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

NEBRASKA DEPARTMENT OF ROADS
LETTING DATE: December 17, 2015

CALL ORDER: 200            CONTRACT ID: 2576X
CONTROL NO. SEQ. NO.: 22576 000            PROJECT NO.: HSIP-77-3(133)
TENTATIVE START DATE: 09/19/2016            CONTRACT TIME: 25 Working Days
LOCATION: S. JCT. US-77/N-91, NICKERSON
IN COUNTY: DODGE

GROUP 1  GRADING
GROUP 3  CONCRETE PAVEMENT
GROUP 4  CULVERT
GROUP 8B ELECTRICAL
GROUP 10 GENERAL

SEE SPECIAL PROVISIONS FOR GROUP TIES

NOTES

THE TOTAL AMOUNT OR WORK WHICH WILL BE ACCEPTED IN THIS LETTING IS LIMITED TO $__________________

THE NUMBER OF GROUP ____________ CONTRACTS WHICH WILL BE ACCEPTED IN THIS LETTING IS LIMITED TO ____________. 
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 submitted to NDOR in a written format through the Bid Express (BidX) website at https://www.bidx.com/ne/lettings. Likewise, NDOR will post answers exclusively to the BidX website. All official answers will be identified as “Authorized by NDOR.” Questions will not be answered verbally.
REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

I. General
II. Nondiscrimination
III. Nonsegregated Facilities
IV. Davis-Bacon and Related Act Provisions
V. Contract Work Hours and Safety Standards Act Provisions
VI. Subletting or Assigning the Contract
VII. Safety: Accident Prevention
VIII. False Statements Concerning Highway Projects
IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
X. Compliance with Governmentwide Suspension and Debarment Requirements
XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS
A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor’s own organization and with the assistance of workers under the contractor’s immediate supervision and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadsways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more. The provisions of 23 CFR Part 230 are not applicable to materials supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding $10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor’s project activities under
this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are
applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor’s work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor’s association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union, and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth any efforts that have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualified minorities and women. The failure of any union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, the contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

   a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

   b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

   a. The requirements of 49 CFR Part 26 and the State DOT’s U.S. DOT-approved DBE program are incorporated by reference.

   b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

   a. The records kept by the contractor shall document the following:

      (1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

      (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

      (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

   b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor
will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may not require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor’s obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor’s control, where the facilities are segregated. The term “facilities” includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding $2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 “Contract provisions and related matters” with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein. Provided, that the employer’s payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates computed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or
will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(i) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(o)(2)(i) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/WH347/inst.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency.

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5(a)(3)(i) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5(a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 5;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WM—347 shall satisfy the requirement for submission of the “Statement of Compliance” required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any person employed in his or her first 90 days of probationary employment as an apprentice shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices.

Every apprentice must be paid at least the rate specified in the approved program for the apprentice's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprenticeship classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed unless an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 28 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontractors. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).


V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontractors. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section.
VI. SUBLETING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

   a. The term “perform work with its own organization” refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

      (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
      (2) the prime contractor remains responsible for the quality of the work of the leased employees;
      (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
      (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

   b. “Specialty items” shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned, or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be 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.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in the performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project.
"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost $25,000 or more — as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification — First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contractor). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion—Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epis.gov/), which is compiled by the General Services Administration.
i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) contract or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subprocess, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost $25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract), "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epis.gov/), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the
department or agency with which this transaction originated, may pursue available remedies, including suspension and/or debarment.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence any officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such recipients shall certify and disclose accordingly.
ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

   a. To the extent that qualified persons regularly residing in the area are not available.

   b. For the reasonable needs of the contractor to employ supervisory or specialty experienced personnel necessary to assure an efficient execution of the contract work.

   c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.
NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY
(EXECUTIVE ORDER 11246)

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.

2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area are as follows:

GOALS FOR MINORITY PARTICIPATION IN EACH TRADE

<table>
<thead>
<tr>
<th>Economic Area</th>
<th>Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>103 Sioux City, IA:</td>
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<tr>
<td>SMSA Counties: 7720 Sioux City, IA-NE</td>
<td></td>
</tr>
<tr>
<td>IA Woodbury, NE Dakota</td>
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</tr>
<tr>
<td>Non-SMSA Counties</td>
<td></td>
</tr>
<tr>
<td>IA Cherokee, IA Crawford, IA Ida, IA Monona, IA O'Brien, IA Plymouth, IA Sioux, NE Antelope, NE Cedar, NE Cuming, NE Dixon, NE Knox, NE Madison, NE Pierce, NE Stanton, NE Thurston, NE Wayne, SD Bon Homme, SD Clay, SD Union, SD Yankton</td>
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</tr>
<tr>
<td>142 Lincoln, NE:</td>
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<tr>
<td>SMSA Counties: 4360 Lincoln, NE</td>
<td></td>
</tr>
<tr>
<td>NE Lancaster</td>
<td></td>
</tr>
<tr>
<td>Non-SMSA Counties</td>
<td></td>
</tr>
<tr>
<td>NE Butler, NE Fillmore, NE Gage, NE Jefferson, NE Johnson, NE Namaha, NE Otoe, NE Pawnee, NE Polk, NE Richardson, NE Saline, NE Seward, NE Thayer, NE York</td>
<td></td>
</tr>
<tr>
<td>143 Omaha, NE:</td>
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<tr>
<td>SMSA Counties: 5920 Omaha, NE-IA</td>
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<tr>
<td>IA Pottawattamie, NE Douglas, NE Sarpy</td>
<td></td>
</tr>
<tr>
<td>Non-SMSA Counties</td>
<td></td>
</tr>
</tbody>
</table>

GOALS AND TIMETABLES FOR FEMALE PARTICIPATION IN EACH TRADE

<table>
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<tr>
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<td>Non-SMSA Counties</td>
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<td>NE Adams, NE Arthur, NE Blaine, NE Boone, NE Boyd, NE Brown, NE Buffalo, NE Chase, NE Cherry, NE Clay, NE Custer, NE Dawson, NE Dundy, NE Franklin, NE Frontier, NE Furnas, NE Garfield, NE Gaspere, NE Grant, NE Greeley, NE Hall, NE Hamilton, NE Harlan, NE Hayes, NE Hitchcock, NE Holt, NE Hooker, NE Howard, NE Kearney, NE Keith, NE Keya Paha, NE Lincoln, NE Logan, NE Loup, NE McPherson, NE Merrick, NE Nance, NE Nuckolls, NE Perkins, NE Phelps, NE Red Willow, NE Rock, NE Sherman, NE Thomas, NE Valley, NE Webster, NE Wheeler</td>
<td></td>
</tr>
<tr>
<td>145 Scottsbluff, NE:</td>
<td></td>
</tr>
<tr>
<td>Non-SMSA Counties</td>
<td></td>
</tr>
<tr>
<td>NE Banner, NE Box Butte, NE Cheyenne, NE Dawes, NE Deuel, NE Garwin, NE Kimball, NE Morrill, NE Scotts Bluff, NE Sheridan, NE Sioux, WY Goshen</td>
<td></td>
</tr>
</tbody>
</table>

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of $10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is by county.

November 3, 1980

- 15 -
1. As used in these specifications:
   a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
   b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
   d. "Minority" includes:
      (i) Black (all persons having origins in any of the Black African racial groups, not of Hispanic origin);
      (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish Culture or origin, regardless of race);
      (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
      (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of $10,000 the provisions of these specifications and the Notice, which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.

3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization. The Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area, Covered Construction contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

November 3, 1980
7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its action. The Contractor shall document these efforts fully and shall implement affirmative action steps at least as extensive as the following:

a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.

b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.

d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.

f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.

i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's work force.
k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.

m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.

n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.

o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female work force participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).

10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

11. The contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the
work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

Supplemental Reporting Requirements

A. The contractor will keep such records as are necessary to determine compliance with the contractor’s equal employment opportunity obligations. The records kept by the contractor will be designed to indicate the number of minority and non-minority group members and women employed in each work classification on the project.

B. All such records must be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the State Highway agency and the Federal Highway Administration.

C. The Contractor and each covered subcontractor will submit to the State Highway agency, for the month of July, for the duration of the project, a report (Form PR-1391) “Federal-aid Highway Construction Contractors Annual EEO Report”, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. If on-the-job training is being required by “Standard Federal Equal Employment Opportunity Specifications” the contractor will be required to furnish (Form FHWA 1409) “Federal-aid Highway Construction Contractor's Semi-Annual Training Report”.

Equal Employment Opportunity Policy

The contractor will accept as its operating policy the following statement which is designed to further the provision of equal employment opportunity to all persons without regard to their race, color, religion, sex, or national origin, and to promote the full realization of equal employment opportunity through a positive continuing program:

It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, or national origin. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job training.
General Decision Number: NE150033 01/02/2015 NE33
Superseded General Decision Number: NE20140033
State: Nebraska
Construction Type: Highway

HIGHWAY CONSTRUCTION PROJECTS

Note: Executive Order (EO) 13658 establishes an hourly minimum wage of $10.10 for 2015 that applies to all contracts subject to the Davis-Bacon Act for which the solicitation is issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least $10.10 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number     Publication Date
0             01/02/2015

* ENGI0571-005 01/01/2013

Rates          Fringes
OPERATOR: Trencher.........$ 20.83             9.60

* SUNE2011-029 08/29/2011

Rates          Fringes
CARPENTER (Excludes Form Work)...$ 16.39
CEMENT MASON/CONCRETE FINISHER...$ 13.91
ELECTRICIAN......................$ 20.14
FORM WORKER......................$  9.98
IRONWORKER, REINFORCING.......$ 17.93
LABORER (FLAGGER & CONE/BARREL SETTER)
     Antelope County............$ 10.37
     Boone, Boyd, Burt, Colfax,
     Cuming, Holt, Pierce,
     Platte, Rock, Stanton,
     Thurston....................$  9.96
Brown, Keya Paha Counties...$ 9.47
Cedar County...............$ 9.75
Dodge County...............$ 10.03
Knox County...............$ 10.91
Madison County.............$ 9.03
Wayne County...............$ 9.22

LABORER (LANDSCAPE & IRRIGATION).........................$ 8.30

LABORER: (COMMON OR GENERAL)
  Antelope County............$ 11.31
  Boone, Boyd, Burt, Colfax,
  Cuming, Holt, Pierce,
  Platte, Rock, Stanton, &
  Thurston Counties..........$ 10.79
  Brown, Keya Paha Counties...$ 11.82
  Cedar County...............$ 10.54
  Dodge County...............$ 10.63
  Knox County...............$ 10.47
  Madison County.............$ 11.73
  Wayne County...............$ 9.71

LABORER: Mason Tender
  (Cement/Concrete)..............$ 9.75

Operating Engineers: (Skid Loader)..........................$ 11.79

OPERATOR:
  Backhoe/Excavator/Trackhoe
  Antelope, Boone, Boyd,
  Burt, Colfax, Cuming,
  Dodge, Hold, Madison,
  Pierce, Platte, Rock,
  Stanton, Thurston, Wayne
  Counties......................$ 15.83
  Brown, Keya Paha Counties...$ 18.39
  Cedar County..................$ 15.28
  Knox County...................$ 12.55

OPERATOR: Bulldozer...............$ 16.21

OPERATOR: Compactor...............$ 10.76

OPERATOR: Crane..................$ 16.17

OPERATOR: Distributor............$ 14.37
OPERATOR: Loader
Antelope, Boone, Boyd,
Burt, Colfax, Cuming,
Dodge, Holt, Knox,
Madison, Pierce, Platte,
Rock, Stanton, Thurston,
Wayne Counties.............$ 13.21
Brown, Keya Paha Counties...$ 11.95
Cedar County................$ 12.10

OPERATOR: Scraper............$ 12.40

OPERATOR: Screed
Antelope County.............$ 13.30
Boone, Boyd, Burt, Cedar,
Colfax, Cuming, Dodge,
Hold, Knox, Madison,
Pierce, Platte, Rock,
Stanton, Thurston, Wayne
Counties....................$ 12.60
Brown, Keya Paha Counties...$ 11.37

OPERATOR: Tractor
Antelope, Boone, Boyd,
Burt, Cedar, Colfax,
Cuming, Dodge, Holt, Knox,
Madison, Pierce, Platte,
Rock, Stanton, Thurston,
Wayne Counties.............$ 11.97
Brown, Keya Paha Counties...$ 9.50

OPERATOR: Broom/Sweeper
Antelope County.............$ 11.82
Boone, Boyd, Brown, Burt,
Colfax, Cuming, Dodge,
Hold, Keya Paha, Knox,
Madison, Pierce, Platte,
Rock, Stanton, Thurston,
Wayne Counties.............$ 11.62
Cedar County................$ 12.97

OPERATOR: Grader/Blade
Antelope, Boone, Boyd,
Brown, Burt, Cedar,
Colfax, Cuming, Dodge,
Hold, Knox, Madison,
Pierce, Platte, Rock,
Stanton, Thurston, Wayne
Counties....................$ 16.26
Madison County.............$ 15.56

OPERATOR: Paver
Antelope County.............$ 13.55
Boone, Boyd, Brown, Burt,
Colfax, Cuming, Dodge,
Hold, Keya Paha, Knox,
Madison, Pierce, Platte,
Rock, Stanton, Thurston
Counties....................$ 14.76
Cedar County...............$ 15.05
Wayne County...............$ 12.45

OPERATOR: Roller
  Antelope County.............$ 13.68
  Boone, Boyd, Burt, Colfax,
  Cuming, Dodge, Holt, Knox,
  Madison, Pierce, Platte,
  Rock, Stanton, Thurston

Counties....................$ 13.72
  Brown, Keya Paha Counties...$ 11.39
  Cedar County...............$ 15.00
  Wayne County...............$ 11.96

POWER EQUIPMENT OPERATOR:
  (Asphalt Plant)...............$ 14.09

POWER EQUIPMENT OPERATOR:
  (Backhoe Loader Combo).......$ 13.58

POWER EQUIPMENT OPERATOR:
  (Concrete Texture Cure
  Machine).....................$ 11.11

POWER EQUIPMENT OPERATOR:
  (Mechanic)
    Antelope County.........$ 15.22
    Boone, Boyd, Burt, Cedar,
    Colfax, Cuming, Dodge,
    Holt, Knox, Madison,
    Pierce, Platte, Rock,
    Stanton, Thurston, Wayne
  Counties....................$ 14.26
    Brown, Keya Paha Counties..$ 13.95

TRUCK DRIVER, Includes Dump
  and Tandem Truck
    Antelope County.........$ 15.55
    Boone, Boyd, Brown, Burt,
    Colfax, Cuming, Holt, Keya
    Paha, Knox, Madison,
    Pierce, Platte, Rock,
    Stanton, Thurston, Wayne
  Counties....................$ 14.12
    Cedar County...............$ 14.55
    Dodge County...............$ 14.02

TRUCK DRIVER: Lowboy Truck....$ 10.85

TRUCK DRIVER: Oil
  Distributor Truck...........$ 13.25
TRUCK DRIVER:  Semi-Trailer Truck
   Antelope, Boone, Boyd, Burt, Colfax, Cuming, Dodge, Holt, Knox, Madison, Pierce, Platte, Rock, Stanton, Thurston Counties....................$ 12.66
   Brown, Keya Paha Counties...$ 11.25
   Cedar County................$ 12.63
   Wayne County..............$ 11.69

TRUCK DRIVER: Water Truck.......$ 15.68
----------------------------------------------------------------
WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.
================================================================
Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).
================================================================
The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.
Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial
contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

================================================================
END OF GENERAL DECISION
SPECIAL PROVISIONS
FOR
FEDERAL AID
PROJECT NO. HSIP-77-3(133)

GENERAL CONDITIONS

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 December 17, 2015, until 1:30 P.M.

a. 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 2007 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 Required Contract Provisions, Form FHWA 1273, (Rev. 5-12), and the Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity and Standard Federal Equal Employment Opportunity Construction Contract Specifications dated November 3, 1980, are attached to and are a part of this proposal form. The Standard Labor Classifications and Descriptions for Highway Construction dated September 1, 1996, are made a part of these Special Provisions, through reference.

The General Wage Decision issued under the Davis-Bacon and Related Acts is attached to and is a part of this proposal form.

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

GROUPS 1, 3, 4, 8B and 10 ARE TIED TOGETHER AND BIDDING PROPOSAL FORMS FOR THIS WORK WILL BE ISSUED AND A CONTRACT AWARDED TO A CONTRACTOR WHO IS QUALIFIED FOR CONCRETE PAVEMENT.

DISADVANTAGED BUSINESS ENTERPRISES
(A-8-0507)

A. Policy

The Contractor agrees to ensure that Disadvantaged Business Enterprises as defined in 49 CFR Part 26 shall have a “level playing field” and equal opportunity to participate in the performance of contracts financed in whole or in part with Federal funds under this contract. Consequently, the Disadvantaged Business requirements of 49 CFR Part 26 are hereby made a part of and incorporated by this reference into this contract.
B. Disadvantaged Business Enterprises Obligation

The Contractor agrees to ensure that Disadvantaged Business Enterprises as defined in 49 CFR Part 26 have a "level playing field" and equal opportunity to participate in the performance of contracts and subcontracts financed in whole or in part with Federal funds provided under this agreement. In this regard, the Contractor shall take all necessary and reasonable steps in accordance with 49 CFR Part 26 to ensure that Disadvantaged Business Enterprises have a "level playing field" and equal opportunity to compete for and perform contracts. The Contractor shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of FHWA assisted contracts.

Failure of the Contractor to carry out the requirements set forth above shall constitute breach of contract and, after the notification of the FHWA, may result in termination of the agreement or contract by the State or such remedy as the State deems appropriate.

DISADVANTAGED BUSINESS ENTERPRISES
(Prime Contractor Reporting of DBE Payments)
(A-8-1110)

This project is funded with Federal Funds and NDOR is required by law to collect DBE payment data from the Contractor. The Prime Contractor shall complete the DBE Total Paid To Date portion on the Monthly Employment Report. This report can be found by using the “Contractor Reports” link at www.nebraskatransportation.org/letting/index.htm. All reports must be completed by the Prime Contractor no later than the 10th day of the following month. No estimates/invoices will be processed until this information is received.

CERTIFICATION FOR FEDERAL-AID CONTRACTS
(A-11-0307)

The bidder certifies, by signing and submitting this bid, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

The bidder also agrees by submitting his or her bid that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such subrecipients shall certify and disclose accordingly.

STATUST OF UTILITIES

The following information is current as of November 6, 2015.

Utility facilities, aerial and/or underground may exist within this project. The Contractor shall determine to his satisfaction the extent of utility occupancy and utility conflict for facilities located within the construction areas.

At this time no utilities have been required to relocate their facilities.

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 Diggers Hotline of Nebraska at 1-800-331-5666, or dial 811.

Utilities known to be in the vicinity of this project:

   CenturyLink

Any work necessary will be concurrent with construction.

STATUST OF RIGHT OF WAY

The right of way for this project has been acquired and physical possession is held by the State of Nebraska and ready for the Contractor’s use, except tracts listed below:

<table>
<thead>
<tr>
<th>Unacquired Right-of-Way Tracts as follows:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tract Number</td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Right-of-Way Tracts with Pay Items:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tract Number</td>
</tr>
<tr>
<td>--------------</td>
</tr>
<tr>
<td>None</td>
</tr>
</tbody>
</table>

- No encroachments on the old right of way.
- Acquisition of right of way is not required for this project.
ENVIRONMENTAL COMMITMENT

Control No.: 22576
Project No.: HSIP-77-3(133)
Project Name: S. Jct. US-77/N-91 at Nickerson

Below are the Conservation Conditions that will be required for this project. All conditions and regulations of any permit obtained for this project will be followed by the contractor.

(Responsible Party for the measure is found in parentheses)

Conservation Measure for Environmentally Sensitive Areas

All wetlands within the project area will be marked on the project plans for the Contractor as avoidance areas. (NDOR Design, NDOR Environmental)

The Contractor shall not stage, store, waste or stockpile materials and equipment in undisturbed locations, or in known/potential wetlands and/or known/potential streams that exhibit a clear “bed and Bank” channel. Potential wetland areas consist of any area that is known to pond water, swampy areas or areas supporting known wetland vegetation or areas where there is a distinct difference in vegetation (at lower elevations) from the surrounding upland areas. (Contractor, NDOR District)

- Regulated Wetlands and/or Water Resources for this project have been identified and delineated in the field by NDOR. The above condition pertains to the areas within delineated wetland boundaries (Wetlands – Do Not Disturb) and/or environmentally sensitive areas (Area of Environmental Concern – Do Not Disturb) as shown in the 2-W aerial plan sheets and/or the erosion control plan sheets included in the plan set. If access to any of these areas is required to complete the project construction, the NDOR construction project manager shall coordinate with the Environmental Permits Unit to determine need for field verification and/or permitting requirements prior to disturbance of the area. (Contractor, District Construction)

Contact Person: Justin Williams, Highway Environmental Biologist, (402) 479-3812

General Conservation Conditions

A-1 Changes in Project Scope. If there is a change in the project scope, the project limits, or environmental commitments, the NDOR Environmental Section must be contacted to evaluate potential impacts prior to implementation. Environmental commitments are not subject to change without prior written approval from the Federal Highway Administration. (District Construction, Contractor)

A-2 Conservation Conditions. Conservation conditions are to be fully implemented within the project boundaries as shown on the plans. (District Construction, Contractor)

A-3 Early Construction Starts. Request for early construction starts must be coordinated by the Project Construction Engineer with NDOR Environmental for approval of early start to ensure avoidance of listed species sensitive lifecycle timeframes. Work in these timeframes will require approval from the Federal Highway Administration and could require consultation with the USFWS and NGPC. (District Construction, Contractor)
A-4 **E&T Species.** If federal or state listed species are observed during construction, contact NDOR Environmental. Contact NDOR Environmental for a reference of federal and state listed species. (NDOR Environmental, District Construction, Contractor)

A-5 **Refueling.** Refueling will be conducted outside of those sensitive areas identified on the plans, in the contract, and/or marked in the field. (Contractor)

A-6 **Restricted Activities.** The following project activities shall, to the extent possible, be restricted to between the beginning and ending points (stationing, reference posts, mile markers, and/or section-township-range references) of the project, within the right-of-way designated on the project plans: borrow sites, burn sites, construction debris waste disposal areas, concrete and asphalt plants, haul roads, stockpiling areas, staging areas, and material storage sites.

For activities outside the project limits, the contractor should refer to the Nebraska Game and Parks Commission website to determine which species ranges occur within the off-site area. The contractor should plan accordingly for any species surveys that may be required to approve the use of a borrow site or other off-site activities. The contractor should review Chapter 11 of the Matrix (on NDOR’s website), where species survey protocol can be found to estimate the level of effort and timing requirements for surveys.

Any project related activities that occur outside of the project limits must be environmentally cleared/permited with the Nebraska Game and Parks Commission as well as any other appropriate agencies by the contractor and those clearances/permits submitted to the District Construction Project Manager prior to the start of the above listed project activities. The contractor shall submit information such as an aerial photo showing the proposed activity site, a soil survey map with the location of the site, a plan-sheet or drawing showing the location and dimensions of the activity site, a minimum of 4 different ground photos showing the existing conditions at the proposed activity site, depth to ground water and depth of pit, and the “Platte River depletion status” of the site. The District Construction Project Manager will notify NDOR Environmental which will coordinate with FHWA for acceptance if needed. The contractor must receive notice of acceptance from NDOR, prior to starting the above listed project activities. These project activities cannot adversely affect state and/or federally listed species or designated critical habitat. (NDOR Environmental, District Construction, Contractor)

A-7 **Waste/Debris.** Construction waste/debris will be disposed of in areas or a manner which will not adversely affect state and/or federally listed species and/or designated critical habitat. (Contractor)

A-8 **Post Construction Erosion Control.** Erosion control activities that may take place by NDOR Maintenance or Contractors after construction is complete, but prior to project close-out, shall adhere to any standard conservation conditions for species designated for the project area during construction. (NDOR Maintenance, District Construction, Contractor)

S-2 **Platte River Depletions** All efforts will be made to design the project and select borrow sites to prevent depletions to the Platte River. If there is any potential to create a depletion, NDOR (during design) and the contractor (for borrow sites) shall follow the current Platte River depletion protocols for coordination, minimization, and mitigation. In general, the following are considered de minimis depletions but may still require agency coordination; a project which: a) creates an annual depletion less than 0.1 acre feet, b) creates a detention basin that detains water for less than 72 hours, c) any diverted
water will be returned to its natural basin within 30 days, or d) creates a one-time depletion of less than 10 acre feet.

S-3 Revegetation All permanent seeding and plantings (excluding managed landscaped areas) shall use species and composition native to the project vicinity as shown in the Plan for the Roadside Environment. However, within the first 16 feet of the road shoulder and within high erosion prone locations, tall fescue or perennial ryegrass may be used at minimal rates to provide quick groundcover to prevent erosion, unless state or federally listed threatened or endangered plants were identified in the project area during surveys. If listed plants were identified during survey, any seed mix requirements identified during resource agency consultations shall be used for the project. (NDOR Environmental)

Contact Person: Melissa Marinovich, Highway Environmental Biologist, (402) 479-3546

Borrow, Debris Disposal and Staging

Any material needed shall be provided by the contractor. The contractor shall try to obtain borrow from an upland site to prevent depletion issues. If the borrow site is within a depletion area of concern, the contractor shall coordinate with the appropriate agencies and NDOR to offset or minimize impacts. The contractor shall obtain all environmental clearances and permits required for the borrow site prior to obtaining borrow material for the project. The Contractor shall have a staging area for the project where material and equipment for the project is stored (e.g. resteel, forms, etc.). The Contractor shall dispose of material removed as part of the project described above and miscellaneous obstructions encountered and removed along the project. The disposal is the responsibility of the Contractor. A waste site may be needed. The Contractor shall obtain all permits and clearances and all conditions of those permits shall be followed. (Contractor)

Utilities Relocation

All affected utilities shall be coordinated through NDOR and the Contractor as per NDOR's Standard Specifications for Highway Construction, Subsections 105.06 and 107.16. All utilities in the area shall be notified of this project. Utilities in the area shall be provided in project plans. (NDOR District)

Any utility adjustments or interruption of service for the convenience of the Contractor shall be the sole responsibility of the Utility. Any environmental permits required for utility relocations shall be the responsibility of the Utility. (Utility Provider(s))

Public Involvement

A minimum of one news release shall go to all local and area media and be posted on the NDOR website prior to the start of construction work. (NDOR District, NDOR Communication)
Hazardous Materials

If contaminated soils and/or water or hazardous materials are encountered, then all work within the immediate area of the discovered hazardous material shall stop until NDOR/FHWA is notified and a plan to dispose of the Hazardous Materials has been developed. Then NDEQ shall be consulted and a remediation plan shall be developed for this project. The potential exists to have contaminants present resulting from minor spillage during fueling and service associated with construction equipment. Should contamination be found on the project during construction, the NDEQ shall be contacted for consultation and appropriate actions to be taken. The Contractor is required by NDOR's Standard Specification section 107 (legal relations and responsibilities to the public) to handle and dispose of contaminated material in accordance with applicable laws. (Contractor)

Traffic Management

This project shall be constructed under traffic with lane closures controlled by approved temporary traffic control. Access to adjacent properties shall be maintained during construction. (Contractor)

Contact Person: Shannon Sjolie, Highway Environmental Biologist, (402) 479-4415

NOTICE TO BIDDERS
(Storm Water Pollution Prevention Plan)
(A-20-0307)

The Contractor shall understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit that authorizes the storm water discharges associated with industrial activity from the construction site. For reference, the general permit is posted on the Department's website.

