



TRANSMITTAL

DATE: 3/7/2019
 TO: CITY OF MERCER ISLAND, PLANNING DEPARTMENT
 FROM: Rebekah Weston, Principal Civil Engineer
 SUBJECT: Lee-Boyle Critical Areas Determination

TO WHOM IT MAY CONCERN:

The following items are being submitted for the critical areas determination:

- 0) Transmittal/Land Use Checklist for Each Required Item
- 1) Survey
- 2) Site Plan
- 3) Tree Plan
- 4) Critical Areas Drawings
- 5) Critical Areas Report
- 6) Construction, Grading, Utility Plan
- 7) Geotechnical Report

TRANSMITTAL INCLUDES THE FOLLOWING:

<input type="checkbox"/> E-Transmit CADD Files, CD, ETC. (PER WAIVER ABOVE)	<input type="checkbox"/> MYLAR COPY	<input checked="" type="checkbox"/> CRITICAL AREA REPORT
<input checked="" type="checkbox"/> PDF (24 x 36) Files	<input type="checkbox"/> PDF (12 X 18)	<input type="checkbox"/> SWPPP
<input type="checkbox"/> PDF (22 x 34) Files	<input type="checkbox"/> PDF (11 X 17)	<input type="checkbox"/> SEPA ENV. CHECKLIST (N/A)
<input type="checkbox"/> HALF SIZE HARD COPIES _- # COPIES	<input type="checkbox"/> EXHIBITS	<input checked="" type="checkbox"/> OTHER _____

If you have any questions concerning this submittal, please contact Rebekah Weston at rebekah@redbarn-engineering.com or (206) 200-7174



Thanks.
 Rebekah Weston, PE



CITY OF MERCER ISLAND

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LAND USE APPLICATION- PLAN SET GUIDE

The applicant for a land use approval is responsible for the preparation and submission of all required plans or other documents necessary to obtain an approval and to determine compliance with applicable regulations. The following list is a general summary of the normal submittal requirements for plan sets.

Please note: additional documentation by the applicant may be necessary to demonstrate compliance with applicable regulations.

This handout is organized to describe different types of plans that the City may require for review of land use applications. In some cases, the described plans will require more than one plan sheet. If multiple sheets are necessary, each sheet should be legible and contain complete information.

Project Types and Submittal Requirements

Project Type	Title Sheet	Survey	Plat Drawings	Site Plan	Tree Plan	Critical Areas Plans & Study *	Landscaping	Design Review	Conceptual Grading & Utility / Street Profile	Geotech Report
Accessory Dwelling Unit		X		X	X	X			X	
Conditional Use Permit	X	X		X	X		X		X	
* Critical Areas Determination		X ¹		X ²	X ³	X ^{4,5}			X ⁶	X ⁷
Design Review- Minor	X			X			X	X		
Design Review- Major	X	X		X	X	X	X	X	X	
Lot Line Revision		X	X							
Reasonable Use Exception		X		X	X	X			X	
Shoreline- Exemption				X			X			
Shoreline Substantial Development	X	X		X	X	X	X		X	
Shoreline Conditional Use Permit	X	X		X	X	X	X		X	
Shoreline Variance	X	X		X	X	X	X		X	
Subdivision- Short	X	X	X	X	X	X			X	
Subdivision- Long	X	X	X	X	X	X			X	
Subdivision- Final Plat		X	X							
Wireless Communication Facility				X	X					
Zoning Variance	X	X		X	X				X	

*required if critical areas and/or associated buffers are adjacent to the subject property.

All Sheets

- Yes A. Engineering scale (1"=20' typical);
- Yes B. Date, graphic scale, and north arrow oriented to the top or right of the paper/plan sheet;
- Yes C. Dimensions of all property lines, easements, and abutting streets;
- Yes D. Shared base map layer across all plan sets with the same orientation;
- N/A E. In cases where a large site must be displayed over several sheets, provide a composite plan (labeled: "composite site plan") showing the entire site;
- F. PDF files:
 - Yes 1. Shall not exceed 200mb in size;
 - Yes 2. Shall be exported from their source (not scanned);
 - Yes 3. Oriented so the top of the page is always at the top of the computer screen and set to landscape orientation;
 - Yes 4. All pages must be bookmarked, and bookmarks within the PDF must match the page number sheet.

