APPENDIX E: MAINTENANCE AND CONSTRUCTION STANDARDS FOR PERSONAL FLOATING FACILITIES (DOCKS AND BOATHOUSES)

E.1 Inspection: Inspections will be conducted not less than annually, and more frequently as necessary because of storms and flooding. The USACE is not required to notify permit holders prior to an inspection of a private floating facility. The Lake Manager and/or a USACE representative will notify the permit holder of any deficiencies and establish a timeline for correction. Unless authorized in writing, failure to comply with these standards within 30 days after any inspection will result in the revocation of the permit. The permit holder shall remove a permitted facility within 60 days, at permit holder's expense. Failure to remove the structure within 30 days will result in impoundment and removal by the Government or by contract, and the permit holder pays all the cost incurred.

E.2 Posting of Permit: Permit holders shall affix a placard listing their permit number with 3-inch lettering that can be easily read from the landside or the lakeside. A copy of the permit shall also be posted inside the personal floating facility.

E.3 Grandfathered Facilities: According to Section 1134(d) of Public Law 99-662 (Water Resources Development Act of 1986), the USACE could not remove personal floating facilities (boat docks and boathouses) lawfully installed on USACE reservoirs by the date the legislation was enacted (November 17, 1986) if the property (1) is maintained in a usable and safe manner, (2) does not pose a threat to life or property, or (3) remains in substantial compliance with the existing lease or license. Grandfathered facilities that comply with these three requirements may continue to exist at Proctor Lake. Grandfathered facilities do not have to follow the entirety of this Standard, except where it pertains to safety, outlined in the document "U.S. Army Corps of Engineers, Fort Worth District Boathouse or Boat Dock Inspection Checklist" (Appendix D).

If a grandfathered facility becomes damaged to the point where the substructure is not floating, safe, or usable, the facility must be removed and replaced. Replacing or significantly modifying a grandfathered boathouse or boat dock requires the new facility or modifications to the existing facility abide with this Standard, including supplying designs prepared by a licensed professional engineer and receiving approval by the Lake Manager. Once replaced or modified, grandfathered structures must continue to abide with all aspects of the Standard. Additionally, if the cost of repairs needed to keep the facility "usable and safe" exceed 50 percent (50%) of the cost of a new-like structure, the facility cannot be repaired and must be replaced. Failure to correct safety deficiencies identified during inspections, maintain the facility as "usable and safe", or follow the Standard when replacing or significantly modifying a grandfathered facility may result in the termination of a Shoreline Use Permit and the removal of the facility.

E.4 Design Criteria: Any personal floating facility structure must be for the mooring of vessel or watercraft and the storage, in enclosed locker facilities, of gear essential to operation of such vessel or watercraft. A personal floating facility shall be only large

enough to store the vessel or watercraft within the dimensions of the structure or moor the vessel or watercraft adjacent to the structure, with enough additional room for walkways and securing of the floatation. Designs for replacement of any personal floating facility must be prepared by a licensed professional engineer and approved by the Lake Manager before the construction of a replacement structure. Replacement structure designs will be limited to a similar size footprint (square footage) of the facility it is replacing. Modifying a personal floating facility without designs prepared by a licensed professional engineer and approved by the Lake Manager is a violation of the permit conditions, and the permit may be revoked and the facility removed.

E.5 Design Loads (Minimum):

a. Deck Loads (Substructure): 50 lbs. per square foot

b. Gangways/walkways: 50 lbs. per square foot

c. Wind Loads (Substructure and Superstructure): 25 lbs. per square foot

d. Roof Loads (Superstructure): To provide for a 2-inch ice load or equivalent amount of snow load.

E.6 Floatation Material: All new and replacement floatation must be plastic encapsulated foam that meets marina industry standards. Floatation must support the entire facility eight inches above the water surface. Floatation must be adequate to maintain a stabilized and safe facility and(or) walkway. Failure to maintain these standards may result in termination of the shoreline use permit for the associated facility.

E.7 Anchorage of Facilities: A design of the anchoring system will be submitted for each separate structure and will be developed in accordance with the site where the facility will be anchored, taking into consideration the water depth and exposure to fetch and wind loads. The anchorage must not impinge on any area forward of a line drawn 45 degrees rearward from the front corners of the facility. The front shall be looking away from the bank at 90 degrees. Anchorage shall allow for a 10 foot plus or minus fluctuation from elevation 1162 foot National Geodetic Vertical Datum (NGVD) elevation. Attaching cables must remain serviceable and free of excessive rust or fraying. Cable attaching points, stiff arms, and attachments hardware must be serviceable and free of excessive rust as well. Dead-man cables must not be attached to trees. Mooring pilings, poles, and collars must be secure and in good condition. Failure to maintain these standards may result in termination of the shoreline use permit for the associated facility.

