

# Appendix IV: Wildfire Development Permit Area & Guidelines

## Designation

The Wildfire Development Permit Area is designated for the purpose of protection of the natural environment, its ecosystems and biological diversity and protection of development from hazardous conditions. Overall guidelines and specific conditions guidelines are included here for building and construction materials, landscaping alternatives and developments.

Wildfire Development Permit Areas include areas of land designated on Schedule H. The Development Permit Area has been established using fuel typing and associated potential fire behaviour modelling, similar to that completed in the RDCO Community Wildfire Prevention Plan.

## Justification

The Okanagan has a naturally dry climate and a community interface with large forested areas. Wildfire will be an ever present threat. The Okanagan Valley contains ecosystems within which wildfire is a natural disturbance agent, and since wildfire cannot be eliminated from these ecosystems, the threat of wildfire will always be present. However, the risk wildfire poses to urban development can be managed through appropriate development policies and continual management efforts.

Reducing wildfire hazard is a multilayered approach including education, larger community prevention activities, requirements at the time of rezoning or subdivision for new development, and changes in how residents build homes. These Development Permit Guidelines are considered a minimum and relate to the subdivision of land, construction of new homes, large additions and their immediate vicinity. Other community protection requirements may be determined and required through other development approval processes.

An important part of reducing wildfire risk and fuel hazards is modifying how individual homes are constructed and designed within proximity of forest or grass fuel type areas. The accumulation of small choices such as siding material, building material, screening of soffits, screening the tops of chimneys, using non-combustible landscape mulch, and choosing plant material, can critically impact the survivability of a home or neighborhood.

There are two fuel types within the Development Permit Area: grass and forest fuel types. The guidelines apply to all development within the fuel types with the exception of being those guidelines involving fuel management, which are only applicable to development and construction occurring within the forest fuel types or within 100m of these forest fuel types.

This development permit area has the following objectives:

- Reduce the susceptibility to wildfire of new construction or large additions;
- Address wildfire risk reduction at time of subdivision;
- Ensure important ecosystem values are addressed in wildfire mitigation recommendations and activities’.

## Exemptions

In Wildfire Development Permit must be approved before land is subdivided; or construction of, addition to or alteration of a building or structure. A Development Permit is required unless one of the following exemptions applies:

- a. The construction or alterations in accessory buildings or structures are not in excess of 55 square meters, and additions to existing approved buildings that are not in excess of 25% of the existing gross floor area; or
- b. Where plans for construction are submitted for a building permit, and the plans show compliance with the guidelines “Wildfire Development Permit Design Guidelines”; and, a restrictive covenant is registered on the title of the property in order to ensure that future property owners are aware of and obligated to the wildfire risk and fuel hazard reduction measures, or
- c. A development permit of this type or a covenant registered on property title has already been issued for the area in the past, and the conditions in the development permit or covenant have all been met, and the conditions addressed in the previous development permit or covenant will not be affected.
- d. A Professional Forester registered in BC, specializing in wildfire risk and fuel hazard assessments and fuel management, has completed a report on the property or building in question that: indicates there is a low fuel hazard; and has provided recommendations for mitigating any existing or potential risk associated with the new development with provisions in place to ensure that development is carried out in accordance with the recommendations; or
- e. There is a technical subdivision for lot consolidation or boundary adjustments; or
- f. The proposed works are site restoration, ecological enhancement, forest fuel management, general parks maintenance and works in accordance with established Best Management Practices, RDCO Parks Operational Wildfire Protection Plan and Provincial approvals, as required, under purview of RDCO Parks Services.

## Guidelines Background and Applicability

The guidelines will be used in reviewing Development Permit applications. It is important that construction within the Wildfire Development Permit Area designated in the Official Community Plan demonstrate an application of these guidelines.

The basis for these Guidelines is the FireSmart Manual developed by Partners in Protection and adopted by the BC Wildfire Management Branch as well as the RDCO’s *Community Wildfire Protection Plan*.

