

FWD:CJP:dn

NOV 15 1976

From: Commanding General  
To: Commander, Atlantic Division, Naval Facilities Engineering  
Command, Norfolk, Virginia 23511

Subj: Proposed license to Onslow County for clearance of drainage  
outfalls

Ref: (a) LANTNAVFACENGCOM ltr 241:RHS over LIC-O-558 dtd 16 Jul 1976

Encl: (1) FWO, MCB, CLNC memo FWO:JRH:Jh for AG/S, Facilities dtd  
26 Aug 1976

*Design*

1. It is requested that the license proposed in reference (a) not be issued. This is based upon review of prior correspondence relating to the subject project and current engineering evaluation by Public Works Department engineers.
2. Files at Marine Corps Base, Camp Lejeune indicate that Onslow County first contacted the Base on 5 May 1969 to request improvement of drainage through the Base in the general areas of Piney Green-Hubert and Camp Geiger. In the intervening years, numerous meetings took place among County, State (Highway Commission) and Base representatives on various aspects of the problem and all agreed that a problem does, indeed, exist. The extent of engineering work that has been accomplished to define the degree of the problem and the extent of remedial work to be undertaken has been woefully inadequate, however. Throughout the negotiations, it was understood that an easement would be issued and Marine Corps Base, Camp Lejeune insisted upon the County assuming responsibility for future upkeep. A license, since it does not require any maintenance or repair by the licensee, would not be satisfactory.
3. As outlined in enclosure (1), this Command believes that the drainage problem to the north of Highway 24 in the Piney Green-Hubert area is far too complex to be solved by the simplistic approach contained in the proposed license. It is proposed that the following course of action be pursued:
  - a. The Commanding General, Marine Corps Base, Camp Lejeune contact the new Onslow County Manager setting forth the position of the Command and request a meeting with County officials to review the problem. A letter is being prepared at this time.
  - b. The Government require that a comprehensive engineering study be conducted and a plan be developed to show proposed invert elevations

RETURN TO AG/S, FACILITIES

*Public Works*



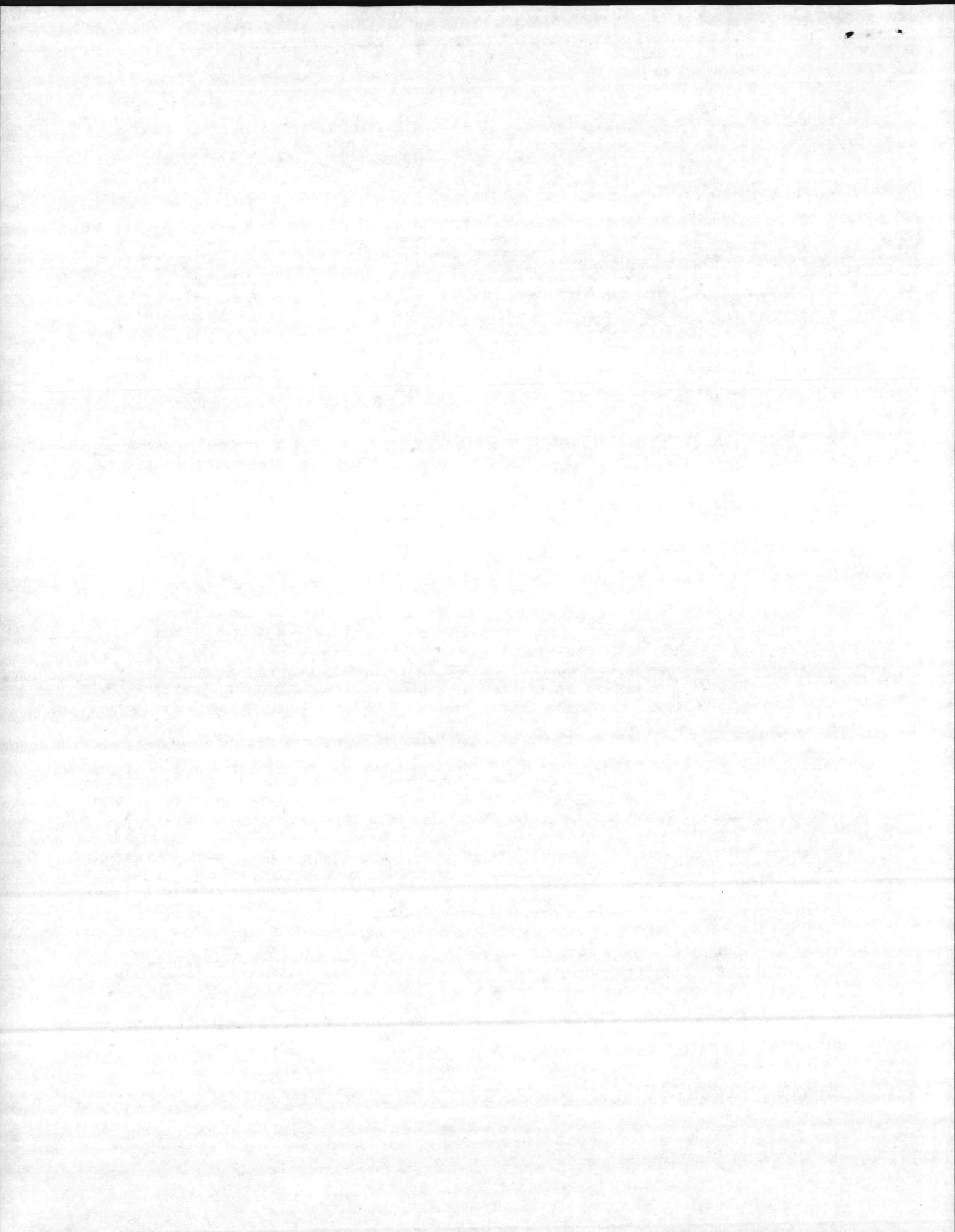
Subj: Proposed license to Onslow County for clearance of drainage outfalls

of culverts, proposed ditch bottom profiles both on and off Base property, maximum discharges to be delivered to each culvert, details of construction work to be performed on Base, and details of drainage improvement work that will be performed on the private sector side (north side) of Highway 24. The engineering plan should address the question of just how much the general water table will be lowered in various areas as a result of the proposed work and should take into account the permeability of the natural soils.

c. The Commanding General, Marine Corps Base, Camp Lejeune urge the County Manager to develop long-range zoning plans for the problem area that will insure adequate control of pollution problems. Even if the water table can be lowered appreciably, it is felt that septic tanks do not provide an adequate method of sewage disposal in the area. At present, septic tank systems are grossly underdesigned in some areas and no amount of lowering of the water table will render them adequate. This matter is of acute importance to this Command since it affects the usability of surface waters entering the Base. It is likely that various state agencies and the EPA may have substantial interests in this matter.

d. When, and if, it is decided that lowering the culverts and stream bed profiles will be of mutual benefit to the private sector and the Command, it appears that an easement is the type of instrument that should be executed. It should include requirements for the County to: (1) provide perpetual maintenance of the easement areas; (2) assume the responsibility for obtaining all necessary permits; (3) guarantee the bacteriological, biological and chemical quality of the water delivered onto the Base (standards should be stated); (4) assume responsibility for preventing erosion during and after construction; and (5) relocate all utility lines, that may be affected, in a manner satisfactory to the Command. Any easements granted to the County would have to conform with easements already granted the State for portions of the streams downstream from the culverts under Highway 24. LANTNAVFACENGCOM comments are solicited.

4. In the many deliberations that have taken place regarding this matter, an important basic fact has been overlooked or obscured; that is, that the drainage and pollution problems that are occurring today are, in many cases, the results of improper development. Contour maps dated 1951 show that this entire area was flat and swampy at that time so there is every reason to believe that the current high water table is not a recent phenomenon. The real question, then, is to what extent Marine Corps Base, Camp Lejeune should acquiesce with a request for alterations to Base property for the purpose of enhancing commercial development of off-Base property. It is the policy of this Command to cooperate with the local community to the

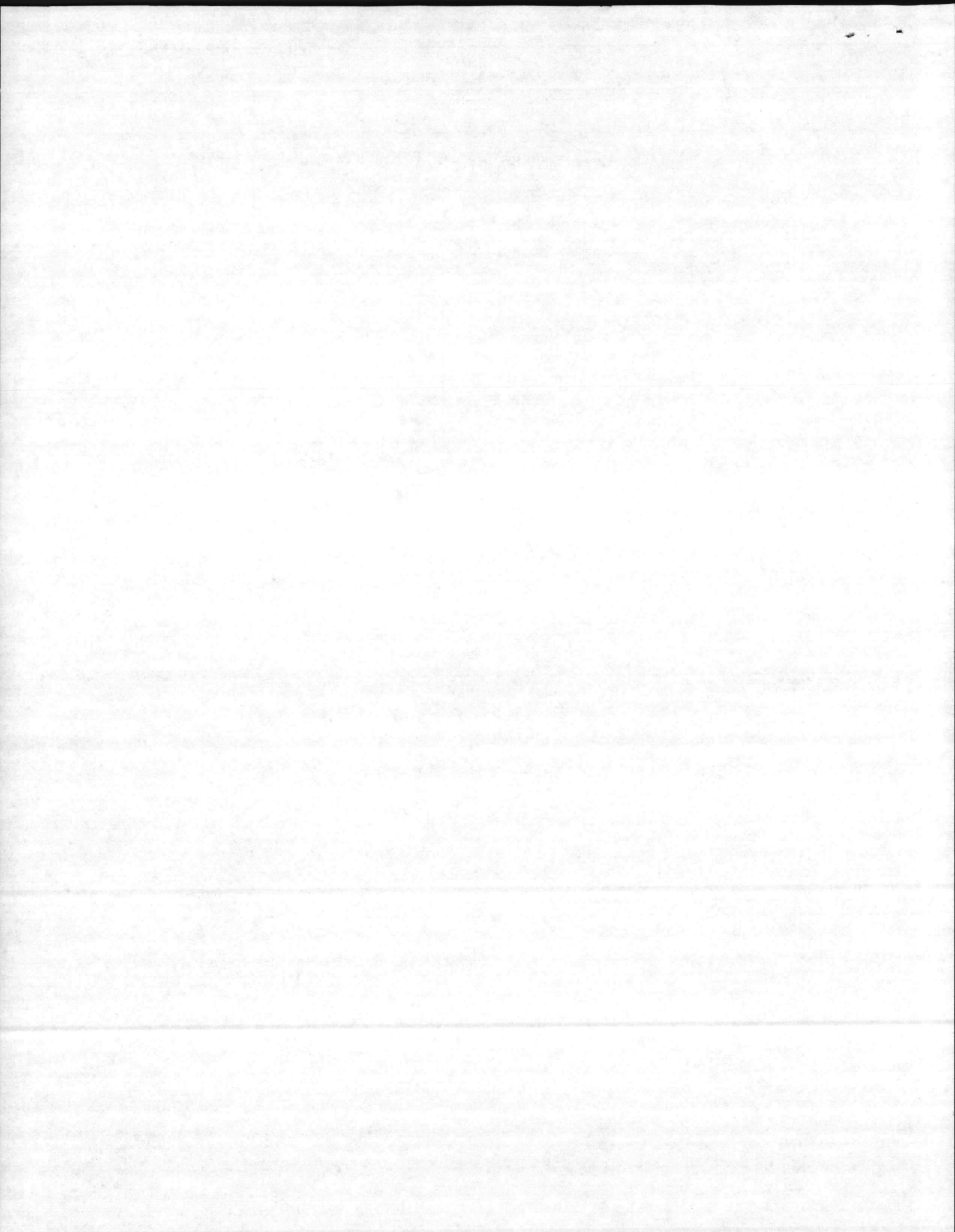


Subj: Proposed license to Onslow County for clearance of drainage  
outfalls

maximum extent consistent with Base interests but, on this particular  
problem, it is imperative that a solid determination be made that the  
plan is a good one and that the Base not incur future liabilities as a  
result of it.

B. H. CURWEN, JR.  
CHIEF OF STAFF

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





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

TELEPHONE NO.  
444-7131  
AUTOVON 690-7131  
IN REPLY REFER TO:  
20A3:JHB  
11010/CAMLEJ  
7 SEP 1976

**From:** Commander, Atlantic Division, Naval Facilities  
Engineering Command

**To:** Commanding General, Marine Corps Base, Camp Lejeune,  
North Carolina

**Subj:** MARCORB CAMLEJ Proposed License to Onslow County,  
North Carolina, for clearance of Drainage Outfalls;  
Environmental review of

**Ref:** (a) Onslow County ltr of 13 Jun 1975  
(b) Onslow County Environmental Assessment  
(c) MCO-P-11000.8A  
(d) OPNAVINST 6240.3D  
(e) Phonecon btwn MARCORB CAMLEJ (Mr. J. Powell)  
and LANTNAVFACENCOM (Mr. J. Brandon) of  
27 Aug 1976

1. Reference (a) requested authority to clear 18,374 linear feet of natural drainage features at MARCORB CAMLEJ. Reference (b) was reviewed for compliance with references (c) and (d), and is considered to be inadequate.
2. This Command feels that the proposed ditch improvements will not solve the high water table and storm runoff problems. Additionally, should the proposed improvements be implemented, MARCORB CAMLEJ will experience additional flooding problems along Wallace Creek due to the decreased concentration time of storm runoff upstream.
3. Geological surveys indicate that the soils in the vicinity of MARCORB CAMLEJ drain poorly. The fact that the water table is extremely high in this area gives some indication that subsurface drainage may be inadequate to lower the water table enough to allow proper operation of the sewage disposal systems. An extensive soil study should be made in the areas experiencing problems to verify that the proposed ditch improvements will lower the water table to the desired elevation and to verify that the sewage disposal systems will operate properly if the water table is lowered.







7 SEP 1976

4. As discussed in reference (e), onsite observations revealed that elevation of the ditches on MARCORB CAMLEJ do not control the storm runoff, but that flow is controlled predominantly upstream of MARCORB CAMLEJ property, and in some cases, by culverts running under State Highway 24. It appears that a considerable amount of channel improvements will have to be made upstream of MARCORB CAMLEJ, in the private sector, and at State Highway 24.

