P-869

change to FY-90

SPECIAL TRAINING ANALYSIS

CAMP LEJEUNE

SEPTEMBER 19, 1985

P-869

SPECIAL TRAINING ANALYSIS

CAMP LEJEUNE

SEPTEMBER 19, 1985

INTRODUCTION

The military reservation of the Marine Corps Base, Camp Lejeune, North Carolina, has remained virtually unchanged since its establishment in 1941; however, the Marine Corps' organization, mission, doctrine, and equipment have continuously evolved with the passing of time. Changes in the structure of the units assigned to the installation and the development of new tactics for conducting warfare have increased the firepower and mobility required of the modern Marine fighting unit. In turn, these requirements have created demand for additional training land. Moreover, the continued improvement in the ballistics, range, and mobility of modern weapons and the philosophy that effective preparation for war requires training under conditions that reflect those of actual combat have further accentuated the need for suitable training areas. Future trends in organization, doctrine, and weapons suggest that more and larger firing ranges and expanded maneuver areas will be required for realistic field training of troop units.

Coincident with the growing demand for training land is an increase in the number and types of limitations that may render some land unavailable for training use. The increased public awareness of the need to protect the earth's environment from damage has altered earlier judgments concerning the manner in which training exercises are conducted. In particular, current Federal legislation requiring the maintenance of suitable habitat for endangered wildlife on Federal lands may either restrict the availability of some lands for training or change the way training operations in these areas are conducted. Increased sensitivity to the effect training operations have on neighboring civilian communities may also restrict the means by which a unit's training mission is accomplished. Finally, other natural and man-made constraints may impose limitations on training that are equally as restrictive, if not more so, than those mandated by law or administrative ruling. Collectively, these limitations effectively reduce the supply of land that is suitable for conducting military training.

Based on an awareness of the changes cited above, the Marine Corps Base, Camp Lejeune decided to evaluate their range and training areas to determine how future training requirements will be satisfied. Accordingly, a Special Training Analysis was conducted to make this assessment. The purpose of today's briefing is to present the results of the Analysis.

Briefly, the presentation will cover the following subjects:

1) the process or methodology used in the Training Analysis

2) existing conditions and deficiencies at the installation

3) training range and maneuver area requirements

4) the ideal training land model

5) concept plans designed to remedy existing deficiencies

6) the recommended training land use plan.

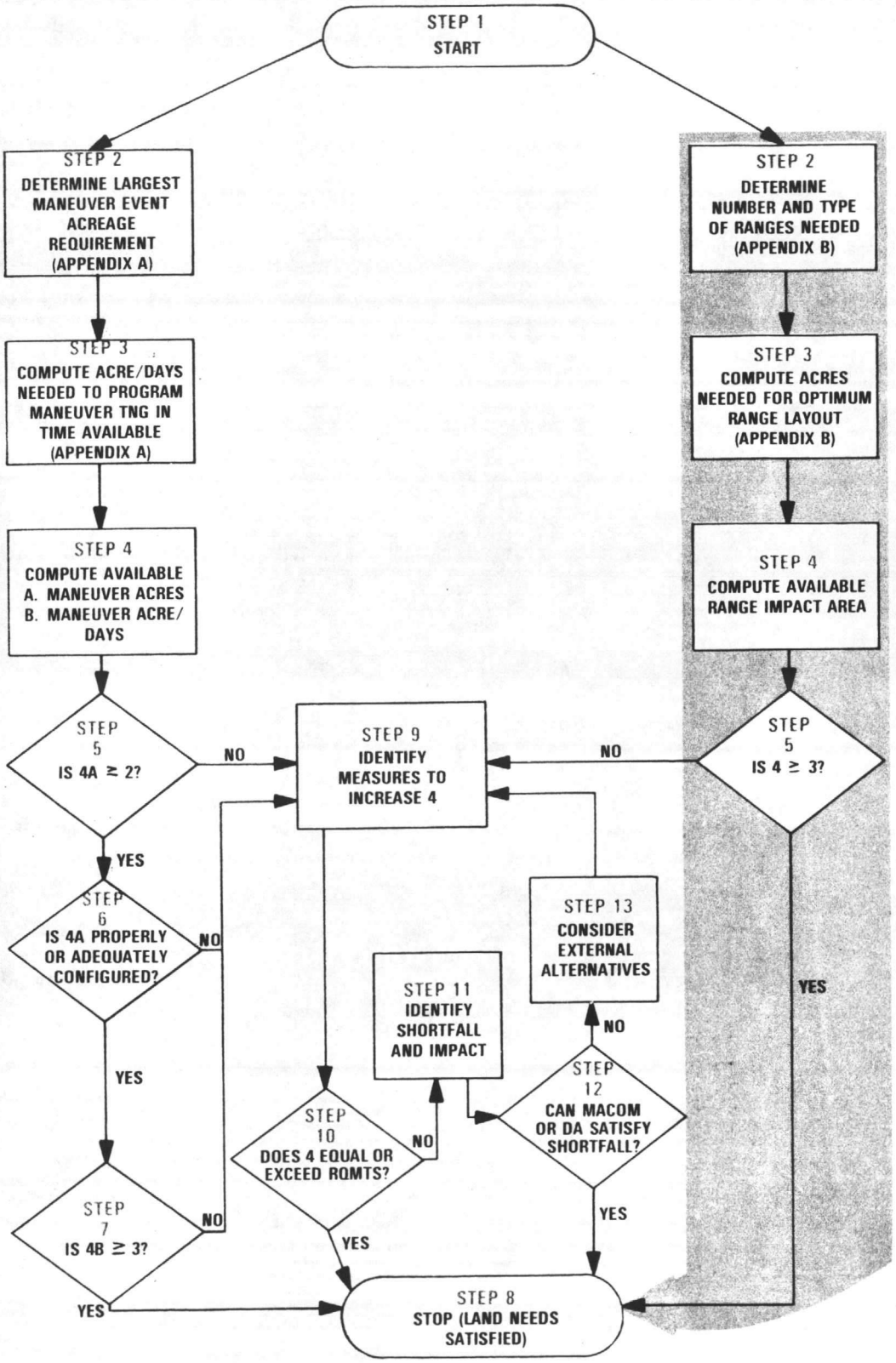


Chart 3-1. Army Training Land Analysis Model

TRAINING ANALYSIS PROCESS

A. IDENTIFY UNITS TO BE TRAINED AND THEIR TRAINING MISSION

B. DETERMINE EACH UNITS' RANGE & MANEUVER REQUIREMENTS

C. COMPARE REQUIREMENTS TO AVAILABLE ASSETS

D. DETERMINE DEFICIENCIES/EXCESSES

E. DEVELOP AND EVALUATE CONCEPTS

F. DEFINE A RECOMMENDED TRAINING PLAN

EXISTING RANGE AND TRAINING AREA DEFICIENCIES

1. LACK OF AVAILABLE TRAINING LAND DUE TO INCREASED MOBILITY OF VEHICLES AND RANGE OF WEAPONS.

2. INTERFERENCE ON RANGES (INTRACOASTAL WATERWAY AND OVERLAPPING RANGE FANS) CAUSES NUMEROUS CHECK FIRES.

3. EXPENSE OF TRANSPORTING TROOPS TO OFF-BASE TRAINING AREAS.

4. G-10 IMPACT AREA IS TOO SMALL FOR ARTILLERY TO EXERCISE GUNS' FULL CAPABILITIES.

5. AIRSPACE RESTRICTIONS LIMIT THE ELEVATIONS OF ARTILLERY ROUNDS.

6. TANKS LACK A LARGE CLEARED AREA FOR REALISTIC, TACTICAL MANEUVERS.

7. NEED DUPLICATE RANGES ON BOTH SIDES OF THE NEW RIVER.

8. ONLY ONE RANGE FOR FIRING 50 CALIBER MACHINE GUN AND TOW MISSILE.

9. NO LIVE FIRE ALLOWED AT COMBAT TOWN.

MANEUVER AREA REQUIREMENTS FOR TANK BATTALION

MILITARY UNIT/EXERCISE	NO. OF UNITS	LAND AREA REQUIRED (km2)	DAYS REQUIRED	ITERATIONS REQUIRED PER YEAR	REQUIRED LAND AREA PER TASK (km2-days)
TANK PLATOON					
Movement to Contact	12	5	1	4	240
Hasty Attack	12	2	1	4	96
Active Defense	12	10	1	4	480
Defense of Built Up Area	12	1	1	4	48
TANK COMPANY					
Movement to Contact	4	16	1	4	256
Hasty Attack	4	8	1	4	128
Deliberate Attack	4	18	1	4	288
Active Defense	4	8	1	4	128
Delay	4	8	1	4	128
Prepare Strong Point	4	8	1	4	128
Defense of Built Up Area	4	1	1	4	16
Breaching Mine Field	4	4	1	4	64
TANK BATTALION					
Movement to Contact	1	72	1	2	144
Hasty Attack	1	21	1	2	42
Deliberate Attack	1	36	1	2	72
Active Defense	1	65	1	2	130
Delay	1	90	1	2	180
Defense of Built Up Area	1	9	1	2	18

ANNUAL TRAINING DAYS

START	365
CHRISTMAS/NEW YEAR	-15
FIVE LEGAL 3-DAY WEEKENDS	-15
INDEPENDENCE DAY	-1
THANKSGIVING WEEKEND	-4
REMAINING WEEKENDS	-88
TOTAL	242

SUMMARY OF MANEUVER AREA REQUIREMENTS

MILITARY UNIT	MANEUVER TIME (km2-DAYS/YEAR)
INFANTRY REGIMENTS	42,666
ARTILLERY REGIMENT	46,078
TANK BATTALION	2,586
LAV BATTALION	1,714
AAV BATTALION	2,280
MARINE AIR WING	905
MCSSS	123
FIELD MEDICAL SCHOOL	856
2D COMBAT ENGINEER BATTALION	1,768
INFANTRY TRAINING SCHOOL	3,046
8th ENGINEER SUPPORT BATTALION	876
8th MOTOR TRANSPORT BATTALION	2,355
2D LANDING SUPPORT BATTALION	3,636
2D RADIO BATTALION	540
INFANTRY TRAINING SCHOOL	919
TOTAL	**110,348**

MANEUVER AREA-AVAILABLE VS. REQUIRED

	MANEUVER AREA (KM^2)	ANNUAL MANEUVER TIME (KM^2-DAYS)
AVAILABLE		
TOTAL AREA CAMP LEJEUNE	450	
LESS:		
WATER AREA	-102	
CANTONMENT AREA	- 34	
WOODPECKER , SEA TURTLE HABITAT	- 11	
IMPACT AREAS	- 45	
MISCELLANEOUS (CLEARED RANGES, ROADS, BORROW PITS, WILDLIFE FOOD PLOTS, FRESHWATER PONDS)	- 11	
POTENTIAL MANEUVER AREA/ TRAINING TIME	247	59,774
REQUIRED		
REQUIRED MANEUVER AREA/ TRAINING TIME	456	110,348
SHORTFALL	209	50,604

RANGE REQUIREMENTS FOR AAV BATTALION

RANGE TYPE	RANGE EXERCISE	UNIT SIZE	NO. OF UNITS	TIME ON RANGE (DAYS)	ITERATIONS (TIMES/YEAR)	TOTAL TIME (DAYS/YEAR)
INDIVIDUAL						
RIFLE RANGE	QUAL.	BN	1	5	1	5
COMBAT RIFLE	PROF.	PLT	26	.5	1	13
PISTOL FAM.	FAM.	DTL(210PN)	1	.2	.5	1.4
RIFLE FAM.	FAM.	PLT	26	.2	1	5.2
PISTOL QUAL.(1)	QUAL.	DTL(14PN)	1	5	.5	2.5
M203 40mm	QUAL.	CO	5	.5	2	5
HAND GRENADE	FAM.	PLT	26	.5	1	13
SAW(2)	QUAL.	SQD	6	.5	4	12
CREW-SERVED						
M60 A1 MG	GUN DRILL/QUAL.	SQD	6	1	2	12
Mk 19 40mm MG	GUN DRILL/QUAL.	SQD	6	1	2	12
CREW-SERVED VEH.						
M85 50 cal MG	STA./STA.	PLT	17	.5	2	17
	STA./MOVING	PLT	17	.5	2	17
	MOVING/STA.	SEC	55	.3	2	33
	MOVING/MOVING	SEC	55	.3	2	33
	ANTI-AIR GUNNERY	PLT	17	.5	2	17
M257 Smoke	SYSTEM CHECKS	PLT	17	.5	1	8.5
M60D MG	STA./STA.	SECT	20	.3	2	12
	STA./MOVING	SECT	20	.3	2	12
Mk 19 40mm MG (3)	STA./STA.	SECT	17	.3	4	20.4
	STA./MOVING	SECT	17	.3	4	20.4

NOTES
(1) USE I-1 RANGE, 15 FIRING POINTS
(2) FUTURE REQUIREMENT
(3) FUTURE REQUIREMENT

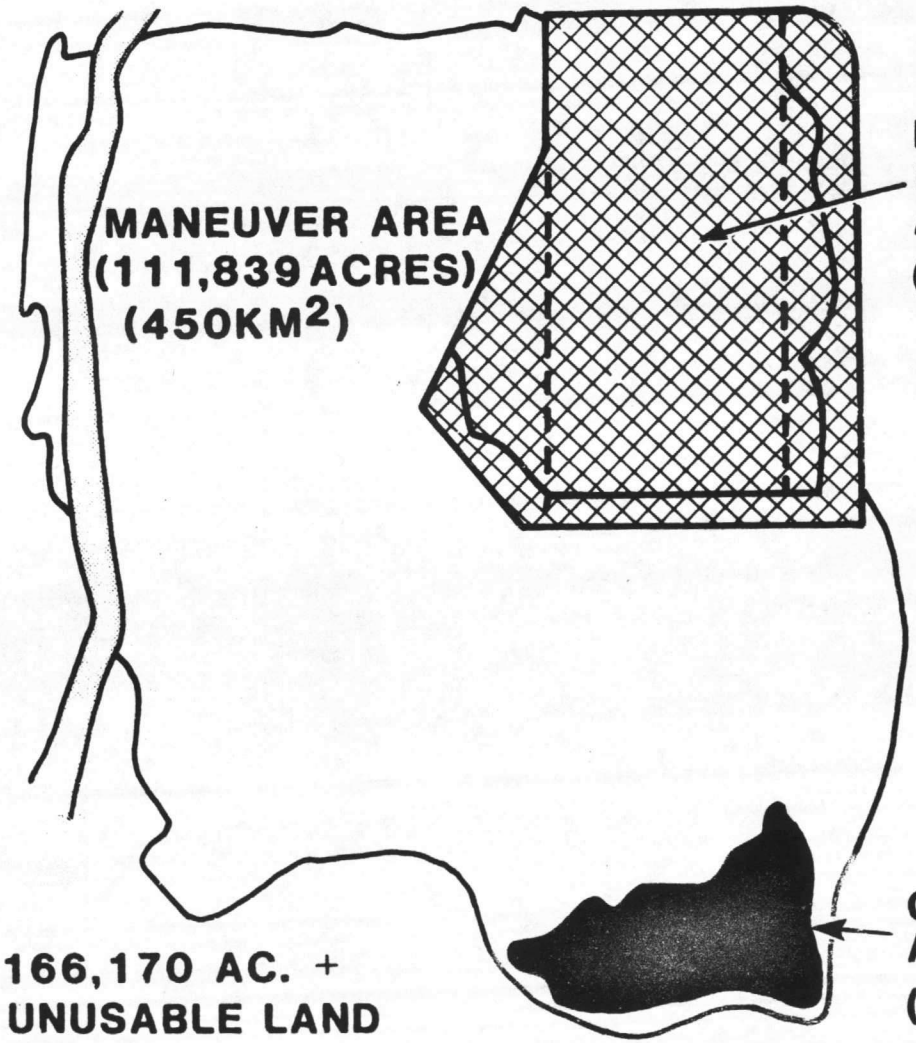
SUMMARY OF RANGE REQUIREMENTS

MILITARY UNIT	RANGE TIME (DAYS/YEAR)
INFANTRY REGIMENTS	3526
ARTILLERY REGIMENT	1877
INFANTRY TRAINING SCHOOL	804
LAV BATTALION	688
AAV BATTALION	274
TANK BATTALION	113
RECONAISSANCE BATTALION	120
2D COMBAT ENGINEER BATTALION	229
MARINE AIR WING	241
8th ENGINEER BATTALION	186
2D SUPPLY BATTALION	122
DIVISION SCHOOLS	94
H&S COMPANY, 2D FSSG	66
FIELD MEDICAL SCHOOL	17
2D MAINTENANCE BATTALION	15
8th MOTOR TRANSPORT BATTALION	26
8th COMMUNICATION BATTALION	26
2D LANDING SUPPORT BATTALION	26
2D RADIO BATTALION	26
TOTAL	**8476**

