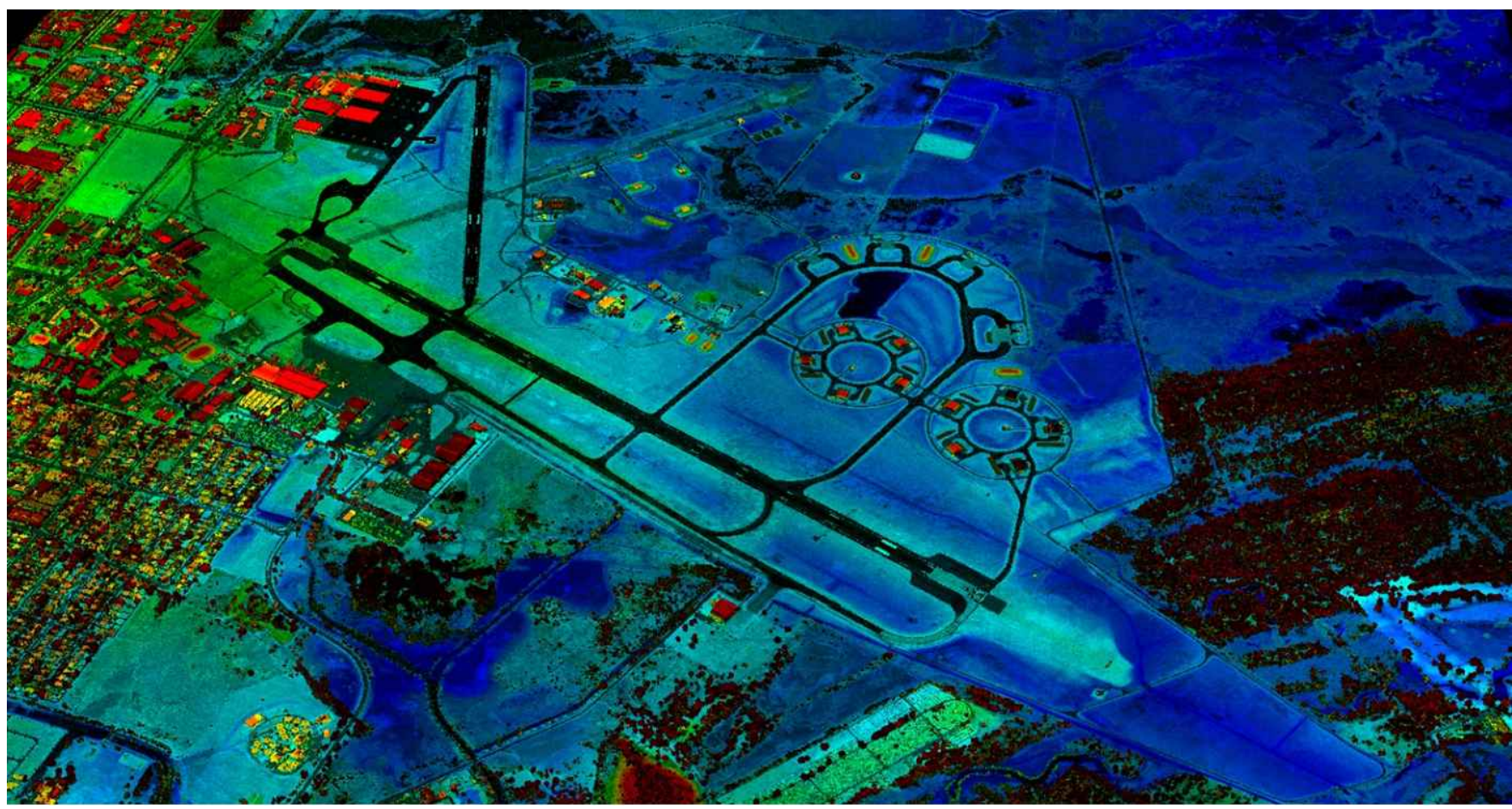


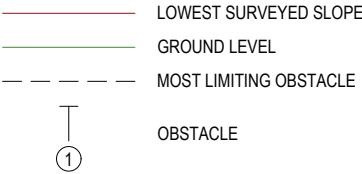
OBSTACLE LIMITATION SURVEYS AND ASSESSMENT

RAAF BASE TOWNSVILLE
AERODROME OBSTACLE CHART ICAO TYPE A
(OPERATING LIMITATIONS) ISSUED FEBRUARY 2024



DECLARED DISTANCES FOR RUNWAY 01	
TAKE OFF RUN AVAILABLE (TORA)	2438m (7998')
TAKE OFF DISTANCE AVAILABLE (TODA)	2640m (8661') 4.17%
ACCELERATE STOP DISTANCE AVAILABLE (ASDA)	2438m (7998')
LANDING DISTANCE AVAILABLE (LDA)	2438m (7998')
SUPPLEMENTARY TAKE OFF DISTANCE AVAILABLE (STODA)	N/A

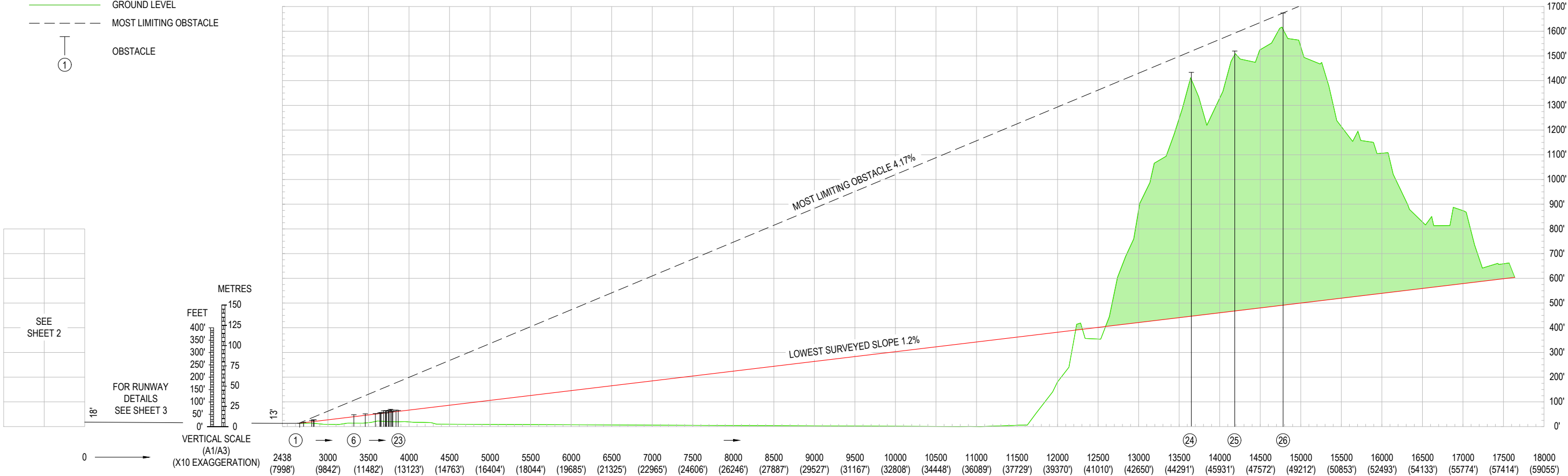
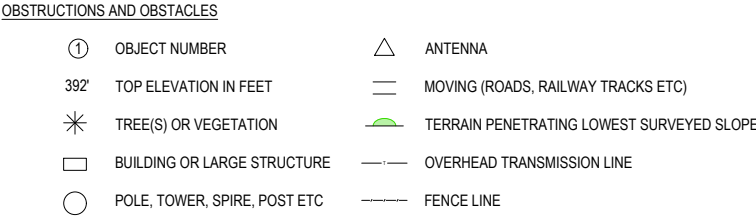
LEGEND



