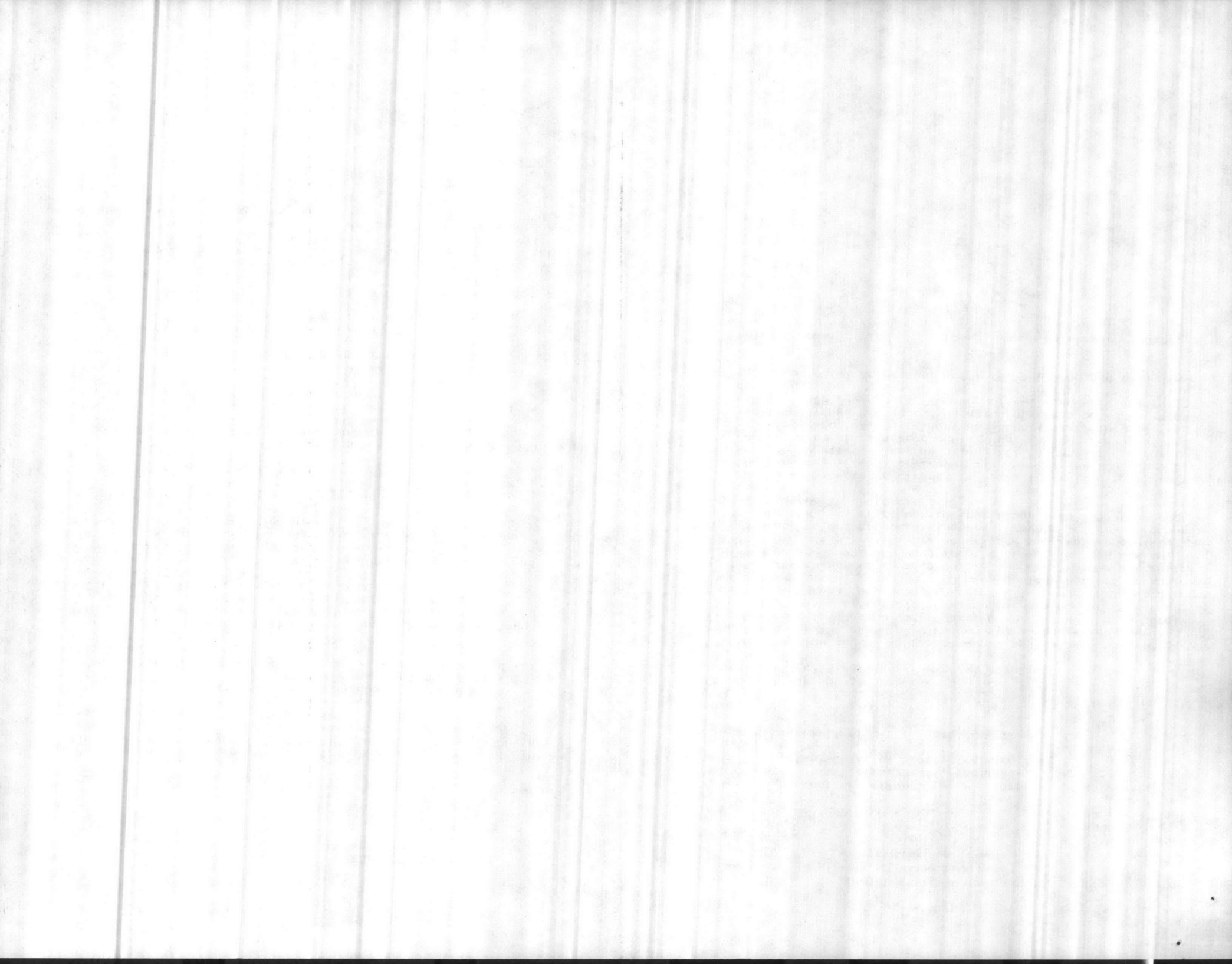
UNITED STATES MARINE CORPS
MARINE CORPS BASE
CAMP LEJUNE, NORTH CAROLINA 28542

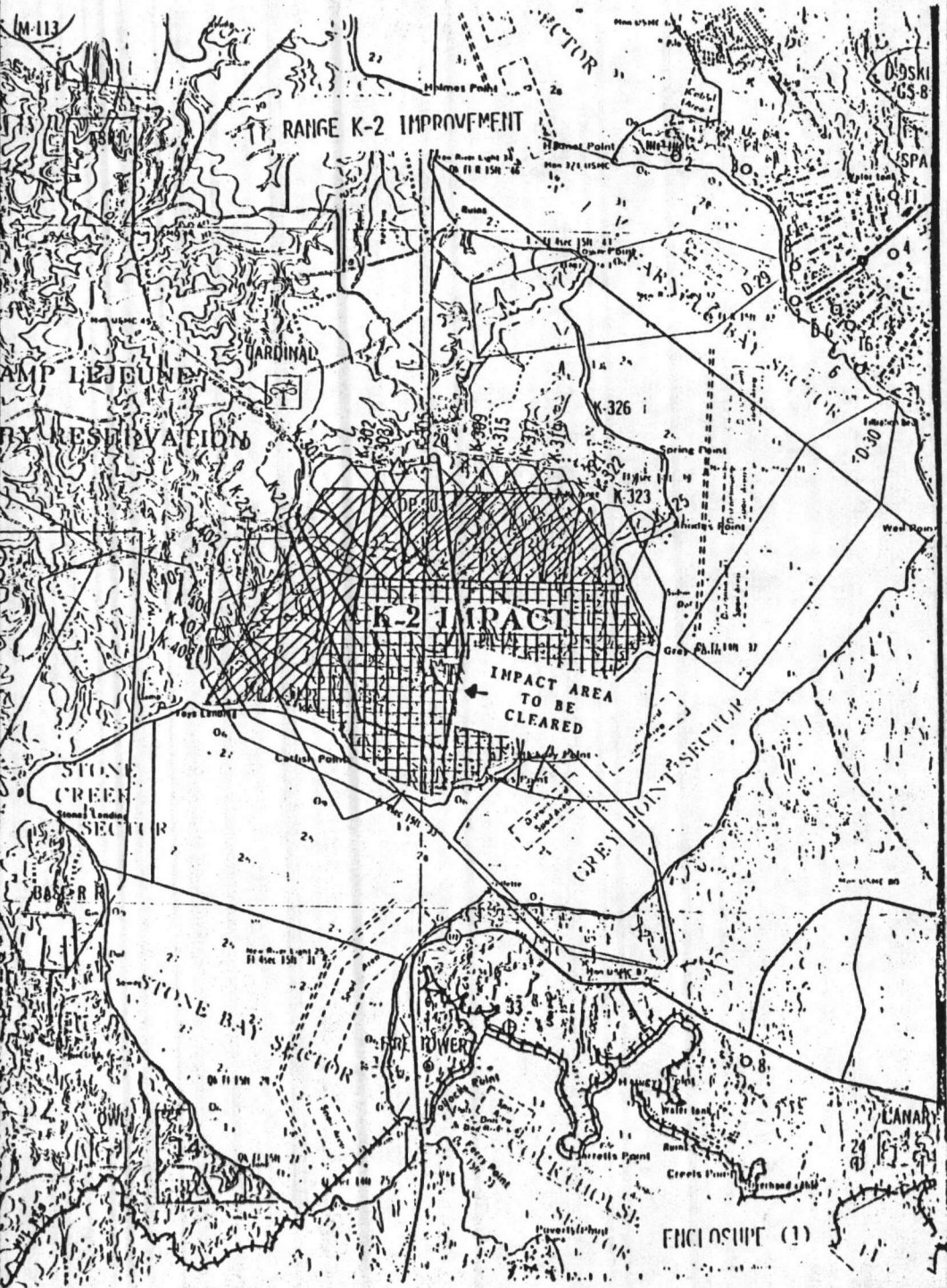
IN REPLY REFER TO
RCTL/HNR/irh
11000
8 March 1984

From: Range Control Officer
To: Assistant Chief of Staff, Facilities
Via: Assistant Chief of Staff, Training
Subj: Improvement of K-2 Impact Area; request for
Ref: (a) MCO 3570.1A
Encl: (1) Map Showing Range
(2) Preliminary Environmental Assessment (PEA)

1. Introduction of the M198, 155mm gun system and improved ammunition for the 60mm and 81mm gun system has established a requirement for Marine Corps Base, Camp Lejeune, North Carolina to provide a live fire training range for use of these weapon systems in the Verona Loop Area. Range K-211 is currently used for 40mm grenade firing with the M203 grenade launcher and is scheduled for refurbishment to accommodate the MK-19, 40mm gun system. Range K-303 and K-305 are used for the 60mm, 81mm gun system, and Dragon Missile system. In accordance with reference (a), and in order to meet the training requirements of tenant commands at Camp Lejeune, it is requested that Range K-303 and K-305 be expanded as shown in enclosure (1).
2. The total area to be cleared is shown in enclosure (1) and will have no significant environmental impact. An EOD sweep of the area to be cleared of vegetation will be conducted prior to the commencement of clearance operations. An EOD survey of the area to be cleared of vegetation, as shown in enclosure (1) has not located any dud ordnance. Clearing of trees could be accomplished by heavy equipment. EOD support will be provided for all down range construction work. Enclosure (2) is the Preliminary Environmental Assessment (PEA) for the proposed range improvement.
3. Point of contact is: MSgt Moses, Range Maintenance Chief, phone extension 5211/3542.

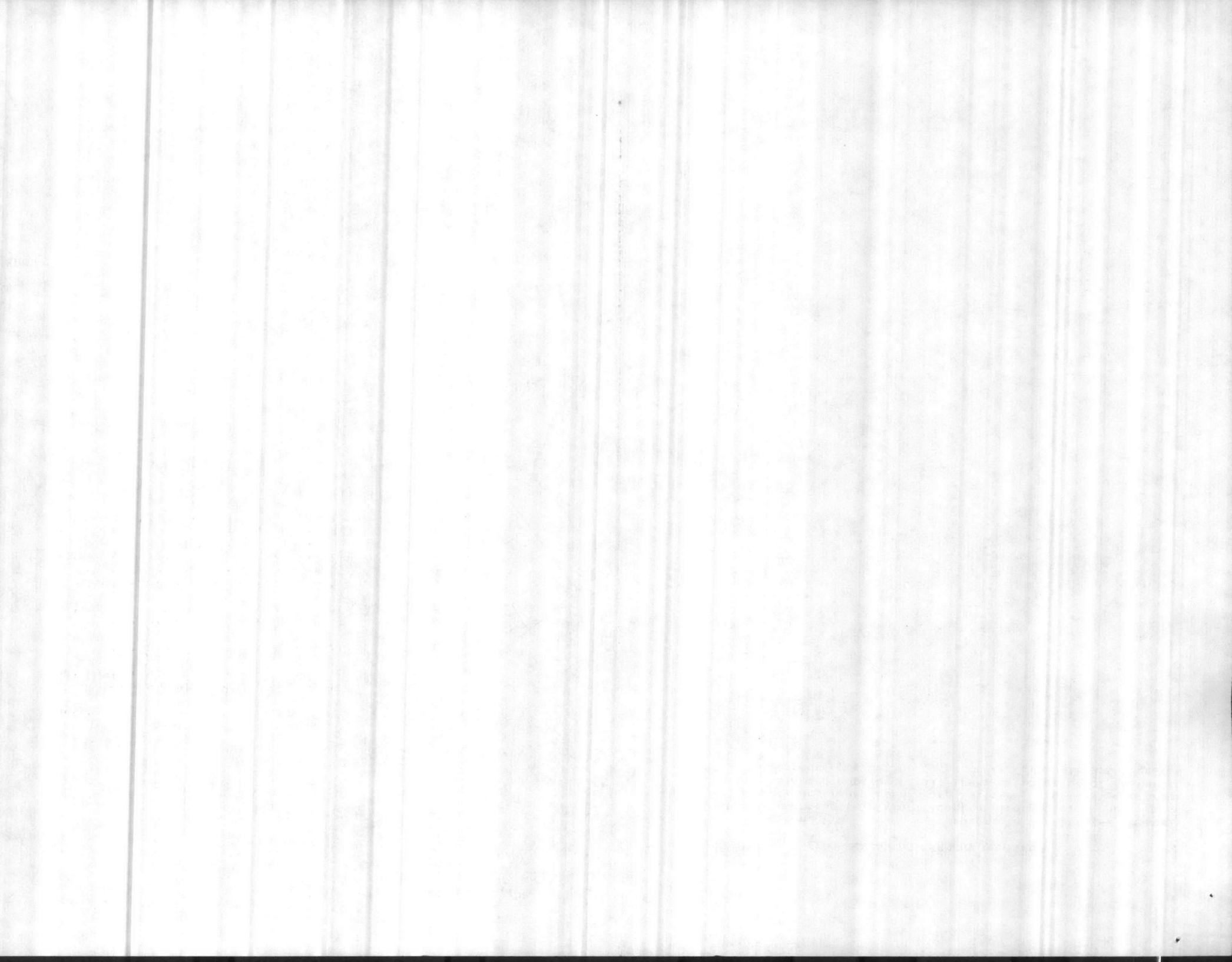
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W. W. 1111





PRELIMINARY ENVIRONMENTAL ASSESSMENT continued:

7. Conclusion. The proposed improvements for the K-2 Impact Area will not result in significant environmental impact provided the measures described herein are followed. Further, the project is not considered controversial, thus, preparation of an Environmental Assessment per Marine Corps Order 6280.5 is not required.



