

7-4-89

CENTRAL MAPPING AUTHORITY  
Department of Lands

Trigonometrical Survey of N.S.W.

RECONNAISSANCE and MAINTENANCE REPORT

STATION	CAMBEWARRA T.S. 1361		
Co:	CAMDEW	PH:	CAMBEEWARRA
Map Sheet:	KIAMA SOUTH	No:	9028-S
Inspected by:	H. BORDER	Date:	4 <sup>th</sup> July, 1974
Authority:	C. M. A.	Field Book:	1382
Beacon Diagram	Not to Scale		

This Trig. Station has been:-

Note: Cross out word or words which do not apply

1. Completely cleared to permit 360° vision to surrounding Trig.
  2. Cleared by lanes bearing ..... from Trig. Mast
  3. Trig. Mast & Vanes have been painted white & black respectively. ✓
  4. The Trig. ~~was unpiled/not unpiled, dimensions now being~~ <sup>Trig. Plug</sup> should be explicit, e.g. Steel plug, Brass plug, Bolt, G.L. Pipe  
Description of mark..... <sup>above</sup> <sub>below</sub> m rock/concrete ..... m G.L.
- Height of Top Vanes to Top Mark..... m. Diameter of Vanes (vertical) 0.220 m.  
Height of Cairn..... m. Diameter of Cairn..... m. Mast and Vanes supported by tripod
- Length of Mast 2.745 m. (approximate if not unpiled)
5. A Copper Nail set in conc/rock has been placed 6.066 m. bearing 359°M from Trig. Mast
  6. A ..... set in conc/soil has been placed ..... m. bearing .....°M from Trig. Mast
  7. A ..... set in conc/soil has been placed ..... m. bearing .....°M from Trig. Mast
  8. A S.S.M. set in conc/rock has been placed 4.085 m. bearing 24°M from Trig. Mast

9. Connection..... to..... m. bearing.....°M
10. Connection..... to..... m. bearing.....°M
11. Connection..... to..... m. bearing.....°M
12. Connection..... to..... m. bearing.....°M
13. Diff. Ht. Copper Nail & N. is Level m. <sup>above</sup> <sub>below</sub> Trig. Plug
14. Diff. Ht. S.S.M. in rock is 0.740 m. <sup>above</sup> <sub>below</sub> Trig. Plug
15. Diff. Ht. S.S.M. in rock is 0.740 m. <sup>above</sup> <sub>below</sub> Copper Nail & N.
16. Diff. Ht. is ..... m. <sup>above</sup> <sub>below</sub> .....

*C.B. 2/1/76*

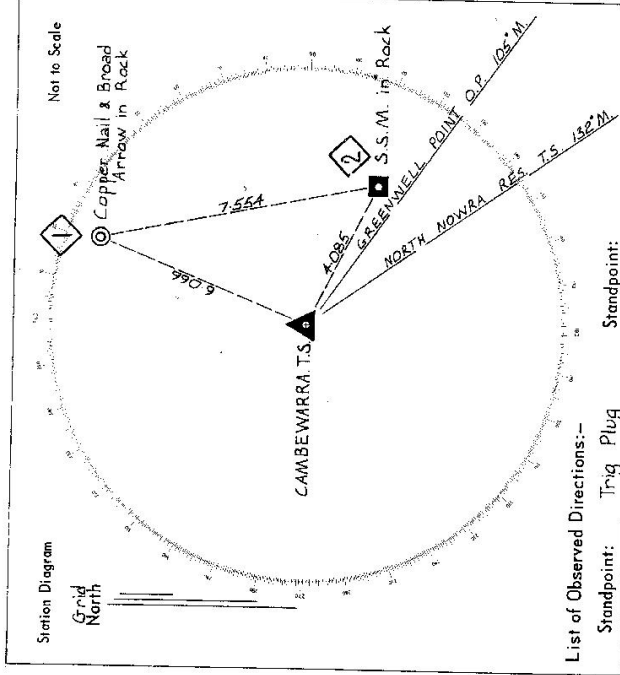
Prepared by: *E.J. Brown* Checked: *[Signature]* 2/1/75 Noted on U.T.M. Card

Date  
Record of Station

STATION CAMBEWARRA T.S. 1361

Owners Name.....  
 Current Occupant.....  
 Address.....  
 Address.....