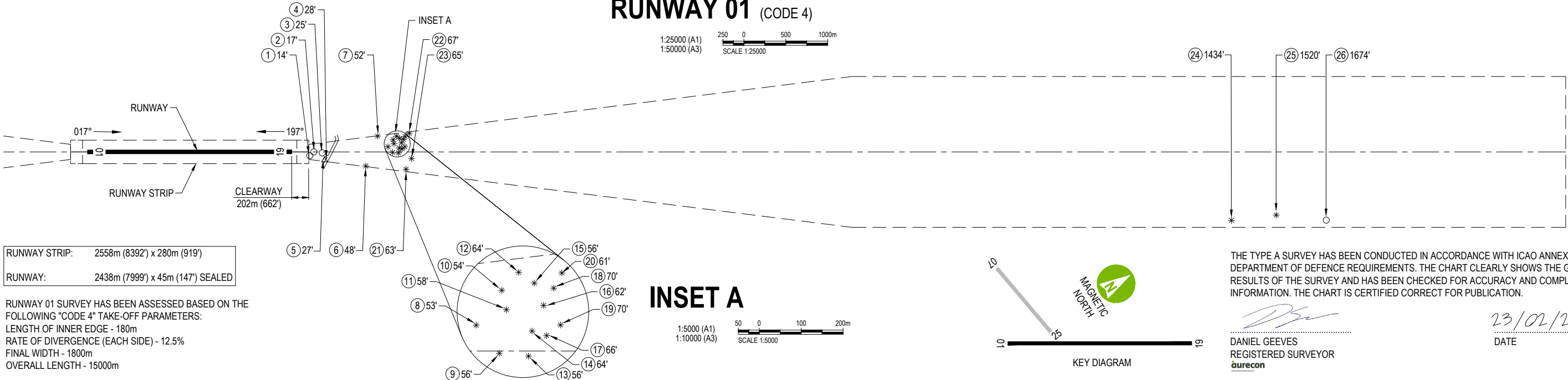
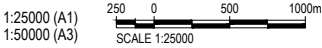
NOTES

- AZIMUTH AND COORDINATES FOR THIS SURVEY ARE BASED ON MGA (GDA2020) ZONE 55 THE VERTICAL DATUM BEING AHD.
- HORIZONTAL DIMENSIONS IN METRES (FEET) ELEVATIONS IN FEET
- USERS OF THIS CHART SHOULD NOTIFY ANY ERRORS OR OMISSIONS AS SOON AS THEY BECOME APPARENT TO :
AERONAUTICAL INFORMATION SERVICE – AIR FORCE
EMAIL: AIS.AF@DEFENCE.GOV.AU
- FOR FURTHER INFORMATION REGARDING THIS CHART CONTACT THE ABOVE
- MAGNETIC VARIATION 7°16' E (MAY 2023)
- AERIAL SURVEY COMPLETED OCTOBER 2022.
GROUND SURVEY CHECKS AND VERIFICATION NOVEMBER 2022.

LEGEND



RUNWAY 01 (CODE 4)



RUNWAY STRIP:	2558m (8392') x 280m (919')
RUNWAY:	2438m (7999') x 45m (147') SEALED

RUNWAY 01 SURVEY HAS BEEN ASSESSED BASED ON THE FOLLOWING "CODE 4" TAKE-OFF PARAMETERS:
LENGTH OF INNER EDGE - 180m
RATE OF DIVERGENCE (EACH SIDE) - 12.5%
FINAL WIDTH - 1800m
OVERALL LENGTH - 15000m

THE TYPE A SURVEY HAS BEEN CONDUCTED IN ACCORDANCE WITH ICAO ANNEX 4 AND DEPARTMENT OF DEFENCE REQUIREMENTS. THE CHART CLEARLY SHOWS THE GRAPHICAL RESULTS OF THE SURVEY AND HAS BEEN CHECKED FOR ACCURACY AND COMPLETENESS OF INFORMATION. THE CHART IS CERTIFIED CORRECT FOR PUBLICATION.

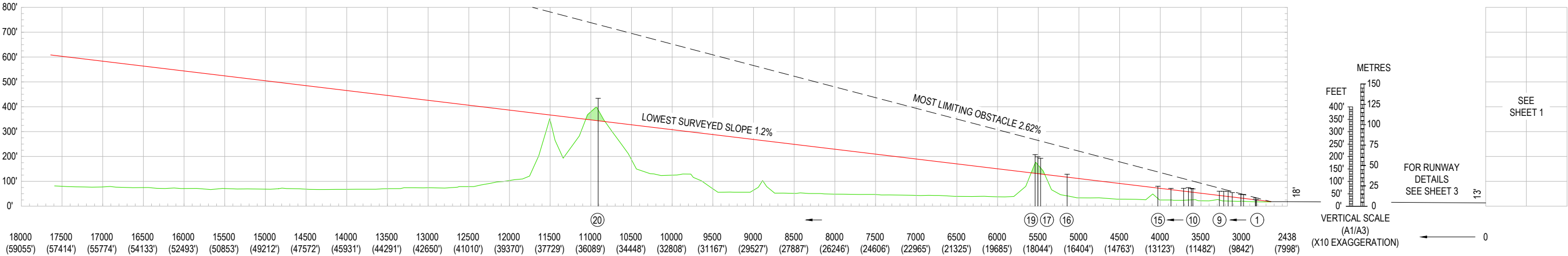
DANIEL GEEVES
REGISTERED SURVEYOR
aurecon
23/02/2024
DATE

REV	DATE	REVISION DETAILS	APPROVED	SCALE	SIZE	FOR ISSUE	PROJECT	OBSTACLE LIMITATION SURVEYS AND ASSESSMENT RAAF BASE TOWNSVILLE							
A	09.02.24	FOR REVIEW	DG	AS SHOWN	A1/A3	NOT FOR CONSTRUCTION									
B	23/02/24	100% ISSUE	DG												
				DRAWN		APPROVED									
				MH											
				SURVEYED		DATE									
				BW/MH/AAM		23/02/2024									
				CHECKED											
				GH			DANIEL GEEVES								
								DRAWING No.	PROJECT No.	WBS	TYPE	DISC	SITE	NUMBER	REV
								520002	EST09759	DRG	UU	TVL	002	B	

