

**Summary**  
**Minutes of Virtis Opis TF Meeting held in Santa Fe, NM**  
**October 25-27, 2011**



# Summary Minutes Of The

## AASHTO Virtis Opis Task Force Meeting October 25-27, 2011 Santa Fe, NM

### Table of Contents

General Information – Meeting of the BRIDGEWare Task Force .....	4
General Discussion.....	4
Prior business.....	4
1a. Review June meeting minutes from Boise, ID .....	4
1b. Review August meeting minutes from Helena.....	4
1c. Review Action Items .....	4
Financial overview and work plan summary .....	4
2a. Update on Phase 15 (FY 2011) .....	4
2b. Update on Phase 16 (FY 2012) .....	4
Update on Virtis/Opis Licensees (FY 11) .....	4
3a. Product report .....	4
3b. Service Unit Report (Handout VO-SN-3b).....	4
Support and Maintenance report .....	5
4a. Incident and support summary (Handout VO-SN-4a).....	5
4b. Progress on bug resolution .....	5
4c. Enhancement list update .....	5
4d. Maintenance issues .....	5
User Group.....	5
5a. Summary Minutes from Boise (Handout VO-SN-5a).....	5
5b. Summary Minutes from Helena (Handout VO-SN-5b) .....	5
5c. Web domain renewal (UG web site) .....	5
Update on VO 6.4 .....	5
6a. Progress and schedule review (including SP for 6.3).....	5
6b. Beta Testing.....	5
6c. Regression Testing .....	6
Enhancements .....	6
7a. Brainstorming Results .....	6
7b. BRASS culvert import utility Estimate .....	6
7c. Capacity Override (VI 9359, 2010 UG).....	6
7d. Design Settings – removal of vehicle selection (2010-VO-88) .....	6
7e. Specification implementation commentary (2011-VO-41).....	6
7f. Additional Testing (2010-VO-32) .....	6
7g. 2011 Interim spec updates (2010-VO-52) .....	6
7h. Truss to use interaction equation (2010-VO-34) .....	6
7i. VI 10990 Stage loading for floor system (2011-VO-40).....	7
7j. Opis as a Design Tool – P/S (2011-VO-56).....	7
7k. 3D analysis revised cost estimate .....	7
7l. Drilled Shaft cost estimate .....	7
7m. Model mild steel in PS beams – Reviewer requests .....	7
7n. Maintenance items in estimates (2011-VO-47) .....	7
7o. 2011 UG Top 10 estimates (Handout VO-SN-7o).....	7
7p. Bridge Explorer Customization (Handout VO-SN-7p) .....	7
This estimate would be revised by the contractor.....	7
Miscellaneous Topics .....	7
8a. KS DOT – off-site licensing of Virtis for Permit/Routing .....	7



8b.	KS DOT – use of OkiePro DLL and new utility for distribution factors .....	7
8c.	Support of Virtis Standard Engine (BAR7).....	7
8d.	Product Performance Measures .....	7
8e.	OK DOT Gusset plate analysis (review of original estimate) (Handout VO-SN-8e).....	7
8f.	OkiePro DLL maintenance.....	8
8g.	MI DOT licensing (3 <sup>rd</sup> party support).....	8
8h.	Reports TAG (2011-VO-48).....	8
8i.	Customer Satisfaction Survey .....	8
Agenda Item VO-09: Work Plan.....		8
9a.	FY 12 draft amendment .....	8
9b.	FY 13 draft work plan (Handout VO-SN-9b).....	8
9c.	Future work plans .....	9
FHWA Update .....		9
Agenda Item VO-11: Marketing / Training.....		9
11a.	AASHTO Bridge update.....	9
11b.	WV Trip update .....	10
Review Action Item List from This Meeting.....		10
Summary of Upcoming Activities.....		<b>Error! Bookmark not defined.</b>



## General Information – Meeting of the BRIDGEWare Task Force

---

Date: Tuesday, October 25, thru Thursday, October 27, 2011

### **Participants:**

BRIDGEWare Task Force			
AASHTO	Alaeddin Mohseni	Project Manager	BRIDGEWare
	Jim Ramsey	Project Manager	T&AA
	Jan Edwards	Project Director	
SCOJD	Dan Buhler	Manitoba DOT	
T&AA	Wally Ballou	Kansas DOT	
V/O Task Force	Tim Armbrecht	Illinois DOT	Chair
	Dean Teal	Kansas DOT	
	Bryan Silvis	Virginia DOT	
	Amjad Waheed	Ohio DOT	
	Tom Saad	FHWA Liaison	
		Midwest Resource Center	
V/O Contractor	Jim Duray	Baker	
	Herman Lee	Baker	
Guest	Gary Kinchen	New Mexico DOT	

Joshua Sletten (V/O TF) was unable to attend the meeting.

