

CHAPTER 1 AASHTOWARE PROJECT OVERVIEW

Application and Module Overview

AASHTOWare Project is a web based system designed by AASHTO and developed by InfoTech to manage highway contracts. AASHTOWare Project has several modules which are described below.

The *WisDOT Contract Management System* diagrams (Figures 1 and 2) show how AASHTOWare Project interfaces with our existing systems now and in the future.

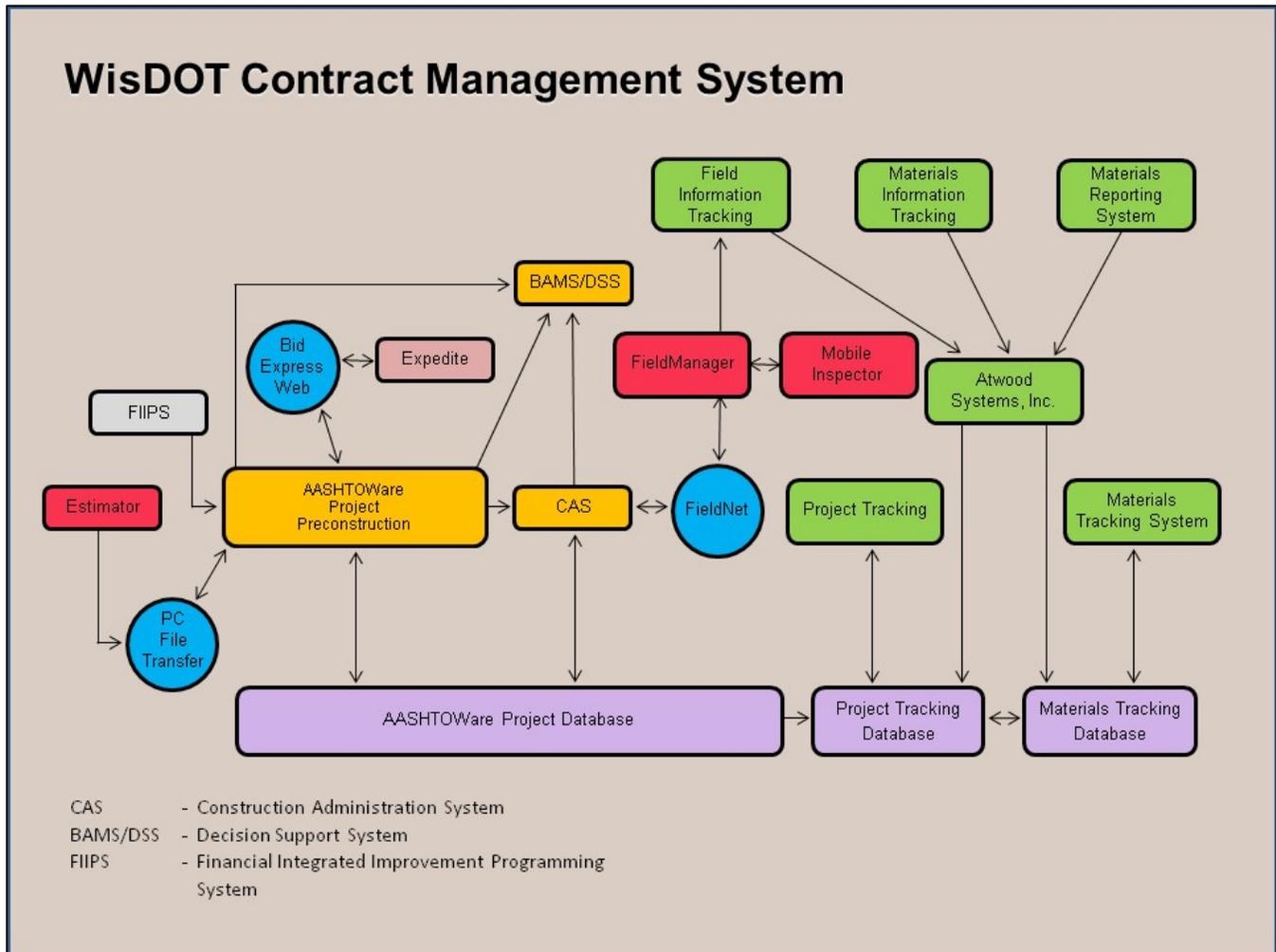


Figure 1



WisDOT Contract Management System – Future

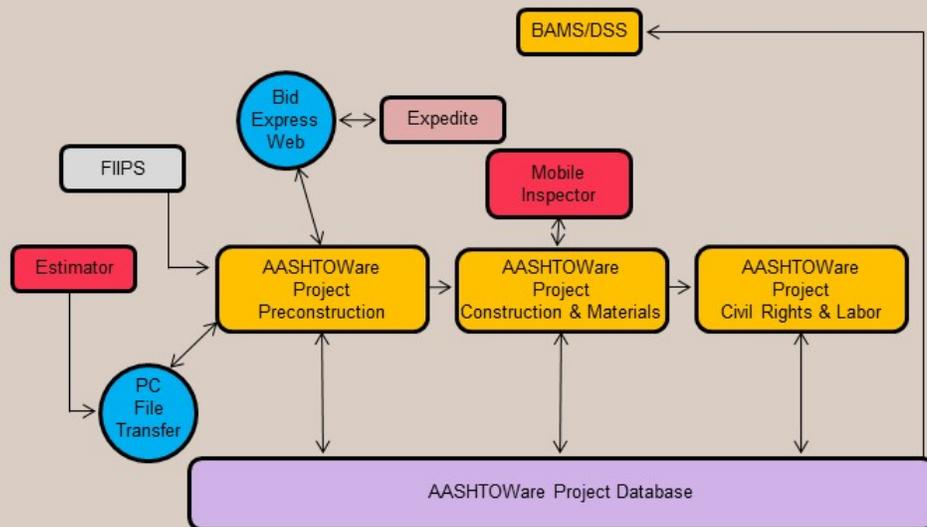


Figure 2

AASHTOWare Project Estimator

Estimator is the Highway Construction Cost Estimation standalone application which helps designers estimate the cost of a construction project using cost-based, bid-based, quote-based, or ad-hoc estimation methods. The designer uses Estimator to create project categories and then adds items to the categories. Prices for the items are derived from one of the aforementioned estimation methods. Estimator uses historical price information that is maintained in AASHTOWare Project BAMS/DSS to generate price information for bid-based pricing. Once a project estimate is complete it is transferred to AASHTOWare Project Preconstruction.

AASHTOWare Project Preconstruction

The AASHTOWare Project Preconstruction module provides designers with a tool to assist in project definition, project cost estimation, proposal creation, and bid let creation. Within this module, detailed project information, not available in Estimator, is added to the project estimate, funding is assigned to each of the project categories, multiple projects are combined to make the proposal package, and the proposals are combined to make the bid letting package. This module also provides bid let staff with automated tools for the management of bid data entry, bid tabulation with low-bid analysis, and contract award processing. In addition, this module includes vendor management including vendor qualification, affiliation, and DBE/WBE information.



AASHTOWare Project CAS

The Construction and Administration System (CAS) supports construction management personnel in the areas of contract status reporting, progress payments, DBE/WBE reporting, funding participation allocation, and project finalization management. Contracts awarded in AASHTOWare Project Preconstruction are initialized in CAS. Payment estimates, generated by construction project field staff using the product FieldManager, are processed in CAS and then transferred to the accounting department for dispersing moneys to the contractor.

FieldManager

FieldManager is a construction management system for managing and tracking construction projects. It enables construction project personnel to record work item and material progress, contractor/subcontractor documentation, daily diary information, contractor payments, contract changes, and generate reports. Awarded contracts are transferred via FieldNet from AASHTOWare Project CAS to FieldManager for administration.