- c. Clean Air Act. No discharge of air pollutants is anticipated.
- d. Control Pesticide Management Act (CPMA). Not applicable to this site.
- e. Archaeological and Historic Preservation Act. Nothing of archaeological or historic significance has been identified at this site.
- f. North Carolina Erosion and Sedimentation Regulations. Erosion problems are not foreseeable and this regulation is not applicable.
- g. Hazardous Materials and Hazardous Waste Disposal. No hazardous materials or waste are anticipated, therefore this item is not applicable.
- h. Protections of Wetlands Executive Order 11990. Not applicable.
- i. Sanitary Waste and Refuse Disposal. Sanitary waste and refuse will not be generated and therefore do not require consideration.

4. Probable Impact. Construction of the ordnance arming/dearming pad and the proposed loading/downloading pad and parking area would eliminate the Waiver requirements New River now operates under. The project would lessen the chance of an incident that would endanger lives and lower accident potential with growth of training and ordnance missions. The proposed action should have no significant adverse effect on the environment.

Attachment (GM)

Loading/Downloading Apron
at the
Marine Corps Air Station (MCAS) (1)
New River, Jackson County, NC

1. Action/Project Description.

The project will provide construction of a combat aircraft loading/downloading apron and parking area. The apron will be a 12" concrete slab with aircraft tie downs and grounding. Asphalt access road with lighting and ordnance trailer holding area. The Fleet Marine Force mission requires that loading of explosive ordnance and combat aircraft aboard station is essential for the training and readiness of personnel assigned to the Marine Air Groups. Currently no area exists that meets the quantity distance requirements specified for ordnance handling and training at squadron levels. Waiver to MCAS (M), HREC 1-7B) was authorized 2 May 1976 and renewed 12 May 1982 and is due to expire 31 March 1984. A request for renewal is in process at this time.

The proposed site is adjacent to the existing taxiway and allows for good drainage, vegetation other than grass is non-existent, water and sewage are not applicable to this project. No major changes in landscape would be incurred under this project.

2. Consideration of Site Selection.

An alternative to this project would be to arm and dearm at a training site. Additional personnel and equipment are not available to support such a training mission. Severe logistics problems associated with remote sites lacking operational facilities would curtail ordnance operations and affect training/readiness within the squadrons.

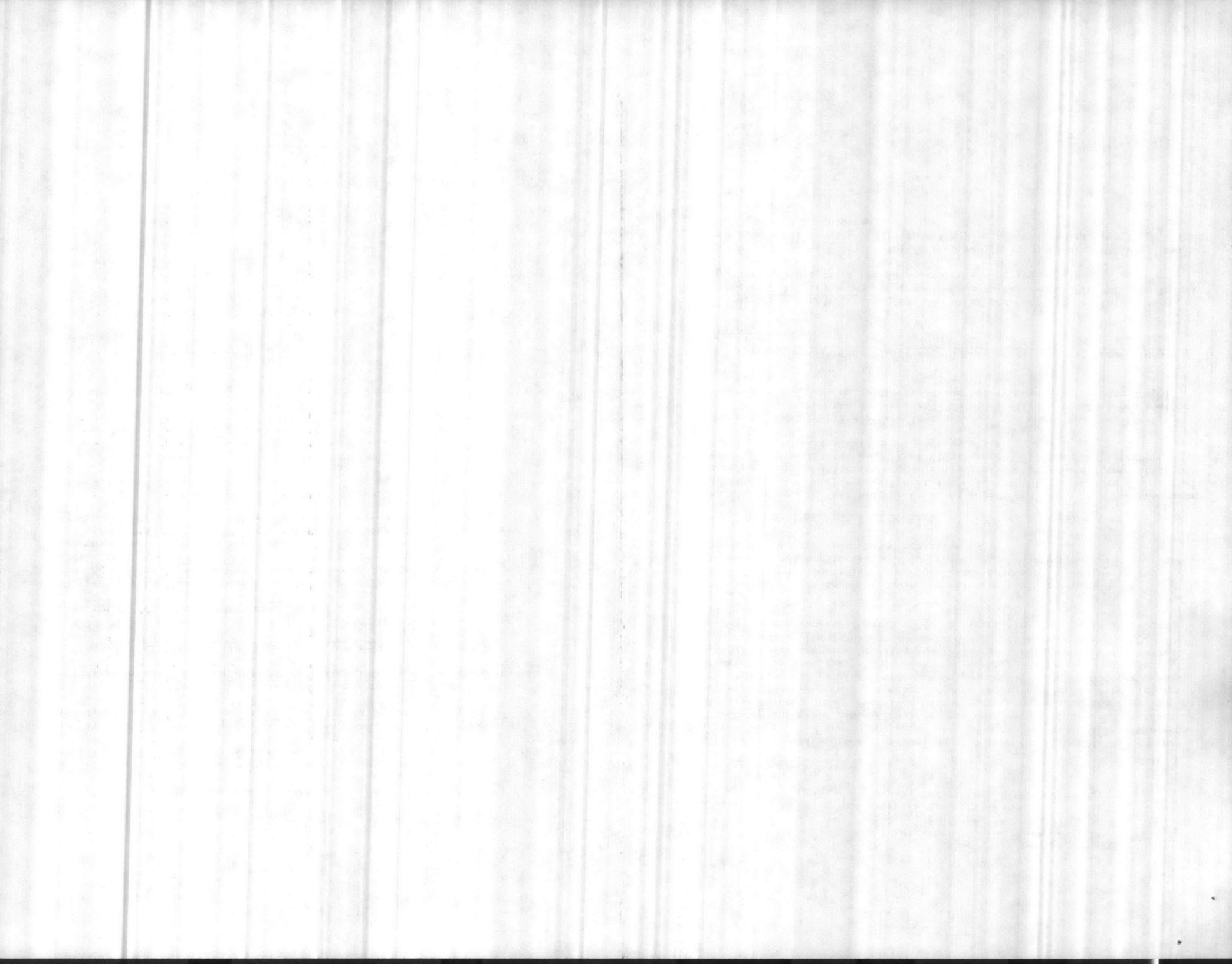
The site location offered here is convenient and would have relatively little impact upon the environment. No other site is available on station that would meet the necessary Explosive Safety Quantity Distance (ESQD) clearances.

3. Compliance with Federal, State and Local Environmental Regulations and Guidelines.

a. Endangered Species. Deployment of personnel for training would incur more likelihood of non-compliance with this act. Project site is not applicable since it is not inhabited by endangered species.

b. Clean Water Act. Spills incurred in the area are unlikely, however strict compliance with spill reporting, containment and cleanup IAW MCO Order 11090.1B will be enforced.

ENCLOSURE (3)



Preliminary Environmental Impact Assessment
for Runway Centerline Lighting
at the
Marine Corps Air Station (Helicopter)
New River, Jacksonville, NC

1. Action/Project Description.

This project provides centerline lighting for the primary runway at the Marine Corps Air Station (H), New River facility. The cable to feed the lights will be fed partially through an existing ductway from building 504 to 520; from building 520 to building 3620 a new concrete encased ductway and cable will be installed and a new duct bank to the runway and down the centerline, a distance of 5200 LF, with a total of 200 new lights. An addition to building 3620 will be required to house the controls and switchgear for the project.

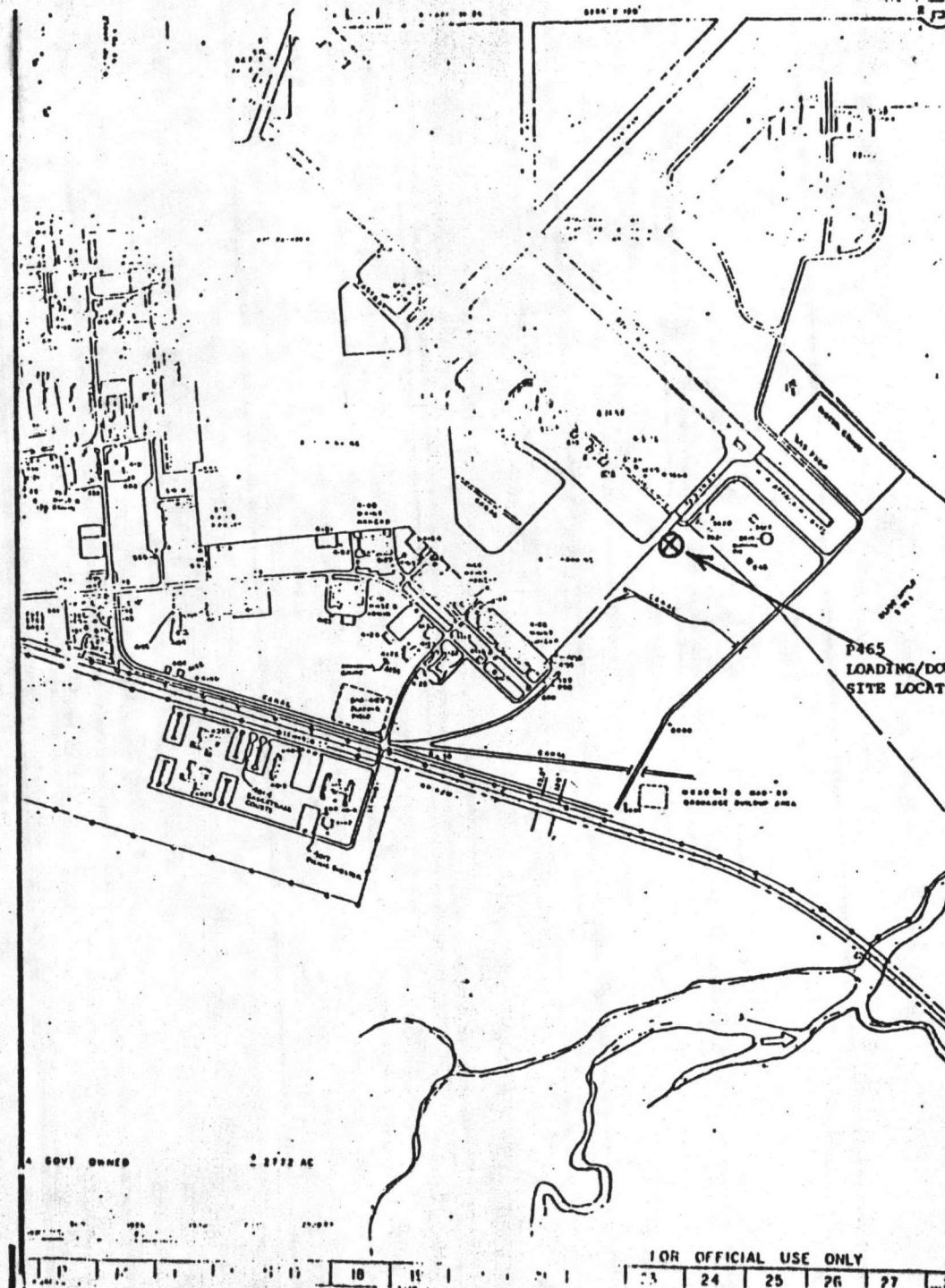
2. Consideration of Site Selection.

The site was selected as the most utilized runway due to its size and its capability to handle the transit traffic with its varied aircraft traffic.