N/A Title/ Cover Sheet

- A. Sheet Index;
- B. Small scale vicinity map;
- C. Project name and file number (once assigned) of the proposed project;
- D. Names/ contact information, signatures/ stamps of the property owner, contact, engineer, and surveyor;
- E. Project description;
- F. Site address;
- G. Zoning designation;
- H. Section/ township/ range, tax parcel number(s), and legal description;
- I. Project details (where appropriate):
 - 1. Gross site area;
 - 2. Proposed gross floor area;
 - 3. Number of dwelling units;
 - 4. Impervious/ pervious surface areas by type (e.g. building, driving surfaces, walkways, etc.);
 - 5. Existing and proposed lot coverage (driving surfaces, buildings) and hardscape;
 - 6. Required setbacks;
 - 7. Building height and average building elevation;
 - 8. Proposed parking spaces by type (standard/ compact/ accessible/ bicycle/ etc.)

① Survey

Drawing Requirements:

- ✓ A. All surveys shall be prepared by a professional land surveyor in accordance with applicable State Laws;
- ✓ B. Engineering scale (1"=20' typical, survey control drawing not smaller than 1"=200');
- ✓ C. Legend showing all symbols used;
- ✓ D. Date, graphic scale, and north arrow;
- ✓ E. Bearing and length of boundary lines;
- N/A F. Radii, internal angles, points of curvature, tangent bearings and lengths of all arcs;
- ✓ G. Corner pins;
- ✓ H. Property lines;
- ✓ I. Identify all monuments found or set (section corners, street monuments, property corner markers, etc.) and show ties to these monuments on the drawings;
- N/A J. Easements, with associated recording number;
- ✓ K. Centerline and name of adjacent streets;

- ✓L. Location of all existing buildings, structures, and on-site improvements (e.g. paving, decks, sheds, fences, retaining walls, etc.)
- ✓M. Location of all existing utilities (pipes, catch basins, manholes, vaults, hydrants, etc.), including the direction of flow where applicable; *The water meter is shown. No other pipes were identified.*
- ✓N. Existing topography at 2-foot maximum contour intervals extending fifty (50) feet beyond the exterior property lines;
- ✓O. Top and toe of any slopes in excess of 15%;
- ✓P. Location of critical area flagging (placed by qualified professional) used to delineate wetlands or watercourses; *OHWM Staking is at the site and shown on each plan.*
- ✓Q. Trees on the subject site and where driplines encroach onto the subject site, numbered, showing diameter and species; *(This is similar to F.)*

Notes/ Text:

- A. Procedure/ Narrative; *(N/A)*
- ✓B. Legal description;
- ✓C. Surveying notes;
- ✓D. Basis of elevation;
- ✓E. Basis of bearing;
- F. Surveyor certificate; *(N/A)*
- ✓G. Surveyor stamp, signed and dated by surveyor.

N/A

Plat Drawings (short plat, long plat, lot line revisions)

Drawing Requirements:

- A. Date, graphic scale, and north arrow oriented to the top or right of the paper/ plan sheet;
- B. Radii, internal angles, points of curvature, tangent bearings and lengths of all arcs;
- C. All plat meander lines or reference lines along bodies of water shall be established above the ordinary high water mark of such water;
- D. Accurate outlines and legal description of any areas to be dedicated or reserved for public use, with the purpose indicated thereon and in the dedication; and of any area to be reserved by deed covenant for common uses of all property owners;
- E. All lot and block numbers and lines, with accurate dimensions in feet and hundredths. The square footage for each lot less vehicular easements shall be shown;
- F. Boundary plat, based on an accurate traverse, with angular and lineal dimensions;
- G. Identify all monuments found or set (section corners, street monuments, property corner markers, etc.) and show ties to these monuments on the drawings;
- H. Names, locations, widths and other dimensions of existing and proposed streets, alleys, easements, utilities, storm drainage facilities, parks, open spaces and reservations, within or adjacent to the proposed plat (show the full extent of any necessary off-site easements);
- I. Critical areas and associated buffers as identified under Chapter 19.07 MICC;
- J. Corner pins made of rebar with caps;
- K. Designated building pad pursuant to MICC 19.09.090;

Plat Notes/ Text:

- A. Declaration: A statement that the long subdivision or short subdivision has been made with the free consent and in accordance with the desires of the owner or owners;
- B. Dedication: If the plat is subject to dedications to the city or any other party, the dedications shall be shown and shall be duly acknowledged. The plat shall also contain a waiver of all claims for damages against the city which may be occasioned to the adjacent land by the established construction, drainage, and maintenance of any streets dedicated to the city;
- C. If the project is a lot line revision, a note that reads: "APPROVAL NOTE: This lot line revision request qualifies for exemption under RCW 58.17.040. It does not guarantee the lots will be suitable for

development now or in the future. The legal transfer of the property must be done by separate instrument unless all lots herein are under the same ownership.”