5. It is recommended that the Commanding General, Marine Corps Base, Camp Lejeune:

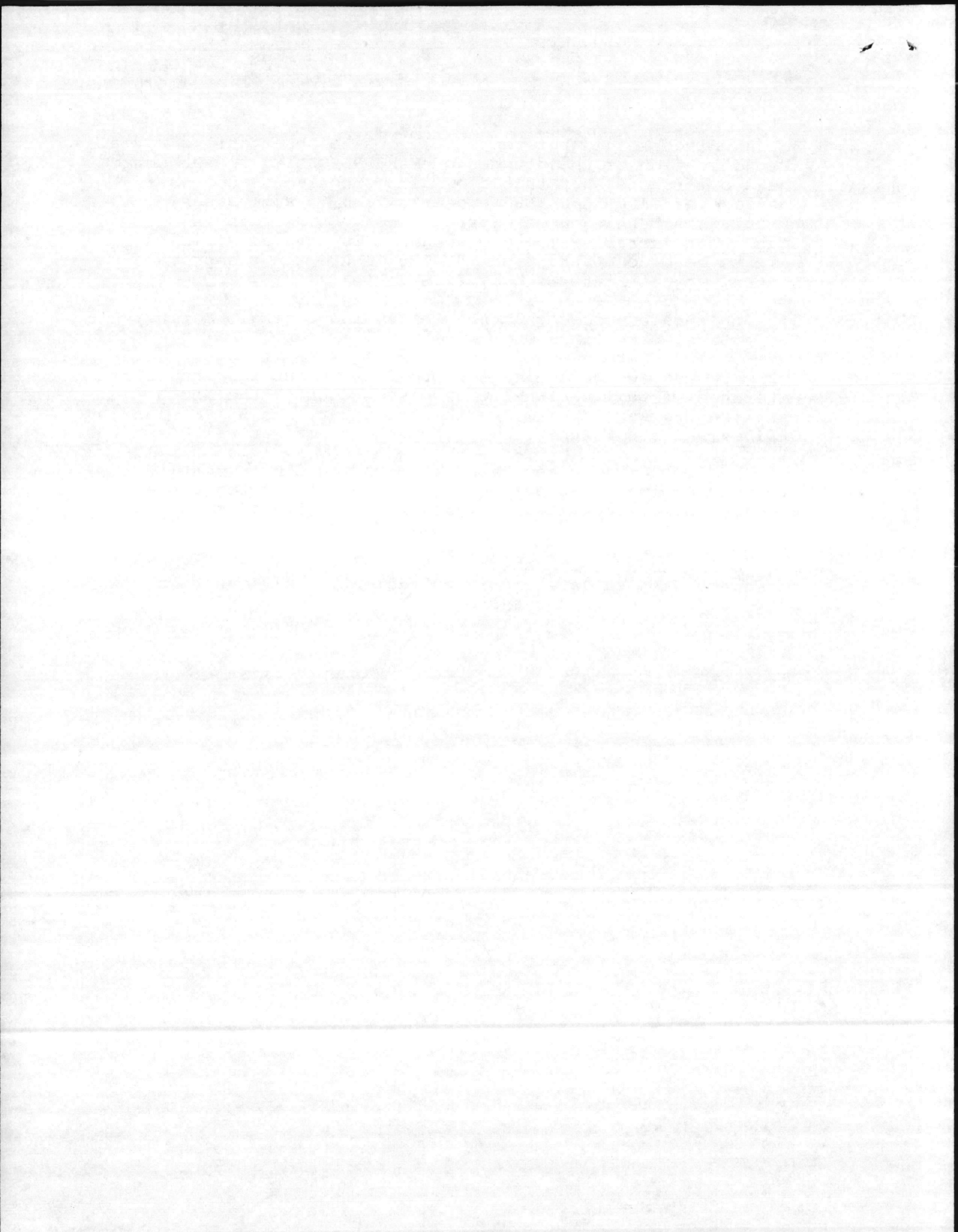
a. Review the drainage improvement plans for the entire watershed of Wallace Creek with Onslow County, the North Carolina Highway Department, the North Carolina State Planning Office, and the North Carolina Department of Natural Resources.

b. Obtain some assurance from Onslow County that the proposed drainage improvements will lower the water table to the desired elevation for proper operation of the sewage disposal systems.

c. Obtain some assurance that the soil in the areas of sewage disposal systems is sufficiently pervious to allow proper operation of the systems.



N. D. FALK  
By direction



8 Sept 76  
Called Joe  
Brandon and  
told him of  
the Base's  
position. He  
will notify  
Murray Spruill  
that Base does  
not desire to  
issue license.  
I told him our  
letter will follow.



HEADQUARTERS, MARINE CORPS BASE  
CAMP LEJEUNE, NORTH CAROLINA

Date 1 Sep 76

From: Chief of Staff.

To: ACIS Facilities

Subj:

I concur with memo and  
paras 7a, b, + c. Regarding  
last para: Consider this be  
handled through the Fr-secg

Order Development Committee (or son  
(think there  
is potential)  
interest) union ACIS for already sub  
than invitation.

In my case, new County Manager  
must be informed of MCB position  
if Co appears. Welcome to the Big Zoo

→ large - DO SO  
I 3  
7



ASSISTANT CHIEF OF STAFF, FACILITIES  
HEADQUARTERS, MARINE CORPS BASE  
CAMP LEJEUNE, NORTH CAROLINA 28542

8/30/76

Commanding General C

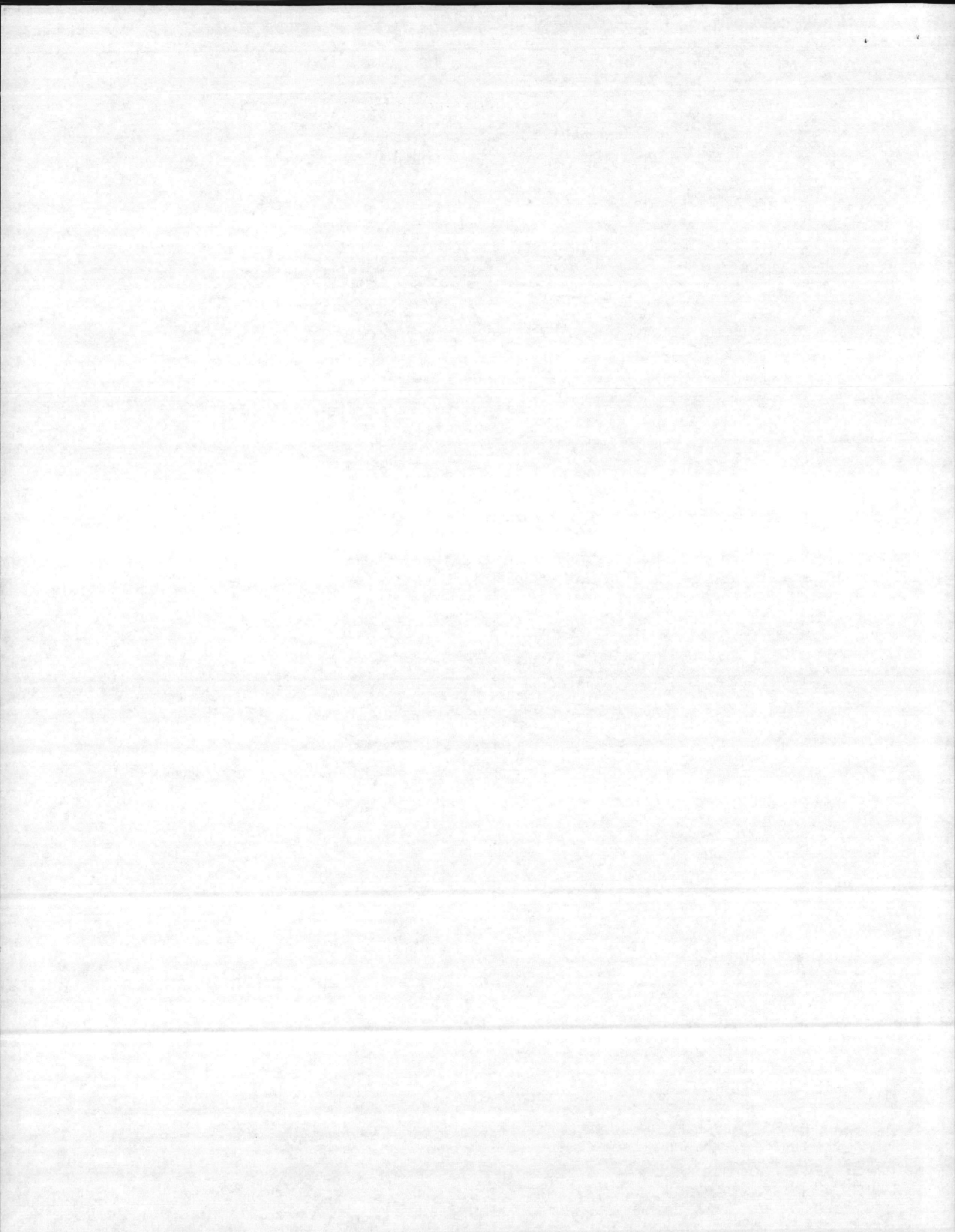
Hwy 24 drainage problems

1. Mr. Earnst, with Natural Resource  
2. and LSWD SW engineers,  
looked into proposed easement  
of Orston County.

3. stated package is forwarded for  
and gardens for future  
tion. I concur with Col's  
recommendation.

U/R

George L. ...







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

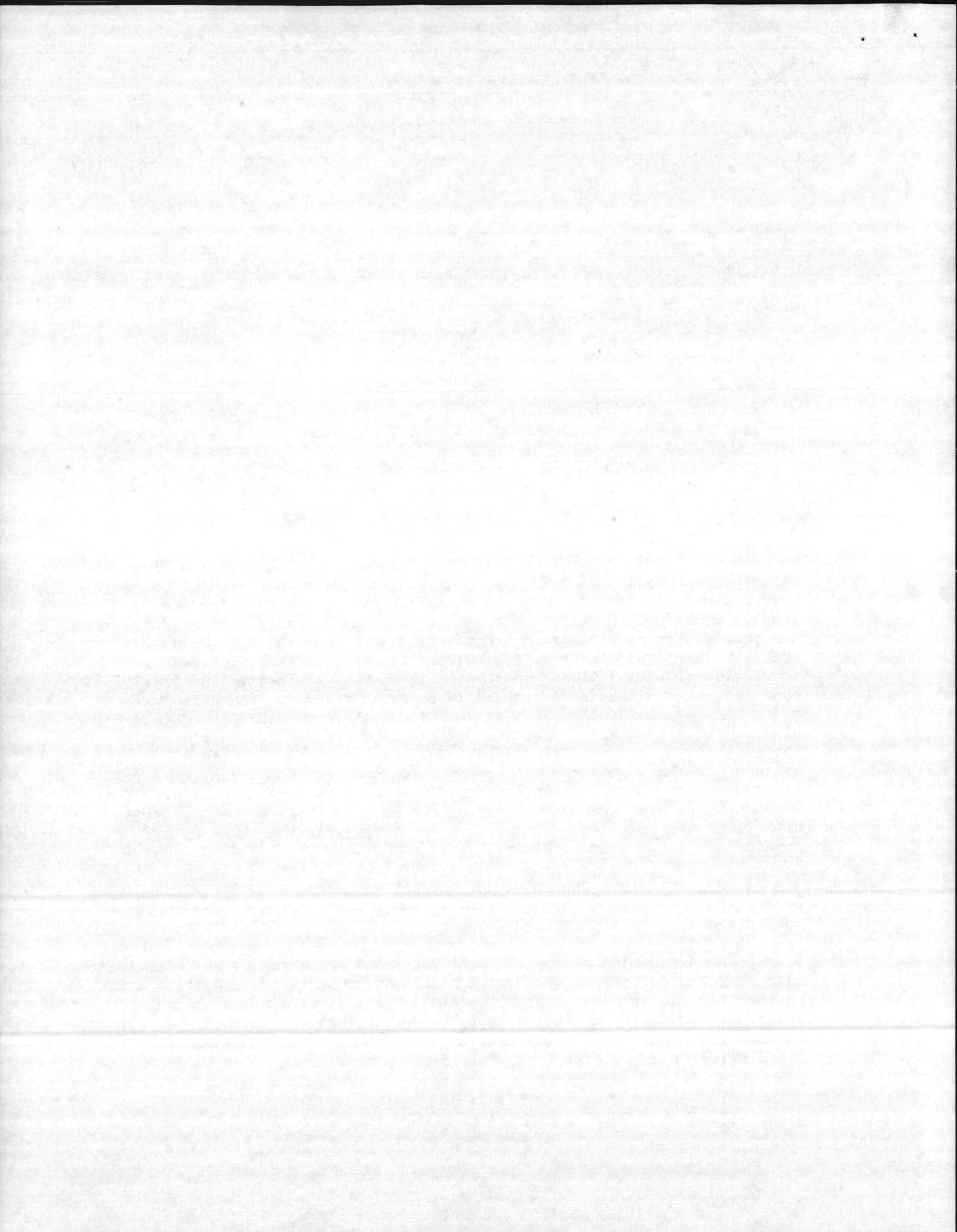
IN REPLY REFER TO  
PWO:JBH:dh  
26 Aug 1976

MEMORANDUM FOR THE ASSISTANT CHIEF OF STAFF, FACILITIES

Subj: Proposed license to Onslow County for clearance of drainage outfalls

- Encl: (1) LANTDIV ltr 241:RHS over LIC-0-558 of 16 Jul 1976  
(2) AdminO, Office of the County Commissioners, Onslow County, Jacksonville, N. C. ltr of 14 Jun 1976  
(3) Copy of Proposed License

1. Enclosures (1), (2) and (3) and all available backup information on the clearance of drainage outfalls on Government-owned land near Hwy. 24 have been reviewed.
2. On 4 August 1976, the day following a rainfall expected once in ten years for this area, Public Works Department personnel inspected the area north of Hwy. 24 between Midway Park and Hubert which drains through culverts under Hwy. 24 onto Camp Lejeune property. All of the culverts under Hwy. 24 were carrying all the storm water reaching them and flowing less than one-half full. High water marks indicated that none of the culverts had flowed full with the exception of the one draining the trailer court behind Marie's Bar and Grill. The entrance to this culvert had been constricted by trash and debris washed from the trailer court. When the debris was removed, the culvert then carried the flow reaching it without flowing full and the hydraulic control shifted to the trailer court drainage ditch itself, which is badly obstructed. The storm water had a very strong odor and was discharging pollutants onto Camp Lejeune property. Several areas north of Hwy. 24 were flooded at the time of the inspection; however, the flooding was caused by an inadequate drainage system within the flooded area and not by culverts under Hwy. 24. The outfall ditches from the culverts which flow through Camp Lejeune property were also inspected. All of the outfall ditches were carrying off all the storm water reaching them and showed no signs of ever having impeded the flow of storm water.
3. On 10 August 1976 the culverts, outfall and areas were again inspected by PWD and NREA personnel. The findings were the same as on the previous inspection.
4. It is the opinion of the PWD engineers, and concurred in by NREA, that deepening the outfall ditches on Camp Lejeune property would have no effect on the drainage or water table elevation of the areas north of Hwy. 24. It is questionable that the water table would be lowered appreciably even by lowering both the road culverts and outfall ditches. A thorough hydrological study of the area would have to be made in order to determine





STATES MARINE CORPS  
MARINE CORPS BASE  
PINE BLUFF, NORTH CAROLINA

FWO:JRH:dh  
26 Aug 1976

Subj: Proposed license to Onslow County for clearance of drainage outfalls

if the water table could be lowered. If the outfall ditches on MCB, Camp Lejeune were dredged, there would be an adverse effect on both the fauna and flora of the adjacent region and siltation or erosion problems might develop.