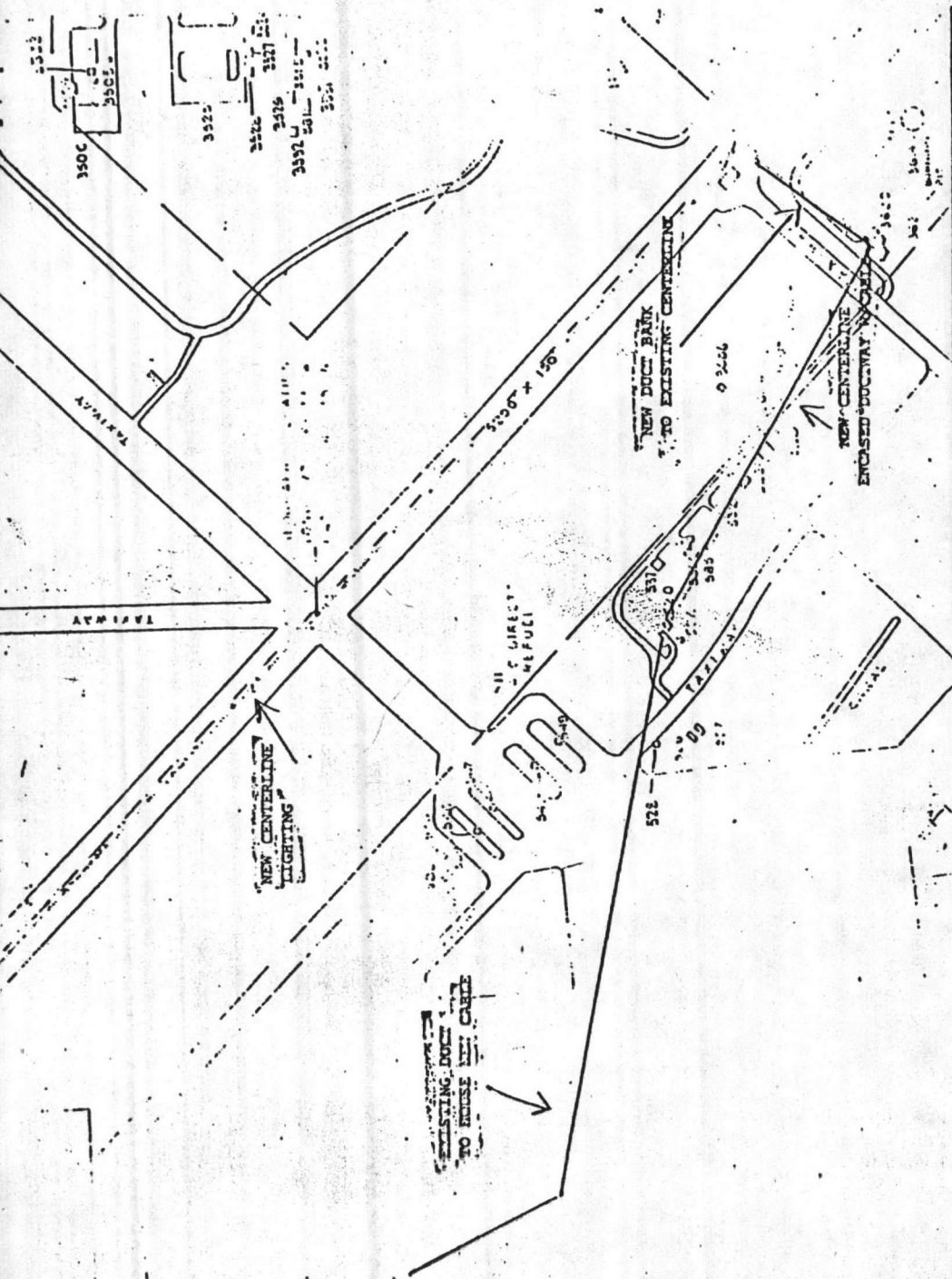
3. Compliance with Federal, State and Local Environmental Regulations and Guidelines.

- a. Endangered Species. The habitat of endangered species does not exist in this project area.
- b. Clean Water Act. This project will not alter or introduce toxic or hazardous substances or significant amounts of chemicals, organic substances or solid wastes into bodies of water, on land or otherwise effect water or soil quality.
- c. Clean Air Act. No emissions will be released into the atmosphere of toxic or hazardous substances or significant amounts of pollutants.
- d. Coastal Zone Management Act. Not applicable due to location of projected site.
- e. Archaeological and Historic Preservation Act. No significant cultural resources are with the site limitations.
- f. North Carolina Erosion and Sedimentation Regulations. There is no potential for erosion occurring, therefore this regulation does not apply.
- g. Hazardous Materials and Hazardous Waste Disposal. No hazardous materials or waste are anticipated, therefore this item is not applicable.
- h. Protections of Wetlands Executive Order 11990. Does not apply.

ENCLOSURE 4/1



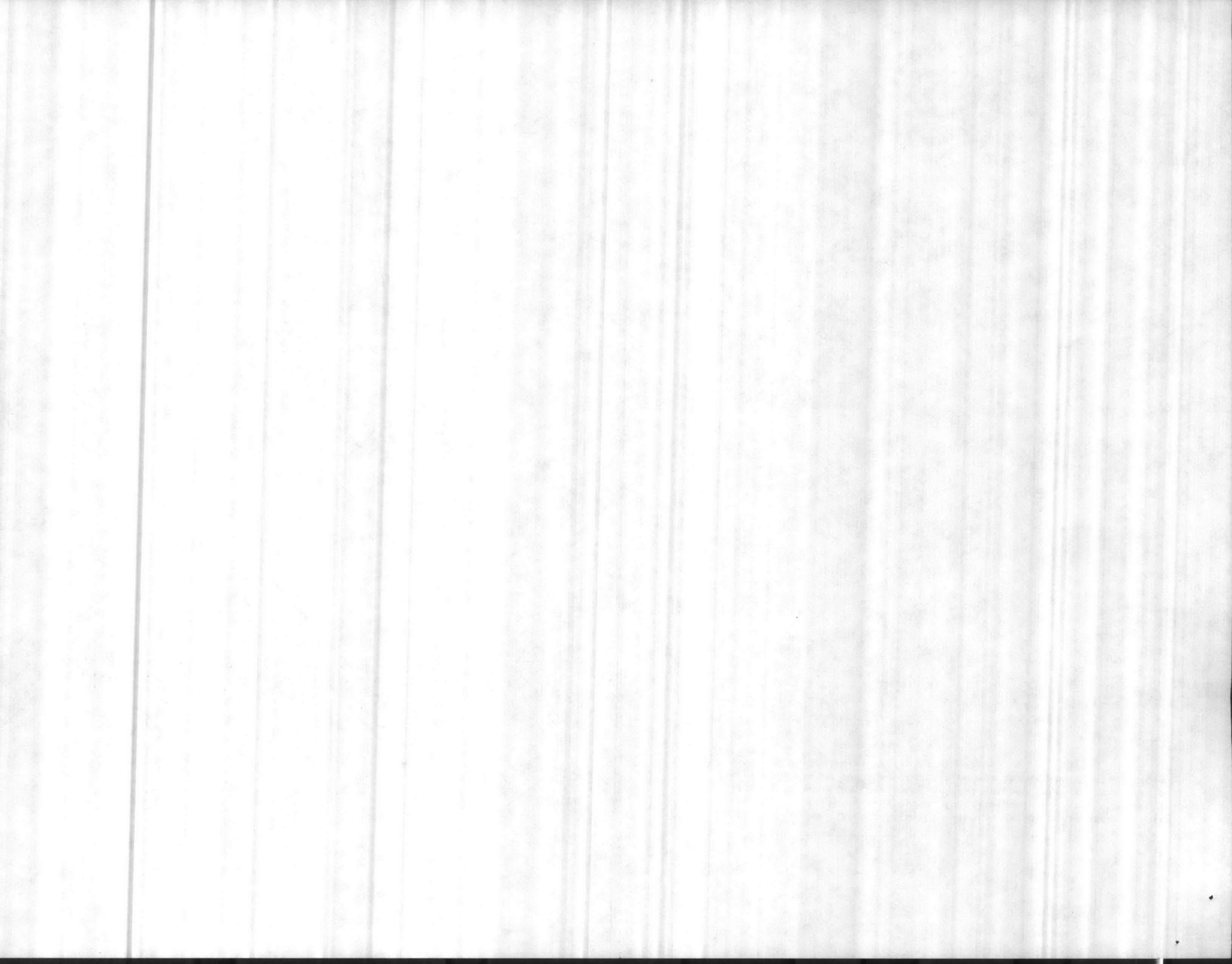




4. Proposed Action Impact.

The proposed modification to the existing runway would incur reduced air traffic on the runway during installation. However, upon completion it would lessen the chances of an accident and enhance the safety of operation status for the PMF training and lessen the stress factors involved in foul weather flying.

ATTACHMENT (GDM)



h. Protection of Wetlands Executive Order 11990. Does not apply.

i. Sanitary Waste and Refuse Disposal. Sanitary waste and refuse are not anticipated, since this will primarily be a storage area.

4. Probable Impact.

The proposed project will not have a significant impact upon the environment nor will it involve the use of air contaminating materials. There will be no loss of forest nor will it change the land use projected in the base master plan. There is no known controversy associated with this project.

Attachment (GM)

Preliminary Environmental Impact Assessment
for
Helicopter Internal Storage Storage
at the
Marine Corps Air Station (Helicopter)
New River, Jacksonville, NC

1. Action/Project Description.

The project consists of a prefabricated metal building, asphalt and concrete paving, storm drainage system, lighting and related work. This facility will provide storage for extended range fuel tanks.

2. Consideration of Site Selected.

The proposed site utilizes an area restricted to uninhabited buildings as required by OP-5 ordnance regulations. No alternate site is available that would cause no major change in landscaping and meet the location requirements for the facility. The project will have no foreseeable impact on the long range activity functions in this area.

3. Compliance with Federal, State and Local Environmental Regulations and Guidelines.

a. Endangered Species. Project site is not inhabited by endangered species.

b. Clean Water Act. This project will require disposal of a small amount of residual fuel found in the storage tanks. Consideration will be given to this requirement at the design stage.

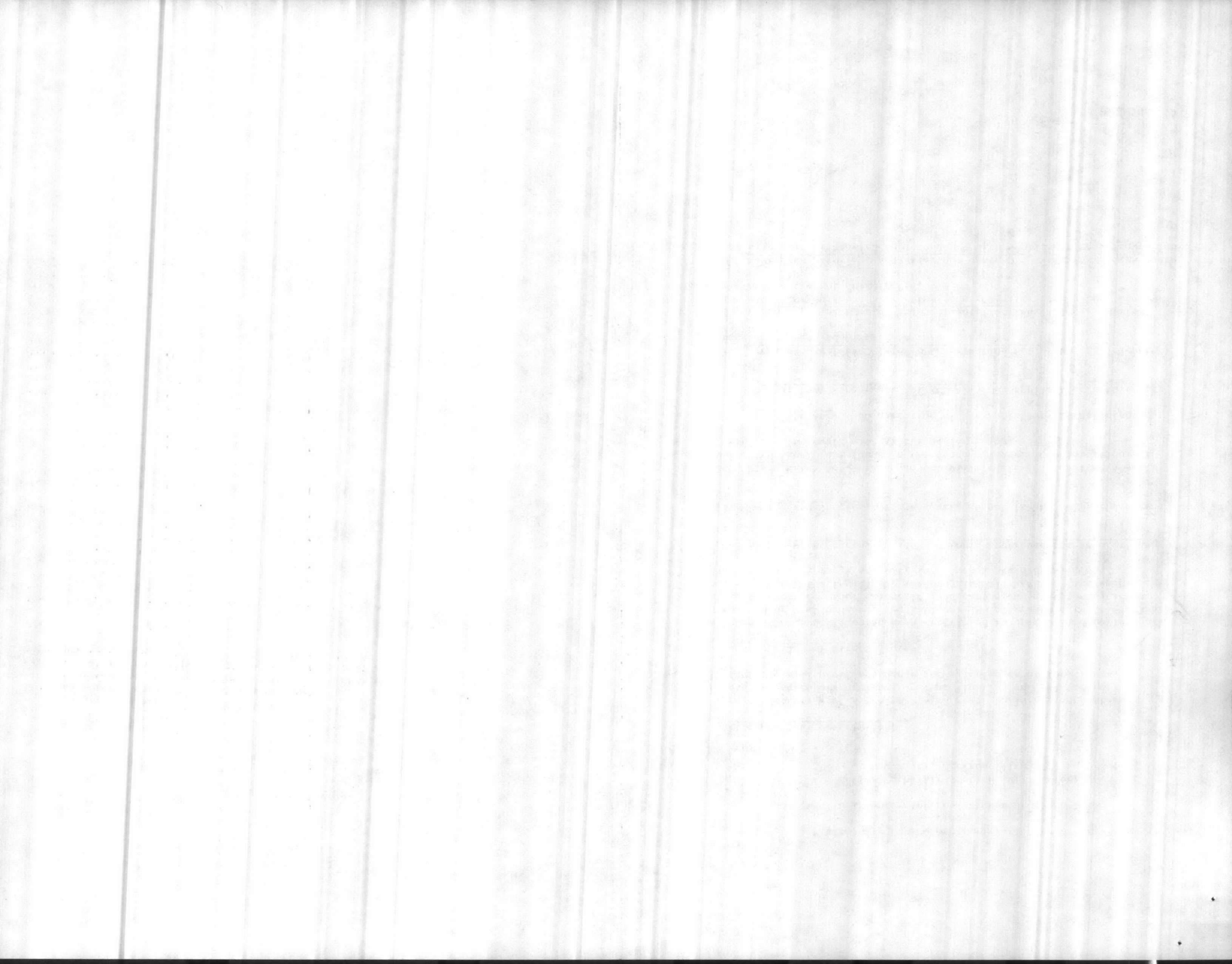
c. Clean Air Act. No discharge of air pollutants is anticipated.

d. Coastal Zone Management Act (CZMA). Not applicable to this site location.

e. Archaeological and Historic Preservation Act. No significant resources have been identified in this area.

f. North Carolina Erosion and Sedimentation Regulations. Minimal erosion may occur during construction requiring silt fences but long range problems are not anticipated.

g. Hazardous Materials and Hazardous Waste Disposal. Hazardous waste at this site will be handled in accordance with applicable base regulations.



Preliminary Environmental Impact Assessment
for
Ground Support Equipment Facility
at the
Marine Corps Air Station (Helicopter)
New River, Jacksonville, NC

1. Action/Project Description.

The proposed GSE facility will provide a concrete floor, metal building with an overhead crane, exhaust vent system, CHU interior walls, plumbing, electric, storm and sanitary systems, and sprinkler and intercom systems. Asphalt paving, concrete walks and a fenced outside storage area.

