Michigan (26)
SPS-6

CONSTRUCTION PLAN
SHRP (SPS 6)
CS 09101 J28164 A
US 10 EB

Beginning of SHRP Test Area

Sta 607+00 to 626+75	As designed, rubblization with 7-in. overlay
Sta 626+75 to 632+30	Remove and replace under Seven Mile Road bridge

Existing Pavement Treatment In SHRP Test Area

Sta 632+30	End remove and replace under Seven Mile Rd. bridge and begin crack and seat, begin edge drain
637+73 642+73 260608 Sta 658+00	End crack and seat and begin maximum CPR (patching with reinforcement)
Sta 666+90	End maximum CPR and begin minimum CPR (Detail 7 & 8), end edge drain
Sta 684+25	End minimum CPR, mill butt joint for overlay taper back. Begin control section (no existing pavement treatment)
Sta 692+00	End control section, begin minimum CPR
Sta 706+25	End minimum CPR, begin maximum CPR, begin edge drain
Sta 717+73.91	Mill butt joint for overlay taper ahead
Sta 719+85	End maximum CPR, resume rubblizing, end edge drain

Shoulder Treatment In SHRP Test Area

Sta 632+30 to Sta 682+75	Shoulder thickness shall be the same thickness as the bituminous overlay
Sta 682+75 to Sta 719+75	Shoulder thickness shall be 2" minimum (undercut as required) or equal to the overlay thickness whichever is greater

Overlay for SHRP Test Area

Sta 632+30	Begin overlay taper from 7" to 8"
Sta 636+50	End taper to 8" begin 8" overlay
637+73 642+73 Sta 644+00	End 8" overlay begin taper to 4" overlay
Sta 646+00	End taper to 4" overlay begin 4" overlay
Sta 675+00	Begin saw and seal joints
Sta 682+75	End 4" overlay, end saw and seal joints, begin taper to 0" overlay
Sta 684+25	End taper to 0" overlay
Sta 717+73.91	End 0" overlay begin taper to 7" overlay as designed
Sta 719+85	End taper to 7" overlay resume 7" overlay as designed

CONTROL SECTION.	JOB NUMBER	MICHIGAN PROJECT
AFUR 09101	28163A	ACFR 102(317)
AFRR 09101	28164A	ACFR 102(317)
(B01 of 09101)		
AFUR 09101	28165A	ACFR 102(317)
AFUR 09042	28166A	ACF 255(314)
AIR 09034	28206A	ACIR 75-2(365)

LOCATION

In the Townships of Williams, Monitor, and Bangor, Bay County.

TYPE OF WORK: 07

28163A: 2.0 miles of concrete pavement rubblizing, bituminous shoulder pulverizing, bituminous resurfacing and safety work.

28164A: 7.9 miles of concrete pavement rubblizing, bituminous shoulder pulverizing, bituminous resurfacing and safety work.

B01 of 09101: Bridge widening and railing replacement.

28165A: 1.1 miles of concrete pavement rubblizing, bituminous shoulder pulverizing, bituminous resurfacing and safety work.

28166A: 1.2 miles of concrete pavement rubblizing, bituminous shoulder pulverizing, bituminous resurfacing and safety work.

28206A: Interchange reconstruction; includes G &D.S., bituminous base course, and bituminous pavement.

DESCRIPTION

28163A: On US-10EB, commencing at Bay Road, thence easterly to Carter Road.

28164A: On US-10EB, commencing at Carter Road, thence easterly to west of 3 Mile Road

B01 of 09101: US-10 over the Culver Drain

28165A: On US-10EB, commencing west of 3 Mile Road, thence easterly to I-75.

28166A: On I-75BL EB, commencing at I-75, thence easterly to the W.C.L. of Bay City.