These Design Guidelines do not cover all possible measures for wildfire risk reduction but should be considered minimum standards that focus mainly on new home construction, substantial additions, subdivisions and the immediately adjacent surroundings.

These guidelines will be used in reviewing Development Permit applications. While these guidelines only apply to WDP areas, flying embers can ignite structures several kilometers away from the fire source, and the recommendations contained within this document would be wise consideration for many homeowners in the Regional District.

These guidelines are to be used in conjunction with the WDP area maps as designated within the OCPs or otherwise defined as any location within forest and grass fuel types for building construction and within or 100m from forest fuel types for subdivision.

Development permit conditions may include conditions that lands that must remain free of development; require specified natural features or areas to be preserved, protected, restored or enhanced in accordance with the permit.

## **PRIORITY ZONES**

Priority Zones have been developed to assist in the assessment and design of new and existing structures that may be threatened by wildfire. The priority zones are defined by a measured distance from the structure and there are specific guidelines that apply within each zone. The priority zones should be extended on downhill slopes and on windward exposures. The following descriptions for each zone are extracted directly from the FireSmart Manual and additional details on these Priority Zones, including objectives and specific vegetation management guidelines, are available in Chapter 3 of the manual.

### **Priority Zone 1 (0 – 10 meters)**

This area is immediately adjacent to a given building and extends outward in all directions for a recommended minimum of 10 meters in flat terrain. The main objective of vegetation management in this zone is to create an environment that will not support fire of any kind. In some situations, this may be the only zone or area that homeowners need to manage.

### **Priority Zone 2 (10 – 30 meters)**

This area begins 10 meters from the building and extends to 30 meters from the building. The main objective of fuel management within this zone is to create an environment that will only support fires of lower intensity and rate of spread.

### **Priority Zone 3 (30 –100+ meters)**

This area begins 30 meters from the building and extends to 100 meters or farther from the building. Fuel management in this area may only be needed in specific cases, when high hazard levels resulting from heavy continuous forest vegetation and steep topography are not reduced enough by fuel management in Priority Zone 2.

## SPECIFIC CONDITIONS GUIDELINES

It is not possible to entirely remove the threat of wildfire to a structure built within the wildland–urban interface. Instead, the design guidelines are intended to reduce the overall susceptibility of a structure to the threat of wildfire and thereby improve structure survivability.

### Building Construction and Materials

#### 1. Roofing

The roof coverings shall conform to Class A, B or C fire resistance as defined in the BC Building Code. Preferred roofing materials are metal, clay and asphalt shingles that meet the Class A, B or C requirements.

#### 2. Exterior Wall Finishes

Any material used for exterior wall finishes should be fire resistant such as stucco, metal siding, brick, cement shingles, concrete block, poured concrete, rock and logs or heavy timbers as defined in the BC Building Code. If log or heavy timber materials are used, the property owner must have an approved development permit or covenant for fire resistant landscaping, concrete, rock material or irrigated lawn within 30m of the home (Priority Zone 2).

#### 3. Chimneys

All chimneys should be constructed to meet BC Building Code requirements with an approved spark arrester consisting of 12 gauge welded or woven wire mesh screen with mesh openings 12 millimeters or less.

#### 4. Eaves, Vents and Openings

All eaves, attic and under floor openings should be screened with corrosion–resistant, 3–millimeter non–combustible wire mesh.

#### 5. Windows and Glazing

All windows must be double paned or tempered glass.

#### 6. Balconies, Decks and Porches

All ground level decks, balconies and porches should be skirted with fire resistant materials as outlined in the Exterior Wall Finishes section above. These features should not be open to the environment such as to allow vegetation to grow beneath the feature or that allows combustible material to be stored beneath the feature (i.e. firewood, lumber, paint, etc).