5. The areas north of Hwy. 24 definitely need an adequate storm drainage system to handle the surface runoff and prevent flooding; however, this will not solve the pollution problem caused by too many septic tanks too close together in low lying areas. This problem can be solved only by the elimination of faulty septic tanks and prohibiting the installation of additional ones in unsuitable areas. Even with the installation of an adequate drainage system, the danger of polluting the shallow wells in the area will exist as long as the septic tanks remain. In all likelihood, community or regional sewage treatment facilities will be required.

6. On 24 June 1971 the United States of America granted a perpetual easement to North Carolina State Highway Commission for the construction, operation and maintenance of Hwy. 24 including the drainage structures and outfall ditches. The parcels described in Addendum No. 1 to enclosure (3) include the same drainage structures and outfalls covered in the easement to N. C. State Highway Commission of 24 June 1971.

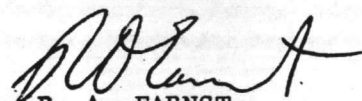
7. It is recommended that the license not be granted to Onslow County for the following reasons:

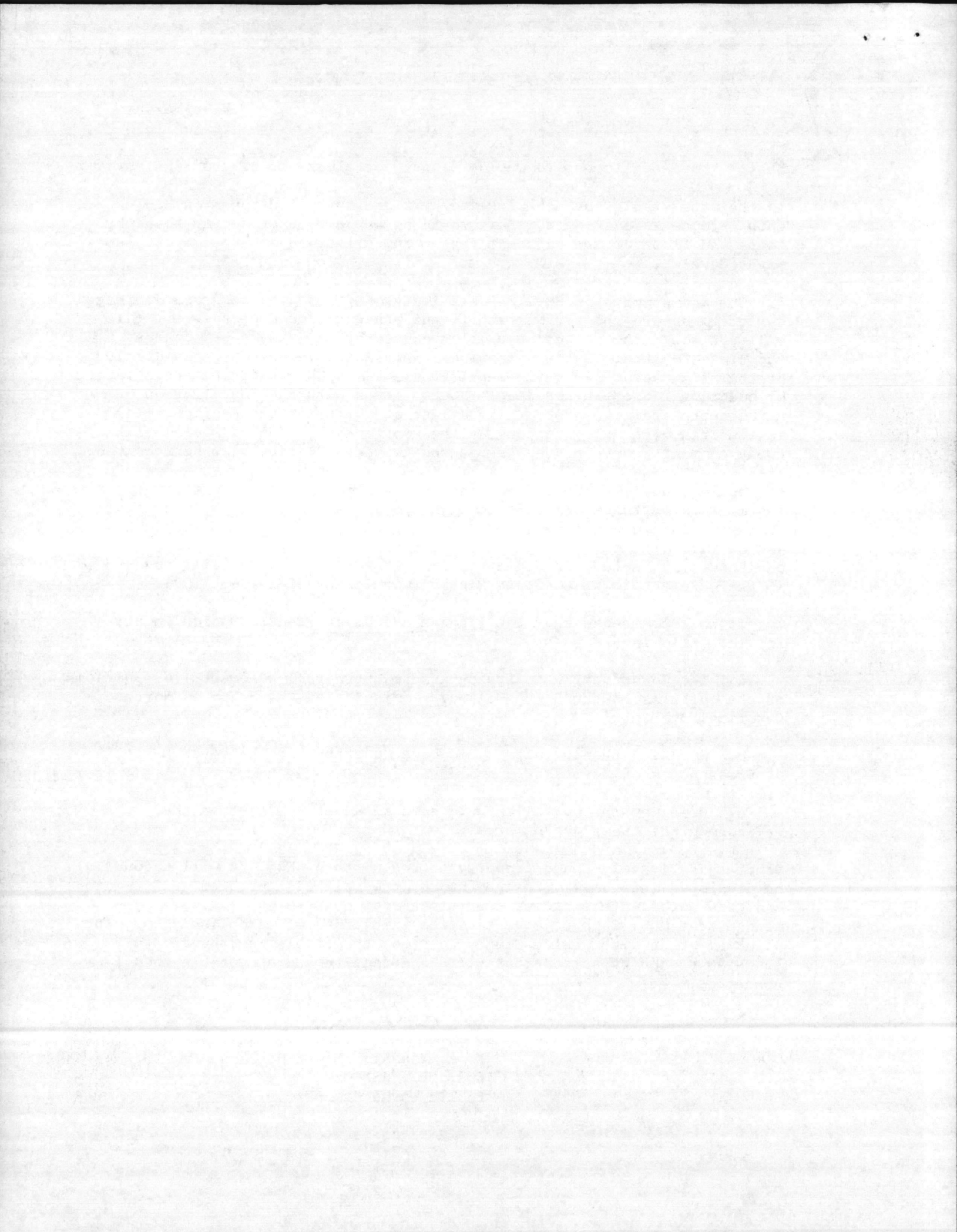
a. The Government has already granted perpetual easements for portions of the outfalls to the State Highway Commission of the State of North Carolina.

b. Dredging the outfalls would have no effect on the water table of areas north of Hwy. 24.

c. Dredging the outfalls would have an adverse effect on the environment of the adjacent areas.

Since the privately-owned property to the north of Hwy. 24 will undoubtedly be developed intensively in the future, the pollution problem will remain and grow worse unless proper corrective action is taken. It is recommended that MCB, Camp Lejeune take the initiative of establishing a joint planning group with Onslow County to study the problem and develop a long-range plan of action that will be effective and acceptable to all concerned.

  
R. A. EARNST  
CDR, CEC, USN  
Public Works Officer



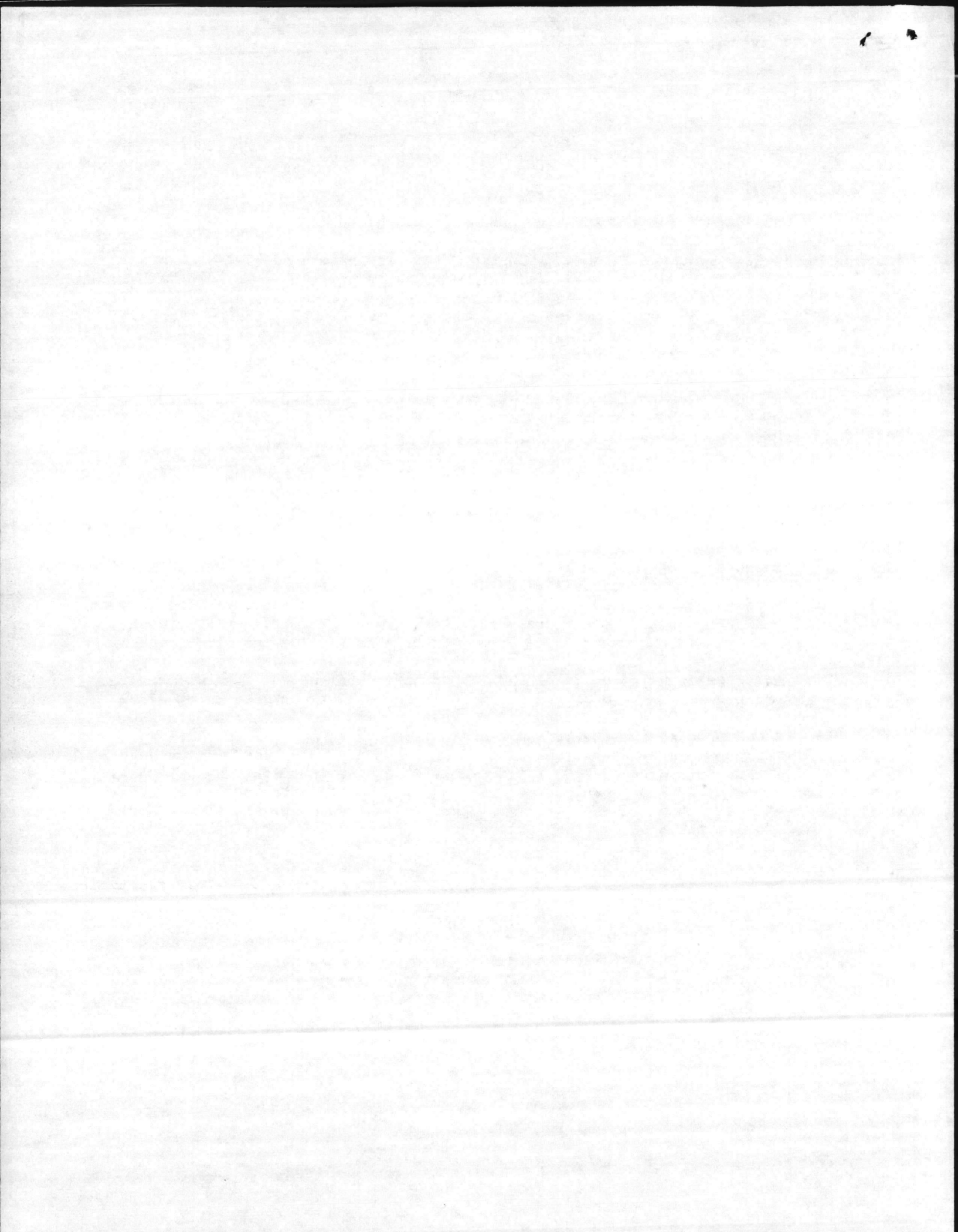
PWO:JBH:dh  
26 Aug 1976

MEMORANDUM FOR THE ASSISTANT CHIEF OF STAFF, FACILITIES

Subj: Proposed license to Onslow County for clearance of drainage outfalls

Encl: (1) LANTDIV ltr 241:RHS over LIC-0-558 of 16 Jul 1976  
(2) AdminO, Office of the County Commissioners, Onslow County,  
Jacksonville, N. C. ltr of 14 Jun 1976  
(3) Copy of Proposed License

- Design*
1. Enclosures (1), (2) and (3) and all available backup information on the clearance of drainage outfalls on Government-owned land near Hwy. 24 have been reviewed.
  2. On 4 August 1976, the day following a rainfall expected once in ten years for this area, Public Works Department personnel inspected the area north of Hwy. 24 between Midway Park and Hubert which drains through culverts under Hwy. 24 onto Camp Lejeune property. All of the culverts under Hwy. 24 were carrying all the storm water reaching them and flowing less than one-half full. High water marks indicated that none of the culverts had flowed full with the exception of the one draining the trailer court behind Marie's Bar and Grill. The entrance to this culvert had been constricted by trash and debris washed from the trailer court. When the debris was removed, the culvert then carried the flow reaching it without flowing full and the hydraulic control shifted to the trailer court drainage ditch itself, which is badly obstructed. The storm water had a very strong odor and was discharging pollutants onto Camp Lejeune property. Several areas north of Hwy. 24 were flooded at the time of the inspection; however, the flooding was caused by an inadequate drainage system within the flooded area and not by culverts under Hwy. 24. The outfall ditches from the culverts which flow through Camp Lejeune property were also inspected. All of the outfall ditches were carrying off all the storm water reaching them and showed no signs of ever having impeded the flow of storm water.
  3. On 10 August 1976 the culverts, outfall and areas were again inspected by PWD and NREA personnel. The findings were the same as on the previous inspection.
  4. It is the opinion of the PWD engineers, and concurred in by NREA, that deepening the outfall ditches on Camp Lejeune property would have no effect on the drainage or water table elevation of the areas north of Hwy. 24. It is questionable that the water table would be lowered appreciably even by lowering both the road culverts and outfall ditches. A thorough hydrological study of the area would have to be made in order to determine



Subj: Proposed license to Onslow County for clearance of drainage outfalls

if the water table could be lowered. If the outfall ditches on MCB, Camp Lejeune were dredged, there would be an adverse effect on both the fauna and flora of the adjacent region and siltation or erosion problems might develop.

5. The areas north of Hwy. 24 definitely need an adequate storm drainage system to handle the surface runoff and prevent flooding; however, this will not solve the pollution problem caused by too many septic tanks too close together in low lying areas. This problem can be solved only by the elimination of faulty septic tanks and prohibiting the installation of additional ones in unsuitable areas. Even with the installation of an adequate drainage system, the danger of polluting the shallow wells in the area will exist as long as the septic tanks remain. In all likelihood, community or regional sewage treatment facilities will be required.

6. On 24 June 1971 the United States of America granted a perpetual easement to North Carolina State Highway Commission for the construction, operation and maintenance of Hwy. 24 including the drainage structures and outfall ditches. The parcels described in Addendum No. 1 to enclosure (3) include the same drainage structures and outfalls covered in the easement to N. C. State Highway Commission of 24 June 1971.

