

# Buckhorn Lake

## Shoreline Management Plan

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## SHORELINE MANAGEMENT PLAN BUCKHORN LAKE, KENTUCKY

### 1. Purpose and Scope

a. **Purpose.** The purpose of this plan is to provide guidance and policy on management of the shoreline of Buckhorn Lake, located on the Middle Fork of the Kentucky River, and to provide a balance of permitted uses of the shoreline while preserving and protecting the project's natural resources.

b. **Scope.** This plan is applicable to Buckhorn Lake. Shoreline shall be construed as the portion of Buckhorn Lake that is held in fee simple estate by the United States of America under U.S. Army Corps of Engineers jurisdiction whether or not it is covered by water. Easement estate is not considered under the provisions of this plan, but is subject to the restrictions stated in the easement documents.

### 2. Policy

a. **Policy.** It is the policy of the Chief of Engineers to protect and manage shorelines of all Civil Works water resource development projects under the Corps of Engineers jurisdiction in a manner which will promote the safe and healthful use of these shorelines by the public, while maintaining environmental safeguards to ensure a quality resource for use by the public. The objectives of all management actions will be to achieve a balance between permitted uses and resource protection for general public use.

### 3. References

- a. Section 4, 1944 Flood Control Act, as amended (16 USC 460d).
- b. The Rivers and Harbors Act of 1894, as amended and supplemented (33 USC 1).
- c. National Environmental Policy Act of 1969 as amended.
- d. Section 10, Rivers and Harbors Act of 1899 (33 USC 403).
- e. National Historic Preservation Act of 1966 (P.L. 89-915) as amended (16 USC 470 et seq).
- f. The Clean Water Act (33 USC 1344 et, seq).
- g. The Water Resources Development Act of 1986 (P.L. 99-662).
- h. Title 36, Chapter III, Part 327, Code of Federal Regulations, "Rules and Regulations Governing Public Use of Water Resource Development Projects Administered by the Chief of Engineers."
- i. Executive Order 12088 (13 Oct 78).
- j. 33 CFR 320-330, "Regulatory Programs of the Corps of Engineers."
- k. ER 1130-2-540, "Environmental Stewardship Operations and Maintenance Policies" (including EP 1130-2-540 Guidance).

- l. ER 1130-2-550, "Recreation Operations and Maintenance Policies" (including EP 1130-2-550 Guidance).
- m. ER 1130-2-406, "Shoreline Management and Civil Works Projects."
- n. EM 385-1-1, "Safety and Health Requirements Manual."
- o. CEORDR 405-2-13, "Issuance of Minor Licenses and Permits at Water Resource Projects."
- p. ORLR 1130-2-9, "Special Events Permits."
- q. LEDR 1130-1-14, "Impoundment and Disposal of Abandoned Private Personal Property."
- r. ER 1110-2-4401, "Clearances for Power and Communication Lines Over Reservoirs."
- s. 1997 Shoreline Management Plan for Buckhorn Lake

**4. Objectives.** The objectives of the Shoreline Management Plan are:

- a. To promote the safe and healthful use of the shoreline for recreation purposes for the general public.
- b. To preserve and protect Buckhorn Lake's natural resources and environmental quality.
- c. To manage use of public property in a manner that maintains a balance between development and the protection of the resource for general public use.
- d. To minimize the impact of authorized uses upon resources.
- e. To promote restoration of the shoreline where degradation has occurred.
- f. To manage the project shoreline to establish, enhance, and maintain fish and wildlife habitat.
- g. To protect aesthetic quality and sustain natural conditions.

**5. Development of Shoreline Management Plan.** A Shoreline Management Plan is required for each Corps of Engineers project where shoreline use is allowed per paragraph 4.c of reference m. The Shoreline Management Plan is developed through a public participation process. This 2006 revision is an update of the 1997 plan for Buckhorn Lake. The original plan allocated the entire lakeshore into various classifications or zones and outlined the authorized activities for each zone. Included are fee schedules for permits, specifications for community docks and vegetation alteration and other factors affecting shoreline use. In formulating the shoreline management plan, the shoreline was carefully evaluated against the criteria contained in Appendix B to determine if the existing zoning was adequately servicing the needs of the public. The entire plan is subject to a public involvement process and valid public concerns are incorporated. Current guidance requires that Shoreline Management Plans be reviewed periodically by the District Commander, but no less often than every five years, to determine the need for an update. District Commanders may make minor revisions to the Shoreline Management Plan when the revisions are consistent with policy, and funds for a complete plan update are not available.

## 6. Shoreline Allocation.

a. **General.** Shoreline allocation (zoning) is a designation of the Corps of Engineers' property into various classifications under which specific activities or uses are permitted for each classification. The allocations have been made in a manner which the Corps of Engineers considers to best to provide for the management and protection of project resources for the benefit of the general public while allowing a level of shoreline development. The entire shoreline of Buckhorn Lake has been allocated into the classifications outlined in Paragraph b, below, and delineated on the map found in Appendix A. A large scale map which identifies the shoreline zoning is available for viewing at the Buckhorn Lake project office. The classification assigned to an area applies to the land/water from the water's edge and waterward as well as the land from the water's edge to the project boundary. In instances where different classifications exist on opposite sides of the lake or a cove, the respective zoning applies to the mid-point between the shorelines.

### b. Types of Zoning.

(1) **Prohibited Access.** These are areas in which public access is not allowed for health, safety, or security reasons. At Buckhorn Lake, these areas are a section of the dam adjacent to the outlet structure and the emergency spillway. No outgrants or permits will be issued in these areas.

(2) **Public Recreation Areas.** These are areas designated for concentrated use by the general public and include Corps of Engineers operated campgrounds and launching ramps, and recreation areas operated by other federal, state, or local agencies. No shoreline uses are permitted in or near these areas.

(3) **Protected Shoreline Areas.** These are areas where no shoreline use permits or outgrants are authorized for floating facilities or fixed recreational facilities. The areas have been so designated to maintain aesthetic features, maintain fish and wildlife habitat, protect specific resources, or for other environmental considerations. Other factors which have resulted in a protected designation are the potential for erosion, excessive siltation, exposure to high wind and wave action and water depth. The only type of development allowed in these areas include minor vegetation alteration to make a narrow meandering path to allow access to the water and normal foot traffic for hunting or other purposes not involving alteration of the resource. Other allowable uses include erosion control structures and limited road access. These uses are allowed only after the Park Manager, or his/her representative, has determined that no adverse environmental impact will result and a permit or license has been issued to the individual. No permission is required for entry upon Protected Shoreline Areas and no individual shall attempt to impede the free access by the general public to these lands.

(4) **Limited Development Areas.** Limited Development Areas (LDA) are shoreline areas in which facilities can be authorized through the issuance of a license or permit. The specific activities which can be permitted are shown in Paragraph 7 below. An area is classified as Limited Development only after the impact of permitted uses has been carefully evaluated by the Park Manager. The majority of these areas at Buckhorn

Lake are shoreline areas adjacent to cabins/homes in existence prior to the initial zoning of this lake. The maximum density of permitted and fixed recreation facilities in LDA at Buckhorn Lake is established at 50 percent in accordance with guidance contained in Reference m. Density of development shall be determined by comparing the total length of shoreline that is obstructed by docks and/or other facilities to the total length of the segment that is zoned as LDA. When an LDA segment reaches 50 percent density, the Park Manager shall provide notice that no additional facilities will be allowed in that segment.

c. **Zoning or Other Changes.** Zoning changes are considered a major change to the Shoreline Management Plan and therefore will require a formal revision. A revision of the plan requires a public involvement process. Requested changes having significant benefits and no adverse impact based on the criteria in Appendix B may be incorporated into the revised plan. The revised plan will be subject to public review and comment prior to submission to the District Commander for final review and approval. A moratorium may be placed on issuing new permits and licenses in areas considered for a zoning (or other) change until a formal update can be completed.

## **7. Permits and Licenses.**

a. **Section 404 Permits.** Buckhorn Lake is not considered a navigable water of the United States. Certain activities are regulated under the authority of Section 404 of the Water Pollution Control Act, subject to the Endangered Species Act, the National Environmental Policy Act, and the Fish and Wildlife Coordination Act. These activities include dredging, extensive riprapping, construction of outfall lines, intake structures and other fixed structures, seawalls, filling and the discharge of dredged materials. Requests for items of this nature are reviewed by the Regulatory Branch of the Operations Division. All requests to perform any of the above activities should be coordinated through the Buckhorn Lake Park Manager.

b. **Special Event Permits.** These permits are issued for special events or activities such as regattas, boat races, fireworks displays, motorcycle events, religious ceremonies, social ceremonies (weddings, etc) reunions, etc. A fee may be assessed for the permit and insurance may be required for certain activities. Application for any special event should be made to the Park Manager, Buckhorn Lake for processing in accordance with Reference p. of this plan. Permitted use of the project lands and waters authorized under these special event permits cannot preempt public use of project recreational resources (i.e., the event cannot close a ramp to public use or prevent navigation around a water based activity). Application for a Special Event Permit must be made to the Park Manager in accordance with Reference p. of this plan 30 days in advance of the event using the standard application form provided and any fees due must be paid 15 days prior to the event.

c. **Special Act Permits.** Certain activities or acts of an unusual nature and generally a one-time occurrence may be authorized on case by case basis by the issuance of a letter permit from the Park Manager after a determination has been made that the activity is necessary and that no significant adverse impact will result from this act. Application must be made to the Park Manager by letter, outlining the nature and purpose of the

request. Each request will be reviewed separately and the permit, if issued, will outline all the conditions of permit. Examples of this type of permit would be the removal of a hazardous tree from government property in an area where a vegetation alteration permit cannot be issued or access by equipment to recover an item such as a vehicle that inadvertently entered upon Government property and cannot otherwise be removed.

**d. Shoreline Use Permits/Licenses in Limited Development Areas.**

(1) **General.** Development can be authorized on project lands designated as Limited Development Areas, through the issuance of a permit or license. Permits and licenses will only be issued to adjacent property owners or owners of property in a developed subdivision adjacent to government property who have legal right of access to the shoreline. The Park Manager may ask for documentation to show access. Should the legal right of access be revoked by the grantor or lost for any reason, at any time, the permittee will immediately remove the permitted facility from Government property. Applications for all structures or actions requiring a permit or license shall be made to the Park Manager at the project. The Park Manager or his/her representative will make an initial inspection of the area with the applicant. In the event that the proposed action is clearly unacceptable under the provisions of the plan, the request will be denied and a record of the action, with the reasons for the denial will be entered into the project files. If the request is acceptable, the applicant will be advised of the documents necessary to process the request and how to complete them. Upon receipt of the properly completed documents, the Park Manager will collect fees, issue the permit or forward the documents to the District Office for issuance of a license. All fees associated with the request will be collected by the Park Manager or his/her representative at the time that the request is accepted and approved in accordance with Appendix K, although courtesy renewal reminders are mailed prior to expiration of the permit/license, renewal is the responsibility of the permittee/licensee.

**(2) Trespass and Encroachments**

(a) The existence or occurrence of any trespass items or activities, or temporary encroachments on Government fee and easement land by an individual or organization precludes the granting of shoreline use permits and licenses. Therefore, any trespass items or activities, or encroachments of a temporary nature, must be resolved prior to the granting of the permit or license.

(b) Any permit or license application from an individual or organization that has an existing permanent encroachment which has been referred to the Corps of Engineers Louisville District Real Estate Division will be processed only after the encroachment has been resolved.

(c) Trespasses (to include but not limited to tree cutting, vegetation alteration such as brush clearing, excavations, or other activities that cause damage and/or destruction to public lands) or failure to comply with requests to remove encroachments may result in termination of any or all permit(s) or license(s) that have been issued in accordance with the Shoreline Management Plan. The permit/license may not be eligible for reinstatement for a period of up to five years from the date that the trespass or encroachment is resolved. If shoreline zoning is changed within that five year

period to protected shoreline, a request for reinstatement of the permit/license will not be considered.

(d) Flowage easements acquired around the lake allow the Government to flood those lands and prohibit the construction of any structure, other than farm fences, without the prior written approval of the Government. Habitable structures are strictly prohibited on flowage easement lands. The restrictions on construction are necessary to prevent any actions that could interfere with the Government's right to use the properties for flood storage. Owners of property subject to these easements are encouraged to know the boundaries of the easements and the restrictions imposed on their use of the property. Violation of the easement restrictions creates an encroachment, and it is the landowner's responsibility to resolve any encroachment activity. Landowners are encouraged to consult the Park Manager before undertaking any land modification or construction activities in order to avoid an inadvertent encroachment.

(3) **Licenses.** The following facilities may be authorized in Limited Development Areas by the issuance of a license by the Real Estate Division after approval by the Park Manager:

(a) **Electrical Use.** Use of electricity may be approved for operation of boat lifts and convenience outlets if the service poses no safety hazard and does not conflict with other recreational uses of the project. The conditions and specifications for electrical use are contained in Appendix C.

(b) **Water Lines.** Licenses for water lines and/or water withdrawal may be issued for the purpose of obtaining water for domestic use. The withdrawal of water for irrigation is not permitted under the Shoreline Management Plan. The conditions, specifications, and application procedure for water line licenses are contained in Appendix D.

(c) **Stairways and Steps, Improved Pathways, and Footbridges.** Licenses for stairways and/or steps may be issued, provided that they do not interfere with project operation, are not obtrusive and are constructed such that they can be easily removed. Specifications and conditions for stairways and steps and the application procedure are found in Appendix E. Reinforced footpaths and footbridges may be allowed by a license. Footbridges are allowed where terrain features such as ditches or ravines make them necessary. Reinforced paths may be used as cart paths by individuals with disabilities under certain conditions. See Appendix H for specifications and conditions.

(d) **Erosion Control Devices.** Erosion control devices are acceptable where bank erosion is a problem. Permits for erosion control devices are free due to the benefit derived by the project as a result of these devices. Structures that may be placed are riprap, stone filled baskets (gabions), or vegetative cover. Specifications and conditions for erosion control devices are found in Appendix F.

(e) **Roadways, Turnarounds, Parking Areas, and Ramps.** Ramps are allowed under the provisions of a license. Roadways, parking areas, and turnarounds may also be allowed in conjunction with a licensed ramp or a permitted

group dock. A boat dock permit does not authorize these facilities and a separate license must be obtained prior to any construction. See Appendix G for specifications and conditions.

(4) **Shoreline Use Permits.** The following facilities or activities are allowed under a permit that is approved by the Buckhorn Lake Park Manager.

(a) **Group or Community Boat Docks.** Group docks are permitted at locations approved by the Park Manager, Buckhorn Lake. All private docks are treated as and called group docks, and additional slips may be added to dock facilities to accommodate future applicants. Dock locations will be selected to best serve all members, and the Park Manager may direct the relocation of a dock to better serve a group. As an operative rule, future docks will not be placed closer than 500 feet, as measured center to center along the summer pool line, to another dock. A waiver of the 500 foot spacing requirement may be approved by the Project Manager, Upper Kentucky River Project, if terrain features make access to an existing dock unusually difficult and access cannot be improved by other approved means. Specifications, conditions, and application procedures for group boat docks are found in Appendix I. A fee is charged for dock permits. Fee information is found in Appendix K.

(b) **Vegetation Alteration.** Vegetation alteration, to include mowing, underbrush removal, selected tree removal and driftwood removal will be permitted only after issuance of a permit by the Park Manager or their designated representative. Vegetation permits will be issued in a manner which will minimize the appearance of private use of Government property. The general policy will be to restore existing areas where a lawn type appearance exists to a more natural state through a gradual reduction in the size of mowing areas and a limit to the amount and type of vegetation that can be removed. Vegetation alteration permits are covered in Appendix J. No herbicides may be used for vegetation control. A fee is charged for a vegetation alteration permit in accordance with Appendix K.

(c) **Unimproved Paths.** The Park Manager or his/her representative may issue a free permit for a pathway to the shoreline which will authorize limited vegetation removal to provide improved access. The paths will be designed/placed to reduce rapid runoff of rain water and reduce soil erosion. Paths will not normally be wider than 5 feet. Paths cannot be further improved in any manner without the issuance of a license as outlined in Paragraph 7d. The Park Manager may issue a path permit of this type in Protected Shoreline Areas to facilitate access to the shoreline; however, no further improvements are allowed in Protected Shoreline Areas.

(d) **Duck Blinds.** Duck blind permits will be issued upon request on a first come first served basis. Blinds must be removed within 30 days of the end of the season. Permittee shall not cut vegetation or otherwise alter Government Property to construct the blind. No fee will be charged for duck blind permits. Land based blinds at locations other than those assigned by permit are not allowed on Corps of Engineers property, however floating blinds are allowed subject to State of Kentucky hunting regulations without a permit from the Corps of Engineers.

(5) **Fees.** A fee will be charged for each permit and license issued, unless otherwise indicated in this plan. Such fees are due in advance and must be paid in full prior to the initiation of any construction or permitted activity.

