

WIM System Field Calibration and Validation Handout Guide

Minnesota, SPS-5
SHRP ID – 270500

Validation Date: April 3, 2012



Table of Contents

1	Site Information.....	3
2	Contact Information.....	3
3	Schedule of Events	4
4	Maps	5
4.1	Site Location	5
4.2	Truck Scale Location	5
4.3	Airport Location.....	6
4.4	Hospital Location.....	6
5	Occupational Health and Safety Plan	7
6	Contingency Plan.....	7

1 Site Information

Site ID:	270500	State:	Minnesota
LTPP Region:	North Central	Configuration:	Loop-Quartz -Quartz-Loop
Controller Type:	iSINC	Sensor Type:	Quartz Piezo
Power:	AC	Communication:	Landline
Class Scheme:	LTPP Mar 06	CPU type/setup:	iSINC

2 Contact Information

Agency	Contact	Position	Phone	E-Mail
FHWA	Debbie Walker	COTR	202 493-3068	deborah.walker@dot.gov
FHWA	William Lohr	FHWA Division	651-291-6122	william.lohr@dot.gov
RSC	Frank Meyer	Project Manager	716-632-0804	fmeyer@stantec.com
MNDOT	Ben Worel	LTPP contact	651-779-5522	ben.worel@dot.state.mn.us
MNDOT	Tim Clyne	LTPP contact	651-779-5626	tim.clyne@dot.state.mn.us
MNDOT	Benjamin Timerson	Traffic Contact	651-366-3855	benjamin.timerson@state.mn.us
MNDOT	Mark Novak	Traffic Contact	651-366-3869	mark.novak@dot.state.mn.us
ARA	Dean Wolf	Task Leader	717-512-6638	dwolf@ara.com
ARA	Olga Selezneva	Project Manager	410-540-9949	oselezneva@ara.com

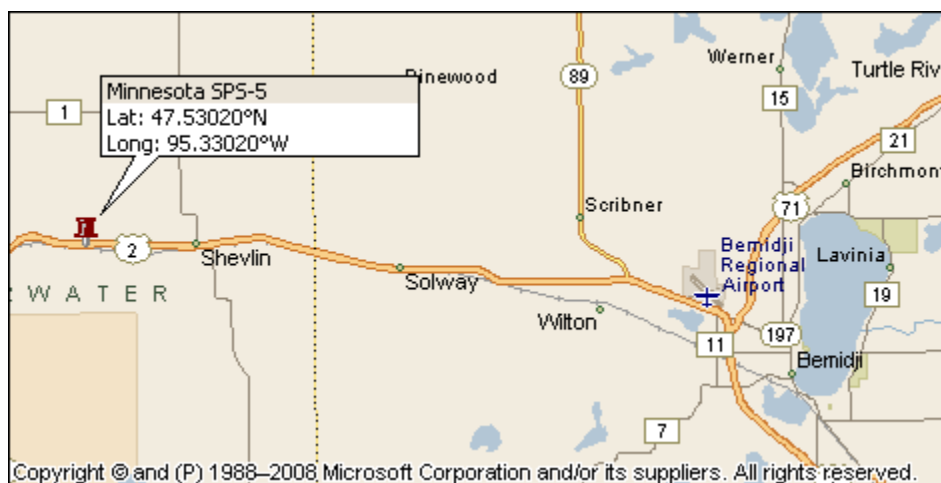
3 Schedule of Events

Date	Event	Location	Start Time
4/2/12	Travel	Bemidji, MN	TBD
4/2/11	Equipment Assessment	WIM Site	2:00 pm
4/2/11	System Test/Class and Speed Study	WIM Site	2:30 pm
4/3/12	Test Truck Weigh/Measure/Inspection	Waste Management	6:30 am
4/3/12	Initial Performance Evaluation	WIM Site	8:00 am
4/4/12	Test Truck Weigh/Measure/Inspection	Waste Management	6:30 am
4/4/12	Calibration/Validation (if required)	WIM Site	7:30 am
4/5/12	Travel	Camp Hill, PA	TBD

4 Maps

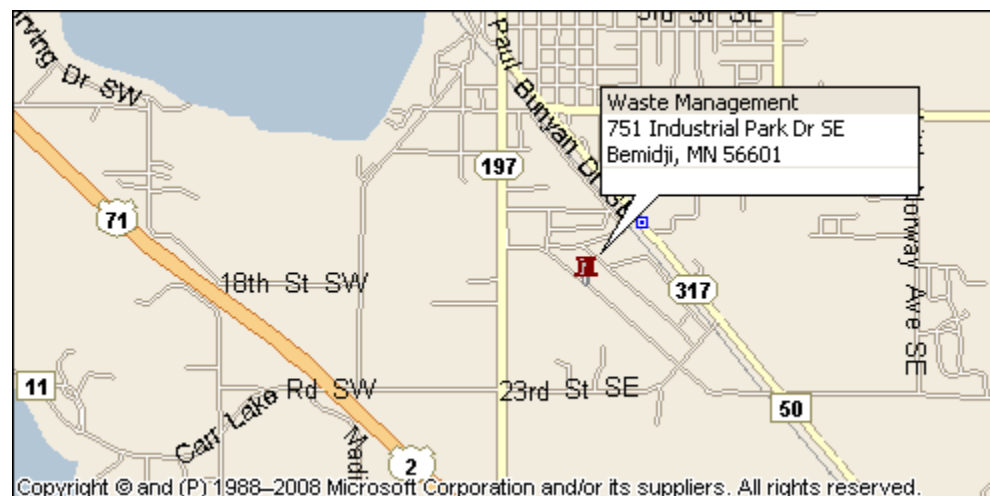
4.1 Site Location

Location:	US-2 at M.P. 91.8, 3.3 miles west of SR 2			Dir:	WB
Latitude:	47.5302°	Longitude:	-95.3302°		



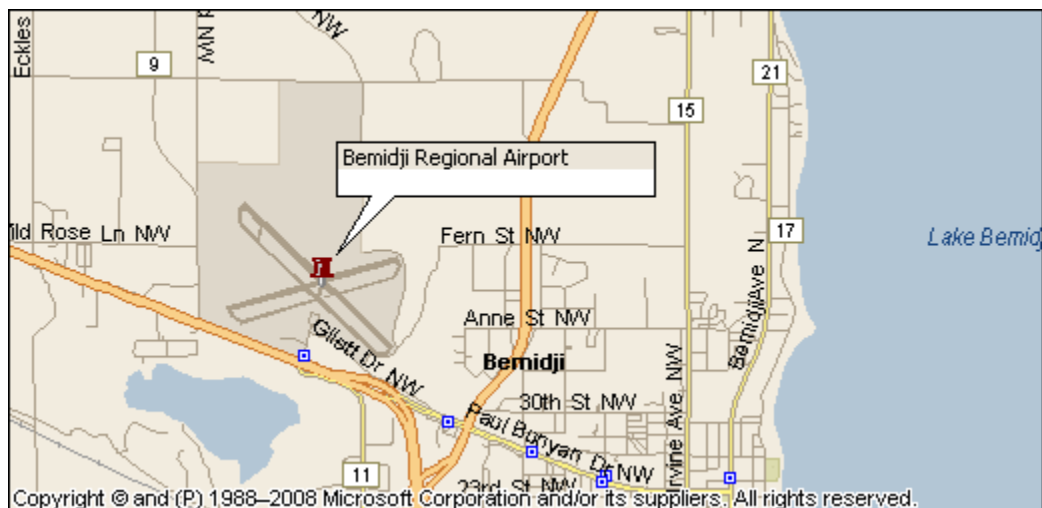
4.2 Truck Scale Location

Name:	Waste Management	Location:	751 Industrial Park Dr. SE, Bemidji, MN
Latitude:	47.4448°	Longitude:	-94.8573°



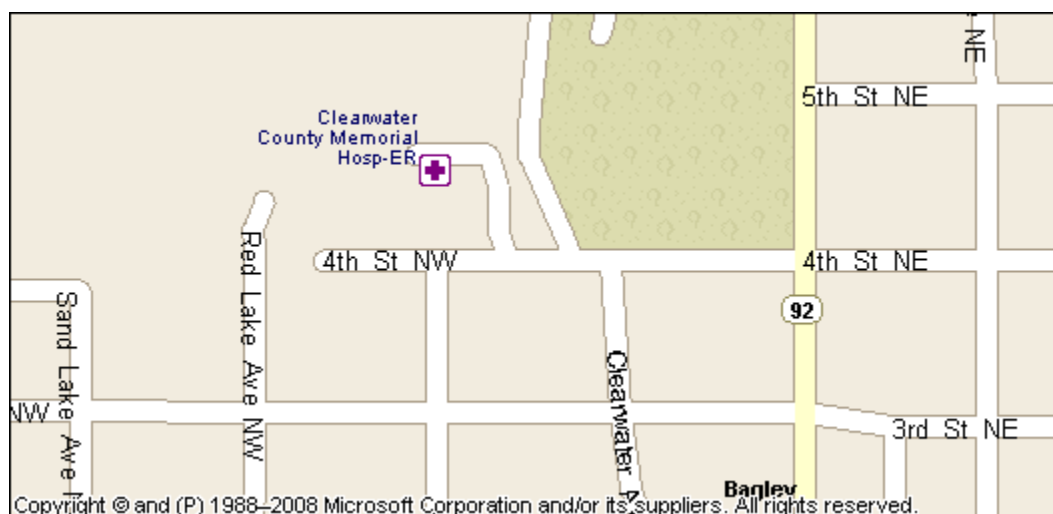
4.3 Airport Location

Name:	Bemidji Regional Airport	Location:	Bemidji, MN
Latitude:	47.5907°	Longitude:	-94.9333°



4.4 Hospital Location

Name:	Clearwater County Memorial Hospital - ER	Location:	203 4 th St. NW, Bagley, MN
Phone:	218-694-6501		



5 Occupational Health and Safety Plan

All fieldwork in the right-of-way will be carried out when the ground visibility is more than 3 km, and when there is no accumulation of water, snow, or ice is on the pavement.

To the extent possible, inspection work during extremely high and low temperatures will be avoided. If the work becomes necessary, workers will be reminded to make appropriate precautions (wear protective clothing, drink fluids, and avoid prolonged exposure to severe weather conditions).

All personnel present on the right-of-way will wear approved safety gear (boots, reflective safety vest, and helmet).

The following items will be available at the site: a standard first-aid kit, a cell phone, and the location of nearby hospital(s).

6 Contingency Plan

If inclement weather is forecasted prior to mobilizing to the site, the Project Manager will make the final decision to postpone the Validation visit. The Task Leader is responsible for contacting all parties involved to inform them of the postponement. He is also responsible for rearranging travel.

