

Survey Report

Job name	337-1-nere_ul
Creation date	17 Mar 2025
Version	Trimble General Survey 3.21
Distance Units	Meters
Angle units	Gons
Pressure Units	mbar
Temperature Units	Celsius

Coordinate system (Job)

System	
Zone	
Datum	

Projection

Projection	Transverse Mercator
Origin lat	0°00'00.00000"N
Origin long	21°00'00.00000"E
False northing	0.000
False easting	7500000.000
Scale	0.99990000
South azimuth (grid)	No
Grid coords	Increase North-East
Ellipsoid	Semi-major axis: 6378137.000 Flattening: 298.25722154

Local site

Type	Grid
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Datum transformation

Type	None
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Collected Field Data

Projection

Projection	Transverse Mercator
Origin lat	0°00'00.00000"N
Origin long	21°00'00.00000"E
False northing	0.000
False easting	7500000.000
Scale	0.99990000
Ellipsoid	Semi-major axis: 6378137.000 Flattening: 298.25722154

Local site

Type	Grid
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Datum transformation

Type	None
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Feature library

Library name	LIRIDON
Library File Name	LIRIDON.fxl
Attribute Support	No

Corrections

South azimuth (grid)	No
Grid coords	Increase North-East
Magnetic declination	0.0000
Distances	Grid
Neighborhood adjustment	Off

Rover options

Elevation mask	13	PDOP mask	6						
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Rover options

Elevation mask	13	PDOP mask	6						
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Rover options									
Elevation mask	13	PDOP mask	6						

Survey event	Rover started
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Note	VRS base: 42°22'13.41480", 21°06'31.33800", 660.487m
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GPS week	2358	Seconds	139438	Initialization type	On the fly	Survey type	Real-time		
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Receiver type	R10
Serial number	5452489155
Firmware version	4.9
Antenna type	R10 Internal
Measurement method	Bottom of quick release
Tape adjustment	0.000
Horizontal offset	0.000
Vertical offset	0.199

Point	Auto0000	X	4403136.807	Y	1699792.770	Z	4276530.239	Code	ParcelaB 9988
Antenna height	2.300	Method	Network RTK	Type	Rapid point	Search class	As-staked		
QC 1		Type	Uncorrected	Hz Prec	0.012	Vt Prec	0.024		
		PDOP	1.7	GDOP	2.3	HDOP	0.8	VDOP	1.5
		Base data age	1	Satellites	12	Positions used	1		
Stake out point (Auto0000)		Design point: ParcelaB 9988Code:							
Method		To the point							
Stakeout	Deltas: Grid	Δ North	-0.023	Δ East	0.048	ΔElev	-642.849		

Point	Auto0001	X Method	4403142.930 Network RTK	Y Type	1699781.829 Rapid point	Z Search class	4276528.712 As-staked	Code	ParcelaB 9992
Antenna height	2.300	Type	Uncorrected	Hz Prec	0.013	Vt Prec	0.026		
QC 1		PDOP	2.0	GDOP	2.7	HDOP	0.9	VDOP	1.8
		Base data age	1	Satellites	11	Positions used	1		
Stake out point (Auto0001)		Design point: ParcelaB 9992Code:							
Method		To the point							
Stakeout	Deltas: Grid	Δ North	-0.051	Δ East	-0.001	ΔElev	-643.130		

Point	Auto0002	X	4403134.286	Y	1699775.305	Z	4276539.608	Code	ParcRe 11103
Antenna height	2.300	Method	Network RTK	Type	Rapid point	Search class	As-staked		
QC 1		Type	Uncorrected	Hz Prec	0.029	Vt Prec	0.071		
		PDOP	4.4	GDOP	5.8	HDOP	2.1	VDOP	3.8
		Base data age	1	Satellites	7	Positions used	1		
Stake out point (Auto0002)		Design point: ParcRe 11103Code:							
Method		To the point							
Stakeout	Deltas: Grid	Δ North	-0.066	Δ East	0.296	ΔElev	-642.779		

Point	Auto0003	X	4403136.341	Y	1699777.127	Z	4276536.523	Code	ParcRe 11102
Antenna height	2.300	Method	Network RTK	Type	Rapid point	Search class	As-staked		
QC 1		Type	Uncorrected	H_z Prec	0.013	V_t Prec	0.026		
		PDOP	3.0	GDOP	4.2	HDOP	1.1	VDOP	2.8
		Base data age	1	Satellites	10	Positions used	1		
Stake out point (Auto0003)		Design point: ParcRe 11102Code:							
Method		To the point							
Stakeout	Deltas: Grid	Δ North	0.030	Δ East	0.007	ΔElev	-642.601		

