

2016



VECTORWORKS®
LANDMARK

Cover: National Gallery Australia - Australian Garden by McGregor Coxall.
Artwork by James Turrell titled 'Within Without.' Photo by John Gollings.

IT'S ALL ABOUT YOUR EXPERIENCE

Designers experience the world differently. So do we. That's why Vectorworks® software gives you the freedom to design in your own way. It feels like you think, supporting the creative process instead of replacing it, and enabling great design to materialize from inspiration, exploration, and discovery.

Creative design is in our DNA, so we place a heavy emphasis on the freedom of artistic expression through the development and documentation of each project. Industry-leading, intuitive programming and workflow features make our products a natural extension of the design process, providing the tools to take you from concept to SIM to built environment seamlessly.

Discover how Vectorworks Landmark software will enhance your workflows and improve your design process. From effective project sharing that allows you and your team to work concurrently on the same Vectorworks design file to a Hardscape tool that allows you to get more creative with pavements and walkways, Landmark designers will be poised to create unmatched experiences and transform the built environment like never before.

There's so much more to explore. Take a look and see what you can do with Vectorworks Landmark.

EXPLORE THE POSSIBILITIES

The freedom and power to explore is essential to the design process. Vectorworks Landmark allows you to bring your design ideas into the virtual world to investigate and discover. With Landmark on your side, you have an intuitive, flexible suite of resources that encourages you to create and explore any form.

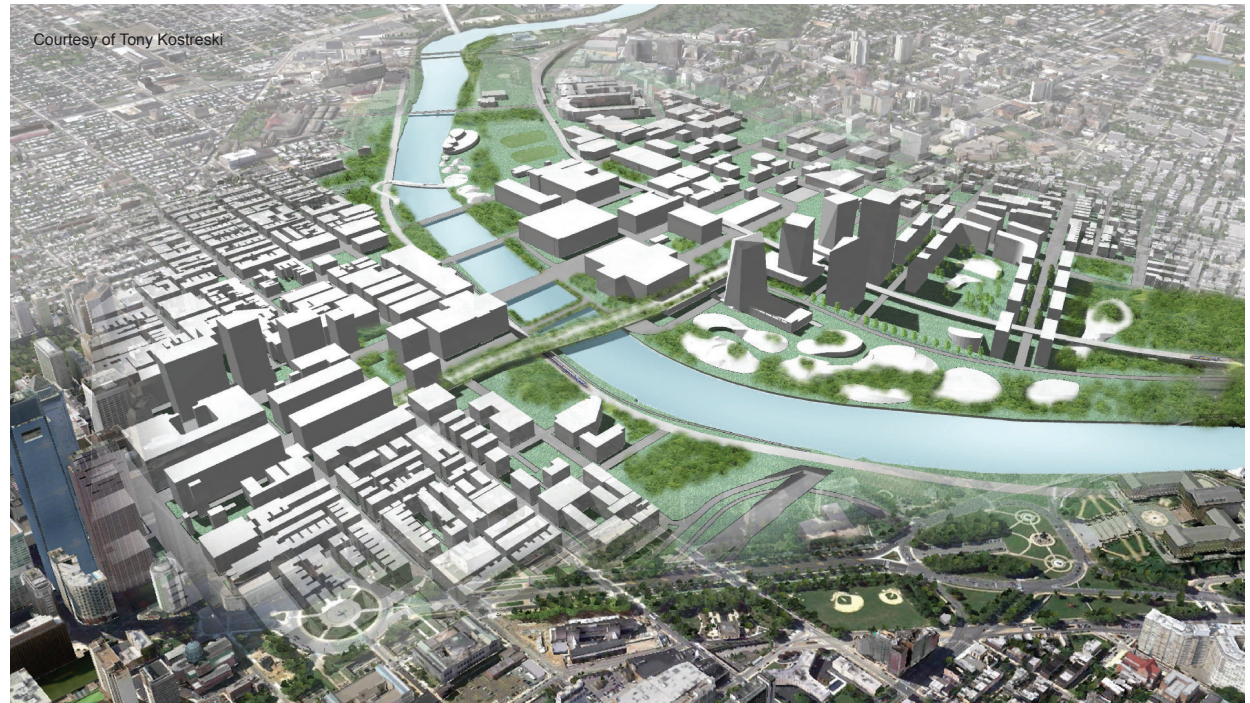


FULL RANGE OF PROJECTS

Vectorworks Landmark provides a flexible design environment that allows you to work on any type of project. Design residential plans at a 1:10 scale up to master plans at 1:1,000 or larger. The design tools easily scale up or down to accommodate your work.

INTEGRATED MAPPING AND GIS

Incorporate maps into your work with ease. Add survey data to your drawing and use it as the basis of your site model, or import CAD drawings and data from architects, builders, or engineers to use as base plans. Import geo-referenced aerial/satellite images and Geographic Information System (GIS) data files from federal, city, state, or other agencies to explore all of your design options.



