

Accountability and Transparency in Construction

IHEEP 2009
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Agenda

- Purpose
- Company Background
- The History of the Local Program
 - FHWA Findings
- Possible Solutions for Addressing Requirements
- Actions to Consider
- Q&A



Purpose – Why are we here?

- Discuss FHWA/DOT Requirements for Local Aid Projects
- Provide an opinion on significant risk areas associated with these Requirements for DOTs and their Local Governments
- Create awareness regarding existing solutions that address these areas



Background

- Contractor for American Association of State Highway & Transportation Officials (AASHTO)
- Info Tech developed software is used in 42 U.S. state DOTs, 125 local agencies, 2 Canadian provinces, hundreds of engineering firms, and by thousands of transportation contractors
- 30+ years in operation
- 11+ years in Internet Sealed Bidding
- Corporate HQ in Gainesville, Fla.
- Regional offices: Atlanta, DC, and Sacramento
- 180 professionals

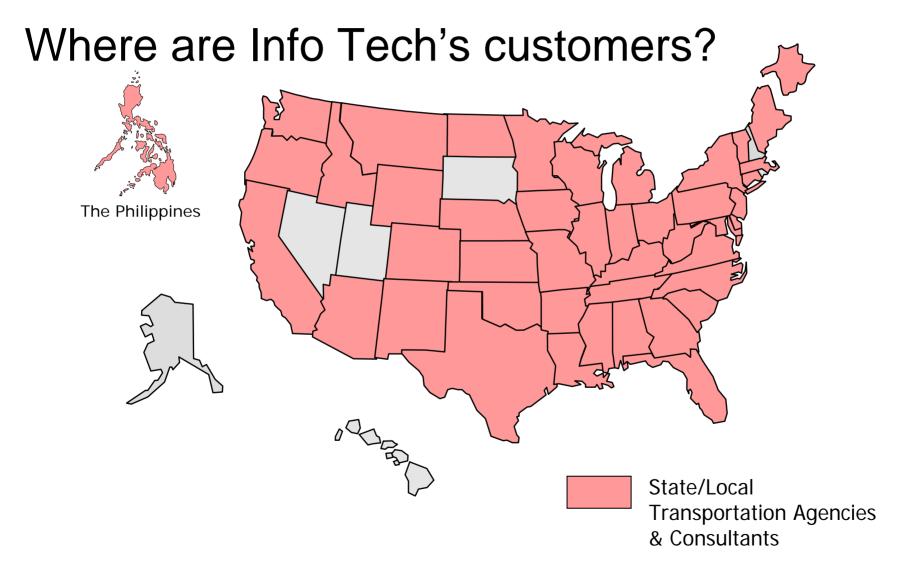




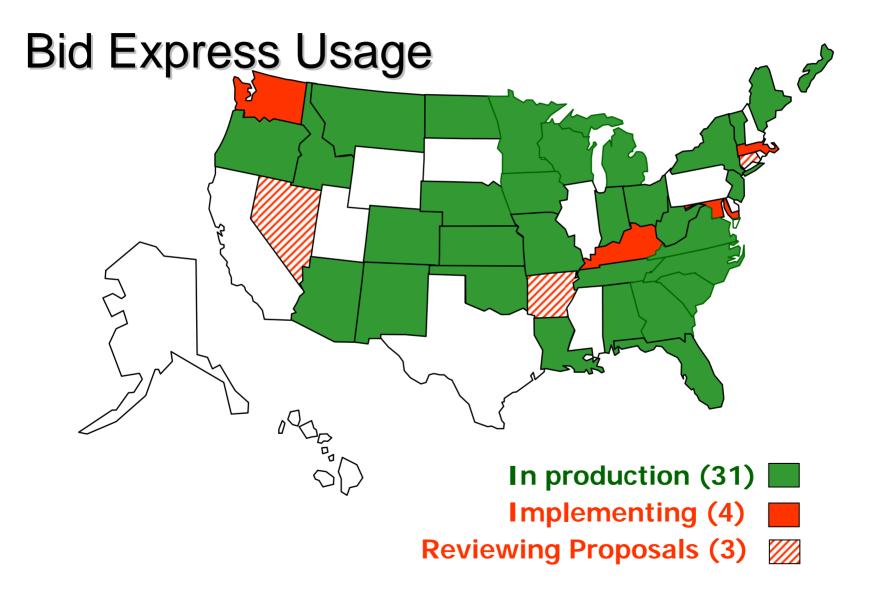
What Value does Trns•port® Software Provide?

- Enables transportation agencies to:
 - Develop cost estimates for their projects
 - Organize their projects for advertisement
 - Advertise and receive bids electronically
 - Provide a forum for communication between prime contractors, subs and DBE firms
 - Analyze all bids for collusive behavior
 - Track and report on construction in the field
 - Generate change orders & contractor payments











Example: Bid Express (Electronic Bidding)

- 11 years of signed, sealed bidding via the Internet
- 31 state DOTs and 6 local agencies use Bid Express to advertise, post, and receive bids
- About 5,000 contractors use Bid Express to search for jobs and submit signed, sealed bids to agencies
- In 2008, more than 27,000 bids worth more than \$103.5 billion were submitted via Bid Express
- Levels the playing field and is a tremendous cost savings to agencies and contractors
- Small Business Network focuses directly on DBEs



History of Local Program

- Pre mid '90's
 - DOTs Inspected Local Projects
- Post mid '90's
 - Locals were left on their own



Pre mid '90's

- Most DOT's did the CI on Local Projects
- DOT Project Engineer
- Consultant and/or DOT staff
- Followed DOT CI Requirements (MURK)



Post mid '90s

- Locals were made accountable for CI
- Most didn't have Engineering Staff
- Most used Consultants
- Many Consultants followed MURK
- Some used a "watered down" version
- Records were inconsistent at best



An interesting read...

- Report released by the Federal
 Highway Administration entitled
 The Administration of Federal-aid
 Projects by Local Public Agencies
- In 2006, an executive review of 39 locally-administered projects by 35 different local agencies was completed to compile the report
- Review team concluded that, by and large, Federal funds were "not used effectively and efficiently in locally administered projects..."

National Review Program (NRP)

The National Review Program (NRP) provides program evaluation at the corporate level for the Federal Highway Administration. These program evaluations help to ensure more program consistency, enhance program effectiveness, and identify successful practices across the nation. The Administration of Federal-aid Projects by Local Public Agencies

FINAL REPORT

Office of Professional and Corporate Development Program Improvement Team

> FHWA/HPC-10 400 7th Street SW., Room 4208 Washington, DC 20590 Phone: 202-366-393 FAX: 202-366-3411

> > December 2006





Also noted in the report...

- "...Weaknesses were found in Local Program Agency processes associated with program management...contract award and construction contract administration."
- "...construction quality was highly variable, and the quality and availability of records made it difficult to verify compliance."
- "There is a risk to the agencies who are responsible and accountable for local Federal-aid projects that funds are being used inefficiently and ineffectively. In addition, there may be a risk of fraud, waste and abuse."





Repercussions for DOTs

- Increased Financial Integrity Review and Evaluation (FIRE) Audits
- FAIN Federal Aid Ineligibility Notification





What now?