Additionally, the Contractor, as evidenced by their signature on this proposal, agrees and understands that, if awarded the contract on this project, he/she:

1) becomes a co-permittee, along with the owner(s), to the Nebraska Department of Environmental Quality NPDES General Permit for Storm Water Discharges from construction sites on this project;

2) is legally bound to comply with the Clean Water Act to ensure compliance with the terms and conditions of the storm water pollution prevention plan developed under the NPDES permit and the terms of the NPDES permit; and

3) will hold the owners harmless for damages or fines arising as a result of noncompliance with the terms of the storm water permits and authorizations associated with the work on this project.
SPECIAL PROSECUTION AND PROGRESS
(Migratory Birds)
(A-42-1112)

The Department of Roads will, to the extent practicable, schedule the letting of projects such that clearing and grubbing can occur outside of the primary nesting season in Nebraska which has been determined to generally occur between April 1 and September 1. Work on structures, such as but not limited to bridges and culverts, should occur outside the primary swallow nesting season, April 15 to September 30, unless approved methods of avoiding nesting have been taken on the bridge and/or culvert structures. The nesting dates above are a guide only, nesting can occur outside of those dates. Work outside of those dates is not exempt from compliance with the Migratory Bird Treaty Act.

The Contractor shall, to the extent possible, schedule work on structures, such as but not limited to bridges and culverts, and clearing and grubbing activities to occur outside the primary nesting season in Nebraska. However, if circumstances dictate that project construction or demolition must be done when nesting migratory birds may be present, a survey of the number of active nests and species of birds shall be conducted by qualified personnel representing the Contractor, and assisted by the Project Manager (PM), NDOR Environmental Section staff, or the United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) - Wildlife Services Office. If the survey finds that nests will be impacted by the proposed construction, the Contractor may be responsible for delays.

The following guidance is provided for compliance with the Migratory Bird Treaty Act for construction of NDOR projects:

1. The Contractor shall submit a plan to the NDOR regarding how he intends to accomplish bridge demolition or clearing and grubbing of the project to avoid conflict with nesting migratory birds.

2. The Contractor must submit a temporary erosion control plan tailored to fit the plan for clearing and grubbing.

3. If construction operations result in unavoidable conflict with nesting migratory bird's eggs or young, which will result in "taking" nests and their contents, the Contractor should notify the NDOR Project Manager (PM). The PM shall notify the Environmental Section of Planning and Project Development by telephone at 402-479-4766.

4. The NDOR Environmental Section will then determine if assistance in conducting the survey will be provided by the NDOR Environmental Section (if available) or from the USDA APHIS - Wildlife Services Office and arrange for assistance with the survey of nest numbers, bird species, etc. Results of the survey shall be maintained by the NDOR until project completion.

5. If the nesting survey is required, and the project was awarded prior to the nesting season, and the Contractor did not accomplish clearing/grubbing and/or work on bridge/culvert structures outside the nesting season, the Contractor will reimburse the Department of Roads for each survey required at $1,000 per survey. If the project was awarded during the nesting season, and construction activities are such that clearing/grubbing and/or work on bridge/culvert structures must be accomplished prior to any other activity on the project, then there will be
no charge assessed for the initial survey. The Contractor is responsible for removing all trees surveyed, that do not contain active nests, and for taking appropriate measures on bridge/culvert structures, within 3 days of the survey. Reimbursement for additional surveys may be charged if the Contractor fails to remove the trees within 3 days of the survey, and requires an additional survey. Survey reimbursement will be determined on a project specific basis, considering the project timeline and associated activities.

6. If an active nest is found during the survey, the Contractor should do everything possible to restructure his activities and leave the nest undisturbed until the young fledge. Fledging could occur within a week, or up to a month, after the survey depending on the species of bird and whether the nest contained eggs or young. Also depending on the species of bird and their sensitivity to disturbance, a buffer of up to 30 feet surrounding the tree with the active nest could be required.

7. If construction cannot be rescheduled to allow the birds to fledge, and it is determined as an unavoidable “take” circumstance, the Contractor shall stop all work within 30 feet of the active nest and coordinate with the Construction Project Manager to determine how to proceed. The Construction Project Manager will then coordinate with the NDOR Environmental Section and they will facilitate coordination with the US Fish and Wildlife Service and the Federal Highway Administration (for projects using Federal-aid) to determine the appropriate way to address the active nest. No work shall occur within 30 feet of the active nest until US Fish and Wildlife Service coordination is complete and the requirements of the Migratory Bird Treaty Act are satisfied.

8. It is the Contractor’s responsibility to schedule his work to accommodate the process of conducting a survey(s) and submitting the necessary documentation if avoidance is not practicable. The Contractor shall be responsible for using any legal and practical method to prevent the nesting of birds in order to prevent the need for any survey and prevent the need for additional surveys. It is understood and agreed that the Contractor has considered in the bid all of the pertinent requirements concerning migratory birds (including endangered species) and that no additional compensation, other than time extensions if warranted, will be allowed for any delays or inconvenience resulting in these requirements.

**STORM WATER DISCHARGES**

(A-43-0408)

In compliance with the Federal Water Pollution Control Act, authorization to discharge storm water on this project has been granted under National Pollutant Discharge Elimination System (NPDES) General NPDES Permit Number NER110000 for Storm Water Discharges from Construction Sites to Waters of the State of Nebraska. This permit became effective on January 1, 2008.

Contractors are advised that, under the Construction Storm Water General Permit, plant sites, camp sites, storage sites, and borrow or waste sites not shown on the plans may be subject to separate NPDES permit authorization requirements for stormwater discharges from those locations. Contractors shall be responsible for verifying the need for NPDES permit coverage with the Nebraska Department of Environmental Quality (NDEQ). When
required for these locations, the filing of a "Notice of Intent" shall be made by the Contractor directly to the NDEQ.

Additionally, asphalt (SIC Code 2951) or concrete (SIC Code 3273) batch plants that are owned by a private contractor and are operated on a contract-for-service basis to perform work for the Contractor completing the project may be subject to NPDES General Permit Number NER000000 for Industrial Storm Water Discharges. While the plant may be required for completion of the project, it is not under the control of the Department (or other project owner); and the filing of a "Notice of Intent" shall be made by the Contractor directly to the NDEQ.

The NDEQ may be contacted at 402-471-4220 for additional information.

REQUIRED SUBCONTRACTOR/SUPPLIER QUOTATIONS LIST
(A-43-0307)

All bidders must provide to the NDOR the identity of all firms who provided quotations on all projects, including both DBEs and non-DBEs. This information must be on a form provided by the NDOR Contracts Office.

If no quotations were received, the bidder must indicate this in the space provided.

Each bidder will be required to submit one list per letting to cover all projects bid.

PROPOSAL GUARANTY BID BOND
(A-43-0307)

Paragraphs 1.a. and 1.b. of Subsection 102.15 in the Standard Specifications are void and superseded by the following:

a. OPTION 1 - (Project Specific Paper Bid Bond). The Bid Bond shall be executed on an original Department Bid Bond Form, which may be obtained from the Department. The original Bid Bond shall be delivered to the Department with the bid. A reproduction or a copy of the original form will not be accepted and will cause the bid not to be opened and read.

b. OPTION 2 - (Annual Bid Bond). The Department at its discretion may allow a bidder to place an "Annual Bid Bond" on file with the Department. This bond would cover all projects the bidder bids for a 12-month period shown in the bond. The bidder must indicate in the bid submittal to the Department that their "Annual Bid Bond" applies to the submitted bid. The original Annual Bid Bond shall be executed on the Department of Roads Bid Bond Form, which may be obtained from the Department. A reproduction or a copy of the original form will not be accepted.
WORKER VISIBILITY
(A-43-0507)

Pursuant to Part 634, Title 23, Code of Federal Regulations, the following modified rule is being implemented:

Effective on January 1, 2008, all workers within the right-of-way who are exposed either to traffic (vehicles using the highway for purposes of travel) or to construction equipment within the work area shall wear high-visibility safety apparel.

High-visibility safety apparel is defined to mean personal protective safety clothing that:

1 - is intended to provide conspicuity during both daytime and nighttime usage, and

2 - meets the Performance Class 2 or Class 3 requirements of the ANSI/ISEA 107-2004 publication titled "American National Standards for High-Visibility Safety Apparel and Headwear."

VALUE ENGINEERING PROPOSALS (VEP)
(A-43-0807)

Subsection 104.03 in the Standard Specifications is amended to include the following:

14. A VEP will not be accepted if the proposal is prepared by an Engineer or the Engineering Firm who designed the contract plans.

LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC
(A-43-0210)

Paragraph 4.a. of Subsection 107.01 in the Standard Specifications is void and superseded by the following:

4. a. Whenever the Contractor violates any governing Federal, State or Local environmental quality regulation and/or is in noncompliance with any environmental commitment, the violating activity must cease immediately until the appropriate remedy can be determined by: the Engineer, the NDOR Environmental Section, the Federal Highway Administration (for projects utilizing Federal-aid) and other agencies, as deemed appropriate. The Engineer, with assistance from the NDOR Environmental Section and the FHWA, will provide a written order confirming the appropriate corrective action to the Contractor. Work can resume to normal conditions once the Engineer determines that the violation or non-compliance has been addressed in accordance with the order for corrective action.
Subsection 107.01 in the *Standard Specifications* is amended to include the following two paragraphs:

5. Should the Contractor encounter any previously unidentified hazardous materials, the Engineer shall be promptly notified. The Contractor shall suspend operations in the area involved until such time that arrangements are made for their proper treatment or removal.

6. The Contractor shall prevent the transfer of invasive plant and animal species. The Contractor shall wash equipment at the Contractor's storage facility prior to entering the construction site. The Contractor shall inspect all construction equipment and remove all attached vegetation and animals prior to leaving the construction site.

**SPECIAL PROSECUTION AND PROGRESS**
(Federal Immigration Verification System)
(A-43-1209)

The Contractor shall register with and use a Federal Immigration Verification System to determine the work eligibility status of newly hired employees physically performing services within the State of Nebraska. The Prime Contractor shall contractually require every subcontractor to register with and use a Federal Immigration Verification System to determine the work eligibility status of newly hired employees physically performing services within the State of Nebraska.


The Prime Contractor shall furnish a letter to the NDOR Construction Division in Lincoln on company letterhead and signed by an officer of the company stating that documentation is on file certifying that the Contractor and all subcontractors have registered with and used a Federal Immigration Verification System. The Contractor shall maintain all records of registration and use for a period of three years and make records available upon request. The Contractor shall contractually require subcontractors to maintain all records for a period of three years and make records available upon request.

Payment will not be made to the Contractor for using the Federal Immigration Verification System or the maintenance of the records. This work shall be subsidiary to the work being performed.

The Contractor’s Certification shall become part of the final records of the Contract. The Department considers this document to have direct bearing to the beginning interest date and may affect the amount of interest earned.
Paragraph 5. of Subsection 108.02 of the *Standard Specifications* is void and superseded by the following:

5. Each week, the Engineer shall post on the Department’s website a report of working days or calendar days charged. The Contractor then has 14 days from the day the Engineer’s report is posted to provide a written explanation of why he/she does not concur with the working days or calendar days as assessed.

Paragraph 6.b. of Subsection 108.02 of the *Standard Specifications* is amended to include the following:

(4) If the time allowance for the contract has been established on a calendar day basis, the Contractor is expected to schedule the work and assign whatever resources are necessary to complete the work in the time allowance provided regardless of the weather. Accordingly, regardless of anything to the contrary contained in these Specifications, the Department will not consider delays caused by inclement or unseasonable weather as justification for an extension of the contract time allowance unless:

i. the weather phenomena alleged to have contributed to or caused the delay is of such magnitude that it results in the Governor issuing a Disaster Declaration, and

ii. the weather phenomena alleged to have contributed to or caused the delay can clearly be shown to have directly impacted the work on the critical path identified on the Contractor’s schedule.

Paragraphs 10.b. and 10.c. of Subsection 108.02 of the *Standard Specifications* are void and superseded by the following:

b. (1) If the extra work is not in the original contract, time extensions will be granted by determining the actual time necessary to accomplish the extra work.

(2) If the extra work is the result of the addition of additional quantities of existing contract items, time extensions will be granted by either:

(i) determining the actual time necessary to accomplish the extra work; or

(ii) determining the additional time to be granted by comparing the value of the additional quantities of work to the total amount of the original contract when measurement of the actual additional time is not possible or practical.

(3) In either case, only the time necessary to perform the extra work of the additional quantities of existing contract items when the extra work or the additional quantities of existing contract items are deemed to be the current controlling operation will be granted as a time extension.
c. Increases in quantities of work associated with traffic control items measured by the day will not be considered for extending the contract time allowance. Overruns of traffic control items that are measured by methods other than time may be considered for extending the contract time allowance, but they must be deemed to be a controlling operation when the overrun of quantities occurs.

PARTIAL PAYMENT
(A-43-1110)

Paragraph 2. of Subsection 109.07 of the Standard Specifications is void and superseded by the following:

2. When the value of the work completed during a semi-monthly period exceeds $10,000, the Contractor will receive semi-monthly progress estimates from which the Department shall make such retentions as may be allowed by the contract, provided that the nature and quality of the completed work are satisfactory and provided further that the progress of the work conforms to the requirements of Subsection 108.07.

Paragraph 3.b. of Subsection 109.07 of the Standard Specifications is void and superseded by the following:

b. Under normal circumstances, the Department shall not retain any earnings on a progress estimate. However, the Department reserves the right to retain such amounts as are necessary for material deficiencies, anticipated liquidated damages, unpaid borrow, and for other reasons to protect the Department’s interests.

PARTIAL PAYMENT
(A-43-0611)

Paragraph 4. of Subsection 109.07 of the Standard Specifications is void and superseded by the following:

4. a. (1) Upon presentation by the Contractor of received bills, billing invoices, or such other documentation sufficient to satisfy the Engineer and verify the Contractor’s or subcontractor’s actual costs for the materials, payments may also be allowed for acceptable nonperishable materials purchased expressly to be incorporated into the work and delivered in the vicinity of the project or stored in acceptable storage places within Nebraska.

(2) Materials not delivered and stored in the immediate vicinity of or on the actual project site must be clearly marked to identify the project on which they are to be used, must be segregated from similar materials at the storage site, and cannot be included in a supplier’s inventory of material available for sale for other purposes.

(3) All items eligible for partial payment as stored materials must be available for verification, sampling, and measurement.
b. The amount to be included in the payment will be determined by the Engineer, but in no case shall it exceed 100 percent of the value of the materials documented. This value may not exceed the appropriate portion of the value of the contract item or items in which such materials are to be incorporated, nor shall the quantity in any case exceed the total estimated quantity required to complete the project.

c. Payment will not be approved when the documented value of such materials amounts to less than $1,000.00, when the progress of the work is not in accordance with the requirements set forth in Subsection 108.07, or when the material can reasonably be expected to be incorporated into the work and eligible for payment as completed work on a progress estimate within 15 days of being placed into storage.

d. Deductions at rates and in amounts which are equal to the payments will be made from estimates as the materials are incorporated into the work.

e. Payment for the materials shall not in itself constitute acceptance, and any materials which do not conform to the specifications shall be rejected in accordance with Subsection 106.05.

f. The Contractor shall be responsible for all damages and material losses until the material is incorporated into the work and the work is accepted.

g. Partial payment will not include payment for fuels, supplies, form lumber, falsework, other materials, or temporary structures of any kind which will not become an integral part of the finished construction.

h. No partial payments will be made on living or perishable plant materials until planted.

BUY AMERICA
(A-43-0212)

Subsection 106.07 in the Standard Specifications is void and superseded by the following:

106.07 -- Buy America

1. The Buy America rule requires that steel or iron materials be produced domestically, and only those products which are brought to the construction site and permanently incorporated into the completed project are covered. Construction materials, forms, etc., which remain in place at the Contractor’s convenience, but are not required by the contract, are not covered.

2. To further define the coverage, a domestic product is a manufactured steel construction material that was produced in one of the 50 States, the District of Columbia, Puerto Rico, or in the territories and possessions of the United States.

3. All manufacturing processes to produce steel or iron materials (i.e., smelting, and any subsequent process which alters the steel or iron material's physical form or shape, or changes its chemical composition) must occur within one of the 50
States, the District of Columbia, Puerto Rico, or in the territories and possessions of the United States, to be considered of domestic origin. This includes processes such as casting, rolling, extruding, machining, bending, grinding, drilling, and coating. Coating includes epoxy coating, galvanizing, painting, and any other coating that protects or enhances the value of the material. The manufacturer shall include a statement on the material test report or certification that all material described above except the coating material is a domestic product.

4. Raw materials used in the steel or iron materials may be imported. All manufacturing processes to produce steel or iron materials must occur domestically. Raw materials are materials such as iron ore, limestone, waste products, etc., which are used in the manufacturing process to produce the steel products. Waste products would include scrap; i.e., steel no longer useful in its present form from old automobiles, machinery, pipe, railroad tracks and the like. Also, steel trimmings from mills or product manufacturing are considered waste. Extracting, crushing, and handling the raw materials which is customary to prepare them for transporting are exempt from Buy America. The use of pig iron and processed, pelletized, and reduced iron ore manufactured outside of the United States may be used in the domestic manufacturing process for steel and/or iron materials.

5. Notwithstanding this requirement, a minimum of foreign steel or iron materials will be permitted if its value is less than one-tenth of one percent of the total contract cost or $2,500, whichever is greater.

6. Upon completion of all work utilizing steel or iron products, the Prime Contractor shall furnish a letter to the State on company letterhead and signed by an officer of the company stating that documentation is on file certifying that all steel or iron materials brought to the construction site and permanently incorporated into the work complied in all respects with the Buy America requirements.

BORROW, WASTE, STOCKPILE, AND PLANT SITE APPROVAL  
(A-43-0512)

Subsection 107.02 in the Standard Specifications is amended to include the following:

4. Site Approval:
   a. When borrow is obtained from a borrow site or waste excavation is placed at sites which are not shown in the contract, or the Contractor plans to use a plant or stockpile site which is not shown in the contract, the Contractor shall be solely responsible for obtaining all necessary site approvals. The Department will provide the procedures necessary to obtain approvals from the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, Nebraska State Historical Society, Nebraska Game and Parks Commission, and Nebraska Department of Natural Resources on the NDOR website. The Contractor shall also be responsible for obtaining a Discharge Number from the Nebraska Department of Environmental Quality (NDEQ) that allows work under the current Construction Stormwater Permit. The Contractor shall also be
responsible for obtaining any and all other permits required by local
governments.

b. It is anticipated that it may require 60 calendar days or more for the
Contractor to obtain the necessary approvals. The Contractor will not be
allowed to begin work at borrow or waste sites until the necessary
approvals are obtained. No extension of completion time will be granted
due to any delays in securing approval of a borrow or disposal site unless
a review of the time frames concludes that there were conditions beyond
the Contractor’s control.

Paragraph 7. of Subsection 205.02 in the Standard Specifications is void and superseded by the
following:

7. Borrow and Waste Site Approval:
   a. Borrow and waste site approvals shall be in accordance with
      Section 107.02.
   b. Material shall not be removed from borrow sites until preliminary cross
      sections and representative soil samples have been taken by the
      Engineer. The Contractor shall notify the Engineer a sufficient time in
      advance of the opening of any borrow site so that cross sections may be
      taken.
   c. Material shall be removed in a manner that will allow accurate final cross
      sections to be taken for determining the quantity of excavation. The
      surfaces of the borrow sites shall be bladed and shaped to drain as
      shown in the contract or as directed by the Engineer.

SPECIAL PROSECUTION AND PROGRESS
(Subletting or Assigning of Contract)
(A-43-0414)

Subsection 108.01 in the Standard Specifications is void and superseded by the following:

108.01 – Subletting or Assigning of Contract

  1. a. (1) The Contractor will not be allowed to sublet, assign, sell, transfer, or
         otherwise dispose of any portion of the contract or any right, title, or
         interest therein; or to either legally or equitably assign any of the money
         payable under the contract or the claims without the prior written consent
         of the Engineer.

         (2) With the Engineer’s consent, the Contractor may sublet up to 70 percent
             of the work.

         (3) Any items designated in the contract as “specialty items” may be
             performed by subcontract.
(4) The cost of any subcontracted “specialty items” may be deducted from the total contract cost before computing the percentage of work required to be performed by the Contractor.

(5) Subcontracts, or transfer of contract, will not release the Contractor of any liability under the contract and bonds.

b. Certain items of work may be performed without a subcontract. A list of items not requiring a subcontract is available from the Engineer.

2. The performance of any work by a subcontractor before the date of authorization by the Department shall subject both the Contractor and subcontractor to the imposition of appropriate sanctions by the Department.

3. a. The Contractor’s request to sublet work shall be made electronically to the NDR Construction Engineer using project management software identified by the Department. A signed subcontract agreement shall be on file in the Contractor’s office when the request is made. The subcontract agreement must provide that the subcontracted work will be completed according to the terms of the contract. The required and Special Provisions contained in the proposal shall be physically included in any subcontract.

b. On all Federal-aid projects, a scanned copy (.pdf format) of the signed subcontract agreement shall be included with the subcontracting request. (Federal-aid projects can be identified by inclusion in the Proposal of Form FHWA-1273 (REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS).

c. Scanned copies (.pdf format) of all executed subcontracts, written agreements, and/or lease agreements used to meet DBE goals shall be submitted to the NDR Construction Engineer with the subcontracting request. These copies must show labor cost, material prices, overhead and profit.

4. a. Second tier subcontracts will be allowed.

b. If a DBE firm subcontracts work to another firm, only work subcontracted to another DBE firm can be counted toward meeting a DBE goal.

c. All requests for second tier subcontracting shall be submitted to and approved by the Prime Contractor before they are forwarded to the NDR Construction Engineer for approval.

5. All subcontract documents relating to the contract shall be maintained during the course of the work and preserved for a period of three years thereafter. These documents shall be available for inspection by authorized representatives of State and Federal agencies. Scanned copies (.pdf format) of the signed subcontract agreements not specifically identified elsewhere in this Subsection shall be furnished to the Department upon request.

6. The Contractor may discuss a proposed subcontract with the Engineer before entering into a signed subcontract agreement, but final approval will not be
granted until a formal request and proper certification has been received by the Department.

7. On projects requiring submittal of certified payrolls, all subcontractor payrolls shall be checked by the Contractor before submittal to the Engineer.

8. a. The Prime Contractor, and subcontractors when subletting work to lower tier subcontractors, shall include language which can be identified as a “Prompt Payment Clause” as a part of every subcontract for work and materials.

   b. (1) The language constituting the “Prompt Payment Clause” will require payment to all first tier subcontractors for all labor and materials --- for work completed to date --- within 20 calendar days of receipt of progress payments from the Department for said work. Similar language in a contract between a subcontractor and a lower-tier subcontractor will require payment to the lower tier subcontractor for all labor and materials --- for work completed to date --- within 10 calendar days of receipt of progress payments from the prime Contractor for said work.

   (2) The language constituting the “Prompt Payment Clause” will also stipulate the return of retainage within 30 calendar days after the satisfactory completion of the work by the subcontractor as evidenced by inclusion of the work on a progress payment.

   (3) Additionally, the language constituting the “Prompt Payment Clause” may stipulate the subcontractor’s obligation to return to the Contractor or subcontractor, as the case may be, any overpayments which result from adjustments to measured and recorded quantities as part of the preparation of subsequent progress payments or the final records. Overpayments shall be returned to the Prime Contractor or subcontractor, as the case may be, within 20 calendar days of receiving notice of the adjusted quantities and the amount of the overpayment.

   c. The Prime Contractor of subcontractors, as the case may be, may withhold payment only for just cause and shall not withhold, delay, or postpone payment without first receiving written approval from the Department.

   d. (1) The failure by the Prime Contractor to abide by the agreements identified in the “Prompt Payment Clause” without just cause, including the timely return of retainage, is a material breach of this contract which may result in the Department withholding the amount of payment from the prime Contractor that should have been paid to the subcontractor, termination of this contract, or other such remedy as the Department deems necessary.

   (2) Additionally, the failure of any subcontractor to abide by the agreements identified in the “Prompt Payment Clause” without just cause, including the timely return of retainage to lower tier subcontractors, or by failing to return overpayments in a timely manner when the language permitted in Paragraph 8.b.(3) above is included in the subcontract may result in the Department withholding subcontract approval for other work until the overpayments have been returned.
9. a. (1) For Davis Bacon (DBRA)-covered projects and Non-DBRA-covered projects, a Contractor or subcontractor may wish to use another individual owner-operator or trucking company to supplement his or her hauling fleet. (The Department will not recognize multiple individuals claiming to be collectively identified as a single “owner operator.”)

(2) This supplemental individual or company must either become a subcontractor (first tier or lower tier, as the case may be) or be otherwise documented by the utilizing Contractor or subcontractor by entering into a lease agreement for the trucks and showing the driver (or drivers) from the supplemental company on the Prime Contractor’s or subcontractor’s payrolls in the manner described below.

(3) Payrolls will only be accepted from the Prime Contractor or approved subcontractors.

b. (1) If the decision is made to subcontract the hauling, the Prime Contractor must first notify the NDOR Construction Office to request subcontract approval. As part of the subcontract approval process --- at any tier --- the proper certificates of insurance must be provided before approval will be granted.

(2) Additionally, on DBRA-covered projects, the Prime Contractor must submit payrolls for all subcontractors --- at any tier.

c. (1) Owner/Operators of trucks hired by a Contractor or subcontractor to supplement his or her hauling fleet are not subject to Davis Bacon wage requirements. However, they must still be shown on a payroll prepared by the Contractor or subcontractor for whom they are working with the notation “owner/operator.”

(2) Any other employees of the “owner/operator” must appear on the certified payroll in complete detail and must be compensated according to the wage rates established for the project.

d. In the event a Prime Contractor or subcontractor elects to not subcontract the supplemental driver or drivers but instead chooses to “carry the workers/truckers on their payroll,” the following requirements must be met:

(1) The Prime Contractor’s or subcontractor’s certified payroll must contain the names of all workers/truck drivers, and the payroll should identify their supervisors (including “owner-operators”).

(2) Pay checks for the workers/truckers in question must be drawn against the Prime Contractor’s or subcontractor’s payroll or other account.

