

City of West Linn
PRE-APPLICATION CONFERENCE
SUMMARY NOTES

Nov. 6, 2008

SUBJECT: Floodplain Management Permit at 18940 Nixon Avenue
ATTENDEES: Applicant: Martin Ralston, Tony Henkel
Staff: Peter Spir (Associate Planner)

The following is a summary of the meeting discussion provided to you from staff meeting notes. Additional information may be provided to address any “follow-up” items identified during the meeting. These comments are PRELIMINARY in nature. Please contact the Planning Department with any questions regarding approval criteria, submittal requirements, or any other planning-related items. Please note disclaimer statement below.

Project Details

Applicant proposes to add an enclosed entryway/porch to his house which is in the 100 year floodplain. Also proposed is a covered/non-enclosed shelter at the rear of the house 15 feet back from the top of bank. Staff finds that any construction in the 100 year floodplain requires a floodplain management permit to demonstrate that the new building will not modify adversely the floodwater patterns and characteristics.

The portion of the property that is being developed is out of the Willamette River Greenway. Also, this property was re-classified per CDC Chapter 28 as being outside the habitat conservation area so the only setback of structures is 15 feet from top of bank. Consequently, no Willamette River Greenway permit is needed.

Process

A Floodplain Management permit is required. The fee is \$1,050.

For the Floodplain Management permit the submittal requirements of CDC Section 27.050 must be addressed. If some of this is considered not applicable (N/A), the applicant may request a waiver of that code section in a letter addressed to the Planning Director. The letter must identify which code section is to be waived, and most importantly, why it should be waived or why it is not applicable. Staff finds that CDC 27.050(F), (G) and (H) are not required since the City’s snap map covers that data. Critical to the application is a site plan to scale (1:20) showing a location of the addition and architectural plans. The plans must be accompanied by a stamped and signed statement from a civil engineer as described below.

The application must include full point-by-point response to the following approval criteria of CDC Section 27.060(A) through (J).

27.060

APPROVAL CRITERIA

The Planning Director shall make written findings with respect to the following criteria when approving, approving with conditions, or denying an application for development in flood management areas.

- A. *Development, excavation, and fill shall be performed in a manner to maintain or increase flood storage and conveyance capacity and not increase design flood elevations.*
- B. *No net fill increase in any floodplain is allowed. All fill placed in a floodplain shall be balanced with an equal amount of soil material removal. Excavation areas shall not exceed fill areas by more than 50 percent of the square footage. Any excavation below bankful stage shall not count toward compensating for fill.*
- C. *Excavation to balance a fill shall be located on the same parcel as the fill unless it is not reasonable or practicable to do so. In such cases, the excavation shall be located in the same drainage basin and as close as possible to the fill site, so long as the proposed excavation and fill will not increase flood impacts for surrounding properties as determined through hydrologic and hydraulic analysis.*
- D. *Minimum finished floor elevations must be at least one foot above the design flood height or highest flood of record, whichever is higher, for new habitable structures in the flood area.*
- E. *Temporary fills permitted during construction shall be removed.*
- F. ***Prohibit encroachments, including fill, new construction, substantial improvements, and other development in floodways unless certification by a professional civil engineer licensed to practice in the state of Oregon is provided demonstrating that***

encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

- G. *All proposed improvements to the floodplain or floodway which might impact the flood carrying capacity of the river shall be designed by a professional civil engineer licensed to practice in the state of Oregon.*
- H. *New culverts, stream crossings, and transportation projects shall be designed as balanced cut and fill projects or designed not to significantly raise the design flood elevation. Such projects shall be designed to minimize the area of fill in flood management areas and to minimize erosive velocities. Stream crossings shall be as close to perpendicular to the stream as practicable. Bridges shall be used instead of culverts wherever practicable.*
- I. *Excavation and fill required for the construction of detention facilities or structures, and other facilities, such as levees, specifically shall be designed to reduce or mitigate flood impacts and improve water quality. Levees shall not be used to create vacant buildable land.*
- J. *The applicant shall provide evidence that all necessary permits have been obtained from those Federal, State, or local governmental agencies from which prior approval is required.*
(ORD 1522)

The applicant shall also provide a discussion of how the standards of 27.070 and 27.080 are to be met (see below).