- Agencies are looking for innovative ways to address these problems
- FHWA is showing particular interest in technological solutions
 - Client/server (installed) software
 - Web-based applications
 - Web-based services
- Solutions that are inclusive of all parties (for the agency, contractors, and consultants)





Appia – A Web Based Solution



What is Appia?

- Web-based program for construction program management/administration for local agencies and consulting firms
- Automates and integrates:
 - Project definition and cost estimation
 - Advertising and bidding
 - Contract award decisions
 - Construction management/administration and inspection
 - Program and project level reporting and analysis



Appia - continued

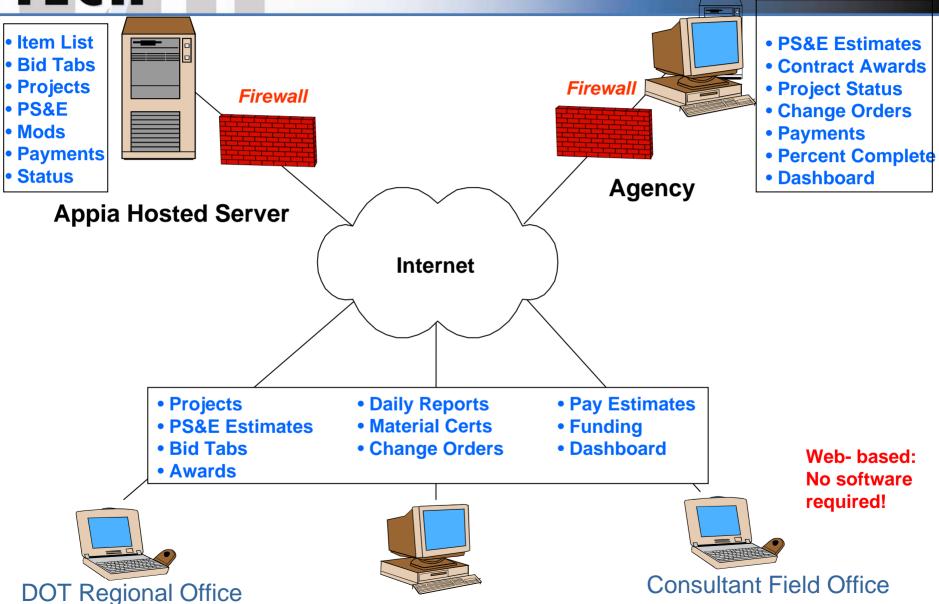
- Modular Only use functionality you need
- Limited resource friendly
 - Hosted Service No IT requirements
 - Minimal training needed
 - License includes new releases
 - Unlimited support (included in license fee)
- Configurable settings and business rules
- Business drives the technology NOT the other way around!



The Appia project lifecycle







FHWA



NY Locals' use of Info Tech CI Software

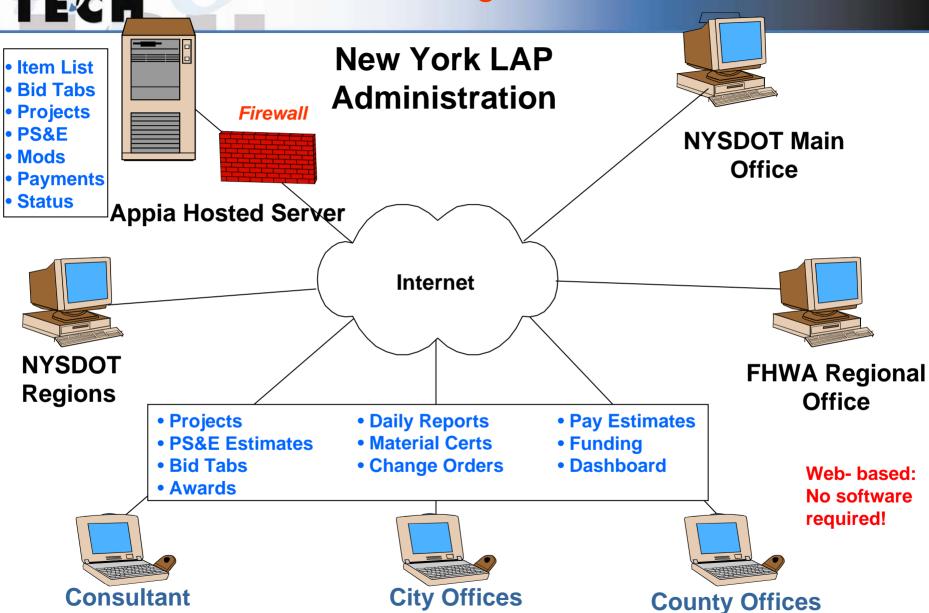
- Began w/FieldManager 2003
- Did Pilots 2004 & 2005
- FM accepted by FHWA & DOT
- First Appia Construction 2008
- Appia Construction accepted by FHWA & DOT Spring 2009



NY Locals' use of Info Tech CI Software

- Consultants using Appia Construction in 5 Regions on Local Projects
- NYSDOT Region and Main Office staff monitor Local Projects from their desk
- FHWA also has access to all Projects
- All audits of projects using FM or Appia Construction have been satisfactory

Offices





Info Tech Construction Products ROI

- Accountability
- Source Data entry
- Standardization
- Elimination of redundant entries in Daily Diary
- Material Tracking and calculation of insufficiencies at Estimate time
- Timely and accurate contractor estimates



Info Tech Construction Products ROI

- Search/find capabilities Daily, at Audit time and at Claim time
- Item Balancing when doing Change
 Orders during Project and at Final
- Readily available reporting such as the item history to date
- Usage calculation on stockpiles



Top to Bottom Utilization of CI Products

Inspector

- Easy to enter inspection reporting
- Can be done at home or office due to web-based program

Resident Engineers

- Easy to review inspection reports
- No data entry errors after approval of quantities
- Less time to prepare estimates



Top to Bottom Utilization of CI Products

Records Specialist

- Easy to process estimates
- Can be done without much input from field office other than period end date

Manager

- Have real time cost projections of construction costs and progress rather than monthly estimates
- Can look at "Composite Project Costs" in real time and can predict a budgetary problem quicker





Appia Construction



Appia - Construction

- Source Data Entry at the IR
- Daily Diaries
- Material Certification w/filtered payments
- Progress Payments
- Tracks Multiple Funding Sources
- Change Order Administration
- Item Balancing for Processing the Final
- Real-time project access