(a) **License Fees.** 10 USC 2695, as amended, allows the Corps of Engineers to recover the administrative costs incurred in the processing and managing of licenses issued for use of the shoreline. Fees for licenses are based on the fair market value of the service provided plus the administrative cost of providing the service. These fees are subject to change as the market values fluctuate or administrative costs vary. Current license fees will be provided by the Park Manager upon request.

(b) **Permit Fees.** Fees for permits are established by Headquarters, U.S. Army Corps of Engineers and are applicable nationwide. The fee schedule may be published as a separate part of ER 1130-2-406 and these fees may be subject to periodic update. A change in the fees schedule does not constitute a major revision of the Shoreline Management Plan and an update of the plan is not required for each fee change. The current fee schedule for permits is shown in Appendix K. Licenses and permits are non-transferable and refunds will not be made for any unused portion of a license or permit that the grantee terminates before the expiration date, however, the Corps may issue a refund when the Government terminates a license or permit for the benefit of the Government.

(6) **Consolidated Licenses and Permits.** In instances where an individual has multiple licenses or permits, these instruments may be consolidated into a single license or permit, resulting in a lower overall fee. Licenses and permits will not be consolidated together as one instrument.

(7) **Conditions of Permits, Licenses and Leases.**

(a) **General.** The conditions for shoreline permits are found in Appendix L. The permittee agrees to abide by these conditions upon application for and acceptance of a permit. The permit conditions are enforceable through Title 36, Chapter III, Part 327, Code of Federal Regulations. Violations of this regulation may be punishable by a fine of not more than \$5000 and/or imprisonment of not more than 6 months. All facilities located on Corps of Engineers property at Buckhorn Lake must be authorized by a permit, license, or lease. Unauthorized structures may be removed in accordance with the above regulation and in addition, the violator may be cited into U.S. Magistrates Court. No construction or alteration on fee simple estate lands shall take place until such time as the lessee, licensee, or permittee has a valid instrument in his possession, and plans have been approved by the Park Manager or his/her representative. All construction on Corps property is subject to inspection to insure compliance with approved plans. When deviations from the approved plans are noted, the outgrantee will immediately halt all work until such time as satisfactory measures are taken to comply with approved plans. Continued noncompliance may result in the instrument being revoked and the owner may be required to remove the structure and restore the area to its original condition. Structures which are not removed within 30 days of written notice to do so may be impounded and/or removed by the Corps of Engineers in accordance with reference q. The owner will be assessed the costs incurred by the Corps for any impoundment or removal. An exception of the above is the appeal rights listed below

when a permit is revoked. No new or reconstructed floating facility will be placed on Buckhorn Lake until such time as it is inspected by the Park Manager or his/her representative for compliance with submitted plans. Conditions applicable to licenses are found in the license instrument issued to the grantee.

(b) **Appeal Rights.** The District Commander or his/her designee may revoke any permit when it is determined that the public interest requires such revocation or when the permittee fails to comply with the terms and conditions of the permit. The permittee will be notified by certified letter. The permittee will be allowed a 30-day period from the date of notification to submit an appeal request in writing. The Park Manager may deny a permit application or a request for exception. In either case the Park Manager will review the appeal request and forward for review by the Operations Manager for the Upper Kentucky River Area. The Operations Manager will make a decision and notify the applicant by certified letter. If the applicant chooses to contest the decision of the Operations Manager a second appeal may be submitted within 15 days of notification to the Operations Manager for forwarding to the District Office for review. Following the final District Office review, a written decision will be mailed to the person making the appeal by certified letter. The terms for revocation of a license are addressed in the license document, and are coordinated with the Real Estate Division.

(c) **Compliance Inspections.** Compliance inspections on all licenses and permits will be conducted by the Park Manager or his/her representative on a regular basis. Any non-compliance with the provisions of the license/permit will be brought to the attention of the instrument holder for correction at field level where possible.

(d) **Transfer of Licenses/Permits.** All permits and licenses are nontransferable except as noted below. Upon the sale or other transfer of the permitted facility or the death of the permittee and his/her legal spouse, the permit or license is null and void. When the permit holder for a group dock having multiple numbers relinquishes his interest in the dock the permit will be reissued in the name of another member of the dock without the assessment of an additional fee.

(8) **Permits/Licenses for Persons with Disabilities.** Requests for special consideration based on a physical disability will normally be considered within the criteria specified in Appendix H where reinforced cart paths are discussed. Universal access will normally be provided through the Corps of Engineers operated public access areas and the facilities identified in Appendix H may be allowed when justified. In addition, licensed roadways, turnarounds, and ramps may be approved. Step and path licenses may also be utilized. The selection of group dock sites by the Park Manager will include consideration of any special needs, but will not be made based solely on the medical conditions of an applicant. Medical factors may be considered in evaluating terrain features for dock site selection.

(9) **Grandfathered Facilities.** Should it become necessary to change zoning from Limited Development to Protected Shoreline based upon the criteria in this plan, existing permits for vegetation alteration and boat docks will be reissued to the original permit or license holder, and/or a surviving spouse, as long as conditions in the

appropriate appendix for the type of structure are met. Vegetation alteration permits will not be automatically issued to a new owner should the adjacent property change hands. Dock permits will be renewed to a new owner for that portion of the dock which was in existence as of November 17, 1986 if the following conditions are met:

- (a) Dock is maintained in a usable and safe condition.
- (b) Dock does not occasion a threat to life or property.
- (c) The holder of the permit is in substantial compliance with the existing permit.

**8. Prohibited Items or Activities.** The following items or activities are prohibited on the fee simple lands or waters of the Corps of Engineers at Buckhorn Lake:

- a. Flower or vegetable gardens.
- b. Formal arrangements of hedges and shrubs, except that an approved hedge may be planted and maintained on the property line to meet the requirements of Para. 9. B below. All plantings on Corps lands shall be under Corps supervision. Members of the public may volunteer to plant Corps approved materials on Corps property in areas approved by the Park Manager.
- c. Painting or whitewashing of any tree trunk, boulder, rock outcrop, stump, or other feature.
- d. Private swings, picnic tables, signs, patios, etc.
- e. Alteration of the natural terrain by making cuts or fills unless in conjunction with the construction of a licensed or permitted facility.
- f. Excavation of or disturbing an archeological site or the removal of an artifact.
- g. Boat houses.
- h. Private piers or jetties, except at designated recreation areas.
- i. Marking buoys. Buildings or any structure not covered by a permit, license, or lease.
- j. Sewage outfalls or structures.
- k. Well or spring development.
- l. Fences, except farm fences on the property line. The adjacent land owner erecting the fence is responsible for determining the exact location of the property line, which may require a professional survey.
- m. Anchor posts or devices such as fenders, bumpers, or matting made from old tires, logs, etc.
- n. Garbage, debris, or refuse dumps, or garbage pickup points unless covered by a license or lease.
- o. Fuel tanks or other fuel storage containers.
- p. Ranging, grazing, watering, or allowing livestock on project lands.
- q. Surface mining.
- r. Alteration of natural terrain by removal of fallen trees, ginseng, grapevine, plants, trees, wild flowers, and threatened or endangered species.
- s. Hunting or collecting of animals except as allowed by federal, state, and local regulations.
- t. Operation of any vehicle, including all-terrain vehicles, motorcycles, cars, trucks, or any other motorized vehicle, off of designated roadways or in violation of local, state, or federal regulations.

- u. Inflatable Items moored around docks or on government property (i.e., water trampolines, tubes, floating toys, floating platforms, floating diving platforms, other water toys not described here). Items must be placed on boats, in an approved storage cabinet on the dock, or removed from government property when not in immediate use.
- v. Diving boards, rope swings, (or similar devices).
- w. Chairs, tables, umbrellas, and/or carpet may not be left on government property or on docks unless in use at the time. If not in use, they must be kept on boats, in an approved storage cabinet on the dock, or removed from government property. No permanent mounting of items of this type.

## **9. Boundary Identification.**

a. **Corps of Engineers Actions.** Buckhorn Lake contains 121 miles of fee boundary marked with bronze disks and iron posts. Sections of the fee line between marker posts and monuments are marked with fluorescent orange tree marking paint at eye level to allow a person at any point on the line to see either a marked tree or boundary post in either direction. The remoteness and limited accessibility to much of the project boundary makes it difficult to adequately monitor the boundary line. Flowage easement boundaries are marked with a yellow post at elevation 845 m.s.l. Total flowage easement line is 42 miles. The fee line basically surrounds the lake while the majority of easement land lies at the extreme upper ends of small feeder streams and upstream from Hyden, Kentucky, along flood plain areas of the Middle Fork of the Kentucky River. Fee Line designates the boundary between Government owned property and adjacent private property. Corps personnel periodically inspect and maintain the boundary line. Easement Line designates land which the government has identified as property subject to flooding because of lake level increases due to flood control activities. The government has only purchased the right to flood the property, however the land is still privately owned. The restrictions on easement properties basically prohibit habitable structures and major alterations to the land surface. Easement property does not fall under the guidelines of the shoreline management plan.

b. **Landowners Actions.** It is the adjacent landowner's responsibility to ascertain the exact location of the boundary line through the services of a qualified surveyor prior to initiating any action which might result in a trespass upon government property or onto adjacent private property. The holders of vegetation alteration permits are required to delineate the property line as specified in Appendix J. Other adjacent landowners are encouraged to delineate the line in a similar manner, however all such delineations will be accomplished at no cost to the Government.

**10. Kentucky Department of Fish and Wildlife.** The State of Kentucky Department of Fish and Wildlife lease 3482 acres of land and water at Buckhorn Lake, and has assumed the responsibility for the management of the wildlife in the leased areas and the fish populations in the lake itself.

**11. Kentucky Department of Parks.** The Kentucky Department of Parks leases and operates one recreation area known as the Buckhorn Lake State Park, comprising a total of 856.5 acres. The State is responsible for the upkeep of the facilities, provision of

visitor assistance programs, and the protection of the natural resources located within leased areas.

**12. Corps of Engineers Recreation Areas.** The Corps of Engineers operates four recreation areas within its boundaries including: (1) Tailwater Recreation Area – 26 acres; (2) Leatherwood Recreation Area – 27 acres; (3) Trace Branch Recreation Area – 54 acres; (4) Confluence – 66 acres.

**13. Cooperative Agreements.** The Leslie County Fiscal Court participates with the Corps of Engineers in the operation of the Confluence Recreation Area (5 developed acres) and the Trace Branch Recreation Area (35 acres).

**APPENDIX A**

**Shoreline Management Plan, Buckhorn Lake**

**Shoreline Management Map**

**(Provided as separate document that may be obtained at the local Corps project office)**

## Appendix B

### Shoreline Management Plan, Buckhorn Lake

#### Zoning Criteria

**1. Evaluation Factors.** - Limited Development Areas (LDA) are the only areas in which facilities or activities are authorized through permit or license, with the exception of the items identified in Paragraph 6.b.3. (Protected Shoreline Areas) of the Shoreline Management Plan. The Commander, Great Lakes and Ohio River Division has approved the zoning contained in this plan, with the stipulation that no future changes from Protected Shoreline Area to Limited Development Area will be permitted. Exceptions to this policy will only be considered in instances where the government accepts a zoning trade from Protected to Limited Development that results in a net gain in Protected Shoreline footage in a location determined by the government to be of greater value relative to natural resource management. Areas currently zoned Limited Development Areas will periodically be reevaluated by the Park Manager to determine if further protection is necessary. This reevaluation will be based on the factors contained below.

a. **Availability of Access.** - An evaluation will be made to determine the availability of access and mooring facilities in the area within 500 feet which have the capacity to serve the needs of the requestors. Zoning areas will not be revised if there is insufficient access and mooring facilities exist in the area from commercial or public recreation areas.

b. **Population Served.** - In the periodic review of lake zones the concept of public access will be the primary consideration for management of the shoreline. Public access areas, available to all, are preferred over designating large areas of shoreline for limited development use areas. This also allows the public a more unrestricted use of that public property from the waters edge to private property.

c. **Terrain.** - Areas for which LDA zoning currently exists will be evaluated for terrain characteristics that might have an impact on increased utilization. Areas in which terrain modifications would be required such as cut and fill or the extensive use of steps, stairways and footbridges necessary to permit ready access to the shoreline will not be favorably considered. Areas susceptible to accelerated erosion due to slope or soil type will not be favorably considered.

d. **Aesthetics.** - Areas currently zoned LDA will be evaluated for any unique aesthetic values. Areas offering a highly scenic view or pristine areas may be considered for rezoning to the Protected Shoreline category.

e. **Exposure to Wind and Wave Action.** - The shoreline, in any area for which zoning as LDA exists, will be evaluated for the effects of wind and wave action. Wind and wave action may make the placement of docks infeasible. The potential for accelerated shoreline erosion due to high wave energy in areas where vegetation would be removed may make it necessary to change the area's LDA classification.

f. **Water Depth and Configuration of Lake Bottom.** - The water depth and the configuration of the lake bottom must be suitable for the installation of docks. Water depth must be sufficient to allow at least a four foot depth at the lakeward edge of the dock without using unusually long walkways or standoffs. The bottom configuration must be such that a dock could rest on the lake bottom at its designated site without damage from large rocks or twisting when the lake is lowered to winter pool, elevation 757 m.s.l.

g. **Proximity to Recreation Areas.** - Shoreline that is within one-quarter mile, straight line distance, either on the same or opposite side of the lake, and in view from any point in a developed or future recreation area may be considered for rezoning to Protected Shoreline. Starting point for the measurement will be from any point within the recreation area, above summer pool, which would give the maximum buffer for the recreation area. Existing zoning of LDA in such areas may be changed to meet the distance and line of sight criteria. Docks in these areas will be grandfathered to the existing owner for his/her lifetime and the lifetime of his/her spouse. Vegetation alteration permits will be grandfathered to the present permittee or his/her surviving spouse for their lifetime only.

2. **Review of Existing Zoning.** - The Park Manager, Buckhorn Lake, based on the factors in Paragraph 1 above, may recommend that segments of shoreline be changed from LDA to Protected Shoreline or other classification and such recommendations will be considered in the next update of the Shoreline Management Plan. When the Park Manager has determined that a change is needed, a moratorium on new permits and licenses in the area in question will be put into effect until the public participation process is completed. Existing permitted facilities in areas that are removed from LDA zoning will be allowed to remain for the lifetime of the permit holder and his/her spouse or until the property is sold. Permits will not be reissued to new adjacent property owners in these areas and all facilities must be promptly removed by the original owner and the area restored as stipulated in the permit or license.

3. **Application Procedure for Zoning Changes.** Requests for zoning changes from Limited Development to Protected Shoreline will only be accepted from the owners of property adjoining Government property. The requestor must provide proof of ownership of the adjacent property if requested by the Park Manager. Rezoning applications will not be processed if the transfer of property is contingent upon approval of a zoning change of the Government lands that adjoin the private property. The requestor shall complete the form furnished and provide sufficient detail to allow the Park Manager to accurately determine the limits of the area for which the change is requested.

## Appendix C

### Shoreline Management Plan, Buckhorn Lake

#### Electric Service on Government Lands

1. **General.** - The installation of electrical service to authorized facilities on fee land is permitted under the provisions of a license issued by the Real Estate Division. Electric service will be permitted for lighting, water pumps and for convenience outlets adjacent to group docks. All such service shall pose no safety hazard to any individual nor shall it interfere with any aspect of project operations. Due to the wide fluctuation of pool levels at Buckhorn Lake, no permanently installed electrical service is permitted on any floating facility except commercial concession marinas. Service to group docks will be by drop cord only and cords will be removed when not in use. All electrical service is subject to the conditions in Para.2b.below.

2. **Conditions.** - The following conditions apply to all electrical service on Government land that serves permitted or licensed facilities:

a. **Electric Codes.** All electrical installations must conform to the National Electric Code, the National Electrical Safety Code, and all state and local codes and regulations.

b. **Inspection.** All electrical service that extends upon Government land must be inspected by a State of Kentucky certified inspector and proof of compliance provided to the Park Manager, Buckhorn Lake prior to energizing any circuits. Electrical facilities must be recertified at each renewal of the license.

c. **Ground Fault Interrupters.** All electrical circuits which extend onto Government land (including drop cords) must have a properly operating ground fault interrupter (GFI) installed above elevation 845 m.s.l. Failure to provide the GFI or to maintain such in a proper working condition may result in the license being revoked. The GFI shall be installed on a post or on the exterior of a building in plain view where it is readily accessible and shall be approximately 5 feet above the ground. The ground fault interrupter shall not be attached to a tree or other vegetation. Licensees are required to turn off power at the GFI and lock out access when not in use.

d. **Wire.** All new permanently installed electrical wiring extending onto Government land shall be buried to the depth required by the National Electrical Code, except that the option of encasement in concrete is not allowed. The location of the cable or conduit shall be marked with warning tape buried at a depth of 9 - 12 inches above the electric wire. Underground wiring must be direct burial type (UF or USE) which can be installed without conduit or THW or equal standard wiring installed in non-metallic conduit. Existing aerial service will be allowed to remain for the lifetime of the licensee or his/her spouse provided all other conditions are met. Upon change of ownership all aerial lines must be removed by the original licensee.

e. **Conduit and Boxes.** All above ground wiring shall be installed in an approved electrical conduit. All enclosures such as breaker boxes, switch boxes, and receptacles shall be rain tight and weather resistant and shall be securely mounted on a treated wooden post or pole a minimum of 4 feet above the ground.

