



Product Bulletin

940CIVIL CONSTRUCTION

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TRIMBLE DISTRIBUTOR CONFIDENTIAL

TRIMBLE SITEWORKS RELEASE HISTORY VERSION 1.00 to VERSION 1.75

Introduction

This document serves as a summary of the features released in each version of Siteworks. For more information on any given feature please see the specific Release Notes associated with that version and the most recent version of the Siteworks User Guide. Release notes are available on the Civil Construction Partners Documents site and also on the Siteworks webpage at:

<https://heavyindustry.trimble.com/en/products/siteworks-positioning-system> under Downloads > Documentation.

Siteworks v1.0

Release date: April 18, 2018

Release Version Number: 1.00.18101.473

Required Software Protection Plan Date for upgrade: March 31, 2018

Features:

- Initial Release of Siteworks. Refer to release notes and user guide for updates and changes from SCS900.

Siteworks v1.01

Release date: July 18, 2018

Release Version Number: 1.01.18203.233

Required Software Protection Plan Date for upgrade: June 30, 2018

Features:

- Measure when level for SPS986 in walking mode
- Arrow key support for main menu navigation

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- Utility locator support; enabled through Ctrl+O menu
- General Improvements:
 - Improved the usability of pinch to zoom in the 3d view. Users will now be able to more easily zoom in close to a 3d model.
 - Setup of Utility locators officially supported in Siteworks by pressing CTRL+O (Letter “oh”) and selecting “Enable Utility Locator Setup”.
 - Various language and translation updates.
 - General updates to system and performance.
 - Updates to the Coordinate System Library.
- Bug Fixes:
 - Incorrect scaling of DXF file exports for measured Project data with units of feet.
 - Battery level status in Siteworks now matches what is displayed in the Windows Operating System.
 - Users with an expired SCS900 license file on their device can now use the Siteworks Emulator.
 - DXF files containing splines can now be imported and the splined line data will be displayed but the user will not be able to select these features for staking or reference lines as Splines are unsupported by Siteworks. Siteworks now also displays an error message when the DXF file fails to load correctly.
 - Not showing closed lines imported from certain DXF files.
 - Records the tilt value at the time a measurement is taken instead of the time the point is stored.

Siteworks v1.02

Release date: December 12, 2018

Release Version Number: 1.02.18400.62

Required Software Protection Plan Date for upgrade: November 30, 2018

Features:

- Dynamic Tilt in Vehicle Mode for SPS986
- SPS785 Support
- Remember last used line elevation in 2D/3D line stakeout
- Performance improvements when loading large DXF/DWG files
- General Improvements:
 - Various minor language and translation changes in Finnish, Japanese and Danish.
 - General updates to system and performance.
 - Updates to the Coordinate System Library.
- Bug fixes:
 - In v1.01, Windows updates caused the on screen keyboard to keep appearing. This bug was fixed.
 - When using a TSC7 with a total station and prism the buttons on the TSC7 keypad could not be used after a loss of lock to the prism occurred.
 - Surfaces were not displaying correctly in certain situations in the 3D view.
 - When using a published coordinate system and applying the mean sea level correction a bug has been fixed to allow this correction to be applied during a known point, or arbitrary setup with a total station.

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Siteworks v1.03

Release date: April 17, 2019

Release Version Number: 1.03.19100.22

Required Software Protection Plan Date for upgrade: March 31, 2019

Features:

- Send position and status information to WorksManager beta.
- General Improvements:
 - Updates to the Coordinate System Library, including a fix for a scale factor calculation bug in the Swiss Coordinate System CH1903+.
- Bug Fixes:
 - Fixed a crash when leaving required FXL attributes blank. Siteworks will now default to the first selected item in the dropdown list.
 - A bug when recording a point at an offset when using the Dual Measurement option has been fixed.

Siteworks v1.10

Release Date: June 5, 2019

Release Version Number:

Required Software Protection Plan Date for upgrade: May 31, 2019

Features: 1.10.19202.379

- Siteworks Mobile for Android Tablets - See Android Release notes for details
- Tilt Compensation on Survey Pole for SPS986
- Plumb Pole Routine for SPS986
- General Improvements:
 - An issue that caused radio connection problems using the internal 2.4GHz radio on some recently shipped T10 Tablets has been fixed.
 - When Siteworks is not connected to a GNSS or Total Station and is not active the screen will turn off or the system will go to sleep after a time period to save battery power on the controller according to the device's OS settings.
 - Cosmetic improvements have been made to the GNSS Status Sky Plot so all satellites that are used are displayed. Siteworks was previously limited to only showing 24 satellites in the skyplot.
 - The term GPS was replaced with the more accurate term GNSS throughout the software.
 - Updates to the Coordinate System Library.
 - Various language and translation updates.
 - General updates to system and performance.
- Bug Fixes:
 - A bug that caused the eBubble warning to appear when the eBubble was not calibrated has been fixed.

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- Known issues:
 - Removed utility locator support. Must use v1.03 to connect to utility locators
 - Removed support for setting up connections to external radios. Radios must be configured outside of Siteworks and select “External Radio” correction method in the receiver connection screen.
 - Siteworks v1.10+ is no longer able to connect to any receiver running firmware version 4.6 or below.

