Aspects of a Rural, Road Survey in the Hunter Valley

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ABSTRACT

This paper is an outline of some aspects of a cadastral survey in a rural location where very limited recent survey information is available. To complicate matters the agricultural pursuits since the area was settled has seen the destruction of much of the established timber including, it would appear, the reference trees placed at the time of the early Crown portion surveys. The survey for the purpose of opening and closing roads is not that important, however it is the road issues that have drawn the Department of Land and Water Conservation into the fray.

INTRODUCTION

The Department of Land and Water Conservation is responsible for the management and use of Crown Land within New South Wales, including Crown roadways not dedicated as Council public roads.

With respect to surveys for Crown roads, the position taken is nearly always that the Crown has provided the initial survey and any further surveys are for the adjoining owners to arrange at their own expense.

BACKGROUND

In December 1997 I was instructed to make an inspection of a property in the vicinity Gungal between Merriwa and Denman in the upper Hunter Valley. The purpose of the inspection was to provide survey information to assist with resolving access problems that had been the concern of some landholders for some time.

Until recently, approximately 10 to 15 years ago, a number of portions including Portion 7 in the Parish of Worondi, had been held in the same ownership as a single property. As such there was no need for the landowner to formalise roadways within the property. A road running nearly north south was surveyed in 1868 as R764 and then partly again as R764a in 1873. The R764 survey was made prior to the surveys of the surrounding Crown portions. The proposed roads were notified however they were not confirmed. The surveys for portion 7 (Worondi) and the adjoining portion 51 in the parish of Wickham were completed in 1871. The Crown surveys for these portions refer to the road and show the location of the road. The titles for these portions specifically exclude a road one chain wide. Crown public roads were allowed for when other portions were surveyed later in time. These Crown public roads provide public access where they link with other roads to form a continuous roadway.

The property has now been broken up and sold as individual parcels and access issues have become a problem. Initially, the owner of portion 7 allowed the neighbours to drive along an existing track at the northern end of portion 7 and then onto the Crown road along the west and south of portion 7. Upon the resale of portion 7, the present owner refused to allow the neighbours to drive along the track. Gates were locked and

obstacles placed to impede access across portion 7. Unfortunately, there is a perceived discontinuity through portions 7 and 51 due to the failure of the present owner of portion 7 to recognise the exclusion of a road from the title. Police have been required to attend the site on numerous occasions.

The problem for DLWC is such that the affected parties, having tried to resolve the issue in the normal manner without success, have approached the Minister for Land and Water Conservation and requested the government to intervene. Various officers of the department have devoted numerous hours trying to resolve the issue. The 1997 working file is now well into the sixth volume.

A road was intended to be opened in the late 1800's, that it should have been opened from today's perspective there is no doubt, the titles to portions 7 and 52 include a 'reservation' for a road. Alternative routes for access were considered however there were legal and other issues that dictated the direction for resolution. A new road is required to be opened through portions 7 and 51 to enable legal access to other portions west of Worondi Rivulet near Portion 7 and also including portions west and south of this portion.

THE SOLUTION – SURVEY 1

A Landboard hearing was held late in 1997 to address the specific problem of access through Portion 7 in the Parish of Worondi. The Land Board recommended to the Minister and it was agreed that the DLWC would prepare a survey for the purpose of opening the Crown road through portion 7. Although this is not the usual use of departmental resources, it was considered the right approach in this case. The neighbouring parties claimed that they had already spent a considerable sum of money for surveys and survey reports providing information about their rights to access their properties. The right for a road 20.115 metres (1 chain) wide was excluded from the original freehold Portion 7. This road was not defined by survey even though the Department of Lands had completed the survey as well as much of the administrative work for opening the road in the 1870's. The Lands Department appears to have erred by not completing the road opening at that time.

The survey to identify the boundary of the Crown road through Portion 7 was commenced in March 1998. The plan showing the position of the road, for the purpose of advertising to seek public comment, was completed on 27 May 1998. The plan was subsequently completed and has been registered.

Preparation for the survey of the road involved the collection of all prior surveys in the locality. With the exception of one survey DP 639712, all other surveys were of Crown portions. DP 639712 is a survey for a Right of Carriageway 10 wide through Portions 203, 79,78 and 77 in the Parish of Wickham, this 'Private' access is on the east of Worondi Rivulet and does not provide continuity north or south of Portion 7. The original survey for Portion 7 (Crown plan B36) was dated 28 March 1871 the same as that for Portion 51 (Wickham) (Crown plan B34). Portion 203 (Wickham) abutting on the east was surveyed July 1881 (B1933). Other adjoining surveys were for Portion 57

(Worondi) dated November 1876 (B2121), Portion 77 (Worondi) dated January 1914, Portion 52 (Worondi) dated September 1880 (B1861), Portion 51 (Worondi) dated March 1880 (B1834), Portions 72 and 73 (Wickham) dated August 1876 (B1006). DP 639712 was surveyed in December 1986, very few original marks were shown as found. The two road plans prepared in 1868 and 1873, R764 and R764a, as already mentioned, these proposed roads were notified but there is no record that they were confirmed.

The method of survey was to establish the northern and southern limits of Portion 7 and survey and mark the road 20.115 metres wide through Portion 7 and slightly west of the old homestead. The position of this Crown road is as agreed to by all parties and "pegged" by the Board on 10 December 1997 during an on-site inspection and formal marking of road centreline.

Due to the age of the prior Crown surveys, there are no obvious survey marks at the corners of the portions. Fencing in the area is sparse and generally less than twenty (20) years old. An identification/remark survey of Portion 7 was prepared probably about 15 years ago to assist in the sale of this and other parcels. Remark pegs have been found located under the recent fence lines near fence intersections. It is my opinion that these pegs have been placed by adopting the original title dimensions along the south and west boundaries of Portion 7.

In order to start the survey, connections were made to marks shown on DP 639712. The original rock mark at the northwest corner of Portion 203 (Wickham), surveyed in July 1881, was found, this mark provides an indication of an abuttal for Portion 7. The south west corner of Portion 203 can be re-established from DP 639712. The connection to the remains of the reference tree shown by Surveyor Lowe did not agree with that measured in the field. There is no direct connection from Portion 203 to the west side of Worondi Creek and as such Portion 203 has only been used as an abuttal for part of Portion 7. In my opinion Portion 7 cannot overlap any part of Portion 203.

The Crown plan for portion 57 shows a connection to the south west corner of Portion 203. This portion also provides an abuttal to Portion 7 on the south and part of the west. A problem with the original plans is that the southern boundary of Portion 7 and the northern boundary of portion 57 differ by about 50 links or 10 metres. This problem cannot be resolved without making a determination in the field based on the overall survey definition adopted. The remains of a dead reference tree was found at the south east corner of Portion 57. No other marks were found for this portion or others in the vicinity.

Measurements were made from the southern extent of Portion 57 to the northern extent of Portion 72. Connection was made to the occupations being old post and wire fences along the Crown roads between Portions 72 and 73 and 187. Some recent survey pegs were also found along these fences. In 1987, the Department undertook a survey for investigation purposes, this survey adopted the fences for defining the boundaries. The orientation of the fencelines is considered to agree reasonably with the original surveys and the recent occupations near Portion 7. These fences have been adopted to control the orientation of the road survey.

The survey of the Crown road has been connected to the cadastre by maintaining the orientation mentioned above and adopting the remains of a reference tree at the south east corner of Portion 57 as the starting point. The original bearings, adjusted for orientation and distances from B36 have been used to mark the common boundary between the southern end of the road and Portion 7. The 50 link error was ignored at this stage.

I am of the opinion that the artificial boundaries of portion 7 have been lost. The creek is of course not lost but by its nature and the uncertainty of the banks as to survey definition, it is not much more than an indicator of the east and north extent of Portion 7. Clauses 39 and 40 of the Surveyors (Practice) Regulation 1996 are applicable to this survey and have been complied with.

By 'matching' adjoining portions a mosaic of land parcels can be created. For example, commencing with portion 72 (Wickham) the measurements shown on the adjoining portion 51 (Wickham) can be used without change as the common boundary has used the same reference marks and orientation. Difficulties can arise when there is no direct comparison between adjoining plans. For example, continuing south from portion 51 (Wickham) to Portion 7, the plan for Portion 7 shows portion 51 (Wickham) but no marks used to justify that parcel. As the surveys of these two portions were carried out by the same surveyor and at the same time a direct orientation relationship between the plans can be assumed.

The road survey prepared by me has redefined sufficient of the former boundaries to enable the limits of the road to be established. It is appropriate to refer to comments presented by K E Hamer, former Supervising Surveyor, Registrar General's Department in his paper *"Some aspects of title boundary location in NSW"*.

- Title boundary definition is recognised by surveyors as being far from an exact science, unfortunately the general public do not understand this.

- Unlike some other surveying disciplines, problems encountered in cadastral surveying do not always fall within certain well defined limits nor are they governed by well established formulae which will always provide the correct answers.

In order for me to re-establish the boundaries, I have adopted the remains of reference tree found at the south east corner of Portion 57 and oriented the survey according to the fencing in the vicinity of Portions 72 and 73. The connection from the south east corner of Portion 57 to the south west corner of portion 203 re-established from DP 639712 agrees with the original connection on Crown plan B2121. By maintaining original bearings and distances from this starting point as oriented, the boundaries have been redefined by me as shown in the plan dated 28 May 1998. There is an excess of land north of Portion 7 as well as to the south. The location of the eastern limit of Portion 7 does not encroach onto Portion 203.

