



CITY OF
West Linn
 PLANNING AND DEVELOPMENT

**STAFF REPORT
 PLANNING MANAGER DECISION**

DATE: June 17, 2016

FILE NO.: MIS-16-02

REQUEST: The applicant requires Flood Management Area (FMA) and Willamette and Tualatin River Protection area permits to construct a new house at 5005 Mapleton Drive.

PLANNER: Peter Spir, Associate Planner


Planning Manager 

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GENERAL INFORMATION

- OWNER:** Garrin Royer, 3050 Roxbury Drive, West Linn, OR. 97068
- APPLICANT:** Scott Edwards Architecture, Attn: Joe Broders, 2525 E. Burnside St., Portland OR 97214
- SITE LOCATION:** 5005 Mapleton Drive
- SITE SIZE:** 26,180 square feet
- LEGAL DESCRIPTION:** Assessor's Map 2-1E-24AC Tax Lot 600
- COMP PLAN DESIGNATION:** Low Density Residential
- ZONING:** R-10, Single-Family Residential Detached (10,000 square foot minimum lot size)
- APPROVAL CRITERIA:** Community Development Code (CDC) Chapter 27 Flood Management Area (FMA), Chapter 28 Willamette and Tualatin River Protection Area, Chapter 11 (R-10)
- 120-DAY RULE:** The application became complete on April 28, 2016. The 120-day period therefore ends on August 30, 2016.
- PUBLIC NOTICE:** Notice was mailed to property owners within 300 feet of the subject property and all neighborhood associations on May 17, 2016. A sign was placed on the property on May 17, 2016. The notice was also posted on the City's website. Therefore, public notice requirements of CDC Chapter 99 have been met.

EXECUTIVE SUMMARY

The property at 5005 Mapleton Drive (See Figure 1) is currently occupied by a single family home which is located within the 100-year floodplain. The applicant proposes to demolish the house and build a new one, substantially in the same location. (See Figure 2.) A FMA permit is required; primarily to demonstrate that the new house will not adversely modify floodwaters and to ensure that the home's first habitable floor is at least one foot above the 100-year flood elevation. The base flood (100-year) elevation (BFE) is 46 feet.

There is also a Habitat Conservation Area (HCA) on the property. HCAs are administered under the provisions of CDC Chapter 28: Willamette and Tualatin River Protection Area. The proposed area of construction is outside the Willamette River Greenway boundary and within the area "Not Designated as an HCA". (See Figure 3.)

Public comments:

Staff has not received any public comments.

DECISION

The Planning Manager (designee) approves this application (MIS-16-02), based on: 1) the findings submitted by the applicant, which are incorporated by this reference, and 2) supplementary staff findings included in the Addendum below. With these findings, the applicable approval criteria are met. The following conditions of approval shall apply:

1. Elevation Certificate. Prior to issuance of an occupancy permit, the applicant's engineer shall submit a signed post construction Elevation Certificate to the Planning Department to demonstrate that all the structural elements of the finished habitable floor are at least one foot above the base flood elevation of 46 feet.
2. Floodplain displacement. The applicant's engineer shall provide a "no rise" certification that confirms that the proposed design has adequate venting ("one for one") on two sides of the "at grade" spaces/garage that automatically equalize flood levels per the Engineer's stamped plan so that encroachment into the floodway fringe will not result in a significant increase in the flood levels. The perimeter foundation wall will contain the required openings/louvers no more than one foot above grade.
3. Landscaping. All landscaping within the HCA will be native per 28.050(5) while landscaping in the "Habitat and Impact Areas Not Designated as HCAs" may include non-native vegetation.
4. Mechanicals. All mechanicals (HVAC etc.) must be elevated above the Base Flood Elevation (BFE).
5. Standards. The applicant/builder will comply with applicable state, federal and local standards regarding construction and building elements below the BFE and within the floodplain.

The provisions of the Community Development Code Chapter 99 have been met.

Peter Spir

PETER SPIR, Associate Planner

June 17, 2016

DATE

Appeals to this decision must be filed with the West Linn Planning Department within 14 days of the mailing date listed below. The cost of an appeal is \$400. The appeal must be filed by an individual who has established standing by submitting comments prior to the date identified in the public notice. Appeals will be heard by City Council.

Mailed this 17th day of June, 2016.
Therefore, the 14-day appeal period ends at 5 p.m., on July 1, 2016.

- Note to Builder/Applicant: As part of the building permit process, a six-foot wide sidewalk must be installed along the 82 feet of Mapleton Drive frontage. Alternately, the applicant may propose to pay fees in lieu based upon engineered bids for the improvement and approved by the City's development engineer.

**ADDENDUM:
STAFF FINDINGS IN RESPONSE TO APPROVAL CRITERIA**

CHAPTER 11, SINGLE-FAMILY RESIDENTIAL DETACHED R-10

11.030 Permitted Uses

The following are uses permitted outright in this zoning district

- 1. Single-family detached residential unit.*

Staff Finding 1: The property proposes one single-family detached residential home which is permitted per this criteria. The criterion is met.

11.070 Dimensional Requirements, Uses Permitted Outright and Uses Permitted Under Prescribed Conditions

Except as may be otherwise provided by the provisions of this code, the following are the requirements for uses within this zone:

- 1. The minimum lot size shall be 10,000 square feet for a single-family detached unit.*

(...)

- 5. Except as specified in CDC [25.070\(C\)](#) (1) through (4) for the Willamette Historic District, the minimum yard dimensions or minimum building setback area from the lot line shall be:*

- a. For the front yard, 20 feet; except for steeply sloped lots where the provisions of CDC [41.010](#) shall apply.*

- b. For an interior side yard, seven and one-half feet.*

- c. For a side yard abutting a street, 15 feet.*

- d. For a rear yard, 20 feet.*

Staff Finding 2: The property comprises 26,180 square feet which exceeds the minimum lot size of the R-10 zone. The applicant proposes to place the new house 41 feet from Mapleton Drive which meets the front setback of 20 feet. The side setbacks will be 15 and 16 feet which exceed the required 7.5 foot setback. The rear of the house is 112 feet from the rear lot line which exceeds the required 20 foot rear setback. The criteria is met.

- 6. The maximum building height shall be 35 feet, except for steeply sloped lots in which case the provisions of Chapter 41 CDC shall apply.*

Staff Finding 3: The proposed house will be 35 feet tall from grade which meets the 35 foot height requirements of the R-10 zone. The criteria is met.

7. The maximum lot coverage shall be 35 percent.

9. The floor area ratio shall be 0.45.

10. The sidewall provisions of Chapter [43](#) CDC shall apply.

Staff Finding 4: The lot is 26,180 square feet. The proposed house has a footprint of 3,200 square feet for a lot coverage of 12.2 percent, which is below the maximum 35 percent allowed. The FAR is 15 percent which is below the 45 percent allowed FAR. The sidewall transitions are met with two foot pop outs for every 700 square feet of elevation area. The subsequent building permit review process will provide confirmation of the applicant's ability to meet the dimensional and design standards of the R-10 zone. The criterion is met.

(...)

CHAPTER 27, FLOOD MANAGEMENT AREAS

27.060 Approval Criteria

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.

Staff Finding 5: The proposed house will have finished floor elevations more than one foot above the BFE of 46 feet as required by the CDC 27.080 (A). The foundations for the proposed house are below the BFE. The perimeter foundation wall will contain the required openings/louvers to allow for the conveyance of floodwater and to equalize hydrostatic flood force on the exterior walls. Condition of approval 2 reinforces the requirement that louvers and openings will be no more than one foot above grade. The applicant's professional civil engineer, Jeffrey Fitch of SFA Design Group, provided stamped and signed concurrence with the foundation plans which will be equipped with screens, louvers or other covers that allow for the automatic entry and exit of floodwaters. The proposal is not expected to have any impact on the flood storage capacity or increase design flood elevations. This criterion is met by conditions of approval 1, 2 and 6. (Please see also Staff Findings 10 and 11.)

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 the ordinary high water line shall not count toward compensating for fill.

Staff Finding 6: The “fill” amount comprises the perimeter foundation wall. This criteria is satisfied by the condition of approval 2 that the applicant’s engineer provide a written “no rise” determination.

C. Excavation to balance a fill shall be located on the same lot or 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.

Staff Finding 7: The applicant shall provide a written “no rise” determination that confirms that adequate venting (“one for one”) equalizes flood levels. Thus, encroachment into the 100-year floodplain will not result in a significant increase in the flood levels. This criterion is met by condition of approval 2.

(...)

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.

Staff Finding 8: The proposed house is located in the Special Flood Hazard Area (100-year floodplain), but outside of the floodway. (See Figure 2.) This criteria does not apply.

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.

Staff Finding 9: The applicant’s professional civil engineer, Jeffrey Fitch of SFA Design Group, provided stamped and signed concurrence with the proposed improvements in the floodplain. This criterion is met.

27.070 Construction Materials and Methods

(...)

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.

Staff Finding 10: The proposed house will have all structural elements of the finished floor at least one foot above the base flood elevation of 46 feet. The applicant shall submit a post construction elevation certificate showing finished construction elevations prior to issuance of an occupancy permit. The louvers/openings must be on at least two wall sides. This criterion is met by condition of approval 1.

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 be certified by either a professional civil engineer or an 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.

Staff Finding 11: The applicant's professional civil engineer, Jeffrey Fitch of SFA Design Group, provided stamped and signed concurrence that the house plans will meet this criteria. The perimeter foundation envelopes 3,200 square feet. This translates into a requirement for a minimum of 3,200 square inches in openings. The openings will be equipped with screens, louvers or other covers that allow for the automatic entry and exit of floodwaters. The louvers/openings must be on at least two wall sides. The criteria is met by condition of approval 2 and 3.

2. The bottom of all openings shall be no higher than one foot above grade.

Staff Finding 12: According to the applicant's response, the bottom of all openings shall be no higher than one foot above grade. This criterion is met.

(...)

C. Crawlspace. Crawlspace 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.

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 one square inch for each square foot of enclosed area.

The bottom of each flood vent opening can be no more than one foot above the lowest adjacent exterior grade. For guidance on flood openings, see FEMA Technical Bulletin 1-93, Openings in Foundation Walls.

(....)

Staff Finding 13: The applicant will comply with applicable state, federal and local standards regarding construction and building elements within the BFE. HVAC and similar equipment shall be above the BFE. The criteria is met by conditions 5 and 6.

Chapter 28

WILLAMETTE AND TUALATIN RIVER PROTECTION

28.040 EXEMPTIONS/USES PERMITTED OUTRIGHT

S. In cases where the required development standards of this chapter are applied and met with no encroachment into HCAs, and also meeting subsections T and U of this section, where applicable, then no permit under the provisions of this chapter will be required. For example, if the proposed development or action will be located in the “Habitat and Impact Areas Not Designated as HCAs” and keeps out of the habitat conservation areas, a Willamette or Tualatin River Protection Area permit shall not be required. Floodplain management area or other permits may still be required.

Staff Response 14: Addressing 28.040 (S), staff finds that the construction of the proposed house will take place completely in the “Habitat and Impact Areas Not Designated as HCAs”. Consistent with this section, staff finds *“The proposed development or action will be located in the “Habitat and Impact Areas Not Designated as HCAs” and keeps out of the habitat conservation areas, a Willamette or Tualatin River Protection Area permit shall not be required”*. This proposal is exempt under these provisions. 28.040 (S) states that subsections (T) (U) only need to be met “where applicable”. Those subsections are not applicable as explained below.

T. The construction, remodeling or additions of home and accessory structures that take place completely within the “Habitat and Impact Areas Not Designated as HCAs” shall be exempt from a Willamette or Tualatin River Protection Area permit. Where the “Habitat and Impact Areas Not Designated as HCAs” goes to the edge of a clearly defined top of bank, the applicant’s home and accessory structures shall be set back at least 15 feet from top of bank. At-grade patios and deck areas within 30 inches of grade may extend to within five feet from

top of bank. No overhang or cantilevering of structures is permitted over HCA or over setback area. If these terms are met then no permit will be required under this chapter.

Staff Response 15: Staff finds that the construction of the proposed house will take place completely in the “Habitat and Impact Areas Not Designated as HCAs” and is therefore exempt from a Willamette or Tualatin River Protection Area permit under this provision. Therefore the provision does not apply and the criteria is met.

U. Maintenance, alteration, expansion, repair and replacement of existing structures are exempt, provided impermeable surfaces do not exceed 5,000 square feet and that it complies with the provisions of Chapters 27 and 28 CDC. The following standards shall also apply:

1. Rebuilding of existing residential and non-residential structures within the same foundation lines as the original structure(s) including, but not limited to, those damaged or destroyed by fire or other natural hazards; or
2. The alteration, expansion, repair and replacement of a house or structure per the standards of CDC [28.110](#)(E) not to exceed 5,000 square feet of impermeable surface per that section; or
3. The alteration, expansion, repair and replacement of a house or structure vertically where the applicant is adding additional floors or expanding above the footprint of the existing structure regardless of whether the structure’s footprint is in an HCA or not.