(3) Owner/Operators need only be identified as such on the payroll. Additional drivers, if any, from the “owner-operator’s” company must appear on a payroll in complete detail and be compensated according to the wage rates established for the project.

(4) The Prime Contractor or subcontractor must enter into a lease agreement for the trucks driven by such drivers, and the lease agreement must show
that the compensation for the leased equipment is on a time basis and
not based on the amount of work accomplished. The lease agreements
must be available for inspection by NDOR personnel.

(5) Any supplemental truckers employed under this arrangement must still
carry the minimum automobile liability coverage specified in the contract.
It shall be the duty of the Prime Contractor to ensure that the
supplemental truckers have such coverage in effect. Evidence of proper
insurance must be presented for verification on demand.

ELECTRONIC SHOP DRAWINGS
(A-43-0215)

Paragraphs 5, 6, and 7 of Subsection 105.02 of the Standard Specifications are void and
superseded by the following:

5. a. The Contractor shall provide electronic working drawings in a Portable Document
Format (PDF). The PDFs shall be sized to print on an 11x17 inch sheet of paper
and have a minimum resolution of 300 dpi. Each sheet of the shop drawings
shall have a space provided for an electronic stamp that measures 2.5 inches x
3.5 inches when printed.

b. Electronic working drawing files shall be named with the following file naming
format:

Control Number_Brief Description_Date.pdf

For example: 12345_FloorDrains_05Feb2015
12345_FloorDrainCoverLetter_05Feb2015

c. The project number, control number, and project location as it appears on the
plans shall be shown on the front sheet of each Shop Drawing file. Structure
numbers shall be included, if applicable.

6. No electronic working drawings shall be submitted to the Engineer unless they
have been checked by the Contractor. The electronic submittal shall be
accompanied by a Contractor’s letter of approval in a PDF format. This letter
shall also be named with the format shown in the example above. The letter of
approval shall clearly indicate that the Contractor is responsible for any errors on
the working drawings.

7. a. Electronic submittals shall be submitted by email to the following address:

DOR.ShopDrawings@nebraska.gov

b. Attachments shall be limited to 25 MB of data per email. Larger files shall be
separated and sent in multiple emails.

c. Electronic working drawings will only be accepted from the Prime Contractor.
8. Any reference to hard copy shop drawings in the contract shall be considered void.

LIABILITY INSURANCE
(A-55-0414)

Subsection 107.13 in the Standard Specifications is void and superseded by the following:

107.13 – Liability Insurance

Prior to execution of the contract, the Contractor shall obtain insurance coverage to fully protect it from loss associated with the work, and have at a minimum the insurance described below:

1. General Liability:
   Limits of at least:
   $ 1,000,000 per Occurrence
   $ 2,000,000 General Aggregate
   $ 2,000,000 Completed Operations Aggregate
   $ 1,000,000 Personal and Advertising Injury

   a. Contractor shall be responsible for the payment of any deductibles.

   b. Coverage shall be provided by a standard form Commercial General Liability Policy (CG0001 or equivalent) covering bodily injury, property damage including loss of use, and personal injury.

   c. The General Aggregate shall apply on a Per Project Basis.

   d. The State of Nebraska, Department of Roads, shall be named as an Additional Insured on a primary and non-contributory basis including completed operations for three (3) years after final acceptance and payment.

   e. Contractor agrees to waive its rights of recovery against the State of Nebraska, Department of Roads. Waiver of Subrogation in favor of the State of Nebraska, Department of Roads shall be added to the policy.

   f. Contractual liability coverage shall be on a broad form basis and shall not be amended by any limiting endorsements.

   g. If work is being performed near a railroad track, the 50’ railroad right-of-way exclusion must be deleted.

   h. Products and completed operations coverage in the amount provided above shall be maintained for the duration of the work, and shall be further maintained for a minimum period of three years after final acceptance and payment.

   i. Coverage shall be included for demolition of any building or structure, collapse, explosion, blasting, excavation and damage to property below surface of ground (XCU coverage).
j. Policy shall not contain a total or absolute pollution exclusion. Coverage shall be provided for pollution exposures arising from products and completed operations as per standard CG0001 Pollution Exclusion or equivalent. If the standard pollution exclusion as provided by CG0001 has been amended, coverage must be substituted with a separate Pollution Liability policy of $1.0 million per occurrence and $2.0 million aggregate. If coverage is provided by a “claims made” form, coverage will be maintained for three years after project completion. Any applicable deductible is the responsibility of the Contractor.

2. Automobile Liability:
   Limits of at least:
   $1,000,000 CSL per Accident
   a. Coverage shall apply to all Owned, Hired, and Non-Owned Autos.
   b. If work is being performed near a railroad track, the 50-foot railroad right-of-way exclusion must be deleted.
   c. Contractor agrees to waive its rights of recovery against the State of Nebraska, Department of Roads. Waiver of Subrogation in favor of the State of Nebraska, Department of Roads, shall be added to the policy.
   d. Automobile liability coverage shall be obtained from an insurance carrier who is licensed with the Nebraska Department of Insurance.

3. Workers’ Compensation:
   Limit: Statutory coverage for the State where the project is located.
   Employer’s Liability limits: $500,000 Each Accident
   $500,000 Disease – Per Person
   $500,000 Disease – Policy Limit
   a. Contractor agrees to waive its rights of recovery against the State of Nebraska, Department of Roads. Waiver of Subrogation in favor of the State of Nebraska, Department of Roads shall be added to the policy.
   b. Workers’ compensation coverage shall be obtained from an insurance carrier who is licensed with the Nebraska Department of Insurance.
   c. Where applicable, the Longshore and Harborworkers Compensation Act endorsement shall be attached to the policy.

4. Umbrella/Excess:
   Limits of at least:
   $1,000,000 per Occurrence
   a. Policy shall provide liability coverage in excess of the specified Employers Liability, Commercial General Liability and Automobile Liability.
   b. The State of Nebraska, Department of Roads, shall be an “Additional Insured.”
   c. Contractor agrees to waive its rights of recovery against the State of Nebraska, Department of Roads. Waiver of subrogation in favor of the State of Nebraska, Department of Roads shall be provided.
5. Pollution Liability:
   a. When “hazardous wastes” or contaminated or polluted materials must be handled and/or moved, the Contractor shall obtain Pollution Liability Coverage with minimum limits of $1,000,000 per occurrence and $2,000,000 aggregate.
   b. If, during the course of construction, hazardous wastes, contaminated or polluted material are discovered on the project, the Contractor shall immediately cease any operation that may disturb these materials, and shall immediately notify the Engineer of all facts related to the discovery of these materials.
   c. Unforeseen work related to the discovery of hazardous, contaminated or polluted materials on the project, and the extra cost, if any, of pollution liability coverage will be handled as “extra work.”

6. Additional Requirements:
   a. The Contractor shall provide and carry any additional insurance required by the Special Provisions.
   b. Except as otherwise provided herein, all insurance shall be kept in full force and effect until after the State releases the Contractor from all obligations under the contract.
   c. (1) If any of the work is sublet, equivalent insurance shall be provided by or on behalf of the subcontractor or subcontractors (at any tier) to cover all operations.
      (2) Approved trucking subcontractors (at any tier) who are being utilized only for the purpose of hauling materials shall be exempt from the requirements of Paragraphs 1, 4, and 5.
      (3) (i) When a Contractor or subcontractor chooses to employ a trucker by carrying the driver on his or her payroll and entering into a lease agreement for the truck, the owner-operator of the truck shall be required to comply with the Automobile Liability provisions of Paragraph 2.
          (ii) Furthermore, it shall be the duty of the Prime Contractor to ensure that the owner-operator of the truck has such insurance in effect. The Prime Contractor shall maintain evidence that any truckers so utilized (at any tier) are insured to the minimum limits specified and be able to furnish documentation of the same on demand.
          (iii) Failure to ensure that insurance coverage exists and failure to maintain evidence thereof shall be considered a breach of the contract.
   d. Any insurance policy shall be written by an insurance company with a Best’s Insurance Guide Rating of A – VII or better.
   e. Prior to execution of the contract, Contractor shall provide the State of Nebraska, Department of Roads evidence of such insurance coverage in effect in the form of an Accord (or equivalent) certificate of insurance executed by a licensed representative of the participating insurer(s). Certificates of insurance shall show the Nebraska Department of Roads as the certificate holders.
f. For so long as insurance coverage is required under this agreement, the Contractor shall have a duty to notify the Department when the Contractor knows, or has reason to believe, that any insurance coverage required under this agreement will lapse, or may be cancelled or terminated. The Contractor must forward any pertinent notice of cancellation or termination to the Department at the address listed below by mail (return receipt requested), hand-delivery, or facsimile transmission within 2 business days of receipt by Contractor of any such notice from an insurance carrier. Notice shall be sent to:

Nebraska Department of Roads
Construction Division --- Insurance Section
1500 Highway 2, P.O. Box 94759
Lincoln, NE 68509-4759

Facsimile No. 402-479-4854

g. Failure of the owner or any other party to review, approve, and/or reject a certificate of insurance in whole or in part does not waive the requirements of this agreement.

h. The limits of coverage set forth in this document are suggested minimum limits of coverage. The suggested limits of coverage shall not be construed to be a limitation of the liability on the part of the Contractor or any of its subcontractors/tier subcontractors. The carrying of insurance described shall in no way be interpreted as relieving the Contractor, subcontractor, or tier subcontractors of any responsibility or liability under the contract.

i. If there is a discrepancy of coverage between this document and any other insurance specification for this project, the greater limit or coverage requirement shall prevail.

CONSTRUCTION DETAILS

FUEL COST ADJUSTMENT PAYMENT
(B-1-0708)

Paragraph 16.a. of Subsection 205.05 in the Standard Specifications is amended to provide that the references to fuel cost fluctuation will be 5% instead of the 10% shown.

The fuel use factor, "F", shown in Paragraph 16.c. of Subsection 205.05 is void and superseded by the following:

\[ F = \text{English} \]

The fuel use factor for diesel fuel, in gallons per cubic yard. For the items of work "Excavation", "Excavation, Borrow", and "Excavation, Established Quantity", "F" shall be equal to 0.20. For the item of work "Earthwork Measured in Embankment", "F" shall be equal to 0.27.
Metric
The fuel use factor for diesel fuel, in liters per cubic meter. For the items of work "Excavation", "Excavation, Borrow", and "Excavation, Established Quantity", "F" shall be equal to 0.99. For the item of work "Earthwork Measured in Embankment", "F" shall be equal to 1.32.

Paragraph 16.d. of Subsection 205.05 is void and superseded by the following:

d. The allowable price differential, "D", for the current estimate will be computed according to the following formula:

When the current price, $P$, is greater than the base price, $P(b)$.

$$D = P - 1.05P(b), \text{ but not less than zero.}$$

When the current price, $P$, is less than the base price, $P(b)$.

$$D = P - 0.95P(b), \text{ but not greater than zero.}$$

WATER
(B-1-0307)

Paragraph 4.a. of Subsection 205.04 in the Standard Specifications is amended to include the following:

Payment shall be made at the established contract unit price.

EXCAVATION AND EMBANKMENT
(B-1-0212)

Paragraph 6. of Subsection 205.02 in the Standard Specifications is void and superseded by the following:

6. Frozen Layers:

a. Thin Frozen Layer. A thin soil layer that freezes during the construction of an embankment may remain provided that the layer:

(i) had proper density and moisture prior to freezing,
(ii) can be readily broke up by a single pass of a tamping (sheepsfoot) roller or track mounted excavator,
(iii) is thoroughly scarified into pieces having a single dimension of 3 inches or less, and a second dimension of $\frac{1}{2}$ inch or less, and
(iv) is not within 10 inches (measured vertically) of any thin frozen layer that was previously scarified and left in place.
b. Thick Frozen Layer. A soil layer that freezes during the construction of an embankment, but does not meet the Thin Frozen Layer requirements:
   (i) may remain in the embankment provided that the layer is thawed and has proper density and moisture after thawing, or
   (ii) shall be completely removed from the embankment prior to placing any additional embankment material.

**GENERAL CLEARING AND GRUBBING**
*(B-2-0307)*

Paragraph 1. of Subsection 202.03 in the Standard Specifications is amended to provide that General Clearing and Grubbing shall include all tree removal.

Paragraphs 2.a., and b., of Subsection 202.03 in the Standard Specifications are void.

Paragraph 3. of Subsection 202.04 in the Standard Specifications is void and superseded by the following:

3. All tree removal is subsidiary to the pay item “General Clearing and Grubbing”.

**TEMPORARY WATER POLLUTION CONTROL**
*(B-3-1014)*

Section 204 in the Standard Specifications is void.

**CONSTRUCTION STORMWATER MANAGEMENT CONTROL**
*(B-3-1014)*

A. General

1. This Section defines some best management practices (BMPs) for erosion and sediment control measures and construction practices the Contractor shall use to prevent soil erosion and avoid water pollution.

2. a. The Department and the Contractor are co-permittees of the NPDES Construction Storm Water General Permit.

   b. The Contractor shall comply with all conditions required by the current NPDES Construction Storm Water General Permit.

3. The Contractor shall exercise every reasonable precaution throughout the life of the contract to prevent silting of the waters of the state, the project site, and adjacent property. Construction of drainage facilities, as well as performance of other contract work which will contribute to the control of siltation, shall be carried out in conjunction with earthwork operations or as soon thereafter as is practicable.
4. a. The Contractor shall take sufficient precautions to prevent pollution of the waters of the state, the project site, and adjacent property from construction debris, petroleum products, chemicals, or other harmful materials.

The Contractor shall conduct and schedule the operations to avoid interference with any protected species.

b. The Contractor shall comply with all applicable statutes relating to pollution of the waters of the state and fish and game regulations.

5. All construction debris shall be disposed in a manner that it cannot enter any waterway. Excavation shall be deposited as to protect the waters of the state from siltation.

6. All erosion and sediment control measures shall be properly installed and maintained by the Contractor until all permanent drainage facilities have been constructed, and all slopes are sufficiently vegetated to be an effective erosion deterrent; or until tentative acceptance of the work.

7. All erosion and sedimentation resulting from the Contractor's operations and the weather conditions must be corrected by the Contractor.

LIMITATION OF OPERATIONS
(B-3-1014)

A. General

1. The maximum exposed surface area for the Contractor's operations in excavation, borrow, and embankment is 18 acres (72,800 m²) plus an equal area of clearing and grubbing/large tree removal. A written request for an increase in the maximum exposed surface area may be approved by the Engineer. This approval will be based on the soil, moisture, seasonal conditions, the Contractor's operation, or other conditions.

2. The Engineer shall have the authority to reduce the maximum exposed surface area when any of the following conditions warrant:

   a. Soil and moisture conditions are such that erosion is probable.

   b. Seasonal conditions may force extended delays.

   c. Proximity to the waters of the state requires more stringent controls.

   d. Equipment and personnel available on the job is not sufficient to properly maintain erosion and dust control measures.

   e. Any other environmental condition in the area that may exist which would be affected by erosion from the project.
3. Construction operations in rivers, streams, wetlands, and impoundments shall be restricted to those areas specifically shown in the contract. Rivers, streams, wetlands, and impoundments shall be promptly cleared of all false work, piling, debris, or other obstructions placed therein or caused by the construction operations.

4. Fording and operation of construction equipment within streams and wetlands will not be allowed, unless explicitly allowed in the contract. Streams are defined as any area between the high banks, regardless of the flow conditions.

CONSTRUCTION METHODS
(B-3-1014)

A. General

1. The Contractor shall conduct all construction activities and install temporary erosion control measures, as necessary, to control sediment and avoid soil erosion during construction.

2. The Contractor shall incorporate all permanent erosion control features into the project at the earliest practicable time.

3. Construction stormwater management control measures for Contractor obtained work areas located outside the right-of-way, such as borrow site operations, haul roads, plant sites, staging sites, waste sites, equipment storage sites, etc. are the sole responsibility of the Contractor. All construction stormwater management control measures for these areas are at the Contractor’s expense. The Contractor is responsible for securing all required permits for use of these sites.

4. The construction stormwater management procedures contained herein shall be coordinated with any permanent erosion control measures specified elsewhere in the contract to the extent practical to assure economical, effective, and continuous erosion and sediment control throughout the construction period.

5. The Contractor shall be responsible to limit erosion and prevent siltation into the waters of the state during the construction period, as well as during the times that work may be suspended.

6. a. All erosion and sediment control items shall be installed by personnel who are knowledgeable in the principles and practice of various BMP installations.

   b. The installation of all erosion and sediment control items shall be done under the direct supervision of the Contractor’s employee who has successfully completed training provided by the Department and has been certified as an Erosion and Sediment Control Inspector (Inspector). The Contractor’s Inspector shall be present at each site during installation to direct and inspect all erosion and sediment control BMP installations.

   i. The NDOR Erosion and Sediment Control Inspector Certification is obtained by completing an Erosion and Sediment Control
Inspector Training Course provided by the Nebraska Department of Roads and passing the examination that accompanies the training.

c. The Contractor shall notify the Engineer of all employees, who have been certified as Inspectors, who will be on the project to direct and inspect all erosion and sediment control BMP installations.

d. No payment will be made for any erosion and sediment control item unless a Contractor’s Inspector was present to directly supervise and inspect the work.

e. No payment will be made for any erosion and sediment control item that is not properly installed. All erosion and sediment control items shall be installed as per the contract.

ENVIRONMENTAL COMMITMENT DOCUMENT (B-3-1014)

A. Environmental Commitment Document

1. a. An Environmental Commitment Document will be created by the Department to identify all project specific environmental commitments and will be included in the Contract.

b. The Department will provide information for the following, when applicable:

   i. Storm Water Pollution Prevention Plan (SWPPP)
   ii. U.S. Army Corps of Engineers (USACE) Section 404 Permit
   iii. Nebraska Department of Environmental Quality 401 Water Quality Certification
   iv. State Title 117 Waters (USACE Non-Jurisdictional)
   v. Floodplain Permit
   vi. Historic Clearance
   vii. Endangered Species Act Clearance
   viii. Nebraska Nongame and Endangered Species Conservation Act Clearance
   ix. National Environmental Policy Act Compliance
   x. NPDES Construction Stormwater Permit (within Right-of-Way limits, only)
   xi. Conservation Measures
   xii Migratory Bird Treaty Act
   xiii. Bald and Golden Eagle Protection Act Compliance
   xiv. Other pertinent issues

c. The Contractor shall provide information for the following, when applicable:

   i. Temporary Erosion Control Plan
   ii. Spill Prevention and Control Plan
iii. Migratory Bird Treaty Act Compliance Plan
iv. Name and telephone number of the Contractor’s representative responsible for the Environmental Commitments
v. Name and telephone number of the employees that are NDOR-Certified Erosion and Sediment Control Inspectors
vi. Critical Path Construction Schedule
vii. Other items as defined elsewhere in the contract

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)  
(B-3-1014)

A. General

1. A SWPPP is required for projects that construction activities will cause a land disturbance of one (1) acre or more. The Department will prepare the SWPPP for the areas within the Right-of-Way, temporary easements and permanent easements.

2. For projects not requiring a SWPPP, the Contractor shall comply with the requirements of Environmental Commitment Document, Paragraph 1.b. of this Special Provision, as applicable.

3. Contractor obtained work areas, located on private property, are not included in the NDOR Project SWPPP.

B. Temporary Erosion Control Plan

1. The Contractor shall prepare and submit the Temporary Erosion Control Plan prior to the start of any work. The Contractor shall not begin work until the Temporary Erosion Control Plan has been submitted to the Engineer and appropriate erosion control measures are in place. Payment for any work on the contract will be withheld if erosion control measures are not in place or properly maintained.

2. The Temporary Erosion Control Plan will be reviewed at project progress meetings. All active Contractors shall have their Inspectors present and work in cooperation to determine any necessary changes. Necessary changes will be documented on the Temporary Erosion Control Plan by the Engineer.

3. Payment for preparing the Temporary Erosion Control Plan, inspections and meeting reviews are subsidiary to items that direct payment is made.

C. Spill Prevention and Control Plan

1. All project activities shall be addressed in the Spill Prevention and Control Plan. The Contractor shall prepare and submit the plan to the Engineer and install all appropriate spill prevention and control measures prior to the start of any work.

2. The Spill Prevention and Control Plan shall clearly state measures to prevent, contain, document and clean up a spill. It shall state measures for disposal of the
contaminated material, disposal documentation and incident review to train personnel to prevent spills from reoccurring.

3. Spill Prevention and Control Plans are applicable to construction sites where hazardous materials are stored, used and/or generated onsite. Hazardous materials include, but not limited to: hazardous wastes, pesticides, paints, cleaners, petroleum products, fertilizers, solvents and porta-potty wastes.

4. Direct payment will not be made for the Spill Prevention and Control Plan.

D. Migratory Bird Treaty Act Compliance Plan

1. The Contractor shall not begin work until a Migratory Bird Treaty Act Compliance Plan has been submitted to the Engineer and appropriate nesting migratory bird avoidance measures are in place.

2. a. The Contractor shall clearly state the necessary measures they intend to use to avoid a “Take” of nesting migratory birds in the Migratory Bird Treaty Act Compliance Plan. Measures may include but are not limited to:

i. Clearing and grubbing prior to April 1st or after September 1st
ii. Tree removal prior to April 1st or after September 1st
iii. Clearing empty nests on structures prior to April 1st
iv. Maintaining clear structures until commencement and throughout the duration of work on structures
v. Netting structures to prevent nesting
vi. Commitment to perform surveys according to protocol
vii. Hire a biologist to survey areas to be disturbed prior to commencement of work during the nesting season
viii. Submittal of required bird survey reports
ix. Training of Contractor Personnel to insure compliance

3. a. The Migratory Bird Treaty Act Compliance Plan is applicable to the entire project site to avoid the “Take” of migratory birds protected under the Migratory Bird Treaty Act.

b. “Take” is defined as: pursuit, hunt, shoot, wound, kill, trap, capture, collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect.

4. The Migratory Bird Treaty Act Compliance Plan shall adhere to the NDOR’s Avian Protection Plan located at:

Direct payment will not be made for the Migratory Bird Treaty Act Compliance Plan.
E. **SWPPP Inspection**

1. The Contractor shall accompany the Engineer on inspections in accordance with the NPDES Construction Storm Water General Permit.

2. The SWPPP will be maintained and updated by the Engineer as work progresses and site conditions change to accurately describe the BMPs that are currently in place.

3. The Contractor’s participation in SWPPP inspections, maintenance and updates shall begin on the first day construction activities cause land disturbance and end on the date of project completion as evidenced as the completion date in the District Engineer’s Letter of Tentative Acceptance.

4. a. The Contractor’s Inspector shall be responsible for ensuring that all BMPs are installed in accordance with the contract or the manufacturers’ recommendations. The Contractor’s Inspector shall be capable of reading and interpreting these documents.

   b. The Contractor’s Inspector shall be familiar with product and structural BMPs. The Contractor’s Inspector shall inspect, assess, and supervise the maintenance of erosion and sediment control BMPs to ensure compliance with the NPDES Construction Storm Water General Permit while preserving BMP functionality.

5. Payment for project inspection is subsidiary to items that direct payment is made.

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**ENVIRONMENTAL COMMITMENT ENFORCEMENT**

**(B-3-1215)**

A. **General**

1. This specification establishes payment and disincentive assessment for the Contractor’s performance in complying with Contract Environmental Commitments.

2. Deficiencies are described but not limited to:

   a. Failure to install pollution prevention control BMPs as work progresses or as described in the SWPPP.

   b. Failure to maintain existing pollution prevention control BMPs.

   c. Failure to remove non-functioning pollution prevention control BMPs.

   d. Failure to comply with USACE Section 404 Permit requirements.

   e. Failure to comply with NPDES Construction Storm Water General Permit requirements.
f. Failure to comply with all applicable statutes relating to pollution of the waters of the state.

g. Exceeding the maximum exposed surface area for excavation of 18 Acres without written request for permission and written approval.

h. Failure to comply with wildlife species specific conservation conditions.

i. Failure to comply with the Contract.

j. Failure to comply with the Engineers directives.

B. SWPPP Deficiency Notification

1. The Engineer will document and direct the Contractor to correct deficiencies.

2. a. The Contractor shall commence correcting deficiencies, provide adequate equipment and personnel, and diligently pursue correcting deficiencies without cessation until all deficiencies have been corrected.

b. The count of Working Days and/or Calendar Days will continue during the time period that corrective work is being performed.

c. Delays to the project as a result of the Contractor conducting corrective actions for the Contract Environmental Commitments will not constitute a valid reason for an extension of the contract time allowance.

3. Deficiencies shall be corrected within seven (7) calendar days of notification or within an approved extension. When deficiencies are not corrected within seven (7) calendar days or within an approved extension, the Engineer will make a disincentive assessment to the contract as stated herein.

4. a. If soil, weather, or other conditions prevent the Contractor from completing the corrective actions within seven (7) calendar days, the Contractor shall notify the Engineer in writing. The Contractor’s letter shall state the reasons preventing corrective action within the time allowed. The Contractor shall propose a written Corrective Action Plan within 48 hours. Corrective work shall continue while the Corrective Action Plan is developed. The Contractor’s Corrective Action Plan must contain a course of action and a time frame for completion. If the reasons and the Corrective Action Plan are acceptable, the Engineer may extend the time in which to complete the corrective work.

b. The Contractor will be allowed to proceed with the plan as proposed without incurring a disincentive assessment. If all corrective work is completed within the time allowance shown in the Notification or within an approved extension, a disincentive assessment will not be imposed upon the Contractor.

c. Storm events or soil and weather conditions occurring on other projects, which interfere with a Contractor completing corrective actions on the
project within seven (7) calendar days, will not be justification for a time extension to complete the corrective work.

5. If all corrective work identified in the Notification has not been completed at the end of the seventh (7th) calendar day after the Initial Notice Date or within an approved extension, a Shut-Down Notice will be issued on the eighth (8th) calendar day after the Initial Notice Date or on the calendar day following the last day of an approved extension.

6. All operations shall cease as of the date and time cited in the Shut-Down Notice. The Contractor shall work, exclusively, on the deficiencies until all have been corrected or as directed by the Engineer. Upon issuance of the Shut-Down Notice, a disincentive of $500.00 per deficiency per calendar day will be assessed thru the day the corrective work is completed, inclusive.

7. The Engineer may require the Contractor to provide a written Procedures Plan that describes the process to prevent reoccurrence of deficiencies. The written Procedures Plan shall be provided within two (2) calendar days of the request. Failure to correct all deficiencies and provide a Procedures Plan may result in payments being withheld until such time that procedures are outlined.

a. Payment for preparing a written Procedures Plan is subsidiary to items that direct payment is made.

C. Storm Event Restoration – Incentive and Disincentive

1. The Department will pay “Storm Event Restoration - Incentive” when the Contractor completes the restoration work to eliminate the pollution prevention control deficiencies within seven (7) calendar days of Notification or within an approved extension. Multiple deficiencies may be included in one notification. If the restoration work has not been completed within seven (7) calendar days after the Initial Notice or within an approved extension, payment for the item of “Storm Event Restoration - Incentive” will not be made.