RANGES - REQUIRED ADDITIONAL

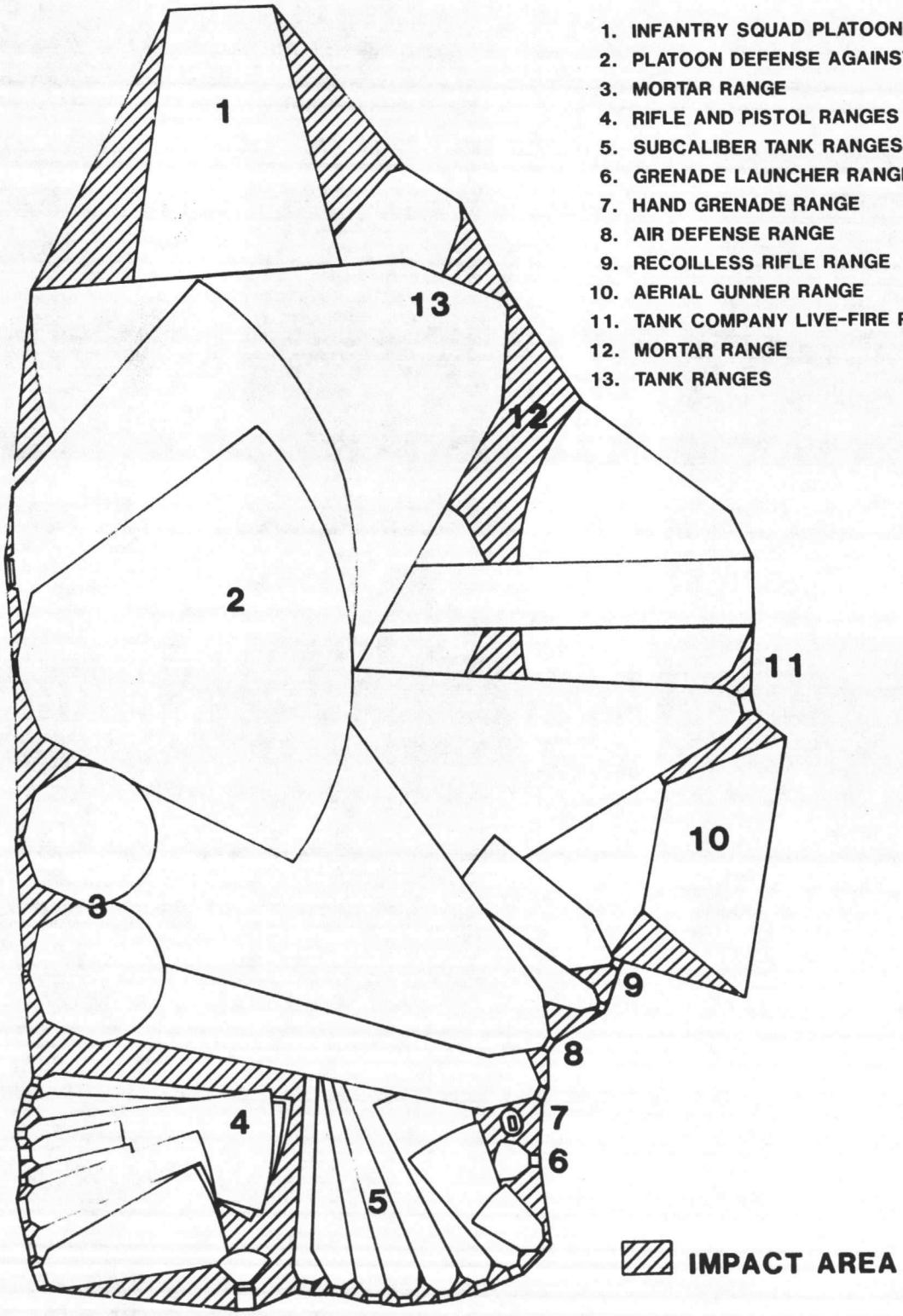
RANGE TYPE	NUMBER REQUIRED
SQUAD AUTOMATIC WEAPON (SAW)	1
M2, 50 caliber MACHINE GUN	2
M40A1 SNIPER RIFLE	1
SHOULDER-LAUNCHED MULTI-PURPOSE ASSAULT WEAPON (SMAW)	4
MOUT ASSAULT COURSE	1
MK-19, 40mm MACHINE GUN	1
TANK-LAV MOVING TARGET RANGE	1
PLATOON DEFENSE AGAINST AIRCRAFT	1
TOTAL	12

MECHANIZED INFANTRY DIVISION POST MODEL



TOTAL AREA = 166,170 AC. +
UNUSABLE LAND
(670KM2)

EXAMPLE OF OVERLAPPING SURFACE DANGER ZONES



CONCEPT COMPARISON

	EXISTING CONDITION	A MAXIMIZE RANGE/IMPACT	B MAXIMIZE MANEUVER	C BAL. REQT. I	D BAL. REQT. II
MANEUVER AREA (km2)	247	225	456	238	242
PERCENT OF REQUIRED MANEUVER AREA PROVIDED	54	49	100	52	53
IMPACT AREA (km2)	45	90	54	64	49
NUMBER OF RELOCATED RANGES	—	29	8	21	11
NUMBER OF NEW RANGES	—	12	12	12	12
ADDITIONAL LAND ACQUISITION (km2)	0	22	209	0	0
EXISTING IMPACT AREA REQUIRING CLEARANCE (km2)	0	0	0	0	14
NUMBER OF LANDING ZONES DISPLACED	0	4	1	4	0
WOODPECKER HABITAT DISPLACED (km2)	0	3.0	2.9	2.6	1.8
REMOVES INTRACOASTAL CONFLICT	NO	YES	NO	NO	NO
REMOVES HWY. 172 CONFLICT	NO	YES	NO	NO	YES
DISPLACES EXISTING AMMO STORAGE AREA	NO	NO	NO	NO	YES
PROVIDES ADDITIONAL MANEUVER SCENARIO	NO	NO	YES	NO	YES
PROVIDES GREATER DEFLECTION FOR ARTILLERY	NO	YES	NO	YES	YES
PROVIDES ADDITIONAL MECHANIZED MANEUVER AREA-RELOCATE F RANGES	NO	NO	YES	YES	YES
ESTIMATED COST OF CONSTRUCTION AND LAND ACQUISITION (MILLION $)	—	27	60	11	15

DECISIONS TO BE MADE

A. ARE TRAINING REQUIREMENTS TO BE CONTAINED WITHIN EXISTING BOUNDARY OF CAMP LEJUENE OR THROUGH THE ACQUISITION OF ADDITIONAL LAND AREA?

B. ARE TRAINING MANEUVERS TO BE MAXIMIZED OR ARE TRAINING RANGES TO BE MAXIMIZED?

RECOMMENDATIONS

1. CONCEPT D
   - ACHIEVE OPTIMUM UTILIZATION OF EXISTING CAMP LEJEUNE TRAINING AREAS

2. ACHIEVE A BALANCE BETWEEN MANEUVER AND RANGE REQUIREMENTS

3. DO NOT ACQUIRE LAND AT THIS TIME

4. ESTABLISH STANDARD PROCEDURES FOR DOCUMENTING TRAINING EVOLUTIONS AND REQUIREMENTS

UNITED STATES MARINE CORPS
Marine Corps Base
Camp Lejeune, North Carolina 28542-5001

IN REPLY REFER TO:
11000
PWO

From: Commanding General, Marine Corps Base, Camp Lejeune
To: Commandant of the Marine Corps (LFF-1)
Via (1) Commander, Atlantic Division, Naval Facilities Engineering Command, Norfolk, VA 23511-6287 (ATTN: Code 09A21B3/Code 407)
(2) Commander, Naval Facilities Engineering Command 200 Stovall Street, Alexandria, VA 22332

Subj: FY-90 MILITARY CONSTRUCTION (MCON) PROGRAM FOR MARINE CORPS BASE, CAMP LEJEUNE, NC

Ref: (a) MCO P11000.12B
(b) CMC ltr 11000 over LFF-1 dtd 8 Jul 86
(c) CMC msg 050129Z Aug 86
(d) CG MCB CLNC msg 191422Z Aug 86
(e) CMC msg 210124Z Aug 86

Encl: (1) Revised NAVMC 10956 Summary for Correction of Facility Deficiencies for FY-90 MCON program dtd 30 Sep 86
(2) FY-90 MCON Program:
P-887, Wallace Creek Bridge, consisting of DD Form 1391/1391c dtd 30 Sep 86 and approved NAVMC Form 11069 Request for Site Approval with Site Location Map dtd 30 Sep 1986
P-869, Land Acquisition, consisting of DD Form 1391/1391c dtd 30 Sep 86 and approved NAVMC Form 11069, Request for Site Approval with Site Location Map dtd 24 Feb 86
P-057, Division Operations Center, consisting of DD Form 1391/1391c dtd 30 Sep 86 and approved NAVMC Form 11069, Request for Site Approval with Site Location Map dtd 22 Sep 81
P-804, Field Maintenance Complex (Increment 3), consisting of DD Form 1391/1391c dtd 30 Sep 86 and approved NAVMC Form 11069, Request for Site Approval with Site Location Map dtd 30 Sep 86
P-828, Field Medical Service School Facility, consisting of DD Form 1391/1391c dtd 30 Sep 86 and approved NAVMC Form 11069, Request for Site Approval with Site Location Map dtd 18 Sep 86
P-630, Bachelor Enlisted Quarters, consisting of DD Form 1391/1391c dtd 30 Sep 86 and approved NAVMC Form 11069, Request for Site Approval with Site Location Map dtd 18 Sep 86
P-196, Combat Vehicle Maintenance Shop, consisting of DD Form 1391/1391c dtd 30 Sep 86 and approved NAVMC Form 11069, Request for Site Approval with Site Location Map dtd 22 Sep 81

P-644, Electronics/Communications Maintenance Shop, consisting of DD Form 1391/1391c dtd 30 Sep 86 and approved NAVMC Form 11069, Request for Site Approval with Site Location Map dtd 22 Sep 81

P-881, Anti-Tank Maintenance Facility, consisting of DD Form 1391/1391c dtd 30 Sep 86 and approved NAVMC Form 11069, Request for Site Approval with Site Location Map dtd 18 Sep 86

P-849, Bachelor Officers Quarters, consisting of DD Form 1391/1391c dtd 30 Sep 86 and approved NAVMC Form 11069, Request for Site Approval with Site Location Map dtd 24 Jul 85

P-842, Regional Automated Service Center (RASC), consisting of DD Form 1391/1391c dtd 30 Sep 86 and approved NAVMC Form 11069, Request for Site Approval with Site Location Map dtd 24 Jul 84

P-065, Gymnasium, consisting of DD Form 1391/1391c dtd 30 Sep 86 and approved NAVMC Form 11069, Request for Site Approval with Site Location Map dtd 16 Nov 81

P-824, Chapel (Tarawa Terrace), consisting of DD Form 1391/1391c dtd 30 Sep 86 and approved NAVMC Form 11069 Request for Site Approval with Site Location Map dtd 30 Aug 82

P-672, Road Improvements (Brewster Blvd. Overpass), consisting of DD Form 1391/1391c and approved NAVMC Form 11069, Request for Site Approval with Site Location Map dtd 24 Feb 86.

P-853, Vehicle Ready Fuel Storage, project package consisting of DD Form 1391/1391c dtd 30 Sep 86 and approved NAVMC Form 11069, Request for Site Approval with Site Location Map dtd 24 Jul 85

(3) NAVMC 10956 Summary for Correction of Facility Deficiencies for Navy Centrally Managed Program

(4) FY-87 Energy Conservation Investment Program (ECIP)

P-799, Add Insulation to Above-Ground Steam Lines, project package consisting of DD Form 1391/1391c, Life Cycle Cost Analysis Summary and Approved NAVMC Form 11069 with Request for Site Approval with Site Location Map, all dtd 14 Apr 86

(5) FY-89 Navy Occupational Safety and Health (NAVOSH) Deficiency Abatement Program

P-811, Electrical Safety Improvements, Preliminary Project Engineering Documentation (PED) dtd 1 Jan 86

P-864, Provide Exterior Stairways, consisting of DD Form 1391/1391c with NAVFAC Form 11013/7 and Site Location Map, all dtd 12 Sep 85

P-788, Provide Fire Alarm Systems, consisting of DD Form 1391/1391c with NAVFAC Form 11013/7 and Site Location Map all dtd 12 Sep 85

Subj: FY-90 MILITARY CONSTRUCTION (MCON) PROGRAM FOR MARINE CORPS BASE, CAMP LEJEUNE, NC

P-867, Modify Loading Docks, consisting of DD Form 1391/ 1391c with NAVFAC Form 11013/7 and Site Location

(6) FY-89 Pollution Abatement Program
P-829, Fly Ash Control System, Building 1700, project package consisting of DD Form 1391/1391c dtd 14 Aug 85
P-845, Tactical Vehicle Wash Down Facility, project package consisting of DD Form 1391/1391c dtd 15 Jul 86 (LANTDIV Mark-up), and approved NAVMC 11069, Request for Site Approval with Site Location Map dtd 30 Aug 84

1. Reference (a) provided detailed guidance in the formulation and submission of MCON programming. Reference (b) provided guidance for the Camp Lejeune Military Construction Program specifically requesting project documentation for the FY-90 program. Reference (c) requested Navy Centrally Managed Project Documentation be submitted with the FY-90 program by 15 September 1986. Reference (d) requested extension to 30 September and reference (e) granted the extension.

2. This submission provides developed MILCON projects for FY-90. Our program consists of four FY-90 projects previously submitted and the resubmission of nine FY-89 projects. In addition, there are two new projects P-881 and P-887. Project submission for P-881, Anti-Tank Maintenance Facility, was necessitated by the formulation of the Anti-Tank Battalion and is consistent with the Base Facilities Support Requirements (FSR) dated January 1986, and revised 1 May 1986. P-887, Wallace Creek Bridge, is urgently required to replace the existing structures which have deteriorated and are located on the main artery of ingress and egress to Marine Corps Base. The bridge inspection report by Bigger and Agnew, Inc. dated July 1986, recommended replacement based on structural deterioration. As a result, reduced loads have been posted and immediate repairs are being made to extend service five years when reduced loads will again become necessary. At present, heavy equipment, commercial and military vehicles are required to use alternate indirect routes resulting in loss of manhours and increased operation expenses. Upgrading to three-lane structures is deemed essential to cope with existing and anticipated increase in traffic volumes.

3. Our Navy Centrally Managed Program consists of one FY-87 Energy Conservation Investment Program (ECIP) project, four FY-89 Navy Occupational Safety and Health (NAVOSH) Deficiency Abatement Program projects, and two FY-89 Pollution Abatement program projects; P-811, Electrical Safety Improvements, has been dropped from FY-88 to the FY-89 program. As shown on enclosure (3) P-822, Refuse Burning Supplemental Steam Plant, is no longer required and cancellation is requested. This represents our complete current program.

Subj: FY-90 MILITARY CONSTRUCTION (MCON) PROGRAM FOR MARINE CORPS BASE, CAMP LEJEUNE, NC

4. Enclosure (1) submits revised NAVMC 10956, Summary for Correction of Facility Deficiencies, for FY-90 MILCON program to reflect proper category codes, title and cost; and enclosure (2) submits project documentation. Enclosure (3) NAVMC 10956, Summary for Correction of Facility Deficiencies Navy Centrally Managed program projects with enclosures (4) through (6) depicting project documentation as submitted. In accordance with references (a) through (e) enclosures (1) through (6) are hereby submitted.

5. The Atlantic Division, Naval Facilities Engineering Command is requested to certify the cost of all projects as shown by enclosures (1) and (2) to the Commander, Naval Facilities Engineering Command with copies to CMC and this Command. It is further requested the status of all Navy Centrally Managed Projects as shown by enclosures (3) through (6) be forwarded to this Command with copy to CMC.

T. J. DALZELL
By direction

Copy to:
CMC (LFF) (advance)
NAVFACENGCOM (advance)
CG, FMFLANT (G-4)
CG, 2d MARDIV
CG, 2d FSSG
CG, II MAF
CG, 6th MAB

UNITED STATES MARINE CORPS
Marine Corps Base
Camp Lejeune, North Carolina 28542-5001

IN REPLY REFER TO:
11010/2
FAC

From: Commanding General, Marine Corps Base, Camp Lejeune
To: Commandant of the Marine Corps (Code L)
Via: Commander, Atlantic Division, Naval Facilities Engineering Command, Norfolk, VA 23511

Subj: LAND ACQUISITION, MARINE CORPS BASE CAMP LEJEUNE

Ref: (a) CG MCB ltr P-11010/2 FAC dtd 28 Oct 85

Encl: (1) Military Construction Project P-869; Expand Range and Maneuver Training Area

1. As a result of the gradual introduction of new, highly mobile, long range weapons systems and during the revisions to the Camp Lejeune Complex Master Plan, it became obvious that more detailed planning was required for land and facilities to support modern Marine Corps training requirements. Preliminary results of this analysis as discussed in the reference indicates that land acquisition is required in the amount of approximately 52,000 acres to expand training ranges and maneuver areas. A military construction project is attached as the enclosure describing in detail this requirement.

2. The area proposed for acquisition is currently commercial forest land located immediately west of Camp Lejeune. Ownership consists predominantly under one owner, International Paper Company. There are reportedly an undetermined number of private in-holdings which also could be affected. Upon acquisition, the area will be developed for maneuver area training with live fire ranges and a common impact area. In view of the impact of this requirement to Marine Corps readiness request support for early programming of this project in the FY-88 Military Construction Program.

4. For LANTNAVFACENGCOM, it is requested that preliminary milestones and cost estimates for appropriate environmental documentation in support of this action be provided as soon as possible. Upon completion of the Special Training Analysis an Engineering Service Request with detailed scope will be forwarded requesting execution of required environmental documentation to support FY-88 programming. Point of contact is Mr. A. Austin, Construction Coordinator on AV 484-3034.

