APPENDIX E - SUBMITTAL REQUIREMENTS

CRITICAL AREA REPORTS:

SECTION 1. MINIMUM CONTENTS:

A. Minimum Report Contents. At a minimum, the report shall contain the following:

1. The name and contact information of the applicant, a description of the proposal, and identification of the permit requested;

2. A copy of the site plan for the development proposal including:
   a. A map to scale depicting critical areas and required buffers;
   b. A map to scale of the development proposal and limits of construction overlaid on the critical areas map; and
   c. A description of the proposed stormwater management plan for the development and consideration of impacts to drainage alterations.

3. The dates, names, and qualifications of the persons preparing the report and documentation of any fieldwork performed on the site;

4. Identification and characterization of all critical areas, wetlands, water bodies, and buffers adjacent to the proposed project area;

5. A statement specifying the accuracy of the report, and all assumptions made and relied upon;

6. An assessment of the probable cumulative impacts to critical areas resulting from development of the site and the proposed development;

7. An analysis of site development alternatives including a no development alternative;

8. A description of reasonable efforts made to apply mitigation sequencing pursuant to Section 22.08.20, Mitigation Sequencing to avoid, minimize, and mitigate impacts to critical areas;

9. Plans for adequate mitigation, as needed, to offset any impacts, in accordance with Mitigation Plan Requirements as specified below and additional requirements specified for each critical area as specified in the sections below, including, but not limited to:
   a. The impacts of any proposed development within or adjacent to a critical area or buffer on the critical area; and
   b. The impacts of any proposed alteration of a critical area or buffer on the development proposal, other properties and the environment;

10. A discussion of the performance standards applicable to the critical area and proposed activity;

11. Financial guarantees to ensure compliance; and
12. Any additional information required for the critical area as specified in the corresponding chapter.

B. Unless otherwise provided, a critical area report may be supplemented by or composed, in whole or in part, of any reports or studies required by other laws and regulations or previously prepared for and applicable to the development proposal site, as approved by the Director.

C. **Limitations to Study Area.** The Director may limit the required geographic area of the Critical Area report as appropriate if:

1. The applicant, with assistance from the City, cannot obtain permission to access properties adjacent to the project area; or

2. The proposed activity will affect only a limited part of the subject site.

D. **Modifications to Required Contents.** The applicant may consult with the Director prior to or during preparation of the Critical Area report to obtain City approval of modifications to the required contents of the report where, in the judgment of a qualified professional, more or less information is required to adequately address the potential Critical Area impacts and required mitigation.

E. **Additional Information Requirements.** The Director may require additional information to be included in the Critical Area report when determined to be necessary to the review of the proposed activity in accordance with this Chapter. Additional information that may be required, includes, but is not limited to:

1. Historical data, including original and subsequent mapping, aerial photographs, data compilations and summaries, and available reports and records relating to the site or past operations at the site;

2. Grading and drainage plans; and

3. Information specific to the type, location, and nature of the Critical Area.

**SECTION 2. MITIGATION PLANS**

When mitigation is required, the applicant shall submit a mitigation plan as part of the Critical Area report. The mitigation plan shall include:

A. Prepared by a qualified professional specializing in the type of Critical Area.

B. Report requirements:

1. Detailed summary of the project, including the impacts to the Critical Area, and the proposed mitigation to compensate for lost functions and values to appear in the beginning of the report.

2. Rationale for selecting the mitigation site.

3. Complete site characterization of the proposed mitigation site to include parcel size, ownership, soils, vegetation, hydrology, topography, and wildlife.
4. Goals, objectives, performance standards and dates of completion of the mitigation proposal.

5. Report and maps of the Critical Area to be impacted. (If it is a wetland, the report must include a functional assessment as provided below in SECTION 3 - 3.i.)

6. Monitoring, maintenance, and contingency plan. The monitoring schedule (dates, frequencies and protocols) must be included and a monitoring report submitted accordingly. Monitoring and maintenance shall be required for at least five years unless otherwise stipulated by another government agency.