E.8 Walkways and Landing Areas: A shoreline landing to provide a place on the shoreline to access the gangway/walkway and in some cases to attach the gangway/walkway may be authorized but is not required. However, if requested and approved the shoreline landing shall be constructed of metal and no larger than six (6) feet by six (6) feet. The width for the gangway/walkway from the shoreline to the boathouse will be four (4) feet. Handrails are required on any new or replacement

walkways or ramps that are more than 30 inches above ground or are located over water. Existing walkways or ramps are not required to have handrails unless the walkway or ramp is replaced or an imminent hazard exists. Sides of facility and attached walkways used for loading and unloading boats do not require handrails. Handrails shall be constructed with a top rail at 42 inches above the walkway surface and a bottom rail constructed 20 inches below the top rail. Handrails shall be designed and constructed with 2x4 lumber or material of an equivalent strength, that is capable of resisting a load of 50 pounds per linear foot applied in any direction at the top rail. The boathouse deck landing area will be a minimum of four (4) feet and a maximum of six (6) feet wide. Internal walkways around and in between slips within the boathouse will be a minimum of three (3) feet and maximum of four (4) feet in width. Walkways must be maintained to a safe and usable condition. Decking for walkways may use marine plywood, 2x6 wood planks, composite decking, or metal decking with slip-resistant tread, provided the strength of the decking is equivalent to 2x6 wood planks in strength. All wood shall be pressure treated with environmentally friendly chemicals. Arsenic treated wood materials are prohibited. Walkways shall be free from excessive spring, deflection, and lateral movement. Failure to maintain these standards may result in termination of the shoreline use permit for the associated facility.

E.9 Electrical: The design, installation and maintenance of all electrical systems shall meet the requirements of all local and state laws, the most current version of the National Electric Safety Code (NESC), and the National Electrical Code (NEC). Electrical systems must be designed by a Registered Professional Electrical Engineer or licensed Master Electrician and installed and inspected by a licensed electrician. A real estate instrument (license) is required for all electrical lines. Recertification is required at each permit renewal, change of ownership or at any time an inspection reveals that the service does not meet requirements. Applicants for electric line licenses are encouraged to consider solar applications that will meet the need for electrical power. Failure to maintain these standards may result in termination of the shoreline use permit for the associated facility. Additional requirements for electrical installations are as follows:

a. All electric lines on Government land shall be installed underground.

b. Electrical service to a private floating facility (boathouse) is limited to 120 volt receptacles and lighting circuits. All wires must be free of fraying or excessive wear.

c. Exterior lighting, including all lighting on open-sided facility, is limited to 150 watt, or equivalent, lamps. All exterior lighting shall be aimed directly downward to reduce glare when viewed from the water or adjacent homes.

d. Main electrical cutoff /disconnect switch for the electric line shall be maintained above flowage easement 1200 feet National Geodetic Vertical Datum (NDVD) and permit holder is responsible for de-energizing the line during periods of rising water.

e. All electrical service must have ground fault interrupter (GFI) protection and adhere to NEC.

f. Solar power systems for electrical systems is permitted and encouraged on personal floating facilities, provided all aspects of the system are securely installed on the facility itself rather than Government land, the facility substructure and(or) supports the weight of the system, and all batteries are stored in an enclosed facility storage locker separate for other authorized equipment and any flammable liquids. Designs for the installation of a solar system on any personal floating facility shall demonstrate the facility substructure and(or) roof can support or can be modified to support the system. These designs shall be prepared by a licensed professional engineer and approved by the Lake Manager before the construction of a solar structure.

E.10 Water Lines, Pumps, and Discharge: Water lines may not be run to personal floating facilities from adjacent property. Personal floating facilities may not contain water pumps or large storage containers intended to collect lake water for personal use. Sources of grey or black water such as sinks, showers, toilets introduce foreign substances and pollutants to the lake and are prohibited. The release of grey or black water from facilities may be subject to citation under Title 36 and may carry additional penalties under State of Texas or Federal law. Personal floating facility owners may use portable water hoses and pressure washers to clean algae and other naturally occurring substances from their facility and vessels provided they do not introduce foreign substances and pollutants, including soap, oils, or paint chips. Portable water hoses and pressure washers cannot be stored on facility and must be removed from Government property between uses. Failure to maintain these standards may result in termination of the shoreline use permit for the associated personal floating facility.