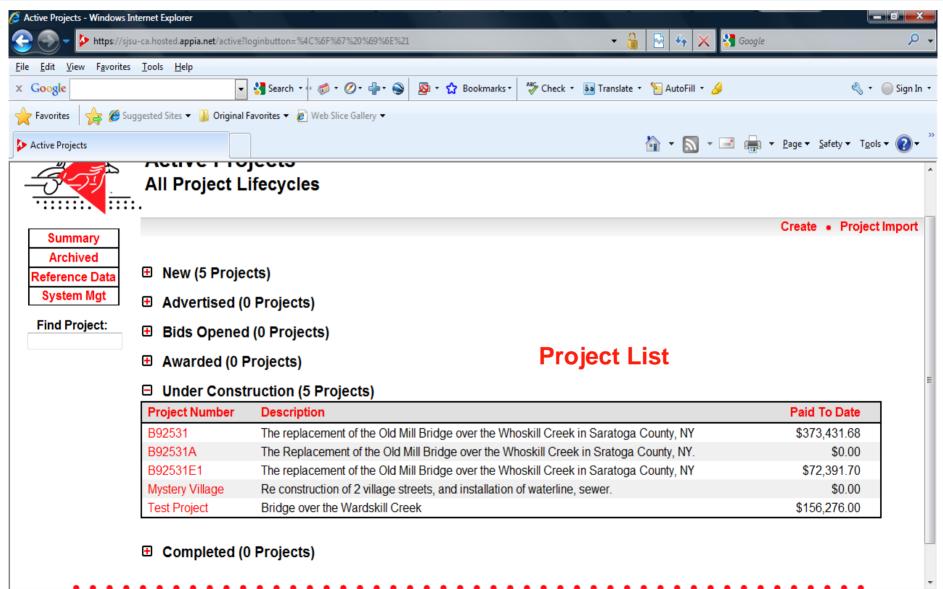


New project



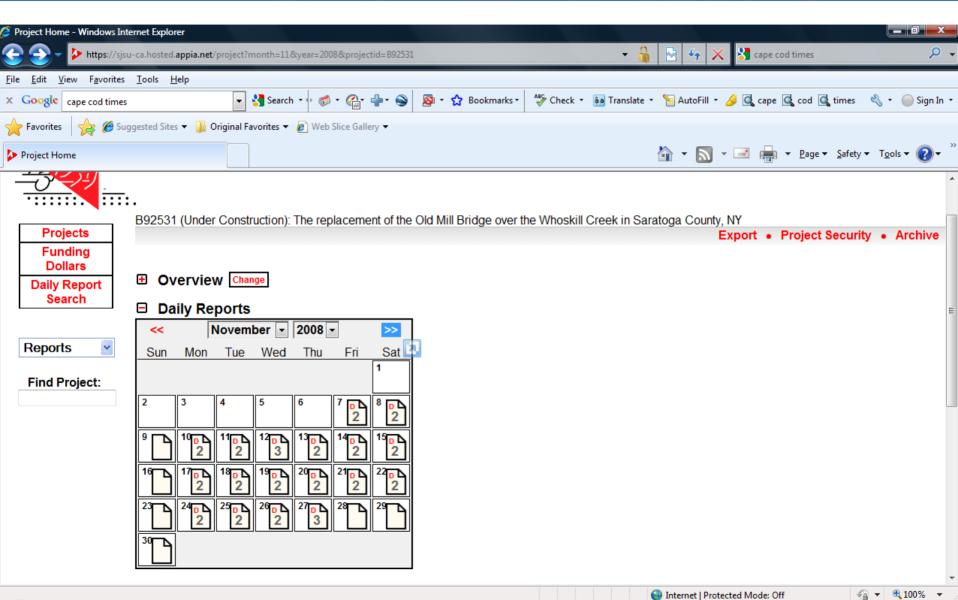
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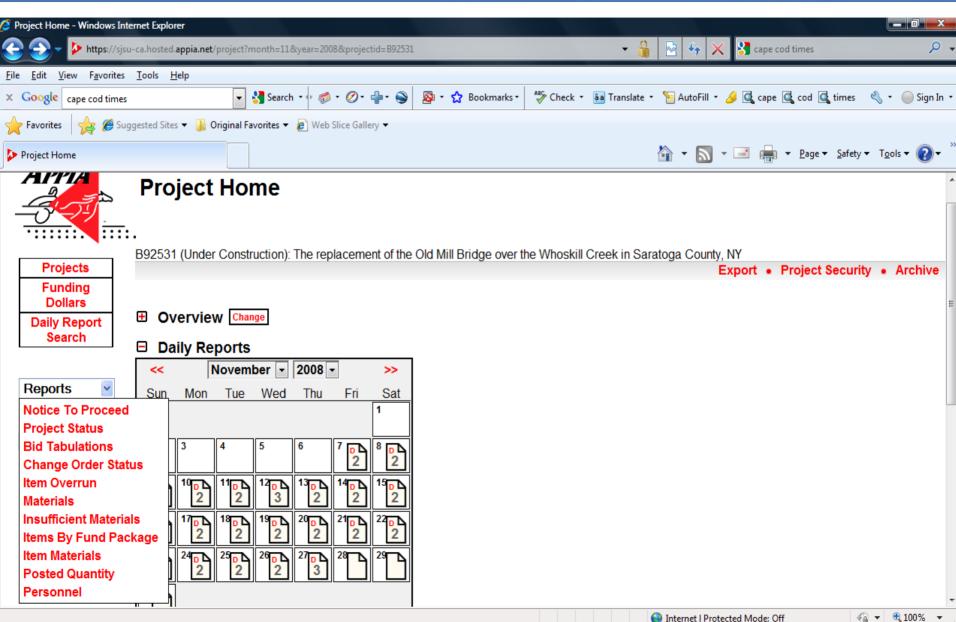
Daily Reporting



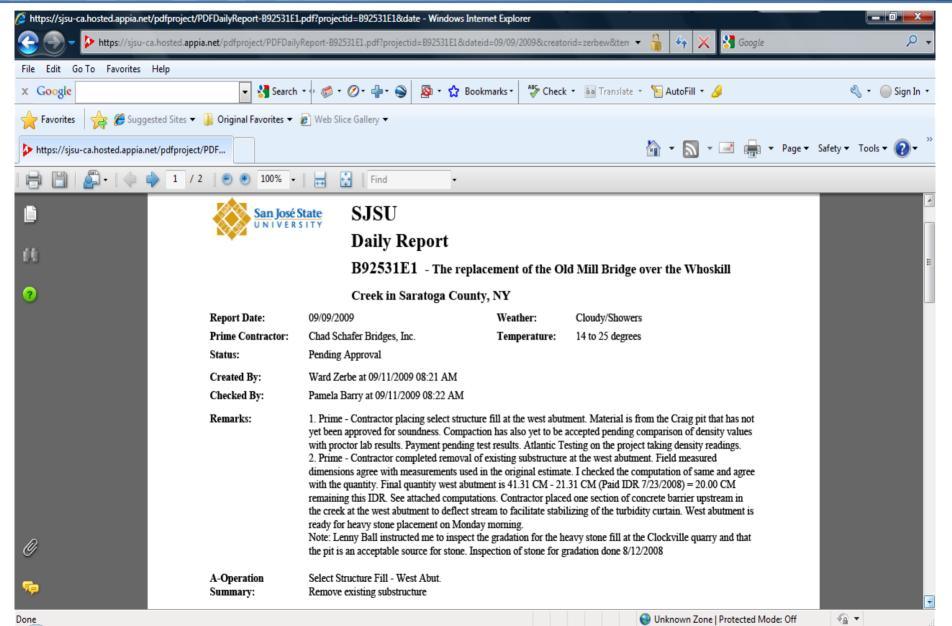
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Built-in Reports