FieldNet

FieldNet is an automated interface that helps manage the data that flows between the construction sites, region offices, and central office. Initially, contracts are transferred from AASHTOWare Project CAS via FieldNet to FieldManager for administration. Payment information is later routed from FieldManager via FieldNet to CAS for processing.

AASHTOWare Project BAMS/DSS

The AASHTOWare Project Decision Support System (BAMS/DSS) provides a complete historical database of contract information along with a set of analysis models, and the capability for ad hoc query and analysis. Executive information requests, summary reports for management, bid management and monitoring analyses, market analysis and cost indices, project planning, project cost estimation, and legislative presentations are some of the applications of BAMS/DSS. Price and payment information is passed from AASHTOWare Project Preconstruction and Project Construction to BAMS/DSS, where it is maintained for providing pricing information for Estimator and Project Preconstruction.

Bid Express

Bid Express is a paid subscription service that provides contractors with bid letting information. Through Bid Express contractors can download Proposals, Addenda, Bid Tabulations, and software such as Expedite. Other reports available include Eligible Bidders Lists, Plan Holders Lists, Contractors Directory, and more. Letting information is transferred from AASHTOWare Project Preconstruction to Bid Express. Bid proposals, which are downloaded by contractors, are then imported to Expedite for completion of the contractor's bid.

Expedite

Expedite is an electronic bidding system program used by contractors to prepare their bid proposals. Contractors simply enter the unit price for each item in a proposal and Expedite automatically calculates the extended amount and proposal total. The Contractor's completed bid is submitted to Bid Express. The bids are then downloaded from Bid Express and imported into AASHTOWare Project Preconstruction where the letting analysis is performed.



AASHTOWare Project Civil Rights and Labor

Future release

The AASHTOWare Project Civil Rights and Labor module allows the department to receive and process the data required to meet federal and state requirements for civil rights and labor compliance activities. The department is planning on implementing this module in the near future.

AASHTOWare Project Construction and Materials

Future release replacing FieldManager, FieldNet and AASHTOWare Project CAS

The AASHTOWare Project Construction and Materials module provides construction engineers a system to manage awarded contracts by allowing the entry of daily work progress diaries, item quantity usage, contract modifications and pay estimate generation. Pay estimates are transferred to the accounts payable department for contractor payment. Construction management personnel can complete contract status reporting, progress payments, DBE/WBE reporting, funding participation allocation, and project finalization management. The department is not using the Materials functionality of this module at this time.



Consultant Software Licensing and Purchasing Information

Consultants with contracts for highway improvement projects must complete their estimate in AASHTOWare Project Preconstruction and/or AASHTOWare Project Estimator.

AASHTOWare Project Estimator

Consultants are responsible for their annual license of AASHTOWare Project Estimator plus the installation and configuration of the software. Consultants can purchase a software license from the AASHTOWare vendor, InfoTech. The annual license fee for this product also includes technical support from InfoTech.

InfoTech

5700 SW 34th Street, Suite 1235

Gainesville, FL 32608-5371

Business: (352) 381-4400

FAX: (352) 381-4444

Or order online at <https://www.infotechfl.com/estimator>

AASHTOWare Project Preconstruction

The licensing for this application will be purchased and maintained by WisDOT. There is no AASHTOWare Project Preconstruction installation as this is a web based product.

AASHTOWare Project Estimator Catalog File

AASHTOWare Project Estimator uses a catalog file which is maintained by WisDOT. This file contains the Standard Item List and bid history unit price information from previous lettings. The unit prices presented should be a starting point for creating the engineer estimate.

WisDOT staff

Region offices should link to the Estimator catalog file stored on the central office file server: <\\mad00fph\n4public\AASHTOWareProject\Estimator\Catalog>.

The location of the catalog file is set within Estimator using a configuration setting.

Consultants

Consultants can download the catalog file from the Consultant Extranet site:

<http://wisconsin.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/tools/estimating/estimator-cat.aspx>.

