LOUISIANA EXPERIMENTAL BASE PROJECT

Interim Report No. 1

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ABSTRACT

The Louisiana Experimental Base Project is a research study evaluating the design/performance characteristics of three types of base courses as incorporated into comparable flexible pavement systems on a full-scale test road. Fourteen different test sections were constructed in order to evaluate the study variables. The variables of the experimental design included base course type (soil-cement, stabilized sand clay gravel, and black base), design life (5, 10, and 15 years), and surface thickness (three and one-half and five and one-half inches [8.9 and 14.0 cm]). The test road is U.S. Route 71 south of the City of Alexandria.

This interim report documents the design, construction, as-built properties of the components and total road section, and current traffic trends at the Louisiana Experimental Base Project.

INTRODUCTION

Approximately a decade ago the Louisiana Department of Highways adopted the design procedure established for flexible pavements at the AASHO Road Test at Ottawa, Illinois. Subsequently, this Department's research engineers verified that in general this design procedure could be applied to the soil types, traffic loadings, and environment conditions of Louisiana.

Limited funds, materials shortages, and the advent and appeal of new pavement design concepts render "general" verification of the above mentioned design procedure inadequate. The Department's design engineers need to know more precisely the accuracy of their design predictions as reflected by actual performance of flexible pavements. This research project is intended to provide the needed information by making direct, controlled comparison of section design and performance.

SCOPE

The scope of the research project is as follows:

1. Determine the accuracy of predictions of pavement performance for a given design. This will necessarily involve a re-evaluation of the pavement design coefficients involved.

2. Determine layer equivalencies for three different base course types by inference from observations at some common level of performance.

3. Determine relationships of performance (pavement roughness and distress) to the following:

   a. Standard design factors such as base type and thickness and equivalent 18-kip axle loads.

   b. Structural factors such as deflections and calculated stresses and strains.

   c. Materials properties such as fatigue strength of asphaltic concrete.

The scope of this first interim report is to present the study design, the as-built properties of the components and total road section, and current traffic trends at the Louisiana Experimental Base Project.

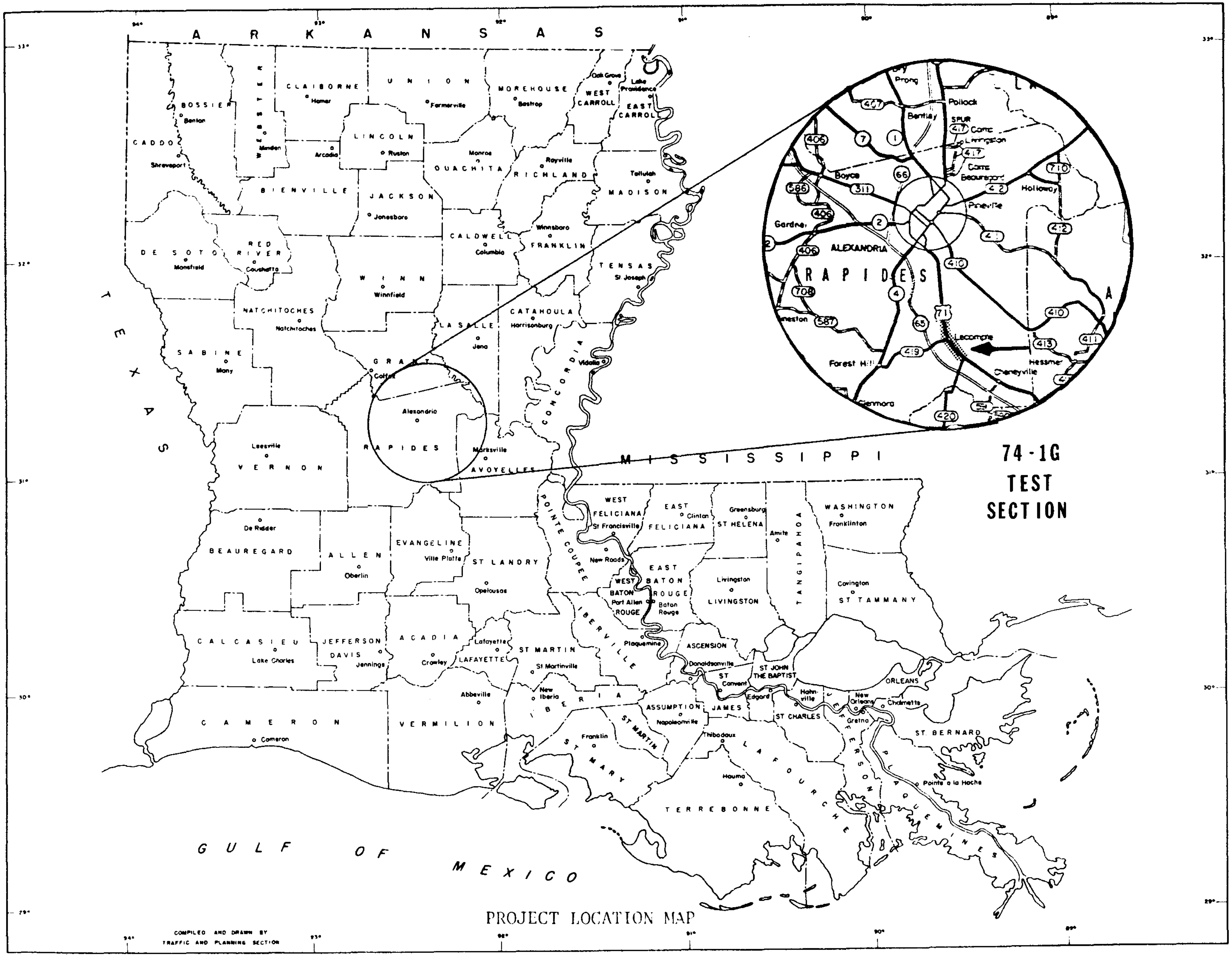
METHOD OF PROCEDURE

The methodology involved the design and construction of 18 full-scale test sections on an actual highway project. The test sections represent various combinations of base course type, base course and surface course thicknesses, and design life.

The experimental sections are located on Route U.S. 71 and Route U.S. 167 in central Louisiana. Figure 1 is a map depicting the facility between the communities of Meeker and Chambers in Rapides Parish. The location of the facility represents a compromise between the low wetlands of south Louisiana and the slight hills in the northern part of the state. The terrain at the test site is flat and affords poor drainage. Subgrade material is relatively uniform, basically fine-grained soils. The mean variation in air temperature at the test site in 1977 was from 39°F to 84°F. The annual rainfall was typically 55.6 inches.

The road is a major rural route, accommodating a moderate volume of mixed (automobile and truck) traffic. A loadometer is located on the highway near the test sections and provides historical and current traffic counts. Researchers have installed Weigh-In-Motion (WIM) load frame-transducer assemblies in the outside lane immediately north of the test area. The WIM analyzes the traffic stream with regard to vehicle type, number of axles, weight (per axle and total), axle spacing and speed. Researchers also employ an independent vehicle classifier at the test site to record vehicle type and number of axles.

The test facility was constructed as part of a larger project to upgrade the route to a four-lane highway. The experimental section was thus surveyed, planned, bid upon, and constructed as part of the overall project. This project was let to bid in 1974. The contractor completed placement of embankment and an overlying


ARKANSAS
TEXAS
MISSISSIPPI
GULF OF MEXICO
74-1G
TEST
SECTION
PROJECT LOCATION MAP
COMPILED AND DRAWN BY
TRAFFIC AND PLANNING SECTION
CADDO
BOSSIER
WEBSTER
CLAIBORNE
UNION
MOREHOUSE
WEST CARROLL
EAST CARROLL
LINCOLN
OUACHITA
RICHLAND
MADISON
BIENVILLE
JACKSON
CALDWELL
FRANKLIN
TENSAS
DE SOTO
RED RIVER
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ALLEN
EVANGELINE
ST LANDRY
POINTE COUPEE
WEST FELICIANA
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ST JOHN THE BAPTIST
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ST JAMES
ST CHARLES
JEFFERSON
ST BERNARD
ST MARY
LAFOURCHE
TERREBONNE
PLAQUEMINES
Shreveport
Benton
Minden
Homer
Farmerville
Bastrop
Oak Grove
Lake Providence
Ruston
Arcadia
Monroe
Rayville
Tallulah
Jonesboro
Columbia
Winnsboro
Mansfield
Coushatta
Winnfield
St Joseph
Natchitoches
Harrisonburg
Jena
Many
Colfax
Vidalia
Alexandria
Marksville
Leesville
De Ridder
Oberlin
Ville Platte
Opelousas
St Francisville
Clinton
Greensburg
Amite
Franklinton
New Roads
Port Allen
Baton Rouge
Livingston
Covington
Lake Charles
Jennings
Crowley
Lafayette
St Martinville
Plaquemine
Donaldsonville
Convent
Edgard
Hahnville
New Orleans
Chalmette
Gretna
Abbeville
New Iberia
Napoleonville
Thibodaux
Franklin
Houma
Cameron
Pointe a la Hoche
Prong
Bentley
Pollock
SPUR
Holloway
Pineville
Boyce
Gardner
ALEXANDRIA
Lecompte
Hessmer
Cheneyville
Forest Hill
Glenmora

FIGURE 1

select soil in 1975. In the summer of 1976, the experimental base courses and the surface course were completed. Fourteen test sections were thus built with certain experimental features as explained in the "Experimental Design" portion of this report. Four additional control sections were built for reference--one at each end of the experimental area and two within the research area. The roadway was opened to traffic in August, 1976.

Research personnel observed construction of the test sections, and concurrently collected materials samples and conducted roadway tests generally in accordance with a construction sampling and testing program, Table 3, Appendix A. The program outlined in Table 3 is designed to determine laboratory properties of the component road materials and to define the as-built properties of the ensuing (road) structure.

Research personnel are to determine changes in the as-built properties of the experimental sections through a measurements program, Table 4, Appendix B. This program will provide evaluation of materials, traffic, and road performance in pursuit of design verification.

In Table 3 the Asphalt Institute is listed as an agency to perform tests in this research project. The Asphalt Institute is to determine certain fundamental properties of the materials comprising the experimental sections. That agency is considering using these properties with a design procedure such as "PDMAP" or "VESYS II" to forecast the distress-related life of the test sections.

Louisiana Technical University is also providing support to this experimental base course project. The University is conducting indirect tensile and fatigue tests on base and surface course materials from the test sections. These laboratory test results will be used with layered theory analysis and actual road performance results to verify or develop design procedures.

EXPERIMENTAL DESIGN

Basis of Experimental Design

The present theory pertinent to the effect of materials and layer thickness on performance is not fully adequate. To provide the needed answers to the development of theory and obtain some type of empirical answers to the structural road design problems, field experiments are needed. The experiments involve the construction of test sections of specified materials and thickness. The performance of these sections must then be compared to seek the needed design concepts.

The designer of these experiments faces several major problems, the foremost being the cost of building the test sections. This means a minimum of replications. By replication it is meant that more than one test section is constructed under a given set of specified variables.

A second major problem is concerned with the time required to obtain results. An experimenter does not have time to wait a prolonged period before analyzing and interpreting the experimental data. The alternative is to design thinner sections and extrapolate to thicker sections. One of the basic purposes of road test section experiments is to develop a basis for extrapolation.

The other major problem in experimental design is the impracticability of using balanced factorial designs. As an example, consider material A which provides a useful road life of 25 years for a given thickness. Material B, for the same thickness, may last only half as long. Thus using the same thickness for each material would lead to extended waiting time for some materials before final results become available. The alternative is to select certain levels of performance in terms of design life (say 5, 10, and 15 years). The problem then would be to assign thicknesses for each material which would provide the desired performance goal.

Experimental Design

On the basis of the above philosophy and the definition of the major objective of the study, an experiment was designed to provide a set of thickness levels for each material. Specifically, the experiment was designed to include two factors relative to the pavement structure and one factor relative to average daily load in terms of design life. The main elements of this experimental design are shown in Table 1. It includes asphaltic concrete surface thickness at two levels (3.5 inches and 5.5 inches), base course material at two levels (asphaltic concrete or black base and cement stabilized soil), and design life at three levels (5, 10, and 15 years). The levels of thickness for each base course material were determined using AASHTO design procedures and the following Louisiana coefficients for material components:

Surface course - .44
Base course - .34 for asphaltic concrete
- .15 for cement stabilized soil
- .18 for cement stabilized sand clay gravel

TABLE 1

EXPERIMENTAL DESIGN

Surface Thickness	3½"			5½"		
Design Life	Base Type			Base Type		
	Black Base	Soil-Cement	Stab. S.C.G.	Black Base	Soil-Cement	Stab. S.C.G.
5 Years	6"	12"	10"	3"	6"	6"
10 Years	7½"	15"		4½"	9"	
15 Years	11"	20"		8"	16"	

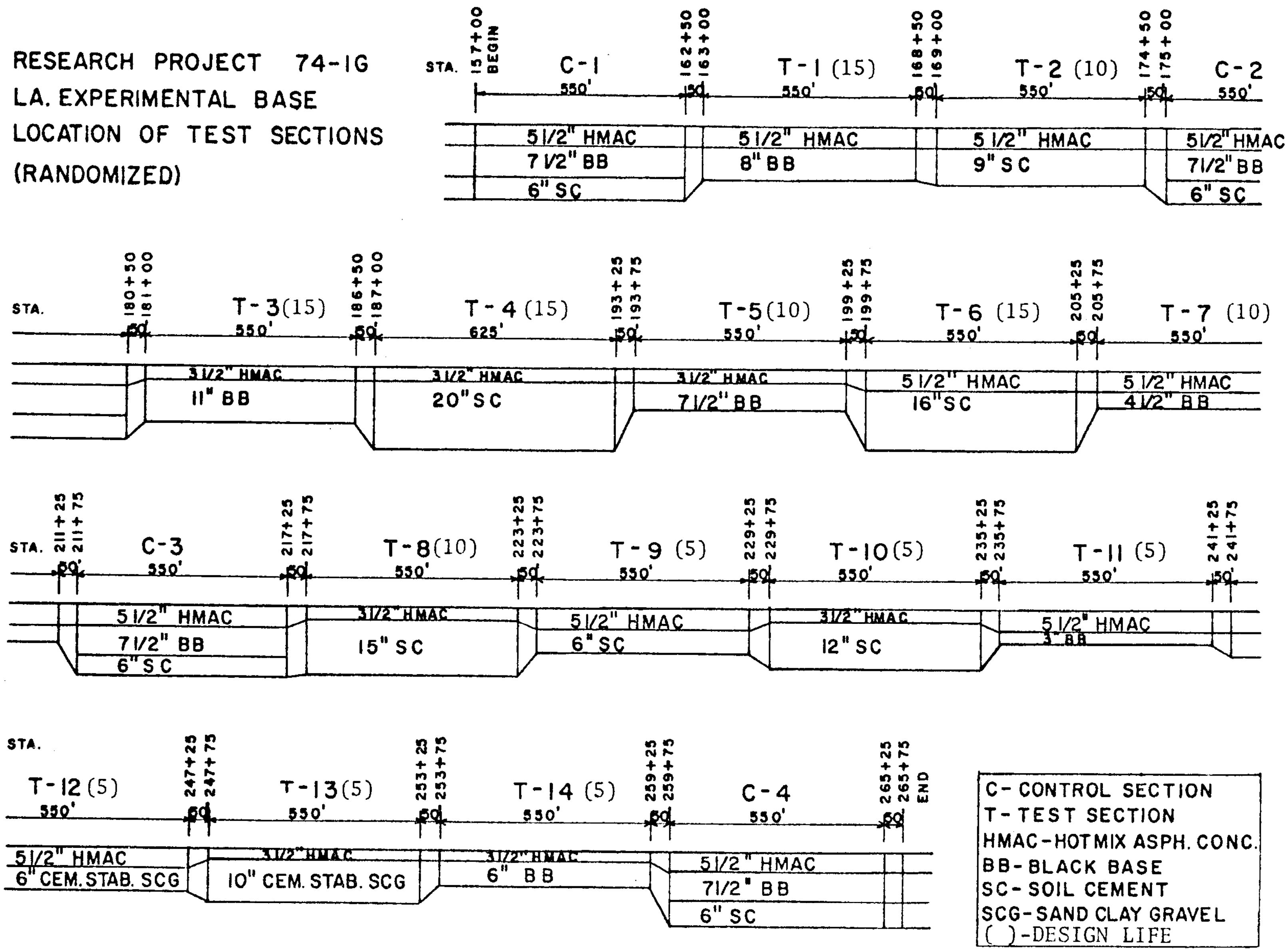
The levels of the pavement surface thickness were chosen because these are the predominant levels encountered in Louisiana. The levels of design life were chosen so as to provide adequate data points for detection of failure of design life (or some transformed function of design life) and its relationship to the two pavement surface thicknesses.

All 2 x 2 x 3 = 12 combinations of the factor levels were constructed at a single site without replications. However, all sections refer to two-lane sections. Analysis and evaluation of performance will be for outer lane section only.

In addition to the 12 sections discussed above, two additional sections of cement stabilized sand clay gravel were constructed under each level of surface course at a single level of design life (5 years). Only limited comparison is anticipated from these sections.

The above 14 experimental test sections were supplemented with four control sections, one at each end of the project and two within the experimental area. These control sections were composed of 5-1/2 inches of surface course over 7 inches of asphaltic concrete base course and 6 inches of soil-cement.

Figure 2 is a profile of the various test sections. Each test section is approximately 550 feet long with a transition of 50 feet between each test section. The 10- and 15-year design sections were placed in random order. However, the 5-year design sections (sections 9 through 14) were grouped together to allow an overlay of the entire segment should early manifestation of distress become evident in any or all of these sections.



Design Profile of the Test Sections

FIGURE 2

Analysis Using Experimental Design

In the recommended experimental design, each of the two base course materials has its own set of thickness levels. In essence, the thickness of each material can be considered as a controlled variable and hence should be assumed to possess no error except that of achieving the specified thickness. The random error will be in the performance response of the experimental sections.

It is anticipated that the recommended design would yield experimental data similar to those shown in Figure 3. In the figure the ordinate is plotted on the log scale and the thickness of the base course on arithmetic scale. Furthermore, the ordinate scale represents the number of years required for the performance index to decline to some specified value. This performance index could be psi, deflection or some other manifestation of distress. In the example shown, the ordinate represents design life or life to some terminal measure of performance.

If performance is regressed on thickness, and if it is assumed that the lines will be approximately parallel (and this can be done by choosing scales which will linearize and produce parallelism among performance-thickness regression lines), then it is possible to compare thickness of the two material types for equivalent performance. The performance equations would be of the following form:

$$\log P = a_{BB} + bT_{BB}$$

and

$$\log P = a_{SC} + bT_{SC}$$

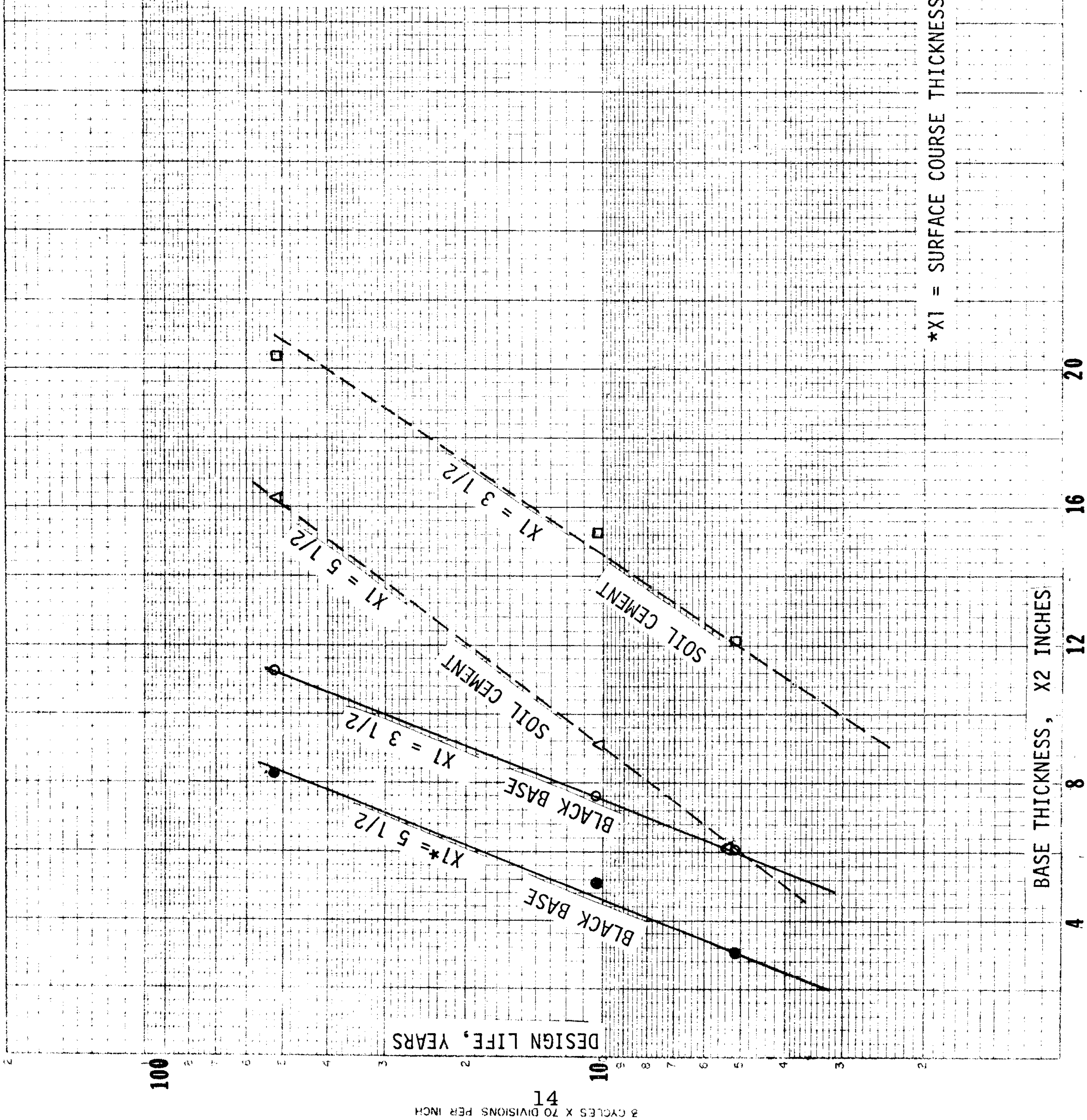
For equivalent performance

$$T_{SC} = \frac{a_{BB} - a_{SC}}{b} + T_{BB}$$

Thus there is a linear relationship between the thickness of the material required for equivalent performance.

Relationship Between Base Thickness and Design Life

FIGURE 3



One of the shortcomings of the recommended design is that it will not be possible to detect the non-linearity between the surface thickness levels and performance. A minimum of three levels of a factor are required to detect such non-linearity of the regression of performance on thickness.

EMBANKMENT, SELECT, AND CEMENT-STABILIZED BASE COURSE CONSTRUCTION

Embankment

Tests were run on the embankment material for classification into soil groups and for R-values. The natural material in the southern part of the project (Sta. 157+00 to Sta. 202+00) was composed of silts A-4-(8), average plasticity index (P.I.) = 4; silty loams A-4-(8), avg. P.I. = 2; and silty clay loams A-6-(9), avg. P.I. = 14. The northern part (Sta. 202+00 to Sta. 265+25) consisted of silty clay A-6-(12), avg. P.I. = 20; medium silty clay A-7-6(18), avg. P.I. = 34; and heavy clays A-7-6(20), avg. P.I. = 40. The entire length of the job was covered with a hauled-in 6- to 24-inch layer of medium silty clay A-7-6(20), avg. P.I. = 41 or heavy clay A-7-6(20), avg. P.I. = 40. Nuclear moistures and densities were run on the embankment material in place. Undisturbed cores of the embankment materials were taken and sent to the Asphalt Institute for resilient modulus testing. Some areas encountered excessive moisture problems. The few areas where problems were encountered during embankment construction are listed in Appendix C.

Select Material

The select material on the Louisiana Experimental Base job was placed according to plans with very few problems. The select material was composed of sand A-2-4(0), avg. P.I. = 6; a sandy loam A-2-4(0), avg. P.I. = 9; and a sandy clay loam A-2-6(0), avg. P.I. = 11. Testing performed on this material included soil classification, field nuclear moisture and density, R-values, and modulus of elasticity. The modulus of elasticity testing was done by the Asphalt Institute.

Soil-Cement and Cement-Stabilized Sand Clay Gravel

Testing done on the soil-cement material included classification for soil groups (same materials as the select soils), nuclear moistures and densities on the in-place material at the roadway site, laboratory design tests for optimum cement percentages, thickness measurements, and the taking of 7-day and 28-day cores. The physical cores were tested for compressive strengths and cement contents. The 28-day core results are in Appendix E. One basic flaw with many of the cores was that the top 1 to 3 inches of the core either broke or separated due to compaction laminations. Also in the deep soil-cement sections (20, 16, 15 and 12 inches) which were cut-in in two separate layers, the cores came apart at the junction between the layers. Some cores showed 1/2 to 2 inches of raw soil between top and bottom layers which did not have the cement cut-in with the soil. Fundamental properties of soil-cement mixtures will be examined to provide a basic understanding of the engineering properties and performance characteristics of the construction materials which were utilized and evaluated in the Louisiana Experimental Base Project. The engineering properties of the construction materials will provide information required in establishing a fundamental relationship between material behavior as measured in the laboratory and the projected performance of the construction material in the field.

The 10-inch cement-stabilized sand clay gravel section was troubled by cut-in and compaction attempts during a medium to heavy rain. Compaction equipment had to be removed from the section because of the soupy condition of the roadway. Core attempts in this section produced only four fair cores out of 25 attempts. Compressive strengths of the 28-day cores obtained are in Appendix E. The problem areas in the soil-cement and cement-stabilized sand clay gravel construction and the condition of cores obtained can be found in Appendix C.

ASPHALT CONCRETE BASE AND SURFACE COURSE CONSTRUCTION

The asphaltic concrete for this experimental project was produced at the contractor's Hot Wells batch plant, located approximately thirty miles northeast of the job site. The following listing is an average representation of the percent passing aggregate gradation, the asphalt content, the percent crushed aggregate, the plant batch temperatures, and the field compaction temperatures for all three mix types produced:

Sieve	Type 5-A Base	Type 3 Binder	Type 3 Wearing
1 inch	100	100	100
3/4 inch	93	100	100
1/2 inch	81	89	88
No. 4	49	57	61
No. 10	34	43	48
No. 40	21	26	26
No. 80	11	13	13
No. 200	5	8	6
Asphalt, %	4.0	4.4	4.6
Crushed, %		75	83
Plant Temp., °F	315	320	320
Road Temp., °F	280	300	300

All mix types were composed of siliceous sands and chert gravel. A mineral filler (silica dust) comprised part of the aggregate gradation for the binder and wearing course mixes (2 and 3 percent, respectively). The asphalt cement was a Lion Oil (El Dorado, Arkansas) AC-40 grade with typical properties as shown in Table 9 in Appendix F.

Construction of the asphaltic concrete portion of the experimental project occurred during 1976, as follows:

Type 5-A Base	-	April 19 through June 2, 1976
Type 3 Binder	-	June 7 through June 10, 1976
Type 3 Wearing	-	June 28 and June 29, 1976

The various design thicknesses of eight of the ten black base sections were constructed in two equal lifts with approximately 0.04 gsy tack coat between lifts; section 7's base ($4\frac{1}{2}$ inches) and section 11's base (3 inches) were constructed in a single lift. All binder course sections designed in excess of 2 inches were constructed (and tacked) in two equal lifts.

All plant production during the construction period was sampled and tested in accordance with normal state practices. Table 10 in Appendix F lists by construction date the following mix properties:

- Marshall Stability
- Gradation
- Asphalt Content
- Percent Crushed (binder and wearing course mixes)

Table 11 in Appendix F lists by section number, lane, and lift the following: The date of construction, the mean roadway density, and the corresponding as-constructed air void content. These road densities were derived from cores taken for job acceptance testing.

Additional cores were taken in each section at three locations in the outside wheel path of the outside lane to determine as-constructed section thicknesses. These same additional cores were used for further density verification. Table 12 in Appendix F shows by section number, lift, and specific location (all in outside lane) the following: The date of construction, the specific location density, and the specific location air void content.

In an effort to establish the relationship between section life and fundamental material properties, raw materials used in the production of each mix type (base, binder, and wearing) were sent to The Asphalt Institute. These materials will be used to reproduce mix specimens which will be tested for modulus of elasticity, tensile strength, and fatigue properties. Another part of this effort was the shipment to the Institute of 56 full depth hot mix cores (4 from each black base section and 2 from each other section). These cores were taken in early July of 1977, approximately ten months after the roadway had been open to traffic. The Asphalt Institute will determine in-place modulus of elasticity and creep characteristics from these cores.

TRAFFIC SAMPLING AND DETERMINATION

Sampling Scheme

In order to assimilate information on the response of the various pavement test sections to traffic loading through time, it was necessary to develop a scheme for the monitoring of both traffic weight and traffic volume throughout the test area.

The basic plan now underway involves the use of a semi-automated Weigh-In-Motion (WIM) system built by Unitech, Inc. of Austin, Texas, and a Streeter-Amet model 401 vehicle classifier. These two pieces of equipment are operated simultaneously for seven 24-hour days each quarter at a site just north of the northernmost test section.

Operation is planned so that 24-hour weight and volume data will be available for a seven-day "typical week" each calendar quarter. This will provide data which can be summarized and/or separated to yield yearly, quarterly, monthly, weekly, daily, and hourly traffic information as needed.

Traffic Sampling Equipment Description

The WIM system basically includes a series of load cells and detector loops installed in the roadway and an instrumented trailer containing electronic measuring and recording equipment. Two "loop detectors" a fixed distance apart provide a speed trap for computing speed. Actuation of a third detector loop, the vehicle presence detector, initiates the weighing and dimensioning program and relates succeeding axles to the transducers. The wheel load transducers containing the aforementioned load cells are powered by signal conditioning equipment, and their output is amplified so that each signal is compatible with an analog-to-digital converter. Each scale voltage signal is sampled 1,200 times per second by the analog-to-digital converter as it is switched between scale outputs by the multiplexer. The digital data is processed by a digital controller and the results may be typed and/or recorded on magnetic tape.

A correlation study completed by the Department in 1975 compared WIM data from 173 trucks, varying in weight and numbers of axles and traveling at various speeds with weight data obtained from permanent weight enforcement scales located nearby. The study showed the WIM system to be capable of a quite acceptable $\pm$ 5 percent total weight accuracy when properly installed, operated and maintained.

The Streeter-Amet model 401 classifier is a portable battery-operated unit contained in a weatherproof housing measuring 11-1/2 x 9-3/4 x 6-1/2 inches. The unit is powered by rechargeable lead gel batteries and data is recorded on resettable six-digit mechanical counters.

The unit classifies and counts passing vehicles as follows: auto, auto and trailer, two-axle truck, three-axle truck, four-axle truck, and five-or-more-axle truck. A reverse inhibit circuit omits vehicles traveling in the opposite direction.

The counter is activated by two counter tubes 50 feet long spaced 11 feet apart. Classification is based on the spacing of the first two axles of a passing vehicle. Axle length over 11 feet is recorded as a truck, and length less than 11 feet as a car. The remaining axles determine the category of classification. Cars pulling trailers with two or more axles are classified as trucks.

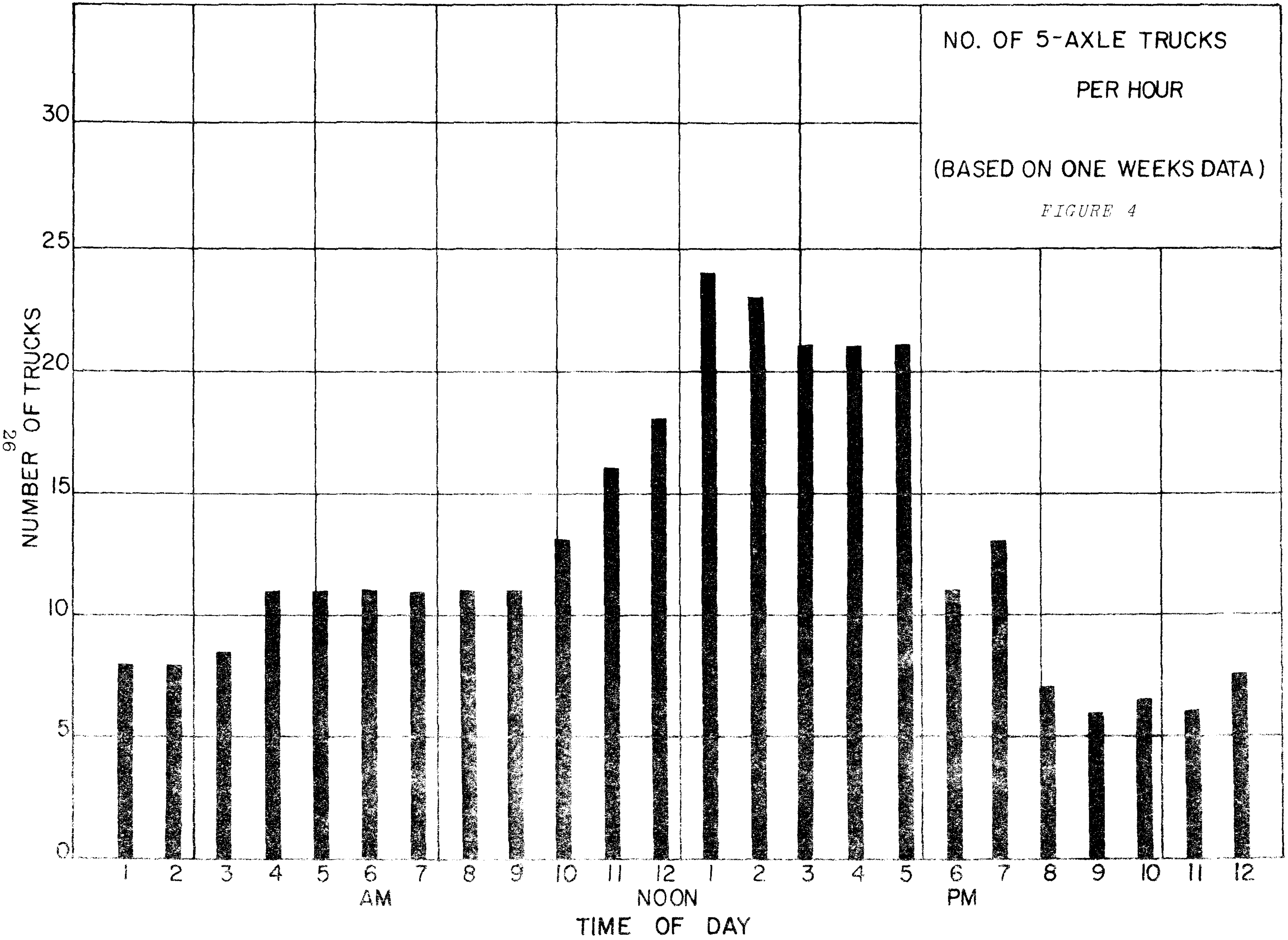
<u>Traffic Data</u>

Traffic data was successfully gathered in the prescribed manner during fourth quarter 1976 and first quarter 1977. Two-way traffic was present on the two-lane roadway at the sampling site during this entire period because of ongoing construction in the old roadway. A manual classification count was conducted during the daytime hours of both of these quarterly runs. This was done for correlation purposes as well as to provide some measure of the temporary southbound traffic which was crossing the test areas and adding to their total loading history. This southbound traffic was not detectable by either the WIM system or the classifier; consequently, the daytime manual count data will be the only accurate record of this portion of the roadway. An axle-counting traffic recorder which counts both of these lanes is located just north of the WIM site and should help provide supplementary data for this once southbound lane. The two adjacent lanes wherein the test sections are located have carried only northbound traffic since June 28, 1977, when the roadway received its final topping of plant mix seal. Data from weighing operations subsequent to this date will therefore need to be treated somewhat differently.

Figures 4 and 5 are charts showing hourly loading and count data for five-axle trucks passing the WIM site during the seven days of data acquisition from fourth quarter 1976. Localized hauling of agricultural products was quite heavy during this quarter with soybeans, sugar cane and cotton making up most of the recognizable cargoes.

Initial traffic projections for this project indicated an average daily traffic load (ADL) of 612 equivalent 18-kip axle loads for 1980, the median year for the design period. As of 1978, the ADL is approximately 725 and would appear to reach a level of 782 (28% above the initial estimate) in 1980.

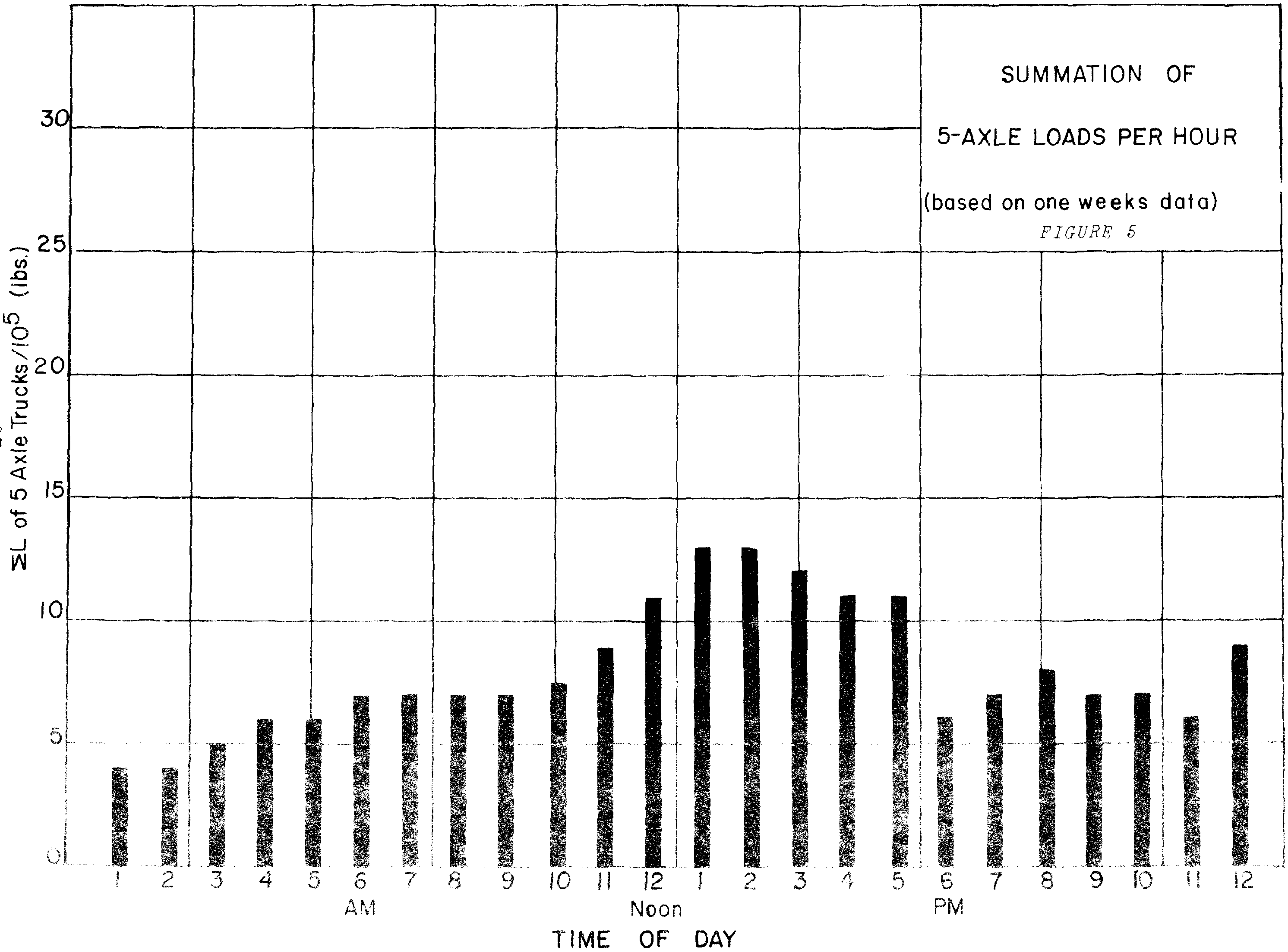
Sampling subsequent to 1978 should be mostly for verification purposes and much less frequent. Exact sampling requirements will be determined after careful scrutiny of data collected during the initial four quarters.



