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PLANS AND DOCUMENTS

referred to in the ULDA

APPROVAL dated 9/3/11

***Bushfire Hazard Assessment and Mitigation
Plan***

Supplementary Report

Reconfiguration of a Lot by Subdivision

***Flagstone Creek Estate – Stage 14
Reserve Drive, Jimboomba***

Commissioned by

***MTAA Superannuation Fund (Flagstone Creek and Spring
Mountain Park) Property Pty Ltd***

January 2011

RDG

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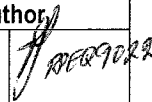
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Original Date of Issue:	20 January 2011
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REVISION

Document Title	Version No.	Date	Author
A. Bushfire Hazard Assessment and Mitigation Plan (Supplement)	1	20 January 2011	RDG 

DISTRIBUTION RECORD

Destination	Document Format			Version					
	Bound	Unbound	Electronic	1	2	3	4	5	6
Client	2		1	x					
Council									
DNR&W									
DMR									
File Copy	1		1	x					

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1.0 Introduction

The warrant for this supplement to the *Bushfire Hazard Assessment and Mitigation Plan* previously prepared by RDG Environmental Engineering Solutions Pty Ltd, dated May 2008, has come about as a result of the revision of the reconfiguration layout for Flagstone Creek Estate - Stage 14. This supplement is to be read in conjunction with the *Bushfire Hazard Assessment and Mitigation Plan* previously prepared by RDG Environmental Engineering Solutions Pty Ltd, dated May 2008.

The revision of the reconfiguration layout for Flagstone Creek Estate – Stage 14 has come about in direct response to the ULDA declaration of the Greater Flagstone Area as the Greater Flagstone Urban Development Area, Greater Flagstone UDA. The lands seen to represent Flagstone Creek Estate - Stage 14 have been designated as an 'early release UDA'.

The revision of the reconfiguration layout for Stage 14 seeks to provide for the efficient utilisation of developable lands by way of compact and efficient allotment design whilst providing for increased housing affordability, diversity and choice better suitable to modern society. Residents will be afforded a high quality, affordable lifestyle by way of a range of housing choices designed to better suit the needs of modern society, notably life cycle and affordability requirements.

This supplement seeks to review the potential risk to future residents posed by the vegetation retained upon the development site and the lands immediately adjacent the site in light of the revised reconfiguration layout and in-turn make recommendations as to the appropriate mitigation measures that need to be employed in order to minimise the potential impacts to residents as a result of a significant bushfire event.

The findings and the subsequent recommendations of this supplement are based upon:

- the revised Plan of Development for Flagstone Creek Estate – Stage 14 prepared by Schlencker Surveying (QLD), drawing number 10083-01 (refer **Appendix A**);
- recent site inspections of the lands constituting Flagstone Creek Estate - Stage 14A conducted throughout January 2011.

This supplement to the *Bushfire Risk Assessment and Mitigation Plan* seeks to reevaluate:

- the potential bushfire hazard risks posed by the existing vegetation present upon the development site and the lands immediately adjacent to the site, at the time of the assessment; and
- the measures that need to be implemented in order to minimise the potential risk to individuals, their property and third parties that may be called upon in response to a bushfire event.

This supplement to the *Bushfire Risk Assessment and Mitigation Plan* has been prepared with due regard having been had in regards to the provisions of SPP 1/03.

2.0 The Proposal

MTAA Superannuation Fund (Flagstone Creek and Spring Mountain Park) Property Pty Ltd has made application to the ULDA on the 5th November 2010 for:

- A Development Permit for Reconfiguring a Lot (with a Plan of Development) for the establishment of 126 lots plus road and parks; and
- A development Permit for a Material Change of Use – House (126 dwellings) and Multiple Residential (12 dwellings in Dual Occupancy configuration) as identified on lots within the Plan of Development.

The reconfiguration proposal is provided at **Appendix A**.

3.0 The Site

3.1 Site Description

The development site is described as L900 on SP216471 with an area of 12.8304 hectares. The lands in question form a portion of the original site area constituting Flagstone Creek Estate – Stages 13, 14 and 15, namely L995 SP190157 and L879 SP133970 Parish Maclean and L875 SP146552 Parish Undullah, with a combined area of 84.308 hectares.

