## INFORMATIONAL PROPOSAL

FOR INFORMATION ONLY, NOT TO BE USED FOR BIDDING

NEBRASKA DEPARTMENT OF ROADS LETTING DATE : March 14, 2002

	METRIC
CALL ORDER: F02 CONTRACT ID: 1837X	
CONTROL NO./SEQ. NO.: 11837 /000 PROJECT NO.: EACN	IH-75-1(105)
TENTATIVE START DATE: 04/15/02 CONTRACT TIME:	: 125 WORKING DAYS
LOCATION: ON US-75 IN DAWSON. IN COUNTY: RICHARDSON	BIDDER
GROUP 1 GRADING GROUP 4 CULVERTS GROUP 4A WATER MAIN	

GROUP 4 CULVERTS GROUP 4A WATER MAIN GROUP 8B ELECTRICAL GROUP 9 BITUMINOUS GROUP 10 GENERAL ITEMS

THIS PROPOSAL CONTAINS A DBE GOAL OF 10.0 %.

SEE SPECIAL PROVISIONS FOR GROUP TIES

NOTES

THE TOTAL AMOUNT OF WORK WHICH WILL BE ACCEPTED IN THIS LETTING IS LIMITED TO \$\_

THE NUMBER OF \_\_\_\_\_\_ 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 directed to Construction Division personnel at (402) 479-4568 or (402) 479-4529.

#### REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

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#### ATTACHMENTS

A. Employment Preference for Appalachian Contracts (included in Appalachian contracts only)

#### I. GENERAL

 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 superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.

3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.

4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

> Section I, paragraph 2; Section IV, paragraphs 1, 2, 3, 4, and 7; Section V, paragraphs 1 and 2a through 2g.

5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 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 DOL, or the contractor's employees or their representatives.

6. Selection of Labor: During the performance of this contract, the contractor shall not:

a. discriminate against labor from any other State, possession, or territory of the United States (except for employment

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preference for Appalachian contracts, when applicable, as specified in Attachment A), or

 employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

#### **II. NONDISCRIMINATION**

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

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 and 41 CFR 60) 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 Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American 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 State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.

b. The contractor will accept as his 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, preapprenticeship, and/or on-the-job training."

 EEO Officer: The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active contractor program of EEO 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 minority group employees.

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 minority groups 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 minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group 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, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)

c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group 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 insure 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 his 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 his avenues of appeal.

#### 6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.

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. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.

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 minority group and women employees 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 his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. 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 best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

b. The contractor will use best 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 SHA and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women 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 qualifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Execu-Form FHWA-1273 (Rev. 3-94) tive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.

 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.

a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.

b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.

c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.

9. 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 completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.

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

 The number 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;

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and

(4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. The contractors will submit an annual report to the SHA 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. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

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III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.

b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

#### IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

#### 1. General:

a. All mechanics and laborers 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 (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) 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. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more

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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 paragraphs 4 and 5 of this Section IV.

b. 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.

c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

#### 2. Classification:

a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.

b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:

 the work to be performed by the additional classification requested is not performed by a classification in the wage determination;

(2) the additional classification is utilized in the area by the construction industry;

(3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) with respect to helpers, when such a classification prevails in the area in which the work is performed.

c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification 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 DOL, Administrator of the Wage and Hour Division, Employment Standards 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.

d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional 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. Said 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

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

#### 3. Payment of Fringe Benefits:

a. 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 or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.

b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a 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.

4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

#### a. Apprentices:

(1) 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 DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/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 Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeymanlevel employees 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 employee 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 listed in 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 for the work actually performed. Where a contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

(3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level 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 for

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the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination

(4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

b. Trainees:

(1) 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 DOL, Employment and Training Administration.

(2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. 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.

(3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level 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-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which case such trainees shall receive the same fringe benefits as apprentices.

(4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor 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. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV.2. Any worker listed on a payroll at a helper wage rate, who is not a helper under a approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

# 5. 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.

#### 6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor 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, as 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 SHA contracting officer 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.

#### 7. Overtime Requirements:

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

#### 8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her 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, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

#### 9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies 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 8 above.

#### V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

#### 1. Compliance with Copeland Regulations (29 CFR 3):

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

#### 2. Payrolis and Payroll Records:

a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.

b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found 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(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.

c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices, trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form

desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

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

(1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;

(2) that such 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 the Regulations, 29 CFR 3;

(3) that each laborer or mechanic has been paid not less that the applicable wage rate and fringe benefits or cash equivalent for the classification of worked performed, as specified in the applicable wage determination incorporated into the contract.

e. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.

f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.

g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, 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 SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions 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.

#### VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

1. On all Federal-aid contracts on the National Highway System, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:

a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.

b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of

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the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.

c. Furnish, upon the completion of the contract, to the SHA resident engineer on Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.

 At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

#### VII. SUBLETTING OR ASSIGNING THE CONTRACT

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 State. Specialty items may be performed by sub-contract 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).

a. "Its own organization" shall be construed to include only workers employed and paid directly 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, assignee, or agent of the prime contractor.

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 on the contract as a whole and in general are to be limited to minor components of the overall contract.

 The contract amount upon which the requirements set forth in paragraph 1 of Section VII 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 SHA 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 SHA 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 SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

#### VIII. SAFETY: ACCIDENT PREVENTION

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 SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees

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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 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. 333).

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. 333).

# IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

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, the following notice 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:

# NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

#### 18 U.S.C. 1020 reads as follows:

"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 not more that \$10,000 or imprisoned not more than 5 years or both."

## X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more.)

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

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.

2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.

3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

#### XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

1. Instructions for Certification - Primary Covered Transactions:

(Applicable to all Federal-aid contracts - 49 CFR 29)

 By signing and submitting this proposal, the prospective primary 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 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 primary participant to furnish a certification or an explanation shall disgualify 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 department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.

d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary 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," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.

f. The prospective primary 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 primary 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 Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

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 may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded From Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.

i. 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.

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.

\* \* \* \* \*

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Primary Covered Transactions

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

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

b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgement 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) transaction 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;

c. 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 1b of this certification; and

d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2. Where the prospective primary 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 Covered Transactions:

(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

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," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.

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.

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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 in all solicitations for lower tier covered transactions.

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 may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.

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 Covered Transactions: 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 participation in this transaction 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.

XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(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 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.

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 \$10,000 for each such failure.

3. The prospective participant also agrees by submitting his or her bid or proposal 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 recipients shall certify and disclose accordingly.

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#### 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 MIN	IOBITY PARTICIPAT	TION IN FACH TRADE
JOALD I OIL MINN		I TOTA IN LAGIT TRADE

	Goal		Goal
Economic Area	%	Economic Area	%
103 Sioux City, IA:		Non-SMSA Counties	5.3
SMSA Counties:		IA Adams, IA Audubon, IA Cass,	
7720 Sioux City, IA-NE	1.9	IA Fremont, IA Harrison, IA Mills,	
IA Woodbury, NE Dakota		IA Montgomery, IA Page, IA Shelby,	
Non-SMSA Counties	1.2	IA Taylor, NE Burt, NE Cass, NE Colfax,	
IA Cherokee, IA Crawford, IA Ida,		NE Dodge, NE Platte, NE Saunders,	
IA Monona, IA O'Brien, IA Plymouth,		NE Washington	
IA Sioux, NE Antelope, NE Cedar,		144 Grand Island, NE:	
NE Cuming, NE Dixon, NE Knox,		Non-SMSA Counties	1.4
NE Madison, NE Pierce, NE Stanton,		NE Adams, NE Arthur, NE Blaine,	
NE Thurston, NE Wayne, SD BonHomme,		NE Boone, NE Boyd, NE Brown,	
SD Clay, SD Union, SD Yankton		NE Buffalo, NE Chase, NE Cherry,	
142 Lincoln, NE:		NE Clay, NE Custer, NE Dawson,	
SMSA Counties:		NE Dundy, NE Franklin, NE Frontier,	
4360 Lincoln, NE	2.8	NE Furnas, NE Garfield, NE Gosper,	
NE Lancaster		NE Grant, NE Greeley, NE Hall, NE	
Non-SMSA Counties	1.9	Hamilton, NE Harlan, NE Hayes,	
NE Butler, NE Fillmore, NE Gage,		NE Hitchcock, NE Holt, NE Hooker,	
NE Jefferson, NE Johnson, NE Nemaha,		NE Howard, NE Kearney, NE Keith,	
NE Otoe, NE Pawnee, NE Polk, NE		NE Keya Paha, NE Lincoln, NE Logan,	
Richardson, NE Saline, NE Seward,		NE Loup, NE McPherson, NE Merrick,	
NE Thayer, NE York		NE Nance, NE Nuckolls, NE Perkins,	
143 Omaha, NE:		NE Phelps, NE Red Willow, NE Rock,	
SMSA Counties:		NE Sherman, NE Thomas, NE Valley,	
5920 Omaha, NE-IA	7.6	NE Webster, NE Wheeler	
IA Pottawattamie, NE Douglas,		145 Scottsbluff, NE:	
NE Sarpy		Non-SMSA Counties	5.3
		NE Banner, NE Box Butte, NE Chey-	
		enne, NE Dawes, NE Deuel, NE	
		Garden, NE Kimball, NE Morrill,	
		NE Scotts Bluff, NE Sheridan, NE	
		Sioux, WY Goshen	

GOALS AND TIMETABLES FOR FEMALE PARTICIPATION IN EACH TRADE

	Goals
Timetables	(Percent)
From April 1, 1980 until further notice	6.9

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.

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#### STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONSTRUCTION CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)

- 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;
  - c. "Employer Identification Number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
  - 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.

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- 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 offthe-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 dispositon 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.

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.

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.

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.

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 his 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 NE000002 03/02/01 NE2 General Decision Number NE010002 Superseded General Decision No. NE000002 State: Nebraska Construction Type: HEAVY HIGHWAY County(ies): ADAMS FURNAS NANCE ANTELOPE GAGE NEMAHA ARTHUR GARDEN NUCKOLLS BANNER GARFIELD OTOE GOSPER BLAINE PAWNEE GRANT PERKINS BOONE BOX BUTTE GREELEY PHELPS BOYD HALL PIERCE BROWN HAMILTON PLATTE BUFFALO HARLAN POLK BURT HAYES RED WILLOW HITCHCOCK RICHARDSON BUTLER HOLT CEDAR ROCK HOOKER SALINE CHASE CHERRY HOWARD SAUNDERS CHEYENNE SCOTTS BLUFF JEFFERSON CLAY JOHNSON SEWARD KEARNEY SHERIDAN COLFAX CUMING KEITH SHERMAN CUSTER KEYA PAHA SIOUX DAKOTA KIMBALL STANTON DAWES KNOX THAYER DAWSON LANCASTER THOMAS THURSTON LINCOLN DEUEL LOGAN DIXON VALLEY DODGE LOUP WAYNE MADISON DUNDY WEBSTER MCPHERSON FILLMORE WHEELER FRANKLIN MERRICK YORK FRONTIER MORRILL

HEAVY CONSTRUCTION PROJECTS (does not include water well drilling); HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects, and railroad construction; bascule, suspension & spandrel arch bridges; bridges designed for commercial navigation; bridges involving marine construction; other major bridges)

SAUNDERS COUNTY (WEST OF HWY. #109 EXTENDED NORTH AND SOUTH TO THE COUNTY LINE)

Modification Number	Publication Date
0	03/02/2001

COUNTY(ies):		
ADAMS	FURNAS	NANCE
ANTELOPE	GAGE	NEMAHA

ARTHUR	GARDEN	NUCKOLLS
BANNER	GARFIELD	OTOE
BLAINE	GOSPER	PAWNEE
BOONE	GRANT	PERKINS
BOX BUTTE	GREELEY	PHELPS
BOYD	HALL	PIERCE
BROWN	HAMILTON	PLATTE
BUFFALO	HARLAN	POLK
BURT	HAYES	RED WILLOW
BUTLER	HITCHCOCK	RICHARDSON
CEDAR	HOLT	ROCK
CHASE	HOOKER	SALINE
CHERRY	HOWARD	SAUNDERS
CHEYENNE	JEFFERSON	SCOTTS BLUFF
CLAY	JOHNSON	SEWARD
COLFAX	KEARNEY	SHERIDAN
CUMING	KEITH	SHERMAN
CUSTER	KEYA PAHA	SIOUX
DAKOTA	KIMBALL	STANTON
DAWES	KNOX	THAYER
DAWSON	LANCASTER	THOMAS
DEUEL	LINCOLN	THURSTON
DIXON	LOGAN	VALLEY
DODGE	LOUP	WAYNE
DUNDY	MADISON	WEBSTER
FILLMORE	MCPHERSON	WHEELER
FRANKLIN	MERRICK	YORK
FRONTIER	MORRILL	

SUNE2002E 06/16/1999

	Rates	Fringes
CARPENTER	13.30	
CEMENT FINISHER	12.50	
ELECTRICIAN	11.90	
FLAGGER	7.60	
FORM SETTER	10.80	
LABORER	8.30	
MANHOLE BUILDER	10.20	
MECHANIC	12.95	
PAINTER	8.35	
PILE DRIVER LEADPERSON	8.35	
POWER EQUIPMENT OPERATORS:		
Asphalt distributor	9.65	
Asphalt paving machine	12.35	
Asphalt paving machine (screed)	10.45	
Asphalt roller, self-propelled	11.20	
Backhoe excavator (track type)	12.55	
Concrete finishing machine or sl	.ip	
form paver	12.80	
Concrete saw operator	11.20	
Concrete cure machine	9.20	
Concrete texture machine	9.20	
Bulldozer or push tractors:		
Less than 115 drawbar h.p.	11.60	
115 drawbar h.p. and over	12.80	
Material stockpiler	10.20	
Motor grader (finisher)	13.15	
Motor grader (rough)	10.90	

Power broom operator	9.15	
Roller or compactor, earthwork,		
self-propelled	10.05	
Scraper	12.40	
Traveling plant stabilization	11.60	
Water tankers:		
Under 6000 gallons	9.65	
6000 gallons and over	11.20	
All purpose spreader	9.50	
Clamshell, dragline, crane,		
pile driver/shovel	13.60	
Dredge pump	9.50	
Front end loaders:		
4 cu. yds. or less	11.40	
Over 4 cu. yds.	12.10	
Hydrohammer	9.60	
Loader/backhoe (rubber-tired)	9.85	
Power grader machine (trimmer &		
profiler)	12.80	
Skid steer loader	9.50	
Tractor (farm type)	9.50	
Trenching machine	9.85	
Stationary plant (base or stabil	i-	
zation)	11.75	
Stationary plant (asphalt or		
concrete)	12.75	
Crusher (including those with		
integral screening plant)	11.75	
TRUCK DRIVERS:		
Single axle	8.40	
Tandem axle	9.65	
Semi-trailer or lowboy	10.85	
Transit mix	9.65	
WELDER	12.25	

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 (29 CFR 5.5(a)(1)(v)).

In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations

indicate unions whose rates have been determined to be prevailing.

#### 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, D. C. 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, D. C. 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, D. C. 20210

4.) All decisions by the Administrative Review Board are final. END OF GENERAL DECISION

## SPECIAL PROVISIONS FOR FEDERAL AID PROJECT NO. EACNH-75-1(105)

## **GENERAL CONDITIONS**

Sealed bids for the work contemplated in this proposal form will be received at the office of the Nebraska Department of Roads in Room 104 of the Central Office Building at 1500 Highway 2 at Lincoln, Nebraska, on March 14, 2002, until 1:30 P.M.

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

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

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

The Required Contract Provisions, Form FHWA 1273, (Rev. 4-93), 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, 4, 4A, 8B, 9 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 BITUMINOUS.

## DISADVANTAGED BUSINESS ENTERPRISES (S1-8-0801)

## 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.

## USE OF DISADVANTAGED BUSINESS ENTERPRISES (S1-9-0801)

I. INTRODUCTION: The specific requirements of the use of Disadvantaged Business Enterprises, hereinafter referred to as DBEs, are set forth in these Required Contract Provisions and are imposed pursuant to 49 CFR Part 26.

- A. Definitions:
  - 1. Whenever "NDR" is used within these special provisions it shall refer to the Nebraska Department of Roads.
  - 2. For the purpose of these special provisions, the following definitions will apply:
    - a. Disadvantaged Business Enterprise (DBE) means a for profit small business concern, as defined pursuant to Section 3 of the Small Business Act and Small Business Administration regulations implementing it, which is independently owned and controlled by one or more socially and economically disadvantaged individuals.
    - b. Owned and controlled means a business:
      - (1) Which is at least 51 percent (51%) owned by one or more socially and economically disadvantaged individuals or women, or, in the case of a public owned business, such individuals must own at least 51 percent (51%) of each class of voting stock and 51 percent of the aggregate of all stock outstanding.
      - (2) Whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged owners.
      - c. Socially and economically disadvantaged individual means a person who is a citizen (or lawful permanent resident) of the United States, and who is:

- (1) "African American," which includes persons having origins in any of the Black racial groups of Africa;
- (2) "Hispanic American," which includes persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race;
- (3) "Native American," which includes persons who are American Indians, Eskimos, Aleuts, or Native Hawaiians;
- (4) "Asian-Pacific American," which includes persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, the U.S. Trust Territories of the Pacific Islands (Republic of Palau), the Commonwealth of the Northern Marianas Islands, Macao, Fiji, Tonga, Kirbati, Juvalu, Nauru, Federated States of Micronesia, or Hong Kong;
- (5) "Subcontinent Asian American," which includes persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka;
- (6) A Woman;
- (7) Any additional groups whose members are designated as socially and economically disadvantaged by the SBA, at such time as the SBA designation becomes effective.

## II. DBE CONTRACT GOALS:

- A. DBE goals are set by the NDR for specific contracts. The specific DBE contract goals are stated on the Required DBE Participation Form included in the proposal. The Contractor must meet or exceed the goal or demonstrate good faith efforts to meet the goal. Requirements for submission of DBE good faith effort information are contained in Section IV of these special provisions.
- B. A current list of certified DBE Contractors will be posted on the NDR website (www.dor.state.ne.us). Only the DBE firms whose names appear on the list will be considered in meeting the contract goal for this project. The DBE firms will be considered only for the items of work listed under the heading, "<u>Nature of Business</u>". DBE firms may request to have additional items of work added to their "<u>Nature of Business</u>"; however, no items of work will be added after 5:00 p.m., ten (10) calendar days preceding the letting.
- C. Contractors shall, as a minimum, seek DBE subcontractors in the same geographic area in which they seek subcontractors generally for a given solicitation. If the contractor cannot meet the DBE goals using DBEs from the normal area, the contractor will expand its search to a reasonably greater geographic area.
- D. Contractors are required to make good faith efforts to replace a DBE subcontractor that is unable to perform with another DBE. In order to ensure compliance with this

requirement, any substitution of DBE subcontractors after execution of the contract must be approved by the NDR.

E. Contractors are also encouraged to use the services of banks owned and controlled by minorities and women; however, this will not be counted toward the contract DBE goal.

III. MEETING DBE CONTRACT GOAL CRITERIA: The award of the contract will be made upon satisfaction of the requirements of these special provisions. The apparent low bidder must either meet or exceed the DBE goals for the contract or satisfy the NDR that good faith efforts were made to meet the goals.

- A. <u>REQUIRED DBE PARTICIPATION INFORMATION:</u> All bidders are required to submit to the NDR the "Required DBE Participation Form" with their bid proposal on the form provided in this proposal.
- B. THE REQUIRED DBE PARTICIPATION FORM SHALL INCLUDE:
  - 1. The names and addresses of the DBE subcontractors that will actually participate in meeting the contract goal.
  - 2. A complete description (by item number or group, etc.) of the work each named DBE subcontractor will perform.
  - 3. The dollar amount of participation by each named DBE subcontractor.
  - 4. Written and signed documentation from the bidder of commitment to use a DBE subcontractor whose participation it submits to meet a contract goal.
  - 5. The apparent low bidder must submit written and signed confirmation from each DBE that it is participating in the contract as provided in the prime contractor's commitment, BY 5:00 P.M. ON THE FIRST WEDNESDAY FOLLOWING THE LETTING. IF THE WEDNESDAY FALLS ON A STATE HOLIDAY, THE TIME WILL BE EXTENDED UNTIL 10:00 A.M. ON THE NEXT OFFICIAL WORKING DAY OF THE NEBRASKA DEPARTMENT OF ROADS.
  - 6. If the contract goal is not met, evidence of good faith efforts.
- C. THE PROPOSAL <u>WILL NOT BE READ</u> IF THE "REQUIRED DBE PARTICIPATION FORM" IS NOT INCLUDED.