7. Map of development, with scale, shown in relation to Critical Area.

8. Financial guarantees (“surety”) for 150 percent of the total costs to ensure the mitigation plan is fully implemented, including, but not limited to, the required monitoring and maintenance periods.

SECTION 3. CRITICAL AREA REPORT - ADDITIONAL REQUIREMENTS FOR WETLANDS AND WETLAND BUFFERS

A. Wetland Determination and Mapping. The exact location of all wetland boundaries shall be determined through the performance of a field investigation by a qualified wetland professional applying the Washington State Wetlands Identification and Delineation Manual as required by RCW 36.70A.175 (Ecology Publication #96-94). The wetland boundary shall be marked in the field and surveyed. The surveyed wetlands areas shall be mapped showing location and size of all wetlands. The Director may require the wetland delineation to be verified in the field by the Army Corps of Engineers when a high degree of accuracy is necessary to determine applicable regulations and requirements.

B. Wetland Delineation Requirements. The following are required components of a wetland delineation report.

1. Prepared by a qualified professional. The report shall be prepared by a qualified professional, as defined in Chapter 22.10.

2. Maps. The wetland delineation report shall include the following maps:
   a. Vicinity map.
   b. Parcel map, with scale, showing all wetlands on the site and within 150 feet of the parcel boundaries unless access is denied in writing by the adjacent property owner. Parcel map shall include all streams and drainages (Type 1, 2, 3, 4, or 5 streams), shorelines, floodplains, flood prone areas and critical habitat for threatened and endangered species on the parcel and within 150 feet of the parcel boundaries.
   c. Topographic map based on city or surveyed data.
   d. Map of development proposal with scale.

3. Wetland analysis. A wetland delineation report shall provide an analysis of all wetlands and buffers on site and within 150 feet of the lot or parcel boundaries including, at a minimum, the following information:
a. Wetland delineation.

b. The wetland boundaries shall be surveyed by a licensed surveyor or using an equivalent method with an accuracy of +/- one (1) foot of a survey.

c. Determination of each wetland size.

d. Description of each wetland class and category.

e. Description of overall water sources and drainage patterns on site.

f. Description of vegetation, hydrologic conditions, and soil and substrate conditions.

g. Description of wildlife and habitat.

h. Topographic elevation, at two-foot contours.

i. Functional assessment of the wetland and adjacent buffer using a local or state agency-recognized method and including the reference of the method and all data sheets.

j. Standard buffer requirements for each wetland.

C. Additional Information. Additional information may be required by the Director, as necessary, to adequately determine the wetland regulatory requirements. The Director may also require the wetland delineation report to be reviewed by other agencies with jurisdiction, including the Washington State Departments of Ecology, Fish and Wildlife, Natural Resources or the Army Corps of Engineers to determine whether these agencies shall require any permit or approval for the proposed project.

D. Valid for Five Years. Wetland delineation reports conducted by a qualified wetland professional shall be valid for five years from the date of the delineation report if the wetland rating or boundary has not measurably changed.

SECTION 4. CRITICAL AREA REPORT - ADDITIONAL REQUIREMENTS FOR FREQUENTLY FLOODED AREAS

A. Prepared by a Qualified Professional. A Critical Areas report for a frequently flooded area shall be prepared by a qualified professional such as a hydrologist or fluvial geo-morphologist.

B. Areas Addressed in Critical Area Report. The following areas shall be addressed in a Critical Area report for frequently flooded areas:

1. The project area of the proposed activity;

2. All shoreline areas, floodplains, other Critical Areas, and related buffers within two hundred (200) feet of the project area.

