



**City of Sammamish**  
**Department of Public Works**  
**and Financial Services**

**INTERIM**  
**PUBLIC WORKS**  
**STANDARDS**

*Adopted April 19, 2000*  
*Ordinance No. O2000-60*



704 – 228<sup>th</sup> Avenue NE • PMB 491 • Sammamish, WA 98074 • Phone 425-898-0660 • Fax 425-898-0669

---

## **COUNCIL MEMBERS**

Jack Barry, Mayor  
Troy Romero, Deputy Mayor  
Phil Dyer, Council Member  
Don Gerend, Council Member  
Ron Haworth, Council Member  
Kathleen Huckabay, Council Member  
Kenneth Kilroy, Council Member

## **CITY STAFF**

Michael Wilson, City Manager  
Dennis Richards, Director of Administrative Services  
Ben Yazici, Director of Public Works and Financial Services  
Ray Gilmore, Director of Community Development



704 – 228<sup>th</sup> Avenue NE • PMB 491 • Sammamish, WA 98074 • Phone 425-898-0660 • Fax 425-898-0669

---

*So... You want to develop in Sammamish.*

**Welcome to a community dedicated to a quality environment. The City of Sammamish Council and staff will work with you to create first class additions to our City. We look forward to meeting with you to work out the details of your project. This document will show you our process and our standards. We hope that all your questions can be answered here. If not, call us and we will be glad to help.**

This document has been prepared as a supplement to the WSDOT/APWA Standard Specifications for Road, Bridge, and Municipal Construction and City Codes and Ordinances. While these standards are intended to apply to all projects within the City limits, they are also intended to be utilized in applicable circumstances where the City's service areas, annexation areas or planning areas extend outside its limits.

We attempt to achieve maximum uniformity of planning and engineering and construction practices within the City of Sammamish and as applicable as outlined above. These are minimum standards and are intended to assist, but not to substitute for competent work by engineering and design professionals. Special conditions or environmental constraints may require more stringent design than would normally be required under these Standards. It is not the intent of the City to unreasonably limit any innovative effort which could result in a superior project design. A proposed design, which is different from these Public Works Standards, will be evaluated on the basis that the proposed design will produce a comparable or superior result, and in every way adequate for the user, the City, and the public.

This document may contain minor errors, discrepancies or omissions. The editor would appreciate it if users of this document would notify the Department of Public Works at-425-898-0660 of any required corrections.

A copy of this document may be obtained by contacting Gail Davila, Administrative Assistant, 425-836-7916  
A charge of \$15.00 is required to cover printing costs, payable to The City of Sammamish

**City of Sammamish, Washington**  
**INTERIM PUBLIC WORKS STANDARDS**

**TABLE OF CONTENTS**

<b><u>Section</u></b>	<b><u>Page</u></b>
<b>Street and Alley Vacation Procedures</b>	<b>Chapter PWS.05 1-3</b>
<b>General Public Works Considerations</b>	<b>Chapter PWS.10 4-20</b>
<b>Appeal of a Decision</b>	<b>21</b>
<b>Transportation –General Considerations</b>	<b>Chapter PWS.15 22-57</b>
<b>Figures/Drawings - index</b>	<b>58</b>
<b>Figures/Drawings</b>	<b>59-89</b>
<b>Storm Drainage</b>	<b>Chapter PWS.20 90-95</b>
<b>Appendix “A”      Ordinance No. 02000-60</b>	<b>96-97</b>
<b>Appendix “B”      SEPA Checklist</b>	<b>98-105</b>
<b>Appendix “C”      Determination of Non-Significance (Environmental)</b>	<b>106-107</b>

**Division I. General**

**Chapter PWS.05**

**STREET AND ALLEY  
VACATION PROCEDURES**

**Sections:**

<b>PWS.05.010</b>	<b>Definitions.</b>
<b>PWS.05.020</b>	<b>Statement of purpose.</b>
<b>PWS.05.030</b>	<b>Initiation of vacation.</b>
<b>PWS.05.040</b>	<b>Petition for vacation.</b>
<b>PWS.05.050</b>	<b>Petition fees.</b>
<b>PWS.05.060</b>	<b>Survey, vicinity map, plat map and legal description.</b>
<b>PWS.05.070</b>	<b>Setting of hearing.</b>
<b>PWS.05.080</b>	<b>Staff report.</b>
<b>PWS.05.090</b>	<b>Notice of hearing.</b>
<b>PWS.05.100</b>	<b>Protest.</b>
<b>PWS.05.110</b>	<b>Compensation for vacation.</b>
<b>PWS.05.120</b>	<b>Appraisals.</b>
<b>PWS.05.130</b>	<b>Payment of compensation of conveyance.</b>

**PWS.05.010 Definitions.**

A street or alley “vacation” means that the public is letting go of, or “vacating”, the public interest in a property. After a street or an alley is vacated, the public no longer has a right to use the property for access.

**PWS.05.020 Statement of purpose.**

The purpose of this chapter is to establish procedures, notice requirements and fees for the vacation of streets and alleys within the City. This chapter is intended to implement the authority granted to the City by Chapter 35.79 RCW and RCW 35A.47.020 and to conform to their provisions. In case of conflict between this chapter and those statutes, the statutory provisions shall be controlling.

**PWS.05.030 Initiation of vacation.**

The owners of an interest in any real property abutting upon any street or alley who may desire to vacate the street or alley, or any part thereof, may petition the City council. In the alternative, the City council may itself initiate a vacation by resolution. The petition or resolution shall be filed with the City clerk.

**PWS.05.040 Petition for vacation.**

The petition shall be in a form prescribed by the Director of Public Works/Finance. The petition shall also discuss the criteria set forth in PWS.05.110. The sufficiency of the petition shall be governed by RCW 35A.01.040.

**PWS.05.050 Petition fees.**

Every petition for the vacation of any street or alley, or any part thereof, shall be accompanied by a fee in an amount established by resolution of the City to defray the administrative costs incurred in processing the petition and publishing, posting and mailing notices, plus any consulting costs incurred by the City during the review process.

**PWS.05.060 Survey, vicinity map, plat map and legal description.**

- A. Every petition shall be accompanied by:
  - 1. A survey, containing an exact legal description of the portion of road to be vacated prepared and sealed by a professional land surveyor, registered in the state of Washington;
  - 2. A vicinity map showing the general area of the proposed vacation;
  - 3. A plat map prepared and sealed by a professional land surveyor, registered in the state of Washington, indicating the specific parcels abutting the proposed street or alley to be vacated;
  - 4. The name and address of all property owners for properties which lie within three hundred feet of the street or alley to be vacated.
- B. Flagging which indicates the boundaries of the street or alley shall be installed when the survey is conducted.

**PWS.05.070 Setting of hearing.**

Upon receipt of the petition, the fee and all required documents, the City clerk shall make a determination whether the petition has been signed by the owners of more than two-thirds of the property owners abutting the part of the street or alley to be vacated. The City clerk shall then forward the petition and required documents to the director of public works for further review and action. If the petition has been signed by two-thirds of such owners, the petition shall be forwarded to the City council which shall, by resolution, fix a time when the petition will be heard and determined by the City council, or committees of the City council. The hearing shall be not more than 60 days nor less than 20 days after the date of adoption of the resolution. Where the City council initiates the vacation by resolution, that resolution shall fix a time when the proposed vacation will be heard by the City council or a committee of the City council.

**PWS.05.080 Staff report.**

The public works department shall prepare a report concerning the proposed vacation, which report shall address the criteria (see PWS.05.120) to be considered by the City council in determining whether to vacate the street or alley, and such other information as deemed appropriate by the department. In preparing the report, the department shall solicit comments from police, fire and other City departments other governmental agencies which may be affected by the right-of-way vacation, and utilities operating within the City. The report shall be submitted to the City council, or the City council committee hearing the matter, and to the petitioners, not less than five days before the hearing.

**PWS.05.090 Notice of hearing.**

Upon the passage of the resolution fixing the time for hearing the petition or proposal for vacation, the City clerk shall give notice to the time, place and purpose of the hearing as set forth in RCW 35.79.020 and by:

- A. Publishing written notice once in the City's official newspaper;
- B. Posting a placard in a conspicuous place at each end of the street or alley sought to be vacated; and
- C. Mailing written notice to all petitioners at the address on the petition and all owners of property abutting the street or alley proposed to be vacated, as shown on the records of the King County assessor. In addition, notice shall be given to the owners of property which lie within 300 feet beyond the street or alley to be vacated, measuring in both directions from the area to be vacated. The public works department shall send the same written notice to the petitioners at the address on the petition. The placards shall be highly visible and at least 11 by 14 inches in size, and shall include a map showing the location of the street or alley proposed to be vacated.

**PWS.05.100 Protest.**

If 50 percent or more of the owners of the abutting property file written objections to a City council resolution setting a hearing to vacate a street or alley with the City clerk, prior to the time of the hearing, the City shall not proceed with the resolution.

**PWS.05.110 Compensation for vacation.**

- A. Where a vacation has been initiated by petition, the owners of the property abutting the area vacated shall pay to the City, prior to the effective date of the ordinance vacating the area, a sum equal to one-half of the appraised value of the area vacated plus the full cost of physical closure and road repairs as set by the City Council in the vacation resolution, as requested by the director of public works ; provided, that where the vacation was initiated by the City or was required by the City as a condition of a permit or approval, the owners of property abutting the area vacated shall not be required to pay such sum; and provided further, that where the area vacated was acquired at public expense, the owners of property abutting the area vacated shall pay to the City a sum equal to the full appraised value of the area to be vacated.
- B. Conveyance of other property acceptable to the City may be made in lieu of the required payment, whether required to mitigate adverse impacts of the vacation or otherwise. When the conveyance is made for street purposes, one-half of the fair market value of the land conveyed shall be credited to the required payment. When the conveyance is made in fee for purposes other than street purposes, the full appraised value of the land conveyed shall be credited to the required payment.
- C. When the value of the in-lieu parcel is less than the required payment, the petitioners shall pay the difference to the City. When the value of the in-lieu parcel exceeds the required payment, the City shall pay the difference to the petitioners.

**PWS.05.120 Appraisals.**

- A. The director of public works may determine the appraised value of the area vacated based on an appraisal from a state-certified real estate appraiser who has an MAI or SRA designation from the Appraisal Institute. To obtain such appraisal, the director shall present to the representatives of the petitioners a list of three such certified and designated appraisers from which the representatives of the petitioners shall select one appraiser. The petitioner shall pay for the appraisal. If the director is not satisfied with the appraisal, the director may order a second appraisal from a state-certified real estate appraiser who has an MAI or SRA designation from the Appraisal Institute. The City shall pay for the second appraisal.
- B. The director shall use the appraisal having the highest value for the area vacated. The director of public works shall determine the fair market value or full appraisal value of the real property proposed to be granted or dedicated to the City in lieu of cash payment under ISPW PWS.05.110 in accordance with the appraisal procedure in subsection (A) of this section.

**PWS.05.130 Payment of compensation of conveyance.**

After determining the appraisal value of the street or alley to be vacated, pursuant to PWS.05.120, the director of public works shall notify the representatives of the petitioners of the amount of compensation. The payment shall be delivered to the director who, upon receipt of the payment, shall transmit it to the City finance department for deposit in the street fund and shall make a written report of the payment to the City council. If the petitioner has been authorized to deliver an instrument granting or dedicating to the City a parcel or parcels of land in lieu of cash payment, as contemplated in PWS.05.110, the director, at the petitioner's expense, may obtain either a policy of title insurance insuring title of the property in the City, or a certificate of title as to the title thereof, and upon receipt of such policy or certificate, shall transmit it to the City council.

**Division II. Public Works Standards**

**Chapter PWS.10**

**Sections: GENERAL PUBLIC WORKS CONSIDERATIONS**

<b>PWS.10.010</b>	<b>Scope</b>
<b>PWS.10.020</b>	<b>Definitions and Terms</b>
<b>PWS.10.030</b>	<b>Stop Orders</b>
<b>PWS.10.040</b>	<b>Standard Specifications</b>
<b>PWS.10.050</b>	<b>Permit Requirements</b>
<b>PWS.10.060</b>	<b>Regulations for tree cutting on public lands and within the public right-of-way</b>
<b>PWS.10.070</b>	<b>Construction Control</b>
<b>PWS.10.080</b>	<b>Inspection</b>
<b>PWS.10.085</b>	<b>As-Builts</b>
<b>PWS.10.090</b>	<b>Utility Locations</b>
<b>PWS.10.100</b>	<b>Easements</b>
<b>PWS.10.110</b>	<b>Pavement Cutting</b>
<b>PWS.10.120</b>	<b>Utility Extension</b>
<b>PWS.10.130</b>	<b>Traffic Control</b>
<b>PWS.10.140</b>	<b>Call before You Dig</b>
<b>PWS.10.150</b>	<b>Violations and Penalties</b>
<b>PWS.10.160</b>	<b>Severability</b>
<b>PWS.10.170</b>	<b>Variations</b>
<b>PWS.10.180</b>	<b>Appeals</b>



### **PWS.10.010 Scope.**

Chapters PWS.10 - Chapter PWS.25 of the Sammamish Municipal Code are necessary to protect the health, safety and welfare of the citizens and businesses located within the City. Therefore, these Chapters shall govern the design and construction of all facilities located within City rights of way. In addition, they shall govern all clearing and grading within the City, and all facilities for transportation, storm drainage, sanitary sewer, electricity, water, natural gas, telecommunications and any other utilities located on private land.

### **PWS.10.020 Definitions and terms.**

- "Average daily traffic (ADT)" means the average number of vehicles passing a specified point during a 24-hour period. "Annual average daily traffic (AADT)" denotes that daily traffic that is averaged over one calendar year.
- "Building" means any structure used or intended for supporting or sheltering any use or occupancy.
- "City engineer" means the City engineer or duly authorized representative.
- "Clearing" means the cutting, moving on site, or removal of standing or fallen timber (including stumps); the removal or moving on site of stumps; or the cutting or removal of brush, grass, ground cover, or other vegetative matter from a site in a way which exposes the earth's surface of the site. In addition to the above, clearing is an activity which does not require reforestation per an approved Forest Practices Application/Notification issued under the Forest Practices Act.
- "Commercial driveway" means a driveway which is used to provide access to business and nonresidential enterprises, including but not limited to sales, service, industry, churches or other quasi-public buildings.
- "Developer" means any person, firm, partnership, association, joint venture, or corporation or any other entity responsible for a given project.
- "Development" means any manmade change to improved or unimproved real estate including but not limited to buildings or the structures, placement of manufactured home/mobile home, mining, dredging, clearing, filling, grading, paving, excavation, drilling or the subdivision of property.
- "Director of public works" means the City of Sammamish public works director or duly authorized representative.
- "Driveway" means that portion of street area which provides access to an off-street vehicular facility through a depression in the constructed curb, or when there is no constructed curb, that area in front of such vehicle facility as is well defined or as is designated by authorized signs or markings.
- "Easement" means a grant of interest in land by the property owner for a designated use by another person or entity or the public in general. .
- "Emergency vehicle access" means an all weather drivable surface for emergency vehicles constructed and maintained in accordance with this chapter.
- "Engineer" means any Washington State licensed professional engineer
- "Grading" means any excavating or filling.
- "Grubbing" means the removal and disposing of all unwanted vegetative matter from underground, such as sod, stumps, roots, buried logs, or other debris.
- "Horizon year" means the year in which future conditions are to be evaluated.
- "Major tenant improvement" shall mean improvements to the interior and/or exterior of a structure which within a twelve-month period exceeds a cumulative value of twenty-five percent of the assessed value as assessed by the King County's Assessor's Office of the structure.
- "Private street" means privately owned and maintained vehicular access.
- "Project" is a general term encompassing all phases of the work to be performed and is synonymous with "improvement" or "work". A project may entail work on one or more parcels of land.
- "Public street" means publicly owned and maintained street.
- "Residential driveway" means a driveway which is used to provide access to a single-family resident.

- "Right-of-way" means all public streets and property granted or reserved for, or dedicated to, public use for street purposes, together with public property granted or reserved for, or dedicated to, public use for walkways, sidewalks, bikeways and horse trails, whether improved or unimproved, including the air rights, sub-surface rights and easements related thereto.
- "Road" is used interchangeably with street, roadway, or street way.
- "Shared driveway" means a driveway which is used to provide access to a duplex on one lot or two single-family residences on separate parcels which use one access.
- "Street frontage" means the distance between the two points where the lot lines intersect the boundary of public street right-of-way
- "Significant Tree" means street trees located within right of ways and/or any deciduous plant 12 inches in diameter or evergreen plant 8 inches in diameter measured at 4.5 feet above existing grade.
- "Traffic signal warrants" list of criteria that establish the need to install a traffic signal as outlined in the Manual on Uniform Traffic Control Devices, U.S. Department of Transportation, Federal Highway Administration.
- "Utility" means an entity to provide public services including, but not limited to: gas, oil, electric power, street lighting, telephone, telegraph, telecommunications, water, sewer, storm drainage, or cable television, whether or not such company is privately owned or owned by a governmental entity.

**PWS.10.030 Stop Orders.**

When any development is being done contrary to any provisions of Title PWS, or other ordinance, code provisions, or regulation of the City, the PW Department may issue a Stop Work order under ISDC Title 23. The stop work order shall be served in writing on any person at the project site. Alternatively, the Public Works Department may post the Stop Work order prominently at the project site. It shall be the duty of all persons at a project site who have either been served or have actual notice that a stop work notice has been posted at the site to immediately cease all work at the site until the Public Works Department authorizes in writing a resumption of work.

**PWS.10.040 Standard specifications.**

The most current version of the following standards shall be applied. Design detail, workmanship, and materials shall be in accordance with the current edition of the "Standard Specifications for Road, Bridge and Municipal Construction", the "APWA Amendments to Division One", and the "Standard Plans for Road, Bridge and Municipal Construction", all written and promulgated by the Washington State Chapter of the American Public Works Association and the Washington State Department of Transportation, except where these standards provide otherwise.

The following specifications shall be applicable when deemed pertinent by the director of public works or when specifically cited in the standards or standards of any agency funding a project. In case of conflict, the most restrictive standards shall govern. The most current version of the following standards shall be applied.

- A. City of Sammamish Comprehensive and Storm Drainage Plan.
- B. Conditions and standards as set forth in the most current edition of the King County Public Works and Utilities Comprehensive Sanitary Sewer Plan.
- C. Conditions and standards set forth in the most current edition of the King County Pre-Treatment Standards for Sanitary Sewage.
- D. Conditions and standards as set forth in the most current edition of the King County Health Department regulations.
- E. Conditions and standards as set forth in the most current edition of the Sammamish Comprehensive Plan.
- F. King County Surface Water Design Manual, 1998 Edition.
- G. Criteria set forth in the Local Agency Guidelines as amended and approved by Washington State Department of Transportation.
- H. City and County Design Standards for the Construction of Urban and Rural Arterial and Collector Roads Promulgated by the City Engineers Association of Washington, May 24, 1989.

- I. Conditions and standards as set forth in the WSDOT Design Manual as amended and approved by WSDOT.
- J. U.S. Department Transportation Manual on Uniform Traffic Control Devices (MUTCD), as amended and approved by Washington State Department of Transportation.
- K. WSDOT Construction Manual as amended and approved by Washington State Department of Transportation.
- L. Rules and regulations of the State Board of Health regarding public water supplies, as published by the State Department of Health.
- M. Conditions and standards as set forth in the State of Washington Department of Ecology "Criteria for Sewage Works Design", most current edition.
- N. Conditions and Standards as set forth by the State of Washington, Department of Labor and Industries.
- O. Criteria set forth in "Transportation and Land Development" by V.G. Stover and F. Koepke and the Institute of Transportation Engineers (I.T.E.).
- P. Design criteria of federal agencies including Department of Housing and Urban Development and the Federal Housing Administration.
- Q. Highway Capacity Manual, Special Report 209, Third Edition, 1994.
- R. I.T.E. Trip Generation Manual, 5th Edition.
- S. A.A.S.H.T.O., A Policy on Geometric Design of Highways and Streets, 1994.
- T. Uniform Building Code, current edition.
- U. King County Road Standards, 1993 (for drainage structures, and appurtenances only).
- V. Puget Sound Energy Code
- W. State of Florida Department of Transportation Roundabout Design Guidelines.
- X. State of Maryland Department of Transportation Roundabout Design Guidelines
- Y. American Association of Nurseries, Standards, latest edition.
- Z. Other specifications not listed above as may apply when required by the City of Sammamish.

**PWS.10.050 Permit Requirements.**

A. Permits Required. Before any person, firm or corporation shall commence or permit any other person, firm or corporation to commence any work to clear land, cut and remove trees, plane fill, stockpile, grade, pave, level, alter, construct, repair, remove, excavate or place any pavement, sidewalk, crosswalk, curb, driveway, gutter, drain, sewer, water, conduit, tank, vault, street banner or any other structure, utility or improvement located over, under or upon any public right-of-way or property in the City of Sammamish, or place any structure, building, barricade, material, earth, gravel, rock, debris or any other material or thing tending to obstruct, damage, disturb, occupy, or interfere with the free use thereof or any improvement situated therein, or cause a dangerous condition, the appropriate permit shall be obtained from the City. A separate permit shall be obtained for each separate project.

If a short plat or special use permit is a development requirement, a site development permit will not be issued until one or more of the permit types in PWS 10.050B are acquired. However, a site development permit may be processed jointly with a conditional use or land use permit.

**B. Permit Types**

1. Land Surface Modification. A land surface modification permit is required for any project which alters property to provide new or additional access, to pave parking lots, alter drainage patterns, requires erosion control, remove trees and/or construct road-ways and utility extensions. Tree removals are included as a land surface modification permit activity. However, if construction activities involve *only* clearing and grubbing, or *only* grading, then a separate specific permit, as listed below, is required. Significant tree provisions still apply.

A. Clearing Permit. A clearing permit will be required for cutting, clearing and/or the grubbing of an area greater than 10,000 square feet.

B. Grading Permit. A grading permit is required for any grading, filling or excavation work unless exempted by Uniform Building Code Appendix Chapter 33 as adopted by City of Sammamish.

2. Right-of-Way Permit. A right-of-way permit is required for any work within the right-of-way as outlined at the beginning of this chapter. Such work may include utilities work, telecommunications work, lane closures, driveways, curbs, side-walks, cutting, topping, damaging or pruning trees, and haul routes. Permission to temporarily close a street or portion thereof for construction activities is obtained through the right-of-way permit. A utility must have a franchise, license or other lawful authority expressly granted by the City before it can operate, maintain, install or construct any facility in a right of way of the City unless such a requirement is preempted by state or federal law.

3. Blanket Right-of-Way Permits. All utilities operating under a franchise with the City are eligible for an annual blanket right-of-way permit to cover the franchisee's work within the right-of-way of streets classified as local road feeder and local road minor. The annual blanket right-of-way permit would be in lieu of individual right-of-way permits.

The fee for each work occurrence under the blanket permit is the same as the fee for an individual right-of-way permit. Annual blanket permit holders must notify the Department of Community Development, in writing, at least 24 hours in advance of any work proposed to be done under the annual blanket permit. At the beginning of each month, the City will invoice blanket permit holders for work done the previous month.

Blanket permits do not entitle an entity to perform work within the rights-of-ways of streets classified as arterial streets. An individual right-of-way permit must be obtained for any work performed by a utility within the right-of-way of an arterial street in the City.

The City Engineer may revoke the annual blanket permit of any franchisee that fails to comply with the Public Works Standards of the provisions of the blanket permit. If a blanket permit is revoked, the franchisee will be required to apply for an individual right-of-way permit for work performed within the right-of-way of any street in the City.

Any revocation or suspension of a blanket permit shall be appealable to the City's Hearing Examiner.

4. Approvals and Other Permits. There are several other permits or approvals which may be required and referred to in these standards: site plan review; plat and short plat approvals; building permit and certificate of occupancy.

In addition, there are several other City approvals which may have to be obtained prior to the above listed permits and which may affect the standards as contained in this document: reclassification; conditional use; planned development district; shoreline substantial development permit.

### C. Permit Exemptions.

The following work is exempt from the permit requirements of these standards:

1 Construction, maintenance or repair of public roads or storm drainage facilities when done by a public agency and the project has a completed SEPA environmental checklist or letter of SEPA categorical exemption, has been approved by the Washington State Department of Transportation (WSDOT), City of Sammamish, or the City engineer, and the work is in existing public right-of-way or easement dedicated to or owned by the City of Sammamish.

2. Cutting and clearing and/or grubbing of any site area with a project size less than 10,000 square feet unless the activity is located in sensitive areas, land-slide, steep slope, erosion hazard areas or wetlands.

3. The stockpiling or broadcasting in a single year of not more than 100 cubic yards of topsoil, peat, sawdust, mulch, bark, chips or solid nutrients on a lot, tract, or parcel, except within wetlands, except in floodplains or sensitive areas.

4. The excavation or filling required to accommodate only the footprint of a proposed single-family residential structure in preparation for the proposed construction. The following conditions apply:

a. A building permit application has been accepted by the City.

4/19/00 Ordinance 02000-60

- b. The proposed structure is not located within 150 feet of a wetlands.
- c. The proposed structure is located a minimum of 150 feet from a drainage course.
- d. The proposed structure is not located in the 100 year floodplain.
- e. The proposed structure is not located in a sensitive area.

5. Emergency sandbagging, diking, ditching, filling or similar work during or after period of extreme weather conditions when done to protect life or property. Properties which are contiguous to each other and which were in common ownership at any time during the year preceding any claimed exemption under these standards will be considered one tract for the purpose of applying these exemptions.

#### D. Permit Applications

All permit applications shall be made to the City's Community Development Department. Permit applications are processed in accordance with ISDC Chapters 20, 21A and 25.

For all other public works permits, processing shall proceed as follows: after submittal of a complete application to the permit center and payment of all necessary fees, a cursory check of the plans against the plan checklist will be made by City staff. Any necessary easements or dedications shall be submitted for review along with the plans. If the plans, easements, and dedications meet the minimum checklist requirements, they will be routed to begin the plan review process.

After initial review, the applicant's engineer will be requested to submit the original drawings for approval or will be notified of additional required revisions. Additional review time will be required if revisions are necessary.

#### E. Approval and Other Permits

There are several other permits or approvals issued under Interim Sammamish Development Code (ISDC) which may be required and referred to in these Standards: site plan review; plat and short plat approvals; building permit and certificate of occupancy. In addition, there are several other City approvals which may have to be obtained prior to issuance of one or more permit type listed in section PWS.10.050(B) which may affect the Standards as contained in this document, including but not limited to, conditional use; variances, planned unit development (PUD); and shoreline substantial development permits.

#### F. Submittal Documents

1. Detailed plans, prepared by a licensed engineer, must be submitted to the City permit center for plan review and approval prior to the commencement of any construction. All plans to be submitted must be signed and stamped by a professional engineer, licensed in the State of Washington, prior to submittal for plan review. Street tree plans, tree removal plans must be prepared by a registered landscape architect. Final plans shall be approved by the director of public works prior to the start of construction.

2. Six folded copies of the plans shall be submitted to the City for review. All drawings shall be on 22-inch by 34-inch sheet size. Original sheets shall be good quality reproducible ink on Mylar. Original Mylar drawings of the approved plan shall be provided and shall become the property of the City of Sammamish. The drawings shall also be provided to the City in digital format utilizing AutoCAD software in the version utilized by the City at the time of plan approval. Drawing files will be provided on three-and-one-half-inch discs (or other media format acceptable to the City). A reproducible copy of the drawing will be returned to the applicant's engineer.

3. Plans and profile drawings are required for all proposed transportation-related improvements, street illumination, traffic signalization, storm drainage facilities, and sewer and water improvements. For specific minimum requirements, see the plan checklist in the Appendix. On occasion, the scope of a project (i.e.,

4/19/00 Ordinance 02000-60

relocating one hydrant) may not require engineered plans and can instead be handled via a right-of-way permit. This option will be decided during technical review committee pre-submission conference.

4. Specifications shall be required and submitted with the plans if general notes do not adequately cover the project requirements.

#### G. Permit Issuance

A permit will be issued and approved plans returned to the applicant only after receipt of all applicable financial guarantees; easement dedications; and payment of application, review, permit, and inspection fees.

#### H. Validity

Plans that have been approved more than 180 days before construction commences (i.e., pre-construction meeting scheduled and inspection fees paid) shall be subject to re-review based on the hourly rate established for additional submittals.

#### I. Permit Expiration

All site development permits, including clearing and grubbing permits and grading permits, expires 180 days after permit issuance if construction has not commenced. Verification of start of work is a recorded inspection. A permit may be renewed for 180 days at the discretion of the City. Site development permits expire three years after permit issuance if work has begun within the first 180 days after permit issuance.

#### J. Fees.

Fees, charges or financial guarantee requirements shall be as established by the City council by a resolution adopting a fee, charge, and financial guarantee requirement schedule. The City council shall further set the dollar penalty for failure to pay said fee or charge in a timely manner by passage of such resolution. A copy of the "fees and charges" resolution can be found in the office of the City clerk. It is the applicant's responsibility to verify that the fees are current.

The initial plan check fee and application fees are due at the time of submittal of the permit application to allow the permit to be processed for issuance

All additional plan check fees are due prior to issuance of the site development permit and release of approved plans.

In addition, there are various miscellaneous service and connection fees and charges. We strongly urge all applicants to request an estimate of these fees and charges from the appropriate utility providers as soon as practical.

Notice: Pursuant to RCW 36.70B.070, a permit application must be accompanied by the necessary application fees to allow the permit to be processed for issuance. An application is incomplete within the meaning of RCW 36.70B.070 and ISPC Title 20 unless it is accompanied by all fees necessary to complete the processing of the application.

#### K. Financial guarantees (General).

Financial guarantees shall be on a City form or on a form acceptable to the City and will not be released by the City until the required improvements are constructed in accordance with the approved plans. All improvements financially guaranteed must be constructed and/or completed within three years from the date of issuance of the site development permit and if not, the financial guarantee must be paid to the City to be used for completion of the required construction.

Financial guarantees shall conform with ISDC Title 27A for letters of credit, releases and cost adjustments.

1. Site Development Construction Guarantee. Prior to issuance of a permit, the applicant will be required to submit a financial guarantee to the City to assure compliance with the provisions of these regulations, the permit, and accepted plans.

4/19/00 Ordinance 02000-60

a. Financial guarantee may be submitted to the City in lieu of construction of the required improvements except in situations where the required work involves a safety or public welfare issue. Project approval shall not be granted until all required safety and public welfare issues are completed to the satisfaction of the City.

b. An engineer's estimate shall be submitted to the City by the engineer detailing the quantity of work to be done. The estimate shall be based on current construction costs and shall be stamped and signed by the engineer.

An executed contract for the total project between a licensed, bonded contractor and the project applicant may be substituted in lieu of the engineer's estimate.

c. The City shall review the engineer's estimate or the executed contract, and if it is in order the City will establish the amount of the financial guarantee. The financial guarantee shall be 125 percent of the engineer's estimate or of the executed contract to allow for inflation and engineering administration expenses should the City have to complete the project.

d. The applicant will be allowed a two-year time period from the acceptance of the financial guarantee in which to complete the work after which the financial guarantee is subject to default to the City who will complete the work and use the guarantee for reimbursement. The applicant shall remain financially responsible for any and all costs exceeding the amount of the original financial guarantee.

e. Final approval of the street construction plans will not be given or a construction permit issued until a financial guarantee is submitted and the amount necessary when so required by the City.

2. Private Storm Drainage Maintenance Financial Guarantee. Prior to issuance of a building permit or approval of a plat, the applicant will be required to submit a financial guarantee to the City to guarantee the maintenance of the private storm drainage system within the development.

a. The City shall require a bond or other financial surety acceptable to the City to guarantee that the applicant will correct any defect or subsequent problem in a dedicated improvement, including the satisfactory functioning of the project's drainage and/or drywell system caused by improper design, faulty construction, poor housing construction practices, or other reasons determined by the City. The guarantee shall not exceed 7.5 percent of the construction cost of the project as determined by the City. The guarantee shall remain in effect for a period of 18 months from the time that the City accepts the street and/ or storm drainage system for maintenance. The applicant shall remain financially responsible for any and all costs exceeding the amount of the original financial guarantee.

b. The guarantee shall be submitted to the City before the improvements are dedicated to the City or, if applicable, before the posted construction bond is released back to the applicant at the applicant's option.

3. Public Road and Storm Drainage Cleaning Financial Guarantee. An assignment of funds will also be required of the building permit applicant to guarantee the cleaning of the public roads and storm drainage systems adjacent to or within the development. Cleaning frequency will be determined by the City and must continue until written notification is received from the City.

The assignment of funds must be submitted to the City upon application for a building permit and prior to issuance of the permit. The guarantee will be held by the City until the structure and the front yard landscaping has been completed.

The amount of the street cleaning guarantee will be \$150.00/lot for plats and \$1,000 to \$5,000 for other developments, as determined by the City.

4 Procedure for Releasing Financial Guarantee for Storm Drainage Construction. Upon receipt of an acceptable letter of completion from the engineer, the City will release the applicable financial guarantee unless the City determines a drainage problem exists as a direct result of the development. If the applicant fails to correct the drainage problem, the City may seek to foreclose on the financial guarantee to obtain the funds to correct the deficiency.

5.Procedure for Releasing Financial Guarantee for Private Storm Drainage Maintenance. Upon approval of the final inspection of all structures, and acceptance of a form supplied by the City, and completed by the

4/19/00 Ordinance 02000-60

developer, stating that the storm drainage system has been cleaned of all debris, dirt, sediment, etc., the City will release the applicable financial guarantee.

**PWS.10.060 Regulations for tree cutting on public lands and within the public right-of-way.**

1. Policy. It is the policy of the City of Sammamish to protect and preserve trees, shrubs, bushes, flowers and other landscaping on public lands and within the public right of way to:

- a) Preserve and enhance the City's aesthetic character and maintain visual screening and buffering;
- b) Prevent landslides, accelerated soil creep, settlement and subsidence hazards;
- c) Preserve habitat to the greatest extent feasible.
- d) Minimize the potential for flooding, erosion, siltation or other form of pollution in a watercourse.

2. Prohibition of Damaging Trees or Landscaping Planted by the City. No person shall cut, remove, top, damage, prune, or trim any tree, bush, shrub, flower or other landscaping located by the City of Sammamish on public land or in the public right-of-way. The public right-of-way includes but is not limited to streets, street shoulders, planter strips and medians.

3. Prohibition of Cutting Significant Trees Located within Public Rights of Ways. No person, including abutting property owners, shall cut, remove, top, damage, prune, or trim any significant tree located within a public right-of-way without first having obtained a right of way use permit from the City.

4. Exemptions. The following shall be exempt from the provisions of this Section:

- a) Removal of trees and/or ground cover by the Public Works Department, Parks Department, Fire District and/or public or private utility in emergency situations involving immediate danger to life or property, substantial fire hazards, or interruption of services provided by a utility.
- b) Removal of dead or terminally diseased or damaged ground cover or trees which have been certified as such by a certified arborist, professional forester, landscape architect or the City prior to their removal.
- c) Maintenance activities including routine vegetation management and essential tree removal for public and private utilities, road rights of way, easements and parks.
- d) Installation of distribution lines by public and private utilities provided that such activities are categorically exempt from the provisions of the State Environmental Policy Act.

**PWS.10.070 Construction control.**

Work performed for the construction or improvement of City roads and utilities whether by or for a private developer, by City forces, or by a City contractor, shall be done to the satisfaction of the City and in accordance with approved plans. It is emphasized that no work shall be started until such plans are approved and applicable permits issued. Any revision to such plans shall be approved by the City before being implemented. Failure to receive the City's approval can result in removal or modification of construction at the contractors or developer's expense to bring the work into conformance with approved plans.

**PWS.10.080 Inspection.**

All work performed within the public right-of- way, easements and/or private property, as described in these standards, whether by or for a private developer, by City forces, or by a City contractor, shall be done to the satisfaction of the City and in accordance with the WSDOT/APWA Standard Specifications, any approved plans and these Standards. Unless otherwise approved, any revision to construction plans must be approved by the City before being implemented.

It is the responsibility of the developer, contractor, or their agents to notify the City in advance of the commencement of any authorized work. A preconstruction meeting and/or field review shall be required before the commencement of work. Inspection fees shall be paid before permit issuance. Any necessary easements or dedications are required before plan approval.



It is the responsibility of the developer, contractor or their agents to have an approved set of plans and any necessary permits on the job site whenever work is being accomplished.

The City shall have authority to enforce these Standards as well as other referenced or pertinent specifications. The City will appoint project engineers, assistants and inspectors as necessary to inspect the work and they will exercise such authority as the City engineer may delegate.

All specific inspections, test measurements or actions required of all work and materials are set forth in their respective chapters herein. Tests shall be performed at the owner's expense.

Failure to comply with the provisions of these standards may result in stop work orders, removal of work accomplished (at developer's expense), or other penalties as established by ordinance.

A project is considered final when a letter of acceptance is issued by the City to the party responsible for the project.

If adequate inspection is not called for before completion of the roadway construction, it may be necessary for core drilling and testing to be performed to ensure an acceptable quality of roadway. When core drilling becomes necessary, the contractor will be billed and held fully responsible for all incurred costs.

#### **PWS.10.085 As-Builts**

As-built drawings must be provided to the City for all roadway and storm system construction. As-builts must be prepared by a licensed professional engineer or surveyor, stamped by the professional and submitted prior to acceptance of any improvement.

- Roadway centerline stationing at minimum 50' spacing. Stationing shall include elevations and state plane coordinates.
- Clearly marked Right-of-Way and property lines.
- Locations, widths, and composition of travel lanes, sidewalks, curbs, gutters, medians, planter strips, shoulders and bike lanes.
- Street light locations and types.
- Utility locations.
- Street names.
- Pavement markings and street signs.
- Easements (types and widths).
- Catchbasin type, location, rim elevation, bottom elevation, and inlet/outlet invert elevation.
- Storm drain pipe size, composition, location and invert elevation.
- Detention/retention/infiltration facility location, and inlet/outlet locations and elevations.
- Street trees, type and caliper size (diameter at 4.5 feet above grade).

#### **PWS.10.090 Utility locations.**

- A. Utilities shall be located as required by public works and the utility provider. Where existing utilities are in place, new utilities shall conform to these standards as nearly as practical and yet be compatible with the existing installations. Deviations of location shall be approved by the director of public works and/or the utility provider as may be applicable. Existing utilities shall be shown using the best information available. This verification may require exploration/excavation (potholing) if utilities are in conflict with proposed design.
- B. The contractor/developer shall be responsible for locating utilities in conjunction with their project until final public works approval is given.
- C. All new utilities shall be installed in compliance with City standards, the utility provider's standards and under the supervision of the utility owning said facility. New and existing facilities in the right-of-way shall comply with provisions as set forth in franchise agreements between the City and the utility.
- D. Utilities converted from overhead to underground on existing roadways may be located within the right-of-way.

