



CITY OF MILWAUKIE

To: Planning Commission

Through: Dennis Egner, Planning Director

From: Vera Kalias, Associate Planner
Dalton Vodden, Associate Engineer

Date: August 27, 2019, for September 10, 2019, continued Public Hearing

Subject: **File:** NR-2018-005 (master)
Applicant: Gillis Properties, LLC
Owner(s): Same
Address: 12205-12225 SE 19th Ave
Legal Description (Map & Tax Lot): 11E35DD 03200 & 03300
NDA: Island Station

ACTION REQUESTED

Review the material submitted since the July 23 public hearing and consider re-opening the public hearing as requested by Mary Neustadter. If the Commission declines to reopen the hearing for additional testimony, then deliberate and make a tentative decision. Continue the hearing to October 8 for a final vote.

BACKGROUND INFORMATION

As originally proposed, the staff report and findings for the initial public hearing recommended denial of the application due to deficiencies related to the floodplain and natural resources. The applicant requested that the hearing be continued to develop revisions and to provide additional materials to address the identified deficiencies. These materials are the subject of this hearing.

Please review materials provided for the initial [May 28, 2019](#) public hearing for materials submitted up to that date.

The public hearing was opened on [July 23, 2019](#) for the staff report, applicant's presentation, and public testimony; the Commission did not deliberate. The Commission closed the public hearing but left the written record open as follows:

1. Until August 6 for anyone to submit argument and evidence;

2. Until August 13 for anyone to rebut the first open record period submittals; and
3. Until September 3 for applicant only to submit final written argument without new evidence.

All comments and materials received for the August 6 and August 13 comment periods were posted [here](#), and are also included as Attachments 4-9.

A. Project Summary

The applicant is proposing a natural resources cluster development with a total of 12 single family detached homes (10 new and 2 existing homes to be remodeled) on a site located between 19th Ave and the Willamette slough adjacent to Elk Rock Island and Spring Park. The site includes 100-yr floodplain, mapped natural resource areas, and the Willamette Greenway. Variances are requested to a side yard setback, a front yard setback, building height for the homes facing the slough, and to allow garage doors to exceed 50% of the building width.

The application materials were reviewed and analyzed by ESA, the City's peer review natural resources consultant.

The site is located at 12205-12225 SE 19th Ave. The site is made up of two tax lots and contains a total of 3.66 acres. There are two existing single-family homes on the site, which would be remodeled and would be part of the proposed development. The surrounding area is zoned Residential R-5 and consists of detached single-family homes to the north and east, Elk Rock Island to the west, and Spring Park and the unimproved Sparrow St right-of-way to the south. See Figures 1-2.

The project site is bisected by the Willamette slough, effectively limiting the developable portion of the site to the eastern portion. The site includes Willamette Greenway over the entire site, Water Quality Resource Areas (WQR) along the slough and river, Habitat Conservation Areas (HCA), and the 100-yr floodplain over all of the site but the upland area along 19th Ave (See Figures 3, 4, and 5).

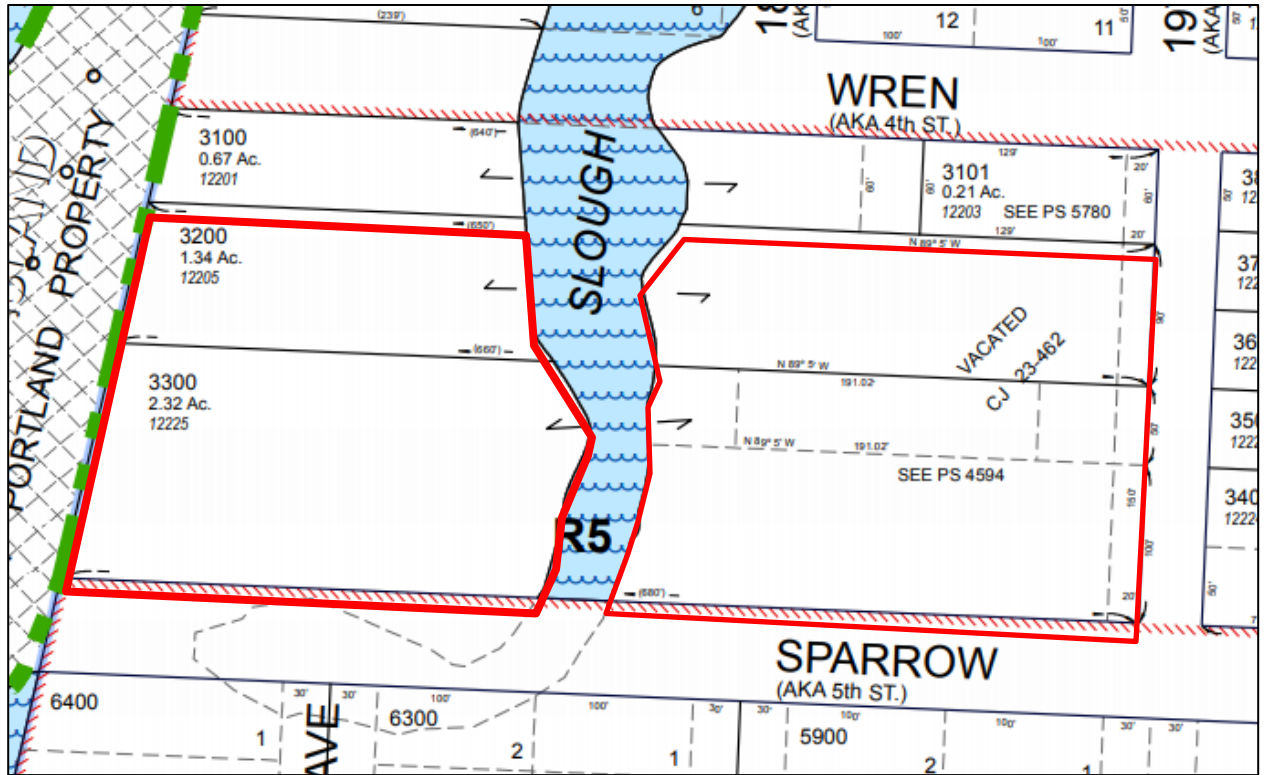


Figure 1. Tax Map with property outlined in red.



Figure 2. Site and Vicinity

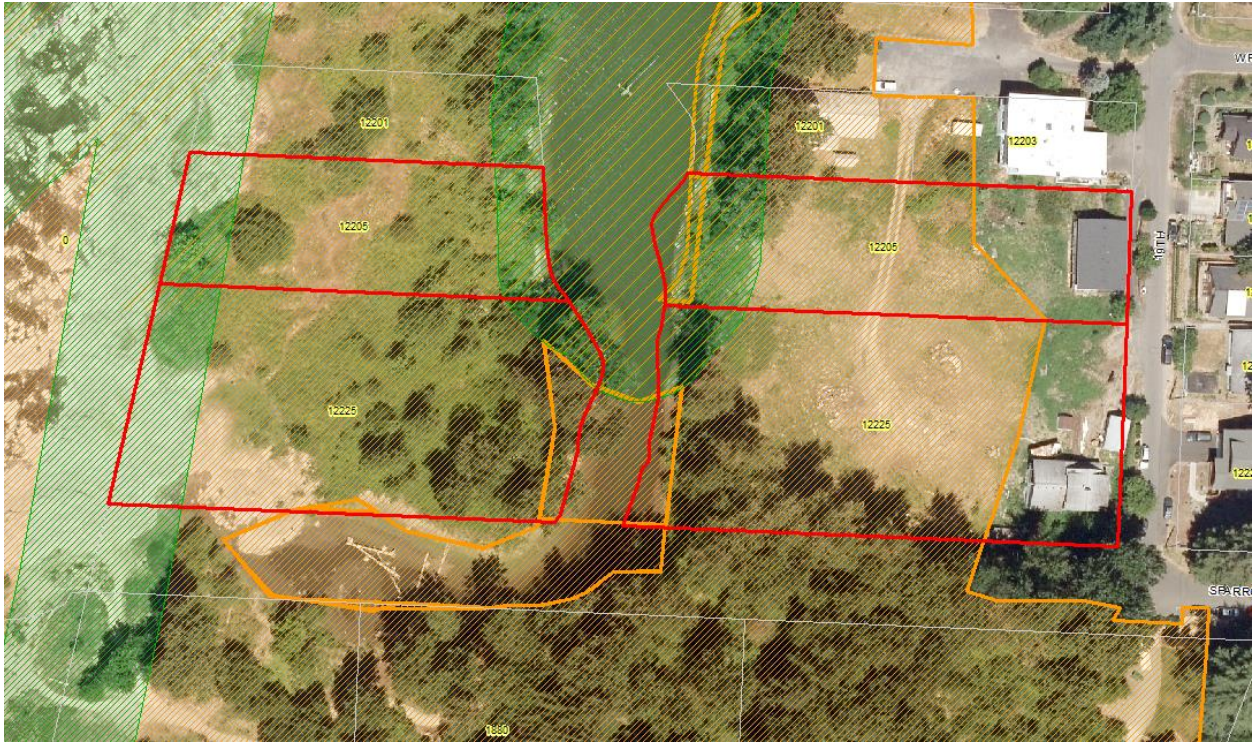
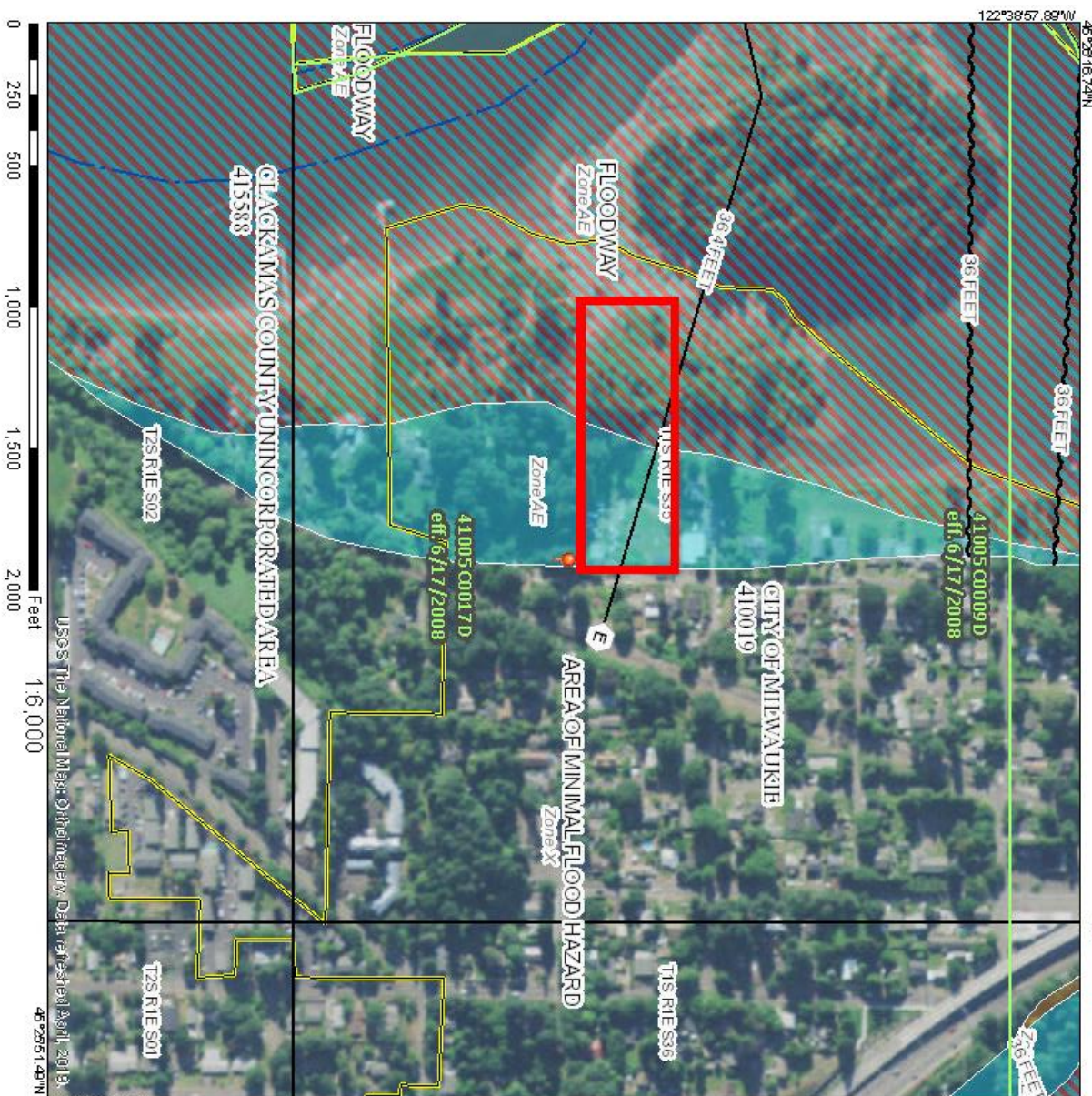


Figure 3. Natural Resource overlay zones: Water Quality Resource Area (green) and Habitat Conservation Area (orange)

National Flood Hazard Layer FIRMette



Legend

SEE FIRM REPORT FOR DETAILED LEGEND AND MORE MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile, Zone X
- Future Conditions 1% Annual Chance Flood Hazard, Zone X
- Areas with Reduced Flood Risk due to Levees, See Notes, Zone X
- Areas with Flood Risk due to Levee, Zone D

OTHER AREAS

- Areas of Minimal Flood Hazard, Zone X
- Effective LOMBs
- Areas of Undetermined Flood Hazard, Zone D

GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES

- Cross Sections with 1% Annual Chance Water Surface Elevation
- Oceanal Transsect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Oceanal Transsect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmipped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps. If it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was reported on 5/17/2019 at 1:43:29 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmipped and unmipped areas cannot be used for regulatory purposes.

Figure 4. FEMA Special Flood Hazard Area, Approximate Site Location Added in Red for Clarity (Unaltered Image in Attachment 6)



Figure 5. Metro Special Flood Hazard Area, 1996 flood limits is indicated by the white line. Approximate Site Location Added in Red for Clarity (Unaltered Image in Attachment 6)

The applicant is seeking land use approvals for construction of a natural resources cluster development (see Figure 6) for 10 new single-family homes and 2 remodeled existing homes. The project includes a new pedestrian path and repair of an existing dock extending into the slough, and enhancements to natural resources to the west of the slough.

The project requires approval of the following applications:

1. Natural Resource Review (master file, #NR-2018-005).

The project is a natural resources cluster development and is subject to natural resources review.

2. Variance Request (VR-2018-014; VR-2018-015).

As proposed, the project requires 4 variances: (1) to exceed the maximum allowed building height of 2.5 stories or 35 ft for single-family homes; (2) relief from the 25-ft side yard setback; (3) relief from the number of access points in close proximity on the same frontage; and (4) relief from the requirement that garage doors not exceed 50% of the width of the street facing façade.

3. Lot Consolidation (LC-2018-001).

The proposal includes consolidation of the two underlying lots into one.

4. Willamette Greenway Review (WG-2018-001).

The site is in the Willamette Greenway and the project requires a Willamette Greenway Conditional Use review, both for the main development as well as the non-commercial dock.

Key plan revisions since July 23 public hearing

- Lowest floor elevation for houses was raised to reflect the higher base flood elevation for the area of special flood hazard.
- Driveway access for House #12 to address driveway spacing issue



Figure 6. Site Plan

KEY ISSUES

Summary

Staff has identified the following remaining key issues for the Planning Commission's deliberation.

- A. Floodplain: Has the applicant adequately addressed all floodplain impacts?
- B. Natural Resources: Has the applicant adequately addressed impacts to mapped natural resources to avoid, minimize, and mitigate with a reasonable footprint for the cluster development?
- C. Does the proposed development adequately address the approval criteria for a Willamette Greenway Conditional Use?

Analysis

A. Has the applicant adequately addressed all floodplain impacts?

The City of Milwaukie regulates floodplain development through title 18 of the municipal code. The code identifies requirements that must be satisfied within two flood management areas. The applicant's proposed development includes impacts to both flood management areas. Impacts include construction of ten new homes, significant renovation of two existing homes, construction of a private street, construction of common space amenities, significant regrading, and design of a stormwater facility. See Figures 3 and 4 for mapped flood management areas on site.

The applicant has provided preliminary information and has committed to meeting all general standards laid out in MMC 18.04.150. These standards include the need for new construction and substantial improvements to meet anchoring, materials, utilities, crawl space, and cut and fill standards. The applicant has also submitted information to address specific standards laid out in MMC 18.04.160 for residential construction and has committed to meeting provisions for fully enclosed areas below the lowest floor subject to flooding on all new construction and substantial improvements. The applicant has proposed to construct a dock in the floodway, which must meet MMC 18.04.170 through certifying the improvement results in no increase to flood levels during base flood discharge.

The development requires a private street to provide access to all of the new homes and one of the existing homes to be renovated. The City's comprehensive plan states in chapter 3, objective 1, policy 3, "(T)he finished elevations of the lowest floor of buildings and streets will be a minimum of 1.0 foot above the 100-year flood elevation." Standards set forth in the comprehensive plan must be met by this proposed development to satisfy the

approval criteria of Willamette Greenway review. The applicant has provided elevation of the proposed road at a crowned center line. The lowest elevation of the private road occurs on Accessway 2 at station 0+26.00. The centerline elevation is marked at 37.4 ft. This would produce elevations at the edge of road of 37.16 ft, 0.24 ft less than the required one foot above the FEMA 100-yr flood elevation of 36.4 ft required by City policy.

The ten new homes proposed include above grade enclosed garages below the base flood elevation (BFE), 38.0 ft NAVD. Habitable floors, including a potential half story being sought through a variance, will be located above the garages. The enclosed garages represent added enclosed space below BFE that will require professionally designed features to accommodate the hydrodynamic loading. If compliant openings are not feasible, the garage floor becomes the buildings lowest floor. This may require the garages to be raised one foot above BFE. The applicant has proposed a less conservative design for these enclosed areas. The applicant will be required to meet design guidelines according to conditions established by the FEMA flood insurance study (FIS) for the area. Utilizing a less conservative design would require a revision to the flood-hazard information presented in the FIS.

The applicant is seeking to use a crawlspace foundation type. FEMA technical guidance advises against crawlspaces in this flood zone, “open foundations are recommended in riverine flood hazard areas where flow velocities are expected to exceed five feet per second because of the anticipated hydrodynamic loads and potential for debris impact and scour. These loads may be sufficient to damage typical solid perimeter foundation walls, even though flood openings are provided.” Information regarding openings in foundation walls and walls of enclosures can be found in FEMA Technical Bulletin 1 (https://www.fema.gov/media-library-data/20130726-1502-20490-9949/fema_tb_1_1_.pdf).

Any area of a building having its floor subgrade (below ground level) on all sides must have their internal floor elevation raised to one foot above BFE per MMC 18.04.160.A. The applicant, through communication dated July 23rd, 2019, stated foundations were to be designed in accordance with all code requirements. The applicant must request a variance following MMC 18.04.130 to have subgrade enclosed areas below the BFE. This includes crawlspaces subgrade on all sides. No such variance has been requested.

The fill and excavation below BFE proposed for this development includes changes of slope near the edge of the property. The applicant has not provided details on the impact of drainage to neighboring properties. Oregon drainage law prohibits a landowner from diverting water onto adjoining land that would not otherwise have flowed there and changing the place where water flows onto the lower owner’s land. The applicant has stated, in communication dated July 23, 2019, that no drainage is being directed toward neighboring properties. Even if it is not the intent of the applicant to divert water to neighboring properties, extensive regrading that creates steeper slopes at the property line is proposed to mitigate the applicant’s impacts to the floodplain and could result in alteration of the existing drainage pattern.

The new impervious area proposed requires engineered stormwater management. The applicant has proposed a stormwater treatment facility located within the floodplain. This stormwater facility is part of the proposed excavation necessary to meet balanced floodplain cut and fill. The applicant has proposed that detention will not be required.

In general, City of Milwaukie Public Works Standards Section 2.0041 requires all development to provide onsite detention unless the developer can demonstrate through hydraulic analysis that the proposed development will not increase stormwater runoff volumes or peak discharge and meets all requirements of the City's municipal discharge permit.

All impervious areas of the development are proposed to be piped to the stormwater facility. Analysis has not been provided to indicate the stormwater facility can accept the required stormwater and still provide floodplain storage during extreme events. The design storm event for the stormwater facility does not necessarily correspond to the design flood event. Additionally, MMC 19.402.11.E.5 requires that facilities not harm watershed health and that stormwater management plans include a stream protection strategy. Additional impacts within the floodplain beyond those currently proposed may be required in order to meet these requirements. One concern regarding potential impacts to watershed health is the potential for fish entrapment. However, the applicant has indicated they would consult with Oregon Department of Fish and Wildlife on whether this potential impact is a concern.

Summary of Issues

As noted above, the application does not adequately address all code requirements. A summary of the deficiencies is provided below:

1. Analysis of cut and fill based on only one of the two flood management areas was included.
2. The applicant is seeking to develop enclosed spaces below BFE that are discouraged by both MMC and FEMA technical guidance.
3. Extensive regrading for floodplain mitigation near the property line and the resultant drainage impact on neighboring properties was not adequately addressed.
4. The stormwater facility located in the floodplain and close to an identified water quality resource does not address fish entrapment during high flow events or provide details for watershed protection.
5. Feasibility of accommodating stormwater detention onsite while meeting floodplain requirements has not been established.

B. Has the applicant adequately addressed impacts to mapped natural resources to avoid, minimize, and mitigate with a reasonable footprint for the cluster development?

Due to its location within a Water Quality Resource (WQR) and a Habitat Conservation Area (HCA), the applicant is requesting to develop a residential cluster development under MMC 19.402.14.C. The residential cluster development process is an adjustment or variance to the normal, clear and objective development process and is inherently discretionary in nature. The goal of a cluster development is to allow residential development to be clustered so that land can be developed at allowed densities while avoiding or minimizing impacts to WQR or HCA, including allowing alternative types of residential development, such as attached housing or multifamily structures, to meet density. This discretionary process requires an analysis of the impacts of development on WQRs and HCAs, including measures to prevent negative impacts and requirements for mitigation and enhancement. The approval criteria for evaluating a development’s impacts requires that the application demonstrate how the proposed activity:

- Avoids the intrusion of development into resource areas to the extent practicable;
- Minimizes detrimental impacts if there is no practicable alternative to avoiding disturbance; and
- Mitigates for adverse impacts if the applicant demonstrates that there is no practicable alternative that will avoid disturbance of the designated natural resources.

The applicant submitted information and arguments making an assertion that there is no practicable alternative to impacts on the mapped natural resources. More than 80% of the site contains resource areas. Balancing other code requirements, such as floodplain standards, minimum setbacks, and access requirements, makes avoiding or minimizing impacts difficult. Minimum density requires at least 12 dwelling units on the site that, according to the applicant, have been clustered “as much as possible away from the natural resources by locating them on the east side of the slough as close as possible to 19th Ave.”

When revised materials were submitted for the July 23 hearing, the applicant prepared four design alternatives to the proposed design for evaluation under this discretionary review process. The following table summarizes potential impacts of the four alternatives:

Alternative	WQR/HCA impacts (combined)	Wetland fill	Below OHWM of the Willamette River
Preferred – 12 units	38,500 sq ft	0	Repair to existing dock, no new structure

#2 – 23 units	57,213 sq ft	3,363 sq ft	Proposed Dock, plus possible additional fill
#3 – 16 units	>38,500 sq ft ¹	0	Proposed Dock
#4 – 18 units	>38,500 sq ft	0	Proposed Dock
#5 – 16 units ²	Unknown – includes units on the “island” west of the slough and an access bridge	unknown	Proposed Dock

The applicant contends that the proposed 12 units with mitigation on the “island” is the only feasible alternative that minimizes impacts to the natural resources.

Staff is conflicted on the issue of the alternatives analysis. The applicant did not propose an alternative with a significantly different layout that focused on avoiding impacts. An alternative, or alternatives, that emphasizes fewer homes, duplexes, or multifamily units outside of the HCA/WQR was not provided and should have been considered. However, it is difficult to know for certain that there is a better design for this site than the preferred option.

There are trade-offs with every alternative, ranging from impacts to views and the relationship of the homes to 19th Ave, to compatibility with the neighborhood and the benefits of the proposed mitigation on the area west of the slough. The code does not prohibit development on this property. Rather, it outlines the process and the necessary analysis required to ensure that alternatives are considered, and impacts are mitigated. The code also includes the notion of “practicable,” which is defined to include the consideration of cost, ecological functions, scenic views, and/or adjacent uses. Development on this degraded portion of the site, using technology to address floodplain issues, and mitigating and enhancing nearly one acre of land adjacent to the slough and to Elk Rock (including removal of invasive and nuisance species and planting hundreds of trees and shrubs) appears to meet the spirit and intent of MMC 19.402. Alternatively, there was no serious evaluation of an alternative that focused on avoiding impacts by fronting a set of duplexes or triplexes on 19th Ave with parking tucked underneath.

Mitigation

In the final plan submission, the applicant proposes to mitigate for natural resource impacts in the western portion of the site to the west of the slough (see Figure 7). The overall concept is to plant a wide variety of native shrubs, trees, and groundcover with the aim that suitable species will take root while others may not. As noted by ESA, the

¹ Alternative #3 would have less impact than #2 but more than #4 and the preferred because the private drive would extend further south into the buffer of Wetland A.

² Alternative #5 submitted as a site plan on July 12, 2019 to illustrate another development alternative. No mitigation, floodplain evaluation, etc. was provided for this alternative.

proposed mitigation site appears suitable but is anticipated to be challenging because of its position in the Willamette River floodplain, periodic flooding, the existing extent of weeds, and the presence of shallow bedrock in some areas. Despite the potential challenges, ESA notes that several of the native shrubs and trees are anticipated to establish given adequate irrigation and maintenance.

Based on the analysis and inventory of this area, the total area of 41,708 sq ft will be used while preserving existing native trees and saplings as well as the standing dead trees (snags) that provide perches for birds. The total mitigation would consist of 385 trees and 1,925 shrubs. The soils appear to be suitable on-site, new mulch and compost will be brought in to prepare the soils for planting, and site preparation and weed control will need to be thorough and will require several site visits and treatments. The fact that there are Oregon ash and black cottonwood saplings/trees on-site indicates that suitable conditions exist for these native plants. Floodplains can support wooded areas and the species that generally thrive in floodplains include Oregon ash, black cottonwood, willows, and red alder. Oak trees can also handle winter flooding as long as the soils dry out in the summer. Some plant loss and mortality should be expected due to flooding. The code requires 80% survival so an ongoing maintenance program would be needed. The applicant has provided general information about how they will access the mitigation area to perform the required work, including foot access through Spring Park, as well as boat access for equipment and during the winter. Given that this area is separated from the development portion of the site by the slough, a detailed plan that shows access points is necessary.

Several conditions of approval (see Attachment 3) are recommended, including the following:

- Provide a detailed planting plan that shows existing native trees/shrubs to be retained, a typical planting scheme (40 x 40'), and details on site preparation and maintenance including timing and frequency for weed control. Show mitigation site access, where signage will be posted and how irrigation will be provided across the slough.
- Submit a revised planting list that reflects that vine maple is not a tree and tall shrubs should not be substituted for trees.
- Submit a revised mitigation monitoring report that replaces the proposed criteria for total percent cover of native species stratum with "the percent cover of invasive herbaceous species shall be no greater than 20%." This is the average of the options provided that were either 10 percent or 30 percent based on the extent of woody vegetation.
- Remove trash and debris from transient camps that have been established on site.
- Submit an updated mitigation monitoring and maintenance plan and monitoring report forms. Extended on-going monitoring, including a repair and

restoration program, is required to address flood damage. The timeframe for this extended monitoring program is 10 years.

Summary of Issues

As noted above, the application appears to adequately mitigate for the impacts to the HCA. The primary concern is whether plantings on the mitigation site will survive. Conditions have been recommended for an extended period of monitoring.



Figure 7. Subject property with the slough and the Willamette River

C. Does the proposed development adequately address the approval criteria for a Willamette Greenway Conditional Use?

Approval of a project in the Willamette Greenway is a conditional use, subject to the provisions of MMC 19.905. The conditional use approval criteria are found in MMC 19.505.4. The key criteria that apply to this project and that must be addressed by the application are:

- Are the characteristics of the lot suitable for the proposed use considering size, shape, location, topography, existing improvements, and natural features?
- Will the operating and physical characteristics of the proposed use be reasonably compatible with, and have minimal impact on, nearby uses?
- Will all identified impacts be mitigated to the extent practicable?

The purpose of the Willamette Greenway Zone (WG) is to protect, conserve, enhance, and maintain the natural, scenic, historic, economic, and recreational qualities of lands along the Willamette River and major courses flowing into the Willamette River. The subject property is entirely within the Willamette Greenway. The WG section (MMC 19.401) of the code functions as an overlay zone and is combined with the base zone. MMC 19.401.6 includes a list of criteria that are to be taken into account in the consideration of a greenway conditional use:

- Compatibility with the scenic, natural, historic, economic, and recreational character of the river;
- Protection of views both toward and away from the river;
- Landscaping, aesthetic enhancement, open space, and vegetation between the activity and the river, to the maximum extent practicable;
- Public access to and along the river, to the greatest possible degree, by appropriate legal means;
- Emphasis on water-oriented and recreational uses;
- Maintain or increase views between the Willamette River and downtown;
- Protection of the natural environment according to regulations in Section 19.402;
- Conformance to applicable Comprehensive Plan policies;
- The request is consistent with applicable plans and programs of the Division of State Lands;
- A vegetation buffer plan.

The criteria of MMC 19.401.6 and 19.905.4 are important to consider, particularly the suitability of the site for the proposed development, given that nearly the entire site is in the 100-yr floodplain and contains mapped natural resources. Based on the applicant's plans, approximately one-half of the site would be altered to accommodate the proposed development and effectively all of the mapped natural resource areas would be altered (through both development and mitigation).

The applicant's materials state that the proposal is consistent with the character of the river because this section of the river has been developed over the past 100 years for residential and commercial use and that the proposed residential development is consistent with the surrounding uses on both sides of the river.

The applicant's narrative states that views to the Willamette River will not be impacted by the development because the main channel of the river is not visible from the property. While the proposal would remove invasive vegetation, and enhance the vegetated buffer, it is clear that the project would also greatly intensify the development impacts on the site.

As related to the approval criteria, views to the river are considered from the public right-of-way. When staff visited the site, and stood on 19th Ave in front of the property, small areas of the Willamette River to the north and south and the properties on the west bank were visible across the property (see Figure 8). Existing views from the public right-of-way are limited.



Figure 8. Looking southwest from 19th Ave

The presence of Elk Rock Island blocks any views directly west across the property, in addition to dense vegetation that blocks views in the summer months. But, as shown above, there are portions of the river that are visible from the public right-of-way in the winter and spring. The proposed site plan identifies view corridors from the right-of-way (see Figure 9). It appears that the proposed development will provide some narrow views to the river. Numerous comments were received related to this issue and they unilaterally opposed the development based on its impact on views.

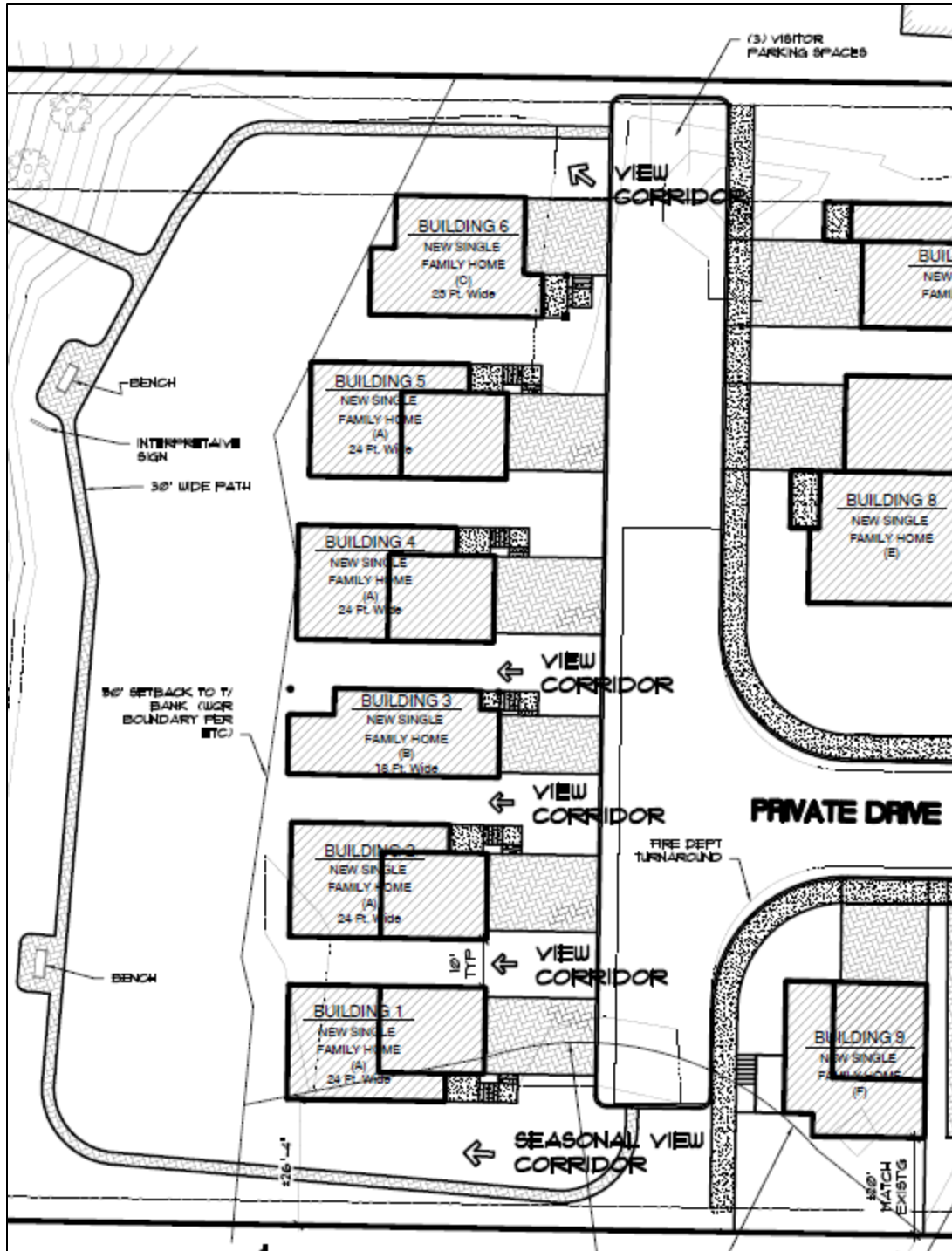


Figure 9. View corridors

The overall views from the public right-of-way toward the river are limited today and do not appear significant enough to preclude approval of the WG conditional use application.

Summary of Issues

Staff again is conflicted in its review of the application. The applicant has responded admirably to the challenges presented by this site. Twelve units are proposed in a manner that meets the code requirements for floodplain development while also mitigating for impacts to the natural resources by restoring native vegetation to the west of the slough. But at the same time, the application raises questions when evaluating it against the conditional use approval criteria, particularly the question of suitability of the proposal on a lot that contains more than 80% floodplain and mapped natural resource areas.

CONCLUSIONS

A. Staff recommendation to the Planning Commission is as follows:

1. Close the public hearing and begin deliberation. Staff could not agree on a recommendation for approval or denial. Findings to support denial and approval have been provided to the Commission to assist in deliberation.

CODE AUTHORITY AND DECISION-MAKING PROCESS

The proposal is subject to the following provisions of the Milwaukie Municipal Code (MMC).

- MMC 18.04 Flood Hazard Area
- MMC 19.301 Low Density Residential Zones
- MMC 19.401 Willamette Greenway Zone
- MMC 19.402 Natural Resources
- MMC 19.504 Site Design Standards
- MMC 19.505 Building Design Standards
- MMC 19.600 Off-Street Parking and Loading
- MMC 19.700 Public Facility Improvements
- MMC 19.911 Variances
- MMC 19.1006 Type III Review

This application is subject to Type III review, which requires the Planning Commission to consider whether the applicant has demonstrated compliance with the code sections shown above. In Type III reviews, the Commission assesses the application against review criteria and development standards and evaluates testimony and evidence received at the public hearing.

Staff recommends that the Planning Commission continue the public hearing to October 8 for a final decision. However, the Commission does have the option of reopening the hearing for additional oral testimony. Reopening the hearing for additional oral testimony

will delay deliberation and may push out the decision. If an appeal is filed, that process will commence and a hearing will be held with the City Council, who will make the final decision.

The final decision on these applications, which includes any appeals to the City Council, must be made by November 1, 2019, the date of the extension of this application.

COMMENTS

Notice of the proposed project was given to the following agencies and persons: City of Milwaukie Building, Engineering, and Public Works Departments, Island Station Neighborhood District Association (NDA), Oregon Marine Board, Oregon Department of Fish and Wildlife, Division of State Lands, Oregon Parks and Recreation Department, North Clackamas Park and Recreation District, Clackamas Fire District #1, and properties within 300 ft of the subject site.

The public hearing was opened on July 23, 2019 for the staff report, applicant's presentation, and public testimony; the Commission did not deliberate.

Agency and NDA comments received are summarized as follows:

- **Chris Stevenson, Jurisdiction Coordinator, Oregon Department of State Lands:** The Department concurs with the wetland and waterway boundaries as mapped for the site. The letter included information regarding permitting for fill or removal of material from the site.
- **Sarah Hartung, Senior Biologist, ESA (City's on-call Natural Resource consultant):** ESA has provided three memos serving as peer review of the applicant's Natural Resource Review report.
- **Dalton Vodden, Associate Engineer, City of Milwaukie Engineering Department:** Comments related to the proposal's compliance with MMC Title 12 Streets, Sidewalks, and Public Places; MMC Chapter 13.14 Stormwater Management; MMC Title 18 Flood Hazard Regulations; and MMC Chapter 19.700 Public Facility Improvements.
- **Izak Hamilton, Fire Inspector, CFD#1:** Standard comments related to fire access and water supply.
- **Island Station NDA Land Use Committee:** comments related to the impacts on views, traffic on 19th Ave, provide additional on-street parking in the development, and concern that the proposed development not be gated.

The following individuals submitted comments in opposition to the project:

- Christopher Roberts
- Kary King
- Jana Tracy
- Steve Gerken

- Joanne Tracy
- Mary Neustadter
- Theresa Silver
- Michele Bertaus-Zabaglio
- John Clinton
- Charlene Toman
- Tienneke Pavesic
- Lura Lee
- Carol Timper
- Serafine Lilien
- Beth Mills
- David Peters
- Victoria Mendez
- Marco Clark
- Rebecca Banyas
- Robert Murakami
- Howard Lanoff
- Kate Morrison
- Priscilla Elliott
- Gavin Bondy
- Sean Garmire
- Douglas Musgrove
- Mary Weick
- Beth Lorio
- Sharon Smith
- Carla Maria Buscaglia
- Mary Weick

All comments can be reviewed here: <https://www.milwaukieoregon.gov/planning/nr-2018-005> and in Attachments 4-9.

ATTACHMENTS

Attachments are provided as indicated by the checked boxes. All material is available for viewing upon request.

	Early PC Mailing	PC Packet	Public Copies	Packet
1. Findings Recommending Approval	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2. Findings Recommending Denial	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3. Draft Conditions of Approval	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4. City comments for August 6 deadline	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5. Applicant comments for August 6 deadline	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6. Public comments for August 6 deadline	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7. City rebuttal comments for August 13 deadline	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
8. Applicant rebuttal comments for August 13 deadline	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
9. Public rebuttal comments for August 13 deadline	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Key:

Early PC Mailing = paper materials provided to Planning Commission at the time of public notice 20 days prior to the hearing.

PC Packet = paper materials provided to Planning Commission 7 days prior to the hearing.

Public Copies = paper copies of the packet available for review at City facilities and at the Planning Commission meeting.

Packet = packet materials available online at <https://www.milwaukieoregon.gov/bc-pc/planning-commission-36>.

**Recommended Findings in Support of Approval
File #NR-2018-005, Elk Rock Estates**

Sections of the Milwaukie Municipal Code not addressed in these findings are found to be inapplicable to the decision on this application.

1. The applicant, Matthew Gillis of Gillis Properties LLC, has applied for approval of a natural resources cluster development at 12205-12225 SE 19th Ave. This site is in the R-5 Zone. The land use application file number is NR-2018-005.
2. The applicant seeks approval for a Natural Resources Cluster Development with a total of 12 single family detached homes (10 new and 2 existing homes to be remodeled) on a site located between 19th Ave and the Willamette slough adjacent to Elk Rock park. The site includes 100-yr floodplain, mapped natural resource areas, and the Willamette Greenway. Variances are requested to a side yard setback, a front yard setback, building height for the homes not adjacent to 19th Ave, and to allow garage doors to exceed 50% of the building width.
3. The proposal is subject to the following provisions of the Milwaukie Municipal Code (MMC):
 - MMC 12.16 Access Management
 - MMC 12.24 Clear Vision at Intersections
 - MMC 18.04 Flood Hazard Area
 - MMC 19.301 Low Density Residential Zones
 - MMC 19.401 Willamette Greenway Zone
 - MMC 19.402 Natural Resources
 - MMC 19.504 Site Design Standards
 - MMC 19.505 Building Design Standards
 - MMC 19.600 Off-Street Parking and Loading
 - MMC 19.700 Public Facility Improvements
 - MMC 19.911 Variances
 - MMC 19.1006 Type III Review
4. The application has been processed and public notice provided in accordance with MMC Section 19.1006 Type III Review. Public hearings were held on July 23, September 10, and October 8, as required by law.
5. MMC Title 12 Streets, Sidewalks, and Public Places
 - a. MMC Chapter 12.08 – Street & Sidewalk Excavations, Construction, and Repair

- (1) This will apply to all construction that is completed in the right of way and for all public utilities. The public improvement process will follow MMC 12.08.020.
- b. MMC Chapter 12.16 Access Management
 - (1) MMC 12.16.040 Access Requirements and Standards

MMC 12.16.040 establishes standards for access (driveway) requirements.

 - (a) MMC Subsection 12.16.040.A requires that all properties be provided street access with the use of an accessway.

The proposed development has access to 19th Ave. This standard is met.
 - (b) MMC Subsection 12.16.040.B Governs access spacing onto arterial and collector streets.
 - (i) *19th Avenue is a local street, 12.16.040.B is not applicable.*
 - (c) MMC Subsection 12.16.040.C establishes standards for accessway location.
 - (i) Double Frontage

When a lot has frontage on two (2) or more streets, access shall be provided first from the street with the lowest classification. For example, access shall be provided from a local street before a collector or arterial street.

The subject property currently has frontage on 19th Ave, a local street, and undeveloped Sparrow St. The proposal is for all access to be from 19th Ave.

This standard is met.
 - (ii) Limiting driveway access from arterials and collectors.

Not applicable.
 - (iii) Distance from property line

The nearest edge of the driveway apron shall be at least seven and one-half (7½) feet from the side property line in residential districts and at least ten (10) feet from the side property line in all other districts

No planned access ways are within 7 ½ ft of the property line.

This standard is met.
 - (iv) Distance from Intersection

To protect the safety and capacity of street intersections, the following minimum distance from the nearest intersecting street face of curb to the nearest edge of driveway apron shall be maintained: At least forty-five (45) feet for single-family residential properties accessing local and neighborhood streets.

All construction that is completed in the right-of-way and for all public utilities the improvement process will follow MMC 12.08.020.

(d) MMC Subsection 12.16.040.D Sets standards for the number of accessway locations

- (i) Requires the number of accessway locations be the minimum necessary without inhibiting safe circulation and carrying capacity of the street.

The applicant has proposed a private right-of-way labeled as Private Drive to provide access for buildings 1-11. The intersection with the private drive will replace the existing driveway at 12225 SE 19th Ave. Building 12 will have an driveway north of the shared accessway. Circulation and carrying capacity of 19th Ave will not be reduced as the number of access points on 19th Ave will remain the same.

The proposed development is consistent with MMC 12.16.040.D.1.

- (ii) Requires shared access to be used on collector and arterial streets to minimize the number of access points.

Not applicable.

- (iii) Specifies accessway number and spacing for single-family residential. One accessway per property is allowed for single-family residential uses. One additional accessway per property is allowed on a second local road frontage or when spaced 50 feet apart on the same frontage. Existing conditions conform.

Not applicable to the proposed cluster development.

- (iv) Specifies accessway number and spacing for all uses other than single-family residential. One accessway is allowed on local streets. One additional accessway is allowed per frontage where the driveway approaches, including adjacent property accessways, can be spaced 150' apart, measured from the nearest edges of the driveway aprons.

The applicant proposes a cluster development with a separate driveway access for building 12. The applicant proposes a new street intersection for the development's private street and SE 19th Ave. This new street intersection will not cause any accessways to be out of compliance with intersection spacing.

(e) MMC Subsection 12.16.040.E Requires accessway designs meet ADA and Public Works Standards.