2. A storm event is defined as a storm exceeding 0.50 inch of rain in a 24 hour period.

3. The Department will notify the Contractor of pollution prevention control deficiencies.

4. a. Payment for the item of “Storm Event Restoration - Incentive” may not be made when the Contractor is notified to correct pollution prevention devices not installed in accordance with the contract or the manufacturer’s recommended installation instructions.

5. If the restoration work is not completed within seven (7) calendar days or within an approved extension, a disincentive assessment of $500.00 per deficiency per calendar day will be assessed. The disincentive assessment will begin on the eighth (8th) calendar day after the issuance of the Initial Notice Date or on the calendar day following the last day of an approved extension(s) and continue through the day that the restoration work is completed, inclusive.
D. Method of Measurement

1. a. “Storm Event Restoration – Incentive” will be measured by the each upon completion of restoration of all deficiencies included in a notification within the allowed time and only one payment per notification is allowed when multiple deficiencies are included on the notification.

   b. If deficiencies from multiple notifications are restored during the same restoration operation, only one (1) incentive is eligible for payment.

   c. If multiple notifications are the result of successive storm events and deficiencies are transferred to ensuing notifications, incentive payment is only eligible for the latest notification.

2. “Storm Event Restoration – Disincentive” will be measured by the calendar day in accordance with Paragraph C.5. above.

E. Basis of Payment

1. Pay Item Pay Unit
   Storm Event Restoration – Incentive Each
   Storm Event Restoration – Disincentive Calendar Day

2. All equipment, materials, etc. used in the restoration work will be paid for in accordance with Division 800 of the Standard Specifications.

3. Payment is full compensation for all other incidentals required to complete the restoration work included in the notification within the allowed time.

F. Environmental Commitments – Contractor Compliance

1. To provide payment for all plans, inspections, surveys, reports, travel, qualified inspection person’s, carrion removal, and any other subsidiary activities for the work of implementing threatened and endangered species commitments, temporary erosion control or any other environmental commitments prescribed in the contract.

2. Multiple visits to the project may be required to comply with environmental commitments prescribed in the contract.

G. Method of Measurement

1. No measurement is required.

H. Basis of Payment

1. Pay Item Pay Unit
   Environmental Commitments – Contractor Compliance Lump Sum
2. Partial payments will be made as follows:
   
a. The Department will pay 50 percent of the total amount bid for the item Environmental Commitments – Contractor Compliance within seven (7) calendar days after the Notice to Proceed Date.

   b. Upon completion of 50 percent of the Original Contract Amount, the Department will pay 30 percent of the amount bid for the item Environmental Commitments – Contractor Compliance.

   c. Upon completion of 75 percent of the Original Contract Amount, the Department will pay the remaining 20 percent of the amount bid for the item Environmental Commitments – Contractor Compliance.

   d. Failure to comply with any or all of the contract requirements, included for payment under the item of Environmental Commitments – Contractor Compliance, will preclude all payment for the item, including any previous payment.

3. Payment is full compensation for all work prescribed in the contract.

I. Immediate Action Deficiencies

1. Deficiencies that pose an imminent threat to the environment are considered an emergency situation. These deficiencies will be identified in the Immediate Action Deficiencies Section of the Environmental Commitment Deficiency Notification Form. The corrective work for Immediate Action Deficiencies shall begin immediately and continue without cessation until completed.

2. The Engineer will issue a shut-down notice. All work on the contract shall cease until the corrective work has been completed. The Engineer may allow the Contractor to continue working in areas unaffected by the Immediate Action Deficiency, provided corrective actions are being actively performed on the deficiency.

3. Immediate Action Deficiencies are not eligible for an incentive payment.

4. The Contractor will be assessed a disincentive assessment of $1,000.00 per deficiency per calendar day for failure to begin corrective actions or failing to continue to completion as directed by the Engineer or by the regulatory agency with jurisdiction.

5. Examples of Immediate Action Deficiencies include but are not limited to:
   
a. Threatened & Endangered Species habitat protection deficiencies

   b. USACE Section 404 Permit Noncompliance

   c. Petroleum Spills/Tank Leakage

   d. Hazardous Material Spills
J. Rights Reserved

1. The Department reserves the right to initiate and perform corrective action on any deficiencies which result from the Contractors’ actions, inactions, or for failure to comply with the NPDES Construction Stormwater General Permit, USACE Section 404 Permit, or any other applicable permit.

2. The Contractor shall be liable to the Department for any and all costs incurred by the Department for corrective actions taken by the Department.

3. It is expressly understood that the provisions of this specification shall not relieve the Contractor of their responsibilities nor shall it relieve the Surety of its obligation for and concerning any just claim.

4. The Contractor shall indemnify and save harmless the Department and all of its representatives from any and all actions or claims brought because of the Contractor's actions, inactions, or for failure to comply with the NPDES Construction Storm Water General Permit, USACE Section 404 Permit, or any other applicable permit.

ACCEPTANCE TESTING OF SOILS BY USE OF THE LIGHT WEIGHT DEFLECTOMETER (LWD) SCOPE (B-4-0915)

This test method covers the in-place measurement of deflection and moisture content of Class III embankments, subgrade preparation, granular fill and backfill for acceptance testing on Nebraska Department of Roads Projects. Refer to Subsection 205.03 of the NDOR Standard Specifications for Highway Construction for a definition of Class III embankments. Refer to NDR Test Method T 2835 for the proper operation of the LWD.

The deflection test measurement shall be the average measured deflection of the fourth, fifth, and sixth drops of the falling weight of the LWD. The first three drops are to be used to seat the LWD.

The Deflection Target Value (DTV) is the deflection value of each soil determined by using a test strip or from correlation with the Nebraska Group Index for an individual Soil.

Option 1

A. Determination of DTV using a Test Strip

1. A test strip shall be constructed for each soil type to determine the deflection target value.

2. A new test strip shall be constructed when there is an observed change in material or as determined by the Engineer.

3. The test strip dimensions for roadway embankment and subgrades shall have a minimum length of 200 feet and a width equal to the embankment or roadway. The total thickness shall be no less than 6 inches for roadway subgrade and no less than 1-foot and no more than 3 feet for roadway embankment.
4. The test strip dimensions for trenches, culverts, and structures shall have a minimum length of 10 feet and a width equal to that of the excavation. The total thickness shall be no less than 1-foot and no more than 3 feet.

5. The optimum moisture of fine grained soils shall either be determined in the NDOR Branch Lab or Central Lab, and shall be based on a correlation with the Plastic Limit or determined from AASHTO T-99. A 10-lb sample of proposed material shall be submitted to the NDOR Branch Lab or Central Lab a minimum of 14 days prior to grading operations.

6. The moisture content for granular soils shall be “as necessary” to achieve proper compaction.

7. The moisture content limits of the soil shall follow the requirements provided in Table 1.

8. The test strip area construction shall be incidental to the embankment construction.

9. The testing rate during the test strip construction is provided in Table 2.

Table 1 - Moisture Requirements

<table>
<thead>
<tr>
<th>Location</th>
<th>Soil Type</th>
<th>Depth Below Finished Subgrade</th>
<th>Minimum %</th>
<th>Maximum %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil materials receiving gravel surfacing</td>
<td>All materials</td>
<td>All Depths</td>
<td>**</td>
<td>**</td>
</tr>
<tr>
<td>Stabilized Subgrade</td>
<td>-</td>
<td>-</td>
<td>See Specifications</td>
<td></td>
</tr>
<tr>
<td>Granular Structural Fill (MSE Walls, bridges, culverts, et.)</td>
<td>Granular</td>
<td>All Depths</td>
<td>**</td>
<td>**</td>
</tr>
</tbody>
</table>

** Moisture as necessary to obtain proper compaction. The moisture target value for granular materials shall be established in the field by the Contractor during the compaction process. Once established the target moisture shall not vary by more than ± 2%.
Table 2 - Test Strip Testing Rate

<table>
<thead>
<tr>
<th>Material Location</th>
<th>Minimum Testing Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roadway embankment and subgrade</td>
<td>3 tests/ pass*</td>
</tr>
<tr>
<td>Trenches, culverts, and miscellaneous structures</td>
<td>1 test / pass*</td>
</tr>
</tbody>
</table>

* Number of passes with compaction equipment as described in paragraph 14c of Subsection 205.03 of the NDOR Standard Specifications for Highway Construction.

B. Test Strip Construction and Testing

1. Prior to placing the fill material for the test strip, the subgrade shall be scarified and re-compacted.

2. The fill material shall be placed with a lift thickness no greater than 8 inches uncompacted.

3. The test strip shall be constructed with uniform material and moisture content, and compaction; until it meets the requirements of numbers 3 or 4 of Section A of this provision.

4. The deflection target value is obtained when:
   i. The moisture content is within the acceptable range.
   ii. The average of the deflection test measurements for three consecutive passes of compaction equipment does not change by more than 10% with additional compaction. The DTV shall be based on the lowest average deflection test measurement from these passes.

5. A 10-lb sample of the test strip material shall be submitted to the NDOR Branch Lab or Materials and Research Soil Lab for index testing.

6. The DTV shall be re-evaluated when:
   i. Deflection test measurements are consistently less than the DTV. (3 out of 5 consecutive deflection test measurements are less than 0.80 of the DTV).
   ii. Failing test results are consistently occurring and adequate compaction is observed.

Option 2

C. Determination of Deflection Target Values based on the Nebraska Group Index (NGI)

1. Prior to construction a 10-lb bag of representative material shall be submitted to the nearest NDOR Branch Lab or Materials and Research Soil Lab for each different soil type no less than 21 days prior to grading operations.

2. From the laboratory testing NDOR will determine the Nebraska Group Index (NGI) for each soil type submitted and provide a correlated minimum DTV and optimum moisture content.
3. If no correlation data is available for an individual NGI, a test strip shall be used to determine the DTV as discussed in parts A and B in this provision.

4. The DTV shall be re-evaluated when:
   
i. Deflection test measurements are consistently less than the DTV. (More than 20% of the deflection test measurements are less than 0.80 of the DTV.

   ii. Failing test results are consistently occurring and adequate compaction is observed.

Acceptance Testing

1. The Deflection Target Value for use as acceptance testing shall be:

   \[ DTV \leq 1.10 \times \text{average deflection value determined from Option 1, Part B, of this provision} \]

   \[ DTV \leq \text{Correlated DTV determined from the NGI correlation, Option 2, Part C} \]

2. The testing frequency for moisture and deflection shall follow the NDOR Materials Sampling Guide.

3. The moisture content of soil shall be performed using NDOR’s approved equipment and methods. Approved equipment includes: 1) hot plates, stove, or microwave, 2) Speedy Moisture Method, or 3) Laboratory oven method.

4. Moisture content results shall be reported to the nearest tenth of a percent.

SAWING PAVEMENT

Paragraph 5. of Subsection 203.04 in the Standard Specifications is void.

SUBGRADE PREPARATION
(C-1-0307)

Paragraph 2.a. of Subsection 302.03 in the Standard Specifications is amended to include that trimming on narrow, irregular or roadway grading of 1/2 mile (0.8 km) or less may be accomplished using conventional methods.

BITUMINOUS FOUNDATION COURSE
(C-2-0915)

Paragraph 2.b. of Subsection 307.02 in the Standard Specifications is void and superseded by the following:

2. b. All salvaged bituminous material must be less than 3 inches (75 mm) in maximum dimension and shall not contain more than 5 percent by weight of material retained on a 2-inch (50 mm) sieve just prior to its use.
(1) Contractor Production

(i) All salvaged bituminous material produced by the Contractor from pavement removal or by cold milling material from the existing pavement structure on the project, whether hauled directly to the site of use or temporarily stockpiled, shall be screened to meet the requirements of Paragraph 2.b.

(ii) If, after screening, there is insufficient material to produce the plan quantity, the Engineer may order the oversized salvaged bituminous material to be further processed at no cost to the State prior to delivery to the roadway. Processing shall mean crushing, pulverizing, re-screening, or a combination of these methods.

(iii) On projects that allow multiple foundation course materials to be used, the Engineer may direct that the remaining salvaged bituminous material continue to be placed for bituminous foundation course to the extent this material is available and can be utilized on the project.

(iv) Unless otherwise shown in the plans or Special Provisions, all Contractor produced salvaged bituminous material including oversized remaining at the end of the bituminous foundation course operation shall become the property of the Contractor and removed from the project.

(v) Asphaltic concrete millings shall be free of deleterious matter as determined by the Engineer.

(2) State Provided Stockpiles

(i) If the salvaged bituminous material is to be obtained from existing stockpiles described in the Special Provisions or the plans, the salvaged bituminous material shall be screened to meet the requirements of Paragraph 2.b. prior to delivery to the roadway. Any oversized bituminous material remaining from the screening operation shall remain the property of the State.

(ii) If, after screening, there is insufficient material to produce the plan quantity, the Engineer may order the oversized bituminous material to be further processed prior to the delivery to the roadway. Processing shall mean crushing, pulverizing, re-screening, or a combination of these methods.

Paragraph 2.b.(2) through Paragraph 2.b.(5) of Subsection 307.03 are void.
Method of Measurement

Subsection 307.04 is amended to include the following:

4. a. Screening of salvaged bituminous material will not be measured for payment.

   b. Processing of Contractor produced salvaged bituminous material, ordered by the
      Engineer, which contains excessive oversized material due to the Contractor’s
      production methods, will not be measured for payment.

Basis of Payment

Paragraph 6. of Subsection 307.05 is void and superseded by the following:

6. Screening of salvaged bituminous material shall be considered subsidiary to the
   bituminous foundation course item.

7. Processing of salvaged bituminous material, ordered by the Engineer, which
   contains excessive oversize material due to the Contractor’s production methods,
   shall be considered subsidiary to the bituminous foundation course item.

8. If the Contractor is required to reprocess the oversized bituminous material from
   State stockpiles, the work of reprocessing will be paid for as "extra work".

9. Payment is full compensation for all work prescribed in this Section.

AGGREGATE FOUNDATION COURSE-D
(C-3-0915)

Amend Section 307 of the Standard Specifications to include Aggregate Foundation Course-D.

1. Material Requirements

   a. Foundation Course-D shall consist of mineral aggregate.

   b. Aggregate shall conform to the quality requirements of Subsection 1033.02,
      Paragraphs 1., 2., and 9.

   c. At least 14 days before beginning foundation course production, the Contractor
      shall submit a proposed mix design along with a 50 pound (23 kg) sample of
      each aggregate to the NDR Materials and Research laboratory for approval.
      The mix design will:

         (1) Result in an aggregate mix that meets the gradation requirements of
             Table 1.

         (2) Propose single defined values for the percentage passing each sieve on
             the gradations of Table 1.

         (3) Include the average aggregate(s) gradations used to calculate the mix
             design.

         (4) Create a fine aggregate angularity value of 43.0 or greater. The specific
             gravity for calculation of the Fine Aggregate Angularity (FAA) shall be
d. The NDR Materials and Research laboratory will determine the specific moisture value for the proposed foundation course design. The compaction requirements shall be established by rolling pattern using the light weight deflectometer.

<table>
<thead>
<tr>
<th>Sieve Size</th>
<th>Target Value (Percent Passing)</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2 in (12.5 mm)</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>3/8 in (9.5 mm)</td>
<td>100</td>
<td>-4</td>
</tr>
<tr>
<td>No. 4 (4.75 mm)</td>
<td>93</td>
<td>±4</td>
</tr>
<tr>
<td>No. 10 (2.0 mm)</td>
<td>55</td>
<td>±10</td>
</tr>
<tr>
<td>No. 30 (600 µm)</td>
<td>25</td>
<td>±5</td>
</tr>
<tr>
<td>No. 40 (425 µm)</td>
<td>20</td>
<td>±4</td>
</tr>
<tr>
<td>No. 200 (75 µm)</td>
<td>3</td>
<td>±3</td>
</tr>
</tbody>
</table>

2. Construction Methods

a. The Contractor shall place compact and profile the foundation course as shown in the plans.

b. The foundation course shall be spread in a uniform layer and compacted to a stiffness established by a rolling pattern.

c. After compaction the foundation course shall be trimmed such that the thickness will not vary from the plan thickness by more than 1/2 inch (12.5 mm).

**CRUSHED CONCRETE FOUNDATION COURSE**

(C-4-0915)

Section 307 of the Standard Specifications is amended to include the following:

All samples, including field samples, will be washed sieve. All samples will be taken from the project grade prior to spreading and trimming. Material represented by samples with 15 percent or more passing the No. 200 (75 µm) sieve will be subject to removal.

Paragraph 3.b. of Subsection 307.02 of the Standard Specifications is void.

Paragraph 3.c. of Subsection 307.02 is void and superseded by the following:

Crushed Concrete shall be free of deleterious matter as determined by the Engineer.
Paragraph 3.d. of Subsection 307.02 of the Standard Specifications is void and superseded by the following:

The crushed concrete gradation shall be determined as prescribed in NDR T 27 (washed test). The target gradation requirement for the crushed concrete foundation course is shown below:

Material gradation will be accepted by the table below on a lot basis of 2500 cubic yards on the average of 5 consecutive tests, one for each 500 cubic yard sublot. If at the end of the project, the final lot consists of less than 2500 cubic yards, a minimum of 3 samples, or 1 sample for each 500 cubic yards or fraction thereof, whichever is greater shall be taken and tested and acceptance based on the average of those tests.

<table>
<thead>
<tr>
<th>Sieve Size</th>
<th>(Percent Passing)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1½ inch (37.5 mm)</td>
<td>100 minimum</td>
</tr>
<tr>
<td>¾ inch (19.0 mm)</td>
<td>85 maximum</td>
</tr>
<tr>
<td>No. 4 (4.75 mm)</td>
<td>20 to 50</td>
</tr>
<tr>
<td>No. 200 (75 µm)</td>
<td>0 to 8</td>
</tr>
</tbody>
</table>

Paragraph 3.e. of Subsection 307.02 is void and superseded by the following:

Moisture content shall be no higher than necessary to facilitate compaction.

Paragraph 3.a. of Subsection 307.03 of the Standard Specifications is amended to include the following:

a. (1) The Contractor shall roll the crushed concrete foundation course until no further compaction can be obtained and all roller marks are eliminated.

   (2) The Department will establish a rolling pattern for the project and set a deflection target value.

   (3) The Department shall monitor the rolling pattern with a light weight deflectometer, testing and recording the value every 1,500 square yards. Additional testing of separately placed irregular areas shall be performed as directed by the Engineer.

   (4) The Contractor shall take immediate action to correct the foundation course stiffness if any deflection measurements are outside of the specified range.

Paragraph 4 of Subsection 307.03 is void and superseded by the following:

Foundation course stiffness and thickness testing shall be tested by the Department.

**FOUNDATION COURSE 4”**

The Contractor shall have the option of using either Aggregate Foundation Course-D, Crushed Concrete Foundation Course or Bituminous Foundation Course; and the Contractor shall bid the pay item “Foundation Course ____” accordingly.

These different foundation courses may be used interchangeably throughout the project, with the exception being that the same type of foundation course shall be used across the entire width of a
pavement section to provide uniform drainage across that template. The Contractor shall make every attempt to use the same type of foundation course in long paving runs and any changes in foundation course type shall be approved by the Engineer.

Regardless of the type of material used it may be obtained from Contractor sources or from the pavement removal operation on the project.

Regardless of the type of material used it shall be measured and paid for as Foundation Course 4”.

Method of Measurement

Foundation Course shall be measured as prescribed in Paragraph 3 of Subsection 307.04.

Basis of Payment

Amend Subsection 307.05 of the Standard Specifications to include the following:

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Pay Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundation Course</td>
<td>Square Yard</td>
</tr>
</tbody>
</table>

**FOUNDATION COURSE**

Paragraph 1.e. of Subsection 307.02 is void and is superseded by the following:

The NDR Materials and Research Engineer will evaluate the soil sample characteristics and determine the specific moisture and compaction requirements for the proposed foundation course design.

Paragraph 1.a.(4)(i) of Subsection 307.03 is void and is superseded by the following:

The foundation course material shall be hauled to the road, spread in a uniform layer and compacted to the stiffness that is determined by a control strip.

Amend Subsection 307.03 of the Standard Specifications to include:

**Equipment**

A minimum of one self-propelled double drum vibratory roller shall be required. The vibratory roller shall have a minimum operating weight of 18,000 pounds.

**Compaction and Stiffness**

The Department shall monitor the in-place stiffness by measuring the deflection of the foundation course by using a control strip by performing Light Weight Deflectometer measurements of the foundation course for acceptance. Refer to NDR Test Method T 2835 for
the proper operation of the Light Weight Deflectometer (LWD). The procedure for conducting Lightweight Deflectometer testing is as follows:

1. The deflection test is defined as the average of the fourth, fifth, and sixth drops of the deflectometer at one location.
2. The deflection value is defined as the average of 3 test locations.
3. The Deflection Target Value (DTV) is the lowest deflection value determined by using a control strip.
4. A single coverage is defined as the compacting of unbound material over a given point a single time.
5. A new control strip shall be constructed when there is an observed change in material or as determined by the Engineer.

A Control Strip shall be constructed for the purpose of determining the Deflection Target Value.

6. The control strip dimensions for roadway shall have a minimum length of 200 feet.
7. The control strip area construction shall be incidental to the pay item Foundation Course___.
8. During construction of the control strips, the Contractor shall make repeated compaction coverages. When the material is visibly densified, the Engineer will take deflection tests at 3 locations to get an average deflection value. Following each test, additional coverages shall be conducted and deflection tests taken until a Deflection Target Value is established.
9. The Deflection Target Value of the control strip shall be determined by compacting the foundation course to a point that three consecutive coverages do not change the deflection by more than 1 mm. The DTV shall be based on the lowest average deflection test. The roller procedure shall have a minimum of 6 consecutive coverages unless an alternate rolling pattern is approved by the Engineer.
10. The Deflection Target Value shall be re-evaluated when:
   i. Deflection test measurements are consistently less than the DTV. (3 out of 5 consecutive deflection tests are less than 0.8 of the DTV).
   ii. Failing test results are consistently occurring and adequate compaction is observed.

Acceptance Testing

A passing deflection test is defined as a deflection value that is less than 1.10 x DTV. The frequency of testing deflection is 1 test at one location for every 1500 square yards or less.

**TYPE B HIGH INTENSITY WARNING LIGHTS**

(D-6-0307)

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.
TEMPORARY TRAFFIC CONTROL DEVICES
(Type II Barricades, Reflectorized Drums, 42" (1070 mm) Reflective Cones, and Vertical Panels)
(D-6-1112)

Paragraph 2.d. of Subsection 422.03 in the Standard Specifications is void and superseded by the following:

d. (1) Reflectorized drums used for traffic warning or channelization shall be constructed of lightweight, flexible, and deformable materials, be a minimum of 36 inches (900 mm) in height, and have a minimum width of 18 inches (450 mm), regardless of orientation. The predominant color of the drum shall be orange.

(2) Steel drums shall not be used.

(3) The markings on drums shall be horizontal, shall be circumferential, and shall display four 6-inch (150 mm) wide bands of retroreflective sheeting, alternating fluorescent orange - white - fluorescent orange - white. The fluorescent orange sheeting shall meet the luminance requirements of the following table.

<table>
<thead>
<tr>
<th>FGWA Luminance Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luminance Factor $Y_T$</td>
</tr>
<tr>
<td>Sheeting Type</td>
</tr>
<tr>
<td>Fluorescent Orange</td>
</tr>
</tbody>
</table>

e. When approved by the Engineer or shown in the plans, 42" (1070 mm) reflective cones may be used in lieu of Type II Barricades or Reflectorized Drums. 42" (1070 mm) reflective cones shall include a 30-pound (14 kg) rubber base and display four 6-inch (150 mm) wide bands of retroreflective sheeting, alternating fluorescent orange - white - fluorescent orange - white. 42" (1070 mm) reflective cones shall not be used for lane-closure tapers or shifts.

f. Rubber base-mounted 36-inch vertical panels shall not be used for channelization when the speed limit exceeds 40 miles per hour.

Paragraph 2.b. of Subsection 422.04 of the Standard Specifications is void and superseded by the following:

b. (i) Type II Barricades, Reflectorized Drums, and 42" (1070 mm) Reflective Cones shall be counted as "Barricades, Type II" and measured for payment by the number of calendar days each is in place and positioned as shown in the plans or as directed by the Engineer.

(ii) Vertical Panels shall be measured for payment as permanent "Sign Days" (by the each) by the number of calendar days each vertical panel unit is in place and positioned as shown in the plans or as directed by the Engineer.

Paragraph 2.c. of Subsection 422.04 of the Standard Specifications is amended to include Reflectorized Drums.
Paragraphs 3. and 4. of Subsection 422.05 of the Standard Specifications are void and superseded by the following:

3. a. The pay item "Barricade, Type II" is used to pay for three items ("Barricades, Type II", "42" (1070 mm) Reflectorized Cones", and "Reflectorized Drums").

b. "Barricades, Type II", which includes "42" (1070 mm) Reflectorized Cones", and "Reflectorized Drums", is paid for as an "established" contract unit price item. The established unit price is identified on the "Schedule of Items" shown in the Proposal.

4. Payment for vertical panels includes all posts, brackets, or hardware necessary to install and maintain the vertical panel units.

WORK ZONE TRAFFIC CONTROL SIGNS
(D-6-1212)

The Department has adopted the FHWA 2009 Manual of Uniform Traffic Control (MUTCD) and the 2011 Nebraska Supplement to the MUTCD as the official guidance for work zone traffic control signs. Many work zone traffic control signs have been revised, redesigned, or replaced in the 2009 MUTCD (and 2011 Nebraska Supplement). Accordingly, all work zone signs shall comply with the following:

1 - All signs, regardless of age, shall meet the design standards of the 2009 MUTCD (and 2011 Nebraska Supplement).

TEMPORARY PAVEMENT MARKING
(D-10-0811)

Paragraph 4.f. of Subsection 422.01 in the Standard Specifications is void.

Paragraph 6.a.(2) of Subsection 422.03 is void and superseded by the following:

(2) When the markings are no longer needed, the Contractor shall remove them. If removing markings from the final wearing surface, the removal process shall not mar or damage the surface. Removed markings shall no longer be visible on the final wearing surface.

Paragraph 6. of Subsection 422.03 in the Standard Specifications is amended to include the following:

This work shall consist of installing and removing reflectorized temporary pavement lines of the color, width and line configuration shown in the plans or as designated by the Engineer.

Temporary paint markings will be used on this project. The use of Type I tape will not be permitted and Type II tape may be used for short durations only, as directed by the Engineer. Temporary paint stripes shall be a minimum 4" (100 mm) wide, 10' (3 m) long
with a 30-foot (9 m) gap or a minimum 4" (100 mm) wide solid line as shown on the plans.

Temporary pavement marking which is no longer applicable shall be removed as directed by the Engineer.