Once the Validation team is on-site, the On-Site Task Leader is responsible for making decisions to delay or postpone the Validation. He will contact the Project Manager to make recommendations for completing the Validation, and the Project Manager will make the final decision to cancel or postpone. The On-Site Task Leader is responsible for contacting the COTR and all other participating parties to inform them of the delay or postponement.

Traffic Sheet 17 LTPP MONITORED TRAFFIC DATA WIM SITE INVENTORY	STATE CODE:	27
	SPS WIM ID:	270500
	DATE (mm/dd/yyyy)	4/3/2012

1. ROUTE: US-2 MILEPOST: 91.8 LTPP DIRECTION: west

2. WIM SITE DESCRIPTION

Grade: <1% Sag Vertical: N
 Nearest Upstream SPS Section:
 Distance from sensors to SPS Section: feet

3. LANE CONFIGURATION

Lanes in LTPP direction: 2 Median: 3 - grass
 Lane width: Shoulder: 2 - paved AC
 Shoulder width:

4. PAVEMENT TYPE AC

5. PAVEMENT SURFACE CONDITION - Distress Survey

Date: 4/3/12 Photo Filename: 270500_downstream_04_03_12.jpg
 Date: 4/3/12 Photo Filename: 270500_trailing_loop_04_03_12.jpg
 Date: Photo Filename:

6. SENSOR SEQUENCE

Loop - Quartz - Quartz - Loop

7. REPLACEMENT AND/OR GRINDING

Date:
 Date:
 Date:

8. RAMPS OR INTERSECTIONS

Intersection within 300' upstream of site: N
 Intersection within 300' downstream of site: N
 Is shoulder routinely used for turning? N

9. DRAINAGE

Drainage (*bending plate and load cell*):
 Clearance under plate (in.):
 Clearance /access to flush fines from under system:

Traffic Sheet 17 LTPP MONITORED TRAFFIC DATA WIM SITE INVENTORY	STATE CODE:	27
	SPS WIM ID:	270500
	DATE (mm/dd/yyyy)	4/3/2012

10. CABINET LOCATION

Same side of road as LTPP lane: Y
 Distance from edge of traveled lane: _____ ft
 distance from system: _____ ft
 type: _____

Cabinet access controlled by: _____

Contact name: _____ Phone # _____

Alternate name: _____ Phone # _____

11. POWER

Distance to cabinet from drop: 1 ft
 Type: AC
 AC in cabinet?
 Service provider: Phone #

12. TELEPHONE

Distance to cabinet from drop: 1 ft
Type: landline
Service provider: _____ Phone # _____

13. SYSTEM

Software and version no. _____
Computer connection: _____

14. TEST TRUCK TURNAROUND TIME

Duration: 10 minutes Distance: miles

15. PHOTOS

	Filename
Power source:	270500_solar_panel_04_03_12.jpg
Phone source:	270500_cellular_modem_04_03_12.jpg
Cabinet exterior:	270500_cabinet_exterior_04_03_12.jpg
Cabinet interior:	270500_cabinet_interior_front_04_03_12.jpg
Weight sensors:	270500_cabinet_interior_rear_04_03_12.jpg
	270500_leading_WIM_sensor_04_03_12.jpg
Other sensors:	0
	270500_leading_loop_04_03_12.jpg
Downstream from sensors on LTPP lane:	270500_trailing_loop_04_03_12.jpg
Upstream from sensors on LTPP lane:	270500_downstream_04_03_12.jpg

Traffic Sheet 18 LTPP MONITORED TRAFFIC DATA WIM SITE COORDINATION	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/3/2012
---	--

1. DATA PROCESSING

- a. Download: LTPP download
- b. Data review: LTPP
If state, how often? _____
- c. Data submission LTPP
If state how often? _____

2. EQUIPMENT

- a. Purchase LTPP
- b. Installation LTPP contract
- c. Maintenance Contract with purchase
Expiration Date _____
- d. Calibration LTPP
- e. Manuals and software control: LTPP
- f. Power
i. Type Underground ii. Payment State
- g. Communication
i. Type Landline ii. Payment State

3. PAVEMENT

- a. Type Asphalt Concrete
- b. Allowable Rehabilitation activities Maintenance only
- c. Profile Site Markings Temporary

Traffic Sheet 18 LTPP MONITORED TRAFFIC DATA WIM SITE COORDINATION	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/3/2012
---	--

4. Onsite Activities

- a. WIM Validation Check advance notice required

_____ Days 2 Weeks

- b. Notice for straightedge and grinding check

_____ Days 2 Weeks

i. On site lead LTPP

ii. Accept grinding LTPP

- c. Authorization to calibrate site LTPP

- d. Calibration routine LTPP annually
Other: _____

- e. Test Vehicle Responsibilities

- i. Trucks

1st- Air suspension 3S2 LTPP

2nd- Air Suspension 3S2 LTPP

3rd- _____

4th- _____

ii. Loads LTPP

iii. Drivers LTPP

- f. Contractor(s) with prior experience in wim calibration in state:
IRD

- g. Access to cabinet Joint

- h. State personel required on site No

- i. Traffic control required No

- J. Enforcement coordination required No

Traffic Sheet 18 LTPP MONITORED TRAFFIC DATA WIM SITE COORDINATION	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/3/2012
---	--

5. SITE SPECIFIC CONDITIONS

- a. Funds and accountability: _____
- b. Reports: _____
- c. Other: _____
- c. Special Conditions _____

6. CONTACTS

- a. Equipment (operational status, access, etc.)
Name Roy Czinku Phone # 306-270-9492
Agency IRD
- b. Maintenance (equipment)
Name Roy Czinku Phone # 306-270-9492
Agency IRD
- c. Data Processing and pre-visit data
Name Roy Czinku Phone # 306-270-9492
Agency IRD
- d. Construction schedule and verification
Name _____ Phone # _____
Agency _____
- e. Test Vehicles (trucks, loads, drivers)
Name _____ Phone # _____
Agency _____
- f. Traffic control
Name _____ Phone # _____
Agency _____
- g. Enforcement coordination
Name _____ Phone # _____
Agency _____
- h. Nearest static scale
Name _____ Location: _____
Phone: _____

Traffic Sheet 19 LTPP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # <u>1</u>	STATE CODE: <u>27</u> SPS WIM ID: <u>270500</u> DATE (mm/dd/yyyy) <u>4/3/2012</u>
---	---

CALIBRATION TEST TRUCK - Primary

PART A

1. FHWA CLASS: 9 2. Number of axles: 5
3. AXLE WEIGHTS (lbs)

	a. Empty Truck Avg. Axle Weight	b. Pre-test Average Axle Weight	c. Post-Test Avg. Axle Weight	d. Direct or Calculated?
A		12310	12110	Calculated
B		17000	16940	Calculated
C		16080	16050	Calculated
D		14765	14735	Calculated
E		14625	14625	Calculated
F				

4. GVW (same units as axles)

- a. Empty GVW: _____
- b. Average Pre-Test Loaded weight: 74780
- c. Post Test Loaded Weight: 74460
- d. Difference Post Test - Pre-Tests: 320

5. TRUCK DESCRIPTION

- a. Tractor Cab Style: Conventional Sleeper Cab: Yes
photo: ☒

- b. Make: Kenworth
c. Model: T600

- d. Trailer Load Distribution Description:

palletted beezwax, pellet fuel, and wood shavings

photo: ☒

- e. Tractor Tare weight - _____ - _____
- f. Trailer Tare weight - _____ - _____
- g. Axle Spacing - (feet and tenths)

A to B 17.2 B to C 4.3 C to D 34.5 D to E 4.0 E to F _____

- h. Wheelbase - ☐ Measured _____ ☒ Computed 60.0
- i. Kingpin offset from Axle B (units) -1.0' photo: ☐
- j. Overall Length - ☒ Measured 71.8

Traffic Sheet 19 LTPP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # <u>1</u>	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/3/2012
---	--

CALIBRATION TEST TRUCK - Primary

6. SUSPENSION

	a. Tire size	b.Suspension description (leaf, air # of leaves, taper or flat leaf, etc.)	c. photo
A	295/75 R22.5	steel spring	☒
B	295/75 R22.5	air	☒
C	295/75 R22.5	air	☒
D	285/75 R24.5	air	☒
E	285/75 R24.5	air	☒
F			☐

d. Cold Tire Pressures (psi)- from right to left

Steering Axle	Axle B	Axle C	AxleD	AxleE	Axle F

PART B

Table 1 - Raw Measurements -Platform Scale

Axles	Meas.	Pre-test Weight	Instance	Instance	Post-test weight
A	I	12300			12100
A+B	II	29420			29140
A+B+C	III	45540			45240
A+B+C+D	IV	60230			59930
A+B+C+D+E(1)	V	74780			74460
A+B+C+D+E+(F)(1)	VI				
B+C+D+E+(F)	VII	62460			62340
C+D+E+(F)	VIII	45580			45500
D+E+(F)	IX	29540			29500
E+(F)	X	14700			14720
(F)	XI				
A+B+C+D+E+(F)(2)	XII	74780			74460

Traffic Sheet 19 LTTP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # <u>1</u>	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/3/2012
---	---

CALIBRATION TEST TRUCK - Primary

Table 2 - Axle and GVW Computations -Platform Scale Pre-test

	1		2		Avg.
Axle A	I	12300	VI-VII	12320	12310
Axle B	II-I	17120	VII-VIII	16880	17000
Axle C	III-II	16120	VIII-IX	16040	16080
Axle D	IV-III	14690	IX-X	14840	14765
Axle E	V-IV	14550	X-XI	14700	14625
Axle F	VI-V		XI		
GVW	VI	74780	XII	74780	74780

Table 3- Axle and GVW Computations - Platform Scale - Instance -

	1		2		Avg.
Axle A	I	0	VI-VII	0	0
Axle B	II-I	0	VII-VIII	0	0
Axle C	III-II	0	VIII-IX	0	0
Axle D	IV-III	0	IX-X	0	0
Axle E	V-IV	0	X-XI	0	0
Axle F	VI-V		XI		
GVW	VI	0	XII	0	0

Table 4- Axle and GVW Computations - Platform Scale - Instance -

	1		2		Avg.
Axle A	I	0	VI-VII	0	0
Axle B	II-I	0	VII-VIII	0	0
Axle C	III-II	0	VIII-IX	0	0
Axle D	IV-III	0	IX-X	0	0
Axle E	V-IV	0	X-XI	0	0
Axle F	VI-V		XI		
GVW	VI	0	XII	0	0

Table 5- Axle and GVW Computations - Platform Scale Post-Test

	1		2		Avg.
Axle A	I	12100	VI-VII	12120	12110
Axle B	II-I	17040	VII-VIII	16840	16940
Axle C	III-II	16100	VIII-IX	16000	16050
Axle D	IV-III	14690	IX-X	14780	14735
Axle E	V-IV	14530	X-XI	14720	14625
Axle F	VI-V		XI		
GVW	VI	74460	XII	74460	74460

Traffic Sheet 19 LTPP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # <u>1</u>	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/3/2012
---	---

CALIBRATION TEST TRUCK - Primary

Table 6 - Raw Data -Axle Scales - Pre-test

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
1							
2							
Avg.							