The applicant has indicated that accessways shall meet ADA and Public Works Standards.

- (f) MMC Subsection 12.16.040.F establishes accessway size to minimize surface water runoff and reduce conflicts between vehicles, bicyclists, and pedestrians.

Plans submitted by the applicant show access points on 19th Ave with current road width and design. Final improvements on 19th Ave will include a 15-ft paved asphalt width, flush curbs, and 3-ft wide load bearing shoulders. Surface water mitigation is included in the final improvement standards.

The existing driveway for building 12 is non-conforming and is being replaced by a conforming driveway by the proposal.

The sizes of the accessways meet City code.

c. MMC Chapter 12.24 – Clear Vision at Intersections

This code section defines a clear vision area for safe access and use of City streets.

The applicant has not proposed any clear vision violations. This standard is met.

6. MMC Title 17 Land Division

a. MMC Chapter 17.12 Application Procedure and Approval Criteria

(1) MMC Section 17.12.020 Application Procedure

MMC 17.12.020 requires that property line adjustments and lot consolidations be processed as described in Table 17.12.020. Property line adjustments that are consistent with the Oregon Revised Statutes (ORS) and Title 19 shall be processed through Type I review and any adjustment that modifies a plat restriction shall be processed through Type II review. Lot consolidations other than replats, involving legal lots created by deed, shall be processed through Type I review.

The Planning Commission finds that the proposed lot consolidation is not a replat and involves legal lots established by deed and that the proposed boundary adjustment does not modify any known plat restriction. Therefore, the proposed lot consolidation could be processed with Type I review. As noted in Finding 4, the entire application submittal has been processed concurrently with Type III review.

(2) MMC Section 17.12.030 Approval Criteria for Lot Consolidation, Property Line Adjustment, and Replat

MMC 17.12.030 specifies the approval criteria for lot consolidations and property line adjustments.

(a) MMC Subsection 17.12.030.A.1 requires compliance with Title 17 Land Division Ordinance and Title 19 Zoning Ordinance.

As evidenced by these finding, the proposed lot consolidation and boundary adjustment meet all applicable standards of Titles 17 and 19.

- (b) MMC Subsection 17.12.030.A.2 requires that the proposed change allow for reasonable development of the affected lots and not create the need for a variance of any land division or zoning standard.

The proposed lot consolidation would combine the two tax lots into one single tax lot for the purposes of a natural resources cluster development described in Finding 2. The property is of adequate size for reasonable development without requiring a variance of any land division or zoning standard given the natural resource cluster development process.

- (c) MMC Subsection 17.12.030.A.3 requires that the proposed change not reduce the residential density below the minimum density requirements of the zoning district.

The subject property is currently developed for residential use. The proposed lot consolidation would not affect the minimum residential density of the site.

The Planning Commission finds that these criteria are met.

The Planning Commission finds that the proposed lot consolidation and boundary adjustment meet the applicable standards of MMC 17.12.

b. MMC Chapter 17.16 Application Requirements and Approval Criteria

MMC 17.16 establishes the submittal requirements for boundary changes and land division. For property line adjustments and lot consolidations, MMC Section 17.16.040 requires a completed application form, application fee, narrative report addressing approval criteria, scaled plan showing sufficient details of the subject properties, and deeds of the properties involved.

The applicant's submittal materials include the necessary forms and fees, a narrative that addresses all applicable approval criteria, the deed for the subject property, and a site plan that shows the proposed change.

The Planning Commission finds that no additional information is required for a decision related to the lot consolidation.

c. MMC Chapter 17.28 Design Standards

MMC 17.28 establishes design standards for land division. In particular, MMC Section 17.28.040 establishes general design standards for lots, including standards for size, shape, compound lot line segments, and frontage.

- (1) MMC 17.28.040.A requires that the lot size, width, shape, and orientation shall be appropriate for the location and the type of use contemplated. Minimum lot standards shall conform to Title 19.

As a result of the proposed lot consolidation, the resulting property would have adequate size and dimensions for development and uses allowed in the underlying R-5 zone and conform to the lotting standards of Title 19 as described in these findings.

- (2) MMC 17.28.040.B requires that lot shape shall be rectilinear, except where not practicable due to location along a street radius, or existing lot shape. The sidelines of lots, as far as practicable, shall run at right angles to the street upon which the lots face. As far as practicable, the rear lot line shall run parallel to the street.

As proposed, the consolidated property would be rectilinear in shape.

- (3) MMC 17.28.040.C discourages cumulative lateral changes in direction of a side or rear lot line exceeding 10% of the distance between opposing lot corners along a given lot line. Changes in direction shall be measured from a straight line drawn between opposing lot corners.

The proposed lot consolidation would not result in any lateral changes in direction of a side or rear lot line.

- (4) MMC 17.28.040.D provides that lot shape standards may be adjusted subject to Section 19.911 Variances.

No adjustments to lot shape standards are requested or required.

- (5) MMC 17.28.040.E limits double and reversed frontage lots except where essential to provide separations of residential development from railroads, traffic arteries, or adjacent nonresidential uses, or to overcome specific disadvantages of topography and orientation.

The existing subject property has public street frontage on 2 sides (19th Ave and unimproved Sparrow St). The proposed lot consolidation would not change the multiple-frontage status of the newly consolidated lot.

- (6) MMC 17.28.040.F requires that required frontage be measured along the street upon which the lot takes access.

The consolidated lot would continue to have access from 19th Ave, where it has 240 ft of frontage.

The Planning Commission finds that the proposed lot consolidation complies with all applicable design standards of MMC 17.28.

The Planning Commission finds that the proposed lot consolidation meets all applicable standards of MMC Title 17. This standard is met.

7. MMC 18 Flood Hazard Regulations

- a. MMC 18.04 provides standards intended to minimize public and private losses due to flood conditions in specific areas. The regulations established in MMC Title 18 do this in part by controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters; controlling filling, grading, dredging, and other development which may increase flood damage; and preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other

areas. As per MMC Section 18.04.100, a development permit is required prior to any construction or development within the flood management area.

The project site is located within the City's flood management area. The applicant states within the application materials that they acknowledge the inherent risks of building within the floodplain and will construct the project in accordance with current federal and local requirements for construction of homes within a floodplain. A development permit is required to be obtained prior to beginning work upon approval of this application. Floodproofing of all structures need to be appropriately certified and surveyed prior to completion of construction. No watercourses are proposed to be altered or relocated as part of the proposed development.

The Planning Commission finds that MMC 18 applies to the proposed development.

(1) MMC 18.04.150 General Standards

MMC 18.04.150 establishes the required standards for development in a flood hazard area.

(a) Anchoring

- (i) All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
- (ii) All manufactured homes shall be anchored to resist flotation, collapse, or lateral movement to the structure, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, over-the-top and frame ties to ground anchors (reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques).

The applicant proposes that all new structures in this development will be securely anchored to properly designed foundations to prevent flotation, lateral movement or collapse in accordance with accepted engineering practices.

Additionally, the applicant must meet these requirements for structures that are substantially improved.

(b) Construction Materials and Methods

- (i) All new construction and substantial improvements shall be constructed with materials and utilize equipment resistant to flood damage.
- (ii) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

- (iii) 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.

The applicant proposes that all new structures would be constructed with concrete foundations and designed with flood vents to allow for unrestricted flow of flood water. Electrical, heating, ventilation and plumbing systems would be elevated above flood elevation or designed to be watertight per local and federal design guidelines for “floodproof” construction. These standards also apply to substantially improved structures.

The proposed development is in an area likely of high flood velocity (FIRM Zone AE) and will require additional consideration for floodproofing. The applicant has proposed to meet all local requirements.

(c) Utilities

- (i) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system;
- (ii) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters; and
- (iii) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

The applicant proposes that all new water supply and sanitary sewer systems would be designed to minimize or eliminate infiltration of floodwaters in accordance with accepted engineering practices. No on-site waste disposal systems are proposed.

(d) Subdivision Proposals

- (i) All subdivision proposals shall be consistent with the need to minimize flood damage.
- (ii) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize or eliminate flood damage.
- (iii) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.
- (iv) Base flood elevation data shall be provided for subdivision proposals and other proposed development which contain at least fifty (50) lots or five (5) acres (whichever is less).

No subdivision is proposed with this application. This application is for a 12-unit condominium development. This criterion does not apply.

(e) Review of Building Permits

Where elevation data are not available, applications for building permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two (2) feet above grade in these zones may result in higher insurance rates.

Federally established flood elevation data is available for the site. The applicable Flood Insurance Rate Map (FIRM) is 41005C0017D. The flood elevation of the 1996 areas of inundation has been codified in MMC 18.04.030.

(f) Balanced Cut and Fill

The displacement of flood storage area by the placement of fill or structures (including building foundations) shall conform to the following standards for balanced cut and fill:

- (i) The placement of fill or structures that displaces ten (10) cubic yards or less of flood storage area is exempt from the requirements of subsection 2 below.
- (ii) The placement of fill or structures that displaces more than ten (10) cubic yards of flood storage area shall comply with the following standards:
 1. No net fill in any floodplain is allowed.
 2. All fill placed in a floodplain shall be balanced with at least an equal amount of soil material removal.
 3. Any excavation below bankfull stage shall not count toward compensating for fill.
 4. 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 may be located in the same drainage basin and as close as possible to the fill site subject to the following:
 - a. The proposed excavation and fill will not increase flood impacts for surrounding properties as determined through hydrologic and hydraulic analysis;
 - b. The proposed excavation is authorized under applicable municipal code provisions including Section 19.402 Natural Resources; and

- c. Measures to ensure the continued protection and preservation of the excavated area for providing balanced cut and fill shall be approved by the City.

The applicant proposes each new building will have a flow through below grade foundation to act as floodplain storage. The applicant provided a letter that estimated the average cut for each new building will be 40 cubic yards. This assumed that each new building will have a stem wall foundation for the entire first floor (approximately 800 sq ft). This is likely an overestimation. It would be more typical for the portion of the first floor that is a garage to have a slab on grade foundation, which would not provide flood storage or cut.

Even with the over estimation, it has not been established that enough cut is possible to offset the required fill for grading the private street to one foot above base flood elevation.

Additionally, it has not been sufficiently proven that the proposed foundation type is feasible to use in this floodplain zone. Crawlspace below grade on all sides are considered basements by the National Flood Insurance Program (NFIP) and must be raised 1 ft above the Base Flood Elevation (BFE). Conditions of approval will require compliance with these standards.

5. Temporary fills permitted during construction shall be removed at the end of construction.

Any temporary fills needed for construction will be removed at the end of construction. No temporary fills have been proposed.

6. 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.

No new culverts, stream crossings or transportation projects are proposed. This criterion does not apply.

7. Excavation and fill required for the construction of detention facilities or structures, and other facilities, shall

be designed to reduce or mitigate flood impacts and improve water quality. Levees shall not be used to create vacant buildable lands.

A stormwater facility has been proposed west of the building sites. This facility is located in an area proposed to provide a significant source of excavation for the required balanced cut and fill. No levees have been proposed.

(g) Crawlspace Construction

Below-grade crawlspaces are allowed subject to the following standards as found in FEMA Technical Bulletin 1101, Crawlspace Construction for Buildings Located in Special Flood Hazard Areas.

- (i) 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. Hydrostatic loads and the effects of buoyancy can usually be addressed through the required openings stated in Section B of FEMA Technical Bulletin 1101. Because of hydrodynamic loads, crawlspace construction is not allowed in areas with flood velocities greater than five (5) feet per second unless the design is reviewed by a qualified design professional, such as a registered architect or professional engineer. Other types of foundations are recommended for these areas.

The proposed development is in FEMA zone AE where high flow velocities are likely. The development is intersected by mapped floodplain cross section E of Flood Insurance Study (FIS) study number 41005CV001A. Table 5 of the study lists a mean flooding velocity of 5.9 ft/s at the floodway located at cross section E. The applicant is proposing every new building with an enclosed garage floor below the BFE and crawlspace foundations. The applicant is required to have all enclosed areas below the BFE reviewed by a design professional for hydrodynamic loading.

The same criteria must be met by existing structures that are substantially improved.

- (ii) The crawlspace is an enclosed area below the base flood elevation (BFE) and, as such, must have openings that equalize hydrostatic pressures by allowing the automatic entry and exit of floodwaters. The bottom of each flood vent opening can be no more than one (1) foot above the lowest adjacent exterior grade.

The applicant has proposed that all crawlspaces and garages located below the BFE will have appropriately sized automatic flood vents properly

installed. Hydrodynamic forces in addition to hydrostatic forces are expected in high velocity floodzones. Additional design review is required by a licensed professional be conducted to verify the feasibility of using crawlspaces in this floodzone. A crawlspace below grade on all sides is considered a basement by the NFIP. All basements must be raised 1 ft above BFE.

Additionally, the applicant must meet these requirements for structures that are substantially improved.

- (iii) Portions of the building below the BFE must be constructed with materials resistant to flood damage. This includes not only the foundation walls of the crawlspace used to elevate the building, but also any joists, insulation, or other materials that extend below the BFE. The recommended construction practice is to elevate the bottom of joists and all insulation above BFE.

The applicant proposes that all wood joists, insulation and other building components would be located above the BFE. The applicant proposes garages and building entry areas located below the BFE will have concrete floors and walls.

Additionally, the applicant must meet these requirements for structures that are substantially improved.

- (iv) Any building 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.

The applicant has proposed that all building utility systems within the crawlspaces of the proposed homes would be designed so that floodwaters cannot enter the systems. The applicant proposes all ductwork and HVAC units would be located above the BFE.

Additionally, the applicant must meet these requirements for structures that are substantially improved.

Utility systems not locate above the BFE would be inundated during the 100-year flood. The development is proposed in a high velocity flood zone. These utilities would be susceptible to significant hydrodynamic forces.

- (v) The interior grade of a crawlspace below the BFE must not be more than two (2) feet below the lowest adjacent exterior grade.

The applicant proposes that all crawl spaces would be less than 2' below lowest adjacent grade to allow for drainage.

Additionally, the applicant must meet these requirements for structures that are substantially improved.

- (vi) 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 four (4) feet at any point. The height limitation is the maximum allowable unsupported wall height according to the engineering analyses and building code requirements for flood hazard areas.

The applicant proposes that no crawlspace foundation walls would have more than 4 ft of unbalanced fill as proposed. The applicant has not established the feasibility of crawlspaces within this flood zone.

Additionally, the applicant must meet these requirements for structures that are substantially improved.

- (vii) There must be an adequate drainage system that removes floodwaters from the interior area of the crawlspace. The enclosed area should be drained within a reasonable time after a flood event. The type of drainage system will vary because of the site gradient and other drainage characteristics, such as soil types. Possible options include natural drainage through porous, well-drained soils and drainage systems such as perforated pipes, drainage tiles or gravel or crushed stone drainage by gravity, or mechanical means.

No specific drainage system has been proposed by the applicant.

- (viii) The velocity of floodwaters at the site should not exceed five (5) feet per second for any crawlspace. For velocities in excess of five (5) feet per second, other foundation types should be used.

The development is in flood zone AE where FEMA considers high velocity floods as likely. The FIS table for the nearest cross-section lists 5.9 ft/s as the mean flood velocity. The applicant has committed to meeting local standards.

The applicant has committed to constructing foundations to meet local standards. With appropriate conditions for compliance, the Planning Commission finds that the standards in MMC 18.04.150 are met.

(2) 18.04.160 Specific Standards

MMC 18.04.160 establishes specific required provisions and standards for development in special flood hazard and flood management areas where base flood elevation data has been provided.

(a) Residential Construction

New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated one (1) foot above base flood elevation.

The applicant proposes that all new structures would be constructed with concrete foundations extending above the BFE with finished floors at least 1 ft above the design flood elevation. The applicant must also meet these requirements for substantial improvements of the existing buildings. The NFIP defines a "basement" as any area that is below-grade on all sides. The regulations do not allow basements to extend below the BFE.

(b) Miscellaneous Provisions

(i) For all new construction and substantial improvements, 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 registered professional engineer or architect or must meet or exceed the following minimum criteria:

- (i) A minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided.
- (ii) The bottom of all openings shall be no higher than one (1) foot above grade.
- (iii) Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

The applicant proposes that automatic flood vents would be installed at all areas below the BFE.

Additionally, the applicant must meet these requirements for structures that are substantially improved.

(3) MMC 18.04.170 Floodways

MMC 18.04.107 establishes the standards and requirements for development in floodways, which are areas located within areas of special flood hazard. These standards are established since the floodway is an extremely hazardous area due to the velocity of floodwaters.

The applicant has proposed a dock in the floodway. This will require state authorization after city approval is obtained. A no rise certificate will be required prior to permitting.

As conditioned, the development meets MMC 18 and is recommended for approval. Remaining issues can be addressed through the permitting process.

8. MMC 19.301 Low Density Residential Zones (including R-5)

a. Table 19.301.4 establishes standards for development in the R-5 zone.

Table 19.301.4 Residential Zone R-5 Development Standards			
Standard	Required	Proposed	Staff Comment
1. Minimum Lot Size	5,000 sq ft	3.66 acres	<i>Per Finding 9-b, the proposal is a natural resources cluster development. More than one principal building or structure may be placed on a lot.</i>
2. Minimum Lot Width	50 ft	N/A	<i>Per Finding 9-b, the proposal is a natural resources cluster development. Minimum lot width and lot depth standards do not apply.</i>
3. Minimum Lot Depth	80 ft	N/A	<i>Per Finding 9-b, the proposal is a natural resources cluster development. Minimum lot width and lot depth standards do not apply.</i>
4. Minimum Setbacks	20 ft (front, rear) 5 ft (side) 15 ft (street side)	N/A	<i>Per Finding 9-b, the proposal is a natural resources cluster development. MMC 19.402.14.C establishes a minimum yard depth of 25 ft. A variance has been submitted requesting relief from this standard.</i>
5. Off-Street Parking and Loading	Min one/dwelling unit; no maximum	20 spaces in garages + 16 spaces in driveways	<i>Complies with standard.</i>
6. Height Restriction	2½ stories or 35 ft, whichever is less	3 stories/32 ft	<i>Per Finding 14, a variance has been requested to allow 3-story homes.</i>
7. Lot Coverage	30% max.	8.1% lot coverage	<i>Complies with standard.</i>

8. Minimum Vegetation	35% min.	83.6%	Complies with standard.
9. Frontage	35 ft	240 ft along 19 th Ave. 680 ft along Sparrow St.	Complies with standard.
10. Density	7.0-8.7 units/net acre	12 dwelling units	Per Finding 9-b, the development is proposed as a cluster development in accordance with the provisions of Section 19.402.14. The density allowed for the gross property area would be 25-32 dwelling units based on the ratio of 7-8.7 dwelling units per the base R-5 zone. The proposed density of 12 dwellings is 3.28 dwellings per gross acre.
11. Transportation Requirements	Yes	Requesting adjustment to sidewalk width, planting strip requirement.	As conditioned, application will comply.

With conditions, the Planning Commission finds that this standard would be met.

9. MMC 19.400 Overlay Zones and Special Areas

a. MMC 19.401 Willamette Greenway Overlay Zone

MMC 19.401 establishes criteria for reviewing and approving development in the Willamette Greenway.

(1) MMC Subsection 19.401.5 Procedures

MMC 19.401.5 establishes procedures related to proposed uses and activities in the Willamette Greenway zone. Development in the Willamette Greenway zone requires conditional use review, subject to the standards of MMC Section 19.905 and in accordance with the approval criteria established in MMC Subsection 19.401.6.

The construction of new primary structures constitutes “development” as defined in MMC Subsection 19.401.4 and is subject to the conditional use review standards of MMC 19.905 and the approval criteria of MMC 19.401.6.

(2) MMC Subsection 19.401.6 Criteria

MMC 19.401.6 establishes the criteria for approving conditional uses in the Willamette Greenway zone.

- (a) Whether the land to be developed has been committed to an urban use, as defined under the State Willamette River Greenway Plan

The State Willamette River Greenway Plan defines “lands committed to urban use” in part as “those lands upon which the economic, developmental and locational factors have, when considered together, made the use of the property for other than urban purposes inappropriate.”

The subject properties are lots that were platted in 1884 and shown with a residential zoning designation on the City’s zoning map since at least 1968. The upland portion of the property is committed to an urban use. The majority of the area in the floodplain is undeveloped. The portion west of the Willamette slough is not appropriate for urban use.

- (b) Compatibility with the scenic, natural, historic, economic, and recreational character of the river

The site is adjacent to the Willamette slough and according to 1967 aerial photographs, it was actively used for agricultural or logging use in the past. The proposal is consistent with the character of the river because this section of the greenway includes residential property to the north and has been developed over the past 100 years for residential and commercial use.

- (c) Protection of views both toward and away from the river

The site is adjacent to the Willamette slough and provides views to the main channel of the river to the northwest and to the southwest. There are limited views from the 19th Ave public right-of-way, so consideration is required with respect to view protection. The proposed development has been configured to maximize river views through identified view corridors between the proposed homes and aligned with the main access drive as applicable.

- (d) Landscaping, aesthetic enhancement, open space, and vegetation between the activity and the river, to the maximum extent practicable

The existing site has been disturbed over the years and although it is located in the floodplain, there is little significant natural vegetation on the site to the east of the slough. The proposed development will include new plantings to enhance the site and provide native vegetation in the mapped natural resource areas.

- (e) Public access to and along the river, to the greatest possible degree, by appropriate legal means

No public access is provided by the development. The subject properties are private residential properties that are adjacent to the river via the slough. The proposed development would only provide private access to the river.

- (f) Emphasis on water-oriented and recreational uses

The subject properties are private residential properties. The project would provide direct access to the Willamette River via a proposed dock into the slough.

- (g) Maintain or increase views between the Willamette River and downtown

The site is not in the downtown.

- (h) Protection of the natural environment according to regulations in Section 19.402

As identified in Finding 9-b, as conditioned, the application meets the applicable approval criteria for development and disturbance in mapped natural resource areas.

- (i) Advice and recommendations of the Design and Landmarks Committee, as appropriate

The subject properties are not within a downtown zone and the proposed activity does not require review by the Design and Landmarks Committee.

- (j) Conformance to applicable Comprehensive Plan policies

The Willamette Greenway Element in the Milwaukie Comprehensive Plan includes policies related to land use, public access and view protection, and maintenance of private property. These policies include the requirement of a conditional use permit for new development and intensification of existing uses, evaluation of development impacts to visual corridors, and limitations on authorizing the unrestricted public use of private land.

The Natural Hazards Element includes policies that prohibit development in known areas of natural disasters and hazards without appropriate safeguards. The Open Spaces, Scenic Areas, and Natural Resources Element includes policies to conserve open space and protect and enhance natural and scenic resources.

The proposed development is being reviewed through the Willamette Greenway conditional use process as provided in MMC Subsection 19.401.5. The project will not significantly impact visual corridors from 19th Ave given the limited view opportunities that currently exist. The proposed development is on private property and does not provide public access to the river over private land.

Policy number 3 of Chapter 3 Objective 1 of subsection 1.6 of the Comprehensive Plan is a regulatory policy that states that streets are to be at a minimum of 1.0 foot above the 100-year flood elevation.

The applicant proposes a private street system, open to public travel, providing emergency service access to the development labeled as Private Drive 1 and Private Drive 2. Unit specific driveways provide buildings 1,2,3,4,5,6,7,8,9, and 10 access to the private street system.

Private Drive 1 and Private Drive 2 are shown at elevations above the 100-year flood elevation. This conforms to city standards.

- (k) The request is consistent with applicable plans and programs of the Division of State Lands

The proposed activity is not inconsistent with any known plans or programs of the Department of State Lands (DSL).

- (l) A vegetation buffer plan meeting the conditions of Subsections 19.401.8.A through C

The subject properties are not immediately adjacent to the main channel of the Willamette River. The proposed residential development is providing a 50 ft buffer from the top of the slough bank and no areas of riverbank (or slough bank) erosion have been identified as requiring stabilization. No existing large trees or pristine sections of native vegetation exist on the portion of the site proposed to be developed. The vegetated buffer as identified on the planting plan using native species will be an enhancement to the existing conditions.

The Planning Commission finds that, as conditioned, the proposed activity meets all relevant approval criteria provided in MMC 19.401.6.

- (3) MMC Subsection 19.401.9 Private Noncommercial Docks

MMC 19.401.9 establishes the requirements for private noncommercial docks.

- (a) Only 1 dock is allowed per riverfront lot of record.

A single 8 ft wide and 24 ft long dock is proposed for this development. It is proposed to be located at the slough and not along the river.

- (b) In areas designated as open water areas or special management areas by the Division of State Lands, docks may be restricted or additional requirements may be applied to docks. Restrictions or additional requirements will be identified by DSL in their review of the development application.

No special requirements for docks have been identified by DSL for this proposal.

- (c) Private, noncommercial docks shall not exceed 400 sq ft (square footage is measured as the width times the length of the outer edge of the structure).

The proposed dock is less than 200 sq ft.

- (d) Docks, pilings, and walkways shall either be dark natural wood colors, or painted dark earthtones (dark brown or green).

The proposed dock will be a dark natural wood color and pilings will be painted dark brown steel.

This standard is met.

The Planning Commission finds that the proposed activity meets all applicable standards of development activity in the Willamette Greenway zone.

b. MMC 19.402 Natural Resources

Note: ESA, the City's environmental consultant, reviewed the applicant's technical report and presented its assessment to the City in a summary memo, which informs this portion of the findings.

MMC 19.402 establishes regulations for designated natural resource areas. The standards and requirements of MMC 19.402 are an acknowledgment that many of the riparian, wildlife, and wetland resources in the community have been adversely impacted by development over time. The regulations are intended to minimize additional negative impacts and to restore and improve natural resources where possible.

(1) MMC Subsection 19.402.3 Applicability

MMC 19.402.3 establishes applicability of the Natural Resource (NR) regulations, including all properties containing Water Quality Resources (WQRs) and Habitat Conservation Areas (HCAs) as shown on the City's Natural Resource (NR) Administrative Map.

The project site is bisected by the Willamette Slough. The City's NR Administrative Map shows WQR and HCA designations on the majority of site and portions of these natural resource areas will be disturbed by the proposed development.

As presented in the applicant's submittal materials, the proposed development will temporarily or permanently disturb approximately 38,500 sq ft of WQR and/or HCA area. At that scale, the proposed activity is not listed as exempt according to the standards outlined in MMC 19.402.4.

The Planning Commission finds that the requirements of MMC 19.402 are applicable to the proposed activity.

(2) MMC Subsection 19.402.8 Activities Requiring Type III Review

MMC 19.402.8 establishes that certain activities within a designated WQR and/or HCA are subject to Type III review in accordance with MMC 19.1006. As per MMC 19.402.8.A.1, this includes activities allowed in the base zone that are not otherwise exempt or permitted as a Type I or II activity.

The level of disturbance proposed within the designated WQR and HCA areas on the subject property exceeds the levels allowed by Type I and II review, as provided in MMC 19.402.6 and 402.7, respectively. As such, the activity is subject to Type III review and the discretionary process established in MMC 19.402.12. As noted in Finding 4-b above,

the Natural Resource review is associated with other applications being processed concurrently with Type III.

The Planning Commission finds that the proposed activity is subject to Type III review.

(3) MMC Subsection 19.402.9 Construction Management Plans

MMC 19.402.9 establishes standards for construction management plans, which are required for projects that disturb more than 150 sq ft of designated natural resource area. Construction management plans must provide information related to site access, staging of materials and equipment, and measures for tree protection and erosion control.

The applicant's Natural Resource Review report states that a construction management plan will be submitted for review at the time of submittal for development permits.

(4) MMC Subsection 19.402.11 Development Standards

MMC 19.402.11 establishes development standards for projects that impact a designated natural resource, including requirements to protect natural resource areas during development and general standards for required mitigation (e.g., plant species, size, spacing, and diversity).

MMC Subsection 19.402.11.D establishes mitigation requirements for disturbance within HCAs. Because the proposed development will not result in the removal of any trees, and the few trees on the site are on the margins, the applicant proposes to calculate required mitigation via Option 2. Mitigation Option 2 calculates required mitigation based on the size of the disturbance area and assigns required trees and shrubs based on this area.

Using the mitigation planting ratio provided in MMC Subsection 19.402.11.D.2.b as a guide, for the total WQR and HCA disturbance of approximately 38,500 sq ft, the applicant proposes to plant 385 native trees and 1,925 native shrubs. The mitigation areas have been identified as the 41,708 sq ft "island" west of the slough. Mitigation on the "island" includes removal of invasive species and soil remediation to support the new plantings. As proposed, the mitigation plantings will meet the minimum requirements established in MMC Subsection 19.402.11.B. Mitigation trees will be of at least ½-in caliper (measured at 6 ft above the ground level after planting) and shrubs will be of at least 1-gallon size and at least 12-in height. A full planting list was submitted identifying the proposed mix of species.

However, the applicant did not provide information about how the mitigation area will be accessed to perform the required work. Because this area is separated from the development portion of the site by the slough, a detailed plan that shows access points is necessary.

As conditioned, the Planning Commission finds that the applicable development standards of MMC 19.402.11 are met.

(5) MMC Subsection 19.402.12 General Discretionary Review

MMC 19.402.12 establishes the discretionary review process for activities that substantially disturb designated natural resource areas.

(a) Impact Evaluation and Analysis

MMC Subsection 19.402.12.A requires an impact evaluation and alternatives analysis in order to determine compliance with the approval criteria for discretionary review and to evaluate alternatives to the proposed development. A technical report prepared by a qualified natural resource professional is required and should include the following components:

(i) Identification of ecological functions

The application concludes that the proposed development area is “degraded” based on the low cover of shrubs and trees and the high percentage of weeds in the groundcover. This characterization is assumed to meet the Class C “Poor” category per Table 19. 402.11.C. The application provides a discussion of ecological functions of riparian habitat.

(ii) Inventory of vegetation

The applicant’s submittal materials include a technical report prepared by Environmental Technology Consultants, a private firm providing a range of environmental consulting services including natural resource assessment, wetland delineation, and environmental restoration. The technical report includes an impact evaluation and alternatives analysis, as well as an inventory of existing vegetation. The natural resource documentation concludes that the WQR of the slough is “degraded” which appears accurate based on the lack of shrub and tree cover on-site. An assessment of the condition of the natural resources west of the slough was also provided.

(iii) Assessment of water quality impacts

Four sample plots were established by the applicant to characterize vegetation and investigate the presence of potential wetlands (no wetlands were found). ESA agrees with the determination that no wetlands conditions occur in the proposed mitigation area, although the area is presumed to experience flooding during high flows of the Willamette River.

(iv) Alternatives analysis

The application materials consider 4 alternatives to the proposed development: an alternative with 23 dwelling units, an alternative with 18 units, and an alternative with 16 dwelling units. Both alternatives would result in significantly more disturbance to the WQR and HCA. The report concludes that the proposed development is the most practicable alternative that results in the least impact to designated natural resources on the site.

<i>Alternative</i>	<i>WQR/HCA impacts (combined)</i>	<i>Wetland fill</i>	<i>Below OHWM of the Willamette River</i>
<i>Preferred – 12 units</i>	<i>38,500 ft²</i>	<i>0</i>	<i>Repair to existing dock, no new structure</i>
<i>#2 – 23 units</i>	<i>57,213 ft²</i>	<i>3,363 ft²</i>	<i>Proposed Dock plus possible additional fill</i>
<i>#3 – 16 units</i>	<i>>38,500 ft²; less impact than #2 but more than #4 and the preferred because the private drive would extend further south into the buffer of Wetland A.</i>	<i>0</i>	<i>Proposed Dock</i>
<i>#4 – 18 units</i>	<i>>38,500 ft²</i>	<i>0</i>	<i>Proposed Dock</i>
<i>#5 – 16 units¹</i>	<i>Unknown – includes units on the “island” west of the slough and an access bridge</i>	<i>unknown</i>	<i>Proposed Dock</i>

The preferred design appears to impact the least amount of natural resources of the four development alternatives. A large part of the impacts from the preferred option are due to Private Drives 1 and 2 which are required for access. Retaining the two existing structures (buildings 10 and 12) at the east end of the project site also limits layout and roadway options.

Staff communicated with the applicant that, based on the alternatives presented, it is unclear if the preferred design has the least amount of impact on natural resources because the revised materials do not include a revised impact analysis addressing the floodplain from the previous iteration. Moreover, the applicant did not propose an alternative with a significantly different layout that focused on avoiding impacts. An alternative, or alternatives, that emphasizes fewer homes, duplexes, or multifamily units outside of the HCA/WQR was not provided and should have been considered. A question was posed to the applicant: Would fewer units, such as 9 units clustered at the street as shown in Alternative #2, which would significantly avoid and minimize HCA and floodplain impacts, be a viable

¹ Alternative #5 submitted as a site plan on July 12, 2019 to illustrate another development alternative. No mitigation, floodplain evaluation, etc. was provided for this alternative.

project? Staff notes that this alternative was a quick way to illustrate an alternative that would avoid impacts to the mapped natural resource areas and to the floodplain, which had not been provided.

The applicant submitted information and arguments to support the assertion that there is no practicable alternative to impacts on the mapped natural resources. More than 80% of the site contains resources areas. Balancing other code requirements, such as floodplain standards, minimum setbacks, and access requirements, makes avoiding or minimizing impacts virtually impossible. Minimum density requires at least 12 dwelling units on the site which, according to the applicant, have been clustered as much as possible away from the natural resources by locating them on the east side of the slough as close as possible to 19th Ave.

The applicant's response states that the 9-unit option would not be feasible because:

- *9 units is below minimum density*
- *The configuration would not provide visitor parking*
- *2 existing homes would be torn down, which would be in conflict with the comprehensive plan objective of preserving existing structures where possible*
- *The configuration would block all views to the Willamette River and would not comply with the Willamette Greenway overlay zone.*

The applicant contends that the proposed 12 units with mitigation on the "island" is the only feasible alternative that minimizes impacts to the natural resources.

The Planning Commission finds that the applicant's impact evaluation and alternatives analysis is sufficient for purposes of reviewing the proposed activity against the approval criteria provided in MMC 19.402.12. This standard is met.

- (v) **Demonstration that no practicable alternative method or design exists that would have a lesser impact on the resource and that impacts are mitigated to the extent practicable**

As identified above, the Planning Commission finds that the applicant's impact evaluation and alternatives analysis is sufficient for purposes of reviewing the proposed activity against the approval criteria provided in MMC 19.402.12. This standard is met.

- (vi) **Mitigation plan**

The applicant's submittal materials include a mitigation plan for permanent and temporary impacts to the WQR and HCA.

ESA has evaluated the proposed mitigation plan and concluded that it is sufficient. The applicant proposes to mitigate for natural resource impacts in the western portion of the parcels west of the slough. The overall concept is to plant a wide variety of native shrubs, trees and groundcover with the aim that suitable species will establish and others may not. As noted by ESA, the proposed mitigation site appears suitable but is anticipated to be challenging because of its position in the Willamette River floodplain, periodic flooding, the existing extent of weeds, and presence of shallow bedrock in some areas. Despite the potential challenges, several of the native shrubs and trees are anticipated to establish given adequate irrigation and maintenance.

The soils appear suitable on-site, although site preparation and weed control will need to be thorough and will require several site visits and treatments. The fact that there are Oregon ash and black cottonwood saplings/trees on-site means that there are suitable conditions for these native plants. Floodplains can support wooded areas and the species that generally thrive in floodplains include Oregon ash, black cottonwood, willows, and red alder. Oak trees can also handle winter flooding as long as the soils dry out in the summer. Some plant loss and mortality should be expected due to flooding and would be part of the 80% survival criterion.

The Planning Commission finds that the applicant's mitigation plan is sufficient for purposes of reviewing the proposed activity against the approval criteria provided in MMC 19.402.12. As conditioned, this standard is met.

(b) Approval Criteria

MMC Subsection 19.402.12.B provides the approval criteria for discretionary review as follows:

Note: ESA reviewed the applicant's technical report and presented its assessment to the City in a summary memo, which informs this portion of the findings.

- (i) Avoid – The proposed activity avoids the intrusion of development into the WQR and/or HCA to the extent practicable, and has less detrimental impact to the natural resource areas than other practicable alternatives.

The Willamette Slough bisects the site and the 100-year floodplain covers nearly all of the site, resulting in significant areas of designated WQR and HCA. Site development that avoids any impacts to the WQR and HCA at permitted densities is not possible. The applicant has proposed a development of 12 single family homes and a private drive for access and concentrates impacts in the eastern portion of the site. However, the buildings and associated roadway and stormwater facilities would intrude into the WQR and HCA and disturb approximately 0.88 acres of natural resource area. As noted in the discussion of alternatives noted in Finding 9-b(5) above, an

alternative that would allow the proposed development to further avoid the WQR and HCA was provided and applicant contends that this alternative is not feasible.

- (ii) Minimize – If the applicant demonstrates that there is no practicable alternative to avoid disturbance of the natural resource, then the proposed activity shall minimize detrimental impacts to the extent practicable.

As noted in the above discussion of avoiding impacts, absent another alternative that avoids the resource areas, the preferred alternative impacts the least amount of resource area of the alternatives provided.

- (iii) Mitigate – If the applicant demonstrates that there is no practicable alternative that will avoid disturbance of the natural resource, then the proposed activity shall mitigate for adverse impacts to the resource area. The applicant shall present a mitigation plan that demonstrates compensation for detrimental impacts to ecological functions, with mitigation occurring on the site of the disturbance to the extent practicable, utilization of native plants, and a maintenance plan to ensure the success of plantings.

As noted in Finding 9-b(5), the applicant's submittal includes a mitigation plan for the WQR and HCA disturbance that will accompany the proposed development. The applicant has proposed to plant 385 native trees and 1,925 native shrubs and to remove nuisance plants and noxious material and debris. The proposed mitigation appears to meet the code requirements with significant management.

The Planning Commission finds that, as conditioned, the proposed development does meet the approval criteria for discretionary review as established in MMC 19.402.12.B.

- (c) Limitations and Mitigation for Disturbance of HCAs

MMC Subsection 19.402.12.C establishes the discretionary review process for mitigation of more HCA disturbance than would be allowed by the nondiscretionary standards of MMC Subsection 19.402.11.D.1. In such cases, the applicant must submit an Impact Evaluation and Alternatives Analysis consistent with the standards established in MMC 19.402.12.A and subject to the approval criteria established in MMC 19.402.12.B.

As discussed in Finding 9-b(5), the applicant's submittal materials include a technical report that provides an evaluation of impacts to the WQR as well as to those impacted HCA areas beyond the WQR. Based on the materials submitted, the proposed development does meet the approval criteria established in MMC 19.402.12.B.

The Planning Commission finds that the proposed development meets the discretionary standards for disturbance of HCAs as established in MMC 19.402.12.C.

As conditioned, the Planning Commission finds that the proposed development meets the applicable discretionary review standards of MMC 19.402.12.

(6) MMC Subsection 19.402.14 Adjustments and Variances

To encourage applicants to avoid or minimize impacts to WQRs and/or HCAs, several types of adjustments and variances are available for use on any property that includes a WQR or HCA. These include adjustments to specific base zone and lot design standards, discretionary variances, and allowances for residential cluster development.

(a) MMC Subsection 19.402.14.C Residential Cluster Development

MMC 19.402.14.C establishes the standards for developments that are clustered so that land can be developed at allowed densities while avoiding or minimizing impacts to WQRs or HCAs. The intent of this section is to encourage creative and flexible site design that enables the allowable density to be transferred elsewhere on a site to protect environmentally sensitive areas and preserve open space and natural features. A residential cluster development may be permitted in any residential or mixed-use zoning district, subject to Type III review and approval by the Planning Commission.

(i) Calculation of Permitted Number of Dwelling Units

1. The maximum number of dwelling units proposed for a residential cluster development shall not exceed the number of dwelling units otherwise permitted for the residential zoning district in which the parcel is located. The number of units allowed on a parent lot may be transferred to one or more newly created lots or parcels on the site. The cumulative density for all lots or parcels shall not exceed the density allowed for the parent lot.

The subject property is 3.66 acres. Based on a density range of 7.0 - 8.7 dwelling units per acre, 25-32 dwelling units would be permitted when calculating minimum density per MMC 19.202.4.D. It would appear that the only way to achieve the densities without even greater environmental impact would be to build a multi-family development on the site. However, per MMC 19.202.4.E, when calculating maximum density, the net area is determined by subtracting the 100-year floodplain from the gross area. This would result in a net area of approximately 6,400 sq ft, or 1 dwelling unit.

2. The number of permitted dwelling units on a site shall be calculated in the following manner:
 - a. Measure the gross area of the proposed cluster development site in acres and tenths of an acre.
 - b. From the gross area, subtract the area of public streets, other publicly dedicated improvements, and common open space (whether or not it is conveyed pursuant to Subsection 19.402.14.C.2.c), measured in acres and tenths of an acre. The remainder shall be the net buildable area.
 - c. Convert the net buildable area from acres to square feet, using the equivalency of 43,560 sq ft = 1 acre.
 - d. Divide the net buildable area by the smallest minimum lot size (in square feet) per unit for a dwelling unit permitted in the zoning district. This figure shall be rounded to the nearest lower number to establish the maximum number of dwelling units permitted in the cluster development.

The gross site area is 3.66 acres. The common area consisting of HCA and WQR and the area west of the slough is 1.58 acres, leaving 2.08 acres, or 90,605 sq ft, of net buildable area. Minimum lot size in the R-5 zone is 5,000 sq ft, resulting in a maximum number of dwelling units for the cluster development of 18 units. 12 units are proposed.

(ii) Development Standards

1. All principal and accessory uses authorized in the underlying zoning district(s) shall be allowed in the cluster development. In addition, single-family attached dwellings, multifamily dwellings, and townhouses may be permitted for a cluster development located in a residential zoning district that does not otherwise allow attached dwelling units.

The proposed development consists of 12 single-family homes. An alternative with nine townhome units was considered and rejected.

2. Maximum lot coverage, building height, and off-street parking requirements for the applicable zoning district shall apply to the cluster development. Maximum lot coverage, floor area ratios, and off-street parking

requirements shall be applied to the entire site rather than to any individual lot.

The maximum lot coverage and off-street parking for the R-5 zone will be met with the proposed development. Variances have been requested to the building height for some of the proposed homes.

3. The following provisions shall apply to any residential cluster development, regardless of the general requirements of the applicable residential zoning district:

- a. The adjustments allowed by Subsection 19.402.14.A shall be available for cluster development proposals.

No adjustments are being requested per Subsection 19.402.14.A. The requested variances are addressed by this section.

- b. Minimum lot width and lot depth standards shall not apply.

The proposal is a single-lot, 12-unit condominium development.

- c. A minimum separation of 10 ft shall be provided between all principal buildings and structures.

Proposed site plan shows this standard is met.

- d. A minimum yard or common open space shall be provided, with a minimum depth of 25 ft, as measured from all public streets and from the side and rear lot lines of the entire cluster development.

Variances have been requested to allow a 20-ft side setback on the south side of the site. As shown in the application materials, a variance to allow a 15-ft front yard setback for building 11 is also required, but has not been requested. The applicant has indicated that revised plans will show compliance with this standard.

- e. Each lot shall provide at least 12 ft of frontage on a public street.

The consolidated lot will have 240 ft of frontage on 19th Ave.

- f. More than 1 principal building or structure may be placed on a lot.

Twelve units are proposed.

- g. No less than 25% of the site shall be conveyed as common open space.

1.58 acres (43% of gross site area) is proposed to be conveyed as common open space.

- h. No less than 50% of the designated natural resources on the site shall be included in calculating the common open space.

94% of the designated natural resource area on the site is being proposed as common open space.

(iii) Site Plan Requirements

The preliminary and final site plans for a residential cluster development shall include the following information, in addition to the items listed on the City's Site Plan Requirements:

1. The maximum number and type of dwelling units proposed.
2. The areas of the site on which the dwelling units are to be constructed or are currently located and their size. This may take the form of the footprint of the dwelling unit or a building envelope showing the general area in which the dwelling unit is to be located.
3. The calculations for the permitted number of dwelling units, derived pursuant to Subsection 19.402.14.C.1.
4. The areas of the site on which other principal and accessory uses are proposed to be located and their size.
5. The areas of the site designated for common open space and their size.

The site plans submitted with the application materials contain this information.

(iv) Approval Criteria

1. Proposals for residential cluster development shall demonstrate compliance with the following criteria:
 - a. The site plan satisfies the requirements of Subsections 19.402.14.C.1 and 2.
 - b. Buildings and structures are adequately grouped so that at least 25% of the total area of the site is set aside as common open space. To the greatest degree practicable, common open space shall be designated as a single tract and not divided into unconnected

small parcels located in various parts of the development. Common open space shall be conveyed as allowed by Subsection 19.402.13.J.

A single common open space tract is proposed with instrument of conveyance acceptable to the City, such as via a deed restriction, public ownership, common tract, or easement.

- c. Individual lots, buildings, structures, streets, and parking areas are situated to minimize the alteration of natural features, natural vegetation, and topography.

Per Finding 9-b(5), the Planning Commission finds that the proposed development's disturbance of WQR and HCA areas on the subject property meets this standard.

