

DEPARTMENT OF THE ARMY PERMIT

Permittee: **Nebraska Game and Parks Commission**

Permit No: **NE 89-12896, Amendment 3 (General Permit 89-01)**

Issuing Office: **Omaha District, Corps of Engineers**

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description:

Construct breakwaters and various types of revetments (see attached drawings). No single and complete project will exceed 1,000 feet. Materials will consist of rock (non-streambed source), broken concrete, untreated timber, wire basket gabions, native plant materials, tire mats, and geoweb fabric. The slope of reshaped or armored banks may vary from 1:1 to 3(H):1(V). Breakwater dikes may be constructed in intensively used recreation areas. Breakwaters will be limited to a length of 100 feet, 10-foot top width, heights varying between 3 and 10 feet, and side slopes varying from 1:1 to 3(H):1(V). Five areas are excluded: Harold Andersen WMA, Blue Hole WMA, Jack Sinn Memorial WMA, Meridian WMA, and Peterson WMA. Wetlands are excluded.

Project Location:

Waters of the United States in the State of Nebraska that are owned, leased, or maintained by the Nebraska Game and Parks Commission

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on **July 31, 2007**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

ENG Form 1721, Nov 86

EDITION OF SEP 82 IS OBSOLETE.

(33 CFR 320-330)

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

See page 4.

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

Section 10 of the River and Harbors Act of 1899 (33 U.S.C. 403).

Section 404 of the Clean Water Act (33 U.S.C. 1344).

Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

- a. This permit does not obviate the need to obtain other Federal, state, tribal, or local authorizations required by law.
- b. This permit does not grant any property rights or exclusive privileges.
- c. This permit does not authorize any injury to the property or rights of others.
- d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

- a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
- b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
- c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
- d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

(PERMITTEE)

(DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

KURT F. UBBELOHDE
COLONEL, CORPS OF ENGINEERS
(DISTRICT ENGINEER)

(DATE)

By:

Kathryn M. Schenk, P.E.
Chief, Regulatory Branch

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(TRANSFEEE)

(DATE)

Nebraska Game and Parks Commission
NE 89-12896, Amendment 3

SPECIAL CONDITIONS

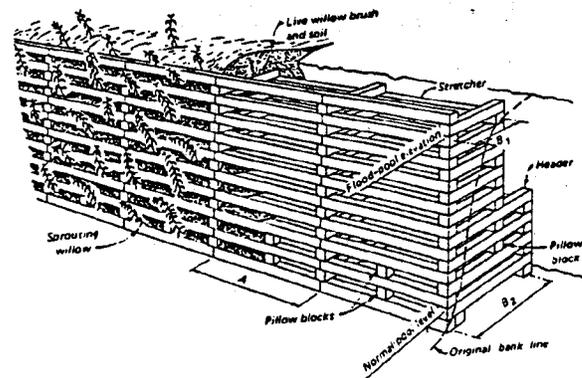
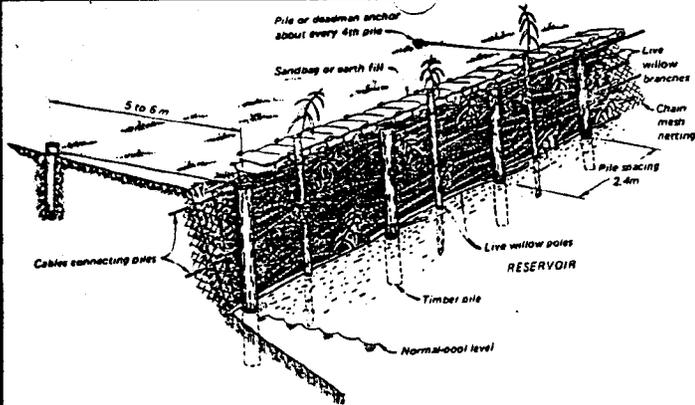
- (1) The District Engineer has the discretion to require an individual permit on a case-by-case basis for any of the activities authorized herein.
- (2) The time limit for completing work under this proposed general permit (GP 89-01) ends on July 31, 2007. If more time is required to complete a project, the permittee may submit a time extension request at least one month prior to the deadline. Project construction that overlaps the July 31, 2007 expiration of this general permit must receive an extension of authorization in order to remain valid.
- (3) No discharge of dredged or fill material may occur in the proximity of a public water supply intake.
- (4) No activity is authorized under this regional general permit which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act, or which is likely to destroy or adversely modify the critical habitat of such species. Authorization of an activity under this regional general permit does not authorize the take of a threatened or endangered species as defined under the Federal Endangered Species Act.
- (5) No discharge of dredged or fill material may consist of unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.) and material discharged must be free from toxic pollutants in toxic amounts.
- (6) Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills must be permanently stabilized at the earliest practicable date. Exposed soil above the ordinary high water mark shall be revegetated with native species and maintained. Vegetation clearing will be limited to the minimum required for project construction.
- (7) The permittee will submit a signed compliance certificate to the Corps of Engineers for each authorization.
- (8) Discharges of fill material in spawning areas during spawning season must be avoided to the maximum extent practicable. Activities that result in the physical destruction of an important spawning area are not authorized.
- (9) Discharges of fill material into breeding areas for migratory waterfowl must be avoided to the maximum extent practicable.
- (10) Activities that are commenced or under contract to commence by May 31, 2007 will be granted an additional 12 months from this expiration date to complete the work under the