IF NO DBE PARTICIPATION IS INTENDED, THE FORM MUST INDICATE THAT GOOD FAITH EFFORT DOCUMENTATION WILL BE SUBMITTED. A BLANK FORM THAT IS SIGNED WILL BE INTERPRETED AS MEANING NO DBE PARTICIPATION IS INTENDED AND WILL BE READ.

LISTING OPTIONS AND/OR ALTERNATES FOR DBE SUBCONTRACTORS AND/OR ITEMS OR GROUPS OF WORK TO BE PERFORMED IS NOT ALLOWED, AND WILL CAUSE THIS BID TO BE DECLARED NON-RESPONSIVE.

REQUIRED DBE INFORMATION SHALL NOT BE SUBJECT TO REVISION AFTER BIDS ARE OPENED.

- D. The information submitted on the DBE Participation Form will be verified by the NDR. Errors in addition will be treated in accordance with current NDR specifications and procedures.
- E. If the use of non-certified firms or the use of DBE firms not certified for the type of work indicated results in under achievement of the goal, the bid will be declared non-responsive.
- F. If, at any time prior to execution of the contract, previously undetected errors result in under-achievement of the goal, the low bidder, along with the other bidders on the project, will be given 5 days from receipt of notification by the NDR to submit good faith information as outlined in Section IV of these specifications.
- G. <u>REQUIRED BIDDERS LIST INFORMATION</u>: All bidders must provide to the NDR the identity of <u>all firms</u> who bid or quote subcontracts on DOT-assisted projects, including both DBEs and non-DBEs. This information must be provided with the bid proposal on a form provided to the contractors by the NDR Contracts Office.

<u>IV. GOOD FAITH DETERMINATION:</u> It is the low bidder's responsibility to meet the DBE contract goals or to provide sufficient information to enable the NDR to determine that, prior to bidding, the low bidder actually made good faith efforts to meet such goals.

- A. The NDR will, in the "Apparent Low Bidder" listing (available 24 hours after bid opening) identify all projects which contain a DBE goal. The listing will indicate the apparent low bidder's status in attaining the goal, i.e. "Contractor Meets DBE Goal," or "Contractor Requires Good Faith Determination."
- B. If the low bidder's "Required DBE Participation Form" submitted with the bid indicates the DBE contract goal will be met, and the NDR concurs, the contract will proceed toward award and the low bidder need not submit any further DBE information prior to award.
- C. <u>Good Faith Information Submittal:</u> If the contract DBE goals have not been met, the "Apparent Low Bidders" listing will reflect that the apparent low bidder is required to submit good faith effort information. Complete and accurate documented information to support a good faith efforts determination <u>MUST BE SUBMITTED BY 5:00 P.M. ON THE</u> <u>FIRST WEDNESDAY FOLLOWING THE LETTING.</u> <u>IF THE WEDNESDAY FALLS ON</u> <u>A STATE HOLIDAY, THE TIME WILL BE EXTENDED UNTIL 10:00 A.M. ON THE</u> <u>NEXT OFFICIAL WORKING DAY OF THE NEBRASKA DEPARTMENT OF ROADS.</u>
- D. Any other bidder on the contract who requires a good faith effort submittal must also follow the time frames set forth in "C" above if they wish to be considered for award of the contract. Any bidder who does not meet the submittal deadlines, <u>WILL BE NOT BE ELIGIBLE FOR AWARD OF THE CONTRACT</u>. (The only exception is a case where the apparent low bidder who met the goal initially is declared ineligible for the award for reasons other than DBE goal attainment.) If this results in a new apparent low bidder who did not initially meet the goal, <u>ALL</u> other bidders on the contract indicating good faith effort will be notified, and given 5 days after receipt, to submit complete information to support their good faith efforts. Bidders are cautioned by the NDR to retain documentation of their good faith efforts until an award is made, or all bids are rejected.
- E. The NDR will review all information submitted to determine whether the apparent low bidder actually made good faith efforts to meet the contract goal. The decision as to whether the good faith efforts are acceptable will be made jointly by a committee

comprised of the NDR' Highway Civil Rights Coordinator, the Contracts Letting Manager, and the Legal Counsel.

A NDR determination that the low bidder's information failed to show acceptable good faith efforts shall be cause for declaring the low bid non-responsive. In making a determination, information submitted by other bidders will be considered. If the low bid is declared non-responsive, the above procedure will be applied to the next lowest bid, and other higher bids if necessary, until a bid is found that meets the goal, or establishes that good faith efforts were made to meet it. NDR reserves the right to reject all bids and readvertise the contract if none of the bids result in a satisfactory level of DBE participation at a reasonable price.

- F. <u>Establishing Good Faith Efforts</u>: To demonstrate good faith efforts to meet the DBE contract goals, documentation shall be maintained and submitted to the NDR as set forth above. Such documentation may include any or all of the following: (This list is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases.)
  - 1. Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all Certified DBE firms that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE firms to respond to the solicitation. The bidder must determine with certainty if the DBE firms are interested, by taking steps to follow up initial solicitations.
  - 2. Selecting portions of the work to be performed by DBE firms in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform work items with its own workforce.
  - 3. Providing interested DBE firms with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
  - 4. (1) Negotiating in good faith with interested DBE firms. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers, and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation should include the names, addresses, and telephone numbers of DBE firms that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE firms to perform the work.

(2) A bidder using good business judgement would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE firms, is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Prime contractors are not, however, required to accept higher quotes from DBE firms if the price difference is excessive or unreasonable.

- 5. Not rejecting DBE firms as being unqualified without sound reasons based on a thorough investigation of their capabilities. The contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection, or non-solicitation of bids in the contractor's efforts to meet the project DBE goal.
- 6. Making efforts to assist interested DBE firms in obtaining bonding, lines of credit, or insurance as required by the recipient or contractor.
- 7. Making efforts to assist interested DBE firms in obtaining necessary equipment, supplies, materials, or related assistance or services.
- 8. Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.
- G. If the NDR's preliminary finding is that the bidder did not demonstrate a satisfactory effort to meet the contract goal, the bidder may appeal the decision by submitting a written request for reconsideration within three (3) days of the decision. The bidder may then present information either in a written narrative supporting its good faith effort submittal, or may appear in person. Any <u>new</u> information not included in the original submittal will not be used in the final determination. The appeal will be heard by a Hearing Officer appointed by the NDR' Director. The Hearing Officer will be an individual who is knowledgeable about the DBE Program and its good faith efforts provision, but who had no part in the initial decision.

The Hearing Officer will hear the appeal within five (5) days of receipt of the written request, and will issue a written decision within three (3) days after the appeal. The reconsideration process is administratively final and has no further appeal.

## V. COMMERCIALLY USEFUL FUNCTION:

A. A contractor may count toward its DBE goals only expenditures to DBE firms that perform a commercially useful function in the work of a contract. A DBE firm is considered to perform a commercially useful function when it is responsible for the execution of a distinct element of the work of a contract, and carrying out its responsibilities by actually performing, managing, and supervising the work involved. The DBE firm must also be responsible for materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, installing (where applicable), and paying for the material.

## Guidelines:

1. As a general rule, it is expected that workers on a DBE subcontract shall be regular employees of the DBE subcontractor, and shall be listed on the subcontractor's payroll. A regular employee is a person who would normally be working for the DBE firm on any other subcontract with any other prime

contractor, and whose immediate past employment has not been with the prime contractor on the present project, or with the renter-lessor of equipment being used on the present project.

2. On DBE subcontracts, the DBE must perform or exercise responsibility for at least 30 percent of the total cost of its contract with its own work force, or the DBE will not be considered to be performing a commercially useful function. (If a DBE subcontracts part of its work to another firm, the value of the subcontracted work may be counted toward DBE goals <u>only</u> if the DBE's subcontractor is itself a DBE. Work that a DBE subcontracts to a non-DBE firm <u>does not count</u> toward DBE goals.)

Operators of leased specialized equipment are included under this provision. In any case, <u>all</u> employees shall be listed on the DBE firm's payroll and paid by that firm.

- 3. In addition, a DBE subcontractor shall be required to designate a project superintendent/foreman who is a regular employee of the subcontractor, and who shall be active in the day-to-day management of the project.
- 4. DBE subcontractors who purchase supplies and materials from the prime contractor, which are to be incorporated into the project <u>WILL NOT</u> count toward the established DBE contract goals.
- 5. TWO PARTY CHECKS: The NDR does not prohibit the practice of a DBE firm and a prime contractor using two party checks, so long as the prime contractor acts solely as a guarantor, and the funds do not come from the prime contractor. <u>Two party checks cannot be used unless formal written requests to do so from</u> the DBE firm and the prime contractor are delivered to the NDR Disadvantaged <u>Business Enterprise Office and the NDR DBE Office gives its written approval to</u> <u>do so.</u> The NDR will closely monitor the use of two party checks to avoid abuse of this practice.

## VI. PROHIBITED PRACTICES:

- A. An area of special concern is exclusive arrangements between the prime contractor and DBE subcontractors. The DBE subcontractors must be willing to contract with more than one prime contractor.
- B. Any subcontracting arrangement which artificially inflates DBE participation is not acceptable. Of utmost concern are the interjection of DBE middlemen or passive conduits and arrangements in which a DBE subcontractor is acting essentially as a broker.

## VII. ADMINISTRATION OF THE DBE PROGRAM:

A. The Nebraska Department of Roads intends to achieve its annual overall DBE participation goal with a "narrowly tailored" DBE Program that meets the "strict scrutiny" requirements as defined by case law. The NDR will adhere to all of the rules and regulations of the DOT's DBE Program Regulations as contained in CFR 49 part 26.

It is the intention of the NDR that DBE subcontractors be independent companies, and function in the same capacity as majority contractors. It is not the intention of the NDR

to be involved with "in name only" DBE subcontractors who are not providing a commercially useful function to the highway industry. The following will be used in administering the DBE Program.

## Situation #1:

Prime Contractor "A" subcontracts to a DBE subcontractor, who performs the work with its own workforce (the employees work on a full-time basis for the DBE firm, or were hired from a union hall, employment service, or other hiring sources by the DBE firm, and are supervised by a full-time employee of the DBE), and uses its own equipment, or equipment rented or leased from an equipment dealer. Prime Contractor "A" is not involved in the DBE firm's operation, other than coordinating when the work is to be performed, and/or other normal industry practices of contracts between a prime contractor and a subcontractor.

# THIS IS THE IDEAL SITUATION, IS TOTALLY ACCEPTABLE, AND IS WITHIN THE INTENT OF THE DBE PROGRAM.

## Situation #2:

Prime Contractor "A" subcontracts to a DBE firm, that performs the work with its own workforce, (the employees work on a full-time basis for the DBE firm, or were hired from a union hall, employment service, or other sources by the DBE firm for the project, and are supervised by a full-time employee of the DBE). The DBE firm uses equipment owned by a majority contractor, (either Prime Contractor "A", or some other majority contractor), on a <u>long-term</u> rent or lease arrangement at rates consistent with normal industry standards, and not leased on an "as equipment is needed" basis. This situation would be no different than the DBE firm leasing or renting equipment from a commercial equipment supplier. Many majority contractors lease equipment, and the action is standard industry practice. <u>THIS IS TOTALLY ACCEPTABLE, AND IS WITHIN THE</u> INTENT OF THE DBE PROGRAM.

## Situation #3:

A DBE firm is a subcontractor to Prime Contractor "A", on a NDR' project. When it is time for the subcontract work to be performed, the work is actually performed using Prime Contractor "A's" equipment, work force, and supervisory personnel. The DBE firm then makes a certified payroll using the names of Prime Contractor "A's" employees. Basically, the subcontract work was performed by Prime Contractor "A". While the NDR cannot tell the DBE subcontractor who to hire, or where to obtain equipment, we find this to be a very close association with the prime contractor, and the DBE's owner is not considered to be in control of the DBE firm, or the project in question. This situation described is not considered to be a commercially useful function, and may be subject to any of the administrative actions as cited in Section VIII, C. below.

Note: If a DBE subcontractor is performing work on a project with his own equipment, workforce and supervisory personnel, and an equipment failure or unusual circumstance occurs, and the prime contractor rents or loans equipment and/or employees on a short-term basis to the DBE, the NDR could find this acceptable as long as this only occurs occasionally and is kept to an absolute minimum.

## Situation #4:

A DBE firm is a subcontractor to Prime Contractor "A" on a NDR project. When it is time for the subcontract work to be performed, the work is actually done using the workforce, equipment, and supervisory personnel of a majority contractor, Contractor "B". The DBE firm makes a certified payroll showing Contractor "B's" employees. While the NDR cannot tell the DBE subcontractor who to hire, or where to obtain equipment, this condition is not considered to be within the intent of the DBE Program. In reality, majority Contractor "B" is the one that performed the work. The NDR does not consider this to be a commercially useful function, as Prime Contractor "A" is actually subcontracting to majority Contractor "B", in an unapproved status, rather than the DBE firm. This situation described is not considered to be a commercially useful function, and may be subject to any of the administrative actions as cited in Section VIII, C. below.

## Situation #5:

Prime Contractor "A" is buying supplies from a DBE supplier or contractor to fulfill the DBE goal. This is only acceptable if the DBE firm is a true supplier. The mere fact that the DBE firm purchases the material from another supplier, then adds some cost and sells the material to a prime contractor, does not constitute the DBE as being a supplier. A supplier must have an inventory and be generally recognized as a material supplier. This situation described may be subject to any of the administrative actions as cited in Section VIII, C. below.

## Situation #6:

A DBE firm is a subcontractor to Prime Contractor "A". When it is time for the subcontract work to be performed, the DBE firm brings in its workforce to do the work, and uses equipment already at the site that belongs to Prime Contractor "A". The DBE subcontractor says it is leasing the equipment from Prime Contractor "A". The NDR will closely review this arrangement. This situation resembles a "specific equipment lease" where the equipment is made available on a convenience basis to the DBE firm. The test is whether or not the DBE firm can use the equipment at the DBE's convenience, and not be tied to the availability of the equipment by Prime Contractor "A". If the equipment lease arrangement indicates the DBE firm has total control of the equipment, but in fact Prime Contractor "A" controls the equipment, the NDR would question the relationship to determine whether or not a commercially useful function had been provided. This situation described may be subject to any of the administrative actions cited in Section VIII, C. below.

The above situations are very broad and general. While it is known that many different situations may arise, these are basic guidelines used to administer the DBE Program.

The NDR is more than willing to discuss particular situations with either DBE firms or prime contractors prior to a letting in the hope of developing DBE firms.

## VIII. INVESTIGATORY POWERS, ADMINISTRATIVE PROCEDURES FOR ENFORCEMENT AND PENALTIES

- A. INVESTIGATORY POWERS:
  - 1. The NDR specifically reserves the right and power to investigate, monitor and/or review all actions taken, statements made, documents submitted, by any contractor, subcontractor or DBE firm under the terms of these provisions.

### B. ADMINISTRATIVE PROCEDURES FOR ENFORCEMENT:

Whenever the NDR believes a contractor, subcontractor or DBE firm may not be operating in compliance with the terms of these provisions, the NDR will conduct an investigation. If the NDR finds any person or entity not in compliance with these provisions, the NDR will notify such person or entity in writing as to the specific instances or matters found to be in non-compliance. At the option of the NDR, the person or entity shall then be allowed a reasonable time to correct any deficiencies noted, and to come into compliance. In the event that the person or entity cannot, thereafter, come into compliance, or fails or refuses to do so, then the NDR may impose one or more of the penalties hereafter provided for. It is specifically provided by the NDR that any person or entity will be found to be out of compliance with these provisions if an investigation reveals any violation or act of such serious or compelling nature that the violation or act indicates a serious lack of business integrity or honesty.

## C. PENALTIES:

- 1. In the event the NDR finds any contractor, subcontractor, or DBE firm, to be out of compliance with these provisions, the NDR may impose one or more of the following sanctions:
  - a. Termination of the contract.
  - b. The DBE firm may be decertified and/or suspended from participating in the NDR' DBE Program.
  - c. The prime contractor may not be able to count the work performed toward his project DBE goal, and if possible to do so, may need to subcontract other work on the project to DBE subcontractors to achieve the goal.
  - d. The contract items involved may be considered for a monetary reduction equal to the amount of work not done by the DBE subcontractor.
  - e. The prime contractor may be suspended and/or debarred.
  - f. If at any time during the life of the contract, it is determined that the contractor is out of compliance with these provisions, the NDR may withhold payment of progress payments.
  - g. If at the completion of the project, the contractor is determined to be out of compliance, the NDR may sustain damages, the exact extent of which would be difficult or impossible to ascertain and, therefore, in order to liquidate such damages, the monetary difference between the amount stated by the contractor and the amount actually paid to the DBEs will be

deducted from the contractor's payment as liquidated damages. These damages would be in addition to any liquidated damages assessed in accordance with Subsection 108.08 of the Standard Specifications.

- h. Referral to the Attorney General for possible prosecution for fraud.
- i. Other action as appropriate, within the discretion of the NDR.

## DISADVANTAGED BUSINESS ENTERPRISE (DBE) GOAL (S1-9-0801)

ALL BIDDERS SHALL SUBMIT WRITTEN ASSURANCE THAT THE MINIMUM GOAL FOR DISADVANTAGED BUSINESS ENTERPRISE (DBE) PARTICIPATION WILL BE MET. THE REQUIRED DBE PARTICIPATION FORM INCLUDED IN THIS PROPOSAL SHALL BE USED. The bidder shall submit the name and address of the DBE(s), a complete description of the participation by the DBE(s), and the dollar value of the participation. If the bidder cannot meet the minimum goal for DBE participation, as specified herein, the bidder shall submit complete documentation of its efforts, following the time limits set forth in IV. A., "Good Faith Information Submittal". These efforts shall include but not be limited to those stated previously in IV. E., "Establishing Good Faith Efforts".

Bidders that fail to meet DBE goals or fail to demonstrate sufficient good faith efforts shall be declared non-responsive and ineligible for award of the contract.

Bidders shall assume the responsibility of determining if they are the apparent low bidders by contacting the Nebraska Department of Roads, Contract Lettings Section in Lincoln, Nebraska. Such information is made public 24 hours after the announced time for opening bids. This information is available from the NDR' Internet web site (http://www.dor.state.ne.us/).

The contract shall be awarded to the lowest responsive responsible bidder.

The standard NDR' procedure concerning subcontractors and suppliers shall apply.

The DBE firms identified at the time of bid opening are the firms to whom subcontracts will be issued. The work subcontracted to be done, and the amount to be paid for the work, shall be as identified at the time of bid opening.

If the prime contractor desires to alter this list after execution of the contract, it must demonstrate to the NDR that the listed DBE firm(s) is unable to perform, and provide the necessary written justification for approval. Justification must also include written documentation from the affected DBE firm(s) stating their position on the prime contractor's request. There must be a solid basis for any change.

Any substitution of the named DBE firms must be approved by the Department of Roads Disadvantaged Business Enterprise Office. Substitution of DBE's will only be allowed when the DBE firm(s) is not able to perform because of default or over-extension on other jobs or other similar justification. A prime contractor's ability to negotiate a more advantageous contract with another subcontractor is not considered as a valid basis for change. PRIOR TO FINAL PAYMENT THE FOLLOWING FORMS MUST BE COMPLETED AND SUBMITTED TO THE NDR DISADVANTAGED BUSINESS ENTERPRISE OFFICE.

- A. DR Form 441, DBE I. This form shall be filled out by the prime contractor, indicating the DBE firms used, actual work performed, and actual amount of money paid to the DBE Firms.
- B. DR Form 442, DBE II. This form shall be filled out by the DBE subcontractor, indicating the name of the DBE firm, actual work performed, and actual amount of money received from the prime contractor.
- C. The above referenced forms are available from the NDR' Disadvantaged Business Enterprise Office, upon request. The forms are also available electronically from the NDR' Internet web site (http://www.dor.state.ne.us/).

The Code of Federal Regulations, Title 49, Part 26 and the Nebraska Department of Roads' Disadvantaged Business Enterprise (DBE) Program, are hereby made a part of and incorporated by this reference into this proposal. Copies of these documents are available, upon request, from the Nebraska Department of Roads, Disadvantaged Business Enterprise Office, P.O. Box 94759, Lincoln, Nebraska 68509-4759.

## SUBLETTING OR ASSIGNING OF CONTRACT (S1-9-0801)

Prior to beginning work, a copy of all executed subcontracts, written agreements and/or lease agreements used to meet DBE goals shall be submitted to the construction engineer for forwarding to the minority business office. These copies must contain prices.