NO. OF 5-AXLE TRUCKS PER HOUR

(BASED ON ONE WEEKS DATA)

FIGURE 4



SUMMATION OF

5-AXLE LOADS PER HOUR

(based on one weeks data)

FIGURE 5

PAVEMENT PERFORMANCE MEASUREMENTS

Method of Procedure

A. Structural Evaluation by Means of Dynamic Deflection Determination System (Dynaflect)

Research personnel inspected the subject project visually and used a Dynaflect device to obtain an index of the strength of the pavement system. The actual name of the device is long but descriptive of its function--Dynamic Deflection Determination System. The Dynaflect imposes a given dynamic load on a pavement and measures the resulting deflection.

The Dynaflect is a trailer-mounted device which induces a 1000-pound dynamic load on the pavement. It then measures the resulting slab deflections by use of five geophones spaced under the trailer at approximately one-foot intervals from the application of the load. The 1000-pound dynamic load is generated at a frequency of eight cycles per second by the counter-rotation of two unbalanced flywheels. This cyclic force is transmitted vertically to the pavement through two steel wheels spaced 20 inches center to center. The horizontal reaction forces cancel themselves due to the opposing rotations. The dynamic force varies in sine wave fashion from 500 pounds upward to 500 pounds downward during each rotation. The entire force transmitted to the pavement, however, consists of the weight of the trailer (approximately 1600 pounds) and the dynamic force which alternately adds to and subtracts from the static weight. Thus, the vertical force during each rotation of the flywheels at the proper speed varies from 1100 to 2100 pounds. The deflections induced by this system are expressed in terms of milli-inches (thousandths of an inch).

Figure 6 is a photograph of the Department's Dynaflect device. Figure 7 is a representation of the deflection basin which the Dynaflect generates. The Dynaflect actually measures the extent of only one-half of the deflection bowl, with the other half assumed to be a mirror image of the measured portion. In Figure 7 the measurement W_1 is the maximum depth of the deflection bowl and occurs near the force wheels. The terms W_2, W_3, W_4, and W_5 are the deflections related by geophones 2 through 5, respectively.

The maximum (first sensor) deflection W_1 provides an indication of the relative strength of the total road section. The Surface Curvature Index, S.C.I. (W_1-W_2), provides an indication of the relative strength of the upper (pavement) layers of the road section. A parameter termed spreadability (1)* or percent spread, $\% \ SP = (W_1 + W_2 + W_3 + W_4 + W_5 \ / \ 5W_1)100$, relates the response of the pavement in distributing load applied thereon. The Base Curvature Index, B.C.I. (W_4-W_5), and the fifth sensor value W_5 provide a measure of the relative strength of the foundation. For the four parameters W_1, S.C.I., B.C.I., and W_5, smaller deflection values indicate greater strength. Percent spread increases as pavement strength increases.

Analysis of Dynaflect deflections on flexible pavements must consider pavement temperature. A procedure for determining temperature-deflection correction factors, developed by H. F. Southgate (2), has produced excellent results in Louisiana. The applicability of this procedure to the conditions and construction materials used in the state has been verified by using a Cole-Parmer digital probe thermometer as illustrated in Figure 8. All Dynaflect deflections reported herein have accordingly been adjusted to a standard temperature of 60° F.

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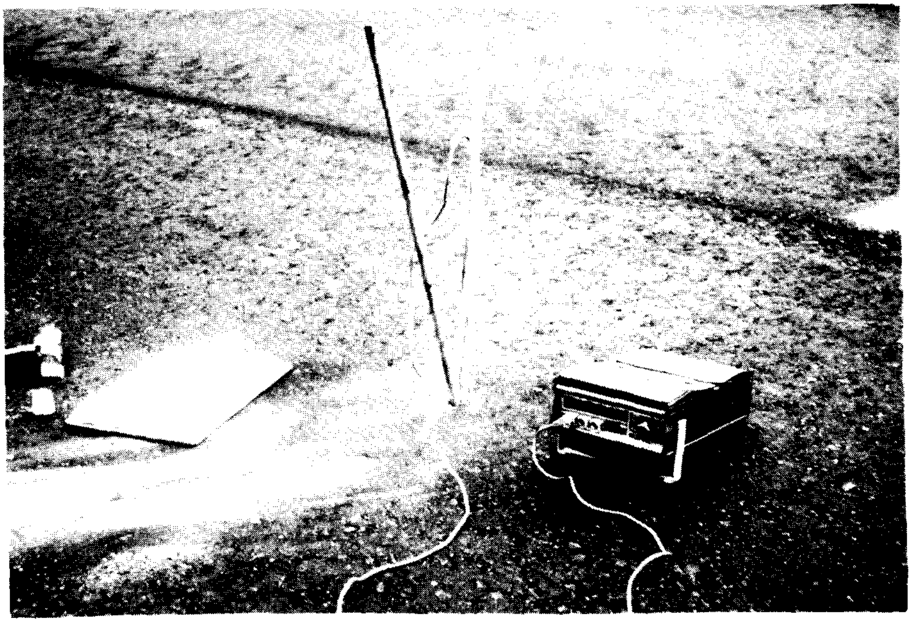
*Underlined numbers in parentheses refer to Bibliography.



Digital Thermometer Used to Measure Pavement Temperatures

FIGURE 8

Dynaflect deflections were measured at 100-foot intervals in the outside wheelpath, outside lane, for the base course and surface course in each test section. This pattern normally yielded five measurements per course per test section as indicated in Appendix G.

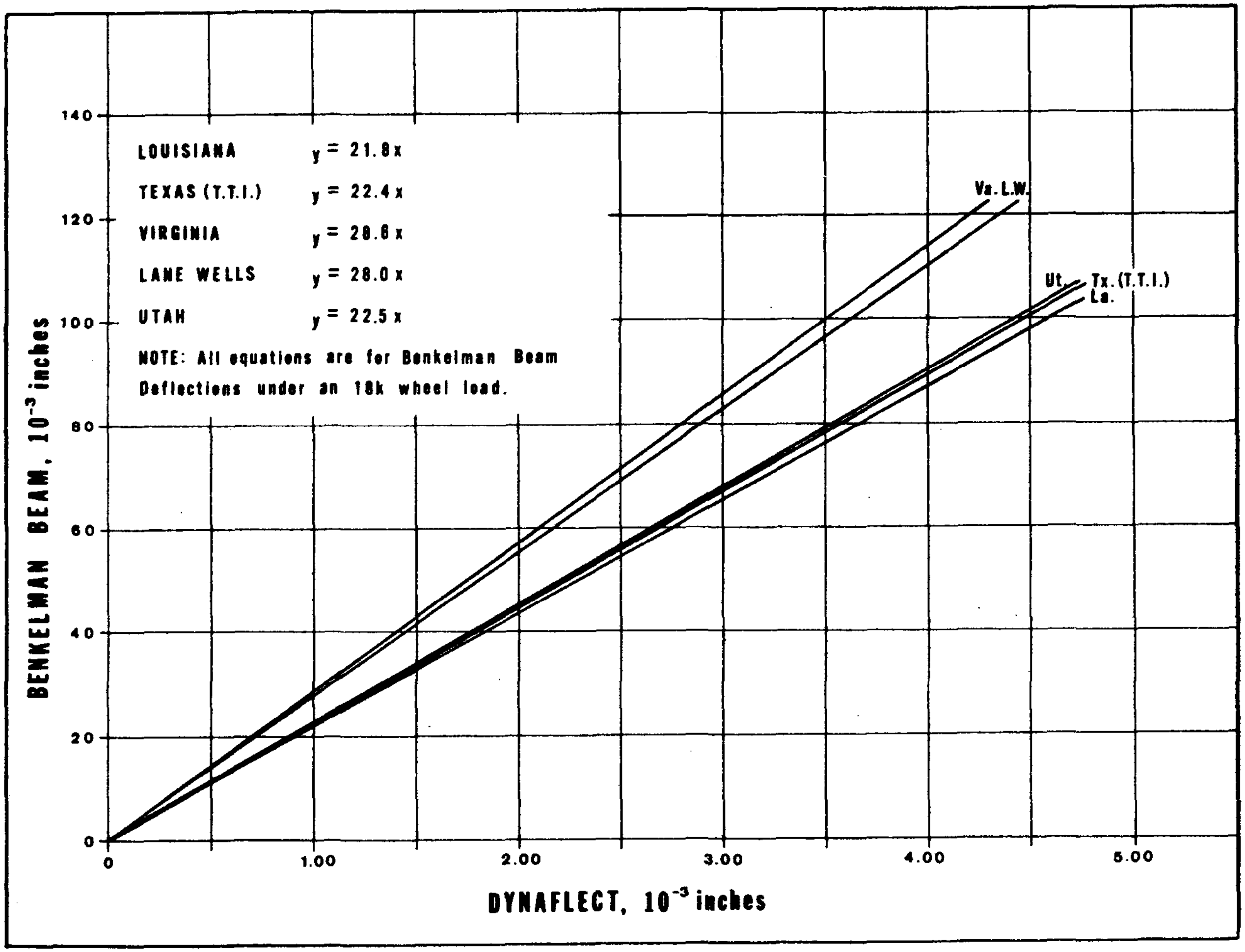
A sparse measurements pattern was pursued in Dynaflect deflection testing on the embankment soil and accompanying layer of suitable material for each test section. Measurements taken in the centerline of both lanes will serve to generally characterize the in-place strength of the embankment and suitable material. These measurements are also documented in Appendix G.

B. Structural Evaluation by Means of Benkelman Beam

The Benkelman Beam was used to measure pavement deflection resulting from application of a full-scale, standard 18-kip axle load positioned at various distances from the point of measurement. The commonly known Canadian Good Roads Association test method was followed (3). Figure 9 presents correlations of Dynaflect and Benkelman Beam deflections from this study and from other states.

Research personnel conducted Benkelman Beam tests at 200-foot intervals in the outside wheelpath of the outside lane for the base course and surface course of each test section. This pattern normally yielded three measurements per course per test section at alternate stations listed in Appendix G.

A sparse measurements pattern was used in Benkelman Beam deflection testing on the suitable material overlying embankment soil in the test sections. Measurements taken in the centerline of both lanes will serve to generally characterize the in-place strength of the suitable material. These measurements are also documented in Appendix G.



Benkelman Beam - Dynaflect Correlations

FIGURE 9

C. Structural Evaluation by Means of Visual Condition Survey

Visual condition surveys are being conducted to determine the occurrence of fatigue cracking and permanent deformation (rutting) in the project. In formal surveys researchers will seek and document information on cracking, patching, and rutting.

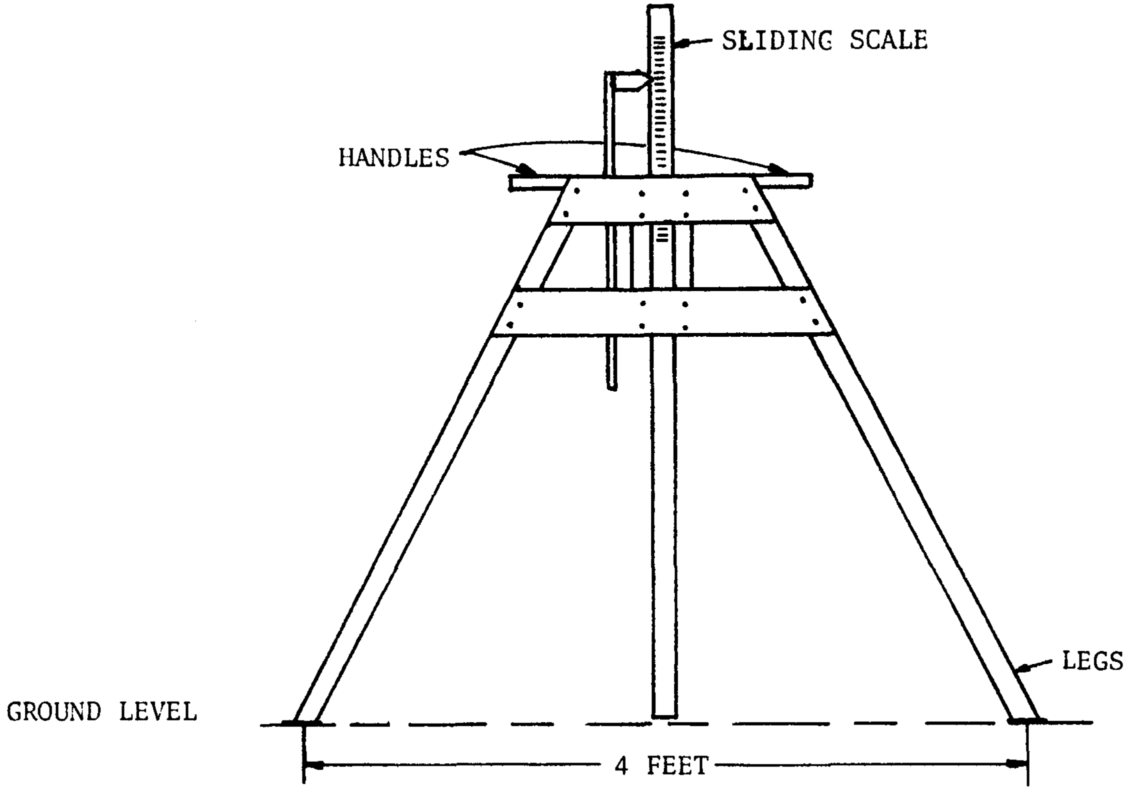
Researchers will measure rut depths with the standard (four-foot) AASHO Road Test A-Frame Rut Depth Device depicted in Figure 10. Rut depth measurements are to be taken at 50-foot intervals in alternate wheelpaths of the outside lane and are to be measured to the nearest tenth of an inch. Cracks and patches will be measured with regard to frequency and dimensions.

Additional distress signs such as stabilized base course pumping and wearing of the surface course will also be noted.

D. Functional Evaluation by Means of the Chloe Profilometer

The Chloe Profilometer provides a measure of road roughness as it sums the variation in road profile over a given distance. The resulting parameter is termed slope variance and has been used with measurements of cracking, patching, and rutting in the AASHO Road Test equations to express the Present Serviceability Index (P.S.I.) for each test section (Appendix I). P.S.I. is a numerical index which can range between 0 and 5 and denotes the relative manner in which a pavement functions under traffic.

The Chloe Profilometer, as described in the Federal Highway Administration's "Chloe Profilometer Operating and Servicing Instructions," is essentially two units: the trailer unit which carries the transducing mechanism and the electronic computer indicator. The electronic computer indicator accepts information from the transducer, performs a computation on it and then indicates the results.



AASHO Road Test A-frame Rut Depth Device

FIGURE 10

The slope transducer, carried at the rear of the 20-foot trailer, is comprised of two 8-inch wheels mounted 9 inches on centers, a roller contact on an upright arm fastened at the pivot point between the wheels and a printed circuit switch with 29 active segments. The transducer provides a continual measure of the angle between the bar connecting the slope wheels and the arbitrary reference of the trailer unit. A slotted disc-photocell combination, attached to one of the carriage wheels, produces a command to sample pulses at 6-inch intervals of highway travel.

At each 6-inch interval, sample pulses are produced through the 29 active segments. The computer squares these segments plus accumulatively sums up the numbered segments, the squares and the number of 6-inch intervals traveled (number of samples). Standard forms are used to record the data accumulation as well as the subsequent calculations.

E. Functional Evaluation by Means of the Mays Ride Meter (M.R.M.)

The M.R.M. operates from within a standard size car and records road roughness as reflected by movement of the vehicle's axle with respect to its chassis. A transmitter attached to the differential collects this movement information and feeds it forward to a portable recorder located on the front seat. Quantitative and qualitative roughness measurements are presented on a strip chart produced by the recorder. The base speed for the M.R.M. is 50 miles per hour, and correlation curves for each M.R.M. convert test data obtained at other speeds to that at the base speed.

M.R.M. measurements are reported in terms of Present Serviceability Index (P.S.I.). P.S.I. has been defined as a "numerical index (ranging from 0.0 to 5.0) of the ability of a pavement in its present condition to serve traffic." Perfectly smooth pavement would have a P.S.I. of 5.0. Pavement so rough as to be impassable would have a P.S.I. of 0.0.

More specifically, a numerical-adjective description of P.S.I. is as follows:

4.1 - 5.0	Very Good
3.1 - 4.0	Good
2.1 - 3.0	Fair
1.1 - 2.0	Poor
0.0 - 1.0	Very Poor

Mays Ride Meter P.S.I. reported herein is based on a correlation with the University of Texas (General Motors) Surface Dynamics Profilometer, which, in turn, relates to actual panel ratings. Initial P.S.I. was established for each test section and is reported in Appendix I.

Analysis of Pavement Performance Measurements

A. Dynaflect Deflections

Deflection tests were conducted with the Dynaflect device on each pavement layer beginning with the completed clay embankment. The primary objective of these tests was to characterize the as-constructed strength of each layer. A comparison of as-built strengths and design strengths was facilitated by translating measured Dynaflect deflections into structural numbers, SN, a strength parameter used in the AASHO Flexible Pavement Design system.

This method of deflection analysis was developed through a combination of two-layer linear elastic theory and AASHO-Louisiana flexible pavement design theory. Layered theory provided the ability to individually characterize the strengths of the embankment layer (E_s) and the pavement layer (E_1). A recent Louisiana Department of Transportation and Development research study (4) provided an E_s-SN relationship in a pavement evaluation chart which was used to evaluate the strength contribution of each layer upon construction.

An example of the use of the pavement evaluation chart to calculate the strength contributions of individual pavement layers is presented in Figure 11. In this example at station 230+75 (Test Section No. 10), as each new pavement layer is added the as-built SN increases, deflection decreases, and spreadability increases.

The strength contribution of the embankment (E_s) in Figure 11 also increased as additional pavement layers were constructed. This increase is thought to be principally due to a moisture loss in the subgrade soil as deflection evaluations progressed from the wet to the dry season. The confining effect of each added pavement layer on the subgrade may also have contributed to the gain in subgrade strength indicated by the deflections.

It is interesting to note the sensitivity of the pavement evaluation chart of Figure 11 in indicating the SN-related strength gain with time of the 12.3-inch soil-cement base course.

Figures 12-15 depict three types of structural numbers for each individual pavement layer and for the total roadway of each test section and control section. "Design structural numbers" represent intended layer thicknesses and minimum acceptable layer strengths. Structural numbers computed from the measured depths of roadway cores have been termed "thickness SN's." These structural numbers were also developed on the assumption of specified layer strengths (AASHO strength coefficients). "Field-measured structural numbers" are a representation of as-built thicknesses and actual strengths at the time of test as related by the Department's pavement evaluation chart.

It is important to note that due to the time sequence of construction, deflection tests on the asphaltic concrete materials were conducted soon after placement, as follows: black base at 3 days, binder course at 7 days, and wearing course at 15 days. For this reason the SN values indicated in Figures 12-15 represent only a portion of the ultimate strengths of these materials.

AS CONSTRUCTED DEFLECTION TEST DATA-- TEST SECTION # 10 (STA. 230+75)

PAVEMENT LAYER	LAYER THICKNESS	DATE OF TEST	AGE AT TEST
1 Embankment		9-22-75	1 day
2 Selected Soil	8.8"	10-7-75	5 days
3 Cement Stabilized Soil	12.3"	4-15-76	9 days
4 Cement Stabilized Soil	12.3"	4-26-76	20 days
5 HMAC Binder Course	2.9"	6-15-76	5 days
6 HMAC Wearing Course	1.9"	7-15-76	16 days

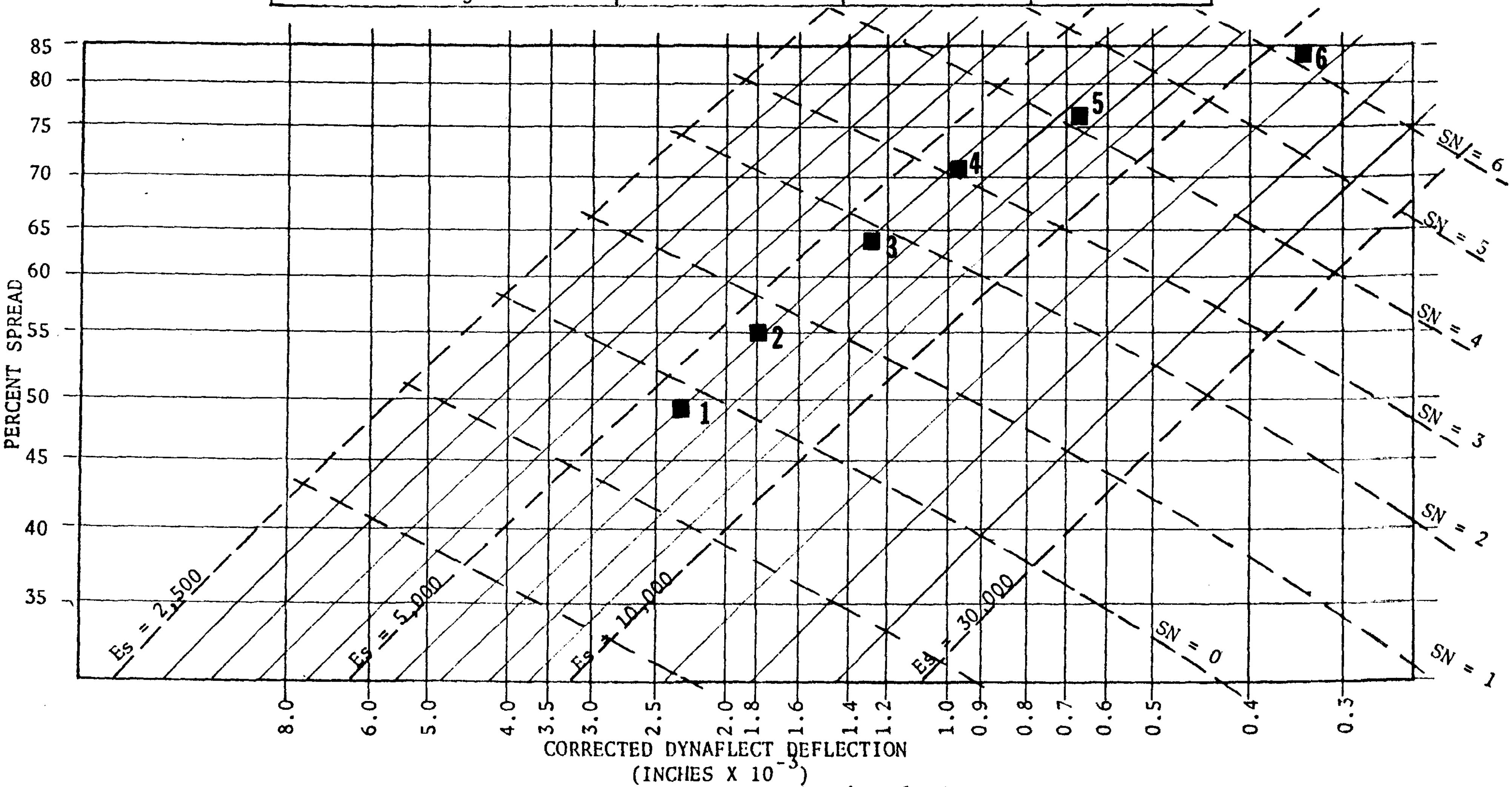
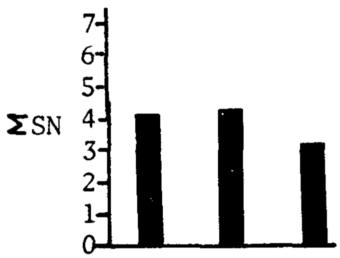


FIGURE 11: Pavement Evaluation Chart

FIVE YEAR DESIGN

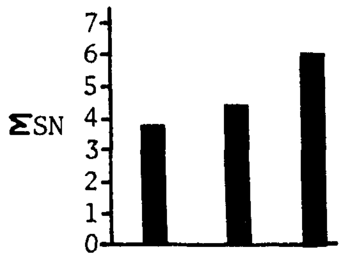
SECTION T-14
(3 1/2" HMAC/6"BB)

	A	B	C
EMB	0.0	0.0	0.3
SEL	0.6	0.5	0.2
BB	2.1	2.3	1.5
BC	0.8	0.9	0.8
WC	0.7	0.7	0.4
ΣSN	4.2	4.4	3.2



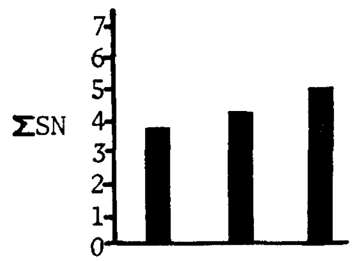
SECTION T-10
(3 1/2" HMAC/12"SC)

	A	B	C
EMB	0.0	0.0	0.1
SEL	0.4	0.3	0.3
SC	1.8	2.0	2.9
BC	0.8	1.2	1.2
WC	0.7	1.0	1.5
ΣSN	3.7	4.5	6.0



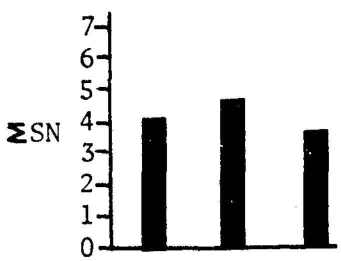
SECTION T-13
(3 1/2" HMAC/10"S/C/G)

	A	B	C
EMB	0.0	0.0	-.5
SEL	0.6	0.6	0.6
SSCG	1.8	1.7	3.2
BC	0.8	1.2	0.4
WC	0.7	0.8	1.3
ΣSN	3.8	4.3	5.0



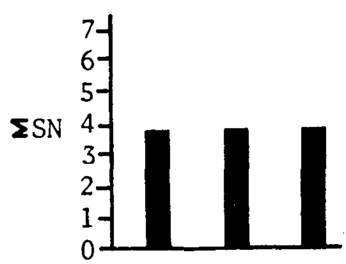
SECTION T-11
(5 1/2" HMAC/3"BB)

	A	B	C
EMB	0.0	0.0	-.9
SEL	0.7	0.7	1.4
BB	1.0	1.5	1.4
BC	1.7	1.8	0.9
WC	0.7	0.7	0.9
ΣSN	4.1	4.7	3.7



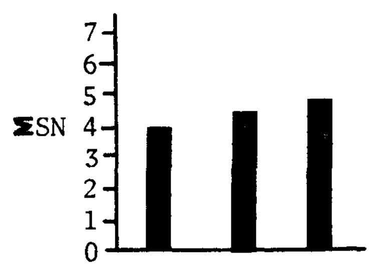
SECTION T-9
(5 1/2" HMAC/6"SC)

	A	B	C
EMB	0.0	0.0	-1.0
SEL	0.5	0.5	1.2
SC	0.9	1.0	1.5
BC	1.7	1.7	1.5
WC	0.7	0.7	0.7
ΣSN	3.8	3.9	3.9



SECTION T-12
(5 1/2" HMAC/6"S/C/G)

	A	B	C
EMB	0.0	0.0	-1.3
SEL	0.5	0.4	1.5
SSCG	1.1	1.5	2.1
BC	1.7	1.9	1.5
WC	0.7	0.6	1.0
ΣSN	4.0	4.4	4.8



A = Design SN B = Thickness SN C = Field Measured SN

Pavement Structural Number Values

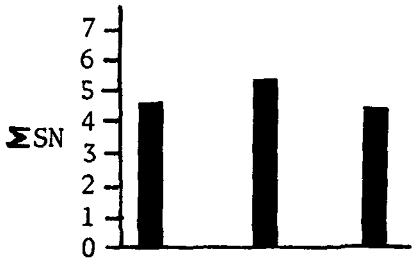
FIGURE 12

TEN YEAR DESIGN

SECTION T-5

(3 1/2"HMAC/7 1/2"BB)

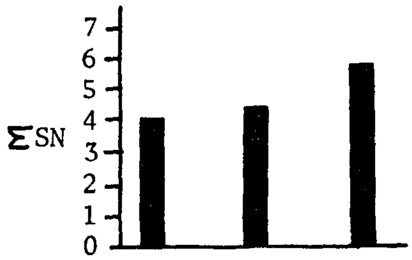
	A	B	C
EMB	0.0	0.0	-0.3
SEL	0.6	0.6	1.3
BB	2.6	3.2	2.2
BC	0.8	0.8	0.3
WC	0.7	0.7	0.9
ΣSN	4.7	5.3	4.4



SECTION T-8

(3 1/2"HMAC/15"SC)

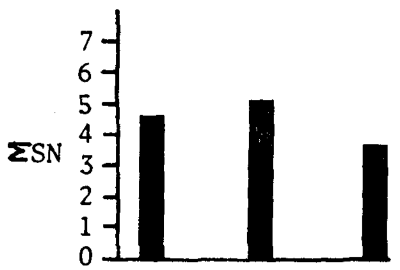
	A	B	C
EMB	0.0	0.0	0.2
SEL	0.3	0.4	0.3
SC	2.2	2.4	3.1
BC	0.8	0.8	1.1
WC	0.7	0.7	1.2
ΣSN	4.0	4.3	5.9



SECTION T-7

(5 1/2"HMAC/4 1/2"BB)

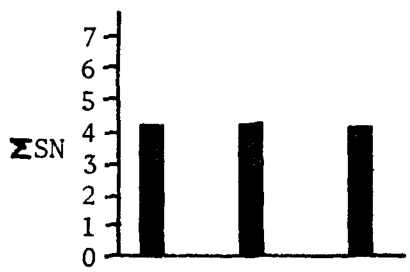
	A	B	C
EMB	0.0	0.0	-1.0
SEL	0.6	0.6	2.1
BB	1.5	1.7	1.0
BC	1.7	2.0	0.8
WC	0.7	0.7	0.7
ΣSN	4.5	5.0	3.6



SECTION T-2

(5 1/2"HMAC/9"SC)

	A	B	C
EMB	0.0	0.0	-0.7
SEL	0.4	0.3	0.4
SC	1.4	1.3	2.6
BC	1.7	1.9	1.6
WC	0.7	0.7	0.2
ΣSN	4.2	4.2	4.1



A = Design SN　　B = Thickness SN　　C = Field Measured SN

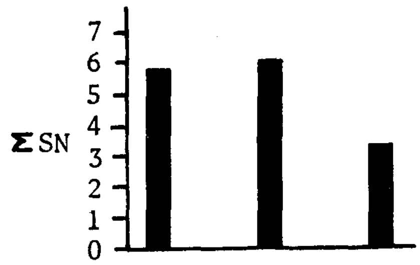
Pavement Structural Number Values

FIGURE 13

FIFTEEN YEAR DESIGN

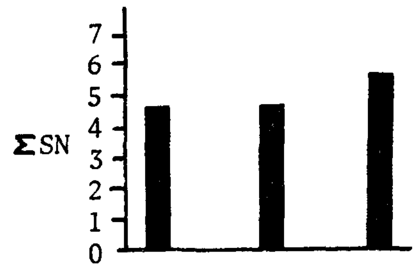
SECTION T-3
(3 1/2"HMAC/11"BB)

	A	B	C
EMB	0.0	0.0	-1.0
SEL	0.4	0.5	1.2
BB	3.8	3.7	1.6
BC	0.8	1.0	1.7
WC	0.7	0.8	-0.1
ΣSN	5.8	6.0	3.4



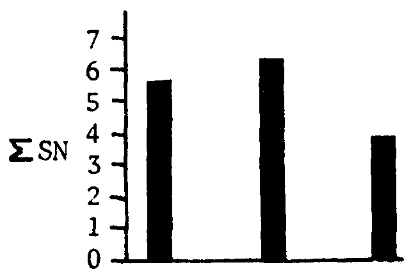
SECTION T-4
(3 1/2"HMAC/20"SC)

	A	B	C
EMB	0.0	0.0	-1.1
SEL	0.1	0.1	0.6
SC	3.0	2.9	5.1
BC	0.8	0.8	-0.4
WC	0.7	0.8	1.4
ΣSN	4.6	4.6	5.6



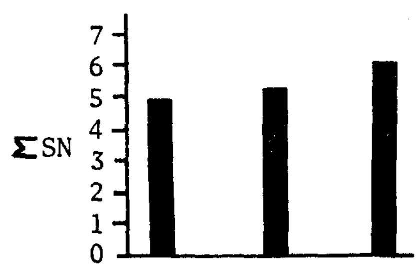
SECTION T-1
(5 1/2"HMAC/8"BB)

	A	B	C
EMB	0.0	0.0	-2.1
SEL	0.5	0.6	2.1
BB	2.7	2.6	1.7
BC	1.7	2.3	1.9
WC	0.7	0.7	0.2
ΣSN	5.6	6.2	3.8



SECTION T-6
(5 1/2"HMAC/16"SC)

	A	B	C
EMB	0.0	0.0	-0.6
SEL	0.1	0.3	1.2
SC	2.4	2.3	3.7
BC	1.7	1.8	0.3
WC	0.7	0.7	1.4
ΣSN	4.9	5.1	6.0



A = Design SN B = Thickness SN C = Field Measured SN

Pavement Structural Number Values

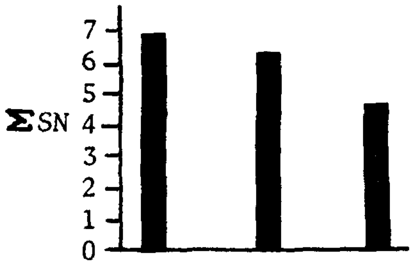
FIGURE 14

CONTROL SECTIONS

5 1/2" HMAC/
7 1/2" Black Base/
6" Soil Cement/
6" Select

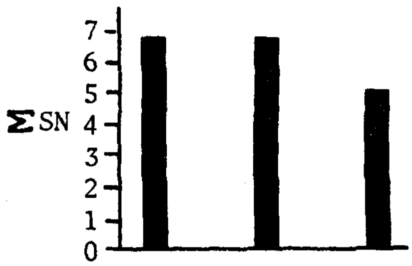
SECTION C-1

	A	B	C
EMB	0.0	0.0	-1.5
SEL	0.2	0.3	1.1
SC	0.9	1.0	N T
BB	3.3	2.1	-
BC	1.7	2.0	1.0
WC	0.7	0.9	0.2
ΣSN	6.8	6.3	



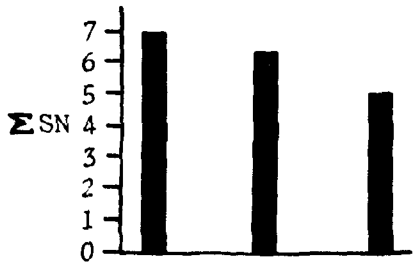
SECTION C-2

	A	B	C
EMB	0.0	0.0	-1.8
SEL	0.2	0.5	2.1
SC	0.9	0.8	1.1
BB	3.3	3.0	0.6
BC	1.7	1.8	2.3
WC	0.7	0.7	0.7
ΣSN	6.8	6.8	5.0



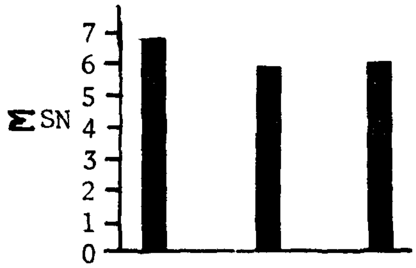
SECTION C-3

	A	B	C
EMB	0.0	0.0	-0.6
SEL	0.2	0.4	0.9
SC	0.9	1.0	0.4
BB	3.3	2.4	2.6
BC	1.7	1.9	0.1
WC	0.7	0.6	1.4
ΣSN	6.8	6.3	4.8



SECTION C-4

	A	B	C
EMB	0.0	0.0	-1.0
SEL	0.2	0.3	1.6
SC	0.9	1.0	N T
BB	3.3	2.1	-
BC	1.7	1.7	1.3
WC	0.7	0.7	1.3
ΣSN	6.8	5.8	



A = Design SN B = Thickness SN C = Field Measured SN

Pavement Structural Number Values

FIGURE 15

The cement-stabilized materials were tested approximately 23 days after construction. Here the field-measured strength values are larger than the values predicted from actual layer thicknesses.

Table 2 contains a summary of base course strengths in terms of design and field-measured structural numbers and coefficients. As noted above, analysis of the asphaltic concrete (black base) is confounded by the early age at which these layers had to be tested concomitantly with the construction process.

In a similar research effort deflection tests were conducted on a 6-inch black base course on La. Route 108 near Sulfur, Louisiana. The structural coefficient of this base course was calculated to be 0.36 at a temperature of 93° F and at an age of 40 days (5).

Data in Table 2 relative to soil-cement and stabilized sand clay gravel base courses reflect an average age at time of test of 23 days. Previous work (6) has shown that 28-day compressive strengths represent a major portion of the ultimate strengths of cement-stabilized base courses. Hence, it is considered that 23-day strengths would provide an adequate basis for analysis. Accordingly, it appears that for very thick (greater than 6 inches) layers of cement-stabilized base courses, the design coefficient could be increased. The high stability of the cement-stabilized base courses as related by the Dynaflect are verified elsewhere in this report by the compressive strength data from field cores of these materials.

B. Benkelman Beam Deflections

Benkelman Beam deflections were measured on all asphaltic concrete base courses and surface courses in each of the 14 test sections and 4 control sections. These deflection values are listed in Appendix G.

TABLE 2

SUMMARY OF AS-BUILT BASE COURSE STRENGTHS
AS MEASURED WITH THE DYNAFLECT

Design Thickness	Actual Thickness	Design SN	Field-Measured SN	Design Coefficient	Field-Determined Coefficient	Age at Test
T_D (Inch)	T_A (Inch)	SN_D	SN_F	a_D	$a_F = \frac{SN_F}{T_A}$	(Days)
5 Year						
6" B.B.	6.8	2.0	1.5	0.34	0.22	4
12" S.C.	13.0	1.8	2.9	0.15	0.22	20
10" S. S/C/G	9.4	1.8	3.2	0.18	0.34	24
3" B.B.	4.4	1.0	1.4	0.34	0.32	8
6" S.C.	6.7	0.9	1.5	0.15	0.22	21
6" S. S/C/G	8.3	1.1	2.1	0.18	0.25	20
10 Year						
7 1/2" B.B.	9.4	2.6	2.2	0.34	0.23	1
15" S.C.	16.0	2.3	3.1	0.15	0.19	20
4 1/2" B.B.	5.0	1.5	1.0	0.34	0.20	6
9" S.C.	8.7	1.4	2.6	0.15	0.30	26
15 Year						
11" B.B.	10.9	3.8	1.6	0.34	0.15	1
20" S.C.	19.3	3.0	5.1	0.15	0.26	19
8" B.B.	7.6	2.8	1.7	0.34	0.22	1
16" S.C.	15.3	2.4	3.7	0.15	0.24	31

Testing problems were encountered in measuring deflections soon after construction on several of the asphaltic concrete layers. Surface temperatures during a portion of the testing reached 142° F. Deflections determined under these conditions with the beam can be misleading because surface deformations influence the measured total system deflection. For these reasons the correlation of Benkelman Beam and Dynaflect deflections will be conducted in cooler weather and after the plant mix seal course has had time to age under traffic.

C. Mays Ride Meter Measurements

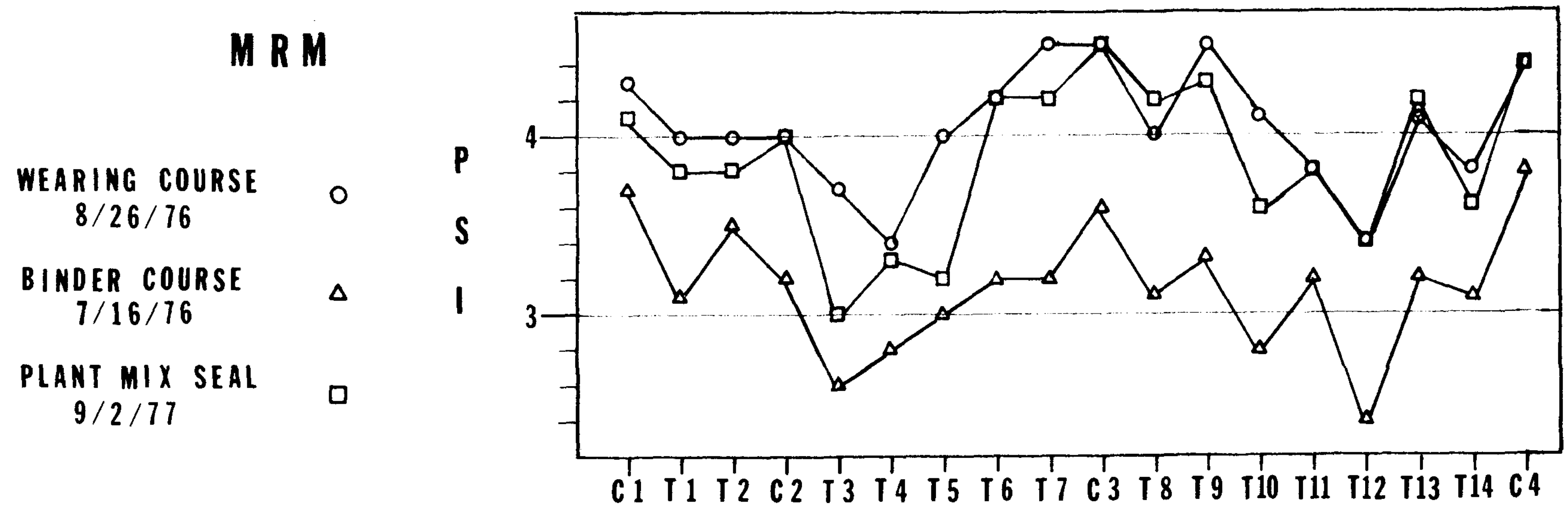
Present Serviceability Indices were determined with the Mays Ride Meter for the binder course, wearing course, and plant mix seal courses on each test section as indicated in Figure 16. Test section smoothness improved by approximately 0.5 P.S.I. upon addition of the wearing course. Even so the range in P.S.I. between sections is 3.3 to 4.5. The addition of a 3/4-inch thick plant mix seal course appears to have provided no improvement in rideability. Initial Mays P.S.I. values for the binder and wearing courses are tabulated in Appendix I.