Table 7- Raw Data- Axle scales -

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
Avg.							

Table 8- Raw Data- Axle scales -

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
Avg.							

Table 9 - Raw Data -Axle Scales - Post-test

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
1							
2							
Avg.							

Validation Test Truck Run Set - Pre

Measured By: Kevin Trousdale
Verified By: Dean J. Wolf

Traffic Sheet 19 LTPP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # <u>1</u>	STATE CODE: <u>27</u> SPS WIM ID: <u>270500</u> DATE (mm/dd/yyyy) <u>4/4/2012</u>
---	---

CALIBRATION TEST TRUCK - Primary

PART A

1. FHWA CLASS: 9 2. Number of axles: 5
3. AXLE WEIGHTS (lbs)

	a. Empty Truck Avg. Axle Weight	b. Pre-test Average Axle Weight	c. Post-Test Avg. Axle Weight	d. Direct or Calculated?
A		12190	0	Calculated
B		16510	0	Calculated
C		15910	0	Calculated
D		15080	0	Calculated
E		15070	0	Calculated
F				

4. GVW (same units as axles)

- a. Empty GVW: _____
- b. Average Pre-Test Loaded weight: 74760
- c. Post Test Loaded Weight: 0
- d. Difference Post Test - Pre-Tests: 74760

5. TRUCK DESCRIPTION

- a. Tractor Cab Style: Conventional Sleeper Cab: Yes
photo: ☒

- b. Make: Kenworth
c. Model: T600

- d. Trailer Load Distribution Description:

palletted beezwax, pellet fuel, and wood shavings

photo: ☒

- e. Tractor Tare weight - _____ - _____
- f. Trailer Tare weight - _____ - _____
- g. Axle Spacing - (feet and tenths)

A to B 17.2 B to C 4.3 C to D 34.5 D to E 4.0 E to F _____

- h. Wheelbase - ☐ Measured _____ ☒ Computed 60.0
- i. Kingpin offset from Axle B (units) -1.0' photo: ☐
- j. Overall Length - ☒ Measured 71.8

Traffic Sheet 19 LTPP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # <u>1</u>	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/4/2012
---	--

CALIBRATION TEST TRUCK - Primary

6. SUSPENSION

	a. Tire size	b.Suspension description (leaf, air # of leaves, taper or flat leaf, etc.)	c. photo
A	295/75 R22.5	steel spring	☒
B	295/75 R22.5	air	☒
C	295/75 R22.5	air	☒
D	285/75 R24.5	air	☒
E	285/75 R24.5	air	☒
F			☐

d. Cold Tire Pressures (psi)- from right to left

Steering Axle	Axle B	Axle C	AxleD	AxleE	Axle F

PART B

Table 1 - Raw Measurements -Platform Scale

Axles	Meas.	Pre-test Weight	Instance	Instance	Post-test weight
A	I	12360			
A+B	II	29320			
A+B+C	III	44620			
A+B+C+D	IV	59740			
A+B+C+D+E(1)	V	74760			
A+B+C+D+E+(F)(1)	VI				
B+C+D+E+(F)	VII	62740			
C+D+E+(F)	VIII	46680			
D+E+(F)	IX	30160			
E+(F)	X	15120			
(F)	XI				
A+B+C+D+E+(F)(2)	XII	74760			

Traffic Sheet 19 LTTP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # <u>1</u>	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/4/2012
---	---

CALIBRATION TEST TRUCK - Primary

Table 2 - Axle and GVW Computations -Platform Scale Pre-test

	1		2		Avg.
Axle A	I	12360	VI-VII	12020	12190
Axle B	II-I	16960	VII-VIII	16060	16510
Axle C	III-II	15300	VIII-IX	16520	15910
Axle D	IV-III	15120	IX-X	15040	15080
Axle E	V-IV	15020	X-XI	15120	15070
Axle F	VI-V		XI		
GVW	VI	74760	XII	74760	74760

Table 3- Axle and GVW Computations - Platform Scale - Instance -

	1		2		Avg.
Axle A	I	0	VI-VII	0	0
Axle B	II-I	0	VII-VIII	0	0
Axle C	III-II	0	VIII-IX	0	0
Axle D	IV-III	0	IX-X	0	0
Axle E	V-IV	0	X-XI	0	0
Axle F	VI-V		XI		
GVW	VI	0	XII	0	0

Table 4- Axle and GVW Computations - Platform Scale - Instance -

	1		2		Avg.
Axle A	I	0	VI-VII	0	0
Axle B	II-I	0	VII-VIII	0	0
Axle C	III-II	0	VIII-IX	0	0
Axle D	IV-III	0	IX-X	0	0
Axle E	V-IV	0	X-XI	0	0
Axle F	VI-V		XI		
GVW	VI	0	XII	0	0

Table 5- Axle and GVW Computations - Platform Scale Post-Test

	1		2		Avg.
Axle A	I	0	VI-VII	0	0
Axle B	II-I	0	VII-VIII	0	0
Axle C	III-II	0	VIII-IX	0	0
Axle D	IV-III	0	IX-X	0	0
Axle E	V-IV	0	X-XI	0	0
Axle F	VI-V		XI		
GVW	VI	0	XII	0	0

Traffic Sheet 19 LTPP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # <u>1</u>	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/4/2012
---	---

CALIBRATION TEST TRUCK - Primary

Table 6 - Raw Data -Axle Scales - Pre-test

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
1							
2							
Avg.							

Table 7- Raw Data- Axle scales -

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
Avg.							

Table 8- Raw Data- Axle scales -

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
Avg.							

Table 9 - Raw Data -Axle Scales - Post-test

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
Avg.							

Validation Test Truck Run Set - Cal 1

Measured By: Kevin Trousdale
Verified By: Dean J. Wolf

Traffic Sheet 19 LTPP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # <u>1</u>	STATE CODE: <u>27</u> SPS WIM ID: <u>270500</u> DATE (mm/dd/yyyy) <u>4/4/2012</u>
---	---

CALIBRATION TEST TRUCK - Primary

PART A

1. FHWA CLASS: 9 2. Number of axles: 5
3. AXLE WEIGHTS (lbs)

	a. Empty Truck Avg. Axle Weight	b. Pre-test Average Axle Weight	c. Post-Test Avg. Axle Weight	d. Direct or Calculated?
A		12190	0	Calculated
B		16510	0	Calculated
C		15910	0	Calculated
D		15080	0	Calculated
E		15070	0	Calculated
F				

4. GVW (same units as axles)

- a. Empty GVW: _____
- b. Average Pre-Test Loaded weight: 74760
- c. Post Test Loaded Weight: 0
- d. Difference Post Test - Pre-Tests: 74760

5. TRUCK DESCRIPTION

- a. Tractor Cab Style: Conventional Sleeper Cab: Yes
photo: ☒

- b. Make: Kenworth
c. Model: T600

- d. Trailer Load Distribution Description:

palletted beezwax, pellet fuel, and wood shavings

photo: ☒

- e. Tractor Tare weight - _____ - _____
- f. Trailer Tare weight - _____ - _____
- g. Axle Spacing - (feet and tenths)

A to B 17.2 B to C 4.3 C to D 34.5 D to E 4.0 E to F _____

- h. Wheelbase - ☐ Measured _____ ☒ Computed 60.0
- i. Kingpin offset from Axle B (units) -1.0' photo: ☐
- j. Overall Length - ☒ Measured 71.8

Traffic Sheet 19 LTPP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # <u>1</u>	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/4/2012
---	--

CALIBRATION TEST TRUCK - Primary

6. SUSPENSION

	a. Tire size	b.Suspension description (leaf, air # of leaves, taper or flat leaf, etc.)	c. photo
A	295/75 R22.5	steel spring	☒
B	295/75 R22.5	air	☒
C	295/75 R22.5	air	☒
D	285/75 R24.5	air	☒
E	285/75 R24.5	air	☒
F			☐

d. Cold Tire Pressures (psi)- from right to left

Steering Axle	Axle B	Axle C	AxleD	AxleE	Axle F

PART B

Table 1 - Raw Measurements -Platform Scale

Axles	Meas.	Pre-test Weight	Instance	Instance	Post-test weight
A	I	12360			
A+B	II	29320			
A+B+C	III	44620			
A+B+C+D	IV	59740			
A+B+C+D+E(1)	V	74760			
A+B+C+D+E+(F)(1)	VI				
B+C+D+E+(F)	VII	62740			
C+D+E+(F)	VIII	46680			
D+E+(F)	IX	30160			
E+(F)	X	15120			
(F)	XI				
A+B+C+D+E+(F)(2)	XII	74760			

Traffic Sheet 19 LTTP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # <u>1</u>	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/4/2012
---	---

CALIBRATION TEST TRUCK - Primary

Table 2 - Axle and GVW Computations -Platform Scale Pre-test

	1		2		Avg.
Axle A	I	12360	VI-VII	12020	12190
Axle B	II-I	16960	VII-VIII	16060	16510
Axle C	III-II	15300	VIII-IX	16520	15910
Axle D	IV-III	15120	IX-X	15040	15080
Axle E	V-IV	15020	X-XI	15120	15070
Axle F	VI-V		XI		
GVW	VI	74760	XII	74760	74760

Table 3- Axle and GVW Computations - Platform Scale - Instance -

	1		2		Avg.
Axle A	I	0	VI-VII	0	0
Axle B	II-I	0	VII-VIII	0	0
Axle C	III-II	0	VIII-IX	0	0
Axle D	IV-III	0	IX-X	0	0
Axle E	V-IV	0	X-XI	0	0
Axle F	VI-V		XI		
GVW	VI	0	XII	0	0

Table 4- Axle and GVW Computations - Platform Scale - Instance -

	1		2		Avg.
Axle A	I	0	VI-VII	0	0
Axle B	II-I	0	VII-VIII	0	0
Axle C	III-II	0	VIII-IX	0	0
Axle D	IV-III	0	IX-X	0	0
Axle E	V-IV	0	X-XI	0	0
Axle F	VI-V		XI		
GVW	VI	0	XII	0	0

Table 5- Axle and GVW Computations - Platform Scale Post-Test

	1		2		Avg.
Axle A	I	0	VI-VII	0	0
Axle B	II-I	0	VII-VIII	0	0
Axle C	III-II	0	VIII-IX	0	0
Axle D	IV-III	0	IX-X	0	0
Axle E	V-IV	0	X-XI	0	0
Axle F	VI-V		XI		
GVW	VI	0	XII	0	0

Traffic Sheet 19 LTPP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # <u>1</u>	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/4/2012
---	---

CALIBRATION TEST TRUCK - Primary

Table 6 - Raw Data -Axle Scales - Pre-test

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
1							
2							
Avg.							