existing authorization.

- (11) Revetments shall follow the existing bank contours. A 15-foot wide buffer extending landward of the top bank shall be established to native species and maintained.
- (12) Wetlands are excluded from bank protection projects.
- (13) Tires will be bolted together through the treads with 3/8" bolts and fender washers. Tires above the ordinary high water mark will then be filled with soil and planted to willow posts. On higher gradient stream segments, the tire mat shall extend into the streambed, up to the centerline in very high-gradient reaches. The tire mattress shall be secured by concrete block deadman anchors. This method will only be used where annual inspection and maintenance will take place.
- (14) No activity which may affect historic properties listed, or eligible for listing, in the National Register of Historic Places is authorized, until the District Engineer has complied with the provisions of 33 CFR Part 325, Appendix C.
- (15) No activity may occur in a component of the National Wild and Scenic River System or in a river officially designated by Congress as a study river for possible inclusion in the system, while the river is in an official study status, unless the National Park Service states in writing that the proposed activity will not adversely affect the Wild and Scenic River designation, or study status.
- (16) Riprap with more than 5% fines (material 1.5 inch or smaller) is prohibited.
- (17) Broken concrete must be chemically acceptable, free of protruding reinforcing bar or mesh and free of other construction debris (i.e., lath, plaster, asphalt, scrap metal, etc.)
- (18) The maximum weight of any piece of riprap shall be 1,350 pounds with 50% of the material weighing at least 200 pounds (Missouri River locations).
- (19) The riprap shall range in size from 6 inches to 36 inches in maximum dimension. The average mean dimension shall be approximately 13 inches and the protection layer thickness shall be 1 to 1.5 times the largest riprap dimension.
- (20) The riprap shall be angular. No more than 30% of the material shall have the maximum dimension more than 2.5 times the minimum dimension. No material shall have the maximum dimension more than 3.5 times the minimum dimension.
- (21) The maximum elevation of a revetment shall not exceed 2 vertical feet above the anticipated flood stage elevation.
- (22) The exposed riprap must be covered from the top of the structure to the ordinary high water mark with a minimum of 6 inches of soil compacted into the voids of the riprap and immediately seeded with an annual rye grass (nurse crop) plus a mixture of native grass species. Soil cover and seeding shall be completed immediately upon completion of construction to allow

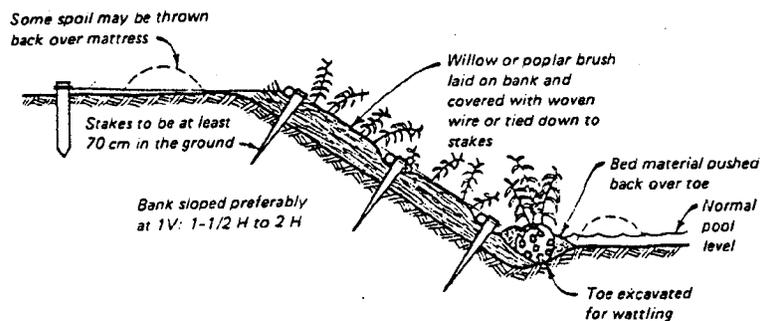
maximum opportunity for vegetation establishment prior to the next high water event. The planted vegetation will require maintenance such as reseeded, watering, grazing restrictions, fencing, etc. as necessary to ensure survival. Covering soil may be obtained offsite.