Siteworks v1.11

Release Date: October 16, 2019

Release Version Number: 1.11.19302.221

Required Software Protection Plan Date for upgrade: September 30, 2019

Features:

- Background image support for raster images with an associated world file; Windows devices only
- New current location crosshair icons in plan view with bearing indicator when in Tilt Compensation
- Map view rotation according to SPS986 Bearing
- Stakeout enhancements to fine guidance bullseye using SPS986 Bearing
- Total Station Settings shown during first Total Station Setup to enable entering of scale factor. Option is activated through the ctrl+O menu and selecting “Display scale factor option at connection”.
- Object layer names displayed in Stakeout Object Selection Screen
- Added Support for RTX Corrections on SPS785
- Added Support for the MPS865 Marine Receiver
- Utility Locator support added back in and for Android systems
- General Improvements:
 - Siteworks v1.11 can now connect to Trimble R10-2 and R2 GNSS Receivers.
 - Siteworks now displays codes in an FXL file (feature code library) with more than 5 characters in the plan view.
 - When a base setup is completed in Siteworks the base elevation mask now defaults to 10 degrees instead of 7.
 - When vehicle mode is used with Tilt Compensation enabled a user can now view and record the same values as in standing mode (Pitch, Roll, Site Bearing).
 - A total station calibration can now be completed when a controller is connected to the total station via 2.4Ghz radio link. Previously it was only possible to calibrate a total station via a Bluetooth or Cable connection.
 - Translation updates including Danish and Italian.
 - Coordinate System Database update to v87.
- Bug Fixes:
 - A crash was fixed that occurred after taking multiple high resolution photos as attributes when using a Feature Code Library.
 - A bug was fixed for a certain limited number of coordinate systems that use a Shift Grid file (SGF) that produced positional errors.

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Siteworks v1.20

Release date: March 25, 2020

Release Version Number: 1.20.20102.355

Required Software Protection Plan Date for upgrade: March 31, 2020

Features:

- VCL File support for Designs, Avoidance Zones, and Background Site Maps
- TDC600 Small Screen Android support
- Create PDF Reports
- Tilt Compensation with Centerpoint RTX Enabled for SPS986
- Centerpoint RTX Corrections over Internet
- Set base station satellite elevation mask during setup
- Updates to User Interface: “Side by Side” selection screens & moved some map icons to left side
- Enhanced FXL toolbar behavior
- Change references from “Trimble Connected Community/TCC” to “WorksManager”
- Prompt to reload site after performing WorksManager sync
- Tap and Hold pop-ups now show object layer names
- Change name of “Static” GNSS correction method to “Autonomous”
- Geoid selection shows GGF filename when choosing coordinate system cc
- General Improvements:
 - Siteworks will now dash out the precision values when losing a RTK-quality fix when in Tilt Compensation mode. Such an instance may occur when losing a VRS connection or radio link to a base station and after xFill corrections expire. Measurements are now prevented when no precisions are displayed in the software. The GNSS receiver must be in an INS(RTK), INS(RTX) or INS(xFill) fix quality as seen in the WebUI in order to display precisions and therefore take a measurement when Tilt Compensation is enabled.
 - Improved status messaging in the Sky Plot and correction icon in status bar when in xFill mode.
 - xFill is now automatically disabled when using RTX; this can prevent errors in correctly utilizing the RTX datum and for measuring RTX datum shifts.
 - Ability to select “Controller’s Radio” as a correction method for receiving GNSS corrections over 2.4GHz radios. This allows for the use of a controller’s Empower (TSC7 & T7) or built-in (T10 and Site Tablet 10) 2.4GHz radio to be used to receive GNSS corrections.
 - Added support for “GeoRadio” in base station setup to allow for the setting up of a 2.4GHz radio to broadcast base station corrections.
 - Direct IP GNSS connections now available through the “Internet” correction method. It is now possible to input an IP address and port for direct connections to correction streams without requiring a username or password. This was previously not available in Siteworks.
 - Updated the Trimble Coordinate System Database to version 89.
 - Siteworks now supports coordinate systems with a projection grid shift.
 - The ability to connect to a R12 GNSS receiver has been added.
 - SPS610/SPS910 Total Stations and the SPS882 GNSS receiver are no longer officially supported in Version 1.20 of Siteworks. The user will still be able to connect and use the devices in Siteworks, but these end of life products are no longer actively tested and verified to work in Siteworks v1.20. If any problems with these devices are encountered you must roll back to a prior version of Siteworks that listed support for these devices.

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- Bug Fixes:
 - A bug displaying isolated .ttm surfaces where Siteworks was not respecting surface boundaries was fixed.
 - A bug exporting GCS900 .CFG files from Siteworks when using site calibrations made in TBC was fixed.