DECLARED DISTANCES FOR RUNWAY 19	
TAKE OFF RUN AVAILABLE (TORA)	2438m (7998')
TAKE OFF DISTANCE AVAILABLE (TODA)	2640m (8661') 2.62%
ACCELERATE STOP DISTANCE AVAILABLE (ASDA)	2438m (7998')
LANDING DISTANCE AVAILABLE (LDA)	2438m (7998')
SUPPLEMENTARY TAKE OFF DISTANCE AVAILABLE (STODA)	1924m (6312') 1.6%, 2500m (8202') 1.9%, 2535m (8316') 2.0%, 2575m (8448') 2.2%, 2623m (8605') 2.5%

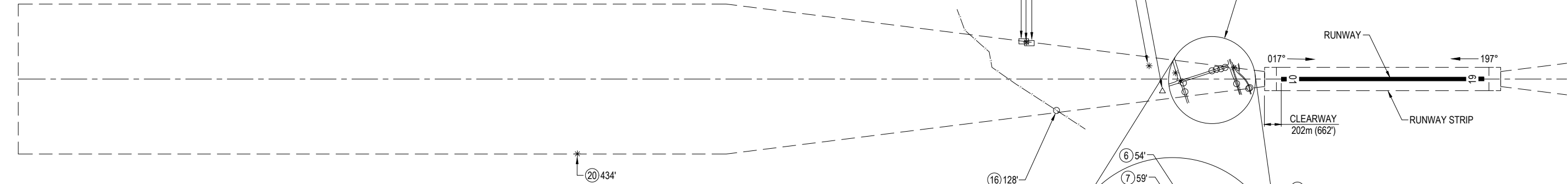
LEGEND

- LOWEST SURVEYED SLOPE
— GROUND LEVEL
- - - MOST LIMITING OBSTACLE
① OBSTACLE



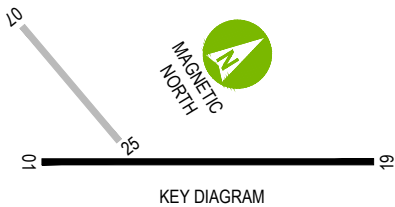
RUNWAY 19 (CODE 4)

1:25000 (A1)
1:50000 (A3)
SCALE 1:25000



RUNWAY STRIP:	2558m (8392') x 280m (919')
RUNWAY:	2438m (7999') x 45m (147') SEALED

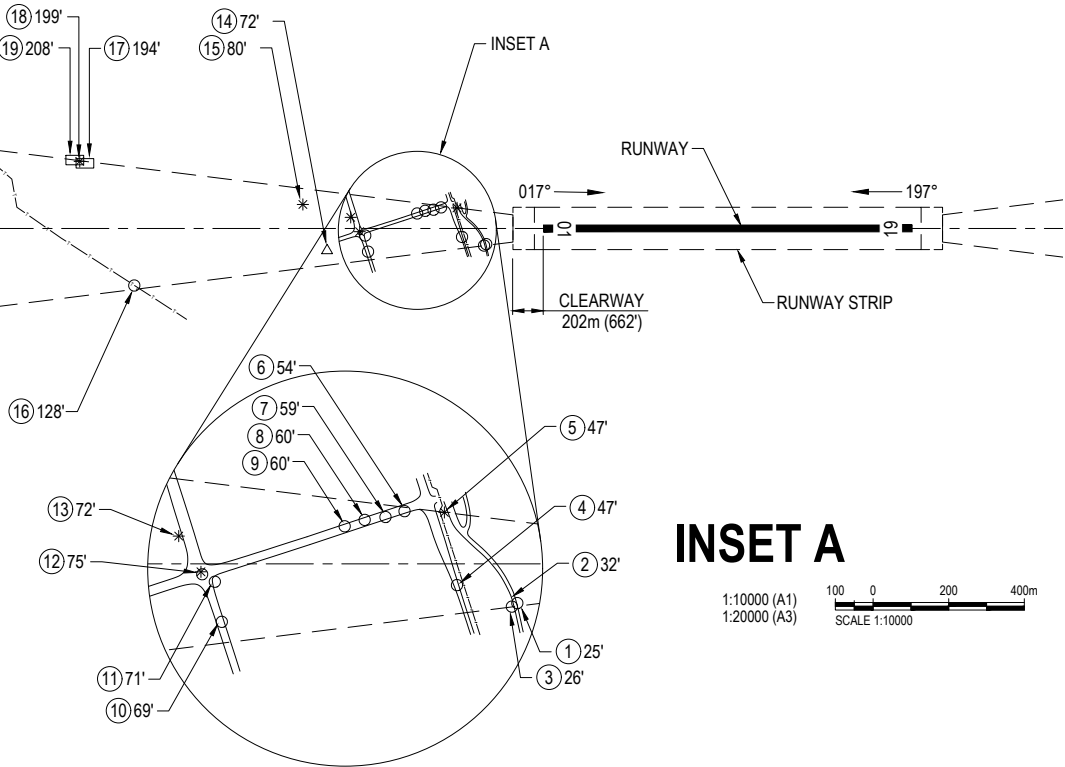
RUNWAY 19 SURVEY HAS BEEN ASSESSED BASED ON THE FOLLOWING "CODE 4" TAKE-OFF PARAMETERS:
LENGTH OF INNER EDGE - 180m
RATE OF DIVERGENCE (EACH SIDE) - 12.5%
FINAL WIDTH - 1800m
OVERALL LENGTH - 15000m



THE TYPE A SURVEY HAS BEEN CONDUCTED IN ACCORDANCE WITH ICAO ANNEX 4 AND DEPARTMENT OF DEFENCE REQUIREMENTS. THE CHART CLEARLY SHOWS THE GRAPHICAL RESULTS OF THE SURVEY AND HAS BEEN CHECKED FOR ACCURACY AND COMPLETENESS OF INFORMATION. THE CHART IS CERTIFIED CORRECT FOR PUBLICATION.

DANIEL GEEVES
REGISTERED SURVEYOR
aurecon

23/02/2024
DATE



INSET A

1:10000 (A1)
1:20000 (A3)
SCALE 1:10000

NOTES

- AZIMUTH AND COORDINATES FOR THIS SURVEY ARE BASED ON MGA (GDA2020) ZONE 55 THE VERTICAL DATUM BEING AHD.
- HORIZONTAL DIMENSIONS IN METRES (FEET) ELEVATIONS IN FEET
- USERS OF THIS CHART SHOULD NOTIFY ANY ERRORS OR OMISSIONS AS SOON AS THEY BECOME APPARENT TO : -
AERONAUTICAL INFORMATION SERVICE - AIR FORCE
EMAIL: AIS.AF@DEFENCE.GOV.AU
- FOR FURTHER INFORMATION REGARDING THIS CHART CONTACT THE ABOVE
- MAGNETIC VARIATION 7°16' E (MAY 2023)
- AERIAL SURVEY COMPLETED OCTOBER 2022.
GROUND SURVEY CHECKS AND VERIFICATION NOVEMBER 2022.