3.2 Existing Land Use(s)

The site is currently vacant.

3.3 Surrounding Land Use(s)

The predominant form of development within Flagstone Creek Estate is a mixture of residential low density and urban residential development, the aforementioned development occurring within Flagstone Creek Estate - East. The lands constituting Flagstone Creek Estate - West are not yet subject to development although the lands have been the subject of a substantial land clearing exercise undertaken in accordance with a development approval issue for Operational Works – Vegetation Clearing by the then Beaudesert Shire Council.

The lands immediately to the south of the site take in Flagstone Community College (High School), Flagstone State School (Primary School) and Flagstone Creek Estate - Stages 12A and 12B. The lands to the north and the east of the site take in residential low density allotments also created as a result of previous stages of Flagstone Creek Estate.

The lands immediately to the west and the north-west of the site take in recently completed stages of Flagstone Creek Estate, namely Stage 13A, 13B, 13C and Stage 15A.

3.4 Topography

The topography of the site, for the better part, remains unaltered since the time of the preparation of the initial *Bushfire Hazard Assessment and Mitigation Plan*. The exception being that limited earthworks have occurred within the bounds of the development site, notably Stage 14.

3.5 Vegetation

The greater majority of the vegetation once present upon the site has been cleared in conjunction with the development works associated with Stages 13A, 13B, 13C and 15A.

The vegetation immediately adjacent the site is limited predominantly to the bed and the banks of *Sandy Creek* and or drainage lines leading to *Sandy Creek*. The vegetation generally consists of a light covering of eucalypt species and non-endemic grasses and weed growth. The recent rainfall events of December 2010 and January 2011 have in-turn lead to substantive weed growth within the aforementioned corridors.

The ground / near ground fuel loads were seen to represent a low - moderate fuel load at the time of the site inspection.

4.0 Bushfire Hazard Assessment

The methodology utilised in order to establish the susceptibility to bushfire and the severity of any bushfires occurring within the areas of retained bushland in and about the estate has been established in accordance with the provisions of *Appendix 3 – Undertaking Natural Hazard Assessment – Bushfire of State Planning Policy Guidelines – Mitigating the Adverse Impacts of Flood, Bushfire and Landslide*, June 2003. The assessment methodology involves both quantitative and qualitative assessments. The quantitative component requires the assessment of three (3) key characteristics of land that have been found to be the main determinants of the severity of bushfire hazard, namely the vegetation community type and form present upon the lands and immediately adjacent to the lands, the slope of the landform and the aspect of the landform.

4.1 Potential Bushfire Exposures

Having undertaken a preliminary tabletop assessment of the risk posed to the development site by bushfire activity and thereafter having undertaken a field assessment of the site and the lands adjacent to the site, the following portions of the site and / or the lands adjacent to the site are seen to pose a potential bushfire hazard risk to the proposed development:

- the vegetated corridors that generally coincide with the drainage corridors, particularly the *Sandy Creek* creekline corridor.

The retained bushland areas are such that they have the potential to carry a localised bushfire, although with the adoption of appropriate bushfire management techniques, bushfires originating in these areas should be readily manageable.

4.2 Bushfire Hazard Ratings

Whilst the bushland areas to the western side of the Sydney - Brisbane rail corridor were previously seen to represent a bushfire hazard risk, the lands in question have been substantially cleared. The cleared bushland areas to the western side of the Sydney - Brisbane rail corridor have significantly reduced the potential hazard posed to the Flagstone Creek Estate – East, as a whole, by bushfire activity.

The retained bushland areas / corridors immediately adjacent to the site (Stage 14) are relatively narrow in nature and somewhat segregated by road crossings and or service crossings. The susceptibility to bushfire attack and ultimately the severity of a bushfire is thus substantially reduced. The outbreak of a fire within the bushland corridor is more likely to come about as a result of human interaction whether it be deliberate or accidental, than by way of natural occurrence (i.e. lightning strike / spotting as a result of a fire within an adjacent bushland corridor).

