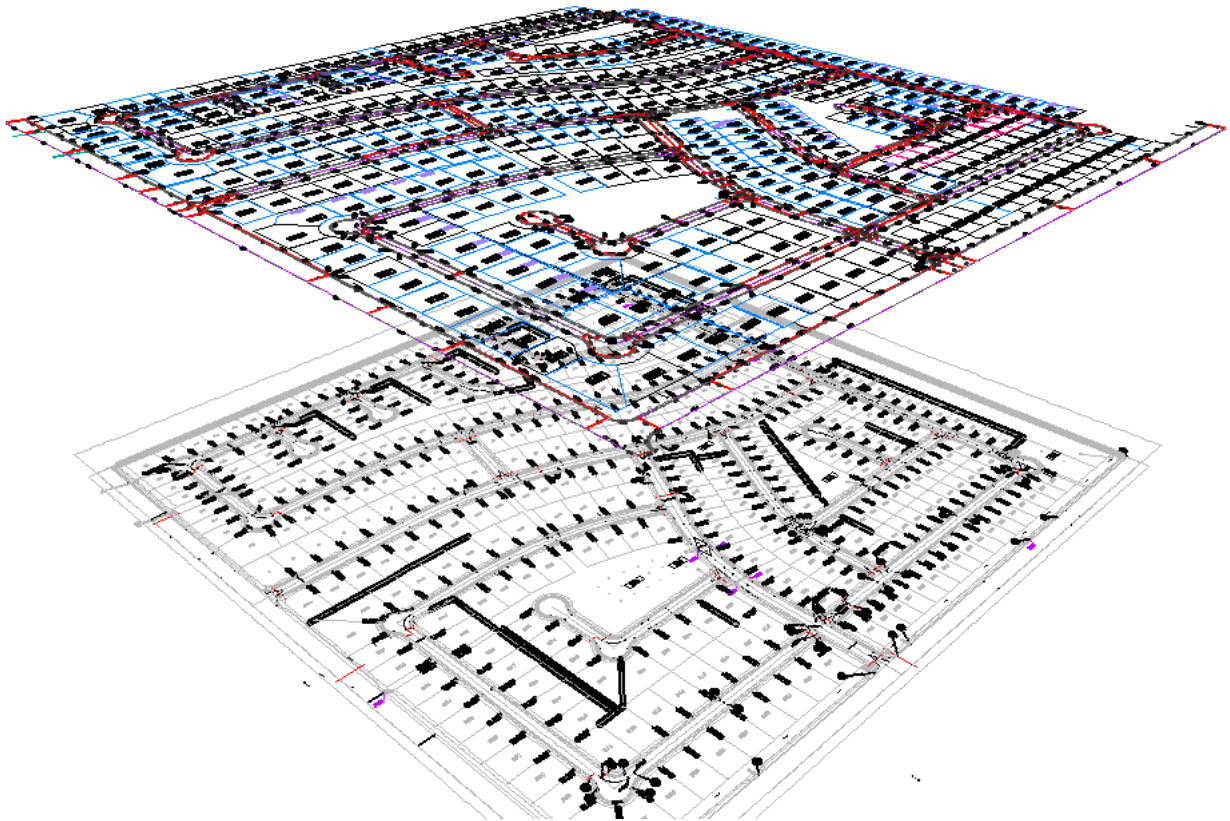


ASE civil

EXTENDING - - - THE POWER OF CIVIL 3D FOR SUBDIVISIONS



• PRODUCT INFORMATION GUIDE •



[\[Table of Contents\]](#)

Rev. 15/01/22

270 E. Hunt Hwy., Ste. 16-223, San Tan Valley, Arizona 85143 | Ph: 480.720.8890 | Fax: 480.907.2262 | <http://www.azsubdivisions.com> | Info@AzSubdivisions.com

TABLE OF CONTENTS

TOPIC	PAGE
Cover Page	1
Table Of Contents	2
What Is ASE Civil?	3
Productivity	4
Program Features	5
Profile Generation	6
3-D Corridor Modeling	7
Improvement Plans	8
Pad Management	9
Surface Management	10
Vertical Design Control	11
Basins	12
Plan Labels	13
Alignments	14
Client Feedback...	15
Licensing	16
Compatibility	17
ASE Productivity: Benchmark Data	18
References	19
Contact Us	20

"WHAT IS ASE CIVIL?"

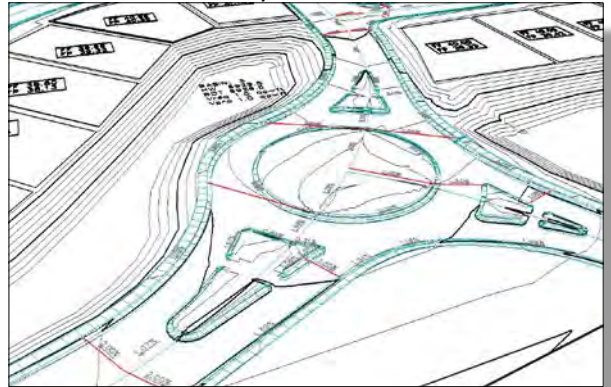
ASE Civil (An Autodesk Partner Product) is add-on software that extends the usability of AutoCAD and Civil 3D for subdivision projects. Versus using Civil 3D alone, ASE will:

- **MAXIMIZE** subdivision productivity
- Simplify & **FULLY** automate multi-line/"3-line" road profiles
- **ELIMINATE** missed deadlines
- Reduce CAD design team size
- Drastically reduce design & development time

ASE is the **LOGICAL** solution when:

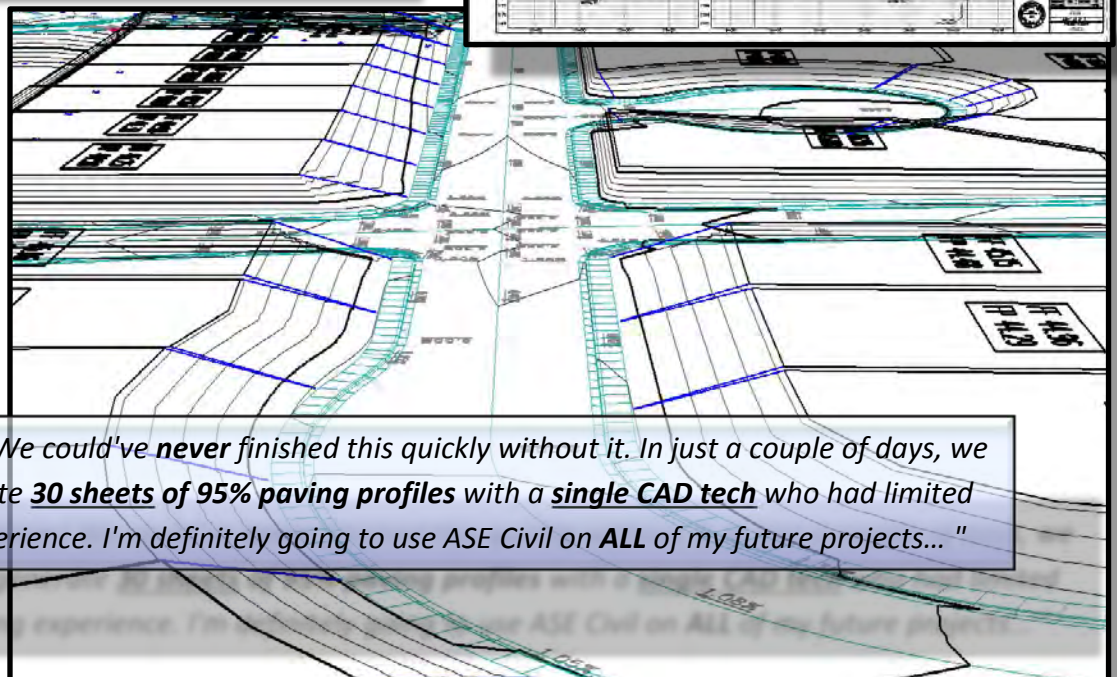
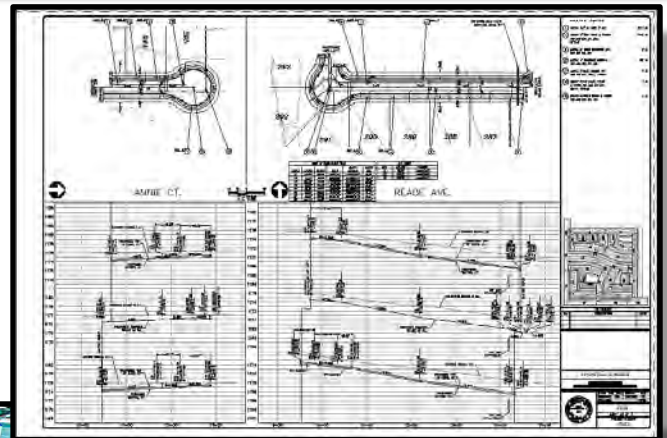
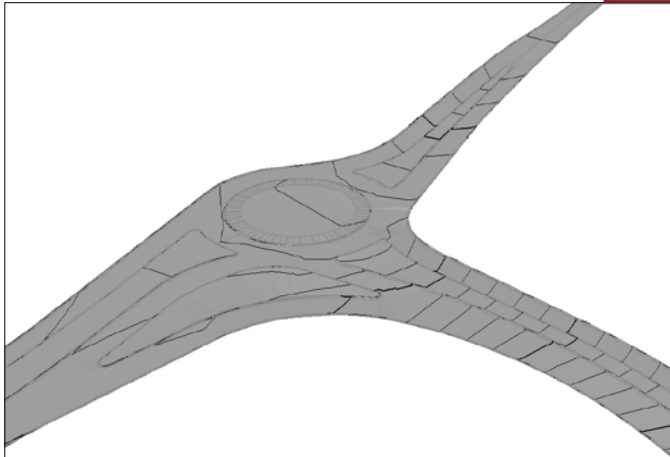
- Tight Deadlines
- Stringent Submittal Requirements
- Slim Project Budgets

... drive CAD design and production techniques.



