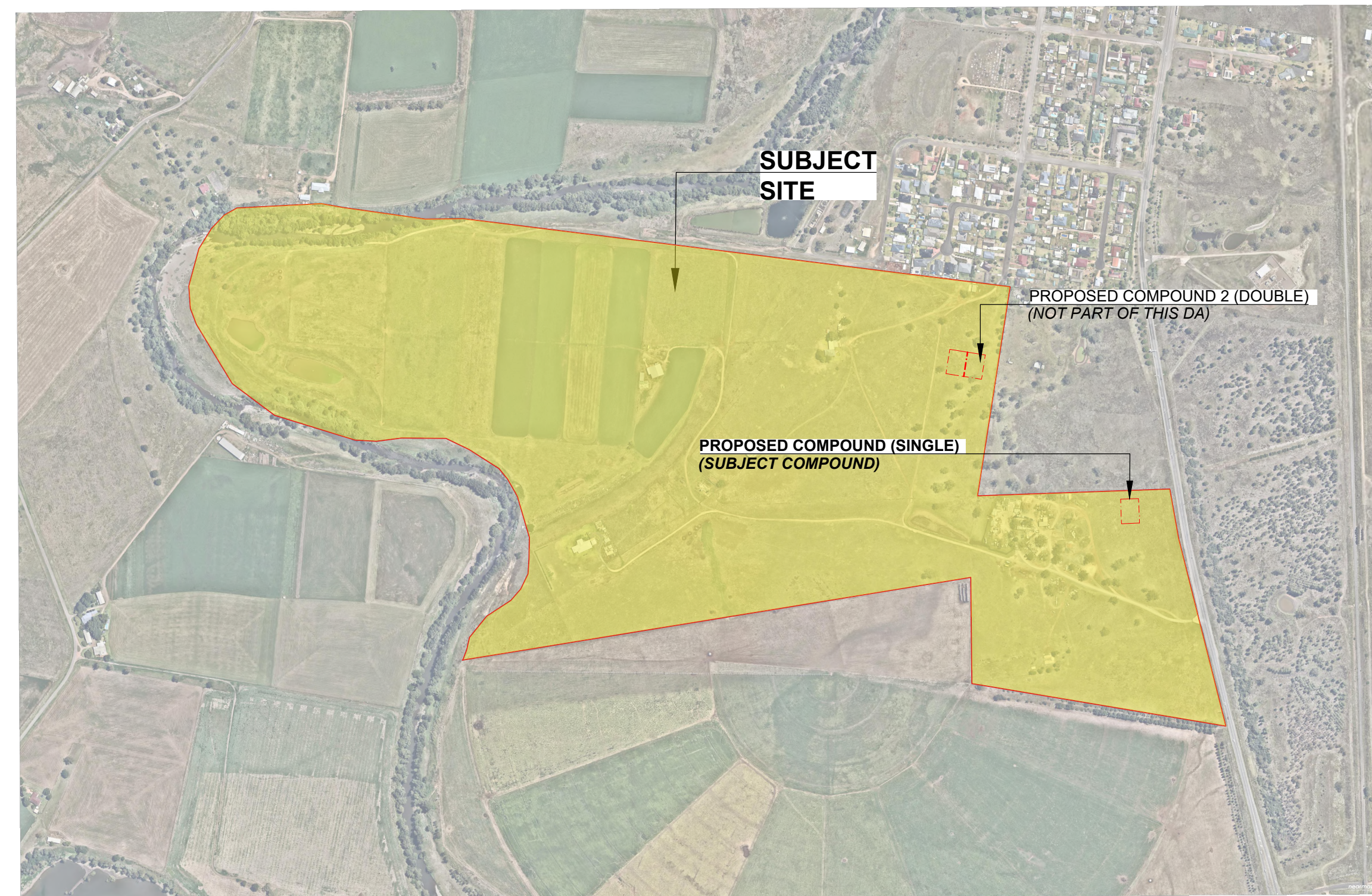


DEVELOPMENT APPLICATION

PROPOSED BATTERY ENERGY STORAGE SYSTEM (BESS)

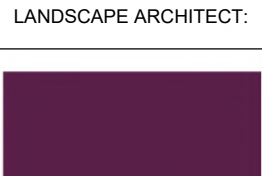
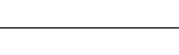