- E. A right-of-way permit is required of any utility, except for maintenance and repair of City-owned facilities and utilities for any work done within the right-of-way and shall comply with all provisions as set forth in PWS.10.080.

**PWS.10.100 Easements.**

- A. The office of the City attorney will process and arrange for the recording of all easements and other dedications of property to the City. All easements and dedications must be in a form acceptable to the City attorney prior to issuance of a permit. After the documents are recorded with the King County auditor, a conformed copy will be filed in the project file and the auditor stamped copy shall be filed with the City clerk. Recording fees shall be collected from the applicant.
- B. Utility easement widths shall be of sufficient width to construct and maintain the utilities in the easement.
- C. Easements are required to be submitted in draft, unsigned, for review and approval prior to plan approval. Signed copies are required prior to plan approval. Any change in design which places an amenity, i.e., water, sewer, sidewalk, etc., out-side of the easement may necessitate stopping of construction until plans and easements can be resubmitted and approved. Plan review fee shall be based on the rate as established for an additional submittal fee. Easements will be filed by the City upon satisfactory completion of work.

**PWS.10.110 Pavement cutting.**

Except as may be required by law, franchise or license, all pavement types shall not be cut for a period of 36 months after the pavement has been constructed or resurfaced. Untrenched construction techniques such as pushing, jacking, or boring shall be explored on all new or existing pavement road crossing. Information on which roads have been recently constructed or resurfaced may be obtained from the public works department upon request. Except for work performed under emergency conditions, or as a result of a City construction or maintenance project, an additional permit fee may be charged for pavements cutting during the said 36-month period.

**PWS.10.120 Utility extension.**

- A. Anyone who wishes to extend any public utility should contact the engineering department of the utility provider for an extension/connection fee estimate and any special extension requirements.
- B. Utility mains shall be extended to and through the extremes of the property being developed for loop closures and/or future development as determined by the utility provider and the City of Sammamish.

**PWS.10.130 Traffic control.**

- A. The developer/contractor shall be responsible for interim traffic control during construction on or along traveled roadways. Traffic control shall follow the guidelines of the WSDOT/APWA Standard Specifications. All barricades, signs and flagging shall conform to the requirements of the MUTCD.
- B. Signs must be legible and visible and should be removed at the end of each work day if not applicable after construction hours.
- C. When road closures and detours cannot be avoided the contractor/developer shall notify the department of public works. The City may require a detour plan to be prepared, submitted and approved prior to closing any portion of a City roadway.

**PWS.10.140 Call before you dig.**

All developers/contractors are responsible for timely notification of all utilities in advance of any construction in right-of-way or utility easements. The utilities one-call underground location center phone number is 1-800-424-5555.

**PWS.10.150 Violations and Penalties.**

- A. General.

1. Failure to comply with any of these regulations will be cause for withholding or withdrawing approval of the overall project plans, revocation of the site development permit, suspension of building inspections, forfeiture of the financial guarantee submitted to the City, and/or non-acceptance of the work by the City.

2. The City is authorized to make inspections and take such actions as required to enforce these regulations. The City representative shall present proper credentials and make a reasonable effort to contact the property owner before entering onto private property.

3. A site development permit will not be issued on any parcel that has a valid non-conversion forest practices permit for a period of six years from the date of the forest practice application approval.

4. The City may require the property owner to remove or replace illegal earthwork and/or restore and reclaim an illegally cleared or graded parcel. Earth material brought onto a parcel must be removed to a properly permitted disposal site.

B. Enforcement Powers. The City may remove, correct, or replace any improperly constructed facility, structure, or portion thereof which was allowed through an issued site development permit, and all expenses incurred by the City shall be paid by the property owner or applicant. If the City is required to bring an action to recover such costs, the City will recover reasonable attorney's fees and interest at the statutory percent per annum to run from the date the work was completed by the City. Applicants must agree to this provision as a condition of issuance of any permit authorized by these regulations.

C. Penalties.

1. Violation of any of the provisions of these regulations by an applicant or engineer shall be a misdemeanor. Each day or portion of a day during which a violation of these regulations is continued, committed, or permitted shall constitute a separate offense.

2. Any work carried out contrary to the provisions hereof shall constitute a public nuisance and may be abated or enjoined as provided by the statutes of the state of Washington.

**PWS.10.160 Severability.**

If any part of these regulations shall be found invalid, all other parts shall remain in effect.

**PWS.10.170 Variations.**

Variations to these Standards may be authorized by the City engineer only upon submittal and approval of information, plans, and/or design data by the engineer which indicates that the requested variation is based upon sound engineering judgment, and that requirements for safety, environmental considerations, function, appearance, and maintainability are fully met and the variation is in the best interest of the public. All variations must be approved by the City engineer in writing prior to the start of construction.

**PWS.10.180 Appeals.**

Any person or agency aggrieved by an act or decision of the City under these regulations may appeal to the City of Sammamish hearings examiner pursuant to the provisions of ISDC Title 20, as now enacted or hereafter amended. Administration, including staff report preparation and public hearing notification, shall be prepared by the City. The applicant shall file the appeal with the City permit center on the form entitled "Appeal of a Decision of an Administrative Official", available at the City of Sammamish Community Development department. Payment of appeal fees shall be in accordance with the City's fee resolution, or the most recent version thereof, with said fees payable to the City before acceptance of the appeal by the City for processing.

## APPENDIX

### Plan Checklist

#### A. Standard Items - Water, Sanitary Sewer, Storm Sewer, Street, Lighting, And Signal.

- Vicinity Map
- Legend (APWA Standard Symbols)
- North Arrow
- Scale Bar
- Datum - Bench Mark Elevation and Location (on all sheets where elevations are referenced)
- Title Block:
- Title:
- Design By:
- Drawn By:
- Date:
- Checked By:
- Signature Approval Block:
- Sheet Number of Total Sheets:
- Section, Township and Range (every plan/profile sheet)
- Engineers' Stamp (signed and dated)
- Project Title (cover sheet)
- Utility System Map (showing all proposed utilities on one drawing)
- Revision Block

#### B. Plan Portion Standard Items.

- Centerline and Stations
- Edge of Pavement and Width
- Right-of-Way and Width
- Proposed Survey Monumentation Locations and Details
- Sidewalk and Width
- Roadway Sections
- Existing Utilities (above and below ground)
- Adjacent Property Lines, Ownership, Parcel Number, and Street Address
- Contour Lines (2-foot intervals)
- Identify Street Names, Rights-of-Way, Lots
- Identify Match Existing Sheet Numbers and Stations
- Easements, Width and Type
- Define Survey Baseline
- Stations for Structures
- Flow Direction Arrows
- Flood Plane Boundary (if applicable)
- Street Trees

#### C. Profile Portion Standard Items.

- Profile Grades (decimal FT./FT.)
- Existing Ground
- Scale (horizontal and vertical)
- Stationing
- Vertical Elevation Increments
- Existing Utilities (if available)

Misc.:

- Detail Sheet
- General Notes

D. Sanitary Sewer.

- "Documented" compliance with King County Public Works and Utilities requirements.

E. Water.

- "Documented" compliance with Sammamish Public Utilities Department requirements.

F. Storm Sewer.

- Drainage and Erosion Control Plan Report:
- Cover Sheet
- Table of Contents
- Section 1 - Proposed Project Description
- Section 2 - Existing Conditions
- Section 3 - Infiltration Rates/Soils Report
- Section 4 - Wells
- Section 5 - Fuel Tanks
- Section 6 - Sub-Basin Description
- Section 7 - Analysis of the 100-Year Flood
- Section 8 - Aesthetic Considerations for Facilities
- Section 9 - Downstream Analysis
- Section 10 - Covenants, Dedications, Easements
- Section 11 - Homeowners - Articles of Incorporation
- Project Engineer's Certificate
- Facility Summary Form
- Engineer's Estimate
- Erosion Control Plan Report:
- Section 1 - Construction Sequence and Procedure
- Section 2 - Trapping Sediment
- Section 3 - Permanent Erosion Control and Site Restoration
- Section 4 - Geotechnical Analysis and Report
- Section 5 - Inspection Sequence
- Drawings and Specifications:
- Vicinity Map
- Project Boundaries
- Sub-Basin Boundaries
- Off-Site Area Tributary to Project
- Contours (2-foot intervals)
- Major Drainage Features
- Flow Path
- Site Map:
- Existing Topography at Least 50 Feet Beyond Site Boundaries
- Finished Grades
- Existing Structures within 1,000 Feet of Project Boundary
- Utilities
- Easements, Both Existing and Proposed

- ( ) Environmentally Sensitive Areas
- ( ) 100-Year Floodplain Boundary
- ( ) Existing and Proposed Wells within 1,200 Feet of Proposed Retention Facility
- ( ) Existing and Proposed Fuel Tanks
- ( ) Existing and Proposed On-Site Sanitary Systems within 100 Feet of Detention/Retention

Facilities

- ( ) Detention/Retention Facilities
- ( ) Proposed Structures Including Roads and Parking Surfaces
- ( ) Lot Dimensions and Areas
- ( ) Proposed Drainage Facilities and Sufficient Cross-Sections and Details to Build
- ( ) Plan View - Conveyance System:
- ( ) Station and Number at Each Manhole/Catch Basin
- ( ) Manhole/Catch Basin Type and Size
- ( ) Manhole/Catch Basin Rim Elevation
- ( ) Flow Direction with Arrow on Pipe/Channel
- ( ) Type and Size of Pipe
- ( ) Length of Pipe in Lineal Feet
- ( ) Profile View - Conveyance System:
- ( ) Station and Number at Each Manhole/Catch Basin
- ( ) Rim Elevation
- ( ) Invert In and Out
- ( ) Length of Pipe in Lineal Feet
- ( ) Grades (FT./FT.)
- ( ) Design Velocity
- ( ) Work Map:
- ( ) Unit Area (including off-site contributing areas)
- ( ) Percentage Impervious
- ( ) Average Slope
- ( ) Estimated Ultimate Infiltration Rate
- ( ) Conveyance Date, Identifier (for reference to model output), Length, Slope, Inverts
- ( ) Overland Flow Paths and Distances
- ( ) Soil Types
- ( ) Spot Water Surface Elevations, Discharges and Velocities for the Design Event
- ( ) Erosion Control Drawing:
- ( ) Soil Types
- ( ) Locations of Soil Pits and Infiltration Tests
- ( ) Construction Entrance Detail
- ( ) Silt Fences and Traps
- ( ) Mulching and Vegetation Plan
- ( ) Clearing and Grubbing Limits
- ( ) Existing and Finished Grade
- ( ) Details and Locations of all BMPs Recommended
- ( ) Location and Details of Temporary Sediment Ponds
- ( ) Maintenance Report:
- ( ) Required Type and Frequency of Long-Term Maintenance Organization
- ( ) Identification of Responsible Maintenance Organization
- ( ) Frequency of Sediment Removal
- ( ) Cleaning of Catch Basins
- ( ) Vegetation Control

- ( ) Annual Cost Estimate of Maintenance
- ( ) Construction Inspection Report
- ( ) Detail Sheet
- ( ) Storm General Notes
- ( ) Street Trees
- ( ) Significant Trees
- ( ) Misc.

G. Street.

Plan View:

- ( ) Flow Direction Arrows at Curb Returns Showing Grade
- ( ) Spot Elevations on Curb Returns
- ( ) Station PC, PT, PI and Intersections
- ( ) Curve Information Delta, Radius, Length and Tangent
- ( ) BCR and ECR (Begin Curb Radius, End Curb Radius)
- ( ) Identify All Field Design Situations
- ( ) Typical Sections
- ( ) Pavement Marking Details with Station and Offset
- ( ) Sidewalks
- ( ) Driveway Approach
- ( ) Station
- ( ) Width, Material (AC, PCC)
- ( ) Driveway Type
- ( ) Accessibility Ramps - Detail and Type

Profile View:

- ( ) Vertical Information VPI, BVC, EVC, AP, Low Point, High Point
- ( ) Show Grades in Decimal Form with (+ or -) Slope
- ( ) Super Elevated Roadways
- ( ) Detail - Show Transitions
- ( ) Special Detail Showing Gutter Flowing Adequately

Misc.:

- ( ) Detail Sheet
- ( ) Street General Notes
- ( ) AASHTO Street Design Worksheet, With Soils Report, if Applicable

H. Illumination and Signals.

- ( ) Lighting
- ( ) Station and Offset to Fixtures
- ( ) Pole Type, Including Manufacturer and Model Number
- ( ) Mounting Height, Arm Length, Anchor Bolt Size and Pattern
- ( ) Power Source
- ( ) Wire Size, Type, Conduit
- ( ) Line Loss Calculations
- ( ) Luminaire Type, Lamp Wattage
- ( ) Location of Service Disconnects (5 percent max. voltage drop from source to farthest luminaire)

- ( ) J-Box Location (include station and offset)
- ( ) Signal (follow WSDOT specs unless otherwise required by the City)
- ( ) Station and Offset Signal Base, Cabinets, Ped. Lead, Loops, Etc.
- ( ) Wiring Schedule
- ( ) Signal Heads and Mounting Assembly
- ( ) Detection Loops
- ( ) Opticom
- ( ) Control Cabinet, Size and Layout
- ( ) Power Source
- ( ) Conduit
- ( ) Wire Size and Type
- ( ) Construction Notes
- ( ) J-Box Schedule
- ( ) Pedestrian Signal Type with Push Button
- ( ) Controller Type, Configuration, and Wiring Schematic

Misc.:

- ( ) Detail Sheet
- ( ) Lighting General Notes
- ( ) Line Loss Calculations

I. Miscellaneous.

- ( ) Easements and/or Dedication Deeds
- ( ) Contract Documents/Specifications

Additional Items:

- ( ) Sheet Index (on title sheet if required)
- ( ) Field Verify Note on DWG. - Expose Connection Points and Verify Fittings 48 Hours prior to Distributing Shut-Down Notices
- ( ) Call Before You Dig Note
- ( ) Signing - Temporary and Permanent
- ( ) Channelization
- ( ) Location of Cluster Mailboxes
- ( ) Location of School Bus (and/or Metro Transit) Bus Shelter/Pad





APPEAL OF A DECISION
of an
ADMINISTRATIVE OFFICIAL

704 - 228th Avenue NE • PMB 491 • Sammamish, WA 98074 • Phone 425-898-0660 • Fax 425-898-0669

Case Name or Number: \_\_\_\_\_

Parcel Number: \_\_\_\_\_

TO: THE HEARING EXAMINER

COMES NOW \_\_\_\_\_ on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_,
(Your Name)

as an APPELLANT and an "aggrieved person directly affected," in the matter of the decision by the Administrative
Official on CASE NO. \_\_\_\_\_, the application of
\_\_\_\_\_ for
\_\_\_\_\_

WHEREAS, the Administrative Official, after duly considering said matter, did on \_\_\_\_\_, \_\_\_\_\_, 20\_\_\_\_,
(decision date)
take said action to
\_\_\_\_\_
\_\_\_\_\_
\_\_\_\_\_

THEREFORE BE IT KNOWN, that the appellant, after review and consideration of the administrative decision of the
Administrative Official does now, under the provisions of the appropriate official regulations, give written notice of appeal
to the Planning Department and concisely specifies such errors and/or issues the Hearing Examiner is asked to consider:

(If more space is required, please attached additional sheet.)

AND FURTHERMORE, requests that the Hearing Examiner having responsibility for a determination in this matter, will
upon review of the record of Case No. \_\_\_\_\_ and this appeal, find in favor of the appellant and reverse
the action of the Administrative Official by \_\_\_\_\_ the applicant's request.
(approving/denying)

\_\_\_\_\_  
Signature of Appellant                      Address of Appellant                      Phone No.

Filed with Planning Department this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_,  
by \_\_\_\_\_ Received by \_\_\_\_\_;

Forwarded to the Clerk of the Council on \_\_\_\_\_, \_\_\_\_\_ 20\_\_\_\_.

**Chapter PWS.15**

**TRANSPORTATION**

Article I. General Considerations

Sections:

- PWS.15.010 General.
- PWS.15.020 Standardized format for traffic analyses.

Article II. Streets

- PWS.15.030 General.
- PWS.15.040 Design standards.
- PWS.15.045 Street construction.
- PWS.15.050 Functional classification.
- PWS.15.060 Naming.
- PWS.15.070 Signing.
- PWS.15.080 Right-of-way.
- PWS.15.090 Private streets and alleys.
- PWS.15.100 Developments on substandard streets.
- PWS.15.110 Street frontage improvements.
- PWS.15.120 Cul-de-sac.
- PWS.15.130 Hammerhead turnaround.
- PWS.15.140 Temporary dead ends.
- PWS.15.150 Medians.
- PWS.15.160 Intersections.
- PWS.15.170 Driveways.
- PWS.15.180 Sight obstruction.
- PWS.15.190 Surfacing requirements.
- PWS.15.200 Temporary street patching.
- PWS.15.210 Trench backfill and restoration.
- PWS.15.220 Staking.
- PWS.15.230 Testing.

Article III. Sidewalks, Curbs and Gutters

- PWS.15.240 General.
- PWS.15.250 Design standards.
- PWS.15.260 Sidewalks.
- PWS.15.265 Pedestrian Circulation
- PWS.15.270 Curb and gutter.
- PWS.15.280 Handicap accessibility ramps.
- PWS.15.290 Bus pads.
- PWS.15.300 Staking.
- PWS.15.310 Testing.

Article IV. Bikeways

- PWS.15.320 General.

#### Article V. Illumination

PWS.15.330	General.
PWS.15.340	Design standards.
PWS.15.345	Street light construction.
PWS.15.350	Staking.
PWS.15.360	Testing.

#### Article VI. Signals

PWS.15.370	General.
PWS.15.380	Design standards.
PWS.15.390	Induction loops.
PWS.15.400	Staking.
PWS.15.410	Testing.
PWS.15.420	Check-out procedure.

#### Article VII. Roadside Features

PWS.15.430	General.
PWS.15.440	Design standards.
PWS.15.450	Staking.
PWS.15.460	Testing.
PWS.15.470	Survey monuments.
PWS.15.480	Bus stops, shelters, and amenities.
PWS.15.490	Mailboxes.
PWS.15.500	Guard rails.
PWS.15.510	Retaining walls.
PWS.15.520	Street trees.
PWS.15.530	Temporary signs and banners.

#### Article VIII. Emergency Vehicle Access

PWS.15.540	Purpose.
PWS.15.550	Administration.
PWS.15.560	EV access requirements.

#### Article IX. Roundabouts

PWS.15.570	Design Standards
------------	------------------

## Article I. General Considerations

### **PWS.15.010 General.**

The overall goal of this chapter is to encourage the uniform development of an integrated, fully accessible public transportation system that will facilitate present and future travel demand with minimal environmental impact to the community as a whole.

This chapter provides minimum development standards supplementing the applicable standards as set forth in PWS.10.040.

### **PWS.15.020 Standardized format for traffic analyses.**

A. Introduction. A traffic impact analysis (TIA) is a specialized study of the impacts a certain type and size of development will have on the surrounding transportation system. The traffic impact analysis is an integral part of the development impact review process. It is specifically concerned with the generation, distribution, and assignment of traffic to and from the development.

The purpose of a TIA is to determine what impact development traffic will have on the existing and proposed street network and what impact the existing and projected traffic on the street system will have on the project.

These guidelines have been prepared to establish the requirements for a traffic impact analysis. The public works department will be responsible under SEPA as well as City ordinances for determining the need for a traffic impact analysis.

B. When Required. To adequately assess a development traffic impact on the transportation system and level of traffic service (LOS) the public works department may require a traffic impact analysis (TIA). The requirement for a TIA will be based on the size of the development proposed, existing street and intersection conditions, traffic volumes, accident history, community concerns, and other pertinent factors relating to traffic impacts attributable to developments.

If a site action requires an environmental checklist be prepared, a TIA may be required if any of the following conditions are met:

1. The development generates 10 or more trips in the peak hour(s) at any given intersection.

This would include site generated traffic for all turning movements for the peak hour(s) at all affected intersections. The public works department may require analysis for the a.m. and/or p.m. peak hour.

2. The development lies within an area that contains an existing or proposed local improvement districts (LID), local/state transportation improvement areas programmed for development reimbursements or at locations that have late-comer agreements.

3. The development proposes a use of the subject property which will increase the amount of site-generated traffic.

4. The original TIA is more than two years old or where the increase in traffic volume as measured by ADT, peak hour, or peak hour of the critical movement is more than 10 percent.

If the department of public works has made the determination to require a TIA, the TIA shall follow the format outlined in subsection (D).

C. Qualifications for Preparing TIA Documents. Impact analyses (TIA) shall be conducted under the direction of a responsible individual or firm. The TIA shall be prepared by an engineer licensed to practice in the state of Washington with special training and experience in traffic engineering and who is a member of the Institute of Transportation Engineers (ITE).

D. Scope of Work. The level of detail and scope of work of a TIA may vary with the size, complexity, and location of the development. A TIA shall be a thorough review of the immediate and long-range effects of the development on the transportation system.

1. Development Prospectus.

- a. Provide a reduced copy of the site plan showing the type of development, street system, rights-of-way limits, access points, and other features of significance in the development. The site plan shall also include pertinent off-site information such as locations of adjacent intersections and driveways, land use descriptions, street right-of-way limits for the existing roadways and other features of significance.

b. Provide a vicinity map of the project area showing the transportation system to be impacted by the development.

c. Discuss specific development characteristics such as type of development proposed (single-family, multifamily, retail, industrial, etc.), internal street network, proposed access locations, parking requirements, zoning, and other pertinent factors attributable to the development.

d. Discuss project completion and occupancy schedule for the development. Identify horizon years for traffic analysis purposes.

#### 2. Existing Conditions.

a. Discuss street characteristics including functional classification, number of traveled lanes, lane width, shoulder treatment, bicycle path corridors and traffic control at study intersections. A figure shall be used to illustrate existing transportation facilities.

b. Identify safety and access problems including discussions on accident history, sight distance restrictions, traffic control, and pedestrian conflicts.

c. Obtain all available traffic data from the City of Sammamish and surrounding jurisdictions if applicable. If data is unavailable, the individual or firm preparing the TIA shall collect the necessary data to supplement the discussions and analysis in the TIA.

d. Conduct manual peak hour turning movement counts at study intersections if traffic volume data is more than two years old, unless otherwise required by the public works department. A copy of the reduced data shall be attached to the TIA when submitted to public works for review.

e. A figure shall be prepared showing existing average daily traffic (ADT) and peak(s) hour traffic volumes on the adjacent streets and intersections in the study area. Complete turning movement volumes shall be illustrated. This figure shall represent the base-line traffic volumes for analysis purposes.

3. Development Traffic. This element of the TIA shall be conducted initially to identify the limits of the study area. The study area shall include all pertinent intersections and streets impacts by development traffic.

The threshold requirement of development traffic exceeding 10 vehicles in the peak hour(s) on the adjacent streets and intersections shall apply.

The individual or firm preparing the TIA shall submit to the public works department a figure illustrating the proposed trip distribution for the development. The trip generation shall be included in a table format on the figure with the peak hour traffic volumes assigned to the study area in accordance with the trip distribution. Once approved by the public works department, a formal "scoping" by the public works department of the development proposal shall be conducted to clearly identify the study area and contents expected in the TIA.

The methodology and procedures used in preparing the trip generation and trip distribution elements of the TIA are as follows:

a. Trip Generation. Site-generated traffic of developments shall be estimated using the latest edition of the ITE Trip Generation Manual. Variations of trip rates will require the approval of public works. Trip rate equations will be utilized for estimating site generated traffic. Average trip rates shall be used for all land use categories where applicable and/or required by public works.

Site traffic shall be generated for p.m. and/or a.m. peak hour periods as required by public works. Adjustments made for passer-by and mixed-use traffic volumes shall follow the methodology outlined in the latest edition of the ITE Trip Generation Manual. A passer-by traffic volume discount for commercial centers shall not exceed 25 percent.

For multi-use and/or phased projects, a trip generation table shall be prepared showing proposed land use, trip rates, and vehicle trips for daily and peak hour periods and appropriate traffic volume discounts if applicable.

b. Trip Distribution. The trip distribution for a development shall be approved by public works and prior to the formal scoping of the TIA. The methodology shall be clearly defined and discussed in detail in the TIA. Information on transportation modeling, regional distribution models, transportation analysis zones, and employment density areas may be available from King County and/or the public works department. Available information can be used to assist in the preparation of the trip distribution model. A regional trip distribution map may be required by public works for large scale development projects.

The TIA shall identify other transportation modes that may be applicable, such as transit use, bicycle and pedestrian facilities. Developments are encouraged to implement transportation demand management practices such as flex time for employees and ridesharing programs including carpools, van pools, shuttle buses, etc.

#### 4. Future Traffic.

a. Future Traffic Conditions Not Including Site Traffic. Future traffic volumes shall be estimated using information from transportation models for applying an annual growth rate to baseline traffic volumes. The future traffic volumes shall be representative of the horizon year for project development. Public works shall determine an appropriate growth rate, if that option is utilized.

In addition, proposed on-line development projects shall be taken into consideration when forecasting future traffic volumes. The increase in traffic from proposed on-line projects shall be compared to the increase in traffic by applying an annual growth rate.

If modeling information is unavailable, the greatest traffic increase from either the on-line developments or the application of an annual growth rate shall be used to forecast the future traffic volumes.

b. Future Traffic Conditions Including Site Traffic. The site-generated traffic shall be assigned to the street network in the study area based on the approved trip distribution model. The site traffic shall be combined with the forecasted traffic volume to show the total traffic conditions estimated at development completion. A figure will be required showing daily and peak period turning movement volumes for each traffic study intersection. In addition, a figure shall be prepared showing the base-line volumes with site-generated traffic added to the street network. This figure will represent site specific traffic impacts to existing conditions.

5. Traffic Operations. The level of service (LOS) and capacity analysis shall be conducted for each pertinent intersection in the study area as determined by public works. The methodology and procedures for conducting the capacity analysis shall follow the guidelines specified in the Highway Capacity Manual-Special Report 209, 1994 Manual. The individual or firm preparing the TIA shall calculate the intersection LOS for each of the following conditions:

- a. Existing peak hour traffic volumes (figure required).
- b. Existing peak hour traffic volumes including site-generated traffic (figure required).
- c. Future traffic volumes not including site traffic (figure required).
- d. Future traffic volumes including site traffic (figure required).
- e. Level of service results for each traffic volume scenario (table required).

The level of service table shall include LOS results for a.m. and p.m. peak periods if applicable. The table shall show LOS conditions with corresponding vehicle delays for signalized intersections and LOS conditions for the critical movements at unsignalized intersections. For signalized intersections, the LOS conditions and average vehicle delay shall be provided for each approach and the intersection as a whole.

The capacity analyses for existing signalized intersections shall include existing phasing, timing, splits and cycle lengths in the analysis as observed and measured during the peak hour traffic periods. All traffic signal system operational data will be made available by the City of Sammamish and adjacent jurisdictions if applicable.

If the "new development" is scheduled to be completed in phases, the TIA shall conduct a LOS analysis for each separate development phase. The incremental increases in site traffic from each phase shall be included in the LOS analysis for each proceeding year of development completion. A figure will be required for each horizon year of phased development.

If the development impacts a traffic signal coordination system currently in operation, public works may require the TIA to include operational analysis of the system. Timing plans and proposed modifications to the coordination system may be required.

The capacity analysis shall be conducted using a City approved software package. The computer worksheets, along with a three-and-one-half- inch floppy disk of each capacity analysis, shall be submitted concurrently with the TIA document to public works. For unsignalized intersections, the Highway Capacity Manual methodology shall be used. A copy of the capacity analyses worksheets shall be submitted concurrently with the TIA document.

6. Mitigation. The TIA shall include a proposed mitigation plan. The mitigation may be either the construction of necessary transportation improvements or contributions to the City for the developments of a fair share of the costs for identified future transportation improvements. Level of service of "E" and "F" shall be used as the threshold for determining appropriate mitigating measures on roadways and intersections in the study area. Mitigating measures shall be required to the extent that the transportation facilities operate at a level of service "D" condition or better upon completion of the development.

The following guidelines shall be used to determine appropriate mitigating measures of traffic impacts generated by new developments.

a. On transportation facilities where the need to construct improvements, by the horizon year of the development, the cost for the mitigation will be entirely borne by the development. However, in the event public works identifies more than one development under simultaneous review, cumulative impacts and distribution of mitigation costs may be considered. A latecomers agreement could be formulated by the development for reimbursement for mitigation costs.

b. On transportation facilities programmed for improvements as part of a City project, the adverse traffic impacts of the development will be considered mitigated by providing a proportionate share contribution of the costs for the proposed improvements. The proportionate share of local costs for the improvements shall be based on the percentage of development traffic generated through the intersection. The percentage shall be based on the total projected peak hour traffic volumes for the horizon year of the transportation facility.

If the transportation facility currently operates at less than level of service "D", the development shall be required to make interim facility improvements to improve the level of service to LOS "D" or better. The cost of the interim improvements will be deducted from the development's proportionate share of costs for the programmed facility improvements only if the cost of the interim improvements is less than the ultimate proportionate share. If the interim improvements cannot be incorporated into the ultimate improvements programmed for the transportation facility, there will be no reimbursement for interim costs incurred.

c. On transportation facilities where the existing level of service condition is less than LOS "D" and where no improvements are programmed to improve capacity and traffic operations, the "new development" shall mitigate the intersection to an acceptable level of service "D" condition or wait until the improvements are implemented by the City or other developments. Improvements made by the City prior to the development of the subject project shall be reimbursed by the development based on a proportionate fair share costs of the facility improvements.

d. Unsignalized intersections that currently operate less than a level of service "D" condition shall be analyzed for traffic signal and intersection improvements. If three or more traffic signal warrants are satisfied, signal and intersection improvements will be required as a mitigating measure for the development. If at least three traffic signal warrants are not satisfied by the development's horizon year, the TIA shall determine if traffic signal warrants and intersection improvements would be needed within a five-year period after the development's horizon year. The development would be required to provide a proportionate share cost as a traffic mitigation fee towards future traffic signal and intersection improvements if warranted within the five-year period.

However, if traffic signal warrants are not satisfied after a five-year period from the development's horizon year, mitigation fees would not be required from the development for traffic signal improvements.

e. Signalized intersections where the projected level of service condition is at "D", but where one or more of the level of service conditions on the approaches falls below level of service "D", mitigating measures may be required to improve the capacity and traffic operations at the intersection. The City reserves the right to review all adverse traffic impacts at these intersections and to determine appropriate mitigating measures.

f. Where there are no bicycle lanes on abutting streets which have been identified in the City's capital improvement plan as streets to have bicycle lanes, the applicant shall provide sufficient right-of-way to allow the construction of the planned bicycle lane.

g. To mitigate pedestrian impacts, a concrete gutter/curb/sidewalk section shall be constructed along abutting streets. For formal plats, to provide for the safety of school children walking to the bus, concrete curbs, gutters, and sidewalks shall be provided along each side of all interior plat roads.

To mitigate pedestrian impacts, a bus stop shelter on a concrete pad shall be constructed where Metro Transit and/or the school district has identified a need for a bus stop to serve the development and the citizens of Sammamish. Design standards for the bus shelter shall be provided by Metro Transit and/or the school district.

## Article II. Streets

### **PWS.15.030 General.**

Street design must provide for the maximum loading conditions anticipated. The width and grade of the pavement must conform to specific standards set forth herein for safety and uniformity.

### **PWS.15.040 Design standards.**

The design of streets and roads shall depend upon their type and usage. The design elements of City streets shall conform to City standards as set forth herein and current design practice as set forth in PWS.10.040. Standard roadway sections for each street classification are provided at the end of this chapter. The design of pavement structures shall be based on the criteria as outlined in PWS.15.190.

The layout of streets shall provide for the continuation of existing principal streets in adjoining subdivisions or of their proper projection when adjoining property is not subdivided. Minor streets, which serve primarily to provide access to abutting property, shall be designed to encourage through non-motorized traffic (pedestrians and bicycles). See the Minimum Public Street Design Standards Table.

- A. Alignment. Alignment of major arterials and collectors shall conform as nearly as possible with that shown in the City's comprehensive plan.
- B. Grade. Street grade should conform closely to the natural contour of the land. In some cases a different grade may be required by the director of public works/finance. The minimum allowable grade shall be 0.5 percent. The maximum allowable grade shall be 15 percent, depending upon the street classification.
- C. Width. The pavement and right-of-way width depend upon street classification. The table of Minimum Street Design Standards show the minimum widths allowed.
- D. Street widths shall be measured from face of curb to face of curb on streets with cement concrete curb and gutter.
- E. The general notes in PWS.15.045 shall be included on any plans dealing with street design in addition to all applicable requirements in PWS.10.050.
- F. Parking and fire lanes shall be provided in accordance with the requirements of zoning and fire codes.
- G. Bus stops, pullout, and other bus transit amenities shall be in accordance with the requirements of Metro Transit.

### **PWS.15.045 Street construction.**

- A. All workmanship and materials shall be in accordance with City of Sammamish standards and the most current copy of the State of Washington Standard Specifications for Road, Bridge, and Municipal Construction.
- B. The contractor shall be responsible for all traffic control in accordance with MUTCD. Prior to disruption of any traffic, traffic control plans shall be prepared and submitted to the City for approval. No work shall commence until all approved traffic control is in place.
- C. All curb and gutter, street grades, sidewalk grades, and any other vertical and/or horizontal alignment shall be staked by an engineering or surveying firm capable of performing such work.
- D. Where new asphalt joins existing, the existing asphalt shall be cut to a neat vertical edge and tacked with asphalt emulsion type CSS-1 in accordance with the standard specifications. The new asphalt shall be feathered back over existing to provide for a seal at the saw cut location and the joint sealed with grade AR-4000W paving asphalt.
- E. Compaction of subgrade, rock, and asphalt shall be in accordance with the standard specifications.

4/19/00 Ordinance 02000-60



- F. Form and subgrade inspection by the City is required before pouring concrete. Twenty-four hours notice is required for form inspection.
- G. The City will procure and install street name and regulatory signs at the contractor's/developer's expense. Signs shall be requested at the time construction begins.
- H. Temporary erosion control/water pollution measures shall be required in accordance with the King County Surface Water Design Manual. At no time will silt and debris be allowed to drain into an existing or newly installed facility.

**PWS.15.050 Functional classification.\***

A. Functional Classification Elements. Streets and highways are most effectively classified by their function, according to the character of the service they are intended to provide. The primary functions of streets and highways are to provide mobility and to provide access, and the degree to which these functions are provided is considered an integral part of classifying streets. The functional classification system creates a hierarchy of classified streets.

For example, a freeway provides a high degree of mobility and limited access (available only at interchanges) that could be spaced several miles apart. Higher vehicle speeds and volumes are typical on freeways and are, in fact, desirable. On the other hand, a local street within a residential neighborhood provides a high degree of access by way of numerous driveways to adjacent lots, and lower vehicle speeds and volumes are desired. Between these two extremes are the remainder of the streets, commonly called the arterial system, that must provide both mobility and access.

Streets are grouped into a number of different classifications for administrative, planning, and design purposes. For example, the classification system can be used for planning new routes, improvements to existing streets, and planning for area development in concert with the transportation network and providing minimum design standards or criteria to encourage the use of the street as intended.

The main considerations for classifying streets into functional groups are the travel desires of the public land service needs based on existing and expected land use, and the overall continuity of the system. A classification plan which fits the various classes of streets together into a logical pattern and assigns realistic improvement standards to each class will promote the highest overall level of service for the funds that are available.

City definitions for each functional classification are presented below. A table of design elements, the standard, and application for each functional classification are in the pages that follow. Geometric design criteria follow each functional classification table. The City transportation plan will include transportation plans for modes other than passenger vehicles. These modal plans are intended to overlay onto the functional classification system. For example, the bicycle plan would overlay the function classification system to identify those streetways that should include bicycle facilities as a design element of the streetway.

The City functional classification system directly addresses all streets that are under the jurisdiction of the City. City streets are divided into major (or principal) arterials, secondary arterials, collector arterials and local access streets in accordance with regional transportation needs and the functional use each serves. Function is the controlling element for classification and shall govern rights-of-way, road width, and road geometrics. The following list is provided to assist the developer in determining the classification of a particular street. New streets will be classified by the director of public works/finance. If a street or portion of a street is not listed, the developer is responsible for making inquiries to the Public Works Department to determine the correct street classification.

**PRINCIPAL ARTERIALS**

<b>STREET NAME</b>	<b>FROM</b>	<b>TO</b>
228 <sup>th</sup> AVE SE/NE	SE 43 <sup>RD</sup> WAY	SAHALEE WAY NE
SE 43 <sup>RD</sup> WAY	E LK SAMM PKWY	228 <sup>TH</sup> SE
SAHALEE WAY	228 <sup>TH</sup> AVE NE	SR202
ISSAQUAH-FALL CITY RD	SE 32 <sup>ND</sup> ST	SE DUTHIE HILL RD

## MINOR ARTERIALS

STREET NAME	FROM	TO
E LK SAMM PKWY	E LK SAMM PKWY	228 <sup>TH</sup> AVE NE
INGLEWOOD HILL RD	228 <sup>TH</sup> AVE NE	224 <sup>TH</sup> AVE NE
NE 8 <sup>TH</sup> ST	ISSAQUAH-FALL CITY RD	228 <sup>TH</sup> AVE SE
ISSAQUAH-PINE LK RD	SE 32 <sup>ND</sup> WAY	SR 202
244 <sup>TH</sup> AVE SE/NE	ISSAQUAH-PINE LK RD	ISSAQUAH-FALL CITY RD
SE 32 <sup>ND</sup> ST		

## COLLECTOR ARTERIALS

STREET NAME	FROM	TO
LOUIS THOMPSON RD	E LK SAMM PKWY	212 <sup>TH</sup> AVE SE
212 <sup>TH</sup> AVE SE	E LK SAMM PKWY	LOUIS THOMPSON RD
SE 20 <sup>TH</sup> ST	212 <sup>TH</sup> AVE SE	228 <sup>TH</sup> AVE SE
SE 24 <sup>TH</sup> ST	228 <sup>TH</sup> AVE SE	224 <sup>TH</sup> AVE SE
TROSSACHS BLVD SE	SE DUTHIE HILL RD	SE 8 <sup>TH</sup> ST
SE 8 <sup>TH</sup> ST	212 <sup>TH</sup> AVE SE	244 <sup>TH</sup> AVE SE
SE 4 <sup>TH</sup> ST	218 <sup>TH</sup> AVE SE	SW 244 <sup>TH</sup> ST
218 <sup>TH</sup> ST SE	SE 8 <sup>TH</sup> ST	SE 4 <sup>TH</sup> ST
E MAIN DR	244 <sup>TH</sup> AVE NE	END
216 <sup>TH</sup> AVE NE	INGLEWOOD HILL RD	NE 16 <sup>TH</sup> ST
NE 16 <sup>TH</sup> ST	211 <sup>TH</sup> WAY NE	216 <sup>TH</sup> AVE NE
211 <sup>TH</sup> WAY NE	NE 16 <sup>TH</sup> ST	205 <sup>TH</sup> PL NE
205 <sup>TH</sup> PL NE	211 <sup>TH</sup> WAY NE	216 <sup>TH</sup> AVE
NE 27 <sup>TH</sup> WAY	205 <sup>TH</sup> PL NE	SAHALEE WAY NE
NE 8 <sup>TH</sup> ST	244 <sup>TH</sup> AVE NE	END

### B. Function Classification Definitions.

1. Principal Arterials. Principal arterials provide service for major traffic movements within the City. They serve major centers of activity, intra-area travel between Sammamish and other suburban centers, between larger communities, and between major trip generators. Principal arterials serve the longest trips and carry the major portion of trips entering and leaving the overall area. Typically they are one of the highest traffic volume corridors in the City. The design year ADT is approximately 5,000 to 30,000 vehicles per day or more. They frequently carry important intra-urban and inter-City bus routes.