Notes Taker: Amjad Waheed

### **Financial overview and work plan summary**

#### 2a. Update on Phase 15 (FY 2011)

The TF was informed that this agenda item is on track.

#### 2b. Update on Phase 16 (FY 2012)

The TF was informed that this agenda item is on track.

### **Update on Virtis/Opis Licensees (FY 11)**

#### 3a. Product report

The Contractor gave a report on Licenses of Virtis/Opis. The Contractor suggested that DOTs should promote Virtis in universities and institutes. Two states have unlimited Agency Sponsored Consultant Licenses at the moment.

#### 3b. Service Unit Report

The Contractor presented the Service Unit (SU) Report. The TF authorizes use of SUs. The AASHTO BRIDGEWare Project Manager has the responsibility to keep track of SUs used and their balance. Tracking the SUs committed by various states was also suggested.

### **General Discussion**

Tim Armbrecht opened the meeting and informed the Task Force (TF) members that members from the New Mexico DOT may be joining the meeting sometime in the morning. Tim also said that during his absence from the Virtis Opus (VO) meeting while attending the concurrent Pontis meeting, Dean Teal would chair the VO meeting.

### **Prior Business**

#### 1a. Review June meeting minutes from Boise, ID

The minutes were reviewed and approved as is.

#### 1b. Review August meeting minutes from Helena

The minutes of TF meeting after VO User group meeting were reviewed and approved as is.

#### 1c. Review Action Items

The open Action Items (AI) were reviewed and their status was updated.



## **Support and Maintenance report**

### 4a. Incident and support summary

The Contractor informed the TF that there were 20 unresolved issues and 16 new issues to date. In January 2011, the number of unresolved issues was also reported as 20. The following 4 critical issues/bugs were identified by the Contractor:

10960 – Reanalysis of a floor beam does not show the change in dead load (it would be fixed by a patch)  
10459 – Virtis uses Secant Equation to calculate RF of tensile members which is incorrect (its fix was deferred)  
10837 – When LLs are over-ridden Virtis Substructure does not use user entered loads (it would be fixed by the patch)  
10642 – Virtis calculates negative load for negative haunch area in prestressed beam rating (will be resolved in VO6.4)

### 4b. Progress on bug resolution

The Contractor provided the maintenance progress report on incidents. The TF confirmed that all bugs reported by December 31, 2011 are required to be fixed in VO 6.4.

### 4c. Enhancement list update

Two handouts were passed out: Beta TAG Enhancement Bucket List & Virtis Opis Enhancement List.

### 4d. Maintenance issues

The Contractor informed the TF that there were a few bugs in the Madero engine (timber module) that need to be fixed. The TF was informed that a majority of States were running newer (6.3) version of VO. However, there are some states that are still using VO6.2. Tim suggested that the Contractor should continue to provide technical support for agencies that use older versions of VO as long as those agencies continue paying the annual license fee. However, any bugs reported in older versions would be fixed in the newer version of VO thus giving States incentive to convert to the newer version of the program.

## **User Group**

### 5a. Summary Minutes from Boise

Summary of minutes from the Boise, ID meeting were presented to the TF.

### 5b. Summary Minutes from Helena

Summary of Minutes from the Helena, MT meeting were presented to the TF.

### 5c. Web domain renewal (UG web site)

Tim A. informed the TF that the VO User Group had requested that the TF fund the \$15 maintenance fee for the VOBUG site.

Jan E. informed the TF that User Groups used to be constitutionally independent and had their own funds to cater small expenses. Now the User Groups do not have any independent funds.

The TF agreed to fund the maintenance of the VOBUG site. Tim A. will contact the VO UG website administrator (David Warner of MTDOT) and ask him to submit an expense report to Ala M. for reimbursement. In the future, the TF would continue funding VOBUG website maintenance fee.

## **Update on VO 6.4**

### 6a. Progress and schedule review (including SP for 6.3)

The Contractor started with the update on Service Pack (SP) 6.3.1. The Contractor said that VDOT was testing its enhancements and anticipated it would be done by the end of the week. The SP would then be released subject to TF approval. Bryan confirmed that VDOT's testing would be done soon.

