MicroSurvey®

SurveyTools™ for BricsCAD® V23.0

Features and Benefits

19 July 2023

Contents

SurveyTools for BricsCAD V23.0

Release Date: July 20, 2023

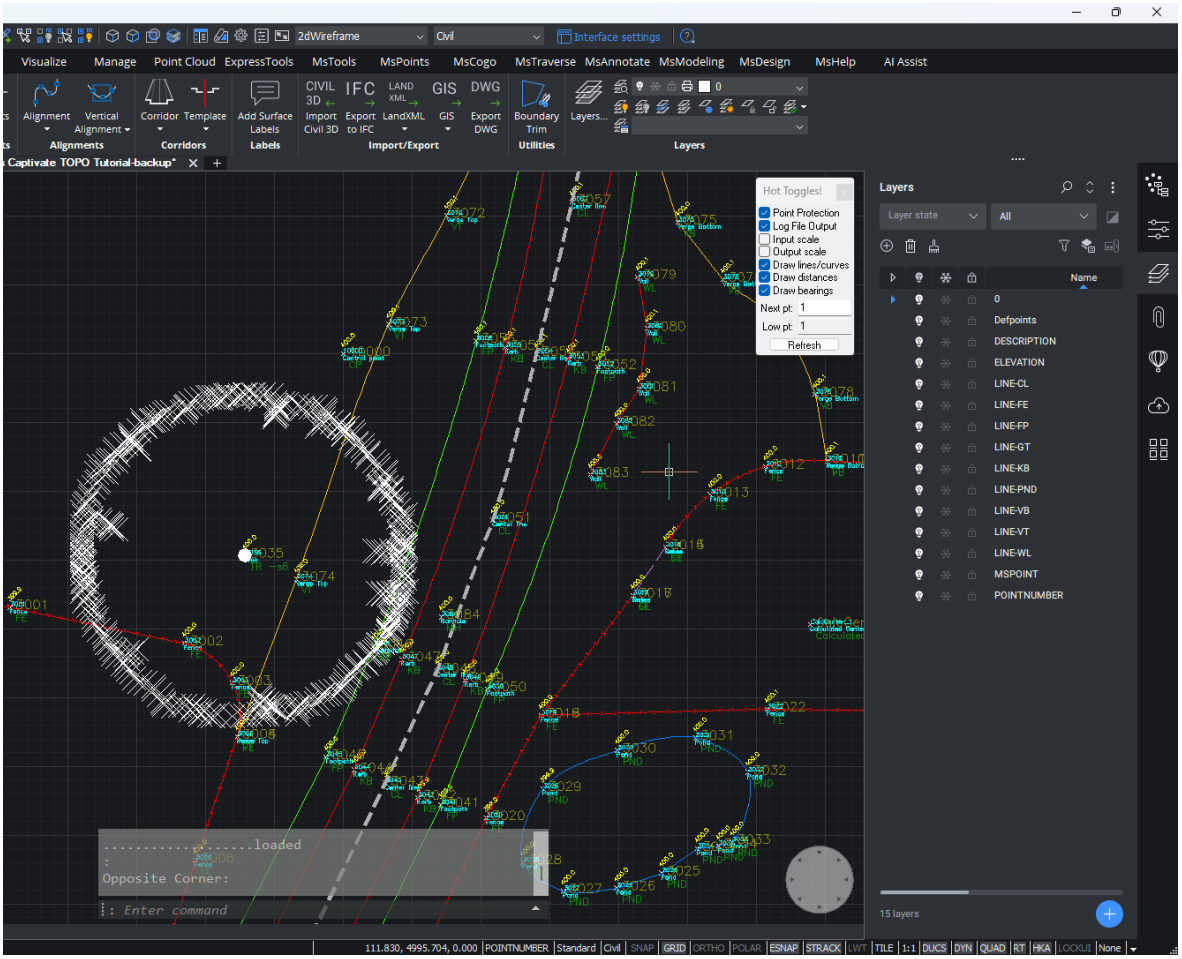
SurveyTools for BricsCAD is an all-in-one solution for surveying workflows by MicroSurvey®. The combined solution includes leading technology from MicroSurvey, Bricsys and the trusted industry partner, Leica Geosystems. As Hexagon companies, we work together to enhance day-to-day workflows between our solutions. Land surveyors will benefit from this collaboration by accelerating their productivity with industry-specific tools developed by surveyors for surveyors while benefiting from BricsCAD's AI-driven drafting tools and point cloud workflows. This initial release had the primary objective of bringing our survey tools to the BricsCAD platform and ensuring data integrity for you.

