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

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

16 MAR 1984

From: Commanding General
To: Distribution List

Subj: Proposed Clearing within K-2 Impact Area and K-211 40mm Grenade Range

Ref: (a) BO 11000.1A
(b) BO 11015.2G
(c) CG ltr FAC/REA/nh 6280/1 dtd 9 Mar 84

Encl: (1) RgCtrlO ltr RCTL/HBR/ves over 11000 dtd 30 Jan 84 w/end
(2) AC/S Trng ltr RCTL/HBR/irh 11000 dtd 8 Mar 84

1. Request that the enclosures be reviewed in accordance with references (a) and (b). These enclosures will be reviewed for appropriate environmental considerations at the 21 March 1984 meeting of the Environmental Impact Review Board.

2. Point of contact for this review is Mr. Bob Alexander, ext 3034/3035.

M. G. LILLEY
By direction

DISTRIBUTION:

(Members)	(Advisors)
Rep, 2d MarDiv (G-4)	Dir, NREA
Rep, 2d FSSG (G-4)	SupvEcologist
Rep, 6th MAB (G-4)	BWildlifeMgr
Rep, MCAS(H), NR (S-4)	BGameProtector
TFACO	SAFD
BMO	SJA
PWO	DPDO
	Ch, VetMedSvc, NavHosp
	Ch, Occup/PrevMed, NavHosp

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

IN REPLY REFER TO
TRNG/RJW/ekd
11000
31 Jan 1984

FIRST ENDORSEMENT on RgCtrlO ltr RCTL/HBR/ves over 11000 dtd
30 Jan 1984

From: Assistant Chief of Staff, Training
To: Assistant Chief of Staff, Facilities

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

1. Forwarded, recommending approval on a priority basis.

R. J. WEIDNER
By direction

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

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

From: Range Control Officer
To: Assistant Chief of Staff, Facilities
Via: Assistant Chief of Staff, Training Concur M

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

Ref: (a) MCO 3570.1A

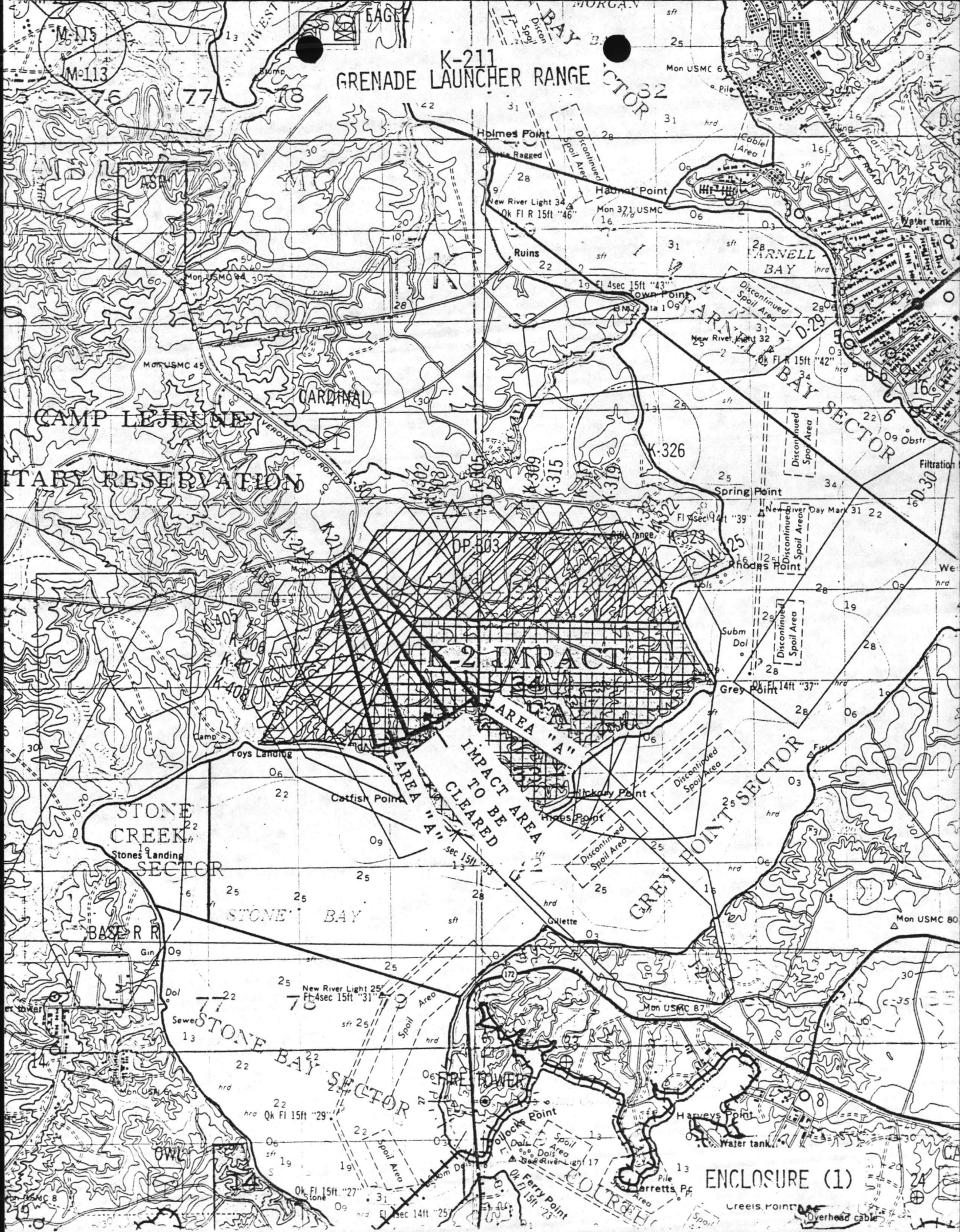
Encl: (1) Map Showing Range
(2) Preliminary Environmental Assessment (PEA)

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

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

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

H. W. FITZ


K-211
GRENADE LAUNCHER RANGE
CAMP LEJEUNE
MILITARY RESERVATION
K-2 IMPACT AREA
AREA "A"
IMPACT AREA TO BE CLEARED "A"
STONE CREEK
STONE BAY
STONE BAY SECTOR
GREY POINT SECTOR
BAY SECTOR
HARNELL BAY
Holmes Point
Hadnot Point
Town Point
Spring Point
Rhodes Point
Grey Point
Hickory Point
Catfish Point
Foys Landing
Stones Landing
Harveys Point
Pollocks Point
Ferry Point
Creels Point
Gillette
Cardinal
Cabiel Area
Water tank
FIRE TOWER
ENCLOSURE (1)

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

1. Enclosures. Map showing proposed range.

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

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

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

5. Range Characteristics

a. Number of Firing Positions - 6

b. Firing Line Width - 30 meters

c. Target Area Width - 150 meters at 400 meters from the firing line expanding out to 300 meters at 2200 meters from the firing line.

d. Minimum Range Depth - 2200 meters

e. Firing Point Configuration - Concrete cinder block wall.

f. Target configuration - Static personnel and material targets.

6. Compliance with Environmental Requirements

a. Air Quality: No emmissions are anticipated

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

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

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

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

f. Endangered Species Act: The impact of this project on the habitat of any endangered species has been determined to be negligible. This statement is based on the determination that no endangered species are known to live in the area to be affected by clearing and earthwork.

7. Conclusion. The proposed improvements for the K-211 Grenade Launcher Range will not result in significant environmental impact provided the measures described herein are followed. Further, the project is not considered controversial, thus, preparation of an Environmental Assessment per Marine Corps Order 6280.5 is not required.


K-211
GRENADE LAUNCHER RANGE
BAY
Holmes Point
Little Ragged
Hadnot Point
New River Light 34
Ok Fl R 15ft "46"
Mon 371 USMC
Ruins
FARNELL BAY
Lewis Creek
Own Point
New River Light 32
Ok Fl R 15ft "42"
Mon USMC 44
Mon USMC 45
CARDINAL
CAMP LEJEUNE
MILITARY RESERVATION
K-326
Spring Point
Rhodes Point
Subm Dol
Grey Point
K-2 IMPACT
AREA "A"
IMPACT AREA TO BE CLEARED
Foys Landing
Catfish Point
Hickory Point
Rhodes Point
STONE CREEK
Stones Landing
STONE BAY
BASE R R
GREY POINT SECTOR
New River Light 25
Ok Fl 15ft "29"
FIRE TOWER
Ellis Cove
Blocks Point
Harveys Point
Water tank
Ferry Point
Jarretts Pt
Creels Point
OWL
ENCLOSURE (1)

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

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

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

Subj: Improvement of K-2 Impact Area; request for

Ref: (a) MCO 3570.1A

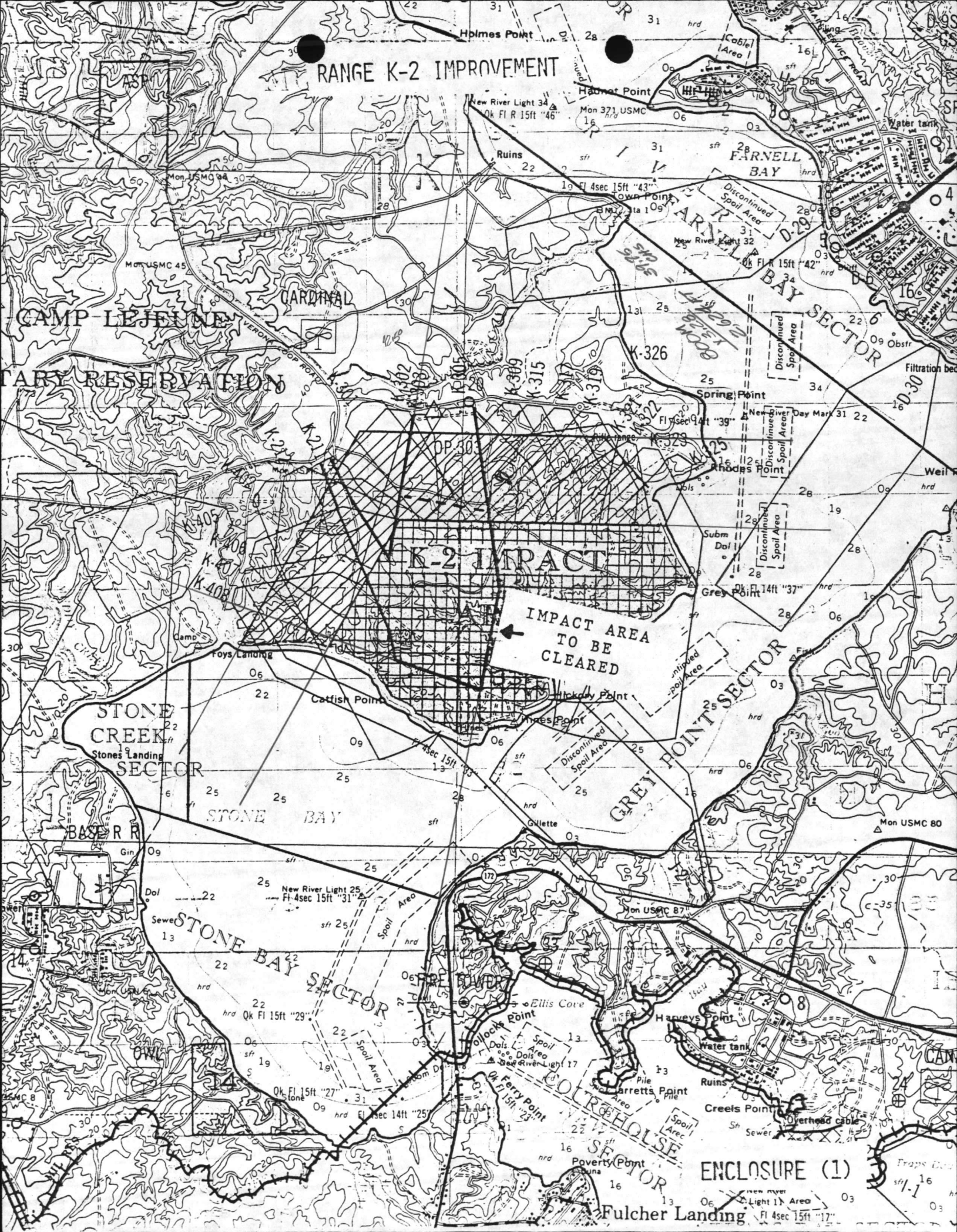
Encl: (1) Map Showing Range
(2) Preliminary Environmental Assessment (PEA)

