Advance Packet 8/31/07

For

Monday, September 10, 2007 Council Meeting

Included in this packet is documentation to support the following 9-10-07 Agenda Items:

Ordinance

A. First and second reading by title only with possible adoption of Ordinance 07-O-594, an ordinance amending Chapter 17.92, Off-Street Parking and Loading Regulations of the City of Brookings Land Development Code. [pg. 3]

Public Hearings

A. File #LDC-2-06, revisions to Title 17, Chapters 17.170, Street Standards, 17.168, Utilities, and 17.80, Site Plan Approval of the Brookings Municipal Code. [pg. 21]

IN AND FOR THE CITY OF BROOKINGS STATE OF OREGON

In the Matter of an Ordinance Amending Chapter 17.92, Off-Street Parking and Loading)) Ord	dinance No. 07-O-594
Regulations of the City of Brookings Land)	
Development Code.)	

The City of Brookings ordains as follows:

Chapter 17.92, Off-Street Parking and Loading Regulations, of the City of Brookings Land Development Code is amended to read as follows:

Chapter 17.92

OFF-STREET PARKING AND LOADING REGULATIONS

Sections:	
17.92.010	Generally.
17.92.020	Off-street loading.
17.92.030	Off-street parking.
17.92.040	Number of spaces required.
17.92.050	Location of parking facilities.
17.92.060	Use of parking facilities.
17.92.070	More than one use.
17.92.080	Joint use of facilities.
17.92.090	Parking – Front yard.
17.92.100	Development and maintenance standards for off-street parking areas.
17.92.110	Handicapped parking.
17.92.120	Bicycle Parking Standards

17.92.010 Generally.

Map 17.92.939 – 1 Downtown Business District

No development permit shall be issued until plans and evidence are presented to show how the off-street parking and loading requirements are to be fulfilled and that property is and will be available for the exclusive use as off-street parking and loading space, except for public and private parking areas that can be temporarily converted to public plazas.. The subsequent use of the property for which the permit is issued shall be

conditional upon the continuance and availability of the amount of parking and loading space required by this chapter.

17.92.020 Off-street loading.

Every hospital, institution, hotel, commercial or industrial building hereafter erected or established having a gross floor area of 10,000 square feet or more shall provide and maintain at least one off-street loading space plus one additional off-street loading space for each additional 20,000 square feet of gross floor area. Any use requiring one-half or more of a loading space shall be deemed to require the full space. Each loading space shall be not less than 10 feet wide, 25 feet in length and 14 feet of vertical clearance.

17.92.030 Off-street parking.

Off-street parking spaces shall be provided and maintained as set forth in this chapter for all uses in all zoning districts except that a portion of the central commercial (C-3) district is exempt from these regulations. This exempt area is defined as parcels fronting on Hwy. 101 (Chetco Ave.) easterly from Pacific Street to Oak St.

Parcels within the Downtown Business District (DBD) (see description below) may pay an in lieu parking space construction fee when it is not possible to provide some or all of the required off-street parking. The funds shall be retained by the City and shall be used exclusively for the purpose of acquiring and developing public off-street parking facilities in the DBD. The in lieu fee is set by resolution. The DBD is described as including the first tier of lots on the north side of Highway 101 from Center St. to Oak St., to the north side of Railroad Street and from Center St. on the west to Alder St. on the east. See Map 17.92.030 -1.

Off-street parking spaces in all other areas within the City shall be provided at the time:

A new building is erected; or

A building existing on the effective date of this code is enlarged to the extent that parking requirements are increased in terms of units listed in BMC 17.92.040; or

The use is changed to another use with greater parking requirements.

When calculating parking requirements:

- A. Any use requiring one-half or more of a parking space shall be deemed to require the full space.
- B. Parking spaces provided to meet the requirements of this chapter shall not be reduced in size or number to an amount less than required by this code for the use

occupying the building. The provision and maintenance of off-street parking space is a continuing obligation of the property owner.

- C. Bicycle parking may substitute for required motor vehicle parking pursuant to the provisions of 17.92.120 if:
- 1. The minimum required motor vehicle parking is more than 10 spaces;
 - 2. No more than 10 percent of the required motor vehicle spaces are substituted with bicycle parking;
 - 3. For every one bicycle parking space provided, the motor vehicle standard is reduced by one space; and
 - 4. The use is not a new or existing residential use.

Existing motor vehicle parking may be converted to take advantage of this provision.

17.92.040 Number of spaces required.

The number of off-street parking spaces required shall be set forth in the following schedule:

		Use	Requirement
A.	Res	sidential	-0
	1.	Single and two-family dwelling	2 spaces per dwelling unit
		Multiple-family dwelling containing 3 or more dwelling units	1-1/2 spaces per studio or 1 bedroom unit; units with more than 1 bedroom need 2 spaces
	3.	Mobile home park	2 spaces per dwelling plus 1 guest space/ 5 units
B.	Con	l nmercial-Residential	
	1.	Recreation vehicle park	1 space per recreation vehicle space and 3 spaces for manager residence and guest parking
	2.	Hotel or motel	1 space per guest room or suite plus 1 additional space for the owner or manager plus 1 space/10 rooms

	2	Club: lodge	Spaces to most the combined requirements of the
l	ا.د	Club; lodge	Spaces to meet the combined requirements of the uses conducted such as hotel, restaurant,
İ	ł		auditorium, etc.
			auditorium, ctc.
	ı		
		•	
1			
1	-		
	- {		
1			
	ı		
ł			
CI	neti	tutions	
C. II			
H	- 1	Welfare or correctional institution,	1 space per 5 beds for residents, patients or inmates
		convalescent hospital, nursing home, rest	
		home, home for the aged, sanitarium,	
1		residential care facility, or similar institution	
	Į		
1	- 1		
	2.	Hospital	3 spaces per 2 beds
		·	5 spaces per 2 seas
D. 1	Pla	ces of Public Assembly	
	1.	Church, auditorium, gymnasium, community	1 space per 4 seats or 8 feet of bench length in the
		center, mortuary, or other place of public	main auditorium or, if no permanent seats are
		assembly	provided, 1 space per 75 square feet of floor area
ı	Ì		
1			
	2	Library, reading room, museum, art gallery	1 100 5-4 -5
	۷.	Library, reading room, museum, art gamery	1 space per 400 square feet of customer service area
<u> </u>			alea
	E	Schools	
1			
	1	Preschool nursery, day nursery or	2 spaces per teacher or adult supervisor
		kindergarten	2 spaces per teacher of adult supervisor
	2.	Elementary or junior high school	2 spaces per classroom and special instruction area
			1
	3.	High school	8 spaces per classroom and special instruction area,
	٠.		or the requirement for a place of public assembly,
1			whichever is the greater
1			
1			
—		0.13	
	4.	College	Parking needs based on a Parking Management
			Plan for all uses contemplated for the entire
			campus.
F. C	Con	nmercial Amusement	
	- 71		

1.	Stadium, arena, theater	1 space per 4 seats or 8 feet of bench length
2.	Bowling lanes	6 spaces per lane
3.	Dance hall, skating rink, pool hall or similar indoor	1 space per 100 square feet of total floor area
4.	Miniature Golf Course	1 ½ spaces per hole
5.	Swimming pool	1 space per 75 sq. ft. of swimming pool
6.	Tennis, racquet ball courts	2 spaces per court
7.	Other outdoor recreation facilities	1 space per 500 sq. ft. of land area
G. Co	mmercial	
1.	Retail store, except as provided in BMC 17.92.040 (G)(2)	1 space per 400 square feet of customer service area.
2.	Retail store exclusively handling bulky merchandise such as furniture and large appliances.	1 space per 600 square feet of customer service floor area.
3.	Auto/ vehicle/ boat dealership	1 per 500 sq ft. of building.
4.	Vehicle/ boat repair	1 space per 250 sq. ft. of service bay area
5.	Gas stations	1 space per employee
6.	Service or repair shop, non vehicle	1 space per 800 square feet of total floor area.
7.	Bank; office (except medical or dental)	1 space per 400 square feet of total floor area
8.	Medical or dental clinic	1 space per 200 square feet of customer service area.

	9.	Eating or drinking establishment	1 space per 4 seats or 1 space per 100 square feet of dining or drinking area, whichever is greater
	10.	Eating or drinking establishment, with drive- thru	1 space per 4 seats or 1 space per 100 square feet of dining or drinking area, whichever is greater, and 5 spaces in drive-thru queue
	11.	Open air market.	1 space per 1,500 sq. ft. of land area.
H.	Ind	ustrial	
	1.	Storage warehouse; air, rail or trucking freight terminals	1 space per 1000 sq. ft. of storage floor area.
	2.	Wholesale establishments	1 space per 700 square feet of customer service area
	3.	Manufacturing facility	1 space per employee and 1 space per company vehicle. Multi-shift uses must have spaces equal to 150% of the number of employees on the maximum shift.
	4.	Contractor office/ storage	1 space per 800 sq. ft. of total floor area
I.		Other uses not specifically listed above shall full Committee. In determining the off-street parkings the above requirements as a general guide, parking spaces required to avoid undue interference.	ng requirements for said uses, the Committee shall and shall determine the minimum number of

17.92.050 Location of parking facilities.

Off-street parking spaces for dwellings shall be located on the same lot with the dwelling. Other required parking spaces shall be located on the same parcel or on another parcel not further than 1000 feet from the building or use they are intended to serve, measured in all directions from the outside boundaries of the subject parcel. The right to use the off-premise parking spaces must be approved after submittal of items as described in 17.92.080 below.

17.92.060 Use of parking facilities.

Required spaces must be maintained and available for parking. Spaces may not be used for the parking of equipment, storage of goods, inoperable vehicles, or other items

17.92.070 More than one use.

Where more than one use is included within any one building or on any single parcel, the parking requirements shall be the sum total of the requirements of the various uses; provided, however, where the operation of these different uses is such that the hours of operation or uses complement each other insofar as the parking demand is concerned, the Site Plan Committee may authorize a reduction in these requirements. The right to joint use of the parking spaces may be approved after submittal of items as described in 17.92.080 below.