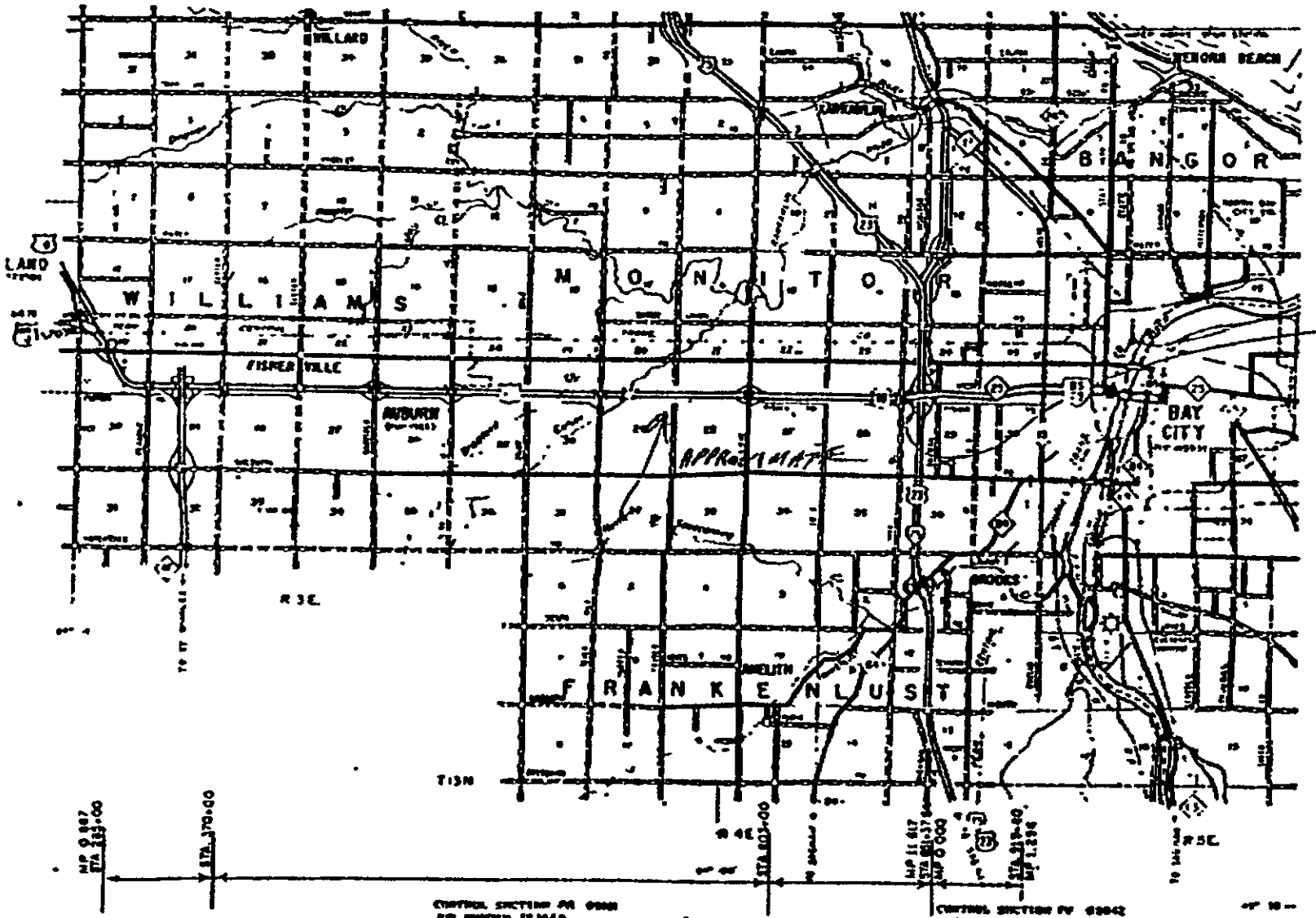
28206A: Interchange of I-75/US-10

JOB NUMBER 28163A 28165A, 28164A, 28166A, 28206A

US-10, M-25 & I-75 BS

BAY CO.

WILLIAMS, MONITOR & BANGOR TWPS.