1. Introduction of the M198, 155mm gun system and improved ammunition for the 60mm and 81mm gun system has established a requirement for Marine Corps Base, Camp Lejeune, North Carolina to provide a live fire training range for use of these weapon systems in the Verona Loop Area. Range K-211 is currently used for 40mm grenade firing with the M203 grenade launcher and is scheduled for refurbishment to accommodate the MK-19, 40mm gun system. Range K-303 and K-305 are used for the 60mm, 81mm gun system, and Dragon Missile system. In accordance with reference (a), and in order to meet the training requirements of tenant commands at Camp Lejeune, it is requested that Range K-303 and K-305 be expanded as shown in enclosure (1).

2. The total area to be cleared is shown in enclosure (1) and will have no significant environmental impact. An EOD sweep of the area to be cleared of vegetation will be conducted prior to the commencement of clearance operations. An EOD survey of the area to be cleared of vegetation, as shown in enclosure (1) has not located any dud ordnance. Clearing of trees could be accomplished by heavy equipment. EOD support will be provided for all down range construction work. Enclosure (2) is the Preliminary Environmental Assessment (PEA) for the proposed range improvement.

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

K. W. ZITZ


RANGE K-2 IMPROVEMENT
Holmes Point
Hadnot Point
Cable Area
New River Light 34
Ok Fl R 15ft "46"
Mon 371 USMC
Water tank
Ruins
FARNELL BAY
Fl 4sec 15ft "43"
Town Point
Discontinued Spoil Area
New River Light 32
Ok Fl R 15ft "42"
Mon USMC 45
CARDINAL
CAMP LEJEUNE
TARY RESERVATION
K-326
BAY SECTOR
Filtration bed
Spring Point
Fl 4sec 14ft "39"
New River Day Mark 31
Rhodes Point
OP 303
K-2 IMPACT
IMPACT AREA TO BE CLEARED
Subm Dol
Grey Point
Ok Fl 14ft "37"
Foys Landing
Catfish Point
Hickory Point
Holmes Point
STONE CREEK
Stones Landing
SECTOR
STONE BAY
GREY POINT SECTOR
Gillette
Mon USMC 80
New River Light 25
Fl 4sec 15ft "31"
Mon USMC 87
STONE BAY SECTOR
Ok Fl 15ft "29"
Ellis Cove
Harveys Point
Water tank
Ruins
Creels Point
Overhead cable
Ok Fl 15ft "27"
Fl 4sec 14ft "25"
Ferry Point
Poverty Point
ENCLOSURE (1)
Fulcher Landing
Fl 4sec 15ft "17"

PRELIMINARY ENVIRONMENTAL ASSESSMENT

FOR

RANGE K-2

1. Enclosure. Map showing proposed range.

2. Purpose and Need. The purpose of this proposed action is to provide the Marine Corps Base, Camp Lejeune, North Carolina with a range in the Verona Loop Area to teach Marines the skills necessary for combat situations.

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

4. Site Selection. The site is located on enclosure (1). The location is currently part of the surface danger area for the K-2 Impact Area. The site was selected because the terrain allows for visability at ranges up to 2800 meters.

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

6. Compliance with Environmental Requirements.

a. Air Quality: No emmissions are anticipated.

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

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

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

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

f. Endangered Species Act: The impact of this project on the habitat of any endangered species has been determined to be negligible. This statement is based on the determination that no endangered species are known to live in the area to be affected by clearing and earthwork.

ENCLOSURE (2)

PRELIMINARY ENVIRONMENTAL ASSESSMENT continued:

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

NREAD/DDS/jc
11000
20 Mar 1984

From: Director
To: Assistant Chief of Staff, Facilities

Subj: Preliminary Environmental Assessments for the Proposed Clearing within K-2 Impact Area and K-211 40MM Grenade Range

Ref: (a) CG MCB CLNC ltr FAC/REA/nh 6280/1 of 16 Mar 1984
(b) BO 11000.1A
(c) NCAC Title 15, Chap 14, Sedimentation Control
(d) Endangered Species Act of 1973 as Amended
(e) MCO 11015.4

Encl: (1) Map depicting Clearing for K-211, 303 and 305 Ranges

1. Reference (a) provided the subject PEAs and requested review in accordance with reference (b). The following comments are provided:

a. Approximately 851 acres of land are directly involved in the clearing operation. Approximately 634 acres are heavily forested. The remaining area has individual trees or clumps of trees requiring removal. The enclosure delineates areas to be cleared.

b. The PEAs provided by the reference do not provide a clear description of how the work will be accomplished, and the clearing specifications.

c. The PEAs indicate that Base Maintenance Division or other heavy equipment will be used to remove trees. This type operation will generally cause significant soil disturbance to a depth of at least three feet. The PEAs indicate that Base EOD is prepared to clear the area of unexploded ordnance prior to commencing work.

d. A significant portion of the area contains steep soils subject to severe erosion if cleared. These soils are located adjacent to live streams. An erosion control plan prepared and approved by the State in accordance with reference (c) is required if ground cover is removed. Based on information provided in reference (a), reference (c) is applicable to the project.

e. There is a significant probability that the endangered Red-Cockaded Woodpecker is located in the area to be cleared. This creates a "may affect" situation relative to references (d) and (e) and requires consultation with the U. S. Fish and Wildlife Service. Consultation should also include the endangered American Alligator, another species likely to be in the area.

NREAD/DDS/jc
11000

Subj: Preliminary Environmental Assessments for the Proposed Clearing within K-2 Impact Area and K-211 40MM Grenade Range

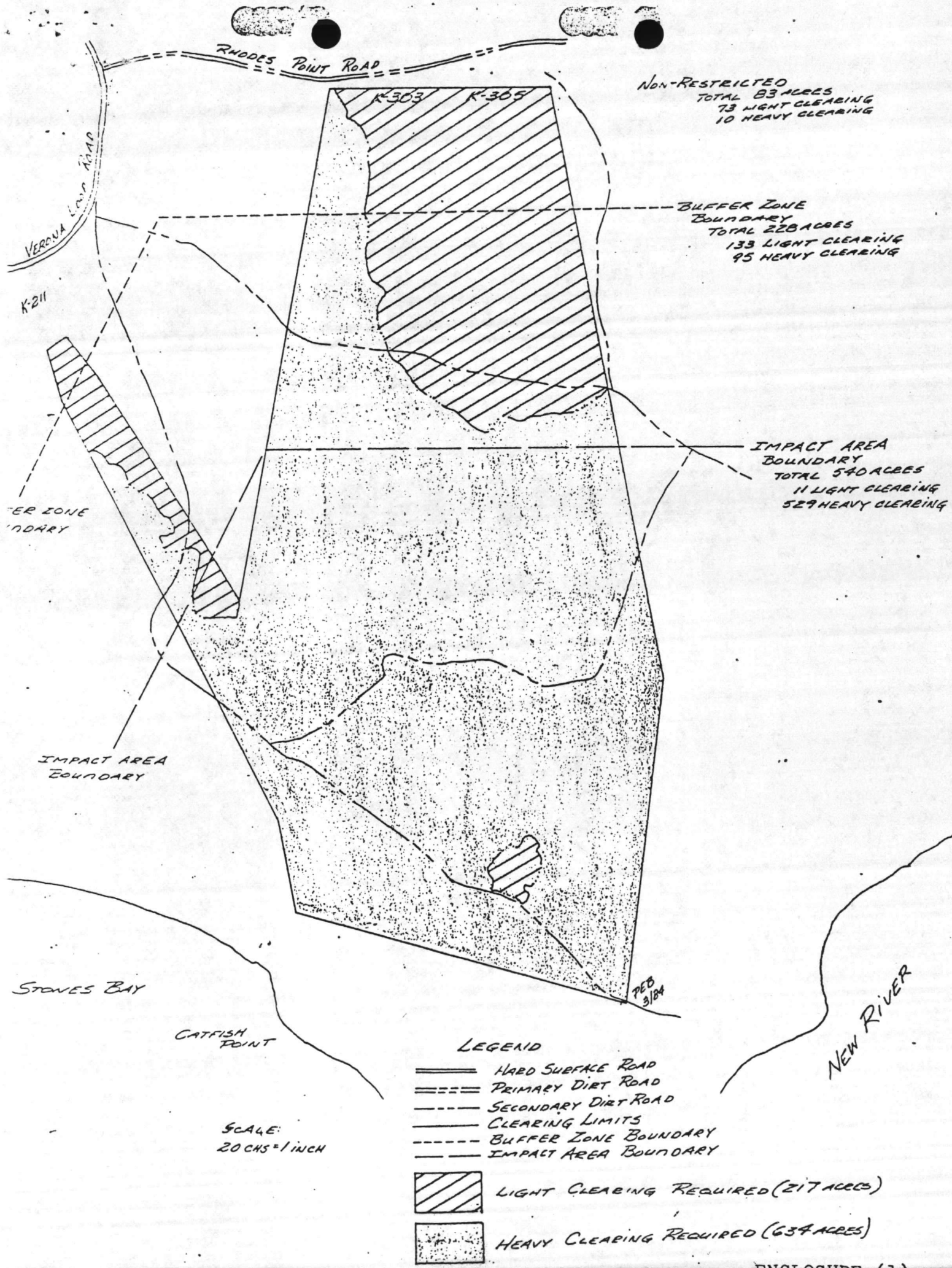
f. Because the clearing work involves working in known impact areas, significant local controversy should be expected associated with employees involved in actual clearing.

g. Logging of marchantable size timber by commercial logger is not feasible due to the danger of unexploded ordnance to loggers' personnel.

h. Because of the potential impact of erosion on streams and shell fish areas, a written determination of consistency with land use programs/plans developed pursuant to the N. C. Coastal Area Management Act and related federal enabling legislation should be filed with appropriate state agencies.