The definition of Portion 7 using PO measurements indicates that the recent fencing and remark pegs are significantly different to the location of boundaries by my survey. If the connections adopted by me were ignored and the recent fencing adopted instead,

then Portion 7 would encroach onto Portion 203 and there would be even more of an excess of land north to portions 73 and 187.

In the absence of any other definite, original survey marks, I stand by the definition shown suffice for the establishing of a road through portion 7.

This first survey was registered as DP 48709.

INTERLUDE

The completion of the first survey has seen the continuation of problems. Local newspaper reports and internet pages were prepared calling the road a "road to nowhere" and an exercise government bureaucracy at its worst. The bridge at the northern end of the road was partially demolished, this action was claimed necessary to protect potential users from possible danger. Gates were placed across the road with assorted problems, too narrow, chain to tight, approach angle awkward and grids that were placed in lieu of gates were pulled out. DP 48709 shows that the fencing on the west of portion 7 stands on that portion. The track being used along the west of portion 7 is actually on portion 7. More fences and more locks. Police once again become embroiled in the 'neighbourly' disputes. The pressure brought about by all these problems was seen to have reached the summit when one fellow was convicted of a bank robbery. He quoted the ongoing road problems and the financial strain due to not being able to access and tend to cattle as the reasons for his transgression.

ACT 2 – SURVEY 2 AND SURVEY 3

To resolve the "road to nowhere" issue the road was to be surveyed north from portion 7 (Worondi) through portion 51 and portion 72 both in the Parish of Wickham. This had always been planned as a part of the DLWC actions to ensure full public access. Along with this additional survey was the requirement for the control of the road and therefore the bridge across the creek, to be taken up by Merriwa Council.

In August 1999, the road was surveyed north to the existing Council public road at the northern boundary of portion 72. In order to maintain a reliable relationship with DP48709, the Survey Control marks placed for that survey were used for azimuth in the subsequent survey. Additional searching for the portions north of the end of the road revealed the existence of rock marks placed in 1914. A numbered Broad Arrow was found at the south east corner of portion 187. Remains of other marks were found along the east of the valley and a reasonable definition for portions 51 and 72 was established. The centreline of the creek again formed the boundary for parts of both of these lots and no marks were found along the creek. The new road was surveyed following consultation with the land holders. The result is that when the plans are registered, the road will be continuous to south of portion 7.

Time was marching forward and the problems all of the affected parties were still unresolved. With continued correspondence to senior executive staff of the department, a meeting was called to brief the Deputy Director General and consider options to bring

about a solution. The decision to come out of the meeting was to negotiate to open a road along the northern part of portion 7 connecting the road in portion 51 (Wickham) to the reserved road at the west of portion 52. This is the site of the track that had been used prior to the current owner of portion 7 barring access. Agreement was negotiated with the assistance of the Chairman of the Land Board.

In mid December 1999, I ventured forth once more to connect the surveys and hopefully find some of the original marks around this part of the valley. Unfortunately, there have been no additional marks found. The original boundaries are in my opinion lost. This 'final' survey requires the western boundary of portion 7 to be redefined and therefore the resolution of the 50 link error.

At the completion of this survey, opening a new road and closing part of another that was opened in DP 48709, the parties are to consider the position of their boundaries and must agree prior to the plan being lodged for registration.

CONCLUSION

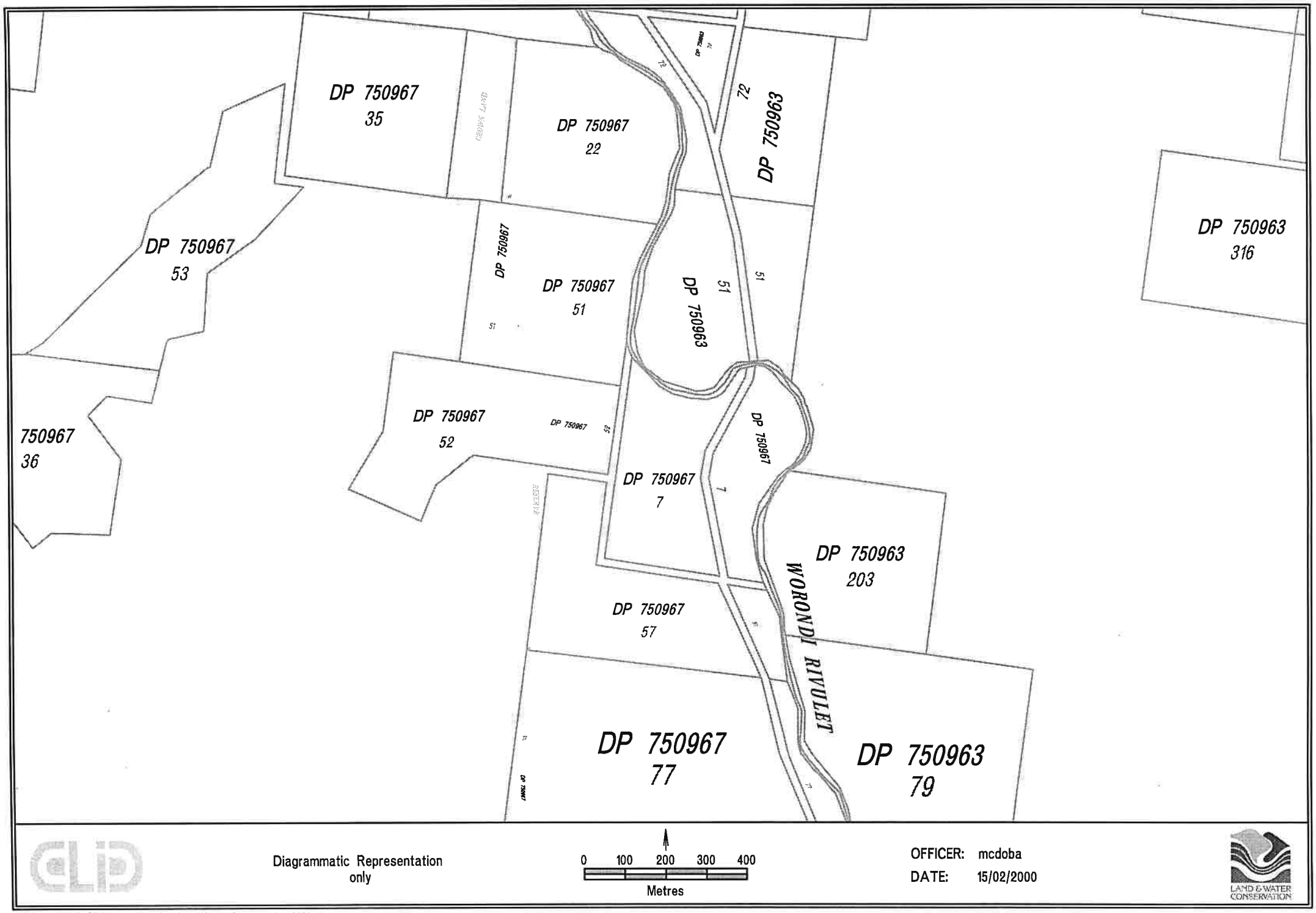
There are a number of points to clarify.

- The original grant for Portion 7 (Worondi) dated 28 April 1873, exclusive of a road 1 chain wide, was surveyed 28 March 1871. A survey of a road, R 764, was prepared in June 1868, it is apparent that this road was not confirmed.
- The 50 link error in the original survey for portion 7 has been 'resolved' in the third survey.
- The rock mark found at the north west corner of portion 203 (Wickham) is an abuttal that cannot be breached by portion 7. Although a direct connection to portion 7 is not provided, this is one point on the Creek boundary of both Portion 7 and Portion 203.
- The creek and the high wall at the north of portion 7 is ancient. The wall is about 15 metres high and nearly vertical. The original survey of portion 7 showed a traverse around the north and east sides of the portion, there were no connections to the creek. A surveyor running such a traverse would have positioned the traverse lines close to the top of the high bank, while maintaining a safety margin.
- The north and east boundary of portion 7 is the centre of the creek.
- The final positions of the boundaries as determined by me are based on the few monuments found adown the eastern side of the valley. From these few marks, the geometry of the original portions was maintained in a consistent manner with angle being preserved and distance scaled from the original in uniform manner. Within the east-west bounds of the valley each landholder has the quantum of land originally granted and slightly more. Beyond these parcel is vacant Crown land on the east and State forest on the west. There is an excess of land to the north to portion 73 and to the south by comparison with DP 639712 there appears to be a slight excess.

The solution to the access problem is dependent on all the parties accepting the verdict for boundary locations and getting on with their lives without adversely impacting on their neighbours.