2. Consideration of Site Selected.

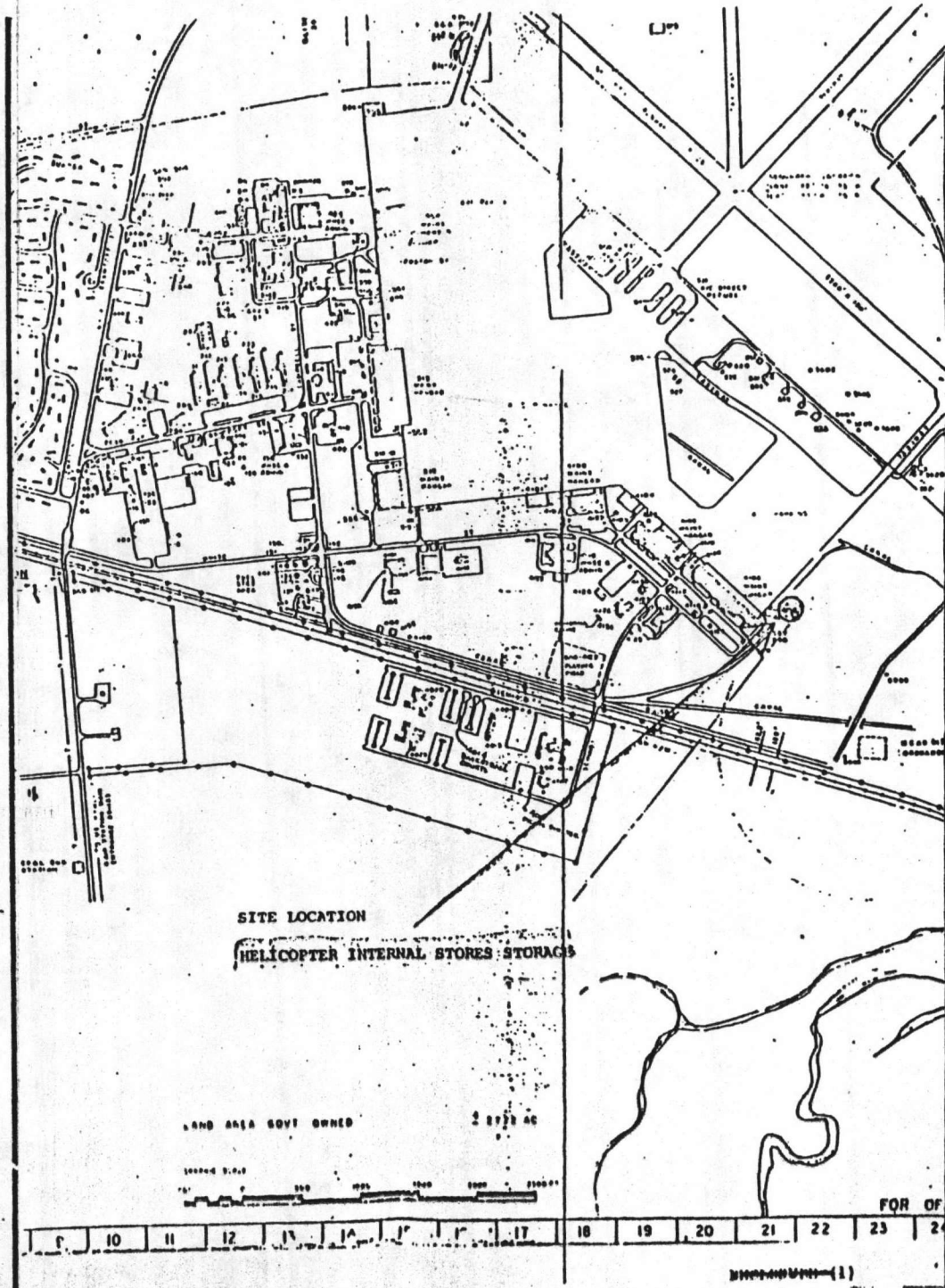
The site is unimproved with grasses, shrubs and pine trees, conveniently located in the Marine Air Group 29 area (see enclosure (1)). The current GSE group for the MAG 29 is physically located in AS-4106 and occupies space urgently required for increased IMA functions generated by the mirror image reorganization. This project will improve operational efficiency by allowing room for maintenance support now being performed in remote sites and under primitive conditions and improving the morale of personnel who currently are working in those cramped areas.

3. Compliance with Federal, State and Local Environmental Regulations and Guidelines.

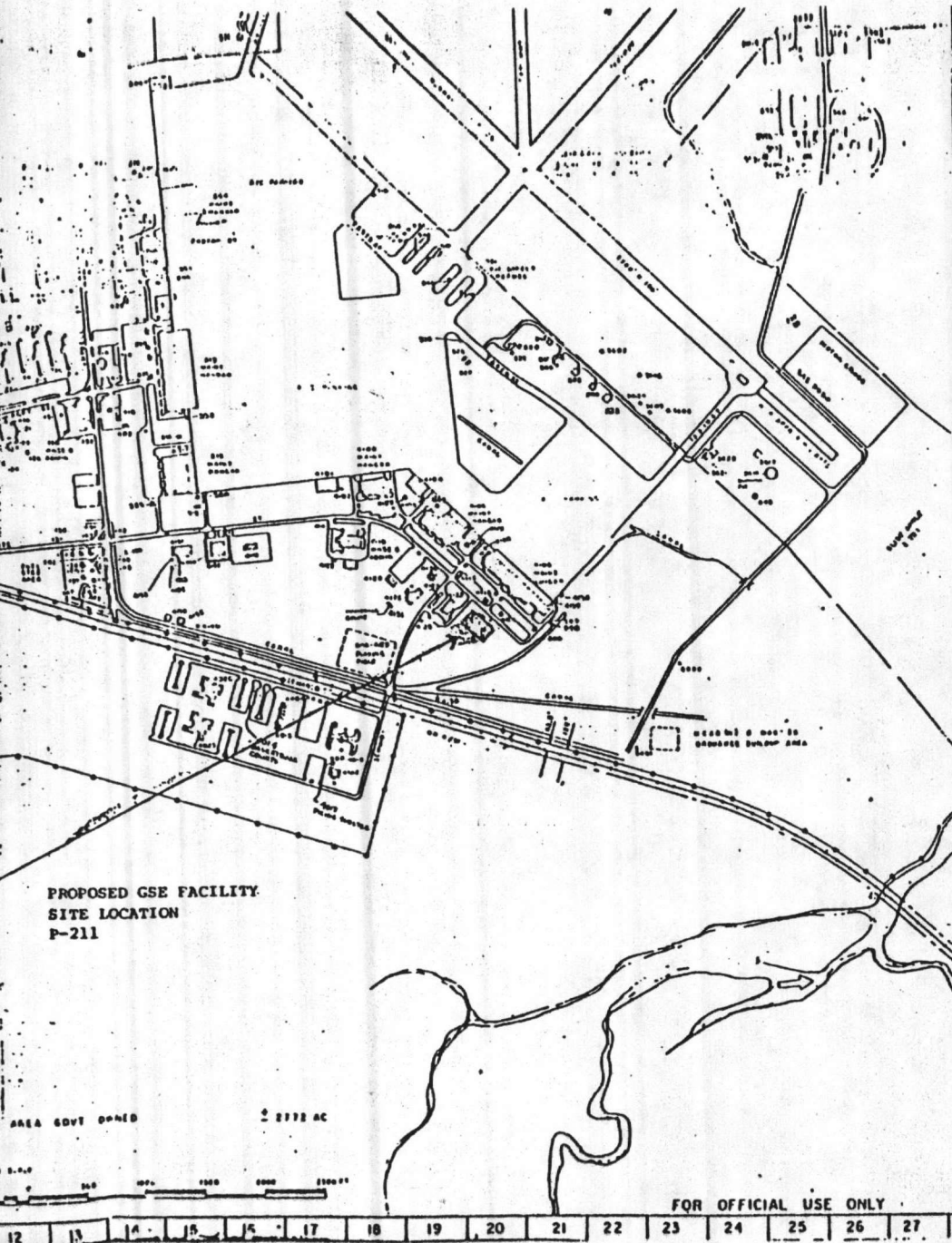
a. Endangered Species. This project is not the habitat for any endangered species, therefore does not pose a threat.

b. Clean Water Act. This project will generate some petroleum, oil and acid wastes. Containment walls will be included during design to retain any potential spills. Base Order 11090.1B, Oil Pollution Prevention and Abatement and Other Hazardous Substances Spill Contingency Plan policies will regulate prevention, collection, clean up and reporting of any pollutant wastes.

c. Clean Air Act. Incorporation of a water wash exhaust unit and appropriate exhaust ventilation system with filters will be incorporated in the design criteria for this facility, due to paint room requirements associated with ground support equipment maintenance and upkeep.







d. Coastal Zone Management Act (CZMA). Due to the location of this project this Act does not apply.

e. Archaeological and Historical Preservation Act. No known cultural resources exist at the site.

f. North Carolina Erosion and Sedimentation Regulations. Soil erosion may occur during construction requiring silt fences but long range problems are not anticipated.

g. Hazardous Materials and Hazardous Waste Disposal. Hazardous waste at this site will be handled in accordance with AS(II) Order 6280.1 and Base Order 11090.1B dealing with hazardous waste disposals and spills.

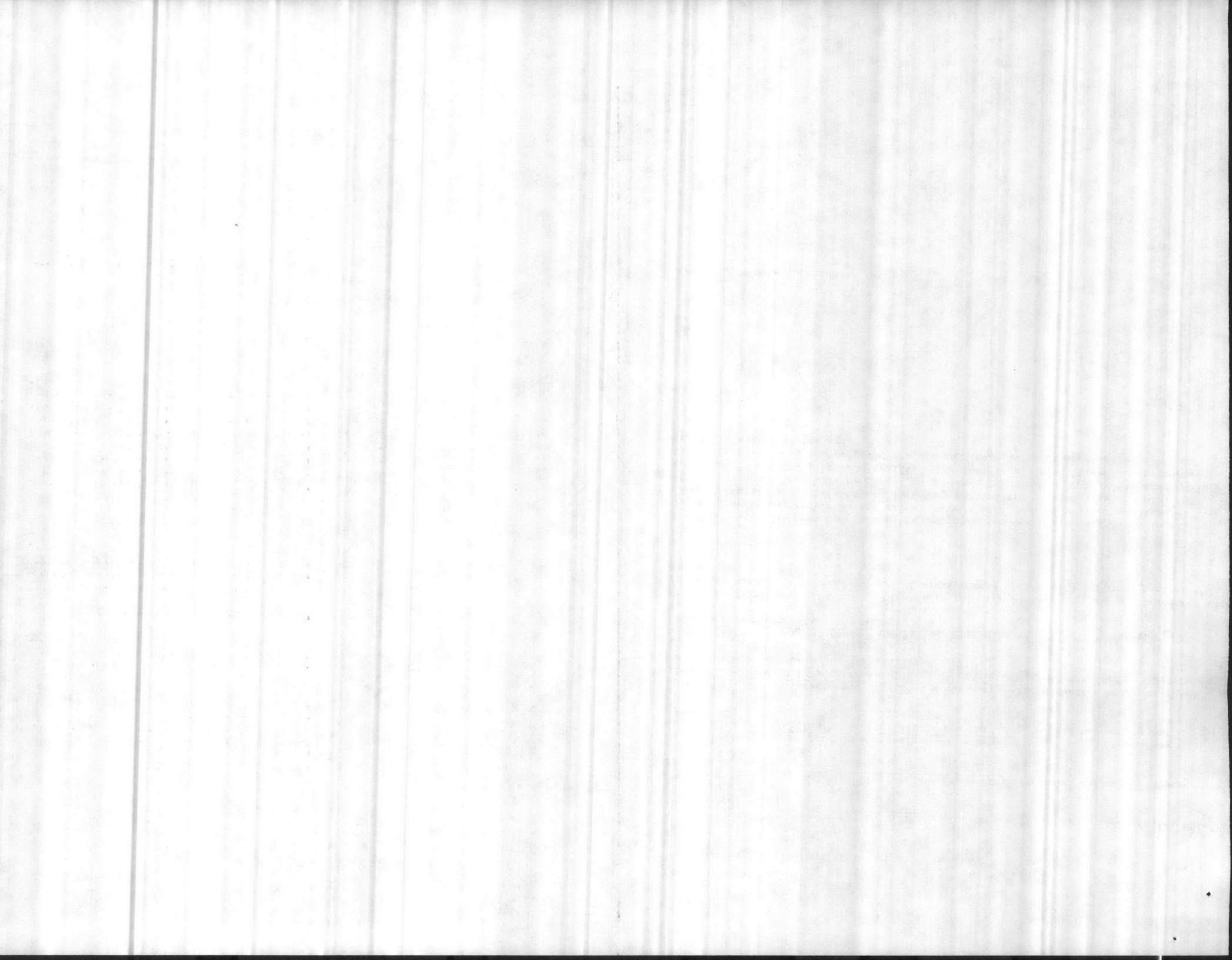
h. Protection of Wet Lands Executive Order 11990. This order does not apply to this proposed site location.

i. Sanitary Waste and Refuse Disposal. Refuse will be collected in accordance with applicable Marine Corps Base Orders. Sanitary waste system will become a part of the base central system.