17.92.080 Joint use of facilities.

The off-street parking requirements of two or more uses, structures or parcels of land may be satisfied by the same parking or loading space used jointly to the extent that it can be shown to the Site Plan Committee by the owners or operators of the use, structures or parcels that their operations and parking needs do not overlap in point of time. The applicant(s) must submit the following in writing as part of a building permit or land use permit review:

- A. The names and addresses of the uses and of the owners or tenants that are sharing the parking;
- B. The location and number of parking spaces that are being shared;
- C. The parking area must be within 1000 ft. of the use that it serves (that distance is measured in all directions from the outside boundary of the subject property;
- D. An analysis showing that the peak parking times of the uses occur at different times and that the parking area will be large enough for the anticipated demands of all uses;
- E. The right to joint use of the parking area must be described in a deed, lease, contract or other appropriate written document to establish the joint use for parking purposes. This agreement may restrict future changes to use of the property. This document must be recorded and a copy provided to the City.

F.

17.92.090 Parking - Front yard.

Unless otherwise provided, required parking and loading spaces shall not be located in a required front yard, except in the case of single-family and duplex dwellings, but such space may be located within a required side or rear yard.

17.92.100 Development and maintenance standards for off-street parking areas.

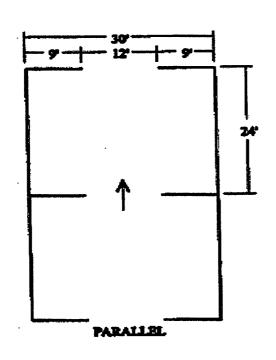
- A. Access. Except for single-family dwellings, duplex dwellings, and groups of no more than two parking spaces all other parking areas must be located and served by a driveway so there will be no backing movements or other maneuvering within a street or right-of-way other than an alley.
- B. Screening. A commercial off-street parking area for more than five vehicles shall be effectively screened by a sight-obscuring fence, hedge or planting on each side which adjoins property situated in a residential zone or the premises of any school.
- C. Lighting shall be provided so that all facilities are thoroughly illuminated and visible from adjacent sidewalks during all hours of use. Any lighting used to illuminate the off-street parking areas shall be so arranged that it will not project light rays directly upon any adjoining property in a residential zone. Lighting for parking facilities shall be energy efficient type.
- D. Surfacing. Areas used for parking and maneuvering of vehicles shall have dust-free, asphaltic or concrete surfaces, or other materials approved by the Site Plan Committee. This surface must be maintained adequately for all weather use and adequately drained so as to avoid flow of water across sidewalks, and constructed to support use by solid waste vehicles and fire-fighting apparatus.
- E. Vision Clearance. Commercial service drives shall have a minimum vision clearance area formed by the intersection of the driveway centerline, the street right-of-way line, and straight lines connecting a point on the driveway 20 feet from their intersection and 15 feet in both directions along the property line. Corner vision clearance requirements are found in 17.128.050 BMC.
- F. Curbing and Wheel Stops. Parking spaces along the outer boundaries of a parking lot shall be contained by a curb or a bumper rail so placed to prevent a motor vehicle from extending over an adjacent property, or a street or sidewalk. Wheel stops shall be a minimum of four inches in height and width, and six feet in length; shall be firmly attached to the ground, and so constructed as to withstand normal wear. Wheel stops shall be provided where appropriate for all spaces abutting property lines, buildings, landscaping, and no vehicle shall overhang a public right-of-way.
- G. Marking. All spaces shall be clearly marked, and such marking shall be replaced regularly, to remain visible.
- H. Landscaping. In all zones except SR, R-1, and R-2 zones, all parking facilities shall include landscaping to cover not less than seven (7) percent of the area devoted to outdoor parking facilities, including any landscaping required in

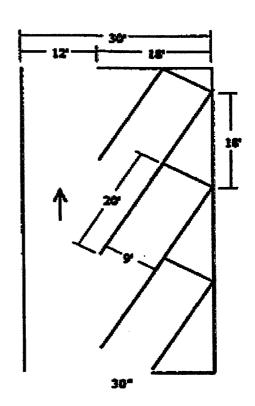
subsection B above. Said landscaping shall be distributed throughout the parking area, be provided with drip system or other conservation-type irrigation facilities and protective curbs or raised wood headers. It may consist of trees, plus shrubs, groundcover or related plant material. Parking facilities adjacent to streets must be screened from view by trees or plants a minimum of 3 feet in height. The landscape screening shall be a minimum of 5 feet in width from the property line and contain a minimum of 1 tree for each 60 feet of street frontage. No tree shall be planted within 20 feet of any street corner. At least 20 % of plantings must be drought resistant plants. As much as 30% of the landscaped area may be decorative rock or other hardscape materials. The landscape plan must be submitted at the time a development permit is requested.

I. Parking Layout and Design Criteria. All required parking areas shall be drawn to scale and designed in accordance with the following parking layout chart. The standard parking spaces shall be a minimum of 9 feet in width, 20 feet in length, have 8 feet of vertical clearance, and shall have a minimum 24-foot backup space except where parking is angled. Parking lots may have up to 30% of the spaces designated for compact cars. Compact car spaces must have signage stating they are reserved for small or compact cars only. A compact space measures 8 feet in width by 17 feet in length. Backup space requirement remains the same as for a standard space. Standards for bicycle parking spaces within a parking lot are found in BMC 17.92.120.

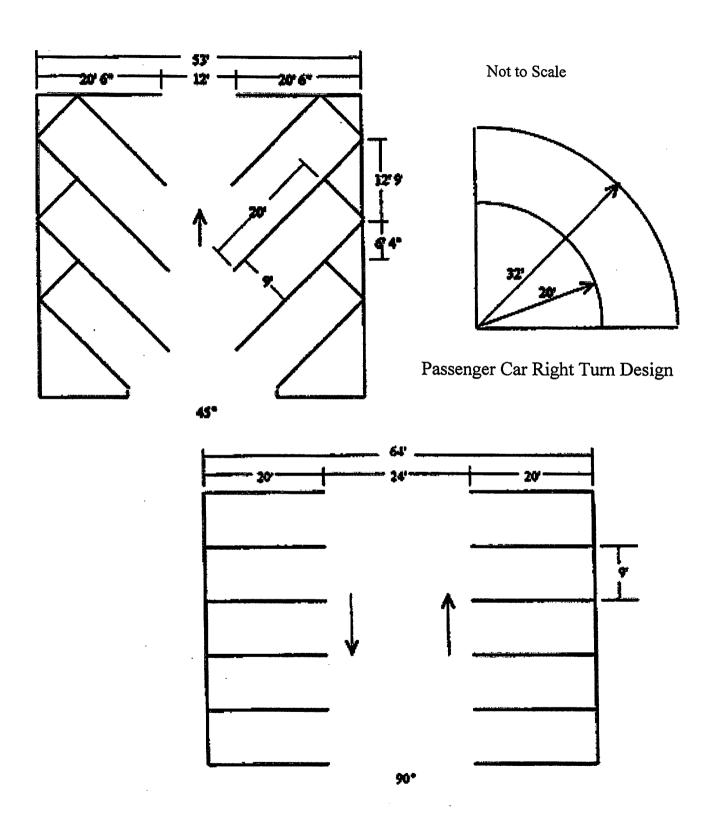
VEHICLE PARKING FACILITY DIAGRAMS

Not to Scale

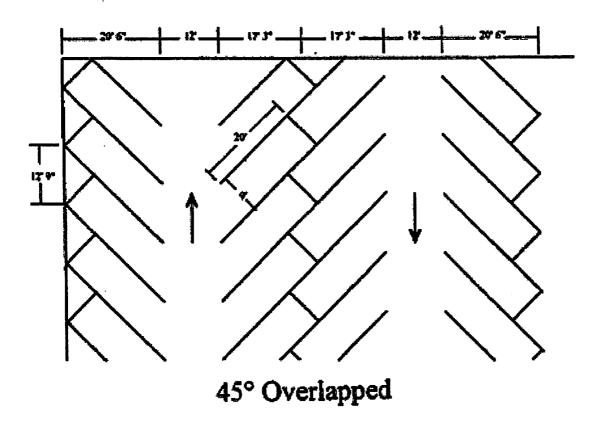




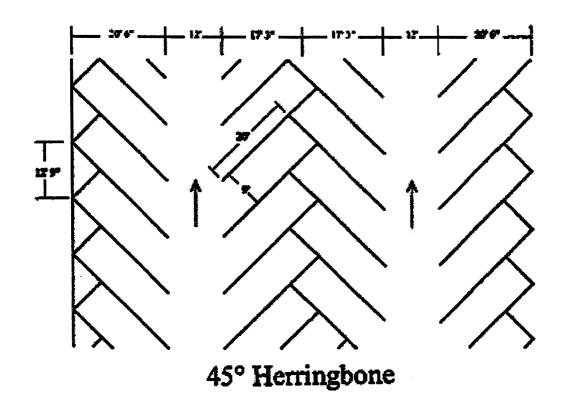
Page 11 of 16



Page 12 of 16



Not to Scale



Page 13 of 16

17.92.110 Handicapped parking.

A. Handicapped parking shall be provided at the following rate:

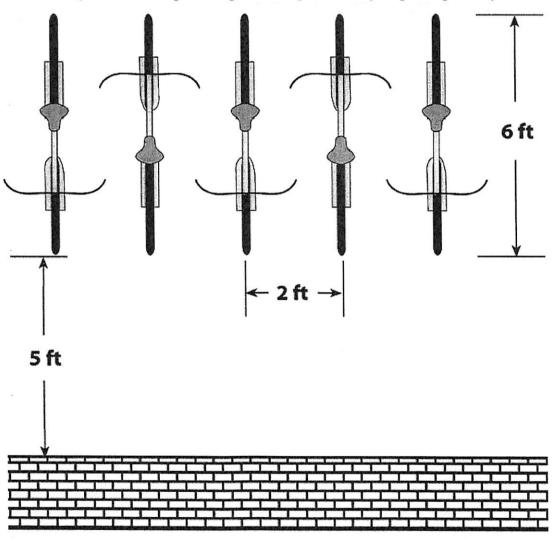
Total Parking in Lot	Minimum Required ADA Spaces
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 to 300	7
301 to 400	8
401 to 500	9
501 to 1,000	2 percent of total
1,000 and above	20 plus 1 for each 100 over 1,000

B. Parking Spaces. Handicapped parking spaces shall be a minimum of nine feet in width and shall have an adjacent access aisle of six feet in width. A minimum of one and a ratio of one "van" space for each eight required accessible spaces shall be provided. A "van" space shall be a minimum of nine feet wide with an adjacent access aisle of eight feet. Parking access aisles shall be a part of the accessible route to the building or facility entrance. Two parking spaces for handicapped may share a common access aisle.

