

# IOWA SHRP UPDATE No. 2

Iowa Department of Transportation  
Highway Division  
Office of Materials  
6-89

## SPS-6 SITE ESTABLISHED IN POLK COUNTY

Iowa firmly entered the Specific Pavement Study (SPS) division of the SHRP program the week of May 15 when it established the first SPS site in North America. The site is located in the southbound lane of Interstate 35 in Polk County, between milepost 99.00 and 94.75, and will be in the SPS-6\* experiment.

The SPS-6 experiment is designed to study various PC concrete restoration techniques in combination with variation of overlay thickness. The Iowa site will be composed of eight test sections which will include two levels of Concrete Pavement Repair (CPR), asphalt overlay thickness of 4 and 8 inches, and pre-overlay treatments of crack and seat and saw and seal. The layout and various combination of these techniques can be seen in figure 1.

The AC project, IR-35-4(59)42--12-77, which includes the SPS site, will be let June 27 and a prebid conference is scheduled for June 19.

Prior to construction, the SHRP regional contractor responsible for sampling and testing plans to complete the pre-overlay pavement evaluation and sampling. This will include pavement coring, soil boring and collection of soil samples, and structural evaluation with the Falling Weight Deflectometer (FWD). Visual condition survey including video taping and still photos were completed during the initial site verification visit. The sampling procedures and guidelines for SPS sites have not yet been written, therefore, the Iowa SPS site will serve as a pilot study to help establish guidelines for other SPS sites. The testing for the Polk County SPS is tentatively scheduled for July 10 and is expected to take three days to complete.

Site specific Weigh-in-Motion (WIM) will be installed at the Polk County SPS. This equipment will collect and classify traffic data to establish a record of 18 KIP Equivalent Single Axle Loadings (ESAL's) experienced at the site. This information is essential for future analysis. This equipment will be purchased under separate contract and should be in place within a year.

\*Erroneously noted as SPS-7 in SHRP Update No. 1

Finally, it is anticipated that a public advisory sign will be erected at this site. It will be larger than normal SHRP signing but details are not yet final. Look for it this summer on I-35 southbound between Ames and Des Moines.

#### ACTIVITIES AT GPS SITES

The PASCO unit may begin its survey of Iowa's SHRP sites as early as the third week of June. PASCO produces a high resolution strip photograph of the pavement surface while operating at highway speed. Because control of lighting is critical, it operates mainly at night. It was believed that this testing would not take place until late summer or early fall, but due to changes in the schedule, it may be completed much earlier.

Sampling and testing at the I-35 GPS sites (Franklin, Worth) may be scheduled for July. This testing was not anticipated to take place until after mid-August. The schedule has been altered so that the initial sampling and testing at the Polk County SPS site can be completed prior to the overlay. The contractor is planning on testing at Polk County I-35 SPS site during the week of July 10 and would like to complete the other I-35 sites on the return trip to Minnesota.

#### REMINDERS

Please double check SHRP GPS sites for possible presence of underground utilities. Some districts have done this already. Thank you if you have, if you haven't please check.

All time and expenses related to SHRP activities should be reported to Function 777, Project Control No. 72 00 1054-000.

If you have any comments or concerns or require further information about items in this SHRP UPDATE or SHRP in general, please contact one of the following:

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SPS-6 TEST SITE  
I-35 Polk County

<u>SHRP ID</u>	<u>STATIONING</u>	<u>MILEPOST</u>	<u>LENGTH (FT)</u>	<u>REHABILITATION</u>
190602	598+06 - 588+06	98.82 - 98.63	1000 296	CPR W/MIN PREP TRANSITION
190601	585+10 - 580+10	98.57 - 98.48	500 985	CONTROL SECTION TRANSITION
190605	570+25 - 560+25	98.29 - 98.10	1000 10419	CPR W/MAX PREP TRANSITION
190607	458+76 - 453+76	96.18 - 96.08	500 262	CRACK/SEAT W/4"OL TRANSITION
190608	451+14 - 446+14	96.03 - 95.94	500 2092	CRACK/SEAT W/8"OL TRANSITION
190603	425+22 - 420+22	95.54 - 95.45	500 1104	MIN PREP W/4"OL TRANSITION
190604	409+18 - 404+18	95.24 - 95.14	500 1568	MIN PREP W/S&S W/4"OL TRANSITION
190606	388+50 - 383+50	94.85 - 94.75	500	MAX PREP W/4" OL