The spacing of principal arterials usually varies from about one mile in highly developed business areas to five miles or more in rural areas. Service to abutting land is subordinate to the provision of routes for major traffic movements. It is desirable to place arterials on community and neighborhood boundaries or adjacent to, but not through, major shopping centers, parks, and other homogeneous areas.

2. Minor Arterials. Minor arterials interconnect with and augment the principal arterial system. Minor arterials connect principal arterials to collector arterials and small generators. They provide service to medium-size trip generators, such as less intensive commercial development, high schools and some junior high/grade schools, warehousing areas, active parks and ball fields, and other land uses with similar trip generation potential. They distribute travel to smaller geographic areas and communities than those identified with the major arterial system. They provide routes for trips of moderate length, somewhat lower level of travel mobility than major arterials. The design year ADT is approximately 2,500 to 15,000.

Spacing of minor arterials is usually less than one mile in fully developed areas. They provide intra-community continuity and are typically a continuous street with a direct rather than a meandering alignment.

They may carry local bus routes. Minor arterials allow for more emphasis on land access than the principal arterial system. They usually do not penetrate identifiable neighborhoods.

3. Collector Arterials. Collector arterials distribute trips from principal and minor arterials to the ultimate destination, or may collect traffic from local streets and channel it into the principal and minor arterials systems. They carry a low proportion of traffic traveling through the entire subarea; carry a high proportion of local traffic with an origin or destination within that area. Design year ADT is approximately 2,500 to 15,000. They may be on a somewhat meandering alignment and need not be particularly long or continuous. Spacing is typically about one-quarter mile in developed areas. Collector arterials provide both land access service and traffic circulation within residential neighborhoods, commercial, and industrial areas. They may penetrate identifiable residential neighborhoods.

4. Local Street System. The local street system provides circulation and access for residential neighborhoods away from the arterial system. The local street system consists of local access and minor access streets.

For developments or neighborhoods of moderate size or larger, the streets serving as primary access to and from the bordering arterial system should be considered for collector arterial classification with no direct lot access and abutting residences oriented away from it. Traffic generators, such as schools or churches, within residential areas should be considered within the local circulation pattern, not only from within the subdivision, but from adjacent neighborhoods as well. There should be a limited number of access points with the arterial streets that border the subdivision.

Local streets should be designed for relatively uniform low volume of traffic upon full development, particularly for local access and minor access streets. The system should be designed to discourage excessive speeds and should minimize the necessity for traffic control devices. Internal streets with direct lot access should be discontinuous so as to discourage through traffic.

a. Local feeder streets serve as primary access to the development from the adjacent street system. They distribute traffic from local or minor streets in residential neighborhoods and channel it to the arterial system. There are usually no bus routes, with the exception of possible school buses. They directly serve any major traffic generators within the neighborhood, such as an elementary school or a church. They usually serve one moderate size neighborhood or a combination of a few small developments, rather than interconnecting two or more larger neighborhoods. They serve little, if any, through traffic generated outside the neighborhood. Typical ADT may range from about 400 to 1,500. Abutting residences are oriented away from the feeder.

b. Minor access provides direct access from abutting land to the local access streets. There are usually no bus routes on local access streets. They are typically internal subdivision streets providing circulation within the subdivision or between subdivisions. Service to through-traffic is deliberately discouraged. Minor access streets can never be a higher classification. Typical ADT may range from about 300 to 1,000.

**Table I**

**MINIMUM PUBLIC STREET DESIGN STANDARDS**

<b>Design Standard</b>	<b>Principal Arterial</b>	<b>Minor Arterial</b>	<b>Collector Arterial</b>	<b>Local Road Feeder</b>	<b>Local Road Minor</b>
Minimum Right-of-Way	85' to 89'	63' to 67'	55' to 67'	57'	57'
Parking Lane	None	Requires City Engineer Approval	Requires City Engineer Approval	Both sides 8' wide	<sup>3</sup> Both sides 8' wide
Minimum Maximum Grade	0.7% / 8%	0.7%/ 8%	0.7%/ 15%	0.7%/ 15%	0.7% / 15%
Curb and Gutter	Cement Concrete Curb and Gutter Both Sides	Cement Concrete Curb and Gutter Both Sides	Cement Concrete Curb and Gutter Both Sides	Cement Concrete Curb and Gutter Both Sides	Cement Concrete Curb and Gutter Both Sides
Sidewalks	Both Sides: 6' wide (commercial areas may require up to 10' widths at discretion of the public works department)	Both Sides: 6' wide (commercial areas may require up to 10' widths at discretion of the public works department)	Both Sides: 6'	Both Sides: 5'	Both Sides: 5'
Planter Strip	Both Sides 3.5' to 5' wide	Both Sides 3.5' to 5' wide	Both Sides 5' wide	Both Sides 5' wide	Both Sides 5' wide
Bike Lanes	Both Sides	Both Sides	Both Sides	Optional	Optional
Cul-De-Sac (a) Radius (pavement width) (b) maximum length	N/A	N/A	N/A	N/A	45' Paved Radius (residential) 600'
Intersection Curb Radius	25'-35'	25'-35'	25'-35'	30'	<sup>2</sup> 20'
Minimum Centerline Radius for Normal Crown	w/superelevation <sup>±1</sup> per AASHTO w/o superelevation 600'	w/superelevation <sup>n*</sup> per AASHTO w/o superelevation 600'	150'	150'	As Approved
Raised Landscape Median	8' to 12' wide	8' to 12' wide	<sup>4</sup> Optional 8' to 12' wide	None	None
Travel Lane	11' wide	11' wide	11' wide	10' wide	10' wide

<sup>±1</sup>Maximum superelevation = 6%

<sup>2</sup> Increase to 35' at arterial intersections.

<sup>3</sup> May be reduced to one side of cul-de-sacs if signed and subject to Fire Department approval.

<sup>4</sup> As determined by the City Engineer

**Table II**

**Stopping Sight Distance (SSD)**

<b>Design Speed (mph)</b>	<b>Stopping Sight Distance<sup>1,2,3</sup> (ft)</b>
<b>25</b>	<b>150</b>
<b>30</b>	<b>200</b>
<b>35</b>	<b>250</b>
<b>40</b>	<b>325</b>
<b>45</b>	<b>400</b>
<b>50</b>	<b>475</b>

**Table III**

**Entering Sight Distance (ESD)**

<b>Design Speed (mph)</b>	<b>Entering Sight<sup>4,5</sup> Distance (ft)</b>
<b>25</b>	<b>295</b>
<b>30</b>	<b>355</b>
<b>35</b>	<b>415</b>
<b>40</b>	<b>470</b>
<b>45</b>	<b>530</b>
<b>50</b>	<b>590</b>

<sup>1</sup>Is based on entering vehicle eye height of 3.5 feet, measured 10 feet back from edge of traveled way. Approaching vehicle height is 4.25 feet.

<sup>2</sup>Is based on an eye height of 3.5 feet and an object height of 0.5 feet.

<sup>3</sup>The minimum SSD for any down-grade averaging 3 percent or steeper will be increased as shown in Table IV

<sup>4</sup>Applies to intersection and driveway approaches to typical roads under average conditions. In difficult topography the City engineer may authorize a reduction in the ESD based on factors mitigating the hazard. Such factors may include an anticipated posted or average running speed less than the design speed or the provision of acceleration lanes and/or a median space allowing an intermediate stop by an approaching vehicle making a left turn.

<sup>5</sup>Applies to intersections and driveways.

**Table IV**

**Stopping Sight Distance Correction Factor**

<b>Design Speed (mph)</b>	<b>SSD in Feet for Downgrade Slope 3 %</b>	<b>SSD in Feet for Downgrade Slope 6 %</b>	<b>SSD in Feet for Downgrade Slope 9 %</b>
<b>50</b>	<b>50</b>	<b>110</b>	
<b>40</b>	<b>30</b>	<b>70</b>	
<b>30</b>	<b>20</b>	<b>40</b>	<b>70</b>
<b>20</b>	<b>10</b>	<b>20</b>	<b>30</b>

**Table XXX Intersection Spacing**

Distance between major arterial	One mile +/-
Distance from major arterial to secondary arterials	One-half mile +/-
Distance from major and secondary arterials to collector arterials	One-quarter mile +/-
Spacing of intersections on arterial shall be	300 feet or more
Spacing of intersections on local access roads shall be	150 feet or more

The intent of spacing is to minimize the number of intersections on arterials and local road feeders.

**PWS.15.060 Naming.**

Streets and roads shall be named according to specific criteria established by the City.

An address number will be assigned to all new buildings at the time the building permit is issued. It is then the owner's responsibility to see that the house numbers are placed clearly and visibly at the main entrance to the property or at the principal place of ingress.

The developer must check with the building official regarding the naming of streets. This should be done at the time the preliminary plat is submitted and again upon approval of the final plat. The building official will insure that the name assigned to a new street is consistent with policies of the City.

**PWS.15.070 Signing.**

The developer is responsible for providing all traffic control signs. Traffic control signing shall comply with the provisions as established by the U.S. Department of Transportation Manual on Uniform Traffic Control Devices (MUTCD).

Street designation signs, including poles and hardware, will be paid for by the developer but will be designed, furnished and installed by the City to establish uniformity unless otherwise indicated by the City. A written request must be submitted to the City public works department when signing is needed and the developer will be billed upon completion. Street designation signs shall display street name or number.

**PWS.15.080 Right-of-way.**

Right-of-way is determined by the functional classification of a street. See Minimum Public Street Design Standards Table for specific additional information. Additional roadside easements may be required to facilitate roadway maintenance.

Right-of-way requirements may be increased if additional lanes, pockets, transit lanes, bus loading zones, operational speed, bike lanes, utilities, schools or other factors are proposed and/or required by the City.

Right-of-way shall be conveyed to the City on a recorded plat or by a right-of-way dedication deed. All costs of same are to be borne by the property owner/developer.

**PWS.15.090 Private streets and alleys.**

A. Private streets may be allowed under the following conditions:

1. Permanently established by commonly-owned tract (or easement if situation requires) providing access to serve no more than four dwelling units or businesses on separate parcels, or unlimited dwelling units or businesses situated on one parcel when approved as a planned development district (PDD) and sufficient to accommodate required improvements, to include provisions for future use by adjacent property owners when applicable.

2. Have a minimum 20-foot paved surface, and have a sidewalk five feet in width on one side of such design that prevents parking on the sidewalk (sidewalk not required for two or less dwelling units).

3. Private street serving single-family, multi-family, mobile home, or commercial uses shall be accessible at all times for emergency and public service vehicle use.

4. Will not result in landlocking of present or future parcels, conflict with any transportation or street improvement plan, nor obstruct public street circulation.

5. Covenants have been approved by the City and recorded which provide for maintenance of the private streets and associated parking areas by the owner, private road maintenance agreement, or homeowners' association or other legal entity.

6. If parking on a private street is requested, an additional eight feet of pavement shall be provided on each side of the street where parking is to be allowed.

7. Construction and inspection standards for public road apply for private roads unless otherwise noted within these guidelines.

B. Alleys are considered private roads and are governed by the following criteria:

1. Allowed for primary access only when lots served have full frontage on a public street.

2. Serves a maximum of 30 lots, with a maximum length of 400 feet, no cul-de-sacs and no dead ends if serving more than four lots.

3. When an alleyway is to be provided with utilities, the alley shall be located within a utility easement.

4. Minimum alley tract (easement if circumstances require) width of 20 feet with a pavement surface of 16 feet (including thickened edge), based on a five-foot structure setback from property line or edge of tract (easement). For differing structure setback requirements, alley configuration shall be designated to provide for safe turning access to properties.

5. Alleyways shall be provided with a paved surface, a thickened edge on one side and cross slope in one direction.

6. Alleys will be allowed only when lots have frontage on a public street.

7. Alley entry shall be provided by a driveway cut.

8. Construction and inspection standards for public roads apply for alleys unless otherwise noted within these guidelines.

C. Acceptance as Public Streets. Acceptance of private streets as public streets will be considered only if the street(s) meet all applicable public street standards, including right-of-way widths.

## MINIMUM PRIVATE STREET AND ALLEY DESIGN STANDARDS

Design Standard	Private Street	Alley (Residential Only)
Minimum Right-of-Way (Tract)	26' (with an additional 6' utility esmt. Outside tract)	20'
Service Area	4 Dwelling Units Maximum	30 Lots Maximum
Minimum Pavement Width	20'	16'
Parking Lane	None <sup>1</sup>	None
Minimum and Maximum Grade	0.5% – 15.0%	0.5% – 15.0%
Curb Type	None	Wedge Curb or None if in 2% V-section
Sidewalk	5' One Side (within tract) <sup>2</sup>	None
Cul-De-Sac Radius (pavement width)	45	None
Intersection Curb Radius	10	10
Design Speed (MPH)	15	10

<sup>1</sup> Pavement width and tract width shall increase eight feet for each parking lane desired.

<sup>2</sup> Not required for two or less dwelling units.

### **PWS.15.100 Developments on substandard streets.**

All new developments which obtain access from substandard public or private streets shall be required to construct all necessary street improvements to bring any street up to current City standards prior to final approval. Such improvements shall be made from the point of access to the closest intersection of a public street that meets current standards. Street improvements may include but are not limited to curb and gutter, sidewalk, street storm drainage, street lighting, traffic signal modification, relocation or installation, utility relocation, and street widening all per these standards.

### **PWS.15.110 Street frontage improvements.**

A. All developments or major tenant improvements shall install street frontage improvements at the time of construction pursuant to these standards. Such improvements shall include curbs, gutters, bike lanes, planter strips, medians, sidewalks, bus stops, bus shelters, bus pads, bus pullout, street storm drainage, street lighting system, traffic signal modification, relocation or installation, utility relocation, landscaping and irrigation, and street widening all per these standards. Plans shall be prepared and signed by a licensed civil engineer registered in the state of Washington. Right-of-way dedication shall be required in conjunction with required street frontage improvements.

B. All frontage improvements shall be made across the full frontage of property from centerline to right-of-way line.

C. Exceptions.

1. When the director of public works/finance deems that the above such improvements cannot be accomplished at the time of building construction, a recorded agreement on forms provided by

4/19/00 Ordinance 02000-60



the City shall be completed which provide for these improvements to be installed at a later date by the applicant or by the applicant's signing of a waiver of protest to a local improvement district (LID) in favor of and on a form acceptable to the City. Provided further that no street frontage improvements shall be required in conjunction with the building or remodeling of a single family home on single residential lot unless the lot is part of a subdivision of land which required street frontage improvements as a condition of final plat approval.

2. Requirements of this section shall not apply to the construction, remodeling or enlargement of any Group R, Division 3 (single family or duplex) or Group U occupancy (as defined in the Uniform Building Code), to the construction of any accessory residential structure, to any sign, or to the structural addition, alteration or repair to any existing structure within any twelve month period which neither exceeds fifty percent of the value of the existing structure nor increases the total floor space of the structure by more than ten percent. Provided, that no Group R, Division 3 structure or mobile home shall be constructed or placed on a lot unless such lot takes access from a road which satisfies the requirements of this Chapter.

#### **13.15.120 Cul-de-sac.**

Streets designed to have one end permanently closed shall be no longer than 600 feet measured from centerline of street intersection to the center of the bulb section. Proposed exceptions to this rule will be considered by the City Engineer based on pertinent traffic planning factors such as topography, sensitive areas and existing development. At the closed end, there shall be a widened "bulb" having a minimum paved traveled radius as shown in the Minimum Public Street Design Standards Table. Within an easement dedicated to the public, developer shall install five-foot-wide concrete sidewalk(s) from the end of the cul-de-sac to the nearest public road per Option A or Option B in drawings, Figure 1-06. Required easement width shall be determined by the director of public works/finance.

#### **PWS.15.130 Hammerhead turnaround.**

Hammerheads will be allowed on streets which serve four lots or less and must be approved by the City fire marshal. See standard hammerhead detail, drawing 2-32, at the end of this chapter.

#### **PWS.15.140 Dead End Streets.**

Dead-end streets shall be permitted only where there is no feasible connection with an adjacent street, or if topographic or existing forested areas prevent such connections. Half-streets, which do not provide for future full right-of-way width, shall not be allowed.

Where a street is temporarily dead ended, turn-around provisions must be provided where the road serves more than one lot. The turnaround may be a hammerhead with a minimum distance on both sides at the centerline intersection of 60 feet to facilitate emergency vehicle turnaround.

#### **PWS.15.150 Medians.**

Raised, landscaped medians shall be provided along all principal and minor arterial roadways, and are optional for collector arterial roadways. Medians will include pedestrian landing/refuge areas to make it safer for pedestrians to cross wide streets, where appropriate. Medians shall be designed so as not to limit turning radius or sight distance at intersections. A detailed landscaping and irrigation plan prepared by a professional landscaped architect registered in the state of Washington shall be submitted to the public works department for review and approval. The developer is required to pay all water system connection fees and charges associated with installation of an irrigation system.

#### **PWS.15.160 Intersections.**

A. Traffic control will be as specified in the Manual on Uniform Traffic Control Devices (MUTCD) or as modified by the director of public works/finance as a result of appropriate traffic engineering studies.

B. Street intersection shall be laid out so as to intersect as nearly as possible at right angles. Sharp angled intersections shall be avoided. For reasons of traffic safety, a "T" intersection (three- legged) is preferable to

the crossroad (four- legged) intersection for local access streets. For safe design, the following types of intersection features should be avoided:

1. Intersections with more than four intersecting streets;
2. “Y” type intersections where streets meet at acute angles;
3. Intersections adjacent to bridges and other sight obstructions.

C. Spacing between adjacent intersecting streets, whether crossing or “T”, should be as follows:

<b>When highest classification involved is:</b>	<b>Minimum centerline offset should be:</b>
Principal Arterial	350 feet
Minor Arterial	300 feet
Collector Arterial	200 feet
Local Road Feeder	150 feet
Local Road Minor	150 feet

When different class streets intersect, the higher standard shall apply on curb radii. Deviations to this may be allowed at the direction of the director of public works/finance.

D. On sloping approaches at an intersection, landings shall be provided with grade not to exceed one foot difference in elevation for a distance of 30 feet approaching any arterial or 20 feet approaching a collector or local access street, measured from nearest right-of-way line (extended) of intersecting street.

**PWS.15.170 Driveways.**

A. General.

1. Details of driveway sections are located at the end of this chapter.
2. All abandoned driveway areas on the same frontage shall be removed and the curbing and sidewalk or shoulder and ditch section shall be properly restored.
3. All driveways shall be constructed of Portland concrete cement and shall be subject to the same testing and inspection requirements as curb, gutter, and sidewalk construction.
4. Joint use driveways serving two adjacent parcels are permitted upon formal written agreement by both property owners and approval of the City. The agreement shall be a recorded easement for both parcels of land specifying joint usage. Joint use driveways shall be a minimum of 15 feet wide and paved along that portion which serves both parcels.
5. Grade breaks, including the tie to the roadway, shall be constructed as smooth vertical curves. The maximum change in driveway grade shall be eight percent within any 10 feet of distance on a crest and 12 percent within any 10 feet of distance in a sag vertical curve.
6. No commercial driveway shall be approved where backing onto the sidewalk or street will occur.
7. All commercial locations must be shown on the site development plans. Residential driveway locations for lots in formal plats are not restricted to any location unless so noted on the plat mylar.
8. New driveway locations created by the development of property shall be unified whenever possible to create the fewest number of accesses onto a City street.
9. Combined driveways for adjoining properties are encouraged. In conjunction with the approval of a development, the City may require the applicant to provide access and circulation easement to an abutting owner, where joint access is reasonable to serve future development.

B. Arterial Streets.

1. No driveway may access an arterial within 75 feet (measured along the arterial) of any other such arterial street access on either side of the street; provided, that such access may be located directly opposite another access.
2. No driveway access shall be allowed to an arterial street within 150 feet of the nearest right-of-way line of an intersecting street.

3. Within the limitations set forth above, access to arterial streets within the City shall be limited to one driveway for each tract of property separately owned. Properties contiguous to each other and owned by the same person are considered to be one tract.

4. Driveways giving direct access onto arterials may be denied if alternate access is available. Variations from this standard may be permitted if sufficient engineering justification is provided to the director of public works/finance as set forth in Chapter PWS.10 of these Standards.

5. Wherever a potential access exists to any property from both a public road and a private easement, the City may refuse access to the public road.

6. The public works department and Metro Transit will determine the minimum separation that will be allowed between an existing bus stop and a proposed driveway.

**C. Residential Driveways.**

1. Residential driveways shall be constructed the maximum practical distance, but in no event less than 35 feet or the posted speed limit in feet, whichever is greater, from a side street or intersection. The distance is measured from the road right-of-way line to the nearest edge of the driveway.

2. Wherever a potential access exists to any property from both a public road and a private easement, the City may refuse access to the public road.

**D. Width.**

1. The maximum driveway width for two-way access drives onto an arterial or collector shall be 24 feet for residential, 30 feet for commercial uses, and 35 feet for industrial uses. Maximum driveway widths for one way access drives onto an arterial or collector shall be 20 feet for residential, 20 feet for commercial, and 25 feet for industrial uses. A road approach or wider driveway width may be approved by the director of public works/finance where a substantial percentage of over-sized vehicle traffic exists, where divisional islands are desired, or where multiple exit or entrance lanes are needed.

2. The maximum two-way driveway width onto a local access street shall be 24 feet for residential uses and 26 feet for commercial uses.

3. The maximum one way driveway width shall be 15 feet for residential and 22 feet for commercial driveways . Parking lot circulation and signing needs shall be met on site. The public right-of-way shall not be utilized as part of a one way parking lot flow.

4. Road approaches and/or ingress and egress tapers may be required in industrial and commercially zoned areas as directed by the director of public works/finance. Tapers shall be designed per Institute of Transportation Engineers publication "Transportation and Land Development" by V.G. Stover and F. Koepke.

5. Commercial drive aisles from the driveway section through the associated parking lot(s) shall be a minimum of 24 feet and shall meet all the requirements of the planning department and the fire marshal.

**PWS.15.180 Sight obstruction.**

The following sight clearance requirements take into account the proportional relationship between speed and stopping distance.

The sight distance area is a clear-view triangle formed on all intersections by extending two lines of specified length (A) and (B) as shown below from the center of the intersecting streets along the centerlines of both streets and connecting those endpoints to form the hypotenuse of the tri-angle. See sight obstruction detail, drawing 2-30, at the end of this chapter.

Sight Distance Triangle:

**A. Stop or Yield Controlled Intersection.**

**Sight Distance (Ft.)**

Speed Limit	(A)	(B)
	Arterial Street	Local Street
20 mph	295	*
25 mph	355	*
30 mph	415	*
35 mph	470	*
40 mph	530	*

50 mph	590	*
--------	-----	---

\*Sight distance measured from a point on the minor road 10 feet from the edge (extended) of the major road pavement and measured from a height of eye at 3.50 feet on the minor road to height of object at 4.25 feet on the major road.

B. Uncontrolled Intersection.

**Sight Distance (Ft.)**

	(A)	(B)
Speed Limit	Arterial Street	Local Street
20 mph	90	90
25 mph	110	110
30 mph	PWS0	PWS0
35 mph	155	155
40 mph	180	180

C. The vertical clearance area within the sight distance triangle shall be free from obstructions to a motor vehicle operator's view between a height of three feet and 10 feet above the existing surface of the street.

D. Exclusions. Sight obstructions that may be excluded from these requirements include: fences in conformance with this chapter, utility poles, regulatory signs, trees trimmed from the base to a height of 10 feet above the street, places where the contour of the ground is such that there can be no cross visibility at the intersection, saplings or plant species of open growth habits and not in the form of a hedge which are so planted and trimmed as to leave at all seasons a clear and unobstructed cross view, buildings constructed in conformance with the provisions of appropriate zoning regulations and pre-existing buildings.

**PWS.15.190 Surfacing requirements.**

All streets in the City of Sammamish will be paved with either asphalt concrete or Portland cement concrete, in strict compliance with these standards.

The pavement design shall meet the requirements in the latest publication of the AASHTO Guide for Design of Pavement Structures. The pavement section shall be designed and stamped by an engineer currently licensed in the state of Washington.

One soil sample per each 500 l.f. of centerline with three (3) minimum per project representative of the roadway subgrade shall be taken by a qualified soils technician hired by the developer and delivered to a soil lab in order to determine a statistical representation of the existing soil conditions.

Soil tests shall be performed by an engineering firm specializing in soils analysis and currently licensed in the state of Washington.

The soils report, signed and stamped by a soils engineer licensed by the state of Washington, shall be based on actual soils tests and submitted with the plans. All depths indicated are a minimum compacted depth.

Construction of streets paved with asphalt concrete shall conform to Section 5-04 of the Standard Specifications. Pavement material will be Class "B" asphalt concrete and be constructed at least two inches thick (minimum compacted thick-ness) over the prepared crushed surface, top course, or asphalt treated base. Mechanical spreading and finishing will be as described in Section 5-04.3(9) of the Standard Specifications. Compaction will be performed by the equipment and methods presented in Section 5-04.3(10) of the Standard Specifications, and surface smoothness shall satisfy the requirement of Section 5-04.3(PWS) of the Standard Specifications.

Portland cement concrete streets will be constructed as specified in Section 5-05 of the Standard Specifications.

Permanent pavement patching will be performed as described in the pavement repair detail listed herein (Figure 2-8), and in compliance with Section 5-04 of the Standard Specifications. All fill material will be placed

in lifts no thicker than six inches and mechanically compacted to 95 percent of standard density, as described in Section 2-03 of the Standard Specifications and to the satisfaction of the City inspector.

**PWS.15.200 Temporary street patching.**

Temporary restoration of trenches shall be accomplished by using two-inch Class B Asphalt Concrete Pavement when available or two-inch medium-curing (MC-250) Liquid Asphalt (cold mix), two-inch Asphalt Treated Base (ATB), or steel plates. ATB used for temporary restoration may be dumped directly into the trench, bladed and rolled. After rolling, the trench must be filled flush with asphalt concrete pavement to provide a smooth riding surface.

All temporary patches shall be maintained by the contractor until such time as the permanent pavement patch is in place.

If the contractor is unable to maintain a patch for whatever reason, the City will patch it and will charge the contractor the actual cost plus overhead and materials.

**PWS.15.210 Trench backfill and restoration.**

Trench restoration shall be either by a patch or patch plus overlay as required by the City.

- A. All trench and pavement cuts shall be made by spade bladed jackhammer or sawcuts. The cuts shall be a minimum of one foot outside the trench width.
- B. All trenching shall be backfilled with crushed surfacing materials conforming to Section 2-04 of the WSDOT/APWA Standard Specifications. The trench shall be compacted to 95 percent maximum density, as described in Section 2-03 of the WSDOT/APWA Standard Specifications.
- C. If the existing material is determined by the City to be suitable for backfill, the contractor may use the native material except that the top eight inches of trench shall be two-and-one-half inch minus ballast. All trench backfill materials shall be compacted to 95 percent density.
- D. Backfill compaction shall be performed in six inch lifts.
- E. Replacement of the asphalt concrete or Portland cement concrete shall be of existing depth plus one inch, or three inches, whichever is greater. Replacement of Portland cement concrete shall match existing thickness of adjacent concrete or six inches, whichever is greater.
- F. Tack shall be applied to the existing pavement and edge of cut and shall be emulsified asphalt grade CSS-1 as specified in Section 9- 02.1(6) of the WSDOT/APWA Standard Specifications. Tack coat shall be applied as specified in Section 5-04 of the WSDOT/APWA Standard Specifications.
- G. Asphalt concrete Class B shall be placed on the prepared surface by an approved paving machine and shall be in accordance with the applicable requirements of Section 5-04 of the WSDOT/APWA Standard Specifications, except that longitudinal joints between successive layers of asphalt concrete shall be displaced laterally a minimum of 12 inches unless otherwise approved by the director of public works/finance. Fine and coarse aggregate shall be in accordance with Section 9- 03.8 of the WSDOT/APWA Standard Specifications. Asphalt concrete over two inches thick shall be placed in equal lifts not to exceed two inches each.
- H. All street surfaces, walks or driveways within the street trenching areas affected by the trenching shall be feathered and shimmed to an extent that provides a smooth-riding connection and expeditious drainage flow for the newly paved surface. Shimming and feathering as required by the director of public works/finance shall be accomplished by raking out the oversized aggregates from the Class B mix as appropriate.
- I. Surface smoothness shall be per Section 5- 04.3(PWS) of the WSDOT/APWA Standard Specifications. The paving shall be corrected by removal and repaving of the trench only.

- J. All joints shall be sealed using paving asphalt AR4000W.
- K. When trenching within the roadway shoulder(s), the shoulder shall be restored to its original or better condition.
- L. The final patch shall be completed as soon as possible and shall be completed within 30 days after first opening the trench. This time frame may be adjusted if delays are due to inclement paving weather, or other adverse conditions that may exist. Delaying of final patch of overlay work is allowable only subject to the director of public work's approval. The director of public works/finance may deem it necessary to complete the work within 30 days' time frame and not allow any time extension. If this occurs, the contractor shall perform the necessary work as directed by the director of public works/finance.

**PWS.15.220 Staking.**

All surveying and staking shall be performed by an engineering or surveying firm capable of performing such work. The engineer or surveyor directing such work shall be licensed as a professional engineer or professional land surveyor by the state of Washington.

A pre-construction meeting shall be held with the City prior to commencing staking. All construction staking shall be inspected by the City prior to construction.

The minimum staking of streets shall be as directed by the director of public works/finance or as follows:

- A. Stake centerline every 50 feet in tangent sections and 25 feet in curved sections plus grade breaks, points of vertical curvature (PVCs), points of vertical tangency (PVTs), high points and low points, with cut and/or fill to subgrade.
- B. Stake top of ballast and top of crushed surfacing at centerline and edge of pavement at the above-described intervals.
- C. Stake top back of curb at the above- described intervals with cut or fill to finished grade.

**PWS.15.230 Testing.**

Testing shall be required at the developer's or contractor's expense. The testing shall be ordered by the developer or contractor. Testing shall be performed by an engineering firm currently licensed in the state of Washington. Testing shall be done on all materials and construction as specified in the WSDOT/APWA Standard Specifications and with frequency as specified herein. A list of required tests is provided.

In addition, the City shall be notified before each phase of street construction commences (i.e., staking, grading, subgrade, ballast, base, top course, and surfacing).

## APPENDIX

### TESTING AND SAMPLING FREQUENCY GUIDE

ITEM	TYPE OF TESTS	MINIMUM NO.	FREQUENCY
GRAVEL BORROW	GRADING AND SE	1 EACH	1 – 4,000 TON
SAND DRAINAGE BLANKET	GRADING	1 EACH	1 – 4,000 TON
CSTC	GRADING, SE AND FRACTURE	1 EACH	1 – 2,000 TON
CSBC	GRADING, SE AND FRACTURE	1 EACH	1 – 2,000 TON
BALLAST	GRADING, SE AND DUST RATIO	1 EACH	1 – 2,000 TON
BACKFILL/SAND DRAINS	GRADING	1 EACH	1 – 2,000 TON
<i>GRAVEL BACKFILL FOR:</i>			
FOUNDATIONS	GRADING, SE AND DUST RATIO	1 EACH	1 – 1,000 TON
WALLS	GRADING, SE AND DUST RATIO	1 EACH	1 – 1,000 TON
PIPE BEDDING	GRADING, SE AND DUST RATIO	1 EACH	1 – 1,000 TON
DRAINS	GRADING	1 EACH	1 – 100 TON
<i>PCC STRUCTURES (Sidewalk, curb and gutter, foundations)</i>			
COARSE AGGREGATE	GRADING	1 EACH	1 – 1,000 TON
FINE AGGREGATE	GRADING	1 EACH	1 – 500 TON
CONSISTENCY	SLUMP	1 EACH	1 – 100 CY
AIR CONTENT	AIR	1 EACH	1 – 100 CY
CYLINDERS (28 DAY)	COMPRESSIVE STRENGTH	2 EACH	1 – 100 CY
CEMENT	CHEMICAL AND PHYSICAL CERTIFICATION	1	1 – JOB
<i>ASPHALT CEMENT CONCRETE</i>			
BLEND SAND	SE	1 EACH	1 – 1,000 TON
MINERAL FILLER	S.G. AND PI, CERTIFICATION	1	1 – JOB
COMPLETED MIX	FRACTURE, SE, GRADING, ASPHALT CONTENT, COMPACTION	1 EACH 2 EACH	1 – 1,000 TON 5 – 400 TON
<i>ASPHALT TREATED BASE</i>			
COMPLETED MIX	SE, GRADING, ASPHALT CONTENT	1 EACH	1 – 1,000 TON
	COMPACTION	1 EACH	5 – Control Lot*
ASPHALT MATERIALS	CERTIFICATION	1	1 – JOB
RUBBERIZED ASPHALT	CERTIFICATION	1	1 - JOB
<i>COMPACTION TESTING</i>			
EMBANKMENT	COMPACTION	1 EACH	1 – 500 L.F.
CUT SECTION	COMPACTION	1 EACH	1 – 500 L.F.
CSTC	COMPACTION	1 EACH	1 – 500 L.F.
CSBS	COMPACTION	1 EACH	1 – 500 L.F.
TRENCH BACKFILL	COMPACTION	1 EACH	1 – 500 L.F.

SE = Sand Equivalency

\* A control lot shall be a normal day's production. For minor quantities 200 tons or less per day, a minimum of two gauge readings shall be taken.

## Article III. Sidewalks, Curbs and Gutters

### **PWS.15.240 General.**

All properties within commercial zones of the City, properties abutting arterial or local access streets and properties upon which there are to be public buildings shall, in conjunction with new construction or a major tenant improvement, have curbs, gutters, and sidewalks constructed along abutting streets.

### **PWS.15.250 Design standards.**

Plans for the construction of sidewalks, curbs and gutters are to be submitted as part of the street plans when applicable.

The City has set forth minimum standards as outlined in this section which must be met in the design and construction of sidewalks, curbs and gutters. Because these are minimum standards, they may be modified by the director of public works/finance should the director feel circumstances require increased or decreased widths.

### **PWS.15.260 Sidewalks.**

Sidewalks shall be constructed of commercial concrete, minimum four inches thick except in driveway approaches where the minimum thickness shall be six inches. When the sidewalk, curb and gutter are contiguous, the width of the sidewalk shall be measured from back of curb to back of sidewalk.

- A. Arterial Streets. Sidewalks, curbs and gutters shall be required on both sides of all arterial streets interior to the development. Sidewalks, curbs and gutters shall also be required on the development side of streets abutting the exterior of said development. Arterial streets for purposes of this subsection shall include major arterials, secondary arterials and collector arterials.
- B. Local Access Streets. Sidewalks shall be required on both sides of local access streets which are interior to the development and on the development side of local road feeder and local road minor streets abutting the exterior of said development including cul-de-sacs.
- C. The design and construction of all sidewalks, curbs, and gutters shall meet the following minimum standards:
- D. The width of sidewalks shall be as shown in the minimum street design standards and the street design drawings. The design of all sidewalks shall provide for a gradual rather than an abrupt transition between sidewalks of different widths or alignments.
- E. Form and subgrade inspections by the City are required before sidewalk is poured.
- F. Monolithic pour of curb, gutter and sidewalk will not be allowed.
- G. For driveway requirements, see PWS.15.170.

### **13.15.265 Pedestrian Circulation**

Joint pedestrian and bicycle-only facilities which are separate from but continue the street right-of-way of the public roadway system shall be a minimum of twelve feet wide paved surface (sixteen feet desirable) and shall be built with necessary drainage and illumination. The joint bicycle/pedestrian right-of-way may be asphalt or concrete per Public Works Department approval. Additional right-of-way width may be required to accommodate drainage facilities.

### **PWS.15.270 Curb and gutter.**

Cement concrete curb and gutter shall be used for all street edges unless otherwise approved by the director of public works/finance. All curbs and gutters shall be constructed of commercial concrete as shown on drawing 2-14.

Extruded curb and gutter per WSDOT/APWA Standard Specifications is allowed.

Form and subgrade inspections by the City are required before curb and gutter are poured.

4/19/00 Ordinance 02000-60



**PWS.15.280 Handicap accessibility ramps.**

All sidewalks must be constructed to provide for accessibility ramps in accordance with the Standards of state law.

Accessibility ramps shall be constructed of commercial Portland cement concrete. Form and subgrade inspections by the City are required before accessibility ramps are poured.

**PWS.15.290 Bus pads.**

Bus stop pads shall be installed to Metro Transit specifications as part of frontage improvements where bus stops currently exist or will be created where no pads are currently present.

**PWS.15.300 Staking.**

The criteria set forth in PWS.15.220 for engineering and surveying qualifications and construction meetings shall be adhered to in addition to the following:

The minimum staking of curb, gutter and sidewalk shall be as directed by the director of public works/finance or as follows:

Stake top of back of curb every 50 feet in tan-gent sections and 25 feet in curved sections plus grade breaks, points of vertical curvature (PVCs), points of vertical tangency (PVTs), high point and low points, with cut or fill to finished grade.

**PWS.15.310 Testing.**

Testing shall be required at the developer's or contractor's expense on all materials and construction as specified in the WSDOT/APWA Standard Specifications.