Courtesy of hutterreimann landschaftsarchitektur, Berlin Wettbewerb "Park auf dem Gleisdreieck"

GROUND-BREAKING GRAPHICAL SCRIPTING

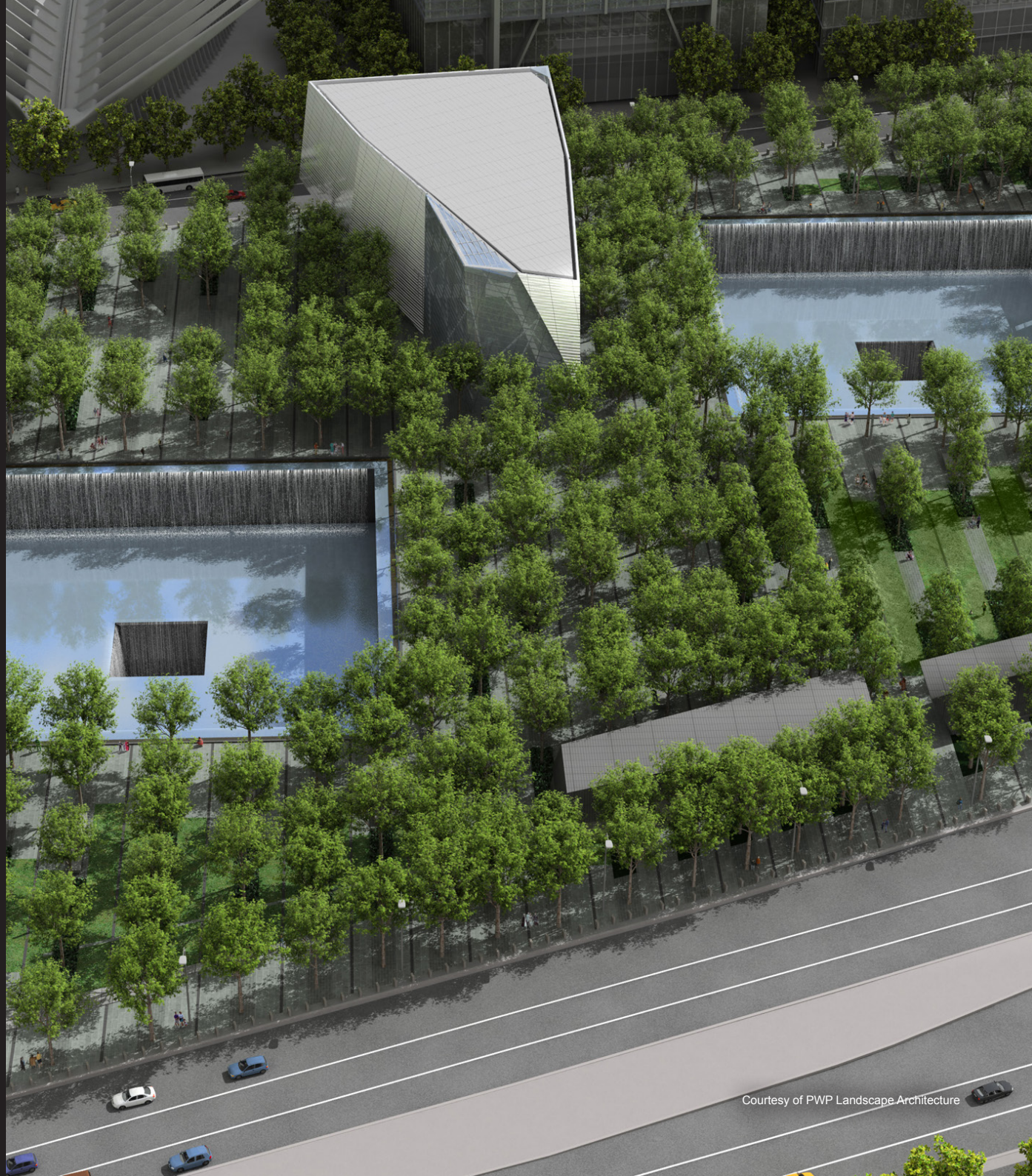
Graphical scripting will play a significant role in the workflows of the future. These tools, when built into an intelligent information modeling application, present landscape professionals and urban planners with unlimited opportunities to generate, define, build, and explore form and function throughout the design process — even automate data and information retrieval to enhance your BIM workflows.

Built directly into Vectorworks Landmark, Marionette is the first and only cross-platform graphical scripting tool for the

AEC, entertainment, and landscape design industries. This Python®-based scripting tool delivers a robust and scalable way to program well beyond the confines of traditional design software. When you use Marionette, you can create visual scripts that take advantage of the superior 2D interface and robust 3D modeling capabilities that Vectorworks software offers, ushering in a new world of discovery that enhances your workflows. Imagine using this powerful tool to create stunning visual pieces in landscape architecture, as well as unique, organic shapes that are scalable and constructible.

