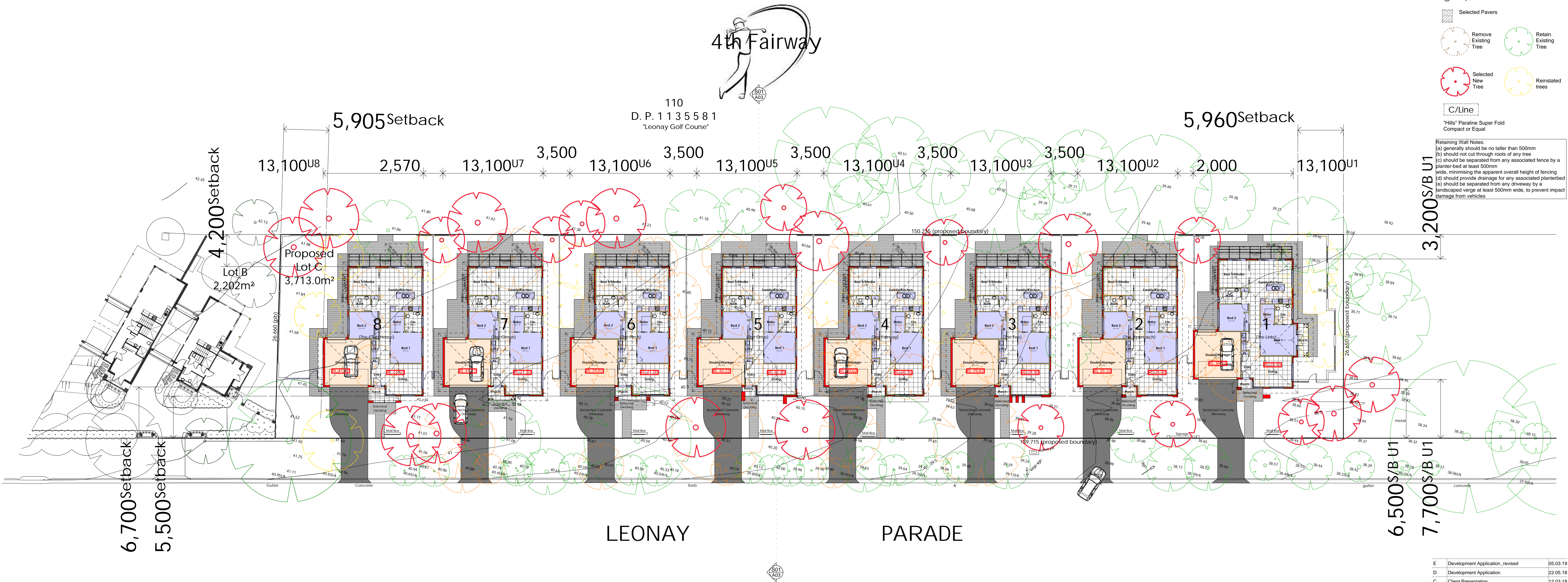


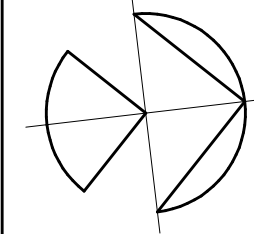
NathERS - THERMAL COMFORT SUMMARY			BASIS COMMITMENTS NOTES			
Address: Lot 1100 Leonyay Pde, Leonyay NSW 2750						
Building Elements	Material	Detail	WATER			
External walls	Brick Veneer	R2.0 bulk insulation (excluding garage)	Fixtures	All Shower Heads	All toilet flushing systems	All kitchen taps
Internal walls	Plasterboard on studs	R2.0 bulk insulation to walls adjacent to garage		3 star (1.5 or > 5 cfm)	4 star	4 star
Ceiling	Plasterboard	R3.5 bulk insulation to ceilings with roof above (excluding garage)		Individual rainwater tank to collect run off from at least 90m <sup>2</sup> of roof area - Tank size 4000 litres		4 star
Floors	Concrete	Waffle Pod	Alternative water source	The applicant must consider the rainwater tank to:		
Roof	Roof Tiles / Metal Roof - Dark Colour solar Absorbance >0.70	Foil insulation to underside of roof		Landscaping connection	Toilet connection	Laundry connection
	<u>Awning windows &amp; French door:</u> Aluminium frame, single glazed clear	U value 6.70 or less and SHGC 0.57 +/- 10%		Yes	Yes	YES
	<u>Sliding doors, Double Hung windows &amp; fixed windows:</u> Aluminium frame, single glazed clear	U value 6.70 or less and SHGC 0.70 +/- 10%				N/A
Doors/Windows			ENERGY	Hot water system: Gas instantaneous with a performance of 5 stars		
				Bathroom ventilation system: Individual fan, ducted to facade or roof; manual switch on/off		
				Kitchen ventilation system: Individual fan, ducted to facade or roof; manual switch on/off		
				Laundry ventilation system: Individual fan, ducted to facade or roof; manual switch on/off		
				Cooling system: 1 Phase air-conditioning EER 2.5 - 3.0 in at least 1 living/bed area (zoned)		
				Heating system: 1 Phase air-conditioning EER 2.5 - 3.0 in at least 1 living/bed area (zoned)		
Lighting: Each dwelling has been rated with non-ventilated LED dwellings as per NathERS Certificate.				Natural lighting: as per BASIX		
Note: Provision specified must be installed in accordance with Part 3.12.1.1 of the BCA.				Artificial lighting: as per BASIX		
Note: In some climate zones, insulation should be installed with due consideration of condensation and associated interaction with adjoining building materials.				Alternative energy: Must install a photovoltaic system with the capacity to generate at least 1.0 peak kilowatts of electricity.		
Note: Self-closing damper to all exhaust fans.				Must install a gas cooking and electric oven.		
				Must install 1 fixed outdoor clothes drying line as part of the development.		

**Retaining Wall Notes:**

- (a) generally should be no taller than 500mm
- (b) should not cut through roots of any tree
- (c) should be separated from any associated fence by a planter-bed at least 500mm wide, minimising the apparent overall height of fencing
- (d) should provide drainage for any associated planterbed
- (e) should be separated from any driveway by a landscaped verge at least 500mm wide, to prevent impact damage from vehicles



E	Development Application_revised	05.03.19
D	Development Application	22.05.18
C	Client Presentation	12.03.18
B	Site compatibility certificate issue	08.02.17
A	Pre-Lodgement council meeting	08.10.16
Issue	Amendment	Date



### Development Calculations