Table 7- Raw Data- Axle scales -

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
Avg.							

Table 8- Raw Data- Axle scales -

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
Avg.							

Table 9 - Raw Data -Axle Scales - Post-test

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
Avg.							

Validation Test Truck Run Set - Cal 2

Measured By: Kevin Trousdale
Verified By: Dean J. Wolf

Traffic Sheet 19 LTPP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # <u>1</u>	STATE CODE: <u>27</u> SPS WIM ID: <u>270500</u> DATE (mm/dd/yyyy) <u>4/4/2012</u>
---	---

CALIBRATION TEST TRUCK - Primary

PART A

1. FHWA CLASS: 9 2. Number of axles: 5
3. AXLE WEIGHTS (lbs)

	a. Empty Truck Avg. Axle Weight	b. Pre-test Average Axle Weight	c. Post-Test Avg. Axle Weight	d. Direct or Calculated?
A		12190	11980	Calculated
B		16510	16560	Calculated
C		15910	15770	Calculated
D		15080	15090	Calculated
E		15070	15060	Calculated
F				

4. GVW (same units as axles)

- a. Empty GVW: _____
- b. Average Pre-Test Loaded weight: 74760
- c. Post Test Loaded Weight: 74460
- d. Difference Post Test - Pre-Tests: 300

5. TRUCK DESCRIPTION

- a. Tractor Cab Style: Conventional Sleeper Cab: Yes
photo: ☒

- b. Make: Kenworth
c. Model: T600

d. Trailer Load Distribution Description:

palletted beezwax, pellet fuel, and wood shavings

photo: ☒

- e. Tractor Tare weight - _____ - _____
- f. Trailer Tare weight - _____ - _____
- g. Axle Spacing - (feet and tenths)

A to B 17.2 B to C 4.3 C to D 34.5 D to E 4.0 E to F _____

- h. Wheelbase - ☐ Measured _____ ☒ Computed 60.0
- i. Kingpin offset from Axle B (units) -1.0' photo: ☐
- j. Overall Length - ☒ Measured 71.8

Traffic Sheet 19 LTPP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # <u>1</u>	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/4/2012
---	--

CALIBRATION TEST TRUCK - Primary

6. SUSPENSION

	a. Tire size	b.Suspension description (leaf, air # of leaves, taper or flat leaf, etc.)	c. photo
A	295/75 R22.5	steel spring	☒
B	295/75 R22.5	air	☒
C	295/75 R22.5	air	☒
D	285/75 R24.5	air	☒
E	285/75 R24.5	air	☒
F			☐

d. Cold Tire Pressures (psi)- from right to left

Steering Axle	Axle B	Axle C	AxleD	AxleE	Axle F
96.0	114.2	109.2	110.4	102.4	
112.1	118.3	110.0	112.2	110.0	
	110.0	106.9	114.2	108.1	
	110.0	110.3	120.1	110.3	

PART B

Table 1 - Raw Measurements -Platform Scale

Axles	Meas.	Pre-test Weight	Instance	Instance	Post-test weight
A	I	12360			12180
A+B	II	29320			29040
A+B+C	III	44620			44340
A+B+C+D	IV	59740			59440
A+B+C+D+E(1)	V	74760			74460
A+B+C+D+E+(F)(1)	VI				
B+C+D+E+(F)	VII	62740			62680
C+D+E+(F)	VIII	46680			46420
D+E+(F)	IX	30160			30180
E+(F)	X	15120			15100
(F)	XI				
A+B+C+D+E+(F)(2)	XII	74760			74460

Traffic Sheet 19 LTTP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # <u>1</u>	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/4/2012
---	---

CALIBRATION TEST TRUCK - Primary

Table 2 - Axle and GVW Computations -Platform Scale Pre-test

	1		2		Avg.
Axle A	I	12360	VI-VII	12020	12190
Axle B	II-I	16960	VII-VIII	16060	16510
Axle C	III-II	15300	VIII-IX	16520	15910
Axle D	IV-III	15120	IX-X	15040	15080
Axle E	V-IV	15020	X-XI	15120	15070
Axle F	VI-V		XI		
GVW	VI	74760	XII	74760	74760

Table 3- Axle and GVW Computations - Platform Scale - Instance -

	1		2		Avg.
Axle A	I	0	VI-VII	0	0
Axle B	II-I	0	VII-VIII	0	0
Axle C	III-II	0	VIII-IX	0	0
Axle D	IV-III	0	IX-X	0	0
Axle E	V-IV	0	X-XI	0	0
Axle F	VI-V		XI		
GVW	VI	0	XII	0	0

Table 4- Axle and GVW Computations - Platform Scale - Instance -

	1		2		Avg.
Axle A	I	0	VI-VII	0	0
Axle B	II-I	0	VII-VIII	0	0
Axle C	III-II	0	VIII-IX	0	0
Axle D	IV-III	0	IX-X	0	0
Axle E	V-IV	0	X-XI	0	0
Axle F	VI-V		XI		
GVW	VI	0	XII	0	0

Table 5- Axle and GVW Computations - Platform Scale Post-Test

	1		2		Avg.
Axle A	I	12180	VI-VII	11780	11980
Axle B	II-I	16860	VII-VIII	16260	16560
Axle C	III-II	15300	VIII-IX	16240	15770
Axle D	IV-III	15100	IX-X	15080	15090
Axle E	V-IV	15020	X-XI	15100	15060
Axle F	VI-V		XI		
GVW	VI	74460	XII	74460	74460

Traffic Sheet 19 LTPP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # <u>1</u>	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/4/2012
---	---

CALIBRATION TEST TRUCK - Primary

Table 6 - Raw Data -Axle Scales - Pre-test

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
1							
2							
Avg.							

Table 7- Raw Data- Axle scales -

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
Avg.							

Table 8- Raw Data- Axle scales -

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
Avg.							

Table 9 - Raw Data -Axle Scales - Post-test

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
1							
2							
Avg.							

Validation Test Truck Run Set - Post

Measured By: Kevin Trousdale
Verified By: Dean J. Wolf

Traffic Sheet 19 LTPP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # 2	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/3/2012
--	--

CALIBRATION TEST TRUCK - Secondary

PART A

1. FHWA CLASS: 9 2. Number of axles: 5

3. AXLE WEIGHTS (lbs)

	a. Empty Truck Avg. Axle Weight	b. Pre-test Average Axle Weight	c. Post-Test Avg. Axle Weight	d. Direct or Calculated?
A		11430	11350	Calculated
B		14505	14340	Calculated
C		14840	13780	Calculated
D		10175	11165	Calculated
E		11410	11425	Calculated
F				

4. GVW (same units as axles)

a. Empty GVW: _____
 b. Average Pre-Test Loaded weight: 62360
 c. Post Test Loaded Weight: 62060
 d. Difference Post Test - Pre-Tests: 300

5. TRUCK DESCRIPTION

a. Tractor Cab Style: Conventional Sleeper Cab: Yes
 photo: ☒

b. Make: Peterbilt
 c. Model: 377

d. Trailer Load Distribution Description:

palletized wood shavings

 photo: ☒

e. Tractor Tare weight - _____ - _____
 f. Trailer Tare weight - _____ - _____
 g. Axle Spacing - (feet and tenths)

A to B 17.1 B to C 4.3 C to D 35.5 D to E 4.0 E to F _____

h. Wheelbase - ☐ Measured _____ ☒ Computed 60.9
 i. Kingpin offset from Axle B (units) -1.0 photo: ☐
 j. Overall Length - ☒ Measured 71.8

Traffic Sheet 19 LTPP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # 2	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/3/2012
--	--

CALIBRATION TEST TRUCK - Secondary

6. SUSPENSION

	a. Tire size	b.Suspension description (leaf, air # of leaves, taper or flat leaf, etc.)	c. photo
A		steel spring	☒
B		air	☒
C		air	☒
D		air	☒
E		air	☒
F			☐

d. Cold Tire Pressures (psi)- from right to left

Steering Axle	Axle B	Axle C	AxleD	AxleE	Axle F

PART B

Table 1 - Raw Measurements -Platform Scale

Axles	Meas.	Pre-test Weight	Instance	Instance	Post-test weight
A	I	11440			11360
A+B	II	25940			25700
A+B+C	III	40800			39460
A+B+C+D	IV	50900			50560
A+B+C+D+E(1)	V	62360			62060
A+B+C+D+E+(F)(1)	VI				
B+C+D+E+(F)	VII	50940			50720
C+D+E+(F)	VIII	36430			36380
D+E+(F)	IX	21610			22580
E+(F)	X	11360			11350
(F)	XI				
A+B+C+D+E+(F)(2)	XII	62360			62060

Traffic Sheet 19 LTTP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # 2	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/3/2012
--	---

CALIBRATION TEST TRUCK - Secondary

Table 2 - Axle and GVW Computations -Platform Scale Pre-test

	1		2		Avg.
Axle A	I	11440	VI-VII	11420	11430
Axle B	II-I	14500	VII-VIII	14510	14505
Axle C	III-II	14860	VIII-IX	14820	14840
Axle D	IV-III	10100	IX-X	10250	10175
Axle E	V-IV	11460	X-XI	11360	11410
Axle F	VI-V		XI		
GVW	VI	62360	XII	62360	62360

Table 3- Axle and GVW Computations - Platform Scale - Instance -

	1		2		Avg.
Axle A	I	0	VI-VII	0	0
Axle B	II-I	0	VII-VIII	0	0
Axle C	III-II	0	VIII-IX	0	0
Axle D	IV-III	0	IX-X	0	0
Axle E	V-IV	0	X-XI	0	0
Axle F	VI-V		XI		
GVW	VI	0	XII	0	0

Table 4- Axle and GVW Computations - Platform Scale - Instance -

	1		2		Avg.
Axle A	I	0	VI-VII	0	0
Axle B	II-I	0	VII-VIII	0	0
Axle C	III-II	0	VIII-IX	0	0
Axle D	IV-III	0	IX-X	0	0
Axle E	V-IV	0	X-XI	0	0
Axle F	VI-V		XI		
GVW	VI	0	XII	0	0

Table 5- Axle and GVW Computations - Platform Scale Post-Test

	1		2		Avg.
Axle A	I	11360	VI-VII	11340	11350
Axle B	II-I	14340	VII-VIII	14340	14340
Axle C	III-II	13760	VIII-IX	13800	13780
Axle D	IV-III	11100	IX-X	11230	11165
Axle E	V-IV	11500	X-XI	11350	11425
Axle F	VI-V		XI		
GVW	VI	62060	XII	62060	62060

Traffic Sheet 19 LTPP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # <u>2</u>	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/3/2012
---	---

CALIBRATION TEST TRUCK - Secondary

Table 6 - Raw Data -Axle Scales - Pre-test

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
1							
2							
Avg.							