- d. Impacts to WQRs and HCAs are avoided or minimized to the greatest degree practicable.

Per Finding 9-b(5), the Planning Commission finds that the proposed development's disturbance of WQR and HCA areas on the subject property meets this standard.

- e. The cluster development advances the purposes established in Subsection 19.402.1.

Per Finding 9-b, the Planning Commission finds that the proposed development's disturbance of WQR and HCA areas on the subject property meets this standard.

- 2. The Planning Commission may apply such conditions or stipulations to its approval as may be required to maintain harmony with neighboring uses and promote the objectives and purposes of the Comprehensive Plan and the Zoning and Land Division Ordinances.
- 3. If the Planning Commission finds that the criteria in Subsection 19.402.14.C.4.a are met, it shall approve the residential cluster development, subject to any conditions established pursuant to Subsection 19.402.14.C.4.b.

As conditioned, per Finding 9-b(5), the Planning Commission finds that the proposed development's disturbance of WQR and HCA areas on the subject property and proposed mitigation meets the applicable standards of MMC 19.402. The Planning Commission finds that the criteria in 19.402.14 have been met.

10. MMC 19.500 Supplementary Development Regulations

a. MMC 19.505 Building Design Standards

MMC 19.505 establishes design standards for single-family dwellings. The design standards apply to the closest street-facing façade that is within 50 ft of a front or street side lot line.

The project consists of new detached, single-family homes on a common lot. Only Building 11 is within 50 ft of 19th Ave and the front lot line. Therefore, compliance with these standards is only required for Building 11. However, per the applicant's materials, compliance with these standards is voluntary and being applied to all of the new homes to the greatest extent possible.

(1) MMC 19.505.2 Garages and Carports

MMC 19.505.2 establishes standards for garages and carports, with the intent of preventing garages from obscuring or dominating the street-facing façade of a dwelling and providing a pleasant pedestrian environment.

- (i) The width of a street-facing garage door(s), as measured between the inside of the garage door frame, may not exceed 40% of the total width of the street-facing façades on the same street frontage as the garage door. See Figure 19.505.2.C.2. Notwithstanding this limit, a dwelling is allowed 1 12-ft-wide garage door, regardless of the total width of street-facing façades.

The maximum allowed garage door width may be increased to 50% of the total width of the street-facing façade if a total of 7 detailed design elements in Subsection 19.505.1.C.4 are included on the street-facing façade.

The total width of the façade of Building 11 is 26 ft. The width of each garage door is 9 ft for a total of 18 ft, which is 69% of the width of the façade. A Type III variance has been submitted.

Conditional upon approval of the Type III variance to maximum garage door width, this standard is met.

11. MMC Chapter 19.600 Off-Street Parking and Loading

MMC 19.600 regulates off-street parking and loading areas on private property outside the public right-of-way. The purpose of these requirements includes providing adequate space for off-street parking, minimizing parking impacts to adjacent properties, and minimizing environmental impacts of parking areas.

a. MMC Section 19.602 Applicability

MMC 19.602 establishes the applicability of the provisions of MMC 19.600, and MMC Subsection 19.602.3 establishes thresholds for full compliance with the standards of

MMC 19.600. Development of a vacant site is required to provide off-street parking and loading areas that conform fully to the requirements of MMC 19.600.

The proposed development consists of 10 new single-family homes on a site containing 2 existing single-family homes. The development is required to conform fully to the requirements of MMC 19.600.

The Planning Commission finds that the provisions of MMC 19.600 are applicable to the proposed development.

b. MMC Section 19.605 Vehicle Parking Quantity Requirements

MMC 19.605 establishes standards to ensure that development provides adequate vehicle parking (off-street) based on estimated parking demand. MMC Subsection 19.605.2 establishes a process for determining parking requirements when a use is not listed in MMC Table 19.605.1 or if the applicant seeks a modification from the minimum required or maximum allowed quantities as listed in the table.

The proposed residential development will have a total of 12 single-family homes.

As per MMC Table 19.605.1, the minimum number of required off-street parking spaces single-family homes is one space per dwelling with no maximum. According to MMC Table 19.605.1, the proposed development should provide a minimum of 12 spaces.

The proposed development provides 36 off street parking spaces with 20 spaces in private garages and an additional 16 located in driveways serving these garages.

This standard is met.

12. MMC Chapter 19.700 Public Facility Improvements

MMC 19.700 is intended to ensure that development, including redevelopment, provides public facilities that are safe, convenient, and adequate in rough proportion to their public facility impacts.

a. MMC Section 19.702 Applicability

MMC 19.702 establishes the applicability of the provisions of MMC 19.700, including partitions, subdivisions, new construction, and modification or expansion of an existing structure or a change or intensification in use that result in any projected increase in vehicle trips or any increase in gross floor area on the site.

The applicant proposes to construct 10 single family houses. The natural resources cluster development triggers the requirements of MMC Chapter 19.700.

b. MMC Section 19.703 Review Process

MMC 19.703 establishes the review process for development that is subject to MMC 19.700, including requiring a preapplication conference, establishing the type of application required, and providing approval criteria.

The applicant had a preapplication conference with City staff on March 28th, 2018, prior to application submittal. The proposed development does not require a Transportation Facilities

Review application. The applicant will provide transportation improvements and mitigation in rough proportion to the potential impacts of the development.

c. MMC Section 19.704 Transportation Impact Evaluation

MMC 19.704 establishes the process and requirements for evaluating development impacts on the surrounding transportation system, including determining when a formal Transportation Impact Study (TIS) is necessary and what mitigation measures will be required.

The Engineering Director determined that a transportation impact study was not required as the existence of impacts on the transportation system was evident.

d. MMC Section 19.705 Rough Proportionality

MMC 19.705 requires that transportation impacts of the proposed development be mitigated in proportion to its potential impacts.

Transportation impacts of the proposed development are to be mitigated through the required improvements along the full width of 19th Ave fronting the development.

e. MMC Section 19.707 Agency Notification and Coordinated Review

MMC 19.707 establishes provisions for coordinating land use application review with other agencies that may have some interest in a project that is in proximity to facilities they manage.

Given the relatively small scale and location of the project, the application does not trigger general notice provisions to other agencies.

f. MMC Section 19.708 Transportation Facility Requirements

MMC 19.708 establishes the City's requirements and standards for improvements to public streets, including pedestrian, bicycle, and transit facilities.

(1) MMC Subsection 19.708.1 General Street Requirements and Standards

MMC 19.708.1 provides general standards for streets, including for access management, clear vision, street layout and connectivity, and intersection design and spacing.

The applicant has not provided a public improvement plan set. The applicant will need to comply with the applicable standards of MMC 19.708.1. prior to receiving development permits.

(2) MMC Subsection 19.708.2 Street Design Standards

MMC 19.708.2 provides design standards for streets, including dimensional requirements for the various street elements (e.g., travel lanes, bike lanes, on-street parking, landscape strips, and sidewalks).

Applicant is responsible for constructing 15-feet of asphalt, 6-inch flush mount curbs and 3-foot load bearing gravel shoulders on both sides of the roadway, and ADA

pedestrian accommodation. This roadway design that is unique to 19th Avenue. The asphalt surface functions as the ADA pedestrian route and requires ADA longitudinal delineation within the roadway structure in addition to specialized signing.

The ADA component requires construction of the full roadway. Half right of way construction will not be accepted. The remaining portion of the right-of-way along the frontage is flexible for the applicant to propose such items as on street parking, landscaping, bioswales, etc. For additional information, see the 19th and Sparrow Neighborhood Greenway concept plan dated January 2016.

Right-of-way improvements for internal streets in the development shall conform to MMC 19.708.2.

(3) MMC Subsection 19.708.3 Sidewalk Requirements and Standards

MMC 19.708.3 provides standards for public sidewalks, including the requirement for compliance with applicable standards of the Americans with Disabilities Act (ADA).

The applicant proposes to construct public facilities aligned with the 19th and Sparrow Neighborhood Greenway design concept. This is consistent with City of Milwaukee Resolution No. 53-2016.

(4) MMC Subsection 19.708.4 Bicycle Facility Requirements and Standards

MMC 19.708.4 provides standards for bicycle facilities, including a reference to the Public Works Standards.

The portion of 19th Avenue fronting the proposed development is designated as a neighborhood greenway in the Milwaukee Transportation Plan and is governed by the design plan for the 19th and Sparrow Neighborhood Greenway. Bicycle facility improvements are to be consistent with the greenway concept plan.

(5) MMC Subsection 19.708.5 Pedestrian/Bicycle Path Requirements and Standards

MMC 19.708.5 provides standards for pedestrian and bicycle paths and requires such connection be built in addition to public streets in residential districts every 300ft when a street connection is not feasible, in residential districts where a path would reduce walking distance by at least 400 ft to a transit stop, school, shopping center, or park, or where a path would provide a midblock connection between blocks that exceed 800 ft or would link the end of a turnaround with a nearby street or activity center.

The proposed development does not present an opportunity to construct an additional public path. Neighborhood greenway improvements on 19th Ave achieve the desired connectivity outlined in the Transportation Systems Plan.

(6) MMC Subsection 19.708.6 Transit Requirements and Standards

MMC 19.708.6 provides standards for transit facilities.

Transit facility improvements are not required for the proposed development.

As conditioned, the Planning Commission finds that the proposed development will meet the applicable public facility improvement standards of MMC 19.700.

13. MMC Section 19.905 Conditional Uses

MMC 19.905 establishes regulations for conditional uses, including standards for establishing uses identified as conditional uses in any overlay zones. As noted in Finding 7-a and as provided in MMC Subsection 19.401.5.A, activities within the Willamette Greenway zone that trigger Willamette Greenway review are subject to the provisions of Section 19.905 as conditional uses.

a. MMC Subsection 19.905.3 Review Process

MMC 19.905.3 establishes the process by which a new conditional use must be reviewed.

As noted in Finding 7-a, the proposed activity is development as defined for the Willamette Greenway zone and so requires review as a conditional use.

MMC 19.905.3.A requires that establishment of a new conditional use be evaluated through the Type III review process per MMC Section 19.1006.

b. MMC Subsection 19.905.4 Approval Criteria

MMC 19.905.4.A establishes the approval criteria for a new conditional use or a major modification to an existing conditional use.

- (1) The characteristics of the lot are suitable for the proposed use considering size, shape, location, topography, existing improvements, and natural features.

Although the subject property is in the 100-yr floodplain and mapped natural resource areas, the development meets the necessary standards as described in Findings 7 and 9.

The Planning Commission finds that this standard is not met.

- (2) The operating and physical characteristics of the proposed use will be reasonably compatible with, and have minimal impact on, nearby uses.

As described in Finding 7, impacts of the development on the 100-yr floodplain have been mitigated and will not impact surrounding properties.

The Planning Commission finds that this standard is met.

- (3) All identified impacts will be mitigated to the extent practicable.

As described in Findings 7 and 9, as designed, mitigation of floodplain impacts and impacts to mapped natural resources have been demonstrated.

The Planning Commission finds that this standard is met.

- (4) The proposed use will not have unmitigated nuisance impacts, such as from noise, odor, and/or vibrations, greater than usually generated by uses allowed outright at the proposed location.

The proposed development is for a residential condominium development of 12 single-family homes in a residential zone and will not generate any unmitigated nuisance impacts due to that use.

The Planning Commission finds that this standard is met.

- (5) The proposed use will comply with all applicable development standards and requirements of the base zone, any overlay zones or special areas, and the standards in Section 19.905.

The subject property is in the Residential R-5 zone, Willamette Greenway zone, 100-yr floodplain, and contains mapped WQR and HCA. In addition to the R-5 standards for building height, side-yard height plane, lot coverage, and minimum vegetation, the proposed development is subject to the standards for development in the floodplain, the WG zone, and for natural resources cluster development. As addressed in Finding 14, the applicant has requested variances from the side yard setbacks for one of the lots, the width of garage doors, building height and requires variances from the front yard setback and number of accessways.

As addressed in Findings 7 and 9 the proposed activity will comply with the relevant standards of the flood hazard area, Willamette Greenway overlay zone, and the Natural Resources chapter in the code. As addressed elsewhere in Finding 13, the proposed activity is compliant with the other standards of MMC 19.905.

The Planning Commission finds that this standard is met.

- (6) The proposed use is consistent with applicable Comprehensive Plan policies related to the proposed use.

As addressed in Finding 9-a(2), the proposed development is consistent with all relevant polices in the Comprehensive Plan.

The Planning Commission finds that this standard is met.

- (7) Adequate public transportation facilities and public utilities will be available to serve the proposed use prior to occupancy pursuant to Chapter 19.700.

As addressed in Finding 12, the proposed development triggers the requirements of MMC 19.700 and will be reviewed for compliance with the applicable provisions of this chapter at the time development permits are submitted.

The Planning Commission finds that this standard is met.

The Planning Commission finds that the proposed development meets the approval criteria outlined in MMC 19.905.4.A for establishing a conditional use.

c. MMC Subsection 19.905.5 Conditions of Approval

MMC 19.905.5 establishes the types of conditions that may be imposed on a conditional use to ensure compatibility with nearby uses. Conditions may be related to a number of issues, including access, landscaping, lighting, and preservation of existing trees.

The Planning Commission finds that with conditions, the proposed development adequately mitigates impacts to floodplain and natural resource areas.

d. MMC Subsection 19.905.6 Conditional Use Permit

MMC 19.905.6 establishes standards for issuance of a conditional use permit, including upon approval of a major modification of an existing conditional use. The provisions include a requirement to record the conditional use permit with the Clackamas County Recorder's Office and provide a copy to the City prior to commencing operations allowed by the conditional use permit.

As conditioned, the Planning Commission finds that the proposed development is consistent with the relevant standards established in MMC 19.905 for conditional uses.

14. MMC Section 19.911 Variances

MMC Section 19.911 establishes the variance process for seeking relief from specific code sections that have the unintended effect of preventing reasonable development or imposing undue hardship.

a. MMC Subsection 19.911.2 Applicability

MMC 19.911.2 establishes applicability standards for variance requests.

Variances may be requested to any standard of MMC Title 19, provided the request is not specifically listed as ineligible in MMC Subsection 19.911.2.B. Ineligible variances include requests that result in any of the following: change of a review type, change or omission of a procedural step, change to a definition, increase in density, allowance of a building code violation, allowance of a use that is not allowed in the base zone, or the elimination of restrictions on uses or development that contain the word "prohibited."

The applicant has requested the following 3 variances:

- (1) to exceed the maximum building height of the underlying R5 zone (2.5 stories or 35 ft) for the proposed homes to allow three-story houses;*
- (2) for relief from the minimum side yard requirements in a natural resources cluster development to allow 20 ft rather than 25 ft; and*
- (3) for relief from the maximum garage door width of 50% of the width of the street-facing façade.*

The requested variances meet the eligibility requirements established in MMC 19.911.2.

b. MMC Subsection 19.911.3 Review Process

MMC 19.911.3 establishes review processes for different types of variances. Subsection 3-B establishes the Type II review process for limited variations to certain numerical standards. Subsection 3-C establishes the Type III review process for larger or more complex variations to standards that require additional discretion and warrant a public hearing.

None of the requested variances are identified in MMC 19.911.3.B as being eligible for Type II review. Therefore, the requested variances are subject to the Type III review process and the approval criteria established in MMC Subsection 19.911.4.B.

c. MMC Subsection 19.911.4 Approval Criteria

MMC 19.911.4 establishes approval criteria for variance requests. Specifically, MMC Subsection 19.911.4.B.1 provides the following approval criteria for Type III variances where the applicant elects to utilize the Discretionary Relief Criteria:

- (1) The applicant's alternatives analysis provides, at a minimum, an analysis of the impacts and benefits of the variance proposal as compared to the baseline code requirements.

Building Height: To minimize the building footprint, provide greater overall open space, and reduce impacts to the WQR and HCA resources on the site, the applicant has proposed 3-story homes that meet the measured height limits. Because the property is in the floodplain, the lower level of the homes is not habitable and can only be used as a garage or unfinished storage space. Without increasing the height, homes of similar capacity would have a larger footprint, which would likely impact a larger portion of the WQR and HCA on site.

Side yard setback: The proposal includes retention of 2 existing homes. The home located at the south of the site (#12225 SE 19th Ave) has an existing street side yard setback of 20 ft. The proposed 20-ft setback rather than 25 ft would allow the proposed new home to the west align with the existing home. The 20-ft setback, along with the 40-ft adjacent unimproved Sparrow St right-of-way provides an effective 60 ft of buffer to Spring Park.

Garage door width: The proposal includes some house designs with garage doors that exceed the maximum 50% of the width of the street-facing façade. This allows the homes to provide traditional 2-car garages rather than tandem-style garages for the narrow homes proposed for the site.

The Planning Commission finds that the applicant's submittal provides an adequate analysis of the impacts and benefits of the requested variances compared to the baseline requirements. This criterion is met.

- (2) The proposed variance is determined to be both reasonable and appropriate, and it meets one or more of the following criteria:
 - (a) The proposed variance avoids or minimizes impacts to surrounding properties.
 - (b) The proposed variance has desirable public benefits.
 - (c) The proposed variance responds to the existing built or natural environment in a creative and sensitive manner.

Building Height: The proposed height increase to three stories reduces the building footprint, resulting in fewer impacts to the designated natural resource areas on the site. The additional one-half story provides additional living area with the proposed narrow building envelopes while still meeting the measured height standard of less than 35 ft. The proposed lower level of these homes is located below the height of 19th Ave, so there would be little visual impact from the additional half story.

Side yard setback: The proposed 20-ft setback rather than 25 ft will have no impact on surrounding properties because it matches the existing setback of #12225 SE 19th Ave.

Garage door width: The detached homes with garage door widths exceeding the maximum 50% of the width of the street-facing façade will not be visible from 19th Ave. The proposed design includes garage doors with a wood stained appearance and glazing to better fit into the surrounding environment.

The Planning Commission finds that the requested variances are reasonable and appropriate and that each meets one or more of the criteria provided in MMC Subsection 19.911.B.1.b.

- (3) Impacts from the proposed variance will be mitigated to the extent practicable.

Building Height: The increased building height would be mitigated by the location of the homes off 19th Ave where the site is lower than the street. The preserved open space of the natural resource area on the western half of the site, the fact that the homes still meet the measured height standard, and the proposed design all contribute to an aesthetically pleasing development.

Side yard setback: The proposed 20-ft setback in addition to the existing unimproved 40-ft Sparrow St right-of-way retains the goal of the setback by creating a buffer to the adjacent property.

Garage door width: The detached homes with garage door widths exceeding the maximum 50% of the width of the street-facing façade will not be visible from 19th Ave. The proposed design includes garage doors with a wood stained appearance and glazing to better fit into the surrounding environment.

As proposed, the Planning Commission finds that the requested variances meet the approval criteria established in MMC 19.911.4.B.1 for Type III variances seeking discretionary relief.

The Planning Commission finds that the requested variances are allowable as per the applicable standards of MMC 19.911.

15. The application was referred to the following departments and agencies on February 28, 2019:
- Milwaukie Building Division
 - Milwaukie Engineering Department
 - Milwaukie Public Works Department
 - Clackamas County Fire District #1

- Island Station Neighborhood District Association Chairperson and Land Use Committee
- Oregon Marine Board
- Oregon Department of Fish and Wildlife
- Division of State Lands – Wetlands and Waterways
- Oregon Parks and Recreation Department
- North Clackamas Parks and Recreation District

Notice of the public hearing was mailed to owners and residents of properties within 300 ft of the subject property on May 8, 2019.

The public hearing was opened on July 23, 2019 for the staff report, applicant's presentation, and public testimony; the Commission did not deliberate. The Commission closed the public hearing but left the written record open as follows:

1. until August 6 for anyone to submit argument and evidence;
2. until August 13 for anyone to rebut the first open record period submittals; and
3. until September 3 for applicant only to submit final written argument without new evidence.

Agency and NDA comments received are summarized as follows:

- **Chris Stevenson, Jurisdiction Coordinator, Oregon Department of State Lands:**
The Department concurs with the wetland and waterway boundaries as mapped for the site. The letter included information regarding permitting for fill or removal of material from the site.
- **Sarah Hartung, Senior Biologist, ESA (City's on-call Natural Resource consultant):**
ESA has provided three memos serving as peer review of the applicant's Natural Resource Review report.
- **Dalton Vodden, Associate Engineer, City of Milwaukie Engineering Department:**
Comments related to the proposal's compliance with MMC Title 12 Streets, Sidewalks, and Public Places; MMC Chapter 13.14 Stormwater Management; MMC Title 18 Flood Hazard Regulations; and MMC Chapter 19.700 Public Facility Improvements.
- **Izak Hamilton, Fire Inspector, CFD#1:** Standard comments related to fire access and water supply.
- **Island Station NDA Land Use Committee:** comments related to the impacts on views, traffic on 19th Ave, provide additional on-street parking in the development, and concern that the proposed development not be gated.

The following individuals submitted comments in opposition to the project:

- Christopher Roberts
- Kary King
- Jana Tracy
- Steve Gerken

- Joanne Tracy
- Mary Neustadter
- Theresa Silver
- Michele Bertaus-Zabaglio
- John Clinton
- Charlene Toman
- Tienneke Pavesic
- Lura Lee
- Carol Timper
- Serafine Lilien
- Beth Mills
- David Peters
- Victoria Mendez
- Marco Clark
- Rebecca Banyas
- Robert Murakami
- Howard Lanoff
- Kate Morrison
- Priscilla Elliott
- Gavin Bondy
- Sean Garmire
- Douglas Musgrove
- Mary Weick
- Beth Lorio
- Sharon Smith
- Carla Maria Buscaglia
- Mary Weick

The submitted comments can be reviewed here:

<https://www.milwaukieoregon.gov/planning/nr-2018-005>.

**Recommended Findings for Denial
File #NR-2018-005, Elk Rock Estates**

Sections of the Milwaukie Municipal Code not addressed in these findings are found to be inapplicable to the decision on this application.

1. The applicant, Matthew Gillis of Gillis Properties LLC, has applied for approval of a natural resources cluster development at 12205-12225 SE 19th Ave. This site is in the R-5 Zone. The land use application file number is NR-2018-005.
2. The applicant seeks approval for a Natural Resources Cluster Development with a total of 12 single family detached homes (10 new and 2 existing homes to be remodeled) on a site located between 19th Ave and the Willamette slough adjacent to Elk Rock park. The site includes 100-yr floodplain, mapped natural resource areas, and the Willamette Greenway. Variances are requested to a side yard setback, a front yard setback, building height for the homes not adjacent to 19th Ave, and to allow garage doors to exceed 50% of the building width.
3. The proposal is subject to the following provisions of the Milwaukie Municipal Code (MMC):
 - MMC 12.16 Access Management
 - MMC 12.24 Clear Vision at Intersections
 - MMC 18.04 Flood Hazard Area
 - MMC 19.301 Low Density Residential Zones
 - MMC 19.401 Willamette Greenway Zone
 - MMC 19.402 Natural Resources
 - MMC 19.504 Site Design Standards
 - MMC 19.505 Building Design Standards
 - MMC 19.600 Off-Street Parking and Loading
 - MMC 19.700 Public Facility Improvements
 - MMC 19.911 Variances
 - MMC 19.1006 Type III Review

Only the sections relevant to the decision for denial of the application are addressed below.

4. The application has been processed and public notice provided in accordance with MMC Section 19.1006 Type III Review. Public hearings were held on July 23, September 10, and October 8, as required by law.

5. MMC 18 Flood Hazard Regulations

- a. MMC 18.04 provides standards intended to minimize public and private losses due to flood conditions in specific areas. The regulations established in MMC Title 18 do this in part by controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters; controlling filling, grading, dredging, and other development which may increase flood damage; and preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas. As per MMC Section 18.04.100, a development permit is required prior to any construction or development within the flood management area.

The project site is located in special flood management areas. The applicant states within the application materials that they acknowledge the inherent risks of building within the floodplain and will construct the project in accordance with current federal and local requirements for construction of homes within a floodplain through obtaining all relevant permits.

The Planning Commission finds that MMC 18 applies to the proposed development.

(1) MMC 18.04.150 General Standards

MMC 18.04.150 establishes the required standards for development in a flood hazard area.

(a) Anchoring

- (i) All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
- (ii) All manufactured homes shall be anchored to resist flotation, collapse, or lateral movement to the structure, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, over-the-top and frame ties to ground anchors (reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques).

The applicant proposes that all new structures in this development will be securely anchored to properly designed foundations to prevent flotation, lateral movement or collapse in accordance with accepted engineering practices.

Additionally, the applicant must meet these requirements for structures that are substantially improved.

(b) Construction Materials and Methods

- (i) All new construction and substantial improvements shall be constructed with materials and utilize equipment resistant to flood damage.
- (ii) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
- (iii) 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.

The applicant proposes that all new structures would be constructed with concrete foundations extending above the 100-year flood elevation with flood vents to allow for unrestricted flow of flood water. Electrical, heating, ventilation and plumbing systems would be elevated above flood elevation or designed to be watertight per local and federal design guidelines for "floodproof" construction. These standards must also apply to substantially improved structures.

The proposed development is in an area likely of high flood velocity. The applicant has insisted in communication with city staff on utilizing foundation designs that are discouraged by federal guidance. The applicant did not consider minimizing flood damages through utilizing pier, post, or piling foundations. The applicant is not proposing these foundation types, even though they are preferred by FEMA guidance and are approved alternatives for minimizing disturbances in natural resource areas (MMC 19.402.12.B.1.b.(2).(a)).

(c) Utilities

- (i) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system;
- (ii) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters; and
- (iii) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

The applicant proposes that all new water supply and sanitary sewer systems would be designed to minimize or eliminate infiltration of floodwaters in accordance with accepted engineering practices. No on-site waste disposal systems are proposed.

(d) Subdivision Proposals

- (i) All subdivision proposals shall be consistent with the need to minimize flood damage.
- (ii) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize or eliminate flood damage.
- (iii) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.
- (iv) Base flood elevation data shall be provided for subdivision proposals and other proposed development which contain at least fifty (50) lots or five (5) acres (whichever is less).

No subdivision is proposed with this application. This application is for a 12-unit condominium development. This criterion does not apply.

(e) Review of Building Permits

Where elevation data are not available, applications for building permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two (2) feet above grade in these zones may result in higher insurance rates.

Federally established flood elevation data is available for the site. The applicable Flood Insurance Rate Map (FIRM) is 41005C0017D. The flood elevation of the 1996 areas of inundation has been established by MMC 18.04.030.

(f) Balanced Cut and Fill

The displacement of flood storage area by the placement of fill or structures (including building foundations) shall conform to the following standards for balanced cut and fill:

- (i) The placement of fill or structures that displaces ten (10) cubic yards or less of flood storage area is exempt from the requirements of subsection 2 below.
- (ii) The placement of fill or structures that displaces more than ten (10) cubic yards of flood storage area shall comply with the following standards:
 1. No net fill in any floodplain is allowed.
 2. All fill placed in a floodplain shall be balanced with at least an equal amount of soil material removal.
 3. Any excavation below bankfull stage shall not count toward compensating for fill.

4. 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 may be located in the same drainage basin and as close as possible to the fill site subject to the following:
 - a. The proposed excavation and fill will not increase flood impacts for surrounding properties as determined through hydrologic and hydraulic analysis;
 - b. The proposed excavation is authorized under applicable municipal code provisions including Section 19.402 Natural Resources; and
 - c. Measures to ensure the continued protection and preservation of the excavated area for providing balanced cut and fill shall be approved by the City.

The applicant proposes each new building will have a flow through below grade foundation to act as floodplain storage. The applicant provided a letter that estimated the average cut for each new building will be 40 cubic yards. This assumed that each new building will have a stem wall foundation for the entire first floor (approximately 800 sqft). This is likely an overestimation. It would be more typical for the portion of the first floor that is a garage to have a slab on grade foundation, which would not provide flood storage or cut.

Even with the over estimation, it has not been established that enough cut is possible to offset the required fill for grading the private street to one foot above base flood elevation.

Additionally, it has not been sufficiently proven that the proposed foundation type is feasible to use in this floodplain zone. Crawlspace below grade on all sides are considered basements by the National Flood Insurance Program (NFIP) and must be raised one foot above the Base Flood Elevation (BFE).

5. Temporary fills permitted during construction shall be removed at the end of construction.

Any temporary fills needed for construction will be removed at the end of construction. No temporary fills have been proposed.

6. 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.

No new culverts, stream crossings or transportation projects are proposed. This criterion does not apply.

7. Excavation and fill required for the construction of detention facilities or structures, and other facilities, shall be designed to reduce or mitigate flood impacts and improve water quality. Levees shall not be used to create vacant buildable lands.

A stormwater facility has been proposed inside the area that is being excavated to balance floodplain cut and fill. No levees have been proposed.

(g) Crawlspace Construction

Below-grade crawlspaces are allowed subject to the following standards as found in FEMA Technical Bulletin 1101, Crawlspace Construction for Buildings Located in Special Flood Hazard Areas.

- (i) 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. Hydrostatic loads and the effects of buoyancy can usually be addressed through the required openings stated in Section B of FEMA Technical Bulletin 1101. Because of hydrodynamic loads, crawlspace construction is not allowed in areas with flood velocities greater than five (5) feet per second unless the design is reviewed by a qualified design professional, such as a registered architect or professional engineer. Other types of foundations are recommended for these areas.

The proposed development is in FEMA zone AE where high flow velocities are likely. The development is intersected by mapped floodplain cross section E of Flood Insurance Study (FIS) number 41005CV001A. Table 5 of the study lists a mean flooding velocity of 5.9 ft/s at the floodway located at cross section E. The applicant proposes that all new structures would be constructed with flow through, enclosed foundations with crawl spaces or garages below the BFE. The applicant is required to have all enclosed areas

below the BFE reviewed by a design professional for hydrodynamic loading. Design documentation has not been provided.

Additionally, the applicant must meet these requirements for structures that are substantially improved.

- (ii) The crawlspace is an enclosed area below the base flood elevation (BFE) and, as such, must have openings that equalize hydrostatic pressures by allowing the automatic entry and exit of floodwaters. The bottom of each flood vent opening can be no more than one (1) foot above the lowest adjacent exterior grade.

The applicant has proposed all crawlspaces and garages located below the BFE will have appropriately sized automatic flood vents properly installed. Hydrodynamic forces in addition to hydrostatic forces are expected in high velocity floodzones. Additional design review is required by a licensed professional be conducted to verify the feasibility of using crawlspaces in this floodzone. A crawlspace below grade on all sides is considered a basement by the NFIP. All basements must be raised one foot above BFE.

Additionally, the applicant must meet these requirements for structures that are substantially improved.

- (iii) Portions of the building below the BFE must be constructed with materials resistant to flood damage. This includes not only the foundation walls of the crawlspace used to elevate the building, but also any joists, insulation, or other materials that extend below the BFE. The recommended construction practice is to elevate the bottom of joists and all insulation above BFE.

The applicant proposes that all wood joists, insulation and other building components would be located above the BFE. The applicant proposes garages and building entry areas located below BFE will have concrete floors and walls.

Additionally, the applicant must meet these requirements for structures that are substantially improved.

The applicant's proposed design relies on the absence of hydrodynamic loads likely in this flood zone. The flood-hazard data on file with the city indicates hydrodynamic loads are likely.

- (iv) Any building 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.

The applicant has proposed that all building utility systems within the crawlspaces of the proposed homes would be designed so that floodwaters cannot enter the systems. The applicant proposes all ductwork and HVAC units would be located above the BFE.

Additionally, the applicant must meet these requirements for structures that are substantially improved.

Utility systems not locate above the BFE would be inundated during the 100-year flood. The development is proposed in a high velocity flood zone. These utilities would be susceptible to significant hydrodynamic forces.

- (v) The interior grade of a crawlspace below the BFE must not be more than two (2) feet below the lowest adjacent exterior grade.

The applicant proposes that all crawl spaces would be less than two feet below lowest adjacent grade to allow for drainage.

Additionally, the applicant must meet these requirements for structures that are substantially improved.

- (vi) 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 four (4) feet at any point. The height limitation is the maximum allowable unsupported wall height according to the engineering analyses and building code requirements for flood hazard areas.

The applicant proposes that no crawlspace foundation walls would have more than 4 feet of unbalanced fill as proposed. The applicant has not established the feasibility of crawlspaces within this flood zone.

Additionally, the applicant must meet these requirements for structures that are substantially improved.

- (vii) There must be an adequate drainage system that removes floodwaters from the interior area of the crawlspace. The enclosed area should be drained within a reasonable time after a flood event. The type of drainage system will vary because of the site gradient and other drainage characteristics, such as soil types. Possible options include natural drainage through porous, well-drained soils and drainage systems such as perforated pipes, drainage tiles or gravel or crushed stone drainage by gravity, or mechanical means.

No specific drainage system has been proposed by the applicant.

- (viii) The velocity of floodwaters at the site should not exceed five (5) feet per second for any crawlspace. For velocities in excess of five (5) feet per second, other foundation types should be used.

The development is in flood zone AE where FEMA considers high velocity floods as likely. The FIS table for the nearest cross-section lists 5.9 ft/s as the mean flood velocity. The FIS must be revised in order to allow crawlspace construction. The applicant has not demonstrated that proposed foundation types are feasible.

The Planning Commission finds that the standards in MMC 18.04.150 are not met.

(2) 18.04.160 Specific Standards

MMC 18.04.160 establishes specific required provisions and standards for development in special flood hazard and flood management areas where base flood elevation data has been provided.

(a) Residential Construction

New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated one (1) foot above base flood elevation.

The applicant proposes that all new structures would be constructed with concrete foundations extending above the 100-year flood elevation with finished floors at least one foot above the BFE. The applicant must also meet these requirements for substantial improvements of the existing buildings. The NFIP defines a "basement" as any area that is below-grade on all sides. The regulations do not allow basements to extend below the BFE.

(b) Miscellaneous Provisions

(i) For all new construction and substantial improvements, 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 registered professional engineer or architect or must meet or exceed the following minimum criteria:

- (i) A minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided.
- (ii) The bottom of all openings shall be no higher than one (1) foot above grade.
- (iii) Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

The applicant proposes that automatic flood vents would be installed at all areas below the BFE. These flood vents may not appropriately deal with the

hydrodynamic loadings expected. The applicant is proposing extensive closed space in a high velocity flood zone.

Additionally, the applicant must meet these requirements for structures that are substantially improved.

(3) MMC 18.04.170 Floodways

MMC 18.04.107 establishes the standards and requirements for development in floodways, which are areas located within areas of special flood hazard. These standards are established since the floodway is an extremely hazardous area due to the velocity of floodwaters.

The applicant has proposed a dock in the floodway. This will require state authorization after city planning approval is obtained. The applicant will need a no rise certificate for work in the floodway.

As proposed, the development does not meet MMC 18 and is not recommended for approval.

6. MMC 19.301 Low Density Residential Zones (including R-5)

a. Table 19.301.4 establishes standards for development in the R-5 zone.

Table 19.301.4 Residential Zone R-5 Development Standards			
Standard	Required	Proposed	Staff Comment
1. Minimum Lot Size	5,000 sq ft	3.66 acres	<i>Per Finding 7-b, the proposal is a natural resources cluster development. More than one principal building or structure may be placed on a lot</i>
2. Minimum Lot Width	50 ft	N/A	<i>Per Finding 7-b, the proposal is a natural resources cluster development. Minimum lot width and lot depth standards do not apply.</i>
3. Minimum Lot Depth	80 ft	N/A	<i>Per Finding 7-b, the proposal is a natural resources cluster development. Minimum lot width and lot depth standards do not apply.</i>

4. Minimum Setbacks	20 ft (front, rear) 5 ft (side) 15 ft (street side)	N/A	Per Finding 7-b, the proposal is a natural resources cluster development. MMC 19.402.14.C establishes a minimum yard depth of 25 ft. A variance has been submitted requesting relief from this standard.
5. Off-Street Parking and Loading	Min one/dwelling unit; no maximum	20 spaces in garages + 16 spaces in driveways	Complies with standard.
6. Height Restriction	2½ stories or 35 ft, whichever is less	3 stories/32 ft	A variance has been requested to allow 3-story homes.
7. Lot Coverage	30% max.	8.1% lot coverage	Complies with standard.
8. Minimum Vegetation	35% min.	83.6%	Complies with standard.
9. Frontage	35 ft	240 ft along 19 th Ave. 680 ft along Sparrow St.	Complies with standard.
10. Density	7.0-8.7 units/net acre	12 dwelling units	Per Finding 7-b, the development is proposed as a cluster development in accordance with the provisions of Section 19.402.14. The density allowed for the gross property area would be 25-32 dwelling units based on the ratio of 7-8.7 dwelling units per the base R-5 zone. The proposed density of 12 dwellings is 3.28 dwellings per gross acre.
11. Transportation Requirements	Yes	Requesting adjustment to sidewalk width, planting strip requirement.	As conditioned, application will comply.

With conditions, the Planning Commission finds that this standard would be met.

However, as per Findings 5, 7-a and 7-b, the overall project has been found deficient and is recommended for denial.

7. MMC 19.400 Overlay Zones and Special Areas

a. MMC 19.401 Willamette Greenway Overlay Zone

MMC 19.401 establishes criteria for reviewing and approving development in the Willamette Greenway.

(1) MMC Subsection 19.401.5 Procedures

MMC 19.401.5 establishes procedures related to proposed uses and activities in the Willamette Greenway zone. Development in the Willamette Greenway zone requires conditional use review, subject to the standards of MMC Section 19.905 and in accordance with the approval criteria established in MMC Subsection 19.401.6.

The construction of new primary structures constitutes “development” as defined in MMC Subsection 19.401.4 and is subject to the conditional use review standards of MMC 19.905 and the approval criteria of MMC 19.401.6.

(2) MMC Subsection 19.401.6 Criteria

MMC 19.401.6 establishes the criteria for approving conditional uses in the Willamette Greenway zone.

(a) Whether the land to be developed has been committed to an urban use, as defined under the State Willamette River Greenway Plan

The State Willamette River Greenway Plan defines “lands committed to urban use” in part as “those lands upon which the economic, developmental and locational factors have, when considered together, made the use of the property for other than urban purposes inappropriate.”

The subject properties are lots that were platted in 1884 and shown with a residential zoning designation on the City’s zoning map since at least 1968. The upland portion of the property is committed to an urban use. The majority of the area in the floodplain is undeveloped and is not appropriate for urban use.

(b) Compatibility with the scenic, natural, historic, economic, and recreational character of the river

The site is adjacent to the Willamette slough and according to 1967 aerial photographs, it was actively used for agricultural or logging use in the past. Residential development within the floodplain will disrupt the scenic and natural character of the Willamette slough which is a part of the Willamette River.

(c) Protection of views both toward and away from the river

The site is adjacent to the Willamette slough and provides views to the main channel of the river to the northwest and to the southwest. There are limited views from the 19th Ave public right-of-way. Additional development on the site will further limit views of the river.

- (d) Landscaping, aesthetic enhancement, open space, and vegetation between the activity and the river, to the maximum extent practicable
- (e) *The existing site has been disturbed over the years and although it is located in the floodplain, there is little significant natural vegetation on the site east of the slough. The site presents an opportunity to restore the native vegetation in the floodplain area which will enhance natural functions along the river. Public access to and along the river, to the greatest possible degree, by appropriate legal means*

No public access is provided by the development. The subject properties are private residential properties that are adjacent to the river via the slough. The proposed development would only provide private access to the river.

- (f) Emphasis on water-oriented and recreational uses
The subject properties are private residential properties. The project would provide direct private access to the Willamette River via a proposed dock into the slough.
- (g) Maintain or increase views between the Willamette River and downtown
The site is not in the downtown.
- (h) Protection of the natural environment according to regulations in Section 19.402

As identified in Finding 7-b, the application is deficient and does not meet the applicable approval criteria for development and disturbance in mapped natural resource areas.

- (i) Advice and recommendations of the Design and Landmarks Committee, as appropriate

The subject properties are not within a downtown zone and the proposed activity does not require review by the Design and Landmarks Committee.

- (j) Conformance to applicable Comprehensive Plan policies

The Willamette Greenway Element in the Milwaukie Comprehensive Plan includes policies related to land use, public access and view protection, and maintenance of private property. These policies include the requirement of a conditional use permit for new development and intensification of existing uses, evaluation of development impacts to visual corridors, and limitations on authorizing the unrestricted public use of private land.

The Natural Hazards Element includes policies that prohibit development in known areas of natural disasters and hazards without appropriate

safeguards. The Open Spaces, Scenic Areas, and Natural Resources Element includes policies to conserve open space and protect and enhance natural and scenic resources.

The proposed development is being reviewed through the Willamette Greenway conditional use process as provided in MMC Subsection 19.401.5.

Natural Hazards Element Objective #1 states:

To manage identified 100 year floodplains in order to protect their natural function as waterways, and to protect the lives and property of those individuals and concerns currently located within and along the floodplain boundary.

Policy #4 under Natural Hazards Element Objective #1 states:

Whenever possible, the floodplain will be retained as open space and used for recreation, wildlife areas, or trails. Dedication of lands or public easements within the floodplain is encouraged when indicated by the Recreational Needs Element, and may be required as a condition of development along creeks and rivers or other water bodies or wetlands.

Policy #1 under Environmental and Natural Resources Objective #2 states in part:

Protect designated natural resources and their associated values through preservation, intergovernmental coordination, conservation, mitigation, and acquisition of resources.

- Regulate activities within natural resources that may be detrimental to the provision of food, water, and cover for wildlife.

The objective and policies listed above direct the City to protect functions and values of natural resources and floodplains to retain floodplains as open space, whenever possible. The proposed project results in development of the floodplain and a designated habitat conservation area contrary to the objective and policies.

- (k) The request is consistent with applicable plans and programs of the Division of State Lands

The proposed activity is not inconsistent with any known plans or programs of the Department of State Lands (DSL).

- (l) A vegetation buffer plan meeting the conditions of Subsections 19.401.8.A through C

The subject properties are not immediately adjacent to the main channel of the Willamette River. The proposed residential development is providing a 50 ft buffer from the top of the slough bank and no areas of riverbank (or slough bank) erosion have been identified as requiring stabilization. No existing large trees or pristine sections of native vegetation exist on the portion of the site proposed to be

developed. The vegetated buffer as identified on the planting plan using native species will be an enhancement to the existing conditions.

The Planning Commission finds that the proposed activity does not meet all relevant approval criteria provided in MMC 19.401.6.

The Planning Commission finds that the proposed activity does not meet all applicable standards of development activity in the Willamette Greenway zone.

b. MMC 19.402 Natural Resources

Note: ESA, the City's environmental consultant, reviewed the applicant's technical report and presented its assessment to the City in a summary memo, which informs this portion of the findings.

MMC 19.402 establishes regulations for designated natural resource areas. The standards and requirements of MMC 19.402 are an acknowledgment that many of the riparian, wildlife, and wetland resources in the community have been adversely impacted by development over time. The regulations are intended to minimize additional negative impacts and to restore and improve natural resources where possible.

(1) MMC Subsection 19.402.3 Applicability

MMC 19.402.3 establishes applicability of the Natural Resource (NR) regulations, including all properties containing Water Quality Resources (WQRs) and Habitat Conservation Areas (HCAs) as shown on the City's Natural Resource (NR) Administrative Map.

The project site is bisected by the Willamette Slough. The City's NR Administrative Map shows WQR and HCA designations on the majority of site and portions of these natural resource areas will be disturbed by the proposed development.

As presented in the applicant's submittal materials, the proposed development will temporarily or permanently disturb approximately 29,062 sq ft of WQR and/or HCA area. At that scale, the proposed activity is not listed as exempt according to the standards outlined in MMC 19.402.4.

The Planning Commission finds that the requirements of MMC 19.402 are applicable to the proposed activity.

(2) MMC Subsection 19.402.8 Activities Requiring Type III Review

MMC 19.402.8 establishes that certain activities within a designated WQR and/or HCA are subject to Type III review in accordance with MMC 19.1006. As per MMC 19.402.8.A.1, this includes activities allowed in the base zone that are not otherwise exempt or permitted as a Type I or II activity.

The level of disturbance proposed within the designated WQR and HCA areas on the subject property exceeds the levels allowed by Type I and II review, as provided in MMC 19.402.6 and 402.7, respectively. As such, the activity is subject to Type III review and

the discretionary process established in MMC 19.402.12. As noted in Finding 7-b above, the Natural Resource review is associated with other applications being processed concurrently with Type III.

The Planning Commission finds that the proposed activity is subject to Type III review.

(3) MMC Subsection 19.402.9 Construction Management Plans

MMC 19.402.9 establishes standards for construction management plans, which are required for projects that disturb more than 150 sq ft of designated natural resource area. Construction management plans must provide information related to site access, staging of materials and equipment, and measures for tree protection and erosion control.

The applicant's Natural Resource Review report states that a construction management plan will be submitted for review at the time of submittal for development permits.

(4) MMC Subsection 19.402.11 Development Standards

MMC 19.402.11 establishes development standards for projects that impact a designated natural resource, including requirements to protect natural resource areas during development and general standards for required mitigation (e.g., plant species, size, spacing, and diversity).