17.92.120 Bicycle parking standards

- A. Location of Bicycle Parking Facilities. Bicycle parking facilities shall be located on-site in well lit, secure locations within 50 feet of well-used entrances.
- B. General design requirements for bicycle parking. All bicycle parking and maneuvering areas shall be constructed to the following minimum design standards:
 - 1. Surfacing: Outdoor bicycle parking facilities shall be surfaced in the same manner as a motor vehicle parking area. This surface will be maintained in a smooth, durable and well-drained condition.
 - 2. Parking Space Dimension Standard: Bicycle parking spaces shall be at least 6 feet in length, 2 feet in width and have 8 feet of vertical clearance.

- 3. Bike Rack: The bike rack must be compatible with current style of bike locks.
- 4. Lighting: Lighting shall be provided in a bicycle parking area so that all facilities are thoroughly illuminated and visible from adjacent sidewalks or motor vehicle parking lots during all hours of use. Any lighting used to illuminate the off-street parking areas shall be so arranged that it will not project light rays directly upon any adjoining property in a residential zone.
- 5. Aisles: A 5-foot aisle for bicycle maneuvering shall be provided and maintained beside or between each row of bicycle parking.
- 6. Signs: Where bicycle parking facilities are not directly visible from the public rights-of-way, entry and directional signs shall be provided to direct bicycles from the public rights-of-way to the bicycle parking facility.

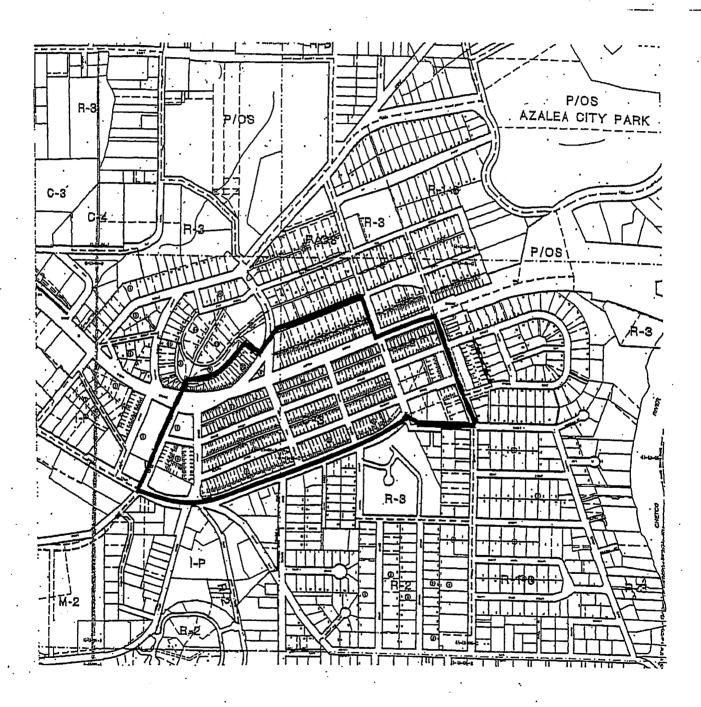


BICYCLE PARKING FACILITIES DIAGRAM

	Pat Sherman, Mayor
ATTEST:	
Finance Director/Recorder	

MAP 17.92.030 - 1

Downtown Business District



The first tier of lots on the north side of Hwy. 101 (Chetco Avenue) from Center St. Oak St., to the north side of Railroad St. and from Center St. on the west to Alder St. on the east.



COUNCIL AGENDA REPORT

To: Mayor and City Council

From: Dianne Morris, Planning Director

Date: August 31, 2007

Re: File # LDC-2-06 revisions to Chapter 17.170, Street Standards, 17.168, Utilities,

and 17.80, Site Plan Approval, Brookings Municipal Code (BMC).

<u>Subject:</u> Draft versions of Chapter 17.170, Street Standards and 17.168, Public Improvement Standards and Criteria for Utilities, BMC, and deletion of a section of Chapter 17.80, Site Plan Approval.

Background /Discussion: A hearing to consider these Chapters was continued from the City Council's August 27, 2007 meeting. The new proposed language has been inserted in these drafts. In Chapter 17.170, Street Standards, the remaining discussion item is the size of cul-desac to be required. The Fire Chief will be in attendance to discuss this at the Council hearing. Language covering the possibility of a reimbursement is also added in BMC 17.170.030(C). In Chapter 17.168, Utilities, BMC, the same reimbursement language is added. Also in BMC 17.168.020(1) the text is altered to reflect the possible requirement to up-sizing off-site infrastructure when constructing a single family or duplex dwelling.

<u>Recommendation:</u> Approval of the revisions to these Chapters and removing of the language in Chapter 17.80.040(C) to avoid conflicting requirements.

Financial Impact(s): None.

City Manager Review and Approval for placement on Council Agenda:

Gary Milliman, City Manager

Chapter 17.170 STREET STANDARDS

Draft August 28, 2007

New language is bold and italicized.

Sections:

17.170.010	Purpose
17.170.020	Definitions
17.170.030	General development standards and requirements.
17.170.040	Security improvement agreement.
17.170.050	Street construction standards.
17.170.060	Street standards.
17.170.070	Street improvements, deferred.
17.170.080	Street names and signs.
17.170.090	Traffic impact statement or analysis.
17.170.100	Access management.
17.170.110	Bicycle and pedestrian development standards.
17.170.120	Driveway approaches

17.170.010 Purpose. The purpose of this section is to provide a multi-modal circulation system within the city that preserves the flow of motorized traffic in terms of safety, capacity, functional classification, and level of service while at the same time providing and encouraging a safe and efficient bicycle and pedestrian system throughout the city.

17.170.020 <u>Definitions.</u> The following definitions apply for the purpose of this Section. Also see definitions in Chapter 17.8, BMC.

Access. A way or means of approach to provide pedestrian, bicycle, or motor vehicular entrance or exit to a property.

Access Classification. A ranking system for roadways used to determine the appropriate degree of access management. Factors considered include functional classification, the appropriate local government's adopted plan for the roadway, subdivision of abutting properties, and existing level of access control.

Access Management. The process of providing and managing access to land development while preserving the regional flow of traffic in terms of safety, capacity, and speed.

Bicycle Facilities. A general term denoting improvements and provisions made to accommodate or encourage bicycling, including parking facilities and all bikeways.

Bikeway. Any road, path, or way that is in some manner specifically open to bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are shared with other transportation modes. The five types of bikeways

are:

- 1. Multi-use Path. A paved 10 to 12-foot wide way that is physically separated from motorized vehicular traffic; typically shared with pedestrians, skaters, and other non-motorized users.
- 2. Bike lane. A 4 to 6-foot wide portion of the roadway that has been designated by permanent striping and pavement markings for the exclusive use of bicycles.
- 3. Shoulder Bikeway. The paved shoulder of a roadway that is 4 feet or wider; typically shared with pedestrians in rural areas.
- 4. Shared Roadway. A travel lane that is shared by bicyclists and motor vehicles.
- 5. Multi-use Trail. An unpaved path that accommodates all-terrain bicycles; typically shared with pedestrians.
- Through-connector. A short spur that provides through-connectivity for bicycle circulation between adjoining streets, between abutting dead-end roads, through a multiple-family dwelling cluster, or through a park.
- Corner Clearance. The distance from an intersection of a public or private road to the nearest driveway or street measured from the closest edge of the pavement of the intersecting road to the closest edge of the pavement of the connection along the traveled way.
- Cross Access. A commercial or industrial service drive providing vehicular access between two or more contiguous sites so the driver need not enter the public street system.
- Frontage Road. A public or private drive which generally parallels a public street between the right-of-way and the front building setback line. The frontage road provides access to private properties while separating them from the arterial street.
- Functional Area (Intersection). That area beyond the physical intersection of two roads that comprises decision and maneuver distance, plus any required vehicle storage length.
- Functional Classification. A system used to group public roadways into classes according to their purpose in moving vehicles and providing access.
- Joint Access (or Shared Access). A driveway connecting two or more contiguous sites to the public street system.
- Lot. A parcel, tract, or area of land whose boundaries have been established by some legal instrument, which is recognized as a separate legal entity for purposes of transfer of title, has frontage upon a public or private street, and complies with the dimensional requirements of this code.
- Lot, Corner. Any lot having at least two (2) contiguous sides abutting upon one or more streets, provided that the interior angle at the intersection of such two sides is less than one hundred thirty-five (135) degrees.

Lot Depth. The average distance measured from the front lot line to the rear lot line.

Lot Frontage. That portion of a lot extending along a street right-of-way line.

Non-conforming Access Features. Features of the property access that existed prior to the date of ordinance adopting and do not conform to the requirements of this ordinance.