Staff Response 16: Staff finds that 28.040 (U) limits development of replacement homes to 5,000 square feet of disturbed area; and references, in subsection (U) (2), the standards of 28.110(E). Section 28.110(E) is a clarifying criteria in that explains that the 5,000 square foot limit only applies to non-conforming structures which are defined as: *“existing structures whose building footprint is completely or partially on HCA lands. Any additions, alterations, replacement, or rehabilitation of existing non-conforming non-water-related structures (including decks), roadways, driveways, accessory uses and accessory structures shall avoid encroachment upon the HCAs, especially high HCAs”*. The proposed house, which replaces a house (conforming structure), is in the “Habitat and Impact Areas Not Designated as HCAs/ Allow Development” (non-HCA). It is neither partially nor completely in an HCA. The nearest HCA is 51 feet away. Therefore the provision does not apply and the criteria is met.

28.050 PROHIBITED USES

The following are prohibited:

5. Any new lawn area or garden area consisting primarily of non-native vegetation within HCA lands. A lawn area in the “Allowed Development” area is permitted.

6. Planting of any species identified as nuisance or prohibited plants on the Metro Native Plant List.

8. Excessive trimming or removal of existing native vegetation within the HCA unless it is to reestablish native vegetation in place of non-native or invasive vegetation.

Staff Response 17: No non-native landscaping within the HCA is proposed. The criteria is met.

28.110 APPROVAL CRITERIA

No application for development on property within the protection area shall be approved unless the decision-making authority finds that the following standards have been met or can be met by conditions of approval. The development shall comply with the following criteria as applicable:

A. *Development: All sites.*

1. *Sites shall first be reviewed using the HCA Map to determine if the site is buildable or what portion of the site is buildable. HCAs shall be verified by the Planning Director per CDC [28.070](#) and site visit. Also, "tree canopy only" HCAs shall not constitute a development limitation and may be exempted per CDC [28.070\(A\)](#). The municipal code protection for trees and Chapters 55 and 85 CDC tree protection shall still apply.*

Staff Response 18: The adopted 2005 HCA Map (see Figure 3) identifies the proposed development area as "Habitat and Impact Areas Not Designated as HCAs", as such, it is buildable. Only the area between the Willamette River and top of bank has HCA designation and is not buildable. That area is 51 feet from the proposed development site. The criteria is met.

2. *HCAs shall be avoided to the greatest degree possible and development activity shall instead be directed to the areas designated "Habitat and Impact Areas Not Designated as HCAs," consistent with subsection (A) (3) of this section.*

Staff Response 19: Staff finds that the development area will be in an area designated "Habitat and Impact Areas Not Designated as HCAs". Development in the HCA is completely avoided. (The nearest HCA is 51 feet from the development site.) This criteria is met.

3. *If the subject property contains no lands designated "Habitat and Impact Areas Not Designated as HCAs" and development within HCA land is the only option it shall be directed towards the low HCA areas first, then medium HCA areas and then to high HCA as the last choice. The goal is to, at best, avoid or, at least, minimize disturbance of the HCAs. (Water-dependent uses are exempt from this provision.)*

4. All development, including exempted activities of CDC [28.040](#), shall have approved erosion control measures per Clackamas County Erosion Prevention and Sediment Control Planning and Design Manual, rev. 2008, in place prior to site disturbance and be subject to the requirements of CDC [32.070](#) and [32.080](#) as deemed applicable by the Planning Director.

Staff Response 20: Staff finds that the subject property contains lands designated “Habitat and Impact Areas Not Designated as HCAs”. Development will occur in these areas. Standard erosion control measures around the development site have already been put in place for the demolition of the house and will remain in place through home construction. This criteria is met.

B. Single-family or attached residential. Development of single-family homes or attached housing shall be permitted on the following HCA designations and in the following order of preference with “a” being the most appropriate and “d” being the least appropriate:

- a “Habitat and Impact Areas Not Designated as HCAs”*
- b Low HCA*
- c Moderate HCA*
- d High HCA*

- 1. Development of land classifications in “b,” “c” and “d” shall not be permitted if at least a 5,000-square-foot area of buildable land (“a”) exists for home construction, and associated impermeable surfaces (driveways, patios, etc.).*

(...)

Staff Response 21: Staff finds that the development area will be in an area designated “Habitat and Impact Areas Not Designated as HCAs”. Development in the HCA is completely avoided. (The nearest HCA is 51 feet from the development site.) This criteria is met.

6. Table showing development allowed by land classification:

	Development Allowed
Non-HCA (“a”)	Yes
Low-Medium HCA (“b” and “c”)	Yes, if less than 5,000 sq. ft. of non-HCA land available. Avoid “d.”

High HCA (“d”) Yes, but only if less than 5,000 sq. ft. of “a,” “b” and “c” land available.

Non-conforming Structures (structures on HCA land) Yes: vertically, laterally and/or away from river.
Avoid “d” where possible.

(The underlying zone FAR and allowable lot coverage shall also apply.)

Staff Response 22: The adopted HCA map shows that the area of proposed development, including the house footprint, is “Habitat and Impact Areas Not Designated as HCAs/ Allow Development” (Non-HCA). Therefore, development of the proposed house and associated improvements is allowed. The criteria is met.

C. *Setbacks from top of bank.*

1. *Development of single-family homes or attached housing on lands designated as “Habitat and Impact Areas Not Designated as HCAs” shall require a structural setback of 15 feet from any top of bank that represents the edge of the land designated as “Habitat and Impact Areas Not Designated as HCAs.”*

(....)

Staff Response 23: The proposed single-family home is on land designated as “Habitat and Impact Areas Not Designated as HCAs” The rear of the house will be 51 feet from the top of bank and HCA, which exceeds the required 15 foot setback. The criteria is met.

(....)

E. *Hardship provisions and non-conforming structures.*

1. *For the purpose of this chapter, non-conforming structures are existing structures whose building footprint is completely or partially on HCA lands.*

(....)

Staff Response 24: The applicant is proposing to build a single-family homes on land designated as “Habitat and Impact Areas Not Designated as HCAs”. (The nearest HCA is 51 feet away.) No hardship provisions exist and there are no non-conforming structures on the property. These criteria do not apply.

F. *Access and property rights.*

1. *Private lands within the protection area shall be recognized and respected.*
2. *Where a legal public access to the river or elsewhere in the protection area exists, that legal public right shall be recognized and respected.*

(...)

Staff Response 25: The proposed house is 110 feet from the Ordinary Low Water Mark below which public access is allowed. The proposed development will constitute no impediment to public access along the river's edge. The City's 2013 Trails Plan identifies an on-street trail along nearby Mapleton and Nixon Streets but identifies no trail along the shoreline. The criteria is met.

H. Partitions, subdivisions and incentives.

1. *When dividing a property into lots or parcels, an applicant shall verify the boundaries of the HCA on the property.*
2. *Applicant shall partition or subdivide the site so that all lots or parcels have a buildable site or envelope available for home construction located on non-HCA land or areas designated "Habitat and Impact Areas Not Designated as HCAs" per the HCA Map.*

(...)

Staff Response 26: No subdivision or partition is proposed, so this criteria is not applicable.

I. Docks and other water-dependent structures.

1. *Once the preference rights area is established by DSL, the property owner identifies where the water-dependent use will be located within the authorized portion of the preference rights area. The water-dependent use should be centered or in the middle of the preference rights/authorized area or meet the side yard setbacks of the underlying zone.*

(...)

Staff Response 27: No dock is proposed, so this criteria is not applicable.

L. Roads, driveways, utilities, or passive use recreation facilities. Roads, driveways, utilities, public paths, or passive use recreation facilities may be built in those portions of HCAs that include wetlands, riparian areas, and water resource areas when no other practical alternative exists but shall use water-permeable materials unless City engineering standards do not allow that. (...)

Staff Response 28: No development of roads, driveways, utilities, or passive use recreation facilities are proposed in the HCAs. All development will be on lands designated as “Habitat and Impact Areas Not Designated as HCAs”, so this criteria is not applicable.

M. Structures. All buildings and structures in HCAs and riparian areas, including all exterior mechanical equipment, should be screened, colored, or surfaced so as to blend with the riparian environment. Surfaces shall be non-polished/reflective or at least expected to lose their luster within a year. In addition to the specific standards and criteria applicable to water-dependent uses (docks), all other provisions of this chapter shall apply to water dependent uses, and any structure shall be no larger than necessary to accommodate the use.

Staff Response 29: No development is proposed within an HCA or within a riparian area. All development will be on lands designated as “Habitat and Impact Areas Not Designated as HCAs”, so this criteria is not applicable.

N. Water-permeable materials for hardscapes.... O. Signs and graphics.... P. Lighting.... Q. Parking... R. Views.... S. Aggregate deposits.... T. Changing the landscape/grading....

U. Protect riparian and adjacent vegetation.

Staff Response 30: All above sections relate to development in an HCA and/or adjacent to the Willamette River. All development will be on lands designated as “Habitat and Impact Areas Not Designated as HCAs”. The proposed house site is not in an HCA (51 feet away) and is 110 feet from the river. There will be no landscaping or grading within the Willamette River Greenway boundary or within HCAs or areas below the OLWM. All existing riparian vegetation within the Willamette River Greenway boundary and within HCAs or areas below the OLWM will be untouched. Therefore these criteria do not apply.

FIGURE 1: Location Map



FIGURE 2: Flood Boundaries superimposed on applicant's property

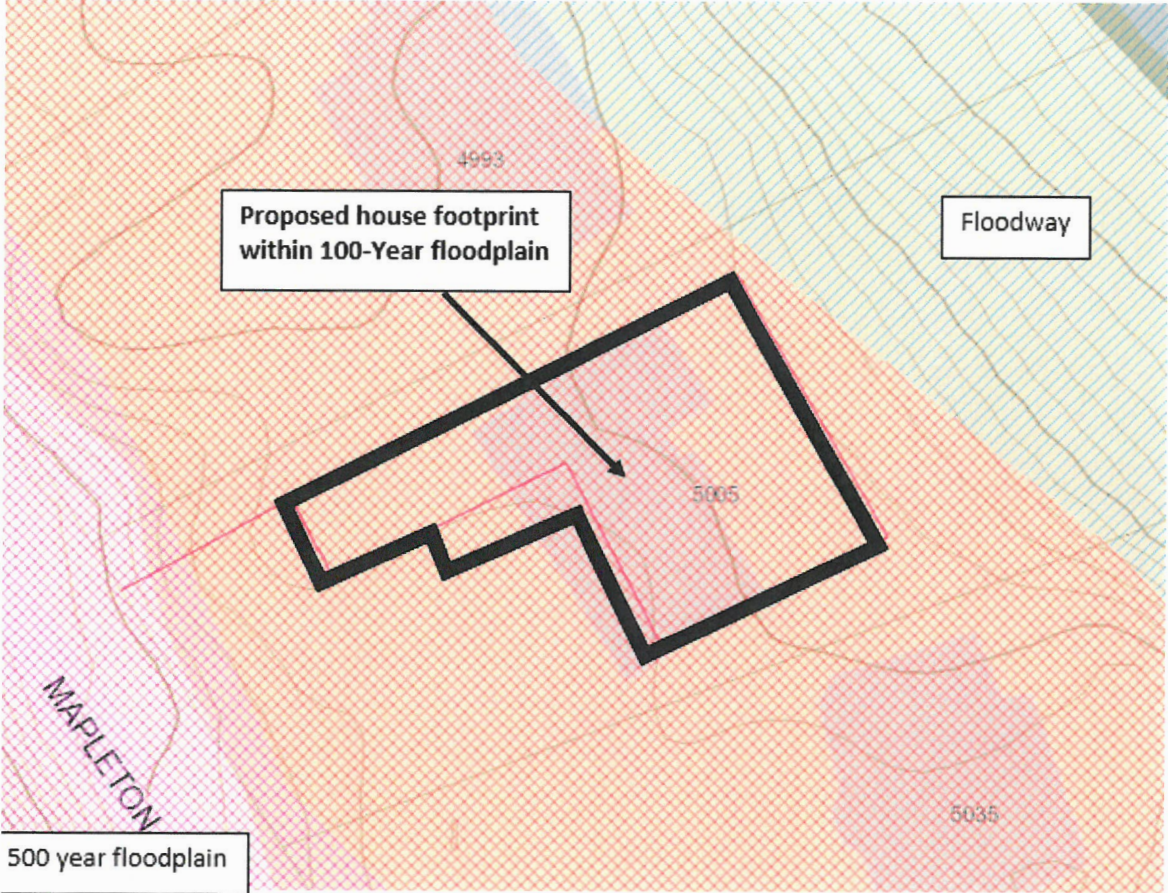
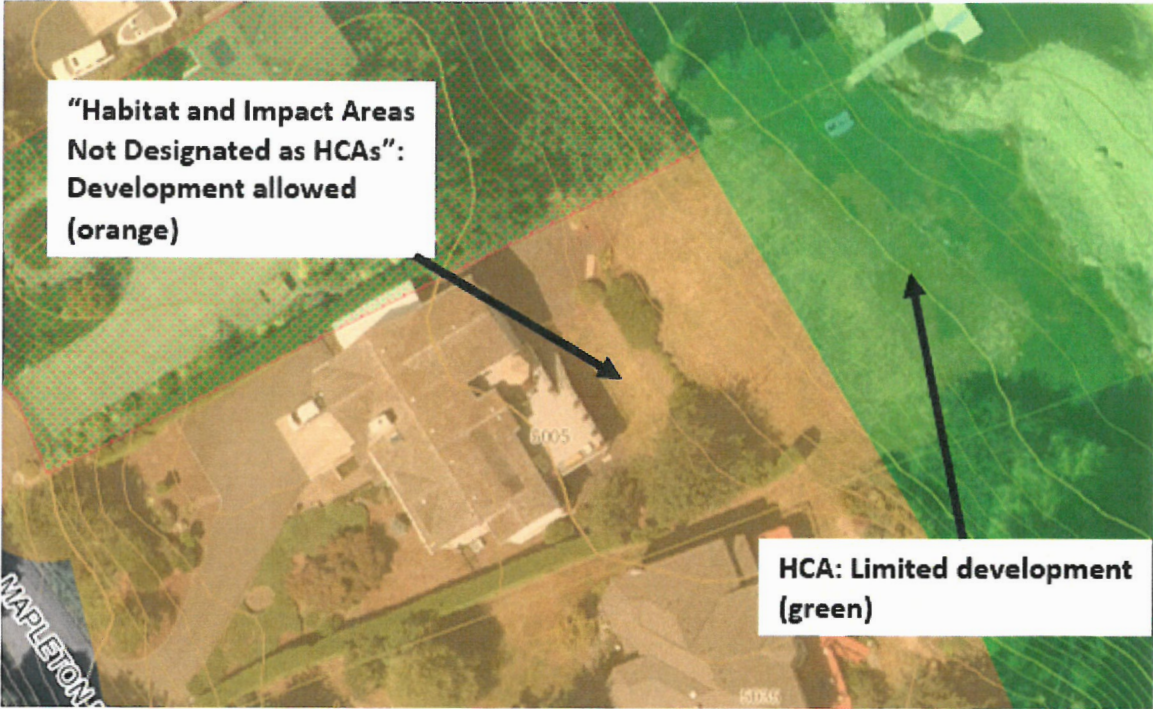