MMC Subsection 19.402.11.D establishes mitigation requirements for disturbance within HCAs. Because the proposed development will not result in the removal of any trees, and the few trees on the site are on the margins, the applicant proposes to calculate required mitigation via Option 2. Mitigation Option 2 calculates required mitigation based on the size of the disturbance area and assigns required trees and shrubs based on this area.

Using the mitigation planting ratio provided in MMC Subsection 19.402.11.D.2.b as a guide, for the total WQR and HCA disturbance of approximately 38,500 sq ft, the applicant proposes to plant 385 native trees and 1,925 native shrubs. The mitigation areas have been identified as the 41,708 sq ft "island" west of the slough. Mitigation on the "island" includes removal of invasive species and soil remediation to support the new plantings. As proposed, the mitigation plantings will meet the minimum requirements established in MMC Subsection 19.402.11.B. Mitigation trees will be of at least ½-in caliper (measured at 6 ft above the ground level after planting) and shrubs will be of at least 1-gallon size and at least 12-in height. A full planting list was submitted identifying the proposed mix of species.

However, the "island" is subject to periodic flooding and the mitigation plantings will be susceptible to damage during any future flooding event. In addition, the applicant did not provide information about how the mitigation area will be accessed to perform the required work. Because this area is separated from the development portion of the site by the slough, a detailed plan that shows access points is necessary.

Given the risk of periodic flooding, the Planning Commission finds that the mitigation area is not appropriate and therefore the development standards of MMC 19.402.11 are not met.

(5) MMC Subsection 19.402.12 General Discretionary Review

MMC 19.402.12 establishes the discretionary review process for activities that substantially disturb designated natural resource areas.

(a) Impact Evaluation and Analysis

MMC Subsection 19.402.12.A requires an impact evaluation and alternatives analysis in order to determine compliance with the approval criteria for discretionary review and to evaluate alternatives to the proposed development. A technical report prepared by a qualified natural resource professional is required and should include the following components:

(i) Identification of ecological functions

The application concludes that the proposed development area is “degraded” based on the low cover of shrubs and trees and the high percentage of weeds in the groundcover. This characterization is assumed to meet the Class C “Poor” category per Table 19.402.11.C. The application does not provide a detailed discussion of ecological functions of riparian habitat.

(ii) Inventory of vegetation

The applicant’s submittal materials include a technical report prepared by Environmental Technology Consultants, a private firm providing a range of environmental consulting services including natural resource assessment, wetland delineation, and environmental restoration. The technical report includes an impact evaluation and alternatives analysis, as well as an inventory of existing vegetation. The natural resource documentation concludes that the WQR of the slough is “degraded” which appears accurate based on the lack of shrub and tree cover on-site. An assessment of the condition of the natural resources west of the slough was also provided.

(iii) Assessment of water quality impacts

Four sample plots were established by the applicant to characterize vegetation and investigate the presence of potential wetlands (no wetlands were found). ESA agrees with the determination that no wetlands conditions occur in the proposed mitigation area, although the area is presumed to experience flooding during high flows of the Willamette River.

(iv) Alternatives analysis

The application materials consider various alternatives to the proposed development: an alternative with 23 dwelling units, an alternative with 18 units, and an alternative with 16 dwelling units. Both alternatives would result in significantly more disturbance to the WQR and HCA. The report concludes that the proposed development is the most practicable alternative that results in the least impact to designated natural resources on the site.

<i>Alternative</i>	<i>WQR/HCA impacts (combined)</i>	<i>Wetland fill</i>	<i>Below OHWM of the Willamette River</i>
<i>Preferred – 12 units</i>	<i>38,500 ft²</i>	<i>0</i>	<i>Repair to existing dock, no new structure</i>
<i>#2 – 23 units</i>	<i>57,213 ft²</i>	<i>3,363 ft²</i>	<i>Proposed Dock plus possible additional fill</i>
<i>#3 – 16 units</i>	<i>>38,500 ft²: less impact than #2 but more than #4 and the preferred because the private drive would extend further south into the buffer of Wetland A.</i>	<i>0</i>	<i>Proposed Dock</i>
<i>#4 – 18 units</i>	<i>>38,500 ft²</i>	<i>0</i>	<i>Proposed Dock</i>
<i>#5 – 16 units¹</i>	<i>Unknown – includes units on the “island” west of the slough and an access bridge</i>	<i>unknown</i>	<i>Proposed Dock</i>

In addition to the alternatives presented above, ESA suggested that the applicant consider a proposal that clustered units closer to 19th Ave. The applicant dismissed the suggestion in an email stating that ESA’s suggestion was below minimum density and did not provide adequate parking. The ESA proposal was merely a suggested concept to allow the applicant to develop and consider an alternative that was a serious attempt at avoiding the HCA to the extent practicable and clustering development close to 19th Ave. The applicant did not generate such an alternative.

¹ Alternative #5 submitted as a site plan on July 12, 2019 to illustrate another development alternative. No mitigation, floodplain evaluation, etc. was provided for this alternative.

Based on the alternatives presented, it is unclear if the preferred design impacts the least amount of natural resources because the materials do not include an alternative, or alternatives, that emphasizes fewer homes, duplexes, or multifamily units clustered in a way that attempts to avoid impacts to the HCA. A set of duplexes or triplexes fronting on 19th Ave with parking tucked underneath via a common driveway in the Sparrow St ROW may offer a viable option for minimizing impacts to the HCA and the floodplain.

The Planning Commission finds that the applicant's impact evaluation and alternatives analysis is not sufficient for purposes of reviewing the proposed activity against the approval criteria provided in MMC 19.402.12. This standard is not met.

- (v) Demonstration that no practicable alternative method or design exists that would have a lesser impact on the resource and that impacts are mitigated to the extent practicable

As identified above, the Planning Commission finds that the applicant's impact evaluation and alternatives analysis is not sufficient for purposes of reviewing the proposed activity against the approval criteria provided in MMC 19.402.12. This standard is not met.

- (vi) Mitigation plan

The applicant's submittal materials include a mitigation plan for permanent and temporary impacts to the WQR and HCA.

ESA has evaluated the proposed mitigation plan and concluded that it is sufficient. The applicant proposes to mitigate for natural resource impacts in the western portion of the parcels west of the slough. The overall concept is to plant a wide variety of native shrubs, trees and groundcover with the aim that suitable species will establish and others may not. As noted by ESA, the proposed mitigation site appears suitable but is anticipated to be challenging because of its position in the Willamette River floodplain, periodic flooding, the existing extent of weeds, and presence of shallow bedrock in some areas. Despite the potential challenges, several of the native shrubs and trees are anticipated to establish given adequate irrigation and maintenance.

The soils seem suitable on-site, although site preparation and weed control will need to be thorough and will require several site visits and treatments. The fact that there are Oregon ash and black cottonwood saplings/trees on-site means that there are suitable conditions for these native plants.

Floodplains can support wooded areas and the species that generally thrive in floodplains include Oregon ash, black cottonwood, willows, and red alder.

Oak trees can also handle winter flooding as long as the soils dry out in the

summer. Some plant loss and mortality should be expected due to flooding and would be part of the 80% survival criterion.

The Planning Commission finds that the applicant's mitigation plan is not sufficient for purposes of reviewing the proposed activity against the approval criteria provided in MMC 19.402.12. This standard is not met.

(b) Approval Criteria

MMC Subsection 19.402.12.B provides the approval criteria for discretionary review as follows:

Note: ESA reviewed the applicant's technical report and presented its assessment to the City in a summary memo, which informs this portion of the findings.

- (i) Avoid – The proposed activity avoids the intrusion of development into the WQR and/or HCA to the extent practicable, and has less detrimental impact to the natural resource areas than other practicable alternatives.

The Willamette Slough bisects the site and the 100-year floodplain covers nearly all of the site, resulting in significant areas of designated WQR and HCA. Site development that avoids any impacts to the WQR and HCA at permitted densities is not possible. The applicant has proposed a development of 12 single family homes and a private drive for access and concentrates impacts in the eastern portion of the site. However, the buildings and associated roadway and stormwater facilities would intrude into the WQR and HCA and disturb approximately 0.88 acres of natural resource area. As noted in the discussion of alternatives noted in Finding 7-f(1) above, consideration must be given to an alternative that makes a serious attempt to avoid impacts to the HCA by clustering development near 19th Ave.

- (ii) Minimize – If the applicant demonstrates that there is no practicable alternative to avoid disturbance of the natural resource, then the proposed activity shall minimize detrimental impacts to the extent practicable.

As noted in the above discussion of avoiding impacts, there must be serious consideration given to an alternative that truly minimizes impacts. The preferred alternative impacts the entire site with development of the portion east of the slough and intensive site work to prepare the area west of the slough for mitigation plantings.

- (iii) Mitigate – If the applicant demonstrates that there is no practicable alternative that will avoid disturbance of the natural resource, then the proposed activity shall mitigate for adverse impacts to the resource area. The applicant shall present a mitigation plan that demonstrates compensation for detrimental impacts to ecological functions, with mitigation occurring on the site of the disturbance to

the extent practicable, utilization of native plants, and a maintenance plan to ensure the success of plantings.

As noted in Finding 7-b(5), the applicant's submittal includes a mitigation plan for the WQR and HCA disturbance that will accompany the proposed development. The applicant has proposed to plant 385 native trees and 1,925 native shrubs and to remove nuisance plants and noxious material and debris. The proposed mitigation appears to meet the code requirements with significant management.

Although, the proposal may be able to meet code requirements for mitigation, the Planning Commission finds that the proposed development does not meet the approval criteria for discretionary review as established in MMC 19.402.12.B.

(c) Limitations and Mitigation for Disturbance of HCAs

MMC Subsection 19.402.12.C establishes the discretionary review process for mitigation of more HCA disturbance than would be allowed by the nondiscretionary standards of MMC Subsection 19.402.11.D.1. In such cases, the applicant must submit an Impact Evaluation and Alternatives Analysis consistent with the standards established in MMC 19.402.12.A and subject to the approval criteria established in MMC 19.402.12.B.

As discussed in Finding 7-b(5), the applicant's submittal materials include a technical report that provides an evaluation of impacts to the WQR as well as to those impacted HCA areas beyond the WQR that does meet the standards established in MMC 19.402.12.A. As discussed in Finding 7-b(5), the proposed development does not meet the approval criteria established in MMC 19.402.12.B.

The Planning Commission finds that the proposed development does meet the discretionary standards for disturbance of HCAs as established in MMC 19.402.12.C.

The Planning Commission finds that the proposed development does not meet the applicable discretionary review standards of MMC 19.402.12.

8. MMC Section 19.905 Conditional Uses

MMC 19.905 establishes regulations for conditional uses, including standards for establishing uses identified as conditional uses in any overlay zones. As noted in Finding 7-a and as provided in MMC Subsection 19.401.5.A, activities within the Willamette Greenway zone that trigger Willamette Greenway review are subject to the provisions of Section 19.905 as conditional uses.

a. MMC Subsection 19.905.3 Review Process

MMC 19.905.3 establishes the process by which a new conditional use must be reviewed.

As noted in Finding 7-a, the proposed activity is development as defined for the Willamette Greenway zone and so requires review as a conditional use.

MMC 19.905.3.A requires that establishment of a new conditional use be evaluated through the Type III review process per MMC Section 19.1006.

b. MMC Subsection 19.905.4 Approval Criteria

MMC 19.905.4.A establishes the approval criteria for a new conditional use or a major modification to an existing conditional use.

- (1) The characteristics of the lot are suitable for the proposed use considering size, shape, location, topography, existing improvements, and natural features.

The subject property is in the 100-yr floodplain and contains mapped natural resources and is not suitable for development for the reasons described in Findings 5 and 7.

The Planning Commission finds that this standard is not met.

- (2) The operating and physical characteristics of the proposed use will be reasonably compatible with, and have minimal impact on, nearby uses.

As described in Finding 5, impacts of the development on the 100-yr floodplain may impact surrounding properties.

The Planning Commission finds that this standard is not met.

- (3) All identified impacts will be mitigated to the extent practicable.

As described in Findings 5 and 7, as designed, mitigation of floodplain impacts and impacts to mapped natural resources has not been demonstrated.

The Planning Commission finds that this standard is not met.

- (4) The proposed use will not have unmitigated nuisance impacts, such as from noise, odor, and/or vibrations, greater than usually generated by uses allowed outright at the proposed location.

The proposed development is for a residential condominium development of 12 single-family homes in a residential zone and will not generate any unmitigated nuisance impacts due to that use.

The Planning Commission finds that this standard is met.

- (5) The proposed use will comply with all applicable development standards and requirements of the base zone, any overlay zones or special areas, and the standards in Section 19.905.

The subject property is in the Residential R-5 zone, Willamette Greenway zone, 100-yr floodplain, and contains mapped WQR and HCA. In addition to the R-5 standards for building height, side-yard height plane, lot coverage, and minimum vegetation, the proposed development is subject to the standards for development in the floodplain, the WG zone, and for natural resources cluster development. As addressed in Finding 14,

the applicant has requested variances from the side yard setbacks for one of the lots, the width of garage doors, building height and requires variances from the front yard setback and number of accessways.

As addressed in Findings 5 and 7 the proposed activity will not comply with the relevant standards of the flood hazard area, Willamette Greenway overlay zone, or the Natural Resources chapter in the code.

The Planning Commission finds that this standard is not met.

- (6) The proposed use is consistent with applicable Comprehensive Plan policies related to the proposed use.

As addressed in Finding 7-a(2), the proposed development is not consistent with all relevant polices in the Comprehensive Plan.

The Planning Commission finds that this standard is not met.

- (7) Adequate public transportation facilities and public utilities will be available to serve the proposed use prior to occupancy pursuant to Chapter 19.700.

The proposed development triggers the requirements of MMC 19.700 and will be reviewed for compliance with the applicable provisions of this chapter at the time development permits are submitted.

The Planning Commission finds that this standard is met.

The Planning Commission finds that the proposed development does not meet the approval criteria outlined in MMC 19.905.4.A for establishing a conditional use.

- c. MMC Subsection 19.905.5 Conditions of Approval

MMC 19.905.5 establishes the types of conditions that may be imposed on a conditional use to ensure compatibility with nearby uses. Conditions may be related to a number of issues, including access, landscaping, lighting, and preservation of existing trees.

The Planning Commission finds that the proposed development does not sufficiently mitigate floodplain or natural resources impacts, as proposed.

- d. MMC Subsection 19.905.6 Conditional Use Permit

MMC 19.905.6 establishes standards for issuance of a conditional use permit, including upon approval of a major modification of an existing conditional use. The provisions include a requirement to record the conditional use permit with the Clackamas County Recorder's Office and provide a copy to the City prior to commencing operations allowed by the conditional use permit.

The Planning Commission finds that the proposed development is inconsistent with the relevant standards established in MMC 19.905 for conditional uses.

9. The application was referred to the following departments and agencies on February 28, 2019:

- Milwaukie Building Division
- Milwaukie Engineering Department
- Milwaukie Public Works Department
- Clackamas County Fire District #1
- Island Station Neighborhood District Association Chairperson and Land Use Committee
- Oregon Marine Board
- Oregon Department of Fish and Wildlife
- Division of State Lands – Wetlands and Waterways
- Oregon Parks and Recreation Department
- North Clackamas Parks and Recreation District

In addition, notice of the public hearing was mailed to owners and residents of properties within 300 ft of the subject property on May 8, 2019.

The public hearing was opened on July 23, 2019 for the staff report, applicant's presentation, and public testimony; the Commission did not deliberate. The Commission closed the public hearing but left the written record open as follows:

1. until August 6 for anyone to submit argument and evidence;
2. until August 13 for anyone to rebut the first open record period submittals; and
3. until September 3 for applicant only to submit final written argument without new evidence.

Agency and NDA comments received are summarized as follows:

- **Chris Stevenson, Jurisdiction Coordinator, Oregon Department of State Lands:**
The Department concurs with the wetland and waterway boundaries as mapped for the site. The letter included information regarding permitting for fill or removal of material from the site.
- **Sarah Hartung, Senior Biologist, ESA (City's on-call Natural Resource consultant):**
ESA has provided three memos serving as peer review of the applicant's Natural Resource Review report.
- **Dalton Vodden, Associate Engineer, City of Milwaukie Engineering Department:**
Comments related to the proposal's compliance with MMC Title 12 Streets, Sidewalks, and Public Places; MMC Chapter 13.14 Stormwater Management; MMC Title 18 Flood Hazard Regulations; and MMC Chapter 19.700 Public Facility Improvements.
- **Izak Hamilton, Fire Inspector, CFD#1:** Standard comments related to fire access and water supply.
- **Island Station NDA Land Use Committee:** comments related to the impacts on views, traffic on 19th Ave, provide additional on-street parking in the development, and concern that the proposed development not be gated.

The following individuals submitted comments in opposition to the project:

- Christopher Roberts
- Kary King
- Jana Tracy
- Steve Gerken
- Joanne Tracy
- Mary Neustadter
- Theresa Silver
- Michele Bertaus-Zabaglio
- John Clinton
- Charlene Toman
- Tienneke Pavesic
- Lura Lee
- Carol Timper
- Serafine Lilien
- Beth Mills
- David Peters
- Victoria Mendez
- Marco Clark
- Rebecca Banyas
- Robert Murakami
- Howard Lanoff
- Kate Morrison
- Priscilla Elliott
- Gavin Bondy
- Sean Garmire
- Douglas Musgrove
- Mary Weick
- Beth Lorio
- Sharon Smith
- Carla Maria Buscaglia
- Mary Weick

The submitted comments can be reviewed here:

<https://www.milwaukieoregon.gov/planning/nr-2018-005>.

**Recommended Conditions of Approval
(REVISED August 6, 2019)
Working Draft – for discussion purposes only
File #NR-2018-005, Elk Rock Estates**

Conditions

1. Conditional Use Permit

As per MMC Subsection 19.905.6, the City will issue a conditional use permit upon approval of an application to establish a conditional use (including the Willamette Greenway conditional use). The applicant must record the conditional use permit with the Clackamas County Recorder's Office and provide a copy to the City prior to developing the property.

2. Prior to the approval of any building, the following shall be resolved:

- a. The applicant shall submit a Construction Management Plan (CMP) that satisfies the requirements of MMC 19.402.9 and shows the following:
 - i. The CMP must establish root protection zones (RPZs) around trees in WQR/HCA adjacent to any approved work area. Per 19.402.9, the RPZ shall extend from the trunk to the outer edge of the tree's canopy, or as close to the outer edge of the canopy as is practicable for the approved project.
 - ii. Clarify the location of all staging and access areas, and ensure that all temporary disturbance areas have been identified and accounted for in the mitigation plan.
- b. The applicant shall provide a detailed planting plan that includes the following:
 - i. Identifies existing native trees/shrubs to be retained,
 - ii. A typical planting scheme (40 x 40') – note that vine maple is not a tree; tall shrubs may not be substituted for trees,
 - iii. Details regarding site preparation and maintenance including timing and frequency for weed control,
 - iv. Plans for mitigation improvements including site access, where signage will be posted, and how irrigation will be provided across the slough.
 - v. An updated mitigation monitoring and maintenance plan and monitoring report forms. Extended on-going monitoring, including a repair and restoration program, is required to address flood damage. The timeframe for this extended monitoring program is 10 years.
- c. The applicant shall provide documentation by a professional engineer, certified floodplain manager, or other approved professional certifying compliance with all relevant NFIP policies, Oregon Metro Title 3, and Milwaukie Municipal Code Title 18.

- d. Submit a final storm water management plan to the City of Milwaukie Engineering Department for review and approval. The plan shall be prepared in accordance with Section 2 – Stormwater Design Standards of the City of Milwaukie Public Works Standards. In the event the storm management system contains underground injection control devices, submit proof of acceptance of the storm system design from the Department of Environmental Quality.
- e. Analyze the effect of onsite detention to downstream peak flows. If downstream peak flows are shown not to increase with this development, then on-site detention will not be required. Stormwater facilities must be designed to mitigate flooding impacts.
- f. Modify the design of the stormwater facility and area proposed for floodplain cut to achieve an appearance that integrates better with this natural environment. Provide mitigation plantings in this area.
- g. The Willamette River is identified as salmonid habitat; as such, fish passage needs to be considered with new development. Provide fish passage from the low-point of the proposed stormwater facility to the Willamette River, or obtain a statement from a qualified state or federal agency that the proposed stormwater facility is exempt from appropriate fish protection measures.
- h. Submit an operation and maintenance plan for all private stormwater facilities. Include legal documents to ensure continued maintenance and contingency in the event the proposed homeowner's association is ever dissolved.
- i. Provide plans clearly indicating the 34.5 ft NGVD contour (38.0 ft NAVD) of the Metro 1996 areas of inundation. Note that 34.5 ft NGVD, or 38.0 ft NAVD, is considered Base Flood Elevation (BFE) for this project. No net fill can occur within either flood management areas found on site.
- j. Provide plans clearly indicating the bankful elevation contour. Excavation below the bankful elevation shall not count towards floodplain compensatory cut.
- k. Provide separate balanced cut and fill calculations for each flood management area. Include any soil enhancement for the mitigation area in the total fill calculations.
- l. Revise plans for all portions of Private Drive 1 and Private Drive 2 to be at least one foot above design BFE.
- m. Provide documentation on current market value and cost of improvements for existing buildings. All improvements classified as substantial improvements in the flood hazard areas must follow all NFIP requirements for substantial improvements in flood hazard areas.
- n. All right-of-way improvement on SE 19th Ave shall conform with the Island Station Neighborhood Greenway plan. This includes a full street improvements with 15-foot wide pavement, an ADA route identified with tactile warning strips, sharrow pavement markings, 6-inch wide flush mount curb, 3-foot wide load bearing gravel shoulders, and improvements in the identified flexible zone including street trees and acceptable Low Impact Development facility across the site frontage.

- o. At 12205 SE 19th Ave., the existing structural wall (located within the right-of-way) appears to be structurally deficient. Submit a stamped letter from a registered, structural or geotechnical engineer providing calculations and approval that the wall is structurally sound for supporting the adjacent street traffic (per the above design requirements); or submit design and construction plans for a new structural retaining wall from a registered, structural or geotechnical engineer; or remove the existing wall and design and construct a stable slope adjacent to the reconstructed roadway.
 - p. Submit a construction vehicle access route plan through the Island Station Neighborhood for approval by the City Engineer. Submit photographs of the road conditions along the approved route prior to construction vehicles accessing the site. Failure of vehicles related to construction to follow the approved route or missing photographs for sections of road may result in fines detailed in MMC 12.08.050. The condition of the route shall be inspected prior to issuance of the final two occupancy certificates. Any excessive wear or damage as the result of the applicant’s construction activities in the area shall be repaired by the applicant at the applicant’s expense. No occupancy certificate for the final two dwellings shall be issued prior to review and acceptance by the City of the condition of the construction vehicle access route.
3. Prior to issuance of a certificate of occupancy of any building permit, the following shall be resolved:
- a. Prior to the final inspection of the sixth dwelling, submit a letter from the project landscape designer attesting that all required site plantings have been completed in conformance with the approved site plans and with City standards, including all mitigation plantings. This includes removal of all invasive or nuisance species vegetation (as identified on the Milwaukie Native Plant List) per the Natural Resources report and mitigation plan.
 - b. Install a minimum of two permanent signs along the perimeter of the mitigation area stating, “Habitat Mitigation Area” and/or “Protected Sensitive Area” to signify to the public the area is an active restoration site.
 - c. Remove trash and debris from transient camps that have been established on site.
 - d. Provide a narrative describing all actions taken to comply with these conditions of approval. In addition, describe any changes made after the issuance of this land use decision that are not related to these conditions of approval.
 - e. Construct all accessways on SE 19th Avenue to meet all guidelines of the Americans with Disabilities Act (ADA). The driveway approach aprons shall meet city design standards.
 - f. Submit all relevant elevation certificates to the City.
 - g. Record a deed restriction for all garage spaces with floors below BFE to prevent conversion to any use that is not strictly parking, storage, or access. Record a

deed protecting all areas serving as compensatory excavation for balanced floodplain cut and fill.

Record a deed restriction to maintain view corridors between buildings so that Elk Rock Island, the slough, and/or the Willamette River from the street system.

Additional Requirements

1. Prior to any earth disturbance activity, the applicant shall obtain an erosion control permit from the City.
2. At the time of submission of any building permit application, final plans submitted for building permit review shall be in substantial conformance with plans approved by this action, which are the plans stamped received by the City on June 24 and July 3, 2019, except as otherwise modified by these conditions.
3. Limitations on Development Activity
Development activity on the site shall be limited to 7:00 a.m. to 10:00 p.m. Monday through Friday and 8:00 a.m. to 5:00 p.m. Saturday and Sunday, as per MMC Subsection 8.08.070.(1).
4. Landscape Maintenance
As per MMC Subsection 19.402.11.B.9, a minimum of 80% of all required mitigation plantings for WQR or HCA disturbance shall remain alive on the second anniversary of the date the planting is completed. An annual report on the survival rate of all plantings shall be submitted for 2 years.
5. Submit full-engineered plans for construction of all required public improvements on SE 19th Ave, reviewed and approved by the City of Milwaukie Engineering Department.
6. Obtain a right-of-way permit for construction of all required public improvements listed in these recommended conditions of approval.
7. Pay an inspection fee equal to 5.5% of the cost of the public improvements.
8. Provide a payment and performance bond for 100 percent of the cost of the required public improvements.
9. Install all underground utilities, including stubs for utility service prior to surfacing any streets.
10. Clear vision areas shall be maintained at all driveways and accessways and on the corners of all property adjacent to an intersection.
11. Provide a final approved set of electronic "As Constructed" drawings to the City of Milwaukie prior to final inspection.
12. Remove all signs, structures, or vegetation in excess of three feet in height located in "vision clearance areas" at intersections of streets, driveways, and alleys fronting the

proposed development. Prior to the removal of any vegetation, applicant shall confirm with the Engineering department the location of clear vision areas and if the vegetation removal is required to comply with clear vision standards.

13. Expiration of Approval

As per MMC 19.1001.7.E.1.a, proposals requiring any kind of development permit must compete both of the following steps:

- a. Obtain and pay all necessary development permits and start construction within 2 years of land use approval.
- b. Pass final inspection and/or obtain a certificate of occupancy within 4 years of land use approval.

Vera Kolias

From: Justin Gericke
Sent: Friday, July 26, 2019 2:13 PM
To: Robinson, Michael C.
Cc: Vera Kolias; Dennis Egner; Steve Adams; Beth Britell
Subject: MMC 18.04.030 Design Flood Height for Elk Rock Estates

Mike,

At the hearing this week, you entered into the record an objection to the definition of "design flood height" in MMC 18.04.030. Specifically, your objection was to the City's conversion of the water surface elevation of the February 1996 flood event from National Geodetic Vertical Datum (NGVD) to North American Vertical Datum (NAVD). The purpose for the conversation was to enable a comparison between the February 1996 flood elevation and the elevation of the 100 year flood as depicted on the relevant FEMA Flood Insurance Rate Map (FIRM). This comparison is necessary in order to determine which of the two elevations is higher as required by the code. It is important to note that also contained in MMC 18.04.030 is the definition of "water surface elevation," which means the "height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929, (or other datum, where specified)..." Likewise, "[a]rea of February 1996 inundation" is defined in MMC 18.04.030 as "the areas along the Willamette River and its backwaters of Johnson and Kellogg Creeks that were flooded to elevation 34.5 (NGVD) in February of 1996."

Based on these definitions, the 34.5 elevation noted in the definition of "design flood height" is unmistakably in relation to NGVD. In order to compare that elevation to the FEMA 100 year flood elevation, which the most recent FIRM depicts in NAVD, the elevations must be converted to a common datum. Otherwise, they cannot be compared. In this case, city staff used the accepted conversion algorithm developed by NOAA (VERTCON) to convert 34.5 (NGVD) to its equivalent in NAVD. Staff could have also made that comparison by using VERTCON to convert the FIRM measurement in NAVD to its equivalent in NGVD. Regardless of the conversion used, staff determined that the elevation of the February 1996 flood event – 34.5 (NGVD) – is higher than the FEMA 100 year flood elevation.

As this information will likely influence project design, I wanted to pass it along as soon as possible. This information will also be placed into the record pursuant to the briefing schedule.

Please let me know if you have any questions.

Best,

Justin

JUSTIN D. GERICKE

City Attorney
o: 503.786.7529 c: 971.221.6423
City of Milwaukie
10722 SE Main St • Milwaukie, OR 97222

LEGAL MEMORANDUM

To: Planning Commission

Date Written: August 6, 2019

From: Justin D. Gericke, City Attorney
Denny Egner, Planning Director
Vera Koliás, Associate Planner

Subject: **Applicability of Needed Housing Statutes:** Elk Rock Estates File# NR-2018-005, LC-2018-001, WG-2018-001, VR-2018-014 and VR-2018-015

This memorandum is in response to Michael C. Robinson's letter dated July 16, 2019, regarding applications filed by his client for development of Elk Rock Estates. In the letter, Mr. Robinson represents that applications for Elk Rock Estates are "Needed Housing" applications as defined in ORS 197.303(1) and that pursuant to ORS 197.307(4), the city "may adopt and apply only clear and objective standards, conditions and procedures" when processing the applications.

The city disagrees for the following reasons:

1. In the city's most recent geographic information system (GIS) analysis that was conducted in support of the Milwaukie's 2016 Housing Needs Analysis, the subject property was not identified as land that is required to meet the need shown for housing within the city's urban growth boundary. The GIS analysis excluded lands with development constraints such as the 100-yr floodplain and areas subject to water quality and habitat conservation overlays. Given these constraints, the GIS analysis found that the subject property would add only one additional dwelling unit to the city's overall housing capacity. The 2016 Housing Needs Analysis concludes that the city's zoned capacity provides land for 2919 housing units which far exceeds the 1150 housing units forecast as Milwaukie's future growth through 2036. Based on the analysis, the city's future housing demand can be met without maximizing the development potential of the subject property and therefore the development should not be considered as "needed."
2. The applicant has chosen to pursue a highly discretionary pathway to develop the property rather than a clear and objective pathway as allowed under the code.

The applicant chose an inherently discretionary pathway when other clear and objective alternatives are available. Due to its location within a Water Quality Resource (WQR) and a Habitat Conservation Area (HCA), the applicant is requesting to develop a residential cluster

development under MMC 19.402.14.C. The residential cluster development process is an adjustment or variance to the normal, clear and objective development process and is inherently discretionary in nature. The goal of a cluster development is to allow residential development to be clustered so that land can be developed at allowed densities while avoiding or minimizing impacts to WQR or HCA, including allowing alternative types of residential development, such as multifamily, to meet density. The type of development sought by the applicant would not exist without the application of discretionary criteria to determine the suitability of the site and the proposed development for a clustered development.

The discretionary cluster development process is allowed under ORS 197.307(6) because the city has otherwise provided clear and objective pathways that would allow residential development on the property, the approval criteria for the cluster development complies with statewide land use planning goals and rules, and the criteria for the cluster development authorizes a density level at or above the density level authorized in the zone under the available clear and objective pathways.

Because the applicant has chosen a discretionary pathway rather than one of the clear and objective pathways provided by the city, the city is authorized to apply discretionary criteria to this application for a residential cluster development.

Included by reference: 2016 Housing Needs Analysis and related GIS data -

[https://www.milwaukieoregon.gov/sites/default/files/fileattachments/planning/page/104111/background - draft housing needs analysis.pdf](https://www.milwaukieoregon.gov/sites/default/files/fileattachments/planning/page/104111/background_-_draft_housing_needs_analysis.pdf)



August 6, 2019

Michael C. Robinson

Admitted in Oregon
 T: 503-796-3756
 C: 503-407-2578
 mrobinson@schwabe.com

Kim Travis, Chair
 Milwaukie Planning Commission
 Milwaukie City Hall
 6101 SE Johnson Creek Boulevard
 Milwaukie, OR 972

RE: City of Milwaukie File No. NR-2018-005 (master); Application by Gillis Properties, LLC (the "Application")

Dear Chair Travis and Members of the Milwaukie Planning Commission:

This office represents the Applicant. This letter and its exhibits are the Applicant's first open record period submittal ending on August 6, 2019 at 4:00 p.m. This letter responds to argument and evidence submitted to the Milwaukie Planning Commission (the "Planning Commission") through the close of the public hearing on July 23, 2019. The Applicant reserves the right to submit additional rebuttal evidence and argument prior to the close of the second open record period and additional argument in the Applicant's final written argument.

1. Milwaukie Municipal Code ("MMC") 19.402.12.A – General Discretionary Review.

The Applicant explained in its July 23rd letter that, under the Needed Housing Statutes in ORS 197.303, 197.307, 197.522, and 227.175(4), the City must provide an option to proceed under clear and objective standards and criteria, but the City has not done so here. MMC 19.402.12.A is a discretionary review procedure for development proposals in mapped Water Quality Resources ("WQRs") and Habitat Conservation Areas ("HCAs"). Subsection A requires an "impact evaluation" and "alternatives analysis." The Applicant reasserts its argument regarding the effect of the Needed Housing statutes on the City's lawful authority to apply discretionary standards to this needed housing application.

Notwithstanding the above, the Staff Report at Page 12 argues that the Applicant failed to satisfy Subsection A because the Application, as submitted, does not include an alternative that avoids impacts to the mapped natural resource areas. However, doing so is impossible because WQRs and HCAs cover most of the property: MMC Section 19.402 applies to all properties that contain, or are within one hundred feet of a WQR or HCA. MMC 19.402.3.A. Combined, the WQR and the HCA cover all but the upland area near 19th Street. See Staff Report at Page 4, Figure 3, "Natural Resource Overlay Zones." **Exhibit 1** is an analysis prepared by the Applicant that explains in detail why avoiding impacts to the WQRs and HCAs is not feasible. In summary, the Applicant disagrees with the Staff Report's conclusion because the Applicant has

demonstrated that no practicable alternatives exist that would avoid disturbance of the WQR or HCA, as required by MMC 19.402.12.A.4.a.

Substantial evidence in the whole record demonstrates that impacts to natural resources can be adequately mitigated. The proposed plan minimizes loss of views, maximizes mitigation of a now poorly landscaped island, minimizes access ways and roadways, and properly addresses applicable approval criteria. Mr. McConnaughey, the Applicant's environmental consultant, testified to the Planning Commission that it was both appropriate and feasible to provide mitigation on Elk Rock Island, that the mitigation would not require plowing the island but instead would involve using mulch and compost, and that the island could be easily accessed in the summer by using the existing pathway.

Additionally, the Applicant's substantial evidence on mitigation, buttressed by the oral testimony of the Applicant's landscape architect in the July 23, 2019 initial evidentiary hearing, demonstrates that proposed mitigation plantings are feasible and likely to survive. Consequently, the Applicant has no objection to proposed condition 2.b.iv, requiring an extended mitigation monitoring program for ten years.

For these reasons, the Planning Commission can find that the requirements of MMC 19.402 are satisfied.

2. MMC 19.401, "Willamette Greenway Zone."

Statewide Planning Goal 15 (the "Willamette Greenway Goal"), defines "lands committed to urban uses" as "lands upon which the economic, developmental and locational factors have, when considered together, made the use of the property for other than urban purposes inappropriate." The Milwaukie Comprehensive Plan shows the subject property as committed to urban uses.

Milwaukie Comprehensive Plan Chapter 4, "Land Use," "Residential Land Use and Housing Element," "Objective #1-Buildable Lands," notes that "only about thirty-four total acres remain buildable for residential purposes outside of the Town Center." Comprehensive Plan Map 6, "Buildable Lands," shows unbuilt lands in green. **Exhibit 2.** This site is not shown as unbuilt land; therefore, the Planning Commission can find that this site is committed to urban use.

The Planning Commission was also concerned about views to and from the river because of the proposed development. The Staff Report at Pages 19 and 20 conclude that the views "do not appear significant enough to preclude approval of the WG Conditional Use application." Moreover, were the Applicant to avoid disturbance of the HCA area by moving all of the proposed dwellings (the minimum number of dwellings allowed under the MMC is 12) to abut 19th Street, whatever views exist would be further precluded. As the Applicant explained at the July 23, 2019 public hearing, the preservation of views in MMC Section 19.401 implement Statewide Planning Goal 15, "Willamette Greenway." However, Goal 15 is concerned with views of the river itself and not the greenway.

3. Variances.

The Staff Report at Pages 20-23 discusses the requested variances. The Staff Report notes that the variance requested to allow three-story homes meets the relevant MMC provisions (Staff Report at Page 21) and concludes that the height variance request is reasonable “given the proposed home design.” (Staff Report at Page 22.) The Applicant has submitted in an attached exhibit additional narrative addressing the relevant standards to allow an additional access way less than one hundred fifty feet from another driveway approach. **Exhibit 1.**

Finally, the Staff Report at Page 23 concludes that the remaining requested variances do not result in significant impacts.

4. Recommended conditions of approval.

The Applicant agrees with all recommended conditions of approval on Staff Report Pages 26-29.

5. Response to selected questions from Planning Commission Members.

A. Question regarding responsibilities for continued monitoring of mitigation plantings.

The Applicant agrees with recommended condition of approval 2.b.v. The approval and conditions run with the land so any property owner, including a future homeowners association, is required to comply with the conditions of approval.

B. Public access.

A Planning Commission member asked about alternative to provide public access via path to the river. No public access currently exists on this property and the Applicant has not proposed any public access. However, public access is provided in the form of an unimproved right-of-way adjacent to the Applicant’s property.

C. Active eagle’s nest.

One Planning Commission member asked about the existence of an active eagle’s nest close to the property. The evidence presented to the Planning Commission is that HHPR’s expert looked at the nest and determined it was not an eagle’s nest nor was it an active nest. The HHPR raptor specialist made this determination because the nest was too small for eagles.

6. Response to flood plain issues.

Exhibit 3 is a memorandum from Mr. Ken Valentine addressing the flood plain issues.

Kim Travis, Chair
August 6, 2019
Page 4

7. Conclusion.

For the reasons contained in this letter and the Applicant's prior oral and written argument and evidence, the Applicant respectfully requests that the Milwaukie Planning Commission find that the Applicant has met its legal burden of proof, and approve the Application with the Staff-recommended conditions of approval.

I have asked Ms. Koliias to place this letter before the Planning Commission and in the official Planning Commission file for these Applications.

Very truly yours,



Michael C. Robinson

MCR:jmhi

Cc Mr. Matt Gillis (*via email*) (*w/enclosures*)
Mr. Ken Valentine (*via email*) (*w/enclosures*)
Mr. Todd Iselin (*via email*) (*w/enclosures*)
Mr. John McConnaughey (*via email*) (*w/enclosures*)
Mr. Denny Egner (*via email*) (*w/enclosures*)
Ms. Vera Koliias (*via email*) (*w/enclosures*)

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Honorable Planning Commission,

Natural resources-

Our proposed plan is the most practicable option to balance all the code requirements and planning requests which is detailed in the extensive documentation already provided.

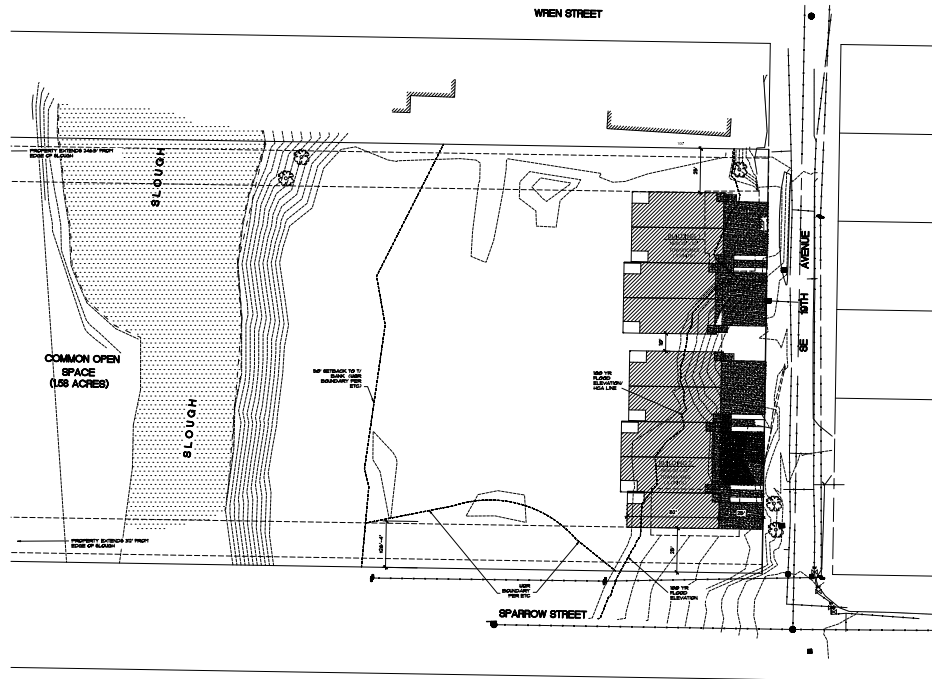
In our alternatives analysis it shows there is no way to avoid the HCA to the extent practicable because it covers approximately 80% of the site. The proposal by ESA of clustering 9 units at the street, was revised to meet setback requirements and is shown below. It would require tearing down 2 houses, which would be approximately 800K loss, and the result would be super tall super skinny houses that block almost all views and, that is not desirable or practicable. They would have to have a reduced bedroom and bathroom count (not practicable) and would not function as well. Attached Homes would not fit into the neighborhood. This alternative would go against the comprehensive plan for desirable living spaces and maintain existing housing stock. It would not meet the greenway code, because it would block almost all the views. It would make the parking situation on 19th worse. The Staff report also mentioned the code only allows one access way per lot. We had to adjust our site plan to meet the criteria with only 3 access ways on our previous submittal. Doing this option does not meet the access way criteria.

To meet the code for density on the alternative proposal by ESA, we would need 12-18 access ways on 19th to make this concept even work, which does not meet the access way criteria per MCC. If you did 18 attached units per this concept they would only be 9 ft wide units. The whole length of the lot, would have 8 ft wide driveways separated by 1 ft of dirt. This does not meet the code and would be the worst option for the neighborhood. It is not a practicable option. This would create a wall of units at the street and would not fit into the single family neighborhood. It would block all the views.

The Below Site plan shows nine units at the street suggested by ESA, Milwaukie's Environmental Consultant. In theory, less disturbance would be a great idea, but the reality of this site is there is no way to avoid HCA disturbance and meet the Code. Per MCC garages need to be setback a minimum of 20 ft. Even doing that would disturb over 6,000 sq ft of HCA, but the reality is the houses are impracticable and would need a tandem driveway to fit enough parking for guests which would push these houses even further into the HCA and disturb another 3,800 sq ft of permanent disturbance for the additional parking beyond what is shown in the site plan below. Any design over 9 units would also need to be pushed further into the HCA to get enough sq ft. with such skinny townhomes. It would require more fill, so the cut would add even more to that disturbance area. All of these reasons prove why this concept is not practicable and it does not meet MCC criteria. This would be the *worst* option for the neighborhood.

Due to the cut and fill requirements to meet the code, any other option with a lower access way would require disturbing the same 38,500 sq ft as our proposed plan. There is no way to move it closer to 19th and meet grading criteria. This shows that our proposed plan is the best alternative to meet the code criteria. **Any options clustering on 19th would NOT meet the**

Milwaukie Municipal Code, and would not be in the best interests of the neighborhood.



PRELIMINARY SITE PLAN - TOWNHOME OPTION MINIMAL HCA IMPACT



GILLIS PROPERTIES
ELK ROCK ESTATES
 12235/12205 SE 19TH
 Milwaukie, OR

PROJ. NO.: 1138
 FILE: A01
 DATE: 6/26/19




SHEET #
A0
 SITE PLAN

We meet the avoid, minimize, and mitigate code by not proposing the allowed 18 units. The site is 3.66 acres. We have avoided development to the extent practicable in 1.58 acres of the site. We have clustered the buildings on 2 acres to avoid disturbance to the extent practicable. We proposed 12 units instead of 18 units to minimize impact to the weedy lot to the extent practicable. And we are dramatically improving the environment by mitigated the disturbance of the weedy lot.

Our proposed project is beneficial to the environment. We are building in an area that is weedy grasses and dirt, but we are mitigating by removing invasive species, Planting 385 trees, and planting over 1900 native scrubs. Going from a weedy dirt lot, to adding 40,000 sq feet of mitigation dramatically improves the environment.