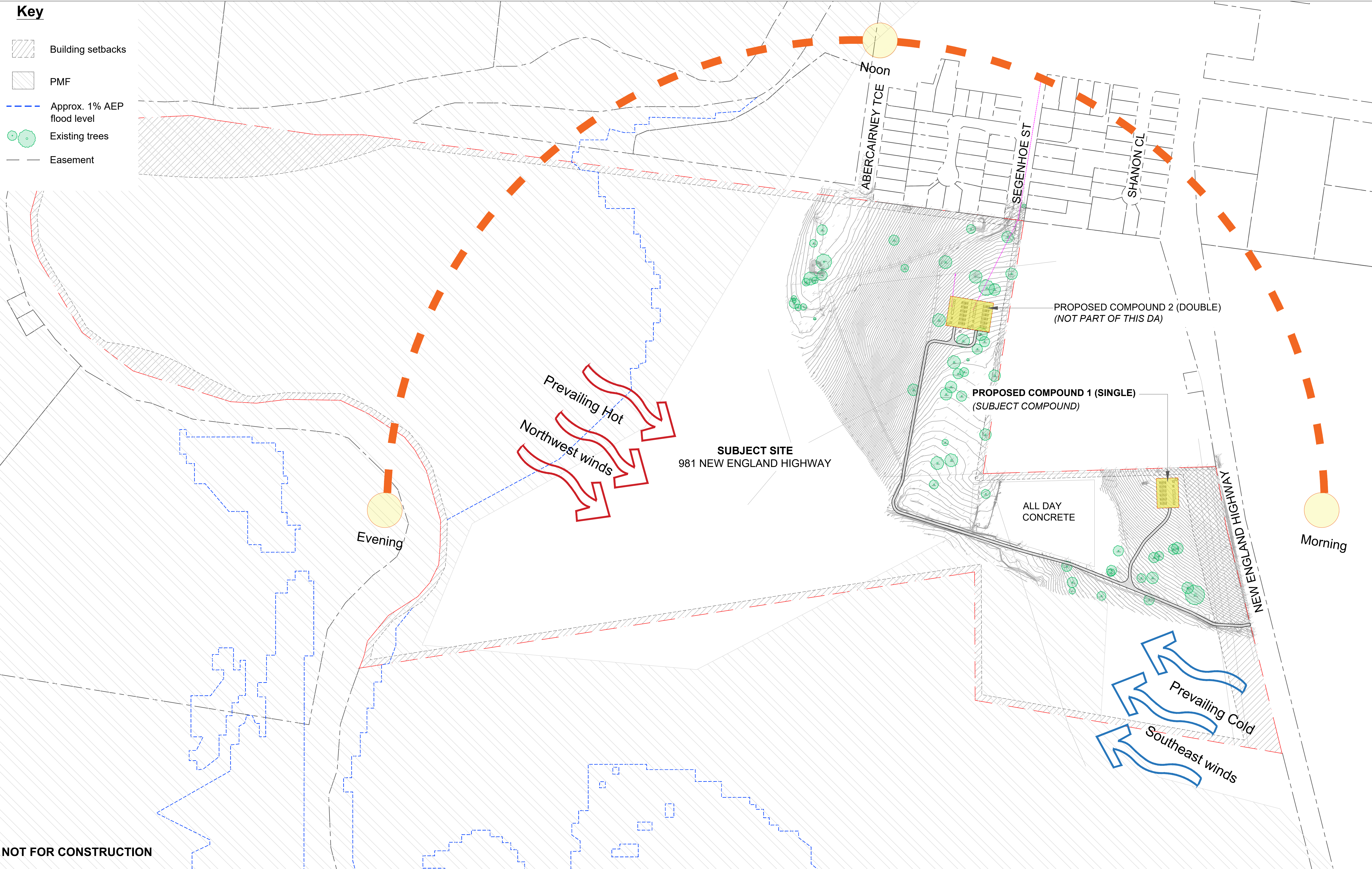
**981 New England Hwy,
Aberdeen**

DRAWING SCHEDULE

LDA00	COVERSHEET
LDA01	SITE ANALYSIS & CONTEXT
LDA02	LANDSCAPE PLAN: COMPOUND 1 (SINGLE)
LDA03	PLANT SCHEDULE, IMAGES, DETAIL & ELEVATION C2 (MATURED)
LDA04	ELEVATION C2 (1-3 YEARS)
LDA05	VIEWPOINT 1 (SINGLE)
LDA06	VIEWPOINT 2 (SINGLE)
LDA07	VIEWPOINT 3 (SINGLE)
LDA08	MAINTENANCE SPECIFICATION

NOT FOR CONSTRUCTION

LANDSCAPE ARCHITECT:			BAR SCALE:			ASPECT:			CLIENT:			ENGINEERING AND PLANNING:			PROJECT:			TITLE:			STATUS:					
 Conus Landscape Architecture 158 Grandview Rd, New Lambton Hills, NSW 2305, p. 02 4950 9195 e. info@conuslandscapearchitecture.com.au w. conuslandscapearchitecture.com.au abn. 52 144 562 756  Australian Institute of Landscape Architects						Hive Battery Developments Pty Ltd Quintas Energy			HDB			B15/12/2023Single BESS final submission A13/12/2023Preliminary concept for review REVDATENOTATION/AMENDMENT DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS. FIGURED DIMENSIONS TAKE PRECEDENCE. THESE DRAWINGS ARE NOT FOR CONSTRUCTION.			Proposed Battery Energy Storage System (BESS) 981 New England Hwy, Aberdeen			COVER SHEET			Development Application					
																		SCALE:			DATE: 15/12/23			JOB No: 23.43		
ISSUE: B			DWG No: LDA 00			PLOTTED: 1						DRAWN: FV + DS			CHECKED: AC			APPROVED: AC								



NOT FOR CONSTRUCTION

LANDSCAPE ARCHITECT:		BAR SCALE:		ASPECT:		CLIENT:		ENGINEERING AND PLANNING:		PROJECT:		TITLE:		STATUS:	
 Conus Landscape Architecture 158 Grandview Rd, New Lambton Hts, NSW 2305. p. 02 4950 9195 e. info@conuslandscapearchitecture.com.au w. conuslandscapearchitecture.com.au abn. 52 144 562 756 Registered Landscape Architect: Anton Conus AILA No. 8420		 Australian Institute of Landscape Architects		 1:2500 @ A1		Hive Battery Developments Pty Ltd		HDB		Proposed Battery Energy Storage System (BESS)		SITE ANALYSIS		Development Application	
						Quintas Energy				981 New England Hwy, Aberdeen					
										DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS. FIGURED DIMENSIONS TAKE PRECEDENCE. THESE DRAWINGS ARE NOT FOR CONSTRUCTION					
										B		15/12/2023		Single BESS final submission	
										A		13/12/2023		Preliminary concept for review	
										REV		DATE		NOTATION/ AMENDMENT	
												ISSUE:		DWG No:	
												B		LDA01	
												PLOTTED:			
												1			
												DRAWN:		CHECKED:	
												FV + DS		AC	
												APPROVED:		AC	