C. A Critical Area report for frequently flooded areas shall contain an assessment of the following site and proposal related information that describes the effects of proposed development on floodplain functions including but not limited to:
1. Storing and conveying floodwater;
2. Reducing peak flows and flow velocities;
3. Reducing redd scour and displacing rearing juvenile fish at the project site and downstream;
4. Maintaining sediment quality in streams;
5. Improving water quality;
6. Development within frequently flooded areas shall be allowed. Maintaining and improving fish access;
7. The reports shall also include mitigation for adverse effects on floodplain functions.

D. Planning Director shall have the authority to require consultation with the Washington Department of Fish and Wildlife or other appropriate agencies.

SECTION 5. CRITICAL AREA REPORTS - ADDITIONAL REQUIREMENTS FOR GEOLOGICALLY HAZARDOUS AREAS

A. **Prepared by a Qualified Professional.** A Critical Areas report for a geologically hazardous area shall be prepared by a qualified professional as defined in Chapter 22.10.

B. **Area Addressed in Critical Area Report.** The following areas shall be addressed in a Critical Area report for geologically hazardous areas:

1. The project area of the proposed activity; and
2. All geologically hazardous areas within zone or distance of potential significant influence as determined by a professional engineer/geologist.

C. **Geological Hazards Assessment.** A Critical Area report for a geologically hazardous area shall contain an assessment of geological hazards including the following site- and proposal-related information at a minimum:

1. **Site and Construction Plans.** The report shall include a copy of the site plans for the proposal showing:
   a. The type and extent of geologic hazard areas, any other Critical Areas, and buffers on, adjacent to, or within a zone or distance of potential significant influence as determined by a professional engineer/geologist;
   b. Proposed development, including the location of existing and proposed structures, fill, storage of materials, and drainage facilities, with dimensions indicating distances to the floodplain, if available;
   c. The topography, as determined by a professional engineer or geologist, of the project area and all hazard areas addressed in the report; and
   d. Clearing limits.
2. **Assessment of Geological Characteristics.** The report shall include an assessment of the geologic characteristics of the soils, sediments, and/or rock of the project area and potentially affected adjacent properties, and a review of the site history regarding landslides, erosion, and prior grading. Soils analysis shall be accomplished in accordance with accepted classification systems in use in the region. The assessment shall include, but not be limited to:

   a. A description of the surface and subsurface geology, hydrology, soils, and vegetation found in the project area and in all hazard areas addressed in the report;

   b. A detailed overview of the field investigations, published data, and references; data and conclusions from past assessments of the site; and site specific measurements, test, investigations, or studies that support the identification of geologically hazardous areas; and

   c. A description of the vulnerability of the site to seismic and other geologic events.

3. **Analysis of Proposal.** The report shall contain a hazards analysis including a detailed description of the project, its relationship to the geologic hazard(s), and its potential impact upon the hazard area, the subject property, and affected adjacent properties.

4. **Minimum Buffer and Building Setback.** The report shall make a recommendation for the minimum no-disturbance buffer and minimum building setback from any geologic hazard based upon the geotechnical analysis.

D. **Incorporation of Previous Study.** Where a valid Critical Areas report has been prepared, and where the proposed land use activity and surrounding site conditions are unchanged, said report may be incorporated into the required Critical Area report, if deemed still valid and appropriate by a professional engineer or geologist. The applicant shall submit a hazards assessment detailing any changed environmental conditions associated with the site based on best professional judgment of the engineer/ geologist.

E. **Mitigation of Long-Term Impacts.** When hazard mitigation is required, the mitigation plan shall specifically address how the activity maintains or reduces the pre-existing level of risk to the site and adjacent properties on a long-term basis (equal to or exceeding the projected life span of the activity or occupation). Proposed mitigation techniques shall be considered to provide long-term hazard reduction only if they do not require regular maintenance or other actions to maintain their function. Mitigation may also be required to avoid any increase in risk above the pre-existing conditions following abandonment of the activity.