On-site Improvements. Street facilities installed on the subject property.

Off-site Improvements. Street facilities not on the subject property.

Pedestrian Facilities. A general term denoting improvements and provisions made to accommodate or encourage walking, including sidewalks, accessways, crosswalks, ramps, paths, and trails.

Plat. An exact and detailed map of the subdivision of land.

Private Road. A local access road that is built to City standards and that the City has not officially accepted for purposes of jurisdiction, or an existing local access road that was not constructed to City standards and was never intended to be dedicated to the public.

Public Road. A road over which the public has a right of use that is a matter of public record.

Reasonable Access. The minimum number of access points, direct or indirect, necessary to provide safe access to and from the roadway.

Right-of-Way. Land reserved, used, or to be used for a highway, street, alley, walkway, drainage facility, or other public purpose.

Significant Change in Trip Generation. A change in the use of the property, including land, structures or facilities, or an expansion of the size of the structures or facilities causing an increase in the trip generation of the property exceeding: (1) local 10 percent more trip generation (either peak or daily) and 100 vehicles per day more than the existing use for all roads under local jurisdiction; or (2) State exceeding 25 percent more trip generation (peak volume) and 100 vehicles per day more than the existing use for all roads under state jurisdiction.

Stub-out (Stub-street). A portion of a street or cross access drive used as an extension to an abutting property that may be developed in the future.

Walkway. A hard-surfaced area intended and suitable for pedestrians, including sidewalks and the surfaced portions of accessways.

Chapter 17.170.030 General development standards and requirements.

- A. On-site improvements shall be provided, paid for and installed, or caused to be installed by the developer, including by way of example and not by way of limitation, curbs and gutters, sidewalks and pedestrian walkways, street base course and wearing course materials, bridges, street signs, and traffic control devices.
- B. Off-site improvement requirements are found in 17.170.060.
- C. If the original developer is required to construct off-site improvements, future reimbursement may be applicable. The Public Works document, "General Engineering Requirements and Standard Specifications" contains provisions for the reimbursement process.
- 17.170.040 <u>Security improvement agreement.</u> The developer shall enter into a security improvement agreement pursuant to the provisions of BMC 17.80.080, if requesting postponement for installation of public improvements.
- 17.170.050 <u>Street construction standards.</u> The improvement plans shall comply with the standards and criteria set forth herein and with the specifications contained in current Public Works document, "General Engineering Requirements and Standard Specifications". Proposed construction of improvements not covered by the above document shall be reviewed for approval by the City. The materials and workmanship of said improvements shall be warranted as outlined in BMC 17.80.090. Other improvements may be required pursuant to Chapter 17.168, BMC.

17.170.060 Street standards.

- A. All parcels of land subject to the issuance of a development permit shall be provided access to a public or private street as follows:
 - 1. Street improvements are required along the street frontage of all newly created lots and of new development on an existing vacant lot. Improvements shall be to the standards as shown in BMC Table 17.170.060 or as in an approved neighborhood circulation plan, Planned Unit Development or Master Plan. Deferment of street improvements may be allowed when authorized by the Site Plan Committee as described in 17.170.070. Some development is exempt from street improvements as described in BMC 17.4.070(D), (E).
 - 2. Newly created lots must have access from the street on which they front.
 - 3. Existing residential, commercial or industrial lots must take access from the street on which they front. Easement access is acceptable if no street frontage exists or topography or other circumstance, not in applicant's control, prohibits access from the fronting street.
- B. Street classification and location shall conform to the Transportation Systems Plan, or to an adopted neighborhood circulation plan. Where street classification or location is not shown in the Transportation Systems Plan, the arrangement of public

- streets shall provide for connectivity and alignment with existing streets in the surrounding area.
- C. Standard minimum right-of-way and roadway width. Unless otherwise indicated in an adopted neighborhood circulation plan, Planned Unit Development, or authorized by the Planning Commission as stated in 17.170.060 (C)(1), the street right-of-way and roadway widths shall not be less than the standard shown in BMC Table 17.170.060.

Table 17.170.060
<u>Standard Minimum Right-of-Way and Roadway Width</u>

Type of Street	ROW	Road Way Curb to Curb	Sidewalk
	(Feet)	(Feet)	Improvements
State Highway Arterial ¹	80	70	5-12 feet both sides
Residential Collector	50	36	5 feet both sides
Residential (Local) Maximum of 20 dwelling units taking access. ⁶	45	28	5 feet both sides
Residential (Local) Maximum of 8 dwelling units taking access and on-street parking available within 400 feet on this street. ²	30	20	5 feet one side
Downtown Business District ¹	53	36	5-8 feet both sides
Residential One Way Street ²	36	20	5 feet both sides
Half Street 2,5	25/22 1/2	18/15	5 feet one side
Cul-de-Sac Bulb for all streets 7	56 foot radius from center of bulb	48 foot radius from center of bulb.	5 feet-adjacent to circumference; 4 feet paved shoulder with hillside street
Commercial/Industrial ¹	60	44	5-8 feet-both sides
Commercial One Way Street 1	53	36	5-8 feet both sides
Hillside Street ^{2, 3, 4}	50	24	4' paved shoulder one side
Hillside One Way Street 2, 3, 4, 8	35 to 50	16	4' paved shoulder one side
Alley	20	20	None

SIDEWALKS MUST BE THE MAXIMUM POSSIBLE WHEN ADEQUATE RIGHT-OF-WAY IS AVAILABLE.

² No parking on either side.

³Requires documentation that topographical constraints warrant use of Hillside streets. Site Plan committee approval required.

⁴Alternative engineered designed standards may be considered and right-of-way width may vary depending on topography.

⁵Only used when easement for second half width is secured on adjacent property. Must be approved by Planning Commission.

Page 5 of 12

- 1. The Planning Commission may accept a narrower right-of-way width and/or alternate construction standard than those set forth in BMC Table 17.170.060 above, where it can be shown by the applicant, to the satisfaction of the Commission, that the topography or the small number of lots served and the probable future traffic development are such that the proposal is justified
- 2. Slope easements. The Planning Commission may require a perpetual, unobstructed easement adjacent to a public right-of-way where the slope of the land is such that earth movements might damage a public right-of-way. Within this easement area the natural vegetative cover shall not be disturbed.
- 3. In areas where a neighborhood circulation plan has been adopted, the right-of-way and roadway width can be constructed to the standards of BMC Table 17.170.060 or at the standards of the adopted neighborhood circulation plan. Once a standard has been determined for any street segment the remaining portion of the segment will be constructed at that standard.
- D. All development proposals, plan amendments or zone changes shall be in conformance with the adopted Transportation System Plan.
- E. Frontage roads. When any parcels front on an arterial street, the Planning Commission may require the developer to dedicate and improve a frontage road at the front of the parcel to serve the resulting lot(s).
- F. Planting strips. When a lot borders an arterial street, the Planning Commission may require the developer to dedicate and improve a planting strip adjacent to said highway or arterial street.
- G. Alleys. When any lots are proposed for commercial or industrial usage, alleys at least 20 feet in width may be required at the rear thereof with adequate ingress and egress for truck traffic unless alternative commitments for off-street service truck facilities without alleys are approved by the Planning Commission.
- H. Street alignment. As far as practical, streets other than minor streets shall be in alignment with existing streets by continuation of the center line thereof. Staggered street alignment resulting in "T" intersections shall, wherever practical, leave a minimum distance of 200 feet between the center lines of streets having approximately the same direction and otherwise shall not be less than 125 feet. In areas with an adopted neighborhood circulation plan, alignment shall conform to the adopted plan.
- I. Future extension of streets. When necessary to give access to or permit a satisfactory future division or development of adjoining land, a public street shall be extended to the boundary of the development and the resulting dead-end street may be approved without a permanent turnaround provided a temporary turnaround is constructed in a manner approved by the City Fire Chief.

⁶Parking on one side only.

Alternative turn arounds are described in the "Standard Details and Specifications for Construction" document.

⁸PAVED SHOULDER MUST BE CONSTRUCTED TO MEET PAVED ROAD WAY STANDARDS.

- J. Street intersection angles. All streets within or abutting a development shall intersect one another at an angle as near to a right angle as is practicable in each specific case unless otherwise necessitated by topographical conditions or other pre-existing conditions and approved by the City.
- K. Cul-de-sacs. A cul-de-sac shall be as short as possible. Cul-de-sacs shall have a maximum length of 400 feet, although where unusual circumstances exist the Planning Commission may authorize a longer street. A cul-de-sac shall terminate with a turn-around as specified in BMC Table 17.170.060 above, and a minimum corner radius of 20 feet is required at curb returns. In areas with an adopted neighborhood circulation plan, cul-de-sac length and design shall conform to the adopted plan.
- L. Private streets. A private street is permitted only if provisions are made to assure private responsibility for future maintenance. Unless otherwise specifically authorized as part of a street plan or adopted neighborhood circulation plan, a private street shall comply with the same standards as a public street. A street held for private use shall be distinguished from public streets and any reservations or restrictions relating to the private street shall be described in the land division documents and the deed records.
- 17.170.070 Off-Site street improvements, deferred. Street improvements may include pavement, curbs, gutters, pavement markings, sidewalks, and storm drainage. These improvements may be deferred by the Site Plan Committee. The Site Plan Committee will consider street improvement requirements on a case by case basis utilizing the following information:
 - The condition and standard of the existing, abutting street;
 - The likelihood and timing of new improvements given existing development on parcels in the vicinity;
 - Topographic constraints;
 - Safety concerns;
 - Other details specific to the subject property or vicinity.
 - A. When an entire street, or a segment of a street, is on the City's Capital Improvement Project List to be improved within the next 5 years, the property owner will be required to provide an engineer's estimate of cost for street improvements to the frontage of the subject property. This estimate must be reviewed and approved by the City. These costs must be paid and these funds will be put into an account to be used when the project is initiated.
 - B. Deferred Street Improvements. When street improvements are deferred, the developer shall enter into a Deferred Improvement Agreement for each lot fronting the street segment and record said agreement with the Curry County Recorder's Office. Said agreement shall run with the land and require that the property owner agree to the performance of the work deferred by conformance with one of the following options:
 - 1. Work performed by property owner. The owner of the property subject to a deferred improvement agreement shall be responsible for performance of the work identified in said agreement and for obtaining contractors therefore.