2. It is recommended that the requirements discussed in paragraphs 1.d., 1.e. and 1.h. above be properly addressed prior to commencing actual land clearing.

J. I. WOOTEN


RHODES POINT ROAD
K-303
K-305
NON-RESTRICTED
TOTAL 83 ACRES
73 LIGHT CLEARING
10 HEAVY CLEARING
VERONA LOOP ROAD
BUFFER ZONE
BOUNDARY
TOTAL 228 ACRES
133 LIGHT CLEARING
95 HEAVY CLEARING
K-211
IMPACT AREA
BOUNDARY
TOTAL 540 ACRES
11 LIGHT CLEARING
529 HEAVY CLEARING
IMPACT AREA
BOUNDARY
STONES BAY
CATFISH POINT
NEW RIVER
PEB 3/84
LEGEND
HARD SURFACE ROAD
PRIMARY DIRT ROAD
SECONDARY DIRT ROAD
CLEARING LIMITS
BUFFER ZONE BOUNDARY
IMPACT AREA BOUNDARY
LIGHT CLEARING REQUIRED (217 ACRES)
HEAVY CLEARING REQUIRED (634 ACRES)
SCALE:
20 CHS = 1 INCH

UNITED STATES MARINE CORPS
Natural Resources and Environmental Affairs Division
Marine Corps Base
Camp Lejeune, North Carolina 28542

IN REPLY REFER TO:
11000
NREAD
17 Aug 1984

From: Director
To: Memorandum for the Record

Subj: K-2 IMPACT AREA CLEARING/DRAINAGE STAFF STUDY

Ref: (a) Meeting btwn Col Lilley, AC/S FAC and Mr. J. I. Wooten, Dir NREAD on 23 July 1984 at approximately 1730 hours
(b) Mtg btwn Col Lilley, AC/S FAC, and Mr. J. I. Wooten, Dir, NREAD and C. D. Peterson, Wildlife Mgr, NREAD on 2 Aug 1984
(c) Mtg btwn Col Lilley, AC/S FAC, Mr. Peter Murphy, Mr. Gayle, HQMC General Counsel, Mr. Al Austin, Mr. Bob Alexander, AC/S FAC Office, and Mr. J. I. Wooten, and C. D. Peterson, NREAD on 13 Aug 1984 at approximately 1620 hours

Encl: (1) Dir NREAD ltr 11000/4 dtd 23 July 1984
(2) Excerpts from a Manual on file at AC/S FAC pertaining to Staff Study
(3) Dir NREAD ltr 11000 NREAD of 27 July 1984 unsigned

1. During reference (a) I presented Col Lilley with enclosure (1) and discussed same. I requested a meeting with Col Lilley ASAP to discuss with me and my staff (Sharpe, Peterson, Black) issues addressed in enclosure (1) either in his office or NREAD office Bldg 1103. Col Lilley suggested a meeting between NREAD personnel (mentioned above) and Mr. B. Alexander and others. I told Col Lilley I wanted a meeting with only him, me, C. D. Peterson, D. Sharpe and P. Black first to discuss NREAD position addressed in enclosure (1). As of this date, the requested meeting has not taken place.

2. During reference (b) and following a discussion pertaining primarily to the Game Warden function and personnel, Col Lilley picked up enclosure (1) and stated it presented new information and he advised he wanted NREAD to do a staff study on the proposed project to clear the K-2 Impact Area for submission to the CG. Col Lilley used a manual to discuss and instruct me on procedure for a staff study. Enclosure (2) was provided. I drafted enclosure (2) for Col Lilley's signature requesting information from AC/S Training for the staff study. Enclosure (2) wasn't signed but returned to NREAD on 16 August 1984.

3. Shortly after the adjournment of reference (c), Col Lilley advised Charles Peterson and me he had called a meeting of the Environmental Enhancement/Impact Review Board for 1430 on 14 August 1984. I told him I hadn't heard anything about the meeting and asked him what about the staff study I was assigned to do on the K-2 Impact Area Improvement Project and he essentially said forget it. Col Lilley stated the AC/S Training

Col Speicher was going on leave and he (Col Lilley) was going TAD 16-17 August 1984 and he wanted to get the K-2 Improvement Project out of the way as AC/S Training was anxious to get the project started. Col Lilley told me he wanted me to have my day in court. I told Col Lilley I would like for my 23 July 1984 letter without enclosures be presented to the board members before the meeting and that I probably would not make an oral presentation but would try to answer any questions.

J. I. Wooten

J. I. WOOTEN

11000/4
NREAD
23 July 1984

From: Director, Natural Resources and Environmental Affairs Division, Marine Corps Base, Camp Lejeune
To: Assistant Chief of Staff Facilities, Marine Corps Base, Camp Lejeune

Subj: Environmental Enhancement/Impact Review Board Meeting Agenda for 24 July 1984; comments concerning

Ref: (a) AC/S FAC memo 5420/2 FAC of 18 July 1984

Encl: (1) Comments on Proposed K-2 Impact Area/Drainage and Clearing
(2) Comments on Tracked Vehicle Trail
(3) Comments on LAV Operations in Hoffman Forest
(4) Comments on LZ Bluebird Repair Project

1. Preliminary Environmental Assessments (PEA) furnished and scheduled by the reference for review by the Environmental Impact Review Board (EIRB) on 24 July 1984 have been reviewed and discussed by members of the NREAD staff and comments/recommendations are provided as enclosures (1) - (4). Although there are some minor variations between Mr. Peterson and Mr. Sharpe's comments our conclusion relative to the PEA's are essentially the same. Pertaining to K-2 Impact Area Clearing and Drainage Project, the following issues are not addressed or are not adequately addressed or there are inaccurate statements, i.e.:

a. There are endangered species (Red-Cockaded Woodpeckers and American Alligators) in the proposed project area requiring formal consultation with the US Fish and Wildlife Service.

b. Whitehurst Creek and Mill Creek are classified by state as primary nursery area. These areas will probably be impacted by the clearing and drainage of K-2 due to accelerated fresh-water flow.

c. The Base Archaeological and Historical Survey of 1981 showed part of the K-2 area as being sensitive and it is recommended consultation with the state Archives and History personnel be completed before clearing and drainage work begins.

d. Drainage of K-2 area wetlands requires review by the Army Corps of Engineers before work begins.

Subj: Environmental Enhancement/Impact Review Board Meeting Agenda for 24 July 1984: comments concerning

e. File a Federal Consistency Statement with the NC Office of Coastal Management.

f. Submittal of a sedimentation control plan to the state prior to beginning the work in the K-2.

g. In my opinion, outside agencies may consider the K-2 project a major federal action because of impacts on endangered species, wetlands, primary nursery areas and archaeological and historical resources. In my opinion an Environmental Assessment (EA) is required by Headquarters Marine Corps because of both the environmental impact and the potential for controversy.

2. The reference gives the Director, NREAD credit for preparing the PEA for the construction of track vehicle trail from Rhodes Point to TLZ Cardinal. NREAD provided information for the PEA but did not prepare the document. It is this Division's position that a sedimentation control plan approved by the state is required.

3. Pertaining to LAV operation in Hoffman Forest, NREAD is of the opinion there will be conflict between LAV and general public use of the area. Headquarters Marine Corps approved EA is required. A state approved sedimentation control plan is required.

4. Pertaining to LZ Bluebird repair, it is recommended base consult with the State Department of Archives and History pertaining to possible artifacts under the matting, as well as adjacent areas. A state approved sedimentaiton control plan is required.

5. Earlier this year I discussed conflicts that were arising between the Environmental Engineer and me and my staff with you. Also, I expressed concern about some of the comments I was hearing from LtCol Cummings pertaining to NREAD matters and how the base should handle the matter as related to management and consultation with off base personnel. Pertaining to paragraphs 3 and 4 of Mr. Sharpe's portion of enclosure (1), I agree with Mr. Sharpe's statement that the Environmental Engineer and SJA have provided inaccurate information which has the base in a potentially embarrassing position.

J. I. WOOTEN

11000/5
NREAD
23 July 1984

From: Supervisory Ecologist
To: Director, Natural Resources and Environmental Affairs Division

Subj: PROPOSED PROJECT TO CLEAR AND DRAIN THE K-2 IMPACT AREA

Ref: (a) Executive Order 11990
(b) NCAC Title 15, Chap 4, Sedimentation Control
(c) Endangered Species Act of 1973 as Amended
(d) MCO P11000.8B
(e) Chairman, EIRB ltr 5420/2 FAC of 18 July 1984

1. The subject project has the following significant environmental impact:

a. Will cause accelerated rates of discharge of freshwater and sediment to primary nursery areas (as identified by State fisheries regulations).

b. Alteration of several types of wetlands specifically protected by reference (a) by channelization/drainage.

c. Affects the habitat of the endangered species, Dendrocopus Boreais (Red-Cockaded Woodpecker).

d. May affect the endangered species Dionaea Muscipula (Venus Fly Trap); several species of Sarracenia (Pitcher Plants), and alligator mississippiensis (American Alligator).

2. The subject project requires implementation of the following procedural requirements:

a. Filing of a Federal Consistency Determination with the North Carolina Office of Coastal Management.

b. Submittal of a Sedimentation Control Plan required by reference (b).

c. Consultation with United States Fish and Wildlife Service (USFWS) and North Carolina Wildlife Resources Commission as required by reference (c).

d. Submittal of an Environmental Assessment (EA) to Headquarters Marine Corps as required by reference (d).

3. The considerations listed in the foregoing are almost the same as those pointed out by NREAD during the Environmental review of the recently completed G-10 Impact Area clearing project. At that time the Environmental Engineer, AC/S Facilities and members of the Staff Judge Advocate's (SJA) office cooperated in refuting the NREAD position. In my opinion, inaccurate information was provided by the Environmental Engineer and SJA which resulted in possible violations of references (a), (b) and (c). It must be assumed that the Environmental Engineer and SJA will take the same position on the subject project. The approach used by the Environmental Engineer and SJA has, in my opinion, seriously harmed previously excellent working relationships between the Base and both the USFWS and the Wilmington District, U. S. Army Corps of Engineers.

4. It is recommended that K-2 Impact Clearing and Drainage Project PEA provided by reference (c) not be put before the Environmental Impact Review Board unless the board members are provided thorough background which includes all of NREAD's comments on both the K-2 and the G-10 project. The Board should also be advised that the Wilmington District U. S. Army Corps of Engineers has made the USFWS aware that the areas of Red-Cockaded Woodpecker habitat in the G-10 have been cleared and that habitat is also present in the K-2 Impact Area.