D. Chloe Profilometer Measurements

A comparison of Chloe P.S.I. and Mays Ride Meter P.S.I. on the wearing course layer is presented in Figure 17. Initial Chloe P.S.I. values for the wearing course are tabulated in Appendix I.

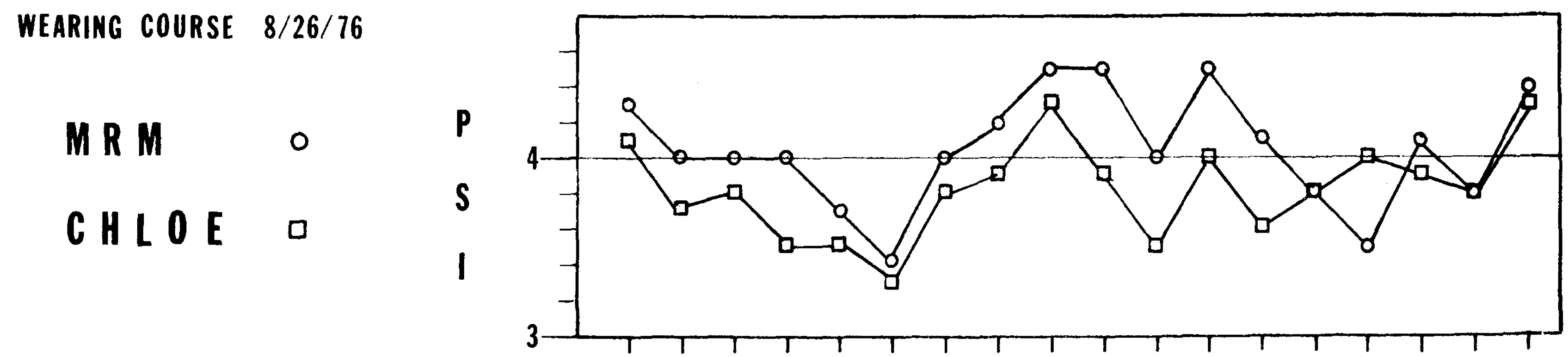
E. Visual Condition Survey Findings

Approximately four months after completion of the Type 3 wearing course, hairline cracks could be seen in four of the test sections. The test sections (Nos. 4, 8, 10, 13) all consist of the thin asphalt surfacing (3-1/2 inches) over cement-stabilized base course



Present Serviceability Indices Chart for the Binder, Wearing and Plant Mix Seal Courses on Each Section

FIGURE 16

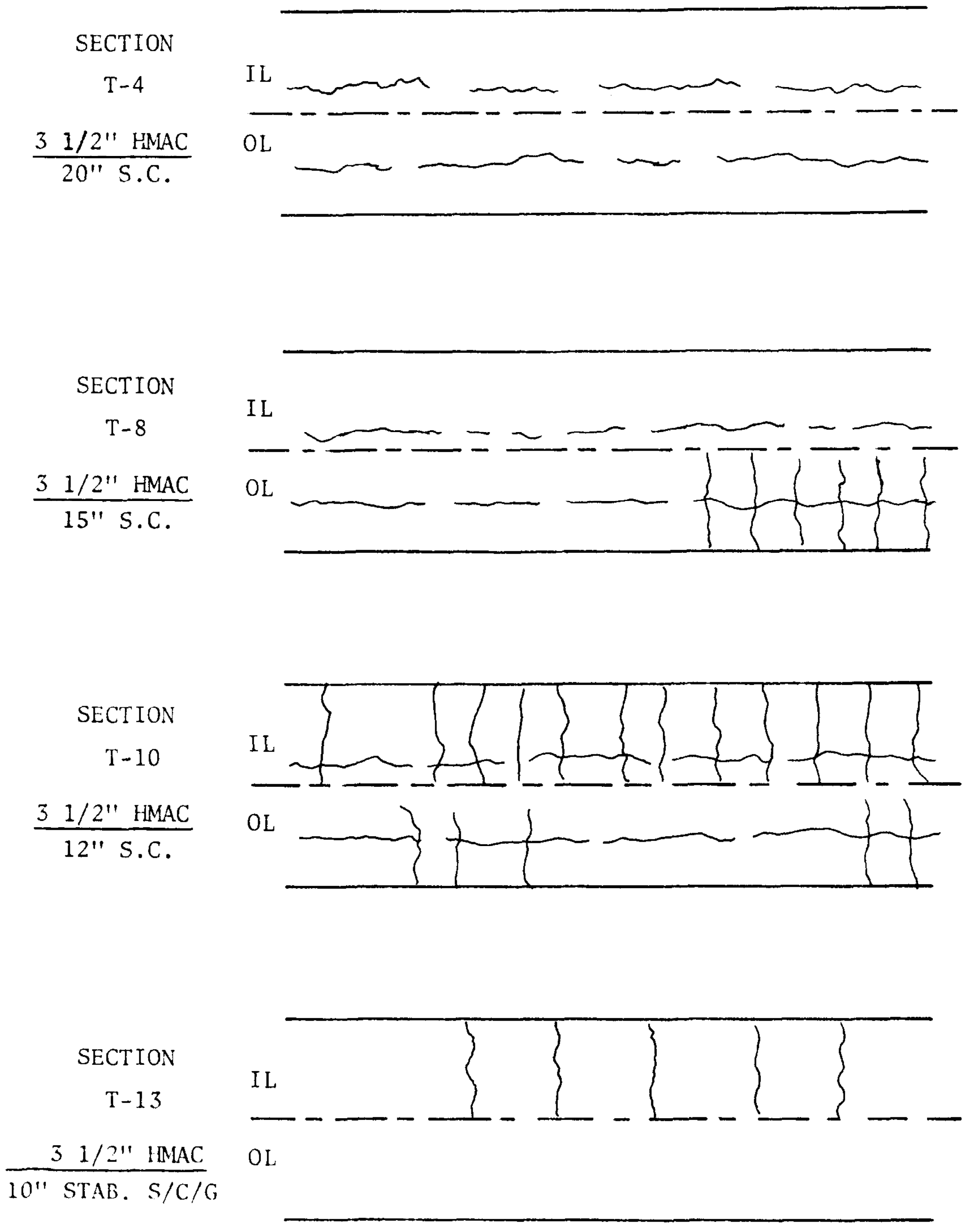


A Comparison of Chloe P.S.I. and Mays Ride Meter P.S.I. on the Wearing Course Layer

FIGURE 17

material. Test sections with the thicker asphalt surfacing (5-1/2 inches) over cement-stabilized base courses and all test sections with asphaltic concrete bases contained no visible surface cracking.

The hairline cracking, shown in Figure 18, appears to be a reflection of longitudinal construction "seams" and transverse shrinkage cracks.



Cracking Reflected Through Hot Mix Asphalt Concrete Surface on Cement-Stabilized Bases

FIGURE 18

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APPENDIX A

CONSTRUCTION SAMPLING AND TESTING PROGRAM

TABLE 3

CONSTRUCTION SAMPLING AND TESTING PROGRAM

Material and Test	Test Method	Sampling Time	Sampling Size	Sampling Frequency	Testing Time	Testing Agency
SUBGRADE SOIL						
Moisture Density	LDH TR 415-66	Before	15 lb.	Three Minimum/Section	Before	Department
R-value	Calif. 301-F	During	15 lb.	Three Minimum/Section	After	Department
Resilient Modulus, M_R	AI	During	300 lb.	One/Project	After	Asphalt Institute
In-place Density & Moist.	LDH TR 401-67	Not Applicable	Not Applicable	Three Minimum/Section	During	Department
Mechanical & Physical Anal.	LDH TR 407-69	Before	30 lb.	Two Minimum/Section	Before	Department
SOIL CEMENT BASE						
Mix Design	LDH TR 432-71	Before	80 lb.	As Required for Design	Before	Department
Modulus of Elasticity	Indirect Tensile Test	During			After	Department
Poissons Ratio	Indirect Tensile Test	During			After	Department
Fatigue Properties	Repeated Indirect Tensile Test	During			After	Department
Tensile Strength	Indirect Tensile Test	During			After	Department
In-place Density	LDH TR 401-67	Not Applicable	Not Applicable	3 Random Tests/Section	During	Department
Thickness	LDH TR 602-67	Not Applicable	Not Applicable	3 Random Tests/Section	During	Department
ASPHALT BASE & SURFACE						
Mix Design	LDH 303-64	Before	75 lb. agg. 2 qt. A.C. 1 gal. can mineral filler	As Required for Design	Before	Department
Modulus of Elasticity	Indirect Tensile Test	During	300 lb. each aggregate 3 gal. asphalt	One/Project One/Project	After	Department

TABLE 3 (CONTINUED)

CONSTRUCTION SAMPLING AND TESTING PROGRAM

Material and Test	Test Method	Sampling			Testing	
		Time	Size	Frequency	Time	Agency
Fatigue Properties	Repeated Indirect Tensile Test	During	500 lb. each aggregate 5 gal. asphalt	One/Project One/Project	After	Department
Tensile Strength	Indirect Tensile Test	During	150 lb. aggregate 4 lb. filler 8 lb. asphalt	One/Project One/Project One/Project	After	Department
In-place Density	Troxler Nuclear Method (Back-scatter Air Gap)	Not Applicable	Not Applicable	Three Minimum/Section Five Cores/Section	During	Department
Thickness	LDH TR 602-67	Not Applicable	Not Applicable	Three Minimum/Section Five Cores/Section	During	Department
CEMENT STABILIZED SAND-CLAY-GRAVEL						
Mix Design	LDH TR 432-71	Before	36 lb. cement 300 lb. aggregate	As Required for Design	Before	Department
Modulus of Elasticity	Indirect Tensile Test	During			After	Department
Poissons Ratio	Indirect Tensile Test	During			After	Department
Tensile Strength	Indirect Tensile Test	During			After	Department
Fatigue Properties	Repeated Indirect Tensile Test	During			After	Department
In-place Density & Moisture	LDH TR 401-67	Not Applicable	Not Applicable	Three Minimum/Section	During	Department
Thickness	LDH TR 602-67	Not Applicable	Not Applicable	Three Minimum/Section	During	Department
ASPHALT CEMENT						
Specific Gravity, 77°F	AASHO T228-68	Before	1 qt. for all tests	Routine Number	Before	Department
Specific Gravity, 60°F	AASHO T228-68	Before		Routine Number	Before	Department

TABLE 3 (CONTINUED)

CONSTRUCTION SAMPLING AND TESTING PROGRAM

Material and Test	Test Method	Sampling Time	Sampling Size	Frequency	Testing Time	Testing Agency
Wt. per gallon, 60°F	AASHO T228-68	Before		Routine Number	Before	Department
Flash Point, C.O.C., °F	AASHO T48-68	Before		Routine Number	Before	Department
Viscosity						
Saybolt Furol Sec.@ 275°F	AASHO T72/102	Before		Duplicate	Before	Department
Absolute @ 140°F, Poises	AASHO T202	Before		Duplicate	Before	Department
Pen.@39.2°F, 200g, 60 sec.	AASHO T49	Before		Duplicate	Before	Department
Pen.@77°F, 100g, 60 sec.	AASHO T49	Before		Duplicate	Before	Department
Duct.@39.2°F, 5cm/min,cm	AASHO T51	Before		Duplicate	Before	Department
Thin Film Oven Test	AASHO T179-68	Before		Duplicate	Before	Department
Loss % @ 325°F, 5 hrs.		Before		Duplicate	Before	Department
Pen. of Residue @ 77°F		Before		Duplicate	Before	Department
Residue Pen. % of Orig.		Before		Duplicate	Before	Department
Duct. of Residue @77°F		Before		Duplicate	Before	Department
Pen. of Residue @ 32°F						
Solubility in CS 2%	AASHO T44			Routine Number	Before	Department
Homogeniety Test	AASHO T102			Routine Number	Before	Department
Mixing Temperature	AASHO T72/102			Routine Number	Before	Department
	AASHO T202			Routine Number	Before	Department

TABLE 3 (CONTINUED)

CONSTRUCTION SAMPLING AND TESTING PROGRAM

Material and Test	Test Method	Sampling			Testing	
		Time	Size	Frequency	Time	Agency
PORTLAND CEMENT						
Autoclave Expansion	ASTM C151	Before	1 gal. of each sample for all tests	Routine Number	Before	Department
Time of Setting by Vicat Needle	ASTM C191	Before		Routine Number	Before	Department
Air Content	ASTM C185	Before		Routine Number	Before	Department
Compressive Strength	ASTM C109	Before		Routine Number	Before	Department
Fineness by Air Permeability Apparatus	AASHO T153	Before		Routine Number	Before	Department
Normal Consistency	ASTM C187	Before		Routine Number	Before	Department

APPENDIX B

POST-CONSTRUCTION MEASUREMENTS PROGRAM

TABLE 4

MEASUREMENTS PROGRAMS

Program Title and Description	Measurement Schedule
I. Undisturbed subgrade cores, four-inch thinwall tubing - three samples from each, thickest and thinnest section of each base type - three samples from control. For basement soil characteristics. Coring for Programs I, II and III will be combined.	1. Initial measurements six months after construction. 2. Run special test in second or third year for wet and dry seasons.
II. Four-inch core samples of bases and surfacing for thickness, density, modulus of elasticity and (asphalt mixes only) creep test. Three cores from each section. One additional set may be needed from the asphalt base sections depending on the outcome of development work on the creep test procedure.	1. Cores six months after construction. 2. Repeat in a subsequent year if rutting occurs.
III. Core samples for tensile strength tests.	
IV. Sample for fatigue properties of surfacing and base (asphalt mixes only). Roadway samples may be required if performance indicates that original lab tests were unconservative in predicting fatigue cracking.	1. Beam samples in a subsequent year if needed.
V. Visual observations, cracking maps and condition survey.	1. Initial measurements within first three months after construction. 2. Routine: once per year. 3. Special: as needed, at more frequent intervals if cracking is progressing rapidly.
VI. Deflection measurements: 1. Deflection using Benkelman Beam in outer wheel path. 2. Deflection using Dynaflect. 3. Texas Surface Curvature Index. 4. Read thermocouples each time deflections are taken. (Surface temperature plus two-inch interval of depth, for 5-1/2-inch surfacing and thickest base - in hot mix only).	1. Initial measurements within one month after construction. 2. Routine: two times per year during March and August. 3. Benkelman Beam tests will be dropped as soon as correlation with Dynaflect is established for this project - about 2 years.

TABLE 4 (CONTINUED)

MEASUREMENTS PROGRAMS

	Program Title and Description	Measurement Schedule
VII.	Profilometer measurements: 1. Chloe Profilometer with calculated PSI. 2. Mays Ride Meter. 3. BPR Roughometer.	1. Initial measurements within one month after construction. 2. Chloe Profilometer will be dropped as soon as correlation with Mays Ride Meter is established. 3. Special: as needed, at more frequent interval if conditions are changing rapidly.
VIII.	Rut Depth Measurements using AASHO Road Test A - frame rut depth device or similar.	1. Same as Chloe Profilometer schedule, except if special conditions indicate more frequent tests.
IX.	Traffic count.	1. Once a year to establish growth pattern. 2. More frequent intervals to establish large seasonal variation if needed. 3. Continuous count from permanent station adjacent to project.
X.	Truck weight study. 1. Classify and record loads in motion by a system of transducers.	1. Continuing traffic evaluation by loop detector and weighing-in-motion transducers applied in outer lane. 2. Check seasonal variation of agricultural traffic.

APPENDIX C

CONSTRUCTION CONDITION AND PROBLEM AREAS OF EMBANKMENT, SELECT, SOIL-CEMENT AND CEMENT-STABILIZED SAND CLAY GRAVEL BASE COURSES

TABLE 5

CONSTRUCTION CONDITION AND PROBLEM AREAS OF EMBANKMENT, SELECT, SOIL-CEMENT, AND CEMENT STABILIZED SAND CLAY GRAVEL BASE COURSES

Embankment

Control Section #2 - 7½" black base, 6" soil-cement

Sta. 179+00-180+00 and Sta. 177+25-178+25
17' left ℄ to 23' right ℄ undercut right roadway approximately 6" depth.

Section #3 - 11" black base

Sta. 182+00-182+50
℄ to 23' right ℄ undercut right roadway approximately 6".

Section #7 - 4½" black base

Sta. 205+50-211+50
Cut out failures. Some subgrade material was removed and replaced with select material.

Section #11 - 3" black base

Sta. 240+00-241+50
Undercut and backfilled failures in right roadway.

Section #12 - 6" stabilized sand clay gravel

Sta. 241+50-242+00
Undercut and backfilled failures in right roadway.

Soil-Cement and Cement Stabilized Sand Clay Gravel

Control Section #1 - 7½" black base, 6" soil-cement

3 sound cores and 12 broken cores were obtained. The broken cores were due to laminations and cracks.

Section #2 - 9" soil-cement

5 good cores and 9 broken cores were obtained. The broken cores were due to laminations and cracks.

Control Section #2 - 7½" black base, 6" soil-cement

Sta. 177+80-179+20
7' left ℄ to 17' left ℄ (roadway edge) recut 6" with 8% cement.

Sta. 178+16-179+86
13' right ℄ to 23' right ℄ (roadway edge) recut 6" with 8% cement.

3 good cores and 12 broken cores were obtained in this section. The broken cores were due to laminations and cracks.

Section #4 - 20" soil-cement

Sta. 193+08-193+26
1' left ℄ - 7' right ℄ - raw material between soil-cement lifts approximately 1/2" thick.

Section produced 5 good cores and 13 broken cores. The broken cores were due to laminations and cracks.

Section #6 - 16" soil-cement

Sta. 203+50-205+50
Visual inspection showed several areas with approximately 1-1½" raw material between top and bottom lifts. The six-hour time limit expired by one hour and fifteen minutes. This section was to be recut. Top 8" lift of soil-cement and the unstabilized raw material down to the bottom lift of soil-cement was recut. New select material was spread and graded out. Top 8" of 16" soil-cement was recut with 10% cement. This section produced 2 good cores and 16 broken cores. The broken cores were due to laminations and cracks.

Control Section #3 - 7½" black base, 6" soil-cement

Sta. 215+50-217+50
5' right ℄ - 23' right ℄ had overdepth cut of 3", had additional cement added and was recut.

Sta. 216+00-216+25
Material was rolling beneath motor patrol wheels during blading of soil-cement base (due to excess moisture).

Sta. 212+00-214+00
Approximately a 7' strip along the edges of both the left and right roadway was removed. The select material had to be removed down to the clay embankment due to excess moisture. The area excavated from left roadway was approximately 2' of roadway and 5' of shoulder and right roadway was 7' of shoulder. Dry select material was used to replace material removed.

Sta. 215+62-217+50
6' left ℄ - 17' ℄ (roadway edge) 6" recut with 10% cement.

Sta. 213+68-215+50
12' right ℄ 23' right ℄ (roadway edge) 6" recut with 10% cement.

Sta. 214+36-215+29
7' left ℄ - 17' left ℄ (roadway edge) 6" recut with 10% cement.

Sta. 213+68-213+88
11' left ℄ removed failure in 6" soil-cement and replaced with hot mix.

This section produced 2 good cores and 10 broken cores. The broken cores were due to laminations and cracks.

Section #8 - 15" soil-cement

This section had the cement cut in with two lifts, 8" bottom and 7" top. Both lifts were cut in the same day. The six-hour time expired by 30 to 45 minutes.

This section produced 8 good cores and 1 broken core. The broken core had a compaction plane and separated there.

Section #9 - 6" soil-cement

Sta. 228+50-229+50
4' left ℄ - 17' left ℄ (roadway edge) recut to various depths with 10% cement.

Sta. 225+07-225+42
10' right ℄ - 23' right ℄ (roadway edge) recut to various depths with 10% cement.

Sta. 223+50-247+37
12' right ℄ - 23' right ℄ (roadway edge) recut to various depths with 10% cement.

Sta. 223+50-224+05
6' left ℄ - 17' left ℄ (roadway edge) recut to various depths with 10% cement.

This section produced 8 good and 8 broken cores. The broken cores had laminations or cracks.

Section #10 - 12" soil-cement

This section produced 9 good cores and 9 broken cores. Cores broke in several pieces due to laminations and cracks.

Section #12 - 6" stabilized sand clay gravel

Sta. 241+50-244+50
4' right ℄ - 23' right ℄ had overdepth of 2-2½". An additional 2% cement was added to this area and recut.

Sta. 241+50-241+92
13' right ℄ - 23' right ℄ (roadway edge) recut to various depths with 6% cement. Most of this recut fell within the transition between Sections 11 and 12.

This section produced 2 fairly good cores badly grooved by loose aggregate, and 6 broken cores. The broken cores had crumbled and washed away.

Section #13 - 10" stabilized sand clay gravel

Sta. 250+50-253+50
This spread was drenched by an extremely heavy downpour of rain. The P & H pulverizer was able to complete its last pass. The Rex compactor had been rolling in but was forced to stop. The motor patrol completed one pass on the outside edge of the right roadway. All equipment had to be removed due to the soupy condition of the roadway. 3' right ℄ - 23' right ℄ had to be recut full 10". 12' right ℄ - 17' left ℄ recut 4½" of 10" stabilized sand clay gravel. Material was ripped up with motor patrol and recut in-place with soil-cement stabilizer.

Sta. 247+50-253-50
The contractor's soil-cement foreman stated that the Rex compactor had completed all rolling-in prior to getting off the spread after a heavy rain and that blading would be continued whenever roadway was dry enough to permit.

Various stations in this section produced 4 good cores and 21 broken cores. The broken cores crumbled and washed away.

Control Section #4 - 7½" black base, 6" soil-cement

Numerous attempts were made to obtain a good 7-day core due to lamination plane at the top. This section produced 9 good cores and 5 broken cores.

APPENDIX D

DESCRIPTIVE STATISTICS AND COMPREHENSIVE DATA ON DENSITY AND MOISTURE OF EMBANKMENT, SELECT MATERIAL, SOIL-CEMENT AND CEMENT-STABILIZED SAND CLAY GRAVEL LAYERS

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
BATON ROUGE, LOUISIANA

TABLE 6

DESCRIPTIVE STATISTICS FOR EMBANKMENT, SELECT & SOIL CEMENT PAVEMENT LAYERS

16:20 FRIDAY, FEBRUARY 9, 1979

LAYER=EM

SECT	NDWD	NMC	NCOMP	MEANDWD	MEANMC	MEANCOMP	MINDWD	MINMC	MINCOMP	MAXDWD	MAXMC	MAXCOMP
C01	3	3	3	99.0	23.3	101.4	97.4	21.3	98.5	101.8	24.8	103.4
C02	3	3	3	94.6	27.5	89.9	85.1	23.9	87.1	102.9	29.6	94.9
C03	3	3	3	102.7	25.5	100.4	100.5	23.7	97.7	105.5	28.4	104.2
C04	3	3	3	103.1	23.9	100.9	98.7	20.0	98.6	107.5	26.2	103.3
T01	3	3	3	88.4	34.8	92.8	86.8	34.3	91.8	89.4	35.3	93.7
T02	3	3	3	105.5	17.8	103.1	103.4	17.5	100.4	106.8	18.5	105.0
T03	3	3	3	106.6	18.6	96.6	96.3	15.9	94.0	112.6	23.1	101.6
T04	3	3	3	101.0	19.3	94.4	84.6	15.2	82.8	109.4	26.5	100.2
T05	3	3	3	101.3	23.9	97.5	96.1	18.0	95.4	108.5	29.0	99.0
T06	3	3	3	99.6	21.1	98.1	86.4	18.4	88.4	108.1	25.0	104.6
T07	3	3	3	104.6	16.9	98.4	95.7	16.5	90.0	111.8	17.2	104.7
T08	3	3	3	101.5	21.0	100.8	100.2	16.6	98.7	102.7	23.7	104.0
T09	3	3	3	105.1	21.2	108.4	103.6	19.0	107.1	106.3	23.5	109.8
T10	3	3	3	100.7	24.8	104.0	96.9	22.7	99.0	103.5	27.4	107.0
T11	3	3	3	100.4	25.3	101.8	99.5	22.8	99.5	101.0	27.6	103.8
T12	3	3	3	103.8	23.7	100.6	98.8	15.9	96.4	111.8	29.5	106.7
T13	3	3	3	108.7	16.6	108.8	106.3	15.8	103.4	111.0	17.2	113.3
T14	3	3	3	108.2	18.3	107.7	104.4	15.8	101.6	110.5	22.6	112.5

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LAYER=SC

SECT	NDWD	NMC	NCOMP	MEANDWD	MEANMC	MEANCOMP	MINDWD	MINMC	MINCOMP	MAXDWD	MAXMC	MAXCOMP
C01	3	3	3	113.9	15.0	96.9	113.2	12.6	96.4	114.2	16.9	97.2
C02	3	3	3	118.3	16.2	104.8	113.0	14.9	100.2	124.0	17.3	109.9
C03	3	3	3	114.5	14.5	102.6	113.5	12.3	101.7	116.2	15.7	104.2
C04	5	5	5	109.6	17.4	94.6	98.8	15.1	85.3	116.5	20.0	100.6
T02	3	3	3	112.3	13.6	95.8	108.5	13.2	92.6	116.2	14.1	99.2
T04	6	6	6	112.4	15.8	95.1	108.8	14.5	91.5	115.2	18.2	98.0
T06	7	7	7	112.4	14.4	97.0	107.8	13.0	94.8	116.8	15.9	100.7
T08	6	6	6	114.4	13.8	97.8	104.8	12.7	89.4	125.0	15.8	107.1
T09	3	3	3	114.0	15.1	96.3	112.0	14.0	94.6	116.2	16.0	98.2
T10	6	6	6	112.2	17.6	98.1	103.2	14.0	92.7	118.5	28.8	102.0

LAYER=SG

SECT	NDWD	NMC	NCOMP	MEANDWD	MEANMC	MEANCOMP	MINDWD	MINMC	MINCOMP	MAXDWD	MAXMC	MAXCOMP
T12	3	3	3	117.7	13.8	99.9	112.0	10.3	95.1	121.5	16.7	103.1
T13	3	3	3	113.3	14.4	97.9	109.5	13.8	94.6	119.5	15.5	103.2

DESCRIPTIVE STATISTICS FOR EMBANKMENT, SELECT & SOIL CEMENT PAVEMENT LAYERS

16:20 FRIDAY, FEBRUARY 9, 1979

LAYER=SM

SECT	NDWD	NMC	NCOMP	MEANDWD	MEANMC	MEANCOMP	MINDWD	MINMC	MINCOMP	MAXDWD	MAXMC	MAXCOMP
C02	3	3	3	115.0	12.9	96.5	113.6	11.4	94.2	115.9	13.9	99.4
C03	3	3	3	116.9	12.2	96.2	113.5	11.8	94.4	121.2	13.0	99.1
C04	5	5	5	113.6	10.4	93.4	102.8	6.0	84.5	119.5	14.0	97.0
T01	3	3	3	115.4	10.1	94.2	106.1	8.1	88.1	122.6	11.8	98.6
T02	3	3	3	118.4	11.9	98.3	117.5	11.5	97.4	119.8	12.3	99.4
T03	3	3	3	115.7	11.3	95.9	112.7	10.6	92.1	120.3	12.3	99.4
T04	3	3	3	113.8	12.8	96.4	113.1	10.8	95.6	115.1	13.9	97.8
T05	3	3	3	112.7	8.4	91.7	109.8	6.9	89.9	117.4	10.2	95.2
T06	3	3	3	114.2	11.9	95.7	110.7	11.6	92.2	116.8	12.5	98.3
T07	3	3	3	123.0	9.4	101.1	122.0	9.3	99.0	124.4	9.6	102.4
T08	3	3	3	112.9	12.4	94.0	109.4	11.4	90.4	114.7	13.4	95.9
T09	3	3	3	121.3	12.8	100.4	120.8	12.2	99.3	122.0	13.5	101.0
T10	3	3	3	115.6	14.4	96.3	112.2	12.9	94.9	118.5	16.8	98.4
T11	3	3	3	121.6	8.7	99.6	119.9	8.2	97.6	123.4	9.0	101.0
T12	3	3	3	117.5	12.8	98.8	116.8	9.9	98.7	118.3	15.2	99.0
T13	3	3	3	118.1	12.8	97.9	115.6	11.5	96.8	121.5	14.2	100.0
T14	3	3	3	121.7	10.8	100.2	119.2	9.9	98.4	123.2	11.4	101.7

WHERE

N = NUMBER OF OBSERVATIONS

DWD = DRY WEIGHT DENSITY

MC = PERCENT DRY WEIGHT MOISTURE CONTENT

COMP = PERCENT COMPACTION

MIN = MINIMUM

MAX = MAXIMUM

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
BATON ROUGE, LOUISIANA

TABLE 7

COMPREHENSIVE DATA ON DENSITY & MOISTURE OF EMBANKMENT(EM), SELECT MATERIAL(SM) & SOIL CEMENT(SC) PAVEMENT LAYERS

16:20 FRIDAY, FEBRUARY 9, 1979

LAYER=EM

SECT	STATION	LOC	DEPTH	DWD	FLDMC	LABDEN	LABMC	COMP
C01	159+00	09R	0-12	97.8	23.7	94.6	25.5	103.4
C01	160+00	00C	0-12	101.8	21.3	99.5	22.7	102.3
C01	161+00	09R	0-12	97.4	24.8	98.9	22.6	98.5
C02	176+00	09R	0-12	85.1	29.1	97.6	23.7	87.1
C02	178+00	00C	0-12	95.7	29.6	109.1	17.0	87.7
C02	179+00	09R	0-12	102.9	23.9	108.4	17.8	94.9
C03	212+00	09R	0-12	105.5	23.7	101.3	21.7	104.2
C03	214+00	00C	0-12	100.5	28.4	102.9	20.7	97.7
C03	216+00	09R	0-12	102.1	24.4	102.7	21.3	99.4
C04	261+00	09R	0-12	98.7	26.2	100.1	22.5	98.6
C04	263+00	09R	0-12	107.5	20.0	104.1	20.2	103.3
C04	264+00	09R	0-12	103.2	25.5	102.5	21.1	100.7
T01	164+00	09R	0-12	86.8	35.3	94.6	25.4	91.8
T01	166+00	09R	0-12	89.0	34.8	95.8	25.7	92.9
T01	167+00	00C	0-12	89.4	34.3	95.4	25.2	93.7
T02	170+00	09R	0-12	103.4	17.5	99.6	22.2	103.8
T02	171+00	00C	0-12	106.8	18.5	106.3	18.7	100.4
T02	173+00	09R	0-12	106.4	17.5	101.3	21.6	105.0
T03	182+00	00C	0-12	96.3	23.1	102.5	20.6	94.0
T03	184+00	09R	0-12	112.6	16.8	119.6	12.2	94.2
T03	185+00	09R	0-12	110.9	15.9	109.1	16.6	101.6
T04	188+00	09R	0-12	108.9	16.2	108.7	17.1	100.2
T04	190+00	00C	0-12	109.4	15.2	109.3	16.8	100.1
T04	192+00	09R	0-12	84.6	26.5	102.2	21.2	82.8
T05	194+00	09R	0-12	108.5	18.0	110.5	15.6	98.2
T05	195+00	09R	0-12	96.1	29.0	100.7	22.3	95.4
T05	197+00	00C	0-12	99.4	24.8	100.4	22.9	99.0
T06	201+00	00C	0-12	108.1	18.4	103.4	21.0	104.6
T06	203+00	09R	0-12	104.2	20.0	102.9	21.1	101.3
T06	204+00	09R	0-12	86.4	25.0	97.7	23.7	88.4
T07	207+00	09R	0-12	106.3	17.1	105.8	19.6	100.5
T07	208+00	00C	0-12	95.7	16.5	106.3	19.2	90.0
T07	210+00	09R	0-12	111.8	17.2	106.8	19.0	104.7
T08	219+00	09R	0-12	101.6	16.6	102.9	20.8	98.7
T08	221+00	09R	0-12	100.2	22.8	100.4	22.2	99.8
T08	222+00	09R	0-12	102.7	23.7	102.7	22.8	104.0
T09	225+00	09R	0-12	105.3	21.1	97.1	24.3	108.4
T09	226+00	00C	0-12	106.3	19.0	96.8	24.1	109.8
T09	228+00	09R	0-12	103.6	23.5	96.7	23.8	107.1
T10	231+00	09R	0-12	103.5	22.7	96.7	24.1	107.0
T10	233+00	09R	0-12	101.8	24.3	96.1	24.2	105.9
T10	235+00	09R	0-12	96.9	27.4	97.9	23.6	99.0
T11	236+00	09R	0-12	99.5	27.6	97.6	24.1	102.0
T11	238+00	09R	0-12	101.0	22.8	97.3	24.7	103.8
T11	239+00	00C	0-12	100.8	25.6	101.3	21.4	99.5
T12	243+00	09R	0-12	100.8	25.6	104.5	19.9	96.4
T12	245+00	09R	0-12	111.8	15.9	104.7	20.0	106.7
T12	246+00	09R	0-12	98.8	29.5	100.0	22.3	98.8
T13	248+00	03R	0-12	106.3	17.2	102.8	20.3	103.4
T13	249+00	09R	0-12	111.0	15.8	101.2	21.7	109.7
T13	251+00	09R	0-12	108.8	16.8	96.0	24.8	113.3

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
BATON ROUGE, LOUISIANA

COMPREHENSIVE DATA ON DENSITY & MOISTURE OF EMBANKMENT(EM), SELECT MATERIAL(SM) & SOIL CEMENT(SC) PAVEMENT LAYERS

16:20 FRIDAY, FEBRUARY 9, 1979

LAYER=EM

SECT	STATION	LOC	DEPTH	DWD	FLDMC	LABDEN	LABMC	COMP
T14	254+00	09R	0-12	104.4	22.6	102.8	20.6	101.6
T14	255+00	09R	0-12	109.8	16.6	100.6	22.1	109.1
T14	258+00	00C	0-12	110.5	15.8	98.2	23.0	112.5

N=54

LAYER=SC

SECT	STATION	LOC	DEPTH	DWD	FLDMC	LABDEN	LABMC	COMP
C01	159+00	09R	6	114.2	16.9	117.5	12.2	97.2
C01	160+00	00C	6	113.2	12.6	117.5	12.2	96.4
C01	161+00	09R	6	114.2	15.5	117.5	12.2	97.2
C02	176+00	09R	6	124.0	14.9	112.8	13.3	109.9
C02	178+00	00C	6	117.8	16.4	112.8	13.3	104.4
C02	179+00	09R	6	113.0	17.3	112.8	13.3	100.2
C03	212+00	09L	6	113.5	12.3	111.6	12.2	101.7
C03	214+00	09R	6	116.2	15.7	111.6	12.2	104.2
C03	216+00	09R	6	113.8	15.6	111.6	12.2	101.9
C04	261+00	8R	6	111.0	20.0	115.4	13.3	95.9
C04	261+00	0C	6	116.5	16.1	115.8	13.3	100.6
C04	261+00	9L	6	112.0	17.0	115.8	13.3	96.7
C04	263+00	9R	6	98.8	19.0	115.8	13.3	85.3
C04	264+00	9R	6	109.5	15.1	115.8	13.3	94.6
T02	170+00	09R	9	116.2	13.6	117.2	13.3	99.2
T02	171+00	00C	9	108.5	14.1	117.2	13.3	92.6
T02	173+00	09R	9	112.2	13.2	117.2	13.3	95.7
T04	188+00	09R	T-10	112.8	16.2	118.8	13.3	94.9
T04	188+00	09R	B-10	115.2	14.5	117.6	13.3	98.0
T04	190+00	00C	T-10	108.8	18.2	118.8	13.3	91.5
T04	190+00	00C	B-10	113.0	15.0	117.6	13.3	96.1
T04	192+00	09R	T-10	110.5	14.7	118.8	13.3	93.0
T04	192+00	09R	B-10	114.2	16.0	117.6	13.3	97.1
T06	201+00	00C	T-08	109.2	13.0	113.7	13.3	96.0
T06	201+00	00C	B-08	112.5	15.1	116.0	13.3	96.1
T06	203+00	09R	T-08	107.8	13.2	113.7	13.3	94.8
T06	203+00	09R	B-08	116.6	15.9	116.0	13.3	100.5
T06	204+00	09R	T-08	109.0	14.2	113.7	13.3	95.9
T06	204+00	09R	B-08	116.8	15.0	116.0	13.3	100.7
T06	205+00	09R	T-08	115.0	14.4	120.7	13.3	95.3
T08	219+00	09L	T-07	115.2	13.7	116.7	12.2	98.7
T08	219+00	09L	B-08	116.2	14.0	117.2	12.2	99.2
T08	221+00	09R	T-07	125.0	12.8	116.7	12.2	107.1
T08	221+00	09R	B-08	112.2	15.8	117.2	12.2	95.8
T08	222+00	09R	T-07	113.0	13.7	116.7	12.2	96.8
T08	222+00	09R	B-08	104.8	12.7	117.2	12.2	89.4
T09	225+00	09R	6	113.8	16.0	118.4	12.2	96.1
T09	226+00	00C	6	112.0	15.4	118.4	12.2	94.6
T09	228+00	09R	6	116.2	14.0	118.4	12.2	98.2
T10	231+00	09L	T-06	111.4	14.5	110.0	12.2	101.2

COMPREHENSIVE DATA ON DENSITY & MOISTURE OF EMBANKMENT(EM), SELECT MATERIAL(SM) & SOIL CEMENT(SC) PAVEMENT LAYERS

16:20 FRIDAY, FEBRUARY 9, 1979

LAYER=SC

SECT	STATION	LOC	DEPTH	DWD	FLDMC	LABDEN	LABMC	COMP
T10	231+00	09L	B-06	117.8	14.2	118.9	12.2	99.0
T10	233+00	09R	T-06	112.2	14.0	110.0	12.2	102.0
T10	233+00	09R	B-06	118.5	15.0	118.9	12.2	99.7
T10	234+12	15R	T-06	103.2	28.8	110.0	12.2	93.9
T10	234+12	15R	B-06	110.2	19.3	118.9	12.2	92.7

N=45

LAYER=SG

SECT	STATION	LOC	DEPTH	DWD	FLDMC	LABDEN	LABMC	COMP
T12	242+00	09R	6	112.0	16.7	117.8	12.9	95.1
T12	245+00	09R	6	121.5	14.4	117.8	12.9	103.1
T12	246+00	11R	6	119.5	10.3	117.8	12.9	101.4
T13	248+00	09R	10	111.0	14.0	115.8	12.9	95.9
T13	249+00	09R	10	119.5	13.8	115.8	12.9	103.2
T13	251+00	11L	10	109.5	15.5	115.8	12.9	94.6

N=6

LAYER=SM

SECT	STATION	LOC	DEPTH	DWD	FLDMC	LABDEN	LABMC	COMP
C02	176+00	09R	0-06	113.6	11.4	120.6	11.4	94.2
C02	178+00	00C	0-06	115.4	13.5	120.3	11.8	95.9
C02	179+00	09R	0-06	115.9	13.9	116.6	13.8	99.4
C03	212+00	09R	0-08	113.5	11.9	120.2	12.0	94.4
C03	214+00	00C	0-08	121.2	11.8	122.3	11.4	99.1
C03	216+00	09R	0-08	115.9	13.0	121.8	11.3	95.2
C04	159+00	09R	0-06	112.8	13.0	121.2	11.6	93.0
C04	160+00	00C	0-06	118.2	12.5	123.4	10.6	95.8
C04	161+00	09R	0-06	114.5	14.0	118.1	13.0	97.0
C04	261+00	09L		.	.	.	.	.
C04	263+00	09R	0-08	102.8	6.0	121.7	11.4	84.5
C04	264+00	09R	0-09	119.5	6.3	123.3	10.7	96.9
T01	164+00	09R	0-11	106.1	10.3	120.4	11.6	88.1
T01	166+00	09R	0-11	122.6	8.1	124.3	10.6	98.6
T01	167+00	00C	0-11	117.6	11.8	122.5	11.3	96.0
T02	170+00	09R	0-10	117.9	11.5	120.3	12.0	98.0
T02	171+00	00C	0-10	119.8	12.3	120.5	11.9	99.4
T02	173+00	09R	0-10	117.5	11.9	120.6	11.9	97.4
T03	182+00	00C	0-10	120.3	10.6	121.0	11.6	99.4
T03	184+00	09R	0-10	114.0	12.3	118.5	12.5	96.2
T03	185+00	09R	0-10	112.7	10.9	122.4	11.2	92.1
T04	188+00	09R	0-05	113.1	13.6	117.9	12.9	95.9
T04	190+00	00C	0-05	113.3	13.9	115.9	13.3	97.8
T04	192+00	09R	0-05	115.1	10.8	120.4	11.8	95.6