RECONST. RAMP & BUBBLIZING RESURF

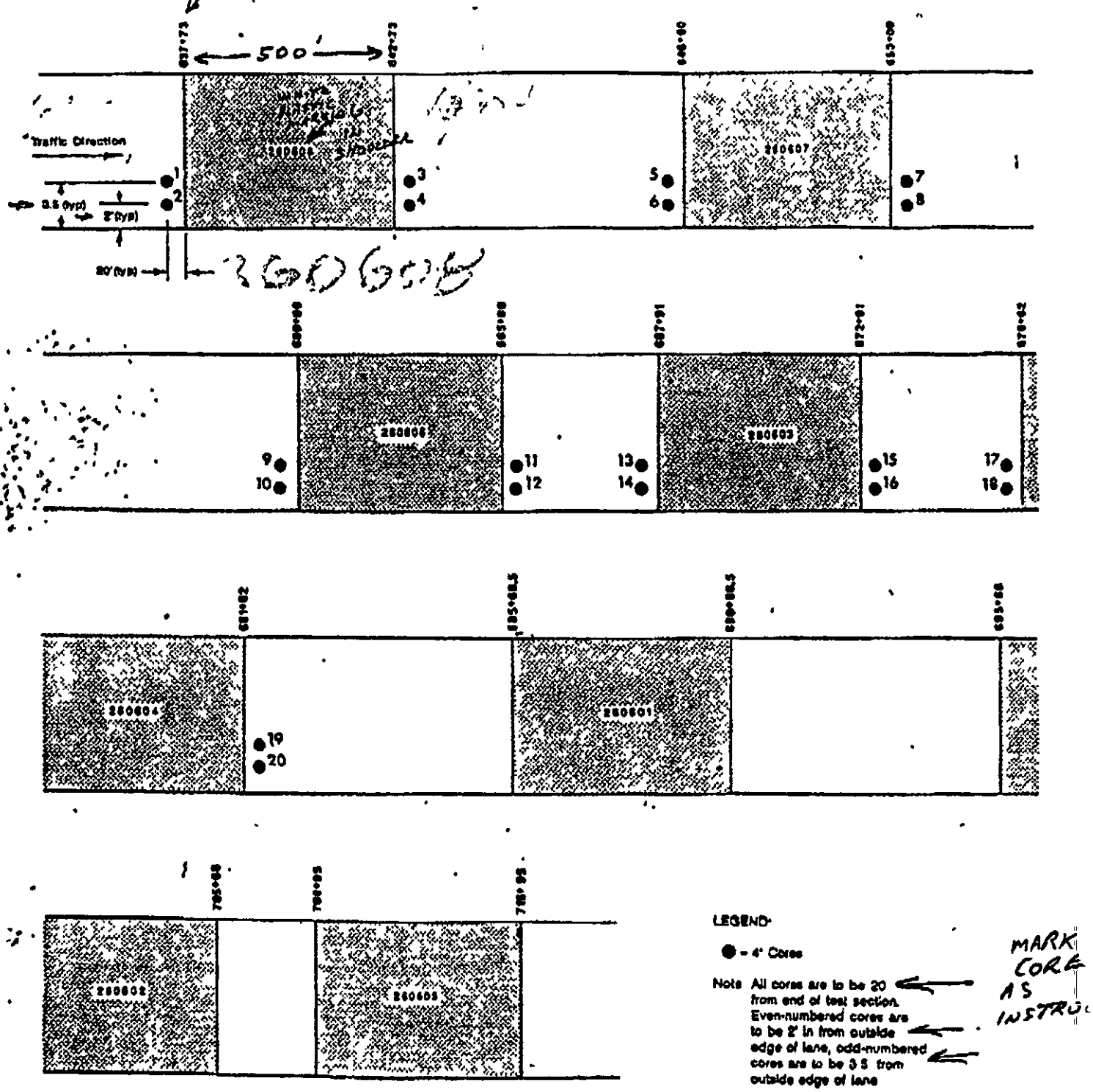
APPI

MIC

DEPARTMENT OF

STATION ARE IN ORANGE PAINT SPRAY PAINT IN OUTSIDE SHOULDER

RECORD LOCATIONS BY STATIONING ONLY



POST-CONSTRUCTION SAMPLING PLAN (SHRP SP56)
US10 EB, CS09101 J28164A

THERE MAY BE STATIONING MARKED EVERY 100'