BUILDABLE LANDS

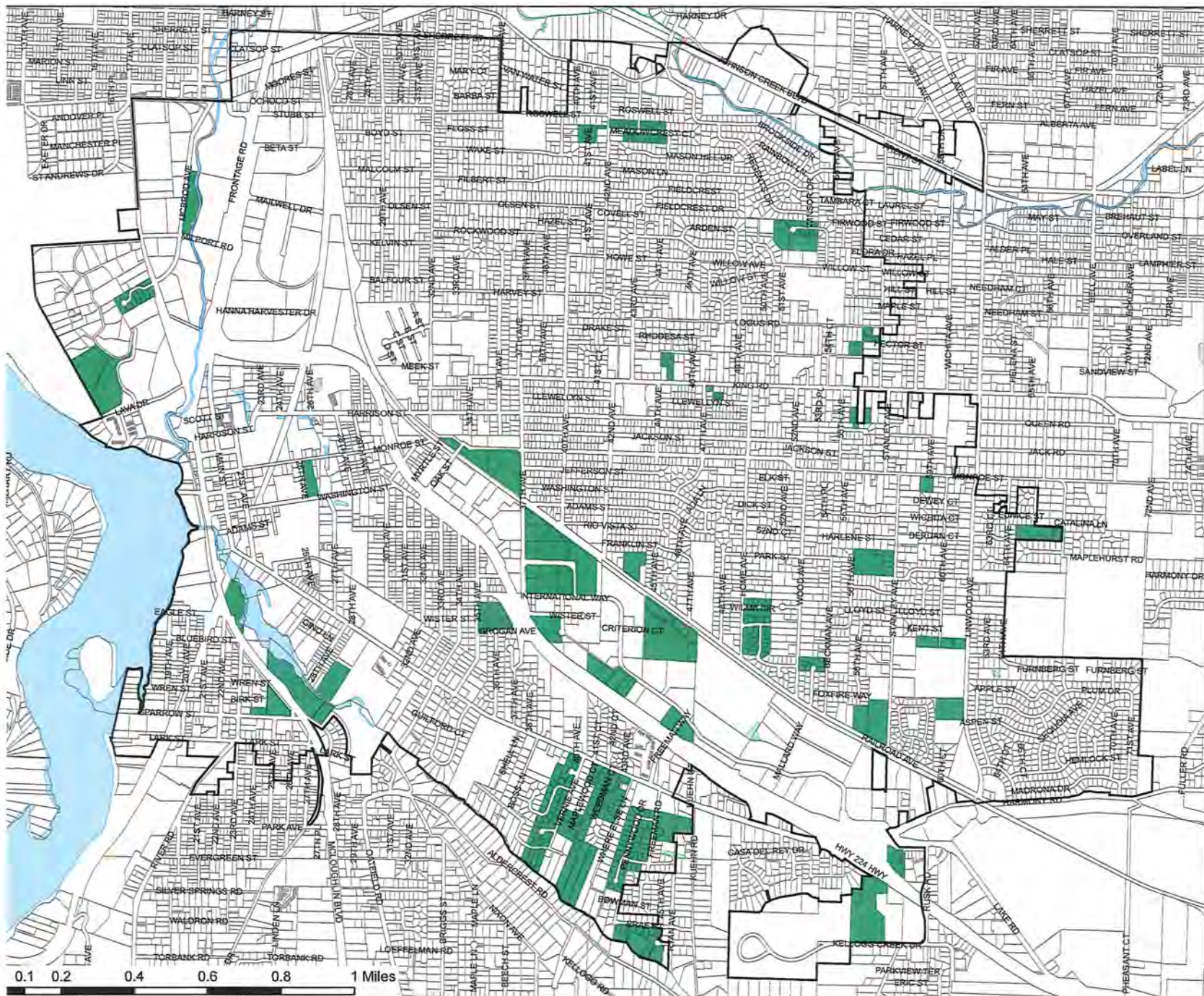
Milwaukie Comprehensive Map 6

-  Unbuilt Lands
-  City Boundary
-  Water Body



Revised Ord. #1987 October 21,

Data Sources: City of Milwaukie GIS
Clackamas County GIS
Metro Data Resource Center



Job No.: MSC-221
Date: August 5, 2019
To: Vera Kolias, AICP
City of Milwaukee
From: Ken Valentine, PE



Project/Subject: Elk Rock Estates – Planning Commission Hearing

Vera,

During the planning commission hearing several issues and comments were made that I would like to respond to. There are also several code issues that we feel should be addressed for clarity.

1. MC 18.04.150 (F) states that any excavation below bankfull stage shall not be counted toward compensating fill. The MC does not define “bankfull”; however, during the hearing staff stated that Metro defines bankfull as the 2-year event.

Response: The applicant team respectfully disputes staff’s findings that water quality facility earthwork cannot be included in the cut/fill calculations. These improvements are perceived by staff as below the bankfull elevation. However, based on the definitions provided in the Metro Code and OAR, the applicant believes the earthwork associated with these facilities is not below the bankfull elevation.

Metro Title 10 (fff) states that “top of bank” means the same thing as “bankfull stage” defined in OAR 141-085-0510(5). OAR 141-085-0510(5) states “bankfull stage” means the two-year recurrence flood elevation. The 2-year flow in the Willamette River is approximately 329,000 cfs. The bank full stage was determined to be approximately elevation 29 (NAVD 88) by routing the event through a HECRAS hydraulic model. This number will be confirmed during the final stage of design. The lowest cut elevation as proposed in the preliminary design is at elevation 31 (NAVD 88). Therefore all of the proposed cut is above the bank full stage and should be counted toward the balanced cut/fill calculations. We request the following condition of approval: “The applicant shall show that the cut/fill calculations meet the intentions of MC 18.04.150(F).”

2. 100-year event vs 1996 flood. The comp plan objective #1 (3) states that the finished elevations of the lowest floor of buildings and streets will be a minimum of 1.0 foot above the 100 year flood event. The base flood as designated on maps always includes the letter A. Section 18.04.030 states “base flood” means the flood having a one percent chance of being equaled or exceeded in any given year. Section 18.04.160 (A) states, “New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated one foot above “base flood elevation”.”

Response: The MC and comp plan provide clear language referencing the base flood elevation relates to the FEMA base flood elevation. The comp plan nor the MC list the 1996 flood elevation

205 SE Spokane Street
Suite 200
Portland, OR 97202
PHONE 503.221.1131
FAX 503.221.1171
www.hhpr.com

when referring to the finish floor elevations or roads. The preliminary design, as previously submitted, met the standard of one foot above the base flood elevation. The City indicated just before the hearing that the buildings should be designed to be one foot above the 1996 flood contrary to all code flood references related to finish floor elevations. The 1996 flood is not the base flood and was somewhere between the base flood and the 500 year flood. The base flood has a discharge rate of 375,000 cubic feet per second (cfs), the 500-year event has a discharge rate of 450,000 cfs and the 1996 event had a peak discharge of 459,000 cfs. The developer has agreed to adjust the finish floor elevations of the homes to one foot above the 34.5 (NGVD) 1929 in an effort to address the concerns for mitigation flood impacts, despite the code inconsistencies. However, the driveway that provides access to the homes is designed to be one foot above the 100-year base flood elevation, as stated in the comp plan and the definition of “base flood” in the MC. Since Comprehensive Plan objective #1 identifies only streets and the lowest floors of buildings are subject to this requirement, more discretion and flexibility can be used in the requirement for the base flood elevation of the driveway. The design team requests that the City approve the project with a condition that the grading meets the language referencing the 100-year flood plain base flood elevation defined in the MC and comprehensive plan.

3. Balanced Cut/Fill. 18.04150 (F) provides language providing direction for placement of fill or structures that displaces greater than 10 cubic yards of flood storage area. The codes states that no NET fill in any floodplain is allowed. Section 18.04.050(F)(2)(d)(1) states that the proposed excavation fill not increase flood impacts for surrounding properties as determined through hydrologic and hydraulic analysis.

Response: The preliminary plans have demonstrated that the project will not have a NET increase of fill in the floodplain. During the final design process a “no rise” analysis will be prepared in accordance with FEMA’s procedures for “No-Rise” Certification process. The developer requests that the project be approved with the condition to certify a “No-Rise” in accordance with standard engineering practice and that the encroachment will not increase flood levels within the community during the occurrence of the base 100-year flood discharge.

We have included a cut/fill exhibit to assist staff in understanding the proposed grading plan and how the proposed grading plan meets the cut/fill requirements.

4. Foundations and crawlspaces. MC 18.04.030 defines a basement as any areas of the building having its floor subgrade below grade on all sides. This section also states “lowest floor” means the lowest floor of the lowest enclosed area (including basement and any crawlspace that is below grade). The code seems to indicate that the crawlspace floor is the lowest floor and must be elevated one foot above the base flood elevation. However, MC 18.04.150 (G) states that below grade crawlspaces are allowed subject to FEMA Technical Bulletin 1101. Section 18.04.150 (G)(2) states the crawlspace is an enclosed area below the base flood elevation (BFE) and, as such, must have openings that equalize hydrostatic pressures by allowing the automatic entry and exit of flood waters. The MC states that crawlspace construction is not allowed in areas with flood velocities greater than 5 feet per second UNLESS the design is reviewed by a qualified design professional, such as a registered architect or professional engineer. The code does not outright prohibit crawlspaces below the BFE or in areas with flood velocities greater than 5 feet per second. The code requires that the foundations and crawlspaces are designed to resist hydrostatic pressures.

Response: The project intends to utilize traditional stem wall foundations with crawlspaces where feasible. The foundations will be designed in accordance with FEMA Technical bulletin 1101.

The crawl spaces below the BFE will not be more than two feet below the adjacent exterior grade and the interior grade of the crawlspace will not exceed four feet at any point. If, for any reason, the final design finds these conditions cannot be met, alternate foundations will be proposed in accordance with FEMA guidelines. The exact type of foundation and crawlspace should not be considered for this land use submittal. The design team requests approval of the project with a condition to meet the MC foundation requirements.

5. General Floodplain Standards

The project has proposed improvements within the regulated floodplain and has demonstrated that it can be constructed to comply with all requirements. The access has been designed to be one foot above the 100-year base flood elevation (BFE) and the proposed structures will be set one foot above the 1996 flood elevation of 38 msl NAVD 1988. These standards are higher than any other jurisdiction in the metro area. Typically roadways are not required to meet this standard and driveways are never required to unless they include a bridge over a regulated floodplain. Bridges are required to have the bottom chord one foot above the BFE. Buildings are required to have their lowest habitable floor elevation to be one foot above the BFE. In this case the finish floors are proposed to be set higher than the highest flood event ever recorded for the Willamette River. The proposed design exceeds regional and national standards. The proposed river model has already been approved by FEMA for a Trimet project. The model will be further refined and will be submitted to FEMA during the Letter of Map Revision process.

The design team has provided a preliminary design with ample evidence to prove that the project can be designed to meet the municipal code and comprehensive plan. We request that the City approve the application with conditions of approval.

Sincerely,

Ken K Valentine
Ken Valentine, PE

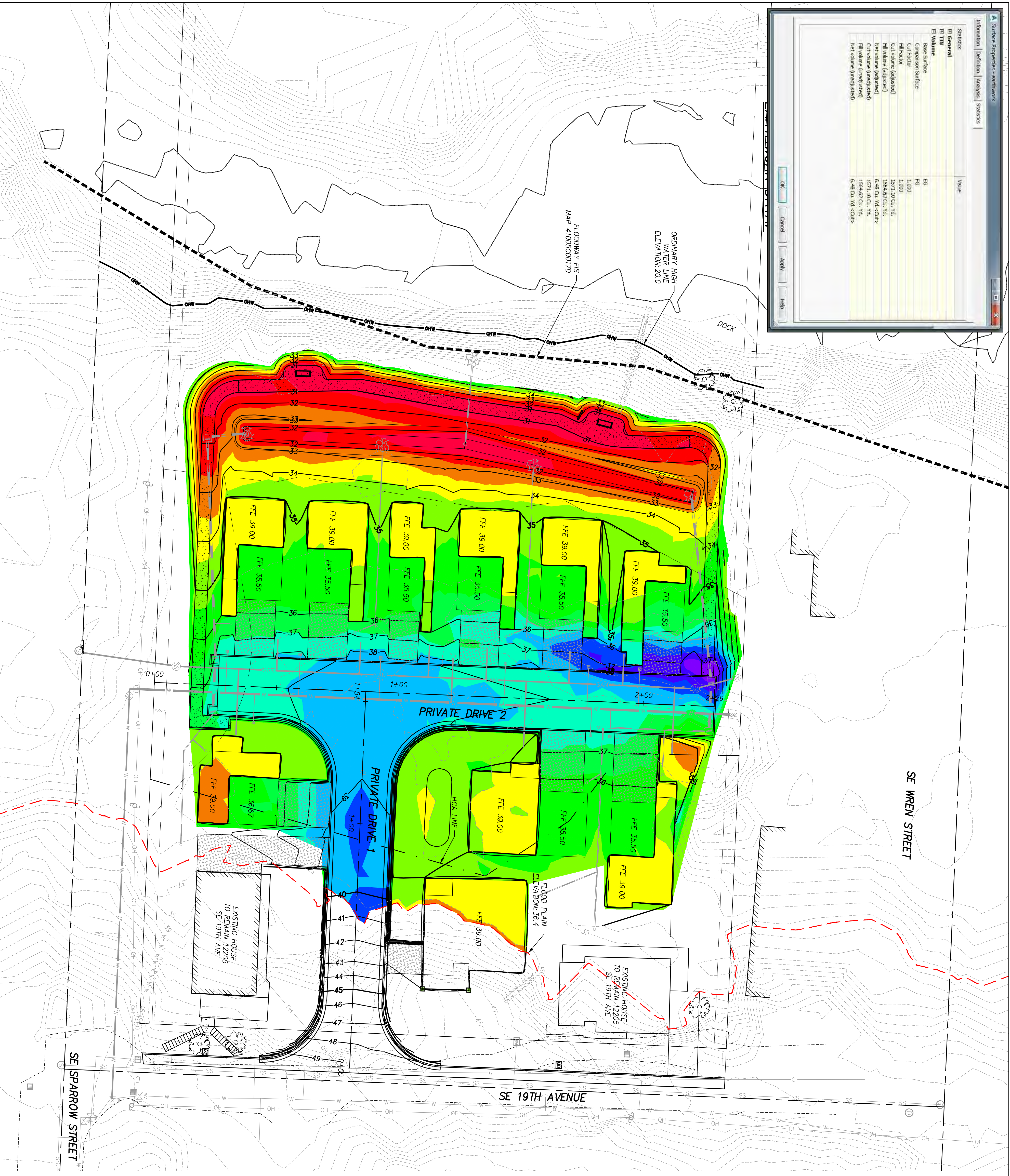


Surface Properties - earthwork

Information | Definition | Analysis | Statistics

Statistics	Value
General	
Volume	
Base Surface	56
Comparison Surface	56
Cut Factor	1.000
Fill Factor	1.000
Cut Volume (adjusted)	1571.10 Cu. Yd.
Fill Volume (adjusted)	1584.82 Cu. Yd.
Net Volume (adjusted)	6.98 Cu. Yd. C_{adj}
Fill Volume (unadjusted)	1571.10 Cu. Yd.
Net Volume (unadjusted)	1584.82 Cu. Yd.
Net Volume (unadjusted)	6.98 Cu. Yd. C_{adj}

OK Cancel Apply Help

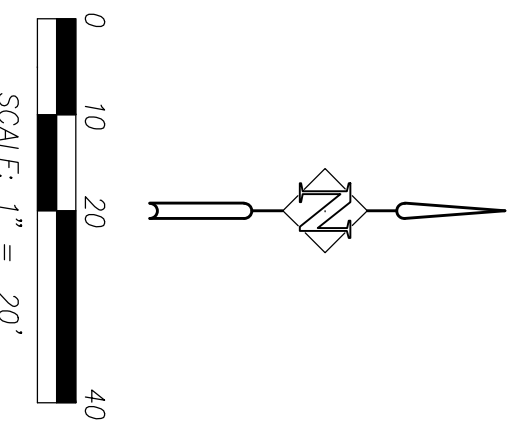


PROPOSED LEGEND:

- SANITARY LINE
- WATER LINE
- STORM LINE
- ATRIUM INLET
- PEDESTRIAN PATH
- MAJOR CONTOUR - 5' INTERVALS
- MINOR CONTOUR - 1' INTERVALS
- RIP RAP

ELEVATIONS TABLE

NUMBER	MINIMUM CUT (FT)	MAXIMUM FILL (FT)	AREA	COLOR
1	-4.82	-4.00	2086.53	Red
2	-4.00	-3.00	3251.62	Orange
3	-3.00	-2.00	3036.54	Yellow
4	-2.00	-1.00	7974.17	Light Green
5	-1.00	0.00	7524.37	Green
6	0.00	1.00	6568.76	Light Blue
7	1.00	2.00	3115.28	Blue
8	2.00	3.00	4645.19	Light Cyan
9	3.00	4.00	4700.24	Cyan
10	4.00	5.00	1037.92	Dark Cyan
11	5.00	6.00	344.67	Dark Blue
12	6.00	6.70	88.90	Very Dark Blue



DATE	NO.	DESCRIPTION
APRIL 2019	1	REVISED GRADING
8/5/2019	2	GRADING MODIFICATION

R E V I S I O N S

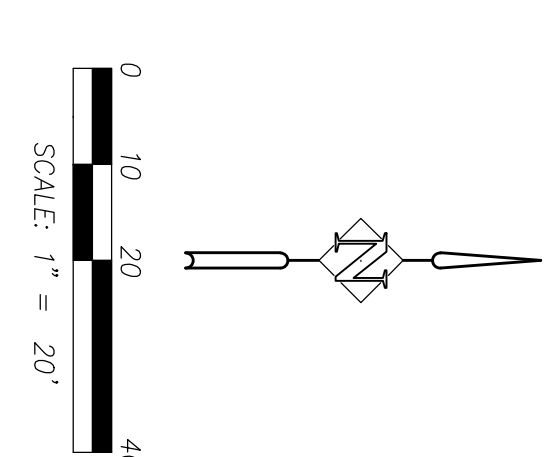
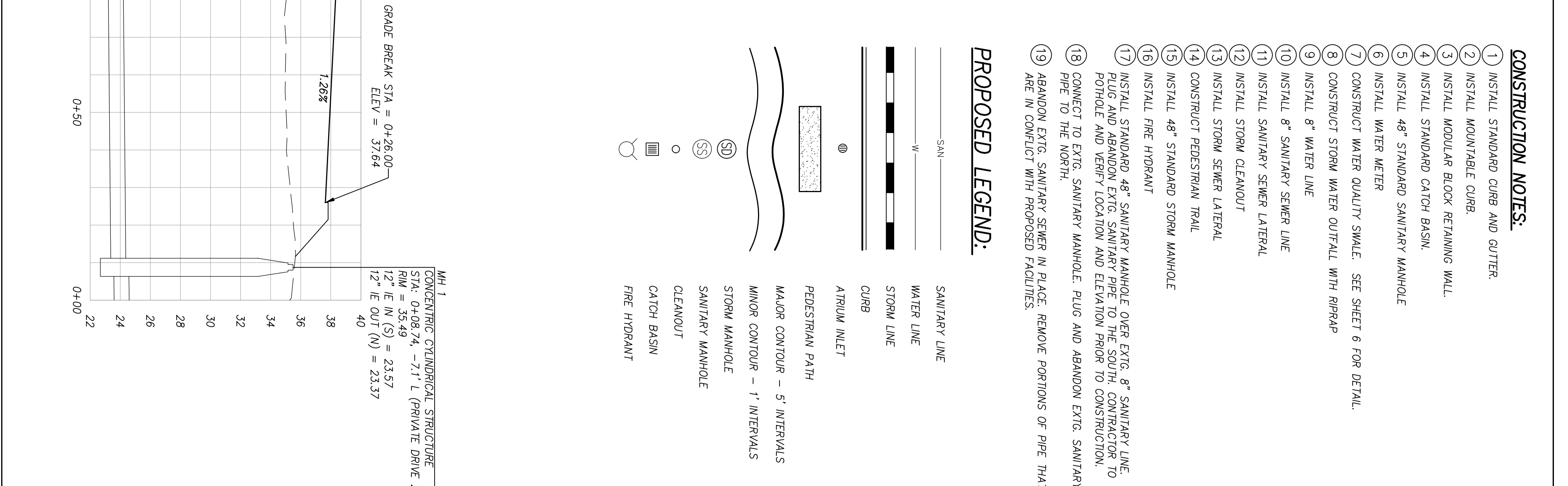
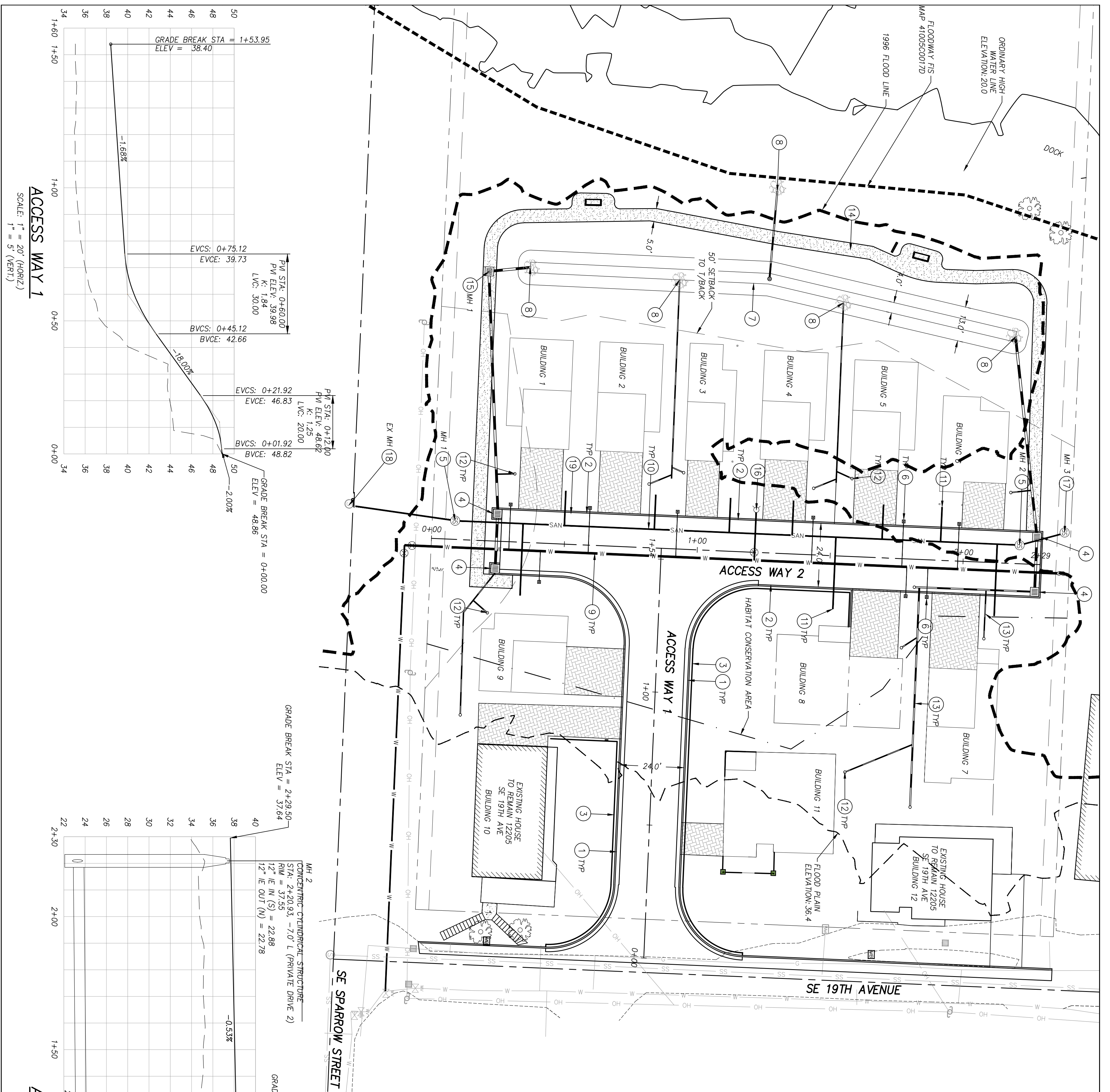
DESIGNED: KKV
 DRAWN: HHPR TEAM
 CHECKED: KKV
 DATE: JUNE 2019

REGISTERED PROFESSIONAL ENGINEER
 50,102
 OREGON
 JULY 13, 1999
 KENNETH K. VALENTI INC.
 EXPIRES: 06/30/20

HHPR Harper Houf Peterson Righellis Inc.
 ENGINEERS*PLANNERS
 LANDSCAPE ARCHITECTS*SURVEYORS
 205 SE Spokane Street, Suite 200, Portland, OR 97202
 phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

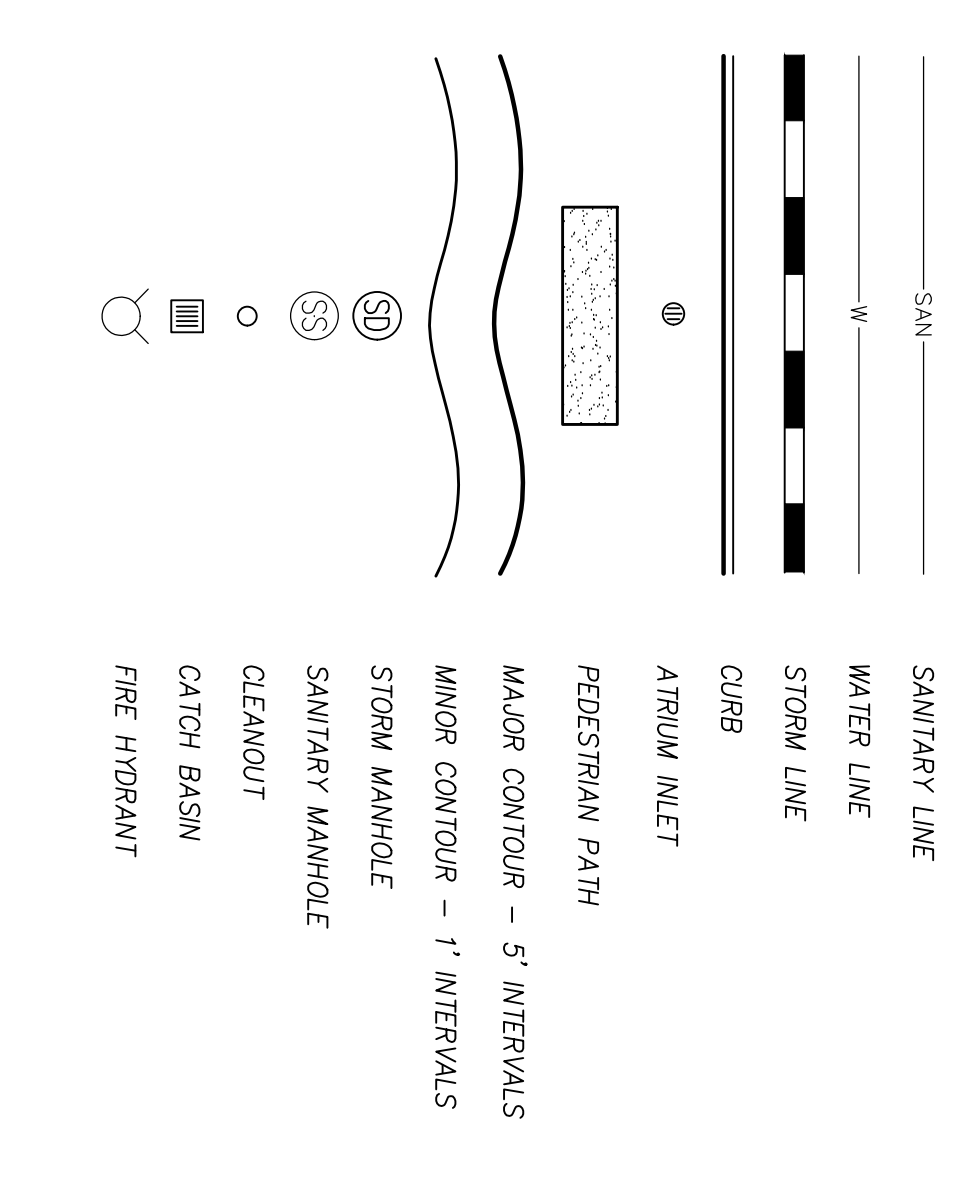
**EARTHWORK E HIBIT
 ELK ISLAND ESTATES
 MILWAUKIE, OREGON**

JOB NO. MSC-221
 SHEET NO.



- CONSTRUCTION NOTES:**
1. INSTALL STANDARD CURB AND CUTTER.
 2. INSTALL MOUNTABLE CURB.
 3. INSTALL MODULAR BLOCK RETAINING WALL.
 4. INSTALL STANDARD CATCH BASIN.
 5. INSTALL STANDARD SANITARY MANHOLE.
 6. INSTALL WATER METER.
 7. CONSTRUCT WATER QUALITY SMALL. SEE SHEET 6 FOR DETAIL.
 8. CONSTRUCT STORM WATER OUTFALL WITH RIPRAP.
 9. INSTALL 8" WATER LINE.
 10. INSTALL 8" SANITARY SEWER LINE.
 11. INSTALL SANITARY SEWER LATERAL.
 12. INSTALL STORM CLEANOUT.
 13. INSTALL STORM SEWER LATERAL.
 14. CONSTRUCT PEDESTRIAN TRAIL.
 15. INSTALL 48" STANDARD STORM MANHOLE.
 16. INSTALL FIRE HYDRANT.
 17. INSTALL STANDARD 48" SANITARY MANHOLE OVER EXTG. 8" SANITARY LINE. PLUG AND ABANDON EXTG. SANITARY PIPE TO THE SOUTH. CONTRACTOR TO POTHOLE AND VERIFY LOCATION AND ELEVATION PRIOR TO CONSTRUCTION.
 18. CONNECT TO EXTG. SANITARY MANHOLE. PLUG AND ABANDON EXTG. SANITARY PIPE TO THE NORTH.
 19. ABANDON EXTG. SANITARY SEWER IN PLACE. REMOVE PORTIONS OF PIPE THAT ARE IN CONFLICT WITH PROPOSED FACILITIES.

PROPOSED LEGEND:

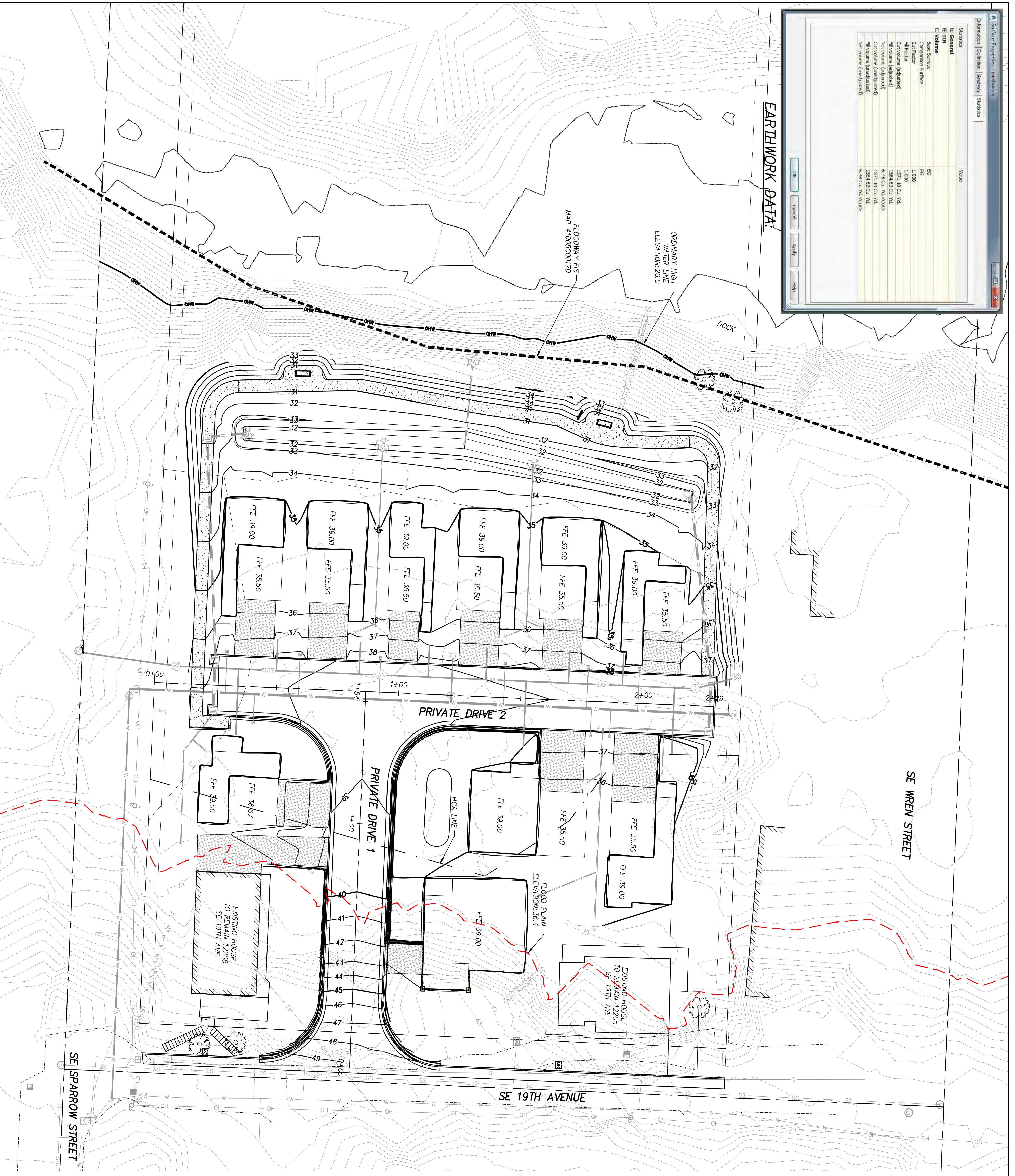


JOB NO. MSC-221	APRIL 2019	1	REVISED GRADING	DESIGNED: KKV	REGISTERED PROFESSIONAL ENGINEER 50,102 ORREGON JULY 13, 1989 KENNETH K. VALENTINE EXPIRES: 06/30/20	<p>Harper Houf Peterson Righellis Inc. ENGINEERS*PLANNERS LANDSCAPE ARCHITECTS*SURVEYORS 205 SE Spokane Street, Suite 200, Portland, OR 97202 phone: 503.221.1131 www.hhpr.com fax: 503.221.1171</p>						
	8/5/2019	2	GRADING MODIFICATION				DRAWN: HHPR TEAM CHECKED: KKV DATE: JUNE 2019					
SHEET NO.	<table border="1"> <thead> <tr> <th>DATE</th> <th>NO.</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>			DATE	NO.	DESCRIPTION				DATE: JUNE 2019		
DATE	NO.	DESCRIPTION										

Surface Properties - earthwork

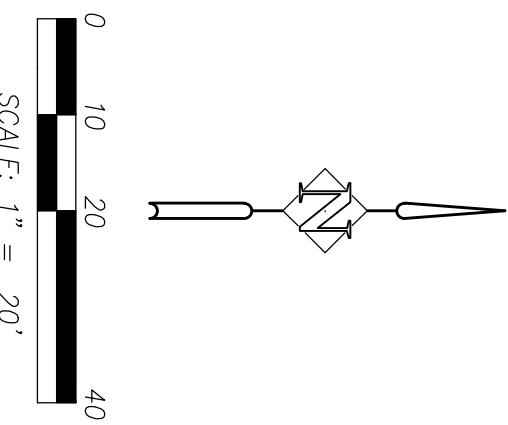
Statistics	Value
General	
ETM	52
Volume	52
Base Surface	52
Comparison Surface	52
Fill Surface	1,000
Fill Volume (adjusted)	1571.10 Cu. Yd.
Fill Volume (unadjusted)	1584.63 Cu. Yd.
Net Volume (adjusted)	6.48 Cu. Yd. <Cut>
Net Volume (unadjusted)	1584.63 Cu. Yd.
Net Volume (adjusted)	6.48 Cu. Yd. <Cut>

OK Cancel Apply Help



PROPOSED LEGEND:

	SANITARY LINE
	WATER LINE
	STORM LINE
	ATRIUM INLET
	PEDESTRIAN PATH
	MAJOR CONTOUR - 5' INTERVALS
	MINOR CONTOUR - 1' INTERVALS
	RIP RAP



DATE	NO.	DESCRIPTION
APRIL 2019	1	REVISED GRADING
8/5/2019	2	GRADING MODIFICATION

REVISIONS

SHEET NO. **4**

JUNE 2019

DESIGNED: KKV
 DRAWN: HHPR TEAM
 CHECKED: KKV
 DATE: JUNE 2019

REGISTERED PROFESSIONAL ENGINEER
 50,102
 OREGON
 JULY 13, 1999
 KENNETH K. VALENTINE
 EXPIRES: 06/30/20

HHPR Harper Houf Peterson Righellis Inc.
 ENGINEERS*PLANNERS
 LANDSCAPE ARCHITECTS*SURVEYORS
 205 SE Spokane Street, Suite 200, Portland, OR 97202
 phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

**GRADING PLAN
 ELK ISLAND ESTATES
 MILWAUKIE, OREGON**

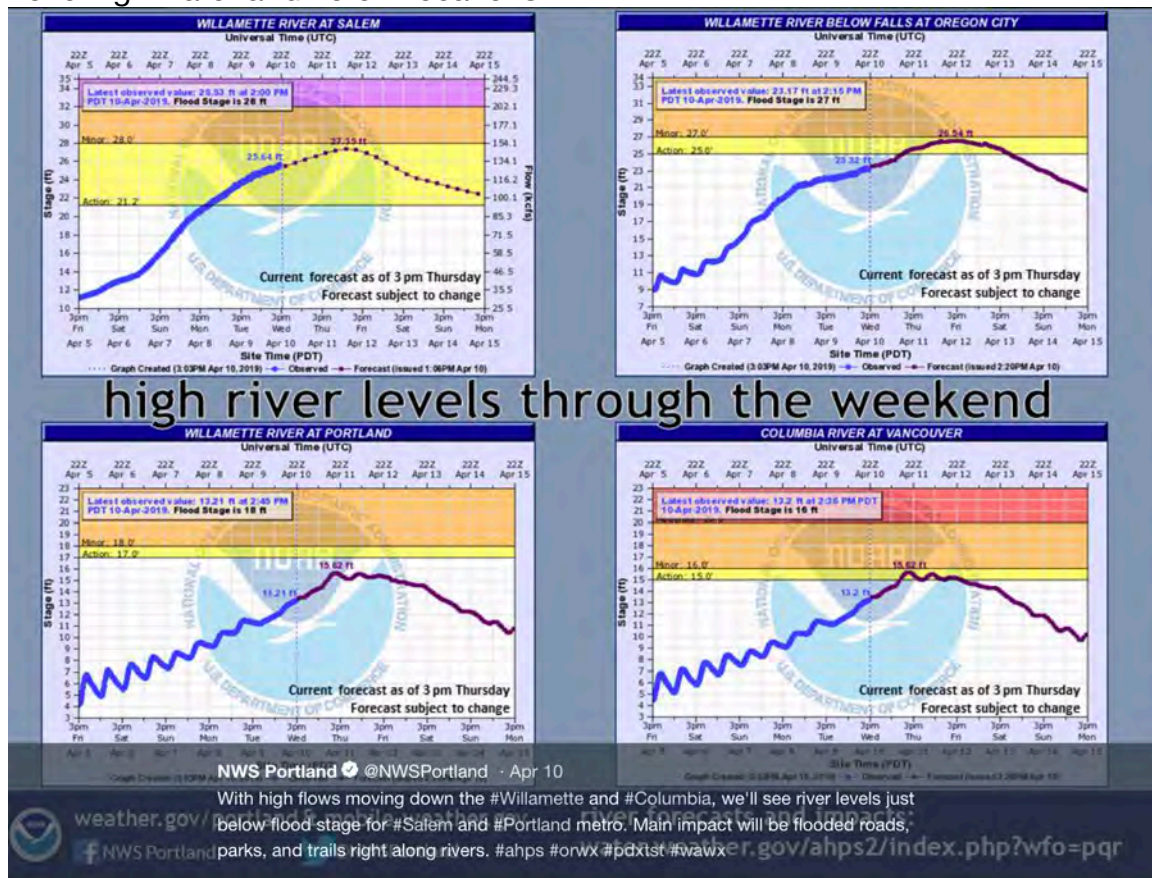
Planning Commission Questions and Responses.

How often would the storm water facility be inundated by flood waters?

The only time we know that area was flooded was in the 1996 flood. The 96' flood was estimated to be around the flow volume of a 500-year flood event. The site where bio swell is to be located has not been flooding since 1996. The bio swell is designed per the Milwaukie municipal code.

Flooding of mitigation site. - It was stated at the planning commission that the mitigation site was under water half the year. This is not correct; our site was still above water in April 2019 high water as seen in the photos below. This data shows that mitigation site would rarely flood. It would probably only flood once every 5-10 years based off the cresting data from the National Weather Service.

There is no direct data to the flooding of the mitigation site. There is only data from Oregon City below the falls and downtown Portland. Based on the Data found from the national weather service; I believe there is only 2-3 events in the last 20 years (possibly 4-5 events since 1996) that may have possibly flooded the mitigation site, based on April photos of the mitigation site, and recent cresting data from National Weather Service. This graph represents the April 2019 high water at different locations.



The pictures below show our mitigation site still above water during the April High Water event.



April 2019

 **KATU News** ·  Follow

Willamette Falls flooding in 1996 and 2019 ...

WILLAMETTE RIVER FLOODING: Check out this side-by-side of Willamette Falls from the flood of '96 and footage from the current flooding. bit.ly/2Z8upjE



1996 2019

-0:11   

Recent Crests

- (1) 29.00 ft on 01/22/2012
- (2) 28.34 ft on 01/14/2006
- (3) 27.65 ft on 01/11/2006
- (4) 27.52 ft on 01/02/2006
- (5) 23.06 ft on 11/27/1999
- (6) 29.56 ft on 12/30/1998
- (7) 36.79 ft on 01/02/1997
- (8) 46.04 ft on 02/09/1996
- (9) 29.30 ft on 02/26/1986

Oregon City Data

Recent Crests

- (1) 17.30 ft on 03/30/2017
- (2) 17.20 ft on 06/02/2011
- (3) 28.55 ft on 02/09/1996
- (4) 18.90 ft on 02/24/1986
- (5) 20.10 ft on 02/21/1982

[Show More Recent Crests](#)

Portland Cresting Data

Question from staff report- What Remodeling will be done to existing houses?

We have already done a cosmetic remodel to 12225 se 19th ave. We fixed the electrical and cleaned it up so it is nice and livable. We currently have no plan to do any additional remodeling at this time. If we decided to do a remodel we would only be putting a staircase in to the lower level. Approximately 10K of cost. And do some cosmetic upgrades.

12205- We will eventually remodel this house, but it will only be to put a staircase in between the levels (approximately 10k) and do some minor cosmetic upgrades. It's already in great condition inside.

I would expect less than 40K to be put into each house if we decided to remodel them in the future.

Views from Elk Rock Island and the Spring Water Park?

Although the city stated they interpreted the view criteria to be from 19th, we will have little to no view impact from Elk Rock Island and the Spring Water Park Trail. This was actually taken the day before the planning commission hearing by John from ETC Environmental. This question was asked at the planning commission, and this photo shows the private island would block views of the

development from Elk Rock. You can only see houses that are a few lots north of the site. So there should be little to no impact to views from Elk Rock Island.



Views From the Springwater Park Trail?

There will be very little to no impact to views from Springwater Park Trail. The photos below taken from the closest two view points from the trail and show that the trees and foliage already block the views of the proposed development site.



Dear Honorable Planning Commission,

We have been working on this project for the past 2 years to create a beautiful development that blends with the neighborhood and meets all the code criteria. I have spent over \$200,000 in engineering and associated costs to create the best possible project for the neighborhood, while meeting the code criteria. We have submitted hundreds of pages of documentation, and engineering reports. We have continuously adjusted the plans to work with the city and make sure we meet all the code criteria. Our documentation is very thorough, but it is meant for planning approval and we will have final engineering completed per Milwaukie Municipal Code prior to issuance of building permits. Our documentation has proven we can meet all the code criteria. I ask that you would please approve this this project with conditions.

Thanks
Matt Gillis

WREN STREET

PROJECT INFORMATION

PROJECT DESCRIPTION	RESIDENTIAL CLUSTER DEVELOPMENT W/ 12 DETACHED SINGLE FAMILY HOMES (10 NEW AND 2 EXISTING)
PROPERTY LOCATION	TAX LOTS 3200/ 3300 TAX MAP 1 1E, 35DD)
ADDRESS	12205/ 12225 SE 19TH AVE MILWAUKIE, OR 97206
ZONE	R-5
SITE AREA	3.66 ACRES
COMMON AREA	1.58 ACRES
NET BUILDABLE AREA	2.08 ACRES
MAXIMUM DENSITY	90 605/ 5,000 = 18.12 DWELLINGS
PROPOSED DEVELOPMENT	12 DWELLING UNITS
BUILDING COVERAGE	8.02%
VEGETATIVE COVERAGE	83.15%
PARKING REQUIRED	12 SPACES
PARKING PROVIDED	37 SPACES (19 IN PRIVATE GARAGES, 15 AT DRIVEWAYS, 3 VISITOR SPACES)



ISELIN ARCHITECTS P.C.

