

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

NEBRASKA DEPARTMENT OF ROADS  
LETTING DATE : September 05, 2013

CALL ORDER: 200            CONTRACT ID: 2502

CONTROL NO./SEQ. NO.: 22502 /000 PROJECT NO.: MISC-92-6(1020)

TENTATIVE START DATE: 10/14/14            CONTRACT TIME: 10 WORKING DAYS

LOCATION: N-92, PLATTE RIVER EAST MITIGATION SITE  
IN COUNTY: SAUNDERS

BIDDER

GROUP 4 CULVERTS

## 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 submitted to NDOR in a written format through the Bid Express (BidX) website at <https://www.bidx.com/ne/lettings>. Likewise, NDOR will post answers exclusively to the BidX website. All official answers will be identified as “Authorized by NDOR.” **Questions will not be answered verbally.**

STATE OF NEBRASKA  
DEPARTMENT OF ROADS

Required Provisions Supplemental to the

**Standard Specifications for Highway Construction**

**I. Application**

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

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

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

**II. Equal Opportunity**

1. **Selection of Labor**

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

2. **Nebraska Fair Employment Practices Act**

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

3. **Nebraska Equal Pay Act**

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

April 4, 1995

### III. Employment of Labor

#### 1. General

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

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

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

#### 2. Payrolls

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

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

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

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

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

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

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

April 4, 1995

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

#### **IV. Safety and Accident Prevention**

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

#### **V. Subletting or Assigning the Contract**

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

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

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

April 4, 1995

**SPECIAL PROVISIONS  
FOR  
STATE  
PROJECT NO. MISC-92-6(1020)**

**GENERAL CONDITIONS**

Bids for the work contemplated in this proposal form will be received at the office of the Nebraska Department of Roads in Room 104 of the Central Office Building at 1500 Highway 2 at Lincoln, Nebraska, on September 5, 2013, until 1:30 P.M.

- a. Bids submitted by mail should be addressed to the Nebraska Department of Roads, c/o Contract Lettings Section, P.O. Box 94759, Lincoln, NE 68509-4759.
- b. Bids submitted electronically over the internet, shall be submitted using [www.bidx.com](http://www.bidx.com).

The 2007 Edition of the Standard Specifications for Highway Construction, including all amendments and additions thereto effective at the date of the contract, are made a part of these Special Provisions, through reference.

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

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

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

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

**STATUS OF UTILITIES**

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

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

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

To arrange for utilities to locate and flag their underground facilities, contact The Diggers Hotline of Nebraska at 1-800-331-5666 or dial 811.

### STATUS OF RIGHT OF WAY

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

**Unacquired Right-of-Way Tracts as follows:**

Tract Number	Status of Tract	Hearing Date
None	None	None

**Right-of-Way Tracts with Pay Items:**

Tract Number	Pay Items
None	None

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

### ENVIRONMENTAL COMMITMENT

**Control No.:** 22502 **Project No.:** MISC-92-6(1020)

**Project Name:** Platte River East Mitigation Site

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

**(Responsible Party for the measure is found in parentheses)**

This project is being constructed in an existing wetland to fulfill conditions required for the Platte River East highway Improvement Project (Project No. STPD-92-7(103), CN 21085). Therefore, a new 404 permit is not required because any impacts to wetlands are already authorized under USACE Permit No.2004-10214. Disturbance to the wetlands area will be required to make the necessary improvements. However, to the extent practicable, the Contractor will avoid and minimize disturbance to the wetlands areas and use appropriate BMPs to minimize erosion. (District Construction, Contractor)

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

**General Conservation Conditions**

**A-1 Changes in Project Scope.** If there is a change in the project scope, the project limits, or environmental commitments, the NDOR Environmental Section must be contacted to evaluate potential impacts prior to implementation. Environmental commitments are not

subject to change without prior written approval from the Federal Highway Administration. (District Construction, Contractor)

- A-2 Conservation Conditions.** Conservation conditions are to be fully implemented within the project boundaries as shown on the plans. (District Construction, Contractor)
- A-3 Early Construction Starts.** Request for early construction starts must be coordinated by the Project Construction Engineer with NDOR Environmental for approval of early start to ensure avoidance of listed species sensitive lifecycle timeframes. Work in these timeframes will require approval from the Federal Highway Administration and could require consultation with the USFWS and NGPC. (District Construction, Contractor)
- A-4 E&T Species.** If federal or state listed species are observed during construction, contact NDOR Environmental. Contact NDOR Environmental for a reference of federal and state listed species. (NDOR Environmental, District Construction, Contractor)
- A-5 Refueling.** Refueling will be conducted outside of those sensitive areas identified on the plans, in the contract, and/or marked in the field. (Contractor)
- A-6 Restricted Activities.** The following project activities shall, to the extent possible, be restricted to between the beginning and ending points (*stationing, reference posts, mile markers, and/or section-township-range references*) of the project, within the right-of-way designated on the project plans: borrow sites, burn sites, construction debris waste disposal areas, concrete and asphalt plants, haul roads, stockpiling areas, staging areas, and material storage sites. Any project related activities that occur outside of these areas must be environmentally cleared/permitted with the Nebraska Game and Parks Commission as well as any other appropriate agencies by the Contractor and those clearances/permits submitted to the District Construction Project Manager prior to the start of the above listed project activities. The Contractor shall submit information such as an aerial photo showing the proposed activity site, a soil survey map with the location of the site, a plan-sheet or drawing showing the location and dimensions of the activity site, a minimum of 4 different ground photos showing the existing conditions at the proposed activity site, depth to ground water and depth of pit, and the "Platte River depletion status" of the site. The District Construction Project Manager will notify NDOR Environmental which will coordinate with FHWA for acceptance if needed. The Contractor must receive Notice of Acceptance from NDOR, prior to starting the above listed project activities. These project activities cannot adversely affect state and/or federally listed species or designated critical habitat. (NDOR Environmental, District Construction, Contractor)
- A-7 Waste/Debris.** Construction waste/debris will be disposed of in areas or a manner which will not adversely affect state and/or federally listed species and/or designated critical habitat. (Contractor)
- S-2 Platte River Depletions.** If within the Platte River watershed (including the Elkhorn, Salt Creek, Loup, Calamus, and Lower Platte drainage basins), include the following as a design commitment for all detention basin/retention basins, and borrow sites:

All efforts will be made to design the project to prevent depletions to the Platte River. If there is any potential to create a depletion, NDOR shall follow the current Platte River depletion protocols for coordination, minimization, and mitigation. In general, the



following are considered de minimis depletions, but may still require agency coordination; a project which: a) creates an annual depletion less than 0.1 acre feet, b) creates a detention basin that detains water for less than 72 hours, c) any diverted water will be returned to its natural basin within 30 days, or d) creates a one-time depletion of less than 10 acre feet.