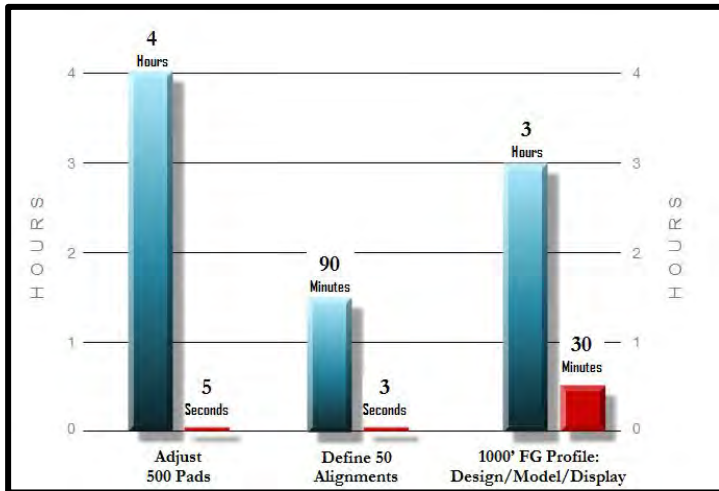
"...If you're designing *subdivisions*, take a closer look at **ASE Civil** design software, available through Engineering Design Innovations ... "

-Cadalyst Magazine



"...a great program! We could've **never** finished this quickly without it. In just a couple of days, we were able to generate **30 sheets of 95% paving profiles** with a **single CAD tech** who had limited profile drafting experience. I'm definitely going to use ASE Civil on **ALL** of my future projects..."

Cut Your Subdivision Development Time in HALF!



In today's **extremely-competitive** economy, land developers are now demanding that civil consultants deliver higher volumes of service in less time and on a much tighter budget than in previous market years. The only way engineers can accomplish this and still "turn a profit" is by ensuring that their workflow is effective, accurate, agile and most of all, extremely **efficient**.

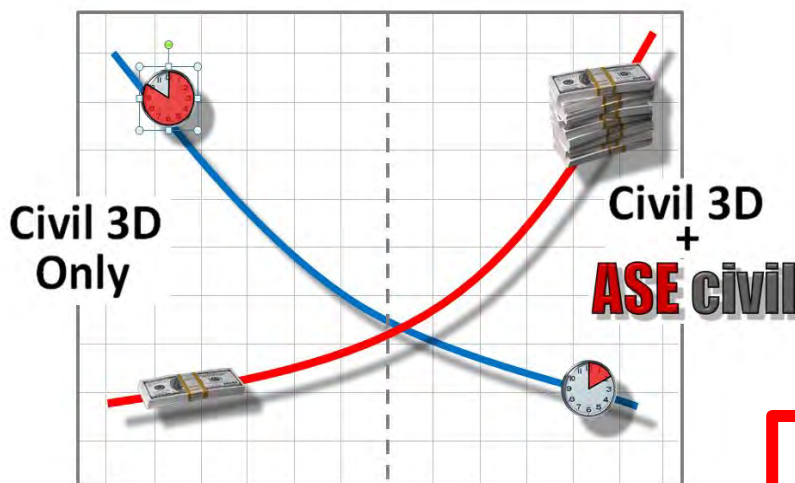
For
consult

ants to be profitable, design teams simply cannot afford to spend weeks or months setting up and developing subdivision projects.

The ability to quickly establish a solid vertical design and instantly turn that into a reactive, renewable design/production "workflow object", is

Civil 3D	Civil 3D + ASE
Adjust 500 Pads:	Includes modification of all 3D pad objects to a specific driveway grade or elevation difference from curb reference and update of all labels.
Define 50 Alignments:	Definition from site layout centerline geometry. Includes invisible terminal extensions on each alignment and all interval & key-point stationing.
1000' FG Profiles:	Includes design of profile data to include grade breaks, 2 intersections, curb transitions, vertical curves, key labels, true-length dimensions, 1 knuckle, 1 cul-de-sac, creation of top or datum 3D road model, EG & FG profile linework w/all labels and placement of profiles on improvement sheet

what makes ASE Civil a MUST-HAVE tool for subdivisions work.



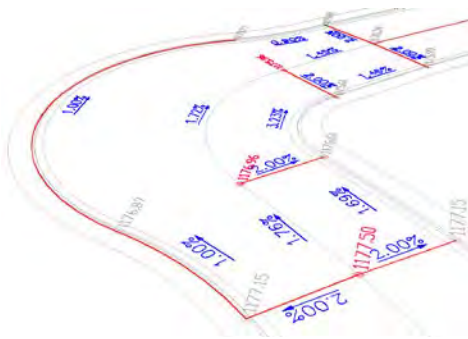
Twice featured in "Cadalyst" magazine!
(Follow the links in logos below to read the articles)

cadalyst

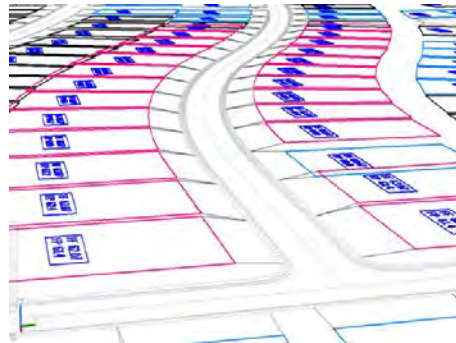
cadalyst
Get productive with CAD
and get the job done.

PROGRAM FEATURES

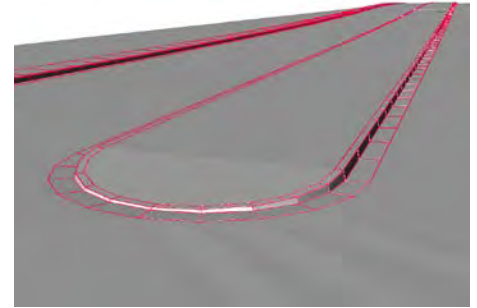
ASE Civil contains a variety of specialized tools for subdivision paving and grading tasks. They are highly-effective, easy-to-use, dynamic, cost-saving features that dramatically accelerate **vertical design**, **pad management**, **corridor modeling**, **plan labels**, **basin design**, **surface management**, **profile generation**, **alignment definition** and **improvement plan** development.



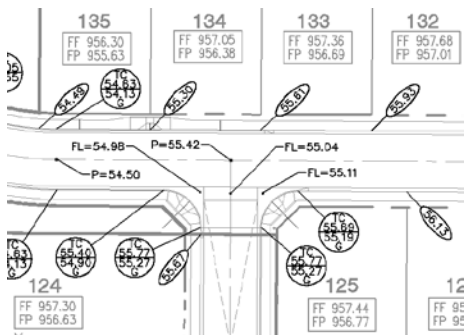
[Vertical Design](#)



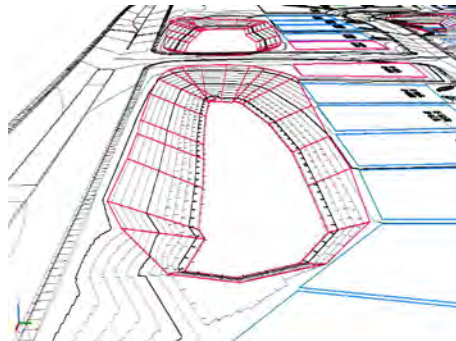
[Pad Management](#)



[Corridor Modeling](#)



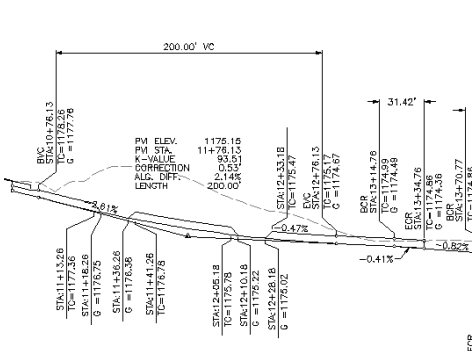
[Plan Labels](#)



[Basins](#)



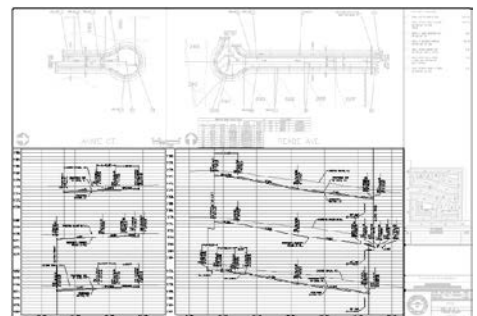
[\(Civil 3D\) Surface Mgt.](#)



[Profile Generation](#)



[Alignments](#)



[Improvements \(Profile Display\)](#)

[\[Table of Contents\]](#)

PROFILE GENERATION

All-Inclusive. Accurate. Dynamic. Flexible. Easy! ASE Civil's "Profile Generator" will create and update FG road profiles instantly from your project design data.