Siteworks v1.30

Release date: July 15, 2020

Release Version Number: 1.30.20200

Required Software Protection Plan Date for upgrade: June 30, 2020

Features:

- Inches Display for Projects in US Survey and International Feet
- Trimble Remote Assist in WorksManager
- Android Total Station and TDL2.4 External Radio Support
- Support for TDL2.4 External Radio
- Site Calibrations with CenterPoint RTX
- EM100 GNSS Module Support Added
- Use Last Settings when Setting up Machine Control
- Background Images Now Available on Android
- Support for Samsung Galaxy Tab Active Tablet and S10+ Smartphone
- Android Screen Rotation Enabled
- Stop at Tangent Points when Staking VCL Alignments
- General Improvements:
 - Added support to show “OwnDrive”, an online cloud storage service as an available system drive.
 - Improved text display behavior when using VCL files.
 - Update to latest Coordinate System Database of v90.
 - Translation updates.
- Bug Fixes:
 - Fixed crash with certain VCL data if a 3D view was visible when opening a project.
- Known Issues:
 - When exporting to machine control, the check for if the DC file was generated using RTX may incorrectly indicate that the site was calibrated with RTX and prevent export even if the site was not calibrated with RTX. If this error message appears, reload the site and try exporting to the machine again.
 - When using a UTS on Android if the user brings up the control panel by tapping on the prism icon, the prism and battery icons may disappear from the top of the screen.
 - It is not possible to change the network ID of the UTS when doing a Machine Control Setup. Attempting to change the Network ID will cause Siteworks to lose connection to the UTS and require a restart of Siteworks and the UTS. You must use v1.20 to change the Network ID.

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Siteworks v1.30 Patch

Release date: August 19, 2020

Release Version Number: 1.30.20201.252

Required Software Protection Plan Date for upgrade: June 30, 2020

Features:

- Rover Antenna Height Limit Changed to 100m
- Internal Security Updates to Password Storage
- Bug Fixes:
 - A display issue with the Fine Stakeout Guidance distances being obscured by the map toolbar when the Advanced Measurement Module was not installed has been fixed.
 - A missing measurement toolbar has been replaced when in certain stake modes and there is no Advanced Measurement Module installed.
 - Fixed an issue preventing the changing of the Total Station's Network ID when setting up a UTS in Machine Control Mode.
 - Crash fixed if an FXL code was selected when switching to stake mode on Android.
 - Suppressed an incorrect message regarding the need to connect to the internet to validate a license.
 - Fixed crash that can occur in site calibration routine.

Siteworks v1.31

Release date: December 3, 2020

Release Version Number: 1.31.20400.240

Required Software Protection Plan Date for upgrade: November 30, 2020

Features:

- Streaming output for Windows 10 devices with AMM
- Android Cable UTS Connections
- VCL Design Exports for Earthworks
- Select "None" as "Default Point Input Field" Option
- Setup RTCM3.2 Corrections of 450MHz Base Stations
- Allow Stationing Format for Line Start Station in Stakeout Line Settings
- RTX Site Calibration Report now Available
- Support for Surface Template Instructions in VCL Corridor Models
- General Improvements:
 - Fixed issue with total stations that could lead to potential position errors when Total Stations have been used by other field software
 - Update Coordinate System Database to Version 93
 - IMUs shut off during base station setup
 - Internal radio shut off in SPS785 for all correction methods except for internal radio
 - Somero .NOD file format export added to Data Management menu when activated in Ctrl+O menu. .NOD always exported in meters regardless of site unit settings
- Known Issues:
 - Siteworks is not yet able to utilize VCL linework with 3D linestrings produced in TBC that have Vertical Points of Intersection (VPIs) as the line's elevation definition.

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Siteworks v1.40

Release date: March 3, 2021

Release Version Number: 1.40.21100.164

Required Software Protection Plan Date for upgrade: February 28, 2021

Features:

- Siteworks SE Starter Edition Initial Release
- Support for TSC5
- EM100 Precise RTK Support for External Antennas
- New Line Length and Area Displays in Info Bar/Panel
- Receiver Wifi “Switch” in GNSS Settings
- Read & Display Point Codes in VCL Files
- Fractional Seconds added to GNSS Timestamps in CSV Exports
- General Improvements:
 - Language and Translation Updates.
 - Adjustments to certain screens to improve legibility on small screen Android devices.
 - Fix to an issue introduced in v1.31 where IBSS connection setup was not able to be completed.
 - Improvements to taking measurements in the Traverse routine to reduce failed measurements.
 - Fixed an issue with inverted text on south azimuth sites.
 - An improvement in GNSS connection speed was made on Android devices to decrease the amount of time between finishing the GNSS setup and when the map screen appears.
 - Fixed an issue on MPS865 and SPS785 receivers where incompatible radio settings could be selected on 450MHz radio equipped units. Now only compatible regional radio settings are available to be chosen during setup.
 - Fixed an issue where “+” or “-” was not able to be entered into the station/chainage selection field on devices with a physical keyboard.
 - Fixed issue between TDC600 and SPS785 receivers to improve connection quality and reduce the number of lost connection messages.
 - Fixed a bug where GNSS guide arrow and fine navigation bullseye would stop being displayed during Stakeout after staking an alignment in random station mode.
 - Siteworks now respects the controller's OS screen lock setting. When locked in the OS, Siteworks will not rotate 180 degrees if the controller is flipped upside down.
- Known Issues:
 - There are some isolated workflows on Android devices with a physical keyboard where pressing the “Enter” key may not properly trigger the “Accept” button in Siteworks. Tapping the “Accept” button on the touchscreen will work properly in those instances.
 - Users with a Siteworks TPaaS system will not be able to switch into Siteworks SE mode.