- S-3 Revegetation.** All permanent seeding and plantings (excluding managed landscaped areas) shall use species and composition native to the project vicinity as shown in the Plan for the Roadside Environment. However, within the first 16 feet of the road shoulder and within high erosion prone locations, tall fescue or perennial ryegrass may be used at minimal rates to provide quick groundcover to prevent erosion, unless state or federally listed threatened or endangered plants were identified in the project area during surveys. If listed **plants** were identified during survey, any seed mix requirements identified during resource agency consultations shall be used for the project. (NDOR Environmental)
- S-4 Sensitive Areas.** Environmentally Sensitive Areas will be marked on the plans, in the field, or in the contract by NDOR Environmental for avoidance. (NDOR Environmental, District Construction)
- S-5 Species Surveys.** If species surveys are required for this project, results will be sent by NDOR to the USFWS, NGPC, and if applicable COE. FHWA will be copied on submittals. (NDOR Environmental, District Construction)

**Interior Least Tern & Piping Plover:**

- LT-1, PP-1** For construction activities that begin prior to April 15 and continue beyond April 15, surveys will be conducted starting April 8 and continue through the end of construction or August 15, whichever comes first. NDOR Environmental, NDOR trained personnel, or a qualified biologist will conduct surveys according to protocol at the following locations: sandbars within the Platte River (location of suitable habitat). If species are present, the District will notify the Contractor to stop work within ¼ mile of nesting activities and follow the protocol to determine when work can resume. (NDOR Environmental, District, Contractor)
- ILT-2, PP-2** When initiating construction activities between April 15 and August 15, surveys will start one week prior to construction activities and will continue through the end of construction or August 15<sup>th</sup>, whichever comes first. NDOR trained personnel or a qualified biologist will conduct surveys, according to protocol, at the following locations: sandbars within the Platte River (location of suitable habitat). If species are present, the District will notify the Contractor to stop work within ¼ mile of nesting activities and follow the protocol to determine when work can resume. (NDOR Environmental, District, Contractor)
- R-4** For the **Interior Least Tern** and **Piping Plover**, nighttime work with lights from April 15 – August 15 is not authorized. If nighttime work is required, the Contractor will notify the District and the District will request approval from NDOR Environmental Section at least 10 working days prior to construction so consultation with the USFWS, NGPC, and FHWA can be initiated. Surveys may be required to determine if nesting birds are present within ½ mile of the

nighttime activity. Approval from these agencies is required. (NDOR Environmental, District Construction, Contractor)

**River Otter:**

**RO-1** A qualified biologist will survey according to protocol no more than 10 days prior to construction. If no active den sites are found, then the project can proceed. If active den sites are found, NDOR Environmental Section will notify the District and will consult with the USFWS, NGPC, and FHWA. If species are present the District will notify the Contractor to stop work within 1/2 mile of the active den until NDOR Environmental completes consultation. (NDOR Environmental, District Construction, Contractor)

**Lake Sturgeon, Pallid Sturgeon, Sturgeon Chub:**

**PS-2, LS-2, SC-2** Any detention basin outlets will be designed such that it is stabilized to prevent streambank erosion and will not otherwise impact stream channel/bank. (Design, Contractor)

**LS-6, PS-6, SC-6** No flow modifications or disturbance in the channel from February 1 through July 31. Work is allowed within a cofferdam if the work is conducted from a temporary work platform or another location not directly in the channel (i.e., the riverbank). Temporary bridges can be constructed between July 1<sup>st</sup> and April 1<sup>st</sup>, provided they are constructed according to the terms and conditions of the associated 404 permit.

**PS-7, LS-7, SC-7** Any upland soil disturbances will be designed to avoid or minimize sedimentation. (Design, Contractor)

**Bald Eagle:**

- Suitable Bald Eagle nesting and/or roosting habitat exists within 0.5 miles of the Environmental Study Area. If construction will begin between February 1 and April 15, a nest survey must be completed at least 1 but not more than 14 days prior to construction. If construction will begin between April 15 and October 1, a nest survey completed in March is sufficient, as nests will likely already be constructed if nesting will occur that year. However, a nest survey may be completed anytime during this timeframe, as long as it is completed prior to construction. If Bald Eagles are nesting in the area, consultation with NGPC and USFWS will be required. Eagle roosting surveys will be conducted if construction occurs between October 1 and January 31.

**NDOR Construction Project Managers should contact NDOR Environmental at 402-479-3546 or [Melissa.marinovich@nebraska.gov](mailto:Melissa.marinovich@nebraska.gov) at least 30 days prior to construction start to schedule River Otter and Bald Eagle surveys.**

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

## Interior Least Tern & Piping Plover Fact Sheet

Piping plovers (*Charadrius melodus*) and Interior Least Terns (*Sterna antillarum*) are small water birds that nest on a sandy-gravelly substrate. Their natural nesting habitat in Nebraska is high, dry, barren mid-stream sandbars within rivers. Terns and plovers also nest on artificial substrate, mainly sand spoils produced as a byproduct of sand and gravel mining.

### Piping Plover (*Charadrius melodus*)

**Order:** Charadriiformes

**Family:** Charadriidae

**Status:** State and Federally Threatened



**Foraging Piping Plover**



**Piping Plover on Nest**



**Piping Plover Fledgling**

The Piping Plover was listed in the Federal Register on December 11, 1985, as Endangered. It has since been de-listed to Threatened in Nebraska (Information from U.S. Fish and Wildlife Service)

**Description:** L 7 1/4" (18 cm). Sexes similar. Very pale above, white below. In breeding plumage has single complete black breast band. Sometimes the breast band can be incomplete, especially in females and juveniles. White forehead and small black cap. Legs are orange. Bill is yellow with black tip.

**Habitat:** Sparsely vegetated shorelines of shallow water bodies. Prefer shorelines with bare sand, and sandy or pebbly mud. Plovers generally nest on unvegetated or sparsely vegetated sandbars in river channels.

**Status/Range:** Occasional to rare spring and fall migrant and rare local summer resident. Have recent breeding records for Platte, Niobrara, Loup, and Middle Loup Rivers and at Lake McConaughy and recently at Lake Minatare. **Call:** Clear piping "peep-lo." **Comments:** Surveys in 1996 indicate that nearly 300 pairs of Piping Plovers bred in the state. (Information provided from Nebraska Game and Parks Commission website)

**Courtship Behaviors:** Males perform courtship flights over breeding territory, with slow wing beats and piping call note. On the ground, male approaches female, stands upright with neck stretched, and rapidly stamps feet with odd high-stepping gait.

**Nest/Nesting Behavior:** Nest site is on open ground some distances from the water, often with large rock or clump of grass nearby, but no direct shelter or shade. May nest very close to tern breeding colonies. Nest is a shallow scrape in the sand, sometimes lined with shells and pebbles. May make several scrapes before actual nesting. Piping plovers lay 4 eggs that take about 25-30 days to hatch. Soon after hatching the chicks leave the nest and are able to feed themselves (worms, flies, and other invertebrates along the shoreline). **Chicks are very mobile within**

**about 3-5 days.** In approximately another 20-25 days, they are able to fly and may feed at the site for another week or two. (Information from Renae Held, UNL Tern & Plover Conservation Partnership Program Coordinator and Troy Peterson Field Guides).