List of Plans

Plan No.	Description
1	Map showing location of the road
2	Survey 1
3	Survey 2 (North)
4	Survey 2 (South)
5	Survey 3
6	B36 – Plan of Portion 7
7	B34 – Plan of Portion 51 (Wickham)
8	B2121 – Plan of Portion 57
9	B1861 – Plan of Portion 52
10	B1933 – Plan of Portion 203 (Wickham)
11	B1834 – Plan of Portion 51
12	B1006 – Plan of Pors. 72 & 73 (Wickham)
13	B4442 – Plan of Portion 187 (Wickham)


DP 750967
35
DP 750967
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72
DP 750963
DP 750963
316
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53
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77
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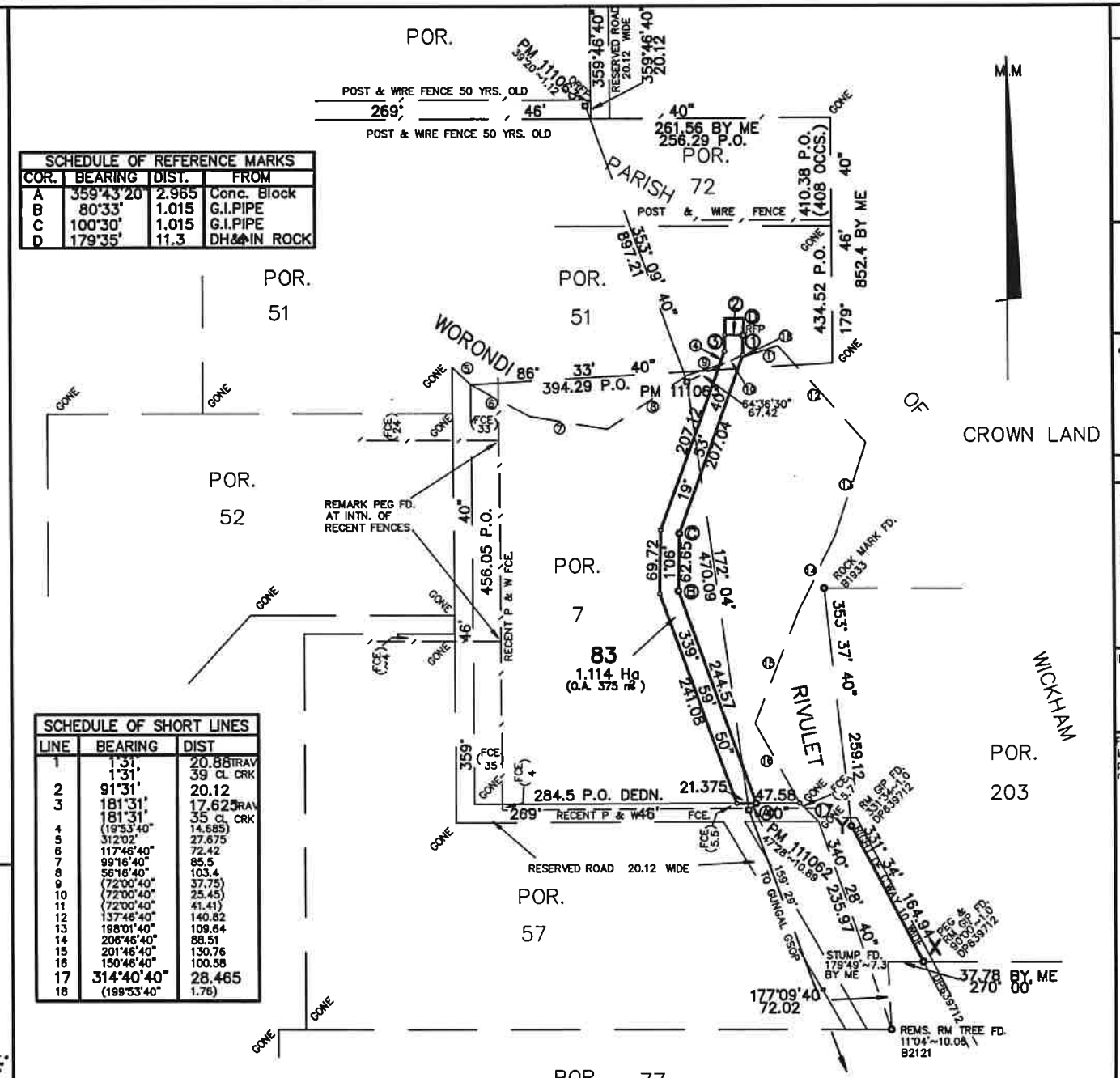
79
Diagrammatic Representation only
0 100 200 300 400
Metres
OFFICER: mcdoba
DATE: 15/02/2000
LAND & WATER CONSERVATION

PLAN 1

PLAN FORM 2

Plan Drawing only to appear in this space

*OFFICE USE ONLY



SCHEDULE OF REFERENCE MARKS			
COR.	BEARING	DIST.	FROM
A	359°43'20"	2.965	Conc. Block
B	80°33'	1.015	G.I.PIPE
C	100°30'	1.015	G.I.PIPE
D	179°35'	11.3	DH&IN ROCK

SCHEDULE OF SHORT LINES		
LINE	BEARING	DIST
1	1°31'	20.88TRAV
	1°31'	39 CL CRK
2	91°31'	20.12
3	181°31'	17.625TRAV
	181°31'	35 CL CRK
4	(19°53'40"	14.685)
5	312°02'	27.675
6	117°46'40"	72.42
7	99°16'40"	85.5
8	56°16'40"	103.4
9	(72°00'40"	37.75)
10	(72°00'40"	25.45)
11	(72°00'40"	41.41)
12	137°46'40"	140.82
13	198°01'40"	109.64
14	206°46'40"	88.51
15	201°46'40"	130.76
16	150°46'40"	100.58
17	314°40'40"	28.465
18	(199°53'40"	1.76)

Registered:

C A:

Title System:

Purpose:

Ref. Map:

Lost Plan:

PLAN OF CROWN PUBLIC ROAD THROUGH PORTION 7

Lengths in metres Reduction Ratio 1: 3000

Shire	MERRIWA
Locality	GUNGAL
Parish	WORONDI
County	BRISBANE

This is sheet 1 of my plan in sheets (Delete if applicable)

I KEVIN JAMES THOMPSON of DEPT. OF LAND & WATER CONSERVATION a surveyor registered under the Surveyors Act 1909 certify that the survey represented in this plan is accurate, has been made in accordance with the Survey Practice Regulation 1990 and was completed on 27TH MAY 1998

The survey relates to LOT 83

(here specify the land actually surveyed, or specify any land shown in the plan that is not the subject of the survey)

(Signature) ..... Surveyor registered under the Surveyors Act 1909

Dated this "X" day of "Y" Shire, Division, County

Plans used in preparation of survey/completion

DP 639712	B 1834
B 34	B 1861
B 36	B 1933
B 1006	B 2121
B 1026	B 4453

PANEL FOR USE ONLY for statements of intention to dedicate public roads or to create public reserves, drainage reserves, easements or restrictions as to user.

PURSUANT TO SECTION 18 (1) OF THE ROADS ACT 1993, IT IS INTENDED TO IDENTIFY LOT 83 AS CROWN PUBLIC ROAD 20.12 WIDE.

SIGNATURES, SEALS AND STATEMENTS of intention to dedicate public roads or to create reserves, drainage reserves, easements, restrictions on the use of the land or positive covenants.

Crown Lands Office Approval

PLAN APPROVED ..... Authorised Officer

Land District .....

Paper No. .....

Field Book ..... pages .....

Council Clerk's Certificate

I hereby certify that –

*(a)the requirements of the Local Government Act, 1919 (other than the requirements for the registration of plans), and

*(b)the requirements of Part 3 (Division 4) of the Water Board Act 1987 and the Water Supply Authorities Act 1987

have been complied with by the applicant in relation to the proposed (insert "new road", "subdivision" or "consolidated lot") and said lands.

Subdivision No. .....

Date .....

(Signature) ..... Council Clerk

Council File No. .....

*This part of certificate to be deleted where the application is only for a consolidated lot or the opening of a new road or where the land to be subdivided is wholly outside the areas of operations of the Metropolitan Water Sewerage and Drainage Board and the Hunter Water Corporation.

† Delete if inapplicable.

SURVEYORS REFERENCE: MD97H284 (CHECKLIST)