### Building Construction Alternatives

The following is an alternative to the *Building Construction and Material – Guideline # 6*:

- a) Balconies, decks and porches can be built with construction utilizing the following materials as a minimum equivalent to the requirements:
  - i. Wood columns – 6”x 6” minimum nominal dimension (solid sawn or built–up)
  - ii. Wood beams – 6”x 8” minimum nominal dimension (solid sawn or built–up)
  - iii. Exposed joists – 3”x 6” minimum nominal dimension (solid sawn or built–up)
  - iv. Joists – may be dimension lumber provided that the underside of the joists is clad with 1” lumber, ½ panel type sheathing or non–combustible finishes.

- b) As an alternative to the materials listed in a(i) the structures may be enclosed from the deck floor to the grade with wood frame wall or skirting construction clad.

## Landscaping

Any combustible fuels surrounding the building within the Priority Zones may require modifications or removal. Managing these areas around the buildings is important for safe and successful fire protection. Any landscaping work should also take into consideration ecosystem retention and restoration objectives and values. The guidelines below provide specific landscaping recommendations.

1. A fuel free space should be achieved in Priority Zone 1. This includes the removal of coniferous evergreen shrubs such as junipers, mugo pines, or coniferous evergreen hedges.
2. No additional evergreen trees are to be planted within Zone 1.
3. Forested areas within Zones 2 and 3 should be thinned to achieve 3–6 meter spacing between crowns.
4. Prune retained trees to a minimum height of 2 meters above the ground on flat terrain and 3 meters on slopes greater than 15%.
5. Less combustible or fire resistant plants and shrubs should be used during landscaping design (for example, deciduous shrubs, annuals, perennials and mowed grass)
6. Combustible landscaping materials, specifically mulch or wood chips should not be used in Zone 1.

## Landscape Alternatives

It is not advisable to retain previously existing mature coniferous trees within 10 meters of a building. Any coniferous trees retained in Priority Zone 1 must:

- a. Have the branches pruned to 3 meters above the ground.
- b. Be spaced so that no tree crown, or group of tree crowns, is closer than 3 meters to the next trees crown or group of tree crowns.
- c. No branches be within 3 meters of the buildings or balconies.

## Alternatives for Any Guidelines

Where a Development Permit is required, and subdivision of land, development or construction is proposed to vary from the Wildfire Development Permit Design Guidelines, a report by a registered professional forester or other registered professional with wildfire management experience is required to ensure wildfire risk reduction is occurring.

## Fuel Management Guidelines

Subdivisions that are planned within the forest fuel types or within 100m of the forest fuel types on the Development Permit Area maps must engage a registered professional forester with wildfire management experience to undertake a Wildfire Risk Reduction Report for the development prior to receiving a development permit.

This report should include, but not be limited to, the following contents:

- Fuel Hazard Assessments for all proposed structures
- Fuel Management Treatment Recommendations for areas and natural area reserves
- Fuel Management Prescription to mitigate the existing fuel hazard in the above areas
- Community design guidelines as per the FireSmart Manual (road design, emergency vehicle access needs, bridge load limits, water supply, landscaping, building materials, etc)

## Other Guidelines

- Improve access in areas of the community that are considered isolated and that have inadequate developed access for evacuation and fire control.
- Require access points suitable for evacuation and the movement of emergency response equipment are provided.
- Development shall be set back a minimum of 10 metres from the top of ridgelines, cliffs or ravines. Variation of the setback may be considered if a Professional Forester registered in BC specializing in wildfire risk and fuel hazard assessments and fuel management can justify a change in the setback distance.
- May request the registration of a restrictive covenant to ensure long term wildfire risk reduction and that reflects the wildfire risk reduction guidelines and best practices included in this Development Permit Area.
- Encourage wildfire risk reduction through conducting fuel hazard abatement in a way that is supportive of retaining or restoring the natural environment.