Software Installation and Configuration for AASHTOWare Project Estimator

WisDOT staff

WisDOT staff use the IT Service Catalog to request AASHTOWare Project Estimator. It is a two-step install process for WisDOT IT staff.

1. Create shortcut on the user's desktop to the region installation of AASHTOWare Project Estimator.
2. Install Crystal Reports Runtime for Estimator on the user's computer which allows them to generate and print reports in Estimator.

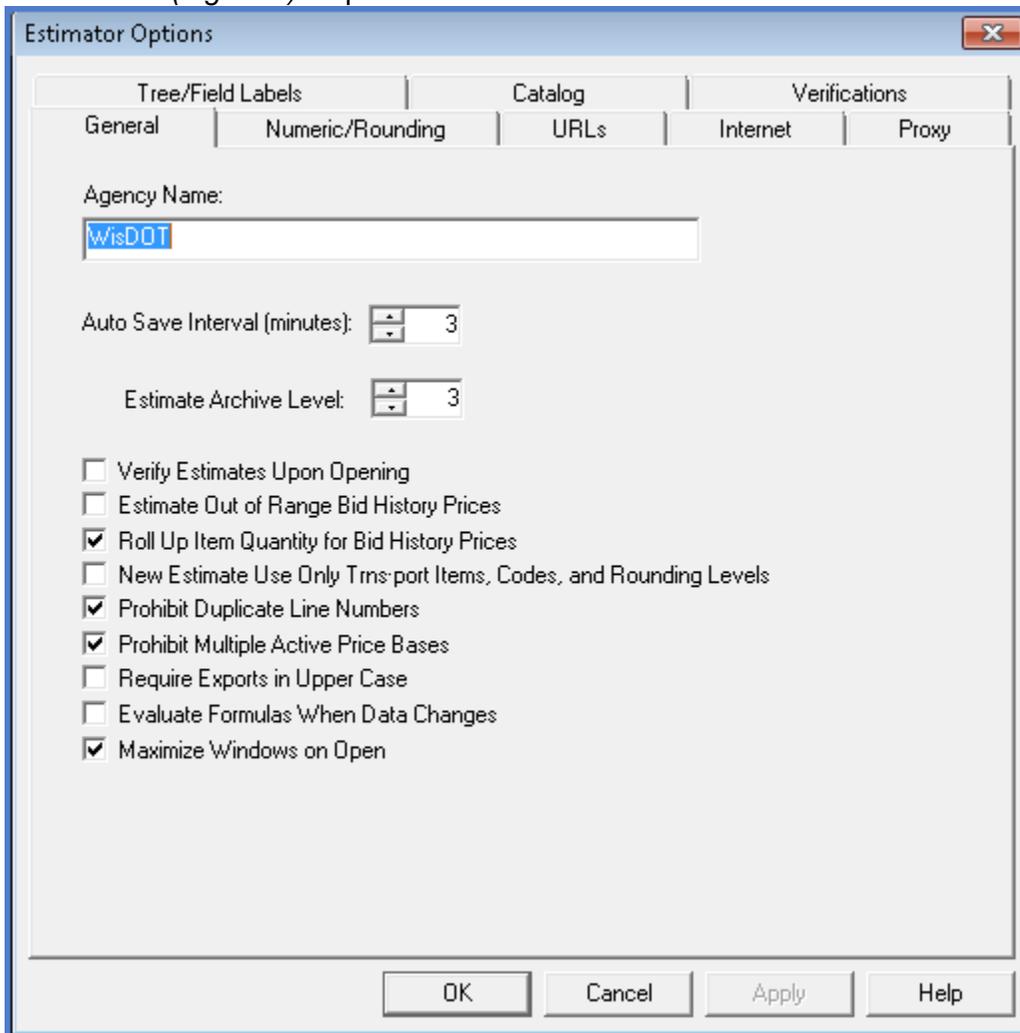
NOTE: The AASHTOWare Project Estimator configurations are taken care of by WisDOT IT staff when the application is installed on the region file server.