D. D. SHARPE

Writer: D. D. Sharpe, NREAD 5003
Typist: J. Cross, 23Jul84, 5003

11000/2
NREAD
24 July 1984

From: Base Forester
To: Director, Natural Resources and Environmental Affairs Division

Subj: PEA FOR IMPROVEMENTS OF K-2 IMPACT AREA; COMMENTS ON

Ref: (a) EODO ltr 11000 EOD of 11 July 1984
(b) Mtg btwn AC/S FAC; DAC/S FAC; ROICC/PWO; TPO; EODO; EnvEngr; Dir NREAD, and AsstBase Forester on 17 July 1984

1. The clearing of large acreage in the K-2 Impact Area as addressed in reference (a) and discussed during reference (b) generated significant interest from some local timber procurement personnel. However, the possibility of metal contamination in the timber, and hazardous ground conditions for harvesting equipment and personnel has resulted in a greatly lowered level of interest than would be expected from uncontaminated timber.

2. If maximum effort to clearcut an area of 1,000 acres is undertaken by a major contractor, it is estimated that approximately two months would be needed to harvest the area under the most ideal circumstances. Poor weather, suppressed timber markets, equipment breakdown or accidents at the logging site or at the mill would increase the time required for the completion of the job.

3. Interest by some representatives has been high, while others wanted more information, and others expressed no interest because of the possibility of metal contaminated timber and hazardous ground conditions from unexploded ordnance. Interest is noted as follows:

a. Federal Paper Woodlands Division - Official company policy is to avoid metal contaminated timber.

b. Squires Timber Company - Procurement personnel indicate that they are interested in the proposed timber salvage provided that primary purchasers will accept the timber.

c. Hinson Pulpwood - The company is interested in possible timber salvage operations but is concerned about mill acceptance or quotas interrupting the harvest.

d. Georgia Pacific - The initial response to the proposed salvage harvest was guarded; however, after further assessment

by the company's procurement personnel, this office was informed that the company felt it to be too risky.

e. Weyerhaeuser Company - The initial response solicited from procurement personnel is that the company may be interested in the proposed salvage. They will further assess the potential for utilization of metal contaminated timber and contact this office.

P. E. BLACK

Writer: P. E. Black, NREAD, 5003
Typist: J. Cross, 24Ju84 - 5003

11015/1A
NREAD
23 July 1984

From: Base Wildlife Manager
To: Director, Natural Resources and Environmental Affairs Division
Subj: Clearing K-2 Impact Area

Ref: (a) Range Control Officer ltr 11000 EOD of 11 July 1984
(b) Section 7 of the Endangered Species Act of 1973

Encl: (1) North Carolina Fisheries' Regulations

1. The amended preliminary environmental assessment contained in reference (a) has been reviewed as requested. Five previously unknown active cavity trees of the endangered Red-Cockaded Woodpecker have been located in the area which is proposed for clearing according to the Environmental Engineer. This apparently indicates that there is at least one colony of woodpeckers in the area. Any major clearing operation in this area would create a "may affect" situation requiring consultation with the U. S. Fish and Wildlife Service in accordance with reference (b).

2. The endangered American Alligator occurs along Whitehurst Creek which is in the area proposed for clearing. The alligator nests above the tidal zone well within the fire-line along the creek. Clearing the area would also create a "may affect" situation relative to the occurrence of alligators thereby requiring consultation.

3. Whitehurst Creek is a protected nursery area for young finfish and crustaceans as defined in the North Carolina Fisheries Regulations for coastal waters as contained in enclosure (1). Draining the wetlands of the area proposed for clearing into Whitehurst Creek and channelization of the creek would change the salinity of the water. This would impact on the productivity of the creek for saltwater fishes and crustaceans. Therefore, it is recommended that the North Carolina Department of Natural Resources and Community Development, Division of Commercial Fisheries, be contacted prior to initiating the clearing project.

4. The shorelines along Whitehurst Creek and New River proper where the proposed clearing is planned is identified as a sensitive area in the 1981 Archaeological and Historical Survey for Camp Lejeune. It is recommended that Dr. Thomas Loftfield, principal investigator for the survey, be contacted for expert advice relative to protecting archaeological and historical resources in the proposed area before initiating the clearing project. Additionally, it is recommended the North Carolina Division of Archives and History also be consulted before clearing is initiated.

C. D. PETERSON

Writer: C. D. Peterson, NREAD - 5003
Typist: J. Cross, 23Jul84 - 5003

11000/5
NREAD
23 Jul 1984

From: Supervisory Ecologist
To: Director, Natural Resources and Environmental Division

Subj: CONSTRUCTION OF TRACKED VEHICLE TRAIL FROM RHODES POINT TO TLZ CARDINAL; PRELIMINARY ENVIRONMENTAL ASSESSMENT (PEA) OF

Ref: (a) Chairman, EIRB ltr 5420/2 FAC 18 Jul 1984
(b) SJA ltr 5800 CLO 5 Jul 1984
(c) Director, NREAD ltr 5200 NREAD 20 Jun 1984
(d) Director, NREAD ltr 11000/5 NREAD 20 Jun 1984
(e) MCO.P11000.8B

1. The subject Preliminary Environmental Assessment (PEA) has been reviewed per your request and the following comments are provided It should be noted that current base guidelines were not followed in the PEA format.

2. The title page of the subject PEA as provided by reference (a) is misleading. Natural Resources and Environmental Affairs Division (NREAD) has not prepared a PEA of the subject action. The subject document was not compiled by NREAD. NREAD comments incorporated into the subject document address only the section of new trail east of grid coordinates 802362.

3. Engineering support is recommended to design road bed, associated ditches and culverts, and erosion control structures. It should be noted that Staff Judge Advocate (SJA) opinion contained in reference (b) conflict with paragraph 2 of reference (c). Ref (c) is incorporated into the subject PEA. It is my opinion that submittal of a sediment control plan for the subject project to the State as discussed in reference (d) is required.

4. Provided that the sedimentation control requirements identified in reference (c) are satisfied, this project appears to meet the criteria contained in reference (e) for a categorically excluded action (i.e. submittal of an EA to Headquartes Marine Corps is not required).

D. D. SHARPE

ENCL (2)

11000/5
NREAD
23 Jul 1984

From: Supervisory Ecologist
To: Director, Natural Resource and Environmental Affairs Division

Subj: PRELIMINARY ENVIRONMENTAL ASSESSMENT FOR LAV CREW TRAINING IN HOFFMAN FOREST

Ref: (a) Chairman, Environmental Impact Review Board ltr 5420/2 Fac 18 Jul 1984
(b) BO 11000.1B
(c) MCO P11000.8B

1. The Preliminary Environmental Assesment (PEA) provided by reference (a) was prepared following current procedures in reference (b). The description is adequate for initial review. However, a map showing roads to be traveled should be incorporated into environmental impact assessment document. The following comments are provided relative to accuracy of section 5 of the subject PEA.

a. Air Quality: Agree

b. Land Quality: There will be soil disturbance to the forest roads even under excellent weather conditions. High levels of management and supervision of the operation will be required. Has potential to be controversial if public access to the forest is affected by road damage.

c. Groundwater Quality: Agree

d. Surface Water Quality: There will be some increase in erosion/siltation (highly dependent on supervision and maintenance). Sanitary waste disposal needs to be addressed.

e. Natural Resources: Many areas of Hoffman Forest are used for fox hunting. This citizens group is highly active with strong ties with state legislature. Any conflict with this group should be addressed carefully and thoroughly. These hunters frequent the area during the night time period proposed for LAV training. Road damage could affect public access unless timely maintenance provided. The area involved are public gamelands open to the hunting public.

f. Socio-Economic Considerations: Off base persons and property will be affected at levels which could be preceived as significant by noise traffic impact and dust associated with vehicle. Public controversy should be anticipated and sufficient public education provided.

ENCL (3)

2. Section 3109 of reference (c) provides that training exercise in nonmilitary land require preparation of an environmental assessment (EA). This section also requires EA's for projects likely to cause public controversy. Section 3105.2 requires submittal of EA's to Headquarters Marine Corps. It is recommended that this course of action be followed for the subject action. Available alternatives should be thoroughly explored.

D. D. SHARPE

11000/2
NREAD
23 July 1984

From: Base Wildlife Manager
To: Director, Natural Resources and Environmental Affairs Division

Subj: REVIEW OF PEA FOR LAV CREW TRAINING

Ref: (a) Chairman, EIRB ltr 5420/2 FAC of 18 Jul 1984

1. The reference has been reviewed as requested relative to the PEA for LAV Crew Training in the Hoffman Forest area of Onslow County. Hoffman Forest is an area which is extensively used by the public for recreational hunting, fishing and trapping. There is a tremendous amount of deer hunting from October through December each year, and fox hunting throughout the year.

2. Some of the land is leased for deer hunting by private clubs and the remainder includes the Hoffman Game Lands which are set aside for public hunting. Both the deer and fox hunters have strong ties with members of the North Carolina Legislature.

3. It is recommended that the North Carolina Wildlife Resources Commission, Department of Natural Resources and Community Development be contacted concerning the proposed use of LAV Crew Training in Hoffman Forest, since there will likely be conflicts with hunters in particular.

C. D. PETERSON

Writer: C. D. Peterson, NREAD, 23 Jul 84
Typist: J. Cross, 23 Jul 84 5003

11000/5
NREAD
23 July 1984

From: Base Wildlife Manager
To: Director, Natural Resources and Environmental Affairs Division

Subj: REVIEW PEA FOR LZ BLUEBIRD REPAIR

Ref: (a) Chairman, EIRB ltr 5420/2 FAC of 18 Jul 1984
(b) Volume I Archaeological and Historic Survey for MCB

1. In accordance with your request, the PEA for LZ Bluebird repair as contained in reference (a) has been reviewed. There is a possibility that a portion of Site ON^{V} 138 contained in reference (b) remains intact under the existing AM2 matting material. Therefore it is recommended that the portion of the site be examined by a qualified archaeologist before grading and filling is initiated.

2. Contact with the North Carolina Department of Archives and History is additionally recommended before work on the proposed project is initiated.

C. D. PETERSON

Writer: C. D. Peterson, NREAD, 5003
Typist: J. Cross, 23Jul84, 5003

FNCL (4)

From Col Lilly 3 Aug 84

friendly forces in the area of operations. The character, type, and extent of such assistance are considered. In connection with an amphibious operation, any pre-D-day operations of air, naval, or ground forces in the objective area are included.)