Table 7- Raw Data- Axle scales -

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
Avg.							

Table 8- Raw Data- Axle scales -

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
Avg.							

Table 9 - Raw Data -Axle Scales - Post-test

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
1							
2							
Avg.							

Validation Test Truck Run Set - Pre

Measured By: Kevin Trousdale
Verified By: Dean J. Wolf

Traffic Sheet 19 LTPP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # 2	STATE CODE: 27
	SPS WIM ID: 270500
	DATE (mm/dd/yyyy) 4/4/2012

CALIBRATION TEST TRUCK - Secondary

PART A

1. FHWA CLASS: 9 2. Number of axles: 5

3. AXLE WEIGHTS (lbs)

	a. Empty Truck Avg. Axle Weight	b. Pre-test Average Axle Weight	c. Post-Test Avg. Axle Weight	d. Direct or Calculated?
A		11490	0	Calculated
B		14120	0	Calculated
C		14090	0	Calculated
D		11030	0	Calculated
E		11610	0	Calculated
F				

4. GVW (same units as axles)

a. Empty GVW: _____
b. Average Pre-Test Loaded weight: 62340
c. Post Test Loaded Weight: 0
d. Difference Post Test - Pre-Tests: 62340

5. TRUCK DESCRIPTION

a. Tractor Cab Style: Conventional Sleeper Cab: Yes
photo: ☒

b. Make: Peterbilt
c. Model: 377

d. Trailer Load Distribution Description:

palletized wood shavings

photo: ☒

e. Tractor Tare weight - _____ - _____
f. Trailer Tare weight - _____ - _____
g. Axle Spacing - (feet and tenths)

A to B 17.1 B to C 4.3 C to D 35.5 D to E 4.0 E to F _____

h. Wheelbase - ☐ Measured _____ ☒ Computed 60.9
i. Kingpin offset from Axle B (units) -1.0 photo: ☐
j. Overall Length - ☒ Measured 71.8

Traffic Sheet 19 LTPP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # 2	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/4/2012
--	---

CALIBRATION TEST TRUCK - Secondary

6. SUSPENSION

	a. Tire size	b.Suspension description (leaf, air # of leaves, taper or flat leaf, etc.)	c. photo
A		steel spring	☒
B		air	☒
C		air	☒
D		air	☒
E		air	☒
F			☐

d. Cold Tire Pressures (psi)- from right to left

Steering Axle	Axle B	Axle C	AxleD	AxleE	Axle F

PART B

Table 1 - Raw Measurements -Platform Scale

Axles	Meas.	Pre-test Weight	Instance	Instance	Post-test weight
A	I	11540			
A+B	II	25920			
A+B+C	III	39720			
A+B+C+D	IV	50800			
A+B+C+D+E(1)	V	62340			
A+B+C+D+E+(F)(1)	VI				
B+C+D+E+(F)	VII	50900			
C+D+E+(F)	VIII	37040			
D+E+(F)	IX	22660			
E+(F)	X	11680			
(F)	XI				
A+B+C+D+E+(F)(2)	XII	62340			

Traffic Sheet 19 LTTP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # 2	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/4/2012
--	---

CALIBRATION TEST TRUCK - Secondary

Table 2 - Axle and GVW Computations -Platform Scale Pre-test

	1		2		Avg.
Axle A	I	11540	VI-VII	11440	11490
Axle B	II-I	14380	VII-VIII	13860	14120
Axle C	III-II	13800	VIII-IX	14380	14090
Axle D	IV-III	11080	IX-X	10980	11030
Axle E	V-IV	11540	X-XI	11680	11610
Axle F	VI-V		XI		
GVW	VI	62340	XII	62340	62340

Table 3- Axle and GVW Computations - Platform Scale - Instance -

	1		2		Avg.
Axle A	I	0	VI-VII	0	0
Axle B	II-I	0	VII-VIII	0	0
Axle C	III-II	0	VIII-IX	0	0
Axle D	IV-III	0	IX-X	0	0
Axle E	V-IV	0	X-XI	0	0
Axle F	VI-V		XI		
GVW	VI	0	XII	0	0

Table 4- Axle and GVW Computations - Platform Scale - Instance -

	1		2		Avg.
Axle A	I	0	VI-VII	0	0
Axle B	II-I	0	VII-VIII	0	0
Axle C	III-II	0	VIII-IX	0	0
Axle D	IV-III	0	IX-X	0	0
Axle E	V-IV	0	X-XI	0	0
Axle F	VI-V		XI		
GVW	VI	0	XII	0	0

Table 5- Axle and GVW Computations - Platform Scale Post-Test

	1		2		Avg.
Axle A	I	0	VI-VII	0	0
Axle B	II-I	0	VII-VIII	0	0
Axle C	III-II	0	VIII-IX	0	0
Axle D	IV-III	0	IX-X	0	0
Axle E	V-IV	0	X-XI	0	0
Axle F	VI-V		XI		
GVW	VI	0	XII	0	0

Traffic Sheet 19 LTPP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # <u>2</u>	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/4/2012
---	---

CALIBRATION TEST TRUCK - Secondary

Table 6 - Raw Data -Axle Scales - Pre-test

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
1							
2							
Avg.							

Table 7- Raw Data- Axle scales -

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
Avg.							

Table 8- Raw Data- Axle scales -

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
Avg.							

Table 9 - Raw Data -Axle Scales - Post-test

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
Avg.							

Validation Test Truck Run Set - Cal 1

Measured By: Kevin Trousdale
Verified By: Dean J. Wolf

Traffic Sheet 19 LTPP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # 2	STATE CODE: 27
	SPS WIM ID: 270500
	DATE (mm/dd/yyyy) 4/4/2012

CALIBRATION TEST TRUCK - Secondary

PART A

1. FHWA CLASS: 9 2. Number of axles: 5
3. AXLE WEIGHTS (lbs)

	a. Empty Truck Avg. Axle Weight	b. Pre-test Average Axle Weight	c. Post-Test Avg. Axle Weight	d. Direct or Calculated?
A		11490	0	Calculated
B		14120	0	Calculated
C		14090	0	Calculated
D		11030	0	Calculated
E		11610	0	Calculated
F				

4. GVW (same units as axles)

- a. Empty GVW: _____
- b. Average Pre-Test Loaded weight: 62340
- c. Post Test Loaded Weight: 0
- d. Difference Post Test - Pre-Tests: 62340

5. TRUCK DESCRIPTION

- a. Tractor Cab Style: Conventional Sleeper Cab: Yes
photo: ☒

- b. Make: Peterbilt
c. Model: 377

d. Trailer Load Distribution Description:

palletized wood shavings

photo: ☒

- e. Tractor Tare weight - _____ - _____
- f. Trailer Tare weight - _____ - _____
- g. Axle Spacing - (feet and tenths)

A to B 17.1 B to C 4.3 C to D 35.5 D to E 4.0 E to F _____

- h. Wheelbase - ☐ Measured _____ ☒ Computed 60.9
- i. Kingpin offset from Axle B (units) -1.0 photo: ☐
- j. Overall Length - ☒ Measured 71.8

Traffic Sheet 19 LTPP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # 2	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/4/2012
--	--

CALIBRATION TEST TRUCK - Secondary

6. SUSPENSION

	a. Tire size	b.Suspension description (leaf, air # of leaves, taper or flat leaf, etc.)	c. photo
A		steel spring	☒
B		air	☒
C		air	☒
D		air	☒
E		air	☒
F			☐

d. Cold Tire Pressures (psi)- from right to left

Steering Axle	Axle B	Axle C	AxleD	AxleE	Axle F

PART B

Table 1 - Raw Measurements -Platform Scale

Axles	Meas.	Pre-test Weight	Instance	Instance	Post-test weight
A	I	11540			
A+B	II	25920			
A+B+C	III	39720			
A+B+C+D	IV	50800			
A+B+C+D+E(1)	V	62340			
A+B+C+D+E+(F)(1)	VI				
B+C+D+E+(F)	VII	50900			
C+D+E+(F)	VIII	37040			
D+E+(F)	IX	22660			
E+(F)	X	11680			
(F)	XI				
A+B+C+D+E+(F)(2)	XII	62340			

Traffic Sheet 19 LTTP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # 2	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/4/2012
--	---

CALIBRATION TEST TRUCK - Secondary

Table 2 - Axle and GVW Computations -Platform Scale Pre-test

	1		2		Avg.
Axle A	I	11540	VI-VII	11440	11490
Axle B	II-I	14380	VII-VIII	13860	14120
Axle C	III-II	13800	VIII-IX	14380	14090
Axle D	IV-III	11080	IX-X	10980	11030
Axle E	V-IV	11540	X-XI	11680	11610
Axle F	VI-V		XI		
GVW	VI	62340	XII	62340	62340

Table 3- Axle and GVW Computations - Platform Scale - Instance -

	1		2		Avg.
Axle A	I	0	VI-VII	0	0
Axle B	II-I	0	VII-VIII	0	0
Axle C	III-II	0	VIII-IX	0	0
Axle D	IV-III	0	IX-X	0	0
Axle E	V-IV	0	X-XI	0	0
Axle F	VI-V		XI		
GVW	VI	0	XII	0	0

Table 4- Axle and GVW Computations - Platform Scale - Instance -

	1		2		Avg.
Axle A	I	0	VI-VII	0	0
Axle B	II-I	0	VII-VIII	0	0
Axle C	III-II	0	VIII-IX	0	0
Axle D	IV-III	0	IX-X	0	0
Axle E	V-IV	0	X-XI	0	0
Axle F	VI-V		XI		
GVW	VI	0	XII	0	0

Table 5- Axle and GVW Computations - Platform Scale Post-Test

	1		2		Avg.
Axle A	I	0	VI-VII	0	0
Axle B	II-I	0	VII-VIII	0	0
Axle C	III-II	0	VIII-IX	0	0
Axle D	IV-III	0	IX-X	0	0
Axle E	V-IV	0	X-XI	0	0
Axle F	VI-V		XI		
GVW	VI	0	XII	0	0

Traffic Sheet 19 LTPP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # <u>2</u>	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/4/2012
---	---

CALIBRATION TEST TRUCK - Secondary

Table 6 - Raw Data -Axle Scales - Pre-test

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
1							
2							
Avg.							

Table 7- Raw Data- Axle scales -

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
Avg.							

Table 8- Raw Data- Axle scales -

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
Avg.							

Table 9 - Raw Data -Axle Scales - Post-test

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
Avg.							