LEGEND

- OBSTRUCTIONS AND OBSTACLES
- ① OBJECT NUMBER
 - 392' TOP ELEVATION IN FEET
 - * TREE(S) OR VEGETATION
 - BUILDING OR LARGE STRUCTURE
 - POLE, TOWER, SPIRE, POST ETC
 - △ ANTENNA
 - MOVING (ROADS, RAILWAY TRACKS ETC)
 - TERRAIN PENETRATING LOWEST SURVEYED SLOPE
 - OVERHEAD TRANSMISSION LINE
 - FENCE LINE

REV	DATE	REVISION DETAILS	APPROVED
A	09.02.24	FOR REVIEW	DG
B	23/02/24	100% ISSUE	DG

SCALE	SIZE	FOR ISSUE
AS SHOWN	A1/A3	NOT FOR CONSTRUCTION
DRAWN	MH	APPROVED
SURVEYED	BW/MH/AAM	DATE 23/02/2024
CHECKED	GH	DANIEL GEEVES

PROJECT	OBSTACLE LIMITATION SURVEYS AND ASSESSMENT RAAF BASE TOWNSVILLE
TITLE	AERODROME OBSTACLE CHART ICAO TYPE A (OPERATING LIMITATIONS) ISSUED FEBRUARY 2024 RUNWAY 19 - SHEET 2 OF 6
DRAWING No.	520002
PROJECT No.	EST09759
WBS	DRG
TYPE	UU
DISC	TVL
SITE	003
NUMBER	B

DEPARTMENT OF DEFENCE

SECURITY AND ESTATE GROUP

AERODROME OBSTACLE CHART - ICAO TYPE A
(OPERATING LIMITATIONS) FEBRUARY 2024, COMPILED BY AURECON

TO BE READ IN CONJUNCTION WITH CURRENT NOTAMs

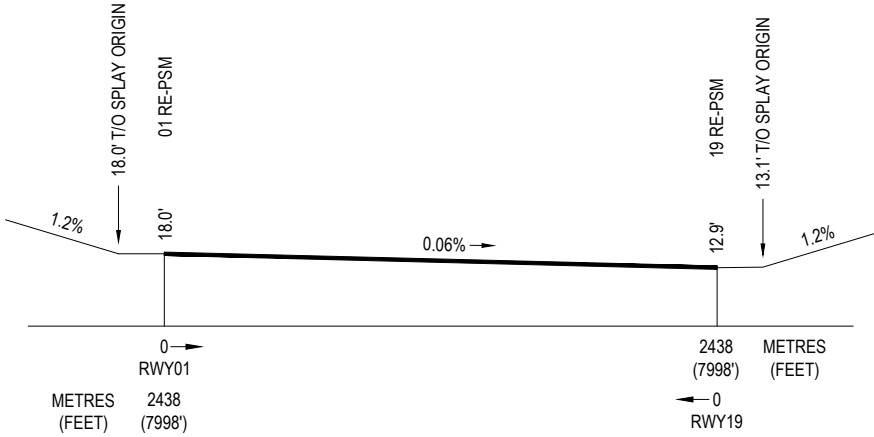
THE ORIGIN OF THE TAKE OFF SURFACE IS LOCATED AT THE END OF THE CLEARWAY.
DISTANCES COMMENCE FROM THE RAAF RE-PSM AT THE START OF THE TAKE-OFF RUNWAY (SOT)

DATUM

AZIMUTH AND COORDINATES FOR THIS SURVEY ARE BASED ON MGA (GDA2020) ZONE 55
THE VERTICAL DATUM BEING AHD.

DEFINITIONS

- RE-PSM: RUNWAY END PERMANENT SURVEY MARK
- LENGTH OF INNER EDGE 180m
- RATE OF DIVERGENCE OF SPLAY (EACH SIDE) 12.5%
- FINAL WIDTH 1800m
- OVERALL LENGTH 15000m



01/19 RWY LONGITUDINAL SECTION
NOT TO SCALE

THE TYPE A SURVEY HAS BEEN CONDUCTED IN ACCORDANCE WITH ICAO ANNEX 4 AND DEPARTMENT OF DEFENCE REQUIREMENTS. THE CHART CLEARLY SHOWS THE GRAPHICAL RESULTS OF THE SURVEY AND HAS BEEN CHECKED FOR ACCURACY AND COMPLETENESS OF INFORMATION. THE CHART IS CERTIFIED CORRECT FOR PUBLICATION.