CAPTURE YOUR INSPIRATION

Go beyond exploration, channeling your inspiration into unmatched designs. With Vectorworks Landmark, you'll find tools to capture the catalyst of your inspiration, propelling you toward easier workflows, stunning designs, and happier clients.



POINT CLOUD SUPPORT

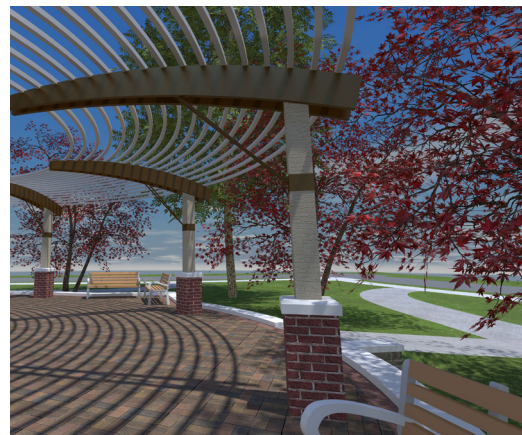
Field surveys and other manual methods used to capture existing spaces can now be replaced by our Point Cloud Support. Using your preferred 3D scanning device, you can capture a physical location and import a 3D point cloud object into Vectorworks Landmark using PTS, E57, LAS, and XYZ file formats. Supporting point cloud technology not only provides a real way for landscape architects and designers to model efficiently and affordably with more accuracy than ever before, but it also makes modeling, inferring, and referencing data easier.



Courtesy of Luciole Design, Inc.



Courtesy of CYP Studios/MORRIS



CREATIVE MODELING

Design beyond the limits of traditional CAD software. With Subdivision Surfaces, you can transform primitive shapes like spheres and cubes by subdividing and molding each surface into any form imaginable, creating unique focal pieces, sculptures, water features, play structures, and more. Based on the modeling techniques of Pixar Animation Studios, this innovative practice isn't just for animated films; it opens new workflow avenues across the landscape industry.



POWERFUL CONCEPTUALIZATION

Find your inspiration and start drawing. Or, import hand sketches, site pictures, and even documents or models from other applications. Invoke ideas in 2D and explore them in 3D with free-form models.

FREE-FORM MANIPULATION

With our intuitive interface, you can design from any 3D view using modes in modeling tools that automatically infer working planes as you move your cursor, and enjoy the superior quality that allows you to manipulate your models with ease. More accurate object information and better snapping make drawing in 3D easy. The SmartCursor™ helps by showing hints, like the angle from the previous segment, as you draw, and our patent-pending X-ray Select technology lets you see through models to select, move, and modify hidden objects with precision and ease. Plus, an advanced suite of solids and NURBS surface tools lets you create any shape and easily explore organic geometry. Push, pull, blend, twist, sculpt, deform, bulge, taper, or punch holes. Anything is possible with Vectorworks Landmark.

DEVELOP YOUR DESIGN

The transition from virtual to actual presents distinct challenges. Vectorworks Landmark offers first-class tools and customizable workflows to go beyond exploration and into development. The pragmatic issues of materiality, fabrication details, structure, and constructability come into play as your concepts mature into concrete solutions.



HORIZONTAL SECTIONS FROM THE CLIP CUBE

Explore your design with horizontal sections from the clip cube. Use this command to isolate horizontal segments of your models to create conceptual, diagrammatic views, giving clients a deeper understanding of your design throughout the development process.



SUPERIOR SIM CAPABILITIES

Vectorworks Landmark also provides an efficient way to introduce Site Information Modeling (SIM) capabilities into your workflow. The program's tools will help you analyze your design for area, volume, slope, cut/fill, and other data such as water flow and sun/shade. Scan in planting plans and trace over them with ease. Or, simply enter your

field measurements. Use the property line tool to define a site's boundaries and setbacks. Plus, building tools and site objects easily document existing structures and site conditions. In addition, you can use the program's drawing, modeling, and 2D and 3D graphics capabilities to create compelling presentations.

