## INFORMATIONAL PROPOSAL (For information only, not to be used for bidding)

NEBRASKA DEPARTMENT OF ROADS LETTING DATE : October 10, 2002

CALL ORDER: N14 CONTRACT ID: 6236

CONTROL NO./SEQ. NO.: 61236 /000 PROJECT NO.: RD-80-4(1012)

TENTATIVE START DATE: 06/16/03 CONTRACT TIME: 80 WORKING DAYS

LOCATION: ON I-80, EAST OF BRADY.

IN COUNTY: LINCOLN

BIDDER

GROUP 3 CONCRETE PAVEMENT

#### NOTES

THE	TOTAL	AMOUNT	OF W	ORK 1	WHICH	WILI	BE	ACCE	PTED	IN	THIS	LETT	ring	IS	LIMIT	ED :	ro \$		·
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STRIKE OUT WORDS IN PARENTHESIS THAT DO NOT APPLY.

## NOTICE TO ALL BIDDERS

To report bid rigging activities, call: 1-800-424-9071

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m. eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

## **LETTING QUESTIONS**

Prior to the letting, any questions pertaining to the Special Provisions or the plans for this project should be directed to Construction Division personnel at (402) 479-4568 or (402) 479-4529.

## STATE OF NEBRASKA DEPARTMENT OF ROADS

## Required Provisions Supplemental to the

## **Standard Specifications for Highway Construction**

### I. Application

These contract provisions shall apply to all work performed on the contract by the contractor with his own organization and with the assistance of workmen under his immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

The contractor shall insert in each of his subcontracts all of the stipulations contained in the Special Provisions and these Required Provisions.

A breach of any of the stipulations contained in these Required Provisions may be grounds for termination of the contract.

## **II.** Equal Opportunity

## 1. Selection of Labor

During the performance of this contract, the contractor shall not discriminate against labor from any other state.

#### 2. Nebraska Fair Employment Practices Act

The contractor shall not discriminate against any employee or applicant for employment, to be employed in the performance of this contract with respect to his hire, terms, conditions, or privileges of employment, because of his race, color, religion, sex or national origin. The contractor agrees to post in a conspicuous place or places a notice to be provided by the State Highway Department which sets forth excerpts of the Act.

## 3. Nebraska Equal Pay Act

The contractor shall not discriminate on the basis of sex by paying wages to employees of one sex at a lesser rate than the rate paid to employees of the opposite sex for comparable work on jobs which have comparable requirements. An abstract of the Act is included on the notice which is provided by the State Highway Department.

April 4, 1995

### III. Employment of Labor

### 1. General

No person under the age of sixteen (16) years, and no one whose age or physical condition is such as to make his employment dangerous to his health or safety, or to the health and safety of others shall be employed on any project. This paragraph shall not be construed to deny the employment of older people or physically handicapped persons, otherwise employable, where such persons may be safely assigned to work which they can ably perform.

No person currently serving sentence to a penal or correction institution shall be employed on any project.

Except as specifically provided under this section, workers who are qualified by training or experience to be assigned to projects of this character shall not be discriminated against on any grounds whatsoever.

## 2. **Payrolls**

Payrolls and basic records relating thereto will be maintained during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working on the site of the work.

The contractor's and subcontractor's payroll records shall be available for inspection by authorized representatives of the State Highway Department and authorized representatives of Federal Agencies.

The wages of labor shall be paid in legal tender of the United States, except that this condition will be considered satisfied if payment is made by a negotiable check, on a solvent bank, which may be cashed readily by the employee in the local community for the full amount, without discount or collection charges of any kind. Where checks are used for payment the contractor shall make all necessary arrangements for them to be cashed and shall give information regarding such arrangements.

No fee of any kind shall be asked or accepted by the contractor or any of his agents from any person as a condition of employment on the project.

No laborers shall be charged for any tools used in performing their respective duties except for reasonably avoidable loss or damage thereto.

Every employee on the work covered by this contract shall be permitted to lodge, board and trade where and with whom he elects and neither the contractor nor his agents, nor his employees shall directly or indirectly require as a condition of employment that an employee shall lodge, board or trade at a particular place or with a particular person.

No charge shall be made for any transportation furnished by the contractor or his agents to any person employed on the work.

April 4, 1995

No individual shall be employed as a laborer on this contract except on a wage basis, but this shall not be construed to prohibit the rental of teams, trucks or other equipment from individuals. No such rental agreement, or any charges for feed, gasoline, supplies, or repairs on account of such agreement, shall cause any deduction from the wages accruing to any employee except as authorized by the regulations hereinbefore cited.

## IV. Safety and Accident Prevention

In the performance of this contract, the contractor shall comply with all applicable Federal, State and local laws governing safety, health and sanitation. The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions, on his own responsibility or as the contracting officer may determine, reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

## V. Subletting or Assigning the Contract

The contractor shall perform with his own organization contract work amounting to not less than 30 percent of the total contract amount except that any items designated in the contract as "Specialty Items" may be performed by subcontract and the amount of any such "Specialty Items" so performed may be deducted from the total contract amount before computing the amount of work required to be performed by the contractor with his own organization.

Any items that have been selected as "Specialty Items" for the contract are listed as such in the Special Provisions found elsewhere in the contract.

No portion of the contract shall be sublet, assigned, or otherwise disposed of except with the written consent of the contracting officer or his authorized representative. Requests for permission to sublet assign or otherwise dispose of any portion of the contract shall be in writing and accompanied by a showing that the organization which will perform the work is particularly experienced and equipped for such work. The contractor shall give assurance that the minimum wage for labor as stated in his proposal shall apply to labor performed on all work sublet, assigned or otherwise disposed of in any way. Consent to sublet, assign or otherwise dispose of any portion of the contract shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract.

## SPECIAL PROVISIONS FOR STATE PROJECT NO. RD-80-4(1012)

#### **GENERAL CONDITIONS**

Sealed bids for the work contemplated in this proposal form will be received at the office of the Nebraska Department of Roads in Room 104 of the Central Office Building at 1500 Highway 2 at Lincoln, Nebraska, on October 10, 2002, until 1:30 P.M.

Bids submitted by mail should be addressed to the Nebraska Department of Roads, c/o Contract Lettings Section, P.O. Box 94759, Lincoln, NE 68509-4759.

The 1997 English Edition of the Standard Specifications for Highway Construction, including all amendments and additions thereto effective at the date of the contract, are made a part of these Special Provisions, through reference.