DANIEL GEEVES
REGISTERED SURVEYOR
aurecon

23/02/2024
DATE

01 TAKE OFF																					
REPSM AT START OF TORA (REPSM 01)												RUNWAY MAGNETIC BEARING			TORA		TODA		ELEVATION AT T.O. ORIGIN		
	GEOGRAPHIC								MGA 2020 ZONE 55		ELEVATION		(DEG)	(MIN)	(SEC)	(m)	(Ft)	(m)	(Ft)	(m)	(Ft)
	LAT				LONG				EASTING	NORTHING	(m AHD)	(Ft)									
	DECIMAL DEG	(DEG)	(MIN)	(SEC)	DECIMAL DEG	(DEG)	(MIN)	(SEC)													
	-19.2582886	-19°	15'	29.839"	146.7647287	146°	45'	53.023"													
OBJECTS THAT APPEAR ON THE CHART																					
REF No.	GEOGRAPHIC								MGA		ELEVATION TOP		TYPE OF OBSTACLE	DISTANCE FROM SOT		OFFSET			GRADIENT TO TOP		
	LAT				LONG				EASTING	NORTHING	(m AHD)	(Ft)		(m)	(Ft)	(m)	(Ft)	LEFT/RIGHT	%		
	DECIMAL DEG	(DEG)	(MIN)	(SEC)	DECIMAL DEG	(DEG)	(MIN)	(SEC)													
1	-19.236592	-19°	14'	11.72"	146.775442	146°	46'	31.59"	476398.88	7872978.64	4.2	13.8	BOLLARD	2652.4	8702.0	44.9	147.3	R		1.72	
2	-19.236027	-19°	14'	09.69"	146.775241	146°	46'	30.86"	476377.68	7873041.08	5.2	17.0	ANTENNA	2700.8	8860.8	0.1	0.2	R		1.98	
3	-19.235235	-19°	14'	06.84"	146.775732	146°	46'	32.63"	476429.11	7873128.83	7.5	24.7	ILS LOCALISER	2801.9	9192.6	11.2	36.8	R		2.18	
4	-19.235355	-19°	14'	07.27"	146.776528	146°	46'	35.50"	476512.85	7873115.58	8.3	27.3	MOVING	2824.0	9265.0	93.1	305.5	R		2.35	
5	-19.235317	-19°	14'	07.14"	146.776583	146°	46'	35.69"	476518.57	7873119.85	8.2	26.8	ANTENNA ON BUILDING	2830.2	9285.5	96.6	316.9	R		2.21	
6	-19.231540	-19°	13'	53.54"	146.779126	146°	46'	44.85"	476785.35	7873538.10	14.5	47.7	TREE	3321.1	10896.0	169.5	556.2	R		1.55	
7	-19.229053	-19°	13'	44.59"	146.776566	146°	46'	35.63"	476515.93	7873812.94	15.7	51.5	TREE	3462.2	11358.8	188.7	619.2	L		1.42	
8	-19.228495	-19°	13'	42.58"	146.778153	146°	46'	41.35"	476682.62	7873874.90	16.0	52.3	TREE	3586.8	11767.7	61.8	202.6	L		1.26	
9	-19.228287	-19°	13'	41.83"	146.778951	146°	46'	44.22"	476766.48	7873897.98	17.0	55.8	TREES	3642.1	11949.1	5.4	17.7	R		1.30	
10	-19.227683	-19°	13'	39.66"	146.777667	146°	46'	39.60"	476631.49	7873964.64	16.3	53.4	TREE	3647.9	11968.1	145.1	476.0	L		1.22	
11	-19.227764	-19°	13'	39.95"	146.778112	146°	46'	41.20"	476678.22	7873955.75	17.5	57.3	TREE	3658.8	12004.0	98.8	324.1	L		1.32	
12	-19.227192	-19°	13'	37.89"	146.777451	146°	46'	38.82"	476608.71	7874018.97	19.4	63.6	TREE	3688.2	12100.4	188.1	617.0	L		1.47	
13	-19.227738	-19°	13'	39.85"	146.779282	146°	46'	45.41"	476801.19	7873958.77	17.0	55.8	TREE	3711.8	12177.8	12.3	40.3	R		1.21	
14	-19.227448	-19°	13'	38.81"	146.778795	146°	46'	43.66"	476750.00	7873990.89	19.5	64.0	TREES	3720.2	12205.5	47.6	156.1	L		1.44	
15	-19.226980	-19°	13'	37.12"	146.777820	146°	46'	40.15"	476647.47	7874042.52	17.1	56.1	TREE	3725.5	12222.9	162.3	532.4	L		1.21	
16	-19.226993	-19°	13'	37.17"	146.778369	146°	46'	42.12"	476705.14	7874041.08	18.9	61.8	TREES	3747.8	12295.8	109.0	357.7	L		1.34	
17	-19.227200	-19°	13'	37.92"	146.779023	146°	46'	44.48"	476773.91	7874018.30	20.0	65.6	TREE	3755.0	12319.6	36.9	121.1	L		1.44	
18	-19.226641	-19°	13'	35.90"	146.778106	146°	46'	41.18"	476677.41	7874080.00	21.3	69.9	TREES	3772.0	12375.3	150.2	492.9	L		1.53	
19	-19.226834	-19°	13'	36.60"	146.778932	146°	46'	44.15"	476764.32	7874058.79	20.4	67.0	TREE	3788.1	12428.1	62.2	204.1	L		1.43	
20	-19.226348	-19°	13'	34.85"	146.777868	146°	46'	40.32"	476652.34	7874112.43	18.5	60.5	TREES	3791.4	12438.9	186.4	611.5	L		1.26	
21	-19.227710	-19°	13'	39.75"	146.781317	146°	46'	52.74"	477015.13	7873962.22	19.0	62.2	TREE	3802.3	12474.6	206.3	676.8	R		1.29	
22	-19.225801	-19°	13'	32.88"	146.777751	146°	46'	39.90"	476639.97	7874172.89	20.3	66.6	TREES	3841.5	12603.5	222.3	729.5	L		1.36	
23	-19.226698	-19°	13'	36.11"	146.780467	146°	46'	49.68"	476925.60	7874074.09	19.8	65.0	TREES	3867.9	12689.9	78.9	258.7	R		1.29	
24	-19.148744	-19°	08'	55.47"	146.824945	146°	49'	29.80"	481591.93	7882704.96	436.9	1433.4	TERRAIN/TREE	13655.4	44801.3	817.9	2683.5	R		3.93	
25	-19.144090	-19°	08'	38.72"	146.826470	146°	49'	35.29"	481751.70	7883220.16	463.3	1519.9	TERRAIN/TREE	14191.2	46559.0	753.6	2472.4	R		3.98	
26	-19.139400	-19°	08'	21.83"	146.829321	146°	49'	45.55"	482051.09	7883739.39	510.2	1673.9	TERRAIN/TWR - MAGNETIC IS.	14787.6	48515.8	815.1	2674.2	R		4.17	

