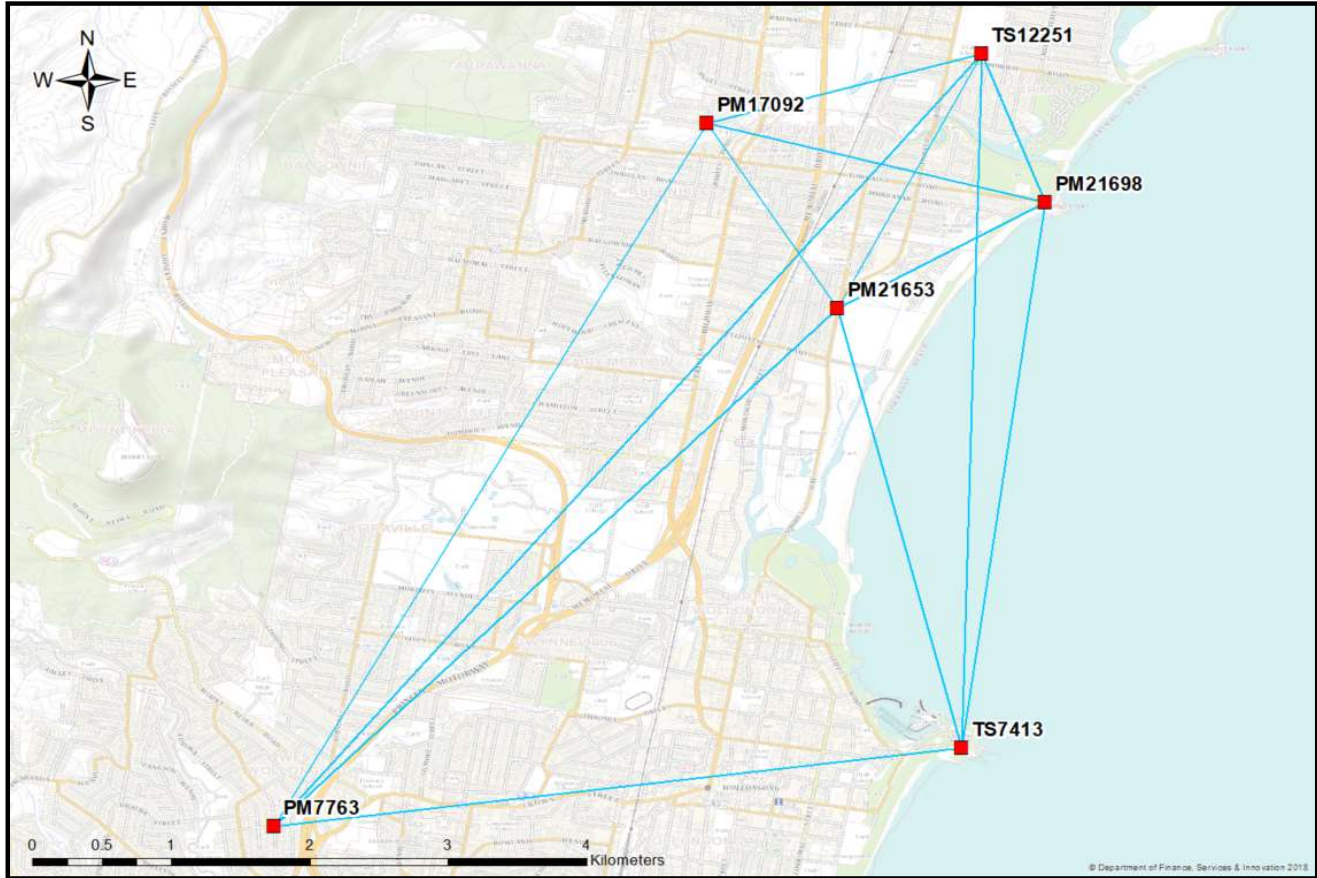


Wollongong



Station	MGA2020 - Zone 56		Height		
	Easting (m)	Northing (m)	Ellipsoid (m)	Geoid (m)	Derived AHD (m)
PM17092	306280.466	6193662.742	37.595	21.050	16.546
PM21653	307087.318	6192305.669	24.463	20.955	3.508
PM21698	308309.345	6193119.038	26.383	20.923	5.460
PM7763	303803.578	6188384.088	58.232	20.949	37.283
TS12251 (East Corrimal CORS)	307907.010	6194218.057	42.661	20.984	21.677
TS7413	307895.925	6189050.928	41.924	20.796	21.127

Warning!

Coordinates are to be used for GNSS validation only.

Values differ from those published in SCIMS.

NSW GNSS TEST NETWORK:

Wollongong

Network Information

The Wollongong GNSS Test Network has been derived through a 3 dimensional minimally constrained least squares adjustment holding constrained TS12251 (East Corrimal CORS). The adjustment was run on 17/02/2020.