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Siteworks v1.41

Release date: July 14, 2021

Release Version Number: 1.41.21200.277

Required Software Protection Plan Date for upgrade: June 30, 2021

Features:

- VCL Design File Functionality Improvements
 - Support for Linestrings with Vertical Point of Intersection (VPI) elevations
 - Support for multiple Vertical Alignments along a Horizontal Alignment
 - Support for “Cleaned Up” VCL files exported from TBC with the “Cleanup” command on
- Set Random or Fixed as Default Line Stakeout Method
- Customize PDF Reports with an Image/Logo and Company Information
- Machine Control Data Export to USB Drives on Android Devices
- Updates to Available 450MHz Base Station Transmit Modes
- Security Upgrades for Status Messaging to WorksManager - Must upgrade to v1.41 by Aug 31, 2021 to continue to report status and location data to WorksManager
- 30 Day Siteworks Demonstration Licenses for Windows now Available in Trimble Installation Manager
- General Improvements:
 - Fixed multiple reported crashes on Android devices for improved performance and stability.
 - Language and Translation Updates including the addition of Czech as a supported language.
 - Android 11 is now supported in Siteworks v1.41
 - Official support for the Samsung Galaxy Tab S7 Tablet
 - Update Coordinate System Database to version 97
 - TPaaS license support for Android devices has been added
 - A bug was fixed in the BaseAnywhere “Update Base Position” workflow when using modular receivers with an external antenna that could have resulted in an incorrect APC offset being used in the updated base position.
 - Siteworks with a TPaaS license can now be switched into Siteworks SE Starter Edition mode.
 - Fixed bug in stockpile scanning with SPS620 total stations where the same point was repeatedly measured.
 - A change has been made to allow exporting of Machine Control data to GCS900 systems where a coordinate system is not present in the CoordSystemDatabase.xml.
 - Fixed an issue with opening some DXF files that had block definitions at original insert locations with large negative coordinate values.
 - Bug fixed that would cause photos taken in portrait mode to be rotated incorrectly in PDF reports.
 - Fixed an issue that can prevent all available VRS Mountpoints from appearing in the Source Table.
 - Improved SPS785 and TDC600 connections to reduce erroneous “New Base Station Detected” messages.
- Known Issues:
 - Certain COGO created points may not be elevated properly when doing a point offset command on a linestring with a VPI definition.

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Siteworks v1.42

Release date: November 3, 2021

Release Version Number: 1.42.21300.210

Required Software Protection Plan Date for upgrade: October 31, 2021

Features:

- Surface Cross Section for non-corridor template surfaces
- VRS/Internet GNSS correction settings now saved on a per-project basis
- Option to Set Decimal Place Precision Display for Info Bar and Info Panel
- New Option to Specify the Decimal Delimiter in Style Guides
- General Improvements:
 - Tapping the Map Options button  on the plan view map screen or entering it through the *Menu > Settings > Map Options* has been reverted to open the “Measure” tab from the layers tab.
 - Multiple improvements to small screen displays on Android devices have been made in the area of showing more rows of data in the Point Manager and in the Tap and Hold pop-up screens.
 - Improved performance and stability of Siteworks on Android devices when using total stations to decrease lags in position updates and reduce apparent freezing.
 - When using a MT1000 or MT900 in Walking or Standing modes in active mode the update rate has been adjusted to 3Hz to improve Siteworks performance.
 - EZ level functionality is now available with Tilt Compensation on.
 - The list of Background Images on Android devices has been alphabetized when selecting an image from the pulldown in the Images tab of the Map Options.
 - UI optimizations were performed to ensure progress bars pause less frequently when loading designs.
 - Base station antenna height is now limited to 4m or less during setup to fix a height error that can occur when saving a base station location as a control point during a Site Calibration.
 - Images with a portrait orientation in PDF reports are now centered in the PDF report.
 - Memory handling of large TTM files and surfaces within VCLs has been improved to increase Siteworks performance and stability.
 - Reduced the amount of writing to the setting XML files to optimize performance and decrease chances of XML file corruption if device power is lost or Siteworks crashes.
 - Bug fixed that would cause the Fine Guidance stakeout arrows to be reversed when using a “Use Last” or “Read from Instrument” UTS Setup.
 - Siteworks will now properly send 16 characters of a base station name to a base station.
 - Crash fixed when editing a table value in the Key-In Corridor and the user attempted to cancel.
 - Fixed an issue with Software Protection Plan expiration dates equal to the software entitlement date not recognizing the correct date properly.
 - Bug fixed where a SPS785 may give incorrect elevations from a base setup on a control point that was saved during a Site Calibration.

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- A bug introduced in v1.41 that did not display all storyboard points when staking a catch point from a .PRO file has been fixed.
- Bug fixed when setting a custom prism constant in regions using a comma as the decimal separator that could lead to an incorrect prism constant being saved.
- A crash introduced in v1.40 was fixed when returning to the map screen after selecting a catch point in the select stakeout object workflow when using a .PRO file and default station selection mode was set to random.
- Language and translation updates based on user feedback.