- D. Location by section, township and range and legal descriptions of the property (existing and proposed lots);
- E. Certification by Washington registered land surveyor to the effect that the plat represents a survey made by that person and that the monuments shown thereon exist and located and that all dimensional and geodetic details are correct;
- F. Signature blocks for the City Engineer and Mayor (Long Plat) or Code Official (Short Plat or Lot Line Revision);
- G. Approval by the King County Department of Records;
- H. Space for the subdivision file number; and
- I. Other information as may be required for compliance with applicable federal, state, or local regulations.

② Development Plan Set- Site Plan

Please note: include all applicable items.

Drawing Requirements:

- ✓ A. Plans should be drawn on the same base plan sheet as other development plan sets;
- ✓ B. Property lines;
- ✓ C. Existing and proposed structures; *(No existing structures exist.)*
- ✓ D. Existing and proposed topographic contours at two-foot intervals;
- E. Designate areas with greater than six (6) feet of cut and/ or fill; *(Only building excavation will have this.)*
- ✓ F. Existing trees, numbered, and showing diameter and species;
- ✓ G. Location of critical areas and associated buffers as identified under Chapter 19.07 MICC;
- ✓ H. Adjacent right-of-ways, private roads and access easements, nearest street intersections (including intersections opposite the subject property), alleys and other right-of-way;
- ✓ I. Location and dimension of all existing or proposed easements with recording number; *(None showed upon title report.)*
- ✓ J. Building setbacks;
- ✓ K. Proposed building pad location(s);
- ✓ L. Proposed vehicular/ parking/ pedestrian circulation (dimensioned):
 - N/A 1. Vehicular circulation system;
 - ✓ 2. Parking spaces and aisle/ driveway circulation;
 - N/A 3. Stacking/ queuing of vehicles;
 - ✓ 4. Driveways;
 - N/A 5. Services areas, loading zones with turning radii
 - N/A 6. Pedestrian circulation;
 - N/A 7. Connections to the subject site from adjacent sidewalks/ trails;
 - N/A 8. Location of existing/ proposed transit;
- ✓ M. Distance to the nearest fire hydrant as measured along roads;
- ✓ N. Location and dimensions of any existing or proposed structures, buildings, docks, drenching or retaining walls, free-standing signs, and easements;
- ✓ O. Existing and proposed utility and drainage improvements;
- ✓ P. Average building elevation grade points;
- N/A Q. Calculated lot slope for each lot (lowest elevation of the lot is subtracted from the highest elevation and the resulting number is divided by the horizontal distance between these two points, and the resulting product is multiplied by 100);
- N/A R. Calculate net lot area for each lot (net area= lot area minus ingress/ egress easements and roadways);
- N/A S. Fire:
 - 1. Designated fire lanes with dimensions;

- N/A 2. Profiles of existing or proposed road grades in excess of 10 percent;
- N/A 3. Turning radii and the driving area of the emergency vehicle access routes;
- N/A 4. Vehicle control devices such as gates bollards, etc.;
- Yes 5. Water supply and fire features (e.g. fire hydrants, connections, etc.);

Notes/ Text:

- ✓ A. Lot Coverage and Gross Floor Area calculations (existing and proposed);
- ✓ B. The number of dwelling units/ acre;
- ✓ C. The area of proposed structure in square feet;
- ✓ D. The proposed and existing lot coverage (building and vehicle driving surfaces) and hardscape (all data in both sq. ft. and a percentage of lot area);
- ✓ E. Impervious surface area (in both sq. ft. and a percentage);
- ✓ F. Proposed building height;
- ✓ G. Average building elevation calculation;
- ✓ H. The number of parking spaces (both compact and standard);
- ✓ I. The area of existing and proposed landscaping in sq. ft.