## PROMPT PAYMENT CLAUSE:

The prime contractor shall include a "Prompt Payment Clause" as a part of <u>every</u> <u>subcontract</u> (including second tier subcontracts) for work and material. The "Prompt Payment Clause" will require payment to <u>all subcontractors for all labor and material</u>, for work completed, within twenty (20) calendar days of receipt of progress payments from the NDR for said work. The "Prompt Payment Clause" will also stipulate the return of retainage within thirty (30) calendar days after the subcontractor achieves the specified work as verified by payment from the NDR.

The failure by the prime contractor to carry out the requirements of the "Prompt Payment Clause" and/or timely return of retainage, without just cause, is a material breech of this contract, which may result in the NDR 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 NDR deems appropriate.

NOTE: The prime contractor may withhold payment only for just cause, and must notify the NDR in writing of its intent to withhold payment prior to actually withholding payment. The prime contractor shall not withhold, delay or postpone payment without first receiving written approval from the NDR.

## DBE GOAL CREDIT (S1-9-0801)

It is the intent of the NDR to assure eligible DBE firms have a "level playing field" and equal opportunity to participate in federal-aid contracts, and maintain the integrity of the DBE program. DBE participation is counted toward goals as follows:

When a DBE firm participates in a contract, only the value of the work actually performed by the DBE firm counts toward the goal.

1. The entire amount of that portion of a construction contract that is performed by the DBE firm's own forces is counted toward the goal. This includes the cost of supplies and materials obtained by the DBE firm for the work of the contract, including supplies purchased or equipment leased by the DBE, but not supplies or equipment the DBE purchases or leases from the prime contractor or its affiliate.

Example: A DBE firm furnishing and erecting steel or concrete superstructure members, furnishing and driving piling for bridge structures, furnishing and placing prestressed concrete deck panels, and furnishing and placing panels for retained earth walls <u>will</u> be considered a commercially useful function for attaining contract goals for disadvantaged business enterprise (DBE) participation unless the supplies or materials are purchased from the prime contractor or its affiliate.

When a DBE subcontractor is responsible for substantially constructing a complete structure the total value of the subcontract may be credited to the DBE goal.

Paragraph 8.a. (5) of Subsection 109.07 in the 1997 English Edition of the Standard Specifications is void and superseded by the following:

When applicable a DR Form 441, "Identification of DBE Goal Achievement".

B. Manufacturers, Suppliers, and Haulers:

<u>DBE Manufacturers</u> may be given 100% credit towards the DBE goal for products they produce for the contract.

<u>DBE Suppliers</u> may be given 60% credit towards the DBE goal for products they furnish for the contract.

<u>DBE Haulers</u> may be given 100% credit towards a DBE goal for the delivery fees charged.

A DBE firm certified as both a supplier and hauler may be given 60% credit for supplying a given product and 100% credit for hauling that same product.

See the DBE Goal Credit Table for a guide to DBE credit.

## DESCRIPTIONS (S1-9-0801)

<u>Manufacturer</u> - To be certified as a manufacturer, a DBE firm must operate or maintain a factory or establishment that produces, <u>on the premises</u>, the materials, supplies, articles or equipment required under the contract and of the general character described by the specifications.

<u>Supplier</u> - A DBE supplier, or regular dealer, is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles, or equipment of the general character described by the specifications, and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business. To be a supplier or regular dealer, the firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question.

A DBE firm may be a supplier or regular dealer in such <u>bulk products</u> as petroleum products, steel, cement, gravel, stone, or asphalt without owning a place of business if the DBE firm both owns and operates distribution equipment for the products. Any supplementing of a DBE supplier's or regular dealer's own distribution equipment shall be by a long-term lease agreement and not on an ad hoc or contract-by-contract basis.

<u>Hauler</u> - The DBE firm must be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract. There cannot be a contrived arrangement for the purpose of meeting DBE goals.

The DBE firm must itself own and operate at least <u>one</u> fully licensed, insured, and operational truck used on the contract.

The DBE firm receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs. The DBE firm may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE firm that leases trucks from another DBE firm receives credit for the total value of the transportation services the lessee DBE firm provides on the contract.

The DBE firm may also lease trucks from a non-DBE firm, including an owner-operator. The DBE firm that leases the trucks from a non-DBE firm is entitled to credit only for the fee or commission it receives as a result of the lease agreement. The DBE firm does not receive credit for the total value of the transportation services provided by the lessee, since these services are not provided by a DBE firm.

For the purposes of the above paragraphs, a lease must indicate that the DBE firm has exclusive use of, and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE firm, so long as the lease gives the DBE firm absolute priority for the use of the leased truck. Leased trucks must display the name and identification number of the DBE firm.

If a DBE firm performs in the manner outlined above, it will be performing a commercially useful function.

Pass-throughs and/or brokering will not be tolerated. A pass-through/brokering situation is one in which a DBE firm contracts to haul materials for a project, then hires another hauler to actually perform on the contract.
## CERTIFICATION (S1-9-0801)

Certain DBE's may be certified in multiple classifications as manufacturers, suppliers, and haulers. The certification will be limited by the products being manufactured, supplied, or hauled.

For example, a manufacturer of certain steel products or aggregates, may also be a supplier of products they store or deliver, but do not manufacture.

A supplier of bulk products, such as aggregates or fuel, may also be certified as a hauler.

## DBE GOAL CREDIT TABLE

	Type of firm used as source of construction materials:			
	DBE Manufacturer	DBE Supplier (Regular Dealer) NOT BULK PRODUCTS	DBE Supplier (Regular Dealer) BULK PRODUCTS	Non-DBE Manufacturer or Supplier
Delivered by: Amount of DBE credit allowed, expressed as percentage of cost:				
Non-DBE Delivery Firm	100% of Materials	60% of Materials	No Credit	No Credit
(Hauler)	0% of Hauling	0% of Hauling		
Another DBE Delivery Firm	100% of Materials	60% of Materials	60% of Materials	100% of Hauling
(Hauler)	100% of Hauling	100% of Hauling	100% of Hauling	
Manufacturer or Supplier is also certified to haul	100% of All	60% of Materials 100% of Hauling	60% of Materials 100% of Hauling	Not Applicable

# CERTIFICATION FOR FEDERAL-AID CONTRACTS (S1-11-0801)

The prospective participant certifies, by signing and submitting this bid or proposal, 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 prospective participant also agrees by submitting his or her bid or proposal 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.

## **STATUS OF UTILITIES**

The following information is current as of February 11, 2002.

Utility facilities, aerial and/or underground may exist within this project. The contractor should request a utility status update at the project preconstruction conference, and/or prior to starting work.

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

The following utilities have facilities within the project area, and have been provided project plans.

<u>Village of Dawson:</u> Has existing 6" water main that parallels and crosses both sides of the highway project. This water main will be constructed with our highway project using the State Contractor.

<u>Nebraska Public Power District:</u> Has existing facilities paralleling the right side of the highway and will be sharing poles with ALLTEL Communications.

<u>ALLTEL Communications:</u> Has existing facilities paralleling the right side of the highway and will be sharing poles with Nebraska Public Power District.

Galaxy Cablevision: Has existing facilities within the project area.

<u>Qwest Communications:</u> Has existing facilities within the project area.

All utility rehabilitation will be accomplished prior to or concurrent with construction.

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

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

## SUBCONTRACTOR BIDDERS LIST INFORMATION (S1-43-0801)

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

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

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

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

105.08 - Authority and Duty of the Inspector

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

105.13 – Tentative Acceptance of Portions of the Project

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

## LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC (S1-43-1001)

107.14 – Opening of Sections of the Project to Traffic

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

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

107.15 – Contractor's Responsibility for Work

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

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

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

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

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

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

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

## AWARD AND EXECUTION OF CONTRACT

The first sentence of Subsection 103.03 in the Standard Specifications is void and superseded by the following:

The bidder to whom the contract is awarded shall furnish within 5 days after the award, a contract bond, in a sum equal to the full amount of the contract.

The first sentence of Subsection 103.04 is void and superseded by the following:

The contract shall be signed by the successful bidder and returned, together with a satisfactory bond, within 5 days from the date of award.

Paragraph 1.a. of Subsection 103.05 is void and superseded by the following:

a. Fails to file an acceptable performance bond within 5 days from the date of award.

## THE BURLINGTON NORTHERN AND SANTA FE RAILWAY COMPANY

## WORK TO BE PERFORMED BY THE RAILROAD COMPANY

The Burlington Northern and Santa Fe Railway Company will perform, or cause to be performed, such temporary and permanent alterations of telegraph, telephone, signal wires and signals, tracks or other facilities on its right of way as are required. According to the best information available at this time it may be necessary for the Railroad Company to perform work within the limits of the project concurrently with the highway construction work. The company agrees to furnish to the State a drawing showing the location of the existing facilities and their relocation.

The Railroad Company shall provide an inspector or inspectors for any direct labor work undertaken by the Railroad Company on or in connection with the project.

## RAILROAD SAFETY TRAINING (S1-22A-0801)

The railroad company requires that anyone working within the railroad right-of-way attend a "Rail Safety Training" class. The Contractor, or their representative, will not be allowed on railroad right-of-way until they have successfully completed the mandatory safety training. The railroad will present a certification card to everyone who completes their safety training, and construction crews will be required to have their safety training certification cards in their possession at all times when they are working on railroad right-of-way.

The contractor will be responsible for all costs associated with attending this training class.

## FLAGGING PROTECTION

When, for any reason, the Manager Public Projects or other duly authorized representative of The Burlington Northern and Santa Fe Railway Company shall deem it necessary to employ flagmen for the protection of train operations, such flagmen shall be furnished by the Railroad Company and all costs for such flagmen shall be borne by the contractor.

Prospective bidders shall familiarize themselves fully with the Railroad Company's requirements for flagging protection before bidding on the work.

## REIMBURSEMENT TO RAILROAD COMPANY FOR FLAGGING COSTS (S1-24-0801)

At all times while performing such work, flagmen shall be deemed to be employees of the Railroad Company.

The contractor shall reimburse the Railroad Company directly for this flagging protection and shall make a showing that the Railroad Company has been reimbursed for all necessary flagging required by his operations before final payment for the work contemplated in the contract is made by the State.

Direct payment for flagging protection as required in these special provisions will not be made but it shall be considered that this work is subsidiary to any or all of the items for which the contract provides that direct payment shall be made.

## FLAGGING CONDITIONS (S1-25-0801)

Flagging and other protective services and devices will be provided by the Company to protect its facilities, property and movements of its trains or engine.

In general, the Company will furnish such flagging or other protective services and devices:

- (a) For any excavation below elevation of track subgrade, if, in the opinion of the Company's representative, track or other railroad facilities may be subject to settlement or movement.
- (b) During any clearing, grubbing, grading or blasting in proximity to the railroad, which, in the opinion of the Company's representative, may endanger or interfere with the railroad's facilities or operations.
- (c) When any of the Contractor's operations are carried on or within the Railroad Company's right of way and in the opinion of the Company's representative could endanger Company's facilities or create a hazard to the Company's operations.

## PROTECTION OF UTILITIES (S1-26-0801)

Before the contractor begins his operations on the railroad right-of-way he shall confer with the official representatives of the State and the Railroad Company with regard to any underground or overhead utilities which may be on or in close proximity to the site of the work. The contractor shall take such measures as the State or Railroad Company may direct in protecting those utilities properly throughout the period his construction operations are in progress. The party or parties owning or operating overhead or underground utilities shall perform the actual work of moving, repairing, reconditioning or revising those utilities, except as otherwise provided in the contract. Whenever and wherever such operations are undertaken by owners of utilities, the contractor shall cooperate to the extent that ample protection of their work will be provided so that the entire work that is contemplated in the contract may be expedited to the best interests of all concerned, as judged by the engineer for the State.

The contractor shall be responsible for any and all damages to utilities that are permitted to remain in place, or to reconstructed utilities in the vicinity, which may be due either directly or indirectly to his operations, and shall repair promptly any such damaged property to the satisfaction of the engineer and the owner of the property, or shall make payment to such owners for repairs as may become necessary on account of damages that are due to his operations.

Direct payment for this work will not be made but it shall be considered that the protection of the utilities is subsidiary to any or all of the items for which the contract provides that direct payment shall be made.

## **RAILROAD SPECIAL PROVISIONS**

Before the contractor begins his operations on railroad right of way, he will contact the railroad at least 10 days in advance by telephone at 1-800-533-2891 (a 24-hour number) to determine if fiber optic cable is buried anywhere on the railroad property to be used by the contractor.

The railroad will advise the contractor if fiber optic cable exists at the location(s) being occupied and will dispatch a representative to locate, mark and protect each cable in the vicinity of the work to be performed by the contractor.

The railroad will need the Railroad Mile Post involved which is 33.37 on this project.

The contractor, for his own protection, should obtain and record the "Trouble Log Number" from the railroad for verification of the call made.

## WRITTEN NOTICE TO RAILROAD COMPANY

The contractor shall give written notice to the Manager Public Projects or to his authorized representative, at least ten days in advance of the date on which he expects to begin any work under or adjacent to any of the tracks of the Railroad Company or he expects to begin any construction work on the right of way of the Railroad Company. The contractor shall also give written notice to the Manager Public Projects no later than ten days after completion of all work on the railroad company's right of way.

## PROTECTION OF PROPERTY (S1-29-0801)

The contractor shall use the utmost care to guard against accidents or cause the least possible interference with the operation of trains of the Railroad Company and the telephone, telegraph or signal lines of the Railroad Company or of any tenant of the Railroad Company's right-of-way. The contractor shall use the utmost care in guarding against injury to underground and overhead public utilities and services at or near the site of the work.

All work to be done under this contract shall be handled by the contractor so as to interfere as little as is reasonably possible with the use of tracks, wires, signals and property of the Railroad Company or its tenants, and the underground or overhead services of public and private utilities, and the contractor shall be responsible for any damages which may be sustained by the Railroad Company, its tenants, employees, passengers or freight in its care, or by the owners of any public or private overhead or underground services caused by such interferences which could have been avoided by the proper handling of said work. The contractor shall discontinue immediately, upon request of the engineer, any practices or actions which, in the opinion of the engineer, are unsafe or cause damage to underground or overhead services of public or private utilities, or which might result in delays to trains, engines or cars, or damage to tracks, roadbed, telephone, telegraph or signal wires.

The contractor shall take all precautions for the purposes of protecting the embankment of all railroad tracks as may be determined necessary by the authorized representative of the Railroad Company. The contractor agrees to affix the seal of a registered professional engineer licensed to practice in the State of Nebraska on all plans and calculations pertaining to details for sheeting or otherwise protecting excavations next to or adjacent to railroad tracks if necessary and noted on the State's plans. The contractor also shall take all precautions for the protection of underground and overhead services either public or private, as may be determined by the engineer.

## **PROTECTION OF PROPERTY**

The contractor shall not place or permit to be placed, or remain, piles of material or other temporary obstructions closer than 12 feet (3.7 meters) to the nearest rail of any track or closer than 23 feet (7 meters) above the top of any rail except that the construction forms and scaffolding may be placed no closer than 12 feet (3.7 meters) from the centerline of any such track.

Any changes necessary in the clearance set forth above shall be made only by special arrangements with the Manager Public Projects of the Company or his authorized representative.

The contractor agrees to affix the seal of a registered professional engineer licensed to practice in the State of Nebraska on all plans and calculations pertaining to details for sheeting or otherwise protecting excavations next to or adjacent to railroad tracks if necessary and noted on the State's plans.

## RAILROAD CROSSINGS (S1-31-1201)

The Contractor shall use only public roadways or special crossings that are specifically shown on the plans to cross railroad tracks. If the Contractor should desire a temporary crossing for construction purposes at a location other than an existing public crossing, provisions for such crossing shall be negotiated with the railroad by the Contractor, and all costs for such crossing shall be borne by the Contractor.

Prospective bidders should familiarize themselves with railroad temporary crossing and insurance requirements before bidding on the work.

## INSPECTION (S1-32-0801)

Subsection 105.09 in the Standard Specifications is amended to provide also that the work shall be subject to the inspection of the properly authorized representatives of the railroad and that such inspection shall in no sense make the railroad a party to this contract and will in no way interfere with the rights of either party hereunder.

## INSURANCE (S1-33-1201)

The State shall require its Contractor or any of his subcontractors to carry regular Contractor's Public Liability and Property Damage Insurance as specified in Federal-Aid Policy Guide 23 CFR 646A providing for a limit of not less than Two Million Dollars (\$2,000,000) for all damages arising out of bodily injuries to or death of one person, and subject to that limit for each person, a total limit of not less than Four Million Dollars (\$4,000,000) for all damages arising out of bodily injuries to or death of two or more persons in any one accident and providing for a limit of not less than Two Million Dollars (\$2,000,000) for all damages to or destruction of property in any one accident and subject to that limit a total (or aggregate) limit of not less than Four Million Dollars (\$4,000,000) for all damages to or destruction of property during the policy period. A certified copy of the policy providing said Contractor's Public Liability and Property Damage Insurance executed by a corporation qualified to write the same in the State in which the work is to be performed, in form and substance satisfactory to the Railroad, shall be delivered to and approved by the Railroad prior to the entry upon or use of the Railroad's property by the Contractor.

In addition to any other forms of insurance or bonds required under the terms of the contract and the specifications, the Contractor shall furnish to the Railroad a Railroad Protective Policy in the form provided by Federal-Aid Policy Guide 23 CFR 646A. The combined single limit of said policy shall not be less than Two Million Dollars (\$2,000,000) for all damages arising out of bodily injuries to or death of any person or persons and for all damages arising out of loss or destruction of or injury or damage to property in any one occurrence during the policy period; and subject to that limit, a total (or aggregate) limit of not less than Six Million Dollars (\$6,000,000) for all damages arising out of bodily injuries to or destruction of or injury or damage to property during the policy period. Said insurance policy executed by a corporation qualified to write the same in the State in which the work is to be performed shall be in form and substance satisfactory to the

Railroad and shall be delivered to and approved by the Railroad prior to the entry upon or use of its property by the Contractor.

The above mentioned insurance shall be written in accordance with the Federal-Aid Policy Guide 23 CFR 646A issued by the Federal Highway Administration, which is hereby, through reference, made a part of these provisions.

The State shall require its Contractor or any of its subcontractors to carry a Business Automobile Insurance Policy or equivalent policy with minimum limits of one million dollars (\$1,000,000) for bodily injury and property damage per occurrence on all vehicles which the Contractor or subcontractors, their agents or employees may use at any time in connection with the performance of the work on this project. A certified copy of the policy providing said Business Automobile Insurance executed by a corporation qualified to write the same in the state in which the work is to be performed, in form and substance satisfactory to the companies, shall be delivered to and approved by the companies prior to the entry upon or use of the companies property by the Contractor.

The insurance as hereinbefore specified shall be carried by the Contractor and the Railroad covering all work performed on this project within the limits of the rights-of-way of the Railroad. Said insurance shall be carried until all work required under the terms of the contract is satisfactorily completed, as evidenced by formal acceptance by the State.

The State's Contractor shall cause triplicate originals of the policy or policies covering the Railroad Protective Liability Insurance specified above to be delivered to the State for delivery to the Railroad. The Contractor shall not enter upon or perform any work upon the property or the rights-of-way of the Railroad until the specified originals of the policy or policies have been delivered to and approved by the Railroad. The Contractor shall deliver one original policy of the above described Contractor's Property Damage Liability Insurance and one copy of the Business Automobile Insurance Policy to the State prior to the beginning of any work on the Railroad's right-of-way.

In addition to the above, the Contractor shall indemnify and hold the railroad(s) harmless against and from all cost, liability, and expense whatsoever (including the railroad attorney's fees and court costs and expenses) actually incurred arising out of or in any way contributed to by any negligent act or omission of the Contractor and its employees, for any damage to or destruction of any telecommunications system by the Contractor and its employees on the railroad's property.

## RIGHT OF WAY (S1-34-0801)

The right of way and property which the public has, or will have, by ownership or easement, for the permanent construction and the prosecution of the construction operations, is indicated in the plans or will be defined upon request. Any additional ground, or working or storage space that the contractor may require for his operations, shall be provided by the contractor at his own expense.