The owner shall cause satisfactory plans and specifications for the improvements to be prepared and to submit said plans and specifications to the City Public Works Department for approval prior to commencement of the work to be done. Such work shall be done in accordance with City standards in effect at the time the improvement plans are submitted for approval. Owner agrees to make payments required by the City including, but not limited to, engineering deposits, permit fees and inspection fees. Owner shall obtain a "Permit to Work in the Right-of-Way" and notify the City Public Works Department at least 48 hours prior to the start of work.

Prior to approval of improvement plans by the City, the owner may be required to execute and deliver to the City a security bond in an amount and form acceptable to the City, to be released by the City upon the City's final acceptance of the work performed.

- 2. Recordation of a Deferred Improvement Agreement shall be equivalent to consent to the establishment of a Local Improvement District. If the property owner does not complete the improvement pursuant to BMC 17.80.080 (F), the City may do the work as a local improvement project following the procedures established by ordinance for such projects and assess the cost against the property specially benefited. Permission to enter onto the property of the owner is granted to the City or its contractor as may be necessary to construct such improvements.
- 3. Activation of deferred improvement agreements. When the City determines the improvements must be constructed, the City shall notify affected property owners in writing. All or any portion of said improvement may be required at a specified time. Each affected owner shall participate on a pro rata basis of the cost of installation of the improvements. The City may require a Local Improvement District to be formed for a street or segment of a street involving all properties owners to participate when this street or segment has at least 50% of the properties subject to a Deferred Improvement Agreement. As City funds are available, the City may participate in the expense of the project.
- C. The Site Plan Committee's decision regarding required street improvements may be appealed to the Planning Commission.

17.170.080 Street names and signs.

- A. The name of any public or private street shall not duplicate or be so similar as to be confused with the name of any existing street within the 97415 zip code area.
- B. Street names and traffic control signs shall be installed by the applicant as required by the City.
- C. An alley may be named if it has a paved surface and an unobstructed travel-way between two streets.

D. Street names shall be approved by the Planning Commission.

17.170.090 Traffic impact statement or analysis.

- A. Applicability. A traffic impact statement or analysis may be required by the City as necessary to determine a development impact on the adjacent street system. When required, the traffic impact statement or analysis shall be prepared by an engineer registered in the State of Oregon and submitted to the City prior to action on a project authorization for which the traffic impact statement or analysis was required.
- B. The traffic impact statement or analysis is designed to identify the traffic impacts and potential problems which may be caused by a proposed use, and to identify all improvements required to insure safe and efficient pedestrian and vehicular ingress to and egress from a proposed development, to maintain an adequate street capacity, and to eliminate hazardous conditions and situations.

17.170.100. Access management.

- A. Access standards for the state highway are shown in the Oregon Highway Plan.
- B. Special Transportation Areas (STA). Access to arterial streets located in the area designated as a Special Transportation Area, is less restrictive than in Oregon Highway Plan.
- C. Commercial joint and cross access.
 - Adjacent commercial properties classified as major traffic generators, shall be provided a cross access drive and pedestrian access to allow circulation between sites.
 - 2. A system of joint use driveways and reciprocal access agreements shall be established wherever feasible and shall incorporate the following.
 - a. A continuous service drive or cross access corridor extending the entire length of each block served to provide for driveway separation consistent with the Highway's access management classification system if accessing the Highway.
 - b. A design speed of 10 mph and a maximum width of 20 feet to accommodate two-way travel aisles designated to accommodate automobiles, service vehicles, and loading vehicles;
 - c. Stub-outs and other design features to make it visually obvious that the abutting properties may be tied in to provide cross-access via a service drive;
 - d. A unified access and circulation system plan for coordinated or shared

parking areas is encouraged.

- 3. Shared parking areas shall be permitted a reduction in required parking spaces if peak demands do not occur at the same time periods pursuant to 17.92.050, BMC.
- 4. Pursuant to this section, property owners shall:
 - Record an easement with the deed allowing cross access to and from other properties served by the joint use driveways and cross access or service drive;
 - b. Record an agreement with the deed that remaining access rights along the roadway will be dedicated to the (city/county) and preexisting driveways will be closed and eliminated after construction of the joint-use driveway;
 - c. Record a joint maintenance agreement with the deed defining maintenance responsibilities of property owners.
- D. Commercial access connection and driveway design
 - 1. Driveways shall meet the following standards:
 - a. If the driveway is a one way in or one way out drive, then the driveway shall be a minimum width of 10 feet and shall have appropriate signage designating the driveway as a one way connection.
 - b. For two-way access, each lane shall have a minimum width of 10 feet.
 - 2. Driveway approaches must be designed and located to provide an exiting vehicle with an unobstructed view. Construction of driveways along acceleration or deceleration lanes and tapers shall be avoided due to the potential for vehicular weaving conflicts.
 - 3. The length of driveways shall be designed in accordance with the anticipated storage length for entering and exiting vehicles to prevent vehicles from backing into the flow of traffic on the public street or causing unsafe conflicts with on-site circulation.

E. Reverse frontage

- 1. Lots that front on more than one street shall be required to locate motor vehicle accesses on the street with the lower functional classification, or lower average daily traffic, if both facilities have the same functional classification. Where safety concerns exist, the City will have final authority to permit appropriate access.
- 2. When a residential subdivision is proposed that would abut an arterial, it shall be designed to provide through lots along the arterial with access from a frontage road or interior local road, unless otherwise constrained by

topography. Access rights of these lots to the arterial shall be dedicated to the city and recorded with the deed. A berm or buffer yard may be required at the rear of through lots to buffer residences from traffic on the arterial. The berm or buffer yard shall not be located within the public right-of-way.

F. Connectivity

- 1. The street system of proposed subdivisions shall be designed to connect with existing, proposed, and planned streets outside of the subdivision as provided in this Section.
- 2. Wherever a proposed development abuts unplatted land or a future development phase of the same development, street stubs shall be provided to provide access to abutting properties or to logically extend the street system into the surrounding area. All street stubs shall be provided with a temporary turn-around unless specifically exempted by the Site Plan Committee, and the restoration and extension of the street shall be the responsibility of any future developer of the abutting land.
- 3. Collector and local residential access streets shall connect with surrounding streets to permit the convenient movement of traffic between residential neighborhoods or facilitate emergency access and evacuation. Connections shall be designed to avoid or minimize through traffic on local streets. Appropriate design and traffic control and traffic calming measures are the preferred means of discouraging through traffic.
- 4. When a public or private street intersects a state highway, the Oregon Highway Plan will be used to determine proper spacing and signal placement.
- 17.170.110 <u>Bicycle and pedestrian development standards.</u> New commercial and multifamily development will provide safe and convenient pedestrian and bicycle access and connections such as accessways, walkways, and transit facilities.
 - A. Internal pedestrian and bicycle circulation shall be provided in new commercial, office and multi-family residential developments through the clustering of buildings, construction of hard surface walkways, landscaping, accessways, or similar techniques.
 - B. Bikeways shall be required, where possible, along existing arterial and collector streets. Bikeways shall be required on proposed collector streets.

17.170.120 Residential driveway approaches.

- A. Distance from intersection. Driveway approaches shall be positioned from the intersection of a residential street a distance of no less than 20 feet and 100 feet for collector and arterial streets provided however that such distances may be reduced by the city engineer where impractical due to lot configuration and/or width.
- B. Number of accesses permitted. Access points to a public street shall be the minimum necessary to provide reasonable access while not inhibiting the safe traffic circulation and carrying capacity of the street. Each parcel or lot may

- have one access to the street unless an additional access is approved by the Site Plan Committee.
- C. Joint access encouraged. Common accessways at a property line shall be encouraged and in some instances may be required in order to reduce the number of access points to streets. Construction of common accessways shall be preceded by recording of joint access and maintenance easements.

Proposed deletion of section below to avoid conflicts with revisions in Chap. 17.170, Street Standards.

Chapter 17.80.040 (C), Site Plan Approval, Development Standards

17.80.040 (C). Proposed development in any zone, except the Public Open Space Zone, subject to the provisions of Section 80, which fronts upon an unimproved street shall either be required to improve same to city standards by the installation of curb, gutter, pavement and sidewalk on the side abutting the said development, plus 12 feet of pavement beyond the center line or match existing pavement whichever the City deems appropriate. The owner may request a deferred improvement agreement for future street improvements which shall run with the land. The City Council, with recommendations from the Site Plan Committee, will determine the extent of needed off site improvements in regard to the nature of off site improvements in the Public Open Space Zone on a case by case basis.

Chapter 17.168 <u>PUBLIC IMPROVEMENT STANDARDS AND CRITERIA FOR</u> <u>UTILITIES</u>

Draft August 28, 2007

New language bold and italicized.

Sections:

17.168.010 General on-site development standards and requirements.

17.168.020 General off-site development standards and requirements.

17.168.030 Easements.

17.168.040 Underground utilities.

17.168.050 Service extension.

17.168.060 Improvement plans.

17.168.070 Performance bond and improvement agreement.

17.168.010 General on-site development standards and requirements. On-site means utilities on the subject property. Unless otherwise provided by this code, all improvements shall be at the sole cost and expense of the developer, who shall provide, install or cause to be installed, including, but not limited to, the following:

- Water mains and fire hydrants, sanitary sewer mains, storm drain mains and all associated equipment and easements required by the City.
- Electrical, communication, and Cable TV conduits or raceways and transformer bases.
- Street light bases and stanchions.
- Grading and erosion control and drainage plans pursuant to Section 100 of this code.

