Form A

Initial Condition — General Site Description

PROPERTY DESCRIPTION

1. Date: / /20
2. Project number: _____
3. Property name: _____
4. Address: _____

   _____ State _____ Postcode _____
5. Land title details: _____
6. Reference location: Farm gate ☐ Planting entry point ☐ Other _____

   Easting: _____E Northing _____N

   Datum used on map: GDA94 ☐ AMG/AGD66 ☐ Map zone: _____

   (refer to relevant topographic maps)
7. Assessing organisation: _____
8. Project officer: _____
9. Time spent overall on initial condition assessment: _____ (person hours)

SITE DESCRIPTION AND LAND-USE HISTORY (FOR ESTABLISHING SINK ELIGIBILITY)

All data in this section applies to the net area that is to be established.

10. Average annual rainfall: _____ (mm)
11. Was the land clear of forest at 1990: Yes ☐ No ☐
12. Current land-use: Improved pasture ☐ Unimproved pasture ☐ Cropped ☐
13. Note significant land-use or vegetation changes since 1990 and when they occurred (e.g. removal of native vegetation or woody weeds, cropping, fertiliser, pasture improvement):

    Event description Event date

    _____

    _____

    _____
14. Attach photographs of the project area prior to any work being undertaken (e.g. before any removal of existing trees). Use aerial photographs if project area greater than 20 ha. These maps or photographs should show:
    - the site immediately prior to establishment;
    - any vegetation to be killed or removed from the site.
15. Attach documentary evidence of land-use back to 1 January 1990.
16. Other comments on the site: _____

    _____

Use this form to record general site characteristics for the initial site condition

Form A

Initial Condition — General Site Description

17. Draw a sketch map of the project area showing: property and project boundaries; area to be planted with different types of vegetation (stand-types); year of planting for different stands; and points where photographs and GPS readings have been taken. Also draw on any net area exclusions by type (i.e., roads, waterways, patches of remnant vegetation).

18. Draw a side view of the project area showing landforms and stand-type locations. Draw a line on the main sketch map above to show where the profile was drawn from.

Use this form to record general site characteristics for the initial site condition

Form B

Initial Condition — Stand-type Description and Site Plan

STAND-TYPE DESCRIPTION

A separate form is required for each stand-type within a planting

1. Project number:_____
2. Stand-type description: _____
3. Stand-type number: _____ of _____
4. Tree planting ☐ Direct seeding ☐
5. Area (estimate hectares and provide names of any GPS files):

   Datum used on map: GDA94 ☐ AMG/AGD66 ☐ Map zone: _____
   (refer to relevant topographic maps)

   — Gross stand-type area: _____ (ha) _____ (GPS file name)

   — If rectangular: Length: _____ (m) Width _____ (m)

	Description	Field estimate	GPS file name
— Net area exclusion 1:	_____	_____ (ha)	_____
— Net area exclusion 2:	_____	_____ (ha)	_____
— Net area exclusion 3:	_____	_____ (ha)	_____
— Net area exclusion 4:	_____	_____ (ha)	_____
— Net area exclusion 5:	_____	_____ (ha)	_____
— Net stand-type area:	_____ (ha)	_____	

   Attach Form C if used to record area.

STAND-TYPE INFORMATION (FOR PREDICTING CARBON SEQUESTRATION)

6. Predominant slope (estimate in degrees):

   flat (0-10 degrees) ☐ sloping (10-20 degrees) ☐ steep (over 20 degrees) ☐
7. What direction does the slope face: North ☐ East ☐ South ☐ West ☐
8. Position on slope: Upper ☐ Mid ☐ Lower ☐ Gully ☐
9. Soil:

   Parent rock type: _____

   Depth to bedrock (estimate): 0-30cm ☐ 30cm-1m ☐ 1-2m ☐ over 2m ☐

   Texture: _____

   Soil sampled for carbon content?: Yes ☐ No ☐
10. Average annual rainfall for stand-type: _____ (mm)
11. Irrigation: Yes ☐ No ☐ Method:_____
12. Potential influence of other water sources (groundwater, rivers, etc.): Yes ☐ No ☐

Use this form to record the initial site condition for the stand-type and the site plan

Form B

Initial Condition — Stand-type Description and Site Plan

EXISTING TREES

13. Are there any trees within the net area before establishment: Yes ☐ No ☐

What species are they:_____

Approximate ages: _____

Estimate cover using the scale below: _____

0 = nil, 1 = edges only; 2 = isolated individuals; 3 = in patches, 4 = scattered throughout, 5 = abundant throughout.