FIGURE 3: Habitat Conservation Area (HCA) Map



**Metro 2005
Habitat Conservation Areas (HCAs)**

Conservation Area

- High
- Moderate
- Low
- Habitat and Impact Areas no designated as HCAs

West Linn Exceptions

West Linn Exceptions include the Planning Director's land use decisions: MISC-08-19, MISC-10-26, and memo dated January 25, 2011

Data Source: Metro Data Resource Center
 Habitat Conservation Areas Map December 15, 2005
 Urban Growth Management Functional Plan
 Title 13. Nature in Neighborhoods
 Adopted Sept. 29, 2005 (Metro Ordinance No. 05 -1077C)
 Amended Dec. 6, 2005 (Metro Ordinance No. 05 -1097A)

PD-1 AFFADAVIT OF NOTICE

AFFIDAVIT OF NOTICE

We, the undersigned do hereby certify that, in the interest of the party (parties) initiating a proposed land use, the following took place on the dates indicated below:

GENERAL

File No. MISC-16-02 Applicant's Name Scott Edwards Architecture
Development Name _____
Scheduled Meeting/ Decision Date 5-31-16

NOTICE: Notices were sent at least 20 days prior to the scheduled hearing, meeting, or decision date per Section 99.080 of the Community Development Code. (check below)

TYPE A _____

- A. The applicant (date) _____ (signed) _____
B. Affected property owners (date) _____ (signed) _____
C. School District/ Board (date) _____ (signed) _____
D. Other affected gov't. agencies (date) _____ (signed) _____
E. Affected neighborhood assns. (date) _____ (signed) _____
F. All parties to an appeal or review (date) _____ (signed) _____

At least 10 days prior to the scheduled hearing or meeting, notice was published/posted:

Tidings (published date) _____ (signed) _____
City's website (posted date) _____ (signed) _____

SIGN posted

At least 10 days prior to the scheduled hearing, meeting or decision date, a sign was posted on the property per Section 99.080 of the Community Development Code.

(date) 5-17-16 (signed) [Signature]

NOTICE: Notices were sent at least 14 days prior to the scheduled hearing, meeting, or decision date per Section 99.080 of the Community Development Code. (check below)

TYPE B 4*

- A. The applicant (date) 5-17-16 (signed) S. Shroyer
B. Affected property owners (date) 5-17-16 (signed) S. Shroyer
C. School District/ Board (date) _____ (signed) _____
D. Other affected gov't. agencies (date) 5-17-16 (signed) S. Shroyer
E. Affected neighborhood assns. (date) 5-17-16 (signed) S. Shroyer
ALL

Notice was posted on the City's website at least 10 days prior to the scheduled hearing or meeting.

Date: 5-17-16 (signed) S. Shroyer

STAFF REPORT mailed to applicant, City Council/Planning Commission and any other applicable parties 10 days prior to the scheduled hearing.

(date) _____ (signed) _____

FINAL DECISION notice mailed to applicant, all other parties with standing, and, if zone change, the County surveyor's office.

(date) 6-17-16 (signed) S. Shroyer

PD-2 NOTICE

**CITY OF WEST LINN
NOTICE OF UPCOMING
PLANNING MANAGER DECISION
FILE NO. MIS-16-02**

The West Linn Planning Manager is considering a request for a Flood Management Area Permit to allow the construction of a new home at 5005 Mapleton Drive.

The decision will be based on the approval criteria in Chapters 11, 27 and 28 of the Community Development Code (CDC). The approval criteria from the CDC are available for review at City Hall, at the City Library, and at <http://www.westlinnoregon.gov/cdc>.

You have received this notice because County records indicate that you own property within 300 feet of this property (Tax Lot 600 of Clackamas County Assessor's Map 21E 24AC) or as otherwise required by Chapter 99 of the CDC.

All relevant materials in the above noted file are available for inspection at no cost at City Hall, and on the city web site <http://westlinnoregon.gov/planning/5005-mapleton-drive-flood-management-area-permit> or copies may be obtained for a minimal charge per page. A public hearing will not be held on this decision. **Anyone wishing to present written testimony for consideration on this matter shall submit all material before 4:00 p.m. on May 31, 2016.** **Persons interested in party status should submit their letter along with any concerns related to the proposal by the comment deadline.** For further information, please contact Peter Spir, Associate Planner, City Hall, 22500 Salamo Rd., West Linn, OR 97068, (503) 723-2539, or pspir@westlinnoregon.gov.

Any appeals to this decision must be filed within 14 days of the final decision date with the Planning Department. **It is important to submit all testimony in response to this notice. City Council will not accept additional evidence if there is an appeal of this proposal.** Failure to raise an issue in person or by letter, or failure to provide sufficient specificity to afford the decision-maker an opportunity to respond to the issue, precludes the raising of the issue at a subsequent time on appeal or before the Land Use Board of Appeals.

MAILED
5-17-16 SS

PD- 3 COMPLETENESS LETTER

Sent



CITY OF
West Linn

May 10, 2016

Scott Edwards Architecture
ATTN: Joe Broders
2525 East Burnside St.
Portland, OR 97214

SUBJECT: MIS-16-02 application for Flood Management Area permit to construct a house at 5005 Mapleton Drive.

Dear Mr. Broders:

Your submittal was received on April 28, 2016 and found to be **complete**. The City has 120 days from today's date to exhaust all local review; that period ends on August 30, 2016.

Please be aware that a determination of a complete application does not guarantee a recommendation of approval from staff for your proposal as submitted – it signals that staff believes you have provided the necessary information for the Planning Manager to render a decision on your proposal.

Twenty day public notice will be prepared and mailed. The notice will identify the earliest possible decision date by the Planning Manager.

Please contact me at 503-723-2539, or by email at pspir@westlinnoregon.gov if you have any questions or comments.

Sincerely,

Peter Spir

Peter Spir
Associate Planner

PD-4 APPLICANT'S SUBMITTAL

DEVELOPMENT REVIEW APPLICATION

For Office Use Only		
STAFF CONTACT <i>Peter Spiv</i>	PROJECT NO(S). <i>MISC-16-02</i>	
NON-REFUNDABLE FEE(S)	REFUNDABLE DEPOSIT(S) <i>1050⁰⁰</i>	TOTAL <i>1050⁰⁰</i>

Type of Review (Please check all that apply):

- | | | |
|---|--|---|
| <input type="checkbox"/> Annexation (ANX)
<input type="checkbox"/> Appeal and Review (AP) *
<input type="checkbox"/> Conditional Use (CUP)
<input type="checkbox"/> Design Review (DR)
<input type="checkbox"/> Easement Vacation
<input type="checkbox"/> Extraterritorial Ext. of Utilities
<input type="checkbox"/> Final Plat or Plan (FP)
<input checked="" type="checkbox"/> Flood Management Area
<input type="checkbox"/> Hillside Protection & Erosion Control | <input type="checkbox"/> Historic Review
<input type="checkbox"/> Legislative Plan or Change
<input type="checkbox"/> Lot Line Adjustment (LLA) */**
<input type="checkbox"/> Minor Partition (MIP) (Preliminary Plat or Plan)
<input type="checkbox"/> Non-Conforming Lots, Uses & Structures
<input type="checkbox"/> Planned Unit Development (PUD)
<input type="checkbox"/> Pre-Application Conference (PA) */**
<input type="checkbox"/> Street Vacation | <input type="checkbox"/> Subdivision (SUB)
<input type="checkbox"/> Temporary Uses *
<input type="checkbox"/> Time Extension *
<input type="checkbox"/> Variance (VAR)
<input type="checkbox"/> Water Resource Area Protection/Single Lot (WAP)
<input type="checkbox"/> Water Resource Area Protection/Wetland (WAP)
<input type="checkbox"/> Willamette & Tualatin River Greenway (WRG)
<input type="checkbox"/> Zone Change |
|---|--|---|

Home Occupation, Pre-Application, Sidewalk Use, Sign Review Permit, and Temporary Sign Permit applications require different or additional application forms, available on the City website or at City Hall.

Site Location/Address: 5005 MAPLETON DRIVE WEST LINN, OREGON 97068	Assessor's Map No.: 2-1E-24AC <hr/> Tax Lot(s): 600 <hr/> Total Land Area: 26,180 sf
--	--

Brief Description of Proposal: DEMOLISH EXISTING THREE LEVEL HOME AND CONSTRUCT NEW THREE LEVEL SINGLE FAMILY DWELLING, 5 BEDROOM, 4.5 BATHROOM. WITH BASEMENT GARAGE.

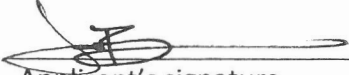
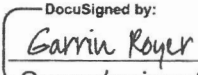
Applicant Name: SCOTT EDWARDS ARCHITECTURE, LLP – JOE BRODERS <small>(please print)</small> Address: 2525 E BURNSIDE ST. City State Zip: PORTLAND, OREGON 97214	Phone: (503) 226-3617 Email: jbroders@seallp.com
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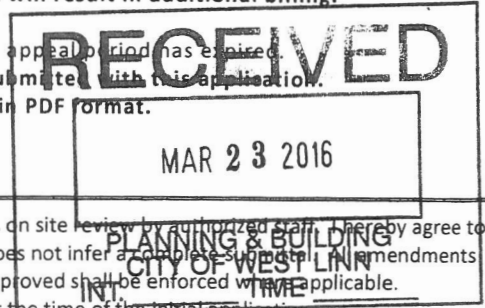
Owner Name (required): GARRIN ROYER <small>(please print)</small> Address: 3050 ROXBURY DRIVE City State Zip: WEST LINN, OREGON 97968	Phone: (503) 816-7726 Email: groyer@redsidecre.com
---	---

Consultant Name: SCOTT EDWARDS ARCHITECTURE, LLP <small>(please print)</small> Address: 2525 E BURNSIDE ST City State Zip: PORTLAND, OREGON 97214	Phone: (503) 226-3617 Email: Jbroders@Seallp.com
---	---

1. All application fees are non-refundable (excluding deposit). **Any overruns to deposit will result in additional billing.**
 2. The owner/applicant or their representative should be present at all public hearings.
 3. A denial or approval may be reversed on appeal. No permit will be in effect until the appeal period has expired.
 4. **Three (3) complete hard-copy sets (single sided) of application materials must be submitted with this application.**
 One (1) complete set of digital application materials must also be submitted on CD in PDF format.
 If large sets of plans are required in application please submit only two sets.
- * No CD required / ** Only one hard-copy set needed

The undersigned property owner(s) hereby authorizes the filing of this application, and authorizes on site review by authorized staff. I hereby agree to comply with all code requirements applicable to my application. Acceptance of this application does not infer a complete approval. All amendments to the Community Development Code and to other regulations adopted after the application is approved shall be enforced where applicable. Approved applications and subsequent development is not vested under the provisions in place at the time of the initial application.