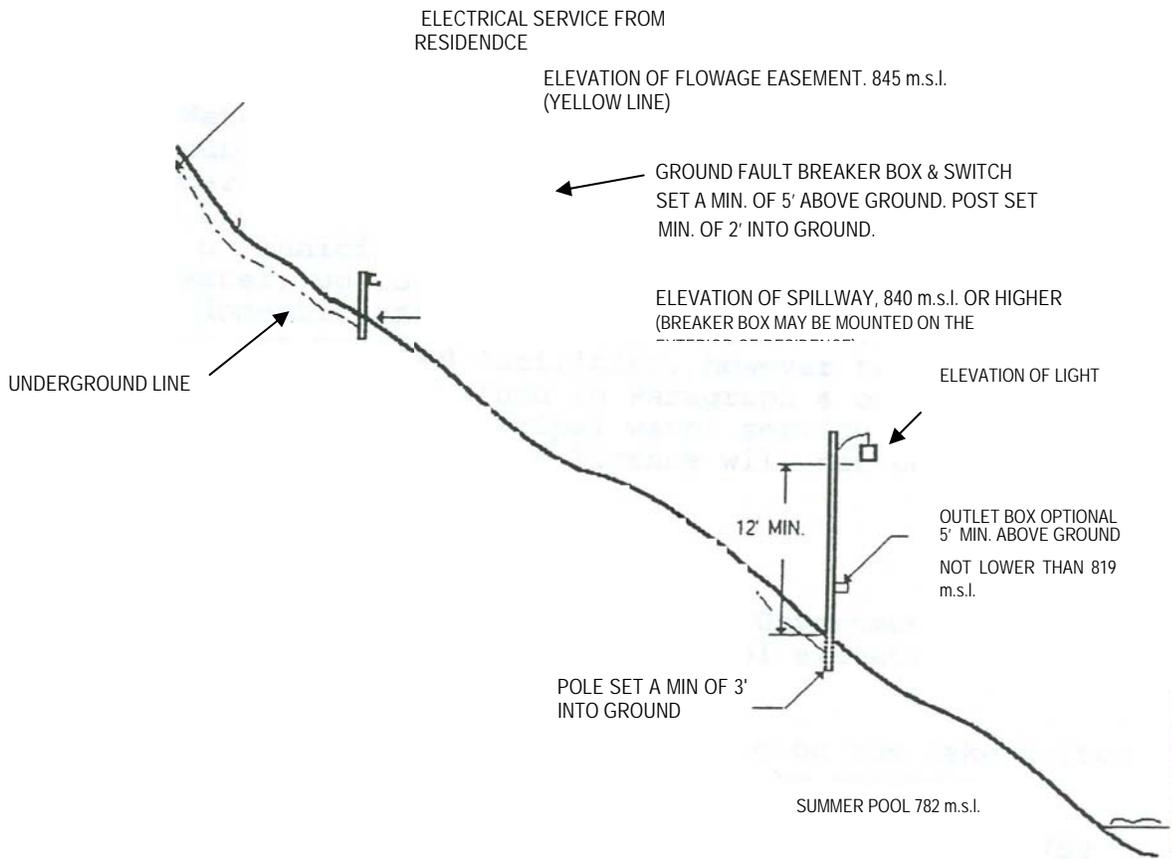
f. **Security Lights.** Security lights shall be installed on treated wooden posts or poles not less than 12 feet above the base of the pole. The height of the light bulb shall not be lower than the calculated five year flood pool, 819 m.s.l. Lights or wiring to lights shall not be installed on trees.

g. **Convenience Outlets.** Convenience outlets will be permitted adjacent to group docks only under the provisions of a separate Real Estate license. Outlets may also be installed in connection with a security light, on the same post. Temporary drop cords extending onto Government land are subject to these same conditions and require Corps review and approval. Any drop cords not in use will immediately be disconnected and removed from Government land.

h. Attached at the end of this Appendix is a sketch for a typical electrical installation on Government property. This sketch is provided as a guide only, and the applicant must submit a drawing or sketch of the proposed installation along with the application as specified in Para. 4.

3. **Existing Facilities.** All existing electrical service extending onto Corps of Engineers lands at Buckhorn Lake shall be upgraded to meet the requirements noted in Paragraphs 2.a.- 2.f. of this appendix except for the aerial service wiring covered by Paragraph 2.d. The Park Manager will require the immediate upgrade or removal of any electrical service that is not certified, does not meet code or is not safely maintained. It is the responsibility of the licensee to assure that the initial inspection or certification is accomplished and to provide proof of such to the Park Manager and to obtain recertification prior to renewal. Corps of Engineers personnel will periodically inspect to assure that facilities are properly maintained in compliance with these conditions.

4. **Application Procedures.** - The applicant should contact the Park Manager or their representative to inspect the site and to obtain an application for a license. Upon approval by the Park Manager, the applicant will be advised of the cost of the license and will submit payment with the application. Should the applicant have other licenses and/or permits, they may be coordinated into a single outgrant with the fees adjusted accordingly. The Real Estate Division will prepare the license document for delivery to the licensee. The Park Manager will inspect the initial installation to determine compliance with the license conditions.



**BUCKHORN LAKE  
SHORELINE MANAGEMENT  
PLAN**

TYPICAL ELECTRICAL INSTALLATION

## Appendix D

### Shoreline Management Plan, Buckhorn Lake

#### Water Lines Licenses and Water Withdrawal Contracts

1. **General.** - Water lines licenses and water withdrawal contracts may be issued subject to the conditions contained in this appendix to owners of land abutting government property in areas that are zoned Limited Development Areas and access to an existing local or municipal water system is not available. The withdrawal of water, up to 30,000 gallons annually can be authorized for domestic and industrial purposes but not for irrigation under the provisions of this license. These licenses are for permanently installed facilities; however temporary licenses may be issued as outlined in Paragraph 4 of this appendix. In the event that municipal water service becomes available to a water licensee, the license will not be renewed upon expiration.

2. **Conditions.**

a. Water lines shall be buried from the Government property line (red line) to five feet below summer pool elevation (summer pool elevation is 782 feet m.s.l.).

b. Water lines and intake casings may lie on the lake bottom below elevation 777 m.s.l.; however they must be securely anchored and positioned such that they present no hazard to navigation. Waterlines can extend to a minimum elevation of 752 m.s.l.

c. Complete plans and specifications, including the method of anchoring of pipe and intake must be submitted to the Park Manager with the application.

d. The water withdrawal license authorizes the withdrawal of up to the number of gallons specified in the license. Both the water line license and water withdrawal license are required, however they will be consolidated into one outgrant.

3. **Application Procedures.** - The applicant shall contact the Park Manager or their representative to obtain the required application and instructions on how to apply. A site inspection will be conducted to determine the feasibility of granting the request. If feasible, the applicant shall submit the completed application form, detailed plans and specifications, and the required fee to the Park Manager. The fee will be the established fee in effect at the time and the applicant will be advised of the amount prior to submitting the application. The approved application will be forwarded to the Real Estate Division for issuance of the formal license.

4. **Temporary Water Withdrawal Licenses.** - The Corps of Engineers may issue temporary water withdrawal licenses during periods of drought for domestic and/or industrial uses but not for irrigation. These licenses are not restricted to adjacent property

owners and the water must be withdrawn at the location and under the conditions specified by the Park Manager, Buckhorn Lake. The license is granted for a 90 day period and allows up to 30,000 gallons of water to be withdrawn after payment of a fee. The Park Manager will authorize the immediate withdrawal upon collection of the fee, and forward the application to the Real Estate Division.

## Appendix E

### Shoreline Management Plan, Buckhorn Lake

#### Stairways and Steps

1. **General.** - Stairways and steps are permitted in Limited Development Areas through the issuance of a license by the Real Estate Division. The structures will be approved only where necessary to provide access to the shoreline and will not be authorized for landscaping or ornamental purposes or over gentle terrain presenting no major obstacles to foot traffic. Staircases will not be permitted over cliffs or bluffs that are near vertical.

#### 2. Specifications.

a. **Materials.** - Building material shall be dimension structural lumber, cross ties or similar material that can be removed if required. Metal staircases, massively placed concrete, or mortared block, brick or stone will not be permitted. All wood materials shall be pressure-treated or otherwise treated with a wood preservative that will not damage the environment.

b. **Anchoring.** - All steps or stairways constructed of a buoyant material shall be firmly anchored in place. Trees shall not be used as an anchoring device, nor shall hand rails be attached to trees.

c. **Painting.** - New steps and stairways will not be painted. A clear sealer may be applied to wooden materials. Existing wooden structures that were previously painted may continue to be painted a neutral color and metal structures will be maintained with the surface treatment of the initial installation.

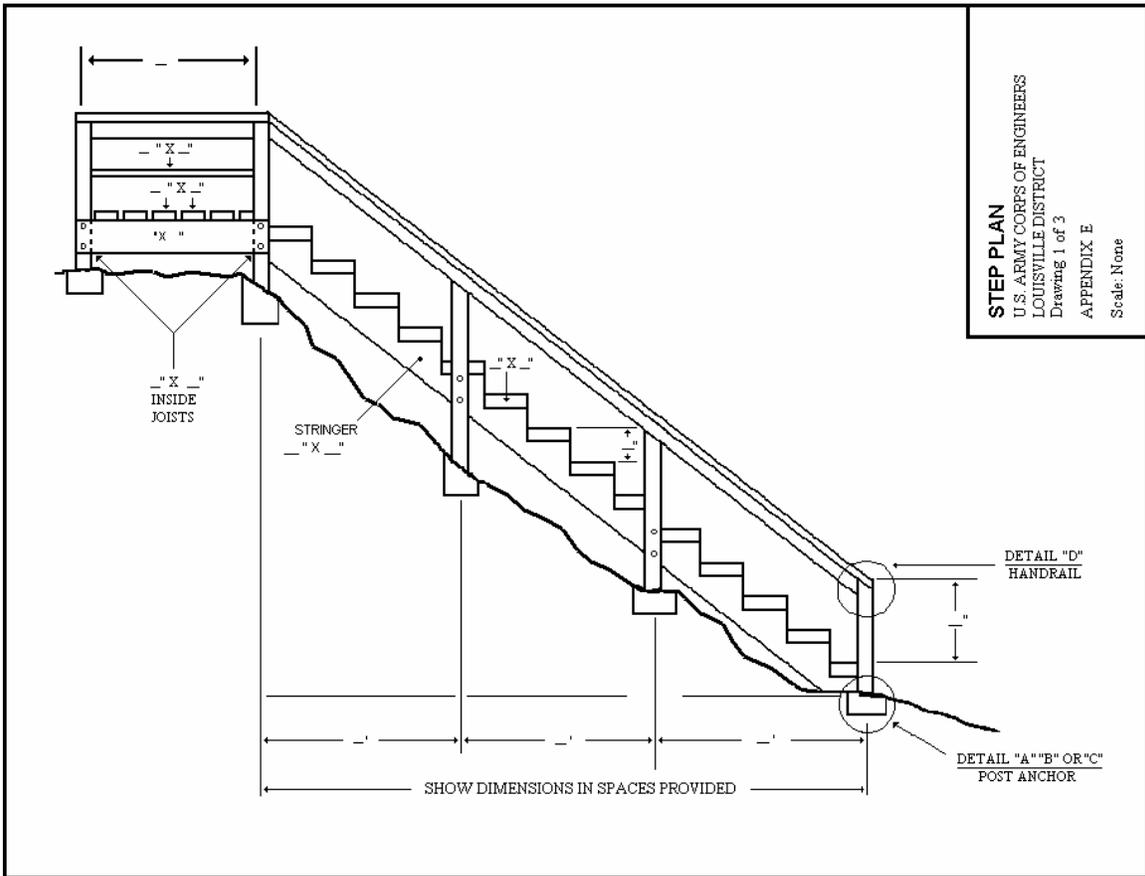
3. **Design.** - A material specification sketch of a stairway is included at the end of this Appendix that can be used as a guideline. Designs may be submitted by the licensee for approval. Embedded cross ties, cast blocks or natural stones may be used as steps in lieu of a staircase. Handrails may be constructed from materials that blend into the natural setting, such as wooden rails or ropes mounted on posts. At least one handrail is required for staircases where the height above the ground is four foot or more. Steps should be arranged in a zigzagged configuration to blend with the terrain and minimize erosion damage.

4. **Grandfathered Structures.** - Existing or previously approved facilities that do not meet the guidelines in this plan will be grandfathered to current and future owners as long as they are properly maintained. Should the licensee fail to properly maintain the structure, the structure will be replaced with an approved structure meeting current standards and complying with current policy, or the structure will be removed and the area restored in accordance with the conditions in the license.

It is the Government's intent to limit the number of pathways to the greatest extent possible to minimize the impacts on natural resources. In areas where more than one adjacent property owner has applied for a pathway license, joint use of a new or existing pathway will be required to the greatest extent possible. Licensees can not restrict use of that portion of a licensed facility located on government property.

**5. Application Procedure.** - The applicant shall contact the Park Manager or their representative and request a stairway or step license. The Park Manager or a Corps Ranger will inspect the proposed site to determine the feasibility of granting a license. If feasible, the applicant will be given an application form and advised of the cost of the license. The completed application, in duplicate, plans and specifications for the structure and the required fee shall be submitted to the Park Manager who will forward to the Real Estate Division for issuance of the license.

# Sketch of Typical Staircase



## Appendix F

### Shoreline Management Plan, Buckhorn Lake

#### Erosion Control Devices

1. **General.** - Erosion control devices can be authorized by a permit in areas where bank stabilization is needed to prevent the loss of shoreline due to wave and wake action. These devices are subject to the provision of Section 404 of the Clean Water Act when fill material or stone protection will be placed below elevation 782 m.s.l. Due to the mutual benefit derived from these structures, no fee will be charged for shoreline erosion protection licenses.

2. **Specifications.** - Bank stabilization may consist of placed or dumped rip rap or stone filled wire baskets (gabions) placed immediately above and below the summer pool elevation, 782 m.s.l. No massively constructed structures such as mortared masonry units or poured concrete will be allowed, nor will retaining wall type structures built from timbers or stone. The quantity of stone for dumped or placed rip rap shall not exceed one cubic yard per running foot of shoreline below elevation 782 m.s.l. The stone shall not normally extend more than five feet vertically above or below summer pool elevation. The length of shoreline on which stabilization may be performed by one licensee is limited to the adjoining lot width or 200 feet, whichever is less. Quantities and distances beyond these criteria require higher review and approval. Small amounts of rip rap stone may be locally collected from the lake bottom, subject to approval by the Park Manager, between elevations 757 (winter pool) and 782 (summer pool). Purchased stone shall be Class II channel liner in accordance with Kentucky Department of Transportation Highway Specifications. The use of vegetation or plantings, such as willow bundles may be approved for erosion control. Any such proposal should be submitted to the Park Manager for evaluation and approval.

3. **Application Procedure.** - The applicant should contact the Park Manager, Buckhorn Lake, and request permission to install an erosion control device. The Park Manager or their representative will inspect the site to verify the need for bank stabilization. If necessary, the applicant will be asked to submit a completed application and his proposed plan. After approval by the Park Manager, a permit will be issued. There will be no fee charged for this permit or any subsequent renewal. The permit holder may or may not be required to remove the structure upon expiration of the license depending on local conditions and the effectiveness of the structure.

## Appendix G

### Shoreline Management Plan, Buckhorn Lake

#### Roadways, Turnarounds, Parking Areas and Launch Ramps

1. **General.** - Boat ramps are allowed in Limited Development Areas under the provisions of a license if there are no public access ramps within a reasonable distance. Roadways, turnarounds and parking areas are allowed in conjunction with ramps and under the conditions outlined in Paragraph 6.e. of this appendix, may be authorized in conjunction with a group dock. Licenses for roadways may be authorized in Protected Shoreline Areas under the conditions described in Paragraph 3 of this appendix.

2. **Eligibility.** – The licensee must own land contiguous to Corps of Engineers fee simple lands that are zoned for Limited Development Area. Access may not be restricted to launching ramps served by a public road. Owners of facilities on government property will not restrict free use of the area by the general public. Failure to meet these conditions may result in the revocation of the license. Licenses will not be issued where significant alteration of the land form (cut and fill over 18 inches) is necessary to construct the facility.