1307 Seventh Street
Oregon City, OR 97045
503-656-1942 ph
503-656-0658 fax
www.iselinarchitects.com

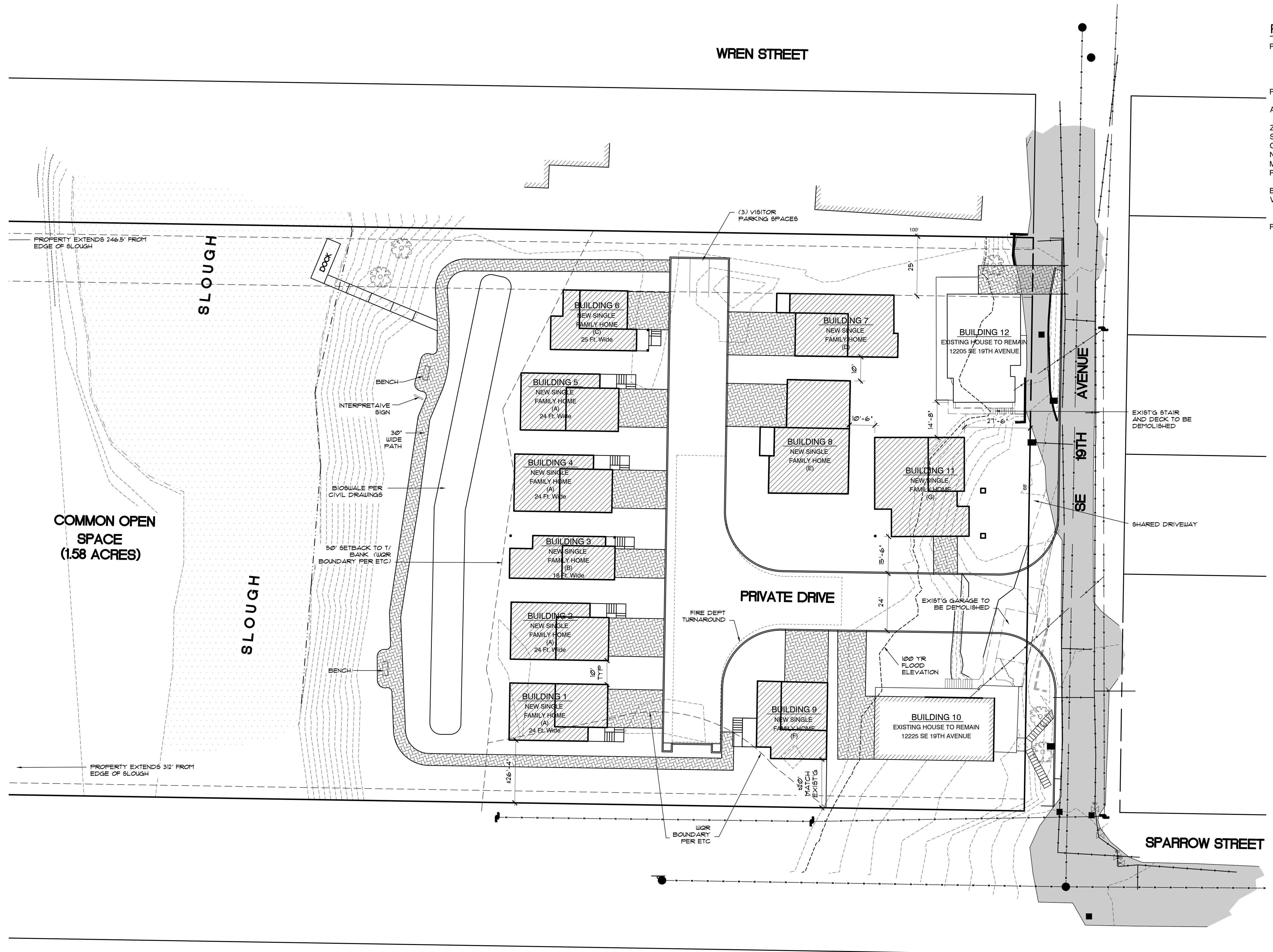
NOT FOR PRELIMINARY CONSTRUCTION

GILLIS PROPERTIES
ELK ROCK ESTATES
12225/ 12205 SE 19TH
Milwaukie, OR

PROJ. NO. : 1738
FILE : A-SIT
DATE : 8/05/19

SHEET #
A0

SITE PLAN



PRELIMINARY SITE PLAN

1" = 20'

ATTACHMENT 6

Vera, here are my notes from our conversation with a few extra thoughts:

1. What is the geologic data on major and crustal fault lines in Milwaukie?
2. How near to the proposed development is the closest fault line - major or crustal?
Who is assessing the danger or safety of this distance?
3. Has a geomorphologist been consulted about the nature of that particular patch of land to be built upon?
 - a. what is the present depth and composition of the soil on the land to be built upon?
 - b. what is below the soil? Is it stable lava rock?
4. Will the homes be built on bedrock? Why might this be a good idea? (or not)
5. How stable will the landfill the developers plan to put in be in an earthquake or flood event? Is the proposed depth adequate? Is the composition of the landfill appropriate in lieu of the dangers of the flood plain and the natural incline of the land surface?
6. The word “mitigation” is sometimes used only as a “catchword” which can make the general public happy and content. But due to the nature of climate change; the obvious and potential danger of earthquakes and flooding - mitigation can only be short sighted, in my opinion, and a panacea against looking at reality. (and an effort to make money on a project)
7. The expression “100 year flood event” was used during the Tuesday meeting. This expression, in reality, does NOT mean since there was a flood in 1996 there won't be another one until 2096! This is information that a geomorphologist could explain to you.

Received via email from Mary Weick, 19th Ave resident.

RECEIVED

By Vera Kolas, AICP at 1:59 pm, Jul 25, 2019

Vera Kolia

From: Harriet & Doug <haredoug@comcast.net>
Sent: Sunday, July 28, 2019 2:39 PM
To: Vera Kolia
Subject: Proposed Elk Rock "estates" development

Dear sir or madam,

My family strongly opposes the proposed 12-unit, three stories tall housing development being considered in our city's floodplain.

Please contact me with developments in this review process.

Sincerely,

Douglas W. Musgrove
11549 SE Home Ave.
Milwaukie OR 97222

Vera Kolias

From: Sean Garmire <seangarmire@gmail.com>
Sent: Sunday, July 28, 2019 9:54 AM
To: Vera Kolias
Subject: Regards nr 2018 005

Hello there. This is concerning the plan and houses built in the floodplain of the Willamette River. Only someone who has no foresight would ever consider building a house in a flood plane. There is no question homes will be submerged underwater at some point, causing massive property damage and more pollution into an already polluted river. Please have some common sense and do not build in a flood zone. There are plenty of places above the high watermark to build.

People also shouldn't build on top of active volcanos or on the beach at low tide. These things are obvious.

Thanks!

Sean

Vera Kolia

From: Harriet & Doug <haredoug@comcast.net>
Sent: Sunday, July 28, 2019 2:39 PM
To: Vera Kolia
Subject: Proposed Elk Rock "estates" development

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Please contact me with developments in this review process.

Sincerely,

Douglas W. Musgrove
11549 SE Home Ave.
Milwaukie OR 97222

Vera Kolias

From: David Peters <dlpupholstery@icloud.com>
Sent: Saturday, August 03, 2019 6:02 PM
To: Vera Kolias
Subject: Future homes on SE 19th ave

I'm writing to state my opinion on the proposed development on SE 19th ave. As a resident of Island Station for over 6 years, I do not want to see this construction happen. The property is in the flood plain and visible from Elk Rock Island and Spring Park. Forcing a half dozen homes onto this property is ridiculous, and only being asked for because someone bought it as a investment thinking they could cash in. After no luck finding someone to buy it as is, they decide to build their own subdivision to make a profit. Why should this be allowed just so some speculator can make a profit off of his bad decision to pay too much for the property?

David Peters
12120 SE 21 st Ave
Milwaukie OR 97222
Sent from my iPhone

Vera Kolias

From: Gavin Bondy <gavinbondy@gmail.com>
Sent: Tuesday, July 30, 2019 10:30 PM
To: Vera Kolias
Subject: The Potential Housing Project on SE 19th

Hi Vera,

I was given your email address and told you are the person to voice my concerns to about the potential housing project west of 19th Avenue in Island Station.

Thank you for your consideration.

While I don't know all the details of the potential effects on our wild area there, I do suspect they would not be positive for the bald eagles, the beavers, and such. I have personally been witness to the annual nesting of the eagle family there. Across the street from me lives a man, Doug Stowell, who can tell you their habits in much more detail. This is a high concern.

Beyond that though, the plans for so many tiny houses crammed onto the parcel would not only change the character of our neighborhood in an unfavourable direction, but would maximize the increase in traffic on 19th avenue, potentially overburdening the woonerf that works so well right now. It seems nobody around here wants that woonerf to change.

While a local government might see high density as a boon, bringing in more taxable units than a more graceful development, this kind of planning increases the budget burden, as well. I believe San Francisco has learned this lesson recently.

I also have friends who lived in a house that periodically flooded the ground floor, and can tell you: That is never a good situation to have to deal with. They eventually got fed up and moved away.

Over all, the present plan reeks of careless greed, and I, for one, don't want that touching my neighborhood.

Thank you again for your consideration.

- Gavin Bondy

Gavin Bondy
1912 SE Wren
Milwaukie, OR 97222 USA
tel: (503) 799-7839
[email: GavinBondy@gmail.com](mailto:GavinBondy@gmail.com)

Vera Kolia

From: Howard Lanoff <howardlanoff@yahoo.com>
Sent: Thursday, August 01, 2019 10:51 AM
To: Vera Kolia
Subject: Elk Rock Estates

Hello Vera,

I walk along 19th street on my way to Elk Rock and am happy to see the open area of the slough. It brings me a feeling of peace to be able to have that little piece of land empty. We have so much urban density that our green spaces are becoming limited. The thought of putting 9 houses on that property makes me sad and feel the injustice of money over green spaces. Milwaukie already is among the cities in the U.S with the fewest number of parks and green spaces.

Please keep this space green.

Howard Lanoff
503-744-0623

Vera Koliias

From: Kate Morrison <katemorrisoncreative@gmail.com>
Sent: Wednesday, July 31, 2019 4:34 PM
To: Vera Koliias
Subject: Fwd: Island Station development

Greetings Vera,

I'm writing in regard to the proposed development. I wasn't able to attend the public discussion about it, unfortunately, but I spoke to a few neighbors who were there and I understand that the developer suggested that he had the support of the neighborhood, which is entirely untrue. I live on Wren and 20th, within a block of the proposed development. I walk my dogs twice a day and am in regular contact with my neighbors—**not one** of them supports this proposed development. Here are some of the reasons this is the wrong direction for not only the neighborhood, but for Milwaukie:

1. This area is an annual nesting habitat for bald eagles. For the five years I've lived here, I've seen them every spring in the trees down the street. There's been a new baby (or two) every year. I understand that point was also discounted by the developer in the meeting.
2. Elk Rock Slough is one of very few natural habitats for beaver, which are critical for a healthy ecosystem—this one including fish, herons, osprey and much more.
3. Portland is losing critical natural spaces in exchange for housing that isn't well thought out but makes developers and tax-supported government money. I find it a conflict of interest that the agencies making the rules about housing are the ones making the money via taxes.
4. This neighborhood's street infrastructure simply couldn't handle the increased traffic. If you drive through it, you'll see what I mean. Our streets are awful with potholes everywhere that are rarely taken care of. I find it hard to believe that this development and any taxes it would generate would go toward supporting the streets or other infrastructural needs.
5. The path that 19th street creates from the park on Eagle to Elk Rock park—the one that people/cyclists/cars share without trouble now—would no longer be possible with the increase in traffic. Couple more residents with the summertime increase in traffic of visitors to Elk Rock, it would be a mess and would put pedestrians and cyclists in greater danger.
6. On the west side of Elk Rock is the deepest part of the Willamette River. When the river rises each spring, the water spills over to the east side of the rock, and it floods the slough. Some years the water gets so high that the water table rises and many of us (even higher up) have flooded basements. Building on that site is careless. Who would build right IN the flood plain? It makes no sense.

It seems that this development is more about money for the developer than anything else. It would change too many things that make this part of Portland unique and desirable for visitors and neighbors to enjoy. Please let me know if I can provide any more information or assist in any way. Thank you for considering the neighbors' concerns; they are many.

Kate Morrison

509-301-7000
www.k8morrison.com

Vera Kolias

From: Marco Clark <mcxiaoma@gmail.com>
Sent: Friday, August 02, 2019 2:25 PM
To: Vera Kolias
Subject: Elk Rock Estates Development Proposal

Greetings,

It is with great concern I write to you in regard to the proposed development in the Island Station neighborhood. My wife, son and I live at 12111 SE 20th Ave, Milwaukie, and enjoy our walks to Elk Rock on nearly a daily basis. Our concerns with the proposed development are as follows:

- 1) The development is planned in a flood plain. When (not if) the next flood occurs it will destroy the 10 proposed homes, and there is a good chance they will be abandoned rather than rebuilt, leaving 10 derelict structures in what was otherwise scenic wildlife habitat. This reason alone should be adequate to deny changes to the zone restrictions.
- 2) The impact on the view shed for those who are enjoying Elk Rock. More houses equals less natural habitat for plants and wildlife.
- 3) Impact on wildlife in the area. Elk Rock is home to numerous species, to include nesting raptors. The building of this development and its lasting impact will disrupt this vital habitat.
- 4) Allowing Elk Rock Estates to change not one, but three zoning restrictions sets a dangerous precedent for future construction in the City of Milwaukie. Our family, like many others, chose Milwaukie, and specifically Island Station, due to the low density housing zoning.
- 5) This development will negatively impact the safety of this community. Island Station does not have sidewalks on any of its streets. An increase in traffic volume of roughly 10-20 more vehicles will make walking in the neighborhood less safe as we are forced to walk in the streets.
- 6) I suspect the owner of Elk Rock Estates does not live in the Island Station neighborhood, and thus will only see monetary benefit from this development without incurring any of the negative externalities (to include abandoned houses after the next flood). It has come to my attention that the developer has claimed "residents in the community support the development." I believe this to be extremely disingenuous. Our family was never asked if we approved of this development. All residents I've spoken to in the neighborhood have also not been solicited for their opinions outside of the July 23rd meeting. This calls into question the character and integrity of the developer.

I hope this email is helpful in making your decision. If you would like further input please feel free to reach out to me.

--

Marco Clark

mcxiaoma@gmail.com

Vera Kolias

From: priscilla Elliott <pskillet@gmail.com>
Sent: Wednesday, July 31, 2019 2:28 PM
To: Vera Kolias
Cc: robertschristopher4@gmail.com
Subject: Comments on Elk Rock Estates

Hi Vera, thank you for sending Chris and I the 'dossier' on elk rock estates. After reading. I have formulated my comments as follows. Thanks you for posting & best regards
Priscilla Elliott

I see by the record, the city's been dealing with this builder for a while. Looking through the litany of his recently released outlandish requests to pursue this project -seemingly fueled solely by misguided ambition and desire for maximum personal profit- which have all already been denied, this latest seems as greedy as it is exhausting, which doesn't mean this least-worst request for a variance and permanent disruption on the slough/greenway/floodplain/eagle habitat/park edge should be accepted!

As Kellogg Creek is being restored, as the TriMet is invigorating downtown, as people flock to Elk Rock to drop their boats in at the new pier, looking at this regressive, dangerous, selfish "plan", Milwaukie seems to be one irreversible decision away from what will define the future and livability and charm of this whole city and riverfront.

In addition, this idea to put maximum density housing on a floodplain, in the HCA, between two parks, on a small city access road, during this time of increased natural disaster and climate change is shortsighted and dangerous, given the additional burden on the traffic, parking, runoff, FEMA, fire & police departments, etc.

As a resident of 19th Ave. who staked my lifetimes earnings on refurbishing an existing abandoned home in island station— because it is such a wonderful place— some hopeful part of me would see this land added to the park, wetlands restored, to the wonder of the public. To help make Milwaukie and Portland a sorely needed viable city of the future.

But the alternative is insane.

It's called out by the experts in your literature:

“The following deficiencies are recommended to be resolved....A significantly different layout that eliminates the need for road access onsite...A complete alternatives analysis that updates viable development options according to stormwater and floodplain no-net-rise issues... Are they willing to reduce...to significantly avoid and minimize floodplain and HCA impacts?”

—Sarah Hartung, Senior Biologist

“Adjacent private property to the north and south of Spring Park also have significant natural resource value. These areas are functionally part of the Elk Rock Island Natural Area”

— Elk Rock Natural Management Plan - adopted by the city of Milwaukie 1995

Thank you,

Priscilla Elliott

Sent from my iPhone

Vera Kolias

From: Rebecca Banyas <banyasr@gmail.com>
Sent: Friday, August 02, 2019 11:54 AM
To: Vera Kolias
Cc: Ann Ober; Mark Gamba; Milo Denham; Charles Bird
Subject: Elk Rock Estates

Hello Vera -- As a Milwaukie resident of Island Station, I am writing to state my concerns about the "Elk Rock Estates" development in Island Station.

As you well know, building in a flood plain presents challenges. I am very concerned that with the unpredictability of unusual weather events we will face due to climate change, that it is ill advised to approve building in a flood plain. Given Milwaukie's commitment to climate change, keeping this area natural and free of human structures seems like a sensible step. Has the City's Climate Action staff person reviewed and weighed in on this proposal?

My primary concern about this dense development in a residential neighborhood, however, is traffic.

There are two primary entrances to the neighborhood, Sparrow and Bluebird Streets. Both are narrow roads without sidewalks, as is 19th, where the development is proposed. I live at the corner of Sparrow Street and 22nd, a route frequently used by pedestrians, cyclists and cars to access Spring Park and Elk Rock Island. The increase in traffic on Sparrow Street in the last five years has been incredible, due to the increasing popularity of Spring Park, the Willamette, and Elk Rock Island. Summer weekends are extremely hectic, as witnessed by people parking up and down Sparrow Street and 19th, as well as on private property, to access the river.

The addition of 12 residences with their household cars will add to an already challenging traffic situation on Sparrow St. As stated, it is a narrow road with no sidewalks, and it is heavily used by pedestrians, dog-walkers, kids walking to the school bus, and cyclists. It's quite depressing to think of adding many more cars using the street daily, adding to air pollution and noise. There is also the noise and polluting traffic generated by construction -- lots of big rigs with large loads of materials. What route will all these trucks use?

In addition, the turn from 22nd onto Sparrow is downright dangerous -- a bad accident waiting to happen. Auto drivers fly around that corner, putting walkers at risk.

The very least that should be expected of this developer is a traffic management plan, both during construction and after completion. I ask that the City of Milwaukie do its due diligence here, as well -- traffic into this neighborhood is in need of better management. I believe if you put a "counter" on Sparrow you would be very surprised at the number of cars travelling up and down this little street.

Thanks for your time.

Rebecca Banyas
503-303-7337 home
310-405-4534 mobile

Vera Kalias

From: 3drockchiro@gmail.com
Sent: Friday, August 02, 2019 10:45 AM
To: Vera Kalias
Subject: NR-2018-005

Dear Ms Kaliasv,

I do not live in this particular neighborhood but I visit Elk Rock Park often and I support my neighbors' objections to the 9 or 12 unit housing development being considered. This is the first I have heard about this development and I wonder if you are aware how it affects not only this particular neighborhood but surrounding neighbors and visitors to this wonderful natural resource and neighborhood. I understand progress and need for housing but not in sacrifice of the history and viability of established neighborhoods and the impacts not only to surrounding neighborhoods but to the environment, floodplain, and natural habitat.

Thank you for allowing my wife and me to comment on the livability of our neighborhoods and parks.

Sincerely,

Robert Murakami and Lulu Moonwood Murakami

Sent from Windows Mail

Vera Kolias

From: Steve Gerken <argentpickle@yahoo.com>
Sent: Sunday, August 04, 2019 6:09 PM
To: Vera Kolias
Subject: Brief comment on NR-2018-005 "Elk Rock Estates"

Hello Ms Kolias--

I have a few brief thoughts on NR-2018-005 about the applicant's proposal to replant the portion of the property on the west side of the slough, as mitigation for environmental harm brought about due to construction.

First, according the US Forest Service, bitter cherry is a shrub unless provided with deep fertile soil. (<https://www.fs.fed.us/database/feis/plants/tree/pruema/all.html#BOTANICAL%20AND%20ECOLOGICAL%20CHARACTERISTICS>) It's not clear that the soil in the mitigation area is such that bitter cherry should count as a tree for purposes of mitigation. Second, Oregon white oak grows a taproot of anywhere between six and twenty feet in depth. (https://www.blm.gov/or/districts/salem/files/white_oak_guide.pdf) The augured depth probes in the mitigation area did not discover soil depths sufficient to accommodate the taproot of an Oregon white oak.?? Both these species should be reconsidered; they seem unsuitable to appear in a list of mitigation trees given the site conditions.

Third, at a broader scope, the proposed mitigation area is already heavily vegetated.?? We can be judgmental about whether we are personally fond of the plants there, but the fact remains that the proposed mitigation site already provides cover, nest sites, and food sources for small birds, and by attracting small birds it provides a food source for various raptors.?? The vegetation also provides food and cover for insects and rodents. There is already an ecosystem in place.?? Tearing out the vegetation in the mitigation site destroys the ecosystem that is already there, and would itself be a loss of habitat.?? Replanting the area with different vegetation can mitigate the harm done in uprooting what is currently in the mitigation area, but it should not count double as also mitigating harm done elsewhere.

Finally, I am dismayed that the proposed security to ensure good performance of a planting mitigation is a financial bond.?? Loss of habitat is not a situation in which money remedies the harm.?? If the planting mitigation fails, the construction project is out of compliance with a fundamental condition of its existence.?? Letting the failure be remedied with a financial transaction creates the appearance that we are willing to sell indulgences on our environmental protection regulations.?? It creates a moral hazard in which a builder can weigh the finances of the bond vs the mitigation, and choose not to service the mitigation.?? A more appropriate security on the performance of a planting mitigation, which communicates the seriousness of environmental protection, and one less likely to create a moral hazard, would be to itemize the sequence in which the new residences would be demolished and the land returned to its undisturbed state in the event the mitigation underperforms.

Regards,
Steve Gerken
12114 SE 19th Avenue
Milwaukie

Vera Kolas

From: Steve Gerken <argentpickle@yahoo.com>
Sent: Wednesday, July 31, 2019 1:06 AM
To: Vera Kolas
Subject: NR-2018-005 and neighborhood or community input

Hello Ms Kolas--

I'd like to point out that, with respect to the written record and testimony at hearing of neighbor comment on NR-2018-005:
??- the letter sent in March 2019 by the ISNDA land use committee had extensive concerns about how the applicant's plans would detrimentally affect parking, traffic, views, sidewalks, and the woonerf character of SE 19th Avenue;

??- the letter sent in March 2019 by Milo Denham also had extensive concerns about how the applicant's plans would detrimentally affect parking;

??- other comments sent by neighbors in March 2019, and included in the staff report of May 20, 2019, were stridently opposed to applicant's plans;

??- additional comments included in the staff report of July 16, 2019 also opposed applicant's plans;

??- oral testimony of Pam Denham and of Milo Denham at the July 23, 2019 hearing raised concerns about how applicant's plans would detrimentally affect neighborhood parking;

??- oral testimony of Chris Roberts at the July 23, 2019 hearing raised extensive concerns regards disaster preparedness, river flooding, and planning with awareness of ongoing climate change and its effects on river flows, and expressed incredulity that anyone would think new residential construction in the flood plain is a good idea; and

??- no comment or testimony of an Island Station resident expressed unqualified support.

This record of neighbor comment and testimony does not support applicant's claim in the July 23, 2019 hearing that he has the support of the neighborhood.

Further, the applicant was most recently in an ISNDA meeting in December 2018. The written record indicates the applicant's plans were significantly revised April/May 2019 and again in June/July 2019.?? It ought not be presumed that any ISNDA endorsement of the December 2018 plans also applies to the current plans.

Any claim by the applicant of having neighborhood or community support appears disingenuous at best.

Regards,
Steve Gerken
12114 SE 19th Avenue
Milwaukie

HCA Impacts and Alternatives regards NR-2018-005

Dear Ms Koliass:

In regards the HCA impacts of NR-2018-005 "Elk Rock Estates", per Milwaukie Municipal Code 19.402.12 "General Discretionary Review" [1] the impact analysis is incomplete without considering the water absorption capacity of the soil at the site, and the reduction to zero of that capacity under any area developed with impervious hardscaping.

In its current state, the existing undeveloped vegetated soil on the subject property absorbs water during rainfall, retaining some of the rain within the soil and thereby preventing some fraction of the rainfall over the subject property from reaching the Willamette River. Applicant proposes to cover several tens of thousands of square feet of currently vegetated soil with residences, roads, driveways, and other hardscaping. Following such development, rain falling over the impervious developed surfaces would be diverted across other soils, possibly through a swale, but in all cases generally into the Willamette River.

During severe rain, during which soils become saturated, rainwater falling over impervious development cannot be absorbed by other already-saturated soils toward which it may be diverted. In these conditions, the volume of water which would have been absorbed by the vegetated soil had the site remained undeveloped would instead flow into the Willamette River. In this manner, impervious hardscape development contributes to a rise in the river level during severe rain.

While not a "fill" in the volumetric sense as applies to cuts and fills in the floodplain, the elimination of soil absorbtive capacity due to coverage by impermeable hardscaping has an effect on the river comparable to that of an unbalanced fill in the floodplain: the level of the river rises, especially during the severe situations in which all possible reserves are needed to prevent and mitigate flooding.

For roads and driveways, use of porous asphalt, if a viable option subject to engineering constraints, would allow rainwater to permeate through the paved surface and be absorbed by the underlying soil [2]. This would mitigate the absorbtion impacts of the roads and driveways.

For residences, no known mitigation allows the soil underneath the building foundation to absorb the rain falling on the roof. Per code and best practices, rain falling on a residence roof is to be collected (generally via gutters and downspouts) and directed away from the residence foundation. For the area covered by new residences, that soil area becomes completely unable to absorb water during rainfall; the water absorbtion capacity of the area covered by residences drops to zero.

Note that applicant's current proposal includes a planting area for mitigation of HCA impacts. For purposes of soil absorbtion, the proposed planting area is already undeveloped vegetated soil. The general nature of the proposed planting is that it would change what the plants are which constitute the vegetation. This is not reasonably expected to materially increase the water absorbtive capacity of the soil in the planting area, and thus does not mitigate the reduction of water absorbtive capacity due to impervious hardscaping and new residences in the construction area.

In the case of residences, then, the most effective available mitigation for reduction in absorbtive capacity is to cover as little land as possible. This is trivially achievable by not building new residences on the subject property, thereby eliminating new buildings, new roads, new driveways, and all other new impermeable surfaces on the site.

Of the alternatives consistent with the proposed use of developing new residential construction, one previously proposed alternative of putting nine townhouses along SE 19th Avenue would considerably reduce the impermeable area compared to applicant's proposal. Applicant objected to this approach on the basis that it involves commercial loss due to demolition of existing residences, and also objected on the basis that the nine housing units in this approach is less than the twelve housing units in applicant's approach.

Of these objections, the first is moot for purposes of HCA consideration. HCA impact and alternative criteria do not include commercial viability as a listed criterion for decision-making among possible alternatives, so a commercial loss in connection with a particular alternative does not weigh into the applicability of that alternative for HCA purposes. Regarding the objection on the number of housing units, an alternative exists which results in a total of twelve housing units on the site, while materially reducing the area of impermeability. As an added bonus, this approach also retains the existing residences.

The SRO Approach

If:

- the existing residences at 12205 and 12225 SE 19th Avenue are retained and remodeled; and
- a two-story, ten-unit Single Room Occupancy (SRO) building is constructed between the existing residences,

the site will retain the existing structures, have a total of twelve housing units at the end of development, and the area of impermeability due to new construction can be reduced from several tens of thousands of square feet to about two thousand square feet [3]. This approach mitigates the water absorbtive capacity issue much more effectively than applicant's proposal and should be considered an alternative approach for purposes of HCA determination.

Regards,
Steve Gerken
12114 SE 19th Avenue
Milwaukie

References

[1] "19.402.12 General Discretionary Review", https://www.qcode.us/codes/milwaukie/view.php?topic=19-19_400-19_402-19_402_12&frames=off. Retrieved 2019-08-03.

[2] "Porous Asphalt", http://www.asphaltpavement.org/index.php?option=com_content&view=article&id=359&Itemid=863. Retrieved 2019-08-04.

[3] See for example Jolene's First Cousin, <https://guerrilladev.co/jolenes-first-cousin/>. (Retrieved 2019-08-03.) In that design, two buildings share a common site. Of the two buildings, the one to the south contains ten SRO units and relevant amenities. The design is not directly applicable in that it also contains commercial retail space, which is inappropriate for the subject property. However, the example serves to illustrate that ten SRO housing units can be fit into a two-story building with an approximate footprint of 50' by 35'.

In Reference to NR-2018-005 "Elk Rock Estates": Datum and its applicability to flood elevation

Dear Ms Koliass:

In general, "datum" is the term used to mean the reference framework within which distance is measured relative to the Earth, such as when creating a map[1]. As a geophysical term, datum can refer to the manner and extent to which the Earth is not a perfect sphere, for calculating distances on the Earth's surface between points at sea level. Datum can also define the zero elevation, for measuring heights above or depths below sea level. In the latter usage, datum is sometimes qualified as "vertical datum". For purposes of understanding the hundred year flood elevation in the vicinity of 12205 and 12225 SE 19th Avenue, Milwaukie Oregon, the relevant usage of datum is the vertical datum used to measure heights above sea level.

What does "define the zero elevation" mean?

Leaving aside vertical elevations for a moment, consider instead temperature.

In the early 1700s, the Germanic scientist Daniel Fahrenheit devised a scale for measuring temperature[2]. In this scale, the zero temperature corresponds with the coldest temperature which could be reliably reproduced in the laboratories of the day. It can be understood as the freezing temperature of a mixture of ice, water, and ammonium chloride. This temperature scale also has 180 evenly spaced degrees between the freezing point of pure water and the boiling point of pure water (at sea level and one atmosphere of pressure). This Fahrenheit temperature scale is the scale most commonly used in the United States; it is the scale on which water freezes at 32° and boils at 212°.

A contemporary of Daniel Fahrenheit, the Swedish astronomer Anders Celsius, also devised a temperature scale[3]. After subsequent revision, the Celsius temperature scale defined its zero temperature as the temperature at which pure water freezes (at sea level and one atmosphere of pressure). This Celsius temperature scale is familiar in high-school science classes in the US, and in common use in much of the rest of the world, as the scale on which water freezes at 0° and boils at 100°.

In both scales, the temperature at which water freezes is the same; water cannot be forced to stay liquid thirty-two degrees colder simply by measuring with a Celsius thermometer. The two temperature scales define their zero temperatures differently. A simple mathematical formula converts a temperature measured on the Fahrenheit scale to the same temperature measured on the Celsius scale. Using this formula, the zero temperature on the Fahrenheit scale is equal to approximately -17.77 degrees Celsius. (Note that the Celsius degree is of a different magnitude than the Fahrenheit degree. Fortunately, vertical datums do not have the equivalent complication of defining the foot to be a different distance.)

Similarly to the Fahrenheit and Celsius scales using different definitions for the zero temperature, there are several different ways of defining what elevation constitutes the zero elevation for measuring vertical distance. Depths below the surface are typically measured from average low tide, and depth datums vary from one another in part based on which low tides are included in the average. For distances up toward the sky, the most usual zero elevation is "sea level", meaning the average location of the surface of the ocean.

Since sea level varies with the tides over the course of a day, and the tides vary within a month and across a year, many measurements must be taken to fully understand where average sea level really

is. This will yield a good understanding of where sea level is for places covered by the ocean, where sea level can be measured directly. For places which do not border on the ocean, such as the Portland, Oregon metro area (and most of the continental United States), mathematical modeling is used to extrapolate from the measurements taken at the coasts. When a datum is created, the specific way to do this extrapolation is codified into the datum. The codified extrapolation used in each datum is based on the then-current understanding of the not-quite-spherical shape of the Earth.

Over several decades through the late 1920s, tidal measuring stations in the coastal United States and Canada pooled their data in an attempt to determine the average height of the ocean, so that mean sea level could be used as the zero elevation for subsequent use in maps and coordinate systems. This effort culminated in a datum currently called National Geodetic Vertical Datum of 1929, or NGVD 29[4].

After NGVD 29 was created, put to use, and codified into law, subsequent scientific and field observations began to call into question whether NGVD 29 was the best possible datum for its intended purposes. A new effort to determine sea level began in the 1970s and resulted in the North American Vertical Datum of 1988, or NAVD 88 [5]. NAVD 88 differs from NGVD 29 in a number of important respects, and reflects a greater understanding of the physical properties and shape of the Earth. (This greater understanding stems in part from the scientific use of computers and satellites subsequent to 1929.) Following the creation and validation of NAVD 88, the Federal Emergency Management Agency (FEMA) officially adopted NAVD 88 as the datum of reference, including for flood maps [6].

When an elevation at a specific location is known with respect to NGVD 29, and one wishes to locate that elevation on a map which is drawn in NAVD 88, it is necessary to convert the NGVD 29 elevation into an NAVD 88 elevation. Similarly to how conversion of a temperature from Fahrenheit to Celsius does not change the physical temperature, such a datum conversion does not change the physical elevation. Datum conversion determines the number in the new datum which corresponds to exactly the physical elevation at the known number in the old datum, after adjusting for the difference in zero elevation between the two datums.

Various calculation tools exist for this purpose. In the vicinity of Portland, Oregon, the conversion of a given elevation in NGVD 29 to NAVD 88 may be approximated by adding three and nineteen-fortieths feet to the NGVD 29 elevation [7]. In other words:

$$\text{NGVD 29 elevation in feet} + 3.475 \text{ feet} = \text{NAVD 88 elevation in feet}$$

This formula is an approximation of calculations which vary depending on latitude and longitude, where that variation stems from local variation in both of NGVD 29 and NAVD 88 regards the extrapolation of sea level to places not touched by the sea. A more detailed discussion of the exact calculation applicable to a specific location is outside the scope of this exposition. Interested parties may find more information about these vertical datums and datum conversion at the National Geodetic Survey [8].

The relevance to the Milwaukie Municipal Code (MMC) and the base flood elevation in the vicinity of Spring Park results from the specification of some elevations in NGVD in MMC, and the general need to locate all elevations on FEMA maps during the planning process. Because FEMA converted all operations to NAVD 88, any elevation line which is to be located on a FEMA map must first be converted to and expressed in the NAVD 88 datum. However, note at MMC 18.04.030 "Definitions" [9] the definition of the term "Area of February 1996 inundation":

“Area of February 1996 inundation” means the areas along the Willamette River and its backwaters of Johnson and Kellogg Creeks that were flooded to elevation 34.5 (NGVD) in

February of 1996.

The parenthetical indicates that the NGVD datum is the applicable datum for the 34.5 elevation figure. Note further the definition of the term "Water surface elevation":

"Water surface elevation" means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929, (or other datum, where specified) of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas. (Ord. 1983 § 2, 2008; Ord. 1899 § 2, 2002)

Finally, note the definition of the term "Design flood height":

"Design flood height" means the higher elevation of the following:

1. The elevation of the one hundred (100)-year storm as defined in FEMA Flood Insurance Studies and shown as Zone A on Flood Insurance Rate Maps; or
2. Water surface elevation of 34.5, the elevation of the February 1996 flood event measured for the Willamette River.

In item 2 of the definition for "Design flood height", since it is defined as a "water surface elevation" without giving a specific datum, the definition of "water surface elevation" governs. Under that definition, the "water surface elevation of 34.5" in item 2 of "design flood height" is in reference to NGVD 29. This is further internally consistent with the definition of "Area of February 1996 inundation" above, which uses the same 34.5 figure in specific reference to the NGVD datum in description of the same event called out in item 2 of "design flood height".

To convert the 34.5 NGVD 29 value to the NAVD 88 datum used on FEMA maps, the applicable calculation is:

$$34.5 \text{ NGVD } 29 + 3.475 = 37.975 \text{ NAVD } 88$$

at least to a first approximation; location-sensitive tools such as are available to civil engineers and city planners may yield a slightly different value in NAVD 88 after taking into consideration the precise latitude and longitude at which the vertical conversion applies.

In oral testimony before the Planning Committee on July 23, 2019, the attorney representing the applicant was not persuaded that the 34.5 figure in Design flood height referred to the NGVD datum. I am personally persuaded by the text of MMC 18.04.030 as detailed above. I expect and believe the Planning Committee will be similarly persuaded that the text of Milwaukie code adequately establishes that the 34.5 figure in Design flood height item 2 is in reference to NGVD 29.

Thus, after relevant datum conversion, the elevation referred to as 34.5' NGVD 29 in municipal code is approximately 37.975' NAVD 88, for use with FEMA maps and comparison to the FEMA 100-year flood elevation. In reference to NR-2018-005 "Elk Rock Estates", applicant's materials indicate a finished floor elevation of 37.4' on several buildings, and a finished road elevation of 37.4' as well. These elevations appear on FEMA-derived maps without annotation, and are understood to be elevations in the NAVD 88 datum used on FEMA maps. Since 37.4 feet NAVD 88 is less than the 37.975 feet NAVD 88 water surface elevation for the inundation of February 1996, the applicant's materials indicate finished floor and finished road elevations below the water surface elevation of the inundation of February 1996. On this basis, the application is materially in violation of Milwaukie building standards as documented in Milwaukie Municipal Code, and therefore, application NR-2018-005 should be denied.

Sincerely,
Steve Gerken
12114 SE 19th Avenue, Milwaukie

References:

- [1] "Datums And Reference Frames", <https://www.ngs.noaa.gov/datums/index.shtml> . Retrieved 2019-07-28.
- [2] "Fahrenheit", <https://en.wikipedia.org/wiki/Fahrenheit> . Retrieved 2019-07-28.
- [3] "Celsius", <https://en.wikipedia.org/wiki/Celsius>. Retrieved 2019-07-28.
- [4] "National Geodetic Vertical Datum of 1929 (NGVD 29)", <https://www.ngs.noaa.gov/datums/vertical/national-geodetic-vertical-datum-1929.shtml>. Retrieved 2019-07-28.
- [5] "North American Vertical Datum of 1988 (NAVD 88)", <https://www.ngs.noaa.gov/datums/vertical/north-american-vertical-datum-1988.shtml>. Retrieved 2019-07-28.
- [6] "Vertical Datum", https://www.fema.gov/media-library-data/20130726-1615-20490-4828/vertical_datum_letter.pdf. Retrieved 2019-07-28.
- [7] "How to convert City of Portland datum to another datum", <https://www.portlandoregon.gov/transportation/article/70676>. Retrieved 2019-07-28. To convert from NGVD 29, first add 1.375 feet to reach City of Portland datum, then add 2.10 feet to go from City of Portland datum to NAVD 88.
- [8] "Vertical Datums", <https://www.ngs.noaa.gov/datums/vertical/>. Retrieved 2019-07-28.
- [9] "18.04.030 DEFINITIONS", https://www.qcode.us/codes/milwaukie/view.php?topic=18-18_04-18_04_030. Retrieved 2019-07-28.

Needed Housing as regards NR-2018-005

Dear Ms Kolas:

Applicant's materials as detailed in the packet for the July 23, 2019 hearing before the Milwaukie Planning Committee include a letter dated July 16, 2019, on letterhead of Schwabe Williamson & Wyatt, in which it is asserted that the application is a “Needed Housing” application under the definition of ORS 197.303(1). The letter then details various exceptions to Milwaukie Municipal Code and the Milwaukie Comprehensive Plan which would flow from that assertion, if true. However, applicant provides no evidence, in the letter or elsewhere in application materials, to substantiate the assertion that the application is in fact a “Needed Housing” application under ORS 197.303(1).

Per the text of ORS 197.303(1), “needed housing” means:

...all housing on land zoned for residential use or mixed residential and commercial use that is determined to meet the need shown for housing within an urban growth boundary at price ranges and rent levels that are affordable to households within the county with a variety of incomes, including but not limited to households with low incomes, very low incomes and extremely low incomes, as those terms are defined by the United States Department of Housing and Urban Development under 42 U.S.C. 1437a.[1]

Note that under the definition of ORS 197.303(1), not all housing is needed housing. In order to qualify, housing must be:

- determined to meet a demonstrated need;
- for housing within an urban growth boundary;
- at price ranges and rent levels that are affordable to households within the county with a variety of incomes.

Applicant has not demonstrated that a need exists for housing with three to five bedrooms per unit and 2.5 to 3.5 bathrooms per unit, having garages well within the inundation zone of February 1996, four blocks away from a sewage treatment plant, and one block away from a rail line on which the railroad parks idling diesel locomotives at all hours of the day and night. It may be inferred that applicant believes there is a need, and pursues the application based on that belief. However, having a belief is not the same as showing need. Belief cannot be substituted for demonstration. In order to qualify as needed housing, applicant bears the burden of showing that a need exists for the proposed housing, and applicant has not done so.

While it is trivial to demonstrate that the subject property is within the Portland metro area urban growth boundary, applicant still bears the burden of establishing that the application fulfills necessary criteria. Applicant has not provided a map or statement specifically demonstrating that the subject property is within the urban growth boundary.

Applicant has not provided intended price range or rent information, other than the term “market rate”. Assuming a rational residential mortgage market with foreclosure rates remaining below 1% [2], while remembering the irrational mortgage market that led to the real estate crash of 2008 [3], it may be assumed that most real estate transactions which close are affordable to the buyer. This does not by itself establish that the transacted property is affordable to households within the county with a variety of incomes. If the houses in question are priced such that they are affordable to investment bankers,

hedge fund managers, and the starting guards for the Portland Trail Blazers, it seems unlikely that this would constitute a variety of incomes for the purposes of ORS 197.303(1). Applicant has provided neither specific intended price ranges, nor data on the variety of household incomes within the county and the prices or rents that would be affordable on those incomes. Lacking this information, the application does not substantiate an assertion that its proposed housing will be at price ranges and rent levels that are affordable to households within the county with a variety of incomes.

Because the applicant has not met the burden of showing that the proposed development meets a demonstrated need, or the burden of showing that the intended price range or rent is affordable to a variety of household incomes in the county, applicant cannot substantiate the assertion that the proposal is for needed housing. Since the applicant bears the burden of proof, and has not provided proof, the application cannot be considered a needed housing application. Due to the application not being a needed housing application, applicant is not due any exceptions from Milwaukie Municipal Code or exceptions from the Milwaukie Comprehensive Plan, and is not due the opportunities to amend the application or propose conditions of approval detailed in ORS 197.522.

Sincerely,
Steve Gerken
12114 SE 19th Avenue
Milwaukie

References:

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- [2] “Foreclosure rate U.S. 2005-2018”, <https://www.statista.com/statistics/798766/foreclosure-rate-usa/>. Retrieved 2019-08-01.
- [3] “United States housing bubble”, https://en.wikipedia.org/wiki/United_States_housing_bubble. Retrieved 2019-08-01.

Vera Kolias

From: Victoria Mendez <msvictoriakm@gmail.com>
Sent: Saturday, August 03, 2019 11:14 AM
To: Vera Kolias
Subject: Elk Island Estates

Hello, My name is Victoria Mendez I am a home owner in the Island Station neighborhood. I 'm terrified at the idea of a large development in our very small neighborhood. The impact on the environment and the community will be devastating, First its in a flood plane, second our streets are not built for all of the construction and traffic, third the Island and the neighborhood is already being impacted by the increased activity and and traffic daily. The traffic impact to our neighborhood alone is insane, our streets are not meant for more than one car at a time, there isn't room for two cars to even pass each other. This neighborhood is historic and should have protections like all other historic neighborhoods. They should not be able to do something like this to our community without all of us having a say and a vote. This in not just any empty lot, its a WETLAND and its a delicate environment that needs protection not development. PLEASE consider the impact to the environment and our small community that will be affected beyond repair. Leaving the current home owners and tax payers out of this decision is wrong. You are making a huge mistake for our environment and our community and we the voters are taking notice. All peoples involved in pushing this through should be ashamed. Please reconsider this incredibly destructive development.

Sincerely,
Concerned Island Station home owner/tax payer/voter
Victoria Mendez

Vera Kolias

From: Beth Mills <contact.bethmills@gmail.com>
Sent: Sunday, August 04, 2019 8:53 PM
To: Vera Kolias
Subject: Against Elk Rock Estates

Dear Ms Kolias,

I live on River Road and often walk down by the river via Spring Park & Kellog Park.

I feel it would be detrimental to build 12 3 story units in this area. I feel it is irresponsible and greedy of the city to allow this to move forward.

Think about our children and the legacy we leave them.

Sincerely,

Beth Mills

12425 SE River Rd
Milwaukie

Vera Kolias

From: S J L <serafinejl@gmail.com>
Sent: Sunday, August 04, 2019 9:32 PM
To: Vera Kolias
Subject: concerns about the "Elk Rock Estates" development in Island Station.

Hello Vera -- I am writing to state my concerns about the "Elk Rock Estates" development in Island Station.

