



**Bushland Protection
Systems Pty Ltd**
Specialising in
**BUSHFIRE HAZARD
PLANNING & MITIGATION**

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BUSHFIRE RISK ASSESSMENT AND MITIGATION PLAN

FOR

**PRECINCT A
PARADISE WATERS ESTATE
LOT 207 CH31135
SOUTH DEEBING CREEK ROAD
DEEBING HEIGHTS**

PREPARED BY

BUSHLAND PROTECTION SYSTEMS PTY LTD

COMMISSIONED BY

PLANS AND DOCUMENTS

referred to in the ULDA

APPROVAL dated 23/12/11

RPS GROUP

FOR

STOCKLAND DEVELOPMENTS

DATE: 3rd November, 2010.

1. Background

A Bushfire Mitigation Plan is designed to identify and minimise the potential bushfire risk to a given property and to help property owners to minimise bushfire risk to themselves, their property and their neighbours, it will not completely eliminate that risk. Ultimately it is a community responsibility to protect the environmental values, life and property in their area.

This plan is produced in accordance with the State Planning Policy 1/03, *Mitigating the Adverse Impacts of Flood, Bushfire and Landslide*, under the Queensland Sustainable Planning Act 2009 and the Ipswich Planning Scheme 1/06 – Part 11 Division 4 – *Bushfire Risk Areas*.

This plan is for Precinct A of Paradise Waters Estate located on Lot 207 CH31135, South Deebling Creek Road, Deebling Heights & part of the adjacent unconstructed road reserve along the western boundary. This plan is based on the following material supplied by RPS Group, and the site inspection on 26/10/10.

- 1.1. The Overall Landscape Concept Plan, drawn by RPS Group, Project No. 106228_01_Rev 2, dated October 2010, is included as Appendix 1 in this report.
- 1.2. The Preliminary Proposed Subdivision of Precinct A, drawn by RPS Group, Plan Ref. 104527-30, Revision I, dated 1/11/10, is included as Appendix 2 in this report.

2. Site Description.

The proposed Precinct A currently consists of predominantly open grazed grassland with some scattered trees and pockets of regrowth. With the area being developed into a residential style estate, the majority of vegetation will be cleared on the proposed allotments.

To the north of the site is another rural grazing property consisting of grazed grassland. The open maintained grassland areas, in accordance with appendix 3 of the State Planning Policy 1/03 (SPP1/03), would be assigned a vegetation score of 2 (grazed/slashed grass), and therefore would be given a PBH rating of 0 low, in accordance with table A3.1 and section A3.14 of the SPP 1/03 and the SPP 1/03 guideline - errata.

To the west of the site is a road reserve adjoining several well maintained 'Large Lot Residential' allotments. Recommendations on the management of the road reserve, particularly where road construction is not planned, are included in this report to ensure the road reserve does not pose a hazard.

To the south of Precinct A is proposed future Precinct B consisting of more residential allotments. The majority of this area is grazed grassland with a Low PBH rating. There is some regrowth vegetation near the western boundary with relatively low ground fuel levels due to grazing. Buffer and vegetation management requirements are outlined in this report to ensure that undeveloped precincts do not pose a threat to developed precincts.

To the east of Precinct A is an area of open space incorporating the 100 metre wide South Deebling Creek corridor, as shown in Appendix 1. This area will predominantly consist of dry sclerophyll, grassy eucalypt woodland similar to what is already present along the creek. This open space area will be the predominant bushfire hazard, albeit a limited one. The slopes are relatively level being under 5%. The severity of bushfire hazard for the open space, as calculated in accordance with appendix 3 of the State Planning Policy 1/03 (SPP1/03), would assign a vegetation score of 6 (grassy eucalypt), a slope score of 1 (plain 0%-5%) and an aspect score of 0 (all slopes under 5%), equating to a severity of bushfire hazard score of 7 medium (see table 1).

Table 1

TOTAL HAZARD SCORE	SEVERITY OF BUSHFIRE HAZARD
13 or greater	High
6 to 12.5	Medium
1 to 5.5	Low

Section A3.24 and table A3.5 of the SPP 1/03 sets out inclusion zones when calculating a PBH level. Any land within 50 metres of medium PBH rated bushland is deemed to have a medium PBH rating. Any land within 100 metres of high PBH rated bushland is deemed to have a high PBH rating. Therefore any proposed buildings within 50 metres of unmanaged bushland open space will be assigned a medium PBH rating.