19 TAKE OFF																				
REPSM AT START OF TORA (REPSM 19)												RUNWAY MAGNETIC BEARING			TORA		TODA		ELEVATION AT T.O. ORIGIN	
GEOGRAPHIC								MGA 2020 ZONE 55		ELEVATION										
	LAT				LONG				EASTING	NORTHING	(m AHD)	(Ft)	(DEG)	(MIN)	(SEC)	(m)	(Ft)	(m)	(Ft)	
	DECIMAL DEG	(DEG)	(MIN)	(SEC)	DECIMAL DEG	(DEG)	(MIN)	(SEC)												
	-19.2381863	-19°	14'	17.471"	146.7742211	146°	46'	27.196"												476270.77
OBJECTS THAT APPEAR ON THE CHART																				
REF No.	GEOGRAPHIC								MGA		ELEVATION TOP		TYPE OF OBSTACLE	DISTANCE FROM SOT		OFFSET			GRADIENT TO TOP	
	LAT				LONG															
	DECIMAL DEG	(DEG)	(MIN)	(SEC)	DECIMAL DEG	(DEG)	(MIN)	(SEC)	EASTING	NORTHING	(m AHD)	(Ft)		(m)	(Ft)	(m)	(Ft)	LEFT/RIGHT	%	
1	-19.261800	-19°	15'	42.47"	146.764155	146°	45'	50.95"	475216.36	7870187.76	7.7	25.1	ROAD SIGN	2818.1	9245.6	104.0	341.3	L	1.23	
2	-19.261798	-19°	15'	42.47"	146.763956	146°	45'	50.23"	475195.40	7870187.97	9.9	32.4	MOVING	2826.4	9273.1	84.8	278.2	L	2.37	
3	-19.261952	-19°	15'	43.02"	146.764179	146°	45'	51.04"	475218.89	7870170.87	7.9	25.9	ROAD SIGN	2832.5	9292.8	113.2	371.5	L	1.27	
4	-19.262941	-19°	15'	46.58"	146.763120	146°	45'	47.23"	475107.72	7870061.33	14.3	47.0	LIGHT POLE	2977.9	9770.0	56.4	185.0	L	2.62	
5	-19.262503	-19°	15'	45.00"	146.761319	146°	45'	40.74"	474918.48	7870109.55	14.4	47.1	TREE	3011.1	9878.9	136.1	446.6	R	2.40	
6	-19.263362	-19°	15'	48.10"	146.760881	146°	45'	39.17"	474872.55	7870014.39	16.6	54.4	LIGHT POLE	3116.7	10225.5	139.2	456.8	R	2.33	
7	-19.263834	-19°	15'	49.80"	146.760819	146°	45'	38.94"	474866.10	7869962.19	18.1	59.4	LIGHT POLE	3167.1	10390.6	123.8	406.2	R	2.40	
8	-19.264315	-19°	15'	51.53"	146.760671	146°	45'	38.41"	474850.58	7869908.95	18.2	59.8	LIGHT POLE	3222.0	10570.9	116.3	381.4	R	2.20	
9	-19.264814	-19°	15'	53.33"	146.760613	146°	45'	38.20"	474844.61	7869853.67	18.3	59.9	LIGHT POLE	3274.9	10744.6	99.1	325.3	R	2.02	
10	-19.268430	-19°	16'	06.34"	146.761540	146°	45'	41.54"	474942.57	7869453.74	21.1	69.3	LIGHT POLE	3600.2	11811.8	153.6	503.8	L	1.63	
11	-19.268189	-19°	16'	05.48"	146.760547	146°	45'	37.96"	474838.17	7869480.20	21.7	71.3	LIGHT POLE	3618.7	11872.3	47.4	155.5	L	1.66	
12	-19.268394	-19°	16'	06.21"	146.760176	146°	45'	36.63"	474799.22	7869457.52	22.7	74.6	TREES	3655.3	11992.4	21.1	69.2	L	1.70	
13	-19.268530	-19°	16'	06.70"	146.759126	146°	45'	32.85"	474688.88	7869442.35	21.9	71.8	TREE	3714.2	12185.6	73.5	241.1	R	1.53	
14	-19.270630	-19°	16'	14.26"	146.760422	146°	45'	37.51"	474825.45	7869210.14	21.8	71.6	ANTENNA ON BUILDING	3870.5	12698.6	146.0	479.1	L	1.33	
15	-19.270826	-19°	16'	14.97"	146.757152	146°	45'	25.74"	474481.87	7869187.98	24.5	80.2	TREE	4031.0	13225.1	158.7	520.8	R	1.37	
16	-19.282006	-19°	16'	55.22"	146.757460	146°	45'	26.85"	474515.95	7867950.96	39.1	128.3	HV PYLON	5146.9	16886.2	377.3	1237.9	L	1.34	
17	-19.281709	-19°	16'	54.15"	146.749177	146°	44'	57.03"	473645.58	7867982.58	58.6	192.3	TERRAIN/BUILDING	5473.3	17957.0	430.5	1412.5	R	1.88	
18	-19.281940	-19°	16'	54.98"	146.748931	146°	44'	56.15"	473619.81	7867956.90	60.5	198.5	TERRAIN/TREE	5507.3	18068.4	443.6	1455.4	R	1.92	
19	-19.282180	-19°	16'	55.84"	146.748727	146°	44'	55.41"	473598.41	7867930.35	63.2	207.3	TERRAIN/BUILDING	5540.2	18176.6	452.3	1483.9	R	1.99	
20	-19.331467	-19°	19'	53.28"	146.739521	146°	44'	22.27"	472639.29	7862475.19	132.3	434.0	TERRAIN/TREES	10914.1	35807.5	898.3	2947.2	L	1.53	

DECLARED DISTANCES FOR RUNWAY 07	
TAKE OFF RUN AVAILABLE (TORA)	1100m (3609')
TAKE OFF DISTANCE AVAILABLE (TODA)	1160m (3806') 3.20%
ACCELERATE STOP DISTANCE AVAILABLE (ASDA)	1100m (3609')
LANDING DISTANCE AVAILABLE (LDA)	1100m (3609')
SUPPLEMENTARY TAKE OFF DISTANCE AVAILABLE (STODA)	864m (2834') 2.2%, 977m (3205') 2.5%

LEGEND

- LOWEST SURVEYED SLOPE
- GROUND LEVEL
- MOST LIMITING OBSTACLE
- ①

OBSTACLE

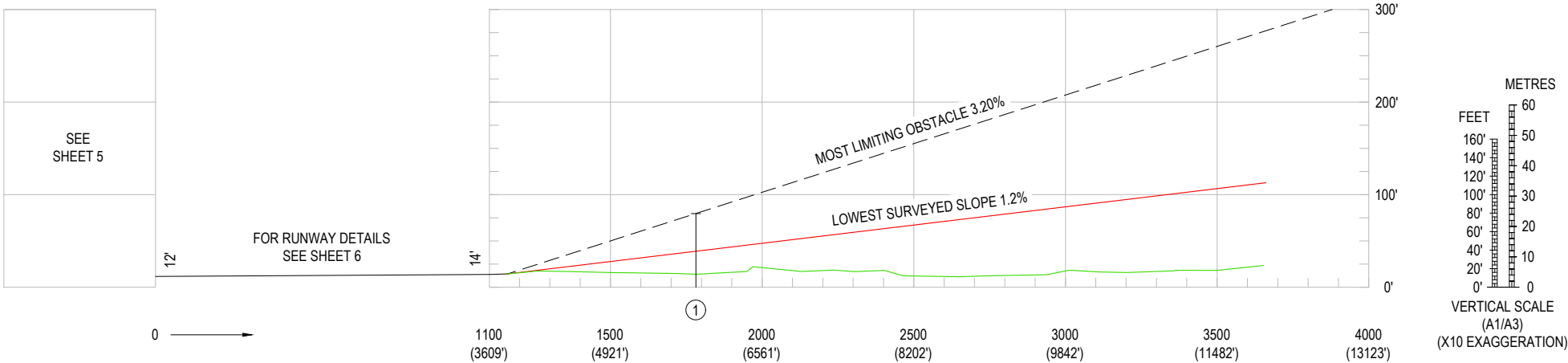
NOTES

1. AZIMUTH AND COORDINATES FOR THIS SURVEY ARE BASED ON MGA (GDA2020) ZONE 55 THE VERTICAL DATUM BEING AHD.
2. HORIZONTAL DIMENSIONS IN METRES (FEET) ELEVATIONS IN FEET
3. USERS OF THIS CHART SHOULD NOTIFY ANY ERRORS OR OMISSIONS AS SOON AS THEY BECOME APPARENT TO : -

AERONAUTICAL INFORMATION SERVICE – AIR FORCE
EMAIL: AIS.AF@DEFENCE.GOV.AU
4. FOR FURTHER INFORMATION REGARDING THIS CHART CONTACT THE ABOVE
5. MAGNETIC VARIATION 7°16' E (MAY 2023)
6. AERIAL SURVEY COMPLETED OCTOBER 2022.
GROUND SURVEY CHECKS AND VERIFICATION NOVEMBER 2022.