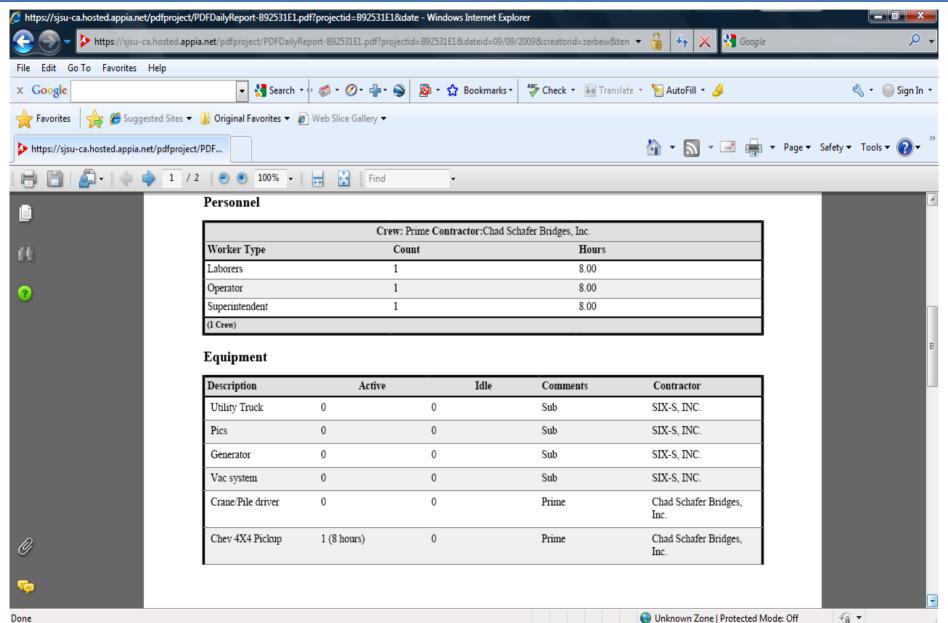






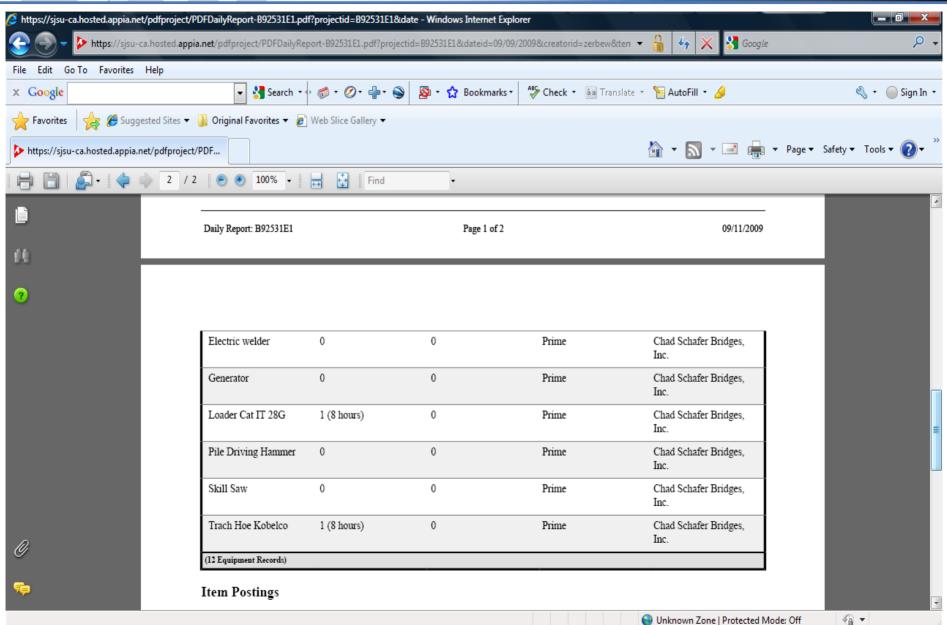


Personnel & Equipment Tracking



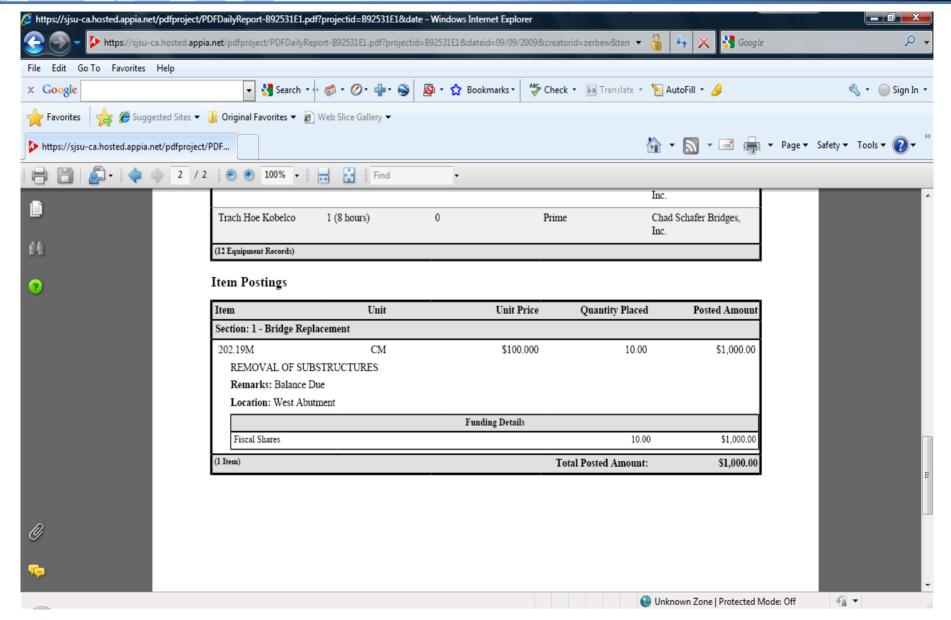


Equipment Tracking

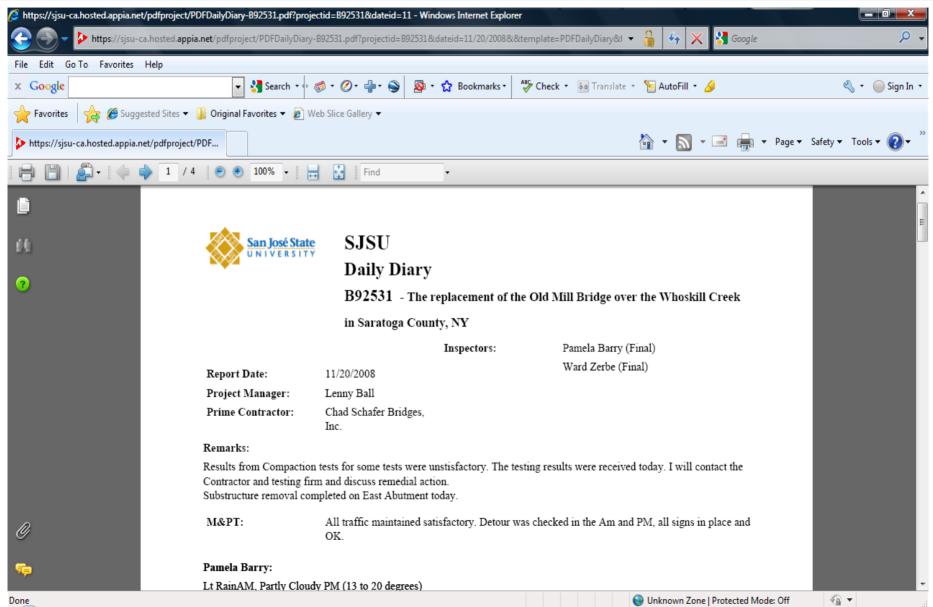