STREAMLINED SITE MODELING

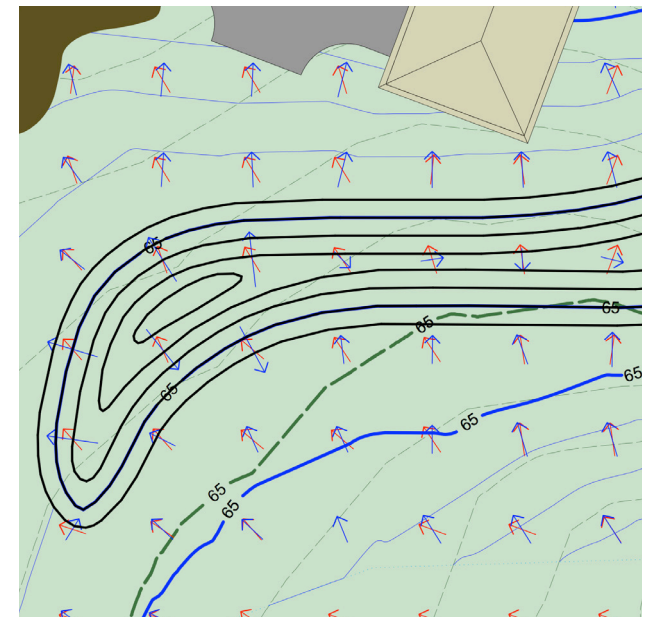
EXACTING SITE DESIGNS

Take your site designs to new heights with Landmark's slope modifiers, tools, and definitions. Accurately manage multiple sloping surfaces, choose how you prefer to display your slope labels, and more to generate the most exacting site designs with less work.



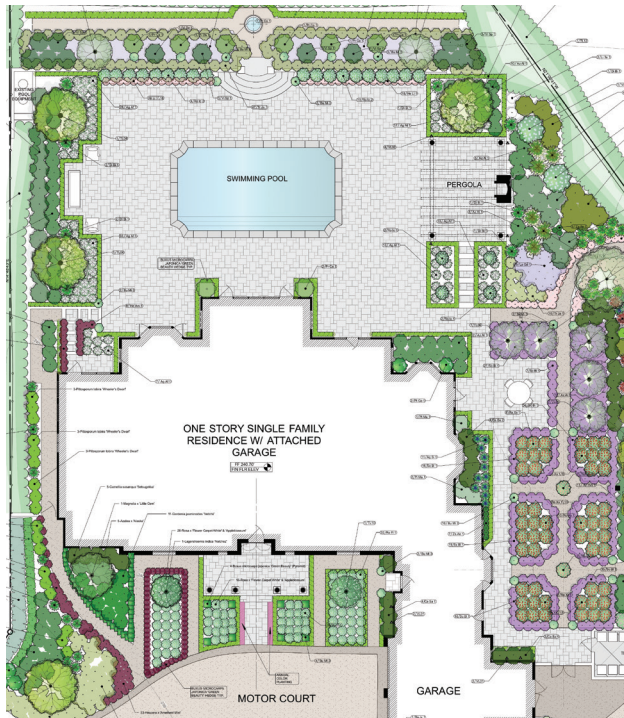
SITE MODEL FLOW ARROWS

Proposing changes to a site's terrain alters the flow of rainwater. With Landmark, you can use color and other linetype changes to quickly recognize the difference in water flow direction from existing to proposed to better plan how you manage water on a site.

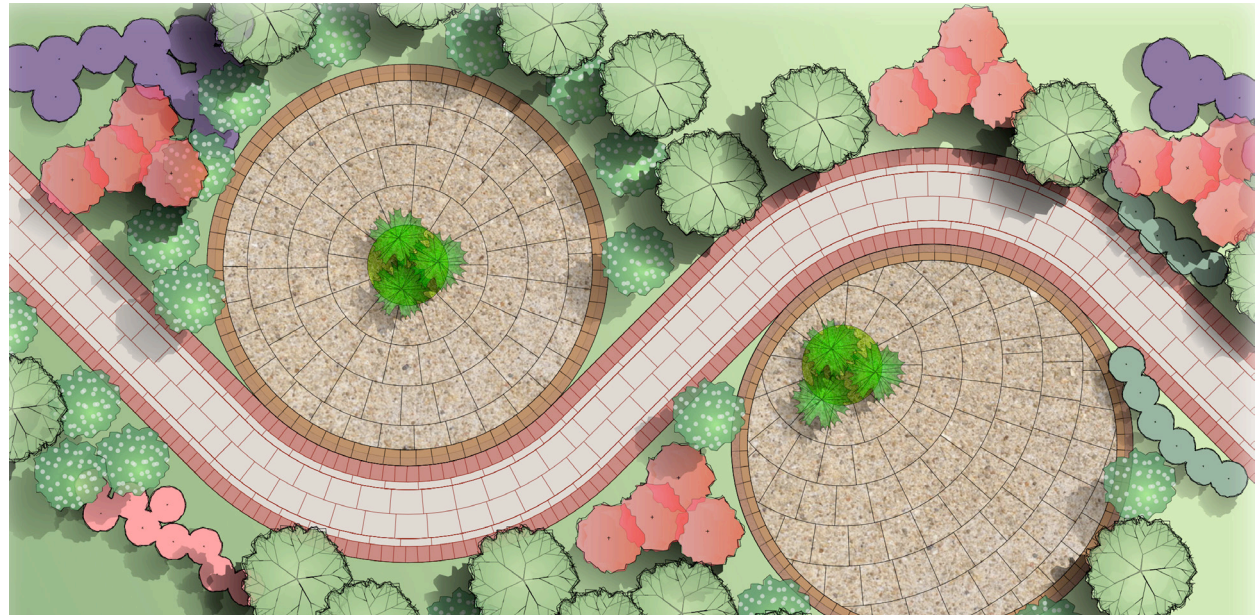


INSPIRATIONAL PRESENTATIONS

Define and communicate your firm's graphical preference with Vectorworks Landmark to create beautiful presentations. Tap into our large libraries of entourage, customizable line types, gradients, dash styles, and unlimited color palettes.