The Supplemental Specifications to the 1997 English Edition of the Standard Specifications for Highway Construction dated July 12, 2001, including all amendments and additions thereto effective at the date of the contract, are made part of these Special Provisions, through reference.

The Required Provisions dated April 4, 1995, are attached to and are a part of this proposal form.

The attention of bidders is directed to the Required Provisions covering subletting or assigning the contract.

The proposal contains a statement that the contractor is complying with, and will continue to comply with, fair labor standards in the pursuit of his business and in the execution of the work contemplated in this proposal.

Fair labor standards shall be construed to mean such a scale of wages and conditions of employment as are paid and maintained by at least fifty per cent of the contractors in the same business or field of endeavor as the contractor filing this proposal.

BIDDING PROPOSAL FORMS FOR THIS WORK WILL BE ISSUED AND A CONTRACT AWARDED TO A CONTRACTOR WHO IS QUALIFIED FOR CONCRETE PAVEMENT OR BITUMINOUS.

### STATUS OF UTILITIES

No utilities have been or will be required to relocate within the limits of this project.

Underground utilities may exist within the limits of this project. The Contractor shall determine to his satisfaction the extent of occupancy of any underground utilities located within the respective construction areas and the extent of conflict with the proposed work under this contract.

Any utility adjustments or interruption of service for the convenience of the Contractor shall be the sole responsibility of the Contractor.

To arrange for utilities to locate and flag their underground facilities, contact The Diggers Hotline of Nebraska at 1-800-331-5666.

## STATUS OF RIGHT-OF-WAY (S1-16-0801)

According to the best information available, all necessary right-of-way has been acquired.

# SUBCONTRACTOR BIDDERS LIST INFORMATION (\$1-43-0801)

All bidders must complete and submit with the bidding proposal, the "Subcontractor Bidders List" form provided by the NDR Contracts office.

Bidders must identify all firms who bid or quote subcontracts on all projects. If no bids or subcontractor quotations are received, the "Subcontractor Bidders List" must be submitted with the bidding documents and the bidder must indicate on the face of the "Subcontractor Bidders List" that no bids or subcontractor quotations were received.

## CONTROL OF WORK (S1-43-0901)

Subsection 105.08 in the 1997 Standard Specifications is void and replaced by the following:

105.08 - Authority and Duty of the Inspector

Department inspectors are authorized to inspect all work performed and all materials furnished. Such inspection may extend to the preparation, fabrication, or manufacture of the materials. The inspector has the authority to reject work or materials until any issues can be decided, including the right to suspend work. The inspector is not authorized to alter or waive the provisions of the contract or act as a supervisor for the Contractor.

105.13 – Tentative Acceptance of Portions of the Project

Paragraph 3.a. of Subsection 105.13 is amended by deleting the word "normal".

## LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC (\$1-43-1001)

107.14 – Opening of Sections of the Project to Traffic

Subsection 107.14 Paragraphs 2.b.(1) and (2) are void and replaced by the following:

- 2.b. (1) Whenever the Department permits the public use of a highway undergoing construction, repair, or maintenance in lieu of a detour route, the Contractor shall not be held responsible for damages to those portions of the project upon which the Department permitted public use, when such damages are the result of no proximate act or failure to act on the part of the Contractor.
  - (2) If the traveling public should cause damage to the roadway, the Contractor shall assist the State in identifying the responsible party and the Contractor shall as a minimum if present at the time of the damage record pertinent information regarding the accident. (Who caused the damage; when the damage occurred; and how the damage occurred.)

107.15 – Contractor's Responsibility for Work

Subsection 107.15 is amended by adding Paragraph 1.b.(3) as follows:

(3) The Contractor shall not be held responsible for damage caused by the traveling public on those portions of the project where the Department has permitted public use of the road in lieu of using a detour route and the damage as not the result of any proximate act or failure to act on the part of the Contractor.

## MEASUREMENT AND PAYMENT (S1-43-0901)

109.08 - Acceptance, Final Payment, and Termination of Contractor's Responsibility

Subsection 109.08 Paragraph c. amended by deleting the word "normal".

Subsection 109.08 Paragraph d. is void and replaced by the following:

d. If the traveling public should cause damage to the roadway the Contractor shall assist the State in identifying the responsible party and the Contractor shall as a minimum if present at the time of the damage record pertinent information regarding the accident. (Who caused the damage; when the damage occurred; and how the damage occurred.)

# SPECIAL PROSECUTION AND PROGRESS (Holidays)

The contractor will be required to schedule his operations in a manner to have all traffic lanes open to traffic on the following holidays:

Memorial Day and Labor Day weekends – these holiday weekends shall begin at 3:00 p.m., Friday, and shall include the remainder of Friday and all day Saturday, Sunday and the Monday holiday.

July 4<sup>th</sup> - If July 4<sup>th</sup> falls on a Monday or Friday, the Saturday and Sunday either preceding or following July 4<sup>th</sup> shall be included as part of the holiday.

- If July 4<sup>th</sup> falls on either Tuesday, Wednesday or Thursday, only that day will be considered as the holiday.
- If July 4<sup>th</sup> falls on a Saturday or Sunday, the day preceding and the day following July 4<sup>th</sup> shall be included as part of the holiday.
- The July 4<sup>th</sup> holiday shall begin at 3:00 p.m. on the day preceding the first day of the July 4<sup>th</sup> holiday, as defined above.

Failure to have all traffic lanes open to traffic, as specified, on these holidays will result in a liquidated damage assessment of \$5,000 per occurrence. This assessment will be in addition to other liquidated damages described elsewhere in this proposal or in the Standard Specifications used for this project.

# SPECIAL PROSECUTION AND PROGRESS (Dowel Bar Retrofit and Diamond Grinding)

The Contractor shall maintain a single lane closure in areas where the dowel bar placement/grouting operation is in progress or where it has been completed and the diamond grinding has not been completed. Providing that the minimum material strengths have been met, the Contractor will be required to begin the diamond grinding within 7 calendar days after completion of the dowel bar retrofit on any traffic lane segment of 5 miles or less in length. For segments greater than 5 miles, the Contractor will be required to begin the diamond grinding within 7 calendar days after completing 5 miles of the dowel bar retrofit. The removal of the concrete in the kerf cuts and placement/grouting of the dowel bars will be completed for an entire lane segment in one direction prior to beginning concrete removal of the kerf cuts and dowel bar placement/grouting operation in another segment. Failure to begin the diamond grinding in any traffic lane segment within the calendar days allowed shall result in the assessment of liquidated damages of \$1,000.00 per day for each traffic lane segment in violation.

