MATERIAL SAMPLING
AND
FIELD TESTING PLAN

ALABAMA SPS-1 PROJECT 010100
US-280 WBL, LEE COUNTY, ALABAMA

PREPARED BY:

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REVISED
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ALABAMA SPS-1 PROJECT (010100)

MATERIALS SAMPLING AND FIELD TESTING PLAN

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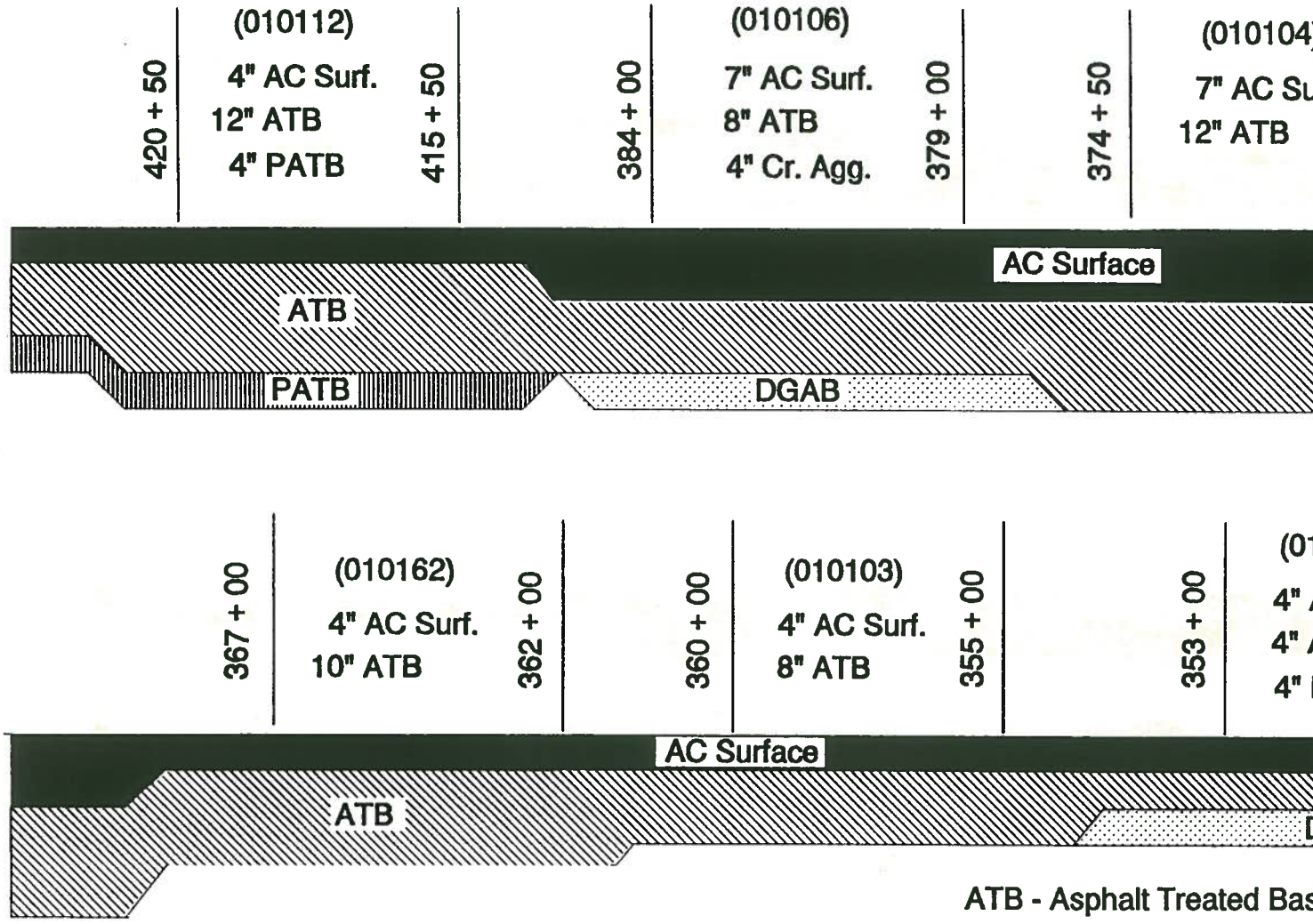
010107 (N7)	4″ AC Surf. 4″ PATB 4″ Cr. Agg.	470+00	465+00	225
010108 (N8)	7″ AC Surf. 4″ PATB 8″ Cr. Agg.	462+75	457+75	125
010109 (N9)	7″ AC Surf. 4″ PATB 12″ Cr. Agg.	456+50	451+50	250
010163 (Suppl.)	4″ AC Surf. 6″ AC Base 4″ PATB 6″ Cr. Agg.	449+00	444+00	600
010110 (N10)	7″ AC Surf. 4″ AC Base 4″ PATB	438+00	433+00	350
010111 (N11)	4″ AC Surf. 8″ AC Base 4″ PATB	429+50	424+50	400
010112* (N12)	4″ AC Surf. 12″ AC Base 4″ PATB	420+50	415+50	3150
010106 (N6)	7″ AC Surf. 8″ AC Base 4″ Cr. Agg.	384+00	379+00	450
010104* (N4)	7″ AC Surf. 12″ AC Base	374+50	369+50	250
010162 (Suppl.)	4″ AC Surf. 10″ AC Base	367+00	362+00	200
010103* (N3)	4″ AC Surf. 8″ AC Base	360+00	355+00	200

PROPOSED TEST SECTION LAYOUT SITES WITH SUBSURFACE DRAINAGE (Continued)

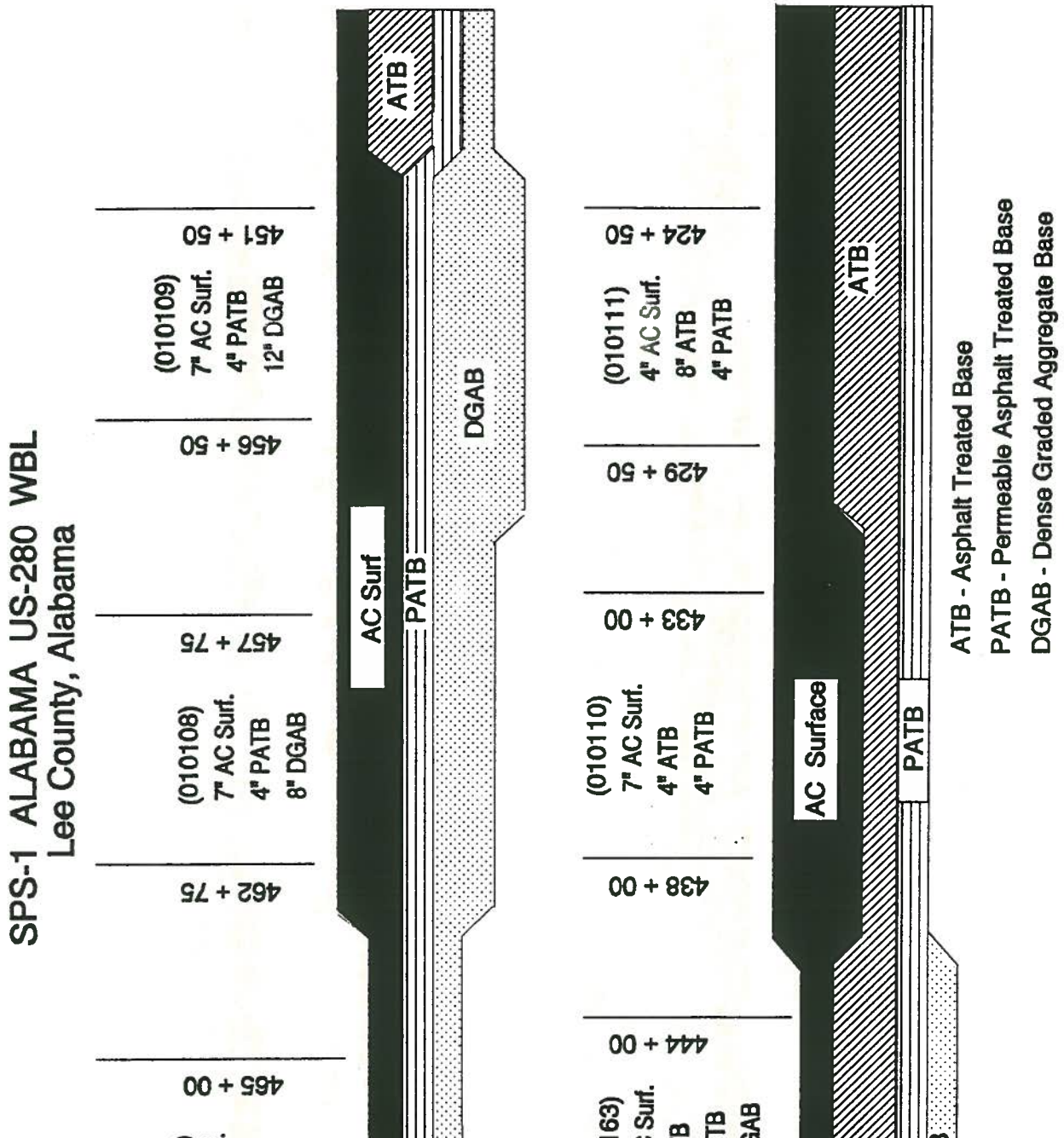
Section	Cross Section	Begin Station	End Station	Transition (Ft.)
010105 (N5)	4″ AC Surf. 4″ AC Base 4″ Cr. Agg.	353+00	348+00	350
010101 (N1)	7″ AC Surf. 8″ Cr. Agg.	344+50	339+50	4925
010102 (N2)	4″ AC Surf. 12″ Cr. Agg.	290+25	285+25	---
010161 (Suppl.)	4″ AC Surf. 6″ ATB 6″ Soil Agg.	281+00	276+00	---

* Indicates Change from Original Plan

SPS - 1 ALABAMA US-280 WBL
Lee County, Alabama



ATB - Asphalt Treated Bas
PATB - Permeable Asphal
DGAB - Dense Graded Ag


SPS-1 ALABAMA US-280 WBL
Lee County, Alabama
451 + 50
(010109)
7" AC Surf.
4" PATB
12" DGAB
456 + 50
457 + 75
(010108)
7" AC Surf.
4" PATB
8" DGAB
462 + 75
465 + 00
ATB
AC Surf
PATB
DGAB
424 + 50
(010111)
4" AC Surf.
8" ATB
4" PATB
429 + 50
433 + 00
(010110)
7" AC Surf.
4" ATB
4" PATB
438 + 00
444 + 00
(0101 63)
AC Surface
PATB
ATB
ATB - Asphalt Treated Base
PATB - Permeable Asphalt Treated Base
DGAB - Dense Graded Aggregate Base

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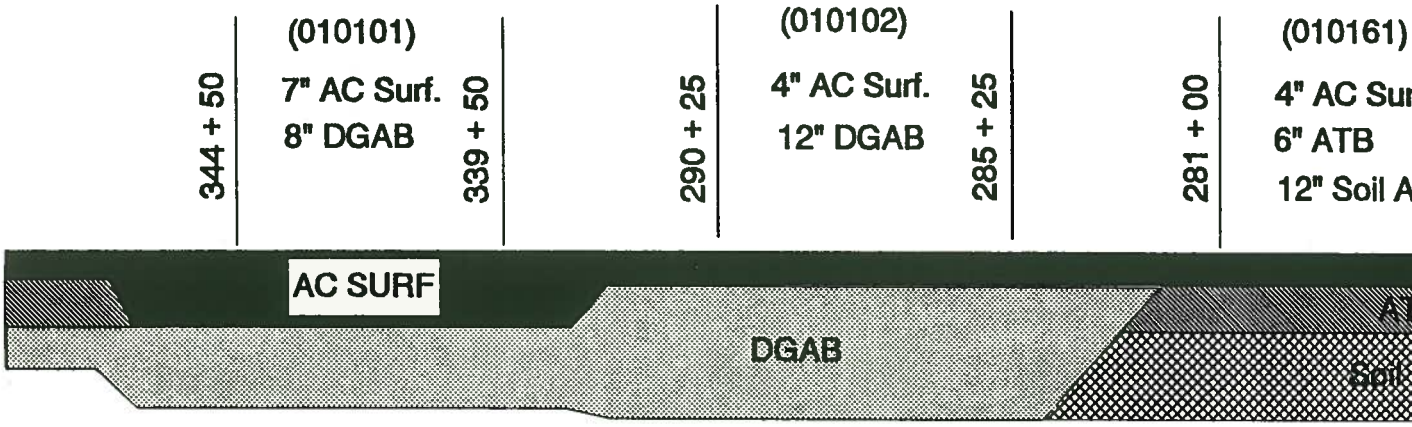
Lee County, Alabama



ATB - Asphalt Treated Base
DGAB - Dense Graded Aggregate Bas
Soil Agg. - Soil Aggregate Mixture

SCOPE OF MATERIALS SAMPLING

Material And Sample Description	Number Of Tests	Sample Location
Asphalt Concrete		
Coring - 4″ Diameter Cores	68	C1-C68
Bulk Sampling (100 Lbs. of Each Mix, Uncompacted)	3	B23, B24, B25 (From Plant)
Unbound Base/Subbase Layers (Per Layer)		
Bulk Sampling	3	B8-B10
Moisture Content Samples	3	B8-B10
Asphalt Treated Base		
Coring - 4″ Diameter Cores	42	C17-C58
Bulk Sampling (100 Lbs. Per Sample, Uncompacted)	3	B20, B21, B22 (From Plant)
Permeable Asphalt Treated Base		
Coring - 4″ Diameter Cores	34	C1-C34
Bulk Sampling (100 Lbs. Per Sample, Uncompacted)	3	B11, B12, B13 (From Plant)
Subgrade		
Splitspoon Sampling	36*	A1-A18
Thin-Walled Tube Sampling (*2 Tubes or 2 Spoons or Combination Per Hole)	36*	A1-A18
Bulk Sampling (400 Lbs. Each Sample)	7	B1-B7
Moisture Content Samples	25	A1-A18, B1-B7
Permeability	3	A3, A9, A18
Shoulder Auger Probes (Depth to Rigid Layer)	14	S1-S14
Asphalt Cement (5 Gallons Each Sample)	3	B26, B27, B28 (From Plant)

NOTE: If different AC mixes are used for the surface course and binder course, bulk

In Situ Density	70	T94-T155, SA1-SA28 (T156-T183)
Unbound Base/Subbase Layers (Per Layer) In Situ Density, Moisture Content (Nuclear Gauge) Moisture Content Samples	 24 3	 T43-T66 B8-B10
Asphalt Treated Base In Situ Density	47	T67-T93, SA7-SA24 (T136-T153), SA27, SA28
Subgrade In Situ Density, Moisture Content (Nuclear Gauge)	48	T1-T42, B1-B7

FIELD AND LABORATORY MATERIALS TESTING PLAN

al Type operties	SHRP Des.	SHRP Protocol	Tests	Material Source/ Test Location
	SS01	P51	7	B1-B7
0.01mm	SS02	P42	7	B1-B7
s	SS03	P43	7	B1-B7
	SS04	P52	24	B1-B7, A1-A18 --- Note 1
ty Relations	SS05	P55	7	B1-B7
lus (At In-Situ Moisture)	SS07	P46	6	A2, A5, A8, A11, A14, A17
	SS08	P56	7	B1-B7
re Content	SS09	P49	7	B1-B7
mp. Strength	SS10	P54	6	A1, A4, A7, A10, A13, A16
y		SHRP-LTPP Method	49	T1-T42, B1-B7
Layer		SHRP-LTPP Method	14	S1-S14
	SS11	P57	3	A3, A9, A18
Base				
nalysis	UG01	P41	3	B8, B9, B10
(Washed)	UG02	P41	3	B8, B9, B10
s	UG04	P43	3	B8, B9, B10
ty Relations	UG05	P44	3	B8, B9, B10
lus (At In-Situ Moisture)	UG07	P46	3	B8, B9, B10
	UG08	P47	3	B8, B9, B10
	UG09	P48	3	B8, B9, B10
re Content	UG10	P49	3	B8, B9, B10
y and Moisture		SHRP-LTPP Method	24	T43-T66

FIELD AND LABORATORY MATERIALS TESTING PLAN
(CONTINUED)

Material Type And Properties	SHRP Des.	SHRP Protocol	Tests	Material Test Lo
Permeable Treated Asphalt Base				
Core Examination/Thickness	AC01	P01	34	C1-C34
Bulk Specific Gravity	AC02	P02	15	C5-C8, C15-C16, C C31, C32
Maximum Specific Gravity	AC03	P03	3	B11,B12,B13 - Fror
Asphalt Content (Extraction)	AC04	P04	3	B11,B12,B13 - Fror
Moisture Susceptibility	AC05	P05	3	B11,B12,B13 - Fror
Permeability/Flow	AC08	P08	1	BT02 --- Note 2
Resilient Modulus	AC09	P09	6	C1-C3, C11-C13 --
Tensile Strength	AC09	P09	8	C1-C4, C11-C14
Extracted Aggregate -				
Specific Gravity:				
Coarse Aggregate	AG01	P11	3	B11,B12,B13
Fine Aggregate	AG02	P12	3	B11,B12,B13
Type and Classification:				
Coarse Aggregate	AG03	P13	3	B11,B12,B13
Fine Aggregate	AG03	P13	3	B11,B12,B13
Gradation of Aggregate	AG04	P14	3	B11,B12,B13
NAA Test for Fine Aggregate Particle Shape	AG05	P14A	3	B11,B12,B13
Coarse Aggregate Shape	AG06	P14B	3	B11,B12,B13
Asphalt Cement -				
Abson Recovery	AE01	P21	3	B11,B12,B13
Penetration at 50F, 77F, 90F	AE02	P22	3	B11,B12,B13
Specific Gravity (60F)	AE03	P23	3	B11,B12,B13
Viscosity at 77F	AE04	P24	3	B11,B12,B13
Viscosity at 140F, 275F	AE05	P25	3	B11,B12,B13

FIELD AND LABORATORY MATERIALS TESTING PLAN
(CONTINUED)

l Type perties	SHRP Des.	SHRP Protocol	Tests	Material Source/ Test Location
se				
n/Thickness	AC01	P01	42	C17-C58
avity	AC02	P02	42	C17-C58
ic Gravity	AC03	P03	3	B20,B21,B22
(Extraction)	AC04	P04	3	B20,B21,B22
ibility	AC05	P05	1	B21
s	AC07	P07	9	C29-C31, C35-C37, C49-C51
	AC07	P07	12	C29-C32, C35-C38, C49-C52
		SHRP-LTPP Method	45	T67-T93, SA7-SA24
gate - ity:				
ggregate	AG01	P11	3	B20,B21,B22
regate	AG02	P12	3	B20,B21,B22
ssification:				
ggregate	AG03	P13	3	B20,B21,B22
regate	AG03	P13	3	B20,B21,B22
Aggregate	AG04	P14	3	B20,B21,B22
r Fine Aggregate	AG05	P14A	3	B20,B21,B22
hape				
egate Shape	AG06	P14B	3	B20,B21,B22
-				
ery	AE01	P21	3	B20,B21,B22
t 50F, 77F, 90F	AE02	P22	3	B20,B21,B22
ity (60F)	AE03	P23	3	B20,B21,B22
7F	AE04	P24	3	B20,B21,B22
40F, 275F	AE05	P25	3	B20,B21,B22