On VO 6.4 progress, the Contractor updated the TF on the three big modules planned for the next release of VO (Culverts; Drilled Shafts; 3D Analysis). Work on Culvert and 3-D modules is underway. Not much work had been done on the Drilled Shaft module.

### 6b. Beta Testing

The Contractor informed that beta testing would start in April 2012. The Contractor suggested testing different modules separately but Tim suggested testing all modules simultaneously so the testing would not have to be repeated. The VO TAG Chair, Dean Teal, said that he had targeted some TAG members to test specifically the culvert module. The Contractor said one of the modules might be ready for testing as early as mid-March 2012 while the other two would be ready by mid-April 2012. One thought was to have three separate TAG groups testing different modules of software in parallel. This idea did not gain much support.

The Contractor requested that the TAG forward the 3-D models they intend to test with. Dean said he would ask the TAG members to forward the 3-D models by the end of December 2011. Beta testing could start by mid-March 2012, on small tasks and likely one of the three major enhancements. The other two major enhancements could be released for testing by mid-April 2012. TF members were concerned that there would not be enough time for testing between mid-April and the release date.

The Beta testing schedule will be revisited at the January meeting when development is further along.



### 6c. Regression Testing

Regression testing was covered later under 7f.

## **Enhancements**

### 7a. Brainstorming Results

Brainstorming results from the last VOBUG were presented. The top eleven enhancements were:

- 1) Frame Analysis (19 votes)
- 2) Sort Bridge Explorer by Structure Type (more fields)(e.g., Add name of designer to the reports) (19 votes)
- 3) Concrete Arches (17 votes)
- 4) GUI for Trusses (16 votes)
- 5) Reports Compatibility with Excel (16 votes)
- 6) LRFR Gusset Plate Analysis (15 votes)
- 7) Less Input (Improve GUI) (14 votes)
- 8) Post-tensioned beams and Tub-girders (14 votes)
- 9) LRFR for Trusses (14 votes)
- 10) NSG for LRFR (13 votes)
- 11) Steel Box Girder (13 votes)

The Contractor presented planning estimates for the following items including the following:

- 1) Frame Analysis
- 2) Sort Bridge Explorer by Structure Type (more fields)(e.g., Add name of designer to the reports)  
This estimate was to select the fields for display and change their order of display. It was proposed that ten fields customizable by the administrator be provided in the database. The data labels for 10 fields would be controlled by the agency and would get exported as system defaults. These fields would not have any information to be used for analysis. The Contractor was advised to prepare an estimate for adding 10 customizable fields in the database. This enhancement would be considered in the VO6.5 work plan.
- 3) Concrete Arches  
The Contractor said that this estimate was prepared but had a lack of information about the scope for this enhancement and based on concrete spandrels. Bryan S. said we need to go back to those who voted for this enhancement and get more information on what type of arches they would like to be included (concrete arch culvert, concrete spandrels and/or structural arch with fill). Tom S. said we should present the estimated enhancement costs at the next VOBUG meeting and ask the Users to help in determining the scope. However, this enhancement would not be in the VO 6.5 work plan.
- 4) GUI for Trusses  
Could be combined with 9) below

- 5) Reports Compatibility with Excel (need explanation)  
Amjad W. would provide an explanation.
- 6) LRFR Gusset Plate Analysis  
Tim A. suggested that this should be included in
- 9) LRFR for Trusses. Contractor would verify with OKDOT if it is included in the scope of enhancements funded by OKDOT.
- 7) Less Input (Improve GUI) (need explanation)  
Tim A. said he would send an Email to voters of this enhancement to get their input on simplifying the tree.
- 8) Post-tensioned beams and Tub-girders
- 9) LRFR for Trusses  
Could be combined with 4) above
- 10) NSG for LRFR
- 11) Steel Box Girder (need scope defined to prepare an estimate)

### 7b. BRASS culvert import utility Estimate

The Contractor presented an estimate to prepare import utility for BRASS-Culvert files. The Contractor explained that they had approached WYDOT to obtain BRASS Culvert Command Language and is currently awaiting a response. The current estimate assumes detailed information on the command language.

### 7c. Capacity Override

The Contractor presented an estimate which included design and load rating capacity overrides.

### 7d. Design Settings – removal of vehicle selection

This item evolved from a Kansas incident.

### 7e. Specification implementation commentary

The Contractor will check on whether the cost of links from the flow-charts to the specification documentation was included in the estimate.