Point	Auto0004	X	4403140.945	Y	1699770.711	Z	4276535.265	Code	ParcRe 11068
Antenna height	2.300	Method	Network RTK	Type	Rapid point	Search class	As-staked		
QC 1		Type	Uncorrected	Hz Prec	0.014	Vt Prec	0.029		
		PDOP	3.0	GDOP	4.1	HDOP	1.1	VDOP	2.7
		Base data age	1	Satellites	10	Positions used	1		
Stake out point (Auto0004)		Design point: ParcRe 11068Code:							
Method		To the point							
Stakeout	Deltas: Grid	Δ North	-0.025	Δ East	0.076	ΔElev	-643.219		

Elevation mask	13	PDOP mask	6					
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Survey event

Survey event	Rover started
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Note	VRS base: 42°22'13.98600", 21°06'29.13660", 642.310m
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Initialization event: RTK initialized

GPS week	2358	Seconds	140056	Initialization type	On the fly	Survey type	Real-time		
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GNSS receiver

Receiver type	R10
Serial number	5452489155
Firmware version	4.9
Antenna type	R10 Internal
Measurement method	Bottom of quick release
Tape adjustment	0.000
Horizontal offset	0.000
Vertical offset	0.199

Point	Auto0008	X	4403146.647	Y	1699756.447	Z	4276535.316	Code	ParcRe 11018
		Method	Network RTK	Type	Rapid point	Search class	As-staked		
Antenna height	2.300	Type	Uncorrected	Hz Prec	0.026	Vt Prec	0.044		
QC 1		PDOP	2.5	GDOP	3.5	HDOP	1.4	VDOP	2.1
		Base data age	1	Satellites	8	Positions used	1		
Stake out point (Auto0008)		Design point: ParcRe 11018Code:							
Method		To the point							
Stakeout	Deltas: Grid	Δ North	0.107	Δ East	-0.222	ΔElev	-643.389		

Initialization event: RTK not initialized

GPS week	2358	Seconds	140129	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK initialized

GPS week	2358	Seconds	140144	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK not initialized

GPS week	2358	Seconds	140155	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK initialized

GPS week	2358	Seconds	140181	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK not initialized

GPS week	2358	Seconds	140183	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK initialized

GPS week	2358	Seconds	140198	Initialization type	On the fly	Survey type	Real-time		
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Point	Auto0009	X	4403154.129	Y	1699753.967	Z	4276528.767	Code	ParcRe 11026
		Method	Network RTK	Type	Rapid point	Search class	As-staked		
Antenna height	2.300	Type	Uncorrected	Hz Prec	0.018	Vt Prec	0.032		
QC 1		PDOP	2.0	GDOP	2.7	HDOP	0.9	VDOP	1.8
		Base data age	1	Satellites	11	Positions used	1		
Stake out point (Auto0009)		Design point: ParcRe 11026Code:							
Method		To the point							
Stakeout	Deltas: Grid	Δ North	2.072	Δ East	-0.396	ΔElev	-643.472		

Point	Auto0010	X	4403116.586	Y	1699832.687	Z	4276534.530	Code	ParcelaB 9980
		Method	Network RTK	Type	Rapid point	Search class	As-staked		
Antenna height	2.300	Type	Uncorrected	Hz Prec	0.015	Vt Prec	0.026		
QC 1		PDOP	1.7	GDOP	2.2	HDOP	0.8	VDOP	1.4
						Positions			