PLANT SCHEDULE

Botanic Name	Common Name	Size (m)	Pot Size	Spacing
Trees				
Acacia salicina	Willow Wattle	8H x 4W	200mm	As shown
Brachychiton populneus	Kurrajong	10H x 9W	25L	As shown
Callistemon viminalis	Weeping Bottlebrush	8H x 6W	25L	As shown
Callitris glaucophylla	White Cypress	10H x 4W	25L	As shown
Eucalyptus blakelyi	Blakelyi's Red Gum	20H x 12W	25L	As shown
Eucalyptus melliodora	Yellow Box	20H x 12W	25L	As shown
Geijera parvifolia	Willow Wilga	9H x 6W	25L	As shown
Shrubs				
Callsitemon citrinus	Crimson Bottlebrush	3H x 3W	200mm	1.5m
Dodonaea viscosa	Hop Bush	2.5H x 2W	200mm	1.5m
Olea microcarpa	Narrow-leaved Mock Olive	5H x 4W	140mm	2m
Olearia elliptica	Sticky Daisy Bush	2H x 2W	140mm	1m
Climbers and Groundcovers				
Lomandra longifolia	Mattrush Grass	0.8H x 1W	tube	2/m2
Themeda australis	Kangaroo Grass	1H x 1W	tube	4/m2

NOTES:

1. All garden beds to contain premium imported garden mix with 5% organics mixed with site soil
2. Provide slow-release fertiliser to each plant to manufacturer's instructions
3. All garden beds to contain 80mm depth native hardwood chip mulch, similar to ANL 'Forest Fines'
4. All trees to be staked by 1800 x 50 x 50mm hardwood timber stakes fastened with hessian ties
5. All trees to comply with NATSPEC specifications
6. All turf to be Couch on 50mm premium topdress
7. All garden edges to be H4 treated pine