Access 4-7-1974



List of Observed Directions:-

Standpoint:		Ting Plug		Standpoint:	
Station	Direction	Station	Direction	Station	Direction
NORTH NOWRA RES. T.S.	359 .. 59 .. 60				
Copper Nail & in Rock	RET .. 23 .. 30				
S.S.M. in Rock	321 .. 34				
GREENWELL POINT O.P.	332 .. 38 .. 51				
Station	Direction	Station	Direction	Station	Direction

*TS-1361*

TS-1361



TRIGONOMETRICAL SURVEY OF NEW SOUTH WALES  
 GEODETIC STATION SUMMARY

Authority: CENTRAL MAPPING AUTHORITY

Original Station Established by:	N.S.W. DEPARTMENT OF LANDS	Date:	1885
Existing Station Marked by:	CENTRAL MAPPING AUTHORITY	Date:	1975
Reference Books:	Distance Measurement: L89, L90, L91, L92, L491, Vol. 14		
	Direction Measurement: V28, Wollongong 1:250,000	Eg. Book:	W7
Cadastral Location:	State: N.S.W.	County: B&M	Camden
Parish:	Cambewarra	Section:	185
Plan Ref:	Ms. 310 Gbn. Ms. 507 Gbn.	Portion:	T.R. 21498

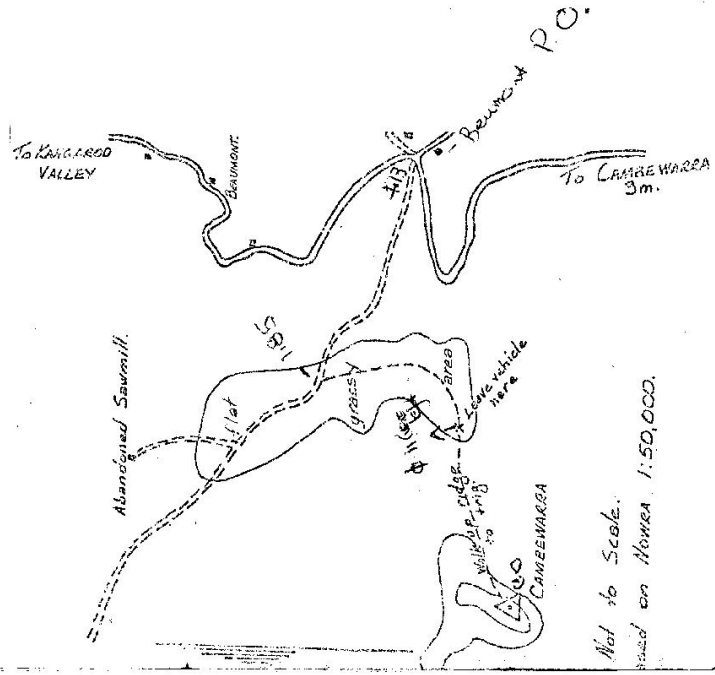
STATION CAMBEWARRA

Particulars of station marking and beacon:

- 10.6.75 Station Mark: Pillar plate concentric with trig. mark. Beacon: Conc. obs. pillar with mast & vanes (.92m dia.)  
 Effective Height: Top vanes to top pillar plate 3.158m.
- 1928 Beacon dismantled-replaced with bush pole
- 1956 Plug in rock found, stone cairn with mast & vanes (1.06m dia.) to top vanes 3.32m.
- 1975 Station visited by National Mapping for access.
- 4.7.74 Orig. trig. plug found. Mast & vanes (.92m dia.) supported by tripod.
- 10.6.75 Conc. obs. pillar est.

Access and Locality Sketch:

*0.55 S of 11 extremely dangerous rocky section*



*Not to Scale. based on NSWMA 1:50,000.*

TS-1361

TRIGONOMETRICAL SURVEY OF NEW SOUTH WALES  
STATION SUMMARY

State of New South Wales  
Camberarra

Name: **KIAMA** Station No: **9028** Order: **100,000**

Reference No. **118** V. **67**

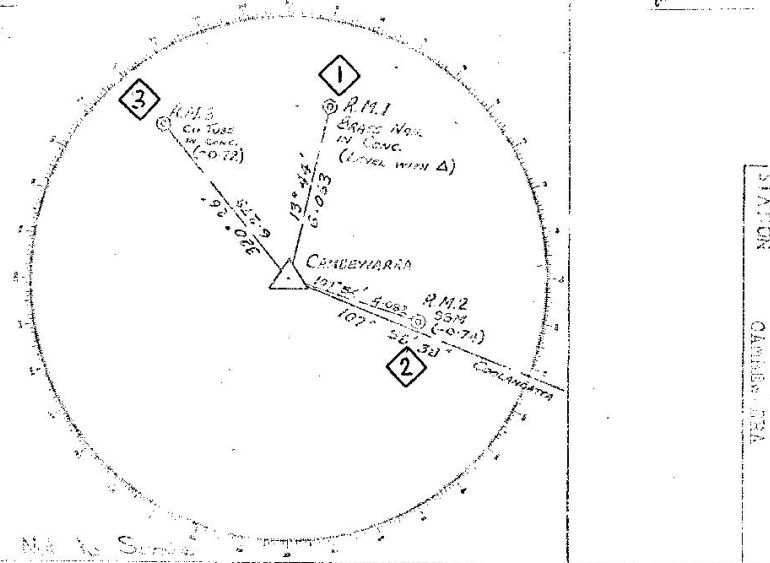
Height: **626.6**

SECTION **NEW ACT** SERIAL **68**

SOUTH LATITUDE	EAST LONGITUDE	ZONE	EASTING	NORTHING	CONVERGENCE	HEIGHT
34 47 49.1479	150 31 56.1412	56	274234.857	614881.182	-1 24 31.94	
NO.	SERIAL	ADJ AZIMUTH	ADJ LENGTH			
69	69	56 55 51.20	25728.681			
70	70	56 22 54.52	22675.352			
71	71	63 49 5.25	20855.632			
73	73	107 58 38.30	17498.252			
84	84	156 11 8.42	44441.285			
83	83	205 23 17.64	47694.997			
82	82	234 6 35.15	42239.166			
68	68	315 1 5.94	29137.613			

34 47 49.1479 150 31 56.1412 55 623191.871 6143767.253

S.G. INFORMATION  
 5671 257198.257 1148847.316



100,000

RECONNAISSANCE and MAINTENANCE REPORT

STATION CAMBEWARRA O.P.Ts 1361

This Trig. Station has been: Note: Cross out word or words which do not apply

1. Completely cleared to permit 360° vision to surrounding Trigs.
2. Cleared by lanes bearing ..... from Trig. Mast
3. Trig. Mast & Vanes have been painted white & black respectively. ✓
4. The Trig. was unspiled/not unspiled, dimensions now being .....

Description of mark Concrete Observation Pillar should be explicit, e.g. Steel plug, Brass plug, Bolt, G.I. Pipe placed concentric with Trig Plug

Height of mark ..... m above rock/concrete ..... m above G.L.

Height of Top Vanes to Top Mark 3.758 m. Diameter of Vanes (vertical) 0.220 m.

Height of Cairn ..... m. Diameter of Cairn ..... m. Mast and Vanes supported by tripod

Length of Mast 2.745 m. (approximate if not unspiled)

5. A Copper Pipeset in ~~conc~~/rock has been placed 6.284 m. bearing 307° M from Trig. Mast

6. A Copper Nailset in ~~conc~~/soil has been placed 6.065 m. bearing 353° M from Trig. Mast

7. A ..... set in conc/soil has been placed ..... m. bearing .....° M from Trig. Mast

8. A S.S. Nailset in ~~conc~~/rock has been placed 4.083 m. bearing 94° M from Trig. Mast

9. Connection Copper Nail to S.S. Nail ..... 2.554 m. bearing 147° M

10. Connection Copper Nail to Copper Pipe ..... 5.542 m. bearing 245° M

11. Connection ..... to ..... m. bearing .....° M  
*C. J. Brown 21/1/76 SENIOR TRIGONOMETRICAL SURVEYOR*

12. Connection ..... to ..... m. bearing .....° M  
*(Orig trig plug is 1.52 below pillar axis)*

13. Diff. Ht. Copper Pipe in Rock is 2.235 m. above Below Pillar Plate

14. Diff. Ht. Copper Nailset in Rock is 1.515 m. above Below Pillar Plate

15. Diff. Ht. S.S. Nail in Rock is 2.255 m. above Below Pillar Plate

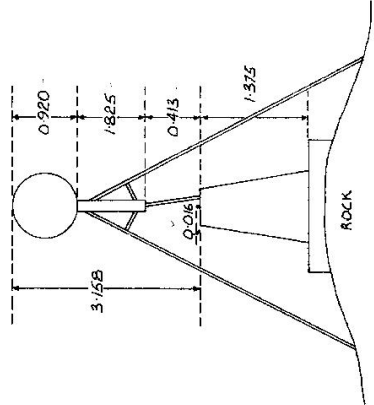
16. Diff. Ht. ..... is ..... m. above Below Pillar Plate

Prepared by: *C. J. Brown* Checked: *[Signature]* Noted on U.T.M. Card

Co: CAMDEN PH: CAMBEWARRA  
Map Sheet: KIAMA SOUTH No: 902B-S  
Inspected by: C. J. BROWN Date: 10<sup>th</sup> June, 1975.  
Authority: C. M. A. Field Book: 1451