**See Schedule H: Wildfire Development Permit Area**

LAND TITLE ACT  
FORM C

Wildfire Covenant  
(Buildings Only)

(Section 219.81)  
Province of  
British Columbia

GENERAL INSTRUMENT - PART 1 (This area for Land Title Office use)

1  
. APPLICATION: (Name, address, phone number and signature of applicant, applicant's solicitor or agent)

2  
. PARCEL IDENTIFIER(S) AND LEGAL DESCRIPTION(S) OF LAND:\*

(PID)	(LEGAL DESCRIPTION)
*	*

3  
. NATURE OF INTEREST:\*

DESCRIPTION	DOCUMENT REFERENCE (page and paragraph)	PERSON ENTITLED TO INTEREST
Section 219 Covenant	Entire Instrument	Transferee

4

. TERMS: Part 2 of this Instrument consists of (select one only)

(a) Filed Standard Charge Terms  D.F. No.

(b) Express Charge Terms  Annexed as Part 2

(c) Release  There is no Part 2 of this instrument

A selection of (a) includes any additional or modified terms referred to in Item 7 or in a schedule annexed to this instrument. If (c) is selected, the charge described in Item 3 is released or discharged as a charge on the land described in Item 2.

5

. TRANSFEROR(S):\*

6

. TRANSFeree(S): (Including occupation(s), postal addresses(es) and postal code(s))\*

REGIONAL DISTRICT OF CENTRAL OKANAGAN, 1450 KLO Road, Kelowna, BC, V1W 3Z4

7

. ADDITIONAL OR MODIFIED TERMS:\*

N/A

8

. EXECUTION(S):\*\* This instrument creates, assigns, modifies enlarges discharges or governs the priority of the interest(s) described in Item 3 and the Transferor(s) and every other signatory agree to be bound by this instrument, and acknowledge(s) receipt of a true copy of the filed standard charge terms, if any.

Officer Signature(s)	Execution Date	Party(ies) Signature(s)
	Y M D	

\* \_\_\_\_\_

\_\_\_\_\_

OFFICER CERTIFICATION:  
Your signature constitutes a representation that you are a solicitor, notary public or other person authorized by the Evidence Act, R.S.B.C. 1979, C.116, to take affidavits for use in British Columbia and certifies the matters set out in Part 5 of the Land Title Act as they pertain to the execution of this instrument.

\* If space insufficient, enter "SEE SCHEDULE" and attach schedule in Form E.

\*\* If space insufficient, continue executions on additional page(s) in Form D.

THIS INDENTURE made the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

BETWEEN:

\*

(hereinafter called the "Transferor")

OF THE FIRST PART

AND

REGIONAL DISTRICT OF CENTRAL OKANAGAN

a regional district

1450 K.L.O. Road, Kelowna, B.C. V1W 3Z4

(hereinafter called the "Transferee")

OF THE SECOND PART

A. WHEREAS the Transferor is the registered owner in fee simple of all and singular that certain parcel(s) or tract(s) of land and premises, situate, lying and being in the Kelowna Assessment area, in the Province of British Columbia, more particularly known and described as:

*Parcel Identified:* \*

*Lot:* \*

*Osoyoos Division Yale District*

*Plan:* \*

(hereinafter called the "Lands")

B. AND WHEREAS pursuant to Section 219 of the *Land Title Act*, R.S.B.C. 1996 C.250, there may be registered a covenant against the title to the Lands subject to the covenant, and such covenant is enforceable against the Transferor and the successors in title of the Transferor even if the covenant is not annexed to land owned by the Transferee;

C. AND WHEREAS a building permit for a residence has been applied for by the Transferor from the Regional District of Central Okanagan for a structure indicated as requiring a *wildfire hazard development permit*.

D. AND WHEREAS a development permit is not required where a previous development permit or covenant has been registered on the title of the property and all the conditions addressed in the previous development permit or covenant have been met and those conditions will not be affected;

E. AND WHEREAS the parties have agreed that based upon the development permit requirements of the Regional District this Covenant should be registered against title to the Lands pursuant to Section 219 of the *Land Title Act*.