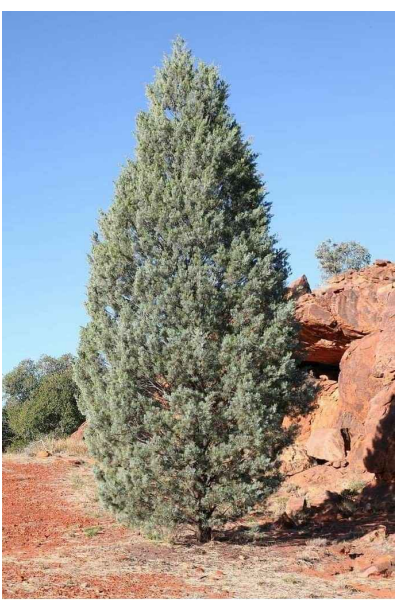
Acacia salicina



Brachychiton populneus



Callistemon citrinus



Callitris glaucophylla



Callistemon viminalis



Dodonaea viscosa



Eucalyptus blakelyi



Eucalyptus melliodora



Geijera parvifolia



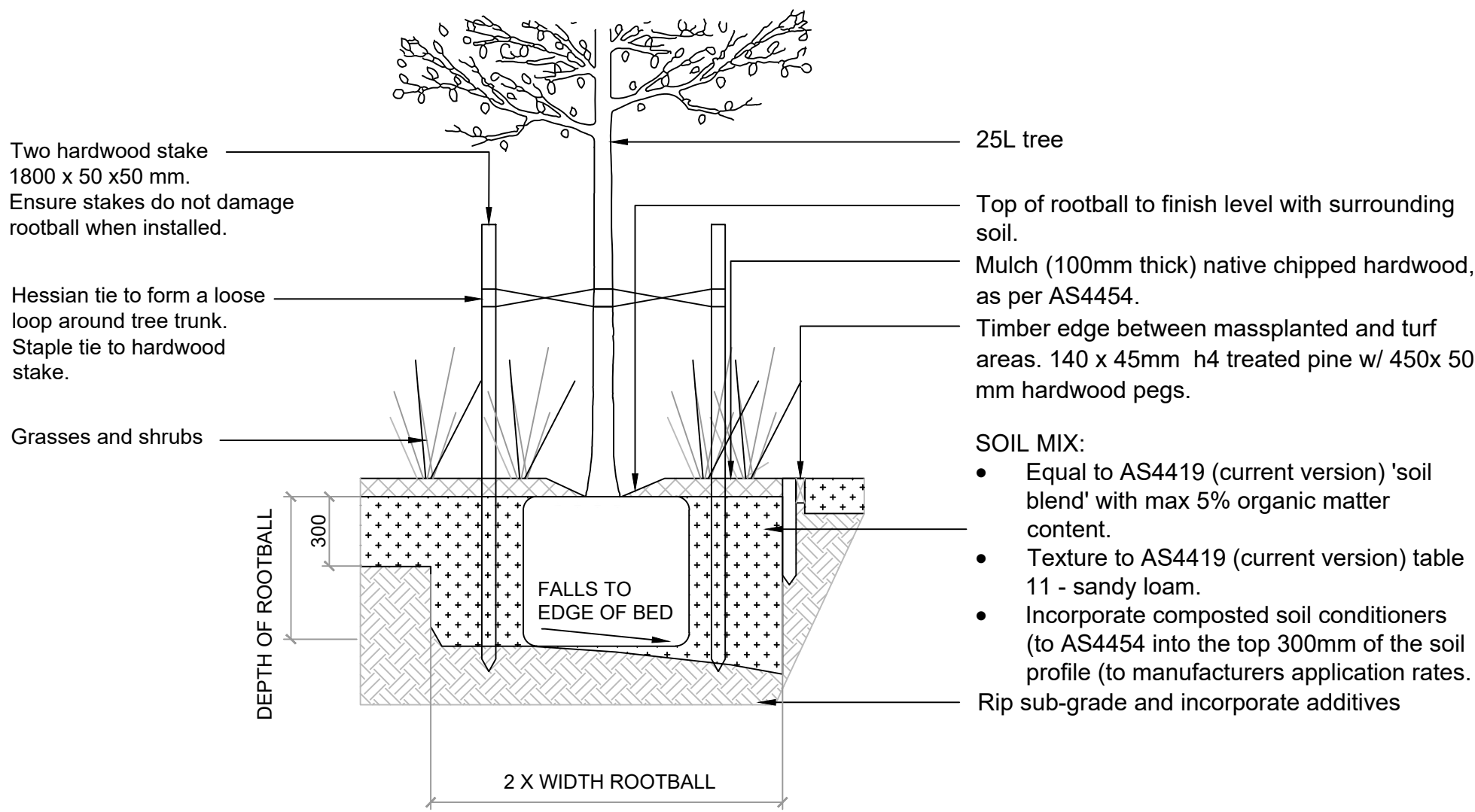
Lomandra longifolia



Olea microcarpa



Olearia elliptica



01 03 TREE DETAIL 1:25 25L TREE IN MASS PLANTING - GENERAL



02 03 ELEVATION C2 (MATURED STAGE) 1:200

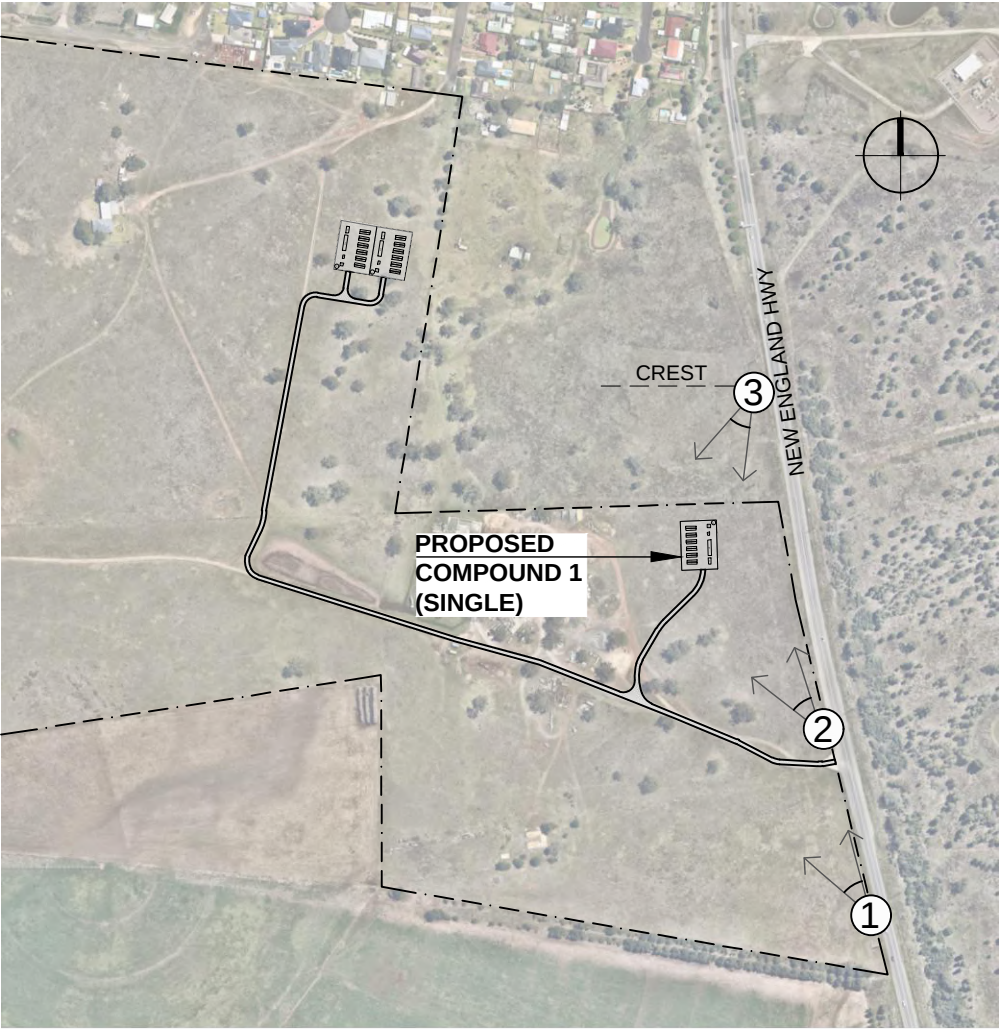
NOT FOR CONSTRUCTION

LANDSCAPE ARCHITECT:		BAR SCALE:		ASPECT:		CLIENT:		ENGINEERING AND PLANNING:		PROJECT:		TITLE:		STATUS:									
conus LANDSCAPE ARCHITECTURE Registered Landscape Architect: Anton Conus AILA No. 8420 Conus Landscape Architecture 158 Grandview Rd, New Lambton Hts, NSW 2305. p. 02 4950 9195 e. info@conuslandscapearchitecture.com.au w. conuslandscapearchitecture.com.au o. 52 144 562 756 Australian Institute of Landscape Architects						Hive Battery Developments Pty Ltd		HDB		Proposed Battery Energy Storage System (BESS)		981 New England Hwy, Aberdeen		PLANT SCHEDULE, IMAGES, DETAIL & ELEVATION C2 (MATURED)		Development Application							
						B		15/12/2023		Single BESS final submission													
						A		13/12/2023		Preliminary concept for review													
						REV		DATE		NOTATION/ AMENDMENT													
										DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS. FIGURED DIMENSIONS TAKE PRECEDENCE. THESE DRAWINGS ARE NOT FOR CONSTRUCTION													
												ISSUE:		DWG No:		PLOTTED:		DRAWN:		CHECKED:		APPROVED:	
												B		LDA03		1		FV + DS		AC		AC	



NOT FOR CONSTRUCTION

LANDSCAPE ARCHITECT:		BAR SCALE:	ASPECT:	CLIENT:	ENGINEERING AND PLANNING:	PROJECT:			TITLE:			STATUS:																																