**Similar Species:** Killdeer, Semipalmated plover



**Killdeer is 9 - 11"**



**Semipalmated plover**

**Interior Least Tern (*Sterna antillarum*)**

**Order:** *Charadriiformes*

**Family:** *Laridae*

**Status:** State and Federally Endangered



**Foraging Least Tern**



**Least Tern with nestling**



**Least Tern with nestling**

The Interior Least Tern was listed in the Federal Register as Endangered on May 28, 1985 (Information from U.S. Fish and Wildlife Service)

**Description:** L 9" (23 cm) W 20" (51 cm). Sexes similar. Breeding adults show distinctive white forehead against black cap and nape; gray above and white below; orange-yellow bill with dark tip; orange-yellow legs. Conspicuous black wedge on outer primaries is visible in flight. Short deeply forked tail. Non-breeding birds lack black cap, instead having a dark eye stripe. Juvenile birds are mottled gray-brown above and white below. **The Interior Least Tern is the smallest of all the terns.**

**Habitat:** Migrants can be found on lakes, rivers, and reservoirs. Nesting is done mainly on river sand bars or islands, but sometimes also on barren shorelines, gravel beaches, or newly cleared land.

**Status/Range:** Uncommon spring and fall migrant in eastern part of the state. Highly local summer resident in Platte and Niobrara River valleys. Local breeder. **Call:** Sharp "kit, kit", and repetitive "dee-dee". (Information from Nebraska Game and Parks Commission website)

**Courtship Behaviors:** In courtship, male (carrying fish in bill) flies upward, followed by female, then both glide down. On the ground, displays include courtship feeding by male.

**Nest/Nesting Behavior:** Nest site is on open ground. Nest is shallow scrape, sometimes lined with pebbles, grass, and debris. Least terns lay 3 eggs that hatch in about 22-28 days. The chicks are fed small, whole fish by the adults even after they learn to fly. **In the first few weeks the chicks move very little and tend to stay near the nest. Their defense at this age is to lie down and hide, making them vulnerable to machinery and human traffic or disturbance.**

(Information from Renae Held, UNL Tern & Plover Conservation Partnership Program Coordinator and Troy Peterson Field Guides)

**Similar Species:** Common Tern or Forster's Tern



**Forster's Tern is 14-15"**



**Common Tern is 13-16"**

## **Interior Least Tern and Piping Plover Survey Protocol**

*Terns and plovers can be disturbed by sight (human figures, equipment within sight) and sound (loud equipment, banging, etc.) that are abnormal (roadway traffic is normal), therefore surveys are needed to ensure disturbance is minimized.*

### **Dates of Survey:**

- April 15 – August 15.
- If no nests are observed by July 31, then no further surveys are needed.

### **Time of Survey:**

- Prior to the start of construction, must be light enough to conduct adequate survey.
- Record start and stop time.
- Survey at least 3 times a week: Monday, Wednesday, Friday.

### **Method of Survey:**

- Stand at the four corners of the bridge, look 0.25 miles up and downstream of the bridge site.
- Use binoculars or spotting scope to survey for 20 minutes overall.
- Look specifically for bird movements along sandbars in the middle of the channel.
- Other important activity to note:
  - Nesting- courtship behaviors, particularly copulations, birds returning to the same place, sitting on the sand for a long period of time, or nest exchange (males and females will generally take 20 minute shifts to incubate).
  - Foraging behavior- looking for food along sandbar, probing the sand, hovering over river channel and diving into water for fish, and bringing back fish to sandbar.
- If cloudy, overcast or foggy – take additional time to ensure the best survey possible.

**If no nesting birds are observed, bridge work may begin accordingly. If a possible sighting occurs, then further investigation may be needed on foot. Landowner permission must be obtained if entering private land.**

### **If at any time, a nest and nesting behavior is observed within 0.25 miles of the site:**

- Do not start work.
- Stop work if nest or nesting behavior is observed at times other than the morning survey.
- Contact NDOR Environmental Section, 402-479-4464 or 402-479-3546.
  - NDOR Environmental will contact USFWS and NGPC for further instructions.
- Do not resume work at the bridge or within 0.25 mile of the abutments until NDOR Environmental Section relays the "all clear" message to the Project Manager.

**River Otter Survey  
Protocol  
Nebraska Game and Parks  
Commission**

***Background***

River otters were historically found in all major waterways of Nebraska. Unregulated trapping was the likely factor leading to the complete disappearance of otters from Nebraska in the early 1900's. From 1986 to 1991, river otters were reintroduced at seven locations: South Loup River, Calamus River, North Platte River, Platte River, Cedar River, Elkhorn River and Niobrara River (Andelt 1992). Their populations have become established and have expanded from these locations.

River otters are very adaptable. They typically live along wooded rivers and streams with sloughs and backwater areas and ponds. Ideal habitat has year-round open water with a plentiful food supply. Otters have been referred to as a "flagship species" for wetlands and aquatic habitats and are an indicator of wetlands with ample and high quality water (Foster-Turley 1996 and Polechla 2000) and often select sites with the least amount of human disturbance (Wilson 1959, Tabor and Wight 1977, Polechla 1990, Testa et al. 1994). Suitable habitat must also have a sufficient food source available. River otters are generalists. The primary component of their diet is fish but crustaceans are a major component of their diet in Nebraska. Fallen trees, logjams, rock piles, and other structures in the water make good habitat for the otter's prey species and thus good habitat for the otter. Beaver dams create deep pools and slow currents that otters frequently utilize for hunting.

River otters are a highly mobile species and require large amount of space to meet their annual requirements. They are active throughout the year and may occupy 50 or more miles of stream course annually (Andelt 1992) and will often move from one area to another. A single day movement was documented of 42 km (Melquist and Hornocker 1983) but daily movements are more likely less than 10km/day (Melquest et al. 2003). The social structure of river otters is not well defined and appears to vary across its geographic range (Gorman et al. 2006a), so local densities are highly variable as otters may be solitary or in small groups.

While on land, otters will utilize "slides" on steep muddy or snowy banks where they slide down into the water on their bellies. When traveling any distance on a slippery surface otters are known to take a running start and then slide up to six meters (twenty feet).

River otters use dens that were dug by other species such as beaver and will also utilize upland dens such as rock, brush and log piles, hollow logs, or tree root structures. They will use a variety of temporary dens and resting sites and appear to prefer sheltered sites that provide protection and seclusion (Melquist et al. 2003). A female with young pups will typically only use one natal den until the pups are sufficiently mobile and self-sufficient which may take 10 weeks. Gorman et al. 2006b found that natal dens were located in areas protected from rapid changes in water levels. Many of the dens in this study were not in the bank, but rather a distance overland and were most often located below the ground. In Nebraska, female otters enter the natal den beginning in late February through April.