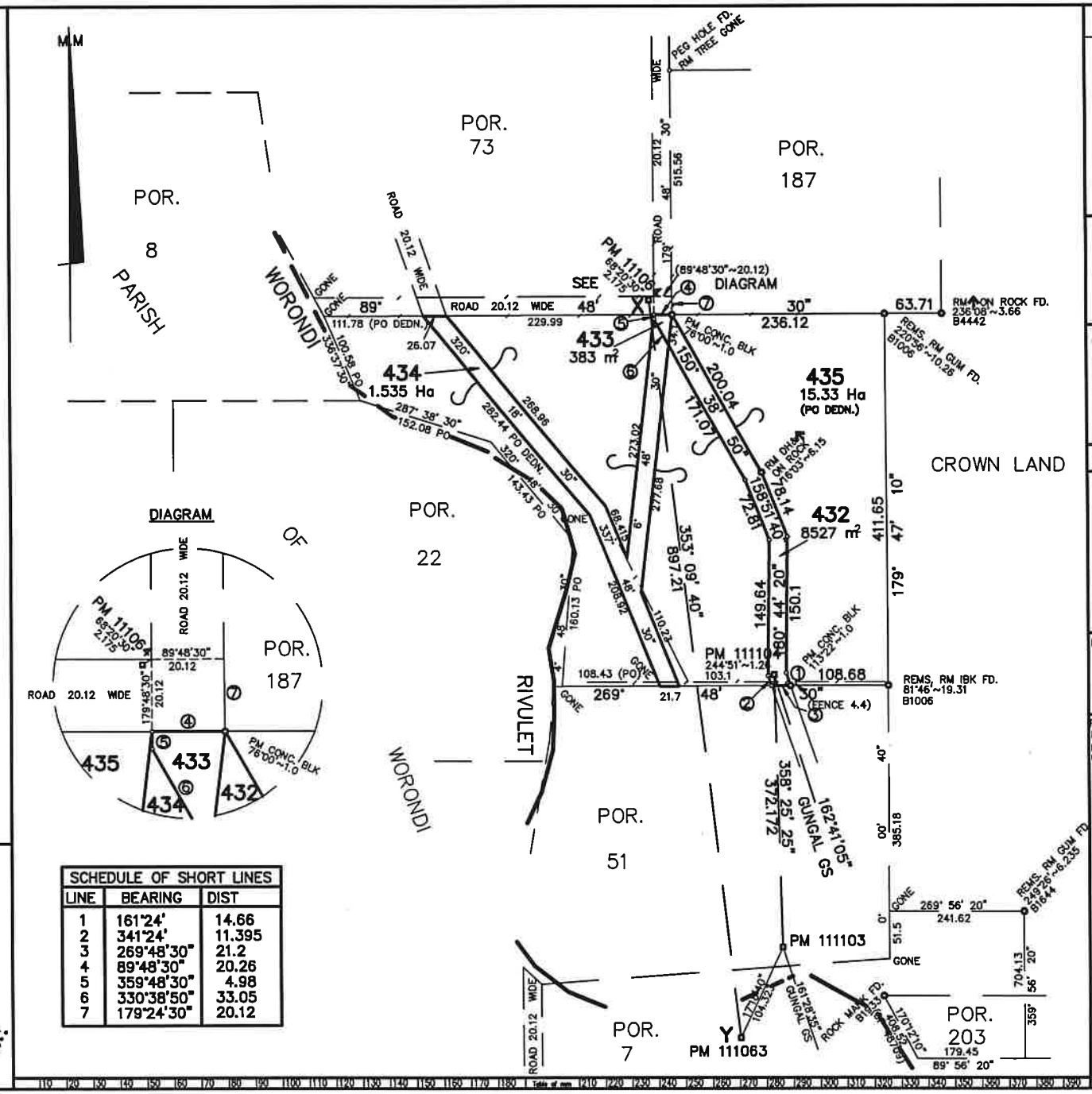
WARNING:CREASING OR FOLDING WILL LEAD TO REJECTION

SURVEY 1 PLAN 2

PLAN FORM 2

Plan Drawing only to appear in this space

OFFICE USE ONLY



SCHEDULE OF SHORT LINES		
LINE	BEARING	DIST
1	161°24'	14.66
2	341°24'	11.395
3	269°48'30"	21.2
4	89°48'30"	20.26
5	359°48'30"	4.98
6	330°38'50"	33.05
7	179°24'30"	20.12

Registered:

C A:

Title System:

Purpose:

Ref. Map:

Last Plan:

PLAN PLAN OF PROPOSED ROAD CLOSURE AND PROPOSED ACQUISITION OF PART LOT 72 DP 750963 FOR ROAD

Lengths in metres Reduction Ratio 1: 3000

Locality	GUNGAL
Parish	WICKHAM
County:	BRISBANE

This is sheet 1 of my plan in sheets (Delete if applicable)

I, KEVIN JAMES THOMPSON of DEPT. OF LAND & WATER CONSERVATION a surveyor registered under the Surveyors Act 1930 hereby certify that this survey represented in this plan is accurate, has been made in accordance with the Surveyors Act 1930 and the Regulations made thereunder and was completed on 12 AUGUST 1988

The survey relates to LOT 432 & 433 ONLY

(Here specify the land actually surveyed, or specify any land shown in the plan that is not the subject of the survey)

(Signature) _____ Surveyor registered under the Surveyors Act 1930

Datum Line "X" — "Y"

Zone (Absolute/County)

Plans used in preparation of survey/compilation

DP 48709	B 4442
B 1006	B 1644
B 34	B 1933

PANEL FOR USE ONLY for statements of intention to dedicate public roads or to create public reserves, drainage reserves, easements or restrictions as to user.

IT IS INTENDED TO ACQUIRE LOT 432 FOR ROAD.
LOT 434 ROAD IS PROPOSED TO BE CLOSED.
LOT 433 IS CROWN PUBLIC ROAD.

SIGNATURES, SEALS AND STATEMENTS of intention to dedicate public roads or to create reserves, drainage reserves, easements, restrictions as to the use of the land or positive covenants.

Crown Lands Office Approval

PLAN APPROVED ..... Authorised Officer

Land District .....

Paper No. .....

Field Book ..... pages .....

Council Clerk's Certificate

I hereby certify that –

*(a)the requirements of the Local Government Act, 1919 (other than the requirements for the registration of plans), and

*(b)the requirements of Part 3 Division 1 of the † Water Board Act 1987 and † Water Supply Authorities Act 1987

have been complied with by the applicant in relation to the

(Insert "new roads", "subdivision" or "consolidation (Lot)" and civil parish)

Subdivision No. .....

Date .....

(Signature) ..... Council Clerk

Council File No. .....

*This part of certificate to be deleted where the application is only for a consolidation lot or the opening of a new road or where the land is to be subdivided in wholly rateable land areas of operations of the Metropolitan Water Sewerage and Drainage Board and the Hunter Water Corporation.

† Delete if inapplicable.

SURVEYORS REFERENCE: MD97H284/A (CHECKLIST)

WARNING:CREASING OR FOLDING WILL LEAD TO REJECTION

SURVEY 2 (NORTH)
PLAN 3

PLAN FORM 2

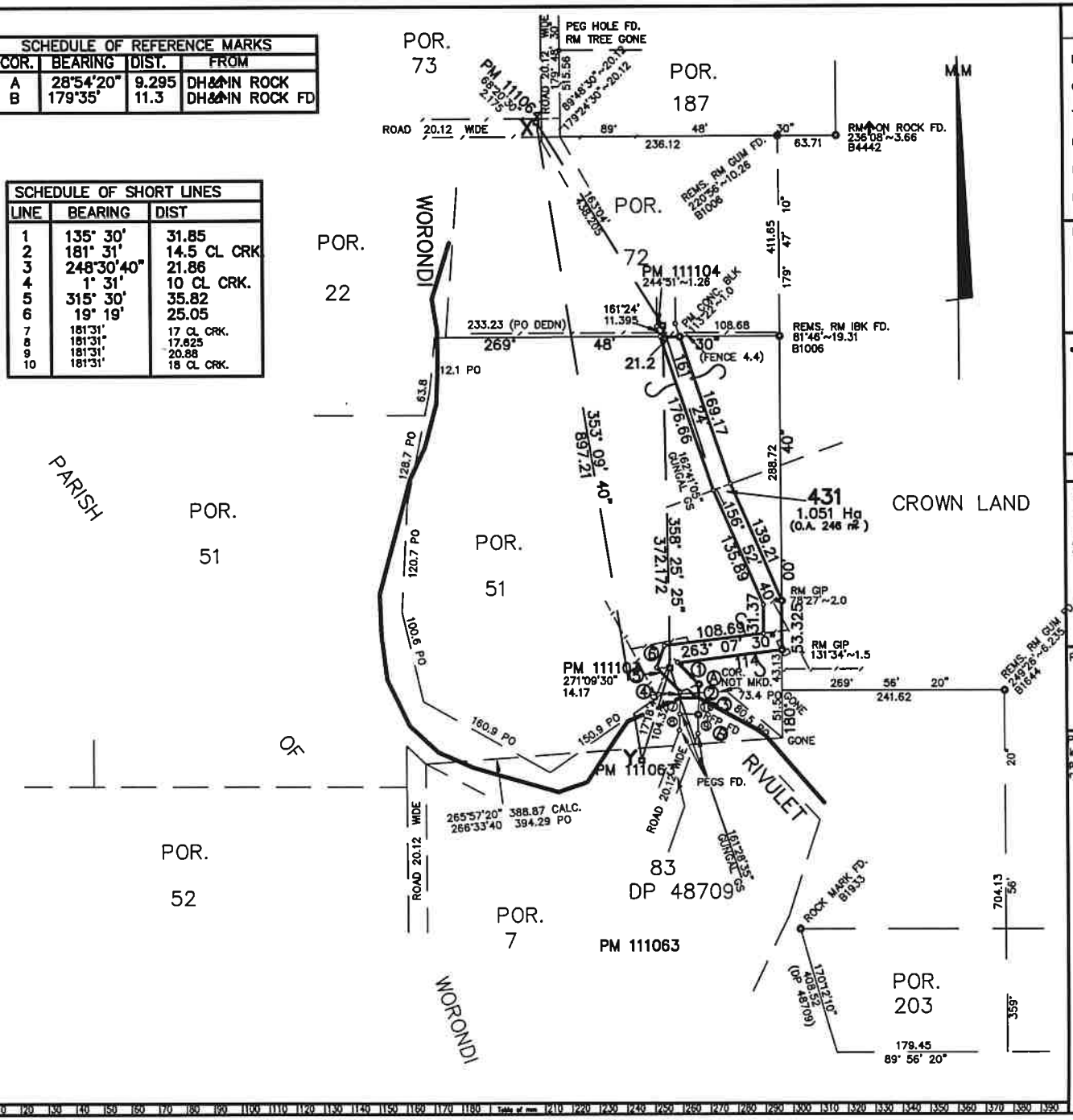
Plan Drawing only to appear in this space

*OFFICE USE ONLY

SIGNATURES, SEALS AND STATEMENTS of intention to dedicate public roads or to create reserves, drainage reserves, easements, restrictions on the use of the land or positive covenants.