7. It is recommended that the license not be granted to Onslow County for the following reasons:

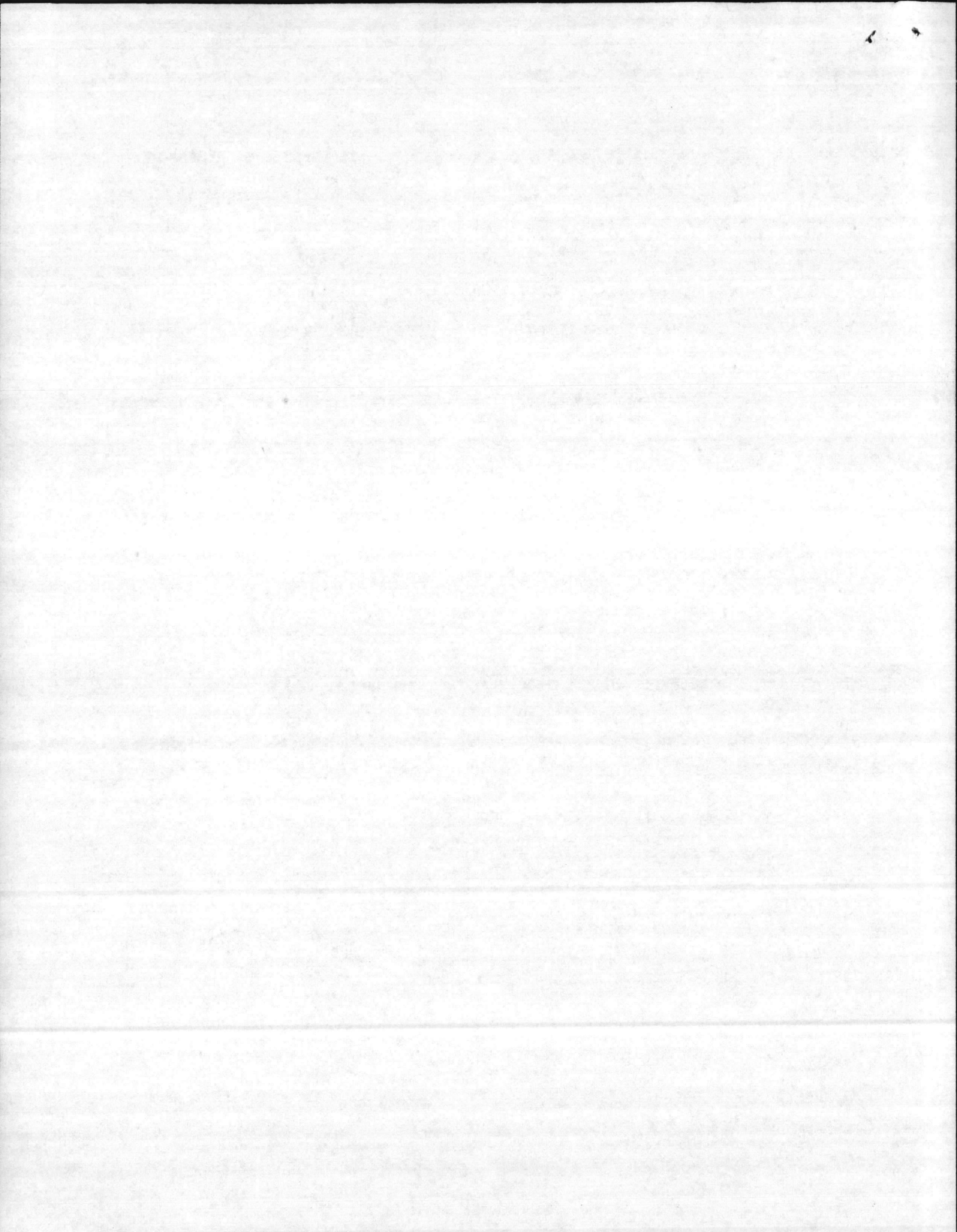
a. The Government has already granted perpetual easements for portions of the outfalls to the State Highway Commission of the State of North Carolina.

b. Dredging the outfalls would have no effect on the water table of areas north of Hwy. 24.

c. Dredging the outfalls would have an adverse effect on the environment of the adjacent areas.

Since the privately-owned property to the north of Hwy. 24 will undoubtedly be developed intensively in the future, the pollution problem will remain and grow worse unless proper corrective action is taken. It is recommended that MCB, Camp Lejeune take the initiative of establishing a joint planning group with Onslow County to study the problem and develop a long-range plan of action that will be effective and acceptable to all concerned.

R. A. EARNST  
CDR, CEC, USN  
Public Works Officer





ROUTING  
ORDER

	ORIG	INT
1	10	6
2	20	#
3	200	2/28
4	1100wers	
5	280	
	750	
	ORIG	INT

750  
 Jack,  
 Please take for  
 action ASAP.  
 [Signature]





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

TELEPHONE NO.

444-7411

IN REPLY REFER TO:

241:RHS

LIC-0-558

16 JUL 1976

From: Commander, Atlantic Division, Naval Facilities Engineering Command  
To: Commanding General, Marine Corps Base, Camp Lejeune


Subj: Proposed license to Onslow County for clearance of drainage outfalls

Ref: (a) Onslow County ltr of 13 June 1975  
(b) MCB CAMLEJ ltr FAC:LD:mkc P-11340 of 2 July 1975

Encl: (1) Onslow County ltr of 14 June 1976 (copy)  
(2) Proposed License (copy)

1. Reference (a) requested an easement to clear 18,374 linear feet of natural drainage outfalls along several streams located on Base property in the vicinity of N. C. State Highway 24. Reference (b) recommended that the request be granted. By enclosure (1), Onslow County requested a license in lieu of an easement for subject project.

2. Enclosures (1) and (2) are forwarded for review and approval prior to the issuance of subject license to Onslow County.

  
M. L. SPRUILL  
By direction





107-2-0000  
COUNTY

Office of the  
County Commissioners

June 14, 1976

107 New Bridge Street  
Jacksonville, NC 28540  
Telephone (919) 347-4717

Mr. A. R. Young, Director  
Real Estate Division  
Department of the Navy  
Atlantic Division  
Naval Facilities Engineering Command  
Norfolk, Virginia 23511

Re: 24:ARY  
EO-234

Dear Mr. Young:

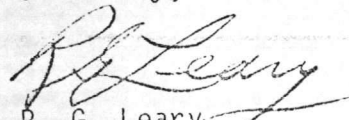
I am in possession of your letter to Mr. Timothy Wood of February 4, 1976 regarding Onslow County's request for easement to clear 18,374 lineal feet of natural drainage outfalls on Government-owned land near Highway 24 at Marine Corps Base, Camp Lejeune.

I have discussed this project with the supervisors involved and we are in agreement with you that we should opt for a license in lieu of an easement. Attached are copies of the plans and specifications as well as an environmental assessment which has been prepared by the Onslow County Public Works Department. I have reviewed the license you sent in your April 4th letter and have executed it and am returning it to you.

If the attached documents are approved by your office, we do expect that work will start after July 1, 1976 on this project.

We appreciate your cooperation in this matter and we will be glad to supply further information regarding it if you so desire.

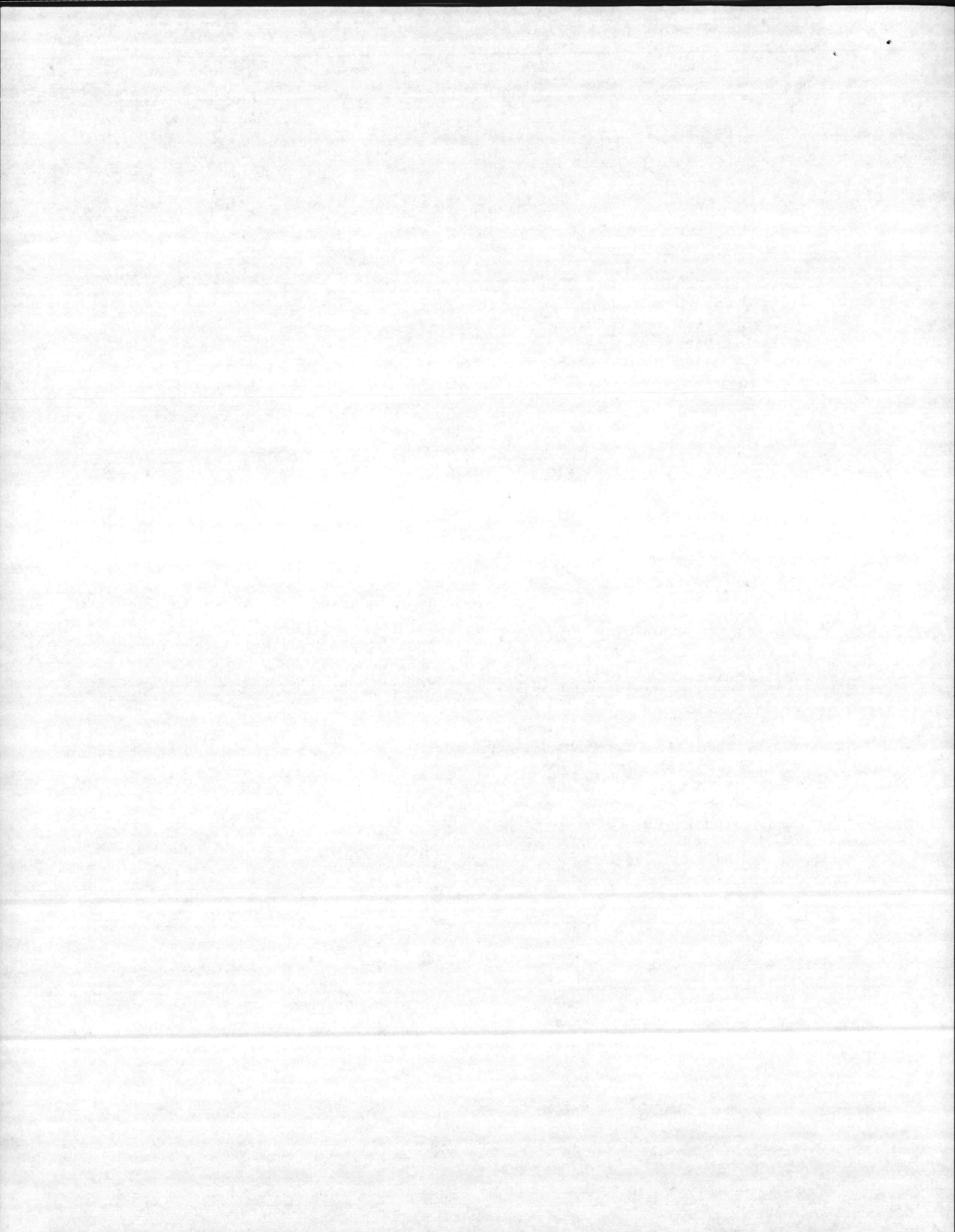
Sincerely,

  
R. G. Leary  
Administrative Officer

RGL:bf

cc: Mr. John Downing, Public Works Director

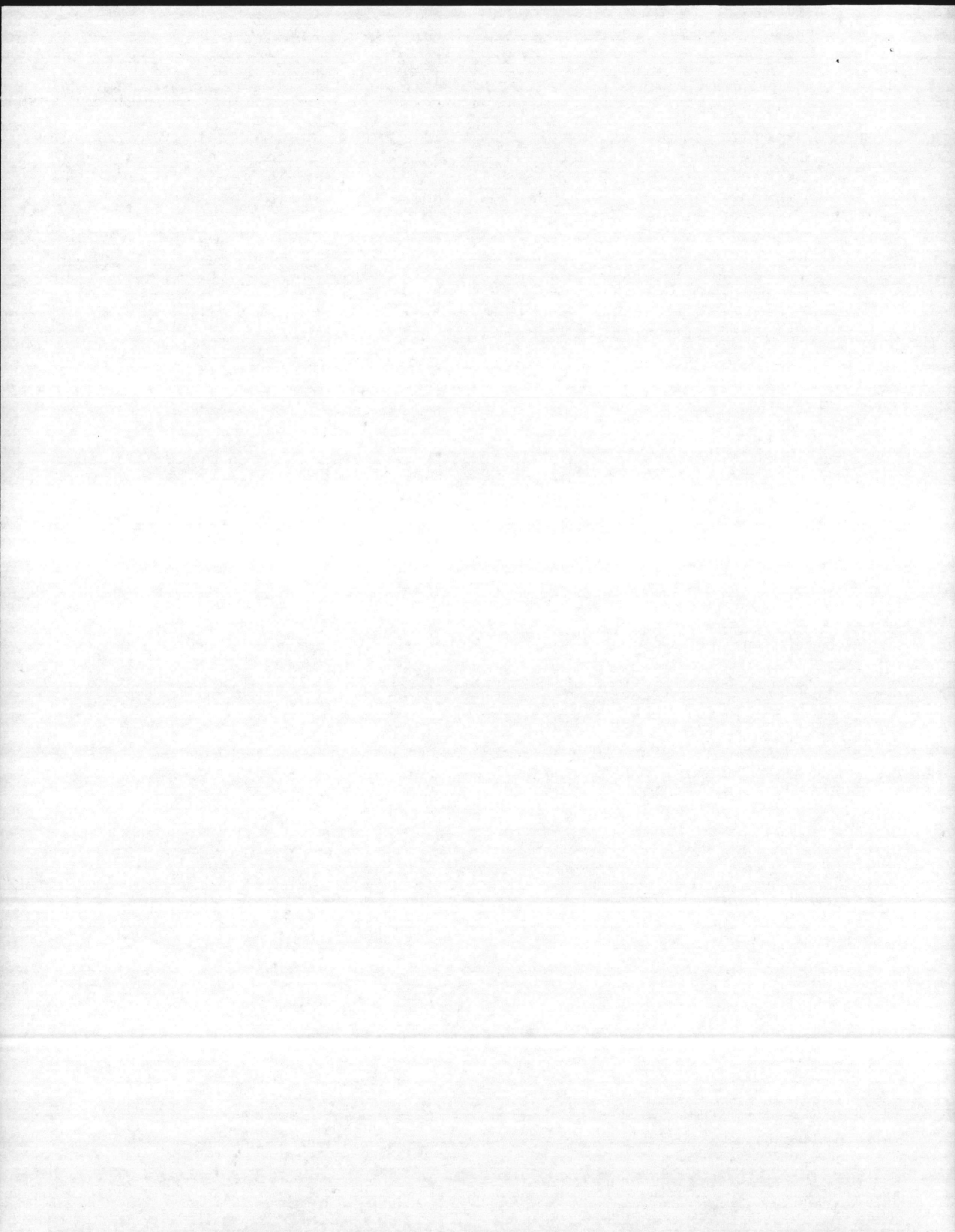
Encl (1)



## PLANS AND SPECIFICATIONS

Experience has shown that by following a natural watercourse, the channel has a natural self-cleaning phenomenon if not destroyed by man's activities. Based on fifteen years experience on small watersheds of this type, we do not expect maintenance to be needed for many years.