### **Purpose**

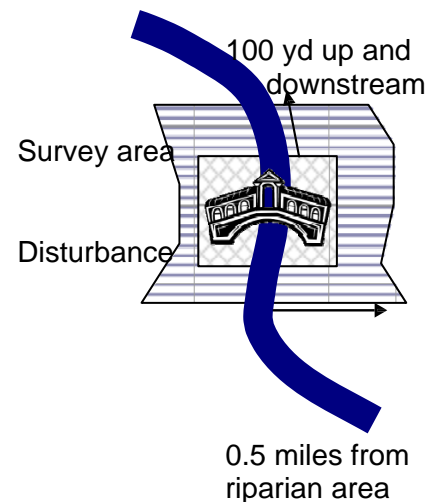
River otter surveys are designed to ensure awareness and resolution to any potential conflicts between the river otters and potentially disruptive human activities. This is a highly mobile species, and if present, is likely to leave during disturbance. However, otters are especially susceptible to disturbance when they have young pups in the natal den. Den surveys, which include presence/absence surveys, are recommended and, upon consultation with the Nebraska Game and Parks Commission, may be modified from this protocol depending on the situation. These should be considered when a disturbance will be within 0.5 miles of a river, pond, sandpit, or wetland area where river otters are known to exist or are likely to be present.

### **Den Surveys**

River otter dens are notoriously difficult to find and identify, as they will use dens excavated by other animals as well as brush piles, log piles and uprooted tree structures. For this reason, a den survey should begin by establishing presence/absence for the designated area. If river otters are present, a more thorough search for dens is necessary. Otters are highly mobile, and therefore, presence/absence and den surveys should be done within 10 days of the initiation of the construction activities or disturbance. It may be desirable to conduct two sets of surveys, one month or a season in advance and one within 10 days of the project beginning.

Generally the survey area must include:

1. The entire area of disturbance which includes construction areas, equipment staging areas, temporary roads, etc.
2. An additional 100 yards up and down stream from the edge of the area of disturbance
3. At least 0.5 miles from the edge of the riparian/wetland area upland across the entire area of disturbance. Additional survey area may be necessary depending on the landscape context of the site. Tributaries, wetland complexes, sloughs or ponds may increase the necessary survey area.



Presence/absence can be established by identifying sign (scat, tracks, runs, rolls etc.), by finding slides or latrine sites. Otter scat will vary in size, but can generally be distinguished by fish scales. They often disintegrate into a pile of fish scales and reek of fish (Elbroch 2003). In Nebraska, scat is likely to have crayfish shells and may have bones of mammals, birds, or amphibians. Ideal latrine sites for otters in Nebraska tend to be higher areas near the edge of the water and may include sandbars, bank protrusions, rocks or logs which stick out into waterways or sites where tributaries meet a main stream or body of water. They can often be found right near the water's edge but can also be located higher up on a bank, especially if water levels change throughout the year. Often a latrine will be located near a potential den site. Since otters repeatedly use the same latrine sites, scats will usually be abundant in one site, making them easier to find. Otter tracks are 5 to 7.5 cm (2 to 3 inches) across (Elbroch 2003)

Otter slide marks can be an easy way to identify the presence or absence of river otters. They will slip down the steep banks of a body of water and also when they travel overland across snow, ice, or mud. Bridge surveys or aerial surveys after a fresh snow are especially good times to find evidence of otter activity because the snow provides a slippery surface for an otter to slide and slides imprints can be seen in fresh snow. Otters can take a few running steps and then slide up to six meters (20 feet) on the right surfaces and slopes. Winter otter slides can be an easy way to find if otters are in the area, however, presence or absence in the winter will not preclude additional surveys immediately prior to construction (within 10 days) for these highly mobile animals. In some cases, if otters are present there may be preventative measures that can be used to prevent them from using the area prior to construction.

If otters are established in the area, a thorough survey for potential den sites should be conducted. Any potential dens should be monitored to determine which species inhabits the den. Since they are highly mobile, potential dens should be re-checked 24 hours prior to initiating groundbreaking construction. If a river otter den is found in the area of the den survey, disturbance activities should not proceed or should cease and the Nebraska Game and Parks Commission should be contacted immediately.

Michelle Koch, Environmental Analyst Supervisor, 402-471-5438  
Sam Wilson, Furbearer Biologist, 402-471-5174

Note: River otter research is currently underway. This protocol is only valid for 1 year. If it has expired, contact the Environmental Analyst Supervisor for any updated protocols.

## References

Andelt, R. 1992. Nebraska's Threatened and Endangered Species: River Otter. Nebraskaland, Nebraska Game and Parks Commission, Lincoln, Nebraska.

Elbroch, M. 2003. Mammal Tracks and Sign: A guide to North American species. Stackpole Books, Mechanicsburg, PA.

Foster-Turley, P. 1996. Making biodiversity conservation happen: The role of environment education and communication. Environmental Education and Communication Project, U.S. Agency for International Development, Washington, DC.

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Wilson, K. A. 1959. The role of mink and otter as muskrat predators in northeastern North Carolina. Journal of Wildlife Management 18: 199-207.

## Bald Eagle Survey Protocol Nebraska Game and Parks Commission

### ***Background***

Bald eagles (*Haliaeetus leucocephalus*) utilize the mature, forested areas along the major river systems in Nebraska. Eagles are present throughout the year in Nebraska as they both breed and winter in Nebraska. Nest building activity may begin as early as December. Nests are typically built near rivers, lakes and reservoirs and in Nebraska are most often in large cottonwood trees, although bald eagles use other types of trees nationwide. The nests are constructed with large sticks and lined with leaves and grasses. A breeding pair will often return to the same nest and add new material each year. Nests can become 8 feet across and 12 feet deep. Nesting activities begin with egg laying which occurs as early as February. Fledging takes place when the young are approximately 10 – 11 weeks old, however the young remain near the nest and are dependent on the adults for food for at least another 6 weeks. In Nebraska, the nesting season continues through August.

The bald eagle southward migration begins as early as October and the wintering period extends from December through March. Breeding pairs may stay at their nest site year round if food is available. Eagles are often most numerous from late February through early March, when wintering numbers are supplemented by migrants that wintered further south. All migrants that breed elsewhere typically leave by late March. Wintering eagle numbers fluctuate from year to year, but birds typically concentrate in areas with large open water where food is available and form winter roosts. In Nebraska, there are often few locations that provide adequate resources for eagles during the winter. Protection of these areas is important, as relocation during the winter may impact survival. Roosts may be in deciduous or coniferous trees, but in Nebraska, most are in cottonwood trees. Eagles may establish winter roosts miles from the foraging areas (Keister et al. 1985). Winter roosting may assist with finding resources (Knight and Knight 1983) and pair bond formation. In Nebraska, some communal roost sites can have as many as 100 eagles (Nebraska Game and Parks Commission 1993).

### ***Purpose***

Eagle surveys are designed to ensure awareness and resolution to any potential conflicts between bald eagle and potentially disruptive human activities. To document the presence or absence of bald eagles and their activities, two types of surveys are recommended: nest surveys and winter roost surveys. These should be considered when a disturbance will occur within 0.5 miles of areas of suitable habitat for bald eagles.

### ***Nest Surveys***

Bald eagle nests are usually conspicuous and distinctive, but it must be stressed that nests can be well concealed and very difficult to see, particularly when trees have foliage. Nest surveys should complete a full inspection of potential trees for bald eagle nests within 0.5 miles of the project in areas considered suitable habitat. Transects should be recorded using GPS. In addition to nests, any bald eagles observed during the survey and their behavior should be noted. Potential nests should be observed from a distant location that does not disturb the eagles to confirm the presence or absence of eagles. Nest surveys are to be conducted by a qualified

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biologist. Results of surveys and transect locations should be sent to the Nebraska Game and Parks Commission and US Fish and Wildlife Service.