#### 3. Roadways

a. **Access to a Dwelling.** A limited number of licenses or easements have been issued to provide access from public roads to private property with dwellings that existed at the time the lake was built. No new licenses or easements will be issued to provide access or any future dwellings on property adjacent to Corps property in Protected Shoreline Areas.

b. **Temporary Timber Access.** If no other access is available, a short term license may be issued to provide temporary access on previously existing roads for logging on private property. The access road is to be used for the hauling of timber only; any yarding must be done on private property.

#### 4. Design Standards.

##### a. Ramps

- (1) Ramps shall be constructed of concrete designed to have a 3000 psi compressive strength, with a minimum thickness of 6 inches on top of a minimum of 4 inches of crushed limestone.
- (2) Ramp will extend a minimum of 5 feet vertically above and five feet vertically below normal seasonal pool elevation of 782 m.s.l.

- (3) Slope of the ramp must be not less than 12% or more than 15% and must be of uniform slope for the entire length.
- (4) Minimum width of the ramp will be 12 feet.
- (5) Concrete slab and end sections will be reinforced as shown in the sketch on page 4 of this appendix. Size and quantity of steel are as follows:
  - (a) Fourteen #3 bars - 3 feet long
  - (b) Two #6 bars - 12 feet long
  - (c) 6 x 6 - #10 x #10 wire mesh that is 12+ feet wide and the length of the slab.
- (6) Construction and expansion joints shall be installed as shown in the sketch
- (7) Surface of the ramp shall have a broom finish with a rough surface to increase the traction of the launching vehicle.
- (8) Edges and seaward end of the ramp will be rip-rapped with Class II channel liner to prevent undermining of the slab. Stone shall be placed a minimum of 2 feet wide around the perimeter of the ramp and to a minimum of 6 inches deep. Unsafe conditions, such as undermining of the concrete, may result in termination of the license.

**b. Roads.**

- (1) Roadways will be surfaced with crushed stone or creek gravel. No asphaltic concrete or concrete will be used. Existing roadways constructed of concrete materials may remain through their useful life, but cannot be resurfaced.
- (2) Roadway width shall be 12 feet. The right-of-way or disturbed area shall not exceed 18 feet in width. Drainage structures will be permitted where required.
- (3) Roadways will follow the natural contour of the land to the maximum extent possible. Cuts or fills in excess of 18 inches will not be permitted except to install drainage structures.

**c. Parking Lots and Turnarounds.**

- (1) Surface of parking lots and turnarounds will be crushed stone or creek gravel.
- (2) Turnarounds shall have a minimum radius of 40 feet measured from the centerline of the ramp road.
- (3) Ramp parking lots shall be of sufficient width to accommodate a vehicle and a boat trailer without interference with the launching of a boat or the use of the turnaround.

**5. Application Procedures.** - The applicant shall contact the Park Manager and request approval for a ramp and turnaround, roadway or parking lot license. The Park Manager or their representative will inspect the proposed site and make a determination as to the necessity and feasibility of the proposal. If approved, the applicant will be required to complete an application and to prepare a detailed plan of the facility. The Park Manager will collect the fee at the time of application for approved parking lots, turnarounds, and roads less than 500 feet in length. Fair market value for roadways over 500 feet in length will be determined through an appraisal by the Real Estate Division after receipt of the application from the project. Upon payment of the fee, the Real Estate Division will issue the license for delivery to the licensee. No work shall be started until the license is delivered to the applicant and approval given by the Park Manager to proceed with construction.

**6. Special Considerations.**

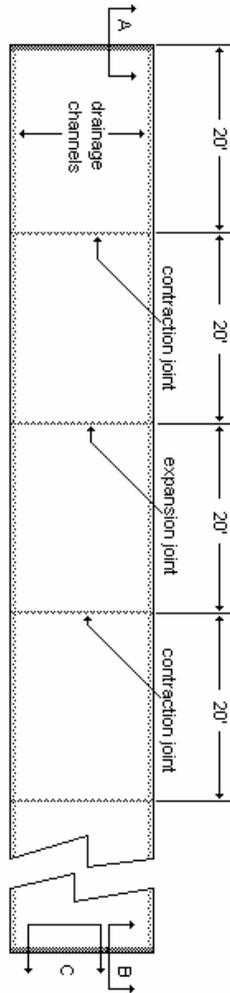
a. No commercial operations will be conducted at any of the licensed facilities covered under this appendix. No launch fees or use fees will be collected unless specifically authorized by the District Commander.

b. No vegetation will be removed except by permission of the Park Manager or his representative.

c. Licensee shall be responsible for collecting and properly disposing of all garbage and debris deposited on the licensed facility, regardless of the source.

d. Licensee shall provide and maintain such signs as the Corps of Engineers deem necessary to provide for public safety on ramps and roadways leading to the water.

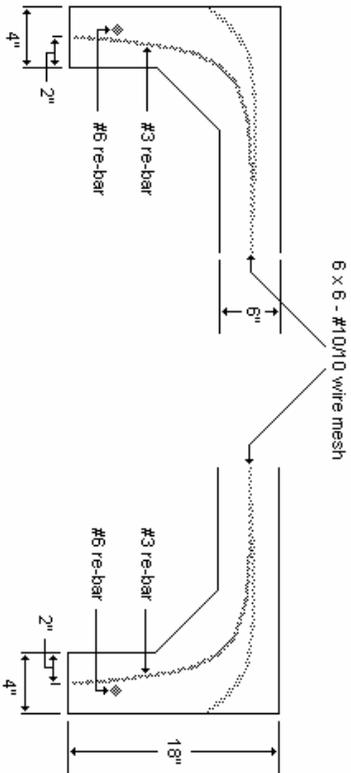
e. Roads, turnarounds and parking lots in conjunction with group docks will only be authorized in areas where in the opinion of the Park Manager the walking distance to the dock is excessive or a member of the dock has a physical disability that precludes walking. A separate Real Estate License is required in addition to the boat dock permit in these instances.



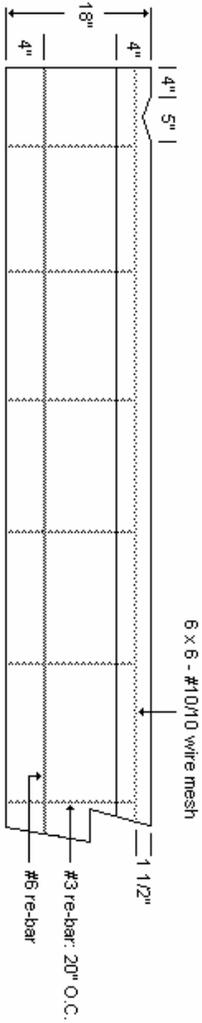
**PLAN OF JOINTS AND DRAINAGE CHANNELS**

SECTION A  
(head of ramp - side view)

SECTION B  
(toe of ramp - side view)



SECTION C  
(head and toe of ramp - end view)

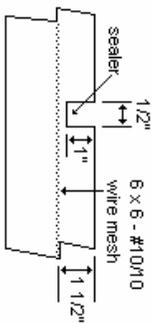


**DETAILS:**

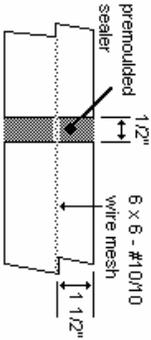
1 OTIMUM GRADE: 12 - 15%

2 MINIMUM RAMP WIDTH: 12'

3 TYPICAL CONTRACTION JOINT



4 TYPICAL EXPANSION JOINT



5 RIP-RAPPING AT HEAD AND TOE IS REQUIRED WITH CLASS 2 CHANNEL LINER.

6 RE-SEEDING OF AREAS TORN UP BY CONSTRUCTION IS ALSO REQUIRED.

**RAMP SPECIFICATIONS**  
 U.S. ARMY CORPS OF ENGINEERS  
 LOUISVILLE DISTRICT  
 Drawing 1 of 1  
 APPENDIX G

## Appendix H

### Shoreline Management Plan, Buckhorn Lake

#### Foot Paths, Foot Bridges, and Cart Paths

1. **General.** - Foot paths, foot bridges and cart paths may be authorized under the provisions of a license to adjoining property owners in areas that are zoned Limited Development. Cart path licenses for the use of motorized conveyances will only be issued to landowners with disabilities as outlined below. It is the Government's intent to limit the number of paths to the greatest extent possible to minimize the impacts on natural resources. In areas where more than one adjacent property owner qualifies for a path, joint use of a path will be required to the greatest extent possible. Licensees cannot restrict use of that portion of a licensed facility located on Government property.

2. **Foot Paths.** - Foot paths shall not exceed 5 feet in width and may be paved with creek gravel, crushed stone, tan bark, wood chips, stepping stones or other readily removable material. Asphalt, concrete, or other permanent surfacing will not be used for foot paths unless the individual or a member of his/her household has a disability which would limit mobility over unconsolidated materials such as gravel, chips, etc. Foot paths for persons with disabilities may be constructed of approved materials following review of site conditions and approval by the Park Manager. At the licensee's option, cross ties or landscaping timbers may be used to edge the path and confine the paving material; however such timbers will be securely anchored to prevent floating. No significant alteration (over 6 inch cut and fill) will be permitted for a foot path. The slope of the path should be held to a minimum through the use of zigzagged layout to reduce erosion damage.

3. **Foot Bridges.** - Foot bridges may be authorized where necessary to traverse ditches or ravines that impede access to the shoreline or a dock. Bridges will not be authorized solely for ornamental or landscaping purposes. Bridges will be constructed of wood that has been treated with a preservative that is not harmful to the environment. Bridges will not be painted but a clear sealer may be applied. Structures will be firmly anchored to prevent flotation. Trees will not be used for anchoring devices or as any part of the structure.

#### 4. **Cart Paths.**

a. **Eligibility.** - Cart path licenses may be issued in limited development areas only to those adjacent landowners who themselves or a member of their household have a permanent disability which precludes normal walking. Applicants must submit an application with appropriate documentation of their impairment.

b. **Authorized Use.** - Authorized conveyances may be used to transport the individual with the documented mobility impairment and for activities directly associated with that individual's use of permitted or licensed facilities. The conveyance may be a golf cart, riding mower, or a similar low-speed vehicle. Authorized conveyances must display a sticker issued by the Corps of Engineers. All terrain vehicles (ATV), motorcycles, and/or vehicles licensed for highway use are prohibited. Since the tremendous variety of available conveyances cannot be listed here, permission to use conveyances other than golf carts and riding mowers must be obtained from the Park Manager. Such conveyances will operate only on the reinforced surface of the path and any violation of this condition will be considered a violation of Part 327.2c of Title 36 CFR and handled as such. Repeated violation can cause revocation of the license and require removal of the path at the licensee's expense.

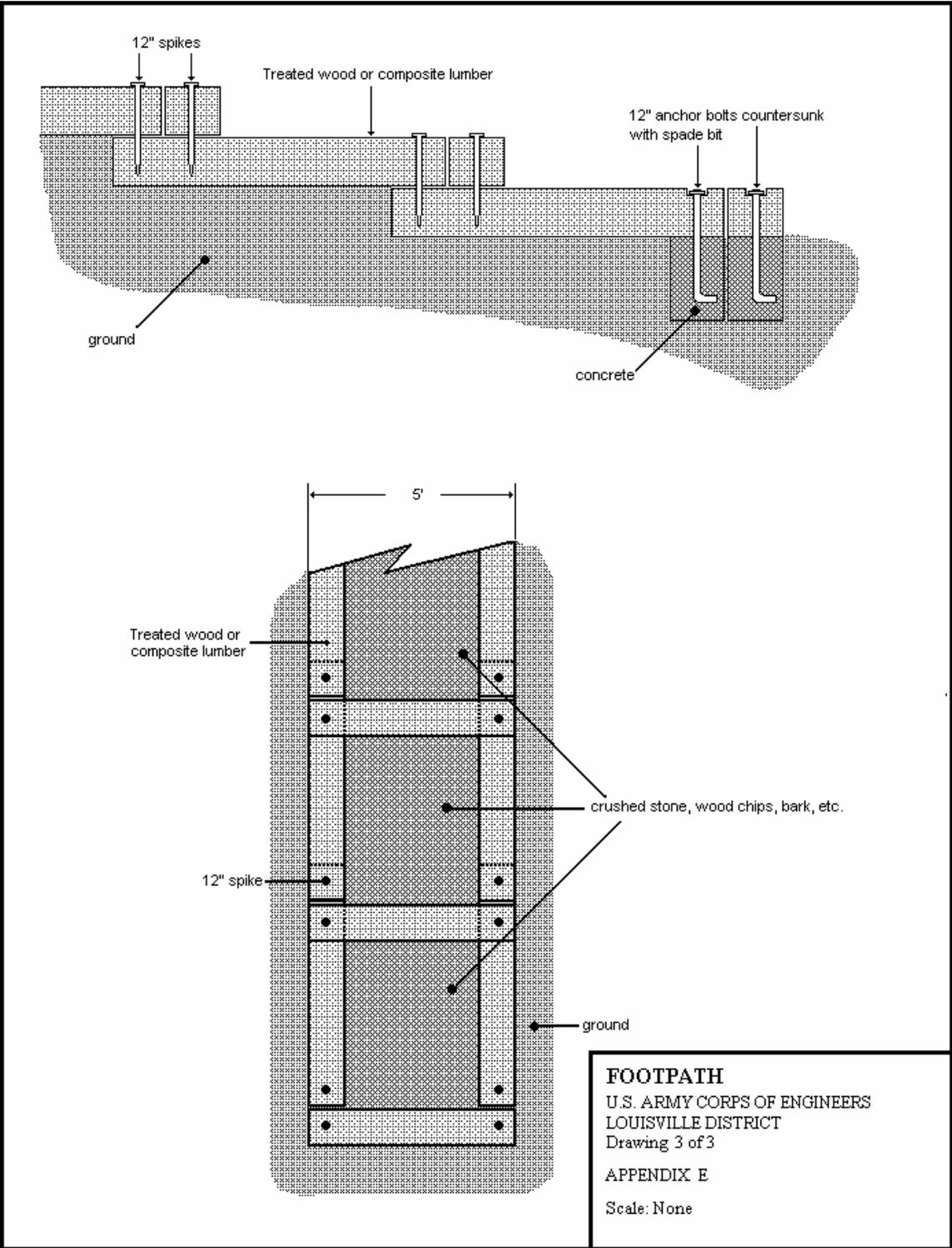
c. **Design.** - The cart path shall not exceed 6 feet in width and shall be surfaced with a material which will prevent erosion and allow access by the approved cart. A design for the path will be submitted to the Park Manager for approval prior to any construction. The type of surfacing material used on the cart path will dictate the type of conveyance that will be allowed. The path may be edged with cross ties or other timbers, securely anchored to prevent floating. Cut and fill over 12 inches will not normally be permitted, however small culverts or pipes may be used to cross ditches or ravines. Slope of the path should be held to a minimum by using a cutback layout to reduce erosion damage. A small turnaround may be constructed at the terminus of the path at the shoreline. The maximum length of the cart path is 500 feet, or to the nearest dock location, whichever distance is shorter. Extensions in length may be considered on a case by case basis, provided there is a minimal change to the limits to allow reasonable access to an authorized community dock and no other provisions or requirements of the plan are violated.