 Applicant's signature	<i>03/22/2016</i> Date	DocuSigned by:  Owner's signature (required)	March 22, 2016 11:07 AM Date
--	---------------------------	--	-----------------------------------



Flood Management Area Permit Application

Date: March 22, 2016

**Owner/
Applicant:** Garrin & Cortney Royer
3050 Roxbury Drive
West Linn, OR 97968
E: goyer@rredside.com
P: 503.816.7726

Architect: Scott | Edwards Architecture, LLP
2525 E. Burnside St.
Portland, OR 97214
Attn: Joe Broders
E: jbroders@seallp.com
P: 503.226.3617

Site Location: 5005 Mapleton Drive

Legal Description: Lot 21, Maple Grove
NE ¼ of Section 24, T.2S., R.1E., WM
City of West Linn, Clackamas Co., OR

Base Zoning: R-10

Comp Plan: Low-Density Residential

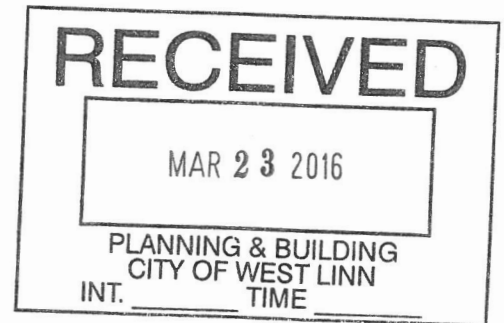
Applicable Ord: West Linn CDC Chapter 27 – Flood Management Areas

Request: Flood Management Area permits to allow replacement of existing single family residence with a new single family residence with no decrease in Flood Storage or Conveyance capacity from existing conditions.

Narrative addressing Chapter(s) 27.060, 27.070 & 27.080.

27.060 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.*

The siting of the proposed design closely approximates the existing conditions with primary east wall moved riverward approximately 12'. The structure is held landward of the required Floodway Setback. Access to the basement parking level mirrors the existing driveway in design elevation. (see Exhibit A1.1) Flood storage area is increased by the addition of a guest parking area and by increased garage apron area (see Exhibit A0.3). No adverse effects in either Flood Storage Area or Floodway result.



Flood Management Area Permit Application 3/18/2016

27.060 B. *No net fill increase in any floodplain is allowed. All fill 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 the ordinary high water line shall not count toward compensating for fill.*

Cut and fill are balanced in the proposed design resulting in a slightly greater net flood storage capacity from existing to proposed.

27.060 C. *Excavation to balance a fill shall be located on the same lot or parcel....*

All project work is located on-site.

27.060 D. *Minimum finished floor elevations must be at least one foot above the design flood height or highest flood of record.....*

The finished habitable floor line (1st floor) is proposed at elevation 52.0', 6.0 feet above the established BFE of 46.0'.

27.060 E. *Temporary fills permitted during construction shall be removed.*

All temporary fills will be removed prior to completion of construction.

27.060 F, G. *Prohibit encroachments, including fill, new construction, substantial improvements, and other development in floodways.....*

No encroachments into floodway are requested.

27.060 H. *New culverts, stream crossings, and transportation projects.....*

No new culverts, stream crossings, etc. as defined in this section are proposed.

27.060 I. *Excavation and fill required for the construction of detention facilities....shall be designed to reduce or mitigate flood impacts and improve water quality.*

A small residential detention facility is proposed for bio-filtration of auto paving runoff and will be designed per City of Portland Storm Water Management guidelines adopted by City of West Linn. It is located well landward of the Floodway setback and presents no reduction of Flood storage capacity (see Exhibit A1.1).

27.060 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.*

All permits for this proposal are to be obtained from City of West Linn and/or Clackamas County as applies.

27.070 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.*

All structural components below the BFE will be either concrete, steel or pressure treated lumber.

27.070 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.*

All components (other than sealed plumbing lines) will be elevated a minimum of 1.0' above the BFE of 46.0'.

27.070 C. *New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.*

All water supply components shall be fully pressure tight.

27.070 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.*

All on-site sanitary sewerage system components shall be fully water tight.

27.070 E. *On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.*

No on-site waste disposal systems are proposed. The public sanitary system shall be utilized.

27.070 F. *All new construction and substantial improvements shall be anchored to prevent flotation, collapse, and lateral movement of the structure.*

The structure will be fully engineered. Further, the basement level has been included as part of the Flood Storage volume and as such will be designed with the necessary components to automatically equalize hydrostatic flood forces by allowing entry and exit of floodwaters.

27.080 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.*

The finished habitable floor line (1st floor) is proposed at elevation 52.0', 6.0 feet above the established BFE of 46.0'.

27.080 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....*

The basement level has been included as part of the Flood Storage volume and as such will be designed by a registered architect or engineer with the necessary components to automatically equalize hydrostatic flood forces by allowing entry and exit of floodwaters. Reference is made to FEMA Technical Bulletin 1, August 2008 – Openings in Foundation Walls and Walls of Enclosures.

1. Openings shall be provided at 1 square inch / square foot of enclosure minimum.
2. Bottom of openings will be a maximum of 12" above grade.
3. Openings shall have screens and/or louvers that permit automatic entry and exit of floodwaters.

Flood Management Area Permit Application 3/18/2016

4. Enclosed areas below BFE shall only be used for parking, access or limited storage.
5. Service equipment is not permitted below BFE.
6. All construction below BFE must be unfinished and constructed of materials resistant to flood damage. Materials shall be concrete, steel and/or pressure treated lumber.

27.080 C. *Crawlspaces below BFE:*

The entire area below the habitable structure (levels 1 & 2) will be built as a basement subject to the restrictions of 27.080 B above. This is consistent with the existing structure and thus provides Flood Storage volume equivalent to current site conditions.

Specific provisions of 27.080 C therefore do not apply.

27.080 D. *A poured slab placed over fill can be used to elevate the lowest floor of a structure above the BFE.*

Filling of site in order to construct habitable structure as opposed to elevating it upon an enclosed structure similar to existing conditions would violate provisions of 27.060 B by substantially reducing the site's Flood Storage volume. Proposed basement will be designed for to resist hydrostatic forces & allow flood water to flow through.

27.080 E. *Placing a structure on piers, piles, and posts is allowed provided supporting members are designed to resist hydrostatic and hydrodynamic forces.*

Those portions of the proposed design to be supported on posts shall be designed to withstand hydrostatic forces but, are landward of the Floodway setback and not subject to hydrodynamic forces.

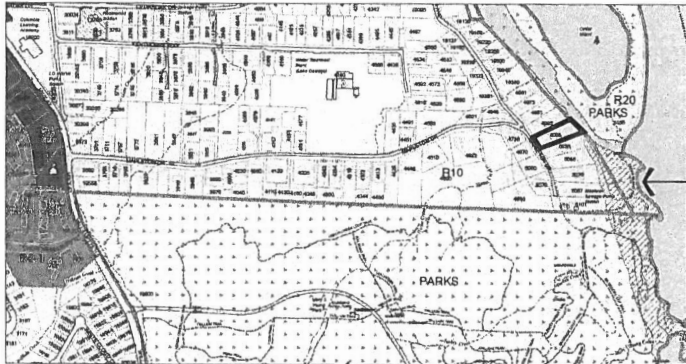
27.120 A. *Alteration of Watercourses*

No alteration of existing watercourses are proposed.

Additional Information:

Joint Dock at 4993 / 5005 Mapleton Drive

No modification to the existing dock structure is proposed under this application. We list prior dock permit application WRG-11-01 / MISC-11-05 for reference only.



WETLANDS INVENTORY (HATCHED)

1 WEST LINN ZONING MAP - 8/2015



2 AERIAL PHOTO



FLOODWAY AREAS IN ZONE AE

1% (100 YR) SPECIAL FLOOD HAZARD AREA ZONE AE - BASE FLOOD ELEVATION DETERMINED (BFE 46.0)

.2% (500 YR) SPECIAL FLOOD HAZARD AREA

1 FIRM MAP 41005C0019D - CLACKAMAS COUNTY, OR

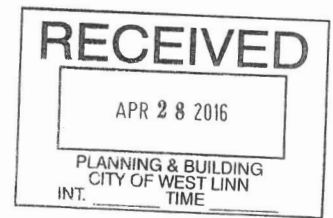
S|E|A

SCOTT | EDWARDS ARCHITECTURE LLP
2525 E. Burnside St., Portland, OR 97214
phone (503) 228-3611 www.seaeb.com



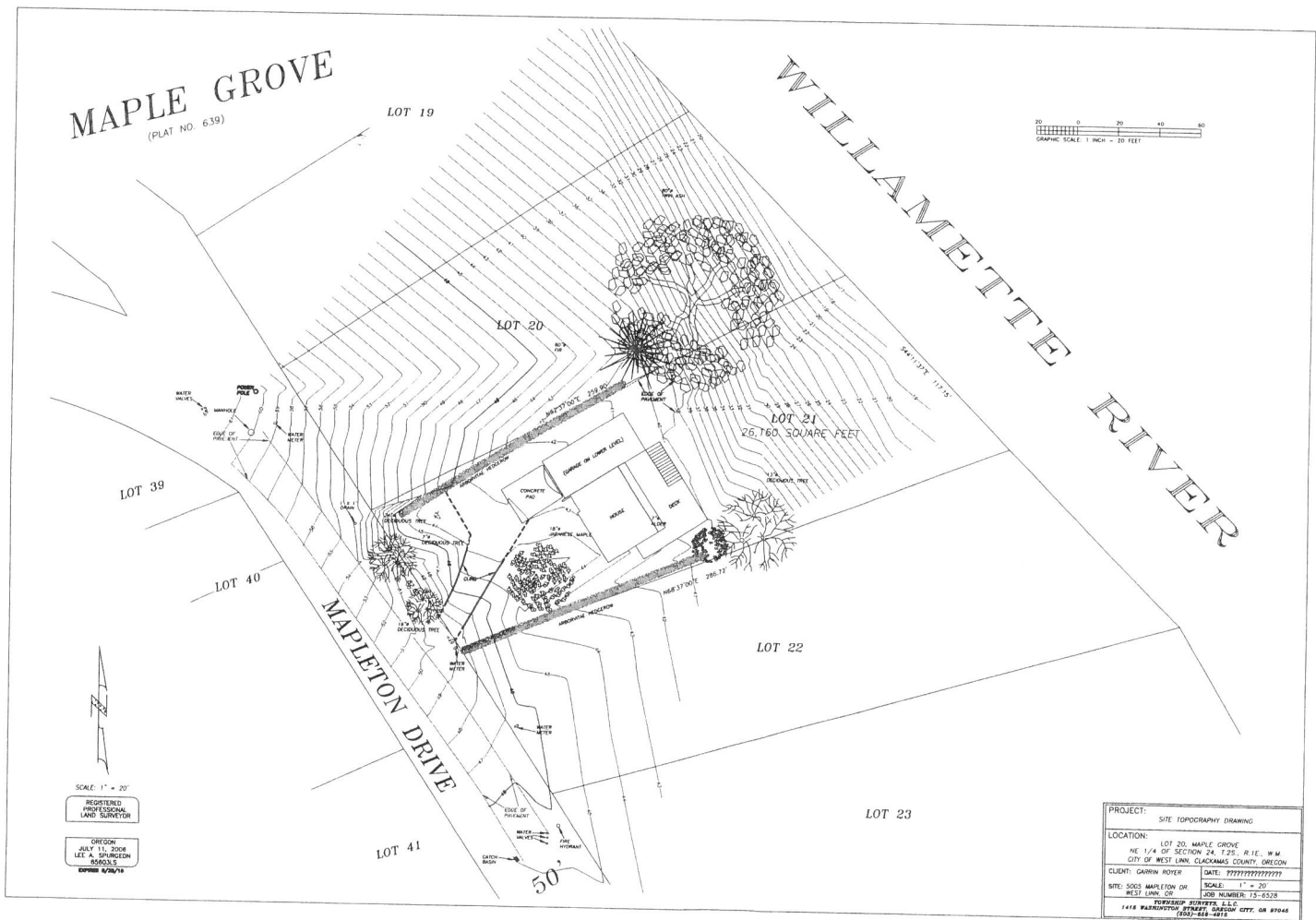
ROYER RESIDENCE

5005 MAPLETON DR.
WEST LINN, OR



Drawing _____
VICINITY MAPS
Job No: 15144
Date: 03/22/2016
Drawn By: _____
Checked By: _____
Sheet No: _____

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S|E|A
SCOTT EDWARDS ARCHITECTURE LLP
2525 E. Burnside St., Portland, OR 97214
phone (503) 228-2617 www.sealp.com