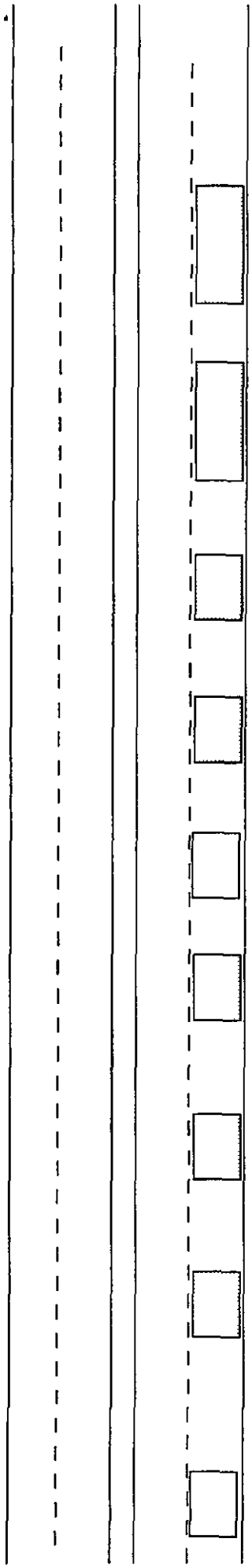
THERE IS A SHRP SIGN AT SITE

SPS-6 LAYOUT

US-10

EASTBOUND LANE

MICHIGAN



260605 MAXIMUM PREPARATION
706+95 - 716+95

260602 MINIMUM PREPARATION
695+66 - 705+66

260601 CONTROL SECTION
685+66.5 - 690+66.5

N

260604 MIN PREP WITH SAW AND SEAL
676+62 - 681+62

260603 MINIMUM PREP WITH 4" AC OVERLAY
667+90 - 672+90

260606 MAX PREP WITH 4" AC OVERLAY
660+90 - 665+90

260607 CRACK/SEAT WITH 4" AC OVERLAY
648+00 - 653+00

260608 CRACK/SEAT WITH 8" AC OVERLAY
637+73 - 642+73

260609 RUBBLEIZATION WITH 7" AC OVERLAY
617+00 - 622+00

MICHIGAN SPS-6: There are 9 test sections associated with this experiment on US-10, located between Midland and Bay City, Michigan. The section starts 4.44 miles west of I-75 and ends 2.55 miles west of I-75. The test section layout of this eastbound project is as follows:

SHRP ID	STATIONS	DIST. FROM START TO I-75(MI.)
260609	617 - 622	4.44
260608*	637+73 - 642+73	4.05
260607*	648 - 653	3.85
260606*	660+90 - 665+90	3.61
260603*	667+90 - 672+90	3.47
260604*	676+62 - 681+62	3.31
260601*	685+66.5 - 690+66.5	3.14
260602*	695+66 - 705+66	2.95
260605*	706+95 - 716+95	2.74