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
BATON ROUGE, LOUISIANA

COMPREHENSIVE DATA ON DENSITY & MOISTURE OF EMBANKMENT(EM), SELECT MATERIAL(SM) & SOIL CEMENT(SC) PAVEMENT LAYERS
16:20 FRIDAY, FEBRUARY 9, 1979

LAYER=SM

SECT	STATION	LOC	DEPTH	DWD	FLDMC	LABDEN	LABMC	COMP
T05	194+00	09R	0-12	109.8	10.2	122.2	11.0	89.9
T05	195+00	09R	0-12	110.9	6.9	123.3	10.9	89.9
T05	197+00	00C	0-12	117.4	8.2	123.3	10.9	95.2
T06	201+00	00C	0-05	116.8	11.7	118.8	12.6	98.3
T06	203+00	09R	0-05	115.1	11.6	119.2	12.6	96.6
T06	204+00	09R	0-05	110.7	12.5	119.6	11.9	92.2
T07	207+00	09R	0-12	122.0	9.4	123.2	11.0	99.0
T07	208+00	00C	0-12	122.7	9.6	120.4	11.2	101.9
T07	210+00	09R	0-12	124.4	9.3	121.5	11.5	102.4
T08	219+00	09R	0-04	109.4	12.4	121.0	11.3	90.4
T08	221+00	09R	0-04	114.6	13.4	119.6	12.1	95.8
T08	222+00	09R	0-05	114.7	11.4	119.6	12.0	95.9
T09	225+00	09R	0-12	122.0	12.7	120.8	11.5	101.0
T09	226+00	00C	0-12	120.8	12.2	119.9	12.0	100.8
T09	228+00	09R	0-12	121.1	13.5	122.0	11.0	99.3
T10	231+00	09L	0-09	118.5	13.5	120.4	11.6	98.4
T10	233+00	09R	0-09	112.2	16.8	118.2	12.5	94.9
T10	235+00	09R	0-09	116.0	12.9	121.3	11.4	95.6
T11	236+00	09R	0-12	121.5	8.2	121.2	11.2	100.3
T11	238+00	09R	0-12	119.9	8.8	122.8	11.1	97.6
T11	239+00	00C	0-12	123.4	9.0	122.2	11.4	101.0
T12	243+00	09L	0-12	118.3	9.9	119.9	11.8	98.7
T12	245+00	09R	0-12	116.8	15.2	118.4	12.6	98.7
T12	246+00	09R	0-12	117.4	13.3	118.6	12.6	99.0
T13	248+00	09L	0-11	117.2	12.6	121.1	11.8	96.8
T13	249+00	09R	0-11	121.5	11.5	121.5	11.4	100.0
T13	251+00	09R	0-11	115.6	14.2	119.2	12.3	97.0
T14	254+00	09R	0-12	122.8	9.9	122.2	11.1	100.5
T14	255+00	09R	0-12	119.2	11.0	121.1	11.6	98.4
T14	258+00	00C	0-12	123.2	11.4	121.1	11.6	101.7

N=54

APPENDIX E

COMPRESSIVE STRENGTHS AND CEMENT CONTENTS OF CEMENT-STABILIZED SOIL AND SAND CLAY GRAVEL ROADWAY CORES

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
BATON ROUGE, LOUISIANA

TABLE 8

COMPRESSIVE STRENGTHS OF SOIL CEMENT ROADWAY CORES FROM LOUISIANA EXPERIMENTAL BASE COURSE

15:58 TUESDAY, JUNE 19, 1979

SECT	STATION	DATE	LOCATION	CORE_NO	AGE	DSGN_C	ACT_C_V	ACT_C_WT	PSI
C01	158+00	51276	7R	97	29	10	6.2	5.2	873
C01	158+00	51276	7R	97A	29	10	6.4	5.4	788
C01	161+00	51276	7R	94A	29	10	10.1	8.8	1146
T02	170+00	51276	7R	92A	28	8	6.0	5.2	369
T02	171+00	51276	7L	91	28	8	.	.	360
T02	173+00	51276	7R	89A	28	8	7.2	6.3	623
T02	174+00	51276	7L	88A	28	8	6.4	5.5	581
C02	175+00	51176	7L	87	28	8	.	.	621
C02	178+00	51176	7R	85A	29	8	4.0	3.3	663
C02	179+00	51176	7R	84A	29	8	7.6	6.6	476
C02	180+00	51176	7L	83	29	8	6.7	5.8	463
C02	180+00	51176	7L	83A	29	8	6.7	5.8	429
T04	188+00	51176	7R	82 -B	29	8	5.6	4.8	301
T04	188+00	51976	7R	106 -T	28	8	4.9	4.2	359
T04	189+00	51177	7R	81A-B	29	8	9.3	8.2	619
T04	189+00	51977	7R	105A-T	28	8	5.1	4.3	275
T04	190+00	51177	7L	80A-B	29	8	8.4	7.4	612
T04	190+00	51977	7L	104 -T	29	8	7.5	6.5	389
T04	190+00	51977	7L	104A-T	29	8	8.3	7.3	347
T04	192+00	50577	7R	79 -B	28	8	11.3	10.2	747
T04	192+00	51977	7R	103A-T	29	8	6.2	5.3	277
T04	193+00	50577	7L	78 -B	28	8	6.3	5.4	480
T04	193+00	51977	7L	102A-T	29	8	4.2	3.6	324
T06	200+00	50577	7R	77 -B	28	8	5.0	4.3	575
T06	200+00	51776	7R	100 -T	30	8	8.5	7.4	581
T06	201+00	50577	7L	76 -B	28	8	7.7	6.8	897
T06	201+00	50577	7L	76A-B	28	8	8.1	7.1	1014
T06	203+00	50577	7R	75 -B	28	8	6.3	5.4	631
T06	203+00	50577	7R	75A-B	28	8	6.6	5.7	495
T06	203+00	51776	7R	98A-T	30	8	7.4	6.4	564
T06	204+00	51976	9R	101A-T	29	10	6.8	5.9	971
T06	205+00	50577	7L	73 -B	28	8	8.1	7.1	665
T06	205+00	50577	7L	73A-B	28	8	9.6	8.6	878
C03	212+00	50577	7L	72	28	10	8.1	6.9	718
C03	212+00	50577	7L	72A	28	10	8.1	6.9	612
C03	213+00	50577	7R	71	28	10	8.6	7.4	404
C03	214+00	50577	7R	70	28	10	8.1	6.9	707
C03	216+00	50476	7R	69	28	10	9.4	8.1	737
C03	216+00	50476	7R	69A	28	10	10.7	9.4	1030
C03	217+00	50476	7L	68	28	10	.	.	366
T08	218+15	50476	7R	67 -T	28	10	9.1	7.8	1011
T08	218+15	50476	7R	67 -B	28	10	7.7	6.6	555
T08	219+00	50476	9L	66 -B	28	10	8.9	7.7	1167
T08	219+00	50476	9L	66A-T	28	10	8.4	7.2	818
T08	219+00	50476	9L	66A-B	28	10	8.2	7.0	1163
T08	221+00	50476	7R	65 -T	28	10	8.5	7.3	696
T08	221+00	50476	7R	65 -B	28	10	7.5	6.4	776
T08	222+00	50476	7R	64 -T	28	10	9.2	7.9	679
T08	222+00	50476	7R	64 -B	28	10	9.3	8.0	613
T08	223+00	50476	7L	63 -T	28	10	11.3	10.0	644
T08	223+00	50476	7L	63 -B	28	10	8.5	7.3	529
T09	224+00	50376	7R	57	30	10	12.0	10.6	772
T09	225+00	50376	7R	56	30	10	.	.	745

COMPRESSIVE STRENGTHS OF SOIL CEMENT ROADWAY CORES FROM LOUISIANA EXPERIMENTAL BASE COURSE

15:58 TUESDAY, JUNE 19, 1979

SECT	STATION	DATE	LOCATION	CORE_NO	AGE	DSGN_C	ACT_C_V	ACT_C_WT	PSI
T09	226+00	50376	7L	55	30	10	6.7	5.7	506
T09	227+00	50376	7L	54	30	10	.	.	938
T09	228+00	50376	9R	53A	30	10	9.0	7.7	819
T10	230+00	50376	7R	62 -T	29	10	11.1	9.7	640
T10	230+00	50376	7R	62 -B	29	10	9.3	8.0	1224
T10	231+00	50376	7L	61A-T	29	10	6.8	5.8	795
T10	233+00	50376	7R	60 -T	29	10	6.1	5.1	1104
T10	234+00	50376	7L	59 -T	29	10	7.4	6.2	635
T10	234+00	50376	7L	59 -B	29	10	.	.	840
T10	235+00	50376	7R	58 -T	29	10	.	.	819
T10	235+00	50376	7R	58 -B	29	10	.	.	748
T12	243+00	50376	7L	51	30	6	.	.	528
T12	246+00	50376	9R	48	30	6	.	.	184
T13	249+00	50376	7R	45	30	6	.	.	511
T13	251+00	42176	9R	33	29	6	.	.	229
C04	260+00	42176	9R	32A	29	8	.	.	618
C04	261+00	42176	9L	31A	29	8	8.0	7.0	415
C04	262+00	42176	9R	30	29	8	6.4	5.5	274
C04	263+00	121375	9R	110	32	8	.	.	358
C04	264+00	121375	9R	109	32	8	.	.	308

N=73

WHERE

LOCATION IS WITH RESPECT TO CENTERLINE OF ROADWAY

AGE IS IN DAYS

DSGN C = DESIGN CEMENT CONTENT, PERCENT BY VOLUME

ACT C V = ACTUAL CEMENT CONTENT, PERCENT BY VOLUME

ACT C WT = ACTUAL CEMENT CONTENT, PERCENT BY WEIGHT

PSI = COMPRESSIVE STRENGTH, P.S.I.

APPENDIX F

ASPHALT CONCRETE BASE AND SURFACE COURSE TEST PROPERTIES

Form No. 03-22-1004
1/72

STATE OF LOUISIANA

DEPARTMENT OF HIGHWAYS

Central LABORATORY

REPORT OF TESTS OF AC-40

Laboratory No. 239241 Date 6/23/76

Project No. 74-1G FAP No. P. O. No.
Submitted By Don Carey
Source of Material Lion Oil Co.
Sampled From Plant Tank Date Sampled 6/16/76
Identification Quantity Represented
Intended Use Type III Binder
Remarks

Test Results

Specific Gravity, 77°F	1.034
Specific Gravity, 60°F	1.037
Flash Point, C.O.C., °F	670
Viscosity Kinematic @ 275°F, CS	621
Saybolt Furol Sec. @ 275°F	288
Absolute @ 140°F, Poises	3937
Penetration @ 39.2°F, 200 g., 60 sec.	20
Penetration @ 77°F 100 g., 5 sec.	46
Ductility @ 39.2 5 cm/min., cm.	2
Thin Film Oven Test	
Loss % @ 325°F, 5 hrs.	0.00
Penetration of Residue @ 77°F	37
Residue Penetration, % of Original	80.4
Ductility of Residue @ 77°F	150+
Penetration of Residue @ 32°F	7
Viscosity, Absolute @ 140°F, Poises	6132
Solubility in CS_2%	99.97
Homogeniety Test	Neg.

REMARKS:
jm:cc
Don Carey
Lion Oil Co.

H. B. Rushing by: J. D. B.
Materials Engineer

TABLE 10

PLANT MIX PROPERTIES

DATE LAID	MARSHALL STABILITY	GRADATION (PERCENT PASSING) 1"	3/4"	1/2"	#4	#10	#40	#80	#200	%AC	PERCENT CRUSHED
041976	1120	100	90	80	43	32	21	12	5.0	3.7	
	1063	100	94	82	43	33	22	13	6.0	3.7	
	1121										
	1246										
042276	1325	100	92	74	43	30	17	09	4.0	3.6	
	1332										
042676	1420	100	92	80	52	35	19	11	6.0	3.8	
	1393										
052576	1745	100	93	72	46	32	18	11	6.0	3.7	
	1559	100	95	80	51	36	27	17	8.0	4.1	
	1544										
	1378										
052676	1711	100	91	78	39	25	15	09	4.0	3.8	
	1724	100	95	81	48	38	24	11	6.0	3.6	
	1192										
	1650										
052776	1193	100	93	85	51	33	21	10	5.0	3.8	
	1226	100	98	87	50	35	21	10	5.0	4.0	
	1317										
	1302										
052876	1261	100	96	91	53	34	21	12	6.0	3.9	
	1196	100	94	85	54	37	24	15	5.0	4.0	
	1241										
	1211										
052976	1408	100	92	79	53	41	25	12	6.0	4.0	
	1376	100	91	80	50	34	22	10	6.0	4.1	
	1332										

TABLE 10 (CONTINUED)
PLANT MIX PROPERTIES

DATE LAID	MARSHALL STABILITY	GRADATION (PERCENT PASSING) 1"	3/4"	1/2"	#4	#10	#40	#80	#200	%AC	PERCENT CRUSHED
053176	1226	100	91	78	54	32	18	08	4.0	4.1	
060276	1244	100	93	82	51	35	20	08	4.0	4.1	
	1462										
060776	1575	100	100	87	59	41	24	12	7.0	4.3	74
	1559	100	100	95	63	46	27	16	6.0	4.5	79
	1420										
	1438										
060876	1608	100	99	86	52	42	25	12	8.0	4.3	79
	1590	100	99	87	57	41	24	12	9.0	4.4	73
	1529										
	1544										
060976	1563	100	100	90	60	46	27	14	7.0	4.6	73
	1559	100	100	86	52	42	25	12	8.0	4.3	74
	1529										
	1514										
061076	1345	100	100	90	54	42	25	12	6.0	4.1	70
	1616	100	100	93	60	46	27	14	9.0	4.6	77
	1363										
062876	2029	100	100	88	61	50	28	15	6.0	4.8	86
	1893	100	100	90	59	47	26	14	7.0	4.5	83
	1741										
	1832										
062976	1820	100	98	83	61	49	27	11	5.0	4.4	80
	1635	100	100	89	61	47	24	12	7.0	4.7	84
	1726										

TABLE 11

ROADWAY COMPACTION FROM ACCEPTANCE CORES

SEC	LIFT	LA	DATE LAID	N	MEAN DENS	AIR VOIDS
C01	1BAS	IN	042676	5	142.0	7.9
	1BAS	OU	042676	5	142.0	7.9
	2BAS	IN	052576	5	141.0	8.6
	2BAS	OU	052576	5	141.0	8.6
	1BIN	IN	060876	5	143.5	6.6
	1BIN	OU	060876	5	143.5	6.6
	2BIN	IN	060976	5	141.0	8.2
	2BIN	OU	061076	5	143.5	6.6
	WEAR	IN	062876	5	141.0	8.2
	WEAR	OU	062976	5	138.5	9.8
T01	1BAS	IN	052676	5	142.3	7.7
	1BAS	OU	052676	5	142.3	7.7
	2BAS	IN	052876	5	141.0	8.6
	2BAS	OU	052876	5	141.0	8.6
	1BIN	IN	060776	5	142.3	7.4
	1BIN	OU	060876	5	143.5	6.6
	2BIN	IN	060976	5	141.0	8.2
	2BIN	OU	061076	5	143.5	6.6
	WEAR	IN	062876	5	141.0	8.2
	WEAR	OU	062976	5	138.5	9.8
T02	1BIN	IN	060776	5	142.3	7.4
	1BIN	OU	060876	5	143.5	6.6
	2BIN	IN	060976	5	141.0	8.2
	2BIN	OU	061076	5	143.5	6.6
	WEAR	IN	062876	5	141.0	8.2
	WEAR	OU	062976	5	138.5	9.8

TABLE 11 (CONTINUED)

ROADWAY COMPACTION FROM ACCEPTANCE CORES

SEC	LIFT	LA	DATE LAID	N	MEAN DENS	AIR VOIDS
C02	1BAS	IN	052676	5	142.3	7.7
	1BAS	OU	052676	5	142.3	7.7
	2BAS	IN	052876	5	141.0	8.6
	2BAS	OU	052876	5	141.0	8.6
	1BIN	IN	060776	5	142.3	7.4
	1BIN	OU	060876	5	143.5	6.6
	2BIN	IN	060976	5	141.0	8.2
	2BIN	OU	061076	5	143.5	6.6
	WEAR	IN	062876	5	141.0	8.2
	WEAR	OU	062976	5	138.5	9.8
T03	1BAS	IN	052676	5	142.3	7.7
	1BAS	OU	052676	5	142.3	7.7
	2BAS	IN	052876	5	141.0	8.6
	2BAS	OU	052876	5	141.0	8.6
	1BIN	IN	060976	5	141.0	8.2
	1BIN	OU	061076	5	143.5	6.6
	WEAR	IN	062876	5	141.0	8.2
	WEAR	OU	062976	5	138.5	9.8
T04	1BIN	IN	060976	5	141.0	8.2
	1BIN	OU	061076	5	143.5	6.6
	WEAR	IN	062876	5	141.0	8.2
	WEAR	OU	062976	5	138.5	9.8
T05	1BAS	IN	053176	5	141.6	8.2
	1BAS	OU	052976	5	142.9	7.3
	2BAS	IN	060276	5	142.9	7.3
	2BAS	OU	060276	5	142.9	7.3

TABLE 11 (CONTINUED)
ROADWAY COMPACTION FROM ACCEPTANCE CORES

SEC	LIFT	LA	DATE LAID	N	MEAN DENS	AIR VOIDS
	1BIN	IN	060976	5	141.0	8.2
	1BIN	OU	061076	5	143.5	6.6
	WEAR	IN	062876	5	141.0	8.2
	WEAR	OU	062976	5	138.5	9.8
T06	1BIN	IN	060776	5	142.3	7.4
	1BIN	OU	060876	5	143.5	6.6
	2BIN	IN	060976	5	141.0	8.2
	2BIN	OU	061076	5	143.5	6.6
	WEAR	IN	062876	5	141.0	8.2
	WEAR	OU	062976	5	138.5	9.8
T07	1BAS	IN	052776	5	143.5	6.9
	1BAS	OU	052776	5	143.5	6.9
	2BAS	IN	052776	5	143.5	6.9
	2BAS	OU	052776	5	143.5	6.9
	1BIN	IN	060776	5	142.3	7.4
	1BIN	OU	060876	5	143.5	6.6
	2BIN	IN	060976	5	141.0	8.2
	2BIN	OU	061076	5	143.5	6.6
	WEAR	IN	062876	5	141.0	8.2
	WEAR	OU	062976	5	138.5	9.8
C03	1BAS	IN	052876	5	141.0	8.6
	1BAS	OU	052876	5	141.0	8.6
	2BAS	IN	053176	5	141.6	8.2
	2BAS	OU	060276	5	142.9	7.3
	1BIN	IN	060776	5	142.3	7.4
	1BIN	OU	060876	5	143.5	6.6
	2BIN	IN	060976	5	141.0	8.2
	2BIN	OU	061076	5	143.5	6.6

TABLE 11 (CONTINUED)
ROADWAY COMPACTION FROM ACCEPTANCE CORES

SEC	LIFT	LA	DATE LAID	N	MEAN DENS	AIR VOIDS
	WEAR	IN	062876	5	141.0	8.2
	WEAR	OU	062976	5	138.5	9.8
T08	1BIN	IN	060976	5	141.0	8.2
	1BIN	OU	061076	5	143.5	6.6
	WEAR	IN	062876	5	141.0	8.2
	WEAR	OU	062976	5	138.5	9.8
T09	1BIN	IN	060776	5	142.3	7.4
	1BIN	OU	060876	5	143.5	6.6
	2BIN	IN	060976	5	141.0	8.2
	2BIN	OU	061076	5	143.5	6.6
	WEAR	IN	062876	5	141.0	8.2
	WEAR	OU	062976	5	138.5	9.8
T10	1BIN	IN	060976	5	141.0	8.2
	1BIN	OU	061076	5	143.5	6.6
	WEAR	IN	062876	5	141.0	8.2
	WEAR	OU	062976	5	138.5	9.8
T11	1BAS	IN	041976	5	144.1	6.9
	1BAS	OU	041976	5	144.1	6.9
	2BAS	IN	041976	5	144.1	6.9
	2BAS	OU	041976	5	144.1	6.9
	1BIN	IN	060776	5	142.3	7.4
	1BIN	OU	060876	5	143.5	6.6
	2BIN	IN	060976	5	141.0	8.2
	2BIN	OU	061076	5	143.5	6.6
	WEAR	IN	062876	5	141.0	8.2
	WEAR	OU	062976	5	138.5	9.8

TABLE 11 (CONTINUED)
ROADWAY COMPACTION FROM ACCEPTANCE CORES

SEC	LIFT	LA	DATE LAID	N	MEAN DENS	AIR VOIDS
T12	1BIN	IN	060776	5	142.3	7.4
	1BIN	OU	060876	5	143.5	6.6
	2BIN	IN	060976	5	141.0	8.2
	2BIN	OU	061076	5	143.5	6.6
	WEAR	IN	062876	5	141.0	8.2
	WEAR	OU	062876	5	141.0	8.2
T13	1BIN	IN	060976	5	141.0	8.2
	1BIN	OU	061076	5	143.5	6.6
	WEAR	IN	062876	5	141.0	8.2
	WEAR	OU	062876	5	141.0	8.2
T14	1BAS	IN	041976	5	144.1	6.9
	1BAS	OU	041976	5	144.1	6.9
	2BAS	IN	042276	5	139.2	10.4
	2BAS	OU	042276	5	139.2	10.4
	1BIN	IN	060976	5	141.0	8.2
	1BIN	OU	061076	5	143.5	6.6
	WEAR	IN	062876	5	141.0	8.2
	WEAR	OU	062876	5	141.0	8.2
C04	1BAS	IN	041976	5	144.1	6.9
	1BAS	OU	041976	5	144.1	6.9
	2BAS	IN	042276	5	139.2	10.4
	2BAS	OU	042276	5	139.2	10.4
	1BIN	IN	060776	5	142.3	7.4
	1BIN	OU	060876	5	143.5	6.6
	2BIN	IN	060876	5	143.5	6.6
	2BIN	OU	061076	5	143.5	6.6
	WEAR	IN	062876	5	141.0	8.2
	WEAR	OU	062876	5	141.0	8.2

TABLE 12

ROADWAY COMPACTION AT SPECIFIC LOCATIONS

SEC	STA. NO.	LIFT	DATE LAID	DENSITY	% AIR VOID
C01	158 + 50	1BAS	042676	141.6	8.2
	158.+ 50	2BAS	052576	137.4	10.9
	158 + 50	1BIN	060976	142.3	7.4
	158 + 50	2BIN	061076	144.8	5.7
	158 + 50	WEAR	062976	135.9	11.5
	160 + 50	1BAS	042676	138.8	10.0
	160 + 50	2BAS	052576	135.8	11.9
	160 + 50	1BIN	060976	144.4	6.0
	160 + 50	2BIN	061076	142.5	7.2
	160.+ 50	WEAR	062976	137.2	10.7
	161 + 50	1BAS	042676	136.3	11.6
	161 + 50	2BAS	052576	135.8	11.9
	161 + 50	1BIN	060976	BROKEN CORE	
	161 + 50	2BIN	061076	144.6	5.9
	161.50	WEAR	062976	137.0	10.8
T01	164 + 50	1BAS	052676	140.5	8.9
	164 + 50	2BAS	052876	140.2	9.0
	164 + 50	1BIN	060776	144.1	6.2
	164.+ 50	2BIN	060876	142.8	7.0
	164 + 50	WEAR	062976	138.9	9.6
	166 + 50	1BAS	052676	BROKEN CORE	
	166 + 50	2BAS	052876	BROKEN CORE	
	166 + 50	1BIN	060776	142.3	7.4
	166 + 50	2BIN	060876	145.8	5.0

TABLE 12 (CONTINUED)

ROADWAY COMPACTION AT SPECIFIC LOCATIONS

SEC	STA. NO.	LIFT	DATE LAID	DENSITY	% AIR VOID
	166 + 50	WEAR	062976	141.2	8.0
	167 + 50	1BAS	052676	140.1	9.1
	167 + 50	2BAS	052876	135.6	12.1
	167 + 50	1BIN	060776	144.3	6.1
	167 + 50	2BIN	060876	144.3	6.1
	167 + 50	WEAR	062976	138.7	9.7
T02	170 + 50	1BIN	060776	*148.5	* 3.3
	170 + 50	2BIN	060876	145.5	5.3
	170 + 50	WEAR	062976	138.2	10.0
	172 + 50	1BIN	060776	*147.5	* 4.0
	172 + 50	2BIN	060876	143.4	6.6
	172 + 50	WEAR	062976	140.2	8.7
	173 + 50	1BIN	060776	BROKEN CORE	
	173 + 50	2BIN	060876	143.1	6.8
	173 + 50	WEAR	062976	140.5	8.5
C02	176 + 50	1BAS	052676	141.2	8.4
	176 + 50	2BAS	052876	138.5	10.2
	176 + 50	1BIN	060776	BROKEN CORE	
	176 + 50	2BIN	060876	144.0	6.3
	176 + 50	WEAR	062976	136.9	10.9
	178 + 50	1BAS	052676	143.8	6.7
	178 + 50	2BAS	052876	141.5	8.2
	178 + 50	1BIN	060776	145.0	5.6
	178 + 50	2BIN	060876	BROKEN CORE	
	178 + 50	WEAR	062976	140.3	8.7

TABLE 12 (CONTINUED)

ROADWAY COMPACTION AT SPECIFIC LOCATIONS

SEC	STA. NO.	LIFT	DATE LAID	DENSITY	% AIR VOID
	179 + 50	1BAS	052676	BROKEN CORE	
	179 + 50	2BAS	052876	143.5	6.9
	179 + 50	1BIN	060776	146.5	4.6
	179 + 50	2BIN	060876	143.4	6.6
	179 + 50	WEAR	062976	139.2	9.4
T03	182 + 50	1BAS	052676	*143.4	* 7.0
	182 + 50	2BAS	052876	139.2	9.7
	182 + 50	1BIN	061076	142.9	7.0
	182 + 50	WEAR	062976	142.0	7.6
	184 + 50	1BAS	052676	*144.6	* 6.2
	184 + 50	2BAS	052876	139.7	9.4
	184 + 50	1BIN	061076	143.1	6.8
	184 + 50	WEAR	062976	138.7	9.7
	185 + 50	1BAS	052676	BROKEN CORE	
	185 + 50	2BAS	052876	138.5	10.2
	185 + 50	1BIN	061076	143.6	6.5
	185 + 50	WEAR	062976	140.3	8.6
T04	188 + 50	1BIN	061076	BROKEN CORE	
	188 + 50	WEAR	062976	138.6	9.8
	190 + 50	1BIN	061076	*144.7	* 5.8
	190 + 50	WEAR	062976	136.2	11.3
	191 + 50	1BIN	061076	141.1	8.1
	191 + 50	WEAR	062976	136.8	10.9

TABLE 12 (CONTINUED)
ROADWAY COMPACTION AT SPECIFIC LOCATIONS

SEC	STA. NO.	LIFT	DATE LAID	DENSITY	% AIR VOID
T05	195 + 25	1BAS	052976	BROKEN CORE	
	195 + 25	2BAS	053176	141.5	8.2
	195 + 25	1BIN	061076	142.6	7.5
	195 + 25	WEAR	062976	138.5	9.8
	197 + 25	1BAS	052976	*146.2	* 5.2
	197 + 25	2BAS	060276	141.9	8.0
	197 + 25	1BIN	061076	140.0	8.9
	197 + 25	WEAR	062976	137.8	10.3
	198 + 25	1BAS	052976	143.2	7.1
	198 + 25	2BAS	060276	142.9	7.3
	198 + 25	1BIN	061076	140.1	8.8
	198 + 25	WEAR	062976	137.0	10.8
T06	201 + 25	1BIN	060876	*145.9	* 5.0
	201 + 25	2BIN	061076	144.2	6.1
	201 + 25	WEAR	062976	137.8	10.3
	203 + 25	1BIN	060876	*147.6	* 3.9
	203 + 25	2BIN	061076	142.0	7.6
	203 + 25	WEAR	062976	137.0	10.8
	204 + 25	1BIN	060876	BROKEN CORE	
	204 + 25	2BIN	061076	142.7	7.1
	204 + 25	WEAR	062976	136.4	11.2
T07	207 + 25	1BAS	052776	*143.7	* 6.8
	207 + 25	2BAS	052776	140.8	8.7
	207 + 25	1BIN	060876	*143.9	* 6.3
	207 + 25	2BIN	061076	142.6	7.2

TABLE 12 (CONTINUED)

ROADWAY COMPACTION AT SPECIFIC LOCATIONS

SEC	STA. NO.	LIFT	DATE LAID	DENSITY	% AIR VOID
	207 + 25	WEAR	062976	137.3	10.6
	209 + 25	1BAS	052776	*143.5	* 6.9
	209 + 25	2BAS	052776	139.3	9.7
	209 + 25	1BIN	060876	*145.9	* 5.0
	209 + 25	2BIN	061076	144.1	6.2
	209 + 25	WEAR	062976	136.2	10.0
	210 + 25	1BAS	052776	BROKEN CORE	
	210 + 25	2BAS	052776	140.3	9.0
	210 + 25	1BIN	060876	BROKEN CORE	
	210 + 25	2BIN	061076	143.5	6.7
	210 + 25	WEAR	062976	137.5	10.5
C03	213 + 25	1BAS	052876	BROKEN CORE	
	213 + 25	2BAS	060276	140.6	8.8
	213 + 25	1BIN	060876	142.8	7.0
	213 + 25	2BIN	061076	143.0	6.9
	213 + 25	WEAR	062876	137.8	10.3
	215 + 25	1BAS	052876	140.4	8.9
	215 + 25	2BAS	060276	140.6	8.8
	215 + 25	1BIN	060876	141.6	7.8
	215 + 25	2BIN	061076	144.6	5.9
	215 + 25	WEAR	062876	138.5	9.8
	216 + 25	1BAS	052876	*147.0	*4.7
	216 + 25	2BAS	060276	140.3	9.0
	216 + 25	1BIN	060876	142.2	7.4
	216 + 25	2BIN	061076	143.9	6.3
	216 + 26	WEAR	062876	138.2	10.0

TABLE 12 (CONTINUED)

ROADWAY COMPACTION AT SPECIFIC LOCATIONS

SEC	STA. NO.	LIFT	DATE LAID	DENSITY	% AIR VOID
T08	219 + 25	1BIN	061076	143.2	6.8
	219 + 25	WEAR	062976	140.2	8.7
	221 + 25	1BIN	061076	*143.1	* 6.8
	221 + 25	WEAR	062976	136.5	11.1
	222 + 25	1BIN	061076	142.5	7.2
	222 + 25	WEAR	062976	134.5	12.4
T09	225 + 25	1BIN	060876	BROKEN CORE	
	225 + 25	2BIN	061076	144.3	6.1
	225 + 25	WEAR	062876	139.1	9.4
	227 + 25	1BIN	060876	BROKEN CORE	
	227 + 25	2BIN	061076	143.2	6.8
	227 + 25	WEAR	062976	136.9	10.9
	228 + 25	1BIN	060876	BROKEN CORE	
	228 + 25	2BIN	061076	140.8	8.3
	228 + 25	WEAR	062976	138.0	10.2
T10	231 + 25	1BIN	061076	141.7	7.7
	231 + 25	WEAR	062976	141.5	7.9
	233 + 25	1BIN	061076	141.5	7.9
	233 + 25	WEAR	062976	142.5	7.2
	234 + 25	1BIN	061076	142.5	7.2
	234 + 25	WEAR	062976	140.0	8.9
T11	237 + 25	1BAS	041976	*145.2	* 6.1

TABLE 12 (CONTINUED)

ROADWAY COMPACTION AT SPECIFIC LOCATIONS

SEC	STA. NO.	LIFT	DATE LAID	DENSITY	% AIR VOID
	237 + 25	2BAS	041976	142.6	7.0
	237 + 25	1BIN	060876	*141.6	* 7.8
	237 + 25	2BIN	061076	141.6	7.8
	237 + 25	WEAR	062976	136.2	11.3
	239 + 25	1BAS	041976	*145.0	* 6.3
	239 + 25	2BAS	041976	144.9	6.3
	239 + 25	1BIN	060876	142.7	7.1
	239 + 25	2BIN	061076	142.0	7.6
	239 + 25	WEAR	062976	*143.1	* 6.8
	240 + 25	1BAS	041976	BROKEN CORE	
	240 + 25	2BAS	041976	145.3	6.1
	240 + 25	1BIN	060876	BROKEN CORE	
	240 + 25	2BIN	061076	145.3	5.4
	240 + 25	WEAR	062976	132.9	13.5
T12	243 + 25	1BIN	060876	BROKEN CORE	
	243 + 25	2BIN	061076	'143.8	6.4
	243 + 25	WEAR	062876	135.2	12.0
	245 + 25	1BIN	060876	142.1	7.5
	245 + 25	1BIN	061076	142.1	7.5
	245 + 25	WEAR	062876	135.4	11.8
	246 + 25	1BIN	060876	142.3	7.4
	246 + 25	1BIN	061076	143.7	6.4
	246 + 25	WEAR	062876	136.2	11.3

TABLE 12 (CONTINUED)

ROADWAY COMPACTION AT SPECIFIC LOCATIONS

SEC	STA. NO.	LIFT	DATE LAID	DENSITY	% AIR VOID
T13	249 + 25	1BIN	061076	141.8	7.7
	249 + 25	WEAR	062876	132.8	13.5
	251 + 25	1BIN	061076	143.9	6.3
	251 + 25	WEAR	062876	131.0	14.7
	252 + 25	1BIN	061076	142.4	7.3
	252 + 25	WEAR	062876	132.7	13.6
T14	255 + 25	1BAS	041976	BROKEN CORE	
	255 + 25	2BAS	042276	144.0	7.3
	255 + 25	1BIN	061076	143.6	6.5
	255 + 25	WEAR	062876	136.6	11.1
	257 + 25	1BAS	041976	*144.8	* 6.4
	257 + 25	2BAS	042276	143.0	7.9
	257 + 25	1BIN	061076	*145.3	* 5.4
	257 + 25	WEAR	062876	134.7	12.3
	258 + 25	1BAS	041976	143.3	7.4
	258 + 25	2BAS	042276	140.8	9.3
	258 + 25	1BIN	061076	BROKEN CORE	
	258 + 25	WEAR	062876	136.6	11.7
C04	261 + 25	1BAS	041976	146.1	5.6
	261 + 25	2BAS	042276	141.3	9.0
	261 + 25	1BIN	060876	*146.9	4.4
	261 + 25	2BIN	061076	142.8	7.0
	261 + 25	WEAR	062876	138.0	10.2

TABLE 12 (CONTINUED)

ROADWAY COMPACTION AT SPECIFIC LOCATIONS

SEC	STA. NO.	LIFT	DATE LAID	DENSITY	% AIR VOID
	263 + 25	1BAS	041976	144.9	6.3
	263 + 25	2BAS	042276	143.0	7.9
	263 + 25	1BIN	060876	*143.0	* 4.9
	263 + 25	2BIN	061076	143.1	6.8
	263 + 25	WEAR	062876	139.2	9.4
	264 + 25	1BAS	041976	144.4	6.7
	264 + 25	2BAS	042276	140.0	9.9
	264 + 25	1BIN	060876	BROKEN CORE	
	264 + 25	2BIN	061076	142.5	7.2
	264 + 25	WEAR	062876	140.3	8.7

* Cores used to determine these densities and % Air Voids were taken 10 months after initial evaluation.