In those instances where a fire does occur within the vegetated corridor it is unlikely that the fire will reach full intensity as a result of the narrow band width and segmentation of the vegetation present. In saying this, a fire of nuisance value could impact upon allotments adjacent the vegetated corridors if basic mitigation practices are not observed by the then resident and / or the Local Authority acting as trustee for the park reserves on behalf of the crown. All said, the vegetation associated with the vegetated corridors have been assigned a reduced vegetation score per the provisions of *Table A3.1: Hazard scores and associated fire behaviours for various vegetation communities, Note 1, of SPP 1/03.*

Properties that are likely to have a direct exposure to these vegetated corridors are likely to be susceptible to a **low - medium** severity bushfire hazard risk of 4 to 6 (refer **Table 1**) although the nature of the terrain (i.e. creek corridor) is likely to result in modified wind directions, creating localised turbulence and erratic fire behaviour. The potential localised heightened bushfire severity has therefore been given consideration within the recommendations of this supplement, notably the requirement for the adoption of a physical barrier (i.e. colour bond fencing) at the interface between the creek corridor and the allotments immediately adjacent.

The lands typically have a vegetation score of 3 - 4 (Semi-Intact acacia forests with a light grass to leaf litter load), a slope score of 1 - 2 (Slopes predominantly 0% to 5% with creek embankments exceeding 10% over short distances typically less than 10 metres) and an aspect score of 0 (Lands typically with a slope of less than 5%).

The retained bushland areas / corridors, as a whole, whilst potentially having a **low - medium** bushfire hazard severity risk should be treated as having a **medium** bushfire hazard severity risk in that the Local Authority is un-likely to perform the routine maintenance typically required to maintain the reduced susceptibility to bushfire attack.

Total hazard score	Severity of Bushfire hazard
13 or greater	High
6 to 12.5	Medium
1 to 5.5	Low

Table 1: Bushfire Hazard Severity Rating
(Sourced from SPP 1/03 Guidelines – Table A3.4)

It is held that with the implementation of the recommendations of this report and the adoption and implementation of sensible and sound practises relating to bushfire fuel level management by the Local Authority in conjunction with the Queensland Fire and Rescue Service (QFRS) and where applicable, property owners, that the potential for intrusive and destructive bushfires encroaching on this estate can be kept to a minimum.

5.0 Roadways and Fire Access Trails

Stage 14 is currently accessed by way of the existing road network servicing the wider area of the estate.

5.1 Roadways / Access Provisions

Principal Road Network

The principal road network is not seen to have altered from that previously reported within the *Bushfire Hazard Assessment and Mitigation Plan*.

Internal Road Network

The minor order road network seen to provide access to the site (Stage 14) has not altered from that previously reported within the *Bushfire Hazard Assessment and Mitigation Plan*.

The roadway layout servicing the respective allotments seen to constitute Stage 14 has however substantially changed from that of the reconfiguration layout approved in conjunction with the initial development approval issued in respect of Flagstone Creek Estate – Stages 13, 14 and 15.

The revised roadway layout will see the proposed allotments, for the better part, segregated from the surrounding vegetation within the bushland corridor by way of a frontage roadway.

The perimeter roadways are seen to represent a significant firebreak between the proposed residential development and the vegetation retained within the *Sandy Creek* creekline corridor. The perimeter roadways will also serve as a ready means of access to the vegetation sited within the *Sandy Creek* creekline corridor in the event of a bushfire event.

5.2 Fire Access Trails

Having regard to the revised roadway layout, notably the extent of the frontage roadway to the park areas adjacent *Sandy Creek*, there is no perceivable warrant for the establishment of defined fire access trails.

5.3 Firebreaks

Whilst sufficient warrant no longer exists for the establishment of fire access trails it is considered reasonable that either:

- a firebreak in the order of ten (10) metres be established to the boundaries of proposed Lots 75 through 79 and Lots 92 through 97; or alternatively
- a reduced firebreak (i.e. five (5) metres) be established to the rear of the aforementioned allotments in conjunction with a 1.8 metre high colour bond fence.

Ideally, the vegetation within the area of the firebreak should be maintained as a low ground fuel area. However, where the lands in question take in earthworks batters requiring landscaping, the landscaping should be restricted to ground covers.