Will any of these trees be killed and/or removed?: Yes ☐ No ☐

Which species: _____ Method of Killing: Poisoned ☐ Cut down ☐

Will dead trees be: Left on site (habitat) ☐ Burnt ☐ Used commercially ☐

In most cases existing trees should be measured. If killing or removing any trees from the site (e.g. weeds such as willows), they must be measured.

14. Existing trees and litter measured?: Yes ☐ No ☐

If yes, attach Form D.

SITE PLAN (WORKS TO BE UNDERTAKEN)

Fencing: Type: _____ Distance: _____

Weed control: Type: _____ Rate: _____

Ground preparation: Ripping ☐ Depth: _____ (m)

Mounding ☐ Type: _____

Spot ☐ Depth: _____ (m)

No cultivation ☐

Planting sequence for age classes (stands) within this stand-type:

Planting year									
Area (ha)									

Tree planting: Machine ☐ Type of machine: _____

Hand ☐ Tool used: _____

Direct seeding: Machine ☐ Type of machine: _____

Seed mix: _____

Bulking agent: _____

Rate: _____ (kg/ha)

Hand ☐ Method: _____

Use this form to record the initial site condition for the stand-type and the site plan

Form B

Initial Condition — Stand-type Description and Site Plan

SEEDLINGS OR SEEDSTOCK REQUIRED

Species	Quantity (no. or kg)	Provenance	Supplier

Fertiliser ☐ Type: _____ Rate: _____

Herbicide ☐ Type: _____ Rate: _____ No. of applications: ____

Mulch ☐ Type: _____ Thickness:_____

Guards ☐ Type: _____

Watering ☐ Method:_____ No. of times: _____

Comments: _____

_____

_____

_____

_____

_____

_____

_____

Use this form to record the initial site condition for the stand-type and the site plan

Form C

Initial Condition — Area Record

Date: / /20

Project no:_____

Measured by: _____

Datum used on map: GDA94 ☐ AMG/AGD66 ☐ Map zone: _____

(refer to relevant topographic maps)

Point no.	Boundary being recorded	Feature	If using GPS		If using hip chain and compass		
			Easting	Northing	Bearing (°)	Distance (m)	Slope (°)

Use this form to record distance, bearing and features of a planting boundary

Form D

Initial Condition — Existing Trees and Litter

Project no:_____

EXISTING TREES

Date: / /20

Measured by: _____

Species 1: _____

Species 2: _____

Species 3: _____

Species 4: _____

Species 5: _____

Number of trees in net area: _____

Sampling approach Number of trees sampled: _____

Are these trees going to be killed and/or removed?: Yes ☐ No ☐

Take-off point location: Easting _____E Northing _____N

Tree No.	Species	DBH (cm)	Ht (m)	BT 1	BT 2	BT 3	BT 4
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

DBH = Diameter at 1.3m (Breast Height)
Ht = Height (m)
BT = Bark Thickness

Use this form to record data for existing trees

Form D

Initial Condition — Existing Trees and Litter

Project no:_____

LITTER SURVEY

Fine Litter (diameter <6 mm at largest point)

Sample number	Litter depth	Litter load (t/ha)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
Average		

Use this form to record data for existing trees

Form D

Initial Condition — Existing Trees and Litter

Project no:_____

Coarse Woody Debris (diameter > 6 mm at largest point)

Length of Transects:……m

Transect number	Distance (m)	Bearing (°)	Piece number	Diameter (cm)	Rotten (R) or Solid (S)?

Use this form to record data for existing trees

Form D

Initial Condition — Existing Trees and Litter

Project no:_____

Transect number	Distance (m)	Bearing (°)	Piece number	Diameter (cm)	Rotten (R) or Solid (S)?

Use this form to record data for existing trees

Form E

Biodiversity and Ecosystem Health Assessment

Project no: _____ Stand-type no:_____ Planting year: _____

VEGETATION

Cover scores:

0=nil, 1=edges only; 2=isolated individuals; 3=in patches, 4=scattered throughout, 5=abundant throughout.

Major Weed Species Present

Species	Cover score	Comments

Significant Patches of Remnant Vegetation

Description: _____

Major species present:_____

Tree ages present: Juvenile ☐ Sapling ☐ Mature ☐ Old growth ☐ All ☐

Condition:

Factor	Cover score	Factor	Cover score
Tree regeneration		Woody weeds	
Trees with significant dieback		Herbaceous weeds	
Trees with significant mistletoe		Evidence of grazing/browsing	
Native understorey species		Bare soil	

Notes: Significant dieback: foliage predominately epicormic or greater than 75% of twigs on crown apparently dead (equivalent to <5 on the Nadolny dieback scale).