E.11 Fire Protection: An ABC dry chemical fire extinguisher of not less than ten pounds in capacity shall be located on every personal floating facility. All fire extinguishers shall be inspected by owner every 4 months and bear a date inspection tag. Failure to maintain these standards may result in termination of the shoreline use permit for the associated personal floating facility.

E.12 Emergency Rescue Equipment: A United States Coast Guard approved ring buoy, having fifty 50 feet of 3/8" rope or equal, is recommended for each personal floating facility.

E.13 Personal Floating Facility Storage Lockers: Total enclosed storage will not exceed a maximum floor area of 24 square feet in size and must be fastened securely to the personal floating facility. No individual dimension will exceed 8 feet. The storage locker(s) are not to interfere with walking space, nor are they to be used for the purpose of creating an enclosed facility. Facility storage boxes are authorized for storage of items essential to watercraft operation. Batteries may be stored in an enclosed facility storage locker as long as it is stored separately from other authorized equipment and any flammable liquids. Storage of flammable liquids must be in an OSHA approved flammable storage cabinet with appropriate ventilation. Storage lockers must be kept in

a good state of repair. Failure to maintain these standards may result in termination of the shoreline use permit for the associated personal floating facility.

E.14 Personal Floating Facility Furniture and Household Items: Furniture or household type items that denote habitation (such as, but not limited to, couches, stoves, and refrigerators) are prohibited. Carpet and other materials covering decking and obscuring visual inspection of deck integrity are prohibited. Failure to maintain these standards may result in termination of the shoreline use permit for the associated personal floating facility.

E.15 Siding on Structure: Siding material on existing boat personal floating facilities may be replaced with new material, when necessary, as long as the remainder of the boathouse is in good condition, free of holes, rust, patched appearances, etc. Any replacement of existing structures must be open sided. Chain link mesh or similar material will be allowed for security. Chain link fencing must remain in a state of good repair and siding must present a near appearance and condition. Failure to maintain these standards may result in termination of the shoreline use permit for the associated personal floating facility.

E.16 Roofs or Superstructure: Roofs may be gabled or mono-sloped. The roof overhang may extend no more than 1 horizontal foot from the exterior walls of a personal floating facility. Roofs may use construction materials commonly used for joist, rafters, and studding, such as wood and/or metal. Roofs must be securely fastened to the superstructure by use of steel plates, metal straps, or plywood gussets. All nails, bolts or screws must securely fasten supports and decking to maintain structural stability and must be galvanized or stainless steel. All wood shall be pressure treated with environmentally friendly chemicals. Arsenic treated wood materials are prohibited. When metal material is used it will be designed in accordance with American Institute of Steel Construction Specifications of the American Society of Civil Engineers' Proceedings for Aluminum Structures depending on the type of metal used. Welded or bolted connections are optional. New metal on the exposed exterior of the superstructure is desired. Used metal may be authorized if it is in good condition; however, if the used metal is of a dull color application of paint may be required. Paint colors will be approved by Lake Manager. All metal must present a neat appearance free from excessive flaking paint, discoloration, rust, or damage. All columns and stud walls will be adequately braced to resist wind loads of at least 25 pounds per square foot. Bracing will be designed and constructed to counteract design loads. The structure will have sufficient flexibility whereby wave actions will not damage the structural or roof system. Roofs or superstructure may be added to existing facilities with a design prepared by a licensed professional engineer and approved by the Lake Manager prior to construction. Failure to maintain these standards may result in termination of the shoreline use permit for the associated personal floating facility.

E.17 Shoreline and Access: Permits for private floating facilities may convey permission for permit holders to mow pedestrian access trails from their property through Government land to the permitted personal floating facility. While these paths are permitted through the associated shoreline use permit, they must follow the

guidelines for “Pedestrian Access Paths” within the Vegetation Modification Permit section of the Shoreline Management Plan. Additionally, the shoreline area surrounding the private floating facility must remain free of private property or unnatural debris or litter. Failure to follow these standards may result in termination of the shoreline use permit for the associated personal floating facility. The guidelines for pedestrian access paths relevant to paths accessing private floating facilities are as follows:

a. Paths must be for pedestrian foot traffic and limited to four (4) feet in width.

b. Permit holders may access their private floating facilities with motorized vehicles for the sole purpose of maintenance, repair, removal, or installation provided they notify the Lake Manager in writing at least 24 hours before the planned access.

c. Paths must blend naturally with existing topography and vegetation.

d. Permit holders must take precautions to prevent erosion, including using meandering paths in steeper areas.

e. Paths located on government property must be open to public traffic.

f. Permit holders may not construct or place any structures such as steps, bridges, handrails, benches, signs, light poles, or to make any changes in landform or topography on Government lands or along the path.