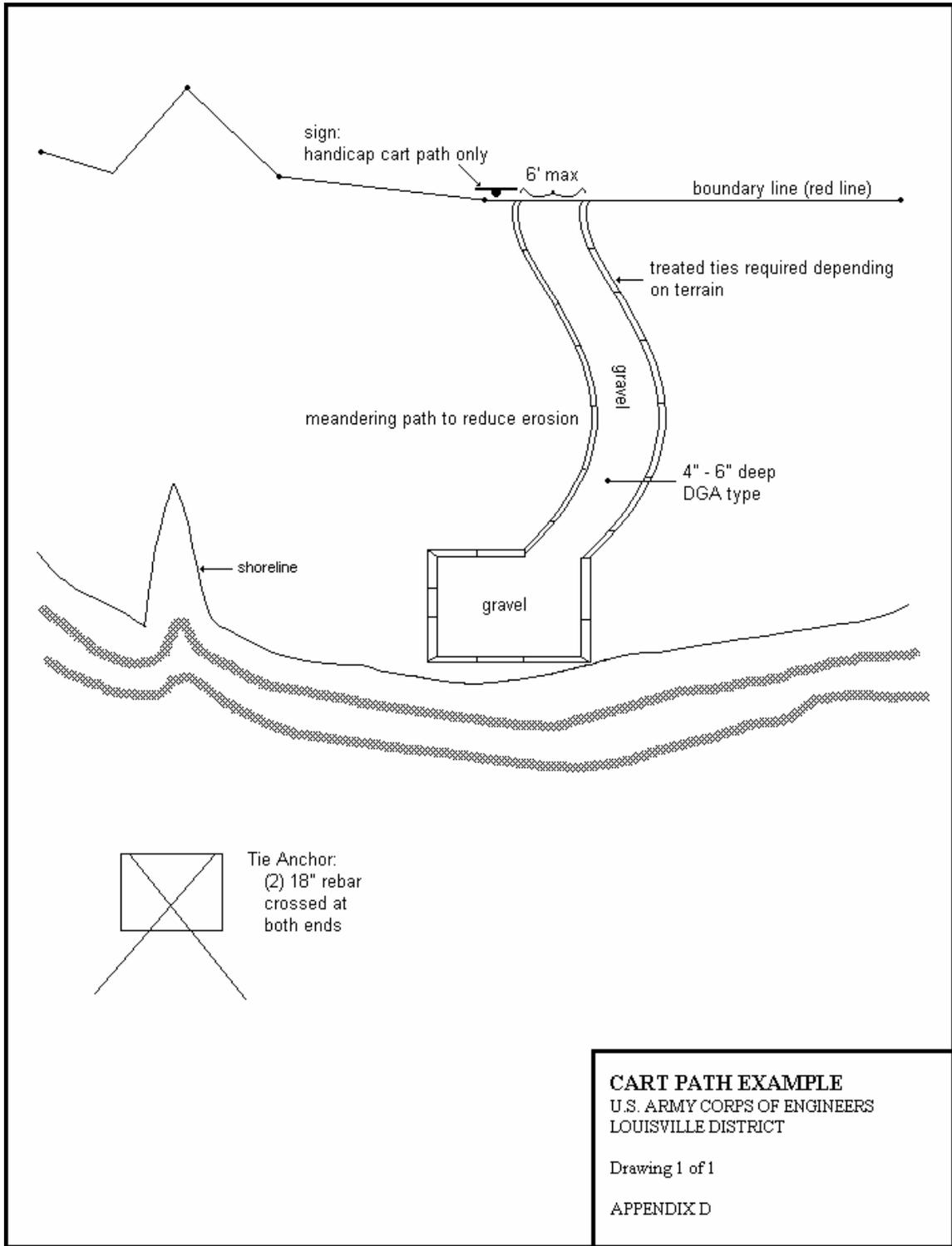
d. **Layout.** - The Park Manager will review and approve the location of all cart paths. The Park Manager may authorize the construction of a cart path through areas in which other lot owners hold outgrants if such action is necessary to permit access to an existing group dock, however only the person with disability to whom the license was issued may operate or have operated a motorized conveyance on the cart path.

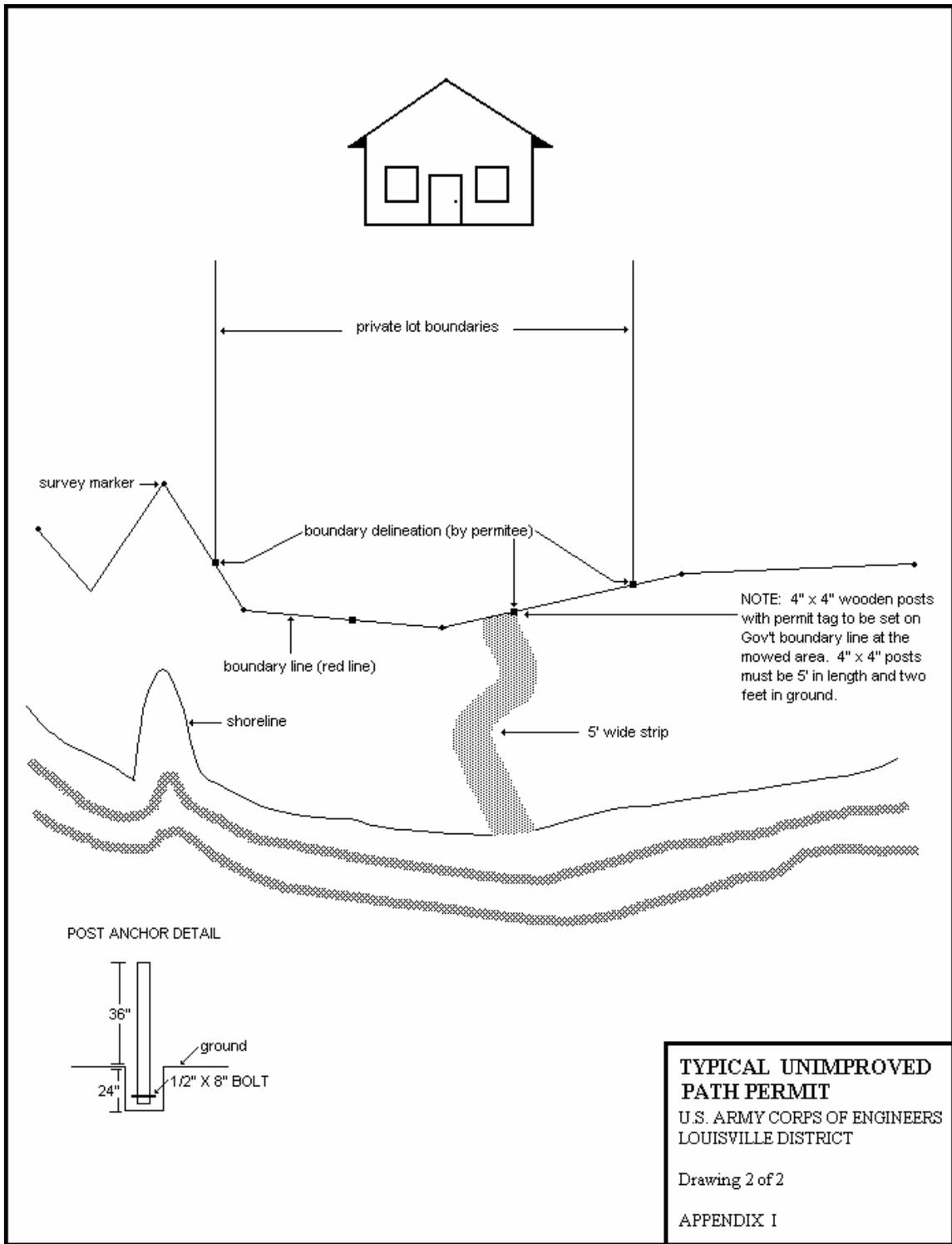
5. **Application Procedure.** - The applicant should contact the Park Manager and request the desired facility. The Park Manager or their designated representative will inspect the site to verify the need for the facility and its feasibility. If approved, the applicant will be required to complete an application, provide a set of plans and specifications, and appropriate documentation. Upon payment of the required fee, the application will be forwarded to the Real Estate Division for issuance of a license for delivery to the licensee.

6. **Failure to Maintain.** - Failure to maintain a licensed foot path, foot-bridge, or cart path may result in revocation of the license. A failure to maintain may be described as any circumstance which results in the licensed structure becoming unusable or any condition which results in excessive erosion, damage to the adjacent environment, damage or interference with other

outgranted facilities, or any safety hazard. The licensee may be held liable for expenses incurred by the Corps of Engineers in removing the structure or restoring the habitat to its previous condition.







**TYPICAL UNIMPROVED  
PATH PERMIT**  
 U.S. ARMY CORPS OF ENGINEERS  
 LOUISVILLE DISTRICT

Drawing 2 of 2

APPENDIX I

## Appendix I

### Shoreline Management Plan, Buckhorn Lake

#### Group Boat Docks

1. **General.** - Permits for group floating docks may be issued in the areas that are zoned Limited Development and where the topography, both under the water and on land is suitable. The location of all docks will be determined by the Park Manager, Buckhorn Lake and dock locations may be changed to best serve the needs of the entire group. All docks will be considered to be group docks, regardless of the number of members, in that the Park Manager may add slips in lieu of issuing a separate new permit. All portions of the dock must be maintained in a usable and safe condition, create no threat to life or property, and is in substantial compliance with the existing permit.

Group boat docks are individual, privately owned slips that are joined together. A boat slip is one main dock section and one finger section in an “L” configuration, and includes the water area it defines. The main dock section will be parallel to the shoreline with the finger section attached to and perpendicular to the main dock section. The Park Manager may give approval to add individual boat slips up to a maximum of twelve (12). Group docks must be maintained in a usable and safe condition, create no threat to life or property, and be in substantial compliance with the existing permit.

A maximum of one boat slip per property unit or household will be authorized. Joint ownership of a property or the ownership of more than one lot by one household does not authorize more than one slip. Each slip can accommodate one boat or two personal watercraft. An additional Jon boat, canoe or personal watercraft can be stored on a finger section (out of the water). Joint property owners may register additional vessels to a slip, however not more than indicated above may be moored at any one time. In the case of joint property owners, one owner will be designated as the contact person for that slip.

It is required that each group dock have one Point of Contact (POC) appointed at all times. The POC will serve as the primary point of contact to receive and distribute information to all dock members related to such matters as permit renewal documents and safety and structural inspection reports requiring corrective action. The POC will keep the local Corps project office updated on changes in ownership of property associated with boat docks, unsafe conditions, and other related matters. The local Corps project office will attempt to keep the POC informed of dock actions either by the Corps or dock owners such as requests to add on to the dock. Whenever there is a change in the POC, a representative of the members on the affected group dock will inform the local Corps project office in writing. Only members of the group dock may serve as a POC.

**2. Eligibility.** - Group dock members must own property in a developed subdivision which abuts Government fee land that is zoned Limited Development and own a boat or personal watercraft that will be moored on Buckhorn Lake. Owners of interior lots that do not border the Government boundary must have legal right of access through either a public access area or through private property to access Government property. If access is across private property, the applicant must provide a notarized letter of permission from that landowner. Should the dock owner lose the right of access for any reason, the dock will immediately be removed from the lake. If the landowner who granted permission sells his property, each affected landowner must obtain a new letter of permission. A maximum of two slips per property unit or household may be authorized. Joint ownership of a property or the ownership of more than one lot by one household does not authorize more than two slips. In instances of joint ownership of a property, more than one boat or watercraft may be registered to a dock slip, however not more than one watercraft per slip may be moored at any one time. Applicants for a dock permit will be required to furnish proof of ownership of a boat prior to issuance of a dock permit.

**3. Transfer of Ownership.** - Dock permits are nontransferable. A new property owner who has bought property for which a dock slip is authorized must immediately apply for a dock permit or the dock and/or slip must be removed by the previous owner. The new property owner's request will be treated as a first time applicant, and the permit may not be issued if all current policy requirements and current specifications are not met. The Park Manager may issue the permit, but require relocation of the dock to better serve the needs of the dock group.

When a new owner purchases a previously permitted slip, it will be inspected for compliance with the current Shoreline Management Plan standards. If it complies, a new permit will be issued. If it does not comply, the main dock and finger sections may be upgraded to meet current standards, or the old sections replaced with a new main dock and/or finger section(s).

If structural modifications are required to upgrade, a new facility must be built to replace the old one. Structural modifications would be replacing anything more than the decking and flotation materials.

**4. Grandfathered Docks.** – Existing docks which are not constructed to current specifications; have a configuration not in accordance with current policy; or of a size not acceptable under present policy will be allowed to remain as long as they can be safely maintained without major rebuilding. When major repairs to a grandfathered dock are required to maintain the dock in a safe condition, the dock will be brought up to the latest standards. Major repairs, means the replacement of any wooden structural member other than decking and/or any flotation materials. The grandfather provision applies to the permit holder or original owner and his/her spouse for their lifetime. A grandfathered facility cannot be re-permitted to another individual until it meets current standards and complies with current policy.

Permits for grandfathered facilities will be issued to new owners; however, new owners must upgrade the facility to meet the specifications and conditions in effect at that time. The addition of new slips to these existing docks may be approved by the Park Manager;

however any addition must meet the current Corps of Engineers standards and policy for new boat docks. If the holder of a permit fails to comply with the terms of the permit, it may be revoked and the holder required to remove the structure, in accordance with the terms of the conditions of permit as to notice, time and appeal.

**5. Location of Docks.** - Group boat docks will be permitted in Limited Development areas only, and at locations approved by the Park Manager, Buckhorn Lake. The Park Manager will select locations which will best serve the interest of all current and potential applicants in an area. Priority will be given to areas which have public access avenues to fee land that can serve a larger segment of the public. Applicants for boat slips will be required to add on to an existing dock in lieu of a separate facility if the distance to an existing dock is not excessive and there are no terrain features which make access unusually difficult. Docks will not be placed less than 500 feet apart as measured from center to center along the waters edge at seasonal pool level as explained in Paragraph 6 of this Appendix. The Operations Manager, Upper Kentucky River Project may waive the 500 foot distance requirement in cases where the existing docks are near maximum size (12 slips) or terrain features make access along the shoreline unusually difficult.

Proposed dock locations will be evaluated on the basis of the number of people served, the topography of the shoreline as it relates to access, the depth of the water, underwater topography and exposure to wave, wind and wake action. The Park Manager may direct the relocation of an existing dock if the new site will better serve the needs of the entire group. Any directed relocation will be at the expense of the permittee(s).

New docks will not be permitted at locations that are within 1/4 mile straight line distance from a developed or future recreation area. Existing docks that do not meet the sight and distance criteria will be grandfathered and allowed to remain as long as they are owned by the original owner or his/her spouse but no expansion of these docks will be permitted.

**6. Size and Configuration.** - The size of docks will be limited to the minimum size necessary to moor the permittee's boats plus the minimum size required for an enclosed storage locker for oars, life preservers and other items essential to boat operation. Each boat shall have separate mooring facilities which shall consist of a main dock section and a slip or finger section in an "L" configuration. The main dock section will be 6 feet wide and the length may vary according to the width of the boat. The length will be equal to the beam of the boat or its widest dimension plus 6 feet rounded up to the nearest whole foot. The minimum length shall be a minimum of 10 feet and a maximum of 16 feet long. The slip sections will be 4 feet wide and a minimum of 15 feet long and a maximum of 20 feet long. Main dock sections shall be joined together end to end to form a continuous main dock if the dock consists of more than one slip. The connection shall be made through an approved hinge mechanism which will facilitate the removal of a single slip as a distinct unit without damage to other slips. A maximum of two walkways will be permitted for each dock. The minimum width of the walkway shall be 3 feet and length may vary depending on site conditions. The Park Manager may approve walkway widths greater than 3 feet and lengths greater than 20 feet upon a demonstrated need by the permittee.

The Park Manager will determine the maximum size dock that can be accommodated at any given location. Terrain features may restrict the number of slips on a community or group dock. No dock shall extend more than one-third the width of a cove at normal summer pool. With no terrain restrictions or other special considerations the maximum number of slips per dock will be twelve (12). The exact number of slips is determined by the Park Manager after a review of all factor involved. The Park Manager may waive the maximum limitation in special cases if conditions warrant in lieu of issuing a separate permit. The density of docks will not be more than 50% of the segment of Limited Development Area in which they are located, nor shall docks be located closer than 500 feet apart as measured from center to center along the water edge at seasonal pool. This rule complies with density regulations mandated by shoreline management regulations. Density will be determined by measuring the length of shoreline at summer pool elevation as compared to the total length of main dock sections.

**7. Dock Design.** - The design of the dock shall be such that a safe, stable facility is constructed. The Louisville District Corps of Engineers' standard design is found as an attachment to these appendices. The intent of this design is to insure that each individual slip is compatible with the group dock. The permittee may use a commercially manufactured dock that is produced by a company normally engaged in the manufacture of docks provided that all requirements as to dimensions, quantity of flotation, and configuration are met. The permittee may submit his own design for approval; however, any such design must be certified by a registered professional engineer.

## **8. Design Standards**

a. The flotation material for slips shall be fabricated of materials manufactured for marine use. Flotation materials shall be 100% warranted for a minimum of 8 years against sinking, becoming waterlogged, cracking, peeling, fragmenting or losing beads. All flotation shall resist puncture and penetration and shall not be subject to damage by animals under normal conditions for the area. Flotation material used shall be fire resistant. Flotation material, which is within 40 feet of a line carrying fuel, shall be 100% impervious to water and fuel. New or recycled plastic or metal drums or non-compartmentalized air containers for encasement of Styrofoam is prohibited. Existing flotation will be authorized until it has severely deteriorated and is no longer serviceable or capable of supporting the structure, at which time it shall be replaced with approved flotation. For any flotation installed after the effective date of this specification, repair or replacement shall be required when it no longer performs its designated function or fails to meet the specifications for which it was originally warranted. Flotation material shall be placed with the maximum surface area in contact with the water to increase the stability of the dock.

b. Quantities of flotation required for group docks are:

<u>Main Dock</u>		<u>Slip</u>	
<u>Length (ft)</u>	<u>Flotation (cf)</u>	<u>Length (ft)</u>	<u>Flotation (cf)</u>
10	33	15	33
12	39	16	35
14	46	17	37
16	52	18	39
18	59	19	40
20	65	20	41

Flotation material shall be placed such that the maximum surface area will be in contact with the water to increase the stability of the dock.

c. All wood materials shall be seasoned dimension stock lumber that has been pressure treated with a standard wood preservative.

d. All nails, bolts, screws, washers and other metal hardware shall be galvanized, plated, stainless steel or otherwise protected to resist corrosion damage.

e. Wood docks will not be painted. Additional wood preservatives or clear sealers may be applied before the slip is put on the water or when the slip is setting on the lake bottom. The Park Manager must first approve any treatment applied to the wood. Commercially manufactured metal docks may be painted a neutral color so as to blend into the natural background. White, yellow, orange or other high visibility paint or coloring will not be used except for flotation materials.

f. The Corps of Engineers' standard design contained in this section has a detail for hinges to join dock sections together. The permittee may use this design or submit an alternative method to the Park Manager for review and approval. Any hinge used must facilitate the easy joining or disconnection of dock sections, either while floating or aground and must provide a strong, stable connection. The same type of hinge shall be used throughout a dock once a type is selected.

g. Additional information regarding specifications and materials appropriate for floating docks can be obtained at the Buckhorn Lake project office.