Courtesy of Choate Associates



HARDSCAPE TOOL

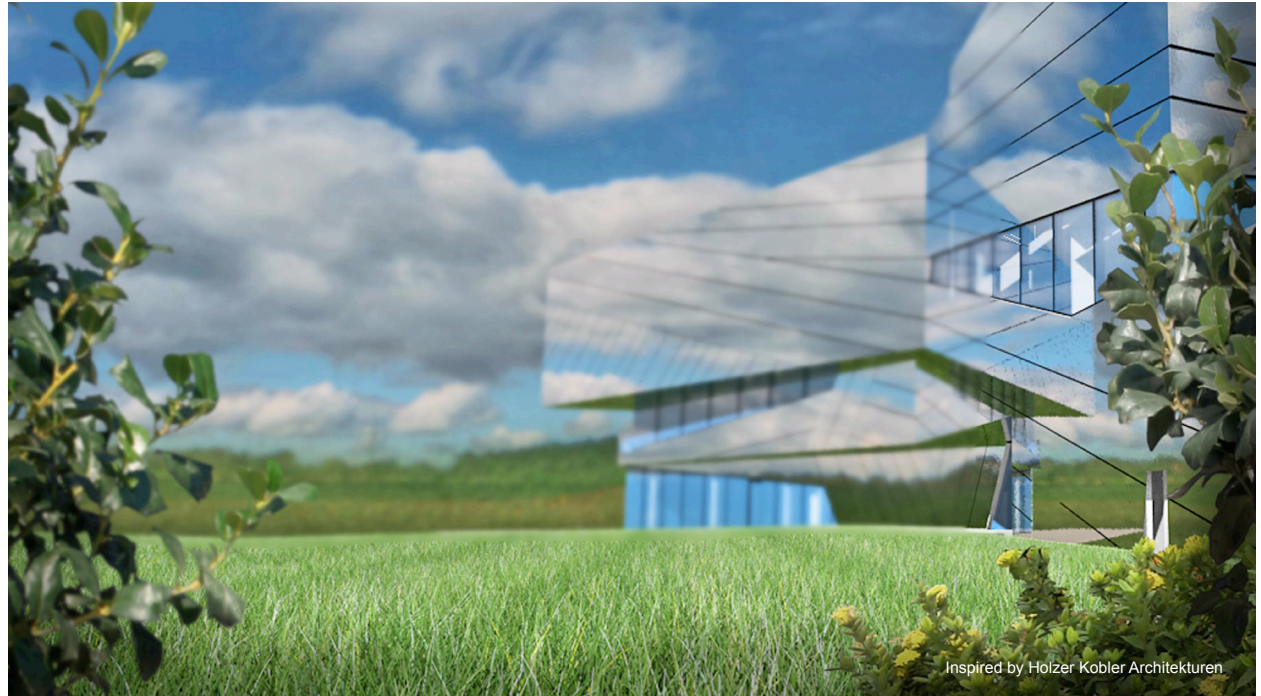
Simplify the complexities of landscape design. With our parametric Hardscape tool, you can specify and develop hardscaping plans that convey your signature style, while also benefiting from the creation of 2D and 3D views that are reportable from our integrated reporting database.

The Hardscape object includes options to accomplish radial paving patterns and paving patterns based on curvilinear paths, enabling site designers to be more creative in laying out pavements and walkways.

RENDERWORKS

Powered by MAXON's CINEMA 4D® render engine, Renderworks® is an industry-leading rendering application that produces amazing, high-quality renderings directly inside your Vectorworks design files. With new full-screen preview, as well as auto-start and quick-cancel features, our latest release streamlines the production of clear and accurate renderings.

Available as an add-on to the Vectorworks line of software products, Renderworks makes it simple to achieve breathtaking results with a simple drag and drop. Improved camera features allow you to manipulate the depth of field, apply vibrant back lighting, alter exposure, and generate panoramic images, creating striking visualizations and dynamic animations.