NOW THEREFORE in consideration of the promises set forth in this Covenant and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereby agree as follows:

1. No building may be used or occupied unless the building is maintained as follows:
  - a) Roofing – The roof covering shall conform to Class A, B or C fire resistance as defined in the BC Building Code.
  - b) Exterior Wall Finishes – Any material used for exterior wall finishes shall be fire resistant such as stucco, metal siding, brick, cement shingles, concrete block, poured concrete, logs or heavy timbers as defined in the BC Building Code, and rock.
  - c) Chimneys – All chimneys shall have spark arrestors made of 12 gauge (or better) welded or woven wire mesh with mesh openings of less than 12 millimetres.
  - d) Eaves, vents, and openings – All eaves, attic and under floor openings shall be screened with corrosion-resistant, 3-millimetre noncombustible wire mesh (as a minimum).
  - e) Windows and glazing – All windows must be double paned or tempered.
  - f) Balconies, decks and porches –
    - i. Decks shall be constructed of heavy timber as defined in the BC Building Code, or, with 1-hour fire resistant rated assemblies or noncombustible construction as defined by the BC Building Code; or equivalent alternative as approved by the Regional District Building Inspector.
    - ii. Manufactured homes shall be skirted with a fire resistant material as outlined in the previous guideline for exterior wall finishes.
  - g) Landscaping on the lands within 10 metres of a building shall not include coniferous evergreen shrubs such as junipers, mugo pines, or coniferous evergreen hedges.
  - h) No additional or new coniferous evergreen trees are to be planted within 10 metres of the building.
  - i) Any coniferous evergreen trees that are to be retained on the lands that lie within 10 metres of the building must;
    - i. Have limbs pruned such that they are at least 2 meters above the ground.
    - ii. Be spaced so that they have 3 metres between crowns. (In other words, the tips of the branches of a tree are no closer than 3 meters to the tips of the branches of another).
    - iii. No limbs should be within 3 meters of the building or attachments such as balconies.
  - j) Landscaping on the lands within 10 metres of a building shall use only noncombustible landscape mulches.
2. The Transferor agrees to ensure that all authorities having jurisdiction have unrestricted access to the lands for the purposes of fire fighting, suppression, control and prevention.
3. The Transferor does hereby, on behalf of the Transferor and the Transferors heirs, executors, administrators, successors and assigns, remise, release, indemnify and save harmless the Transferee, its officers, officials, employees or agents from any and all claims, causes of action, loss or suits of whatever nature of kind including, without limitation, claims for property damage, personal injury or death arising out of or in any way connected with the fire hazard existing on the lands. The Transferor does further agree that the Transferee shall have no obligation to ensure compliance with or enforce the terms of this Covenant or to do any act or thing in connection with the fire hazard or this Covenant, which at all times shall remain the responsibility of the Transferor and Transferors heirs, executors, administrators, successors, assigns and successors in title.

4. Pursuant to Section 219 of the *Land Title Act*, the covenants herein contained shall be covenants running with the lands and shall ensure to the benefit of and be binding upon the Transferor and the Transferors heirs, executors, administrators, successors, assigns and successors in title.
5. In this Covenant unless the context otherwise requires, the singular includes the plural and vice versa.
6. This Covenant will be interpreted according to the laws of the Province of British Columbia.
7. If any part of this Covenant are found to be illegal or unenforceable, that part will be considered separate and severable and the remaining parts will not be affected thereby and will be enforceable to the fullest extent permitted by law.
8. Nothing contained or implied in this Covenant shall prejudice or affect the exercise of any of the Transferees functions under any source of authority including, without limitation, any statutes, regulations, bylaws, orders or other constating documents, all of which may be fully and effectively exercised by the Transferee.
9. The Transferor will do or cause to be done all things and execute or cause to be executed all documents and give such further and other assurances which may be reasonably necessary to give proper effect to the intent of this Covenant.
10. This Covenant will not be modified or discharged except in accordance with the provisions of Section 219(9) of the *Land Title Act*.