Building in a flood plain is short sighted at best, as conventional wisdom has shown, especially given the climate changes we are currently facing. This alone should trigger a denial from the city.

My primary concern to this plan is the dense development in a neighborhood that does not have dense housing. I moved here because it is NOT dense housing. I moved here for the narrow streets and NO sidewalks. I like this about my neighborhood. This project will change the vibe in the entire neighborhood. This one project alone has the ability to change the entire feel to this neighborhood.

In addition to that is the limited driving access in and out of it. Since I have lived here there are many more people coming into the neighborhood especially on weekends to access Spring Park and Elk Rock Island. The increase in traffic on Sparrow Street in the five years has been incredible, in large part to the popularity of Spring Park, the Willamette, and Elk Rock Island. Summer weekends are extremely hectic, as witnessed by people parking up and down Sparrow Street and 19th, as well as on private property, to access the river.

The addition of 12 residences with their household cars will add to an already very challenging traffic situation in the area. The streets are narrow roads with no sidewalks, and it is heavily used by pedestrians, dog-walkers, kids walking to the school bus, and cyclists.

I moved into this neighborhood for these very things, narrow streets with no sidewalks and the ability to walk around the neighborhood without having to worry about fast driving cars. I like the peaceful, quietness of the neighborhood I invested to live in and adding 12 more houses to this area will increase traffic by a substantial percentage. Therefore change the whole vibe of the neighborhood. **This one project alone has the ability to change the entire feel to this neighborhood.** This area is not density housing area, this project will change that to become more density populated area. I for one chose to live in this area because it is NOT dense.

This project will change the entire vibe of the neighborhood, it will increase traffic, it is being built on a flood plain, these are the reasons I sincerely hope this project is denied.

Many thanks,
Serafine Lilien
12204 SE 21st Ave.
Milwaukie, OR 97222

Vera Kolas

From: carol timper <cjtimper@yahoo.com>
Sent: Monday, August 05, 2019 9:37 AM
To: Vera Kolas
Subject: Elk Rock Estates

Dear City of Milwaukie,

I understand that I can still respond to this ridiculous variance proposal to build 11 house in the flood plain, in the Willamette greenway.

I was out of town for both the proposed meeting dates.

I live at 12206 SE 19th Avenue and this would directly impact me and the good feature of my home. Not only would this completely destroy the livability of our unique neighborhood by trying to squeeze 11 homes into the space of perhaps 3, it would make it impossible to feel safe walking on 19th Avenue. Not to mention the increase of 20-30 new resident vehicles that would come with it. We spent a lot of time with the City of Milwaukie as a neighborhood making the street design for 19th Avenue. The additional homes and traffic would make all our efforts of this futile.

Elk Rock Island/Milwaukie Bay Park has become a popular destination and especially on hot days with its access to the river. This past weekend alone there were easily 50 more vehicles in the area near Spring Park and vehicles were parking on the hill of our property and up SE Wren. It was crazy! There has also been an increase of walkers who travel from the area of Milwaukie Bay Park & Kellogg Park. "Elk Rock Estates" would likely give 25 or more cars to the neighborhood on a daily basis on top of the increased visitors. I can swear that on a daily basis the listed speed limit of 15 mph is not adhered to or enforced. The people coming in to this area who do not live in this neighborhood are traveling 25-30 MPH on any given day. I completely see that there will be a tragic accident and allowing the variances for 11 homes will directly impact this area.

I have restrictions of what I am allowed to do with my property as I live on the corner and several feet of both the front and side of my home have restrictions as to what I can do. I for example cannot build any hardscapes on the front or side of the property. I also cannot build a garage due to the City code and how much covered space I am allowed. This proposal is asking for a multitude of variances that you should not allow either.

I bought my house knowing it was on a corner lot and I would have limitations. The people who bought the properties in front of us also bought knowing they would have limitations. I strongly urge that no additional variances be made for the "Elk Rock Estates" proposal including not allowing a new street entrance from SE 19th Avenue.

Best regards,

Carol Timper
Home owner at
12206 SE 19th Avenue

Vera Koliias

From: charlene toman <ckt360@gmail.com>
Sent: Monday, August 05, 2019 3:58 PM
To: Vera Koliias
Subject: elk rock estates

Greetings vera, as for making our voices heard, I'm a resounding no on this development being Built.

- 1) The natural areas in milwaukie are worth saving!
- 2) Too much infill building everywhere. If I wanted to live in Portland With all buildings looking the same, too expensive for average person, parking Options way way down, way more traffic, river views blocked by very expensive Housing for a few and certainly not the many, pollution/sewage runoff, etc. -I would have stayed in Portland and Not moved to milwaukie long ago. Many others echo my sentiments.
- 3) If a flood happens, who saves the proposed new neighborhood? The taxpayers? Seems like the folks who want expensive houses built in natural unsafe areas, should Pay for their own 'rescue' if one is needed. (like building on government land until a Natural disaster hits, many examples here).
- 4) Driving up housing prices for the entire city.
- 5) Where is tax revenue going? Fancy new schools, light rails, developer tax breaks Like the multi story apartments where bernards' used to be, etc. is this being looked at Other than more tax revenue for the city? Who are these developers? From Oregon, Clackamas County, out of state, out of country? How do we find out. Non- local developers have no Concern for our local interests obviously. Maybe local developers have no concern either, depends On where people with money have their values).
- 6) Where do the slough concerns get voiced and to whom? What is the process? If local residents have their concerns aired, who listens? What is that process like? Who ultimately makes the decision on this development?

Thanks for reading, caring, listening and info gathering. I look forward to your response.

Thank you-ck

Sent from [Mail](#) for Windows 10

Vera Kolias

From: joanne tracy <cup.a.jo@comcast.net>
Sent: Tuesday, August 06, 2019 12:24 PM
To: Vera Kolias
Subject: NO on the development of Willamette Slough

Hello. I have lived in the Island Station area for over five years. I have spent a great deal of time walking, reflecting, photographing in the Willamette Slough area. This is NOT the place for development next to a conserved area. The only benefit to doing this is for some home owners and since when do we give a variance for the satisfaction of the few who would live there?

I ask that the developer in question alter the plans to a much smaller footprint. Large scale construction will destroy native habitats. Native habitats are what we want to protect and encourage. Clearly this developer is out to make a killing. Literally.

Thank you for the chance to voice my concerns. If I wasn't leaving soon on a trip I would add much more to this letter, Joanne Louise Tracy

Vera Kalias

From: John Clinton <cptclinton@gmail.com>
Sent: Monday, August 05, 2019 6:15 PM
To: Vera Kalias
Subject: Regarding NR-2018-005

Dear Vera Kalias,

I'm writing in opposition to the purposed development between SE 19th and the Willamette River.

My wife and I have lived in Milwaukie for just short of 6 years now. When we found our home it was a perfect wonderland. Close to downtown but felt far away with large lots, too many natural mature trees to count, and a wonderful water front. The Elk Rock Park, in particular, has been a staple of a warm summer day and will only become more popular in our family as our young son gets older. That is unless this development is approved.

This purposed development goes against everything that makes Milwaukie special. It's huge, gaudy houses are just another incremental step in making Milwaukie over crowded and absorbed by the big city. Everything we came here to avoid. Not to mention they are knowingly building on the flood plain which just doesn't make sense. The first time the waters rise and these homes are swamped the residents will look to the insurers and the community for help.

I'm all for more housing and I understand the need. However, this is not the way. My family and my community vehemently oppose this development. You can expect more emails stating the same from my neighborhood.

John Clinton
1085 SE Rim Rock On
Milwaukie, OR 97267

Vera Kolias

From: Lura Lee <lura.lee1010@gmail.com>
Sent: Monday, August 05, 2019 11:23 AM
To: Vera Kolias
Subject: new development near Elk Rock, Milwaukie / NR-2018-005

I was walking by Elk Rock which is just down the street from me. It is a favorite place to walk, explore and appreciate our dwindling natural areas along the river.

Much to my dismay I saw a posting on the telephone pole about a proposed development between the slough and SE 19th avenue.

First, let me say I realize the county is in need of more taxes and also there is a big push for high density housing, but I would hope there is a more proper place for this type of development.

Along the river, is not one of them.

From my understanding, this development would block the view of the island from SE 19th. That view is one of the joys of the neighborhood.

The developer apparently has told the county that he has support of the community.

Not sure where he came up with that bit of fantasy, but it was not talking to people affected by the development.

It would be sad to have only the few people in the development to have a view of the beautiful island.

thank you

Lura Lee
503-679-6401

Vera Kolias

From: Mary Neustadter <mwneustad@aol.com>
Sent: Tuesday, August 06, 2019 12:13 PM
To: Vera Kolias
Subject: Elk Roc Estates Comment Letter

Vera:

I have several objections to Elk Rock Estates development:

At a time when we are faced with massive climate change, we are still building in the 100 year floodplain. While our regulations allow for it, is the applicant doing all he can to avoid the floodplain in the first place? Has this been thoroughly explored? And, has the applicant been able to meet all the requirements including ensuring that the new the new development does not cause increased flooding elsewhere should he build in the floodplain?

Furthermore, at a time when we are threatened with an enormous decline in biodiversity that threatens the extinction of a million plants and animals, we are contemplating building in a Habitat Conservation Area (HCA). In fact, the applicant is seeking approval for the new development through a Natural Resource Cluster Development that, in turn for mitigation to the HCA, the applicant can take advantages of variances that would allow him to be more creative in clustering the buildings on the property to avoid encroachment of the HCA. Is the mitigation presented by the applicant adequate - removing 23,000 square feet from the Habitat Conservation District in perpetuity for \$41,000 of improvements to vegetation elsewhere in the HCA. I think not. Furthermore, has the applicant really explored how to best use the variances to cluster the buildings to avoid impacting the HCA?

There is real concern by the community about the impact the additional traffic will have to those living on 19th Street and Sparrow Street, but has anyone thought about the impact to those people living on River Road north of Sparrow Street? I live at 12213 SE River Road, just three houses north of the intersection of River Road and Sparrow Street. It is likely that most if not all of the traffic leaving the Elk Rock Estates will go east on Sparrow Street and turn north on River Road past my house since it is the most direct route to McLoughlin Blvd. and the easiest way to exit the development. At times during morning traffic, there are cars stacked up from the light at McLoughlin Blvd. all the way up River Road and past my house – about 2.5 blocks - waiting for the light to turn green. The traffic on River Road has become increasingly congested over the last three years. Roads in the immediate area accessing McLoughlin Blvd. were closed when the MAX was put in and River Road was made into a one way street below Sparrow to mitigate the flow of traffic. There has been significant development south on River Road outside Milwaukie's jurisdiction and the new inhabitants rely on River Road to access McLoughlin Blvd. The additional traffic generated by Elk Rock Estates will only continue to degrade this situation. Please consider doing a traffic study to see if/how traffic can be mitigated given this new development.

I am so aware of the compromise we need to make today in this very complex world as we push against urban growth boundaries but there is just no excuse for making bad choices. I recommend we open up the decisional meeting of the Planning Commission on September 10th to the public to ensure everyone has a voice.

Mary Neustadter

Vera Kolia

From: Michele Bertaux-Zabaglio <michele.bert.zab@gmail.com>
Sent: Tuesday, August 06, 2019 7:42 AM
To: Vera Kolia
Subject: Comments for Elk Rock Estates proposal

Dear City of Milwaukie Planning:

I oppose development of the flood plain in the Elk Rock Estates proposal. This flood plain is adjacent to a larger area - a beloved and much-visited natural environment - which needs and deserves protection. It's part of the heritage of the city of Milwaukie and the Island Station neighborhood.

From downtown Milwaukie, I walk to Spring Creek and Elk Rock Island almost daily. In the past two years, I have observed eagles, osprey, peregrine falcons, herons, kingfishers, pheasants - and more - in nesting and food-hunting activities here. We do not need more of the Elk Rock Estates sort of housing in Mikwaukie. It doesn't come under the heading of affordable. Nor is it in keeping with the neighborhood.

There is also the matter of sea-level rise generally and the subduction event specifically. In my opinion, it's irresponsible to put a housing development in this area. Nor is it in keeping with the intentions set out by the city to promote sustainability, livability and affordability. It would be worthwhile to designate this floodplain as permanently a conservation area that cannot be developed.

Just yesterday, at an Elk Rock cleanup followed by a talk on ER Island geology, Bill Burns of the Oregon Department of Geology and Mineral Industries (DOGAMI), spoke of the unique habitat along the river edge of that part of the flood plain, because of natural springs that come out there due to geological formations.

Please do the right thing by the citizens and the environment by not granting permission for this development.

Sincerely,

Michele Bertaux

513-207-6709

10671 SE Harrison St

Milwaukie

Dear Ms Koliass--

According to legend, in the year 1028 King Canute set his throne at the water's edge and commanded the rising tide not to wet his feet [1].

We've learned a little about the oceans since King Canute's time. He knew of the inevitability of the tide and the futility of commanding Nature to obey; we know these precepts to still be true today. We also know now that the level of the sea is not fixed over a span of centuries or decades or even years; the average level of the seas has risen measurably since 1990, and at an accerated rate since 2002 [2]. In ten days of June 2019 alone, 80 billion tons of Greenland's glacier ice melted into the sea [3]. The following month, a heat dome that had brought record-breaking high temperatures to Europe moved over Greenland, causing some of the most marked melting in recorded human history [4] and melting at a rate that had not been forecast to occur for another fifty years [5]. The situation in Antarctica is comparable: land ice on the southernmost continent is melting six times faster than in the 1970s [6]. All the polar glacier melt contributes to a measurably rising ocean.

We also know the effects of the rising seas. We see it in the basements of Miami's luxury high-rises, and on the streets of Miami [7], where flooding has become as regular as the full moon. We see it in an increasing frequency of sunny-day flooding due to higher high tides, in East Coast cities including Baltimore and Washington D.C. [8] We see it in photos of city streets underwater in Annapolis, Boston, Galveston, New York City, and Norfolk VA [9]. In the Norfolk area, floods threaten to make the largest naval base in the world inaccessible.

We know that the river which surrounds Elk Rock Island is affected by ocean tides in its reach downriver of the Oregon City falls. On sunny summer days, the river gages at Portland and at Oregon City show a clear daily tidal variation, with a daily peak-to-trough range of about four feet [10]. As the rising ocean flattens the total water slope between Milwaukie and the sea, we can expect to see a rise in the average river level here also. Further, a flatter river system between the Milwaukie riverbanks and the open ocean can be expected to produce slower-moving water, leading to flood crests which are both higher and longer-lasting than history alone would predict.

King Canute was a pious man, and attributed to God what some today would attribute to Nature. After the sea lapped around King Canute's legs, he hung up his crown and declared the inadequacy of his royal command to hold sway over the waters. Shall we be as wise? Or shall we allow a land developer to plant the footings of new buildings in the floodplain, and demand the river never bathe their legs? I should think that for all we have learned, we can be at least as astute as King Canute, and show better sense than to plant houses' toes in the floodplain. Let us be wise, and deny permit to NR-2018-005.

Regards,
Steve Gerken
12114 SE 19th Avenue
Milwaukie

References:

- [1] "King Canute and the tide", https://en.wikipedia.org/wiki/King_Canute_and_the_tide. Retrieved 2019-08-05.
- [2] "Understanding the Greenland Ice Sheet: Polar Portal", <http://polarportal.dk/en/groenlands-indlandsis/nbsp/viden-om-groenlands-indlandsis/>. Retrieved 2019-08-05.
- [3] "A record melt event in mid-June | Greenland Ice Sheet Today", <https://nsidc.org/greenland-today/2019/07/a-record-melt-event-in-mid-june/>. Retrieved 2019-08-05.
- [4] "The Greenland Ice Sheet is in the midst of one of its greatest melting events on record - The Washington Post", <https://www.washingtonpost.com/weather/2019/07/31/greenland-ice-sheet-is-throes-one-its-greatest-melting-events-ever-recorded/>. Retrieved 2019-08-05.
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- [9] "Sea level rise, high tides cause sunny day flooding in coastal cities - Business Insider", <https://www.businessinsider.com/sea-level-rise-high-tides-sunny-day-flooding-coastal-cities-2018-4>. Retrieved 2019-08-05.
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Vera Kolia

From: Theresa Silver <tsilver2@spiretech.com>
Sent: Tuesday, August 06, 2019 8:04 AM
To: Vera Kolia
Subject: Do Not approve the NR-2018-005 "Elk Rock Estates" Development

Dear Ms Kolia,

I am writing to strenuously object to the proposed development. From the very beginning of this process Gillis Properties LLC has submitted inaccurate, incomplete, internally inconsistent, and flat out misleading materials. They seem to be willing to say whatever they have to say in order to be allowed to build their subdivision. There is nothing to support the "Natural Resources Cluster" designation for the proposed development. What they are proposing is a standard subdivision and they seem to be hoping that if they call it a "Natural Resources Cluster" we won't notice that they're sticking that subdivision in an environmentally fragile wetlands.

I sincerely believe that building the proposed subdivision will be detrimental to the character of the neighborhood as well as disruptive to the natural habitats currently protected along the riverbank. Furthermore, they have not demonstrated trustworthiness and I am deeply concerned that regardless of any limitations put on them by the planing commission, once they start construction, they are unlikely to adhere to the plan. For these reasons their application should be denied.

Sincerely,
Theresa Silver
12114 SE 19th Ave
Milwaukie, OR 97222

Vera Kolia

From: tieneke pavesic <tienekp@comcast.net>
Sent: Monday, August 05, 2019 3:08 PM
To: Vera Kolia
Subject: NR-2018-005

Hello,

I'd like to go on record against this proposed development. The road is too tight to accommodate such a large scale project and that much traffic. The train tracks will block large trucks from one side. It also imposes on the park and we should not be allow new development on a flood plane.

I live in the area on Fair Oaks Ln.

Thanks.

Vera Kolia

From: Tracy, Jana <jtracy@blm.gov>
Sent: Tuesday, August 06, 2019 1:33 PM
To: Vera Kolia
Subject: Elk Rock Estates Proposal

To whom it concerns,

I am sending my comments to you regarding the proposed Elk Rock Estates.

I am very disappointed in the City of Milwaukie that they are even considering allowing ten houses to be built on the former Smith acreage.

I have followed the city's land use laws for my property, including a Right of Way permit to alter the slope in front of my home at 12206 SE 19th Ave. Why should the residents in Elk Island Station abide by rules you change so easily for real estate developers? In building these ten homes, there are too many rules that would be violated that our neighbors have followed for years.

This proposal does not conform to the future neighborhood goals. The site is within the Willamette Greenway where all types of birds, butterflies, bees, reptiles and other animals call home. There is also a quietness of the neighborhood not found in other neighborhoods. This proposal will disrupt the habitat in the area, create excessive noise and remove protections from the defined Greenway area within the neighborhood.

The neighborhood is an area where bikers, cars, pedestrians, birdwatchers, runners, skaters, skateboarders and small children use the same narrow streets. Elk Rock Island is also a place other neighborhoods enjoy because of the access to the Willamette River. Adding 10 homes in a small space is going to increase traffic on these narrow streets. Anyone injured from added cars is a liability to the city as they are willing to provide a variance to so many of the codes they already set forth.

Please do not risk the environment and the neighborhood for added tax value. In the end, it will not be worth it. I have noticed a lot of housing developments underway in the Milwaukie area. There is going to be plenty of housing without Elk Rock Estates. Even the sound of such a place is not in line with any neighborhood unless it is in Portland, Wilsonville or Lake Oswego.

I am not opposed to having a few homes on this property. However, ten homes is past the point of decency. Even your land use laws forbid it.

I hope the city has heard of climate change and the value of open areas with greenery to combat the heating of the planet. I would hope that the city also knows that with climate change comes more flooding especially in flood plains like this property.

I will not support this plan and will do everything in my power to stop it. Use your common sense and end this nonsense. Do the right thing for our neighborhood and planet.

Jana Tracy *PMP*
Kapala IT Project Manager
503-808-6188
(cell) 503-810-6266
jtracy@blm.gov

Vera Koliias

From: Steve Gerken <argentpickle@yahoo.com>
Sent: Tuesday, August 06, 2019 1:16 PM
To: Vera Koliias
Subject: Crawlspace wall height, other concerns regards NR-2018-005

Hello Ms Koliias--

Regards the proposal NR-2018-005, please note that applicant's plans call for crawlspace construction on buildings 1 through 6 with crawlspace (garage) floor at approximately 33 feet elevation and finished floor at 37.4 feet elevation (crawlspace floor elevation is estimated from topo lines as the most current engineering drawing does not label this elevation). This would lead to a crawlspace foundation wall height of about four and a half feet measured from the crawlspace floor to the finish floor. Milwaukie Municipal Code 18.040.150.G.6 caps the height of crawlspace walls in flood zones at a maximum of four feet. It cannot be determined from applicant's supplied materials that the proposal is in compliance with MMC 18.04.150.G.6 . The Planning Commission should not grant a permit unless applicant can establish compliance with all relevant code including MMC 18.04.150.G.6.

An earlier comment from Marco Clark, on 2 August 2019, raised the concern that following a flood event up to 10 structures in the proposed development would be abandoned as derelict. A relevant section of municipal code in which the planning commission can evaluate this concern is MMC 18.04.010.F.

An earlier comment called out the reduction to zero of rainwater absorbtive capacity of soil covered by new residences. A relevant section of the Comprehensive Plan in which the planning commission can evaluate this concern is CHAPTER 5 — TRANSPORTATION, PUBLIC FACILITIES AND ENERGY CONSERVATION, under the section heading "Drainage and Streets".

A comment from much earlier in the application process raised the concern that MMC 19.505.3.D.11 is not being met. No subsequent materials from applicant address the concern that as proposed, new residential construction which includes large west-facing windows without design for summer shading will lead to excessive energy use for cooling , in violation of the both the above code section and Milwaukie's energy conservation goals in the Comprehensive Plan. Multiple proposed buildings in applicant's plans have such west facing expanses of window without summer shade. This is in violation of the above section of MMC.

Sincerely,
Steve Gerken
12114 SE 19th Ave
Milwaukie

From: Christopher Roberts <robertsc@lclark.edu>
Sent: Tuesday, August 06, 2019 3:56 PM
To: Vera Kalias
Subject: Environmental objections to Elk Rock Estates

Environmental

The applicant's responses to environmental issues raised by the proposed development was insufficient at best, and indicative of disregard for public safety at worst. These issues and the applicable criteria were all discussed in detail in the May 20 staff report, and insufficiently answered by the applicant in the public meeting on July 23rd.

In discussion with a team of environmental lawyers, we have confirmed that these environmental issues are myriad, but key among them are:

- (1) compliance with the floodplain development requirements,
- (2) avoiding or minimizing impacts to natural resources under the criteria in MMC 19.402; and
- (3) compliance with the Willamette Greenway conditional use criteria at MMC 19.401.6.

The applicant's responses to these issues fall far short of the applicable criteria, and since the burden of proving that a variance should be granted falls on the applicant, for these reasons alone the variance request should be denied.

But this is before the Planning Committee because human judgment is required to determine whether the law should be "bent" instead of applied "straight", or should it be variously instead of uniformly applied. Each variance becomes a precedent for the next, and the threat of a slippery slope is very real when the profit motive is so strong behind development at all costs. For this reason this variance might not be a one-off, but instead it could set a litigation trend whereby other builders eager to encroach on our natural wonders demand other and even worse variances.

In this case, the request is for a variance, that is, to make an exception to what others before us determined to be the best way to manage our city and its resources. Among the many questions we must ask is, can we see better in the long-term than our predecessors? In this case, we certainly can. But does this better foresight in regard to flood-risks recommend relaxing the standards set long before now regarding building in the floodplain? Absolutely not. In fact, the reverse. We should be raising our building standards, not diminishing or disregarding them.

All this suggests that the Planning Committee also bears the burden of understanding how the past few decades of flooding experience are not the proper baseline for the flooding to come. We have warnings from all across the country that the convergence of climate change and intensifying regional weather patterns are leading to 100-year floods occurring every five years in some locales. That the Portland area has been spared for a few years has led to complacency among many. It was this complacency that I heard in the applicant's response to queries about last year's flooding in Salem. The implications was clearly that, well, that was Salem, not here. This complacent posture wants us to think, "So it can't happen here" but without saying something so ridiculous out loud. Nonetheless, this was the clear implication of their lack of concern about the recent Salem floods.

What makes this variance request not only negligent environmentally but also a direct threat to the public good is that, even beyond the predictable increase in seasonal and flash flooding that will come with accelerating climate change, there are particular dangers in SE Portland that make the applicant's complacency about flood risks a danger to himself and others.

First, the southeast flanks of Mount Hood haven't seen a significant forest fire in decades. With drier summers and consequent increases in wildfires, such an event is entirely predictable within the next decade or two, probably before construction on these misbegotten homes could be completed. And with these fires will come landslides, debris-swollen rivers and inundated flood plains. The proposed variance would increase the pain of this predictable flooding ten-fold, whereas this area should instead serve as a buffer for flooding and wildlife alike.

Second, the glaciers on Mount Hood currently serve a buffering function in the hydrological cycle, allowing the winter snows to release as a trickle over the summer instead of as sudden melts and floods in the spring and early summer. Sad to say, those glaciers will only be there for a few more years, and then the entire watershed will be much more vulnerable to flooding than before.

These are just two of the many reasons that this development proposed in this location is particularly ill-conceived. To make the point clear: it is entirely probable that these two events will converge in the next decade, and Elk Rock Estates will suffer for this inability to see how the future will be predictably different from the past.

Right next to the oldest landmass in the Portland area, some 40 million years old, this variance would build a monument to short-sighted ambition, a sandcastle at the edge of the low tide line.

The 1996 flood levels are obsolete in regards to real-world applications. In asking for a particular exemption through this variance the applicant asks the Planning Committee to use its collective judgment, and this knowledge of a changing world all around us will hopefully inform that judgment. Please say No to this variance and this development.

Vera Kolias

From: Christopher Roberts <robertsc@lclark.edu>
Sent: Tuesday, August 06, 2019 3:32 PM
To: Vera Kolias
Subject: Save the Willamette Slough from Elk Rock Estates

Hello Vera,
Thank you for fielding public comments.

The City of Milwaukie has recently made a significant investment in the public goods that we all enjoy. With this variance proposal to build Elk Rock Estates in a floodplain a central feature of Milwaukie's public river face, the Willamette Slough, stands endangered with irreversible encroachment that feeble "mitigation" efforts can never undo. This is why in the short period allowed I want to speak out in resistance to this encroachment upon the Elk Rock Island ecosystem, and in particular defense of the east bank of the Willamette Slough.

The developer's case for a "variance" to allow construction in the floodplain depends upon the "undeveloped" condition of the easement-slash-turnabout. The developer would "develop" this hardpacked, undernourished area between 19th St and the Willamette Slough with even more flood-intensifying impacts on this terrain. These would be in the form of impermeable surfaces like: a new road perpendicular to 19th St, ten driveways, and ten single-family three-story homes in this floodplain.

In stark contrast to this developer's vision, people I talk to see the good in a restored floodplain. Instead of a "development" that encroaches on the Slough's east bank, the developer and various public partners could restore this fallow but impacted area. Instead of seeking variance after misguided radiance to try and "develop" it, this would serve the Elk Rock Island ecosystem that faces increasing impacts from all sides, as well as serve the public good of moderating floodwaters by means of native plant and wildlife.

As the impacted but undevelopable floodplain slowly fills with spongy mosses and other hydrophilic native plants, this itself would be a public good, as the Willamette Slough Restoration Project would be educational for the entire community. In particular, there are several public schools within a 5 mile radius of the site, and their K-12 science classes could treat this Project as an active learning laboratory. In this way an "undeveloped" floodplain could support the flourishing of the plant and wildlife that call Elk Rock Island home, as well as the people of Milwaukie and greater Portland.

Actually this should be a win-win situation: with the east bank of the Slough restored, the rest of the applicant's property in the floodplain could be a private interface with this project, thus with his existing residential footprint providing a sublime experience for people who would value this kind of respectful, environment-friendly building. This is the kind of development for nature lovers that would serve the builder better than simply maxing out square footage. In other words, the applicant should get on board with this because it would increase the value of his property not by maximizing the quantity of square-footage packed into a tiny, vulnerable footprint, but through the quality of experience his residents on his current footprint would enjoy with this restored Slough as their backyard.

Development cannot be mitigated, but development coupled with restoration can benefit both sides of the interface. Instead of encroaching upon the Willamette Slough, a public effort to restore it drawing on multiple stakeholders and constituencies would actually increase both the value of the developer's current footprint and the fallow floodplain land.

If the applicant could see the value in this project that is more in line with Milwaukie's civic vision, then we might begin a different kind of development in this special landscape, and this relationship could serve as a model for the way a city like Milwaukie should strive to embellish the ecosystem that enframes our local natural wonder, Elk Rock Island.

Sincerely,
Christopher Roberts

Twelve-Year Resident of Waverly Greens Apartments
New co-proprietor at 12203 SE 19t St in Milwaukie

Vera Kolias

From: kary king <karyking57@gmail.com>
Sent: Tuesday, August 06, 2019 3:54 PM
To: Vera Kolias
Subject: Elk Rock Estates

No to development. Yes to restoration. Natural habitats on flood plains. Not big buildings & cars



TO: Community Development Department
THROUGH: Steve Adams, City Engineer
FROM: Beth Britell, Civil Engineer
 Dalton U. Vodden, Associate Engineer
RE: Applicant Response Dated August 5, 2019
 Application #NR-2018-005
 12225 & 12205 SE 19th Avenue
DATE: August 13, 2019

The applicant has provided a statement in response to testimony and comments made at the planning commission hearing. Please find below staff responses with relevant statements from applicants.

Applicant: The 2-year flow in the Willamette River is approximately 329,000 cfs

Staff response: The applicant does not provide the data source used to determine the 2-year flow. The applicant later states that the base flood (100-year flood or annual exceedance probability of 1%) is 375,000 cfs, suggesting that the 100-year flow is only 46,000 cfs more than the 2-year flow. It appears the applicant has reported the 50-year flow as the 2-year flow. The 2-year recurrence interval flood has an annual exceedance probability of 50%.

Based on the Preliminary Flood-Duration Frequency Estimates Using Naturalized Streamflow Records for the Willamette River Basin, Oregon (USGS Open-File Report 2018-1020) the 2-year recurrence interval flood on the Willamette River near Portland, Oregon approximately 200,000 cfs, rather than 329,000 cfs. Other studies indicate that the 2-year recurrence interval is a low as 160,000 cfs, based on analysis of USGS 14211720 Willamette River at Portland, located at Morrison Bridge.

The applicant calculated bankful stage by routing the incorrect 2-year flow through a HEC-RAS hydraulic model. It appears that the applicant's determination of bankful stage may be incorrect.

Based on the discrepancies described above it is not possible at this time to determine whether the applicant has met MCC 18.04.150.F.c. Please revise the 2-year flow and recalculate bankful stage.

Section 18.04.050(F)(2)(d)(1) states that the proposed excavation fill not increase flood impacts for surrounding properties as determined through hydrologic and hydraulic analysis.

This section of MCC pertains to offsite mitigation of fill only and is not applicable to this development proposal.

The developer requests that the project be approved with the condition to certify a "No-Rise in accordance with standard engineering practice and that the encroachment will not increase flood levels within the community during the occurrence of the base 100-year flood discharge.

MCC 18.04.150.F.g states “excavation and fill required for the construction of detention facilities or structures, and other facilities, shall be designed to reduce or mitigate flood impacts and improve water quality”.

A “No-Rise” study is required to document that a structural encroachment into the FEMA floodway will not result in an increase in the FEMA base flood elevation. A “No-Rise” analysis is not required to document compliance with Metro Title 3, or balanced cut and fill within the 1996 inundation area.

A hydraulic and hydrologic analysis of flood impacts in the floodplain, rather than the floodway, demonstrating reduction or mitigation of flood impacts such as reduction flood velocity or reduction in flood depth, in addition to evidence the proposed grading will improve water quality would meet MCC 18.04.150.F.g.

Commission Questions and Responses. How often would the storm water facility be inundated by flood waters? The site where bio swell is to be located has not been flooding since 1996.

The applicant does not have historical knowledge of the presence or absence of floodwaters on site to support this statement.

Additional staff comments not addressed by the applicant:

1. Drainage impacts on neighboring properties or adherence to Oregon Drainage Law based on the proposed grading was not addressed.
2. Stormwater detention analysis was not included in the applicant’s response. The inclusion of a detention facility on-site would greatly alter proposed site grading and the current balanced cut and fill calculations. Stormwater detention is required per Public Works Standards section 2.0043 unless the applicant can demonstrate that the proposed development will not increase stormwater runoff volumes or peak discharges.
3. Design of detention area to avoid fish being trapped during high flow events was not addressed.

August 13, 2019

Michael C. Robinson

Admitted in Oregon

T: 503-796-3756

C: 503-407-2578

mrobinson@schwabe.com

Kim Travis, Chair
Milwaukie Planning Commission
Milwaukie City Hall
6101 SE Johnson Creek Boulevard
Milwaukie, OR 972

RE: City of Milwaukie File No. NR-2018-005 (master); Application by Gillis Properties, LLC (the "Application"); Applicant's Second Open Record Period Submittal

Dear Chair Travis and Members of the Milwaukie Planning Commission:

This office represents the Applicant.

The Applicant will defer its responses to the first open record period submittals by opponents of the Application, to the Staff Report and to the new conditions of approval proposed by staff to the Planning Commission until its final written argument due on September 3, 2019. The Applicant and its engineer may submit evidence rebutting evidence submitted during the first open record period prior to the close of the second open record period on Tuesday, August 13, 2019 at 4:00 p.m.

I have asked Ms. Koliass to place this letter before you for your consideration and in the official Planning Department file for this Application.

Very truly yours,



Michael C. Robinson

MCR:jmhi

Cc Mr. Matt Gillis (via email)
Mr. Ken Valentine (via email)
Mr. Todd Iselin (via email)
Mr. John McConnaughey (via email)
Ms. Vera Koliass (via email)

PDX\134393\246818\MCR\25968986.1

Dear planning commission. This submittal addresses letters received last week. Our proposed project meets the code criteria. Please approve the project with conditions. We have consistently proven we can meet the code criteria.

**Thanks
Matt Gillis**

Affordable Housing-

From: Milwaukie's Housing Strategies' report adopted July 2018:

"Building market rate housing is an important part of the overall housing affordability strategy. New market rate units will not immediately increase the stock of existing units, but they will help to keep existing affordable units affordable. When housing demand is high and the supply for rent to homeownership does not keep pace prices increase. Decreased affordability is the result."

From APG and Johnson Economics for Clatsop County in 2019:

"Newly-built housing supply will tend to be more expensive housing, as it is up-to-date and in better condition than older housing. However, adding new supply for higher-income households is necessary to allow the older housing supply to "filter" to those with more modest income."

These statements show how our proposed development would help alleviate housing needs.

Floodplain

The reality of the 96' flood is that the estimated flow was above the flow of the 500-year flood event. The house next door with a foundation approximately 4-5 feet lower than our proposed homes built; to much lower building standards is still standing today after the 96 flood. Although 12205 is shown on the flood maps to have been inundated with water in 96, There are still 1970's cabinets and tile in the lower level that do not show flood damage.

There have been historical floods prior to 1996, but there have been many dams and flood control measures implemented on over the last 100 years to protect against flooding. They have been implemented on streams and tributaries that feed into the Willamette River, which have reduced the chance of flooding. FEMA has done the research to reduce flooding risk. Our proposed development complies with FEMA code criteria.

Addressing Letters

Since the planning hearing, there was a person who recently purchased a house in the neighborhood that was very vocal in a negative light against Elk Rock Estates within the community. They posted signs all over town. Staff stated they posted signs in the Ardenwald, they were at the farmers market and were all over town promoting Stop Elk Rock Estates. Their propaganda stated Save our Slough, Stop Elk Rock Estates. It also stated: "stop elk rock estates- Be aware of what is being proposed in your floodplain, in your park." **Their statements are wrong, we are not touching the slough or the park.** Even though there were new comments, very few wrote in until they were pushed with misleading propaganda, even though there was a public notice sign posted onsite for over 60 days prior to the hearing. These letters do not affect the code criteria.

Road and floor Elevation

Vera Kolias

RE: Question

To: matt gillis, Robinson, Michael C., Cc: Dennis Egner, Justin Gericke, Steve Adams

10:01 AM

[Details](#)



Hi Matt,

The City Engineer is most comfortable with enforcing 39.0 ft NAVD for building floor elevations and 37.4 ft NAVD for street elevations.

I will try to find a date and time next week to meet to discuss the conditions of approval as you requested.

-Vera

VERA KOLIAS, AICP
Associate Planner
503.786.7653
City of Milwaukie
6101 SE Johnson Creek Blvd * Milwaukie, OR 97206

Email from Staff-

We agree that the road elevation should be 37.4 ft NAVD. Although we do not agree that building floor elevations should be 39 ft NACD per MCC. But we have raised our floor elevations to meet this request. Our road and floors elevations conform with the email above.

MSC-221

August 13, 2019

Matt Gillis
11650 SW 67th Avenue
Suite 210
Tigard, OR 97223



RE: ELK ROCK ESTATES COMMENTS

I compiled the attached information because it appears the City is proposing a higher standard on the Elk Rock Estates project than they did for Milwaukie Riverfront Park. Both projects are in the Willamette Greenway and Floodplain. The only reason I make this comparison is because the projects are very close together and would appear to have similar impacts, therefore I wanted to present this comparison.

1. The Milwaukie Riverfront Park plans were reviewed and approved by the National Marine Fisheries Service (NMFS) even though the storm water facility includes dead storage below the 100-year storm event. Dead storage means that the pond outlet structure is higher than the elevation at the bottom of the facility. The rim elevation of the outlets is set 6" above the base elevation of the facility. Once the water drops below the rim elevation there is no way for fish to escape. The Elk Rock Estates storm water facility does not propose dead storage and it is sloped at 1% toward the outlet structure. In the unlikely event that fish got stuck in this facility they would end up at the outlet structure which discharges to the slough. I've included a copy of NMFS approval, a copy of the Riverfront Park storm water plan and a page from the FEMA Kellogg Street Bridge grant that concludes that no listed species or other designated critical habitat are present in the area and that the project is not located in or near essential fish habitat. The proposed Elk Rock Estates project is very close to the park and should fall under the same standard. It appears that during the Milwaukie Riverfront Park and Bridge project that the City supported statements in grant and permits that suggest the Willamette River is not fish habitat as noted in the FEMA grant information. However for private development it is apparently fish habitat and the storm facility has to meet "fish passage". I've also included the standard outlet detail from the Park plans and indicated we intend to use the same detail, except we will set the rim elevation at the base of the proposed facility so that it does not create dead storage and trap fish.
2. The most recent conditions of approval suggest that the storm water facility would be unattractive and not blend in the local environment. Those statements are incorrect and misleading. The preliminary landscape plan submitted indicate a high degree of landscaping prepared by an award winning landscape architect. HHPR has a history of designing high caliber landscaping projects including many parks and water related projects. HHPR has designed hundreds of storm water facilities throughout the metro area and we are well versed in the survivability and aesthetics of these facilities. We take this very seriously and find it odd that the City would make those statement about the facility without providing anything to suggest it doesn't meet the City of Portland Storm Water Manual or evidence that it won't blend in to the area. The goal for this facility is three pronged, 1) It provides a natural storm water treatment method while providing habitat enhancement, 2) provide additional flood plain storage nearer

to the river and 3) be aesthetically pleasing to the residents and guests. If the City would like to see additional features such as woody debris or landscape boulders they can be added, but it has so far been misrepresented in the comments and draft conditions of approval. I have included some photos of fully matured vegetated swales designed by the same landscape architect to show that these facilities are very attractive when mature.

3. Another thing I noticed when reviewing the Milwaukie Riverfront Park plans is that they do not clearly indicate where HCA line is nor indicate if any mitigation was performed, however they do indicate planting/seeding well within the floodplain and below the ordinary high water line. The Quoting the US Army Corp permit it states "the City states that extensive shoreline treatment and planting is considered to be **self-mitigating** and will provide significant benefit ... and that no additional mitigation is being proposed for the project". The Elk Rock Estates project provides a higher degree of mitigation and will definitely enhance the area. Replacing invasive species with native plants and trees will provide a vast improvement that would not occur without this project, yet there appears to be push back that isn't supported by recent projects or code.
4. We have demonstrated that the project meets the balanced cut/fill for the 100-year flood as well as 1996 inundation. The access way has been designed to one foot above the 100-year event and the building finish floors have been set one foot above the 1996 flood elevation of 38' per the City statement. I can't find a code requirement for the higher finish floor elevations, but we have demonstrated the project can meet the request. We would prefer to meet the FEMA requirement of one foot above the BFE if at all possible to reduce the amount of earthwork required within the flood plain.

Sincerely,



Ken Valentine, PE



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northwest Region
7600 Sand Point Way N.E., Bldg. 1
Seattle, WA 98115

Refer to NMFS No:
NWR-2010-563

May 10, 2013

Shawn H. Zinszer
Chief, Regulatory Branch
U.S. Army Corps of Engineers
P.O. Box 2946
Portland, Oregon 97208-2946

Re: Endangered Species Act Biological Opinion and Magnuson-Stevens Fishery
Conservation and Management Act Essential Fish Habitat Response for Milwaukie
Riverfront Park, Willamette River (HUCs 170900120104 and 170900120103),
Multnomah County, Oregon (Corps No.: NWP-2009-00019)

Dear Mr. Zinszer:

The enclosed document contains a biological opinion (opinion) prepared by the National Marine Fisheries Service (NMFS) pursuant to section 7(a)(2) of the Endangered Species Act (ESA) on the effects of the proposal by the U.S. Army Corps of Engineers (Corps) to authorize the City of Milwaukie's proposal for the Milwaukie Riverfront Park using the Corps' regulatory authority under section 404 of the Clean Water Act and section 10 of the Rivers and Harbors Act.

In this opinion, NMFS concludes that the proposed action is not likely to jeopardize the continued existence of Lower Columbia River (LCR) Chinook salmon (*Oncorhynchus tshawytscha*), Upper Willamette River (UWR) spring-run Chinook salmon, LCR coho salmon (*O. kisutch*), LCR steelhead (*O. mykiss*), UWR steelhead, or result in the destruction or adverse modification of critical habitat designated or proposed for these species.

As required by section 7 of the ESA, NMFS is providing an incidental take statement with the opinion. The incidental take statement describes reasonable and prudent measures NMFS considers necessary or appropriate to minimize the impact of incidental take associated with this action. The take statement sets forth nondiscretionary terms and conditions, including reporting requirements, that the Federal action agency must comply with to carry out the reasonable and prudent measures. Incidental take from actions that meet these terms and conditions will be exempt from the ESA's prohibition against the take of listed species.

This document also includes the results of our analysis of the action's likely effects on essential fish habitat (EFH) pursuant to section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA), and includes two conservation recommendations to avoid, minimize, or otherwise offset potential adverse effects on EFH. One of these conservation recommendations is identical to the ESA take statement's terms and conditions. Section 305(b) (4) (B) of the MSA requires Federal agencies to provide a detailed written response to NMFS within 30 days after receiving these recommendations.

NWP-2009-19

NATIONAL MARINE FISHERIES APPROVED THE MILWAUKIE RIVERFRONT PARK UTILIZING SAME TYPE OF STORMWATER FACILITY AS PROPOSED FOR ELK ROCK ISLAND. THE RIVERFRONT PARK FACILITY INCLUDED DEAD STORAGE THAT WOULD TRAP FISH DURING 100-YEAR FLOOD. ELK ROCK STATES DOES NOT PROPOSE DEAD STORAGE

51 Page 171



If the response is inconsistent with the EFH conservation recommendations, the Federal action agency must explain why the recommendations will not be followed, including the scientific justification for any disagreements over the effects of the action and the recommendations. In response to increased oversight of overall EFH program effectiveness by the Office of Management and Budget, NMFS established a quarterly reporting requirement to determine how many conservation recommendations are provided as part of each EFH consultation and how many are adopted by the action agency. Therefore, we request that in your statutory reply to the EFH portion of this consultation, you clearly identify the number of conservation recommendations accepted.

Please direct questions regarding this opinion to Mischa Connine, in the Oregon State Habitat Office, at 503.230.5401.

Sincerely,



William W. Stelle, Jr.
Regional Administrator

cc: JoAnn Herrigel, City of Milwaukie

RECORD OF ENVIRONMENTAL CONSIDERATION (REC)

Project ID: PA-10-OR-4258-PW-00068

Title: ST0265 - Kellogg Creek Bridge

Environmental Law/ Executive Order	Status	Description	Comments
Endangered Species Act (ESA)	Not Applicable	No listed species and/or designated critical habitat present in areas affected directly or indirectly by the federal action - Review concluded	
Farmland Protection Policy Act (FPPA)	Not Applicable	Project does not affect designated prime or unique farmland - Review concluded	
Fish and Wildlife Coordination Act (FWCA)	Not Applicable	Project does not affect, control, or modify a waterway/body of water - Review concluded	
Migratory Bird Treaty Act (MBTA)	Not Applicable	Project not located within a flyway zone - Review concluded	
Magnuson-Stevens Fishery Conservation and Management Act (MSA)	Not Applicable	Project not located in or near Essential Fish Habitat - Review concluded	
National Historic Preservation Act (NHPA)	Not Applicable	Not type of activity with potential to affect historic properties - Review concluded	
Wild and Scenic Rivers Act (WSR)	Not Applicable	Project is not along and does not affect Wild and Scenic River - Review concluded	

CONDITIONS

Special Conditions required on implementation of Projects:

NEPA: No EHP review was performed on Version Zero (0) because this is a \$0 project. Any subsequent versions of this project require an EHP review.