Inspired by Holzer Kobler Architekturen



Courtesy of MORRIS

Further improvements that add new dimensions to your designs include:

- **Caustics Capabilities** — Refracts light through translucent surfaces like crystal and water
- **Ambient Occlusion** — Adds depth to your designs with more realistic shadowing
- **New Grass Shader** — Makes it simple to render realistic scenes with grass, carpeting, or hair

No matter what your visualization needs are, Renderworks gives you the power to deliver.

Visit vectorworks.net/renderworks to learn more.

ENHANCE YOUR WORKFLOW

Vectorworks Landmark gives you more resources than ever to streamline and optimize your workflow. With seamless project sharing capabilities, access to reliable cloud-based storage solutions, improved communication and visualization tools, and the industry-leading development team that is always working to make your design software experience better, you'll design smarter than ever before.



Courtesy of the Office of James Burnett and James Steinkamp, Steinkamp Photography

COLLABORATIVE PROJECT SHARING

Seeking new ways to collaborate and maximize efficiency? Project Sharing enables landscape professionals to streamline design document production and manage planting, hardscape, grading, and more — all while multiple designers are working on the same Vectorworks file concurrently from simple sketch to final product.

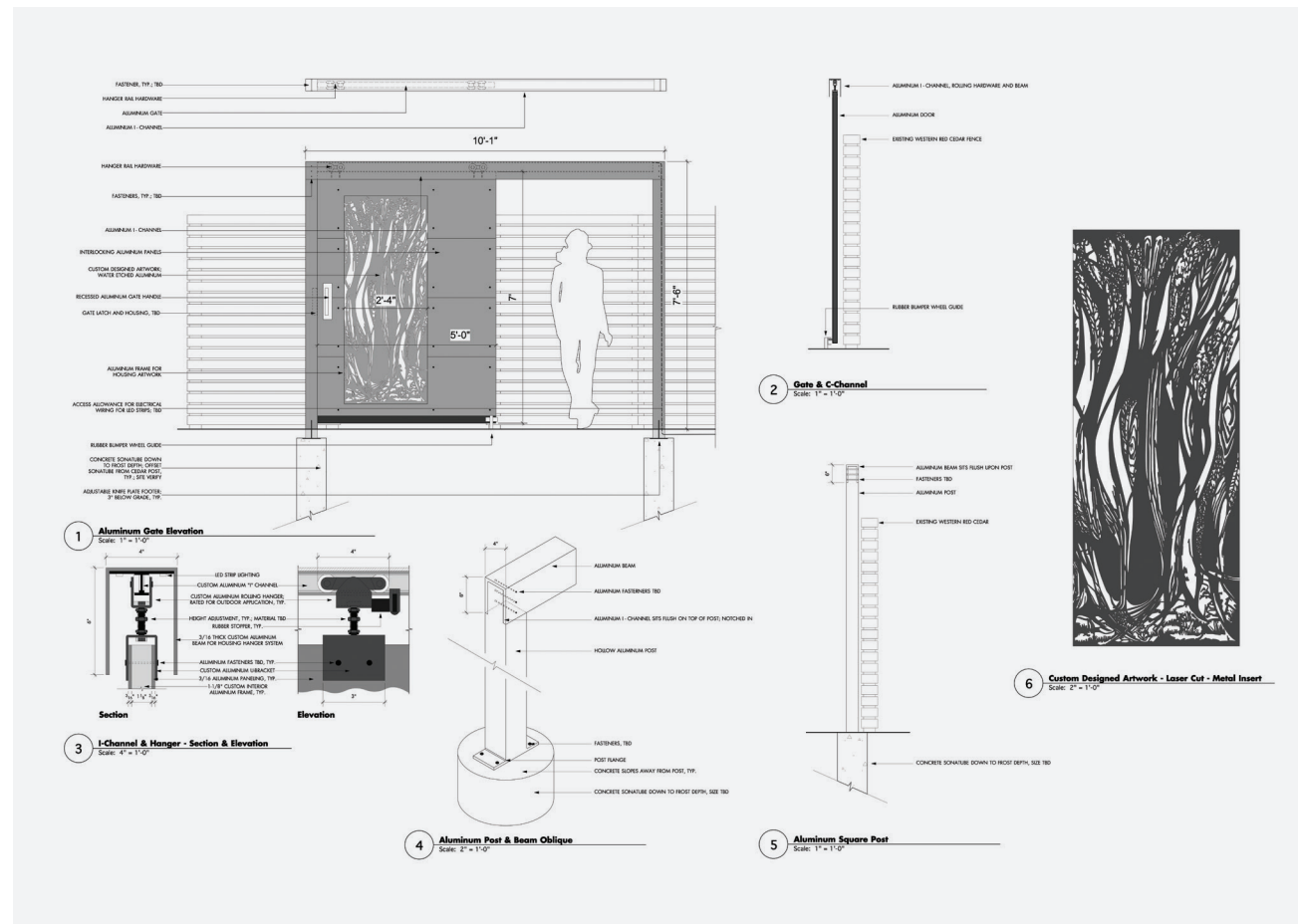
SEAMLESS INTEROPERABILITY

Get on the cutting edge of collaborative BIM workflows and share files fluidly among design, analysis, and construction packages with Vectorworks' IFC 2x3 and gbXML translators. Exchange 3D NURBS models with Rhinoceros®. Import concept models from SketchUp®, and access thousands of models from the Trimble® 3D Warehouse and many other content sources that support OBJ, STL, 3DS, SKP, and more. Import, export, or directly reference AutoCAD® 2016 (and earlier) files. Publish drawing sets as multiple page PDFs, DWFs, or DXF/DWGs. Export 3D models to 3D PDF, IFC, DXF, C4D, Rhinoceros, Google Earth®, and Vectorworks Nomad (available to Vectorworks Service Select members).

Vectorworks Nomad is an exclusive benefit for Vectorworks Service Select members. Learn more at vectorworks.net/service-select.

SUPERIOR 2D DOCUMENTATION

Produce high-quality documentation with ease. Use our suite of precision drawing tools and intelligent landscaping, irrigation, site design, and road objects to lay out plans, elevations, sections, and detail drawings.

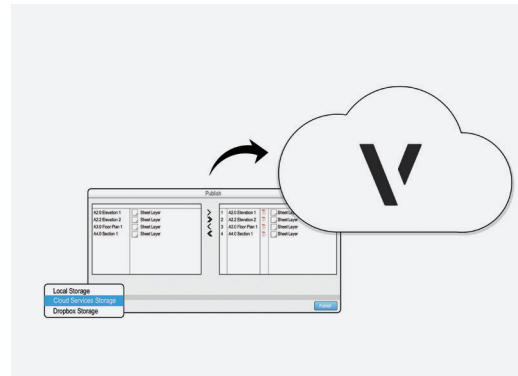