## RESTORATION OF RAILROAD COMPANY'S PROPERTY (S1-35-0801)

In the event the contractor shall in any manner move or disturb other property of the Railroad Company, in connection with the use of the said property, then, and in that event, the contractor shall, as soon as possible and at its sole expense, restore such property to the same condition as it was in before such property was moved or disturbed, and the contractor shall indemnify and save harmless the Railroad Company against and from any and all liability, loss, damages, claims, demands, costs and expenses of whatsoever nature, including court costs and attorneys' fees, which may result from injury to or death of persons whomsoever, or damage to or loss or destruction of property whatsoever, when such injury, death, damage, loss or destruction grows out of or arises from the taking down of any fence, or the moving or disturbance of any other property, of the Railroad Company.

## FINAL CLEANING UP (S1-36-0801)

Subsection 104.08 in the Standard Specifications is amended to provide also that upon the completion of the work contemplated in this contract, the contractor shall remove all machinery, equipment, surplus materials, falsework, rubbish, ditches, and temporary building, furnished or erected by him from within the limits of the right of way of the Railroad Company and shall leave the said right of way in a neat condition satisfactory to the Chief Engineer of the Railroad Company, or his authorized representative.

## PERCENTAGE OF COST OF WORK WITHIN RAILROAD RIGHT-OF-WAY

The following information is furnished to aid in the determination of a proper premium for the Railroad Protective Liability Insurance required elsewhere in these special provisions.

## RAILROAD PROTECTIVE POLICY DATA SHEET

Railroad: The Burlington Northern and Santa Fe Railway Company

Railroad Contact: Robert Carter

Title: Manager Public Projects

Address: 201 North 7<sup>th</sup>, Lincoln, NE 68501

Telephone Number: (402) 458-7515

Project Number: <u>NH-75-1(105)</u>

Project Location: In Dawson

Type of Project: <u>Reconstruction</u>

No. of trains/day: Total: 39

Freight or Coal: <u>39</u> Speed: <u>72</u> mph Passenger <u>0</u> Speed \_\_\_\_\_ mph

No. of Tracks: Mainline <u>1</u> Branchline <u>1</u>

Project Over RR: No X Yes Project Under Railroad: No X Yes

Railroad Shoo-fly Required: No X Yes

Project Parallel to RR: No X Yes If Yes, Number of Miles

Crossings on State Highway or City Street System: No \_\_\_\_\_ Yes X

If Yes, Number of Crossings 1

Pavement or Overlay up to Crossing on County or City Road:

No X Yes If Yes, Number of Crossings

Work to be done by Railroad Install concrete crossing @ DOT No. 083690G

It shall be the contractor's responsibility to contact the railroad for additional information needed to purchase the Railroad Protective Policy.

The percentage of work within railroad right of way that is within 50 feet (15.25 meters) of any railroad track shall be covered by railroad protective insurance. The railroad's ownership of right of way that extends beyond 50 feet (15.25 meters) from the closest track shall be covered under regular Contractor's Public liability and Property Damage Insurance in the amounts specified in this contract.

	Approximate	Approximate	
	Percent of Work	Percent of Work on	
	Within 50 feet	RR/ROW Not Within	
	(15.25 meters) of	50 feet (15.25 meters)	
Group	Centerline of	of Centerline	Description of Work
	Nearest Track	of Nearest Track	
All	0.4_%	0.0_%	

## CONSTRUCTION DETAILS

## FUEL COST ADJUSTMENT PAYMENT (S2-1-0801)

Section 205 in the Standard Specifications and Supplemental Specifications is amended to include the following:

Payment will be made to the contractor for monthly fluctuations in the cost of diesel fuel used in performing the items of work, "Excavation", "Excavation, Borrow", "Excavation, Established Quantity", and/or "Earthwork Measured in Embankment" when the fuel cost fluctuates by more than 10% from the base price defined below. Payments may be positive, negative, or nonexistent depending on the circumstances. Payments or deductions will only be calculated on that portion of the fuel cost fluctuation that exceeds the 10% specified above.

Payments or deductions for the fuel cost adjustment will be included in the contractor's progress estimates; and the payment or deduction authorized for each estimate will be based upon the algebraic difference between the quantities for "Excavation", "Excavation, Borrow", "Excavation, Established Quantity", and/or "Earthwork Measured in Embankment" on the current estimate and the quantities shown on the previous estimate.

The fuel cost adjustment for the current estimate will be computed according to the following formula:

#### FCA=QFD where

- FCA = Fuel cost adjustment, in dollars;
- Q = The algebraic difference between the quantities (in cubic yards or cubic meters) for "Excavation", "Excavation, Borrow", "Excavation, Established Quantity", and/or "Earthwork Measured in Embankment" on the current estimate and the quantities shown on the previous estimate;
- F = 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 .15. For the item of work "Earthwork Measured in Embankment", "F" shall be equal to .20.
  - 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 .74. For the item of work "Earthwork Measured in Embankment", "F" shall be equal to 1.00.

D = Allowable price differential.

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 - 1.10P(b), but not less than zero.

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

D = P - .90P(b), but not greater than zero.

In either case, P(b) shall be the base diesel price, in dollars per gallon (liter), defined as the average of the minimum and maximum prices for No. 2 Diesel Fuel (Oklahoma) published in the first issue of "*Platt's Oilgram Price Report*" for the month in which bids for the work were received.

In either case, P, shall be the current diesel price, in dollars per gallon (liter), defined as the average of the minimum and maximum prices for No. 2 Diesel Fuel (Oklahoma) published in the first issue of "*Platt's Oilgram Price Report*" for the month in which the progress estimate is generated.

## GENERAL CLEARING AND GRUBBING (S2-2-0801)

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

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

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

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

## **REMOVE AND RESET FENCE**

This work shall consist of removing and resetting the existing fence at the location shown in the plans or as designated by the Engineer.

The fence shall be removed by the Contractor and all materials stored or stockpiled in such locations and manner as may be necessary to preserve them intact for future resetting. Responsibility for the care of the materials shall be the obligation of the Contractor.

The fence shall be reset in a manner similar to the existing fence. The Contractor shall replace all materials damaged during removal if directed by the Engineer.

Removing and resetting fence shall be measured by the meter of fence reset.

The total length of fence which is reset and accepted by the Engineer will be paid for at the contract unit price per meter for the item "Remove and Reset Fence." This price shall be considered full compensation for removing, necessary excavation and backfilling, storing and resetting the fence, concrete if required, all labor, equipment, tools and incidentals necessary to complete the work, including replacement of damaged or lost materials.

## CONSTRUCTION AND OBLITERATION OF TEMPORARY ROAD

The 1200 mm culvert pipe for temporary road shall be furnished and installed by the grading contractor. The length of each section of pipe shall not exceed 8 meters. Excavation and connection bands required to install the pipes will be subsidiary to the pipes.

The embankment required to construct the temporary road is included in the pay quantity of Earthwork Measured in Embankment shown in Group 1.

When the temporary road is no longer required, it shall be obliterated by the grading contractor. The temporary surfacing shall be removed, the embankment removed, and the area graded to the original cross sections.

The culvert pipes used for the temporary road shall be removed, salvaged and delivered to the State of Nebraska Maintenance Yard located in Falls City, Nebraska.

The removal of the temporary surfacing shall be as stated elsewhere in the Special Provisions.

The work of obliterating the embankment shall be paid for as "Excavation (Established Quantity)".

The removal of the culvert pipe, will not be measured and paid for directly, but will be considered subsidiary to "Excavation (Established Quantity)".

## SUBGRADE PREPARATION (S3-1-0801)

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.

## **ROADWAY LIGHTING**

Paragraph 2. of Subsection 415.02 in the Standard Specifications is void and superseded by the following:

2. Lamps provided shall be as shown in the plans.

Paragraph 7 of Subsection 1073.02 in the Standard Specifications and Supplemental Specifications is amended to include the following:

1. Conventional Roadway Luminaires

#### A. Housing

Luminaire housing shall be "cobra-head" style, of pressure die-cast aluminum, Large Housing Series. The casting shall be sound, complete, with smooth edges and free of flash. The lower portion of the housing shall be hinged for easy access.

The optical compartment shall be effectively sealed and filtered using a dacron polyester filter. The seal/filter combination shall be provided between the reflector and lens and between the socket assembly and reflector. The seal/filter combination shall be under compression when the assembly is in operating position. Seal/filter combination shall be of heat resisting material selected to last the functional life of the unit, but shall be easily replaceable should they become damaged. The optical compartment door shall be secured in position with a positive latch mechanism. The hinge arrangement shall be designed to prevent accidental disengagement when it is in the open position.

Finish shall be a gray Polyester Powder Coat or an electrodeposited epoxidized acrylic paint coat capable of successfully withstanding 1,000 hours of salt spray test per ASTM B 117.

Attachment hardware used to secure components to the aluminum housing shall be organically coated. Stainless steel or galvanized hardware is not allowed.

Housing must be legibly and durably marked with the lamp size, using ANSI NEMA lamp identification label.

## B. Slipfitter

The slipfitter shall accept 1 1/4 inch to 2 inch (32 mm to 50 mm) pipe.

#### C. Reflector

The reflector shall be hydroformed aluminum with an approved aluminum oxide or silica coating bonded to the inside and outside surfaces.

#### D. Socket

The socket shall be a mogul base porcelain.

#### E. Lens

The lens shall be made of clear tempered flat glass, heat resistant and free from imperfections.

## F. Terminal Block

A terminal block will be required.

#### G. Ballast

The ballast shall be of the magnetic regulator type the high pressure sodium lamp size as indicated in the plans.

Ballast shall be dual volt 120/240 or multi tap, ballast to be factory wired to 240 volt.

The ballast and starting aid shall not incur significant life reduction should the lamp continue in open or shorted circuit condition for a six-month period.

Regulation and Operation:

At nominal line voltage and nominal lamp voltage, the ballast design center will not vary more than 5% from rated lamp wattage. Lamp wattage variation shall not exceed 10% for a  $\pm 10\%$  line voltage variation.

The ballast/lamp combination must provide reliable starting to -40 degrees F (-40 degrees C).

Ballast starting current must not exceed normal operating current.

Power factor must be rated above 90% through all operational modes.

H. Photometric and Performance Requirement

The luminaire shall have "cutoff" control characteristics as follows: Candela per 1000 lumens shall not exceed 100 (10%) at a vertical angle of 80 degrees above nadir, and 25 (2.5%) at an angle of 90 degrees above nadir horizontal.

The luminaires as required by manufacturer to meet specifications shall be installed according to the following parameters: Lamp size and lumens as specified in the plans shall provide a minimum average maintained horizontal illumination level of .90 FC with an average to minimum uniformity ratio not exceeding 3.5:1. The maximum to minimum ratio shall not exceed 7.0:1. Lateral distribution shall be factory-preset to IES distribution to meet specifications.

Parameters used; roadway width 14.9 m, pole spacing 52 m, mounting height 12.2 m, pole setback 2.4 m, mastarm length 1.8 m, maintenance factor .81, pole layout staggered.

I. Substitutions and Variations

No substitutions or variations of the above will be allowed.

J. Approval Requirements

In addition to the requirements for approval of the roadway lighting luminaires outlined in Subsection 1073.02, the contractor may be asked to supply IES formatted photometrics on a 1.44 MB computer disk for each type of luminaire he/she proposes to furnish for the project. The disk must be IBM compatible.

The contractor shall be prepared, upon request, to furnish a working sample of any luminaire proposed for this project (sample will be returned to the contractor or counted as part of the contract quantity).

The right is reserved to reject any and all proposals. The State of Nebraska will decide all questions which may arise as to the quality or acceptability of the luminaire submitted for approval under this specification.

Manufacturers allowed to submit luminaires for approval are as follows:

Crouse Hinds General Electric Hubbell American Electric

## TEMPORARY TRAFFIC CONTROL DEVICES (S4-9-1201)

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

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

## LOCAL MATERIAL SOURCES (S5-1-0801)

Information regarding possible sources of local materials is available at the Materials and Research Division of the Department of Roads, Lincoln, Nebraska.

## **BITUMINOUS PATCHING OF CONCRETE PAVEMENT**

Approximately 34 mg of bituminous patching material will be required to patch approximately 112 spalled areas. The average patch area will be about 3-4 inches (75-100 mm) in depth and cover about 2.5 square feet (0.25 square meters).

Paragraph 4. of Subsection 520.02 in the Supplemental Specifications is void and superseded by the following:

4. Composition of Mixture – The mixture shall consist of the bituminous material and aggregate as described above, plant-mixed in such a manner as to contain 100 - 120 lbs. (45.4 - 54.4 kg) of bituminous material for each finished ton (.9 Mg).

## ASPHALTIC CONCRETE (S5-5-0801)

Paragraph 5. of Subsection 503.02 in the Standard Specifications is void.

## REMOVING ASPHALT SURFACE FROM PAVEMENT

Section 203 in the 1997 Metric Edition of the Standard Specifications is amended to include the removal of asphalt patches, as directed by the Engineer, from existing concrete pavement surface.

Bituminous material produced from the removal operation shall become the property of the Contractor and removed from the project.

Subsection 203.03 is amended to provide for the measurement of Removing Asphalt Surface From Pavement in square meters.

Subsection 203.04 is amended to provide that the removing of asphalt surface shall be paid for at the contract unit price per square meter for the item "Remove Asphalt Surfacing from Pavement."

## MILLING FOR INLAYS AND TRANSITIONS

Cold Milling Class 1 for the asphaltic concrete inlays and transitions will not be measured and paid for but shall be considered subsidiary to the item "Remove Asphalt Surfacing from Pavement."

## **TEMPORARY SURFACING**

The work shall consist of the construction and removal of the temporary surfacing on this project in accordance with plans and these Special Provisions.

The Temporary Surfacing depth shall be as shown in the plans. This provision is applicable to all Temporary Surfacing depths shown in the plans.

Prepare the underlying subgrade, prior to placing the temporary surfacing, in accordance with the requirements of Section 302 in the 1997 Metric Edition of the Standard Specifications.

At the Contractor's option, the surfacing may be constructed using Class "47B-25" Concrete, Class "AX-25" Concrete, Class "PR-25" Concrete or Asphaltic Concrete Type SP4. These materials may be used interchangeably during the course of the work except that surfacing at any individual location must be completed with the same material with which the work was begun.

Asphaltic Concrete used for surfacing shall meet all specifications and sampled and tested as shown in the Supplemental Specifications. The incentive, disincentive pay tables do not apply, however, any Asphaltic concrete not meeting the specifications will be subject to removal.

Subsection 302.04 is amended to provide that the work of subgrade preparation, as well as all water applied as directed by the Engineer, will not be measured for payment, but shall be considered subsidiary to the item "Temporary Surfacing \_\_\_\_\_".

Subsection 304.04 is amended to provide that the work of shoulder construction, as well as all water applied as directed by the Engineer, will not be measured for payment, but shall be considered subsidiary to the item "Temporary Surfacing \_\_\_\_\_".

Subsection 503.05 is amended to provide that Asphaltic Concrete and P.G. Binder used in the Asphaltic concrete will not be measured for payment, but shall be considered subsidiary to the item "Temporary Surfacing \_\_\_\_\_".

Paragraph 10. of Subsection 603.03 is amended to provide that concrete used in the surfacing, reach a minimum strength of 25 MPa before opening to traffic.

Section 603.04 is amended to provide that concrete pavement will not be measured for payment, but shall be considered subsidiary to the item "Temporary Surfacing \_\_\_\_\_".

When the need for the temporary surfacing is no longer required, the Contractor shall remove the temporary surfacing and it shall become the property of the Contractor and removed from the project. All the work necessary to accomplish this requirement is considered subsidiary to the item "Temporary Surfacing \_\_\_\_\_".

Measure temporary surfacing by the square meter of completed and accepted work.

The work and materials required for temporary surfacing will be paid for at the contract unit price per square meter for the item "Temporary Surfacing \_\_\_\_\_." Payment will be full compensation for the work prescribed in these Special Provisions and the Standard Specifications.

## CONCRETE PAVEMENT JOINT REPAIR

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

Approximately 7 lane joints will require the full depth joint repair.

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

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

Subsection 605.01 is amended to include the following:

7. The asphalt surfacing on the concrete may be milled prior to or after performing the joint repair work. The Contractor has the option to pour the repair to the top of the existing asphalt surfacing before or after milling. On single lift projects, if the Contractor elects to pour the concrete to the top of the asphalt surfacing, the Contractor will be required to place an asphalt wedge over the repair immediately prior to placing the asphalt surfacing. The asphalt wedge shall be approximately 1 inch (25 mm) thick over the repair tapered to 0 inches (0 mm) in 10 feet (3 m) on each side of the repair parallel to the centerline. The depth of the existing asphalt is approximately 2 inches (50 mm). If the Contractor elects to pour the concrete to the top of the existing asphalt surfacing, and the existing asphalt is greater than 1 inch (25 mm) deeper than is shown here, then the Contractor shall be paid the invoice price per cubic yard (cubic meter) for the extra concrete needed. If the Contractor elects to pour concrete to the top of the existing concrete and use asphaltic concrete to finishing filling the repair area, it shall be either Asphaltic Concrete for Patching as shown in the plans or temporary asphaltic concrete. Temporary asphaltic concrete shall be any asphaltic concrete approved by the Engineer. The material, installation, maintenance, removal and disposal of temporary asphaltic concrete will not be measured and paid for, but shall be considered subsidiary to the item "Concrete Pavement, Class "PR" Joint Repair." Asphaltic concrete used to finish filling the repair area shall be the Asphaltic Concrete for Patching as shown on the plans and shall be paid for at the contract unit price per ton (mg).

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

Paragraphs 16. and 17. of Subsection 605.04 are void.

Paragraph 19.a. of Subsection 605.04 is amended to include the following:

When joint repairs are overlaid with asphaltic concrete, the curing method shall be with tack coat, RC-70, an approved asphalt emulsion or wet burlap.

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

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

Paragraphs 24. a. and 24. b. of Subsection 605.04 are void.

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

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

Dowel bars or tie bars shall be anchored into the faces of the existing concrete as designated in the plans. A gang drill shall be used for the drilling operation. The drilled holes shall be thoroughly cleaned with compressed air to remove all dust, dirt, loose material, and moisture.

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

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

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

The last sentence of Paragraph 25. d. of Subsection 605.04 is void.

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

Pay Item		Pay Unit
Concrete Revement	Joint Repair	Square Yard (SY)
		Square Meter (m <sup>2</sup> )

## CONCRETE PAVEMENT REPAIR

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

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

Subsection 605.01 is amended to include the following:

7. The asphalt surfacing on the concrete may be milled prior to or after performing the pavement repair work. The Contractor has the option to pour the repair to the top of the existing asphalt surfacing before or after milling. On single lift projects, if the Contractor elects to pour the concrete to the top of the asphalt surfacing, the Contractor will be required to place an asphalt wedge over the repair immediately prior to placing the asphalt surfacing. The asphalt wedge shall be approximately 1 inch (25 mm) thick over the repair tapered to 0 inches (0 mm) in 10 feet (3 m) on each side of the repair parallel to the centerline. The depth of the existing asphalt is approximately 2 inches (50 mm). If the Contractor elects to pour the concrete to the top of the existing asphalt surfacing, and the existing asphalt is greater than 1 inch (25 mm) deeper than is shown here, then the Contractor shall be paid the invoice price per cubic yard (cubic meter) for the extra concrete needed. If the Contractor elects to pour concrete to the top of the existing concrete and use asphaltic concrete to finishing filling the repair area, it shall be either Asphaltic Concrete for Patching as shown in the plans or temporary asphaltic concrete. Temporary asphaltic concrete shall be any asphaltic concrete approved by the Engineer. The material, installation, maintenance, removal and disposal of temporary asphaltic concrete will not be measured and paid for, but shall be considered subsidiary to the item "Concrete Pavement Repair, Type A, B or C, Full Depth." Asphaltic concrete used to finish filling the repair area shall be the Asphaltic Concrete for Patching as shown on the plans and shall be paid for at the contract unit price per ton (mg).

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

Paragraph 10. of Subsection 605.04 is void.

Paragraph 16. of Subsection 605.04 is void and superseded by the following:

The minimum concrete placement shall be as shown in the plans or as directed by the engineer. Interior transverse joints shall be sawed to a minimum of one-third the actual thickness of the slab at the spacing designated in the plans.

Paragraphs 17. and 18. of Subsection 605.04 are void.

Paragraph 19.a. of Subsection 605.04 is amended to include the following:

When pavement repairs are overlaid with asphaltic concrete, the curing method shall be with tack coat, RC-70, an approved asphalt emulsion or wet burlap.

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

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

Paragraphs 24. a. and b. of Subsection 605.04 are void.