## **9. Anchoring**

a. Anchoring devices shall consist of metal cable or wire rope firmly attached to the dock and to suitable anchoring devices on the shore. Cable anchor connections to the dock are to be by 1/2" minimum eyebolts. Cable size shall be 3/8" minimum. Trees or other vegetation will not be used for anchoring docks. A detail for a concrete anchor is shown in the standard design.

b. Anchor cables that extend lakeward of the dock will be permitted only after review and approval of the plans by the Park Manager. All cables extending lakeward must be at a minimum depth of 4 feet at summer pool to prevent interference with navigation. It will

be the permittee's responsibility to remove any anchoring devices placed in the lake when no longer in use.

**10. Appurtenant Structures** - Structures permitted in conjunction with group docks are as follows:

a. Foot lockers or storage lockers may be authorized. These lockers shall not exceed one locker per slip. Height of lockers shall not exceed 5 feet, width and depth shall not exceed 4 feet X 2 feet. Lockers may be positioned with the maximum dimension either vertical or horizontal, however all positioning shall be uniform on any one group dock. Lockers shall be positioned on top of main dock section and shall not extend over the water. Wooden lockers will not be painted, but clear preservatives or sealers may be used. Commercially manufactured lockers will be corrosion resistant. No bright colors, stainless steel or chrome will be allowed.

b. Boat lifts and/or personal watercraft lifts may be installed in boat slips. Personal watercraft lifts can be the type that installs on the end of the finger or in the slip (on the water). If a personal watercraft lift is to be installed on the end of the finger section, the Park Manager may authorize a wider finger section, up to 6'. This type of lift would completely remove the personal watercraft from the water for storage on the top of the finger. Watercraft lifts shall be commercially manufactured units from a manufacturer normally engaged in the production of boat/personal watercraft lifts. Boat or personal watercraft lifts may attach only to the owner's main dock and finger. Plans and catalog cuts will be submitted to the Park Manager for approval prior to installation. No permanent electrical service will be allowed on the slips to operate a lift. Temporary service may be utilized as outlined in Appendix C. Properly muffled portable generators, with a GFI may be used in lieu of temporary service.

c. Bumper strips around the docks are optional. A strip of white material not more than 2" wide may be affixed or painted on the vertical seaward edge of the dock to provide for night visibility. Amber reflectors may be used in lieu of white material if desired. Reflectors will be spaced no closer than 3 feet apart.

d. Personal watercraft, small boats and canoes may be stored on the lake end of the finger section of a slip only provided that the registration information or other identifying data is furnished to the Park Manager and such craft shall not count toward the two authorized boats provided they are not stored on the waters surface. The finger section may be modified to provide a ramp for getting personal watercraft and small boats out of the water. The permittee shall submit his design for these ramps to the Park Manager for approval prior to any construction. Personal watercraft, small boats or other watercraft that are stored on the water or on lifts shall count toward the two allotted slips to which any one household is entitled by a permit.

e. Ladders may be attached to the dock provided their installation is included in the plans submitted to the Park Manager for approval.

## 11. Special Considerations

- a. No carpeting is permitted on docks.
- b. The permit tag provided by the Corps of Engineers will be displayed on the seaward side of dock finger of the permit holder so as not to be obscured by a moored boat or an attached ladder.
- c. Docks are the private property of the permittee(s). The owner(s) may place "No Trespassing" or a sign of similar nature on the dock. Such signs will be placed flat on the deck and not be visible from the water. Enforcement of the "No Trespassing" provision will be the responsibility of the owner and local law enforcement.
- d. Houseboats or other vessels designed or altered to facilitate human habitation for other than short term recreational use will not be moored at group docks nor will any dock specifically designed for houseboats be permitted on Buckhorn Lake except at commercial marinas.
- e. The permittee or their designated representative must maintain surveillance of the dock on a regular basis. The dock shall be kept afloat at all times that the pool level is above elevation 782 m.s.l. Allowing the dock to become grounded above elevation 782 as the water level is lowered may result in revocation of the permit and/or permittee maybe cited into U.S. Magistrates Court for violation of Part 327.20, Title 36, CFR for violation of terms of permit.

## 12. Application Procedures

- a. Applicant shall contact the Park Manager, Buckhorn Lake or his representative and indicate his desire to obtain a dock permit.
- b. The Park Manger will determine if the applicant is eligible to obtain a boat dock permit based on the criteria contained in Paragraph 2 of this appendix. If eligible, the Park Manager will determine if the applicant's dock slip(s) will be added to an existing dock or if a new permit will be issued.
  - (1) If an applicant is to be added to an existing dock, he will be provided the name and address of the permit holder and instructed to contact the permit holder and make arrangements for the addition. The Park Manager will render decisions where the parties cannot reach agreement as to location and configuration of the dock. The Park Manager may require members of an existing dock to reconfigure their slips to accommodate the new slip if the existing dock is not in accordance with current policy. The applicant will be provided a set of standard plans and a copy of the conditions of permit. Applicant will submit a letter of request, a plan view of his dock section showing configuration and how it will connect to the existing dock, and a statement to the effect that he understands the conditions of permit and the Shoreline Management Plan and will comply with such.
  - (2) If a new permit is to be issued, the applicant will be provided an application form ENG 4264-R, a set of standard plans, and the conditions of permit. The applicant

will be asked to contact adjacent lot owners to determine if others are interested in joining a group dock at this time. Applicant will submit a letter of request, a completed ENG 4264-R, a completed membership data sheet and a drawing showing a plan view of the dock with dimensions, cable locations and anchorage. In the letter of request the applicant will indicate a willingness to serve as the point of contact for a group dock and state that he understands the conditions of permit and the Shoreline Management Plan and will comply with such.

c. Applicant will be informed in writing if the Park Manager determines that a permit cannot be issued. The correspondence will outline the reasons for the denial.

d. The Park Manager will issue a letter of authorization to an applicant who is approved for addition to an existing dock. No separate fee is charged for an addition to an existing dock at this time; however this provision may be subject to change under future fee policy. All docks must be inspected and approved by a Corps of Engineers representative before they can be placed on the lake.

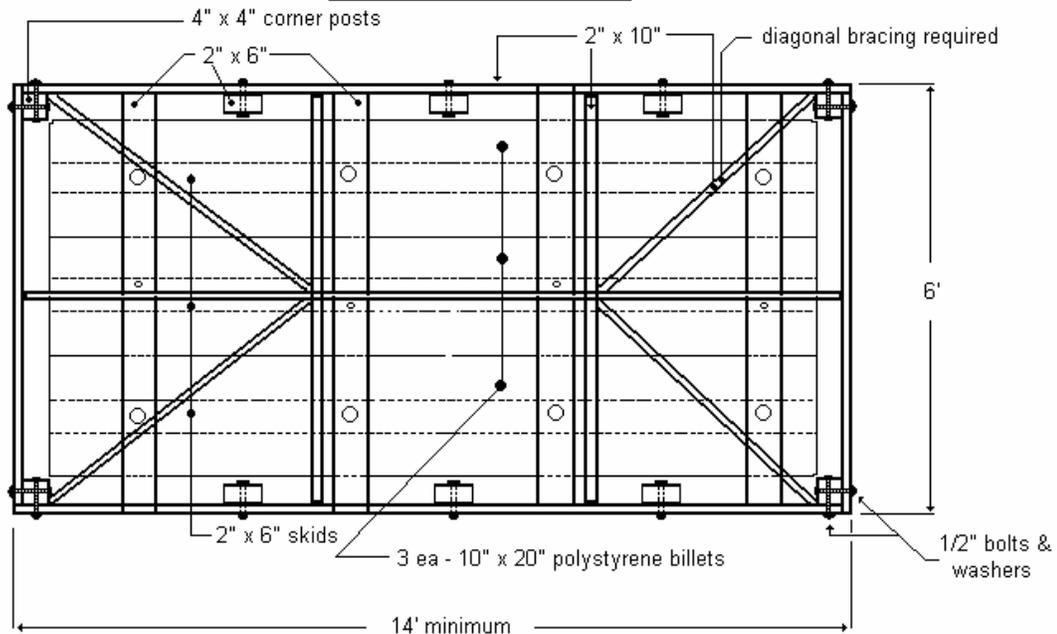
e. The Park Manager will select or approve the site for any new docks. A fee will be collected as outlined in Appendix K of the Shoreline Management Plan. After review by the Upper Kentucky River Project Manager, the permit will be issued to the applicant. Dock must be constructed and placed on the lake within one year from the date of the permit or the permit becomes invalid. All docks must be inspected and approved prior to placement on the lake.

f. Renewal of docks will be handled as follows:

(1) The permittee will be advised in writing by the Park Manager 60 days in advance of the permit expiration date that renewal is necessary and furnished the required forms. A permit that is not renewed within 90 days of the expiration date will be null and void and renewal after that date will be subject to any new guidelines as to size, configuration and materials of construction.

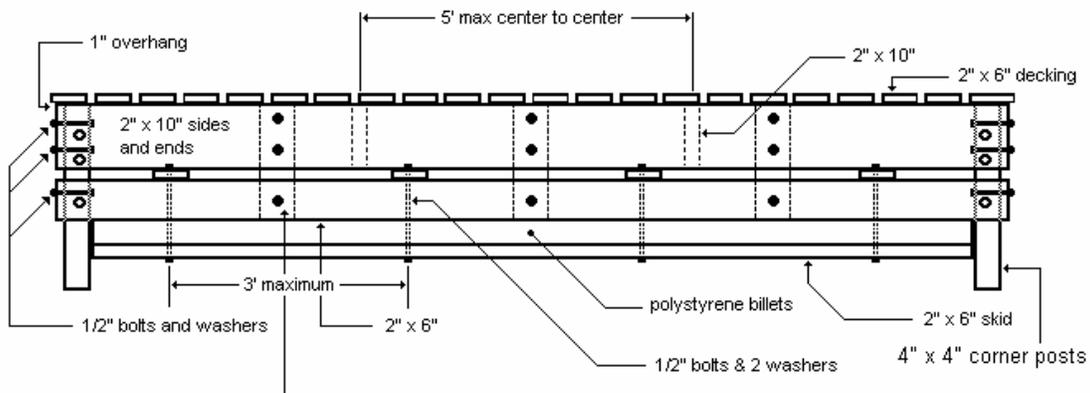
(2) Permittee will complete an ENG 4264-R and provide a completed membership data sheet signed by each member. The renewed permit will be issued after payment of the appropriate fee as outlined in Appendix K of the Shoreline Management Plan.

**MAIN DOCK PLAN VIEW**



Note: Main dock plan view shown without decking - not to scale

**MAIN DOCK -- SIDE VIEW**



3 evenly spaced 2" x 6" supports, 16.5 inches in length on each side.

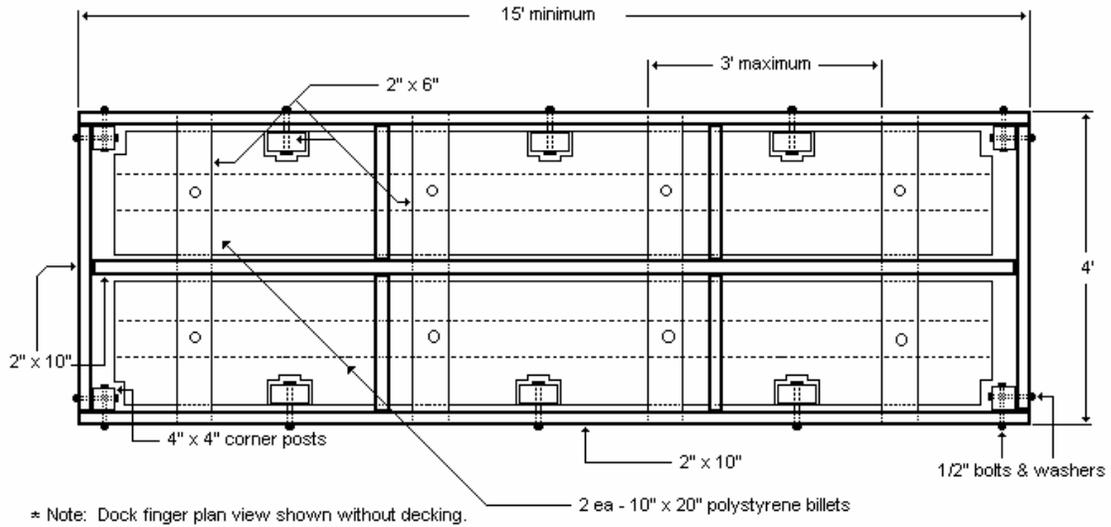
**GROUP FLOATING DOCK SPECIFICATIONS**

U.S. ARMY CORPS OF ENGINEERS  
LOUISVILLE DISTRICT  
Drawing 1 of 7

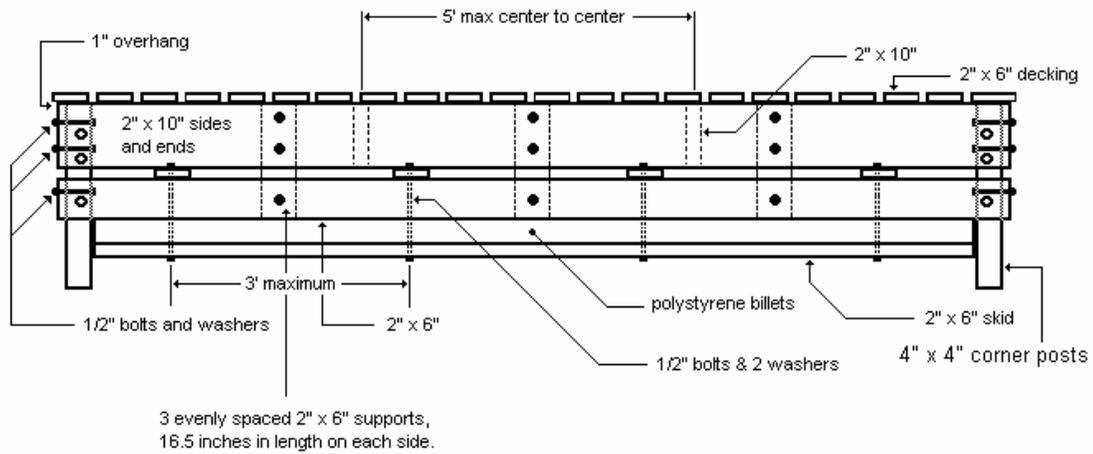
APPENDIX H

Scale: None

### DOCK FINGER - TOP VIEW



### DOCK FINGER - SIDE VIEW



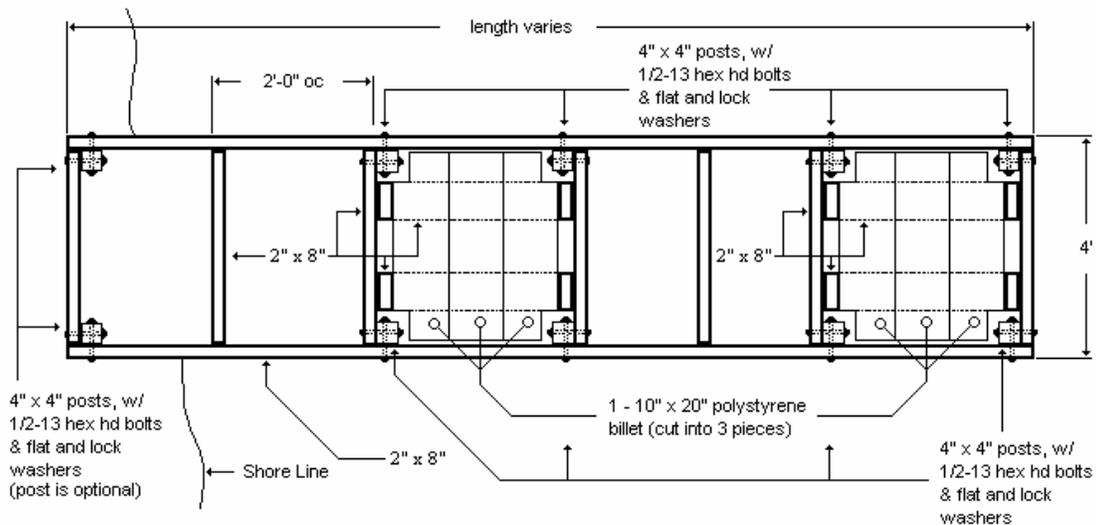
### GROUP FLOATING DOCK SPECIFICATIONS

U.S. ARMY CORPS OF ENGINEERS  
LOUISVILLE DISTRICT  
Drawing 2 of 7

APPENDIX H

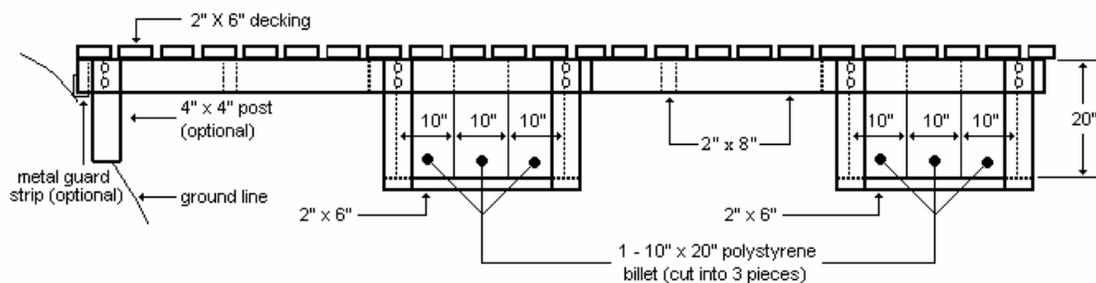
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**WALKWAY - PLAN VIEW**



Note: Walkway plan view shown without decking.  
Position of mid-walkway flotation will vary, depending on site conditions.

