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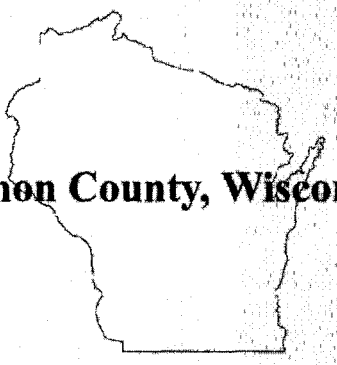
W: SPS-2

# Sampling and Testing Plan

## SPS-2 Experimental Project
## STH 29 Westbound and Eastbound



**Marathon County, Wisconsin**

Summer 1997

**Prepared by:**
**SHRP North Central Region**

LTPP

DEPARTMENT OF TRANSPORTATION
UNITED STATES OF AMERICA

**Submitted by**

ERES CONSULTANTS, INC.

# SAMPLING AND TESTING PLAN
# SPS-2 EXPERIMENTAL PROJECT
# STH 29
# MARATHON COUNTY, WISCONSIN

Strategic Highway Research Program
Long-Term Pavement Performance
Specific Pavement Studies

Prepared by
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# 1.0 INTRODUCTION

The SHRP experimental project SPS-2, "Strategic Study of Structural Factors for Rigid Pavements," investigates the effect of selected structural factors on the long-term performance of rigid pavements. In this experiment, a total of 12 test sections with varying layer thicknesses, portland cement concrete strengths, base types, and lane widths are constructed. Field tests are conducted and samples obtained from the outer (right) lane of the test sections at different stages of construction. The purpose of the sampling and testing activities is to document the conditions of the as-built pavement layers.

An SPS-2 experiment is planned for construction on westbound and eastbound STH 29 in Marathon County, Wisconsin. The Marathon County SPS-2 site incorporates 7 Wisconsin DOT test sections in addition to the 12 SHRP test sections. Several of the test sections are reconstruction of existing pavement, and other test sections are new construction.

This document presents the type, number, and locations for the sampling and testing activities at different stages of construction on all test sections. In addition, it contains details of the laboratory tests to be conducted on the samples. Further details of the SPS-2 experiment, materials sampling procedures, and laboratory testing procedures are given in references 1 through 4.

The laboratory tests will be conducted by the Wisconsin DOT laboratory or their designee and the FHWA-LTPP Laboratory Materials Testing Contractor. In this document, the 12 sections constructed according to SHRP guidelines will be referred to as SHRP sections.

This is a working document. As situations are encountered in the field during construction, it may be necessary to augment parts of this sampling plan. For instance, sampling locations may be moved slightly in either the transverse or longitudinal direction. However, it is essential that any changes made to this plan, even slight ones, be documented carefully for future reference.

# 2.0 LAYOUT OF TEST SECTIONS

The layout of the test sections included in the SPS-2 experimental project is shown in figures 1 and 2. Figure 1 is the layout of the westbound test sections, and figure 2 is the layout of the eastbound test sections. These figures show the monitoring portion of each test section. Tables 1 and 2 provide the layer coding and numbering schemes for the SPS-1 experiment. Table 3 gives the section limits for all test sections. Each test

section includes a monitoring section of 500 ft, and 50 ft at each end of the monitoring section to be used for materials sampling. The design features of each test section, which include the layer thicknesses, base types, and PCC flexural strengths, are shown in table 4.

# 3.0 MATERIALS SAMPLING AND TESTING

Materials sampling and field testing are required at different stages of construction. These activities shall be conducted according to the standards specified or referenced in this document. The standards may be specific to the SHRP-LTPP program or standard AASHTO/ASTM methods. LTPP sampling and field testing procedures have been developed specifically for the SHRP program and are described in reference 2. In addition, protocols have been developed by SHRP for conducting laboratory tests. These protocols are documented in appendix E.2 of the *SHRP-LTPP Interim Guide for Laboratory Material Handling and Testing* (reference 1).

In reconstructed sections, sampling and field testing shall commence from the prepared surface of the existing base or subbase. In newly constructed sections, sampling and field testing shall begin from the subgrade or embankment (fill) layer, depending on the thickness of the fill. A summary of the samples to be obtained and field tests to be performed on all layers are described next.

## 3.1 Subgrade

- Conduct moisture and density tests using the nuclear gauge on the prepared subgrade surface.
- Obtain bulk samples and moisture samples from the prepared subgrade surface.
- Obtain splitspoon samples from the prepared subgrade surface.
- Conduct elevation measurements on the prepared subgrade surface in section 550224.

## 3.2 Embankment

- Conduct moisture and density tests using the nuclear gauge on the prepared embankment surface.
- Obtain bulk samples and moisture samples from the prepared embankment surface.

- Obtain splitspoon samples from the prepared embankment surface.

- Conduct elevation measurements on the prepared embankment surface in sections 550261, 550213, 550217, 550220, 550216, 550221, 550263, 550259, 550260, and 550264.

### 3.3 Existing Subbase

- Obtain bulk samples and moisture samples from the prepared subbase surface.

- Conduct moisture and density tests using the nuclear gauge on the prepared subbase surface.

- Conduct elevation measurements on the prepared subbase surface in sections 550215, 550219, 550223, and 550265.

### 3.4 Existing Crushed Rock Base

- Obtain bulk samples and moisture samples from the prepared crushed rock base surface.

- Conduct elevation measurements on the prepared crushed rock base surface in sections 550218, 550262, 550214, and 550222.

### 3.5 Dense Graded Aggregate Base

- Conduct moisture and density tests on compacted aggregate base using the nuclear gauge.

- Obtain bulk samples and moisture samples from the compacted aggregate base.

- Conduct deflection testing using a falling weight deflectometer (FWD) along the outer wheelpath and mid-lane of the compacted aggregate base.

- Conduct elevation measurements on the prepared aggregate base surface.

### 3.6 Permeable Asphalt Treated Base (PATB)

- Obtain bulk samples of uncompacted permeable asphalt treated base material.

- Conduct elevation measurements on the prepared surface of permeable asphalt treated base.

### 3.7 Cement Stabilized Open Graded Base (CSOGB)

- Conduct elevation measurements on the prepared cement stabilized open graded base.

### 3.8 Lean Concrete Base (LCB)

- Obtain bulk samples from as-delivered lean concrete base material to prepare molded test specimens for laboratory testing.
- Perform slump, air content, and temperature measurements on the as-delivered LCB mix.
- Obtain cores from as-placed lean concrete base for laboratory testing.
- Conduct elevation measurements on the prepared surface.

### 3.9 Portland Cement Concrete (PCC)

- Obtain bulk samples from as-delivered PCC for preparation of molded PCC specimens (cylinders and beams) for laboratory testing.
- Perform slump, air content, and temperature measurements on the as-delivered PCC mix.
- Obtain cores from the PCC surface for laboratory testing.
- Conduct elevation measurements on the prepared surface.

The materials sampling requirements from each layer are summarized in table 5A. Table 5B gives the samples that are required for the LTPP Materials Reference Library. Section 3.3.6 in reference 3 gives procedures for obtaining and shipping these samples. A summary of the field tests that shall be conducted on each layer is presented in table 6. A summary of laboratory tests that shall be conducted on subgrade, embankment, existing subbase, existing crushed rock base, dense graded aggregate base, permeable asphalt treated base, lean concrete base, and portland cement concrete are given in table 7. This table also gives the SHRP test designations and the SHRP protocols for the laboratory tests.

The detailed plan for sampling and field testing showing the sampling and field test locations, as well as the detailed laboratory testing plan that allocates samples for each laboratory test, will be described in the next sections.

# 4.0 OVERVIEW OF SAMPLING AND FIELD TESTING PLAN

Figures 3 and 4 give an overview of the layer types and thicknesses in all sections. An overview of the sampling and field testing requirements for the different pavement layers is shown in figures 5 through 17. Elevation measurements shall be conducted on all layers. FWD testing shall be conducted on the dense graded aggregate base in all sections. All sampling and field testing in each layer shall be completed before construction begins on the next layer. Locations for field tests and sampling in these figures are specified according to the construction stationing.

# 5.0 SAMPLING AND TESTING FOR EACH LAYER

## 5.1 Introduction

Sampling, field tests and laboratory tests on each pavement layer will be described in this section. Refer to figures 5 though 17 for an overview of sampling and testing on each pavement layer. All sampling and field tests shall be conducted according to the specified standards for sampling and testing. These standards are either AASHTO standards, ASTM standards, or methods specific to the SHRP program. All laboratory tests shall be conducted according to protocols developed for the SPS-2 experiment that are in appendix E.2 of the *SHRP-LTPP Interim Guide for Laboratory Material Handling and Testing* (reference 1).

The laboratory tests specified in this document shall be conducted by Wisconsin DOT or a Wisconsin DOT designated laboratory and by the FHWA-LTPP Materials Testing Contractor. Sampling, field testing, and laboratory testing for each layer are described in the next sections. The offsets for sampling and testing locations are given from the centerline of the pavement.

## 5.2 Subgrade

### 5.2.1 Sampling

Bulk samples and moisture samples shall be obtained from the prepared subgrade surface at the locations given in table 8. Prior to obtaining bulk samples at these locations, nuclear moisture/density testing shall be conducted at the sampling locations. Approximately 400 lb of material shall be obtained from each sampling location. The bulk sample shall consist of a single excavation, 2 ft by 2 ft in area and 12 in deep. Following procedures outlined in section 3.3.2 of reference 3, from this 400-lb sample, 100 lb shall be shipped to the State laboratory or their designee and 300 lb shall be shipped to the FHWA-LTPP Laboratory Materials Testing Contractor.

Splitspoon samples shall be obtained from the prepared subgrade surface at the locations shown in table 9. Splitspoon sampling shall be performed using a 140-lb hammer, 30-in drop, and a sampler specified in AASHTO T206. After performing splitspoon sampling, the barrel shall be opened and the recovered material shall be carefully examined and logged to record the length of the recovery and description of the soil. The soil layers should be identified and recorded on Sampling Data Sheet 4-1 (see appendix D in reference 3). If rock, boulders, or other forms of dense materials are encountered within 4 ft of the top of the layer, another attempt for sampling shall be made at a different location with a longitudinal offset of 5 to 10 ft. If refusal occurs at a second location, splitspoon sampling shall be terminated. Splitspoon samples need not be retained or shipped to the lab for further evaluation.

5.2.2 Field and Laboratory Tests

A summary of the field and laboratory test plan for the subgrade is shown in table 10. This table also gives the SHRP protocols that shall be followed when conducting these tests. The applicable procedures outlined in the *SHRP-LTPP Interim Guide for Laboratory Materials Handling and Testing* (reference 1) shall be followed when conducting any laboratory tests.

1. *Auger Probes.* Roadway boring logs have been provided from 1993 that indicate that no rigid layer exists in the area within 20 ft of the surface. Therefore, it has been determined that no shoulder probes will be required for this project.

2. *Density and Moisture Tests.* Locations for in-place density and moisture measurements on the prepared subgrade surface are shown in table 11. The density/moisture measurements shall be made using direct transmission method for density and the backscatter method for moisture determination. Density determinations shall be conducted using AASHTO T238-86, "Standard Method for Density of Soil and Soil Aggregate in Place by Nuclear Method (Shallow Depth)," Method B - Direct Transmission. Moisture measurements shall be conducted using AASHTO T239-86, "Moisture Content of Soil and Soil Aggregate in Place by Nuclear Methods (Shallow Depths, Backscatter Method)." For the density test, the rod shall be imbedded 4 to 8 in below the layer surface as appropriate to test the full layer. At each testing location, four readings of 1 minute each shall be conducted, with the nuclear testing instrument rotated 90° between each reading.

3. *Elevation Measurements.* Elevation measurements shall be performed on the surface of the prepared subgrade in section 550224. The elevation measurements shall be conducted at the following locations: (1) five points across the lane at 50-ft intervals between the beginning and end of the monitoring section, and (2) five

points across the lane, at 25 ft prior to the beginning of the monitoring section and 25 ft from the end of the monitoring section. The locations at which the elevation measurements are to be performed are given in table 12. Each elevation measurement shall be measured with an accuracy within 0.01 ft.

## 5.3 Embankment

### 5.3.1 Sampling

Bulk samples and moisture samples shall be obtained from the prepared embankment surface at the locations given in table 14. Prior to obtaining bulk samples at these locations, nuclear moisture/density testing shall be conducted at the sampling locations. Approximately 400 lb of material shall be obtained from each sampling location. The bulk sample shall consist of a single excavation, 2 ft by 2 ft in area and 12 in deep. If the depth of the embankment is less than 12 in at the sampling location, the area of the excavation shall be increased to obtain sufficient material. Following procedures outlined in section 3.3.2 of reference 3, from this 400-lb sample, 100 lb shall be shipped to the State laboratory or their designee and 300 lb shall be shipped to the FHWA-LTPP Laboratory Materials Testing Contractor.

Splitspoon samples shall be obtained from the prepared embankment surface at the locations shown in table 15. Splitspoon sampling shall be performed using a 140-lb hammer, 30-in drop, and a sampler specified in AASHTO T206. After performing splitspoon sampling, the barrel shall be opened and the recovered material shall be carefully examined and logged to record the length of the recovery and description of the soil. The soil layers should be identified and recorded on Sampling Data Sheet 4-1 (see appendix D in reference 3). If rock, boulders, or other forms of dense materials are encountered within 4 ft of the top of the layer, another attempt for sampling shall be made at a different location with a longitudinal offset of 5 to 10 ft. If refusal occurs at a second location, splitspoon sampling shall be terminated. Splitspoon samples need not be retained or shipped to the lab for further evaluation.

### 5.3.2 Field and Laboratory Tests

A summary of the field and laboratory test plan for the embankment is shown in table 16. This table also gives the SHRP protocols that shall be followed when conducting these tests. The applicable procedures outlined in the *SHRP-LTPP Interim Guide for Laboratory Materials Handling and Testing* (reference 1) shall be followed when conducting any laboratory tests. The following field tests shall be conducted on the prepared embankment surface:

1. *Density and Moisture Tests.* Locations for in-place density and moisture measurements on the prepared embankment surface are shown in table 17. The density/moisture measurements shall be made using direct transmission method for density and the backscatter method for moisture determination. Density determinations shall be conducted using AASHTO T238-86, "Standard Method for Density of Soil and Soil Aggregate in Place by Nuclear Method (Shallow Depth)," Method B - Direct Transmission. Moisture measurements shall be conducted using AASHTO T239-86, "Moisture Content of Soil and Soil Aggregate in Place by Nuclear Methods (Shallow Depths, Backscatter Method)." For the density test, the rod shall be imbedded 4 to 8 in below the layer surface as appropriate to test the full layer. At each testing location, four readings of 1 minute each shall be conducted, with the nuclear testing instrument rotated 90° between each reading.

2. *Elevation Measurements.* Elevation measurements shall be performed on the surface of the prepared embankment in sections 550261, 550213, 550217, 550220, 550216, 550221, 550263, 550259, 550260, and 550264. The elevation measurements shall be conducted at the following locations: (1) five points across the lane at 50-ft intervals between the beginning and end of the monitoring section, and (2) five points across the lane, at 25 ft prior to the beginning of the monitoring section and 25 ft from the end of the monitoring section. The locations at which the elevation measurements are to be performed are given in table 12. Each elevation measurement shall be measured with an accuracy within 0.01 ft.

## 5.4 Existing Subbase

### 5.4.1 Sampling

Bulk samples and moisture samples from the prepared subbase shall be obtained from the test sections at the locations given in table 18. Prior to obtaining bulk samples at these locations, nuclear moisture/density testing shall be conducted at the sampling locations. The bulk sampling shall consist of a single excavation, 2 ft by 2 ft in area and 10 in deep. Approximately 400 lb of material shall be obtained from each sampling location. If the thickness of the existing subbase layer is less than 10 in, the area of the excavation shall be increased so that the required sample can be obtained. Following procedures outlined in section 3.3.2 of reference 3, from this 400-lb sample, 100 lb shall be shipped to the State laboratory or their designee and 300 lb shall be shipped to the FHWA-LTPP Laboratory Materials Testing Contractor.

### 5.4.2 Field and Laboratory Tests

A summary of the field and laboratory test plan for the existing subbase is shown in table 19. This table also gives the SHRP protocols that shall be followed when conducting these tests. The applicable procedures outlined in the *SHRP-LTPP Interim Guide for Laboratory Material Handling and Testing* (reference 1) shall be followed when conducting any laboratory tests.

The following field tests shall be conducted on the prepared existing subbase:

1. *Density and Moisture Tests.* Locations for in-place density and moisture tests on the prepared subbase are shown in table 20. The density/moisture measurements shall be made using direct transmission method for density and the backscatter method for moisture determination. Density determinations shall be conducted using AASHTO T238-86, "Standard Method for Density of Soil and Soil Aggregate in Place by Nuclear Method (Shallow Depth)," Method B - Direct Transmission. Moisture measurements shall be conducted using AASHTO T239-86, "Moisture Content of Soil and Soil Aggregate in Place by Nuclear Methods (Shallow Depths, Backscatter Method)." For the density test, the rod shall be imbedded 4 to 8 in below the layer surface as appropriate to test the full layer. At each testing location, four readings of 1 minute each shall be conducted, with the nuclear testing instrument rotated 90° between each reading.

2. *Elevation Measurements.* Elevation measurements shall be performed on the surface of the prepared subbase in sections 550215, 550219, and 550223. The elevation measurements shall be conducted at the following locations: (1) five points across the lane at 50-ft intervals between the beginning and end of the monitoring section, and (2) five points across the lane, at 25 ft prior to the beginning of the monitoring section and 25 ft beyond the end of the monitoring section. The locations at which the elevation measurements are to be performed are given in table 12. Each elevation measurement shall be measured with an accuracy within 0.01 ft.

## 5.5 Existing Crushed Rock Base

### 5.5.1 Sampling

Bulk samples and moisture samples from the existing crushed rock base shall be obtained at the locations shown in table 21. Insufficient layer thickness prohibits nuclear moisture and density tests at the bulk sampling locations. The bulk sampling shall consist of a single excavation, 4 ft by 4 ft in area, to top of subgrade in sections

550218 and 550214. Approximately 400 lb of material shall be obtained from each sampling location. If the thickness of the existing crushed rock base layer is less than adequate to obtain the sample necessary, the area of the excavation shall be increased so that the required sample can be obtained. Following procedures outlined in section 3.3.3 of reference 3, from this 400-lb sample, a 100-lb sample shall be shipped to the State laboratory or their designee and a 300-lb sample shall be shipped to the FHWA-LTPP Laboratory Materials Testing Contractor.

#### 5.5.2 Field and Laboratory Tests

A summary of the field and laboratory tests to be conducted on the existing crushed rock base is shown in table 22. This table also gives the SHRP protocols that shall be followed when conducting these tests. The applicable procedures outlined in the *SHRP-LTPP Interim Guide for Laboratory Material Handling and Testing* (reference 1) shall be followed when conducting any laboratory tests.

The following field tests shall be conducted on the surface of the prepared crushed rock base:

1. *Elevation Measurements*. Elevation measurements shall be performed on the prepared crushed rock base surface in sections 550218, 550262, 550214, and 550222. Elevation measurements shall be conducted at the following locations: (1) five points across the lane at 50-ft intervals between the beginning and end of the monitoring section, and (2) five points across the lane, at 25 ft prior to the beginning of the monitoring section and 25 ft beyond the end of the monitoring section. The locations at which the elevation measurements are to be performed are given in table 12.

### 5.6 Dense Graded Aggregate Base

#### 5.6.1 Sampling

Bulk samples and moisture samples from the compacted aggregate base material shall be obtained at the locations shown in table 23. Nuclear moisture and density tests shall be conducted at the bulk sampling locations prior to obtaining bulk samples. Each bulk sample shall contain 400 lb of material. Following procedures outlined in section 3.3.3 of reference 3, from this 400-lb sample, a 100-lb sample shall be shipped to the State laboratory or their designee and a 300-lb sample shall be shipped to the LTPP Materials Testing Contractor.

5.6.2 Field and Laboratory Tests

A summary of the field and laboratory tests to be conducted on the aggregate base is shown in table 24. This table also gives the SHRP protocols that shall be followed when conducting these tests. The applicable procedures outlined in the *SHRP-LTPP Interim Guide for Laboratory Material Handling and Testing* (reference 1) shall be followed when conducting any laboratory tests.

The following field tests shall be conducted on the prepared aggregate base surface.

1. *Density and Moisture Tests.* Locations for in-place density and moisture tests on the prepared aggregate base are shown in table 25. The density/moisture measurements shall be made using direct transmission method for density and the backscatter method for moisture determination. Density determinations shall be conducted using AASHTO T238-86, "Standard Method for Density of Soil and Soil Aggregate in Place by Nuclear Method (Shallow Depth)" Method B - Direct Transmission. Moisture measurements shall be conducted using AASHTO T239-86, "Moisture Content of Soil and Soil Aggregate in Place by Nuclear Methods (Shallow Depths, Backscatter Method)." For the density test, the rod shall be imbedded 4 to 8 in below the layer surface as appropriate to test the full layer. At each testing location, four readings of 1 minute each shall be conducted, with the nuclear testing instrument rotated 90° between each reading.

2. *Elevation Measurements.* Elevation measurements shall be performed on all test sections that contain an aggregate base. Elevation measurements on the prepared aggregate base shall be conducted at the following locations: (1) five points across the lane at 50-ft intervals between the beginning and end of the monitoring section, and (2) five points across the lane, at 25 ft prior to the beginning of the monitoring section and 25 ft from the end of the monitoring section. The locations at which the elevation measurements are to be performed are given in table 12. Each elevation measurement shall be measured with an accuracy within 0.01 ft.

3. *Deflection Testing.* Deflection testing using an FWD shall be performed on the prepared aggregate base at all test sections that contain an aggregate base. The deflection tests are carried out along the outer wheelpath and along the mid-lane. The locations at which deflection tests are to be carried out are shown in table 13. The procedures given in SHRP protocol P59 shall be followed when conducting deflection testing. Representatives of the LTPP NCRCO will perform all FWD testing.

## 5.7 Permeable Asphalt Treated Base

### 5.7.1 Sampling

Bulk samples of uncompacted permeable asphalt treated base material shall be obtained from the haul vehicle or the paver. The samples shall be obtained from the mix that is to be placed at the locations shown in table 26. These samples shall be obtained in accordance with AASHTO T168. Each sample shall contain 100 lb of material.

### 5.7.2 Field and Laboratory Tests

A summary of the field and laboratory tests to be conducted on the permeable asphalt treated base is shown in table 27. The applicable procedures outlined in the *SHRP-LTPP Interim Guide for Laboratory Material Handling and Testing* (reference 1) shall be followed when conducting any laboratory tests. The following field tests shall be conducted on the prepared PATB surface.

1. *Elevation Measurements.* Elevation measurements shall be performed on all test sections that contain a PATB layer. Elevation measurements on the prepared PATB shall be conducted at the following locations: (1) five points across the lane at 50-ft intervals between the beginning and end of the monitoring section, and (2) five points across the lane, at 25 ft prior to the beginning of the monitoring section and 25 ft from the end of the monitoring section. The locations at which the elevation measurements are to be performed are given in table 12. Each elevation measurement shall be measured with an accuracy within 0.01 ft.

## 5.8 Cement Stabilized Open Graded Base (CSOGB)

The following field tests shall be carried out on the sections containing a cement stabilized open graded base.

1. *Elevation Measurements.* Elevation measurements shall be performed on test section 550261. Elevation measurements on the prepared CSOGB shall be conducted at the following locations: (1) five points across the lane at 50-ft intervals between the beginning and end of the monitoring section and (2) five points across the lane, at 25 ft prior to the beginning of the monitoring section and 25 ft from the end of the monitoring section. The locations at which the elevation measurements are to be performed are given in table 12. Each elevation measurement shall be measured with an accuracy within 0.01 ft.

## 5.9 Lean Concrete Base (LCB)

### 5.9.1 Sampling

*As-Delivered Material.* Sampling of lean concrete base material shall be performed during or just prior to placement. The locations from which these samples shall be obtained are shown in table 28. The samples shall be obtained in accordance with AASHTO T141, "Sampling Fresh Concrete." Six 6-in diameter by 12-in height cylindrical specimens shall be molded from each bulk sample. All specimens shall be made and cured in the field in accordance with AASHTO T126, "Making and Curing Concrete Test Specimens in the Field." Once they have been transported to the laboratory they shall be cured in accordance with AASHTO T126, "Making and Curing Concrete Test Specimens in the Laboratory."

*Core Samples.* Cores of 4-in diameter are to be obtained from the lean concrete base. The locations from which the LCB cores shall be obtained are shown in table 30. Laboratory tests on cores from LCB shall be conducted at 14, 28, and 365 days after the placement of the layer. To ensure reasonable representation of the cores to field conditions, the cores shall be obtained according to the following schedule:

- For 14-day tests, cores shall be obtained 10-12 days after placement.
- For 28-day tests, cores shall be obtained 21-24 days after placement.
- For 365-day tests, cores shall be obtained 350-360 days after placement.

This schedule allows time for shipping and conditioning of the cores prior to testing at the designated age. There will be an age difference between the LCB and PCC surface, as placement will not occur simultaneously. In some situations, cores from the LCB layer may have to be taken independently from those of the PCC surface to achieve the required age for both layers. In such situations, the additional coring locations for obtaining the LCB samples will be specified by the SHRP Regional Office. Coring operations shall be performed in accordance with AASHTO T24, "Obtaining and Testing Drilled Cores and Sawed Beams of Concrete." Carbide diamond bit drilling is to be performed. Mist or air-cooled drilling is preferred as the best method to minimize water contamination of the underlying layers. The offsets of these cores from the centerline of the pavement are shown in table 29. Further details on coring operations and details on tolerance and quality control of the cores are given in section 3.3.7 of reference 3. The direction of traffic shall be marked on all cores.

### 5.9.2 Field and Laboratory Tests

The laboratory testing plan for samples made from as-delivered lean concrete base material, as well as for cores obtained from the as-placed material, is shown in table 30.

The visual examination and determination of thickness of the cores shall be performed before conducting any laboratory tests. The following field tests shall be conducted on the prepared LCB surface:

1. *Temperature, Slump, and Air Content.* Field tests shall be performed on bulk samples of fresh lean concrete base obtained from locations given in table 29 to determine mix temperature, slump, and air content (volumetric). Samples shall be obtained in accordance with ASTM C172 and tests performed in accordance with ASTM C1064 for temperature, ASTM C231 for air content, and ASTM C143 for slump. Results shall be recorded on Sampling Data Sheet 11-1 (see appendix D of reference 3).

2. *Elevation Measurements.* Elevation measurements shall be performed on all test sections that contain an LCB layer. Elevation measurements on the prepared LCB shall be conducted at the following locations: (1) five points across the lane at 50-ft intervals between the beginning and end of the monitoring section, and (2) five points across the lane, at 25 ft prior to the beginning of the monitoring section and 25 ft from the end of the monitoring section. The locations at which the elevation measurements are to be performed are given in table 12. Each elevation measurement shall be measured with an accuracy within 0.01 ft.

## 5.10 Portland Cement Concrete (PCC)

### 5.10.1 Sampling

*As-Delivered Material.* Sampling of as-delivered material shall be performed in the field during or just before placement. The locations from which the samples shall be obtained are shown in table 31. Six samples of the 550 psi design flexural strength mix and four samples of the 900 psi design flexural strength mix will be obtained. These samples shall be obtained using AASHTO T141, "Sampling Fresh Concrete." From each bulk sample, six 6-in diameter by 12-in height cylinder specimens and three 6-in wide by 6-in tall by 20-in long beam specimens shall be molded. All specimens shall be made and cured in the field in accordance with AASHTO T23, "Making and Curing Concrete Specimens in the Field." Once they are shipped to the laboratory, they shall be cured in accordance with AASHTO T126, "Making and Curing Concrete Specimens in the Laboratory." Field tests to be performed on samples of fresh concrete are described in section 5.10.2 of this report.

*Core Samples.* Core samples of 4-in diameter are to be obtained from the PCC surface. Laboratory tests on PCC cores have to be conducted at 14, 28, and 365 days after the placement of the layer. To ensure reasonable representation of the cores to field condition, the cores shall be obtained according to the following schedule:

- For 14-day tests, cores shall be obtained 10-12 days after placement.
- For 28-day tests, cores shall be obtained 21-24 days after placement.
- For 365-day tests, cores shall be obtained 350-360 days after placement.

This schedule allows time for shipping and conditioning prior to testing at the designated age. The locations and the times at which the cores have to be obtained from the PCC surface are given in table 32. At the specified locations, cores from lean concrete base may also be obtained when coring for PCC samples, as long as the LCB cores still meet the required time frame for laboratory tests.

Coring operations shall be performed in accordance with AASHTO T24, "Obtaining and Testing Drilled Cores and Sawed Beams of Concrete." Carbide diamond bit drilling is to be performed. Mist or air-cooled drilling is preferred as the best method to minimize water contamination of the underlying layers. Plugs shall not be inserted in cores. Suction cups or wire pulls have been used successfully for core extraction. Care shall be taken to obtain cores at a 90° angle to the pavement surface and that the edges are straight, intact, smooth, and suitable for laboratory testing. Further details of coring operations and details on tolerance and quality control of the cores are given in section 3.3.7 of reference 3. The direction of traffic shall be marked on all cores.

5.10.2 Field and Laboratory Tests

A summary of the field and laboratory test plan for as-delivered PCC is given in table 33. A summary of the laboratory tests to be conducted on the PCC cores is given in table 34. The visual examination and determination of thickness of the cores shall be performed before conducting any laboratory tests on the cores. Note that air content testing at 28 days on cores 3, 19, and 126 shall be performed before compression testing. Also note that unit weight testing and 28-day static modulus of elasticity tests are run on the same set of cores. The cores for PCC coefficient of thermal expansion testing are to be sent to the FHWA lab in Virginia for testing (see section 4.8.1 of reference 3 for address). The following field tests shall be performed on PCC:

1. *Temperature, Slump, and Air Content.* Field tests shall be performed on bulk samples of fresh concrete obtained from locations given in table 31 to determine mix temperature, slump, and air content (volumetric). Samples shall be obtained in accordance with ASTM C172 and tests performed in accordance with ASTM C1064 for temperature, ASTM C231 for air content, and ASTM C143 for slump. Results shall be recorded on Sampling Data Sheet 11-1 (see appendix D of reference 3).

2. *Elevation Measurements.* Elevation measurements shall be performed on the prepared PCC surface on all test sections. Elevation measurements on the

prepared PCC surface shall be conducted at the following locations: (1) five points across the lane at 50-ft intervals between the beginning and end of the monitoring section, and (2) five points across the lane, at 25 ft prior to the beginning of the monitoring section and 25 ft from the end of the monitoring section. The locations at which the elevation measurements are to be performed are given in table 12. Each elevation measurement shall be measured with an accuracy within 0.01 ft.

### 5.11 Samples for Long Term-Storage

The following additional samples are required for long-term storage at the LTPP Materials Reference Library (MRL):

1. Portland Cement: One 5-gal pail of portland cement, approximately 50 lb (sealed in a heavy plastic bag and placed into the pail).

2. Flyash: One 5-gal pail of flyash, approximately 50 lb (sealed in a heavy plastic bag and placed into the pail).

3. Liquid Additive: One quart of each liquid additive (stored in glass containers, suitably protected from breakage).

4. Fine Aggregate: Four 5-gal pails from the plant.

5. Coarse Aggregate: Four 5-gal pails from the plant.

If different types of any of these materials are used for the 550 psi and 900 psi mix concrete, then a separate sample shall be taken of each material. Further details and details of shipping are given in section 3.3.6 of reference 3. Note that Mr. Rod Soule is now the contact person for MRL.

## 6.0 LOGS AND REPORTS

During field sampling operations, two types of forms must be completed—the Field Operations Information Forms and the Sampling Data Sheets. Field Operations Information Forms are used to record general information concerning the pavement test sections and the materials samples. Sampling Data Sheets are used to record the actual information for each sampling area or sampling location. A person shall be designated to record data at each site on the appropriate data sheets, to ensure the accuracy and integrity of the collected data. This person shall have a thorough understanding of the content of the data sheets and the procedures for completing the sheets. Further details

regarding logs and reports are contained in section 3.3.14 of reference 3. Details on assembling of data sheets and transmittal are described in section 3.2.19 of reference 3.

## 7.0 HANDLING AND SHIPPING OF SAMPLES

Because of the research nature of this project and because samples will be shipped over long distances, it is extremely important that the samples be packaged carefully. All samples shall be shipped within 5 days to the laboratory designated by the participating highway agency, if practical. Sections 3.3.7, 3.3.8, 3.3.9, 3.3.10, 3.3.11, and 3.3.12 in reference 3 give detailed guidelines on packaging and shipping of samples.

## 8.0 SAMPLE STORAGE

The guidelines for storing samples from the LTPP experiment are given in section 4.11 of reference 3.

## 9.0 LABORATORY TESTING

Procedures to be followed in laboratory testing are described in section 4reference 3 and in the *SHRP-LTPP Interim Guide for Laboratory Material Handling and Testing* (reference 1). Tables 35 through 53 detail what samples are shipped to each laboratory and what tests are performed on individual samples.

## 10.0 DOCUMENTATION

An extensive amount of documentation is required for SPS projects. It is essential that the State assign a person full-time who will be in charge of completing all necessary documentation for this project. This includes documentation related to inventory, construction, sampling, field testing, and laboratory testing.

## 11.0 REFERENCES


1. *SHRP-LTPP Interim Guide for Laboratory Materials Handling and Testing (PCC, Bituminous Materials, Aggregates and Soils)*, Operational Guide No. SHRP-LTPP-OG-004, Strategic Highway Research Program, Revised and Amended July 1993.

2. *SHRP-LTPP Guide for Field Materials Sampling, Testing and Handling*, Version 2.0, Operational Guide No. SHRP-LTPP-OG-006, Strategic Highway Research Program, Revised October 1992.

3. *Specific Pavement Studies, Materials Sampling and Testing Requirements for Experiment SPS-2, Strategic Study of Structural Factors for Rigid Pavements*, Federal Highway Administration, LTPP Division, January 1994.

4. *Specific Pavement Studies, Construction Guidelines for Experiment SPS-2, Strategic Study of Structural Factors for Rigid Pavements*, Federal Highway Administration, LTPP Division, December 1993.