27.070

CONSTRUCTION MATERIALS AND METHODS

- A. *All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage using methods and practices that minimize flood damage.*
- B. *Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.*
- C. *New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.*
- D. *New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.*
- E. *On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.*
- F. *All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.*

27.080

RESIDENTIAL CONSTRUCTION

- A. *New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to at least one foot above the base flood elevation.*
- B. *Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a professional civil engineer or architect licensed to practice in the state of Oregon, and must meet or exceed the following minimum criteria:*

1. *A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.*
 2. *The bottom of all openings shall be no higher than one foot above grade.*
 3. *Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry or exit of floodwaters.*
 4. *Fully enclosed areas below the base flood elevation shall only be used for parking, access, and limited storage.*
 5. *Service equipment (e.g., furnaces, water heaters, washer/dryers, etc.) is not permitted below the base flood elevation.*
 6. *All walls, floors, and ceiling materials located below the base flood elevation must be unfinished and constructed of materials resistant to flood damage.*
- C. *Crawlspaces. Crawlspaces are a commonly used method of elevating buildings in Special Flood Hazard Areas (SFHAs) to or above the Base Flood Elevation (BFE), and are allowed subject to the following requirements:*
1. *The building is subject to the Flood-Resistant Construction provisions of the Oregon Residential Specialty Code.*
 2. *They shall be designed by a professional engineer or architect licensed to practice in the State of Oregon to meet the standards contained in the most current Federal Emergency Management Agency's (FEMA) Technical Bulletin.*
 3. *The building must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.*

4. *Flood vent openings shall be provided on at least two sides that equalize hydrostatic pressures by allowing for the automatic entry and exit of floodwaters. The total area of the flood vent openings must be no less than 1 square inch for each square foot of enclosed area. The bottom of each flood vent opening can be no more than 1 foot above the lowest adjacent exterior grade. For guidance on flood openings, see FEMA Technical Bulletin 1-93, Openings in Foundation Walls.*
5. *Portions of the building below the BFE must be constructed with materials resistant to flood damage. This includes not only the foundation walls (studs and sheathing), but also any, joists, insulation, or other materials that extend below the BFE. For more detailed guidance on flood-resistant materials see FEMA Technical Bulletin 2-93, Flood-Resistant Materials Requirements.*
6. *Utility systems within the crawlspace must be elevated above BFE or designed so that floodwaters cannot enter or accumulate within the system components during flood conditions. Ductwork, in particular, must either be placed above the BFE or sealed from floodwaters. For further guidance on the placement of building utility systems in crawlspaces, see FEMA 348, Protecting Building Utilities From Flood Damage. Flood-resistant materials and utilities, access, and ventilation openings in crawlspaces are further addressed in this bulletin.*
7. *The interior grade of a crawlspace below the BFE must not be more than 2 feet below the lowest adjacent exterior grade (LAG).*
8. *The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall must not exceed 4 feet at any point. This limitation will also prevent these crawlspaces from being converted into habitable spaces.*
9. *There must be an adequate drainage system that removes floodwaters from the interior area of the crawlspace. Possible options include natural drainage through porous, well-drained soils and drainage systems such as low-point drains perforated pipes, drainage tiles, or gravel or crushed stone drainage by gravity.*

10. *The velocity of floodwaters at the site should not exceed 5 feet per second for any crawlspace. For velocities in excess of 5 feet per second, other foundation types should be used.*
11. *For more detailed information refer to FEMA Technical Bulletin 11-01 or the most current edition.*
12. *The use of below grade crawlspaces to elevate the building to 1-ft. above the BFE may cause an increase in flood insurance premiums which, are beyond the control of the City.*
(ORD. 1565)

- D. *A poured slab placed over fill can be used to elevate the lowest floor of a structure above the base flood elevation. However, when a building site is filled, it is still in the floodplain and no basements are permitted.*
- E. *Placing a structure on piers, piles, and posts is allowed provided supporting members are designed to resist hydrostatic and hydrodynamic forces.*

No waivers of the approval criteria are allowed; N/A is not an acceptable response. You must explain why the specific approval criteria are not applicable.

The City has 30 days to determine if the application is complete or not (most applications are incomplete). The applicant then has 180 days to make it complete, although usually it is complete within three months of the original submittal. Once complete, staff prepares public notice and schedules the decision date. There is no public hearing. This is a Planning Director's decision. The public notice period is 14 days and involves notifying all property owners within a 500-foot radius of the site. The Planning Director's decision becomes final after 14 days if no appeals are filed. If it were appealed, it would then go to City Council. The City has a total of 120 days to exhaust all local review and appeals. Subsequent appeals go to LUBA.

Once approved, the applicant has three years to construct the improvements and satisfy conditions of approval before approval lapses and is void.

The applicant shall be responsible for verifying if additional permits need to be obtained through the US Army Corps of Engineers and the Department of State Lands.

DISCLAIMER: This summary discussion covers issues identified to date. It does not imply that these are the only issues. The burden of proof is on the applicant to demonstrate that all approval criteria have been met. These notes do not constitute an endorsement of the proposed application. Staff responses are based on limited material presented at this pre-application meeting. New issues, requirements, etc. could emerge as the application is developed.

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