

Where We Stand and Where We Are Going

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Construction & Materials Information System Development (CMISD)

- The Construction and Materials Information System Development (CMISD) section was formed in 2001 to facilitate the Department's implementation of AASHTOWare's construction software - SiteManager.
- Today, we are a staff of 5 with varied backgrounds (technical, construction administration, materials, etc.)
 - Cullen Pfeiffer (lead), Aaron Lenz, Fred Rojas, Joe Hanson, Ryan Evans
- CMISD serves as the liaison between Construction Division and other Department Divisions to collaborate on software solutions that best implement the Department's business policies. CMISD also works with Department Districts to troubleshoot issues and provide guidance on proper usage of software.

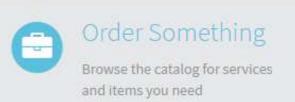
CMISD TxDOTNow Ticket System

- Implemented May 2021 and completely in-place September 2021.
- Started with the intent to better serve Department users.

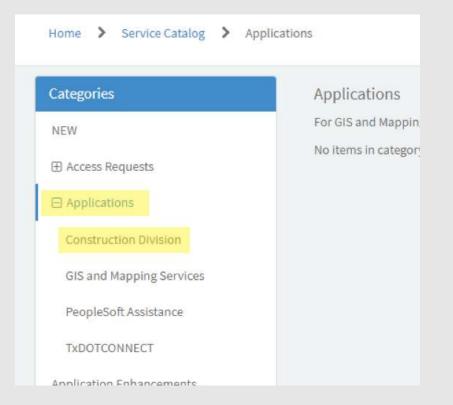


- Previous way to manage incidents and requests was with a shared email inbox.
 - Challenges included emails left unread or mistakenly deleted and an inability to receive notifications directly.
- Ticket System Positives
 - Centralized System that allows for collaboration with IT Service Desk members.
 - Enhanced Workflow management that drives accountability.
 - Creates documentation (i.e., paper trail).

CMISD TxDOTNow Ticket System



 <u>Note</u>: Manager approval is not needed when submitting CMISD/CST tickets. Manager approval is systematically granted.



SiteManager

- SiteManager serves as TxDOT's construction management software and has been utilized by the Department since the early 2000s.
- It is an AASHTOWare product.
 - Texas participates in workgroups with other state agencies to collaboratively identify improvement areas.
- 6,400+ users.
- Currently, Texas is in version 3.17a 3.005 of SiteManager (as of 11/19/2021).





Reminders:

- SiteManager now features a Training/Sandbox environment.
- When experiencing connectivity and/or server availability issues, use Citrix.
 - If you do not have one already, a SiteManager-Citrix account can be granted by completing a Form 2526 and submitting a TxDOTNow ticket.
- Allow processes to complete before exiting/closing.
- Reports from CMISD should be opened and run from the Intranet site every time. Do not save to a local drive.

SiteManager

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- SiteManager user vs Material User
 - SiteManager User accounts have access to SiteManager and typically enter information into the system.
 - All SiteManager User accounts are a Material User, test certifications are associated with a person's Material User account.
 - Material User accounts(only) are used to associate tester certifications, for individuals that do not access SiteManager. An example is a contractor's employees. We enter the tests provided to TxDOT by contractors and show the contractor's employee as the tester.
- If all else fails, contact <u>CST_SITEMANAGER@txdot.gov</u> and/or 512-416-2553.

SiteManager Version Upgrade (3.004 > 3.005)

TXDOT4AVXA028 20210517	×
AASHTOWare Project SiteManager	L-5FF01X2 20211022
AASHID 3.17-a TXDOT 3.004 User ID:	3.17-a TXDOT 3.005
Connect to: Server Logon Change Password Close Download RTF Templates Copyright © 2021 the American Association of State	Wanthind "Initial or Michael Users only. Unauthorized access, use, misuse or modification of this system, the data contained herein, or in transit to/from this system, may constitute a violation of defeard, state and local laws and subject individual(s) to criminal and/or civil prosecution and penalties. This system and associated usage is subject to monitoring and security testing by authorized personnel. There is no expectation of privacy except as otherwise provided by applicable privacy laws. [Enter the User Login Id.
Highway & Transportation Officials, Inc. ("AASHTO"). All rights reserved. This software or parts thereof may not be reproduced in any form without written permission of AASHTO. Produced in the United States of America.	

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SiteManager Version Upgrade (3.004 > 3.005)

- New Features:
 - Upcoming shift to signing in with Active Directory (TxDOT Network) credentials.