# Appendix A

# Tables

Table 1. Layer Coding SPS-2.

| Project Layer Code | Material Code | Comments |
|---|---|---|
| A | 59 | Subgrade |
| B | 57 | Embankment (Fill) |
| C | 26 | Existing Subbase |
| D | 23 | Existing Crushed Rock Base |
| E | 23 | Dense Graded Aggregate Base |
| F | 31 | Permeable Asphalt Treated Base |
| G | 85 | Cement Stabilized Open Graded Base |
| H | 38 | Lean Concrete Base |
| I | 04 | Portland Cement Concrete (550 psi) |
| J | 04 | Portland Cement Concrete (900 psi) |

Table 2. Test Section Layer Numbering SPS-2.

| Test Section | Layer Number | Project Layer Code | Layer Thickness | Material Code | Comments |
|---|---|---|---|---|---|
| 550215 WB | 1 | A | N/A | 59 | Subgrade |
| | 2 | C | 9.75 | 26 | Existing Subbase |
| | 3 | E | 6 | 23 | DGAB |
| | 4 | I | 11 | 04 | PCC (550 psi) |

| Test Section | Layer Number | Project Layer Code | Layer Thickness | Material Code | Comments |
|---|---|---|---|---|---|
| 550219 WB | 1 | A | N/A | 59 | Subgrade |
| | 2 | C | 9.75 | 26 | Existing Subbase |
| | 3 | H | 6 | 38 | LCB |
| | 4 | I | 11 | 04 | PCC (550 psi) |

| Test Section | Layer Number | Project Layer Code | Layer Thickness | Material Code | Comments |
|---|---|---|---|---|---|
| 550218 WB | 1 | A | N/A | 59 | Subgrade |
| | 2 | C | 10 | 26 | Existing Subbase |
| | 3 | D | 2 75 | 23 | Existing Crushed Rock Base |
| | 4 | H | 6 | 38 | LCB |
| | 5 | J | 8 | 04 | PCC (900 psi) |

| Test Section | Layer Number | Project Layer Code | Layer Thickness | Material Code | Comments |
|---|---|---|---|---|---|
| 550262 WB | 1 | A | N/A | 59 | Subgrade |
| | 2 | C | 10 | 26 | Existing Subbase |
| | 3 | D | 2.75 | 23 | Existing Crushed Rock Base |
| | 4 | E | 6 | 23 | DGAB |
| | 5 | J | 8 | 04 | PCC (900 psi) |

| Test Section | Layer Number | Project Layer Code | Layer Thickness | Material Code | Comments |
|---|---|---|---|---|---|
| 550214 WB | 1 | A | N/A | 59 | Subgrade |
| | 2 | C | 10 | 26 | Existing Subbase |
| | 3 | D | 2.75 | 23 | Existing Crushed Rock Base |
| | 4 | E | 6 | 23 | DGAB |
| | 5 | J | 8 | 04 | PCC (900 psi) |

| Test Section | Layer Number | Project Layer Code | Layer Thickness | Material Code | Comments |
|---|---|---|---|---|---|
| 550222 WB | 1 | A | N/A | 59 | Subgrade |
| | 2 | C | 10 | 26 | Existing Subbase |
| | 3 | D | 0.75 | 23 | Existing Crushed Rock Base |
| | 4 | E | 4 | 23 | DGAB |
| | 5 | F | 4 | 31 | PATB |
| | 6 | J | 8 | 04 | PCC (900 psi) |

Table 2. Test Section Layer Numbering SPS-2 (continued).

| Test Section | Layer Number | Project Layer Code | Layer Thickness | Material Code | Comments |
|---|---|---|---|---|---|
| 550223 WB | 1 | A | N/A | 59 | Subgrade |
| | 2 | C | 7.75 | 26 | Existing Subbase |
| | 3 | E | 4 | 23 | DGAB |
| | 4 | F | 4 | 31 | PATB |
| | 5 | I | 11 | 04 | PCC (550 psi) |

| Test Section | Layer Number | Project Layer Code | Layer Thickness | Material Code | Comments |
|---|---|---|---|---|---|
| 550261 WB | 1 | A | N/A | 59 | Subgrade |
| | 2 | B | Varies | 57 | Embankment |
| | 3 | E | 4 | 23 | DGAB |
| | 4 | G | 4 | 85 | CSOGB |
| | 5 | I | 8 | 04 | PCC (550 psi) |

| Test Section | Layer Number | Project Layer Code | Layer Thickness (in) | Material Code | Comments |
|---|---|---|---|---|---|
| 550213 WB | 1 | A | N/A | 59 | Subgrade |
| | 2 | B | Varies | 57 | Embankment |
| | 3 | E | 6 | 23 | DGAB |
| | 4 | I | 8 | 04 | PCC (550 psi) |

| Test Section | Layer Number | Project Layer Code | Layer Thickness | Material Code | Comments |
|---|---|---|---|---|---|
| 550217 WB | 1 | A | N/A | 59 | Subgrade |
| | 2 | B | Varies | 57 | Embankment |
| | 3 | H | 6 | 38 | LCB |
| | 4 | I | 8 | 04 | PCC (550 psi) |

| Test Section | Layer Number | Project Layer Code | Layer Thickness | Material Code | Comments |
|---|---|---|---|---|---|
| 550220 WB | 1 | A | N/A | 59 | Subgrade |
| | 2 | B | Varies | 57 | Embankment |
| | 3 | H | 6 | 38 | LCB |
| | 4 | J | 11 | 04 | PCC (900 psi) |

| Test Section | Layer Number | Project Layer Code | Layer Thickness | Material Code | Comments |
|---|---|---|---|---|---|
| 550216 WB | 1 | A | N/A | 59 | Subgrade |
| | 2 | B | Varies | 57 | Embankment |
| | 3 | E | 6 | 23 | DGAB |
| | 4 | J | 11 | 04 | PCC (900 psi) |

| Test Section | Layer Number | Project Layer Code | Layer Thickness | Material Code | Comments |
|---|---|---|---|---|---|
| 550224 WB | 1 | A | N/A | 59 | Subgrade |
| | 2 | E | 4 | 23 | DGAB |
| | 3 | F | 4 | 31 | PATB |
| | 4 | J | 11 | 04 | PCC (900 psi) |

Table 2. Test Section Layer Numbering SPS-2 (continued).

| Test Section | Layer Number | Project Layer Code | Layer Thickness | Material Code | Comments |
|---|---|---|---|---|---|
| 550221 WB | 1 | A | N/A | 59 | Subgrade |
| | 2 | B | Varies | 57 | Embankment |
| | 3 | E | 4 | 23 | DGAB |
| | 4 | F | 4 | 31 | PATB |
| | 5 | I | 8 | 04 | PCC (550 psi) |

| Test Section | Layer Number | Project Layer Code | Layer Thickness | Material Code | Comments |
|---|---|---|---|---|---|
| 550263 WB | 1 | A | N/A | 59 | Subgrade |
| | 2 | B | Varies | 57 | Embankment |
| | 3 | E | 6 | 23 | DGAB |
| | 4 | I | Varies | 04 | PCC (550 psi) |

| Test Section | Layer Number | Project Layer Code | Layer Thickness | Material Code | Comments |
|---|---|---|---|---|---|
| 550259 WB | 1 | A | N/A | 59 | Subgrade |
| | 2 | B | Varies | 57 | Embankment |
| | 3 | E | 6 | 23 | DGAB |
| | 4 | I | 11 | 04 | PCC (550 psi) |

| Test Section | Layer Number | Project Layer Code | Layer Thickness | Material Code | Comments |
|---|---|---|---|---|---|
| 550260 WB | 1 | A | N/A | 59 | Subgrade |
| | 2 | B | Varies | 57 | Embankment |
| | 3 | E | 6 | 23 | DGAB |
| | 4 | I | 11 | 04 | PCC (550 psi) |

| Test Section | Layer Number | Project Layer Code | Layer Thickness | Material Code | Comments |
|---|---|---|---|---|---|
| 550264 EB | 1 | A | N/A | 59 | Subgrade |
| | 2 | B | Varies | 57 | Embankment |
| | 3 | E | 6 | 23 | DGAB |
| | 4 | I | 11 | 04 | PCC (550 psi) |

| Test Section | Layer Number | Project Layer Code | Layer Thickness | Material Code | Comments |
|---|---|---|---|---|---|
| 550265 EB | 1 | A | N/A | 59 | Subgrade |
| | 2 | C | 9.75 | 26 | Existing Subbase |
| | 3 | E | 6 | 23 | DGAB |
| | 4 | I | 11 | 04 | PCC (550 psi) |

Table 3. Limits of Test Sections - SPS-2.

| Section Number | 600 ft SHRP Section | | 500 ft Monitoring Section | |
|---|---|---|---|---|
| | Beginning | End | Beginning | End |
| 550215 | 1055 + 00 | 1061 + 00 | 1055 + 50 | 1060 + 50 |
| 550219 | 1064 + 10 | 1070 + 10 | 1064 + 60 | 1069 + 60 |
| 550218 | 1071 + 30 | 1077 + 30 | 1071 + 80 | 1076 + 80 |
| 550262* | 1080 + 30 | 1086 + 30 | 1080 + 80 | 1085 + 80 |
| 550214 | 1091 + 10 | 1097 + 10 | 1091 + 60 | 1096 + 60 |
| 550222 | 1098 + 00 | 1104 + 00 | 1098 + 50 | 1103 + 50 |
| 550223 | 1104 + 90 | 1110 + 90 | 1105 + 40 | 1110 + 40 |
| 550261 | 1111 + 80 | 1117 + 80 | 1112 + 30 | 1117 + 30 |
| 550213 | 1122 + 60 | 1128 + 60 | 1123 + 10 | 1128 + 10 |
| 550217 | 1144 + 80 | 1150 + 80 | 1145 + 30 | 1150 + 30 |
| 550220 | 1152 + 00 | 1158 + 00 | 1152 + 50 | 1157 + 50 |
| 550216 | 1159 + 20 | 1165 + 20 | 1159 + 70 | 1164 + 70 |
| 550224 | 1166 + 40 | 1172 + 40 | 1166 + 90 | 1171 + 90 |
| 550221 | 1173 + 90 | 1179 + 90 | 1174 + 40 | 1179 + 40 |
| 550263* | 1187 + 70 | 1193 + 70 | 1188 + 20 | 1193 + 20 |
| 550259* | 1194 + 60 | 1200 + 60 | 1195 + 10 | 1200 + 10 |
| 550260* | 1201 + 80 | 1207 + 80 | 1202 + 30 | 1207 + 30 |
| 550264* | 1194 + 60 | 1200 + 60 | 1195 + 10 | 1200 + 10 |
| 550265* | 1201 + 80 | 1207 + 80 | 1202 + 30 | 1207 + 30 |

* denotes Wisconsin DOT supplemental sections.
Other Sections are SHRP Sections.
Sections 550264 and 550265 located in Eastbound lanes.

Table 4. Design Features of Test Sections - SPS-2.

| Test Section Number | Lane Width (ft) | PCC Comp. Strength (psi) | PCC Thickness (in) | Material and Thickness (in) (Base 1) | Material and Thickness (in) (Base 2) | Edge Drains |
|---|---|---|---|---|---|---|
| 550215 | 12 | 550 | 11 | DGAB 6 | - | No |
| 550219 | 12 | 550 | 11 | LCB 6 | - | No |
| 550218 | 12 | 900 | 8 | LCB 6 | - | No |
| 550262* | 12 | 900 | 8 | DGAB 6 | - | No |
| 550214 | 12 | 900 | 8 | DGAB 6 | - | No |
| 550222 | 12 | 900 | 8 | PATB 4 | DGAB 4 | Yes |
| 550223 | 12 | 550 | 11 | PATB 4 | DGAB 4 | Yes |
| 550261* | 12 | 550 | 8 | CSOGB 4 | DGAB 4 | Yes |
| 550213 | 14 | 550 | 8 | DGAB 6 | - | No |
| 550217 | 14 | 550 | 8 | LCB 6 | - | No |
| 550220 | 14 | 900 | 11 | LCB 6 | - | No |
| 550216 | 14 | 900 | 11 | DGAB 6 | - | No |
| 550224 | 14 | 900 | 11 | PATB 4 | DGAB 4 | Yes |
| 550221 | 14 | 550 | 8 | PATB 4 | DGAB 4 | Yes |
| 550263* | 14 | 550 | 8 - 11 | DGAB 6 | - | No |
| 550259* | 14 | 550 | 11 | DGAB 6 | - | No |
| 550260* | 14 | 550 | 11 | DGAB 6 | - | No |
| 550264* | 14 | 550 | 11 | DGAB 6 | - | No |
| 550265* | 14 | 550 | 11 | DGAB 6 | - | No |

* denotes Wisconsin DOT supplemental sections.
Other Sections are SHRP Sections.
Sections 550264 and 550265 located in Eastbound lanes.

PCC - Portland Cement Concrete
DGAB - Dense Graded Aggregate Base
LCB - Lean Concrete Base
PATB - Permeable Asphalt Treated Base
CSOGB - Cement Stabilized Open Graded Base

Table 5A. Materials Sampling Requirement - SPS-2.

| Layer | Number of Samples | | |
|---|---|---|---|
| | SHRP Sections | WI DOT Sections | Total |
| **SUBGRADE** | | | |
| Bulk Samples - 400 lbs per sample | 6 | 2 | 8 |
| Moisture Content Samples | 6 | 2 | 8 |
| Splitspoon samples (3 at each location) | 27 | 45 | 72 |
| **EMBANKMENT** | | | |
| Bulk Samples - 400 lbs per sample | 3 | 2 | 5 |
| Moisture Content Samples | 3 | 2 | 5 |
| Splitspoon samples (3 at each location) | 18 | - | 18 |
| **EXISTING SUBBASE** | | | |
| Bulk Samples - 400 lb per sample | 4 | 1 | 5 |
| Moisture Content Samples | 4 | 1 | 5 |
| **EXISTING CRUSHED ROCK BASE** | | | |
| Bulk Samples - 400 lb per sample | 2 | - | 2 |
| Moisture Content Samples | 2 | - | 2 |
| **DENSE GRADED AGGREGATE BASE** | | | |
| Bulk Samples - compacted surface, 400 lb per sample | 3 | 2 | 5 |
| Moisture Content Samples | 3 | 2 | 5 |
| **PERMEABLE ASPHALT TREATED BASE** | | | |
| Bulk Samples - uncompacted, 100 lb per sample | 3 | - | 3 |
| **CEMENT STABILIZED OPEN GRADED BASE (NO SAMPLES TAKEN)** | | | |
| **LEAN CONCRETE BASE** | | | |
| Cores (4 in diameter) | 24 | - | 24 |
| Bulk Samples<br>- From each sample mold nine cylinders (6" X 12") | 2 | - | 2 |
| **PORTLAND CEMENT CONCRETE** | | | |
| Cores (4 in. diameter) | 99 | 58 | 157 |
| Bulk Samples<br>- From each sample mold six cylinders (6" X 12") and three beams (6" X 6" X 20") | 7 | 3 | 10 |

Table 5B. Materials Sampling for Materials Reference Library - SPS-2.

**Portland Cement** - One 5-gallon pail, approximately 50 lbs (sealed in a heavy plastic bag and placed into the pail).
**Flyash** - One 5-gallon pail, approx. 50 lbs (sealed in a heavy plastic bag and placed into the pail).
**Liquid Additive** - One quart of each liquid additive (stored in glass containers suitably protected from breakage).
**Fine Aggregate** - Four 5-gallon pails (from the plant).
**Coarse Aggregate** - Four 5-gallon pails (from the plant).

***If different types of any of these materials are used for the 550 psi concrete and 900 psi concrete, then a separate sample shall be taken of each material.***

Table 6. Summary of Field Tests on Each Layer - SPS-2.

| Layer and Test/Measurement | Tests per Section | Number of Sections | Total Tests |
|---|---|---|---|
| **SUBGRADE - 19 Sections** | | | |
| Density and Moisture Tests (Nuclear Gauge) | - | - | 20 |
| Elevation Measurements | 65 | 1 | 65 |
| **EMBANKMENT - 10 Sections** | | | |
| Density and Moisture Tests (Nuclear Gauge) | - | - | 32 |
| Elevation Measurements | 65 | 10 | 650 |
| **EXISTING SUBBASE - 8 Sections** | | | |
| Density and Moisture Tests (Nuclear Gauge) | - | - | 17 |
| Elevation Measurements | 65 | 4 | 260 |
| **EXISTING CRUSHED ROCK BASE - 4 Sections** | | | |
| Elevation Measurements | 65 | 4 | 260 |
| **DENSE GRADED AGGREGATE BASE - 15 Sections** | | | |
| Density and Moisture Tests (Nuclear Gauge) | - | - | 50 |
| Elevation Measurements | 65 | 15 | 975 |
| Falling Weight Deflectometer Tests (P59) | 25 | 15 | 375 |
| **PERMEABLE ASPHALT TREATED BASE- 4 Sections** | | | |
| Elevation Measurements | 65 | 4 | 260 |
| **CEMENT STABILIZED OPEN GRADED BASE - 1 Section** | | | |
| Elevation Measurements | 65 | 1 | 65 |
| **LEAN CONCRETE BASE - 4 Sections** | | | |
| Slump | - | - | 2 |
| Air Content | - | - | 2 |
| Mix. Temperature | - | - | 2 |
| Elevation Measurements | 65 | 4 | 260 |
| **PORTLAND CEMENT CONCRETE - 19 Sections** | | | |
| Slump | - | - | 10 |
| Air Content | - | - | 10 |
| Mix. Temperature | - | - | 10 |
| Elevation Measurements | 65 | 19 | 1235 |

Table 7. Laboratory Materials Testing Plan for Each Layer - SPS-2.

| Test | SHRP Test Designation | SHRP Protocol | No. of Tests | Test Conducted by: State | FHWA |
|---|---|---|---|---|---|
| **SUBGRADE** | | | | | |
| Sieve Analysis | SS01 | P51 | 8 | - | X |
| Hydrometer to 0.001mm | SS02 | P42 | 8 | - | X |
| Atterberg Limits | SS03 | P43 | 8 | - | X |
| Classification - Bulk Samples | SS04 | P52 | 8 | - | X |
| Classification (visual-manual on splitspoons) | | | 24 | X | - |
| Resilient Modulus - Bulk Samples | SS07 | P46 | 8 | - | X |
| Natural Moisture Content | SS09 | P49 | 8 | - | X |
| Permeability - Bulk Samples | UG09 | P48 | 8 | X | - |
| **EMBANKMENT** | | | | | |
| Sieve Analysis | SS01 | P51 | 5 | - | X |
| Hydrometer to 0.001mm | SS02 | P42 | 5 | - | X |
| Atterberg Limits | SS03 | P43 | 5 | - | X |
| Classification - Bulk Samples | SS04 | P52 | 5 | - | X |
| Classification (visual-manual on splitspoons) | | | 6 | X | - |
| Resilient Modulus | SS07 | P46 | 5 | - | X |
| Natural Moisture Content | SS09 | P49 | 5 | - | X |
| Permeability - Bulk Samples | UG09 | P48 | 5 | X | - |
| **EXISTING SUBBASE** | | | | | |
| Particle Size Analysis | UG01 | P41 | 5 | - | X |
| Sieve Analysis (washed) | UG02 | P41 | 5 | - | X |
| Atterberg Limits | UG04 | P43 | 5 | - | X |
| Moisture - Density Relations | UG05 | P44 | 5 | - | X |
| Resilient Modulus | UG07 | P46 | 5 | - | X |
| Classification | UG08 | P47 | 5 | - | X |
| Permeability | UG09 | P48 | 5 | X | - |
| Natural Moisture Content | UG10 | P49 | 5 | - | X |
| **EXISTING CRUSHED ROCK BASE** | | | | | |
| Particle Size Analysis | UG01 | P41 | 2 | - | X |
| Sieve Analysis (washed) | UG02 | P41 | 2 | - | X |
| Atterberg Limits | UG04 | P43 | 2 | - | X |
| Moisture - Density Relations | UG05 | P44 | 2 | - | X |
| Resilient Modulus | UG07 | P46 | 2 | - | X |
| Classification | UG08 | P47 | 2 | - | X |
| Permeability | UG09 | P48 | 2 | X | - |
| Natural Moisture Content | UG10 | P49 | 2 | - | X |

Table 7. Laboratory Materials Testing Plan for Each Layer - SPS-2 (continued).

| Test | SHRP Test Designation | SHRP Protocol | No. of Tests | Test Conducted by: State | FHWA |
|---|---|---|---|---|---|
| **DENSE GRADED AGGREGATE BASE** | | | | | |
| Particle Size Analysis | UG01 | P41 | 5 | - | X |
| Sieve Analysis (washed) | UG02 | P41 | 5 | - | X |
| Atterberg Limits | UG04 | P43 | 5 | - | X |
| Moisture - Density Relations | UG05 | P44 | 5 | - | X |
| Resilient Modulus | UG07 | P46 | 5 | - | X |
| Classification | UG08 | P47 | 5 | - | X |
| Permeability | UG09 | P48 | 5 | X | - |
| Natural Moisture Content | UG10 | P49 | 5 | - | X |
| **PERMEABLE ASPHALT TREATED BASE** | | | | | |
| Asphalt Content (extraction) | AC04 | P04 | 3 | X | - |
| Extracted Aggregate - Gradation | AG04 | P14 | 3 | X | - |
| **LEAN CONCRETE BASE - CYLINDERS** | | | | | |
| Compressive Strength - Cylinders | PC01 | P61 | | | |
| 7 Day | | | 6 | X | - |
| 28 Day | | | 6 | X | - |
| 1 Year | | | 6 | X | - |
| **LEAN CONCRETE BASE - CORES** | | | | | |
| Core Examination and Thickness | PC06 | P66 | 24 | X | - |
| Compressive Strength | PC01 | P61 | | | |
| 14 Day | | | 8 | X | - |
| 28 Day | | | 8 | X | - |
| 1Year | | | 8 | X | - |
| **PORTLAND CEMENT CONCRETE - CYLINDERS AND BEAMS** | | | | | |
| Compressive Strength - Cylinders | PC01 | P61 | | | |
| 14 Day | | | 10 | X | - |
| 28 Day | | | 10 | X | - |
| 1 Year | | | 10 | X | - |
| Splitting Tensile Strength - Cylinders | PC02 | P62 | | | |
| 14 Day | | | 10 | X | - |
| 28 Day | | | 10 | X | - |
| 1 Year | | | 10 | X | - |
| Flexural Strength - Beams | PC09 | P69 | | | |
| 14 Day | | | 10 | X | - |
| 28 Day | | | 10 | X | - |
| 1 Year | | | 10 | X | - |

Table 7. Laboratory Materials Testing Plan for Each Layer - SPS-2 (continued).

| Test | SHRP Test Designation | SHRP Protocol | No. of Tests | Test Conducted by: State | FHWA |
|---|---|---|---|---|---|
| **PORTLAND CEMENT CONCRETE - CORES** | | | | | |
| Core Examination and Thickness | PC06 | P66 | 157 | X | - |
| PCC Unit Weight | PC05 | P65 | 19 | X | - |
| Compressive Strength | PC01 | P61 | | | |
| 14 Day | | | 19 | X | - |
| 28 Day | | | 19 | X | - |
| 1 Year | | | 19 | X | - |
| Splitting Tensile Strength | PC02 | P62 | | | |
| 14 Day | | | 19 | X | - |
| 28 Day | | | 19 | X | - |
| 1 Year | | | 19 | X | - |
| Static Modulus of Elasticity | PC04 | P64 | | | |
| 28 Day - NOTE 1 | | | 19 | X | - |
| 1 Year | | | 19 | X | - |
| Air Content at 28 days | PC08 | P68 | 4 | X | - |
| PCC Coefficient of Thermal Expansion | PC03 | P63 | 4 | - | X |

NOTE 1: Tests performed on same cores as for PCC Unit Weight.

Table 8. Locations for Bulk Samples and Moisture Samples from Prepared Subgrade - SPS-2.

| Sample Location Designation | Sample Designation | Reference Monitoring Section | Sampling Location | Offset from Center Line of Pavement (ft) |
|---|---|---|---|---|
| S2B1 | BS01, MS01 | 550215 | 1061 + 00 WB | 6 |
| S2B2 | BS02, MS02 | 550218 | 1077 + 30 WB | 6 |
| S2B3 | BS03, MS03 | 550214 | 1097 + 10 WB | 6 |
| S2B4 | BS04, MS04 | 550223 | 1110 + 90 WB | 6 |
| S2B5 | BS05, MS05 | 550216 | 1165 + 20 WB | 6 |
| S2B6 | BS06, MS06 | 550221 | 1179 + 90 WB | 6 |
| S2B7 | BS07, MS07 | 550259 | 1200 + 60 WB | 6 |
| S2B8 | BS08, MS08 | 550264 | 1200 + 60 EB | 6 |

NOTE: Perform nuclear moisture and density tests at these locations before obtaining bulk samples.

Table 9. Locations for Splitspoon Sampling from Subgrade - SPS-2.

| Sample Location Designation | Sample Designation | Reference Monitoring Section | Sampling Location | Offset from Center Line of Pavement (ft) |
|---|---|---|---|---|
| S2A1 | JS01 | 550219 | 1065 + 60 WB | 6 |
| S2A1 | JS02 | 550219 | 1065 + 60 WB | 6 |
| S2A1 | JS03 | 550219 | 1065 + 60 WB | 6 |
| S2A2 | JS04 | 550219 | 1067 + 10 WB | 6 |
| S2A2 | JS05 | 550219 | 1067 + 10 WB | 6 |
| S2A2 | JS06 | 550219 | 1067 + 10 WB | 6 |
| S2A3 | JS07 | 550219 | 1068 + 60 WB | 6 |
| S2A3 | JS08 | 550219 | 1068 + 60 WB | 6 |
| S2A3 | JS09 | 550219 | 1068 + 60 WB | 6 |
| S2A4 | JS10 | 550262 | 1081 + 80 WB | 6 |
| S2A4 | JS11 | 550262 | 1081 + 80 WB | 6 |
| S2A4 | JS12 | 550262 | 1081 + 80 WB | 6 |
| S2A5 | JS13 | 550262 | 1083 + 30 WB | 6 |
| S2A5 | JS14 | 550262 | 1083 + 30 WB | 6 |
| S2A5 | JS15 | 550262 | 1083 + 30 WB | 6 |
| S2A6 | JS16 | 550262 | 1084 + 80 WB | 6 |
| S2A6 | JS17 | 550262 | 1084 + 80 WB | 6 |
| S2A6 | JS18 | 550262 | 1084 + 80 WB | 6 |
| S2A7 | JS19 | 550222 | 1099 + 50 WB | 6 |
| S2A7 | JS20 | 550222 | 1099 + 50 WB | 6 |
| S2A7 | JS21 | 550222 | 1099 + 50 WB | 6 |
| S2A8 | JS22 | 550222 | 1101 + 00 WB | 6 |
| S2A8 | JS23 | 550222 | 1101 + 00 WB | 6 |
| S2A8 | JS24 | 550222 | 1101 + 00 WB | 6 |
| S2A9 | JS25 | 550222 | 1102 + 50 WB | 6 |
| S2A9 | JS26 | 550222 | 1102 + 50 WB | 6 |
| S2A9 | JS27 | 550222 | 1102 + 50 WB | 6 |
| S2A10 | JS28 | 550261 | 1113 + 30 WB | 8 |
| S2A10 | JS29 | 550261 | 1113 + 30 WB | 8 |
| S2A10 | JS30 | 550261 | 1113 + 30 WB | 8 |
| S2A11 | JS31 | 550261 | 1114 + 80 WB | 8 |
| S2A11 | JS32 | 550261 | 1114 + 80 WB | 8 |
| S2A11 | JS33 | 550261 | 1114 + 80 WB | 8 |
| S2A12 | JS34 | 550261 | 1116 + 30 WB | 8 |
| S2A12 | JS35 | 550261 | 1116 + 30 WB | 8 |
| S2A12 | JS36 | 550261 | 1116 + 30 WB | 8 |

Table 9. Locations for Splitspoon Sampling from Subgrade - SPS-2 (continued).

| Sample Location Designation | Sample Designation | Reference Monitoring Section | Sampling Location | Offset from Center Line of Pavement (ft) |
|---|---|---|---|---|
| S2A13 | JS37 | 550224 | 1167 + 90 WB | 8 |
| S2A13 | JS38 | 550224 | 1167 + 90 WB | 8 |
| S2A13 | JS39 | 550224 | 1167 + 90 WB | 8 |
| S2A14 | JS40 | 550224 | 1169 + 40 WB | 8 |
| S2A14 | JS41 | 550224 | 1169 + 40 WB | 8 |
| S2A14 | JS42 | 550224 | 1169 + 40 WB | 8 |
| S2A15 | JS43 | 550224 | 1170 + 90 WB | 8 |
| S2A15 | JS44 | 550224 | 1170 + 90 WB | 8 |
| S2A15 | JS45 | 550224 | 1170 + 90 WB | 8 |
| S2A16 | JS46 | 550263 | 1189 + 20 WB | 8 |
| S2A16 | JS47 | 550263 | 1189 + 20 WB | 8 |
| S2A16 | JS48 | 550263 | 1189 + 20 WB | 8 |
| S2A17 | JS49 | 550263 | 1190 + 70 WB | 8 |
| S2A17 | JS50 | 550263 | 1190 + 70 WB | 8 |
| S2A17 | JS51 | 550263 | 1190 + 70 WB | 8 |
| S2A18 | JS52 | 550263 | 1192 + 20 WB | 8 |
| S2A18 | JS53 | 550263 | 1192 + 20 WB | 8 |
| S2A18 | JS54 | 550263 | 1192 + 20 WB | 8 |
| S2A19 | JS55 | 550260 | 1203 + 30 WB | 8 |
| S2A19 | JS56 | 550260 | 1203 + 30 WB | 8 |
| S2A19 | JS57 | 550260 | 1203 + 30 WB | 8 |
| S2A20 | JS58 | 550260 | 1204 + 80 WB | 8 |
| S2A20 | JS59 | 550260 | 1204 + 80 WB | 8 |
| S2A20 | JS60 | 550260 | 1204 + 80 WB | 8 |
| S2A21 | JS61 | 550260 | 1206 + 30 WB | 8 |
| S2A21 | JS62 | 550260 | 1206 + 30 WB | 8 |
| S2A21 | JS63 | 550260 | 1206 + 30 WB | 8 |
| S2A22 | JS64 | 550265 | 1203 + 30 EB | 6 |
| S2A22 | JS65 | 550265 | 1203 + 30 EB | 6 |
| S2A22 | JS66 | 550265 | 1203 + 30 EB | 6 |
| S2A23 | JS67 | 550265 | 1204 + 80 EB | 6 |
| S2A23 | JS68 | 550265 | 1204 + 80 EB | 6 |
| S2A23 | JS69 | 550265 | 1204 + 80 EB | 6 |
| S2A24 | JS70 | 550265 | 1206 + 30 EB | 6 |
| S2A24 | JS71 | 550265 | 1206 + 30 EB | 6 |
| S2A24 | JS72 | 550265 | 1206 + 30 EB | 6 |

Table 10. Field and Laboratory Test Plan for Subgrade - SPS-2.

| Test | SHRP Test Designation | SHRP Protocol | Number of Tests | Material Source/ Test Location | Test Conducted by: State | Test Conducted by: FHWA |
|---|---|---|---|---|---|---|
| **FIELD TESTS** | | | | | | |
| In-Place Density & Moisture | - | Section 3.3.15 Reference 3 | 20 | T1 - T20 | X | - |
| Elevation Measurements | - | Fig. 6 Reference 4 | 65 per Section | Section 550224 only. See Table 12 of this report | X | - |
| **LABORATORY TESTS** | | | | | | |
| Sieve Analysis | SS01 | P51 | 8 | B1 - B8 | - | X |
| Hydrometer to 0 001mm | SS02 | P42 | 8 | B1 - B8 | - | X |
| Atterberg Limits | SS03 | P43 | 8 | B1 - B8 | - | X |
| Classification (bulk samples) | SS04 | P52 | 8 | B1 - B8 | - | X |
| Classification (splitspoons, NOTE 1) | | | 24 | A1 - A24 | X | - |
| Moisture-Density Relations | SS05 | P55 | 8 | B1 - B8 | - | X |
| Resilient Modulus | SS07 | P46 | 8 | B1 - B8 | - | X |
| Natural Moisture Content | SS09 | P49 | 8 | B1 - B8 | - | X |
| Permeability | UG09 | P48 | 8 | B1 - B8 | X | - |

NOTE 1: Visual-manual classification only.

Table 11. Locations for In-place Density and Moisture Tests on Prepared Subgrade - SPS-2.

| Sample Location Designation | Reference Monitoring Section | Sampling Location | Offset from Center Line of Pavement (ft) |
|---|---|---|---|
| S2T1* | 550215 | 1061 + 00 WB | 6 |
| S2T2* | 550218 | 1077 + 30 WB | 6 |
| S2T3* | 550214 | 1097 + 10 WB | 6 |
| S2T4* | 550223 | 1110 + 90 WB | 6 |
| S2T5 | 550261 | 1113 + 30 WB | 4 |
| S2T6 | 550261 | 1114 + 80 WB | 4 |
| S2T7 | 550261 | 1116 + 30 WB | 4 |
| S2T8* | 550216 | 1165 + 20 WB | 6 |
| S2T9 | 550224 | 1167 + 90 WB | 4 |
| S2T10 | 550224 | 1169 + 40 WB | 4 |
| S2T11 | 550224 | 1170 + 90 WB | 4 |
| S2T12* | 550221 | 1179 + 90 WB | 6 |
| S2T13 | 550263 | 1189 + 20 WB | 4 |
| S2T14 | 550263 | 1190 + 70 WB | 4 |
| S2T15 | 550263 | 1192 + 20 WB | 4 |
| S2T16* | 550259 | 1200 + 60 WB | 6 |
| S2T17 | 550260 | 1203 + 30 WB | 4 |
| S2T18 | 550260 | 1204 + 80 WB | 4 |
| S2T19 | 550260 | 1206 + 30 WB | 4 |
| S2T20* | 550264 | 1200 + 60 EB | 6 |

NOTE: * - Bulk and moisture sampling locations. Perform nuclear moisture and density tests before obtaining samples.