FIELD AND LABORATORY MATERIALS TESTING PLAN
(CONTINUED)

Material Type And Properties	SHRP Des.	SHRP Protocol	Tests	Material Test Lo
Asphalt Treated Base (Continued)				
Asphalt Cement (From Tanker) -				
Penetration at 50F, 77F, 90F	AE02	P22	3	B26,B27,B28 - Fron
Specific Gravity (60F)	AE03	P23	3	B26,B27,B28 - Fron
Viscosity at 77F	AE04	P24	3	B26,B27,B28 - Fron
Viscosity at 140F, 275F	AE05	P25	3	B26,B27,B28 - Fron

FIELD AND LABORATORY MATERIALS TESTING PLAN
(CONTINUED)

l Type operties	SHRP Des.	SHRP Protocol	Tests	Material Source/ Test Location
Surface				
on/Thickness	AC01	P01	68	C1-C68 --- Note 4
ravity	AC02	P02	68	C1-C68
fic Gravity	AC03	P03	3	B23,B24,B25 - From Plant
(Extraction)	AC04	P04	3	B23,B24,B25 - From Plant
tibility	AC05	P05	3	B23,B24,B25 - From Plant
	AC06	P06	1	C3, C23, C47
us	AC07	P07	24	C1-C3, C11-C13, C29-C31, C35-C37, C49-C51, C55-C57, C58-C61, C65-C67
	AC07	P07	31	C1-C4, C11-C14, C29-C32, C35-C38, C49-C52, C55-C58, C59-C62, C66-C68
		SHRP-LTPP Method	70	SA1-SA28 (T156-T183), T94-T135
gate - c Gravity:				
ggregate	AG01	P11	3	B23,B24,B25
regate	AG02	P12	3	B23,B24,B25
assification:				
ggregate	AG03	P13	3	B23,B24,B25
regate	AG03	P13	3	B23,B24,B25
f Aggregate	AG04	P14	3	B23,B24,B25
or Fine Aggregate	AG05	P14A	3	B23,B24,B25
Shape				
egate Shape	AG06	P14B	3	B23,B24,B25

FIELD AND LABORATORY MATERIALS TESTING PLAN
(CONTINUED)

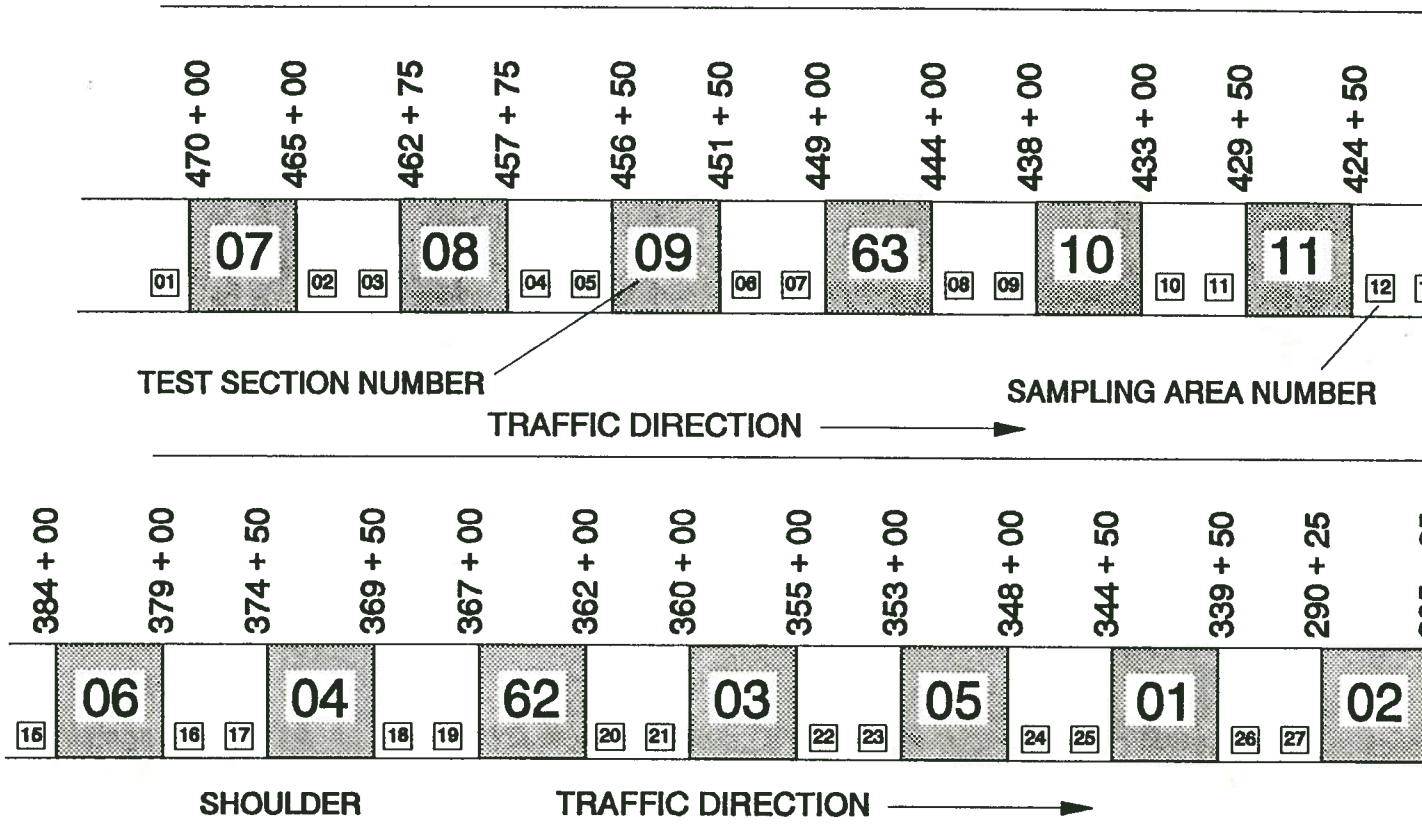
Material Type And Properties	SHRP Des.	SHRP Protocol	Tests	Material Test Lo
Asphaltic Concrete Surface and Binder (Continued)				
Asphalt Cement -				
Abson Recovery	AE01	P21	3	B26,B27,B28
Penetration at 50F, 77F, 90F	AE02	P22	3	B26,B27,B28
Specific Gravity (60F)	AE03	P23	3	B26,B27,B28
Viscosity at 77F	AE04	P24	3	B26,B27,B28
Viscosity at 140F, 275F	AE05	P25	3	B26,B27,B28

NOTE 1 - Visual-manual classification ONLY.
NOTE 2 - Laboratory permeability test to be developed.
NOTE 3 - Revision to existing P07 protocol or develop new protocol P09.
NOTE 4 - Does NOT include cores or bulk sampling requirements for SHRP Asphalt Research Progra

MATERIAL SAMPLING FOR SHRP ASPHALT RESEARCH PROGRAM

Material And Sample Description	Number Of Samples	Material Source
Asphalt Cement (5 Gallon Containers)	11	Plant
Aggregate (55 Gallon Drums)	2	Plant
Finished Asphaltic Concrete Mix (200 Lbs. Each - Surface, Binder, ATB, PATB)	4	Plant
Asphalt Concrete - 4" Diameter Cores	24	C69-C92

SPS - 1 ALABAMA US 280 WBL
Lee County, Alabama
SITE LAYOUT WITH SAMPLING AREAS



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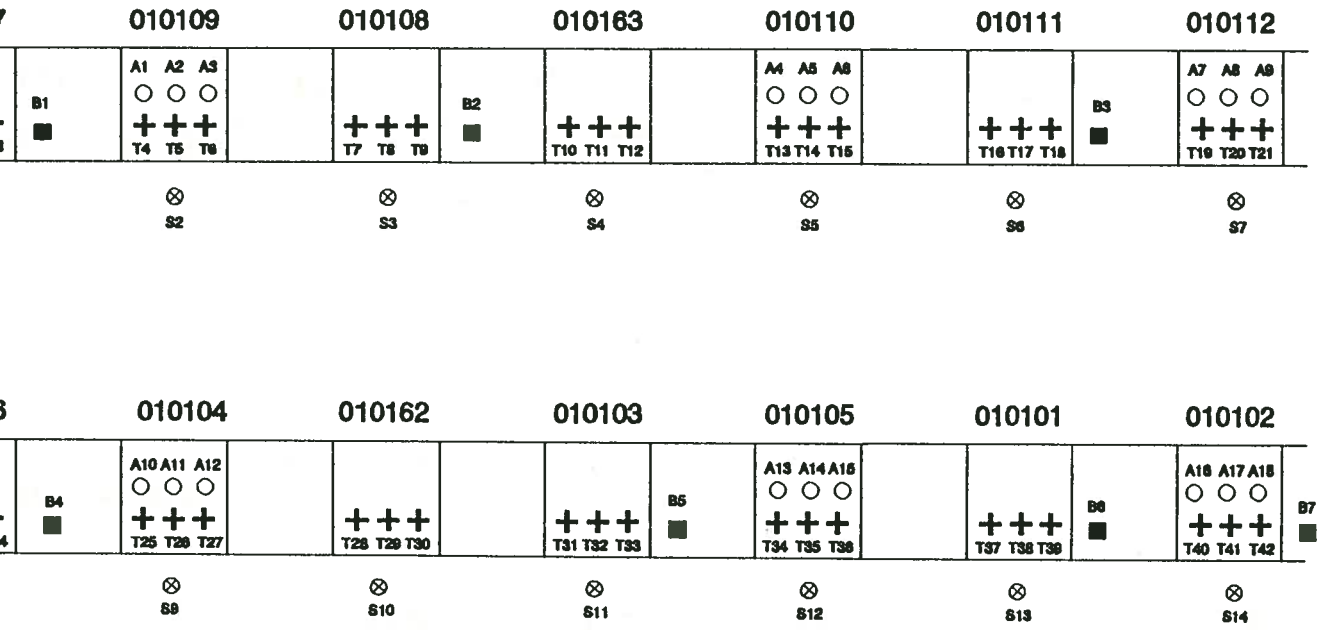
Lee County, Alabama

Sampling and Testing Locations for Subgrade



2 x 2 bulk sampling location (B1 - B7) to 12" below top of subgrade

Shelby tube/splitspoon sampling to 4' below top of subgrade (A1 - A18)

Shoulder probe (S1 - S14)

Location of field testing (T1 - T42)

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Lee County, Alabama

Sampling and Testing Locations for DGAB

Stage of Construction	DGAB Prep. Sg.		DGAB Prep. Sg.		DGAB Prep. Sg.		DGAB Prep. Sg.					
Section No.	010107		010109		010108		010163		010110		010111	
Sampling and Field Testing Locations	+++ T43 T44 T45		+++ T46 T47 T48		+++ T49 T50 T51	B8 ■	+++ T52 T53 T54		N/A		N/A	

Stage of Construction	DGAB Prep. Sg.								DGAB Prep. Sg.		DGAB Prep. Sg.	
Section No.	010106		010104		010162		010103		010105		010101	
Sampling and Field Testing Locations	+++ T55 T56 T57	B9 ■	N/A		N/A		N/A		+++ T58 T59 T60		+++ T61 T62 T63	

LEGEND

+ Location of field testing (T43 - T66)

■ Location of bulk sampling of DGAB (B8 - B10)

Prep. Sg. -Prepared Subgrade

PATB - Permeabel Asphalt Treated Bas

DGAB - Dense Graded Aggregate Base

SPS - 1 ALABAMA US 280 WBL
Lee County, Alabama
Testing Locations for ATB

						ATB PATB DGAB Prep. Sg.		ATB PATB Prep. Sg.		ATB PATB Prep. Sg.		ATB PATB Prep. Sg.
107		010109		010108		010163		010110		010111		010112
/A		N/A		N/A		+++ T67 T68 T69		+++ T70 T71 T72		+++ T73 T74 T75		+++ T76 T77 T78

B AB Sg.		ATB Prep. Sg.		ATB Prep. Sg.		ATB Prep. Sg.		ATB DGAB Prep. Sg.				
106		010104		010162		010103		010105		010101		010102
++ 80 T81		+++ T82 T83 T84		+++ T85 T86 T87		+++ T88 T89 T90		+++ T91 T92 T93		N/A		N/A

LEGEND

+ Location fo field testin (T67-T93, T136-T153)

Prep. Sg. - Prepared Subgrade

PATB - Permeable Asphalt Treated Base

DGAB - Dense Graded Aggregate Base

ATB - Asphalt Treated Base

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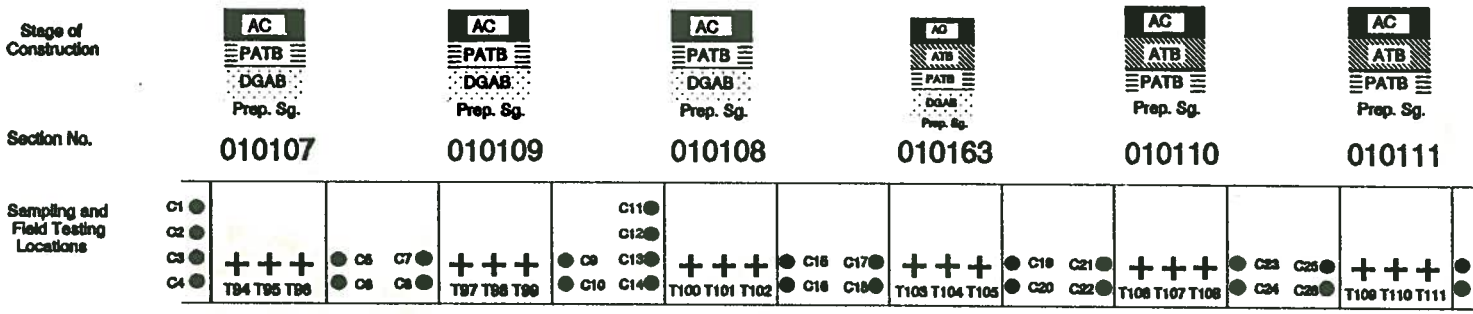
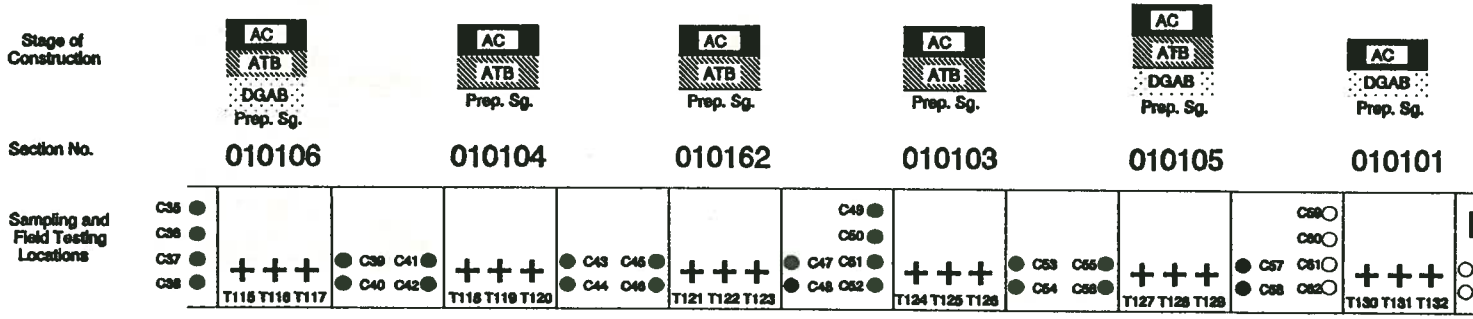
Lee County, Alabama
Sampling and Testing Locations for AC Surface





LEGEND

- ○ 4" OD Core of Asphalt Concrete Surface (C59 - C68)
- ● 4" OD Core of Asphalt Concrete Surface and Treated Base (C1 - C58)
- + Location of field testing within section (T94 - T135, T156 - T183)
- ■ SHRP Asphalt Research Cores (C69-C92)

