



# Leica Builder in the “Green Industry”

by Erwin Bauer

**Garden and landscaping company Dukat is very pleased with its new Leica Builder Theodolite with electronic distance measurement combined with a PDA and seamless interface to Dataflor CAD and other specialist landscaping industry software. Enormous time-savings and the ability to create drawings even without specialist knowledge of surveying have convinced garden and landscaping expert Jürgen Dukat.**

When he attended a seminar last spring on site and quantity surveying, hosted by Leica Geosystems sales partner Dataflor, Jürgen Dukat was still sceptical about whether the acquisition of a CAD-supported surveying solution for his garden and landscape construction business in the form of the Leica Builder and PDA would really pay its way. “What finally convinced me was the ability of the system to link CAD

drawing data recorded on site with my own specialist software for producing bills of quantities. I later confirmed in practice on several occasions that the system was capable of being operated without any specialist surveying knowledge,” explains Dukat. The Leica Builder, Dataflor software CAD V6 and GreenXpert complement one another perfectly – they are ideal for many applications in garden and landscape construction.

## **Impressed by understandable surveying system**

One of the first projects was a survey of a 120 m diameter retention basin for the re-flooding of some marshland. The survey took less than two hours to complete. As is common with many local authority construction works the client required Dukat to submit an electro-optic survey for design verification and documentation of quantities. The first stage was to survey about 90 points and then link these using the

software module "Digital Terrain Model" from Dataflor before producing the associated earthworks volumes automatically in the form of a schedule. "Earlier I would have given such a survey to a surveying office, which would have charged me several hundred Euro. Now we can produce fully understandable calculations in a very short time backed up by exact CAD drawings. The possibilities of Leica Builder have allowed us to achieve very high standards in design, job preparation, and quantity surveying whilst providing the customer with a thoroughly professional service," says Dukat.

Shortly afterwards, the new equipment was used to survey some parkland with an area of around 40,000 square metres. Every individual tree and all the planted and grass areas were picked up and the annual maintenance and development plan for the park drawn up based on this accurate inventory. "Without Leica Builder we would have certainly needed a week for the survey alone. With the new system we were finished in a day and a half. The detailed CAD inventory drawing allowed us to calculate areas quickly. Based on this I estimated the cost of each task and was able to produce an exact quotation for the maintenance work," explains Dukat's construction manager Peter Reintjes.

### Highly accurate drawings

Peter Reintjes believes using a total station for pri-

vate garden contracts is also worthwhile. The construction manager appreciates the accuracy that the integrated surveying solution offers: "Surveying a site with a tape is very time-consuming. On the other hand with Leica Builder the process is done quickly and reliably. The brilliance of the system lies in the fact that for each point surveyed I also receive its height. I now have accurate information available to me that earlier I would have had to roughly estimate or spend a lot of time calculating. All slopes, angles, even curved shapes correspond exactly with the real situation on site. The system is therefore very valuable to us in design, execution and billing."

Not only does the total station supply precise ground survey information for the design and tender stage: thanks to the integrated interface with the CAD program it can transmit the drawing data from the surveyed site immediately over a wireless Bluetooth® connection to a hand-held computer (PDA) where it can be displayed as a CAD drawing. The user does not have to bother with survey sheets or coordinate lists. The newly surveyed points, lines, and areas can be viewed on-screen. Further details can be added to the drawing back in the office on a PC using Dataflor CAD software. ■

#### About the author:

*Dipl.-Betriebswirt Erwin Bauer is editor-in-chief of the professional journal bi-GaLaBau.*

## Leica Geosystems and Dataflor

Dataflor is the leading software provider for the "Green Industry" in Germany, Austria and Switzerland. It employs a staff of 60 at nine offices in Germany. Dataflor plans to increase customer satisfaction with this complete solution and has recently become a development and sales partner of Leica Geosystems for the garden and landscaping sector. Dataflor now offers several surveying solutions with Leica Geosystems sensors, for example Leica Builder, which can seamlessly exchange data in both directions with Dataflor office software.