		Base data age	1	Satellites	12	used	1		
Stake out point (Auto0010)		Design point: ParcelaB 9980Code: To the point							
Stakeout	Deltas: Grid	Δ North	-0.021	Δ East	0.012	ΔElev	-642.426		
Point	Auto0011	X	4403114.422	Y	1699836.987	Z	4276535.082	Code	ParcRe 11758
Antenna height	2.300	Method	Network RTK	Type	Rapid point	Search class	As-staked		
QC 1		Type	Uncorrected	Hz Prec	0.018	Vt Prec	0.031		
		PDOP	1.7	GDOP	2.2	HDOP	0.8	VDOP	1.4
		Base data age	2	Satellites	12	Positions used	1		
Stake out point (Auto0011)		Design point: ParcRe 11758Code: To the point							
Stakeout	Deltas: Grid	Δ North	0.001	Δ East	-0.051	ΔElev	-642.450		
Point	Auto0012	X	4403109.677	Y	1699833.720	Z	4276541.066	Code	ParcRe 11733
Antenna height	2.300	Method	Network RTK	Type	Rapid point	Search class	As-staked		
QC 1		Type	Uncorrected	Hz Prec	0.019	Vt Prec	0.032		
		PDOP	1.6	GDOP	2.2	HDOP	0.8	VDOP	1.4
		Base data age	1	Satellites	12	Positions used	1		
Stake out point (Auto0012)		Design point: ParcRe 11733Code: To the point							
Stakeout	Deltas: Grid	Δ North	-0.011	Δ East	-0.006	ΔElev	-642.343		
Point	Auto0013	X	4403109.361	Y	1699814.762	Z	4276548.940	Code	ParcRe 11128
Antenna height	2.300	Method	Network RTK	Type	Rapid point	Search class	As-staked		
QC 1		Type	Uncorrected	Hz Prec	0.017	Vt Prec	0.029		
		PDOP	1.6	GDOP	2.2	HDOP	0.8	VDOP	1.4
		Base data age	1	Satellites	12	Positions used	1		
Stake out point (Auto0013)		Design point: ParcRe 11128Code: To the point							
Stakeout	Deltas: Grid	Δ North	0.006	Δ East	0.047	ΔElev	-642.387		
Point	Auto0014	X	4403114.233	Y	1699817.115	Z	4276543.609	Code	ParcRe 11145
Antenna height	2.300	Method	Network RTK	Type	Rapid point	Search class	As-staked		
QC 1		Type	Uncorrected	Hz Prec	0.013	Vt Prec	0.022		
		PDOP	1.6	GDOP	2.2	HDOP	0.9	VDOP	1.4
		Base data age	1	Satellites	11	Positions used	1		
Stake out point (Auto0014)		Design point: ParcRe 11145Code: To the point							
Stakeout	Deltas: Grid	Δ North	0.347	Δ East	-0.364	ΔElev	-642.779		
Point	Auto0015	X	4403096.856	Y	1699860.501	Z	4276543.253	Code	mungespa 11248
Antenna height	2.300	Method	Network RTK	Type	Rapid point	Search class	As-staked		
QC 1		Type	Uncorrected	Hz Prec	0.015	Vt Prec	0.024		
		PDOP	1.8	GDOP	2.5	HDOP	0.9	VDOP	1.6
		Base data age	1	Satellites	11	Positions used	1		
Stake out point (Auto0015)		Design point: mungespa 11248Code: To the point							
Stakeout	Deltas: Grid	Δ North	0.016	Δ East	0.051	ΔElev	-642.106		
Point	Auto0016	X	4403095.663	Y	1699859.401	Z	4276545.023	Code	mungespa 11223
Antenna height	2.300	Method	Network RTK	Type	Rapid point	Search class	As-staked		
QC 1		Type	Uncorrected	Hz Prec	0.014	Vt Prec	0.023		
		PDOP	1.8	GDOP	2.5	HDOP	0.9	VDOP	1.6
		Base data age	1	Satellites	11	Positions used	1		
Stake out point (Auto0016)		Design point: mungespa 11223Code: To the point							
Stakeout	Deltas: Grid	Δ North	-0.020	Δ East	0.073	ΔElev	-642.184		
Point	Auto0017	X	4403082.601	Y	1699875.356	Z	4276551.903	Code	mungespa 11499
Antenna height	2.300	Method	Network RTK	Type	Rapid point	Search class	As-staked		
QC 1		Type	Uncorrected	Hz Prec	0.014	Vt Prec	0.022		
		PDOP	1.8	GDOP	2.4	HDOP	0.9	VDOP	1.6
		Base data age	1	Satellites	11	Positions used	1		
Stake out point (Auto0017)		Design point: mungespa 11499Code: To the point							
Stakeout	Deltas: Grid	Δ North	0.013	Δ East	-0.047	ΔElev	-642.063		

Point	Auto0018	X	4403081.521	Y	1699873.044	Z	4276553.900	Code	mungespa 11524
Antenna height	2.300	Method	Network RTK	Type	Rapid point	Search class	As-staked		
QC 1		Type	Uncorrected	Hz Prec	0.016	Vt Prec	0.020		
		PDOP	2.1	GDOP	2.9	HDOP	1.2	VDOP	1.8
		Base data age	1	Satellites	10	Positions used	1		
Stake out point (Auto0018)		Design point: mungespa 11524Code: To the point							
Stakeout	Deltas: Grid	Δ North	-0.004	Δ East	-0.026	ΔElev	-642.050		