Digitally signed by Peter J. Smith
Date: 2018.06.27 16:18:22 -0700

**ROYER
RESIDENCE**

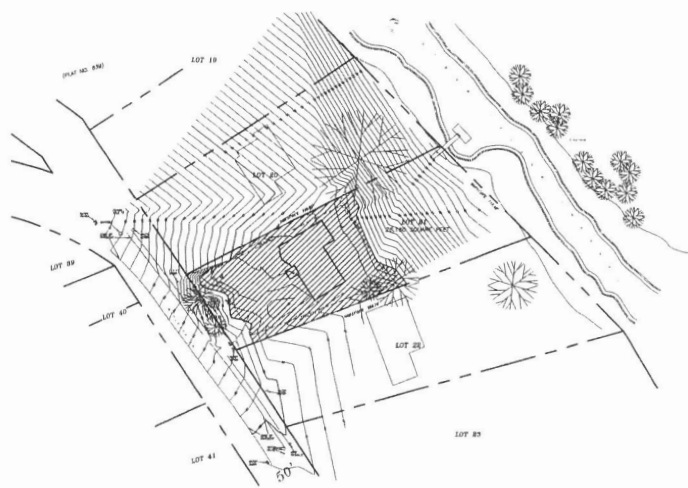
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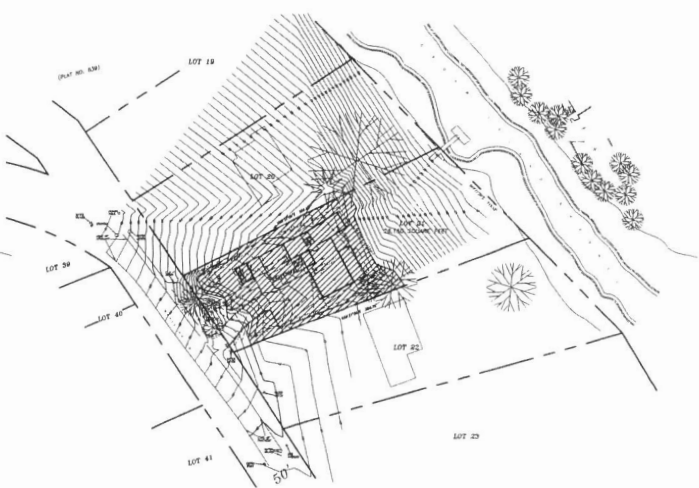


ROYER RESIDENCE

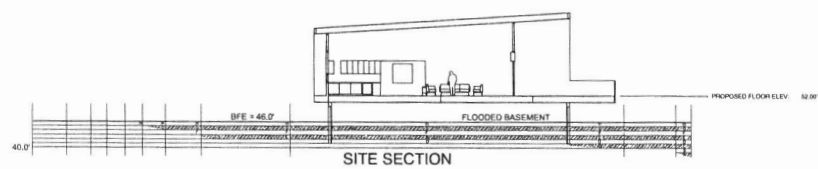
5505 MAPLETON CIR
WEST LINN, OR



1 FLOOD MANAGEMENT PLAN - EXISTING
1" = 40' 0"



2 FLOOD MANAGEMENT PLAN - PROPOSED
1" = 40' 0"



FLOOD VOLUME TABULATION: (BY 1' CONTOUR INTERVALS)
EXISTING GRADING

Elevation	Square Footage	Volume @ .5 (CF)	Volume @ 1.0 (CF)	YT (CF)
A 38-39	545.00	272.50		
B 39-40	1082.00	541.00	545.00	1086.00
C 40-41	2010.00	1005.00	1627.00	2632.00
D 41-42	934.00	467.00	3637.00	4104.00
E 42-43	2217.00 (2)	857.00	4571.00	5428.00
F 43-44	4563.00	1148.00 (1)	6788.00	7936.00
G 44-45	1730.00	865.00	11351.00	12216.00
H 45-46	661.00	330.50	13081.00	13411.50
			46813.50	

PROPOSED GRADING

Elevation	Square Footage	Volume @ .5 (CF)	Volume @ 1.0 (CF)	YT (CF)
A 38-39	545.00	272.50		
B 39-40	992.00	496.00	545.00	1041.00
C 40-41	1352.00	676.00	1537.00	2213.00
D 41-42	4637.00	1210.00 (1)	2889.00	4099.00
E 42-43	1544.00	772.00	7526.00	8298.00
F 43-44	1556.00	778.00	9070.00	9848.00
G 44-45	662.00	331.00	10626.00	10957.00
H 45-46	735.00	367.50	11288.00	11655.50
			48113.50	

(1) ADJUSTED TO ELIMINATE BASEMENT AREA WHERE NO SLOPE EXISTS
(2) ADJUSTED TO INCLUDE 25% OF BASEMENT AREA FOR SLAB ELEVATION BELOW 43'

PROPOSED EXCEEDS EXISTING

LEGEND:

- 46 --- EXISTING GRADE CONTOURS
- SFE --- BASE FLOOD ELEVATION
- 46 --- NEW GRADE CONTOURS
- [Hatched Box] --- FLOOD WAY VOLUMES BE TWEEN ELEVATION 46 AND DISTURBANCE AND ELEVATION 46 BASE FLOOD ELEVATION SEE TABULATION
- [Hatched Box] --- INCLUDES FULL FLOODED BASEMENT

BASIC ZONING INFO

SETBACKS: F 20'
R 7.5'
R 20' SUPERCEDED BY FLOODWAY

FLOODWAY SETBACK: 36' FORWARD OF EXISTING HOUSE EAST WALL

MAX HEIGHT 36' (6' 4" + 30' + 6' 18" HOUSE MAX)

MAX LOT COVERAGE 20% (1,188 SF)

MAX FAR 45% (1,779 SF)

BASE FLOOD ELEVATION: 46.00'

EXISTING FLOOR ELEV: 41.00'

EXISTING FLOOR ELEV: 41.00'

PROPOSED FLOOR ELEV: 82.00'



Drawing: **FLOOD MANAGEMENT PLAN**

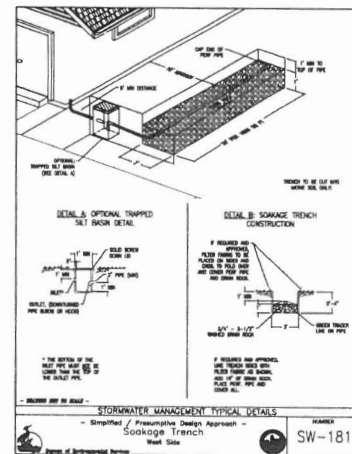
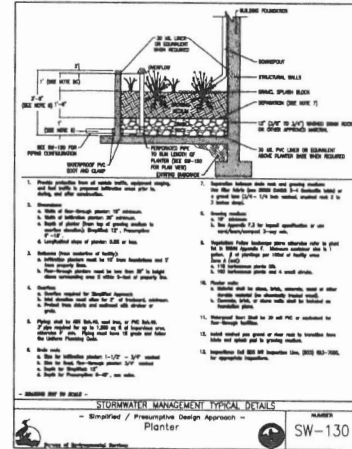
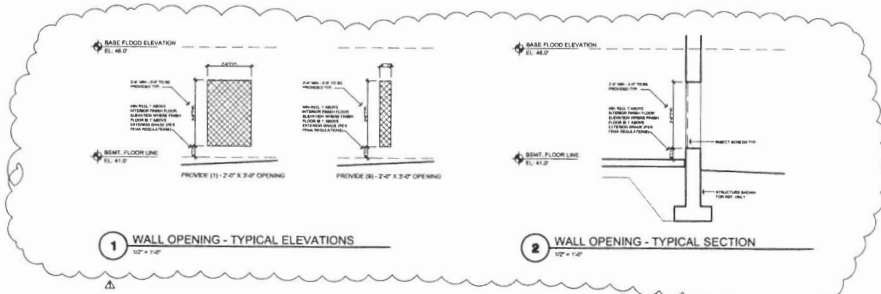
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Date: 03/22/2016

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Sheet No:

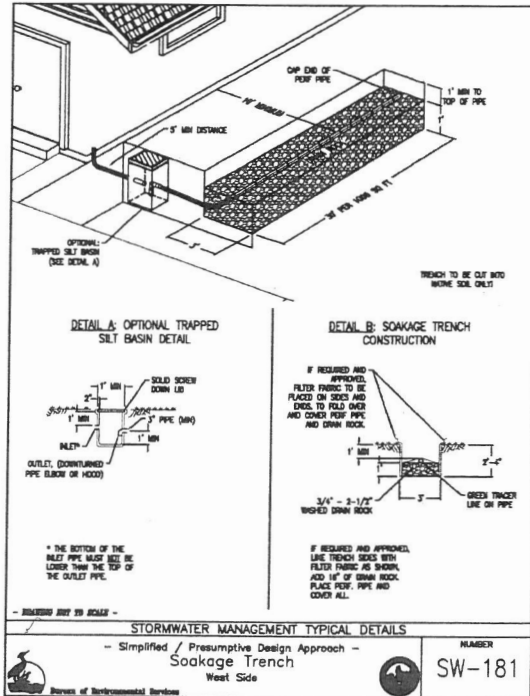
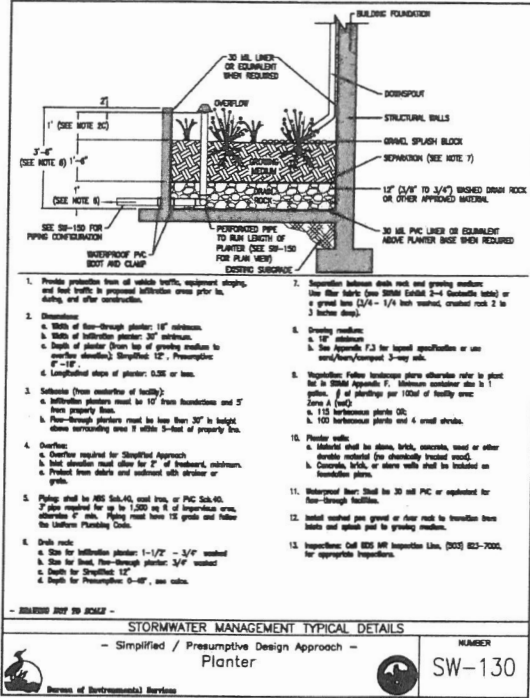




Digitally signed by Peter Grimm
Date: 2016.04.27 16:19:43-0700

ROYER RESIDENCE

5005 MAPLETON DR.
WEST LINN, OR



REVISION - 04.27.2016

Drawing:

STORM SYSTEM COMPONENTS

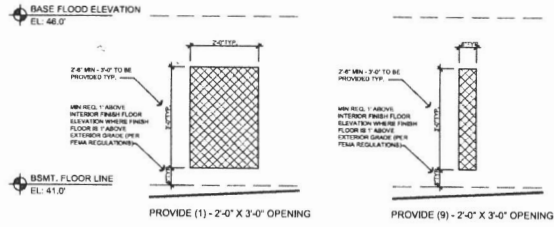
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Date: 03/22/2016

Drawn By:

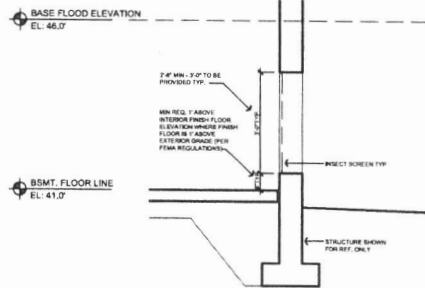
Checked By:

Sheet No:



1 WALL OPENING - TYPICAL ELEVATIONS

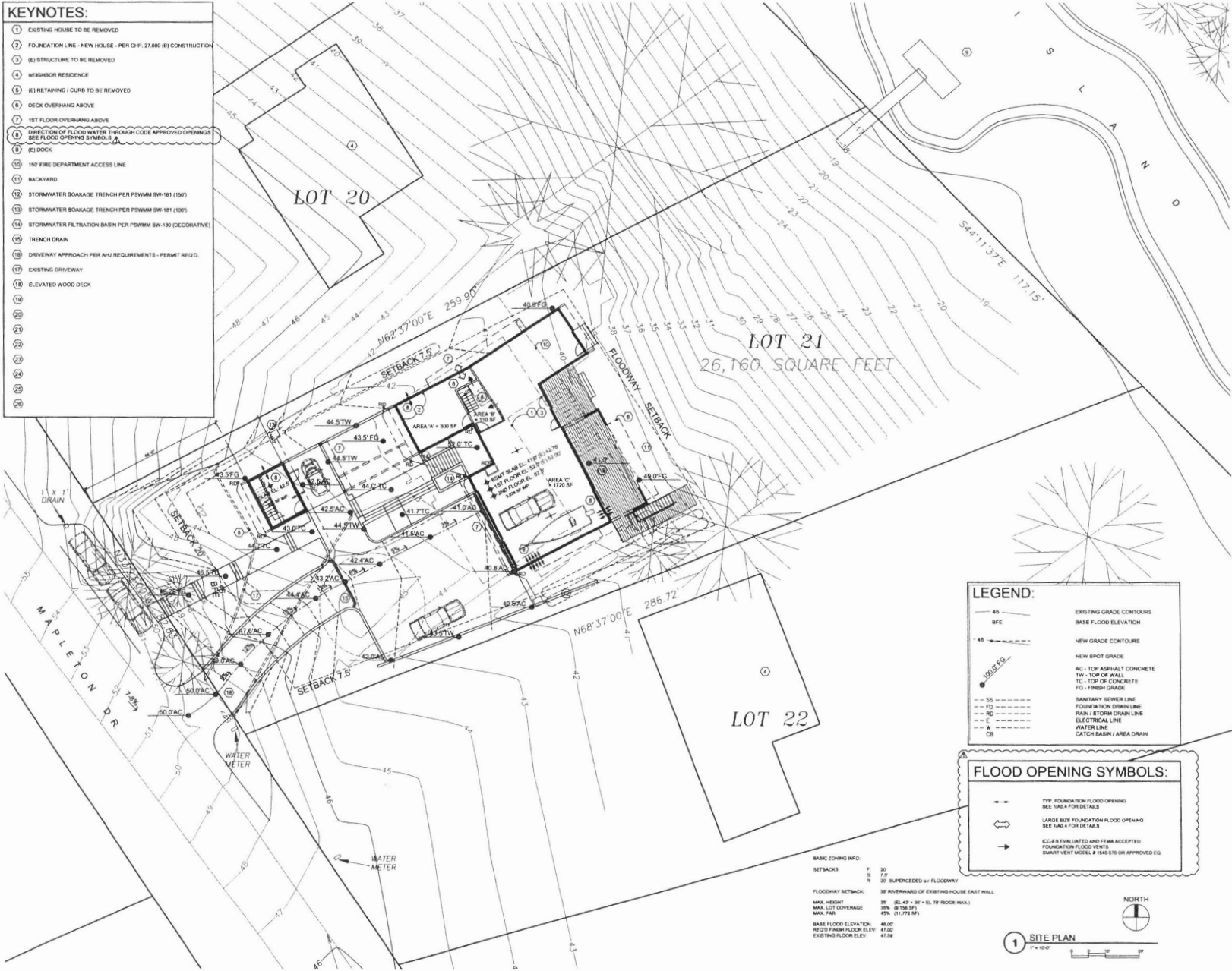
1/2" = 1'-0"