Prep. Sg. - Prepared Subgrade

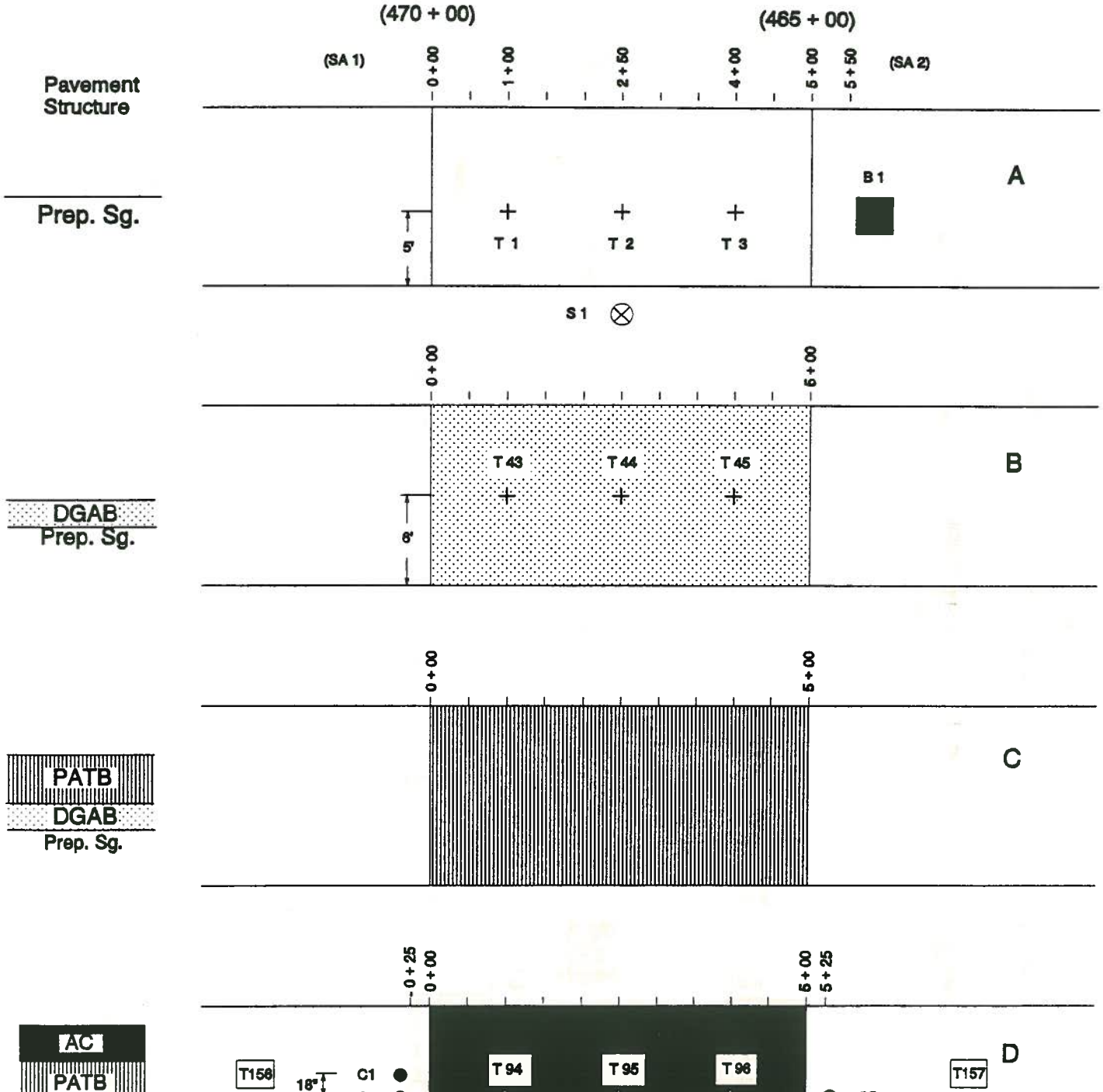
PATB - Permeable Asphalt Treate

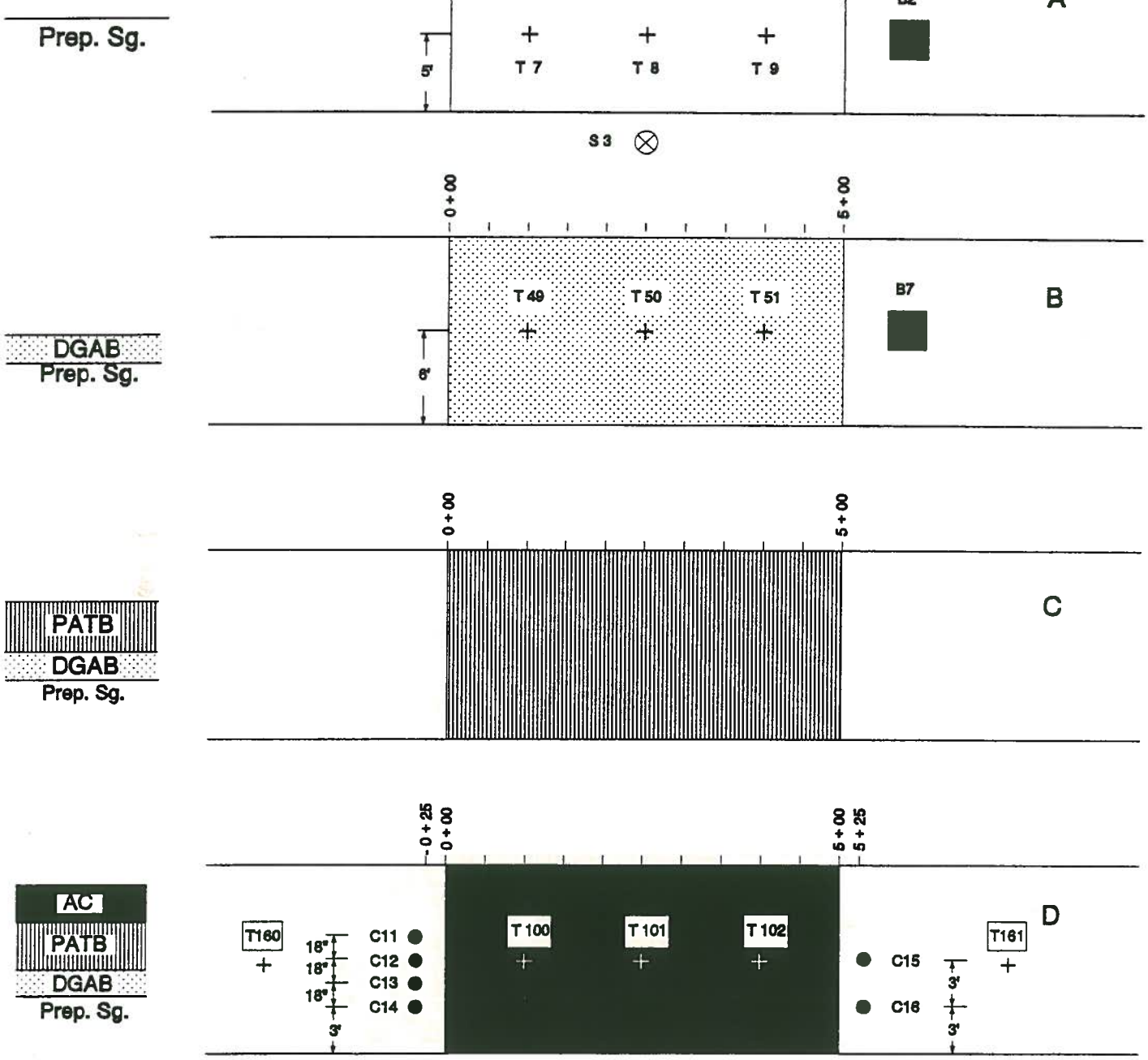
DGAB - Dense Graded Aggregate

ATB - Asphalt Treated Base

AC - Asphalt Concrete Surface

SAMPLING AND TESTING PLAN FOR TEST SECTION 010107





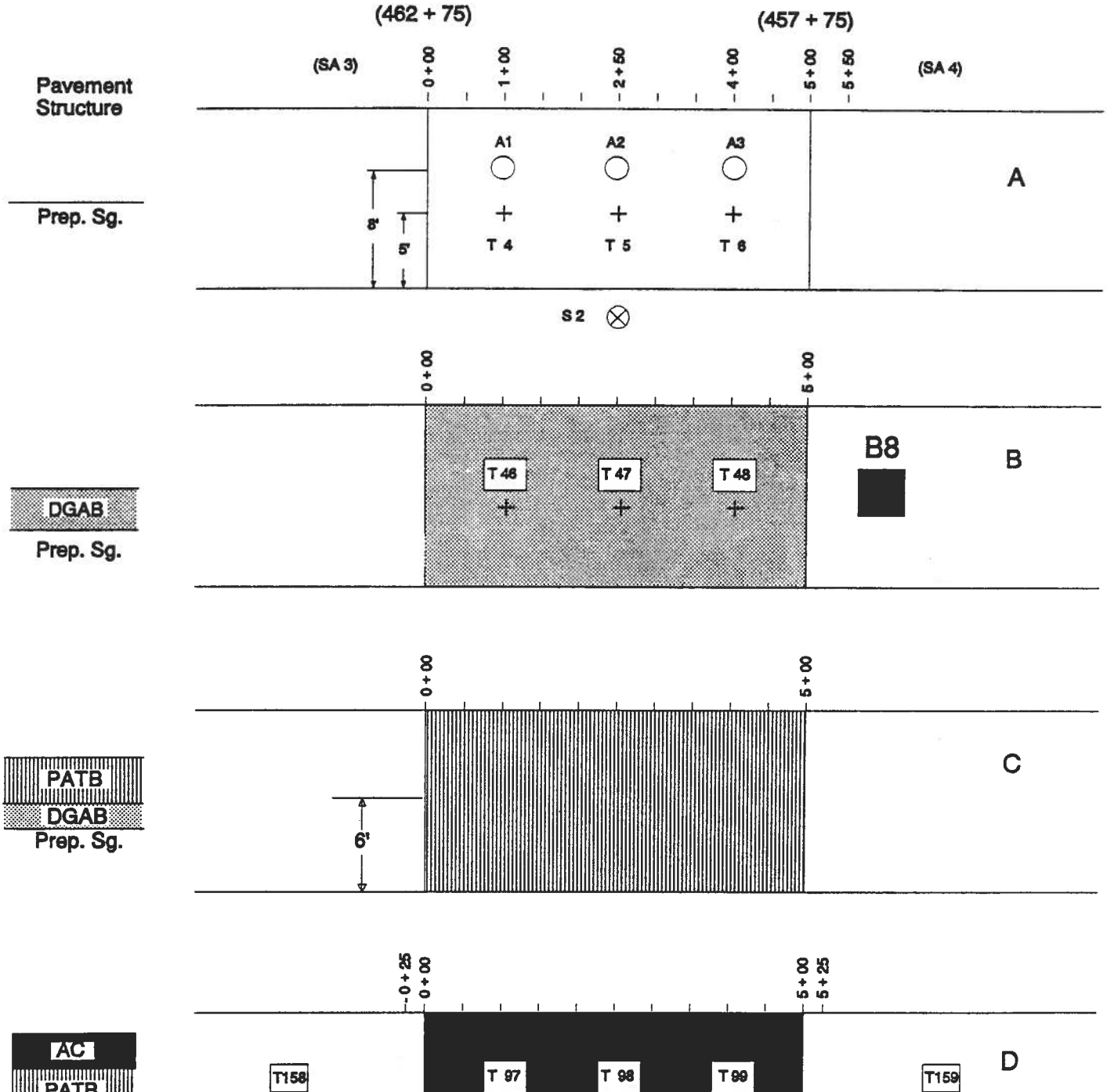
A Testing on prepared Subgrade (T7 - T9, B2, S3)

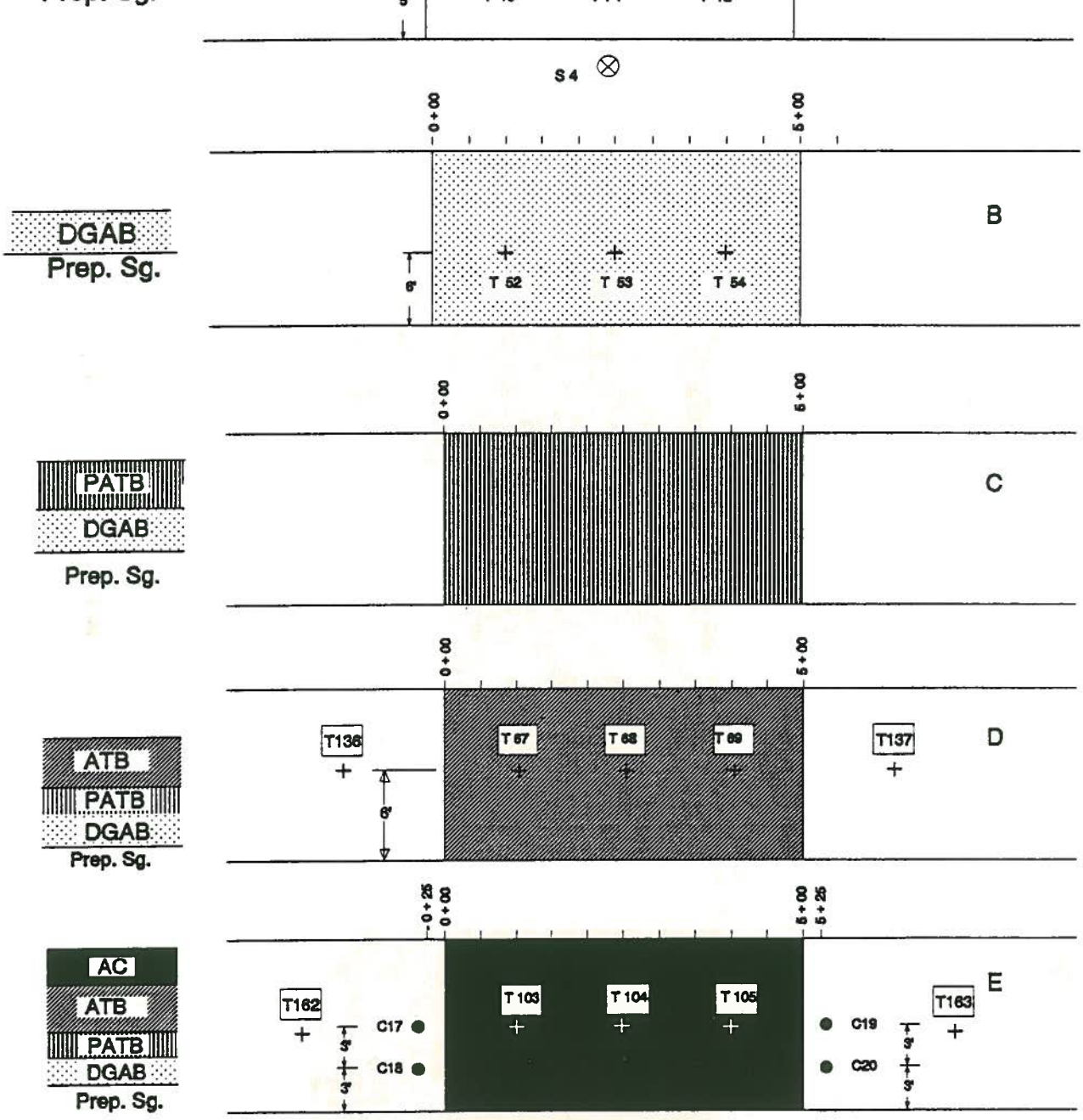
B Testing on compacted DGAB (T49 - T51,B7)

C No testing on compacted PATB

D Testing on finished AC Surface (T100 - T102,T160,T161)
Coring AC Surface and bound layers (C11 - C16)

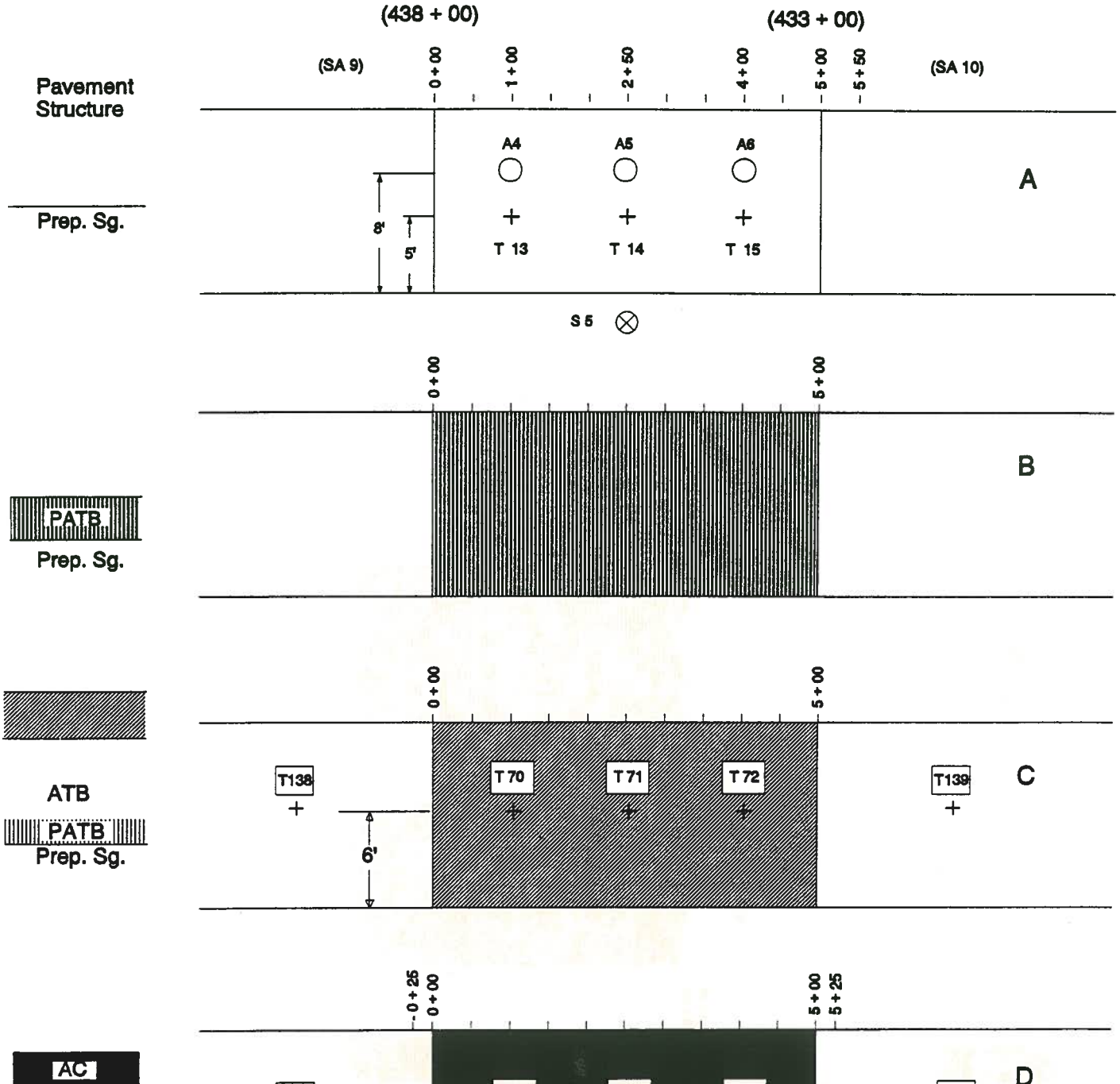
SAMPLING AND TEST SECTION PLAN FOR TEST SECTION 010109



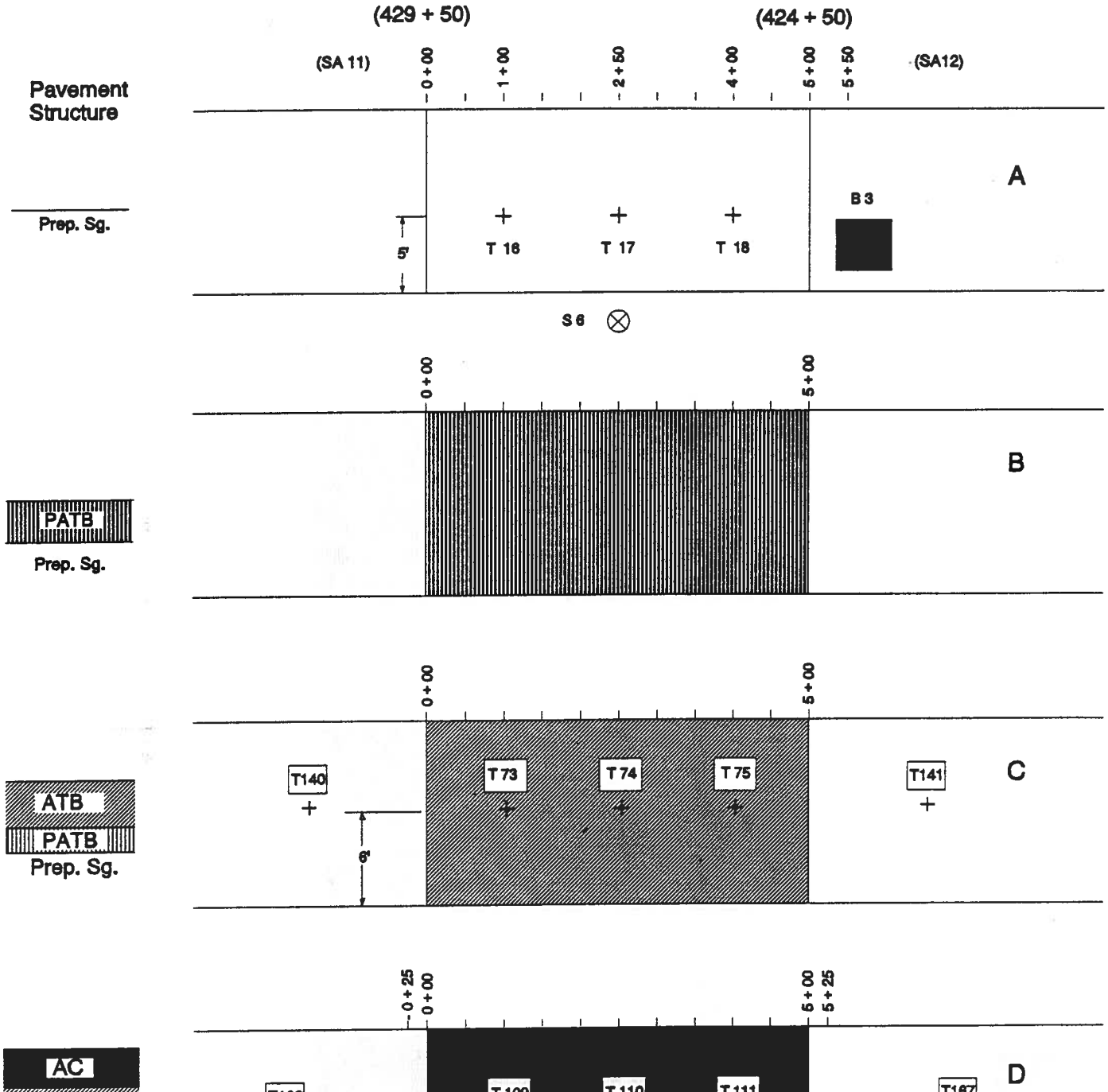


A Testing on prepared Subgrade (T10 - T12, S4)
B Testing on DGAB (T52 - T54)
C No testing on compacted PATB
D Testing on compacted ATB (T67 - T69, T136, T137)
E Testing on finished AC Surface (T103 - T105, T162, T163)
Coring AC Surface and bound layers (C17 - C20)