### 7f. Additional Testing

The Contractor presented an estimate for additional testing which includes additional enhancement of the regression tool. The culvert estimate has a line item for regression testing. Future regression tool enhancement could include floor systems and substructure.

### 7g. 2011 Interim spec updates

The Contractor presented an estimate to update AASHTO LRFD Bridge Specifications 5<sup>th</sup> Edition, 2011 Interim Revisions. The actual next AASHTO release was thought to be the 6<sup>th</sup> Edition (i.e. not an Interim).

### 7h. Truss to use interaction equation

The Contractor presented an estimate to implement truss interaction rating for longitudinal trusses instead of using



the secant method. This implementation would address CALTRANS's issue with the truss rating.

7i. VI 10990 Stage loading for floor system

The Contractor presented an estimate to change handling of stage 2 loads for non-composite floor beams. The Contractor said this would also be applied to girders in VO 6.4 at no cost.

7j. Opis as a Design Tool – P/S

The Contractor presented an estimate to implement Opis as a design tool for prestressed beam as a stand-alone utility in C# language. The Contractor said more utilities could be added at a much lower cost as they would use the tools added during development of this design tool. The complete estimate for Opis as a design tool has not been developed.

7k. 3D analysis revised cost estimate

The Contractor presented a revised cost estimate for 3-D Analysis. The Contractor does not anticipate that 64-bit capability would be required to run the 3-D analysis and does not have an estimate of the time required to run a 3-D analysis. The Contractor indicated that running the 3-D analysis from the Bridge Explorer (requested by several TAG members) would not make a significant financial difference. The Contractor indicated that significant 3-D graphic progress was made in a short amount of time and demonstrated the influence surface graphic. The TF expressed interest in gradient shading.

7l. Drilled Shaft cost estimate

The Contractor presented two cost estimates for Drilled Shafts: cost estimate to implement Florida Pier (FP) approach and that to implement COM624 approach. Majority of states had asked to implement FP approach.

7m. Model mild steel in PS beams – Reviewer requests

The Contractor presented requests made by the reviewers on PS Beam mockups to model mild steel. TF reviewed and discussed reviewers' comments. Adding a checkbox to mark if the mild steel is to be considered or not in the rating analysis was suggested.

7n. Maintenance items in estimates

The Contractor presented the estimates for 14 issues categorized as maintenance. The summation of the estimated costs was substantial and the TF discussed potential methods to resolve the issues in stages.

7o. 2011 UG Top 10 estimates

The Contractor provided estimate on User Group's picked top ten enhancements.

7p. Bridge Explorer Customization

The Contractor provided an estimate to implement simplest Bridge Explorer Customization (see also 7a above). This estimate would be revised by the Contractor.

**10-26-2011**

Miscellaneous Topics

8a. KS DOT – off-site licensing of Virtis for Permit/Routing

Wally informed the TF that Kansas had overweight/over height permitting application hosted on a vendor's site. Kansas also wanted to host Virtis on the vendor's site. Wally wanted to know the AASHTO licensing requirements. Jim R. asked if the site would be under full control of KSDOT.

TF was informed that there would be two databases; one database would be on vendor's servers and other on KSDOT's servers. Kansas would periodically synchronize both databases. Jim R. said AASHTO would not object to it as long as the support stays the same. Tim A. also agreed. KSDOT was given Ok to proceed.

8b. KS DOT – use of OkiePro DLL and new utility for distribution factors

Dean T. informed the TF that KSDOT is standardizing non-standard gage vehicles. KSDOT is asking for an estimate from the Contractor to modify live load distribution factors by a percentage for non-standard gage trucks at the time of running analysis at the Bridge Explorer level.

The Contractor said it would be a small enhancement. Dean would provide the detailed documentation to the Contractor about the KSDOT enhancement and the Contractor would then prepare an estimate accordingly.

8c. Support of Virtis Standard Engine (BAR7)

The TF decided to continue supporting import of BAR7 files into Virtis Opis. However, Virtis Standard Engine (VSE) would no longer be enhanced or maintained in VO anymore. Optional scripts would be released in VO 6.4 to convert VSE option to AASHTO Standard Engine.

8d. Product Performance Measures

No discussion. The topic was deferred for the time being.