At the beginning of construction on the outfall end of the channel, a sediment basin approximately 200' long and a silt curtain will be constructed to contain silt during construction. The trap will also catch the initial loose soil on the side slopes of the channel after rainfall washes this loose soil into the channel.





The problem area that needs environmental improvement extends from Piney Green along highway N. C. #24 to Hubert and is bound on the north by the Camp Lejeune-Cherry Point Railroad.

Most of the project area should naturally drain into Wallace Creek with a small area draining into Bell Swamp.

The topography of the area is extremely flat with a high water table.

The area is thickly populated with private residences and mobile homes. The majority of these residences utilize septic tank sewage disposal systems.

Due to the high water table and poor drainage, many of the sewage disposal systems are malfunctioning especially during the winter months when little water is lost by evaporation and transpiration.

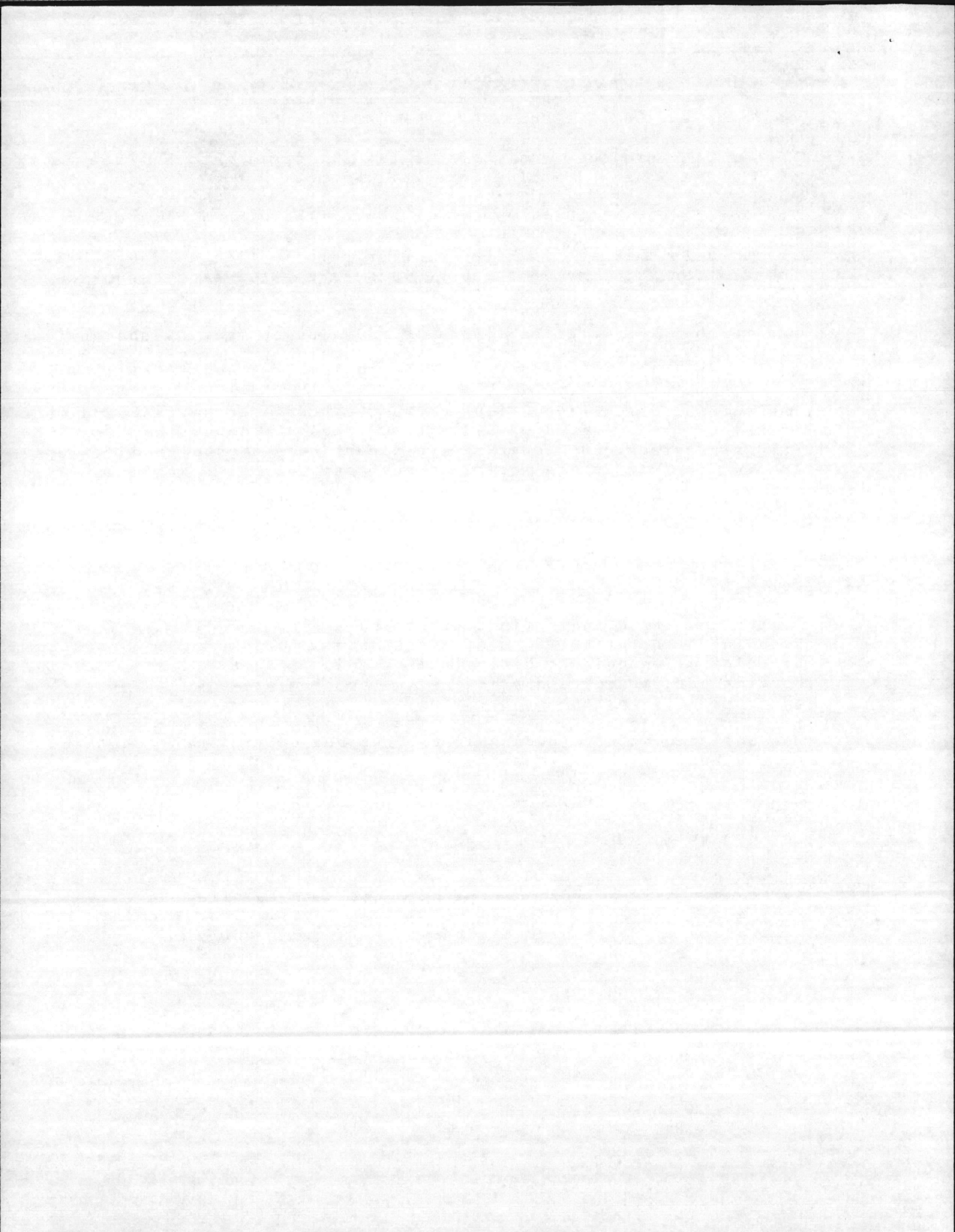
The saturated soil conditions cause the sewage to surface and when it rains the sewage is washed into ditches and downstream into the estuarine areas. By lowering the water table with a good drainage system, the raw sewage would not surface; Coliform particles would be confined to the sewage drain field and any seepage that eventually filtered into the drainage system would be of good quality. The polluted water in the area constitutes a (very real) potential source of contamination to private water supplies in the area especially since most of the private water supplies are shallow wells.

Polluted water standing in depressions and in the ditches is a breeding area for billions of mosquitoes. Because of the constant breeding of mosquitoes during the breeding season and high density development, mosquitoes breeding in the area are almost impossible to control by fogging or spraying.

The polluted water standing in ditches and depressions constitutes a very unhealthy environment for children in which to play.

The only feasible way to provide drainage in the said area is to restore the drainage outfalls on Camp Lejeune Military Reservation as submitted in the project application.

As indicated on the enclosed drawings, channel improvement would have to be made only a short distance downstream to effect the desired drainage. Since the natural drains are small tributaries at the headwaters of Wallace Creek, they are intermittently dry and support no marine life in the proposed project area. Wildlife would be

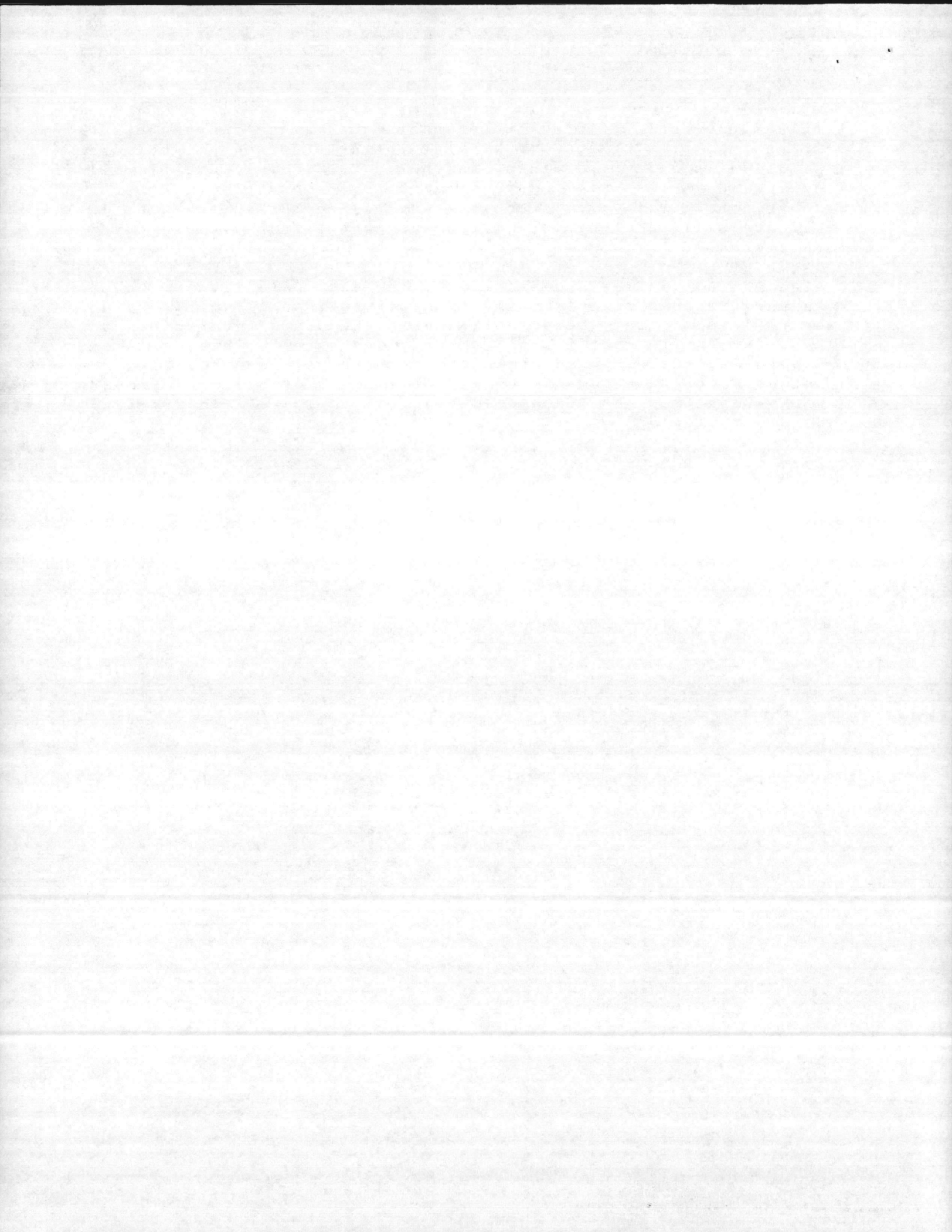


- 2 -

ENVIRONMENTAL ASSESSMENT OF RESTORING PROPOSED OUTFALL DRAINS  
ALONG HIGHWAY #24 AT CAMP LEJEUNE

relatively unaffected by the proposed work since there are few large trees that provide food or habitat in the proposed project area. Wildlife is more predominant further downstream in the floodplain swamp and in the more remote area of the reservation. As stated above, the quality of water entering Wallace Creek and the New River estuary will be of better quality after the proposed project is completed.

Although no figures are available, the vast majority of the population in the proposed area is active military personnel, military dependent or retired military personnel. Onslow County's interest is to provide a better environment for all the residents in the project area. Hopefully, the proposed drainage work can be accomplished either by Marine Corps Base Camp Lejeune Public Works or by Onslow County Public Works Department as licensee during the period of January 1 to December 31, 1977.



THIS LICENSE TO USE THE U.S. GOVERNMENT PROPERTY HEREIN DESCRIBED IS ISSUED BY THE DEPARTMENT OF THE NAVY TO THE LICENSEE NAMED BELOW FOR THE PURPOSE HEREIN SPECIFIED UPON THE TERMS AND CONDITIONS SET FORTH BELOW AND THE GENERAL PROVISIONS ON THE REVERSE SIDE HEREOF. BY THE EXECUTION HEREOF THE LICENSEE AGREES TO COMPLY WITH ALL SUCH TERMS, CONDITIONS AND GENERAL PROVISIONS.

correspondence pertaining to this document should include a reference to NF(R)-

(Refer to BuDocks Instr. 11011.18 and any succeeding changes.)

1. NAVAL ACTIVITY (Property location) Marine Corps Base Camp Lejeune, North Carolina	2. DATES COVERED (Inclusive) From 1 July 1976 to 30 June 1977
--	--

3. DESCRIPTION OF PROPERTY (Include room and building numbers where appropriate)  
As described on Addendum Number 1.

4. PURPOSE OF LICENSE  
To clear 18,374 linear feet of natural drainage to alleviate flooding conditions and potential health hazards.

5. LICENSOR UNITED STATES OF AMERICA DEPARTMENT OF THE NAVY	5a. LOCAL REPRESENTATIVE, DEPT. OF NAVY OFFICIAL (Title and address) Commanding General Marine Corps Base, Camp Lejeune, North Carolina
6. LICENSEE (Name and address) Onslow County 107 New Bridge Street Jacksonville, North Carolina 28540	6a. LOCAL REPRESENTATIVE (Name and address) R. G. Leary, Administrative Officer, 107 New Bridge Street, Jacksonville, North Carolina 28540

7. CASH PAYMENT BY LICENSEE (Payable in advance)  
(If no cash payment is required, enter "None" under item 7a "Amount")

a. AMOUNT (Each payment) NONE	b. FREQUENCY PAYMENTS DUE	c. FIRST DUE DATE	d. TO (Address of DPWO)
----------------------------------	---------------------------	-------------------	-------------------------

8. DEPOSIT FOR UTILITIES AND SERVICES (Payable in advance)  
(If no cash payment is required, enter "None" under item 8a "Amount")

a. AMOUNT (Each deposit) NONE	b. FREQUENCY PAYMENTS DUE	c. FIRST DUE DATE	d. TO (Mailing address)
----------------------------------	---------------------------	-------------------	-------------------------

9. INSURANCE REQUIRED AT EXPENSE OF LICENSEE  
(If any or all insurance requirements have been waived, enter "None" in a, b, c, or d as appropriate)

TYPE	MINIMUM AMOUNT	TYPE	MINIMUM AMOUNT
a. FIRE AND EXTENDED COVERAGE	\$ NONE	c. THIRD PARTY PERSONAL INJURY PER PERSON	\$ NONE
b. THIRD PARTY PROPERTY DAMAGE	\$ NONE	d. THIRD PARTY PERSONAL INJURY PER ACCIDENT	\$ NONE

10. GENERAL PROVISIONS (See Reverse Side)  
 o. The insurance requirements of provisions 10.h., 10.i., and 10.j. of this license have been waived prior to its execution.  
 p. The clearance work done in connection with the provisions of this license shall be in accordance with the plans and specifications attached hereto as Exhibit "B".