(k) Peculiarities and Weaknesses. (Significant peculiarities and weaknesses of enemy and friendly forces which may affect the accomplishment of the mission, such as peculiar tactical doctrine, unconventional methods, and idiosyncrasies of individual commanders.

b. Enemy Capabilities. (Enemy capabilities are those actions of which the enemy is physically capable and which, if adopted, will favorably or unfavorably affect the accomplishment of the commander's mission. These capabilities are enumerated in this subparagraph for subsequent analysis in connection with the commander's own courses of action. When justified by facts and logical assumptions, the relative order of probability of adoption of enemy capabilities is noted. Statements of attack, defense, and reinforcement capabilities include statements of how, when, where, and in what strength. The statement of a withdrawal capability is usually a mere statement that the enemy can withdraw, usually beyond our objective, at any time.)

c. Own Courses of Action. (In preparing this subparagraph, the commander visualizes all reasonable and practicable courses of action which, if successful, will accomplish his mission. He then eliminates from further consideration those courses of action which are obviously inferior to the others. Finally, he lists in this subparagraph those retained courses of action which must be tested further, in the light of significant enemy capabilities and other factors, in paragraphs 3 and 4 below.

There may be only one reasonable and practicable course of action open to the commander in a simple situation, in a small command, or in a case where the commander's freedom of action has been limited by a detailed mission assigned by his superior. In such cases, the decision should not be stated until the course of action has been tested by carrying it through an analysis of the content of paragraph 3, in order to fully determine the ramifications of the course of action and to refine the HOW of the decision.

3. ANALYSIS OF OPPOSING COURSES OF ACTION

(In this paragraph, each course of action listed in subparagraph 2c is analyzed to determine its probable outcome when opposed by each of the enemy's capabilities enumerated in subparagraph 2b. This is accomplished by visualizing the results which would occur if each course of action were opposed separately by each enemy capability. Enemy capabilities which have little or no effect on the choice of action are not included in this cross-analysis.

This visualization also includes a consideration of the influence of pertinent factors treated in subparagraph 2a. These factors are applied in order to determine more definitely the possibilities inherent in each course of action, and to develop and refine the HOW of the decision. At this point in the estimate, the commander determines how the factors in subparagraph 2a may best be exploited by him in order to enhance the advantages and reduce the disadvantages of each course of action under consideration. This may result in the introduction of new courses of action or major changes in the ones already under consideration. The steps which the commander determines to be essential to the success of a course of action becomes a part of his concept of operation, if that course of action is selected for execution.

From his visualization of the results of each course of action, the commander can determine the enemy's ability to oppose that course of action, and the degree of success which can be expected from it. The commander then isolates the governing factors of the situation which have the most important bearing on his choice of the most suitable course of action. The governing factors are carried forward to paragraph 4 for use in comparing the several courses of action open to him.)

4. COMPARISON OF OWN COURSES OF ACTION

(In this paragraph, the advantages and disadvantages of each of his own courses of action are summarized by the commander, and the courses are compared and weighed against each other. That course of action which appears to offer the greatest prospect of success is selected and stated as a conclusion. If several courses of action offer equal prospects of success, the one is chosen which most favors future action. During this comparison, certain favorable aspects of two or more courses of action may result in formulation of a new or combination of courses of action which the commander may adopt and state in his decision. In some cases, it will be possible to eliminate all but one of the commander's own courses of action by means of deductions made in subparagraph 2a. In such cases, the comparison required by paragraph 4 is omitted.)

5. DECISION

(The course of action selected for adoption is formally stated in this paragraph as the decision. The decision is a clear, concise, and logical statement of the commander's intentions. Appropriately amplified, it becomes the commander's concept of operation. The decision and the concept of operation form the basis for the preparation of plans and orders.

A commander's decision always indicates WHAT the command as a whole is to do. It also indicates as much of the WHO, WHEN, WHERE, HOW, and WHY as may be appropriate and practicable under the circumstances.

WHAT is a statement of the course of action to be executed to accomplish the mission; i.e., "to land and secure," "to continue the march," "to attack," or "to defend."

FORM 1

STAFF STUDY

(Local variations and modifications as necessary to meet requirements.)

CLASSIFICATION

Copy no. __ of __ copies
Originating section
Parent headquarters
PLACE OF ISSUE
Date/time of issue

SUBJECT

The subject matter is indicated briefly but in sufficient detail to facilitate filing and future reference.

INTRODUCTION

An introduction is not necessary but may be used to clarify an understanding of the problems or to limit the scope. It should be brief and should not include discussion material.

1. PROBLEM

The problem is stated in concise and specific terms. A statement beginning with an infinitive is commonly employed but other forms of expression may be used when more desirable.

2. ASSUMPTIONS

If there are no assumptions, indicate by so stating. Assumptions are used to bridge gaps between known facts and their use may be necessary to complete the problem solving process. Unnecessary assumptions are avoided, and care is taken to avoid substituting assumptions for ascertainable factors or for conclusions. An assumption is defined as a supposition regarding the current situation, or a presupposition on the future course of events, either or both assumed to be true in the absence of positive proof to the contrary. They may be necessary to enable the commander, in the process of planning, to complete his estimate of the situation and make a decision on his course of action.

3. FACTS BEARING ON THE PROBLEM

Known and established facts having a direct bearing on the problem. These are stated concisely and the source shown; e.g., (A/5p.6) indicates Annex A (bibliography), 5th reference, page 6. They are indicated and numbered in the order of first appearance in the study. Page numbers are not shown in the bibliography.

CLASSIFICATION

4. DISCUSSION

The facts and assumptions and their implications are analyzed in this paragraph. The reasoning which leads to the conclusions and recommendations is set forth. This paragraph is a logical development of all pertinent aspects of the problem, including the formulation, analysis, and comparison of possible solutions and courses of action. An essay-type statement of facts, assumptions, and their inter-relation to the problem does not satisfy the requirements of this paragraph. If a detailed discussion is attached as an annex, then the discussion paragraph in the body of the study should be a summary of the annex. In these instances, however, the discussion paragraph must contain sufficient information to ensure understanding without reference to the annex. A statement "See Annex B, detailed discussion" does not suffice.

5. CONCLUSIONS

The reasoning set forth in the discussion culminates in conclusions which are presented here in concise form. Statements in the conclusions paragraph should begin with: "THAT the . . . ." They should not be a restatement of facts or assumptions, but rather should be solutions which are logically derived from the analysis in the discussion.

6. ACTION RECOMMENDED

Recommendations are reduced to clear, concise statements permitting simple approval or disapproval by the approving authority. Normally recommendations begin with "THAT" or "It is recommended that" (list subparagraphs)." If an implementing document is required, it should be attached with a recommendation for signature to implement and forward as necessary.

Signature

Name
Rank and Service
Title

Recommendations	Approved	Disapproved
6.a	_____	_____
6.b	_____	_____
6.c	_____	_____

ANNEX A: Bibliography

1. Author, title, year of publication, name of publisher.
2.
3.
4.

(Page number)

CLASSIFICATION

ASSISTANT CHIEF OF STAFF, FACILITIES
HEADQUARTERS, MARINE CORPS BASE

DATE 8/15/89

TO:

BASE MAINT O
PUBLIC WORKS O
COMM-ELECT O
DIR., NAT. RESOURCES & ENV. AFFAIRS
DIR, FAMILY HOUSING
DIR, UNACCOMPANIED PERS HSG
BASE FIRE CHIEF

ATTN: Julian

1. Attached is forwarded for info/action.

Returned. The staff study was dismissed

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

Has been overcome by events.

3. Your file copy.

Col S

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

MCBCL 5216/21 (REV. 6-83)

27 July 84

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

11000
NREAD

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

Subj: PROPOSED CLEARING AND DRAINAGE OF K-2 IMPACT AREA

Encl: (1) Map of K-2 Impact Area

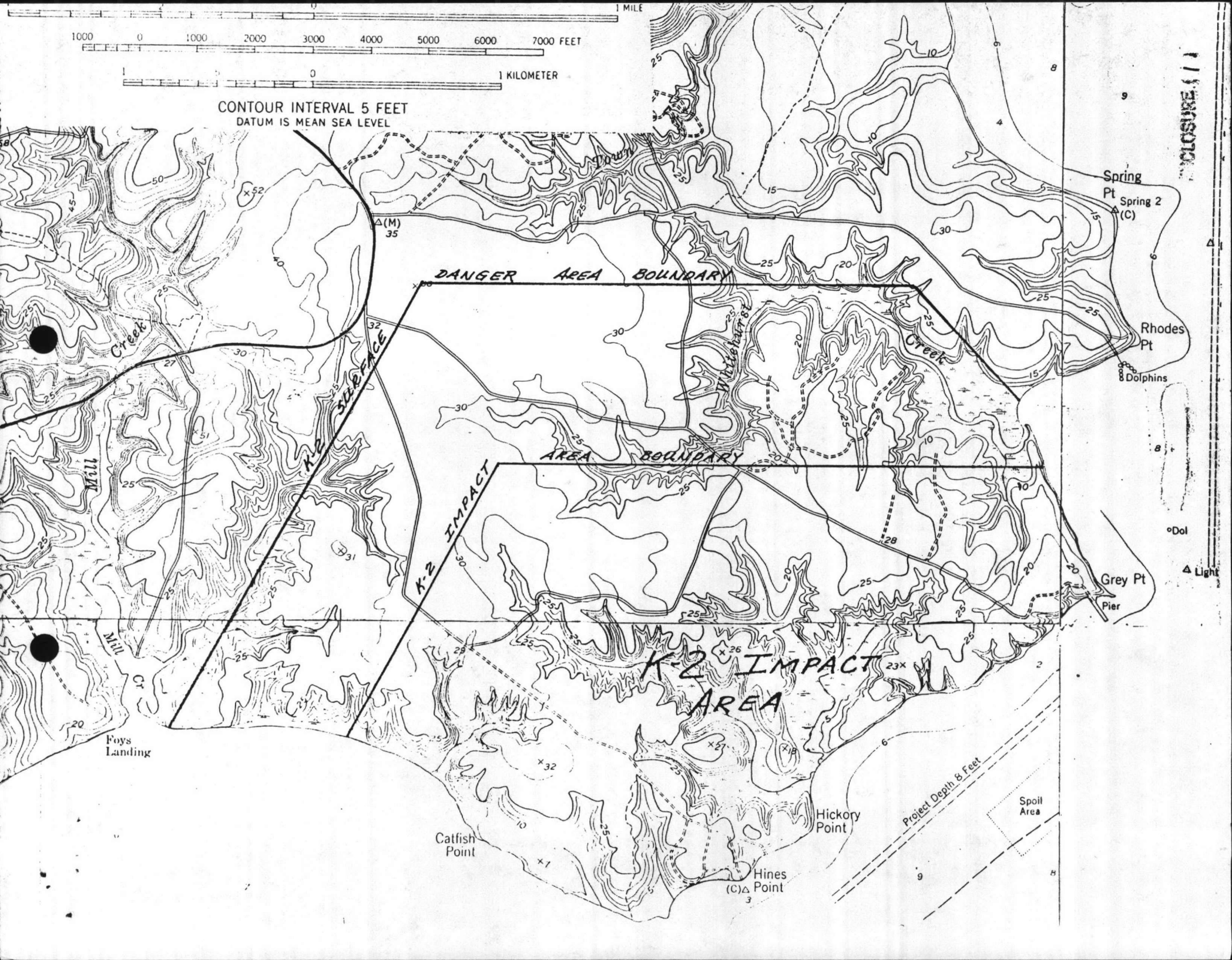
1. The Director, Natural Resources and Environmental Affairs Division (NREAD) has been assigned the responsibility of doing the subject staff study. The purpose of the study is to determine the alternative for clearing the subject area which strikes an acceptable balance between achieving the military objectives of the project and compliance with public policy on environmental protection.