SCHEDULE OF REFERENCE MARKS			
COR.	BEARING	DIST.	FROM
A	28°54'20"	9.295	DH & IN ROCK
B	179°35'	11.3	DH & IN ROCK FD

SCHEDULE OF SHORT LINES		
LINE	BEARING	DIST
1	135° 30'	31.85
2	181° 31'	14.5 CL CRK
3	248°30'40"	21.86
4	1° 31'	10 CL CRK.
5	315° 30'	35.82
6	19° 19'	25.05
7	181°31'	17 CL CRK.
8	181°31'	17.625
9	181°31'	20.88
10	181°31'	18 CL CRK.



Registered:

C A:

Title System:

Purpose:

Ref. Map:

Lost Plan:

PLAN OF CROWN PUBLIC ROAD THROUGH PORTION 51

Lengths in metres Reduction Ratio 1: 3000

Shire/City: MERRIWA

Locality: GUNGAL

Parish: WICKHAM

County: BRISBANE

This is sheet 1 of my plan in sheets (Delete if applicable)

I, KEVIN JAMES THOMPSON of DEPT. OF LAND & WATER CONSERVATION a surveyor registered under the Surveyors Act 1928, hereby certify that the survey represented in this plan is accurate, has been made in accordance with the Surveyors Act 1928 and was completed on 12 AUGUST 1988

The survey relates to LOT 431

(Here specify the land actually surveyed, or specify any land shown in the plan that is not the subject of the survey)

(Signature) _____

Surveyor registered under the Surveyors Act 1928

Datum Line "X" — "Y"

Zone (Obligatory)/Country

Plans used in preparation of survey/completion

DP 48709	B 4442
B 1006	B 1644
B 34	B 1933

PANEL FOR USE ONLY for statements of intention to dedicate public roads or to create public reserves, drainage reserves, easements or restrictions as to user.

PURSUANT TO SECTION 18 (1) OF THE ROADS ACT 1993, IT IS INTENDED TO IDENTIFY LOT 431 AS CROWN PUBLIC ROAD 20.12 WIDE.

Crown Lands Office Approval

PLAN APPROVED .....
Authorised Officer

Land District .....
Paper No. .....
Field Book ..... pages .....

Council Clerk's Certificate

I hereby certify that –

*a)the requirements of the Local Government Act, 1919 (other than the requirements for the registration of plans), and

*b)the requirements of Part 3 Division 2 of the † Water Board Act 1987 and † Water Supply Authorities Act 1987

have been complied with by the applicant in relation to the proposed ..... ("road", "subdivision" or "consolidation (of)") and said lands

Subdivision No. .....

Date. .....

(Signature) .....
Council Clerk

Council File No. .....

*This part of certificate to be deleted where the application is only for a consolidation lot or the opening of a new road or where the land to be subdivided is wholly outside the areas of operations of the Metropolitan Water Sewerage and Drainage Board and the Hunter Water Corporation.

† Delete if inapplicable.

SURVEYORS REFERENCE: MD97H284/B (CHECKLIST)

WARNING:CREASING OR FOLDING WILL LEAD TO REJECTION

SURVEY 2 (SOUTH)
PLAN 4

PLAN FORM 2

Plan Drawing only to appear in this space

*OFFICE USE ONLY

Registered:

C A:

Title System:

Purpose:

Ref. Map:

Last Plan:

PLAN PLAN OF PROPOSED ROAD CLOSURE AND PROPOSED ACQUISITION OF PART LOT 7 DP 750967 FOR ROAD

Lengths in metres Reduction Ratio 1: 3000

Locality: GUNGAL

Parish: WORONDI

County: BRISBANE

This is sheet 1 of my plan in sheets (Delete if applicable)

I, KEVIN JAMES THOMPSON of DEPT. OF LAND & WATER CONSERVATION a surveyor registered under the Surveyors Act 1929, hereby certify that the survey represented in this plan is correct, has been made in accordance with the Surveyors (General) Regulation, 1998 and was completed on 7th DECEMBER 1990

The survey relates to LOTS 84, 85 AND 86

(here specify the land actually surveyed, or specify any land shown in the plan that is not the subject of the survey)

(Signature) Surveyor registered under the Surveyors Act 1929

System Used "X" "Y" Zone (Meridian/Country)

Plans used in preparation of survey/compilation

DP 639712	B 1834	DP 48709
B 34	B 1861	
B 36	B 1933	
B 1006	B 2121	
B 1026	B 4453	

PANEL FOR USE ONLY for statements of intention to dedicate public roads or to create public reserves, drainage reserves, easements or restrictions as to user.

IT IS INTENDED TO ACQUIRE LOT 85 FOR ROAD.
LOT 84 ROAD IS PROPOSED TO BE CLOSED.
LOT 86 IS CROWN PUBLIC ROAD.

SIGNATURES, SEALS AND STATEMENTS of intention to dedicate public roads or to create reserves, drainage reserves, easements, restrictions on the use of the land or positive covenants.

Crown Lands Office Approval

PLAN APPROVED ..... Authorised Officer

Land District .....

Paper No. .....

Field Book ..... pages .....

Council Clerk's Certificate

I hereby certify that –

*(a)the requirements of the Local Government Act, 1919 (other than the requirements for the registration of plans), and

*(b)the requirements of Part 3 Division 4 of the Water Board Act 1987 and Water Supply Authorities Act 1987

have been complied with by the applicant in relation to the proposed (insert "new road", "subdivision" or "consolidation (of)") and said parish

Subdivision No. .....

Date. .....

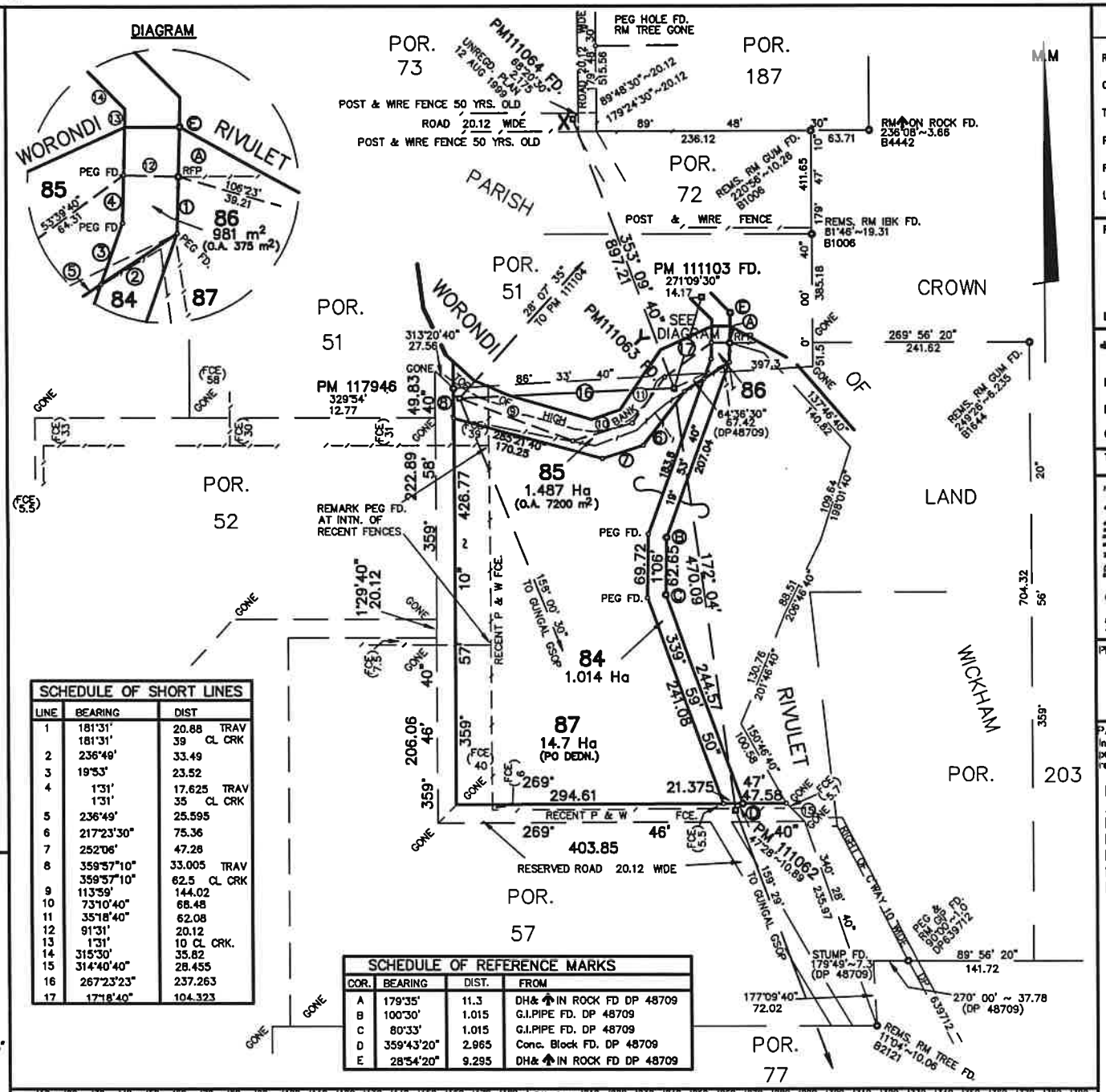
(Signature) ..... Council Clerk

Council File No. .....