Paragraph 12.a. of Subsection 422.04 is void and superseded by the following:

a. "Pavement Marking Removal" and "Temporary Pavement Marking Removal" shall be measured by the linear foot (meter) along the centerline of the traveled roadway for each line removed.

Subsection 422.04 is amended to include the following:

21. The use of paint for Temporary Pavement Marking shall be measured per linear foot (meter) for the item "Temporary Pavement Marking, Type Paint".

22. Temporary pavement marking tape Type II shall be measured per linear foot (meter) for the item "Temporary Pavement Marking, Type II".

23. Initial surface preparation requiring sand or shot blasting shall be measured per linear foot (meter) for the item "Temporary Pavement Marking, Surface Preparation". Surface preparation for repainting, consisting of air blasting and brushing, shall be subsidiary to other items for which payment is made.

Paragraph 1. of Subsection 422.05 is amended to include the following:

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Pay Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temporary Pavement Marking Removal</td>
<td>Linear Foot (LF)</td>
</tr>
<tr>
<td>Temporary Pavement Marking, Type Paint</td>
<td>Linear Foot (LF)</td>
</tr>
<tr>
<td>Temporary Pavement Marking, Type II</td>
<td>Linear Foot (LF)</td>
</tr>
<tr>
<td>Temporary Pavement Marking, Surface Preparation</td>
<td>Linear Foot (LF)</td>
</tr>
</tbody>
</table>

Paragraph 9.c. of Subsection 422.05 is void.

Paragraph 13. of Subsection 422.05 is void and superseded by the following:

13. Removal of temporary pavement markings including overlay broken/solid lines will be paid for except:

a. When the temporary markings are intended to be covered up by permanent markings.

b. When surface preparation removes the temporary markings.

Section 1069 in the Standard Specifications is amended to include the following:

1. Prior to the initial placement of the markings, temporary paint, or Type II tape the pavement upon which the markings are to be placed shall be dry, cleaned and properly prepared by sand or shot blasting, as a minimum, and to the extent recommended by the manufacturer so that all contaminants, loose debris, and
other foreign material are completely removed. Surface preparation for any subsequent application shall consist of air blasting and brushing the roadway surface to remove all loose dirt, mud or other debris and to dry the surface. Each additional application of paint shall be applied over the previously painted stripes.

Prior to placing the temporary pavement markings on the prepared surface, the Contractor shall layout, spot or string line the proposed temporary marking location. The temporary markings shall be aligned in such a way as to provide a smooth and gradual transition to and from the existing markings, and throughout both straight and horizontally curved sections of the project.

2. The material used for temporary paint marking shall be a commercially available acrylic resin Type II traffic paint that dries to no pickup in 4 minutes and shall be applied with a minimum of 6 pounds (0.7 kg) of glass beads per gallon (liter). The paint shall be applied at a minimum width of 4 inches (100 mm) and a wet thickness of approximately 15 mils (380 µm) (approximately 16.5 gallons (39 liters) of paint per mile (kilometer) of solid line). The equipment used to paint the line shall be a machine designed for the purpose of applying long line traffic lane markings of the type, width and thickness required, and shall be self-propelled or truck mounted and be equipped with an adjustable guide-on to assure proper placement of the line. Hand application, walk behind equipment or towing of the equipment will not be allowed.

Temporary paint lines shall be used on new or existing concrete pavement and asphaltic concrete pavement.

Any temporary painted line or segment of line, placed before December 1, which fails to adhere to the roadway surface for a minimum of 60 days under normal vehicular traffic or which appears wavy, nonuniform, thin, poorly applied, misaligned, beadless or nonreflective, shall be replaced as directed by the Engineer. For temporary painted pavement markings placed between December 1 and March 15, the minimum time requirement shall be 15 days with the same conditions applicable. No direct payment will be made for replacement within the 60 day or 15 day warranty periods.

After the minimum 60 day or 15 day warranty periods, the Contractor may be required to repaint the temporary traffic markings, as directed by the Engineer. Direct payment will be made for each additional application. However, should the additional application fail within the 60 day or 15 day warranty periods, the provisions as stated in the previous paragraph shall apply.

The Contractor must begin each additional repainting application within 72 hours after notification by the Engineer. Should the Contractor fail to begin repainting within this 72 hour period, the Engineer may use State forces or hire a private contractor to repaint the temporary traffic markings. The Contractor will be assessed any costs above the contract unit price “Temporary Pavement Marking, Type Paint” incurred by the State as a result of performing the corrective action by others, and the project will be shut down until the painting is completed.

When painting is required with air temperatures between 38° F (3° C) and 50° F (10° C), the paint shall be heated according to the manufacturer's recommendation prior to application on the dry, clean and properly prepared
pavement. Any paint application made when the air temperature is below 38° F (3° C) will be paid for by the State, even if the application falls within either the 60 day or 15 day warranty periods previously described.

3. Temporary pavement marking tape Type II shall be a mixture of high quality polymeric materials and pigments, with glass beads throughout the pigmented portion of the film, and a reflective layer of high index of refraction glass beads bonded to the top surface. The film shall be precoated with a pressure-sensitive adhesive. Unless otherwise specified, the temporary pavement marking shall be 4 inches (100 mm) wide and the reflectorizing glass beads shall be incorporated to facilitate removal of the tape easily from asphalt and Portland cement concrete surfaces intact or in large pieces, at temperatures above 40° F (4° C), either manually or with a recommended roll up device. Removal shall be accomplished without the use of heat, solvents, grinding or sandblasting.

TEMPORARY TRAFFIC CONTROL FOR PERMANENT PAVEMENT MARKING
(D-13-1007)

Paragraph 4. of Subsection 423.04 in the Standard Specifications is void.

WET REFLECTIVE POLYUREA PAVEMENT MARKING, GROOVED
(D-17-1114)

I. Description

This work shall consist of furnishing and installing wet night retroreflective polyurea pavement markings in accordance with this provision and in conformance to the dimensions and lines shown on the plans or established by the Engineer.

The wet reflective polyurea marking material shall be applied by spray method onto asphaltic cement concrete and Portland cement concrete surfaces. Following an application of glass beads or black aggregate, and upon curing, the resulting marking shall be an adherent reflectorized stripe of the specified thickness and width that is capable of resisting deformation by traffic.

The Contractor shall field verify the pavement marking quantities required for the project prior to purchasing materials. The Department will not be held responsible for the Contractor's shortage or surplus of material. The Contractor's verification of quantities and purchasing material shall not delay the project or the installation of pavement marking when required.

The polyurea pavement marking shall be applied in grooves cut into the surfacing. The grooves shall be made in a single pass dry cut; the equipment used shall be self-vacuuming and leave the cut groove ready for polyurea pavement marking application. The equipment and method used shall be approved by the polyurea pavement marking manufacturer. The polyurea pavement marking shall be applied in the grooves the same day as the cut. Grooves shall be clean and dry prior to polyurea pavement marking application. All conflicting pavement markings which remain after application of the polyurea pavement markings shall be removed. The removal of conflicting, pre-existing
temporary or permanent pavement marking shall be paid for with the appropriate removal pay item. The removal of conflicting temporary or permanent pavement marking placed as part of this work shall be at no cost to the Department.

Groove width: pavement marking width + 1 inch to 2 inch maximum
Groove depth: per manufacturer’s recommendations to a minimum of 60 mils
Groove length: full length of marking + required grooving transition
Groove position: 2 inches off of joint line (per plan)

Grooving of the surfacing shall be performed in accordance with the polyurea manufacturer’s recommendations. Grooving the surfacing shall not be measured and paid for but shall be considered subsidiary to "_____ Polyurea Pavement Marking, Grooved".

II. Materials

A. Polyurea

Composition Requirements:

Composition requirements are per manufacturer’s specifications. The Polyurea Pavement Markings approved for use are shown on the NDR Approved Products List. Markings which have not been previously approved by the Department will not be permitted on the project until approved by the Traffic Engineer.

Properties:

1. Color and Weathering Resistance: The mixed polyurea compound, white, yellow and black, when applied to a 3" x 6" aluminum panels at 15±1 mil in thickness with no glass beads or elements and exposed for 500 hours in a Q.U.V. Environmental Testing Chamber, as described in ASTM-G154, Cycle #1, shall conform to the following minimum requirements. The color of the white polyurea system shall not be darker than Federal Standard No. 595A-17778. The color of the yellow polyurea system shall conform to Federal Standard No. 595A-13538. The color of the black polyurea system shall conform to Federal Standard No. 595A-17038.

2. Track-Free Time (Laboratory): When tested in accordance with ASTM D 711, the polyurea marking material shall reach a track-free condition in 10 minutes or less for a 15 mil thickness. This test shall be performed with AASHTO Type 1 beads coated at a rate of 0.099 pounds per square foot. The track-free time shall not increase substantially with decreasing temperature.

3. Adhesion to Concrete: The polyurea coating, when tested according to ACI Method 503, shall have such a high degree of adhesion to the specified concrete surface that there shall be a 100% concrete failure in the performance of this test. The prepared specimens shall be conditioned at room temperature (75°F ± 2°F) for a minimum of 24 hours and maximum of 72 hours prior to the performance of the tests indicated.
4. Adhesion to Asphalt: The polyurea coating, when tested according to ACI Method 503, shall have such a high degree of adhesion to the specified asphalt surface that there shall be a 100% asphalt failure in the performance of this test. The prepared specimens shall be conditioned at room temperature (75°± 2° F) for a minimum of 24 hours and maximum of 72 hours prior to the performance of the tests indicated.

B. Reflective Media

The reflective media application shall incorporate a double drop technique to maximize wet night reflectivity and color. The reflective media used shall ensure the wet reflective polyurea pavement markings meet the retroreflectance performance requirements in Section II.D.3. The glass beads for drop-on application shall conform to the following requirements or be an approved equivalent.

1. Glass Beads

The required glass beads shall be a 60/40 blend (60% sinkers and 40% floaters) of AASHTO M 247-81 Type I gradation 1.5 index glass beads. The glass beads shall have a minimum of 70% Rounds as measured according to ASTM D1155. Crush Resistance shall be measured according to the procedures of ASTM D1213 and shall be a minimum of 30 pounds retained on US #40 Mesh.

Acid Resistance: A sample of glass beads supplied by the manufacturer shall show resistance to corrosion of their surface after exposure to a 1% solution (by weight) of sulfuric acid. The 1% acid solution shall be made by adding 5.7 cc of concentrated acid into 1000 cc of distilled water. CAUTION: Always add the concentrated acid into the water, not the reverse. The test shall be performed as follows:

Take a 1” x 2” sample, adhere it to the bottom of a glass tray and place just enough acid solution to completely immerse the sample. Cover the tray with a piece of glass to prevent evaporation and allow the sample to be exposed for 24 hours under these conditions. Then decant the acid solution (do not rinse, touch, or otherwise disturb the bead surfaces) and dry the sample while adhered to the glass tray in a 150° F (66° C) oven for approximately 15 minutes. Microscopic examination (20X) shall show not more than 15% of the beads having a formation of very distinct opaque white (corroded) layer on their entire surface.

2. Wet Reflective Media

Wet reflective media shall be approved for use by the polyurea manufacturer. The Wet Reflective Media approved for use are shown in the NDR Approved Products List.
C. Non-reflective Media

Black aggregate shall be broadcast to saturation on all black lines to provide a matte, non-reflective finish. The black aggregate shall be either a fine or medium gradation.

D. Finished Markings

Because of normal variances in road surfaces, application processes and measurement, the properties of markings made from the materials specified herein will vary from one installation to the next. When the materials are applied according to the specifications in Section III, they shall be capable of forming markings with the following reproducibility of properties:

1. On-the-road Track-Free Time: When installed at 77° F and at a wet film thickness of 15±1 mils, the markings shall reach a no-track condition in less than 10 minutes. Track-free shall be considered as the condition where no visual deposition of the polyurea marking to the pavement surface is observed when viewed from a distance of 50 feet, after a free-rolling traveling vehicle's tires have passed over the line. The track-free time shall not increase substantially with decreasing temperature.

2. Skid Resistance: The average initial skid resistance shall be 45 BPN or greater when tested according to ASTM E303.

3. Retroreflectance – Required initial retroreflectance values are shown in the table below. Typical retroreflectivity is determined as the average of many readings (mcd(ft-2)(fc-1)) metric equivalent (mcd(m-2)(lux-1)) as described below.

<table>
<thead>
<tr>
<th>Average Minimum Initial Retroreflectance</th>
<th>White</th>
<th>Yellow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry (ASTM E1710)</td>
<td>500</td>
<td>350</td>
</tr>
<tr>
<td>Wet Recovery (ASTM E2177)</td>
<td>350</td>
<td>275</td>
</tr>
<tr>
<td>Wet Continuous (ASTM E2832 )</td>
<td>100</td>
<td>75</td>
</tr>
</tbody>
</table>

3.1.1 Some reasonable variance should be expected (for example, application on very rough road surfaces or differences in glass beads).

3.1.2 The initial retroreflectance value of a single installation or unit of work shall be the average value determined according to the measurement and sampling procedures outlined in ASTM D7585, using a 30-meter (98.4 feet) retroreflectometer, except as modified below. The 30-meter retroreflectometer shall measure the coefficient of retroreflected luminance, \( R_L \) at an observation angle of 1.05 degrees and an entrance angle of 88.76 degrees. \( R_L \) shall be expressed in units of millimillcandela per square foot per foot-candle \([\text{mcd}(\text{ft}^{-2})(\text{fc}^{-1})]\). The metric equivalent shall be expressed in units of millimillcandela per square meter per lux \([\text{mcd}(\text{m}^{-2})(\text{lux}^{-1})]\).

3.1.3 The initial retroreflectance values of the pavement marking shall be measured no sooner than 48 hours after application, but not
later than 30 days after application. The Contractor shall provide an acceptable 30-meter retroreflectometer to use on the project (the retroreflectometer will remain the property of the Contractor). The contractor will take measurements in the presence of the Engineer. Prior to taking measurements, the Contractor shall calibrate the retroreflectometer according to the manufacturer’s requirements.

Measurements will be taken at equally spaced (or nearly so) test areas located by the Engineer in each evaluation section. An evaluation section is defined as a 3 mile (or major fraction) portion of a segment. If the last evaluation section is less than 1.5 miles in length, it shall be combined with the preceding section.

The test areas shall be at least 400 ft. in length and a minimum of 10 readings shall be taken over the length of each test area.

All measurements shall be made in the direction of travel. On centerlines of undivided highways, measurements shall be taken in both directions in each test area and averaged to determine the value of that color line in that test area.

Measurements shall be taken for each type and color of line in the evaluation section.

Individual symbols and legends will be treated as separate evaluation sections. Three (3) readings shall be taken on each symbol to determine the average retroreflectance value for the symbol.

The Department will do verification testing. When the average of the readings for an evaluation section fall below the minimum, the entire section represented by those readings will be further evaluated by the Engineer and may be subject to removal and replacement.

3.1.4 The Department may elect to determine wet retroreflectance values measured under a “condition of continuous wetting” (simulated rain) in accordance with ASTM E2832. To reduce variability between measurements, the test method shall be performed in a controlled laboratory environment while the marking is positioned with a 3 to 5 degree lateral slope. Measurements shall be reported as the average of the minimum of three locations. Samples of the completed finished product shall be applied to flat panels during application and brought back to the lab for testing. When such samples are taken, the Department will furnish the panels.
III. Application

The Contractor shall furnish equipment and apply the materials according to the following specifications:

A. Equipment

Application equipment shall be capable of producing markings that meet the specifications of the manufacturer’s listed on the NDR Approved Products List for Polyurea Pavement Marking.

At any time throughout the duration of the project, the Contractor shall provide free access to his application equipment for inspection by the Engineer, his authorized representative or a materials representative.

When black and white polyurea are applied together to create a contrast pattern, they shall be applied from one truck in a single pass operation.

B. Application Conditions:

1. **Moisture**: The markings shall only be applied during conditions of dry weather and when the pavement surface is dry and free of moisture.

2. **Air Temperature**: The markings shall only be applied when road and air temperatures are above 40 degrees F, unless manufacturer’s guidelines state otherwise.

3. **Surface Preparation**: Marking operations shall not begin until applicable surface preparation work is completed and approved by the Engineer.
   
   3.1 Prior to applying the markings, the Contractor shall remove any remaining existing markings to expose a minimum of 80% of the pavement surface.

   3.2 Prior to applying the markings, the Contractor shall remove all curing compounds on new Portland cement concrete surfaces.

   3.3 Prior to applying the markings, the Contractor shall remove all dirt, sand, dust, oil, grease and any other contaminants from the road surface.

   3.4 Application over temporary paint is not acceptable.

4. **Dimensions**: The pavement markings shall be placed only on properly prepared surfaces and at the widths and patterns as designated in the contract. The markings shall be applied in accordance with the "Manual on Uniform Traffic Control Devices" and in accordance with the Engineer’s plans.

Any markings that are found to be 0.5 inches less than the width shown in the plans shall be removed and replaced by the Contractor.
5. **Other Restrictions**: The Engineer and/or Contractor shall determine further restrictions and requirements of weather and pavement conditions necessary to meet the all other application specifications and produce markings that perform to the satisfaction of the Engineer.

6. **Binder Thickness**: The polyurea binder (mixed Part A and Part B) coating shall be applied at rates to achieve minimum uniform wet thicknesses as follows:

<table>
<thead>
<tr>
<th>Surface Type</th>
<th>Recommended Polyurea Pavement Marking Thickness (1 inch=1000 mils)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Smooth Asphalt or Concrete Surface</td>
<td>20±2 mils</td>
</tr>
<tr>
<td>New Concrete Surface¹</td>
<td>20±2 mils</td>
</tr>
<tr>
<td>New Asphalt Surface (Standard Asphalt Mix)</td>
<td>20±2 mils</td>
</tr>
<tr>
<td>Open Grade Friction Course (OGFC) or Stone Matrix Asphalt (SMA)²</td>
<td>25±2 mils</td>
</tr>
<tr>
<td>Rough Concrete or Asphalt</td>
<td>22±2 mils</td>
</tr>
<tr>
<td>Concrete or Asphalt after Grinding Off Pavement Markings³</td>
<td>22±2 mils</td>
</tr>
</tbody>
</table>

¹ Use thicker binder (20 mils) on new concrete surfaces with heavy tines.
² Very large aggregate sizes for open grade friction course or stone matrix asphalt mixes may require a thickness of 25 mils for proper coverage.
³ Pavement marking thickness determined by the type of surface and roughness/texture created from grinding operation.

7. **Reflective Media Application**: The Contractor shall ensure that the reflective media are properly set in the polyurea coating so that their exposed portions are free of polyurea coating material. The specified reflective media shall be dropped per the manufacturer’s specified rates to achieve their recommended coating weights:

8. **Volumetric Proportioning**: The Contractor shall ensure proper proportioning as required by manufacturer’s specifications and mixing of the polyurea components so that the markings are adequately hardened throughout and are free of soft or uncured material. Typically, such areas will darken over time from dirt and tire residue.

9. **Overspray**: The Contractor shall ensure the polyurea coating does not exhibit excessive overspray.
10. **Adhesion**: The Contractor shall ensure that the polyurea coating is well adhered to the road surface, and that the reflective media are well adhered to the binder.

**IV. Observation Period**

Following initial completion of all pavement marking, there will be a 180-day observation period before final acceptance. During the observation period, the Contractor, at no expense to the Department of Roads, shall replace any marking that the Engineer determines are not performing satisfactorily due to defective materials and/or workmanship in manufacture and/or application. At the end of the observation period the minimum required retention percentage for marking installed shall be 90%.

Determination of Percentage Retained - The percentage retained shall be calculated as the nominal area of the strip less the area of loss divided by the nominal area and expressed as a percentage of the nominal area. A claim, made by the State against the Contractor, shall be submitted to the Contractor in writing within 30 days after the 180-day observation period. When such a claim is made prior to August 1, the replacement material shall be installed during that same construction season. Replacement material for any claim after August 1, shall be installed prior to June 1, of the following year. Marking replacement shall be performed in accordance with requirement specified herein for the initial application, including but not limited to surface cleaning, sealer application, etc.

Final acceptance of all marking will include an inspection of the appearance of the markings during daylight and darkness. Any markings that fail to have a satisfactory appearance during either period, as determined by the Engineer, shall be reapplied at no expense to the Department of Roads.

Final acceptance of the pavement marking will be: (1) 180 days after the initial completion of all work, or (2) upon completion of all corrective work, whichever occurs last.

**V. Contract Units and Basis for Payment**

A. Linear pavement markings will be measured in linear feet complete-in-place for the width specified.

B. Arrows and Legends are measured by the each.

Subsection 423.05 of the Standard Specifications is amended to include the item: "____ Polyurea Pavement Marking, Grooved". Payment shall be full compensation for grooving the pavement surface, furnishing and applying all markings, and for all materials, labor, tools, equipment and incidentals necessary to complete the work.

Payment will be made under:

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Pay Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>____ Polyurea Pavement Marking, Grooved</td>
<td>Linear Feet</td>
</tr>
<tr>
<td>____ Polyurea Pavement Marking, Grooved</td>
<td>Each</td>
</tr>
</tbody>
</table>
Payment is full compensation for all work prescribed in this Section.

**PREFORMED PAVEMENT MARKING**

Section 423 in the Standard Specifications is amended to provide that when the item “___ Preformed Pavement Marking” is used, “Preformed Pavement Marking, Type 4, Grooved” or “Preformed Pavement Marking, Thermoplastic” may be used. Approved products are shown on the NDR Approved Products List. The material used shall be installed in accordance with the manufacturers specifications.

Paragraph 1. of Subsection 423.05 is amended to include the following:

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Pay Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>___ Preformed Pavement Marking</td>
<td>Linear Foot (LF)</td>
</tr>
<tr>
<td>___ Preformed Pavement Marking</td>
<td>Each (ea)</td>
</tr>
</tbody>
</table>

Regardless of the material used it shall be measured and paid for as “___ Preformed Pavement Marking”.

**RELOCATE EXISTING LIGHTING UNIT**

The three existing lighting units EP-1 thru EP-3 carry a 250 watt luminaire on a 12 foot mastarm, mounted 40 feet above the roadway. The poles are mounted on concrete foundations using a breakaway transformer base.

The Contractor shall relocate the existing lighting units as indicated on the plans. The lighting units to be relocated shall be carefully dismantled, stored and protected from damage until installed at the new location. The Engineer may designate specific areas for temporary storage of the salvaged material. It will be the Contractors’ responsibility to protect all material from damage during removal and storage.

The Contractor shall remove the concrete foundations, including the steel and anchor bolts to a minimum of two feet below finished grade, backfill the excavation with clean soil and compact the soil to the density requirements of the project. Any debris resulting from the removal operation shall be removed from the project. Abandon existing unused conduit and cable in place.

The salvaged components shall be installed at the new locations indicated on the plans and connected electrically as shown. The salvaged luminaires shall be cleaned and provided with a new HPS lamp of like wattage.

**Method of Measurement and Basis of Payment**

Lighting unit, relocated as indicated in the plans, shall be measured for payment as an individual unit. The relocated lighting unit, in place, and accepted by the Engineer, shall be paid for at the contract unit price, per each, for the item “Relocate Street Lighting Unit”. This price shall be full compensation for the removal, salvage, storage, transportation, preparation, installation of
salvaged material, disposal of surplus materials; for the termination and abandonment of existing underground feeders and for all materials, labor, equipment, tools and incidentals necessary to complete the work.

**UTILITY CONTACT PERSON**

Paragraph 1 of Subsection 413.03 in the Standard Specifications is amended to include the following:

The utility contact person for this project is:

Mr. Robert “Bert” Adams
Utilities Coordinator
Omaha Public Power District
(402) 636-3333

**CONCRETE PAVEMENT CORING**

(F-17-0110)

Paragraphs 3. a. and 3.b. of Subsection 603.05 of the Standard Specifications are void and superseded by the following:

3. a. (1) A pay factor will be applied to each unit based on the compressive strength of 1 core per unit tested in accordance with AASHTO T 24.
   
   (2) Concrete cores must have a minimum age of 28 days before testing.

   (3) The paved area shall be divided into units, and each unit will be considered separately.

   (4) Units are 750 linear feet (230 m) of pavement for each separately placed width or width of each class of concrete whether or not placed separately starting at the beginning of the pavement.

b. (1) When any unit core fails to have the required minimum compressive strength, the Contractor will have the option to obtain, at no cost to the Department, two additional cores from that unit provided that:

   (i) The cores shall be cut by the contractor. (The cutting to be witnessed by the Engineer)

   (ii) The cores shall be cut within seven (7) days of being notified of the strength deficiency, and

   (iii) The cores shall be cut within 6 inches of the original unit core in the longitudinal direction.

   (2) The Engineer will take possession of the cores and have them tested within 24 hours at the Materials and Research laboratory.

   (3) The results of all three cores sampled at the location will be averaged for the final compressive strength calculation and pay factor.
(4) The Department may agree to cut the additional cores if requested to do so by the Contractor, but will do so only if the Department's coring crew is available on the project and has sufficient time to cut and transport the cores for testing during normal working hours within seven (7) days of the Contractor being notified of the strength deficiency.

Paragraph 4.a.(4) of Section 603.05 in the Standard Specifications is void and replaced by the following:

A separately placed width is the width between field constructed longitudinal joints, between a longitudinal construction joint and the edge, or between two pavement edges. A separately placed width may include more than one pay class of concrete, such as doweled and non-doweled.

PORTLAND CEMENT CONCRETE PAVEMENTS
GENERAL REQUIREMENTS
(F-20-0611)

Paragraph 7.b. of Subsection 601.02 in the Standard Specifications is void and superseded by the following:

b. The finishing machine shall travel at a controlled speed such that it produces a uniform, well consolidated pavement that does not contain large voids.

Paragraph 10.d. of Subsection 601.02 is void and superseded by the following:

d. The Contractor shall always have a tachometer available to monitor vibrator frequency. The vibrator frequency shall be within the manufacturer’s specifications not to exceed 9,000 vpm.

Paragraph 12.d.(1) of Subsection 601.02 is void and superseded by the following:

(1) The mechanical joint saw shall have an adjustable guide to insure a true line is cut. The mechanical joint saw blade shall be water-cooled, or specifically designed for early-entry sawing if air cooled.

Paragraph 12.d.(2) of Subsection 601.02 is void.

Paragraph 12.d.(3) of Subsection 601.02 is void and superseded by the following:

d. (3) The joint cut shall be made with a diamond-toothed blade.
CONCRETE PAVEMENT
(F-21-0611)

Paragraph 2.a. of Subsection 603.03 in the Standard Specifications is amended to include the following:

(6) The base material shall be moistened through a uniform, lightly applied spray pattern prior to concrete placement as directed by the Engineer.

Paragraphs 2.d. and e. of Subsection 603.03 are void and superseded by the following:

d. After being consolidated with internal mechanical vibration, the concrete shall be struck off to a uniform height approximately 0.5 inch (12 mm) above the finished surface and then finished to the final elevation by means of a vibrating mechanical or vibrating hand operated screed.

e. Finished concrete shall be of uniform density with no segregation, honeycombing, or large voids.