Validation Test Truck Run Set - Cal 2

Measured By: Kevin Trousdale
Verified By: Dean J. Wolf

Traffic Sheet 19 LTPP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # 2	STATE CODE: 27
	SPS WIM ID: 270500
	DATE (mm/dd/yyyy) 4/4/2012

CALIBRATION TEST TRUCK - Secondary

PART A

1. FHWA CLASS: 9 2. Number of axles: 5
3. AXLE WEIGHTS (lbs)

	a. Empty Truck Avg. Axle Weight	b. Pre-test Average Axle Weight	c. Post-Test Avg. Axle Weight	d. Direct or Calculated?
A		11490	11310	Calculated
B		14120	14090	Calculated
C		14090	14030	Calculated
D		11030	11040	Calculated
E		11610	11590	Calculated
F				

4. GVW (same units as axles)

- a. Empty GVW: _____
- b. Average Pre-Test Loaded weight: 62340
- c. Post Test Loaded Weight: 62060
- d. Difference Post Test - Pre-Tests: 280

5. TRUCK DESCRIPTION

- a. Tractor Cab Style: Conventional Sleeper Cab: Yes
photo: ☒

- b. Make: Peterbilt
c. Model: 377

d. Trailer Load Distribution Description:

palletized wood shavings

photo: ☒

- e. Tractor Tare weight - _____ - _____
- f. Trailer Tare weight - _____ - _____
- g. Axle Spacing - (feet and tenths)

A to B 17.1 B to C 4.3 C to D 35.5 D to E 4.0 E to F _____

- h. Wheelbase - ☐ Measured _____ ☒ Computed 60.9
- i. Kingpin offset from Axle B (units) -1.0 photo: ☐
- j. Overall Length - ☒ Measured 71.8

Traffic Sheet 19 LTPP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # 2	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/4/2012
--	--

CALIBRATION TEST TRUCK - Secondary

6. SUSPENSION

	a. Tire size	b.Suspension description (leaf, air # of leaves, taper or flat leaf, etc.)	c. photo
A	295/75R22.5	steel spring	☒
B	295/75R22.5	air	☒
C	295/75R22.5	air	☒
D	285/75R24.5	air	☒
E	285/75R24.5	air	☒
F			☐

d. Cold Tire Pressures (psi)- from right to left

Steering Axle	Axle B	Axle C	AxleD	AxleE	Axle F
96.0	114.2	109.2	110.4	102.4	
112.1	118.3	110.0	112.2	110.0	
	110.0	106.9	114.2	108.1	
	110.0	110.3	120.1	110.3	

PART B

Table 1 - Raw Measurements -Platform Scale

Axles	Meas.	Pre-test Weight	Instance	Instance	Post-test weight
A	I	11540			11300
A+B	II	25920			25680
A+B+C	III	39720			39440
A+B+C+D	IV	50800			50580
A+B+C+D+E(1)	V	62340			62060
A+B+C+D+E+(F)(1)	VI				
B+C+D+E+(F)	VII	50900			50740
C+D+E+(F)	VIII	37040			36940
D+E+(F)	IX	22660			22640
E+(F)	X	11680			11700
(F)	XI				
A+B+C+D+E+(F)(2)	XII	62340			62060

Traffic Sheet 19 LTTP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # 2	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/4/2012
--	---

CALIBRATION TEST TRUCK - Secondary

Table 2 - Axle and GVW Computations -Platform Scale Pre-test

	1		2		Avg.
Axle A	I	11540	VI-VII	11440	11490
Axle B	II-I	14380	VII-VIII	13860	14120
Axle C	III-II	13800	VIII-IX	14380	14090
Axle D	IV-III	11080	IX-X	10980	11030
Axle E	V-IV	11540	X-XI	11680	11610
Axle F	VI-V		XI		
GVW	VI	62340	XII	62340	62340

Table 3- Axle and GVW Computations - Platform Scale - Instance -

	1		2		Avg.
Axle A	I	0	VI-VII	0	0
Axle B	II-I	0	VII-VIII	0	0
Axle C	III-II	0	VIII-IX	0	0
Axle D	IV-III	0	IX-X	0	0
Axle E	V-IV	0	X-XI	0	0
Axle F	VI-V		XI		
GVW	VI	0	XII	0	0

Table 4- Axle and GVW Computations - Platform Scale - Instance -

	1		2		Avg.
Axle A	I	0	VI-VII	0	0
Axle B	II-I	0	VII-VIII	0	0
Axle C	III-II	0	VIII-IX	0	0
Axle D	IV-III	0	IX-X	0	0
Axle E	V-IV	0	X-XI	0	0
Axle F	VI-V		XI		
GVW	VI	0	XII	0	0

Table 5- Axle and GVW Computations - Platform Scale Post-Test

	1		2		Avg.
Axle A	I	11300	VI-VII	11320	11310
Axle B	II-I	14380	VII-VIII	13800	14090
Axle C	III-II	13760	VIII-IX	14300	14030
Axle D	IV-III	11140	IX-X	10940	11040
Axle E	V-IV	11480	X-XI	11700	11590
Axle F	VI-V		XI		
GVW	VI	62060	XII	62060	62060

Traffic Sheet 19 LTPP MONITORED TRAFFIC DATA CALIBRATION TEST TRUCK # <u>2</u>	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/4/2012
---	---

CALIBRATION TEST TRUCK - Secondary

Table 6 - Raw Data -Axle Scales - Pre-test

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
1							
2							
Avg.							

Table 7- Raw Data- Axle scales -

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
Avg.							

Table 8- Raw Data- Axle scales -

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
Avg.							

Table 9 - Raw Data -Axle Scales - Post-test

Pass	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW
1							
2							
Avg.							

Validation Test Truck Run Set - Post

Measured By: Kevin Trousdale
Verified By: Dean J. Wolf

Traffic Sheet 21 (Wheel Load) LTPP MONITORED TRAFFIC DATA WIM SYSTEM TRUCK RECORDS											STATE CODE: SPS WIM ID: DATE: (mm/dd/yyyy):					
---	--	--	--	--	--	--	--	--	--	--	---	--	--	--	--	--

Pvmt Temp	Radar speed	Truck	Pass	Time	Record No.	WIM Speed	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW	A-B space	B-C space	C-D space
56.0	54	1	1	10:22:14	49094	55.0	11.1	16.7	15.3	14.5	14.2		71.7	17.1	4.3	34.4
56.0	53	2	1	10:22:43	49099	54.0	11.1	13.4	14.0	10.1	10.9		59.6	17.2	4.4	35.4
60.1	64	1	2	10:42:13	40103	64.0	10.7	16.1	15.1	15.0	14.4		71.2	17.1	4.3	34.4
60.1	63	2	2	10:42:29	49196	63.0	11.0	14.5	14.2	9.6	11.1		60.6	17.1	4.4	35.5
67.9	65	1	3	11:13:41	49362	64.0	11.1	16.7	15.3	13.3	13.2		69.6	17.2	4.3	34.4
67.9	64	2	3	11:14:00	49363	64.0	11.2	13.9	13.6	10.5	11.7		60.8	17.1	4.4	35.5
67.1	54	1	4	11:23:21	49412	55.0	11.7	16.8	15.1	14.4	13.8		71.8	17.1	4.3	34.4
67.1	54	2	4	11:23:33	49414	55.0	11.1	13.2	14.1	9.7	11.2		59.4	17.2	4.4	35.5
70.4	59	1	5	11:34:03	49464	59.0	11.7	17.1	16.0	14.8	13.6		73.2	17.1	4.3	34.4
70.4	60	2	5	11:34:21	49466	60.0	10.8	14.5	14.6	9.6	11.0		60.3	17.1	4.4	35.4
71.4	63	1	6	11:43:47	49526	64.0	11.5	16.7	15.5	14.6	14.4		72.8	17.1	4.3	34.5
71.4	59	2	6	11:44:01	49529	60.0	11.0	14.4	13.9	10.4	11.9		61.5	17.2	4.4	35.4
72.9	54	1	7	11:53:18	49579	54.0	11.3	16.6	15.2	14.5	14.2		71.7	17.1	4.3	34.4
72.9	65	2	7	11:53:29	49581	65.0	10.5	13.9	14.1	9.6	11.3		59.3	17.1	4.4	35.4
74.5	59	1	8	12:03:41	49632	59.0	12.0	16.7	15.5	14.9	13.7		72.8	17.1	4.3	34.4
77.8	63	1	9	12:13:57	49683	64.0	11.7	16.9	15.4	14.5	13.8		72.3	17.0	4.4	34.4
77.8	59	2	8	12:14:11	49685	59.0	11.1	14.6	14.5	9.7	11.4		61.4	17.1	4.4	35.5
76.2	54	1	10	12:27:26	49775	55.0	11.3	17.4	15.6	14.0	13.7		72.1	17.1	4.3	34.5
76.2	52	2	9	12:27:37	49776	54.0	10.2	14.0	14.2	8.3	10.4		57.3	17.1	4.4	35.5
79.5	60	1	11	13:41:49	50180	60.0	12.2	17.8	16.1	14.7	14.2		75.0	17.1	4.3	34.4
79.5	60	2	10	13:42:01	50181	60.0	11.3	15.0	14.7	9.7	11.3		61.9	17.2	4.4	35.5
83.1	64	1	12	13:51:49	50236	64.0	11.9	16.7	15.0	15.6	14.1		73.2	17.1	4.3	34.4
83.1	64	2	11	13:51:55	50239	65.0	10.8	14.4	13.8	9.8	11.0		59.9	17.1	4.4	35.4
82.5	59	1	13	14:12:25	50342	59.0	11.7	16.8	15.6	13.5	12.9		70.5	17.1	4.3	34.4

Recorded By: _____ kt

Verified By: _____ djw

Traffic Sheet 21 (Wheel Load) LTPP MONITORED TRAFFIC DATA WIM SYSTEM TRUCK RECORDS										STATE CODE: SPS WIM ID: DATE: (mm/dd/yyyy):						
---	--	--	--	--	--	--	--	--	--	---	--	--	--	--	--	--