R. A. TIEBOUT
By direction

Copy to:
CMC (advance)
CG, FMFLANT
CG, IIMAF
CG, 2dFSSG
CG, 2dMAW
CG, 6th MAB
COMLANTNAVFACENGCOM

Xtra

1. COMPONENT	FY 19 88 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
MARINE CORPS		25 Nov 85

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA 28542	EXPAND RANGE AND MANEUVER AREA

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
	911-10	P-869	45,000

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
LAND ACQUISITION	AC	52,000	776	40,370
TOTAL CONTRACT COST	-			40,370
CONTINGENCY 5%	-			2,019
SUBTOTAL				42,389
SUPERVISION, INSPECTION & OVERHEAD - 5.5%	-			2,331
TOTAL PROJECT COST	-			44,720
TOTAL PROJECT ROUNDED	-			45,000

10. DESCRIPTION OF PROPOSED CONSTRUCTION

Acquire 52,000 acres of land for the expansion of range and maneuver areas.

11. REQUIREMENT: 113,000 AC ADEQUATE: 61,000 AC SUBSTANDARD: 0 AC

PROJECT: The acquisition of additional land to satisfy new fire-impact-maneuver areas requirements.

REQUIREMENT: The introduction of new highly mobile, long range weapons systems and training techniques mandates additional training land. New weapons and combat vehicles are: Light Armored Vehicle, The M-1 tank (1989) MK19 Machine gun, M-198 Artillery, Up-Gunned Weapons Systems for Amphibious Assault Vehicles, 25mm Chain Gun, Rocket Assisted Projectile, Squad Automatic Weapon, Shoulder Launched Multi-purpose Assault Weapon, M-85 50 cal. Machine Gun, Military Operations in Urban Terrain Assault Course and Maneuver training areas for a Tank Battalion, an Artillery Regiment, three Infantry Regiments, an Assault Amphibious Tractor Battalion, a Light Armored Vehicle Battalion and other units.

CURRENT SITUATION: The military reservation of the Marine Corps Base, Camp Lejeune, North Carolina, has remained virtually unchanged since its establishment in 1941; however, the Marine Corps' organization, mission, doctrine, and equipment have continuously evolved with the passing of time. Changes in the structure of the units assigned to the installation and the development of new tactics for conducting warfare have increased the firepower and

1. COMPONENT	FY 1988 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
MARINE CORPS		25 Nov 85

3. INSTALLATION AND LOCATION

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

4. PROJECT TITLE	5. PROJECT NUMBER
EXPAND RANGE AND MANEUVER AREA	P-869

CURRENT SITUATION: (cont'd)
mobility required of the modern Marine fighting unit. In turn, these requriements have created demand for additional training land. Moreover, the continued improvement in the ballistics, range, and mobility of modern weapons and the philosophy that effective preparation for war requires training under conditions that reflect those of actual combat have further accentuated the need for suitable training areas. Future trends in organization, doctrine, and weapons require that more and larger firing ranges and expanded maneuver areas must be acquired for realistic field training of troop units.

Coincident with the growing demand for training land is an increase in the number and types of limitations that render portions of Camp Lejeune unavailable for training use. The increased public awareness of the need to protect the environment from damage has altered earlier judgments concerning the manner in which training exercises are conducted. In particular, current Federal legislation requiring the maintenance of suitable habitat for endangered wildlife on Federal lands either restricts the availability of some lands for training or changes the way training operations in these areas are conducted. Increased sensitivity to the effect training operations have on neighboring civilian communities has also restricted the means by which the Marine Corps' training mission is accomplished. Finally, other natural and man-made constraints may impose limitations on training that are equally as restrictive, if not more so, than those mandated by law or administrative ruling. Collectively, these limitations effectively reduce the supply of land that is suitable for conducting military training.

The analysis of available versus required maneuver areas reveals:

Total Area of Camp Lejeune Available (acres)		111,600
Less Excluded Areas (Impact Areas, Containment Areas, Water Areas, Endangered Species Areas)		50,300
Available Maneuver Area		61,300
Required Maneuver Area (Based on training, land analysis model, DACir25-1)		113,100
Shortfall	approximately	52,000

IMPACT IF NOT PROVIDED: The existing training area shortfall will continue to adversely affect Marine Corps readiness training. Scarce resources will continue to be diverted for transportation of FMF units to off-base training locations due to the deficiencies in Camp Lejeune land area. Combined arms training for mechanized assault and realistic evaluations of

1. COMPONENT MARINE CORPS	FY 19 88 MILITARY CONSTRUCTION PROJECT DATA	2. DATE 25 Nov 85

3. INSTALLATION AND LOCATION

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

4. PROJECT TITLE	5. PROJECT NUMBER
EXPAND RANGE AND MANEUVER AREA	P-869

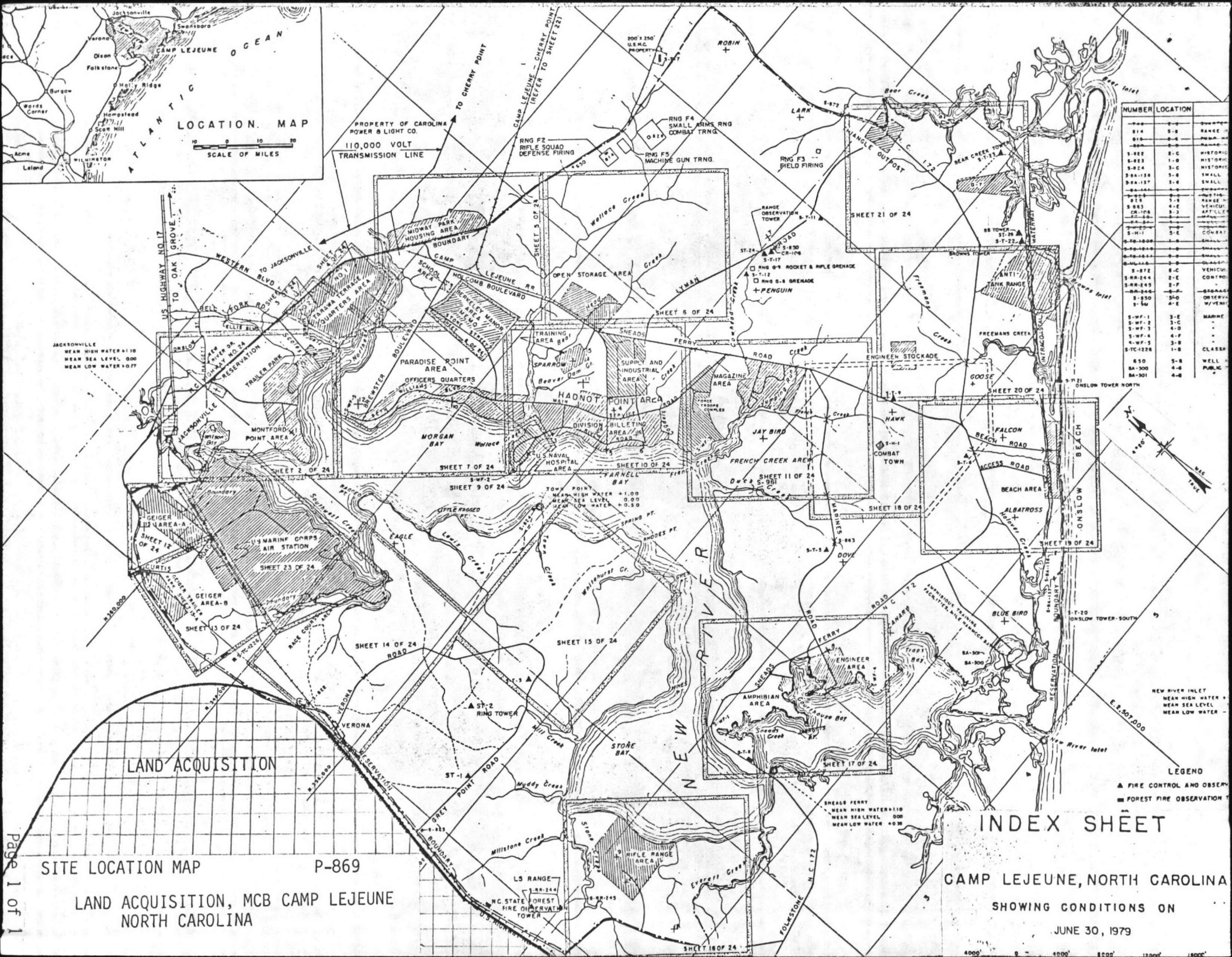
IMPACT IF NOT PROVIDED: (cont'd)

Marine Amphibious Brigade capabilities will continue to be hampered. Development will be restricted for firing ranges required to support Marine Corps force modernization through the 1990's.

SPECIAL CONSIDERATIONS

Special considerations will be contingent upon the results of the Environmental and Land Acquisition Studies.

ACA



NUMBER	LOCATION
S-RE2	S-C
S-B23	1-B
S-B24	3-C
S-H-1	5-E
S-87Z	8-C
S-RR-244	2-E
S-RR-245	2-F
S-850	5-D
S-WF-1	3-E
S-WF-2	3-C
S-WF-3	4-D
S-WF-4	4-F
S-WF-5	3-B
S-TC-1226	1-B
650	5-B
BA-300	4-G
BA-301	4-G

SITE LOCATION MAP P-869

LAND ACQUISITION, MCB CAMP LEJEUNE
NORTH CAROLINA

1. COMPONENT	FY 19 88 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
MARINE CORPS		25 Nov 85

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA 28542	EXPAND RANGE AND MANEUVER AREA

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
	911-10	P-869	45,000

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
LAND ACQUISITION	AC	52,000	776	40,370
TOTAL CONTRACT COST	-			40,370
CONTINGENCY 5%	-			2,019
SUBTOTAL				42,389
SUPERVISION, INSPECTION & OVERHEAD - 5.5%	-			2,331
TOTAL PROJECT COST	-			44,720
TOTAL PROJECT ROUNDED	-			45,000

10. DESCRIPTION OF PROPOSED CONSTRUCTION

Acquire 52,000 acres of land for the expansion of range and maneuver areas.

11. REQUIREMENT: 113,000 AC ADEQUATE: 61,000 AC SUBSTANDARD: 0 AC

PROJECT: The acquisition of additional land to satisfy new fire-impact-maneuver areas requirements.

REQUIREMENT: The introduction of new highly mobile, long range weapons systems and training techniques mandates additional training land. New weapons and combat vehicles are: Light Armored Vehicle, The M-1 tank (1989) MK19 Machine gun, M-198 Artillery, Up-Gunned Weapons Systems for Amphibious Assault Vehicles, 25mm Chain Gun, Rocket Assisted Projectile, Squad Automatic Weapon, Shoulder Launched Multi-purpose Assault Weapon, M-85 50 cal. Machine Gun, Military Operations in Urban Terrain Assault Course and Maneuver training areas for a Tank Battalion, an Artillery Regiment, three Infantry Regiments, an Assault Amphibious Tractor Battalion, a Light Armored Vehicle Battalion and other units.

CURRENT SITUATION: The military reservation of the Marine Corps Base, Camp Lejeune, North Carolina, has remained virtually unchanged since its establishment in 1941; however, the Marine Corps' organization, mission, doctrine, and equipment have continuously evolved with the passing of time. Changes in the structure of the units assigned to the installation and the development of new tactics for conducting warfare have increased the firepower and

1. COMPONENT	FY 1988 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
MARINE CORPS		25 Nov 85

3. INSTALLATION AND LOCATION

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

4. PROJECT TITLE	5. PROJECT NUMBER
EXPAND RANGE AND MANEUVER AREA	P-869

CURRENT SITUATION: (cont'd)
mobility required of the modern Marine fighting unit. In turn, these requriements have created demand for additional training land. Moreover, the continued improvement in the ballistics, range, and mobility of modern weapons and the philosophy that effective preparation for war requires training under conditions that reflect those of actual combat have further accentuated the need for suitable training areas. Future trends in organization, doctrine, and weapons require that more and larger firing ranges and expanded maneuver areas must be acquired for realistic field training of troop units.

Coincident with the growing demand for training land is an increase in the number and types of limitations that render portions of Camp Lejeune unavailable for training use. The increased public awareness of the need to protect the environment from damage has altered earlier judgments concerning the manner in which training exercises are conducted. In particular, current Federal legislation requiring the maintenance of suitable habitat for endangered wildlife on Federal lands either restricts the availability of some lands for training or changes the way training operations in these areas are conducted. Increased sensitivity to the effect training operations have on neighboring civilian communities has also restricted the means by which the Marine Corps' training mission is accomplished. Finally, other natural and man-made constraints may impose limitations on training that are equally as restrictive, if not more so, than those mandated by law or administrative ruling. Collectively, these limitations effectively reduce the supply of land that is suitable for conducting military training.

The analysis of available versus required maneuver areas reveals:

Total Area of Camp Lejeune Available (acres)	111,600
Less Excluded Areas (Impact Areas, Containment Areas, Water Areas, Endangered Species Areas)	50,300
Available Maneuver Area	61,300
Required Maneuver Area (Based on training, land analysis model, DACir25-1)	113,100
Shortfall approximately	52,000

IMPACT IF NOT PROVIDED: The existing training area shortfall will continue to adversely affect Marine Corps readiness training. Scarce resources will continue to be diverted for transportation of FMF units to off-base training locations due to the deficiencies in Camp Lejeune land area. Combined arms training for mechanized assault and realistic evaluations of

1. COMPONENT MARINE CORPS	FY 19 88 MILITARY CONSTRUCTION PROJECT DATA	2. DATE 25 Nov 85

3. INSTALLATION AND LOCATION

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

4. PROJECT TITLE	5. PROJECT NUMBER
EXPAND RANGE AND MANEUVER AREA	P-869

IMPACT IF NOT PROVIDED: (cont'd)

Marine Amphibious Brigade capabilities will continue to be hampered. Development will be restricted for firing ranges required to support Marine Corps force modernization through the 1990's.

SPECIAL CONSIDERATIONS

Special considerations will be contingent upon the results of the Environmental and Land Acquisition Studies.

ACA

1. COMPONENT	FY 19 89 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
MARINE CORPS		20 Feb 86

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA 28542	EXPAND RANGE AND MANEUVER AREA

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
	911-10	P-869	45,000

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
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TOTAL CONTRACT COST	-			40,370
CONTINGENCY 5%	-			2,019
SUBTOTAL				42,389
SUPERVISION, INSPECTION & OVERHEAD - 5.5%	-			2,331
TOTAL PROJECT COST	-			44,720
TOTAL PROJECT ROUNDED	-			45,000

10. DESCRIPTION OF PROPOSED CONSTRUCTION

Acquire 52,000 acres of land for the expansion of range and maneuver areas.

11. REQUIREMENT: 113,000 AC ADEQUATE: 61,000 AC SUBSTANDARD: 0 AC

PROJECT: The acquisition of additional land to satisfy new fire-impact-maneuver areas requirements.

REQUIREMENT: The introduction of new highly mobile, long range weapons systems and training techniques mandates additional training land. New weapons and combat vehicles are: Light Armored Vehicle, The M-1 tank (1989) MK19 Machine gun, M-198 Artillery, Up-Gunned Weapons Systems for Amphibious Assault Vehicles, 25mm Chain Gun, Rocket Assisted Projectile, Squad Automatic Weapon, Shoulder Launched Multi-purpose Assault Weapon, M-85 50 cal. Machine Gun, Military Operations in Urban Terrain Assault Course and Maneuver training areas for a Tank Battalion, an Artillery Regiment, three Infantry Regiments, an Assault Amphibious Tractor Battalion, a Light Armored Vehicle Battalion and other units.

CURRENT SITUATION: The military reservation of the Marine Corps Base, Camp Lejeune, North Carolina, has remained virtually unchanged since its establishment in 1941; however, the Marine Corps' organization, mission, doctrine, and equipment have continuously evolved with the passing of time. Changes in the structure of the units assigned to the installation and the development of new tactics for conducting warfare have increased the firepower and

1. COMPONENT	FY 1989 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
MARINE CORPS		20 Feb 86

3. INSTALLATION AND LOCATION

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

4. PROJECT TITLE	5. PROJECT NUMBER
EXPAND RANGE AND MANEUVER AREA	P-869

CURRENT SITUATION: (cont'd)

mobility required of the modern Marine fighting unit. In turn, these requriements have created demand for additional training land. Moreover, the continued improvement in the ballistics, range, and mobility of modern weapons and the philosophy that effective preparation for war requires training under conditions that reflect those of actual combat have further accentuated the need for suitable training areas. Future trends in organization, doctrine, and weapons require that more and larger firing ranges and expanded maneuver areas must be acquired for realistic field training of troop units.

Coincident with the growing demand for training land is an increase in the number and types of limitations that render portions of Camp Lejeune unavailable for training use. The increased public awareness of the need to protect the environment from damage has altered earlier judgments concerning the manner in which training exercises are conducted. In particular, current Federal legislation requiring the maintenance of suitable habitat for endangered wildlife on Federal lands either restricts the availability of some lands for training or changes the way training operations in these areas are conducted. Increased sensitivity to the effect training operations have on neighboring civilian communities has also restricted the means by which the Marine Corps' training mission is accomplished. Finally, other natural and man-made constraints may impose limitations on training that are equally as restrictive, if not more so, than those mandated by law or administrative ruling. Collectively, these limitations effectively reduce the supply of land that is suitable for conducting military training.