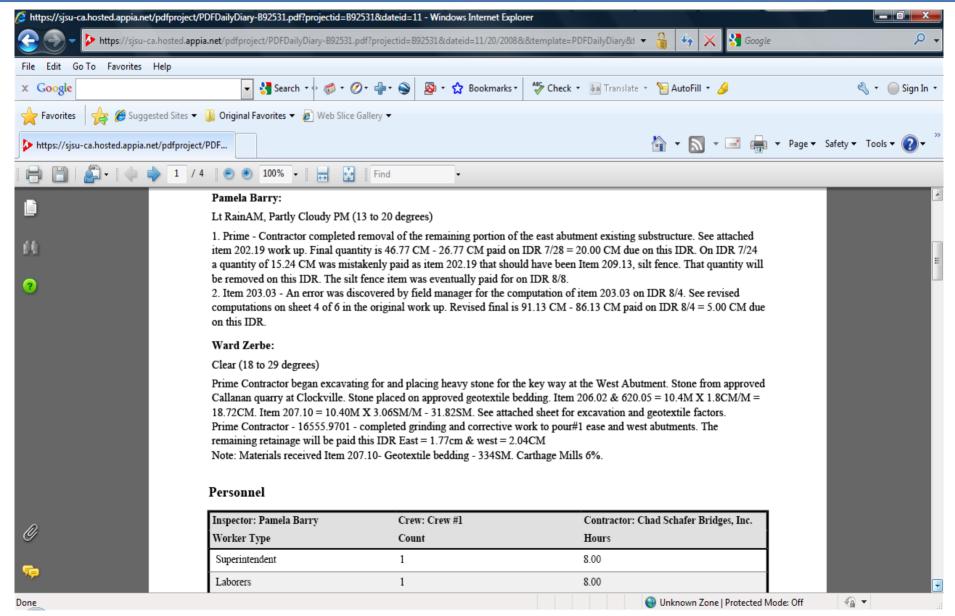
Item Posting





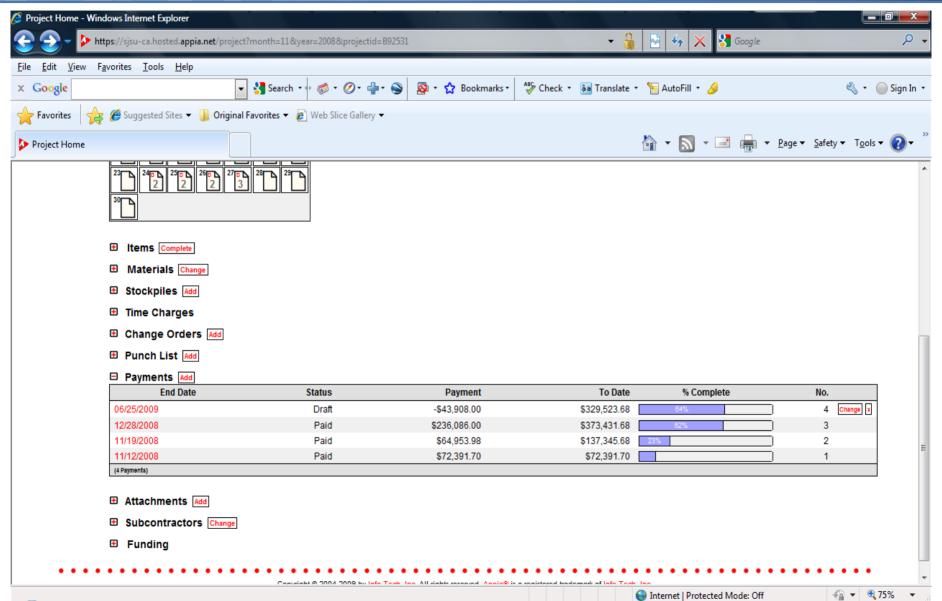






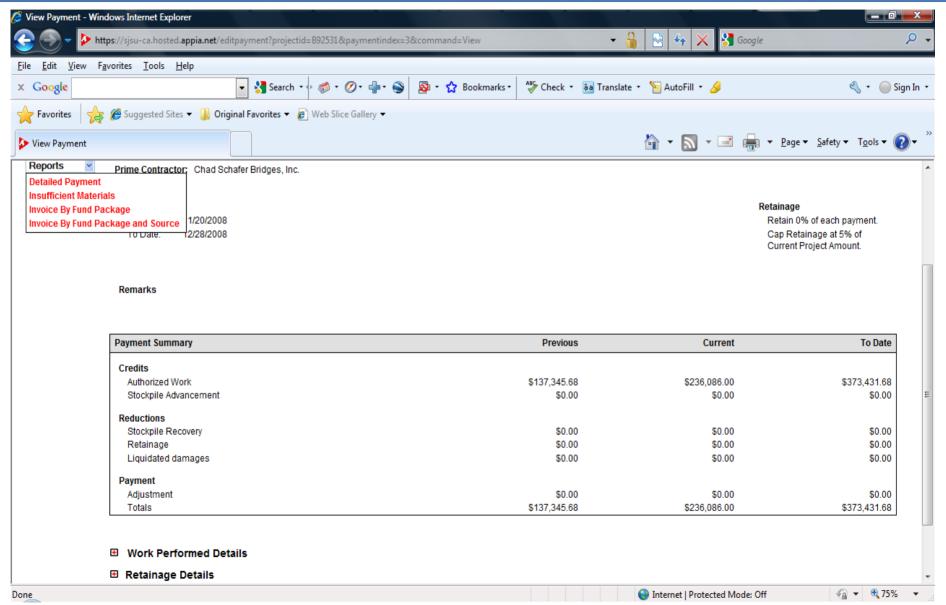


Pay Estimates



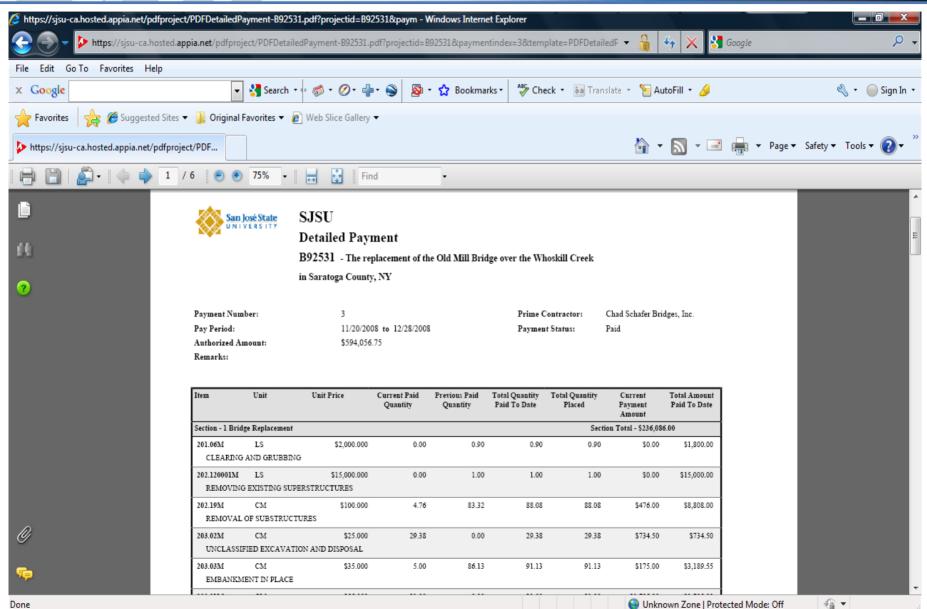


Payment History & Reports



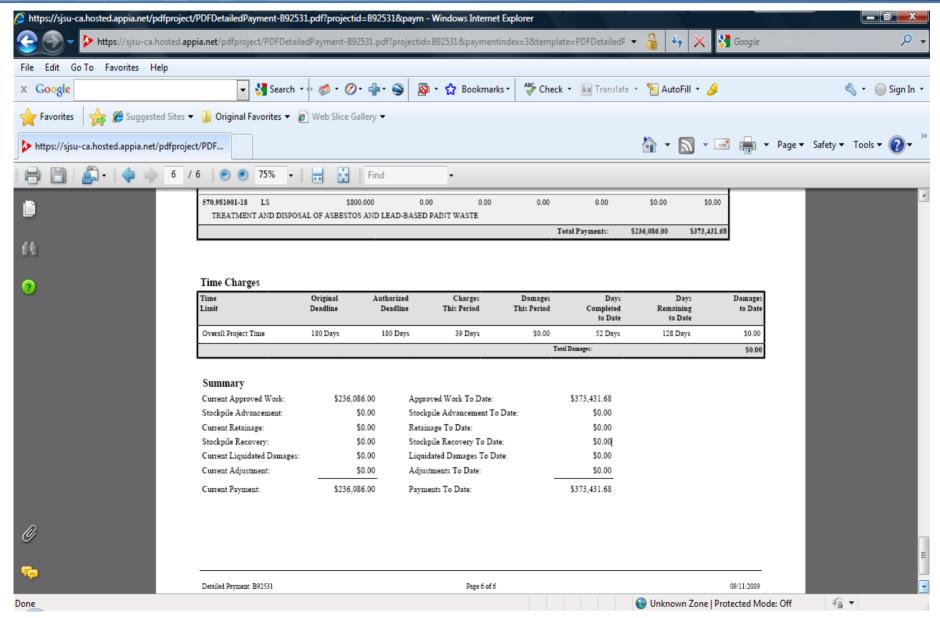