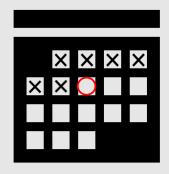




AASHTOWare Project Construction & Materials



- Estimated go-live date: **December 2022**.
- Current Transition Plan:
 - Run SiteManager and APCM in parallel.
 - Rollout several districts at a time.
 - Mitigates risk associated with migrating existing data.
 - Allows for better planning of end-user training.
- This plan is subject to change.



- Training plan and materials are being developed.
 - Expected to be a multipronged approach of inperson, virtual, and online media.



What to Expect

- Web-based platform
- Not SiteManager 2.0
 - Much different appearance
 - Different structure than SiteManager
 - Functions may have new locations in the system
 - New Materials Test Templates
- Minor workflow changes to meet new system requirements.



Password			
TXDOT - C	ST Constructio	n Division	



Home • Previous • My Pages •						Actions	? Help	U Log aff
On this page: External Links System Information Reference Data System Administration Estimat Materials Data Analytics	tion	Civil Rights & Labor	Preconstruction	Civil Rights & Labor Non-Agency	Construction	Materia	als Works	heets
PROJECT SAMPLE ROLE for System Wide Admin (DO NOT MODIFY)								
✓ System Information	?	🗸 External L	inks					
Constr Management Sys ID (CMSID)		aashtowareproj	ect.org	AASHTO Transpo	rtation Construc	tion Comr	nunity	
ee56d393-ccb5-4d0a-acd3-da1c3726b29f		Reference	e Data					
Product Version		Administrative	Offices					
4.4.1 Revision 036		Alternate Test V	Vorkflow					
Database Version		Change Order /	Approval Groups					
		Change Order /	Approval Rules					
4.4.036		Change Order I	Explanation					
✓ System Administration	?	Code Tables						
Agency Entities		Contract Claim	Types					
Algering Entitles	- 0	Contractor Eval	luation Structure					

- The APCM project has been a unified effort between several parties.
 - Driven by CST and ITD.
 - Valuable insight and collaboration with TxDOT Divisions (ex. MNT & MTD).
 - InfoTech, a third-party software vendor, is providing implementation support.

DWRs in SiteManager...

DWR Info.	Contractors	Cor	vitacioi Equip	Ĩ	Daily Staff		Work, Item	e Force Accounts			
antract ID: j044001039	Inspecto	r: Aaron L									
DWRs by Inspectors	«« «		Oc	tober 2		Tod	tay > >>	DWR Date: 10/09/20			
+ Aaron Lenz + Brandon Thompson	Sun	Mon	Tue	Wed	Thu 1	Fri Z	Sat	Authorized: No 00/00/00			
Jayme L Holmes (i)								Locked No			
+ Jeremy Mikes					-	-		No Work Items Installed:			
 Kyle Mccoy Kyle P. Russell 	4	5	6	7	8		10	No Contractors On Site: V No Daily Staff On Site: V			
Leslie Haak (i) Nathan Wright (i) Rhonda Dietrich								Temperature			
	11	12	13	14	15	16	17	High: 0 ±			
Thomas E Jones (i)						-		Low: 0 ±			
		6 3						Weather Conditions			
	18	19	20	21	22	23	24	A.M.: P.M.:	-		
	25	26	27	28	29	30	31	Work Suspended: Suspended Time: 00:00	-		
				-				Resumed Time: 00.00			
		8 8		100			Legend				
			Authoria Equipme		strer 1		Force Acont Attachment				
3			Dentiur	ion 💽 Pai	d w/Est		DWR Sample				
	Remarks:							5) () () () () () () () () () (Spell Check		

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Basic Sample Dat	a Addtl Sample Data	Contract	Other	Tests
Smpl ID: 4651	021CPFEIFF*001	Status:	Pending Delivery	
Revised By:		Revising:		Sample Date: 12/3
Link To:		Link From:		Log Date: 00/0
Smpl Type: PRC	NECT TEST	Acpt Meth:	Spaces	
Material: 0300	ICBM003	MC-30		
Sampler: TWA	ARREN	Warren, Timothy J		
P/S:				
Туре:		City:		
Prod Nm:			🗆 🗆 DWR Sar	mple
Mnfetr: ASP	HALT FUEL AND SUPPLY - T	ULSA, OK		M00AC000099997
Town:			Geog Area: ATHENS AF	IEA OFFICE
Intd Use: PRIM	4E - MC 30 - 175 REHAB			
Repr Qty:	.000 GALLON		✓ Lab Cont	trol Number:
Auth By:		Auth Date: 00/00/00	L	ab Reference Number: C20375
Lock Type:	•	Locked By:	Lock Date:	Send Notice to Cen

- Clearing deficiencies in SiteManager
 - Sample for MX Design
 - Sample for Coarse Aggregate
 - Sample for Fine Aggregate
 - QM Sample for Cement
 - Sample for Strength, Slump, and Temperature

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DWRs in APCM...

