
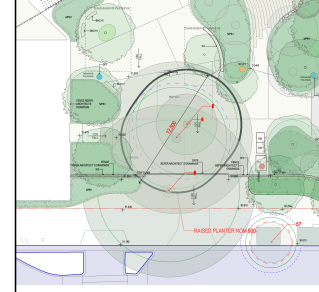
















SSDA Trees	Tree Photo (where possible)	Species	Remove/Retain	Category for Removal	Justification if removed		Diagram	Incursion if retained (%)	
Tree					Design	Arborist		into TPZ	into SRZ
1		Broad leaved paperbark (Melaleuca quinquenervia)	Remove	FUNCTIONALITY (SITE AND EMERGENCY ACCESS)	Trees 1 and 2 are proposed to be removed due to changes to existing levels to meet overland flow requirements due to existing flooding on site and provision of a new accessible pedestrian entry, and vehicular entry including emergency vehicle access. To retain these paperbark trees a new raised planter would be required due to the change in level (approx. 500+mm). In accordance with the Arborist requirements, the size of the planter is to align with the TPZ. The combined TPZ will protrude into the new footpath zone and is the full width of the entry way (refer diagram). The accessible entry can't be relocated to the east of this planter (as the footpath levels become lower, resulting in a non-compliant pathway) The accessible entry can't be relocated to the west of this planter as the planter blocks the connection to the 1:20 graded pathways. Due to the above, it is not possible for Trees 1 and 2 to be retained.	Changes to existing levels and new accessible pedestrian entry.		-	-
2		Broad leaved paperbark (Melaleuca quinquenervia)	Remove					-	-
4		Cabbage tree palm (Livistona australis)	Remove	PREFERENCE TO REMOVE (FUNCTIONALITY OF RECREATIONAL PLAY SPACE)	This tree was recommended for removal, to create an open run around area as requested by the school leadership. Due to changes to existing levels to create a level surface Astroturf kick about zone, retention would mean that a raised planter bed would be required. It is our preference to maintain the run around area, however if deemed necessary this tree can be retained. As the Cabbage Tree palm does have some substantial spikes to its base, the garden bed will provide some protection. Retaining this tree will result in loss of play space. This tree does not have a significant canopy size and would not provide significant shading. <u>Replacement is recommended.</u>	I am not so confident retaining Trees 4 and 5. As shown in the images the roots are likely to have grown into and around the existing concrete surface so removing this concrete will result in a degree of root loss that will be hard to quantify.		-	-
5		Swamp mahogany (Eucalyptus robusta)	Remove	PREFERENCE TO REMOVE (FUNCTIONALITY OF RECREATIONAL PLAY SPACE)	This tree was recommended for removal, to create an open run around area as requested by the school leadership. Due to changes to levels to create a level surface Astroturf kick about zone, retention would mean that a raised planter bed would be required. It is our preference to maintain the run around area, however if deemed necessary this tree can be retained and the play space reduced. It should be noted that the NSW Department of Education requires 10m2 of recreational play space per student, therefore any reduction is not preferred as the play space calculations are currently on the cusp of 10sqm per student			-	-
6		Brushbox (Lophostemon confertus)	RETAIN		-	-		12%	0
7		Coastal banksia (Banksia integrifolia)	Remove	ACCESSIBILITY	Changes to levels to create new accessible entry path, and grading to deliver the overall overland flowpath result in 2m difference in height between the adjacent COLA and the existing soil level for T7 & T8. If they were to be retained, a retaining wall to retain 2m of soil would be required and the trees would be 2 meters below the COLA level and 1m below the eastern foot path level. Retention is not recommended due to the extreme level differences.	Changes to levels to create new accessible entry path.		-	-
8		Swamp mahogany (Eucalyptus robusta)	Remove					-	-