Consultants

Once AASHTOWare Project Estimator is installed, complete the configuration steps below:

1. Download a copy of the catalog file from the WisDOT Internet site:
<http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/tools/estimating/estimator-cat.aspx> and save to C:\ProgramData\Estimator\Catalogs\.
2. Log into Estimator with the administrator account.
User name admin
Password password
3. Select **Catalog Tools | Open A Catalog**. Select the current catalog from the list.
Click **<OK>**.
4. Select **Other Tools | Global Options**
General tab (*Figure 3*) – update to reflect the values and boxes checked/unchecked below.



The screenshot shows the 'Estimator Options' dialog box with the 'General' tab selected. The 'Agency Name' field contains 'WisDOT'. The 'Auto Save Interval (minutes)' is set to 3, and the 'Estimate Archive Level' is also set to 3. The following checkboxes are checked: 'Roll Up Item Quantity for Bid History Prices', 'Prohibit Duplicate Line Numbers', 'Prohibit Multiple Active Price Bases', and 'Maximize Windows on Open'. The other checkboxes are unchecked.

Tree/Field Labels	Catalog	Verifications
General	Numeric/Rounding	URLs
	Internet	Proxy

Agency Name:

Auto Save Interval (minutes):

Estimate Archive Level:

Verify Estimates Upon Opening
 Estimate Out of Range Bid History Prices
 Roll Up Item Quantity for Bid History Prices
 New Estimate Use Only Transport Items, Codes, and Rounding Levels
 Prohibit Duplicate Line Numbers
 Prohibit Multiple Active Price Bases
 Require Exports in Upper Case
 Evaluate Formulas When Data Changes
 Maximize Windows on Open

OK Cancel Apply Help

Figure 3



Numeric/Rounding tab (Figure 4) – update to reflect the values for the fields below.

The screenshot shows the 'Estimator Options' dialog box with the 'Numeric/Rounding' tab selected. The dialog has a title bar with a close button (X) and a tabbed interface with three main sections: 'Tree/Field Labels', 'Catalog', and 'Verifications'. Under 'Tree/Field Labels', the 'Numeric/Rounding' sub-tab is active. The settings are as follows:

- New Estimate Unit Price Rounding Level: Tenth of Cents 0.001\$
- New Estimate Extended Amount Rounding Level: Cents 0.01\$
- New Estimate Quantity Rounding Level: Hundredths of Unit
- Line Number Start: 0010
- Line Number Increment: 10
- Group Number Start: 0010
- Group Number Increment: 10
- Increment Line Number Start by Group Number

At the bottom of the dialog are four buttons: 'OK', 'Cancel', 'Apply', and 'Help'.

Figure 4



URLs tab (*Figure 5*) - Confirm the paths for each item.

Catalog Path – The location of the Estimator catalog, C:\ProgramData\Estimator\Catalogs

Estimate Folder – The location you want all your users to save their estimates files to.

Estimate Template, Report Template and Cache Folders – Accept the defaults.