At a minimum, one slump test and two test cylinders shall be taken once per day. All other testing frequencies shall be as specified in the Testing and Sampling Frequency Guide in PWS.15.230.

In addition, the City shall be notified before each phase of sidewalk, curb and gutter construction commences.

**Article IV. Bikeways**

**PWS.15.320 General.**

Bike lane construction is required on all arterial streets adjacent to any development or redevelopment where the estimated cost of improvements on such properties exceeds 25 percent of the value of the existing structures, or as a condition of building permit, or plat or short plat approval.

**Article V. Illumination**

**PWS.15.330 General.**

All developments requiring frontage improvements pursuant to this Code shall provide street lights in accordance with the standards for such improvements of the City and they shall be owned and operated by the City if located within public rights-of-way. Street lighting located on private properties shall be under a maintenance agreement and maintained by the homeowners' association.

**PWS.15.340 Design standards.**

A street lighting plan submitted by the applicant and approved by the public works director shall be required for all street light installations. Type of installation shall be as set forth in these Standards and as directed by the City except where noted herein.

All public street light designs shall be prepared by an engineering firm capable of performing such work. The engineer shall be licensed by the state of Washington. All developments shall submit the lighting plan on a separate sheet. After system is completed and approved, a set of "as built" mylars shall be submitted to the City as a permanent record.

Street lighting shall incorporate a mixture of two pedestrian light poles to one median light pole along sidewalks to achieve lighting requirements and also to provide pedestrian safety and pedestrian scale to the street.

A. Planter Strip Lighting

Light poles located within planter strips shall be 16 feet high, round tapered fiberglass poles, model No. OA-305-16-GR/-3 (anchor base) as manufactured by W.J. Whatley, Inc. or City Engineer approved equal. Mounted on each pole shall be a luminaire, model No. K118-LAR-III-150 MH-120-K18-GR, as manufactured by W.J. Whatley, Inc. or City Engineer approved equal. Each pole shall be outfitted with a decorative base cover, as manufactured by W.J. Whatley, Inc. Pole color to be determined by City Engineer. Poles shall be positioned to provide a minimum 24-inch clearance between the edge of the pole base and the vertical face of the curb.

**B. Median Lighting**

Light poles located within raised medians shall be 35 feet high, round tapered fiberglass poles, model No. A4328-(Y)-18-64/611-N6 (anchor base) as manufactured by W.J. Whatley, Inc. or City Engineer approved equal. Each pole shall be outfitted with a decorative base cover, as manufactured by W.J. Whatley, Inc. Pole color to be determined by City Engineer. Mounted on each pole shall be a decorative double mast arm, model No. KA 72-T1-8-7' (rise) and two luminaires, Model No. K-205-EPP-200-HPS-120-PC-GR, all as manufactured by King Luminaires, or City Engineer approved equal.

Spacing will be determined by the director of public works/finance using the following criteria:

**AVERAGE MAINTAINED HORIZONTAL ILLUMINATION (FOOT CANDLES)**

Road Class	Residential
Local Feeder and Minor	0.4
Collector Arterial	0.6
Secondary Arterial	0.8
Major Arterial	0.8
Uniformity Ratio:	6:1 average: minimum for local 4:1 average: minimum for collector 3:1 average: minimum for secondary and major arterial
Dirt Factor = 0.85, lamp lumen depreciation factor – .073	
Minimum Weak Point Light = 0.2fc except residential local street	
Average Illumination at Intersections = 1.5 times the illumination required on the more highly illuminated street	
400 watt initial lamp lumens	= 50,000
200 watt initial lamp lumens	= 22,000
150 watt initial lamp lumens	= 16,000
100 watt initial lamp lumens	= 9,500

Line loss calculations shall show that no more than five percent voltage drop occurs in any circuit. Lamp load factor shall equal 1.2.

All street light electrical installations including wiring conduit and power connections shall be located underground.

The general notes in PWS.15.345 need to be included on any plans dealing with street design in addition to all applicable requirements as set forth in PWS.10.040.

**PWS.15.345 Street light construction.**

- A. All workmanship, materials and testing shall be in accordance with the most current Washington State Department of Transportation/American Public Works Association Standard Specifications for Road, Bridge, and Municipal Construction, and National Electrical Code as applicable unless otherwise specified below. In cases of conflict the most stringent guideline shall apply. When the most stringent guideline is not clear, the director of public works/finance will make the determination. The electrical contractor shall be familiar with all above stated publications and guidelines as they will be strictly enforced by the City.
- B. All safety standards and requirements shall be complied with as set forth by the State of Washington Department of Labor and Industries.

- C. The contractor shall be responsible for all traffic control in accordance with the Manual on Uniform Traffic Control Devices. Prior to disruption of any traffic, traffic control plans shall be prepared and submitted to the City for approval. (See WSDOT Standard Plans K2 – K21). No work shall commence until all approved traffic control is in place.
- D. A pre-construction meeting shall be held with the City of Sammamish prior to the start of construction.
- E. All approvals and permits required by the City of Sammamish shall be obtained by the contractor prior to the start of construction.
- F. It shall be the responsibility of the contractor to have a copy of an approved set of plans on the construction site at all times.
- G. All surveying and staking shall be done by a surveying or engineering firm licensed in the state of Washington.
- H. Temporary erosion control/water pollution measures shall be required in accordance with Section 1-07.15 of the WSDOT/APWA Standard Specifications and the King County Surface Water Design Manual. At no time will silt and debris be allowed to drain into an existing or newly installed facility.
- I. If construction is to take place in the county right-of-way, the contractor shall notify the county and obtain all the required approvals and permits.
- J. The contractor shall be fully responsible for the location and protection of all existing utilities. The contractor shall verify all utility locations prior to construction by calling the Underground Locate Line at 1-800-422-5555 a minimum of 48 hours prior to any excavation. The contractor will also be responsible for maintaining all locate marks once the utilities have been located.
- K. Electrical permits and inspections are required for all street lighting installations within the City of Sammamish. The contractor is responsible for obtaining permits prior to construction. These permits are available from the electrical inspection permit counter at Puget Sound Energy. Prior to installation of any materials the electrical contractor shall submit for approval by the City two copies of material catalog cuts, specifications, shop drawings and/or wiring diagrams. Any materials purchased or labor performed prior to such approval shall be at the contractor's risk. Mounting heights, arm length, power source, luminaire type and bolt patterns shall follow PWS.15.340. Modifications of any portion of the lighting system will not be allowed without prior approval by the City.
- L. A rated service disconnect shall be provided for every branch circuit. Light branch circuit breakers shall be 40 amp minimum. The location and installation of the disconnect shall conform to the National Electric Code (NEC) and City of Sammamish Standards. The service disconnect shall be of a type equal to a "MYERS" MEUGL-M100C- UM or "UNICORN" CPIIB-0111A Service, 120/ 240 VAC, CALTRANS TYPE 3B or City approved equal, with two lighting relays, one three position test switch (Auto/Off/Manual) and one photocell. The photocell shall face north unless otherwise directed by the City.
- M. Service entrance conductors shall be a minimum size of #2 copper. All lighting wire shall be stranded copper with a minimum size of #8 with insulation suitable for wet locations. Phasing tape will not be allowed. All wire shall be installed in schedule 40 PVC conduit with a minimum diameter of one-and-one-quarter inches. All conduit shall be installed in the "utility ditch" or as other-wise directed by the City. A bushing or bell end shall be used at the end of every conduit. All splices shall be in the nearest junction box. Wire nuts will not be allowed. All splices will be made with Type C copper fittings, centered and encased in a 3-M Scotchcast epoxy kit, rated at 600 Volts, Type 82-A1, 82-B1 or City approved equal. If more than one circuit passes through a junction box each is to have a PCV sleeve clearly identifying the circuit. (WSDOT Standard Specification 8- 20.3). A 500-volt megger test will be performed by the electrical contractor on each circuit between conductor and ground prior to acceptance of the lighting system. The insulation resistance shall not be less than six mega-ohms to

ground 2,500 feet and over nor less than eight mega-ohms under 2,500 feet. A functional test will be performed by the City, in which it is demonstrated that each and every part of the system functions as specified or intended herein. (WSDOT Standard Specifications 8-20.3(11)).

- N. Each luminaire pole shall have an in-line, fused, water tight electrical disconnect located at the base of the pole. Access to these fused disconnects shall be through the hand-hole on the pole. The hand-hole shall be facing away from on- coming traffic from the adjacent street. Load side of in-line fuse to luminaire head shall be cable and pole bracket wire, two conductor, 19-strand cop-per #10 and shall be supported at the end of the luminaire arm by an approved means(Drawing 2- 17.2). Fuse, size, disconnect installation and grounding in pole shall conform to WSDOT Standards.
- O. City approved pull boxes or junctions boxes shall be installed per WSDOT Standard Plan J- 11a in all street lighting installations. Junction boxes shall be incorporated into the back edge of sidewalk or as directed by City. Where no sidewalks exists, junction boxes shall have a concrete pad per City of Sammamish Standards. No conduit run shall be more than 200 feet between Junction Boxes. A junction box shall be located within 10 feet of each luminaire pole and at every road crossing . No conduit shall be installed in the roadway except at designated road crossings. Conduit entering the junction box shall be perpendicular to the sides of the box and a minimum of six but no more than eight inches below the lid. Boxes shall be clearly and indelibly marked as lighting boxes by the legend "L.T." or "LIGHTING". All J-Boxes shall be supported by a minimum six-inch crushed gravel pad. A three-eighths-inch expansion joint shall be installed between concrete sidewalk and junction box.
- P. All lighting poles shall be as specified in PWS.15.340. In existing developed areas, the City may require the use of other poles to establish uniformity within the developed area. After installation and before acceptance by the City all poles shall be free of dents and marks. Sonotube shall be removed to below ground level. Pole bases shall be grouted and all luminaire heads shall be plumb and level.
- Q. Conduit shall extend between three and six inches above the concrete base.
- R. Any modification to approved lighting plans shall be reviewed and approved by the City prior to installation. Any approved modifications shall be shown on a mylar as-built supplied to the City after the lighting installation is completed and before final acceptance. It shall be the responsibility of the electrical contractor to ensure these as-builts are provided to the City.

**PWS.15.350 Staking.**

The criteria set forth in PWS.15.220 for engineering and surveying qualifications and pre-construction meetings shall apply as well as the following:

- A. Location and elevation to the center of every pole base.
- B. Location and elevation of each service disconnect.

**PWS.15.360 Testing.**

All illumination systems shall be subject to an electrical inspection. Lamp, photocell and fixture shall be under warranty for a period of one year.

**Article VI. Signals**

**PWS.15.370 General.**

Signals shall be installed per the requirements. This work shall consist of furnishing and installing a complete and functional traffic control system of controllers, signals, 3M Opticom systems and appurtenances as required by the City.

**PWS.15.380 Design standards.**

Signal system shall be designed in accordance with the specifications as set forth in the WSDOT Design Manual and WSDOT/APWA Standard Specifications unless otherwise authorized by the City.

All public signal designs shall be prepared by an engineering firm capable of performing such work. The engineer shall be licensed by the state of Washington.

**PWS.15.390 Induction loops.**

Induction loops shall be constructed per WSDOT/APWA Standard Specification 8- 20.3(14)C and the following:

A. Loops shall not be cut into final lift of new asphalt.

B. Loops shall be installed in crushed surfacing top course (CSTC) before paving or shall be cut in existing asphalt or leveling course to sub-base before intersection is overlaid.

**PWS.15.400 Staking.**

The criteria set forth in PWS.15.220 for engineering and surveying qualifications and pre-construction meetings shall apply as well as the following:

A. Location, with cut and fill to center of all pole bases shall be marked in the field.

B. Location of junction box shall be marked in the field.

C. Location of all corners of controller base shall be marked in the field.

D. Location of service disconnect shall be marked in the field.

**PWS.15.410 Testing.**

All signals shall be subject to any necessary electrical inspections as well as requirements as set forth in the WSDOT Design manual and the WSDOT/APWA Standard Specifications.

A signal system shall not be approved or accepted by the City until the signal has performed correctly to the City's satisfaction for a 30-day "check-out" period as outlined below.

Controller and cabinet testing may be required by WSDOT District 3 laboratory and/or the City of Sammamish. All specifications and materials samples shall be submitted to the City for review and approval prior to installation.

**PWS.15.420 Check-out procedure.**

The contractor shall call for an intersection checkout after completing the controller cabinet installation along with all other signal equipment complete with wiring connections. All parts and workmanship shall be warranted for one year from date of acceptance.

New signals shall operate without any type of failure for a period of 30 days. The contractor shall have a representative available to respond to system failure within 24 hours during the 30-day "check-out" period.

Failure of any control equipment or hardware within the "check-out" period shall restart the 30- day "check-out" period.

## Article VII. Roadside Features

### **PWS.15.430 General.**

Miscellaneous features included herein shall be developed and constructed to encourage the uniform development and use of roadside features wherever possible. The director of public works/finance shall have the discretion to allow or not allow the installation of new, or the modification of existing miscellaneous features within the right-of-way as requested by the public from time to time.

### **PWS.15.440 Design standards.**

The design and placement of roadside features included herein shall adhere to the specific requirements as listed for each feature, and, when applicable, to the appropriate standards as set forth in PWS.10.010 and PWS.10.040.

### **PWS.15.450 Staking.**

The criteria set forth in PWS.15.220 for engineering and surveying qualifications and pre-construction meetings shall apply.

### **PWS.15.460 Testing.**

Testing shall be required at the developer's or contractor's expense on all materials and construction as specified in the WSDOT/APWA Standard Specifications and with a frequency as specified in the WSDOT Construction Manual.

### **PWS.15.470 Survey monuments.**

A. All existing survey control monuments which will be disturbed or destroyed during construction shall be referenced prior to construction and replaced after construction by a professional land surveyor licensed by the state of Washington. All applicable RCWs and WACs will be complied with, including but not limited to, Chapters 332-120 and 332-PWS0 WAC and Chapter 58.09 RCW. The monuments shall be replaced with the proper type as outlined in subsections (B) or (C) below at the expense of the responsible builder or developer.

B. Street Type: major arterial, secondary arterial, bus routes and truck routes. A pre-cast concrete monument with cast iron monument case and cover installed per City of Sammamish Standards is required.

C. Street Type: collector arterial, local access feeder, and local access minor. A poured-in-place concrete surface monument per City of Sammamish Standards is required.

D. Monument Locations. Appropriate monuments as outlined in subsections (B) or (C) above shall be placed:

1. At all street intersections;
2. At the points of curvature (PCs) and points of tangency (PTs) of all horizontal curves or at the point of intersection (PI) if it lies in the traveled roadway;
3. At all DLC corners, section corners, quarter corners and sixteenth corners that fall within the subdivision. Where these points fall outside of the pavement or sidewalks, a poured-in-place monument per City of Sammamish standards shall be set so that the top of the monument is one foot below the surface of the ground.

E. The monument case shall be installed after the final course of surfacing has been placed.

### **PWS.15.480 Bus stops, shelters, and amenities.**

A. Metro Transit shall determine the required necessity and locations of all new bus stops, pull outs, shelters and other associated amenities required as frontage improvements for new developments for public transportation.

B. The Issaquah and Lake Washington School District will use the following criteria in placement and design of school bus stops:

1. A school bus stop shall be required for each new residential subdivision or apartment complex where school children are to be boarding or deboarding unless it is determined by the school district that a new bus stop is not required because adjacent facilities already exist for the site.

2. Placement shall be determined by the school district and the City.

3. Location of school bus stops shall be designed with safety as a paramount concern. Major arterials with high traffic counts should be avoided where possible and only used when bus pull outs are available and significant protection provided for children.

4. School bus stops shall be designed to compliment the residential environment and provide convenient location and access for neighborhood children including sidewalk access.

5. Every effort shall be made to make school bus stops and sidewalk access to school bus stops a safe and pedestrian-friendly environment.

6. Metro Transit and the school district should make every effort to coordinate the location of bus stops.

C. The physical location of any bus stop shall be primarily determined by the following considerations: maximizing safety, operational efficiency, and minimizing impacts to adjacent property. Bus pullouts may be required on all arterial roads for safe bus loading and to minimize impacts on traffic flow of buses stopping. Additionally, bus pull outs may be required on local access roads if road geo-metrics require, such as determined by the City and the school district.

D. All transit and school bus stops shall be identified in some fashion. This may include pavement marking and bus stop signs. Contact Metro Transit for details on Metro Transit sites.

E. Passenger shelters are required at all bus pullouts, transfer centers, and bus stops as part of frontage improvements for developments. The following requirements apply to bus shelters.

1. Passenger shelters for Metro Transit sites and school district sites shall be designed to standards of Metro Transit, provide protection from the elements, and reasonably vandalism resistant for easy maintenance.

Specifications for bus shelters:

a. Bus shelters shall be models 4x2S-GL246.5 or larger as manufactured by Ace Aluminum Company, phone number (209) 268-5506, or approved equal.

b. Anchors/Footing. Anchors and footing shall be constructed in accordance with Metro Transit specifications.

c. Benches. Benches shall be constructed in accordance with Metro Transit's current standard.

d. Assembly. The whole shelter structure and components shall be easily and rapidly assembled.

e. Installation Equipment. All necessary installation equipment shall be included with the delivery of shelters.

f. No advertising will be allowed on or within any portion of any bus shelter or benches.

2. Metro Transit shelters shall be maintained by Metro Transit. School bus stop shelters shall be maintained by the subdivision's home-owners' association or apartment owner, whichever is appropriate.

F. Designing quality into the walk to and wait at a bus stop facility is an important design consideration. A pedestrian friendly environment shall be designed into all bus stop locations and surrounding service area to make bus stop use easy, friendly, and safe.

The following pedestrian friendly criteria shall be applied by the planning and community development department during the review of bus stop facilities in conjunctions with developments.

1. Provide concrete walkways constructed to sidewalk standards linking various sections of subdivision and developments to peripheral streets with bus stops.

2. In designing walkways provide access through mid-blocks to decrease distances to bus facilities and flexibility to pedestrians.

3. Provide accessibility ramps and other facilities consistent with barrier free design Standards along walkways leading to bus stops.

4. Developments enclosed by walls or fences shall provide openings or gates for walkways to provide direct access between developments and bus facilities.

5. Use street signs to mark pedestrian walkways.

6. Separate roads and parking areas from pedestrian pathways by grade separations, landscaping and other devices. Per these standards, a planting strip with trees shall be provided to buffer sidewalks or walkways from streets and parking areas. When possible a second row of trees should be provided between the sidewalk and adjacent property.

7. Provide pedestrian facilities such as lighting, signs, trash cans as warranted by anticipated use.

8. Street systems should be designed so as to minimize pedestrian travel to bus stops.

**PWS.15.490 Mailboxes.**

A. During construction, existing mailboxes shall be accessible for the delivery of mail or, if necessary, moved to a temporary location. Temporary relocation shall be coordinated with the U.S. Postal Service. The mailboxes shall be reinstalled at the original location or, if construction has made it impossible, to a location as outlined below and approved by the U.S. Postal Service.

B. Location.

1. Bottom or base of box shall be 36 inches to 42 inches above the road surface.

2. Front of mailbox 18 inches behind vertical curb face or outside edge of shoulder.

3. Clustered mailboxes are required for developments. Contact the U.S. Postal Service for details. See drawing 2-18.

C. Mailboxes shall be set on posts strong enough to give firm support but not to exceed four- by-four-inch wood or one-and-one-half-inch diameter pipe, or material and design with comparable breakaway characteristics.

**PWS.15.500 Guard rails.**

For purposes of design and location, all guard rails along roadways shall conform to the criteria of the Washington State Department of Transportation Design Manual as may be amended or revised.

**PWS.15.510 Retaining walls.**

A. Rock walls may be used for erosion protection of cut or fill embankments up to a maximum height of eight feet in stable soil conditions which will result in no significant foundation settlement or outward thrust upon the walls. For heights over six feet or when soil is unstable, structural wall of acceptable design stamped by a licensed structural engineer shall be used. Rock walls over six feet high shall be subject to inspection by a geo-technical engineer as outlined in the following paragraph. Retaining walls over six feet in height shall meet yard setback requirement of the zone.

B. Any rock wall over 30 inches high in a fill section shall require an engineered design by a geo-technical engineer. The geotechnical engineer shall continuously inspect the installation of the wall as it progresses and shall submit to the City inspection reports, including compaction test results and photographs taken during the construction, documenting the techniques used and the degree of conformance to the geotechnical engineer's design.

C. In the absence of such a rock wall design, walls having heights over four feet or walls to be constructed in conditions when soil is unstable require a structural wall having a design approved by the public works department if inside the right-of-way or the building department if outside the right-of-way. The design of structural walls shall be by a professional engineer qualified in retaining wall design. Structural walls require issuance of a building permit prior to construction.

D. Any proposed retaining wall supporting a surcharge less than 15 feet from the base shall be designed by a geotechnical engineer.

E. The rock material shall be as nearly rectangular as possible. No stone shall be used which does not extend through the wall. The rock material shall be hard, sound, durable and free from weathered portions, seams, cracks and other defects. The rock density shall be a minimum of 160 pounds per cubic foot.



- F. The rock wall shall be started by excavating a trench having a depth below subgrade of one half the base course or one foot (whichever is greater).
- G. Rock selection and placement shall be such that there will be minimum voids and, in the exposed face, no open voids over six inches across in any direction. The final course shall have a continuous appearance and shall be placed to minimize erosion of the backfill material. The larger rocks shall be placed at the base of the rockery so that the wall will be stable and have a stable appearance. The rock shall be placed in a manner such that the longitudinal axis of the rock shall be at right angles or perpendicular to the rockery face. The rocks shall have all inclining faces sloping to the back of the rockery. Each course of rocks shall be seated as tightly and evenly as possible on the course beneath. After setting each course of rock, all voids between the rocks shall be chinked on the back with quarry rock to eliminate any void sufficient to pass a two- inch square probe.
- H. The wall backfill shall consist of quarry spalls with a maximum size of six inches and a minimum size of four inches or as specified by a licensed engineer. This material shall be placed to a 12-inch minimum thickness between the entire wall and the cut or fill material. The backfill material shall be placed in lifts to an elevation approximately six inches below the top of each course of rocks as they are placed, until the uppermost course is placed. Any backfill material on the bearing surface of one rock course shall be removed before setting the next course.
- I. Perforated drainage pipe and filter fabric shall be installed as per drawing 2-26. This pipe requirement may be waived by the engineer upon a showing by the developer that no subsurface water problem exists.

**PWS.15.520 Street trees.**

It is the goal of the City to aesthetically enhance public roads by the use of plantings and landscaping where practical. Therefore, the street trees on the following table shall be employed when planting street trees in or along the public right-of-way.

A. Planting Theme.

- 1. Ratio: Three street trees to one accent tree.
- 2. Species: See following table.

B. Planting Size. Trees two-to three-inch caliper, measured six inches above the base. Ground cover (i.e., ivy), four-inch pot spaced 18 to 20 inches on center or one-gallon pots at 20 inches on center. Low growth shrubs (i.e. juniper), one-gallon pots at three feet on center. Shrubs (i.e., rhododendron) 18 to 24 inches in height at five feet on center three-gallon pot at five feet on center.

C. Location. Trees shall be centered in the planter strip or median. Trees shall be spaced 35 feet on center starting 15 feet from the side property line. Tree spacing may be adjusted slightly to allow a 10-foot clear zone on either side of a drive-way.

D. Maintenance. All developments required to plant street trees will also be required to maintain the trees for the life of the project, regardless of ownership.

E. Exceptions to the planting theme may be made by the director of public works/finance and the director of planning and community development. Exceptions include but are not limited to screening industrial areas, planting around historical sites, maintaining natural vegetation that better serves as street landscaping or beautification.

**STREETS AND LANDSCAPING PLANTS**

**TREES:**

Sweet Gum – Liquidamber styraciflua

Red Oak – *Quercus rubra*  
Red Maple – *Acer rubrum*  
Douglas Fir – *Pseudotsuga menziesii*  
Canada Hemlock – *Tsuga canadensis*  
Deodar Cedar – *Cedrus deodara*  
Pennsylvania Marshall Green Ash – *Fraxinus* species

**ACCENT TREES:**

Norway Maple – *Acer platanoides*  
Crabapple – *Malus* species  
Carriere Thorn – *Crataegus iavalleyi*  
Downy Serviceberry – *Amelanebier canadensis*  
Flowering Cherry – *Prunus* species  
Japanese Black Pine  
Austrian Pine  
Flowering Cherry Kwanzan – *Prunus* species  
Thundering Flowering Plum

**SHRUBS:**

Photina – *Photinia fraseri*  
Viburnum – *Viburnum*  
Japanese Privet – *Ligustrum texanum*  
Smooth Sumac – *Rhus glabra*  
Siberian Dogwood – *Cornusalba sibirica*

**GROUNDCOVERS:**

Wintercreeper – *Euonymus fortunei*  
Baltic Ivy – *Hedera helix baltica*  
Saint Johns Wort – *Hypericum calycinum*  
Bearberry Cotoneaster – *Cotoneaster dammeri*  
Japanese Spruge – *Pachysandra terminalis*

**PWS.15.530 Temporary signs and banners.**

No temporary signs or banners shall be permitted in the right-of-way without the express per-mission in writing by the City engineer, and any such object in the right-of-way without written permission is declared illegal. Temporary signs and banners allowed in the right-of-way shall meet the requirements for temporary signs in the zoning code, except setback requirements. Temporary signs in the right-of-way shall be located as close to the outside edge of the right-of-way as possible.

**Article VIII. Emergency Vehicle Access**

**PWS.15.540 Purpose.**

Emergency vehicle access shall be provided from a public or private street to a parcel(s) of land that has a structure(s) on it. This access is exempt from any normal setbacks established for public or private streets. Emergency vehicle access shall be provided and maintained in accordance with the provisions of these standards.

A. Abbreviated Designation. Emergency vehicle access will be cited routinely in the text as the “EV access.”

B. Applicability. EV access shall be required for every building hereafter constructed or installed when any portion of an exterior wall of the first story is located more than 150 feet from the edge of the driving surface of the private or public street providing access to the parcel(s) of land on which that building is located as measured by an approved route around the exterior of the building.

C. Exemptions.

1. When buildings are protected with an approved automatic fire sprinkler system, the provisions of this section may be modified by the City after conferring with the local fire chief.

2. When an EV access cannot be installed in conformance with these standards due to topography, waterways, nonnegotiable grades, or other similar conditions, the City, after conferring with the local fire chief, may allow an exemption to these standards by requiring additional fire protection as specified in Article 9 section 902.2.1 exception #2 and Article 10 section 1001.9 of the most current edition of the Uniform Fire Code as adopted by the City.

3. All common residential accessory buildings similar to Group M-1 occupancies (private garages, carports, sheds, some agricultural buildings, tanks, towers and fences over six feet tall) as defined by the most current edition of the Uniform Building Code as adopted by the City.

4. A one-time expansion, remodel, or alteration of existing uses or structures if the proposed change does not exceed 25 percent of the floor area of the existing use or structure.

D. Environmental Considerations. When an environmental checklist is required, it shall be submitted to the City environmental official for the work shown on the EV access construction plans. Before the project plans are given final approval by the City, a declaration of nonsignificance or a final environmental impact statement must be issued, and all appeal periods must have expired.

#### **PWS.15.550 Administration.**

A. Submittal Procedure. A site plan shall be submitted to the City and fire chief in accordance with the site plan submittal standards of the pro-posed building permit. Site plan details shall include, but not be limited to, location and size of the EV access, location of structures, and parcel or lot configuration.

B. Fees. Fees for EV access review are set by separate resolution adopted by the City council.

C. Variances. The City hearings examiner shall have the authority to grant a variance from the provisions of this chapter, when, in the opinion of the City hearings examiner, the conditions as set forth in subsection (1) below have been found to exist. In such cases a variance may be granted which is in harmony with the general purpose and intent of this chapter so that the spirit of this chapter shall be observed, public safety and welfare secured, and substantial justice done.

Prior to the public hearing on any proposed variance, the hearings examiner shall notify the fire district of the hearing and request comments and concerns that the fire district may have about the variance.

1. Required Showings for a Variance. Before any variance may be granted, it shall be shown:

a. That there are special circumstances applicable to the subject property such as shape, topography, location, or surroundings that do not apply generally to the other property in the same vicinity;

b. That such variance is necessary for the preservation and enjoyment of a substantial property right possessed by other property in the same vicinity but which because of special circumstances is denied to the property in question;

c. That the granting of such variance will not be materially detrimental to the public welfare or injurious to the property or improvements in the vicinity in which the subject property is located;

d. That such variance is based on sound engineering judgment, and that requirements for safety, function, and maintainability are fully met. The City may grant a variance to this chapter only upon submittal of additional information, plans and/or design data by an engineer showing that the requested variance is safe, in the best interest of the public, and will not impose undo maintenance costs on City maintenance forces, if applicable.

2. City Hearings Examiner May Impose Conditions on Variances. When granting a variance, the City hearings examiner shall determine that the circumstances do exist as required by subsection (C)(1) of this section, and attach specific conditions to the variance which will serve to accomplish the standards, criteria, and policies established by this chapter.

D. Appeals. Any person aggrieved by any act or decision of the examiner under this chapter may appeal to the council pursuant to the provisions of the City appeals ordinance, as now enacted or hereafter amended.

E. Inspections. The City reserves the right to enter onto the property during construction and after completion of the EV access to inspect it for compliance with the conditions of the permit.

The City reserves the right to periodically inspect all EV accesses.

F. Enforcement. The applicant must have the EV access constructed in compliance with the conditions of the permit before the project will receive final inspection approval.

Prior to issuance of the occupancy permit on commercial structures, a letter of compliance shall be submitted to the City verifying that the EV access has been completed to the standards in this document.

Failure to construct and/or maintain the EV access as approved, will result in on-site inspections and potential citation under the current edition of the Uniform Fire Code.

**PWS.15.560 EV access requirements.**

A. Length. If an EV access is required, it shall extend from the public or private street to within 150 feet of all portions of an exterior wall of the first story of any structure requiring said EV access as measured by an approved route around the exterior of the building.

B. Width. EV access serving not more than two dwelling units shall not be less than 15 feet. EV access for all other projects shall not be less than 20 feet with no parking allowed, 28 feet with parking on one side and 32 feet with parking on both sides.

C. Vertical Clearance. EV access shall have an unobstructed vertical clearance of not less than 13 feet six inches. The City, after conferring with the local fire chief, may allow a reduction in the vertical clearance; provided such reduction does not impair access by emergency vehicles, and approved signs are installed and maintained indicating the established vertical clearance.

D. Construction Guidelines. EV access shall be designed and maintained to support the imposed loads of fire apparatus and shall be provided with a surface so as to provide all-weather driving capabilities. Individual single-family EV access surface treatment may be gravel. Multifamily and higher uses must be paved.

E. Turning Radii. A minimum outside turning radius of 45 feet shall be provided for all EV access.

F. Turnarounds. A dead end EV access in excess of 150 feet in length shall be provided with a turnaround conforming to the cul-de-sac or hammerhead details, drawings 2-32 and 2-33, provided at the end of this chapter. A turnaround shall be provided within 150 feet of the end of the EV access.

G. Bridges and Structures. All bridges and structures, including drainage structures, on an EV access shall be capable of carrying a minimum design load of HS-20 per AASHTO Standards Specified for Highway Bridges. The design and as-builts for all bridges shall be certified by a licensed structural engineer.

H. Gates (If Applicable). A building permit issued by the City is required when gates are installed over private streets. In order for the City to issue the building permit, the following requirements must be met:

1. Locked gates shall have rapid entry capabilities compatible with the local fire district requirements.
2. Gates which serve 10 or more dwelling units will have an Opticom activation system or an equivalent and compatible system that is approved by the fire chief.
3. All electrically-activated gates will have default capabilities to the unlocked position.
4. The minimum clear width of a gate shall be compatible with the required width of the EV access.
5. Gates that might be obstructed by the accumulation of snow shall not be installed.

The City shall provide notice to the appropriate fire district for a new gate.

I. Number of Access Routes. More than one EV access may be required for commercial developments when it is determined by the City that access by a single street may be impaired by vehicle congestion, condition of terrain, climatic conditions, or other factors that could limit access, unless mitigation acceptable to the City is provided.

J. Grade. The maximum street grade (vertical profile grade) of an EV access shall be 15 percent. All sections of EV access with grades of over 12 percent shall be paved with 0.17 feet, compacted depth, of asphalt concrete.

K. Obstruction. The required width of an EV access shall not be obstructed in any manner, including parked vehicles. Minimum required widths and clearances established under these standards shall be maintained at all times.

L. Signs. When required by the City, approved signs or other approved notices shall be provided and maintained for EV access to identify such streets and prohibit the obstruction thereof, or both. "No parking – Fire Lane" signs shall be installed using fire district's requirements.

M. Approval of EV Access Location. Plans for all EV access shall be approved by the fire chief and the City before a building permit is issued. All construction for the EV access must be completed prior to City approval of the final building inspection.

## **Article IX Roundabouts**

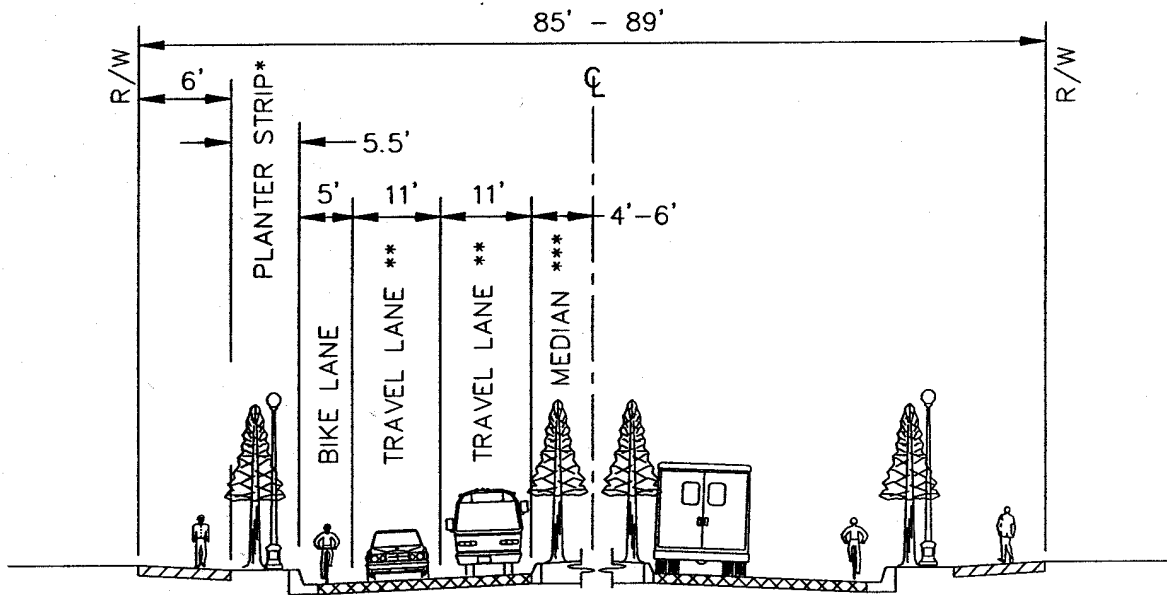
### **PWS.15.570 Design Standards**

Roundabout design shall comply with either the State of Florida Department of Transportation Roundabout Design Guidelines or the State of Maryland Roundabout Design Guidelines as the Director of public works/finance may require in the exercise of reasonable engineering judgement.

## LIST OF FIGURES/DRAWINGS

### CHAPTER PWS.15 – TRANSPORTATION

<b>Roadway Sections</b>	
Principal Arterial – 5 Lane	1-01
Minor Arterial – 3 Lane	1-02
Collector Arterial	1-03
Local Road Feeder (deleted; refer to 1-05)	1-04
Local Road Minor	1-05
Pedestrian/Bike Path Connection	1-06
<b>Cement Concrete Driveway</b>	2-07
<b>Trench-Pavement Restoration</b>	2-08
<b>Sidewalk</b>	2-09
<b>Sidewalk Spacing</b>	2-10
<b>Accessibility Ramp</b>	2-11A–D
<b>Cement Concrete Curb and Gutter</b>	2-14
<b>Mail Box Cluster Style</b>	2-18
<b>Cast In Place Monument</b>	2-20
<b>Monument Case and Cover With Riser</b>	2-21
<b>Monument Case and Cover</b>	2-22
<b>Precast Concrete Monument</b>	2-23
<b>Farside Bus Pullout</b>	2-24
<b>Rock Retaining Wall</b>	2-26
<b>Striping Detail</b>	2-27
<b>Pavement Markings</b>	2-28
<b>Tree Planter and Barrier Detail</b>	2-29
<b>Sight Obstruction</b>	2-30
<b>Residential Driveway</b>	2-31
<b>Hammerhead Turnaround</b>	2-32
<b>Permanent Cul-de-sac</b>	2-33
<b>Butt Joint Detail</b>	2-34



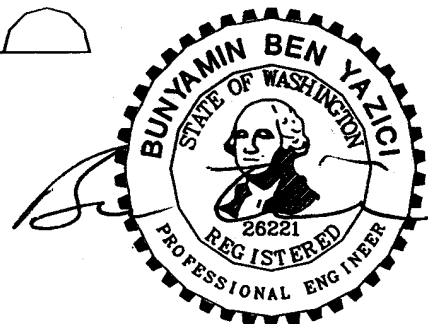
**ROADWAY SECTION  
PRINCIPAL ARTERIAL**

**DETAIL**

N.T.S.

**NOTES:**

- 1. NO ON-STREET PARKING PERMITTED.
- \* MAY BE ELIMINATED OR WIDTH REDUCED WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY, SUBJECT TO CITY ENGINEER'S APPROVAL.
- \*\* MAY BE REDUCED TO 10' WITH CITY ENGINEER'S APPROVAL.
- \*\*\* MAY BE REDUCED TO 3' WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY, SUBJECT TO CITY ENGINEER'S APPROVAL.