conus LANDSCAPE ARCHITECTURE Conus Landscape Architecture 158 Grandview Rd, New Lambton Hts, NSW 2305, p. 02 4950 9195 e. info@conuslandscapearchitecture.com.au w. conuslandscapearchitecture.com.au abn. 52 144 562 756 Australian Institute of Landscape Architects		0 2 5 10 20M 1:200@ A1		Hive Battery Developments Pty Ltd Quintas Energy	HDB	Proposed Battery Energy Storage System (BESS) 981 New England Hwy, Aberdeen			ELEVATION C2 (1-3 YEARS)			Development Application																																
						<table><tr><td>B</td><td>15/12/2023</td><td>Single BESS final submission</td></tr><tr><td>A</td><td>13/12/2023</td><td>Preliminary concept for review</td></tr><tr><td>REV</td><td>DATE</td><td>NOTATION/ AMENDMENT</td></tr></table> DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS. FIGURED DIMENSIONS TAKE PRECEDENCE. THESE DRAWINGS ARE NOT FOR CONSTRUCTION			B	15/12/2023	Single BESS final submission	A	13/12/2023	Preliminary concept for review	REV	DATE	NOTATION/ AMENDMENT	<table><tr><td>SCALE:</td><td>DATE:</td><td>JOB No:</td></tr><tr><td>1:200</td><td>15/12/23</td><td>23.43</td></tr></table>			SCALE:	DATE:	JOB No:	1:200	15/12/23	23.43	<table><tr><td>ISSUE:</td><td>DWG No:</td><td>PLOTTED:</td></tr><tr><td>B</td><td>LDA04</td><td>1</td></tr></table>			ISSUE:	DWG No:	PLOTTED:	B	LDA04	1	<table><tr><td>DRAWN:</td><td>CHECKED:</td><td>APPROVED:</td></tr><tr><td>FV + DS</td><td>AC</td><td>AC</td></tr></table>			DRAWN:	CHECKED:	APPROVED:	FV + DS	AC	AC
B	15/12/2023	Single BESS final submission																																										
A	13/12/2023	Preliminary concept for review																																										
REV	DATE	NOTATION/ AMENDMENT																																										
SCALE:	DATE:	JOB No:																																										
1:200	15/12/23	23.43																																										
ISSUE:	DWG No:	PLOTTED:																																										
B	LDA04	1																																										
DRAWN:	CHECKED:	APPROVED:																																										
FV + DS	AC	AC																																										



LOCATION MAP (NOT TO SCALE)