4. Probable Impact.

Ground support equipment operations are now being conducted from scattered locations in the aircraft hangar spaces and often outdoors in inclement weather conditions. Proper maintenance supervision and inventory control are virtually impossible. GSE maintenance operations will be forced to continue functioning in multiple inadequate locations without the proposed facility. No significant impact upon the environment will be involved with the proposed project and there is no known controversy associated with this project.

Attachment - Site Location



Preliminary Environment Impact Assessment for Interim Facilities (continued)

- c. Clean Air Act. No significant discharge of air pollutants is anticipated.
- d. Coastal Zone Management Act. Both sites are in approved existing hangar areas making this act not applicable.
- e. Archeological and Historical Preservation Act. There are no known cultural resources existing at these sites.
- f. North Carolina Erosion and Sedimentation Regulations. There is no significant potential for sediment to leave either site.
- g. Hazardous Materials and Hazardous Waste Disposal. Disposal operations will be accomplished in accordance with applicable Base Order 6240.5, Hazardous Material Disposal System.
- h. Protection of Wetlands Executive Order 11990. Does not apply.
- i. Sanitary Waste and Refuse Disposal. Refuse will be collected in accordance with applicable Marine Corps Base Orders. Sanitary waste system will become a part of the design criteria and will be included in the base central system.

4. Probable Impact.

Ground support equipment operations are now being conducted from scattered locations in the hangar spaces and often outdoors in inclement weather conditions. GSE maintenance operations will be forced to continue functioning in multiple inadequate locations without the proposed facility. The proposed facilities will provide relief for the critical space shortage currently encumbering the proper utilization of existing hangar areas. Training level readiness will be more efficient with increased space allowances. No significant impact upon the environment will be involved with the proposed project. Personnel morale and welfare will improve. There is no known controversy associated with this project.

Attachment - Site Location Map

Preliminary Environment Impact Assessment
for Interim Facilities
at the
Marine Corps Air Station (Helicopter)
New River, Jacksonville, NC

1. Action/Project Description.

This project will provide two temporary leased prefabricated metal buildings and a separate minor construction project to acquire site preparation for the proposed building sites. Site preparations will include storm drainage; water distribution; sanitary sewer; fire alarm and power distribution; concrete slabs to support the metal buildings; mail access road and storage lot to be enclosed with a security fence. The proposed interim facilities are required to satisfy a critical space shortage in the hangar areas. Permanent military construction projects are programmed to satisfy this shortage in FY 86 with a new hangar and a new ground support equipment facility. The interim facilities will be removed upon completion of the permanent facilities.

2. Consideration of Sites Selected.

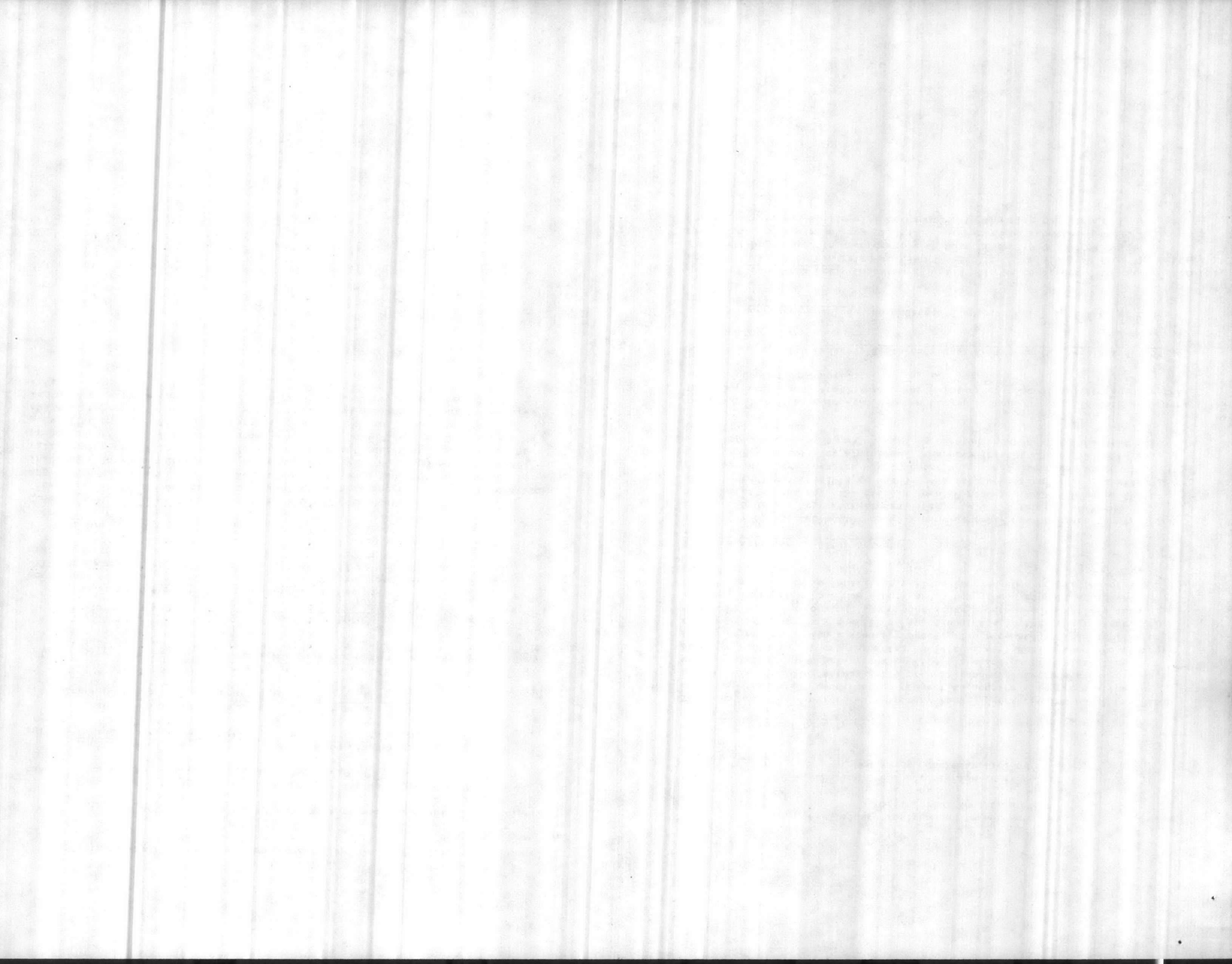
The larger of the two buildings will provide badly needed space required for the MAG-29 Ground Support Equipment (GSE) and GSE personnel work and administrative spaces. The site is located near the MAG-29 hangars and will be readily accessible to the hangars (see enclosure (1)). Existing power and utility lines are within relatively short distances which will keep connection costs at a minimum. The site for the GSE facility is an undeveloped wooded area, which will be cleared under a timber harvest sales contract in the near future.

The HML/A-167 site is located between Hangar 515 and Hangar 518 (see enclosure (1)). It will provide additional spaces for maintenance control and storage for the MAG-26 squadron personnel.

3. Compliance with Federal, State and Local Environmental Regulations and Guidelines.

a. Endangered Species. No endangered species exist in either of these project areas.

b. Clean Water Act. Containment walls will be constructed to retain petroleum spills, that may be generated at the GSE facility. Acid wastes from the battery shop will be removed in accordance with Base Order 11090.1B, Oil Pollution Prevention and Abatement and Oil and Other Hazardous Substances Spill Contingency Plan. Spills will be reported to the Fire Department.



PRELIMINARY ENVIRONMENTAL ASSESSMENT
FOR
FIRING POSITION IMPROVEMENT

A. Reference. FM 6-50, Field Artillery Cannon Battery, 25 Mar 83

B. Enclosures.

1. Site map, scale 1:50,000

2. Nine Gun Position Sites, not to scale: GP #4, 13, 14, 24, 25, 27, 32, 33, and 36

C. Purpose and Need

Improvement of the artillery firing positions allows for realistic tactical training with the new M198, 155mm howitzer. A larger weapon system than its predecessor, the M101A1, 105mm howitzer, the M198 requires more space for proper employment per the reference. To maximize both firing and non-firing training at Camp Lejeune, the enlargement of current gun positions plays a critical role.

D. Project Description

1. Enlargement of selected existing firing positions indicated on enclosure (1). The project generally consists of the following:

- a. Harvest of marketable timber along with clearing about 75 acres in total.
- b. Road improvement at entrances to firing positions #14 and #36.

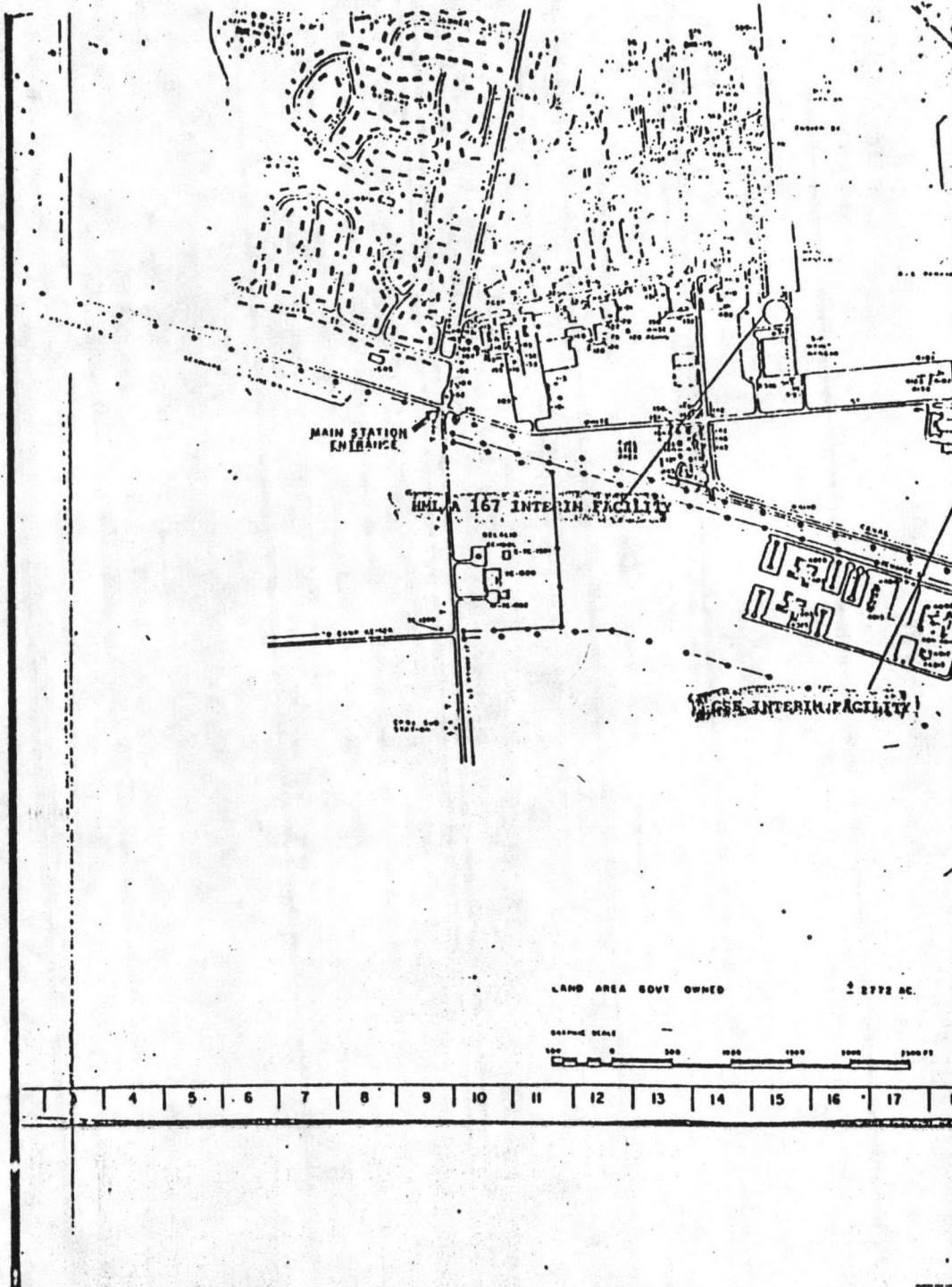
2. The descriptions and site maps as shown on the enclosures indicate those areas to be cleared. These areas were identified during the joint field survey by 10th Marines, Natural Resources and Environmental Affairs Division and Assistant Chief of Staff, Facilities.