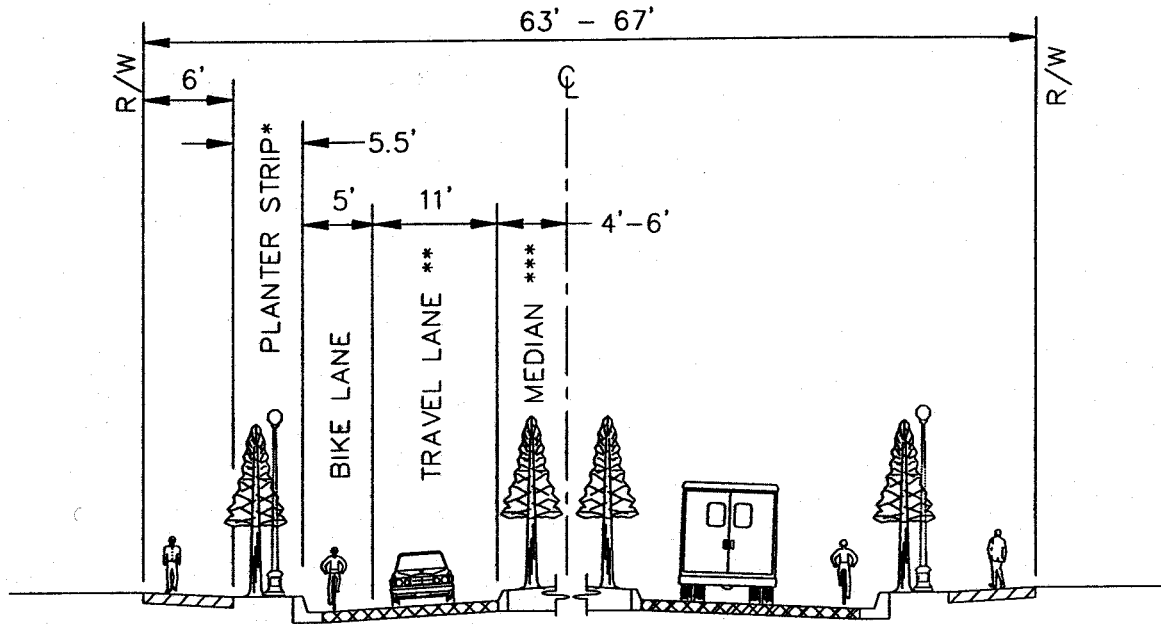


EXPIRES: 4/30/01

CITY OF SAMMAMISH DEPARTMENT OF PUBLIC WORKS			
ROADWAY SECTION PRINCIPAL ARTERIAL			
APPROVED BY CITY ENGINEER	_____	DATE	_____
DWN <b>JM</b>	CKD	DATE MARCH-15-2000	FILE FIG01-01

REV

REV. NO. 2



ROADWAY SECTION  
MINOR ARTERIAL

DETAIL

N.T.S.

NOTES:

1. ON-STREET PARKING PERMITTED AT CITY ENGINEER'S DISCRETION.

\* MAY BE ELIMINATED OR WIDTH REDUCED WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY, SUBJECT TO CITY ENGINEER'S APPROVAL.

\*\* MAY BE REDUCED TO 10' WITH CITY ENGINEER'S APPROVAL.

\*\*\* MAY BE REDUCED TO 3' WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY, SUBJECT TO CITY ENGINEER'S APPROVAL.



EXPIRES: 4/30/01

CITY OF SAMMAMISH  
DEPARTMENT OF PUBLIC WORKS

**ROADWAY SECTION**  
**MINOR ARTERIAL**

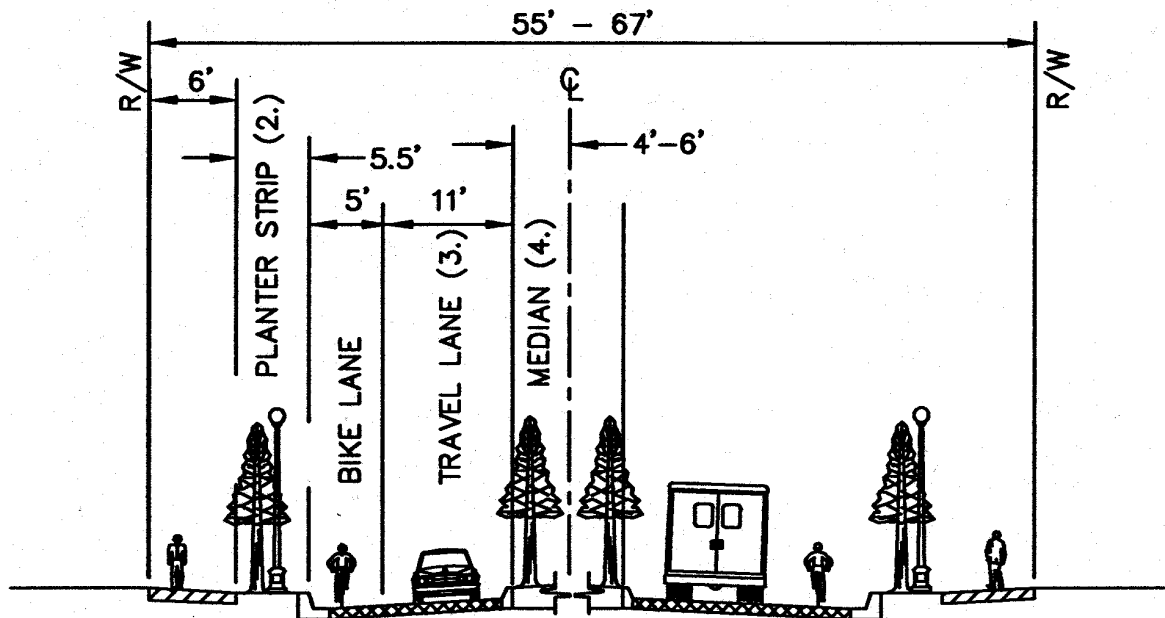
APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_  
CITY ENGINEER

REV

DWN JM	CKD SPS	DATE MARCH-15-2000	FILE FIG01-02
-----------	------------	-----------------------	------------------

REV. NO. 2





**ROADWAY SECTION  
COLLECTOR ARTERIAL**

**DETAIL**

N.T.S.

**NOTES:**

1. ON-STREET PARKING PERMITTED AT CITY ENGINEER'S DISCRETION.
2. MAY BE ELIMINATED OR WIDTH REDUCED WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY, SUBJECT TO CITY ENGINEER'S APPROVAL.
3. MAY BE REDUCED TO 10' WITH CITY ENGINEER'S APPROVAL.
4. TO BE DETERMINED BY THE CITY ENGINEER.
5. PARKING LANES REQUIRE CITY ENGINEER'S APPROVAL.



EXPIRES: 4/30/01

CITY OF SAMMAMISH  
DEPARTMENT OF PUBLIC WORKS

**ROADWAY SECTION  
COLLECTOR ARTERIALS**

APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_  
CITY ENGINEER

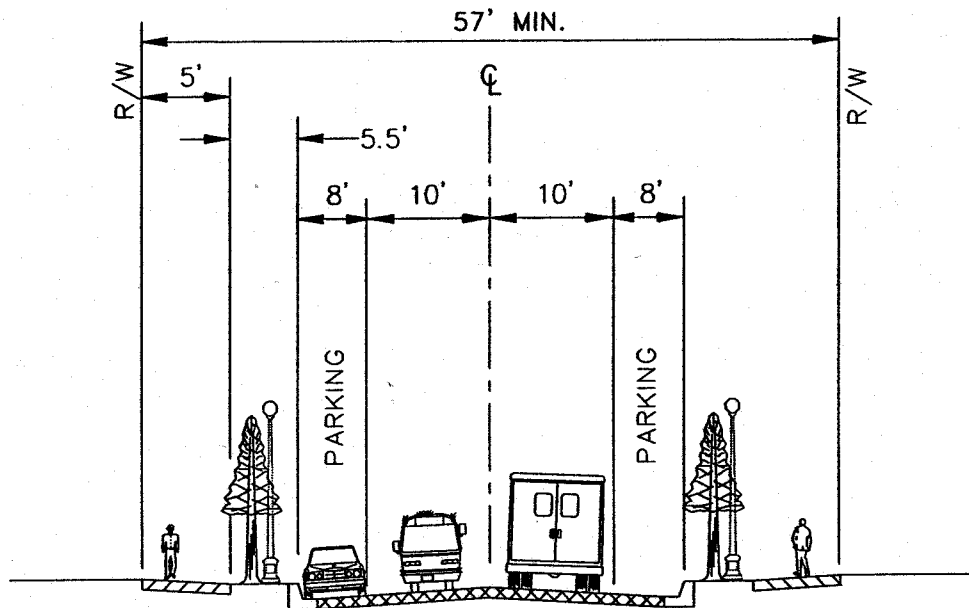
REV

DWN	CKD	DATE	FILE
JM	SPS	MARCH-15-2000	FIG01-03

REV. NO. 2

**File: FIG01-04 DELETED**

**All items referring to Page 4 relate to Page 5**



**ROADWAY SECTION  
LOCAL ROAD  
DETAIL**

N.T.S.



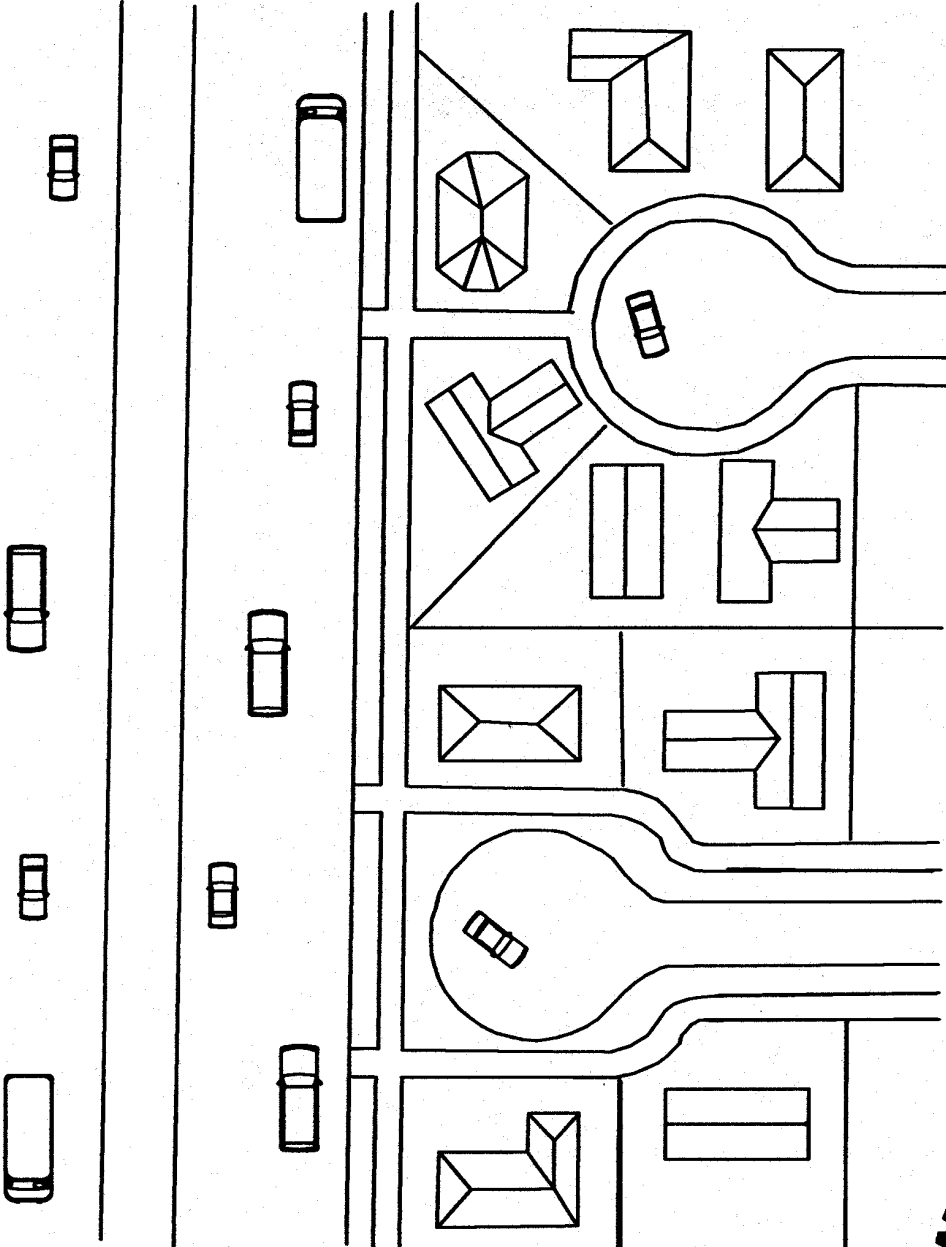
EXPIRES: 4/30/01

**NOTES:**

1. ADD 5' OF PAVEMENT WIDTH EACH SIDE AND 10' OF RIGHT-OF-WAY WIDTH WHEN BIKE LANES ARE REQUIRED.
2. ON-STREET PARKING MAY BE REDUCED WITH CITY ENGINEER'S APPROVAL FOR CUL-DE-SAC STREETS.

CITY OF SAMMAMISH DEPARTMENT OF PUBLIC WORKS			
ROADWAY SECTION LOCAL ROAD			
APPROVED BY CITY ENGINEER		DATE	
DWN JM	CKD SPS	DATE MARCH-15-2000	FILE FIG01-05

REV



OPTION A

OPTION B

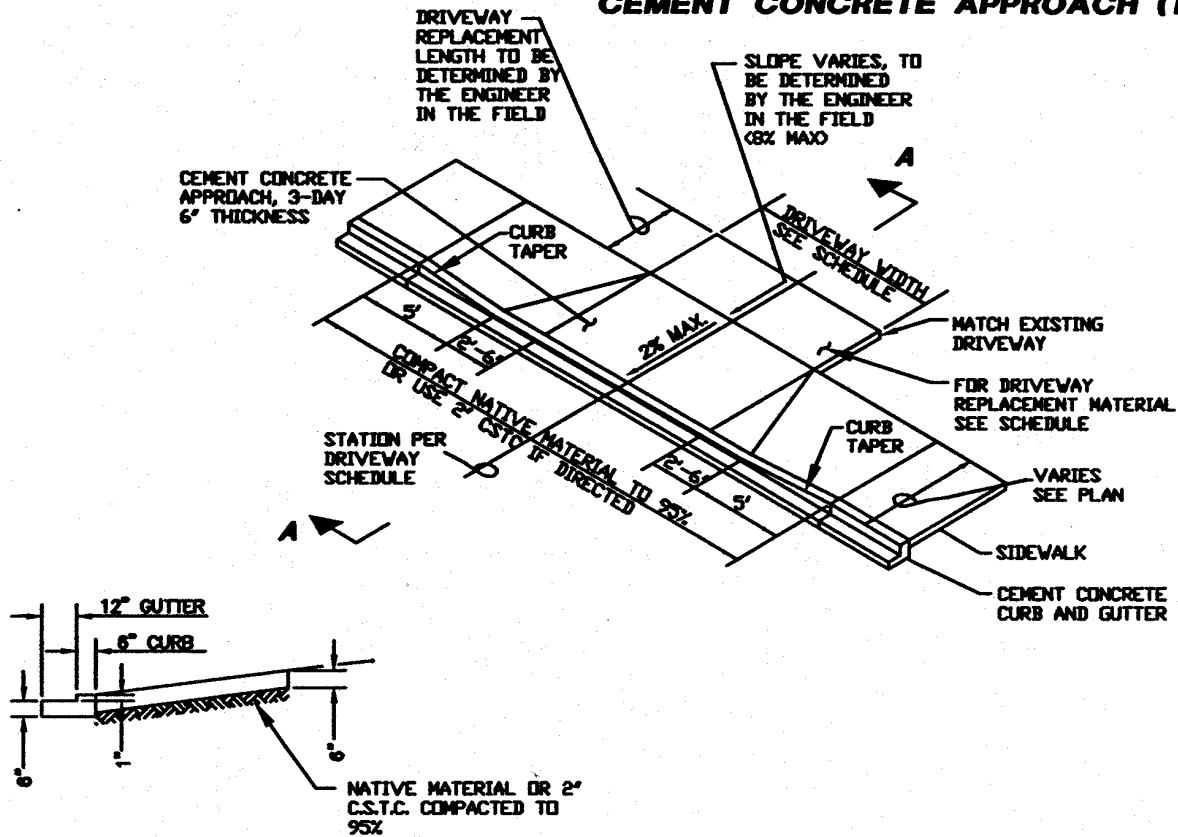


EXPIRES: 4/30/01

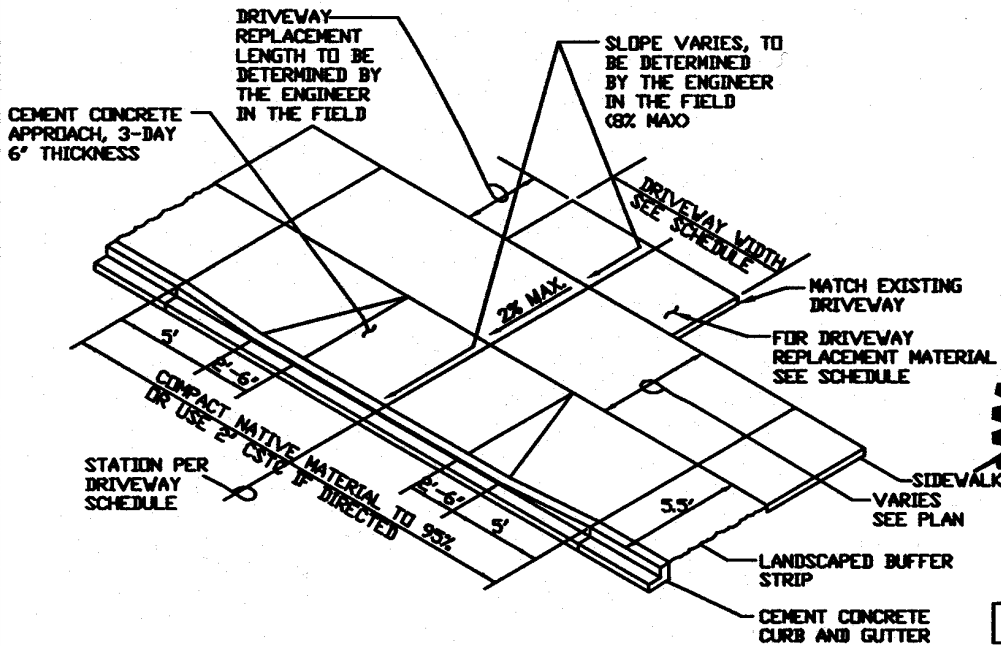
<b>CITY OF SAMMAMISH DEPARTMENT OF PUBLIC WORKS PEDESTRIAN BIKE PATH CONNECTION BETWEEN THROUGH STREET AND CUL-DE-SAC</b>			
APPROVED BY		DATE	
CITY ENGINEER _____		_____	
DWN	CKD	DATE	FILE
UK	SPS	MARCH-15-2000	FIG01-06

REV

### CEMENT CONCRETE APPROACH (TYPE A)



### CEMENT CONCRETE APPROACH (TYPE B)



EXPIRES: 4/30/01

**NOTES:**

1. WHERE APPROACH EXCEEDS 16' IN WIDTH, A 2" DEEP EXPANSION JOINT SHALL BE PLACED TRANSVERSLY, CENTERED IN WALK.
2. 5/8" OR 3/4" C.S.T.C. MAY BE USED UNDER THE DRIVEWAY UPON APPROVAL BY THE ENGINEER.
3. FORM AND SUBGRADE INSPECTION ARE REQUIRED BEFORE POURING CONCRETE.

CITY OF SAMMAMISH  
DEPARTMENT OF PUBLIC WORKS

CEMENT CONCRETE  
DRIVEWAY

APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_  
CITY ENGINEER

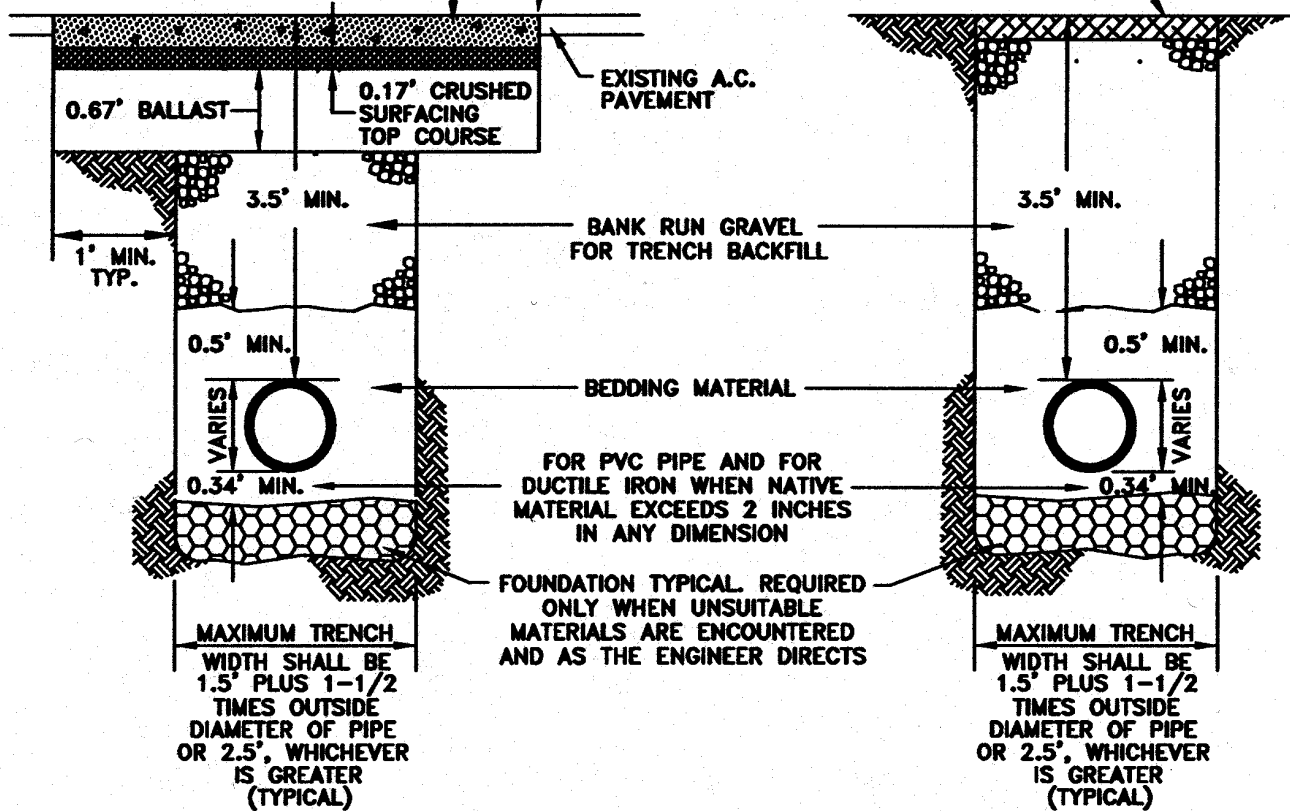
DWN	CKD	DATE MARCH-15-2000	FILE FIG02-07
-----	-----	-----------------------	------------------

REV

MINIMUM 0.25' CLASS 'B' A.C.P. (COMPACTED DEPTH) OR EXISTING PLUS 0.08', WHICHEVER IS GREATER APPLIED IN MAXIMUM 0.17' LIFTS

EMULSIFIED ASPHALT GRADE CSS-1 TACK SHALL BE APPLIED TO EDGES OF EXISTING PAVEMENT. ALL JOINTS SHALL BE SEALED USING PAVING ASPHALT AR4000W.

0.17' OF TOPSOIL OR CSTC AS NOTED ON PLAN



**NOTES:**

1. ALL MATERIALS EXCEPT A.C.P. AND BEDDING MATERIAL SHALL BE COMPACTED IN 6-INCH MAXIMUM LIFTS TO 95% DENSITY.
2. BEDDING SHALL CONFORM TO SECTION 9-03.16 OF STANDARD SPECIFICATIONS.
3. COMPACTION: BEDDING SHALL BE COMPACTED TO 95% MAX. AS DETERMINED BY ASTM D1557. BACKFILL SHALL BE COMPACTED TO 85% IN UNPAVED AREA, AND 95% IN PAVED OR SHOULDER AREAS AS DETERMINED BY ASTM D1557.
4. ALL MATERIALS, WORKMANSHIP, AND INSTALLATION SHALL BE IN CONFORMANCE WITH THE LATEST VERSION OF WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION.
5. KEEP TRENCH BOTTOM COMPACTED WITH UNIFORM GRADE. A BELL JOINT SHALL BE REQUIRED AT EACH JOINT FOR PROPER SUPPORT. NO TEMPORARY SUPPORTS, I.E. BLOCKS, WILL BE ALLOWED TO SUPPORT PIPE. TRENCH BOTTOM SHALL BE TO GRADE PRIOR TO PIPE INSTALLATION.



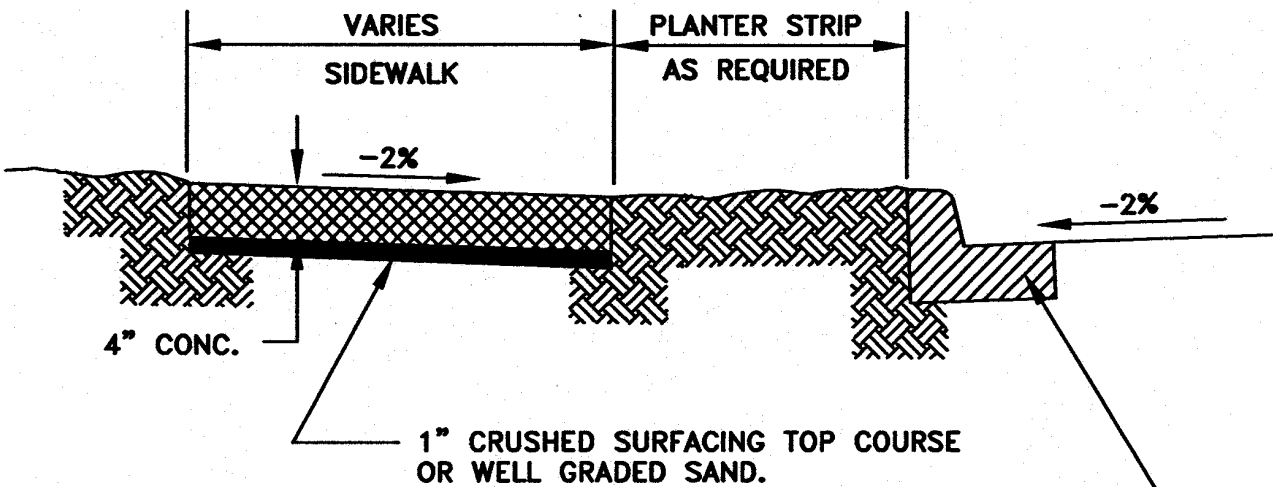
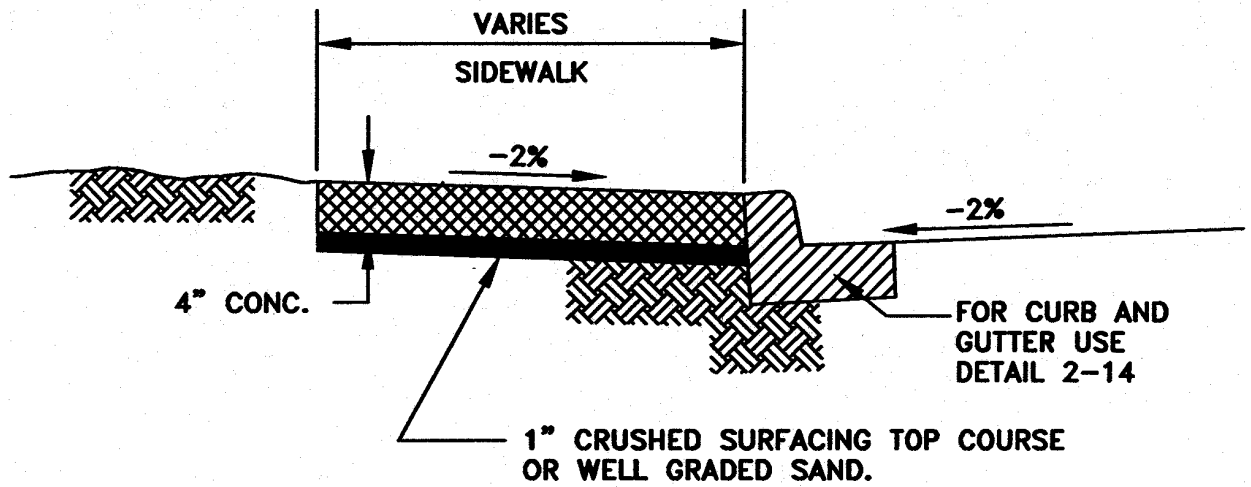
EXPIRES: 4/30/01

CITY OF SAMMAMISH  
DEPARTMENT OF PUBLIC WORKS

**TRENCH-PAVEMENT  
RESTORATION DETAIL**

APPROVED BY		DATE	
CITY ENGINEER			
DWN	CKD	DATE	FILE
JM	X	MARCH-15-2000	FIG02-08

REV



FOR CURB AND  
GUTTER USE  
DETAIL 2-14



EXPIRES: 4/30/01

**GENERAL NOTES:**

1. CONCRETE DRIVEWAYS REQUIRE A MINIMUM DEPTH OF 6".

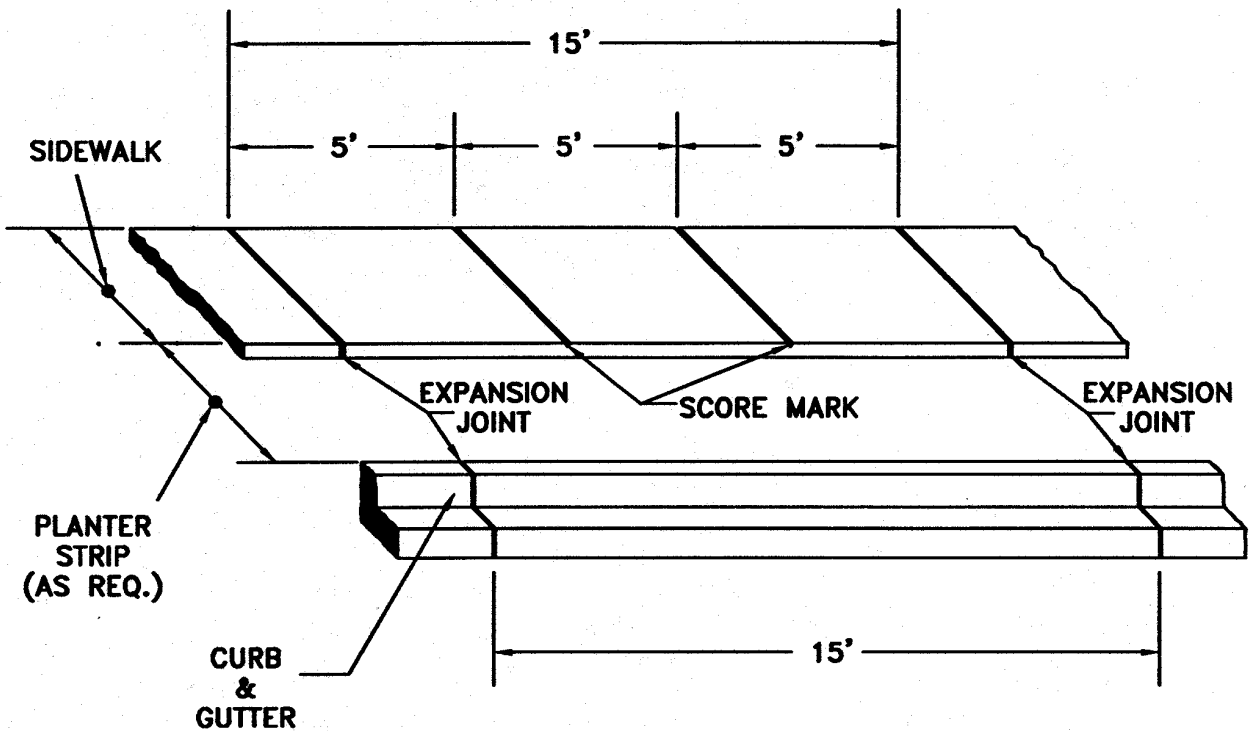
CITY OF SAMMAMISH  
DEPARTMENT OF PUBLIC WORKS

**SIDEWALK**

APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_  
CITY ENGINEER

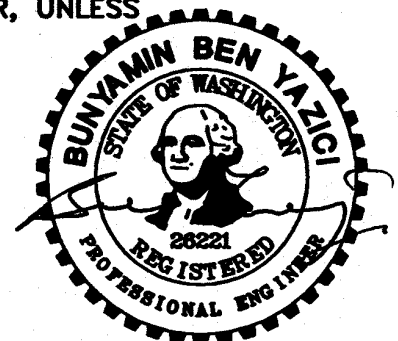
REV

DWN	CKD	DATE MARCH-15-2000	FILE FIG02-09
-----	-----	-----------------------	------------------



**GENERAL NOTES:**

1. EXPANSION JOINT MATERIAL TO BE 3/8" THICK PREMOLDED JOINT FILLER FULL THICKNESS OF CONCRETE.
2. FORM AND SUBGRADE INSPECTION REQUIRED BEFORE POURING CONCRETE.
3. SCORE MARKS SHALL BE ±1/8" WIDE BY ±1/4" DEEP. FOR SIDEWALKS OVER 8' IN WIDTH, A LONGITUDINAL SCORE MARK SHALL BE MADE ALONG CENTER OF WALK.
4. EXPANSION JOINTS SHALL BE INSTALLED IN CURB AND GUTTER AND IN SIDEWALK AT PC AND PT AT ALL CURB RETURNS. EXPANSION JOINTS SHALL BE PLACED IN SIDEWALK AT SAME LOCATIONS AS THOSE IN CURB AND GUTTER WHEN SIDEWALK IS ADJACENT TO CURB AND GUTTER, UNLESS OTHERWISE DIRECTED BY ENGINEER.

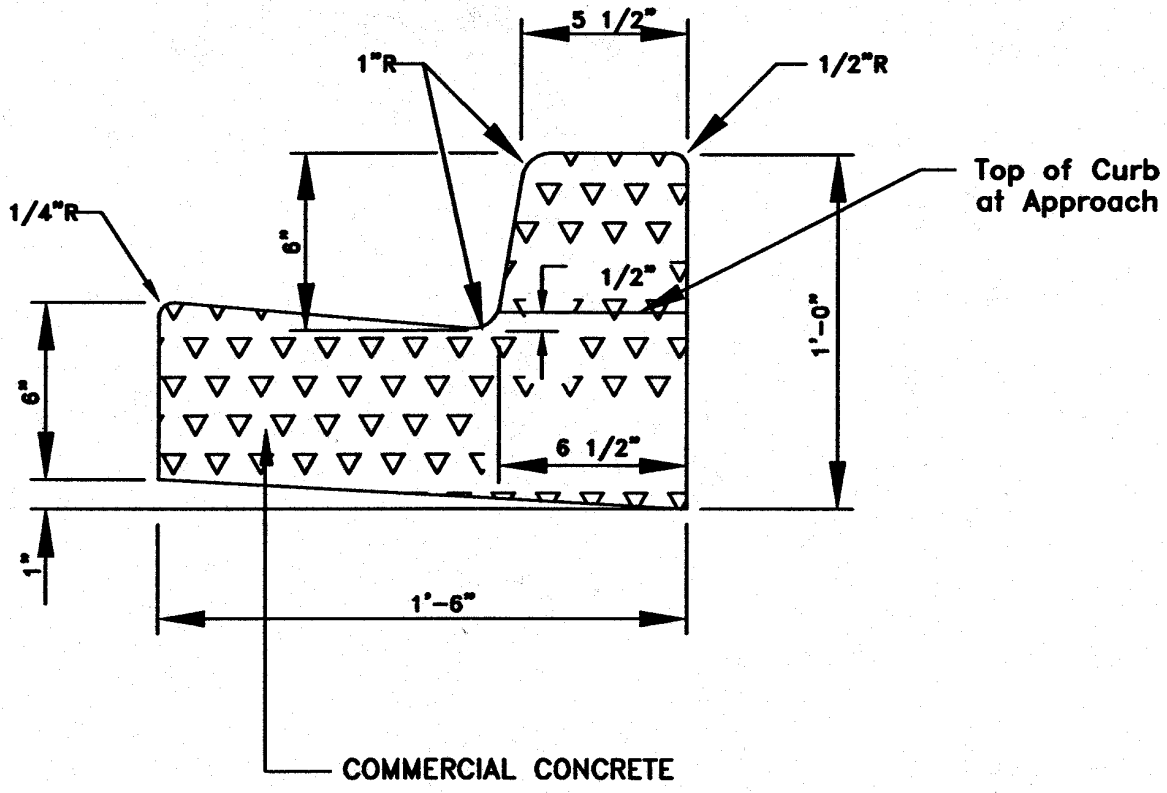


EXPIRES: 4/30/01

<b>CITY OF SAMMAMISH DEPARTMENT OF PUBLIC WORKS</b>			
<b>SIDEWALK SPACING EXPANSION JOINTS &amp; SCORE MARKS</b>			
APPROVED BY		DATE	
CITY ENGINEER			
DWN	CKD	DATE MARCH-15-2000	FILE FIG02-10

REV





**GENERAL NOTES:**

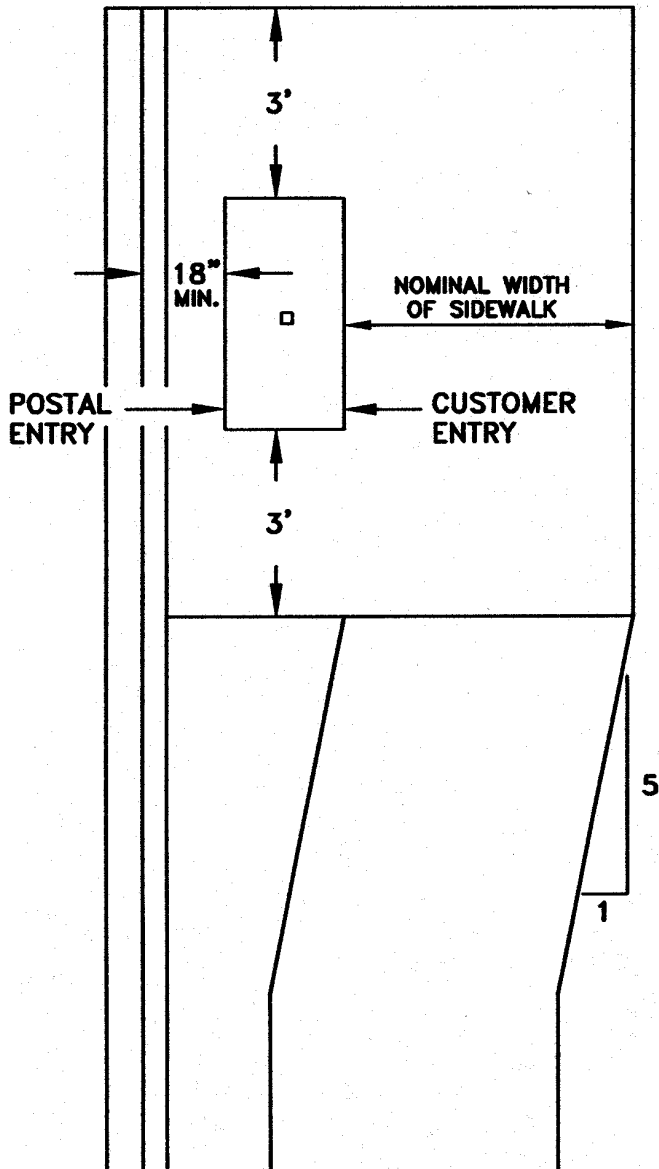
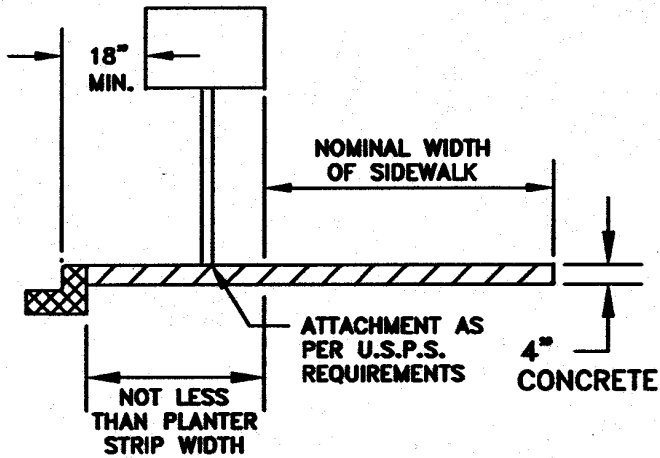
1. EXPANSION JOINT MATERIAL TO BE 3/8" THICK PREMOLDED JOINT FILLER FULL THICKNESS OF CONCRETE SPACING.
2. FORM AND SUBGRADE INSPECTION REQUIRED BEFORE POURING CONCRETE.