TS12251 coordinates (Latitude, Longitude and Elevation above Ellipsoid) have been sourced from the GDA2020 Regulation 13 Certificate.

GDA2020

SCIMS ID & (Name)	Latitude	Longitude	Ellipsoid Height (m)	Date
TS12251 (East Corrimal CORS)	S 34° 22' 32.19313"	E 150° 54' 38.97111"	42.661	17/02/2020

MGA2020

SCIMS ID & (Name)	Easting (m)	Northing (m)	Ellipsoid Height (m)	Date
TS12251 (East Corrimal CORS)	307907.010	6194218.057	42.661	17/02/2020

Adjustment Observation Weightings

Horizontal 5mm + 0.7ppm and 0.0015/0.0015 Centring

Vertical 15mm + 2.0ppm and 0.002/0.002 Centring

Geoid / Ellipsoid Separation (N)

Source: **AUSGEOID2020** (Date: 17/02/2020)

Notes

For an accurate comparison, observe the network shown and run a minimally constrained least squares adjustment as detailed above.

Contact a representative from DCS Spatial Services if further information/clarification is required or to report any mark disturbance or significant differences in results.

No Positional or Local Uncertainty has been determined.

PM17092

Photos:



Sketch:

Survey Co-ordination Act, 1977.

PM No. 17092
SSM No. _____
S.C. _____

LOCALITY SKETCH PLAN

(To be drawn in black waterproof ink, or HB pencil, not necessarily to scale.)

Parish Woolloomooloo County Camden City or Town Corrimal
Municipality or Shire Wollongong Survey Area Corrimal
Zone _____ Map Sheet 62 1292 X Aerial Photograph N.S.W. _____

NOTE - Measurements are to be shown from the mark to as many nearby survey marks, buildings, fence posts, kerbs, etc., as practicable. Up to six measurements are desirable.

Measurements are in METERS

Work last inspected _____
Placed in connection with (type of survey or work) _____
Co-ordinate values of mark _____
Projection _____ Origin _____
Reduced level of mark _____ feet (approx.) to Datum _____ Standard _____
Inspection Book No. 730 Fol. 25
Site selected by D.J. TRAVES
Mark placed by A. CALVERT Date 13/9/73
Locality sketch drawn by D.J. TRAVES Date _____
Locality sketch put into use by D.J. TRAVES Date 13/9/73

PROVISIONAL SKETCH ONLY
A. Calvert
Official in-Charge
Survey Co-ordination Branch
18/9/73