APPENDIX G

COMPREHENSIVE DATA AND STANDARD STATISTICS ON DYNAFLECT AND BENKELMAN BEAM DEFLECTIONS

TABLE 13

COMPREHENSIVE DATA ON DYNAFLECT & BENKELMAN BEAM DEFLECTIONS FOR LOUISIANA EXPERIMENTAL BASE COURSE

16:20 FRIDAY, FEBRUARY 9, 1979

S1-S5=GEOPHONE SENSORS, TEMP1=SURFACE TEMP, TEMP2=MIDDEPTH TEMP, CF=CORRECTION FACTOR, BB1=INITIAL BENKELMAN BEAM(BB) DEFLECTION
BB2=INTERMEDIATE BB DEFLECTION, BB3=FINAL BB DEFLECTION
L1=EMBANKMENT, L2=SELECT, L3=SOIL CEMENT, L4=BLACK BASE L5=BINDER, L6=WEARING

SECT	STATION	DATE	LAYER	LOC	S1	S2	S3	S4	S5	TEMP1	TEMP2	CF	BB1	BB2	BB3	DMO	SCI	BCI	SPREAD
C01	158+00	092975	L1	06R	3.50	1.80	1.35	0.60	0.51	.	.	1.00	.	.	.	3.50	1.70	0.09	44.3
C01	159+00	092975	L1	06L	4.50	2.19	1.44	0.67	0.54	.	.	1.00	.	.	.	4.50	2.31	0.13	41.5
C01	160+00	092975	L1	06R	4.70	2.10	1.50	0.93	0.66	.	.	1.00	.	.	.	4.70	2.60	0.27	42.1
C01	161+00	092975	L1	06L	5.00	2.07	1.20	0.68	0.58	.	.	1.00	.	.	.	5.00	2.93	0.10	38.1
C01	162+00	092975	L1	06R	4.30	2.46	1.50	1.05	0.72	.	.	1.00	.	.	.	4.30	1.84	0.33	46.7
C01	158+00	101475	L2	06R	3.10	1.74	1.12	0.70	0.58	.	.	1.00	0.550	0.594	0.596	3.10	1.36	0.12	46.7
C01	159+00	101475	L2	06L	2.55	1.38	0.90	0.58	0.48	.	.	1.00	.	.	.	2.55	1.17	0.10	46.2
C01	160+00	101475	L2	06R	2.43	1.65	1.17	0.74	0.61	.	.	1.00	0.255	0.285	0.285	2.43	0.78	0.13	54.3
C01	161+00	101475	L2	06L	3.20	2.13	1.38	0.77	0.60	.	.	1.00	.	.	.	3.20	1.07	0.17	50.5
C01	162+00	101475	L2	06R	3.10	1.83	1.26	0.90	0.63	.	.	1.00	0.773	0.815	0.817	3.10	1.27	0.27	49.8
C01	159+00		L3		.	.	.	.	.	.	.	1.00	.	.	.	.	.	.	.
C01	160+00		L3		.	.	.	.	.	.	.	1.00	.	.	.	.	.	.	.
C01	161+00		L3		.	.	.	.	.	.	.	1.00	.	.	.	.	.	.	.
C01	162+00		L3		.	.	.	.	.	.	.	1.00	.	.	.	.	.	.	.
C01	158+00	052876	L4	09R	1.35	1.14	0.96	0.71	0.60	78	74	0.80	0.620	0.626	0.626	1.08	0.21	0.11	70.5
C01	159+00	052876	L4	09R	1.26	1.08	0.93	0.70	0.56	78	74	0.80	.	.	.	1.01	0.18	0.14	71.9
C01	160+00	052876	L4	09R	1.17	1.05	0.93	0.70	0.60	78	74	0.80	0.535	0.543	0.543	0.94	0.12	0.10	76.1
C01	161+00	052876	L4	09R	1.11	0.99	0.90	0.68	0.58	78	74	0.80	.	.	.	0.89	0.12	0.10	76.8
C01	162+00	052876	L4	09R	1.26	1.11	0.99	0.75	0.64	78	74	0.80	0.793	0.808	0.808	1.01	0.15	0.11	75.4
C01	158+00	061676	L5	09R	1.05	0.90	0.74	0.62	0.53	78	74	0.80	0.383	0.394	0.395	0.84	0.15	0.09	73.1
C01	159+00	061676	L5	09R	0.93	0.76	0.68	0.56	0.48	78	74	0.80	.	.	.	0.74	0.17	0.08	73.3
C01	160+00	061676	L5	09R	0.83	0.75	0.70	0.63	0.51	78	74	0.80	0.578	0.592	0.594	0.66	0.08	0.12	82.4
C01	161+00	061676	L5	09R	0.81	0.76	0.66	0.57	0.49	78	74	0.80	.	.	.	0.65	0.05	0.08	81.2
C01	162+00	061676	L5	09R	0.82	0.74	0.68	0.60	0.51	78	74	0.80	0.393	0.406	0.408	0.66	0.08	0.09	81.7
C01	158+00	071476	L6	09R	0.99	0.90	0.73	0.61	0.51	127	111	0.50	0.367	0.374	0.375	0.50	0.09	0.10	75.6
C01	159+00	071476	L6	09R	0.90	0.73	0.68	0.57	0.49	127	111	0.50	.	.	.	0.45	0.17	0.08	74.9
C01	160+00	071476	L6	09R	0.99	0.77	0.70	0.60	0.51	127	111	0.50	0.079	0.087	0.088	0.50	0.22	0.09	72.1
C01	161+00	071476	L6	09R	0.90	0.70	0.64	0.55	0.47	127	111	0.50	.	.	.	0.45	0.20	0.08	72.4
C01	162+00	071476	L6	09R	0.90	0.71	0.66	0.57	0.49	127	111	0.80	0.427	0.437	0.440	0.72	0.19	0.08	74.0
C02	176+00	092975	L1	06L	5.40	1.83	0.93	0.63	0.60	.	.	1.00	.	.	.	5.40	3.57	0.03	34.8
C02	177+00	092975	L1	06R	4.80	3.70	1.29	0.61	0.41	.	.	1.00	.	.	.	4.80	1.10	0.20	45.0
C02	178+00	092975	L1	06L	4.64	2.19	1.20	0.72	0.50	.	.	1.00	.	.	.	4.64	2.45	0.22	39.9
C02	179+00	092975	L1	06R	3.50	1.56	0.90	0.55	0.42	.	.	1.00	.	.	.	3.50	1.94	0.13	39.6
C02	180+00	092975	L1	06L	2.58	1.53	1.44	0.78	0.36	.	.	1.00	.	.	.	2.58	1.05	0.42	51.9
C02	176+00	100675	L2	06L	2.64	1.80	1.05	0.62	0.40	.	.	1.00	0.509	0.548	0.549	2.64	0.84	0.22	49.3
C02	177+00	100675	L2	06R	1.59	1.23	0.93	0.62	0.50	.	.	1.00	.	.	.	1.59	0.36	0.12	61.3
C02	178+00	100675	L2	06L	2.01	1.62	1.05	0.66	0.50	.	.	1.00	0.483	0.508	0.509	2.01	0.39	0.16	58.1
C02	179+00	100675	L2	06R	2.10	1.38	0.77	0.48	0.38	.	.	1.00	.	.	.	2.10	0.72	0.10	48.7
C02	180+00	100675	L2	06L	2.49	1.77	1.17	0.78	0.54	.	.	1.00	0.380	0.418	0.419	2.49	0.72	0.24	54.2
C02	176+00	051176	L3	09R	1.95	1.47	1.18	0.70	0.55	.	.	1.00	0.522	0.534	0.534	1.95	0.48	0.15	60.0
C02	177+00	051176	L3	09R	1.29	1.05	0.74	0.58	0.50	.	.	1.00	.	.	.	1.29	0.24	0.08	64.5
C02	178+00	051176	L3	09R	1.98	1.62	1.20	0.93	0.64	.	.	1.00	0.708	0.717	0.718	1.98	0.36	0.29	64.3
C02	179+00	051176	L3	09R	1.86	1.44	1.05	0.68	0.53	.	.	1.00	.	.	.	1.86	0.42	0.15	59.8
C02	180+00	051176	L3	09R	1.80	1.50	1.18	0.90	0.59	.	.	1.00	0.742	0.755	0.757	1.80	0.30	0.31	66.3
C02	176+00	052876	L4	09R	1.68	1.32	1.02	0.66	0.52	72	66	0.90	0.635	0.645	0.645	1.51	0.36	0.14	61.9
C02	177+00	052876	L4	09R	0.93	0.90	0.68	0.54	0.46	72	66	0.90	.	.	.	0.84	0.03	0.08	75.5
C02	178+00	052876	L4	09R	1.77	1.47	1.17	0.90	0.64	72	66	0.90	0.695	0.701	0.701	1.59	0.30	0.26	67.2
C02	179+00	052876	L4	09R	1.50	1.20	0.96	0.71	0.53	72	66	0.90	.	.	.	1.35	0.30	0.18	65.3
C02	180+00	052876	L4	09R	1.47	1.17	0.96	0.69	0.55	72	66	0.90	0.645	0.651	0.651	1.32	0.30	0.14	65.9
C02	176+00	061676	L5	09R	0.88	0.76	0.68	0.54	0.44	82	78	0.75	0.581	0.590	0.591	0.66	0.12	0.10	75.0

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
BATON ROUGE, LOUISIANA

COMPREHENSIVE DATA ON DYNAFLECT & BENKELMAN BEAM DEFLECTIONS FOR LOUISIANA EXPERIMENTAL BASE COURSE

16:20 FRIDAY, FEBRUARY 9, 1979

S1-S5=GEOPHONE SENSORS, TEMP1=SURFACE TEMP, TEMP2=MIDDEPTH TEMP, CF=CORRECTION FACTOR, BB1=INITIAL BENKELMAN BEAM(BB) DEFLECTION
BB2=INTERMEDIATE BB DEFLECTION, BB3=FINAL BB DEFLECTION
L1=EMBANKMENT, L2=SELECT, L3=SOIL CEMENT, L4=BLACK BASE L5=BINDER, L6=WEARING

SECT	STATION	DATE	LAYER	LOC	S1	S2	S3	S4	S5	TEMP1	TEMP2	CF	BB1	BB2	BB3	DMD	SCI	BCI	SPREAD
C02	177+00	061676	L5	09R	0.58	0.52	0.50	0.42	0.37	82	78	0.75	.	.	.	0.44	0.06	0.05	82.4
C02	178+00	061676	L5	09R	0.96	0.80	0.73	0.61	0.52	82	78	0.75	0.607	0.620	0.621	0.72	0.16	0.09	75.4
C02	179+00	061676	L5	09R	0.73	0.64	0.56	0.46	0.40	82	78	0.75	.	.	.	0.55	0.09	0.06	76.4
C02	180+00	061676	L5	09R	0.84	0.73	0.66	0.58	0.48	82	78	0.75	0.398	0.407	0.408	0.63	0.11	0.10	78.3
C02	176+00	071476	L6	09R	0.79	0.70	0.59	0.51	0.43	142	123	0.50	0.235	0.243	0.244	0.40	0.09	0.06	[illegible]
C02	177+00	071476	L6	09R	0.68	0.57	0.52	0.43	0.37	142	123	0.50	.	.	.	0.34	0.11	0.06	75.6
C02	178+00	071476	L6	09R	0.99	0.76	0.70	0.59	0.50	142	123	0.50	0.228	0.241	0.244	0.50	0.23	0.09	71.5
C02	179+00	071476	L6	09R	0.71	0.61	0.56	0.47	0.40	142	123	0.50	.	.	.	0.36	0.10	0.07	77.5
C02	180+00	071476	L6	09R	0.80	0.70	0.65	0.55	0.46	142	123	0.50	0.181	0.190	0.191	0.40	0.10	0.09	79.0
C03	212+75	092475	L1	06L	3.00	1.29	0.93	0.76	0.62	.	.	1.00	.	.	.	3.00	1.71	0.14	44.0
C03	213+75	092475	L1	06R	3.60	2.04	1.14	0.99	0.53	.	.	1.00	.	.	.	3.60	1.56	0.46	46.1
C03	214+75	092475	L1	06L	3.40	2.10	1.35	0.99	0.71	.	.	1.00	.	.	.	3.40	1.30	0.28	50.3
C03	215+75	092475	L1	06R	3.20	2.07	1.26	0.90	0.68	.	.	1.00	.	.	.	3.20	1.13	0.22	50.7
C03	216+75	092475	L1	06L	3.00	2.01	1.29	0.99	0.67	.	.	1.00	.	.	.	3.00	0.99	0.32	53.1
C03	212+75	100775	L2	06L	2.25	1.62	1.08	0.69	0.52	.	.	1.00	.	.	.	2.25	0.63	0.17	54.8
C03	213+75	100775	L2	06R	2.04	1.38	0.96	0.68	0.51	.	.	1.00	0.710	0.731	0.731	2.04	0.66	0.17	54.6
C03	214+75	100775	L2	06L	3.10	1.95	1.26	0.90	0.60	.	.	1.00	0.464	0.514	0.514	3.10	1.15	0.30	50.4
C03	215+75	100775	L2	06R	2.13	1.59	1.14	0.80	0.62	.	.	1.00	0.634	0.653	0.653	2.13	0.54	0.18	59.0
C03	216+75	100775	L2	06L	2.07	1.50	1.08	0.74	0.59	.	.	1.00	.	.	.	2.07	0.57	0.15	57.8
C03	212+75	051176	L3	09R	2.40	1.68	1.17	0.78	0.59	.	.	1.00	0.736	0.752	0.752	2.40	0.72	0.19	55.2
C03	213+75	051176	L3	09R	1.98	1.59	1.20	0.77	0.58	.	.	1.00	.	.	.	1.98	0.39	0.19	61.8
C03	214+75	051176	L3	09R	2.34	1.68	1.11	0.70	0.53	.	.	1.00	0.752	0.764	0.765	2.34	0.66	0.17	54.4
C03	215+75	051176	L3	09R	1.83	1.50	1.17	0.90	0.61	.	.	1.00	.	.	.	1.83	0.33	0.29	65.7
C03	216+75	051176	L3	09R	3.00	1.83	1.20	0.77	0.59	.	.	1.00	0.519	0.547	0.548	3.00	1.17	0.18	49.3
C03	212+75	060476	L4	09R	1.35	1.14	0.93	0.68	0.55	91	82	0.70	0.798	0.816	0.818	0.94	0.21	0.13	68.9
C03	213+75	060476	L4	09R	1.20	1.05	0.93	0.69	0.57	91	82	0.70	.	.	.	0.84	0.15	0.12	74.0
C03	214+75	060476	L4	09R	1.29	1.08	0.93	0.67	0.55	91	82	0.70	0.762	0.787	0.788	0.90	0.21	0.12	70.1
C03	215+75	060476	L4	09R	1.14	0.99	0.81	0.65	0.54	91	82	0.70	.	.	.	0.80	0.15	0.11	72.5
C03	216+75	060476	L4	09R	1.29	1.08	0.90	0.66	0.54	91	82	0.70	0.863	0.882	0.884	0.90	0.21	0.12	69.3
C03	212+75	061576	L5	09R	1.20	1.02	0.81	0.65	0.56	97	81	0.70	0.958	0.971	0.971	0.84	0.18	0.09	70.7
C03	213+75	061576	L5	09R	1.23	1.02	0.93	0.68	0.60	97	81	0.70	.	.	.	0.86	0.21	0.08	72.5
C03	214+75	061576	L5	09R	0.93	0.72	0.64	0.54	0.45	136	117	0.50	0.615	0.621	0.622	0.47	0.21	0.09	70.5
C03	215+75	061576	L5	09R	1.11	0.96	0.80	0.66	0.58	97	81	0.70	.	.	.	0.78	0.15	0.08	74.1
C03	216+75	061576	L5	09R	1.32	1.08	0.93	0.68	0.59	97	81	0.70	0.160	0.175	0.176	0.92	0.24	0.09	69.7
C03	214+75	071576	L6	09R	0.93	0.72	0.64	0.54	0.45	136	117	0.50	0.615	0.621	0.622	0.47	0.21	0.09	70.5
C03	212+75	071576	L6	09R	0.73	0.67	0.60	0.50	0.43	136	117	0.50	0.548	0.554	0.555	0.37	0.06	0.07	80.3
C03	213+75	071576	L6	09R	0.96	0.75	0.67	0.56	0.47	136	117	0.50	.	.	.	0.48	0.21	0.09	71.0
C03	215+75	071576	L6	09R	0.80	0.69	0.57	0.52	0.45	136	117	0.50	.	.	.	0.40	0.11	0.07	75.7
C03	216+75	071576	L6	09R	0.90	0.79	0.70	0.57	0.48	136	117	0.50	0.521	0.528	0.529	0.45	0.11	0.09	76.4
C04	260+75	092275	L1	06L	3.90	1.68	0.79	0.59	0.48	.	.	1.00	.	.	.	3.90	2.22	0.11	38.2
C04	261+75	092275	L1	06R	3.00	1.89	1.05	0.71	0.52	.	.	1.00	.	.	.	3.00	1.11	0.19	47.8
C04	262+75	092275	L1	06L	2.16	1.50	0.99	0.71	0.53	.	.	1.00	.	.	.	2.16	0.66	0.18	54.5
C04	263+75	092275	L1	06R	5.60	2.25	1.02	0.73	0.55	.	.	1.00	.	.	.	5.60	3.35	0.18	36.2
C04	264+75	092275	L1	06L	2.34	1.44	0.78	0.58	0.45	.	.	1.00	.	.	.	2.34	0.90	0.13	47.8
C04	260+75	100675	L2	06L	1.80	1.29	0.90	0.62	0.48	.	.	1.00	.	.	.	1.80	0.51	0.14	56.6
C04	261+75	100675	L2	06R	2.07	1.47	0.93	0.57	0.45	.	.	1.00	0.652	0.670	0.671	2.07	0.60	0.12	53.0
C04	262+75	100675	L2	06L	2.22	1.62	1.08	0.74	0.61	.	.	1.00	0.616	0.639	0.640	2.22	0.60	0.13	56.5
C04	263+75	100675	L2	06R	1.62	1.23	0.76	0.58	0.48	.	.	1.00	0.839	0.854	0.855	1.62	0.39	0.10	57.7
C04	264+75	100675	L2	06L	2.07	1.47	0.93	0.60	0.50	.	.	1.00	.	.	.	2.07	0.60	0.10	53.8
C04	260+75		L3		.	.	.	.	.	.	.	1.00	.	.	.	.	.	.	.

COMPREHENSIVE DATA ON DYNAFLECT & BENKELMAN BEAM DEFLECTIONS FOR LOUISIANA EXPERIMENTAL BASE COURSE

16:20 FRIDAY, FEBRUARY 9, 1979

S1-S5=GEOPHONE SENSORS, TEMP1=SURFACE TEMP, TEMP2=MIDDEPTH TEMP, CF=CORRECTION FACTOR, BB1=INITIAL BENKELMAN BEAM(BB) DEFLECTION
BB2=INTERMEDIATE BB DEFLECTION, BB3=FINAL BB DEFLECTION
L1=EMBANKMENT, L2=SELECT, L3=SOIL CEMENT, L4=BLACK BASE L5=BINDER, L6=WEARING

SECT	STATION	DATE	LAYER	LOC	S1	S2	S3	S4	S5	TEMP1	TEMP2	CF	BB1	BB2	BB3	DMD	SCI	BCI	SPREAD
C04	261+75		L3		.	.	.	.	.	.	.	1.00	.	.	.	.	.	.	.
C04	262+75		L3		.	.	.	.	.	.	.	1.00	.	.	.	.	.	.	.
C04	263+75		L3		.	.	.	.	.	.	.	1.00	.	.	.	.	.	.	.
C04	264+75		L3		.	.	.	.	.	.	.	1.00	.	.	.	.	.	.	.
C04	260+75	042676	L4	09R	1.29	1.11	0.90	0.65	0.54	103	83	0.70	0.507	0.517	0.518	0.90	0.18	0.11	69.6
C04	261+75	042676	L4	09R	1.17	0.99	0.70	0.67	0.47	103	83	0.70	.	.	.	0.82	0.18	0.20	68.4
C04	262+75	042676	L4	09R	1.32	1.11	0.90	0.67	0.55	103	83	0.70	0.500	0.512	0.514	0.92	0.21	0.12	68.9
C04	263+75	042676	L4	09R	1.14	0.99	0.73	0.60	0.50	103	83	0.70	.	.	.	0.80	0.15	0.10	69.5
C04	264+75	042676	L4	09R	1.11	0.99	0.70	0.56	0.47	103	83	0.70	0.477	0.487	0.488	0.78	0.12	0.09	69.0
C04	260+75	061576	L5	09R	0.85	0.74	0.69	0.60	0.48	78	73	0.80	0.063	0.074	0.075	0.68	0.11	0.12	79.1
C04	261+75	061576	L5	09R	0.86	0.76	0.70	0.59	0.50	78	73	0.80	.	.	.	0.69	0.10	0.09	79.3
C04	262+75	061576	L5	09R	0.85	0.75	0.69	0.56	0.50	78	73	0.80	0.316	0.328	0.330	0.68	0.10	0.06	78.8
C04	263+75	061576	L5	09R	0.85	0.77	0.71	0.58	0.50	78	73	0.80	.	.	.	0.68	0.08	0.08	80.2
C04	264+75	061576	L5	09R	0.76	0.67	0.63	0.51	0.43	78	73	0.80	0.394	0.405	0.406	0.61	0.09	0.08	78.9
C04	260+75	071676	L6	09R	0.76	0.67	0.62	0.51	0.44	116	108	0.50	0.650	0.659	0.660	0.38	0.09	0.07	78.9
C04	261+75	071676	L6	09R	0.67	0.59	0.54	0.45	0.39	116	108	0.50	.	.	.	0.34	0.08	0.06	78.8
C04	262+75	071676	L6	09R	0.79	0.70	0.62	0.54	0.46	116	108	0.50	0.636	0.644	0.646	0.40	0.09	0.08	78.7
C04	263+75	071676	L6	09R	0.66	0.58	0.49	0.45	0.38	116	108	0.50	.	.	.	0.33	0.08	0.07	77.6
C04	264+75	071676	L6	09R	0.62	0.56	0.50	0.43	0.37	116	108	0.50	0.757	0.764	0.765	0.31	0.06	0.06	80.0
T01	164+00	092975	L1	06L	5.80	2.34	1.26	0.99	0.72	.	.	1.00	.	.	.	5.80	3.46	0.27	38.3
T01	165+00	092975	L1	06R	3.30	1.86	1.26	1.02	0.73	.	.	1.00	.	.	.	3.30	1.44	0.29	49.5
T01	166+00	092975	L1	06L	5.80	2.49	1.38	1.29	0.90	.	.	1.00	.	.	.	5.80	3.31	0.39	40.9
T01	167+00	092975	L1	06R	6.30	3.90	1.50	0.96	0.79	.	.	1.00	.	.	.	6.30	2.40	0.17	42.7
T01	168+00	092975	L1	06L	5.20	2.19	1.23	0.96	0.70	.	.	1.00	.	.	.	5.20	3.01	0.26	39.5
T01	164+00	052576	L2	06L	2.25	1.59	1.14	0.78	0.61	.	.	1.00	0.810	0.834	0.835	2.25	0.66	0.17	56.6
T01	165+00	052576	L2	06R	2.28	1.65	1.20	0.90	0.63	.	.	1.00	0.834	0.860	0.862	2.28	0.63	0.27	58.4
T01	166+00	052576	L2	06L	4.20	2.49	1.50	0.93	0.65	.	.	1.00	0.797	0.853	0.856	4.20	1.71	0.28	46.5
T01	167+00	052576	L2	06R	2.43	1.80	1.23	0.78	0.58	.	.	1.00	0.916	0.944	0.944	2.43	0.63	0.20	56.1
T01	168+00	052576	L2	06L	2.64	1.86	1.26	0.90	0.64	.	.	1.00	0.639	0.680	0.683	2.64	0.78	0.26	55.3
T01	164+00	052876	L4	09R	1.65	1.29	0.99	0.68	0.55	78	72	0.80	0.544	0.564	0.564	1.32	0.36	0.13	62.5
T01	165+00	052876	L4	09R	1.62	1.23	0.96	0.68	0.55	78	72	0.80	.	.	.	1.30	0.39	0.13	62.2
T01	166+00	052876	L4	09R	1.83	1.38	1.05	0.73	0.59	78	72	0.80	0.501	0.518	0.518	1.46	0.45	0.14	61.0
T01	167+00	052876	L4	09R	1.74	1.29	1.08	0.76	0.60	78	72	0.80	.	.	.	1.39	0.45	0.16	62.9
T01	168+00	052876	L4	09R	1.74	1.38	1.02	0.71	0.59	78	72	0.80	0.795	0.806	0.806	1.39	0.36	0.12	62.5
T01	164+00	061676	L5	09R	0.96	0.93	0.70	0.58	0.48	78	71	0.85	0.478	0.492	0.493	0.82	0.03	0.10	76.0
T01	165+00	061676	L5	09R	0.96	0.79	0.69	0.56	0.46	78	71	0.85	.	.	.	0.82	0.17	0.10	72.1
T01	166+00	061676	L5	09R	1.05	0.90	0.75	0.62	0.51	78	71	0.85	0.515	0.524	0.526	0.89	0.15	0.11	73.0
T01	167+00	061676	L5	09R	1.02	0.90	0.74	0.62	0.51	78	71	0.85	.	.	.	0.87	0.12	0.11	74.3
T01	168+00	061676	L5	09R	1.05	0.93	0.76	0.63	0.52	78	71	0.85	0.400	0.414	0.416	0.89	0.12	0.11	74.1
T01	164+00	071476	L6	09R	1.08	0.93	0.69	0.56	0.47	135	116	0.50	0.612	0.627	0.628	0.54	0.15	0.09	69.1
T01	165+00	071476	L6	09R	1.05	0.90	0.66	0.54	0.38	135	116	0.50	.	.	.	0.52	0.15	0.16	67.2
T01	166+00	071476	L6	09R	1.08	0.96	0.74	0.60	0.50	135	116	0.50	0.650	0.660	0.661	0.54	0.12	0.10	71.9
T01	167+00	071476	L6	09R	1.08	0.93	0.71	0.58	0.48	135	116	0.50	.	.	.	0.54	0.15	0.10	70.0
T01	168+00	071476	L6	09R	1.20	1.05	0.90	0.60	0.49	135	116	0.50	0.364	0.385	0.387	0.60	0.15	0.11	70.7
T02	170+00	092975	L1	06R	3.10	1.86	1.20	0.90	0.60	.	.	1.00	.	.	.	3.10	1.24	0.30	49.4
T02	171+00	092975	L1	06L	3.70	2.70	1.26	0.74	0.57	.	.	1.00	.	.	.	3.70	1.00	0.17	48.5
T02	172+00	092975	L1	06R	3.10	1.74	1.26	0.90	0.63	.	.	1.00	.	.	.	3.10	1.36	0.27	49.2
T02	173+00	092975	L1	06L	3.00	1.80	1.11	0.70	0.55	.	.	1.00	.	.	.	3.00	1.20	0.15	47.7
T02	174+00	092975	L1	06R	3.00	2.40	1.02	0.67	0.54	.	.	1.00	.	.	.	3.00	0.60	0.13	50.9
T02	170+00	101475	L2	06R	2.67	1.71	0.81	0.73	0.57	.	.	1.00	0.436	0.470	0.472	2.67	0.96	0.16	48.6

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
BATON ROUGE, LOUISIANA

COMPREHENSIVE DATA ON DYNAFLECT & BENKELMAN BEAM DEFLECTIONS FOR LOUISIANA EXPERIMENTAL BASE COURSE

16:20 FRIDAY, FEBRUARY 9, 1979

S1-S5=GEOPHONE SENSORS, TEMP1=SURFACE TEMP, TEMP2=MIDDEPTH TEMP, CF=CORRECTION FACTOR, BB1=INITIAL BENKELMAN BEAM(B3) DEFLECTION
BB2=INTERMEDIATE BB DEFLECTION, BB3=FINAL BB DEFLECTION
L1=EMBANKMENT, L2=SELECT, L3=SOIL CEMENT, L4=BLACK BASE L5=BINDER, L6=WEARING

SECT	STATION	DATE	LAYER	LOC	S1	S2	S3	S4	S5	TEMP1	TEMP2	CF	BB1	BB2	BB3	DMD	SCI	BCI	SPREAD
T02	171+00	101475	L2	06L	2.58	1.68	1.08	0.71	0.51	.	.	1.00	.	.	.	2.58	0.90	0.20	50.9
T02	172+00	101475	L2	06R	2.67	1.65	1.11	0.74	0.56	.	.	1.00	0.376	0.414	0.415	2.67	1.02	0.18	50.4
T02	173+00	101475	L2	06L	3.00	1.89	1.17	0.76	0.55	.	.	1.00	.	.	.	3.00	1.11	0.21	49.1
T02	174+00	101475	L2	06R	2.28	1.38	0.93	0.61	0.48	.	.	1.00	0.818	0.850	0.851	2.28	0.90	0.13	49.8
T02	170+00	051176	L3	9R	1.23	1.14	1.02	0.73	0.63	.	.	1.00	0.812	0.821	0.821	1.23	0.09	0.10	77.2
T02	171+00	051176	L3	09R	0.86	0.78	0.61	0.45	0.37	.	.	1.00	.	.	.	0.86	0.08	0.08	71.4
T02	172+00	051176	L3	09R	2.07	1.50	1.14	0.90	0.61	.	.	1.00	0.576	0.586	0.586	2.07	0.57	0.29	60.1
T02	173+00	051176	L3	09R	1.44	1.20	0.99	0.70	0.55	.	.	1.00	.	.	.	1.44	0.24	0.15	67.8
T02	174+00	051176	L3	09R	1.35	1.17	0.96	0.67	0.54	.	.	1.00	0.275	0.282	0.283	1.35	0.18	0.13	69.5
T02	170+00	061676	L5	09R	1.08	0.96	0.90	0.70	0.58	78	73	0.80	0.541	0.546	0.546	0.86	0.12	0.12	78.1
T02	171+00	061676	L5	09R	1.05	0.90	0.77	0.60	0.48	78	73	0.80	.	.	.	0.84	0.15	0.12	72.4
T02	172+00	061676	L5	09R	1.02	0.90	0.78	0.62	0.51	78	73	0.80	0.488	0.496	0.498	0.82	0.12	0.11	75.1
T02	173+00	051176	L5	09R	0.96	0.80	0.71	0.57	0.46	78	73	0.80	.	.	.	0.77	0.16	0.11	72.9
T02	174+00	061676	L5	09R	0.83	0.74	0.69	0.53	0.44	78	73	0.80	0.569	0.576	0.578	0.66	0.09	0.09	77.8
T02	170+00	071476	L6	09R	0.90	0.72	0.66	0.56	0.47	78	126	0.50	0.353	0.357	0.358	0.45	0.18	0.09	73.6
T02	171+00	071476	L6	09R	0.93	0.75	0.67	0.53	0.44	78	126	0.50	.	.	.	0.47	0.18	0.09	71.4
T02	172+00	071476	L6	09R	1.08	0.96	0.72	0.57	0.46	78	126	0.50	0.481	0.484	0.485	0.54	0.12	0.11	70.2
T02	173+00	071476	L6	09R	1.05	0.93	0.71	0.56	0.45	78	126	0.50	.	.	.	0.52	0.12	0.11	70.5
T02	174+00	071476	L6	09R	0.90	0.72	0.64	0.50	0.40	78	126	0.50	0.463	0.464	0.464	0.45	0.18	0.10	70.2
T03	182+00	092975	L1	06R	3.50	1.92	1.08	0.61	0.48	.	.	1.00	.	.	.	3.50	1.58	0.13	43.4
T03	183+00	092975	L1	06L	2.13	1.41	0.93	0.66	0.52	.	.	1.00	.	.	.	2.13	0.72	0.14	53.1
T03	184+00	092975	L1	06R	7.30	3.90	0.37	0.19	0.12	.	.	1.00	.	.	.	7.30	3.40	0.07	32.5
T03	185+00	092975	L1	06L	2.13	1.47	0.96	0.68	0.57	.	.	1.00	.	.	.	2.13	0.66	0.11	54.6
T03	186+00	092975	L1	06R	2.64	1.59	1.26	0.75	0.61	.	.	1.00	.	.	.	2.64	1.05	0.14	51.9
T03	182+00	052576	L2	06R	2.46	1.77	1.26	0.76	0.57	.	.	1.00	0.956	0.983	0.984	2.46	0.69	0.19	55.4
T03	183+00	052576	L2	06L	2.49	1.65	1.05	0.68	0.55	.	.	1.00	0.836	0.875	0.876	2.49	0.84	0.13	51.6
T03	184+00	052576	L2	06R	2.13	1.47	1.05	0.72	0.59	.	.	1.00	0.846	0.868	0.870	2.13	0.66	0.13	56.0
T03	185+00	052576	L2	06L	2.64	1.62	1.05	0.71	0.59	.	.	1.00	0.842	0.879	0.881	2.64	1.02	0.12	50.1
T03	186+00	052576	L2	06R	2.58	1.65	1.17	0.75	0.58	.	.	1.00	0.793	0.842	0.843	2.58	0.93	0.17	52.2
T03	182+00	052876	L4	09R	1.65	1.29	0.96	0.67	0.55	72	75	0.75	0.541	0.566	0.577	1.24	0.36	0.12	62.1
T03	183+00	052876	L4	09R	1.35	1.12	0.73	0.55	0.46	72	75	0.75	.	.	.	1.01	0.23	0.09	62.4
T03	184+00	052876	L4	09R	1.26	0.96	0.71	0.55	0.42	72	75	0.75	0.446	0.463	0.464	0.94	0.30	0.13	61.9
T03	185+00	052876	L4	09R	1.53	1.17	0.90	0.61	0.49	72	75	0.75	.	.	.	1.15	0.36	0.12	61.4
T03	186+00	052876	L4	09R	1.50	1.14	0.90	0.60	0.37	72	75	0.75	0.402	0.422	0.420	1.13	0.36	0.23	60.1
T03	182+00	061676	L5	09R	1.14	0.96	0.79	0.64	0.52	82	79	0.70	0.773	0.786	0.787	0.80	0.18	0.12	71.1
T03	183+00	061676	L5	09R	0.88	0.74	0.63	0.50	0.41	82	79	0.70	.	.	.	0.62	0.14	0.09	71.8
T03	184+00	061676	L5	09R	0.84	0.69	0.59	0.48	0.39	82	79	0.70	0.443	0.457	0.458	0.59	0.15	0.09	71.2
T03	185+00	061676	L5	09R	1.02	0.82	0.69	0.57	0.44	82	79	0.70	.	.	.	0.71	0.20	0.13	69.4
T03	186+00	061676	L5	09R	1.02	0.79	0.70	0.56	0.46	82	79	0.70	0.376	0.386	0.388	0.71	0.23	0.10	69.2
T03	182+00	071476	L6	09R	1.14	1.02	0.74	0.61	0.50	112	98	0.55	0.647	0.660	0.661	0.63	0.12	0.11	70.4
T03	183+00	071476	L6	09R	0.99	0.70	0.58	0.45	0.38	112	98	0.55	.	.	.	0.54	0.29	0.07	62.6
T03	184+00	071476	L6	09R	0.93	0.67	0.55	0.44	0.37	112	98	0.55	0.692	0.706	0.708	0.51	0.26	0.07	63.7
T03	185+00	071476	L6	09R	1.02	0.74	0.51	0.48	0.40	112	98	0.55	.	.	.	0.56	0.28	0.08	61.8
T03	186+00	071476	L6	09R	1.02	0.74	0.62	0.50	0.41	112	98	0.55	0.752	0.768	0.770	0.56	0.28	0.09	64.5
T04	188+00	092975	L1	06R	2.19	1.41	0.96	0.66	0.54	.	.	1.00	.	.	.	2.19	0.78	0.12	52.6
T04	189+00	092975	L1	06L	3.40	1.71	0.99	0.76	0.61	.	.	1.00	.	.	.	3.40	1.69	0.15	43.9
T04	190+00	092975	L1	06R	2.16	1.29	0.93	0.64	0.59	.	.	1.00	.	.	.	2.16	0.87	0.05	51.9
T04	191+00	092975	L1	06L	9.00	4.60	1.62	0.78	0.60	.	.	1.00	.	.	.	9.00	4.40	0.18	36.9
T04	192+00	092975	L1	06R	8.30	6.20	3.60	2.10	1.05	.	.	1.00	.	.	.	8.30	2.10	1.05	51.2
T04	193+00	092975	L1	06L	2.40	1.53	0.93	0.65	0.53	.	.	1.00	.	.	.	2.40	0.87	0.12	50.3

COMPREHENSIVE DATA ON DYNAFLECT & BENKELMAN BEAM DEFLECTIONS FOR LOUISIANA EXPERIMENTAL BASE COURSE

16:20 FRIDAY, FEBRUARY 9, 1979

S1-S5=GEOPHONE SENSORS, TEMP1=SURFACE TEMP, TEMP2=MIDDEPTH TEMP, CF=CORRECTION FACTOR, BB1=INITIAL BENKELMAN BEAM(BB) DEFLECTION
BB2=INTERMEDIATE BB DEFLECTION, BB3=FINAL BB DEFLECTION
L1=EMBANKMENT, L2=SELECT, L3=SOIL CEMENT, L4=BLACK BASE L5=BINDER, L6=WEARING

SECT	STATION	DATE	LAYER	LOC	S1	S2	S3	S4	S5	TEMP1	TEMP2	CF	BB1	BB2	BB3	DMD	SCI	BCI	SPREAD
T04	188+00	100675	L2	06R	3.00	1.56	1.05	0.67	0.52	.	.	1.00	0.708	0.751	0.752	3.00	1.44	0.15	45.3
T04	189+00	100675	L2	06L	2.40	1.53	0.99	0.65	0.51	.	.	1.00	.	.	.	2.40	0.87	0.14	50.7
T04	190+00	100675	L2	06R	2.67	1.50	0.93	0.64	0.50	.	.	1.00	0.769	0.804	0.805	2.67	1.17	0.14	46.7
T04	191+00	100675	L2	06L	3.50	2.04	1.32	0.93	0.65	.	.	1.00	.	.	.	3.50	1.46	0.28	40.2
T04	192+00	100675	L2	06R	4.20	3.20	2.22	1.56	1.05	.	.	1.00	0.360	0.406	0.407	4.20	1.00	0.51	58.2
T04	193+00	100675	L2	06L	2.16	1.44	0.96	0.67	0.53	.	.	1.00	.	.	.	2.16	0.72	0.14	53.3
T04	188+00	051178	L3	09R	0.84	0.77	0.64	0.51	0.45	.	.	1.00	0.757	0.762	0.764	0.84	0.07	0.06	76.4
T04	189+00	051176	L3	09R	0.68	0.64	0.60	0.50	0.46	.	.	1.00	0.405	0.408	0.409	0.68	0.04	0.04	84.7
T04	190+00	051176	L3	09R	0.72	0.68	0.63	0.54	0.49	.	.	1.00	.	.	.	0.72	0.04	0.05	85.0
T04	191+00	051176	L3	09R	0.72	0.70	0.62	0.54	0.47	.	.	1.00	0.742	0.745	0.746	0.72	0.02	0.07	84.7
T04	192+00	051176	L3	09R	0.77	0.71	0.60	0.52	0.46	.	.	1.00	.	.	.	0.77	0.06	0.06	79.5
T04	193+00	051176	L3	09R	0.76	0.73	0.67	0.58	0.50	.	.	1.00	0.566	0.569	0.570	0.76	0.03	0.08	85.3
T04	188+00	061676	L5	09R	0.71	0.60	0.57	0.48	0.41	82	77	0.75	0.365	0.368	0.369	0.53	0.11	0.07	78.0
T04	189+00	061676	L5	09R	0.73	0.64	0.60	0.56	0.44	82	77	0.75	0.321	0.323	0.324	0.55	0.09	0.12	81.4
T04	190+00	061676	L5	09R	0.78	0.71	0.67	0.57	0.49	82	77	0.75	.	.	.	0.59	0.07	0.08	82.6
T04	191+00	061676	L5	09R	0.99	0.82	0.72	0.60	0.50	82	77	0.75	0.472	0.475	0.475	0.74	0.17	0.10	73.3
T04	192+00	061676	L5	09R	0.96	0.84	0.71	0.58	0.48	82	77	0.75	.	.	.	0.72	0.12	0.10	74.4
T04	193+00	061676	L5	09R	1.11	0.93	0.74	0.63	0.51	82	77	0.75	0.294	0.301	0.301	0.83	0.18	0.12	70.6
T04	188+00	071576	L6	09R	0.56	0.47	0.42	0.38	0.33	111	100	0.55	0.660	0.661	0.660	0.31	0.09	0.05	77.1
T04	189+00	071576	L6	09R	0.54	0.50	0.47	0.42	0.37	111	100	0.55	.	.	.	0.30	0.04	0.05	85.2
T04	190+00	071576	L6	09R	0.71	0.65	0.59	0.51	0.43	111	100	0.55	0.657	0.657	0.658	0.39	0.06	0.08	81.4
T04	191+00	071575	L6	09R	0.76	0.71	0.64	0.53	0.44	111	100	0.55	.	.	.	0.42	0.05	0.09	81.1
T04	192+00	071576	L6	09R	0.68	0.59	0.53	0.46	0.40	111	100	0.55	0.529	0.530	0.530	0.37	0.09	0.06	78.2
T04	193+00	071576	L6	09R	0.68	0.63	0.56	0.46	0.39	111	100	0.55	0.557	0.560	0.560	0.37	0.05	0.07	80.0
T05	194+75	092575	L1	06R	1.62	1.26	0.90	0.66	0.55	.	.	1.00	.	.	.	1.62	0.36	0.11	61.6
T05	195+75	092576	L1	06L	3.00	1.41	0.68	0.62	0.51	.	.	1.00	.	.	.	3.00	1.59	0.11	41.5
T05	196+75	092575	L1	06R	3.70	1.53	0.68	0.62	0.51	.	.	1.00	.	.	.	3.70	2.17	0.11	38.1
T05	197+75	092575	L1	06L	2.46	1.47	0.96	0.71	0.63	.	.	1.00	.	.	.	2.46	0.99	0.08	50.7
T05	198+75	092575	L1	06R	2.34	1.50	0.99	0.72	0.56	.	.	1.00	.	.	.	2.34	0.84	0.16	52.2
T05	194+75	052576	L2	06R	1.83	1.38	1.08	0.77	0.64	.	.	1.00	0.666	0.685	0.687	1.83	0.45	0.13	62.3
T05	195+75	052576	L2	06L	2.25	1.65	1.17	0.76	0.59	.	.	1.00	0.829	0.853	0.856	2.25	0.60	0.17	57.1
T05	196+75	052576	L2	06R	2.10	1.59	1.11	0.68	0.52	.	.	1.00	0.397	0.415	0.419	2.10	0.51	0.16	57.1
T05	197+75	052576	L2	06L	1.95	1.41	1.05	0.70	0.55	.	.	1.00	0.631	0.652	0.654	1.95	0.54	0.15	58.1
T05	198+75	052576	L2	06R	2.01	1.53	1.14	0.77	0.60	.	.	1.00	0.914	0.931	0.932	2.01	0.48	0.17	60.2
T05	194+75	060476	L4	09R	1.20	0.99	0.77	0.60	0.50	80	77	0.75	0.820	0.835	0.837	0.90	0.21	0.10	67.7
T05	195+75	060476	L4	09R	1.05	0.90	0.69	0.54	0.45	80	77	0.75	.	.	.	0.79	0.15	0.09	69.1
T05	196+75	060476	L4	09R	1.11	0.96	0.74	0.57	0.46	80	77	0.75	0.879	0.892	0.892	0.83	0.15	0.11	69.2
T05	197+75	060476	L4	09R	1.11	0.90	0.71	0.55	0.47	80	77	0.75	.	.	.	0.83	0.21	0.08	67.4
T05	198+75	060476	L4	09R	1.11	0.93	0.75	0.58	0.50	80	77	0.75	0.837	0.852	0.853	0.83	0.18	0.08	69.7
T05	194+75	061676	L5	09R	0.99	0.77	0.66	0.54	0.44	84	78	0.75	0.579	0.589	0.590	0.74	0.22	0.10	68.7
T05	195+75	061676	L5	09R	0.82	0.70	0.59	0.48	0.39	84	78	0.75	.	.	.	0.62	0.12	0.09	72.7
T05	196+75	061676	L5	09R	0.96	0.76	0.66	0.52	0.42	84	78	0.75	0.378	0.389	0.390	0.72	0.20	0.10	69.2
T05	197+75	061676	L5	09R	0.96	0.76	0.64	0.52	0.43	84	78	0.75	.	.	.	0.72	0.20	0.09	69.0
T05	198+75	061676	L5	09R	1.08	0.90	0.74	0.61	0.48	84	78	0.75	0.329	0.340	0.341	0.81	0.18	0.13	70.6
T05	194+75	071576	L6	09R	0.77	0.65	0.54	0.43	0.36	111	102	0.55	0.621	0.627	0.626	0.42	0.12	0.07	71.4
T05	195+75	071576	L6	09R	0.70	0.59	0.50	0.40	0.34	111	102	0.55	.	.	.	0.39	0.11	0.06	72.3
T05	196+75	071576	L6	09R	0.74	0.64	0.54	0.44	0.36	111	102	0.55	0.572	0.579	0.578	0.41	0.10	0.08	73.5
T05	197+75	071576	L6	09R	0.79	0.67	0.56	0.46	0.38	111	102	0.55	.	.	.	0.43	0.12	0.08	72.4
T05	198+75	071576	L6	09R	0.99	0.76	0.64	0.51	0.43	111	102	0.55	0.556	0.566	0.567	0.54	0.23	0.08	67.3
T05	200+75	092575	L1	06L	3.00	1.95	1.14	0.90	0.61	.	.	1.00	.	.	.	3.00	1.05	0.29	50.7