8e. OK DOT Gusset plate analysis (review of original estimate)

Oklahoma DOT had requested to add gusset plate analysis to the truss analysis module. The Contractor provided a preliminary estimate to add gusset plate analysis & rating to Virtis truss module. According to



the estimate three new windows would be added to the Bridge Workspace for defining gusset plate properties. Gusset plate property data would be stored in the BRIDGEWare database. Gusset plate rating results would be available to OkiePros. OKDOT would fund the gusset plate analysis through SUs.

8f. OkiePro DLL maintenance

OkiePro DLLs were distributed as a part of regular release. Last release of DLL was for VO 6.2. DLLs needed to be updated. TF members raised the question about the funding for the maintenance of OkiePro DLLs. TF was informed that Utah, New York and other states might also be interested in these DLLs as they had contacted Wally. It was suggested that maintenance of DLLs could be covered under Time and Material Task 4A: Routine Maintenance of Virtis and Opis.

Tim proposed that KSDOT should work with the Contractor and use SUs to fund 8b and 8f. After the initial development through state SUs, TF would take over the maintenance. It was also proposed that KSDOT should market their idea to other states to acquire more funding resources by presenting at the next User Group Meeting and at SCOBS for T-19.

8g. MI DOT licensing (3<sup>rd</sup> party support)

The TF was informed that Michigan DOT had Super Site license for Virtis. MI DOT had requested passing on technical support issues raised by non-DOT and consultants to university resources. The TF had no objection to it.

8h. Reports TAG

Deferred

8i. Customer Satisfaction Survey

Ala Mohseni presented results of Customer Satisfaction Survey. TF response to the Users was very highly rated by the Users. The areas to work on to improve Customers experience were:

- Process and delivery of output reports
- Overall documents
- Quality of documents
- Usability of documents
- Operation (speed & accuracy)

Ala M. said we needed to decide how we would communicate these results to the users. Ala also wanted to repeat this survey every year to track the progress.

8/27/11

**Work Plan**

9a. FY 12 draft amendment

The Contractor provided Task and Cost Summary of Amended FY 2011 Work Plan (WP).

Bryan expressed VDOT's desire to have the drilled shaft enhancement model multiple shafts under a column instead of a single drilled shaft. The Contractor said the current estimate is for single drilled shaft enhancement. Tim said there had already been an increase in FY 2011 WP and wanted to move forward with the single shaft enhancement. Tim suggested adding multiple-shaft enhancement in the list of future enhancements. The Contractor would be asked to provide an estimate on the multiple-shaft enhancement in future.

Amended FY 2011 contract was previously extended to June 30, 2012. FY 2011 and FY2012 WPs would run parallel.

The Contractor also provided amended FY2012 WP.

Some TF members raised questions about the capacity of the Contractor to include all the requested enhancements.

The TF requested Ala to work with Jim R. and review the FY 2011 and FY 2012 budgets to ensure the additional funding required is available. Ala would report back to the TF. The TF would then have a conference call to discuss the enhancements to be included in the FY 2011 and FY2012 WPs.

Top ten enhancements voted by the users were discussed. Incident 11054 (Opis Prestress Design Tool) was voted as #1 but the development of Opis Prestress design tool was deferred to VO 6.5 and 6.6 due to its very high cost. Tim and Bryan proposed to include enhancement #2 (10745 Fatigue Design), #3 (10776 New Function for Different Vehicles placed Side by Side) and #5 (10340 Shear Stud Wizard Enhancement for Splice Plate Gaps).

It was noted that two more tasks could be potentially added with a relatively small budget increase; #4 (3267 Add the Ability to Copy Strand Patterns between Spans) and #6 (10279 Incorrect Distribution factors for Prestress Bulb-Tee Deck Beams). The final decision was deferred until the funding amount would be confirmed by Ala M. and the Contractor could review its capacity.

The TF gave VDOT permission to pursue the Condition Factor enhancement directly with the Contractor using service units.

9b. FY 13 draft work plan

Estimates for VO 6.5 were discussed. The Contractor provided an estimate to include gusset plate analysis. The Contractor was advised to contact OKDOT directly on the issue of gusset plate analysis as this module is fully funded by OKDOT.





The VO TAG would offer services to test OKDOT funded enhancements. The TAG might give comments and suggestions but those might not be included in the OKDOT enhancements. As OKDOT is providing the funding, OKDOT has the final say in the development of the enhancement.