Licensing

Feature	Benefit
Check out a floating license	Take your floating license offline by checking it out for up to four days. License seats are consumed for the entirety of the checkout period, ensuring you have access to a license offline or for important projects.
Check in a floating license	Check in floating licenses any time within the checked out period. After the checkout period has expired, licenses will be automatically returned and the program will run in expired mode if offline. Licenses will automatically become available to other users with access to the floating license.

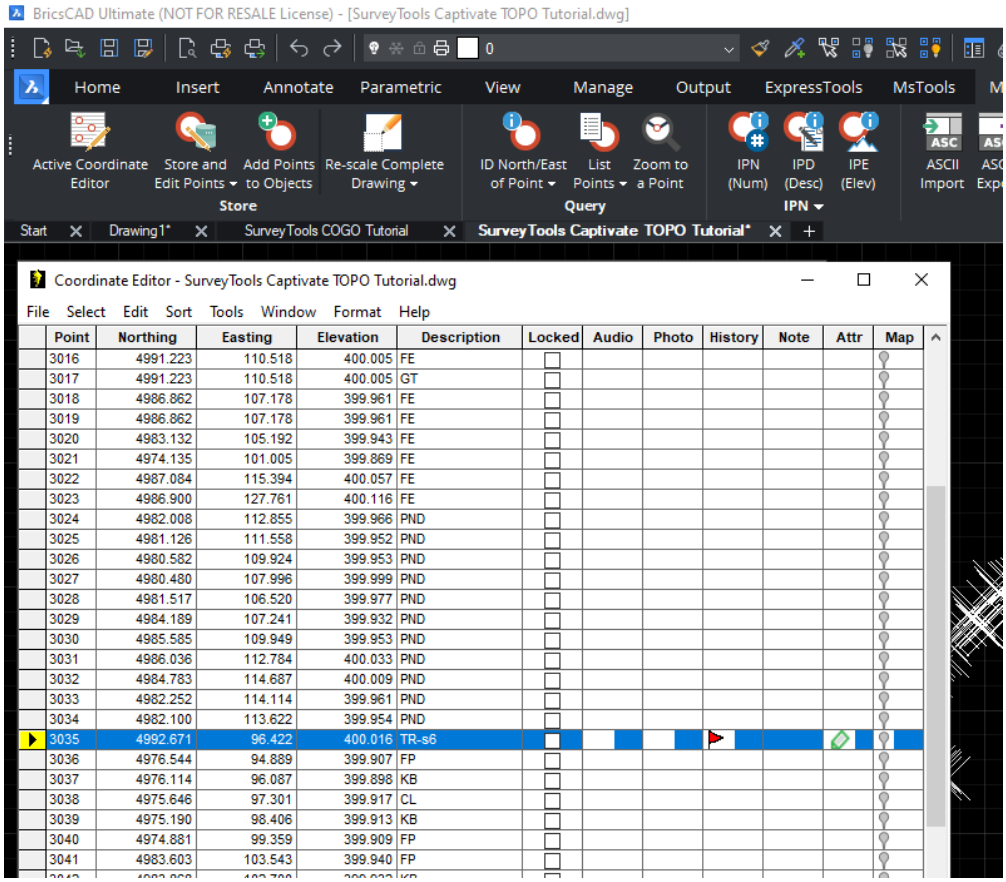
AutoMAP

Feature	Benefit
Use AutoMAP to automate linework, symbols, layer assignment, and labels	Automatically generate linework, symbols, and assign layers and styles from point descriptions on import. AutoMAP is our take on field to finish workflows. Users can quickly set up their intended layers, linework, blocks/symbols, colours, line types, and point labels to be generated each time they import a file in the future. This system can automate much of the required user interaction required when completing drawings, plans, plats, or drawing deliverables.