EXPIRES: 4/30/01

<b>CITY OF SAMMAMISH DEPARTMENT OF PUBLIC WORKS</b>			
<b>CEMENT CONCRETE CURB AND GUTTER</b>			
APPROVED BY		DATE	
CITY ENGINEER _____		_____	
DWN	CKD	DATE MARCH-15-2000	FILE FIG02-14

REV



GENERAL NOTES:  
 1. SEE DEVELOPMENT GUIDELINE 13.15.490 FOR ADDITIONAL REQUIREMENTS.



EXPIRES: 4/30/01

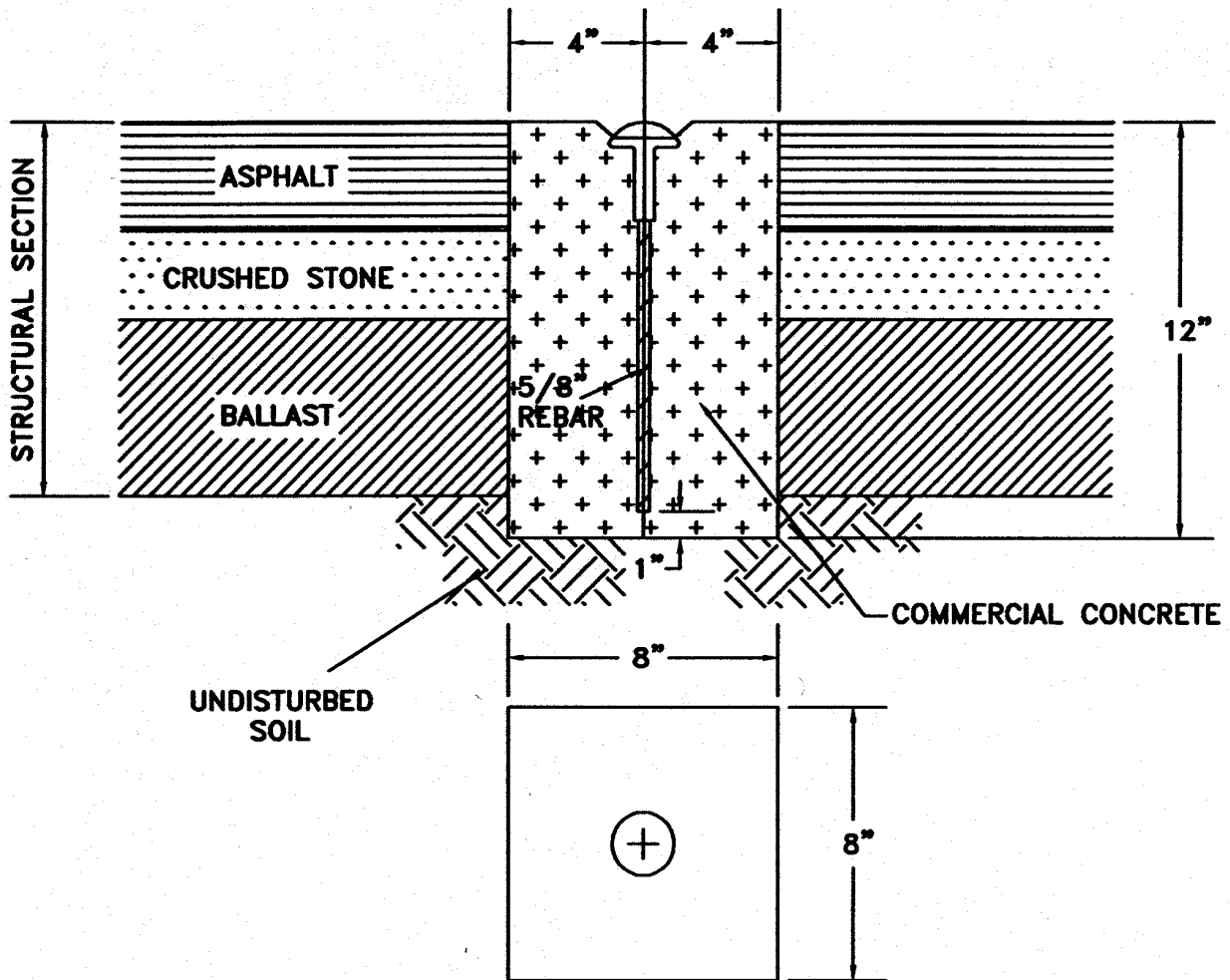
CITY OF SAMMAMISH  
 DEPARTMENT OF PUBLIC WORKS

MAIL BOX  
 CLUSTER STYLE

APPROVED BY CITY ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_

DWN	CKD	DATE MARCH-15-2000	FILE FIG02-18
-----	-----	-----------------------	------------------

REV



**GENERAL NOTES:**

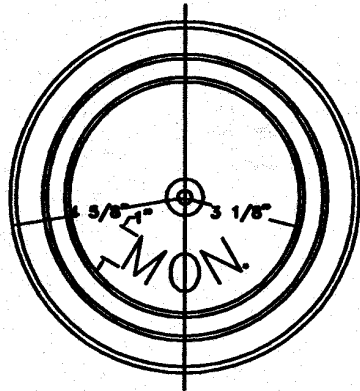
1. THIS MOUNUMENT TO BE USED PRIMARILY ON BITUMINOUS OR ASPHALT CONCRETE PAVEMENT FOR USE PRIMARILY IN SUBDIVISIONS AND MINOR ARTERIALS.
2. CONCRETE BASE DIMENSIONS SHOWN ARE MINIMUM. CONCRETE BASE NEED NOT BE FORMED.
3. CAP SHALL BE "BERNTSEN RB SERIES" OR BRASS PLUG MARKER.
4. CONCRETE TO BE PLACED ON A FIRM AND UNYIELDING FOUNDATION.



EXPIRES: 4/30/01

<b>CITY OF SAMMAMISH DEPARTMENT OF PUBLIC WORKS</b>			
<b>CAST IN PLACE MONUMENT</b>			
APPROVED BY		DATE	
CITY ENGINEER			
DWN	CKD	DATE MARCH-15-2000	FILE FIG02-20

REV



PLAN OF COVER

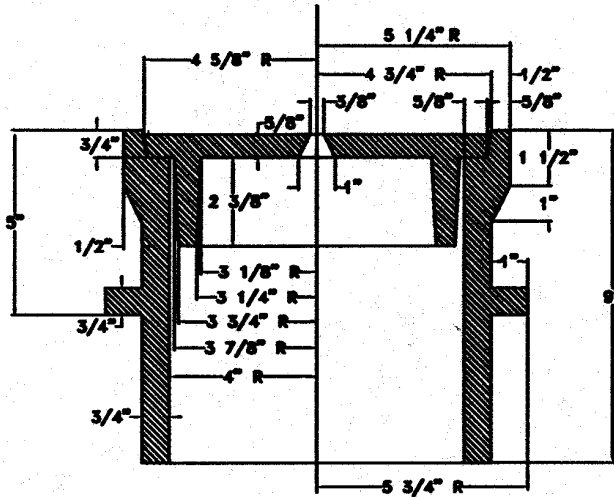
**NOTES:**

THE CASTINGS SHALL BE GRAY-IRON CASTINGS, ASTM DESIGNATION A 48, CLASS 40. THE COVER AND SEAT SHALL BE MACHINED SO AS TO HAVE PERFECT CONTACT AROUND THE ENTIRE CIRCUMFERENCE AND FULL WIDTH OF BEARING SURFACE.

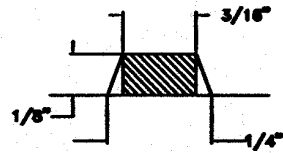
WHEN THE MONUMENT CASE AND COVER ARE PLACED IN CEMENT CONCRETE PAVEMENT THE CONCRETE BASE WILL BE NECESSARY.

**APPROXIMATE WEIGHTS:**

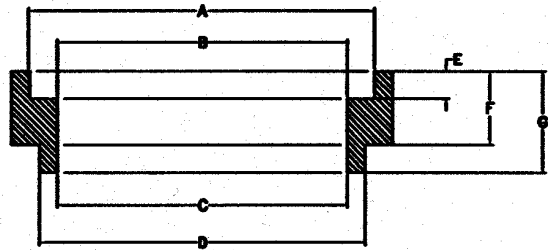
CASE 60 LBS.  
COVER 19 LBS.  
TOTAL 79 LBS.



SECTION



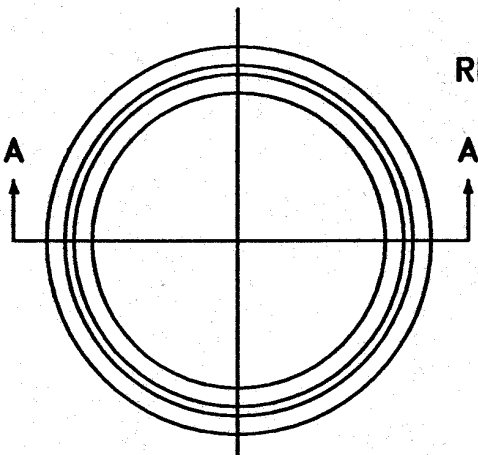
SECTION OF LETTER



SECTION A-A

PLAN

RISER RING



SIZE			
DIM	1-1/2"	2"	3"
A	10-1/2"	10-1/2"	10-1/2"
B	9-1/2"	9-1/2"	9-1/2"
C	8"	8"	8"
D	9"	9"	9"
E	3/4"	3/4"	3/4"
F	1-1/2"	2"	3"
G	2-1/4"	2-3/4"	3-3/4"



EXPIRES: 4/30/01

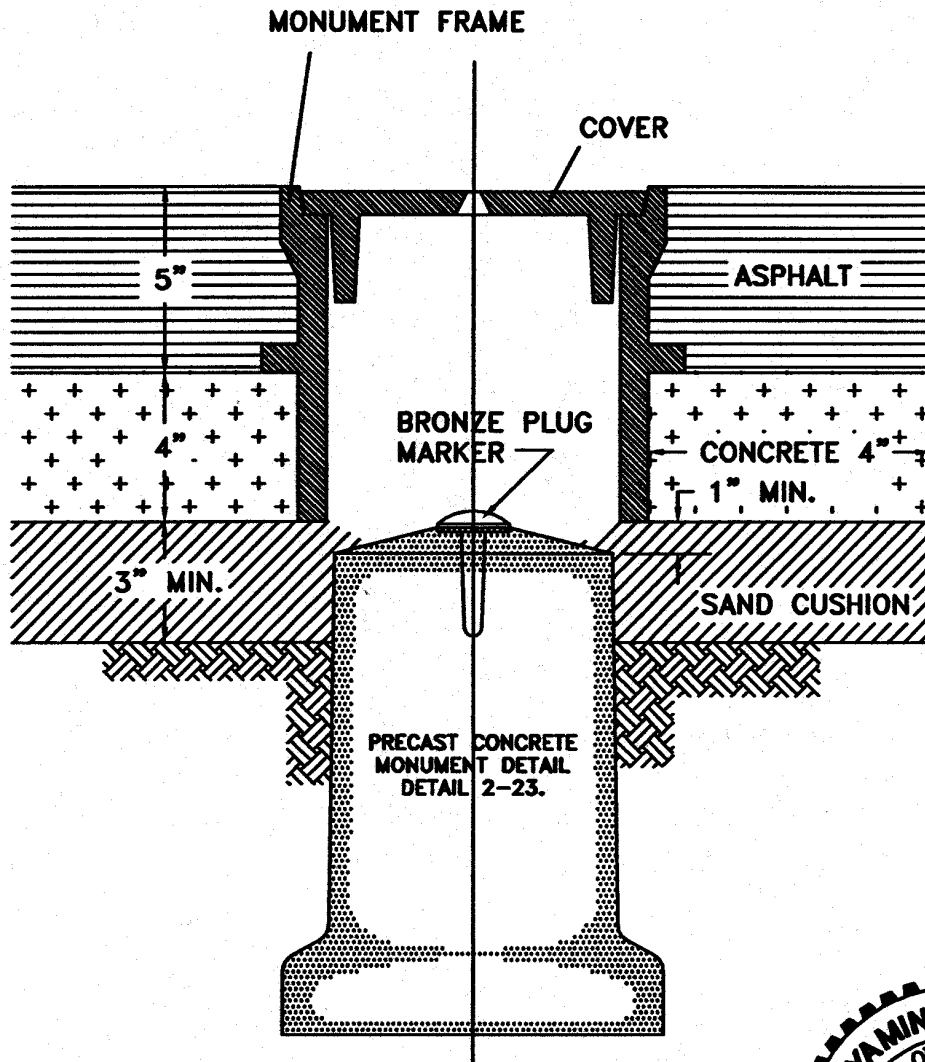
CITY OF SAMMAMISH  
DEPARTMENT OF PUBLIC WORKS  
MONUMENT CASE AND  
COVER WITH RISER

APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_  
CITY ENGINEER

DWN CKD DATE MARCH-15-2000 FILE FIG02-21

REV. NO.

REV



NOTE:  
 FOR USE PRIMARILY ON  
 ARTERIAL STREETS, STREETS  
 WITH BUS TRAFFIC AND  
 TRUCK ROUTES.



EXPIRES: 4/30/01

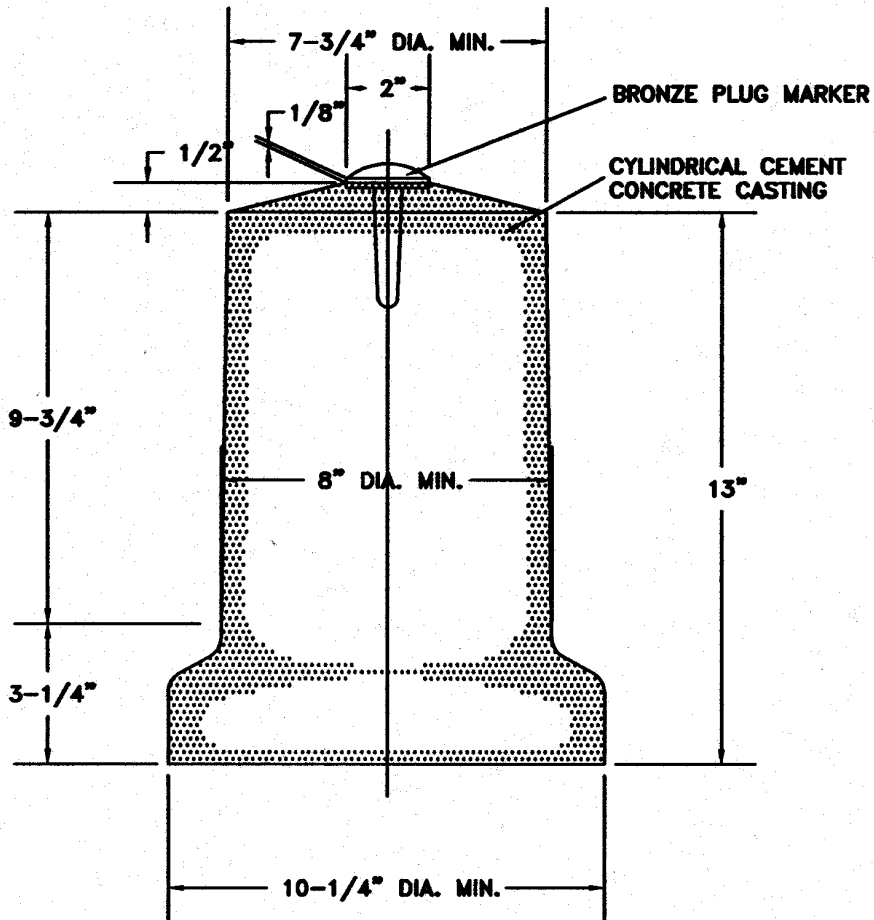
CITY OF SAMMAMISH  
 DEPARTMENT OF PUBLIC WORKS

MONUMENT CASE  
 AND COVER

APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 CITY ENGINEER

DWN	CKD	DATE MARCH-15-2000	FILE FIG02-22
-----	-----	-----------------------	------------------

REV



EXPIRES: 4/30/01

**GENERAL NOTES:**

MINIMUM ULTIMATE COMPRESSIVE  
STRENGTH OF CONCRETE CASTING  
AT 28 DAYS - 3000#.  
MAXIMUM AGGRETE SIZE TO BE 1".

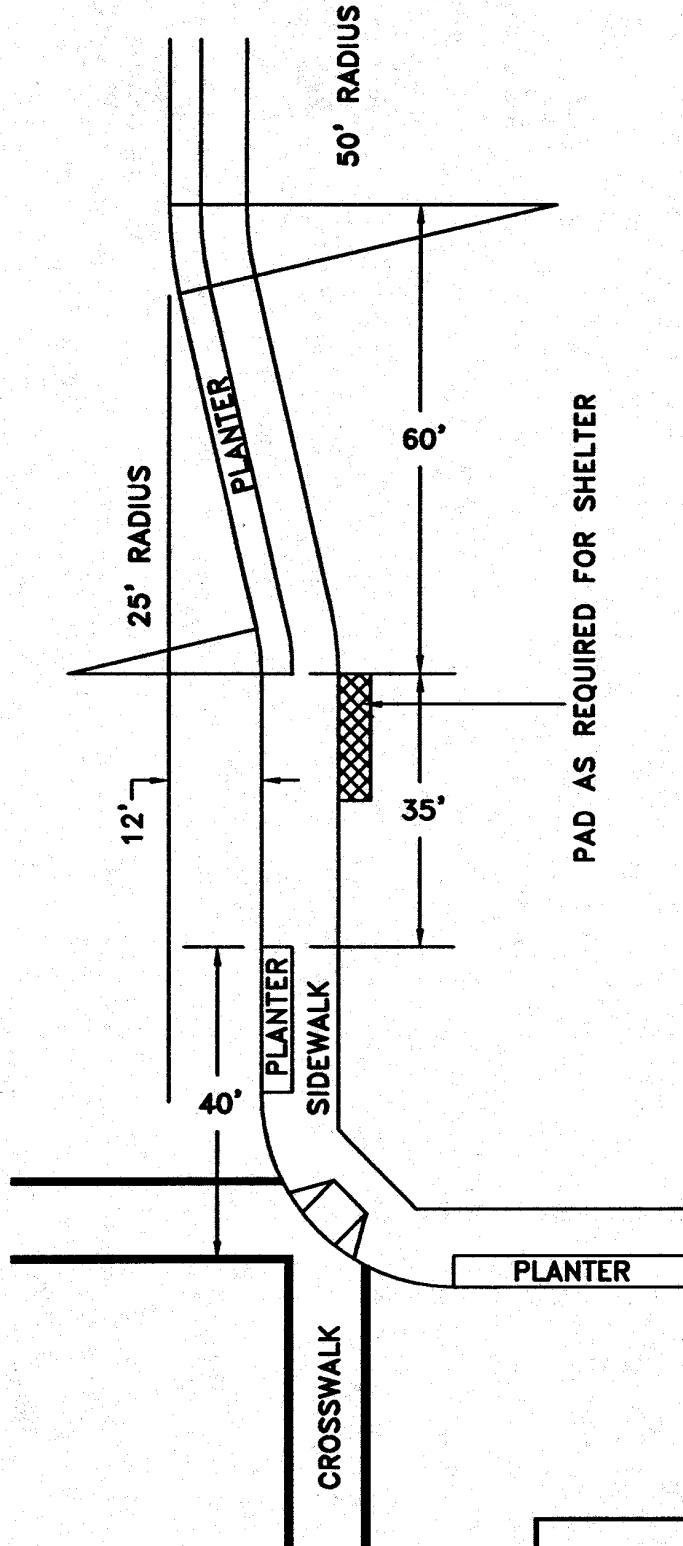
CITY OF SAMMAMISH  
DEPARTMENT OF PUBLIC WORKS

PRECAST CONCRETE  
MONUMENT

APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_  
CITY ENGINEER

REV

DWN	CKD	DATE MARCH-15-2000	FILE FIG02-23
-----	-----	-----------------------	------------------



EXPIRES: 4/30/01

CITY OF SAMMAMISH  
DEPARTMENT OF PUBLIC WORKS

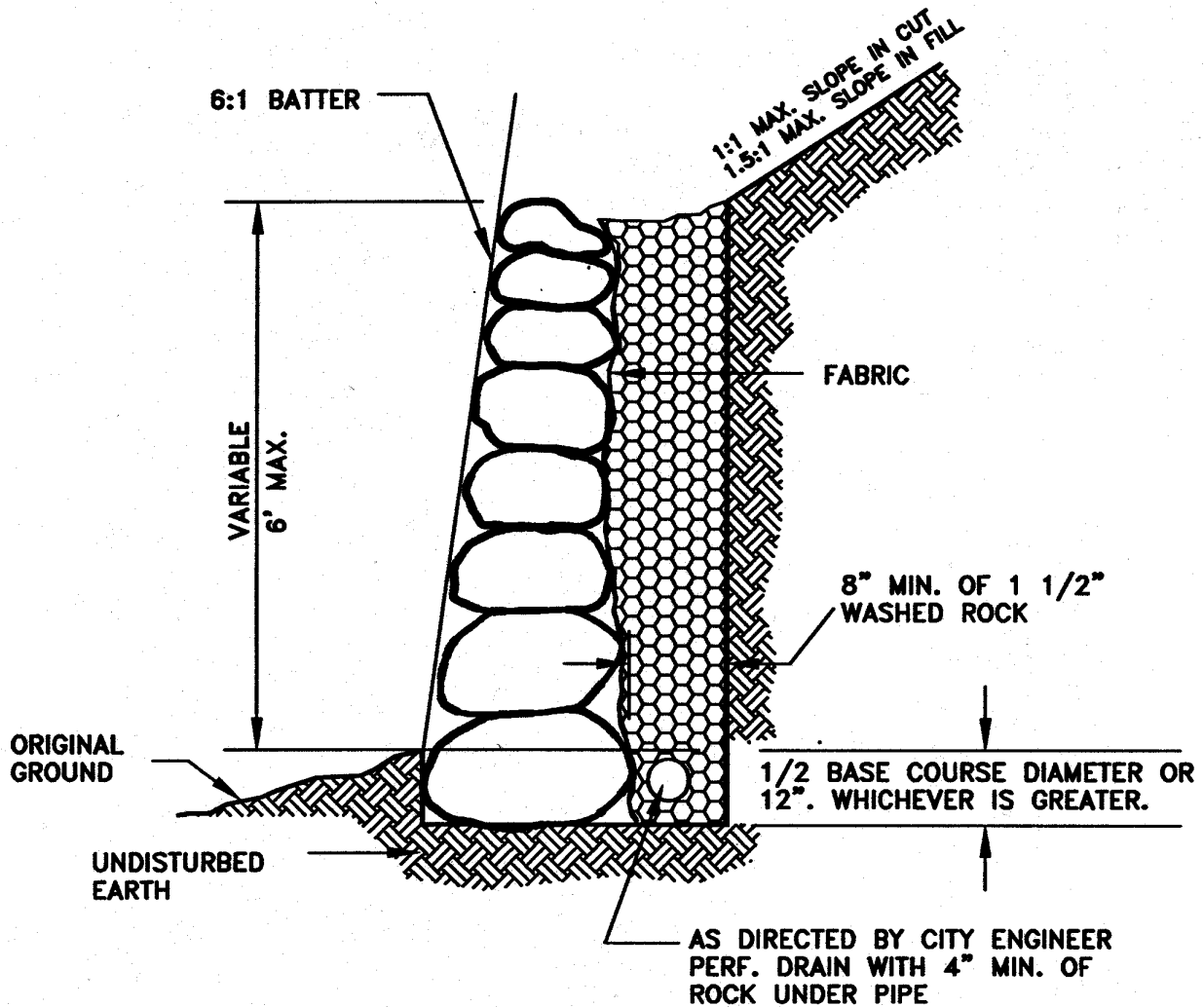
FARSIDE BUS PULLOUT

APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_  
CITY ENGINEER

DWN	CKD	DATE MARCH-15-2000	FILE FIG02-24
-----	-----	-----------------------	------------------

REV

REV NO



**GENERAL NOTES:**

1. Rockeries higher than 5' shall be constructed of rocks of graduated sizes from 5-man to 2-man from bottom to top. Rockeries of 5' or lower shall be constructed of 3-man to 2-man from bottom to top. Rock size categories shall include:
  - Two-man rocks (300 to 600 pounds), 13 inches in least dimension;
  - Three-man rocks (800 to 1200 pounds), 16 inches in least dimension;
  - Four-man rocks (1500 to 2200 pounds), 18 inches in least dimension;
  - Five-man rocks (2400 to 3400 pounds), 24 inches in least dimension.
2. The rockery shall be installed with a smooth face.
3. The long dimension of the rocks shall extend into the earth to provide maximum stability.
4. The rock shall be placed so as to lock into two rocks in the lower tier.
5. Call for inspection prior to base course being placed (for verification of rockery height, foundation material and rock size).
6. Design varying from those indicated shall carry the seal of a civil engineer experienced in soil mechanics.



EXPIRES: 4/30/01

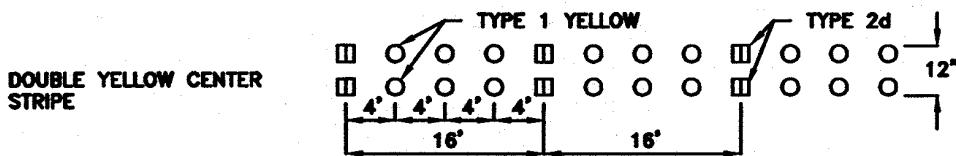
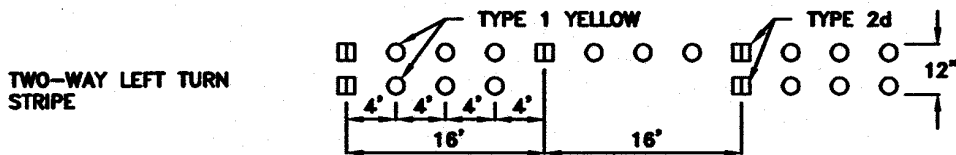
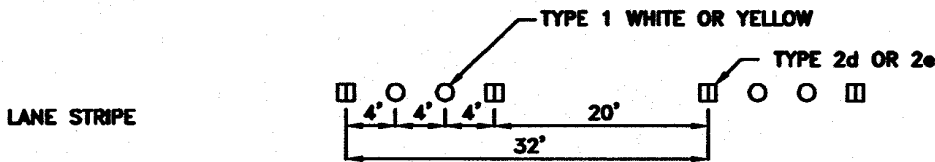
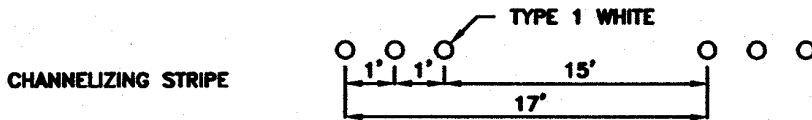
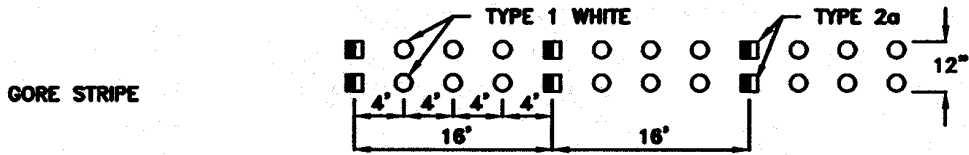
<b>CITY OF SAMMAMISH DEPARTMENT OF PUBLIC WORKS</b>			
<b>ROCK RETAINING WALL</b>			
APPROVED BY CITY ENGINEER _____		DATE _____	
DWN	CKD	DATE MARCH-15-2000	FILE FIG02-26

REV

REV MO



# PAVEMENT MARKING DETAILS



## LANE MARKERS

- TYPE 1 LANE MARKERS, WHITE OR YELLOW
- TYPE 2a REFLECTIVE LANE MARKER, WHITE AND RED
- TYPE 2d REFLECTIVE LANE MARKER, YELLOW AND YELLOW
- ▣ TYPE 2e REFLECTIVE LANE MARKER, WHITE—ONE SIDE ONLY



EXPIRES: 4/30/01

CITY OF SAMMAMISH  
DEPARTMENT OF PUBLIC WORKS

## STRIPING DETAIL

APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_  
CITY ENGINEER

REV

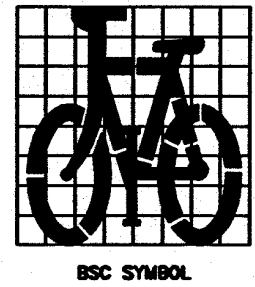
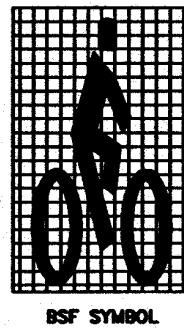
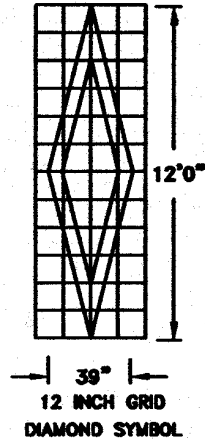
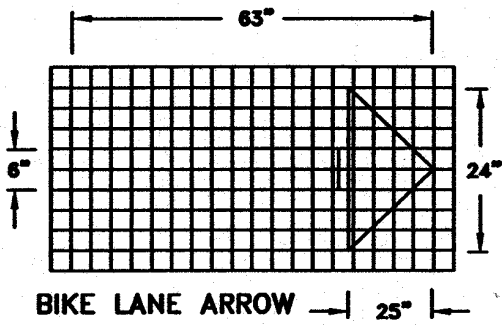
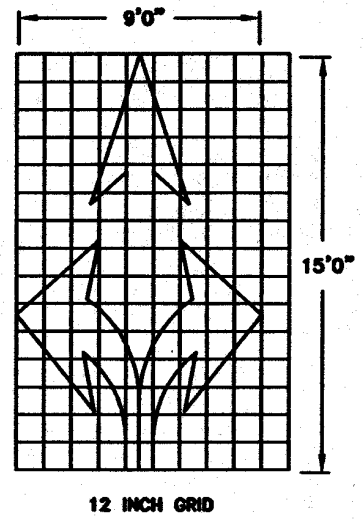
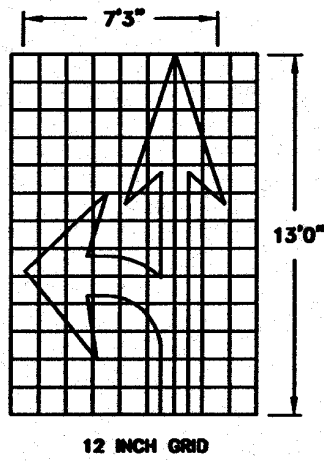
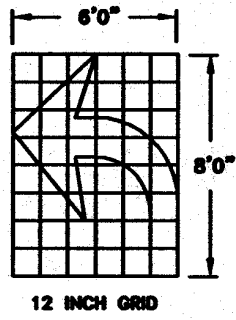
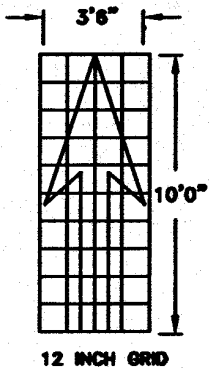
DWN

CKD

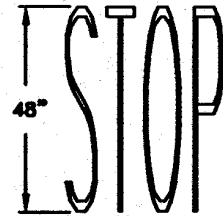
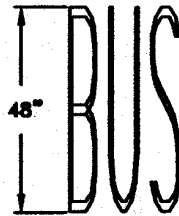
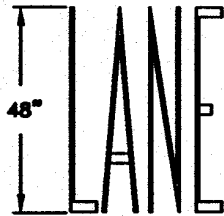
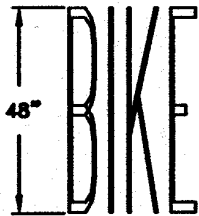
DATE  
MARCH-15-2000

FILE  
FIG02-27

REV NO



**COMPLETE WORD STENCILS**



EXPIRES: 4/30/01

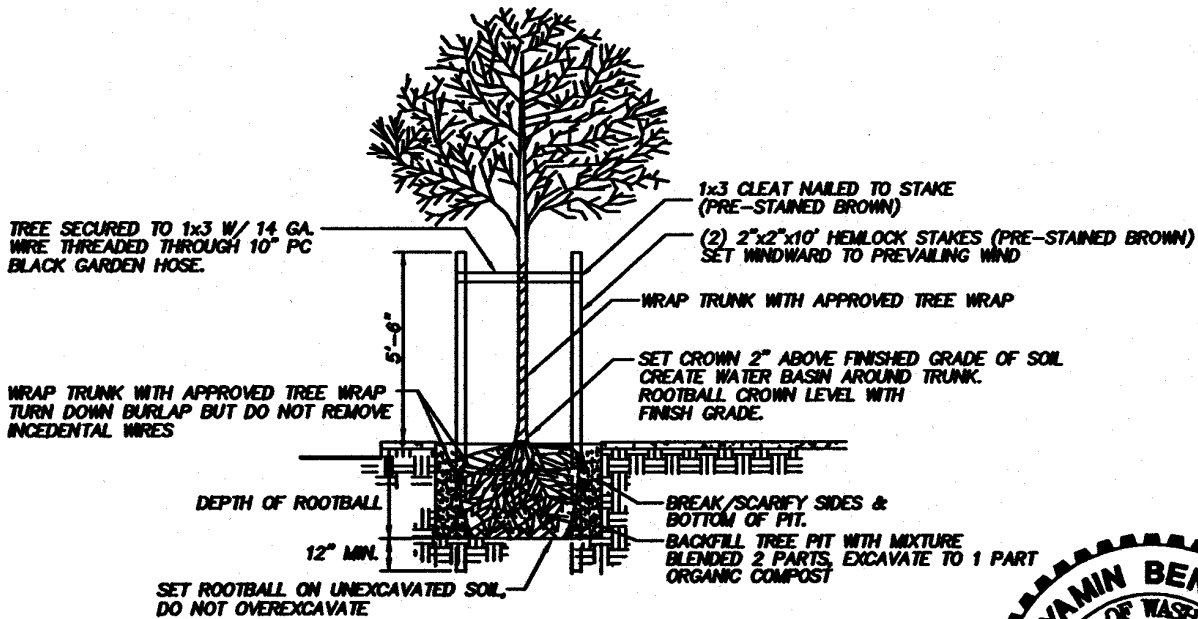
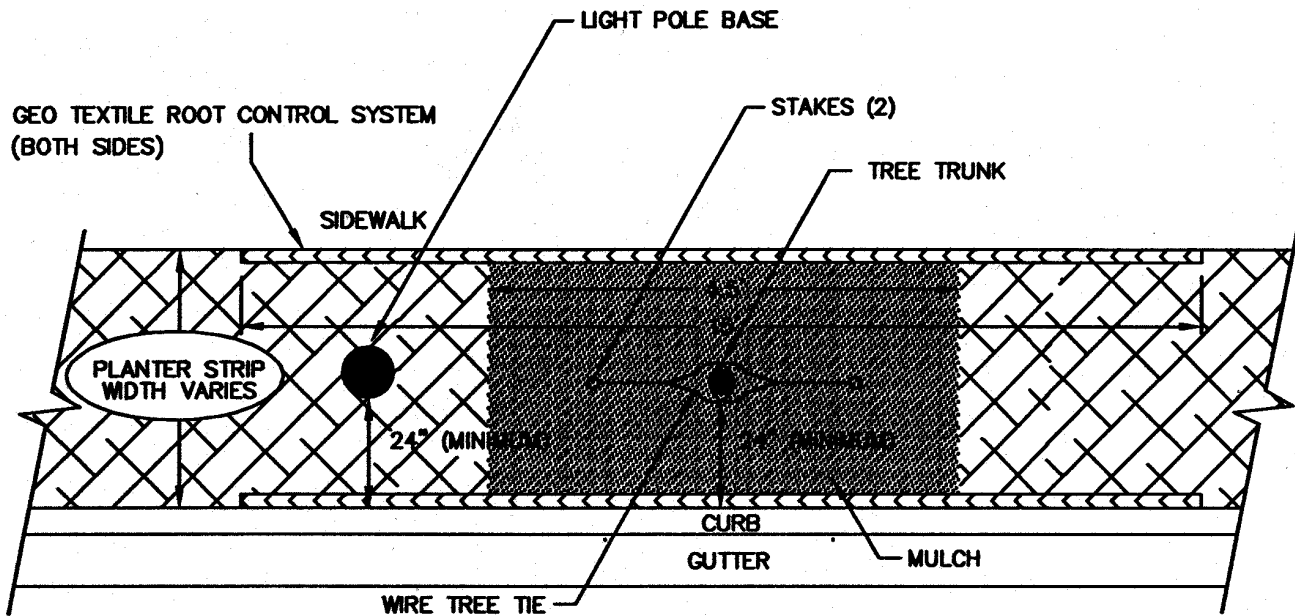
**GENERAL NOTES:**

1. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC OR METHACRYLIC RESIN.
2. ALL MARKINGS SHALL MEET FEDERAL METRIC STANDARDS.