2 WALL OPENING - TYPICAL SECTION

1/2" = 1'-0"

- KEYNOTES:**
- 1 EXISTING HOUSE TO BE REMOVED
 - 2 FOUNDATION LINE - NEW HOUSE - PER CHP: 27.000 (B) CONSTRUCTION
 - 3 (E) STRUCTURE TO BE REMOVED
 - 4 NEIGHBOR RESIDENCE
 - 5 (E) RETAINING / CURB TO BE REMOVED
 - 6 DECK OVERHANG ABOVE
 - 7 1ST FLOOR OVERHANG ABOVE
 - 8 DIRECTION OF FLOOD WATER THROUGH CODE APPROVED OPENINGS
SEE FLOOD OPENING SYMBOLS
 - 9 #1 DOOR
 - 10 150' FIRE DEPARTMENT ACCESS LINE
 - 11 BACKYARD
 - 12 STORMWATER SOAKAGE TRENCH PER PSWMM SW-181 (150')
 - 13 STORMWATER SOAKAGE TRENCH PER PSWMM SW-181 (100')
 - 14 STORMWATER FILTRATION BASIN PER PSWMM SW-130 (DECORATIVE)
 - 15 TRENCH DRAIN
 - 16 DRIVEWAY APPROACH PER AFU REQUIREMENTS - PERMIT REQ'D.
 - 17 EXISTING DRIVEWAY
 - 18 ELEVATED WOOD DECK
 - 19
 - 20
 - 21
 - 22
 - 23
 - 24
 - 25
 - 26



SEA
 SCOTT EDWARDS ARCHITECTURE LLP
 2525 E. Burnside St., Portland, OR 97214
 phone (503) 228-2817 www.seaallp.com



ROYER RESIDENCE
 5005 MAPLETON DR.
 WEST LINN, OR

LEGEND:

45	EXISTING GRADE CONTOURS
BFE	BASE FLOOD ELEVATION
46	NEW GRADE CONTOURS
	NEW SPOT GRADE
AC	TOP ASPHALT CONCRETE
TW	TOP OF WALL
TC	TOP OF CONCRETE
FS	FRESH GRADE
SS	SEWAGE SANITARY SEWER LINE
FD	FOUNDATION DRAIN LINE
RD	RAIN / STORM DRAIN LINE
E	ELECTRICAL LINE
W	WATER LINE
CB	CATCH BASIN / AREA DRAIN

FLOOD OPENING SYMBOLS:

→	TYP. FOUNDATION FLOOD OPENING SEE 10A.4 FOR DETAILS
↔	LARGE SITE FOUNDATION FLOOD OPENING SEE 10A.4 FOR DETAILS
→	ICCES EVALUATED AND FEMA ACCEPTED FOUNDATION FLOOD VENTS SMART VENT MODEL # 1545-310 OR APPROVED EQ.

BASIC ZONING INFO:
 F 20
 R 77 SUPERCEDED BY FLOODWAY
 SETBACKS:
 F 20
 R 77
 FLOODWAY SETBACK: 30' MINIMUM OF EXISTING HOUSE EAST WALL
 MAX HEIGHT: 30' (EL 47' 3" + 3" EL 18' ROOF MAX.)
 MAX LOT COVERAGE: 35% (EL 156 SF)
 MAX FAR: 45% (11,772 SF)
 BASE FLOOD ELEVATION: 44.00'
 FICD1 FINISH FLOOR ELEV: 41.00'
 EXISTING FLOOR ELEV: 41.30'



REVISION - 04.27.2016
 Drawing:

SITE PLAN

Job No: 15144
 Date: 03/22/2016
 Drawn By:
 Checked By:
 Sheet No:

A1.1

ELEVATION CERTIFICATE

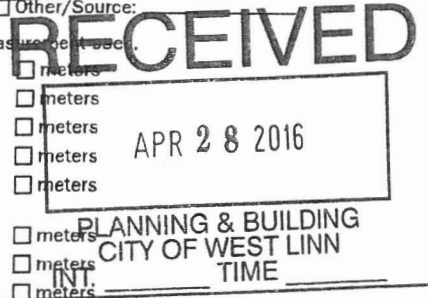
IMPORTANT: Follow the instructions on pages 1-9.

OMB No. 1660-0008
 Expiration Date: July 31, 2015

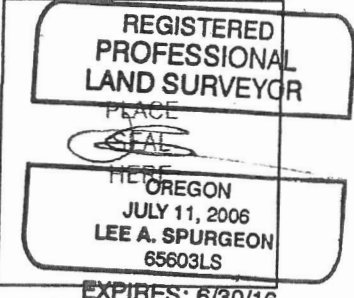
SECTION A - PROPERTY INFORMATION		FOR INSURANCE COMPANY USE
A1. Building Owner's Name Garrin Royer		Policy Number:
A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 5005 Mapleton Dr.		Company NAIC Number:
City West Linn	State OR	ZIP Code 97068
A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.) Tax Lot 3600 on Map 4S 2E 27		
A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) Residential		
A5. Latitude/Longitude: Lat. 45.385141 Long. -122.626990		Horizontal Datum: <input type="checkbox"/> NAD 1927 <input type="checkbox"/> NAD 1983
A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance. (see comments)		
A7. Building Diagram Number 3		
A8. For a building with a crawlspace or enclosure(s):		A9. For a building with an attached garage:
a) Square footage of crawlspace or enclosure(s) N/A sq ft		a) Square footage of attached garage 43 sq ft
b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade 0		b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade 0
c) Total net area of flood openings in A8.b 0 sq in		c) Total net area of flood openings in A9.b 0 sq in
d) Engineered flood openings? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		d) Engineered flood openings? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION					
B1. NFIP Community Name & Community Number Clackamas County, Oregon and incorporated areas 41005C			B2. County Name Clackamas		B3. State Oregon
B4. Map/Panel Number 41005C / 0019	B5. Suffix D	B6. FIRM Index Date	B7. FIRM Panel Effective/ Revised Date 6/17/2008	B8. Flood Zone(s) AE, X	B9. Base Flood Elevation(s) (Zone AO, use base flood depth) 46'
B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9: <input type="checkbox"/> FIS Profile <input checked="" type="checkbox"/> FIRM <input type="checkbox"/> Community Determined <input type="checkbox"/> Other/Source: _____					
B11. Indicate elevation datum used for BFE in Item B9: <input type="checkbox"/> NGVD 1929 <input checked="" type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other/Source: _____					
B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Designation Date: _____ / _____ / _____ <input type="checkbox"/> CBRS <input type="checkbox"/> OPA					

SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)	
C1. Building elevations are based on: <input type="checkbox"/> Construction Drawings* <input type="checkbox"/> Building Under Construction* <input checked="" type="checkbox"/> Finished Construction *A new Elevation Certificate will be required when construction of the building is complete.	
C2. Elevations - Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO. Complete Items C2.a-h below according to the building diagram specified in Item A7. In Puerto Rico only, enter meters. Benchmark Utilized: Corps of Engineers 90H-3-02 Vertical Datum: NAVD88 Indicate elevation datum used for the elevations in items a) through h) below. <input type="checkbox"/> NGVD 1929 <input checked="" type="checkbox"/> NAVD 1988 <input type="checkbox"/> Other/Source: _____ Datum used for building elevations must be the same as that used for the BFE.	
a) Top of bottom floor (including basement, crawlspace, or enclosure floor) 42 . 76 b) Top of the next higher floor 47 . 59 c) Bottom of the lowest horizontal structural member (V Zones only) N/A d) Attached garage (top of slab) 42 . 76 e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments) 50 . 04 f) Lowest adjacent (finished) grade next to building (LAG) 42 . 37 g) Highest adjacent (finished) grade next to building (HAG) 47 . 16 h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support N/A	Check the measurement unit: <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters <input checked="" type="checkbox"/> feet <input type="checkbox"/> meters



SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION			
This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information. I certify that the information on this Certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.			
<input checked="" type="checkbox"/> Check here if comments are provided on back of form.		Were latitude and longitude in Section A provided by a licensed land surveyor? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> Check here if attachments.			
Certifier's Name Lee A. Spurgeon		License Number 65603LS	
Title Professional Land Surveyor		Company Name Township Surveys LLC	
Address 1415 Washington St.		City Oregon City	State OR
Signature 		Date 4/17/2015	ZIP Code 97045
		Telephone 503-656-4915	



ELEVATION CERTIFICATE, page 2


IMPORTANT: In these spaces, copy the corresponding information from Section A.			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 5005 Mapleton Dr.			Policy Number:
City West Linn	State OR	ZIP Code 97068	Company NAIC Number:

SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION (CONTINUED)

Copy both sides of this Elevation Certificate for (1) community official, (2) insurance agent/company, and (3) building owner.

Comments A5) Horizontal datum is WGS84. (Google Earth)

C2.e) Water heater

Signature  Date 4/17/15

SECTION E – BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO AND ZONE A (WITHOUT BFE)

For Zones AO and A (without BFE), complete Items E1–E5. If the Certificate is intended to support a LOMA or LOMR-F request, complete Sections A, B, and C. For Items E1–E4, use natural grade, if available. Check the measurement used. In Puerto Rico only, enter meters.

- E1. Provide elevation information for the following and check the appropriate boxes to show whether the elevation is above or below the highest adjacent grade (HAG) and the lowest adjacent grade (LAG).
- a) Top of bottom floor (including basement, crawlspace, or enclosure) is _____ . _____ feet meters above or below the HAG.
- b) Top of bottom floor (including basement, crawlspace, or enclosure) is _____ . _____ feet meters above or below the LAG.
- E2. For Building Diagrams 6–9 with permanent flood openings provided in Section A Items 8 and/or 9 (see pages 8–9 of Instructions), the next higher floor (elevation C2.b in the diagrams) of the building is _____ . _____ feet meters above or below the HAG.
- E3. Attached garage (top of slab) is _____ . _____ feet meters above or below the HAG.
- E4. Top of platform of machinery and/or equipment servicing the building is _____ . _____ feet meters above or below the HAG.
- E5. Zone AO only: If no flood depth number is available, is the top of the bottom floor elevated in accordance with the community's floodplain management ordinance? Yes No Unknown. The local official must certify this information in Section G.

SECTION F – PROPERTY OWNER (OR OWNER'S REPRESENTATIVE) CERTIFICATION

The property owner or owner's authorized representative who completes Sections A, B, and E for Zone A (without a FEMA-issued or community-issued BFE) or Zone AO must sign here. The statements in Sections A, B, and E are correct to the best of my knowledge.

Property Owner or Owner's Authorized Representative's Name _____

Address _____ City _____ State _____ ZIP Code _____

Signature _____ Date _____ Telephone _____

Comments _____

Check here if attachments.

SECTION G – COMMUNITY INFORMATION (OPTIONAL)

The local official who is authorized by law or ordinance to administer the community's floodplain management ordinance can complete Sections A, B, C (or E), and G of this Elevation Certificate. Complete the applicable item(s) and sign below. Check the measurement used in Items G8–G10. In Puerto Rico only, enter meters.

- G1. The information in Section C was taken from other documentation that has been signed and sealed by a licensed surveyor, engineer, or architect who is authorized by law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.)
- G2. A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.
- G3. The following information (Items G4–G10) is provided for community floodplain management purposes.

G4. Permit Number _____	G5. Date Permit Issued _____	G6. Date Certificate Of Compliance/Occupancy Issued _____
-------------------------	------------------------------	---

- G7. This permit has been issued for: New Construction Substantial Improvement
- G8. Elevation of as-built lowest floor (including basement) of the building: _____ . _____ feet meters Datum _____
- G9. BFE or (in Zone AO) depth of flooding at the building site: _____ . _____ feet meters Datum _____
- G10. Community's design flood elevation: _____ . _____ feet meters Datum _____

Local Official's Name _____ Title _____

Community Name _____ Telephone _____

Signature _____ Date _____

Comments _____

Check here if attachments.

BUILDING PHOTOGRAPHS

See Instructions for Item A6.

IMPORTANT: In these spaces, copy the corresponding information from Section A.			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 5005 Mapleton Dr.			Policy Number:
City West Linn	State OR	ZIP Code 97068	Company NAIC Number:

If using the Elevation Certificate to obtain NFIP flood insurance, affix at least 2 building photographs below according to the instructions for Item A6. Identify all photographs with date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8. If submitting more photographs than will fit on this page, use the Continuation Page.