The ground covers should be planted in a manner that seeks to reduce:

- the potential for direct flame contact; and
- the radiant heat generated as a result of a nuisance fire within the waterway corridor.

Ideally, ground covers should not be planted within a minimum of one (1) metre of the colour bond fence. Similarly it is critical that the colour bond fence be set on a concrete mowing strip with a lip (nominally 25mm) which inhibits the passage of flames beneath the fence.

5.4 Vacant Allotments

The requirements pertaining to vacant allotments remain unchanged from that of the initial *Bushfire Hazard Assessment and Mitigation Plan*.

6.0 Siting of Building Envelopes

Having regard for the revised reconfiguration layout there is little warrant to restrict the siting of building envelopes upon the greater majority of the proposed allotments. In saying this it would be preferable to site the building envelopes upon proposed Lots 75 through 79 and Lots 92 through 97 to the front two-thirds of the allotments.

Should this not be seen to be desirable, the design and construction of the respective dwelling houses / dwelling units will need to accord with the provisions of AS3959-2009 *Construction of buildings in bushfire prone areas* (Standards Australia, 2009).

7.0 Building Construction Controls

The BCA requires that dwellings seen to be within a defined Bushfire Hazard Area are to be constructed in accordance with the appropriate level of construction, which is determined by the Category of Bushfire Attack. Section 3.7.4.2 of the BCA requires that the dwelling be assessed under the Australian Standard 3959 to determine the Category of Bushfire Attack.

AS3959 was updated and released on 10/3/09 as AS3959-2009 and adopted in Queensland on 1st October, 2009. One of the significant changes was replacing the four tier 'Category of Bushfire Attack' (low, medium, high, extreme) with a 6 tier 'Bushfire Attack Level' (Low, 12.5, 19, 29, 40, FZ). Construction standards for each Bushfire Attack Level (BAL) are specified in Sections 3 – 9 of the AS3959-2009. Until the BCA is amended to reflect the new construction standards, the standards outlined in Section 3 – 9 of the AS3959-2009 are to be utilised.

Section 3.7.4.0 of the BCA states:- "*Performance requirement P2.3.4 is satisfied for a class 1 building located in a designated bushfire prone area if it is constructed in accordance with AS 3959 – Construction of buildings in bushfire-prone areas*".

Between development application stage and building application stage, many of the variables used to calculate the building construction level can and usually do change. Therefore to attain accurate ratings an assessment of the construction level required should be carried out at the building application stage, **where properties have a direct exposure to retained unmanaged bushland**. Scattered treed areas with managed ground fuel levels do not constitute a bushfire hazard and do not require assessment.

8.0 Monitoring of Fuel Loads within Vegetated Corridors

The requirements pertaining to the monitoring of fuel loads within vegetated corridors remain unchanged from that of the initial *Bushfire Hazard Assessment and Mitigation Plan*.

9.0 Landscaping Treatments

Having regard for the revised reconfiguration layout, notably the revised allotment sizes and the configuration of the allotments the establishment of green firebreaks to the rear of the allotments with a direct exposure to the vegetated creek line corridors is no longer deemed appropriate nor recommended.

10.0 Provision of Adequate Water Supplies

The requirements pertaining to water supply remain unchanged from that of the initial *Bushfire Hazard Assessment and Mitigation Plan*.

11.0 Provision of Fire Fighting Infrastructure

Where a dwelling house / dwelling unit is likely to have direct exposure to an approaching bushfire it should have external hose cocks and hoses that are suitably positioned so water can be applied under pressure to all parts of the building and the lands immediately adjacent the building. The future residents in undertaking the design and construction of a dwelling house / dwelling unit, upon said allotments, should be required to make provision for the inclusion of a 30 metre (nominal) length fire hose reel, or multiple thereof, suitably sited so as to ensure that each portion of the dwelling house can be readily accessed.

It is important to note that water supply lines servicing the external water supply system should have a minimum of 300mm cover; preferably 450mm cover in order to provide adequate insulation to the water supply lines.

12.0 Local Rural Fire Brigade

The requirements pertaining to the Local Rural Fire Brigade remain unchanged from that of the initial *Bushfire Hazard Assessment and Mitigation Plan*.