**WALKWAY - SIDE VIEW**



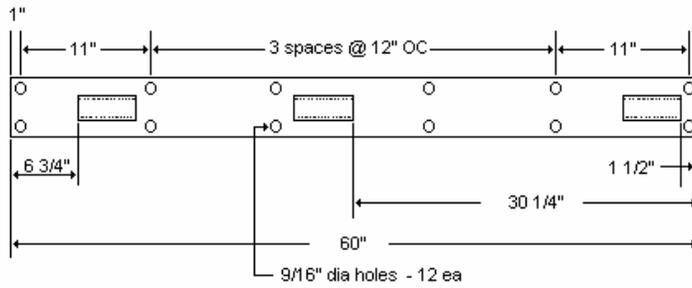
**GROUP FLOATING DOCK  
SPECIFICATIONS**

U.S. ARMY CORPS OF ENGINEERS  
LOUISVILLE DISTRICT  
Drawing 3 of 7

APPENDIX H

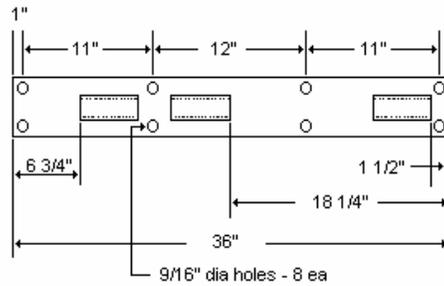
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### MAIN DOCK HINGE



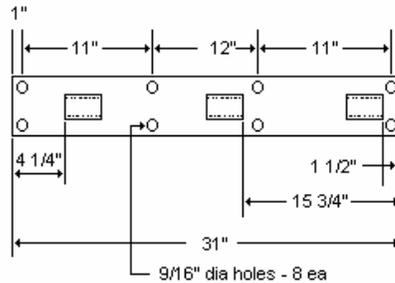
5" long section of 2-1/2" sch 40 steel pipe fillet welded entire length both sides to a 1/4" thick steel plate - typ 3 places

### FINGER / MAIN HINGE



5" long section of 2-1/2" sch 40 steel pipe fillet welded entire length both sides to a 1/4" thick steel plate - typ 3 places

### WALKWAY / MAIN HINGE



2-1/2" long section of 2-1/2" sch 40 steel pipe fillet welded along entire length of section both sides to 1/4" steel plate

### GROUP FLOATING DOCK SPECIFICATIONS

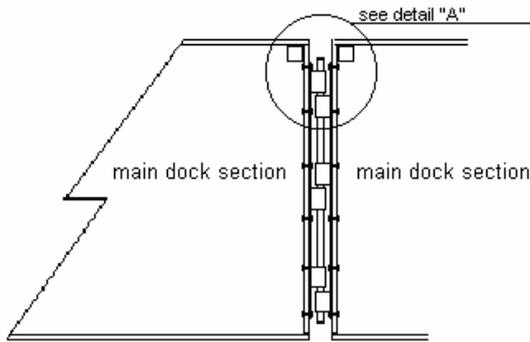
U.S. ARMY CORPS OF ENGINEERS  
LOUISVILLE DISTRICT  
Drawing 4 of 7

APPENDIX H

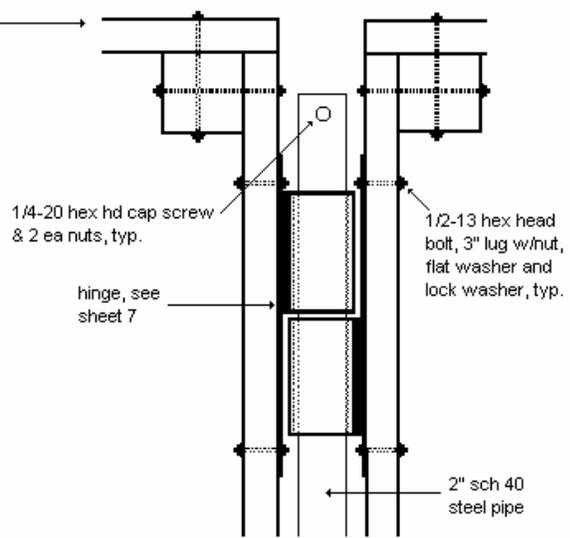
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## HINGE DETAIL

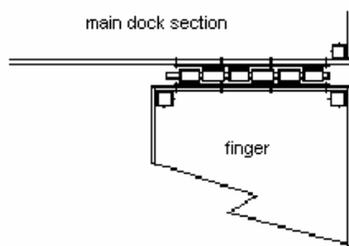
### MAIN DOCK / MAIN DOCK CONNECTION



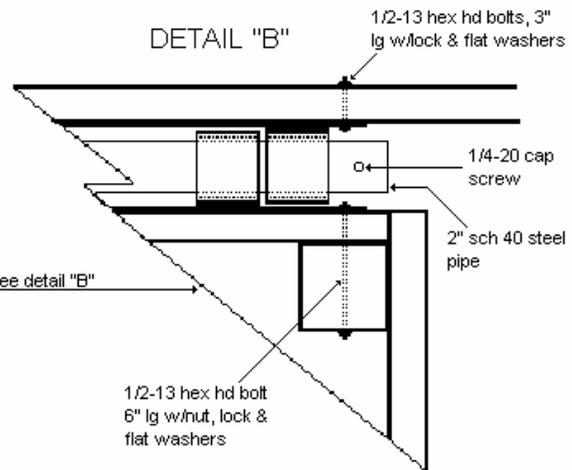
### DETAIL "A"



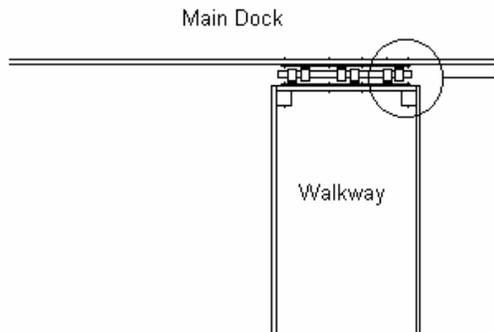
### FINGER / MAIN DOCK CONNECTION



### DETAIL "B"



### WALKWAY / MAIN DOCK CONNECTION



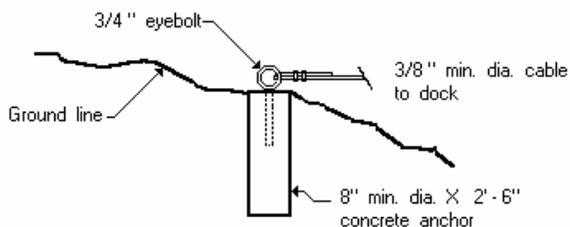
### GROUP FLOATING DOCK SPECIFICATIONS

U.S. ARMY CORPS OF ENGINEERS  
LOUISVILLE DISTRICT  
Drawing 5 of 7

APPENDIX H

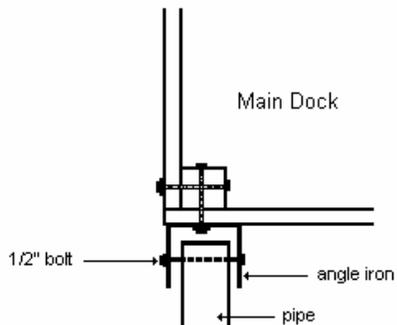
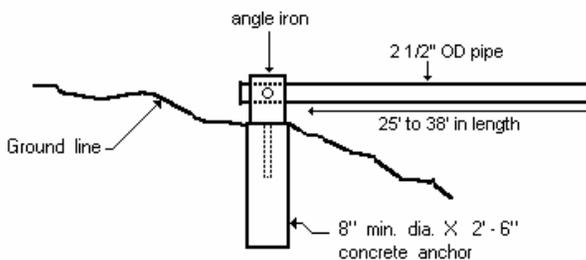
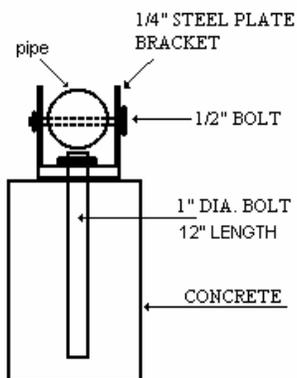
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**SHORE ANCHOR DETAIL**



**PIPE STANDOFF DETAIL**

OPTIONAL



**GROUP FLOATING DOCK SPECIFICATIONS**

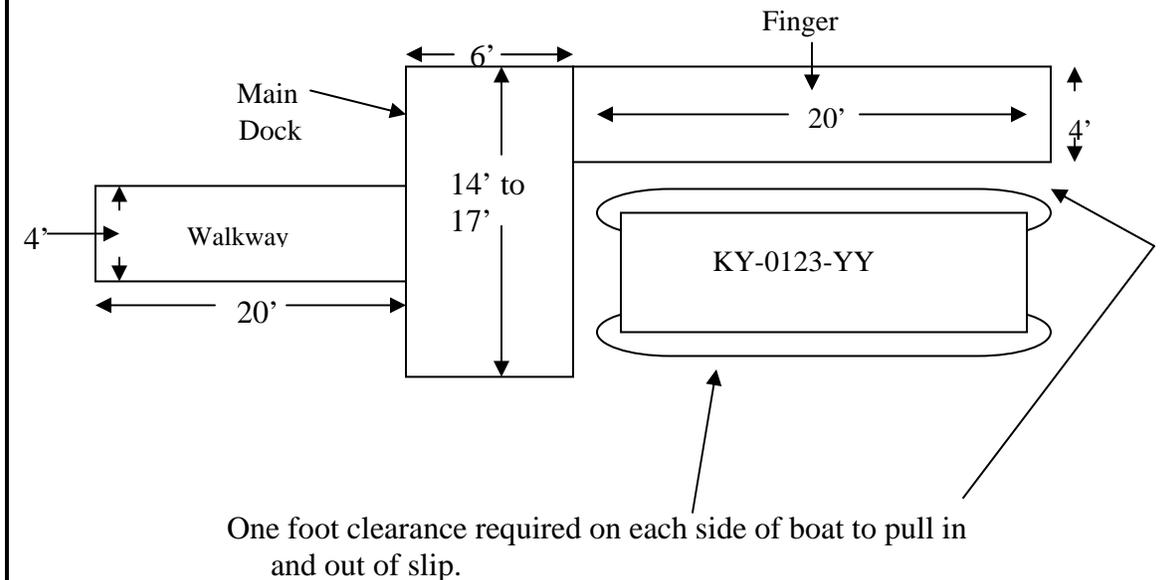
U.S. ARMY CORPS OF ENGINEERS  
LOUISVILLE DISTRICT  
Drawing 6 of 7

APPENDIX H

Scale: None

## DOCK PLAN

\*\*\*EXAMPLE\*\*\*



### Also Please Note:

Walkway: Standard width =4'. Maximum length=20', no minimum length

Main Dock: Standard width =6'. Length may be 14' to 17'.

Finger: Standard width =4'. Length = 20'.

Length of main dock is determined by taking the beam (widest point) of boat, adding 4' for width of finger and adding 2' of width for boat to move in/out of slip (i.e., beam of boat 8' + 4' for width of finger + 2' move in/out space = 14').

### **GROUP FLOATING DOCK SPECIFICATIONS**

U.S. Army Corps of Engineers,  
Louisville District  
Drawing 7 of 7  
Appendix H  
Scale: None

## Appendix J

### Shoreline Management Plan, Buckhorn Lake

#### Vegetation Alteration Permits

1. **General.** - Vegetation alteration permits (VA) may be issued in Limited Development Areas and in Protected Lakeshore Areas (for paths only) subject to the conditions contained in this Appendix. Vegetation alteration permits will be issued for the purpose of improving the access to the lakeshore for the adjacent property owners. The alteration of vegetation to provide a view of the lake or a dock, to develop a lawn type appearance, or to portray the appearance of an extension of private ownership onto Corps of Engineers land will not be permitted. Areas where extensive vegetation alteration has occurred in the past will be restored by a gradual reduction in the amount of mowing/alteration allowed. Permits may not be issued in areas where, in the opinion of the Park Manager, significant adverse environmental impact will result or has occurred due to the removal of vegetation.

2. **Eligibility.** - Vegetation alteration permits will be issued only to individuals owning property abutting Corps of Engineers' fee land that is designated as Limited Development Area, except as noted in Paragraph 1 above. An individual or household is allowed only one vegetation alteration permit on the lake, regardless of the number of lots owned. Vegetation alteration permits for areas adjacent to private property that has been designated for public access may be obtained by the subdivision developer, an officer of a subdivision association or organization, or by the responsible agent for a boat dock located below the public access area.

3. **Size and Configuration.** - The area in which vegetation alteration may be performed shall consist of an area that is a maximum of 35 feet long as measured along the shoreline and 20 feet in depth maximum from the waters edge and a 10 foot wide maximum strip from this area to the government boundary line. The 10 foot wide strip should be meandering to prevent rapid runoff and accelerated erosion. A typical configuration is shown in the sketch on Page J-5 of this appendix. Permits that were in effect as of 31 December 1995 will be grandfathered as to size and configuration for the lifetime of the permit holder or his/her spouse. No increase in the area is allowed if the present permit exceeds new guidelines. Upon sale of the adjacent property, the area in which vegetation alteration is permitted will be reduced to the new guidelines.

4. **Scope.** - Vegetation alteration may consist of removing selected trees and underbrush, trimming, pruning, mowing and driftwood removal. Prior to the removal of any vegetation, the permittee shall meet with a Corps Ranger who will outline the limits of the permit area with stakes and who will designate certain trees or stems that must be left in the permit area. The Ranger will attempt to leave a minimum of one tree or viable stem for each ten foot square. In no case will clear cutting be allowed and trees larger than 3" diameter at 6" above the ground will not be cut unless dead, diseased, or damaged and approved for cutting by the Ranger.

a. **Mowing.** - Vegetation within the permit area may be controlled by mowing with small riding mowers, push mowers or weed cutters using string cutting heads. Agricultural or industrial tractors or mowers shall not be used. Permittee shall exercise care to protect the vegetation designated to remain.

b. **Pruning and Trimming.** - Trees within the permit area that are larger than three inches in diameter breast high (D.B.H.) may be trimmed or pruned to a height of ten feet above the ground or one-half the total tree height, whichever is less.

c. **Removing Underbrush.** - Permittee may elect to selectively remove certain undesirable vegetation within the permit area such as poison ivy, oak, and sumac and vines, briar, and thistles in lieu of mowing.

d. **Driftwood Removal.** - Driftwood, downed timber and other floating debris within the permit area can be removed by the authority of the vegetation alteration permit. Disposal shall be by burning as outlined in Paragraph 5 below, or by removal and disposal off site.

e. **Herbicides.** - No herbicides may be used for vegetation control on government property.

5. **Burning.** - All driftwood, wooden debris, treetops, etc., may be burned unless prohibited by State or local laws and regulations. All burning shall be confined to the area on the lake bottom between minimum pool (winter pool) and seasonal pool (summer pool) or to an area designated by the Park Manager or their representative. All applicable burning and clean air codes, laws, rules, regulations, and all special conditions of the permit shall be adhered to. The vegetation alteration permittee shall obtain a separate burning permit from the Park Manager prior to any burning on Corps lands. There is no charge for the burning permit.