3. Roads and Driveways.

The proposed estate has a substantial road network which exits through a Low PBH rated area in the northeast corner. There are also several connections to the future precincts. The road network also provides road separation from unmanaged bushland for the majority of lots.

Being residential allotments driveways will be short and direct.

4. Appropriate Building Site Location.

Being a residential estate, it would be recommended that dwellings be located on allotments so as to maximise setbacks from any unmanaged bushland, allowing for optimal defendable space.

All buildings are to be provided with a minimum 20 metres of separation from unmanaged bushland. In the vicinity of proposed lots 131-138 there is road separation of 24.5 metres and a proposed semi-active park, where ground fuels will be managed (see Appendix 1). In the vicinity of Lots 22-25 there is road separation of 15 metres which combined with the normal 6 metre front setback within the lot, would equate to 21 metre of separation.

On the eastern side of Lot 21 is a proposed local park and bio-detention basin. The bio-detention basin, managed in accordance with section 6 of this report, and active local park are to be utilised to achieve a minimum 20 metre buffer between the lot and unmanaged bushland.

On the eastern boundary of Lot 9999 there is to be a 20 metre building setback within this lot. Being a commercial lot, car parking within this building setback would be suggested as a suitable land use and buffer which also provides access.

5. Appropriate Building Construction.

Under the Ipswich City Council Planning Scheme, note 11.4.4A(8), housing with a medium or high PBH under the SPP1/03, requires the Building Code of Australia (BCA) and where relevant the Australian Standard for Construction of Buildings in Bushfire-Prone Areas (AS3959-2009) to be addressed.

The level of construction, if any, for dwellings should be assigned at the plan sealing stage, (or just prior to sale if being sold off the plan). Then the actual risk would be more readily assessable for individual allotments allowing greater accuracy.

6. Appropriate Clearing and Landscaping.

For optimal bushfire safety and best practise, the allotments must be cleared during operational works and maintained by the developer with low ground fuel levels until sold. Once sold the purchaser must maintain the allotment at all times, before, during and after construction of the dwelling.

The active park in the northwest corner, incorporating the estate entry statement is to have non-endemic grass and weed growth managed.

The road reserve along the western boundary is to be maintained with low ground fuel levels at all times by regular slashing or mowing. Quality trees and habitat trees can be retained or planted within this corridor provided they do not pose a threat to persons or property.

Vegetation in the bio-detention basin areas is to consist of less flammable species and be managed so as not to create a bushfire hazard and therefore may form a managed vegetation buffers for adjoining lots, that can also be utilised in achieving the minimum 20 metre buffers between dwellings and unmanaged bushland.

As the development is to take place in stages, care should be exercised to ensure that developed stages are not threatened by bushfire from the undeveloped stages. South of Lots 140-150, on the opposite side of the road, is to be a 35 metre wide slashed buffer which when combined with the 15 metre wide roadway will provide a 50 metre buffer. Quality trees and habitat trees can be retained within the slashed buffer zone provided they do not pose a threat to persons or property. This buffer is to be maintained until such time as development takes place in Precinct B. This will ensure that building construction ratings under AS3959-2009 will not be unnecessarily applied to Lots 140-150.

The open space area along the creek should be managed by the control of non-endemic grass and weed growth.

All timber, foliage and rubbish previously cleared or accumulated as a result of the implementation of this report would need to be removed from the site or mulched and

not simply moved down slope as this would result in a concentrated area of fuel loading which would increase the PBH from that direction.

Added protection from bushfire can be achieved by establishing green fire breaks which include green lawns, trees arranged to create a shield to catch sparks or fire brands or the expanding of rainforest species. Trees and shrubs not subject to drought stress will cope better during bushfires. The higher the moisture content in the plant the slower it burns. Therefore by keeping the surrounding area green and low in dry ground fuel, the intensity of an approaching fire will be reduced and the risk of spot fires minimised.

7. Provision of Adequate Water Supplies.

The area of the proposed development is to be serviced by reticulated water supplies with the inclusion of fire hydrants for fire fighting purposes. These services are to comply with the relevant standards as required by the local authorities.

8. Provision of Fire Fighting Infrastructure.

Where a house may have a direct exposure to an approaching bushfire it should have external hose cocks and hoses that are positioned so water supply is capable of reaching to all parts of the building. All water lines are to be covered by at least 300mm of soil. Residents should maintain good access around their homes for fire suppression activities by fire authorities.