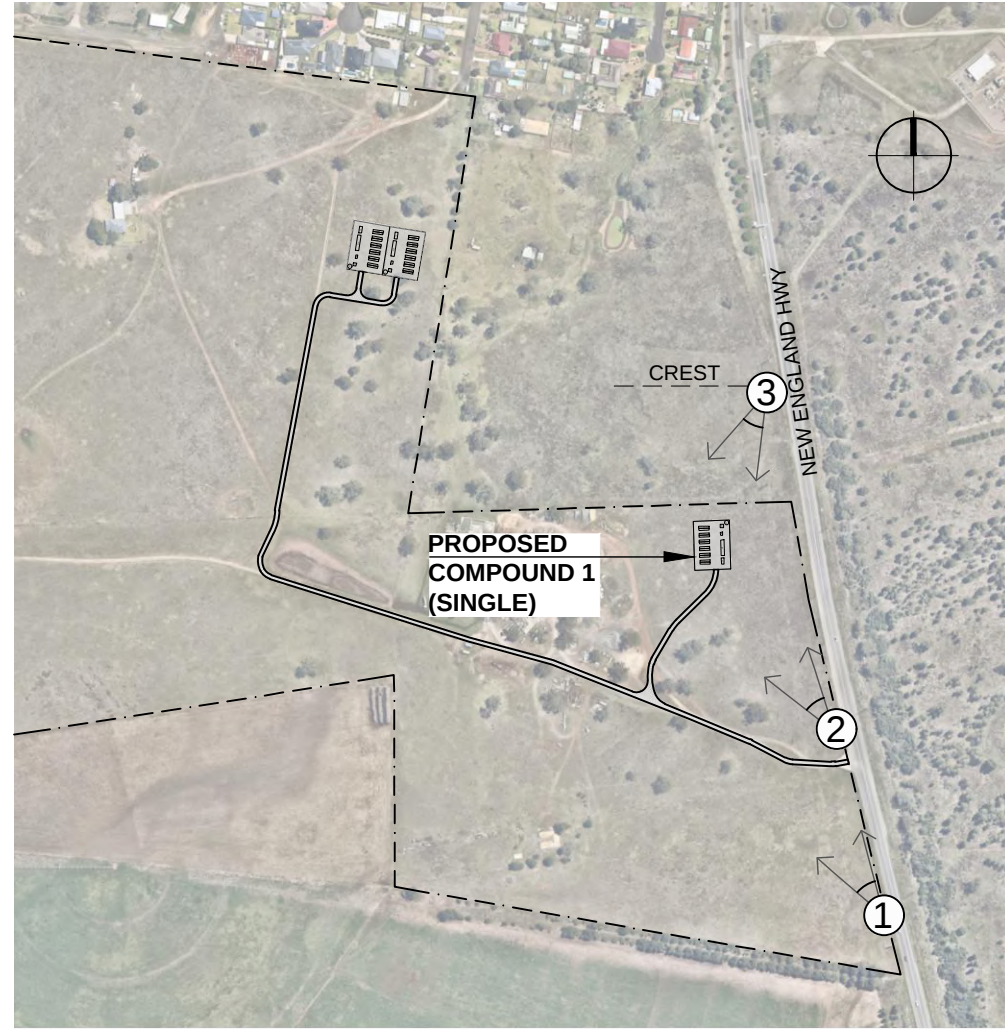
01
05 VIEWPOINT 1 NTS



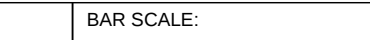
01
05 VIEWPOINT 1 (PLANTING MATURITY) NTS