Active Coordinate Editor

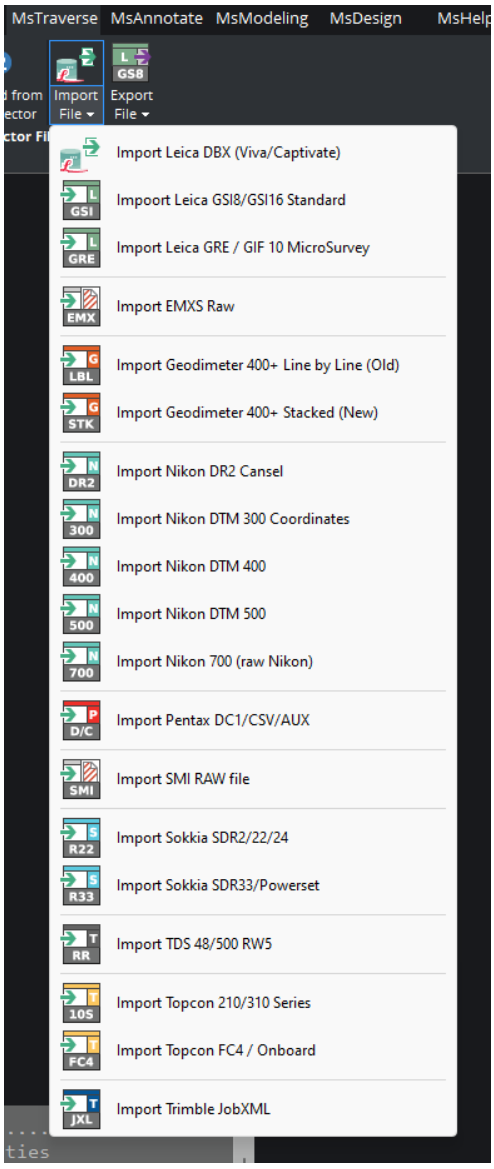
Feature	Benefit
Active Coordinate Editor - Dynamically view, sort, and edit point data	Using the Active Coordinate Editor, you can view, sort, select, and manipulate the points in your drawing where they are updated in real time. Smart linework is defined by the points, so the linework and labels will also update when points are shifted, rotated or scaled.



Point	Northing	Easting	Elevation	Description	Locked	Audio	Photo	History	Note	Attr	Map
3016	4991.223	110.518	400.005	FE							
3017	4991.223	110.518	400.005	GT							
3018	4986.862	107.178	399.961	FE							
3019	4986.862	107.178	399.961	FE							
3020	4983.132	105.192	399.943	FE							
3021	4974.135	101.005	399.869	FE							
3022	4987.084	115.394	400.057	FE							
3023	4986.900	127.761	400.116	FE							
3024	4982.008	112.855	399.966	PND							
3025	4981.126	111.558	399.952	PND							
3026	4980.582	109.924	399.953	PND							
3027	4980.480	107.996	399.999	PND							
3028	4981.517	106.520	399.977	PND							
3029	4984.189	107.241	399.932	PND							
3030	4985.585	109.949	399.953	PND							
3031	4986.036	112.784	400.033	PND							
3032	4984.783	114.687	400.009	PND							
3033	4982.252	114.114	399.961	PND							
3034	4982.100	113.622	399.954	PND							
3035	4992.671	96.422	400.016	TR-s6							
3036	4976.544	94.889	399.907	FP							
3037	4976.114	96.087	399.898	KB							
3038	4975.646	97.301	399.917	CL							
3039	4975.190	98.406	399.913	KB							
3040	4974.881	99.359	399.909	FP							
3041	4983.603	103.543	399.940	FP							