The Contractor shall schedule his work so as to minimize the number of lane closures; for example, constructing different items of work at the same time whenever possible.

It is suggested that the Contractor saw the slots for the dowel bar retrofit operation during the concrete repair operation.

Lanes may be reopened to traffic after sawing the slots for the dowel bars.

The maximum continuous length of lane closure, excluding length of taper, for dowel bar placement and diamond grinding operation shall be ½ the length of the project, not to exceed 4.5 miles. Based on the work operation, the Engineer may specify a lane closure shorter than the maximum permissible length. In the event that the Contractor elects to initiate simultaneous lane closures, the distance between the end of the first closure and the beginning of the taper for the next closure shall be a minimum of 2 miles. Lane closures will be allowed in eastbound and westbound lanes concurrently.

#### **CONSTRUCTION DETAILS**

# TEMPORARY TRAFFIC CONTROL DEVICES (\$4-9-1201)

Paragraphs 2.a. of Subsection 422.05 in the Standard Specifications is void and superseded by the following:

2.a. If signs are not returned or are returned damaged, and the damage is beyond reasonable "wear and tear" and the damage was caused by the Contractor, then the Contractor shall be charged the value of the missing or damaged items. These charges shall be deducted from monies due the Contractor upon final payment.

# TYPE B HIGH INTENSITY WARNING LIGHTS (S4-9-1002)

All references in the plans to Type B High Intensity Warning Lights shall be considered void. The plans will not be revised to reflect this change.

#### TRAFFIC CONTROL MANAGEMENT

## **Description and General Requirements**

Paragraph 1. of Subsection 422.01 of the Specifications is void and superseded by the following:

- This work consists of furnishing, installing at the locations shown on the plans, operating, maintaining, and when work is complete, removing the temporary traffic control devices described in this Section. This work shall also consist of providing Traffic Control Management by furnishing one or more qualified individuals who shall be specifically responsible for performing or supervising the installation, inspection, maintenance, and removal of those devices.
- 2. When project conditions warrant, the Engineer may suspend the need for Traffic Control Management and will notify the Contractor accordingly. The Contractor shall be given at least three days' notice of the suspension, but the work may be suspended in a lesser time if mutually acceptable to the Department and the Contractor. During periods when no payment is being made for Traffic Control Management under this Special Provision, this provision will not apply.

Paragraphs 2.i., 2.j.(2)(ii), and 2.k. of Subsection 422.01 of the Specifications are void; and Paragraph 2. of Subsection 422.01 of the Specifications and Supplemental Specifications is amended to include the following:

p.(1) The Contractor shall designate an individual to be the Traffic Control Manager for the project. This person shall be certified as a Traffic Control Supervisor or Traffic Control Technician by the American Traffic Safety Services Association (ATSSA). Other certifications may be accepted if approved by the Engineer. The Traffic Control Manager shall also possess a current Flagger Certification Card. Copies of the Traffic

- Control Manager's certifications shall be provided to the Engineer prior to the installation of any traffic control devices on the project.
- (2) The Contractor may also designate one or more Assistant Traffic Control Managers for the project. These individuals shall be qualified by certification as a Traffic Control Technician by the American Traffic Safety Services Association (ATSSA) or other training or *qualification* satisfactory to the Engineer.
  - q. The Traffic Control Manager or Assistant Traffic Control Manager shall be available and reasonably accessible (within 30 minutes) to the project during normal working hours on every day that work is being performed on the project and always on call at other times. During other than normal working hours, these individuals shall respond and be on the project within 60 minutes of notice being given that traffic control items on the project are in need of attention. The Contractor may elect to have an employee or employees perform this function simultaneously on more than one project, but shall not be relieved from the sanctions or disincentives that may be imposed for failure to meet the deadlines specified herein.
  - r. The Traffic Control Manager's or Assistant Traffic Control Manager's activities on the project shall be dedicated to the purpose of monitoring and maintaining the traffic control devices. The performance of other crafts or trades will be permitted, but shall be secondary to the performance of duties associated with traffic control.
  - s. The Contractor shall provide prior to the installation of any traffic control devices on the project two to four telephone numbers where the Traffic Control Manager or an Assistant Traffic Control Manager may be reached 24 hours a day, seven days a week.
  - t. The Traffic Control Manager or Assistant Traffic Control Manager shall have available at all times an approved, current version of the Traffic Control Plan.
  - u. If corrective action is not taken by the Contractor within the times specified in Paragraph 2.q., the Engineer may suspend all work on the project until the problem is corrected. The Engineer shall make reasonable allowance for existing weather conditions in the case of materials whose installation is governed by temperature or other atmospheric conditions.

#### **Construction Methods**

Subsection 422.03 of the Standard Specifications is amended to include the following:

- 19. The Traffic Control Manager's or Assistant Traffic Control Manager's duties shall include:
  - a. Insuring that all traffic control devices are functioning properly, are clean, and are correctly located as shown on the Traffic Control Plan or as directed by the Engineer. This provision in no way restricts the cleaning, repair, and maintenance of traffic control devices to the Traffic Control Manager or his or her assistants.
  - b. Inspecting all traffic control devices on every calendar day that traffic control devices are in place, whether in use or covered. Inspections shall take place a minimum of twice daily, and at least two inspections shall be eight hours apart. However, during or following periods of inclement weather or when the situation warrants for other reasons, inspections shall be done more frequently. At least 1 inspection each week

- shall occur during hours of darkness. The Traffic Control Manager or Assistant Traffic Control Manager shall perform the inspections.
- c. Monitoring the cleaning and maintenance of all traffic control devices and the placement of temporary pavement markings.
- d. Completing a Traffic Control Inspection form provided by the Engineer at the completion of each inspection. These forms shall be submitted daily to the Engineer, either in person or via facsimile transmission.
- e. Monitoring flagging operations on the project. The Traffic Control Manager or Assistant Traffic Control Manager shall not act as a flagger, except in an emergency or when providing relief for short periods of time.
- f. Coordinating all traffic control operations, including those of subcontractors and suppliers.
- g. Coordinating traffic-related activities with the appropriate law enforcement, fire, and emergency medical agencies.
- h. Attending all project scheduling meetings.