One-click profile output...
ZERO manual edits!

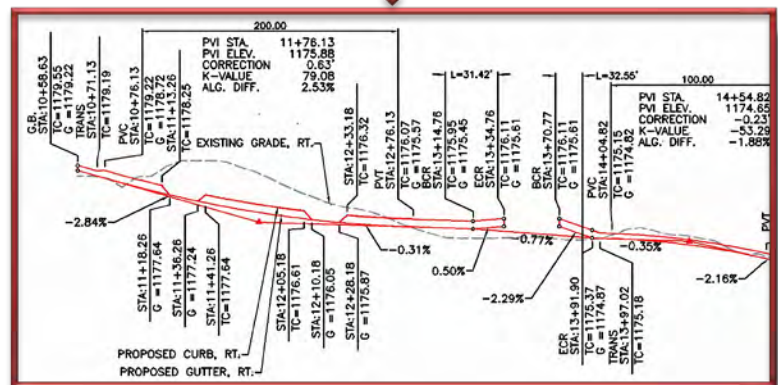
Quickly generate completely automated profiles with one click. Manual

Only ASE can generate complex, dynamic, MULTI-LINE CURB & GUTTER PROFILES, quickly and easily with no manual edits!



editing is non-existent using ASE Civil.

Follow the link below to view an introductory video of ASE's **PROFILE GENERATOR** feature



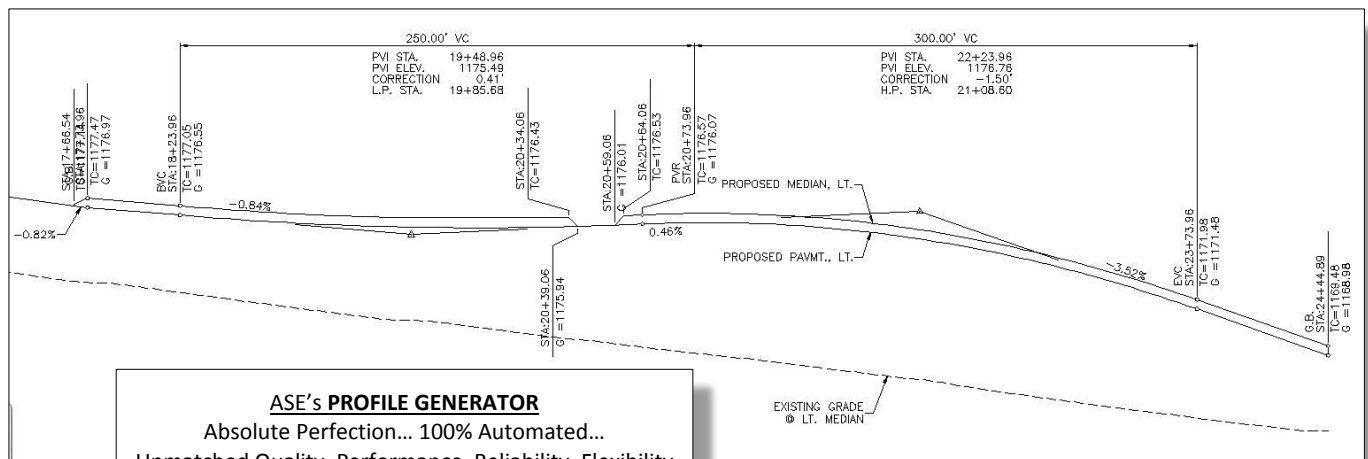
Easily create the most complex road profiles imaginable in **seconds!** Include:

Grade Breaks
Intersections
T/L Dimensions
Label Branching

Vertical Curves
Variable-Height Curbs
True-Grade Calculations
Label Inversion

Curb Transitions
Medians
Linework Description Labels
and **more ...**

Driveways
True-Length Linework
Customizable Labeling
Shared Defaults



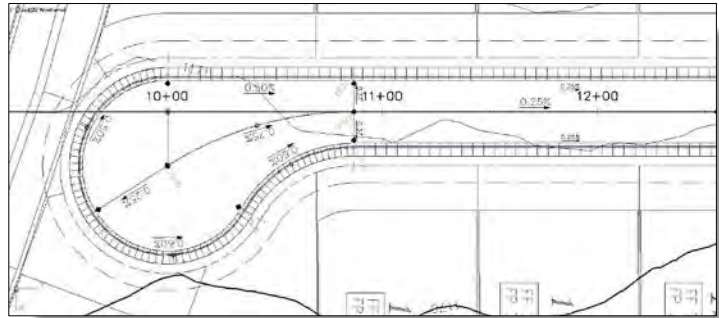
ASE's PROFILE GENERATOR
Absolute Perfection... 100% Automated...
Unmatched Quality, Performance, Reliability, Flexibility

3-D CORRIDOR MODELING

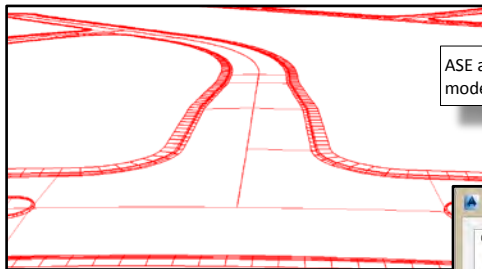
ASE Civil automatically builds highly accurate, 3-D, 100% automated corridor models as a **by-product of the vertical design**. That means **ZERO setup!**

A single centerline alignment is all that's necessary to instantly generate or update local or divided 3-D corridor models for either top or datum surfaces.

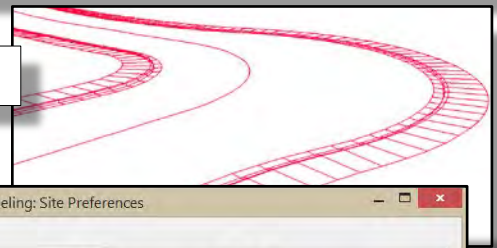
Select from a library of over 70 pre-designed, adjustable assemblies or order your own custom version with a guaranteed 24-hour turnaround time^[1].



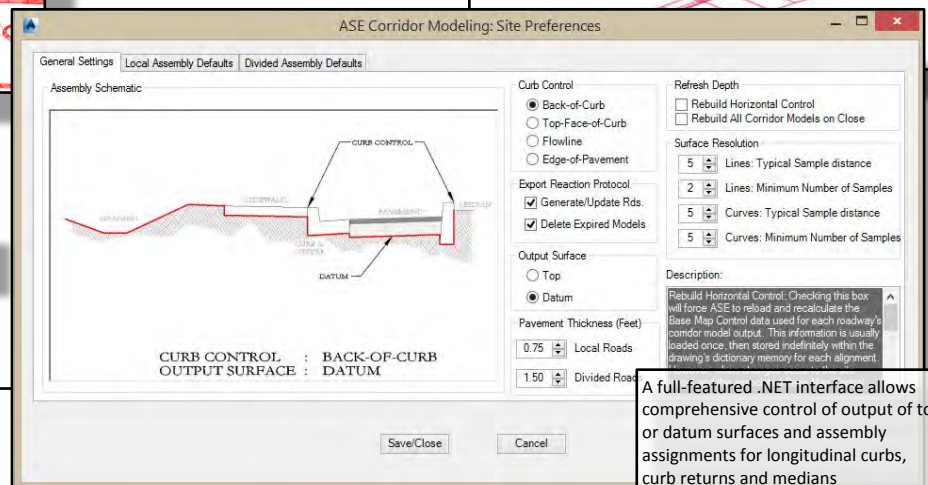
With ASE, no offset / transition alignments necessary!



ASE automatically builds **high-quality** top or datum corridor models with **no setup & no transition alignments!**

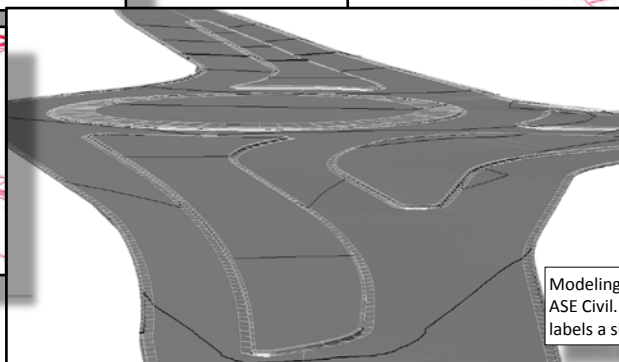
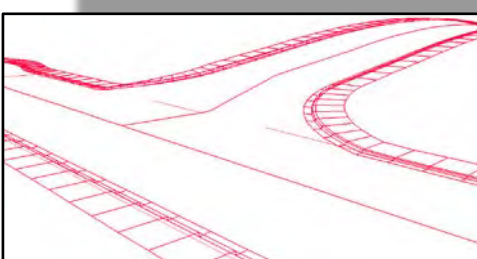


Accurately model divided roads by simply setting Markers at key points & defining paving features



A full-featured .NET interface allows comprehensive control of output of top or datum surfaces and assembly assignments for longitudinal curbs, curb returns and medians