Siteworks v1.43

Release date: February 17, 2022

Release Version Number: 1.43.21400.213

Required Software Protection Plan Date for upgrade: January 31, 2022

Features:

- Horizontal Light Bar
- Export to USB on Android
- Import from USB on Android
- 3D Surface Vertical Exaggeration
- Cross Sections Vertical Exaggeration
- Scaled Distances in UTS Control Panel
- File Delimiter Restrictions Removed on Android
- Open PDF Report or Folder on PDF Creation
- 30 Day Demo License for Trimble Android Devices via TIM
- 3D Surface Color Palette Reversed
- Easier Switching Between Positioning Instruments
- CAD Text Display Improvements
- DXF/DWG/VCL Points Now Displayed in Point Manager
- Trimble GeoData Folder Created at Installation
- Now Export DXF in Siteworks SE
- General Improvements:
 - Layer state of Frozen Layers properly displayed in layer manager
 - Improved VRS/Ntrip source table parsing
 - EM120 for GNSS Corrections & Baud Rate Setting enhancements
 - Correct project units to exported DXFs.
 - Remote Assist updates to improve stability
 - *.surface.dxf now usable on Android
 - Update to CoordinateSystemDatabase 101
 - No user identifiable information published in DXF headers
 - Android Operating System Icon fixes
 - TSC5 PDF Report Photos saved upside down fixed
 - Fixed issue with incorrect line start station on Android in languages with Comma as decimal
 - Reversed GO directions for UTS staking in Info Bar/Panel fixed
 - Crash fixed when connecting to video enable S-series total stations
 - Bug fixed when deleting line when actively measuring another line
 - Crash fixed when attempting to cancel during Bluetooth connection to GNSS

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- Bug fixed missing node names and incorrect storyboard when staking catch points from PRO files
- General performance and stability improvements
- Language and translations updates based on user feedback
- Known Issues:
 - Siteworks compatibility has not been tested or confirmed to work on Android OS 12. Therefore upgrading a BYOD to Android 12 may lose the ability to run Siteworks on that device.

Siteworks v1.44

Release date: July 13, 2022

Release Version Number: 1.44.22200.245

Required Software Protection Plan Date for upgrade: June 30, 2022

Features:

- LandXMLDesign Import & Convert to VCL
- Option to Display Project, Work Order or Design Name in Title Bar
- UTS Raw Data Output Stream via USB to Serial Adapter on Android
- GNSS Precisions and Status in Info Bar/Panel
- Pass Attributes from VCL Design Files to Staked Point FXL Attributes
- Key-in Lat Long Hight/Elevation into COGO and Key In Coordinates
- General Improvements:
 - Win11 on T100 Tested and Supported
 - External radio now available option for MPS865
 - UTS connection improvements with faster “Failed to Connect” message
 - Project load times improved for large FXL file
 - Updated base & rover antenna height diagrams
 - Fixed freeze/crash when lose prism lock during averaging measurements
 - Tracklight on UTS will shut off when switching to Machine Control Mode
 - Fixed issue in Siteworks SE where linework could disappear after reloading a Work Order
 - Fixed an issue with importing data from USB drives on Android devices
 - Several user-reported crashes fixed
 - Updated Trimble Remote Assist Installer for improved performance and stability
 - Language and Translation updates
 - Updated Coordinate System Database to version 102
- Known Issues:
 - Siteworks on Android systems may not read VCL files properly if there are more than two decimals in the file name.

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Siteworks v1.50

Release date: November 16, 2022

Release Version Number: 1.50.22400.308

Required Software Protection Plan Date for upgrade: October 31, 2022

Features:

- SX12 Support for video workflows, photo panoramas, point cloud collection & review
- COGO Offset Line
- VCL Library Update to Current Version of TBC Libraries
- Upgrade to 64 bit architecture
- Improvements to Total Station Connectivity on TSC5 and overall
- Option to Suppress Target Lost Messages
- PNT Field Data Export for Trimble Earthworks
- Option to not display Avoidance Zone Info Message at Project Load
- Upload Diagnostic Data to WorksManager
- Improvements to TPaaS and Termed Subscription License Behavior and License Info Displays
- General Improvements:
 - Closed linestrings in LandXML now preserve line names on import and conversion to VCL
 - Improved LandXML import support for linework with both triangle and breakline defined surface definitions
 - Modified IBSS settings when configuring IBSS base in Siteworks
 - Siteworks can now connect to a Trimble Alloy GNSS receiver as a base or rover
 - Bug fixed that prevented Siteworks from creating alignments in the Key-in-Corridor feature
 - Numerous crashes fixed based on reports received from Support channel
 - Language and Translation updates based on customer and dealer feedback
 - Updated Coordinate System Database to version 104
- Known issues:
 - Siteworks is not able to open a VCL file that contains images draped onto a surface as a surface member
 - VCL files with quick contour objects from TBC will show the quick contours at 0,0. Quick contours should be turned off or deleted prior to exporting a VCL to Siteworks.