### **Method of Measurement**

Subsection 422.04 of the Standard Specifications and Supplemental Specifications is amended to include the following:

- 21. (1) Traffic Control Management is measured by the day for the actual number of days management and inspection are required and provided. Payment will only be made for one day of Traffic Control Management during each midnight-to-midnight period regardless of the number of Traffic Control Managers or assistants required to adequately perform the work.
  - (2) No measurement will be made when the Engineer has suspended the need for Traffic Control Management and notified the Contractor accordingly.

#### **Basis of Payment**

Paragraph 1. of Subsection 422.05 of the Standard Specifications and Supplemental Specifications is amended to include the following:

Traffic Control Management

Day (d)

Paragraph 15. of Subsection 422.05 of the Supplemental Specifications is renumbered to be Paragraph 16. Subsection 422.05 of the Standard Specifications and Supplemental Specifications is amended to include the following:

15. With regard to inspection, maintenance, and repair of temporary traffic control devices, an assessment in the amount of \$500 per occurrence per day shall be charged to the Contractor when any of the following occur (these assessments shall be in addition to any other liquidated damages which may be assessed):

- a. The Contractor fails to respond within the timeframe specified in Paragraph 2.q. of the amended Subsection 422.01 of the Standard Specifications. Response time shall begin when:
  - 1) The Engineer notifies the Contractor of deficiencies in person;
  - 2) The Engineer makes notification of deficiencies via the 24-hour phone number(s) provided by the Contractor; or
  - 3) The Engineer leaves a message or receives no answer at the number(s) provided:
- b. The Contractor fails to begin corrective actions to repair, replace, remove, relocate, or clean any traffic control devices or pavement markings within two hours of the completion of an inspection that uncovers deficiencies or within two hours of notification of deficiencies by the Engineer.
- c. The Contractor fails to begin corrective actions to repair, replace, remove, relocate, or clean any traffic control devices or pavement markings within two hours of documented notification by an official law enforcement agency.
- d. The Contractor fails to make or report the inspections prescribed in this specification.
- e. The Engineer observes and documents any occurrence of the Contractor or his or her subcontractors flagrantly disregarding the necessary maintenance of traffic control devices that are in obvious need of attention.

## **CONCRETE PAVEMENT JOINT REPAIR**

Section 605 in the Standard Specifications and Supplemental Specifications is amended to include the following:

Approximately 18 lane joints will require the full depth joint repair before the retrofitting and diamond grinding operations.

Paragraph 6. of Subsection 605.01 is amended to include the following:

When performing this operation on multi-lane highways, the Contractor will be permitted to have one lane closed at night. Where the pavement has been removed, the Contractor will be required to have the excavated area filled with either (1) the appropriate patching concrete material for curing overnight, or (2) a commercially available cold-mix bituminous mixture or other suitable temporary patch material with a durable surface, as directed by the Engineer. The next day, the Contractor will then be required to remove any "temporary patches", thoroughly clean the repair area and complete the required permanent patch so that the lane can be opened to traffic by the end of the second day. The material, installation, removal and disposal of these temporary patches will not be measured and paid for directly, but shall be considered subsidiary to the concrete pavement repair work being performed.

The last sentence of Paragraph 2. of Subsection 605.04 is void.

Paragraph 16. of Subsection 605.04 is void.

Paragraph 21. of Subsection 605.04 is amended to include the following:

- b. Class PR1 Concrete may be used for concrete repair if the repaired area is to remain closed to traffic for at least 24 hours.
- c. Class PR3 Concrete shall be used for all concrete repair if the repaired areas must be opened to traffic within 24 hours.
- d. Strength measurements for opening the PR1 and PR3 Concrete may be performed using the maturity meter method.

Paragraphs 25. b. (1) and 25. b. (2) of Subsection 605.04 are void and superseded by the following:

A full depth diamond blade saw cut shall be made and dowel bars and/or tie bars anchored into the faces of the existing concrete as designated in the plans. A full depth cut approximately 4 inches (100 mm) wide may be made with a wheel cutter through the repair section if the repair will be overlaid. The wheel-type cutter shall be operated to produce minimum disturbance of the foundation course material, with no encroachment of the cut into the concrete of the adjoining lane.

Dowel bars or tie bars shall be anchored into the faces of the existing concrete as designated in the plans. Dowel bars shall be installed parallel to the pavement surface and parallel to the pavement centerline. To provide proper alignment, a three-bit gang drill shall be used to install the dowel bars. The gang drill shall be capable of drilling simultaneously 3-holes in the same plane at the spacing shown in the plans. The tie bars can be drilled independently. The drilled holes shall be thoroughly cleaned with compressed air to remove all dust, dirt, loose material, and moisture.

After cleaning and prior to dowel or tie bar insertion, an application of grout shall be made at the back of the hole. The grout shall be from the Approved Products List. Twist the dowel or tie bar one full turn during insertion to completely surround it with the grout. Grout retention disks shall be placed on the bars as designated in the plans. The furnishing and installation of dowel and tie bars will not be paid for directly but shall be considered subsidiary to the concrete pavement or joint repair work being performed.

Paragraph 25. c. of Subsection 605.04 is amended to include the following:

Any loosened foundation course material shall be removed and replaced with concrete.

Paragraph 1. of Subsection 605.06 is amended to include the following:

Pay Item	Pay Unit		
Concrete Pavement,	Joint Repair	Square Yard (SY)	
Concrete Favernent,	_ Joint Repair	Square Meter (m <sup>2</sup> )	

## **CONCRETE PAVEMENT REPAIR**

Section 605 in the Standard Specifications and Supplemental Specifications is amended to include the following:

Paragraph 6. of Subsection 605.01 is amended to include the following:

When performing this operation on multi-lane highways, the Contractor will be permitted to have one lane closed at night. Where the pavement has been removed, the Contractor will be required to have the excavated area filled with either (1) the appropriate patching concrete material for curing overnight, or (2) a commercially available cold-mix bituminous mixture or other suitable temporary patch material with a durable surface, as directed by the Engineer. The next day, the Contractor will then be required to remove any "temporary patches", thoroughly clean the repair area and complete the required permanent patch so that the lane can be opened to traffic by the end of the second day. The material, installation, removal and disposal of these temporary patches will not be measured and paid for directly, but shall be considered subsidiary to the concrete pavement repair work being performed.

Repairing the concrete pavement shall be done prior to the retrofitting and diamond grinding operations.

The last sentence of Paragraph 2. of Subsection 605.04 is void.

Paragraph 10. of Subsection 605.04 is void.