9. Local Fire Brigades.

The subject property is currently in the Ripley Valley Rural Fire Brigade district and they would be responded on a 000 emergency call. If back-up is required, further units would be engaged by the Ipswich Rural Fire Brigades Group. Urban fire appliances would be responded in the event of a structural fire or specialised structural protection being required.

It is expected that once developed the estate will most probably come within the Urban Fire District.

10. Improved Community Awareness.

Managing ground fuel in small pockets of bushland at the interface between urban development and bushland (Izone) is the easiest way of reducing bushfire hazard, particularly the removal of non-endemic grass and weeds.

It would be recommended that a copy of the fire management plan be placed on display at any sales office, and a copy of the plan including appendix 3 be given to the purchasers of lots with a direct exposure to the bushland areas to provide them with the necessary information required for the building application process.

The Bushland open space is a very sensitive ecosystem and could be altered drastically if not cared for properly. Residents can assist in maintaining this fragile ecosystem by preventing unwanted fires from encroaching into the parkland, ensure that dumping of rubbish does not degrade the area and that exotic plant species do not invade the bushland. Hot fires on a regular basis will degrade the bushland's biodiversity.

It would be recommended that residents of dwellings with a medium PBH rating prepare a 'Bushfire Survival Plan', which is available from the Queensland Rural Fire Service website at www.ruralfire.qld.gov.au. The 'Bushfire Survival Plan' document provides information on Bushfire Danger Ratings, Community Warning Information, how to prepare your property, what to do in the event of a bushfire and what to expect. The Bushfire Survival Plan should be updated annually. Further information is also available through the Prepare•Act•Survive brochure also available on the Rural Fire Service website. For further information contact your local Fire Brigade for assistance.

11. Summary of recommendations.

- It would be recommended that dwellings be located on allotments so as to maximise setbacks from any unmanaged bushland, allowing for optimal defensible space.
- All buildings are to be provided with a minimum 20 metres of separation from unmanaged bushland.
- On the eastern side of Lot 21 is a proposed local park and bio-detention basin. The bio-detention basin, managed in accordance with section 6 of this report, and active local park are to be utilised to achieve a minimum 20 metre buffer between the lot and unmanaged bushland.
- On the eastern boundary of Lot 9999 there is to be a 20 metre building setback within this lot. Being a commercial lot, car parking within this building setback would be suggested as a suitable land use and buffer which also provides access.
- The level of construction under AS3959-2009, if any, for dwellings should be assigned at the plan sealing stage, (or just prior to sale if being sold off the plan).
- For optimal bushfire safety and best practise, the allotments must be cleared during operational works and maintained by the developer with low ground fuel levels until sold. Once sold the purchaser must maintain the allotment at all times, before, during and after construction of the dwelling.
- The active park in the northwest corner, incorporating the estate entry statement is to have non-endemic grass and weed growth managed.
- The road reserve along the western boundary is to be maintained with low ground fuel levels at all times by regular slashing or mowing. Quality trees and habitat trees can be retained or planted within this corridor provided they do not pose a threat to persons or property.

- Vegetation in the bio-detention basin areas is to consist of less flammable species and be managed so as not to create a bushfire hazard and therefore may form a managed vegetation buffers for adjoining lots, that can also be utilised in achieving the minimum 20 metre buffers between dwellings and unmanaged bushland.
- As the development is to take place in stages, care should be exercised to ensure that developed stages are not threatened by bushfire from the undeveloped stages. South of Lots 140-150, on the opposite side of the road, is to be a 35 metre wide slashed buffer which when combined with the 15 metre wide roadway will provide a 50 metre buffer. Quality trees and habitat trees can be retained within the slashed buffer zone provided they do not pose a threat to persons or property. This buffer is to be maintained until such time as development takes place in Precinct B.
- The open space area along the creek should be managed by the control of non-endemic grass and weed growth.
- All timber, foliage and rubbish previously cleared or accumulated as a result of the implementation of this report would need to be removed from the site or mulched and not simply moved down slope as this would result in a concentrated area of fuel loading which would increase the PBH from that direction.
- Where a house may have a direct exposure to an approaching bushfire it should have external hose cocks and hoses that are positioned so water supply is capable of reaching to all parts of the building. All water lines are to be covered by at least 300mm of soil. Residents should maintain good access around their homes for fire suppression activities by fire authorities.
- It would be recommended that a copy of the fire management plan be placed on display at any sales office, and a copy of the plan including appendix 3 be given to the purchasers of lots with a direct exposure to the bushland areas to provide them with the necessary information required for the building application process.
- It would be recommended that residents of dwellings with a medium PBH rating prepare a 'Bushfire Survival Plan'.