COMPREHENSIVE DATA ON DYNAFLECT & BENKELMAN BEAM DEFLECTIONS FOR LOUISIANA EXPERIMENTAL BASE COURSE

16:20 FRIDAY, FEBRUARY 9, 1979

S1-S5=GEOPHONE SENSORS, TEMP1=SURFACE TEMP, TEMP2=MIDDEPTH TEMP, CF=CORRECTION FACTOR, BB1=INITIAL BENKELMAN BEAM(BB) DEFLECTION, BB2=INTERMEDIATE BB DEFLECTION, BB3=FINAL BB DEFLECTION

L1=EMBANKMENT, L2=SELECT, L3=SOIL CEMENT, L4=BLACK BASE L5=BINDER, L6=WEARING

SECT	STATION	DATE	LAYER	LOC	S1	S2	S3	S4	S5	TEMP1	TEMP2	CF	BB1	BB2	BB3	DMD	SCI	BCI	SPREAD
T06	201+75	092575	L1	06R	2.46	1.50	0.96	0.72	0.59	.	.	1.00	.	.	.	2.46	0.96	0.13	50.7
T06	202+75	092575	L1	06L	3.00	1.74	1.05	0.72	0.61	.	.	1.00	.	.	.	3.00	1.26	0.11	47.5
T06	203+75	092575	L1	06R	4.00	2.55	1.50	1.08	0.72	.	.	1.00	.	.	.	4.00	1.45	0.36	49.2
T06	204+75	092575	L1	06L	2.43	1.41	0.93	0.63	0.51	.	.	1.00	.	.	.	2.43	1.02	0.12	48.6
T06	200+75	100675	L2	06L	2.31	1.38	0.96	0.65	0.49	.	.	1.00	.	.	.	2.31	0.93	0.16	50.1
T06	201+75	100675	L2	06R	1.65	1.23	0.78	0.60	0.50	.	.	1.00	0.920	0.936	0.937	1.65	0.42	0.10	57.7
T06	202+75	100675	L2	06L	2.25	1.38	0.96	0.63	0.50	.	.	1.00	0.746	0.768	0.769	2.25	0.87	0.13	50.8
T06	203+75	100675	L2	06R	2.37	1.98	1.38	1.05	0.68	.	.	1.00	0.515	0.549	0.550	2.37	0.39	0.37	63.0
T06	204+75	100675	L2	06L	1.98	1.44	0.90	0.65	0.50	.	.	1.00	.	.	.	1.98	0.54	0.15	55.3
T06	200+75	051176	L3	09R	0.83	0.73	0.64	0.61	0.50	.	.	1.00	0.516	0.520	0.521	0.83	0.10	0.11	79.8
T06	201+75	051176	L3	09R	0.85	0.75	0.69	0.58	0.50	.	.	1.00	.	.	.	0.85	0.10	0.08	79.3
T06	202+75	051176	L3	09R	0.88	0.82	0.75	0.64	0.55	.	.	1.00	0.205	0.208	0.208	0.88	0.06	0.09	82.7
T06	203+75	051176	L3	09R	0.76	0.74	0.66	0.59	0.51	.	.	1.00	.	.	.	0.76	0.02	0.07	85.5
T06	204+75	051176	L3	09R	0.70	0.65	0.60	0.54	0.46	.	.	1.00	0.760	0.766	0.768	0.70	0.05	0.08	84.3
T06	200+75	061676	L5	09R	0.72	0.66	0.63	0.53	0.46	82	78	0.75	0.265	0.267	0.269	0.54	0.06	0.07	83.3
T06	201+75	061676	L5	09R	0.84	0.75	0.68	0.55	0.48	82	78	0.75	.	.	.	0.63	0.09	0.07	78.6
T06	202+75	061676	L5	09R	0.82	0.70	0.66	0.54	0.48	82	78	0.75	0.314	0.318	0.319	0.62	0.12	0.06	78.0
T06	203+75	061676	L5	09R	0.82	0.72	0.62	0.52	0.46	82	78	0.75	.	.	.	0.62	0.10	0.06	76.6
T06	204+75	061676	L5	09R	0.71	0.60	0.57	0.48	0.44	82	78	0.75	0.251	0.253	0.254	0.53	0.11	0.04	78.9
T06	200+75	071576	L6	09R	0.64	0.56	0.51	0.45	0.39	134	113	0.50	0.647	0.647	0.648	0.32	0.08	0.06	79.7
T06	201+75	071576	L6	09R	0.69	0.60	0.54	0.47	0.40	134	113	0.50	.	.	.	0.35	0.09	0.07	78.3
T06	202+75	071576	L6	09R	0.67	0.58	0.54	0.47	0.41	134	113	0.50	0.717	0.719	0.720	0.34	0.09	0.06	79.7
T06	203+75	071576	L6	09R	0.63	0.55	0.51	0.46	0.41	134	113	0.50	.	.	.	0.32	0.08	0.05	81.3
T06	204+75	071576	L6	09R	0.60	0.55	0.51	0.45	0.40	134	113	0.50	0.513	0.514	0.514	0.30	0.05	0.05	83.7
T07	206+75	092575	L1	06R	2.49	1.59	0.73	0.67	0.52	.	.	1.00	.	.	.	2.49	0.90	0.15	48.2
T07	207+75	092575	L1	06L	2.58	1.65	0.99	0.69	0.42	.	.	1.00	.	.	.	2.58	0.93	0.27	49.1
T07	208+75	092575	L1	06R	3.50	1.53	0.75	0.63	0.47	.	.	1.00	.	.	.	3.50	1.97	0.16	39.3
T07	209+75	092575	L1	06L	2.25	1.59	0.63	0.51	0.46	.	.	1.00	.	.	.	2.25	0.66	0.05	48.4
T07	210+75	092575	L1	06R	3.60	1.77	0.99	0.64	0.53	.	.	1.00	.	.	.	3.60	1.83	0.11	41.8
T07	206+75	052776	L2	06R	1.89	1.29	0.99	0.67	0.53	.	.	1.00	0.538	0.559	0.561	1.89	0.60	0.14	56.8
T07	207+75	052776	L2	06L	1.98	1.38	1.05	0.69	0.55	.	.	1.00	0.347	0.364	0.365	1.98	0.60	0.14	57.1
T07	208+75	052776	L2	06R	2.25	1.62	1.11	0.71	0.53	.	.	1.00	0.619	0.636	0.637	2.25	0.63	0.18	55.3
T07	209+75	052776	L2	06L	1.59	1.20	0.93	0.65	0.52	.	.	1.00	0.214	0.224	0.227	1.59	0.39	0.13	61.5
T07	210+75	052776	L2	06R	1.98	1.56	1.20	0.90	0.61	.	.	1.00	0.634	0.643	0.646	1.98	0.42	0.29	63.1
T07	206+75	060476	L4	09R	1.41	1.05	0.76	0.58	0.48	91	79	0.70	0.785	0.797	0.798	0.99	0.36	0.10	60.7
T07	207+75	060476	L4	09R	1.47	1.11	0.80	0.61	0.47	91	79	0.70	.	.	.	1.03	0.36	0.14	60.7
T07	208+75	060476	L4	09R	1.32	1.05	0.75	0.57	0.47	91	79	0.70	0.872	0.886	0.888	0.92	0.27	0.10	63.0
T07	209+75	060476	L4	09R	1.20	0.90	0.61	0.46	0.39	91	79	0.70	.	.	.	0.84	0.30	0.07	59.3
T07	210+75	060476	L4	09R	1.35	1.08	0.90	0.63	0.53	91	79	0.70	0.971	0.986	0.988	0.94	0.27	0.10	66.5
T07	206+75	061576	L5	09R	1.26	0.96	0.72	0.58	0.48	93	84	0.67	0.564	0.575	0.576	0.84	0.30	0.10	63.5
T07	207+75	061576	L5	09R	1.23	0.93	0.71	0.55	0.48	93	84	0.67	.	.	.	0.82	0.30	0.07	63.4
T07	208+75	061576	L5	09R	1.08	0.79	0.64	0.52	0.43	93	84	0.67	0.558	0.564	0.564	0.72	0.29	0.09	64.1
T07	209+75	061576	L5	09R	0.88	0.67	0.56	0.44	0.37	93	84	0.67	.	.	.	0.59	0.21	0.07	66.4
T07	210+75	061576	L5	09R	1.20	1.02	0.79	0.63	0.55	93	84	0.67	0.902	0.915	0.916	0.80	0.18	0.08	69.8
T07	206+75	071576	L6	09R	0.99	0.74	0.59	0.48	0.39	134	117	0.50	0.442	0.450	0.450	0.50	0.25	0.09	64.4
T07	207+75	071576	L6	09R	0.99	0.73	0.60	0.47	0.39	134	117	0.50	.	.	.	0.50	0.26	0.08	64.2
T07	208+75	071576	L6	09R	0.90	0.66	0.54	0.44	0.37	134	117	0.50	0.508	0.513	0.513	0.45	0.24	0.07	64.7
T07	209+75	071576	L6	09R	0.78	0.62	0.50	0.40	0.33	134	117	0.50	.	.	.	0.39	0.16	0.07	67.4
T07	210+75	071576	L6	09R	1.14	0.93	0.58	0.55	0.45	134	117	0.50	0.595	0.503	0.503	0.57	0.21	0.10	64.0
T08	218+75	092475	L1	06R	2.70	1.89	1.20	1.05	0.67	.	.	1.00	.	.	.	2.70	0.81	0.38	55.6

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
BATON ROUGE, LOUISIANA

COMPREHENSIVE DATA ON DYNAFLECT & BENKELMAN BEAM DEFLECTIONS FOR LOUISIANA EXPERIMENTAL BASE COURSE

16:20 FRIDAY, FEBRUARY 9, 1979

S1-S5=GEOPHONE SENSORS, TEMP1=SURFACE TEMP, TEMP2=MIDDEPTH TEMP, CF=CORRECTION FACTOR, BB1=INITIAL BENKELMAN BEAM(BB) DEFLECTION
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SECT	STATION	DATE	LAYER	LOC	S1	S2	S3	S4	S5	TEMP1	TEMP2	CF	BB1	BB2	BB3	DMD	SCI	BCI	SPREAD
T08	219+75	092475	L1	06L	2.07	1.35	0.90	0.68	0.57	.	.	1.00	.	.	.	2.07	0.72	0.11	53.8
T08	220+75	092475	L1	06R	3.90	2.61	1.62	1.53	0.90	.	.	1.00	.	.	.	3.90	1.29	0.63	54.2
T08	221+75	092475	L1	06L	2.52	1.71	1.17	0.93	0.71	.	.	1.00	.	.	.	2.52	0.81	0.22	55.9
T08	222+75	092475	L1	06R	2.31	1.62	1.05	0.75	0.61	.	.	1.00	.	.	.	2.31	0.69	0.14	54.9
T08	218+75	100775	L2	06R	1.92	1.34	0.93	0.67	0.51	.	.	1.00	0.587	0.612	0.613	1.92	0.58	0.16	55.9
T08	219+75	100775	L2	06L	3.80	2.37	1.95	0.82	0.63	.	.	1.00	.	.	.	3.80	1.43	0.19	50.4
T08	220+75	100775	L2	06R	2.52	1.86	1.20	0.90	0.54	.	.	1.00	0.617	0.633	0.634	2.52	0.66	0.36	55.7
T08	221+75	100775	L2	06L	2.16	1.56	1.14	0.77	0.60	.	.	1.00	.	.	.	2.16	0.60	0.17	57.7
T08	222+75	100775	L2	06R	1.74	1.26	0.90	0.64	0.52	.	.	1.00	0.513	0.524	0.524	1.74	0.48	0.12	58.2
T08	218+75	042776	L3	09R	0.93	0.82	0.66	0.58	0.48	.	.	1.00	0.440	0.443	0.444	0.93	0.11	0.10	74.6
T08	219+75	042776	L3	09R	0.96	0.93	0.68	0.51	0.45	.	.	1.00	.	.	.	0.96	0.03	0.06	73.5
T08	220+75	042776	L3	09R	0.85	0.76	0.63	0.55	0.46	.	.	1.00	0.229	0.232	0.233	0.85	0.09	0.09	76.5
T08	221+75	042776	L3	09R	0.85	0.81	0.76	0.54	0.47	.	.	1.00	.	.	.	0.85	0.04	0.07	80.7
T08	222+75	042776	L3	09R	1.02	0.84	0.70	0.61	0.51	.	.	1.00	0.580	0.583	0.584	1.02	0.18	0.10	72.2
T08	218+75	061576	L5	09R	0.76	0.66	0.62	0.51	0.47	120	87	0.65	0.224	0.223	0.223	0.49	0.10	0.04	79.5
T08	219+75	061576	L5	09R	0.96	0.78	0.72	0.58	0.52	120	87	0.65	.	.	.	0.62	0.18	0.06	74.2
T08	220+75	061576	L5	09R	0.72	0.70	0.62	0.52	0.49	120	87	0.65	0.338	0.334	0.334	0.47	0.02	0.03	84.7
T08	221+75	061576	L5	09R	0.87	0.78	0.68	0.56	0.50	120	87	0.65	.	.	.	0.57	0.09	0.06	77.9
T08	222+75	061576	L5	09R	0.83	0.75	0.67	0.55	0.49	120	87	0.65	0.292	0.292	0.290	0.54	0.08	0.06	79.3
T08	218+75	071576	L6	09R	0.71	0.64	0.58	0.51	0.44	140	122	0.50	0.685	0.685	0.686	0.36	0.07	0.07	81.1
T08	219+75	071576	L6	09R	0.68	0.59	0.54	0.46	0.40	140	122	0.50	.	.	.	0.34	0.09	0.06	78.5
T08	220+75	071576	L6	09R	0.64	0.59	0.54	0.46	0.42	140	122	0.50	0.538	0.538	0.539	0.32	0.05	0.04	82.8
T08	221+75	071576	L6	09R	0.71	0.64	0.57	0.50	0.43	140	122	0.50	.	.	.	0.36	0.07	0.07	80.3
T08	222+75	071576	L6	09R	0.67	0.61	0.54	0.49	0.43	140	122	0.50	0.443	0.430	0.432	0.34	0.06	0.06	81.8
T09	224+75	092275	L1	06L	3.70	2.49	1.50	1.20	0.78	.	.	1.00	.	.	.	3.70	1.21	0.42	52.3
T09	225+75	092275	L1	06R	3.00	1.77	1.05	0.77	0.63	.	.	1.00	.	.	.	3.00	1.23	0.14	48.1
T09	226+75	092275	L1	06L	3.50	1.80	0.90	0.63	0.49	.	.	1.00	.	.	.	3.50	1.70	0.14	41.8
T09	227+75	092275	L1	06R	3.20	1.74	0.99	0.66	0.51	.	.	1.00	.	.	.	3.20	1.46	0.15	44.4
T09	228+75	092275	L1	06L	3.10	1.83	1.05	0.77	0.57	.	.	1.00	.	.	.	3.10	1.27	0.20	47.2
T09	224+75	100775	L2	06L	3.50	2.13	1.44	1.08	0.75	.	.	1.00	.	.	.	3.50	1.37	0.33	50.9
T09	225+75	100775	L2	06R	2.07	1.32	0.90	0.62	0.46	.	.	1.00	0.482	0.502	0.503	2.07	0.75	0.16	51.9
T09	226+75	100775	L2	06L	2.46	1.50	0.93	0.61	0.51	.	.	1.00	0.712	0.740	0.740	2.46	0.96	0.10	48.9
T09	227+75	100775	L2	06R	1.86	1.41	0.99	0.68	0.54	.	.	1.00	0.669	0.688	0.689	1.86	0.45	0.14	58.9
T09	228+75	100775	L2	06L	2.37	1.71	1.14	0.75	0.55	.	.	1.00	.	.	.	2.37	0.66	0.20	55.0
T09	224+75	042676	L3	09R	1.77	1.44	1.11	0.90	0.65	.	.	1.00	0.465	0.477	0.477	1.77	0.33	0.25	66.3
T09	225+75	042676	L3	09R	1.59	1.23	0.93	0.67	0.56	.	.	1.00	.	.	.	1.59	0.36	0.11	62.6
T09	226+75	042676	L3	09R	1.50	1.23	0.93	0.65	0.53	.	.	1.00	0.545	0.557	0.559	1.50	0.27	0.12	64.5
T09	227+75	042676	L3	09R	1.53	1.17	0.90	0.62	0.51	.	.	1.00	.	.	.	1.53	0.36	0.11	61.8
T09	228+75	042676	L3	09R	1.53	1.20	0.76	0.60	0.48	.	.	1.00	0.655	0.667	0.667	1.53	0.33	0.12	59.7
T09	224+75	061576	L5	09R	1.56	1.32	1.08	0.77	0.64	124	105	0.50	0.470	0.463	0.461	0.78	0.24	0.13	68.8
T09	225+75	061576	L5	09R	1.50	1.29	1.05	0.72	0.58	124	105	0.50	.	.	.	0.75	0.21	0.14	68.5
T09	226+75	061576	L5	09R	1.35	1.17	0.96	0.66	0.54	124	105	0.50	0.345	0.344	0.344	0.67	0.18	0.12	69.3
T09	227+75	061576	L5	09R	1.29	1.08	0.84	0.65	0.54	124	105	0.50	.	.	.	0.64	0.21	0.11	68.2
T09	228+75	061576	L5	09R	1.35	1.05	0.77	0.58	0.49	124	105	0.50	0.192	0.200	0.200	0.67	0.30	0.09	62.8
T09	224+75	071576	L6	09R	1.14	0.90	0.79	0.64	0.53	124	121	0.50	0.580	0.583	0.584	0.57	0.24	0.11	70.2
T09	225+75	071576	L6	09R	1.14	0.99	0.77	0.60	0.50	124	121	0.50	.	.	.	0.57	0.15	0.10	70.2
T09	226+75	071576	L6	09R	1.08	0.93	0.71	0.56	0.44	124	121	0.50	0.662	0.663	0.664	0.54	0.15	0.12	68.9
T09	227+75	071576	L6	09R	0.89	0.79	0.68	0.54	0.44	124	121	0.50	.	.	.	0.45	0.10	0.10	75.1
T09	228+75	071576	L6	09R	0.87	0.74	0.62	0.50	0.41	124	121	0.50	0.770	0.772	0.773	0.44	0.13	0.09	72.2
T10	230+75	092275	L1	06R	2.28	1.35	0.78	0.66	0.51	.	.	1.00	.	.	.	2.28	0.93	0.15	48.9

COMPREHENSIVE DATA ON DYNAFLECT & BENKELMAN BEAM DEFLECTIONS FOR LOUISIANA EXPERIMENTAL BASE COURSE

16:20 FRIDAY, FEBRUARY 9, 1979

S1=S5=GEOPHONE SENSORS, TEMP1=SURFACE TEMP, TEMP2=MIDDEPTH TEMP, CF=CORRECTION FACTOR, BB1=INITIAL BENKELMAN BEAM(BB) DEFLECTION, BB2=INTERMEDIATE BB DEFLECTION, BB3=FINAL BB DEFLECTION
L1=EMBANKMENT, L2=SELECT, L3=SOIL CEMENT, L4=BLACK BASE L5=BINDER, L6=WEARING

SECT	STATION	DATE	LAYER	LOC	S1	S2	S3	S4	S5	TEMP1	TEMP2	CF	BB1	BB2	BB3	DMD	SCI	BCI	SPREAD
T10	231+75	092275	L1	06L	3.80	2.58	1.65	1.26	0.90	.	.	1.00	.	.	.	3.80	1.22	0.36	53.6
T10	232+75	092275	L1	06R	2.01	1.38	0.81	0.68	0.53	.	.	1.00	.	.	.	2.01	0.63	0.15	53.8
T10	233+75	092275	L1	06L	2.13	1.53	0.99	0.71	0.58	.	.	1.00	.	.	.	2.13	0.60	0.13	55.8
T10	234+75	092275	L1	06R	2.07	1.35	0.79	0.66	0.53	.	.	1.00	.	.	.	2.07	0.72	0.13	52.2
T10	230+75	100775	L2	06R	1.83	1.20	0.78	0.65	0.54	.	.	1.00	0.279	0.293	0.293	1.83	0.63	0.11	54.6
T10	231+75	100775	L2	06L	4.40	3.40	1.86	1.38	0.96	.	.	1.00	.	.	.	4.40	1.00	0.42	54.5
T10	232+75	100775	L2	06R	1.86	1.26	0.78	0.57	0.48	.	.	1.00	0.575	0.594	0.595	1.86	0.60	0.09	53.2
T10	233+75	100775	L2	06L	2.04	1.47	1.05	0.74	0.61	.	.	1.00	.	.	.	2.04	0.57	0.13	57.9
T10	234+75	100775	L2	06R	2.04	1.44	0.96	0.68	0.56	.	.	1.00	0.192	0.209	0.210	2.04	0.60	0.12	55.7
T10	230+75	042676	L3	09R	0.99	0.79	0.66	0.59	0.50	.	.	1.00	0.380	0.385	0.387	0.99	0.20	0.09	71.3
T10	231+75	042676	L3	09R	1.05	0.93	0.72	0.64	0.56	.	.	1.00	.	.	.	1.05	0.12	0.08	74.3
T10	232+75	042676	L3	09R	1.02	0.81	0.67	0.59	0.51	.	.	1.00	0.440	0.446	0.447	1.02	0.21	0.08	70.6
T10	233+75	042676	L3	09R	0.81	0.74	0.64	0.57	0.49	.	.	1.00	.	.	.	0.81	0.07	0.08	80.2
T10	234+75	042676	L3	09R	1.05	0.93	0.71	0.63	0.53	.	.	1.00	0.761	0.766	0.766	1.05	0.12	0.10	73.3
T10	230+75	061575	L5	09R	1.02	0.93	0.78	0.61	0.54	110	86	0.65	0.498	0.504	0.507	0.66	0.09	0.07	76.1
T10	231+75	061576	L5	09R	0.89	0.82	0.75	0.64	0.56	110	86	0.65	.	.	.	0.58	0.07	0.08	82.2
T10	232+75	061576	L5	09R	0.83	0.77	0.69	0.57	0.50	110	86	0.65	0.424	0.427	0.428	0.54	0.06	0.07	81.0
T10	233+75	061576	L5	09R	0.79	0.73	0.68	0.56	0.48	110	86	0.65	.	.	.	0.51	0.06	0.08	82.0
T10	234+75	061576	L5	09R	1.08	0.99	0.74	0.64	0.54	110	86	0.65	0.260	0.262	0.263	0.70	0.09	0.10	73.9
T10	230+75	071576	L6	09R	0.68	0.63	0.58	0.50	0.43	126	119	0.50	0.645	0.645	0.645	0.34	0.05	0.07	82.9
T10	231+75	071576	L6	09R	0.66	0.60	0.56	0.49	0.42	126	119	0.50	.	.	.	0.33	0.06	0.07	82.7
T10	232+75	071576	L6	09R	0.66	0.60	0.56	0.48	0.41	126	119	0.50	0.673	0.679	0.679	0.33	0.06	0.07	82.1
T10	233+75	071576	L6	09R	0.68	0.62	0.56	0.48	0.41	126	119	0.50	.	.	.	0.34	0.06	0.07	80.9
T10	234+75	071576	L6	09R	0.66	0.61	0.56	0.48	0.42	126	119	0.50	0.701	0.701	0.701	0.33	0.05	0.06	82.7
T11	236+75	092475	L1	06L	3.10	1.83	1.08	0.81	0.66	.	.	1.00	.	.	.	3.10	1.27	0.15	48.3
T11	237+75	092475	L1	06R	2.28	1.53	0.96	0.68	0.58	.	.	1.00	.	.	.	2.28	0.75	0.10	52.9
T11	238+75	092475	L1	06L	4.30	3.10	1.74	1.29	0.80	.	.	1.00	.	.	.	4.30	1.20	0.49	52.2
T11	239+75	092475	L1	06R	3.20	2.13	1.26	1.05	0.79	.	.	1.00	.	.	.	3.20	1.07	0.26	52.7
T11	240+75	092475	L1	06L	5.50	3.30	1.38	0.70	0.41	.	.	1.00	.	.	.	5.50	2.20	0.29	41.1
T11	236+75	100775	L2	06L	1.96	1.32	0.76	0.64	0.52	.	.	1.00	.	.	.	1.96	0.64	0.12	53.1
T11	237+75	100775	L2	06R	1.95	1.38	0.96	0.64	0.56	.	.	1.00	0.945	0.960	0.961	1.95	0.57	0.08	56.3
T11	238+75	100775	L2	06L	1.86	1.35	0.65	0.62	0.50	.	.	1.00	0.849	0.867	0.868	1.86	0.51	0.12	53.5
T11	239+75	100775	L2	06R	2.46	1.62	1.02	0.76	0.60	.	.	1.00	0.914	0.934	0.934	2.46	0.84	0.16	52.5
T11	240+75	100775	L2	06L	2.16	1.68	1.23	0.93	0.69	.	.	1.00	.	.	.	2.16	0.48	0.24	61.9
T11	236+75	042776	L4	09R	1.41	1.02	0.68	0.57	0.47	112	100	0.55	0.311	0.321	0.322	0.78	0.39	0.10	58.9
T11	237+75	042776	L4	09R	1.62	1.17	0.76	0.63	0.49	112	100	0.55	.	.	.	0.89	0.45	0.14	57.7
T11	238+75	042776	L4	09R	1.71	1.26	0.80	0.64	0.51	112	100	0.55	0.468	0.485	0.486	0.94	0.45	0.13	57.5
T11	239+75	042776	L4	09R	2.22	1.65	1.08	0.83	0.62	112	100	0.55	.	.	.	1.22	0.57	0.21	57.7
T11	240+75	042776	L4	06R	1.53	1.11	0.79	0.69	0.57	112	100	0.55	0.558	0.576	0.577	0.84	0.42	0.12	61.3
T11	236+75	061576	L5	09R	1.23	1.02	0.75	0.58	0.50	102	97	0.60	0.278	0.288	0.289	0.74	0.21	0.08	66.3
T11	237+75	061576	L5	09R	1.32	1.05	0.76	0.60	0.50	102	97	0.60	.	.	.	0.79	0.27	0.10	64.1
T11	238+75	061575	L5	09R	1.56	1.20	0.96	0.68	0.56	102	97	0.60	0.204	0.215	0.217	0.94	0.36	0.12	63.6
T11	239+75	061576	L5	09R	1.53	1.26	1.02	0.74	0.63	102	97	0.60	.	.	.	0.92	0.27	0.11	67.7
T11	240+75	061576	L5	06R	1.47	1.17	0.99	0.71	0.61	102	97	0.60	0.415	0.430	0.431	0.88	0.30	0.10	67.3
T11	236+75	071676	L6	09R	0.81	0.69	0.58	0.48	0.33	92	99	0.55	0.727	0.737	0.738	0.45	0.12	0.15	71.4
T11	237+75	071676	L6	09R	1.08	0.90	0.81	0.66	0.42	92	99	0.55	.	.	.	0.59	0.18	0.24	71.7
T11	238+75	071676	L6	09R	1.08	0.83	0.67	0.53	0.44	92	99	0.55	0.608	0.619	0.521	0.59	0.25	0.09	65.7
T11	239+75	071676	L6	09R	1.17	0.99	0.79	0.61	0.38	92	99	0.55	.	.	.	0.64	0.18	0.23	67.4
T11	240+75	071676	L6	06R	1.05	0.82	0.60	0.56	0.48	92	99	0.55	0.626	0.636	0.636	0.58	0.23	0.08	66.9
T12	242+75	092275	L1	06L	5.00	3.50	1.17	1.05	0.73	.	.	1.00	.	.	.	5.00	1.50	0.32	45.8

COMPREHENSIVE DATA ON DYNAFLECT & BENKELMAN BEAM DEFLECTIONS FOR LOUISIANA EXPERIMENTAL BASE COURSE

16:20 FRIDAY, FEBRUARY 9, 1979

S1-S5=GEOPHONE SENSORS, TEMP1=SURFACE TEMP, TEMP2=MIDDEPTH TEMP, CF=CORRECTION FACTOR, BB1=INITIAL BENKELMAN BEAM(BB) DEFLECTION
BB2=INTERMEDIATE BB DEFLECTION, BB3=FINAL BB DEFLECTION
L1=EMBANKMENT, L2=SELECT, L3=SOIL CEMENT, L4=BLACK BASE L5=BINDER, L6=WEARING

SECT	STATION	DATE	LAYER	LOC	S1	S2	S3	S4	S5	TEMP1	TEMP2	CF	BB1	BB2	BB3	DMD	SCI	BCI	SPREAD
T12	243+75	092275	L1	06R	3.00	1.68	1.05	0.79	0.63	.	.	1.00	.	.	.	3.00	1.32	0.16	47.7
T12	244+75	092275	L1	06L	3.00	1.68	1.05	0.79	0.63	.	.	1.00	.	.	.	3.00	1.32	0.16	47.7
T12	245+75	092275	L1	06R	4.10	2.01	1.05	0.79	0.63	.	.	1.00	.	.	.	4.10	2.09	0.16	41.9
T12	246+75	092275	L1	06L	4.40	3.00	1.62	1.23	0.81	.	.	1.00	.	.	.	4.40	1.40	0.42	50.3
T12	242+75	100775	L2	06L	3.20	2.26	1.65	1.05	0.76	.	.	1.00	0.795	0.835	0.836	3.20	0.94	0.29	55.7
T12	243+75	100775	L2	06R	2.52	1.47	0.78	0.66	0.53	.	.	1.00	.	.	.	2.52	1.05	0.13	47.3
T12	244+75	100775	L2	06L	2.34	1.59	1.08	0.77	0.58	.	.	1.00	0.341	0.366	0.370	2.34	0.75	0.19	54.4
T12	245+75	100775	L2	06R	2.67	1.62	0.99	0.70	0.55	.	.	1.00	.	.	.	2.67	1.05	0.15	48.9
T12	246+75	100775	L2	06L	2.52	1.86	1.29	0.93	0.68	.	.	1.00	0.695	0.728	0.730	2.52	0.66	0.25	57.8
T12	242+75	061576	L5	09R	1.14	1.02	0.96	0.71	0.60	94	88	0.65	0.262	0.268	0.266	0.74	0.12	0.11	77.7
T12	243+75	061576	L5	09R	1.38	1.20	1.08	0.90	0.64	94	88	0.65	.	.	.	0.90	0.18	0.26	75.4
T12	244+75	061576	L5	09R	1.23	1.05	0.82	0.67	0.54	94	88	0.65	0.225	0.233	0.234	0.80	0.18	0.13	70.1
T12	245+75	061576	L5	09R	1.02	0.90	0.70	0.57	0.47	94	88	0.65	.	.	.	0.66	0.12	0.10	71.8
T12	246+75	061576	L5	09R	1.08	0.90	0.73	0.61	0.51	94	88	0.65	0.202	0.209	0.210	0.70	0.18	0.10	70.9
T12	242+75	071676	L6	09R	0.80	0.70	0.60	0.54	0.46	112	99	0.55	0.576	0.570	0.572	0.44	0.10	0.08	77.5
T12	243+75	071676	L6	09R	0.86	0.80	0.67	0.55	0.45	112	99	0.55	.	.	.	0.47	0.06	0.10	77.4
T12	244+75	071676	L6	09R	0.88	0.74	0.65	0.63	0.45	112	99	0.55	0.597	0.606	0.607	0.48	0.14	0.18	76.1
T12	245+75	071676	L6	09R	0.83	0.72	0.66	0.52	0.44	112	99	0.55	.	.	.	0.46	0.11	0.08	76.4
T12	246+75	071676	L6	09R	0.78	0.69	0.62	0.51	0.44	112	99	0.55	0.625	0.633	0.633	0.43	0.09	0.07	77.9
T12	242+75	042676	SG	09R	1.35	1.11	0.90	0.68	0.56	.	.	1.00	0.685	0.691	0.691	1.35	0.24	0.12	68.1
T12	243+75	042676	SG	09R	1.68	1.38	1.05	0.76	0.63	.	.	1.00	.	.	.	1.68	0.30	0.13	65.5
T12	244+75	042676	SG	09R	1.29	1.11	0.90	0.67	0.55	.	.	1.00	0.521	0.528	0.529	1.29	0.18	0.12	70.1
T12	245+75	042676	SG	09R	1.35	1.11	0.77	0.65	0.54	.	.	1.00	.	.	.	1.35	0.24	0.11	65.5
T12	246+75	042676	SG	09R	1.26	1.05	0.74	0.63	0.57	.	.	1.00	0.542	0.550	0.552	1.26	0.21	0.06	67.5
T13	248+75	092275	L1	06L	2.67	1.62	0.90	0.69	0.54	.	.	1.00	.	.	.	2.67	1.05	0.15	48.1
T13	249+75	092275	L1	06R	2.28	1.50	0.93	0.78	0.65	.	.	1.00	.	.	.	2.28	0.78	0.13	53.9
T13	250+75	092275	L1	06L	3.10	1.65	1.11	0.90	0.66	.	.	1.00	.	.	.	3.10	1.45	0.24	47.9
T13	251+75	092275	L1	06R	5.20	3.40	2.07	1.41	0.93	.	.	1.00	.	.	.	5.20	1.80	0.48	50.0
T13	252+75	092275	L1	06L	2.67	1.95	0.99	0.74	0.59	.	.	1.00	.	.	.	2.67	0.72	0.15	52.0
T13	248+75	100775	L2	06L	2.01	1.26	1.14	0.58	0.47	.	.	1.00	.	.	.	2.01	0.75	0.11	54.3
T13	249+75	100775	L2	06R	2.10	1.35	0.90	0.64	0.42	.	.	1.00	0.556	0.575	0.575	2.10	0.75	0.22	51.5
T13	250+75	100775	L2	06L	2.13	1.50	1.02	0.74	0.61	.	.	1.00	0.558	0.583	0.584	2.13	0.63	0.13	56.3
T13	251+75	100775	L2	06R	2.40	1.74	1.14	0.55	0.34	.	.	1.00	0.663	0.691	0.689	2.40	0.66	0.21	51.4
T13	252+75	100775	L2	06L	2.52	1.50	0.99	0.70	0.54	.	.	1.00	.	.	.	2.52	1.02	0.16	49.6
T13	248+75	061576	L5	09R	1.11	0.98	0.81	0.64	0.53	86	82	0.70	0.290	0.296	0.297	0.78	0.12	0.11	73.5
T13	249+75	061576	L5	09R	0.96	0.78	0.71	0.58	0.49	86	82	0.70	.	.	.	0.67	0.18	0.09	73.3
T13	250+75	061576	L5	09R	1.02	0.83	0.75	0.62	0.53	86	82	0.70	0.270	0.275	0.277	0.71	0.19	0.09	73.5
T13	251+75	061576	L5	09R	0.96	0.79	0.70	0.58	0.48	86	82	0.70	.	.	.	0.67	0.17	0.10	73.1
T13	252+75	061576	L5	09R	1.02	0.81	0.69	0.55	0.47	86	82	0.70	0.333	0.341	0.342	0.71	0.21	0.08	69.4
T13	248+75	071676	L6	09R	0.77	0.69	0.63	0.52	0.44	116	104	0.55	0.700	0.706	0.707	0.42	0.08	0.08	79.2
T13	249+75	071676	L6	09R	0.70	0.64	0.57	0.49	0.42	116	104	0.55	.	.	.	0.39	0.06	0.07	80.6
T13	250+75	071676	L6	09R	0.77	0.67	0.56	0.52	0.44	116	104	0.55	0.639	0.648	0.649	0.42	0.10	0.08	76.9
T13	251+75	071676	L6	09R	0.77	0.68	0.56	0.50	0.42	116	104	0.55	.	.	.	0.42	0:09	0.08	76.1
T13	252+75	071676	L6	09R	0.77	0.64	0.58	0.47	0.38	116	104	0.55	0.642	0.645	0.645	0.42	0.13	0.09	73.8
T13	248+75	042675	SG	09R	1.08	0.96	0.72	0.63	0.53	.	.	1.00	0.532	0.537	0.538	1.08	0.12	0.10	72.6
T13	249+75	042675	SG	09R	1.05	0.80	0.65	0.57	0.49	.	.	1.00	.	.	.	1.05	0.25	0.08	67.8
T13	250+75	042675	SG	09R	0.88	0.80	0.67	0.60	0.50	.	.	1.00	0.833	0.837	0.839	0.88	0.08	0.10	78.4
T13	251+75	042675	SG	09R	0.85	0.75	0.63	0.54	0.46	.	.	1.00	.	.	.	0.85	0.10	0.08	76.0
T13	252+75	042675	SG	09R	1.02	0.79	0.65	0.57	0.46	.	.	1.00	0.257	0.263	0.264	1.02	0.23	0.11	68.4
T14	254+75	092275	L1	06R	2.10	1.65	1.14	1.20	0.70	.	.	1.00	.	.	.	2.10	0.45	0.50	64.7

COMPREHENSIVE DATA ON DYNAFLECT & BENKELMAN BEAM DEFLECTIONS FOR LOUISIANA EXPERIMENTAL BASE COURSE

16:20 FRIDAY, FEBRUARY 9, 1979

S1-S5=GEOPHONE SENSORS, TEMP1=SURFACE TEMP, TEMP2=MIDDEPTH TEMP, CF=CORRECTION FACTOR, BB1=INITIAL BENKELMAN BEAM(BB) DEFLECTION
BB2=INTERMEDIATE BB DEFLECTION, BB3=FINAL BB DEFLECTION
L1=EMBANKMENT, L2=SELECT, L3=SOIL CEMENT, L4=BLACK BASE L5=BINDER, L6=WEARING

SECT	STATION	DATE	LAYER	LOC	S1	S2	S3	S4	S5	TEMP1	TEMP2	CF	BB1	BB2	BB3	DMD	SCI	BCI	SPREAD
T14	255+75	092275	L1	06L	2.04	1.08	0.76	0.65	0.52	.	.	1.00	.	.	.	2.04	0.96	0.13	49.5
T14	256+75	092275	L1	06R	3.00	1.65	0.99	0.72	0.49	.	.	1.00	.	.	.	3.00	1.35	0.23	45.7
T14	257+75	092275	L1	06L	2.25	1.38	0.90	0.65	0.48	.	.	1.00	.	.	.	2.25	0.87	0.17	50.3
T14	258+75	092275	L1	06R	2.58	1.71	1.11	0.73	0.60	.	.	1.00	.	.	.	2.58	0.87	0.13	52.2
T14	254+75	100775	L2	06R	3.50	2.10	1.44	1.02	0.77	.	.	1.00	0.604	0.639	0.640	3.50	1.40	0.25	50.5
T14	255+75	100775	L2	06L	1.62	1.26	0.90	0.68	0.58	.	.	1.00	.	.	.	1.62	0.36	0.10	62.2
T14	256+75	100775	L2	06R	2.25	1.71	1.14	0.79	0.60	.	.	1.00	0.826	0.845	0.846	2.25	0.54	0.19	57.7
T14	257+75	100775	L2	06L	2.01	1.35	0.75	0.55	0.45	.	.	1.00	.	.	.	2.01	0.66	0.10	50.8
T14	258+75	100775	L2	06R	2.64	1.92	1.38	1.07	0.72	.	.	1.00	0.382	0.403	0.404	2.64	0.72	0.30	58.2
T14	254+75	042676	L4	09R	1.47	1.08	0.73	0.63	0.53	104	97	0.60	0.532	0.544	0.546	0.88	0.39	0.10	60.4
T14	255+75	042676	L4	09R	2.28	1.44	0.90	0.54	0.44	104	97	0.60	.	.	.	1.37	0.84	0.10	49.1
T14	256+75	042676	L4	09R	1.38	0.99	0.64	0.52	0.45	104	97	0.60	0.313	0.326	0.328	0.83	0.39	0.07	57.7
T14	257+75	042676	L4	09R	1.32	0.99	0.68	0.55	0.47	104	97	0.60	.	.	.	0.79	0.33	0.08	60.8
T14	258+75	042676	L4	09R	1.47	1.08	0.74	0.61	0.49	104	97	0.60	0.437	0.449	0.450	0.88	0.39	0.12	59.7
T14	254+75	061576	L5	09R	1.14	0.93	0.71	0.59	0.49	84	79	0.70	0.324	0.335	0.336	0.80	0.21	0.10	67.7
T14	255+75	061576	L5	09R	1.50	1.20	0.81	0.58	0.44	84	79	0.70	.	.	.	1.05	0.30	0.14	60.4
T14	256+75	061576	L5	09R	1.11	0.93	0.69	0.54	0.45	84	79	0.70	0.210	0.221	0.222	0.78	0.18	0.09	67.0
T14	257+75	061576	L5	09R	1.02	0.79	0.65	0.53	0.44	84	79	0.70	.	.	.	0.71	0.23	0.09	67.3
T14	258+75	061576	L5	09R	1.11	0.93	0.73	0.58	0.48	84	79	0.70	0.323	0.334	0.335	0.78	0.18	0.10	69.0
T14	254+75	071676	L6	09R	1.02	0.76	0.63	0.51	0.42	114	106	0.55	0.608	0.615	0.616	0.56	0.26	0.09	65.5
T14	255+75	071676	L6	09R	1.17	0.96	0.68	0.48	0.37	114	106	0.55	.	.	.	0.64	0.21	0.11	62.6
T14	256+75	071676	L6	09R	0.84	0.68	0.54	0.43	0.34	114	106	0.55	0.853	0.872	0.873	0.46	0.16	0.09	67.4
T14	257+75	071676	L6	09R	1.05	0.78	0.62	0.48	0.39	114	106	0.55	.	.	.	0.58	0.27	0.09	63.2
T14	258+75	071676	L6	09R	0.99	0.74	0.47	0.49	0.40	114	106	0.55	0.815	0.825	0.826	0.54	0.25	0.09	62.4