Paragraph 3.f. of Subsection 603.03 is void and superseded by the following:

f. (1) A wet burlap, carpet, or canvas drag will be drawn over the entire surface in a longitudinal direction for a final finish, dampening of this drag material will be accomplished through a uniform, lightly applied spray pattern.

(2) The drag shall be suspended from a mandrel, or similar device, to insure a uniform texture.

(3) The drag shall be lifted from the surface of the concrete pavement when the paving train is not in motion for 30 minutes or more and carefully reset before resuming the dragging operations.

(4) Drags shall be rinsed or washed as necessary to obtain a uniform surface. Drags that cannot be cleaned shall be replaced.

Paragraphs 4.e., f., g., and h. of Subsection 603.03 are void and superseded by the following:

e. For areas with pavement widening, dowel baskets shall be placed in all transverse contraction joints which are 6 feet (1.8 mm) or wider.

f. If normal vibration is found inadequate to thoroughly consolidate the plastic concrete within and around the dowel basket assemblies, adjustments to the material and/or operations shall be made.

g. Precautions shall be taken to assure that the sawed contraction joint is located directly over the center of the dowel bars.

h. Transverse cracks which form in the concrete pavement panels between load transfer joints shall be stitched as shown in the plans, described in the Special Provision or repaired as directed by the Engineer. No payment will be made for this work.
Paragraph 6.b.(7)(i) of Subsection 603.03 is void and superseded by the following:

(7) (i) The concrete shall be textured by dragging a wet burlap, carpet, or canvas belt over the full width of the surface in a longitudinal direction. Dampening of this drag material will be accomplished through a uniform, lightly applied spray pattern.

Paragraph 6.c.(4)(i) of Subsection 603.03 is void and superseded by the following:

(4) (i) The concrete shall be textured by dragging a wet burlap, carpet, or canvas belt over the full width of the surface in a longitudinal direction. Dampening of this drag material will be accomplished through a uniform, lightly applied spray pattern.

Paragraph 7.a.(3) of Subsection 603.03 is void and superseded by the following:

(3) (i) The curing compound shall be applied in 2 equal applications immediately following each other or other methods approved by the Engineer.

(ii) The total rate of applications shall be at a minimum of 1 Gal/100 SF (0.3 L/m²) of surface area for tined surfaces or 1 Gal/150 SF (0.2 L/m²) of surface area for all other finishes.

Paragraph 8.a.(6) of Subsection 603.03 is voided and superseded by the following:

(6) Any panels that contain random cracking will be considered unacceptable. The Engineer will decide whether to replace or repair the panel. The Contractor shall replace or repair these panels at the direction of the Engineer at no cost to the Department. A 20% deduction will be assessed on any repaired panel. Any panel that is replaced will not be assessed a 20% deduction.

Paragraph 8.d.(3) of Subsection 603.03 is void.

Paragraphs 8.d.(4), (5) and (6) of Subsection 603.03 are void and superseded by the following:

(4) Before sealing, the joint wall (not the bottom of joint) surfaces shall be sandblasted or water-blasted to remove all dirt, curing compound residue, laitance, and any other foreign material. After sandblasting, the entire joint shall be cleaned with compressed air having a minimum pressure of 90 psi (620 kPa). The compressed air shall be free of oil, water, and other contaminants. The joints shall be dry at the time of sealing.

(5) (i) Transverse contraction joints in Portland cement concrete pavements shall be sealed so that the joint is filled to approximately 1/8" to 3/8" (3 to 9 mm) below the top of the joint with an approved hot poured sealant.

(ii) All overflow material shall be removed from the surface of the pavement.

(iii) If adhesion is not satisfactory, the material shall be rejected.

(6) The Contractor shall give the Engineer one copy of the hot pour manufacturer's sealing recommendations.
Paragraph 9.b. of Subsection 603.03 in the 2007 edition of the NDOR Standard Specifications for Highway Construction is void and superseded by:

b. When the pay item “Portland Cement Concrete Smoothness Testing” is not included in the contract, the Contractor shall test the hardened concrete for surface irregularities with a California Profilograph. Areas showing high spots (bumps) in excess of 0.30 inches in a 25 foot span will be plainly marked on the pavement and on the printed pavement profile trace. All identified high spots shall be ground to the required profile. The grinding shall be performed so that the cement-aggregate bond is not broken. The equipment and profilograph test procedure requirements of Section 602 of the Standard Specifications for Highway Construction shall apply to this surface testing.

Paragraph 9.c of Subsection 603.03 is amended to include:

c. At the Engineer’s option, the use of a 10 foot straightedge to locate high spots in excess of 1/8 inch may be allowed in lieu of bump detection using a profilograph testing.

Paragraphs 11.c., d. and e. of Subsection 603.03 are void and superseded by the following:

c. The Contractor’s forces may be allowed on the concrete pavement when the concrete has reached a minimum age of 14 days or when the concrete has reached a compressive strength of 3000 psi (24 MPa) when tested in accordance with ASTM C 39.

d. With the approval of the Engineer, the Contractor may elect to increase the early strength of the concrete by adding cement and/or reducing the water/cement ratio, and then the pavement may be opened to traffic provided it has attained a compressive strength of 3500 psi (24 MPa). The concrete in the area where the early strength is required shall be paid for at the bid price.

e. When required by the Special Provisions or when requested by the Contractor, the maturity method, as provided for in ASTM C 1074, may be used in lieu of the requirements of Subsection 603.03, Paragraph 10.c. and d. to determine the strength of concrete pavement for the purpose of early opening to traffic. Requests by the Contractor for use of the maturity method shall be on a project basis and shall be made in writing to the Materials and Research Engineer. The Contractor shall be responsible to coordinate with the Materials & Research Division to develop the maturity curve.

Paragraph 3.a. and b. of Subsection 603.05 is void and superseded by the following:

3. a. A pay factor will be applied to each unit based on the compressive strength of 1 core per unit tested in accordance with AASHTO T 24. Concrete cores must have a minimum age of 28 days before testing. The Contractor will have the option to obtain two additional cores for any unit core that fail to have the required minimum compressive strength provided that the cores are:

(1) Obtained and tested within seven (7) days of being notified of the strength deficiency, under the supervision of the Engineer.

(2) Cut within 6 inches of the original unit core in the longitudinal direction.
The results of all three cores sampled at the location will be averaged for the final compressive strength calculation and pay factor.

b. The paved area shall be divided into units. Each unit will be considered separately. Units are 750 linear feet (230 m) of pavement for each separately placed width, or width of each class of concrete whether or not placed separately starting at the beginning of the pavement.

Paragraph 4.a.(7) of Subsection 603.05 is void and superseded by the following:

(7) A the option of the Engineer, cores may not be required from irregular areas with widths less than 8 feet (2.4 m) or from an individual pavement type that involve less than 5,000 square yards (4200 m²) of pavement.

Paragraph 4.c.(4) of Subsection 603.05 is void and superseded by the following:

(4) If the average thickness of the cores is deficient by more than 0.25 inch (6 mm) but not more than 0.50 inch (12.5 mm) an adjusted unit price will be paid in accordance with Table 603.04. Cores deficient by more than 0.50 inch (12.5 mm) will be treated as prescribed in Paragraph 4.d. of this Subsection.
SEEDING

Subsection 803.02 in the Standard Specifications is amended to include the following:

<table>
<thead>
<tr>
<th>Type “A”</th>
<th>Minimum Purity</th>
<th>Broadcast Application Rate in lb. of Pure Live Seed/Acre</th>
<th>Approved Mechanical Drill Application Rate in lb. of Pure Live Seed/Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Canada wildrye – NE, IA native, Mandan, Homestead</strong></td>
<td>85</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td><strong>Virginia wildrye – Omaha, native</strong></td>
<td>85</td>
<td></td>
<td>3.5</td>
</tr>
<tr>
<td><strong>Slender wheatgrass</strong></td>
<td>85</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Western wheatgrass – Barton, Flintlock</strong></td>
<td>85</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Switchgrass – Trailblazer, Blackwell, Pathfinder</strong></td>
<td>90</td>
<td>0.75</td>
<td></td>
</tr>
<tr>
<td><strong>Indiangrass – Oto, NE-54, Holt</strong></td>
<td>75</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td><strong>Little bluestem – Aldous, Blaze, Camper</strong></td>
<td>60</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td><strong>Big bluestem – Pawnee, Roundtree, Bonanza</strong></td>
<td>60</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Sideoats grama – Butte, El Reno, Trailway</strong></td>
<td>75</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Purple prairie clover – Kaneb, inoculated</strong></td>
<td>85</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td><strong>Partridge pea – Platte, inoculated</strong></td>
<td>90</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td><strong>Black-eyed Susan (Rudbeckia hirta)</strong></td>
<td>90</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td><strong>Compass plant (Silphium laciniatum)</strong></td>
<td>85</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td><strong>Upright coneflower (Ratibida columnifera)</strong></td>
<td>85</td>
<td>0.75</td>
<td></td>
</tr>
<tr>
<td><strong>Mexican red hat (Ratibida columnifera, red)</strong></td>
<td>85</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Pale purple coneflower (Echinacea pallida)</strong></td>
<td>85</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td><strong>Blue flax (Linum lewisii)</strong></td>
<td>85</td>
<td>1.25</td>
<td></td>
</tr>
<tr>
<td><strong>Shell-leaf penstemon (Penstemon grandiflorus)</strong></td>
<td>85</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td><strong>Plains coreopsis (Coreopsis tinctoria)</strong></td>
<td>85</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td><strong>Oats/wheat</strong></td>
<td>90</td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

* wheat in the fall

<table>
<thead>
<tr>
<th>Type “B”</th>
<th>Minimum Purity</th>
<th>Broadcast Application Rate in lb. of Pure Live Seed/Acre</th>
<th>Approved Mechanical Drill Application Rate in lb. of Pure Live Seed/Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Perennial ryegrass – Linn, Norlea, Amazon</strong></td>
<td>85</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td><strong>Western wheatgrass – Flintlock, Barton</strong></td>
<td>85</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td><strong>Slender wheatgrass</strong></td>
<td>85</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Kentucky fescue</strong></td>
<td>85</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td><strong>Blue grama – NE, KS, SD, CO, MN</strong></td>
<td>30</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Buffalograss – Sharp’s Improved, Cody, Bison, Texoka</strong></td>
<td>80</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Inland saltgrass (Distichlis spicata)</strong></td>
<td>75</td>
<td>1.75</td>
<td></td>
</tr>
<tr>
<td><strong>Sand dropseed (Sporobolus cryptandrus)</strong></td>
<td>90</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td><strong>Oats/wheat</strong></td>
<td>90</td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

* wheat in the fall
All seeds shall be origin Nebraska, adjoining states, or as specified. A contractor proposing to use a substitute variety or origin shall submit for the Engineer’s consideration a seed tag representing the seed, which shows the variety, origin and analysis of the seed.

Rate of application of commercial inorganic fertilizer shall be:

<table>
<thead>
<tr>
<th>Rate of Application per Acre (Minimum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available Nitrogen (N₂)</td>
</tr>
<tr>
<td>19 or 36 lbs.</td>
</tr>
<tr>
<td>Available Phosphoric Acid (P₂O₅)</td>
</tr>
<tr>
<td>0 lbs.</td>
</tr>
</tbody>
</table>

Rate of application of granular sulphur coated urea fertilizer shall be:

<table>
<thead>
<tr>
<th>Nitrogen (Total Available)</th>
<th>0 lbs.</th>
</tr>
</thead>
</table>

The contractor may, at his option, apply granular urea formaldehyde in lieu of the sulphur coated urea fertilizer at the following rate:

<table>
<thead>
<tr>
<th>Nitrogen (Total Available)</th>
<th>0 lbs.</th>
</tr>
</thead>
</table>

**EROSION CONTROL**

Subsection 807.01 in the Standard Specifications is void and superseded by the following:

This work shall consist of the preparation of slopes and waterways and the furnishing and application of soil retention blankets at the locations shown in the plans.

Paragraphs 2., 2.a., 2.b. and 2.c. of Subsection 807.02 are void and superseded by the following:

Wire staples shall be used for anchoring the soil retention blanket. The staples shall be a minimum of 13 gauge U-shaped steel wire with a 1 inch or larger throat with at least 6 inch long legs.

Paragraph 5. of Subsection 807.02 is void.
Subsection 807.02 is amended to include the following:

<table>
<thead>
<tr>
<th>Plant Type</th>
<th>Minimum Purity (%)</th>
<th>Application rate in lb. of Pure Live Seed/1000 yd.²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perennial ryegrass – Linn, Norlea, Amazon</td>
<td>85</td>
<td>1.25</td>
</tr>
<tr>
<td>Western wheatgrass – Barton, Flintlock</td>
<td>85</td>
<td>1.25</td>
</tr>
<tr>
<td>Slender wheatgrass</td>
<td>85</td>
<td>1</td>
</tr>
<tr>
<td>Canada wildrye – Mandan, Homestead, NE native</td>
<td>85</td>
<td>1</td>
</tr>
<tr>
<td>K-31 fescue</td>
<td>85</td>
<td>0.75</td>
</tr>
<tr>
<td>Little bluestem – Aldous, Blaze, Camper</td>
<td>60</td>
<td>0.5</td>
</tr>
<tr>
<td>Inland saltgrass (Distichlis spicata)</td>
<td>75</td>
<td>0.5</td>
</tr>
<tr>
<td>Sand lovegrass – Nebraska-27</td>
<td>90</td>
<td>0.2</td>
</tr>
<tr>
<td>Oats/wheat (wheat in the fall)</td>
<td>90</td>
<td>8</td>
</tr>
</tbody>
</table>

All seeds shall be origin Nebraska, adjoining states, or as specified. A Contractor proposing to use a substitute variety or origin shall submit for the Engineer’s consideration a seed tag representing the seed, which shows the variety, origin and analysis of the seed.

Rate of application of inorganic fertilizer shall be:

<table>
<thead>
<tr>
<th>Rate of Application Per 1000 yd.² (Min.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Available Nitrogen (N₂)</td>
</tr>
<tr>
<td>Available Phosphoric Acid (P₂O₅)</td>
</tr>
</tbody>
</table>

Rate of application of granular sulphur coated urea fertilizer or urea-formaldehyde fertilizer shall be:

<table>
<thead>
<tr>
<th>Rate of Application Per 1000 yd.² (Min.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrogen (Total Available)</td>
</tr>
</tbody>
</table>

Paragraph 6.c. of Subsection 807.03 is void.

Paragraphs 7.a.i. and 7.a.ii. of Subsection 807.03 are void.

Paragraph 8. of Subsection 807.03 is void.
Paragraph 1. of Subsection 807.05 is amended to include the following:

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Pay Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erosion Control, Class ____</td>
<td>Square Yard (SY)</td>
</tr>
</tbody>
</table>

**COVERCROP SEEDING**

*(H-14-0515)*

Subsection 812.01

Paragraph 2. is void and superseded by the following:

Cover crop seeding shall be applied to any disturbed area requiring erosion protection. It is intended to be used in staged construction areas, surcharge areas, or other disturbed areas that have not been permanently seeded.

Subsection 812.02

Paragraph 4. is void.

Subsection 812.04 is void and superseded by the following:

.Subsection 812.04
  1. Cover crop seeding is measured by the acre of ground surface seeded. The areas will be calculated from surface measurements of the length and width ± 1 yard (± 900 mm).

**SILT CHECKS**

*(H-17-0515)*

**Description**

1. This work shall consist of furnishing and placing silt check devices at the locations shown in the plans, Temporary Erosion Control Plans or as directed by the Engineer. Bale Checks shall not be allowed.

2. There are two separate and distinct types of silt checks.
   a. Silt Checks are placed as shown in the plans or as directed by the Engineer after final grading is complete in conjunction with the final stabilization.
   b. Temporary Silt Checks are placed as shown in the Temporary Erosion Control plans or as directed by the Engineer throughout the construction process.

**Material Requirements**

1. Approved silt check devices are listed in and shall be selected from the Approved Products List.
a. Silt Checks used for final stabilization shall be the type shown in the plans and selected from the Approved Products List.

b. Temporary Silt Checks may be any product listed on the Approved Products List. The following chart shall be used to determine the appropriate application of Temporary Silt Checks during construction.

<table>
<thead>
<tr>
<th>Type</th>
<th>Material</th>
<th>Ditch Grade</th>
<th>Uses/Locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – Low</td>
<td>9” Diameter Straw Wattle</td>
<td>&lt; 2 %</td>
<td>Medians, Slopes and Urban Ditches</td>
</tr>
<tr>
<td>1 – High</td>
<td>12” Diameter Straw Wattle</td>
<td>&lt; 2 %</td>
<td>Wetlands, Stream Banks, Slopes and Rural Ditches</td>
</tr>
<tr>
<td>2 – Low</td>
<td>9” Diameter Wood Fiber Wattle</td>
<td>All</td>
<td>Medians and Urban/Rural Ditches</td>
</tr>
<tr>
<td>2 - High</td>
<td>12” Diameter Wood Fiber Wattle</td>
<td>All</td>
<td>Wetlands, Stream Banks, and Rural Ditches</td>
</tr>
<tr>
<td>3 – Low</td>
<td>9” Diameter Coir Wattle</td>
<td>All</td>
<td>Slopes, and Rural Ditches</td>
</tr>
<tr>
<td>3 – High</td>
<td>&gt;12” Diameter Coir Wattle</td>
<td>All</td>
<td>Wetlands, Stream Banks, Slopes and Rural Ditches</td>
</tr>
<tr>
<td>4</td>
<td>Synthetic</td>
<td>All</td>
<td>Urban Ditches</td>
</tr>
</tbody>
</table>

2. All silt check devices have unique staking or pinning requirements based upon the BMP and its use. The hold down stakes and pins shall be as shown on the Silt Check Detail Sheet.

**Construction Methods**

1. The silt checks shall be placed as shown in the plans or as directed by the Engineer and secured in accordance with the plans.

2. The limits of the completed silt check shall extend up the foreslope and backslope of the ditch to effectively contain the run-off and prevent erosion and washout at the edges of the installation as shown on the Silt Check Detail Sheet.

3. Temporary Silt Checks

   a. The “Temporary Silt Checks” shall be installed at the locations shown in the plans, Temporary Erosion Control Plan and as directed by the Engineer.

   b. The “Temporary Silt Checks” shall be installed immediately after the rough grading is completed in an area.

   c. The “Temporary Silt Check” shall be left in place until the finish grading begins. Reinstall the “Temporary Silt Checks” as soon as finish grading is done unless the permanent erosion control is initiated immediately after finish grading. “Temporary Silt Checks” should be in place at all times after finish grading until permanent “Silt Check,” are in place.
d. The Temporary Silt Check shall be removed and remain the property of the Contractor when it is no longer functional or needed.

**Method of Measurement**

1. All work involved in constructing silt checks as described above will be included and paid for per linear feet of devices used in the silt checks.

2. “Temporary Silt Checks” shall be measured by the linear foot (meter) for the initial installation. The removing or replacing of the temporary silt checks will not be measured for payment, but will be considered subsidiary to the initial installation.

3. Removal of sediment will be measured based on equipment rental. All incidentals associated with the cleanout shall be subsidiary to the equipment rental items.

**Basis of Payment**

1. **Pay Item** | **Pay Unit**
   - Silt Check, Type _____ | Linear Foot
   - Temporary Silt Check | Linear Foot
   - Rental of Skid Loader, Fully Operated | Hour
   - Rental of Loader, Fully Operated | Hour
   - Rental of Crawler Mounted Hydraulic Excavator, Fully Operated | Hour
   - Rental of Dump Truck, Fully Operated | Hour

2. Payment is full compensation for all work prescribed in this Section.

**SILT FENCE**

(H-18-0515)

Section 809 of the Standard Specifications is void and superseded with the following:

**Description**

This work shall consist of installing the silt fence at locations shown in the plans and at locations as approved or determined by the Engineer. The installation shall be in accordance with these Specifications, the special provisions, and the plans.

**Material Requirements**

1. All silt fence material shall be selected from the NDR Approved Products List.
   a. Low Porosity Silt Fence is typically used for perimeter control.
   b. High Porosity Silt Fence is used for velocity control.
   c. Low Profile Silt Fence is used for perimeter control and inlet protection
d. Coir Silt Fence is used for perimeter control of wetlands and locations specified to use a biodegradable silt fence.

e. Temporary Silt Fence shall be any product from the silt fence category of the Approved Products List with a use appropriate to the situation.

2. Silt Fence Posts

a. The silt fence posts shall be Studded “T” Steel Posts with a minimum weight of 1.25 lbs/foot (37 Kg/m).
b. Used Studded “T” Steel Posts are acceptable.
c. Coir Silt Fence shall be installed with wooden posts, derived from hardwood tree species. The posts shall only be driven until firm.

3. Wire staples shall be used for anchoring the silt fence.

4. Silt Fence shall be attached to the posts with black zip ties. Zip ties shall be UV stabilized, black with a 50 lb (22 Kg) minimum tensile strength.

Construction Methods

1. The silt fence shall be installed and in good working condition prior any grading or excavation operations and as needed throughout the construction process. The silt fence installation shall not exceed the amount required for the current construction season.

2. Silt Fence may be installed in the ground by either of the two methods listed below.

   a. Trenching Method

   (i) The Contractor shall excavate a trench to the depth, width, and length shown in the plans.

   (ii) The Contractor shall place the silt fence in the trench and pin it as shown in the plans.

   (iii) The Contractor shall backfill the trench, compact the soil, and attach the fabric to the posts as shown in the plans.

   b. Slicing Method

   (i) The Contractor shall install silt fence by mechanically slicing the material into the soil.

   (ii) The Contractor shall compact the soil and attach the fabric to the posts as shown in the plans.

3. Fabric Silt Fence installed in a wetland or below water conditions.

   a. Trenching is not required. Fold a 6 inch (150 mm) flap toward the sediment source and pin as shown in the plans. Install the stakes as for a dry installation. Attach the fabric to the posts with zip ties or other approved methods and secure from slipping down the post. For a wetland or below water installation, the sediment shall be left in place.
4. All silt fence splice joints shall be overlapped a minimum of 6 feet (1.8 m).

5. The Contractor shall remove sediment that accumulates near the silt fence during construction and dispose it in an upland location.

   a. Sediment removal shall be initiated when sediment depth has reached one-half the height of the above ground portion of the silt fence or as directed by the Engineer in conjunction with silt fence repairs.

   b. Sediment shall be removed to approximately 6 inches (150 mm) from the silt fence.

   c. Each time sediment is removed, the silt fence shall be repaired to a good working condition. Good working condition includes fabric repair, retrenching, post repair, tie replacement, and any associated hand work.

6. The Contractor shall maintain the silt fence in good working condition throughout the life of the construction project. Upon completion of the project silt fence shall remain in place in good working condition, in locations specified in the plans or at locations specified by the Engineer.

   a. Silt fence may be removed from locations during construction or upon completion of the project as directed by the Engineer.

   b. Silt fence that has been determined to be unnecessary and is subject to removal shall be cut off at ground level and shall remain the property of the Contractor for disposal. Any accumulated sediment shall be removed to an upland location.

   c. Silt fence posts from removed fence shall remain the property of the Contractor and may be reused on other installations.

   d. Temporary Silt Fence shall be removed at the completion of the project or when it is no longer functional.

**Method of Measurement**

1. Fabric silt fence is measured by the length of the silt fence in linear feet (meter).

2. Removal of sediment from the silt fence will be measured based on equipment rental.

3. All silt fence repairs, such as fabric repair, tie replacement, retrenching, and splicing and associated handwork are subsidiary to the appropriate silt fence item.

4. Removal of silt fence and all of its components is subsidiary to the silt fence item.
Basis of Payment

1. **Pay Item** | **Pay Unit**
--- | ---
Fabric Silt Fence “Low Porosity” | Linear Foot (LF)
[Meter (m)]
Fabric Silt Fence “High Porosity” | Linear Foot (LF)
[Meter (m)]
Fabric Silt Fence “Low Profile” | Linear Foot (LF)
[Meter (m)]
Fabric Silt Fence “Coir Fiber” | Linear Foot (LF)
[Meter (m)]
Temporary Silt Fence | Linear Foot (LF)
[Meter (m)]
Rental of Skid Loader, Fully Operated | Hour (h)
Rental of Loader, Fully Operated | Hour (h)
Rental of Dump Truck, Fully Operated | Hour (h)
Rental of Crawler Mounted Hydraulic Excavator, Fully Operated | Hour (h)

2. Payment is full compensation for all work prescribed in this Section.

**GRANULAR SUBDRAINS**

Subsection 915.02 of the Standard Specifications is void and superseded by the following:

Aggregate that is used in granular subdrains shall consist of crushed gravel or crushed rock and shall conform to the requirements of Paragraphs 1. and 2. of Subsection 1033.02.

Crushed gravel shall have a fine aggregate angularity value of 43.0 or greater. The specific gravity for calculation of the Fine Aggregate Angularity (FAA) shall be determined on a combined aggregate sample of the material passing the No. 8 (2.36 mm) sieve and retained on the No. 100 (150 µm) sieve as defined in AASHTO T 304 Method A, except the specific gravity material shall be washed over the No. 100 (150 µm) sieve. Gravel aggregate shall have a soundness loss of not more than 12 percent by weight at the end of 5 cycles using sodium sulfate solution.

Crushed rock shall consist of clean, hard particles of crushed limestone, quartzite, or dolomite. Crushed rock shall have a percent loss of not more than 14 at the end of 16 cycles of the freezing and thawing test.
The crushed gravel or crushed rock shall meet the following gradation requirements.

<table>
<thead>
<tr>
<th>Sieve Size</th>
<th>Target Value (Percent Passing)</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 inch</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>No. 4</td>
<td>40</td>
<td>±20</td>
</tr>
<tr>
<td>No. 10</td>
<td>15</td>
<td>±15</td>
</tr>
<tr>
<td>No. 200</td>
<td>4</td>
<td>±4</td>
</tr>
</tbody>
</table>

Paragraph 2. of Subsection 915.03 of the Standard Specifications is void and superseded by the following:

The Contractor shall provide and place aggregate in the trench as prescribed in the plans but shall be placed at the midpoint of the adjacent concrete slab (midway between contraction joints) or as directed by the Engineer.

Paragraph 5. of subsection 915.03 is void and superseded by the following:

Excavated material shall become the property of the Contractor and removed from the project or used for shoulder construction on the project. Excess material shall become the property of the Contractor and removed from the project.

**PORTLAND CEMENT CONCRETE**

(J-15-0615)

Paragraph 1. of Subsection 1002.02 in the Standard Specifications is amended to include the following:

Concrete mixes will be in accordance of Table 1002.02.

Paragraph 3. of Subsection 1002.02 is void and superseded by the following:

3. Type IP and IT Interground/Blended cement shall be used for all classes of concrete except for pavement repair. Type IP and IT Interground/Blended cement shall meet all requirements of ASTM C 595. Pavement repair shall include Type I/II Portland Cement for Class PR1 Concrete and Type III Portland Cement shall be used in Class PR3 Concrete.