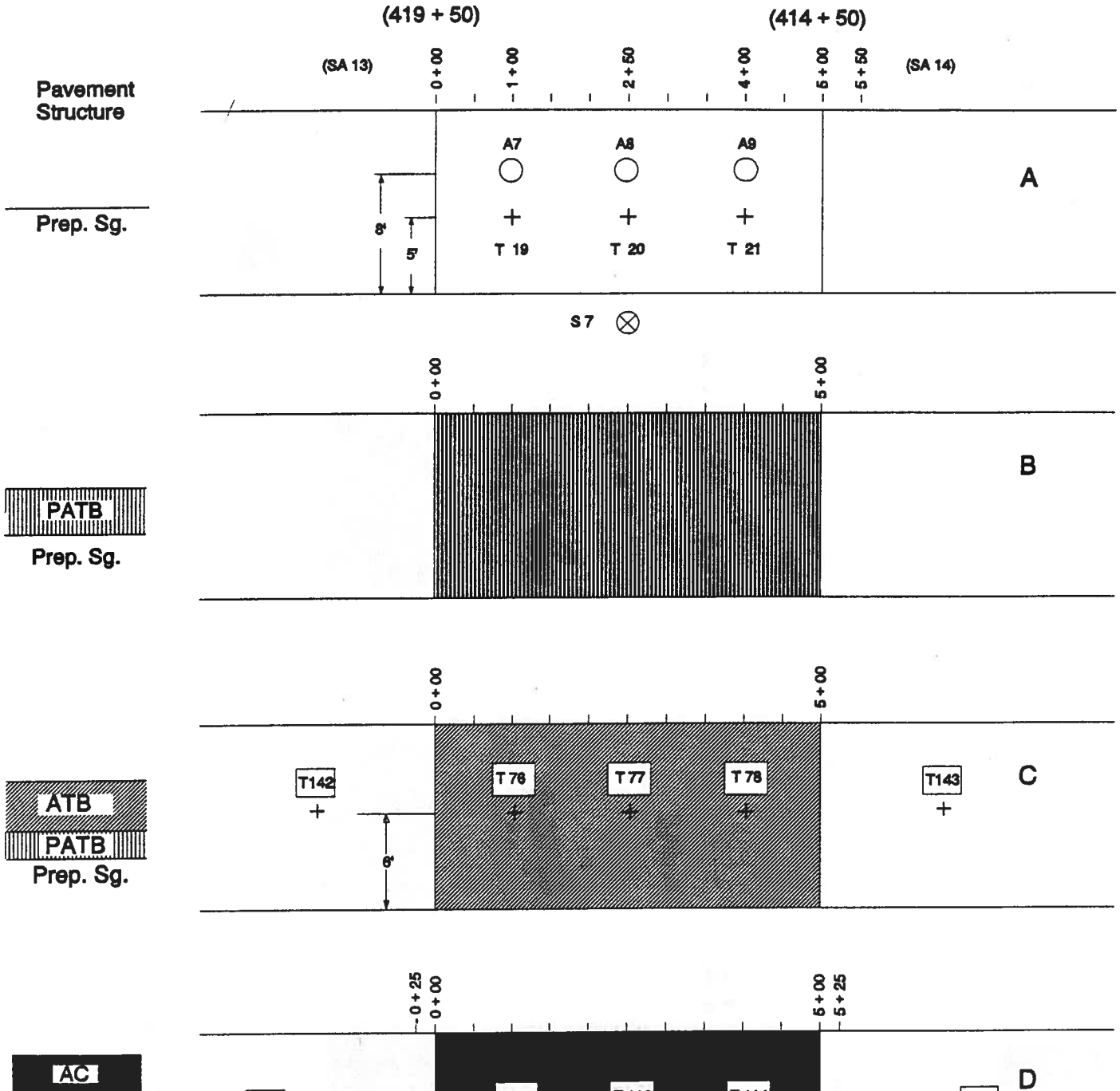
SAMPLING AND TESTING PLAN FOR TEST SECTION 010110



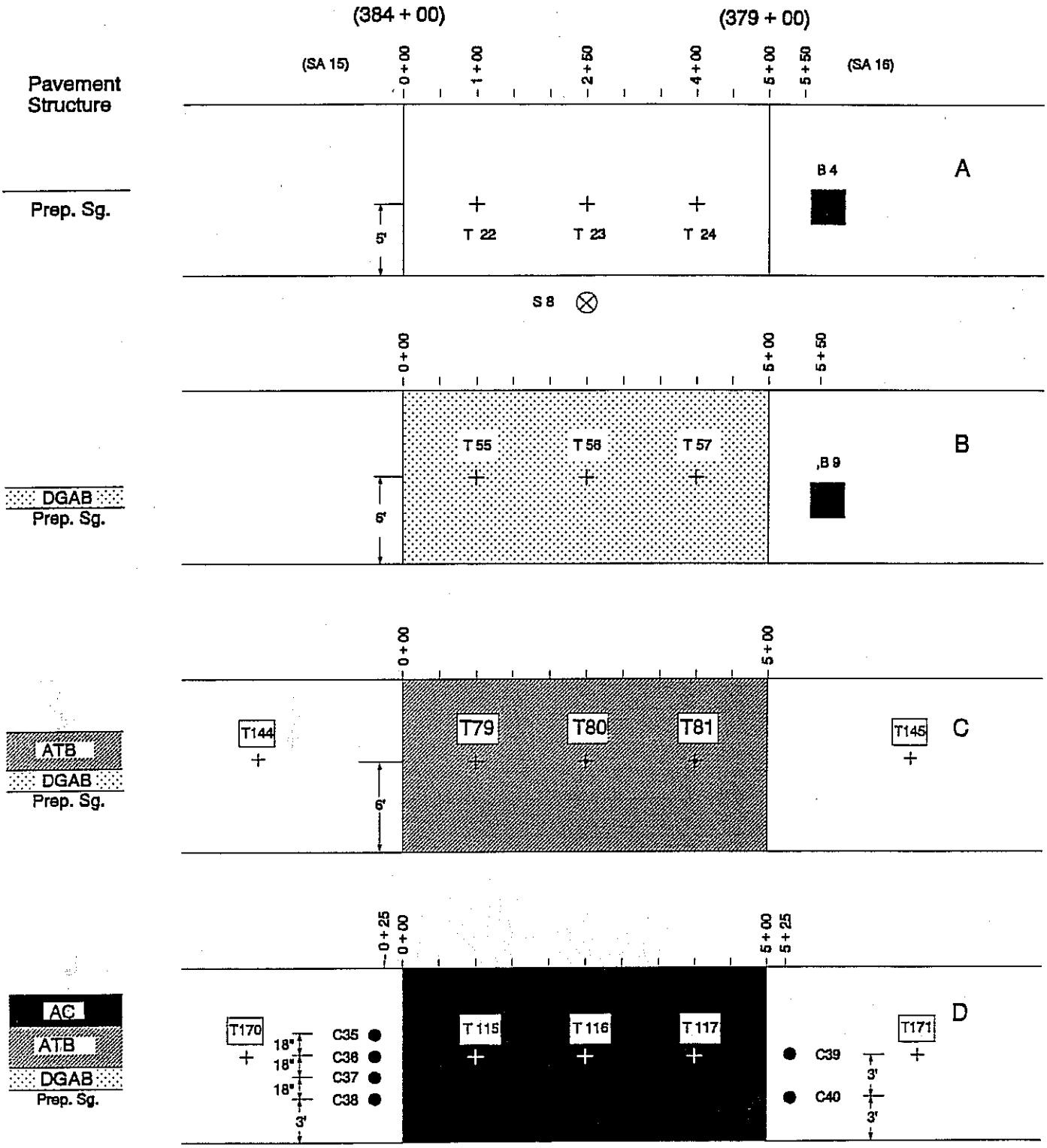
SAMPLING AND TESTING PLAN FOR TEST SECTION 010111



SAMPLING AND TESTING PLAN FOR TEST SECTION 010112



SAMPLING AND TEST PLAN FOR TEST SECTION 010106



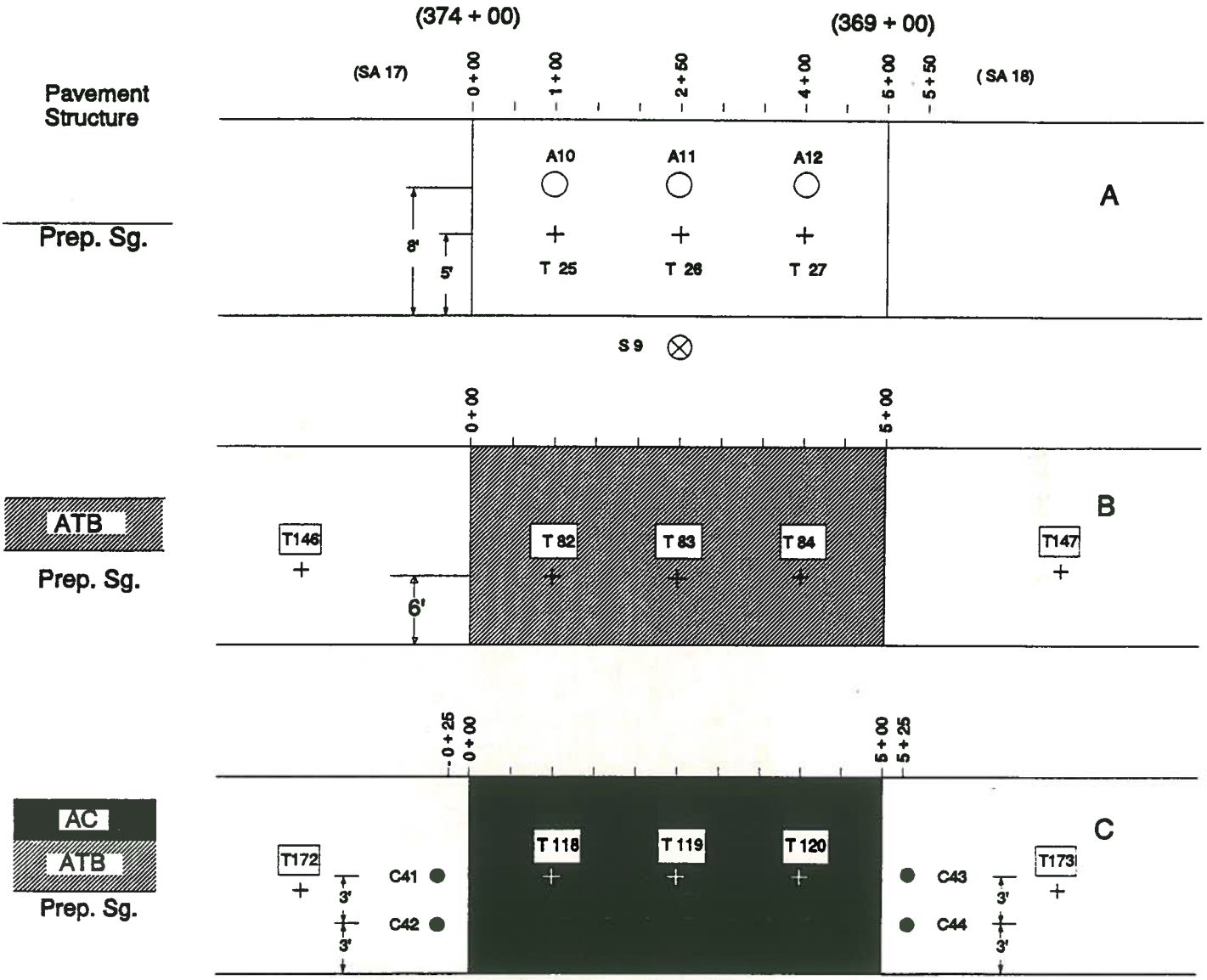
A Testing on prepared Subgrade (T22 - T24, B4, S8)

B Testing on compacted DGAB (T55 - T57,B9)

C Testing on compacted ATB (T79 - T81, T144, T145)

D Testing on finished AC Surface (T115 - T117, T170, T171)
Coring AC Surface and bound layers (C35 - C40)

SAMPLING AND TESTING PLAN FOR TEST SECTION 010104

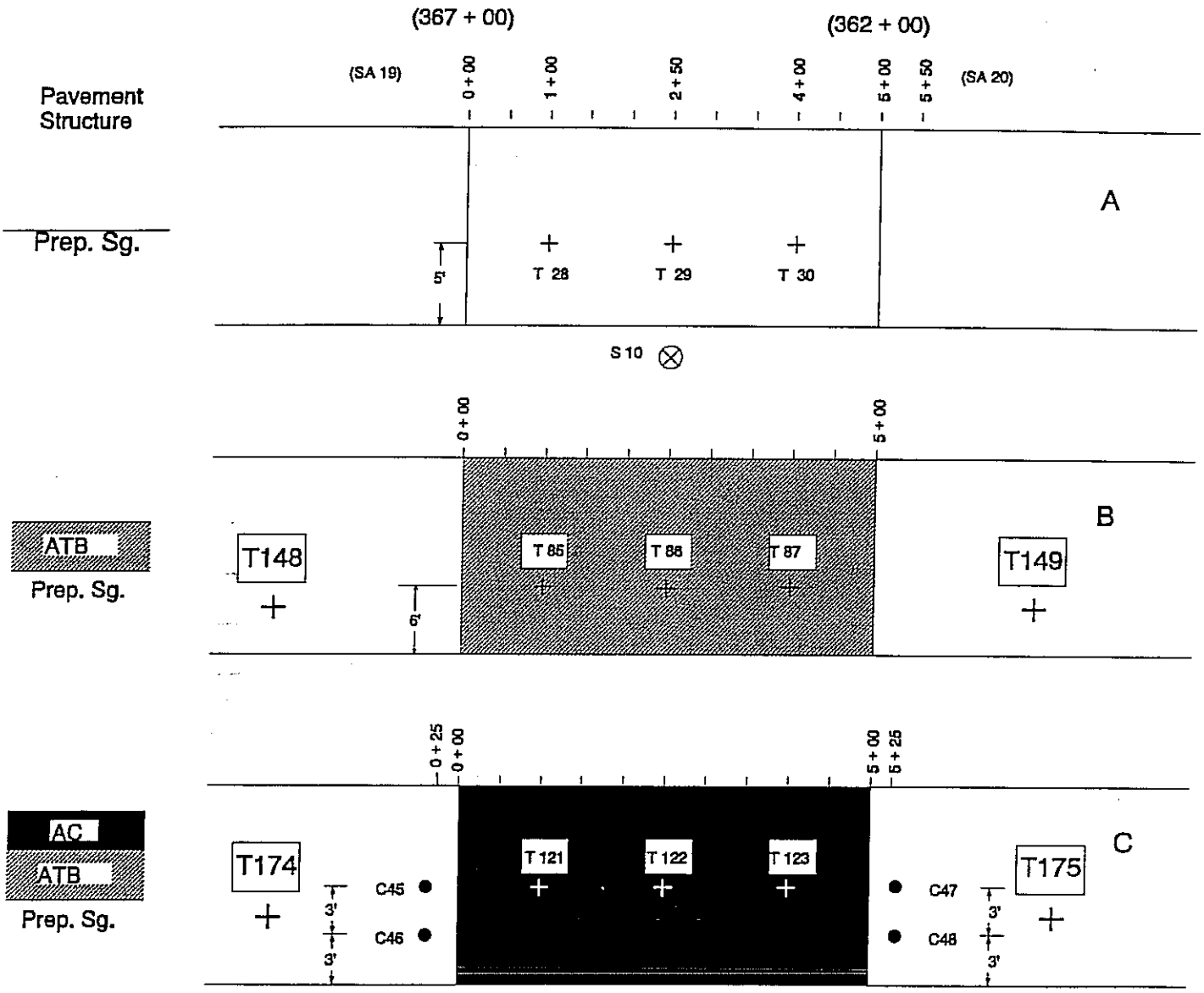


A Testing on prepared Subgrade (T25 - T27, A10 - A12, S9)

B Testing on compacted ATB (T82 - T84, T146, T147)

C Testing on finished AC Surface (T118 - T120, T172, T173)

