U.S. Department
of Transportation
Federal Highway
Administration

LTPP Seasonal Monitoring Program

Site Monitoring Suspension
Status Report
Section 231026, East Dixfield
Maine

Report No. FHWA-TS-95-23-01 **December 1995**

SMP SITE MONITORING SUSPENSION STATUS REPORT
MAINE SECTION 231026

I. INTRODUCTION

The seasonal site 231026 near East Dixfield, Maine was installed on September 15 - September 16, 1993. Seasonal data was collected continuously from November 10, 1993 to June 26, 1995. On June 26, 1995, all site suspension activities were completed at this site according to LTPP directive SM-8 "Suspension of SMP Site Monitoring Activities". The site will remain out of operation until the next round of testing, which is tentatively scheduled for September 1996.

This report entitled "SMP Site Monitoring Suspension Status Report" details the suspension preparation activities, site specific conditions, and provides information pertinent to the site 231026.

II. SUSPENSION PREPARATION ACTIVITIES

The suspension preparation activities at 231026 were conducted during the final two site visits. A manual distress survey of the entire section and transverse Dipstick® surveys were conducted on the May 01, 1995 site visit. PK nails were reconfirmed and replaced as required. The site paint markings were refreshed at this time. June 26, 1995 was the last day of activity at the site. On this day three sets of FWD tests, one set of elevations, and a distress survey of the instrumentation area were conducted. The water table measurements and the manual resistivity measurements (2 and 4 point) were performed in the morning and afternoon. The onsite datalogger was downloaded before being dismantled. Two sets of TDR and resistance voltages were extracted by the mobile datalogger. The instrument hole, trench, and surface temperature probe slot areas were cleaned and sealed as needed.

The air temperature probe, tipping bucket, and the upper part of the support pole were dismantled. The lead wires from the air temperature probe and the tipping bucket were sprayed with anti-corrosive compound and sealed in a air tight bag with desiccant packs. A galvanized wire fished through the pipe and conduit will be used to pull the instrumentation wires back on the re-initiation of data collection at the site. The bottom part of the support pole was cleaned and lubricated prior to installing the end cap.

After all the wires were disconnected from the control panel, the panel was detached from the equipment cabinet with the CR10 datalogger, terminal strip, and the battery pack attached to it. The TDR cables were checked to ensure that they were labeled. The TDR cables, resistivity cable, and the MRC lead wires were sprayed with anti-corrosion compounds and sealed with desiccant packs in air tight bags. All cables were hung up

high inside the equipment cabinet. After the last piezometer reading was recorded the pipe was cleaned and sealed with grease. The access cover and seat were cleaned and lubricated before it was covered and brought up to grade with native soil.

The Profilometer survey corresponding to the closeout was conducted on May 18, 1995.

All the necessary suspension activities were completed by June 26, 1995. The dismantled equipment was removed from the site. The suspended site contained all the underground instrumentation and equipment, and an equipment cabinet with all the cables in it. The equipment cabinet was locked before leaving the site. The site was cleaned and left in a condition such that the instrumentation could be easily accessed when and if site monitoring activities should resume.

