

Land Use Review

Unified Development Code Review Criteria

7.2.603: SS-O: STREAMSIDE OVERLAY

Review Criteria

A. Purpose and Objectives:

- 1. Certain areas of the City are characterized by intermittent and perennial streams that provide significant wildlife habitat, riparian vegetation, water quality protection, flood protection, open space, and multiuse trail opportunities that add to the character, attractiveness, and quality of life of the community. The purpose of the SS-O district is to guide the development and maintenance of the property adjacent to these stream corridors in a manner that is compatible with the environmental conditions, constraints, and character of these areas.
- 2. It is the objective of this Section 7.2.603 to protect and enhance streamside areas by promoting planned development within the SS-O district to the extent that those developments comply with the Streamside Development Plan review criteria and the streamside protection standards found in this Section.
- 3. To minimize the negative impacts that certain uses have on streams and streamside areas, some land uses are conditional or prohibited in the SS-O district, even if they are allowed in the base zone district. See Table 7.3.2-B: Additional Overlay District Use Table in Section 7.3.202 (Additional Overlay District Use Table) for a full list of limited or prohibited uses
- B. Applicability: The SS-O district encompasses all land within the stream channel, stream adjacent wetlands, and within the inner and outer buffers, as represented by the SS-O district boundaries as shown on the official zoning map, and all land within one hundred and fifty (150) feet of the outer buffer. SS-O district requirements are not applicable to those wetland areas that extend beyond the mapped SS-O district boundary. However, wetlands that are wholly or partially outside of the mapped SS-O district shall be analyzed and protected as indicated or recommended by a Land Suitability Analysis, when required.

C. Development Plan Review Criteria:

- 1. In addition to the Development Plan review criteria set forth in Section 7.5.515 (Development Plan), all Development Plans submitted for review for property wholly or partially contained within the SS-O district shall be consistent with the recommendations of the Streamside Design Guidelines Manual, the Land Suitability Analysis, if required, and shall conform with the following Streamside Development Plan review criteria.
- 2. The project justification statement shall be used to evaluate compliance with the review criteria, shall include a narrative discussion of how each streamside development plan review criteria has been considered and applied in the design of the project, and shall demonstrate consistency with the opportunities and constraints identified in the project's land suitability analysis. This requirement may be satisfied by the written summary submitted with the land suitability analysis if that summary has been broadened to include analysis of the streamside development plan review criteria, including:
- 3. Has the natural landform been maintained within the overlay area and does grading conform to the specific grading limitations of this Section as well as all other City grading and filling regulations?
- 4. Does the development incorporate the stream ecosystem into the project design and complement the natural streamside setting? Has the project been designed to link and integrate adjacent properties with the stream corridor using accessways, creek front plazas, employee recreational areas or other site planning and landscaping techniques which include the stream corridor as an amenity?



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- 5. Has the project been designed to minimize impact upon wildlife habitat and the riparian ecosystem which exists on or adjacent to the site? Does the project design protect established habitat or any known populations of any threatened or endangered species or species of special concern?
- 6. Have existing or potential community trail networks and other recreational opportunities been identified and incorporated into the project design?
- 7. Has the project been designed to protect the subject property from potential flood damage and to accommodate flood storage and conveyance needs?
- 8. Have all significant natural features within the project streamside area been identified, and has the project been designed to minimize the impact on these features?
- 9. Does the project identify and implement the recommendations of any approved subarea plans (such as the City Greenway Master Plan, City Open Space plan or a specific drainage basin planning study) and of any approved public works projects and habitat conservation plans?
- 10. Does the project design:
- a. Implement a riparian buffer between the developed portions of the site and the adjacent waterway to assist in preventing point and nonpoint source pollutants and sediment from entering the waterway?
- b. Exclude impervious surfaces from the inner buffer zone and meet imperviousness restrictions across the entire overlay area on the site?
- c. Incorporate all stormwater PCMs required by Stormwater Enterprise throughout the developed site and adjacent to the buffer to encourage on site filtration of stormwater and protect water quality?
- d. Incorporate visual buffers of the stream between identified existing and/or proposed projects on opposing sides of the stream?
- 11. Are inner and outer buffer zone landscaping standards met and does the application meet all other requirements of Part 7.4.9 (Landscaping and Green Space)?
- 12. Have disturbed areas been revegetated to minimize erosion and stabilize landscape areas and does the project landscaping design specify plants selected from the riparian plant communities as set forth in Appendix A of the Landscape Policy Manual?
- 13. Have stream bank and slope areas been identified, including those over fifteen (15) percent slope, has the disturbance to these areas and any protective or stabilizing vegetative cover been minimized, and does the plan provide for the revegetation and stabilization of any disturbed areas required by this UDC?
- 14. Have opportunities to reclaim the drainage way been identified and implemented where practical? For this criterion, reclamation includes any action that improves the quality of that drainage way visually, functionally, or recreationally, and that brings the drainage way into a more natural condition.
- D. Amendment of the Streamside Overlay Zone Boundary:



