NICHOLS CONSULTING ENGINEERS, Chtd.

August 25, 1997
File: 800.12.6.8.13

Mr. Aramis Lopez
FHWA-LTPP Div., HNR-40
Turner Fairbank Highway Research Center
6300 Georgetown Pike
McLean, VA 22101

RE: Dismantle of SMP Site 161010 Near Idaho Falls, Idaho

Dear Mr. Lopez:

The seasonal site 161010 on Interstate Route 15 near Idaho Falls, Idaho, was completely dismantled on June 27, 1997, as the section was being rehabilitated by Idaho Department of Transportation. The dismantle activities were completed after the last round of seasonal data collection. An experiment to determine the feasibility of recovering some of the insitu instrumentation was also carried out during the dismantle. The following is a summary of activities that were accomplished during the dismantle and recovery. The personnel participating in the dismantle and recovery activities were:

- Richard Smith - NCE
- Scott Gibson - NCE
- Srikanth Holikatti - NCE
- Paul Steel - IDOT
- Dennis Nelson - IDOT
- William Hunting - IDOT

A complete round of data collection activities was performed on June 26, 1997. The following activities were performed as part of the last data collection round:

- FWD testing of the section
- Elevation data of the section
- Onsite data collection
- Mobile data collection
- Manual distress and dipstick
- Manual two and four point resistivity data
- Manual TDR traces

The dismantle and recovery of the insitu equipment was completed the next day (June 27, 1997). After some discussion within the WRCOC LTPP staff, IDOT was requested to provide the equipment and personnel to operate the same. Accordingly, IDOT provided a jackhammer and a truck mounted crane. NCE performed the dismantle operations, while the recovery effort was a joint venture between IDOT and NCE.

The sensor wires were disconnected from the CR10 panel board and the board was removed from the instrumentation box. The air temperature probe and the rain gauge were removed from the pole and the pole dismantled. The instrument box was removed from the shoulder.

The surface AC layer in the instrument hole area was removed using the jackhammer. Care was exercised not to damage any of the instruments. With a thin metal rod, the subsurface layers were carefully probed to

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locate the TDR, MRC probe, and the resistivity probe. The top two TDR probes were located and were recovered after snipping the cables. This was necessary because the connectors get jammed in the conduit. Next, an attempt to recover the resistivity probe was made by placing a clove hitch around the probe and the end of the rope was attached to the crane. The hitch continued to slip off of the probe. Finally, the clamp from the grounding rod was attached to the top of the probe to prevent slippage. The trick appears to be to pull vertically up; however, in the next attempt, the top portion of the resistivity probe broke off. We believe that the bands of wire wound around the probe provide excellent anchorage in the soil, preventing the recovery. Next, the thermistor probe was attached to the crane and pulled upward. The thermistor probe came out intact without any damage to the probe. The instruments recovered from this site will be tested for functionality and reliability. The MRC temperature probe was tested for functionality from the data recorded by the CR10 datalogger. The probe appears functional.

The following equipment was recovered from this site:

- Tipping bucket rain gauge
- Air temperature probe
- CR10 panel board in the datalogger
- Weather station pole
- Solar battery charger board
- Instrumentation cabinet
- Two TDR sensors
- MRC thermistor probe

A table detailing the data collected during this round and with the photographs of dismantle activities are enclosed for information and record.

If you have any questions, you can call us at 702/329-4955.

Sincerely,
NICHOLS CONSULTING ENGINEERS, Chtd.

Srikanth S. Holikatti
Srikanth S. Holikatti
Pavement Research Analyst

SSH/rkp
Enclosures

cc: Dr. Gonzalo Rada, PCS/LAW, w/encl.
Mr. Bill Bellinger, LTPP
Mr. Monte Symon, LTPP