12. Conclusion.

With the proposed lots being urban residential, they will be predominantly cleared of vegetation as part of the development. The potential bushfire hazard will be from the creek corridor, albeit a limited one with a PBH rating of only 7 medium.

With the appropriate management of the passive open space areas, adequate water supply, good access provisions and minimising of ground fuels, the risk of bushfire damage can be managed and improve the safety of residents and fire services in attending to a bushfire threat, as well as maintaining the localised ecosystems.

This plan should remain current for a period of 5 years, until 2015, at which time it should be subject to review to take account of changing land use and vegetation patterns. Any major bush fire event affecting the subject site should also trigger a review in order to determine effectiveness of protection measures and annual hazard reduction initiatives.

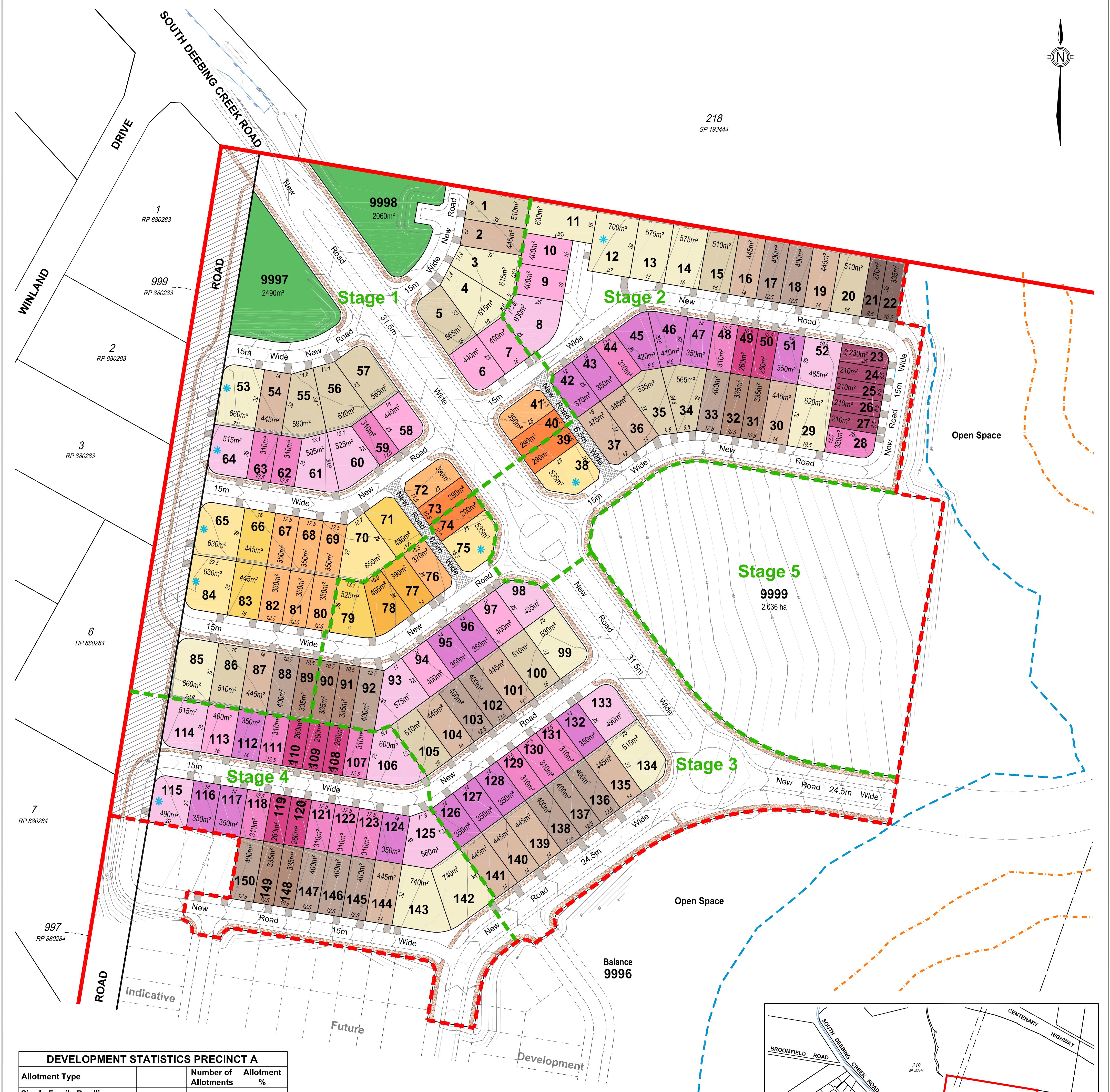
As the development is to take place in stages, care should be exercised to ensure the developed stages are not threatened by bushfire from the undeveloped stages.