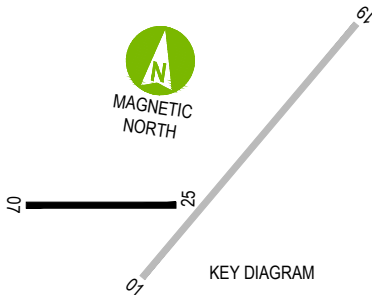
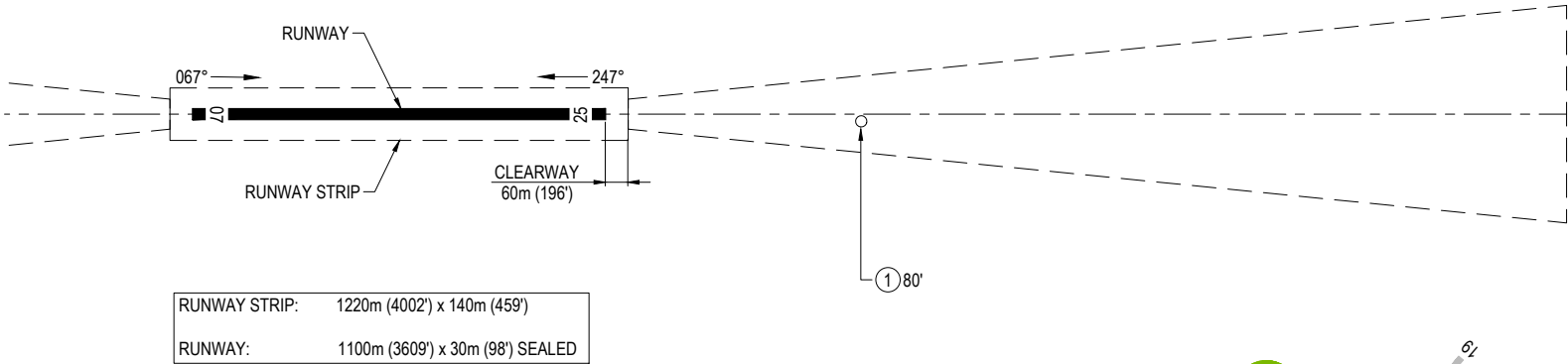
LEGEND

- OBSTRUCTIONS AND OBSTACLES
- ① OBJECT NUMBER
- 392' TOP ELEVATION IN FEET
- * TREE(S) OR VEGETATION
- BUILDING OR LARGE STRUCTURE
- POLE, TOWER, SPIRE, POST ETC
- △ ANTENNA
- MOVING (ROADS, RAILWAY TRACKS ETC)
- TERRAIN PENETRATING LOWEST SURVEYED SLOPE
- OVERHEAD TRANSMISSION LINE
- FENCE LINE



RUNWAY 07 (CODE 2)

1:10000 (A1)
1:20000 (A3)
SCALE 1:10000



RUNWAY 07 SURVEY HAS BEEN ASSESSED BASED ON THE FOLLOWING "CODE 2" TAKE-OFF PARAMETERS:
LENGTH OF INNER EDGE - 80m
RATE OF DIVERGENCE (EACH SIDE) - 10%
FINAL WIDTH - 580m
OVERALL LENGTH - 2500m

THE TYPE A SURVEY HAS BEEN CONDUCTED IN ACCORDANCE WITH ICAO ANNEX 4 AND DEPARTMENT OF DEFENCE REQUIREMENTS. THE CHART CLEARLY SHOWS THE GRAPHICAL RESULTS OF THE SURVEY AND HAS BEEN CHECKED FOR ACCURACY AND COMPLETENESS OF INFORMATION. THE CHART IS CERTIFIED CORRECT FOR PUBLICATION.

DANIEL GEEVES
REGISTERED SURVEYOR
aurecon

23/02/2024
DATE

REV	DATE	REVISION DETAILS	APPROVED
A	09.02.24	FOR REVIEW	DG
B	23/02/24	100% ISSUE	DG

SCALE	SIZE
AS SHOWN	A1/A3
DRAWN	MH
SURVEYED	BW/MH/AAM
CHECKED	GH

FOR ISSUE	NOT FOR CONSTRUCTION
APPROVED	DATE 23/02/2024
DANIEL GEEVES	

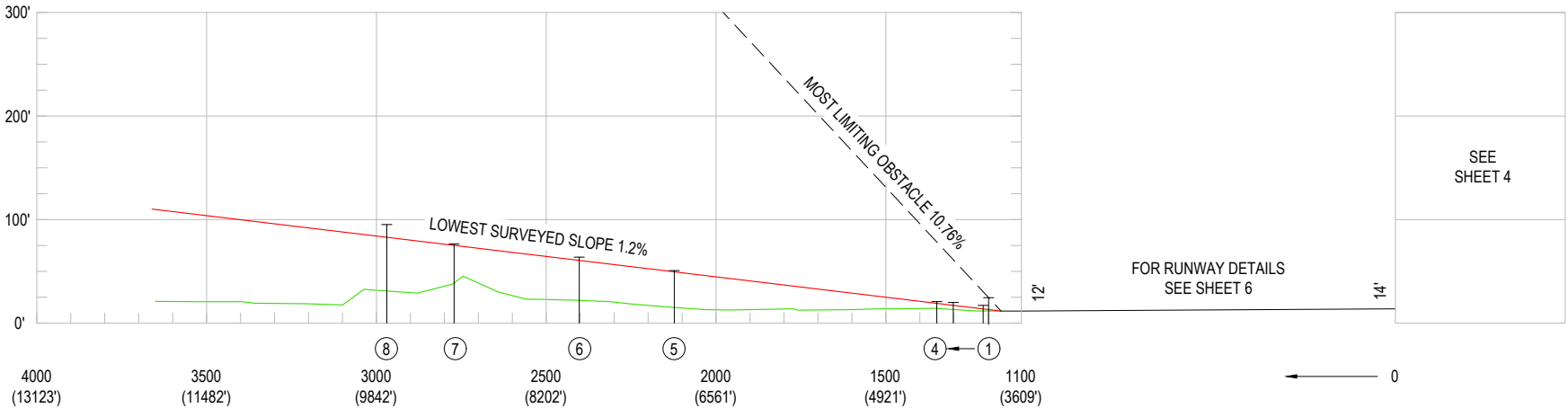
PROJECT	OBSTACLE LIMITATION SURVEYS AND ASSESSMENT RAAF BASE TOWNSVILLE
TITLE	AERODROME OBSTACLE CHART ICAO TYPE A (OPERATING LIMITATIONS) ISSUED FEBRUARY 2024 RUNWAY 07 - SHEET 4 OF 6
DRAWING No.	520002
PROJECT No.	EST09759
WBS	DRG
TYPE	UU
DISC	TVL
SITE	005
NUMBER	B
REV	