9		River she oak (Casuarina cunninghamiana)	Remove	ACCESSIBILITY	<p>Maintenance issues were raised by the school due to pine needles. The needles can also can cause slip hazard. It was suggested that a non slip surface could be used, however the concern is that a higher slip rating will not assist as the needles will form a layer over the ramp's surface. The ramp has been designed to be compliant, with a slip rating of R11.</p> <p>T9 and T10 are located on the edge of a brick retaining wall and pavement which are to be removed in the design.</p> <p>Accessible Pathway T9 is located in the path of new accessible entry pathway. The length of the path is critical as it delivers the compliant grades for wheelchair access.</p> <p>A number of options were tested to locate the accessible path. The current alignment represents the shortest, most direct route, with the boardwalk crossing the TPZ of trees to be retained. We tried to move the boardwalk but it either moved too close to the nature play area, creating a low narrow and unusable space or created an overly circuitous connection.</p>	Not large or significant tree..		-	-
10		River she oak (Casuarina cunninghamiana)	RETAIN IF POSSIBLE (subject to retaining wall removal / assessment on site)	ACCESSIBILITY & FUNCTIONALITY	<p>T10 and T11 are located on the edge of a brick retaining wall and pavement which are to be removed in the design. We have concern over the stability of the trees once the wall is removed.</p> <p>The landscape has been designed around T12 to include sandstone steps and boulders to assist in maintaining existing levels. Work in this area is to be undertaken under Arborist supervision.</p> <p>If T10 & 11 can be retained they can be accommodated in the garden.</p>	Not large or significant tree.		-	-
11		River she oak (Casuarina cunninghamiana)	RETAIN IF POSSIBLE (subject to retaining wall removal / assessment on site)	ARBORIST		Not large or significant tree.		-	-
12		River she oak (Casuarina cunninghamiana)	RETAIN		<p>This species has been retained to provide a reference for the Flora of the Blackwattle Creek riparian zone. The She-Oak is a feature of this community, levels around the tree are to be retained, a cove-like dry creek bed has been designed around the tree, the needles (for the most part) are intended to fall into the play space - opportunity for learning environment and Nature Play.</p> <p>T12 is located on the edge of a brick retaining wall and pavement which are to be removed in the design. It's possible that T12 can be retained as it is set back from the wall. It is noted on the SSDA as subject to Arborist's review.</p>	-		<15%	0
13		Tallowwood (Eucalyptus microcorys)	RETAIN		-	-		These trees have been growing in a restricted root area and will not have the typical broad spreading root plate of a normal tree. This incursion applies to all 4 of these trees	0
14		Tallowwood (Eucalyptus microcorys)	RETAIN		-	-			0
15		Tallowwood (Eucalyptus microcorys)	RETAIN		-	-			0
16		Firewheel tree (Stenocarpus sinuatus)	Remove	PREFERENCE TO REMOVE (FUNCTIONALITY OF SAFETY OF PLAY SPACE)	<p>The level of the adjacent accessible footpath is 1m higher than the existing levels at the base of the tree.</p> <p>The pathway can't be relocated to the west as it would impact Tree11 by cutting through its TPZ & SRZ and possibly result in its failure.</p> <p>To retain the tree, there are to be no changes to the soil levels in the TPZ which would require a 1m high retaining wall as well as a balustrade for safety - a compromise to the design that is not in keeping with the size of the tree. Preference would be to replace with a large size new tree. Refer Arborist comment.</p>	Small tree and could be readily replaced with alternate, more suitable planting.		-	-

17		Illawarra flame tree (Brachychiton acerifolius)	RETAIN	The garden can be adjusted /extended to retain this tree	Retaining this tree will result in loss of play space. This tree does not have a significant canopy size, recommend replacement.	Small tree and could be readily replaced with alternate, more suitable planting.		TBC	TBC
18		Lemon-scented gum tree (Corymbia citriodora)	RETAIN		-	-		<10%	0