Significant mistletoe: >80% of the canopy infested.

Source: Greening Australia Remnant Vegetation Sheet.

Use this form to record biodiversity and ecosystem health assessment

Form E

Biodiversity and Ecosystem Health Assessment

Project no: _____ Stand-type no:_____ Planting year: _____

Scattered Paddock Trees in the Net Area

Estimated trees per hectare: _____

Crown health: Good ☐ Fair ☐ Poor ☐

Epicormics: Stem ☐ Branches ☐ None ☐

Infestations (i.e., mistletoe): High ☐ Low ☐ None ☐

Species (if known): _____

ADDITIONAL VEGETATION INFORMATION TO BE RECORDED AT 5-YEARLY MONITORING

Secondary Seeding (of planted species)

Species	Cover score	Comments

Non-planted Native Species Present? List species if known

Species	Cover score	Comments

Stand Health Indicators

Insect attack?: Yes ☐ No ☐

Main species affected: _____

Disease?: Yes ☐ No ☐

Main species affected: _____

Browsing?: Yes ☐ No ☐

Browsing by?: _____

Project no: _____ Stand-type no:_____ Planting year: _____

Main species affected: _____

Use this form to record biodiversity and ecosystem health assessment

Form E

Biodiversity and Ecosystem Health Assessment

VERTEBRATE FAUNA

Evidence of nesting native birds: Yes ☐ No ☐

Species (if known): _____

Evidence of nesting feral birds: Yes ☐ No ☐

Species (if known): _____

Evidence of arboreal species: Yes ☐ No ☐

Species (if known): _____

Evidence of ground dwelling species: Yes ☐ No ☐

Species (if known): _____

Pest species present: Yes ☐ No ☐

Species (if known): _____

Habitat

Fallen timber with hollows: Yes ☐ No ☐

Number of standing trees (dead or alive) with hollows per hectare: _____

Nest boxes: Yes ☐ No ☐

Year of establishment: _____

Number of nest boxes: _____

Species targeted: _____

SOIL

Erosion Control

Evidence of landslips before planting?: Yes ☐ No ☐

Active erosion control measures in place?: Yes ☐ No ☐

Evidence of landslips since planting?: Yes ☐ No ☐

If yes how many?: _____ What is their average diameter: _____ (m)

Re-establishment of vegetation on slip?: Native ☐ Weed ☐ Both ☐

Percentage of bare ground: _____ %

Use this form to record biodiversity and ecosystem health assessment

Form E

Biodiversity and Ecosystem Health Assessment

Project no: _____ Stand-type no:_____ Planting year: _____

WATER QUALITY (STREAMSIDE PROJECTS ONLY)

Days since rainfall >5mm: _____

Weather conditions during measurement: _____

_____

Water turbidity (depth visible in cm)

Point	Riffle	Flowing	Still
Before site			
After site			

Water temperature (degrees C)

Point	Riffle	Flowing	Still
Before site			
After site			

Other notes on biodiversity and ecosystem health: _____

_____

_____

_____

_____

_____

Use this form to record biodiversity and ecosystem health assessment

Form F

Initial Condition — Works Record

Project no: _____ Stand-type no: _____

Site name: _____

Date of planting/seeding: _____

Tree planting ☐ Direct seeding ☐

SITE PREPARATION UNDERTAKEN

Fencing: Type: _____ Distance: _____

Weed control: Type: _____ Rate: _____

Ground preparation: Ripping ☐ Depth: _____ (m)

Mounding ☐ Type: _____

Spot ☐ Depth: _____ (m)

No cultivation ☐

Planting sequence for age classes (stands) within this stand-type:

Planting year									
Area (ha)									

Tree planting: Machine ☐ Type of machine: _____

Hand ☐ Tool used: _____

Direct seeding: Machine ☐ Type of machine: _____

Seed mix: _____

Bulking agent: _____

Rate: _____ (kg/ha)

Hand ☐ Method: _____

Use this form to record site establishment works and planting information if it differs from the site plan

Form F

Initial Condition — Works Record

SEEDLINGS OR SEEDSTOCK REQUIRED

Species	Quantity (no. or kg)	Provenance	Supplier

Fertiliser ☐ Type: _____ Rate: _____

Herbicide ☐ Type: _____ Rate: _____ No. of applications: ____

Mulch ☐ Type: _____ Thickness:_____

Guards ☐ Type: _____

Watering ☐ Method:_____ No. of times: _____

Comments: _____

_____

_____

_____

_____

_____

_____

_____

Use this form to record site establishment works and planting information if it differs from the site plan