SAMPLING AND TESTING PLAN FOR TEST SECTION 010162



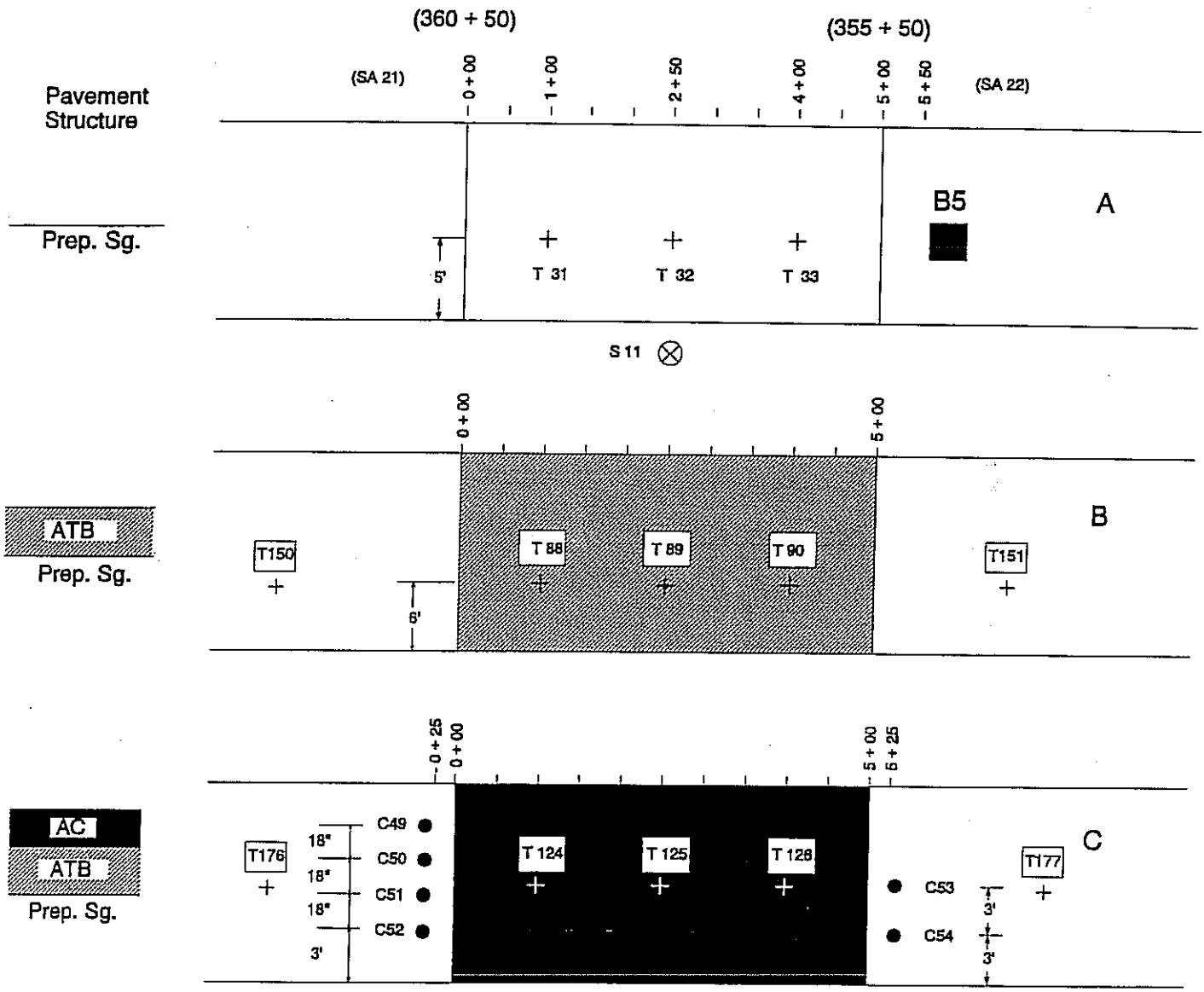
A Testing on prepared Subgrade (T28 - T30, S10)

B Testing on compacted ATB (T85 - T87, T148, T149)

C Testing on finished AC Surgace (T121 - T123), T174, T175)

Coring AC Surface and bound layers (C45 - C48)

SAMPLING AND TESTING PLAN FOR TEST SECTION 010103



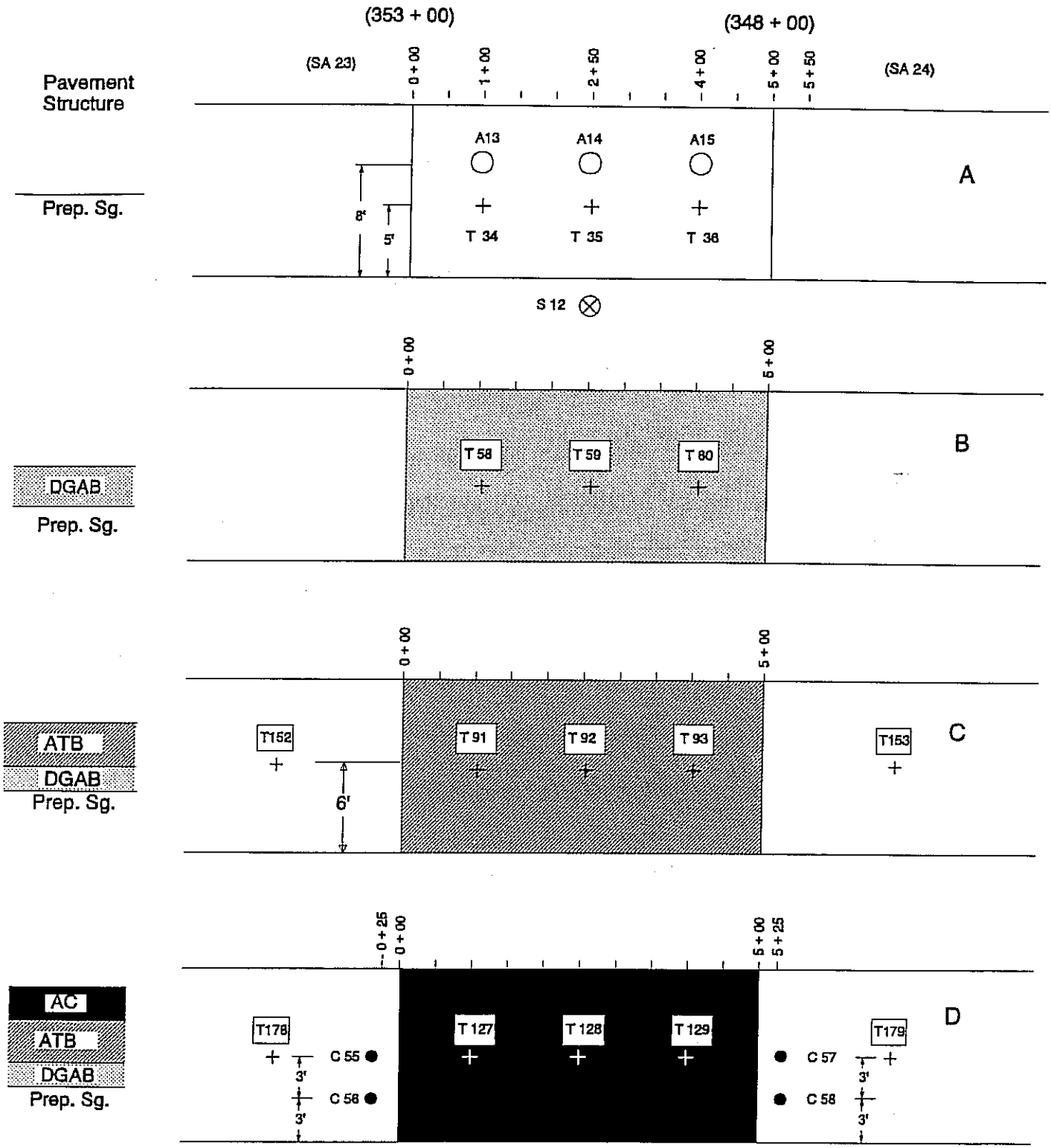
A Testing on prepared Subgrade (T31 - T33, B5, S11)

B Testing on compacted ATB (T88 - T90, T150, T151)

C Testing on finished AC Surgace (T124 - T126, T176, T177)

Coring AC Surface and bound layers (C49 - C54)

SAMPLING AND TESTING PLAN FOR TEST SECTION 010105



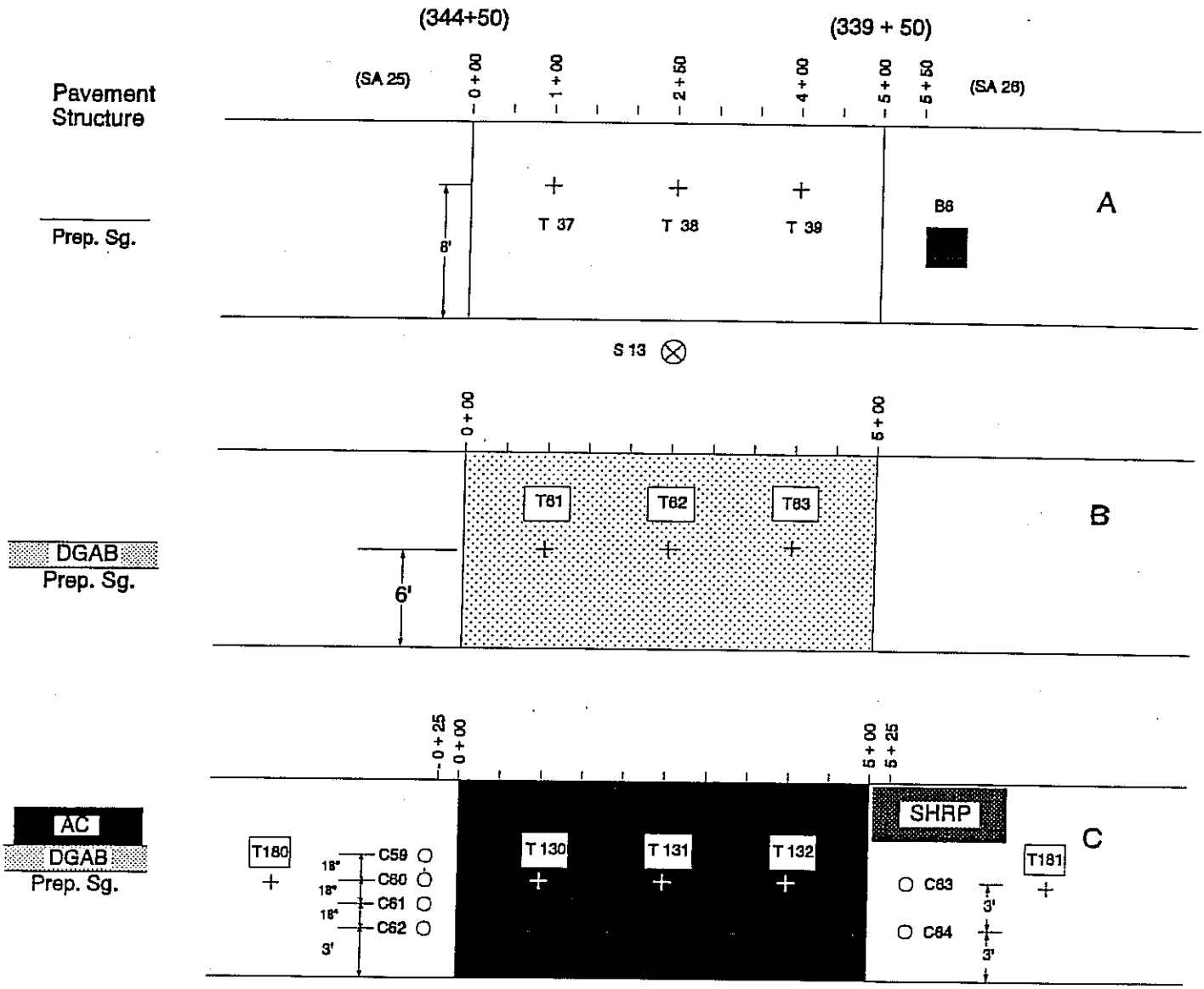
A Testing on prepared Subgrade (T34 - T36, A13- A15,S12)

B Testing on compacted DGAB (T58 - T60)

C Testing on compacted ATB (T91 - T93, T152, T153)

D Testing on finished AC Surface (T127 - T129, T178, T179)
Coring AC Surface and bound layers (C7 - C10)

SAMPLING AND TESTING PLAN FOR TEST SECTION 010101



A Testing on prepared Subgrade (T37 - T39, B6, S13)

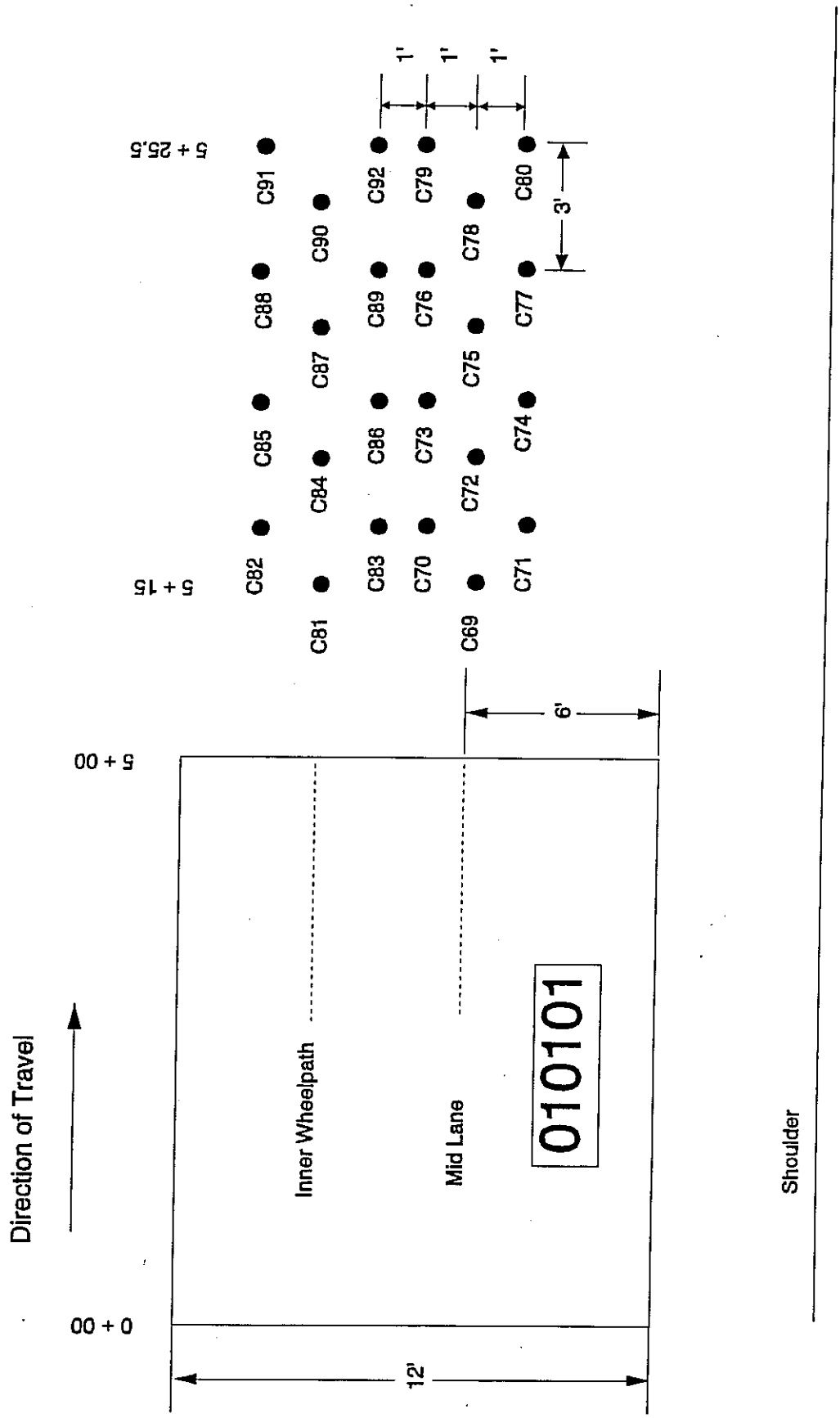
B Testing on compacted ATB (T61 - T63)

C Testing on finished AC Surface (T130 - T132, T180, T181)

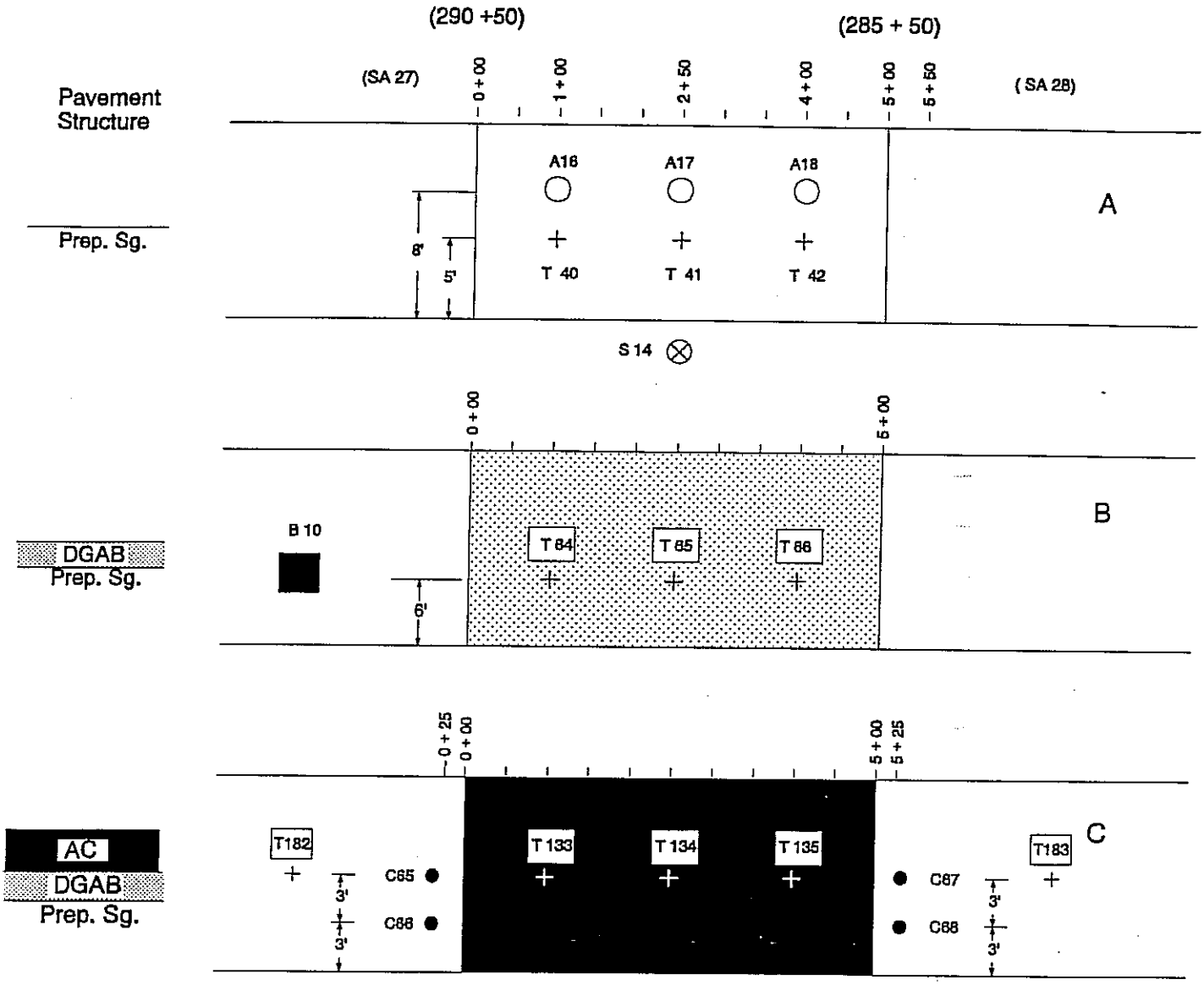
Coring AC Surface and bound layers (C59 - C64)

Coring AC Surface "SHRP" Asphalt Research (C69 - C92)

SHRP ASPHALT RESEARCH 4" CORES (C69 - C92)



SAMPLING AND TESTING PLAN FOR TEST SECTION 010102



A Testing on prepared Subgrade (T40 - T42, A16 - A18, S14)

B Testing on compacted ATB (T64 - T66, B10)

C Testing on finished AC Surgace (T133 - T135, T182, T183)
Coring AC Surface and bound layers (C65 - C68)