III. SPECIAL SITE CONDITIONS

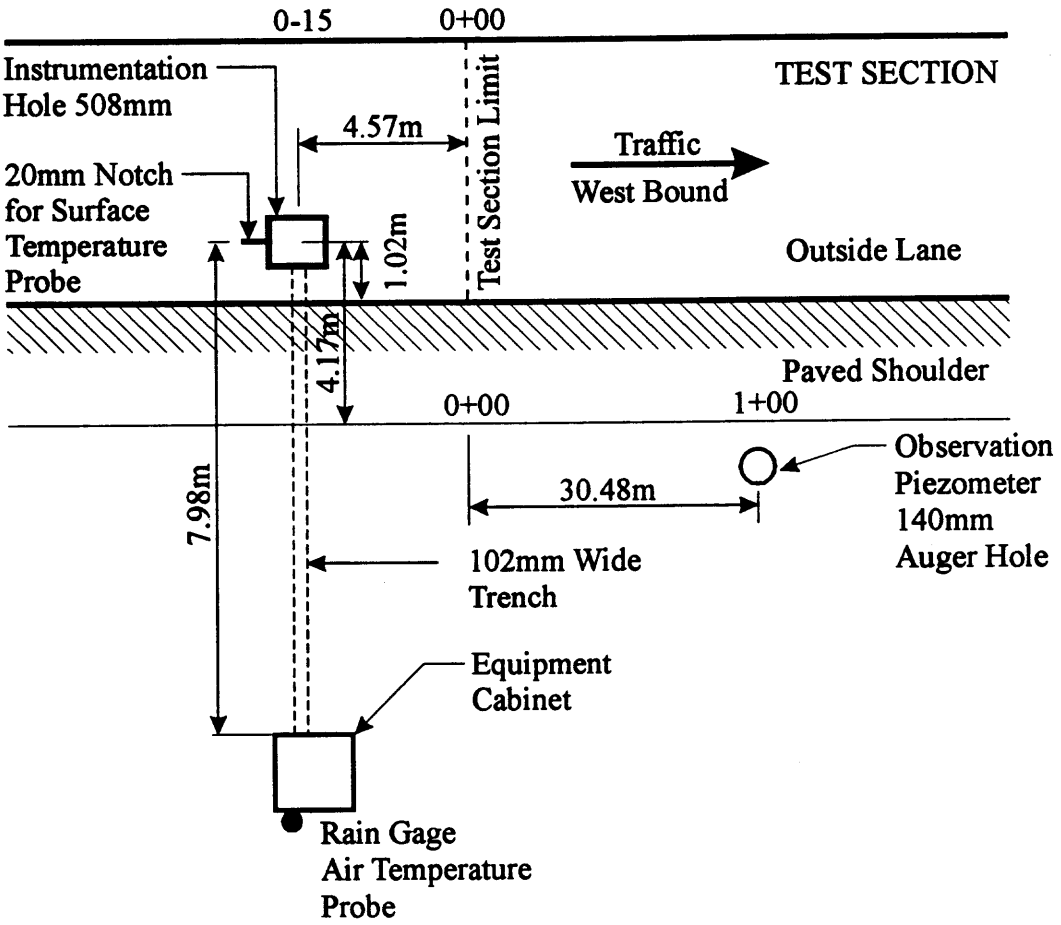
The installation of site 231026 followed the "LTPP Seasonal Monitoring Program: Instrumentation Installation and Data Collection Guidelines" closely. The presence of boulders and cobbles in the subgrade soil made the compaction and replacement of the instrumentation hole difficult. This resulted in some material being left over when the hole was replaced. There was some concern as to the settlement of the pavement because of the excess material. Over the course of the monitoring seasons there was no noticeable settlement. This site contained all of the standard equipment, sensors, and wiring. There were no outstanding problems with any of the sensors at the time of suspension. This site is included in the 1996-1997 overlay plan due to the formation of ruts in the wheel paths. The timing of the overlay will be based on available funding.

IV. SUPPLEMENTAL INFORMATION

Figure 1 shows the locations of the installed instrumentation at the site. The instrumentation hole is at station 0-15 and the piezometer is at station 1+00. The state bench-mark is at station 0+58. This was used to check that the piezometer standpipe, that was used as a bench-mark, was not moving. The measurements from the permanent bench-mark indicated that the piezometer standpipe was not moving.

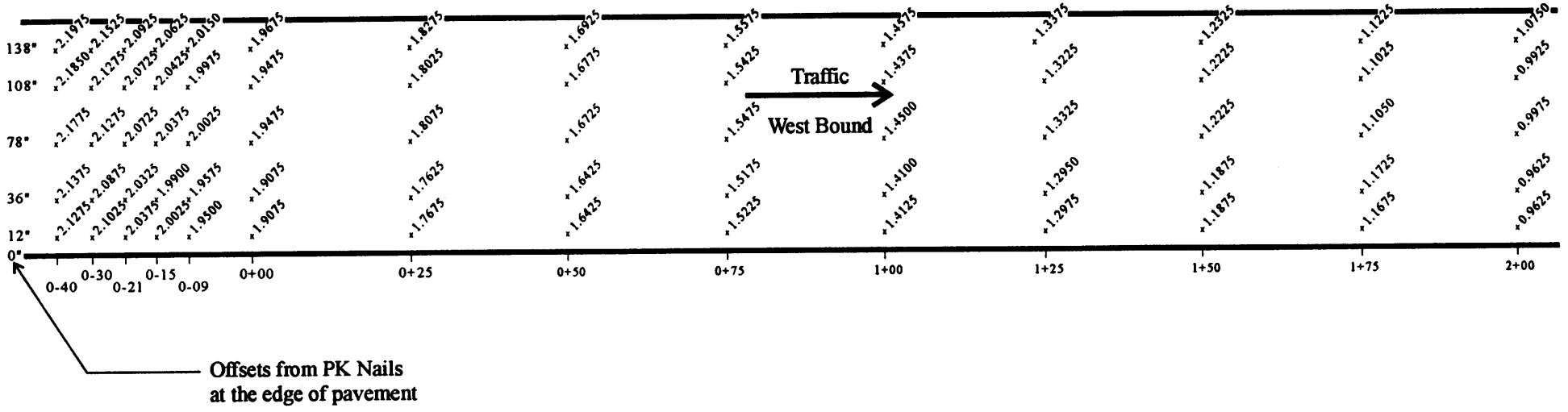
Figure 2 gives the plan view of the portion of test section 231026 that was used for elevation measurements. All offsets are from the PK nails found at the outside pavement edge.