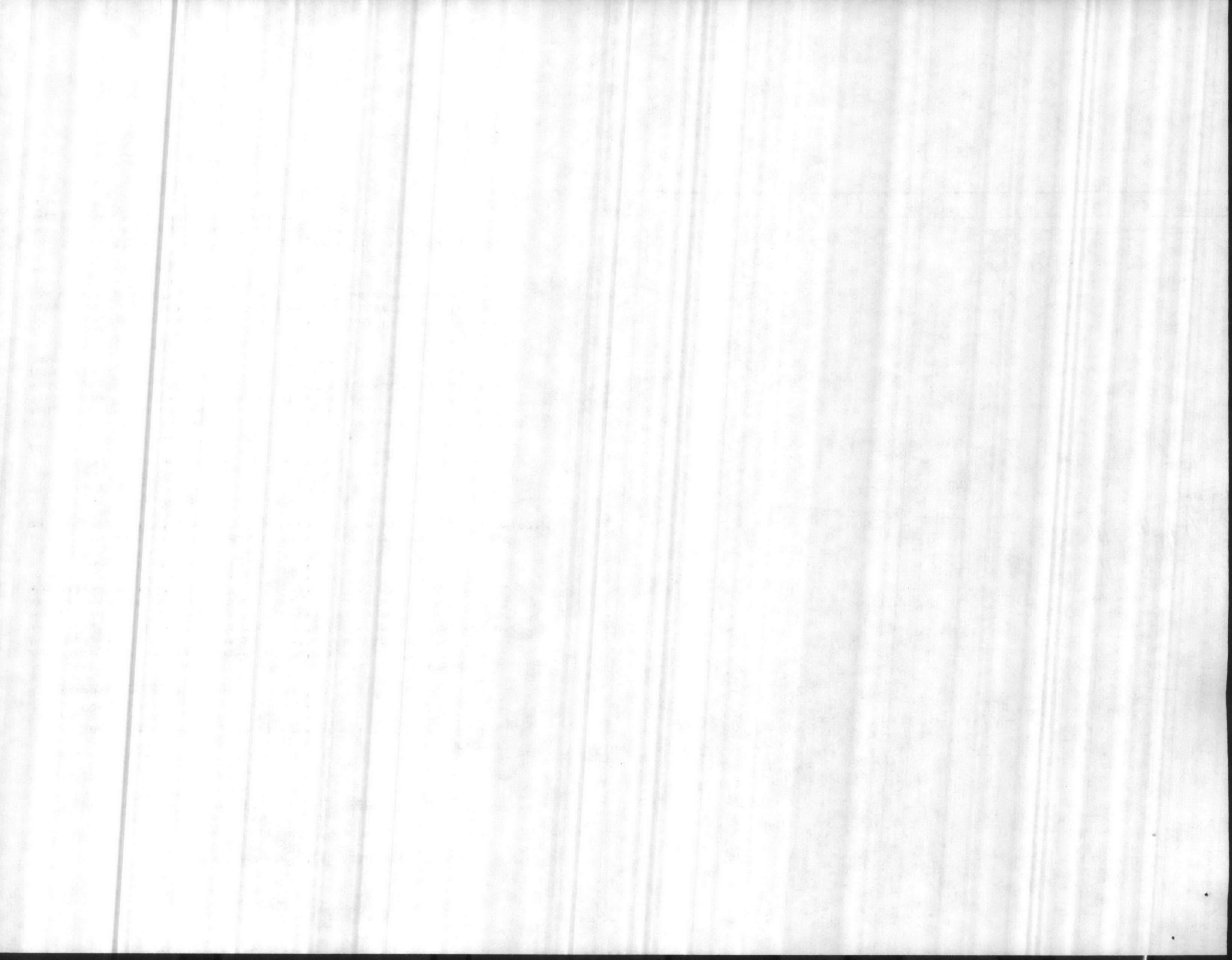
E. Site Selection

The positions were selected based on location, current safety regulations, and need for improvement. Most sites require only a few acres to be cleared of mature timber and scrub brush.

F. Noise Pollution

There will not be any change to existing levels due to the continued use of the same number and type of weapons and charges employed at these existing positions.





NINE GUN POSITION SITES
Site Maps Attached

Gun Position #4

Gun Position #4 is a very narrow food plot at grid vic 927407 with a direction of fire of 3200m.

The road that leads to gun position from the northwest and from the east needs to be graded and graveled. The area to the northeast of the road has been partially cleared but needs to be cleared entirely so it can become a usable gun line. The area east and west of the existing position is thick with pine and oak trees. All boundaries to be cleared are marked by a red ribbon around the trees.

For the east side, start from the northeast corner of the existing position proceed at an azimuth of 2146m for a distance of 125M then to an azimuth of 3416m for a distance of 80M then to an azimuth of 2637m back to the open area.

For the north side, start in the northeast corner of open field and proceed on an azimuth of 2043m for a distance of 120M then to an azimuth of 5820m for a distance of 95M then to an azimuth of 5420m for a distance of 210M then to an azimuth of 221m for a distance of 110M then to an azimuth of 5020m for a distance of 120M then to an azimuth of 2790m to open field.

Gun Position #13

Gun Position #13 is an extremely small open area at grid vicinity 963353 with a direction of fire of 4750m.

The access road entering east off of Highway 172 needs repair on several spots. The area that needs to be cleared is north of the existing position and east. It is covered with large oak and pine trees, also lots of small pine and scrub oak in center area. The eastern side is bordered by a small swampy stream. All boundaries of area to be cleared are marked by red tape around the trees.

From the start which is in the northwest corner of the existing plot next to road proceed on an azimuth of 10m for a distance of 260M then to an azimuth of 1122m for a distance of 160M then to an azimuth of 2790m for a distance of 290M then to an azimuth of 3561m for a distance of 80M then to an azimuth of 4800m along road to the open field.

Gun Position #14

Gun Position #14 is a small square field at grid vic 969347 with a direction of fire of 4800m.

G.. Compliance with Environmental Requirements

1. Endangered Species Act. The impact of this project on the habitat of the endangered species has been determined to be negligible. This statement is based on the determination that the habitat of these species does not occur within the area to be affected by clearing and earthenwork.

2. Clean Water Act. No discharge of wastes to surface waters will occur during gun position improvement or subsequently.

3. Clean Air Act. No omissions are anticipated.

4. National Historic Preservation Act. No significant cultural resources are located in the positions, with the exception of GP 32. This site has been identified as possibly eligible for listing in the National Register of Historic Places. Sitework cannot be initiated at GP 32 prior to this determination of eligibility. If, during the clearing of the remaining sites, materials are uncovered which appear to be historical in nature, the Natural Resources and Environmental Affairs Division will be contacted.

5. North Carolina Sedimentation Pollution Act. Erosion control measures will be included in the project design. Construction management will provide preventive measures to contain all sediment on site. Re-seeding of disturbed areas and vegetative cover on the cleared areas will be accomplished within 30 days of completion of construction. A sediment control plan will be implemented.

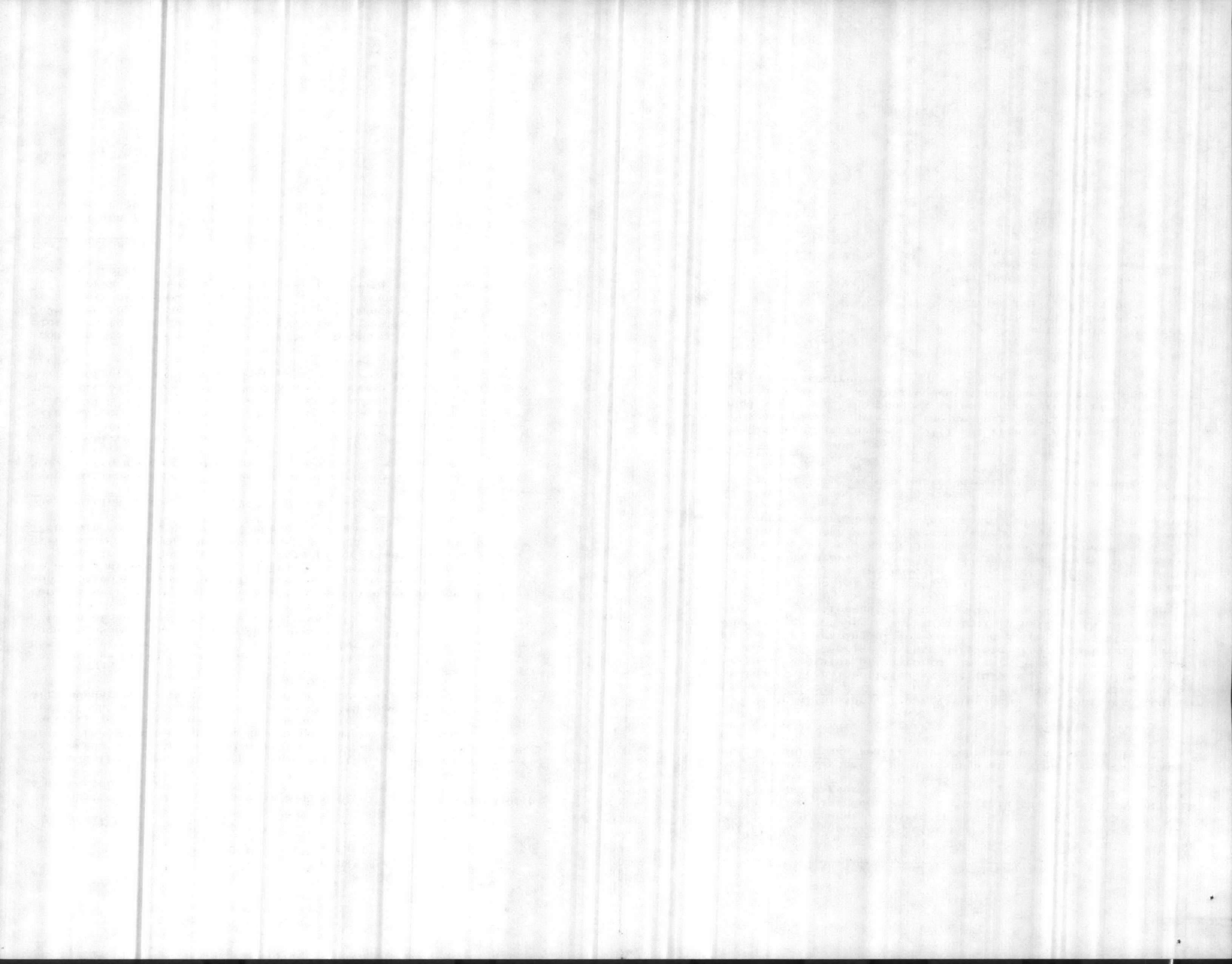
6. Executive Order 11990, Protection of Wetlands. Disturbance of wetlands will be avoided during clearing and earth moving.

II. Conclusion

The proposed improvements will not result in significant environmental impact provided the measures described herein are followed. Further, the project is not considered controversial, thus, preparation of an Environmental Assessment per MC Order 6280.5 is not required.

Prepared by: W. A. Hamilton
Capt USMC
Regimental Safety Officer
10th Marine Regiment
2d Marine Division

and: Robert E. Alexander
Environmental Engineer
Marine Corps Base



for a distance of 160M then to an azimuth of 3100m for a distance of 95M. This is the entire west side. From the start proceed at an azimuth 0600m for a distance of 25M to the road then proceed to an azimuth of 1855m for a distance of 110M then an azimuth of 3370m for a distance of 80M then an azimuth of 3020m for a distance of 75M then an azimuth of 5240m to the open area,

Gun Position #27

Gun Position #27 is a small square field at grid vic 907270 with a direction of fire of 0250m for G-10 and 1050m for N-1.

The position is a small plot and the east side is bordered by a hard top road. All clearing will be done to the west. The area is full of large oak trees and pine trees and the area is bordered by swamp on the south side. All boundaries are marked with orange ribbon around the trees.

From the start at the southwest corner of existing position proceed at an azimuth of 3994m for a distance of 75M then an azimuth of 5170m for a distance of 220M then at an azimuth of 6328m for a distance of 105M then an azimuth of 0958 to the road at a distance of 85M then an azimuth of 1760 along the road a distance of 180M then on an azimuth of 3200m along road to open field.

Gun Position #31

Gun Position #31 is rectangular shaped food plot located at grid vic 893268 with a direction of fire of 0360m.

As you turn south off of Sneads Ferry Road at the TLZ Albatross sign the road is in good shape til TLZ Albatross. From there the road heading into position should be graded because of several low spots.

The position is very narrow and needs widening. It cannot be widened to the west because of swamp so it has to be widened completely to the east, which has several oak groves and large pine trees throughout. Very good firm ground through this area. All boundaries are marked with orange ribbon around trees.

Starting from the northeast corner of the existing position proceed at an azimuth of 1500m for a distance of 210M then an azimuth of 3285m for a distance of 230M then an azimuth of 4740m for a distance of 205M to open field.

Gun Position #32

Gun Position #32 is a long rectangular field with a food plot extending from the northeast corner. Grid vic 928300 with direction of fire of 6300m.

The road into the position is good and graveled. The entrance is at TLZ Falcon. The clearing areas are divided into two areas. The west area is to give a lower site to crest and to the north to

The access road leading to GP 14 which is running east off of Highway 172 needs to be graded and graveled on some spots due to water holes. Clearing needs to be done to the north and south. Most trees in both the north and south area are large pine and oak with heavy underbrush. Also there are two large trees in the west central part of the position that needs to be cut. All boundaries are marked with red ribbon tape around the trees.