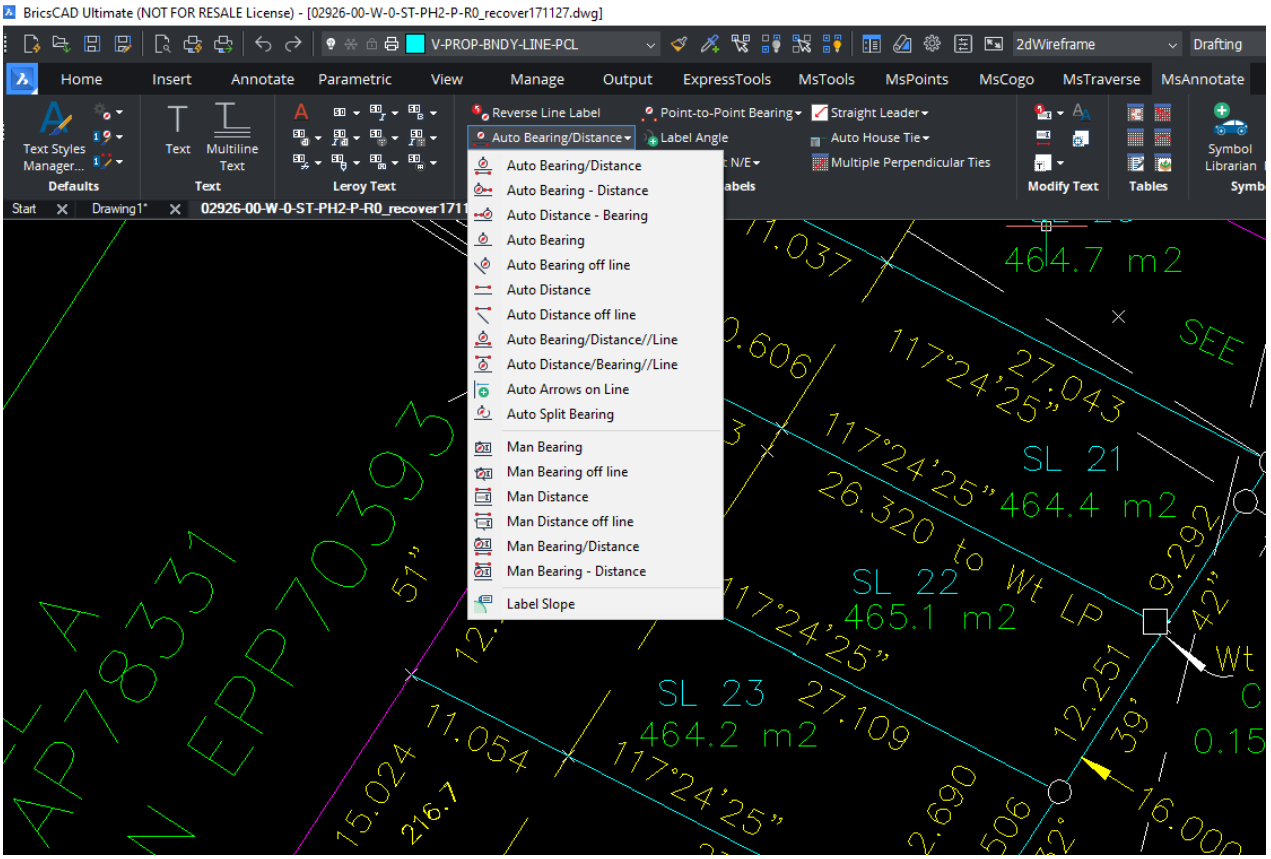
Import and Export Industry Data

Feature	Benefit
Import/Export industry data	We have strived to be manufacturer agnostic. We import and export data collector formats from all of the big manufacturers to ensure SurveyTools for BricsCAD will work for you. We also of course work with ASCII and landXML files.