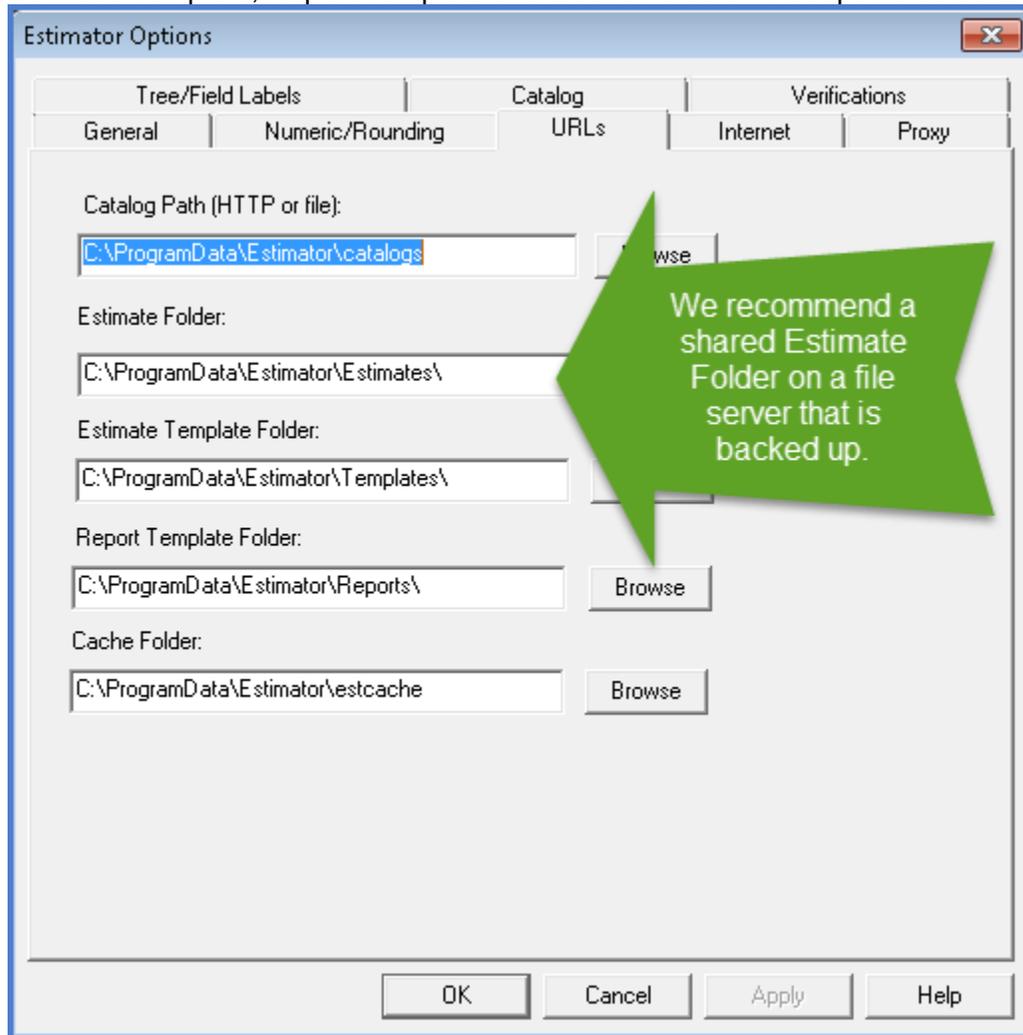


Figure 5

Tree/Field Labels tab (Figure 6) – complete the fields EXACTLY as shown below. Then click **<Group>** to modify group (category) field labels.

Tree Labels		Field Labels	Detail View Fields
Estimate ID:	%1 - %3	Project:	Estimate ?
Group Number:	%1 - %2 - %4	Category:	Group ?
Item:	%2 - %3 %9	Item:	Item ?
Task List Name:	%2		Task List ?
Ref Price ID:	%2 - %3	Ref Price:	Ref. Price ?
Bid History ID:	%5 %6	Bid History:	Bid History ?
Cost Sheet Name:	%2		Cost Sheet ?
Equipment:	%2		Equipment ?
Labor:	%2		Labor ?
Material:	%2		Material ?
Equipment, Labor and Material Sets:			Sets

Buttons: OK, Cancel, Apply, Help

Figure 6



5. **Group Detailed View Field Labels** window (*Figure 7*) will appear. Complete the fields EXACTLY as shown below with the ones to be updated noted with green arrows.

Current Field Labels	New Field Labels
Alt Code	Alt Code
Supplemental Group Number	Supplemental Category Number
Default Fund Package	Default Fund Package
Group Total	Category Total
From Estimate Default	From Estimate Default
Group Description	Category Description
Notes	Notes

OK Cancel Help

Figure 7

6. Click **<OK>** to return to the **Tree/Field Labels** tab.
7. Click **<Apply>** and **<OK>** to save changes.
8. Administrator account logs out of Estimator.