The analysis of available versus required maneuver areas reveals:

Total Area of Camp Lejeune Available (acres)		111,600
Less Excluded Areas (Impact Areas, Containment Areas, Water Areas, Endangered Species Areas)		50,300
Available Maneuver Area		61,300
Required Maneuver Area (Based on training, land analysis model, DACir25-1)		113,100
Shortfall	approximately	52,000

IMPACT IF NOT PROVIDED: The existing training area shortfall will continue to adversely affect Marine Corps readiness training. Scarce resources will continue to be diverted for transportation of FMF units to off-base training locations due to the deficiencies in Camp Lejeune land area. Combined arms training for mechanized assault and realistic evaluations of

1. COMPONENT	FY 89 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
MARINE CORPS		20 Feb 86

3. INSTALLATION AND LOCATION

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

4. PROJECT TITLE	5. PROJECT NUMBER
EXPAND RANGE AND MANEUVER AREA	P-869

IMPACT IF NOT PROVIDED: (cont'd)

Marine Amphibious Brigade capabilities will continue to be hampered. Development will be restricted for firing ranges required to support Marine Corps force modernization through the 1990's.

SPECIAL CONSIDERATIONS

Special considerations will be contingent upon the results of the Environmental and Land Acquisition Studies.

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1. COMPONENT	FY 19 89 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
MARINE CORPS		20 Feb 86

3. INSTALLATION AND LOCATION

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

4. PROJECT TITLE	5. PROJECT NUMBER
EXPAND RANGE AND MANEUVER AREA	P-869

FACILITY STUDY

1. Project: The acquisition of additional land to satisfy new fire-impact-maneuver areas requirements.

2. Current and Planned Future Workload with Regard to This Project: This facility will be utilized 100% of the time and the duration of need is indefinite.

3. Description of proposed Construction: Not applicable.

4. Cost Estimate: Costs is based on fair market value of similar land in surrounding area and will be reviewed and appraised by the Facilities and Real Estate Department of the Atlantic Division, Naval Facilities Engineering Command, Norfolk, Virginia.

5. Justification for project and for Scope of Project:

a. Justification for Project:

(1) Project: The proposed project provides for the acquisition of additional land to satisfy new fire-impact-maneuver areas requirements.

(2) Current Situation: The military reservation of the Marine Corps Base, Camp Lejeune, North Carolina, has remained virtually unchanged since its establishment in 1941; however, the Marine Corps' organization, mission, doctrine and equipment have continuously evolved with the passing of time. Changes in the structure of the units assigned to the installation,and the development of new tactics for conducting warfare have increased the firepower and mobility required of the modern Marine fighting unit. In turn, these requirements have created demand for additional training land. Moreover, the continued improvement in the ballistics, range, and mobility of modern weapons and the philosophy that effective preparation for war requires training under conditions that reflect those of actual combat have further accentuated the need for suitable training areas. Future trends in organization, doctrine, and weapons require that more and larger firing ranges and expanded maneuver areas must be acquired for realistic field training of troop units.

Coincident with the growing demand for training land is an increase in the number and types of limitations that render portions of Camp Lejeune unavailable for training use. The increased public awareness of the need to protect the environment from damage has altered earlier judgments concerning the manner in which training exercises are conducted. In particular, current Federal legislation requiring the maintenance of suitable

1. COMPONENT	FY 19 89 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
MARINE CORPS		20 Feb 86

3. INSTALLATION AND LOCATION

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

4. PROJECT TITLE	5. PROJECT NUMBER
EXPAND RANGE AND MANEUVER AREA	P-869

5. Justification for project and for Scope of Project: (cont'd)

habitat for endangered wildlife on Federal lands either restricts the availability of some lands for training or changes the way training operations in these areas are conducted. Increased sensitivity to the effect training operations have on neighboring civilian communities has also restricted the means by which the Marine Corps' training mission is accomplished. Finally, other natural and man-made constraints may impose limitations on training that are equally as restrictive, if not more so, than those mandated by law or administrative ruling. Collectively, these limitations effectively reduce the supply of land that is suitable for conducting military training.

The analysis of available versus required maneuver areas reveals:

Total Area of Camp Lejeune Available (acres)	111,600
less excluded areas (impact areas, containment areas, water areas, endangered species areas)	50,300
Available Maneuver Area	61,300
Required Maneuver Area (based on training, land analysis model, DACIR 25-1)	113,100
Shortfall (approximately)	52,000

(3) Impact if not Provided: The existing training area shortfall will continue to adversely affect Marine Corps readiness training. Scarce resources will continue to be diverted for transportation of FMF units to off-base training locations due to the deficiencies in Camp Lejeune land area. Combined arms training for mechanized assault and realistic evaluations of Marine Amphibious Brigade capabilities will continue to be hampered. Development will be restricted for firing ranges required to support Marine Corps force modernization through the 1990's.

b. Justification of Scope of Project: The introduction of new highly mobile, lang range weapons systems and training techniques mandates additional training land. New weapons and combat vehicles are: Light Armored Vehicles, the M-1 tank (1989) MK-19 Machine gun, M-198 Artillery, Up-Gunned Weapons Systems for Amphibious Assualt Vehicles, 25mm Chain Gun, Rocket Assisted Projectiles, Squad Automatic Weapon, Shoulder Launched Multipurpose Assault Weapon, M-85 50 cal. Machine Gun, Military Operations in Urban Terrain Assault Course and Maneuver training areas for a Tank Battalion, an Artillery Regiment, three Infantry Regiments, an Assault Amphibious Tractor Battalion, a Light Armored Vehcile Battalion and other units. The acquisition of 52,000 acres is considered the minimum area

1. COMPONENT	FY 19 89 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
MARINE CORPS		20 Feb 86

3. INSTALLATION AND LOCATION

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

4. PROJECT TITLE	5. PROJECT NUMBER
EXPAND RANGE AND MANEUVER AREA	P-869

b. Justification of Scope of Project: (cont'd)

needed to meet the training requirements of these systems.

6. Equipment Provided From Other Appropriations: Not applicable.

7. Common Support Facility: Not applicable.

8. Effect on Other Resources: The project will require an increase in O&MMC funds for increased utility services and operations. No additional personnel will be required. The project will enhance and improve the welfare and morale of personnel and improve the training capabilities of the 2d Marine Division

9. Siting of the Project: This project will be located adjacent to the Verona Loop Area west of U. S. Highway 17S. (see enclosure 1).

10. Other graphic Presentations, including Photographs. None.

11. Economic Analysis: This is a training project in support of personnel assigned to Camp Lejeune.

12. Environmental Impact: An Environmental Impact Assessment of the area will be made.

13. Quantitative Data: Not applicable.

14. Maintenance Facilities: Not applicable.

15. Morale, Welfare and Recreation Facilities: Not applicable.

16. Relocation Facilities: Existing ranges and related facilities will be evaluated, relocated as assessed for training needs, efficiency, and programmed in subsequent projects.

17. Storage Facilities: Not applicable.

18. Hazards, Identification, Assessment and Analysis:

a. System safety engineering and management programs will be used to ensure that the highest possible degree of safety and occupational health is adhered to.

b. The requirement for applying system safety engineering principles and management of this project will include the following documentation.

1. COMPONENT	FY 19 89 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
MARINE CORPS		20 Feb 86

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

4. PROJECT TITLE	5. PROJECT NUMBER
EXPAND RANGE AND MANEUVER AREA	P-869

18. Hazards, Identification, Assessment and Analysis: (cont'd)

(1) A listing of primary hazards identified.

(2) Risk assessment data, leading to the assignment of a "risk assessment code", shall be in accordance with OPNAVINST 5100.23, Navy Occupational Safety and Health (NAVOSH) program.

(3) This project will be in compliance with AR-385-62, and AR-385-63, safety requirements.

(4) A Preliminary Hazard Analysis (PHA) will be submitted.

1. COMPONENT	FY 19 89 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
MARINE CORPS		

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA 28542	~~EXPAND RANGE AND MANEUVER AREA~~ Land Acquisition

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
	911-10	P-869	45,000

ESCALATED TO APRIL 1989

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
LAND ACQUISITION	AC	52,000	776	40,370
TOTAL CONTRACT COST	-			40,370
CONTINGENCY 5%	-			2,019
SUBTOTAL				42,389
SUPERVISION, INSPECTION & OVERHEAD - 5.5%	-			2,331
TOTAL PROJECT COST	-			44,720
TOTAL PROJECT ROUNDED	-			45,000

10. DESCRIPTION OF PROPOSED CONSTRUCTION

Acquire 52,000 acres of land for the expansion of range and maneuver areas.

11. REQUIREMENT: 113,000 AC ADEQUATE: 61,000 AC SUBSTANDARD: 0 AC

PROJECT: The acquisition of additional land to satisfy new fire-impact-maneuver areas requirements.

REQUIREMENT: The introduction of new highly mobile, long range weapons systems and training techniques mandates additional training land. New weapons and combat vehicles are: Light Armored Vehicle, The M-1 tank (1989) MK19 Machine gun, M-198 Artillery, Up-Gunned Weapons Systems for Amphibious Assault Vehicles, 25mm Chain Gun, Rocket Assisted Projectile, Squad Automatic Weapon, Shoulder Launched Multi-purpose Assault Weapon, M-85 50 cal. Machine Gun, Military Operations in Urban Terrain Assault Course and Maneuver training areas for a Tank Battalion, an Artillery Regiment, three Infantry Regiments, an Assault Amphibious Tractor Battalion, a Light Armored Vehicle Battalion and other units.

CURRENT SITUATION: The military reservation of the Marine Corps Base, Camp Lejeune, North Carolina, has remained virtually unchanged since its establishment in 1941; however, the Marine Corps' organization, mission, doctrine, and equipment have continuously evolved with the passing of time. Changes in the structure of the units assigned to the installation and the development of new tactics for conducting warfare have increased the firepower and

1. COMPONENT	FY 1989 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
MARINE CORPS		

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

4. PROJECT TITLE	5. PROJECT NUMBER
EXPAND RANGE AND MANEUVER AREA	P-869

CURRENT SITUATION: (cont'd)
mobility required of the modern Marine fighting unit. In turn, these requriements have created demand for additional training land. Moreover, the continued improvement in the ballistics, range, and mobility of modern weapons and the philosophy that effective preparation for war requires training under conditions that reflect those of actual combat have further accentuated the need for suitable training areas. Future trends in organization, doctrine, and weapons require that more and larger firing ranges and expanded maneuver areas must be acquired for realistic field training of troop units.

Coincident with the growing demand for training land is an increase in the number and types of limitations that render portions of Camp Lejeune unavailable for training use. The increased public awareness of the need to protect the environment from damage has altered earlier judgments concerning the manner in which training exercises are conducted. In particular, current Federal legislation requiring the maintenance of suitable habitat for endangered wildlife on Federal lands either restricts the availability of some lands for training or changes the way training operations in these areas are conducted. Increased sensitivity to the effect training operations have on neighboring civilian communities has also restricted the means by which the Marine Corps' training mission is accomplished. Finally, other natural and man-made constraints may impose limitations on training that are equally as restrictive, if not more so, than those mandated by law or administrative ruling. Collectively, these limitations effectively reduce the supply of land that is suitable for conducting military training.

The analysis of available versus required maneuver areas reveals:

Total Area of Camp Lejeune Available (acres)		111,600
Less Excluded Areas (Impact Areas, Containment Areas, Water Areas, Endangered Species Areas)		50,300
Available Maneuver Area		61,300
Required Maneuver Area (Based on training, land analysis model, DACir25-1)		113,100
Shortfall	approximately	52,000

IMPACT IF NOT PROVIDED: The existing training area shortfall will continue to adversely affect Marine Corps readiness training. Scarce resources will continue to be diverted for transportation of FMF units to off-base training locations due to the deficiencies in Camp Lejeune land area. Combined arms training for mechanized assault and realistic evaluations of

1. COMPONENT MARINE CORPS	FY 89 MILITARY CONSTRUCTION PROJECT DATA	2. DATE

3. INSTALLATION AND LOCATION

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

4. PROJECT TITLE	5. PROJECT NUMBER
EXPAND RANGE AND MANEUVER AREA	P-869

IMPACT IF NOT PROVIDED: (cont'd)

Marine Amphibious Brigade capabilities will continue to be hampered. Development will be restricted for firing ranges required to support Marine Corps force modernization through the 1990's.

SPECIAL CONSIDERATIONS

Special considerations will be contingent upon the results of the Environmental and Land Acquisition Studies.

ACA

Larry - your action - include J. Jordan as needed.

11011
FAC 408

OCT 23 1987

Larry

MEMORANDUM FOR RECORD

Subj: REAL ESTATE PROCEDURES FOR CAMP LEJEUNE EXPANSION

Ref: (a) Mtg btwn Mr. Charles Moody and Mr. Lee Jackson, two real estate appraisers, and Bob Alexander, MCB, FAC dtd 20 oct 87
(b) PHONCON from Bob Swiader, LANTDIV Real Estate of 21 Oct 87

1. As discussed during the references, a meeting is scheduled on 4 November with International Paper Company representatives at 11:00 a.m. in the Wilmington IPC offices. Persons attending will include Mr. Moody, Mr. Swiader and IPC representatives from the New Jersey corporate offices. Mr. Swiader suggests that one person attend from MCB, preferrably a staff level person.

2. The purpose of the meeting is not to initiate negotiations but to agree on the objectives of the appraisal process and to give IPC the opportunity to point out unusual features of the property which should be investigated. (Note: Information is needed on the location of any abandoned landfill or disposal areas following the abandonment of the Camp Davis complex).

3. In reference (a), I provided the appraisers with map information and discussed proposed data to be obtained under Headquarters Marine Corps contract for the LUMS system. Mr. Moody indicated his goal was to complete the initial appraisal early in December. The first step is to agree on a physical inventory, i.e., how much timber is available and what its quality is. Subsequent meetings with IPC would deal with negotiation of values and timber product specifications and operability. Mr. Moody indicated the existing improvements for drainage may or may not have a value to IPC in terms of increased forest production. Another significant item will be the date of the value at which the appraiser and IPC will establish as a base line. Mr. Moody showed me timber stand maps of the IPC area and indicated that IPC has a very accurate data base on the extent of their forest resources. Mr. Moody indicated that four major components of the appraisal will be the value of the land forestry, mineral values, possible peat values and the value of the land for any higher uses. He implied that the Holly Ridge airport area may fall into this latter category.

Abeline - [illegible] map - good

Sebeen [illegible]

8011

OCT 3 1 1991 TOO

Subj: REAL ESTATE PROCEDURES FOR CAMP LEJEUNE EXPANSION

4. Per reference (b), Mr. Swiader said that the 4 November meeting may perhaps address some acquisition milestones. In that regard he is providing updated milestones from his April, 1987 estimate message which we should receive in the near future.

R. E. ALEXANDER

Copy to:
AC/S TRNG & OPS
→ PWO
ConstrCoord
EnvEngr

1. COMPONENT	FY 19 90 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
MARINE CORPS		30 Sep 86

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA 28542	LAND ACQUISITION

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
	911-10	P-869	45,000 41,000

ESCALATED TO APRIL 1990

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
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Acquire 52,000 acres of land for the expansion of range and maneuver areas.

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IS THIS STILL CORRECT

CURRENT SITUATION: The military reservation of the Marine Corps Base, Camp Lejeune, North Carolina, has remained virtually unchanged since its establishment in 1941; however, the Marine Corps' organization, mission, doctrine, and equipment have continuously evolved with the passing of time. Changes in the structure of the units assigned to the installation and the development of new tactics for conducting warfare have increased the firepower and

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CURRENT SITUATION: (cont'd)
mobility required of the modern Marine fighting unit. In turn, these requriements have created demand for additional training land. Moreover, the continued improvement in the ballistics, range, and mobility of modern weapons and the philosophy that effective preparation for war requires training under conditions that reflect those of actual combat have further accentuated the need for suitable training areas. Future trends in organization, doctrine, and weapons require that more and larger firing ranges and expanded maneuver areas must be acquired for realistic field training of troop units.

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Required Maneuver Area (Based on training, land analysis model, DACir25-1)		113,100
Shortfall	approximately	52,000

IMPACT IF NOT PROVIDED: The existing training area shortfall will continue to adversely affect Marine Corps readiness training. Scarce resources will continue to be diverted for transportation of FMF units to off-base training locations due to the deficiencies in Camp Lejeune land area. Combined arms training for mechanized assault and realistic evaluations of

1. COMPONENT		2. DATE
MARINE CORPS	FY 90 MILITARY CONSTRUCTION PROJECT DATA	30 Sep 86

3. INSTALLATION AND LOCATION

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

4. PROJECT TITLE	5. PROJECT NUMBER
LAND ACQUISITION	P-869

IMPACT IF NOT PROVIDED: (cont'd)

Marine Amphibious Brigade capabilities will continue to be hampered. Development will be restricted for firing ranges required to support Marine Corps force modernization through the 1990's.

SPECIAL CONSIDERATIONS

Special considerations will be contingent upon the results of the Environmental and Land Acquisition Studies.

1. COMPONENT	FY 19 90 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
MARINE CORPS		30 Sep 86

3. INSTALLATION AND LOCATION

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

4. PROJECT TITLE	5. PROJECT NUMBER
LAND ACQUISITION	P-869

FACILITY STUDY

1. Project: The acquisition of additional land to satisfy new fire-impact-maneuver areas requirements.

2. Current and Planned Future Workload with Regard to This Project: This facility will be utilized 100% of the time and the duration of need is indefinite.

3. Description of proposed Construction: Not applicable.

4. Cost Estimate: Costs is based on fair market value of similar land in surrounding area and will be reviewed and appraised by the Facilities and Real Estate Department of the Atlantic Division, Naval Facilities Engineering Command, Norfolk, Virginia.