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- 1. Establishment by Annexation: The boundary of the SS-O district may be established in conjunction with the determination of zone district classification of newly annexed areas for stream corridors that exhibit a continuation of the relevant stream characteristics and/or an established SS-O district.
- 2. Refinement: Refinements of the SS-O district that occur during the development review application process shall not require an ordinance to amend the overlay boundary if those refinements are otherwise consistent with this Section 7.2.603. Typical refinement includes the definition of the edge of the channel and the toe of the channel bank. The location of the stream channel and toe of the channel bank as illustrated on the official zoning map will be refined with the review and approval of every Streamside Development Plan and/or Streamside Site Plan. Proposed changes should be supported by a professional survey of the stream channel location, and approved changes shall be recorded on any plans submitted for the project site and may be reflected on the official zoning map from time to time without an additional amending ordinance being required. Once established by an approved Development Plan, the overlay boundary shall remain fixed without regard to changes in the associated stream cross section unless a subsequent change in the streamside overlay boundary is specifically requested by the applicant and mutually agreed to by the applicant and the Manager.
- 3. Stream Realignment: Major channel realignment or the elimination of existing stream channels that are identified on the SS-O district in the official zoning map require completion of the formal zone change procedures described in Article 7.5 and must be in conformance with the applicable Drainage Basin Planning Study described in Part 7.4.7 (Stormwater). The proposed realignment must include significant mitigation activities that replace and/or improve upon existing flood control, wildlife habitat, water quality, and aesthetic values.
- E. Development Standards: This Subsection 7.2.603E describes the requirements for submittals, approvals, and administration of development review applications and identifies the streamside protection standards for development within the SS-O district.

1. Administration:

- a. Streamside Land Use Plan Applications: Applications for Land Use Plans affected by the SS-O district shall be reviewed for consistency with this Section 7.2.603. These plans may be used to identify streamside overlay areas, establish buffer and impervious surface averaging determinations, and to average any other of the streamside standards across the entire respective plan area.
- b. Streamside Development Plan Approval Required: For any property that is designated on the official zoning map as being within the SS-O district, no grading, filling, dumping, property disturbance or removal of trees or other significant vegetation shall occur, nor shall any building or structure be erected, nor shall any Subdivision Plat be approved until a Streamside Development Plan has been approved, pursuant to this Section 7.2.603 and Article 7.5: Administration and Enforcement.
- c. Landscape Requirements: In addition to requirements outlined in Part 7.4.9 (Landscaping and Green Space), the Manager may apply additional landscape requirements when the Manager determines they are necessary to:
- (1) Stabilize the channel bank;
- (2) Provide additional screening within any one hundred and fifty (150) foot outer buffer expansion or if the property owner does not have the ability to provide the additional screening within the inner or outer buffer to provide a screen on their own property; or
- (3) Protect wildlife habitat, connect wildlife corridors, or preserve sensitive environmental features.