11. EXECUTION OF LICENSE

FOR	BY		DATE
	NAME AND TITLE (Typed)	SIGNATURE	
DEPARTMENT OF THE NAVY			
LICENSEE			

If Licensee is a Corporation, Certification of signature is attached

ENCL (2)



ADDENDUM NUMBER 1 TO LICENSE NF(R)-

3. The following nine (9) parcels of land located on the U. S. Marine Corps Base, Camp Lejeune, North Carolina and being situated on the southern side of N. C. Highway 24 and being shown and delineated in red on the drawing attached hereto as Exhibit "A", and more particularly described as follows:

a. Parcel 1 - A strip of land lying 25 feet on either side of the centerline of Stream A; said Stream A beginning at the downstream terminal of a culvert passing under N. C. Highway 24, said beginning lying southerly of and 35' normal to survey station 231 + 00 of the existing center line of N. C. Highway 24 as established by the North Carolina Highway Commission State Project 6.801743, and running thence S 67° W 208'; thence S 05° W 170'; thence S 39° W 220'; thence S 25° W 96'; thence S 45° W 165'; thence S 30° W 125'; thence S 17° W 130' to a junction with Stream C.

b. Parcel 2 - A strip of land lying 25 feet on either side of the centerline of Stream B; said Stream B beginning at the downstream terminal of a culvert passing under N. C. Highway 24, said beginning lying southerly of and 35' normal to survey station 247 + 833 of the existing center line of N. C. Highway 24 as established by the North Carolina Highway Commission State Project 6.801743, and running thence S 20° W 242'; thence S 17° E 148'; thence due east 80'; thence S 51° E 100'; thence S 05° E 195'; thence due east 160'; thence S 02° E 104'; thence S 25° W 28'; thence S 21° E 110' to a junction with Stream C.

c. Parcel 3 - A strip of land lying 25 feet on either side of the centerline of Stream C; said Stream C beginning at the downstream terminal of a culvert passing under N. C. Highway 24, said beginning lying southerly of and 35' normal to survey station 254 + 82 of the existing center line of N. C. Highway 24 as established by the North Carolina Highway Commission State Project 6.801743, and running thence S. 25° W 183'; thence S 23° W 170'; thence S 05° W 138'; thence S 08° E 90'; thence S 63° W 234'; thence S 59° W 96'; thence S 67° W 235'; thence S 70° W 126'; thence N 80° W 145'; thence N 28° W 180'; thence N 35° W 86'; thence N 50° W 105'; thence N 82° W 128'; thence S 90° W 73'; thence S 45° W 152'; thence S 85° W 95'; thence N 60° W 87'; thence N 70° W 153'; thence N 74° W 146'; thence N 70° W 358'.

d. Parcel 4 - A strip of land lying 25 feet on either side of the centerline of Stream D; said Stream D beginning at the downstream terminal of a culvert passing under N. C. Highway 24, said beginning lying southerly of and 26' normal to survey station 293 + 45.2 of the existing center line of N. C. Highway 24 as established by the North Carolina Highway Commission State Project 6.801743, and running thence S 10° W 286'; thence S 20° E 80'; thence S 02° W 174'; thence S 50° E 90'; thence S 59° E 105'; thence S 05° E 135'; thence S 03° W 105'; thence S 30° W 115'; thence S 25° E 100'; thence S 40° W 80'; thence S 25° W 105'; thence S 30° W 160'; thence S 40° W 105'; thence S 45° W 100'; thence S 30° W 170'; thence S 45° W 310'; thence S 55° W 120'.



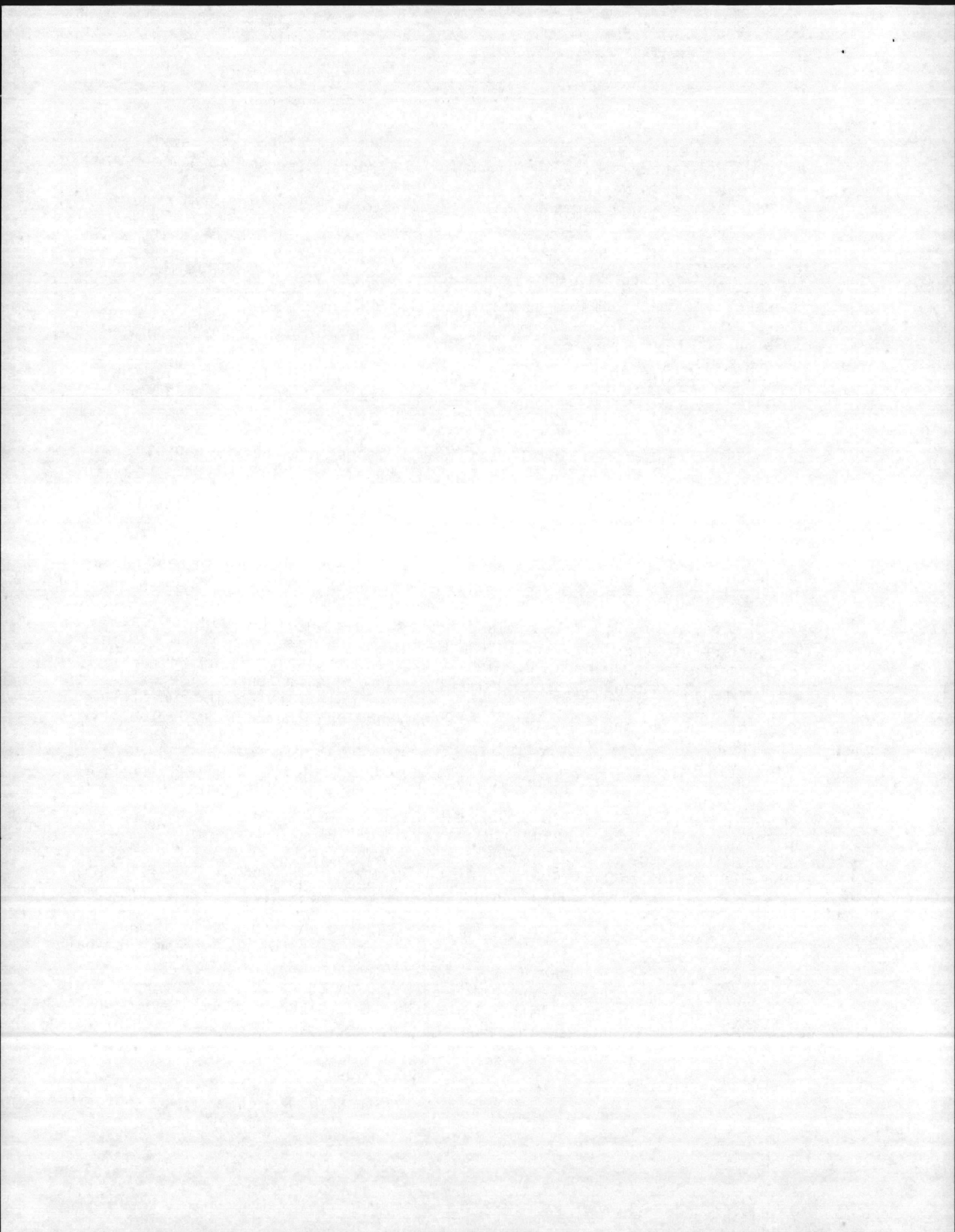


e. Parcel 5 - A strip of land lying 25 feet on either side of the centerline of Stream E; said Stream E beginning at the downstream terminal of a culvert passing under N. C. Highway 24, said beginning lying southerly of and 23' normal to survey station 309 + 85 of the existing center line of N. C. Highway 24 as established by the North Carolina Highway Commission State Project 6.801743, and running thence S 01° W 205'; thence S 15° W 155'; thence S 70° W 105'; thence S 65° W 140'; thence S 25° W 85'; thence S 45° W 110'; thence S 23° W 130'; thence S 28° W 185'; thence S 46° W 105'; thence S 60° W 156'; thence S 19° W 120'; thence S 17° W 94'; thence S 30° W 44'; thence S 22° W 78'; thence S 30° W 72'; thence S 25° E 64'; thence S 30° W 106'; thence S 08° W 70'; thence S 35° W 120'; thence N 75° W 108'; thence S 60° W 96'; thence N 75° W 112'; thence N 45° W 105'; thence N 05° W 105'; thence N 30° W 74'; thence N 35° W 70'; thence N 65° W 146'; thence N 55° W 103'; thence N 18° W 125' thence N 70° W 75' to a junction with Stream D.

f. Parcel 6 - A strip of land lying 25 feet on either side of the centerline of Stream F; said Stream F beginning at the downstream terminal of a culvert passing under N. C. Highway 24, said beginning lying southerly of and 35' normal to survey station 321 + 32 of the existing center line of N. C. Highway 24 as established by the North Carolina Highway Commission State Project 6.801743, and running thence S 75° W 380'; thence S 05° E 280'; thence S 30° E 165'; thence S 88° W 180'; thence S 35° W 80'; thence S 60° W 130' to a junction with Stream G.

g. Parcel 7 - A strip of land lying 25 feet on either side of the centerline of Stream G; said Stream G beginning at the downstream terminal of a culvert passing under N. C. Highway 24, said beginning lying southerly of and 36' normal to survey station 341 + 74 of the existing center line of N. C. Highway 24 as established by the North Carolina Highway Commission State Project 6.801743, and running thence S 20° E 155'; thence S 88° W 160'; thence S 25° W 250'; thence S 28° W 206'; thence S 45° W 154'; thence N 75° W 75'; thence N 60° W 150'; thence S 85° W 175'; thence S 35° W 92'; thence S 75° W 76'; thence S 58° W 137'; thence S 65° W 56'; thence S 68° W 150'; thence S 60° W 134'; thence S 38° W 225'; thence S 55° W 105'; thence S 50° E 100'; thence N 89° W 100'; thence N 50° W 140'; thence N 40° W 130'; thence N 68° W 140'; thence N 59° W 20'; thence N 50° W 128'; thence N 65° W 105'; thence N 50° W 100'; thence N 75° W 210'; thence N 80° W 321'; thence N 65° W 125'; thence N 70° W 83'; thence N 85° W 26'; thence N 65° W 60'; thence N 85° W 285' to a junction with Stream E.

h. Parcel 8 - A strip of land lying 25 feet on either side of the centerline of Stream H; said Stream H beginning at the downstream terminal of a culvert passing under N. C. Highway 24, said beginning lying southerly of and 36' normal to survey station 331 + 47 of the existing center line of N. C. Highway 24 as established by the North Carolina Highway Commission State Project 6.801743, and running thence S 36° E 650' to a junction with Stream G.



i. Parcel 9 - A strip of land lying 25 feet on either side of the centerline of Stream I; said Stream I beginning at the downstream terminal of a culvert passing under N. C. Highway 24, said beginning lying southerly of and 35' normal to survey station 202 + 31 of the existing center line of N. C. Highway 24 as established by the North Carolina Highway Commission State Project 6.801743, and running thence S 39° W 72'; thence S 47° W 101'; thence S 50° W 132'; thence S 75° W 231'; thence S 57° W 127'; thence S 40° W 149'; thence S 62° W 246'; thence S 80° W 125'; thence 42° W 89'.

All above bearings are referenced to the North Carolina Grid System.