Siteworks v1.60

Release date: May 24, 2023

Release Version Number: 1.60.23100.392

Required Software Protection Plan Date for upgrade: April 30, 2023

Features:

- Siteworks Machine Guidance Support
- LAS/LAZ SX12 Point Cloud Scan Export
- New Profile View
- Tilt Compensation Auto Toggle Off/On for Static Point Measurement
- Add & Delete 450MHz GNSS Receive Only Frequencies
- Stakeout Circular Plane
- Performance Increase When Loading TTM Designs

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- Additional “Design to Measured” Surface Option in COGO Volume Calcs
- Pulldown Menu Option for “Create New Project/Work Order/Design”
- EM940 Support
- Internet and RTX Correction Types Added to BaseAnywhere
- General Improvements:
 - RTX Datum/Epoch set to ITRF2020/2005
 - “File Transfer Complete” messages on Android appear after data is actually transferred
 - Emulated SPS986 position icon shows heading direction
 - HDOP & PDOP values now exported in CSV files
 - Progress bar and performance improvements when selecting linestrings
 - Improved connection times and stability for UTS
 - Last antenna type now saved with modular GNSS setup; default to Zephyr 3
 - Out of level check when performing a SX12 scan to prompt if want to save the scan
 - Improvements in 3D view panning performance
 - Improved SX12 turning behavior at high zoom levels when using the D-pad
 - Added Korean as supported language
 - 450MHz radio modes are now alphabetized
 - Bug fix where Enter key was not triggering manual measurement in walking and vehicle mode
 - Fiix for SX12 files containing certain non-English characters were not imported into TBC properly
 - Fixed an issue importing data from USB on Android in non-English languages
 - Bug fix where measurements offsets were still applied after being disabled in the “Measurement Settings” screen
 - Fixed issue with CSV exports on Android where all data was placed on one row of the file
 - Fixed broken toolbar in Create Template in Key-In-Corridor workflow
 - Formatting issue in first line of DC files fixed so files can be imported into VisionLink
 - Issue fixed where DXF text was incorrectly positioned when using a PENZD project
 - Fixed issue where elevation values of COGO 2D circles and arcs were incorrectly set
 - Fixed Android Bluetooth issue where GNSS receiver did not fully disconnect
 - Issue fixed where pressing Enter key could bring user to Info bar settings instead of triggering a measurement
 - Crash fixed when syncing projects to WorksManager that contained periods or spaces in file names
 - Fixed crashes when connecting to certain S-series and VX total stations
 - Numerous crashes fixed and stability improvements made based on submitted support cases
 - Language and translation updates based on user and dealer feedback
 - Coordinate System Database updated to version 106
- Known Issues:
 - SX12 users using firmware version S2.8.4 that have connected to Trimble Access v2023.00+ and were required to change the SX12’s wifi password will have to press the SX12 power button five times quickly in order to rest the wifi password to enable connection in Siteworks.
 - Siteworks Mobile for Android will crash in the COGO Key In Point feature if “Cancel” is pressed when entering values. This crash is not present in v1.50 or on Windows devices.

Siteworks v1.70

Release date: August 30, 2023

Release Version Number: 1.70.23300.188

Required Software Protection Plan Date for upgrade: July 31, 2023

Features:

- Integrated Survey GNSS + UTS Connections
- Georeference Background Images in Siteworks
- PDF Import of Background Images
- Support for the DA2 GNSS Receiver
- JXL use as DC file for coordinate system information
- New Stake Distance in Info Bar/Panel
- Machine Guidance IMU Status Bar Icon
- Total Station Height Defaulted to "Slope"
- Total Station Scale Factor Settings Always Shown During Setup
- Design File Point Visibility Controlled by Layer Setting
- Enhanced Machine Guidance IMU Calculations
- General Improvements:
 - Additional Baud Rate Options for External Radios
 - Coverage Grid Defaulted to Off
 - Background Image Transparency reversed so 100% transparency is "invisible" & 0% is opaque
 - Display bug of cutoff Trunion values in UTS leveling screen fixed
 - Removed hidden files starting with a period when exporting Earthworks Project Libraries
 - Additional logging information sent to Trimble Servers for usage & crash analytics
 - VCL Libraries updated to v5.90
 - Language and Translation Updates
- Known Issues:
 - In v1.60 background image support for TIFF images was dropped. Users requiring TIFF support will need to use v1.50 or below or convert the images in 3rd party software to PNG, BMP, GIF, JPG or PDF

Siteworks v1.71

Release date: December 6, 2023

Release Version Number: 1.71.23400.174

Required Software Protection Plan Date for upgrade: November 30, 2023

Features:

- Support for R580 GNSS Receiver - with Quick Release
- SPS785 Quick Release support
- "Turn To" option added to Total Station Joystick Screen
- Machine control data export updates
 - COGO Arcs & Circles included in "Measured Linework" & "Surface" exports to Machine
 - DXF/TTM Design conversion to SVL/SVD for GCS900 exports
 - Bug fixes for autos cutting out on Earthworks