13.0 Improved Community Awareness

The requirements pertaining to Improved Community Awareness remain unchanged from that of the initial *Bushfire Hazard Assessment and Mitigation Plan*.

14.0 Summary of Recommendations

Having regard for the discussion had within the body of this supplement, it is recommended that:

Fire Breaks

- A firebreak in the order of ten (10) metres be established to the boundaries of proposed Lots 75 through 79 and Lots 92 through 97;
or alternatively
- A reduced firebreak (i.e. five (5) metres) be established to the rear of the aforementioned allotments in conjunction with a 1.8 metre high colour bond fence.

Ideally, the vegetation within the area of the firebreak should be maintained as a low ground fuel area. However, where the lands in question take in earthworks batters requiring landscaping, the landscaping should be restricted to ground covers.

The ground covers should be planted in a manner that seeks to reduce:

- (i) the potential for direct flame contact; and
- (ii) the radiant heat generated as a result of a nuisance fire within the waterway corridor.

Ideally, ground covers should not be planted within a minimum of one (1) metre of the colour bond fence. Similarly it is critical that the colour bond fence be set on a concrete mowing strip with a lip (nominally 25mm) which inhibits the passage of flames beneath the fence.

Vacant Allotments

- Persons purchasing an allotment are to maintain the allotment as a low ground fuel area until such time as a dwelling house is constructed upon the allotment.
- In the event that a vacant allotment is not adequately maintained as a low ground fuel area, adjacent residents should take a proactive approach to protecting themselves, their families and their property by way of ensuring that any vegetation situated within 6 -10 metres of the common property boundary is maintained as a low ground fuel area.

In the event that an adjacent vacant allotment becomes seriously overgrown it is advisable that contact be made with the Local Authority, advising of concerns relating to the potential bushfire hazard posed by said vegetation.

Siting of Building Envelopes

- The building envelopes upon proposed Lots 75 through 79 and Lots 92 through 97 to the front two-thirds of the allotments.

Should this not be seen to be desirable, the design and construction of the respective dwelling houses / dwelling units will need to accord with the provisions of AS3959-2009 *Construction of buildings in bushfire prone areas* (Standards Australia, 2009).

Building Construction Controls

- The construction of a new dwelling house / dwelling unit upon proposed Lots 75 through 79 and Lots 92 through 97 will need to comply with the provisions of Australian Standard AS3959 – 2009 - *Construction of buildings in bushfire prone areas* (Standards Australia, 1999), which specifies minimum standards to improve the performance of buildings against *burning debris (including embers)*.

The actual bushfire category however, should be established at the time of the then owner(s) seeking to facilitate the construction of a dwelling house upon the respective allotments.

Monitoring of Fuel Loads within Vegetated Corridors

- The Local Authority in association with the QFRS should seek to actively monitor the fuel loads and the build up of same to prevent an unacceptable level of ground fuels developing within the area of the vegetated corridors. Monitoring of fuel loads should be carried out from time to time to prevent the unacceptable build-up of ground fuel loads, particularly grass or weed growth within or along the edges of retained vegetated corridors.
- The build-up of bushfire fuel loads should be managed by way of slashing or the like prior to or during the wet season or by way of a cool burn during May, June and or early July depending upon seasonal conditions. Burning should be utilised sparingly (every 5-7 years) as regular burning can alter the ecosystem by way of encouraging the growth of more fire tolerant species¹.

Landscaping Treatments

- In those instances where allotments have a direct exposure to vegetated corridors notably the *Sandy Creek* creek line corridor it is recommended that the 'green firebreaks' be avoided.

The form of the housing proposed is not conducive to the establishment of 'green firebreaks' (i.e. the housing density and the proximity of the rear of the dwellings to the rear property boundary would provide insufficient to permit the establishment of a 'green fire break').

Water Supplies

- The water reticulation network is to be designed not only to cater for the likely demands for water resulting from the residents residing within the dwellings that will be constructed upon the allotments but also the necessary fire fighting requirements prescribed within Council's *Design and Construction Manual*.