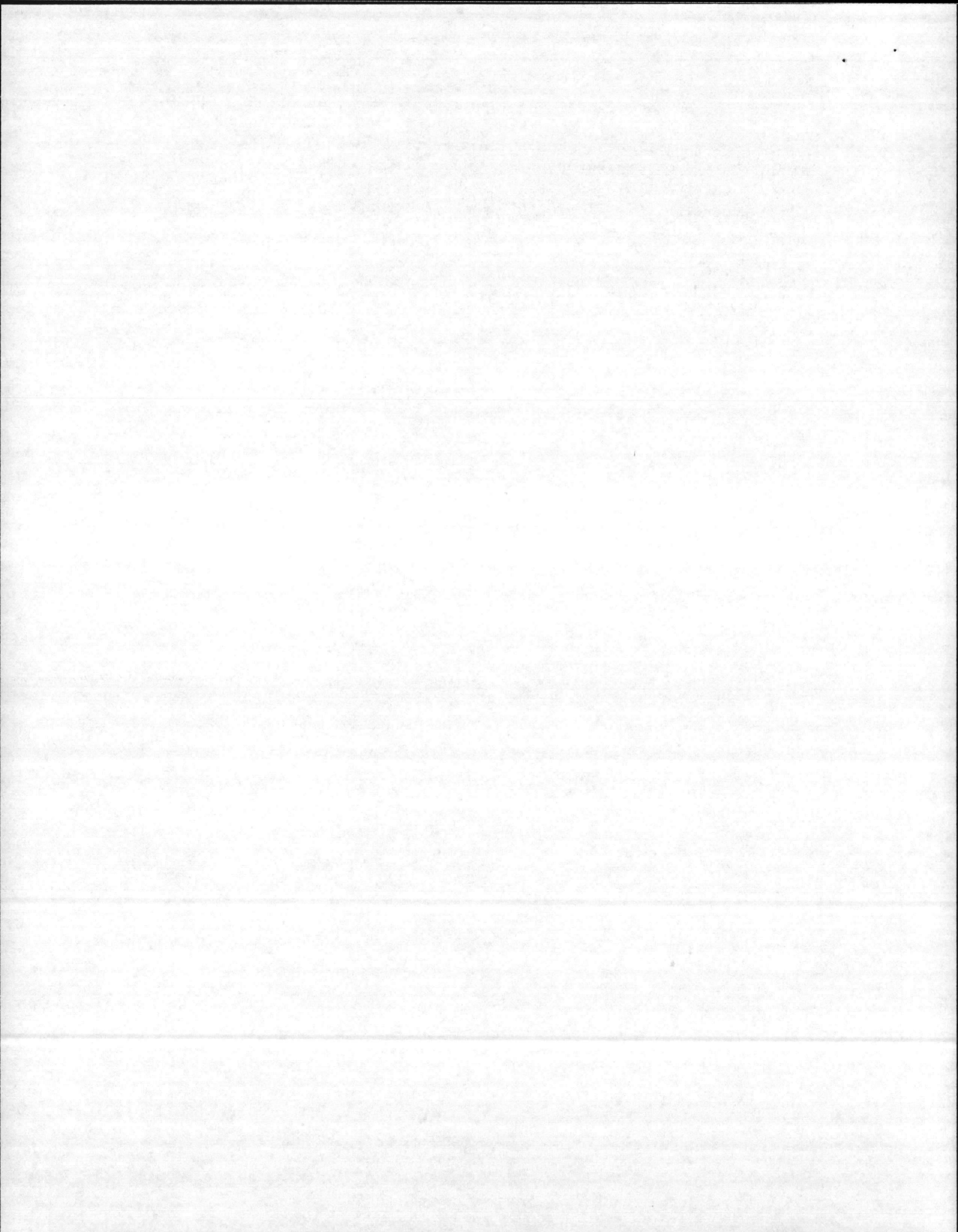
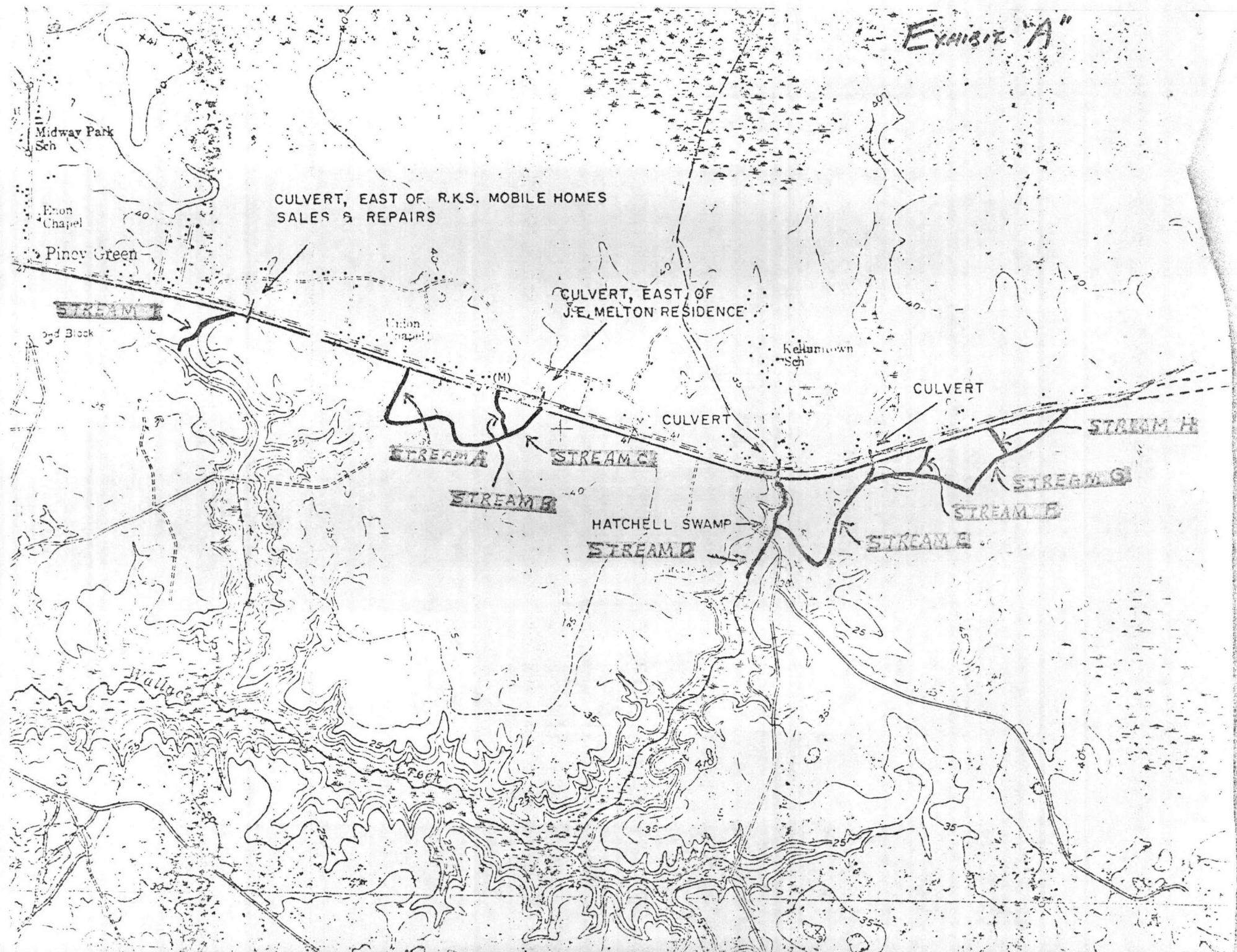
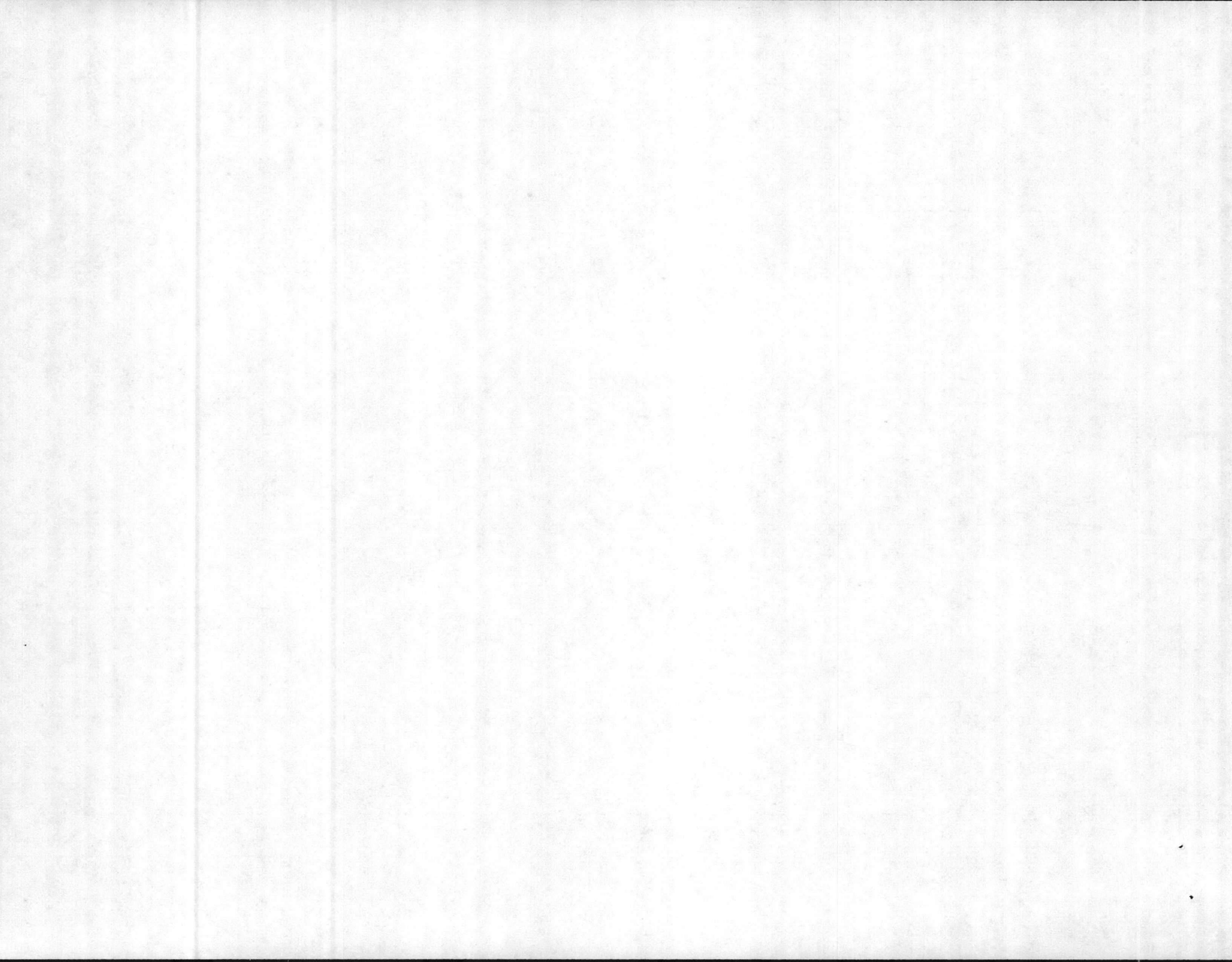
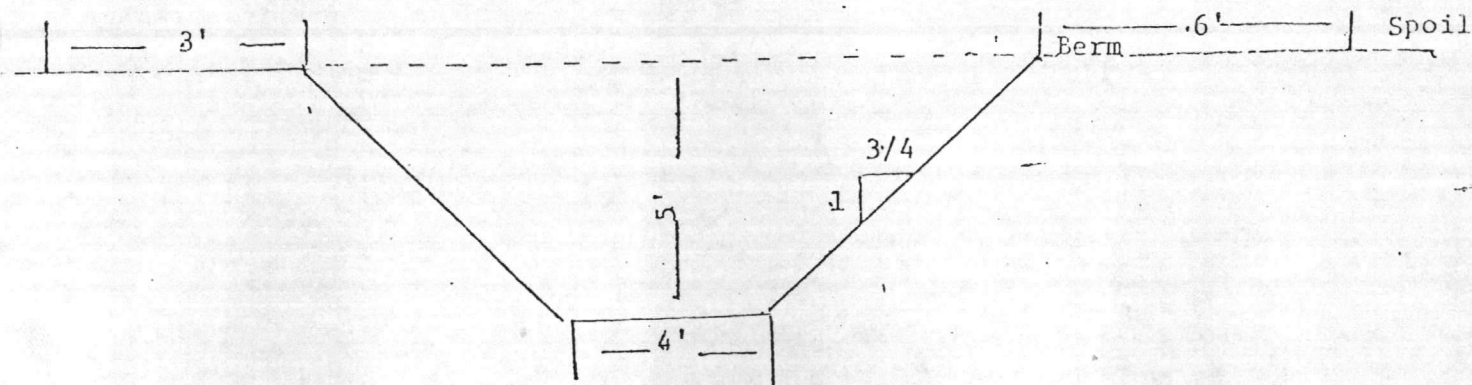


EXHIBIT "A"





PROPOSE PLANS AND SPECIFICATIONS OR NATURAL  
DRAINAGE OUTFALLS ON GOVERNMENT-OWNED LAND  
NEAR HIGHWAY 24 AT THE MARINE CORPS BASE,  
CAMP LEJEUNE



Typical Cross Section  
Not to Scale

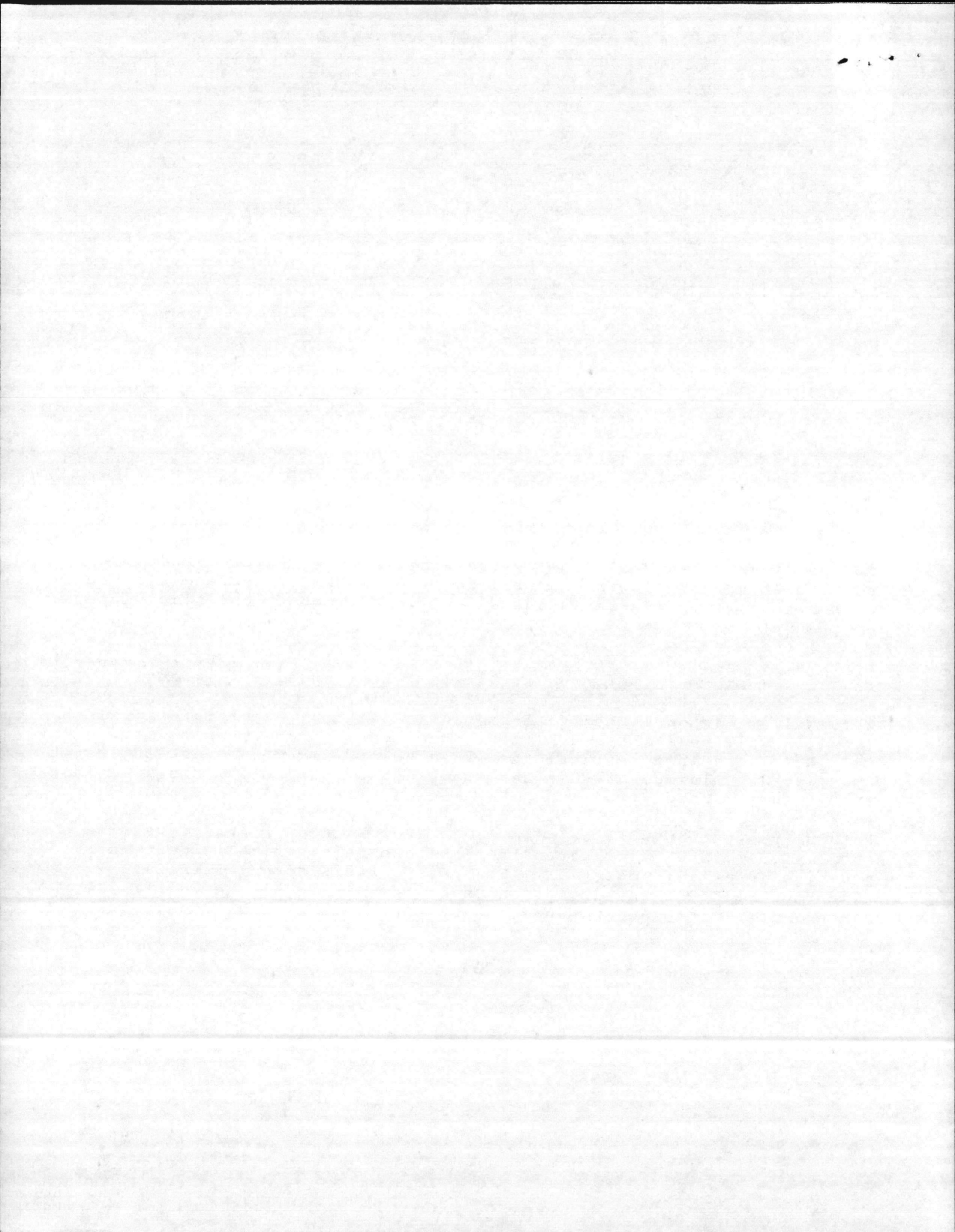
PLANS AND SPECIFICATIONS

Channel improvement will follow the exact natural watercourse with no straightening. Following natural watercourse will insure desirable high organic, erosive-resistant subsoil conditions along side slopes of channel.

Depth of channel will be approximately five (5) feet, or down to water-bearing sand strata, if sand strata is less than five (5) feet.