	My Pages 🔹	orts Contract Materials and Ac	reptance Actions Contract Progress Find Sample Items Payment Estimate Subcontracts	Actions Help Lo
Contract Daily Work Rep			an kanangangan sa	
	41 - FARMERSVILLE ROAD (KY 139)			
DWR Date: 10/07/2020	Inspector TRAINWT/TRAIN25	Sequence, 1	Status: Draft	Save
DWR Date: 10/07/2020	Inspecior: FHAIPWYFYFHAIPI28	Sequence. 1	Status, Data	
General	DWR Date ·		Remarks	
Notes	10/07/2020		.0	
Contract Time	Inspector •		Federal Project Number	
Contractors On Site	Q TRAINWT/TRAIN25		ERC 5033(004)	
Contractor Equipment	TRAINWT TRAIN25 _		State Project Number	
Contractor Personnel	Weather			
Contractor Statf	Sunny - 0% to 30% of sky is covered by	cloud cover 💌	Entered By	
Agency Staff	Rainfall Amount		TRAINWTITRAIN25 - TRAIN25 TRAINWT	
Postings	0.00			
Acceptance Records	Low Temperature		Entered Date	
Force Account Contractors	60		10/07/2020 1:50:50 PM	
			Approval Date	
	High Temperature			
	90		Approved By	
	Stormwater Event			
			Payment Est Num	
	Contractors Onsite		The second second PDP	
	No		Burrant Bat Platers	



DWR Acceptance Records in APCM...

Contract Daily Work Report Summary

Contract: 091511025 - Off System	i Bridge									E 7
DWR Date: 09/28/2021	Inspector CPFEIFF_2	Sequence 1	Status: Dralt							
General										
Notes	Q. Type search criteria or press Enter	Advanced Showing 6 st 6								
Contractors On Site										0 changed
Contractor Equipment	✓ Item ID	Item Description		Project ID		Category ID		Sequence Num		2
Contractor Personnel	04626034	CONC BOX CULV (10 FT X 10 FT)		091511025		001		sequence num	¥.	
Contractor Staff	Location	Sequence		Qty Posted		Material Set -			Materials	
Agency Staff	Here			1	100.000	Q PreCast			1	
Postings										
Acceptance Records	Material	Represented Qty		Source		Facility		SMFMI	201	+
Force Account Contractors	0462PCBOX0 - PRECAST BOX CL Material Units	JLVERTS Conversion Factor	100.00000	BOXCULVERTSOURCE Reported Matl Oty		Cont Est Matl Qty		PCSOUR(Sat Rep Matl Oty	CE	
	LF		1.00000		105 00000		10,000,00000		106.00000	
	Action Type -					Field Inspection Value	*			
	MATLSC - Material Sourcing					IE - Inventory Exists	-			
	Represented Quantity *					Sample Type 💌				
	100.00	ado				•				
	Work Location -					Acceptance Method -				
	Q Begin typing to search or press E	inter								
	Source ID 👻					Comments • -				
	Q BOXCULVERTSOURCE									Q
	BC SOURCE 1									
	Facility ID 🖛					Sample ID				
	Q Begin typing to search or press E	nter				A				
	DWR Quantity From Inventory					Sampler ID				
	Q PCSOURCE					Sample Date				
					,	and the second				

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APCM - Daily Source Reports (New)

Home 👻 Previous 👻 M	ty Pages 👻		Actions Help Log off
^{Dverview} Daily Source Report Sum	nmary		
✓ Daily Source Report			Save 🔻 ?
Source: MMM - MARTIN MARIETTA	A MATERIALS Facility: MMM001 - MMM - BECKMANN	Date: 11/02/2020	
General Materials Inspection	Source • Q MMM MARTIN MARIETTA MATERIALS Facility Q MMM001 MMM - BECKMANN Date * 11/02/2020 Inspector on Site	Remarks 0 Inspector CPFEIFF_2 Locked By Locked Date	
	✓ Remarks Type *	Remark *	Q