Paragraph 16. of Subsection 605.04 is amended to include the following:

The minimum concrete placement shall be as shown in the plans or as directed by the engineer. Interior transverse joints shall be cut at the spacings designated in the plans.

Paragraph 21. of Subsection 605.04 is amended to include the following:

- b. Class PR1 Concrete may be used for concrete repair if the repaired area is to remain closed to traffic for at least 24 hours.
- c. Class PR3 Concrete shall be used for all concrete repair if the repaired areas must be opened to traffic within 24 hours.
- d. Strength measurements for opening the PR1 and PR3 Concrete may be performed using the maturity meter method.

Paragraphs 25. b. (1) and 25. b. (2) of Subsection 605.04 are void and superseded by the following:

A full depth diamond blade saw cut shall be made and dowel bars and/or tie bars anchored into the faces of the existing concrete as designated in the plans. A full depth cut approximately 4 inches (100 mm) wide may be made with a wheel cutter through the repair section if the repair will be overlaid. The wheel-type cutter shall be operated to produce minimum disturbance of the foundation course material, with no encroachment of the cut into the concrete of the adjoining lane.

Dowel bars shall be placed on the transverse joint on the longer side of the panel to minimize the panel length. A minimum of 2 tie bars shall be placed on each side of a full depth pavement repair as designated in the plans.

Dowel bars or tie bars shall be anchored into the faces of the existing concrete as designated in the plans. Dowel bars shall be installed parallel to the pavement surface and parallel to the pavement centerline. To provide proper alignment, a three-bit gang drill shall be used to install the dowel bars. The gang drill shall be capable of drilling simultaneously 3-holes in the same plane at the spacing shown in the plans. The tie bars can be drilled independently. The drilled holes shall be thoroughly cleaned with compressed air to remove all dust, dirt, loose material, and moisture.

After cleaning and prior to dowel or tie bar insertion, an application of grout shall be made at the back of the hole. The grout shall be from the Approved Products List. Twist the dowel or tie bar one full turn during insertion to completely surround it with the grout. Grout retention disks shall be placed on the bars as designated in the plans. The furnishing and installation of dowel and tie bars will not be paid for directly but shall be considered subsidiary to the concrete pavement or joint repair work being performed.

Paragraph 25. c. of Subsection 605.04 is amended to include the following:

Any loosened foundation course material shall be removed and replaced with concrete.

Paragraph 25. d. of Subsection 605.04 is void.

Subsection 605.05 in the 1997 Standard Specifications is amended to provide that adjoining full depth repair areas of varying widths in the same traffic lane, which are situated such the removals of the areas may be accomplished concurrently, shall be considered as a single repair. The total area of the adjoining areas shall be combined to determine the repair type as shown in Table 605.01.

## CONCRETE PAVEMENT REPAIR (PARTIAL DEPTH REPAIR)

Paragraph 6. of Subsection 605.01 is amended to include the following:

When performing this operation on multi-lane highways, the Contractor will be permitted to have one lane closed at night. Where the pavement has been removed, the Contractor will be required to have the excavated area filled with either (1) the appropriate patching concrete material for curing overnight, or (2) a commercially available cold-mix bituminous mixture or other suitable temporary patch material with a durable surface, as directed by the Engineer. The next day, the Contractor will then be required to remove any "temporary patches", thoroughly clean the repair area and complete the required permanent patch so that the lane can be opened to traffic by the end of the second day. The material, installation, removal and disposal of these temporary patches will not be measured and paid for directly, but shall be considered subsidiary to the concrete pavement repair work being performed.

Paragraph 2. of Subsection 605.04 is void and superseded by the following:

All repairs shall be cut so the edges are parallel or perpendicular to the traveled way. For partial depth repairs, the Contractor shall cut and chip the pavement edges with a 15-pound maximum chipping hammer to form reasonably neat vertical surfaces. These repairs shall be done prior to the retrofitting and diamond grinding operations.

Paragraph 9.c. of Subsection 605.04 is void and superseded by the following:

The vertical faces except for the transverse and longitudinal joints and cracks of the repair shall be brushed with the grout just prior to placement of the repair concrete.

Paragraph 16. of Subsection 605.04 is amended to include the following:

The minimum concrete placement shall be as shown in the plans or as directed by the engineer. Interior transverse joints shall be cut at the spacings designated in the plans.

Paragraph 21. of Subsection 605.04 is amended to include the following:

- b. Class PR1 Concrete may be used for concrete repair if the repaired area is to remain closed to traffic for at least 24 hours.
- c. Class PR3 Concrete shall be used for all concrete repair if the repaired areas must be opened to traffic within 24 hours.
- d. Strength measurements for opening the PR1 and PR3 Concrete may be performed using the maturity meter method.

Paragraph 25. d. of Subsection 605.04 is void.

Subsection 605.05 in the 1997 Standard Specifications is amended to provide that adjoining partial depth repair areas of varying widths in the same traffic lane, which are situated such the removals of the areas may be accomplished concurrently, shall be considered as a single repair. The total area of the adjoining areas shall be combined to determine the repair type as shown in Table 605.01.

## SEALING TRANSVERSE AND LONGITUDINAL CRACKS

Subsection 611.01 in the 2001 Supplemental Specifications is void and superseded by the following:

This work shall consist of preparation and sealing of transverse cracks and longitudinal cracks, which are in the Portland cement concrete roadway after the retrofitting and diamond grinding operations.

The first sentence of Paragraph 1. a. of Subsection 611.03 is void and superseded by the following:

Transverse and longitudinal cracks from 1/4 inch to 1/2 inch (6 mm to 12.5 mm) in width shall be prepared with a crack reservoir of a nominal 1/2 inch (12.5 mm) in width at the surface of the pavement and to a depth of at least 5/8 inch (16 mm).

The last sentence of Paragraph 1. b. of Subsection 611.03 is void and superseded by the following:

The backer rod shall be of such diameter to be seated properly that will allow for a depth of approximately 1/2 inch to 1 inch (12.5 mm to 25 mm) of crack sealing filler.

Paragraphs 2. d. and 2. e. of Subsection 611.03 are void and superseded by the following:

- d. When proper pouring consistency is attained, the cracks shall be filled to 1/8 inch (3 mm) below the pavement surface through the use of a pressure type applicator approved by the Engineer, and equipped with a nozzle which will fit into the joints.
- e. Material spilled on surfaces of the pavement adjacent to the crack shall be cleaned away by the Contractor at no additional cost to the Department.