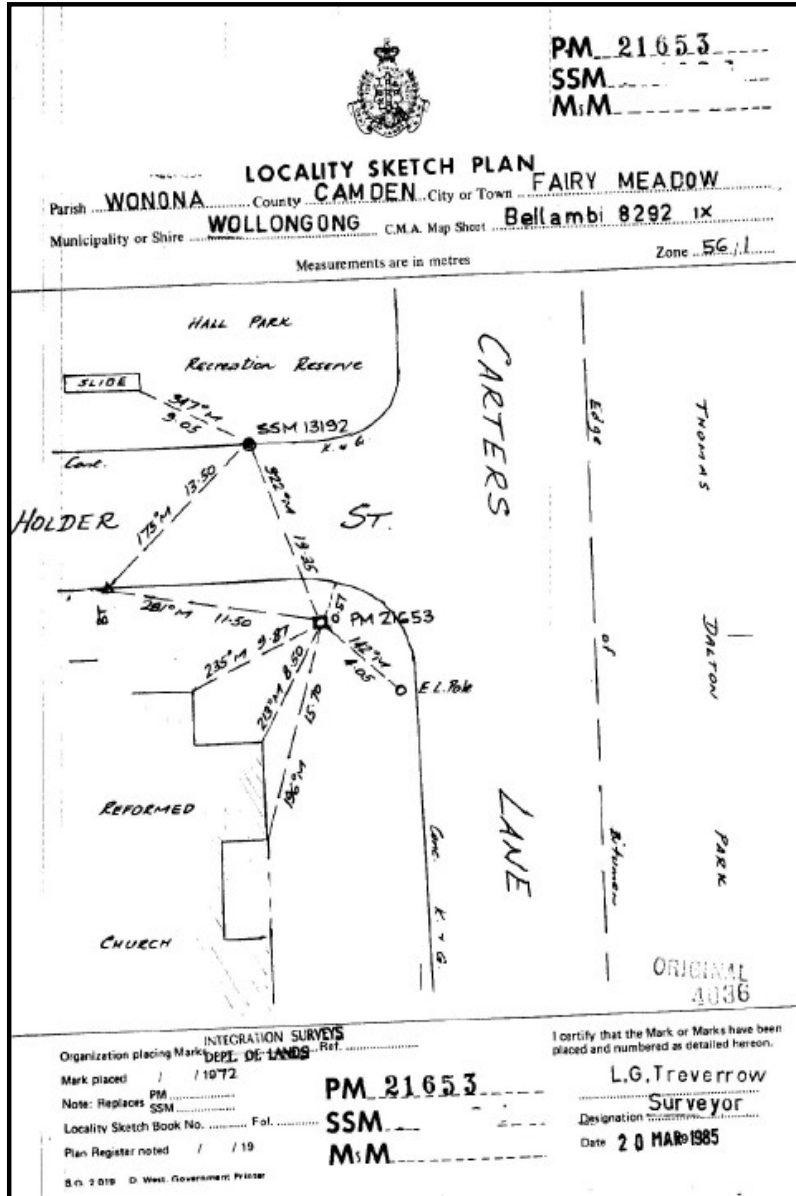
PM No. 17092
SSM No. _____

PM21653

Photos:



Sketch:



PM21698

Photos:



Sketch:

Survey Co-ordination Act, 1949.

PM No. 21698
SSM No. _____
S.C. _____

LOCALITY SKETCH PLAN

(To be drawn in black waterproof ink, or HB pencil, not necessarily to scale.)

Parish Wonona County Camden City or Town Towradgi
Municipality or Shire Wollongong Survey Area Towradgi
Zone _____ Map Sheet 9102 Aerial Photograph N.S.W. _____

NOTE - Measurements are to be shown from the mark to as many nearby survey marks, buildings, fence posts, kerbs, etc., as practicable. Up to six measurements are desirable.

Measurements are in METRES

Mark last inspected _____
Placed in connection with (type of survey or work) _____
Co-ordinate values of mark _____
Projection _____ Origin _____
Reduced level of mark _____ feet (approx.) to Datum _____ Standard _____

Inspection Book No. 1134 Fol. 1
Site selected by L.G. Traversow
Mark placed by L.G. Traversow Date _____
Locality sketch drawn by L.G. Traversow Date 4 AUG 1976
Locality sketch put into use by _____ Date _____

PM No. 21698
SSM No. _____

PROVISIONAL SKETCH ONLY
Officer-in-Charge
Survey Co-ordination Branch

PM7763

Photos:



Sketch:

Survey Coordination Act, 1949.
Regulation 17.

1029 G

PM No. 7763
S.C. 64/8/6
GG/BB

PERMANENT MARK SKETCH PLAN
(To be drawn in black waterproof ink, not necessarily to scale.)

Parish Wollongong County C Camden City of Town Greater Wollongong
Municipality or Shire G. Wollongong Survey Area West Wollongong
Zone B Map Sheet Wollongong 8295-V

Note.—Measurements are to be shown from the mark to as many nearby survey marks, buildings, fence posts, kerbs, etc., as practicable. Up to six measurements are desirable.

Measurements are in Feet

Placed in connection with* Standard Traverse
Coordinate values of mark S 21434.88 ft. E 149099.35 ft.
Projection Cassini Soldner Jallora
Benchmark level of mark _____
*Standard, Railway, Public Works, M.W.S.D. Board, Main Roads, etc., or assumed.

I hereby declare that the permanent mark shown in this sketch has been placed on the ground in accordance with the Regulations under the Survey Coordination Act, 1949, and that the information shown hereon is correct.

Date 3-6-1965 (Signature) J. Arthurson
Public Authority M.W.S.D.B.
Date 11-6-1965 (Proper Officer) [Signature]

PM No. 7763

M 5442 1/10 S. Blake, Government Printer

TS7413

Photos:



Sketch:

LOCALITY SKETCH PLAN

Local Government Area: Wollongong

Town/Suburb/Locality: Wollongong

Approx MGA Coordinate: Zone 56

E: 367 895

N: 6189 049

Description of Mark: Steel Pillar TS7413
GI Pipe
GBM 282 + 281 + Copper Rod

Sketch Plan Details:

- Monument: 116° 9.3, 318, 23.3, 298, 17.0
- GBM 281
- Lighthouse: 35° 29.0
- Steel Fence: 272° 7.4, 118°, 14.6
- Copper Rod "SCB" Cover Box: 4° 7.3, 0° 1.9
- GBM 282 Cover Box: 76° 5.8
- Deep Driven Peg: -345° 6.8
- Gal Pipe in Conc "SCB" Cover Box
- Car Park

Please use black ink only.

SURVEYING REGULATION			
MARK	AHD	SOURCE	DATE
HEIGHT DETERMINED BY: - DIFF. LEVELLING (Specify) - TRIG HEIGHTING			
ADOPTED MARKS: - GPS			

Measurements are in metres

TS 7413

GBM 282 + 281

PM _____

Replaces SS _____

I certify the mark has been placed/lost and numbered as detailed hereon.

Signed: _____

Name: D. Sluys

Organisation placing mark: _____

Date mark placed/lost: 27/11/2016

Ref: _____