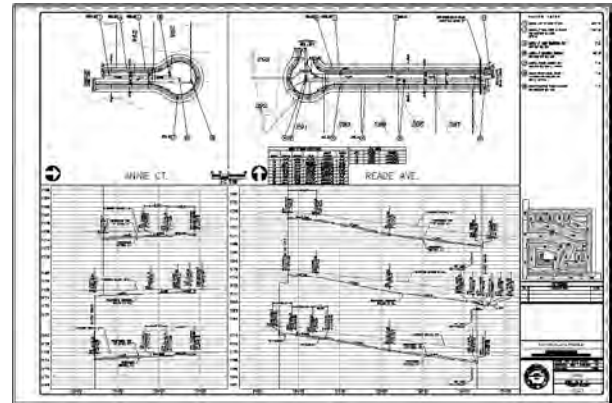
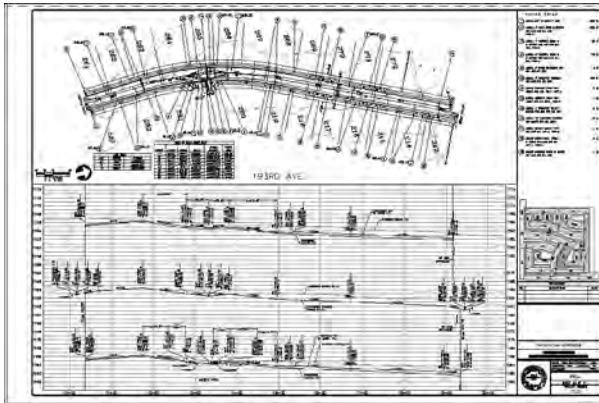
Easily model even the **most complex designs**, integrating vertical curvature, driveways, medians, intersections, curb transitions or combinations of all of these paving features, or more by simply selecting Design Markers and sharing the design data



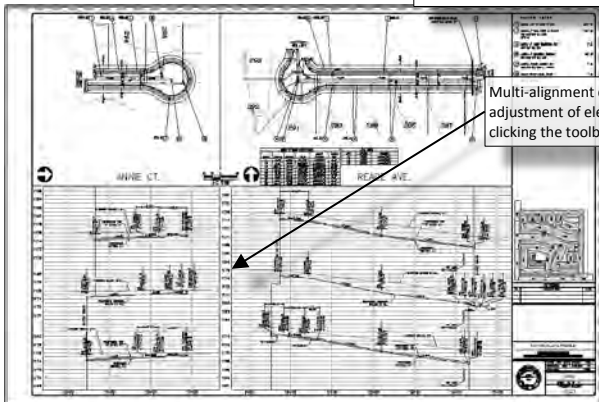
Modeling roundabout designs is easy when using ASE Civil. Placement of dynamic curb & gutter plan labels a simple "click-and-go" drafting process

IMPROVEMENT PLANS

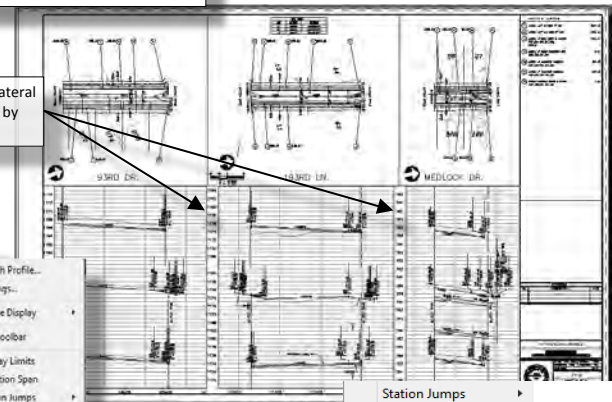
ASE Civil imports and manages pre-formatted AutoCAD viewport arrays on improvement sheets to automatically display and adjust road profile drafting output. Select from six fully-adjustable, customizable Profile Display setups that support 1:1 Paper Space plotting of 20 or 40-scale improvement plan sheets.



Each element of a Profile Display setup is independently-adjustable; elevation columns auto-sync with their related profile component's vertical positions. Station labels sync with lateral adjustment of the profile group.



Multi-alignment displays provide lateral adjustment of elevation partitions by clicking the toolbar button



Local 2
Attach Profile...
Settings...
Create Display
Get Toolbar
Display Limits
Elevation Span
Station Jumps
Utility Breakline
Partition
Display Format
Grid
Save Display
Delete Display

Horizontal Scale
Vertical Scale
Profile #1
Profile #2

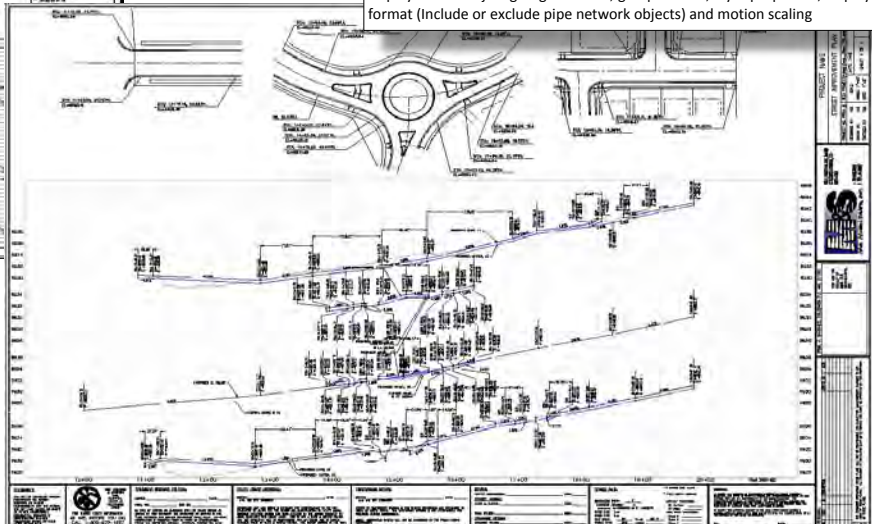
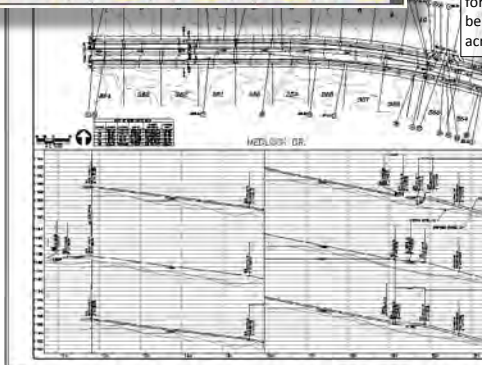
Left
Right
Up
Down

Station Jumps
Utility Breakline
Display Format
Grid
Save Display
Delete Display

Show
Grade +
Grade -
Move Up
Move Down



Vertically-split display setups provide adjustments for the split line, which can be moved dynamically across the profile linework.



Profile Displays are highly-customizable and can to adapt to a wide variety of display needs. Adjust grid graduation, grid positions, layer properties, display format (Include or exclude pipe network objects) and motion scaling

When submittal requirements demand the inclusion of accurately-designed medians on the plans, ASE's Profile Generator and Profile Display setups are fit for the task

PAD MANAGEMENT

Engineers and designers can manage HUNDREDS of pads on a subdivision **simultaneously**. Fully-automated labels are customizable and dynamically update with adjustments to pads.

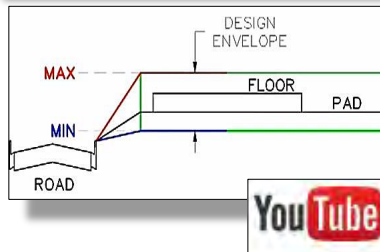
- Manage ASE pads individually or in selected groups.
- Control elevations by increment, driveway grade limits, street slope or high/low curb-reference elevation.
- Attach pads to the roadway design to dynamically control graded elevation limits.



When designing large, master-planned communities, it really doesn't make sense to use any other method of managing pad elevations than with ASE Civil. Over the past decade, ASE's reliability and efficiency have been proven time-and-time again on thousands of large projects just like this...

The Pad label formatting dialog provides diversity and dynamic flexibility for displaying finished floor and/or finished pad elevations for each pad definition.

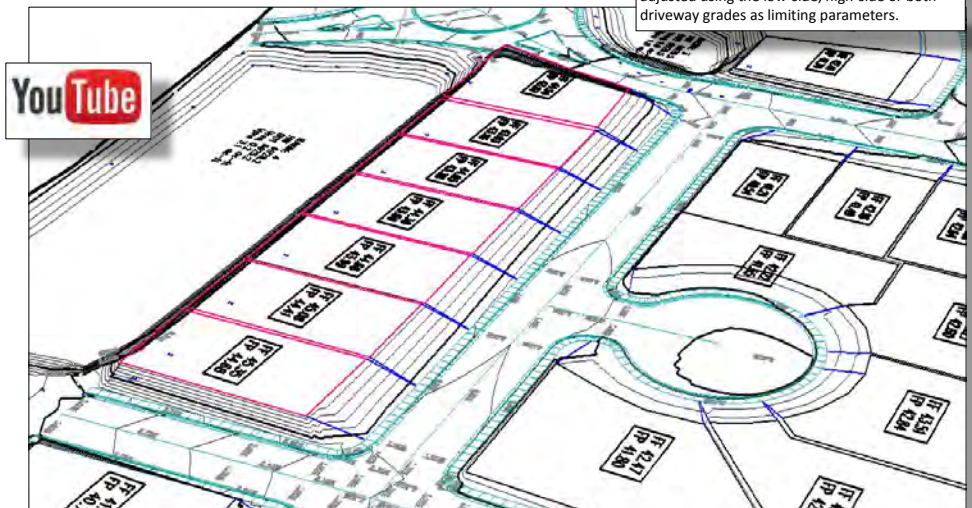
ASE Civil's Pad design parameters dialog includes a generous selection of options that will likely satisfy virtually any local or regional pad grading requirement



Only ASE Civil provides the ability to constrain the elevation range of each individual pad based on reference elevations at the curb. The two curb reference points, their relationship with each other and the design parameters specified by the engineer, determine the thickness of the "design envelope" and the resulting vertical adjustability of the pad it contains.