Subsection 611.04 is void and superseded by the following:

Sealing transverse and longitudinal cracks will be measured for payment by the linear foot (meter) of transverse and longitudinal cracks sealed, measured to the nearest foot (meter) of sealed cracks, complete, in place and accepted by the Engineer.

## CROSS-STITCHING CONCRETE PAVEMENT

### Description

This work shall consist of strengthening the pavement structure by cross-stitching the longitudinal and diagonal cracks and longitudinal joints in areas designated by the Engineer. The work shall be done prior to the dowel bar retrofit and diamond grinding operations. The work shall include drilling the holes, placing the new tie bars, and filling the holes with grout.

#### Location of Drill Holes

The drill holes for the deformed bars shall be placed on alternating sides of the crack or joint at maximum 24-inch centers. A minimum of 2 deformed bars per site shall be placed on the longitudinal cracks or joints.

#### Equipment

The equipment must be approved by the engineer. The drill used shall be hydraulic, with vacuum removal of drill dust. The drill shall be mounted in a frame which shall hold the drill at a 35 degree angle. The drill shall not be hand held. If the vacuum dust removal system is not available on the drill, provisions shall be made to clean the hole free of dust by some other means. A hydraulic drill is required to minimize damage to the concrete surface.

#### Material

Bars shall be No. 5, deformed, of the length "L" required for the depth of the pavement "T" as shown in the plans. The bars shall conform to the requirements of Section 1020 of the 1997 English Edition of the Standard Specifications.

A non-shrink grout from the approved products list for use in cross-stitching operations shall be used. The grout shall be placed according to the manufacturer's recommendations.

#### Construction

Cross-stitching Concrete Pavement, as illustrated in the plans shall be accomplished by: (1) drilling a 1-inch diameter hole at a 35 degree angle from the horizontal which intersects the crack or joint at mid-point of the slab; (2) the drill hole shall be started at approximately distance "X" from the crack or joint as shown in the table; (3) the hole shall be drilled to a depth "D" indicated in the table; (4) prior to placing the grout material, the drill hole shall be cleaned of all drilling dust; (5) the drill hole shall be partially filled with grout; (6) the deformed bar of length "L" shown in the table shall be installed in the hole and seated; (7) the hole shall then be filled with grout until it is flush with the surface of the concrete pavement; and (8) if any damage is done to the joint sealing material during installation of the bars, the joint shall be resealed with like material.

#### Measurement and Payment

The Engineer will measure each deformed bar installed and complete in place. Payment for "Cross-Stitching" at the contract unit price will be full compensation for work prescribed in this specification.

#### DIAMOND GRINDING AND TEXTURING CONCRETE PAVEMENT

#### DESCRIPTION

This work shall consist of diamond grinding and texturing the driving lane of the mainline concrete pavement surface for profile improvement. The passing lane and outside shoulder shall be daylighted as required to prevent any vertical projection in excess of 1/4-inch. The grinding quantities are based on 14' width. Grinding shall not extend across bridges unless specifically designated by the engineer. The work shall be done according to the plans and these Special Provisions.

### PROJECT INFORMATION

The 12" plain portland cement concrete pavement to be ground was constructed in 1986. The surface is 24 feet wide with joint spacing of 16'-6" and has 3' inside and 10' outside concrete shoulders. The joints are not doweled. Pertinent data for the original construction project is shown below:

### Eastbound and Westbound:

Highway I-80

Reference Post 198.40 to 205.61

Station 1170+30 to 1563+50 Westbound Station 1170+50 to 1563+50 Eastbound Equation: Sta. 1429+00.61 BK = Sta. 1440+83.70 AH

Class of Concrete: 47B (30% Coarse Aggregate)

Type of Coarse Aggregate: Limestone

Source of Coarse Aggregate: Kerford Limestone

Weeping Water, NE

Los Angeles Abrasion (% Wear): Min. 26, Max. 30, Avg. 29

Bridge Exceptions: Sta. 1303+23 to 1313+09

The minimum, maximum and average joint faulting in each mile is shown in the following table:

## **JOINT FAULT MEASUREMENTS, INCHES**

Location	Min.	Eastbound Max.	Avg.	Min.	Westbound Max.	Avg.
I-80 (198.40 to 199.0) Sta. 1170+50 to 1202+48	0.19	0.50	0.37	0.25	0.40	0.33
I-80 (199.0 to 200.0) Sta. 1202+48 to 1254+85	0.13	0.46	0.28	0.10	0.80	0.38
I-80 (200.0 to 201.0) Sta. 1254+85 to 1308+29	0.00	0.51	0.25	0.10	0.50	0.24
I-80 (201.0 to 202.0) Sta. 1308+29 to 1360+45	0.11	0.50	0.25	0.13	0.58	0.27
I-80 (202.0 to 203.0) Sta. 1360+45 to 1413+23	0.20	0.26	0.22	0.20	0.38	0.27
I-80 (203.0 to 204.0) Sta. 1413+23 to 1478+44	0.15	0.33	0.25	0.21	0.50	0.33
I-80 (204.0 to 205.0) Sta. 1478+44 to 1531+24	0.25	0.64	0.41	0.10	0.80	0.42
I-80 (205.0 to 205.61) Sta. 1531+24 to 1563+50	0.38	0.85	0.55	0.10	0.75	0.46

Below are the proportions for 47B concrete pavement:

	Sacks of Cement		Lbs To	tal Agg.	Ratio Coarse Agg.	
Class of	per Cu.Yd.	Type of	Per :	Sack ement	To Total Agg.	Type of Coarse
<u>Concrete</u>	(Fixed)	<u>Concrete</u>	Min.	Max.	(Percent)	<u>Aggregate</u>
47B	6.0	Air-Entrained	480	520	30±3	Limestone

## **EQUIPMENT**

Grinding and texturing shall be done utilizing diamond blades mounted on self-propelled machines designed for grinding and texturing pavements. The cutting head shall be at least 36 inches wide and consist of many diamond blades with spacers. The equipment shall be such that it will not cause strain or damage to the underlying surface of the pavement. Equipment that causes excessive raveling, aggregate fractures, spalls, or disturbance of transverse or longitudinal joints will not be permitted.

## DIAMOND GRINDINGS

Grinding shall be done in the longitudinal direction so that grinding begins and ends at lines normal to the pavement centerline within one ground area, but not necessarily at the end of each shift or of a working day.