If construction will begin between February 1 and April 15, a nest survey must be completed at least 1 but not more than 14 days prior to construction. If construction will begin between April 15 and October 1, a nest survey completed in March is sufficient, as nests will likely already be constructed if nesting will occur that year. However a nest survey may be completed anytime during this timeframe, as long as it is completed prior to construction. If bald eagles are nesting in the area, consultation with NGPC and USFWS will be required, so it is in the project proponent's best interest to complete the survey and notify the agencies as early as possible.

(See timing diagram)

***Winter Roost Surveys:***

For the purposes of avoiding adverse impacts to wintering bald eagles, two types of roosts are defined. *Transitory roosts* are defined as 3 or more eagles, within 100 meters of each other, for at least 2 nights in an area with no previous knowledge of winter communal roosting. *Communal roosts* are defined as 6 or more eagles in a small area for extended periods of time or used for multiple years. Communal roosts in Nebraska are monitored, so typically their existence will be known and conservation measures established prior to construction.

If construction will be occurring in an area near suitable habitat (near open water with large trees present) where there is no prior knowledge of a communal roost site and construction will be occurring between October 1 and January 31 winter roost surveys are necessary. Winter roost surveys should begin at least 1 day prior to the first date of construction. Winter roost surveys should be conducted daily at dawn as the eagles are likely to leave the roost to forage within the first hour of daylight (depending on weather conditions). These surveys need only be conducted in the area of active construction, not the entire project area. Surveys may be completed by a trained individual using appropriate binoculars or spotting scope. Survey reports should be submitted weekly to the Nebraska Game and Parks Commission and US Fish and Wildlife Service. Evidence of a roost should be reported immediately.

Please note, eagles seen soaring over a construction site should be watched to observe potential nesting or roosting, but construction does not need to terminate due to soaring behavior.

(See timing diagram)

**References**

Buehler, D.A. 2000. Bald Eagle (*Haliaeetus leucocephalus*), In The Birds of North America, No. 506 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA.

Keister, G. P., Jr., R. G. Anthony and H. R. Holbo. A model of energy consumption in bald eagles: An evaluation of night communal roosting. *The Wilson Bulletin*. 97(2): 148-160

Knight, S. K. and R. L. Night. 1983. Aspects of food finding by wintering bald eagles. *The Auk* 100: 477-484.

Nebraska Game and Parks Commission. 1993. Nebraska's threatened and endangered species: Bald eagle. Nebraska Game and Parks Commission, Lincoln, Nebraska.

January 19, 2007

Bald Eagle Survey Recommendations  
 Standard Protocol prepared by NE Game and Parks Commission  
 January-07

	December	January	February	March	April	May	June	July	August	September	October	November	December
Bald Eagle Activity	Nest building		Hatching and rearing young		Fledging Young		Fledging Young		Winter activities		nest building		winter activities
	Winter Activities		Egg laying and incubation										
Required Surveys	C) Daily surveys for winter roosts		A) survey 2 weeks prior		B) One survey completed in March								C) Daily surveys for winter roosts

- A Projects starting between February 1 to April 15 must have a nest survey completed 1-14 days prior to the start of construction
- B Projects starting between April 15 to October 1 need a nest survey completed as early as March, or before project begins
- C Projects starting between October 1 and December need daily winter roost surveys completed

NOTE: Surveys are only necessary in areas where the disturbance is near suitable eagle habitat

Timing of eagle activity references:

Draft National Bald Eagle Management Guidelines, US Fish and Wildlife Service, 2006,  
 Buehler, D.A. 2000. Bald Eagle (*Haliaeetus leucocephalus*). In The Birds of North America, No. 506 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA.  
 Nebraska Game and Parks Commission. 1993. Nebraska's threatened and endangered species: Bald eagle. Nebraska Game and Parks Commission, Lincoln, Nebraska.

### FLOODPLAIN PERMIT

Nebraska Department of Roads  
**Floodplain/Floodway Development  
 Permit/Application**

RECEIVED  
 ENVIRONMENTAL SECURITY

Permit Application No.
Date: 10/17/12

This form is used for any man-made change to improved or unimproved transportation facility, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation, drilling operations, or storage of equipment or materials.

Nebraska Department of Roads will obtain all other necessary federal, state, or local permits (e.g., Corps of Engineers 404 Permit, Local Levee District, etc.)

1.	Name of Applicant: Nebraska Department of Roads PO Box 94759 Lincoln NE 68509-4759
2.	Type and Use of Development: Mitigation Site
3.	Specific Location of Development: 0.25 miles south of N-92 at M.M. 462+50
4.	Complete this section if the proposed development involves the improvement of a structure (i.e., walled and roofed building). Pre-improvement Value of Structure: \$ _____ Cost of Improvement: \$ _____

The following section is to be completed by the community official:

5.	Is the development Substantial Improvement? (see #4)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
6.	Is the development in an identified floodplain?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>If Yes, complete the following:</b>		
a.	Elevation of the Base (100-Year) Flood	1121.2 Ft. MSL/NGVD 29 or NAVD 88
b.	Elevation/Floodproofing Requirement (if applicable)	_____ Ft. MSL/NGVD 29 or NAVD 88
c.	Is the development in a designed Floodway?	
	<input checked="" type="checkbox"/> Yes	New structures for human habitation are prohibited. For any other Floodway development, the NDOR must provide certification by a registered professional engineer that the development would result in no increase along the floodway water surface profile.
	<input type="checkbox"/> No	If a floodway has not been designated, the NDOR may be required to submit hydraulic data demonstrating that the proposed development will not increase flood heights more than one foot at any location.

If the development is in a floodplain, the following shall apply:

This permit is issued with the condition that the lowest floor (including basement) of a new or substantially improved nonresidential building will be elevated or floodproofed at least one foot above the base flood elevation. NDOR will provide certification by a registered Engineer, Architect, or Land Surveyor that these provisions are met.