19		Bangalow palm (Archontophoenix cunninghamiana)	RETAIN	The garden can be adjusted /extended to retain this tree	Retaining this tree will result in loss of play space. This tree does not have a significant canopy size, recommend replacement.	Could be replaced with a better species to suit area. Minimal canopy cover and shade provision from this tree. It is located on the eastern boundary of the site so shade to the school is limited. A visual barrier between the the school and the adjoining Uni buildings and larger more dense tree species could be selected.		-	-
26		Kaffir plum (Harpephyllum caffrum)	Remove	BUILDING FOOTPRINT	As the neighbouring Sydney Uni Regiment building presents a blank facade and overshadows the site, it was deemed appropriate for the proposed school to abut the existing building. This also enables the pattern of urban form along the streetscape to be reinforced.	Removal of trees due to requested increased footprint. Replacement trees being provided with net increase to canopy.		-	-
27		Kaffir plum (Harpephyllum caffrum)	Remove				-	-	
28		River she oak (Casuarina cunninghamiana)	Remove				-	-	
29		Black bean (Castanospermum australe)	Remove				-	-	
30		Kaffir plum (Harpephyllum caffrum)	Remove				-	-	
31		Willow gum (Eucalyptus scoparia)	Remove				-	-	
32		Mulberry (Morus nigra)	Remove	ARBORICULTURAL Codominant stems with partial decay occurring between the two main stems SULE Category 2c: removed for more suitable planting	Tree recommended for removal due to poor health. Refer Arborist justification.	Tree is splitting between stems. Is a classic example of a tree with codominat stems. The angle of both stems will increase with weight placing tension within the main union. Decay is already present in this union. For the life expectancy of the school project in relation to the life expectancy of this tree it is a chance to replace with a native species.		-	-
47		Spotted gum (Corymbia maculata)	Remove	BUILDING FOOTPRINT	Retaining Trees 47 and 48 was not possible due to the orientation of the proposed preschool to allow for good solar access to the activity rooms. In addition, the alignment of the two upper levels of learning neighbourhoods in a north-south direction allows for an efficient classroom configuration and minimises the building footprint. The proposed design of the upper levels is comprised of 16m wide floorplates for maximum daylight penetration into the learning spaces, with an adjacent external walkway. The external stairs are required to be 6m from the building facade for fire isolation and their location has been dictated by travel distance requirements. The existing RL of tree 48 is approximately 600mm above the design level. The design level allows for an equitable accessible connection from the preschool to the playground. A secondary concern of the School Leadership group is that currently due to the occurrence of limb shedding, the students are not allowed in the play grounds on windy days. The central stair cannot be relocated to avoid this tree. Moving the stair 9 to 10m north would result in non-compliant egress distances and the stair cannot be moved south of the library as it would impede access to the library and sight lines from the COLA, and result in non-compliant egress distances.	Removal of trees due to requested increased footprint. Replacement trees being provided with net increase to canopy. Large mature tree with broad spreading canopy will be exposed to new wind forces once Tree 47 is removed. The TPZ for this tree is almost a 15m radius. Due to the age and size of this tree i would not be recommending an incursion of more than 15% at the most so that this old tree remains viable. The other issue will be the change in surface hydrology that the tree will be become accustomed to over the last 20-30 years.		-	-
48		Sydney blue gum (Eucalyptus saligna)	Remove					-	-
52		Unknown	Remove					-	-

53		Tallowwood (Eucalyptus microcorys)	Remove	BUILDING FOOTPRINT	school located the library at the centre of the proposal, symbolising the 'heart' of the school. The library has been located central to the classrooms and projects out into the playground to provide a connection to the landscape. Alternative locations for the library were considered however these impeded on sightlines and site circulation and were incompatible with the topography of the site.			-	-