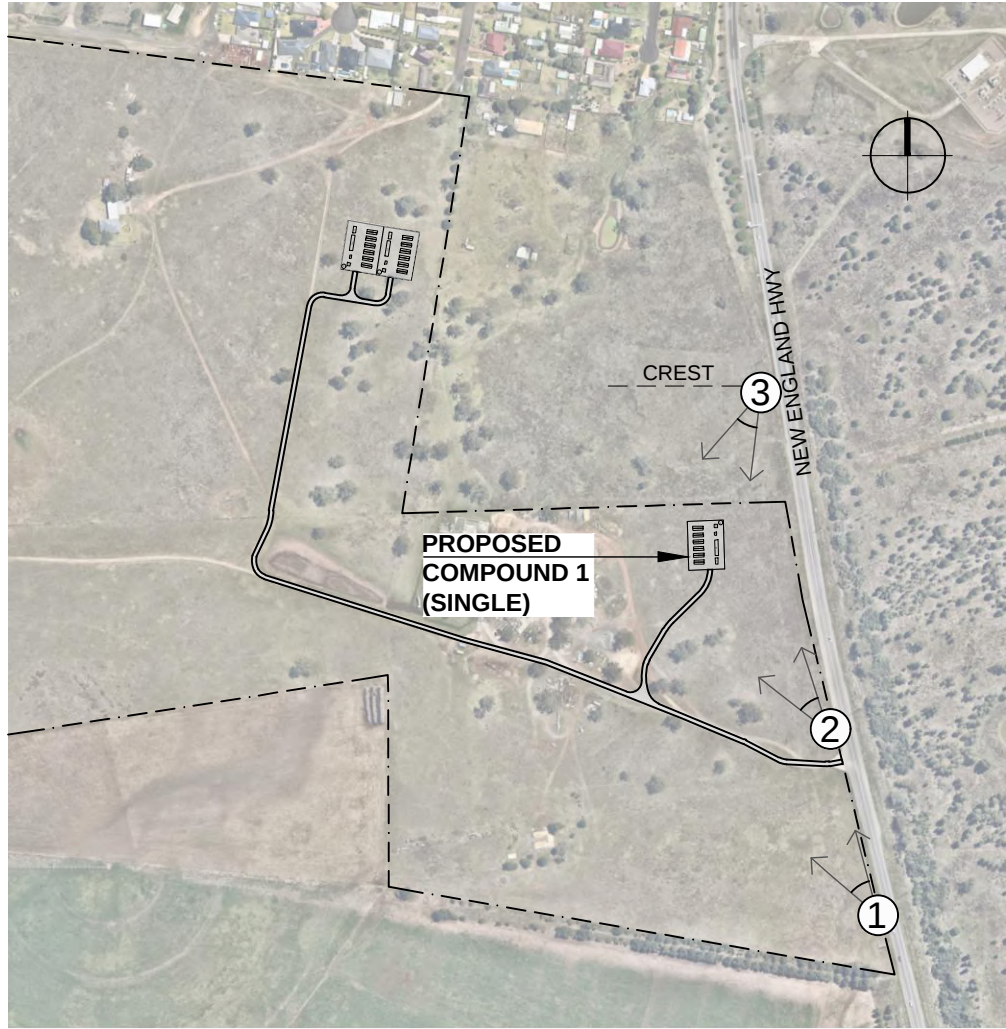
NOT FOR CONSTRUCTION

LANDSCAPE ARCHITECT:		BAR SCALE:	ASPECT:	CLIENT:	ENGINEERING AND PLANNING:				PROJECT:	TITLE:			STATUS:		
Conus Landscape Architecture 158 Grandview Rd, New Lambton Hts, NSW 2305, p. 02 4950 9195 e. info@conuslandscapearchitecture.com.au w. conuslandscapearchitecture.com.au abn. 52 144 562 756 Australian Institute of Landscape Architects <td data-kind="parent" data-rs="5"></td> <td data-kind="parent" data-rs="5"></td> <td data-kind="parent" data-rs="5"></td> <td data-kind="parent" data-rs="5">Hive Battery Developments Pty Ltd</td> <td data-kind="parent" data-rs="5">HDB</td> <td data-cs="3" data-kind="parent" data-rs="5"> DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS. FIGURED DIMENSIONS TAKE PRECEDENCE. THESE DRAWINGS ARE NOT FOR CONSTRUCTION </td> <td data-kind="ghost"></td> <td data-kind="ghost"></td> <td data-kind="parent" data-rs="5">Proposed Battery Energy Storage System (BESS)</td> <td data-cs="3" data-kind="parent" data-rs="5">VIEWPOINT 1 (SINGLE)</td> <td data-kind="ghost"></td> <td data-kind="ghost"></td> <td data-cs="3" data-kind="parent" data-rs="2">Development Application</td> <td data-kind="ghost"></td> <td data-kind="ghost"></td>				Hive Battery Developments Pty Ltd	HDB	DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS. FIGURED DIMENSIONS TAKE PRECEDENCE. THESE DRAWINGS ARE NOT FOR CONSTRUCTION			Proposed Battery Energy Storage System (BESS)	VIEWPOINT 1 (SINGLE)			Development Application		
	SCALE:	DATE:	JOB No:												
	-	15/12/23	23.43												
	Registered Landscape Architect: Anton Conus AILA No. 8420					Quintas Energy				981 New England Hwy, Aberdeen				ISSUE:	DWG No:
													B	LDA05	1



NOT FOR CONSTRUCTION

LANDSCAPE ARCHITECT:		BAR SCALE:		ENGINEERING AND PLANNING:		PROJECT:		TITLE:		STATUS:			
 Conus Landscape Architecture 158 Grandview Rd, New Lambton Hls, NSW 2305. p. 02 4950 9195 e. info@conuslandscapearchitecture.com.au w. conuslandscapearchitecture.com.au abn. 52 144 562 756  Australian Institute of Landscape Architects				Hive Battery Developments Pty Ltd Quintas Energy		HDB DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS. FIGURED DIMENSIONS TAKE PRECEDENCE. THESE DRAWINGS ARE NOT FOR CONSTRUCTION		Proposed Battery Energy Storage System (BESS) 981 New England Hwy, Aberdeen		VIEWPOINT 2 (SINGLE)		Development Application	
						B15/12/2023Single BESS final submission A13/12/2023Preliminary concept for review REVDATENOTATION/ AMENDMENT				SCALE:- DATE:15/12/23 JOB No:23.43			
								ISSUE:B DWG No: LDA06 PLOTTED: 1		DRAWN: FV + DS CHECKED: AC APPROVED: AC			



LOCATION MAP (NOT TO SCALE)



01 07 VIEWPOINT 3 NTS



01 07 VIEWPOINT 3 (PLANTING MATURITY) NTS

NOT FOR CONSTRUCTION

LANDSCAPE ARCHITECT:		BAR SCALE:	ASPECT:	CLIENT:	ENGINEERING AND PLANNING:	PROJECT:			TITLE:			STATUS:		
Conus Landscape Architecture 158 Grandview Rd, New Lambton Hts, NSW 2305. p. 02 4950 9195 e. info@conuslandscapearchitecture.com.au w. conuslandscapearchitecture.com.au abn. 52 144 562 756 Australian Institute of Landscape Architects		Hive Battery Developments Pty Ltd Quintas Energy		HDB		Proposed Battery Energy Storage System (BESS) 981 New England Hwy, Aberdeen			VIEWPOINT 3 (SINGLE)			Development Application		
												SCALE:	DATE:	JOB No:
												-	15/12/23	23.43
												ISSUE:	DWG No:	PLOTTED:
												B	LDA07	1
												DRAWN:		
												FV + DS		
												CHECKED:		
												AC		
												APPROVED:		
												AC		

MAINTENANCE SPECIFICATION
(52 weeks Plant Establishment Period)

Maintenance of the proposed development will be in accordance with "Muswellbrook Council's DCP, 2010".