Pvmt Temp	Radar speed	Truck	Pass	Time	Record No.	WIM Speed	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW	A-B space	B-C space	C-D space
82.5	65	2	12	14:12:42	50345	65.0	11.3	13.8	13.3	10.0	11.1		59.6	17.1	4.4	35.4
83.1	53	1	14	14:22:38	50401	54.0	11.7	16.6	14.8	14.3	14.1		71.6	17.1	4.3	34.4
83.1	54	2	13	14:22:56	50404	54.0	10.9	14.0	14.2	9.4	11.1		59.6	17.2	4.4	35.5
85.0	55	1	15	14:33:05	50466	60.0	12.1	16.3	15.4	14.3	14.1		72.3	17.1	4.3	34.3
85.0	58	2	14	14:33:25	50468	59.0	10.7	13.4	14.2	9.9	11.5		59.8	17.2	4.4	35.5
83.1	64	1	16	14:45:43	50544	64.0	11.5	16.8	15.3	13.9	13.9		71.3	17.1	4.4	34.5
83.1	65	2	15	14:45:58	50546	65.0	10.2	14.1	13.9	9.0	11.3		58.5	17.2	4.4	35.5
85.2	54	1	17	14:55:55	50594	55.0	11.2	16.8	15.2	14.3	13.3		70.9	17.1	4.3	34.5
85.2	54	2	16	14:56:03	50596	54.0	10.4	13.5	13.8	9.6	11.3		58.5	17.2	4.4	35.5
83.5	59	1	18	15:06:04	50661	59.0	11.0	16.9	15.4	14.1	14.5		72.0	17.1	4.3	34.3
83.5	58	2	17	15:06:15	50663	59.0	10.8	13.6	14.0	9.7	11.2		59.3	17.1	4.4	35.4
85.6	65	1	19	15:16:31	50732	64.0	11.7	16.6	15.2	14.9	13.6		72.1	17.1	4.3	34.4
85.6	64	2	18	15:16:42	50734	65.0	10.9	13.0	13.6	9.6	10.7		57.9	17.1	4.3	35.3
83.3	54	1	20	15:26:18	50793	54.0	12.3	16.5	15.1	14.1	14.1		72.1	17.2	4.3	34.5
83.3	55	2	19	15:26:23	50795	55.0	11.1	13.4	13.9	10.4	11.6		60.3	17.1	4.4	35.5
82.7	59	2	20	15:37:30	50874	60.0	10.9	14.0	14.1	9.8	11.8		60.7	17.2	4.4	35.4

Recorded By: _____ kt	Verified By: _____ djw
-----------------------	------------------------

Traffic Sheet 21 (Wheel Load) LTPP MONITORED TRAFFIC DATA WIM SYSTEM TRUCK RECORDS										STATE CODE: 27 SPS WIM ID: 270500 DATE: (mm/dd/yyyy): 4/4/2012									
---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Pvmt Temp	Radar speed	Truck	Pass	Time	Record No.	WIM Speed	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW	A-B space	B-C space	C-D space	D - E space	E - F space	Axle Length	Overall Length
53.9	54	1	1	10:16:46	54340	55.0	12.6	17.0	15.5	15.1	14.8		75.0	17.1	4.3	34.5	4.1		60.0	72.0
53.9	54	2	1	10:16:41	54341	55.0	11.2	14.3	14.4	10.6	11.2		61.7	17.2	4.4	35.4	4.1		61.1	71.0
57.4	59	1	2	10:27:39	54399	59.0	12.1	17.1	15.4	14.8	14.5		73.8	17.2	4.4	34.4	4.1		60.1	72.0
57.4	61	2	2	10:27:42	54401	60.0	10.8	14.2	14.3	10.6	12.1		62.0	17.1	4.4	35.3	4.0		60.8	72.0
60.1	64	1	3	10:37:39	54466	64.0	11.5	18.0	15.7	15.4	14.3		74.7	17.1	4.4	34.3	4.1		59.9	72.0
60.1	53	2	3	10:37:53	54468	55.0	11.5	14.9	14.7	10.0	11.7		62.8	17.2	4.4	35.6	4.0		61.2	71.0
60.3	54	1	4	10:48:00	54537	55.0	12.6	17.0	15.6	15.1	14.9		75.1	17.2	4.4	34.3	4.1		60.0	71.0
60.3	60	2	4	10:48:04	54538	60.0	10.8	14.8	14.6	10.3	12.1		62.6	17.2	4.4	35.4	4.0		61.0	71.0
60.5	59	1	5	10:58:26	54588	59.0	11.8	17.2	15.4	14.5	14.5		73.2	17.1	4.4	34.4	4.1		60.0	72.0
60.5	65	2	5	10:58:31	54590	65.0	11.4	15.5	14.8	10.2	11.3		63.4	17.2	4.3	35.5	4.0		61.0	72.0
63.4	64	1	6	11:08:23	54648	64.0	12.5	17.6	15.1	15.4	14.1		74.6	17.1	4.3	34.4	4.1		59.9	72.0
63.4	64	2	6	11:08:42	54649	65.0	11.6	15.9	14.6	10.6	12.1		64.8	17.2	4.4	35.4	4.0		61.0	71.0
76.0	54	1	7	12:21:33	55049	55.0	12.3	17.0	15.5	14.2	14.8		73.8	17.1	4.3	34.3	4.1		59.8	72.0
76.0	55	2	7	12:21:37	55051	56.0	11.1	14.4	14.6	10.1	12.0		62.0	17.2	4.4	35.5	4.0		61.1	72.0
78.2	64	1	8	12:32:19	55120	64.0	12.4	17.1	15.4	14.8	14.1		73.8	17.1	4.3	34.4	4.1		59.9	72.0
78.2	58	2	8	12:32:33	55121	59.0	10.8	14.9	14.1	10.4	12.1		62.3	17.2	4.4	35.5	4.0		61.1	72.0
78.1	55	1	9	12:42:40	55172	55.0	12.1	17.0	15.7	14.7	14.2		73.7	17.2	4.3	34.4	4.1		60.0	72.0
78.1	63	2	9	12:42:44	55173	64.0	10.9	15.1	14.8	10.3	12.0		63.0	17.1	4.4	35.5	4.0		61.0	72.0
78.9	61	1	10	12:53:10	55244	59.0	11.9	18.0	16.1	14.8	13.8		74.6	17.1	4.4	34.5	4.1		60.1	73.0
78.9	53	2	10	12:53:22	55245	54.0	11.2	14.3	14.1	10.4	11.4		61.3	17.2	4.4	35.4	4.0		61.0	72.0
80.8	64	1	11	13:03:39	55310	64.0	12.0	17.1	15.8	15.3	14.7		75.0	17.1	4.3	34.5	4.1		60.0	72.0
80.8	59	2	11	13:03:52	55312	59.0	11.2	14.4	14.7	10.2	12.3		63.0	17.2	4.4	35.5	4.0		61.1	72.0
81.0	53	1	12	13:16:36	55387	55.0	12.4	17.7	15.6	14.8	14.5		75.0	17.1	4.3	34.5	4.1		60.0	72.0
81.0	53	2	12	13:16:44	55390	55.0	11.1	14.1	14.1	9.9	10.9		60.1	17.2	4.4	35.6	4.0		61.2	72.0

Recorded By: <u>kt</u>										Verified By: <u>djw</u>										Run Set <u>Post</u>									
------------------------	--	--	--	--	--	--	--	--	--	-------------------------	--	--	--	--	--	--	--	--	--	---------------------	--	--	--	--	--	--	--	--	--

Traffic Sheet 21 (Wheel Load) LTPP MONITORED TRAFFIC DATA WIM SYSTEM TRUCK RECORDS										STATE CODE: 27 SPS WIM ID: 270500 DATE: (mm/dd/yyyy): 4/4/2012									
---	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Pvmt Temp	Radar speed	Truck	Pass	Time	Record No.	WIM Speed	Axle A	Axle B	Axle C	Axle D	Axle E	Axle F	GVW	A-B space	B-C space	C-D space	D - E space	E - F space	Axle Length	Overall Length
83.0	58	1	13	13:26:48	55466	59.0	12.3	16.8	15.6	14.6	14.7		73.8	17.1	4.3	34.5	4.1		60.0	72.0
83.0	59	2	13	13:26:56	55468	59.0	10.9	13.5	13.8	10.3	12.0		60.5	17.2	4.4	35.5	4.0		61.1	72.0
83.5	63	1	14	13:37:48	55527	64.0	12.3	16.9	15.8	14.9	14.4		74.3	17.1	4.3	34.3	4.1		59.8	73.0
83.5	64	2	14	13:37:58	55529	65.0	11.0	14.4	14.3	10.0	12.1		62.1	17.2	4.4	35.5	4.0		61.1	73.0
83.3	54	1	15	13:48:41	55587	55.0	12.3	17.0	15.5	14.7	14.3		73.8	17.2	4.3	34.4	4.1		60.0	72.0
83.3	54	2	15	13:48:46	55590	54.0	11.0	14.9	14.1	10.0	11.6		61.6	17.1	4.4	35.4	4.0		60.9	72.0
84.2	60	1	16	13:59:17	55655	60.0	11.8	16.9	15.8	14.2	14.4		73.2	17.1	4.3	34.5	4.1		60.0	72.0
84.2	59	2	16	13:59:22	55657	59.0	11.0	14.4	14.6	10.4	11.8		62.2	17.2	4.4	35.4	4.0		61.0	71.0
84.0	65	1	17	14:09:21	55747	64.0	12.2	17.1	15.7	15.9	15.1		76.0	17.1	4.3	34.4	4.1		59.9	72.0
84.0	64	2	17	14:09:25	55749	64.0	11.2	14.2	14.1	10.7	12.0		62.3	17.2	4.3	35.4	4.0		60.9	72.0
85.0	54	1	18	14:33:06	55886	55.0	11.7	17.5	15.1	14.4	14.7		73.5	17.2	4.3	34.3	4.1		59.9	72.0
85.0	54	2	18	14:33:10	55887	55.0	10.9	13.8	14.5	10.2	11.2		60.5	17.2	4.4	35.5	4.0		61.1	71.0
86.4	60	1	19	14:43:08	55944	60.0	11.7	17.4	15.9	14.9	14.0		74.0	17.1	4.3	34.5	4.1		60.0	72.0
86.4	60	2	19	14:43:14	55945	59.0	11.2	13.4	14.3	10.3	11.9		61.0	17.2	4.3	35.5	4.0		61.0	72.0
86.2	65	1	10	14:53:12	56008	65.0	12.0	16.7	15.6	15.7	14.7		74.8	17.1	4.3	34.4	4.1		59.9	72.0
86.2	64	2	10	14:53:18	56010	64.0	11.1	14.1	14.3	10.8	11.7		61.9	17.2	4.3	35.4	4.0		60.9	71.0
85.7	55	1	11	15:04:40	56094	55.0	12.1	17.1	15.6	14.8	14.1		73.7	17.1	4.3	34.4	4.1		59.9	72.0
85.7	54	2	11	15:04:08	56095	55.0	10.7	14.2	13.9	10.3	11.0		60.1	17.2	4.4	35.3	4.0		60.9	71.0

Recorded By: <u>kt</u>										Verified By: <u>djw</u>										Run Set <u>Post</u>	
------------------------	--	--	--	--	--	--	--	--	--	-------------------------	--	--	--	--	--	--	--	--	--	---------------------	--

Traffic Sheet 22 LTPP MONITORED TRAFFIC DATA SITE EQUIPMENT ASSESSMENT LTPP LANE ONLY	STATE CODE: 27 SPS WIM ID: 270500 STATE ASSIGNED ID 35 DATE (mm/dd/yyyy) 4/3/2012
--	---

SITE EQUIPMENT INFORMATION

1. TYPE OF EQUIPMENT BOTH
2. LANE NUMBER ON SITE 4 3. DIRECTION ON SITE west
4. VENDOR IRD MODEL SERIAL#
5. WEIGHING SENSOR TYPE quartz
6. SYSTEM SOFTWARE VERSIONS:
- CPU
- LOOP
- PIEZO
- WEIGHPAD/ LOADCELL
- COMMUNICATIONS
7. CLASSIFICATION VIDEO:
- TIME FROM: TO:
- TIME FROM: TO:

SITE CONDITIONS

8. PAVEMENT:

Indicate any deficiencies that may affect the performance of the WIM sytem. List all photos on Sheet 24 that support the evaluation.