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

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

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

Dowel bars or tie bars shall be anchored into the faces of the existing concrete as designated in the plans. A gang drill shall be used for the drilling operation. The drilled holes shall be thoroughly cleaned with compressed air to remove all dust, dirt, loose material, and moisture.

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

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

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

Paragraph 25. d. of Subsection 605.04 is void.

Subsection 605.05 in the 1997 Standard Specifications is amended to provide that adjoining partial depth or full depth repair areas of varying widths in the same traffic lane, which are situated such the removals of the areas may be accomplished concurrently, shall be

considered as a single repair. The total area of the adjoining areas shall be combined to determine the repair type as shown in Table 605.01.

## WATER AND SANITARY SEWER UTILITY RELOCATION Dawson, Nebraska

NDOR Project No. NH-75-1(105) Control No. 11837

> I hereby certify that these plans and specifications were prepared by me, or under my direct supervision, and that I am a duly registered Professional Engineer under the laws of the State of Nebraska.

1/15/2002

John (). Jungman John A. Zwingman /P.E. GILMORE & ASSOCIATES, INC.

239.009

## NEBRASKA DEPARTMENT OF ROADS

## PROJECT NO. NH-75-1(105), CONTROL NO. 11837

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## SECTION 01000

#### PROJECT REQUIREMENTS - UTILITY RELOCATION WORK

## PART 1

#### 1.1 GENERAL DESCRIPTION OF WORK

A. The work consists of furnishing all labor and materials for the relocation of water and sewer utilities; including all associated connections, fittings, testing, grading, trenching, backfilling, pavement removal and replacement, and other appurtenances as indicated on the drawings, or specified herein.

#### 1.2 LAND FOR CONSTRUCTION PURPOSES

- A. The Contractor will be permitted to use available land belonging to the Owner, on or near the site of the work, for construction purposes and for the storage of materials and equipment. The location and extent of the areas so used shall be indicated on the drawings designated by the NDOR, or designated by the Owner.
- B. The Contractor shall be solely responsible for obtaining and shall pay all costs in connection with any additional work area, storage site, access to the site, or temporary right-of-way which may be required for proper completion of the work.
- C. It shall be understood that the responsibility for protection and safekeeping of equipment and materials on or near the site shall be entirely that of the Contractor and that no claims shall be made against the Owner by reason of any act of any employee or trespasser. It shall be further understood that should any occasion arise necessitating access to the site occupied by these stored materials and equipment, the Contractor owning or responsible for the stored materials or equipment shall immediately move same. No materials or equipment may be placed upon the property of the Owner until the Owner has agreed to the location contemplated by the Contractor to be used for storage.

#### 1.3 EASEMENTS AND RIGHTS-OF-WAY

A. The easements and rights-of-way for the construction will be provided by the Owner. The Contractor shall confine his construction operations within the limits given and shall use due care in placing construction tools, equipment, excavated materials, and construction materials and supplies, so as to cause the lease possible damage to property and interference with traffic and daily operations.

#### 1.4 ON PRIVATE PROPERTY

A. Easements across private property are indicated on the drawings as required.

#### 1.5 OPERATION OF EXISTING FACILITIES

A. Existing sewer facilities shall be kept in continuous operation throughout the construction period. No interruption will be permitted which adversely affects the degree of service provided. Interruptions in water service shall be kept to an absolute minimum, and affected users shall be notified in writing prior to the interruptions.

- B. The Contractor shall provide temporary facilities and make temporary modifications as necessary to keep the existing facilities in continuous operation during the construction period.
- C. Contractor shall not operate existing valves, hydrants, or other facilities belonging to the Owner without obtaining prior written permission from the Owner.

#### 1.6 NOTICES TO OWNERS AND AUTHORITIES

- A. The Contractor shall notify owners of adjacent property and utilities when construction work may affect them.
- B. When it is necessary to temporarily deny access by owners or tenants to their property, or when any utility service connection must be interrupted, the Contractor shall give written notices at least 24 hours in advance to enable the affected persons to provide for their needs. Notices will conform to any applicable local ordinance and will include appropriate information concerning the interruption and instructions on how to limit their inconvenience.
- C. Utilities and other concerned agencies shall be contacted at least 48 hours prior to cutting or closing streets or other traffic areas or excavating near underground utilities or pole lines.

## 1.7 CONNECTIONS TO EXISTING FACILITIES

A. Unless otherwise specified or indicated, the Contractor shall make all necessary connections to existing utilities. In each case, the Contractor shall receive permission from the Owner or the owning utility prior to undertaking connections. The Contractor shall protect facilities against harmful substances and damage.

#### 1.8 UNFAVORABLE CONSTRUCTION CONDITIONS

A. During unfavorable weather, wet ground, or other unsuitable construction conditions, the Contractor shall confine his operations to work which will not be affected adversely by such conditions. No portion of the work shall be constructed under conditions which would affect adversely the quality or efficiency thereof, unless special means or precautions are taken by the Contractor to perform the work in a proper and satisfactory manner.

#### 1.9 CLEANING UP

- A. The Contractor shall keep the premises free at all times from accumulations of waste materials and rubbish. The Contractor shall provide adequate trash receptacles about the site, and shall promptly empty the containers when filled.
- B. Construction materials, such as concrete forms and scaffolding shall be neatly stacked by the Contractor when not in use. The Contractor shall promptly remove splattered concrete asphalt, oil, paint, corrosive liquids, and cleaning solutions from surfaces to prevent marring or other damage.
- C. Volatile wastes shall be properly stored in covered metal containers and removed daily.

- D. Wastes shall not be buried or burned on the site or disposed of into streams or waterways. All wastes shall be removed from the site and disposed of in a manner complying with local ordinances and antipollution laws.
- E. Adequate cleanup will be a condition for recommendation of progress payment applications.

#### 1.10 PERMITS

A. The Contractor shall obtain and pay the cost of all building permits, licenses, and fees necessary for the construction of permanent structures or permanent changes in existing facilities.

#### 1.11 SITE ADMINISTRATION

A. The Contractor shall be responsible for all areas of the site used by him and by all his Subcontractors in the performance of the work. He will exert full control over the actions of all employees and other persons with respect to the use and preservation of property and existing facilities, except such controls as may be specifically reserved to the Owner or others. The Contractor has the right to exclude from the site all persons who have no purpose related to the work or its inspection, and may require all person on the site (except the Owner's employees) to observe the same regulations as he requires of his employees.

#### 1.12 SALVAGED MATERIAL

A. The Contractor shall deliver to the Owner, as required, materials salvaged from the execution of the project. The materials shall be delivered and stored at the location designated by the Owner. Materials not salvaged shall be removed and disposed of by the Contractor in a manner that complies with state and local ordinances.

#### 1.13 OFF-SITE STORAGE

A. Off-site storage arrangements shall be acceptable to the Owner for all materials and equipment not incorporated into the work but included in Applications for Payment. Such off-site storage arrangements shall be presented in writing, and shall afford adequate and satisfactory security and protection. Off-site storage facilities shall be accessible to Consulting Engineer, representatives of Nebraska Department of Roads, and Owner.

#### 1.14 CONSTRUCTION SCHEDULE

- A. Before work is started, the Contractor shall prepare a detailed schedule of all construction operations that shall indicate the sequence of the work, the time of starting and completion of each part, and the installation dates for major items of equipment. The schedule shall be submitted to the Consulting Engineer for review.
- 1.15 LINES AND GRADES
  - A. All Work shall be done to the lines, grades, and elevations shown on the drawings.

- B. Basic horizontal and vertical control points will be established or designated by the Consulting Engineer. These points shall be used as datum for the Work. All additional survey, layout, and measurement Work shall be performed by Contractor as a part of the Work.
- C. Contractor shall provide an experienced instrument man, competent assistants, and such instruments, tools, stakes, and other materials required to complete the survey, layout, and measurement Work. In addition, Contractor shall furnish, without charge, competent men from his force and such tools, stakes, and other materials as Owner may require in establishing or designating control points, or in checking survey, layout, and measurement of Work performed by Contractor.
- D. Contractor shall keep Consulting Engineer and Owner informed, a minimum of 48 hours in advance, of the times and places at which he wishes to do Work, so that horizontal and vertical control points may be established and any checking deemed necessary by Owner may be done with minimum inconvenience to Consulting Engineer and minimum delay to Contractor. The Contractor will not perform work until the Consulting Engineer has established control points, and the control points have been approved by the Owner.
- E. Contractor shall remove and reconstruct Work which is improperly located.
- 1.16 POWER
  - A. All power for lighting, construction use, operation of the Contractor's plant or equipment or for any other use by the Contractor, shall be provided by the Contractor at his sole cost and expense.
- 1.17 BARRICADES, LIGHTS, AND SAFETY
  - A. All open trenches and other excavations shall have suitable barricades, signs, and lights to provide adequate protection to the public. Obstructions such as material piles and equipment shall be provided with similar warning signs and lights.
  - B. All barricades and obstructions shall be illuminated with warning lights from sunset to sunrise. Material storage and conduct of the work on or alongside public streets and highways shall cause the minimum obstruction and inconvenience to the traveling public.
  - C. All barricades, signs, lights, and other protective devices shall be installed and maintained by the Contractor in conformity with applicable statutory requirements. The Contractor shall be solely responsible for the adequacy of safety measures and for compliance with safety regulations and statutes.
  - D. The Contractor shall at all times comply with all applicable laws and regulations including OSHA regulations to make certain the Contractor's employees, everyone working at the job site, and members of the public are not exposed to hazards. High voltage, uninsulated overhead power lines are located in close proximity to this project. Any conducting object which approaches the power lines may transfer electricity which could cause serious injury or death. The Contractor shall not allow any object to approach a power line within 10 feet without first contacting the Owner. The Contractor shall inform all of his employees of this requirement, and the possible hazards regarding working around the overhead power lines. No earth fill or any other material shall be placed near an overhead power line so as to reduce clearances to less than required by the National Electrical Safety Code.

## 1.18 TREE AND PLANT PROTECTION

- A. Contractor shall take extra measures to protect trees designated to be preserved, such as erecting barricades, trimming to prevent damage from construction equipment, and installing pipe and other Work by means of hand excavation or tunneling methods. Such trees shall not be endangered by stockpiling excavated material or storing equipment against the trunk.
- B. When the injury or removal of tress designated to be preserved cannot be avoided, or when removal and replacement are indicated on the drawings, each tree injured beyond repair or removed shall be replaced with a similar tree of the nearest size possible.
- C. All trimming, repair, and replacement of trees and plants shall be performed by qualified nurserymen or horticulturists.

#### 1.19 COORDINATION

- A. Utility relocation work under each phase of the Contract shall be planned, scheduled, and coordinated in a manner which will facilitate the simultaneous progress of other parts of the project.
- B. Contractor shall give Consulting Engineer and Owner a minimum of two weeks' notice prior to the initiation of utility relocation work for each phase and shall update the Consulting Engineer and Owner on a weekly basis regarding scheduled activities.
- C. Utility relocation work shall be planned, schedule, and coordinated in a manner that prevents cutting or patching of new highway pavement or walks.
- D. Contractor shall conduct his work to interfere as little as possible with public travel, whether vehicular or pedestrian. Whenever it is necessary to cross, obstruct, or close roads, driveways, and walk, whether public or private, Contractor shall provide and maintain suitable and safe bridges, detours, or other temporary expedients for the accommodation of public and private travel, and shall give reasonable notice to owners of private drives before interfering with them. Such maintenance of traffic will not be required when Contractor has obtained permission from the owner and tenant of private property, or from the authority having jurisdiction over public property involved, to obstruct traffic at the designated point. Temporary surfacing shall be provided as necessary on shoulders.

#### 1.20 PHASING REQUIREMENTS

A. It is the intent of the Contract Documents that the Contractor shall be solely responsible for all planning and coordination of construction activities, including those relating to phasing of project construction. Contractor shall provide, at no additional cost, all temporary plugs and connections required as a result of phasing of the utility construction. Contractor shall schedule and perform all utility work so as to prevent cutting and patching of new pavement. The minimum construction activities required for phasing are set forth below. Alternate construction phasing plans which are deemed better suited to completion of the work by the Contractor shall be submitted to Consulting Engineer for review.

#### SECTION 01800 MEASUREMENT AND PAYMENT

## PART 1 GENERAL

- 1.1 REQUIREMENTS INCLUDED
  - A. Methods of measurement and payment for items of work under this contract.

## 1.2 RELATED REQUIREMENTS

A. All sections.

## 1.3 GENERAL

- A. All costs in connection with the proper and successful completion of the work, including furnishing all materials, equipment, supplies, and appurtenances; providing all construction plant, equipment, and tools; and performing all necessary labor and supervision to fully complete the work, shall be included in the contract amount bid.
- B. All Work not specifically set forth as a pay item in the Bid form shall be considered a subsidiary obligation of the Contractor and all costs in connection therewith shall be included in the prices bid. This shall include, but not be limited to, items such as adjustment of existing facilities that are to remain in service to the new liens and grades, piping that is not shown in profile, removal and replacement of paving (that is not indicated as a specific pay item), and other items of incidental work as required.

## 1.4 ESTIMATED QUANTITIES

- A. All estimated quantities are approximate and are to be used only as a basis for estimating the probable cost of the work described in the Bid.
- B. The actual amounts of work done and materials furnished under the unit prices may differ from the estimated quantities.
- C. The basis of payment for work and materials will be the contract amount adjusted for the actual amount of work done and materials furnished. The Contractor shall request and receive written permission from the Consulting Engineer before commencing any work which will bring the actual amount of work done over the contract amount for each bid item.
- D. Contractor agrees that he will make no claim for damages, anticipated profits, or otherwise on account of any difference between the amounts of work actually performed and materials actually furnished and the adjusted amounts therefore.
- E. No direct payment shall be made for dewatering; excavation; trenching; sheeting and shoring; subgrade preparation; embedment; compaction; wet cut-ins to water mains or services; flushing, testing, and disinfection; removal and replacement of existing pavement (except where it is specifically designated as a separate payment item), sidewalks, trees, bushes, and street signs; or other restoration work as required. All cost associated with these items of work shall be included in the unit or lump sum price bid for each item of Work that involves or requires this type of work. In addition, all excavation shall be unclassified as to the materials which may be encountered and as to the depth of the excavation.

F. Pipelines shall be paid for on a unit price basis and shall be measured for payment on a horizontal plane. Measurement of each water main of each size will be continuous through, and shall include the full laying lengths of, all fittings and valves installed between the ends of each line. Sewers will be measured through all line manholes to the centers of new manholes at the points of connection.

## 1.5 PAY ITEMS UNIT PRICES

- A. <u>Water Main</u>. This Bid shall include all materials, labor, and equipment required for furnishing and installing new water mains complete with gaskets (including nitrile gaskets at the locations indicated on the drawings), providing temporary water services, thrust blocking, and all necessary incidental work for constructing water mains in accordance with the plans and specifications. Payment is per meter for item "\_\_\_\_\_ mm Water Main Pipe". When connecting new water main to existing water main, the connection will be paid for on an each basis for the item "Connect to Water Main."
- B. <u>Dry Bore and Install 300 mm Casing</u>. This Bid shall include all materials, labor, and equipment required for boring the undercrossing as shown on the plans; furnishing and installing the steel casing pipe with casing pipe spaced inside of the steel pipe; backfilling the annular space within the casing pipe with sand; construction of end closures; and all necessary incidental work. The pay item is one (1) linear meter of "\_\_\_\_\_ mm Casing".
- C. <u>Fittings.</u> This Bid shall include all materials, labor, and equipment required for furnishing and installing ductile iron fittings and all necessary incidental work in accordance with the plans and specifications. The pay item is one (1) each fitting of the type and diameter indicated, with any necessary bolts or glands paid for as part of the fitting.
- D. <u>Water Service Connection Assembly</u>. The Bid shall include all materials, labor, and equipment required to connect a water service of the size shown with new water mains. This Work shall include furnishing and installing a tapped connection into the new water main, all necessary incidental work, and one of the following items of work.
  - 1. At locations where the existing curb stop is to be reused, the work shall include reinstallation and connection of the existing curb stop and box with the new water service line.
  - 2. At locations where a new curb stop and box are to be furnished and installed, the work shall include installation and connection of the new curb stop and box with the new and existing water service lines, salvaging of existing curb stop and box, and delivering to the Village of Dawson Utility Department.

This pay item is one (1) each "Water Service Connection".

E. <u>Curb Stop</u>. This Bid shall include all materials, labor, and equipment required to supply a new curb stop with curb stop box of the indicated sizes and all necessary incidental work at the locations shown on the drawings. The pay item is one (1) each "Curb Stop and Box" for the size indicated.

- F. <u>Service Tubing or Pipe</u>. This Bid shall include all materials, labor, and equipment required for furnishing and installing new service tubing or pipe of the sizes listed on the Bid Form and all necessary incidental work. The item "25 mm Water Service" will be measured and paid for by the meter.
- G. <u>Fire Hydrant Assembly</u>. This Bid shall include all materials, labor, and equipment required for furnishing and installing a complete hydrant assembly as shown on the drawings including hydrant, hydrant lead piping, reaction blocking, gravel sump, bend, auxiliary hydrant valve with valve box, and all necessary incidental work at the locations indicated on the drawings. The pay item is one (1) each "\_\_\_\_ mm fire hydrant".
- H. <u>Salvage Existing Fire Hydrant</u>. This Bid shall include all materials, labor, and equipment required for removing, cleaning, and salvaging an existing fire hydrant assembly and all necessary incidental work at the locations indicated on the drawings and delivering them to the Village of Dawson Utility Department. The pay item is one (1) each for "Salvage Fire Hydrant".
- I. <u>Abandon Existing Water Main</u>. This Bid shall include all materials, labor, and equipment required for abandoning existing water mains in place by removing from service and filling with flowable fill or grout, removing short sections of the existing main as required to plug or cap new and existing water mains, plugging the ends with concrete at the locations indicated on the drawings, and all necessary incidental work. The pay item is one (1) linear meter of "Abandon Water Main".
- J. <u>Remove Existing Water Main</u>. This Bid shall include all materials, labor, equipment, and all necessary incidental work required for removing and disposing of existing water mains prior to installation of new water mains in accordance with the plans and specifications. Payment is one (1) meter for the item "Remove Water Main Pipe".
- K. <u>Gate Valve</u>. This Bid shall include all materials, labor, and equipment required for furnishing and installing a buried gate valve complete with mechanical joint ends, concrete pad, valve box, and all necessary incidental work in accordance with the plans and specifications. The pay item is one (1) each gate valve of the sizes listed on the Bid Form.
- L. <u>Corporation Stop</u>. This bid shall include all materials, labor, and material required to supply a new corporation stop at the size shown in the plans. The pay item is for each for the size indicated.
- M. The following items required in the installation of the water service shall be measured and paid for by the following:

Remove Cross	Each
Remove Water Valve Box	Each
mm Plug	Each

These prices shall be full compensation for furnishing and installing all materials, labor, tools, equipment necessary to complete the work.
N. <u>Boring Water Service</u>. This bid shall include all materials, labor and equipment required for boring the undercrossing as shown in the plans. The pay item "Boring \_\_\_\_ mm Water Service" is paid for per meter of water service bored.

# PART 2 PRODUCTS

Not used.

# PART 3 EXECUTION

Not used.

# ROUGH GRADING

#### PART 1 GENERAL

#### 1.1 WORK INCLUDED

- A. Remove topsoil and stockpile for later reuse.
- B. Excavate subsoil and stockpile for later reuse.
- C. Grade and rough contour site.

# 1.2 PROTECTION

- A. Protect trees, shrubs, lawns, and other features remaining as portion of final landscaping.
- B. Protect benchmarks and roads.
- C. Protect above or below grade utilities which are to remain.
- D. Repair damage.

#### PART 2 PRODUCTS

#### 2.1 SELECT MATERIALS

- A. Topsoil: Excavated material from the top 300 mm (12 inches), graded free of roots, rocks, subsoil, debris, and weeds.
- 2.2 COMMON FILL MATERIALS
  - A. Subsoil: Excavated material, free of organic materials, graded free of lumps larger than 150 mm (6 inches), rocks larger than 75 mm (3 inches) and debris.

#### PART 3 EXECUTION

#### 3.1 PREPARATION

- A. Identify required lines, levels, contours, and datum.
- B. Identify known below grade utilities. Stake and flag location.
- C. Identify and flag above grade utilities.
- D. Maintain and protect existing utilities remaining which pass through work area.
- E. Notify Owner of utility disconnection, removal and replacement schedules a minimum of 48 hours in advance of work.