Beacon Diagram

Not to Scale

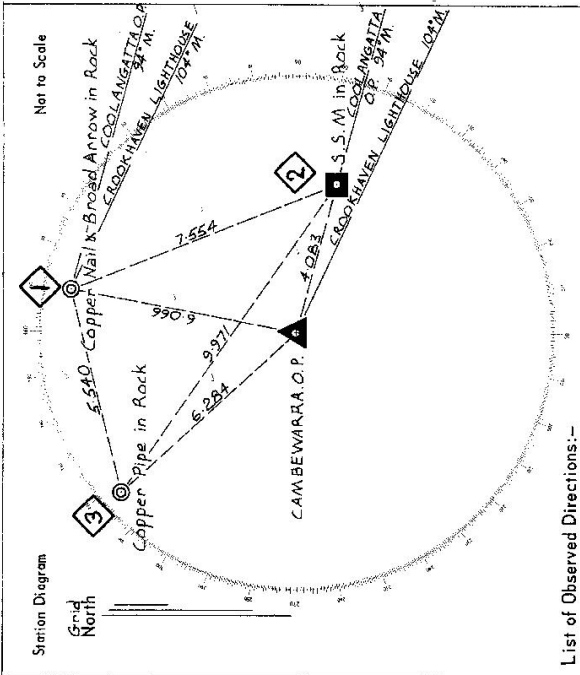


Date	Record of Station

Checked

TS 1361 STATION CAMBEWARRA O.P.

Owners Name.....  
 Address.....  
 Current Occupant.....  
 Address.....  
 Access 10-6-1975



List of Observed Directions:-

Standpoint: Conc. Observation Pillar Standpoint: Copper Nail in Rock

Station	Direction	Station	Direction
COOLANGATTA O.P.	359 59 60	COOLANGATTA O.P.	359 59 60
CROOKHAVEN LIGHTHOUSE 10	04 22	CROOKHAVEN LIGHTHOUSE 10	03 50
Copper Pipe in Rock	212 31 30	S.S.M. in Rock	53 08 30
Copper Nail in Rock	265 47 00	Pillar Spigot	85 45 30
S.S.M. in Rock	359 56	Copper Pipe in Rock	151 09 00

Station	Direction	Station	Direction

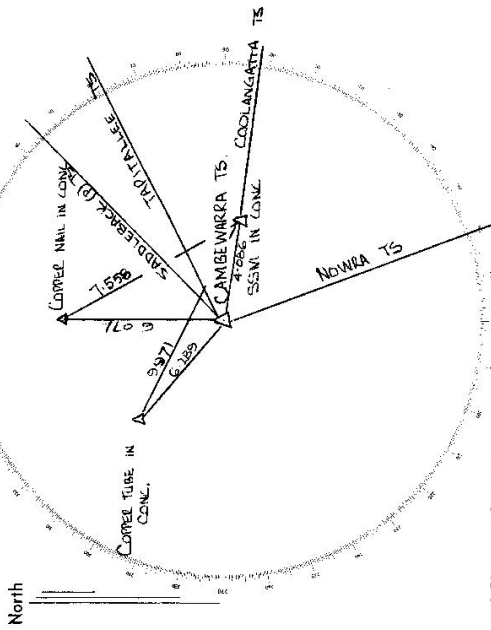


STATION CAMBENI 2A (P) TS 1361

Owners Name.....  
 Current Occupant.....

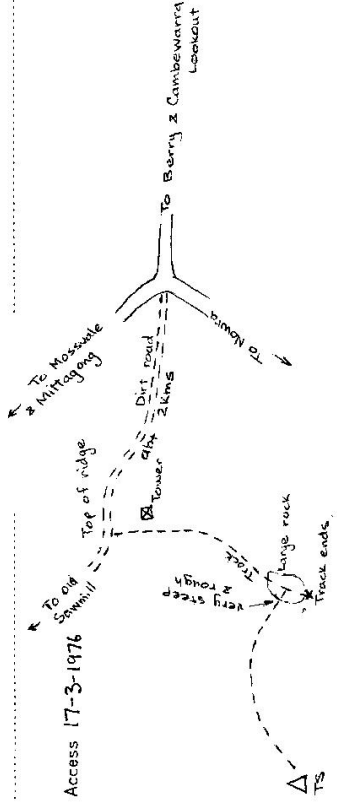
Address.....  
 Address.....