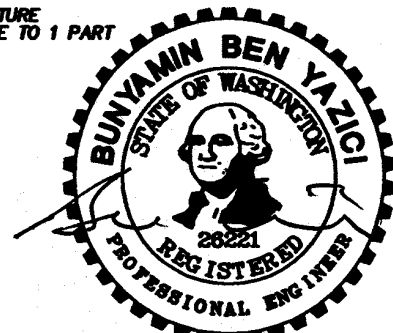
CITY OF SAMMAMISH DEPARTMENT OF PUBLIC WORKS			
PAVEMENT MARKINGS TITLE			
APPROVED BY		DATE	
CITY ENGINEER			
DWN	CKD	DATE	FILE
		MARCH-15-2000	FIG02-28

REV

REV. NO.



**STREET TREE SECTION**  
N.T.S.



EXPIRES: 4/30/01

**TOPSOILING NOTES**

- 1.) ALL PLANT BEDS TO RECEIVE A UNIFORM LAYER OF PREPARED PLANTING MIX 4" DEEP AND ROTOTILLED INTO SUBSOIL TO A DEPTH OF 8". PLANTING MIX TO BE EQUAL PARTS SANDY LOAM, PEAT HUMUS AND ORGANIC COMPOST
- 2.) BACKFILL FOR TREE PITS SHALL BE A UNIFORM BLENDED MIXTURE OF 2 PARTS EXCAVATE AND 1 PART ORGANIC COMPOST.
- 3.) ORGANIC COMPOST SHALL BE STEERCO, GRO-CO, CEDAR GROW COMPOST, NUTRI MULCH OR OTHER EQUAL POST CONSUMER RECYCLED HORTICULTURAL COMPOST PRODUCTS.

CITY OF SAMMAMISH  
DEPARTMENT OF PUBLIC WORKS  
**PLANTER STRIP  
DETAIL**

APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_  
CITY ENGINEER

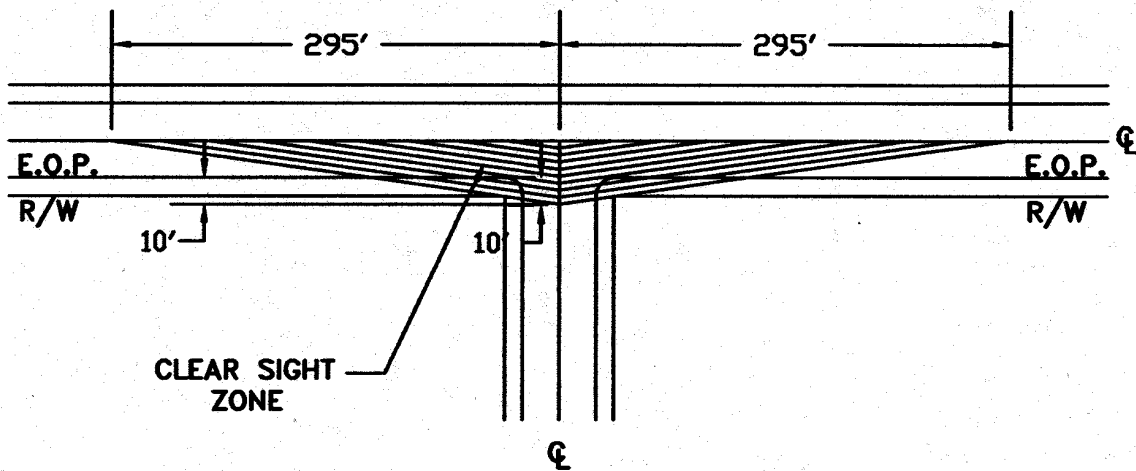
REV

DWN	CKD	DATE MARCH-15-2000	FILE FIG02-29
-----	-----	-----------------------	------------------

REV. NO.

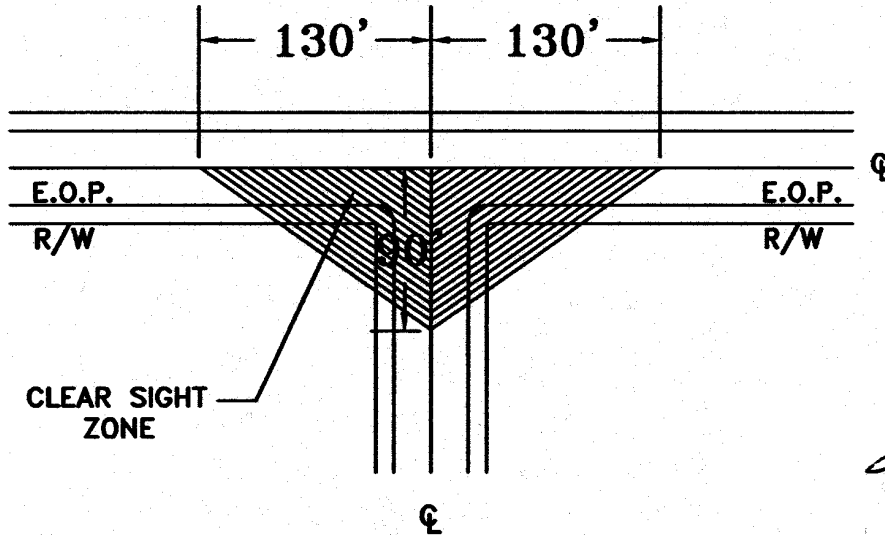
# STOP OR YIELD CONTROLLED INTERSECTIONS

EXAMPLE: MAJOR STREET SPEED LIMIT = 25 M.P.H.



# UNCONTROLLED INTERSECTIONS

EXAMPLE: MAJOR STREET SPEED LIMIT = 30 M.P.H.  
MINOR STREET SPEED LIMIT = 20 M.P.H.



EXPIRES: 4/30/01

## GENERAL NOTES:

1. SEE SECTION 13.15.180 OF THE PUBLIC WORKS STANDARDS FOR MORE INFORMATION ON THE VERTICAL CLEARANCE WITHIN THE CLEAR SIGHT ZONE.

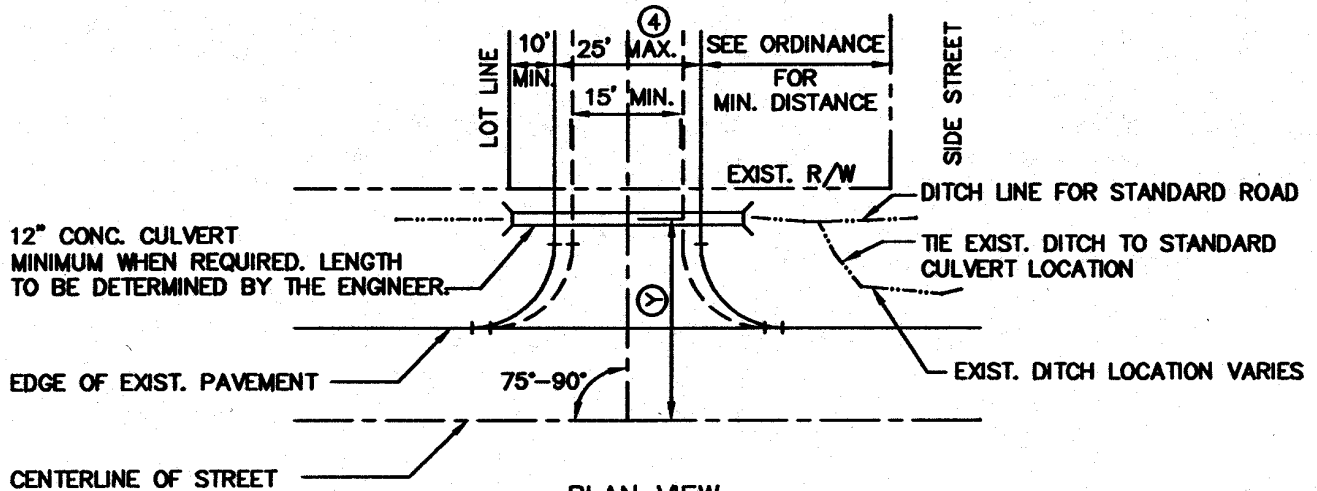
CITY OF SAMMAMISH  
DEPARTMENT OF PUBLIC WORKS

## SIGHT OBSTRUCTION

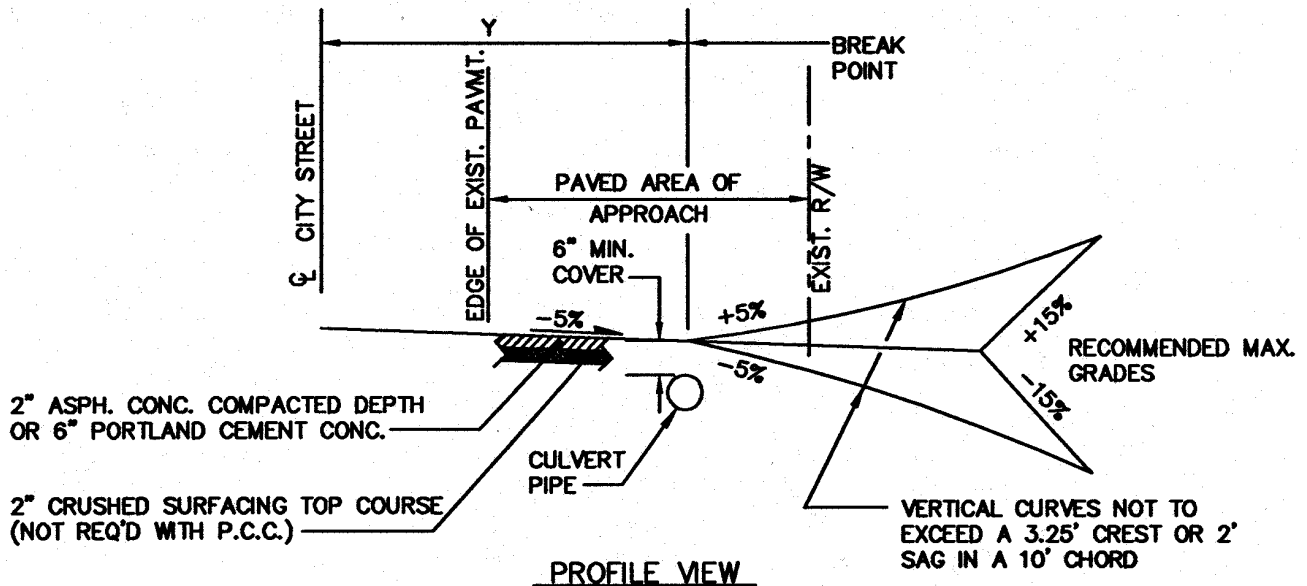
APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_  
CITY ENGINEER

DWN	CKD	DATE MARCH-15-2000	FILE FIG02-30
-----	-----	-----------------------	------------------

REV



PLAN VIEW  
N.T.S.



PROFILE VIEW  
N.T.S.

1. ALL MATERIALS & WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE LATEST STATE OF WASHINGTON, DEPT. OF HIGHWAYS STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION.
2. STORM DRAINAGE FROM THE ROAD APPROACH SHALL NOT BE PERMITTED TO DRAIN ONTO THE ROADWAY SURFACE. CATCH BASINS OR OTHER DRAINAGE DEVICES SHALL BE USED TO INTERCEPT & DIVERT THIS WATER.
3. FOLLOW ADDITIONAL INSTRUCTIONS AS DIRECTED BY THE APPROVING ENGINEER AS STATED ON THE APPROVED PERMIT.
4. A 33' WIDTH MAY BE ALLOWED FOR 3 CAR GARAGE ON A LOCAL ROAD FEEDER, LOCAL ROAD MINOR, OR LOCAL ROAD CUL-DE-SAC.



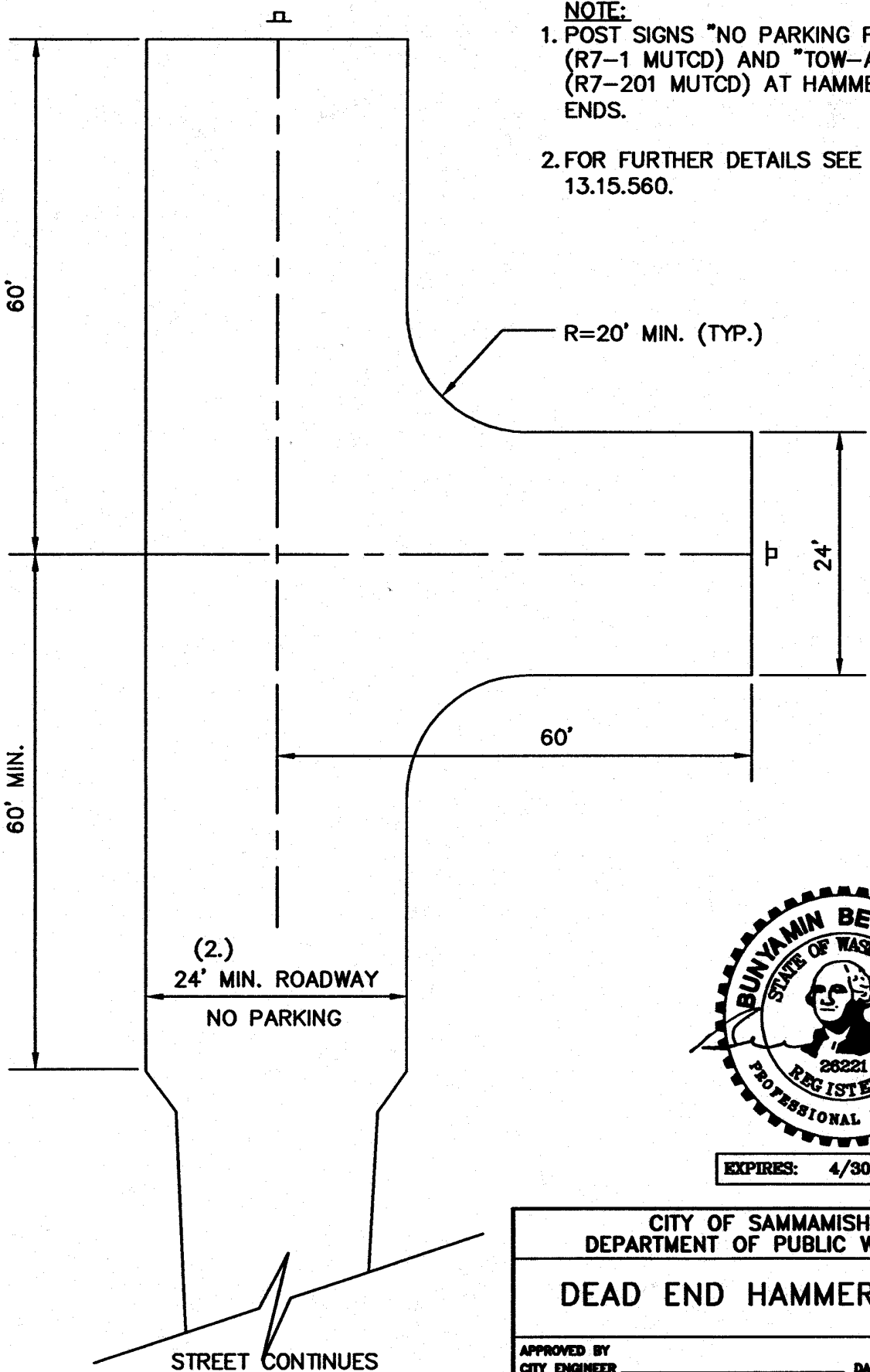
EXPIRES: 4/30/01

- Ⓢ 22.5' FOR LOCAL ACCESS ROADS
- Ⓢ 24.5' FOR ARTERIAL ROADS-TWO LANE ROAD

P.C.C.-PORTLAND CEMENT CONCRETE, 6" THK WITH LONGITUDINAL JOINTS REQUIRED EVERY 10'

<b>CITY OF SAMMAMISH DEPARTMENT OF PUBLIC WORKS</b>			
<b>RESIDENTIAL DRIVEWAY</b>			
APPROVED BY CITY ENGINEER		DATE	
DWN JM	CKD	DATE MARCH-15-2000	FILE FIG02-31

REV



**NOTE:**

1. POST SIGNS "NO PARKING FIRE LANE" (R7-1 MUTCD) AND "TOW-AWAY ZONE" (R7-201 MUTCD) AT HAMMERHEAD ENDS.
2. FOR FURTHER DETAILS SEE UPMC 13.15.560.

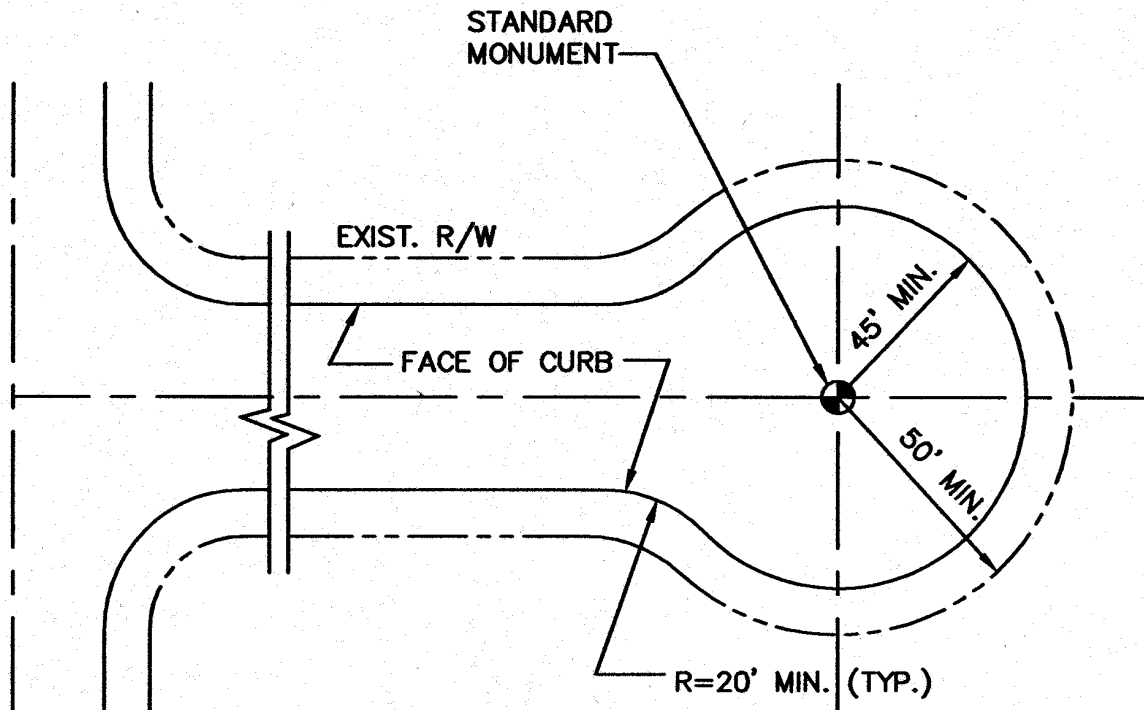


EXPIRES: 4/30/01

<b>CITY OF SAMMAMISH DEPARTMENT OF PUBLIC WORKS</b>			
<b>DEAD END HAMMERHEAD</b>			
APPROVED BY		DATE	
CITY ENGINEER			
DWN	CKD	DATE	FILE
		MARCH-15-2000	FIG02-32

REV

REV. NO.



EXPIRES: 4/30/01

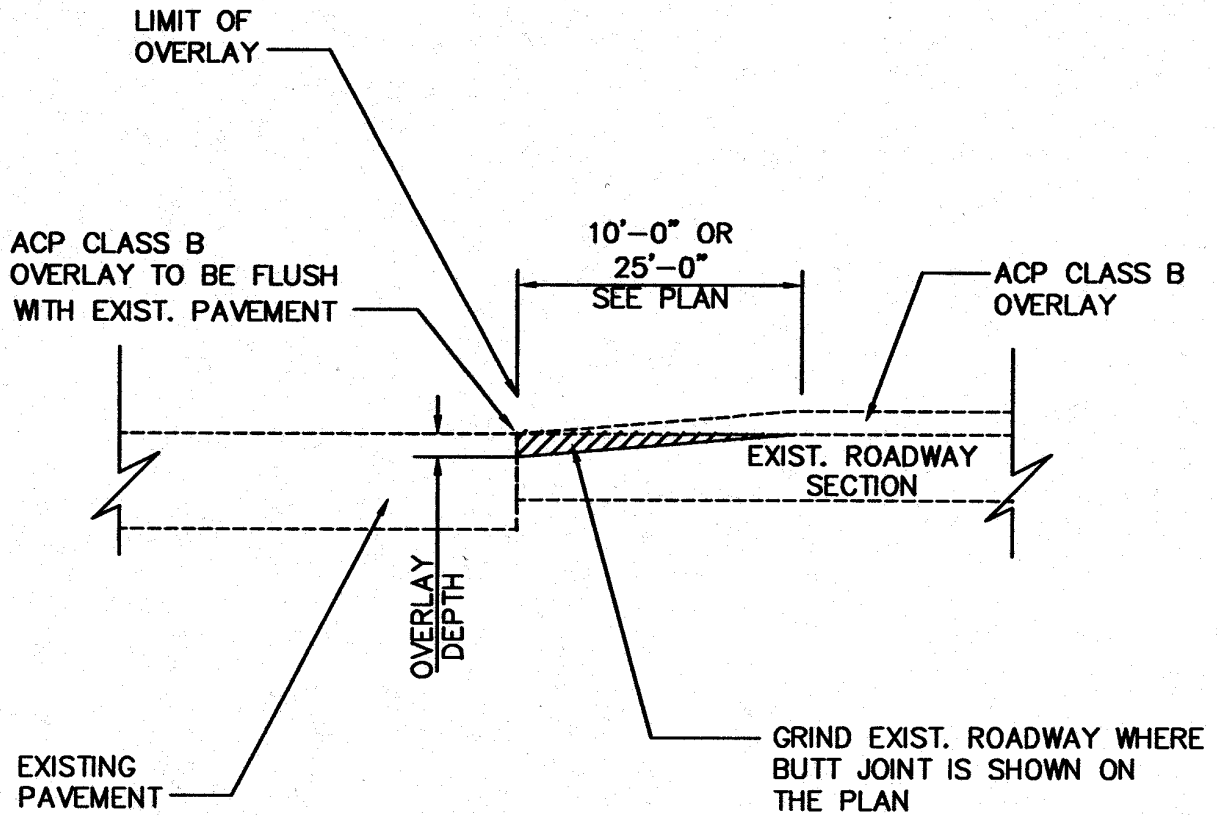
CITY OF SAMMAMISH  
DEPARTMENT OF PUBLIC WORKS

PERMANENT  
CUL-DE-SAC

APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_  
CITY ENGINEER

REV

DWN	CKD	DATE	FILE
JM		MARCH-15-2000	FIG02-33



NOTES:

1. EMULSIFIED ASPHALT GRADE CSS-1. TACK SHALL BE APPLIED TO EDGES OF EXISTING PAVEMENT. ALL JOINTS SHALL BE SEALED USING PAVING ASPHALT AR4000W.



EXPIRES: 4/30/01

CITY OF SAMMAMISH  
DEPARTMENT OF PUBLIC WORKS

**BUTT JOINT  
DETAIL**

APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_  
CITY ENGINEER

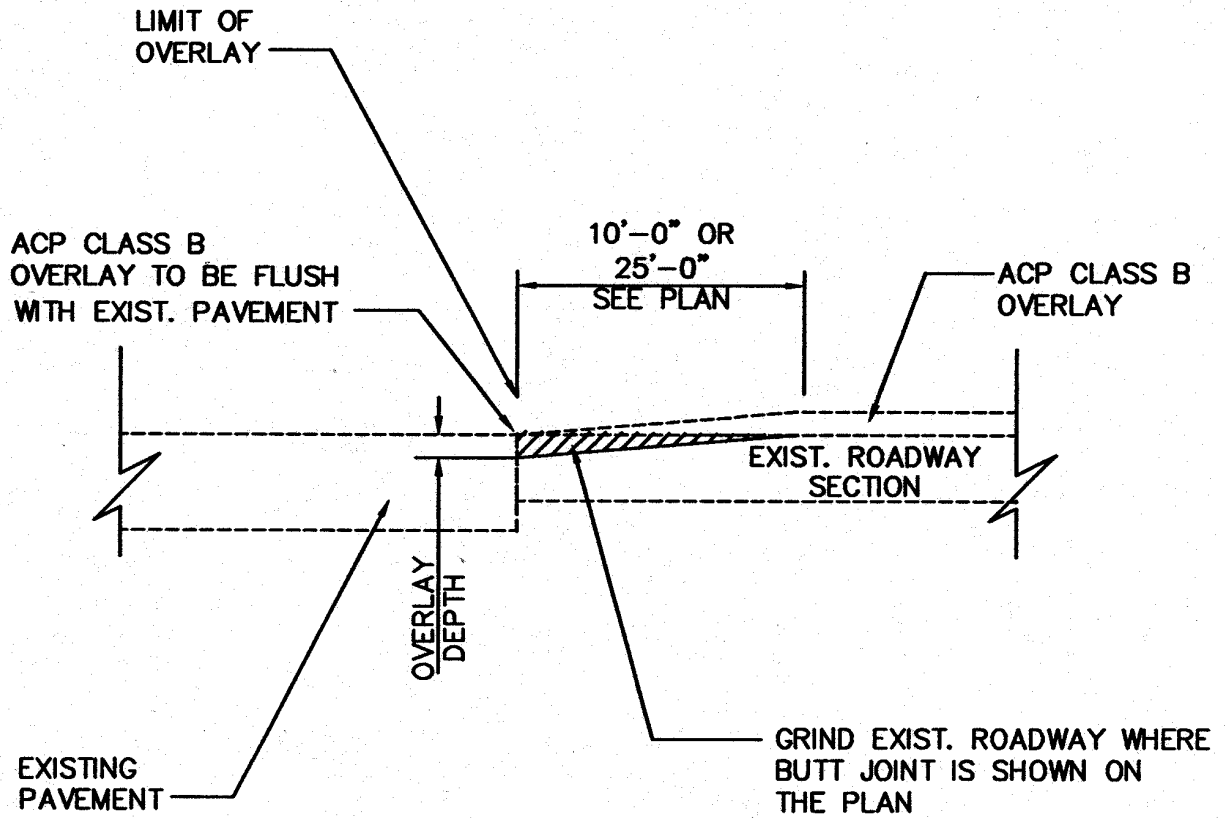
REV

DWN	CKD	DATE	FILE
JM		MARCH-15-2000	FIG02-34

REV. NO. 1

60





**NOTES:**

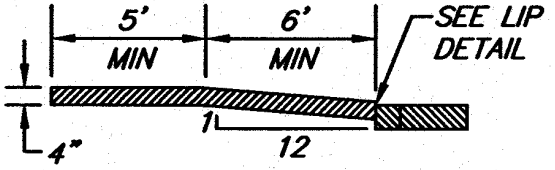
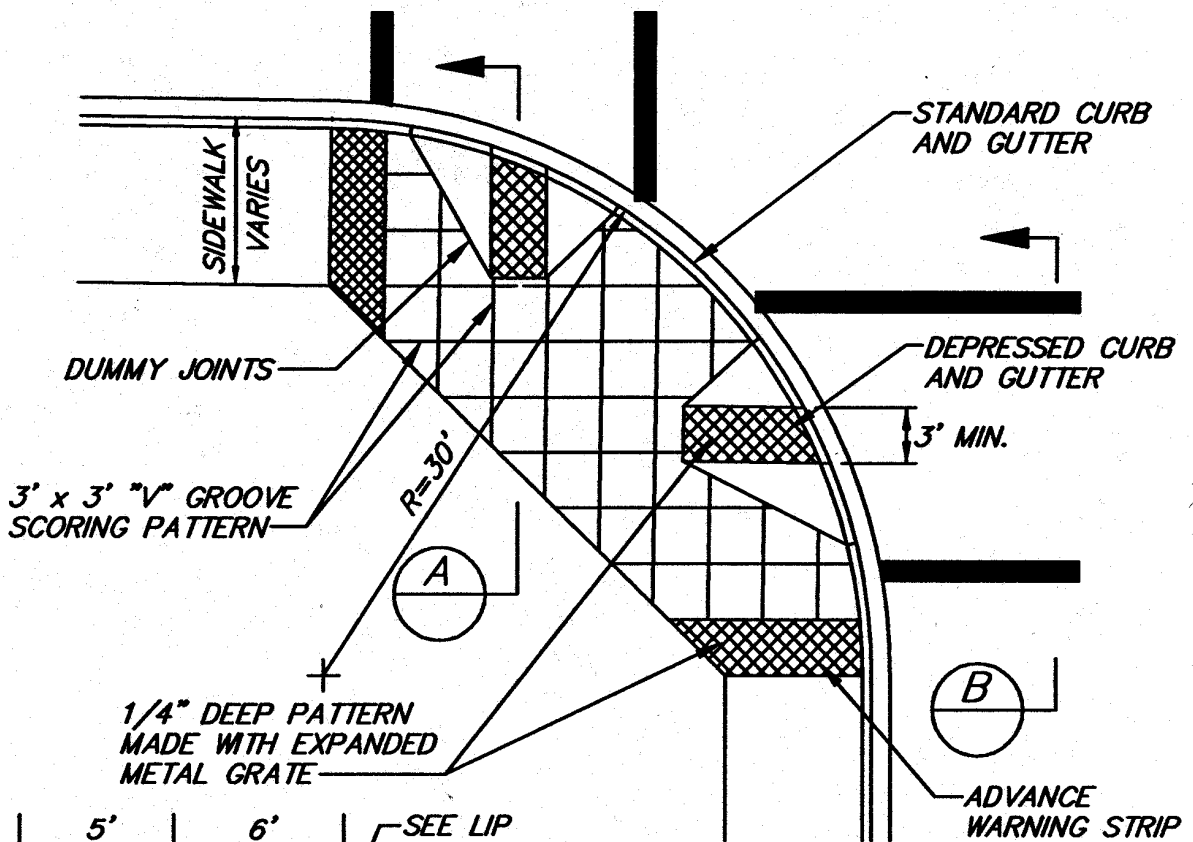
1. EMULSIFIED ASPHALT GRADE CSS-1. TACK SHALL BE APPLIED TO EDGES OF EXISTING PAVEMENT. ALL JOINTS SHALL BE SEALED USING PAVING ASPHALT AR4000W.



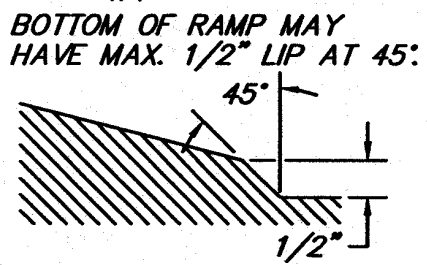
EXPIRES: 4/30/01

CITY OF SAMMAMISH DEPARTMENT OF PUBLIC WORKS			
<b>BUTT JOINT DETAIL</b>			
APPROVED BY		DATE	
CITY ENGINEER			
DWN	CKD	DATE	FILE
JM		MARCH-15-2000	FIG02-35

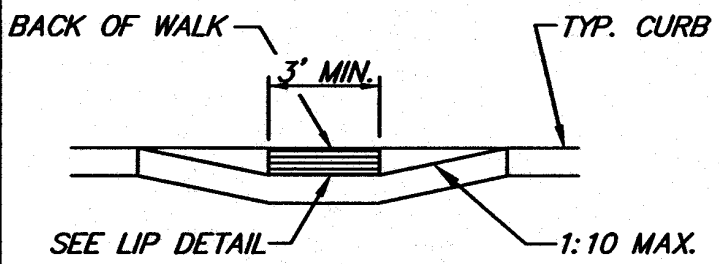
REV



SECTION A  
NO SCALE



LIP DETAIL



SECTION B  
NO SCALE



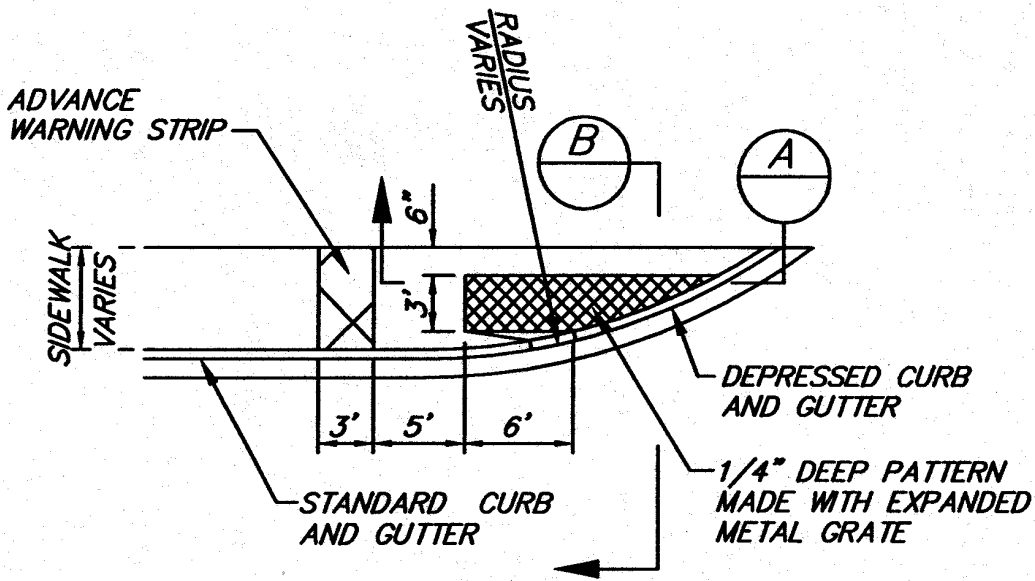
EXPIRES: 4/30/01

**NOTE:**  
SEE SIDEWALK SPACING,  
EXPANSION JOINTS & SCORE  
MARK DETAIL FOR ADDITIONAL  
NOTES.

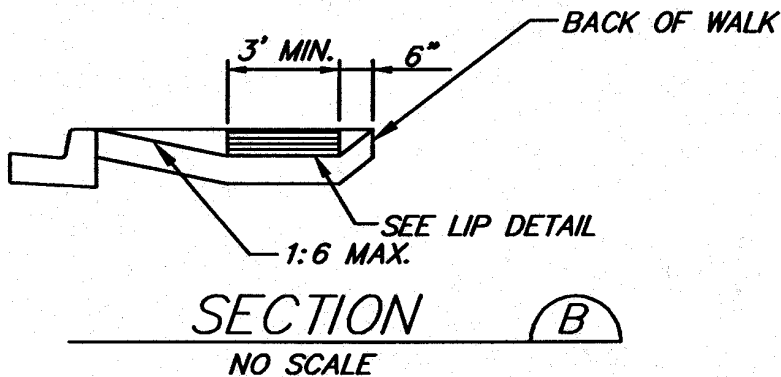
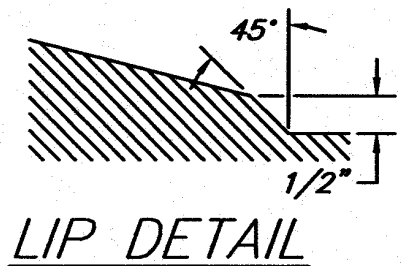
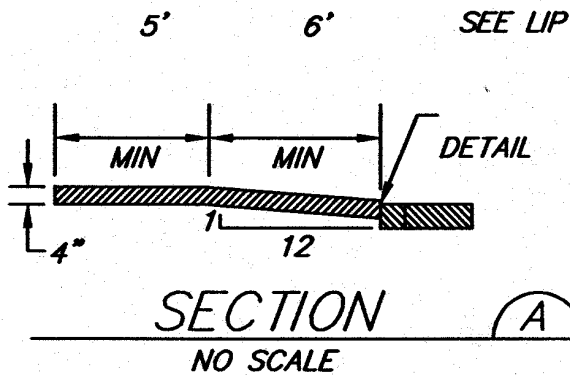
LOCATE HANDICAP RAMP @ 1/4 &  
3/4 DELTA

CITY OF SAMMAMISH DEPARTMENT OF PUBLIC WORKS			
TYPE I ACCESSABILITY RAMP			
APPROVED BY		DATE	
CITY ENGINEER			
DWN	CKD	DATE MARCH-15-2000	FILE FIG-11-A