Table 12. Locations for Elevations Measurements - SPS-2.

| Section Number | Pavement Width (ft) | Station | Distance from Center Line of Pavement (feet) | | | | |
|---|---|---|---|---|---|---|---|
| 550215 WB | 12 | 1055 + 25 | 0 | 3 | 6 | 9 | 12 |
| | | 1055 + 50 | 0 | 3 | 6 | 9 | 12 |
| | | 1056 + 00 | 0 | 3 | 6 | 9 | 12 |
| | | 1056 + 50 | 0 | 3 | 6 | 9 | 12 |
| | | 1057 + 00 | 0 | 3 | 6 | 9 | 12 |
| | | 1057 + 50 | 0 | 3 | 6 | 9 | 12 |
| | | 1058 + 00 | 0 | 3 | 6 | 9 | 12 |
| | | 1058 + 50 | 0 | 3 | 6 | 9 | 12 |
| | | 1059 + 00 | 0 | 3 | 6 | 9 | 12 |
| | | 1059 + 50 | 0 | 3 | 6 | 9 | 12 |
| | | 1060 + 00 | 0 | 3 | 6 | 9 | 12 |
| | | 1060 + 50 | 0 | 3 | 6 | 9 | 12 |
| | | 1060 + 75 | 0 | 3 | 6 | 9 | 12 |
| 550219 WB | 12 | 1064 + 35 | 0 | 3 | 6 | 9 | 12 |
| | | 1064 + 60 | 0 | 3 | 6 | 9 | 12 |
| | | 1065 + 10 | 0 | 3 | 6 | 9 | 12 |
| | | 1065 + 60 | 0 | 3 | 6 | 9 | 12 |
| | | 1066 + 10 | 0 | 3 | 6 | 9 | 12 |
| | | 1066 + 60 | 0 | 3 | 6 | 9 | 12 |
| | | 1067 + 10 | 0 | 3 | 6 | 9 | 12 |
| | | 1067 + 60 | 0 | 3 | 6 | 9 | 12 |
| | | 1068 + 10 | 0 | 3 | 6 | 9 | 12 |
| | | 1068 + 60 | 0 | 3 | 6 | 9 | 12 |
| | | 1069 + 10 | 0 | 3 | 6 | 9 | 12 |
| | | 1069 + 60 | 0 | 3 | 6 | 9 | 12 |
| | | 1069 + 85 | 0 | 3 | 6 | 9 | 12 |
| 550218 WB | 12 | 1071 + 55 | 0 | 3 | 6 | 9 | 12 |
| | | 1071 + 80 | 0 | 3 | 6 | 9 | 12 |
| | | 1072 + 30 | 0 | 3 | 6 | 9 | 12 |
| | | 1072 + 80 | 0 | 3 | 6 | 9 | 12 |
| | | 1073 + 30 | 0 | 3 | 6 | 9 | 12 |
| | | 1073 + 80 | 0 | 3 | 6 | 9 | 12 |
| | | 1074 + 30 | 0 | 3 | 6 | 9 | 12 |
| | | 1074 + 80 | 0 | 3 | 6 | 9 | 12 |
| | | 1075 + 30 | 0 | 3 | 6 | 9 | 12 |
| | | 1075 + 80 | 0 | 3 | 6 | 9 | 12 |
| | | 1076 + 30 | 0 | 3 | 6 | 9 | 12 |
| | | 1076 + 80 | 0 | 3 | 6 | 9 | 12 |
| | | 1077 + 05 | 0 | 3 | 6 | 9 | 12 |
| 550262 WB | 12 | 1080 + 55 | 0 | 3 | 6 | 9 | 12 |
| | | 1080 + 80 | 0 | 3 | 6 | 9 | 12 |
| | | 1081 + 30 | 0 | 3 | 6 | 9 | 12 |
| | | 1081 + 80 | 0 | 3 | 6 | 9 | 12 |
| | | 1082 + 30 | 0 | 3 | 6 | 9 | 12 |
| | | 1082 + 80 | 0 | 3 | 6 | 9 | 12 |
| | | 1083 + 30 | 0 | 3 | 6 | 9 | 12 |
| | | 1083 + 80 | 0 | 3 | 6 | 9 | 12 |
| | | 1084 + 30 | 0 | 3 | 6 | 9 | 12 |
| | | 1084 + 80 | 0 | 3 | 6 | 9 | 12 |
| | | 1085 + 30 | 0 | 3 | 6 | 9 | 12 |
| | | 1085 + 80 | 0 | 3 | 6 | 9 | 12 |
| | | 1086 + 05 | 0 | 3 | 6 | 9 | 12 |
| 550214 WB | 12 | 1091 + 35 | 0 | 3 | 6 | 9 | 12 |
| | | 1091 + 60 | 0 | 3 | 6 | 9 | 12 |
| | | 1092 + 10 | 0 | 3 | 6 | 9 | 12 |
| | | 1092 + 60 | 0 | 3 | 6 | 9 | 12 |
| | | 1093 + 10 | 0 | 3 | 6 | 9 | 12 |
| | | 1093 + 60 | 0 | 3 | 6 | 9 | 12 |
| | | 1094 + 10 | 0 | 3 | 6 | 9 | 12 |
| | | 1094 + 60 | 0 | 3 | 6 | 9 | 12 |
| | | 1095 + 10 | 0 | 3 | 6 | 9 | 12 |
| | | 1095 + 60 | 0 | 3 | 6 | 9 | 12 |
| | | 1096 + 10 | 0 | 3 | 6 | 9 | 12 |
| | | 1096 + 60 | 0 | 3 | 6 | 9 | 12 |
| | | 1096 + 85 | 0 | 3 | 6 | 9 | 12 |

Table 12 Locations for Elevations Measurements - SPS-2 (continued).

| Section Number | Pavement Width (ft) | Station | Distance from Center Line of Pavement (feet) | | | | |
|---|---|---|---|---|---|---|---|
| 550222 | 12 | 1098 + 25 | 0 | 3 | 6 | 9 | 12 |
| WB | | 1098 + 50 | 0 | 3 | 6 | 9 | 12 |
| | | 1099 + 00 | 0 | 3 | 6 | 9 | 12 |
| | | 1099 + 50 | 0 | 3 | 6 | 9 | 12 |
| | | 1100 + 00 | 0 | 3 | 6 | 9 | 12 |
| | | 1100 + 50 | 0 | 3 | 6 | 9 | 12 |
| | | 1101 + 00 | 0 | 3 | 6 | 9 | 12 |
| | | 1101 + 50 | 0 | 3 | 6 | 9 | 12 |
| | | 1102 + 00 | 0 | 3 | 6 | 9 | 12 |
| | | 1102 + 50 | 0 | 3 | 6 | 9 | 12 |
| | | 1103 + 00 | 0 | 3 | 6 | 9 | 12 |
| | | 1103 + 50 | 0 | 3 | 6 | 9 | 12 |
| | | 1103 + 75 | 0 | 3 | 6 | 9 | 12 |
| 550223 | 12 | 1105 + 15 | 0 | 3 | 6 | 9 | 12 |
| WB | | 1105 + 40 | 0 | 3 | 6 | 9 | 12 |
| | | 1105 + 90 | 0 | 3 | 6 | 9 | 12 |
| | | 1106 + 40 | 0 | 3 | 6 | 9 | 12 |
| | | 1106 + 90 | 0 | 3 | 6 | 9 | 12 |
| | | 1107 + 40 | 0 | 3 | 6 | 9 | 12 |
| | | 1107 + 90 | 0 | 3 | 6 | 9 | 12 |
| | | 1108 + 40 | 0 | 3 | 6 | 9 | 12 |
| | | 1108 + 90 | 0 | 3 | 6 | 9 | 12 |
| | | 1109 + 40 | 0 | 3 | 6 | 9 | 12 |
| | | 1109 + 90 | 0 | 3 | 6 | 9 | 12 |
| | | 1110 + 40 | 0 | 3 | 6 | 9 | 12 |
| | | 1110 + 65 | 0 | 3 | 6 | 9 | 12 |
| 550261 | 12 | 1112 + 05 | 0 | 3 | 6 | 9 | 12 |
| WB | | 1112 + 30 | 0 | 3 | 6 | 9 | 12 |
| | | 1112 + 80 | 0 | 3 | 6 | 9 | 12 |
| | | 1113 + 30 | 0 | 3 | 6 | 9 | 12 |
| | | 1113 + 80 | 0 | 3 | 6 | 9 | 12 |
| | | 1114 + 30 | 0 | 3 | 6 | 9 | 12 |
| | | 1114 + 80 | 0 | 3 | 6 | 9 | 12 |
| | | 1115 + 30 | 0 | 3 | 6 | 9 | 12 |
| | | 1115 + 80 | 0 | 3 | 6 | 9 | 12 |
| | | 1116 + 30 | 0 | 3 | 6 | 9 | 12 |
| | | 1116 + 80 | 0 | 3 | 6 | 9 | 12 |
| | | 1117 + 30 | 0 | 3 | 6 | 9 | 12 |
| | | 1117 + 55 | 0 | 3 | 6 | 9 | 12 |
| 550213 | 14 | 1122 + 85 | 0 | 3 | 6 | 9 | 14 |
| WB | | 1123 + 10 | 0 | 3 | 6 | 9 | 14 |
| | | 1123 + 60 | 0 | 3 | 6 | 9 | 14 |
| | | 1124 + 10 | 0 | 3 | 6 | 9 | 14 |
| | | 1124 + 60 | 0 | 3 | 6 | 9 | 14 |
| | | 1125 + 10 | 0 | 3 | 6 | 9 | 14 |
| | | 1125 + 60 | 0 | 3 | 6 | 9 | 14 |
| | | 1126 + 10 | 0 | 3 | 6 | 9 | 14 |
| | | 1126 + 60 | 0 | 3 | 6 | 9 | 14 |
| | | 1127 + 10 | 0 | 3 | 6 | 9 | 14 |
| | | 1127 + 60 | 0 | 3 | 6 | 9 | 14 |
| | | 1128 + 10 | 0 | 3 | 6 | 9 | 14 |
| | | 1128 + 35 | 0 | 3 | 6 | 9 | 14 |
| 550217 | 14 | 1145 + 05 | 0 | 3 | 6 | 9 | 14 |
| WB | | 1145 + 30 | 0 | 3 | 6 | 9 | 14 |
| | | 1145 + 80 | 0 | 3 | 6 | 9 | 14 |
| | | 1146 + 30 | 0 | 3 | 6 | 9 | 14 |
| | | 1146 + 80 | 0 | 3 | 6 | 9 | 14 |
| | | 1147 + 30 | 0 | 3 | 6 | 9 | 14 |
| | | 1147 + 80 | 0 | 3 | 6 | 9 | 14 |
| | | 1148 + 30 | 0 | 3 | 6 | 9 | 14 |
| | | 1148 + 80 | 0 | 3 | 6 | 9 | 14 |
| | | 1149 + 30 | 0 | 3 | 6 | 9 | 14 |
| | | 1149 + 80 | 0 | 3 | 6 | 9 | 14 |
| | | 1150 + 30 | 0 | 3 | 6 | 9 | 14 |
| | | 1150 + 55 | 0 | 3 | 6 | 9 | 14 |

Table 12 Locations for Elevations Measurements - SPS-2 (continued)

| Section Number | Pavement Width (ft) | Station | Distance from Center Line of Pavement (feet) | | | | |
|---|---|---|---|---|---|---|---|
| 550220 WB | 14 | 1152 + 25 | 0 | 3 | 6 | 9 | 14 |
| | | 1152 + 50 | 0 | 3 | 6 | 9 | 14 |
| | | 1153 + 00 | 0 | 3 | 6 | 9 | 14 |
| | | 1153 + 50 | 0 | 3 | 6 | 9 | 14 |
| | | 1154 + 00 | 0 | 3 | 6 | 9 | 14 |
| | | 1154 + 50 | 0 | 3 | 6 | 9 | 14 |
| | | 1155 + 00 | 0 | 3 | 6 | 9 | 14 |
| | | 1155 + 50 | 0 | 3 | 6 | 9 | 14 |
| | | 1156 + 00 | 0 | 3 | 6 | 9 | 14 |
| | | 1156 + 50 | 0 | 3 | 6 | 9 | 14 |
| | | 1157 + 00 | 0 | 3 | 6 | 9 | 14 |
| | | 1157 + 50 | 0 | 3 | 6 | 9 | 14 |
| | | 1157 + 75 | 0 | 3 | 6 | 9 | 14 |
| 550216 WB | 14 | 1159 + 45 | 0 | 3 | 6 | 9 | 14 |
| | | 1159 + 70 | 0 | 3 | 6 | 9 | 14 |
| | | 1160 + 20 | 0 | 3 | 6 | 9 | 14 |
| | | 1160 + 70 | 0 | 3 | 6 | 9 | 14 |
| | | 1161 + 20 | 0 | 3 | 6 | 9 | 14 |
| | | 1161 + 70 | 0 | 3 | 6 | 9 | 14 |
| | | 1162 + 20 | 0 | 3 | 6 | 9 | 14 |
| | | 1162 + 70 | 0 | 3 | 6 | 9 | 14 |
| | | 1163 + 20 | 0 | 3 | 6 | 9 | 14 |
| | | 1163 + 70 | 0 | 3 | 6 | 9 | 14 |
| | | 1164 + 20 | 0 | 3 | 6 | 9 | 14 |
| | | 1164 + 70 | 0 | 3 | 6 | 9 | 14 |
| | | 1164 + 95 | 0 | 3 | 6 | 9 | 14 |
| 550224 WB | 14 | 1166 + 65 | 0 | 3 | 6 | 9 | 14 |
| | | 1166 + 90 | 0 | 3 | 6 | 9 | 14 |
| | | 1167 + 40 | 0 | 3 | 6 | 9 | 14 |
| | | 1167 + 90 | 0 | 3 | 6 | 9 | 14 |
| | | 1168 + 40 | 0 | 3 | 6 | 9 | 14 |
| | | 1168 + 90 | 0 | 3 | 6 | 9 | 14 |
| | | 1169 + 40 | 0 | 3 | 6 | 9 | 14 |
| | | 1169 + 90 | 0 | 3 | 6 | 9 | 14 |
| | | 1170 + 40 | 0 | 3 | 6 | 9 | 14 |
| | | 1170 + 90 | 0 | 3 | 6 | 9 | 14 |
| | | 1171 + 40 | 0 | 3 | 6 | 9 | 14 |
| | | 1171 + 90 | 0 | 3 | 6 | 9 | 14 |
| | | 1172 + 15 | 0 | 3 | 6 | 9 | 14 |
| 550221 WB | 14 | 1174 + 15 | 0 | 3 | 6 | 9 | 14 |
| | | 1174 + 40 | 0 | 3 | 6 | 9 | 14 |
| | | 1174 + 90 | 0 | 3 | 6 | 9 | 14 |
| | | 1175 + 40 | 0 | 3 | 6 | 9 | 14 |
| | | 1175 + 90 | 0 | 3 | 6 | 9 | 14 |
| | | 1176 + 40 | 0 | 3 | 6 | 9 | 14 |
| | | 1176 + 90 | 0 | 3 | 6 | 9 | 14 |
| | | 1177 + 40 | 0 | 3 | 6 | 9 | 14 |
| | | 1177 + 90 | 0 | 3 | 6 | 9 | 14 |
| | | 1178 + 40 | 0 | 3 | 6 | 9 | 14 |
| | | 1178 + 90 | 0 | 3 | 6 | 9 | 14 |
| | | 1179 + 40 | 0 | 3 | 6 | 9 | 14 |
| | | 1179 + 65 | 0 | 3 | 6 | 9 | 14 |
| 550263 WB | 14 | 1187 + 95 | 0 | 3 | 6 | 9 | 14 |
| | | 1188 + 20 | 0 | 3 | 6 | 9 | 14 |
| | | 1188 + 70 | 0 | 3 | 6 | 9 | 14 |
| | | 1189 + 20 | 0 | 3 | 6 | 9 | 14 |
| | | 1189 + 70 | 0 | 3 | 6 | 9 | 14 |
| | | 1190 + 20 | 0 | 3 | 6 | 9 | 14 |
| | | 1190 + 70 | 0 | 3 | 6 | 9 | 14 |
| | | 1191 + 20 | 0 | 3 | 6 | 9 | 14 |
| | | 1191 + 70 | 0 | 3 | 6 | 9 | 14 |
| | | 1192 + 20 | 0 | 3 | 6 | 9 | 14 |
| | | 1192 + 70 | 0 | 3 | 6 | 9 | 14 |
| | | 1193 + 20 | 0 | 3 | 6 | 9 | 14 |
| | | 1193 + 45 | 0 | 3 | 6 | 9 | 14 |

Table 12 Locations for Elevations Measurements - SPS-2 (continued)

| Section Number | Pavement Width (ft) | Station | Distance from Center Line of Pavement (feet) | | | | |
|---|---|---|---|---|---|---|---|
| 550259 WB | 14 | 1194 + 85 | 0 | 3 | 6 | 9 | 14 |
| | | 1195 + 10 | 0 | 3 | 6 | 9 | 14 |
| | | 1195 + 60 | 0 | 3 | 6 | 9 | 14 |
| | | 1196 + 10 | 0 | 3 | 6 | 9 | 14 |
| | | 1196 + 60 | 0 | 3 | 6 | 9 | 14 |
| | | 1197 + 10 | 0 | 3 | 6 | 9 | 14 |
| | | 1197 + 60 | 0 | 3 | 6 | 9 | 14 |
| | | 1198 + 10 | 0 | 3 | 6 | 9 | 14 |
| | | 1198 + 60 | 0 | 3 | 6 | 9 | 14 |
| | | 1199 + 10 | 0 | 3 | 6 | 9 | 14 |
| | | 1199 + 60 | 0 | 3 | 6 | 9 | 14 |
| | | 1200 + 10 | 0 | 3 | 6 | 9 | 14 |
| | | 1200 + 35 | 0 | 3 | 6 | 9 | 14 |
| 550260 WB | 14 | 1202 + 05 | 0 | 3 | 6 | 9 | 14 |
| | | 1202 + 30 | 0 | 3 | 6 | 9 | 14 |
| | | 1202 + 80 | 0 | 3 | 6 | 9 | 14 |
| | | 1203 + 30 | 0 | 3 | 6 | 9 | 14 |
| | | 1203 + 80 | 0 | 3 | 6 | 9 | 14 |
| | | 1204 + 30 | 0 | 3 | 6 | 9 | 14 |
| | | 1204 + 80 | 0 | 3 | 6 | 9 | 14 |
| | | 1205 + 30 | 0 | 3 | 6 | 9 | 14 |
| | | 1205 + 80 | 0 | 3 | 6 | 9 | 14 |
| | | 1206 + 30 | 0 | 3 | 6 | 9 | 14 |
| | | 1206 + 80 | 0 | 3 | 6 | 9 | 14 |
| | | 1207 + 30 | 0 | 3 | 6 | 9 | 14 |
| | | 1207 + 55 | 0 | 3 | 6 | 9 | 14 |
| 550264 EB | 14 | 1194 + 85 | 0 | 3 | 6 | 9 | 14 |
| | | 1195 + 10 | 0 | 3 | 6 | 9 | 14 |
| | | 1195 + 60 | 0 | 3 | 6 | 9 | 14 |
| | | 1196 + 10 | 0 | 3 | 6 | 9 | 14 |
| | | 1196 + 60 | 0 | 3 | 6 | 9 | 14 |
| | | 1197 + 10 | 0 | 3 | 6 | 9 | 14 |
| | | 1197 + 60 | 0 | 3 | 6 | 9 | 14 |
| | | 1198 + 10 | 0 | 3 | 6 | 9 | 14 |
| | | 1198 + 60 | 0 | 3 | 6 | 9 | 14 |
| | | 1199 + 10 | 0 | 3 | 6 | 9 | 14 |
| | | 1199 + 60 | 0 | 3 | 6 | 9 | 14 |
| | | 1200 + 10 | 0 | 3 | 6 | 9 | 14 |
| | | 1200 + 35 | 0 | 3 | 6 | 9 | 14 |
| 550265 EB | 14 | 1202 + 05 | 0 | 3 | 6 | 9 | 14 |
| | | 1202 + 30 | 0 | 3 | 6 | 9 | 14 |
| | | 1202 + 80 | 0 | 3 | 6 | 9 | 14 |
| | | 1203 + 30 | 0 | 3 | 6 | 9 | 14 |
| | | 1203 + 80 | 0 | 3 | 6 | 9 | 14 |
| | | 1204 + 30 | 0 | 3 | 6 | 9 | 14 |
| | | 1204 + 80 | 0 | 3 | 6 | 9 | 14 |
| | | 1205 + 30 | 0 | 3 | 6 | 9 | 14 |
| | | 1205 + 80 | 0 | 3 | 6 | 9 | 14 |
| | | 1206 + 30 | 0 | 3 | 6 | 9 | 14 |
| | | 1206 + 80 | 0 | 3 | 6 | 9 | 14 |
| | | 1207 + 30 | 0 | 3 | 6 | 9 | 14 |
| | | 1207 + 55 | 0 | 3 | 6 | 9 | 14 |

Table 13 Locations for FWD Tests - SPS-2

| Section Number | Locations for FWD Tests | |
|---|---|---|
| | Distance from Center Line of Pavement | |
| | 9 5 +/- 0 5 ft (Outer Wheel Path) | 6 0 +/- 0 5 ft (Mid lane) |
| 550215 WB | 1055 + 25 | 1055 + 25 |
| | 1055 + 50 | 1055 + 75 |
| | 1056 + 00 | 1056 + 25 |
| | 1056 + 50 | 1056 + 75 |
| | 1057 + 00 | 1057 + 25 |
| | 1057 + 50 | 1057 + 75 |
| | 1058 + 00 | 1058 + 25 |
| | 1058 + 50 | 1058 + 75 |
| | 1059 + 00 | 1059 + 25 |
| | 1059 + 50 | 1059 + 75 |
| | 1060 + 00 | 1060 + 25 |
| | 1060 + 50 | 1060 + 75 |
| | 1060 + 75 | - |
| 550219 WB | 1064 + 35 | 1064 + 35 |
| | 1064 + 60 | 1064 + 85 |
| | 1065 + 10 | 1065 + 35 |
| | 1065 + 60 | 1065 + 85 |
| | 1066 + 10 | 1066 + 35 |
| | 1066 + 60 | 1066 + 85 |
| | 1067 + 10 | 1067 + 35 |
| | 1067 + 60 | 1067 + 85 |
| | 1068 + 10 | 1068 + 35 |
| | 1068 + 60 | 1068 + 85 |
| | 1069 + 10 | 1069 + 35 |
| | 1069 + 60 | 1069 + 85 |
| | 1069 + 85 | - |
| 550218 WB | 1071 + 55 | 1071 + 55 |
| | 1071 + 80 | 1072 + 05 |
| | 1072 + 30 | 1072 + 55 |
| | 1072 + 80 | 1073 + 05 |
| | 1073 + 30 | 1073 + 55 |
| | 1073 + 80 | 1074 + 05 |
| | 1074 + 30 | 1074 + 55 |
| | 1074 + 80 | 1075 + 05 |
| | 1075 + 30 | 1075 + 55 |
| | 1075 + 80 | 1076 + 05 |
| | 1076 + 30 | 1076 + 55 |
| | 1076 + 80 | 1077 + 05 |
| | 1077 + 05 | - |
| 550262 WB | 1080 + 55 | 1080 + 55 |
| | 1080 + 80 | 1081 + 05 |
| | 1081 + 30 | 1081 + 55 |
| | 1081 + 80 | 1082 + 05 |
| | 1082 + 30 | 1082 + 55 |
| | 1082 + 80 | 1083 + 05 |
| | 1083 + 30 | 1083 + 55 |
| | 1083 + 80 | 1084 + 05 |
| | 1084 + 30 | 1084 + 55 |
| | 1084 + 80 | 1085 + 05 |
| | 1085 + 30 | 1085 + 55 |
| | 1085 + 80 | 1086 + 05 |
| | 1086 + 05 | - |
| 550214 WB | 1091 + 35 | 1091 + 35 |
| | 1091 + 60 | 1091 + 85 |
| | 1092 + 10 | 1092 + 35 |
| | 1092 + 60 | 1092 + 85 |
| | 1093 + 10 | 1093 + 35 |
| | 1093 + 60 | 1093 + 85 |
| | 1094 + 10 | 1094 + 35 |
| | 1094 + 60 | 1094 + 85 |
| | 1095 + 10 | 1095 + 35 |
| | 1095 + 60 | 1095 + 85 |
| | 1096 + 10 | 1096 + 35 |
| | 1096 + 60 | 1096 + 85 |
| | 1096 + 85 | - |

Table 13 Locations for FWD Tests - SPS-2 (continued)

| Section Number | Locations for FWD Tests | |
|---|---|---|
| | Distance from Center Line of Pavement | |
| | 9 5 +/- 0 5 ft (Outer Wheel Path) | 6 0 +/- 0 5 ft (Mid lane) |
| 550222 WB | 1098 + 25 | 1098 + 25 |
| | 1098 + 50 | 1098 + 75 |
| | 1099 + 00 | 1099 + 25 |
| | 1099 + 50 | 1099 + 75 |
| | 1100 + 00 | 1100 + 25 |
| | 1100 + 50 | 1100 + 75 |
| | 1101 + 00 | 1101 + 25 |
| | 1101 + 50 | 1101 + 75 |
| | 1102 + 00 | 1102 + 25 |
| | 1102 + 50 | 1102 + 75 |
| | 1103 + 00 | 1103 + 25 |
| | 1103 + 50 | 1103 + 75 |
| | 1103 + 75 | - |
| 550223 WB | 1105 + 15 | 1105 + 15 |
| | 1105 + 40 | 1105 + 65 |
| | 1105 + 90 | 1106 + 15 |
| | 1106 + 40 | 1106 + 65 |
| | 1106 + 90 | 1107 + 15 |
| | 1107 + 40 | 1107 + 65 |
| | 1107 + 90 | 1108 + 15 |
| | 1108 + 40 | 1108 + 65 |
| | 1108 + 90 | 1109 + 15 |
| | 1109 + 40 | 1109 + 65 |
| | 1109 + 90 | 1110 + 15 |
| | 1110 + 40 | 1110 + 65 |
| | 1110 + 65 | - |
| 550261 WB | 1112 + 05 | 1112 + 05 |
| | 1112 + 30 | 1112 + 55 |
| | 1112 + 80 | 1113 + 05 |
| | 1113 + 30 | 1113 + 55 |
| | 1113 + 80 | 1114 + 05 |
| | 1114 + 30 | 1114 + 55 |
| | 1114 + 80 | 1115 + 05 |
| | 1115 + 30 | 1115 + 55 |
| | 1115 + 80 | 1116 + 05 |
| | 1116 + 30 | 1116 + 55 |
| | 1116 + 80 | 1117 + 05 |
| | 1117 + 30 | 1117 + 55 |
| | 1117 + 55 | - |
| 550213 WB | 1122 + 85 | 1122 + 85 |
| | 1123 + 10 | 1123 + 35 |
| | 1123 + 60 | 1123 + 85 |
| | 1124 + 10 | 1124 + 35 |
| | 1124 + 60 | 1124 + 85 |
| | 1125 + 10 | 1125 + 35 |
| | 1125 + 60 | 1125 + 85 |
| | 1126 + 10 | 1126 + 35 |
| | 1126 + 60 | 1126 + 85 |
| | 1127 + 10 | 1127 + 35 |
| | 1127 + 60 | 1127 + 85 |
| | 1128 + 10 | 1128 + 35 |
| | 1128 + 35 | - |
| 550217 WB | 1145 + 05 | 1145 + 05 |
| | 1145 + 30 | 1145 + 55 |
| | 1145 + 80 | 1146 + 05 |
| | 1146 + 30 | 1146 + 55 |
| | 1146 + 80 | 1147 + 05 |
| | 1147 + 30 | 1147 + 55 |
| | 1147 + 80 | 1148 + 05 |
| | 1148 + 30 | 1148 + 55 |
| | 1148 + 80 | 1149 + 05 |
| | 1149 + 30 | 1149 + 55 |
| | 1149 + 80 | 1150 + 05 |
| | 1150 + 30 | 1150 + 55 |
| | 1150 + 55 | - |

Table 13. Locations for FWD Tests - SPS-2 (continued).

| Section Number | Locations for FWD Tests | |
|---|---|---|
| | Distance from Center Line of Pavement | |
| | 9.5 +/- 0.5 ft. (Outer Wheel Path) | 6.0 +/- 0.5 ft. (Mid lane) |
| 550220 WB | 1152 + 25 | 1152 + 25 |
| | 1152 + 50 | 1152 + 75 |
| | 1153 + 00 | 1153 + 25 |
| | 1153 + 50 | 1153 + 75 |
| | 1154 + 00 | 1154 + 25 |
| | 1154 + 50 | 1154 + 75 |
| | 1155 + 00 | 1155 + 25 |
| | 1155 + 50 | 1155 + 75 |
| | 1156 + 00 | 1156 + 25 |
| | 1156 + 50 | 1156 + 75 |
| | 1157 + 00 | 1157 + 25 |
| | 1157 + 50 | 1157 + 75 |
| | 1157 + 75 | - |
| 550216 WB | 1159 + 45 | 1159 + 45 |
| | 1159 + 70 | 1159 + 95 |
| | 1160 + 20 | 1160 + 45 |
| | 1160 + 70 | 1160 + 95 |
| | 1161 + 20 | 1161 + 45 |
| | 1161 + 70 | 1161 + 95 |
| | 1162 + 20 | 1162 + 45 |
| | 1162 + 70 | 1162 + 95 |
| | 1163 + 20 | 1163 + 45 |
| | 1163 + 70 | 1163 + 95 |
| | 1164 + 20 | 1164 + 45 |
| | 1164 + 70 | 1164 + 95 |
| | 1164 + 95 | - |
| 550224 WB | 1166 + 65 | 1166 + 65 |
| | 1166 + 90 | 1167 + 15 |
| | 1167 + 40 | 1167 + 65 |
| | 1167 + 90 | 1168 + 15 |
| | 1168 + 40 | 1168 + 65 |
| | 1168 + 90 | 1169 + 15 |
| | 1169 + 40 | 1169 + 65 |
| | 1169 + 90 | 1170 + 15 |
| | 1170 + 40 | 1170 + 65 |
| | 1170 + 90 | 1171 + 15 |
| | 1171 + 40 | 1171 + 65 |
| | 1171 + 90 | 1172 + 15 |
| | 1172 + 15 | - |
| 550221 WB | 1174 + 15 | 1174 + 15 |
| | 1174 + 40 | 1174 + 65 |
| | 1174 + 90 | 1175 + 15 |
| | 1175 + 40 | 1175 + 65 |
| | 1175 + 90 | 1176 + 15 |
| | 1176 + 40 | 1176 + 65 |
| | 1176 + 90 | 1177 + 15 |
| | 1177 + 40 | 1177 + 65 |
| | 1177 + 90 | 1178 + 15 |
| | 1178 + 40 | 1178 + 65 |
| | 1178 + 90 | 1179 + 15 |
| | 1179 + 40 | 1179 + 65 |
| | 1179 + 65 | - |
| 550263 WB | 1187 + 95 | 1187 + 95 |
| | 1188 + 20 | 1188 + 45 |
| | 1188 + 70 | 1188 + 95 |
| | 1189 + 20 | 1189 + 45 |
| | 1189 + 70 | 1189 + 95 |
| | 1190 + 20 | 1190 + 45 |
| | 1190 + 70 | 1190 + 95 |
| | 1191 + 20 | 1191 + 45 |
| | 1191 + 70 | 1191 + 95 |
| | 1192 + 20 | 1192 + 45 |
| | 1192 + 70 | 1192 + 95 |
| | 1193 + 20 | 1193 + 45 |
| | 1193 + 45 | - |

Table 13. Locations for FWD Tests - SPS-2 (continued).

| Section Number | Locations for FWD Tests | |
|---|---|---|
| | Distance from Center Line of Pavement | |
| | 9.5 +/- 0.5 ft. (Outer Wheel Path) | 6.0 +/- 0.5 ft. (Mid lane) |
| 550259 WB | 1194 + 85 | 1194 + 85 |
| | 1195 + 10 | 1195 + 35 |
| | 1195 + 60 | 1195 + 85 |
| | 1196 + 10 | 1196 + 35 |
| | 1196 + 60 | 1196 + 85 |
| | 1197 + 10 | 1197 + 35 |
| | 1197 + 60 | 1197 + 85 |
| | 1198 + 10 | 1198 + 35 |
| | 1198 + 60 | 1198 + 85 |
| | 1199 + 10 | 1199 + 35 |
| | 1199 + 60 | 1199 + 85 |
| | 1200 + 10 | 1200 + 35 |
| | 1200 + 35 | - |
| 550260 WB | 1202 + 05 | 1202 + 05 |
| | 1202 + 30 | 1202 + 55 |
| | 1202 + 80 | 1203 + 05 |
| | 1203 + 30 | 1203 + 55 |
| | 1203 + 80 | 1204 + 05 |
| | 1204 + 30 | 1204 + 55 |
| | 1204 + 80 | 1205 + 05 |
| | 1205 + 30 | 1205 + 55 |
| | 1205 + 80 | 1206 + 05 |
| | 1206 + 30 | 1206 + 55 |
| | 1206 + 80 | 1207 + 05 |
| | 1207 + 30 | 1207 + 55 |
| | 1207 + 55 | - |
| 550264 EB | 1194 + 85 | 1194 + 85 |
| | 1195 + 10 | 1195 + 35 |
| | 1195 + 60 | 1195 + 85 |
| | 1196 + 10 | 1196 + 35 |
| | 1196 + 60 | 1196 + 85 |
| | 1197 + 10 | 1197 + 35 |
| | 1197 + 60 | 1197 + 85 |
| | 1198 + 10 | 1198 + 35 |
| | 1198 + 60 | 1198 + 85 |
| | 1199 + 10 | 1199 + 35 |
| | 1199 + 60 | 1199 + 85 |
| | 1200 + 10 | 1200 + 35 |
| | 1200 + 35 | - |
| 550265 EB | 1202 + 05 | 1202 + 05 |
| | 1202 + 30 | 1202 + 55 |
| | 1202 + 80 | 1203 + 05 |
| | 1203 + 30 | 1203 + 55 |
| | 1203 + 80 | 1204 + 05 |
| | 1204 + 30 | 1204 + 55 |
| | 1204 + 80 | 1205 + 05 |
| | 1205 + 30 | 1205 + 55 |
| | 1205 + 80 | 1206 + 05 |
| | 1206 + 30 | 1206 + 55 |
| | 1206 + 80 | 1207 + 05 |
| | 1207 + 30 | 1207 + 55 |
| | 1207 + 55 | - |

Table 14. Locations for Bulk Samples and Moisture Samples from Embankment (Fill) - SPS-2.

| Sample Location Designation | Sample Designation | Reference Monitoring Section | Sampling Location | Offset from Center Line of Pavement (ft) |
|---|---|---|---|---|
| S2B9 | BS09, MS09 | 550217 | 1150 + 80 WB | 6 |
| S2B10 | BS10, MS10 | 550220 | 1158 + 00 WB | 6 |
| S2B11 | BS11, MS11 | 550221 | 1179 + 90 WB | 6 |
| S2B12 | BS12, MS12 | 550259 | 1200 + 60 WB | 6 |
| S2B13 | BS13, MS13 | 550264 | 1194 + 60 EB | 6 |

NOTE: Perform nuclear moisture and density tests at these locations before obtaining bulk samples.