N=474

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
BATON ROUGE, LOUISIANA

TABLE 14

STANDARD STATISTICS ON DYNAFLECT & BENKELMAN BEAM (BB) DEFLECTIONS

16:20 FRIDAY, FEBRUARY 9, 1979

DMD=DYNAFLECT MAXIMUM DEFLECTIONS; SCI & BCI=SURFACE & BASE CURVATURE INDEX; SP=PERCENT SPREAD; BMD=BB MAXIMUM DEFLECTIONS

SECT	LAYER	NDMD	NSCI	NBCI	NSPREAD	NBMD	MEANDMD	MEANSCI	MEANBCI	MEANSP	MINDMD	MINSCI	MINBCI	MINSP	MAXDMD	MAXSCI	MAXBCI	MAXSP
C01	L1	5	5	5	5	0	4.400	2.276	0.184	42.540	3.50	1.70	0.09	38.1	5.00	2.93	0.33	46.7
C01	L2	5	5	5	5	3	2.876	1.130	0.158	49.500	2.43	0.78	0.10	46.2	3.20	1.36	0.27	54.3
C01	L3	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	.
C01	L4	5	5	5	5	3	0.986	0.156	0.112	74.140	0.89	0.12	0.10	70.5	1.08	0.21	0.14	76.8
C01	L5	5	5	5	5	3	0.710	0.106	0.092	78.340	0.65	0.05	0.08	73.1	0.84	0.17	0.12	82.4
C01	L6	5	5	5	5	3	0.524	0.174	0.086	73.800	0.45	0.09	0.08	72.1	0.72	0.22	0.10	75.6
C02	L1	5	5	5	5	0	4.184	2.022	0.200	42.240	2.58	1.05	0.03	34.8	5.40	3.57	0.42	51.9
C02	L2	5	5	5	5	3	2.166	0.606	0.168	54.320	1.59	0.36	0.10	48.7	2.64	0.84	0.24	61.3
C02	L3	5	5	5	5	3	1.776	0.360	0.196	62.980	1.29	0.24	0.08	59.8	1.98	0.48	0.31	66.3
C02	L4	5	5	5	5	3	1.322	0.258	0.150	67.160	0.84	0.03	0.08	61.9	1.59	0.36	0.26	75.5
C02	L5	5	5	5	5	3	0.600	0.108	0.080	77.500	0.44	0.06	0.05	75.0	0.72	0.16	0.10	82.4
C02	L6	5	5	5	5	3	0.400	0.126	0.078	76.020	0.34	0.09	0.06	71.5	0.50	0.23	0.09	79.0
C03	L1	5	5	5	5	0	3.240	1.338	0.284	48.840	3.00	0.99	0.14	44.0	3.60	1.71	0.46	53.1
C03	L2	5	5	5	5	3	2.318	0.710	0.194	55.320	2.04	0.54	0.15	50.4	3.10	1.15	0.30	59.0
C03	L3	5	5	5	5	3	2.310	0.654	0.204	57.280	1.83	0.33	0.17	49.3	3.00	1.17	0.29	65.7
C03	L4	5	5	5	5	3	0.876	0.186	0.120	70.960	0.80	0.15	0.11	68.9	0.94	0.21	0.13	74.0
C03	L5	5	5	5	5	3	0.774	0.198	0.086	71.500	0.47	0.15	0.08	69.7	0.92	0.24	0.09	74.1
C03	L6	5	5	5	5	3	0.434	0.140	0.082	74.780	0.37	0.06	0.07	70.5	0.48	0.21	0.09	80.3
C04	L1	5	5	5	5	0	3.400	1.648	0.158	44.900	2.16	0.66	0.11	36.2	5.60	3.35	0.19	54.5
C04	L2	5	5	5	5	3	1.956	0.540	0.118	55.520	1.62	0.39	0.10	53.0	2.22	0.60	0.14	57.7
C04	L3	0	0	0	0	0	.	.	.	.	.	.	.	.	.	.	.	.
C04	L4	5	5	5	5	3	0.844	0.168	0.124	69.080	0.78	0.12	0.09	68.4	0.92	0.21	0.20	69.6
C04	L5	5	5	5	5	3	0.668	0.096	0.086	79.260	0.61	0.08	0.06	78.8	0.69	0.11	0.12	80.2
C04	L6	5	5	5	5	3	0.352	0.080	0.068	78.800	0.31	0.06	0.06	77.6	0.40	0.09	0.08	80.0
T01	L1	5	5	5	5	0	5.280	2.724	0.276	42.180	3.30	1.44	0.17	38.3	6.30	3.46	0.39	49.5
T01	L2	5	5	5	5	5	2.760	0.882	0.236	54.580	2.25	0.63	0.17	46.5	4.20	1.71	0.28	58.4
T01	L4	5	5	5	5	3	1.372	0.402	0.136	62.220	1.30	0.36	0.12	61.0	1.46	0.45	0.16	62.9
T01	L5	5	5	5	5	3	0.858	0.118	0.106	73.900	0.82	0.03	0.10	72.1	0.89	0.17	0.11	76.0
T01	L6	5	5	5	5	3	0.548	0.144	0.112	69.780	0.52	0.12	0.09	67.2	0.60	0.15	0.16	71.9
T02	L1	5	5	5	5	0	3.180	1.080	0.204	49.140	3.00	0.60	0.13	47.7	3.70	1.36	0.30	50.9
T02	L2	5	5	5	5	3	2.640	0.978	0.176	49.760	2.28	0.90	0.13	46.6	3.00	1.11	0.21	50.9
T02	L3	5	5	5	5	3	1.390	0.232	0.150	69.200	0.86	0.08	0.08	60.1	2.07	0.57	0.29	77.2
T02	L5	5	5	5	5	3	0.790	0.128	0.110	75.260	0.66	0.09	0.09	72.4	0.86	0.16	0.12	78.1
T02	L6	5	5	5	5	3	0.480	0.156	0.100	71.180	0.45	0.12	0.09	70.2	0.54	0.18	0.11	73.6
T03	L1	5	5	5	5	0	3.540	1.482	0.118	47.100	2.13	0.66	0.07	32.5	7.30	3.40	0.14	54.6
T03	L2	5	5	5	5	5	2.460	0.828	0.148	53.060	2.13	0.66	0.12	50.1	2.64	1.02	0.19	56.0
T03	L4	5	5	5	5	3	1.094	0.322	0.138	61.580	0.94	0.23	0.09	60.1	1.24	0.36	0.23	62.4
T03	L5	5	5	5	5	3	0.686	0.180	0.106	70.540	0.59	0.14	0.09	69.2	0.80	0.23	0.13	71.8
T03	L6	5	5	5	5	3	0.560	0.246	0.084	64.600	0.51	0.12	0.07	61.8	0.63	0.29	0.11	70.4
T04	L1	6	6	6	6	0	4.575	1.785	0.278	47.800	2.16	0.78	0.05	36.9	9.00	4.40	1.05	52.6
T04	L2	6	6	6	6	3	2.988	1.110	0.227	50.400	2.16	0.72	0.14	45.3	4.20	1.46	0.51	58.2
T04	L3	6	6	6	6	4	0.748	0.043	0.060	82.600	0.68	0.02	0.04	76.4	0.84	0.07	0.08	85.3
T04	L5	6	6	6	6	4	0.660	0.123	0.098	76.717	0.53	0.07	0.07	70.6	0.83	0.18	0.12	82.6
T04	L6	6	6	6	6	4	0.360	0.063	0.067	80.500	0.30	0.04	0.05	77.1	0.42	0.09	0.09	85.2
T05	L1	5	5	5	5	0	2.624	1.190	0.114	48.820	1.62	0.36	0.08	38.1	3.70	2.17	0.16	61.6
T05	L2	5	5	5	5	5	2.028	0.516	0.156	58.960	1.83	0.45	0.13	57.1	2.25	0.60	0.17	62.3
T05	L4	5	5	5	5	3	0.836	0.180	0.092	68.620	0.79	0.15	0.08	67.4	0.90	0.21	0.11	69.7
T05	L5	5	5	5	5	3	0.722	0.184	0.102	70.040	0.62	0.12	0.09	68.7	0.81	0.22	0.13	72.7
T05	L6	5	5	5	5	3	0.438	0.136	0.074	71.380	0.39	0.10	0.06	67.3	0.54	0.23	0.08	73.5
T06	L1	5	5	5	5	0	2.978	1.148	0.202	49.340	2.43	0.96	0.11	47.5	4.00	1.45	0.36	50.7
T06	L2	5	5	5	5	3	2.112	0.630	0.182	55.380	1.65	0.39	0.10	50.1	2.37	0.93	0.37	63.0
T06	L3	5	5	5	5	3	0.804	0.066	0.086	82.320	0.70	0.02	0.07	79.3	0.88	0.10	0.11	85.5

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
BATON ROUGE, LOUISIANA

STANDARD STATISTICS ON DYNAFLECT & BENKELMAN BEAM (BB) DEFLECTIONS

16:20 FRIDAY, FEBRUARY 9, 1979

DMD=DYNFLECT MAXIMUM DEFLECTIONS, SCI & BCI=SURFACE & BASE CURVATURE INDEX, SP=PERCENT SPREAD, BMD=BB MAXIMUM DEFLECTIONS

SECT	LAYER	NDMD	NSCI	NBCI	NSPREAD	NBMD	MEANDMD	MEANSCI	MEANBCI	MEANSP	MINDMD	MINSCI	MINBCI	MINSP	MAXDMD	MAXSCI	MAXBCI	MAXSP
T06	L5	5	5	5	5	3	0.588	0.096	0.060	79.08	0.53	0.06	0.04	76.6	0.63	0.12	0.07	83.3
T06	L6	5	5	5	5	3	0.326	0.078	0.058	80.54	0.30	0.05	0.05	78.3	0.35	0.09	0.07	83.7
T07	L1	5	5	5	5	0	2.884	1.258	0.148	45.36	2.25	0.66	0.05	39.3	3.60	1.97	0.27	49.1
T07	L2	5	5	5	5	5	1.938	0.528	0.176	58.76	1.59	0.39	0.13	55.3	2.25	0.63	0.29	63.1
T07	L4	5	5	5	5	3	0.944	0.312	0.102	62.04	0.84	0.27	0.07	59.3	1.03	0.36	0.14	66.5
T07	L5	5	5	5	5	3	0.754	0.256	0.082	65.44	0.59	0.18	0.07	63.4	0.84	0.30	0.10	69.8
T07	L6	5	5	5	5	3	0.482	0.224	0.082	64.94	0.39	0.16	0.07	64.0	0.57	0.26	0.10	67.4
T08	L1	5	5	5	5	0	2.700	0.864	0.296	54.88	2.07	0.69	0.11	53.8	3.90	1.29	0.63	55.9
T08	L2	5	5	5	5	3	2.428	0.750	0.200	55.58	1.74	0.48	0.12	50.4	3.80	1.43	0.36	58.2
T08	L3	5	5	5	5	3	0.922	0.090	0.084	75.50	0.85	0.03	0.06	72.2	1.02	0.18	0.10	80.7
T08	L5	5	5	5	5	3	0.538	0.094	0.050	79.12	0.47	0.02	0.03	74.2	0.62	0.18	0.06	84.7
T08	L6	5	5	5	5	3	0.344	0.068	0.060	80.90	0.32	0.05	0.04	78.5	0.36	0.09	0.07	82.8
T09	L1	5	5	5	5	0	3.300	1.374	0.210	46.76	3.00	1.21	0.14	41.8	3.70	1.70	0.42	52.3
T09	L2	5	5	5	5	3	2.452	0.838	0.186	53.12	1.86	0.45	0.10	48.9	3.50	1.37	0.33	58.9
T09	L3	5	5	5	5	3	1.584	0.330	0.142	62.98	1.50	0.27	0.11	59.7	1.77	0.36	0.25	66.3
T09	L5	5	5	5	5	3	0.702	0.228	0.118	67.52	0.64	0.18	0.09	62.8	0.78	0.30	0.14	69.3
T09	L6	5	5	5	5	3	0.514	0.154	0.104	71.32	0.44	0.10	0.09	68.9	0.57	0.24	0.12	75.1
T10	L1	5	5	5	5	0	2.458	0.820	0.184	52.86	2.01	0.60	0.13	48.9	3.80	1.22	0.36	55.8
T10	L2	5	5	5	5	3	2.434	0.680	0.174	55.18	1.83	0.57	0.09	53.2	4.40	1.00	0.42	57.9
T10	L3	5	5	5	5	3	0.984	0.144	0.086	73.94	0.81	0.07	0.08	70.6	1.05	0.21	0.10	80.2
T10	L5	5	5	5	5	3	0.598	0.074	0.080	79.04	0.51	0.06	0.07	73.9	0.70	0.09	0.10	82.2
T10	L6	5	5	5	5	3	0.334	0.056	0.068	82.26	0.33	0.05	0.06	80.9	0.34	0.06	0.07	82.9
T11	L1	5	5	5	5	0	3.676	1.298	0.258	49.44	2.28	0.75	0.10	41.1	5.50	2.20	0.49	52.9
T11	L2	5	5	5	5	3	2.078	0.608	0.144	55.46	1.86	0.48	0.08	52.5	2.46	0.84	0.24	61.9
T11	L4	5	5	5	5	3	0.934	0.456	0.140	58.62	0.78	0.39	0.10	57.5	1.22	0.57	0.21	61.3
T11	L5	5	5	5	5	3	0.854	0.282	0.102	65.80	0.74	0.21	0.08	63.6	0.94	0.36	0.12	67.7
T11	L6	5	5	5	5	3	0.570	0.192	0.158	68.62	0.45	0.12	0.08	65.7	0.64	0.25	0.24	71.7
T12	L1	5	5	5	5	0	3.900	1.526	0.244	46.68	3.00	1.32	0.16	41.9	5.00	2.09	0.42	50.3
T12	L2	5	5	5	5	3	2.650	0.890	0.202	52.82	2.34	0.66	0.13	47.3	3.20	1.05	0.29	57.8
T12	L5	5	5	5	5	3	0.760	0.156	0.140	73.18	0.66	0.12	0.10	70.1	0.90	0.18	0.26	77.7
T12	L6	5	5	5	5	3	0.456	0.100	0.102	77.06	0.43	0.06	0.07	76.1	0.48	0.14	0.18	77.9
T12	SG	5	5	5	5	3	1.386	0.234	0.108	67.34	1.26	0.18	0.06	65.5	1.68	0.30	0.13	70.1
T13	L1	5	5	5	5	0	3.184	1.160	0.230	50.38	2.28	0.72	0.13	47.9	5.20	1.80	0.48	53.9
T13	L2	5	5	5	5	3	2.232	0.762	0.166	52.62	2.01	0.63	0.11	49.6	2.52	1.02	0.22	56.3
T13	L5	5	5	5	5	3	0.708	0.174	0.094	72.56	0.67	0.12	0.08	69.4	0.78	0.21	0.11	73.5
T13	L6	5	5	5	5	3	0.414	0.092	0.080	77.32	0.39	0.06	0.07	73.8	0.42	0.13	0.09	80.6
T13	SG	5	5	5	5	3	0.976	0.156	0.094	72.64	0.85	0.08	0.08	67.8	1.08	0.25	0.11	73.4
T14	L1	5	5	5	5	0	2.394	0.900	0.232	52.48	2.04	0.45	0.13	45.7	3.00	1.35	0.50	64.7
T14	L2	5	5	5	5	3	2.404	0.736	0.188	55.88	1.62	0.36	0.10	50.5	3.50	1.40	0.30	62.2
T14	L4	5	5	5	5	3	0.950	0.468	0.094	57.54	0.79	0.33	0.07	49.1	1.37	0.84	0.12	60.8
T14	L5	5	5	5	5	3	0.824	0.220	0.104	66.28	0.71	0.18	0.09	60.4	1.05	0.30	0.14	69.0
T14	L6	5	5	5	5	3	0.556	0.230	0.094	64.22	0.46	0.16	0.09	62.4	0.64	0.27	0.11	67.4

APPENDIX H

STANDARD STATISTICS AND COMPREHENSIVE DATA ON THICKNESS AND STRUCTURAL NUMBERS

TABLE 15

STANDARD STATISTICS ON THICKNESS & STRUCTURAL NO(SN) FOR LOUISIANA EXPERIMENTAL BASE COURSE
16:20 FRIDAY, FEBRUARY 9, 1979

SECT	NT1	MT1	NT2	MT2	MNT2	MXT2	NSN1	MSN1	NSN2	MSN2	MNSN2	MXSN2	NSN3	MSN3	MNSN3	MXSN3
C01	0	.	0	.	.	.	5	0.00	5	0.00	0.00	0.00	5	-1.71	-2.19	-1.29
C01	5	6.0	5	6.68	3.25	8.75	5	0.24	5	0.27	0.13	0.35	5	1.28	0.50	2.20
C01	5	6.0	5	6.70	6.25	7.00	5	0.90	5	1.01	0.94	1.05	0	.	.	.
C01	5	7.5	5	6.31	5.00	7.63	5	2.55	5	2.14	1.70	2.59	0	.	.	.
C01	5	4.0	5	4.78	3.75	6.38	5	1.72	5	2.05	1.61	2.74	5	0.92	0.60	1.30
C01	5	1.5	5	1.83	1.56	2.25	5	0.66	5	0.83	0.69	0.99	5	0.18	-0.59	1.00
C02	0	.	0	.	.	.	5	0.00	5	0.00	0.00	0.00	5	-1.61	-2.89	0.00
C02	5	6.0	5	11.20	6.50	17.50	5	0.24	5	0.45	0.26	0.70	5	2.08	0.30	3.00
C02	5	6.0	5	5.95	4.25	6.50	5	0.90	5	0.90	0.64	0.98	5	0.98	0.30	1.40
C02	5	7.5	3	8.67	7.25	9.75	5	2.55	3	2.95	2.47	3.32	5	0.68	0.40	1.30
C02	5	4.0	5	4.08	3.25	5.50	5	1.72	5	1.75	1.40	2.36	5	2.34	2.00	2.60
C02	5	1.5	5	1.64	1.25	1.88	5	0.66	5	0.72	0.55	0.83	5	0.64	0.10	1.00
C03	0	.	0	.	.	.	5	0.00	5	0.00	0.00	0.00	5	-0.61	-0.99	0.00
C03	5	6.0	4	11.13	6.00	16.00	5	0.24	4	0.44	0.24	0.64	5	1.12	0.20	1.50
C03	5	6.0	3	6.58	6.00	7.50	5	0.90	3	0.99	0.90	1.12	5	0.04	-1.49	0.80
C03	5	7.5	4	7.10	6.63	7.38	5	2.55	4	2.41	2.25	2.51	5	2.78	2.00	3.60
C03	5	4.0	5	4.26	3.88	4.75	5	1.72	5	1.83	1.67	2.04	5	0.12	-0.39	0.40
C03	5	1.5	5	1.53	1.38	1.75	5	0.66	5	0.67	0.61	0.77	5	1.12	0.60	2.30
C04	0	.	0	.	.	.	5	0.00	5	0.00	0.00	0.00	5	-1.03	-2.99	0.50
C04	5	6.0	5	7.10	5.25	8.25	5	0.24	5	0.28	0.21	0.33	5	1.72	0.10	4.20
C04	5	6.0	5	6.35	6.00	6.50	5	0.90	5	0.96	0.90	0.98	0	.	.	.
C04	5	7.5	5	6.29	5.31	7.00	5	2.55	5	2.14	1.81	2.38	0	.	.	.
C04	5	4.0	5	4.03	4.00	4.13	5	1.72	5	1.73	1.72	1.78	5	1.26	1.20	1.40
C04	5	1.5	5	1.63	1.50	2.00	5	0.66	5	0.72	0.66	0.88	5	1.24	1.00	1.50
T01	0	.	0	.	.	.	5	0.00	5	0.00	0.00	0.00	5	-1.85	-2.29	-0.59
T01	5	11.5	5	14.85	11.50	18.00	5	0.46	5	0.59	0.46	0.72	5	1.90	1.00	2.50
T01	5	8.0	5	7.70	7.50	8.00	5	2.72	5	2.62	2.55	2.72	5	1.70	1.00	2.80
T01	5	4.0	5	5.33	5.00	5.75	5	1.72	5	2.29	2.15	2.47	5	1.76	1.60	2.00
T01	5	1.5	5	1.60	1.50	1.75	5	0.66	5	0.71	0.66	0.77	5	0.68	0.30	1.40
T02	0	.	0	.	.	.	5	0.00	5	0.00	0.00	0.00	5	-0.69	-1.19	-0.29
T02	5	10.5	2	8.88	8.00	9.75	5	0.42	2	0.35	0.32	0.39	5	0.42	0.10	1.00
T02	5	9.0	5	8.40	7.25	9.00	5	1.35	5	1.26	1.09	1.35	5	2.72	1.20	3.50
T02	5	4.0	5	4.58	3.38	5.75	5	1.72	5	1.97	1.45	2.47	5	1.42	0.20	2.80
T02	5	1.5	5	1.58	1.44	1.75	5	0.66	5	0.69	0.63	0.77	5	0.28	-0.09	0.70
T03	0	.	0	.	.	.	5	0.00	5	0.00	0.00	0.00	5	-0.77	-3.29	0.50
T03	5	10.5	5	12.70	6.00	17.25	5	0.42	5	0.51	0.24	0.69	5	1.00	-0.49	3.90
T03	5	11.0	5	11.11	10.75	11.25	5	3.74	5	3.78	3.66	3.83	5	1.70	1.50	2.00
T03	5	2.0	5	2.13	1.75	3.00	5	0.86	5	0.91	0.75	1.29	5	1.66	1.60	1.80
T03	5	1.5	5	1.86	1.50	2.50	5	0.66	5	0.82	0.66	1.10	5	-0.25	-0.59	0.20
T04	0	.	0	.	.	.	5	0.00	5	0.00	0.00	0.00	5	-1.07	-2.99	0.00
T04	5	1.5	5	3.25	2.25	4.25	5	0.06	5	0.13	0.09	0.17	5	1.36	-0.59	2.50
T04	5	20.0	5	19.20	18.75	20.50	5	3.00	5	2.88	2.81	3.07	5	4.08	3.50	5.20
T04	5	2.0	5	1.80	1.63	2.00	5	0.86	5	0.77	0.70	0.86	5	0.34	-0.29	1.00
T04	5	1.5	5	1.84	1.69	2.00	5	0.66	5	0.81	0.74	0.88	5	1.22	0.70	1.60
T05	0	.	0	.	.	.	5	0.00	5	0.00	0.00	0.00	5	-0.41	-1.89	1.30
T05	5	14.0	5	15.60	12.00	18.50	5	0.56	5	0.62	0.48	0.74	5	1.28	-0.09	2.60
T05	5	8.0	5	9.25	8.25	10.25	5	2.72	5	3.15	2.81	3.49	5	2.22	1.80	2.80
T05	5	2.0	5	1.94	1.38	2.75	5	0.86	5	0.83	0.59	1.18	5	0.50	0.10	0.70
T05	5	1.5	5	1.50	1.25	1.63	5	0.66	5	0.66	0.55	0.72	5	0.76	0.10	1.00
T06	0	.	0	.	.	.	5	0.00	5	0.00	0.00	0.00	5	-0.47	-0.89	0.00
T06	5	3.5	4	6.44	3.75	9.50	5	0.14	4	0.26	0.15	0.38	5	1.06	0.50	1.90
T06	5	16.0	5	15.50	14.00	17.00	5	2.40	5	2.33	2.10	2.55	5	3.72	2.90	4.20
T06	5	4.0	5	4.20	3.50	4.63	5	1.72	5	1.80	1.50	1.99	5	0.46	0.00	1.00

STANDARD STATISTICS ON THICKNESS & STRUCTURAL NO(SN) FOR LOUISIANA EXPERIMENTAL BASE COURSE

16:20 FRIDAY, FEBRUARY 9, 1979

SECT	NT1	MT1	NT2	MT2	MNT2	MXT2	NSN1	MSN1	NSN2	MSN2	MNSN2	MXSN2	NSN3	MSN3	MNSN3	MXSN3
T06	5	1.5	5	1.63	1.50	1.88	5	0.66	5	0.72	0.66	0.83	5	1.28	0.90	1.50
T07	0	.	0	.	.	.	5	0.00	5	0.00	0.00	0.00	5	-0.85	-1.89	-0.19
T07	5	15.0	5	16.23	15.50	17.50	5	0.60	5	0.65	0.62	0.70	5	1.78	1.00	2.90
T07	5	4.5	5	4.64	4.25	5.06	5	1.53	5	1.57	1.44	1.72	5	1.32	0.70	1.90
T07	5	4.0	5	4.76	4.38	5.25	5	1.72	5	2.05	1.88	2.26	5	0.72	0.60	1.10
T07	5	1.5	5	1.68	1.50	1.75	5	0.66	5	0.74	0.66	0.77	5	0.62	0.00	1.00
T08	0	.	0	.	.	.	5	0.00	5	0.00	0.00	0.00	5	0.24	-0.29	0.40
T08	5	6.5	5	8.95	7.75	10.00	5	0.26	5	0.36	0.31	0.40	5	0.26	-1.09	0.80
T08	5	15.0	5	15.60	14.00	17.75	5	2.25	5	2.34	2.10	2.66	5	2.90	1.90	4.10
T08	5	2.0	5	2.05	1.50	3.25	5	0.86	5	0.88	0.65	1.40	5	1.18	0.50	1.70
T08	5	1.5	5	1.51	1.19	1.81	5	0.66	5	0.67	0.52	0.80	5	1.12	0.80	1.60
T09	0	.	0	.	.	.	5	0.00	5	0.00	0.00	0.00	5	-0.89	-1.49	-0.49
T09	5	13.5	5	14.20	13.00	15.00	5	0.54	5	0.57	0.52	0.60	5	1.04	0.00	2.00
T09	5	6.0	5	6.40	6.00	7.00	5	0.90	5	0.96	0.90	1.05	5	1.46	0.50	2.20
T09	5	4.0	3	4.30	4.13	4.38	5	1.72	3	1.85	1.78	1.88	5	1.66	1.50	1.90
T09	5	1.5	3	1.64	1.56	1.81	5	0.66	3	0.73	0.69	0.80	5	0.82	0.30	1.40
T10	0	.	0	.	.	.	5	0.00	5	0.00	0.00	0.00	5	0.20	-0.19	0.70
T10	5	9.5	4	7.78	7.13	8.75	5	0.38	4	0.31	0.29	0.35	5	0.32	0.00	0.70
T10	5	12.0	4	13.00	12.25	13.75	5	1.80	4	1.95	1.84	2.06	5	2.86	2.50	3.50
T10	5	2.0	5	2.95	2.13	3.88	5	0.86	5	1.27	0.92	1.67	5	1.22	0.70	1.90
T10	5	1.5	5	2.25	1.63	2.88	5	0.66	5	0.99	0.72	1.27	5	1.50	0.90	2.30
T11	0	.	0	.	.	.	5	0.00	5	0.00	0.00	0.00	5	-0.63	-2.09	0.30
T11	5	16.5	5	17.60	15.25	20.00	5	0.66	5	0.70	0.61	0.80	5	1.20	0.10	3.10
T11	5	3.0	5	4.38	3.63	5.75	5	1.02	5	1.49	1.23	1.95	5	1.48	1.30	1.70
T11	5	4.0	5	4.19	3.88	4.63	5	1.72	5	1.80	1.67	1.99	5	0.74	0.40	1.50
T11	5	1.5	5	1.66	1.38	2.00	5	0.66	5	0.73	0.61	0.88	5	0.84	0.30	1.20
T12	0	.	0	.	.	.	5	0.00	5	0.00	0.00	0.00	5	-1.15	-1.79	-0.49
T12	5	13.5	5	10.30	8.50	15.50	5	0.54	5	0.41	0.34	0.62	5	1.26	0.10	1.70
T12	5	6.0	5	8.40	7.75	9.00	5	1.08	5	1.51	1.39	1.62	5	2.10	1.60	2.30
T12	5	4.0	5	4.45	3.88	5.00	5	1.72	5	1.92	1.67	2.15	5	2.12	0.80	4.90
T12	5	1.5	5	1.31	1.00	1.75	5	0.66	5	0.58	0.44	0.77	5	1.20	0.90	1.60
T13	0	.	0	.	.	.	5	0.00	5	0.00	0.00	0.00	5	-0.43	-1.09	0.20
T13	5	11.5	3	14.58	12.00	16.50	5	0.46	3	0.58	0.48	0.66	5	0.66	-0.09	1.40
T13	5	10.0	5	9.65	8.50	10.25	5	1.80	5	1.74	1.53	1.84	5	3.12	2.70	3.80
T13	5	2.0	5	2.84	2.50	3.50	5	0.86	5	1.22	1.08	1.50	5	0.64	-0.09	1.20
T13	5	1.5	5	1.75	1.63	2.00	5	0.66	5	0.77	0.72	0.88	5	1.32	1.00	1.60
T14	0	.	0	.	.	.	5	0.00	5	0.00	0.00	0.00	5	0.06	-0.99	1.30
T14	5	15.5	5	13.65	7.00	17.25	5	0.62	5	0.55	0.28	0.69	5	0.42	-1.79	1.80
T14	5	6.0	5	6.49	5.00	7.50	5	2.04	5	2.21	1.70	2.55	5	1.24	-0.79	2.60
T14	5	2.0	5	2.29	1.75	3.88	5	0.86	5	0.98	0.75	1.67	5	1.14	0.90	1.40
T14	5	1.5	5	1.60	1.25	1.75	5	0.66	5	0.70	0.55	0.77	5	0.38	-0.29	1.20

WHERE

N = NUMBER OF OBSERVATIONS, M = MEAN, MN = MINIMUM, MX = MAXIMUM
SN1 = STRUCTURAL NUMBER FROM DESIGN THICKNESS T1
SN2 = STRUCTURAL NUMBER FROM ACTUAL THICKNESS T2
SN3 = STRUCTURAL NUMBER FROM DYNAFLECT DEFLECTIONS

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
BATON ROUGE, LOUISIANA

TABLE 16

COMPREHENSIVE DATA ON THICKNESS & STRUCTURAL NUMBERS(SN) FOR LOUISIANA EXPERIMENTAL BASE COURSE

16:20 FRIDAY, FEBRUARY 9, 1979

L1=EMBANKMENT, L2=SELECT, L3=SOIL CEMENT, L4=BLACK BASE, L5=SCG, L6=BINDER, L7=WEARING
T1=DESIGN THICKNESS, T2=MEASURED THICKNESS, SN1=SN FROM T1, SN2=SN FROM T2, SN3=SN FROM DYNAFLECT DEFLECTIONS

SECT	STATION	LAYER	LOC	T1	T2	SN1	SN2	SN3
C01	158+00	L1	9R	.	.	0.00	0.00	-1.3
C01	159+00	L1	9R	.	.	0.00	0.00	-1.9
C01	160+00	L1	9R	.	.	0.00	0.00	-1.9
C01	161+00	L1	9R	.	.	0.00	0.00	-2.2
C01	162+00	L1	9R	.	.	0.00	0.00	-1.3
C01	158+00	L2	9R	6.0	3.25	0.24	0.13	0.5
C01	159+00	L2	9R	6.0	4.50	0.24	0.18	1.2
C01	160+00	L2	9R	6.0	8.25	0.24	0.33	2.2
C01	161+00	L2	9R	6.0	8.75	0.24	0.35	1.7
C01	162+00	L2	9R	6.0	8.63	0.24	0.35	0.8
C01	158+00	L3	9R	6.0	7.00	0.90	1.05	.
C01	159+00	L3	9R	6.0	6.75	0.90	1.01	.
C01	160+00	L3	9R	6.0	6.25	0.90	0.94	.
C01	161+00	L3	9R	6.0	7.00	0.90	1.05	.
C01	162+00	L3	9R	6.0	6.50	0.90	0.98	.
C01	158+00	L4	9R	7.5	6.88	2.55	2.34	.
C01	159+00	L4	9R	7.5	7.63	2.55	2.59	.
C01	160+00	L4	9R	7.5	6.88	2.55	2.34	.
C01	161+00	L4	9R	7.5	5.00	2.55	1.70	.
C01	162+00	L4	9R	7.5	5.15	2.55	1.75	.
C01	158+00	L6	9R	4.0	3.75	1.72	1.61	0.6
C01	159+00	L6	9R	4.0	4.00	1.72	1.72	0.8
C01	160+00	L6	9R	4.0	4.00	1.72	1.72	1.0
C01	161+00	L6	9R	4.0	6.38	1.72	2.74	0.9
C01	162+00	L6	9R	4.0	5.75	1.72	2.47	1.3
C01	158+00	L7	9R	1.5	1.56	0.66	0.69	1.0
C01	159+00	L7	9R	1.5	1.75	0.66	0.77	0.9
C01	160+00	L7	9R	1.5	1.88	0.66	0.83	-0.6
C01	161+00	L7	9R	1.5	2.25	0.66	0.99	-0.4
C01	162+00	L7	9R	1.5	2.00	0.66	0.88	0.0
C02	176+00	L1	9R	.	.	0.00	0.00	-2.9
C02	177+00	L1	9R	.	.	0.00	0.00	-1.5
C02	178+00	L1	9R	.	.	0.00	0.00	-2.0
C02	179+00	L1	9R	.	.	0.00	0.00	-1.7
C02	180+00	L1	9R	.	.	0.00	0.00	0.0
C02	176+00	L2	9R	6.0	17.50	0.24	0.70	2.6
C02	177+00	L2	9R	6.0	11.00	0.24	0.44	2.8
C02	178+00	L2	9R	6.0	6.50	0.24	0.26	3.0
C02	179+00	L2	9R	6.0	7.00	0.24	0.28	1.7
C02	180+00	L2	9R	6.0	14.00	0.24	0.56	0.3
C02	176+00	L3	9R	6.0	4.25	0.90	0.64	1.4
C02	177+00	L3	9R	6.0	6.00	0.90	0.90	0.7
C02	178+00	L3	9R	6.0	6.50	0.90	0.98	0.3
C02	179+00	L3	9R	6.0	6.50	0.90	0.98	1.2
C02	180+00	L3	9R	6.0	6.50	0.90	0.98	1.3
C02	176+00	L4	9R	7.5	.	2.55	.	0.4
C02	177+00	L4	9R	7.5	7.25	2.55	2.47	1.3
C02	178+00	L4	9R	7.5	.	2.55	.	0.6
C02	179+00	L4	9R	7.5	9.00	2.55	3.06	0.7
C02	180+00	L4	9R	7.5	9.75	2.55	3.32	0.4
C02	176+00	L6	9R	4.0	3.25	1.72	1.40	2.6

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
BATON ROUGE, LOUISIANA

COMPREHENSIVE DATA ON THICKNESS & STRUCTURAL NUMBERS(SN) FOR LOUISIANA EXPERIMENTAL BASE COURSE

16:20 FRIDAY, FEBRUARY 9, 1979

L1=EMBANKMENT, L2=SELECT, L3=SOIL CEMENT, L4=BLACK BASE, L5=SCG, L6=BINDER, L7=WEARING
T1=DESIGN THICKNESS, T2=MEASURED THICKNESS, SN1=SN FROM T1, SN2=SN FROM T2, SN3=SN FROM DYNAFLECT DEFLECTIONS

SECT	STATION	LAYER	LOC	T1	T2	SN1	SN2	SN3
C02	177+00	L6	9R	4.0	5.50	1.72	2.36	2.0
C02	178+00	L6	9R	4.0	3.63	1.72	1.56	2.1
C02	179+00	L6	9R	4.0	4.00	1.72	1.72	2.5
C02	180+00	L6	9R	4.0	4.00	1.72	1.72	2.5
C02	176+00	L7	9R	1.5	1.88	0.66	0.83	1.0
C02	177+00	L7	9R	1.5	1.63	0.66	0.72	0.1
C02	178+00	L7	9R	1.5	1.88	0.66	0.83	0.1
C02	179+00	L7	9R	1.5	1.56	0.66	0.69	1.0
C02	180+00	L7	9R	1.5	1.25	0.66	0.55	1.0
C03	212+75	L1	9R	.	.	0.00	0.00	-1.0
C03	213+75	L1	9R	.	.	0.00	0.00	-1.0
C03	214+00	L1	9R	.	.	0.00	0.00	-0.7
C03	215+00	L1	9R	.	.	0.00	0.00	-0.4
C03	216+00	L1	9R	.	.	0.00	0.00	0.0
C03	212+75	L2	9R	6.0	.	0.24	.	1.5
C03	213+75	L2	9R	6.0	12.50	0.24	0.50	1.5
C03	214+00	L2	9R	6.0	6.00	0.24	0.24	0.2
C03	215+00	L2	9R	6.0	16.00	0.24	0.64	1.4
C03	216+00	L2	9R	6.0	10.00	0.24	0.40	1.0
C03	212+75	L3	9R	6.0	6.25	0.90	0.94	0.2
C03	213+75	L3	9R	6.0	6.00	0.90	0.90	0.2
C03	214+00	L3	9R	6.0	7.50	0.90	1.12	0.8
C03	215+00	L3	9R	6.0	.	0.90	.	0.5
C03	216+00	L3	9R	6.0	.	0.90	.	-1.5
C03	212+75	L4	9R	7.5	7.38	2.55	2.51	2.3
C03	213+75	L4	9R	7.5	.	2.55	.	3.1
C03	214+00	L4	9R	7.5	7.13	2.55	2.42	2.9
C03	215+00	L4	9R	7.5	6.63	2.55	2.25	2.0
C03	216+00	L4	9R	7.5	7.25	2.55	2.47	3.6
C03	212+75	L6	9R	4.0	4.06	1.72	1.75	0.3
C03	213+75	L6	9R	4.0	4.38	1.72	1.88	-0.4
C03	214+00	L6	9R	4.0	4.25	1.72	1.83	0.4
C03	215+00	L6	9R	4.0	4.75	1.72	2.04	0.3
C03	216+00	L6	9R	4.0	3.88	1.72	1.67	0.0
C03	212+75	L7	9R	1.5	1.75	0.66	0.77	2.3
C03	213+75	L7	9R	1.5	1.44	0.66	0.63	0.8
C03	214+00	L7	9R	1.5	1.38	0.66	0.61	0.6
C03	215+00	L7	9R	1.5	1.50	0.66	0.66	1.2
C03	216+00	L7	9R	1.5	1.56	0.66	0.69	0.7
C04	260+75	L1	9R	.	.	0.00	0.00	-2.0
C04	261+75	L1	9R	.	.	0.00	0.00	-0.5
C04	262+75	L1	9R	.	.	0.00	0.00	0.5
C04	263+75	L1	9R	.	.	0.00	0.00	-3.0
C04	264+75	L1	9R	.	.	0.00	0.00	-0.2
C04	260+75	L2	9R	6.0	8.25	0.24	0.33	2.8
C04	261+75	L2	9R	6.0	7.00	0.24	0.28	0.9
C04	262+75	L2	9R	6.0	7.50	0.24	0.30	0.1
C04	263+75	L2	9R	6.0	7.50	0.24	0.30	4.2
C04	264+75	L2	9R	6.0	5.25	0.24	0.21	0.6
C04	260+75	L3	9R	6.0	6.50	0.90	0.98	.
C04	261+75	L3	9R	6.0	6.50	0.90	0.98	.