- F. Upon discovery of unknown utility or concealed conditions, discontinue affected work; notify Owner.
- 3.2 TOPSOIL EXCAVATION
  - A. Excavate topsoil from areas to be further excavated, relandscaped, or regraded.
  - B. Do not excavate wet topsoil.
  - C. Stockpile topsoil to depth not exceeding 2.4 meters (8 feet).
- 3.3 SUBSOIL EXCAVATION
  - A. Excavate subsoil from areas to be relandscaped or regraded and stockpile in area designated on site.
  - B. Do not excavate wet subsoil.
  - C. Stockpile subsoil to depth not exceeding 2.4 meters (8 feet).
  - D. When excavation through roots is necessary, perform work by hand and cut roots with a sharp axe.
- 3.4 TOLERANCES
  - A. Top Surface of Subgrade: Plus or minus 25 mm (1 inch).

# LANDSCAPE GRADING

#### PART 1 GENERAL

#### 1.1 WORK INCLUDED

- A. Finish grade subsoil and proof roll.
- B. Place, level, and compact topsoil.

#### 1.2 PROTECTION

- A. Protect landscaping and other features remaining as final work.
- B. Protect roads.

#### PART 2 PRODUCTS

#### 2.1 SELECTED MATERIALS

A. Topsoil: Excavated material from the top 300 mm (12 inches), graded free of roots, rocks, subsoil, debris, and weeds.

#### PART 3 EXECUTION

#### 3.1 INSPECTION

- A. Verify site conditions and note irregularities affecting work of this Section.
- B. Beginning work of this Section means acceptance of existing conditions.

# 3.2 SUBSOIL PREPARATION

- A. Eliminate uneven areas and low spots. Remove debris, roots, branches, stones, in excess of 13 mm (½ inch) in size.
- B. Scarify subgrade to depth of 75 mm (3 inches) where topsoil is scheduled. In areas where equipment used for hauling and spreading topsoil has compacted subsoil.

#### 3.3 PLACING TOPSOIL

- A. Place topsoil in areas where seeding or sodding is scheduled.
- B. Use topsoil in relatively dry state. Place during dry weather.
- C. Fine grade topsoil eliminating rough or low area. Maintain levels, profiles, and contours of subgrade.

- D. Remove stone, roots, grass, weeds. Debris, and foreign material while spreading.
- E. Manually spread topsoil around trees, plants, and buildings to prevent damage.
- F. Roll placed topsoil.
- G. Remove surplus subsoil and topsoil from site.
- H. Leave stockpile area and site clean and raked, ready to receive landscaping.

# 3.4 TOLERANCES

A. Top of Topsoil: Plus or minus 13 mm (½ inch).

# 3.5 SCHEDULE OF LOCATIONS

A. 300 mm (12 inches) of topsoil shall be provided in all disturbed areas which are not shown to be under paving or sidewalk.

# EXCAVATION

# PART 1 GENERAL

#### 1.1 GENERAL

- A. General excavation.
- 1.2 RELATED WORK
  - A. All Sections.
- 1.3 FIELD MEASUREMENTS
  - A. Verify that survey benchmark and intended elevations for the Work are as indicated.
- 1.4 PROTECTION
  - A. Protect trees, shrubs, lawns, and other features remaining as portion of final landscaping.
  - B. Protect benchmarks and roads.
  - C. Protect above or below grade utilities which are to remain.
  - D. Repair damage.

#### 1.5 DEWATERING

- A. Although dewatering is not anticipated, it may be required due to seasonal fluctuation in the water table, or unusually wet weather.
- B. Contractor shall provide and maintain adequate dewatering equipment as necessary to remove and dispose of all surface and groundwater entering excavations. Each excavation shall be kept dry during subgrade preparation and continually thereafter until construction is completed to the extent that no damage from hydrostatic pressure, flotation, or other cause will result.
- C. All excavations shall be dewatered by lowering and keeping the groundwater level a minimum of 300 mm (12 inches) below the bottom of the excavation.
- D. Surface water shall be diverted or otherwise prevented from entering excavated areas or trenches to the greatest extent practicable without causing damage to adjacent property.
- E. The Contractor will be held responsible for the condition of any pipe or conduit which he may use for drainage purposes, and all such pipes or conduits shall be left clean and free of sediment.

# PART 2 PRODUCTS

#### 2.1 SELECT MATERIALS

A. Topsoil: Excavated material from the top 300 mm (12 inches), graded free of roots, rocks, subsoil, debris, and weeds.

# 2.2 COMMON FILL MATERIALS

A. Subsoil: Material excavated from site below topsoil down to subgrade elevations, free of organic matter, graded free of lumps larger than 150 mm (6 inches), rocks larger than 75 mm (3 inches), and debris.

#### PART 3 EXECUTION

- 3.1 GENERAL
  - A. Excavation work shall be performed in a safe and proper manner with suitable precautions being taken against all hazards.
  - B. Excavation shall provide adequate working space and clearances for the work to be performed therein and for installation and removal of concrete forms.
  - C. Subgrade surfaces shall be clean and free of loose material of any kind when concrete is placed thereon.
  - D. Backfilling during freezing weather shall not be done except by permission of the Owner. No backfill, fill, or embankment materials shall be installed on frozen surfaces, nor shall frozen materials, snow, or ice be placed in any backfill, fill, or embankment.

#### 3.2 PREPARATION

- A. Identify required lines, levels, contours, and datum.
- B. Identify known underground, above ground, and aerial utilities. Stake and flag locations.
- C. Notify utility companies to remove and relocate utilities in the way of excavation.
- D. Maintain, re-route or extend as required existing utility liens to remain which pass through work area. Pay costs for this work, except those covered by utility companies.
- E. Remove abandoned utility service lines from areas of excavation and abandon as required.
- F. Protect above and below grade utilities which are to remain.
- G. Protect plant life, lawns, rock outcroppings, and other features remaining as a portion of final landscaping.

- H. Protect benchmarks, existing structures, fences, sidewalks, paving, and curbs from excavation equipment and vehicular traffic.
- I. Upon discovery of unknown utility or concealed conditions, discontinue affected work; notify Engineer.

#### 3.3 SITE PREPARATION

- A. All sites to be occupied by permanent construction or embankments shall be cleared of all logs, trees, roots, brush, tree trimmings, and other objectionable materials and debris.
- B. All stumps shall be grubbed.
- C. Subgrades for fills and embankments shall be cleaned and stripped of all surface vegetation, sod, and organic topsoil

#### 3.4 PRESERVATION OF TREES

- A. No trees shall be removed outside of excavated or filled area, unless their removal is authorized by Owner.
- B. Trees left standing shall be adequately protected from permanent damage by construction operations.
- C. Trimming of standing trees where required shall be as directed by the Owner.

#### 3.5 TOPSOIL EXCAVATION

- A. Excavate a minimum of 300 mm (12 inches) of topsoil from areas to be further excavated, relandscaped, or regraded and stockpile on site as directed by Owner.
- B. Following completion of construction, topsoil shall be redistributed and left in suitable condition for finish grading and seeding.
- C. Do not excavate wet topsoil.

#### 3.6 SUBSOIL EXCAVATION

- A. Excavate subsoil required to accommodate site improvements.
- B. Machine slope banks to angle of repose or less, until shored.
- C. Grade top perimeter of excavation to prevent surface water from draining into excavation.
- D. Remove lumped subsoil, boulders, and rock.
- E. Notify Owner of unexpected subsurface conditions and discontinue affected Work in area until notified to resume work.
- F. Correct unauthorized excavation at no extra cost to Owner.

- G. Fill areas over-excavated with bedding rock 50 mm (2 inch) nominal size, or with other material acceptable to Owner. If on-site soils are used, they shall be mechanically tamped to prevent settling under the pipe.
- H. Subgrades shall be firm, dense, and thoroughly compacted and consolidated; shall be free from mud and muck; and shall be sufficiently stable to remain firm and intact under the feet of the workmen.
- I. Subgrades which are otherwise solid, but which become mucky on top due to construction operations, shall be reinforced with crushed rock or gravel. The finished elevation of stabilized subgrades shall not be above subgrade elevations shown on the drawings.
- J. Stockpile excavated material in area designated by Owner.
- K. When complete, verify soil bearing capacities, depths, and dimensions.
- L. Accurately locate and record abandoned and active utility lines rerouted or extended, on project record documents.

#### 3.7 FINAL GRADING

A. After other outside work has been finished, and backfilling and embankments completed, all areas on the site of the work which are to be graded shall be brought to grade at the indicated elevations, slopes, and contours. Use of graders or other power equipment may be permitted for final grading and dressing of slopes, provided the result is uniform and equivalent to hand work. All surfaces shall be graded to secure effective drainage.

#### 3.8 DISPOSAL OF EXCESS EXCAVATED MATERIALS

A. The disposal of waste and excess excavated materials, including hauling, handling, grading, and surfacing shall be a subsidiary obligation of the Contractor and no separate payment will be made therefore. These materials shall be disposed of at sites that are approved by the owner and all methods shall be in accordance with city and state ordinances. Excavation sites shall be left in a condition that is suitable to the Owner.

#### 3.9 SETTLEMENT

- A. The Contractor shall be responsible for all settlement of backfill, fills, and embankments which may occur within the one year warranty period following final acceptance of the work.
- B. The Contractor shall make, or cause to be made, all repairs or replacements made necessary by settlement, within 30 days after notice from the Consulting Engineer or Owner.

#### 3.10 FIELD QUALITY CONTROL

A. Provide for visual inspection of bearing surfaces as required.

# 3.11 PROTECTION

- A. Protect excavations by methods required to prevent cave-in or loose soil from falling into excavation as required.
- B. Protect bottom of excavations and soil adjacent to and beneath foundations from freezing.

# TRENCHING

#### PART 1 GENERAL

#### 1.1 WORK INCLUDED

- A. Excavating trenches for utilities.
- B. Placement of bedding materials and backfilling requirements.
- C. Encasement conduits.
- D. Compaction requirements.

#### 1.2 RELATED WORK

A. All sections.

#### 1.3 PROTECTION

- A. Protect trees, shrubs, lawns, and other features remaining as a portion of final grading. No trees or shrubs shall be removed without prior approval of the Owner.
- B. Protect excavations by shoring, bracing, sheet piling, underpinning, or other methods required to prevent cave-in or loose soil from falling into excavation.
- C. Underpin adjacent structures which may be damaged by excavation work, including utility lines and pipe.
- D. Notify Owner of unexpected subsurface conditions and discontinue work in affected area until notification to resume work.
- E. Protect bottom of excavations and soil adjacent to and beneath pipe from frost.
- F. Grade excavation top perimeter to prevent surface water run-off into excavation.
- G. De-water excavations as needed at no additional cost to Owner.

#### PART 2 PRODUCTS

- 2.1 SELECT BEDDING MATERIALS
  - A. Granular Bedding Material: Conforming to the requirements of ASTM "Standard Specifications for Concrete Aggregate," Designation C-33. The gradation for bedding materials shall be No. 67 [19 mm (3/4 inch) to 4.75 mm, No. 4] unless otherwise designated by the Owner.
  - B. Sand: Natural river or bank sand; free of silt, clay, loam, friable, or soluble materials, and organic matter; graded in accordance with ASTM C136 Symbol SW or SP; within the following limits:

Sieve Size	Percent Retained
No. 4 (4.75 mm)	0 to 25
No. 200 (0.075 mm)	93 to 100

Effective size between 0.10 mm and 0.30 mm.

# 2.2 SELECT MATERIALS

- A. Topsoil: Excavated material from the top 300 mm (12 inches), graded free of roots, rocks, subsoil, debris, and weeds.
- B. Select Subsoil: Free of organic material, gravel larger than 25 mm (1 inch) size, and debris.
- 2.3 COMMON FILL MATERIALS
  - A. Subsoil: From trench excavations, free of organic material, graded free of lumps larger than 150 mm (6 inches), rocks larger than 75 mm (3 inches), and debris.

# PART 3 EXECUTION

- 3.1 INSPECTION
  - A. Verify stockpiled fill to be reused is approved.
  - B. Verify subgrade has been inspected and approved.
  - C. Verify utility installation has been inspected and approved.
  - D. Verify areas to be backfilled are free of debris, snow, ice, or water, and surfaces are not frozen.

#### 3.2 PREPARATION

- A. Identify required lines, levels, contours, and datum.
- B. When necessary, compact subgrade surfaces to density requirements for backfill material.

#### 3.3 EXCAVATION

- A. Remove a minimum of 300 mm (12 inches) of topsoil and stockpile for later reuse.
- B. Saw cut existing paved surfaces.
- C. Excavate subsoil as required.
- D. Cut trenches sufficiently wide to enable installation of utilities and allow inspection.

- E. Hand trim excavation and leave free of loose matter. Hand trim for bell and spigot pipe joints.
- F. Remove lumped subsoil, boulders, or other unsuitable material.
- G. Excavation shall not interfere with normal 45 degree bearing splay of foundations.
- H. Excavation is unclassified.
- I. Correct unauthorized excavation at no cost to Owner.
- J. Trenches shall be excavated to a width which will provide adequate working space and sidewall clearances for proper pipe installation, jointing, and embedment. Comply with pipe manufacturer's recommendations.
  - a. Minimum Sidewall Clearance: For water or sewer lines, minimum permissible sidewall clearance between installed pipe and each trench wall, expressed in millimeters (inches), shall be as follows:

	Minimum
<u>Pipe Size</u>	Sidewall Clearance
300 mm (12") and larger	150 mm (6")
250 mm (10")	150 mm (6")
200 mm (8")	125 mm (5")
150 mm (6")	100 mm (4")
100 mm (4") and smaller	100 mm (4")

The stipulated minimum sidewall clearances are not minimum average clearances, but are minimum clear distances which will be required.

- b. Maximum Trench Widths: Maximum trench widths below an elevation 150 mm (6 inches) above the top of installed pipe, shall be pipe diameter plus 600 mm (24 inches).
- K. Fill over-excavated areas under pipe bearing surfaces with approved granular material.
- L. Remove excess material not being reused from the site.
- M. Appurtenances
  - <u>Wood Skids</u>. Wood skids shall be provided as indicated on the drawings. The wood shall be pressure treated with chromated copper arsenate (CCA) in accordance with AWPA C2 and SWPB LB-22. The wood skids shall be securely strapped to the pipe with steel strapping material at least 19 mm (3/4 inches) wide.
  - 2. <u>Sand Backfill</u>. After installation of the pipe in the encasement conduit, the entire annular space between the utility pipe and the encasement conduit shall be filled with sand. The sand (fine aggregate) shall be as specified for select bedding material in this section. The sand shall be blown into the encasement conduit so that all space is filled.

3. <u>End Closure</u>. Both ends of the encasement conduit shall be closed with common brick and mortar as indicated on the drawings.

# 3.4 BACKFILLING

- A. Support pipe during placement and compaction of bedding material.
- B. Backfill trenches to prescribed contours and elevations. Backfill systematically, as early as possible, to allow maximum time for natural consolidation. Do not backfill over porous, wet, or spongy subgrade surfaces.
- C. Place and compact select bedding material in continuous layers not exceeding 150 mm (6 inches) loose depth.
- D. Place and compact common fill material in continuous layers not exceeding 200 mm (8 inches) loose depth.
- E. Maintain optimum moisture content of backfill materials to attain required compaction density.
- F. Remove surplus backfill materials from site.
- G. Leave stockpile areas completely free of excess fill material.

#### 3.6 TOLERANCE

- A. Top surface of backfilled turf or agricultural areas: Plus or minus 25 mm (1 inch) but do not create ponding.
- B. Top surface of backfilled surfaced areas: Plus or minus 16 mm (3/4 inch).
- 3.7 FIELD QUALITY CONTROL
  - A. Compaction testing will be performed in accordance with ANSI/ASTM D698 and D2049.
  - B. If work does not meet specified requirements, remove work, replace, and retest at no cost to Owner.

#### 3.8 SETTLEMENT

- A. Contractor shall be responsible for all settlement of backfill which may occur within the one-year warranty period following final acceptance of the work.
- B. Contractor shall make, or cause to be made, all repairs or replacement made necessary by settlement within 30 days after notice from the Consulting Engineer to Owner.

# 3.9 SCHEDULE OF LOCATIONS

- A. The paragraphs below identify locations, fill material to be used, compacted thickness of each fill, and compaction expressed as a percentage of maximum density and optimum moisture in comparison with ANSI/ASTM D698 or D2049 as appropriate.
- B. Pipe Embedment: Pipe embedment shall be placed as indicated in Figure 022211. Embedment for encasement conduits shall be Class C Ordinary Bedding.
  Embedment for all other pipes shall be Class B Modified.
- C. Fill Under Turf or Agricultural Areas: Common subsoil fill from 150 mm (6 inches) above top of pipe to 300 mm (12 inches) below finish grade, compacted to 88 percent minimum. Fill to finish grade with topsoil, compacted to 88 percent minimum.
- D. Fill Under Structures: Select subsoil fill from 150 mm (6 inches) above top of pipe to prescribed subgrade excavation, compacted to 95 percent minimum.
- E. Fill Under Sidewalks: Select subsoil fill from 150 mm (6 inches) above top of pipe to 200 mm (8 inches) below finished grade, compacted to 95 percent minimum. Sand fill to 100 mm (4 inches) below finished grade, compacted to 65 percent minimum relative density.
- F. Fill Under Roadway: Select subsoil fill from 150 mm (6 inches) above top of pipe to subgrade elevation, compacted to 95 percent minimum.



# WATER DISTRIBUTION SYSTEM

# PART 1 GENERAL

#### 1,1 WORK INCLUDED

- A. Constructing water system.
- B. Pipe and fittings.
- C. Thrust restraints.
- D. Trenching, installation of system, and connection to existing water lines; testing and backfilling.

# 1.2 RELATED WORK

- A. Section 02211: Rough Grading
- B. Section 02218: Landscape Grading
- C. Section 02221: Trenching
- D. Section 02223: Backfilling

# 1.3 REFERENCES

- A. AWWA C104 Cement-Mortar Lining for Ductile-iron and Gray-iron Pipe and Fittings for Water.
- AWWA C110 Gray-iron and Ductile-iron Fittings, 76 millimeters (3 inches) through 1220 millimeters (48 inches) for Water and Other Liquids.
- C. AWWA C150 Thickness Design of Ductile Iron Pipe.
- D. AWWA C151 Ductile Iron Pipe, Centrifugally Cast in Metal Molds or Sand-lined Molds for water or Other Liquids.
- E. AWWA C600 Installation of Gray and Ductile Cast Iron Water Mains and Appurtenances.
- F. AWWA C800 Thread for Underground Service Line Fittings with Appendix on Collected Standards for Service Line Materials.
- G. AWWA C800 Type K Copper Service Line and Tubing, ½ inch (12mm) through 3 inch (76 mm), for Water Service.
- H. ASTM D1785 Polyvinyl Chloride (PVC) Plastic Pipe, 50 millimeters (2 inches) through 100 millimeters (4 inches) for water.

# 1.4 SHOP DRAWINGS AND PRODUCT DATA

- A. Submit shop drawings and product data for all proposed materials.
- B. Submit manufacturer's installation instructions.
- C. Use only named products or Owner approved equal.

#### 1.5 REGULATIONS

A. Comply with all applicable Health Department and Plumbing Code requirements.

# PART 2 PRODUCTS

- 2.1 PIPE MATERIALS
  - A. PVC Water Pipe: PVC water pipe shall be used for all water lines and services from 50 mm (2 inch) to 300 mm (12 inch) in diameter. PVC water pipe shall conform to the requirements of ASTM D1785 and shall be DR18 pipe, "O" ring pipe rated for 1,100 kPa (200 psi). Pipe shall be installed with a covered copper, minimum No. 12 size, tracer wire located within 150 mm (6 inches) of pipe and up along outside of curb box, terminating in loop at top of curb box.
  - B. Copper Water Service Lines. All water service piping shall be soft temper copper service tubing, type K, meeting ASTM B88. The piping shall be installed with a horizontal "gooseneck" bend at the corporation stop to provide for expansion and contraction in accordance with AWWA C800. Pipe shall be installed with a covered copper, minimum No. 12 size, tracer wire located within 150 mm (6 inches) of pipe and up along outside of curb box, terminating in loop at top of curb box.

#### 2.2 JOINTS

- A. PVC Pipe Joints: Joints for heavy wall PVC pipe shall be bell and spigot with rubber "O" ring gaskets. All joints between PVC pipe and cast iron or ductile iron pipe, fittings, and valves, shall be bolt-up type mechanical joints as approved by the engineer.
- B. Copper Service Pipe Joints: Compression type connections as manufactured by Ford, Mueller, Rockwell, or approved equal. Connections shall have a pressure rating greater than or equal to that of the pipe.
- C. Transition Fittings: Provide transition fittings, gaskets, and adapters as required for connecting dissimilar pipe materials. Provide nitrile rubber gaskets where indicated on the drawings.