17.168.020 Off-site development standards and requirements. Off-site means City utilities not on the subject property.

1. New single family or duplex development on an existing lot are may not required to upgrade existing City water, sanitary sewer, or storm drain mains, unless deemed necessary by Site Plan Committee. Site Plan

Committee will determine if up-sizing of utility infrastructure is needed to accommodate the proposed development and what funding mechanisms would be employed.

- 2. New multi-family or commercial development will be considered on a case-by-case basis. Site Plan Committee will determine if up-sizing of utility infrastructure is needed to accommodate the proposed development and what funding mechanisms would be employed. If Site Plan Committee allows deferment of the up-sizing, the Deferred Improvement Agreement (DIA) process will be as described in BMC 17.170.070.
- 3. Land divisions will be handled as stated in #2 above.
- 4. Conditional Use Permits will be dealt with as stated in #2 above only if the approval of the application will result in more intense use of the subject property.
- 5. The Site Plan Committee's decision regarding required improvements to existing City infrastructure may be appealed to the Planning Commission.
- 6. If the original developer is required to install off-site improvements, future reimbursement may be applicable. The Public Works document, "General Engineering Requirements and Standard Specifications" contains provisions for the reimbursement process.

17.168.030 **Easements.**

- A. Public utility easements (PUE). All development including partitions, subdivisions, and Planned Communities shall provide a continuous five (5) foot "PUE" adjacent to the right-of-way on street frontages to be utilized for water related equipment (meters, valves, etc. and other utilities (electrical pedestals, street lights, telephone and other facilities).
- B. Unless determined as unnecessary by the City, an easement dedicated to the City shall be placed over all water and sanitary sewer mains and storm drain facilities, including natural water courses used for engineered drainage, located across private property or common areas. The width of the required easement will be determined at the time of review and approval of construction plans for the facility.

17.168.040 <u>Underground utilities.</u>

Primary utility lines, including, but not limited to, electricity, communications, street lighting and cable television shall be required to be placed underground, whenever possible. Secondary utility lines must be undergrounded. All such service and facilities shall be located in a public utility easement or right-of-way with a junction box. The developer shall confer with each utility company to determine the necessary conduits and equipment, their location and installation requirements. All costs of such equipment and installation shall be at the developers cost or as agreed to between the developer and the utility provider.

17.168.050 Service extension. Where no City utility mains presently exist, a condition of development permit approval will be provision of basic urban services (water, sanitary sewer, storm drainage and streets) along the full length of all portions of the subject property fronting a public right-of-way. Installation of services shall be according to the provision of the City's current edition of the Infrastructure Development Guidelines.

17.168.060 Improvement plans.

The developer shall cause plans and specifications for all public improvements to be prepared by an engineer registered in the State of Oregon. A security deposit in the amount established by the City ordinance shall be collected by the City to cover the cost of plan review and inspections.

SUPPLEMENTAL PACKET

Addendum to Monday, September 10, 2007 City Council Meeting Agenda

The following item is added to the September 10, 2007, City Council Agenda:

VII. Regular Agenda

- **C.** Discussion with possible authorization to:
 - 1. City Manager to execute Sudden Oak Death (SOD) Program Consent Form with the Oregon Department of Forestry (ODF);
 - 2. ODF to remove Tan Oak trees and other infected vegetation from the area of Azalea Park where SOD disease has been found to exist; and
 - 3. ODF to remove Tan Oak trees from areas of Azalea Park that may become infected with SOD as a protective measure.

City of Brookings 898 Elk Drive Brookings, OR 97415



COUNCIL AGENDA REPORT

To: Mayor & City Council

From: City Manager

Date: September 7, 2007

Subject: Sudden Oak Death Eradication at Azalea Park

Recommendation:

Authorize City Manager to Execute Sudden Oak Death Program Consent Form with the Oregon Department of Forestry, and Authorize Department of Forestry to Remove Tan Oak Trees and other infected vegetation from the area of Azalea Park where Sudden Oak Death diseases has been found to exist, and authorize the Department of Forestry to Remove Tan Oak Trees from Areas of Azalea Park that may become infected with Sudden Oak Death as a protective measure.

Background /Discussion:

The City received notification from the Oregon Department of Forestry that at least 14 trees in Azalea Park had been confirmed as being infected with Sudden Oak Death disease. Sudden Oak Death (SOD) disease is a pathogen known as Phytophthora ramorum that has reportedly killed more than one million oak and tanoak trees in 14 California counties since 1995 and was first found in Curry County near Brookings in 2000. The disease also causes branch and shoot dieback and leaf spotting in a large number of woodland and nursery specifies, including huckleberry and rhododendron.

Eradication of infected trees and other infected plants is required by Oregon State Law. Eradication involves cutting and burning of the infected trees and other understory vegetation that has been exposed to the disease.

The Department of Forestry has proposed the removal of all tanoak trees and infected myrtle trees in a 14-acre portion of Azalea Park between the ballfields and North Bank Chetco Road. This is the minimum treatment area they believe is required under the provisions of Oregon State Law. The trees to be removed would first be injected with an herbicide **the week of September 10.** Several weeks later, in late September or early October, crews would move into the area and cut down the trees. The tree debris would be stacked and burned on site. The Forestry Department plans to use a "curtain burner" device to burn much of the debris; this device provides intense heat and is low emission. There will be some broadcast burning on the site to

Phone: (541) 469-2163

Fax: (541) 469-3650



destroy leaf debris. There would be no work on the site during weekends. Access to the site by the public would be prohibited until subsequent testing indicates that the site is clear of the pathogen. There would also be follow-up fungicide and herbicide spraying on the site to prevent tanoak regrowth. A Department of Forestry (DOF) geologist has visited the site, and has provided the DOF with recommendations to minimize erosion. The City will assign a City Public Works employee to the site at all times during the eradication work to observe and maintain contact with the on-site foreman of the crews performing the work. There will be no cost to the City for the work, although the City will assist by digging a trench on the site to facilitate the use of the curtain burner. Most of the site work will be done by hand crews, with the use of equipment limited to dragging larger trees to a burn site.

Working with DOF on this project is Everett Hansen, Professor of Forest Pathology at Oregon State University. Hansen has recommended that the City consider allowing the DOF to remove all tanoak trees from Azalea Park as a protective measure for the rhododendron and azalea fields in the park. This would include the area along both sides of the North Bank Chetco Road entrance to the Park, the area of the Chapella, and the area to the west of the ballfields. There are not large stands of tanoak in these areas. In the case of the area west of the ballfields, the tree debris would be chipped and not burned as no infection has been found in this area as of this date.

Hansen will also be collecting test samples from azaleas and rhododendrons in the Park.

There are several dead and dying conifers at Azalea Park. Removal of these trees at the same time as the SOD work is being completed is recommended to minimize the period of disruption at the Park. Because the trees are in close proximity to the SOD infestation area, these trees will require special handling, but will still be marketable. The City will arrange for these trees to be removed under separate contract, but the "slash" will be burned along with debris from the SOD eradication.

Finally, there are several large tanoak trees at Stout Park. There is no indication that SOD has extended to Stout Park. Inasmuch as there are few trees at the Park, DOF suggested inoculating the trees against the disease. This has had some success, but has not been used extensively. DOF is willing to undertake this project at their expense.

Financial Impact(s):

City employee labor cost in monitoring tree removal and property cleanup, assisting with trench installation, and washing conifer logs.

City Manager Review and Approval for placement on Council Agenda:

Gary Milliman City Manager



Department of Agriculture

635 Capitol Street NE Salem, OR 97301-2532

August 8, 2007

Gary Milliman, City Manager City of Brookings 898 Elk Drive Brookings, OR 97415

Dear Mr. Milliman,

A new and dangerous plant pathogen called *Phytophthora ramorum*, the cause of sudden oak death, was confirmed in Oregon on August 9, 2001. Since that time, at least 140 acres of infected trees have been discovered near Brookings. This year, several infected trees were found in Azalea Park. This letter serves as official notice that the Director of Agriculture has determined that *P. ramorum* poses a serious threat to the agricultural and horticultural interests of the state and has directed that an attempt be made to eradicate this disease as authorized by ORS 570.305.

Background

In 1995, extension agents noted that certain species of oak trees in the Bay Area of California were dying. Since the initial reports of the problem, hundreds of thousands of trees have been killed in a 14 county area. Several understory shrubs are also susceptible. The cause of this epidemic was determined in 2000 to be a fungus new to science, *Phytophthora ramorum*. The list of plants susceptible to this pathogen continues to grow. Oregon host species include tanoak, black oak, madrone, rhododendron, myrtle, and huckleberry among others.

Early in 2001, Oregon adopted a quarantine (OAR 603-052-1230) to prevent firewood and other host material from entering the State from infested areas in California. This quarantine contains a provision that automatically includes any properties in Oregon where *P. ramorum* is found. A copy of the quarantine is attached.

In July-October of 2001, aerial surveyors from the Oregon Department of Forestry (ODF) and USDA Forest Service (USFS) first noted patches of dead tanoaks during flyovers of southwestern Oregon. Samples taken from those areas were processed at Oregon State University and *P. ramorum* was confirmed. Since that time, aerial and ground surveys have been ongoing and several additional sites, including one in Azalea Park, have been found.

Establishment of this disease in Oregon would have serious negative impacts on forest health and wildlife. Large numbers of dead oak trees would also increase fire danger. In addition, the disease has triggered federal and international quarantines detrimental to the timber, secondary forest products, and nursery industries of Oregon.