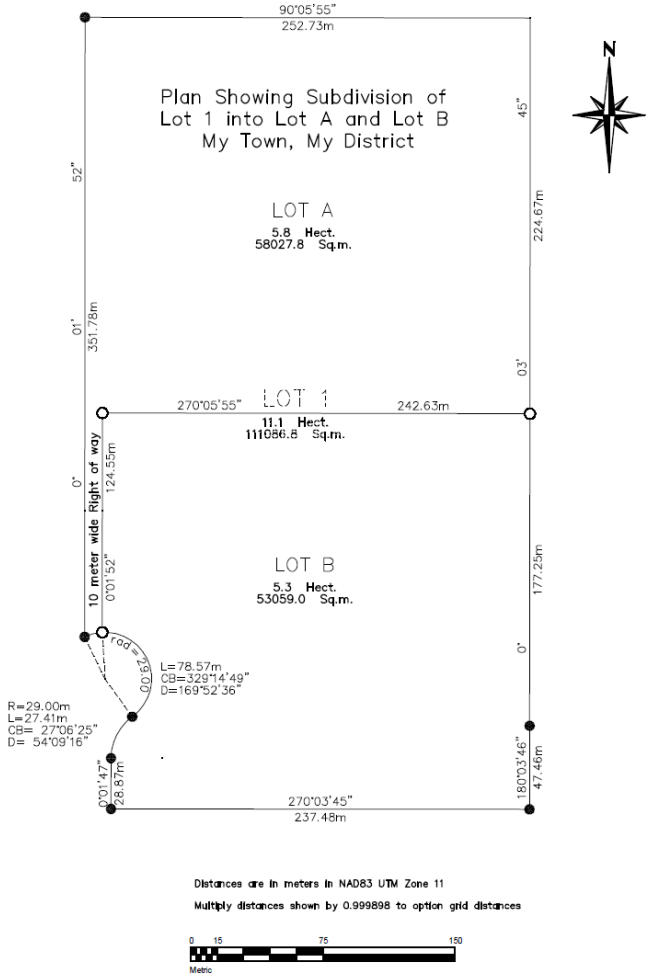
Survey Specific Annotations

Feature	Benefit
Annotations optimized for Surveyors with easy scale factor management	We have been building software for Land Surveyors since 1985. We can label everything that you could want to label in a variety of formats. We can apply grid/ground scaling to the labels so the project can use grid coordinates while the labels are converted to ground.



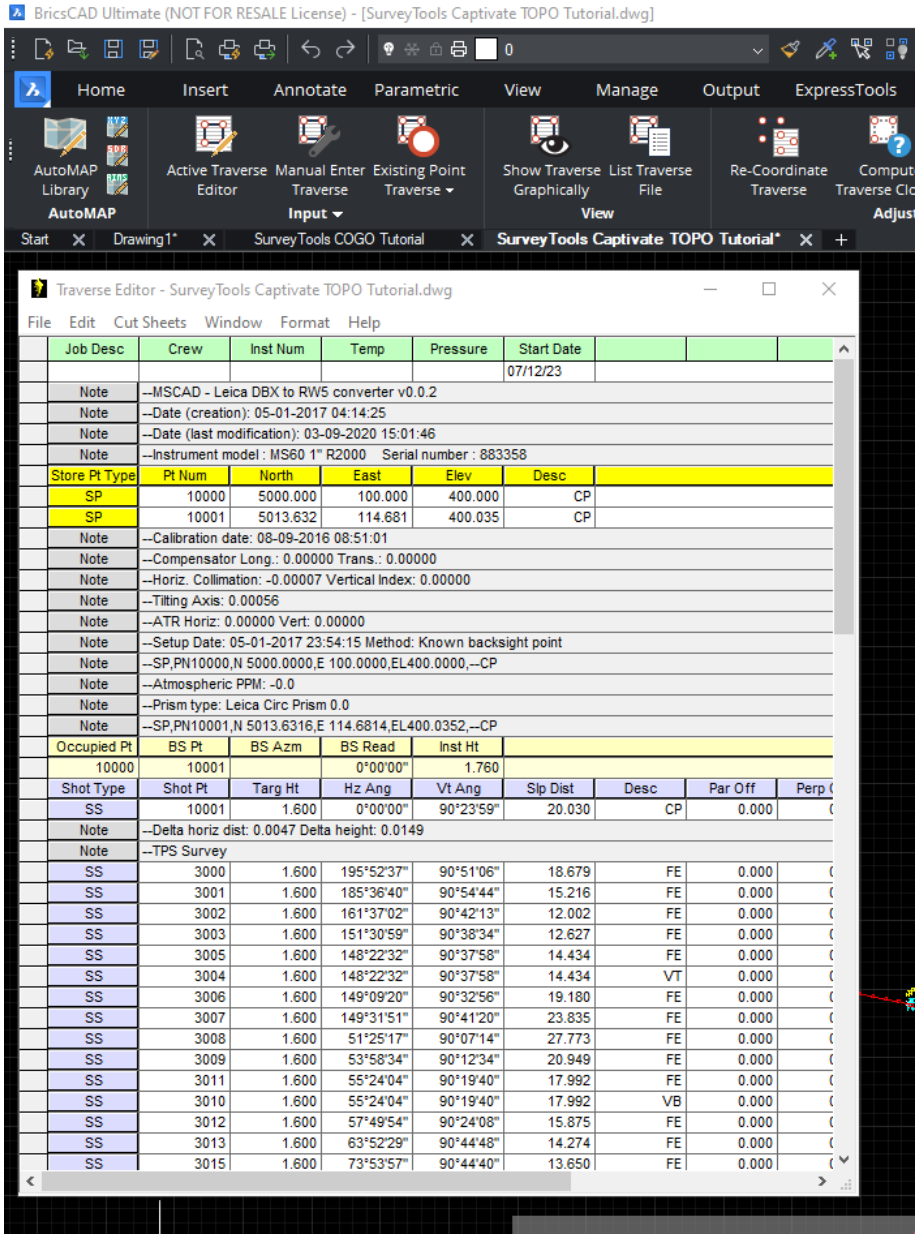
Single-Command Coordinate Geometry Computations