Initialization event: RTK not initialized

GPS week	2358	Seconds	141198	Initialization type	On the fly	Survey type	Real-time		
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Initialization event: RTK initialized

GPS week	2358	Seconds	141198	Initialization type	On the fly	Survey type	Real-time		
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Point	Auto0019	X	4403080.344	Y	1699880.758	Z	4276551.882	Code	mungespa 11680
Antenna height	2.300	Method	Network RTK	Type	Rapid point	Search class	As-staked		
QC 1		Type	Uncorrected	Hz Prec	0.013	Vt Prec	0.019		
		PDOP	1.8	GDOP	2.4	HDOP	0.9	VDOP	1.6
		Base data age	1	Satellites	11	Positions used	1		
Stake out point (Auto0019)		Design point: mungespa 11680Code: To the point							
Stakeout	Deltas: Grid	Δ North	0.022	Δ East	0.051	ΔElev	-641.931		

Point	Auto0020	X	4403081.188	Y	1699882.735	Z	4276550.121	Code	mungespa 11655
Antenna height	2.300	Method	Network RTK	Type	Rapid point	Search class	As-staked		
QC 1		Type	Uncorrected	Hz Prec	0.014	Vt Prec	0.021		
		PDOP	1.8	GDOP	2.4	HDOP	0.9	VDOP	1.6
		Base data age	1	Satellites	11	Positions used	1		
Stake out point (Auto0020)		Design point: mungespa 11655Code: To the point							
Stakeout	Deltas: Grid	Δ North	0.028	Δ East	-0.085	ΔElev	-641.852		

Point	Auto0021	X	4403092.786	Y	1699870.296	Z	4276543.413	Code	ParcKojis 11490
Antenna height	2.300	Method	Network RTK	Type	Rapid point	Search class	As-staked		
QC 1		Type	Uncorrected	Hz Prec	0.014	Vt Prec	0.021		
		PDOP	1.8	GDOP	2.4	HDOP	0.9	VDOP	1.5
		Base data age	1	Satellites	11	Positions used	1		
Stake out point (Auto0021)		Design point: ParcKojis 11490Code: To the point							
Stakeout	Deltas: Grid	Δ North	0.010	Δ East	0.094	ΔElev	-642.015		

Point	Auto0022	X	4403091.653	Y	1699869.145	Z	4276545.066	Code	ParcKojis 10884
Antenna height	2.300	Method	Network RTK	Type	Rapid point	Search class	As-staked		
QC 1		Type	Uncorrected	Hz Prec	0.014	Vt Prec	0.021		
		PDOP	1.8	GDOP	2.4	HDOP	0.9	VDOP	1.5
		Base data age	1	Satellites	11	Positions used	1		
Stake out point (Auto0022)		Design point: ParcKojis 10884Code: To the point							
Stakeout	Deltas: Grid	Δ North	-0.012	Δ East	0.011	ΔElev	-642.042		

Point	Auto0023	X	4403091.088	Y	1699866.880	Z	4276546.624	Code	ParcKojis 10940
Antenna height	2.300	Method	Network RTK	Type	Rapid point	Search class	As-staked		
QC 1		Type	Uncorrected	Hz Prec	0.014	Vt Prec	0.021		
		PDOP	1.8	GDOP	2.4	HDOP	0.9	VDOP	1.5
		Base data age	1	Satellites	11	Positions used	1		
Stake out point (Auto0023)		Design point: ParcKojis 10940Code: To the point							
Stakeout	Deltas: Grid	Δ North	-0.055	Δ East	0.053	ΔElev	-642.100		

Point	Auto0024	X	4403109.576	Y	1699846.342	Z	4276536.259	Code	ParcKojis 11494
Antenna height	2.300	Method	Network RTK	Type	Rapid point	Search class	As-staked		
QC 1		Type	Uncorrected	Hz Prec	0.013	Vt Prec	0.020		
		PDOP	1.8	GDOP	2.4	HDOP	0.9	VDOP	1.5

		Base data age	1	Satellites	11	Positions used	1		
Stake out point (Auto0024)		Design point: ParcKojis 11494Code:							
Method		To the point							
Stakeout	Deltas: Grid	Δ North	0.023	Δ East	0.037	ΔElev	-642.393		

Survey event

Survey event	End survey
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Rover options

Elevation mask	13	PDOP mask	6						
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Rover options

Elevation mask	13	PDOP mask	6						
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Survey event