5. Justification for project and for Scope of Project:

a. Justification for Project:

(1) Project: The proposed project provides for the acquisition of additional land to satisfy new fire-impact-maneuver areas requirements.

(2) Current Situation: The military reservation of the Marine Corps Base, Camp Lejeune, North Carolina, has remained virtually unchanged since its establishment in 1941; however, the Marine Corps' organization, mission, doctrine and equipment have continuously evolved with the passing of time. Changes in the structure of the units assigned to the installation,and the development of new tactics for conducting warfare have increased the firepower and mobility required of the modern Marine fighting unit. In turn, these requirements have created demand for additional training land. Moreover, the continued improvement in the ballistics, range, and mobility of modern weapons and the philosophy that effective preparation for war requires training under conditions that reflect those of actual combat have further accentuated the need for suitable training areas. Future trends in organization, doctrine, and weapons require that more and larger firing ranges and expanded maneuver areas must be acquired for realistic field training of troop units.

Coincident with the growing demand for training land is an increase in the number and types of limitations that render portions of Camp Lejeune unavailable for training use. The increased public awareness of the need to protect the environment from damage has altered earlier judgments concerning the manner in which training exercises are conducted. In particular, current Federal legislation requiring the maintenance of suitable

1. COMPONENT	FY 19 90 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
MARINE CORPS		30 Sep 86

3. INSTALLATION AND LOCATION

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

4. PROJECT TITLE	5. PROJECT NUMBER
LAND ACQUISITION	P-869

5. Justification for project and for Scope of Project: (cont'd)

habitat for endangered wildlife on Federal lands either restricts the availability of some lands for training or changes the way training operations in these areas are conducted. Increased sensitivity to the effect training operations have on neighboring civilian communities has also restricted the means by which the Marine Corps' training mission is accomplished. Finally, other natural and man-made constraints may impose limitations on training that are equally as restrictive, if not more so, than those mandated by law or administrative ruling. Collectively, these limitations effectively reduce the supply of land that is suitable for conducting military training.

The analysis of available versus required maneuver areas reveals:

Total Area of Camp Lejeune Available (acres)	111,600
less excluded areas (impact areas, containment areas, water areas, endangered species areas)	50,300
Available Maneuver Area	61,300
Required Maneuver Area (based on training, land analysis model, DACIR 25-1)	113,100
Shortfall (approximately)	52,000

(3) Impact if not Provided: The existing training area shortfall will continue to adversely affect Marine Corps readiness training. Scarce resources will continue to be diverted for transportation of FMF units to off-base training locations due to the deficiencies in Camp Lejeune land area. Combined arms training for mechanized assault and realistic evaluations of Marine Amphibious Brigade capabilities will continue to be hampered. Development will be restricted for firing ranges required to support Marine Corps force modernization through the 1990's.

b. Justification of Scope of Project: The introduction of new highly mobile, lang range weapons systems and training techniques mandates additional training land. New weapons and combat vehicles are: Light Armored Vehicles, the M-1 tank (1989) MK-19 Machine gun, M-198 Artillery, Up-Gunned Weapons Systems for Amphibious Assualt Vehicles, 25mm Chain Gun, Rocket Assisted Projectiles, Squad Automatic Weapon, Shoulder Launched Multipurpose Assault Weapon, M-85 50 cal. Machine Gun, Military Operations in Urban Terrain Assault Course and Maneuver training areas for a Tank Battalion, an Artillery Regiment, three Infantry Regiments, an Assault Amphibious Tractor Battalion, a Light Armored Vehcile Battalion and other units. The acquisition of 52,000 acres is considered the minimum area

1. COMPONENT		2. DATE
MARINE CORPS	FY 19 90 MILITARY CONSTRUCTION PROJECT DATA	30 Sep 86

3. INSTALLATION AND LOCATION

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

4. PROJECT TITLE	5. PROJECT NUMBER
LAND ACQUISITION	P-869

b. Justification of Scope of Project: (cont'd)

needed to meet the training requirements of these systems.

6. Equipment Provided From Other Appropriations: Not applicable.

7. Common Support Facility: Not applicable.

8. Effect on Other Resources: The project will require an increase in O&MMC funds for increased utility services and operations. No additional personnel will be required. The project will enhance and improve the welfare and morale of personnel and improve the training capabilities of the 2d Marine Division

9. Siting of the Project: This project will be located adjacent to the Verona Loop Area west of U. S. Highway 17S. (see enclosure 1).

10. Other graphic Presentations, including Photographs. None.

11. Economic Analysis: This is a training project in support of personnel assigned to Camp Lejeune.

12. Environmental Impact: An Environmental Impact Assessment of the area will be made.

13. Quantitative Data: Not applicable.

14. Maintenance Facilities: Not applicable.

15. Morale, Welfare and Recreation Facilities: Not applicable.

16. Relocation Facilities: Existing ranges and related facilities will be evaluated, relocated as assessed for training needs, efficiency, and programmed in subsequent projects.

17. Storage Facilities: Not applicable.

18. Hazards, Identification, Assessment and Analysis:

a. System safety engineering and management programs will be used to ensure that the highest possible degree of safety and occupational health is adhered to.

b. The requirement for applying system safety engineering principles and management of this project will include the following documentation.

1. COMPONENT	FY 19 90 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
MARINE CORPS		30 Sep 86

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

4. PROJECT TITLE	5. PROJECT NUMBER
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18. Hazards, Identification, Assessment and Analysis: (cont'd)

(1) A listing of primary hazards identified.

(2) Risk assessment data, leading to the assignment of a "risk assessment code", shall be in accordance with OPNAVINST 5100.23, Navy Occupational Safety and Health (NAVOSH) program.

(3) This project will be in compliance with AR-385-62, and AR-385-63, safety requirements.

(4) A Preliminary Hazard Analysis (PHA) will be submitted.

P-869 | 67001

TO: COMMANDANT OF THE MARINE CORPS (CODE LF) (4700)

FROM
Commanding General, Marine Corps Base, Camp Lejeune, NC 28542

CATEGORY CODE AND PROJECT TITLE	TYPE OF FUNDING	COST ($000)	PROGRAM YEAR
911-10 Land Acquisition	MCON	45.0	FY-89

SECTION A FOR USE BY REQUESTER

PROJECT DESCRIPTION: This project will provide approximately 52,000 acres for expansion of the training ranges and maneuver areas.

REMARKS: The gradual introduction of new, highly mobile long range weapon systems requires expansion of the training ranges and maneuver areas.

TYPE OF MAP: Site Location Map (encl 1)

DATE: -

REQUESTED BY (Typed name and signature): B. W. ELSTON By direction

DATE: 2/18/86

SECTION B HQMC REVIEW AND ANALYSIS

ANALYSIS
(Place a check (✓) in box opposite each item. Y = Yes; N = No; NA = Not Applicable)

DATE RECEIVED

Y	N	NA	PROJECT SITING CONSIDERATION	Y	N	NA	PROJECT SITING CONSIDERATION
✓			a. COMPATIBLE WITH ACTIVITY PLANNED DEVELOPMENT GOALS				d. COMPLIES WITH THE FOLLOWING CRITERIA:
✓			b. DEMONSTRATES SOUND PLANNING PRINCIPLES			✓	(1) AMMUNITION AND EXPLOSIVES
✓			c. MEETS MINIMUM PLANNING AND SITING CRITERIA			✓	(2) ELECTROMAGNETIC RADIATION
						✓	(3) AIRFIELD SAFETY
						✓	(4) NOISE INTENSITY
						✓	(5) FIRE PROTECTION

COMPATIBLE WITH ACTIVITY MASTER PLAN (Check appropriate box)
- [ ] IDENTICAL
- [ ] DIFFERENT BUT CONSISTENT
- [x] NOT SHOWN BUT CONSISTENT
- [ ] *NOT SHOWN AND INCONSISTENT
- [ ] *DIFFERENT AND INCONSISTENT

CRITERIA CERTIFICATION(S) REQUESTED (Check)
[ ] DDESB [ ] CNO [ ] NAVSEA [ ] NAVELEX [ ] NAVAIR [ ] OTHER:

DATE

DATE CERTIFICATION(S) RECEIVED

DDESB	CNO	NAVSEA	NAVELEX	NAVAIR	OTHER

ACTION
- [x] APPROVED
- [ ] DISAPPROVED
- [ ] DEFERRED

REMARKS
AS OUTLINED IN THE APPROVED MCO P11000.12C ACTIVITIES ARE NOW RESPONSIBLE FOR THEIR OWN SITE APPROVALS. (PARA 3003)

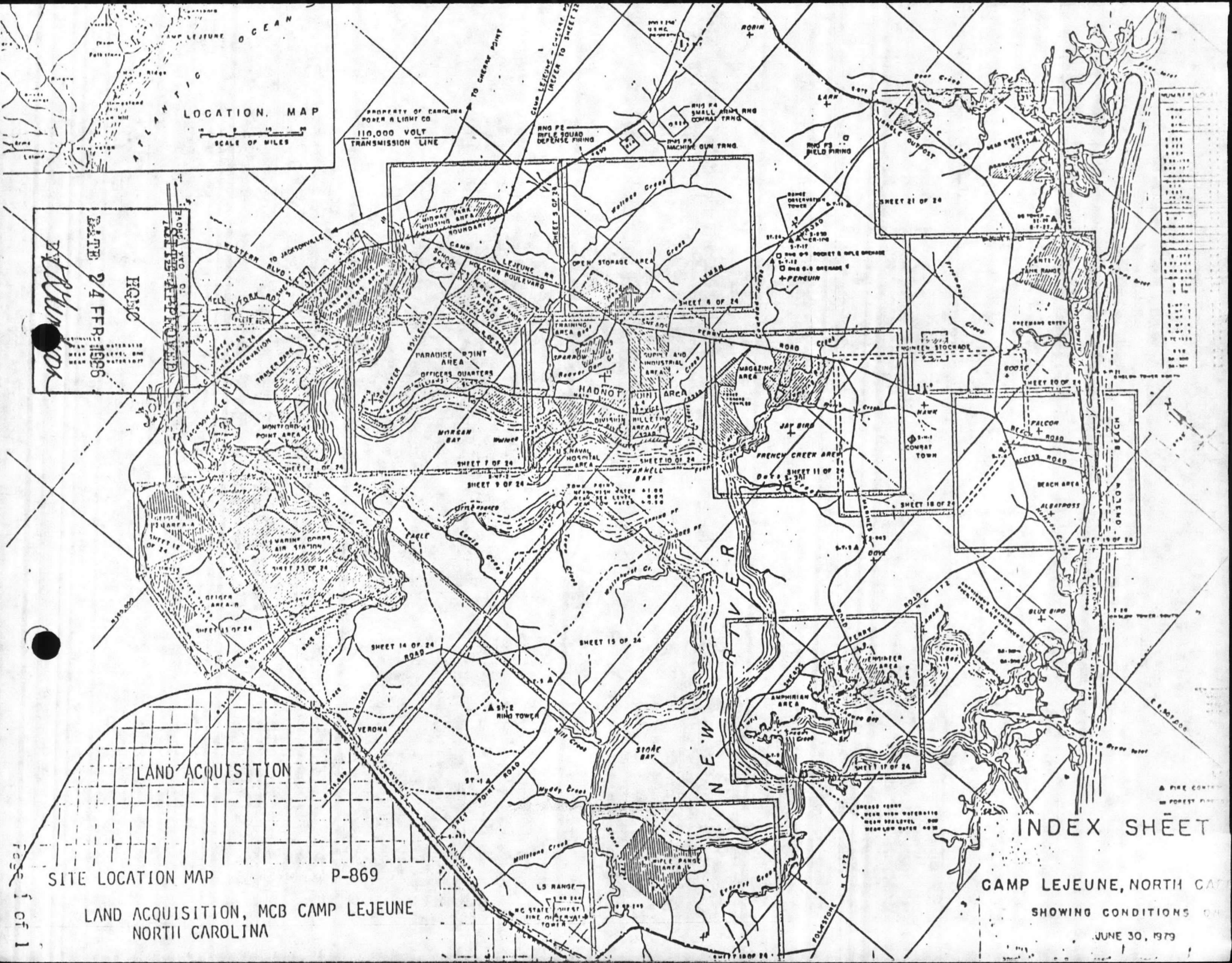
SITE APPROVED
HQMC
DATE 24 FEB 1986
BY [signature]

APPROVING OFFICIAL (Typed name and signature): K. SISSON By direction

DATE: 27 FEB 1986

Forward original plus one with approval

ENCL 1/1



SITE LOCATION MAP P-869

LAND ACQUISITION, MCB CAMP LEJEUNE
NORTH CAROLINA

UNITED STATES MARINE CORPS BASE
Marine Corps Base
Camp Lejeune, North Carolina 28542-5001

11011/1
FAC
OCT 20 1987

MEMORANDUM

From: Assistant Chief of Staff, Facilities, Marine Corps Base, Camp Lejeune

Subj: EXPANSION OF RANGE AND MANEUVER AREA, CAMP LEJEUNE, LAND ACQUISITION PROJECT

1. The land acquisition project, Environmental Impact Study (EIS), is currently being prepared by CZR, Incorporated under contract through Atlantic Division, Naval Facilities Engineering Command for the U. S. Marine Corps.

2. A meeting between Colonel Dalzell, Assistant Chief of Staff, Facilities, Marine Corps Base; Mr. Charles McGuire, NAVFAC; and Mr. James Hudgens of CZR was held on 15 October 1987 to discuss the scoping process for the EIS.

3. The following information is provided:

a. On 26 October 1987, there will be a preliminary meeting of appropriate staff members to discuss the scoping process with the contractor representatives and NAVFAC. The meeting will convene at 1200 at the Steak House Restaurant for a dutch treat lunch. At approximately 1300, we will conduct a working meeting in the conference room, building 1. Representatives from PAO, Facilities, SJA, and Training and Operations are required.

b. During the period 2 through 6 November 1987, letters will be mailed to all residents in the study area informing them of upcoming public meetings and of advertisements to be run in the local newspapers.

c. During the period 9 through 13 November 1987, advertisements will be run in the local newspapers informing the public of upcoming public meetings.

d. On 30 November 1987, a prescoping meeting will be conducted. Times and places will be promulgated later.

e. During the period 7 through 11 December 1987, informal town meetings will be conducted.

Subj: EXPANSION OF RANGE AND MANEUVER AREA, CAMP LEJEUNE, LAND ACQUISITION PROJECT

f. During the period 14 through 15 December 1987, formal public scoping meetings will be conducted.

4. We are approaching a critical phase in the land acquisition process. Proper scoping is a must to ensure a viable and complete EIS. Your cooperation in getting up to speed on the issues and your active participation in this process is essential.

5. Additional details will be forwarded as they become available. Don't forget; 1200, 26 October 1987, Steak House Restaurant!

T. J. Dalzell

T. J. DALZELL

Distribution:
CMC (Code LFL)
AC/S Trng & Ops
SJA
JPAO
PWO
ConstrCoord
EnvEngr

LAND AQUISITION C. I. S.

26 OCT 87

Name	Representing, Position	Phone
Bob Alexander	MCB, Env Engr	451-3034
DAVID NICKERSON	CZR, INCORPORATED	305-747 7455
Tom Fucigna	CZR Inc	" "
S. WAGNER	PWO	X5655
1LT F.X. Shea	JPAO	X 5655
B.W. Elston	Deputy AC/S Facilities	451-3034
J A SPEICHER	Trng & OPS MCB	451-5726/5326
CAPT C. E. DOUGHERTY	OSJA, MCB	5177/5383
T. F. CHARLES	DEP, AC/S TRNG/OPS	451-5326/5720
D.N. BUCKNER, LTCOL	RANGE CONTROL OFFICER	451 5863
F.E. CONE	PWD	451-2213
Danny Sharpe	NREAD	5003
Julian Wooten	Director, NREAD	"
Pete Black	NREAD	"
W.H. SMITH, MAJ.	BASE TRNG O	5276/1714
Chuck Maguire	LANT DIV, NAVFAC ENG-COM	(804)-445-2307 AV 565-2307
Rich Letty	BBN Laboratories Inc.	(617)-899-8022
LTCOL K.J. KIRIACOPOULOS	BASE FACILITIES	451-3034
Lt Col I. Lehman	" "	" "
Col T.J. DALZELL	AC/S Facilities MCB	451-3039/3035
Jim Hudgens	CZR, Inc	
Larry Brant	Public Works Div, Planning Dr	451-1833

DEIS KEY ISSUES

MCB CAMP LEJEUNE

EXPANSION

LAND ACQUISITION -- TAKING ISSUE

Single large landowner
Large number of small landowners
Adjacent and nearby property owners

AIRSPACE

Restricted use
Timing
Private/commercial/air carrier -vs- military needs
Intensity of use
V-139 Projected use

NOISE

Percieved -vs- real impact
Sonic, acoustic noise effects
Firing schedule considerations
Aircraft considerations
Aerial range considerations

WETLANDS

Sandy Run Pocosin
Extensive jurisdictional wetlands (SS 404)
Special requirements, conflicts
Nationwide (NC Regional) Permit
Jurisdictional determinations early
Development considerations

THREATENED/ENDANGERED SPECIES

Existing on-site/adjacent
Potential

DEIS SCOPING DATES

MCB CAMP LEJEUNE

EXPANSION

2 - 6 November 87: Mail out scoping notice
- Local landowners
- Local officials
- US Congressional members (NC)
- NC Legislative members
- Special interest groups

9 -13 November 87: Federal Register advertisements

30 November - 4 December 87: Pre-Scoping Meeting (MCB)

7 -11 December 87: Scoping informal meetings/workshops (AREA)

14, 15 December 87: Scoping Meetings (JAX, RDU)

15 January 87: Scoping comment period closed

29 January 87: Formal scoping document

UNITED STATES MARINE CORPS
Marine Corps Base
Camp Lejeune, North Carolina 28542-5001

11011/2
FAC
SEP 10 1987

From: Assistant Chief of Staff, Facilities, Marine Corps Base, Camp Lejeune

Subj: LAND ACQUISITION EIS: STATEMENT OF WORK

Encl: (1) LANTDIV ltr N62470-86-R-8775 over 09A2134 dtd 13 Aug 87 w/encl

1. We are forwarding the enclosure to keep you abreast of progress on the subject project. When we receive notice of final contract award and a tentative set of milestones, we will forward the data to you.