Fire Fighting Infrastructure

- Where a dwelling house is likely to have direct exposure to an approaching bushfire it should have external hose cocks and hoses that are suitably positioned so water can be applied under pressure to all parts of the building and the lands immediately adjacent the building. The future residents in undertaking the design and construction of a dwelling house, upon said allotments, should be required to make provision for the inclusion of a 30 metre (nominal) length fire hose reel, or multiple thereof, suitably sited so as to ensure that each portion of the dwelling house can be readily accessed. It is important to note that water supply lines servicing the external water supply system should have a minimum of 300mm cover; preferably 450mm cover in order to provide adequate insulation to the water supply lines.

Local Rural Fire Brigade

- A copy of the *Bushfire Risk Assessment and Mitigation Plan* together with this supplement is to be provided to the Local Rural Fire Brigade (Jimboomba Rural Fire Brigade) for feedback in relation to ongoing maintenance requirements.

Local Authority

- A copy of the *Bushfire Risk Assessment and Mitigation Plan* together with this supplement is to be provided to Logan City Council for feedback in relation to ongoing maintenance requirements.

Community Education Program

- A copy of the *Bushfire Risk Assessment and Mitigation Plan* together with this supplement is to be provided to prospective purchasers of the lots with a direct exposure to areas of retained vegetation in order to provide future purchases with an awareness of their responsibility for themselves, their neighbours and the community of which they will become a part of.
- A copy of the *Bushfire Risk Assessment and Mitigation Plan* together with this supplement is to be made available at all Sales Offices and / or Real Estates for the viewing of prospective purchasers.
- The Developer shall also make available copies of the following *Queensland Government Department of Emergency Services* documentation to prospective purchasers of the lots with a direct exposure to areas of retained vegetation in order to provide future purchases with useful information on *Bushfire Preparedness*:
 - (a) *Don't Welcome bushfire into your home – Bushfire Prepared Communities* (V.1 10/04); and
 - (b) *Are you Prepared?*

Currency Period

- The recommendations of the *Bushfire Risk Assessment and Mitigation Plan* together with this supplement, in so far as they apply to Stage 14, are seen to be valid for a period of **five (5)** years from the date of the preparation of the document. Thereafter the *Bushfire Risk Assessment and Mitigation Plan* together with this supplement should be reviewed and modified as and where appropriate, in light of the bushfire hazard risk posed by the vegetation present upon the site and the lands abounding the proposed development at that time. Should a significant bushfire event occur within the life of the *Bushfire Risk Assessment and Mitigation Plan*, it is advisable that the *Bushfire Risk Assessment and Mitigation Plan* together with this supplement, in so far as they apply to Stage 14, be reviewed as to the effectiveness of the mitigation strategies employed.

15.0 Conclusion

The lands constituting Stage 14 once developed will, for the better part, be subject to a **Low** bushfire hazard risk. The exception being those lands situated within fifty (50) metres of the vegetation corridors associated with Sandy Creek and the smaller tributary situated adjacent the northern boundary of the site, which are seen to be subject to a **Low - Medium** bushfire hazard risk.

Having regard for the revised roadway configuration provided for by way of the proposed development and that of the existing development, the suppression of fires within the vegetated corridors is well catered for. Provided that the Local Authority in conjunction with the QFRS continue to monitor and manage the fuel loads within the vegetated corridors, the risk of high intensity fires should be greatly reduced.

The area will be adequately serviced by way of a reticulated water supply (on-demand), which will be designed to cater for fire fighting flows should the need arise to access waters from the reticulated network. Thus, should there be a need for access to water, over and above that catered for upon the individual emergency response units, this should be readily achievable by way of the numerous fire hydrants provided throughout the length of the reticulated network.

In that the development, as a whole, will also see the removal of vegetation from all of the areas upon which residential housing is to be established prior to the construction of any dwelling houses, the vacant lands, developed or otherwise, will need to be maintained as a **Low** ground fuel area.

With the implementation of the recommendations outlined within this report, the adoption of sensible bushfire fuel reduction practices by the property owners and the adoption of appropriate bushfire management strategies and practices by officers of the Local Authority in conjunction with the QFRS, bushfires originating in the vegetated corridors should be readily manageable.