Follow the [YouTube](#) link to view a detailed video describing exactly how this unique system works.

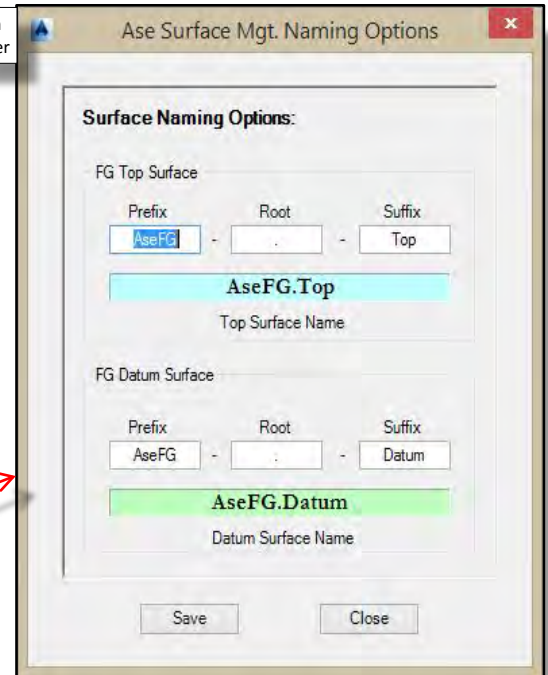
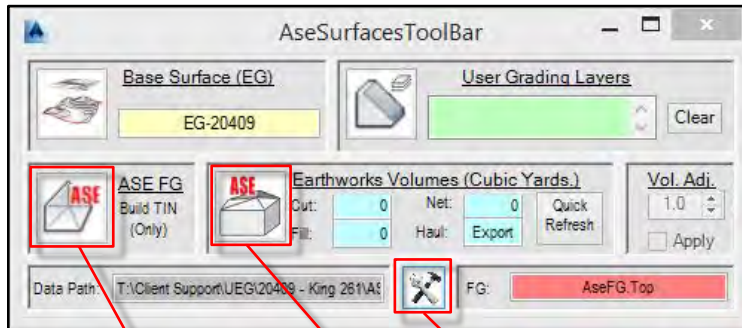
Follow the linked image below to view a [YouTube](#) video demonstrating how pads can be adjusted using the low-side, high-side or both driveway grades as limiting parameters.



SURFACE MANAGEMENT

ASE Civil uses the majority of its dynamic 3-D output geometry to instantly build Civil 3D surfaces or calculate and report earthwork volumes! If desired, Feature Lines and other Civil 3D objects may also be included. One button-click is all it takes to create separate top or datum surfaces or calculate earthworks volumes using Autodesk's advanced Civil 3D TIN engine, which is a **CRITICAL COMPONENT** of ASE Civil's surface-dependent functionality.

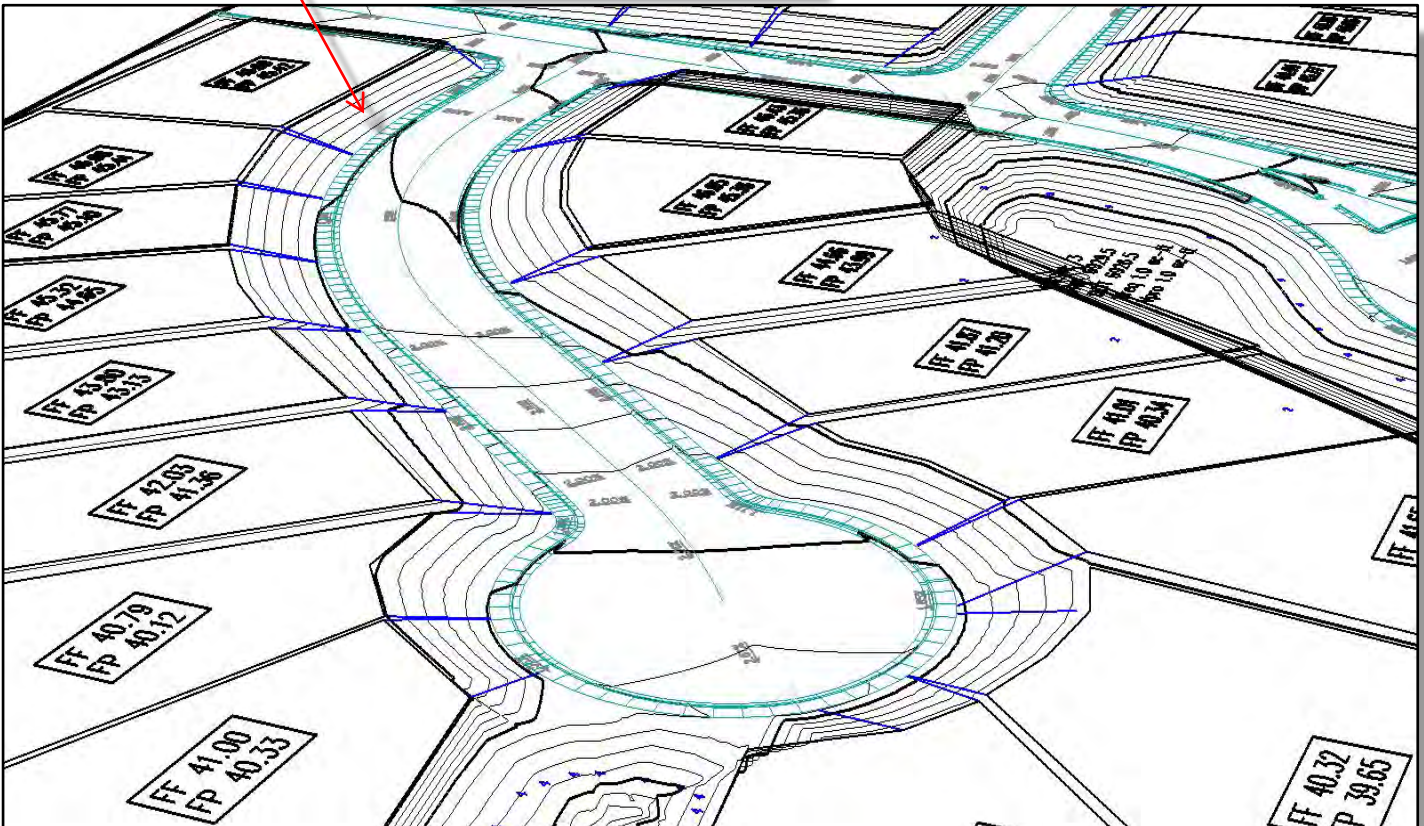
ASE creates Civil 3D TIN surfaces dedicated to the top or datum design surface. The naming format used for each can be controlled by the user



A single mouse-click instantly yields a beautifully-crafted top or datum Civil 3D surface without the need for any manual editing or object selection



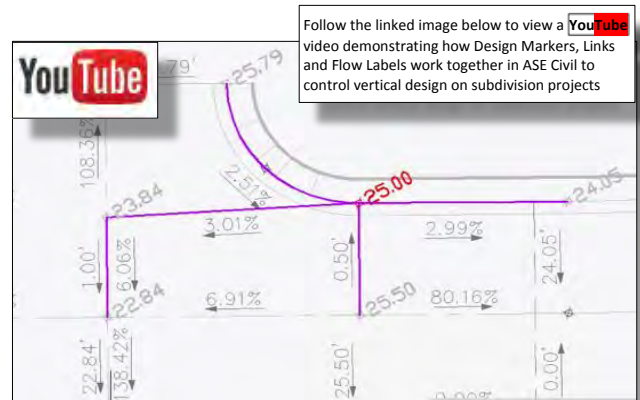
Follow the link above to view a [YouTube](#) video illustrating ASE Civil's brief, straightforward volume calculation and reporting procedure.



VERTICAL DESIGN CONTROL

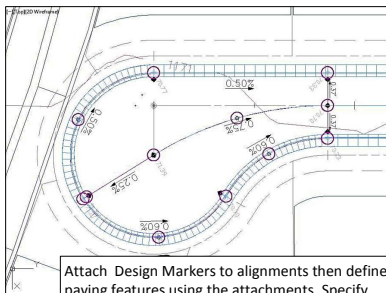
ASE's Design Marker store elevations at design locations and can be "Linked" together with adjustable constraints. Flow Labels dynamically update to display the magnitude and direction of drainage between design locations in real-time through linear or curved paths. Design Markers are also used to define paving features, such as grade breaks, vertical curves, intersections and more.