Eradication plan

ODA has worked with ODF, OSU, USFS and the USDI Bureau of Land Management to delimit the current infestations and devise a generalized eradication plan. The ODF will work with you to develop an eradication plan specifically for your property. The program may include some or all of the

following activities: cutting and piling susceptible trees and shrubs, burning the wood and plant debris when safe to do so, herbicide spraying of stumps and sprouts, fungicide spraying, sampling and monitoring. The best time to perform this work is during the dry season, when it is much more difficult for the pathogen to spread. Time is of the essence.

Required action

All host trees and understory shrubs (tanoak, evergreen huckleberry, and rhododendron -- not conifers) must be cut, bucked, and piled as soon as possible in the infected area and a buffer zone as delimited by the ODF and ODA. Tanoak trees and/or stumps must also be treated to prevent resprouting. After the plants have dried sufficiently and the fire danger is at an acceptable level, the piles must be burned. It is important that all small materials (e.g., twigs and shrubs) are consumed.

The ODF can arrange for a crew to help you with this process. Please contact Alan Kanaskie, Oregon Department of Forestry, 2600 State St., Salem, OR 97310, telephone: 503-945-7397, for more information. Agency staff can also be on hand to oversee the work and assist if necessary.

Your cooperation is critical to the success of the program. We believe we have caught the disease in the first stages of establishment. Thus, this is our best chance to halt the spread of this dangerous pathogen. If you have questions about the disease or the required actions outlined in this Administrative Directive, please contact Dr. Nancy Osterbauer (503-986-4666) or me at 503-986-4663.

Sincerely,

Daniel J. Hilburn

Administrator-Plant Division

503-986-4663

cc:

John Cowan, Public Works Director

Alan Kanaskie

Quarantine: Phytophthora ramorum

- (1) Establishing a quarantine: A quarantine is established against *Phytophthora ramorum*, the cause of sudden oak death and other plant diseases. This quarantine is established under ORS 561.510 and 561.540 to protect Oregon's agricultural industries and natural resources from the artificial spread of *P. ramorum*. This pathogen causes mortality in susceptible oak (*Quercus spp.*), tanoak (*Lithocarpus spp.*), Rhododendron (*Rhododendron spp.*), viburnum (*Viburnum spp.*) and evergreen huckleberry (*Vaccinium ovatum*). In other susceptible plants it causes leaf spots, twig dieback and/or stem cankers. Methods for exclusion of commodities potentially infected with this disease and procedures for eradication of incipient infections are prescribed in this quarantine.
- (2) Area under quarantine:
- (a) The following counties in California: Alameda, Contra Costa, Humboldt, Lake, Marin, Mendocino, Monterey, Napa, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, and Sonoma.
- (b) The following portion of Curry County, Oregon: T39S, R13W, sections 32, 33, and 34; T40S R13W sections 3, 4, 5, 8, 9, 10, the southeastern quartersection of 11, the southwestern quartersection of 12, the northwestern quartersection of 13, and the northeastern quartersection of 14, 15, 16, 17, the eastern half of section 18, the eastern half of section 19, 20, 21, 22, 27, 28, 29, the northeastern quarter of section 30, 32, 33, and 34; T40S R14W the southeastern quartersection of 23, the southwestern quartersection of 24, the northwestern quartersection of 25, and the northeastern quartersection of 26. (c) Any country, state, county, province or area covered by federal quarantine, 7 CFR 301.92 through 301.92-11, *Phytophthora ramorum*; quarantine and regulations or federal order.
- (d) Any property in Oregon where P. ramorum is found, including a buffer-zone of up to 0.5 miles surrounding the infected site during any eradication program.
- (3) The following definitions apply to ORS 603-052-1230:
- (a) "Hosts and associated plants" means plants on USDA's official list of *P. ramorum* hosts and associated plants, last revised September 11, 2006. (NOTE: This list is available from the Oregon Department of Agriculture, 635 Capitol St. NE, Salem, OR 97301, telephone 503-986-4644.)
- (b) "Nursery stock" is defined in ORS 571.005. Tissue culture plantlets in sealed, sterile containers are exempt from this regulation.
- (4) Commodities covered:
- (a) All plants and plant parts of hosts and associated plants: Examples of covered commodities include all above ground portions of the plants including, but not limited to nursery stock, logs, bark, wood chips, mulch, firewood, sawdust, green waste, other plant products that may contain bark or foliage.
- (b) Any other plant found to be naturally infected with P. ramorum, any product or article that an official inspector determines to present a risk of spreading P. ramorum. All life stages of P. ramorum.
- (5) Provisions of the quarantine: Covered commodities originating from the area under quarantine, and any other area found to be infested with *P. ramorum* during the life of this quarantine, are prohibited unless one of the following requirements has been met:
- (a) All regulated commodities must be kiln-dried or heat-treated to 71.1°C (160°F) for 75 minutes measured at the core prior to shipment. Treatments must be officially verified. The official certificate must include the following additional declaration "The (type of covered commodity) from (name of county) County has been treated for *Phytophthora ramorum* as required prior to shipment." The length and temperature of the treatment must be recorded on the official certificate.
- (b) Nursery stock grown in a quarantined county or area may be eligible for shipment to Oregon providing the nursery is part of an official certification program and has been inspected and tested

annually for *P. ramorum*. The official certificate must include the following additional declaration: "The (covered commodity) from (name of county) County has met the *Phytophthora ramorum* quarantine requirements for shipment into Oregon."

NOTE: Recipients of tree and shrub nursery stock imported into the state must notify the ODA no later than two business days after its arrival as required by OAR 603-054-0027.

- (c) Soil and potting media from the quarantine area at a known infected site or from within five meters of an infected host plant must be sterilized before shipment. The soil or potting media must reach a minimum temperature of 60°C (135°F) for 1 hour measured at the center of the mass of soil or potting media. Soil or potting media that has never been associated with the covered commodities is exempt. Treatments must be officially verified. The official certificate must include the following additional declaration "The (soil or potting media) from (name of county) County has been treated for *Phytophthora ramorum* as required prior to shipment." The length and temperature of the treatment must be recorded on the official certificate.
- (6) Infected properties in Oregon: Confirmation of a *P. ramorum* infection must be made by the ODA or an official cooperator. The disease must be eradicated from the property as quickly as possible in accordance with USDA's Confirmed Residential and Landscape Protocol, last revised Nov. 8, 2004 or the APHIS Response Protocol for Forest and Wildland Environments, June 16, 2006. (NOTE: These protocols are available from the Oregon Department of Agriculture, 635 Capitol St. NE, Salem, OR 97301, telephone 503-986-4644.) Affected property owners will be issued infection location and eradication requirements in the form of an Administrative Order. For public and private forested lands, the Oregon Departments of Agriculture (ODA) and Forestry (ODF) will work with the landowner to develop an eradication plan that will be based on the best available science. The program may include some or all of the following activities: cutting and piling susceptible trees and shrubs, burning the wood and plant debris when safe to do so, herbicide spraying of stumps and sprouts, fungicide spraying, sampling and monitoring.
- (7) Infected nurseries in Oregon: Confirmation of a *P. ramorum* infection must be made by the ODA or an official cooperator. Nurseries are required to eradicate the disease as quickly as possible in accordance with USDA's Confirmed Nursery Protocol, last revised September 1, 2006 (version 7.0) (NOTE: This list is available from the Oregon Department of Agriculture, 635 Capitol St. NE, Salem, OR 97301, telephone 503-986-4644.). The ODA will work with the nursery owner to implement an eradication and monitoring program utilizing protocols prescribed by USDA (Confirmed Nursery Protocol).
- (8) Special permits: The Department, upon receipt of an application in writing, may issue a special permit allowing entry into this state and transport within this state of quarantined commodities for research purposes only. Movement of such commodities will be subject to any conditions or restrictions stipulated in the permit.
- (9) Violation of quarantine: Violation of this quarantine may result in a fine, if convicted, of not less than \$500 no more than \$5,000, as provided by ORS 561.990. In addition, violators will be subject to civil penalties of up to \$10,000 as provided by ORS 561.995. Commodities shipped in violation of this quarantine may be treated, destroyed or returned to their point of origin without expense or indemnity paid by the state.

Stat. Auth.: ORS 561.190 & 561.560 Stats. Implemented: ORS 561.560



Department of Forestry

State Forester's Office 2600 State Street Salem, OR 97310 503-945-7200 FAX 503-945-7212 TTY 503-945-7213 / 800-437-4490 http://www.odf.state.or.us

Sudden Oak Death Program Consent Form - 2007

Please complete this consent form and return one copy in the enclosed envelope as soon as possible. Keep the other copy for your records. Thank you for your cooperation with this vital program.

I hereby give my consent to the Oregon Departments of Agriculture and Forestry and their contractors to carry out a Sudden Oak Death eradication program on my property. I understand the program may include some or all of the following activities: cutting and piling susceptible trees and shrubs, burning the wood and plant debris when safe to do so, herbicide injection of trees, herbicide spraying of stumps and sprouts, fungicide spraying, sampling and monitoring. The agencies or contractors will contact you and inform you of the planned activity before coming onto your property. I understand that the cost of these activities will be borne by the agencies involved; I will not have to pay for them.

Name:			
Address:			
Phone: Day:		Evening:	
Email:			-
Signature: _			Date:
	,	arefully and safely as possible to your property:	by checking any of
□ Dog	☐ Gate	☐ Other:	

Background

A new and dangerous plant disease called Sudden Oak Death was first found in Oregon in 2001. Numerous sites with infected trees have been discovered in the vicinity of Brookings. One or more of these sites is on your property.

This disease was first noted in 1995 killing certain species of oak trees in the Bay Area of California. Since the initial reports of the problem, hundreds of thousands of trees have been killed in a 14 county area of California. Several understory shrubs are also susceptible. The cause of this epidemic was determined in 2000 to be a fungus new to science now called *Phytophthora ramorum*. The list of plant species susceptible to this pathogen continues to grow. Oregon host species include tanoak, California black oak, madrone, rhododendron, myrtle, and evergreen huckleberry.