Feature	Benefit
Powerful, intuitive, and efficient COGO computations with integrated labelling and point symbols	Using our COGO command, you can create points and optional linework to efficiently compute points and linework at specified azimuths/bearings and distances, compute bearing/bearing intersections, distance/distance intersections, incorporate offsets, inline arithmetic operations, copy bearings or distances from other lines, and compute inverses from one easy to use command using only the keyboard (You can click too if you prefer!). Our online training project is in a grid coordinate system, we are working with ground distances for the entered distances and labelling. The goal is to subdivide a parcel in half on the east line, the dividing boundary parallel to the north line, and leave a 10-meter access corridor along the western edge for the northerly parcel to access the cul-de-sac. This is starting with the parcel lines already drawn using the COGO command. This workflow represents a 60% reduction in required user interaction to complete the same task compared to normal CAD operations.



Traverse Editor

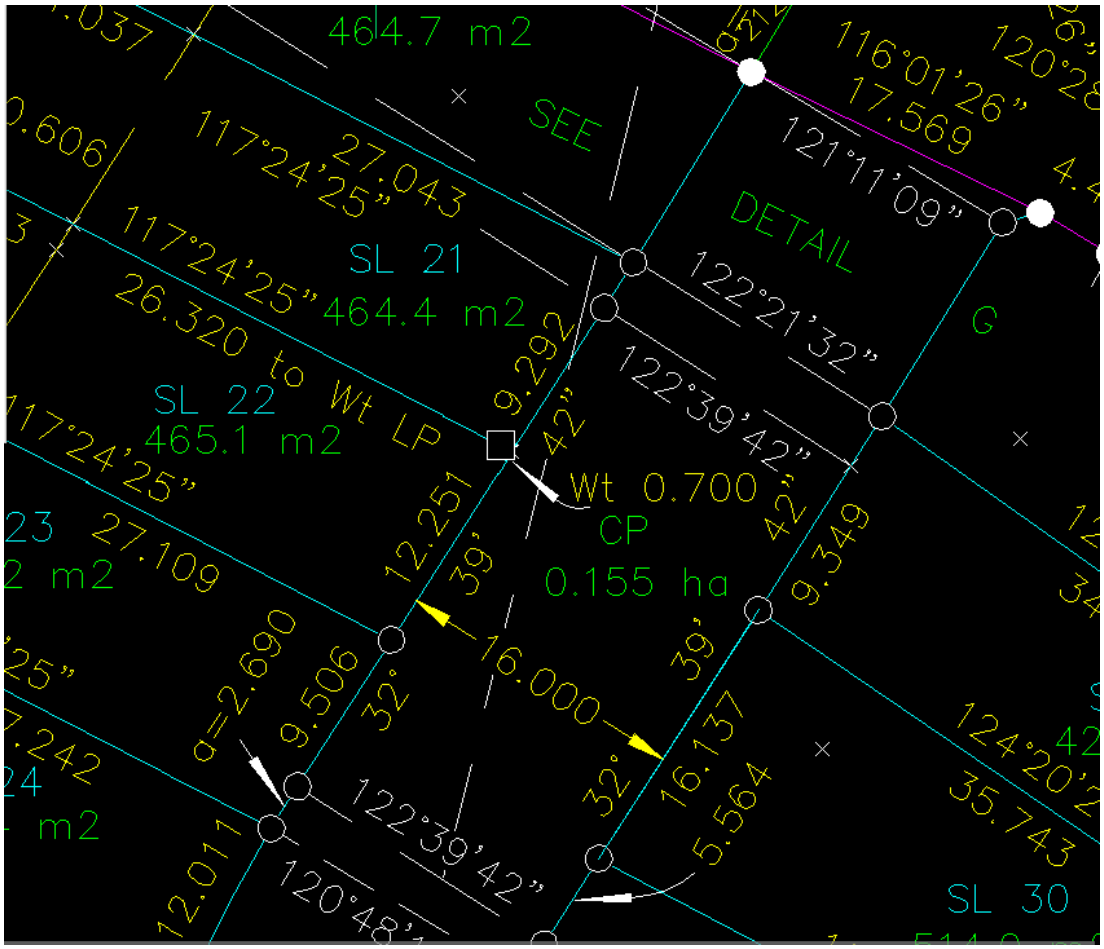
Feature	Benefit
QA, Adjust, and Recompute Traverse Data	In the Traverse Editor, you can view and correct blunders in target height, prism constants, incorrect setup or backsight point ID's and more before recomputing the traverse. This will update all points in your project that were created by the traverse. Traverses can also be adjusted by all the common techniques.