Payment Details



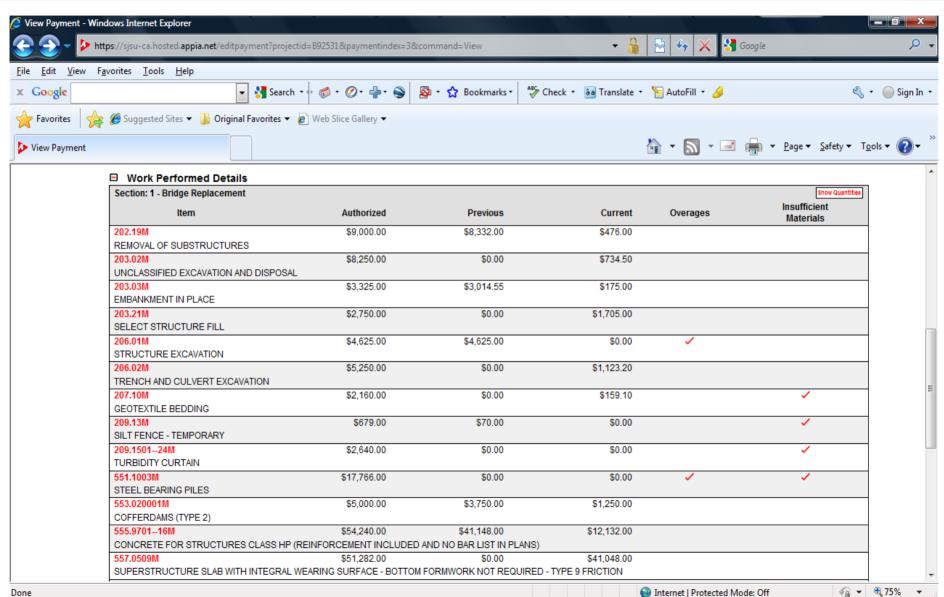


Time Charges

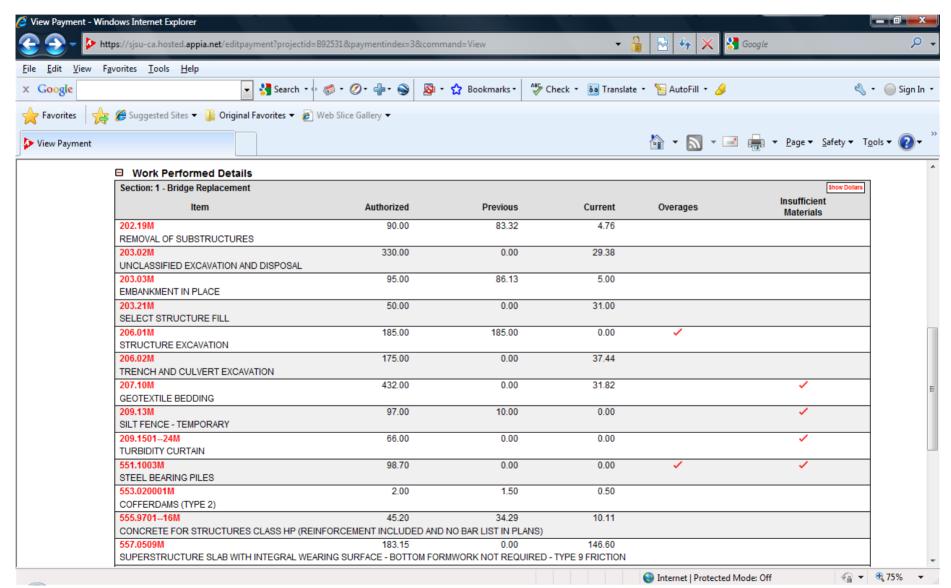




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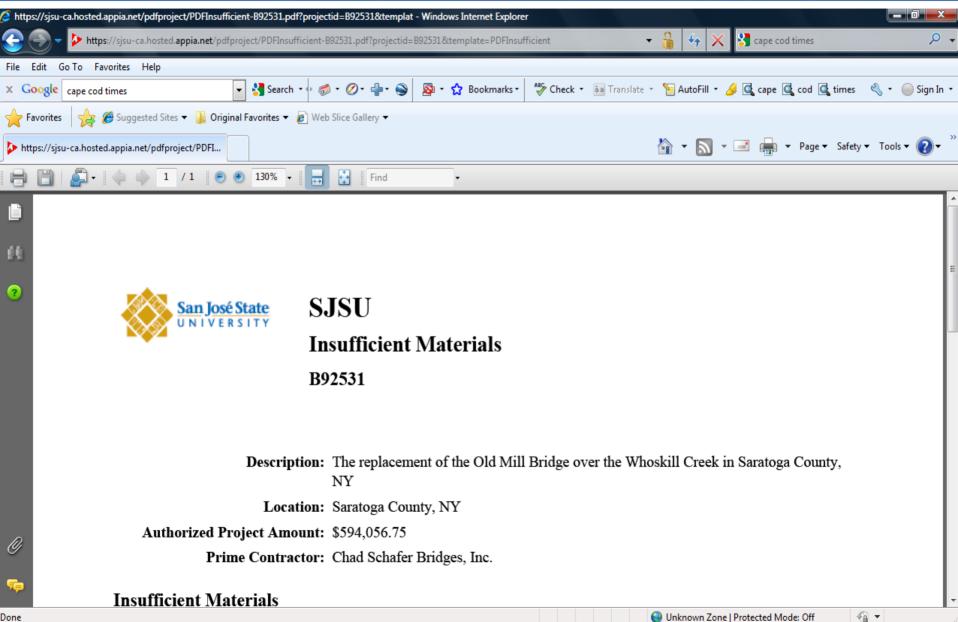