Ultimately, persons living in a bushfire prone area must take the precautions necessary to protect themselves, their families and their homes if Brigades are stretched and are unable to attend immediately.

If you require any further assistance please do not hesitate to contact this office.



C. L. Bain
Principal Consultant.



DEVELOPMENT STATISTICS PRECINCT A			
Allotment Type		Number of Allotments	Allotment %
Single Family Dwellings			
25m Deep Lots	Typical Lot		
Cottage Allotment	8.5 x 25m	5	3.3%
Villa Allotment	10.5 x 25m	7	4.7%
Premium Villa Allotment	12.5 x 25m	15	10.0%
Courtyard Allotment	14 x 25m	16	10.7%
Traditional Allotment	16 x 25m	8	5.3%
Premium Traditional Allotment	18 x 25m	12	8.0%
Sub Total		63	42.0%
28m Deep Lots	Typical Lot		
Villa Allotment	10.5 x 28m	4	2.7%
Premium Villa Allotment	12.5 x 28m	9	6.0%
Courtyard Allotment	14 x 28m	2	1.3%
Traditional Allotment	16 x 28m	4	2.7%
Premium Traditional Allotment	18 x 28m	5	3.3%
Sub Total		24	16.0%
32m Deep Lots	Typical Lot		
Cottage Allotment	8.5 x 32m	2	1.3%
Villa Allotment	10.5 x 32m	7	4.7%
Premium Villa Allotment	12.5 x 32m	14	9.3%
Courtyard Allotment	14 x 32m	15	10.0%
Traditional Allotment	16 x 32m	12	8.0%
Premium Traditional Allotment	18 x 32m	13	8.7%
Sub Total		63	42.0%
Total Single Family Dwellings		150	100.0%
Density Calculation			dw/ha
Net Residential Density (excluding Balance Allotment)			17.5*

LAND USE BUDGET PRECINCT A		
Land Use Budget	Area (ha)	Percentage
Area of Precinct A	13.740	100.00%
Saleable Area		
Single & Multi-Family Lots	6.346	46.19%
Balance Allotment	2.036	14.82%
Total Area of Allotments	8.382	61.00%
Road		
Trunk Collector Road	1.991	14.49%
Existing Road to be Constructed	0.702	5.11%
Local Roads	2.209	16.08%
Total Area of New Road	4.902	35.68%
Open Space		
Detention / Stormwater Drainage / Park	0.456	3.32%
Total Open Space	0.456	3.32%
Road Type		
Total Length of New Road	2341	
6.5m Wide New Road	114	
15m Wide New Road	1352	
24.5m Wide New Road	292	
31.5m Wide New Road	385	
Existing Road 6.5m Pavement	198	

Legend

General Details

- Site Boundary
- Proposed Precinct Boundary
- Proposed Stage Boundary
- Existing Road to be Constructed
- Possible Multi-family dwelling (Duplex and Triplex Lots Only)