Consultants – Creating Estimator User Accounts

Both Estimator and a project created in Estimator have security assigned to them with a user name. It is difficult to share project files if multiple Estimator user names are created and used by a consultant firm. To make things easier, we recommend using the following user names:

Administrator (For install / configuration ONLY) AND Generic user account (For estimate creation / updates)	User name Password	admin password
	User name Password	user password

To create the generic Estimator user account and set access rights (Figure 8):

- Log into Estimator with the administrator account.
- **Other Tools | Maintain User**
- Click **<Add>**

Action	Status	Action	Status
Active status	Checked	Super-User	Unchecked
New Estimate Access	Owner	Open Estimate Access	None
Entire Catalog	Unchecked	Standard Item Catalog	Unchecked
Bid History Catalog	Unchecked	Cost Sheet Catalog	Unchecked
Reference Price Catalog	Unchecked	L/E/M Catalog	Unchecked
Code Tables	Unchecked	Catalog Imports	Checked
Print Bid Based	Checked		

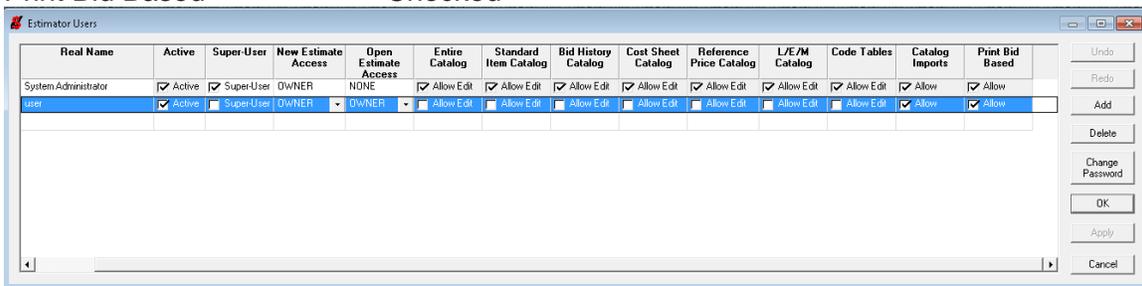


Figure 8

- Click **<OK>** to save the new user. A message stating “Unassigned password values for newly added users are given a default value of ‘password’.” Click **<OK>** to continue.
- These user accounts are stored in the C:\ProgramData\Estimator\Estimator_Users.bin file. This file can be created on one PC and copied to other PCs with Estimator installed.

ALL Estimator users MUST log onto Estimator with the ‘user’ user name and select the latest catalog.

- **Catalog Tools | Open A Catalog**
- Select the **current** catalog.
Example - ENG2016 where 2016 refers to the spec year of the standard specification for the bid items contained in the catalog.
- Click **<OK>** to save changes.



Technical Support

Wisconsin Access Management System (WAMS) username and password support:

Local Madison	(608) 261-4400
Outside Madison	(866) 335-2180 (toll free)
Web URL	https://on.wisconsin.gov/WAMS/FormattedEmail

AASHTOWare Project Estimator support including software installation, configuration and support:

WisDOT staff	(608) 266-9434
	(800) 362-3050 (toll free)
Consultant staff	(715) 421-7319 (Annette Czerneski)
	(715) 833-5574 (Adam Bleskacek)
	(608) 264-7606 (David Castleberg)

AASHTOWare Project Preconstruction support including logon, application and general support issues:

AWP Support Email Address	AWPSupport@dot.wi.gov
Annette Czerneski	(715) 421-7319
Deanna Goebel	(608) 267-6967
Adam Bleskacek	(715) 833-5574
David Castleberg	(608) 264-7606

AASHTOWare Project Preconstruction Support web site:

<http://wisconsin.gov/Pages/doing-bus/eng-consultants/cnslt-rsrcs/tools/awp/awp.aspx>