Sources and Facilities

Yes

		U	
ges 💌	Actions	Help	Log off

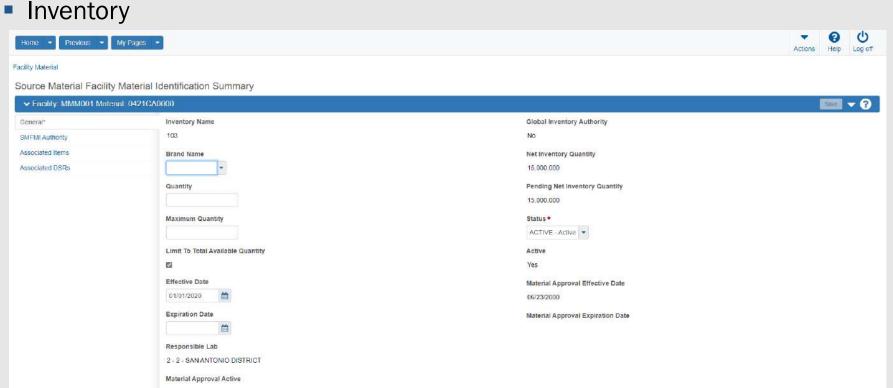
overview Source

Facility Summary

✓ Facility: MMM001 - MMN	I-BECKMANN	Save 🗸 🍞
General	Facility ID*	Remarks
Addresses	MMM001	0
Source Authority	Facility Name +	Source
Material Categories	MMM - BECKMANN	MMM - MARTIN MARIETTA MATERIALS
Materials	Geographic Area	Portable Plant
Test Equipment	×	
Mix Designs	Location Type	Location Description
		9
	Source Management Level Q 2 - SAN ANTONIO DISTRICT 2 2 Last Inspected Date 01/01/2020 Offective Date 01/01/2020 Active 101/01/2020	Sequence Number 0001 Expiration Date Status • ACTIVE - Active

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AASHTOWare Project Construction & Materials (APCM): Coming Soon



Yes



- Clearing deficiencies in APCM
 - On the DWR acceptance record, the inspector selects the Source, Facility, and Mix Design.
 - Because Mix Designs will be entered into APCM, the CA, FA, Cement will be known without having to associate samples.
 - The field tests, Strength, Slump, and Temperature will be recorded on a sample.

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Home	y Pages 💌		Actions Help Lag off
overview Find Sample Maintain	Test Queue Receive at Destination Lab Receive at Lab Unit Review Samples Review Tests		
✓ Sample Record: Pfeiffer20	210129072443		Save 🔫 ?
General	Sample ID *	Remarks	Actions 💥
Sample Location Additional Information	Pfeiffer20210129072443	0	Add New
	Material Code - Name	Sample Date	Сору
Sources/Facilities	Q 0421CM0000	01/29/2021	Tasks
	COMPLETE MIX PCC	01/29/2021	Authorize
Associations		Sample Status	Split Sample Record Unauthorize
Contract	Administrative Office	In Testing	Views
Tests Test Charges	Q. Begin typing to search or press Enter	Sample Type	Attachments
	Lab Control Number	PT - PROJECT TEST -	Issues
	Q CNPfeiffer20210129072443		Links
		Acceptance Method	Reports
		*	Sample Label
	Lab Reference Number	Authorized By	Test Results Report
		, and a start sta	Historical Reports
	Control Number	Authorized Date	Test Results Report
	Control Type	Revising Sample ID	
	Seal Number	Revised By	
	Sample Size	Link To	
		Q Begin typing to search or press Enter	
	Sample Size Units	Link From	



Materials Test Templates in SiteManager...



	HYDE	RAULIC CEMENT Tex-414,1		EREPORT		
Refresh Workbook	SAMPLE ID:		CAL	MPLED DATE	File Version: 03/01	8/15 10:27:
	T NUMBER:			ETTING DATE:		
	E STATUS:			ROLLING CSJ		
Cranin	COUNTY:		GONT	SPEC YEAR:		
SA	MPLED BY			SPEC ITEM.		
	LOCATION:		SPECIA	L PROVISION		
MATER	RIAL GODE:		Contraction of the second	GRADE:		
MATE	RIAL NAME:		00			
	RODUCER:		o;			
AREA	ENGINEER:		PROJEC	CT MANAGER:		
CO	URSE\LIFT:	STATION:		DIST	FROM CL:	
	Test	Method:	ONTENT			
Remarks:				1		
Test Method:	Teste	d By:	Tested Date	1		
TX414						
TX415						
TX415 TX416				0		
TX415		Omt Test]		

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Agency Views in APCM...