SUBGRADE MATERIALS FIELD SAMPLING AND TESTING

Approx. ℄ Sta.	Offset (Ft.)	Section ID №.	Section Sta.	O/S From Lane Edge	Sample ID №.	Sample Type
464+50	46 Lt	010107	5+50	5′ Lt	B1	Bulk
451+00	46 Lt	010109	5+50	5′ Lt	B2	Bulk
424+00	46 Lt	010111	5+50	5′ Lt	B3	Bulk
378+50	46 Lt	010106	5+50	5′ Lt	B4	Bulk
355+00	46 Lt	010103	5+50	5′ Lt	B5	Bulk
339+00	46 Lt	010101	5+50	5′ Lt	B6	Bulk
290 +00	46 Lt	010102	-50	5′ Lt	B7	Bulk
461+75	43 Lt	010108	1+00	8′ Lt	A1	Shelby Tube
460+25	43 Lt	010108	2+50	8′ Lt	A2	Shelby Tube
458+75	43 Lt	010108	4+00	8′ Lt	A3	Shelby Tube
437+00	43 Lt	010110	1+00	8′ Lt	A4	Shelby Tube
435+50	43 Lt	010110	2+50	8′ Lt	A5	Shelby Tube
434+00	43 Lt	010110	4+00	8′ Lt	A6	Shelby Tube
418+50	43 Lt	010112	1+00	8′ Lt	A7	Shelby Tube
417+00	43 Lt	010112	2+50	8′ Lt	A8	Shelby Tube
415+50	43 Lt	010112	4+00	8′ Lt	A9	Shelby Tube
373+00	43 Lt	010104	1+00	8′ Lt	A10	Shelby Tube
371+50	43 Lt	010104	2+50	8′ Lt	A11	Shelby Tube
370+00	43 Lt	010104	4+00	8′ Lt	A12	Shelby Tube
352+00	43 Lt	010105	1+00	8′ Lt	A13	Shelby Tube
350+50	43 Lt	010105	2+50	8′ Lt	A14	Shelby Tube
349+00	43 Lt	010105	4+00	8′ Lt	A15	Shelby Tube
289+50	43 Lt	010102	1+00	8′ Lt	A16	Shelby Tube
288+00	43 Lt	010102	2+50	8′ Lt	A17	Shelby Tube
286+50	43 Lt	010102	4+00	8′ Lt	A18	Shelby Tube

SUBGRADE MATERIALS FIELD SAMPLING AND TESTING (Continued)

Approx. ℄ Sta.	Offset (Ft.)	Section ID №.	Section Sta.	O/S From Lane Edge	Sample ID №.	Sample Type
467+50	60 Lt	010107	2+50	9′ Rt	S1	Shoulder Probe
460+25	60 Lt	010108	2+50	9′ Rt	S2	Shoulder Probe
454+00	60 Lt	010109	2+50	9′ Rt	S3	Shoulder Probe
446+50	60 Lt	0101S3	2+50	9′ Rt	S4	Shoulder Probe
435+50	60 Lt	010110	2+50	9′ Rt	S5	Shoulder Probe
427+00	60 Lt	010111	2+50	9′ Rt	S6	Shoulder Probe
417+00	60 Lt	010112	2+50	9′ Rt	S7	Shoulder Probe
381+50	60 Lt	010106	2+50	9′ Rt	S8	Shoulder Probe
371+50	60 Lt	010104	2+50	9′ Rt	S9	Shoulder Probe
364+50	60 Lt	0101S2	2+50	9′ Rt	S10	Shoulder Probe
358+00	60 Lt	010103	2+50	9′ Rt	S11	Shoulder Probe
350+50	60 Lt	010105	2+50	9′ Rt	S12	Shoulder Probe
342+00	60 Lt	010101	2+50	9′ Rt	S13	Shoulder Probe
288+00	60 Lt	010102	2+50	9′ Rt	S14	Shoulder Probe
469+00	46 Lt	010107	1+00	5′ Lt	T1	Moisture Density
467+50	46 Lt	010107	2+50	5′ Lt	T2	Moisture Density
466+00	46 Lt	010107	4+00	5′ Lt	T3	Moisture Density
461+75	46 Lt	010108	1+00	5′ Lt	T4	Moisture Density
460+25	46 Lt	010108	2+50	5′ Lt	T5	Moisture Density
458+75	46 Lt	010108	4+00	5′ Lt	T6	Moisture Density
455+50	46 Lt	010109	1+00	5′ Lt	T7	Moisture Density
454+00	46 Lt	010109	2+50	5′ Lt	T8	Moisture Density
452+50	46 Lt	010109	4+00	5′ Lt	T9	Moisture Density
448+00	46 Lt	0101S3	1+00	5′ Lt	T10	Moisture Density

SUBGRADE MATERIALS FIELD SAMPLING AND TESTING (Continued)

Approx. ¢ Sta.	Offset (Ft.)	Section ID Nº.	Section Sta.	O/S From Lane Edge	Sample ID Nº.	Sample Type
446+50	46 Lt	0101S3	2+50	5′ Lt	T11	Moisture Density
445+00	46 Lt	0101S3	4+00	5′ Lt	T12	Moisture Density
437+00	46 Lt	010110	1+00	5′ Lt	T13	Moisture Density
435+50	46 Lt	010110	2+50	5′ Lt	T14	Moisture Density
434+00	46 Lt	010110	4+00	5′ Lt	T15	Moisture Density
428+50	46 Lt	010111	1+00	5′ Lt	T16	Moisture Density
427+00	46 Lt	010111	2+50	5′ Lt	T17	Moisture Density
425+50	46 Lt	010111	4+00	5′ Lt	T18	Moisture Density
418+50	46 Lt	010112	1+00	5′ Lt	T19	Moisture Density
417+00	46 Lt	010112	2+50	5′ Lt	T20	Moisture Density
415+50	46 Lt	010112	4+00	5′ Lt	T21	Moisture Density
383+00	46 Lt	010106	1+00	5′ Lt	T22	Moisture Density
381+50	46 Lt	010106	2+50	5′ Lt	T23	Moisture Density
380+00	46 Lt	010106	4+00	5′ Lt	T24	Moisture Density
373+00	46 Lt	010104	1+00	5′ Lt	T25	Moisture Density
371+50	46 Lt	010104	2+50	5′ Lt	T26	Moisture Density
370+00	46 Lt	010104	4+00	5′ Lt	T27	Moisture Density
366+00	46 Lt	0101S2	1+00	5′ Lt	T28	Moisture Density
364+50	46 Lt	0101S2	2+50	5′ Lt	T29	Moisture Density
363+00	46 Lt	0101S2	4+00	5′ Lt	T30	Moisture Density
359+50	46 Lt	010103	1+00	5′ Lt	T31	Moisture Density
358+00	46 Lt	010103	2+50	5′ Lt	T32	Moisture Density
356+50	46 Lt	010103	4+00	5′ Lt	T33	Moisture Density
352+00	46 Lt	010105	1+00	5′ Lt	T34	Moisture Density

SUBGRADE MATERIALS FIELD SAMPLING AND TESTING
(Continued)

Approx. ℄ Sta.	Offset (Ft.)	Section ID Nº.	Section Sta.	O/S From Lane Edge	Sample ID Nº.	Sample Type
350+50	46 Lt	010105	2+00	5′ Lt	T35	Moisture Density
349+00	46 Lt	010105	4+00	5′ Lt	T36	Moisture Density
343+50	46 Lt	010101	1+00	5′ Lt	T37	Moisture Density
342+00	46 Lt	010101	2+50	5′ Lt	T38	Moisture Density
340+50	46 Lt	010101	4+00	5′ Lt	T39	Moisture Density
289+50	46 Lt	010102	1+00	5′ Lt	T40	Moisture Density
288+00	46 Lt	010102	2+50	5′ Lt	T41	Moisture Density
286+50	46 Lt	010102	4+00	5′ Lt	T42	Moisture Density

DENSE GRADED AGGREGATE BASE
FIELD MATERIALS SAMPLING AND TESTING

Approx. ¢ Sta.	Offset (Ft.)	Section ID Nº.	Section Sta.	O/S From Lane Edge	Sample ID Nº.	Sample Type
469+00	45 Lt	010107	1+00	6′ Lt	T43	Density (IS)
467+50	45 Lt	010107	2+50	6′ Lt	T44	Density (IS)
466+00	45 Lt	010107	4+00	6′ Lt	T45	Density (IS)
461+75	45 Lt	010108	1+00	6′ Lt	T46	Density (IS
460+25	45 Lt	010108	2+50	6′ Lt	T47	Density (IS)
458+75	45 Lt	010108	4+00	6′ Lt	T48	Density (IS)
455+50	45 Lt	010109	1+00	6′ Lt	T49	Density (IS)
454+00	45 Lt	010109	2+50	6′ Lt	T50	Density (IS)
452+50	45 Lt	010109	4+00	6′ Lt	T51	Density (IS)
448+00	45 Lt	0101S3	1+00	6′ Lt	T52	Density (IS)
446+50	45 Lt	0101S3	2+50	6′ Lt	T53	Density (IS)
445+00	45 Lt	0101S3	4+00	6′ Lt	T54	Density (IS)
383+00	45 Lt	010106	1+00	6′ Lt	T55	Density (IS)
381+50	45 Lt	010106	2+50	6′ Lt	T56	Density (IS)
380+00	45 Lt	010106	4+00	6′ Lt	T57	Density (IS)
352+00	45 Lt	010105	1+00	6′ Lt	T58	Density (IS)
350+50	45 Lt	010105	2+50	6′ Lt	T59	Density (IS)
349+00	45 Lt	010105	4+00	6′ Lt	T60	Density (IS)
343+50	45 Lt	010101	1+00	6′ Lt	T61	Density (IS)
342+00	45 Lt	010101	2+50	6′ Lt	T62	Density (IS)
340+50	45 Lt	010101	4+00	6′ Lt	T63	Density (IS)
289+50	45 Lt	010102	1+00	6′ Lt	T64	Density (IS)
Density (IS) = In Situ Density (Nuclear Gauge)						

DENSE GRADED AGGREGATE BASE
FIELD MATERIALS SAMPLING AND TESTING
(Continued)

Approx. ℄ Sta.	Offset (Ft.)	Section ID Nº.	Section Sta.	O/S From Lane Edge	Sample ID Nº.	Sample Type
288+00	45 Lt	010102	2+50	6′ Lt	T65	Density (IS)
286+50	45 Lt	010102	4+00	6′ Lt	T66	Density (IS)
451+00	45 Lt	010109	5+50	6′ Lt	B8	Bulk
378+50	45 Lt	010106	5+50	6′ Lt	B9	Bulk
291+00	45 Lt	010102	-50	6′ Lt	B10	Bulk
Density (IS) = In Situ Density (Nuclear Gauge)						

ASPHALT TREATED BASE
FIELD MATERIALS SAMPLING AND TESTING

Approx. ¢ Sta.	Offset (Ft.)	Section ID Nº.	Section Sta.	O/S From Lane Edge	Sample ID Nº.	Sample Type
448+00	45 Lt	0101S3	1+00	6′ Lt	T67	Density (IS)
446+50	45 Lt	0101S3	2+50	6′ Lt	T68	Density (IS)
445+00	45 Lt	0101S3	4+00	6′ Lt	T69	Density (IS)
437+00	45 Lt	010110	1+00	6′ Lt	T70	Density (IS)
435+50	45 Lt	010110	2+50	6′ Lt	T71	Density (IS)
434+00	45 Lt	010110	4+00	6′ Lt	T72	Density (IS)
428+50	45 Lt	010111	1+00	6′ Lt	T73	Density (IS)
427+00	45 Lt	010111	2+50	6′ Lt	T74	Density (IS)
425+50	45 Lt	010111	4+00	6′ Lt	T75	Density (IS)
418+50	45 Lt	010112	1+00	6′ Lt	T76	Density (IS)
417+00	45 Lt	010112	2+50	6′ Lt	T77	Density (IS)
415+50	45 Lt	010112	4+00	6′ Lt	T78	Density (IS)
383+00	45 Lt	010106	1+00	6′ Lt	T79	Density (IS)
381+50	45 Lt	010106	2+50	6′ Lt	T80	Density (IS)
380+00	45 Lt	010106	4+00	6′ Lt	T81	Density (IS)
373+00	45 Lt	010104	1+00	6′ Lt	T82	Density (IS)
371+50	45 Lt	010104	2+50	6′ Lt	T83	Density (IS)
370+00	45 Lt	010104	4+00	6′ Lt	T84	Density (IS)
366+00	45 Lt	0101S2	1+00	6′ Lt	T85	Density (IS)
364+50	45 Lt	0101S2	2+50	6′ Lt	T86	Density (IS)
363+00	45 Lt	0101S2	4+00	6′ Lt	T87	Density (IS)
359+50	45 Lt	010103	1+00	6′ Lt	T88	Density (IS)
358+00	45 Lt	010103	2+50	6′ Lt	T89	Density (IS)
356+50	45 Lt	010103	4+00	6′ Lt	T90	Density (IS)
352+00	45 Lt	010105	1+00	6′ Lt	T91	Density (IS)
Density (IS) = In Situ Density (Nuclear Gauge)						

ASPHALT TREATED BASE
FIELD MATERIALS SAMPLING AND TESTING
(Continued)

Approx. ℄ Sta.	Offset (Ft.)	Section ID Nº.	Section Sta.	O/S From Lane Edge	Sample ID Nº.	Sample Type
350+50	45 Lt	010105	2+50	6′ Lt	T92	Density (IS)
349+00	45 Lt	010105	4+00	6′ Lt	T93	Density (IS)
449+50	45 Lt	0101S3	-50	6′ Lt	T136	Density (IS)
443+50	45 Lt	0101S3	+50	6′ Lt	T137	Density (IS)
438+50	45 Lt	010110	-50	6′ Lt	T138	Density (IS)
432+50	45 Lt	010110	+50	6′ Lt	T139	Density (IS)
430+00	45 Lt	010111	-50	6′ Lt	T140	Density (IS)
424+00	45 Lt	010111	+50	6′ Lt	T141	Density (IS)
420+00	45 Lt	010112	-50	6′ Lt	T142	Density (IS)
414+00	45 Lt	010112	+50	6′ Lt	T143	Density (IS)
384+50	45 Lt	010106	-50	6′ Lt	T144	Density (IS)
378+50	45 Lt	010106	+50	6′ Lt	T145	Density (IS)
374+50	45 Lt	010104	-50	6′ Lt	T146	Density (IS)
368+50	45 Lt	010104	+50	6′ Lt	T147	Density (IS)
367+50	45 Lt	0101S2	-50	6′ Lt	T148	Density (IS)
361+50	45 Lt	0101S2	+50	6′ Lt	T149	Density (IS)
361+00	45 Lt	010103	-50	6′ Lt	T150	Density (IS)
355+00	45 Lt	010103	+50	6′ Lt	T151	Density (IS)
353+50	45 Lt	010105	-50	6′ Lt	T152	Density (IS)
347+50	45 Lt	010105	+50	6′ Lt	T153	Density (IS)
Plant	---	---	---	---	BT20	Bulk
Plant	---	---	---	---	BT21	Bulk
Plant	---	---	---	---	BT22	Bulk

Density (IS) = In Situ Density (Nuclear Gauge)

AC SURFACE FIELD MATERIALS SAMPLING AND TESTING

Approx. ¢ Sta.	Section ID Nº.	Section Sta.	O/S From Lane Edge	Sample ID Nº.	Sample Type
470+25	010107	-25	3.0′,4.5′,6.0′,7.5′	C1,C2,C3,C4	4″ Cores
464+75	010107	5+25	3.0′,6.0′	C5,C6	4″ Cores
463+00	010108	-25	3.0′,6.0′	C7,C8	4″ Cores
457+50	010108	5+25	3.0′,6.0′	C9,C10	4″ Cores
456+75	010109	-25	3.0′,4.5,′6.0′,7.5′	C11,C12,C13,C14	4″ Cores
451+25	010109	5+25	3.0′,6.0′	C15,C16	4″ Cores
449+25	0101S3	-25	3.0′,6.0′	C17,C18	4″ Cores
443+75	0101S3	5+25	3.0′,6.0′	C19,C20	4″ Cores
438+25	010110	-25	3.0′,6.0′	C21,C22	4″ Cores
432+75	010110	5+25	3.0′,6.0′	C23,C24	4″ Cores
429+75	010111	-25	3.0′,6.0′	C25,C26	4″ Cores
424+25	010111	5+25	3.0′,6.0′	C27,C28	4″ Cores
419+75	010112	-25	3.0′,4.5′,6.0′,7.5′	C29,C30,C31,C32	4″ Cores
414+25	010112	5+25	3.0′,6.0′	C33,C34	4″ Cores
384+25	010106	-25	3.0′,4.5′,6.0′,7.5′	C35,C36,C37,C38	4″ Cores
378+75	010106	5+25	3.0′,6.0′	C39,C40	4″ Cores
374+25	010104	-25	3.0′,6.0′	C41,C42	4″ Cores
368+75	010104	5+25	3.0′,6.0′	C43,C44	4″ Cores
367+25	0101S2	-25	3.0′,6.0′	C45,C46	4″ Cores
361+75	0101S2	5+25	3.0′,6.0′	C47,C48	4″ Cores
360+75	010103	-25	3.0′,4.5′,6.0′,7.5′	C49,C50,C51,C52	4″ Cores
355+25	010103	5+25	3.0′,6.0′	C53,C54	4″ Cores
353+25	010105	-25	3.0′,6.0′	C55,C56	4″ Cores
347+75	010105	5+25	3.0′,4.5′,6.0′,7.5′	C57,C58,C59,C60	4″ Cores
344+75	010101	-25	3.0′,6.0′	C61,C62	4″ Cores

AC SURFACE FIELD MATERIALS SAMPLING AND TESTING (Continued)

Approx. ℄ Sta.	Section ID Nº.	Section Sta.	O/S From Lane Edge	Sample ID Nº.	Sample Type
339+25	010101	5+25	3.0′,6.0′	C63,C64	4″ Cores
290+75	010102	-25	3.0′,6.0′	C65,C66	4″ Cores
285+25	010102	5+25	3.0′,6.0′	C67,C68	4″ Cores

Approx. ℄ Sta.	Offset (Ft.)	Section ID Nº.	Section Sta.	O/S From Lane Edge	Sample ID Nº.	Sample Type
469+00	45 Lt	010107	1+00	6′ Lt	T94	Density (IS)
467+50	45 Lt	010107	2+50	6′ Lt	T95	Density (IS)
466+00	45 Lt	010107	4+00	6′ Lt	T96	Density (IS)
461+75	45 Lt	010108	1+00	6′ Lt	T97	Density (IS)
460+25	45 Lt	010108	2+50	6′ Lt	T98	Density (IS)
458+75	45 Lt	010108	4+00	6′ Lt	T99	Density (IS)
455+50	45 Lt	010109	1+00	6′ Lt	T100	Density (IS)
454+00	45 Lt	010109	2+50	6′ Lt	T101	Density (IS)
452+50	45 Lt	010109	4+00	6′ Lt	T102	Density (IS)
448+00	45 Lt	0101S3	1+00	6′ Lt	T103	Density (IS)
446+50	45 Lt	0101S3	2+50	6′ Lt	T104	Density (IS)
445+00	45 Lt	0101S3	4+00	6′ Lt	T105	Density (IS)
437+00	45 Lt	010110	1+00	6′ Lt	T106	Density (IS)
435+50	45 Lt	010110	2+50	6′ Lt	T107	Density (IS)
434+00	45 Lt	010110	4+00	6′ Lt	T108	Density (IS)
428+50	45 Lt	010111	1+00	6′ Lt	T109	Density (IS)
427+00	45 Lt	010111	2+50	6′ Lt	T110	Density (IS)