6. **Delineation of Boundary Line.** - The holder of each vegetation alteration permit shall delineate the boundary between Corps of Engineers lands and private property by the use of wooden posts or other accepted method as agreed to by the Park Manager. This provision applies to new permits as well as grandfathered permits that are covered in Paragraph 3. Posts shall be set at the intersection of the lot boundary line with the government property line (red line) and at the one-third points between these posts. Should a government monument exist at a point where a post is required, the post may be omitted. Permittee shall not move or otherwise disturb any monument or survey marker. Posts shall be five foot long and four inches by four inches and shall be set to a depth of two feet into the ground. The permit tag provided by the Corps of Engineers shall be attached to one of the posts positioned at the one-third points and facing the water. Posts shall be installed prior to any vegetation alteration and shall be at no cost to the government. Permittee may submit an alternate method of delineating the boundary line to the Park Manager for approval, however any such alternate method shall not impede the inspection and surveillance of the boundary by Corps Rangers.

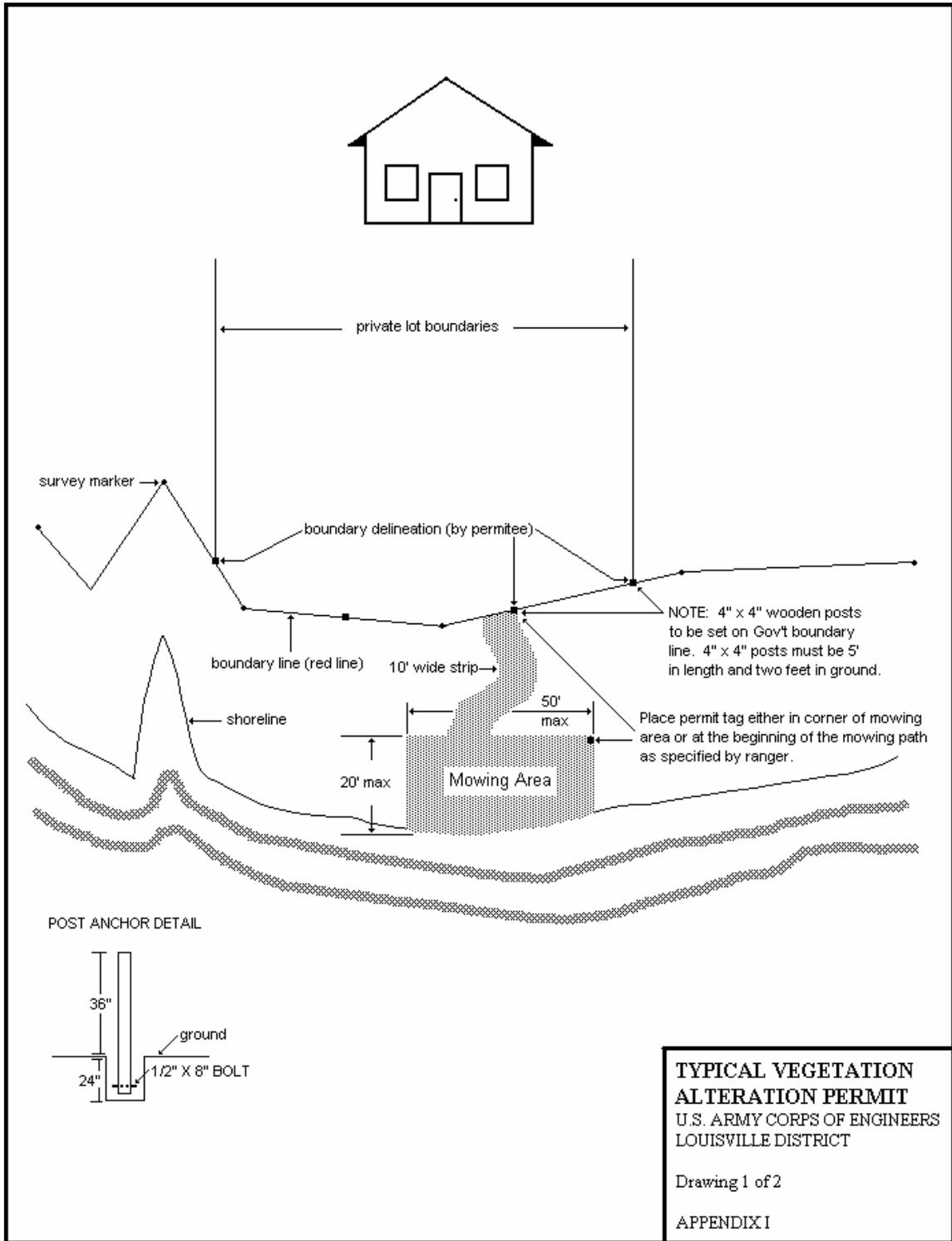
**7. Terms of Permit.** - All new and renewable permits will be issued for a five year period. Expiration dates will be on the anniversary date of the issue of the permit. In certain instances where a permittee holds other permits and/or licenses the vegetation alteration permit may be consolidated into a single outgrant with the other instruments with a common expiration date. The Park Manager may issue one time vegetation alteration permits for such activities as removing a hazardous dead tree or removal of driftwood at a dock location. The permits will be of short duration and the fee will be equal to the administrative fee for one year for a vegetation alteration permit.

**8. Fees.**- A fee is charged for vegetation alteration permits to cover administrative costs incurred by the Corps of Engineers. The amount of this fee is found in Appendix K of the Shoreline Management Plan. These fees are applicable nationwide and are subject to periodic review and adjustment. Payment of the appropriate fee is required by check, money order, or cashiers check made payable to "USAED, Louisville" prior to issuance of the permit. **No cash will be accepted.** No fee will be charged for a five foot path, whether the path is located in a Limited Development Area or a Protected Lakeshore Area.

**9. Application Procedures.** - First-time vegetation alteration permit applicants must contact the Park Manager or their representative to obtain a permit. An on-site inspection by a Corps Ranger and the applicant will be conducted at which time all conditions of the permit will be explained and the permit area delineated. The Ranger will provide an application (Eng Form 4264-R) and advise the applicant of the required fee. Upon receipt of the required fee and approval by the Park Manager, the permit will be issued to the applicant. A permit may be renewed by mail, provided that there is no change in the permit. Any requested change will require an on-site meeting to redefine the scope of the permit. The permit holder will be notified 60 days prior to the expiration date of their permit and advised to renew the permit. A permit that is not renewed within 60 days of the expiration date will be null and void and renewal after this date will be subject to new guidelines as to size and configuration.

**10. Revocation of a Vegetation Alteration Permit.** - The Park Manager may revoke any vegetation alteration permit in instances where the permittee has exceeded the authorized scope of the permit. The permittee may be required to restore the area to a condition satisfactory to the Park Manager. The Park Manager may also revoke vegetation permits in instances where significant adverse environmental impact is occurring due to the actions of the permittee that are within the scope of the permit.

**11. Mitigation of Fish and Wildlife Habitat.** - The Park Manager may issue vegetation alteration permits allowing the removal of trees and stumps in the water, not to exceed five feet below summer pool, for the purpose of installing a dock and opening boat lanes to the dock. The permittee may be required to place fish attractors or other structures to mitigate the loss of habitat caused by the removal of the vegetation. Installation of structure shall be at the location designated by and under the supervision of the Park Manager. Such mitigation shall be a condition of the permit and must be completed prior to removal of any vegetation.



## Appendix K

### Shoreline Management Plan, Buckhorn Lake

#### Permit Fees

1. **General.** - A fee is charged for shoreline use permits to cover the cost incurred by the Corps of Engineers in administering these permits and in certain cases for inspecting the facilities. These fees are uniform for all Civil Works Projects under the jurisdiction of the Corps of Engineers and are subject to periodic revision. All fees will be paid in advance for the entire permit period. Fees for licensed facilities are covered on page 9 (Paragraph 7.d(5)) of the Shoreline Management Plan.

#### 2. Fee and Duration of Permit.

a. **Boat Docks.** - The permit fee for a boat dock will be \$30.00 for a five year permit, regardless as to the number of slips on the dock. The \$30.00 fee is comprised of a \$10.00 administrative fee plus a \$5.00 per year inspection fee for years two through five.

b. **Vegetation Alteration.** - The fee for a vegetation alteration permit is \$10.00 for a 5 year period.

c. **Paths, Burning and Duck Blind Permits.** - These permits are issued at no cost to the permittee. Path permits will be issued for a five year period and in the same manner as vegetation alteration permits. Burning permits will be issued only to individuals holding a valid vegetation alteration permit and the expiration date will coincide with that of the vegetation alteration permit. Duck Blind permits will be issued upon request on a first-come, first-serve basis and these permits will expire 30 days after the end of the duck hunting season.

d. **Special Events.** - The fees for special events permits will be determined on a case by case basis and will reflect the value or cost of any services provided by the Corps of Engineers in connection with the event. The Park Manager will advise the applicant as to the amount of the fee in advance and fee shall be paid 15 days prior to the event.

e. **Special Act Permit.** - There will be no fee for a special act permit; however the permittee may be assessed the cost of any damages resulting from the permitted activity or the amount of any costs incurred by the Corps of Engineers in conjunction with the permit

3. **Payment of Fees.** - The Park Manager or their designated representative will collect the full fee for the entire permit period prior to issuing the permit. Payment shall be made by personal check, money order, or cashiers check made out to "USAED, Louisville".

**Cash will not be accepted.**

4. **Consolidated Permits.** - Vegetation alteration permits and/or boat dock permits may be consolidated with other shoreline management permits into a single permit. The expiration date will be coordinated and only the higher of the two fees will be charged.

## **Appendix L**

### **Shoreline Management Plan, Buckhorn Lake**

#### **Shoreline Use Permit Conditions**

1. This permit is granted solely to the applicant for the purpose described on the attached permit.
2. The permittee agrees to and does hereby release and agree to save and hold the Government harmless from any and all causes of action, suits at law or equity or claims or demands or from any liability of any nature whatsoever for or on account or any damages to persons or property, including a permitted facility, growing out of the ownership, construction, operation or maintenance by the permittee of the permitted facilities and/or activities.
3. Ownership, construction, operation, use and maintenance of a permitted facility are subject to the Government's navigation servitude.
4. No attempt shall be made by the permittee to forbid the full and free use by the public of all public waters and/or lands at or adjacent to the permitted facility or to unreasonably interfere with any authorized project purposes, including navigation in connection with the ownership, construction operation or maintenance of a permitted facility and/or activity.
5. The permittee agrees that if subsequent operations by the Government require an alteration in the location of a permitted facility and/or activity or if in the opinion of the District Commander a permitted facility and/or activity shall cause unreasonable obstruction to navigation or that the public interest so requires, the permittee shall be required, upon written notice from the district commander to remove, alter, or relocate the permitted facility, without expense to the Government.
6. The Government shall in no case be liable for any damage or injury to a permitted facility which may be caused by or result from subsequent operations undertaken by the Government for the improvement of navigation or for other lawful purposes, and no claims or right to compensation shall accrue from any such damage. This includes any damage that may occur to private property if a facility is removed for noncompliance with the conditions of permit.
7. Ownership, construction, operation, use and maintenance of a permitted facility and/or activity are subject to all applicable Federal, state and local laws and regulations. Failure to abide by these applicable laws and regulations may be cause for revocation of the permit.
8. This permit does not convey any property rights either in real estate or material; and does not authorize any injury to private property or invasion of private rights or any infringement of Federal, state or local laws or regulations, nor does it obviate the

necessity of obtaining state or local assent required by law for the construction, operation, use or maintenance of a permitted facility and/or activity.

9. The permittee agrees to construct the facility within the time limit agreed to on the permit issuance date. The permit shall become null and void if construction is not completed within that period. Further, the permittee agrees to operate and maintain any permitted facility and/or activity in a manner so as to provide safety, minimize any adverse impact on fish and wildlife habitat, natural, environmental, or cultural resources values and in a manner so as to minimize the degradation of water quality.

10. The permittee shall remove a permitted facility within 30 days, at his/her expense, and restore the waterway and lands to a condition accepted by the Park Manager upon termination or revocation of this permit or if the permittee ceases to use, operate or maintain a permitted facility and/or activity. If the permittee fails to comply with the satisfaction of the Park Manager, the District Commander may remove the facility by contract or otherwise and the permittee agrees to pay all costs incurred thereof.

11. The use of a permitted boat dock facility shall be limited to the mooring of the permittee's vessel or watercraft and the storage, in enclosed locker facilities, of his/her gear essential to the operation of such vessel or watercraft.

12. Neither a permitted facility nor any houseboat, cabin cruiser, or other vessel moored thereto shall be used as a place of habitation or as a full or part-time residence or in any manner which gives the appearance of converting the public property, on which the facility is located, to private use.

13. Facilities granted under this permit will not be leased, rented, sub-let or provided to others by any means of engaging in commercial activity(s) by the permittee or his/her agent for monetary gain. This does not preclude the permittee from selling total ownership to the facility. Rental property does not meet the requirements for slip application. If a landowner has an authorized slip and converts to rental property, the slip will be removed from project waters.

14. The flotation material for slips shall be fabricated of materials manufactured for marine use. Flotation materials shall be 100% warranted for a minimum of 8 years against sinking, becoming waterlogged, cracking, peeling, fragmenting or losing beads. All flotation shall resist puncture and penetration and shall not be subject to damage by animals under normal conditions for the area. Flotation material used in them shall be fire resistant. Flotation material, which is within 40 feet of a line carrying fuel, shall be 100% impervious to water and fuel. New or recycled plastic or metal drums or non-compartmentalized air containers for encasement of Styrofoam is prohibited. Existing flotation will be authorized until it has severely deteriorated and is no longer serviceable or capable of supporting the structure, at which time it shall be replaced with approved flotation. For any flotation installed after the effective date of this specification, repair or replacement shall be required when it no longer performs its designated function or fails to meet the specifications for which it was originally warranted.

15. Permitted facilities and activities are subject to periodic inspection by authorized Corps representatives. The Park Manager will notify the permittee of any deficiencies and together establish a schedule for their correction. No deviation or changes from approved plans will be allowed without prior written approval of the Park Manager.
16. Floating facilities shall be securely attached to the shore in accordance with the approved plans by means of moorings which do not obstruct general public use of the shoreline or adversely affect the natural terrain or vegetation. Every attempt should be made to route anchor cables around trees. If that is not possible, a protective coating or rubber hose shall be placed on the cable to prevent damage. Anchoring and winch devices will be kept at ground level. Anchoring to vegetation is prohibited.
17. The permit display tag shall be posted on the permitted facility and/or on the land areas covered by the permit so that it can be visually checked with ease in accordance with instructions provided by the Park Manager.
18. No vegetation other than that prescribed in the permit will be damaged, destroyed or removed. No vegetation of any kind will be planted, other than that specifically prescribed in the permit.
19. No change in land form such as grading, excavation or filling is authorized by this permit.
20. This permit is non-transferable. Upon the sale or other transfer of the permitted facility or the death of the permittee and his/her legal spouse, this permit is null and void.
21. By 30 days written notice, mailed to the permittee by certified letter, the District Commander may revoke this permit whenever the public interest necessitates such revocation or when the permittee fails to comply with any permit condition or term. The revocation notice shall specify the reasons for such action. If the permittee requests a hearing in writing to the District Commander through the Park Manager within the 30 day period, the District Commander shall grant such hearing at the earliest opportunity. In no event shall the hearing date be more than 60 days from the date of the hearing request. Following the hearing, a written decision will be rendered and a copy mailed to the permittee by certified letter.
22. Notwithstanding the condition cited in condition 21 above, if in the opinion of the District Commander, emergency circumstances dictate otherwise, the District Commander may summarily revoke the permit.
23. The Park Manager or his/her authorized representative shall be allowed to cross the permittee's property, as necessary, to inspect facilities and/or activities under permit.

24. When vegetation modification is allowed, the permittee will delineate the government property line in a clear, but unobtrusive manner approved by the Park Manager and in accordance with the project Shoreline Management Plan.
25. If the ownership of a permitted facility is sold or transferred, the permittee or new owner will notify the Park Manager of the action prior to finalization. The new owner must apply for a Shoreline Use Permit within 14 days or the permittee must remove the facility and restore the use area within 30 days from the date of ownership transfer.
26. If permitted facilities are removed for storage or extensive maintenance, the Park Manager may require all portions of the facility to be removed from public property.
27. The District Commander or his/her authorized representative may place special conditions on the permit when deemed necessary. Requests for waivers of shoreline management plan permit conditions based on health conditions will be reviewed on a case-by-case basis by the Operations Manager. Effort will be made to reduce onerous requirements when a limiting health condition is obvious or when an applicant provides a doctor's certification of need for conditions, which are not obvious.