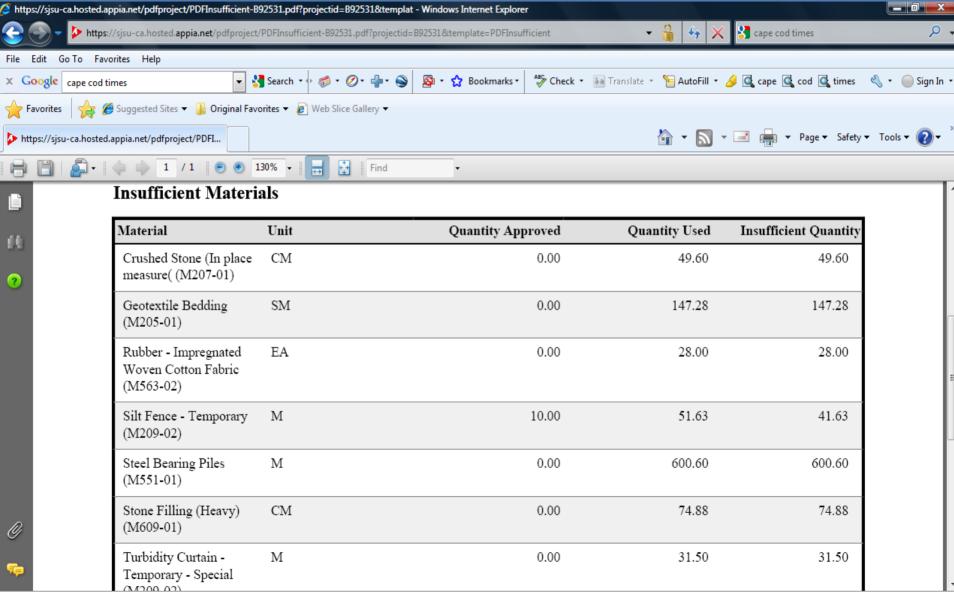


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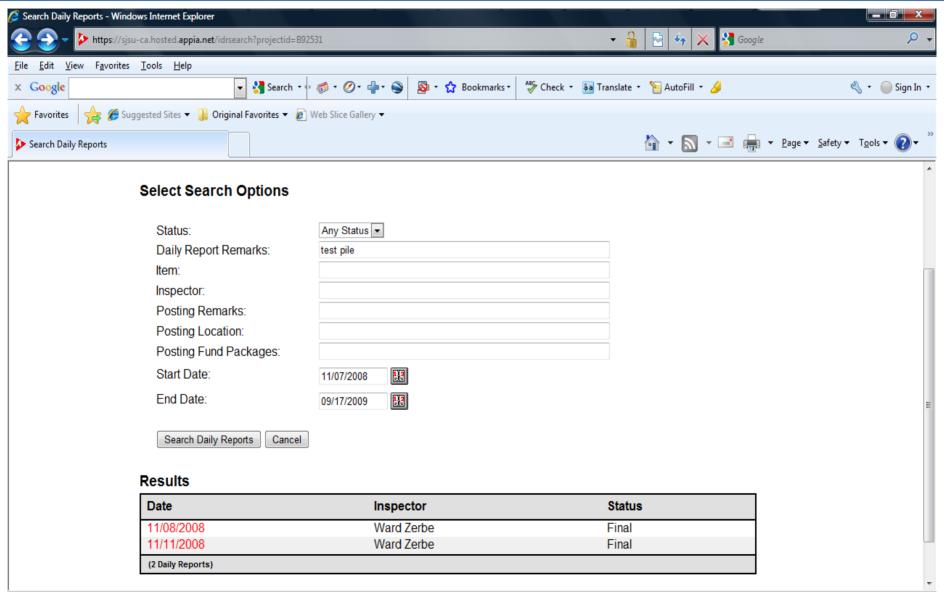
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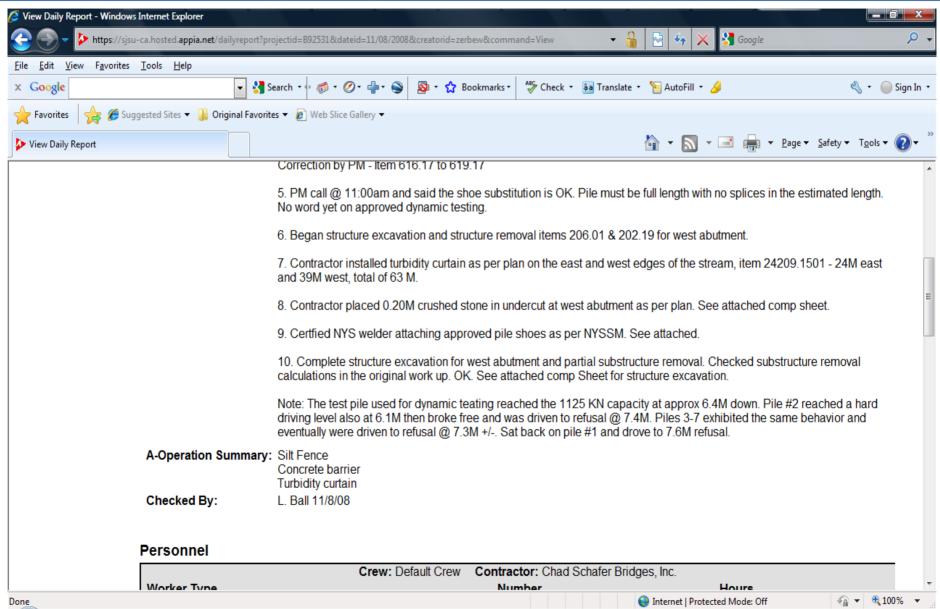
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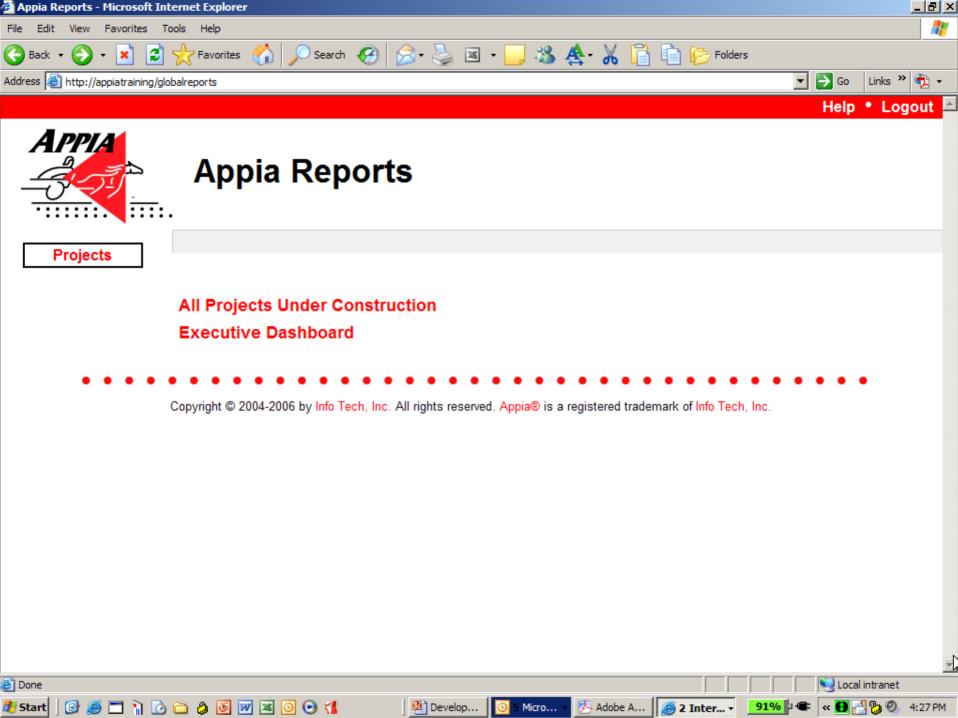
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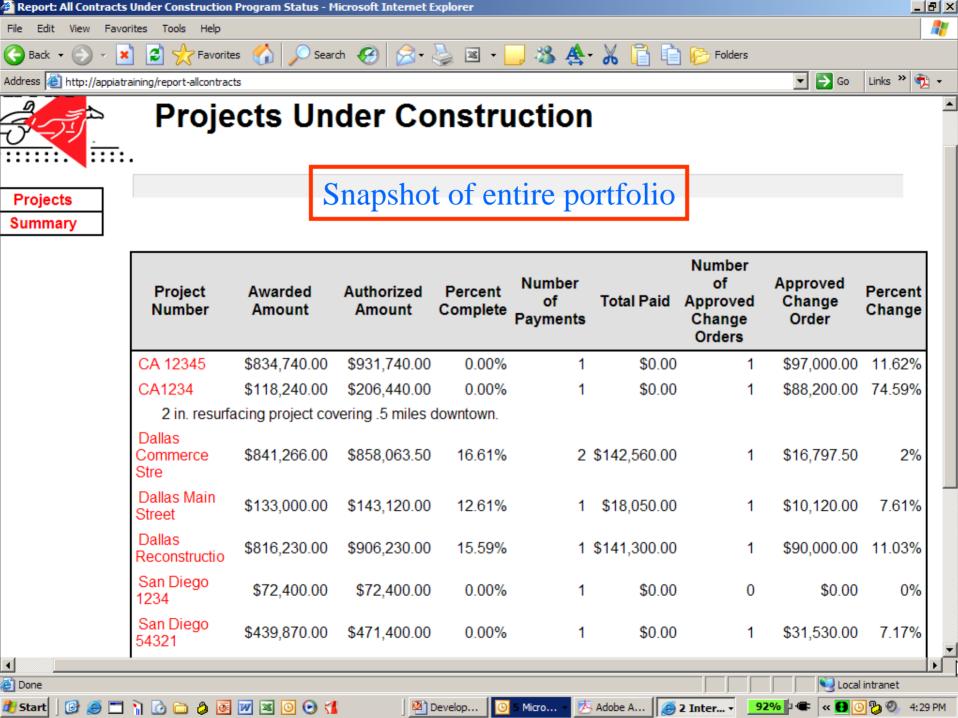