At the time of suspension of the site there were no unresolved problems with any of the sensors. The plots from ONSFIELD, MOBFIELD, and SMPCHECK follow expected trends and produce expected values.



- Total Depth of Piezometer: 4.29m
- Distance of Piezometer Below Ground Level: 102mm

Figure 1. Location for Seasonal Monitoring Instrumentation Installed at GPS 231026



NOTE:

- All offsets are measured from the PK nails at the pavement edge.
- All elevations provided are from the June 26, 1995 survey with the top of the piezometer pipe set at 1.000m.
- Instrument hole is located at station 0-15

Figure 2. - Location for Elevation Measurements at GPS 231026

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Location Wilton, Maine

Test Date dd/mmm/yy	Visit Ident./ Code	ONSITE Data			MOBILE Data		Manual Data								FWD Data				Distress Data		Profile Data		Comments
		Pav Temp.	Ambient Temp.	Rainfall	Moisture (TDR)	Frost Depth (Resist.)	Backup Pav. Temp.	Backup Moisture (TDR)	Frost Depth 2 - point	Frost Depth 4 - point	Water Table	Surface Elev.	Joint Open.	Joint Fault.	Surface Layer Temp.	No. of Cycles/Visit OWP	ML	PE	Manual	PASCO	Profiler	Dipstick	
16-Sep-93	A				X	X			X	X						1	1						
10-Nov-93	B				X	X			X							3	3						On-site datalogger failure
17-Dec-93	C	X	X	X				X	X		X					2	2						On-site data only
10-Jan-94	A	X	X	X	X	X			X	X	X				X	2	2						
07-Feb-94	B	X	X	X	X	X			X		X	X									19-Feb-94		
28-Feb-94	C	X	X	X	X	X			X	X	X	X			X	3	3						
24-Mar-94	D	X	X	X	X	X		X			X				X	3	3						
11-Apr-94	E	X	X	X	X	X		X	X	X	X	X			X	4	4				11-Apr-94		
02-May-94	F	X	X	X				X	X		X				X	4	4		X				On-site data only
23-May-94	G	X	X	X	X	X					X				X	4	4					X	
20-Jun-94	H	X	X	X	X	X			X		X				X	4	4						
18-Jul-94	I	X	X	X	X	X			X	X	X	X			X	3	3						
15-Aug-94	J	X	X	X	X	X					X				X	4	4				04-Aug-94		
19-Sep-94	K	X	X	X	X	X			X		X				X	4	4						
17-Oct-94	L	X	X	X	X	X			X	X	X	X			X	3	3		X			X	
14-Nov-94	M	X	X	X	X	X					X				X	4	4				22-Oct-94		
12-Dec-94	N	X	X	X		X					X				X	2	2						Mobile TDR error
17-Jan-95	A	X	X	X	X	X			X	X	X	X			X	3	3				07-Jan-95		
14-Feb-95	B	X	X	X	X	X			X	X	X	X			X	3	3				21-Feb-95		
06-Mar-95	C	X	X	X	X	X					X												
20-Mar-95	D	X	X	X	X	X					X				X	4	4						
03-Apr-95	E	X	X	X	X	X					X				X	4	4						
01-May-95	F	X	X	X	X	X			X	X	X	X			X	4	4		X		18-May-95		
26-Jun-95	G	X	X	X	X	X			X	X	X	X			X	?	?						Close-out

Instrumentation Hole, Seasonal Site 231026 ME, June 1995, During Suspension Preparation Activities

Instrumentation Hole, Seasonal Site 231026 ME, June 1995, During Suspension Preparation Activities