There were no pavement distresses noted that may affect the accuracies of the WIM system.

Traffic Sheet 22 LTPP MONITORED TRAFFIC DATA SITE EQUIPMENT ASSESSMENT LTPP LANE ONLY	STATE CODE: 27 SPS WIM ID: 270500 STATE ASSIGNED ID 35 DATE (mm/dd/yyyy) 4/3/2012
---	---

9. IN ROAD SENSORS:

Describe any deficiencies regarding the sensor installation. Indicate sensors that show any signs of being broken, severely worn, missing, removed, or loose. List photos on Sheet 24 for

the equipment is operating within the manufacturer's tolerances. None of the in-road sensors show signs of damage or excessive wear and appear to be fully secured in the pavement.

TRUCK OBSERVATIONS

- 10.** Indicate any irregular truck behaviors such as bouncing, swerving, or braking near the weighing area (within 40 meters). Note the distance from the weighing sensors.

A visual observation of the trucks as they approach, traverse, and leave the sensor area did not indicate any adverse dynamics that would affect the accuracy of the WIM system. The trucks appear to track down the center of the lane.

Minimum 15 minute or 35 truck sample video sample for pavement interaction deficiencies:

Tape Filename: _____

Time: _____

From: _____

To: _____

Traffic Sheet 22 LTPP MONITORED TRAFFIC DATA SITE EQUIPMENT ASSESSMENT LTPP LANE ONLY	STATE CODE: 27 SPS WIM ID: 270500 STATE ASSIGNED ID 35 DATE (mm/dd/yyyy) 4/3/2012
--	---

11. CLASSIFICATION VERIFICATION VIDEO:

TAPE 1- NAME: _____

Interval	Filename	From	To
1			
2			
3			
4			
5			
6			
7			
8			

TAPE 2- NAME: _____

Interval	Filename	From	To
1			
2			
3			
4			
5			
6			
7			
8			

TAPE 3- NAME: _____

Interval	Filename	From	To
1			
2			
3			
4			
5			
6			
7			
8			

Traffic Sheet 22 LTPP MONITORED TRAFFIC DATA SITE EQUIPMENT ASSESSMENT LTPP LANE ONLY	STATE CODE: 27 SPS WIM ID: 270500 STATE ASSIGNED ID 35 DATE (mm/dd/yyyy) 4/3/2012
--	--

SYSTEM ACCURACY TESTS

12. CONDUCT THE FOLLOWING SYSTEM ACCURACY TESTS EITHER ON- SITE OR IN OFFICE

Speed Accuracy - Complete Sheet 20 and attach.

Average radar speed	<u>61.7</u> mph	Average WIM Speed	<u>62.4</u> mph
Mean Difference	<u>0.7</u> mph	SD of mean	<u>2.0</u>

Posted Speed Limit	<u>65</u> mph		
Speed Range	15th percentile - <u>62</u> mph	85th percentile-	<u>69</u> mph

Spacing and Weight - Complete Sheet 21 and attach.

Average distance between axles of drive tandem		<u> </u> feet	
% error from 4.25 ft (industry average)	OR	<u>4.35</u> ft (WIM system average)	
= <u>2.4</u> %			

Average front axle weight for Class 9 vehicles		<u> </u> lbs	
% error from 10.3 kips (industry average) OR		<u>11.2</u> lbs (known site value)	
= <u>8.9</u> %			

SUPPORT EQUIPMENT STRUCTURES

17. Indicate any deficiencies with any site equipment other than the in-road sensors. List all photos on the Sheet 24 for each occurrence.

Cabinet/Foundation None ☒

no cabinet or foundation deficiencies

Pull Boxes None ☒

no pull box deficiencies

Mast None ☒

no service mast deficiencies

Solar Panels None ☒

no solar panel deficiencies

Traffic Sheet 22 LTPP MONITORED TRAFFIC DATA SITE EQUIPMENT ASSESSMENT LTPP LANE ONLY	STATE CODE: 27 SPS WIM ID: 270500 STATE ASSIGNED ID 35 DATE (mm/dd/yyyy) 4/3/2012
--	--

Telephone D-Mark Box None ☒

no telephone d-mark box deficiencies

Power Service Box None ☒

no power service box deficiencies

Grounding None ☒

no grounding deficiencies

Conduit None ☒

no conduit deficiencies

STATIC AND DYNAMIC ELECTRONIC EQUIPMENT TESTS

18. Complete and attach a Sheet 22 addendum applicable to the installed road equipment.

ADDITIONAL COMMENTS

All values for the WIM sensors and inductive loops were within tolerances. Electronic tests of the power and communication devices indicated that they were operating normally.

Assessor Kevin Trousdale

Traffic Sheet 22 Addendum - Kistler Quartz LTPP MONITORED TRAFFIC DATA SITE EQUIPMENT ASSESSMENT LTPP LANE ONLY	STATE CODE:	27
	SPS WIM ID:	270500
	STATE ASSIGNED ID	35
	DATE (mm/dd/yyyy)	4/3/2012

STATIC EQUIPMENT VALUES (SYSTEM OFF)

1. POWER

a. Solar Panel		WATTS		VDC
b. Equipment Power	121	VAC		VDC
c. Battery 1	13.46	VDC		
d. Battery 2		VDC		
e. Regulated	13.27	VDC		
f. Power Supply		VAC	13.47	VDC
g. System Input	120.7	VAC		VDC
h. Modem Power	121	VAC		VDC
i. Telephone	53.1	VDC		

2. LOOP SENSORS

	Resistance	Inductance	Shield
a. Leading	0.6 Ω	140.4 μ h	inf M Ω
b. Trailing	0.5 Ω	141.0 μ h	inf M Ω

3. KISTLER SENSORS

	Resistance	Capacitance
a. K1 (lead/left)	10 ¹¹ Ω	η f
b. K2 (lead/middle)	10 ¹¹ Ω	η f
c. K3 (lead mid/right)	10 ¹⁰ Ω	η f
d. K4 (lead/right)	10 ¹⁰ Ω	η f
e. K5 (trail/left)	10 ¹⁰ Ω	η f
f. K6 (trail/mid left)	10 ¹⁰ Ω	η f
g. K7 (trail/mid right)	10 ¹⁰ Ω	η f
h. K8 (trail/right)	10 ¹⁰ Ω	η f

DYNAMIC EQUIPMENT VALUES (SYSTEM ON)

4. LOOP SENSORS

	Frequency
a. Leading	10.65 KHz
b. Trailing	10.79 KHz

5. KISTLER SENSORS

Dynamic testing for the Kistler Quartz sensor is not recommended.

Assessor Kevin Trousdale

Traffic Sheet 24A LTPP MONITORED TRAFFIC DATA SITE PHOTO LOG - Equipment	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/3/2012
---	---

Item	Description	Filename
1	Power Source	270500_solar_panel_04_03_12.jpg
2	Telephone Source	270500_cellular_modem_04_03_12.jpg
3	Cabinet Exterior	270500_cabinet_exterior_04_03_12.jpg
4	Cabinet Interior - Front	270500_cabinet_interior_front_04_03_12.jpg
5	Cabinet Interior - Rear	270500_cabinet_interior_rear_04_03_12.jpg
6	Leading weight sensor	270500_leading_WIM_sensor_04_03_12.jpg
7	Trailing weight sensor	270500_trailing_WIM_sensor_04_03_12.jpg
8	Leading classification sensor	
9	Trailing classification sensor	
10	Leading loop sensor	270500_leading_loop_04_03_12.jpg
11	Trailing loop sensor	270500_trailing_loop_04_03_12.jpg
12	Downstream from site	270500_downstream_04_03_12.jpg
13	Upstream from site	270500_upstream_04_03_12.jpg
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		

RECORDED BY: _____ Dean J. Wolf

Traffic Sheet 24B LTPP MONITORED TRAFFIC DATA SITE PHOTO LOG - Test Trucks	STATE CODE: 27 SPS WIM ID: 270500 DATE (mm/dd/yyyy) 4/3/2012
---	--

Item	Description	Filename
1	Tractor, Truck #1	270500_Truck_1_Tractor_04_03_12.jpg
2	Trailer/Load, Truck #1	270500_Truck_1_Trailer_04_03_12.jpg
3	Kingpin Offset, Truck #1	
4	Suspension A, Truck #1	270500_Truck_1_Suspension_1_04_03_12.jpg
5	Suspension B, Truck #1	270500_Truck_1_Suspension_2_04_03_12.jpg
6	Suspension C, Truck #1	270500_Truck_1_Suspension_3_04_03_12.jpg
7	Suspension D, Truck #1	270500_Truck_1_Suspension_4_04_03_12.jpg
8	Suspension E, Truck #1	270500_Truck_1_Suspension_5_04_03_12.jpg
9	Suspension F, Truck #1	
10	Tractor, Truck #2	270500_Truck_2_Tractor_04_03_12.jpg
11	Trailer/Load, Truck #2	270500_Truck_2_Trailer_04_03_12.jpg
12	Kingpin Offset, Truck #2	
13	Suspension A, Truck #2	270500_Truck_2_Suspension_1_04_03_12.jpg
14	Suspension B, Truck #2	270500_Truck_2_Suspension_2_04_03_12.jpg
15	Suspension C, Truck #2	270500_Truck_2_Suspension_3_04_03_12.jpg
16	Suspension D, Truck #2	270500_Truck_2_Suspension_4_04_03_12.jpg
17	Suspension E, Truck #2	270500_Truck_2_Suspension_5_04_03_12.jpg
18	Suspension F, Truck #2	
19	Tractor, Truck #3	
20	Trailer/Load, Truck #3	
21	Kingpin Offset, Truck #3	
22	Suspension A, Truck #3	
23	Suspension B, Truck #3	
24	Suspension C, Truck #3	
25	Suspension D, Truck #3	
26	Suspension E, Truck #3	
27	Suspension F, Truck #3	
28	Scale	
29		
30		

RECORDED BY: _____ Dean J Wolf