*This part of certificate to be deleted where the application is only for a consolidation lot or the opening of a new road or where the land is to be subdivided to wholly outside the areas of operations of the Metropolitan Water Sewerage and Drainage Board and the Hunter Water Corporation.

* Delete if inapplicable.

DIAGRAM



SCHEDULE OF SHORT LINES

LINE	BEARING	DIST
1	181°31'	20.88 TRAV
	181°31'	39 CL CRK
2	236°49'	33.49
3	19°53'	23.52
4	1°31'	17.625 TRAV
	1°31'	35 CL CRK
5	236°49'	25.595
6	217°23'30"	75.36
7	252°06'	47.26
8	359°57'10"	33.005 TRAV
	359°57'10"	62.5 CL CRK
9	113°59'	144.02
10	73°10'40"	66.48
11	35°18'40"	62.08
12	91°31'	20.12
13	1°31'	10 CL CRK.
14	315°30'	35.82
15	314°40'40"	28.455
16	267°23'23"	237.263
17	17°18'40"	104.323

SCHEDULE OF REFERENCE MARKS

COR.	BEARING	DIST.	FROM
A	179°35'	11.3	DH& ↑ IN ROCK FD DP 48709
B	100°30'	1.015	G.I.PIPE FD. DP 48709
C	80°33'	1.015	G.I.PIPE FD. DP 48709
D	359°43'20"	2.965	Conc. Block FD. DP 48709
E	28°54'20"	9.295	DH& ↑ IN ROCK FD DP 48709

SURVEYORS REFERENCE: MD97H284/C (CHECKLIST)

WARNING:CREASING OR FOLDING WILL LEAD TO REJECTION

SURVEY 3
PLAN 5

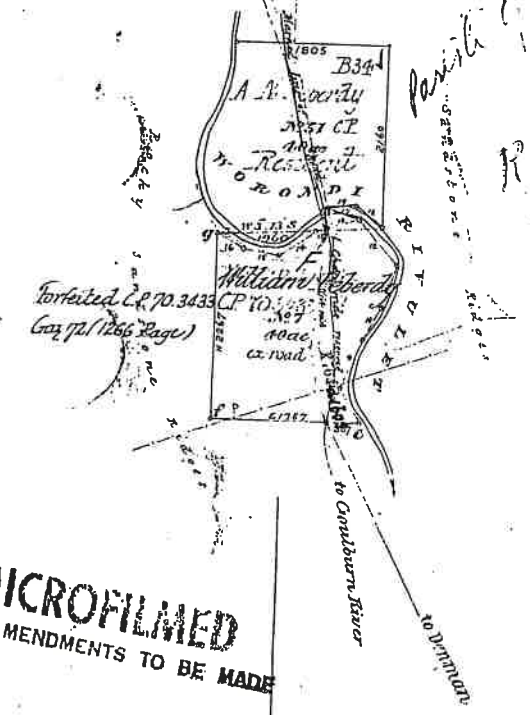
PLAN 6

9/8415

PLAN of portion 7 of 40 acres of land, in the Parish of Worondi, in the County of Brisbane; applied for by William Kendal Peberdy under the 13th Section of the Crown Lands Alienation Act.

Sale at Musclebrook 28th April 1873
Country lot F
Portion 7.
Vide Arv 13/12018 above lot sold

Por. 7 close: 60°43' 0.166
Area trav. 16.37 ha (40.45 ac)
~38 ac ex road.
+ nor to trav. (unknown).



Parish of Hardham

R-76 (1603 ... confirmed ... 0 1bn free ... 11-10-99

→ Lot 52

Forfeited C/P 70.3433 CP (1) ... Gaz 72 (1266 Page)

-0°13'30" fro 0°

PLAN MICROFILMED
NO ADDITIONS OR AMENDMENTS TO BE MADE

Original plan indicates bank is the portion boundary
(ADDED FOR MICROFILM PURPOSES)

Traverse

8	331		50a
9	22		650
10	27		440
11	18	15	545
12	318		700
13	252	14	520
14	236	30	514
15	279	30	425
16	298		360
17	288	15	410
18	308	15	400
19	265	42	365

410

Corners

Corner	Bearing	From	Links	N E or Tree
e	N. 73. W.	Gum	68	T
f	N. 84. 30 E.	Ironbark	47	7
g	S. 56. E.	Box	5	7

Surveyed by Transit March 28th 1871.
Marked in accordance with Regulations.
Scale 20 Chains to 1 inch.
Improved by fencing worth £12

Received 4 Oct 1871
4 Oct 1871

Pearson 8-10-97

I hereby certify that this is a true copy of the original plan in my Office

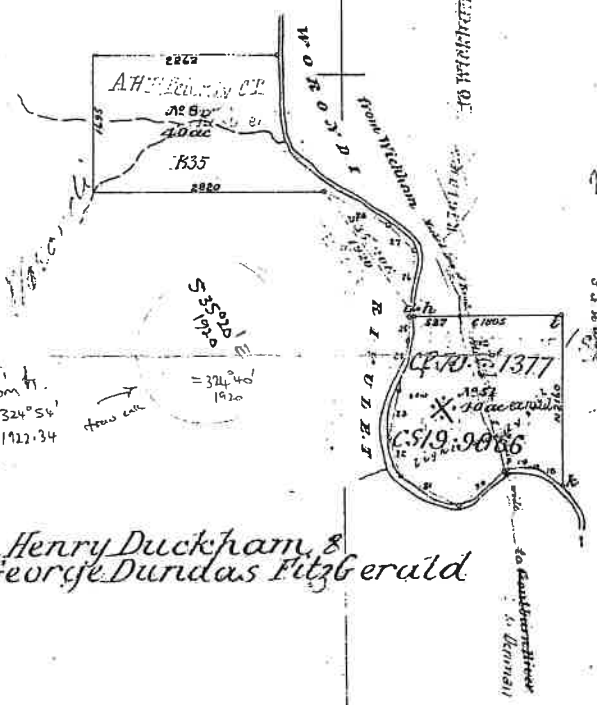
36.2

PLAN 7

P.L.N.Y of portion 51 of 40 acres of land, in the Parish of Wickham in the County of Brisbane; applied for by Anna Maria Peberdy under the 13th Section of the Crown Lands Alienation Act.

Portly Railway
258 Sale
Proclaimed 19th August 1885. Revoked 9th Sept. 05.

Original plan indicates bank is the portion boundary
(ADDED FOR MICROFILM PURPOSES)



William Henry Duckham &
Robert George Dundas FitzGerald

Traverse.

17	305.	15	400
19	265.	42	365
20	233.	30	750
21	297.	45	800
22	345.		500
23	11.	30	640
24	10.		640
25	4.		200
26	4.		830
27	315.	45	445
28	298.	15	900
			2175

Corners.

Corners	Bearing	From	Links	Natives
h	N. 31. W	Wolleybutt	46	21
i	N 62. E	Ironbark	96	51
k	S 87. 15 E	Gum	47	51

Surveyed by Transit March 28th 1871.
Marked in accordance with Regulations.
Scale 20 Chains to 1 inch.
Improved by Hut. value £10.

Transmitted to the Surveyor General with my Letter of the 17th July No 71-33

Edward Landon L.S.

34. 2096

PLAN 8

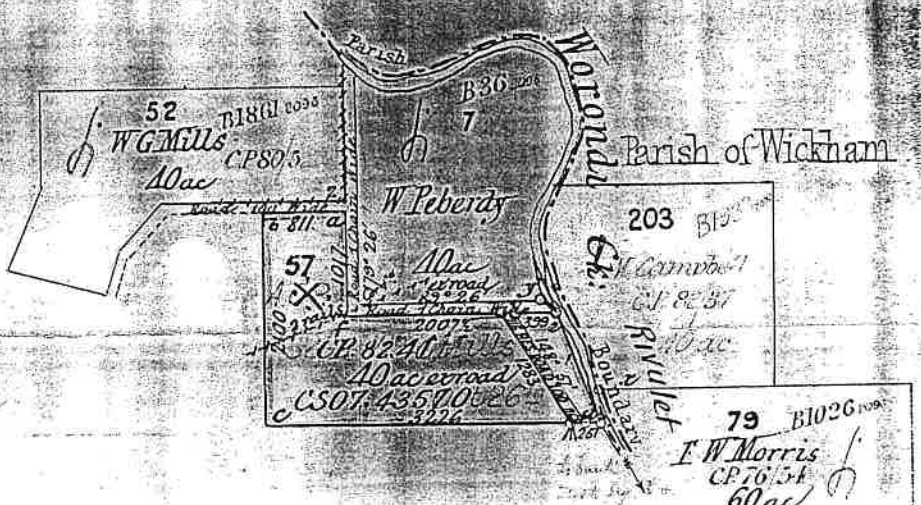
PLAN
of portion No. 57
Parish of Worondi
COUNTY OF BRISBANE

Applied for under the 21st Clause of the Crown Lands Alienation Act of 1861

George William Mills

ACP 82-4 dated Oct 26th Sale Completed

Original plan indicates bank is the portion boundary (ADDED FOR MICROFILM PURP



X George Percy Hall and Frederick Charles Langley Hall
Pt Consd Area 160ac See also B1024, 1834, 1861 2096
Exmd. for Deed [illegible] 17.12.47

May accept [illegible] 9th June 1875

For S.W. cor. Pe 7 inch pegs

Examined & plotted [illegible]

Azimuth taken from a b

Scale, One Inch to Twenty Chains.