For the north side from the start in the northwest corner of the position by the road proceed at an azimuth of 6000m for a distance of 65M then to an azimuth of 5100m for a distance of 115M then to an azimuth of 0250M for a distance of 110M then to an azimuth of 1780m for a distance of 170M then to an azimuth of 2140m for a distance of 85M then to an azimuth of 2700m back to the open field.

For the south side from the start which is on the southeast corner of the position, proceed at an azimuth of 2760m for a distance of 125M then to an azimuth of 4430m for a distance of 135M then to an azimuth of 5990m back to the open field.

Gun Position #24

Gun Position #24 is a square shaped position located at grid vic 852283 with a direction of fire of 0830m.

As you turn south off Sneads Ferry road, the dirt road leading to the position is in good shape. There are several spots with soft sand. There is an area between the road and the position that has heavy woods, this has to be cleared. Once on the east side of the road, the entire area marked off needs to be cleared. Most of the trees are large and medium oak and pine trees.

The boundary of the wooded area that needs to be cleared is marked in orange ribbon tape. Starting in the northeast corner of the existing position moving east south east at an azimuth of 2120m for a distance of 265M then to an azimuth of 3840m for a distance of 185M then an azimuth of 5140m for a distance of 85M then proceed on an azimuth of 5420m for a distance of 155M to the entrance of the position.

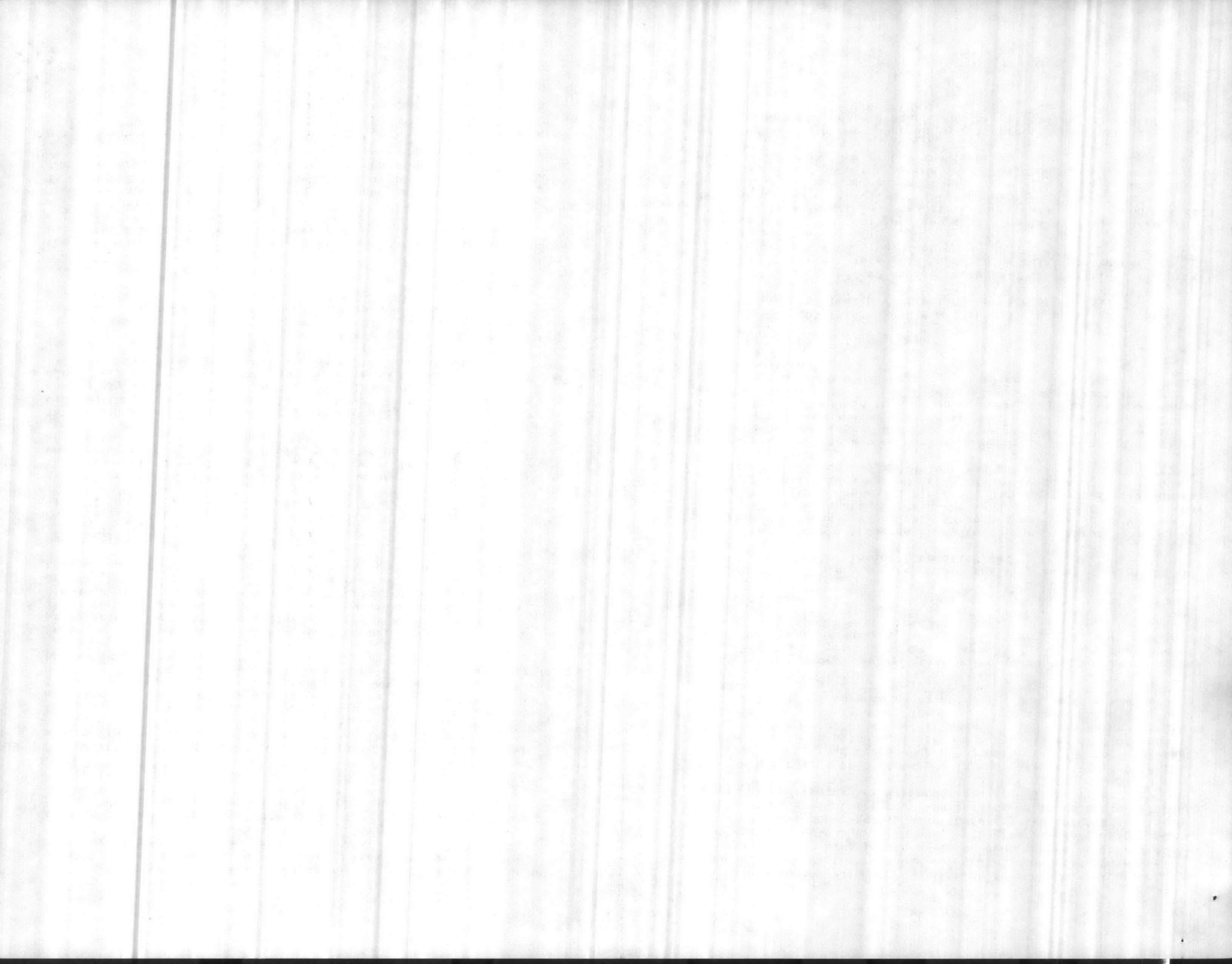
Gun Position #25

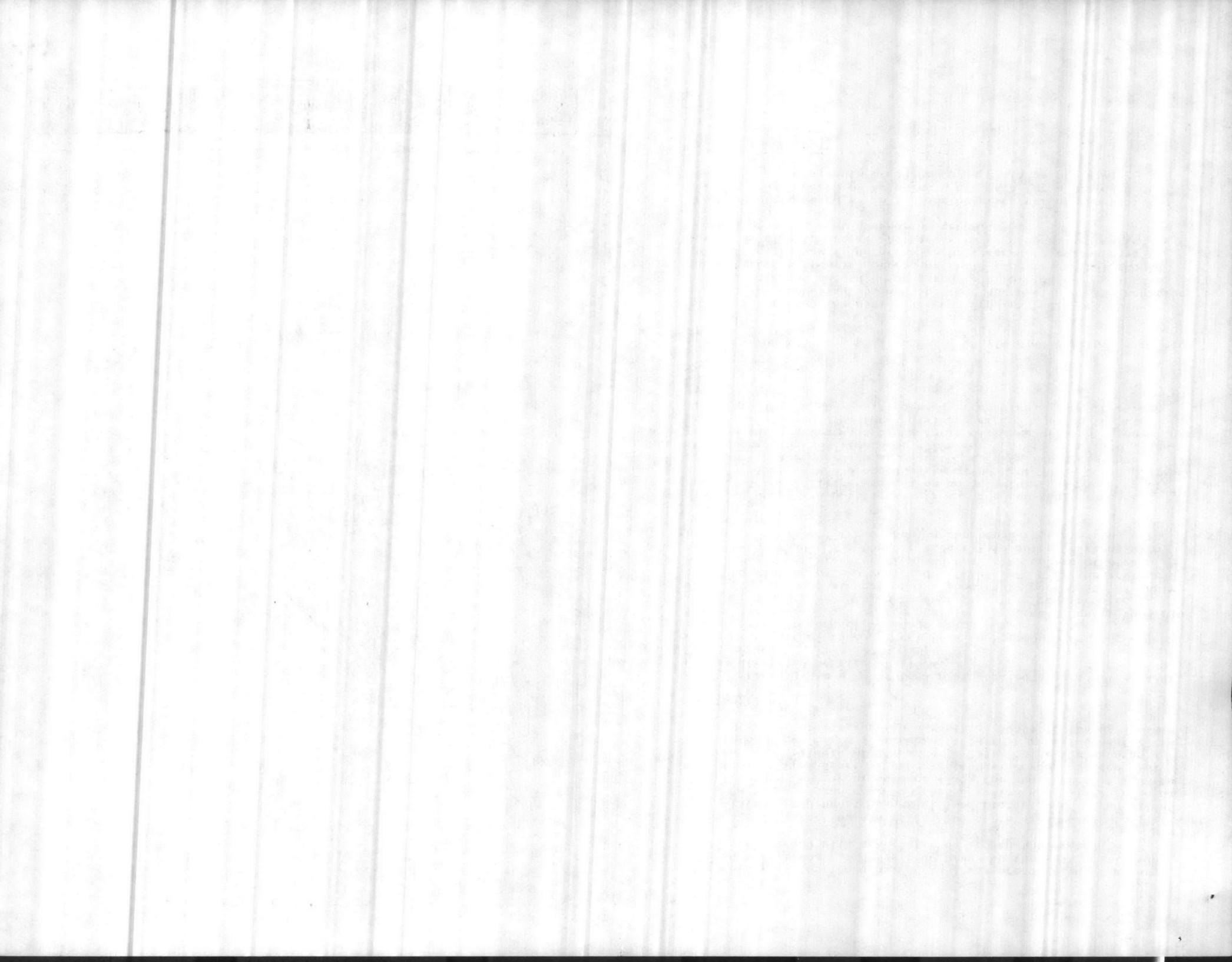
Gun Position #25 is a lazy L (└) shaped gun position located at grid vic 861291 with a direction of fire of 0840m.

As you turn north off of Sneads Ferry Road the position is approximately 150M north. This road needs to be built up because you have to drive through the ditch.

As you look at the position, the east side is a small square and the west is a long thin rectangle. The clearing operation has to be done on the northwest side and the east side. Both sides have large and medium oak and pine trees with heavy underbrush--clearing should go north to the road. All boundaries are marked by orange ribbon tape around the trees.

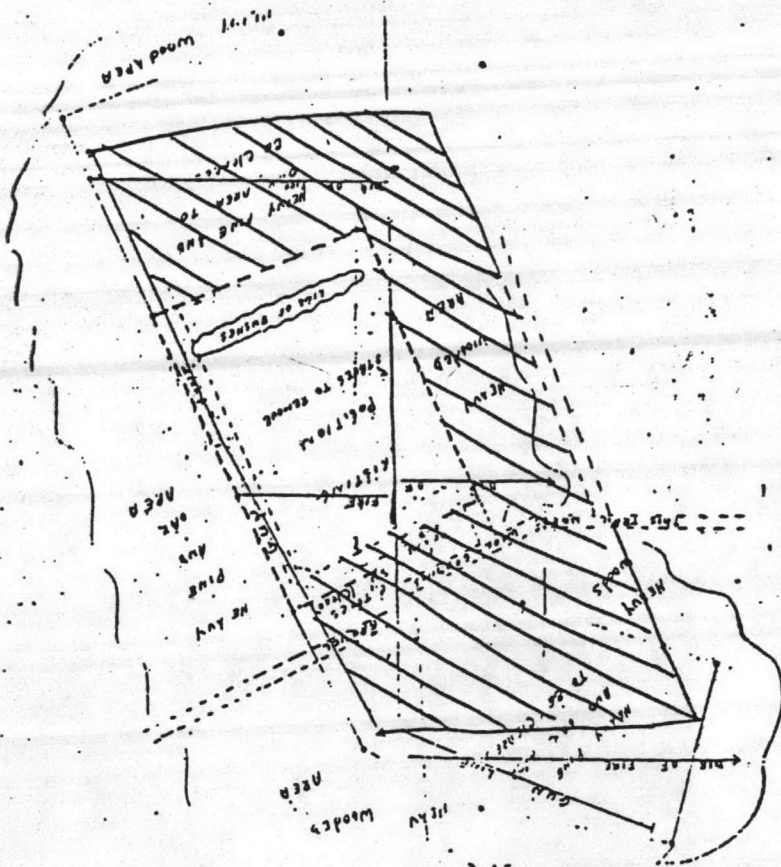
From the start in the upper northwest corner and proceed at an azimuth of 0400m for a distance of 30M then at an azimuth of 4000m





ENCLOSURE (5)