1. GENERAL

- The Contractor will be responsible for maintaining all areas within private property as follows:
- All initial planting should be healthy, pest and disease free.
- All plants should be monitored for pests and diseases every three days for the first four weeks and then every three months. Plants effected badly by pests and diseases should be removed, disposed of off site and replaced.
- Young seedlings are desirable to some species such as rabbits, hares and macropods and if they are considered a problem, plastic tree guards should be used around each plant or reinstated where removed.
- Biological controls are the preferred treatment for pests and diseases. Any chemicals used for pest and disease control must be registered for use in aquatic situations by the National Registration Authority, as indicated on the label.
- Treatment of pests and diseases should be conducted at the same time to avoid reinfestation from adjacent areas.
- Grassed areas will be mowed and landscape beds mulched. Any damage done to nature strip shall be repaired including replacement of street trees and restoration of grassed areas as required.
- Mowing will be kept to a blade height of 30mm-70mm and frequency will be in accordance with the seasons. All edges will be trimmed with a whipper-snipp as frequently as mowing is required.
- Mowing will vary seasonally. Once in a three week cycle is adequate within most months other than 'deep summer' and 'deep winter' environmental conditions.
- Fertiliser shall be applied to manufacturer's requirements.
- Weeding maintenance should be monitored and completed when periodically.
- Weeds will be effectively controlled by the use of mulching and densely planting groundcovers to combat invasion. Where necessary herbicides may be used to control weed infestation.
- Plants will be checked for pest and diseases regularly, any pesticides used will be broad range and have low toxicity.
- Prune as required only. Prune in accordance with Ross Clark's 'Nat Spec'.
- Plant replacement – dead and dying plants should be replaced immediately by the Landscape Contractor; vandalised plants should be replaced to a maximum of two times by the Landscape Contractor. Thereafter, plants replaced should be at the client's expense. All trees to be replaced to be accordance with Ross Clark's 'NatSpec'.
- Stakes and ties of trees to be removed at the end of 52 week
- Using an irrigation system connected to an outside water tank, turf and planting areas to be watered three times per week within the first month, then twice weekly for the next two months. Thereafter, taper to once per month to harden site conditions whilst allowing the maximum root growth within the initial quarter.
- Watering frequency will vary according to season and weather variations. Council's water restriction policy must be adhered to at all times.
- A Maintenance Log is to be kept by the contractor and shown to the Landscape Architect upon request.

2. TREES AND SHRUBS

2.1 New trees - first 2 months following planting

- Monitor soil moisture as this will vary depending on soil and weather conditions.
- As a general guide, water each tree with 10 litres of water three times in the first two weeks, then once per week and 5 litres of water for each shrub.
- Maintain stakes and tree guards (if applicable) vertically and replace immediately if broken.
- Remove encroaching grasses and weeds from the mulched area using herbicides at label rates, or by hand removal.
- Inspect foliage, branches and trunk for any indications of pest and disease infestations. Control where necessary.
- Replenish mulch to retain an even 75mm depth.
- Replace failed trees immediately.

2.2 New trees - from 2-12 months following planting

- Inspect trees and shrubs monthly and water at 10 litres per tree, 5 litres per shrub if required.
- Retain mulch at 75mm depth at all times.
- Remove hessian ties if trees are self-supporting after six months, or re-tie as needed.
- All stakes must be removed by the end of the maintenance period and disposed of in a responsible manner.
- Retain hardwood stakes as markers for the twelve month period.
- Keep the mulched area free of grasses and weeds at all times.
- Inspect foliage, branches and trunk for any indications of pest and disease infestations. Control where necessary.
- After six months, lightly prune trees which need branch direction or branch removal to permit traffic access or pedestrian access. Do not top or lop any tree. Carry out formative pruning to remove any low branches and encourage a clear stem.
- Replace any tree which is dead or in irreversible decline.
- Twelve months after planting, fertilise trees with slow release fertiliser at manufacturer's recommended rates.

2.3 Maintenance of established trees and shrubs

- Inspect trees at six monthly intervals in the second and third year of growth.
- Retain mulch at 75mm depth during this period.
- Remove ties and stakes if trees are self-supporting or re-tie if still needed.
- Remove grass and weeds from mulched area.
- Inspect foliage, branches and trunk for any indications of pest and disease infestations. Control where necessary.
- Prune trees which need directional branch pruning to produce one main trunk to allow pedestrian and traffic access.
- Replace any tree which is dead or in irreversible decline.
- For the first three years after planting, fertilise trees annually with slow release fertiliser at manufacturers recommended rates.
- After trees have been growing for at least three years and have established well and are flourishing, inspection should be made at least annually. Any necessary pruning or tree surgery should be carried out as required to maintain healthy growth.
- When mature trees have been removed, the stump is to be ground out and the areas around made good. Position trees in the area adjacent to the existing tree, or consult Council's Landscape Architect for an alternative location.

NOT FOR CONSTRUCTION

LANDSCAPE ARCHITECT:			BAR SCALE:	ASPECT:	CLIENT:	ENGINEERING AND PLANNING:			PROJECT:	TITLE:			STATUS:		
 Conus Landscape Architecture 158 Grandview Rd, New Lambton Hts, NSW 2305. p. 02 4950 9195 e. info@conuslandscapearchitecture.com.au w. conuslandscapearchitecture.com.au o/n. 52 144 562 756 Registered Landscape Architect: Anton Conus AILA No. 8420		 Australian Institute of Landscape Architects			Hive Battery Developments Pty Ltd	HDB			Proposed Battery Energy Storage System (BESS) 981 New England Hwy, Aberdeen	MAINTENANCE SPECIFICATION			Development Application		
			B	15/12/2023	Single BESS final submission										
			A	13/12/2023	Preliminary concept for review										
			REV	DATE	NOTATION/ AMENDMENT										
						DO NOT SCALE DRAWINGS. CHECK ALL DIMENSIONS. FIGURED DIMENSIONS TAKE PRECEDENCE. THESE DRAWINGS ARE NOT FOR CONSTRUCTION			ISSUE:	DWG No:	PLOTTED:	DRAWN:	CHECKED:	APPROVED:	
									B	LDA08	1	FV + DS	AC	AC	