Job Desc	Crew	Inst Num	Temp	Pressure	Start Date			
					07/12/23			
Note	--MSCAD - Leica DBX to RW5 converter v0.0.2							
Note	--Date (creation): 05-01-2017 04:14:25							
Note	--Date (last modification): 03-09-2020 15:01:46							
Note	--Instrument model : MS60 1" R2000 Serial number : 883358							
Store Pt Type	Pt Num	North	East	Elev	Desc			
SP	10000	5000.000	100.000	400.000	CP			
SP	10001	5013.632	114.681	400.035	CP			
Note	--Calibration date: 08-09-2016 08:51:01							
Note	--Compensator Long.: 0.00000 Trans.: 0.00000							
Note	--Horiz. Collimation: -0.00007 Vertical Index: 0.00000							
Note	--Tilting Axis: 0.00056							
Note	--ATR Horiz: 0.00000 Vert: 0.00000							
Note	--Setup Date: 05-01-2017 23:54:15 Method: Known backsight point							
Note	--SP,PN10000,N 5000.0000,E 100.0000,EL400.0000,--CP							
Note	--Atmospheric PPM: -0.0							
Note	--Prism type: Leica Circ Prism 0.0							
Note	--SP,PN10001,N 5013.6316,E 114.6814,EL400.0352,--CP							
Occupied Pt	BS Pt	BS Azm	BS Read	Inst Ht				
10000	10001		0°00'00"	1.760				
Shot Type	Shot Pt	Targ Ht	Hz Ang	Vt Ang	Slp Dist	Desc	Par Off	Perp
SS	10001	1.600	0°00'00"	90°23'59"	20.030	CP	0.000	
Note	--Delta horiz dist: 0.0047 Delta height: 0.0149							
Note	--TPS Survey							
SS	3000	1.600	195°52'37"	90°51'06"	18.679	FE	0.000	
SS	3001	1.600	185°36'40"	90°54'44"	15.216	FE	0.000	
SS	3002	1.600	161°37'02"	90°42'13"	12.002	FE	0.000	
SS	3003	1.600	151°30'59"	90°38'34"	12.627	FE	0.000	
SS	3005	1.600	148°22'32"	90°37'58"	14.434	FE	0.000	
SS	3004	1.600	148°22'32"	90°37'58"	14.434	VT	0.000	
SS	3006	1.600	149°09'20"	90°32'56"	19.180	FE	0.000	
SS	3007	1.600	149°31'51"	90°41'20"	23.835	FE	0.000	
SS	3008	1.600	51°25'17"	90°07'14"	27.773	FE	0.000	
SS	3009	1.600	53°58'34"	90°12'34"	20.949	FE	0.000	
SS	3011	1.600	55°24'04"	90°19'40"	17.992	FE	0.000	
SS	3010	1.600	55°24'04"	90°19'40"	17.992	VB	0.000	
SS	3012	1.600	57°49'54"	90°24'08"	15.875	FE	0.000	
SS	3013	1.600	63°52'29"	90°44'48"	14.274	FE	0.000	
SS	3015	1.600	73°53'57"	90°44'40"	13.650	FE	0.000	