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Tree Plan

- ✓ A. Plans should be drawn on the same base plan sheet as other development plan sets;
- ✓ B. Location of all proposed improvements (building footprint, access, utilities, buffers, required landscape areas);
- ✓ C. Tree retention summary table showing how the proposal complies with City tree retention requirements (ref. Chapter 19.10 MICC);
- ✓ D. Surveyed location of all Large Trees and Exception Trees on the property and the trunk location and critical root zone of Large Trees that are on adjacent property with driplines extending over the subject property lines;
- ✓ E. Trees labeled corresponding to the tree inventory numbering system along with diameter and species;
- ✓ F. Identify Exceptional Trees using different symbols for trees less than 24 inches and trees greater than or equal to 24 inches;
- ✓ G. Location of tree protection measures;
- ✓ H. Limits of excavation near potential saved trees (e.g. excavation limits for building foundation);
- ✓ I. Indicate limits of disturbance (LOD) drawn to scale around all trees potentially impacted by site disturbances resulting from grading, demolition, or construction activities (including approximate LOD of off-site trees with overhanging driplines);
- ✓ J. Proposed tree statuses (trees to be removed or retained) noted by an 'X' for removal;
- ✓ K. Proposed locations of any required replacement trees;
- N/A L. Proposed Native Growth Protection Easements (NGPEs) or other tree retention easement areas;
- N/A M. The City Arborist or Code Official may require additional documentation, plans, or information as needed to ensure compliance with applicable City regulations

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Critical Areas (Wetland/ Watercourse) Mitigation Plans & Critical Areas Study

Drawing Requirements:

- ✓ A. Plans should be drawn on the same base plan sheet as other development plan sets;
- ✓ B. Critical areas plans shall be prepared by a qualified professional;
- C. Existing conditions and proposed impacts:
 - ✓ 1. Delineated location of wetlands/ watercourses OHWM and associated buffers;
 - ✓ 2. Identification and classification of wetlands/ watercourses (e.g. Wetland A- Cat. II, etc.) (Type II stream)
 - ✓ 3. Identification of proposed buffer reductions, including proposed areas of reduction, and associated buffer widths;
 - ✓ 4. Identification of any direct impacts to wetlands/ watercourse, including proposed are of impact;

- ✓5. Limits of construction activity (e.g. building, grading, tree removal, staging, storage, etc.);
- ✓6. Extent of vegetation (trees, shrubs, groundcover, etc.)
- D. Proposed mitigation/ restoration/ enhancement plan:
 - ✓1. Location of existing trees and vegetation and proposed removal of same;
 - ✓2. Location of proposed buffer additions, including proposed area and resulting buffer width;
 - ✓3. Location and area of proposed mitigation areas;
 - ✓4. Proposed monitoring transect location(s) (if applicable);
 - ✓5. Location, type, and number of native replacement trees and vegetation;
 - N/A 6. In the case of wildlife habitat conservation area, identification of any known endangered or threatened species on the site;

Notes/ Text:

- A. Legend (color coded with area specified):
 - ✓1. Permanent critical area or buffer impacts/ reduction
 - ✓2. Permanent critical area or buffer replacement/ mitigation
 - ✓3. Permanent critical area or buffer enhancement
- ✓B. Planting details;
- ✓C. Plant schedule, identifying species, quantity, species, and size;
- ✓D. Proposed monitoring plan;
- ✓E. Performance standards for proposed mitigation.
- ✓I. The area of existing and proposed landscaping in sq. ft.

Critical Area Study:

Prepared by a qualified professional (e.g. stream/wetland biologist) containing the information identified in MICC 19.07.050, including:

- ✓A. Site survey prepared by a Washington State licensed surveyor (showing property lines, adjacent rights-of-way, location of existing and proposed structures, etc.) for the subject property.
- ✓B. Cover sheet and site construction plan.
- ✓C. Mitigation and restoration plan (maybe combined with a stormwater and erosion/sediment control management plan) to include the following information:
 - ✓1. Delineation of critical areas and buffers.
 - ✓2. Classification of critical areas based on the requirements of MICC 19.07.060, 19.07.070, 19.07.080 and the definitions contained in Chapter 19.16.
 - N/A 3. If a reduction of buffer is requested, the report must detail the specific mitigations that are proposed, consistent with the list of mitigation options identified in MICC 19.07.070(B)(2) that results in no net loss of critical area function. See details below.
 - ✓4. If buffer averaging is requested, the report must address the criteria identified in MICC 17.07.070(B)(2). See details below.
 - ✓5. Location of existing trees and vegetation and proposed removal existing trees and vegetation.
 - ✓6. Location, type, and number of replacement trees and vegetation.
 - N/A 7. In the case of a wildlife habitat conservation area, identification of any know endangered or threatened species on the site.
 - ✓8. Proposed grading.
 - ✓9. Description of impacts to the functions of critical areas, and purposed monitoring plan.
 - ✓10. Additional requirements that apply to specific critical areas are located in:
 - a. MICC 10.07.060, Geologic Hazard Areas
 - b. MICC 19.07.070 Watercourses
 - c. MICC 19.07.080 Wetlands
 - d. MICC 19.07.090 Wildlife Habitat Conservation Areas
- ✓D. Stormwater and erosion control management plan consistent with MICC 15.09. Off-site measures may be required to correct impacts from the proposed alteration. *No off-site measures are required.*

- N/A E. Other technical information consistent with the above requirements, as required by the code official.
- N/A F. The Critical area study requirement may be waived or modified if the code official determines that such information is not necessary for the protection of the critical area.