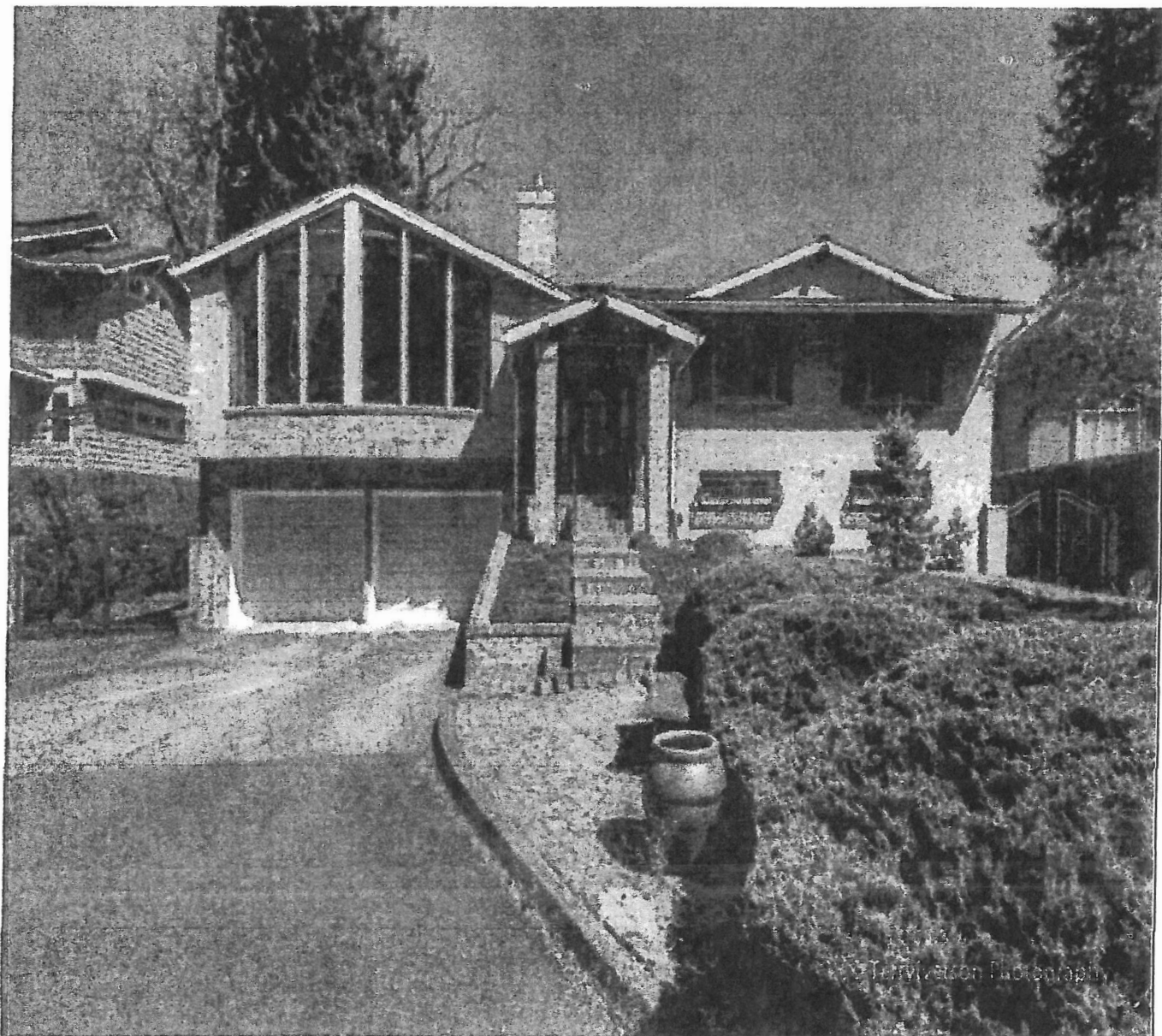
EAST SIDE OF HOUSE



IMPORTANT: In these spaces, copy the corresponding information from Section A.			FOR INSURANCE COMPANY USE
Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. 5005 Mapleton Dr.			Policy Number:
City West Linn	State OR	ZIP Code 97068	Company NAIC Number:

If submitting more photographs than will fit on the preceding page, affix the additional photographs below. Identify all photographs with: date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8.

WEST SIDE OF HOUSE

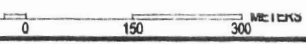




the Flood Insurance Study report for this jurisdiction.
 ce is available in this community, contact your insurance
 d Insurance Program at 1-800-638-6620.



MAP SCALE 1" = 500'



PANEL 0019D

FIRM
FLOOD INSURANCE RATE MAP
CLACKAMAS COUNTY,
OREGON
AND INCORPORATED AREAS

PANEL 19 OF 1175
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
CLACKAMAS COUNTY	410048	0019	D
LAKE OSWEGO, CITY OF	410018	0019	D
WEST LINN, CITY OF	410024	0019	D

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

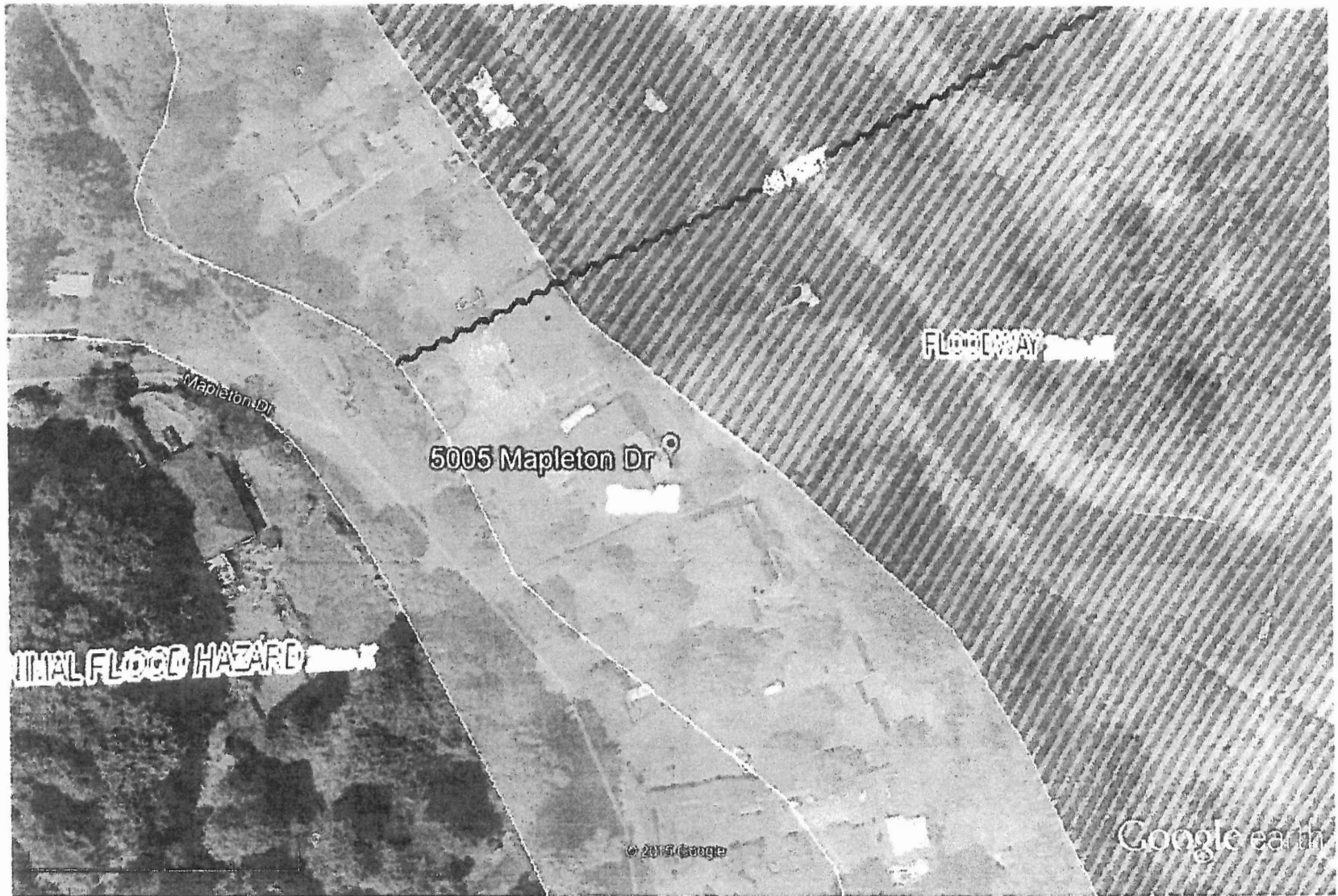


MAP NUMBER
41005C0019D
EFFECTIVE DATE
JUNE 17, 2008

Federal Emergency Management Agency

NATIONAL FLOOD INSURANCE PROGRAM

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov





SFA Design Group, LLC

STRUCTURAL | CIVIL | LAND USE PLANNING | SURVEYING

9020 SW Washington Square Dr., Suite 505 - Portland, OR 97223

1813 Rutan Dr., Suite C - Livermore, CA 94551

P: (503) 641-8311 F: (503) 643-7905

www.sfadg.com

STRUCTURAL CALCULATIONS

Royer Residence Flood Access Requirements

5005 Maplton Dr., West Linn, OR 97068

Scott Edwards Architecture, LLP



EXPIRES: 12-31-17



LIMITATIONS

ENGINEER WAS RETAINED IN A LIMITED CAPACITY FOR THIS PROJECT. DESIGN IS BASED UPON INFORMATION PROVIDED BY THE CLIENT WHO IS SOLELY RESPONSIBLE FOR ACCURACY OF SAME. NO RESPONSIBILITY AND/OR LIABILITY IS ASSUMED BY, OR IS TO BE ASSIGNED TO THE ENGINEER FOR ITEMS BEYOND THAT SHOWN ON THESE SHEETS.

Project No. 16-039

April 18, 2016



Project
ROYER RESIDENCE

Date
4/18/16

Subject
NUMBER OF REQ'D FLOOD ACCESS + SIZE

By
KT

SIZE OF SUBTERRANEAN BASEMENT AREA = 2260 ft^2
REQ'D AREA OF OPENINGS = 1 sq in PER 1 sq ft WEST VIRGINIA CODE 27.080
THEREFORE 2260 in^2 OF OPENINGS REQ'D
OPENINGS SHALL BE 6" W x 30" TALL WITH ONE OPENING 2'-0" W x 30" DP
24" x 30" = 720 in^2 \Rightarrow 2260 in^2 - 720 in^2 = 1540 in^2
6" x 30" = 180 in^2 \Rightarrow 1540 in^2 / 180 in^2 = 8.5 \Rightarrow USE 9 OPENING
 \Rightarrow USE 1 OPENING 2'-0" W x 30" DP + 9 OPENINGS 6" W x 30" DP

Flood Management Area Permit Application – Response to MIS-16-02 Incomplete Letter

Date: April 27, 2016

**Owner/
Applicant:** Garrin & Cortney Royer
3050 Roxbury Drive
West Linn, OR 97968
E: goyer@rredside.com
P: 503.816.7726

Architect: Scott | Edwards Architecture, LLP
2525 E. Burnside St.
Portland, OR 97214
Attn: Joe Broders
E: jbroders@seallp.com
P: 503.226.3617

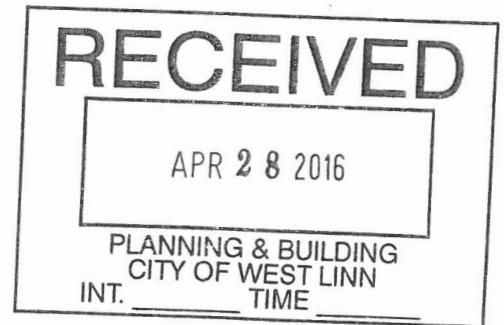
Site Location: 5005 Mapleton Drive

Legal Description: Lot 21, Maple Grove
NE ¼ of Section 24, T.2S., R.1E., WM
City of West Linn, Clackamas Co., OR

Base Zoning: R-10

Comp Plan: Low-Density Residential

Applicable Ord: West Linn CDC Chapter 27 – Flood Management Areas



Narrative addressing incomplete items per MIS-16-02 incomplete letter

1. *27.060(G) requires all development designs in the 100 year floodplain to be stamped by a licensed PE per FEMA requirements.*