Home 👻 Previous 👻 My Pages 👻		Actions	() Help	U Log off
Overview Agency View Summary				
Preview Agency View				
✓ PCC Properties T01				2
Minimum Average Strength Required (psi)	Design Strength Specified (psi)			
Theoretical Unit Weight (pcf)				
Water Cement Ratio				
Unit Weight Measured (pcf)				
Air Content Minimum (%)	Air Content Maximum (%)			
Slump Minimum (In)	Slump Maximum (in)			





CALIBRATED EQUIPMENT IN SITEMANAGER

Serial Number		lanufacturer Name	Model Number		^
MTD-105058	Taylor		9842	Thermometer	
MTD-1099637	MITUTOYO		CD-12	Calipers	
MTD-1099644	MITUTOYO		CD-12	Calipers	
MTD-112056	TPS (MTDFLEX)		MTD16945		
MTD-1250	ASHCROFT		1300-5	Weights	~
<					>
Serial Number: MTD-1099	9644	_	Status: PASS	•	
Manufacturer Name: MITUTOY	0		Lab Id: 46893	001	
Description: CALIPER	DIGITAL 12'				_
Calibration Authority: MTD					
Calibration Type: Calipers		▼ Geographic	c Area: MTD CENTRAL L	AB (AUSTIN)	•
Calibration Method:		▼ Document Refe	erence:		
Calibration Date: 09/01/21		Expiration	n Date: 09/01/22		
Model Number: CD-12					

- Cannot Attachment documents to Calibration Records
- Lack of search functionality



Equipment Calibrations in APCM...

Test Equipment Calibrations Summary

 Test Equipment Calibrations: MTD 	-1099644 - CALIPER DIGITAL 12"			Save 🤝
Equipment Record*	Serial Number *	Model Number	Actions	×
Equipment Records* Calibration Records*	MTD-1099644 Description CALIPER DIGITAL 12* Geographic Area Calibration Interval Calibration Interval Calibration Method Calibration Method	Model Number CD-12 Manufacturer Name MITUTOYO In Service Date 09/01/2021 COLT OF Service Date Service Review Status ACTIVE - Active	Actions Add New Views Attachments issues Links	×
	Q Begin typing to search or press Enter			

Attachments are available in all windows in APCM.



Equipment Calibrations in APCM...

Test Equipment Calibrations Summary

✤ Test Equipment Calibrations: MT	TD-1099644 - CALIPER DIGITAL 12'	n 2				Save	- ?
Equipment Record*	New					0 added 0 marked for deletion	0 changed
Equipment Record* Calibration Records*	New Calibration Period 2021 Calibration Period * 2021 Calibration Effective Date * 09/01/2021 Calibration Expiration Date 09/01/2022 * Remarks Type *	Calb. Eff. Dt 09/01/2021	Calb. Exp. Dt 09/01/2022	AC	Calibration Effective Yes Trive - Active	Actions Delete Duplicate Row Insert Row Tasks Test Equipment 15 Day Notification Test Equipment 30 Day Notification Test Equipment 60 Day Notification Test Equipment Calibration has Expired Test Equipment Expirations Today Views Calibration Attachments Links	0 changed
	Туре*			Remark *		Calibration Attachments	

- Attachments are available in all windows in APCM.
- Future use of Agency Views for entering calibration records instead of utilizing the Excel templates
- Email Notifications



Equipment Calibrations in APCM...

15 Day Equipment Calibration Expiration Notice for MAINTENANCE VACUUM PUMP



Equipment Location(Lab): METROLOGY LABORATORY

Serial Number: MTD-FLEX-431485

Equipment Description: MAINTENANCE VACUUM PUMP

Model Number: FLEX12122

Manufacturer: 10A4-6

In Service Date: 1/1/2020 12:00:00 AM

Calibration Length: 12

Calibration Period: 2021

Calibration Effective Date: 1/1/2020 12:00:00 AM

Calibration Expiration Date: 10/16/2021 12:00:00 AM

Contact the District Laboratory, , or the Materials and Tests Division with any questions.

Mobile Applications

- An effort is currently being taken to explore mobile applications.
- Mobile Inspector
 - A Progressive Web Application (a website that acts as an app).
 - Allows inspectors to collect data for their Daily Work Report:
 - Contractor Work (i.e., Daily Narrative)
 - Site Conditions
 - Contractor Work Force
 - Work Items
 - Photos (only available with APCM)
 - Several District users have assisted with piloting.

- Mobile Tester

- A Progressive Web Application (a website that acts as an app).
- Built to capture sample record information from the field.
- Compatible with Agency Views.
- Transfers information to APCM automatically once an internet connection is established, similar to Mobile Inspector.
- TxDOT assisted with beta testing on this application.



QUESTIONS?