LAND TITLE ACT  
FORM C

(Section 219.81)  
Province of  
British Columbia

**GENERAL INSTRUMENT - PART 1** (This area for Land Title Office use)

APPLICATION: (Name, address, phone number and signature of applicant, applicant's solicitor or agent)

signature of applicant, applicant's solicitor or agent

PARCEL IDENTIFIER(S) AND LEGAL DESCRIPTION(S) OF LAND:\*

(PID) (LEGAL DESCRIPTION)  
\* \*

NATURE OF INTEREST:\*

DESCRIPTION INTEREST	DOCUMENT REFERENCE (page and paragraph)	PERSON ENTITLED TO
Priority Agreement granting Covenant _____ priority Over Mortgage _____	Entire Instrument	Transferee

TERMS: Part 2 of this Instrument consists of (select one only)

- (a) Filed Standard Charge Terms  D.F. No.
- (b) Express Charge Terms  Annexed as Part 2
- (c) Release  There is no Part 2 of this instrument

A selection of (a) includes any additional or modified terms referred to in Item 7 or in a schedule annexed to this instrument. If (c) is selected, the charge described in Item 3 is released or discharged as a charge on the land described in Item 2.

TRANSFEROR(S):\*

\*

TRANSFEEE(S): (Including occupation(s), postal addresses(es) and postal code(s))\*

REGIONAL DISTRICT OF CENTRAL OKANAGAN, 1450 KLO Road, Kelowna, BC, V1W 3Z4

ADDITIONAL OR MODIFIED TERMS:\* N/A

EXECUTION(S):\*\* This instrument creates, assigns, modifies enlarges discharges or governs the priority of the interest(s) described in Item 3 and the Transferor(s) and every other signatory agree to be bound by this instrument, and acknowledge(s) receipt of a true copy of the filed standard charge terms, if any.

Officer Signature(s) Execution Date Party(ies) Signature(s)

Y M D

\*

OFFICER CERTIFICATION:

Your signature constitutes a representation that you are a solicitor, notary public or other person authorized by the Evidence Act, R.S.B.C. 1979, C.116, to take affidavits for use in British Columbia and certifies the matters set out in Part 5 of the Land Title Act as they pertain to the execution of this instrument.

\* If space insufficient, enter "SEE SCHEDULE" and attach schedule in Form E.

\*\* If space insufficient, continue executions on additional page(s) in Form D.

**POSTPONEMENT AGREEMENT**  
(Land Title Act)

THIS AGREEMENT is made the \_\_\_\_\_ day of \_\_\_\_\_, 20 \_

BETWEEN:

\*

*(the prior chargee)*

AND:

REGIONAL DISTRICT OF CENTRAL OKANAGAN  
a regional district  
1450 K.L.O. Road  
Kelowna, B.C. V1W 3Z4

*(the subsequent chargee)*

WHEREAS by instrument(s) registered in the Land Title Office at Kamloops, British Columbia under number(s) \_\_\_\_\_, the prior chargee was granted a mortgage (*the "Prior Charge"*) in respect of the following land in the Province of British Columbia described as:

\* *Parcel Identifier:*

AND WHEREAS by instrument registered in the Land Title Office at Kamloops, British Columbia on the \_\_\_\_\_ day of \_\_\_\_\_, 20 \_ under number \_\_\_\_\_ the subsequent chargee was granted a covenant (*the subsequent charge*) on the land;

AND WHEREAS the parties agree that the subsequent charge shall have priority over the prior charge.

THEREFORE in consideration of \$1.00 (*the receipt of which is hereby acknowledged*), the prior chargee grants to the subsequent chargee priority over the interest of the prior chargee in the land and postpones the right, title and interest of the prior chargee in the land to the subsequent chargee as if the prior charge had been registered immediately after the registration of the subsequent charge and notwithstanding the respective dates and time of execution and registration of the charges or the respective dates of advancement of monies under them.

END OF DOCUMENT

H:\PLANNING\6630-Dev\_General\50-COVENANTS\Wildfire\Building\Covenant.doc  
October 4, 2007