Account No. 82/[illegible]
Passed. 28.[illegible]
Sept Tracing [illegible]
Connection 499 links
Road 1283 links (a

Reference to Corners.

Corner	Bearing	From	Links	No on Tree
a	195° 43'	Dead Ironbark	35	57
b		Stake		
c	107° 15'	Ironbark	24½	57
d	10° 43'	Dead Box	50	57
e	at Corner	Dead Box	0.	57
f	266° 21'	Ironbark	9½	57
x	179° 9'	Box Stump	33	79 &

Reference to Traverse.

Line	Bearing	Distance
1	340° 8'	1173
d to x	356° 43'	358
e to f	311° 20'	141
a to z	1° 9'	100

I hereby certify that I in person m
13th Nov. completed the survey r
Plan, on which are written the bea
of the lines measured by me, an
the survey has been executed in
the regulations published for th
Licensed Surveyors, and the pr
Surveyor General's Department

LAND TITLES OFFICE, SYDNEY, N.S.W.
COPY SERVICES
Date 28/7.
Name BOX 215H C & LM
COPY ORDERED
1861 - 2096.
CARTRIDGE
IMAGE 478
G 64416

PLAN 9

PLAN

of portion 52

Parish of Woronditi

County of Brisbane

Applied for under the 21st clause of the Crown Lands Alienation Act of 1861 by

William C. Mills

CPS0.5 dated 11th Feb.y 1880 Sale Completed

* { George Percy Hall and Frederick Charles Langley Hall pr Consd Area 160ac See also B 1024, 1834, 2121 2096

Extnd. for Deed Jce 11-12-'07

Plan accepted JPL 30th March 81

Reference to Corners

Corner	Bearing	From	Links	Fr on Iron
a	123·0	LD Pine	53	51·52
b	100·0	D Ironbark	23	52
c	333·2	- do -	11	52
d	257·10	Ironbark	76	52
e	3·4·17	- do -	29	52
f	183·22	D Ironbark	100	52

Reference to Traverse

Line	Bearing	Distance

Scale 20 Chains to an Inch

Marked in accordance with regulations

Instrument used in Survey Theodolite

Date of Survey 29th September 1880

Value of Improvements 30/-

~~Situated in the~~ Timber Ironbark & Pine (Dead)

Formation Pine conglomerate. Sandy

1861. 2096

Transmitted to the Surveyor General with my letter of the 21st December No 80/46

Charles North

Licensed Surveyor

1880

1861

PLAN 10

of amended survey of portion 1 [illegible]

Parish of Wickham

County of Brisbane

This plan cancels B.1644-2095 for 203 C.P. 81.4 dated 1st August 1881 by Malcolm Campbell declared void see 81:3420 CS

Now for auction

Selected 21 Sept 82 Sale Completed

Within the Boundaries of Railway Reserve No. 258 Withdrawn from Sale Proclaimed 19th August 1885 Revoked 9th Sept 05

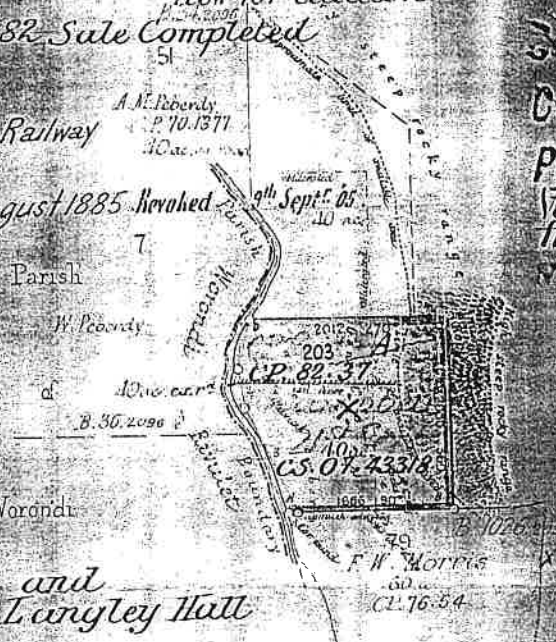
Parish of Moorooka 1st Nov 82

County Lot A

Portion 203

Vide Al.n 83839 above lot withdrawn from sale

Nos 1.1.1.13 Apl 87



Original plan indicates bank is the portion boundary (ADDED FOR MICROFILM PURPOSES)

George Percy Hall and Frederick Charles Langley Hall

I hereby certify that I in person made and on the 10 July completed the survey represented on the plan on which are shewn the bearings & lengths of the lines measured by me, that I used an Theodolite in accurate adjustment and a chain adopted to the standard of the Sydney Observatory that I commenced the survey at the point A on this plan and used as the basis of bearings the line AB thereon, and that the whole of the survey has been executed in accordance with the practice of this Department and the regulations published for the guidance of surveyors, I declare that the above certificate is true in every particular.

Examined & charted 27 Aug

Robert McDonald. 1/8/80.

NOTES.

Scale 20 chains to one inch

Six inch Transit used in Survey

Surveyed on 10th July 1881.

Value of improvements { Fencing £15 / Sawn timber £1 } Total £16

Reference to Traverse

	Bearing	Links
	195° 23'	530 ½
	171° 13'	400
	154° 42' 30"	1209
	270°	91

Reference to Corners

Corner	Bearing	From	Links	Ve on Tree
A	179°	Dead Stump	32 ¾	79 - 203
B	332° 11'	Ironbark	88 ⅓	203
C	276° 32'	Apple	9 ½	203
D	198° 11'	Oak	69 ¾	203

Calc A—D : Po 350° 12' 17" 408.29

me 350° 12' 10" 408.52

Plan accepted 23 Dec 1880

1933-2096

Transmitted to the Surveyor General with my letter No 8/55 of 27 July 81

Robert McDonald Surveyor

B 1933-2096

PLAN 11

80
12138
ENCLOSURE
DEPARTMENT OF LANDS, N.S.W.

PLAN "Musclebrook & Merton"

of portion No. 51

Parish of Worondi

County of Brisbane

Applied for under the 21st clause of the Crown Lands Alienation Act of 1861 by George William G. Mills

C.P. 80/4 dated 26th February 80 Sale Completed

George Percy Hall and Frederick Charles Langley Hall
Pt Consd Area 160 ac See also B 1024, 1861, 2121 2096
Exmd. for Used

Original plan indicates bank is the portion boundary
(ADDED FOR MICROFILM PURPOSES)

examined & checked 24 Apr 80 J.C.

Reference to Corners

Corner	Bearing	From	Links	N° on Tree
a	300 51	Oak	47	22. 51
b	248 45	I. Bark	19	51
c	162 39	Gum	12	51
d	123 0	D. Pine	53	51
e	79 16	D. Box	33	51
x	124 0	— do —	5	

Reference to Traverse

Line	Bearing	Distance
1	204 0	649
2	177 6	861
3	154 7	440
4	313 0	137

Scale 20 Chains to an Inch. Vou 80/1 Sep.