All provisions of the Seward Floodplain Management Resolution/Ordinance (Number 19-2010) shall be complied with.  
 (County or City)

George Benson 10/25/12  
 Local Authorizing Official (Name & Title) Date  
Zoning Administrator  
NDOR Environmental Permits Manager 10/19/12  
 Date

Project Name: Platte River East Mitigation Site	
Project No.: MISC-92-6(1020)	
Control No.: 22502	Structure No.: NONE

**SPECIAL PROSECUTION AND PROGRESS  
(Migratory Birds)  
(A-42-1112)**

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

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

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

1. The Contractor shall submit a plan to the NDOR regarding how he intends to accomplish bridge demolition or clearing and grubbing of the project to avoid conflict with nesting migratory birds.
2. The Contractor must submit a temporary erosion control plan tailored to fit the plan for clearing and grubbing.
3. If construction operations result in unavoidable conflict with nesting migratory bird's eggs or young, which will result in "taking" nests and their contents, the Contractor should notify the NDOR Project Manager (PM). The PM shall notify the Environmental Section of Planning and Project Development by telephone at 402-479-4766.
4. The NDOR Environmental Section will then determine if assistance in conducting the survey will be provided by the NDOR Environmental Section (if available) or from the USDA APHIS - Wildlife Services Office and arrange for assistance with the survey of nest numbers, bird species, etc. Results of the survey shall be maintained by the NDOR until project completion.
5. If the nesting survey is required, and the project was awarded prior to the nesting season, and the Contractor did not accomplish clearing/grubbing and/or work on bridge/culvert structures outside the nesting season, the Contractor will reimburse the Department of Roads for each survey required at \$1,000 per survey. If the project was awarded during the nesting season, and construction activities are such that clearing/grubbing and/or work on bridge/culvert structures must be accomplished prior to any other activity on the project, then there will be no charge assessed for the initial survey. The Contractor is responsible for

removing all trees surveyed, that do not contain active nests, and for taking appropriate measures on bridge/culvert structures, within 3 days of the survey. Reimbursement for additional surveys may be charged if the Contractor fails to remove the trees within 3 days of the survey, and requires an additional survey. Survey reimbursement will be determined on a project specific basis, considering the project timeline and associated activities.

6. If an active nest is found during the survey, the Contractor should do everything possible to restructure his activities and leave the nest undisturbed until the young fledge. Fledging could occur within a week, or up to a month, after the survey depending on the species of bird and whether the nest contained eggs or young. Also depending on the species of bird and their sensitivity to disturbance, a buffer of up to 30 feet surrounding the tree with the active nest could be required.
7. If construction cannot be rescheduled to allow the birds to fledge, and it is determined as an unavoidable "take" circumstance, the Contractor shall stop all work within 30 feet of the active nest and coordinate with the Construction Project Manager to determine how to proceed. The Construction Project Manager will then coordinate with the NDOR Environmental Section and they will facilitate coordination with the US Fish and Wildlife Service and the Federal Highway Administration (for projects using Federal-aid) to determine the appropriate way to address the active nest. No work shall occur within 30 feet of the active nest until US Fish and Wildlife Service coordination is complete and the requirements of the Migratory Bird Treaty Act are satisfied.
8. It is the Contractor's responsibility to schedule his work to accommodate the process of conducting a survey(s) and submitting the necessary documentation if avoidance is not practicable. The Contractor shall be responsible for using any legal and practical method to prevent the nesting of birds in order to prevent the need for any survey and prevent the need for additional surveys. It is understood and agreed that the Contractor has considered in the bid all of the pertinent requirements concerning migratory birds (including endangered species) and that no additional compensation, other than time extensions if warranted, will be allowed for any delays or inconvenience resulting in these requirements.

### **STORM WATER DISCHARGES (A-43-0408)**

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

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

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

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

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

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

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

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

### **PROPOSAL GUARANTY BID BOND (A-43-0307)**

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

- a. OPTION 1 - (Project Specific Paper Bid Bond). The Bid Bond shall be executed on an original Department Bid Bond Form, which may be obtained from the Department. The original Bid Bond shall be delivered to the Department with the bid. A reproduction or a copy of the original form will not be accepted and will cause the bid not to be opened and read.
- b. OPTION 2 - (Annual Bid Bond). The Department at its discretion may allow a bidder to place an "Annual Bid Bond" on file with the Department. This bond would cover all projects the bidder bids for a 12-month period shown in the bond. The bidder must indicate in the bid submittal to the Department that their "Annual Bid Bond" applies to the submitted bid. The original Annual Bid Bond shall be executed on the Department of Roads Bid Bond Form, which may be obtained from the Department. A reproduction or a copy of the original form will not be accepted.

### **WORKER VISIBILITY (A-43-0507)**

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



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

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

- 1 - is intended to provide conspicuity during both daytime and nighttime usage, and
- 2 - meets the Performance Class 2 or Class 3 requirements of the ANSI/ISEA 107-2004 publication titled "American National Standards for High-Visibility Safety Apparel and Headwear."

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

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

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

### **SHOP PLANS (A-43-1108)**

Paragraph 5. of Subsection 105.02 in the *Standard Specifications* is amended to provide that the Contractor may furnish shop plans on half-size plan sheets [11x17 inches (297x420 mm)], provided all information is legible.

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

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

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

Subsection 107.01 in the *Standard Specifications* is amended to include the following two paragraphs:

5. Should the Contractor encounter any previously unidentified hazardous materials, the Engineer shall be promptly notified. The Contractor shall suspend operations in the area involved until such time that arrangements are made for their proper treatment or removal.
6. The Contractor shall prevent the transfer of invasive plant and animal species. The Contractor shall wash equipment at the Contractor's storage facility prior to entering the construction site. The Contractor shall inspect all construction equipment and remove all attached vegetation and animals prior to leaving the construction site.

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

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

The Federal Immigration Verification System shall be an electronic verification of the work authorization program of the Illegal Immigration Reform and Immigration Responsibility Act of 1996, 8 U.S.C. 1324a, known as the E-Verify Program. The Contractor may use an equivalent Federal program designated by the United States Department of Homeland Security or other Federal agency authorized to verify the work eligibility status of a newly hired employee. The equivalent program shall comply with the Immigration Reform and Control Act of 1986.

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

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

The Contractor's Certification shall become part of the final records of the Contract. The Department considers this document to have direct bearing to the beginning interest date and may affect the amount of interest earned.

**CONTRACT TIME ALLOWANCE  
(A-43-0911)**

Paragraph 5. of Subsection 108.02 of the *Standard Specifications* is void and superseded by the following:

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

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

- (4) If the time allowance for the contract has been established on a calendar day basis, the Contractor is expected to schedule the work and assign whatever resources are necessary to complete the work in the time allowance provided regardless of the weather. Accordingly, regardless of anything to the contrary contained in these *Specifications*, the Department will not consider delays caused by inclement or unseasonable weather as justification for an extension of the contract time allowance unless:
  - i. the weather phenomena alleged to have contributed to or caused the delay is of such magnitude that it results in the Governor issuing a Disaster Declaration, **and**
  - ii. the weather phenomena alleged to have contributed to or caused the delay can clearly be shown to have directly impacted the work on the critical path identified on the Contractor's schedule.

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

- b. (1) If the extra work is not in the original contract, time extensions will be granted by determining the actual time necessary to accomplish the extra work.
- (2) If the extra work is the result of the addition of additional quantities of existing contract items, time extensions will be granted by either:
  - (i) determining the actual time necessary to accomplish the extra work; or
  - (ii) determining the additional time to be granted by comparing the value of the additional quantities of work to the total amount of the original contract when measurement of the actual additional time is not possible or practical.
- (3) In either case, only the time necessary to perform the extra work of the additional quantities of existing contract items when the extra work or the additional quantities of existing contract items are deemed to be the current controlling operation will be granted as a time extension.
- c. Increases in quantities of work associated with traffic control items measured by the day will not be considered for extending the contract time allowance.

Overruns of traffic control items that are measured by methods other than time may be considered for extending the contract time allowance, but they must be deemed to be a controlling operation when the overrun of quantities occurs.