Tables 1002.02 and 1002.03 in Subsection 1002.02 are void and superseded by the following:
<table>
<thead>
<tr>
<th>Class of Concrete (1)</th>
<th>Base Cement Type</th>
<th>Total Cementitious Materials Min. lb/cy</th>
<th>Total Aggregate</th>
<th>Air Content % Min.-Max. (2)</th>
<th>Ledge Rock (%)</th>
<th>Water/Cement Ratio Max. (3)</th>
<th>Required Strength Min. psi</th>
</tr>
</thead>
<tbody>
<tr>
<td>47B**</td>
<td>IP/IT*</td>
<td>564</td>
<td>2850</td>
<td>3150</td>
<td>6.5 - 9.0</td>
<td>0.45</td>
<td>3500</td>
</tr>
<tr>
<td>47B***</td>
<td></td>
<td>564</td>
<td>2850</td>
<td>3150</td>
<td>6.0 - 8.5</td>
<td>0.45</td>
<td>3500</td>
</tr>
<tr>
<td>47BD</td>
<td></td>
<td>658</td>
<td>2500</td>
<td>3000</td>
<td>6.0 - 8.5</td>
<td>0.42</td>
<td>4000</td>
</tr>
<tr>
<td>47B-HE</td>
<td></td>
<td>752</td>
<td>2500</td>
<td>3000</td>
<td>6.0 - 8.5</td>
<td>0.40</td>
<td>3500</td>
</tr>
<tr>
<td>BX(4)</td>
<td></td>
<td>564</td>
<td>2850</td>
<td>3150</td>
<td>6.0 - 8.5</td>
<td>0.45</td>
<td>3500</td>
</tr>
<tr>
<td>47B-OL</td>
<td></td>
<td>564</td>
<td>2850</td>
<td>3200</td>
<td>5.0 - 7.0</td>
<td>0.36</td>
<td>4000</td>
</tr>
<tr>
<td>PR1</td>
<td>I/II</td>
<td>752</td>
<td>2500</td>
<td>2950</td>
<td>6.0 - 8.5</td>
<td>0.36</td>
<td>3500</td>
</tr>
<tr>
<td>PR3</td>
<td>III</td>
<td>799</td>
<td>2500</td>
<td>2950</td>
<td>6.0 - 8.5</td>
<td>0.45</td>
<td>3500</td>
</tr>
<tr>
<td>SF(5)</td>
<td>I/II</td>
<td>589</td>
<td>2850</td>
<td>3200</td>
<td>6.0 - 8.5</td>
<td>0.36</td>
<td>4000</td>
</tr>
</tbody>
</table>

(1) Each class of concrete shall identify the minimum strength requirement, per plans and specifications. All classes of concrete shall be air-entrained and a water-reducing admixture shall be used per manufacture's recommendations.
- Class R Combined Aggregate shall use a mid-range water reducer admixture. The dosage shall be at the manufacture’s recommendation and the Engineer may approve a low-range water reducer admixture.

(2) As determined by ASTM C 138 or ASTM C 231.
FOR INFORMATION ONLY. The Contractor may develop a Quality Control Program to check the quantity of air content on any given project; such as, checking the air content behind the paver.

(3) The Contractor is responsible to adjust the water/cement ratio so that the concrete supplied achieves the required compressive strength without exceeding the maximum water/cement ratio. The minimum water/cement ratio for any slip form concrete pavement is 0.38, unless the Contractor requests approval from the Engineer in writing to change the minimum water/cement ratio to 0.36.

(4) For temporary surfacing, Type I/II cement is allowed.

(5) Minimum Portland Cement shall be 564 lbs/cyds and the total Silica Fume added shall be 25 lbs/cyds.

(*) Refer to Subsection 1004.02 for material characteristics.

Lithium Nitrate may be used in place of Supplemental Cementitious Materials (SCMs), see Section 1007 of the Standard Specifications as modified in these Special Provisions.

(**) For slip form applications.

(***) For hand-pours and substructures applications.
Table 1002.03

<table>
<thead>
<tr>
<th>Class Specified</th>
<th>Acceptable Class for Substitution</th>
</tr>
</thead>
<tbody>
<tr>
<td>BX</td>
<td>47B, 47BD or 47B-HE</td>
</tr>
<tr>
<td>47B</td>
<td>47BD or 47B-HE</td>
</tr>
</tbody>
</table>

Paragraphs 5., 6., 7., 8., 9. and 10. of Subsection 1002.02 are void and superseded by the following:

5. Class PR1 and PR3 Concrete:
   a. The calcium chloride for use in PR concrete shall be either:
      (1) A commercially prepared solution with a concentration of approximately 32 percent by weight.
      (2) A Contractor prepared solution made by dissolving 4.5 pounds of Grade 2 or 6.2 pounds of Grade 1 calcium chloride per gallon of water to provide a solution of approximately 32 percent by weight.
   b. The 7.4 pounds of water in each gallon of solution shall be considered part of the total water per batch of concrete.
   c. The calcium chloride solution shall be added, just prior to placement, at a rate of 0.375 gallons/100 pounds of cement (1.4 lb. calcium chloride per 100 lb. cement).
   d. Class A, Flaked or Pellet Calcium Chloride shall be added at a rate not to exceed 2.0 percent of the weight of the cement for Grade 1, or 1.6 percent of the weight of the cement for Grade 2. Grade 1 Calcium Chloride purity is between 70 and 90 percent and Grade 2 Calcium Chloride is between 91 and 100 percent.
   e. Where mixing trucks are used:
      (1) For Class PR3 Concrete, calcium chloride shall be thoroughly mixed into the concrete before placement. The minimum mixing time is 2 minutes.
      (2) For Class PR1 Concrete, calcium chloride shall be added first and then the concrete mixed at least 2 minutes or as required by manufacturer. Next, the Type F high range water-reducer admixture is added and the concrete is mixed an additional 5 minutes.

6. Class High Early (47B-HE) Concrete
   a. High Early (47B-HE) concrete shall be cured as prescribed in Subsection 603.03, Paragraph 7. The Contractor shall take necessary curing measures so the required strength is achieved.
   b. High Early concrete shall achieve a compressive strength of 3,500 psi at 48 hours after placement.
c. The 48-hour compressive strengths shall be used to determine pay factor deductions for high early concrete in accordance with Table 603.03.

d. A non-calcium chloride accelerator shall be used when the ambient temperature at the time of the placement of concrete is 70°F or less.

e. When requested by the Contractor, the maturity method, as provided in NDR C 1074, may be used in lieu of the requirements of Subsection 603.03, Paragraphs 11.c. and d. to determine the strength of concrete pavement for the purpose of early opening to traffic and acceptance. Requests by the Contractor for use of the maturity method shall be on a project basis and shall be made in writing to the Engineer.

7. The yield of the concrete proportions shall be determined and adjusted by the Producer.

8. All Classes of Concrete with the exception of PR1 and PR3 shall have a Durability Factor not less than 70 and a mass loss not greater than five percent after 300 freeze/thaw cycles when tested in accordance with ASTM C 666. The freeze/thaw testing shall be conducted according to Procedure A.

Paragraphs 1. & 2. of Subsection 1002.03 are void and superseded by the following:

1. The Contractor shall identify the plant that will supply the concrete 14 days before use and be entirely responsible for its calibration, batching of concrete, aggregate and sampling of cement per NDR Sampling Guide.

   a. The Contractor shall be responsible for the following:

      1) Batching concrete.

      2) Contractor shall sample aggregate from the conveyor belt or stockpile. Gradations from a split sample shall be tested in accordance to Section 1033 and reported to the Engineer at the frequency required by the Materials Sampling Guide.

         i. Contractor shall retain possession of the split samples on-site at the Contractor’s facility until such a time as determined by the Engineer.

         a. At the pre-construction meeting:

            1) Contractor shall determine the location of testing and report the names of the technician performing the sampling and testing.

            2) Engineer will notify the Contractor of the retrieval of the split samples.

         ii. The Contractor shall split the sample, place the Department’s split sample into a cloth bag and immediately seal the split sample with the provided security seal. The cloth sample bag shall be supplied by the Department.
iii. The sampling splitting and placement of the security seal of aggregate samples shall be witnessed by certified Department personnel.

iv. Contractor shall secure the split sample using a consecutively numbered security seal of 75 pounds breaking strength provided by the Department. The Contractor shall use the consecutively numbered security seals to identify and track each Aggregate Class. Samples that are not consecutively numbered will be investigated for custody of the sample and the Engineer may cease production until it is determined what action will be required.
   a. The Contractor shall report the security seal tracking number with the split sample gradation.
   b. The following training shall be required for personnel who oversee the batching of the concrete:
      1) Concrete Technician Personnel
         i. Concrete Plant Technician
      2) Portland Cement Sampler
         i. NDR Portland Cement Sampler

2. Portland Cement Concrete shall be supplied by certified Ready Mix Plants that are in compliance with the requirements in the Quality Control Manual, Section 3, -- Certification of Ready Mixed Concrete Production Facilities published by the National Ready Mixed Concrete Association. Refer to NDR Material Sampling Guide for the policy on stationary and portable plants.

Paragraph 4. of Subsection 1002.03 is void and superseded by the following:

4. a. Mix times shall meet the requirements of ASTM C 94. Mixing time tests shall be repeated whenever the concrete appearance indicates that mixing was inadequate.

   b. Batch plants that are transporting the concrete in non-agitating trucks, the mixing time will not be less than 60 seconds, and for agitating trucks, the mixing time will not be less than 45 seconds.

   c. The Certification of stationary and portable ready mix plants will conform to the tests that are required in the NDR Materials Sampling Guide.

Paragraph 6. of Subsection 1002.03 is void and superseded by the following:

6. Batch tickets shall be prepared as prescribed in the National Ready Mixed Concrete Association's Quality Control Manual. The Contractor shall keep all gradations and batch tickets until final acceptance by the Department. Projects that have less than 200 cubic yards of concrete placed will be allowed to have hand written tickets. For projects greater than 200 cubic yards, hand written tickets will be at the Engineer's discretion. The concrete batch tickets shall show batch weights, aggregate moisture (shall be tested daily and moisture probes are allowed), admixtures used, water, and mix design calculations. A copy of the batch ticket shall be given to the Engineer upon delivery of concrete.
Paragraph 8. of Subsection 1002.03 is void and superseded by the following:

8. Coarse aggregate and aggregate from a dry pit shall be uniformly saturated with water before it is used. The wetting shall begin 24 hours prior to the concrete mixing to allow complete saturation.

Paragraph 13.a. of Subsection 1002.03 is void and superseded by the following:

13. a. The quantity of water shall be determined by the Contractor. The minimum quantity of water should be used which will produce required workability. Any additional water used to rinse the charging hopper and fins after the batching of concrete is allowed. This water must be estimated and recorded on the batch ticket.

Subsection 1002.04 is void and superseded by the following:

1. Class 47B Concrete Mix Design Submittal:

a. The Contractor shall submit the Concrete Mix Design Worksheet consisting of design mix proportions, testing of mix design from a minimum of 4 cubic yards and aggregate data for 47B class of concrete being placed on the project.

(1) All testing must be performed by a qualified laboratory found on the NDR’s Material and Research website, under the Nebraska Qualified Consultant & LPA Laboratories and submitted to the Engineer.

(2) The Concrete Mix Design shall be submitted to the Engineer 4 weeks prior to any concrete being placed on the project.

(3) The Concrete Mix Design shall not be paid for directly by the Department and shall be subsidiary to items which direct payment is made.

(4) Concrete shall not be placed on the project before the Concrete Mix Design Worksheet has been reviewed and approved by the Engineer.

b. The Contractor shall submit the Concrete Mix Design Worksheet to the Engineer. Email submissions are preferred but will be accepted by fax or postal mail.

(1) Contractor’s Mix Design Worksheet can be found on the Materials and Research website. The submitted Mix Design Worksheet shall include the following:
   - Contractor Name
   - Project Number
   - Date
   - Location of ready mix or central mix plant
   - Date submitted
   - Signature of Contractor representative
(2) Material Source Information.
   - Cement Manufacturer
   - Type of Interground/Blended Cement
   - Type of Admixtures
   - Aggregate Pit and Quarry location

(3) Specific Gravity of each individual aggregate source.

(4) Sand Equivalent for dry pit sand-gravel aggregate.

(5) Combined Aggregate percent passing as described on Table 1033.03C.

(6) Contractor’s Target combined aggregate gradation percent passing.
   (i) The Contractor’s required worksheet can be found on the Materials and Research website.

(7) Testing of Mix Design:

The mix design shall show the weights of all ingredients including Interground/Blended cements, aggregates, water, admixtures types and water cement ratio.
   - Temperature of concrete at time of sampling, ASTM C 1064.
   - The air content of plastic concrete, ASTM C 231.
   - Weight per cubic foot, Yield, ASTM C 138. The relative Yield shall be a minimum of 97%.
   - Compressive strength shall be performed with a minimum of three averaged specimens at 7-day and 28-day, ASTM C 39. The minimum 28-day compressive strength shall be 3500 psi.

(8) Traditional 47B Mix Design is defined as an IP(25) cement, 70 percent Class B Aggregate and 30 percent Class E Aggregate may be exempt from the concrete testing described in Paragraph 1.(b)(7). All other requirements shall be included in the Concrete Mix Design Report.

c. The PCC Engineer will notify the Contractor of the mix design approval for Class 47B Concrete. Approval of the mix design does not alleviate the Contractor of the responsibility of the in-place concrete. The Contractor may adjust admixtures, water cement ratio, vibrator frequency, etc., as needed in accordance to the specifications.

d. The Contractor shall submit a new concrete mix design worksheet meeting the above requirements when a change occurs in the source, type, or proportions of cements or aggregates; unless otherwise approved by the Engineer.
2. The quantity of water to be used shall be determined by the Contractor. It shall not be varied without the Engineer's consent.

3. If the concrete mixture is excessively wet causing segregation, excessive bleeding, excessively dry or any other undesirable condition, the concrete shall be rejected. At the option of the Engineer, slump tests may be performed to determine the consistency.

4. Concrete which has developed initial set before it is consolidated and finished shall be rejected.

5. a. If false set is encountered, the batching operation shall be stopped until the problem is resolved.
   b. Each batch must be mixed or agitated for at least 3 additional minutes after observing the false set and the concrete must be of satisfactory consistency.

6. Compressive strength tests shall be made in accordance with ASTM C 39.

7. Concrete shall be sampled as prescribed in the NDR Materials Sampling Guide. Samples shall be taken at the point of placement, never before the discharge from the last conveyance.

8. Aggregate Acceptance, Verification, Sampling and Testing:
   a. The aggregate will be accepted based on the Contractor's testing results except as noted below.
   b. The aggregate verification sampling and testing by the Department will be randomly selected and tested according to sublot sizes in Table 1002.05.

<table>
<thead>
<tr>
<th>Aggregate Class</th>
<th>Lot</th>
<th>Sublot</th>
</tr>
</thead>
<tbody>
<tr>
<td>E and F</td>
<td>3000 tons</td>
<td>1000 tons</td>
</tr>
<tr>
<td>A, B and C</td>
<td>6000 tons</td>
<td>2000 tons</td>
</tr>
<tr>
<td>R</td>
<td>3000 tons</td>
<td>1000 tons</td>
</tr>
</tbody>
</table>

c. The results of Contractor split sample will be verified by the Department's verification tests. Any samples outside of the tolerances as specified according to the Materials Sampling Guide, Section 28 under the Acceptable Tolerance Limits for Independent Assurance will result in an Independent Assurance (IA) review of testing and may result in the Department test results being applied.

d. On any given Lot, if the results of the gradation from the verification test are within Department's specification, the Contractor's results will be used for the entire lot. On any given Lot, if the gradations results from the verification test are outside Department's specification, further investigation will be initiated by the Engineer for that sublot. Any or all of
the remaining Department sublot samples may be tested and the Department sublot test results may be applied to the respective sublot and the acceptance will apply.

e. When verification tests are within testing tolerance but results show a consistent pattern of deviation from the split sample results, the Engineer will exercise one or more of the following:
   - Cease production.
   - Request additional verification testing.
   - Initiate a complete IA review.

f. Independent Assurance (IA) Review of Testing:

1) The Contractor shall allow the Department personnel access to the Contractors’ laboratory to conduct IA review of the technician testing procedures and apparatus. Any deficiencies discovered in the Contractor’s testing procedures will be reported to the Contractor and corrected by the Contractor.

2) During the IA review, the Department personnel and the Contractor shall split a sample for the purpose of IA testing. The samples selected will be tested in the Department’s Branch Laboratory. Any IA test results found to be outside of defined testing tolerances as stated in Paragraph 8.c. of Subsection 1002.04 will be reported to the Contractor. The Contractor shall immediately correct any deficiencies found during the IA review.

3) If the project personnel and the Contractor cannot reach agreement on the accuracy of the test results, the Department Central Laboratory will be asked to resolve the dispute, which will be final. All dispute resolutions will be in accordance with the Quality Assurance Program requirements in the NDR’s Materials Sampling Guide.

PORTLAND AND INTERGROUND/BLENDED CEMENT
(J-15-0214)

Section 1004 in the Standard Specifications is void and superseded by the following:

1004.01 – Description

1. Portland cement is the binder in concrete, locking the aggregate into a solid structure. It is manufactured from Lime, Silica, and Alumina (with a small amount of plaster of Gypsum).

2. Equivalent alkali referred to herein is hereby defined as the sum of the Sodium Oxide (Na₂O) and the Potassium Oxide (K₂O) calculated as Equivalent Alkali Na₂Oₑ = Na₂O + 0.658 K₂O.

3. Interground and Blended cements consist of intimate and uniform intergrinding or blending of Portland cement clinker, Slag cement, Pozzolan and/or Limestone.
1004.02 – Material Characteristics

1. Type I, Type II, Type I/II and Type III Portland cement shall conform to the requirements in ASTM C 150 with the following additional requirements:
   a. Portland cement shall not contain more than 0.60 percent equivalent alkali.
   b. Processing additions may be used in the manufacture of the cement, provided such materials have been shown to meet the requirements of ASTM C 465 and the total amount does not exceed 1 percent of the weight of Portland cement clinker.

2. Interground and Blended Cement shall conform to the requirements in ASTM C 595 with the following additional requirements:
   a. Interground/Blended cement (Type IP)
      (1) For Type IP(25) shall be composed of Class F fly ash or Class N pozzolan replacement shall be 25% ± 2%.
      (2) For Type IP(20) shall be composed of Class F fly ash or Class N pozzolan replacement shall be 20% ± 2%.
   b. Interground/Blended cement (Type IT)
      (1) For SCMs, Slag cement and Limestone, the maximum replacement by weight shall be 40%. The manufacturer has a production tolerance of ± 2% from the proposed replacement.
      (2) For Slag Cement, the maximum replacement shall be 20% or less when incorporated into the final Interground/Blended cement.
      (3) For Limestone cement, the replacement range shall be from 5.1% to 10.0% when incorporated into the final Interground/Blended cement.
   c. No additional SCMs, Slag cement and Limestone will be added at the batch plant.

1004.03 – Procedures

1. The Contractor shall provide adequate protection for the Portland and Interground/Blended cement against dampness.
   a. Portland and Interground/Blended cement shall be hauled or stored in railroad cars, dry bulk trailers or in suitable moisture-proof buildings.
   b. The use of tarpaulins for the protection of the Portland and Interground/Blended cement against moisture will not be allowed.

2. No Portland and Interground/Blended cement which has become caked or lumpy shall be used.
3. Portland and Interground/Blended cement which has been spilled shall not be used.

4. Accepted Portland and Interground/Blended cement which has been held in storage at the concrete mix plant more than 90 days shall be retested.

5. Portland and Interground/Blended cement coming directly from the manufacturer shall not be used until the temperature is 150°F or less.

6. Portland cement having false set when tested in accordance with in ASTM C 150 will not be used.

1004.04 – Acceptance Requirements

1. For Department projects, Portland and Interground/Blended cements must be on the NDR Approved Product List (APL).

2. The Contractor shall submit any new Portland and Interground/Blended cements to the Engineer to be approved for the APL with the following:

   a. Material source information:
      
      1) Mill Location
      2) Type of Portland and Interground/Blended cements
      3) Grinding Period
      4) Associated Manufacture Product Name
      5) Provide source and type of each SCMs and/or Slag Cement used for final product.
         (i) The Department will allow the use of ASTM C 1697.
            a. When two or more SCMs and/or Slag Cement are pre-blended, the Contractor shall report chemical composition analysis of the final blend.
            b. The final blend shall be reported as per ASTM C 1697, Paragraph 4.

      6) Portland cement shall conform to ASTM C 150.
      7) Interground/blended cements shall conform to ASTM C 595.
      8) Provide total cementitious materials replacement per ASTM C 595.
      9) Report test results per ASTM C 1567 at 28-days.
3. Alkali Silica Reaction Requirements and Testing:

a. Interground/Blended cement shall be tested according to the provisions of ASTM C 1567.

   (1) The mortar bars shall be composed of Type IP or IT Interground/blended cement and sand and gravel from an approved Platte River Valley-Saunders County source.
      i. When Elkhorn River-Madison County source or an out of state aggregate source and type IP(20) or IT cement is being used on a project, the Elkhorn River or an out of state aggregate source shall be used in lieu of the Platte River Valley-Saunders County source.
      ii. When Contractor proposes a change of aggregate source, then the new aggregate source shall be tested by ASTM C 1567.

   (2) The mortar bars for the ASTM C 1567 shall not exceed 0.10% expansion at 28 days.
      i. To accommodate precision within multi-laboratory testing, expansion up to and including 0.13% will be accepted for use. If the expansion is above 0.13%, the material is noncompliant. If tolerance problems are not corrected within 30 days following notification, the Interground/blended cement in question will be removed from the NDR’s APL.

4. Portland and Interground/Blended cements will be placed on NDR’s APL based on the conformance with the NDR’s Acceptance Policy Portland and Interground/Blended Cements.

1004.05 - Sampling and Testing Requirements

1. All Portland and Interground/Blended cements shall be sampled and tested at the rate as described in the NDR’s Materials Sampling Guide.

   a. The Department will inform the Contractor when a sample is required.

   b. A sample shall be taken by a Contractor’s Certified Portland Cement Sampler and must be under the supervision of Department certified personnel.

   c. The sample shall be taken at the plant from a bulk shipment of a rail car, dry bulk trailer, batch plant silo or from the line between the bulk truck and the silo. Upon sampling, the Department will take immediate custody of the sample.

   d. When Elkhorn River aggregate-Madison County source or an out of state aggregate source and type IP(20) or IT cement is being used on a project, the Elkhorn River or an out of state aggregate source shall be used in lieu of the Platte River Valley aggregate source.

2. Noncompliant material from the mill, terminal or project will be temporarily removed from the Approved Products List pending further investigation.
3. If the noncompliant Portland or Integround/Blended cement is removed from the Approval Products List, all shipments from the supplier will be held until the investigation of the failing samples have been completed by the NDR Materials and Research Division. These procedures shall be in accordance with this provision.

WATER FOR CONCRETE
(J-15-0214)

Section 1005 in the Standard Specifications is void and superseded by the following:

1005.01 – Description

1. Water shall be free from objectionable quantities of oil, acid, alkali, salt, organic matter, or other deleterious materials and shall not be used until the source of supply has been approved.

2. Wash water from the mixer washout may be used only with the Engineer’s approval. Use of wash water will be discontinued if undesirable reaction with admixtures or aggregates occurs.

1005.02 – Material Characteristics

1. Water which contains more than 0.25 percent total solids by weight shall not be used.

2. When required by the Engineer, the quality of mixing water shall be determined by NDR C 114, NDR T 290, NDR D 512, NDR C 1602, ASTM C 31, ASTM C 109, ASTM C 191, and ASTM C 1603.

3. Upon written request by the concrete producer and approval by Materials and Research, the concrete producer may utilize up to 10% wash water for batching all classes of concrete with the following conditions:

   a. Wash water shall conform to the requirements in NDR’s Material Sampling Guide under Policy for Certification of Ready Mix Plants.

   b. Wash water must be clarified wash water that has been passed through a settling pond system.

   c. Wash water must be scalped off of a settling basin that has been undisturbed for a minimum of 12 hours.

   d. Wash water must be metered into each load.

   e. Wash water quantities shall be shown on the batch ticket.
CALCIUM CHLORIDE  
(J-15-0214)

Section 1006 of the Standard Specifications is void and superseded by the following:

1006.01 – Description

Calcium Chloride shall be Type S (Solid) or Type L (Liquid). Calcium Chloride can be used for; but not limited to, dust control and acceleration of the set of concrete.

1006.02 – Material Characteristics

The requirements for calcium chloride shall be tested in accordance with ASTM D 98.

1006.03 – Acceptance Requirements

Acceptance shall be based on requirements contained in the NDR Materials Sampling Guide.

SECTION 1007 -- CHEMICAL ADMIXTURES  
(J-15-0214)

Section 1007 in the Standard Specifications is void and superseded by the following:

1007.01 -- Description

1. Admixtures are materials added to Portland cement concrete to change characteristics such as workability, strength, permeability, freezing point, and curing.

2. The Department's concrete admixture types are:
   a. Type A - Water-Reducing Admixture - An admixture that reduces the quantity of mixing water required to produce concrete of a given slump.
   b. Type B - Retarding Admixture - An admixture that slows the setting of concrete.
   c. Type C - Accelerating Admixture - An admixture that speeds the setting and early strength development of concrete.
   d. Type D - Water-Reducing and Retarding Admixture - An admixture that reduces the quantity of mixing water required to produce concrete of a given slump and slows the setting of concrete.
   e. Type E - Water-Reducing and Accelerating Admixture - An admixture that reduces the quantity of mixing water required to produce concrete of a given slump and speeds the setting and early strength development of concrete.
   f. Type F - Water-Reducing, High Range Admixture - An admixture that reduces the quantity of mixing water required to produce concrete of a given slump by 12 percent or greater.
g. Type G - Water-Reducing, High Range and Retarding Admixture - An admixture that reduces the quantity of mixing water required to produce concrete of a given slump by 12 percent or greater and slows the setting of concrete.

h. Air-Entraining - An admixture that encapsulates air in the concrete.

i. Lithium Nitrate – An admixture used to control the Akali Silica Reaction (ASR) in concrete.

1007.02 -- Material Characteristics

1. Type A through G admixtures shall meet the requirements in ASTM C 494.

2. Air-entraining admixtures shall meet the requirements in ASTM C 260.

3. Use of admixtures other than those cited may be requested by the Contractor.

4. Admixtures shall not contain more than 1 percent of chlorides calculated as calcium chloride unless specified otherwise in the Specification.

5. Admixtures shall be used at the manufacturer's recommended dosage rates.

6. The air-entraining admixture characteristics shall produce concrete with satisfactory workability and total air content as prescribed in Table 1002.02.