2. It is requested that an officer be assigned by Assistant Chief of Staff, Training to serve as liaison between the NREAD personnel conducting the study and military units whose training objectives require the subject clearing. It is also requested that you prepare a map of areas to be cleared and areas to be drained using the enclosure.

3. Point of contact is Mr. Julian Wooten, Director, NREAD, extension 5003.

M. G. LILLEY

Writer: J. Wooten, NREAD, ext 5003
Typist: T. Hardison, 27 July 1984


1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 KILOMETER
CONTOUR INTERVAL 5 FEET
DATUM IS MEAN SEA LEVEL
DANGER AREA BOUNDARY
AREA BOUNDARY
K-2 SURFACE
K-2 IMPACT
K-2 IMPACT AREA
Mill Creek
Mill Cr
Foys Landing
Catfish Point
Hickory Point
Hines Point
Spring Pt
Spring 2
Rhodes Pt
Dolphins
Grey Pt
Pier
Dol
Light
Spoil Area
Project Depth 8 Feet
EXHIBIT 1

Peter Black

DEPARTMENT OF THE NAVY
OFFICER IN CHARGE OF CONSTRUCTION
RESIDENT OFFICER IN CHARGE OF CONSTRUCTION
NAVAL FACILITIES ENGINEERING COMMAND CONTRACTS
CAMP LEJEUNE, NORTH CAROLINA 28542

IN REPLY REFER TO
11000
OICC
4 Sep 84

MEMORANDUM

From: Officer in Charge of Construction, Jacksonville, NC Area, Camp Lejeune
To: Assistant Chief of Staff, Facilities, Marine Corps Base, Camp Lejeune

Subj: CLEARING OF K-2 IMPACT AREA

Encl: (1) K-2 Impact Area Timber Sale Contract Analysis
(2) Summary of FY 84 Timber Sale Contracts for Camp Lejeune
(3) Dir NREAD memo of 29 Aug 84 to ROICC

1. Enclosure (1) provided contracting issues relative to a timber sale to achieve the subject clearing. Inter alia was included an estimate of a maximum timber sale price of $70,000. This price was based on NREAD forester's estimates of total wood with the following extensions:

a. In view of shrapnel and projectile contamination, it was presumed that all wood would be saleable as pulpwood only.

b. It was presumed that with possible pulpwood contamination as well and the requirement to clear cut the entire area, the pulpwood would yield the low range of pulpwood timber sale prices achieved during FY 84. Enclosure (2) applies. Moreover, in view of all work associated with the clear cut requirements, this pulpwood price represents a maximum sale price.

2. Enclosure (3), however, advises of a possible sale range from $70,000 to $1,000,000. This sale range provided by the Director NREAD is not supportable in that no one from the NREAD has physically been in the proposed timber sale area. In view of that, estimates provided in enclosure (1) are considered the most reasonable based on known information. Accordingly, to determine if the enclosure (1) estimate of $70,000 is truly reasonable or not, additional facts must be gathered and those facts can only be gathered by a forester physically surveying the impact area just as a contractor would have to survey the area prior to submitting his timber sale bid.

3. Should the foresters at NREAD persist in the contention that the K-2 area is too hazardous for them to conduct a survey, then the following conclusions maintain:

a. It is likewise too hazardous an area to have prospective bidders surveying the area and the Government presuming liability for any accidents.

b. The enclosure (1) estimate would be the most reasonable estimate and should maintain as the Government estimate of timber value.

c. Under any circumstances as a Contracting Officer, I am required to make a determination that a bid is reasonable before award is made. The range of prices proposed by enclosure (3) precludes determination of reasonable bid in view of the large range in price.

Subj: CLEARING OF K-2 IMPACT AREA

4. Notwithstanding the above and in absence of a detailed estimate of timber value developed from a NREAD forester's physical survey of the area, it is concluded that if the area is too hazardous for a Government forester to survey, it is too hazardous for a timber sale contract.

C. A. JOHANNESMEYER

Copy to
NREAD

K-2 IMPACT AREA

GIVEN

- 1,000 Acres containing estimated 1,200,000 cu. ft. of wood.
- Area used as impact/range since 1940's and may contain unexploded ordnance and does contain, to unknown degrees, shrapnel and bullets in trees.
- Require K-2 Area to be clear cut to increase range use.

PROBLEM

- Should timber sale accompany clear cut

FACTS FROM CONTRACTING ISSUES

- OICC JAX has verbal O.K. from Norfolk to execute timber sale contract but General Counsel must review specs re
  1. Clauses concerning potential for unexploded ordnance and results of EOD survey.
  2. Clause concerning potential for contaminated timber.
- Potential for bidders in this case including a hazard risk and a contamination risk was considered minimal by LANTDIV Forester. Local Forester informal survey results were large loggers - No/small loggers - Yes.
- Anticipated price for clear cut timber sale unknown. However, local Forester (who considers area too hazardous to enter) estimates following: 1,200,000 cu.ft. of timber. In view of contamination risk all is potential pulpwood, although large shrapnel constitutes pulpwood contamination. Excluding potential risks here, pulpwood in this location would yield around $5/cord. (Cord + 4'x4'x8' = 128 cu. ft. stacked = 85 cu. ft. wood). Thus, the maximum sale is $70,000. $(1{,}200{,}000 \times \frac{\$5}{85})$.
- Government would not escape under any clause ultimate liability for unexploded ordnance.
- Discounting of maximum sale price for explosive risk and contamination risk is unknown - as stated above may result in no appreciable price or no bids.

ENCL (1)

- Execution times follow:

1. 2 weeks prepare spec.
2. 4 weeks for LANTDIV review/approval/advertise.
3. 4 weeks advertise (may be insufficient time for small logger survey of timber in 1,000 acre area).
4. 2 weeks award receipt of payment and bonds.
5. 2 weeks mobilize.
6. 4 months of 100% production to clear. (Small logger assume four crews 10 acres a day 6 days a week = 17 weeks.)
7. 3 months non-production (includes nil production in Jan, Feb, March due to moisture and inevitable equipment problems.)

- Impact area must be dormant from BOD survey to completion of clearing.

SUMMARY

- Timber sale contract is possible to develop.
- Execution time 10½ months to completion of clear cut.
- Value to U. S. Government unknown. Knowns follow:
  - Maximum possible sale $70,000.
  - If a sale is possible it would not be a certainty until bid opening, a 2½ month lead time.
  - Any government incurred liability due to explosives would render net loss to sale at any price.

UNITED STATES MARINE CORPS
Natural Resources and Environmental Affairs Division
Marine Corps Base
Camp Lejeune, North Carolina 29542

IN REPLY REFER TO

11010
NREAD
29 Aug 1984

From: Director, Natural Resources and Environmental Affairs Division
To: Resident Officer in Charge of Construction, Jacksonville, North Carolina Area

Subj: K-2 IMPACT AREA; ESTIMATED VALUE OF TIMBER TO BE CLEARED IN

Ref: (a) FONECON btwn Mr. E. Rouse, PW and Mr. P. Black, NREAD on 29 Aug 1984

1. During the reference, the following volumes and values were estimated for subject area. Using 85 cubic feet of solid wood per cord, it was determined that there are approximately 14,117 cords in the area. Using 6,000 pounds/cord, this would calculate that there are 42,352 tons of wood in the area. The price could range from $1.66/ton ($5.00/cord) to $25.00/ton ($150/MBF) which would equate a dollar value range from $70,304 to $1,058,800.

2. For additional information, please contact Peter Black at 2083 or 2195.

J. I. Wooten
J. I. WOOTEN

ENCL(2)

R	NUMBER	AWARD DATE	CHANGE ORDER	TYPE TIMBER	QUANTITY		UNIT PRICE	TOTAL PRICE	TOTAL CONTRACT
Squires Timber Co									
er Co.	N62470-84-S-7818	31 Jan 84		Pine Pulpwood	10	CDS	$ 9.00	$ 90.00	
			P01 - Add'l	Pine Pulpwood	50	CDS	9.00	450.00	$ 540.00
Henson Pulpwood									
ood Co.	N62470-84-S-7819	31 Jan 84		Pine Pulpwood	10	CDS	9.00	90.00	
			P01 - Add'l	Pine Pulpwood	50	CDS	9.00	450.00	540.00
Georgia Pacific									
fic Corp.	N62470-84-S-7826	30 Sep 84	(SEEDTREE)	Pine Sawtimber	546.000	MBF	160.16	87,447.36	
				Pine Pulpwood	76	CDS	5.00	380.00	
			P01 - Add'l	Pine Sawtimber	27.5	MBF	160.16	4,404.40	
				Pine Pulpwood	19.12	CDS	5.00	95.60	
			P02 - Add'l	Pine Sawtimber	103	MBF	106.16	16,496.48	
				Pine Pulpwood	40.704	CDS	5.00	203.52	109,027.36
New River Wood									
od Corp.	N62470-84-S-7847	26 Jan 84	G-6 RANGE	Pine Sawtimber	77	MBF	130.00	10,010.00	
				Pine Pulpwood	146	CDS	10.00	1,460.00	11,470.00
Henson Pulpwood									
ood Co.	N62470-84-S-7895	15 May 84		Pine Sawtimber	133	MBF	115.00	15,295.00	
				Pine Pulpwood	231	CDS	10.00	2,310.00	
			P01 - Add'l	Pine Sawtimber	121.93	MBF	115.00	14,021.95	
				Pine Pulpwood	130.47	CDS	10.00	1,304.70	
			P02 - Add'l	Pine Pulpwood	52.2	CDS	10.00	522.00	33,453.65

SPB

ENCL (3)

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

IN REPLY REFER TO
11000
EOD
26 July 84

From: Explosive Ordnance Disposal Officer
To: Assistant Chief of Staff, Training

Subj: NREAD COMMENTS CONCERNING K-2 IMPROVEMENT PROJECT

Ref: (a) Director NREAD ltr 11000/4 over NREAD dtd 23 JUL 84
(b) Ecologists ltr 11000/5 over NREAD dtd 23 JUL 84
(c) Wildlife Manager ltr 11015/1A over NREAD dtd 23 JUL 84
(d) Forester ltr 11000/2 over NREAD dtd 24 JUL 84
(e) Ecologists ltr 11000/5 over NREAD dtd 23 JUL 84

1. References (a) through (e) have been carefully reviewed. The first request for range improvements in the K-2 Impact Area was submitted on 19 January 1984. Since that time numerous offers for NREAD to inspect or review the K-2 Impact Area have been made. Because it is the poicy of NREAD not to go into impact areas, even with EOD escort, they have not taken advantage of these opportunities. Their letters while well written are of little value without on site vists of the areas in questions and constantly refer to "MAY AFFECT SITUATIONS". I believe the Amended PEA submitted on 11 July 84 effectively covers all areas of concern. Base on consultation with the Base Environmental Engineer and SJA office and our prepared presentation to the EIRB; I believe the PEA will be recommended for approval by the Commanding General.