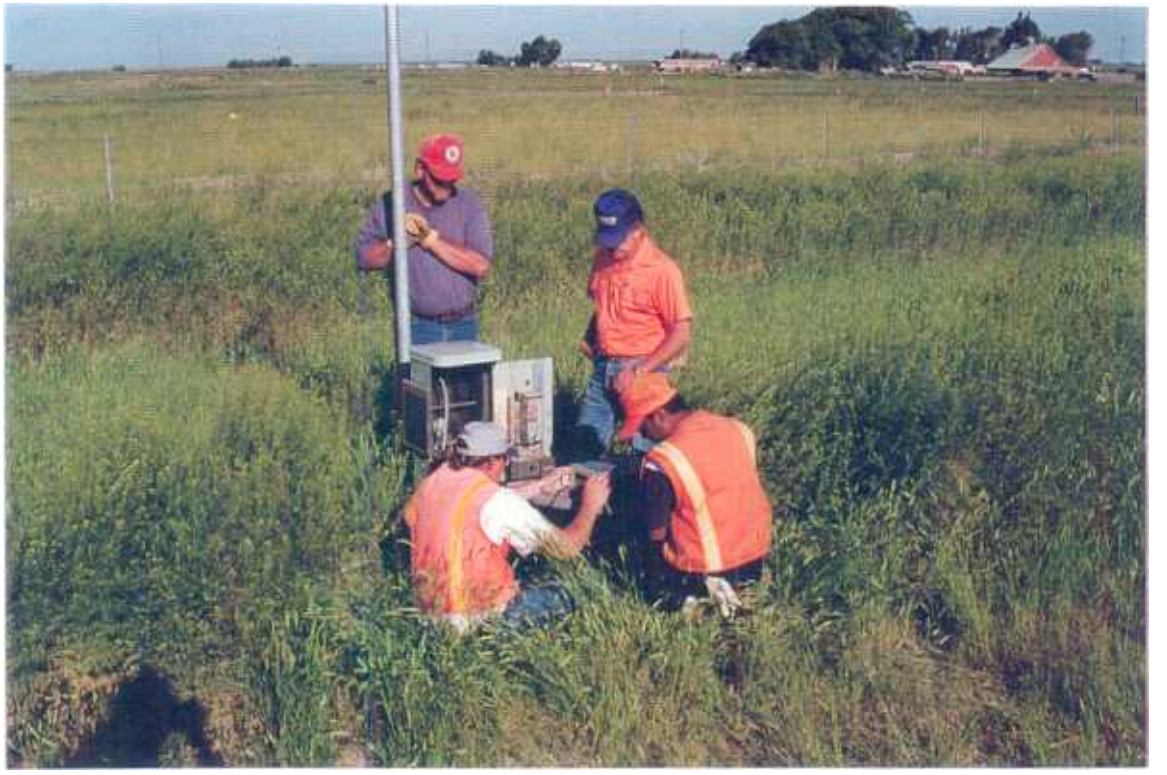
SUMMARY of SMP DATA COLLECTED.

Agency Code: 16
LTPP Section Code: 1010

Location: Idaho Falls, Idaho
Pavement type: Asphalt concrete

		ONSITE Data			MOBILE Data.		Manual Data						F W D Data			Distress Data		Profile Data		
Test Date dd/mm/yy	Visit Identity \ Code	Pav Temp	Ambient Temp	Precptn.	Subsurface Moisture (TDR)	Frost Depth 2-Point	Backup Pav Temp	Backup Moisture (TDR)	Frost Depth 2-Point.	Frost Depth 4-Point.	Water Table.	Surface Elev.	Surface Layer Temp.	No. of Cycles/Visit. OWP	No. of Cycles/Visit. ML	Manual	PASCO	Profiler	Dipstick	Comments
29/09/96	A	N	N	N	N	N	N	Y	Y	Y	Y	N	N	N	N	N	Y	N	N	Pasco survey done on 6/6/96
31/10/96	B	Y	N	Y	N	N	N	Y	Y	Y	Y	N	Y	2	2	Y	N	N	Y	
25/11/96	C	Y	N	Y	Y	Y	N	N	Y	Y	Y	Y	Y	4	4	Y	N	N	Y	
19/12/96	D	Y	N	Y	Y	Y	N	N	Y	Y	Y	N	Y	3	3	N	N	Y	N	
27/01/97	A	Y	N	Y	Y	Y	N	N	Y	Y	Y	N	Y	3	3	N	N	N	N	
25/02/97	B	N	Y	Y	Y	Y	N	N	Y	Y	Y	N	Y	3	3	N	N	N	N	
14/03/97	C	N	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	3	3	Y	N	Y	Y	
28/03/97	D	N	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	1	1	Y	N	N	Y	
16/04/97	E	N	Y	Y	Y	Y	N	N	N*	N*	Y	N	Y	2	2	Y	N	N	Y	
30/04/97	F	N	Y	Y	Y	Y	N	N	Y	Y	Y	N	Y	3	3	N	N	Y	N	
2/6/97	G	N	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	3	3	N	N	N	N	
26/06/97	H	N	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	2	2	Y	N	N	Y	

Notes:
Dismantle was performed on 27/6/97.
N*: Not enough time.



Final set of data collection in progress before dismantle of 161010 site

The resistivity probe with clove hitch

The hoist and rope attachments used in attempting the resistivity and MRC probe recovery.

The MRC probe being recovered from the instrument hole.