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- d. Hillside Overlay Conflicts: Where the SS-O district overlaps a HS-O district, the requirements of the SS-O district shall supersede the requirements of the HS-O district within the overlap area.
- e. Land Suitability Analysis:
- (1) Purpose: The purpose of a Land Suitability Analysis is to provide the basic information about a site's physical characteristics and features. This analysis is used to assess the impact of proposed development across the entire project both on and off the site.
- (2) Requirement:
- (a) A Land Suitability Analysis shall be required in conjunction with the City's review of the following:
- (i) Streamside Land Use Plan.
- (ii) Streamside Development Plan.
- (b) The analysis shall consist of both a written and graphic description and evaluation of the physical and environmental factors that affect the site.
- (c) The Manager may waive certain elements of the Land Suitability Analysis or require additional analyses for sites that do not contain all of the elements listed, or sites that have unique considerations. The landowner or the authorized representative shall submit in writing a letter stating the reason for any requested waiver and list all exceptions being sought.
- (3) Components of a Land Suitability Analysis: In addition to technical requirements listed on the City's website, the Land Suitability Analysis shall include the following components:
- (a) Slope Analysis: The slope analysis identifies the ranges of slopes within proposed development and is used to assess the potential number of sites and preservation areas. The evaluation for this Section should consider the intensity of the development, the ability to provide infrastructure and emergency services access. Slope analysis shall be provided in the following increments and use a contour interval of two (2) feet:
- (i) Zero (0) to eight (8) percent slopes are generally suitable for development;
- (ii) Eight (8) to twelve (12) percent slopes present increased potential for engineering difficulties and moderate potential for activating site hazards;
- (iii) Twelve (12) to fifteen (15) percent slopes present increased potential for engineering difficulties and moderately high potential for activating site hazards;
- (iv) Fifteen (15) to twenty-five (25) percent slopes demonstrate a high potential for activating hazard potential; and
- (v) Slopes greater than twenty-five (25) percent have very high potential for development difficulty and severe hazard potential. Development on such slopes will not be supported.



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- (b) Vegetation and Wildlife: Grasslands, scrub oak and similar shrubs, and coniferous tree cover are major components of streamside areas. Analysis shall show the physical location of vegetation and the following items:
- (i) Identify major vegetation in native ecosystems;
- (ii) Scrub Oak (Gambrel Oak);
- (iii) Deciduous and evergreen trees between four (4) and twelve (12) inches or greater caliper size depending on density of trees onsite; and
- (iv) Native grass/ground cover/shrub massing.
- (v) Assessment of the WUI-O district; and
- (vi) Interface of development and native wildlife habitat and migration corridors.
- (c) Geology Analysis: The Land Suitability Analysis shall demonstrate that the proposed development will comply with the standards in Part 7.4.5 (Geological Hazards).
- (d) Analysis Package: The analysis shall include a composite map with the various components of the Land Suitability Analysis overlaid on a map to show a composite of opportunities and constraints, along with a written analysis of the existing site features and constraints and how the development of the site will occur in a manner which considers both the opportunities and constraints. The analysis shall also include mitigation for the site's physical constraints and hazards.
- f. Assurances May Be Required: Where deemed necessary by the Manager, assurances may be required prior to or after approval of a grading plan or Building Permit as an offset to the potential cost of reparations to sensitive streamside areas where development is approved to take place adjacent to and/or within the SS-O district.
- g. Streamside Site Plan Required: For those developments noted in Subsection 2. g (1) below, a Streamside Site Plan (SSP) may be submitted in place of a Streamside Development Plan. The SSP submittal shall not require a Land Suitability Analysis unless otherwise required but shall be subject to all other requirements of this Section 7.2.603. Review of the SSP shall occur at the time of the Building Permit application and shall be subject to the normal procedural and administrative requirements for these applications.
- 2. Streamside Protection Standards: The purpose of this Subsection E.2 is to prescribe streamside protection standards that apply to development projects located within the SS-O district. Approval of a Streamside Development Plan will demonstrate that the development project meets or exceeds the Streamside Development Plan review criteria and satisfies all of the following streamside protection standards. This Subsection will identify the purpose and characteristics of the three (3) stream types and the three (3) regulatory zones of each stream type, and will prescribe for each stream type and/or buffer zone: a) the recommended acceptable streamside improvements and protective measures, b) the permitted, prohibited, and/or conditional land uses, c) the allowable site impervious area permitted, and d) specific provisions regarding grading, landscaping, and wall and fence construction.
- a. Stream Types and Streamside Buffer Zones:
- (1) Stream Types Defined:



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- (a) Three (3) stream types may be represented on the SS-O district as shown on the official zoning map. The typical characteristics of the stream types are as follows:
- (i) Type 1 Streams have a typical channel width greater than seventy-five (75) feet with buffers one hundred twenty (120) feet wide on both sides of the channel.
- (ii) Type 2 Streams have a typical channel width of twenty-five (25) to seventy-five (75) feet with buffers ninety (90) feet wide on both sides of the channel.
- (iii) Type 3 Streams have a typical channel width less than twenty-five (25) feet with buffers seventy-five (75) feet wide on both sides of the channel.
- (b) Before the Effective Date, Type 1 Streams as described in Subsection (a) above were designated as Type 3 Streams, and Type 3 Streams as described in Subsection (a) above were designated as Type 1 Streams, and those earlier designations shall continue to apply to development approvals and permits related to land now included in the SS-O district and approved by the City before the Effective Date.
- (2) Streamside Buffer Zones: Streamside buffer zones are established within a specified distance of the edge of the stream channel (toe of the channel bank) for each of the specific stream types. Specific buffer zones have been identified as significant based upon their typical size, natural and vegetative characteristics, wildlife habitat suitability, open space, recreational opportunities, and permitted and/or prohibited land use potential. All streamside zoned land falls within one of three(3) regulatory categories: a) stream channel, b) inner buffer zone, or c) outer buffer zone. Uses, landscaping standards, grading, and impervious surface limitations differ between the inner and outer buffer zones.
- (a) Stream Channel: The protection of the stream channel is critical for flood mitigation, water quality, and wildlife habitat. It is identified as the area between the toe of both channel banks. All proposed uses for the stream channel are subject to the review and approval of the Stormwater Enterprise Manager and City Engineer. Wetland areas that are between defined channel banks and are contiguous to the stream itself are to be considered as part of the stream channel regulatory category. Stream bank stabilization, restoration activities, trail crossings, and flood control activities are typically the only permitted activities within the stream channel.
- (b) Inner Buffer Zone: The inner buffer zone is measured outward from the toe of the channel bank. It is considered a preservation area where uses are restricted to flood control, Permanent Control Measures, landscaping, utility corridors, and recreational trails. Impervious surfaces are not permitted within the inner buffer zone. Specific permitted, prohibited and/or conditional uses, impervious surface limitations, grading limitations, and landscaping standards apply within the inner buffer zone.
- (c) Outer Buffer Zone: The outer buffer zone extends from the outward edge of the inner zone to the outer extent of the overlay area. The full range of uses that are permitted in the base zone (unless listed as prohibited in Table 7.3.2-B: Additional Overlay District Use Table in Section 7.3.202 (Additional Overlay District Use Table) are permitted in the outer buffer zone. The outer buffer zone may often be an area of increased activity to improve the human relationship with adjacent stream areas. Specific permitted, prohibited and/or conditional uses, impervious surface limitations, grading limitations, and landscaping standards apply within the outer buffer zone. The following table indicates the streamside types, their associated streamside buffer zone widths, and a general vegetative and land use characteristic description:



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Table	7.2.6-A								
Stream	nside Buffe	ers							
Туре	Width (feet)			Vegetation			Uses		
	Channel	Inner	Outer	Channel	Inner	Outer	Channel	Inner	Outer
1	More than 75	40	80	Little to no vegetation; riparian where present	Riparian vegetation corresponding with the Landscape Policy Manual; 1 tree per 20 ft. of stream frontage	Riparian or upland vegetation; 1 tree per 30 ft. of stream frontage	Stabilization, restoration, and flood control only	Riparian area; flood control, Permanent Control Measures, landscaping, and recreational uses; no impervious surfaces	Upland area; all uses permitted within the underlying zoning and complying with this Subsection 7.2.603E.2.a
2	25 to 75	30	60						
3	Less than 25	20	50						