Grinding for profile improvement shall be continuous, within the area designated on the plans. All grinding shall be to full pavement width and shall include at least 90% of the pavement surface within any 100-foot length of pavement.

Grinding shall leave no vertical projection in excess of 1/4-inch on any longitudinal line and at either edge of the portland cement concrete pavement.

This work shall be done only with one lane closed, as shown in the plans. The contractor will also be allowed to maintain a single-lane closure overnight during the Diamond Grinding operation if he elects to continue grinding on a 24-hour basis. The lane closure shall be removed upon completion of grinding operation in that lane or when there is no grinding activity scheduled for the next day or the weekend. The contractor will be assessed \$500 for each day the lane closure remains in place without grinding taking place.

Removal of all slurry or residue from the grinding operation shall be continuous. Pavement must be left in a clean condition. Residue from grinding operations shall not be permitted to flow into gutters or other drainage facilities. The residue shall be disposed of on the shoulder foreslopes.

Concrete pavement repair, joint repair, dowel bar retrofitting and cross-stitching shall be completed in an area before the grinding operation.

#### SMOOTHNESS

The ground and textured pavement will be considered acceptable provided the maximum roughness does not exceed 1.0 inch in any individual 0.10 mile of each vehicle lane, when tested with the California Type Profilograph.

#### METHOD OF MEASUREMENT

The quantity of grinding and texturing concrete pavement to be paid for shall be measured in square yards to the nearest 1.0 square yard, completed and accepted by the engineer.

## **BASIS OF PAYMENT**

The quantity of completed and accepted work, measured as provided herein, shall be paid for at the contract unit price per square yard for the item "Diamond Grinding and Texturing Concrete Pavement." This price shall be full compensation for furnishing all materials, equipment, labor, supplies, tools and incidentals necessary to complete the work.

## **DOWEL BAR RETROFIT**

#### DESCRIPTION

Install epoxy coated dowel bars on transverse joints and transverse cracks in the existing portland cement concrete pavement driving lane as shown on the plans. The dowels shall be placed after the concrete repair and prior to the diamond grinding operation. Below are the locations for dowel bar retrofit:

I-80 (198.40 to 205.61) Sta. 1170+30 to 1563+50 WB (2251 joints and 3 cracks)

Sta. 1170+50 to 1563+50 EB (2250 joints and 5 cracks)

Equation: Sta. 1429+00.61 BK = Sta. 1440+83.70 AH

#### MATERIALS

Furnish materials meeting the following requirements:

Epoxy coated dowel bars, 1-1/2" x 18", shall conform to the requirements of Section 1022 in the Standard Specifications. All surfaces, excluding the ends, of the dowel bars shall be epoxy coated. The dowel bars shall be uniformly coated with an approved bond breaker in conformance with Paragraph 4. of Subsection 603.03.

The dowel bars shall have tight-fitting end caps made of non-metallic material that allows for 1/4 inch bar movement at each end of the bar. The Contractor shall submit an end cap sample to the engineer for approval before installation.

Chair devices for supporting and holding the dowel bars shall be either epoxy coated or made of non-metallic material. The chair devices shall provide a minimum clearance of 1/2 inch between the bottom of the bar and the surface upon which the chair is placed. The chair shall be designed to prevent movement of the bar during placement of the grout. The chair devices shall be approved by the engineer before installation.

The caulking filler shall be a non-sag sealant approved by the engineer before its use.

The foam core board filler material shall be closed cell foam faced with poster board material on each side. The foam core board filler shall be 1/2 inch thick. The foam core board filler material shall be approved by the engineer before installation.

### Non-Shrink Grout

A non-shrink grout placed around the dowel bars shall be one of the materials listed in the Approved Products List.

The grout may be extended as the manufacturer recommends (100 percent of the aggregate must pass the 3/8 inch sieve) providing that the following strength requirements are being maintained.

4 hour minimum compressive strength 3000 psi 24 hour minimum compressive strength 5000 psi

A minimum of one set of 3 cylinders will be made from each days pour from the first grout produced and additional sets can be made at any time during grout production. When the

lane is going to be opened to traffic at the end of a days pour, cylinders shall also be taken from the last of the grout produced and placed. These cylinders shall be tested at four hours to verify that the minimum four hour compressive strength has been obtained before opening to traffic. If minimum grout strengths are not being met, grouting operations will be suspended until the Contractor can demonstrate batch mixing and proportioning proficiency that meets the minimum strengths required. Acceptance will be based on meeting the 24 hour minimum strength requirements. Acceptance of dowel bars placed with strengths not meeting the 24 hour minimum compressive strength shall be based on a 72 hour compressive strength of 6000 psi. If this strength is not met, the dowel bars shall be removed and replaced at no additional cost. Any additional traffic control required due to not meeting the minimum strength requirements shall be performed at no additional cost.

#### CONSTRUCTION REQUIREMENTS

Slots shall be cut in the pavement with a gang saw capable of cutting no less than three slots, in each wheel path, at a time. The slots shall be cut to the depth required to place the center of the dowel at mid-depth in the concrete slab. Multiple saw cuts parallel to the centerline may be required to remove the material from the slot.

Jackhammers used to remove the concrete from the slots shall not be larger than the 30-pound class. Care will be taken to prevent any damage to pavement and vehicles traveling in the adjoining lane.

All exposed surfaces and cracks in the slot shall be sandblasted and cleaned before bar installation. The transverse contraction joint on the bottom and the sides of the slot shall be filled with caulking filler.

Use chair devices to support the dowel bars at the depth shown on the plans. Place the dowel bars parallel to the centerline of the pavement and parallel to the pavement surface. Place the dowel bars within +/- 1/4inch of the desired position.

Cut a piece of the foam core board filler material to fit tightly around the dowel bar and against the bottom and sides of the slot. Place the foam core board filler material vertically above the transverse crack in the bottom of the slot.

The dowel bar shall be placed so a minimum of 7.0 inches is placed on either side of transverse joint or transverse crack. The foam core board shall be capable of remaining in a vertical position and tight to all edges during the placement of the grout. If for any reason the foam core board shifts during the placement of the grout, the work shall be rejected and replaced at no additional cost.

The non-shrink grout shall be produced using a mobile mixer conforming to the requirements of Paragraphs 15 of Subsection 1002.03. Prior to roadway grout production the Contractor must demonstrate batch mixing in order to measure grout strengths and proportioning proficiency.