2. The following comments refer to reference (a):

a. Para. 1.a. - The Amended PEA is still correct. There are no known endangered species in the area to be cleared. The newly found Red-Cockaded Woodpecker Site is on Range K-303's right flank and will not be affected by the clearing. The American Alligators and their habitat in Whitehurst Creek will be avoided during clearing.

b. Para. 1.b. - Ditching and clearing operations in the Whitehurst and Mill Creek area have been reviewed by Earnie Jenkins of the U. S. Army Corps of Engineers. Increase fresh water flow is estimated at less then 5 cubic feet per second which is an acceptable amount.

c. Para. 1.c. - Archaeological and Historical considerations are covered in detail in the Amended PEA and are correct.

d. Para. 1.d. - A request for a permit to drain the K-2 wetlands was requested from the U. S. Army Corps of Engineers and has been accomplished. Correspondence is forthcoming from the Corps of Engineers granting permission to conduct the project under a "National Permit". Liaison with the Army Corps of Engineers was addressed in the Amended PEA.

e. Para. 1.e. - There is no requirement to file a Federal Consistency Statement with the North Carolina Office of Coastal Management because there will be no construction within 75' of tidal waters.

f. Para.1.f. - A Sedimentation Control Plan is not required to be submitted to the State of North Carolina as per SJA opinion of 10 September 1980. However, sedimentation control is addressed in the Amended PEA and good construction practices will be followed.

g. Para. 1.g. - This project is not a major federal action and does not require a EA. It is classified as Routine Range Maintenance and will not change the primary purpose of the Range.

h. Para. 2 - A Sedimentation Control Plan is not required to be submitted to the State of North Carolina as per SJA opinion of 10 September 1980. HOwever, sedimentation control is addressed in the Amended PEA and good construction practices will be followed.

i. Para. 3 and 4 - I am not involved in these two projects.

j. Para. 5 - I don't agree that the SJA and the Environmental Engineer have provided inaccurate information. However, I do agree that there are some conflicts within the NREAD staff and other sections.

3. The following comments refer to reference (b):

a. Para. 1.a. - Previously addressed in this letter para.2.b.

b. Para. 1.b. - Previously addressed in this letter para. 2.d.

c. Para. 1.c. - Previously addressed in this letter para. 2.a.

d. Para. 1.d. - The habitat of the American Alligator is addressed in this letter para. 2.a. The Dionaea Muscipula (Venus Fly Trap) and Sarracenia (Pitcher Plants) are identified as endangered species that MAY BE AFFECTED by the subject project. However, these plants have not been identified as existing in the K-2 Impact Area in any known previous studies. I believe these plants have been misclassified by NREAD as endangered but in fact are protected species. These same plants were identified in the G-10 Improvement Project by NREAD and to date no evidence has been submitted indicating that these plants were damaged.

e. Para. 2.a. - Previously addressed in this letter in para.2.e.

f. Para. 2.b. - Previously addressed in this letter in para. 2.f.

g. Para. 2.c. - Previously addressed in this letter in para. 2.a.

h. Para. 2.d. - Previously addressed in this letter in para. 2.g.

i. Para. 3 - Previously addressed in this letter in para. 2.g.

j. Para. 4 - I disagree; the K-2 project should be put before the EIRB. NREAD has advisory members on the EIRB and have the opportunity/responsibility to present the EIRB with all available information. It is the responsibility of the EIRB not NREAD to determine whether proposed projects meet all legal and moral requirements before recommending approval to the Commanding General. NREAD is the only agency at Camp Lejeune that is represented by two voting members (AC/S, Facilities and Base Maintenance Officer) on the EIRB. Even if the EIRB approves a project that does not meet with the approval of NREAD there are procedures for writing a Minority Opinion. The final decision rests with the Commanding General.

4. The following comments refer to reference (c):

a. Para. 1 - Previously addressed in this letter para. 2.a.

b. Para. 2 - Previously addressed in this letter para. 2.a.

c. Para. 3 - Previously addressed in this letter para. 2.b., 2.d., and 2.e.

d. Para. 4 - Previously addressed in this letter para. 2.c.

5. The following comments refer to reference (d):

a. I find no faults with the comments provided by the Base Forester. He obviously knows his job and has provided the most accurate information available.

b. It is my opinion that the sale of timber in K-2 is worthwhile. However, because of the short lead time remaining, I believe it will be overcome by events.

6. The following comments refer to reference (e):

a. Para 1 - The correct PEA format was followed. The PEA for the Tracked Vehicle Trail Rhodes Point was submitted before distribution of the new PEA format was made. All information necessary was included.

b. Para. 2 - Concur.

c. Para. 3 - Engineering support from Base Maintenance is being used for construction. A Sedimentation Control Plan is not required to be submitted to the stae as per SJA opinion of 10 Septembet 1980. However, sedimentation control is addressed in the PEA and good construction practices will be followed.

d. Para 4 - No Sedimentation Control Plan is needed for the state. Concur that no EA is required.

7. It is my opinion that any "Environmental Study" done on past or currently under way range projects will show that NO SIGNIFICANT ENVIRONMENTAL DAMAGE HAS BEEN DONE! I believe that we sould and do follow the "Letter of the Law" but leave the interpreting of those laws to the legal experts. Additional information on the proposed projects is and has been available upon request for anyone having a valid interest. I believe it is time to stop throwing poison pens at each other and get to work fulfilling the mission of this base.

H. B. Redmond Jr.
H. B. REDMOND JR.

Copy to:
Range Control Officer

Pete

11000/4
NREAD
14 Aug 1984

From: Director, Natural Resources and Environmental Affairs Division, Marine Corps Base, Camp Lejeune
To: Assistant Chief of Staff, Facilities, Marine Corps Base, Camp Lejeune

Subj: ENVIRONMENTAL ENHANCEMENT/IMPACT REVIEW BOARD MEETING SCHEDULED FOR 14 AUGUST 1984

Ref: (a) Mtg btwn AC/S FAC and Dir, NREAD on 13 Aug 1984

Encl: (1) Dir, NREAD ltr 11000/4 NREAD of 23 July 1984

1. Per our discussion during the reference, the K-2 Impact Area clearing/drainage PEA has been reveiwed again and it has been concluded that my comments, the enclosure, are appropriate. Per the reference, copies of the enclosure are attached and it is recommended they be provided each board member during the subject meeting. Further, it is respectfully requested the enclosure be included as an enclosure to the minutes of the meeting. I do not plan to make an oral presentation, however, I will be available to answer questions.

JULIAN I. WOOTEN

11000/4
NREAD
23 July 1984

From: Director, Natural Resources and Environmental Affairs Division, Marine Corps Base, Camp Lejeune
To: Assistant Chief of Staff Facilities, Marine Corps Base, Camp Lejeune

Subj: Environmental Enhancement/Impact Review Board Meeting Agenda for 24 July 1984; comments concerning

Ref: (a) AC/S FAC memo 5420/2 FAC of 18 July 1984

Encl: (1) Comments on Proposed K-2 Impact Area/Drainage and Clearing
(2) Comments on Tracked Vehicle Trail
(3) Comments on LAV Operations in Hoffman Forest
(4) Comments on LZ Bluebird Repair Project

1. Preliminary Environmental Assessments (PEA) furnished and scheduled by the reference for review by the Environmental Impact Review Board (EIRB) on 24 July 1984 have been reviewed and discussed by members of the NREAD staff and comments/recommendations are provided as enclosures (1) - (4). Although there are some minor variations between Mr. Peterson and Mr. Sharpe's comments our conclusion relative to the PEA's are essentially the same. Pertaining to K-2 Impact Area Clearing and Drainage Project, the following issues are not addressed or are not adequately addressed or there are inaccurate statements, i.e.:

a. There are endangered species (Red-Cockaded Woodpeckers and American Alligators) in the proposed project area requiring formal consultation with the US Fish and Wildlife Service.

b. Whitehurst Creek and Mill Creek are classified by state as primary nursery area. These areas will probably be impacted by the clearing and drainage of K-2 due to accelerated fresh-water flow.

c. The Base Archaeological and Historical Survey of 1981 showed part of the K-2 area as being sensitive and it is recommended consultation with the state Archives and History personnel be completed before clearing and drainage work begins.

d. Drainage of K-2 area wetlands requires review by the Army Corps of Engineers before work begins.

Subj: Environmental Enhancement/Impact Review Board Meeting Agenda for 24 July 1984: comments concerning

e. File a Federal Consistency Statement with the NC Office of Coastal Management.

f. Submittal of a sedimentation control plan to the state prior to beginning the work in the K-2.

g. In my opinion, outside agencies may consider the K-2 project a major federal action because of impacts on endangered species, wetlands, primary nursery areas and archaeological and historical resources. In my opinion an Environmental Assessment (EA) is required by Headquarters Marine Corps because of both the environmental impact and the potential for controversy.

2. The reference gives the Director, NREAD credit for preparing the PEA for the construction of track vehicle trail from Rhodes Point to TLZ Cardinal. NREAD provided information for the PEA but did not prepare the document. It is this Division's position that a sedimentation control plan approved by the state is required.

3. Pertaining to LAV operation in Hoffman Forest, NREAD is of the opinion there will be conflict between LAV and general public use of the area. Headquarters Marine Corps approved EA is required. A state approved sedimentation control plan is required.

4. Pertaining to LZ Bluebird repair, it is recommended base consult with the State Department of Archives and History pertaining to possible artifacts under the matting, as well as adjacent areas. A state approved sedimentaiton control plan is required.

5. Earlier this year I discussed conflicts that were arising between the Environmental Engineer and me and my staff with you. Also, I expressed concern about some of the comments I was hearing from LtCol Cummings pertaining to NREAD matters and how the base should handle the matter as related to management and consultation with off base personnel. Pertaining to paragraphs 3 and 4 of Mr. Sharpe's portion of enclosure (1), I agree with Mr. Sharpe's statement that the Environmental Engineer and SJA have provided inaccurate information which has the base in a potentially embarrassing position.

J. I. WOOTEN

DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1890
WILMINGTON, NORTH CAROLINA 28402

IN REPLY REFER TO

SAWCO-EP

6 August 1984

SUBJECT: Clearing and Draining Activities in K-2 Impact Area

Commanding General, Marine Corps Base
ATTN: Assistant Chief of Staff, Facilities
Camp Lejuene, NC 28542

1. On 18 July 1984 Mr. Ernest Jahnke of my staff met with the following personnel of your office: Mr. Robert Alexander, LT Ben Redmon, and MSG Dennis L. Lecher. The purpose of this meeting was to discuss proposed clearing and drainage activities in the K-2 Impact Area.