DECLARED DISTANCES FOR RUNWAY 25	
TAKE OFF RUN AVAILABLE (TORA)	1100m (3609')
TAKE OFF DISTANCE AVAILABLE (TODA)	1160m (3806') 10.76%
ACCELERATE STOP DISTANCE AVAILABLE (ASDA)	1100m (3609')
LANDING DISTANCE AVAILABLE (LDA)	1100m (3609')
SUPPLEMENTARY TAKE OFF DISTANCE AVAILABLE (STODA)	965m (3166') 1.6%, 1001m (3284') 1.9%, 1010m (3313') 2.0%, 1027m (3369') 2.2%, 1046m (3431') 2.5%, 1080m (3543') 3.3%, 1119m (3671') 5.0%

LEGEND

- LOWEST SURVEYED SLOPE
- GROUND LEVEL
- MOST LIMITING OBSTACLE
- ①

OBSTACLE



NOTES

1.

AZIMUTH AND COORDINATES FOR THIS SURVEY ARE BASED ON MGA (GDA2020) ZONE 55 THE VERTICAL DATUM BEING AHD.
2.

HORIZONTAL DIMENSIONS IN METRES (FEET) ELEVATIONS IN FEET
3.

USERS OF THIS CHART SHOULD NOTIFY ANY ERRORS OR OMISSIONS AS SOON AS THEY BECOME APPARENT TO : -

AERONAUTICAL INFORMATION SERVICE – AIR FORCE
EMAIL: AIS.AF@DEFENCE.GOV.AU
4.

FOR FURTHER INFORMATION REGARDING THIS CHART CONTACT THE ABOVE
5.

MAGNETIC VARIATION 7°16' E (MAY 2023)
6.

AERIAL SURVEY COMPLETED OCTOBER 2022.
GROUND SURVEY CHECKS AND VERIFICATION NOVEMBER 2022.

LEGEND

OBSTRUCTIONS AND OBSTACLES

- ①

OBJECT NUMBER
- 392'

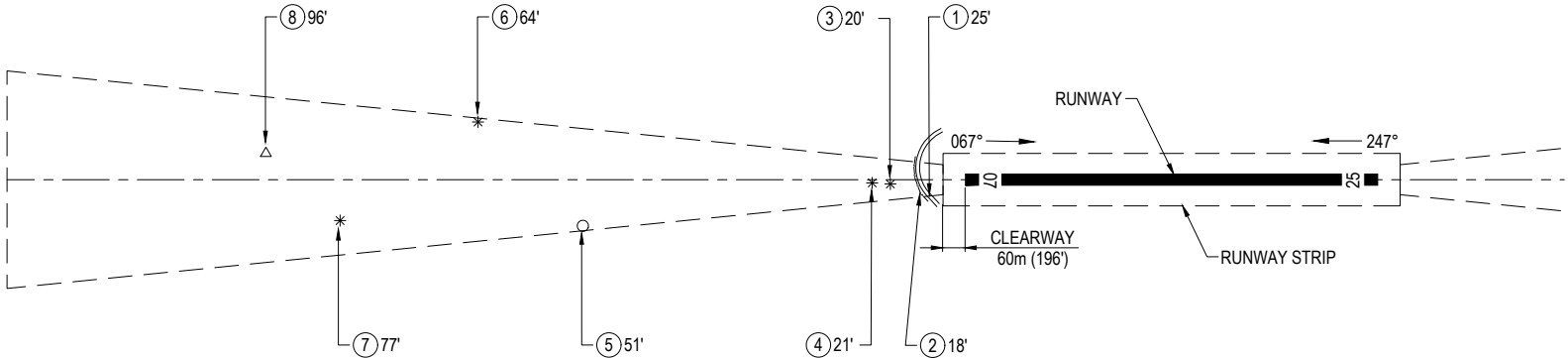
TOP ELEVATION IN FEET
- *

TREE(S) OR VEGETATION
- BUILDING OR LARGE STRUCTURE
- POLE, TOWER, SPIRE, POST ETC
- △

ANTENNA
- MOVING (ROADS, RAILWAY TRACKS ETC)
- TERRAIN PENETRATING LOWEST SURVEYED SLOPE
- OVERHEAD TRANSMISSION LINE
- FENCE LINE

RUNWAY 25 (CODE 2)

1:10000 (A1)
1:20000 (A3)
SCALE 1:10000



10 0 10

KEY DIAGRAM

RUNWAY STRIP:	1220m (4002') x 140m (459')
RUNWAY:	1100m (3609') x 30m (98') SEALED

RUNWAY 25 SURVEY HAS BEEN ASSESSED BASED ON THE FOLLOWING "CODE 2" TAKE-OFF PARAMETERS:
LENGTH OF INNER EDGE - 80m
RATE OF DIVERGENCE (EACH SIDE) - 10%
FINAL WIDTH - 580m
OVERALL LENGTH - 2500m

THE TYPE A SURVEY HAS BEEN CONDUCTED IN ACCORDANCE WITH ICAO ANNEX 4 AND DEPARTMENT OF DEFENCE REQUIREMENTS. THE CHART CLEARLY SHOWS THE GRAPHICAL RESULTS OF THE SURVEY AND HAS BEEN CHECKED FOR ACCURACY AND COMPLETENESS OF INFORMATION. THE CHART IS CERTIFIED CORRECT FOR PUBLICATION.

DANIEL GEEVES
REGISTERED SURVEYOR
aurecon

23/02/2024
DATE

REV	DATE	REVISION DETAILS	APPROVED
A	09.02.24	FOR REVIEW	DG
B	23/02/24	100% ISSUE	DG

SCALE	SIZE
AS SHOWN	A1/A3
DRAWN	MH
SURVEYED	BW/MH/AAM
CHECKED	GH

FOR ISSUE	NOT FOR CONSTRUCTION
APPROVED	DATE 23/02/2024
	DANIEL GEEVES

PROJECT	OBSTACLE LIMITATION SURVEYS AND ASSESSMENT RAAF BASE TOWNSVILLE
TITLE	AERODROME OBSTACLE CHART ICAO TYPE A (OPERATING LIMITATIONS) ISSUED FEBRUARY 2024 RUNWAY 25 - SHEET 5 OF 6
DRAWING No.	520002
PROJECT No.	EST09759
WBS	DRG
TYPE	UU
DISC	TVL
SITE	006
NUMBER	B
REV	