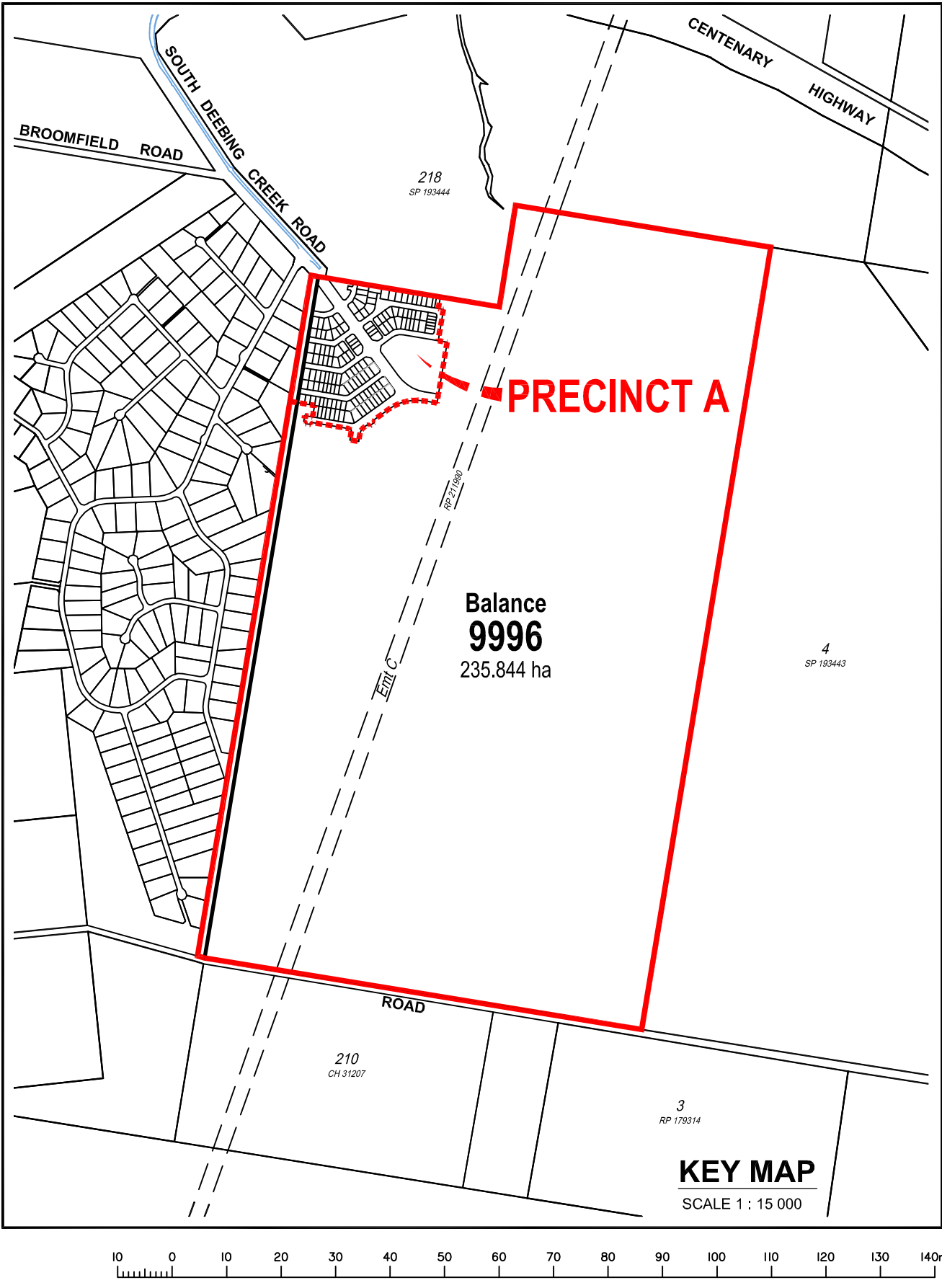
Open Space

- Proposed Detention & Park
- Waterway Top of Bank
- Waterway 50m Buffer

Road

- Indicative Footpath Location
- Indicative 3.5m Wide Driveway

Note
All dimensions and areas are approximate only, and are subject to survey and Council approval.
Dimensions have been rounded to the nearest 0.1 metres.
Areas have been rounded down to the nearest 5m².
The boundaries shown on this plan should not be used for final detailed engineers design.



REVISION A: 27/09/2010 Lot Redesign B: 28/09/2010 Add future layout, amend stats & notes C: 29/09/2010 Add Waterways D: 08/10/10 Amend Entry Area and Stats E: 20/10/10 Amend Lots by swapping 32's & 25's F: 25/10/10 Amend Lots 22-49 and stats G: 26/10/10 Add Parking Bays, Driveways & Footpaths H: 27/10/10 Add New Detail Survey & edit Staging Bdy I: 11/11/10 Adjust Driveway Locations J: 16/11/10 Amend Layout and Precinct Boundary	Level Datum		Date	16 November 2010	CLIENT	PROJECT		 RPS Australia East Pty Ltd ACN 140 292 762 ABN 44 140 292 762 743 Ann Street PO Box 1559 Fortitude Valley QLD 4006 T +61 7 3237 8899 F +61 7 3237 8833 W rpsgroup.com.au	
	Approval Authority.		Comp By.	WW / KCH		PARADISE WATERS			
	URBAN LAND DEVELOPMENT AUTHORITY		DWG Name.	104527_Prop	PROPOSED SUBDIVISION PRECINCT A OVER LOT 207 ON CH 31135 & EXISTING ROAD				
			Local Authority	IPSWICH CITY COUNCIL					
			Scale	Sheet			Locality		DEEBING HEIGHTS
1:1000/1:2000		A1/A3		Job Reference	104527	Plan Ref	104527 - 30	Rev	J

APPENDIX 3

Being Prepared

Knowing how to prepare your property for bush fire, both pre-fire and during a fire, can assist in protecting people and property. It can also alleviate a lot of the stress and panic and the feeling of helplessness that is commonly felt by the inexperienced and by the ill-prepared.

