Building Permit #_____ APN # _____

Contra Costa County
Public Works
Department
APPLICATION AND PERMIT CENTER

Floodplain Administrator
Julia R. Bueren (925) 313-2000

Floodplain Manager
Rich Lierly (925) 313-2348

FLOODPLAIN PERMIT

Date: February 16, 2012 Permit Number: FPP. - _____

Property Owner: _____

Address: _____

City/State/Zip: _____

Telephone Number: _____ FAX: _____

Site Address: _____

City/State/Zip: _____

Assessor's Parcel Number: _____

Permitted Activity: _____

_____

_____

Expiration Date: This permit expires with Building Permits or in absence of Building Permit in 24 months.

This application must be accompanied by building plans which show:
1. Proposed elevation of the lowest floor of the structure including basement.
2. Proposed elevation of floodproofing, if any, for non-residential structures.

Elevation Certificate Required? ☐ Yes ☐ No

Fees: ☐ Floodplain Permit Fee of $325 ☐ Elevation Certificate Fee of $200 **OR** ☐ $50 if no requirements

Receipt Number: G-_____

Is there a well (water, oil or gas)? ☐ Yes ☐ No

Will propane or natural gas tank be used? ☐ Yes ☐ No Septic Tank? ☐ Yes ☐ No

NOTE: If well and/or septic tank is proposed contact the County Health Department.

Floodplain Information: 1. Flood Zone:_____ 2. Panel:_____ 3. Base flood elevation: _____ Feet (M.S.L)

OR Depth of flow _____

4. Comments: _____

_____

_____

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Conditions of Approval: (Read attached Flood Protection Standards carefully prior to start of work.)

1. Required minimum elevation of lowest floor:_____ Feet M.S.L. OR
2. Required minimum elevation of lowest floor above highest adjacent grade:_____ Feet

   OR
3. Required minimum elevation of flood proofing or flood resistant construction (for non-residential structures):

   _____Feet M.S.L./or height above highest adjacent grade.

The permittee agrees to save, indemnify and hold harmless the County of Contra Costa, its boards, officers, employees and agents from all liabilities imposed by law by reason of injury to or death of any person(s) or damage to property, including without limitation, liability for trespass, nuisance or inverse condemnation, which may arise out of the work covered by this permit, and does agree to defend the County, its officers, employees and agents against any claim or action asserting such liability.

Accepting this permit or starting any work hereunder shall constitute acceptance and agreement to all of the conditions and requirements of this permit and the ordinance and specifications authorizing issuance of such permit.

I have read, understand, and agree to abide by the instructions and conditions as stated above. I will ensure that all three certifications required below are completed by the proper Building Official.

Signature of permittee: _____ Date: _____

Printed Name: _____

Address: _____

City/State/Zip: _____

For: Julia R. Bueren, Public Works Director, Floodplain Administrator, County of Contra Costa

By: _____ Date: _____

TO BE COMPLETED BY BUILDING INSPECTION DEPARTMENT STAFF

OFFICE CERTIFICATION:

1. The above conditions of approval have been satisfied per Building Inspection Department plan check.

   Checker/Engineer: _____ Date: _____
2. The elevation certificate has been reviewed.

   Checker/Engineer: _____ Date: _____

FIELD CERTIFICATION:

3. The above conditions of approval have been satisfied per Building Department-Field Inspection.

   Inspector: _____ Date: _____

IMPORTANT: Return this completed form to the Public Works Technician in the Application and Permit Center.

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FLOOD PROTECTION STANDARDS

General:

1. All new or substantial improvements constructed within a floodplain shall have the finished floor and all electrical and mechanical equipment and/or services elevated one to two feet, minimum, above the Base Flood Elevation (BFE).

2. The area below the BFE plus freeboard, shall be used only for vehicle parking, storage, and building access.

3. Electrical outlets (but not **service panels**) can be allowed below the BFE plus free board if, **and only if,** they are of the GFI type.

4. All enclosed space below the BFE shall be adequately ventilated or enclosed with breakaway walls.

5. All tanks (including propane, septic and water) located below BFE shall be anchored.

Ordinance No. 96-11, Section 82-28.1002:

82-28.1002 STANDARDS OF CONSTRUCTION. In all areas of special flood hazards, the following standards are required.

(1) Anchoring.

(A) All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

(B) All manufactured homes shall meet the anchoring standards of Section 82-28.1008.

(2) Construction Materials and Methods.

(A) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

(B) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

(C) All new construction and substantial improvements shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

(D) In Zones AH, AO or VO, adequate drainage paths around structures on slopes to guide flood waters around and away from proposed structures shall be constructed.

(3) Elevation and Floodproofing.

(A) New construction and substantial improvement of any structure shall have the lowest, floor, including basement, elevated to or above the base flood elevation plus required freeboard. In the San Francisco Bay Delta Estuarine Region, 0.61 meters (two feet) of freeboard is required. In all other unincorporated areas of the County, 0.30 meters (one foot) of freeboard is required. Nonresidential structures may meet the standards in Section 82-28.1002(3)(c). Upon the completion of the structure, the elevation of the lowest floor, including basement, shall be certified by a registered professional engineer or surveyor, or verified by the building inspector to be properly elevated. Such certification or verification shall be provided to the Floodplain Administrator.

(B) New construction and substantial improvement of any structure in Zone AH, AO, or VO shall have the lowest floor, including basement, elevated above the highest adjacent grade at least as high as the depth number specified in meters (feet) in the FIRM plus required freeboard, or at least 0.61 meters (two feet) if no depth number is specified. In the San Francisco Bay Delta Estuarine Region, 0.61 meters (two feet) of freeboard is required. In all other unincorporated areas of the County, 0.30 meters (one foot) of freeboard is required. Nonresidential structures may meet the standards in Section 82-28.10-28(3)(c). Upon the completion of the structure the elevation of the lowest floor, including basement, shall be certified by a registered professional engineer or surveyor, property owner, licensed contractor or verified by the building inspector to be properly elevated. Such certification or verification shall be provided to the Floodplain Administrator.

(C) Nonresidential construction shall either be elevated in conformance with Section 82-28.1002 (3)(s) or (b) or together with attendant utility and sanitary facilities.

(i) Be flood proofed so that below the base flood level plus freeboard, the structure is watertight with walls substantially impermeable to the passage of water;

(ii) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and

(iii) Be certified by a registered professional engineer or architect that the standards of this subsection are satisfied. Such certification shall be provided to the Floodplain Administrator.

(iv) The Floodplain Administrator may allow the non residential structure to be made "flood resistant." Flood resistant structures shall comply with Section 82-28.1002(3)(d).

OR

(D) For all new construction and substantial improvements, all fully enclosed areas below the lowest floor, that are subject to flooding, shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood water. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:

(i) Have a minimum of two openings with a total net area of not less than 6.45 square centimeters (one square inch) for every 0.09 square meters (one square foot) of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one foot above grade. (Openings may be equipped with screens, louvers, valves or other coverings or devices provided that they permit the automatic entry and exit of flood water); or

(ii) Be certified to comply with a local flood proofing standard approved by the FIA.

4. Manufactured homes shall also meet the standards of Section 82-28.1008. (Ords. 90-118, 88-50, 87-45.)

82-28.1004 STANDARDS FOR UTILITIES.

(1) All water supply and sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from the system into flood waters.

(2) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding. All septic tanks shall be adequately anchored to resist flotation, collapse, or lateral movement.

(3) On-site water supply systems shall be located to avoid impairment to them or contamination of them during flooding. (Ords 90-118, 88-50, 87-45.)