Form G

Seedling Survival Sheet

Project no: _____ Stand-type no:_____ Planting year: _____

Date: / /20

Establishment method: Planting ☐ Direct seeding ☐

Planned trees per hectare: _____ Planned understorey per hectare: _____

Size of plot:_____ Radius of plot: _____ m

Take-off point location: Easting _____E Northing _____N

Plot number	Distance (m)	Bearing (°)	Live long-lived trees	Live short-lived trees	Live shrubs
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
Average	–	–			

Notes: If using 0.01ha plots, multiply the average number of trees by 100 to get stems per hectare.
Long-lived trees are species with a life-span of over 100 years.
Short-lived trees are species with a life span of between 30 and 100 years.

General comments (e.g. if a particular area or species is dead): _____

_____

_____

_____

_____

Use this form for recording estimates of survival

Form H

Plot Sampling Cover Sheet

Project no: _____ Stand-type no:_____ Planting year: _____

Date: / /20 No. of fixed area plot sheets with this sheet: _____

Property name:_____

Measured by_____

Have any events affected the site since the last visit?

Bushfire ☐ Storm Damage ☐ Browsing ☐ Grazing ☐ Disease ☐ Other ☐

Describe the effects of this event, any natural regeneration or remedial measures undertaken:

_____

_____

_____

_____

Overall error target (from procedures): 15% ☐ 20% ☐ 30% ☐

Number of fixed area plots: _____

Tree stocking used to determine fixed area plot size: _____

Size of fixed area plots: _____ (ha)

Shape of fixed area plots: Circular ☐ Rectangular ☐

Number of point to plant (stocking) plots: _____

Stocking plot interval: _____ (m)

Distance measured to Xth closest tree (circle one): 1 2 3 **4** 5

Tree Species 1: _____ Tree Species 2: _____

Tree Species 3: _____ Tree Species 4: _____

Tree Species 5: _____ Tree Species 6: _____

Take-off point locations:

1) Easting: _____ E Northing: _____ N

2) Easting: _____ E Northing: _____ N

3) Easting: _____ E Northing: _____ N

4) Easting: _____ E Northing: _____ N

Comments on entire stand: _____

_____

_____

_____

Use this form for recording general plot data

Form H

Plot Sampling Cover Sheet

Project no: _____ Stand-type no:_____ Planting year: _____

How were fixed area plots mapped?: GIS ☐ Grid ☐

Fixed area plot no.	Bearing (°)	Map distance (m)	% Slope	Actual distance (m)	From?
1					TOP 1
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					

Use this form for recording general plot data

Form I

Stocking Plot Sheet

Project no: _____ Stand-type no:_____ Planting year: _____

Date: / /20 Measured by: _____

Distance between stocking plots: _____ m

Distance measured to Xth closest tree (circle one): 1 2 3 4 5

Stocking plot no.	Distance to tree (m)	Species	Stocking plot no.	Distance to tree (m)	Species

Use this form for recording stocking plot data

Form I

Stocking Plot Sheet

Project no: _____ Stand-type no:_____ Planting year: _____

Stocking plot no.	Distance to tree (m)	Species	Stocking plot no.	Distance to tree (m)	Species

Use this form for recording stocking plot data

Form J

Fixed Area Plot Sheet

Project no: _____ Stand-type no:_____ Planting year: _____ Plot no: ____

Date: / /20 Measured by: _____

GPS location: _____E _____N

Trees Within Plot Boundary

Diameter measured at: 30cm ☐ Breast Height (1.3m) ☐ Other height _____

Tree No.	Species	Diameter	Ht (m)	BT 1	BT 2	BT 3	BT 4

Ht = Height (metres) = (UP% – DOWN%) * Distance from Tree
BT = Bark thickness

General plot comments: _____

Use this form for recording fixed area plot data

Form J

Fixed Area Plot Sheet

Project no: _____ Stand-type no:_____ Planting year: _____ Plot no: ____

LITTER SURVEY

Fine Litter (diameter <6 mm at largest point)

Sample number	Litter depth	Litter load (t/ha)
1		
2		
Average		

Coarse Woody Debris (diameter >6 mm at largest point)

Length of Transect _____ m

Transect number	Distance (m)	Bearing (°)	Piece number	Diameter (cm)	Rotten (R) or Solid (S)?