2. Point of contact is Bob Alexander, extension 3034.

B. W. ELSTON
By direction

Distribution:
TRNG/OPS
PWO (PLNG) ←
BMO
SJA
JPAO
NREAD
ConstrCoord

Copy to:
EnvEngr

DEPARTMENT OF THE NAVY

ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORFOLK, VIRGINIA 23511-6287

TELEPHONE NO
444-9614

IN REPLY REFER TO:
N62470-86-R-8775
09A2134

13 AUG 1987

CZR, Incorporated
620 Market Street
Wilmington, North Carolina 28401

Re: A&E Contract N62470-86-R-8775, Environmental Impact Statement (EIS) for the Proposed Expansion of the Marine Corps Base, Camp Lejeune, North Carolina Land Maneuver and Range Areas

Gentlemen:

Your firm has been tentatively selected to prepare an Environmental Impact Statement (EIS) for the Proposed Expansion of the Marine Corps Base, Camp Lejeune, North Carolina Land Maneuver and Range Areas. Enclosure (1) defines the scope of work and is forwarded to assist you in the preparation of a fee proposal. Enclosure (2), Guide for Architect-Engineer Firms, supplements enclosure (1) and outlines the procedures, instructions and responsibilities for firms providing services under contract. All facets of project administration, payment of fees, and quality control are discussed within the text of the Guide for Architect-Engineer Firms. IT IS ESSENTIAL THAT YOU BECOME ACQUAINTED WITH ALL PROCEDURES AND RESPONSIBILITIES PRIOR TO YOUR FEE PREPARATION.

Enclosure (3) provides the format of fee submission. Your fee proposal should be submitted within 21 calendar days after receipt of this letter and should be accompanied by the following:

a. Supporting information you developed in preparing your fee proposal; i.e., a breakdown of all direct costs (travel, reproduction, soil investigations, topographic surveys); a breakdown per discipline of field investigation efforts.

b. In the event the total anticipated A&E contract (basic award and all options) cost exceeds $100,000, your fee proposal must be accompanied by the Standard Form (SF) 1411 provided as enclosure (4), and a copy of the most recent Defense Contract Audit Agency (DCAA) audit performed for your firm or consultants; if available.

c. Enclosure (5), certificate of current cost or pricing data, should be SIGNED, dated and submitted UPON COMPLETION of fee negotiations for all fees in excess of $100,000. Also submit enclosure (5) when the initial fee is less than $100,000, but where the total A&E contract cost (including all options) will exceed $100,000.

Encl (1)

N62470-86-R-8775
09A2134
13 AUG 1987

d. The Small Business Administration has amended its size standard regulations for engineering, architectural and surveying services. The revised figure is $2.5 million in annual receipts, averaged over a firm's most recent three completed fiscal years. If your total anticipated contract fee exceeds $100,000 and if your firm is large business, complete and submit a Disclosure Statement, or exemption, by completing, signing and dating enclosure (6), Disclosure Statement-Cost Accounting Practices and Certification.

e. It is requested that you carefully complete and SIGN enclosure (7), representations and certifications form, and return it with your fee proposal. Completion of this form will provide accurate information for contract award and payment. No contract will be awarded without this information.

For further information, please contact Mr. G. N. Callihan, Atlantic Division, Naval Facilities Engineering Command, Norfolk, Virginia, telephone 804-444-9614.

This letter is not intended as a commitment by the Government, and any expense incurred in preparation of the fee proposal is your responsibility. A contract award will await successful completion of fee negotiations.

Sincerely,

D. R. RIDDLE, P.E.
Head, Section C, Stateside Branch
Acquisition Project Management Office
By direction of the Commander

Encl:
(1) Appendix A (Revision 1) dtd 11 Aug 1987
(2) LANTNAVFACENGCOM 4-4330/89C (REVISED 10/84)
(3) A&E Fee Proposal Submittal
(4) SF Form 1411, Contracting Pricing Proposal Cover Sheet (5 copies)
(5) Certificate of Current Cost or Pricing Data (5 copies)
(6) Disclosure Statement-Cost Accounting Practices and Certification
(7) Representations and Certifications Form (REV 7/87)

Blind copy to:
MCB Camp Lejeune (w/encl (1) only)

APPENDIX A (REVISION 1) 11 August 1987

1. A&E Contract No.: N62470-86-B-8775

Project Title/Location: Environmental Impact Statement (EIS) for the Proposed Expansion of the Marine Corps Base, Camp Lejeune, North Carolina, Land Maneuver and Range Areas

Attachments:

(a) Scope - Draft Environmental Impact Statement, Proposed Expansion of Marine Corps Base, Camp Lejeune dated 1 August 1987

3. LANTNAVFACENGCOM Project Manager (PM)/Telephone:

Mr. G. N. (Gary) Callihan, Code 09A2134/804-444-9614

LANTNAVFACENGCOM Planner-in-Charge (PIC)/Telephone

Mr. C. H. Maguire, Jr., Code 2032E1/804-445-2307

4. Services Required:

Provide a complete Draft Environmental Impact Statement (DEIS). The Government shall have the option to award a change order for preparation of a final Environmental Impact Statement (EIS) at a fee to be negotiated after receipt of all comments on the DEIS.

5. Fees and Options: (To be filled in at conclusion of negotiations on A&E contracts)

	AWARD	OPTIONS
Engineering Services	_____	
Travel and Subsistence	_____	
EIS		Unpriced
TOTAL CONTRACT VALUE:	_____	

6. Proposed Milestones:

The contractor of record shall begin work upon receipt of contract document and pursue the work diligently in accordance with the date schedule established therein. **Your assessment of the schedule shall be provided monthly to the PM.**

	CUMULATIVE NO. DAYS	GOVT REV
A&E Award:	0	-
Draft Environmental Impact Statement:		
Preliminary	(To be established	(30)
Draft	after A&E's submittal	(60)
Final	of milestones)	(30)

7. Scope Description: See attachments (a) and (b).

SCOPE

DRAFT ENVIRONMENTAL IMPACT STATEMENT

PROPOSED EXPANSION OF MARINE CORPS BASE

CAMP LEJEUNE

1 August 1987

0134W

I. Introduction

A. Services Required
B. General Information
C. Purpose

II. Contract Administration

A. General
B. Definitions
C. Activity & Site Visits
D. Attend Meetings & Make Presentations
E. Submittals & Reviews

III. Statement of Work

A. Services to be Provided
1. Background/Purpose
2. Project Area

B. General Services to be Provided

C. Specific Services to be Provided

1. Research
(a) Bibliographic
(b) Telephone
(c) Personal Interview

2. Meetings

(a) Contract Initiation
(b) Progress Review
(c) Briefings
(d) Presentations

(1) Scoping
(2) Public Involvement

3. Scoping

4. Characterization of Existing Environment

5. Report Preparation

(a) Purpose
(b) Alternatives
(c) Affected Environment
(d) Environmental Evaluation
(e) Graphics

6. Distribution

7. Public Hearing

I. INTRODUCTION

A. Services Required

The Services to be provided consist of all work necessary to prepare and provide a complete Draft Environmental Impact Statement (DEIS) for a potential "Expansion of Marine Corps Base, Camp Lejeune, NC," to satisfy a deficit of land maneuver and live fire ranges. The DEIS will be prepared in compliance with the National Environmental Policy Act (NEPA); and appropriate regulations. At the government's discretion and without further advertisement, the contract may be amended to include: Section 7, Endangered Species Act, compliance; Historic and Archeological efforts to gain compliance with the Historic Preservation Act or other such acts and regulations; all work to prepare a Final Environmental Impact Statement (FEIS); and/or all work to prepare a detailed Land Use Management Plan (LUMP).

B. General Information

The geographic extent of the Marine Corps Base Camp Lejeune has remained virtually unchanged since its establishment in 1941. The Marine Corps' organization, mission, doctrine and equipment, however, has continued to evolve with technological developments. This has resulted in changes in the structure of the Corps and development of new warfare tactics. These factors, coupled with increased firepower and mobility, have created demands for additional training land.

During development of the current Master Plan, the need for increased training area resulted in development of a separate report entitled "Special Training Analysis, Camp Lejeune, NC". This report identified a need for additional land maneuver area and live fire weapons ranges to meet current training requirements. In 1987 Headquarters Marine Corps (HQMC) prepared a Land and Training Area Requirements Study (LATAR) which also addressed the need for increased range and maneuver area. During the interim, in the late spring of 1986, the International Paper Company advised the Base Commandant of a willingness to sell a large parcel adjacent to the Base.

C. Purpose

The purpose of the contract is to obtain a document that provides the information necessary for Marine Corps decision makers to make judgments of the effects of pursuing the various alternative means to satisfy training area deficiencies. The Marine Corps desires to gather sufficient information to enable senior managers to make a decision as to whether additional land should be acquired to meet the deficiency, and, if so, where, and how much should be acquired to maximize training opportunities while at the same time minimizing adverse effects on the community and the natural environment.

II. CONTRACT ADMINISTRATION

A. General

All correspondence and submittals shall be addressed to:

Commander, Atlantic Division
Naval Facilities Engineering Command (Code 2032)
Norfolk, Virginia 23511-6287

The Consultant shall perform all work in accordance with this scope of work and criteria, guidelines and instructions specified herein, and will receive technical direction from the Atlantic Division Planner in Charge only. No other person or agency is authorized to direct work under this scope or to effect planning decisions or evaluations unless so authorized in writing.

The Consultant shall be responsible for the professional and technical accuracy and coordination of all products and services rendered. The products submitted by the Consultant shall represent his highest capability and shall be reviewed for compliance with Federal and, where applicable, State requirements and criteria. Errors, omissions or deficiencies resulting from the Consultant's performance shall be corrected by him at no additional cost to the Government. Once negotiations are completed, substitutions of Contractor personnel, or other personnel employed in support of the contractor may be made only upon approval of the PIC in writing.

Originals of all materials obtained or prepared, as well as other non-consumable materials including reference material acquired in support of this contract or furnished the contractor by the Navy, are the property of the Government and must be provided to the PIC prior to completion of the contract and final payment. The contractor will be responsible for preparing an inventory, packing, and delivery of the materials.

All materials, published or unpublished data, information, and written reports generated by this contract are the property of the Department of the Navy and shall be released to others only upon written approval of the PIC. All requests for any such material or requests for information pertaining to the contract, its status or any products completed under the contract shall be referred to the Marine Corps Base, Camp Lejeune Public Affairs Officer. (Name & Telephone Number)

All expenses incurred in connection with visits, field work or other support shall be borne by the contractor and included in his fee proposal. The government will not be responsible for providing any support for the contractor.

A milestone and payment schedule, in a format agreed to by the government, is to be prepared by the consultant and submitted with his fee proposal. At a minimum, the milestone schedule should include: Scoping meeting and related activities; data collection including field work and interviews; meetings, briefings, work sessions and presentations; publication and review periods)both internal to DOD and public). Other milestones/events may be included at the discretion of the contractor. A copy of the negotiated milestone and payment schedule will be appended to this scope and included in the contract. The contractor shall adhere to this negotiated schedule and shall provide monthly progress reports, and, if applicable, milestone updates. The

progress reports should be in letter format and address milestones achieved efforts to date, expenditures, problem areas and future plans.

Subsequent to the conclusion of this contract, the PIC shall prepare an evaluation of the Consultant's performance during the execution of this contract. The evaluation will include a rating of the services performed in such categories as overall quality, suitability of recommendations, adequacy of information, adherence to schedules and scope, responsiveness and cooperation. The completed evaluation will be permanently retained in the Consultant's file at LANTDIV for review and consideration by future selection boards.

B. Definitions

Acquisition Area/Proposed Alternative - That area that may be identified as the preferred alternative.

Activity/Base - Marine Corps Base, Camp Lejeune, North Carolina, to include tenant activities, e.g., 2nd MARDIV, 2nd FSSG, etc.

Activity Point of Contact (APOC) - The individual who is the Activity representative responsible for on-site coordination of administrative or other pertinent matters in connection with the execution of this contract. Unless advised to the contrary in writing, (Name and Phone Number) will be the APOC for the Base.

Contractor/Consultant - The individual or firm providing the services specified under this scope.

Field Supervisor - Contractor's employee in charge of acquiring all field data in support of the report.

PIC - The Planner in Charge. The primary representative of the Navy for preparation of the report. Individual designated as the point of contact on all technical matters associated with the services and documents to be provided under the contract. Unless otherwise advised in writing, C. H. Maguire (804) 445-2307 will be the PIC for this contract. The project coordinator for A & E fee and contract matters is G. Callihan (804) 444-9614.

Preferred Alternative - That alternative selected by the Marine Corps as best meeting their training needs.

Principal - Individual with a vested interest in the firm and responsible for the overall contract effort.

Principal Investigator - Contractor's employee in charge of the preparation of the report.

Project Area - Onslow county and vicinity that is influenced by Camp Lejeune.

Public Affairs Officer (PAO) - Individual responsible for coordinating and releasing any information, news releases, etc. concerning MCB CAM LEJ or this contract. The PAO is (Name and phone number).

Sandy Run Pocosin/IPC Area - that area generally bounded by NC Route 17 on the east and southeast, by NC Route 50 on the southwest and west, and by Padgett, How Run, Dawson Cabin and High Hill Roads on the North.

Note: Many private parcels (homes and farms) also lie within these boundaries, and a differentiation may be required.

Sub contractor - Any contractor or individuals not directly employed by the consultant but hired by the consultant to work on any aspect of the services specified.

C. Activity & Site Visits

Activity visits - Visits by the contractor or his personnel/ subcontractors to the Base. Activity visits normally will be scheduled with the APOC three weeks in advance. In addition the PIC will be advised of all planned activity visits.

Site visits - Permission to enter privately owned property will be the responsibility of the contractor and will be obtained prior to entry. The government will seek right of entry for ecological survey purposes for government employees and contractor personnel from the International Paper Company. Approval of this request, subject to the daily consent of the IPC forester, is anticipated. The PIC will be advised three weeks in advance of all planned site visits. For purposes of PIC notification, site visits will be considered synonymous with contractor or sub-contractor personnel performing data gathering/research in Raleigh or other locations within eastern NC.

D. Attend Meetings and Make Presentations

These actions will be in accordance with those stated in "Specific Services to be Provided" and the negotiated milestones. Attendance at meetings by contractor personnel should be limited to those necessary to actively participate; normally the principal investigator and a technical representative. Exceptions to this could occur, e.g. the exit briefing upon conclusion of field work, scoping meeting, public hearing etc.

E. Submittals and Reviews

The work output will consist of a preliminary, a draft and a submittal of a Draft Environmental Impact Statement to satisfy the requirements of 40 CFR 1500 et seq, OPNAVINST 5090.1 and MCO P 11000.8B. The preliminary submittal will be reviewed within LANTNAVFACENGCOM and returned to the contractor within 30 days of receipt. The Draft submittal will be reviewed by the Navy and Marine Corps and possibly selected Federal or State Agencies, and will be returned to the contractor within 60 days of receipt. The final submittal will be provided to the Government for public distribution as the Draft EIS. At government convenience, the contractor, by negotiated change order, may be required to duplicate, prepare for distribution and distribute the document.

The contractor is responsible for correcting, adding or deleting information, correcting text, Figures, maps, graphs etc. in submittals in accordance with the guidance provided. Although a resubmittal of the preliminary, draft or submittal itself is not anticipated, it may be required at the discretion of the PIC, at no additional contract cost.

III. STATEMENT OF WORK

A. Services to be Provided

1. Background/Purpose

As an outgrowth of the 1985 Master Plan update, a Special Training analysis was conducted at MCB Camp Lejeune. The purpose of the analysis was threefold: First, to determine the land area and number and type of ranges required to support the training mission; Second, to assess the current situation and determine its suitability and adequacy to meet the training mission; and Third, to develop concept plans to correct any deficiencies identified in Step Two.

The training analysis identified a deficiency of 12 ranges and 209 km^2. In addition, the study presented several concept plans to satisfy the training deficiencies, and endorsed a concept of acquiring the undeveloped land adjacent to the Base.

During development of the Special Training Analysis, the contractor made several contacts with representatives of International Paper Company (IPC), who became aware of the study's recommendation to acquire additional land. In May 1986, a representative of IPC advised the Commanding General, MCB Camp Lejeune of the willingness of his company to sell their tract, which was adjacent to the Base, to the government.

The purpose of this contract is to acquire the environmental documentation required by the National Environmental Policy Act. This documentation will then be utilized in the decision-making process as to how best meet the training need and whether to purchase land to meet the identified deficiency. If the purchase is the preferred alternative, the study also should help determine its best utilization; balancing the environmental factors, the need to preserve the resources for future training, and the need to meet the training requirement shortfall.