REV



BOTTOM OF RAMP MAY HAVE MAX. 1/2" LIP AT 45°

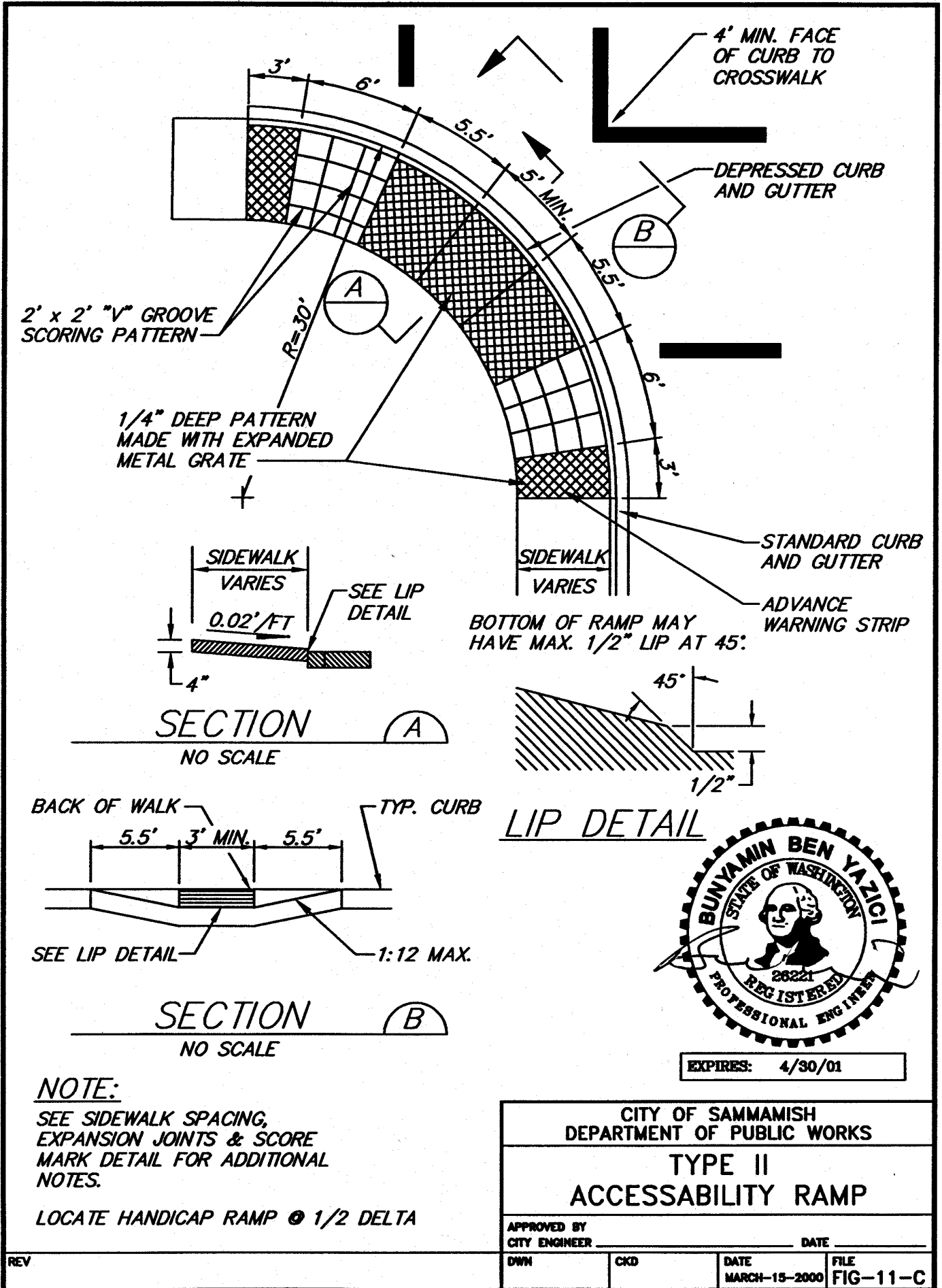


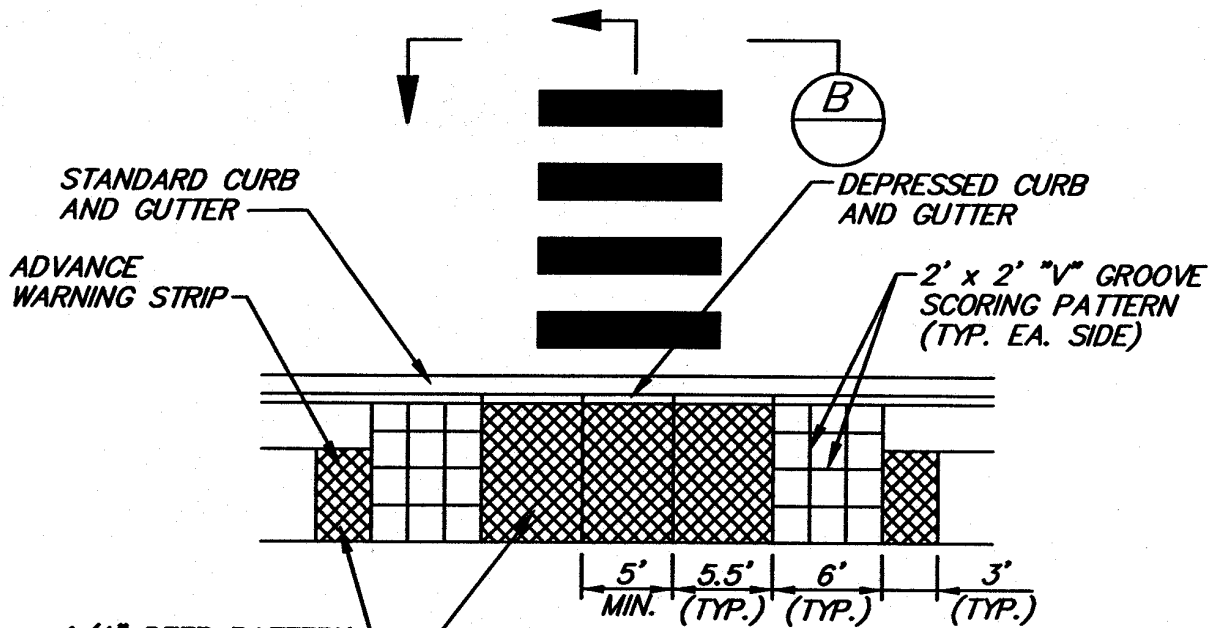
EXPIRES: 4/30/01

**NOTE:**  
SEE SIDEWALK SPACING,  
EXPANSION JOINTS & SCORE  
MARK DETAIL FOR ADDITIONAL  
NOTES.

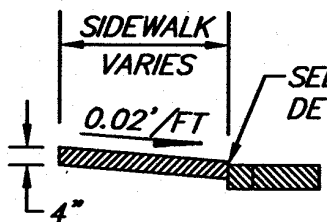
CITY OF SAMMAMISH DEPARTMENT OF PUBLIC WORKS			
TYPE II ACCESSABILITY RAMP			
APPROVED BY		DATE	
CITY ENGINEER			
DWN	CKD	DATE	FILE
		MARCH-15-2000	FIG-11-B

REV



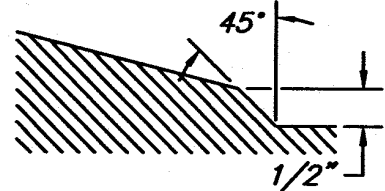


1/4" DEEP PATTERN  
MADE WITH EXPANDED  
METAL GRATE

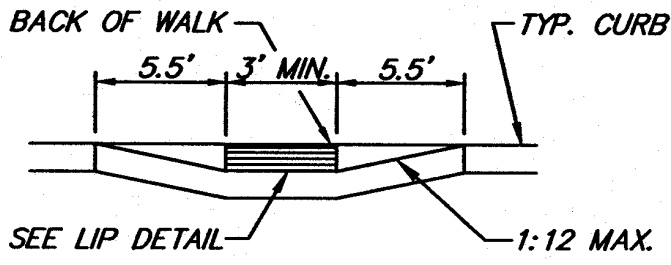


SECTION A  
NO SCALE

BOTTOM OF RAMP MAY  
HAVE MAX. 1/2" LIP AT 45°



LIP DETAIL



SECTION B  
NO SCALE



EXPIRES: 4/30/01

**NOTES:**  
SEE SIDEWALK SPACING,  
EXPANSION JOINTS & SCORE  
MARK DETAIL FOR ADDITIONAL  
NOTES.

FOR LOCATION SEE PLAN

CITY OF SAMMAMISH DEPARTMENT OF PUBLIC WORKS			
TYPE IV ACCESSABILITY RAMP			
APPROVED BY		DATE	
CITY ENGINEER			
DWN	CKD	MARCH-15-2000	FILE FIG-11-D

REV

## Chapter PWS.20

### STORM DRAINAGE

#### Sections:

<b>PWS.20.010</b>	<b>General.</b>
<b>PWS.20.020</b>	<b>Design standards.</b>
<b>PWS.20.030</b>	<b>Maintenance.</b>
<b>PWS.20.040</b>	<b>Construction.</b>
<b>PWS.20.050</b>	<b>Conveyance.</b>
<b>PWS.20.060</b>	<b>Staking.</b>
<b>PWS.20.070</b>	<b>Trench excavation.</b>
<b>PWS.20.080</b>	<b>Backfilling.</b>
<b>PWS.20.090</b>	<b>Street patching and restoration.</b>

#### **PWS.20.010 General.**

The standards established by this chapter are the minimum standards for the design and construction of storm drainage facilities.

The King County Surface Water Design Manual and the King County Road Standards are considered a part of this chapter and the public works standards. The King County Surface Water Design Manual sets forth the minimum drainage and erosion control requirements as supplemented herein. The King County Road Standards will supplement these standards only for drainage structures and appurtenances. All standards and guidelines addressed in this document shall supersede that expressed in the above referenced documents.

#### **PWS.20.020 Design standards.**

The design of storm drainage and/or detention/retention systems shall depend on their type and local site conditions. The design elements of storm drainage systems shall conform to City standards as set forth herein and follow current design practice as set forth in Chapter PWS.10. The following design considerations shall apply:

A. No retention/detention facility shall be located in an area that is used to satisfy an open space requirement unless it enhances a recreational amenity.

Use of designated open space areas for storm-water detention/retention and for infiltration shall satisfy all conditions of the City of Sammamish for usability and landscape conformity.

Because the primary purpose of consolidated open space is to provide usable area for recreation activities, buffer zones, and green belt areas, the open space must be designed for this intent. Any use of this area for stormwater detention/retention must clearly be subordinate to and not detract from open space uses. Because active recreation requires primarily flat topography, the usable open space will be predominantly flat. In no event shall slopes exceed 4:1 where drainage facilities are present and a minimum of 50 percent of the linear slope length shall not exceed 7:1. Design of the combined facility, as well as ease of access into and out of the facility, will be considered by the City in review of the design of such facilities.

Open space also serves an aesthetic function by providing areas of green space that are attractive and an amenity to the project site. Storm drainage facilities, which serve as open space, must provide the impression that the open space is area available for park uses.

The City shall make the sole determination whether the proposed stormwater facilities are compatible with open space and satisfy the intent of the City for open space amenities.

B. The use of commercial parking lots for detention of stormwater will be reviewed by the director of public works and approved or denied based on the design. The detention area shall be situated away from areas of

pedestrian movement unless means for rapid closing of the areas is incorporated in the design, and the maximum depth of water in parking lot storage shall be limited to 12 inches.

C. Maximum catch basin spacing shall be 300 feet on arterials and collectors and 500 feet on all other street classifications. No surface water shall cross any roadway.

The general notes on construction in PWS.20.040 shall be included on any plans dealing with storm systems.

**PWS.20.030 Maintenance.**

As a condition of storm drainage system plan approval the applicant shall maintain the drainage system as shown on the drainage plans. The drainage system shall be maintained and preserved until such time as the applicant or owner and the City agree that the system should be altered in some manner or eliminated. The applicant shall be required to record a maintenance agreement to maintain the storm drainage system.

**PWS.20.040 Construction.**

A. All workmanship and materials shall be in accordance with City of Sammamish Standards and the most current edition of the State of Washington Standard Specifications for Road, Bridge and Municipal Construction (WSDOT/ APWA) and King County Road Standards (for drainage structures and appurtenances).

B. Temporary erosion/water pollution measures shall be required in accordance with the King County Surface Water Design Manual.

C. Comply with all permits and other requirements by the City or other governing authority or agency.

D. A preconstruction meeting shall be held with the City of Sammamish public works department prior to the start of construction.

E. All storm mains and detention/retention areas shall be staked for grade and alignment by an engineering or surveying firm capable of performing such work.

F. Storm drain pipe shall meet the following requirements:

1. Plain concrete pipe conforming to the requirements of AASHTO M 86, Class 2.
2. Reinforced concrete pipe conforming to the requirements of AASHTO M 170.
3. PVC pipe shall conform to ASTM D 3034 SDR 35 or ASTM F 789 with joints and gaskets conforming to ASTM D 3212 and ASTM F 477.
4. Ductile iron pipe conforming to the requirements of AWWA C 151, thickness class as shown on the plans.
5. Polyethylene smooth wall pipe per Advanced Drainage Systems (ADS) N-12 constructed per WSDOT/APWA Standard Specifications 7-04.

G. Special structures, oil/water separators and outlet controls shall be installed per plans and manufacturer's recommendations.

H. Provide traffic control plan(s) as required in accordance with MUTCD.

I. Call underground locate line, 1-800-424- 5555, minimum 48 hours prior to any excavations.

J. Where connections require "field verifications", connection points will be exposed by contractor and fittings verified 48 hours prior to distributing shutdown notices.

K. On-site erosion control measures shall be the responsibility of the developer. The applicant shall correct any problems occurring before final acceptance of the storm system by the engineer.

L. In case erosion or sedimentation occurs on off-site property, all construction work within the development that will further aggravate the situation must cease and the owner/contractor will immediately commence restoration methods. Restoration activity will continue until such time as the erosion and sedimentation no longer occurs off-site.

M. All erosion and sedimentation control devices shown on this drawing shall be installed prior to or at the first stage of site preparation.

N. Should the temporary erosion and sedimentation control measures as shown on this drawing not prove adequate to control erosion and sedimentation, the applicant/contractor shall install additional facilities as necessary to protect adjacent properties, sensitive areas, natural water courses and/or storm drainage systems.

O. In any area which has been stripped of vegetation and where no further work is anticipated for a period of 30 days or more, all disturbed areas must be immediately stabilized with mulching, grass planting or other approved erosion control treatment applicable to the time of year in questions . Grass seeding alone will be acceptable only during the months of April through September inclusive. Seeding may proceed, however, whenever it is in the interest of the applicant/contractor, but must be augmented with mulching, netting or other treatment.

P. The engineer/owner/contractor will be responsible for field locating the clearing limits and establishing those boundaries with bright colored flagging. The contractor shall clear to the limits as established on this plan and flagging in the field.

Q. Tie impervious surfaces (roofs, streets, drives, etc.) to the completed drainage system as soon as possible.

R. The necessary facilities shall be maintained on site to prevent debris, dust, and mud from impacting public facilities and other property owners.

S. All work associated with stabilizing the disturbed areas shall be in accordance with Section 8-01 of the Standard Specifications for Road, Bridge, and Municipal Construction, unless approved otherwise by the City.

T. All erosion control measures shall remain in place and be properly maintained until the disturbed areas have been stabilized.

U. The City shall be responsible for the inspection and acceptance of all clearing and grading work and erosion and sedimentation control facilities. The applicant shall notify the City 48 hours in advance of each required inspection.

1. Inspection No. 1 - Installation of erosion control facilities/prior to clearing.
2. Inspection No. 2 - Completion of clearing.
3. Inspection No. 3 - Upon completion of excavation, filling, and earthwork.
4. Inspection No. 4 - Completion of project.
5. Inspection No. 5 - Work in City right-of- way.

V. Inspection of the storm drainage system must be called for before any backfill is placed for the storm drain system.



**PWS.20.050 Conveyance.**

A. Pipe. Storm drain pipe within a public right-of-way or easement shall be sized to carry the maximum anticipated runoff from the possible contributing area.

The minimum main size shall be 12 inches in diameter. Lateral lines may be six inches in diameter. Nothing shall preclude the City from requiring the installation of a larger sized main if the City determines a larger size is needed to serve adjacent areas or for future service.

All pipe for storm mains shall comply with one of the following types:

1. Polyvinyl Chloride. PVC pipe per Section 7-04 of the current WSDOT Standard Specifications.
2. Plain Concrete. Plain concrete pipe per WSDOT/APWA Standard Specifications as set forth in Section 7-04.
3. Reinforced Concrete. Reinforced concrete pipe per WSDOT/APWA Standard Specifications as set forth in Section 7-04.
4. Ductile Iron. Ductile iron pipe per Section 9-30, WSDOT Standard Specifications.
5. Polyethylene: PE smooth wall pipe per Advanced Drainage Systems (ADS) N-12 constructed per WSDOT/APWA Standard Specifications Section 7-04.

B. Channels. The City encourages the use of open vegetated channels to convey stormwater runoff when possible. Any open channels proposed to be located within public right-of-way shall require special approval from the director of public works.

**PWS.20.060 Staking.**

All surveying and staking shall be performed by an engineering or surveying firm capable of performing such work. The engineer or surveyor directing such work shall be licensed as a professional engineer or professional land surveyor by the state of Washington.

A preconstruction meeting shall be held with the City prior to commencing staking. All construction staking shall be inspected by the City prior to construction.

The minimum staking of storm sewer systems shall be as directed by the City engineer or as follows:

- A. Stake centerline alignment every 50 feet with cut or fill to invert of pipe.
- B. Stake location of all catch basins, manholes and other fixtures for grade and alignment with cut or fill to grate or lid and invert of all pipes.
- C. Grade stake or slope stake (as appropriate) at intervals, sufficient to control location, size and depth of retention/detention facilities.

**PWS.20.070 Trench excavation.**

A. Clearing and grubbing where required shall be performed within the easement or public right-of-way as permitted by the City and/or governing agencies. Debris resulting from the clearing and grubbing shall be disposed of by the owner or contractor in accordance with the terms of all applicable permits.

B. Trenches shall be excavated to the line and depth designated by the City to provide a City approved minimum of cover over the pipe. See details as applicable. Except for unusual circumstances where approved by the City, the trench sides shall be excavated vertically and the trench width shall be excavated only to such widths as are necessary for adequate working space as allowed by the governing agency and in compliance with all safety requirements of the prevailing agencies. See detail. The trench shall be kept free from water until joining is complete. Surface water shall be diverted so as not to enter the trench. The owner shall maintain sufficient pumping equipment on the job to insure that these provisions are carried out.

C. The contractor shall perform all excavation of every description and whatever substance encountered and boulders, rocks, roots and other obstructions shall be entirely removed or cut out to the width of the

trench and to a depth six inches below sewer line grade. Where materials are removed from below pipe grade, the trench shall be backfilled to grade with material satisfactory to the City and thoroughly compacted.

D. Trenching and shoring operations shall not proceed more than 100 feet in advance of pipe laying without approval of the City, and shall be in conformance with Washington Industrial Safety and Health Administration (WISHA) and Office of Safety and Health Administration (OSHA) Safety Standard.

E. The bedding course shall be constructed to grade with hand tools in such a manner that the pipe will have bearing along the entire length of the barrel. The bell holes shall be excavated with hand tools to sufficient size to make up the joint.

F. Gravel backfill for pipe bedding shall be installed in conformance with Section 2-09 of the Standard Specifications (WSDOT). See drawing 2-8.

1. Bedding for Rigid Pipe (Ductile Iron Pipe). Gravel backfill for rigid pipe bedding shall consist of crushed, processed, or naturally occurring granular material. It shall be essentially free from various types of wood waste or other extraneous or objectionable materials. It shall have such characteristics of size and shape that it will compact readily and shall meet the following specifications for grading and quality:

<b>Sieve Size</b>	<b>Percent Passing*</b>
3/4" Square	100
3/8" Square	95 - 100
U.S. No. 8	0 - 10
U.S. No. 200	0 - 3
Sand Equivalent	35 MIN.

\*All percentages are by weight.

2. Bedding for Flexible Pipe (PVC Pipe). Gravel backfill for flexible pipe (PVC pipe) bedding shall consist of crushed, processed, or naturally occurring granular material. It shall be essentially free from various types of wood waste or other extraneous or objectionable materials. It shall have such characteristics of size and shape that it will compact readily and shall meet the following specifications for grading and quality:

<b>Sieve Size</b>	<b>Percent Passing*</b>
3/4" Square	100
3/8" Square	95 - 100
U.S. No. 8	0 - 10
U.S. No. 200	0 - 3
Sand Equivalent	35 MIN.

\*All percentages are by weight.

Native material shall not be used for bedding, unless approved by the engineer.

**PWS.20.080 Backfilling.**

Backfilling and surface restoration shall closely follow installation of pipe so that not more than 100 feet is left exposed during construction hours without approval of the City. Selected backfill material shall be placed and compacted around and under the sewer pipe by hand tools. Special precautions shall be provided to protect the pipe to a point 12 inches above the crown of the pipe. The remaining backfill shall be compacted to 95 per-cent of the maximum density in traveled areas and road "prisms", 90 percent outside driveway,

4/19/00 Ordinance 02000-60

roadways, road prism, shoulders, parking or other traveled areas. Where governmental agencies other than the City have jurisdiction over roadways, the backfill and compaction shall be done to the satisfaction of the agency having jurisdiction. Typically, all utility trenches located in roadway sections, roadway "prisms", or beneath traffic bearing areas shall be backfilled with 5/8-inch minus crushed rock. Due to localized conditions, the City may allow/permit the backfill of the trench section with suitable excavated material, as determined by the City, or if suitable native material is not available from trenching operations, the City may order the placing and compaction of gravel base conforming with Section 9-03.10 of the Standard Specifications (WSDOT) for backfilling the trench. All excess material shall be loaded and hauled to waste.

**PWS.20.090 Street patching and restoration.**

See PWS.15.200 and PWS.15.210 for requirements regarding street patching and trench restoration.

**CITY OF SAMMAMISH  
WASHINGTON**

**ORDINANCE NO. O2000-60**

---

**AN ORDINANCE OF THE CITY OF SAMMAMISH,  
WASHINGTON, ADOPTING INTERIM PUBLIC WORKS  
STANDARDS**

WHEREAS, the City lacks adopted standards to design capital improvement projects and review development projects; and

WHEREAS, the City will be developing appropriate standards as part of its comprehensive planning process; and

WHEREAS, until the comprehensive plan is completed and adopted, the City Council desires to adopt interim standards; and

WHEREAS, the City has conducted an environmental review of the interim standards in accordance with the State Environmental Policy Act, Chapter 43.21C RCW; and

WHEREAS, the City Council has conducted a public hearing to receive comments on the proposed interim standards;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF SAMMAMISH, WASHINGTON, DO ORDAIN AS FOLLOWS:

Section 1. Adoption of Interim Plan. The City hereby adopts the Interim Public Works Standards attached hereto as Exhibit "A" and incorporated herein by reference.

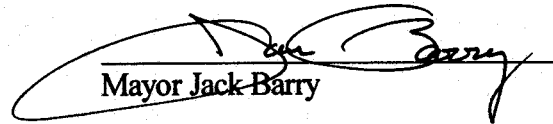
Section 2. Severability. Should any section, paragraph, sentence, clause or phrase of this Ordinance, or its application to any person or circumstance, be declared unconstitutional or otherwise invalid for any reason, or should any portion of this Ordinance be pre-empted by state or federal law or regulation, such decision or pre-emption shall not affect the validity of the remaining portions of this Ordinance or its application to other persons or circumstances.

Section 3. Effective Date. This Ordinance, or a summary thereof, shall be published in the official newspaper of the City, and shall take effect and be in full force five days after the date of

publication.

**ADOPTED BY THE CITY COUNCIL AT A REGULAR MEETING THEREOF ON  
THE 19<sup>th</sup> DAY OF April, 2000.**

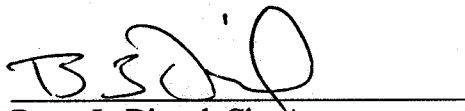
CITY OF SAMMAMISH

  
Mayor Jack Barry

ATTEST/AUTHENTICATED:

  
Ruth Muller, City Clerk

Approved as to form:

  
Bruce L. Disend, City Attorney

Filed with the City Clerk: *April 12, 2000*  
Passed by the City Council: *April 19, 2000*  
Ordinance No. *02000-60*  
Date of Publication: *April 26, 2000*

City of Sammamish  
State Environmental Policy Act (SEPA)  
**Environmental Checklist**

**PART I: PROJECT INFORMATION**

1. Name of the Proposal: *City of Sammamish Interim Public Works Standards*
2. Applicant:
  - a. Name: *City of Sammamish*
  - b. Address: *704 228<sup>th</sup> Avenue NE PMB 491*
  - c. City, State and Zip: *Sammamish, WA 98053*
  - d. Phone: *425-898-0660*
3. Agent:
  - a. Name: *Ben Yazici, Director of Public Work and Finance*
  - b. Address: *same as above*
  - c. City, State and Zip: *same as above*
  - d. Phone: *same as above*
4. Description of the Proposal: *Interim standards for general public works activities, street vacations, street improvement and storm drainage.*
5. Scale of the Proposed Project:
  - a. Size of the site in acres: *The City of Sammamish occupies about 22 square miles.*
  - b. Total area of proposed building in square feet: *Does not apply*
6. Location of the Proposed Project:
  - a. Site address: *Does not apply*
  - b. Tax parcel number: *Does not apply*
7. Comprehensive Plan designation of the site: *All plan designations in the City are impacted.*
8. Zoning of the site: *All zoning designations in the City are impacted.*
9. Shoreline Designation of the site: *All four shoreline designations are impacted.*
10. Description of the existing site: *The City of Sammamish is a suburban community of about 30,000 people occupying the rolling plateau immediately east of Lake Sammamish. It includes eleven miles of Lake Sammamish waterfront between Redmond and Issaquah and two large lakes (Beaver and*

*Pine). The land uses are almost exclusively residential, predominantly single-family, with two small shopping areas and no non-retail employment. The City is about half build-out within its existing boundaries.*

11. Adjacent land uses: *The City is bounded on the north by Redmond, on the west by Lake Sammamish, on the south by the Issaquah, and on the east by the urban growth boundary above the eastern edge of the Snoqualmie River valley.*
12. Estimate of timing for completion: *These interim standards will serve the City until the Comprehensive Plan is complete and more comprehensive standards are adopted as part of implementing the new Plan. Most of these interim standards will likely be retained in the expanded standards.*
13. List any environmental surveys or reports that have been prepared relating to this proposal: *The City has based these interim standards on existing standards of peer cities.*

## **PART II: ENVIRONMENTAL IMPACTS**

### **1. Earth**

- a. General description of the site (circle one):
  - i. Flat
  - ii. Rolling
  - iii. Hilly
  - iv. steep slopes
  - v. other (describe): *All topographic conditions are represented.*
- b. What is the steepest slope on the site (in percent slope)? *10%*
- c. What general types of soil are found on the site? *A full range of soil types will be encountered.*
- d. Are there any surface indications or history of unstable soils on the site, or in the immediate vicinity? *Does not apply.*
- e. Do you propose any proposed filling or grading on the site? If so, describe, including the source of any fill. *Does not apply.*
- f. Could soil erosion occur as a result of clearing, construction or use? If so, describe. *Does not apply*
- g. What measures will you take to reduce and control erosion on the site? *Does not apply.*

- h. About what percentage of the site will be impervious surface after construction? ***Does not apply.***

## 2. Air

- a. What types of emissions to the air might result from the proposal (for examples, dust, automobile exhaust, smoke, etc.)? If any, describe, including quantities. ***Does not apply.***
- b. Are there off-site sources of air emissions that could affect your proposal? ***Does not apply.***
- c. What measures will you take to reduce and control emissions to the air, if any? ***Does not apply.***

## 3. Water

- a. Surface water
  - i. Describe any surface water bodies (lakes, streams, ponds or wetlands) on, or in the immediate vicinity of the site. ***The City of Sammamish includes eleven mile of Lake Sammamish waterfront, all of Beaver and Pine Lakes, and about fifteen streams in three major basins: Sammamish, Bear Creek and Issaquah Creek.***
  - ii. Will the proposed project require any work over, in or within 200 feet of the described surface water bodies? ***Some public works projects will be within 200 feet of these surface water bodies.***
  - iii. Will any amount of fill be placed in or removed from the surface water bodies? If so, describe the approximate quantities and source and/or disposal site for these materials. ***Does not apply.***
  - iv. Will the proposed project require surface water withdrawals or diversions? If so, describe, including the purpose and approximate quantity. ***Does not apply.***
  - v. Does the proposed site lie within the 100-year floodplain? If so, show the floodplain boundary on the attached site plan. ***Some properties on Lake Sammamish are within the 100-year flood plain.***
  - vi. Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volumes. ***Does not apply.***
- b. Ground water
  - i. Does the proposal involve withdrawal from, or discharge to, ground water? If so, describe the purpose and anticipated volumes. ***Does not apply..***
  - ii. Does the proposal anticipate discharge from a septic system or similar source? If so, describe. ***Does not apply.***



#### 4. Plants

- a. Circle any of the following types of vegetation found on the site, and list specific species for circled types:
  - i. Deciduous trees: *Alder, Maple, Birch, Aspen*
  - ii. Evergreen trees: *Fir, Cedar, Pine, Hemlock*
  - iii. Shrubs: *All typical lowland Puget Sound native species, plus domesticated landscape varieties.*
  - iv. Pasture: *Typical species in mostly abandoned, but some active, horse and cattle pastures*
  - v. Grass: *All typical urban species.*
  - vi. Crop or grain: *None*
  - vii. Wet soil plants: *Cattail, Buttercup, Skunk Cabbage, Bulrush*
  - viii. Water plants: *Water lily, Eelgrass, Milfoil*
  - ix. Other types of vegetation: *Typical to disturbed Puget Sound suburban environments.*
- b. What kinds and amounts of vegetation will be removed or altered by the proposed project? *Some public works projects will remove and alter vegetation. Some projects will add new vegetation by landscape plantings.*
- c. Are any threatened or endangered plant species known to on the site? If so, describe. *Does not apply.*
- d. Does this proposal include any landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site? If so, describe. *Does not apply.*

#### 5. Animals

- a. Circle below any animals that have been observed, or are known to be, on the proposed site:
  - i. Birds: *hawk owl heron eagle songbirds* other (list)
  - ii. Mammals: *deer bear beaver* other (list)
  - iii. Fish: *bass salmon trout* other (list)
  - iv. Reptiles: *snakes toads frogs lizards* other (list)
- b. Are there any threatened or endangered animal species know to be on or near the site? If so, describe. *ESA listed salmon species are present in some City streams and Lake Sammamish.*
- c. Is the site known to be part of a migration route for any animal? If so, describe. *Does not apply.*
- d. Is the site on or near a known protected area for animals or wildlife corridor? If so, describe. *Wildlife corridors have been identified in the King County Comprehensive Plan. They are not currently protected by City regulations, but may be when the City's Comprehensive Plan and implementing ordinances are adopted.*
- e. Does this proposal include any measures to preserve, protect or enhance wildlife? If so, describe. *Does not apply.*

## 6. Energy and Natural Resources

- a. Circle below any type of energy that will be required to meet the needs of the proposed project. Describe the source and use of each circled type.
  - i. Electricity: *for street lighting*
  - ii. Natural gas
  - iii. Heating oil
  - iv. Gasoline: *for construction vehicles and equipment*
  - v. Diesel fuel: *for construction vehicles and equipment*
  - vi. Propane
  - vii. Wood
  - viii. Solar
  - ix. Other
- b. Would this project affect the potential use of solar energy by adjacent properties? If so, describe. *No.*
- c. Does this proposal include any measures to conserve energy? If so, describe. *No.*

## 7. Environmental Health

- a. Fire and hazardous waste.
  - i. Are there any environmental health problems, such as exposure to toxic chemicals, risk of fire or explosion, or spill of hazardous waste, which could occur as a result of this proposal? If so, describe. *None are anticipated.*
  - ii. Would any special emergency services be required to deal with these risks? If so, describe. *No.*
  - iii. Does the proposal include any measure to reduce or control any risks of fire or the release of hazardous wastes? If so, describe. *No special measures beyond routine construction site preparedness.*
- b. Noise.
  - i. Are there any existing noises near the site that might affect this project? If so, describe. *No.*
  - ii. What types and levels of noises will be generated during the construction phase of this proposed project? *Does not apply.*
  - iii. Will this project be the source of any noticeable noise when completed? If so, describe. *Does not apply.*
  - iv. Does this proposal include any measures to reduce or control any potentially adverse impacts of noise? If so, describe. *Construction hours are limited by City ordinance.*

## 8. Land and Shoreline Use

- a. Describe the current use of the site, including any structures. *Does not apply.*
- b. Describe the uses of properties adjacent to the proposed site. *See response to question 10, Part I, above.*
- c. Will this project include the demolition of any existing structures? If so, describe. *No.*
- d. Will the proposed project displace any persons or business? If so, describe. *No.*
- e. Approximately how many people will live or work in the completed project? **Does not apply.**

## 9. Housing

- a. Will the proposed project displace any existing housing units? If so, describe, including the income level (high, medium or low) of the displaced tenants. *No.*
- b. Does the proposed project include any measures to increase the affordability of housing in the City of Sammamish? If so, describe. *No*

## 10. Aesthetics

- a. What is the tallest height of any proposed structure, including antennas and chimneys? *Does not apply.*
- b. If the project includes buildings, what exterior materials are planned for the structures? *Does not apply.*
- c. What is the proposed project's ratio of building coverage to lot size (expressed as a percentage)? *Does not apply.*
- d. Would the proposed project alter or obstruct any views? If so, describe. *No.*
- e. Does the proposal include any measures to reduce or control any potentially adverse aesthetic impacts? If so, describe. *Does not apply.*

## 11. Light and Glare

- a. Are there existing sources of off-site light or glare that could adversely impact this proposed project? If so, describe. *No.*
- b. Will the proposed project generate any light or glare? If so, describe, including the usual time of day. *Does not apply.*

- c. Could light or glare from the finished project be a nuisance, interfere with views, or affect wildlife? If so, describe. *Does not apply.*
- d. Does the project include any measures to reduce or control any potentially adverse impacts of light or glare? If so, describe. *Does not apply.*

## 12. Recreation

- a. Are there any park or recreation opportunities in the immediate vicinity of the proposed project? If so, describe. *Park and recreation facilities are near some public works projects.*
- b. Would the proposed project displace any existing recreational uses? If so, describe. *No.*
- c. Does the project include any measures to reduce or control any potentially adverse impacts on existing recreation activities? If so, describe. *Does not apply.*

## 13. Historic and Cultural Preservation

- a. Are there any structures or objects eligible, proposed or listed in local, state or national preservation registers on or near the site? If so, describe. *Some structures and objects are near some proposed public works projects.*
- b. Is there anything about the proposed site, or adjacent properties, known to be of archaeological, scientific or cultural importance? If so, describe. *Some rights-of-way and some adjacent properties to some public works projects may be of such importance.*
- c. Does the project include any measures to reduce or control any potentially adverse impacts on historic or cultural structures, objects or sites? If so, describe. *Any public works project activity that uncovers such potential objects or sites will comply with state law regarding their preservation and protection.*

## 14. Transportation

- a. On the attached site plan show all streets and highways serving the proposed site and proposed access to the proposed project. *Does not apply.*
- b. Will the proposal require any new streets or improvements to existing streets, not including driveways? If so, describe. *Does not apply.*
- c. How many vehicular trips per day will be attracted and generated by the completed project? *Does not apply.*
- d. Is the proposed site currently served by public transit? If not, what is the approximate distance to the nearest transit stop? *Does not apply.*

- e. Does the proposed project include any measures to reduce or control any potentially adverse impacts on the City's transportation system? If so, describe. **Does not apply.**

**15. Public Services**

- a. Will the proposed project result in an increase in the demand for, or a change in the character or level of any of the following public services? If so, circle the service and describe the impact. **Does not apply.**
  - i. Police protection:
  - ii. Fire protection:
  - iii. Emergency medical response:
  - iv. Street maintenance:
  - v. Park and recreation services:
  - vi. Planning and permitting:
  - vii. Water services:
  - viii. Sanitary Sewer services:
  - ix. Storm water management:
  - x. Schools:
- b. Does the proposed project include any measure to reduce or control any potentially adverse impacts on public services? If so, describe. **Does not apply.**

**16. Utilities**

- a. Identify the utility provider for each of the following: **Does not apply.**
  - i. Electricity
  - ii. Water
  - iii. Sanitary Sewer
  - iv. Telephone
  - v. Natural gas
  - vi. Solid waste disposal
- b. Does the proposed project include any measures to reduce or control any potentially adverse impacts on utilities? If so, describe. **Does not apply.**

***I hereby certify that:***

- 1. The information in this application and attachments thereto is true and correct to the best of my knowledge.***
- 2. I have an ownership interest in the subject land.***
- 3. I am authorized to file this application on behalf of all persons with ownership interest.***
- 4. I authorize the City of Sammamish to place one or more signs with the statement "Notice of Application or Notice of Land Use Action" on the subject property.***

---

Signature of person with ownership interest  
Ben Yazici, PE  
Director of Public Works/Financial Services

date



704 – 228<sup>th</sup> Avenue NE • PMB 491 • Sammamish, WA 98074 • Phone 425-898-0660 • Fax 425-898-0669

State Environmental Policy Act (SEPA)  
Determination of Nonsignificance  
(DNS)  
for  
Interim Sammamish Transportation Plan

**Proposal Description:** Interim Sammamish 6-Year Transportation Plan, Interim Sammamish Capital Improvement Plan for Transportation (2001-2006), Interim Sammamish Functional Classification of Streets and Interim Sammamish Public Works Standards dated April 19, 2000.

**SEPA Action:** The environmental review includes the preparation of SEPA Checklist for each component of the comprehensive planning report document series. The four (4) reports include and describe certain SEPA exempt activities (for example, WAC 197-11-800 2 (c) roadway projects) as well as major transportation projects which will require separate SEPA review and action for individual projects. The SEPA action under this determination is made for the maintenance, planning, budgetary, administrative and procedural actions which do not change the environment. The planned action which is not otherwise SEPA exempt is authorized unless 1) separate permits are required and 2) where a change in the environment is proposed. On September 1, 2000, the City of Sammamish became Lead Agency for SEPA action on this proposal.

**Required City of Sammamish Permits:** No permits apply to the adoption of planning reports although individual projects described within each planning report may require permits. Each project will address permits at the time of implementation.

**Applicant:** Public Works Department, City of Sammamish

**Applicable Documents (Proposal):** Four (4) report documents in binders are the proposal. The lead agency for this proposal has determined that the proposal does not have a probable significant adverse impact on the environment. An Environmental Impact Statement (EIS) is not required under RCW 43.21C.030. This decision was made after review of the four (4) completed environmental checklists. The SEPA checklist information is available to the public on request. The SEPA Checklist meets City of Sammamish environmental review needs for the current proposal and will accompany the proposal to the decision makers (the City Council) on the proposal.

**Lead SEPA Agency:** City of Sammamish, WA

**Contact Person:** Matt Mathes, Responsible SEPA Official

**Signature:** \_\_\_\_\_ **Date** \_\_\_\_\_

Phone: 425-898-0660 xt. 223

Fax: 425-898-0669

**Mailing Address:** 704 228<sup>th</sup> Ave NE, PMB 491  
Sammamish, WA 98053

**Office Address:** 486 228<sup>th</sup> Ave NE  
Sammamish, WA 98053

### **Appeals**

The SEPA determination is a Type II decision. The decision may be appealed to the City Hearing Examiner. The appeal must be filed within fourteen (14) days of the date of the determination which was issued on April 21, 2000, by not later than May 5, 2000.

The appeal must be filed on a form maintained at City of Sammamish, WA offices. The one page form was adopted on April 19, 2000 and the appeal must accompany a fee of \$125 (cash or check).

The appeal and fee must be filed by not later than 5:00PM on May 5, 2000 at the City of Sammamish offices at the address listed above, or by mail (postmarked by May 5, 2000).

**Document Availability:** A copy of the SEPA Checklists for the four (4) report series are available for review at City of Sammamish, City Hall located at 486 228<sup>th</sup> Ave NE, Sammamish, WA 98053, 8:30 AM to 5:00 PM, Monday – Friday. Copies may be purchased for \$15 each.