AC SURFACE FIELD MATERIALS SAMPLING AND TESTING (Continued)

Approx. ℄ Sta.	Offset (Ft.)	Section ID Nº.	Section Sta.	O/S From Lane Edge	Sample ID Nº.	Sample Type
425+50	45 Lt	010111	4+00	6′ Lt	T111	Density (IS)
418+50	45 Lt	010112	1+00	6′ Lt	T112	Density (IS)
417+00	45 Lt	010112	2+50	6′ Lt	T113	Density (IS)
415+50	45 Lt	010112	4+00	6′ Lt	T114	Density (IS)
383+00	45 Lt	010106	1+00	6′ Lt	T115	Density (IS)
381+50	45 Lt	010106	2+50	6′ Lt	T116	Density (IS)
380+00	45 Lt	010106	4+00	6′ Lt	T117	Density (IS)
373+00	45 Lt	010104	1+00	6′ Lt	T118	Density (IS)
371+50	45 Lt	010104	2+50	6′ Lt	T119	Density (IS)
370+00	45 Lt	010104	4+00	6′ Lt	T120	Density (IS)
366+00	45 Lt	0101S2	1+00	6′ Lt	T121	Density (IS)
364+50	45 Lt	0101S2	2+50	6′ Lt	T122	Density (IS)
363+00	45 Lt	0101S2	4+00	6′ Lt	T123	Density (IS)
359+50	45 Lt	010103	1+00	6′ Lt	T124	Density (IS)
358+00	45 Lt	010103	2+50	6′ Lt	T125	Density (IS)
356+50	45 Lt	010103	4+00	6′ Lt	T126	Density (IS)
352+00	45 Lt	010105	1+00	6′ Lt	T127	Density (IS)
350+50	45 Lt	010105	2+50	6′ Lt	T128	Density (IS)
349+00	45 Lt	010105	4+00	6′ Lt	T129	Density (IS)
343+50	45 Lt	010101	1+00	6′ Lt	T130	Density (IS)
342+00	45 Lt	010101	2+50	6′ Lt	T131	Density (IS)
340+50	45 Lt	010101	4+00	6′ Lt	T132	Density (IS)
289+50	45 Lt	010102	1+00	6′ Lt	T133	Density (IS)
288+00	45 Lt	010102	2+50	6′ Lt	T134	Density (IS)

AC SURFACE FIELD MATERIALS SAMPLING AND TESTING (Continued)

Approx. ¢ Sta.	Offset (Ft.)	Section ID Nº.	Section Sta.	O/S From Lane Edge	Sample ID Nº.	Sample Type
286+50	45 Lt	010102	4+00	6′ Lt	T135	Density (IS)
470+50	45 Lt	010107	-50	6′ Lt	T156	Density (IS)
464+50	45 Lt	010107	+50	6′ Lt	T157	Density (IS)
463+25	45 Lt	010108	-50	6′ Lt	T158	Density (IS)
455+25	45 Lt	010108	+50	6′ Lt	T159	Density (IS)
457+00	45 Lt	010109	-50	6′ Lt	T160	Density (IS)
451+00	45 Lt	010109	+50	6′ Lt	T161	Density (IS)
449+00	45 Lt	0101S3	-50	6′ Lt	T162	Density (IS)
443+50	45 Lt	0101S3	+50	6′ Lt	T163	Density (IS)
438+50	45 Lt	010110	-50	6′ Lt	T164	Density (IS)
432+50	45 Lt	010110	+50	6′ Lt	T165	Density (IS)
430+00	45 Lt	010111	-50	6′ Lt	T166	Density (IS)
424+00	45 Lt	010111	+50	6′ Lt	T167	Density (IS)
420+00	45 Lt	010112	-50	6′ Lt	T168	Density (IS)
414+00	45 Lt	010112	+50	6′ Lt	T169	Density (IS)
384+50	45 Lt	010106	-50	6′ Lt	T170	Density (IS)
378+50	45 Lt	010106	+50	6′ Lt	T171	Density (IS)
374+50	45 Lt	010104	-50	6′ Lt	T172	Density (IS)
368+50	45 Lt	010104	+50	6′ Lt	T173	Density (IS)
367+50	45 Lt	0101S2	-50	6′ Lt	T174	Density (IS)
361+50	45 Lt	0101S2	+50	6′ Lt	T175	Density (IS)
361+00	45 Lt	010103	-50	6′ Lt	T176	Density (IS)
355+00	45 Lt	010103	+50	6′ Lt	T177	Density (IS)
353+50	45 Lt	010105	-50	6′ Lt	T178	Density (IS)

AC SURFACE FIELD MATERIALS SAMPLING AND TESTING (Continued)

Approx. ℄ Sta.	Offset (Ft.)	Section ID Nº.	Section Sta.	O/S From Lane Edge	Sample ID Nº.	Sample Type
347+50	45 Lt	010105	+50	6′ Lt	T179	Density (IS)
345+00	45 Lt	010101	-50	6′ Lt	T180	Density (IS)
339+00	45 Lt	010101	+50	6′ Lt	T181	Density (IS)
291+00	45 Lt	010102	-50	6′ Lt	T182	Density (IS)
285+00	45 Lt	010102	+50	6′ Lt	T183	Density (IS)

TABLE 11. SAMPLES TO BE USED FOR LABORATORY MATERIALS TESTING

Material Type and Properties	LTPP Designation	LTPP Protocol	Minimum No. of Tests per Layer	Sampling Location	Test Conducted by: State	FHWA
SUBGRADE						
Sieve Analysis	SS01	P51	6	B1-B7		X
Hydrometer to 0.001 mm	SS02	P42	6	B1-B7		X
Atterberg Limits	SS03	P43	6	B1-B7		X
Classification	SS04	P52	6	B1-B7		X
(Visual-manual only on thin-wall tubes)			18	A1-A18	X	X
Moisture-Density Relations	SS05	P55	6	B1-B7		X
Resilient Modulus	SS07	P46	6	A2, A5, A9, A11, A14, A17		X
(If thin-wall tube is not available)			6	B1-B7		X
Unit Weight (If thin-wall tube is not available, test is not conducted)	SS08	P56	6	A1, A4, A8, A10, A13, A16	X	
Natural Moisture Content	SS09	P49	6	B1-B7		X
Unconfined Comp. Strength (If thin-wall tube is not available, test is not conducted)	SS10	P54	6	A1, A4, A8, A10, A13, A16	X	
Permeability	SS11	P57	3	A3, A7, A18	X	
Permeability	UG09	P48	6	B1-B7	X	
UNBOUND GRANDULAR BASE						
Particle Size Analysis	UG01	P41	3	B8-B10		X
Sieve Analysis (Washed)	UG02	P41	3	B8-B10		X
Atterberg Limits	UG04	P43	3	B8-B10		X
Moisture-Density Relations	UG05	P44	3	B8-B10		X
Resilient Modulus	UG07	P46	3	B8-B10		X
Classification	UG08	P47	3	B8-B10		X
Permeability	UG09	P48	3	B8-B10	X	
Natural Moisture Content	UG10	P49	3	B8-B10		X
PERMEABLE ASPHALT TREATED BASE						
Asphalt Content (Extraction)	AC04	P04	3	B11-B13 From Paver	X	
Extracted Aggregate:						
Gradation of Aggregate	AG04	P14	3	B11-B13 From Paver	X	

NOTE: Asphalt cement samples (from tanker or plant) will be required if different grades are used for the remaining bound layers.

TABLE 11. SAMPLES TO BE USED FOR LABORATORY MATERIALS TESTING (Continued)

Material Type and Properties	LTPP Designation	LTPP Protocol	Minimum No. of Tests per Layer	Sampling Location	Test Conducted by: State	FHWA
ASPHALT TREATED BASE						
Core Examination/Thickness	AC01	P01	34	C17-C58	X	X
Bulk Specific Gravity	AC02	P02	34	C17-58	X	X
Maximum Specific Gravity	AC03	P03	3	B20-B22 From Paver	X	
Asphalt Content (Extraction)	AC04	P04	3	B20-B22 From Paver	X	
Moisture Susceptibility	AC05	P05	3	B20-B22 From Paver	X	
Resilient Modulus	AC07	P07	9	C29-C31, C35-C37, C55-C57		X
Tensile Strength	AC07	P07	12	C29-C32, C35-C38, C55-C58		X
Extracted Aggregate:						
Specific Gravity:						
Coarse Aggregate	AG01	P11	3	B20-B22 From Paver	X	
Fine Aggregate	AG02	P12	3	B20-B22 From Paver	X	
Gradation of Aggregate	AG04	P14	3	B20-B22 From Paver	X	
NAA Test for Fine Aggregate	AG05	P14A	3	B20-B22 From Paver	X	
Particle Shape						
Asphalt Cement:						
Abson Recovery	AE01	P21	3	B20-B27 From Paver	X	
Penetration at 25°C, 46°C (77°F, 115°F)	AE02	P22	3	B20-B27 From Paver	X	
Specific Gravity 16°C (60°F)	AE03	P23	3	B20-B27 From Paver	X	
Viscosity at 25°C (77°F)	AE04	P24	3	B20-B27 From Paver	X	
Viscosity at 60°C, 135°C (140°F, 275°F)	AE05	P25	3	B20-B27 From Paver	X	
Asphalt Cement: (From Tanker or Plant)						
Penetration at 25°C, 46°C (77°F, 115°F)	AE02	P22	3	B26-B28 From Tanker	X	
Specific Gravity 16°C (60°F)	AE03	P23	3	B26-B28 From Tanker	X	
Viscosity at 25°C (77°F)	AE04	P24	3	B26-B28 From Tanker	X	
Viscosity at 60°C, 135°C (140°F, 275°F)	AE05	P25	3	B26-B28 From Tanker	X	

TABLE 11. SAMPLES TO BE USED FOR LABORATORY MATERIALS TESTING (Continued)

Material Type and Properties	LTPP Designation	LTPP Protocol	Minimum No. of Tests per Layer	Sampling Location	Test Conducted by: State	FHWA
ASPHALTIC CONCRETE SURFACE AND BINDER						
Core Examination/Thickness	AC01	P01	68	C1-C68	X	X
Bulk Specific Gravity	AC02	P02	68	C1-C68	X	X
Maximum Specific Gravity	AC03	P03	3	B23-B25 From Paver	X	
Asphalt Content (Extraction)	AC04	P04	3	B23-B25 From Paver	X	
Moisture Susceptibility	AC05	P05	3	B23-B25 From Paver	X	
Creep Compliance	AC06	P06	3	C5, C23, C49		X
Resilient Modulus	AC07	P07	21	C1-C3, C17-C19, C29-C31, C35-C37, C45-C47, C59-C61, C65-C67		X
Tensile Strength	AC07	P07	28	C1-C4, C17-C20, C29-C32, C35-C38, C45-C48, C59-C62, C65-C68		X
Extracted Aggregate:						
Specific Gravity:						
Coarse Aggregate	AG01	P11	3	B23-B25 From Paver	X	
Fine Aggregate	AG02	P12	3	B23-B25 From Paver	X	
Gradation of Aggregate	AG04	P14	3	B23-B25 From Paver	X	
NAA Test for Fine Aggregate	AG05	P14A	3	B23-B25 From Paver	X	
Particle Shape						
Asphalt Cement:						
Abson Recovery	AE01	P21	3	B23-B25 From Paver	X	
Penetration at 25°C, 46°C (77°F, 115°F)	AE02	P22	3	B23-B25 From Paver	X	
Specific Gravity 16°C (60°F)	AE03	P23	3	B23-B25 From Paver	X	
Viscosity at 25°C (77°F)	AE04	P24	3	B23-B25 From Paver	X	
Viscosity at 60°C, 135°C (140°F, 275°F)	AE05	P25	3	B23-B25 From Paver	X	
Asphalt Cement (From Tanker):						
Penetration at 25°C, 46°C (77°F, 115°F)	AE02	P22	3	B26-B28 From Tanker	X	
Specific Gravity 16°C (60°F)	AE03	P23	3	B26-B28 From Tanker	X	
Viscosity at 25°C (77°F)	AE04	P24	3	B26-B28 From Tanker	X	
Viscosity at 60°C, 135°C (140°F, 275°F)	AE05	P25	3	B26-B28 From Tanker	X	

TABLE 12. TRACKING TABLE OF ASPHALTIC CONCRETE TESTING IN THE STATE LABORATORY (OR THEIR DESIGNEE)

Sample Location Number	Sample Number	Lab Test Number	Steps Involved in Laboratory Handling and Testing Sequence						
			Required Laboratory Tests Per Layer				Extra Sample	Sample Storage	Sample Disposed?
			First	Second	Third	Fourth			
C6	CA06	2	AC01/P01	AC02/P02			Yes	(a)	No
C9	CA09	2	AC01/P01	AC02/P02			Yes	(a)	No
C10	CA10	2	AC01/P01	AC02/P02			Yes	(a)	No
C13	CA13	1	AC01/P01	AC02/P02			Yes	(a)	No
C14	CA14	1	AC01/P01	AC02/P02			Yes	(a)	No
C15	CA15	2	AC01/P01	AC02/P02			Yes	(a)	No
C16	CA16	2	AC01/P01	AC02/P02			Yes	(a)	No
C21	CA21	1	AC01/P01	AC02/P02			Yes	(a)	No
C22	CA22	1	AC01/P01	AC02/P02			Yes	(a)	No
C24	CA24	1	AC01/P01	AC02/P02			Yes	(a)	No
C25	CA25	1	AC01/P01	AC02/P02			Yes	(a)	No
C26	CA26	1	AC01/P01	AC02/P02			Yes	(a)	No
C27	CA27	2	AC01/P01	AC02/P02			Yes	(a)	No
C28	CA28	2	AC01/P01	AC02/P02			Yes	(a)	No
C33	CA33	2	AC01/P01	AC02/P02			Yes	(a)	No
C34	CA34	2	AC01/P01	AC02/P02			Yes	(a)	No
C39	CA39	2	AC01/P01	AC02/P02			Yes	(a)	No
C40	CA40	2	AC01/P01	AC02/P02			Yes	(a)	No
C41	CA41	1	AC01/P01	AC02/P02			Yes	(a)	No
C42	CA42	1	AC01/P01	AC02/P02			Yes	(a)	No
C44	CA44	2	AC01/P01	AC02/P02			Yes	(a)	No
C52	CA52	1	AC01/P01	AC02/P02			Yes	(a)	No
C53	CA53	2	AC01/P01	AC02/P02			Yes	(a)	No
C54	CA54	2	AC01/P01	AC02/P02			Yes	(a)	No
C63	CA63	2	AC01/P01	AC02/P02			Yes	(a)	No
C64	CA64	2	AC01/P01	AC02/P02			Yes	(a)	No

TABLE 12. TRACKING TABLE OF ASPHALTIC CONCRETE TESTING IN THE STATE LABORATORY (OR THEIR DESIGNEE) (Continued)

Sample Location Number	Sample Number	Lab Test Number	Steps Involved in Laboratory Handling and Testing Sequence						
			Required Laboratory Tests Per Layer				Extra Sample	Sample Storage	Sample Disposed?
			First	Second	Third	Fourth			
B23	BA23	3	See Figure 10				No	(a)	Yes
B24	BA24	3	See Figure 10				No	(a)	Yes
B25	BA25	3	See Figure 10				No	(a)	Yes
B26	BC26	3	AE02/P22	AE03/P23	AE04/P24	AE05/P25	No	(a)	Yes
B27	BC27	3	AE02/P22	AE03/P23	AE04/P24	AE05/P25	No	(a)	Yes
B28	BC28	3	AE02/P22	AE03/P23	AE04/P24	AE05/P25	No	(a)	Yes

Note: All of the core specimens noted herein shall be stored for possible future use. In the future, these specimens may be used to evaluate test procedures for the SUPERPAVE program.

TABLE 13. TRACKING TABLE OF ASPHALT TREATED BASE TESTING IN THE STATE LABORATORY (OR THEIR DESIGNEE)

Sample Location Number	Sample Number	Lab Test Number	Steps Involved in Laboratory Handling and Testing Sequence						
			Required Laboratory Tests Per Layer				Extra Sample	Sample Storage	Sample Disposed?
			First	Second	Third	Fourth			
C21	CT21	1	AC01/P01	AC02/P02			Yes	(a)	No
C22	CT22	1	AC01/P01	AC02/P02			Yes	(a)	No
C24	CT24	2	AC01/P01	AC02/P02			Yes	(a)	No
C25	CT25	1	AC01/P01	AC02/P02			Yes	(a)	No
C26	CT26	1	AC01/P01	AC02/P02			Yes	(a)	No
C27	CT27	2	AC01/P01	AC02/P02			Yes	(a)	No
C28	CT28	2	AC01/P01	AC02/P02			Yes	(a)	No
C33	CT33	2	AC01/P01	AC02/P02			Yes	(a)	No
C34	CT34	2	AC01/P01	AC02/P02			Yes	(a)	No
C39	CT39	2	AC01/P01	AC02/P02			Yes	(a)	No
C40	CT40	2	AC01/P01	AC02/P02			Yes	(a)	No
C41	CT41	1	AC01/P01	AC02/P02			Yes	(a)	No
C42	CT42	1	AC01/P01	AC02/P02			Yes	(a)	No
C44	CT44	2	AC01/P01	AC02/P02			Yes	(a)	No
C52	CT52	1	AC01/P01	AC02/P02			Yes	(a)	No
C53	CT53	2	AC01/P01	AC02/P02			Yes	(a)	No
C54	CT54	2	AC01/P01	AC02/P02			Yes	(a)	No
B20	BT20	3	See Figure 10				No	(a)	Yes
B21	BT21	3	See Figure 10				No	(a)	Yes
B22	BT22	3	See Figure 10				No	(a)	Yes
B20	BC01	3	AE02/P22	AE03/P23	AE04/P24	AE05/P25	No	(a)	Yes
B21	BC02	3	AE02/P22	AE03/P23	AE04/P24	AE05/P25	No	(a)	Yes
B22	BC03	3	AE02/P22	AE03/P23	AE04/P24	AE05/P25	No	(a)	Yes

TABLE 14. TRACKING TABLE OF PERMEABLE ASPHALT TREATED BASE TESTING IN THE STATE LABORATORY (OR THEIR DESIGNEE)

Sample Location Number	Sample Number	Lab Test Number	Steps Involved in Laboratory Handling and Testing Sequence						
			Required Laboratory Tests Per Layer				Extra Sample	Sample Storage	Sample Disposed?
			First	Second	Third	Fourth			
B11	BT01	3	AC04/P04	AG04/P14			No	(a)	Yes
B12	BT02	3	AC04/P04	AG04/P14			No	(a)	Yes
B13	BT03	3	AC04/P04	AG04/P14			No	(a)	Yes

TABLE 15. TRACKING TABLE OF DENSE GRADED AGGREGATE BASE TESTING IN THE STATE LABORATORY (OR THEIR DESIGNEE)

Sample Location Number	Sample Number	Lab Test Number	Steps Involved in Laboratory Handling and Testing Sequence						
			Required Laboratory Tests Per Layer				Extra Sample	Sample Storage	Sample Disposed?
			First	Second	Third	Fourth			
B8	BG08	2	UG09/P48				No	(b)	Yes
B9	BG09	2	UG09/P48				No	(b)	Yes
B10	BG10	1	UG09/P48				No	(b)	Yes