Table 15. Locations for Splitspoon Sampling from Embankment (Fill) - SPS-2.

| Sample Location Designation | Sample Designation | Reference Monitoring Section | Sampling Location | Offset from Center Line of Pavement (ft) |
|---|---|---|---|---|
| S2A25 | JS73 | 550213 | 1124 + 10 WB | 8 |
| S2A25 | JS74 | 550213 | 1124 + 10 WB | 8 |
| S2A25 | JS75 | 550213 | 1124 + 10 WB | 8 |
| S2A26 | JS76 | 550213 | 1125 + 60 WB | 8 |
| S2A26 | JS77 | 550213 | 1125 + 60 WB | 8 |
| S2A26 | JS78 | 550213 | 1125 + 60 WB | 8 |
| S2A27 | JS79 | 550213 | 1127 + 10 WB | 8 |
| S2A27 | JS80 | 550213 | 1127 + 10 WB | 8 |
| S2A27 | JS81 | 550213 | 1127 + 10 WB | 8 |
| S2A28 | JS82 | 550220 | 1153 + 50 WB | 8 |
| S2A28 | JS83 | 550220 | 1153 + 50 WB | 8 |
| S2A28 | JS84 | 550220 | 1153 + 50 WB | 8 |
| S2A29 | JS85 | 550220 | 1155 + 00 WB | 8 |
| S2A29 | JS86 | 550220 | 1155 + 00 WB | 8 |
| S2A29 | JS87 | 550220 | 1155 + 00 WB | 8 |
| S2A30 | JS88 | 550220 | 1156 + 50 WB | 8 |
| S2A30 | JS89 | 550220 | 1156 + 50 WB | 8 |
| S2A30 | JS90 | 550220 | 1156 + 50 WB | 8 |

Table 16. Field and Laboratory Test Plan for Embankment (Fill) - SPS-2.

| Test | SHRP Test Designation | SHRP Protocol | Number of Tests | Material Source/ Test Location | Test Conducted by | |
|---|---|---|---|---|---|---|
| | | | | | State | FHWA |
| **FIELD TESTS** | | | | | | |
| In-Place Density & Moisture | - | Section 3.3 15 Reference 3 | 32 | T21 - T52 | X | - |
| Elevation Measurements | - | Fig 6 Reference 4 | 65 per Section | All sections with fill. See Table 12 of this report. | X | - |
| **LABORATORY TESTS** | | | | | | |
| Sieve Analysis | SS01 | P51 | 5 | B9 - B13 | - | X |
| Hydrometer to 0.001mm | SS02 | P42 | 5 | B9 - B13 | - | X |
| Atterberg Limits | SS03 | P43 | 5 | B9 - B13 | - | X |
| Classification (bulk samples) | SS04 | P52 | 5 | B9 - B13 | - | X |
| Classification (splitspoons, NOTE 1) | | | 6 | A25 - A30 | X | - |
| Moisture-Density Relations | SS05 | P55 | 5 | B9 - B13 | - | X |
| Resilient Modulus | SS07 | P46 | 5 | B9 - B13 | - | X |
| Natural Moisture Content | SS09 | P49 | 5 | B9 - B13 | - | X |
| Permeability | UG09 | P48 | 5 | B9 - B13 | X | - |

NOTE 1: Visual-manual classification only

Table 17. Locations for In-place Density and Moisture Tests on Prepared Embankment - SPS-2.

| Sample Location Designation | Reference Monitoring Section | Sampling Location | Offset from Center Line of Pavement (ft) |
|---|---|---|---|
| S2T21 | 550213 | 1124 + 10 WB | 4 |
| S2T22 | 550213 | 1125 + 60 WB | 4 |
| S2T23 | 550213 | 1127 + 10 WB | 4 |
| S2T24 | 550217 | 1146 + 30 WB | 6 |
| S2T25 | 550217 | 1147 + 80 WB | 6 |
| S2T26 | 550217 | 1149 + 30 WB | 6 |
| S2T27* | 550217 | 1150 + 80 WB | 6 |
| S2T28 | 550220 | 1153 + 50 WB | 4 |
| S2T29 | 550220 | 1155 + 00 WB | 4 |
| S2T30 | 550220 | 1156 + 50 WB | 4 |
| S2T31* | 550220 | 1158 + 00 WB | 6 |
| S2T32 | 550216 | 1160 + 70 WB | 6 |
| S2T33 | 550216 | 1162 + 20 WB | 6 |
| S2T34 | 550216 | 1163 + 70 WB | 6 |
| S2T35 | 550221 | 1175 + 40 WB | 6 |
| S2T36 | 550221 | 1176 + 90 WB | 6 |
| S2T37 | 550221 | 1178 + 40 WB | 6 |
| S2T38* | 550221 | 1179 + 90 WB | 6 |
| S2T39 | 550263 | 1189 + 20 WB | 6 |
| S2T40 | 550263 | 1190 + 70 WB | 6 |
| S2T41 | 550263 | 1192 + 20 WB | 6 |
| S2T42 | 550259 | 1196 + 10 WB | 6 |
| S2T43 | 550259 | 1197 + 60 WB | 6 |
| S2T44 | 550259 | 1199 + 10 WB | 6 |
| S2T45* | 550259 | 1200 + 60 WB | 6 |
| S2T46 | 550260 | 1203 + 30 WB | 6 |
| S2T47 | 550260 | 1204 + 80 WB | 6 |
| S2T48 | 550260 | 1206 + 30 WB | 6 |
| S2T49* | 550264 | 1194 + 60 EB | 6 |
| S2T50 | 550264 | 1195 + 60 EB | 6 |
| S2T51 | 550264 | 1196 + 60 EB | 6 |
| S2T52 | 550264 | 1197 + 60 EB | 6 |

NOTE: * - Bulk and moisture sampling locations. Perform nuclear moisture and density tests before obtaining samples.

Table 18. Locations for Bulk Samples and Moisture Samples from Existing Subbase - SPS-2.

| Sample Location Designation | Sample Designation | Reference Monitoring Section | Sampling Location | Offset from Center Line of Pavement (ft) |
|---|---|---|---|---|
| S2B14 | BG01, MG01 | 550215 | 1061 + 00 WB | 6 |
| S2B15 | BG02, MG02 | 550218 | 1077 + 30 WB | 6 |
| S2B16 | BG03, MG03 | 550214 | 1097 + 10 WB | 6 |
| S2B17 | BG04, MG04 | 550223 | 1110 + 90 WB | 6 |
| S2B18 | BG05, MG05 | 550265 | 1207 + 80 EB | 6 |

NOTE: Perform nuclear moisture and density tests at these locations before obtaining bulk samples.

Table 19 Field and Laboratory Test Plan for Existing Subbase - SPS-2.

| Test | SHRP Test Designation | SHRP Protocol | Number of Tests | Material Source/ Test Location | Test Conducted by | |
|---|---|---|---|---|---|---|
| | | | | | State | FHWA |
| **FIELD TESTS** | | | | | | |
| In-Place Density & Moisture | - | Section 3.3.15 Reference 3 | 17 | T53 - T69 | X | - |
| Elevation Measurements | - | Fig. 6 Reference 4 | 65 per Section | Table 12 of this report | X | - |
| **LABORATORY TESTS** | | | | | | |
| Particle Size Analysis | UG01 | P41 | 5 | B14 - B18 | - | X |
| Sieve Analysis (washed) | UG02 | P41 | 5 | B14 - B18 | - | X |
| Atterberg Limits | UG04 | P43 | 5 | B14 - B18 | - | X |
| Moisture-Density Relations | UG05 | P44 | 5 | B14 - B18 | - | X |
| Resilient Modulus | UG07 | P46 | 5 | B14 - B18 | - | X |
| Classification | UG08 | P47 | 5 | B14 - B18 | - | X |
| Permeability | UG09 | P48 | 5 | B14 - B18 | X | - |
| Natural Moisture Content | UG10 | P49 | 5 | B14 - B18 | - | X |

Table 20. Locations for In-place Density and Moisture Tests on Existing Subbase - SPS-2.

| Test Location Designation | Reference Monitoring Section | Test Location | Offset from Center Line of Pavement (ft) |
|---|---|---|---|
| S2T53 | 550215 | 1056 + 50 WB | 6 |
| S2T54 | 550215 | 1058 + 00 WB | 6 |
| S2T55 | 550215 | 1059 + 50 WB | 6 |
| S2T56* | 550215 | 1061 + 00 WB | 6 |
| S2T57 | 550219 | 1065 + 60 WB | 6 |
| S2T58 | 550219 | 1067 + 10 WB | 6 |
| S2T59 | 550219 | 1068 + 60 WB | 6 |
| S2T60* | 550218 | 1077 + 30 WB | 6 |
| S2T61* | 550214 | 1097 + 10 WB | 6 |
| S2T62 | 550223 | 1106 + 40 WB | 6 |
| S2T63 | 550223 | 1107 + 90 WB | 6 |
| S2T64 | 550223 | 1109 + 40 WB | 6 |
| S2T65* | 550223 | 1110 + 90 WB | 6 |
| S2T66 | 550265 | 1203 + 30 EB | 6 |
| S2T67 | 550265 | 1204 + 80 EB | 6 |
| S2T68 | 550265 | 1206 + 30 EB | 6 |
| S2T69* | 550265 | 1207 + 80 EB | 6 |

NOTE: * - Bulk and moisture sampling locations. Perform nuclear moisture and density tests before obtaining samples.

Table 21. Locations for Bulk Samples and Moisture Samples from Existing Crushed Rock Base - SPS-2.

| Sample Location Designation | Sample Designation | Reference Monitoring Section | Sampling Location | Offset from Center Line of Pavement (ft) |
|---|---|---|---|---|
| S2B19 | BG06, MG06 | 550218 | 1077 + 30 WB | 6 |
| S2B20 | BG07, MG07 | 550214 | 1097 + 10 WB | 6 |

Table 22. Field and Laboratory Test Plan for Existing Crushed Rock Base - SPS-2.

| Test | SHRP Test Designation | SHRP Protocol | Number of Tests | Material Source/ Test Location | Test Conducted by | |
|---|---|---|---|---|---|---|
| | | | | | State | FHWA |
| **FIELD TESTS** | | | | | | |
| Elevation Measurements | - | Fig. 6 Reference 4 | 65 per Section | Table 12 of this report | X | - |
| **LABORATORY TESTS** | | | | | | |
| Particle Size Analysis | UG01 | P41 | 2 | B19 - B20 | - | X |
| Sieve Analysis (washed) | UG02 | P41 | 2 | B19 - B20 | - | X |
| Atterberg Limits | UG04 | P43 | 2 | B19 - B20 | - | X |
| Moisture-Density Relations | UG05 | P44 | 2 | B19 - B20 | - | X |
| Resilient Modulus | UG07 | P46 | 2 | B19 - B20 | - | X |
| Classification | UG08 | P47 | 2 | B19 - B20 | - | X |
| Permeability | UG09 | P48 | 2 | B19 - B20 | X | - |
| Natural Moisture Content | UG10 | P49 | 2 | B19 - B20 | - | X |

Table 23. Locations for Bulk Samples and Moisture Samples from Prepared Aggregate Base - SPS-2.

| Testing Location | Sample Designation | Reference Monitoring Section | Sampling Location | Offset from Center Line of Pavement (ft) |
|---|---|---|---|---|
| S2B21 | BG08, MG08 | 550215 | 1061 + 00 WB | 6 |
| S2B22 | BG09, MG09 | 550214 | 1097 + 10 WB | 6 |
| S2B23 | BG10, MG10 | 550216 | 1165 + 20 WB | 6 |
| S2B24 | BG11, MG11 | 550259 | 1200 + 60 WB | 6 |
| S2B25 | BG12, MG12 | 550265 | 1207 + 80 WB | 6 |

NOTE: Perform nuclear moisture and density tests at these locations before obtaining bulk samples.

Table 24. Field and Laboratory Test Plan for Aggregate Base - SPS-2.

| Test | SHRP Test Designation | SHRP Protocol | Number of Tests | Material Source/ Test Location | Test Conducted by: | |
|---|---|---|---|---|---|---|
| | | | | | State | FHWA |
| **FIELD TESTS** | | | | | | |
| In-Place Density & Moisture | - | Section 3.3.15 Reference 3 | 50 | T70 - T119 | X | - |
| Elevation Measurements | - | Fig. 6 Reference 4 | 65 per Section | Table 12 of this report | X | - |
| Falling Weight Deflectometer (FWD) Testing | - | P59 | 25 per Section | Table 13 of this report. | - | X |
| **LABORATORY TESTS** | | | | | | |
| Particle Size Analysis | UG01 | P41 | 5 | B21 - B25 | - | X |
| Sieve Analysis (washed) | UG02 | P41 | 5 | B21 - B25 | - | X |
| Atterberg Limits | UG04 | P43 | 5 | B21 - B25 | - | X |
| Moisture-Density Relations | UG05 | P44 | 5 | B21 - B25 | - | X |
| Resilient Modulus | UG07 | P46 | 5 | B21 - B25 | - | X |
| Classification | UG08 | P47 | 5 | B21 - B25 | - | X |
| Permeability | UG09 | P48 | 5 | B21 - B25 | X | - |
| Natural Moisture Content | UG10 | P49 | 5 | B21 - B25 | - | X |

Table 25. Locations for In-place Density and Moisture Tests on Compacted Aggregate Base - SPS-2.

| Test Location Designation | Reference Monitoring Section | Test Location | Offset from Center Line of Pavement (ft) |
|---|---|---|---|
| S2T70 | 550215 | 1056 + 50 WB | 6 |
| S2T71 | 550215 | 1058 + 00 WB | 6 |
| S2T72 | 550215 | 1059 + 50 WB | 6 |
| S2T73* | 550215 | 1061 + 00 WB | 6 |
| S2T74 | 550262 | 1081 + 80 WB | 6 |
| S2T75 | 550262 | 1083 + 30 WB | 6 |
| S2T76 | 550262 | 1084 + 80 WB | 6 |
| S2T77 | 550214 | 1092 + 60 WB | 6 |
| S2T78 | 550214 | 1094 + 10 WB | 6 |
| S2T79 | 550214 | 1095 + 60 WB | 6 |
| S2T80* | 550214 | 1097 + 10 WB | 6 |
| S2T81 | 550222 | 1099 + 50 WB | 6 |
| S2T82 | 550222 | 1101 + 00 WB | 6 |
| S2T83 | 550222 | 1102 + 50 WB | 6 |
| S2T84 | 550223 | 1106 + 40 WB | 6 |
| S2T85 | 550223 | 1107 + 90 WB | 6 |
| S2T86 | 550223 | 1109 + 40 WB | 6 |
| S2T87 | 550261 | 1113 + 30 WB | 6 |
| S2T88 | 550261 | 1114 + 80 WB | 6 |
| S2T89 | 550261 | 1116 + 30 WB | 6 |
| S2T90 | 550213 | 1124 + 10 WB | 6 |
| S2T91 | 550213 | 1125 + 60 WB | 6 |
| S2T92 | 550213 | 1127 + 10 WB | 6 |
| S2T93 | 550216 | 1160 + 70 WB | 6 |
| S2T94 | 550216 | 1162 + 20 WB | 6 |
| S2T95 | 550216 | 1163 + 70 WB | 6 |
| S2T96* | 550216 | 1165 + 20 WB | 6 |
| S2T97 | 550224 | 1167 + 90 WB | 6 |
| S2T98 | 550224 | 1169 + 40 WB | 6 |
| S2T99 | 550224 | 1170 + 90 WB | 6 |
| S2T100 | 550221 | 1175 + 40 WB | 6 |
| S2T101 | 550221 | 1176 + 90 WB | 6 |
| S2T102 | 550221 | 1178 + 40 WB | 6 |
| S2T103 | 550263 | 1189 + 20 WB | 6 |
| S2T104 | 550263 | 1190 + 70 WB | 6 |
| S2T105 | 550263 | 1192 + 20 WB | 6 |

Table 25. Locations for In-place Density and Moisture Tests on Compacted Aggregate Base - SPS-2 (continued).

| Test Location Designation | Reference Monitoring Section | Test Location | Offset from Center Line of Pavement (ft) |
|---|---|---|---|
| S2T106 | 550259 | 1196 + 10 WB | 6 |
| S2T107 | 550259 | 1197 + 60 WB | 6 |
| S2T108 | 550259 | 1199 + 10 WB | 6 |
| S2T109* | 550259 | 1200 + 60 WB | 6 |
| S2T110 | 550260 | 1203 + 30 WB | 6 |
| S2T111 | 550260 | 1204 + 80 WB | 6 |
| S2T112 | 550260 | 1206 + 30 WB | 6 |
| S2T113 | 550264 | 1196 + 10 EB | 6 |
| S2T114 | 550264 | 1197 + 60 EB | 6 |
| S2T115 | 550264 | 1199 + 10 EB | 6 |
| S2T116 | 550265 | 1203 + 30 EB | 6 |
| S2T117 | 550265 | 1204 + 80 EB | 6 |
| S2T118 | 550265 | 1206 + 30 EB | 6 |
| S2T119* | 550265 | 1207 + 80 EB | 6 |

NOTE: * - Bulk and moisture sampling locations. Perform nuclear moisture and density tests before obtaining samples.

Table 26. Locations for Bulk Samples of Permeable Asphalt Treated Base - SPS-2.

| Testing Location | Sample Designation | Reference Monitoring Section | Sampling Location (NOTE) |
|---|---|---|---|
| S2B26 | BT01 | 550222 | 1101 + 00 WB |
| S2B27 | BT02 | 550224 | 1169 + 40 WB |
| S2B28 | BT03 | 550221 | 1176 + 90 WB |

NOTE: Sample from the paver or the haul vehicle for the mix to be placed at the specified location.

Table 27. Field and Laboratory Test Plan for Permeable Asphalt Treated Base (PATB) and Cement Stabilized Open Graded Base (CSOGB) - SPS-2.

| Test | SHRP Test Designation | SHRP Protocol | Number of Tests | Material Source/ Test Location | Test Conducted by. | |
|---|---|---|---|---|---|---|
| | | | | | State | FHWA |
| **FIELD TESTS** | | | | | | |
| Elevation Measurements | - | Fig. 6 Reference 4 | 65 per Section | Table 12 of this report | X | - |
| **LABORATORY TESTS** | | | | | | |
| Asphalt Content (Extraction) | AC04 | P04 | 3 | B26 - B28 | X | - |
| **Extracted Aggregate** | | | | | | |
| Gradation of Aggregate | AG04 | P14 | 3 | B26 - B28 | X | - |

Table 28. Locations for Bulk Samples of Lean Concrete Base - SPS-2.

| Testing Location | Sample Designation | Reference Monitoring Section | Sampling Location (NOTE) |
|---|---|---|---|
| S2B29 | BL01 | 550219 | 1067 + 10 WB |
| S2B30 | BL02 | 550217 | 1147 + 80 WB |

NOTE: Sample from the haul vehicle for the mix to be placed at the specified locations.

Table 29. Locations for Cores from Lean Concrete Base - SPS-2.

| Reference Monitoring Section | Core Location | Core Number | Offset from Center Line of Pavement (ft) | Time for Coring After Placement | | |
|---|---|---|---|---|---|---|
| | | | | 10-12 Days | 21-24 Days | 350-360 Days |
| 550219 | 1064 + 35 WB | S2C09 | 9.0 | X | - | - |
| | | S2C10 | 7 5 | - | X | - |
| | | S2C11 | 6.0 | - | - | X |
| | 1069 + 85 WB | S2C13 | 9.0 | X | - | - |
| | | S2C14 | 7.5 | - | X | - |
| | | S2C15 | 6.0 | - | - | X |
| 550218 | 1071 + 55 WB | S2C17 | 9.0 | X | - | - |
| | | S2C18 | 7.5 | - | X | - |
| | | S2C19 | 6.0 | - | - | X |
| | 1077 + 05 WB | S2C21 | 9.0 | X | - | - |
| | | S2C22 | 7.5 | - | X | - |
| | | S2C23 | 6.0 | - | - | X |
| 550217 | 1145 + 05 WB | S2C76 | 9.0 | X | - | - |
| | | S2C77 | 7.5 | - | X | - |
| | | S2C78 | 6.0 | - | - | X |
| | 1050 + 55 WB | S2C80 | 9.0 | X | - | - |
| | | S2C81 | 7 5 | - | X | - |
| | | S2C82 | 6.0 | - | - | X |
| 550220 | 1152 + 25 WB | S2C84 | 9.0 | X | - | - |
| | | S2C85 | 7.5 | - | X | - |
| | | S2C86 | 6.0 | - | - | X |
| | 1157 + 75 WB | S2C88 | 9 0 | X | - | - |
| | | S2C89 | 7 5 | - | X | - |
| | | S2C90 | 6.0 | - | - | X |

NOTE: Cores may be obtained in conjunction with coring of the PCC layer, if the time requirements for laboratory testing of LCB are satisfied.

Table 30. Laboratory and Field Test Plan for Lean Concrete Base - SPS-2.

| Test | SHRP Test Designation | SHRP Protocol | Number of Tests | Material Source/ Test Location | Test Conducted by: State | Test Conducted by: FHWA |
|---|---|---|---|---|---|---|
| **FIELD TESTS** | | | | | | |
| Air Content | - | ASTM C231 | 2 | B29, B30 | X | - |
| Slump | - | ASTM C143 | 2 | B29, B30 | X | - |
| Temperature | - | ASTM C1064 | 2 | B29, B30 | X | - |
| Elevation Measurements | - | Fig. 6 Reference 4 | 65 per Section | Table 12 of this report | X | - |
| **SAMPLES FROM AS-DELIVERED MATERIAL** | | | | | | |
| Compressive strength (cylinders) | | | | | | |
| 7 Day | PC01 | P61 | 6 | B29, B30 - - - NOTE 1 | X | - |
| 28 Day | PC01 | P61 | 6 | B29, B30 - - - NOTE 1 | X | - |
| 1 Year | PC01 | P61 | 6 | B29, B30 - - - NOTE 1 | X | - |
| **SAMPLES FROM AS-PLACED MATERIAL** | | | | | | |
| Thickness of cores | PC06 | P66 | 24 | All cores | X | - |
| Compressive strength (cores) | | | | | | |
| 14 Day | PC01 | P61 | 8 | C9, C13, C17, C21, C76, C80, C84, C88 | X | - |
| 28 Day | PC01 | P61 | 8 | C10, C14, C18, C22, C77, C81, C85, C89 | X | - |
| 1 Year | PC01 | P61 | 8 | C11, C15, C19, C23, C78, C82, C86, C90 | X | - |

NOTE 1: Nine cylinders (6" X 12") are molded from each bulk sample, giving a total of 18 cylinders. Three cylinders from each bulk sample are tested at each cure age.

Table 31. Locations for Bulk Samples of Portland Cement Concrete - SPS-2.

| Testing Location | Sample Designation | Reference Monitoring Section | Sampling Location (NOTE) | Flexural Strength (psi) |
|---|---|---|---|---|
| S2B31 | BP01 | 550215 | 1058 + 00 WB | 550 |
| S2B32 | BP02 | 550218 | 1074 + 30 WB | 900 |
| S2B33 | BP03 | 550214 | 1094 + 10 WB | 900 |
| S2B34 | BP04 | 550223 | 1107 + 90 WB | 550 |
| S2B35 | BP05 | 550213 | 1125 + 60 WB | 550 |
| S2B36 | BP06 | 550220 | 1155 + 00 WB | 900 |
| S2B37 | BP07 | 550224 | 1169 + 40 WB | 900 |
| S2B38 | BP08 | 550263 | 1190 + 70 WB | 550 |
| S2B39 | BP09 | 550260 | 1204 + 80 WB | 550 |
| S2B40 | BP10 | 550264 | 1197 + 60 EB | 550 |

NOTE: Sample from the haul vehicle for the mix to be placed at the specified locations.

Table 32. Locations for Cores from Portland Cement Concrete - SPS-2.

| Reference Monitoring Section | Core Location | Core Number | Offset from Center Line of Pavement (ft) | Time for Coring After Placement (NOTE 1) | | | Comment |
|---|---|---|---|---|---|---|---|
| | | | | 10-12 Days | 21-24 Days | 350-360 Days | |
| 550215 | 1055 + 25 WB | S2C01 | 9.0 | | | X | |
| | | S2C02 | 7.5 | | X | | |
| | | S2C03 | 6.0 | | X | | |
| | | S2C04 | 4.5 | X | | | |
| | 1060 + 75 WB | S2C05 | 9.0 | | | X | |
| | | S2C06 | 7.5 | | | X | |
| | | S2C07 | 6.0 | | X | | |
| | | S2C08 | 4.5 | X | | | |
| 550219 | 1064 + 35 WB | S2C09 | 9.0 | | | X | NOTE 2 |
| | | S2C10 | 7.5 | | X | | NOTE 2 |
| | | S2C11 | 6.0 | | X | | NOTE 2 |
| | | S2C12 | 4.5 | X | | | |
| | 1069 + 85 WB | S2C13 | 9.0 | | | X | NOTE 2 |
| | | S2C14 | 7.5 | | | X | NOTE 2 |
| | | S2C15 | 6.0 | | X | | NOTE 2 |
| | | S2C16 | 4.5 | X | | | |
| 550218 | 1071 + 55 WB | S2C17 | 9.0 | | | X | NOTE 2 |
| | | S2C18 | 7.5 | | X | | NOTE 2 |
| | | S2C19 | 6.0 | | X | | NOTE 2 |
| | | S2C20 | 4.5 | X | | | |
| | 1077 + 05 WB | S2C21 | 9.0 | | | X | NOTE 2 |
| | | S2C22 | 7.5 | | | X | NOTE 2 |
| | | S2C23 | 6.0 | | X | | NOTE 2 |
| | | S2C24 | 4.5 | X | | | |
| 550262 | 1080 + 55 WB | S2C25 | 9 0 | | | X | |
| | | S2C26 | 7.5 | | X | | |
| | | S2C27 | 6.0 | | X | | |
| | | S2C28 | 4 5 | X | | | |
| | 1086 + 05 WB | S2C29 | 9 0 | | | X | |
| | | S2C30 | 7 5 | | | X | |
| | | S2C31 | 6.0 | | X | | |
| | | S2C32 | 4 5 | X | | | |
| 550214 | 1091 + 35 WB | S2C33 | 9.0 | | | X | |
| | | S2C34 | 7.5 | | X | | |
| | | S2C35 | 6.0 | | X | | |
| | | S2C36 | 4.5 | X | | | |
| | 1096 + 85 WB | S2C37 | 9.0 | | | X | |
| | | S2C38 | 7.5 | | | X | |
| | | S2C39 | 6.0 | | X | | |
| | | S2C40 | 4 5 | X | | | |

Table 32. Locations for Cores from Portland Cement Concrete - SPS-2 (continued).

| Reference Monitoring Section | Core Location | Core Number | Offset from Center Line of Pavement (ft) | Time for Coring After Placement (NOTE 1) | | | Comment |
|---|---|---|---|---|---|---|---|
| | | | | 10-12 Days | 21-24 Days | 350-360 Days | |
| 550222 | 1098 + 25 WB | S2C41 | 9 0 | | | X | |
| | | S2C42 | 7 5 | | X | | |
| | | S2C43 | 6.0 | | X | | |
| | | S2C44 | 4.5 | X | | | |
| | 1103 + 75 WB | S2C45 | 9 0 | | | X | |
| | | S2C46 | 7.5 | | | X | |
| | | S2C47 | 6.0 | | X | | |
| | | S2C48 | 4.5 | X | | | |
| | | S2C49 | 3 0 | | X | | |
| 550223 | 1105 + 15 WB | S2C50 | 9.0 | | | X | |
| | | S2C51 | 7 5 | | X | | |
| | | S2C52 | 6.0 | | X | | |
| | | S2C53 | 4.5 | X | | | |
| | 1110 + 65 WB | S2C54 | 9.0 | | | X | |
| | | S2C55 | 7 5 | | | X | |
| | | S2C56 | 6.0 | | X | | |
| | | S2C57 | 4.5 | X | | | |
| | | S2C58 | 3 0 | | X | | |
| 550261 | 1112 + 05 WB | S2C59 | 9 0 | | | X | |
| | | S2C60 | 7 5 | | X | | |
| | | S2C61 | 6.0 | | X | | |
| | | S2C62 | 4 5 | X | | | |
| | 1117 + 55 WB | S2C63 | 9.0 | | | X | |
| | | S2C64 | 7 5 | | | X | |
| | | S2C65 | 6.0 | | X | | |
| | | S2C66 | 4 5 | X | | | |
| 550213 | 1122 + 85 WB | S2C67 | 9 0 | | | X | |
| | | S2C68 | 7 5 | | X | | |
| | | S2C69 | 6.0 | | X | | |
| | | S2C70 | 4.5 | X | | | |
| | 1128 + 35 WB | S2C71 | 9.0 | | | X | |
| | | S2C72 | 7 5 | | | X | |
| | | S2C73 | 6 0 | | X | | |
| | | S2C74 | 4 5 | X | | | |
| | | S2C75 | 3 0 | | X | | |
| 550217 | 1145 + 05 WB | S2C76 | 9.0 | | | X | NOTE 2 |
| | | S2C77 | 7 5 | | X | | NOTE 2 |
| | | S2C78 | 6.0 | | X | | NOTE 2 |
| | | S2C79 | 4 5 | X | | | |
| | 1150 + 55 WB | S2C80 | 9 0 | | | X | NOTE 2 |
| | | S2C81 | 7 5 | | | X | NOTE 2 |
| | | S2C82 | 6.0 | | X | | NOTE 2 |
| | | S2C83 | 4 5 | X | | | |

Table 32. Locations for Cores from Portland Cement Concrete - SPS-2 (continued).

| Reference Monitoring Section | Core Location | Core Number | Offset from Center Line of Pavement (ft) | Time for Coring After Placement (NOTE 1) | | | Comment |
|---|---|---|---|---|---|---|---|
| | | | | 10-12 Days | 21-24 Days | 350-360 Days | |
| 550220 | 1152 + 25 WB | S2C84 | 9 0 | | | X | NOTE 2 |
| | | S2C85 | 7 5 | | X | | NOTE 2 |
| | | S2C86 | 6 0 | | X | | NOTE 2 |
| | | S2C87 | 4.5 | X | | | |
| | 1157 + 75 WB | S2C88 | 9.0 | | | X | NOTE 2 |
| | | S2C89 | 7.5 | | | X | NOTE 2 |
| | | S2C90 | 6 0 | | X | | NOTE 2 |
| | | S2C91 | 4.5 | X | | | |
| 550216 | 1159 + 45 WB | S2C92 | 9 0 | | | X | |
| | | S2C93 | 7 5 | | X | | |
| | | S2C94 | 6.0 | | X | | |
| | | S2C95 | 4 5 | X | | | |
| | 1164 + 95 WB | S2C96 | 9.0 | | | X | |
| | | S2C97 | 7 5 | | | X | |
| | | S2C98 | 6.0 | | X | | |
| | | S2C99 | 4 5 | X | | | |
| 550224 | 1166 + 65 WB | S2C100 | 9.0 | | | X | |
| | | S2C101 | 7 5 | | X | | |
| | | S2C102 | 6.0 | | X | | |
| | | S2C103 | 4 5 | X | | | |
| | 1172 + 05 WB | S2C104 | 9.0 | | | X | |
| | | S2C105 | 7 5 | | | X | |
| | | S2C106 | 6.0 | | X | | |
| | | S2C107 | 4 5 | X | | | |
| 550221 | 1174 + 15 WB | S2C108 | 9.0 | | | X | |
| | | S2C109 | 7.5 | | X | | |
| | | S2C110 | 6 0 | | X | | |
| | | S2C111 | 4 5 | X | | | |
| | 1179 + 65 WB | S2C112 | 9.0 | | | X | |
| | | S2C113 | 7 5 | | | X | |
| | | S2C114 | 6.0 | | X | | |
| | | S2C115 | 4 5 | X | | | |
| 550263 | 1187 + 95 WB | S2C116 | 9 0 | | | X | |
| | | S2C117 | 7 5 | | X | | |
| | | S2C118 | 6 0 | | X | | |
| | | S2C119 | 4.5 | X | | | |
| | 1193 + 45 WB | S2C120 | 9 0 | | | X | |
| | | S2C121 | 7 5 | | | X | |
| | | S2C122 | 6 0 | | X | | |
| | | S2C123 | 4 5 | X | | | |

Table 32 Locations for Cores from Portland Cement Concrete - SPS-2 (continued).

| Reference Monitoring Section | Core Location | Core Number | Offset from Center Line of Pavement (ft) | Time for Coring After Placement (NOTE 1) | | | Comment |
|---|---|---|---|---|---|---|---|
| | | | | 10-12 Days | 21-24 Days | 350-360 Days | |
| 550259 | 1194 + 85 WB | S2C124 | 9 0 | | | X | |
| | | S2C125 | 7 5 | | X | | |
| | | S2C126 | 6.0 | | X | | |
| | | S2C127 | 4.5 | X | | | |
| | 1200 + 35 WB | S2C128 | 9.0 | | | X | |
| | | S2C129 | 7 5 | | | X | |
| | | S2C130 | 6 0 | | X | | |
| | | S2C131 | 4.5 | X | | | |
| 550260 | 1202 + 05 WB | S2C132 | 9.0 | | | X | |
| | | S2C133 | 7 5 | | X | | |
| | | S2C134 | 6.0 | | X | | |
| | | S2C135 | 4 5 | X | | | |
| | 1207 + 55 WB | S2C136 | 9.0 | | | X | |
| | | S2C137 | 7.5 | | | X | |
| | | S2C138 | 6 0 | | X | | |
| | | S2C139 | 4.5 | X | | | |
| | | S2C140 | 3.0 | | X | | |
| 550264 | 1194 + 85 EB | S2C141 | 9 0 | | | X | |
| | | S2C142 | 7 5 | | X | | |
| | | S2C143 | 6 0 | | X | | |
| | | S2C144 | 4 5 | X | | | |
| | 1200 + 35 EB | S2C145 | 9.0 | | | X | |
| | | S2C146 | 7 5 | | | X | |
| | | S2C147 | 6 0 | | X | | |
| | | S2C148 | 4.5 | X | | | |
| 550265 | 1202 + 05 EB | S2C149 | 9.0 | | | X | |
| | | S2C150 | 7 5 | | X | | |
| | | S2C151 | 6.0 | | X | | |
| | | S2C152 | 4.5 | X | | | |
| | 1207 + 55 EB | S2C153 | 9 0 | | | X | |
| | | S2C154 | 7 5 | | | X | |
| | | S2C155 | 6.0 | | X | | |
| | | S2C156 | 4 5 | X | | | |
| | | S2C157 | 3.0 | | X | | |

NOTE 1: Cores must be obtained at specified times so that laboratory testing can be carried out at 14, 28, and 365 days after placement.