Station Diagram Not to Scale



List of Observed Directions:-

Standpoint: Pillar		Standpoint: SSM	
Station	Direction	Station	Direction
COOLANGATTA (P) TS	0° 00' 00"	COOLANGATTA TS	0° 00' 00"
NOWRA (P) TS	59° 18' 44.4"	CAMBENI TS (PILLAR)	179° 56' 21"
SADDLEBACK (P) TS	308° 24' 11"	COPPER TUBE	199° 46' 53"
TAPTALLEE TS (M)	326° 49' 49.2"	COPPER NAIL	238° 09' 50.5"
Pillar			
Station	Direction	Station	Direction
COOLANGATTA (P) TS	0° 00' 00"		
SSM IN CONC	359° 55' 56.5"		
NOWRA (P) TS	59° 18' 44.5"		
COPPER TUBE	212° 31' 13.5"		
COPPER NAIL	265° 47' 01"		



FROM BERRY TAKE MOSSVALE MITTAGONG ROAD TO TOP OF MOUNTAINS, THEN FOLLOW ABOVE SKETCH.



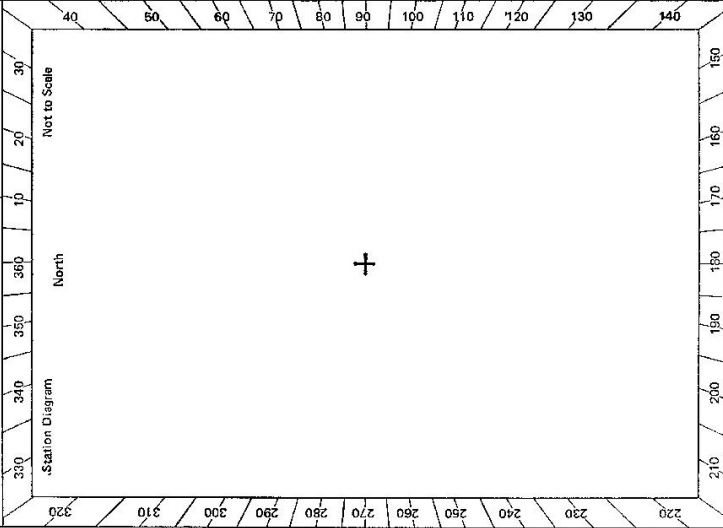
CENTRAL MAPPING AUTHORITY

GEODETIC SURVEY OF NSW  
 GEODETIC STATION RECONNAISSANCE and MAINTENANCE REPORT

STATION: CAMELLWARRA No.: 1361

MAP SHEET SCALE 1:250 000 Wollongong  
 INSPECTED BY: R. Leander A.T.S. DATE: 11-7-78  
 AUTHORITY: C.M.A. FIELD BOOK:

- Description:  
 Note: Cross out word or words which do not apply
1. Cleared by Janes bearing..... from Trig. Mast
  2. Mast & Vanes have been painted white & black respectively.
  3. The station/pillar was unpiled/not unpiled/constructed on.....19....., dimensions now being:  
 Description of mark.....should be explicit, e.g. S/Steel Pillar Plate, Steel plug, Brass plug, Bolt, G.I. Pipe  
 Height of mark.....m. <sup>above</sup>/<sub>below</sub> rock/concrete; Mark is.....m. <sup>above</sup>/<sub>below</sub> G.L.  
 Height of Top Vanes to Top Mark/Pillar plate .....m. Diameter of Vanes (vertical).....m.  
 Height of Cairn.....m. Diameter of Cairn.....m. Name Plate found/not found/placed.  
 Length of Mast.....m. (approximate if not unpiled)
  4. A.....set in conc/rock has been placed/found, bearing.....°M from Mast/Plug/Pillar
  5. A.....set in conc/rock has been placed/found, bearing.....°M from Mast/Plug/Pillar
  6. A.....set in conc/rock has been placed/found, bearing.....°M from Mast/Plug/Pillar
  7. A.....set in conc/rock has been placed/found, bearing.....°M from Mast/Plug/Pillar
  8. Action required:.....



STANDPOINT:

Mark	Direction	Horiz. Distance	Height Difference	Mark	Direction	Horiz. Distance	Height Difference
			above standpt.				above standpt.
			below standpt.				below standpt.
			above standpt.				above standpt.
			below standpt.				below standpt.
			above standpt.				above standpt.
			below standpt.				below standpt.
			above standpt.				above standpt.
			below standpt.				below standpt.
			above standpt.				above standpt.
			below standpt.				below standpt.