Intersection grading is much simpler and more straightforward when utilizing ASE Civil's Design Markers, Links and dynamic Flow Labels.

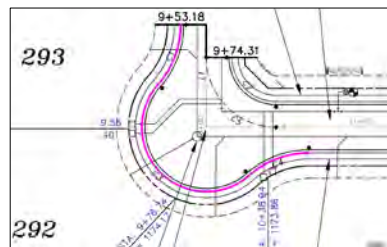


Easily maintain complete control of every longitudinal grade or road cross-slope by simply adjusting Link values or Design Marker elevations.

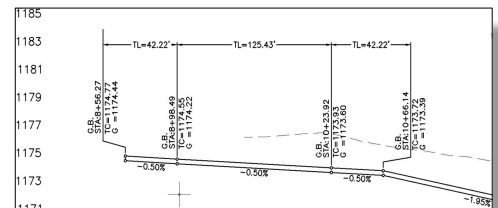
Export paving design data to generate reference information that can be used to automatically build corridor models, generate profiles and supply geometrically-accurate plan label elevations that account for mathematical vertical curvature and curb height at any location. Standard ASE plan elevations are NOT surface-based, but are calculated from actual road design data used to create profiles.



Attach Design Markers to alignments then define paving features using the attachments. Specify grade breaks, vertical curves, curb transitions, on-grade features and more to create a truly accurate model of the street design that can be easily reflected in profiles and corridor models



ASE Civil is the **ONLY** application capable of generating profiles through transitions at **TRUE-LENGTH**. Base Map Control geometry recognition algorithms identify cul-de-sacs and knuckles in the site layout and use that information to support modeling, drafting and label calculations without forcing awkward alignment definitions that traverse crowns. This is why corridors can be modeled without the need to create transition alignments.



ASE Civil “unwraps” cul-de-sacs and knuckles in transition regions to generate true-length profile linework in the finished drafting output for maximum legibility and coherent design communication through accurate illustrations

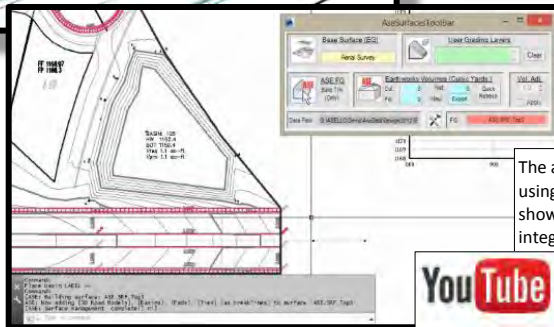
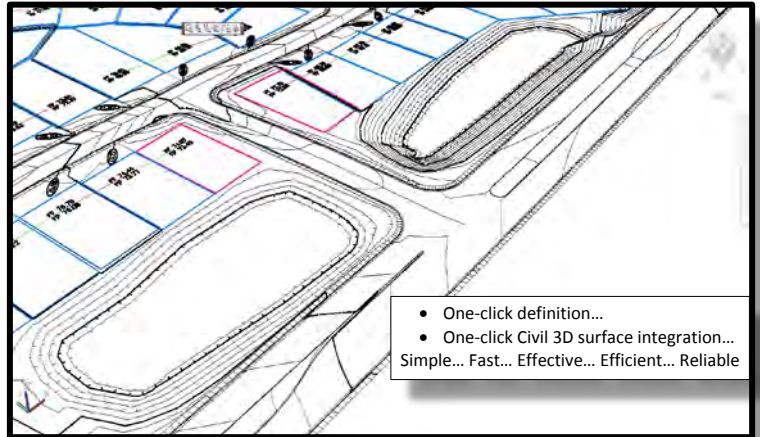
BASINS

ASE Civil's basins can be created in less than a minute. Using a simple Polyline drawn at zero elevation, ASE references the surrounding design data (*Corridor Models, Pads, Design Markers*) to automatically elevate the top bank, find the outfall elevation, calculate the volume, grade the basin's framework and add a label. One more click integrates the basin into the Civil 3D finished surface.

Basins are extremely easy to create and define in ASE Civil. Simply:

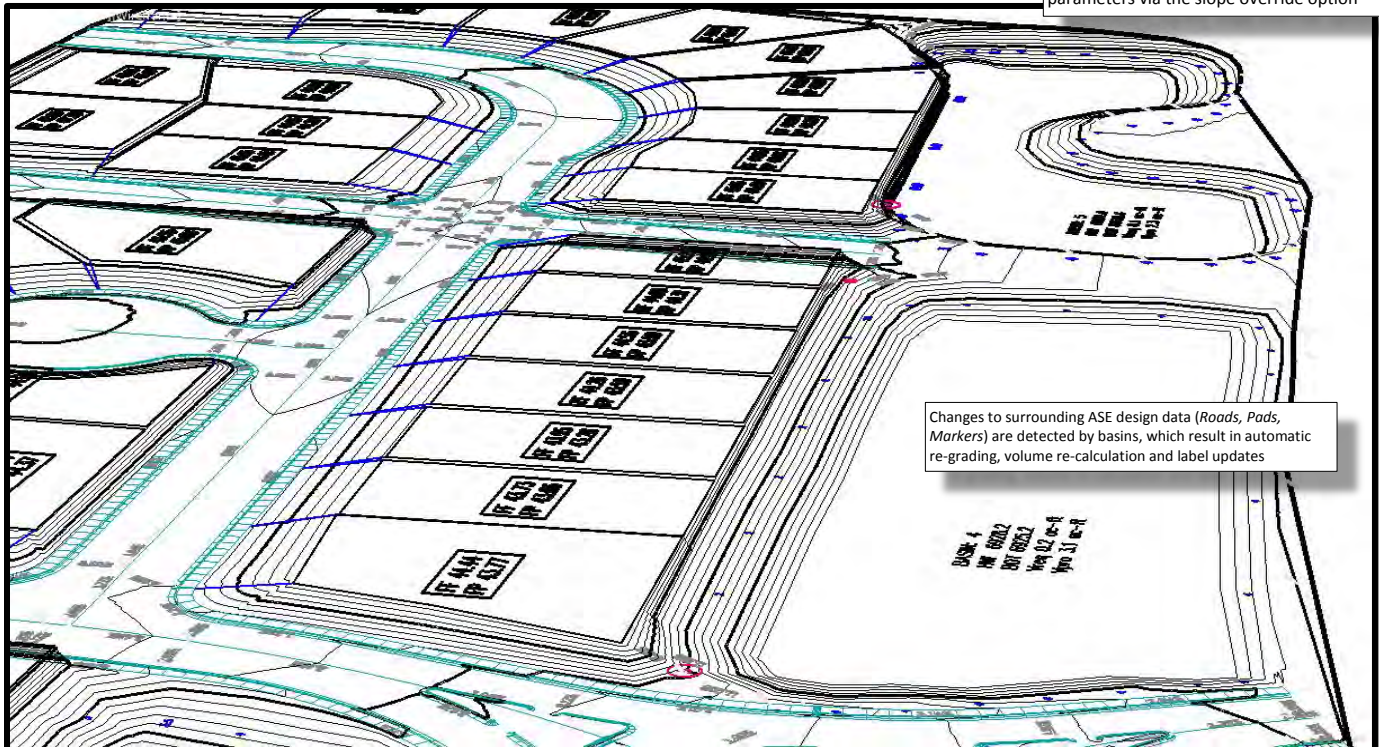
- 1) Draw a 3Dpolyline
- 2) Select it
- 3) Enter the parameters
- 4) Place the label

... you're done!



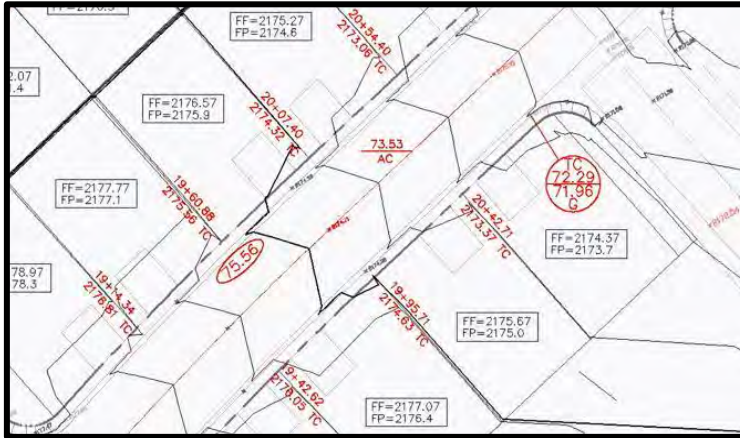
The associated [YouTube](#) video shows just why companies using ASE Civil save so much time and money. The basin shown in this image is drafted, graded, labeled and integrated into the Civil 3D FG surface in **45 seconds!**

Basin slopes can be controlled at the vertex-level, independently from the basin's global parameters via the slope override option