SECTION 6. CRITICAL AREA REPORTS - ADDITIONAL TECHNICAL INFORMATION REQUIREMENTS FOR SPECIFIC HAZARDS

A. **Erosion and Landslide Hazard Areas.** In addition to the basic Critical Area report requirements, the technical information for an erosion hazard or landslide hazard area shall include the following information at a minimum:

   1. **Site Plan.** The Critical Area report shall include a copy of the site plan for the proposal showing:

      a. The height of slope, slope gradient, and cross-section of the project area;
b. The location of springs, seeps, or other surface expressions of ground water on or a zone or distance of potential significant influence as determined by a professional engineer/geologist; and

c. The location and description of surface water run-off features.

2. **Hazards Analysis.** The hazards analysis component of the Critical Areas report shall specifically include:

   a. A description of the extent and type of vegetative cover;

   b. A description of subsurface conditions based on data from site-specific explorations;

   c. Descriptions of surface and ground water conditions, public and private sewage disposal systems, fills and excavations, and all structural improvements;

   d. An estimate of slope stability and the effect construction and placement of structures will have on the slope over the estimated life of the structure;

   e. An estimate of the bluff retreat rate that recognizes and reflects potential catastrophic events such as seismic activity or a one hundred-year storm event;

   f. Consideration of the run-out hazard of landslide debris and/or the impacts of landslide run-out on down slope properties;

   g. A study of slope stability including an analysis of proposed cuts, fills, and other site grading;

   h. Recommendations for building siting limitations; and

   i. An analysis of proposed surface and subsurface drainage, and the vulnerability of the site to erosion.

3. **Geotechnical Engineering Report.** The technical information for a project within a landslide hazard area shall include a geotechnical engineering report prepared by a licensed engineer that presents engineering recommendations for the following:

   a. Parameters for design of site improvements including appropriate foundations and retaining structures. These should include allowable load and resistance capacities for bearing and lateral loads, installation considerations, and estimates of settlement performance;

   b. Recommendations for drainage and sub-drainage improvements;

   c. Earthwork recommendations including clearing and site preparation criteria, fill placement and compaction criteria, temporary and permanent slope inclinations and protection, and temporary excavation support, if necessary; and

   d. Mitigation of adverse site conditions including slope stabilization measures and seismically unstable soils, if appropriate.
4. **Erosion and Sediment Control Plan.** For any development proposal on a site containing an erosion hazard area, an erosion and sediment control plan shall be required. The erosion and sediment control plan shall be prepared in compliance with requirements set forth in BMC 15.42.

5. **Drainage Plan.** The technical information shall include a drainage plan for the collection, transport, treatment, discharge, and/or recycle of water prepared in accordance with BMC 15.42. The drainage plan should consider on-site septic system disposal volumes where the additional volume will affect the erosion or landslide hazard area.

6. **Mitigation Plans.** Hazard and environmental mitigation plans for erosion and landslide hazard areas shall include the location and methods of drainage, surface water management, locations and methods of erosion control, a vegetation management and/or replanting plan, and/or other means for maintaining long-term soil stability.

7. **Monitoring Surface Waters.** If the Director determines that there is a significant risk of damage to downstream receiving waters due to potential erosion from the site, based on the size of the project, the proximity to the receiving waters, or the sensitivity of the receiving waters, the technical information shall include a plan to monitor the surface water discharge from the site. The monitoring plan shall include a recommended schedule for submitting monitoring reports to the City.

B. **Seismic Hazard Areas.** In addition to the basic report requirements, a Critical Area report for a seismic hazard area shall also meet the following requirements:

   1. The site map shall show all known and mapped faults within a zone or distance of potential significant influence as determined by a professional engineer/geologist;
   
   2. The hazards analysis shall include a complete discussion of the potential impacts of seismic activity on the site (for example, forces generated and fault displacement); and
   
   3. A geotechnical engineering report shall evaluate the physical properties of the subsurface soils, especially the thickness of unconsolidated deposits and their liquefaction potential. If it is determined that the site is subject to liquefaction, mitigation measures appropriate to the scale of the development shall be recommended and implemented.