Survey event	Rover started
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Note	VRS base: 42°22'04.80420", 21°05'27.22980", 683.868m
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Initialization event: RTK initialized

GPS week	2358	Seconds	143983	Initialization type	On the fly	Survey type	Real-time		
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Point	fe12m	Latitude	42°22'04.81625"N	Longitude	21°05'27.05949"E	Height	669.828	Code	
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GNSS receiver

Receiver type	R10								
Serial number	5452489155								
Firmware version	4.9								
Antenna type	R10 Internal								
Measurement method	Bottom of quick release								
Tape adjustment	0.000								
Horizontal offset	0.000								
Vertical offset	0.199								

Point	fe122m	X	4403855.296	Y	1698498.360	Z	4276346.264	Code	
		Method	Network RTK	Type	Observed control point	Search class	Normal		
Antenna height	2.300	Type	Uncorrected	Hz Prec	0.011	Vt Prec	0.014		
QC 1		PDOP	1.6	GDOP	2.2	HDOP	1.0	VDOP	1.3
		Base data age	1	Satellites	12	Positions used	30		
QC 2		VCV xx (m²)	0.000157	VCV xy (m²)	0.000025	VCV xz (m²)	0.000058		
				VCV yy (m²)	0.000062	VCV yz (m²)	0.000017		
						VCV zz (m²)	0.000105		

Survey event

Survey event	End survey
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Reduced points

Point	Auto0000	North	4692323.738	East	7508948.357	Elevation	642.849	Code	ParcelaB 9988
Point	Auto0001	North	4692321.400	East	7508935.951	Elevation	643.130	Code	ParcelaB 9992
Point	Auto0002	North	4692336.461	East	7508932.959	Elevation	642.779	Code	ParcRe 11103
Point	Auto0003	North	4692332.450	East	7508933.923	Elevation	642.601	Code	ParcRe 11102
Point	Auto0004	North	4692330.174	East	7508926.284	Elevation	643.219	Code	ParcRe 11068
Point	Auto0005	North	4692333.899	East	7508925.053	Elevation	643.221	Code	ParcRe 11056
Point	Auto0006	North	4692328.045	East	7508915.905	Elevation	646.819	Code	ParcRe 11030
Point	Auto0007	North	4692332.710	East	7508902.539	Elevation	643.047	Code	ParcRe 11022
Point	Auto0008	North	4692330.069	East	7508910.927	Elevation	643.389	Code	ParcRe 11018
Point	Auto0009	North	4692321.124	East	7508905.931	Elevation	643.472	Code	ParcRe 11026
Point	Auto0010	North	4692329.989	East	7508992.861	Elevation	642.426	Code	ParcelaB 9980
Point	Auto0011	North	4692330.720	East	7508997.649	Elevation	642.450	Code	ParcRe 11758
Point	Auto0012	North	4692338.913	East	7508996.301	Elevation	642.343	Code	ParcRe 11733
Point	Auto0013	North	4692349.506	East	7508978.719	Elevation	642.387	Code	ParcRe 11128
Point	Auto0014	North	4692341.935	East	7508979.169	Elevation	642.779	Code	ParcRe 11145
Point	Auto0015	North	4692342.127	East	7509025.892	Elevation	642.106	Code	mungespa 11248
Point	Auto0016	North	4692344.451	East	7509025.292	Elevation	642.184	Code	mungespa 11223

Point	Auto0017	North	4692353.897	East	7509044.866	Elevation	642.063	Code	mungespa 11499
Point	Auto0018	North	4692356.609	East	7509043.094	Elevation	642.050	Code	mungespa 11524
Point	Auto0019	North	4692353.997	East	7509050.716	Elevation	641.931	Code	mungespa 11680
Point	Auto0020	North	4692351.687	East	7509052.259	Elevation	641.852	Code	mungespa 11655
Point	Auto0021	North	4692342.440	East	7509036.492	Elevation	642.015	Code	ParcKojs 11490
Point	Auto0022	North	4692344.652	East	7509035.825	Elevation	642.042	Code	ParcKojs 10884
Point	Auto0023	North	4692346.705	East	7509033.913	Elevation	642.100	Code	ParcKojs 10940
Point	Auto0024	North	4692332.378	East	7509008.118	Elevation	642.393	Code	ParcKojs 11494
Point	fe12m	North	4692048.411	East	7507482.707	Elevation	669.828	Code	
Point	fe122m	North	4692048.444	East	7507482.698	Elevation	669.837	Code	