- (23) To apply for consideration under this general permit, the applicant will provide to the Nebraska Regulatory Office a written notice of intent to construct a particular project at least 30 days prior to any anticipated construction. The notice of intent must clearly describe the proposed work so that it can be determined whether or not the proposed work complies with the terms and conditions of the general permit, and must contain the following information: (a) legal description and location map with project site clearly marked, (b) brief description of work including project dimensions, type of fill material, source of fill material, and construction methods, (c) proposed start date of construction.

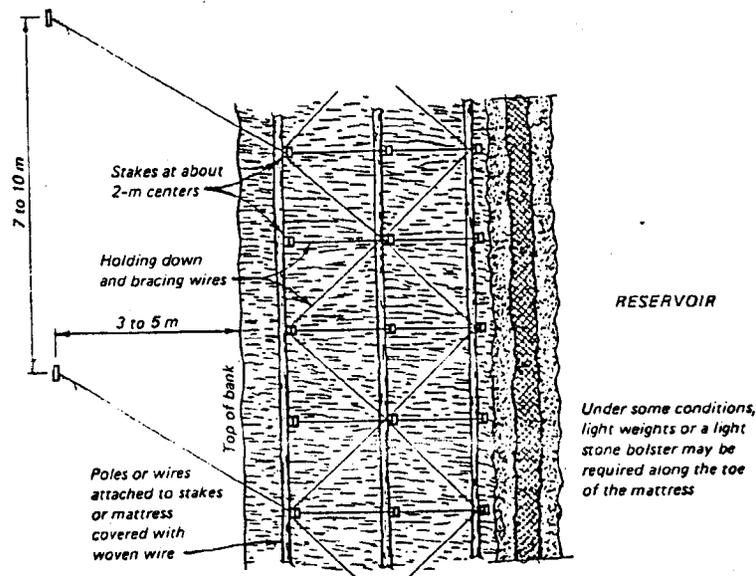


METHOD 1: Pile & Facine Revetment

METHOD 2: Timber Crib Wall with Willow Sprouts



a. PROFILE VIEW

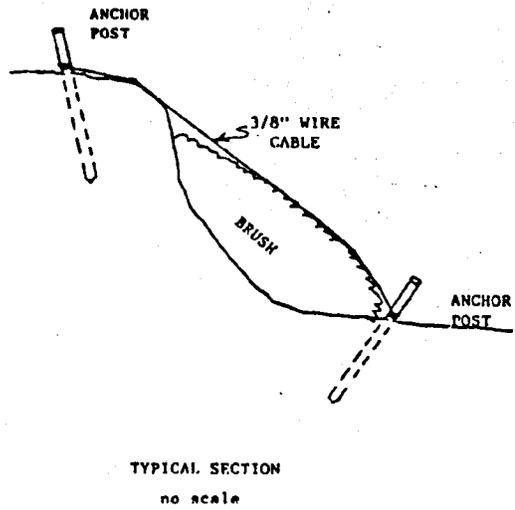
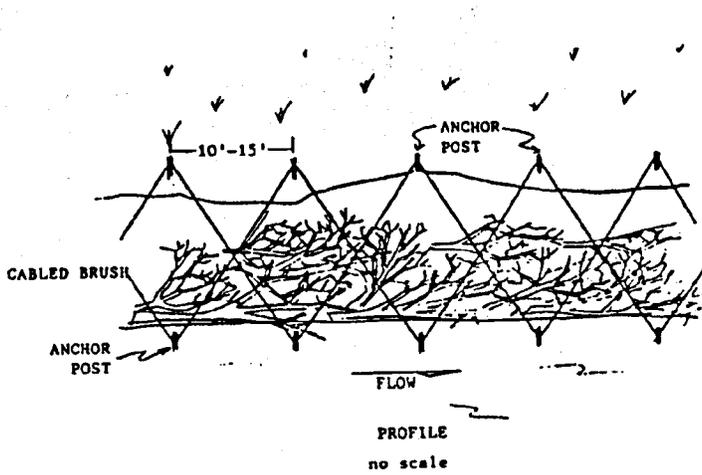