**PARTIAL PAYMENT  
(A-43-1110)**

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

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

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

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

**PARTIAL PAYMENT  
(A-43-0611)**

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

4. a. (1) Upon presentation by the Contractor of receipted bills, billing invoices, or such other documentation sufficient to satisfy the Engineer and verify the Contractor's or subcontractor's actual costs for the materials, payments may also be allowed for acceptable nonperishable materials purchased expressly to be incorporated into the work and delivered in the vicinity of the project or stored in acceptable storage places within Nebraska.  
  
(2) Materials not delivered and stored in the immediate vicinity of or on the actual project site must be clearly marked to identify the project on which they are to be used, must be segregated from similar materials at the storage site, and cannot be included in a supplier's inventory of material available for sale for other purposes.  
  
(3) All items eligible for partial payment as stored materials must be available for verification, sampling, and measurement.
- b. The amount to be included in the payment will be determined by the Engineer, but in no case shall it exceed 100 percent of the value of the

materials documented. This value may not exceed the appropriate portion of the value of the contract item or items in which such materials are to be incorporated, nor shall the quantity in any case exceed the total estimated quantity required to complete the project.

- c. Payment will not be approved when the documented value of such materials amounts to less than \$1,000.00, when the progress of the work is not in accordance with the requirements set forth in Subsection 108.07, or when the material can reasonably be expected to be incorporated into the work and eligible for payment as completed work on a progress estimate within 15 days of being placed into storage.
- d. Deductions at rates and in amounts which are equal to the payments will be made from estimates as the materials are incorporated into the work.
- e. Payment for the materials shall not in itself constitute acceptance, and any materials which do not conform to the specifications shall be rejected in accordance with Subsection 106.05.
- f. The Contractor shall be responsible for all damages and material losses until the material is incorporated into the work and the work is accepted.
- g. Partial payment will not include payment for fuels, supplies, form lumber, falsework, other materials, or temporary structures of any kind which will not become an integral part of the finished construction.
- h. No partial payments will be made on living or perishable plant materials until planted.

**BUY AMERICA  
(A-43-0212)**

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

**106.07 -- Buy America**

- 1. The Buy America rule requires that steel or iron materials be produced domestically, and only those products which are brought to the construction site and permanently incorporated into the completed project are covered. Construction materials, forms, etc., which remain in place at the Contractor's convenience, but are not required by the contract, are not covered.
- 2. To further define the coverage, a domestic product is a manufactured steel construction material that was produced in one of the 50 States, the District of Columbia, Puerto Rico, or in the territories and possessions of the United States.
- 3. All manufacturing processes to produce steel or iron materials (i.e., smelting, and any subsequent process which alters the steel or iron material's physical form or shape, or changes its chemical composition) must occur within one of the 50 States, the District of Columbia, Puerto Rico, or in the territories and possessions of the United States, to be considered of domestic origin. This includes processes such as casting, rolling, extruding, machining, bending, grinding,

drilling, and coating. Coating includes epoxy coating, galvanizing, painting, and any other coating that protects or enhances the value of the material. The manufacturer shall include a statement on the material test report or certification that all material described above except the coating material is a domestic product.

4. Raw materials used in the steel or iron materials may be imported. All manufacturing processes to produce steel or iron materials must occur domestically. Raw materials are materials such as iron ore, limestone, waste products, etc., which are used in the manufacturing process to produce the steel products. Waste products would include scrap; i.e., steel no longer useful in its present form from old automobiles, machinery, pipe, railroad tracks and the like. Also, steel trimmings from mills or product manufacturing are considered waste. Extracting, crushing, and handling the raw materials which is customary to prepare them for transporting are exempt from Buy America. The use of pig iron and processed, pelletized, and reduced iron ore manufactured outside of the United States may be used in the domestic manufacturing process for steel and/or iron materials.
5. Notwithstanding this requirement, a minimum of foreign steel or iron materials will be permitted if its value is less than one-tenth of one percent of the total contract cost or \$2,500, whichever is greater.
6. Upon completion of all work utilizing steel or iron products, the Prime Contractor shall furnish a letter to the State on company letterhead and signed by an officer of the company stating that documentation is on file certifying that all steel or iron materials brought to the construction site and permanently incorporated into the work complied in all respects with the Buy America requirements.

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

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

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

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

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

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

**SPECIAL PROSECUTION AND PROGRESS  
(Subletting or Assigning of Contract)  
(A-43-0813)**

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

**108.01 – Subletting or Assigning of Contract**

- 1. a.(1) The Contractor will not be allowed to sublet, assign, sell, transfer, or otherwise dispose of any portion of the contract or any right, title, or interest therein; or to either legally or equitably assign any of the money payable under the contract or the claims without the prior written consent of the Engineer.
- (2) With the Engineer's consent, the Contractor may sublet up to 70 percent of the work.
- (3) Any items designated in the contract as "specialty items" may be performed by subcontract.
- (4) The cost of any subcontracted "specialty items" may be deducted from the total contract cost before computing the percentage of work required to be performed by the Contractor.
- (5) Subcontracts, or transfer of contract, will not release the Contractor of any liability under the contract and bonds.

- b. Certain items of work may be performed without a subcontract. A list of items not requiring a subcontract is available from the Engineer.
  2. The performance of any work by a subcontractor before the date of authorization by the Department shall subject both the Contractor and subcontractor to the imposition of appropriate sanctions by the Department.
  3.
    - a. The Contractor's request to sublet work shall be made electronically to the NDR Construction Engineer using project management software identified by the Department. A signed subcontract agreement shall be on file in the Contractor's office when the request is made. The subcontract agreement must provide that the subcontracted work will be completed according to the terms of the contract. The required and Special Provisions contained in the proposal shall be physically included in any subcontract.
    - b. On all Federal-aid projects, a scanned copy (.pdf format) of the signed subcontract agreement shall be included with the subcontracting request. (Federal-aid projects can be identified by inclusion in the Proposal of Form FHWA-1273 (REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS)).**
    - c. Scanned copies (.pdf format) of all executed subcontracts, written agreements, and/or lease agreements used to meet DBE goals shall be submitted to the NDR Construction Engineer with the subcontracting request. These copies must show labor cost, material prices, overhead and profit.
  4.
    - a. Second tier subcontracts will be allowed.
    - b. If a DBE firm subcontracts work to another firm, only work subcontracted to another DBE firm can be counted toward meeting a DBE goal.
    - c. All requests for second tier subcontracting shall be submitted to and approved by the prime Contractor before they are forwarded to the NDR Construction Engineer for approval.
  5. All subcontract documents relating to the contract shall be maintained during the course of the work and preserved for a period of three years thereafter. These documents shall be available for inspection by authorized representatives of State and Federal agencies. Scanned copies (.pdf format) of the signed subcontract agreements not specifically identified elsewhere in this Subsection shall be furnished to the Department upon request.
  6. The Contractor may discuss a proposed subcontract with the Engineer before entering into a signed subcontract agreement, but final approval will not be granted until a formal request and proper certification has been received by the Department.
  7. On projects requiring submittal of certified payrolls, all subcontractor payrolls shall be checked by the Contractor before submittal to the Engineer.