TABLE 16. TRACKING TABLE OF SUBGRADE TESTING IN THE STATE LABORATORY (OR THEIR DESIGNEE)

Sample Location Number	Sample Number	Lab Test Number	Steps Involved in Laboratory Handling and Testing Sequence						
			Required Laboratory Tests Per Layer				Extra Sample	Sample Storage	Sample Disposed?
			First	Second	Third	Fourth			
B1	BS01	2	UG09/P48				No	(b)	Yes
B2	BS02	2	UG09/P48				No	(b)	Yes
B3	BS03	2	UG09/P48				No	(b)	Yes
B4	BS04	2	UG09/P48				No	(b)	Yes
B5	BS05	2	UG09/P48				No	(b)	Yes
B6	BS06	2	UG09/P48				No	(b)	Yes
B7	BS07	2	UG09/P48				No	(b)	Yes

TABLE 17. TRACKING TABLE OF ASPHALTIC CONCRETE TESTING IN THE FHWA-LTPP TESTING CONTRACTOR LABORATORY

Sample Location Number	Sample Number	Lab Test Number	Steps Involved in Laboratory Handling and Testing Sequence						
			Required Laboratory Tests Per Layer				Extra Sample	Sample Storage	Sample Disposed?
			First	Second	Third	Fourth			
C1	CA01	1	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C2	CA02	1	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C3	CA03	1	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C4	CA04	1	AC01/P01	AC02/P02		AC07/P07 (ITS)	No	(a)	Yes
C5	CA05	1	AC01/P01	AC02/P02	AC06/P06		No	(a)	Yes
C7	CA07	1	AC01/P01	AC02/P02			No	(a)	Yes
C8	CA08	1	AC01/P01	AC02/P02			No	(a)	Yes
C11	CA11	1	AC01/P01	AC02/P02			No	(a)	Yes
C12	CA12	1	AC01/P01	AC02/P02			No	(a)	Yes
C17	CA17	1	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C18	CA18	1	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C19	CA19	1	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C20	CA20	2	AC01/P01	AC02/P02		AC07/P07 (ITS)	No	(a)	Yes
C23	CA23	2	AC01/P01	AC02/P02	AC06/P06		No	(a)	Yes
C29	CA29	1	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C30	CA30	1	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C31	CA31	1	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C32	CA32	1	AC01/P01	AC02/P02		AC07/P07 (ITS)	No	(a)	Yes
C35	CA35	1	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C36	CA36	1	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C37	CA37	1	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C38	CA38	1	AC01/P01	AC02/P02		AC07/P07 (ITS)	No	(a)	Yes
C43	CA43	2	AC01/P01	AC02/P02			No	(a)	Yes
C45	CA45	2	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C46	CA46	1	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C47	CA47	2	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes

TABLE 17. TRACKING TABLE OF ASPHALTIC CONCRETE TESTING IN THE FHWA-LTPP TESTING CONTRACTOR LABORATORY (Continued)

Sample Location Number	Sample Number	Lab Test Number	Steps Involved in Laboratory Handling and Testing Sequence						
			Required Laboratory Tests Per Layer				Extra Sample	Sample Storage	Sample Disposed?
			First	Second	Third	Fourth			
C48	CA48	2	AC01/P01	AC02/P02		AC07/P07 (ITS)	No	(a)	Yes
C49	CA49	1	AC01/P01	AC02/P02	AC06/P06		No	(a)	Yes
C50	CA50	1	AC01/P01	AC02/P02			No	(a)	Yes
C51	CA51	1	AC01/P01	AC02/P02			No	(a)	Yes
C55	CA55	1	AC01/P01	AC02/P02			No	(a)	Yes
C56	CA56	1	AC01/P01	AC02/P02			No	(a)	Yes
C57	CA57	1	AC01/P01	AC02/P02			No	(a)	Yes
C58	CA58	1	AC01/P01	AC02/P02			No	(a)	Yes
C59	CA59	1	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C60	CA60	1	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C61	CA61	1	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C62	CA62	1	AC01/P01	AC02/P02		AC07/P07 (ITS)	No	(a)	Yes
C65	CA65	1	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C66	CA66	1	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C67	CA67	2	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C68	CA68	2	AC01/P01	AC02/P02		AC07/P07 (ITS)	No	(a)	Yes

TABLE 18. TRACKING TABLE OF ASPHALT TREATED BASE TESTING IN THE FHWA-LTPP TESTING CONTRACTOR LABORATORY

Sample Location Number	Sample Number	Lab Test Number	Steps Involved in Laboratory Handling and Testing Sequence						
			Required Laboratory Tests Per Layer				Extra Sample	Sample Storage	Sample Disposed?
			First	Second	Third	Fourth			
C17	CT17	1	AC01/P01	AC02/P02			No	(a)	Yes
C18	CT18	1	AC01/P01	AC02/P02			No	(a)	Yes
C19	CT19	1	AC01/P01	AC02/P02			No	(a)	Yes
C20	CT20	1	AC01/P01	AC02/P02			No	(a)	Yes
C23	CT23	2	AC01/P01	AC02/P02			No	(a)	Yes
C29	CT29	1	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C30	CT30	1	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C31	CT31	1	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C32	CT32	1	AC01/P01	AC02/P02		AC07/P07 (ITS)	No	(a)	Yes
C35	CT35	2	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C36	CT36	1	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C37	CT37	1	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C38	CT38	1	AC01/P01	AC02/P02		AC07/P07 (ITS)	No	(a)	Yes
C43	CT43	2	AC01/P01	AC02/P02			No	(a)	Yes
C45	CT45	1	AC01/P01	AC02/P02			No	(a)	Yes
C46	CT46	1	AC01/P01	AC02/P02			No	(a)	Yes
C47	CT47	2	AC01/P01	AC02/P02			No	(a)	Yes
C48	CT48	2	AC01/P01	AC02/P02			No	(a)	Yes
C49	CT49	2	AC01/P01	AC02/P02			No	(a)	Yes
C50	CT50	2	AC01/P01	AC02/P02			No	(a)	Yes
C51	CT51	2	AC01/P01	AC02/P02			No	(a)	Yes
C55	CT55	1	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C56	CT56	1	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C57	CT57	1	AC01/P01	AC02/P02	AC07/P07	AC07/P07 (ITS)	No	(a)	Yes
C58	CT58	1	AC01/P01	AC02/P02		AC07/P07 (ITS)	No	(a)	Yes

TABLE 19. TRACKING TABLE OF DENSE GRADED AGGREGATE BASE TESTING IN THE FHWA-LTPP TESTING CONTRACTOR LABORATORY

Sample Location Number	Sample No.	Lab Test No.	Steps Involved in Laboratory Handling and Testing Sequence								
			Required Laboratory Tests Per Layer						Extra Sample	Sample Storage	Sample Disposed ?
			First	Second	Third	Fourth	Fifth	Sixth			
B8	BG08	2	UG01/P41	UG02/P41	UG04/P43	UG08/P47	UG05/P44	UG07/P46	No	(b)	Yes
B9	BG09	1	UG01/P41	UG02/P41	UG04/P43	UG08/P47	UG05/P44	UG07/P46	No	(b)	Yes
B10	BG10	2	UG01/P41	UG02/P41	UG04/P43	UG08/P47	UG05/P44	UG07/P46	No	(b)	Yes
B8	MG08	2	UG10/P49						No	(b)	Yes
B9	MG09	1	UG10/P49						No	(b)	Yes
B10	MG10	2	UG10/P49						No	(b)	Yes

TABLE 20. TRACKING TABLE OF SUBGRADE TESTING IN THE FHWA-LTPP TESTING CONTRACTOR LABORATORY

Sample Location No.	Sample No.	Lab Test No.	Steps Involved in Laboratory Handling and Testing Sequence								
			Required Laboratory Tests Per Layer						Extra Sample	Sample Storage	Sample Disposed ?
			First	Second	Third	Fourth	Fifth	Sixth			
B1	BS01	2	SS01/P51	SS02/P42	SS03/P43	SS04/P52	SS05/P55	SS07/P46	No	(b)	Yes
B2	BS02	2	SS01/P51	SS02/P42	SS03/P43	SS04/P52	SS05/P55	SS07/P46	No	(b)	Yes
B3	BS03	2	SS01/P51	SS02/P42	SS03/P43	SS04/P52	SS05/P55	SS07/P46	No	(b)	Yes
B4	BS04	2	SS01/P51	SS02/P42	SS03/P43	SS04/P52	SS05/P55	SS07/P46	No	(b)	Yes
B5	BS05	1	SS01/P51	SS02/P42	SS03/P43	SS04/P52	SS05/P55	SS07/P46	No	(b)	Yes
B6	BS06	2	SS01/P51	SS02/P42	SS03/P43	SS04/P52	SS05/P55	SS07/P46	No	(b)	Yes
B7	BS07	2	SS01/P51	SS02/P42	SS03/P43	SS04/P52	SS05/P55	SS07/P46	No	(b)	Yes
B1	MS01	2	SS09/P49						No	(b)	Yes
B2	MS02	2	SS09/P49						No	(b)	Yes
B3	MS03	2	SS09/P49						No	(b)	Yes
B4	MS04	2	SS09/P49						No	(b)	Yes
B5	MS05	1	SS09/P49						No	(b)	Yes
B6	MS06	2	SS09/P49						No	(b)	Yes
B7	MS07	2	SS09/P49						No	(b)	Yes

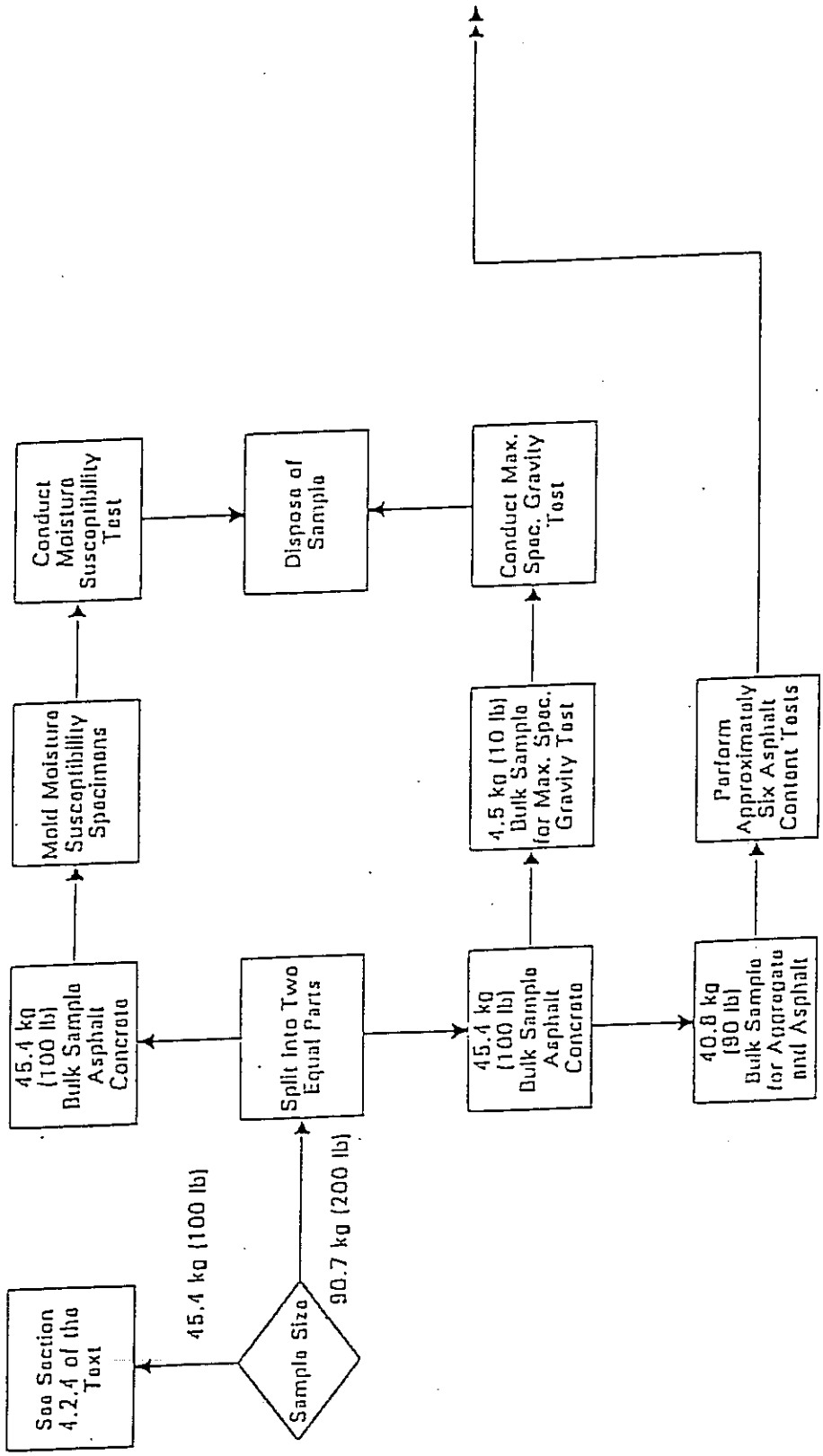


FIGURE 10. . FLOWCHART FOR ASPHALT CONCRETE BULK SAMPLES

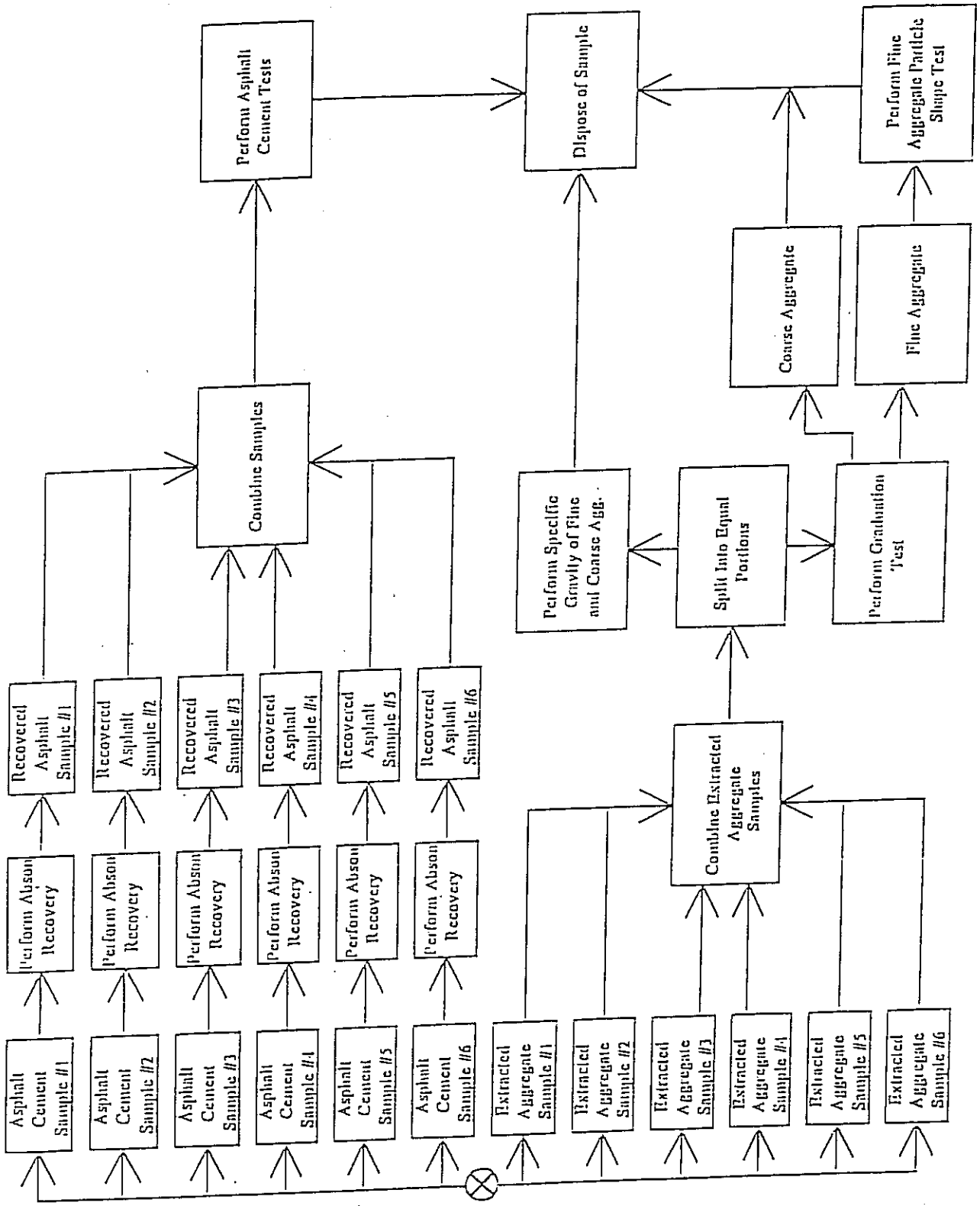


FIGURE 10. FLOWCHART FOR ASPHALT CONCRETE BULK SAMPLES (Continued)

These tables provide the laboratories with the following information and directions:

- tracking of samples as they are taken from the field and testing in the laboratory,
- laboratory test sequences for each pavement material type,
- dedicated sample(s) for each test,
- designation of extra samples for future use,
- instructions for sample storage, and
- special instructions and other remarks.

As mentioned previously, these tables are based on the idealized sampling plan presented in Section 3 and Appendix A of this document. Using these tracking tables, each laboratory shall be able to plan and track each sample through the laboratory materials testing program for the SPS-1 experiment in a step-by-step manner.

The following is a description of the column headings used for the tracking table:

Sample Location Number - As described previously in Section 3 and as shown on sample tags and labels.

Sample Number - As described previously in Section 3 and as shown on sample tags and labels.

Lab Test Number - Shall be assigned as per the following:

a. Beginning of the Section (Station 0-): Samples of each layer that are retrieved from areas in the approach end of the test section (stations preceding 0+00) shall be assigned Laboratory Test Number '1'.

b. End of the Section (Stations 5+): Samples of each layer that are retrieved from the areas in the leave end of the test section (stations 5+00) shall be assigned Laboratory Test Number '2'.

c. Middle of the Section (Stations 0+00 to 5+00): Samples of each layer that are retrieved from areas in the middle of the test section (from the paver) shall be assigned Laboratory Test Number '3'.

Required Laboratory Test Per Layer - Order in which testing shall proceed.

Extra Sample - Is the sample to be saved as a backup for other tests? A "yes" in this column implies that this is a dedicated extra sample saved for future use. A "no" indicates that a sample can be discarded after use.

c. Thin-walled tube samples of the subgrade that should be stored in a fully supported condition and at temperatures between 5° C (40° F) and 21° C (70° F) in an environmentally protected storeroom. They shall be stored on their ends and shall always be stored in a vertical position with respect to the longitudinal axis of the tube in the same orientation as that retrieved from the field.

Sample Disposal? - Indicates whether or not a sample can be disposed of after testing. Generally all samples, or portions of samples that are not tested, are saved until further notice.