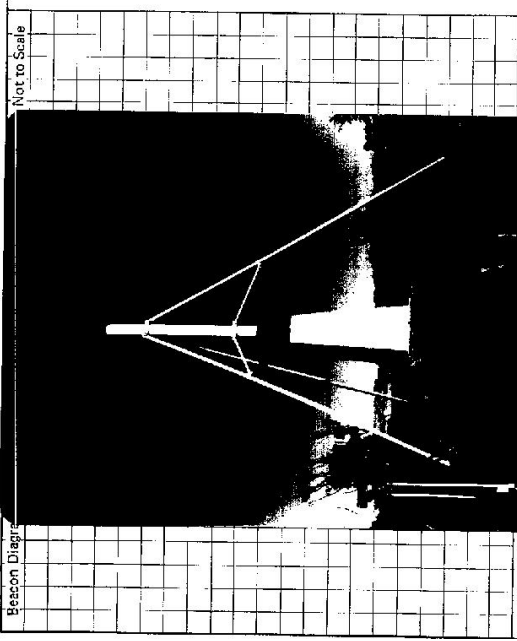
Prepared by: Noted on U.T.M. Card

Checked:

Checked

Sr 2733-2 D. West, Government Printer

STATION CAMBUWARRA TS 1361



Not to Scale

Beacon Diagram

Owner's Name: .....  
 Address: .....  
 Phone: .....

Current Occupant: .....  
 Address: .....  
 Phone: .....

**ACCESS**

Access Report of 11.7.19: ~~It~~ was found suitable/unsuitable.

This section is .....  
 Original station: .....

Description of mark: .....

Original beacon found/not found, .....

Description of beacon: .....

Height: Top of Vanes to Top Mark .....m.  
 above rock/conc .....m. above G.L.  
 below .....m. below .....

Diameter of Vanes .....m. Height of Cairn .....m.

Original Beacon has/has not been destroyed by me.

Date	Record of Station

CENTRAL MAPPING AUTHORITY

GEODETIC SURVEY OF N.S.W.

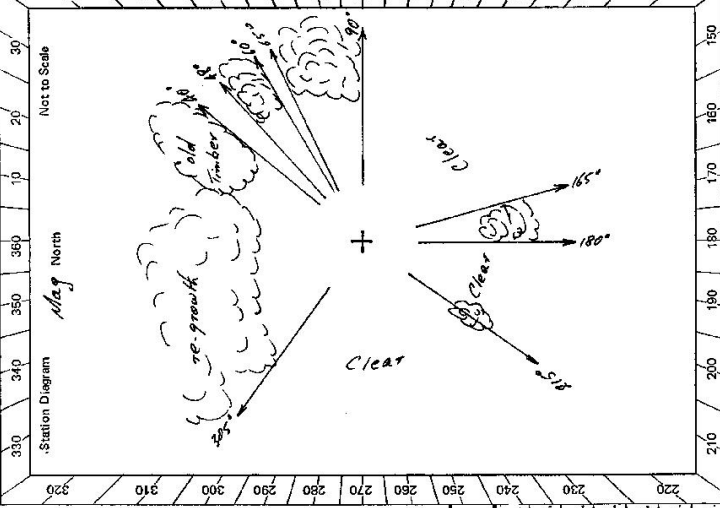
GEODETIC STATION RECONNAISSANCE and MAINTENANCE REPORT

STATION: **CAMBENARRA** No.: **1361**

MAP SHEET  
SCALE 1:250 000 **WOOLONGONG**

INSPECTED BY: **J. FANNING** DATE: **31 Jan 81**

AUTHORITY: **C.M.A.** FIELD BOOK: **1724**



- Description: *Note: Cross out word or words which do not apply*
- Cleared by lanes bearing..... from Trig. Mast
  - Mast & Vanes have been painted white & black respectively.
  - The station/pillar ~~was set in conc/rock~~.....19....., dimensions now being:  
Description of marks/~~to pillar/plate~~.....should be explicit, e.g., S/Steel Pillar Plate, Steel plug, Brass plug, Bolt, G.I. Pipe
  - Height of mark.....m. <sup>above</sup> ~~below~~ rock/concrete; Mark is.....m. <sup>above</sup> ~~below~~ G.L.
  - Height of Top Vanes to ~~top~~ ~~mark~~ Pillar plate .....m. Diameter of Vanes (vertical).....~~0.2~~in.
  - Height of Cairn.....m. Diameter of Cairn.....m. Name Plate found/~~not found~~.....
  - Length of Mast.....m. (approximate if not unplied)
  - A.....~~Pillars~~.....set in conc/rock has been ~~placed~~/~~found~~, bearing...~~R.7~~°M from ~~Mark~~/~~Plate~~/~~Pillar~~
  - A.....~~S.S.M.~~.....set in ~~conc~~/~~rock~~ has been ~~placed~~/~~found~~, bearing...~~94~~°M from ~~Mark~~/~~Plate~~/~~Pillar~~
  - A.....~~C.I. Nail~~.....set in conc/rock has been ~~placed~~/~~found~~, bearing...~~25.9~~°M from ~~Mark~~/~~Plate~~/~~Pillar~~
  - A.....~~set in conc/rock has been placed/found, bearing.....°M from Mast/Plug/Pillar~~
  - Action required: ~~Set in conc/rock~~.....~~1-1 days clearing regrowth~~.....