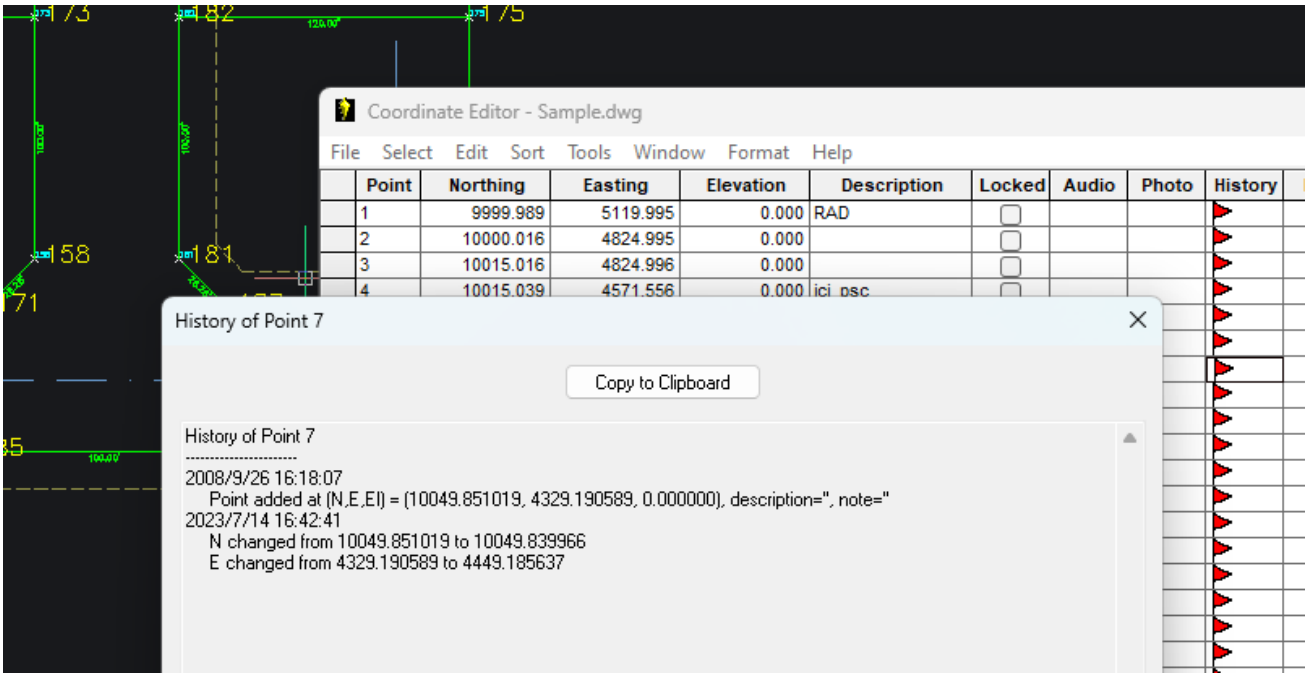
Lot, Block, and Parcels

Feature	Benefit
Fully Featured Block, Lot, and Parcel Tools including computing lot closures.	Lots and parcels can be created, labelled, and subdivided using specialized tools. We provide a tool to compute and report on the closure of lots using only the labels. This ensures the plans your firm produces are labelled correctly.



Point History Tracking

Feature	Benefit
Full data traceability with point history, reports, and point comparisons	Many of our commands contain built-in reporting which can be saved for your records. Points contained in the database have history logging with time stamps for modifications to the points. This combination of history logs and reporting help limit your exposure to liability.



Smart Linework and Labels

Feature	Benefit
Dynamic bearing/azimuth and distance line labelling with scaling	Smart Lines, arcs, polylines and labels: This is where the magic happens. Our line and polyline database is point defined, meaning when points move the linework updates. The labels for linework reads the information from the line, and updates when changes happen. Linework contains scale information, which allows us to have dynamically updating line and polyline labels with scale factors applied if you choose to apply them.