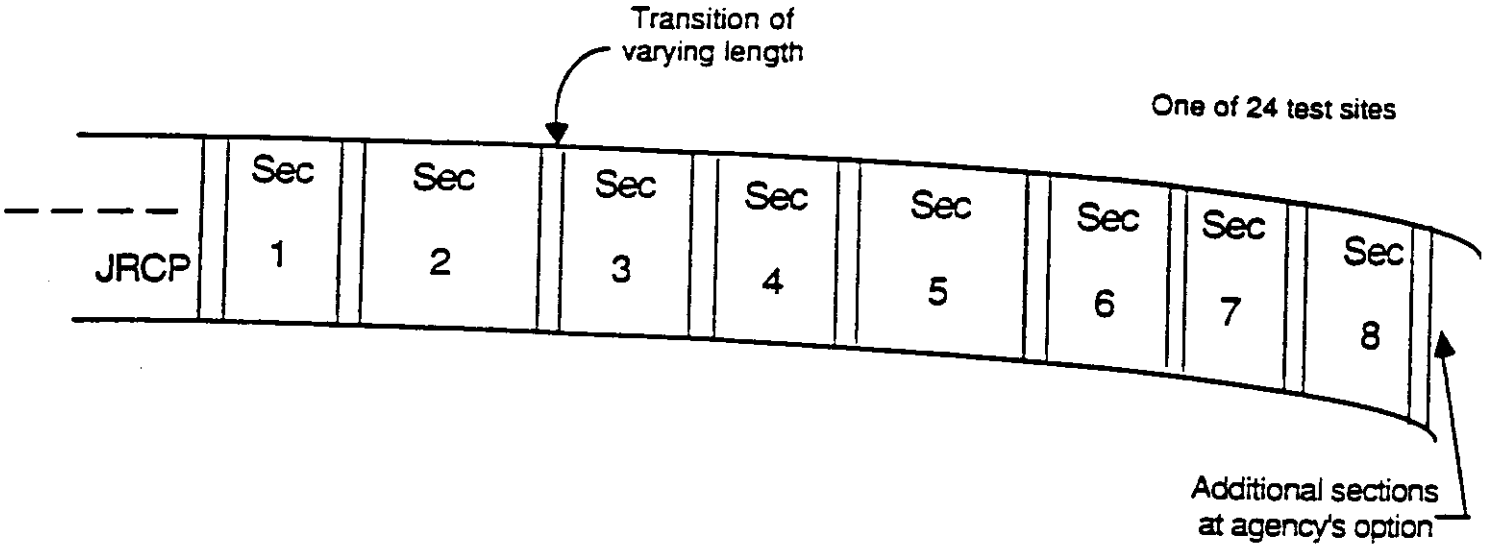
* SHRP sections, 260609 is the study of the states rehabilitation.

PROPOSED CONSTRUCTION LAYOUT SPS-6. MICHIGAN US-10

Station	Length ft	SHRP section	Activity
582+00 - 584+50	250'		Transition to control section
584+50 - 589+50	500'	1	Control section
589+50 - 592+50	300'		Transition to minimum CPR with 0" overlay
592+50 - 602+50	1000' (1)	2	Minimum CPR with 0" overlay
602+50 - 609+00	750'		Transition to mimimum CPR with 4" overlay
609+00 - 614+00	500'	3	Minimum CPR with 4" overlay
614+00 - 616+50	250'		Transition to mimimum CPR with 4" overlay and sawed/sealed joints
616+50 - 621+50	500'	4	Minimum CPR with 4" overlay and sawed/sealed joints
621+50 - 626+75	525' (2)		Transition from minimum CPR with 4" overlay and sawed/sealed joints to pavement replacement under bridge under 7 Mile Rd at ≈629+55
626+75 - 632+50	575'		Approximate stationing of pavement replacement under bridge
632+50 - 634+00	150' (3)		Transition from pavement replacemen under bridge to maximum CPR with 0" overlay
634+00 - 644+00	1000'	5	Maximum CPR with 0" overlay
644+00 - 647+00	300'		Transition from maximum CPR with 0" overlay to maximum CPR with 4" overlay
647+00 - 652+00	500'	6	Maximum CPR with 4" overlay
652+00 - 666+00	1400' (4)		Transition from maximum CPR with 4" overlay to break & seat with 4" overlay
666+00 - 671+00	500'	7	Break & seat with 4" overlay
671+00 - 676+50	550'		Transition from break & seat with 4" overlay to break & seat with 8" overlay

676+50 - 681+50	500'	8	Break & seat with 8" overlay
681+50 - 704+00	2250'		Transition from break & seat with 8" overlay to rubblization with 7" overlay
704+00 - 709+00	500'	9 (5)	Rubblization with 7" overlay
709+00 - 712+00	300'		Transition from rubblization with 7" overlay to state experiment #2
712+00 - 717+00	500	10 (6)	State experiment # 2

Notes:
1) 1000' test sections recommended for CPR sections with 0" overlays
2) Approximate stationing.
3) 150' transition less than recommended 250'.
4) A minimum of 3500' of break & seat is recommended from which two 500' sections are selected.
5) SHRP experiment coupled with state rehabilitation project.
6) Additional state experiment. Other experiments, if desired, can be studied.