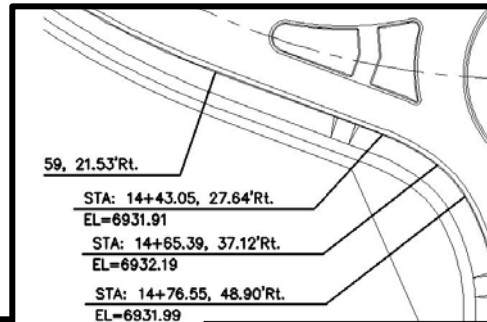


PLAN LABELS

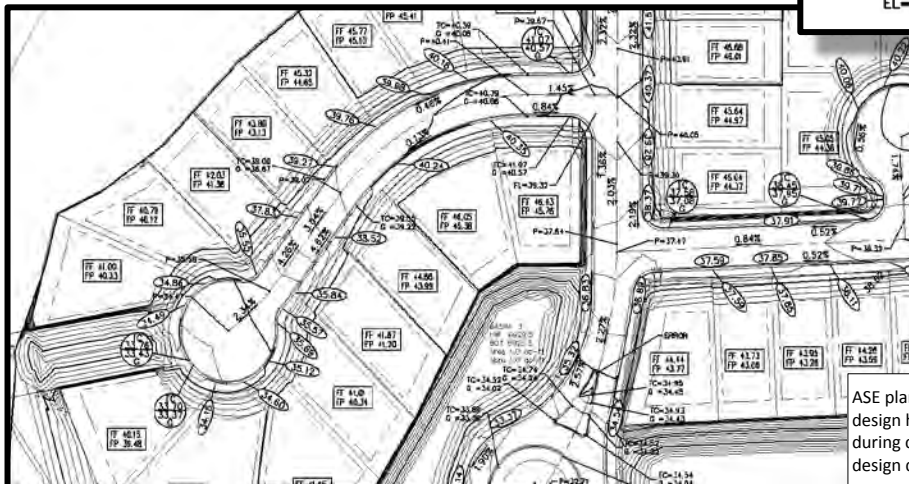
ASE's plan labels can be created with virtually no setup at all with only 2 or 3 clicks of the mouse. Select from a variety of configurations or create your own custom enterprise configuration. ASE labels can be created even before the vertical design has begun. Labels update dynamically with changes to the design data or by moving or grip-editing. ASE's "Make Readable in Viewport" option ensures that labels are always upright. Configure labels to reference paving design data, drawing objects or Civil 3D surfaces. Unlimited flexibility with a simple interface that's easy to use.



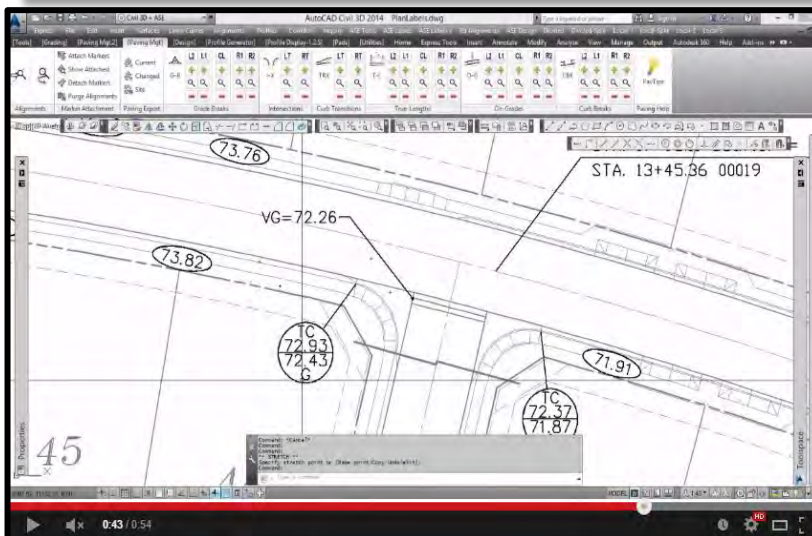
- One-click definition...
 - One-click Civil 3D surface integration...
- Simple... Fast... Effective... Efficient... Reliable



ASE plan labels can be configured to satisfy virtually any organization's style or submittal requirement



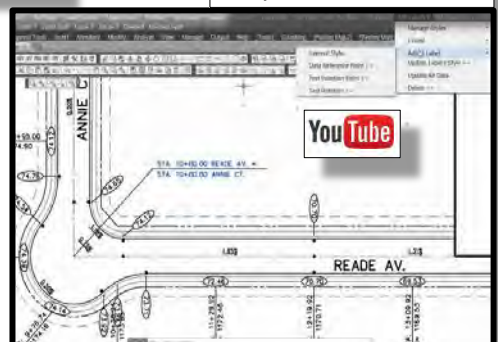
ASE plan labels may be created before the vertical design has even begun. Labels can contain "00.00" during creation and updated anytime thereafter as design data becomes available.



Follow the linked image to view a [YouTube](#) video illustrating how incredibly **easy** it is to create plan labels or dynamically update them with ASE Civil.



Station Equations are a snap with ASE! Check out the [YouTube](#) video to see just how little time it takes...

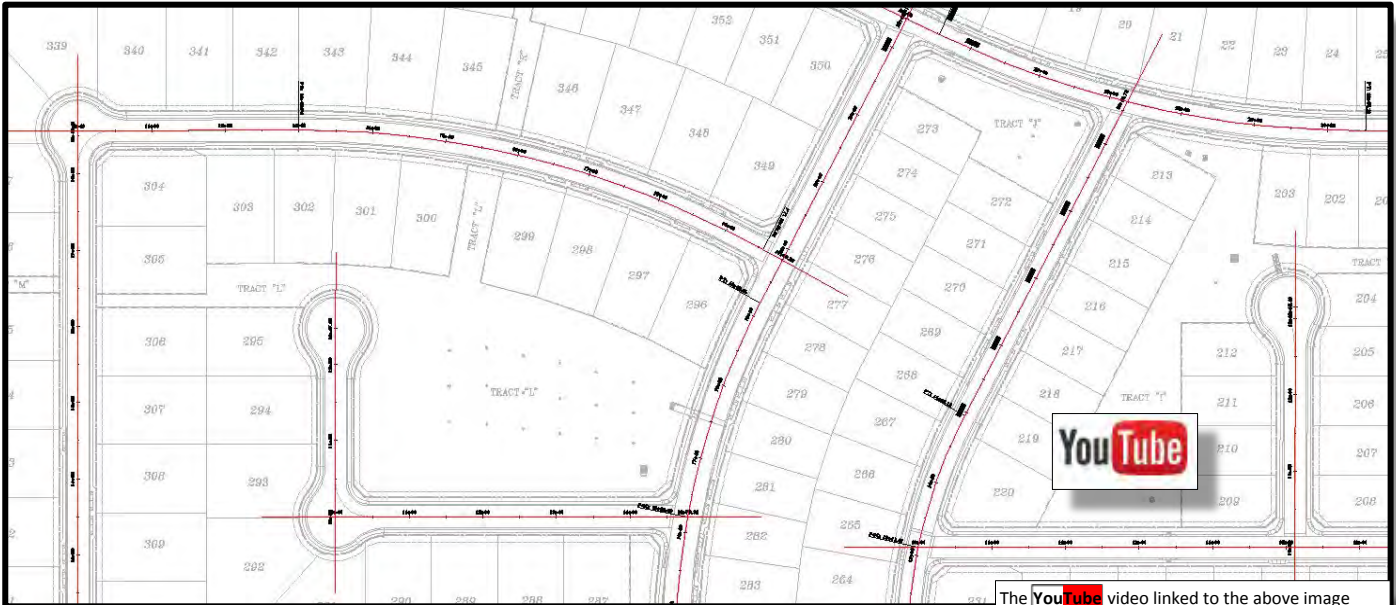


[\[Back to Program Features\]](#)

[\[Table of Contents\]](#)

ALIGNMENTS

ASE Civil includes its own optional alignments system. Defining and stationing 100 alignments takes about 2 seconds. The definitions are automatically oriented correctly and include invisible 100' terminal extensions to support transition and intersection design requirements. Dynamic stations formatting and configuration is **limitless** and alignment properties may be modified or directions reversed instantly. One-click will translate ASE alignments to Civil 3D format in a second.

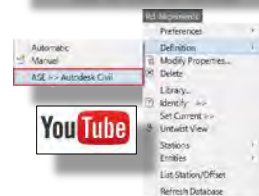


Notice in the linked [YouTube](#) video, that ASE Civil alignments are just as easy to **rename** and **edit** as they are to define...

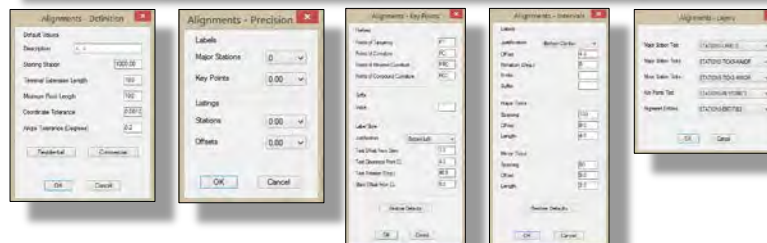
The [YouTube](#) video linked to the above image underscores the effectiveness of ASE Civil on subdivisions from start to finish. Note the speed and efficiency of alignment definition on this medium-sized subdivision.

If you're in this business to **MAKE MONEY**, why would you **NOT** use ASE Civil?

The linked [YouTube](#) video demonstrates the simplicity of the conversion process from ASE to Civil 3D format



ASE Civil's alignments system features a wide range of styling & configuration options that will surely satisfy every possible station formatting requirement or enterprise layering standard



[\[Back to Program Features\]](#)

[\[Table of Contents\]](#)

CLIENT FEEDBACK ...