Whilst the implementation of the *Bushfire Risk Assessment and Mitigation Plan* in conjunction with this supplement will assist to reduce the potential risk posed to individuals, their property and third parties that may be called upon in response to a bushfire event, the implementation of the *Bushfire Risk Assessment and Mitigation Plan* in conjunction with this supplement will not eliminate the risk posed by bushfire events. Individuals residing within bushfire prone areas should take a proactive approach to mitigating the potential impacts that may come about as a result of a bushfire event. In saying this though, individuals should be mindful of their own limitations and those of their families, and according take appropriate actions / measures to prevent the loss of life, homes and property.

The *Queensland Fire and Rescue Service (QFRS)* in conjunction with the *Local Authority* should undertake routine inspections of all areas of hazardous vegetation situated upon Reserves for which the *Local Authority* acts as a Trustee on behalf of the *Crown*. Where the *QFRS* in conjunction with the *Local Authority* determines the build up of bushfire fuel loads to pose a threat to adjoining residential development the *QFRS* should seek to undertake a 'controlled burn off' in order to reduce said fuel loads.

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LIST OF REFERENCES

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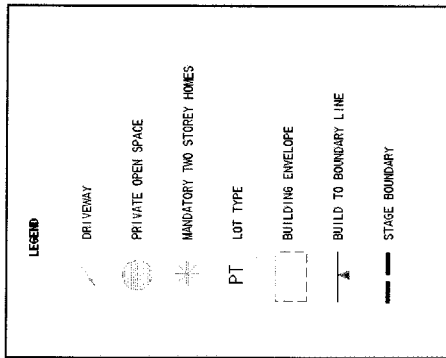
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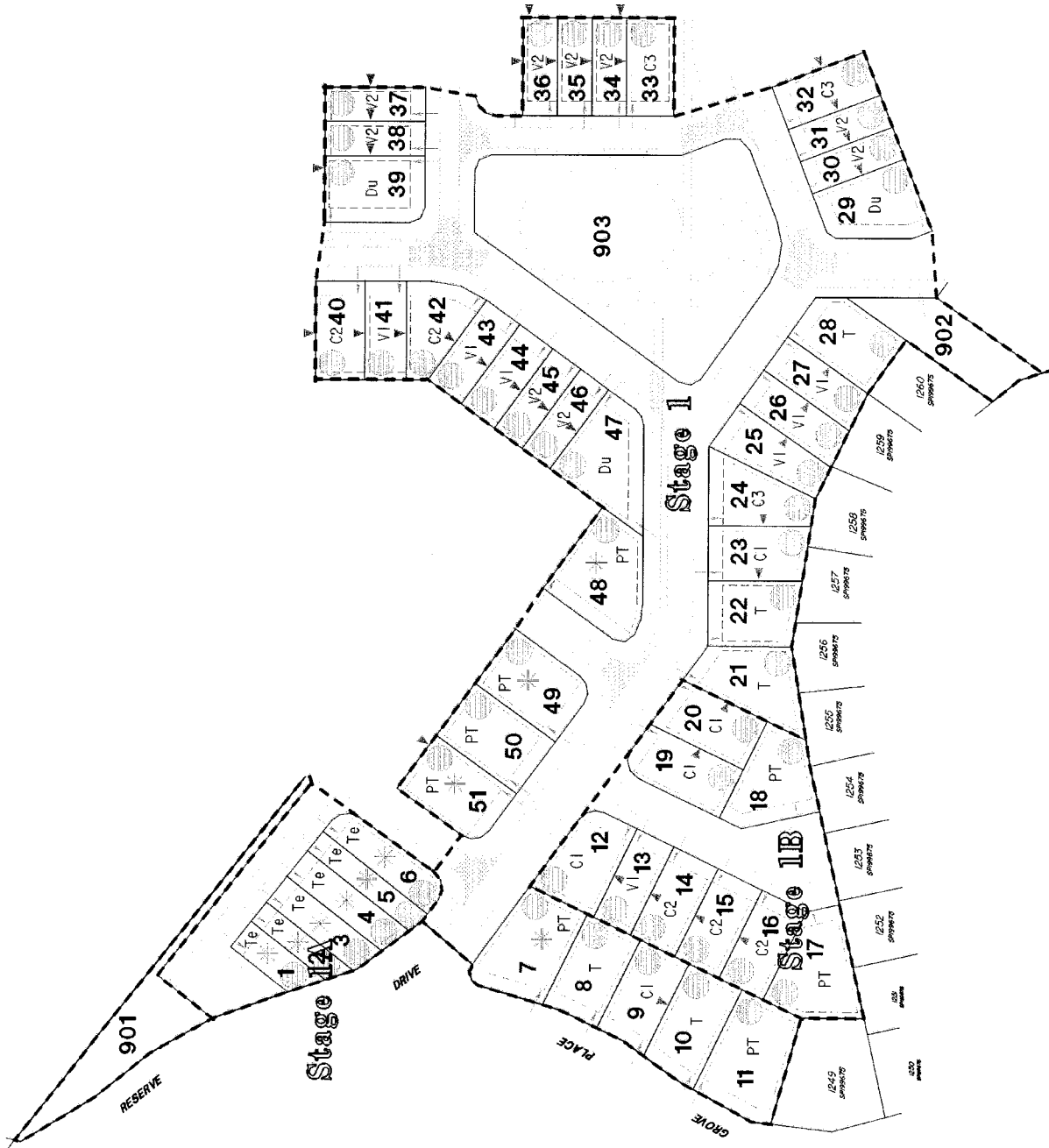
Appendix A