2. As I understand, most of the K-2 Impact Area will be cleared of standing vegetation. This is to facilitate observation during firing exercises and to allow controlled burning to safely maintain the area for this purpose. A Department of the Army permit is not needed for this work and may be undertaken at your convenience.

3. The preliminary locations of most drainage alignments are not within the Corps of Engineers regulatory jurisdiction and will not need permits. Work in Whitehurst Creek and its flood plain is currently authorized under nationwide permit. This is also applicable to a number of unnamed tributaries of the New River. However, pending changes in our regulations may bring these areas into the individual permit process unless it is accomplished before they become effective. On this basis, Mr. Alexander has agreed to formally submit a drainage plan to this office. It is tentatively projected that all work in the K-2 Impact Area will be completed by 31 October 1984.

4. LT Redmon advised that a ditch is to be constructed parallel to but outside of a wooded area in the K-303 range which contains nest cavities of the red-cockaded woodpecker (Picoides borealis). To his knowledge this is the only site within the K-2 Impact Area containing this endangered species. As he explained, the timber in that location will be left undisturbed to protect this habitat. Although the site is not within our area of responsibility, I commend your staff for their conservation efforts and concern in this matter.

5. Thank you for coordinating your plans with this office. If you have questions, please contact Mr. Jahnke at telephone FTS 671-4467.

FOR THE COMMANDER:

CHARLES W. HOLLIS
Chief, Regulatory Branch

Copy Furnished:
U.S. Fish and Wildlife Service
ATTN: V. Gary Henry
100 Otis Street, Room 224
Asheville, NC 28801

MY RESPONSE TO PEA FOR K-2 dtd 11 July & JULIANS 23 July comments

11000/2
NREAD
24 July 1984

From: Base Forester
To: Director, Natural Resources and Environmental Affairs Division

Subj: PEA FOR IMPROVEMENTS OF K-2 IMPACT AREA; COMMENTS ON

Ref: (a) EODO ltr 11000 EOD of 11 July 1984
(b) Mtg btwn AC/S FAC; DAC/S FAC; ROICC/PWO; TFO; EODO; EnvEngr; Dir NREAD, and AsstBase Forester on 17 July 1984

1. The clearing of large acreage in the K-2 Impact Area as addressed in reference (a) and discussed during reference (b) generated significant interest from some local timber procurement personnel. However, the possibility of metal contamination in the timber, and hazardous ground conditions for harvesting equipment and personnel has resulted in a greatly lowered level of interest than would be expected from uncontaminated timber.

2. If maximum effort to clearcut an area of 1,000 acres is undertaken by a major contractor, it is estimated that approximately two months would be needed to harvest the area under the most ideal circumstances. Poor weather, suppressed timber markets, equipment breakdown or accidents at the logging site or at the mill would increase the time required for the completion of the job.

3. Interest by some representatives has been high, while others wanted more information, and others expressed no interest because of the possibility of metal contaminated timber and hazardous ground conditions from unexploded ordnance. Interest is noted as follows:

a. Federal Paper Woodlands Division - Official company policy is to avoid metal contaminated timber.

b. Squires Timber Company - Procurement personnel indicate that they are interested in the proposed timber salvage provided that primary purchasers will accept the timber.

c. Hinson Pulpwood - The company is interested in possible timber salvage operations but is concerned about mill acceptance or quotas interrupting the harvest.

d. Georgia Pacific - The initial response to the proposed salvage harvest was guarded; however, after further assessment

by the company's procurement personnel, this office was informed that the company felt it to be too risky.

e. Weyerhaeuser Company - The initial response solicited from procurement personnel is that the company may be interested in the proposed salvage. They will further assess the potential for utilization of metal contaminated timber and contact this office.

P. E. BLACK

Weyerhaeuser called back 25 July and said they were not interested under any circumstances
Pete Black

Peter Black

Please provide comment

by Friday. 20th July

EIRB meeting
24 July 84

fdW

PETE I have more
info on this
JRG

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

IN REPLY REFER TO:

11000
EOD
11 July 84

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

Subj: IMPROVEMENT OF K-2 IMPACT AREA

Ref: (a) AC/S, FAC ltr 6280 over FAC dtd 20JUN84

Encl: (1) Amended PEA for Improvement of K-2 Impact Area

1. In accordance with the recommendations of the reference concerning the project described at the enclosure, the PEA has been amended and is submitted herewith.

T. B. Howard

T. B. HOWARD

Copy to:
Range Maintenance
EOD

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

IN REPLY REFER TO
11000
TRNG
11 Jul 1984

FIRST ENDORSEMENT on RCO ltr 11000 over EOD dtd 11 Jul 1984

From: Assistant Chief of Staff, Training, Marine Corps Base, Camp Lejeune
To: Assistant Chief of Staff, Facilities, Marine Corps Base, Camp Lejeune, North Carolina 28542

Subj: IMPROVEMENT OF K-2 IMPACT AREA

1. Forwarded concurring in the PEA as written.

2. As a matter of interest, additional EOD technicians from Marine Corps installations in South Carolina, Virginia and California have been requested to assist in the subject clearing operation from 5 September to 31 October 1984.

F. J. CIZERLE
By direction

Copy to:
RCO
EOD

*AMENDED

PRELIMINARY ENVIRONMENTAL ASSESSMENT

FOR

RANGE K-2

1. Enclosure. Map showing proposed range.

2. Purpose and Need. The purpose of this proposed action is to provide the Marine Corps Base, Camp Lejeune, North Carolina with a range in the Verona Loop Area to teach Marines the skills necessary for combat situations.

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

*4. Site Location. The site is located on enclosure (1). The location is currently part of the surface danger area for the K-2 Impact Area. This area has been used in the past for aerial bombardment and artillery. Because of a lack of observation due to tree growth the area has fallen to disuse. The reopening of this impact area will provide a quantum leap for the training of artillery batteries aboard Camp Lejeune.

*5. Range Characteristics. A common impact area is used for all types of mortars, artillery rounds, air delivered ordnance, and dragon missiles. Targets consist of those found in a realistic combat environment such as personnel, vehicle, aircraft, and material targets supplemented by surveyed natural terrain features.

6. Compliance with Environmental Requirements.

a. Air Quality: No emmissions are anticipated.

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

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

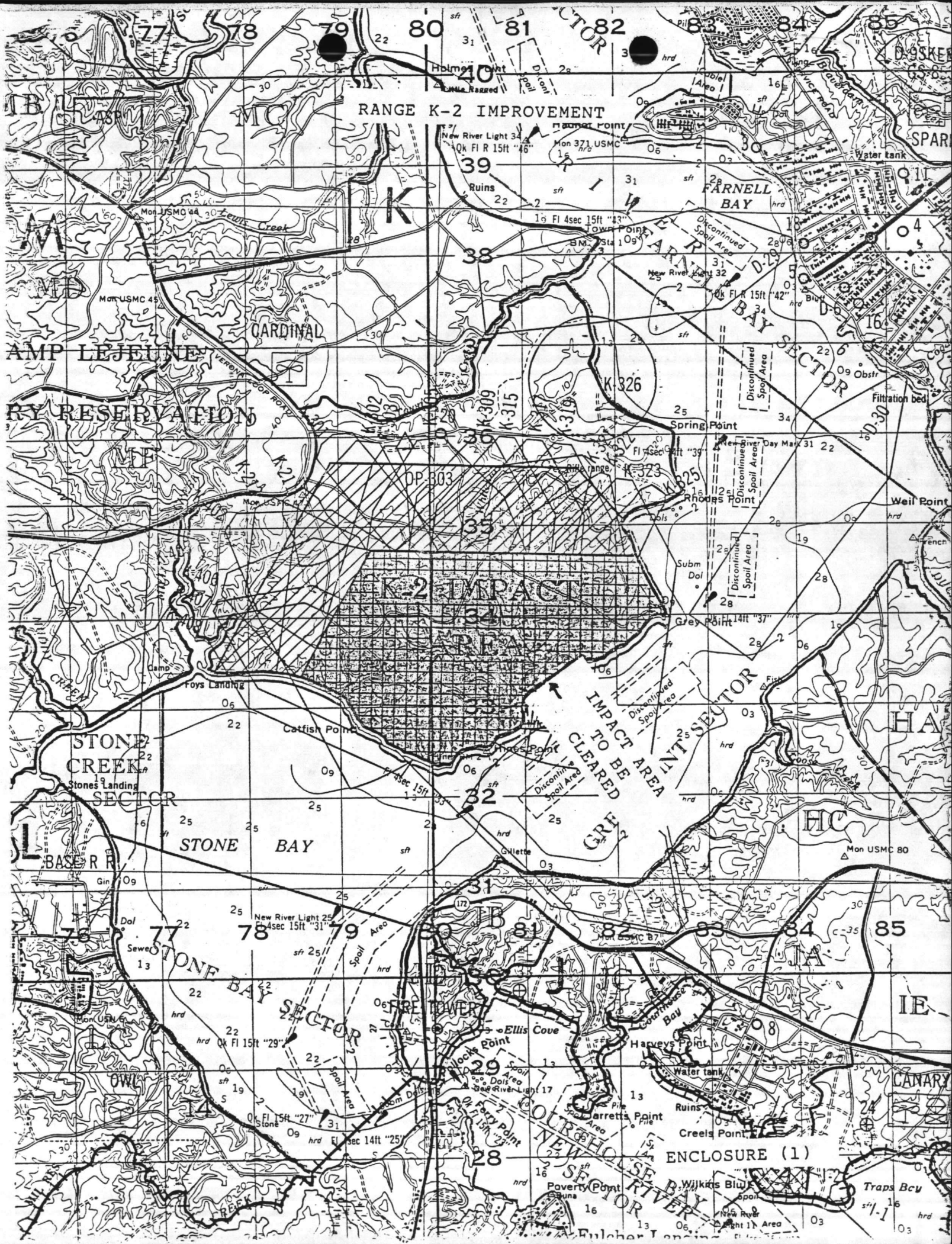
* d. National Historic Preservation Act: No significant cultural resources are located on the project site. However, in

view of the archeological sensitive area, during construction of this project extreme care will be exercised in watching for any indications of matters of historical interest/significance. In the event any evidence is found, construction will imediately be suspended pending further, detailed study and actions in accordance with appropriate directives.

*e. Executive Order 11990 Protection of Wetlands: Disturbance of wetlands will be avoided during clearing and earth moving except that approved by the U. S. Army Corps of Engineers and other agencies as required.

*f. Endangered Species Act: The impact of this project on the habitat of endangered species has been determined to be negligible. This statement is based on the determination that no endangered species are known to live in the area to be affected by clearing and earthwork. However, during construction of this project extreme care will be exercised in watching for any indications of endangered species or their habitat. In the event any evidence is found, construction will immediately be suspended pending further, detailed study and actions in accordance with appropriate directives.

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



RANGE K-2 IMPROVEMENT

ENCLOSURE (1)