It is generally accepted that South East Queensland does not experience the same degree of extreme fire conditions as the southern states of New South Wales, Victoria and South Australia. Having said this it is also accepted that this State's bushland experiences a relatively regular fire regime. From time to time conditions may occur that will institute a serious and potentially destructive fire. These conditions can be recognised and precautions taken. It must be remembered that during extreme fire conditions the fire services may be stretched to the limit and may not be able to respond immediately to your particular emergency. So it would be desirable to be as prepared and self-reliant as possible to protect yourself, your family and your assets. It is not difficult, and the following information is provided to be of some assistance.

1. Conditions of Serious Fire:

- 1.1. Higher than average air temperatures for prolonged periods.
- 1.2. Large and very dry fuel loads.
- 1.3. Prolonged dry spell with little or no rain resulting in low soil moisture content.
- 1.4. Very low relative humidity, ie. there is very little moisture in the air.
- 1.5. Strong and gusty winds, usually from the north through to the west contribute to increased fire hazard. The longer these winds continue the drier the conditions become, and the higher the risk of serious fire.

Observation of local weather conditions past and present will give the best indication of the potential intensity of a fire at any given time or place.

2. Fire Intensities.

Having some idea of what a fire is likely to do in your local area, will help you make the right decisions and give you the confidence to deal with an approaching fire if necessary. Following are some basic fire behaviours.

- 2.1. Fire will travel faster and hotter uphill. The steeper the slope the faster the rate of spread, allowing little time to react.
- 2.2. Fire will travel relatively slow down hill even with reasonably high fuel loads, which will give more time to prepare.
- 2.3. A fire will generally travel faster and at higher intensities with a wind behind it. Again the stronger the wind faster the rate of spread. While a fire will slow considerably when burning against the wind in some cases may even go out.

2.4. The fire will usually burn at a higher intensity and spread faster during the hottest times of the day and tend to slow down considerably as the evening approaches and air temperatures drop.

2.5. The greater the supply of dry ground fuel available to the fire, ie. grass, dry leaf litter, hanging bark and twigs, the greater the intensity of the fire. If the ground fuel is minimised the intensity of the fire reduces considerably and so does the personal risk and the potential for damage.

2.6. If the ground fuels are kept relatively low the chances of a fire progressing into the treetops (crown fire) would be considerably reduced within the Queensland coastal bushlands.

3. Preparing for the bushfire season.

Most cases of damage to property are caused by radiated heat, direct flame contact or most commonly by burning debris or sparks landing in, on, or around buildings and starting small spot fires which if not attended to may destroy the property long after a fire front has passed. There are many steps that should be taken prior to the onset of a fire season to help protect your property.

3.1. Keep ground fuel cleared from around buildings such as long dry grass, branches, dead leaves, hanging bark and thick undergrowth.

3.2. Firebreaks checked and maintained, even a well-watered lawn can be an effective firebreak.

3.3. Flammable material around buildings should be kept well clear, such as firewood piles, plant pots, patio and garden furniture.

3.4. Making sure that rainwater gutters are kept clear of leaf litter build-up. Maybe a method of blocking off down pipes so gutters can be filled with water during a fire to extinguish sparks landing in gutters.

3.5. Make sure that the roofing is well secured, as winds created during a fire may lift roofing and allow the entry of burning embers into the roof space. Also clear any leaf litter or debris build-up from roof areas.

3.6. All windows and vents should be screened with fine wire mesh and all roof areas closed in to prevent entry by sparks.

3.7. Gas tanks are vented away from the house.

3.8. Make sure of reserve water supplies. Power frequently fails during a fire. If petrol or diesel pumps are available make sure they and associated hoses and fittings are in good working order.