2. Project Area

The project area is generally as stated under the definitions.

B. General Services to be Provided.

The general services to be provided consist of all efforts necessary to prepare a Draft Environmental Impact Statement to satisfy the requirements of the National Environmental Policy Act (NEPA); the President's Council on Environmental Quality Regulations (40 CFR 1500 et seq.); OPNAVINST 5090.1 the Navy's Environmental and Natural Resources Protection Manual; MCO P11000.8, the Marine Corps' Real Property Facilities Manual; and other appropriate regulations. In addition to complying with these regulations, the DEIS shall include a narrative that describes the data gathering methodologies utilized, the method of analysis and the associated rationale for the conclusions reached.

The DEIS shall be a single document that incorporates by reference as much material as feasible. The DEIS shall be written in a narrative format in a manner easily comprehended by individuals not conversant with the technical disciplines within the study. Technical information, if required, should be included in a separate Technical Appendix if not incorporated by reference. The document shall be prepared from a multidisciplinary approach and shall provide a thorough description of the affected environment and to the extent practicable shall quantify, but at a minimum qualify, all direct and indirect environmental and socio-economic impacts. All alternatives discussed within the document will receive equal consideration.

The consultant will be responsible for providing all personnel, labor, materials, equipment and support required for a complete professionally prepared and presented DEIS.

C. Specific Services to be Provided

In the preparation of the DEIS, the contractor will be required to complete research, conduct and attend work sessions, briefings meetings and hearings, conduct scoping to identify significant environmental issues deserving of study, conduct work to characterize the affected environment, and prepare technical report(s) in accordance with the directives cited as well as conducted a formal public hearing on the DEIS.

1. Research - Acquire information from published, grey literature and personal interviews of individuals knowledgeable of the information that describes the area or similar areas, or the anticipated effects of the proposed use of the area.

(a) Bibliographic Research - The contractor will be required to conduct a literature search of an information retrieval service such as DIALOG[R], using a key word list developed in concert with the PIC. Library research also is anticipated in the vicinity of the Base, elsewhere in eastern NC, and in Raleigh, NC. (The government has performed some preliminary research and acquired some documents that may be appropriate for the contractor's use. These documents will be made available to the contractor prior to negotiations).

(b) Telephone interviews of Marine Corps personnel, State and Federal agency officials as well as academia, etc., are anticipated.

(c) Personal interviews, including office visits to Marine Corps officials, regulatory and other Federal and State Agencies or individuals with specific knowledge or expertise concerning the project, its need and alternative locations will be required.

Among the agencies that will require interviews and could selectively need office visits are:

Department of Defense
- MCB Camp Lejeune
  - Base, Installations and Logistics Personnel
    - Training Staff
    - Operations Staff
  - Division
    - Training Staff
    - Operational Units
- Commandant Marine Corps (LFL)
  Washington, DC
- Marine Corps Development and Education Command,
  Quantico, Virginia
- Fleet Marine Force Atlantic

Off-Base Training Locations

- Fort Bragg, NC
- Fort Pickett, VA
- Fort Benning, GA
- MCAGCC 29 Palms, CA

Federal
- Federal Aviation Administration
- Army Corps of Engineers
- Fish and Wildlife Service
- Soil Conservation Service
- Environmental Protection Agency
- Forest Service

State
- Departmental of Natural Resources & Community Development
  - Coastal Management
  - Wildlife Resources
  - Marine Fisheries
  - Forest Resources
- Department of Health
- Cultural Resources
- Department of Transportation
  - Highways Division
  - Aviation Division

Local
- Regional, County, City, Township

A brief written summary (log) of all research efforts including telephone contacts/interviews will be maintained and provided to the PIC for review as requested (monthly) and prior to conclusion of the contract.

The Bibliography of the report will result from these research efforts. Note: Although the Government will furnish a list of Points of Contact, this list is NOT to be construed as exhaustive or all encompassing and the contractor will be required to develop additional contacts.

2. Meetings - The contractor will be required to attend meetings and work sessions with Navy and Marine Corps personnel at significant points in the contract. The purpose of meetings is to exchange information and provide input to the DEIS. Meetings are considered necessary at the following points in the contract:

(a) Contract Initiation - to ensure agreement with the scope, milestones and work items negotiated - location - MCB Camp Lejeune

(b) Progress reviews - Shortly after completion of the literature search and prior to initiation of both, scoping and field work - to identify data gaps and discuss resolution - location - Base and contractors' offices.

- At completion of significant milestones identified by the contractor and accepted by the government during negotiations - location - alternating between contractors' offices and MCB Camp Lejeune.

- At the contractors' discretion, to discuss significant items, matters of scope, etc. - location - contractors' offices or Base.

(c) Briefings - In addition to attendance at meetings presenting the project, the contractor will be required to make five briefings. The purpose of briefings is to provide salient information to decision makers. Briefings will require some type of graphics presentation and will be conducted at a minimum according to the following schedule:

o Scoping Preview Briefing - to provide proposed scoping presentation and allow Marine Corps input before formalizing documentation. location-MCB Camp Lejeune.

o Exit Briefing - Upon completion of field work. To present and review general results of field work. - location - MCB Camp Lejeune.

o Alternatives Briefing - to allow selection of preferred alternative. location-MCB Camp Lejeune.

o "Findings" briefings - Prior to completion of the preliminary submittal. Purpose: to present the general findings of the study and review how these findings will be presented in the preliminary submittal. - location - Norfolk.

o Study/Public Hearing Preview Briefing - Preview of the contents of the DEIS and how they will be presented at the DEIS public hearing - location - MCB Camp Lejeune.

(d) Presentations - Presentations will be formal meetings to provide the public information concerning the DEIS. Two formal presentations will be prepared by the Contractor; one for Scoping meetings, the other for public hearings.

The contractor shall be responsible for preparing visual presentations suitable for these meetings as well as a hand-outs (pamphlet) explaining the project. The materials should consist of not more than 30 slides with prepared narratives; duration of approximately 1/2 hour. The presentations and supporting documentation should explain the project, its need and actions taken to date as well as planned by the contractor. Each of the hand outs should summarize the presentation and must address the need for the training. The DEIS pamphlet must include the purpose and need, the alternatives considered and the preferred alternative, field work and results, mitigation measures etc. Four copies of the slides for each presentation are required. The hand outs and narrative should be "camera ready" with ten copies of each provided for each [redacted] submittal.

The contractor will be responsible for maintaining the minutes of all meetings, briefings and presentations and will submit the minutes of all meetings within ten working days to the PIC. Any exceptions noted by the PIC will be provided within five days of receipt.

3. Scoping - The purpose of scoping is to determine public interest in the proposal and concerns. Scoping will identify early-on the significant environmental issues deserving of study. Scope consists of the range of actions, alternatives and impacts to be considered in the DEIS.

The contractor will be required to initiate and complete scoping for the DEIS. Included in the work will be conduct of six meetings; four informal working group meetings in the vicinity of Camp Lejeune and two formal presentations; one at a public facility in the vicinity of Camp Lejeune and the other in Raleigh.

Acquiring use of facilities for the scoping and DEIS public hearings will be the contractor's responsibility as will the notification/announcement/ advertising of the meetings and hearings. Presentations will be as described in that paragraph. The contractor will be responsible for the conduct of all scoping meetings and hearings; the Government's participation in scoping will be limited to filing the "Notice of Intent" in the Federal Register, providing a suggested notification list, and making introductions and closing the meetings. The contractor will keep minutes of scoping meetings and provide them with the appropriate monthly progress review. Upon completion of scoping the contractor will ensure that the government concurs with his identification of issues to be addressed in detail in the DEIS.

4. Work to Characterize the Existing Environment - This effort should be based on the research including data from previous field research in similar or nearby environments, analysis of color and color-infrared photography (infrared photography to be provided by PIC), and field investigations.

Field investigations should be done only after careful and deliberate analysis of the research. Field efforts should employ standard methodologies utilized by a professional within a discipline to gather/verify sufficient factual and objective information on which to base a narrative characterization of the area in accordance with recognized standards.

The level of field effort will be sufficient to provide an adequate description of existing conditions and potential effects of proposed operations. Quantitative data collection should be sufficient to support the qualitative analyses and conclusions.

5. Report Preparation - The DEIS will be as brief and non-technical as practicable. The use of scientific, technical or military terms or acronyms is discouraged. The format of the report shall comply with Chapter 4 of OPNAVINST 5090.1

(a)The Purpose and Need section will be prepared in CLOSE coordination with the PIC, and Base. The contractor, with the assistance of the Base shall document current and projected training requirements for tenants, visiting units, (Active and Reserve) and other services existing training levels and shortfalls also will be identified, as well as the means being used to meet shortfalls including off-base training, under-training (less than required criteria) and missed or delayed training. Limitations to training including sheer numbers, physical and environmental constraints, etc. also will be identified as will the need for additional training land resulting from the development of modern combat systems, including increased force mobility and longer range weapons. Current and near term future needs will be addressed as they relate to defined training policies and standards. This section will review and summarize previous Marine Corps (1986 Special Training Analysis, Camp Lejeune and 1987 HQMC Land and Training Area Requirements [LATAR] Study) and Department of the Army studies. This section shall be prepared in concert with the PIC the APOC, Base and Division Training Officer(s) and Range Officer.

(b) The Alternatives section must focus on identification of means to accomplish the training tasked to the Base in support of tenant, reserve and visiting forces while minimizing adverse effects.

In developing the Alternatives section, the contractor and the PIC will confer with Base staff members to establish the range of alternatives. Among the alternatives that need to receive consideration are: No Action, i.e., maintain the status of conducting the vast majority of training on Camp Lejeune; Acquire additional land; and relocate the training.

The initial set of alternatives and sub-elements are defined as:

(1) No action - continue training as it now occurs. No major realignments of ranges, changes in land use or major changes to existing range impact areas and firing points.

No Action includes maintaining the current program of on-and-off base training efforts on existing military property at Camp Lejeune and other bases. The contractor must examine in detail the overall training land uses and environmental impacts base wide. This is the baseline condition which may demonstrate the need for improving existing facilities and/or for acquiring more land and conforms to the Purpose and Need Section. This description includes the current endangered species situation, noise, wetlands, airspace, waterway traffic, as well as socio-economic issues, including costs and other indirect effects of off-base training due to current land/environmental restrictions. Problems caused and unique opportunities offered by training at other military bases plus any impacts caused by Marine Corps units will be discussed in summary form.

(2) Realign - reconfigure existing assets on the base to optimize use of existing real estate should address the capability to perform the training mission by developing existing Marine Corps training facilities at Camp Lejeune, as well as the impacts of this option. This includes relocation of ranges to maximize maneuver areas but continues firing over the Atlantic Intercoastal Waterway (AIWW). Existing/programmed construction projects will be evaluated in this alternative.

(3) Acquire Additional Land - to meet all identified training shortfalls (e.g. red bag artillery firing) or part of the shortfall.

(a) Adjacent to the base (North, East or West)
(b) Near the base i.e. within 150 miles (1/2 day convoy)

(a) includes determining if expansion in any direction is feasible, and if to the west then acquisition of the IPC land and selected private parcels plus improvements to existing facilities at Camp Lejeune should be discussed. This alternative includes development of new weapons firing positions, helicopter landing zones, and tactical vehicle maneuvers corridors crossing U.S.17 from Camp Lejeune. Improvements to Camp Lejeune would include such things as clearing K-2 Impact Area,relocation of numerous ranges to maximize maneuver area, and reduces extent of firing over the AIWW.

(b) includes acquiring nearby but not contiguous land such as state or national forest or wildlife lands, and/or private lands and constructing to the extent possible weapons and maneuvers training facilities and areas similar to those listed in above. Improvements at MCB would include improving and relocating numerous ranges, and potentially reduces firing over the AIWW.

(4) Relocate - Long term phase down of MCB Camp Lejeune and relocation to another base or develop a new base.

There are obviously several sub-sets/variations of the above alternatives. The contractor will be required to develop a matrix of alternatives including subsets of alternatives.

After conferring with the government about the matrix, the contractor independently will develop a "short list" of alternatives to be considered in detail by applying such criteria as the ability of the alternative to accomplish the training mission relative social and economic costs, environmental effects, etc. Upon completion of the short list, the contractor will again consult with the government and a selection of the government's preferred alternative will be made. The Alternatives section will present a discussion of the methodology used to obtain the "short list, " and the DEIS will then give equal treatment to each of the alternatives on this "short list".

The contractor will identify the environmentally preferable alternative and describe the reasons for the selection. Contractor will also identify the Proposed Action as the alternative that best meets the Marine Corps training requirements. If these are not the same alternative, contractor will explain why the choice of the Proposed Action was made.

(c) The Affected Environment section of the DEIS should be based on the bibliographic research and field work to characterize the affected environment. At minimum, a topic-by-topic coverage of the environmental parameters likely to be affected by implementation of any of the alternatives is essential. For example, the physical environment section should present information on topography, soils, water quality and drainage/basins. The natural environment section would present the actual floral and faunal community parameters. For flora, the following parameters should be described: Established acreage and percentage of each type, e.g. loblolly pine forest, etc., (to include dominant species). Species which may be of special value (ecologically or commercially) shall be delineated and their locations described and mapped. The vegetative structure should be delineated and described to include relative densities, abundance, distribution, coverage, acreage, vigor and dominance.

Important indicators of vigor or lack thereof, should be noted as should any abnormalities. Habitat type/species contribution to the ecological balance in terms of its value for shelter, food, breeding, erosion control, water purification, etc., should be described.

The discussion of fauna should be divided according to terrestrial, avian and, if required, aquatic species. Any species listed should be noted as either directly observed, indirectly observed (nests, scats tracks, etc.), or observed by others (known from the literature or interviews). A seasonal species list will be required. Species which are of special value, such as North Carolina or United States endangered, commercially important, ecologically important, etc., should be delineated and described in detail. Species should be arranged into groups such as migrating or wintering waterfowl, etc.

Relative abundance, densities, population growth rates and population size fluctuations (both seasonal and annual), age distribution, reproductive success, etc., should be discussed were feasible, as should predator - prey relationships. The terrestrial invertebrates will require discussion only if background research indicates the possibility of an endangered or other important species.

The socio-cultural environment should be described only as necessary to present the reader with an understanding of the area and effect of the project on it. This description should be based on archival research of old maps, interviews, and county/regional histories. While an exhaustive study is NOT required, the location of cemeteries, churches and other significant historic features will be presented. Probable historic/archeological resources and their location should be described and general areas recommended for further study including the reason e.g. soils elevations, thoroughfares, etc. - will be delineated. NOTE: All aspects of this parameter that may be significantly affected by the project will require a description commensurate with the discussion under Environmental Effects.

(d) The Environmental Effects portion of the DEIS shall address both adverse and beneficial effects of the alternatives and shall identify the relative degree of effects on both the macro and micro environments. NOTE: Environmental evaluations of the alternatives will follow the format of MCO P11000.8B and will describe both adverse environmental impacts and mitigation required by each alternative.

Among parameters of training that draw considerable attention and that must be addressed in detail are noise, airspace use and restrictions and wetlands. High noise levels from military training results from three major sources; aircraft, muzzle blast and impact/explosive effect. The contractor will develop a detailed noise map for the acquisition alternative(s) using established criteria and models, e.g. Army Environmental Hygiene Agency, B-Noise; Noise map etc., Information as to frequency of use, numbers and type of noise generators will be provided to the contractor by the Base. The contractor in consultation with the base will be responsible for laying out a typical physical model of firing points, impact areas, air routes etc. and compiling the data in a usable format. For any land acquisition alternatives the noise map will be overlain on a base map of the proposed training area at 1: 50,000. Where high noise zones extend beyond any actual or proposed Department of the Navy land, those areas will be depicted at a scale of 1": 400'. The noise analysis will be developed and provided as an Appendix to the DEIS. The format will be suitable for separate distribution for agency and public review, if desired by the Marine Corps.

The analysis will identify existing and potential incompatible lands beyond the project site boundaries. Recommendations will include means of reducing the noise; therefore eliminating or reducing the impact off-site. Consideration will be given to resiating of sources, sound suppression measures, regulating operating hours, etc. within mission requirements. A discussion will be presented of mitigating efforts, present and future, which the Marine Corps can take and actions the community can take to prevent increased off-base noise problems.

The airspace utilization issue within eastern North Carolina is sensitive. For any off Base sites proposed by the contractor, the current airspace use including VFR, IFR and commercial routes will need to be

presented as will the effect of the proposed action on these parameters as well as airspace in general. The contractor will define issues, such as those raised during scoping, suggest alternative actions or modifications to proposed actions, and recommend mitigation measures to reduce airspace problems.

All wetlands regulated under the Corps of Engineers, EPA or Coastal Area Management Act will be identified and mapped for each alternative. Means to mitigate adverse impacts will be clearly identified.

The Environmental Effects portion also will provide recommendations for management. Mitigative measures that could avoid or lessen those impacts on the physical and natural environment and particularly the flora and fauna, while allowing the area to be used for the Marine Corps' purpose, also shall be developed. The approximate cost and environmental benefits of these measures should be included in the report.

The DEIS will reflect the intention of the Marine Corps to prepare a Land Use Management Plan (LUMP) for the proposed action following publication of the Record of Decision. The purpose of the plan is to incorporate mitigation measures and annual training land maintenance requirements into a single management document. The DEIS will include an overview of the scope of the proposed plan and a map of the areas to be covered in the plan.