Early in 2001, Oregon adopted a quarantine to prevent firewood and other host material from entering the State from infested areas in California. This quarantine contains a provision that automatically includes any properties in Oregon where sudden oak death is found. The Director of Agriculture has determined that Sudden Oak Death poses a serious threat to the agricultural and horticultural interests of the state and has directed that an attempt be made to eradicate this disease as authorized by ORS 570.305.

During the past six years aerial surveyors from Oregon Department of Forestry (ODF) and the U.S. Forest Service (USFS) have noted patches of dead tanoaks during flyovers of southwestern Oregon. Samples taken from these sites have confirmed the presence of sudden oak death only in the Brookings area.

Establishment of this disease in Oregon would have serious negative impacts on forest health, wildlife and related industries. Large numbers of dead trees would also increase fire danger.

Eradication Plan

Immediately after the disease was discovered, ODA, ODF, USFS, and Oregon State University initiated a cooperative effort to delimit the infestation and devise an eradication plan. This plan was first presented at a public information meeting in Brookings on August 21, 2001. Since then several additional public meetings have been held in the area. There has been excellent support at these meetings for immediate action to eradicate the disease before it becomes permanently established and spreads.

The core of the plan involves cutting and burning all infected host material and a buffer of potentially infected hosts surrounding each infection center. So far, this action has not eliminated the infestation, but it has slowed its spread dramatically and we've moved much closer to our goal of complete eradication. Forty infested acres were cut and burned in 2001. A few new infested acres were found each year between 2002 and 2005, indicating very slow spread. In 2006 the disease expanded considerably, with 40 new infested acres, but still within a relatively small area near Brookings. This expansion probably was due to unusually wet weather in May and June of 2006.

1 ===

We've learned several important lessons along the way. First, stump sprouts of infected trees that come back after fire can carry the disease. Second, in some cases our eradication treatment areas were not big enough. Trees surrounding the infection centers that appeared healthy one year began to show symptoms and die the following year.

As a consequence, we've added additional procedures to our eradication program. Trees will injected with herbicide prior to cutting and burning; this will prevent re-sprouting. Sprouts existing after treatment will be killed with herbicides or destroyed mechanically. The herbicides will be applied by hand at low volumes. There will be no aerial spraying of herbicides. Susceptible hosts, especially tanoaks, in areas with multiple infested sites will be cut and burned in larger treatment areas. We also may apply a promising phosphorus based fungicide to uninfected trees near infested sites.

This program will work only if all landowners involved cooperate. Any untreated infestations inevitably will spread to surrounding properties and within a few years to the entire region, with tremendous negative impact.

Our only hope to prevent permanent establishment is to work together toward complete eradication. It is not an easy goal, but now is our only chance and the USFS and the State of Oregon have provided resources to help implement an aggressive eradication program. With your help, our chances of success are good.

Questions?

Alan Kanaskie, Oregon Department of Forestry, 2600 State St., Salem, OR 97301; telephone: 503-945-7397.

Nancy Osterbauer/Dan Hilburn, Oregon Department of Agriculture, 635 Capitol St. NE, Salem, OR 97301; telephone: 503-986-4636.

FOREST HEALTH FACT SHEET

EC 1607-E • June 2007

Sudden Oak Death Phytophthora ramorum

D. Shaw

What is it?

Sudden Oak Death (SOD) is a plant disease caused by the water mold *Phytophthora ramorum*. This organism causes disease in more than 100 species of trees, shrubs, herbs, and ferns.

P. ramorum can infect oak and tanoak directly through the bark, causing an area of dead tissue, a canker, often indicated by bleeding on the bark surface (Figure 1). The tree eventually is compromised and dies. It may look as if the tree dies suddenly, but actually it's been infected much longer.

P. ramorum causes leaf blight and twig dieback in most host species, especially in rhododendron, camellia, and huckleberry. The disease is called ramorum





Figure 1.—Bleeding on bark surface of tanoak. Photos: Alan Kanaskie, Oregon Department of Forestry.

leaf and shoot blight in these hosts. Common plants in Oregon that are known hosts for *P. ramorum*, and the diseases in those hosts, are shown in Table 1. For a complete host list, see the California Oak Mortality Task Forest website http://nature.berkeley.edu/comtf/





Figure 2.—Shoot dieback symptoms of *P. ramorum* on rhododendron. Photos: Alan Kanaskie, Oregon Department of Forestry.

What is at risk?

Phytophthora ramorum is an internationally quarantined plant pathogen, and strict restrictions aim to prevent its spread. Quarantines and regulatory compliance impact the economics of growing wood and plants in Oregon. We must do all we can to prevent the spread of this disease.

The disease threatens timber trade, the floral-greens industry, Christmas tree production, and plant nurseries throughout Oregon. It has the potential to increase fuel loads in forests, thus increasing fire risk. In forests, it also could affect slope stability, harm wild mushroom populations, and alter forage and structural components of wildlife habitat. The cost to forests and nurseries in Oregon of eradication and compli

tion and compliance work already is more than \$10 million.

How is it spread?

Sudden Oak Death and the other diseases caused by P. ramorum are so new that information is only now accumulating rapidly. Observations from California, where the disease is widespread, suggest it may be limited to warmer, wetter coastal and near-coastal environments. In California, disease behavior is linked closely to forest composition and structure, spreading on California bay laurel (called myrtlewood in Oregon) and killing tanoak. In Oregon, tanoak and rhododendron are the primary hosts on which we know the disease can spread (Figure 2). So far, Oregon myrtle has not become widely infected, as in California (Figure 3, next page).

Local spread of *P. ramorum* is well documented, but its long-distance dispersal is less well understood. Populations of *P. ramorum* in California and

Table 1.—P. ramorum hosts and diseases.

Disease	Host
Sudden Oak Death	Tanoak California black oak
Ramorum leaf blight	Oregon myrtle Bigleaf maple
Ramorum shoot dieback	Evergreen huckleberry Rhododendron Pacific madrone

David Shaw, Extension forest health specialist, Oregon State University.

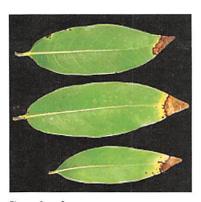


Figure 3.—Symptoms of *P. ramorum* on Oregon myrtle-wood (California bay laurel).

Oregon woodlands belong to a single clone that has reproduced asexually. This occurs via the prolific production of spore packets, called sporangia, that can easily break off in rain and

flowing water. Sporangia release spores that can swim through films of water to infect leaves and bark. *P. ramorum* also can form a resting spore (chlamydospore) that stays in plant material or soil a long time, perhaps more than 1 year, and germinates only under the proper conditions.

People are the best means for long-distance spread of *P. ramorum*, by transporting potted plants or infected wood, leaves, and stems. *P. ramorum* spores also can survive in soil on bike and vehicle tires and on shoes and tools. If you have been in an infested area in California, remove the soil from these items before you return to Oregon. Do not transport plant material from coastal California to Oregon!

Figure 4.—In the wild in Oregon, SOD currently is limited to an area around Brookings (star).

Where did it come from, and where is it now?

The origin of *P. ramorum* is unknown. It also is in Europe, in a population genetically distinct from the one in North America. It appears that both the European and North American types of *P. ramorum* were introduced from an unknown location.

In the urban-woodland interface and in forests, Sudden Oak Death is known only in 14 counties in California and in a 26-square-mile area near Brookings, OR (Figure 4). How SOD came to the Brookings area is not known. No other locations in the wild are known in North America.

Sudden Oak Death has been found in several plant nurseries in Oregon and other states, and these nurseries are under strict inspection and eradication protocols. Each year, new outbreaks are detected, and much effort is spent suppressing the disease.

What is being done?

Phytophthora ramorum is being eradicated in Oregon forests (Figure 5) through the cooperation of the Oregon Departments of Forestry and Agriculture, the USDA Forest Service, the USDI Bureau of Land Management, and Oregon State University.

Surveys for the disease are done by air and ground and in streams throughout the year. In nurseries, inspections for diseased plants are routine. Whenever infected plants are discovered, they and neighboring plants are destroyed.

What you can do

- Do not transport plant material or firewood from affected areas in California to Oregon.
- Before returning to Oregon from affected areas in California, wash mud and soil off your vehicle, equipment, clothing, and footwear. If possible, use a 10-percent bleach solution for washing.
- Familiarize yourself with host plants and symptoms of the
 - diseases caused by *P. ramorum*. This can be tricky! The host list is long, and many other plant pathogens cause diseases with similar symptoms. See below for some sources that can help.
- Keep on the lookout for infected plants in south coastal Oregon.

- Report to OSU Extension foresters or state or federal forestry officials if you think you have seen Sudden Oak Death.
- Do not move host materials or soil from the quarantine zone near Brookings, OR.
- When purchasing host plants from nurseries, ask nursery management about the origin of the plants and whether they have been inspected.

For more information

Sudden Oak Death and Phytophthora ramorum. A guide for forest managers, Christmas tree growers, and forest-tree nursery operators in Oregon and Washington, EM 8877. 2006. E.M. Goheen, E. Hansen, A. Kanaskie, N. Osterbauer, J. Parke, J. Pscheidt, and G. Chastagner. http://extension.oregonstate.edu/catalog/pdf/em/em8877.pdf

The California Oak Mortality
Task Forest
http://nature.berkeley.edu/
comtf/

USDA Agricultural and Plant Health Inspection Service (APHIS) http://www.aphis.usda.gov/ plant_health/plant_pest_info/ pram/regulations.shtml

OSU Extension Service http://extension.oregonstate. edu/emergency/oak_death.php





Figure 5.—Symptoms of *P. ramorum* infection on a Douglas-fir shoot tip (left) and on grand fir. Photos: (left) Alan Kanaskie, Oregon Department of Forestry; (right) Santa Clara County (CA) Agriculture Department.