STANDPOINT:				STANDPOINT:			
Mark	Height Difference	Horiz. Distance	Direction	Mark	Height Difference	Horiz. Distance	Direction
<del>Open</del>	<del>above</del> standpt.	<del>km</del>	<del>11</del>	<del>Open</del>	<del>above</del> standpt.	<del>km</del>	<del>11</del>
<del>Wing</del>	<del>above</del> standpt.	<del>21.7</del>	<del>149</del>	<del>Wing</del>	<del>above</del> standpt.	<del>21.7</del>	<del>149</del>
<del>Back</del>	<del>below</del> standpt.	<del>20.6</del>	<del>52</del>	<del>Back</del>	<del>below</del> standpt.	<del>20.6</del>	<del>52</del>
<del>to</del>	<del>above</del> standpt.	<del>17.5</del>	<del>147</del>	<del>to</del>	<del>above</del> standpt.	<del>17.5</del>	<del>147</del>
<del>Bent</del>	<del>above</del> standpt.	<del>44.4</del>	<del>49</del>	<del>Bent</del>	<del>above</del> standpt.	<del>44.4</del>	<del>49</del>
<del>to</del>	<del>below</del> standpt.	<del>18.9</del>	<del>147</del>	<del>to</del>	<del>below</del> standpt.	<del>18.9</del>	<del>147</del>
<del>to</del>	<del>above</del> standpt.	<del>21.9</del>	<del>147</del>	<del>to</del>	<del>above</del> standpt.	<del>21.9</del>	<del>147</del>
<del>to</del>	<del>below</del> standpt.	<del>21.1</del>	<del>147</del>	<del>to</del>	<del>below</del> standpt.	<del>21.1</del>	<del>147</del>
<del>to</del>	<del>above</del> standpt.	<del>21.1</del>	<del>147</del>	<del>to</del>	<del>above</del> standpt.	<del>21.1</del>	<del>147</del>
<del>to</del>	<del>below</del> standpt.	<del>21.1</del>	<del>147</del>	<del>to</del>	<del>below</del> standpt.	<del>21.1</del>	<del>147</del>

Prepared by: *J. Fanning*

Checked: *J. Fanning*

Noted on U.T.M. Card

51 2733-1



CENTRAL MAPPING AUTHORITY

GEODETIC SURVEY OF A.S.W.

GEODETIC STATION RECONNAISSANCE and MAINTENANCE REPORT

Description:

1. Cleared by lanes bearing  $420^{\circ}$  to  $46^{\circ}$  M,  $51^{\circ}$  M,  $54^{\circ}$  M,  $62^{\circ}$  M,  $68^{\circ}$  M,  $9^{\circ}$  M,  $140^{\circ}$  M. Mast & Vanes have been painted white & black respectively. ✓
2. Mast & Vanes were unpainted/repainted/constructed on  $10$  to  $06$  to  $19$   $75$  dimensions now being: Description of mark ~~3/5~~ should be explicit e.g. S/Steel Pillar Plate, Steel plug, Brass plug, Bolt, G.I. Pipe
3. The ~~steel~~ pillar was ~~unpainted/repainted/constructed~~ on  $10$  to  $06$  to  $19$   $75$  dimensions now being: Height of mark ~~1.5~~ above rock/concrete, Mark is ~~1.5~~ above G.L.
4. Height of Top Vanes to Top Mast/Pillar plate ~~2.2~~ m. Diameter of Vanes (vertical) ~~0.2~~ m.
5. Height of Cairn ~~1.5~~ m. Diameter of Cairn ~~1.5~~ m. Name Plate found/not found/placed.
6. Length of Mast ~~1.5~~ m. (approximate if not unplied)
7. A. ~~S/S~~ set in conc/rock has been placed/found, bearing  $210^{\circ}$  M from Mast/Plug/Pillar
8. A. ~~CU~~ set in conc/rock has been placed/found, bearing  $287^{\circ}$  M from Mast/Plug/Pillar
9. A. ~~CU~~ set in conc/rock has been placed/found, bearing  $253^{\circ}$  M from Mast/Plug/Pillar
10. A. ~~CU~~ set in conc/rock has been placed/found, bearing  $210^{\circ}$  M from Mast/Plug/Pillar
8. Action required: ~~REPAIRING OF SOME LANES REQUIRED~~