NOTE 2: Cores from the LCB may be obtained at these locations when coring PCC, if the time requirements for LCB cores are satisfied.

NOTE 3: The coring locations may be shifted slightly longitudinally if LCB cores are obtained independently of PCC cores.

Table 33. Field and Laboratory Test Plan for As-Delivered PCC - SPS-2.

| Test | SHRP Test Designation | SHRP Protocol | Number of Tests | Material Source/ Test Location | Test Conducted by: | |
|---|---|---|---|---|---|---|
| | | | | | State | FHWA |
| **FIELD TESTS** | | | | | | |
| Elevation Measurements | - | Fig. 6 Reference 4 | 65 per Section | Table 12 of this report | X | - |
| **FIELD TESTS ON CONCRETE** | | | | | | |
| Air Content | - | ASTM C231 | 10 | B31 - B40 | X | - |
| Slump | - | ASTM C143 | 10 | B31 - B40 | X | - |
| Temperature | - | ASTM C1064 | 10 | B31 - B40 | X | - |
| **LABORATORY TESTS** | | | | | | |
| Compressive Strength (Cylinders) | | | | | | |
| 14 Day | PC01 | P61 | 10 | B31 - B40 - - NOTE 1 | X | - |
| 28 Day | PC01 | P61 | 10 | B31 - B40 - - NOTE 1 | X | - |
| 1 Year | PC01 | P61 | 10 | B31 - B40 - - NOTE 1 | X | - |
| Splitting Tensile Strength (Cylinders) | | | | | | |
| 14 Day | PC02 | P62 | 10 | B31 - B40 - - NOTE 1 | X | - |
| 28 Day | PC02 | P62 | 10 | B31 - B40 - - NOTE 1 | X | - |
| 1 Year | PC02 | P62 | 10 | B31 - B40 - - NOTE 1 | X | - |
| Flexural Strength (Beams) | | | | | | |
| 14 Day | PC09 | P69 | 10 | B31 - B40 - - NOTE 2 | X | - |
| 28 Day | PC09 | P69 | 10 | B31 - B40 - - NOTE 2 | X | - |
| 1 Year | PC09 | P69 | 10 | B31 - B40 - - NOTE 2 | X | - |

NOTE 1: From each bulk sample, six cylinders (6" X 12") are molded. Use one cylinder from each bulk sample.
NOTE 2: From each bulk sample three beam specimens (6" X 6" X 20") are molded. Use one beam from each bulk sample.

Table 34. Laboratory Test Plan for PCC Cores - SPS-2.

| Test Name | SHRP Test Designation | SHRP Protocol | No. of Tests | Core Number | Test Conducted by: | |
|---|---|---|---|---|---|---|
| | | | | | State | FHWA |
| Core Thickness | PC06 | P66 | 157 | C1 - C157 | X | - |
| Air Content at 28 Days | PC08 | P68 | 4 | C: 3, 19, 75, 126 - - NOTE 1 | X | - |
| PCC Unit Weight | PC05 | P65 | 19 | C: 2, 10, 18, 26, 34, 42, 51, 60, 68, 77, 85, 93, 101, 109, 117, 125, 133, 142, 150 | X | - |
| Compressive Strength | | | | | | |
| 14 Day | PC01 | P61 | 19 | C: 4, 12, 20, 28, 36, 44, 53, 62, 70, 79, 87, 95, 103, 111, 119, 127, 135, 144, 152 | X | - |
| 28 Day | PC01 | P61 | 19 | C: 3, 11, 19, 27, 35, 43, 52, 61, 69, 78, 86, 94, 102, 110, 118, 126, 134, 143, 151 | X | - |
| 1 Year | PC01 | P61 | 19 | C: 1, 9, 17, 25, 33, 41, 50, 59, 67, 76, 84, 92, 100 108, 116, 124, 132, 141, 149 | X | - |
| Splitting Tensile Strength | | | | | | |
| 14 Day | PC02 | P62 | 19 | C: 8, 16, 24, 32, 40, 48, 57, 66, 74, 83, 91, 99, 107, 115, 123, 131, 139, 148, 156 | X | - |
| 28 Day | PC02 | P62 | 19 | C: 7, 15, 23, 31, 39, 47, 56, 65, 73, 82, 90, 98, 106, 114, 122, 130, 138, 147, 155 | X | - |
| 1 Year | PC02 | P62 | 19 | C: 6, 14, 22, 30, 38, 46, 55, 64, 72, 81, 89, 97, 105, 113, 121, 129, 137, 146, 154 | X | - |
| Static Modulus of Elasticity | | | | | | |
| 28 Day (All PCC Unit Weight cores) | PC04 | P64 | 19 | C: 2, 10, 18, 26, 34, 42, 51, 60, 68, 77, 85, 93, 101, 109, 117, 125, 133, 142, 150 | X | - |
| 1 Year | PC04 | P64 | 19 | C: 5, 13, 21, 29, 37, 45, 54, 63, 71, 80, 88, 96, 104, 112, 120, 128, 136, 145, 153 | X | - |
| PCC Coefficient of Thermal Expansion - - NOTE 2 | PC03 | P63 | 4 | C: 49, 58, 140, 157 | - | X |

NOTE 1: Perform tests on cores 3, 19, and 126 before performing 28-day compressive strength tests.
NOTE 2: Send cores to FHWA lab in Virginia. See Section 4.8.1 in Reference 3 for address.

Table 35 - Samples to be Shipped to the State Laboratory (or their designee) - SPS-2.

| Sample Location Number | Sample Number | Lab Test Number | Type of Sample |
|---|---|---|---|
| **Portland Cement Concrete** | | | |
| B31 | GX01 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GX02 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GY01 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GY02 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GZ01 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GZ02 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | FX01 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |
| | FY01 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |
| | FZ01 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |
| B32 | GX03 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GX04 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GY03 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GY04 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GZ03 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GZ04 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | FX02 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |
| | FY02 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |
| | FZ02 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |
| B33 | GX05 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GX06 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GY05 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GY06 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GZ05 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GZ06 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | FX03 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |
| | FY03 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |
| | FZ03 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |
| B34 | GX07 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GX08 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GY07 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GY08 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GZ07 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GZ08 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | FX04 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |
| | FY04 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |
| | FZ04 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |

Table 35 - Samples to be Shipped to the State Laboratory (or their designee) - SPS-2 (continued).

| Sample Location Number | Sample Number | Lab Test Number | Type of Sample |
|---|---|---|---|
| B35 | GX09 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GX10 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GY09 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GY10 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GZ09 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GZ10 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | FX05 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |
| | FY05 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |
| | FZ05 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |
| B36 | GX11 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GX12 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GY11 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GY12 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GZ11 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GZ12 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | FX06 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |
| | FY06 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |
| | FZ06 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |
| B37 | GX13 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GX14 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GY13 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GY14 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GZ13 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GZ14 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | FX07 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |
| | FY07 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |
| | FZ07 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |
| B38 | GX15 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GX16 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GY15 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GY16 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GZ15 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GZ16 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | FX08 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |
| | FY08 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |
| | FZ08 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |

Table 35 - Samples to be Shipped to the State Laboratory (or their designee) - SPS-2 (continued).

| Sample Location Number | Sample Number | Lab Test Number | Type of Sample |
|---|---|---|---|
| B39 | GX17 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GX18 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GY17 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GY18 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GZ17 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GZ18 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | FX09 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |
| | FY09 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |
| | FZ09 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |
| B40 | GX19 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GX20 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GY19 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GY20 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GZ19 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | GZ20 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | FX10 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |
| | FY10 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |
| | FZ10 | 3 | 152 x 152 x 508 mm (6 x 6 x 20 in) beam |
| C1 | CP01 | 2 | 102 mm (4 in) core |
| C2 | CP02 | 2 | 102 mm (4 in) core |
| C3 | CP03 | 2 | 102 mm (4 in) core |
| C4 | CP04 | 2 | 102 mm (4 in) core |
| C5 | CP05 | 1 | 102 mm (4 in) core |
| C6 | CP06 | 1 | 102 mm (4 in) core |
| C7 | CP07 | 1 | 102 mm (4 in) core |
| C8 | CP08 | 1 | 102 mm (4 in) core |
| C9 | CP09 | 2 | 102 mm (4 in) core |
| C10 | CP10 | 2 | 102 mm (4 in) core |
| C11 | CP11 | 2 | 102 mm (4 in) core |
| C12 | CP12 | 2 | 102 mm (4 in) core |
| C13 | CP13 | 1 | 102 mm (4 in) core |
| C14 | CP14 | 1 | 102 mm (4 in) core |
| C15 | CP15 | 1 | 102 mm (4 in) core |
| C16 | CP16 | 1 | 102 mm (4 in) core |
| C17 | CP17 | 2 | 102 mm (4 in) core |
| C18 | CP18 | 2 | 102 mm (4 in) core |
| C19 | CP19 | 2 | 102 mm (4 in) core |
| C20 | CP20 | 2 | 102 mm (4 in) core |

Table 35 - Samples to be Shipped to the State Laboratory (or their designee) - SPS-2 (continued).

| Sample Location Number | Sample Number | Lab Test Number | Type of Sample |
|---|---|---|---|
| C21 | CP21 | 1 | 102 mm (4 in) core |
| C22 | CP22 | 1 | 102 mm (4 in) core |
| C23 | CP23 | 1 | 102 mm (4 in) core |
| C24 | CP24 | 1 | 102 mm (4 in) core |
| C25 | CP25 | 2 | 102 mm (4 in) core |
| C26 | CP26 | 2 | 102 mm (4 in) core |
| C27 | CP27 | 2 | 102 mm (4 in) core |
| C28 | CP28 | 2 | 102 mm (4 in) core |
| C29 | CP29 | 1 | 102 mm (4 in) core |
| C30 | CP30 | 1 | 102 mm (4 in) core |
| C31 | CP31 | 1 | 102 mm (4 in) core |
| C32 | CP32 | 1 | 102 mm (4 in) core |
| C33 | CP33 | 2 | 102 mm (4 in) core |
| C34 | CP34 | 2 | 102 mm (4 in) core |
| C35 | CP35 | 2 | 102 mm (4 in) core |
| C36 | CP36 | 2 | 102 mm (4 in) core |
| C37 | CP37 | 1 | 102 mm (4 in) core |
| C38 | CP38 | 1 | 102 mm (4 in) core |
| C39 | CP39 | 1 | 102 mm (4 in) core |
| C40 | CP40 | 1 | 102 mm (4 in) core |
| C41 | CP41 | 2 | 102 mm (4 in) core |
| C42 | CP42 | 2 | 102 mm (4 in) core |
| C43 | CP43 | 2 | 102 mm (4 in) core |
| C44 | CP44 | 2 | 102 mm (4 in) core |
| C45 | CP45 | 1 | 102 mm (4 in) core |
| C46 | CP46 | 1 | 102 mm (4 in) core |
| C47 | CP47 | 1 | 102 mm (4 in) core |
| C48 | CP48 | 1 | 102 mm (4 in) core |
| C49 | CP49 | 1 | 102 mm (4 in) core |
| C50 | CP50 | 2 | 102 mm (4 in) core |
| C51 | CP51 | 2 | 102 mm (4 in) core |
| C52 | CP52 | 2 | 102 mm (4 in) core |
| C53 | CP53 | 2 | 102 mm (4 in) core |
| C54 | CP54 | 1 | 102 mm (4 in) core |
| C55 | CP55 | 1 | 102 mm (4 in) core |
| C56 | CP56 | 1 | 102 mm (4 in) core |
| C57 | CP57 | 1 | 102 mm (4 in) core |
| C58 | CP58 | 1 | 102 mm (4 in) core |

Table 35 - Samples to be Shipped to the State Laboratory (or their designee) - SPS-2 (continued).

| Sample Location Number | Sample Number | Lab Test Number | Type of Sample |
|---|---|---|---|
| C59 | CP59 | 2 | 102 mm (4 in) core |
| C60 | CP60 | 2 | 102 mm (4 in) core |
| C61 | CP61 | 2 | 102 mm (4 in) core |
| C62 | CP62 | 2 | 102 mm (4 in) core |
| C63 | CP63 | 1 | 102 mm (4 in) core |
| C64 | CP64 | 1 | 102 mm (4 in) core |
| C65 | CP65 | 1 | 102 mm (4 in) core |
| C66 | CP66 | 1 | 102 mm (4 in) core |
| C67 | CP67 | 2 | 102 mm (4 in) core |
| C68 | CP68 | 2 | 102 mm (4 in) core |
| C69 | CP69 | 2 | 102 mm (4 in) core |
| C70 | CP70 | 2 | 102 mm (4 in) core |
| C71 | CP71 | 1 | 102 mm (4 in) core |
| C72 | CP72 | 1 | 102 mm (4 in) core |
| C73 | CP73 | 1 | 102 mm (4 in) core |
| C74 | CP74 | 1 | 102 mm (4 in) core |
| C75 | CP75 | 1 | 102 mm (4 in) core |
| C76 | CP76 | 2 | 102 mm (4 in) core |
| C77 | CP77 | 2 | 102 mm (4 in) core |
| C78 | CP78 | 2 | 102 mm (4 in) core |
| C79 | CP79 | 2 | 102 mm (4 in) core |
| C80 | CP80 | 1 | 102 mm (4 in) core |
| C81 | CP81 | 1 | 102 mm (4 in) core |
| C82 | CP82 | 1 | 102 mm (4 in) core |
| C83 | CP83 | 1 | 102 mm (4 in) core |
| C84 | CP84 | 2 | 102 mm (4 in) core |
| C85 | CP85 | 2 | 102 mm (4 in) core |
| C86 | CP86 | 2 | 102 mm (4 in) core |
| C87 | CP87 | 2 | 102 mm (4 in) core |
| C88 | CP88 | 1 | 102 mm (4 in) core |
| C89 | CP89 | 1 | 102 mm (4 in) core |
| C90 | CP90 | 1 | 102 mm (4 in) core |
| C91 | CP91 | 1 | 102 mm (4 in) core |
| C92 | CP92 | 2 | 102 mm (4 in) core |
| C93 | CP93 | 2 | 102 mm (4 in) core |
| C94 | CP94 | 2 | 102 mm (4 in) core |
| C95 | CP95 | 2 | 102 mm (4 in) core |

Table 35 - Samples to be Shipped to the State Laboratory (or their designee) - SPS-2 (continued).

| Sample Location Number | Sample Number | Lab Test Number | Type of Sample |
|---|---|---|---|
| C96 | CP96 | 1 | 102 mm (4 in) core |
| C97 | CP97 | 1 | 102 mm (4 in) core |
| C98 | CP98 | 1 | 102 mm (4 in) core |
| C99 | CP99 | 1 | 102 mm (4 in) core |
| C100 | CP100 | 2 | 102 mm (4 in) core |
| C101 | CP101 | 2 | 102 mm (4 in) core |
| C102 | CP102 | 2 | 102 mm (4 in) core |
| C103 | CP103 | 2 | 102 mm (4 in) core |
| C104 | CP104 | 1 | 102 mm (4 in) core |
| C105 | CP105 | 1 | 102 mm (4 in) core |
| C106 | CP106 | 1 | 102 mm (4 in) core |
| C107 | CP107 | 1 | 102 mm (4 in) core |
| C108 | CP108 | 2 | 102 mm (4 in) core |
| C109 | CP109 | 2 | 102 mm (4 in) core |
| C110 | CP110 | 2 | 102 mm (4 in) core |
| C111 | CP111 | 2 | 102 mm (4 in) core |
| C112 | CP112 | 1 | 102 mm (4 in) core |
| C113 | CP113 | 1 | 102 mm (4 in) core |
| C114 | CP114 | 1 | 102 mm (4 in) core |
| C115 | CP115 | 1 | 102 mm (4 in) core |
| C116 | CP116 | 2 | 102 mm (4 in) core |
| C117 | CP117 | 2 | 102 mm (4 in) core |
| C118 | CP118 | 2 | 102 mm (4 in) core |
| C119 | CP119 | 2 | 102 mm (4 in) core |
| C120 | CP120 | 1 | 102 mm (4 in) core |
| C121 | CP121 | 1 | 102 mm (4 in) core |
| C122 | CP122 | 1 | 102 mm (4 in) core |
| C123 | CP123 | 1 | 102 mm (4 in) core |
| C124 | CP124 | 2 | 102 mm (4 in) core |
| C125 | CP125 | 2 | 102 mm (4 in) core |
| C126 | CP126 | 2 | 102 mm (4 in) core |
| C127 | CP127 | 2 | 102 mm (4 in) core |
| C128 | CP128 | 1 | 102 mm (4 in) core |
| C129 | CP129 | 1 | 102 mm (4 in) core |
| C130 | CP130 | 1 | 102 mm (4 in) core |
| C131 | CP131 | 1 | 102 mm (4 in) core |

Table 35 - Samples to be Shipped to the State Laboratory (or their designee) - SPS-2 (continued).

| Sample Location Number | Sample Number | Lab Test Number | Type of Sample |
|---|---|---|---|
| C132 | CP132 | 2 | 102 mm (4 in) core |
| C133 | CP133 | 2 | 102 mm (4 in) core |
| C134 | CP134 | 2 | 102 mm (4 in) core |
| C135 | CP135 | 2 | 102 mm (4 in) core |
| C136 | CP136 | 1 | 102 mm (4 in) core |
| C137 | CP137 | 1 | 102 mm (4 in) core |
| C138 | CP138 | 1 | 102 mm (4 in) core |
| C139 | CP139 | 1 | 102 mm (4 in) core |
| C140 | CP140 | 1 | 102 mm (4 in) core |
| C141 | CP141 | 2 | 102 mm (4 in) core |
| C142 | CP142 | 2 | 102 mm (4 in) core |
| C143 | CP143 | 2 | 102 mm (4 in) core |
| C144 | CP144 | 2 | 102 mm (4 in) core |
| C145 | CP145 | 1 | 102 mm (4 in) core |
| C146 | CP146 | 1 | 102 mm (4 in) core |
| C147 | CP147 | 1 | 102 mm (4 in) core |
| C148 | CP148 | 1 | 102 mm (4 in) core |
| C149 | CP149 | 2 | 102 mm (4 in) core |
| C150 | CP150 | 2 | 102 mm (4 in) core |
| C151 | CP151 | 2 | 102 mm (4 in) core |
| C152 | CP152 | 2 | 102 mm (4 in) core |
| C153 | CP153 | 1 | 102 mm (4 in) core |
| C154 | CP154 | 1 | 102 mm (4 in) core |
| C155 | CP155 | 1 | 102 mm (4 in) core |
| C156 | CP156 | 1 | 102 mm (4 in) core |
| C157 | CP157 | 1 | 102 mm (4 in) core |
| **Lean Concrete Base** | | | |
| B29 | LX01 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | LX02 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | LX03 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | LY01 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | LY02 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | LY03 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | LZ01 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | LZ02 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | LZ03 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |

Table 35 - Samples to be Shipped to the State Laboratory (or their designee) - SPS-2 (continued).

| Sample Location Number | Sample Number | Lab Test Number | Type of Sample |
|---|---|---|---|
| B30 | LX04 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | LX05 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | LX06 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | LY04 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | LY05 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | LY06 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | LZ04 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | LZ05 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| | LZ06 | 3 | 152 mm x 305 mm (6 in x 12 in) cylinder |
| C9 | CL01 | 2 | 102 mm (4 in) core |
| C10 | CL02 | 2 | 102 mm (4 in) core |
| C11 | CL03 | 2 | 102 mm (4 in) core |
| C13 | CL04 | 1 | 102 mm (4 in) core |
| C14 | CL05 | 1 | 102 mm (4 in) core |
| C15 | CL06 | 1 | 102 mm (4 in) core |
| C17 | CL07 | 2 | 102 mm (4 in) core |
| C18 | CL08 | 2 | 102 mm (4 in) core |
| C19 | CL09 | 2 | 102 mm (4 in) core |
| C21 | CL10 | 1 | 102 mm (4 in) core |
| C22 | CL11 | 1 | 102 mm (4 in) core |
| C23 | CL12 | 1 | 102 mm (4 in) core |
| C76 | CL13 | 2 | 102 mm (4 in) core |
| C77 | CL14 | 2 | 102 mm (4 in) core |
| C78 | CL15 | 2 | 102 mm (4 in) core |
| C80 | CL16 | 1 | 102 mm (4 in) core |
| C81 | CL17 | 1 | 102 mm (4 in) core |
| C82 | CL18 | 1 | 102 mm (4 in) core |
| C84 | CL19 | 2 | 102 mm (4 in) core |
| C85 | CL20 | 2 | 102 mm (4 in) core |
| C86 | CL21 | 2 | 102 mm (4 in) core |
| C88 | CL22 | 1 | 102 mm (4 in) core |
| C89 | CL23 | 1 | 102 mm (4 in) core |
| C90 | CL24 | 1 | 102 mm (4 in) core |
| **Permeable Asphalt Treated Base** | | | |
| B26 | BT01 | 3 | 45 kg (100 lb) bulk sample |
| B27 | BT02 | 3 | 45 kg (100 lb) bulk sample |
| B28 | BT03 | 3 | 45 kg (100 lb) bulk sample |

Table 35 - Samples to be Shipped to the State Laboratory (or their designee) - SPS-2 (continued).

| Sample Location Number | Sample Number | Lab Test Number | Type of Sample |
|---|---|---|---|
| **Unbound Granular Base** | | | |
| B21 | BG08 | 1 | 45 kg (100 lb) bulk sample |
| B22 | BG09 | 1 | 45 kg (100 lb) bulk sample |
| B23 | BG10 | 1 | 45 kg (100 lb) bulk sample |
| B24 | BG11 | 1 | 45 kg (100 lb) bulk sample |
| B25 | BG12 | 2 | 45 kg (100 lb) bulk sample |
| **Existing Crushed Rock Base** | | | |
| B19 | BG06 | 1 | 45 kg (100 lb) bulk sample |
| B20 | BG07 | 1 | 45 kg (100 lb) bulk sample |
| **Existing Subbase** | | | |
| B14 | BG01 | 1 | 45 kg (100 lb) bulk sample |
| B15 | BG02 | 1 | 45 kg (100 lb) bulk sample |
| B16 | BG03 | 1 | 45 kg (100 lb) bulk sample |
| B17 | BG04 | 1 | 45 kg (100 lb) bulk sample |
| B18 | BG05 | 2 | 45 kg (100 lb) bulk sample |
| **Embankment** | | | |
| B9 | BS09 | 1 | 45 kg (100 lb) bulk sample |
| B10 | BS10 | 1 | 45 kg (100 lb) bulk sample |
| B11 | BS11 | 1 | 45 kg (100 lb) bulk sample |
| B12 | BS12 | 1 | 45 kg (100 lb) bulk sample |
| B13 | BS13 | 1 | 45 kg (100 lb) bulk sample |
| **Subgrade** | | | |
| B1 | BS01 | 1 | 45 kg (100 lb) bulk sample |
| B2 | BS02 | 1 | 45 kg (100 lb) bulk sample |
| B3 | BS03 | 1 | 45 kg (100 lb) bulk sample |
| B4 | BS04 | 1 | 45 kg (100 lb) bulk sample |
| B5 | BS05 | 1 | 45 kg (100 lb) bulk sample |
| B6 | BS06 | 1 | 45 kg (100 lb) bulk sample |
| B7 | BS07 | 1 | 45 kg (100 lb) bulk sample |
| B8 | BS08 | 2 | 45 kg (100 lb) bulk sample |

Table 36 - Samples to be Shipped to the FHWA-LTPP Testing Contractor Laboratory - SPS-2.

| Sample Location Number | Sample Number | Lab Test Number | Type of Sample |
|---|---|---|---|
| **Portland Cement Concrete** | | | |
| No Testing to be performed by FHWA-LTPP Contractor. | | | |
| **Lean Concrete Base** | | | |
| No Testing to be performed by FHWA-LTPP Contractor. | | | |
| **Permeable Asphalt Treated Base** | | | |
| No Testing to be performed by FHWA-LTPP Contractor. | | | |
| **Unbound Granular Base** | | | |
| B21 | BG08 | 1 | 136 kg (300 lb) bulk sample |
| B22 | BG09 | 1 | 136 kg (300 lb) bulk sample |
| B23 | BG10 | 1 | 136 kg (300 lb) bulk sample |
| B24 | BG11 | 1 | 136 kg (300 lb) bulk sample |
| B25 | BG12 | 2 | 136 kg (300 lb) bulk sample |
| B21 | MG08 | 1 | Moisture content jar sample |
| B22 | MG09 | 1 | Moisture content jar sample |
| B23 | MG10 | 1 | Moisture content jar sample |
| B24 | MG11 | 1 | Moisture content jar sample |
| B25 | MG12 | 2 | Moisture content jar sample |
| **Existing Crushed Rock Base** | | | |
| B19 | BG06 | 1 | 136 kg (300 lb) bulk sample |
| B20 | BG07 | 1 | 136 kg (300 lb) bulk sample |
| B19 | MG06 | 1 | Moisture content jar sample |
| B20 | MG07 | 1 | Moisture content jar sample |
| **Existing Subbase** | | | |
| B14 | BG01 | 1 | 136 kg (300 lb) bulk sample |
| B15 | BG02 | 1 | 136 kg (300 lb) bulk sample |
| B16 | BG03 | 1 | 136 kg (300 lb) bulk sample |
| B17 | BG04 | 1 | 136 kg (300 lb) bulk sample |
| B18 | BG05 | 2 | 136 kg (300 lb) bulk sample |
| B14 | MG01 | 1 | Moisture content jar sample |
| B15 | MG02 | 1 | Moisture content jar sample |
| B16 | MG03 | 1 | Moisture content jar sample |
| B17 | MG04 | 1 | Moisture content jar sample |
| B18 | MG05 | 2 | Moisture content jar sample |

Table 36 - Samples to be Shipped to the FHWA-LTPP Testing Contractor Laboratory - SPS-2 (continued).

| Sample Location Number | Sample Number | Lab Test Number | Type of Sample |
|---|---|---|---|
| **Embankment** | | | |
| B9 | BS09 | 1 | 136 kg (300 lb) bulk sample |
| B10 | BS10 | 1 | 136 kg (300 lb) bulk sample |
| B11 | BS11 | 1 | 136 kg (300 lb) bulk sample |
| B12 | BS12 | 1 | 136 kg (300 lb) bulk sample |
| B13 | BS13 | 1 | 136 kg (300 lb) bulk sample |
| B9 | MS09 | 1 | Moisture content jar sample |
| B10 | MS10 | 1 | Moisture content jar sample |
| B11 | MS11 | 1 | Moisture content jar sample |
| B12 | MS12 | 1 | Moisture content jar sample |
| B13 | MS13 | 1 | Moisture content jar sample |
| **Subgrade** | | | |
| B1 | BS01 | 1 | 136 kg (300 lb) bulk sample |
| B2 | BS02 | 1 | 136 kg (300 lb) bulk sample |
| B3 | BS03 | 1 | 136 kg (300 lb) bulk sample |
| B4 | BS04 | 1 | 136 kg (300 lb) bulk sample |
| B5 | BS05 | 1 | 136 kg (300 lb) bulk sample |
| B6 | BS06 | 1 | 136 kg (300 lb) bulk sample |
| B7 | BS07 | 1 | 136 kg (300 lb) bulk sample |
| B8 | BS08 | 2 | 136 kg (300 lb) bulk sample |
| B1 | MS01 | 1 | Moisture content jar sample |
| B2 | MS02 | 1 | Moisture content jar sample |
| B3 | MS03 | 1 | Moisture content jar sample |
| B4 | MS04 | 1 | Moisture content jar sample |
| B5 | MS05 | 1 | Moisture content jar sample |
| B6 | MS06 | 1 | Moisture content jar sample |
| B7 | MS07 | 1 | Moisture content jar sample |
| B8 | MS08 | 2 | Moisture content jar sample |

Table 37 - Samples to be Shipped to the FHWA Research Laboratory from the State Laboratory (or their designee) - SPS-2.

| Sample Location Number | Sample Number | Lab Test Number | Type of Sample |
|---|---|---|---|
| **Portland Cement Concrete** | | | |
| C49 | CP49 | 1 | 102 mm (4 in) core |
| C58 | CP58 | 1 | 102 mm (4 in) core |
| C140 | CP140 | 1 | 102 mm (4 in) core |
| C157 | CP157 | 1 | 102 mm (4 in) core |

Note: Specimen shipped after core examination and thickness test performed in the State Laboratory (or their designee).