#### 2.3 FITTINGS AND APPURTENANCES

A. Fittings for Water Main: Ductile or cast iron compact fittings conforming to AWWA C153/A21.53. Liner shall conform to AWWA C104/A21.4.

- B. Tapping Saddles and Sleeves:
  - 1. Tapping Saddles: Ductile iron, with stainless steel straps and synthetic rubber sealing gasket, 1.7 MPa (250 msi) pressure rating.
  - 2. Tapping Sleeves: Ductile iron, 1.7 MPa (250 psi) pressure rating.
- C. Curb Stops: As required for 25 mm (1 inch) size, service shall be Mueller H-15155 or Ford Catalog No. B44 Series 5 for 1 inch valves utilizing copper service line piping.
- D. Curb stops shall be furnished with service boxes having steel tops. The service box caps shall be held in place with a suitable pentagonally shaped locking nut, and shall have the word "water" cast on them. Curb stops shall be similar to Model 5614 Minneapolis pattern base as manufactured by A.Y. McDonald Co.; Mueller Co.; or approved equal.
- E. Corporation stops shall be manufactured by Ford Meter Box Co., Mueller Co., or approved equal. Corporation stops shall be similar to Ford Catalog No. F1000 or Mueller H-15008 for copper service line. Each corporation stop shall also be furnished with a 90 degree elbow.
- F. Fire Hydrants: Refer to Specification Section 15100 Valves.
- G. Gate Valves: Refer to Specification Section 15100 Valves.
- 2.4 SHOP COATING AND LINING
  - A. Coatings: The exterior surfaces of all iron pipe and fittings shall be coated with a bituminous coating.
  - B. Linings: The interior surfaces of all iron pipe and fittings shall be lined with cement mortar.
- 2.5 THRUST BLOCKS
  - A. Construct poured in place concrete thrust blocks for all fittings where change of alignment occurs in accordance with the drawings and these specifications.
     Concrete for thrust blocks shall be Nebraska Department of Roads Type 47B-SG, with a minimum compressive strength of 3,250 psi at 28 days.

#### PART 3 EXECUTION

- 3.1 PREPARATION
  - A. Locate all existing utilities and service connections.
  - B. Review layout requirements with other affected work. Coordinate locations of fittings to accommodate system.
  - C. Protect landscaping and other features remaining as final work.

D. Coordinate and schedule work with Owner and notify property owners at least 48 hours before commencing work.

# 3.2 TRENCHING

- A. Trench for water system piping per Section 02221 Trenching.
- B. Keep trenches free of debris, material, or obstructions that may damage pipe.
- C. Backfill per Section 02221 Trenching.

#### 3.3 INSTALLATION

- A. Install pipe and fittings in accordance with manufacturer's instructions and AWWA C600 and AWWA C900.
- B. Connections between new work and existing piping shall be made using fittings suitable for the conditions encountered. Each connection with an existing pipe shall be made at a time and under conditions which will least interfere with service to customers, and as authorized by the Owner. Facilities shall be provided for proper dewatering and for disposal of water removed from the dewatered lines and excavations without damage to adjacent property. Special care shall be taken to prevent contamination of potable water lines when dewatering, cutting into, and making connections with existing pipe. No trench water, mud, or other contaminating substances shall be permitted to enter the lines. The interior of all pipe, fittings, and valves installed in such connections shall be thoroughly cleaned and then swabbed with, or dipped in, a 200 mg/L chlorine solution.
- C. Install corporation stops into top of main as shown on drawings. For ductile iron mains, double wrap threads with 3-mil Teflon tape.
- D. Install new curb stop and box at the location shown on the drawings or as directed by the Owner.
- E. Replacement of Existing Services:
  - 1. Tapping saddles or tapping sleeves shall be used for all service connections 50 mm (2 inches) and smaller on all PVC water mains. Direct tapping of PVC pipe shall not be permitted.
  - 2. At all locations where an existing service line is located, a new curb stop shall be installed at the new property line and the service shall be replaced. All services shall be 25 m (1 inch) unless otherwise notified in writing by the owner.

#### 3.4 HANDLING

A. Pipe, fittings, and accessories shall be handled in a manner that will insure installation in sound, undamaged condition. Equipment, tools, and methods used in handling pipe and fittings in which cement lining has been damaged shall be replaced. Small and readily accessible damaged areas may be repaired.

#### 3.5 INSPECTION

A. Pipe and fittings shall be carefully examined for cracks and other defects immediately before installation; spigot ends shall be examined with particular care. All defective pipe and fittings shall be removed from the site of the work.

#### 3.6 LAYING WATER MAIN

- A. Pipelines or runs intended to be straight shall be laid straight. Deflections from a straight line or grade shall not exceed the values stipulated in Table 5 of AWWA C600, unless specially designed bells and spigots are provided, or as provided in AWWA C900.
- B. All water mains shall be placed at the grades shown on the plans or at a minimum depth sufficient to provide 1.7 meters (5.5 feet) of cover over the top of the pipe.
- C. Pipe shall be protected from lateral displacement by placing the specified pipe embedment material. Under no circumstances shall pipe be laid in water and no pipe shall be laid under unsuitable weather or trench conditions.
- D. Pipe shall be laid with the bell ends facing the direction of laying except when reverse laying is specifically authorized by the Consulting Engineer.
- E. Water mains shall be laid at least 3 meters (10 feet) horizontally from any existing or proposed sewer. Water mains crossing sewers shall be laid to provide a minimum vertical distance of 450 millimeters (18 inches) between the outside of the water main and the outside of the sewer, either above or below the sewer. At crossings, one full length of water pipe shall be located such that both joints will be as far from the sewer as possible.
- F. Either shorter pipe sections or fittings shall be installed where the alignment or grade requires them.

#### 3.7 CUTTING PIPE

A. Cuttings shall be done in a neat manner, without damage to the pipe. Cuts shall be smooth, straight, and at right angles to the pipe axis. After cutting the end of the pipe, it shall be dressed with a file to remove all roughness and sharp corners.

#### 3.8 CLEANING

- A. The interior of all pipe and fittings shall be thoroughly cleaned of foreign material before being installed and shall be kept clean until the work has been accepted. Before jointing, all joint contact surfaces shall be wiped clean and kept clean until jointing is completed.
- B. Precautions shall be taken to prevent foreign material from entering the pipe during installation. Debris, tools, clothing, or other materials shall not be placed in or allowed to enter the pipe.

C. Whenever pipe laying is stopped, the open end of the pipe shall be sealed with a watertight plug which will prevent trench water from entering the pipe.

#### 3.9 FIELD JOINTS

- A. Joints in buried locations shall be push-on type unless otherwise indicated.
- B. All joints for water mains installed inside of casement conduits shall be restrained joints.

#### 3.10 PUSH-ON JOINTS

A. All instructions and recommendations of the pipe manufacturer, relative to gasket installation and other jointing operations, shall be followed by the Contractor. All joints surfaces shall be lubricated with heavy vegetable soap suitable for use in potable water, shall be stored in closed containers, and shall be kept clean. Each spigot end shall be suitably beveled to facilitate assembly.

#### 3.11 THRUST ANCHORAGE AND BLOCKING

- A. All bends deflecting 11-1/4 degrees or more which are installed in buried piping shall be provided suitable thrust blocking, anchors, joint harness, or other acceptable means for preventing movement of the pipe caused by internal pressure.
- B. Concrete blocking shall extend from the fitting to solid undisturbed earth and shall be installed so that all joints are accessible for repair. The bearing area of concrete reaction blocking shall be as shown on the drawings or as directed by the Consulting Engineer. If adequate support against undisturbed ground cannot be obtained, metal harness anchorages consisting of steel rods across the joint and securely anchored to pipe and fitting or other adequate anchorage facilities shall be installed to provide the necessary support. Should the lack of solid vertical excavation face be due to improper trench excavation, the entire cost of furnishing and installing metal harness anchorages in excess of the contract value of the concrete blocking replaced by such anchorages shall be borne by the Contractor.
- C. Restrained joints shall be utilized for all water mains installed inside of encasement conduits.

#### 3.12 LEAKAGE

A. All joints shall be watertight and free from leaks. Each leak which is discovered within one (1) year after final acceptance of the work by the Owner shall be repaired by and at the expense of the Contractor.

#### 3.13 PRESSURE TESTING

- A. Fill line and flush as needed to remove all trapped air.
- B. Hydrostatically test all portions of the new water line for leakage in accordance with AWWA C600, Section 4.

- C. Pressure test all portions of the line at 1,035 kPa (150 psi) measured at the lowest point for 2 hours minimum. No part of the line shall be subjected to a pressure greater than 1,240 kPa (180 psi).
- D. Repair any leaks and retest.
- E. Contractor shall be responsible for performing all required tests.

#### 3.14 ADJUSTMENT

A. Check and adjust curb stops and accessories for smooth operation.

# 3.15 WATER FOR TESTING AND DISINFECTION

- A. The Owner will furnish water for purposes of testing and disinfection.
- B. The Contractor shall disinfect the water distribution system in accordance with Section 02675 Disinfection of Water Distribution System.

# DISINFECTION OF WATER DISTRIBUTION SYSTEM

#### PART 1 GENERAL

#### 1.1 WORK INCLUDED

- A. Disinfection of potable water distribution system.
- B. Test and report results.

#### 1.2 REFERENCES

A. ANSI/AWWA C651 - Standard for Disinfecting Water Mains.

#### 1.3 QUALITY ASSURANCE

A. Testing Laboratory: Approved for examination of drinking water in compliance with applicable State of Nebraska, Department of Health and Human Services Standards.

#### 1.4 PROJECT RECORD DOCUMENTS

- A. Bacteriological report; accurately record:
  - 1. Date issued, project name, and testing laboratory name, address, and telephone number.
  - 2. Time and date of water sample collection.
  - 3. Name of person collecting samples.
  - 4. Test locations.
  - 5. Initial and 24 hour disinfectant residuals in ppm for each location tested.
  - 6. Coliform bacteria test results for each outlet tested.
  - 7. Certification that water conforms, or fails to conform, to bacterial standards.

#### PART 2 PRODUCTS

Not used.

#### PART 3 EXECUTION

- 3.1 PREPARATION
  - A. At least 15 days prior to starting any disinfection work, the Contractor shall submit to the Owner detailed flushing and disinfection plan. The plan shall cover the method and procedure proposed, to include coordination, sequence of operations, equipment to be used, the manner of filling and flushing of lines, and the neutralization and disposal of wasted water. All chlorinated water discharged to drainage courses shall be neutralized by dilution or chemical treatment.

- B. The Contractor shall coordinate flushing and disinfection work with adjacent work as necessary to preclude work interference or duplication of effort and to expedite the overall progress of the work.
- C. The Contractor shall provide all necessary piping connections, temporary valves, sampling taps, pumps, disinfectant, neutralization agents, testing laboratory services, and all other items of equipment or facilities required to complete the disinfection work.
- D. Water required for flushing and disinfection work will be provided by the Owner.
- E. Verify that piping system has been cleaned, inspected, and pressure tested.

#### 3.2 EXECUTION

- A. Provide and attach equipment required to execute work of this Section.
- B. At connections and cut-ins, swab all new pipe fittings, valves, and the open ends of the existing pipe with a 200 ppm chlorine solution immediately before assembly.
- C. Disinfect all portions of the new water line with an approved chlorine compound to provide 50 ppm chlorine throughout the system and let stand for 24 hours, then flush.
- D. Circulate and flush repeatedly until required cleanliness is achieved.
- E. Flush and clean with domestic water.
- F. Replace permanent system devices removed for disinfection.

#### 3.3 TESTS

- A. The Contractor shall collect two water samples 24 hours apart for each continuous section of new water main at two separate sampling locations that are at least 300 meters (1,000 feet) apart. Where continuous sections of new water main are less than 300 meters (1,000 feet) long, one sampling location per continuous section will be adequate. The sample will be analyzed for bacteriological quality. Two consecutive tests at each sampling location must show the absence of coliform bacteria prior to placing water mains into service.
- B. If portions of main are placed in service before the entire system, those portions shall be tested according to Part A given above.
- C. All costs for testing or re-testing due to failed tests will be at the Contractor's expense.
- D. Test samples in accordance with ANSI/AWWA C651.

#### VALVES

# PART 1 GENERAL

- 1.1 WORK INCLUDED
  - A. Gate Valves.
  - B. Fire Hydrants.
  - C. Valve Operators.

#### 1.2 RELATED WORK

A. Section 02620: Water Distribution System.

# 1.3 REFERENCES

- A. AWWA C500-86.
- B. AWWA C600-87.

#### 1.4 SUBMITTALS

- A. Submit copies of valve ordering schedule for approval before ordering valves.
- B. Submit detailed shop drawings. Clearly indicate make, model, location, type, size, and pressure rating.

#### 1.5 OPERATION AND MAINTENANCE DATA

- A. Submit operation and maintenance data.
- B. Include manufacturer's descriptive literature, operating instructions, installation instructions, maintenance and repair data, and parts listing.

# PART 2 PRODUCTS

- 2.1 GATE VALVES
  - A. Gate valves shall be cast iron body; resilient seated, parallel sheath type with mechanical joint ends; conforming to AWWA C509-87. Gate valves shall be Mueller A-2360-20 or Owner approved equal.
  - B. Gate valves which are buried or submerged shall be non-rising stem with O-ring stem seals.
  - C. End connections shall be mechanical joints.

#### 2.2 VALVE OPERATORS

- A. Each gate shall be furnished with a valve box. The valve box shall be a fully adjustable box with extension stem system similar to American Flow Control Trench Adapter or approved equal. This system allows the operating nut to be located immediately below the cap near finished grade.
- B. The box shall be not less than five inches in diameter with a cover with the word "water on it.
- C. The extension stem shall be of plated steel square tubing and torque tested to a minimum of 1,000 foot-pounds. The stem shall be supported in the top section of the valve box by a grit washer designed to keep grit and dirt from entering the box interior.
- D. A 1-1/2 foot diameter concrete encasement four inches thick shall be poured around the box in areas not with paving.

#### 2.3 FIRE HYDRANTS

- A. AWWA 3-way fire hydrants with two 64 mm (2.5 inch) and one 127 mm (5 inch) nozzles, a 133 mm (5-1/4 inch) compression type main valve, suitable for 1.7 meter (5.5 feet) bury, and conforming to AWWA Specifications C502.
- B. Hydrants shall be Mueller Super Centurion 250-A-423 with 150 mm (6 inch) shoe or Owner approved equal.
- C. One (1) auxiliary AWWA 150 mm (6 inch) gate valve with valve box as specified for each fire hydrant.
- D. Provide coarse gravel drain sump as shown on the drawings. Verify drain holes are open before placing coarse gravel. Place minimum 0.20 cubic meters (7 cubic feet) of coarse gravel.
- E. Provide mechanical joint locked hydrant fittings or retainer glands and poured concrete thrust block as specified or indicated on the drawings.

# PART 3 EXECUTION

- 3.1 INSTALLATION
  - A. Valves shall be set plumb; not to exceed 21 mm (1/4 inch per foot) per meter of slope from plumb.
  - B. Fire hydrants and valve boxes shall be set plumb; not to exceed 21 mm (1/4 inch per foot) per meter of slope from plumb. The pumper nozzle shall face perpendicular to the s street.
  - C. Install valves and accessories in accordance with manufacturer's instructions.

# (SEAL)

# SEEDING

Subsection 803.02 in the 1997 Metric Edition of the Standard Specifications is amended to include the following:

Type "A"	Minimum Purity (%)	Broadcast or Hydraulic Seeder Appli- cation Rate in kg of Pure Live Seed/ha	Approved Mech. Drill Application Rate in kg of Pure Live Seed/ha
Canada Wildrye – NE, IA	85		2.25
Eastern gamagrass – Pete	90		2.25
Intermediate Wheatgrass – Flintlock	85		4.5
Switchgrass – Pathfinder	90		1.7
Indiangrass – NE-54	75		3.4
Big Bluestem – Pawnee	60		3.4
Sideoats grama – Trailway	75		3.4
Little Bluestem – Blaze	60		3.4
III. Bundle Flower – Inoculated	90		0.55
Partridge Pea – Platte	90		0.8
Blackeyed Susan	90		0.7
Blue Flax	90		3.4
Rudbeckia laciniata – Golden Glow	90		0.4
Maltese Cross	90		0.7
Grayhead Prairie Coneflower	90		0.55
Pitcher Sage	90		0.7
		[	l
Туре "В"			
Perennial Ryegrass-Linn	85		11
K-31 Fescue	85		22
Western Wheatgrass – Flintlock	85		11
Sideoats grama – Trailway	75		3.5
Buffalograss – Sharps 2, Cody	80		5.5
Blue grama – NE, KS, CO	35		2.25
Birdsfoot Trefoil-Empire-5X Inoculation	90		4.5
Oats/Wheat	90		13

All seed 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.

Rates of application of commercial inorganic fertilizer shall be:

	Rate of Application Per ha (Minimum)
Available Nitrogen (N <sub>2</sub> )	35 or 40 kg
Available Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> )	102 or 107 kg

Rate of application of granular sulphur coated urea fertilizer shall be:

Nitrogen (total available)	67 kg
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The contractor may, at his option, apply granular urea formaldehyde in lieu of the sulphur coated urea fertilizer at the following rate:

Nitrogen (total available)	67 kg
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# SEEDING

Subsection 803.02 in the 1997 Metric Edition of the Standard Specifications is amended to include the following:

Type "Temporary"	Minimum Purity (%)	Broadcast or Hydraulic Seeder Appli- cation Rate in kg of Pure Live Seed/ha	Approved Mech. Drill Application Rate in kg of Pure Live Seed/ha
Oats	90	100	100

Temporary seed requires inorganic fertilizer only.

Temporary seeding is done on the temporary road embankments and other places as shown on the plans or as directed by the Engineer. The seeding and mulching shall be done as soon as the embankment is done. Seeding seasons do not apply to temporary seeding.

Hydra mulch for temporary seeding shall be soil guard, spray mat, conwed 3000, or approved equal. The application rate is 3900 kg/ha. The Hydra mulch will not be measured and paid for separately, but shall be considered subsidiary to the "Temporary Seeding."

Subsections 803.04 and 803.05 are amended to include the item "Temporary Seeding."

All seed 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.

Rates of application of commercial inorganic fertilizer shall be:

	Rate of Application Per ha (Minimum)
Available Nitrogen (N <sub>2</sub> )	67 or 67 kg
Available Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> )	0 or 0 kg

Rate of application of granular sulphur coated urea fertilizer shall be:

Nitrogen (total available)	0 kg
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The contractor may, at his option, apply granular urea formaldehyde in lieu of the sulphur coated urea fertilizer at the following rate:

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# **EROSION CONTROL**

Subsection 807.02 in the 1997 Metric Edition of the Standard Specifications is amended to include the following:

For the Erosion Control at the AAA Installation	Minimum Purity (%)	Application rate in kg of Pure Live Seed/1000 m <sup>2</sup>
Intermediate Wheatgrass-Slate	85	0.6
Western Wheatgrass-Flintlock	85	11
Eastern Gamagrass-Pete	90	0.25
Switchgrass-Pathfinder	90	0.5
III. Bundleflower-Inoculated	90	0.06
Rudbeckia Laciniata-Golden Glow	90	0.06
Oats/Wheat	90	3
For Erosion Control at the New Box Culvert		
Intermediate Wheatgrass-Slate	85	0.6
Western Wheatgrass-Flintlock	85	0.9
Little Bluestem-Blaze	60	0.6
Sideoats Grama-Trailway	75	0.45
Purple Prairie Clover-Inoculated	90	0.17
Partridge Pea – Platte	90	0.09
Blue Flax	90	0.35
Blackeyed Susan	90	0.08
Upright Prairie Coneflower	90	0.11
Pitcher Sage – NeKan	90	0.11
Oats/Wheat	90	3

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 engineers 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:

	Rate of Application Per 1000 m <sup>2</sup> (Min.)
Available Nitrogen ( $N_2$ )	4 or 5 kg
Available Phosphoric Acid (P2O5)	12 or 13 kg

Rate of application of granular sulphur coated urea fertilizer or urea-formaldehyde fertilizer shall be:

	Rate of Application Per 1000 m <sup>2</sup> (Min.)
Nitrogen (Total Available)	10 kg

#### EROSION CONTROL (S8-14-0202)

Subsection 807.02 in the Supplemental Specifications is void.