Marked in accordance with regulations

Instrument used in Survey Theodolite

Date of Survey 8th March 1880

Value of Improvements £1

Situated in the Timber Ironbark, Box & Pine Formation Conglomerate & sandy

Forwarded to the Surveyor General with my Letter of the 17th March 1880

Charles Hall
Licensed Surveyor

Plan accepted & approved 8 June 80

1834. 2096

B. 1834, 2096

PLAN 12

PLAN

Of portion of Land in the Parish of

Wickham Nos 72 & 73

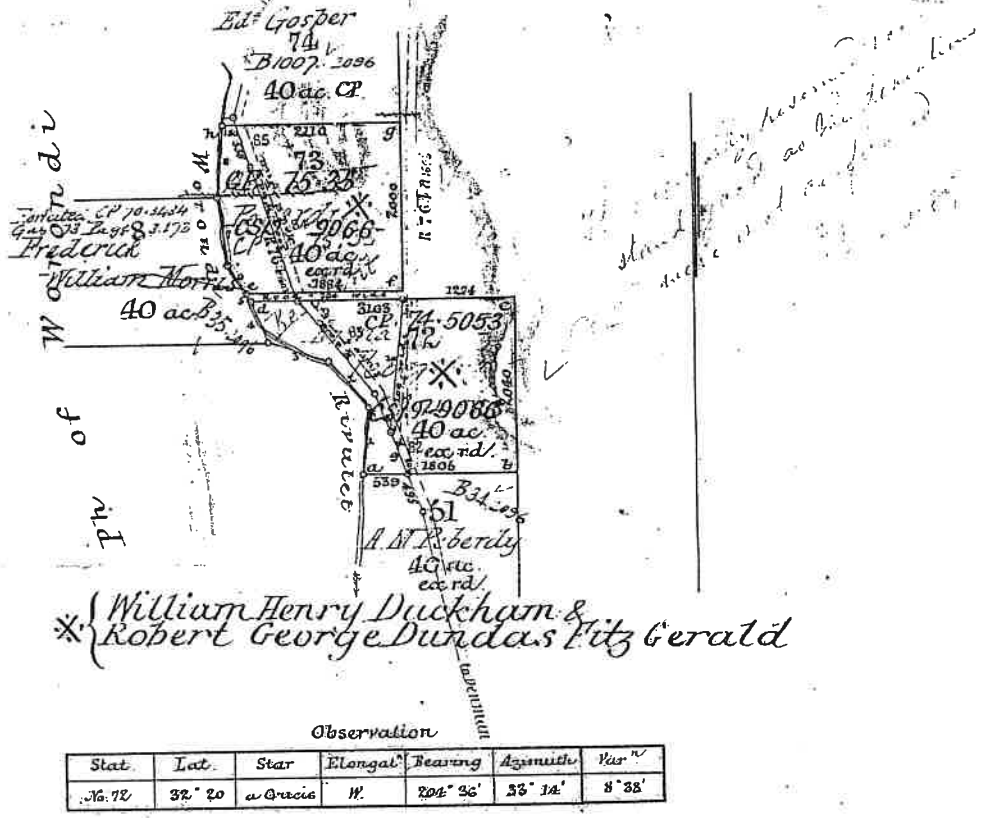
COUNTY OF BRISBANE.

Applied for under the 21st Clause of the Crown Lands Alienation Act of 1861, by

Anna Maria Peberdy

Portion 72 CP 14/5053 May 7th 1874
do 73 CP 15/35 April 3rd 1875

Partly Railway
258 Sale
Proclaimed 19th August 1885 Revoked 9th Sept 05.



※ William Henry Duckham & Robert George Dundas Fitz Gerald

Observation

Stat.	Lat.	Star	Elongat.	Bearing	Azimuth	Var.n
No. 72	32° 20	a Gracie	W.	204° 36'	33° 14'	8° 38'

Original plan indicates
bank is the portion boundary
(ADDED FOR MICROFILM PURPOSES)

REFERENCE.

Cor.	Bearing.	From.	lks.	No. on trees.
a	32° 00'	Woollybutt	46	51. 72
b	32° 00'	3d Ironbark	36	
c	221° 00'	Gum	51	72
d	166° 16'	D. Apple	20	
e	227° 46'	do.	56	73
f	106° 20'	do.	60	
g	143° 16'	D. Ironbark	45	73 74.
h	252° 28'	do.	101	

Traverse

Line	Bearing	Distance
1	5° 00'	796
2	321° 30'	713
3	267° 50'	760
4	316° 49'	600
5	331° 00'	114
6	331° 18'	396
7	252° 00'	801
8	5° 00'	863
9	155° 00'	530
10	187° 00'	1659
52	N 22° W	1500
53	N 39° W	1400
54	N 21° W	1700
55	N 16 W	650

NOTES.

Scale, 20 chains to one inch.
Instrument used.—Theodolite.
Marked in accordance with Regulations.
Date of Survey. 25th & 26th Aug. 1876
Value of Improvements. 72. £115. 73. £4-10.
Timber. ironbark, apple, gum & box
Formation. conglomerate
Soil. sandy

Transmitted to the Surveyor-General with my letter
No. 164 dated the 31st October 1876

Charles North
Licensed Surveyor.

Plan accepted
1.5. 1st Jan 1877

1006-2096

LAND TITLES OFFICE, SYDNEY, N.S.W.
COPY SERVICES
Date 28/7
BOX 215H
C&LM
CORRECTED
4442-2096
RTRIDGE
GE
187
G 644167

PLAN 13

("Appeared")

MERIDIAN CIRCLE

Papers LB 63. 35 64

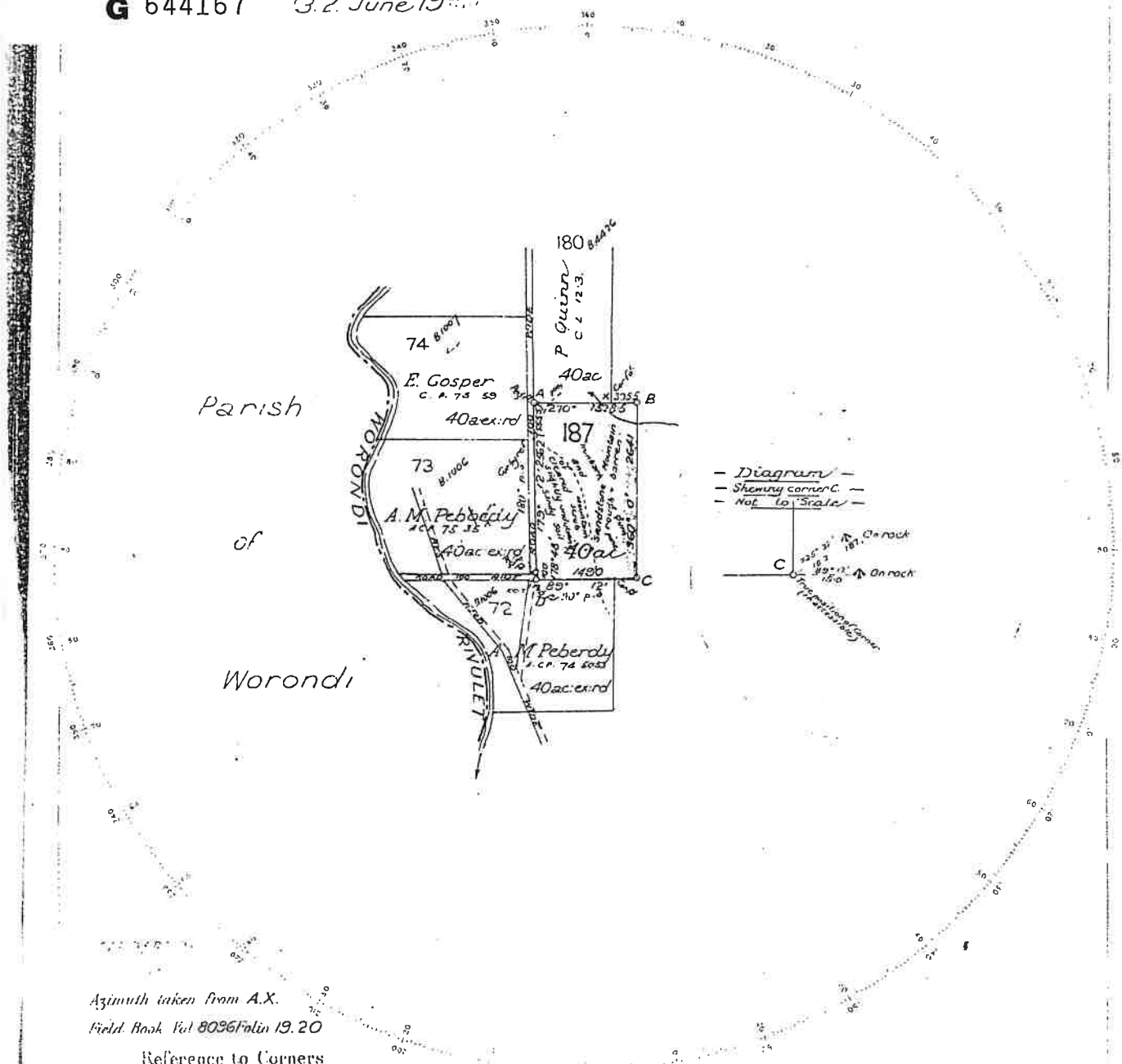
PLAN OF PORTION 187

of Brisbane Parish of Wickham

swellbrook Land Board District Maitland Eastern Division

the 26th Session of the Crown Lands Act of 1889 by Patrick Quinn

13.2. June 19th. 1



Azimuth taken from A.X.

Field Book Vol 8096 Folio 19.20

Reference to Corners

	Name	Bearing	From	Links	Nº on Tree
New tree	A	264° 58'	Ironbark	88·4	180. 187
	B	10° 35'	Gum	16·6	187
	C	235° 32'	Rock	18·2	187 See Diagm
	D	218° 04'	Dead	150·9	187

Reference to Traverse

Line	Bearing	Distance

4442.2096

Improvements: Ringbarking 15/.

Surveyed in 19 Nov 1913

Examined 21/07

20th Nov 1913

I hereby certify that I am personally and on the 12th Aug 1913 completed the survey represented on this plan on which are written the bearings and lengths of the lines measured by me and I declare that the survey has been executed in accordance with the regulations published for the guidance of Licensed Surveyors and the orders of the Department of Lands.

Marcus M. Hyades L.S. Licensed Surveyor

Transmitted to the District Surveyor with my letter of 16th Aug 1913

Voucher Nº -- Passed Staff

Calculation Book Nº — Folio

Checked and Charted A.B. Kelly 17 Sep 1913

Examined and

Plan approved

Scale 20 Chains to an Inch.

Lithographed and Printed at the Department of Lands Sydney N.S.W.

Cat Nº R4442.2096