N/A Design Review Drawings

- A. Plans and materials should be prepared to illustrate existing and proposed conditions;
- B. Dimensioned elevation drawings;
- C. Parking plan, with dimension stalls, driveway widths, wheel stop/ curb locations, etc.;
- D. Parking summary with compact stalls, standard stalls, ADA stalls, and total stall count;
- E. Vehicular and pedestrian circulation plan, with ADA accessible routes of travel and parking spaces;
- F. Bike rack locations;
- G. Loading zones, truck/ delivery areas, fire lanes;
- H. Color/ photorealistic renderings of the proposal, including all perspectives or proposed building(s), landscaping, and other site improvements or amenities;
- I. Exterior colors and materials;
- J. Illustrative aids to communicate the proposed design concept, including plan call outs to document compliance with applicable standards;
- K. Proposed utility vault/ HVAC/ dumpster/ recycling enclosures (including screening dimensions, materials, and colors);
- L. Existing and proposed exterior lighting plan;
- J. Birdseye perspective or massing model (for major design review).

N/A Landscape Plans

- A. Plans should be drawn on the same base plan sheet as other development plan sets;
- B. Proposed landscaping plan:
 - 1. Location of existing trees and vegetation and proposed removal of same;
 - 2. Location and area of proposed landscaping areas.
 - 3. Location, type, and number of trees, shrubs, and groundcover;
 - 4. Planting details;
 - 5. Plant schedule, identifying species, quantity, spacing, and size at maturity;
 - 6. Extend and location of plant materials and other landscape features. Plant materials must be identified by direct labeling of each plant or by a clearly understandable legend;
 - 7. Proposed maintenance plan;
 - 8. Performance standards for proposed landscaping;
- C. Proposed treatment of all ground surfaces must be clearly indicated (paving, turf, compost, etc.);
- D. Location of water outlets. If areas of planting are extensive, plans for an underground sprinkler system will be required.

⑥ Conceptual Grading and Utility Plan/ Street Profile

- ✓ A. Plans should be drawn on the same base plan sheet as other development plan sets;
- ✓ B. Location and dimensions of all on-site existing structures and the location of any existing structures and existing utilities within twenty-five feet (25') of the subject property or which may be affect by the proposed work;
- N/A C. Accurate existing contour lines drawn at two foot (2') or less, intervals showing existing ground and details of terrain and area drainage to include surrounding off-site contours within one hundred feet (100') of the site;
- ✓ D. Finished contours drawn at two foot (2') intervals as a result of proposed site grading;
- ✓ E. Location of any watercourse, including natural drainage systems perennial and intermittent streams and presence of bordering vegetation;

⑦ Geotech Report Provided

- ✓ F. Setback areas, building pads, and any areas not to be disturbed;
- ✓ G. Finished contours drawn at two foot (2') intervals as a result of proposed site grading, clearly indicates limits of clearing;
- ✓ H. Proposed conceptual drainage system design;
- ✓ I. Location of all existing trees (size, species, and dripline), trees proposed for removal shall be marked with an 'X';
- ✓ J. The number of cubic yard of soil to be added, removed, and relocated;
- N/A K. Type and location of fill origin, and destination of any soil to be removed from site, including the foundation areas;
- ✓ L. Finished floor elevation(s) of all structures, existing and proposed (if known);
- ✓ M. A statement indicating the method to be followed on erosion control and restoration of land during and immediately following the construction period of plat improvements;
- ✓ N. Utility drawings:
 - ✓ 1. Existing and proposed gas, electric, cable utility locations, including: depths, pole locations, transformers, junction boxes, etc.
 - ✓ 2. Existing and proposed water, sewer, and storm water utility locations, including: pipe diameter, ditches, slope/ grade, connections, manhole or catch basin locations, inverts, etc.
- N/A O. Street profile:
 - 1. Profiles and grades of each street;
 - 2. Typical cross sections indication width of pavement, location and width of sidewalks, trails, bike lanes, ditches, swales, etc.;
 - 3. Location of any existing/ proposed utility mains/ pipes/ conduits.