GUN POSITION 14
GRID 969 347
DIA OF FIRE 450M
EACH SQUARE 10M
PREPARED BY - TMS CORNBY

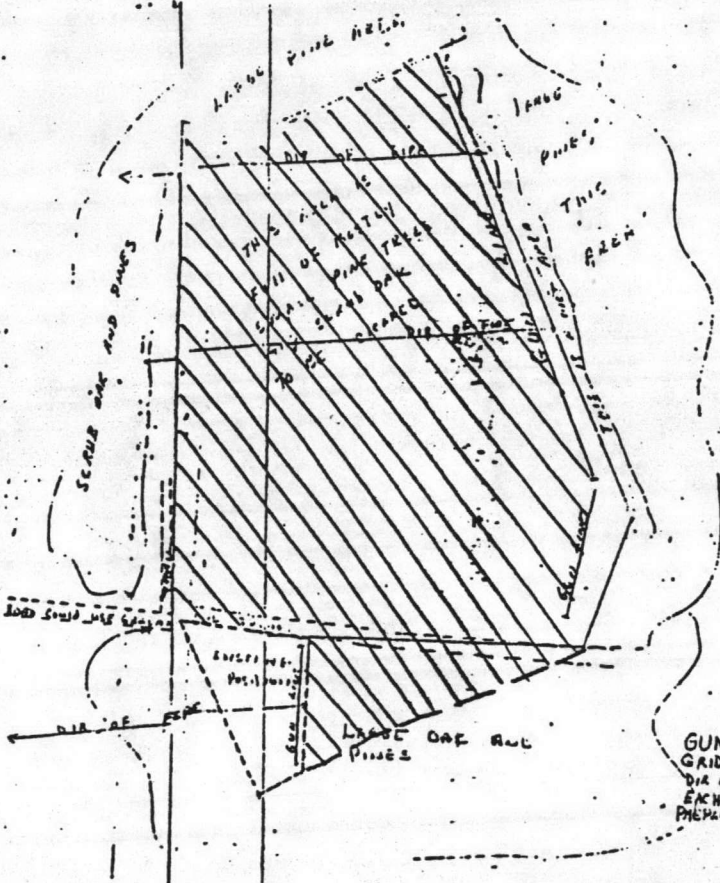


2

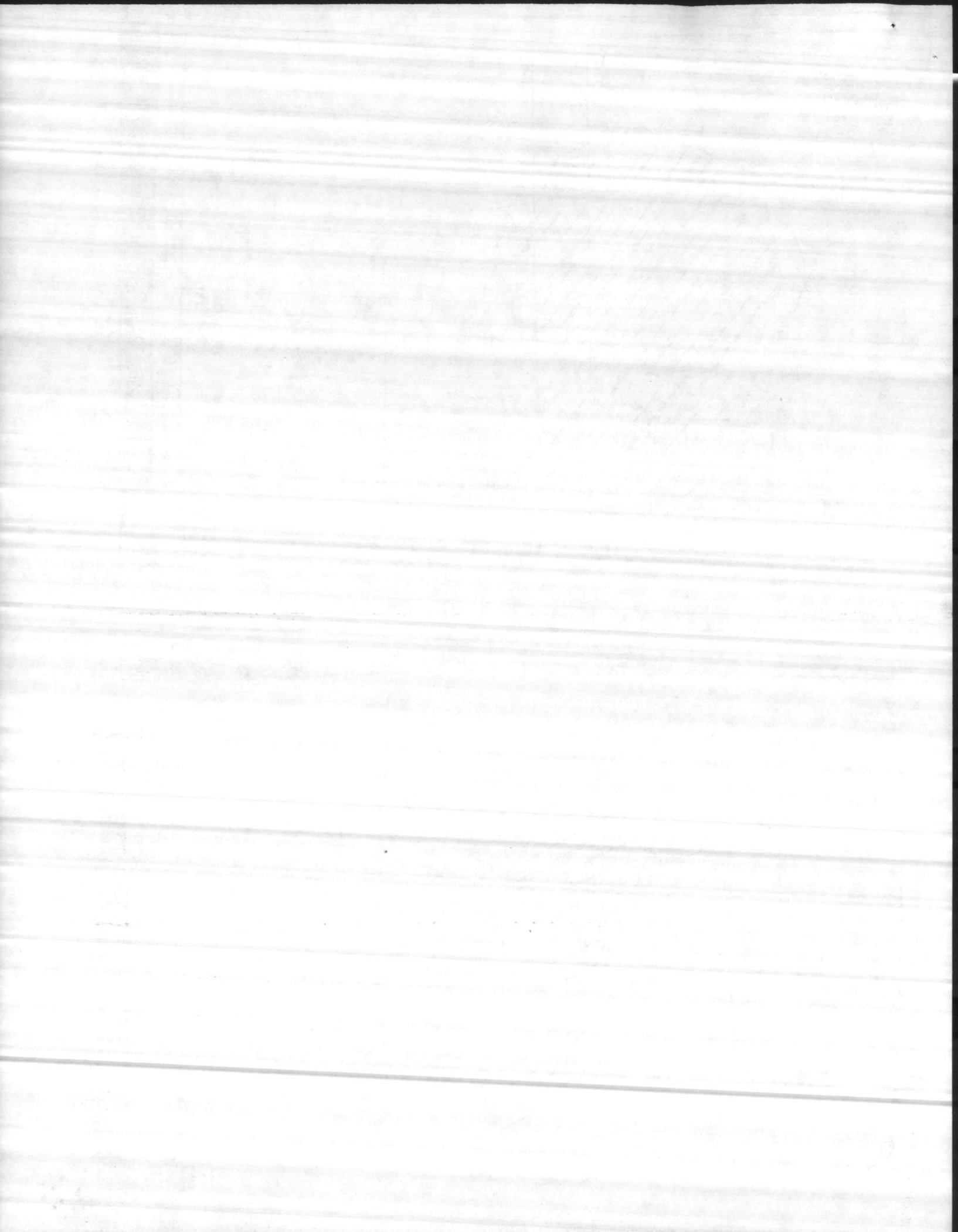
OK

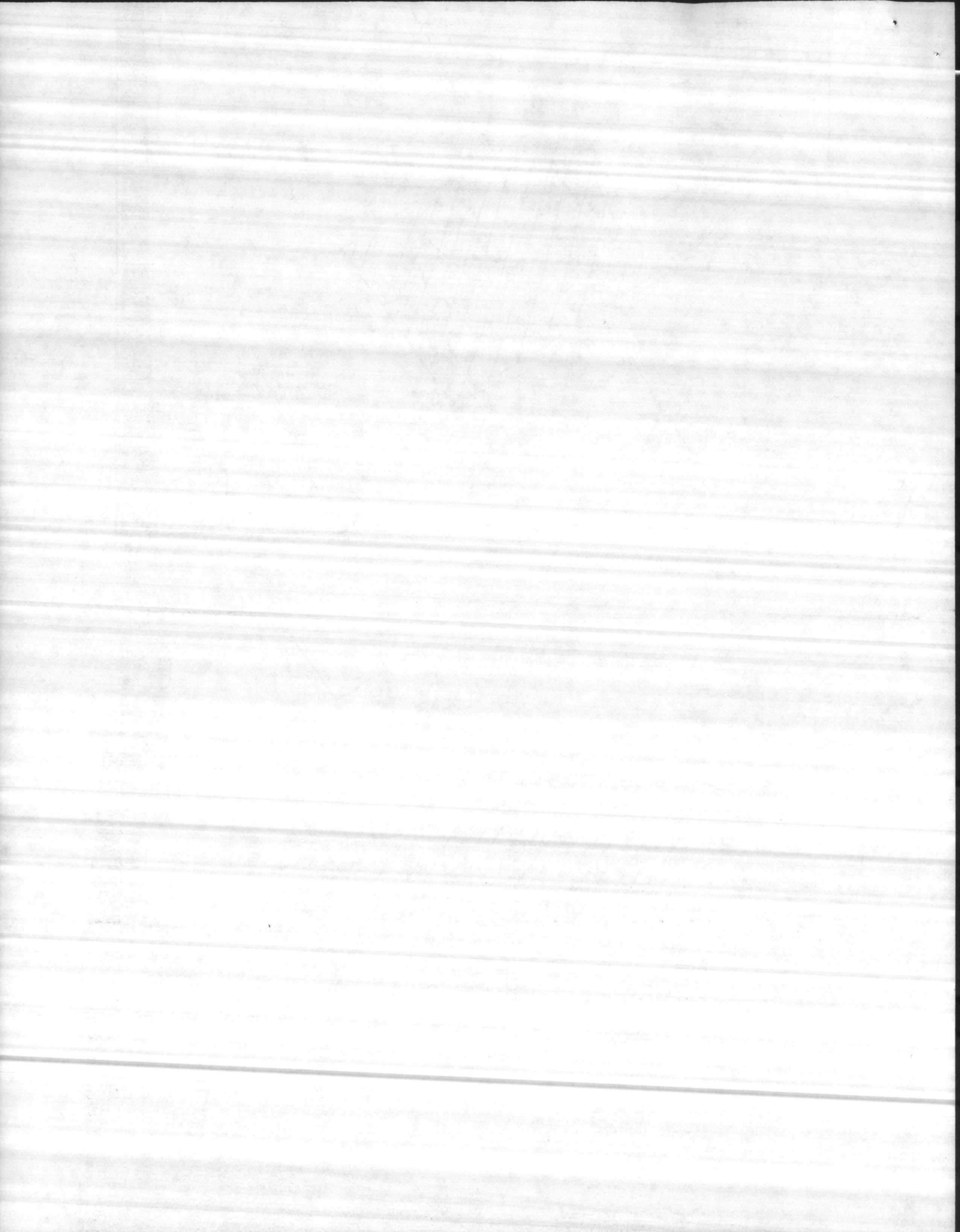
ENCLOSURE (4)

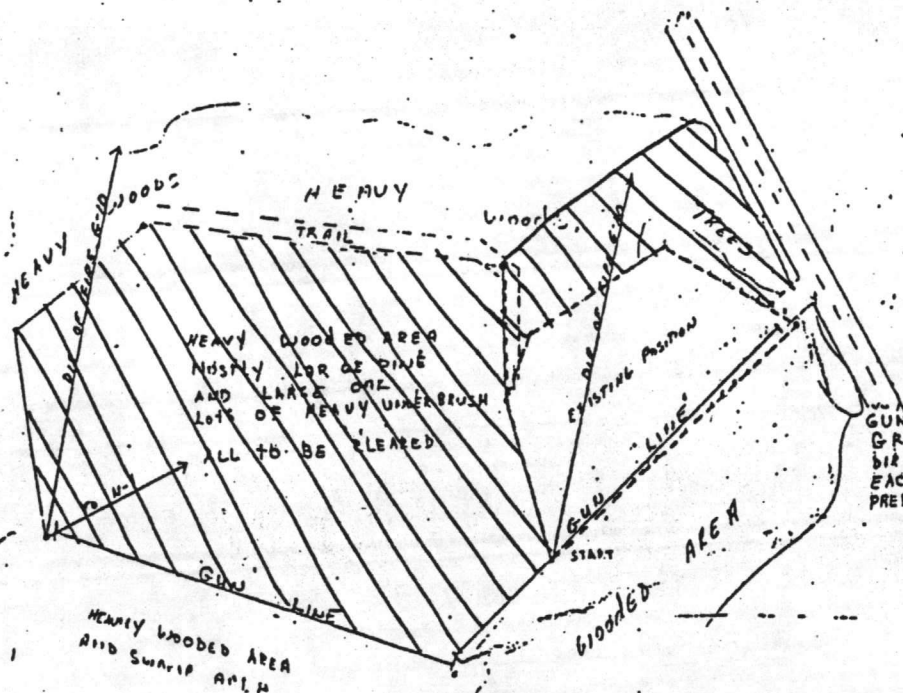
13
GUN POSITION
GRID 963 353
DIA OF FIRE 17.
EACH SQUARE 10
PREPARED BY TMS



2

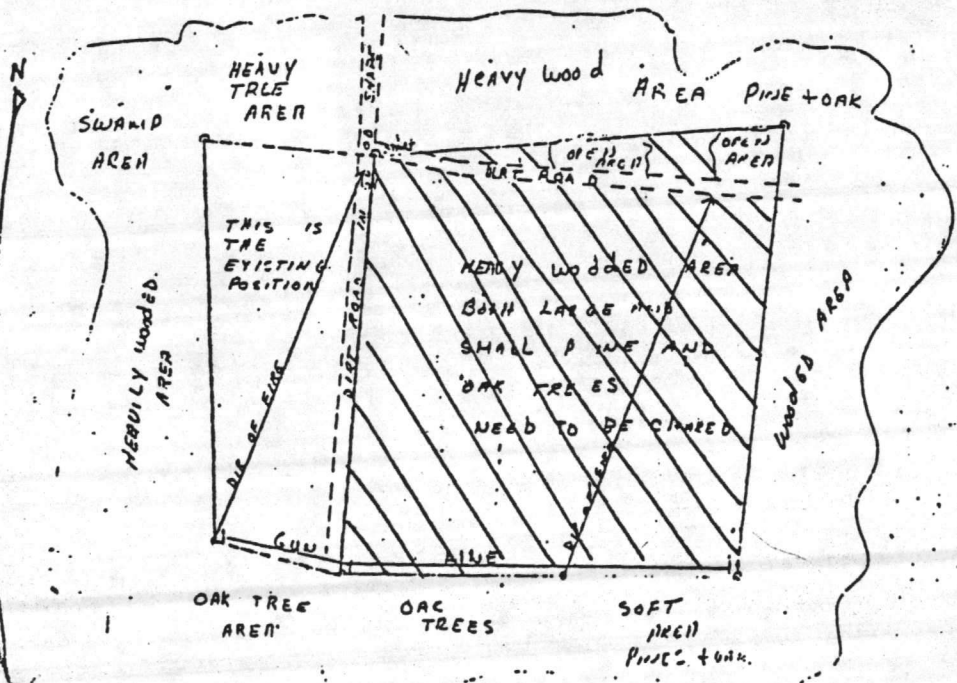






GUN POSITION 27
 GRID 407 278
 DIR OF FIRE 0250
 EACH SQUARE 15M
 PREPARED BY THE SVA

ENCLOSURE (A)



GUN POSITION 31
 GRID 893 268
 DIR OF FIRE 0360
 EACH SQUARE = 10M
 PREPARED BY THE SURVEY

ENCLOSURE (B)