7. a. When using the Lithium Nitrate admixture, the Contractor shall submit to the Engineer:
   (i) A five pound sample of Portland cement that will be used on the project.
   (ii) The Manufacturer’s method for determining the recommendation for the required dose rate based on the equivalent alkali content.
   (iii) Water content of the Lithium Nitrate admixture solution.

b. The Engineer will report the equivalent alkali content to the Contractor. The Contractor shall use the reported equivalent alkali content to determine the required dose rate based on the manufacturer’s recommendation.

1007.03 -- Procedures

1. The process for adding admixtures to a ready mix truck on the project site involves positioning the load of concrete up to the truck chute, stopping short of discharge.

a. The admixture is then poured over the surface of the concrete and mixed for at least 5 minutes.

b. No more than 1.3 gallons of water shall be used to rinse the admixture from the fins and top chute. This water must be shown on the proportioning report and shall not exceed the water cement ratio.

c. When Lithium Nitrate is used, the portion of the admixture that is water will be shown on the proportioning report and shall not exceed the water cement ratio.

d. The Contractor is responsible for the addition of the admixture.
2.   a. If the air content is less than the minimum specified, addition of air-entraining admixtures is allowed.

   b. The Contractor shall take measures based on manufacturer’s recommendations, that are within compliance of NDR Specifications, to bring the load of concrete into NDR prescribed limits according to Table 1002.02.

   c. If the air content is then outside the limits in Table 1002.02, the load of concrete shall be rejected.

1007.04 -- Acceptance Requirements

1.   a. Approved chemical admixtures are shown on the NDR Approved Products List.

   b. Admixture approval shall be based upon annual certifications and certified test results submitted to the NDR Materials and Research Division.

2. The admixture must be essentially identical in concentration, composition, and performance to the admixture tested for certification.

3. Admixtures not identified on the NDR Approved Products List may be used under the following conditions:

   a. A certificate of compliance and certified test results must be submitted to the NDR Materials and Research Division and approval for use must be given by the NDR Materials and Research Division.

SILICA FUME
(J-15-0307)

Paragraph 2 of Subsection 1009.03 in the Standard Specifications is void and superseded by the following:

2. Silica fume shall be protected from temperatures in excess of 90°F (32°C).

LIQUID MEMBRANE-FORMING COMPOUNDS FOR CURING CONCRETE
(J-15-0307)

Subsection 1012.03 in the Standard Specifications is void and superseded by the following:

1012.03 – Acceptance Requirements

1. All curing compounds to be approved must be from the current calendar year with no carry-over from the previous years.

2. Approved compounds are on the NDR Approved Products List.

3. Products not on the NDR Approved Products List shall be sampled and tested in accordance with requirements of the NDR Materials Sampling Guide.
BITUMINOUS LIQUID COMPOUNDS FOR CURING CONCRETE  
(J-15-0515)

Section 1013 in the Standard Specifications is void and superseded by the following:

1013.01 – Description

The compound shall consist essentially of an asphaltic base and shall be of a consistency suitable for spraying at temperatures existing at the time of construction operations. It shall form a continuous, uniform film. It shall be free of precipitated matter caused by conditions of storage or temperature. The compounds shall be relatively nontoxic.

1013.02 – Material Characteristics

a. When tested in accordance with AASHTO T 155, the loss of water shall not be more than 0.11 lb/ft² (0.55 kg/m²) of surface area at 3 days, unless otherwise specified by the Engineer.

b. The Contractor has the option of using bituminous tack coat. The tack coat shall conform to all requirements of Section 504.

c. The base material shall conform to Sections 1030, 1031 and 1032.

1013.03 – Acceptance Requirements

Products shall be sampled and tested in accordance with requirements of the NDR Materials Sampling Guide.

JOINT AND CRACK SEALING FILLER  
(J-15-0813)

Section 1014 in the Standard Specifications is void and superseded by the following:

1014.01 – Description

Joint sealing filler shall be either a cold applied silicone product or an asphalt product (hot pour) conforming to the requirements of this Section. The type of joint filler to be used shall be as specified in the plans or special provisions. If not specified, any of the joint sealing fillers in this Section may be used.

Crack sealing filler shall be a hot pour sealer conforming to the requirements of this Section.

1014.02 – Material Characteristics

1. NE-3405 and NE-3405LM (hot pour)

   a. NE-3405 joint and crack sealer shall conform to the requirements of ASTM D6690, Type II. The material shall conform to the requirements of Table 1 with the following exception:
(i) The test of Bond, non-immersed, ASTM D5329, 3 specimens through 3 cycles shall be run at 0°F (-18°C), 100% extension.

b. NE-3405LM (Low Modulus) joint and crack sealer shall conform to the requirements of ASTM D6690, Type IV. The material shall conform to the requirements of Table 1.

c. The test of Bond, non-immersed, ASTM-D5329, will be tested on concrete blocks that will be constructed by the NDR Concrete Laboratory. The concrete blocks will be made of a 47B concrete mixture as prescribed in Section 1002 in the NDR Standard Specifications. The design is amended so that no fly ash is used in the mixture. All other specifications for Portland Cement Concrete apply.

d. Sample conditioning, preparation and heating shall be in accordance with ASTM D 5167 with the following exceptions:

(i) The following sentence of Section 8.1.2, “Also, if present, remove container liner by cutting it away”, is void and superseded by the following:

“All, if present, as much of the polyethylene bag as possible, shall be removed by cutting it away. Wholly-meltable type container in contact with the sample section shall be left in place.”

(ii) The last sentence of Section 8.1.2 “Solid Materials” is void and superseded by the following:

The entire vertical section which has been cut, shall be placed into the pot for melting.

(iii) The Section of 8.2.2.1 “Solid Materials” is void.

(iv) The Section of 8.2.3 is void and superseded by the following:

After the solid segment is added to the melter, the material shall be allowed to minimally melt to a uniform viscous state suitable for the installation of the stirrer or paddle. The sample shall then be stirred for one full hour. The oil bath temperature shall be regulated to bring the material to the maximum heating temperature within the one hour of stirring.

(v) The Section of 8.2.4.1 is void and superseded by the following:

During the one full hour of stirring, check the temperature of the material at maximum 15 minute intervals using a Type K thermocouple with the calibration verified in accordance with Section 6.1.7 to ensure conformance with specified temperature requirements. Stop the mechanical stirrer when measuring temperatures. If material temperatures ever exceed the maximum heating temperature, or ever drop below the minimum application temperature after the maximum heating temperature was reached, discard the sample and re-do the heating. Maintain appropriate
records of times and temperatures to verify conformance with specification requirements.

(vi) The Section of 8.2.4.2 is void.

e. ASTM D 5329 shall include the following changes:

(i) Sections 6.4 and 12.4 “Specimen Preparation” shall have the reference of “177 ml (6 oz.)” replaced with “3 oz.”

(ii) Section 6 “Cone Penetration, Non-Immersed” shall be superseded with the following exceptions:

1. Section 6.5 “Procedure” is void and superseded by the following:

   Place the specimen in a water bath maintained at 77 +/- 0.2°F (25 +/- 0.1°C) for two hours immediately before testing. Remove the specimen from the bath and dry the surface by shaking gently to remove free water from the surface of the specimen. Using the apparatus described in Section 6.3, make one determination at or near the center of the specimen. Take care to ensure the cone point is placed on a point in the specimen that is representative of the material itself, and is free of dust, water, bubbles, or other foreign material.

2. Section 6.6 “Report” is void and superseded by the following:

   Record the value as penetration of the specimen in dmm units.

(iii) Section 12 “Resilience” shall be superseded with the following exceptions:

1. Section 12.5 “Procedure”, void the sentence “Make determinations at three points equally spaced from each other and less than 13mm (½ inch) from the container rim” and supersede with the sentence “Make one determination at or near the center of the tin.”

2. Section 12.6 “Report” is void.

2. Silicone Joint Sealer (cold applied)

   a. Silicone joint sealers may be either self-leveling or non-sag and shall meet the requirements in Table 1014.01.
### Table 1014.01

<table>
<thead>
<tr>
<th>Property</th>
<th>Requirement</th>
<th>Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>As supplied:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.010-1.515</td>
<td>ASTM D792</td>
</tr>
<tr>
<td>Work Time, minimum</td>
<td>10 minutes</td>
<td></td>
</tr>
<tr>
<td>Tack-Free, at 25°C</td>
<td>20-360 minutes</td>
<td></td>
</tr>
<tr>
<td>Cure Time, at 25°C, maximum</td>
<td>14 days</td>
<td></td>
</tr>
<tr>
<td>Full Adhesion, maximum</td>
<td>21 days</td>
<td></td>
</tr>
<tr>
<td>As cured, at 25°C + 1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elongation, minimum</td>
<td>800%</td>
<td>ASTM D412</td>
</tr>
<tr>
<td>Durometer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Sag, Shore A</td>
<td>10-25</td>
<td>ASTM D2240</td>
</tr>
<tr>
<td>Self-Leveling, Shore 00, minimum</td>
<td>40</td>
<td>ASTM D2240</td>
</tr>
<tr>
<td>Joint Movement Capacity</td>
<td>+100% to -50%</td>
<td>ASTM C719</td>
</tr>
<tr>
<td>Tensile Stress, at 150% Elongation</td>
<td>45 psi</td>
<td>ASTM D412</td>
</tr>
</tbody>
</table>

### 1014.03 -- Packaging

1. NE-3405 and NE-3405LM
   a. The joint and crack sealer can be packaged in either cardboard box of wholly-meltable type containers.
      
      (i) Cardboard box containers shall be manufactured from double wall kraft board producing a minimum bursting test certification of 350 PSI (241 N/cm²) and using water-resistant adhesives. The use of metal staples or fasteners of any kind will be prohibited for closing the lids of the boxes. Tape or other like material is acceptable.
      a. The joint and crack sealer shall be in meltable [300°F (149°C)] polyethylene bag(s).

      (ii) Wholly-meltable type containers, and any of their components, shall be fully meltable and integrational with the joint and crack sealer by the time the manufacturer’s minimum application temperature is reached.
      a. The wholly-melted and integrated container must not adversely affect the test specifications of the joint and crack sealer.

2. Silicone Joint Sealer
   a. Each container shall include information regarding manufacturer and product name.

### 1014.04 -- Acceptance Requirements

1. NE-3405 and NE-3405LM
   a. Acceptance of the manufactured material is based on pre-approval by either on or off-site sampling. Acceptable hot pour sealant lots are listed on the NDR Approved Products List.
      
      (i) NDR on-site field sampling shall be in accordance with the NDR Materials Sampling Guide.
(ii) Off-site (Proxy) sampling shall be in accordance with ASTM D 6690.

1. Proxy sampling shall be overseen by an outside party approved by the NDR, preferably another DOT Agency. Proxy samples shall include a manufacturer’s Certificate of Compliance. Proxy samples shall also include a dated signature of origin by the Representative that is not affiliated with the manufacturer, and can either be on the Certificate of Compliance, or separate letter.

2. For convenience in both sampling and shipping samples, sample containers smaller than a manufacturer’s usual production containers are allowed, as long as the sample is 1500 grams min.

3. Samples shall be sent to the NDR Bituminous Laboratory, or alternatively, sent to an NDR-approved independent laboratory for testing which will be at no cost to the Department. If a NDR-approved independent laboratory will be used for testing purposes, the NDR Bituminous Laboratory must be notified so that NDR concrete blocks for Bond testing can be sent to it.

2. Silicone Joint Sealer
   
a. Acceptance of applied silicone joint sealers shall be in accordance with the NDR Materials Sampling Guide.

b. Acceptable silicone joint sealer manufacturer products are listed on the NDR Approved Products List.

(i) For products that are not listed, approval may be based upon test results from an independent laboratory submitted to the NDR Concrete Materials Section by the manufacturer, and testing by the NDR. Approval must be made prior to product use.

**EPOXY COMPOUNDS AND ADHESIVES**
(J-15-0308)

Section 1018 in the Standard Specifications is void and superseded by the following:

**1018.01 – Description**

This specification provides requirements for two-component, epoxy-resin bonding systems for use in non-load bearing applications and resin adhesives for application to Portland cement concrete.

**1018.02 – Material Characteristics**

1. Epoxy-resin bonding systems shall conform to the requirements of ASTM C 881. Approved systems are shown on the NDR Approved Products List.
2. The classification of Epoxy-Resin Bonding Systems is as follows:

   a. Type I  For use in non-load bearing applications for bonding hardened concrete and other material to hardened concrete.

   Type II  For use in non-load bearing applications for bonding freshly mixed concrete to hardened concrete.

   Type III For use in bonding skid resistant materials to hardened concrete, and as a binder in epoxy mortars or epoxy concretes.

   b. Grade 1  Low viscosity.

   Grade 2  Medium viscosity.

   Grade 3  Non-sagging consistency.

   c. Class A  For use below 40°F (4°C); the lowest allowable temperature to be defined by the manufacturer of the product.

   Class B  For use between 40°F and 60°F (4°C and 15°C).

   Class C  For use above 60°F (15°C); the highest allowable temperature to be defined by the manufacturer of the product.

   Class D  For use between 40°F and 65°F (4°C and 18°C).

   Class E  For use between 60°F and 80°F (15°C and 26°C).

   Class F  For use between 75°F and 90°F (24°C and 32°C).

1018.03 – Procedures

1. The compounds shall be of the type and grade specified in the plans or as directed by the Engineer.

2. The class of the compounds shall be selected for use according to climatic conditions at the time of application.

3. All bonding surfaces shall be clean and free of all oil, dirt, grease, or any other materials which would prevent bonding.

4. Mixing and application shall be in strict accordance with the manufacturer’s instructions.

1018.04 – Acceptance Requirements

1. Epoxy-resin bonding systems and resin adhesives approved for use are shown on the NDR Approved Products List.

2. Epoxy-resin bonding systems that are not on the NDR Approved Products List may be accepted based on a manufacturer’s certificate of compliance.
DEFORMED METAL CENTER JOINT AND METAL KEYWAY
(J-15-0307)

Paragraph 1 a. of Subsection 1027.01 in the Standard Specifications is void and superseded by the following:

a. Metal Center Joint:

Metal center joint sections shall be manufactured from sheets no less than 18 gauge [0.05 inch (1.3 mm)] thick and shall be of the size and trapezoidal shape shown in the plans. The sections shall be punched along the centerline of the narrow face of the trapezoid to admit the tie bars required by the plans and also at intervals of not greater than 2 feet (600 mm) to receive pins that are driven vertically into the subgrade to support the metal center joint.

AGGREGATES
(J-15-0914)

Subsection 1033.01 is amended to include the following paragraphs and Subsection 1033.02, Paragraphs 1 and 3. of the Standard Specifications is void and superseded by the following:

1033.01 – Description

This combined aggregate gradation using Class R aggregate is to optimize aggregate blends utilizing more locally available materials.

Achieving a uniform gradation for Class R may require the use of two or more different aggregates. It is the responsibility of the contractor to consider additional material characteristics; such as, but not limited to particle shape, cubicity, angularity, etc., when designing a mix.

1033.02 -- Material Characteristics

1. Sampling and Testing Procedures:

All materials shall be sampled and tested in accordance with Table 1033.01. All material source locations and quarries must be approved by the Department for prior to use.
### Table 1033.01

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sampling</td>
<td>NDR T 2</td>
</tr>
<tr>
<td>Sieve Analysis</td>
<td>NDR T 27</td>
</tr>
<tr>
<td>Clay Lumps, Shale, and Soft Particles</td>
<td>NDR T 504</td>
</tr>
<tr>
<td>Abrasion</td>
<td>AASHTO T 96</td>
</tr>
<tr>
<td>Freeze and Thaw Soundness</td>
<td>NDR T 103</td>
</tr>
<tr>
<td>Specific Gravity and Absorption</td>
<td>AASHTO T 85</td>
</tr>
<tr>
<td>(course aggregate)</td>
<td>AASHTO T 84</td>
</tr>
<tr>
<td>Specific Gravity and Absorption</td>
<td>AASHTO T 84</td>
</tr>
<tr>
<td>(fine aggregate)</td>
<td>AASHTO T 84</td>
</tr>
<tr>
<td>Total Evaporable Moisture Content of Aggregates by Drying</td>
<td>AASTHO T 255</td>
</tr>
<tr>
<td>Plastic Fines in Graded Aggregates and Soils by Use of the Sand Equivalent Test</td>
<td>AASTHO T 176</td>
</tr>
<tr>
<td>Sodium Sulfate Soundness</td>
<td>AASTHO T 104</td>
</tr>
<tr>
<td>Calcium Carbonate</td>
<td>NDR C 25</td>
</tr>
<tr>
<td>Organic Impurities</td>
<td>AASTHO T 21</td>
</tr>
<tr>
<td>Mortar-Making Properties</td>
<td>AASTHO T 71</td>
</tr>
<tr>
<td>Reducing Field Samples of Aggregate to Testing Size</td>
<td>AASTHO T 248</td>
</tr>
</tbody>
</table>

### 2. Portland Cement Concrete Aggregates:

**a. Sand-Gravel Aggregate:**

(1) Aggregate shall be washed and composed of clean, hard, durable and uncoated particles.

(2) Aggregates produced from wet pits by pumping must be adequately washed by means approved by the Department.

(3) Aggregates from dry pits shall be adequately washed by means approved by the Department and have a Sand Equivalent value not less than 90 in accordance with AASTHO T 176.

(i) If the Sand Equivalent is less than 90, the Engineer may elect to stop aggregate production until such a time ASTM C 109 has been completed. The aggregate, when subjected to the test for mortar-making properties, shall produce a mortar having a compressive strength at the age of 7 days equal to or greater than that developed by mortar of the same proportions and consistency made of the same cement and aggregate after the aggregate has been washed to a sand equivalent greater than 90. Materials failing to produce equal or greater strength shall be unacceptable.

(4) Aggregate for concrete shall have a soundness loss of not more than 10% by weight at the end of 5 cycles using Sodium Sulfate Soundness test AASHTO T 104.

(5) The weight of the aggregate shall not contain more than 0.5% clay lumps.
(6) Aggregate subjected to the colorimetric test for organic impurities which produces a color darker than the standard shall be further tested for its mortar-making properties in accordance with AASHTO T 71. The Engineer may elect to stop aggregate production until such a time AASHTO T 71 testing has been completed.

(i) Aggregate, when subjected to the test for mortar-making properties, shall produce a mortar having a compressive strength at the age of 7 days equal to or greater than that developed by mortar of the same proportions and consistency made of the same cement and aggregate after the aggregate has been treated in a 3% solution of sodium hydroxide. Materials failing to produce equal or greater strength shall be unacceptable, except when determined to be acceptable under the provisions of Subsection 105.03.

(7) Aggregate shall meet the requirement in Tables 1033.02A, 1033.02B and 1033.03C.

<table>
<thead>
<tr>
<th>Table 1033.02A</th>
<th>Percentage passing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1/2&quot;</td>
</tr>
<tr>
<td><strong>Class A</strong></td>
<td>Max</td>
</tr>
<tr>
<td></td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>92</td>
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<tr>
<td><strong>Class B</strong></td>
<td>Max</td>
</tr>
<tr>
<td></td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>77</td>
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<tr>
<td><strong>Class C</strong></td>
<td>Max</td>
</tr>
<tr>
<td></td>
<td>100</td>
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<td></td>
<td>44</td>
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</table>

<table>
<thead>
<tr>
<th>Table 1033.02B</th>
<th>Aggregate Classes and Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate Class</td>
<td>Concrete Description</td>
</tr>
<tr>
<td>A</td>
<td>Overlay Concrete SF</td>
</tr>
<tr>
<td>B</td>
<td>47BD, 47B-HE, 47B-OL, PR 1 and PR 3</td>
</tr>
<tr>
<td>C</td>
<td>BX</td>
</tr>
</tbody>
</table>

b. **Ledge Rock Aggregate:**

(1) Aggregate shall consist of Limestone, Quartzite, Dolomite, Gravel and Granite composed of clean, hard, durable, and uncoated particles.

(2) The percent of clay lumps, shale, or soft particles shall not exceed the following amounts:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clay Lumps</td>
<td>0.5%</td>
</tr>
<tr>
<td>Shale</td>
<td>1.0%</td>
</tr>
<tr>
<td>Soft Particles</td>
<td>3.5%</td>
</tr>
</tbody>
</table>

(3) Any combination of clay lumps, shale, and soft particles shall not exceed 3.5%.

(4) Aggregate for concrete shall be free of coatings that will inhibit bond and free of injurious quantities of loam, alkali, organic matter, thin or laminated pieces, chert, or other deleterious substances as determined by the Engineer.
(5) Aggregate for concrete shall not have a soundness loss greater than 8.0% by weight at the completion of 16 cycles of alternate freezing and thawing.

(6) Aggregates for concrete shall have a Los Angeles Abrasion loss percentage of not more than 40.

(7) All fractions passing the No.4 sieve shall meet quality requirement of soundness loss of not more than 10% by weight at the end of 5 cycles using sodium sulfate solution.

(8) The ledge rock shall be tested according to ASTM C 1260.
   (a) The mortar bars for the ASTM C 1260 shall not exceed 0.10% expansion at 28 days.
      (i) If the proposed ledge rock exceeds 0.10% expansion at 28 days, the ledge rock shall be tested in accordance to ASTM C 1567. If the expansion is greater than 0.10%, the ledge aggregate shall not be used.
         a. The ASTM C 1567 mortar bars shall be composed of Type IP or IT Interground/blended cement and the proposed Ledge Rock aggregate.
         b. To accommodate precision within multi-laboratory testing, expansion up to and including 0.13% will be accepted for use. If the expansion is above 0.13%, the material is noncompliant.

(9) Aggregate shall meet the requirements in Tables 1033.03A, B, and C.

### Table 1033.03A

<table>
<thead>
<tr>
<th>Percent Passing</th>
<th>Class E</th>
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<tr>
<td>1 1/2&quot; 1&quot; 3/8</td>
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*(If the No. 200 sieve is less than 1.5% passing the No.20 sieve could be increased to maximum of 5% passing.)*

### Table 1033.03B

<table>
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<tr>
<th>Aggregate Classes and Uses</th>
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<td>E</td>
<td>47BD, 47B-HE, PR 1 and PR 3</td>
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<tr>
<td>F</td>
<td>47B-OL, Overlay Concrete SF</td>
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</tbody>
</table>

c. Combined Aggregates:

(1) The Contractor shall design and meet the specification requirements. It is the Contractor’s responsibility to provide desirable mix properties; such as, but not limited to, workability, resistance to segregation, stable air void system, good finishing properties and good consolidation properties.
(2) The combined blended aggregate shall meet the requirement in Table 1033.03C and 1033.03D.

<table>
<thead>
<tr>
<th>Table 1033.03C</th>
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<tr>
<td><em>Class R - Combined Aggregate Gradation Limits (Percent Passing)</em></td>
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<tr>
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<td>Max</td>
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* Refer to Subsection 1002.04, Paragraph 1.b.(8) for the traditional 47B Mix Design

<table>
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<td>Aggregate Class</td>
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</table>

d. Aggregate Production and Testing:

(1) Any change greater than 3% in the original verified constituent percentage of the combined aggregates gradation will be considered non-compliant. Any change of the combined gradation targets must remain within the Combined Aggregate Gradation Limits in Table 1033.03C. The Contractor shall resubmit a new mix design if the material is deemed non-compliant in accordance with Subsection 1002.04, Paragraph 1.

(2) The blended gradation tolerance ranges from the approved mix design are established in Table 1033.03E.

(i) The Contractor shall assume the responsibility to cease operations when the specifications are not met. Production shall not be started again without the approval of the Engineer.

<table>
<thead>
<tr>
<th>Table 1033.03E Blended Aggregate Production Tolerances</th>
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<td>Sieve Size</td>
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<td>No. 10 to No. 30</td>
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<td>No. 50</td>
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<td>Minus No. 200</td>
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(3) Ledge rock and aggregate from a dry pit shall be uniformly saturated with water before it is used. The wetting shall begin 24 hours before concrete mixing to allow complete saturation.

**DOWEL BARS**

*(J-15-0812)*

Paragraph 1.c. of Subsection 1022.01 in the Standard Specifications is void and superseded by the following:

1. c. Both Type A and Type B coated dowel bars shall be coated with a bond breaker shown on the NDR Approved Products List, dipped in asphalt or paraffin, or greased in accordance with the specified requirements as shown in the Standard Plans.
EPOXY COATED REINFORCING STEEL  
(J-15-0509)

Paragraph 5. of Subsection 1021.03 in the Standard Specifications is void and superseded by the following:

5. In order to protect the coated reinforcement from damage, the Contractor shall use padded or nonmetallic slings and padded straps. Bundled bars shall be handled in a manner which will prevent excessive sagging of bars which will damage the coating. If circumstances require storing coated steel reinforcing bars outdoors for more than two months, protective storage measures shall be implemented to protect the material from sunlight, salt spray and weather exposure. Coated steel reinforcing bars, whether individual bars or bundles of bars, or both, shall be covered with opaque polyethylene sheeting or other suitable opaque protective material. For stacked bundles, the protective covering shall be draped around the perimeter of the stack. The covering shall be secured adequately, and allow for air circulation around the bars to minimize condensation under the covering. Coated steel reinforcing bars, whether individual bars or bundles of bars, or both, shall be stored off the ground on protective cribbing. The bundled bars shall not be dropped or dragged. If, in the opinion of the Engineer, the coated bars have been extensively damaged, the material will be rejected. The Contractor may propose, for the approval of the Engineer, alternate precautionary measures.

REINFORCED CONCRETE PIPE, MANHOLE RISERS,  
AND FLARED END SECTIONS  
(J-21-0108)

The AASHTO reference made in paragraphs 4.a. and 4.b. of Subsection 1037.02 in the Standard Specifications is amended to read AASHTO M 170 / M 170M-95.

The AASHTO reference made in paragraph 5. of Subsection 1037.02 is amended to read AASHTO M 206 / M 206M-95.

The AASHTO reference made in paragraph 6. of Subsection 1037.02 is amended to read AASHTO M 207 / M 207M-95.

Paragraph 8. of Subsection 1037.02 is void and superseded by the following:

8. Concrete flared-end sections shall be of the design shown in the plans and in conformance with the applicable requirements of AASHTO M 170 / M 170M-95, Class II pipe, AASHTO M 206 / M 206M-95, Class A-II pipe, or AASHTO M 207 / M 207M-95, Class HE-II pipe for the diameter of pipe on which it is to be installed.
PROPOSAL GUARANTY
(A-40-0307)

As an evidence of good faith in submitting a bid for this work, the bidder shall indicate the type of bid bond applied to this project in accordance with the Proposal Guaranty Bid Bond Section of these Special Provisions.

* * * * *

200INFDEC15
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**CONTRACT ID:** 2576X  
**PROJECT(S):** HSIP-77-3(133)  
**CALL ORDER NO.:** 200

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SECTION 2 TOTAL


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SECTION 3 GROUP 4 CULVERT

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SECTION 4 GROUP 8B ELECTRICAL

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SECTION 5 TOTAL

TOTAL BID