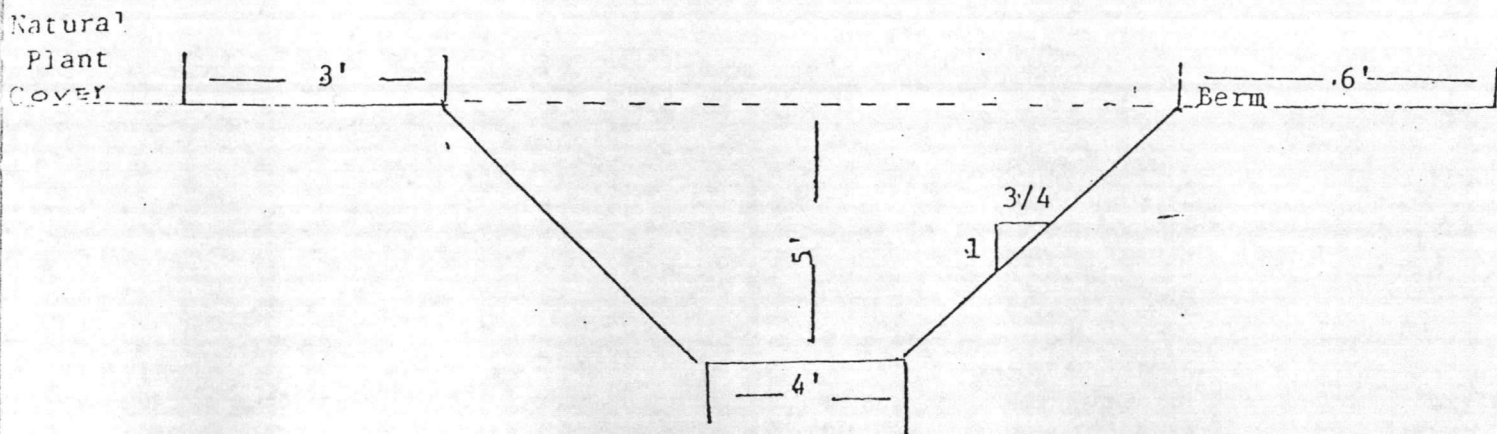
Work will be accomplished with Hydraulic Backhoe. Right-of-way width required will be thirty (30) feet. Soil taken from channel improvement will be placed in piles no longer than twenty-five (25) feet in length and placed a minimum of six feet from edge of channel. This will insure that natural drainage will not be blocked behind the spoil bank.

Natural vegetation will be allowed to grow back on right-of-way and spoil piles. The spoil taken from the channel is rich in nutrients and high in organic material. Stumps and roots sprout immediately after the right-of-way is cut and seeds germinate on the spoil piles making artificial seeding unnecessary with this type of construction.





PROPOSED PLANS AND SPECIFICATIONS FOR NATURAL  
DRAINAGE OUTFALLS ON GOVERNMENT-OWNED LAND  
NEAR HIGHWAY 24 AT THE MARINE CORPS BASE  
CAMP LEJEUNE



Typical Cross Section  
Not to Scale

PLANS AND SPECIFICATIONS

Channel improvement will follow the exact natural watercourse with no straightening. Following natural watercourse will insure desirable high organic, erosive-resistant subsoil conditions along side slopes of channel.

Depth of channel will be approximately five (5) feet, or down to water bearing sand strata, if sand strata is less than five (5) feet.

Work will be accomplished with Hydraulic Backhoe. Right-of-way width required will be thirty (30) feet. Soil taken from channel improvement will be placed in piles no longer than twenty-five (25) feet in length and placed a minimum of six feet from edge of channel. This will insure that natural drainage will not be blocked behind the spoil bank.

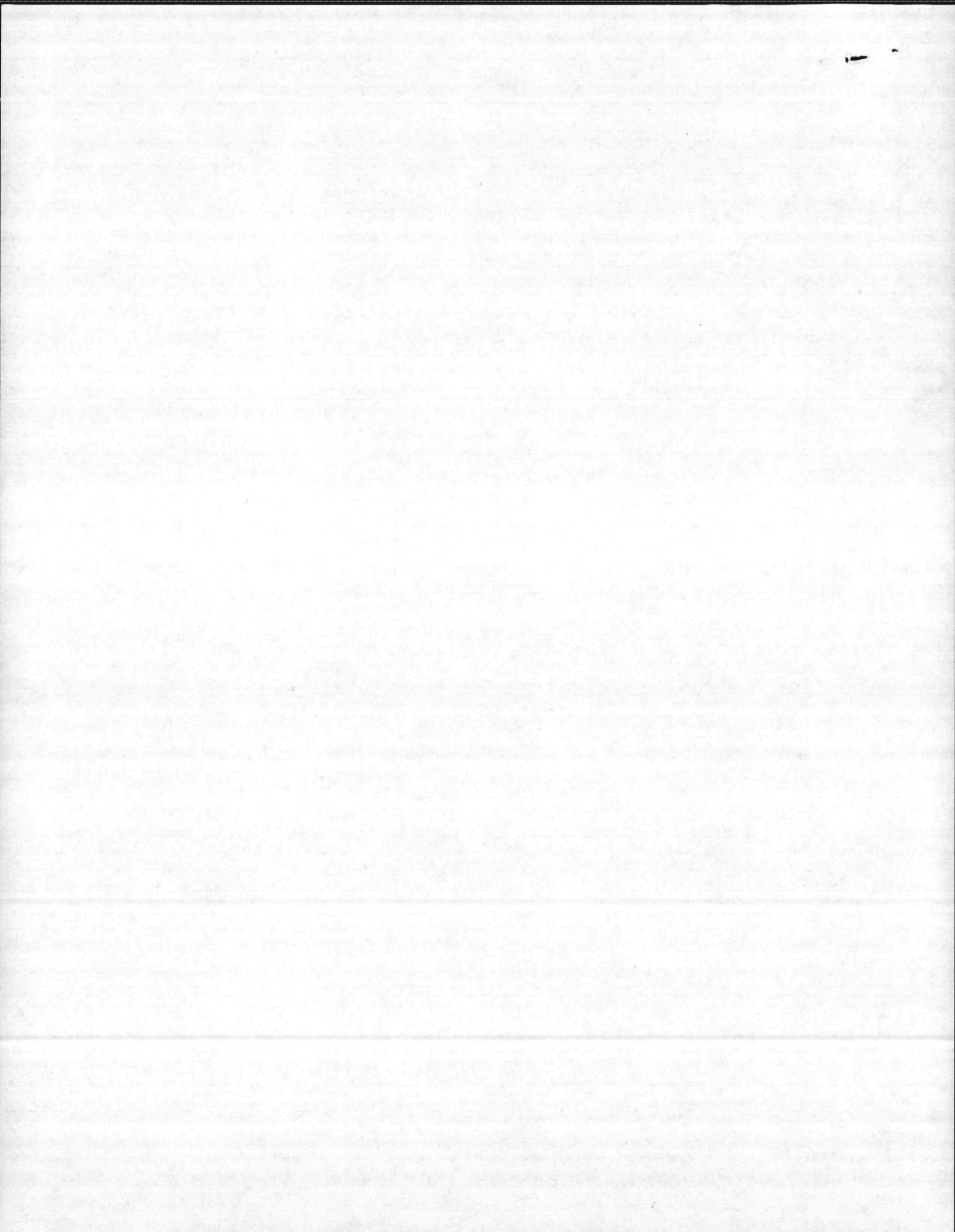
Natural vegetation will be allowed to grow back on right-of-way and spoil piles. The spoil taken from the channel is rich in nutrients and high in organic material. Stumps and roots sprout immediately after the right-of-way is cut and seeds germinate on the spoil piles making artificial seeding unnecessary with this type of construction.



## PLANS AND SPECIFICATIONS

Experience has shown that by following a natural watercourse, the channel has a natural self-cleaning phenomenon if not destroyed by man's activities. Based on fifteen years experience on small watersheds of this type, we do not expect maintenance to be needed for many years.

At the beginning of construction on the outfall end of the channel, a sediment basin approximately 200' long and a silt curtain will be constructed to contain silt during construction. The trap will also catch the initial loose soil on the side slopes of the channel after rainfall washes this loose soil into the channel.



ASSISTANT CHIEF OF STAFF, FACILITIES  
HEADQUARTERS, MARINE CORPS BASE

TO:

BASE COMPTROLLER

12 Feb '76  
PUBLIC WORKS O

BASE STAFF JUDGE ADVOCATE CEO

BASE MAINTENANCE O FIRE MARSHAL

BASE MOTOR TRANS O QTRS & HSG

CO BASE MAT BN

BOQ/BSQ

ATTN:

EO-21

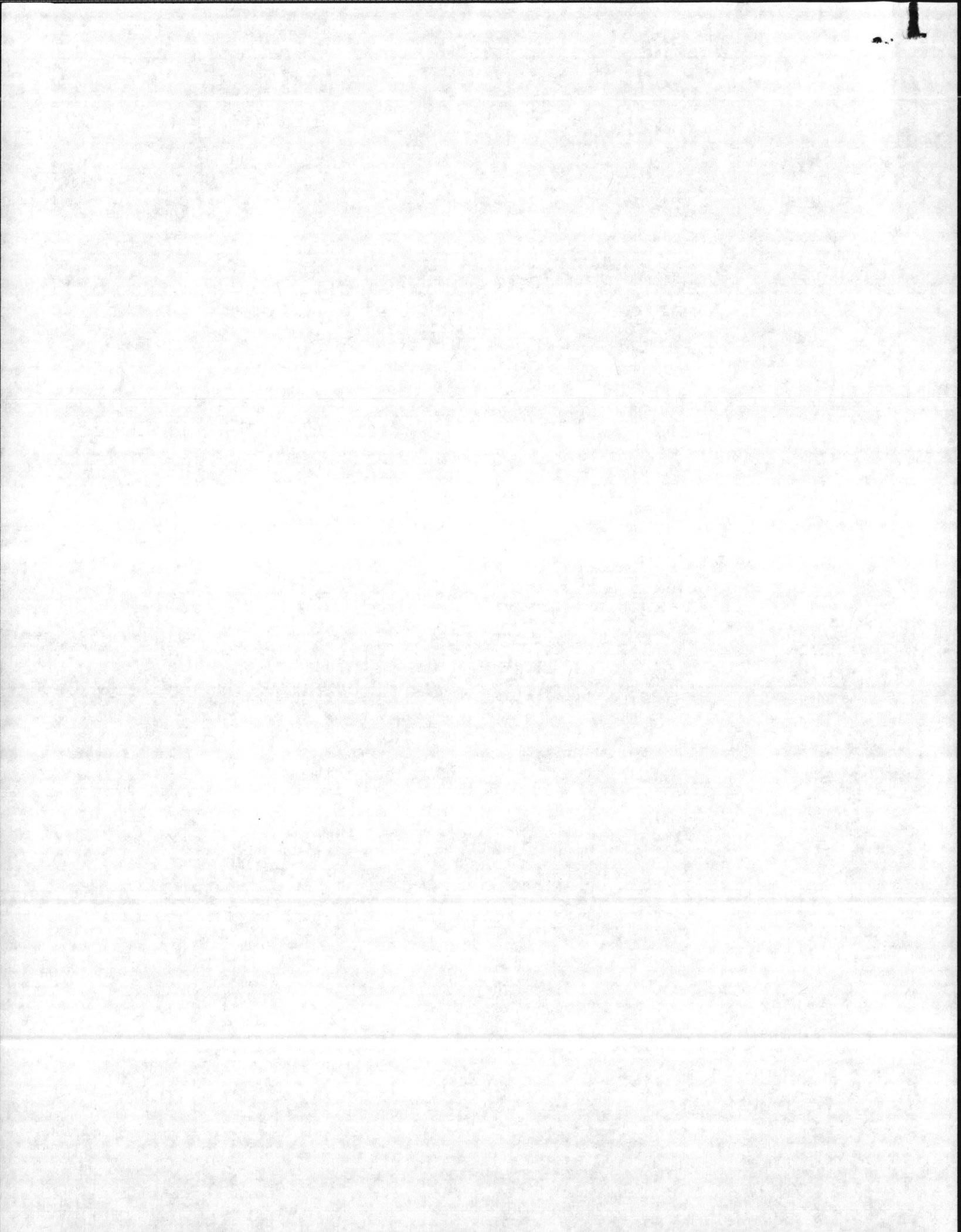
REMARKS:

1. Attached ltr is forwarded <sup>into</sup> f/action

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

3. Your file copy.

8  
Respectfully,  
E. R. Laine, Jr.





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

TELEPHONE NO.  
444-7411

IN REPLY REFER TO:  
24:ARY  
EO-234  
February 4, 1976

ROUTING ORDER	INT
1 10	5
2 20	7
3 200	2/17
4 250	1/19/76
5 TMO	
ORIG	61

Mr. Timothy Wood  
County Manager  
Onslow County  
107 New Bridge Street  
Jacksonville, North Carolina 28540

Dear Mr. Wood:

Reference is made to our conversation of February 3, 1976, concerning Onslow County's request for easements to clear 18,374 lineal feet of natural drainage outfalls on Government-owned land near Highway 24 at the Marine Corps Base, Camp Lejeune.

As stated in our conversation, we will need additional information for processing of the easements, viz.: (1) plans and specifications; (2) copy of environmental impact study; (3) property map for attachment as an exhibit to the easement instrument; and (4) a vicinity map.

It was understood that the project is in the County's FY77 program and construction will begin after July 1, 1976. If the above information can be furnished, we anticipate no problem in processing the easements prior to this date. I am forwarding a copy of the standard easement form for your review. Please advise if it is acceptable.

It is noted that a standard provision in Government easements require that the facility be maintained in good condition. It was understood in our conversation of February 3, 1976, that the County has funds programmed only for cleaning of the drainage outfalls and no funds are programmed for future maintenance. If this is a single operation involving only cleaning of the outfalls, it is suggested that you consider acceptance of a license in lieu of an easement. A standard license form is attached for your review. Authority to accomplish the desired clean out work can be authorized by the license but, of course, there would be no permanent or future interests after the work is completed. The issuance of a license would also not require a property map, legal descriptions, or centerline surveys as would be needed with an easement grant. We would require, however, the environmental study and a copy of your plans and specifications.

Please be assured of our desire to cooperate in this matter.

Sincerely yours,

A. R. YOUNG  
Director, Real Estate Division  
By direction of the Commander

Enclosures

Blind copy to: (w/o encl) MARCORB CAMLEJ