- b. Site Imperviousness Standards: Those portions of the subject parcel or project that fall within the inner or outer buffer zone of the SS-O district shall be allowed ten (10) percent impervious surface unless detention is provided. A Streamside Development Plan shall demonstrate that the impervious surface limitation standard is met.
- (1) For purposes of determining percentage of impervious surface, the impervious surface calculation shall be based upon the area of the lot or project that is located within the inner and outer buffer zone of the SS-O district boundary.
- (2) No impervious surface is permitted within the stream channel or inner buffer zone; it may only be located within the outer buffer zone area. Recreational trails within the overlay zone are exempt from impervious surface calculations and restrictions. Impervious surface outside the overlay zone is not regulated by this Section 7.2.603 and is only subject to coverage limitations imposed by the base zone, as applicable.
- (3) Sites will be allowed up to two and a half (2.5) times the above indicated impervious surface allowances (i.e., twenty-five (25) percent imperviousness) if the Streamside Development Plan can provide either:
- (a) Approved "Water Quality Capture Volume" (WQCV) treatment and detention which is acceptable to City Stormwater following current criteria. To qualify for this partial relief of the imperviousness requirements, the detention area must fall outside of the 100-year floodplain, as amended and as it exists prior to any grading, filling and development activity. Determination of qualification under this part shall be made by the SWENT; or
- (b) Streamside improvements that exceed drainage basin planning study requirements or other development standards and are acceptable to Stormwater Enterprise and the Planning Department. Improvements that will be considered include, but are not limited to, stream bank stabilization and grade control, replacing concrete stream channels with bioengineering or other stabilization techniques that allow more infiltration yet provide economical maintenance, ecological restoration activities including invasive species removal, riparian habitat restoration, and other significant ecological improvements. Designs under this option shall be approved by Stormwater Enterprise and the Planning Department.
- c. Landscaping Requirements: In addition to the landscaping requirements in Part 7.4.9, any development project within the SS-O district is required to meet the following landscaping standards specific to the inner and outer buffer zones. Alternatives or adjustments as described by Section 7.4.913 (Alternatives and Adjustments) and the Landscape Policy Manual shall apply to the following requirements:



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(1) Inner Buffer Zone: The inner buffer zone shall be vegetated with at least one (1) tree for every twenty (20) feet of stream frontage. Shrubs may be substituted for required trees at the rate of ten (10) #5 container shrubs for every tree, with no maximum percentage of shrub substitute. If the inner buffer zone corresponds with the 100-year floodplain, vegetation should be selected to both stabilize the channel bank and protect the stream's flood capacity. Existing appropriate riparian or upland vegetation within the inner buffer may count toward fulfilling this requirement if the tree caliper is at least two (2) to four (4) inches.

(2) Outer Buffer Zone:

- (a) The outer buffer zone should be vegetated with at least one (1) tree for every thirty (30) feet of stream frontage. Shrubs may be substituted for required trees at the rate of ten (10) shrubs for every tree, with a maximum of fifty (50) percent shrub substitute. If the outer buffer zone corresponds with the 100-year floodplain, vegetation should be selected to both stabilize the channel bank and protect the stream's flood capacity. Existing appropriate riparian or upland vegetation within the outer buffer may count toward fulfilling this requirement if the tree caliper is at least two (2) to four (4) inches.
- (b) The Manager may apply outer buffer landscaping requirement to the area up to one hundred fifty (150) feet beyond the outer buffer upon a finding that that the purpose of the SS-O district would be furthered due to the streamside characteristics of the area.

d. Fences and Retaining Walls:

- (1) Fences constructed within the SS-O district shall be of an open design allowing the stream to be visible from the subject property unless opaque fencing is necessary due to the function and design of the site or where screening of the streamside use is needed for other streamside adjacent properties. Metal (chain-link or wire) may be added for security, but only as an attachment to a fence meeting the criteria in this Section. No fencing shall extend into the 100-year floodplain area.
- (2) Where retaining walls are allowed within the SS-O district, retaining walls of up to seven (7) feet in maximum height may be permitted. The retaining walls will require appropriate landscape screening, and the linear extent of any one section of the retaining wall may not exceed two-thirds (2/3) of the length of the stream frontage or three hundred (300) feet, whichever is less. Where a change in the linear alignment of wall sections is required by this Section 7.2.603, the new alignment shall extend for not less than thirty (30) linear feet.
- e. Drainage Requirements: Within the SS-O district, all stormwater facilities and improvements to channels shall be designed to comply with the standards of the Engineering Criteria.
- f. Subdivision: Upon subdivision of a parcel that is in or partially in the SS-O district, the Manager may require as a condition of the Development Plan or Land Use Plan approval that a landscape plan covering all properties within the subdivision and SS-O district area be included in the application.
- g. Exemptions: The purpose of this Subsection is to identify specific properties, projects, and/or development activities that may be exempted from all or a portion of the SS-O district regulations. A note shall be included on the Streamside Development Plan, Development Plan, or Streamside Site Plan identifying exemptions approved for the project. The only acceptable exemptions are as follows:
- (1) Single Dwelling Residential Developments:
- (a) New Residential Development: A single lot for a new single-family or two-family dwelling that is at least partially within the SS-O district may be reviewed as a Streamside Site Plan. Streamside Site Plans shall not



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require the submittal of a Streamside Development Plan or Land Suitability Analysis but shall otherwise be reviewed for compliance with the requirements of this Section.

- (b) Residential Additions: Single residential dwellings located at least partially within the SS-O district that existed as of November 12, 2002, are exempt unless both of the following apply:
- (i) The proposed project requires a Building Permit; and
- (ii) Additional impervious surface and an increased building footprint is proposed that would increase the combined footprint and impervious surface area by fifty (50) percent or more than that which existed as of November 12, 2002.
- (2) Expansion of Existing Nonresidential and Multi-Family Uses: Proposals to expand building footprints or accessory impervious areas of existing commercial, office, industrial, multi-family, mixed-use, and institutional uses by up to thirty (30) percent of the approved area as of November 12, 2002, are exempt from the SS-O district requirements as long as the following conditions exist:
- (a) The land use is permitted within the base zone district.
- (b) The land use is not a prohibited land use type within the streamside overlay zone as set forth in Table 7.3.2-B: Additional Overlay District Use Table in Section 7.3.202 (Additional Overlay District Use Table).
- (c) The expansion project does not include any additional fill material within the overlay portion of the site.
- (d) No new impervious surfaces are proposed within the inner buffer zone as described in Table 7.3.2-B in Section 7.3.202 (Additional Overlay District Use Table).
- (3) Separated Development:
- (a) Street Separated: Properties that meet the applicable standards of the SS-O district but are completely separated from the identified stream by a public or private street are not subject to the regulations of the SS-O district.
- (b) Functionally Separated: Properties that are adjacent to open stormwater drainage channels that are completely lined with concrete may be exempted from the requirements of the SS-O district. A project may be exempted if the Manager determines that the portion of the property that is contained within the SS-O district does not:
- (i) Exhibit any of the important riparian characteristics or recreational opportunities that are intended to be enhanced through the application of the SS-O district; and
- (ii) The proposed development activities will not adversely impact on site or downstream riparian values.

If exempted, the project shall be reviewed pursuant to the standard Development Plan and grading procedures applicable to the base zone.

- (4) Exempted Projects and Uses: The following shall be exempt from the SS-O district regulations.
- (a) Work to install, replace, repair, rehabilitate or maintain public facility infrastructure, including public utility wires, water lines, natural gas pipes, stormwater and drainage improvements, communication lines, trails,



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mechanical infrastructure, and park improvements, but not including utility structures such as substations and water tanks.

- (b) Grading for the purpose of installing new public utilities infrastructure, public drainage improvements, trails, or park amenities, or for the purpose of constructing stream stabilization measures required by Part 7.4.6 (Grading and Erosion Control).
- (c) The following uses, provided that development incidental to the following uses shall still be required to comply with the grading and impervious surface standards of this Section 7.2.603:
- (i) Agricultural uses such as general farming, ranching, nurseries, and forestry operations.
- (ii) Private recreational uses such as golf courses, archery ranges, and ballparks.
- (iii) Residential uses such as lawns, gardens, and play areas.
- (iv) Any other woodland, grassland, wetland, agricultural, horticultural, or recreational uses of land or water not contrary to requirements of this Section. (Ord. 23-03)