Table 38 - Tracking Table of Portland Cement Concrete Testing in the State Laboratory (or their designee) - SPS-2.

| 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 | | | |
| C1 | CP01 | 2 | PC06/P66 | PC01/P61 (1 year) | | No | (b) | Yes |
| C2 | CP02 | 2 | PC06/P66 | PC05/P65 | PC04/P64 (28 Day) | No | (b) | Yes |
| C3 | CP03 | 2 | PC06/P66 | PC08/P68 | PC01/P61 (28 Day) | No | (b) | Yes |
| C4 | CP04 | 2 | PC06/P66 | PC01/P61 (14 Day) | | No | (b) | Yes |
| C5 | CP05 | 1 | PC06/P66 | PC04/P64 (1 Year) | | No | (b) | Yes |
| C6 | CP06 | 1 | PC06/P66 | PC02/P62 (1 year) | | No | (b) | Yes |
| C7 | CP07 | 1 | PC06/P66 | PC02/P62 (28 day) | | No | (b) | Yes |
| C8 | CP08 | 1 | PC06/P66 | PC02/P62 (14 day) | | No | (b) | Yes |
| C9 | CP09 | 2 | PC06/P66 | PC01/P61 (1 year) | | No | (b) | Yes |
| C10 | CP10 | 2 | PC06/P66 | PC05/P65 | PC04/P64 (28 Day) | No | (b) | Yes |
| C11 | CP11 | 2 | PC06/P66 | PC01/P61 (28 Day) | | No | (b) | Yes |
| C12 | CP12 | 2 | PC06/P66 | PC01/P61 (14 Day) | | No | (b) | Yes |
| C13 | CP13 | 1 | PC06/P66 | PC04/P64 (1 Year) | | No | (b) | Yes |
| C14 | CP14 | 1 | PC06/P66 | PC02/P62 (1 year) | | No | (b) | Yes |
| C15 | CP15 | 1 | PC06/P66 | PC02/P62 (28 day) | | No | (b) | Yes |
| C16 | CP16 | 1 | PC06/P66 | PC02/P62 (14 day) | | No | (b) | Yes |
| C17 | CP17 | 2 | PC06/P66 | PC01/P61 (1 year) | | No | (b) | Yes |
| C18 | CP18 | 2 | PC06/P66 | PC05/P65 | PC04/P64 (28 Day) | No | (b) | Yes |
| C19 | CP19 | 2 | PC06/P66 | PC08/P68 | PC01/P61 (28 Day) | No | (b) | Yes |
| C20 | CP20 | 2 | PC06/P66 | PC01/P61 (14 Day) | | No | (b) | Yes |
| C21 | CP21 | 1 | PC06/P66 | PC04/P64 (1 Year) | | No | (b) | Yes |
| C22 | CP22 | 1 | PC06/P66 | PC02/P62 (1 year) | | No | (b) | Yes |
| C23 | CP23 | 1 | PC06/P66 | PC02/P62 (28 day) | | No | (b) | Yes |
| C24 | CP24 | 1 | PC06/P66 | PC02/P62 (14 day) | | No | (b) | Yes |
| C25 | CP25 | 2 | PC06/P66 | PC01/P61 (1 year) | | No | (b) | Yes |
| C26 | CP26 | 2 | PC06/P66 | PC05/P65 | PC04/P64 (28 Day) | No | (b) | Yes |
| C27 | CP27 | 2 | PC06/P66 | PC01/P61 (28 Day) | | No | (b) | Yes |
| C28 | CP28 | 2 | PC06/P66 | PC01/P61 (14 Day) | | No | (b) | Yes |
| C29 | CP29 | 1 | PC06/P66 | PC04/P64 (1 Year) | | No | (b) | Yes |
| C30 | CP30 | 1 | PC06/P66 | PC02/P62 (1 year) | | No | (b) | Yes |
| C31 | CP31 | 1 | PC06/P66 | PC02/P62 (28 day) | | No | (b) | Yes |
| C32 | CP32 | 1 | PC06/P66 | PC02/P62 (14 day) | | No | (b) | Yes |
| C33 | CP33 | 2 | PC06/P66 | PC01/P61 (1 year) | | No | (b) | Yes |
| C34 | CP34 | 2 | PC06/P66 | PC05/P65 | PC04/P64 (28 Day) | No | (b) | Yes |
| C35 | CP35 | 2 | PC06/P66 | PC01/P61 (28 Day) | | No | (b) | Yes |
| C36 | CP36 | 2 | PC06/P66 | PC01/P61 (14 Day) | | No | (b) | Yes |
| C37 | CP37 | 1 | PC06/P66 | PC04/P64 (1 Year) | | No | (b) | Yes |
| C38 | CP38 | 1 | PC06/P66 | PC02/P62 (1 year) | | No | (b) | Yes |
| C39 | CP39 | 1 | PC06/P66 | PC02/P62 (28 day) | | No | (b) | Yes |
| C40 | CP40 | 1 | PC06/P66 | PC02/P62 (14 day) | | No | (b) | Yes |

Table 38 - Tracking Table of Portland Cement Concrete Testing in the State Laboratory (or their designee) - SPS-2 (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 | | | |
| C41 | CP41 | 2 | PC06/P66 | PC01/P61 (1 year) | | No | (b) | Yes |
| C42 | CP42 | 2 | PC06/P66 | PC05/P65 | PC04/P64 (28 Day) | No | (b) | Yes |
| C43 | CP43 | 2 | PC06/P66 | PC01/P61 (28 Day) | | No | (b) | Yes |
| C44 | CP44 | 2 | PC06/P66 | PC01/P61 (14 Day) | | No | (b) | Yes |
| C45 | CP45 | 1 | PC06/P66 | PC04/P64 (1 Year) | | No | (b) | Yes |
| C46 | CP46 | 1 | PC06/P66 | PC02/P62 (1 year) | | No | (b) | Yes |
| C47 | CP47 | 1 | PC06/P66 | PC02/P62 (28 day) | | No | (b) | Yes |
| C48 | CP48 | 1 | PC06/P66 | PC02/P62 (14 day) | | No | (b) | Yes |
| C49 | CP49 | 1 | PC06/P66 | | | Yes | (b) | No |
| C50 | CP50 | 2 | PC06/P66 | PC01/P61 (1 year) | | No | (b) | Yes |
| C51 | CP51 | 2 | PC06/P66 | PC05/P65 | PC04/P64 (28 Day) | No | (b) | Yes |
| C52 | CP52 | 2 | PC06/P66 | PC01/P61 (28 Day) | | No | (b) | Yes |
| C53 | CP53 | 2 | PC06/P66 | PC01/P61 (14 Day) | | No | (b) | Yes |
| C54 | CP54 | 1 | PC06/P66 | PC04/P64 (1 Year) | | No | (b) | Yes |
| C55 | CP55 | 1 | PC06/P66 | PC02/P62 (1 year) | | No | (b) | Yes |
| C56 | CP56 | 1 | PC06/P66 | PC02/P62 (28 day) | | No | (b) | Yes |
| C57 | CP57 | 1 | PC06/P66 | PC02/P62 (14 day) | | No | (b) | Yes |
| C58 | CP58 | 1 | PC06/P66 | | | Yes | (b) | No |
| C59 | CP59 | 2 | PC06/P66 | PC01/P61 (1 year) | | No | (b) | Yes |
| C60 | CP60 | 2 | PC06/P66 | PC05/P65 | PC04/P64 (28 Day) | No | (b) | Yes |
| C61 | CP61 | 2 | PC06/P66 | PC01/P61 (28 Day) | | No | (b) | Yes |
| C62 | CP62 | 2 | PC06/P66 | PC01/P61 (14 Day) | | No | (b) | Yes |
| C63 | CP63 | 1 | PC06/P66 | PC04/P64 (1 Year) | | No | (b) | Yes |
| C64 | CP64 | 1 | PC06/P66 | PC02/P62 (1 year) | | No | (b) | Yes |
| C65 | CP65 | 1 | PC06/P66 | PC02/P62 (28 day) | | No | (b) | Yes |
| C66 | CP66 | 1 | PC06/P66 | PC02/P62 (14 day) | | No | (b) | Yes |
| C67 | CP67 | 2 | PC06/P66 | PC01/P61 (1 year) | | No | (b) | Yes |
| C68 | CP68 | 2 | PC06/P66 | PC05/P65 | PC04/P64 (28 Day) | No | (b) | Yes |
| C69 | CP69 | 2 | PC06/P66 | PC01/P61 (28 Day) | | No | (b) | Yes |
| C70 | CP70 | 2 | PC06/P66 | PC01/P61 (14 Day) | | No | (b) | Yes |
| C71 | CP71 | 1 | PC06/P66 | PC04/P64 (1 Year) | | No | (b) | Yes |
| C72 | CP72 | 1 | PC06/P66 | PC02/P62 (1 year) | | No | (b) | Yes |
| C73 | CP73 | 1 | PC06/P66 | PC02/P62 (28 day) | | No | (b) | Yes |
| C74 | CP74 | 1 | PC06/P66 | PC02/P62 (14 day) | | No | (b) | Yes |
| C75 | CP75 | 1 | PC06/P66 | PC08/P68 | | Yes | (b) | No |
| C76 | CP76 | 2 | PC06/P66 | PC01/P61 (1 year) | | No | (b) | Yes |
| C77 | CP77 | 2 | PC06/P66 | PC05/P65 | PC04/P64 (28 Day) | No | (b) | Yes |
| C78 | CP78 | 2 | PC06/P66 | PC01/P61 (28 Day) | | No | (b) | Yes |
| C79 | CP79 | 2 | PC06/P66 | PC01/P61 (14 Day) | | No | (b) | Yes |
| C80 | CP80 | 1 | PC06/P66 | PC04/P64 (1 Year) | | No | (b) | Yes |

Table 38 - Tracking Table of Portland Cement Concrete Testing in the State Laboratory (or their designee) - SPS-2 (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 | | | |
| C81 | CP81 | 1 | PC06/P66 | PC02/P62 (1 year) | | No | (b) | Yes |
| C82 | CP82 | 1 | PC06/P66 | PC02/P62 (28 day) | | No | (b) | Yes |
| C83 | CP83 | 1 | PC06/P66 | PC02/P62 (14 day) | | No | (b) | Yes |
| C84 | CP84 | 2 | PC06/P66 | PC01/P61 (1 year) | | No | (b) | Yes |
| C85 | CP85 | 2 | PC06/P66 | PC05/P65 | PC04/P64 (28 Day) | No | (b) | Yes |
| C86 | CP86 | 2 | PC06/P66 | PC01/P61 (28 Day) | | No | (b) | Yes |
| C87 | CP87 | 2 | PC06/P66 | PC01/P61 (14 Day) | | No | (b) | Yes |
| C88 | CP88 | 1 | PC06/P66 | PC04/P64 (1 Year) | | No | (b) | Yes |
| C89 | CP89 | 1 | PC06/P66 | PC02/P62 (1 year) | | No | (b) | Yes |
| C90 | CP90 | 1 | PC06/P66 | PC02/P62 (28 day) | | No | (b) | Yes |
| C91 | CP91 | 1 | PC06/P66 | PC02/P62 (14 day) | | No | (b) | Yes |
| C92 | CP92 | 2 | PC06/P66 | PC01/P61 (1 year) | | No | (b) | Yes |
| C93 | CP93 | 2 | PC06/P66 | PC05/P65 | PC04/P64 (28 Day) | No | (b) | Yes |
| C94 | CP94 | 2 | PC06/P66 | PC01/P61 (28 Day) | | No | (b) | Yes |
| C95 | CP95 | 2 | PC06/P66 | PC01/P61 (14 Day) | | No | (b) | Yes |
| C96 | CP96 | 1 | PC06/P66 | PC04/P64 (1 Year) | | No | (b) | Yes |
| C97 | CP97 | 1 | PC06/P66 | PC02/P62 (1 year) | | No | (b) | Yes |
| C98 | CP98 | 1 | PC06/P66 | PC02/P62 (28 day) | | No | (b) | Yes |
| C99 | CP99 | 1 | PC06/P66 | PC02/P62 (14 day) | | No | (b) | Yes |
| C100 | CP100 | 2 | PC06/P66 | PC01/P61 (1 year) | | No | (b) | Yes |
| C101 | CP101 | 2 | PC06/P66 | PC05/P65 | PC04/P64 (28 Day) | No | (b) | Yes |
| C102 | CP102 | 2 | PC06/P66 | PC01/P61 (28 Day) | | No | (b) | Yes |
| C103 | CP103 | 2 | PC06/P66 | PC01/P61 (14 Day) | | No | (b) | Yes |
| C104 | CP104 | 1 | PC06/P66 | PC04/P64 (1 Year) | | No | (b) | Yes |
| C105 | CP105 | 1 | PC06/P66 | PC02/P62 (1 year) | | No | (b) | Yes |
| C106 | CP106 | 1 | PC06/P66 | PC02/P62 (28 day) | | No | (b) | Yes |
| C107 | CP107 | 1 | PC06/P66 | PC02/P62 (14 day) | | No | (b) | Yes |
| C108 | CP108 | 2 | PC06/P66 | PC01/P61 (1 year) | | No | (b) | Yes |
| C109 | CP109 | 2 | PC06/P66 | PC05/P65 | PC04/P64 (28 Day) | No | (b) | Yes |
| C110 | CP110 | 2 | PC06/P66 | PC01/P61 (28 Day) | | No | (b) | Yes |
| C111 | CP111 | 2 | PC06/P66 | PC01/P61 (14 Day) | | No | (b) | Yes |
| C112 | CP112 | 1 | PC06/P66 | PC04/P64 (1 Year) | | No | (b) | Yes |
| C113 | CP113 | 1 | PC06/P66 | PC02/P62 (1 year) | | No | (b) | Yes |
| C114 | CP114 | 1 | PC06/P66 | PC02/P62 (28 day) | | No | (b) | Yes |
| C115 | CP115 | 1 | PC06/P66 | PC02/P62 (14 day) | | No | (b) | Yes |
| C116 | CP116 | 2 | PC06/P66 | PC01/P61 (1 year) | | No | (b) | Yes |
| C117 | CP117 | 2 | PC06/P66 | PC05/P65 | PC04/P64 (28 Day) | No | (b) | Yes |
| C118 | CP118 | 2 | PC06/P66 | PC01/P61 (28 Day) | | No | (b) | Yes |
| C119 | CP119 | 2 | PC06/P66 | PC01/P61 (14 Day) | | No | (b) | Yes |
| C120 | CP120 | 1 | PC06/P66 | PC04/P64 (1 Year) | | No | (b) | Yes |

Table 38 - Tracking Table of Portland Cement Concrete Testing in the State Laboratory (or their designee) - SPS-2 (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 | | | |
| C121 | CP121 | 1 | PC06/P66 | PC02/P62 (1 year) | | No | (b) | Yes |
| C122 | CP122 | 1 | PC06/P66 | PC02/P62 (28 day) | | No | (b) | Yes |
| C123 | CP123 | 1 | PC06/P66 | PC02/P62 (14 day) | | No | (b) | Yes |
| C124 | CP124 | 2 | PC06/P66 | PC01/P61 (1 year) | | No | (b) | Yes |
| C125 | CP125 | 2 | PC06/P66 | PC05/P65 | PC04/P64 (28 Day) | No | (b) | Yes |
| C126 | CP126 | 2 | PC06/P66 | PC01/P61 (28 Day) | | No | (b) | Yes |
| C127 | CP127 | 2 | PC06/P66 | PC01/P61 (14 Day) | | No | (b) | Yes |
| C128 | CP128 | 1 | PC06/P66 | PC04/P64 (1 Year) | | No | (b) | Yes |
| C129 | CP129 | 1 | PC06/P66 | PC02/P62 (1 year) | | No | (b) | Yes |
| C130 | CP130 | 1 | PC06/P66 | PC02/P62 (28 day) | | No | (b) | Yes |
| C131 | CP131 | 1 | PC06/P66 | PC02/P62 (14 day) | | No | (b) | Yes |
| C132 | CP132 | 2 | PC06/P66 | PC01/P61 (1 year) | | No | (b) | Yes |
| C133 | CP133 | 2 | PC06/P66 | PC05/P65 | PC04/P64 (28 Day) | No | (b) | Yes |
| C134 | CP134 | 2 | PC06/P66 | PC01/P61 (28 Day) | | No | (b) | Yes |
| C135 | CP135 | 2 | PC06/P66 | PC01/P61 (14 Day) | | No | (b) | Yes |
| C136 | CP136 | 1 | PC06/P66 | PC04/P64 (1 Year) | | No | (b) | Yes |
| C137 | CP137 | 1 | PC06/P66 | PC02/P62 (1 year) | | No | (b) | Yes |
| C138 | CP138 | 1 | PC06/P66 | PC02/P62 (28 day) | | No | (b) | Yes |
| C139 | CP139 | 1 | PC06/P66 | PC02/P62 (14 day) | | No | (b) | Yes |
| C140 | CP140 | 1 | PC06/P66 | | | Yes | (b) | No |
| C141 | CP141 | 1 | PC06/P66 | PC01/P61 (1 year) | | No | (b) | Yes |
| C142 | CP142 | 1 | PC06/P66 | PC05/P65 | PC04/P64 (28 Day) | No | (b) | Yes |
| C143 | CP143 | 1 | PC06/P66 | PC01/P61 (28 Day) | | No | (b) | Yes |
| C144 | CP144 | 1 | PC06/P66 | PC01/P61 (14 Day) | | No | (b) | Yes |
| C145 | CP145 | 2 | PC06/P66 | PC04/P64 (1 Year) | | No | (b) | Yes |
| C146 | CP146 | 2 | PC06/P66 | PC02/P62 (1 year) | | No | (b) | Yes |
| C147 | CP147 | 2 | PC06/P66 | PC02/P62 (28 day) | | No | (b) | Yes |
| C148 | CP148 | 2 | PC06/P66 | PC02/P62 (14 day) | | No | (b) | Yes |
| C149 | CP149 | 1 | PC06/P66 | PC01/P61 (1 year) | | No | (b) | Yes |
| C150 | CP150 | 1 | PC06/P66 | PC05/P65 | PC04/P64 (28 Day) | No | (b) | Yes |
| C151 | CP151 | 1 | PC06/P66 | PC01/P61 (28 Day) | | No | (b) | Yes |
| C152 | CP152 | 1 | PC06/P66 | PC01/P61 (14 Day) | | No | (b) | Yes |
| C153 | CP153 | 2 | PC06/P66 | PC04/P64 (1 Year) | | No | (b) | Yes |
| C154 | CP154 | 2 | PC06/P66 | PC02/P62 (1 year) | | No | (b) | Yes |
| C155 | CP155 | 2 | PC06/P66 | PC02/P62 (28 day) | | No | (b) | Yes |
| C156 | CP156 | 2 | PC06/P66 | PC02/P62 (14 day) | | No | (b) | Yes |
| C157 | CP157 | 2 | PC06/P66 | | | Yes | (b) | No |

Table 38 - Tracking Table of Portland Cement Concrete Testing in the State Laboratory (or their designee) - SPS-2 (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 | | | |
| B31 | GX01 | 3 | PC01/P61 (14 Day) | | | No | (d) | Yes |
| | GX02 | 3 | PC02/P62 (14 Day) | | | No | (d) | Yes |
| | GY01 | 3 | PC01/P61 (28 Day) | | | No | (d) | Yes |
| | GY02 | 3 | PC02/P62 (28 Day) | | | No | (d) | Yes |
| | GZ01 | 3 | PC01/P61 (1 Year) | | | No | (d) | Yes |
| | GZ02 | 3 | PC02/P62 (1 Year) | | | No | (d) | Yes |
| | FX01 | 3 | PC09/P69 (14 Day) | | | No | (d) | Yes |
| | FY01 | 3 | PC09/P69 (28 Day) | | | No | (d) | Yes |
| | FZ01 | 3 | PC09/P69 (1 Year) | | | No | (d) | Yes |
| B32 | GX03 | 3 | PC01/P61 (14 Day) | | | No | (d) | Yes |
| | GX04 | 3 | PC02/P62 (14 Day) | | | No | (d) | Yes |
| | GY03 | 3 | PC01/P61 (28 Day) | | | No | (d) | Yes |
| | GY04 | 3 | PC02/P62 (28 Day) | | | No | (d) | Yes |
| | GZ03 | 3 | PC01/P61 (1 Year) | | | No | (d) | Yes |
| | GZ04 | 3 | PC02/P62 (1 Year) | | | No | (d) | Yes |
| | FX02 | 3 | PC09/P69 (14 Day) | | | No | (d) | Yes |
| | FY02 | 3 | PC09/P69 (28 Day) | | | No | (d) | Yes |
| | FZ02 | 3 | PC09/P69 (1 Year) | | | No | (d) | Yes |
| B33 | GX05 | 3 | PC01/P61 (14 Day) | | | No | (d) | Yes |
| | GX06 | 3 | PC02/P62 (14 Day) | | | No | (d) | Yes |
| | GY05 | 3 | PC01/P61 (28 Day) | | | No | (d) | Yes |
| | GY06 | 3 | PC02/P62 (28 Day) | | | No | (d) | Yes |
| | GZ05 | 3 | PC01/P61 (1 Year) | | | No | (d) | Yes |
| | GZ06 | 3 | PC02/P62 (1 Year) | | | No | (d) | Yes |
| | FX03 | 3 | PC09/P69 (14 Day) | | | No | (d) | Yes |
| | FY03 | 3 | PC09/P69 (28 Day) | | | No | (d) | Yes |
| | FZ03 | 3 | PC09/P69 (1 Year) | | | No | (d) | Yes |
| B34 | GX07 | 3 | PC01/P61 (14 Day) | | | No | (d) | Yes |
| | GX08 | 3 | PC02/P62 (14 Day) | | | No | (d) | Yes |
| | GY07 | 3 | PC01/P61 (28 Day) | | | No | (d) | Yes |
| | GY08 | 3 | PC02/P62 (28 Day) | | | No | (d) | Yes |
| | GZ07 | 3 | PC01/P61 (1 Year) | | | No | (d) | Yes |
| | GZ08 | 3 | PC02/P62 (1 Year) | | | No | (d) | Yes |
| | FX04 | 3 | PC09/P69 (14 Day) | | | No | (d) | Yes |
| | FY04 | 3 | PC09/P69 (28 Day) | | | No | (d) | Yes |
| | FZ04 | 3 | PC09/P69 (1 Year) | | | No | (d) | Yes |

Table 38 - Tracking Table of Portland Cement Concrete Testing in the State Laboratory (or their designee) - SPS-2 (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 | | | |
| B35 | GX09 | 3 | PC01/P61 (14 Day) | | | No | (d) | Yes |
| | GX10 | 3 | PC02/P62 (14 Day) | | | No | (d) | Yes |
| | GY09 | 3 | PC01/P61 (28 Day) | | | No | (d) | Yes |
| | GY10 | 3 | PC02/P62 (28 Day) | | | No | (d) | Yes |
| | GZ09 | 3 | PC01/P61 (1 Year) | | | No | (d) | Yes |
| | GZ10 | 3 | PC02/P62 (1 Year) | | | No | (d) | Yes |
| | FX05 | 3 | PC09/P69 (14 Day) | | | No | (d) | Yes |
| | FY05 | 3 | PC09/P69 (28 Day) | | | No | (d) | Yes |
| | FZ05 | 3 | PC09/P69 (1 Year) | | | No | (d) | Yes |
| B36 | GX11 | 3 | PC01/P61 (14 Day) | | | No | (d) | Yes |
| | GX12 | 3 | PC02/P62 (14 Day) | | | No | (d) | Yes |
| | GY11 | 3 | PC01/P61 (28 Day) | | | No | (d) | Yes |
| | GY12 | 3 | PC02/P62 (28 Day) | | | No | (d) | Yes |
| | GZ11 | 3 | PC01/P61 (1 Year) | | | No | (d) | Yes |
| | GZ12 | 3 | PC02/P62 (1 Year) | | | No | (d) | Yes |
| | FX06 | 3 | PC09/P69 (14 Day) | | | No | (d) | Yes |
| | FY06 | 3 | PC09/P69 (28 Day) | | | No | (d) | Yes |
| | FZ06 | 3 | PC09/P69 (1 Year) | | | No | (d) | Yes |
| B37 | GX13 | 3 | PC01/P61 (14 Day) | | | No | (d) | Yes |
| | GX14 | 3 | PC02/P62 (14 Day) | | | No | (d) | Yes |
| | GY13 | 3 | PC01/P61 (28 Day) | | | No | (d) | Yes |
| | GY14 | 3 | PC02/P62 (28 Day) | | | No | (d) | Yes |
| | GZ13 | 3 | PC01/P61 (1 Year) | | | No | (d) | Yes |
| | GZ14 | 3 | PC02/P62 (1 Year) | | | No | (d) | Yes |
| | FX07 | 3 | PC09/P69 (14 Day) | | | No | (d) | Yes |
| | FY07 | 3 | PC09/P69 (28 Day) | | | No | (d) | Yes |
| | FZ07 | 3 | PC09/P69 (1 Year) | | | No | (d) | Yes |
| B38 | GX15 | 3 | PC01/P61 (14 Day) | | | No | (d) | Yes |
| | GX16 | 3 | PC02/P62 (14 Day) | | | No | (d) | Yes |
| | GY15 | 3 | PC01/P61 (28 Day) | | | No | (d) | Yes |
| | GY16 | 3 | PC02/P62 (28 Day) | | | No | (d) | Yes |
| | GZ15 | 3 | PC01/P61 (1 Year) | | | No | (d) | Yes |
| | GZ16 | 3 | PC02/P62 (1 Year) | | | No | (d) | Yes |
| | FX08 | 3 | PC09/P69 (14 Day) | | | No | (d) | Yes |
| | FY08 | 3 | PC09/P69 (28 Day) | | | No | (d) | Yes |
| | FZ08 | 3 | PC09/P69 (1 Year) | | | No | (d) | Yes |

Table 38 - Tracking Table of Portland Cement Concrete Testing in the State Laboratory (or their designee) - SPS-2 (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 | | | |
| B39 | GX17 | 3 | PC01/P61 (14 Day) | | | No | (d) | Yes |
| | GX18 | 3 | PC02/P62 (14 Day) | | | No | (d) | Yes |
| | GY17 | 3 | PC01/P61 (28 Day) | | | No | (d) | Yes |
| | GY18 | 3 | PC02/P62 (28 Day) | | | No | (d) | Yes |
| | GZ17 | 3 | PC01/P61 (1 Year) | | | No | (d) | Yes |
| | GZ18 | 3 | PC02/P62 (1 Year) | | | No | (d) | Yes |
| | FX09 | 3 | PC09/P69 (14 Day) | | | No | (d) | Yes |
| | FY09 | 3 | PC09/P69 (28 Day) | | | No | (d) | Yes |
| | FZ09 | 3 | PC09/P69 (1 Year) | | | No | (d) | Yes |
| B40 | GX19 | 3 | PC01/P61 (14 Day) | | | No | (d) | Yes |
| | GX20 | 3 | PC02/P62 (14 Day) | | | No | (d) | Yes |
| | GY19 | 3 | PC01/P61 (28 Day) | | | No | (d) | Yes |
| | GY20 | 3 | PC02/P62 (28 Day) | | | No | (d) | Yes |
| | GZ19 | 3 | PC01/P61 (1 Year) | | | No | (d) | Yes |
| | GZ20 | 3 | PC02/P62 (1 Year) | | | No | (d) | Yes |
| | FX10 | 3 | PC09/P69 (14 Day) | | | No | (d) | Yes |
| | FY10 | 3 | PC09/P69 (28 Day) | | | No | (d) | Yes |
| | FZ10 | 3 | PC09/P69 (1 Year) | | | No | (d) | Yes |

See page 89 of reference 3 for sample storage requirements.

Table 39 - Tracking Table of Lean Concrete Base Testing in the State Laboratory (or their designee) - SPS-2.

| 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 | | | |
| B29 | LX01 | 3 | PC01/P61 (7 day) | | | No | (d) | Yes |
| | LX02 | 3 | PC01/P61 (7 day) | | | No | (d) | Yes |
| | LX03 | 3 | PC01/P61 (7 day) | | | No | (d) | Yes |
| | LY01 | 3 | PC01/P61 (28 day) | | | No | (d) | Yes |
| | LY02 | 3 | PC01/P61 (28 day) | | | No | (d) | Yes |
| | LY03 | 3 | PC01/P61 (28 day) | | | No | (d) | Yes |
| | LZ01 | 3 | PC01/P61 (1 year) | | | No | (d) | Yes |
| | LZ02 | 3 | PC01/P61 (1 year) | | | No | (d) | Yes |
| | LZ03 | 3 | PC01/P61 (1 year) | | | No | (d) | Yes |
| B30 | LX04 | 3 | PC01/P61 (7 day) | | | No | (d) | Yes |
| | LX05 | 3 | PC01/P61 (7 day) | | | No | (d) | Yes |
| | LX06 | 3 | PC01/P61 (7 day) | | | No | (d) | Yes |
| | LY04 | 3 | PC01/P61 (28 day) | | | No | (d) | Yes |
| | LY05 | 3 | PC01/P61 (28 day) | | | No | (d) | Yes |
| | LY06 | 3 | PC01/P61 (28 day) | | | No | (d) | Yes |
| | LZ04 | 3 | PC01/P61 (1 year) | | | No | (d) | Yes |
| | LZ05 | 3 | PC01/P61 (1 year) | | | No | (d) | Yes |
| | LZ06 | 3 | PC01/P61 (1 year) | | | No | (d) | Yes |
| C9 | CL01 | 2 | PC06/P66 | PC01/P61 (14 Day) | | No | (b) | Yes |
| C10 | CL02 | 2 | PC06/P66 | PC01/P61 (28 Day) | | No | (b) | Yes |
| C11 | CL03 | 2 | PC06/P66 | PC01/P61 (1 Year) | | No | (b) | Yes |
| C13 | CL04 | 1 | PC06/P66 | PC01/P61 (14 Day) | | No | (b) | Yes |
| C14 | CL05 | 1 | PC06/P66 | PC01/P61 (28 Day) | | No | (b) | Yes |
| C15 | CL06 | 1 | PC06/P66 | PC01/P61 (1 Year) | | No | (b) | Yes |
| C17 | CL07 | 2 | PC06/P66 | PC01/P61 (14 Day) | | No | (b) | Yes |
| C18 | CL08 | 2 | PC06/P66 | PC01/P61 (28 Day) | | No | (b) | Yes |
| C19 | CL09 | 2 | PC06/P66 | PC01/P61 (1 Year) | | No | (b) | Yes |
| C21 | CL10 | 1 | PC06/P66 | PC01/P61 (14 Day) | | No | (b) | Yes |
| C22 | CL11 | 1 | PC06/P66 | PC01/P61 (28 Day) | | No | (b) | Yes |
| C23 | CL12 | 1 | PC06/P66 | PC01/P61 (1 Year) | | No | (b) | Yes |
| C76 | CL13 | 2 | PC06/P66 | PC01/P61 (14 Day) | | No | (b) | Yes |
| C77 | CL14 | 2 | PC06/P66 | PC01/P61 (28 Day) | | No | (b) | Yes |
| C78 | CL15 | 2 | PC06/P66 | PC01/P61 (1 Year) | | No | (b) | Yes |
| C80 | CL16 | 1 | PC06/P66 | PC01/P61 (14 Day) | | No | (b) | Yes |
| C81 | CL17 | 1 | PC06/P66 | PC01/P61 (28 Day) | | No | (b) | Yes |
| C82 | CL18 | 1 | PC06/P66 | PC01/P61 (1 Year) | | No | (b) | Yes |

Table 39 - Tracking Table of Lean Concrete Base Testing in the State Laboratory (or their designee) - SPS-2 (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 | | | |
| C84 | CL19 | 2 | PC06/P66 | PC01/P61 (14 Day) | | No | (b) | Yes |
| C85 | CL20 | 2 | PC06/P66 | PC01/P61 (28 Day) | | No | (b) | Yes |
| C86 | CL21 | 2 | PC06/P66 | PC01/P61 (1 Year) | | No | (b) | Yes |
| C88 | CL22 | 1 | PC06/P66 | PC01/P61 (14 Day) | | No | (b) | Yes |
| C89 | CL23 | 1 | PC06/P66 | PC01/P61 (28 Day) | | No | (b) | Yes |
| C90 | CL24 | 1 | PC06/P66 | PC01/P61 (1 Year) | | No | (b) | Yes |

See page 89 of reference 3 for sample storage requirements.

Table 40 - Tracking Table of Permeable Asphalt Treated Base Testing in the State Laboratory (or their designee) - SPS-2.

| 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 | | | |
| B26 | BT01 | 3 | AC04/P04 | AG04/P14 | | No | (a) | Yes |
| B27 | BT02 | 3 | AC04/P04 | AG04/P14 | | No | (a) | Yes |
| B28 | BT03 | 3 | AC04/P04 | AG04/P14 | | No | (a) | Yes |

See page 89 of reference 3 for sample storage requirements.

Table 41 - Tracking Table of Unbound Granular Base Testing in the State Laboratory (or their designee) - SPS-2.

| 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 | | | |
| B21 | BG08 | 1 | UG09/P48 | | | No | (b) | Yes |
| B22 | BG09 | 1 | UG09/P48 | | | No | (b) | Yes |
| B23 | BG10 | 1 | UG09/P48 | | | No | (b) | Yes |
| B24 | BG11 | 1 | UG09/P48 | | | No | (b) | Yes |
| B25 | BG12 | 2 | UG09/P48 | | | No | (b) | Yes |

See page 89 of reference 3 for sample storage requirements.

Table 42 - Tracking Table of Existing Crushed Rock Base Testing in the State Laboratory (or their designee) - SPS-2.

| 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 | | | |
| B19 | BG06 | 1 | UG09/P48 | | | No | (b) | Yes |
| B20 | BG07 | 1 | UG09/P48 | | | No | (b) | Yes |

See page 89 of reference 3 for sample storage requirements.

Table 43 - Tracking Table of Existing Subbase Testing in the State Laboratory (or their designee) - SPS-2.

| 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 | | | |
| B14 | BG01 | 1 | UG09/P48 | | | No | (b) | Yes |
| B15 | BG02 | 1 | UG09/P48 | | | No | (b) | Yes |
| B16 | BG03 | 1 | UG09/P48 | | | No | (b) | Yes |
| B17 | BG04 | 1 | UG09/P48 | | | No | (b) | Yes |
| B18 | BG05 | 2 | UG09/P48 | | | No | (b) | Yes |

See page 89 of reference 3 for sample storage requirements.

Table 44 - Tracking Table of Embankment Testing in the State Laboratory (or their designee) - SPS-2.

| 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 | | | |
| B9 | BS09 | 1 | UG09/P48 | | | No | (b) | Yes |
| B10 | BS10 | 1 | UG09/P48 | | | No | (b) | Yes |
| B11 | BS11 | 1 | UG09/P48 | | | No | (b) | Yes |
| B12 | BS12 | 1 | UG08/P48 | | | No | (b) | Yes |
| B13 | BS13 | 1 | UG08/P48 | | | No | (b) | Yes |

See page 89 of reference 3 for sample storage requirements.

Table 45 - Tracking Table of Subgrade Testing in the State Laboratory (or their designee) - SPS-2.

| 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 | | | |
| B1 | BS01 | 1 | UG09/P48 | | | No | (b) | Yes |
| B2 | BS02 | 1 | UG09/P48 | | | No | (b) | Yes |
| B3 | BS03 | 1 | UG09/P48 | | | No | (b) | Yes |
| B4 | BS04 | 1 | UG09/P48 | | | No | (b) | Yes |
| B5 | BS05 | 1 | UG09/P48 | | | No | (b) | Yes |
| B6 | BS06 | 1 | UG09/P48 | | | No | (b) | Yes |
| B7 | BS07 | 1 | UG09/P48 | | | No | (b) | Yes |
| B8 | BS08 | 2 | UG09/P48 | | | No | (b) | Yes |

See page 89 of reference 3 for sample storage requirements.

Table 46 - Tracking Table of Portland Cement Concrete Testing in the FHWA-LTPP Testing Contractor Laboratory - SPS-2.

| 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 | | | |
| No Portland Cement Concrete Testing Will be Conducted by the FHWA-LTPP Testing Contractor. | | | | | | | | |

Table 47 - Tracking Table of Lean Concrete Base Testing in the FHWA-LTPP Testing Contractor Laboratory - SPS-2.

| 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 | | | |
| No Lean Concrete Base Testing Will be Conducted by the FHWA-LTPP Testing Contractor. | | | | | | | | |

Table 48 - Tracking Table of Permeable Asphalt Treated Base Testing in the FHWA-LTPP Testing Contractor Laboratory - SPS-2.

| 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 | | | |
| No Permeable Asphalt Treated Base Testing Will be Conducted by the FHWA-LTPP Testing Contractor. | | | | | | | | |

Table 49 - Tracking Table of Unbound Granular Base Testing in the FHWA-LTPP Testing Contractor Laboratory - SPS-2.

| 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 | Fifth | Sixth | | | |
| B21 | BG08 | 1 | UG01/P41 | UG02/P41 | UG04/P43 | UG08/P47 | UG05/P44 | UG07/P46 | No | (b) | Yes |
| B22 | BG09 | 1 | UG01/P41 | UG02/P41 | UG04/P43 | UG08/P47 | UG05/P44 | UG07/P46 | No | (b) | Yes |
| B23 | BG10 | 1 | UG01/P41 | UG02/P41 | UG04/P43 | UG08/P47 | UG05/P44 | UG07/P46 | No | (b) | Yes |
| B24 | BG11 | 1 | UG01/P41 | UG02/P41 | UG04/P43 | UG08/P47 | UG05/P44 | UG07/P46 | No | (b) | Yes |
| B25 | BG12 | 2 | UG01/P41 | UG02/P41 | UG04/P43 | UG08/P47 | UG05/P44 | UG07/P46 | No | (b) | Yes |
| B21 | MG08 | 1 | UG10/P49 | | | | | | No | (b) | Yes |
| B22 | MG09 | 1 | UG10/P49 | | | | | | No | (b) | Yes |
| B23 | MG10 | 1 | UG10/P49 | | | | | | No | (b) | Yes |
| B24 | MG11 | 1 | UG10/P49 | | | | | | No | (b) | Yes |
| B25 | MG12 | 2 | UG10/P49 | | | | | | No | (b) | Yes |

See page 89 of reference 3 for sample storage requirements.