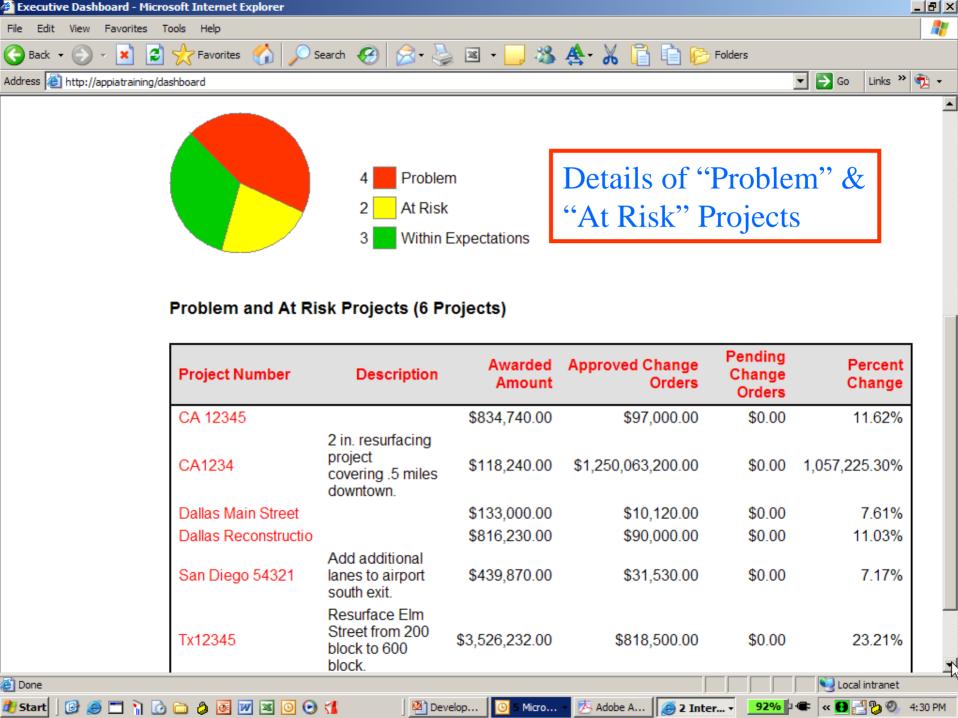














Summary - Appia

- Appia is an enterprise system that intuitively addresses each phase of the construction management process
- It is scalable enough to meet the needs of any organization's items-based projects
- Info Tech works very closely with its' customer base to ensure solution meets the needs