STANDPOINT:

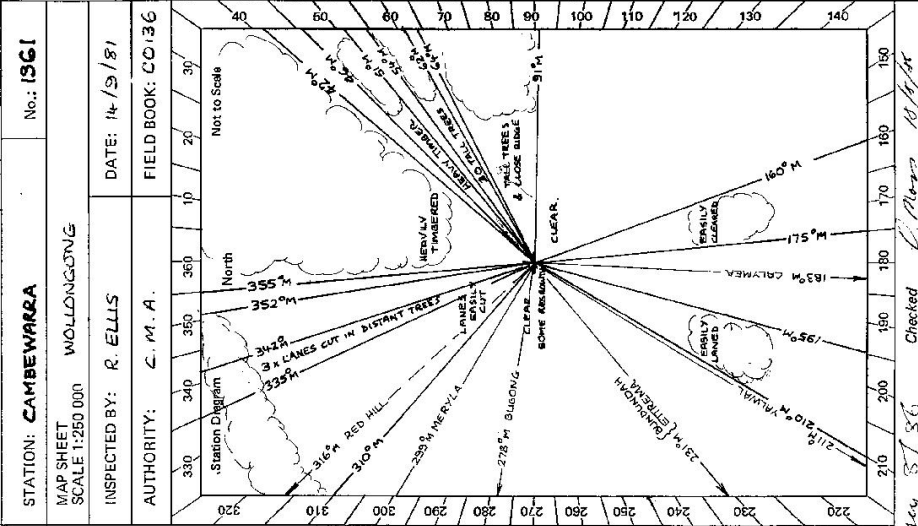
Mark	Direction	Horiz. Distance	Height Difference	Mark	Direction	Horiz. Distance	Height Difference
			above standpt.				above standpt.
			below standpt.				below standpt.
			above standpt.				above standpt.
			below standpt.				below standpt.
			above standpt.				above standpt.
			below standpt.				below standpt.
			above standpt.				above standpt.
			below standpt.				below standpt.
			above standpt.				above standpt.
			below standpt.				below standpt.
			above standpt.				above standpt.
			below standpt.				below standpt.

Prepared by: *Billie Spiller*

Checked: *Billie Spiller*

Noted on U.T.M. Card *Billie Spiller*

Checked: *Billie Spiller*



STATION: **CAMBEWARRA** No.: **1361**

MAP SHEET SCALE 1:250 000 WOLLONGONG

INSPECTED BY: **R. ELLIS** DATE: **14/5/81**

AUTHORITY: **C. M. A.** FIELD BOOK: **CD136**

GS 24

STATION **CAMBEWARRA** TS **1361**

Owner's Name: **TR. NP 21498**  
 Address: **Surrounded by Registrar Reserve - Trustee "Saskatchewan Shire Council"**  
 Phone: .....

Current Occupant: .....  
 Address: .....  
 Phone: .....

ACCESS

Access Report of **17.9.1981** was found suitable/unsuitable.  
**Km**  
**0.00** ON PRINCES HWY ~ SHORLHAVEN RIVER BRIDGE AT NOCURA ~ DRIVE NORTH TOWARDS SYDNEY.

**2.54** TURN LEFT ~ SIGN "KANGAROO VALLEY, MOSSVALE, MITTAGONG"  
**10.81** A SHARP U-BEND AT TOP OF CAMBEWARRA RANGE ~ TURN SHARP LEFT UP GRAVEL TRACK IN CENTRE OF BEND.  
**11.98** PASS UNDER POWERLINES  
**13.20** TURN LEFT ~ FOLLOW TRACK  
**13.67** PASS TOWER ON LEFT ~ FOLLOW TRACK STRAIGHT AHEAD  
**14.1** STOP VEHICLE ~ TRACK IS BADLY WASHED OUT AND APPROX SIX LARGE TREES ARE ACROSS TRACK (1 DAY TO CLEAR TRACK TO TRIG.)  
 IS MIN WALK TO TRIG ALONG TRACK.

Beacon Diagram	Not to Scale
BILLYS MAST & VANES IN GOOD CONDITION TRIPOD IN GOOD CONDITION	
This section to be completed by officer constructing pillar. Original station mark found/not found. Description of mark: ..... Original beacon found/not found. Description of beacon: ..... Height Top of Vanes to Top Mark .....m. Height of mark .....m. above G.L. / below Diameter of Vanes .....m. Height of Cairn .....m. Original Beacon has/has not been destroyed by me.	

Date	Record of Station