COMPREHENSIVE DATA ON THICKNESS & STRUCTURAL NUMBERS(SN) FOR LOUISIANA EXPERIMENTAL BASE COURSE

16:20 FRIDAY, FEBRUARY 9, 1979

L1=EMBANKMENT, L2=SELECT, L3=SOIL CEMENT, L4=BLACK BASE, L5=SCG, L6=BINDER, L7=WEARING

T1=DESIGN THICKNESS, T2=MEASURED THICKNESS, SN1=SN FROM T1, SN2=SN FROM T2, SN3=SN FROM DYNAFLECT DEFLECTIONS

SECT	STATION	LAYER	LOC	T1	T2	SN1	SN2	SN3
C04	262+75	L3	9R	6.0	6.00	0.90	0.90	.
C04	263+75	L3	9R	6.0	6.50	0.90	0.98	.
C04	264+75	L3	9R	6.0	6.25	0.90	0.94	.
C04	260+75	L4	9R	7.5	5.31	2.55	1.81	.
C04	261+75	L4	9R	7.5	6.00	2.55	2.04	.
C04	262+75	L4	9R	7.5	6.63	2.55	2.25	.
C04	263+75	L4	9R	7.5	6.50	2.55	2.21	.
C04	264+75	L4	9R	7.5	7.00	2.55	2.38	.
C04	260+75	L6	9R	4.0	4.13	1.72	1.78	1.3
C04	261+75	L6	9R	4.0	4.00	1.72	1.72	1.2
C04	262+75	L6	9R	4.0	4.00	1.72	1.72	1.4
C04	263+75	L6	9R	4.0	4.00	1.72	1.72	1.2
C04	264+75	L6	9R	4.0	4.00	1.72	1.72	1.2
C04	260+75	L7	9R	1.5	2.00	0.66	0.88	1.0
C04	261+75	L7	9R	1.5	1.50	0.66	0.66	1.4
C04	262+75	L7	9R	1.5	1.50	0.66	0.66	1.0
C04	263+75	L7	9R	1.5	1.50	0.66	0.66	1.3
C04	264+75	L7	9R	1.5	1.63	0.66	0.72	1.5
T01	164+00	L1	9R	.	.	0.00	0.00	-2.3
T01	165+00	L1	9R	.	.	0.00	0.00	-0.6
T01	166+00	L1	9R	.	.	0.00	0.00	-2.2
T01	167+00	L1	9R	.	.	0.00	0.00	-2.0
T01	168+00	L1	9R	.	.	0.00	0.00	-2.2
T01	164+00	L2	9R	11.5	14.50	0.46	0.58	2.3
T01	165+00	L2	9R	11.5	18.00	0.46	0.72	1.3
T01	166+00	L2	9R	11.5	16.75	0.46	0.67	1.0
T01	167+00	L2	9R	11.5	13.50	0.46	0.54	2.4
T01	168+00	L2	9R	11.5	11.50	0.46	0.46	2.5
T01	164+00	L4	9R	8.0	8.00	2.72	2.72	1.8
T01	165+00	L4	9R	8.0	7.50	2.72	2.55	1.0
T01	166+00	L4	9R	8.0	7.50	2.72	2.55	2.8
T01	167+00	L4	9R	8.0	7.50	2.72	2.55	1.4
T01	168+00	L4	9R	8.0	8.00	2.72	2.72	1.5
T01	164+00	L6	9R	4.0	5.00	1.72	2.15	2.0
T01	165+00	L6	9R	4.0	5.25	1.72	2.26	1.6
T01	166+00	L6	9R	4.0	5.38	1.72	2.31	1.8
T01	167+00	L6	9R	4.0	5.25	1.72	2.26	1.7
T01	168+00	L6	9R	4.0	5.75	1.72	2.47	1.7
T01	164+00	L7	9R	1.5	1.50	0.66	0.66	0.6
T01	165+00	L7	9R	1.5	1.63	0.66	0.72	0.3
T01	166+00	L7	9R	1.5	1.63	0.66	0.72	0.8
T01	167+00	L7	9R	1.5	1.75	0.66	0.77	1.4
T01	168+00	L7	9R	1.5	1.50	0.66	0.66	0.3
T02	170+00	L1	9R	.	.	0.00	0.00	-0.6
T02	171+00	L1	9R	.	.	0.00	0.00	-1.2
T02	172+00	L1	9R	.	.	0.00	0.00	-0.7
T02	173+00	L1	9R	.	.	0.00	0.00	-0.7
T02	174+00	L1	9R	.	.	0.00	0.00	-0.3
T02	170+00	L2	9R	10.5	.	0.42	.	0.3
T02	171+00	L2	9R	10.5	9.75	0.42	0.39	1.0
T02	172+00	L2	9R	10.5	8.00	0.42	0.32	0.5

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16:20 FRIDAY, FEBRUARY 9, 1979

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T1=DESIGN THICKNESS, T2=MEASURED THICKNESS, SN1=SN FROM T1, SN2=SN FROM T2, SN3=SN FROM DYNAFLECT DEFLECTIONS

SECT	STATION	LAYER	LOC	T1	T2	SN1	SN2	SN3
T02	173+00	L2	9R	10.5	.	0.42	.	0.1
T02	174+00	L2	9R	10.5	.	0.42	.	0.2
T02	170+00	L3	9R	9.0	8.25	1.35	1.24	3.5
T02	171+00	L3	9R	9.0	9.00	1.35	1.35	3.5
T02	172+00	L3	9R	9.0	7.25	1.35	1.09	1.2
T02	173+00	L3	9R	9.0	8.50	1.35	1.27	2.8
T02	174+00	L3	9R	9.0	9.00	1.35	1.35	2.6
T02	170+00	L6	9R	4.0	5.75	1.72	2.47	0.8
T02	171+00	L6	9R	4.0	3.38	1.72	1.45	0.2
T02	172+00	L6	9R	4.0	4.25	1.72	1.83	2.8
T02	173+00	L6	9R	4.0	4.75	1.72	2.04	1.5
T02	174+00	L6	9R	4.0	4.75	1.72	2.04	1.8
T02	170+00	L7	9R	1.5	1.50	0.66	0.66	0.6
T02	171+00	L7	9R	1.5	1.69	0.66	0.74	0.7
T02	172+00	L7	9R	1.5	1.50	0.66	0.66	0.1
T02	173+00	L7	9R	1.5	1.75	0.66	0.77	0.1
T02	174+00	L7	9R	1.5	1.44	0.66	0.63	-0.1
T03	182+00	L1	9R	.	.	0.00	0.00	-1.2
T03	183+00	L1	9R	.	.	0.00	0.00	0.0
T03	184+00	L1	9R	.	.	0.00	0.00	-3.3
T03	185+00	L1	9R	.	.	0.00	0.00	0.5
T03	186+00	L1	9R	.	.	0.00	0.00	0.1
T03	182+00	L2	9R	10.5	6.00	0.42	0.24	1.5
T03	183+00	L2	9R	10.5	17.25	0.42	0.69	0.0
T03	184+00	L2	9R	10.5	17.00	0.42	0.68	3.9
T03	185+00	L2	9R	10.5	12.00	0.42	0.48	-0.5
T03	186+00	L2	9R	10.5	11.25	0.42	0.45	0.1
T03	182+00	L4	9R	11.0	11.25	3.74	3.83	1.5
T03	183+00	L4	9R	11.0	11.25	3.74	3.83	2.0
T03	184+00	L4	9R	11.0	11.13	3.74	3.78	1.5
T03	185+00	L4	9R	11.0	11.19	3.74	3.80	1.9
T03	186+00	L4	9R	11.0	10.75	3.74	3.66	1.6
T03	182+00	L6	9R	2.0	1.75	0.86	0.75	1.6
T03	183+00	L6	9R	2.0	1.88	0.86	0.81	1.8
T03	184+00	L6	9R	2.0	2.00	0.86	0.86	1.7
T03	185+00	L6	9R	2.0	2.00	0.86	0.86	1.6
T03	186+00	L6	9R	2.0	3.00	0.86	1.29	1.6
T03	182+00	L7	9R	1.5	1.50	0.66	0.66	0.2
T03	183+00	L7	9R	1.5	1.88	0.66	0.83	-0.6
T03	184+00	L7	9R	1.5	1.88	0.66	0.83	-0.4
T03	185+00	L7	9R	1.5	1.56	0.66	0.69	-0.5
T03	186+00	L7	9R	1.5	2.50	0.66	1.10	0.0
T04	188+00	L1	9R	.	.	0.00	0.00	0.0
T04	189+00	L1	9R	.	.	0.00	0.00	-1.1
T04	190+00	L1	9R	.	.	0.00	0.00	0.0
T04	191+00	L1	9R	.	.	0.00	0.00	-3.0
T04	192+00	L1	9R	.	.	0.00	0.00	-1.3
T04	188+00	L2	9R	1.5	2.25	0.06	0.09	-0.6
T04	189+00	L2	9R	1.5	4.00	0.06	0.16	1.9
T04	190+00	L2	9R	1.5	4.25	0.06	0.17	1.0
T04	191+00	L2	9R	1.5	3.50	0.06	0.14	2.5

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
BATON ROUGE, LOUISIANA

COMPREHENSIVE DATA ON THICKNESS & STRUCTURAL NUMBERS(SN) FOR LOUISIANA EXPERIMENTAL BASE COURSE
16:20 FRIDAY, FEBRUARY 9, 1979

L1=EMBANKMENT, L2=SELECT, L3=SOIL CEMENT, L4=BLACK BASE, L5=SCG, L6=BINDER, L7=WEARING
T1=DESIGN THICKNESS, T2=MEASURED THICKNESS, SN1=SN FROM T1, SN2=SN FROM T2, SN3=SN FROM DYNAFLECT DEFLECTIONS

SECT	STATION	LAYER	LOC	T1	T2	SN1	SN2	SN3
T04	192+00	L2	9R	1.5	2.25	0.06	0.09	2.0
T04	188+00	L3	9R	20.0	19.00	3.00	2.85	4.3
T04	189+00	L3	9R	20.0	19.00	3.00	2.85	3.6
T04	190+00	L3	9R	20.0	18.75	3.00	2.81	3.8
T04	191+00	L3	9R	20.0	18.75	3.00	2.81	5.2
T04	192+00	L3	9R	20.0	20.50	3.00	3.07	3.5
T04	188+00	L6	9R	2.0	1.88	0.86	0.81	1.0
T04	189+00	L6	9R	2.0	1.63	0.86	0.70	0.0
T04	190+00	L6	9R	2.0	1.75	0.86	0.75	0.1
T04	191+00	L6	9R	2.0	1.75	0.86	0.75	0.9
T04	192+00	L6	9R	2.0	2.00	0.86	0.86	-0.3
T04	188+00	L7	9R	1.5	1.88	0.66	0.83	1.0
T04	189+00	L7	9R	1.5	1.88	0.66	0.83	1.3
T04	190+00	L7	9R	1.5	1.69	0.66	0.74	0.7
T04	191+00	L7	9R	1.5	2.00	0.66	0.88	1.6
T04	192+00	L7	9R	1.5	1.75	0.66	0.77	1.5
T05	194+75	L1	9R	.	.	0.00	0.00	1.3
T05	195+75	L1	9R	.	.	0.00	0.00	-1.5
T05	196+75	L1	9R	.	.	0.00	0.00	-1.9
T05	197+75	L1	9R	.	.	0.00	0.00	0.0
T05	198+75	L1	9R	.	.	0.00	0.00	0.0
T05	194+75	L2	9R	14.0	18.50	0.56	0.74	-0.1
T05	195+75	L2	9R	14.0	12.00	0.56	0.48	2.0
T05	196+75	L2	9R	14.0	16.00	0.56	0.64	2.6
T05	197+75	L2	9R	14.0	16.00	0.56	0.64	0.9
T05	198+75	L2	9R	14.0	15.50	0.56	0.62	1.0
T05	194+75	L4	9R	8.0	8.25	2.72	2.81	1.8
T05	195+75	L4	9R	8.0	10.25	2.72	3.49	2.8
T05	196+75	L4	9R	8.0	9.75	2.72	3.32	2.2
T05	197+75	L4	9R	8.0	9.25	2.72	3.15	2.0
T05	198+75	L4	9R	8.0	8.75	2.72	2.98	2.3
T05	194+75	L6	9R	2.0	2.75	0.86	1.18	0.5
T05	195+75	L6	9R	2.0	1.75	0.86	0.75	0.7
T05	196+75	L6	9R	2.0	2.06	0.86	0.89	0.6
T05	197+75	L6	9R	2.0	1.75	0.86	0.75	0.6
T05	198+75	L6	9R	2.0	1.38	0.86	0.59	0.1
T05	194+75	L7	9R	1.5	1.50	0.66	0.66	1.0
T05	195+75	L7	9R	1.5	1.50	0.66	0.66	0.7
T05	196+75	L7	9R	1.5	1.63	0.66	0.72	1.0
T05	197+75	L7	9R	1.5	1.25	0.66	0.55	1.0
T05	198+75	L7	9R	1.5	1.63	0.66	0.72	0.1
T06	200+75	L1	9R	.	.	0.00	0.00	-0.4
T06	201+75	L1	9R	.	.	0.00	0.00	0.0
T06	202+75	L1	9R	.	.	0.00	0.00	-0.9
T06	203+75	L1	9R	.	.	0.00	0.00	-0.9
T06	204+75	L1	9R	.	.	0.00	0.00	-0.2
T06	200+75	L2	9R	3.5	.	0.14	.	0.5
T06	201+75	L2	9R	3.5	5.00	0.14	0.20	1.2
T06	202+75	L2	9R	3.5	9.50	0.14	0.38	0.9
T06	203+75	L2	9R	3.5	7.50	0.14	0.30	1.9
T06	204+75	L2	9R	3.5	3.75	0.14	0.15	0.8

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16:20 FRIDAY, FEBRUARY 9, 1979

L1=EMBANKMENT, L2=SELECT, L3=SOIL CEMENT, L4=BLACK BASE, L5=SCG, L6=BINDER, L7=WEARING
T1=DESIGN THICKNESS, T2=MEASURED THICKNESS, SN1=SN FROM T1, SN2=SN FROM T2, SN3=SN FROM DYNAFLECT DEFLECTIONS

SECT	STATION	LAYER	LOC	T1	T2	SN1	SN2	SN3
T06	200+75	L3	9R	16.0	14.00	2.40	2.10	4.0
T06	201+75	L3	9R	16.0	14.75	2.40	2.21	2.9
T06	202+75	L3	9R	16.0	16.50	2.40	2.48	4.2
T06	203+75	L3	9R	16.0	15.25	2.40	2.29	3.3
T06	204+75	L3	9R	16.0	17.00	2.40	2.55	4.2
T06	200+75	L6	9R	4.0	4.50	1.72	1.93	1.0
T06	201+75	L6	9R	4.0	4.63	1.72	1.99	0.4
T06	202+75	L6	9R	4.0	4.00	1.72	1.72	0.4
T06	203+75	L6	9R	4.0	3.50	1.72	1.50	0.5
T06	204+75	L6	9R	4.0	4.38	1.72	1.88	0.0
T06	200+75	L7	9R	1.5	1.50	0.66	0.66	0.9
T06	201+75	L7	9R	1.5	1.50	0.66	0.66	1.2
T06	202+75	L7	9R	1.5	1.63	0.66	0.72	1.5
T06	203+75	L7	9R	1.5	1.88	0.66	0.83	1.3
T06	204+75	L7	9R	1.5	1.63	0.66	0.72	1.5
T07	206+75	L1	9R	.	.	0.00	0.00	-0.3
T07	207+75	L1	9R	.	.	0.00	0.00	-0.3
T07	208+75	L1	9R	.	.	0.00	0.00	-1.9
T07	209+75	L1	9R	.	.	0.00	0.00	-0.2
T07	210+00	L1	9R	.	.	0.00	0.00	-1.6
T07	206+75	L2	9R	15.0	15.63	0.60	0.63	1.1
T07	207+75	L2	9R	15.0	16.88	0.60	0.68	1.0
T07	208+75	L2	9R	15.0	15.50	0.60	0.62	2.3
T07	209+75	L2	9R	15.0	17.50	0.60	0.70	1.6
T07	210+00	L2	9R	15.0	15.63	0.60	0.63	2.9
T07	206+75	L4	9R	4.5	4.25	1.53	1.44	1.2
T07	207+75	L4	9R	4.5	4.63	1.53	1.57	1.3
T07	208+75	L4	9R	4.5	5.00	1.53	1.70	1.9
T07	209+75	L4	9R	4.5	4.25	1.53	1.44	0.7
T07	210+00	L4	9R	4.5	5.06	1.53	1.72	1.5
T07	206+75	L6	9R	4.0	4.81	1.72	2.07	0.6
T07	207+75	L6	9R	4.0	4.38	1.72	1.88	0.7
T07	208+75	L6	9R	4.0	4.75	1.72	2.04	0.6
T07	209+75	L6	9R	4.0	4.63	1.72	1.99	1.1
T07	210+00	L6	9R	4.0	5.25	1.72	2.26	0.6
T07	206+75	L7	9R	1.5	1.63	0.66	0.72	0.7
T07	207+75	L7	9R	1.5	1.75	0.66	0.77	0.6
T07	208+75	L7	9R	1.5	1.75	0.66	0.77	0.8
T07	209+75	L7	9R	1.5	1.75	0.66	0.77	1.0
T07	210+00	L7	9R	1.5	1.50	0.66	0.66	0.0
T08	218+75	L1	9R	.	.	0.00	0.00	0.3
T08	219+75	L1	9R	.	.	0.00	0.00	0.4
T08	220+75	L1	9R	.	.	0.00	0.00	-0.3
T08	221+75	L1	9R	.	.	0.00	0.00	0.4
T08	222+75	L1	9R	.	.	0.00	0.00	0.4
T08	218+75	L2	9R	6.5	8.00	0.26	0.32	0.4
T08	219+75	L2	9R	6.5	10.00	0.26	0.40	-1.1
T08	220+75	L2	9R	6.5	9.25	0.26	0.37	0.7
T08	221+75	L2	9R	6.5	9.75	0.26	0.39	0.5
T08	222+75	L2	9R	6.5	7.75	0.26	0.31	0.8
T08	218+75	L3	9R	15.0	15.50	2.25	2.32	2.8

COMPREHENSIVE DATA ON THICKNESS & STRUCTURAL NUMBERS(SN) FOR LOUISIANA EXPERIMENTAL BASE COURSE
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SECT	STATION	LAYER	LOC	T1	T2	SN1	SN2	SN3
T08	219+75	L3	9R	15.0	15.75	2.25	2.36	4.1
T08	220+75	L3	9R	15.0	17.75	2.25	2.66	2.4
T08	221+75	L3	9R	15.0	14.00	2.25	2.10	3.3
T08	222+75	L3	9R	15.0	15.00	2.25	2.25	1.9
T08	218+75	L6	9R	2.0	3.25	0.86	1.40	1.4
T08	219+75	L6	9R	2.0	2.25	0.86	0.97	0.7
T08	220+75	L6	9R	2.0	1.50	0.86	0.65	1.6
T08	221+75	L6	9R	2.0	1.75	0.86	0.75	0.5
T08	222+75	L6	9R	2.0	1.50	0.86	0.65	1.7
T08	218+75	L7	9R	1.5	1.25	0.66	0.55	0.9
T08	219+75	L7	9R	1.5	1.75	0.66	0.77	1.6
T08	220+75	L7	9R	1.5	1.81	0.66	0.80	0.8
T08	221+75	L7	9R	1.5	1.19	0.66	0.52	1.1
T08	222+75	L7	9R	1.5	1.56	0.66	0.69	1.2
T09	224+75	L1	9R	.	.	0.00	0.00	-0.5
T09	225+75	L1	9R	.	.	0.00	0.00	-0.6
T09	226+75	L1	9R	.	.	0.00	0.00	-1.5
T09	227+75	L1	9R	.	.	0.00	0.00	-1.0
T09	228+75	L1	9R	.	.	0.00	0.00	-0.9
T09	224+75	L2	9R	13.5	15.00	0.54	0.60	0.0
T09	225+75	L2	9R	13.5	15.00	0.54	0.60	0.8
T09	226+75	L2	9R	13.5	13.00	0.54	0.52	1.2
T09	227+75	L2	9R	13.5	14.00	0.54	0.56	2.0
T09	228+75	L2	9R	13.5	14.00	0.54	0.56	1.2
T09	224+75	L3	9R	6.0	7.00	0.90	1.05	2.2
T09	225+75	L3	9R	6.0	7.00	0.90	1.05	1.4
T09	226+75	L3	9R	6.0	6.00	0.90	0.90	2.1
T09	227+75	L3	9R	6.0	6.00	0.90	0.90	0.5
T09	228+75	L3	9R	6.0	6.00	0.90	0.90	1.1
T09	224+75	L6	9R	4.0	4.38	1.72	1.88	1.6
T09	225+75	L6	9R	4.0	4.38	1.72	1.88	1.6
T09	226+75	L6	9R	4.0	4.13	1.72	1.78	1.7
T09	227+75	L6	9R	4.0	.	1.72	.	1.9
T09	228+75	L6	9R	4.0	.	1.72	.	1.5
T09	224+75	L7	9R	1.5	1.56	0.66	0.69	0.5
T09	225+75	L7	9R	1.5	1.56	0.66	0.69	0.6
T09	226+75	L7	9R	1.5	1.81	0.66	0.80	0.3
T09	227+75	L7	9R	1.5	.	0.66	.	1.3
T09	228+75	L7	9R	1.5	.	0.66	.	1.4
T10	230+75	L1	9R	.	.	0.00	0.00	0.0
T10	231+75	L1	9R	.	.	0.00	0.00	-0.2
T10	232+75	L1	9R	.	.	0.00	0.00	0.4
T10	233+75	L1	9R	.	.	0.00	0.00	0.7
T10	234+75	L1	9R	.	.	0.00	0.00	0.1
T10	230+75	L2	9R	9.5	8.75	0.38	0.35	0.7
T10	231+75	L2	9R	9.5	7.25	0.38	0.29	0.0
T10	232+75	L2	9R	9.5	7.13	0.38	0.29	0.0
T10	233+75	L2	9R	9.5	8.00	0.38	0.32	0.3
T10	234+75	L2	9R	9.5	.	0.38	.	0.6
T10	230+75	L3	9R	12.0	12.25	1.80	1.84	2.5
T10	231+75	L3	9R	12.0	13.25	1.80	1.99	3.5

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T1=DESIGN THICKNESS, T2=MEASURED THICKNESS, SN1=SN FROM T1, SN2=SN FROM T2, SN3=SN FROM DYNAFLECT DEFLECTIONS

SECT	STATION	LAYER	LOC	T1	T2	SN1	SN2	SN3
T10	232+75	L3	9R	12.0	12.75	1.80	1.91	2.6
T10	233+75	L3	9R	12.0	13.75	1.80	2.06	3.2
T10	234+75	L3	9R	12.0	.	1.80	.	2.5
T10	230+75	L6	9R	2.0	2.88	0.86	1.24	1.0
T10	231+75	L6	9R	2.0	3.25	0.86	1.40	1.7
T10	232+75	L6	9R	2.0	3.88	0.86	1.67	1.9
T10	233+75	L6	9R	2.0	2.13	0.86	0.92	0.8
T10	234+75	L6	9R	2.0	2.63	0.86	1.13	0.7
T10	230+75	L7	9R	1.5	1.88	0.66	0.83	2.0
T10	231+75	L7	9R	1.5	2.75	0.66	1.21	1.2
T10	232+75	L7	9R	1.5	2.88	0.66	1.27	1.1
T10	233+75	L7	9R	1.5	2.13	0.66	0.94	0.9
T10	234+75	L7	9R	1.5	1.63	0.66	0.72	2.3
T11	236+75	L1	9R	.	.	0.00	0.00	-0.6
T11	237+75	L1	9R	.	.	0.00	0.00	0.3
T11	238+75	L1	9R	.	.	0.00	0.00	-0.7
T11	239+75	L1	9R	.	.	0.00	0.00	-0.1
T11	240+75	L1	9R	.	.	0.00	0.00	-2.1
T11	236+75	L2	9R	16.5	15.25	0.66	0.61	1.1
T11	237+75	L2	9R	16.5	17.25	0.66	0.69	0.4
T11	238+75	L2	9R	16.5	17.00	0.66	0.68	1.3
T11	239+75	L2	9R	16.5	18.50	0.66	0.74	0.1
T11	240+75	L2	9R	16.5	20.00	0.66	0.80	3.1
T11	236+75	L4	9R	3.0	5.75	1.02	1.95	1.7
T11	237+75	L4	9R	3.0	3.63	1.02	1.23	1.6
T11	238+75	L4	9R	3.0	4.38	1.02	1.49	1.3
T11	239+75	L4	9R	3.0	4.38	1.02	1.49	1.5
T11	240+75	L4	9R	3.0	3.75	1.02	1.27	1.3
T11	236+75	L6	9R	4.0	4.63	1.72	1.99	0.8
T11	237+75	L6	9R	4.0	4.00	1.72	1.72	0.4
T11	238+75	L6	9R	4.0	4.00	1.72	1.72	0.4
T11	239+75	L6	9R	4.0	4.44	1.72	1.91	1.5
T11	240+75	L6	9R	4.0	3.88	1.72	1.67	0.6
T11	236+75	L7	9R	1.5	1.38	0.66	0.61	1.2
T11	237+75	L7	9R	1.5	1.56	0.66	0.69	1.2
T11	238+75	L7	9R	1.5	1.63	0.66	0.72	1.0
T11	239+75	L7	9R	1.5	1.75	0.66	0.77	0.3
T11	240+75	L7	9R	1.5	2.00	0.66	0.88	0.5
T12	242+75	L1	9R	.	.	0.00	0.00	-1.5
T12	243+75	L1	9R	.	.	0.00	0.00	-0.5
T12	244+75	L1	9R	.	.	0.00	0.00	-1.0
T12	245+75	L1	9R	.	.	0.00	0.00	-1.8
T12	246+75	L1	9R	.	.	0.00	0.00	-1.0
T12	242+75	L2	9R	13.5	15.50	0.54	0.62	1.7
T12	243+75	L2	9R	13.5	9.00	0.54	0.36	0.1
T12	244+75	L2	9R	13.5	8.50	0.54	0.34	1.3
T12	245+75	L2	9R	13.5	9.50	0.54	0.38	1.5
T12	246+75	L2	9R	13.5	9.00	0.54	0.36	1.7
T12	242+75	L5	9R	6.0	8.50	1.08	1.53	2.3
T12	243+75	L5	9R	6.0	8.50	1.08	1.53	2.1
T12	244+75	L5	9R	6.0	9.00	1.08	1.62	2.2

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
BATON ROUGE, LOUISIANA

COMPREHENSIVE DATA ON THICKNESS & STRUCTURAL NUMBERS(SN) FOR LOUISIANA EXPERIMENTAL BASE COURSE

16:20 FRIDAY, FEBRUARY 9, 1979

L1=EMBANKMENT, L2=SELECT, L3=SOIL CEMENT, L4=BLACK BASE, L5=SCG, L6=BINDER, L7=WEARING
T1=DESIGN THICKNESS, T2=MEASURED THICKNESS, SN1=SN FROM T1, SN2=SN FROM T2, SN3=SN FROM DYNAFLECT DEFLECTIONS

SECT	STATION	LAYER	LOC	T1	T2	SN1	SN2	SN3
T12	245+75	L5	9R	6.0	7.75	1.08	1.39	2.3
T12	246+75	L5	9R	6.0	8.25	1.08	1.48	1.6
T12	242+75	L6	9R	4.0	4.88	1.72	2.10	1.8
T12	243+75	L6	9R	4.0	3.88	1.72	1.67	4.9
T12	244+75	L6	9R	4.0	4.13	1.72	1.78	0.8
T12	245+75	L6	9R	4.0	5.00	1.72	2.15	1.8
T12	246+75	L6	9R	4.0	4.38	1.72	1.88	1.3
T12	242+75	L7	9R	1.5	1.38	0.66	0.61	0.9
T12	243+75	L7	9R	1.5	1.00	0.66	0.44	1.2
T12	244+75	L7	9R	1.5	1.31	0.66	0.58	1.3
T12	245+75	L7	9R	1.5	1.75	0.66	0.77	1.0
T12	246+75	L7	9R	1.5	1.13	0.66	0.50	1.6
T13	248+75	L1	9R	.	.	0.00	0.00	-0.4
T13	249+75	L1	9R	.	.	0.00	0.00	0.2
T13	250+75	L1	9R	.	.	0.00	0.00	-0.7
T13	251+75	L1	9R	.	.	0.00	0.00	-1.1
T13	252+75	L1	9R	.	.	0.00	0.00	-0.2
T13	248+75	L2	9R	11.5	.	0.46	.	0.9
T13	249+75	L2	9R	11.5	.	0.46	.	-0.1
T13	250+75	L2	9R	11.5	16.50	0.46	0.66	1.4
T13	251+75	L2	9R	11.5	15.25	0.46	0.61	1.1
T13	252+75	L2	9R	11.5	12.00	0.46	0.48	0.0
T13	248+75	L5	9R	10.0	10.00	1.80	1.80	2.7
T13	249+75	L5	9R	10.0	8.50	1.80	1.53	2.8
T13	250+75	L5	9R	10.0	10.25	1.80	1.84	3.3
T13	251+75	L5	9R	10.0	9.50	1.80	1.71	3.8
T13	252+75	L5	9R	10.0	10.00	1.80	1.80	3.0
T13	248+75	L6	9R	2.0	2.50	0.86	1.08	0.6
T13	249+75	L6	9R	2.0	2.50	0.86	1.08	1.0
T13	250+75	L6	9R	2.0	3.50	0.86	1.50	-0.1
T13	251+75	L6	9R	2.0	2.81	0.86	1.21	1.2
T13	252+75	L6	9R	2.0	2.88	0.86	1.24	0.5
T13	248+75	L7	9R	1.5	1.63	0.66	0.72	1.4
T13	249+75	L7	9R	1.5	1.63	0.66	0.72	1.6
T13	250+75	L7	9R	1.5	1.75	0.66	0.77	1.1
T13	251+75	L7	9R	1.5	1.75	0.66	0.77	1.0
T13	252+75	L7	9R	1.5	2.00	0.66	0.88	1.5
T14	254+75	L1	9R	.	.	0.00	0.00	1.3
T14	255+75	L1	9R	.	.	0.00	0.00	0.0
T14	256+75	L1	9R	.	.	0.00	0.00	-1.0
T14	257+75	L1	9R	.	.	0.00	0.00	0.0
T14	258+00	L1	9R	.	.	0.00	0.00	0.0
T14	254+75	L2	9R	15.5	17.25	0.62	0.69	-1.8
T14	255+75	L2	9R	15.5	12.25	0.62	0.49	1.3
T14	256+75	L2	9R	15.5	7.00	0.62	0.28	1.8
T14	257+75	L2	9R	15.5	16.00	0.62	0.64	0.1
T14	258+00	L2	9R	15.5	15.75	0.62	0.63	0.7
T14	254+75	L4	9R	6.0	6.19	2.04	2.10	2.6
T14	255+75	L4	9R	6.0	6.50	2.04	2.21	-0.8
T14	256+75	L4	9R	6.0	5.00	2.04	1.70	0.8
T14	257+75	L4	9R	6.0	7.25	2.04	2.47	2.2

COMPREHENSIVE DATA ON THICKNESS & STRUCTURAL NUMBERS(SN) FOR LOUISIANA EXPERIMENTAL BASE COURSE
16:20 FRIDAY, FEBRUARY 9, 1979

L1=EMBANKMENT, L2=SELECT, L3=SOIL CEMENT, L4=BLACK BASE, L5=SCG, L6=BINDER, L7=WEARING
T1=DESIGN THICKNESS, T2=MEASURED THICKNESS, SN1=SN FROM T1, SN2=SN FROM T2, SN3=SN FROM DYNAFLECT DEFLECTIONS

SECT	STATION	LAYER	LOC	T1	T2	SN1	SN2	SN3
T14	258+00	L4	9R	6.0	7.50	2.04	2.55	1.4
T14	254+75	L6	9R	2.0	1.75	0.86	0.75	0.9
T14	255+75	L6	9R	2.0	2.00	0.86	0.86	1.3
T14	256+75	L6	9R	2.0	3.88	0.86	1.67	1.4
T14	257+75	L6	9R	2.0	1.81	0.86	0.78	0.9
T14	258+00	L6	9R	2.0	2.00	0.86	0.86	1.2
T14	254+75	L7	9R	1.5	1.75	0.66	0.77	0.1
T14	255+75	L7	9R	1.5	1.75	0.66	0.77	1.2
T14	256+75	L7	9R	1.5	1.75	0.66	0.77	0.8
T14	257+75	L7	9R	1.5	1.50	0.66	0.66	0.1
T14	258+00	L7	9R	1.5	1.25	0.66	0.55	-0.3

N=470

APPENDIX I

ROUGHNESS, RUTTING AND CRACKING DATA

TABLE 17

ROUGHNESS, RUTTING, AND CRACKING DATA ON TEST SECTIONS 16:20 FRIDAY, FEBRUARY 9, 1979

SECT	DATE	LAYER	MAYS_PSI	CHLOE	RUTTING	CRACKING
C1	6/16/76	BC	3.7	.	.	.
T1	6/16/76	BC	3.1	.	.	.
T2	6/16/76	BC	3.5	.	.	.
C2	6/16/76	BC	3.2	.	.	.
T3	6/16/76	BC	2.6	.	.	.
T4	6/16/76	BC	2.8	.	.	.
T5	6/16/76	BC	3.0	.	.	.
T6	6/16/76	BC	3.2	.	.	.
T7	6/16/76	BC	3.2	.	.	.
C3	6/16/76	BC	3.6	.	.	.
T8	6/16/76	BC	3.1	.	.	.
T9	6/16/76	BC	3.3	.	.	.
T10	6/16/76	BC	2.8	.	.	.
T11	6/16/76	BC	3.2	.	.	.
T12	6/16/76	BC	2.4	.	.	.
T13	6/16/M6	BC	3.2	.	.	.
T14	6/16/76	BC	3.1	.	.	.
C4	6/16/76	BC	3.0	.	.	.
C1	7/14/76	WC	4.3	4.1	0	0
T1	M/14/76	WC	4.3	3.7	0	0
T2	7/14/76	WC	4.0	3.8	0	0
C2	7/14/76	WC	4.0	3.5	0	0
T3	7/14/76	WC	3.7	3.5	0	0
T4	7/14/76	WC	3.4	3.3	.	0
T5	7/14/76	WC	4.0	3.8	0	0
T6	7/14/76	WC	4.2	3.9	0	0
T7	7/14/76	WC	4.5	4.3	0	0
C3	7/14/76	WC	4.5	3.9	0	0
T8	7/14/76	WC	4.0	3.5	0	0
T9	7/14/76	WC	4.5	4.0	0	0
T10	7/14/76	WC	4.1	3.6	0	0
T11	7/14/76	WC	3.8	3.8	0	0
T12	7/14/76	WC	3.3	3.8	0	0
T13	7/14/76	WC	4.1	3.9	0	0
T14	7/14/76	WC	3.8	3.8	0	0
C4	7/14/76	WC	4.4	4.3	0	0

WHERE

BC = BINDER COURSE

WC = WEARING COURSE

PSI = PRESENT SERVICEABILITY INDEX

APPENDIX J

PROPERTIES OF PORTLAND CEMENT

MATT4031

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS
MATERIALS SECTION

DATE 11/17/75

REPORT OF TESTS OF TYPE IB PORTLAND CEMENT

LABORATORY NO...225325 PROJECT NO.. 8-09-20 DATE SAMPLED..10/29/75

SUBMITTED BY....THOMAS BORDELON, PROJECT ENGINEER

PURPOSE.........VERIFICATION IDENTIFICATION..S-16V

TEST RESULTS

PHYSICAL TESTS		CHEMICAL TESTS	
TIME OF SET, HR/MIN, VICAT-INI	45	LOSS ON IGNITION, %	.8
TIME OF SET, HR/MIN, VICAT-FIN	8:00	SULFUR TRIOXIDE, %	3.2
SOUNDNESS	PASSED	IRON & ALUMINUM OXIDE, %	8.6
NORMAL CONSISTENCY, %	25.7	MAGNESIUM OXIDE, %	.9
AUTOCLAVE EXPANSION, %	.01	INSOLUBLE RESIDUE, %	.18
FINENESS, AIR PERMEABILITY	3656	TRICALCIUM ALUMINATE, %	8.4
AIR CONTENT, %	10.6	FERRIC OXIDE, %	3.3
COMP. STRENGTH, PSI 72 HOURS	2630	ALUMINUM OXIDE, %	5.3
COMP. STRENGTH, PSI 7 DAYS	3690	RATIO OF AL2O3 TO FE2O3	1.6

REMARKS... THIS SAMPLE CONFORMS TO STANDARD SPECIFICATIONS FOR TYPE 1 AND 1B CEMENT

COPIES TO
THOMAS BORDELON, PROJECT ENGINEER
MATERIALS ENGINEER
03 DISTRICT LABORATORY ENGINEER
DISTRICT ENGINEER

Original Signed By:
Joe T. Baker

H. B. RUSHING BY
MATERIALS ENGINEER

DEPARTMENT OF HIGHWAYS
MATERIALS SECTION

REPORT OF TESTS
OF
TYPE IB PORTLAND CEMENT

LABORATORY NO...227605 PROJECT NO.. 8-09-20 DATE SAMPLED..12/06/75

SUBMITTED BY....THOMAS BORDELON, PROJECT ENGINEER

PURPOSE.........VERIFICATION IDENTIFICATION..SM117

TEST RESULTS

PHYSICAL TESTS		CHEMICAL TESTS	
TIME OF SET, HR/MIN, VICAT-INI	45	LOSS ON IGNITION, %	1.3
TIME OF SET, HR/MIN, VICAT-FIN	8:00	SULFUR TRIOXIDE, %	3.1
SOUNDNESS	PASSED	IRON & ALUMINUM OXIDE, %	8.1
NORMAL CONSISTENCY, %	25.2	MAGNESIUM OXIDE, %	.9
AUTOCLAVE EXPANSION, %	.04	INSOLUBLE RESIDUE, %	.61
FINENESS, AIR PERMEABILITY	3784	TRICALCIUM ALUMINATE, %	8.1
AIR CONTENT, %	10.1	FERRIC OXIDE, %	3.1
COMP. STRENGTH, PSI 72 HOURS	2960	ALUMINUM OXIDE, %	5.0
COMP. STRENGTH, PSI 7 DAYS	4150	RATIO OF AL2O3 TO FE2O3	1.6

REMARKS... THIS SAMPLE CONFORMS TO STANDARD SPECIFICATIONS FOR
TYPE 1 AND 1B CEMENT

COPIES TO
THOMAS BORDELON, PROJECT ENGINEER
MATERIALS ENGINEER
08 DISTRICT LABORATORY ENGINEER
DISTRICT ENGINEER

[illegible] 615:05

Original Signed By:
Joe T. Baker

H. B. RUSHING BY

MATERIALS ENGINEER

LDH Stock No. 03-22-1004
Rev. 5/72

STATE OF LOUISIANA

DEPARTMENT OF HIGHWAYS

Central LABORATORY

REPORT OF TESTS OF Cement

Laboratory No. 238135 Date 5/19/76

Project No. 8-09-20 FAP No. P. O. No.

Submitted By T. D. Bordelon

Source of Material La. Inds., Alex., La.

Sampled From Transport Date Sampled 4-22-76

Identification SM 130 Quantity Represented 7,500,000 lbs.

Intended Use Soil Cement

Remarks

Test Results

Time of Set, hr.-min.	
Vicat-initial	0:45
Vicat-Final	8:00
Soundness	pass
Normal Consistency, %	24.3
Autoclave Exp., %	+0.02
Air permeability	3380
Air Content, %	11.8
Comp. Str., PSI	
72 hrs.	2800
7 Days	3800
Loss on ignition, %	1.1
Sulphur Trioxide %	2.5
Oxides, % Iron & Alum.	8.5
Magnesium	0.9
Insoluble Residue %	2.60
Tricalcium Aluminate %	10.4
Ferric Oxide %	2.8
Aluminum Oxide %	5.7
Al Oxide/ Fe Oxide	2.0

REMARKS: The aboe tested cement is suitable for intended use.

ew:cc

T. D. Bordelon

K. J. Roy

H. B. Rushing by: [signature]

Materials Engineer