Paragraph 6.b. of Subsection 807.03 in the Standard Specifications is amended to include the following:

The soil retention blanket for Erosion Control Type B, Type B-1, and Type B-2 shall be placed longitudinally next to the shoulder of the roadway. The soil retention blanket shall be placed after the area is seeded and before the area is mulched. One-third more staples are required than shown in the plans.

# EROSION CONTROL, TYPE "AAA" (S8-16-0801)

This work shall consist of placing a soil retention blanket, filter fabric, seed, fertilizer, and soil fill at the locations shown in the plans. The installation shall be as shown in the plans and as directed by the engineer.

Paragraph 1. of Subsection 807.02 in the Standard Specifications is void and superseded by the following:

The soil retention blanket for Erosion Control "AAA" shall be as shown on the approved products list for Erosion Control AAA.

The filter fabric shall be from the approved products list for Erosion Control Type A, Type AA, or Erosion check or approved equal. After the area around the culvert is shaped and graded, the filter fabric shall be placed and pinned. The filter fabric shall be placed under the pipe and the full length of the installation as shown in the plans. Place the Erosion Control "AAA" mat over the pipe to allow for a three foot (1 meter) ± piece of material on top of the pipe. Cut out the hole for the pipe, leaving an area uncut that will be tucked under the culvert and in front of the culvert. Pin the mat as shown and trench in and compact the downstream end. Seed and fertilize the area and soil fill, raking the soil in well. Reseed and rerake the area.

Paragraph 2. of Subsection 807.02 of the Standard Specifications is void and superseded by the following:

The pins for the filter fabric shall be made of No. 11 gauge (3 mm diameter) steel wire. The pins shall be "U" pins with a one-inch (25 mm) throat and at least six inches (150 mm) long.

The pins for the "AAA" mat shall be a minimum of 8 or 9 gauge (4 mm diameter) wire, u shaped pins with 8"-10" (200 mm to 250 mm) legs and a 1" or 2" (25 mm or 50 mm) throat.

# FABRIC SILT FENCE (HIGH POROSITY AND LOW POROSITY)

Paragraph 4. of Subsection 809.03 in the 1997 Metric Edition of the Standard Specifications is amended to include the following:

The silt fence shall be removed at the completion of the project and disposed of as directed by the Engineer. The area shall be graded to conform to the typical cross sections or as directed by the Engineer.

# 47B CONCRETE PAVEMENTS AND 47BD CONCRETE FOR BRIDGES (S10-4-0302)

#### General

Section 1002 in the 1997 Standard Specifications and Supplemental Specifications is amended to include the following:

For the purpose of this Special Provision, Type IPN shall mean Type IP cement made with 15 to 25 percent natural pozzolan and Type IPF shall mean Type IP cement made with 15 to 25 percent Class F fly ash. All cements must conform to the requirements of Section 1004 in the 1997 Standard Specifications and Supplemental Specifications.

#### 47BD Concrete for Bridges and Barriers

The 47BD concrete used in bridge decks, approach slabs, bridge rails, and barriers shall be proportioned using one of the alternates shown in Table I.

				Air		Pounds of			
	Cement	Pounds of Cement	Pounds of Class F	Cor Per	ntent cent	Total per C	l Agg. Cu.Yd.	Ratio of Total Agg.	Type of Coarse
Alt.	Туре	per Cu.Yd.	Fly Ash	Min.	Max.	Min.	Max.	Percent	Agg.
1	l or ll	590	130 Min.	5.0	7.5	2530	2950	30±3	Limestone
2	IPN	658	0*	5.0	7.5	2530	2950	30±3	Limestone
3	IPF	658	0**	5.0	7.5	2530	2950	30±3	Limestone
4	l or ll	658***	0***	5.0	7.5	2530	2950	30±3	Limestone

TABLE I (ENGLISH) CLASS 47BD CONCRETE PROPORTIONS

Alt.	Cement Type	Kg of Cement per Cu. Meter	Kg of Class F Fly Ash	A Cor Per Min.	ir itent cent Max.	Kg of Agg Cu.M Min.	Total . per Meter Max.	Ratio of Total Agg. Percent	Type of Coarse Agg.
1	l or ll	350	77 Min.	5.0	7.5	1500	1750	30±3	Limestone
2	IPN	390	0*	5.0	7.5	1500	1750	30±3	Limestone
3	IPF	390	0**	5.0	7.5	1500	1750	30±3	Limestone
4	l or ll	390***	0***	5.0	7.5	1500	1750	30±3	Limestone

#### TABLE I (METRIC) CLASS 47BD CONCRETE PROPORTIONS

\* Class C or F fly ash may be substituted in the mix design provided the total pozzolan content does not exceed 25 percent. The mix may be modified by substituting an amount of fly ash equal to the weight of cement removed.

\*\* No additional fly ash substitution is allowed.

\*\*\* Total alkali content shall not exceed 3 lbs./yd.<sup>3</sup> (1.8 Kg/m<sup>3</sup>)

Water reducing and set retarding admixtures shall be used in accordance with the manufacturer's recommendations of dosage rates.

#### 47B Concrete Pavements

The 47B concrete used in concrete pavements shall be proportioned using one of the alternates shown in Table II.

Alt.	Cement Type	Pounds of Cement per Cu.Yd.	Pounds of Class F Fly Ash	A Cor Pere Min.	ir itent cent Max.	Pour Total per C Min.	nds of Agg. Cu.Yd. Max.	Ratio of Total Agg. Percent	Type of Coarse Agg.
1	l or ll	510	110 Min.	5.0	7.5	2876	3130	30±3	Limestone
2	IPN	564*	0*	5.0	7.5	2876	3130	30±3	Limestone
3	IPF	564**	0**	5.0	7.5	2876	3130	30±3	Limestone
4	l or ll	564***	0***	5.0	7.5	2876	3130	30±3	Limestone

#### TABLE II (ENGLISH) CLASS 47B CONCRETE PAVEMENT PROPORTIONS

Alt.	Cement Type	Kg of Cement per Cu. Meter	Kg of Class F Fly Ash	A Cor Per Min.	ir itent cent Max.	Kg of Agg Cu.I Min.	<sup>-</sup> Total . per Meter Max.	Ratio of Total Agg. Percent	Type of Coarse Agg.
1	l or ll	303	65 Min.	5.0	7.5	1706	1857	30±3	Limestone
2	IPN	335*	0*	5.0	7.5	1706	1857	30±3	Limestone
3	IPF	335**	0**	5.0	7.5	1706	1857	30±3	Limestone
4	l or ll	335***	0***	5.0	7.5	1706	1857	30±3	Limestone

# TABLE II (METRIC)CLASS 47B CONCRETE PAVEMENT PROPORTIONS

\* Class C or F fly ash may be substituted in the mix design provided the total pozzolan content does not exceed 25 percent. The mix may be modified by substituting an amount of fly ash equal to the weight of cement removed.

- \*\* No additional fly ash substitution is allowed.
- \*\*\* Total alkali content shall not exceed 3 lbs./yd.<sup>3</sup> (1.8 Kg/m<sup>3</sup>)

Water reducing admixtures shall be used in accordance with the manufacturer's recommendations of dosage rates.

# FLY ASH (S10-5-0801)

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

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

# STRUCTURAL STEEL (S10-5-0801)

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

1045.03 -- Steel Plate Substitution

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

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

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

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

2. The material used for repair shall provide a minimum coating thickness of at least 50 µm with one application.
# DOWEL BARS (S10-5-0801)

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

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

# CORRUGATED METAL PIPE (S10-5-0801)

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

# METAL FLARED-END SECTIONS (S10-5-0801)

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

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

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

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

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

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

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

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

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

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

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

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

# HIGH TENSILE BOLTS, NUTS, AND WASHERS (S10-5-1001)

Subsection 1058.02 in the Supplemental Specifications is void.

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

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

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

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

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

Paragraph 3. of Subsection 1068.02 is void.

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

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

1020.01 - Description

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

1020.02 - Material Characteristics

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

## 1020.03 - Acceptance Requirements

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

# PERFORMANCE GRADED BINDER

Section 503 in the Standard Specifications and Supplemental Specifications is amended to include Performance Graded Binders.

#### I. Description:

The performance graded binder to be used on this project shall be PG Binder 70-28 for the Asphaltic Concrete Type SP4 and PG Binder 64-22 for the temporary surfacing supplied by a Certified Supplier.

## Certified Supplier

A supplier must be certified by the Nebraska Department of Roads to be allowed to supply Performance Graded Binder in Nebraska. A certified supplier must be a participant in one or more of the following PG Binder groups.

- 1. AASHTO Materials Reference Laboratory (AMRL)
- 2. Western Cooperative Testing Group
- 3. Combined States Binder Group

The supplier must maintain and follow the requirements of the group or groups in which they participate in to maintain certification by the Nebraska Department of Roads. In addition, active participation is required to maintain certification by the Department. Active participation will include submitting of round robin samples results, along with meeting other requirements of the group or groups. Failure to do so will result in loss of certification by the Department.

A certified supplier may be asked to supply to the Department, past round robin results, laboratory inspection reports, reasons for and investigative reports on out lying results, quality control testing, and/or technician training and proficiency testing reports.

## Supplier Certification

A supplier may request certification by contacting the Nebraska Department of Roads, Materials and Research Division, Flexible Pavement Engineer at (402) 479-4675. A temporary certification may be issued for a period of up to one year. Split sample testing will be required prior to receiving a temporary certification. Split sample testing will be done on all grades of binder that the supplier intends to supply during the temporary certification. The supplier will have up to one year to become certified by participating in and following the requirements of one or more of the approved binder groups.

A supplier may become certified through active participation in other binder certification/round robin groups that are approved by the Department. The Department may request from the supplier prior to approval, past or current round robin results, quality control testing, laboratory inspection reports, and/or technician training and proficiency testing reports.

- II. Binder Sampling and Testing:
  - 1. Lots. Each 3750 tons (3400 Mg) of HMA produced will be a binder lot.
  - 2. A binder lot will include only one PG Binder grade or a blend as allowed in paragraph 6.e.
  - 3. A Binder lot will only include one supplier of the PG Binder or a blend as allowed in paragraph 6.e.
  - 4. Blending of different binder grades and binders from different suppliers will be allowed with restrictions as noted in paragraph 6.e. The Engineer must be notified of the intent to blend prior to actual blending.
  - 5. All binders shall be sampled at the rate of one sample per lot with a minimum of three samples per project.
    - a. The sample shall consist of two one-quart (liter) cans and shall be taken by the Contractor's Certified Sampling Technician, with assistance from or under supervision of NDR personnel. The sample shall be taken at the plant from the line between the storage tank and the mixer or from the tank supplying material to the line, at a location at which material sampled is representative of the material in the line to the mixer. One can will be tested for compliance with MP1 specifications and the other can portion will be saved for dispute resolution, if needed. The sampling process shall follow procedures of the NDR Materials Sampling Guide and NDR T 40.
    - Testing. When the tested PG Binder is in compliance, the binder lot will be accepted and both cans of the sample can be discarded. If the tested PG Binder does not comply, then the price of the PG Binder lot represented by the sample shall be adjusted according to Table 1. Overall project average testing requirements and price adjustments will also apply, as stated in Table 2.
  - 6. Material Requirements:
    - a. Performance graded binder, as specified in the contract items shall be in accordance with AASHTO Designation MP1 and meet all minimum and maximum requirements.
    - b. Substitution of a PG Binder, which exceeds the upper and lower grade designations from the specified, requires advance notification of the Engineer, and be documented by a no cost change order. The bill of lading or delivery ticket shall state the binder grade and specific gravity.
    - c. Material Certification A Material Certification shall be submitted prior to construction stating, the type of modifier being used, and the recommended mixing and compaction temperatures for the Hot Mix Asphalt.
    - d. The Contractor shall receive from the supplier, instructions on the proper storage and handling of each grade and shipment of PG Binder.

- e. Blending of PG Binders at the hot mix plant site will be allowed only when transitioning to an asphalt mixture requiring a different grade of binder and with the following restrictions:
  - (1) The resultant blend will meet MP-1 specifications when tested as ±3° of the specified PG binder. The sample of the blended material will 1) be considered as a lot sample, 2) will be taken during initial production following the blending of the binders, and 3) deductions when not meeting MP-1, will apply. On the blended sample's identification form will be a note explaining the blending conditions and a statement that the sample is a blend of materials. The next lot sample, following the sample representing the blend, will be tested as the specified binder grade for the asphalt mixture being produced and shall meet MP-1 specifications.
  - (2) Modified Binders When a type of modification is used and stated in the Material Certification as required in paragraph 6.c., it will not be allowed to be blended with a binder containing a different type of modification. Blending of the same type of modifiers will be allowed.

SINGLE SAMPLE TOLERANCE AND PRICE REDUCTION TABLE				
	Price Reduction <sup>1</sup> Pay Factor of 0.75	Determined by Engineer <sup>2</sup> Pay Factor of 0.50 or Removal		
$\frac{\text{Tests on Original Binder}}{\text{Dynamic Shear, G*/Sin }\delta, \text{kPa}}$	0.86-0.92	< 0.86		
<u>Tests on Rolling Thin Film</u> <u>Oven Residue</u> Dynamic Shear, G*/Sin δ, kPa	1.76-1.97	< 1.76		
$\frac{\text{Tests Pressure Aging Vessel}}{\text{Residue}}$ Dynamic Shear, G*Sin $\delta$ , kPa	5601-6200	> 6200		
<u>Creep Stiffness</u> S, Mpa	325-348	> 348		
m-value	0.270-0.284	< 0.270		

## TABLE 1

**NOTE:** If more than one test fails to meet requirements, the largest individual price reduction (pay factor of 0.75 or 0.50) will be used to calculate price reduction for the asphalt binder.

<sup>1</sup>Price Reduction will be based on contract unit price of asphalt binder.

<sup>2</sup>The Engineer will determine if the non-compliant material will be removed. If the non-compliant material is accepted, a price reduction of 50% will be applied. The price reduction shall be based on the contract unit price of asphalt binder.

The pay factor will be applied to the quantity of material that the sample represents.

Overall Project Average - Price Reduction Based on Complete MP-1 Testing

Out of specification material will be determined by the specifications outlined in AASHTO MP-1, excluding Direct Tension.

The Nebraska Department of Roads, Materials and Research, Bituminous Laboratory will do complete testing, per MP-1 specifications, on a minimum of three samples or 20% of the total samples from the project, whichever is the greatest. The Department will randomly select one sample for complete MP-1 testing out of every five samples received. When any test result shows sample not meeting MP-1 specifications, the previous and following sample received will be tested for complete MP-1 compliance. Testing will continue in this manner until tested samples meet all of MP-1 specifications.

Original Dynamic Shear Rheometer testing will be completed on all samples. When a sample being tested for only Original Dynamic Shear Rheometer compliance falls out of MP-1 specification, it will then be tested for complete MP-1 specification compliance. Adjacent samples will be tested when results, other than the Original Dynamic Shear Rheometer result, do not meet specification. This additional complete testing for MP-1 compliance is in addition to the minimum number of samples that will be tested for complete MP-1 compliance.

At the completion of testing, all complete MP-1 test results will be averaged. For averages that do not meet MP-1 specifications, the largest reduction shown in Table 2 will be applied to all the Performance Graded Binder used on the project.

OVERALL PROJECT AVERAGE - PRICE REDUCTION TABLE				
	Range of Average	Pay Factor Applied		
<u>Tests on Original Binder</u> Dynamic Shear, G*/Sin δ, kPa Min. 1.00 kPa	< 1.00 - 0.98 < 0.98 - 0.96 < 0.96 - 0.94 < 0.94	0.98 0.95 0.92 0.85		
<u>Tests on Rolling Thin Film</u> <u>Oven Residue</u> Dynamic Shear, G*/Sin δ, kPa Min. 2.20 kPa	< 2.20 - 2.156 < 2.156 - 2.09 < 209 - 2.024 < 2.024	0.98 0.95 0.92 0.85		
<u>Tests Pressure Aging Vessel</u> <u>Residue</u> Dynamic Shear, G*Sin δ, kPa Max. 5000 kPa	< 5000 - 5100 < 5100 - 5250 < 5250 - 5400 < 5400	0.98 0.95 0.92 0.85		
m-Value Min. 0.300	< 0.300 - 0.298 < 0.298 - 0.293 < 0.293 - 0.290 < 0.290	0.98 0.95 0.92 0.85		
<u>Creep Stiffness</u> S, MPa Max. 300 MPa	< 300 - 306 < 306 - 315 < 315 - 324 < 324	0.98 0.95 0.92 0.85		

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Single Sample Reduction and Overall Project Average Reduction

A sample representing a lot, not meeting MP-1 Specification, will have a reduction for the material that the sample represents. Only the largest reduction from Table 1, will apply when more than one result of a single sample does not meet MP-1 specifications. Only the largest overall project average reduction from Table 2, will apply when more than one test average falls out of MP-1 specifications. Pay Factors based on both Table 1 and Table 2 test results are separate from each other and both will be applied.

Investigation of Verification Lot Samples That Do Not Meet Specifications

When the lot sample shows test results out of specification limits, the process of resolving the sample failure will include the following actions as appropriate:

- 1. The Bituminous Lab may conduct retesting of the remaining portion of the original can sample as determined necessary to confirm or disaffirm the original test result(s).
- 2. The Flexible Pavement Engineer will notify the Contractor who will arrange to investigate all aspects of the testing, loading, handling and delivery of the material in question. The Contractor shall report findings to the Central Laboratory, Flexible Pavement Engineer.

- 3. The Department will collect and compile all information and prepare a report. A copy of the report will be distributed to the District and the Contractor.
- 4. The Bituminous Laboratory will issue the standard report of tests for all samples tested, to include any resulting pay factor deductions. A copy of the report of tests will be distributed to the District, Construction Division, and Contractor.

## **Dispute Resolution**

After testing and investigations have been completed on the one can of the sample and there is still a dispute, the Department will select an independent laboratory for referee testing to take place on the second can of the sample. If the independent lab's tests indicate failing results and pay deductions equal to or great than the Department's, the Contractor will reimburse the Department for the cost of testing. If the independent lab's tests indicate that the material meets specification or is at a pay deduction less than the Department's, the Department will assume the cost of testing. When the independent lab's tests indicate a pay deduction, the lesser of the Department's and the independent lab's deductions will be applied.

#### Basis of Measurement

PG Binder shall be measured in accordance with Subsection 503.05 in the Standard Specifications and Supplemental Specifications.

#### Basis of Payment:

Subsection 503.06 in the Standard Specifications and Supplemental Specifications is amended to provide that PG Binder, accepted by the Engineer for use in asphaltic concrete, will be paid for at the contract unit price per ton (Megagram) for the item "Performance Graded Binder \_\_\_\_\_\_", less any deductions as prescribed in the tolerance and price reduction tables.

# SUPERPAVE ASPHALTIC CONCRETE

Asphaltic Concrete Type SP4 shall use the 12.5 gradation band.

Paragraph 4.f.(1)(i) of Subsection 1028.03 in the Supplemental Specifications is void and superseded by the following:

Bulk Specific Gravity (Gmb) shall be determined for each specimen in accordance with AASHTO T 166.

Paragraph 4.f.(5) of Subsection 1028.03 in the Supplemental Specifications is void and superseded by the following:

- 5. (i) The percent of PG Binder shall be determined for each QC test. The percent of PG Binder will be computed by ignition oven results.
- 5. (ii) The gradations shall be determined for each QC test using AASHTO T 30.

Paragraph 4.g.(1) of Subsection 1028.03 in the Supplemental Specifications is void and superseded by the following:

All test results and calculations shall be recorded and documented on data sheets using the latest version of NDOR provided "Superpave" software. A copy containing complete project documentation will be provided to the Materials and Research Division at the completion of the project.

Paragraph 5.b. of Subsection 1028.03 in the Supplemental Specifications is void and superseded by the following:

Two consecutive test results (single test) outside the Specification limits or a (50% or reject) shall be cause to cease operations.

Paragraph 5.e. of Subsection 1028.03 in the Supplemental Specifications is void and superseded by the following:

Failure to cease operations after two consecutive test results fall outside the Specification limits shall subject all subsequent material to be rejected.

The "**Note**" in paragraph 9.b. of Subsection 1028.03 in the Supplemental Specifications is void and superseded by the following:

**Note:** The individual QC test value of the Maximum Mix Specific Gravity (Rice) will be used to calculate the density of each corresponding core.

# PROPOSAL GUARANTY (S1-38-0801)

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

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