Courtesy of Matthew Cunningham Landscape Design LLC

CLOUD SERVICES IN VECTORWORKS

Vectorworks Service Select members can take advantage of Vectorworks Cloud Services directly from Vectorworks. A new Cloud menu gives you direct access to publish your Vectorworks files for easy sharing, collaboration, and viewing using our Vectorworks Nomad app or cloud web portal.

This is an exclusive benefit for Vectorworks Service Select members. Learn more at vectorworks.net/service-select.



	A	B	C	D	E	F	G	H	I	J
19.1	L-MIX	Mixed	2,245.03	0.5	1.1	1.0	2.81	0.625	6280.18	
20	L-MIX-LO	Mixed	123.24	0.5	1.1	0.5	1.40	0.625	172.37	
20.1	L-MIX-HI	Mixed	123.24	0.5	1.1	0.5	1.40	0.625	172.37	
21	L-SOD-HI	Sod	0.00	0.0	0.0	0.0	0.00	0.000	0.00	
22	L-SOD	Sod	127,836.22	0.7	1.0	1.0	3.57	0.625	455133.97	
22.1	L-SOD	Sod	127,836.22	0.7	1.0	1.0	3.57	0.625	455133.97	
23	L-SOD-LO	Sod	0.00	0.0	0.0	0.0	0.00	0.000	0.00	
24										
25										
26										
27										
28	Sod Ks (0.6-0.8)	0.6								
29	Microclimate Layer	Planting Type	Area (sq. ft.)	Ks	Kd	Kmc	ET(L)	IE	TWA (gal.)	
30	L-TREES-HI	Trees	0.00	0.0	0.0	0.0	0.00	0.000	0.00	
31	L-TREES	Trees	1,050.00	2.0	1.0	2.0	1.79	1.250	672.32	
31.1	L-TREES	Trees	575.00	0.2	0.5	1.0	0.51	0.625	219.34	
31.2	L-TREES	Trees	475.00	0.5	0.5	1.0	1.28	0.625	452.98	
32	L-TREES-LO	Trees	0.00	0.0	0.0	0.0	0.00	0.000	0.00	
33	L-SHRUBS-HI	Shrubs	9,187.16	1.0	0.5	1.4	0.71	0.625	4906.34	
33.1	L-SHRUBS-HI	Shrubs	9,187.16	0.2	0.5	1.4	0.71	0.625	4906.34	
34	L-SHRUBS	Shrubs	3,728.91	1.0	0.5	1.0	0.51	0.625	1422.43	
34.1	L-SHRUBS	Shrubs	3,728.91	0.2	0.5	1.0	0.51	0.625	1422.43	
35	L-SHRUBS-LO	Shrubs	2,274.43	2.0	1.0	1.0	0.89	1.250	446.93	
35.1	L-SHRUBS-LO	Shrubs	2,228.53	0.2	0.5	0.5	0.26	0.625	425.05	
35.2	L-SHRUBS-LO	Shrubs	45.90	0.5	0.5	0.5	0.64	0.625	21.89	
36	L-SHRUBS	Groundcover	0.00	1.0	0.5	1.3	0.66	0.625	0.00	
36.1	L-SHRUBS-HI	Groundcover	0.00	0.2	0.5	1.3	0.66	0.625	0.00	
37	L-SHRUBS	Groundcover	0.00	1.0	0.5	1.0	0.51	0.625	0.00	
37.1	L-SHRUBS	Groundcover	0.00	0.2	0.5	1.0	0.51	0.625	0.00	
38	L-SHRUBS-LO	Groundcover	336.05	3.0	1.5	1.5	1.79	1.875	144.52	
38.1	L-SHRUBS-LO	Groundcover	55.18	0.5	0.5	0.5	0.64	0.625	31.08	
38.2	L-SHRUBS-LO	Groundcover	129.56	0.7	0.5	0.5	0.89	0.625	86.49	
38.3	L-SHRUBS-LO	Groundcover	141.30	0.2	0.5	0.5	0.26	0.625	26.95	
39	L-MIX-HI	Mixed	875.94	1.0	0.6	1.4	0.86	0.625	561.35	
39.1	L-MIX-HI	Mixed	875.94	0.2	0.6	1.4	0.86	0.625	561.35	
40	L-MIX	Mixed	2,245.03	1.0	0.6	1.3	0.80	0.625	1335.97	
40.1	L-MIX	Mixed	2,245.03	0.2	0.6	1.3	0.80	0.625	1335.97	
41	L-MIX-LO	Mixed	123.24	3.0	1.8	1.5	2.14	1.875	53.49	