54		Trident maple (Acer sp)	Remove					-	-
55		Water gum (Tristanopsis laurina)	Remove					-	-
56		Sweetgum (Liquidambar styraciflua)	RETAIN					Street tree, no incursions.	
57		Sweetgum (Liquidambar styraciflua)	RETAIN		-		-	Street tree, no incursions.	
58		Sweetgum (Liquidambar styraciflua)	RETAIN		-		-	Street tree, no incursions.	
59		Brushbox (Lophostemon confertus)	RETAIN		-		-	Street tree, no incursions.	
60		Tallowwood (Eucalyptus microcorys)	RETAIN		-		-	Street tree, no incursions.	
61		Tallowwood (Eucalyptus microcorys)	RETAIN		-		-	Street tree, no incursions.	
62		Evergreen Ash (Fraxinus griffithii)	RETAIN		-		-	Street tree, no incursions.	
63		Evergreen Ash (Fraxinus griffithii)	RETAIN		-		-	Street tree, no incursions.	
64		Brushbox (Lophostemon confertus)	RETAIN		-		-	No incursion.	
65		Brushbox (Lophostemon confertus)	RETAIN		-		-	No incursion.	
66		Evergreen Ash (Fraxinus griffithii)	RETAIN		-		-	No incursion.	
67		Evergreen Ash (Fraxinus griffithii)	RETAIN		-		-	No incursion.	
68		Tallowwood (Eucalyptus microcorys)	RETAIN		-		-	No incursion.	

DA Trees	Tree Photo (where possible)	Species	Remove/Retain	Category for Removal	Justification for Removal			Incursion if retained	
Tree		Species	Remove/Retain		Design	Arborist		into TPZ	into SRZ
20		Lemon-scented gum tree (Corymbia citriodora)	Remove	GAMES COURT	The installation of the Multisport Court will require these trees to be removed and 600-800mm of imported fill to be installed.	Removal of trees due to requested increased footprint. Replacement trees being provided with net increase to canopy.		-	-
21		Sydney blue gum (Eucalyptus saligna)	Remove		Providing a full size multi-court to a school of 415 students is a brief requirement and provides high quality amenity for outdoor play for a school of this size. The court has been oriented north-south in order to allow adequate space adjacent to the preschool to meet the NSW Childcare Planning Guideline requirement for external playspace.			-	-
22		Sydney blue gum (Eucalyptus saligna)	Remove					-	-
23		No Value	Remove		The early construction of the games court will provide a quality play space which will enable all students to remain on the site during construction period. It is preferable to provide a staged solution to a school redevelopment, so that any funds required for relocation to an alternative site can be used for the new school.			-	-
24		Spotted gum (Corymbia maculata)	Remove		Due to the topography of the site, the suggestion from the GANSW (SDRP) to provide a street wall response to the urban context and the overland flow path, alternative locations for the games court were ruled out.			-	-
25		Lone Pine (Pinus brutia)	Remove		A number of configurations for the school were explored and tested during concept design - the north south layout met the topographical constraints, maximised solar access (to the playground and the school) and delivered a secure perimeter. Through this process, it become clear that only 1 location for the games court was possible.			-	-
33		Sydney blue gum (Eucalyptus saligna)	Remove	ACCESSIBILITY RAMP	In order to provide an accessible connection for wheelchair access, the existing steps need to be demolished and a new ramp constructed - the existing soil is required to be excavated to create a complying ramp at 1:14 grade - the excavation cuts through a significant portion of the TPZ and SRZ and the health of the tree will be compromised. Other options to provide accessible ramp to this area were considered however resulted in greater impact on existing trees.	Level change at base of tree due to new accessible ramp		-	-

34		Sydney blue gum (Eucalyptus saligna)	Remove	ARBORICULTURAL Asymmetrical canopy to the south suppressed specimen SULE Category 2c: removed for more suitable planting	Refer Arborist justification.	Smaller suppressed specimen which will never reach full potential.		-	-
35		Sydney blue gum (Eucalyptus saligna)	RETAIN		It is noted while this is a high incursion, where levels are required to be retained, terrace seats and walls have been designed in the place of existing structures to minimise excavation and additional impacts to tree health.	-		27%	0
36		Sydney blue gum (Eucalyptus saligna)	RETAIN		The removal of rubber softfall around these trees (and installation of floating deck) is to improve conditions and tree health. It's proposed that work in these areas will be by hand or under the supervision of the arborist.	-		25%	0
37		Sydney blue gum (Eucalyptus saligna)	RETAIN			-		23%	0
38		Sydney blue gum (Eucalyptus saligna)	RETAIN			-		23%	0
39		Sydney blue gum (Eucalyptus saligna)	RETAIN			-		13%	0
40		Liquidambar (Liquidambar styraciflua)	Remove	ARBORICULTURAL Suppressed by larger trees	Refer Arborist justification	Smaller suppressed specimens will never reach full potential		-	-
41		Liquidambar (Liquidambar styraciflua)	Remove					-	-
42		Liquidambar (Liquidambar styraciflua)	Remove					-	-
43		Cupressus sp.	Remove					-	-
44		Sydney blue gum (Eucalyptus saligna)	RETAIN		-	Note: existing wall to be removed and replaced with garden bed for this tree.		7%	0
45		Sydney blue gum (Eucalyptus saligna)	RETAIN		It is noted while this is a high incursion, removal of existing structures and softfall (replacing with garden) is proposed so that impacts to tree are minimised and health is improved.	Note: existing wall to be removed and replaced with garden bed for these 2 trees.		22%	0
46		Spotted gum (Corymbia maculata)	RETAIN		It is proposed that work in these areas will be by hand or under the supervision of the arborist.			21%	0
49		Broad leaved paperbark (Melaleuca quinquenervia)	Remove	BUILDING FOOTPRINT	The installation of the Multisport Court will require these trees to be removed and 600-800mm imported fill to be installed.	Removal of trees due to requested increased footprint. Replacement trees being provided with net increase to canopy.		-	-
50		Illawarra flame tree (Brachychiton acerifolius)	Remove		Providing a full size multi-court to a school of 415 students is a brief requirement and provides high quality amenity for outdoor play for a school of this size. The court has been oriented north-south in order to allow adequate space adjacent to the preschool to meet the NSW Childcare Planning Guideline requirement for external playspace.			-	-
51		Hymenosporum flavum	Remove		Due to the topography of the site and the overland flow path, alternative locations for the games court were ruled out.			-	-