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- .CPZ file delimiters fixed to ignore regional settings
- Integrated Survey GNSS Static Point Prism Height Offset Measurement Support
- Grade Report Updates
- Streaming output of Cut/Fill A-B added to streaming style guide
- General Improvements:
 - TIFF Background image support has been re-enabled. It is now possible to again select a TIFF file as a background image. TIFF support was not available in v1.60 and v1.70.
 - When setting up a base station in Siteworks the enterable base name has been limited to 16 characters and prohibits the entering of special characters.
 - A progress bar has been added when switching between DR and Prism modes with a UTS to improve user experience.
 - GNSS quick release settings have been moved to an AllSites setting. This will fix a potential issue where switching projects when connected to a GNSS receiver where the QR settings were different would not respect the current QR settings, and use the QR settings saved in the second project.
 - Siteworks Machine Guidance users are now prevented from entering any measure modes that use GNSS static measurements while in Machine Guidance mode.
 - Fixed a memory leak on Android that had the potential to negatively affect performance.
 - Improved handling of corrupt cache files leading to increased program stability.
 - Fixed issue where switching between measure modes with Tilt Compensation enabled could have put the receiver in a state where it could not be aligned.
 - A bug was fixed where sloping 3D VCL linestring arc segments were not providing the correct elevation when staking. Now any arc segments along a 3D Linestring will be properly elevated during a staking operation. This was only an issue for 3D arc segments that did not have an elevation assigned in the vertical tab of the Linestring editor.
 - A bug was fixed in Siteworks Machine Guidance mode where if the user had been using a Quick Release in a non-Machine Guidance mode, the QR value was incorrectly applied when in Machine Guidance Mode. Now when switching into Machine Guidance mode the Quick Release setting will be set to off and not applied. Note that now when returning to a non-MG mode the QR will remain off, and the user must turn it back on in the selected measure mode height screen.
 - Language and translation updates based on customer and dealer feedback.
 - Coordinate system database updated to v107. Note that with this update to the coordinate system database entries that have marked as obsolete in the database will now appear as selectable.
 - VCL Libraries updated to v2023.1.
- Known Issues:
 - Linestrings from VCL files that contain sloping 3D arcs will not carry the proper elevations into any extracted points or offset lines along the arc segment when using COGO. The elevation of the linestring's starting node will be the elevation extracted to any COGO derived objects from that arc segment. This is only an issue with COGO derived points.
 - A bug was introduced in v1.71 that prevents the user from manually typing in the desired station value in the stakeout line station selection screen if the +/- icon buttons are used. If the user taps the + or - icon to advance the station, it will not be possible to then type in a station value. The

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workaround is to simply tap on the map view to set the selected station and then manually enter a station value. This will be fixed in a future release.

Siteworks v1.72

Release date: April 17, 2024

Release Version Number: 1.72.24100.280

Required Software Protection Plan Date for upgrade: March 31, 2024

Features:

- Layer Support for Measured Data with FXLs
- Layer Management Enhancements
 - Updated Layer Manager with real time preview & split screen
 - Layer Name Search Bar
 - Layer Object Type Filter
 - Tap & Hold Isolate and Hide Layer
 - Layer Name display in Point & Line Info Screens
- Updated & Enhanced Excavator Machine Measure Up
- .PRO File Support on Android Devices
- Enhanced VCL Linestring Support
 - Full support for Linestrings in COGO
 - Support for Linestrings with missing node elevation values
 - Improved projection of Linestring's elevation beyond endpoints
 - Improved compute distance values
 - Linestring direction now a shared setting
 - Consistent Linestring elevations between TBC & Siteworks
 - Support of non-zero start stations for "double underscore" Linestring names
- Enhanced Support for TDL450B External Radio as a Managed External Radio (MER)
- Added RadioDetection RD8200 & Vivax vLoc-3 Pro Utility Locator Support
- Map Options added to Background Image Georeferencing Screen
- Option to Toggle Offset Corner Points in COGO
- Total Station Staking Guide Arrow
- Better Support for 3rd Party Base Station Correction Messages
- End User License Agreement Updates
- General Improvements:
 - Total station pressure and temperature values now stored to the tasklog.
 - Arcs are now included when performing COGO area computations. In prior versions of Siteworks Arcs were chorded which resulted in inaccurate area calculations for lines that had arc segments. This update also now allows for the calculation of the areas of circles.
 - Performance increase on Android to save approximately 10 seconds at startup.
 - Updated light green stakeout lines to a darker green to improve visibility in sunlight.
 - It is now possible to configure a MPS566 receiver as a base station in Siteworks.
 - Fixed an issue introduced in v1.71 on Android devices where photos taken by Siteworks were not exposed correctly.

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- Fixed an issue where a Tilt Compensated receiver may not have been in the correct mode when switching measure modes.
- Fixed a bug in Create Offset points where the user-entered vertical offset was not being applied at offset points at a corner node.
- A text-wrapping issue in PDF reports was fixed where long names were not wrapped correctly.
- Fix made for Works and Works Plus Subscription licenses that could not connect to Total Stations. Now any Works and Works Plus licenses will be able to connect to Total Stations.
- Fixed an issue using published coordinate systems that had commas in their names.
- A bug was fixed that could cause Siteworks to display the incorrect sign of the offset value when staking a 2D linestring beyond the end of the linestring.
- Crash fixed when entering a "*" character into the VRS or IBSS password field during rover setup.
- Design Selection Fixed bug in Siteworks where the wrong VCL surface was being selected when changing work orders. Siteworks now correctly populates the "Surface" selection box for the selected design when changing work orders.
- Tap and Hold fix When switching the active measured line using the Tap and Hold menu, Siteworks will now correctly close the line that was previously being measured.