Table 50 - Tracking Table of Existing Crushed Rock Base Testing in the FHWA-LTPP Testing Contractor Laboratory - SPS-2.

| 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 | Fifth | Sixth | | | |
| B19 | BG06 | 1 | UG01/P41 | UG02/P41 | UG04/P43 | UG08/P47 | UG05/P44 | UG07/P46 | No | (b) | Yes |
| B20 | BG07 | 1 | UG01/P41 | UG02/P41 | UG04/P43 | UG08/P47 | UG05/P44 | UG07/P46 | No | (b) | Yes |
| B19 | MG06 | 1 | UG10/P49 | | | | | | No | (b) | Yes |
| B20 | MG07 | 1 | UG10/P49 | | | | | | No | (b) | Yes |

See page 89 of reference 3 for sample storage requirements.

Table 51 - Tracking Table of Existing Subbase Testing in the FHWA-LTPP Testing Contractor Laboratory - SPS-2.

| 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 | Fifth | Sixth | | | |
| B14 | BG01 | 1 | UG01/P41 | UG02/P41 | UG04/P43 | UG08/P47 | UG05/P44 | UG07/P46 | No | (b) | Yes |
| B15 | BG02 | 1 | UG01/P41 | UG02/P41 | UG04/P43 | UG08/P47 | UG05/P44 | UG07/P46 | No | (b) | Yes |
| B16 | BG03 | 1 | UG01/P41 | UG02/P41 | UG04/P43 | UG08/P47 | UG05/P44 | UG07/P46 | No | (b) | Yes |
| B17 | BG04 | 1 | UG01/P41 | UG02/P41 | UG04/P43 | UG08/P47 | UG05/P44 | UG07/P46 | No | (b) | Yes |
| B18 | BG05 | 2 | UG01/P41 | UG02/P41 | UG04/P43 | UG08/P47 | UG05/P44 | UG07/P46 | No | (b) | Yes |
| B14 | MG01 | 1 | UG10/P49 | | | | | | No | (b) | Yes |
| B15 | MG02 | 1 | UG10/P49 | | | | | | No | (b) | Yes |
| B16 | MG03 | 1 | UG10/P49 | | | | | | No | (b) | Yes |
| B17 | MG04 | 1 | UG10/P49 | | | | | | No | (b) | Yes |
| B18 | MG05 | 2 | UG10/P49 | | | | | | No | (b) | Yes |

See page 89 of reference 3 for sample storage requirements.

Table 52 - Tracking Table of Embankment Testing in the FHWA-LTPP Testing Contractor Laboratory - SPS-2.

| 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 | Fifth | Sixth | | | |
| B9 | BS09 | 1 | SS01/P51 | SS02/P42 | SS03/P43 | SS04/P52 | SS05/P55 | SS07/P46 | No | (b) | Yes |
| B10 | BS10 | 1 | SS01/P51 | SS02/P42 | SS03/P43 | SS04/P52 | SS05/P55 | SS07/P46 | No | (b) | Yes |
| B11 | BS11 | 1 | SS01/P51 | SS02/P42 | SS03/P43 | SS04/P52 | SS05/P55 | SS07/P46 | No | (b) | Yes |
| B12 | BS12 | 1 | SS01/P51 | SS02/P42 | SS03/P43 | SS04/P52 | SS05/P55 | SS07/P46 | No | (b) | Yes |
| B13 | BS13 | 1 | SS01/P51 | SS02/P42 | SS03/P43 | SS04/P52 | SS05/P55 | SS07/P46 | No | (b) | Yes |
| B9 | MS09 | 1 | SS09/P49 | | | | | | No | (b) | Yes |
| B10 | MS10 | 1 | SS09/P49 | | | | | | No | (b) | Yes |
| B11 | MS11 | 1 | SS09/P49 | | | | | | No | (b) | Yes |
| B12 | MS12 | 1 | SS09/P49 | | | | | | No | (b) | Yes |
| B13 | MS13 | 1 | SS09/P49 | | | | | | No | (b) | Yes |

See page 89 of reference 3 for sample storage requirements.

Table 53 - Tracking Table of Subgrade Testing in the FHWA-LTPP Testing Contractor Laboratory - SPS-2.

| 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 | Fifth | Sixth | | | |
| B1 | BS01 | 1 | SS01/P51 | SS02/P42 | SS03/P43 | SS04/P52 | SS05/P55 | SS07/P46 | No | (b) | Yes |
| B2 | BS02 | 1 | SS01/P51 | SS02/P42 | SS03/P43 | SS04/P52 | SS05/P55 | SS07/P46 | No | (b) | Yes |
| B3 | BS03 | 1 | SS01/P51 | SS02/P42 | SS03/P43 | SS04/P52 | SS05/P55 | SS07/P46 | No | (b) | Yes |
| B4 | BS04 | 1 | 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 | 1 | SS01/P51 | SS02/P42 | SS03/P43 | SS04/P52 | SS05/P55 | SS07/P46 | No | (b) | Yes |
| B7 | BS07 | 1 | SS01/P51 | SS02/P42 | SS03/P43 | SS04/P52 | SS05/P55 | SS07/P46 | No | (b) | Yes |
| B8 | BS08 | 2 | SS01/P51 | SS02/P42 | SS03/P43 | SS04/P52 | SS05/P55 | SS07/P46 | No | (b) | Yes |
| B1 | MS01 | 1 | SS09/P49 | | | | | | No | (b) | Yes |
| B2 | MS02 | 1 | SS09/P49 | | | | | | No | (b) | Yes |
| B3 | MS03 | 1 | SS09/P49 | | | | | | No | (b) | Yes |
| B4 | MS04 | 1 | SS09/P49 | | | | | | No | (b) | Yes |
| B5 | MS05 | 1 | SS09/P49 | | | | | | No | (b) | Yes |
| B6 | MS06 | 1 | SS09/P49 | | | | | | No | (b) | Yes |
| B7 | MS07 | 1 | SS09/P49 | | | | | | No | (b) | Yes |
| B8 | MS08 | 2 | SS09/P49 | | | | | | No | (b) | Yes |

See page 89 of reference 3 for sample storage requirements.

# Appendix B

# Figures

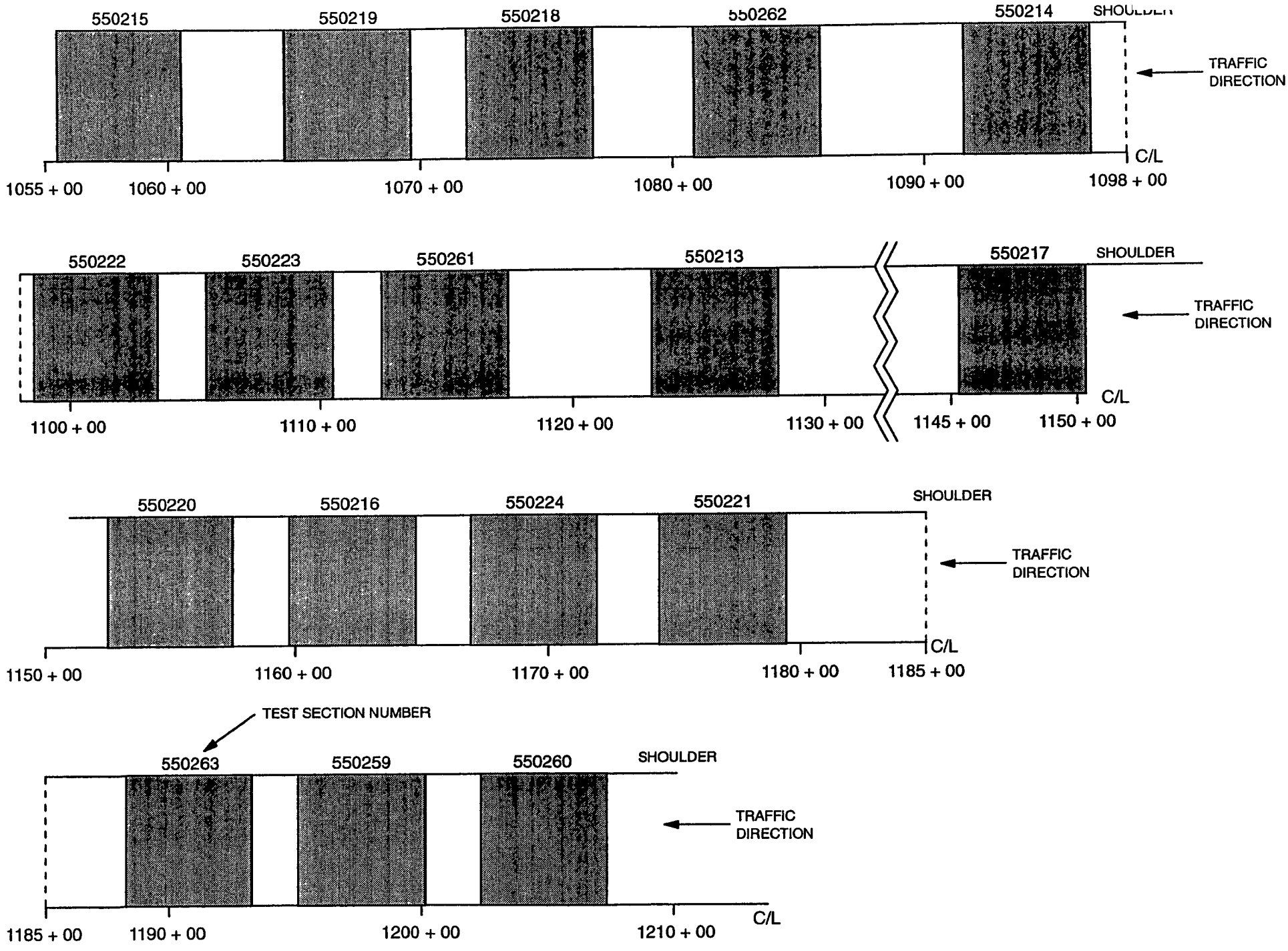



Figure 1. Layout of Westbound Test Sections.

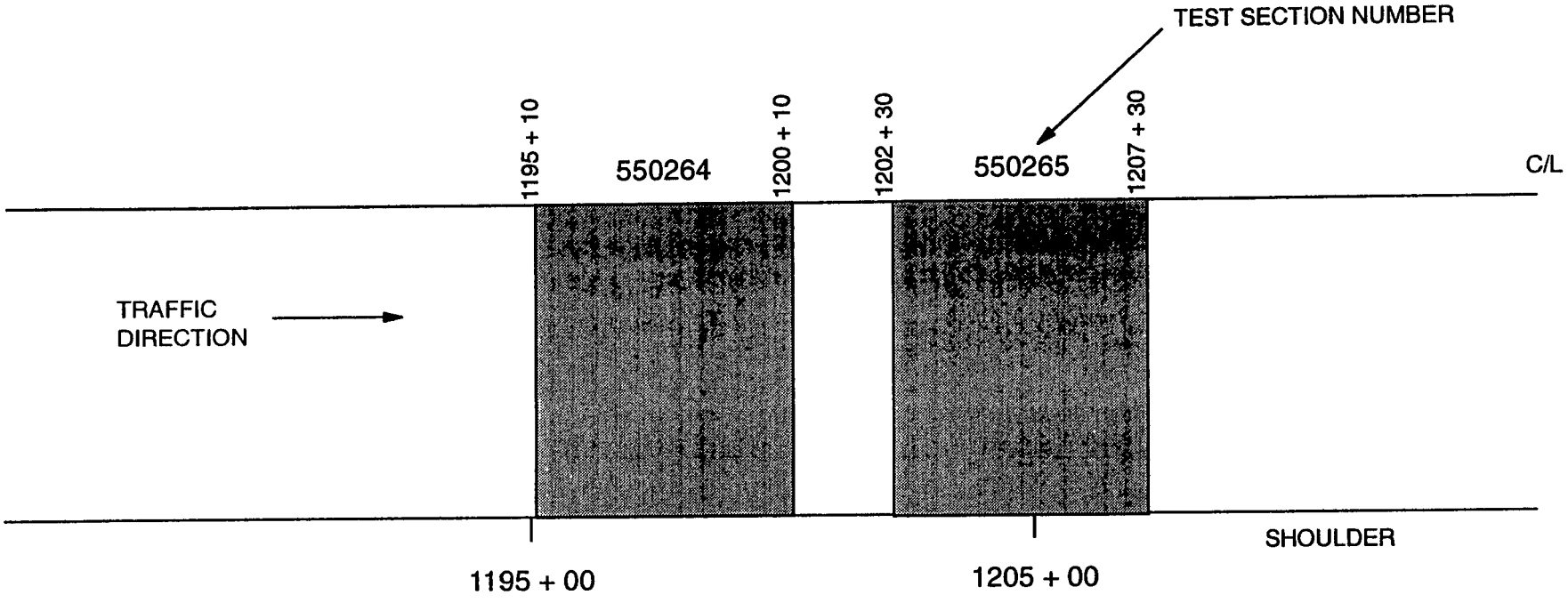



Figure 2. Layout of Eastbound Test Sections.

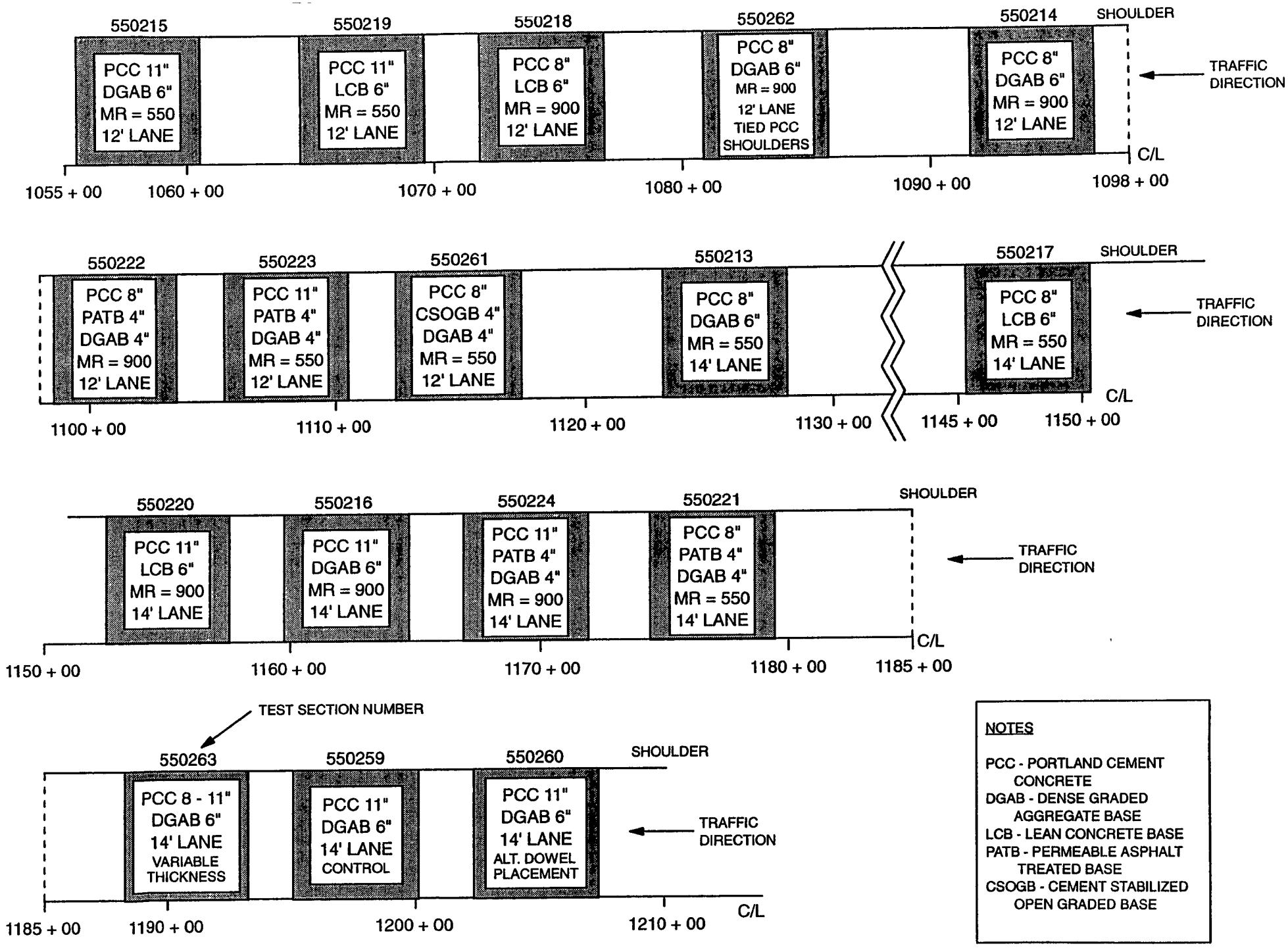



Figure 3. Design Features of Westbound Test Sections.

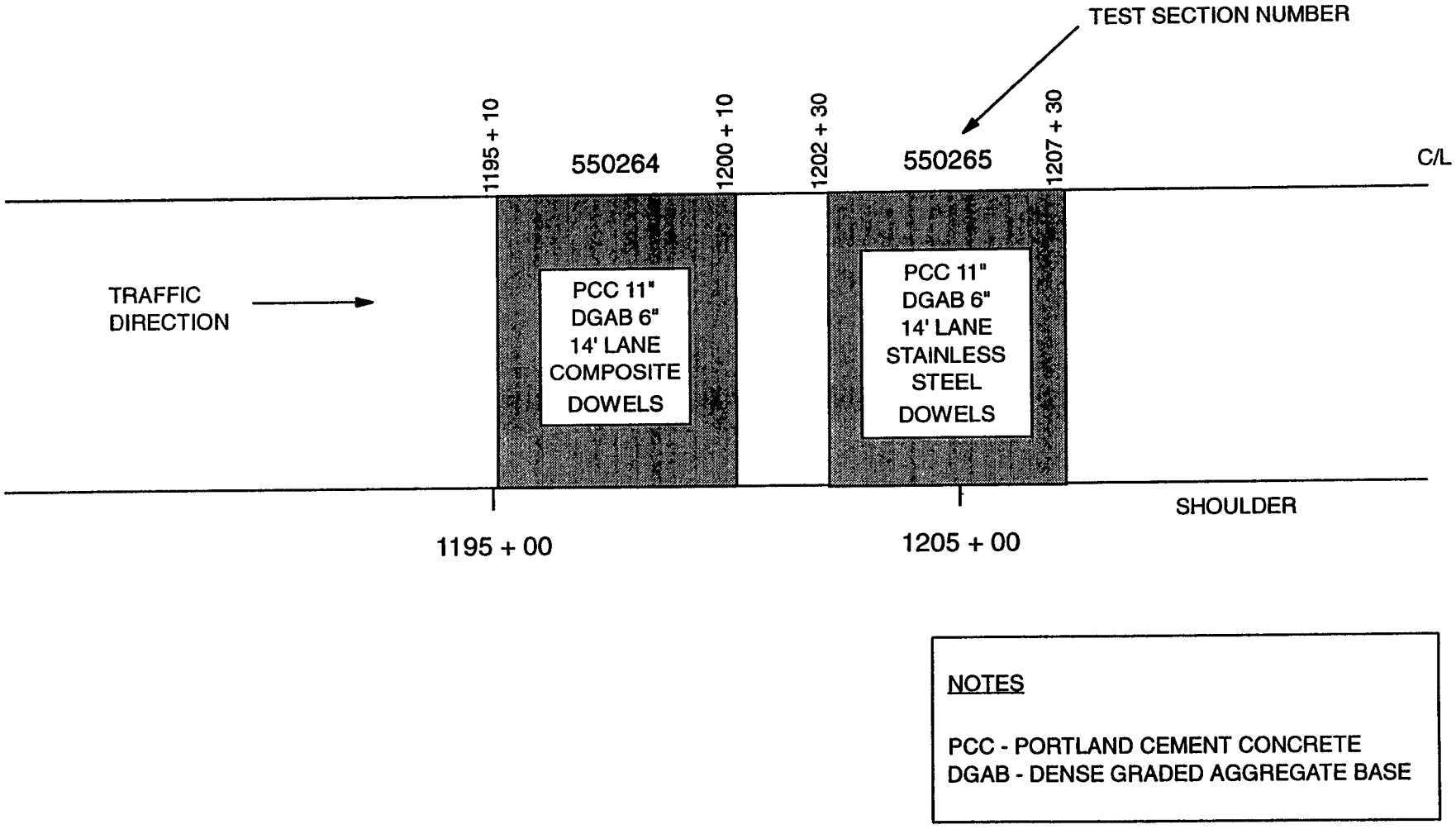



Figure 4. Design Features of Eastbound Test Sections.

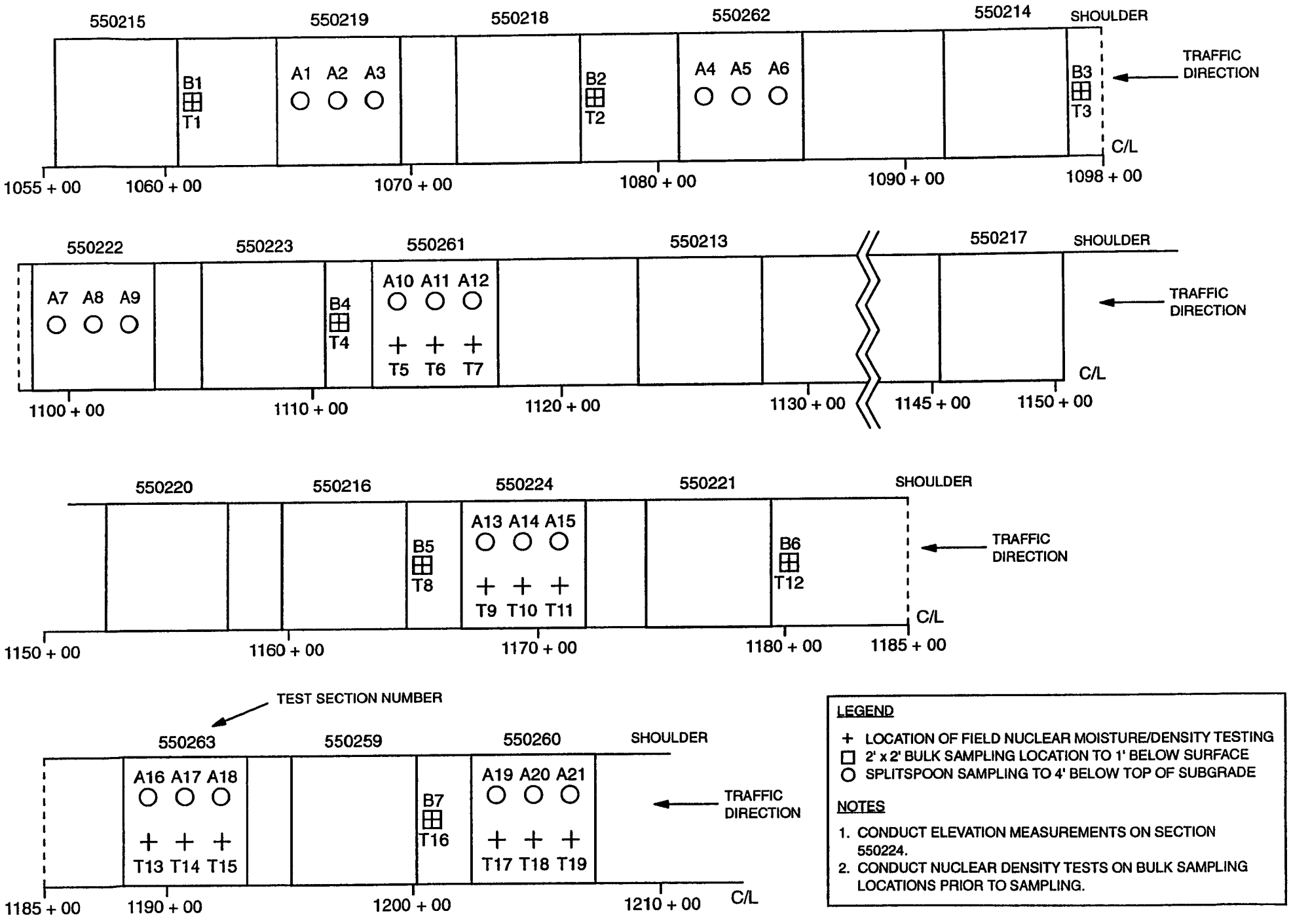
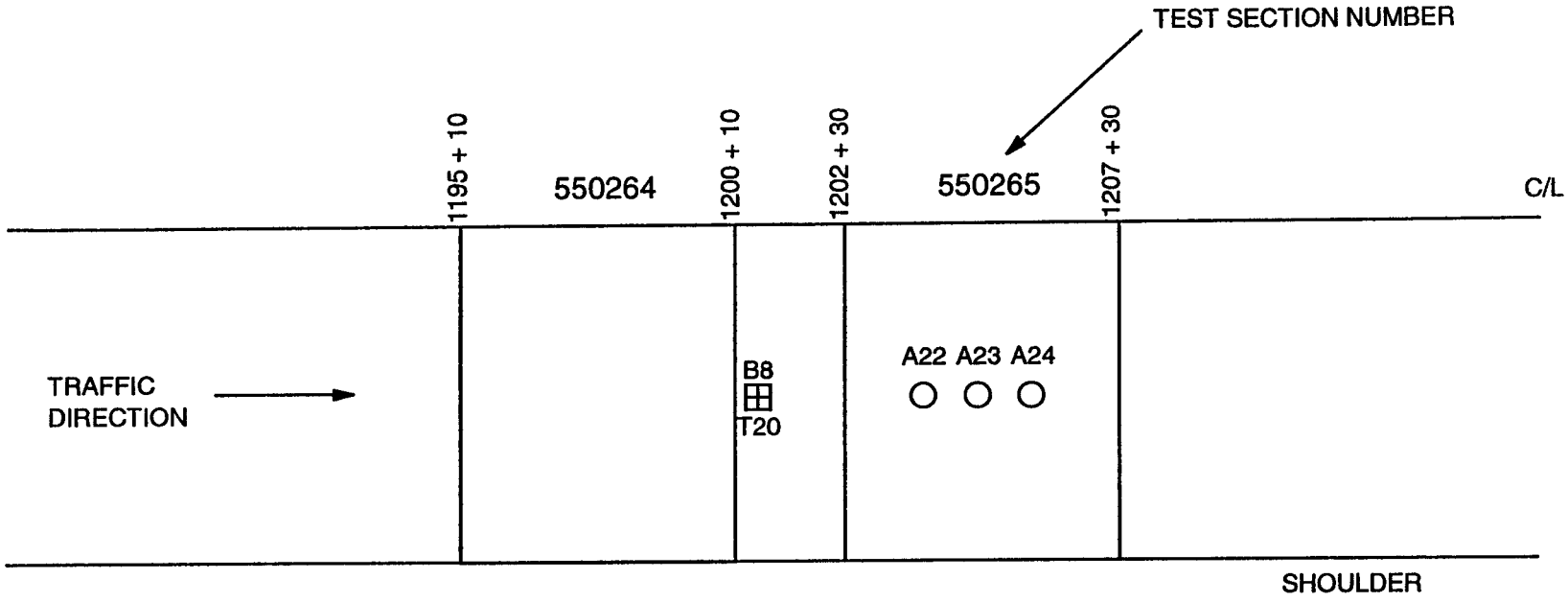



Figure 5. Overview of Sampling and Testing Plan for Subgrade (WB).




LEGEND

+ LOCATION OF FIELD NUCLEAR MOISTURE/DENSITY TESTING
□ 2' x 2' BULK SAMPLING LOCATION TO 1' BELOW SURFACE
○ SPLITSPOON SAMPLING TO 4' BELOW TOP OF SUBGRADE

NOTES

1. CONDUCT NUCLEAR DENSITY TESTS ON BULK SAMPLING LOCATIONS PRIOR TO SAMPLING.

Figure 6. Overview of Sampling and Testing Plan for Subgrade (EB).

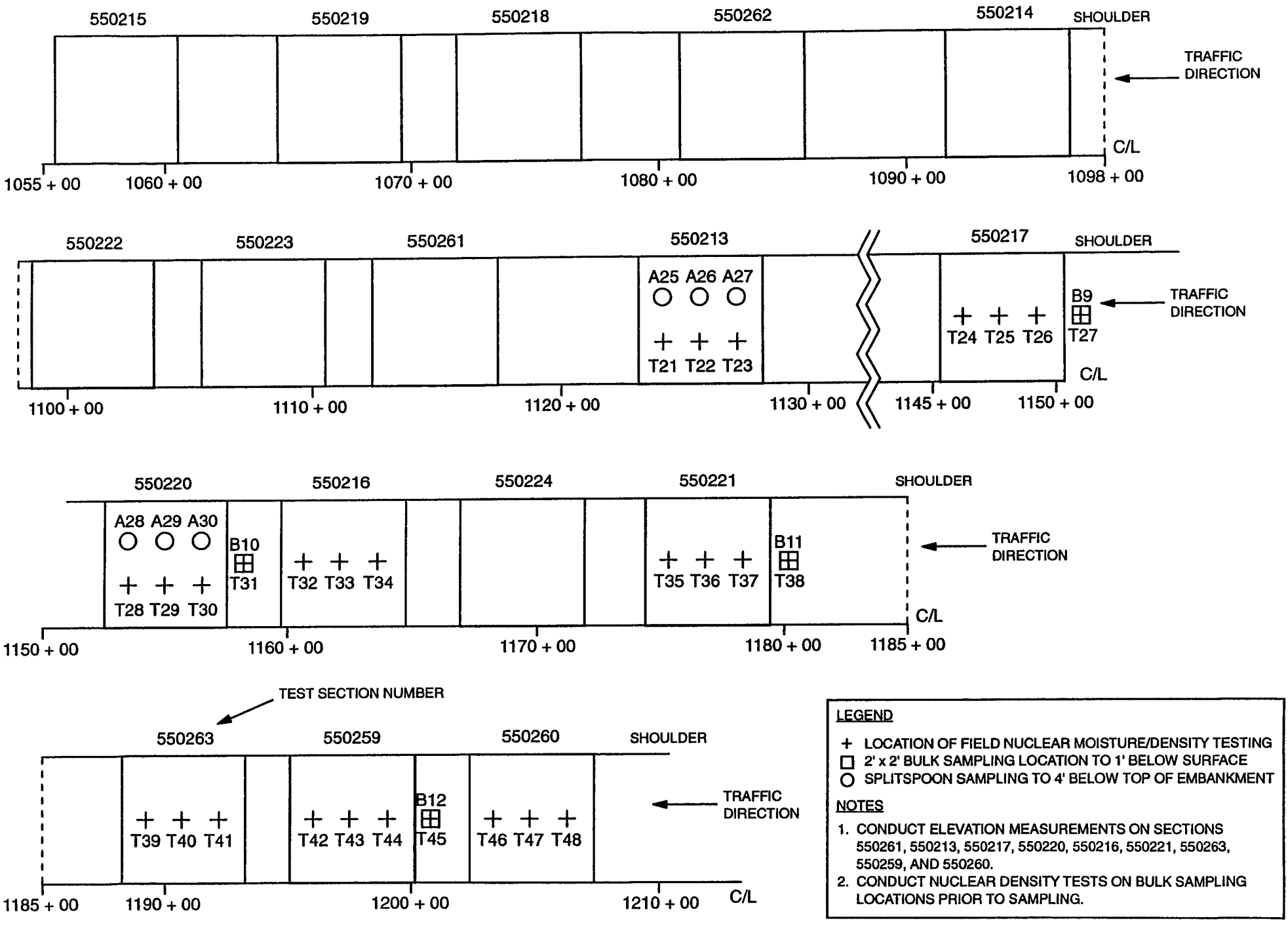
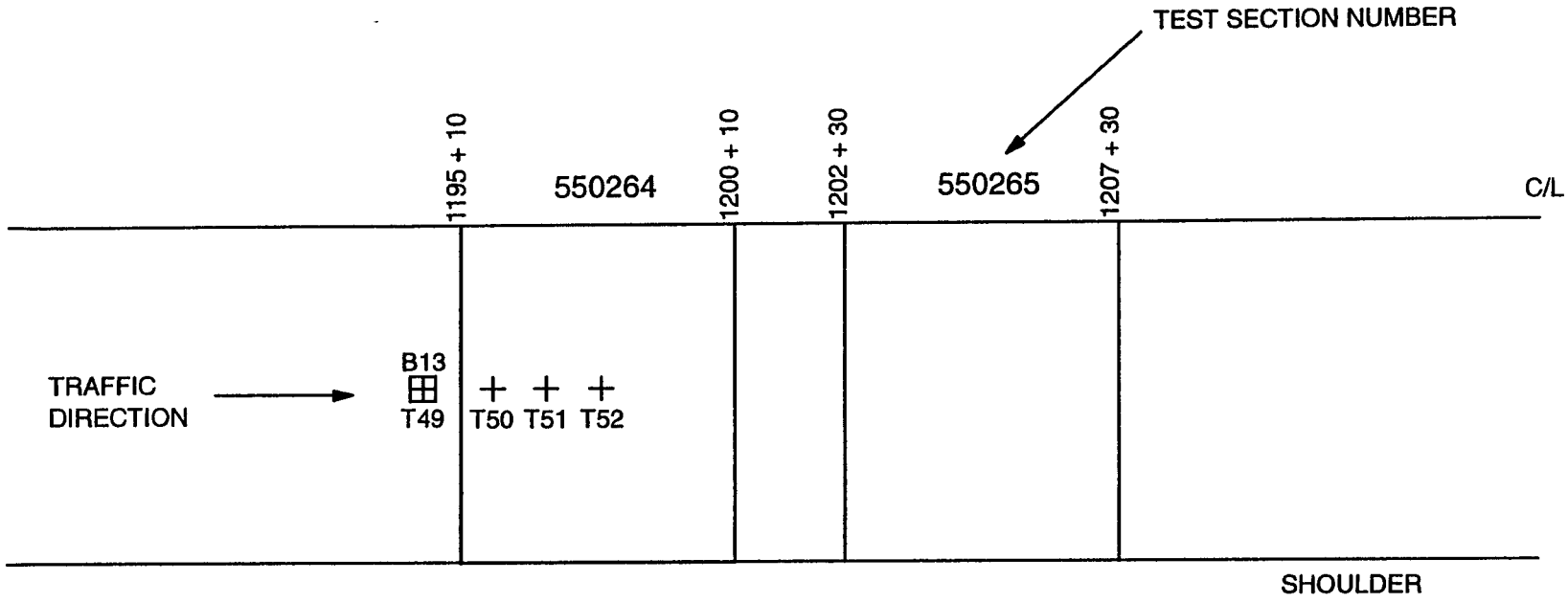



Figure 7. Overview of Sampling and Testing Plan for Embankment (WB).