Place the grout as recommended by the manufacturer and such that the material is at least 1/8 inch higher than the pavement. The grouted surface shall be coated with a white curing compound conforming to the requirements of Section 1012.

## METHOD OF MEASUREMENT

Dowel Bar Retrofit will be measured by the each for each bar placed.

#### METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Payment for Dowel Bar Retrofit will be paid at the contract unit price per each for the item "Dowel Bar Retrofit". Payment will be full compensation for all work prescribed in this specification.

#### SEALING TRANSVERSE AND LONGITUDINAL JOINTS

The first sentence in Subsection 612.01 in the 2001 Supplemental Specifications is void and superseded by the following:

This work shall consist of the preparation and sealing of all the transverse joints on the mainline, concrete shoulders, and all the longitudinal joints in the concrete roadway after the retrofitting and diamond grinding operations. The transverse joints on the ramps at the Brady Interchange shall be sealed up to the gore areas, adjacent to the mainline.

## FLY ASH (S10-5-0801)

Subsection 1008.01 in the Standard Specifications is void and superseded by the following:

Fly ash shall be Class C or F meeting the requirements of ASTM C 618.

# STRUCTURAL STEEL (S10-5-0801)

Section 1045 of the Standard Specifications is amended to include the following:

1045.03 -- Steel Plate Substitution

The Contractor may use either English or Metric steel plates in accordance with Table 1045.01.

Table 1045.01									
English-Metric Steel Plate Substitution Table									
Metric (millimeters)	English (inches)	Metric (millimeters)	English (inches)						
9	3/8	32	1 1/4						
10	3/8	35	1 3/8						
11	7/16	38	1 1/2						
12	1/2	40	1 5/8						
14	9/16	45	1 3/4						
16	11/16	50	2						
18	3/4	55	2 1/4						
20	13/16	60	2 3/8						
22	7/8	70	2 3/4						
25	1	80	3 1/4						
28	1 1/8	90	3 1/2						
30	1 1/4								

# REPAIR OF DAMAGED METALLIC COATINGS (\$10-5-0801)

Paragraph 2. of Subsection 1061.01 in the Standard Specifications is void and superseded by the following:

2. The material used for repair shall provide a minimum coating thickness of at least 50 µm with one application.

# DOWEL BARS (\$10-5-0801)

Subsection 1022.02 in the Standard Specifications is amended to include the following:

In addition to these certificates, two 1.8 meter samples of the coated bar (for tension testing and bend testing) of each size bar and each heat number shall be sent to the NDR Materials and Research Laboratory, Lincoln, Nebraska. These bars will be properly identified with tags showing the size and heat number.

# CORRUGATED METAL PIPE (\$10-5-0801)

Table 1035.01 in Section 1035 of the Supplemental Specifications is amended by deleting the title "Steel and Aluminum Culvert Thickness".

## METAL FLARED-END SECTIONS (\$10-5-0801)

Table 1036.01 in Section 1036 of the Supplemental Specifications is amended by deleting the title "Steel and Aluminum Flared-End Thickness".

## REINFORCED CONCRETE PIPE, MANHOLE RISERS, AND FLARED-END SECTIONS (S10-5-0801)

Paragraph 3.a. of Subsection 1037.02 in the Supplemental Specifications is void and superseded by the following:

3.a. Round reinforced concrete pipe shall conform to the requirements of AASHTO M 170-95 with the exception of the minimum circumferential reinforcing (in2/ft. (mm 2/m) of pipe wall) for 15, 21, and 24 inch (380, 460, 600 mm) Class III pipe, as shown below:

Paragraph 3.b. of Subsection 1037.02 is void and superseded by the following:

b. AASHTO M 170-95 Specifications are modified as follows:

Paragraph 4. of Subsection 1037.02 is void and superseded by the following:

4. Reinforced concrete arch pipe shall conform to the requirements of AASHTO M 206-95.

Paragraph 5. of Subsection 1037.02 is void and superseded by the following:

5. Reinforced concrete elliptical pipe shall conform to the requirements of AASHTO M 207-95.

Paragraph 7. of Subsection 1037.02 is void and superseded by the following:

7. Concrete flared-end sections shall be of the design shown in the plans and in conformance with the applicable requirements of AASHTO M 170-95, Class II pipe, AASHTO M 206-95, Class A-II pipe, or AASHTO M 207-95, Class HE-II pipe for the diameter of pipe which it is to be installed.

# HIGH TENSILE BOLTS, NUTS, AND WASHERS (\$10-5-1001)

Subsection 1058.02 in the Supplemental Specifications is void.

Paragraph 4.b.(5) in the Standard Specifications is void and superseded by the following:

(5) The bolt, nut, and washer assembly shall be assembled in a Skidmore-Wilhelm calibrator or an acceptable equivalent device. For bolts that are too short to be assembled in the calibrator, see Subsection 1058.03, Paragraph 4.b.(9).

## ELASTOMERIC BEARINGS AND LAMINATED BEARING PADS (S10-5-0202)

Paragraph 2. of Subsection 1068.02 in the Standard Specifications is void and superseded by the following:

2. Certification shall be furnished in accordance with NDR's *Materials Sampling Guide*.

Paragraph 3. of Subsection 1068.02 is void.

# STEEL BARS FOR CONCRETE REINFORCEMENT (\$10-5-1201)

Section 1020 in the Standard Specifications is void and superseded by the following:

1020.01 - Description

Steel tie bars for longitudinal joint reinforcement in concrete pavements shall be epoxy coated and deformed Grade 40 or 60 billet steel as shown in the plans, specifications or Special Provisions.

### 1020.02 - Material Characteristics

- 1. Billet-steel bars shall conform to the requirements of ASTM A 615/A 615M.
- 2. Epoxy coatings shall conform to the requirements in Section 1021 of the Standard Specifications and Supplemental Specifications.

## 1020.03 - Acceptance Requirements

Acceptance shall be based on sampling, testing, and certification requirements in accordance with the NDR *Materials Sampling Guide*.

# PROPOSAL GUARANTY (S1-38-0801)

As an evidence of good faith in submitting a proposal for this work or for any portion thereof as provided in the proposal form, the bidder must file with his proposal a bid bond, which must be executed on the Department of Roads' Bid Bond form, in the amount of 5 percent of the amount bid for any group of items or collection of groups for which the bid is submitted. Any alterations, conditions or limitations added to the Department of Roads' Bid Bond form will be unacceptable and cause the bid not to be opened and read.

\* \* \* \* \*

N14INFOCT02

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