Locality Plan(s)

***Everyday Engineers Planners and Surveyors
Trading on behalf of
RDG Environmental Engineering Solutions Pty Ltd
Shop 14A The Colonial Shopping Village
Jimboomba Qld 4280
e-mail: rickygraham@everydayengineers.com.au***



STAGE I INC 1A & 1B AREA		LOT TYPE	NO	%	AREA
PT	Premium Traditional	8	12-6	5394	
T	Traditional	5	6-7	2884	
C1	Courtyard 1	5	5-9	2547	
C2	Courtyard 2	5	5-3	2283	
C3	Courtyard 3	3	3-2	1386	
V1	Villa 1	7	6-5	2803	
V2	Villa 2	9	6-6	2846	
Te	Terrace (attached)	6	4-5	1940	
Du	Duplex	3	4-5	1935	
	Park (active)	-	12-3	5287	
	Open Space	-	2-4	1028	
	Road Reserve	-	29-2	12537	
TOTAL					51 42871



SITE SETBACK TABLE		(metres)
PRIMARY FRONTAGE		4-5
GARAGE LOT TYPE PT & T OTHERS		6-0
		4-3
SIDE (GENERAL) GROUND FLOOR FIRST FLOOR		1-5
		2-0
SIDE (BUILD TO BOUNDARY) GROUND FLOOR FIRST FLOOR		0-0
		0-0
REAR		2-0

All setbacks shown are minimums and are measured to the building wall.

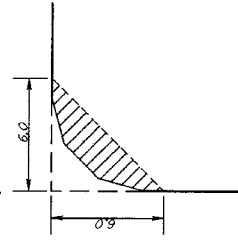
The length of wall on 'build to boundary' lines shall be a minimum of 10-0 metres or 50% of the boundary length.

Setbacks to all garages must be a minimum of 4-5 metres from the setbacks to provide for additional vehicle parking that will not encroach on the verge.

Setbacks for Attached Terraces may be varied by a further site development plan.

No vehicular access is permitted to allotments other than at designated driveway locations.

Special siting requirements for corner allotments. No building allowed in the shaded area:



IMPORTANT NOTE:

The title boundaries as shown hereon have been determined by plan dimensions only and not by field survey. The boundaries, area, and total number of lots shown hereon are preliminary only and are subject to final design. Local authority approval and registration in the Department of Environment & Resource Management.

No search has been undertaken for any Easements or Encumbrances that may exist on the title.

[illegible]

THE RESERVE
Flagstone City
BUILDING DEVELOPMENT
PARAMETERS
STAGE 1
Lot 900 on SP216471
Reserve Drive - Jinboomba

DRAWN BYD	DATE 9-9-10	CHECKED BYD	DATE 9-9-10
PARISH MACLEANN COUNTY Stanley LOCALITY J/NEBOONBA			
SCALE 1:1000	REF. NO. 10083-03A		