LEGEND

+ LOCATION OF FIELD NUCLEAR MOISTURE/DENSITY TESTING
□ 2' x 2' BULK SAMPLING LOCATION TO 1' BELOW SURFACE

NOTES

1. CONDUCT ELEVATIONS MEASUREMENTS ON SECTION 550264.
2. CONDUCT NUCLEAR DENSITY TESTS ON BULK SAMPLING LOCATIONS PRIOR TO SAMPLING.

Figure 8. Overview of Sampling and Testing Plan for Embankment (EB).

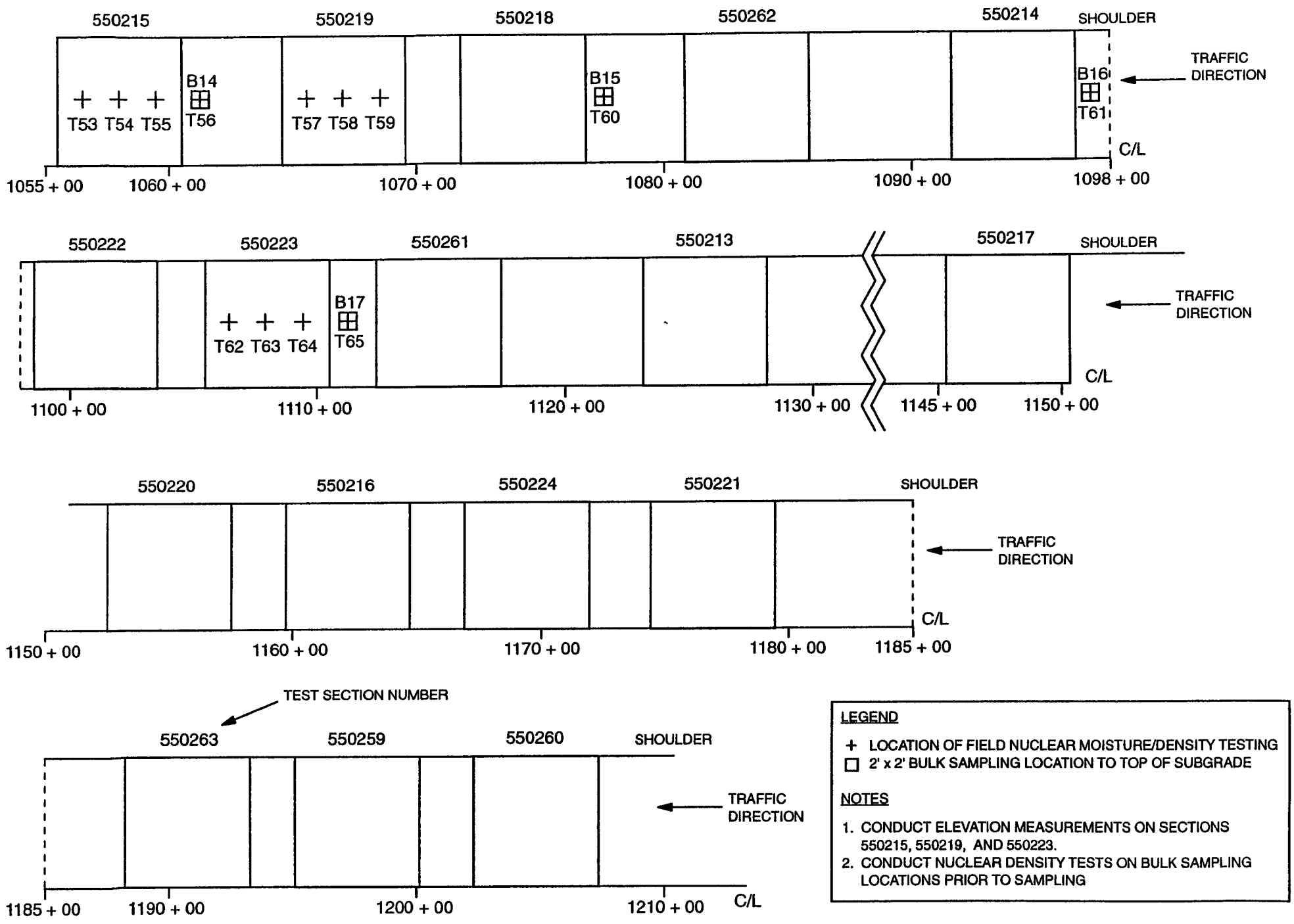
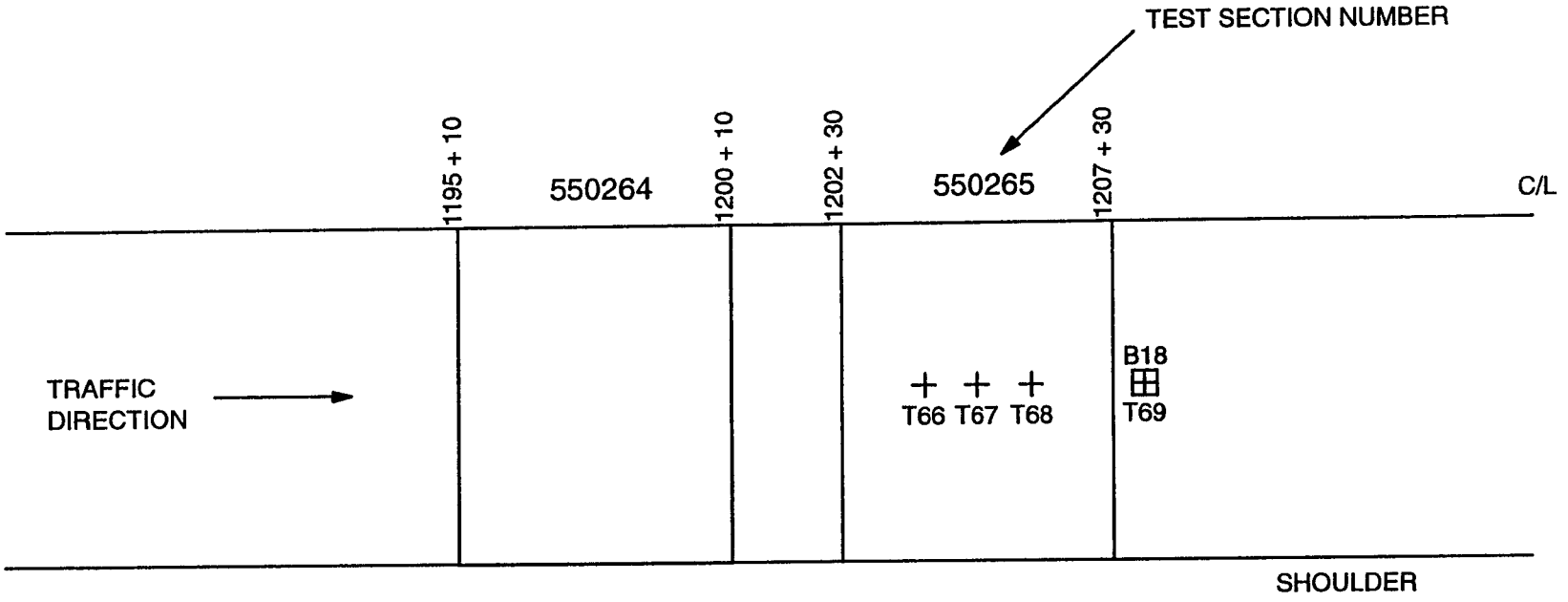



Figure 9. Overview of Sampling and Testing Plan for Existing Subbase (WB).




LEGEND

+ LOCATION OF FIELD NUCLEAR MOISTURE/DENSITY TESTING
□ 2' x 2' BULK SAMPLING LOCATION TO TOP OF SUBGRADE

NOTES

1. CONDUCT ELEVATIONS MEASUREMENTS ON SECTION 550265.
2. CONDUCT NUCLEAR DENSITY TESTS ON BULK SAMPLING LOCATIONS PRIOR TO SAMPLING.

Figure 10. Overview of Sampling and Testing Plan for Existing Subbase (EB).

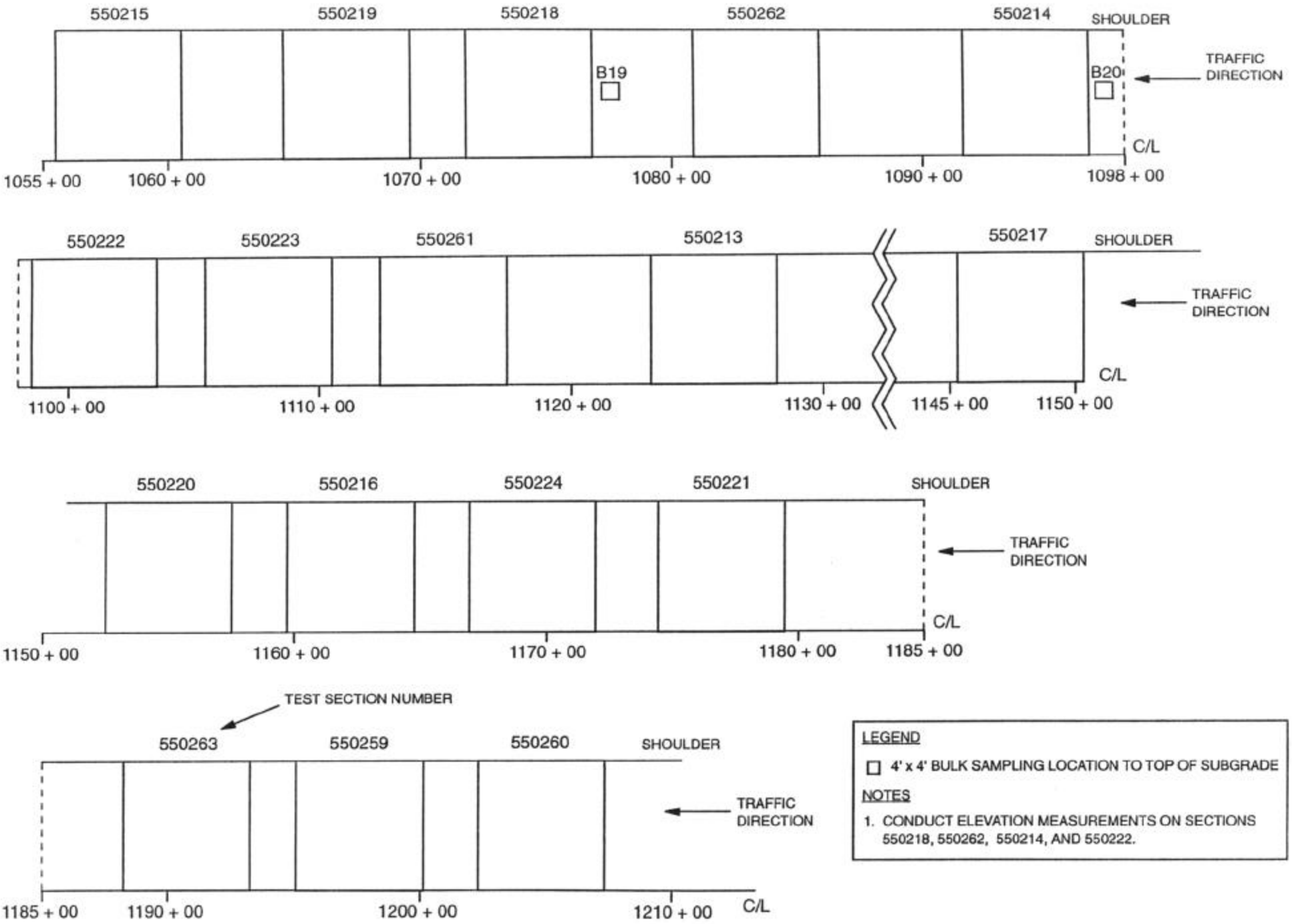



Figure 11. Overview of Sampling and Testing Plan for Existing Crushed Rock Base (WB).

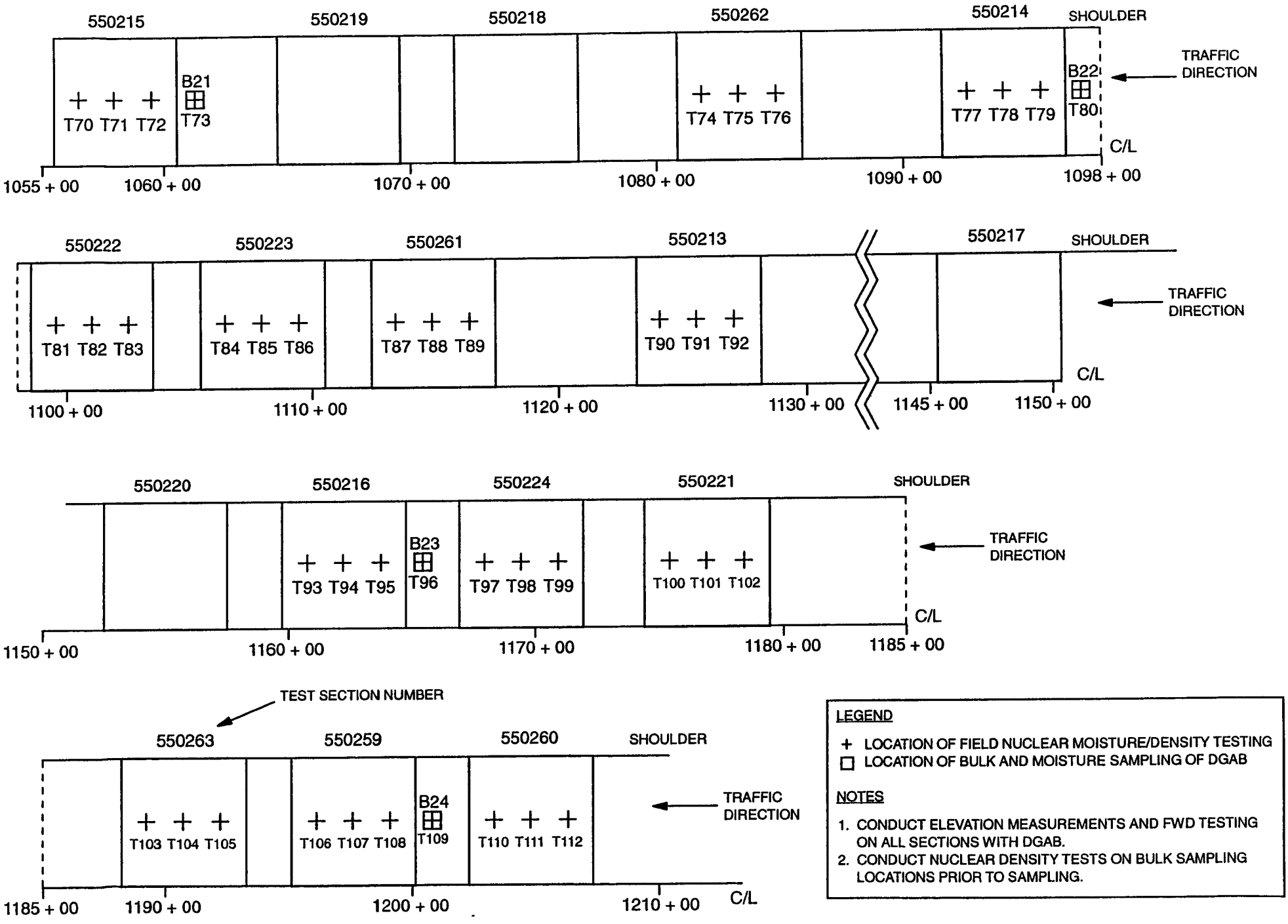
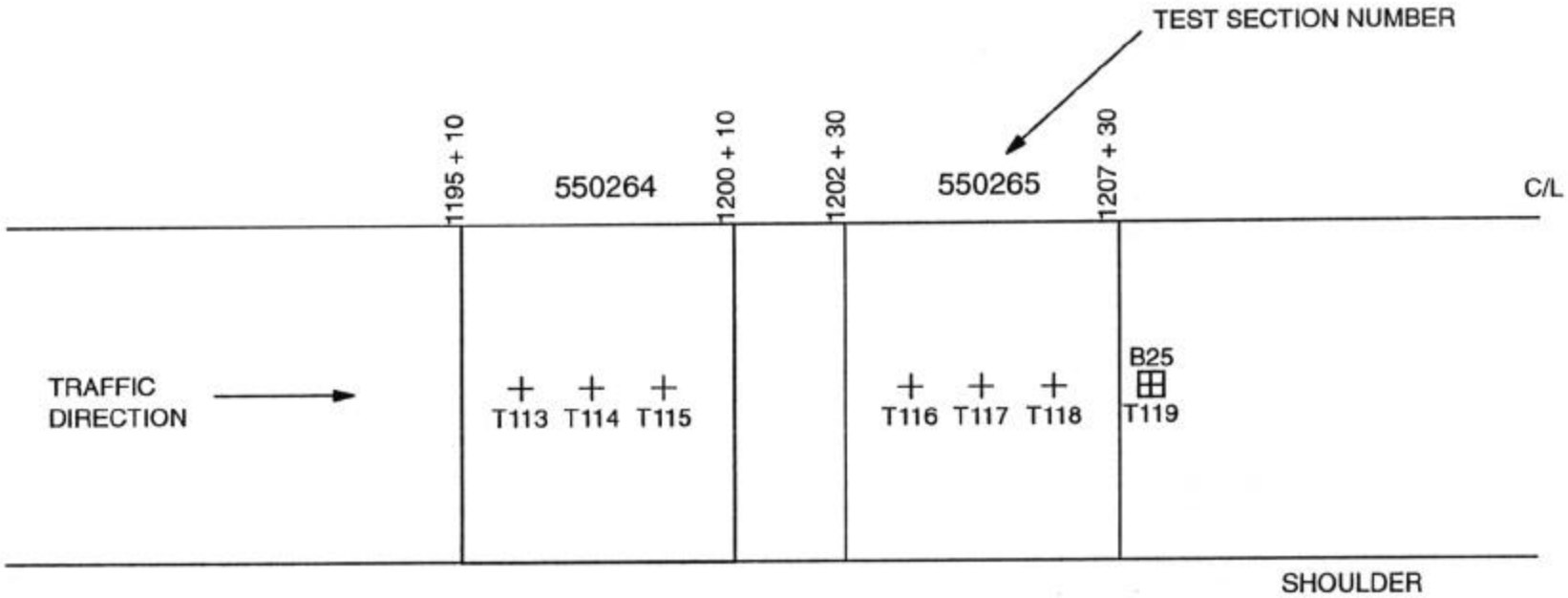



Figure 12. Overview of Sampling and Testing Plan for DGAB (WB).




LEGEND

+ LOCATION OF FIELD NUCLEAR MOISTURE/DENSITY TESTING
□ LOCATION OF BULK AND MOISTURE SAMPLING OF DGAB

NOTES

1. CONDUCT ELEVATION MEASUREMENTS AND FWD TESTING ON ALL SECTIONS WITH DGAB.
2. CONDUCT NUCLEAR DENSITY TESTS ON BULK SAMPLING LOCATIONS PRIOR TO SAMPLING.

Figure 13. Overview of Sampling and Testing Plan for DGAB (EB).

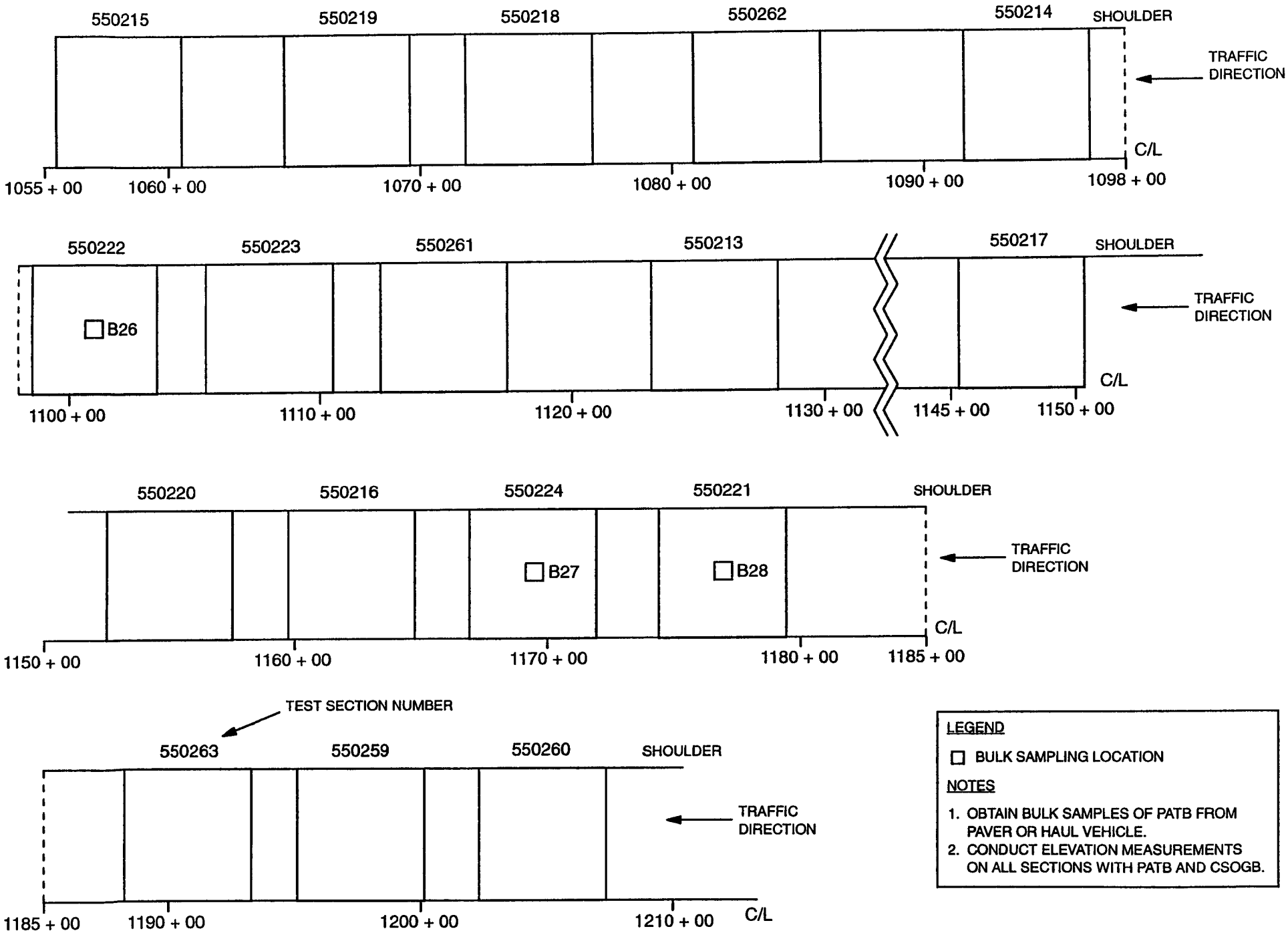



Figure 14. Overview of Sampling and Testing Plan for PATB and CSOGB (WB).

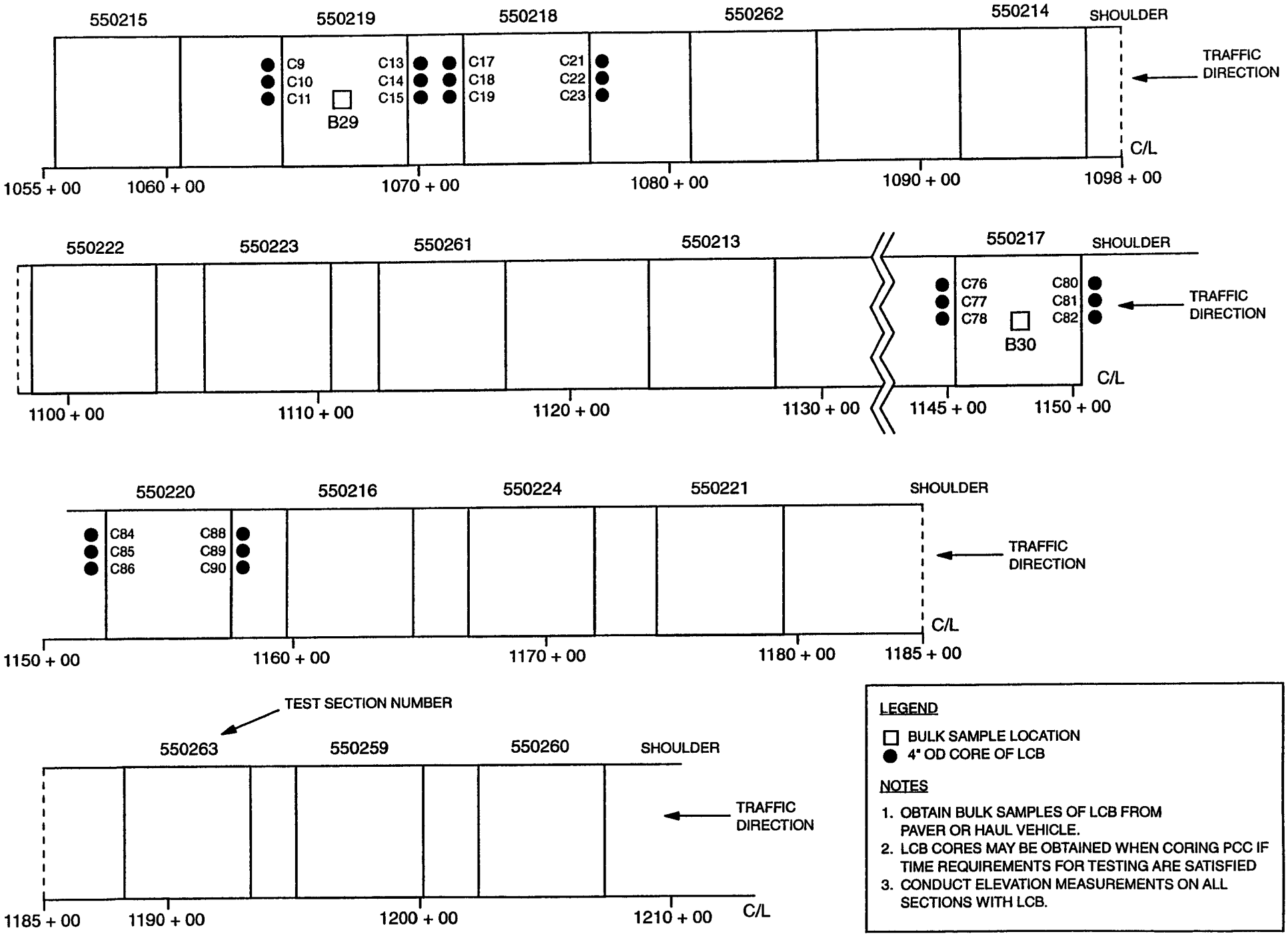



Figure 15. Overview of Sampling and Testing Plan for LCB (WB).

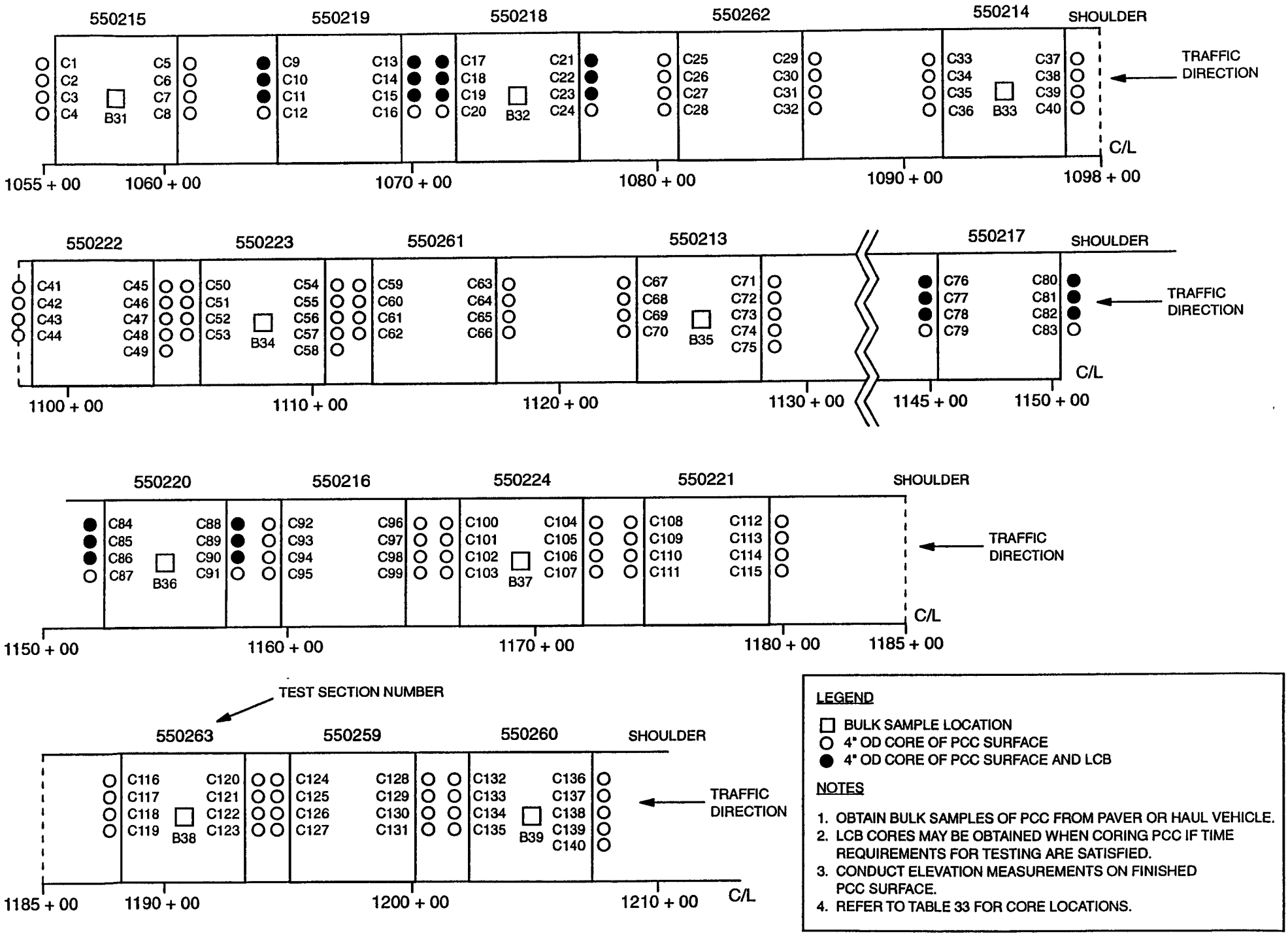
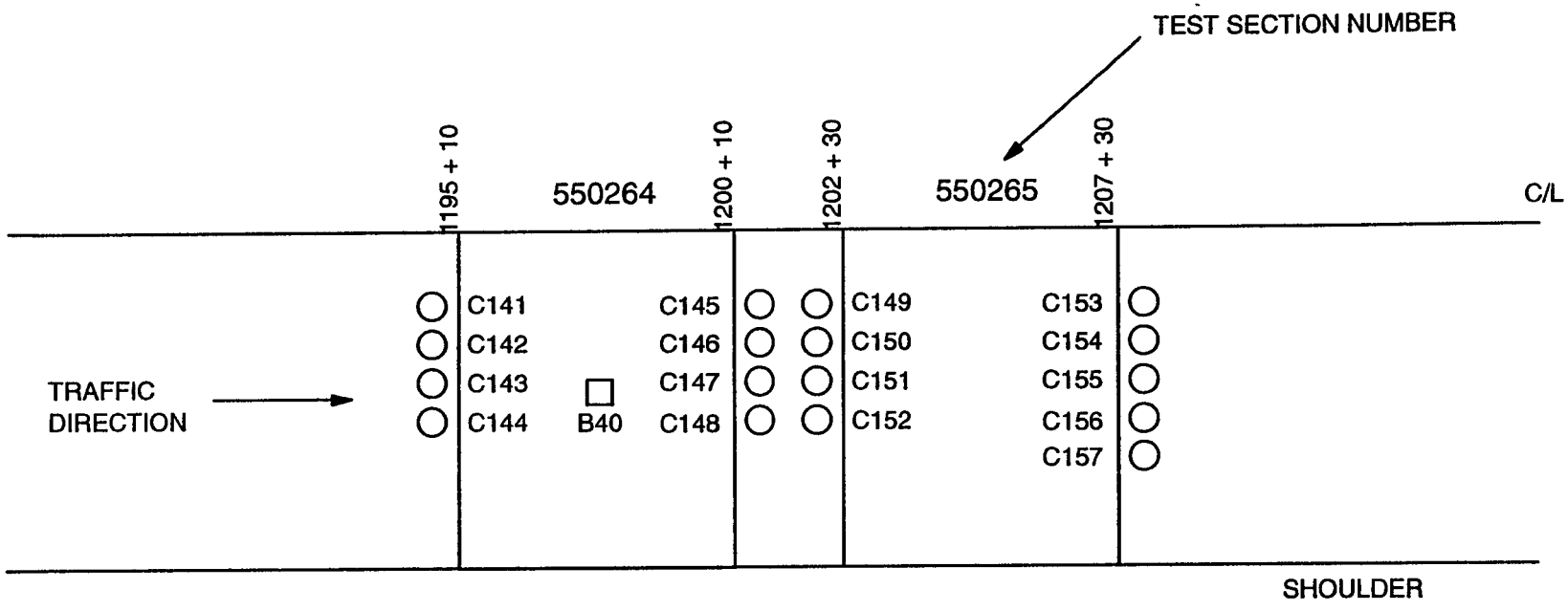



Figure 16. Overview of Sampling and Testing Plan for PCC (WB).




LEGEND

□ BULK SAMPLE LOCATION
○ 4" OD CORE OF PCC SURFACE

NOTES

1. OBTAIN BULK SAMPLES OF PCC FROM PAVER OR HAUL VEHICLE.
2. CONDUCT ELEVATION MEASUREMENTS ON FINISHED PCC SURFACE.

Figure 17. Overview of Sampling and Testing Plan for PCC (EB).