C. **Mine Hazard Areas.** In addition to the basic report requirements, a Critical Area report for a mine hazard Critical Area shall also meet the following requirements:

   1. **Site Plan.** The site plan shall delineate the following found within a zone or distance of potential significant influence as determined by a professional engineer/geologist:

      a. The existence of mines, including all significant mine features, such as mine entries, portals, adits, mine shafts, air shafts, and timber shafts;
      
      b. The location of any nearby mines that may impact or be affected by the proposed activities;
      
      c. The location of any known sinkholes, significant surface depressions, trough subsidence features, coal mine spoil piles, and other mine-related surface features; and
      
      d. The location of any prior site improvements that have been carried out to mitigate abandoned coal mine features.
2. **Hazards Analysis.** The hazards analysis shall include a discussion of the potential for subsidence on the site and classify all mine hazards areas within a zone or distance of potential significant influence as determined by a professional engineer/geologist, as either low, moderate, or severe. The hazards analysis shall include a mitigation plan containing recommendations for mitigation of the potential for future trough subsidence, as appropriate, for the specific proposed alteration and recommendations for additional study, reports, and development standards if warranted.

D. **Other Geologically Hazardous Areas.** In addition to the basic requirements, the Director may require additional technical information to be submitted when determined to be necessary to the review the proposed activity and the subject hazard. Additional technical information that may be required, includes, but is not limited to:

1. **Site Plan.** The site plan shall show all hazard areas located within three hundred (300) feet of the project area or that have potential to be affected by the proposal; and

2. **Hazards Analysis.** The hazards analysis shall include a complete discussion of the potential impacts of the hazard on the project area and of the proposal on the hazard.

**SECTION 7. CRITICAL AREA REPORTS - ADDITIONAL INFORMATION FOR FISH AND WILDLIFE HABITAT CONSERVATION AREAS**

A. **Prepared by a Qualified Professional.** A Critical Areas report for a habitat conservation area shall be prepared by a qualified professional as defined in Chapter 22.10.

B. **Areas Addressed in Critical Area Report.** The following areas shall be addressed in a critical area report for habitat conservation areas:

1. The project area of the proposed activity;

2. All habitat conservation areas and recommended buffers within 300' of the project area; and

3. All shoreline areas, floodplains, other Critical Areas, and related buffers within 300' of the project area.

C. **Habitat Assessment.** A habitat assessment is an investigation of the project area to evaluate the potential presence or absence of designated critical fish or wildlife species or habitat. A critical area report for a habitat conservation area shall contain an assessment of habitats including the following site- and proposal-related information at a minimum:

1. Detailed description of vegetation on and adjacent to the project area and its associated buffer;

2. Identification of any species of local importance, priority species, or endangered, threatened, sensitive, or candidate species that have a primary association with habitat on or adjacent to the project area, and assessment of potential project impacts to the use of the site by the species;

3. A discussion of any federal, state, or local special management recommendations, including Washington Department of Fish and Wildlife habitat management
recommendations, that have been developed for species or habitats located on or adjacent to the project area;

4. A detailed discussion of the direct and indirect potential impacts on habitat by the project, including potential impacts to water quality;

5. A discussion of measures, including avoidance, minimization, and mitigation, proposed to preserve existing habitats and restore any habitat that was degraded prior to the current proposed land use activity and to be conducted in accordance with 22.08.20, Mitigation Sequencing; and

6. A discussion of ongoing management practices that will protect habitat after the project site has been developed, including proposed monitoring and maintenance programs.

D. Additional Information May Be Required. When appropriate due to the type of habitat or species present or the project area conditions, the Director may also require the habitat management plan to include:

1. An evaluation by an independent qualified professional regarding the applicant’s analysis and the effectiveness of any proposed mitigating measures or programs, to include any recommendations as appropriate;

2. A request for consultation with the Washington Department of Fish and Wildlife or other appropriate agency; and

3. Detailed hydrologic features both on and adjacent to the site.