Courtesy of Holcombe Norton Partners, Inc.

EXTENSIVE AUTOMATED REPORTING AND DATABASE SUPPORT

Stop manually counting plants, planting areas, hardscape areas, or other multiple site features in your drawings and models. Automatic data tracking does the tedious work for you; built-in database worksheets continually keep track as your designs evolve. Take advantage of the two-way link between database worksheets and objects, giving you the power to change object parameters directly from the worksheet. The application goes further than automated schedules and quantity take-offs. It provides a user-defined, quick, and accurate way to assign custom data to any object and create unique reports for LEEDS and SITES™ projects that require water budgets and storm water runoff calculations.

TRANSFORM THE WORLD

The reason you do what you do is to create experiences that shape our world. No matter what type of design, you're creating experiences. From the first flicker of inspiration to the finished product, Vectorworks Landmark is there to help you transform the world.



Courtesy of McGregor Coxall

ABOUT VECTORWORKS

Vectorworks cares about design. Since 1985, we have served the architecture, landscape, and entertainment industries, drawing inspiration from the world around us and encouraging the more than half a million designers who use our software to create experiences that transform the world.

Our commitment to develop the world's best cross-platform CAD and BIM software has taught us a simple truth: great design begins with the inspiration of the designer. Vectorworks supports that inspiration by guiding the exploration of discovery and finding creative solutions. We provide powerful tools to help designers

capture ideas, nurture innovation, communicate effectively, and realize their vision.

We serve those who desire to create experiences that are memorable and build things that truly matter. We recognize that great design is about revealing opportunities that explore the unexpected while fully satisfying the demands of an increasingly complex world. We acknowledge the value of a designer's dream and strive to facilitate the creation of something that's truly appreciated and uniquely positioned to express the best in the built environment.

SYSTEM RECOMMENDATIONS

Mac OS X 10.9 or later operating system

Windows 7 SP 1 (64-bit)

Windows 8 (64-bit)

Windows 8.1 (64-bit)

Windows 10 (64-bit)

64-bit Intel Core i5 (or AMD equivalent) or better

RAM

4GB minimum, 8GB highly recommended

8GB — 16GB recommended for large files and complex renderings

Graphics*

A dedicated graphics card is highly recommended.

Open GL 2.1 compatible graphics card

VRAM: 1GB, 2GB-4GB (recommended)

Screen Resolution

1440x900 minimum

1920x1080 or higher recommended

* Like past releases, Vectorworks 2016 added improvements that place still higher demands on graphic hardware. The performance and quality of the graphics provided by the Vectorworks Graphics Module depend directly on the speed, memory, and supported extensions of the graphics card. These new features have the potential to provide a very fast and fluid experience if used on capable hardware, or a noticeably slower experience if used on older or incompatible hardware. Graphic cards should support at a minimum OpenGL version 2.1; cards not meeting this recommendation will have limited functionality and poor performance, particularly when rendering in OpenGL mode. In general, the more powerful your video card is, the better your Vectorworks experience will be.

For the most current and updated technical information, please visit our Knowledgebase at kbase.vectorworks.net.

See vectorworks.net/sysreq/ for updated information.

Vectorworks, Inc.

7150 Riverwood Drive, Columbia, MD 21046-1295 USA

vectorworks.net

T 410.290.5114

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