9c. Future work plans

Tim A. informed the TF that curved beam/girder analysis had tentatively been included in VO 6.5. NSG-LRFR enhancement was also proposed for VO 6.5. The Contractor will contact MIDOT regarding MI enhancement LRFR Part II. The Contractor would modify and develop the scope for MIDOT enhancement. The TF will continue to work to finalize the FY 13 WP at the January meeting. Tim also advised the TF members to start developing ideas for VO 6.6. Tim also asked to defer a Reports TAG discussion until the January meeting.

**FHWA Update**

Tom Saad provided the FHWA Update for VO TF (October 2011), as follows:

The States of Connecticut and Arkansas are hosting LRFR training (NHI course 130092A) in December. This is Connecticut's third course in the past 2 years, and Arkansas's first request. Idaho and Georgia hosted LRFR training in August. The TF may wish to consider contacting these States to discuss opportunities for delivering Virtis and Opis training/marketing.

FHWA's Office of Bridge Technology is hosting a series of webinars on LRFR implementation. The first webinar in the series was offered in October. The webinar focused on the current status of LRFR implementation nationwide, the benefits of LRFR, and showcased VA DOT's statewide implementation of LRFR. The second webinar is scheduled for November 17 and would provide information on design and analysis of culverts. OHDOT would provide a state's perspective on load rating of culverts. A third webinar is being planned for January 2012 which would highlight load rating of segmental and other concrete box girder bridges.

A FHWA Memorandum clarifying the criteria for utilizing 'Assigned' Load Ratings has been distributed to the FHWA Division Offices. The criteria allows States to use assigned ratings provided they demonstrate that there is a QC/QA process in place to check the design through construction, State legal and permit loads are enveloped by the design load model, and the bridge has not experienced deterioration or been modified since the time of design/construction. This policy clarification allows FHWA to allow for the 2010 MBE to be included

as an acceptable version of the MBE in future rulemaking.

With the enactment of a six month extension of P.L. 112-30, the Surface and Air Transportation Programs Extension Act of 2011, FHWA has the contract authority and Highway Trust Fund expenditure authority to operate through March 31, 2012.

In November, a congressional subcommittee would be marking up (moving to the Senate floor) a highway bill referred to as MAP-21 (Moving Ahead for Progress in the 21<sup>st</sup> Century). This bill would provide highway funding legislation for two years at current levels. A FY 2012 Appropriations bill is also moving forward in Congress which sets highway obligation levels at FY2011 levels.

FHWA is reporting that we are meeting the 3<sup>rd</sup> quarter 2011 goals toward completion of the baseline round of NBIS Oversight Compliance assessments. 83% of Divisions have at least initiated the review of all 23 metrics as of September 2011, with the goal of all metrics to be assessed in 100% of the States by December 2011. A Technical Advisory has been issued by FHWA to recommend that State DOTs and other bridge owners review the inspection records of their inventory of fracture critical bridges to ensure any components fabricated with T-1 steel have been regularly and appropriately inspected and that any critical findings have been properly identified and addressed. The TA has been posted on the web, along with a Q&A sheet that provides clarification/information.

The Long-Term Bridge Program has established the LTBP State Coordinator's committee and convened the first annual LTBP SC meeting in September. The State DOTs provided guidance for implementing the long range objectives of the research program; collecting research quality data from in-service bridges to study and provide needed data to address all bridge analysis, management and performance needs. I would keep you informed of the activities of the LTBP in future meetings since the TF would benefit from products produced as a result of this research effort. Expert Technical Groups (ETGs) are being established and would be meeting in November. These groups are made up of industry experts that provide guidance and expertise on specific technologies to the research staff. The deployment phase of the 20 year research program can begin with the establishment of the State Coordinators Committee and ETGs.

**Marketing / Training**

11a. AASHTO Bridge update

Deferred



11b. WV Trip update

TF was updated on Dean and Amjad's marketing trip to West Virginia. Dean said the response of WV raters was very excited after live demo of Virtis was presented to them. WV Rating Engineer made a comment that they would like to analyze steel beams with concrete deck as simply supported for dead loads and continuous for live loads over the piers. Virtis does not support this functionality right now.

The Contractor would check the incidents and add this request as an enhancement.

Ala M. would follow up with the WVDOT.

On other marketing updates, Tim A. will follow up with Dave (RI) after a month as Rhode Island might be interested in licensing Virtis. CT has an evaluation license for Virtis, but no decision had been made. Tim will setup a conference call with Ralph P. and other CT personnel to discuss.

**Review Action Item List from This Meeting**

Amjad reviewed the list of action items created during the meeting.

**The meeting was adjourned on 10-27-2011 at 5:00 P.M.**