Use this form for recording fixed area plot data

Form K

Basal Area Sheet

Project no: _____ Stand-type no:_____ Planting year: _____

Date: / /20 Basal area factor (m^2/ha): _____

Average basal area for stand:_____

Measured by: _____

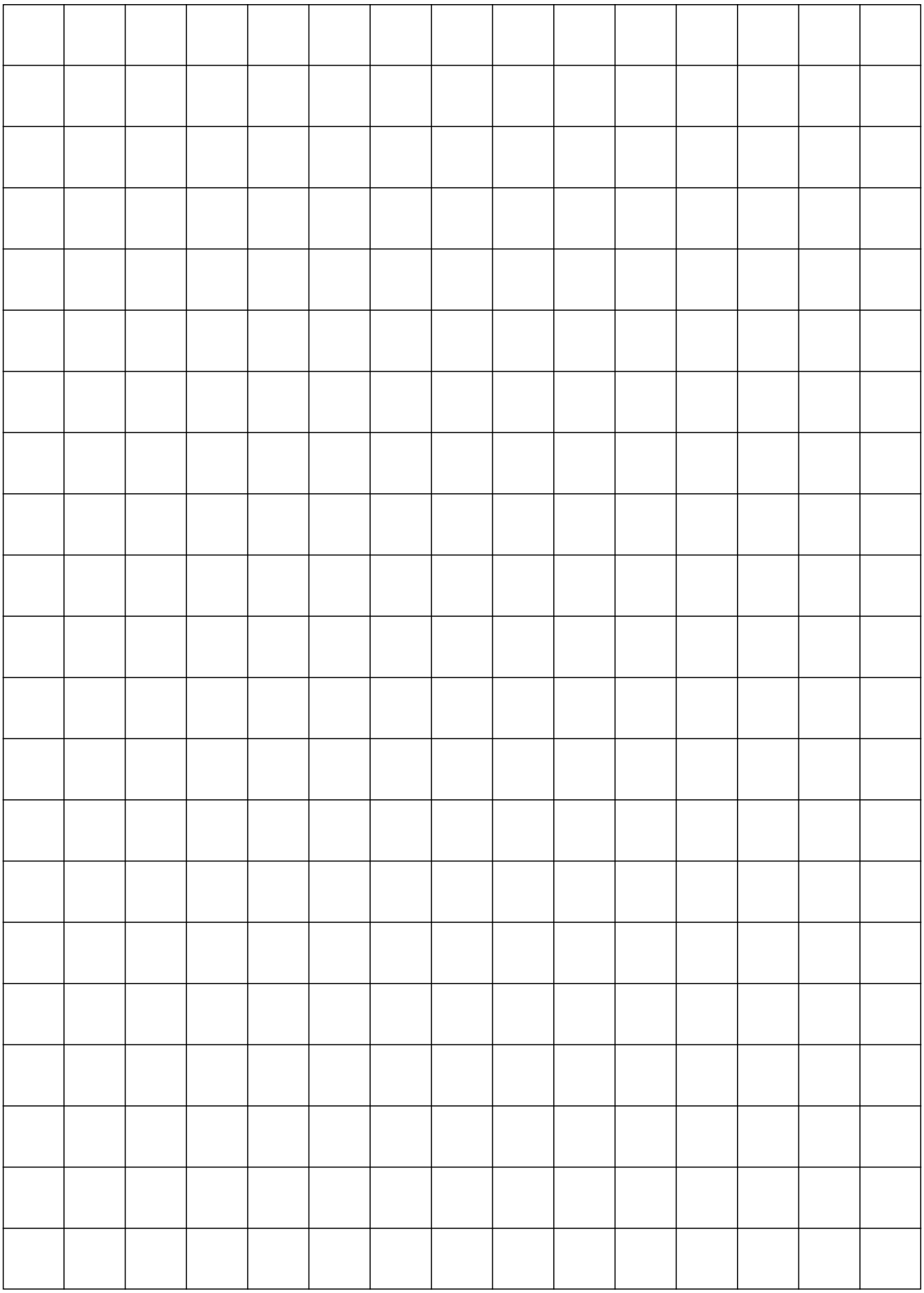
NB: Basal area = Basal Area Factor (BAF) x Tree count x $\frac{1}{cos\sigma^\circ}$

Point no.	Tree count	Basal area	Slope (°)	Point no.	Tree count	Basal area	Slope (°)
1				21			
2				22			
3				23			
4				24			
5				25			
6				26			
7				27			
8				28			
9				29			
10				30			
11				31			
12				32			
13				33			
14				34			
15				35			
16				36			
17				37			
18				38			
19				39			
20				40			

Use this form for recording tree counts when performing a basal area sweep

Form P

Plot Location Grid (10mm by 10mm)



The grid is 10mm by 10mm.

This is a 10mm x 10mm grid for determining plot locations