SPS-6 SECTION	JC PAVEMENT PREPARATION	OTHER TREATMENTS	OVERLAY THICKNESS
1	Routine Maintenance		0
2	Minimum Restoration		0
3	Minimum Restoration		4-inch
4	Minimum Restoration	Saw and seal joints in AC	4-inch
5	Maximum Restoration (CPR)		0
6	Maximum Restoration (CPR)		4-inch
7	Crack/Break and Seat		4-inch
8	Crack/Break and Seat		8-inch

Illustrative Test Section Layout for SPS-6, Rehabilitation of Jointed Portland Cement Concrete Pavements.

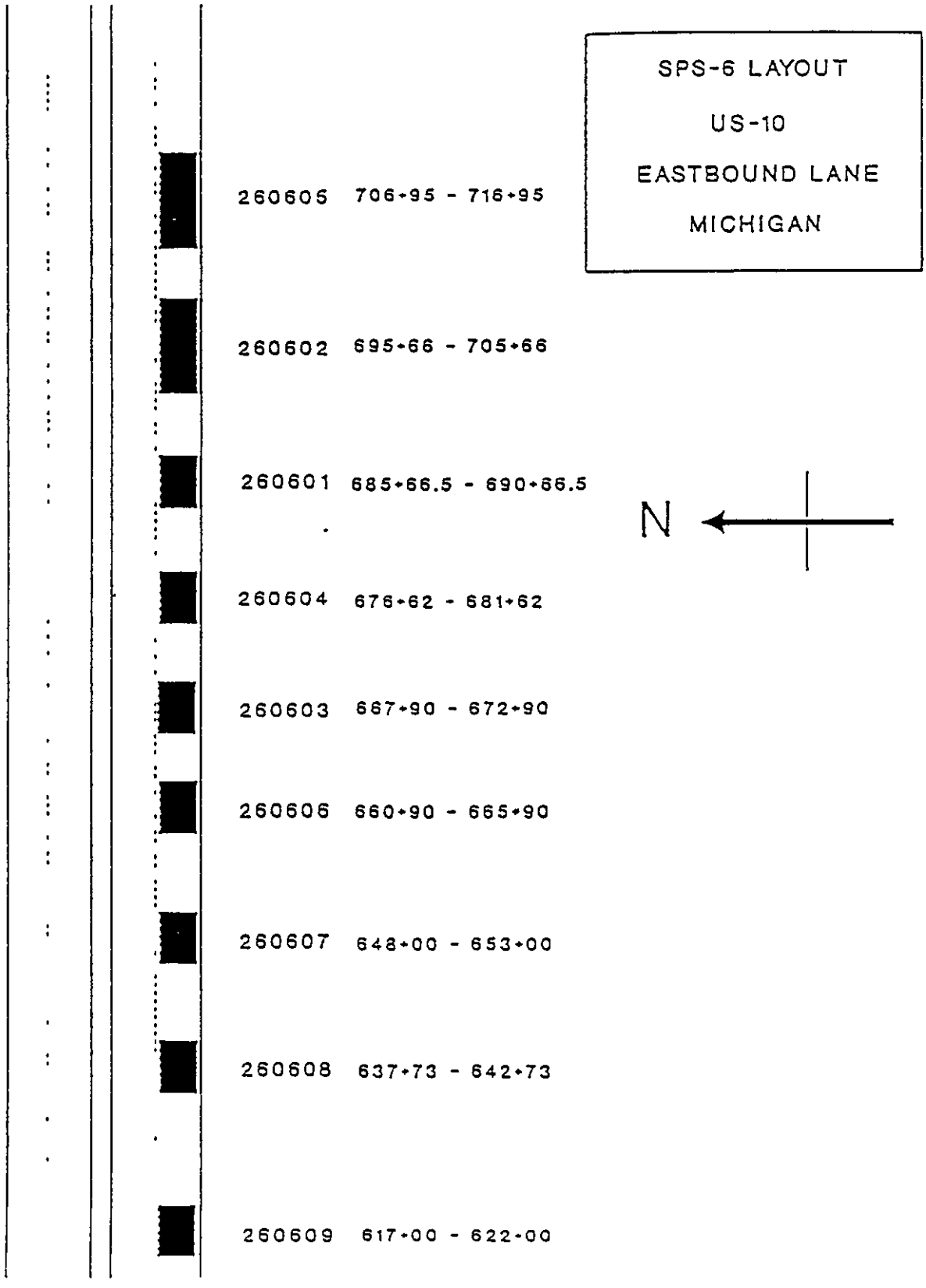


FIGURE 3. SPS–6 SITE LAYOUT