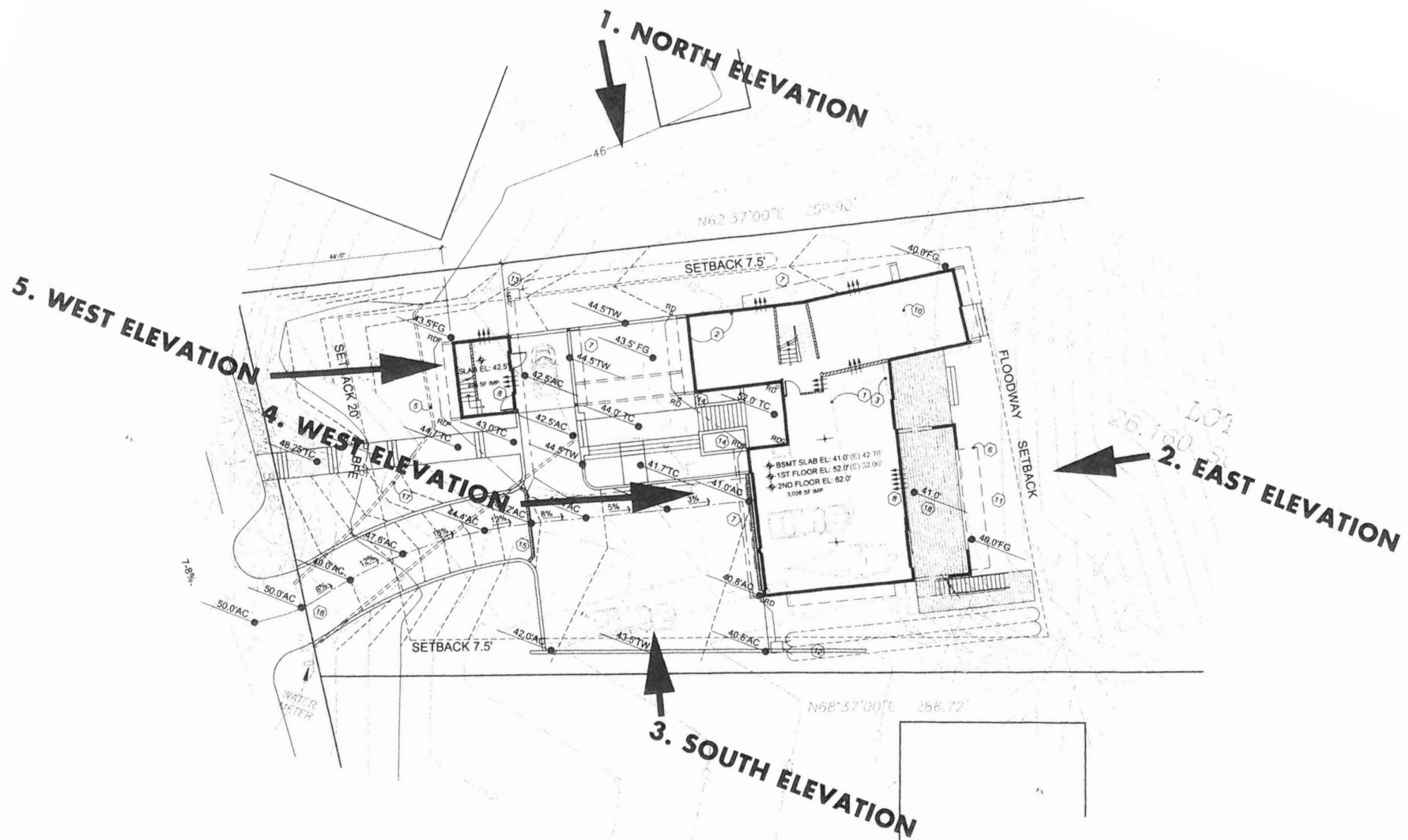
See stamped letter provided by SFA Design Group, Inc. drafted and stamped by Jeff Fitch, PE, P. Eng

2. *27.080(B) provide design stamped by a licensed PE that demonstrates compliance with these provisions. (The criteria states "or architect"; however, FEMA requires a PE stamp.)*

See "STRUCTURAL CALCUALTIONS Royer Residence Flood Access Requirements" attached provided by SFA Design Group, Inc. stamped by Jeff Fitch, PE, P. Eng

3. *A pre-development elevation certificate (for the footprint of the proposed house) stamped by a licensed PE must be provided.*

See Elevation Certificate Attached for existing residence located at 5005 Mapleton Drive. Per a discussion with Peter Spir the elevation certificate attached provides the required information for the floodway management permit.



1 SITE PLAN
1"=20'

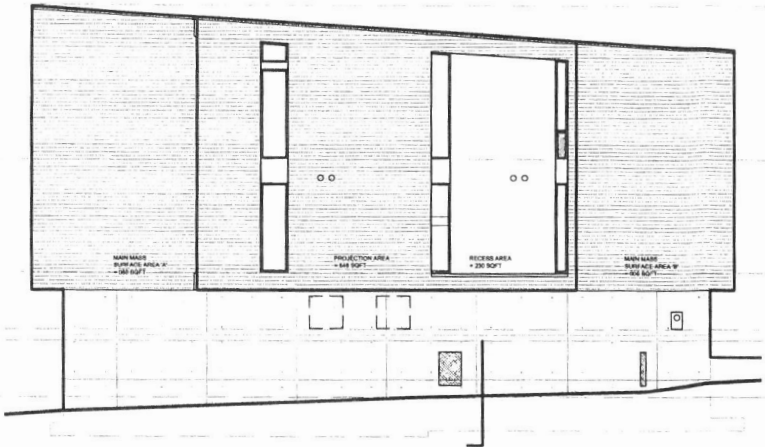
ROOF LINE
+23'-8 1/2" A1stFF

2nd FLOOR LINE
EL: 62.0'

1st FLOOR LINE
EL: 52.0'

BASE FLOOD ELEVATION
EL: 46.0'

BSMT. FLOOR LINE
EL: 41.0'



1 NORTH ELEVATION
3/32"=1'-0" 11X17 FULL SCALE



2 EAST ELEVATION
3/32"=1'-0" 11X17 FULL SCALE

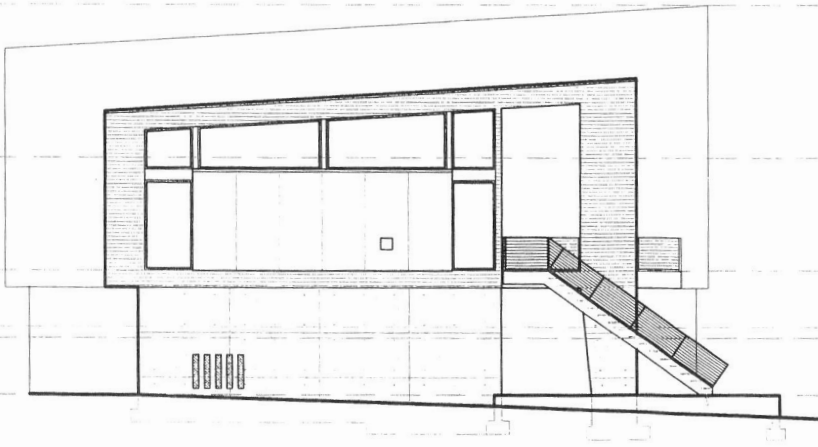
ROOF LINE
+23'-8 1/2" A1stFF

2nd FLOOR LINE
EL: 62.0'

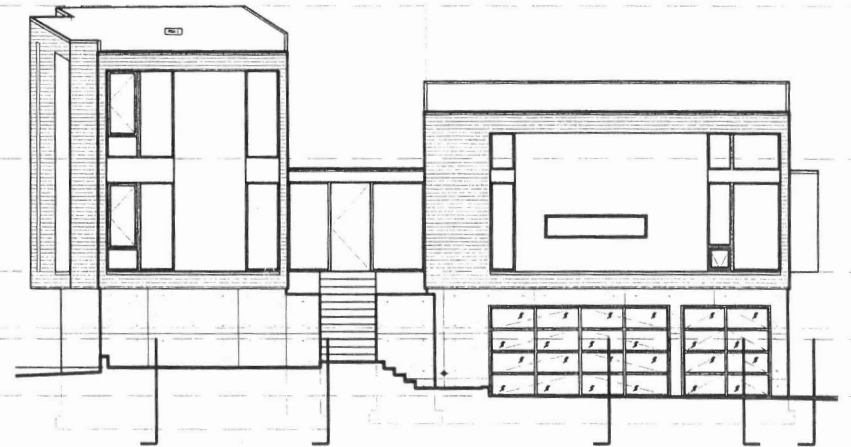
1st FLOOR LINE
EL: 52.0'

BASE FLOOD ELEVATION
EL: 46.0'

BSMT. FLOOR LINE
EL: 41.0'



3 SOUTH ELEVATION
3/32"=1'-0" 11X17 FULL SCALE



4 WEST ELEVATION
3/32"=1'-0" 11X17 FULL SCALE

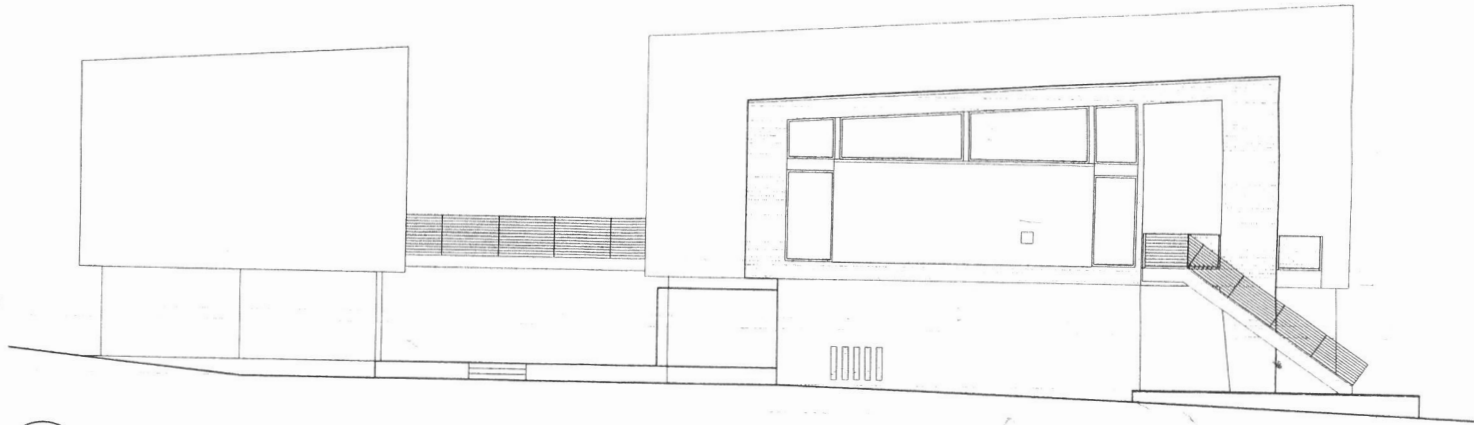
ROOF LINE
+23'-8 1/2" A1stFF

2nd FLOOR LINE
EL: 62.0'

1st FLOOR LINE
EL: 52.0'

BASE FLOOD ELEVATION
EL: 46.0'

BSMT. FLOOR LINE
EL: 41.0'



3 SOUTH ELEVATION

3/32"=1'-0"

11X17 FULL SCALE

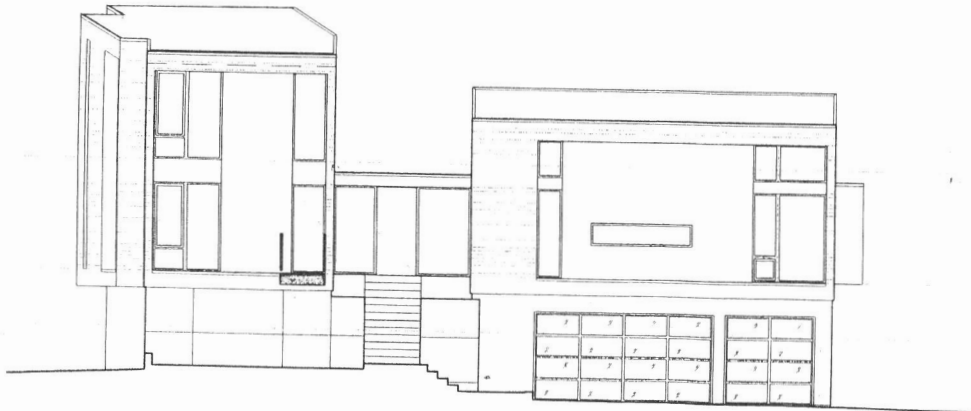
ROOF LINE
+23'-8 1/2" A1stFF

2nd FLOOR LINE
EL: 62.0'

1st FLOOR LINE
EL: 52.0'

BASE FLOOD ELEVATION
EL: 46.0'

BSMT. FLOOR LINE
EL: 41.0'



4 WEST ELEVATION

3/32"=1'-0"

11X17 FULL SCALE

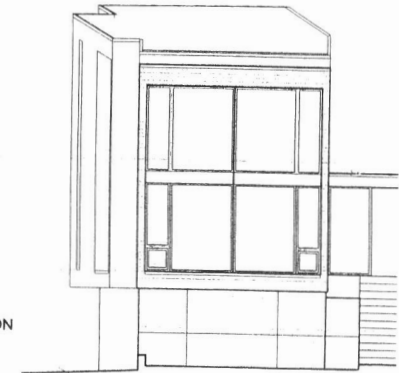
ROOF LINE
+23'-8 1/2" A1stFF

2nd FLOOR LINE
EL: 62.0'

1st FLOOR LINE
EL: 52.0'

BASE FLOOD ELEVATION
EL: 46.0'

BSMT. FLOOR LINE
EL: 41.0'



5 WEST ELEVATION

3/32"=1'-0"

11X17 FULL SCALE