Siteworks v1.73

Release date: September 11, 2024

Release Version Number: 1.73.24300.258

Required Software Protection Plan Date for upgrade: August 31, 2024

Features:

- Time Dependent Transformations for RTX; No longer need to measure a datum shift for use on RTK sites
- Updated PDF Formatting; Photos now centered, option to toggle image name, ability to choose LLH format as DD.DDDD or DMS
- Ability to change point type from/to Feature or Surface
- Added option to enter SX12 wifi password
- New Option to create new lines from COGO Distance and Bearing points
- Updated WorksManager sync behavior for Background Images
- General Improvements:
 - WorksManager syncing issue fixed with files and folders containing diacritical characters (e.g., å, æ, ø, ö).
 - Quick release option for R980, R12 & R12i during rover setup has been removed,
 - The minimum rod height for running the plumb pole routine reduced from 1.3m to 0.5m.
 - Background images will now not be loaded into memory if they are not set to display. This will result in faster Project map screen loading when Background Images are off.
 - .NOD files for Somero concrete screeds will now be exported in project units. Previously .NODs were always exported in metric units. .NOD exports are enabled through the Ctrl+O menu.
 - The number of decimal places in exported points will now match the number of decimal places in the vertices of line objects in exported DXFs.

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- Now when exporting a CSV of measured data containing FXL attributes, the attributes will be properly delimited according to the device's regional settings.
- When exporting measured data to a CSV, the date format will now respect the device's regional date format settings.
- Performance increase when displaying dashed lines for the cross section location and original cross section surface.
- Removed support for Intel processors for Android versions of Siteworks. This is not expected to impact any current known Android devices in use.
- Issue fixed that may have led to background images not being placed correctly.
- Fixed an issue where VCL points that had a label associated were not appearing.
- Removed Russian as a supported language. Users still requiring Russian language support can use the Language Tool Kit.
- Fixed an issue on Android devices where after the screen shuts off or the device was rotated that large characters would appear in the infobar.
- Fixed the issue of when a point is updated from Surface to Feature or vice versa, that the 3D or 2D maps would not update until the project was re-loaded or the map refreshed. Now when a point type is changed the maps will update to correctly reflect the point type.
- Fixed an issue where after a WorksManager sync when a design name changed the design's linework would not be displayed. If linework still does not appear correctly, toggle the layers off/on via the layer manager or reload the design.
- Bug fixed that could lead to incorrect elevations on points extracted from a surface in COGO offset points from a line when the original line had an arc.

Siteworks v1.74

Release date: November 6, 2024

Release Version Number: 1.74.24400.22

Required Software Protection Plan Date for upgrade: October 31, 2024

Features:

- Compact Track Loader Support for Siteworks Machine Guidance
- Heading Calibration Routine for Siteworks Machine Guidance
- Updated Measure up diagrams for Siteworks Machine Guidance
- General Improvements:
 - Fixed crash when staking a line in Siteworks Machine Guidance Mode

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Siteworks v1.75

Release date: January 15, 2025

Release Version Number: 1.75.24400.22

Required Software Protection Plan Date for upgrade: December 31, 2024

Features:

- Enhanced Device Provisioning and Setup in WorksManager
- Notifications, Automatic Download and Deletion of Designs Sent from WorksManager
- Avoidance Zone Enhancements to Create AZs from measured, design, and COGO lines
- Display Line Color of FXL Measured Line
- Exported DXF now preserves FXL layer names
- Support for Multiple Stakeout CSV Files
- Balanced Cut/Fill Volume Calculations and Design Export
- Integrity Check of Exported LAS/LAZ Point Cloud Data
- SX12/SX10 Scan Information now Saved to TaskLog
- General Improvements:
 - Bug fix for incorrect target height offset when performing GNSS static measurements
 - EM450 EMPOWER Module now supported
 - Internet correction issue fixed where incorrect zero value lat/long values could have been sent to corrections server
 - Streaming outputs re-enabled on Android devices for USB to Serial adapters
 - Improved connection behavior with Axiomatic Bluetooth sensor used in Siteworks Machine Guidance
 - GNSS Radio will be shut off for any correction method other than radio
 - Bug fixed for certain GNSS receiver subscription option codes where internet corrections were not working
 - Bug where displayed PPM values were not properly updating on Atmospheric Settings page of UTS setup
 - Fixed Android bug where pressing enter key on TSC5 while input text was highlighted would replace text with space instead of triggering Enter key
 - Fixed an "Access Denied" crash when performing WorksManager syncs
 - Coordinate system library updated to Version 110
 - VCL libraries updated to latest available at time of release

More Information

For more information, contact your local Trimble regional account manager.

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