"...I'll be using ASE until they pry it from my cold dead hands!..."

Once a drafter, designer or engineer uses ASE Civil on a project and gains first-hand experience of the software's features, they quickly become familiar with its capabilities and more fully understand ASE's workflow. After a few days they soon begin to recognize the efficiency of the application and develop a strong appreciation for its actual bottom-line value. After seeing results, it becomes obvious just how much time, frustration, human resources and MONEY they've saved by using ASE Civil.

"... A GREAT benefit!..."

"...I told management that we will need to purchase the software since it does save an **enormous** amount of time..."

Generally speaking, using ASE Civil on one project is usually all it takes for a civil engineering professional to recognize that going back to developing subdivisions the "the old way", is extremely difficult if not totally impossible altogether. One project or just a few days is all it really takes to truly fathom the volume of wasted resources that were lost on past projects which did **not** utilize ASE Civil.

"...ASE Civil is **glorious!** ... ASE and it's capabilities are what sets me apart from every other designer/engineer out there!..."

The following comments from ASE clients^[3] underscore the effectiveness of ASE Civil and validate the real-world, added value gained by consultants' integration and implementation of our software on subdivision projects.

"... I got the hang of ASE and the corridor model done in **two days!** The profiles are created as well ... There is no way I could've got this done without this program!..."

ASE: "... Could you give me an estimate of the time it would've taken **without** using ASE Civil..."

Client: "... using C3D alone, at **least** 5 times as long...I initially thought 10 times as long! ... I'm thinking the people that use only C3D must have come up with some more efficient ways of creating 3 line profiles..."

"...My sincere thanks ... I'm very impressed and feel fortunate ... what you've created is **impressive** ..."

"...I flat-out refuse to design a subdivision **without** ASE. It'd be like working with my hands tied behind my back!..."

"... our success with ASE and the ability to charge our clients **LESS** and still make a profit is a **HUGE** testimony to how much the program helps us..."

"...It is a **badass** program!..."

"...I strongly believe there is no faster way to produce a set of subdivision or roadway plans than with ASE Civil..."

"...It's amazing how quickly it all comes together..."

"...We assigned 1 designer (*splitting time*) and 2 CAD techs, to 2 parcels (*58 lots & 180 lots*). Working simultaneously with ASE, they were able to submit **95%** plans in **18 days!** ...It wouldn't have happened without ASE..."

"...I had a chat with another project manager and he told me that his designer took 7 weeks to do the vertical design for a 200+ lot subdivision using Civil 3D only. He said he got better on the next one and only took 2 weeks to complete the vertical design ..."

I could do the vertical design using ASE in 2 DAYS!!!!..."

"...Thank you for working with us to get us up-and-running with ASE. This is my first time using the program and so far I'm **VERY** impressed!..."

"...I am a strong believer in that this software will pay for itself before you even finish the **FIRST** project it's used on..."

"...I feel real good about using this program. As you said before, after you learn the basics it is relatively simple ... and it is working great ..."

"...It is a significant time-saver..."

"...When I started with this company we didn't have ASE. After I began working on a subdivision with **just Civil 3D only** I quickly realized it was going to be a **nightmare**, especially if we had to adjust the site..."

"...We actually finished early thanks to the software ..."

[\[Table of Contents\]](#)

L I C E N S I N G

The following table provides a variety of information related to the functional characteristics, operational requirements, costs and acquisition of ASE Civil licenses.

Operational Specifications	Licenses “float” and are shared. A license is inaccessible when timed-out/checked out by a user	
	20-minute timeout period starts/restarts each time a license is accessed	
	Licenses are assigned a unique serial number	
	Licenses are managed in the ASE Cloud server	
	A license may be used anywhere at anytime provided there is Internet connectivity	
	Concurrent (simultaneous) license use is limited to the total number of licenses purchased	
Installation	ASE may be installed on any number of workstations	
	Install location is “C:\Program Files” exclusively	
Requirements	Users require read/write access to Windows Registry Hive “HKEY_CURRENT_USER” for program settings and storage of special variables and related data	
	Each installation requires a license file to run (“Client.vlx”)	
	License files are included with trial versions	
	Enterprise license files are provided to each client upon purchase	
Trial Versions	Trial versions are identical to a fully-paid installation of ASE Civil	
	Trial versions may be downloaded and installed from the ASE website	
	Trial licenses do not expire	
	Trial license access is monitored by ASE’s MIS	
	Offsite/remote product support is provided free of charge during trial version evaluation	
Pricing	\$2999 per shared license	
	Discounts are automatically given for purchase of 3 or more licenses	
	Scope of discounts are limited to a single transaction and are not commutable	
	Additional discounts may be negotiated on a case-by-case basis, but are not guaranteed	
Software Maintenance Agreement (“SMA”)	1-year “SMA” is optional with each license purchase	
	“SMA” payment is due upon initial license purchase	
“SMA” Coverage Spec’s	Initial installation (<i>optional</i>)	
	Client orientation & training (<i>8 hours free with 3+ license purchase transaction</i>)	
	Repairs	
	Enhancements	
	Offsite/remote product support	
Product Support Coverage Spec’s (Offsite/ Remote Only)	Telephone	Email
	SMS	Webcast
	MMS	Cloud storage space (<i>drawing and/or project files troubleshooting</i>)
Product Support (Non-Covered)	Non-covered support service is charged @ \$160/hour	
	Non covered software repairs, enhancements, etc. charged @ \$500 per request	

For additional information regarding support and licensing, please [contact EDI, LLC](#)

AutoCAD / C3D Compatibility

ASE Civil has a very wide range of compatibility with AutoCAD/Civil 3D which extends from the latest release all the way back to versions you may never need. Compatibility with C3D has never been an issue for ASE Civil.

Civil 3D	20xx	2022	2023	2024	2025	2026
ASE CIVIL 2017	√	√	√	√	√	√

ASE PRODUCTIVITY: BENCHMARK DATA

Compare **YOUR** productivity to actual **ASE CLIENT** projects:

SAMPLE # 1		
DETAILS		NOTES
Lot Count	770	
Acres	261	
Team Size	2	2 designers; 1:Vertical design, 1:Production
N ^o . Roads/Profiles	52	
N ^o . Basins	23	
Additional Details		5 active oil wells requiring protection from design

TASK	TIME	DETAILS	COMMENTS
Vertical Design	40 hrs.	Define/Label Pads	Draw Polyline, define pad, attach to alignment ("Batch" def option also avail.)
		Design streets	Auto-Set Design Markers, Constrain, elevate to surface, define pav'g features
		Define Basins	Draw Polyline, define basin (Labeling, volume calculation automated)
		Balance earthworks	Raise/lower roads and/or adjust ASE pad definitions, adjust basins
Alignment Definition	2 secs.	ASE Auto-define option used	ASE alignments may be converted to Civil 3D format in equal time required to create ASE definitions (e.g., 2 seconds in this case)
Alignments Editing	30 mins	Ajustments to final definition	Included: • Renaming each alignment • Checking stationing • Verifying proper orientation
Profile Generation		All local roads include: • Offset curbs & gutter Divided roads include: • Medians w/ curb & gutter	Included: • Profile drawing creation, shortcut setup, etc. • Initial generation of multi-line profiles • Line label creation (curbs, gutter, EG) • PVI label & grade label branching (as-needed)

REFERENCES

- [1] Annual software maintenance agreement (“SMA”) required for no-cost assembly development and delivery.
- [2] Continuous function is maintained in the event of temporary loss of Internet connectivity
- [3] All client feedback was unsolicited and none of the individuals were compensated in any way for their feedback. Some ASE clients have agreed to accept inquiries about their real-world experience with ASE Civil. To receive detailed information about any of the statements shown or for contact information for current ASE Civil clients, please email us at: Info@AzSubdivisions.com
- [4] On-site demo’s are provided free of charge for consultants located in the metropolitan Phoenix, Arizona area. For consultants outside Arizona, webcasts are available at no charge.

Seeing the program in action really helps those new to ASE Civil to gain a better understanding of how much can be gained by implementing this unique, yet highly effective software solution. Software demonstrations can be provided either on-site^[4] or via webcast.

STOP THROWING AWAY PROFIT ON WASTED DESIGN & PRODUCTION TIME!

AFTER ALL...AREN'T YOU IN THIS BUSINESS TO **MAKE MONEY**????

ASE Civil will save your company literally **THOUSANDS** of dollars on each project it's used on. Contact us today for a demo of the software and witness first-hand how ASE Civil's exclusive tools, which were developed especially for subdivisions and road design, can "**\$STOP THE BLEEDING**" in your project budgets and put your organization back in the black!

VOICE/SMS/MMS	480.720.8890
FAX	480.907.2262
EMAIL	Info@AzSubdivisions.com , AseCivilSoftware@gmail.com
POSTAL	270 East Hunt Highway, Suite 16-223, San Tan Valley, Arizona 85143

SOFTWARE DEMONSTRATIONS

Demos are available in 30 minute – 90 minute sessions, depending on attendee availability. If you or your office only have a few minutes to spare, we can even demo' the software's key features and functions using whatever time you have available. You **WILL** be impressed by what you see!

Demos can be performed on-site or via webcast to individual desktops or a conference room monitor via www.join.me.com