4. Green Fire Breaks

Added protection from bushfire can be achieved by establishing green fire breaks which include green lawns, trees arranged to create a shield to catch sparks or fire brands or the expanding of rainforest species. Excess rainwater or tertiary treated waste water could be stored and used for this purpose during dry periods to maintain the green fire breaks. Trees and shrubs not subject to drought stress will cope better during bushfires. The higher the moisture content in the plant the slower it burns. Therefore by keeping the surrounding area green and low in dry ground fuel, the intensity of an approaching fire will be reduced and the risk of spot fires minimised.

5. Personal Protection

5.1. If you plan to evacuate, make sure you do so early, long before the fire front arrives. People remaining to fight the fire need to be physically and mentally fit to do so.

5.2. Those staying to protect the property should make sure they protect themselves from radiant heat, flying embers, smoke and most importantly heat stress. Protection measures should include the following:

- Long trousers and long sleeve shirt made of wool or cotton (no synthetics)
- Woollen socks and good leather boots for foot protection
- Goggles for eye protection
- A good pair of gloves to protect hands
- A handkerchief to tie over nose and mouth
- A wet towel can also be helpful hung around the back of the neck, this will lower the risk of heat stress.
- Have plenty of drinking water available to protect against dehydration (not refrigerated as this can cause cramping).

5.3. During the fire

When a fire is approaching and given that you have already carried out your pre-fire precautions, and established the degree of risk to your property, protection from the actual fire should be relatively straightforward.

5.3.1. Dress in the appropriate clothing and be sure to drink water regularly

5.3.2. Fill up bathtubs, sinks, buckets, laundry tubs etc. in case of blackouts.

5.3.3. Close doors, windows and curtains.

5.3.4. Close gaps under doors and windows with wet towels.

5.3.5. Block up down pipes, wet down roof, walls and gardens, paying particular attention to the side the fire is approaching from.

5.3.6. Have a battery-powered radio on hand to listen for information about the fires progress from local radio stations.

5.3.7. Patrol your property while the fire is approaching and for many hours after it has passed, to ensure that any spot fires or smouldering debris does not get a chance to develop into a major fire, paying particular attention to the roof cavity of your buildings. Smouldering embers have been known to start fires hours or even days after the original event.

6. Want to know more?

The local fire brigade is a good source of local district knowledge, they also have pamphlets and literature produced by the Queensland Fire and Rescue Service available. Most brigades will also be happy to advise local residents.



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E-mail: admin@bpsfire.com.au

Fire is a part of nature. Its effects can be catastrophic and fire can never be totally eliminated, however there are steps that can be taken to reduce the chances of uncontrolled fires occurring and the risk to life, property and the environment, in the event of uncontrolled fires. This is what we concentrate on, how the threats from bushfire can be minimised. There are many methods to do so, however deciding which method/s is best to use can be a complex decision to make. There are so many factors to consider such as ecological values, biodiversity, fire history, availability of resources, cost effectiveness and public awareness just to name a few. No guarantees can ever be given when dealing with Mother Nature, with ever increasing complexities it has now become a specialist field to be able to create plans to try and minimise the risk from bushfire. Ultimately it is a community responsibility to protect the environmental values, life and property in their area

COMPANY PROFILE

Bushland Protection Systems Pty Ltd (BPS) is a leading Bushfire Management Consultancy firm in Queensland, with many clients, ranging from private landowners to multi-national companies and government bodies.

BPS consultants began operating as Bushfire Management Consultants with the introduction of the Gold Coast Bushfire Management Strategy in 1998 and spread their operations across the state with the implementation in 2003 of the State Planning Policy for mitigating the adverse impacts of flood, bushfire and landslide.

During that time over 1500 projects have been successfully completed, including large residential estates such as Coomera Waters, Spring Mountain, Pacific Pines, Coomera Springs, Highland Reserve & Delfin Woodlands as well as commercial or Government project sites such as Paradise Country, Wacol Police Academy, Numinbah Correctional Facility, Silkwood Steiner School, Canon Hill Community Links Project & Griffith University. Clyde Bain, the Principal Consultant, is also one of the two most highly sought after expert witnesses for Land and Environment Court Appeals, in Queensland, having worked as the Bushfire Expert for several Regional and City Councils throughout the state on a number of various projects before the Land and Environment Court.

With a strong background in bush fire fighting and involvement with numerous industry bodies, Bushland Protection Systems continues to deliver realistic and cost effective advice, solutions to provide higher levels of safety for the community, improve wildfire suppression and mitigation options for emergency services and land managers, while maintaining and improving environmental values for the future. All our Consultants are members of the Rural Fire Association of Queensland.