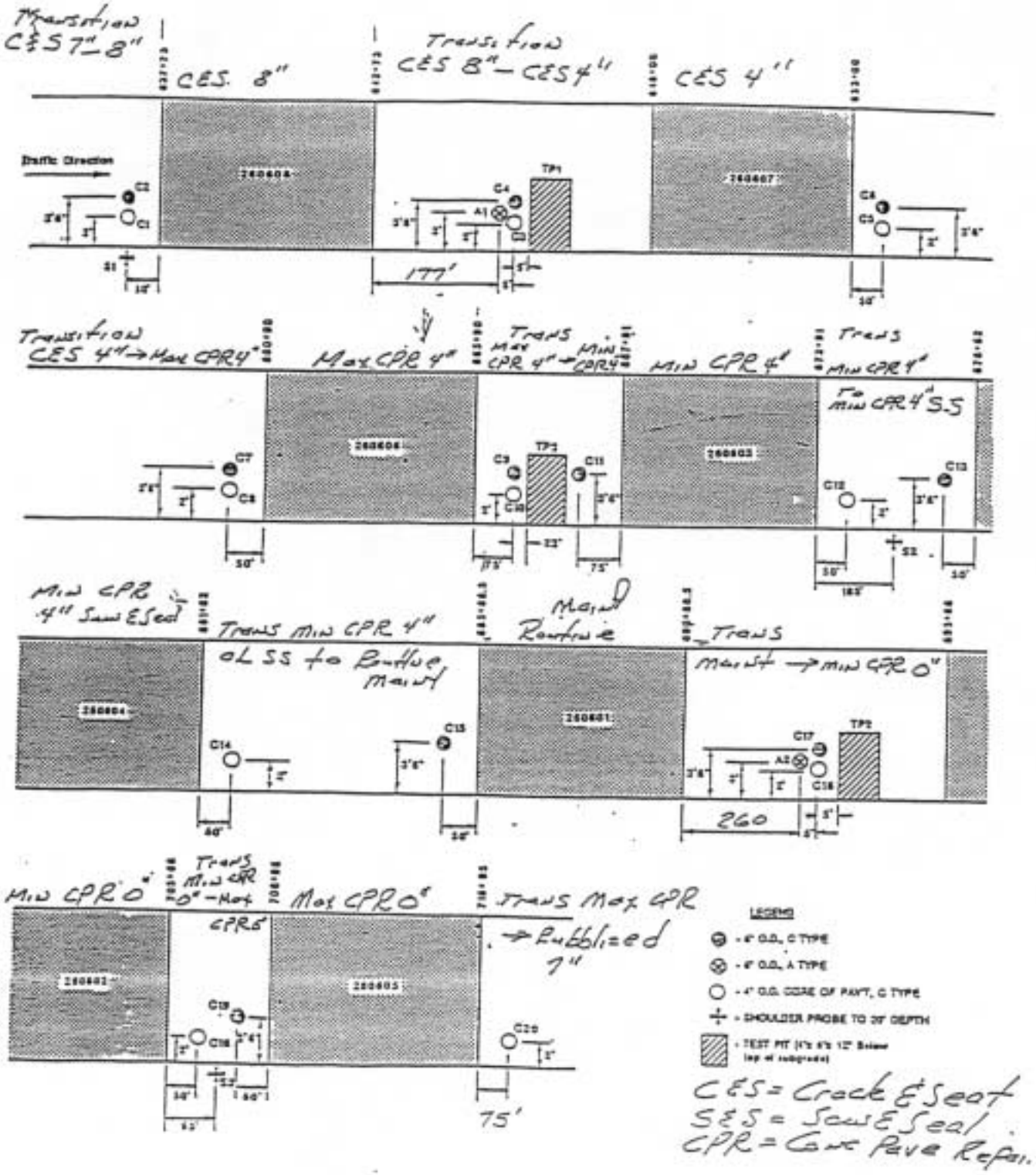
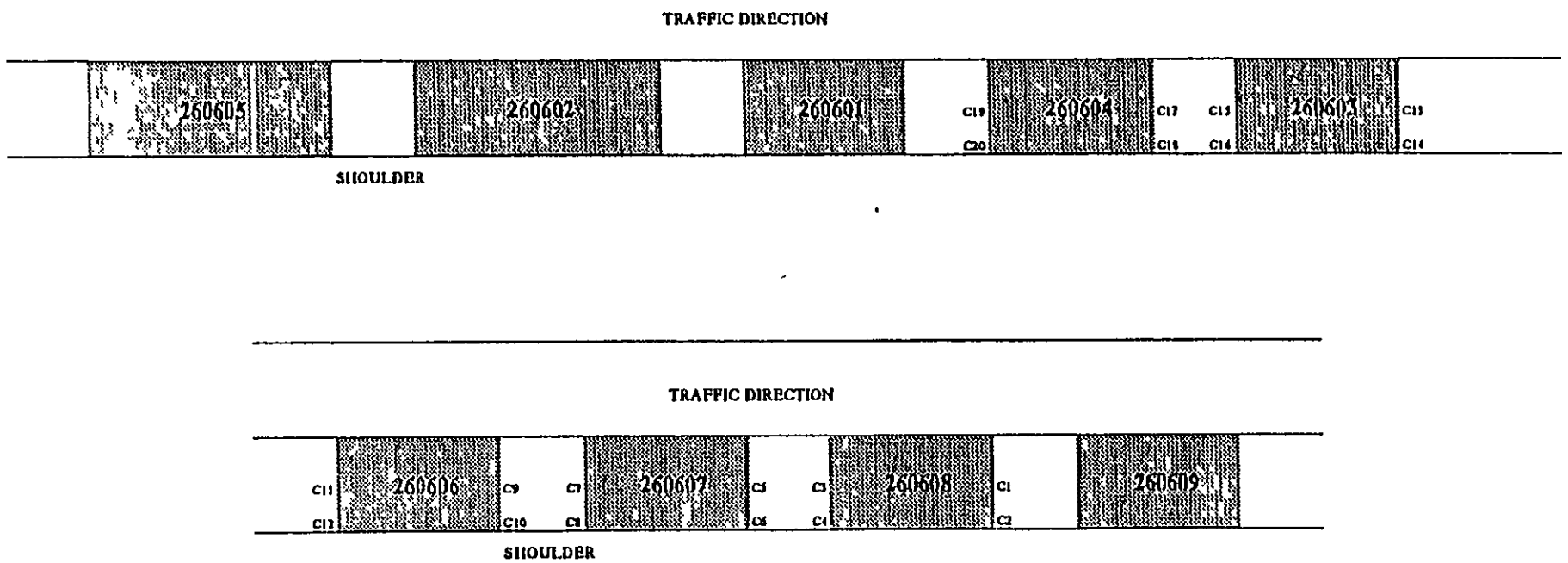


FIGURE 4. PRE-CONSTRUCTION SAMPLING AND TESTING



NOTE All samples consisted of 4" diameter cores of the asphalt concrete overlay.

FIGURE 5 POST-CONSTRUCTION SAMPLING AND TESTING