## SHRP GPS Sites

<u>SHRP#</u>	<u>DIST</u>	<u>COUNTY</u>	<u>ROUTE</u>	<u>DIR</u>	<u>MILEPOST</u>	
JOINTED PAVEMENTS						
193055	1	Hamilton	US 20	WB	152.04	151.95
193033	6	Johnson	US 218	NB	86.35	86.45
193006	6	Clinton	US 30	EB	317.30	317.40*
193028	6	Johnson	US 218	NB	95.23	95.33
193009	6	Linn	I-380	NB	18.89	18.99
CONTINUOUS REINFORCED PAVEMENTS						
195046	2	Franklin	I-35	NB	155.40	155.50
195038	6	Scott	I-74	EB	4.05	4.15
ASPHALT PAVEMENTS						
196041	1	Tama	IA 96	WB	12.60	12.50
196049	6	Cedar	I-80	WB	261.48	261.38
191044	6	Buchanan	US 20	EB	266.76	266.86
ASPHALT OVERLAY OF PC PAVEMENT						
199126	6	Scott	I-80	WB	303.38	303.29
199116	2	Worth	I-35	NB	216.75	216.84

\*Milepost location corrected from SHRP Update No. 1

# SPS SITE

POLK COUNTY  
ACC RESURFACING  
IR-35-4(59)42--12-77

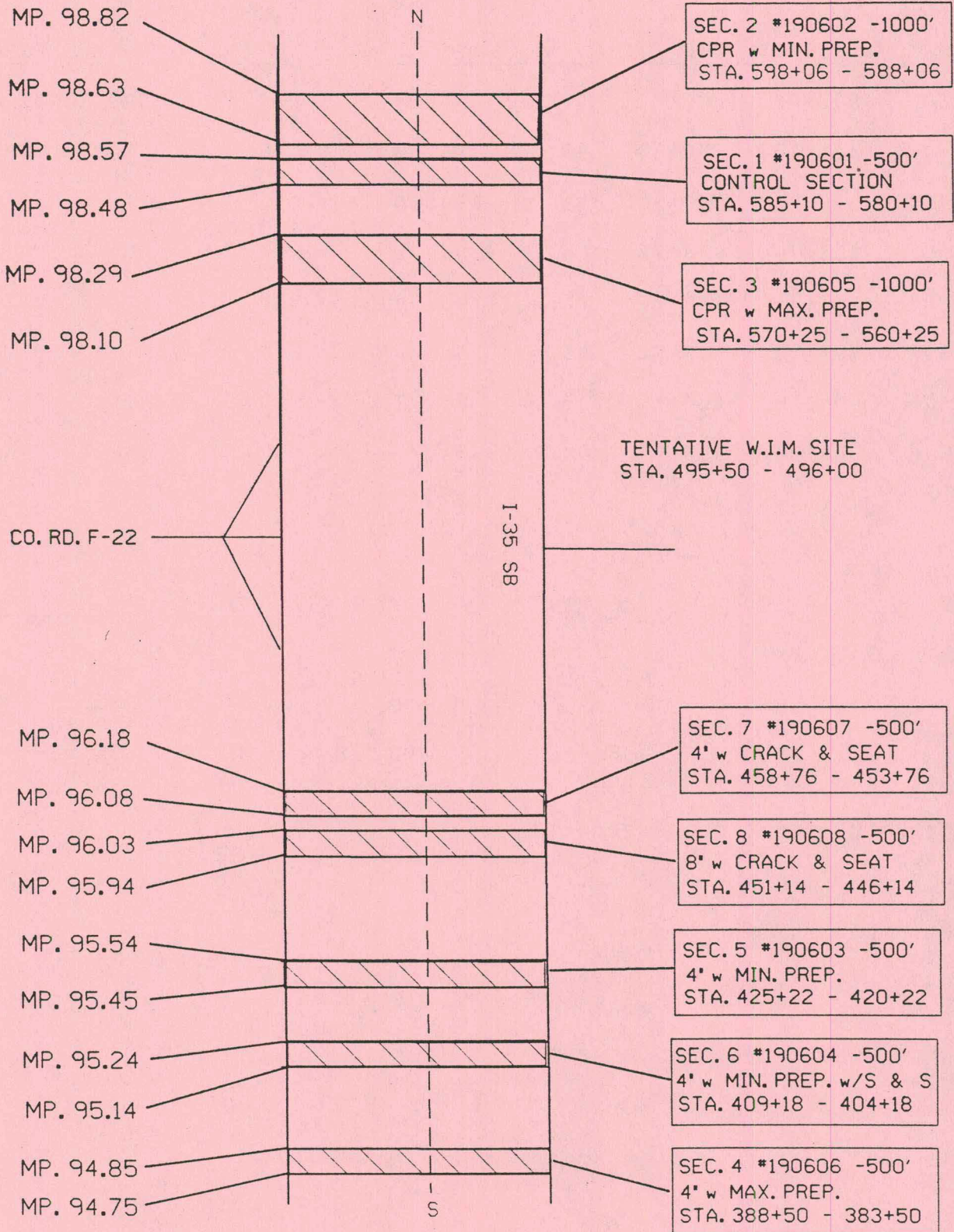


Figure 1