The following topics shall be included in the evaluation of the environmental effects of development:

1 Direct and indirect effects on the physical, natural and socio cultural environment. NOTE: An adequate assessment of socio cultural impacts is as important as an assessment of biophysical impacts. The discussion of each alternative must present the effects of each option on social factors such as relocation of cemeteries, displacement of individuals, change in character of adjacent community, social services, and recreational and cultural opportunities and facilities. The direct effects on economic factors such as land and property values, employment, income, net change in government revenues, and regional economic activity also must be presented.;

2 Short-term use of man's environment versus enhancement of long-term productivity;

3 Possible conflicts between state and local land and water use plans;

4 Unavoidable adverse impacts; and

5 Irreversible or irretrievable commitments of resources.

(2) Graphics will be submitted as film positives on camera ready originals as well as in a digital format that is compatible with the mapping system being installed at the Base.

The graphics listed below will be required in the DEIS. In addition, other graphics that provide clarification or amplification of the resources present, the impact of the proposal or means to mitigate impacts should be presented.

1. Location map

2. Area map

3. Topographic map (May be based on vegetation)

4. Soils map

5. Soils Suitably map

6. Drainage basin map

7. Location maps of field work

8. Vegetation Distribution map

9. Forest Fire Fuels map

10. Timber Stand map

11. Faunal Distribution map

12. Historical Land Ownership Patterns

13. Location map of potential historic or archeological resources

14. Aircraft Flight Patterns map

15. Potential Noise map

16. Proposed/Recommended Use map - Note this will require coordination with PIC & APOC to ensure MCB Camp Lejeune input early in the planning process.

6. Distribution - By the Government or by the contractor after a change order to this contract.

7. Public Hearing - Within 30 days after the "Notice of Availability" of the DEIS appears in the Federal Register (A Marine Corps responsibility), the contractor will be required to make seven presentations of the DEIS during the conduct of meetings with local governments, citizen groups, and agencies to receive inputs/comments on the document. For two of these meetings, (the public hearings) the contractor will be responsible for acquiring a public building and the advertising/announcing of the meeting and recording of events; one in the vicinity of Camp Lejeune and one in Raleigh.

8. Comments on the DEIS. Although the comment period for a DEIS is 45 days, it is anticipated that several groups and agencies will request extensions of time of up to an additional 60 days. After the DEIS comment period is closed, copies of the comments will be provided to the contractor and a meeting will be held to determine which comments fall within the scope of the DEIS and those that should be included under the scope of the FEIS.

UNITED STATES MARINE CORPS
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA 28542-5001

IN REPLY REFER TO

11013
FAC

MAR 01 1990

From: Base Commander, Marine Corps Base, Camp Lejeune, North Carolina 28542-5001

To: Commandant of the Marine Corps, Headquarters Marine Corps, Washington, DC 20380-0001 (Attn: LFL)

Subj: SITE DEVELOPMENT, GREATER SANDY RUN LAND ACQUISITION AREA

Encl: (1) MCON Project P-933, Range Development, Phase I
(2) MCON Project P-934, Range Development, Phase II
(3) MCON Project P-935, Range Development, Phase III
(4) Greater Sandy Run Training Concept Land Use

1. Pursuant to the development of the Greater Sandy Run Land Acquisition Area (P-869), enclosures (1) through (4) are provided for your information and guidance.

2. This undertaking will involve some 33 separate facilities at a combined funding level of approximately 69 million dollars. Our desire is to accomplish this undertaking as one Military Construction project. However, considering the total amount required and the necessary sequencing of certain projects, we have phased the development into three MCON projects. Additionally, it is assumed that all the funds would not be available in one year. This phasing reflects our priority of need and projected range usability during the construction era.

3. Enclosure (4) depicts the total integrated conceptual use of the land; the sum of individual projects listed in enclosures (1) through (3). The step between concept and design is obviously a situation that will require a high degree of control for project scope, project design and environmental coordination -- an effort that exceeds our in-house capability.

4. It is recommended that an engineering/environmental study be undertaken to coordinate specific siting for all proposed facilities, including roads and utilities with respect to use and the environment, or to provide environmental mitigation solutions with costs when necessary. Additionally, the study should include proposals for utilities, including water, sewerage, telephone and electricity, i.e., whether to connect to the existing Camp Lejeune system, to the County system, or whether to develop a separate utility system.

5. This information could be acquired as a separate study and then provided to NAVFAC and Camp Lejeune for MCON design coordination, or it could be incorporated into the design of the Phase I MCON Project, P-933.

Subj: SITE DEVELOPMENT, GREATER SANDY RUN LAND ACQUISITION AREA

6. The scope and estimated cost of the proposed study will be provided if this meets with your approval.

H. L. Luttrell
H. L. LUTTRELL
By direction

Copy to:
AC/S, Trng&Ops
AC/S, EMD
PWO
EACO
FacMgmtDiv

1. COMPONENT	FY 19 90 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
MARINE CORPS		30 Sep 86

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA 28542	LAND ACQUISITION

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
	911-10	P-869	45,000 41,000

ESCALATED TO APRIL 1990

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
LAND ACQUISITION	AC	52,000	776	40,370
TOTAL CONTRACT COST	-			40,370
CONTINGENCY 5%	-			2,019
SUBTOTAL				42,389
SUPERVISION, INSPECTION & OVERHEAD - 5.5%	-			2,331
TOTAL PROJECT COST	-			44,720
TOTAL PROJECT ROUNDED	-			45,000

10. DESCRIPTION OF PROPOSED CONSTRUCTION

Acquire 52,000 acres of land for the expansion of range and maneuver areas.

11. REQUIREMENT: 113,000 AC ADEQUATE: 61,000 AC SUBSTANDARD: 0 AC

PROJECT: The acquisition of additional land to satisfy new fire-impact-maneuver areas requirements.

REQUIREMENT: The introduction of new highly mobile, long range weapons systems and training techniques mandates additional training land. New weapons and combat vehicles are: Light Armored Vehicle, The M-1 tank (1989) MK19 Machine gun, M-198 Artillery, Up-Gunned Weapons Systems for Amphibious Assault Vehicles, 25mm Chain Gun, Rocket Assisted Projectile, Squad Automatic Weapon, Shoulder Launched Multi-purpose Assault Weapon, M-85 50 cal. Machine Gun, Military Operations in Urban Terrain Assault Course and Maneuver training areas for a Tank Battalion, an Artillery Regiment, three Infantry Regiments, an Assault Amphibious Tractor Battalion, a Light Armored Vehicle Battalion and other units.

IS THIS STILL CORRECT

CURRENT SITUATION: The military reservation of the Marine Corps Base, Camp Lejeune, North Carolina, has remained virtually unchanged since its establishment in 1941; however, the Marine Corps' organization, mission, doctrine, and equipment have continuously evolved with the passing of time. Changes in the structure of the units assigned to the installation and the development of new tactics for conducting warfare have increased the firepower and

CURRENT SITUATION: (cont'd)
mobility required of the modern Marine fighting unit. In turn, these requriements have created demand for additional training land. Moreover, the continued improvement in the ballistics, range, and mobility of modern weapons and the philosophy that effective preparation for war requires training under conditions that reflect those of actual combat have further accentuated the need for suitable training areas. Future trends in organization, doctrine, and weapons require that more and larger firing ranges and expanded maneuver areas must be acquired for realistic field training of troop units.

Coincident with the growing demand for training land is an increase in the number and types of limitations that render portions of Camp Lejeune unavailable for training use. The increased public awareness of the need to protect the environment from damage has altered earlier judgments concerning the manner in which training exercises are conducted. In particular, current Federal legislation requiring the maintenance of suitable habitat for endangered wildlife on Federal lands either restricts the availability of some lands for training or changes the way training operations in these areas are conducted. Increased sensitivity to the effect training operations have on neighboring civilian communities has also restricted the means by which the Marine Corps' training mission is accomplished. Finally, other natural and man-made constraints may impose limitations on training that are equally as restrictive, if not more so, than those mandated by law or administrative ruling. Collectively, these limitations effectively reduce the supply of land that is suitable for conducting military training.

The analysis of available versus required maneuver areas reveals:

Total Area of Camp Lejeune Available (acres)		111,600
Less Excluded Areas (Impact Areas, Containment Areas, Water Areas, Endangered Species Areas)		50,300
Available Maneuver Area		61,300
Required Maneuver Area (Based on training, land analysis model, DACir25-1)		113,100
Shortfall	approximately	52,000

IMPACT IF NOT PROVIDED: The existing training area shortfall will continue to adversely affect Marine Corps readiness training. Scarce resources will continue to be diverted for transportation of FMF units to off-base training locations due to the deficiencies in Camp Lejeune land area. Combined arms training for mechanized assault and realistic evaluations of

1. COMPONENT		2. DATE
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3. INSTALLATION AND LOCATION

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4. PROJECT TITLE	5. PROJECT NUMBER
LAND ACQUISITION	P-869

IMPACT IF NOT PROVIDED: (cont'd)

Marine Amphibious Brigade capabilities will continue to be hampered. Development will be restricted for firing ranges required to support Marine Corps force modernization through the 1990's.

SPECIAL CONSIDERATIONS

Special considerations will be contingent upon the results of the Environmental and Land Acquisition Studies.

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FACILITY STUDY

1. Project: The acquisition of additional land to satisfy new fire-impact-maneuver areas requirements.

2. Current and Planned Future Workload with Regard to This Project: This facility will be utilized 100% of the time and the duration of need is indefinite.

3. Description of proposed Construction: Not applicable.

4. Cost Estimate: Costs is based on fair market value of similar land in surrounding area and will be reviewed and appraised by the Facilities and Real Estate Department of the Atlantic Division, Naval Facilities Engineering Command, Norfolk, Virginia.

5. Justification for project and for Scope of Project:

a. Justification for Project:

(1) Project: The proposed project provides for the acquisition of additional land to satisfy new fire-impact-maneuver areas requirements.

(2) Current Situation: The military reservation of the Marine Corps Base, Camp Lejeune, North Carolina, has remained virtually unchanged since its establishment in 1941; however, the Marine Corps' organization, mission, doctrine and equipment have continuously evolved with the passing of time. Changes in the structure of the units assigned to the installation,and the development of new tactics for conducting warfare have increased the firepower and mobility required of the modern Marine fighting unit. In turn, these requirements have created demand for additional training land. Moreover, the continued improvement in the ballistics, range, and mobility of modern weapons and the philosophy that effective preparation for war requires training under conditions that reflect those of actual combat have further accentuated the need for suitable training areas. Future trends in organization, doctrine, and weapons require that more and larger firing ranges and expanded maneuver areas must be acquired for realistic field training of troop units.

Coincident with the growing demand for training land is an increase in the number and types of limitations that render portions of Camp Lejeune unavailable for training use. The increased public awareness of the need to protect the environment from damage has altered earlier judgments concerning the manner in which training exercises are conducted. In particular, current Federal legislation requiring the maintenance of suitable

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5. Justification for project and for Scope of Project: (cont'd)

habitat for endangered wildlife on Federal lands either restricts the availability of some lands for training or changes the way training operations in these areas are conducted. Increased sensitivity to the effect training operations have on neighboring civilian communities has also restricted the means by which the Marine Corps' training mission is accomplished. Finally, other natural and man-made constraints may impose limitations on training that are equally as restrictive, if not more so, than those mandated by law or administrative ruling. Collectively, these limitations effectively reduce the supply of land that is suitable for conducting military training.

The analysis of available versus required maneuver areas reveals:

Total Area of Camp Lejeune Available (acres)	111,600
less excluded areas (impact areas, containment areas, water areas, endangered species areas)	50,300
Available Maneuver Area	61,300
Required Maneuver Area (based on training, land analysis model, DACIR 25-1)	113,100
Shortfall (approximately)	52,000

(3) Impact if not Provided: The existing training area shortfall will continue to adversely affect Marine Corps readiness training. Scarce resources will continue to be diverted for transportation of FMF units to off-base training locations due to the deficiencies in Camp Lejeune land area. Combined arms training for mechanized assault and realistic evaluations of Marine Amphibious Brigade capabilities will continue to be hampered. Development will be restricted for firing ranges required to support Marine Corps force modernization through the 1990's.

b. Justification of Scope of Project: The introduction of new highly mobile, lang range weapons systems and training techniques mandates additional training land. New weapons and combat vehicles are: Light Armored Vehicles, the M-1 tank (1989) MK-19 Machine gun, M-198 Artillery, Up-Gunned Weapons Systems for Amphibious Assualt Vehicles, 25mm Chain Gun, Rocket Assisted Projectiles, Squad Automatic Weapon, Shoulder Launched Multipurpose Assault Weapon, M-85 50 cal. Machine Gun, Military Operations in Urban Terrain Assault Course and Maneuver training areas for a Tank Battalion, an Artillery Regiment, three Infantry Regiments, an Assault Amphibious Tractor Battalion, a Light Armored Vehcile Battalion and other units. The acquisition of 52,000 acres is considered the minimum area

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b. Justification of Scope of Project: (cont'd)

needed to meet the training requirements of these systems.

6. Equipment Provided From Other Appropriations: Not applicable.

7. Common Support Facility: Not applicable.

8. Effect on Other Resources: The project will require an increase in O&MMC funds for increased utility services and operations. No additional personnel will be required. The project will enhance and improve the welfare and morale of personnel and improve the training capabilities of the 2d Marine Division

9. Siting of the Project: This project will be located adjacent to the Verona Loop Area west of U. S. Highway 17S. (see enclosure 1).

10. Other graphic Presentations, including Photographs. None.

11. Economic Analysis: This is a training project in support of personnel assigned to Camp Lejeune.

12. Environmental Impact: An Environmental Impact Assessment of the area will be made.

13. Quantitative Data: Not applicable.

14. Maintenance Facilities: Not applicable.

15. Morale, Welfare and Recreation Facilities: Not applicable.

16. Relocation Facilities: Existing ranges and related facilities will be evaluated, relocated as assessed for training needs, efficiency, and programmed in subsequent projects.

17. Storage Facilities: Not applicable.

18. Hazards, Identification, Assessment and Analysis:

a. System safety engineering and management programs will be used to ensure that the highest possible degree of safety and occupational health is adhered to.

b. The requirement for applying system safety engineering principles and management of this project will include the following documentation.

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18. Hazards, Identification, Assessment and Analysis: (cont'd)

(1) A listing of primary hazards identified.

(2) Risk assessment data, leading to the assignment of a "risk assessment code", shall be in accordance with OPNAVINST 5100.23, Navy Occupational Safety and Health (NAVOSH) program.

(3) This project will be in compliance with AR-385-62, and AR-385-63, safety requirements.

(4) A Preliminary Hazard Analysis (PHA) will be submitted.

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TO: COMMANDANT OF THE MARINE CORPS (CODE LF)

(4700)

SECTION A FOR USE BY REQUESTER

FROM: Commanding General, Marine Corps Base, Camp Lejeune, NC 28542

CATEGORY CODE AND PROJECT TITLE	TYPE OF FUNDING	COST ($000)	PROGRAM YEAR
911-10 Land Acquisition	MCON	45.0	FY-89

PROJECT DESCRIPTION: This project will provide approximately 52,000 acres for expansion of the training ranges and maneuver areas.

REMARKS: The gradual introduction of new, highly mobile long range weapon systems requires expansion of the training ranges and maneuver areas.

TYPE OF MAP: Site Location Map (encl 1)

DATE: -

REQUESTED BY (Typed name and signature): E. W. ELSTON By direction

DATE: 2/18/86

SECTION B HQMC REVIEW AND ANALYSIS

ANALYSIS (Place a check (✓) in box opposite each item. Y = Yes; N = No; NA = Not Applicable)

DATE RECEIVED:

Y	N	NA	PROJECT SITING CONSIDERATION	Y	N	NA	PROJECT SITING CONSIDERATION
✓			a. COMPATIBLE WITH ACTIVITY PLANNED DEVELOPMENT GOALS				d. COMPLIES WITH THE FOLLOWING CRITERIA:
✓			b. DEMONSTRATES SOUND PLANNING PRINCIPLES			✓	(1) AMMUNITION AND EXPLOSIVES
✓			c. MEETS MINIMUM PLANNING AND SITING CRITERIA			✓	(2) ELECTROMAGNETIC RADIATION
						✓	(3) AIRFIELD SAFETY
						✓	(4) NOISE INTENSITY
						✓	(5) FIRE PROTECTION

COMPATIBLE WITH ACTIVITY MASTER PLAN (Check appropriate box)

- [ ] IDENTICAL
- [ ] DIFFERENT BUT CONSISTENT
- [x] NOT SHOWN BUT CONSISTENT
- [ ] *NOT SHOWN AND INCONSISTENT
- [ ] *DIFFERENT AND INCONSISTENT

CRITERIA CERTIFICATION(S) REQUESTED (Check): [ ] DDESB [ ] CNO [ ] NAVSEA [ ] NAVELEX [ ] NAVAIR [ ] OTHER:

DATE:

DATE CERTIFICATION(S) RECEIVED: DDESB ____ CNO ____ NAVSEA ____ NAVELEX ____ NAVAIR ____ OTHER ____

ACTION: [x] APPROVED [ ] DISAPPROVED [ ] DEFERRED

REMARKS: AS OUTLINED IN THE APPROVED MCO P11000.12C ACTIVITIES ARE NOW RESPONSIBLE FOR THEIR OWN SITE APPROVALS. (PARA 3003)

SITE APPROVED
HQMC
DATE 24 FEB 1986
BY [signature]

OPERATING OFFICIAL (Typed name and signature): K. SISSON By direction

DATE: 27 FEB 1986

(Signature of approval)

ERCE 1/1