Source of condition: NEPA Determination

Monitoring Required: No

Standard Conditions:

Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.

This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize federal funding.

If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.

SHEET CONTROL POINT TABLE			
POINT NO.	NORTHING	EASTING	ELEVATION
26	654163.65	7652914.28	38.40
102	654381.14	7652885.70	33.90
51	654383.32	7653071.26	36.23
32	654496.80	7653056.31	34.35
25	654364.23	7653020.83	35.90
9	654485.60	7653029.87	34.56

SURVEY VERTICAL CONTROL IS BASED ON NAVD 1988 DATUM.

DEAD STORAGE BELOW 100-YEAR FLOOD WITH NO FISH PASSAGE

DEAD STORAGE BELOW 100-YEAR FLOOD WITH NO FISH PASSAGE

GRADING ABBREVIATIONS

- 1/2 1/2 CURVE LENGTH/ANGLE
 - 1/4 1/4 CURVE LENGTH/ANGLE
 - FFE FINISH FLOOR ELEVATION
 - FG FINISH GRADE
 - GB GRADE BREAK
 - HP HIGH POINT
 - LP LOW POINT
 - MID MIDPOINT
 - PC POINT OF CURVATURE
 - PCC POINT OF COMPOUND CURVATURE
 - PRC POINT OF REVERSE CURVATURE
 - PT POINT OF TANGENCY
 - TC TOP OF CURB
- NOTE: SPOT ELEVATIONS SHOWN HEREON ARE TO FINISHED PAVEMENT SURFACE UNLESS INDICATED OTHERWISE

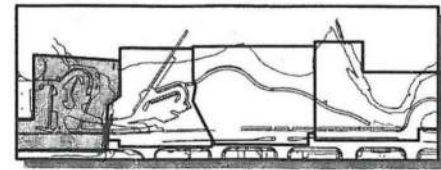
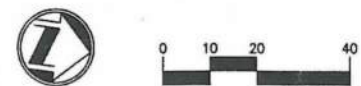
DRAINAGE SYSTEM KEYNOTES

- ① AREA DRAIN, SEE DETAIL 5, SHEET C504
- ② DITCH INLET, SEE DETAIL 4, SHEET C504
- ⑥ OUTFALL RIPRAP, SEE DETAIL 4, SHEET C505
- ⑦ STORM DRAINAGE PIPE PER TRENCH BEDDING AND BACKFILL DETAIL 1, SHEET C506
- ⑩ MANHOLE PER DETAIL 6, SHEET C505

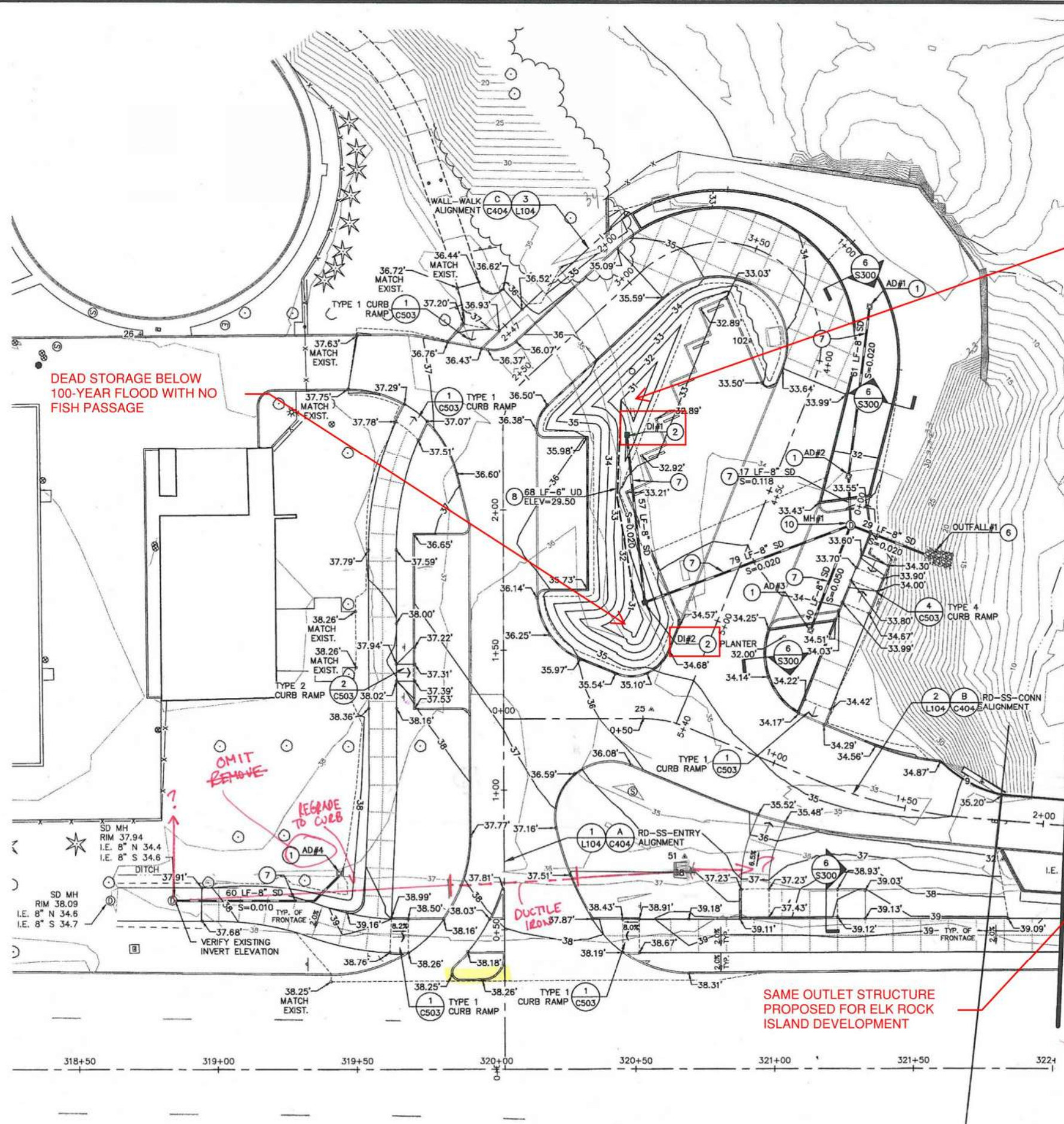
STRUCTURE SCHEDULE

STRUCTURE	RIM ELEV	I.E. IN ELEV	I.E. OUT ELEV	NORTHING	EASTING
DI#1	31.50		29.33(E)	654341.59	7652924.95
DI#2	31.50	28.19(W)	28.00(N)	654356.98	7652983.14
AD#1	32.50	28.61(W)	29.83(E)	654422.13	7652867.41
AD#2	32.50	28.61(W)	28.50(E)	654423.00	7652928.59
AD#3	32.50		28.50(W)	654417.02	7652984.83
AD#4	36.75		35.00(S)	654261.10	7653094.69
MH#1	33.53	26.42(S) 26.50(W) 26.50(E)	26.30(N)	654423.00	7652928.59
OUTFALL#1			25.82(S)	654453.64	7652952.04

SAME OUTLET STRUCTURE PROPOSED FOR ELK ROCK ISLAND DEVELOPMENT



KEY MAP
NOT TO SCALE



2100 SW River Parkway
Portland OR 97201
Phone: 503.223.6863
Fax: 503.223.2701

CITY OF MILWAUKIE	APPROVAL DATE	
	SIGNATURE	
DEPARTMENT	CITY LANDSCAPE ARCHITECT	
	COMMUNITY DEVELOPMENT	
	PUBLIC WORKS	

PROJECT: MILWAUKIE RIVERFRONT PARK PHASE 2 - BOAT RAMP AND PATHWAY S.E. HARRISON STREET - KELLOGG CREEK

SHEET TITLE: GRADING AND DRAINAGE PLAN

NO.	DATE	REVISION



SCALE: AS SHOWN
DATE: 4-1-2014
DRN: RFH
CK: SDH

C400
JOB NO. MAEX0000-0021

Surface Properties - earthwork **EARTHWORK DATA:**

Information | Definition | Analysis | Statistics | EARTHWORK CALCULATED FOR CUT/FILL BELOW THE 38 FOOT CONTOUR

Statistics	Value
General	
TM	
Volume	
Base Surface	EG
Comparison Surface	PG
Cut Factor	1.000
Fill Factor	1.000
Cut volume (adjusted)	1659.93 Cu. Yd.
Fill volume (adjusted)	1658.91 Cu. Yd.
Net volume (adjusted)	1.02 Cu. Yd. <Cut>
Cut volume (unadjusted)	1659.93 Cu. Yd.
Fill volume (unadjusted)	1658.91 Cu. Yd.
Net volume (unadjusted)	1.02 Cu. Yd. <Cut>

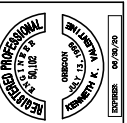
PROPOSED LEGEND:

	SANITARY LINE
	WATER LINE
	STORM LINE
	ATRIUM INLET
	PEDESTRIAN PATH
	MAJOR CONTOUR - 5' INTERVALS
	MINOR CONTOUR - 1' INTERVALS
	RIP RAP



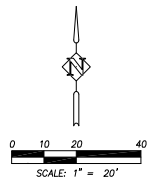
GRADING PLAN
 ELK ISLAND ESTATES
 MILWAUKIE, OREGON

Harper Houff Peterson
 Righellis Inc.
 LANDSCAPE ARCHITECTS • SURVEYORS
 206 SE Spokane Street, Suite 200, Portland, OR 97202
 Phone: 503.221.1121 www.hhp.com Lic: 26523.1111



DESIGNED:	KKV
DRAWN:	HHP TEAM
CHECKED:	KKV
DATE:	JUNE 2019

SHEET NO.	4
JOB NO.	MSC-221



Vegetated Swales Examples



Vegetated Swales Examples



Vegetated Swales Examples



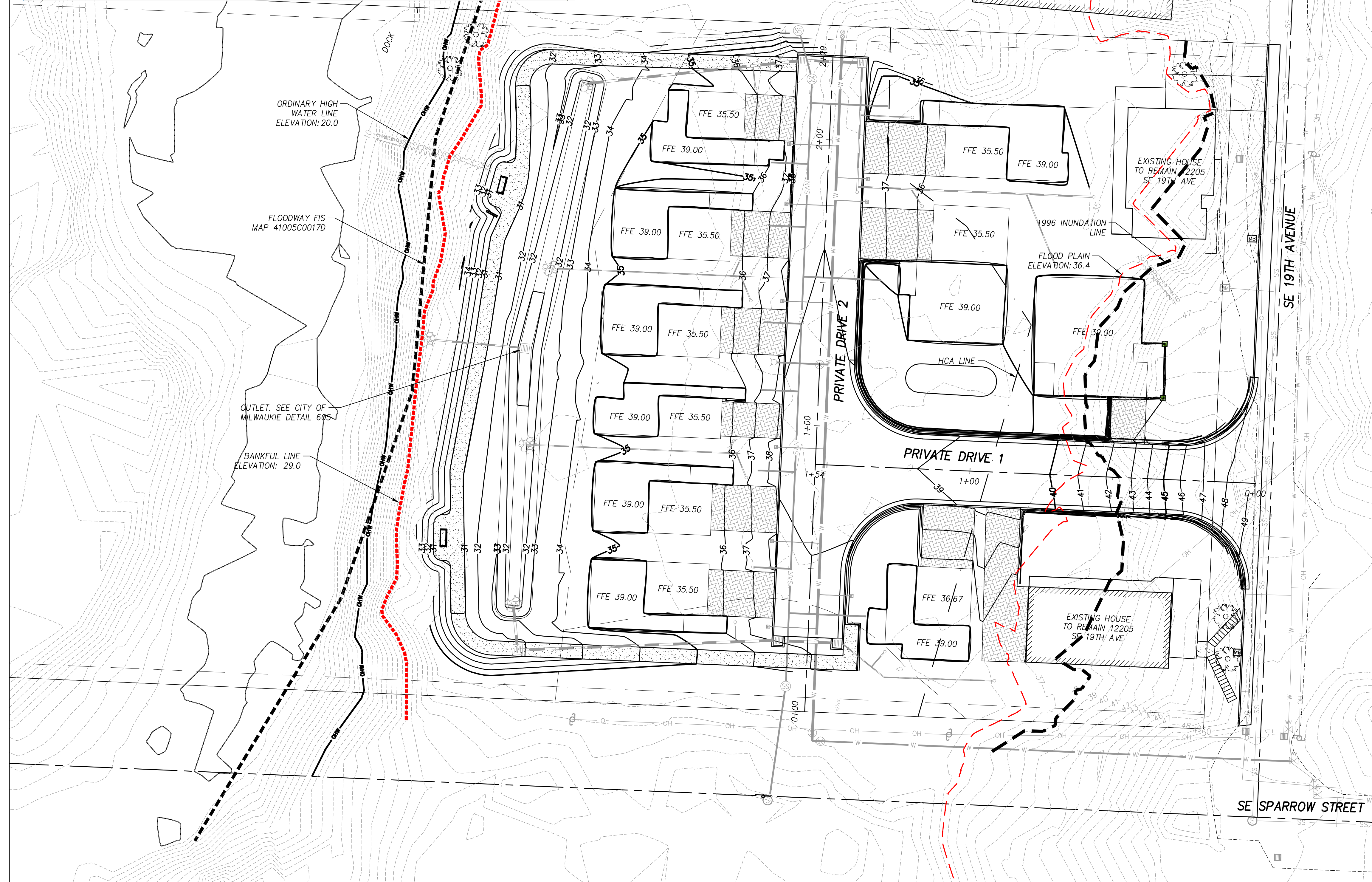
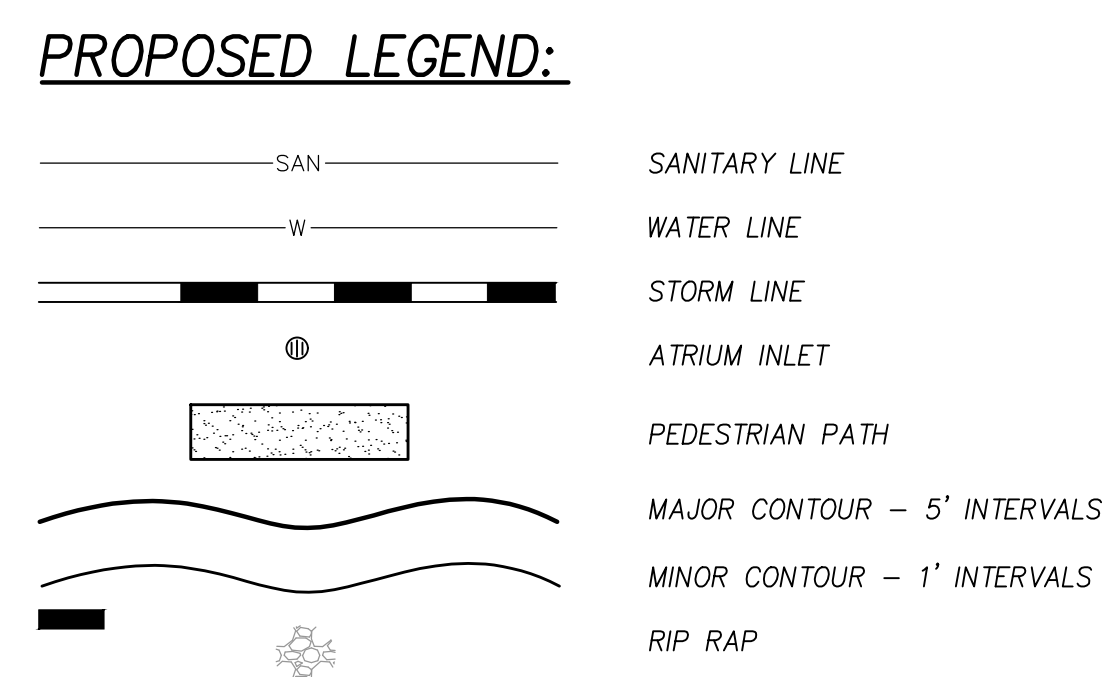
Vegetated Swales Examples



Surface Properties - earthwork **EARTHWORK DATA:**

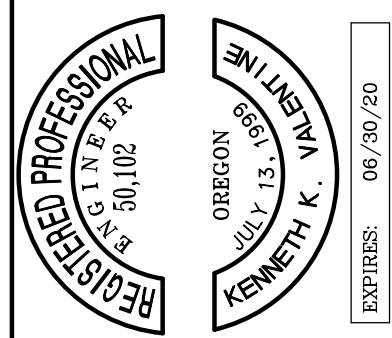
Information | Definition | Analysis | Statistics | EARTHWORK CALCULATED FOR CUT/FILL BELOW THE 38 FOOT CONTOUR

Statistics	Value
General	
TIN	
Volume	
Base Surface	EG
Comparison Surface	FG
Cut Factor	1.000
Fill Factor	1.000
Cut volume (adjusted)	1659.93 Cu. Yd.
Fill volume (adjusted)	1658.91 Cu. Yd.
Net volume (adjusted)	1.02 Cu. Yd. <Cut>
Cut volume (unadjusted)	1659.93 Cu. Yd.
Fill volume (unadjusted)	1658.91 Cu. Yd.
Net volume (unadjusted)	1.02 Cu. Yd. <Cut>



GRADING PLAN
ELK ISLAND ESTATES
 MILWAUKIE, OREGON

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 205 SE Spokane Street, Suite 200, Portland, OR 97202
 phone: 503.221.1131 www.hhpr.com fax: 503.221.1171

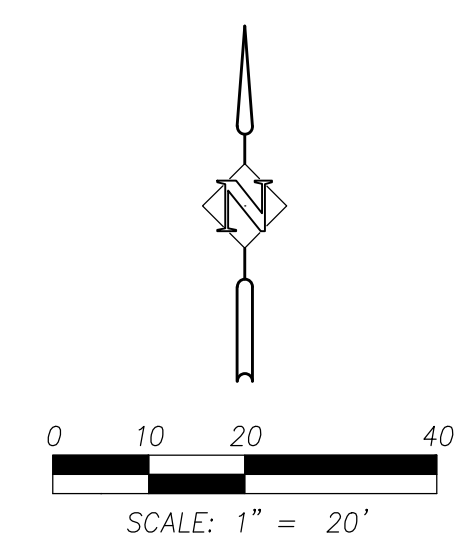


DESIGNED:	KKV
DRAWN:	HHPR TEAM
CHECKED:	KKV
DATE:	JUNE 2019

REVISION	DATE	NO.	DESCRIPTION
1	APRIL 2019		REVISED GRADING
2	8/5/2019		GRADING MODIFICATION
3	8/12/2019		REVISED ANALYSIS TO 1996 FLOOD LINE

SHEET NO. **4**

JOB NO. MSC-221



INSULATED SERIES

This series of vents is ideal for areas requiring flood venting protection but no natural air ventilation.

The flood door contains a 2" insulated core that has an R-value of 8.34 and the vent frame is lined with felt weather stripping, helping to keep the enclosure as insulated from the elements as possible.

IDEAL FOR:

- Garages
- Full height enclosures (e.g. walkouts)
- Conditioned crawlspaces
- Storage facilities
- Metal buildings
- Foyers

1 Flood Vent 1540-520

2 Stacker 1540-521

Stacker Models are twice as efficient as a single unit and are a great solution for large amounts of square footage, and in situations where there is not enough wall space to fit in single units.

3 Wood Wall 1540-570

Wood Wall Models are designed to fit between studs spaced at 16" on center. Pre-drilled slots in the four corners on the vent flange make for an easy installation.



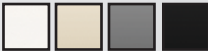
Pictured in powder coat paint gray

For more information on Flood Protection Solutions, contact:

Smart Vent 430 Andbro Drive, Unit 1 • Pitman, NJ 08077
Website: www.smartvent.com Tel: (877) 441-8368 Email: info@smartvent.com



STANDARD FINISH POWDER COAT WHITE
POWDER COAT PAINT OPTIONS:



Custom colors also available.



MODEL NUMBER	FLOOD COVERAGE	VENT SIZE	ROUGH OPENING
1540-520	200 sq. ft.	16"W x 8"H x 3"D	16 ¹ / ₄ in x 8 ¹ / ₄ in
1540-521	400 sq. ft.	16"W x 16"H x 3"D	16 ¹ / ₄ in x 16 ³ / ₈ in
1540-570	200 sq. ft.	14 ¹ / ₂ "W x 8 ¹ / ₂ "H x 3"D	14 ¹ / ₂ in x 8 ³ / ₄ in



To view other sizing options see Multi-frames

For more information on Flood Protection Solutions, contact:

Smart Vent 430 Andbro Drive, Unit 1 • Pitman, N.J. 08078
 Website: www.smartvent.com Tel: (877) 441-8368 Email: info@smartvent.com

DUAL FUNCTION SERIES

This series of vents offers certified flood venting protection with superior automatic natural ventilation control. Ideal for crawlspace applications and other areas requiring flood venting protection as well as natural air ventilation.

VENTILATION

A bimetal coil automatically opens and closes the ventilation louvers as temperature changes from 35° F to 75° F.

No electricity is required.

In the event of a flood, the internal floats lift to release the flood door to rotate open and relieve the hydrostatic pressure regardless of the louvers' position, open or closed.

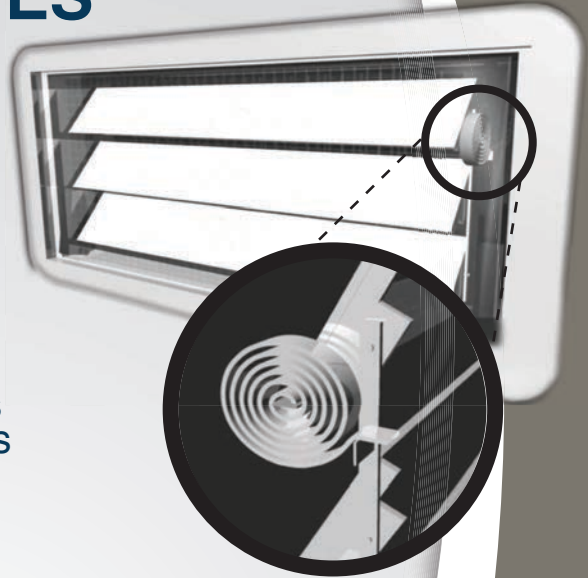
1 Smart Vent 1540-510

2 Stacker 1540-511

Stacker Models are twice as efficient as a single unit and are a great solution for large amounts of square footage, and in situations where there is not enough wall space to fit in the necessary or required single units.

2

Pictured in powder coat white



1

Pictured in custom powder coat black



For more information on Flood Protection Solutions, contact:

Smart Vent 430 Andbro Drive, Unit 1 • Pitman, NJ 08078
Website: www.smartvent.com Tel: (877) 441-8368 Email: info@smartvent.com



STANDARD FINISH POWDER COAT WHITE
POWDER COAT PAINT OPTIONS:



Custom colors also available.



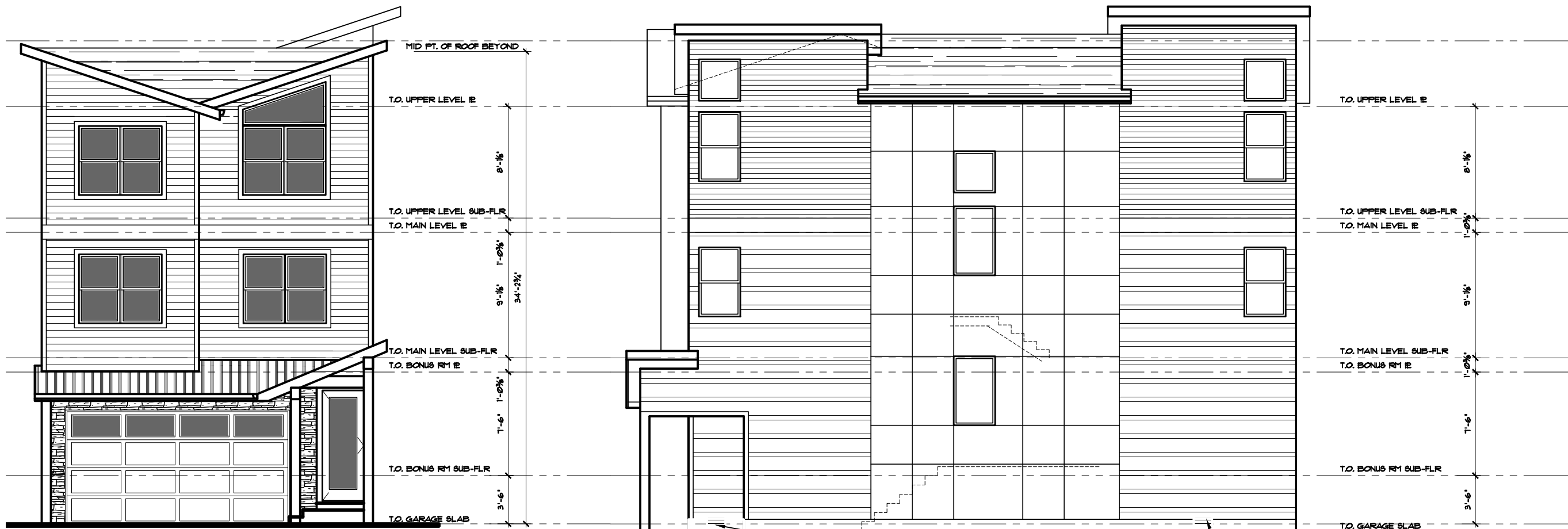
MODEL NUMBER	FLOOD COVERAGE	AIR VENTILATION	VENT SIZE	ROUGH OPENING
1540-510	200 sq. ft.	51 sq. in.	16" W x 8" H x 3" D	16 ¹ / ₄ in x 8 ¹ / ₄ in
1540-511	400 sq. ft.	102 sq. in.	16" W x 16" H x 3" D	16 ¹ / ₄ in x 16 ³ / ₈ in



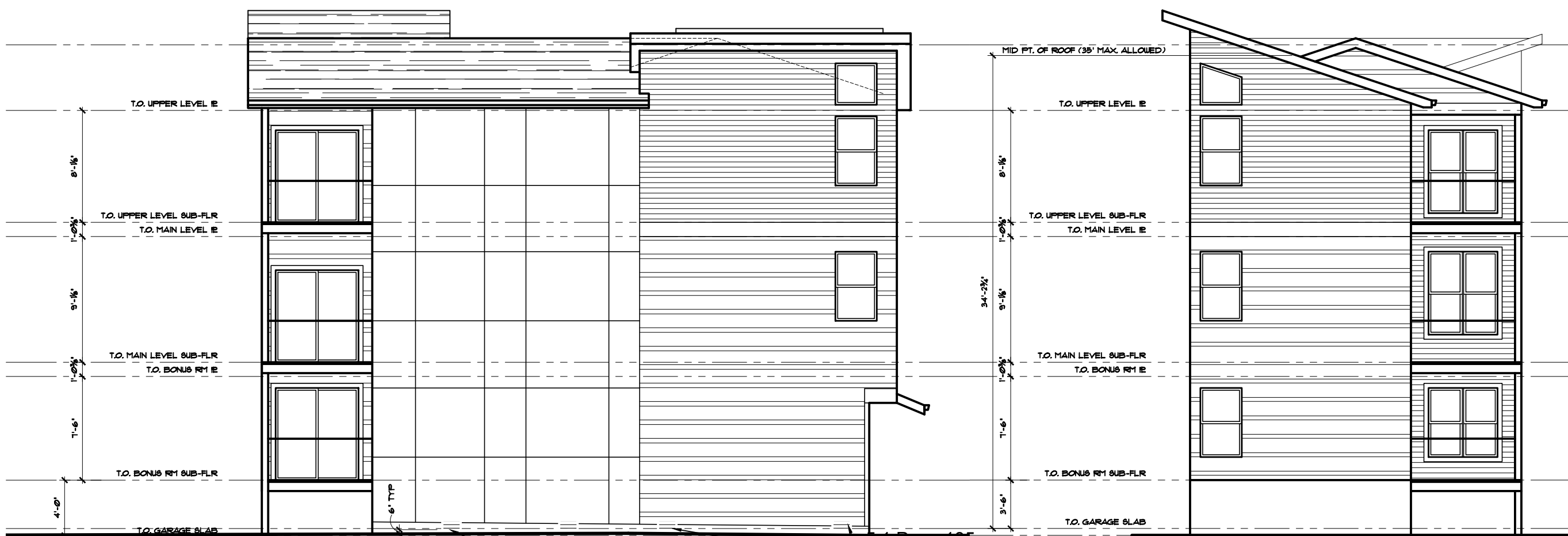
To view other sizing options see Multi-frames

For more information on Flood Protection Solutions, contact:

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Website: www.smartvent.com Tel: (877) 441-8368 Email: info@smartvent.com



'SMART VENT' AUTOMATIC FLOOD VENTS- (3) REQUIRED AT GARAGE AND (3) REQUIRED AT CRAWL SPACE



'SMART VENT' AUTOMATIC FLOOD VENTS- (3) REQUIRED AT GARAGE AND (3) REQUIRED AT CRAWL SPACE

Vera Kalias

From: raggamuffin100@juno.com
Sent: Tuesday, August 06, 2019 6:58 PM
To: Vera Kalias
Subject: Elk Rock Estates

Greetings Kalias V,

Thank you for taking the time to read my email.

I am very much opposed to this elk rock Estates proposition. It is a horrible idea which will have a negative impact upon our waters, the birds, the animals, the trees, the soil, and yes even the insects.

The congestion this will cause is not good. Most likely the developer will take down trees on the property and that's no good. Oregon has been and is losing too many Trees.

Bottom line it would devastating.

I really don't know what more to say, but just No! a big fat-big fat, fat, fat no!

What more can be done - can I do to help not let this happen?

Thank you again for your time.

CarlaMaria Buscaglia

Milwaukie resident

Vera Kolias

From: sharonsmithmd@aol.com
Sent: Tuesday, August 06, 2019 6:47 PM
To: Vera Kolias
Subject: Development of elk rock estates

Hello,

I am deeply concerned about the proposed construction of houses on 19th St, north of The park by Elk Rock. These proposed houses are planned to be built in a sensitive area and will do damage to our river and the wildlife of our park. A few years ago there was a bald eagle's nest on this property. It is too sensitive for the high density construction that has been proposed.

I hope the city blocks the housing project and protects the invaluable assets of our river and park. It is these things that makes Milwaukie a special place to live.

Sincerely,
Sharon Smith

Rebuttal

Page 1 of 4

Dear Vera--

Regards NR-2018-005, herein find rebuttal to several of applicant's written comments made in the open comment period of July 23, 2019 through August 6, 2019.

In applicant's message to the Planning Commission dated August 6, 2019, on page 1, applicant reasserts the unsubstantiated claim that the application is for Needed Housing. Applicant does not in that message or elsewhere in the written record provide any evidence to substantiate the claim. ORS 197.303 states specific criteria which define Needed Housing, and applicant has not provided any evidence whatsoever which in any way addresses those criteria. Simple repetition of the assertion that NR-2018-005 is needed housing does not make the assertion true.

Also, in the same comment period, the City Attorney and others filed a memo stating the city's position on the applicability of the Needed Housing statute to NR-2018-005. I concur with the city's analysis that development in the HCA is not required for the city to meet projected housing need. Since development in the HCA is not required to meet need, I further concur that when the applicant chose to pursue development in the HCA, applicant knowingly and deliberately chose to place the application into a discretionary pathway. For the applicant to then turn around and claim that the approval pathway for NR-2018-005 should be other than discretionary is an abuse of the regulatory framework within which development in the HCA may even be considered at all.

In applicant's message, on page 2 applicant references Statewide Planning Goal 15 (Goal 15), also known as Oregon Administrative Rule (OAR) 660-015-0005 [1]. Under Goal 15 A.1, because none of the exceptions of K.3 apply, applicant's proposal constitutes an intensification of use. By including residential construction, road construction, driveway construction, and by designing for future use and storage of automobiles and other small-motor vehicles (lawnmowers, leaf-blowers, hedge trimmers, etc.), applicant's proposal would pave over and pollute existing habitat in the Greenway. These outcomes run counter to the protection, conservation, enhancement, and maintenance of the Greenway; see Goal 15 A.1 and Goal 15 A.2. Since the proposed intensification of use runs counter to the above Greenway goals, and since Goal 15 A.1 allows only those intensifications of use which are consistent with the Greenway goals, applicant's proposal cannot be allowed under Goal 15.

In applicant's message, on page 2 applicant references Milwaukie Comprehensive Plan Chapter 4 [2], "Land Use," "Residential Land Use and Housing Element," "Objective #1-Buildable Lands." Note that in subsection "Planning Concept" of the above, the Comprehensive Plan states: "Lands with the Special Policies Classification (natural hazards) have constraints that are sufficient to preclude most standard types of development techniques." The subject property has two Special Policies Classifications, for both Drainage (flood plain) and Wildlife Habitat (the HCA). The section "Objective #1-Buildable Lands" specifically excludes flood plain, wildlife habitat, and other special classification lands from the 34 acre estimate of acreage buildable for residential purposes. Applicant's attempt to cite this section and Map 6 to justify new residential construction in the flood plain and in the HCA is a major misinterpretation of this section of the Milwaukie Comprehensive Plan.

In applicant's message, item 5.C on page 3 references the eagle's nest on the subject property. Applicant claims that HHPR's expert examines the nest and concluded that it is not an eagle's nest. I personally observed a breeding pair of bald eagles use a nest on Elk Rock Island for at least two seasons. After that time, the nest on Elk Rock Island collapsed. The breeding pair of eagles then

constructed the nest in question on the subject property from scratch, using it for several seasons, and raising and fledging bald eagle chicks in and from it.

Since the HHPR expert reached a determination of past nest use which is in direct contradiction of my personal experience as a neighborhood resident and observer of local wildlife, I question whether the HHPR expert's opinion can be trusted regards current use or occupancy of the nest. Bear in mind that eagles do not nest year-round. Bald eagles typically return to this area in winter, hatch chicks in early spring, and are gone from the nest as soon as chicks fledge. If for whatever reason chicks do not hatch or do not survive, adults will then leave the nest for the summer and fall, not returning until the following winter.

In applicant's message on pages 5-6 (Exhibit 1), applicant claims that attached homes would not fit into the neighborhood. In actuality, there is an existing duplex at 11919 SE 19th Avenue, on the river side of SE 19th between SE Bluebird and SE Eagle. This residence was constructed in 2011. Also, the Exhibit mentions a financial loss associated with demolishing existing structures. Commercial loss is not one of the criteria included in the list of criteria associated with making a land use decision, and so commercial loss is immaterial to the land use decision. Also, applicant has asked for multiple variances to accommodate proposed plans in the flood plain, but does not contemplate asking for any variances to accommodate alternate plans which would concentrate all development in the upland portion of the subject property.

Additionally, prior comments to the written record have included at least six possible alternatives in addition to the alternative advanced by staff. Other suggestions from the written record include:

- I. No-build option
- II. Add one new residence/duplex/rowhouse set in the upland area between existing houses
- III. Make a boardwalk on posts and piers and put homeless pods on it, repurposing existing residences as kitchen/bath/shower facilities for the pods
- IV. Remodel and/or build duplexes at the approximate locations of buildings 7, 8, 9, 10, 11,12 in applicant's plans
- V. Same as IV, but swap westernmost duplexes with the north-south private drive to reduce total fill under the private drives
- VI. Ten-unit SRO between the existing residences, see for comparison Jolene's First Cousin [3].

Applicant's complete failure to initiate any alternative proposal may be indicative of a deliberate decision to disregard the requirement of considering alternatives to developing in the HCA.

In applicant's message, in Exhibit 3 (pages 8-13 inclusive), applicant discourses extensively, and frequently erroneously, on reasonable precautions related to flooding at the site. For one thing, on pg 10 of the message (pg 3 of exhibit 3), applicant writes "In this case the finish floors are proposed to be set higher than the highest flood event ever recorded for the Willamette River." This claim is not supported by the historical record at the river gages bracketing the subject site.

While there is no river gage at Elk Rock Island, the area is bracketed by gages at Oregon City below the falls, and at Portland.

At Oregon City below the falls, the historical flood crests are [4]:

Historic Crests

- (1) 50.50 ft on 02/05/1890
- (2) 48.10 ft on 12/25/1964
- (3) 48.00 ft on 12/05/1861
- (4) 47.80 ft on 01/09/1923

(5) 46.04 ft on 02/09/1996

Note that the inundation of February 1996 is not the highest crest; it is the fifth highest crest. The flood of December 1964 exceeded the inundation of February 1996 by two feet, and the highest recorded crest, for the flood of 1890, exceeded the inundation of February 1996 by over four feet.

At Portland, the historical flood crests are [5]:

Historic Crests

- (1) 33.00 ft on 06/07/1894
- (2) 30.00 ft on 06/14/1948
- (3) 30.00 ft on 06/01/1948
- (4) 29.80 ft on 12/25/1964
- (5) 28.70 ft on 02/06/1890
- (6) 28.55 ft on 02/09/1996
- (7) 28.20 ft on 06/24/1876
- (8) 27.30 ft on 07/01/1880
- (9) 26.40 ft on 06/04/1956
- (10) 26.20 ft on 06/14/1882

Note that for Portland, the inundation of February 1996 doesn't even make the top 5. At this gage, the flood of December 1964 exceeded the inundation of February 1996 by over a foot, and the highest recorded crest exceeded the inundation of February 1996 by over four feet. Also note in the Great Flood of 1862, “[f]lood waters were so high that at Oregon City at the flood's crest on December 5, the steamer *St. Clair* was able to run the falls, ...” [6]. In the inundation of 1996, by comparison, the falls at Oregon City were flat, but were not submerged at a depth sufficient for a marine vessel to run the falls.

In light of the gages which bracket the subject site each having multiple recorded historical flood crests exceeding by more than a foot the flood crest used to establish base flood elevation for the project, the Exhibit 3 statement that base flood elevation plus one foot exceeds the historical record is a ridiculous claim. The historical record soundly establishes that the inundation of February 1996 is not an isolated event in the recorded history of the Willamette River, but rather that floods comparable to that flood, and exceeding that flood, recur through the historical record.

Even if we discount the severity of floods in 1862 and 1890 which predate the post-WWII flood control dams, we are still faced with the Christmas flood of 1964 and the inundation of February 1996 both occurring within approximately 70 years, with the 1964 flood having markedly higher crests at both bracketing gages. If anything, the floods of 1964, 1890, and 1862 put the inundation of February 1996 into a context in which it appears to be a fifty-year or forty-year flood. In that light, the claim on page of Exhibit 3 (page 9 of the applicant's message) of “[t]he 1996 flood is not the base flood and was somewhere between the base flood and the 500 year flood” simply does not bear scrutiny in the context of the historical record. While comprehensive plan chapter 3 objective #1 item (3) does state “The finished elevations of the lowest floor of buildings and streets will be a minimum of 1.0 foot above the 100 year flood elevation,” the 100 year flood elevation is not there defined to be the FEMA-designated 100 year flood elevation. With respect to item 2 of Exhibit 3 of the applicant's message, the historical record supports a stance that the elevation of the inundation of February 1996 is not less than the actual 100 year flood elevation, and can be treated as the 100 year flood elevation for all planning purposes including those of the Comprehensive Plan.

Having established that the historical record supports a view that the inundation of February 1996 is

not an isolated event but rather one of a series of comparable reoccurring floods, consider next the Exhibit 3 item 3 claims regarding cut and fill in the floodplain. Applicant correctly notes that MMC 18.04.150.F.2.a states “[n]o net fill in any floodplain is allowed,” but fails to expand upon that statement to include the area inundation of February 1996 as a floodplain. By any reasonable understanding of the recurring floods of 1862, 1890, 1964, and 1996, any areas inundated in February 1996 constitute a volume which serves as a floodplain on a roughly fifty-year interval. Note further that the inundation of February 1996 is specifically called out in MMC 18.04.030 “Definitions” as part of the meaning of “flood management areas”. The planning commission may reasonably consider the elevation of the inundation of February 1996 to define a floodplain for the purposes of “any floodplain” in MMC 18.04.150.F.2.a, and thus require balanced cut and fill below the elevation of the inundation of February 1996. Recall in this context that MMC 18.04.080 states in part:

“In the interpretation and application of this chapter, all provisions shall be:

A. Considered as minimum requirements;

B. Liberally construed in favor of the City; ”

The applicant has applied the incorrect elevation when determining whether cuts and fills are balanced within the floodplain, as this determination should be made for all volumes below an elevation no lower than that of the inundation of February 1996.

Applicant's misapplication of Needed Housing statute, misapplication of Statewide Goal 15, misapplication of Milwaukie Comprehensive Plan, mischaracterization of the eagle nest on the property, refusal to investigate developing only the upland area of the property, and repeated misunderstanding of flood protection requirements are collectively difficult to reconcile with an intention to fully and completely comply with city code and best practices in the furtherance of the best interest of the neighborhood, the City, and relevant State of Oregon interests. Applicant's proposal NR-2018-005 does not appear to be compatible with the protection of the floodplain, nor does it appear to be compatible with the goals and purposes of the Willamette Greenway, and it should therefore be denied.

Sincerely,
Steve Gerken
12114 SE 19th Avenue
Milwaukie

References

- [1] “Oregon’s Statewide Planning Goals & Guidelines GOAL 15: WILLAMETTE RIVER GREENWAY OAR 660-015-0005”, <https://www.oregon.gov/lcd/OP/Documents/goal15.pdf>. Retrieved 2019-08-08.
- [2] “CHAPTER 4 -- LAND USE”, http://www.qcode.us/codes/milwaukie/view.php?topic=comprehensive_plan-4&frames=on. Retrieved 2019-08-10.
- [3] “Jolene's First Cousin”, <https://guerrilladev.co/jolenes-first-cousin/>. Retrieved 2019-08-10.
- [4] “Historical Crests for Willamette River below Falls at Oregon City”, https://water.weather.gov/ahps2/crests.php?wfo=pqr&gage=orco3&crest_type=historic. Retrieved 2019-08-11.
- [5] “Historical Crests for Willamette River at Portland”, https://water.weather.gov/ahps2/crests.php?wfo=pqr&gage=prto3&crest_type=historic. Retrieved 2019-08-11.
- [6] “Great Flood of 1862 - Wikipedia” https://en.wikipedia.org/wiki/Great_Flood_of_1862#Oregon. Retrieved 2019-08-11.

Rebuttal to the applicant's message of August 6, 2019 on NR-2018-005.

The nest in question is most certainly a bald eagle's nest. Please see the attached photo of one of the adults feeding a chick in the nest in 2012. The photo was taken from the front porch of my house at 12114 SE 19th Ave. The nest is small because it was only a couple of years old, having been started after the larger nest on Elk Rock Island that the pair had been using to raise chicks blew down in a storm.

The existence of an active bald eagle's nest in the area was widely known among the birding community and we regularly had people visiting the neighborhood to view the parents and their chicks. This is information that could be confirmed with one phone call to the Portland Audubon Society or other local birding group. I seriously question HHPR's "expert's" knowledge and commitment to finding the truth.

Theresa Silver, MS (biology)
12114 SE 19th Ave
Milwaukie, OR



Vera Kolias

From: Beth Lorio <betheenea@hotmail.com>
Sent: Tuesday, August 06, 2019 8:35 PM
To: Vera Kolias
Subject: No Elk Rock Estates

Hello,

I live on SE 19th in the Island Station neighborhood and I am absolutely opposed to the development of three story apartments across from Elk Rock Island. The Elk Rock Island area and wetlands should be PRESERVED not developed. If Milwaukie is going to set itself up as a truly environmentally forward thinking city, developing such sensitive and precious land is the LAST thing we should be doing. Please reconsider the Elk Rock Estates proposal. It is clearly about profit rather than care for our green spaces.

Sincerely,
Beth Lorio

Vera Kolia

From: Theresa Silver <tsilver@alumni.reed.edu>
Sent: Tuesday, August 13, 2019 3:06 PM
To: Vera Kolia
Subject: Rebuttal to eagle nest claims in NR-2018-005

Rebuttal to the HHPR raptor expert's comment in the applicant's August 6 message for NR-2018-005.

From Harry Nehls with the Portland Audubon Society:

"Bald Eagles usually build two nests, then alternate using them from time to time. They may have abandoned it for some reason, or may use it again when they want."

So while the nest is currently inactive, we cannot yet assume that it won't be used again at some time in the near future.

Theresa Silver, MS (biology)
12114 SE 19th Ave
Milwaukie, OR

Sent from my iPhone