b. PLAN VIEW

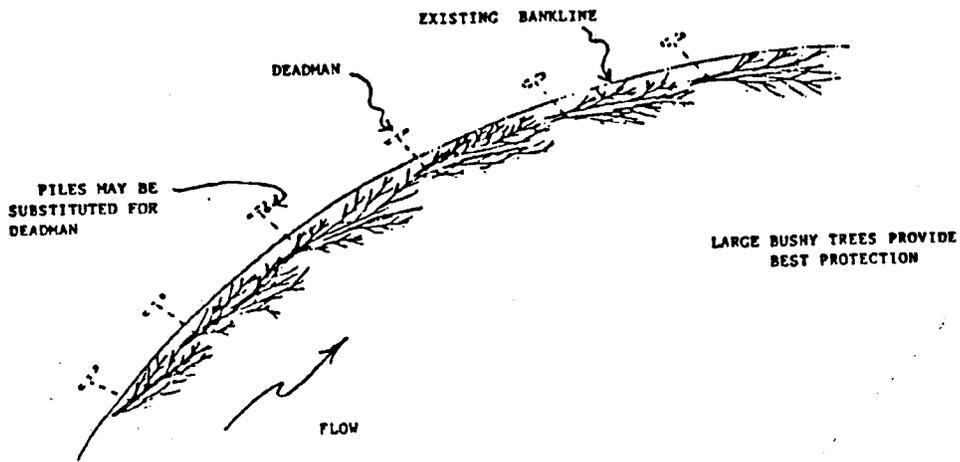
METHOD 3: Brush Mattress

Bank Stabilization
 Various Waters
 NE 2SB OXT 2 12896
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 State of Nebraska



METHOD 4: Cabled Brush Revetment



METHOD 5: Cabled Tree Revetment

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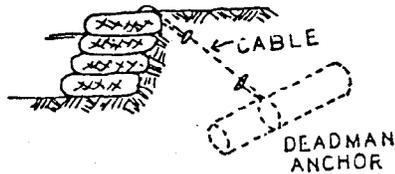
TOP



FRONT

Posts should be treated lumber or galvanized steel. Place a wire or board on top of the posts to prevent loss of tires during high flows. Cut or burn two holes in the sidewalls of each tire to release air and prevent flotation.

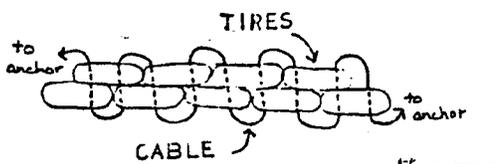
METHOD 8: Stacked Tire Post Retard



SIDE VIEW



FRONT VIEW



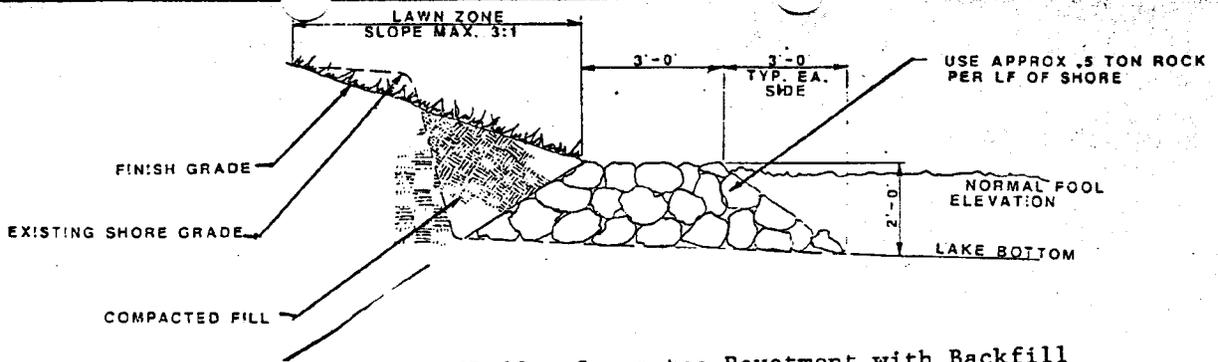
Use a minimum of 3/8 inch wire for cable.

STACKED TIRE REVETMENT: Place tires at the toe of the bank and step back 6 to 12 inches per row to reach top of bank. Each tire should overlap the two tires underneath it. Attach the tires by deadman anchors to the bank at the upstream and downstream ends to prevent water flow behind the tires. Place other anchors in the middle as needed. Fill the tires with dirt, concrete or stone. Cut or burn two holes in the sidewalls of each tire to prevent flotation.

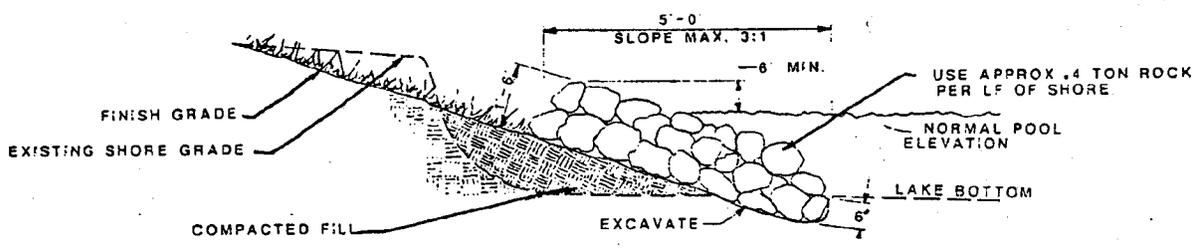
METHOD 9: Stacked Tire Revetment

Bank Stabilization
 Various Waters
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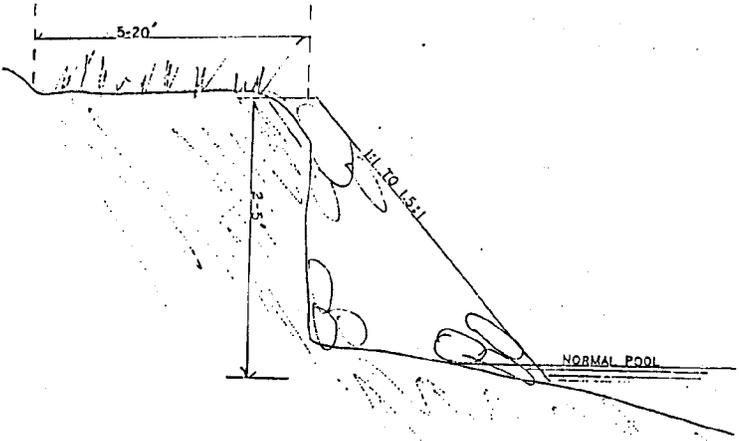
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METHOD 10: Stone-toe Revetment with Backfill



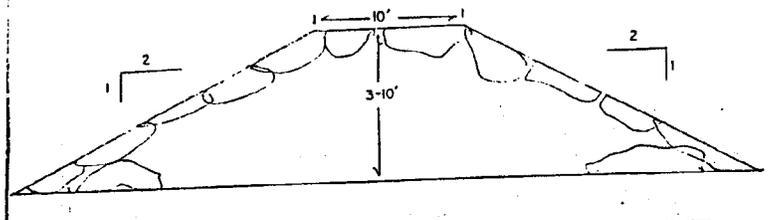
METHOD 11: Backfill and Slope with Revetment



ROCK DIKE

METHOD 12: Typical Revetment with no additional bank shaping

TYPICAL CROSS-SECTION



METHOD 13: Breakwater

Bank Stabilization
 Various Waters
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 State of Nebraska