8. a. The prime Contractor, and subcontractors when subletting work to lower tier subcontractors, shall include language which can be identified as a "Prompt Payment Clause" as a part of every subcontract for work and materials.
- b.(1) The language constituting the "Prompt Payment Clause" will require payment to all first tier subcontractors for all labor and materials --- for work completed to date --- within 20 calendar days of receipt of progress payments from the Department for said work. Similar language in a contract between a subcontractor and a lower-tier subcontractor will require payment to the lower tier subcontractor for all labor and materials --- for work completed to date --- within 10 calendar days of receipt of progress payments from the prime Contractor for said work.
- (2) The language constituting the "Prompt Payment Clause" will also stipulate the return of retainage within 30 calendar days after the satisfactory completion of the work by the subcontractor as evidenced by inclusion of the work on a progress payment.
- (3) Additionally, the language constituting the "Prompt Payment Clause" may stipulate the subcontractor's obligation to return to the Contractor or subcontractor, as the case may be, any overpayments which result from adjustments to measured and recorded quantities as part of the preparation of subsequent progress payments or the final records. Overpayments shall be returned to the prime Contractor or subcontractor, as the case may be, within 20 calendar days of receiving notice of the adjusted quantities and the amount of the overpayment.
- c. The prime Contractor of subcontractors, as the case may be, may withhold payment only for just cause and shall not withhold, delay, or postpone payment without first receiving written approval from the Department.
- d.(1) The failure by the prime Contractor to abide by the agreements identified in the "Prompt Payment Clause" without just cause, including the timely return of retainage, is a material breach of this contract which may result in the Department withholding the amount of payment from the prime Contractor that should have been paid to the subcontractor, termination of this contract, or other such remedy as the Department deems necessary.
- (2) Additionally, the failure of any subcontractor to abide by the agreements identified in the "Prompt Payment Clause" without just cause, including the timely return of retainage to lower tier subcontractors, or by failing to return overpayments in a timely manner when the language permitted in Paragraph 8.b.(3) above is included in the subcontract may result in the Department withholding subcontract approval for other work until the overpayments have been returned.

**ELECTRONIC SHOP DRAWINGS  
(A-43-0813)**

Subsection 105.02 of the Standard Specifications is amended to include the following:

8. a.(1) The Contractor may provide electronic working drawings in a Portable Document Format (PDF). The PDFs shall be sized to print on an 11 x 17 inch sheet of paper and have a minimum resolution of 300 dpi. Each sheet of the shop drawings shall have a space provided for an electronic stamp that measures 2.5 inches x 3.5 inches when printed.

(2) Electronic working drawing files shall be named with the following file naming format:

Control Number\_Brief Description\_Date.pdf

For example: 12345\_FloorDrains\_12May2013.pdf

(3) The project number, control number, and project location as it appears on the plans shall be shown on each sheet of the shop drawings. Structure numbers shall be included, if applicable.

b. No electronic working drawings shall be submitted to the Engineer unless they have been checked by the Contractor. The electronic submittal shall be accompanied by a Contractor's letter of approval in a PDF format. The letter of approval shall clearly indicate that the Contractor is responsible for any errors on the working drawings.

c.(1) Electronic submittals shall be submitted by email to the following address:

[DOR.ShopDrawings@nebraska.gov](mailto:DOR.ShopDrawings@nebraska.gov)

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

(3) Electronic working drawings will only be accepted from the Prime Contractor.

### **LIABILITY INSURANCE (A-55-0611)**

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

#### **107.13 – Liability Insurance**

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

1. General Liability:  
Limits of at least:

\$ 1,000,000 per Occurrence  
\$ 2,000,000 General Aggregate  
\$ 2,000,000 Completed Operations Aggregate  
\$ 1,000,000 Personal and Advertising Injury

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

- b. Coverage shall be provided by a standard form Commercial General Liability Policy (CG0001 or equivalent) covering bodily injury, property damage including loss of use, and personal injury.
  - c. The General Aggregate shall apply on a Per Project Basis.
  - d. The State of Nebraska, Department of Roads, shall be named as an Additional Insured on a primary and non-contributory basis including completed operations for three (3) years after final acceptance and payment.
  - e. Contractor agrees to waive its rights of recovery against the State of Nebraska, Department of Roads. Waiver of Subrogation in favor of the State of Nebraska, Department of Roads shall be added to the policy.
  - f. Contractual liability coverage shall be on a broad form basis and shall not be amended by any limiting endorsements.
  - g. If work is being performed near a railroad track, the 50' railroad right-of-way exclusion must be deleted.
  - h. Products and completed operations coverage in the amount provided above shall be maintained for the duration of the work, and shall be further maintained for a minimum period of three years after final acceptance and payment.
  - i. Coverage shall be included for demolition of any building or structure, collapse, explosion, blasting, excavation and damage to property below surface of ground (XCU coverage).
  - j. Policy shall not contain a total or absolute pollution exclusion. Coverage shall be provided for pollution exposures arising from products and completed operations as per standard CG0001 Pollution Exclusion or equivalent. If the standard pollution exclusion as provided by CG0001 has been amended, coverage must be substituted with a separate Pollution Liability policy of \$1.0 million per occurrence and \$2.0 million aggregate. If coverage is provided by a "claims made" form, coverage will be maintained for three years after project completion. Any applicable deductible is the responsibility of the Contractor.
2. Automobile Liability:  
Limits of at least:  
\$ 1,000,000 CSL per Accident
- a. Coverage shall apply to all Owned, Hired, and Non-Owned Autos.
  - b. If work is being performed near a railroad track, the 50-foot railroad right-of-way exclusion must be deleted.
  - c. Contractor agrees to waive its rights of recovery against the State of Nebraska, Department of Roads. Waiver of Subrogation in favor of the State of Nebraska, Department of Roads, shall be added to the policy.
  - d. Automobile liability coverage shall be obtained from an insurance carrier who is licensed with the Nebraska Department of Insurance.

3. Workers' Compensation:  
Limit: Statutory coverage for the State where the project is located.  
Employer's Liability limits: \$500,000 Each Accident  
\$500,000 Disease – Per Person  
\$500,000 Disease – Policy Limit
  - a. Contractor agrees to waive its rights of recovery against the State of Nebraska, Department of Roads. Waiver of Subrogation in favor of the State of Nebraska, Department of Roads shall be added to the policy.
  - b. Workers' compensation coverage shall be obtained from an insurance carrier who is licensed with the Nebraska Department of Insurance.
  - c. Where applicable, the Longshore and Harborworkers Compensation Act endorsement shall be attached to the policy.
4. Umbrella/Excess:  
Limits of at least:  
\$1,000,000 per Occurrence
  - a. Policy shall provide liability coverage in excess of the specified Employers Liability, Commercial General Liability and Automobile Liability.
  - b. The State of Nebraska, Department of Roads, shall be an "Additional Insured."
  - c. Contractor agrees to waive its rights of recovery against the State of Nebraska, Department of Roads. Waiver of subrogation in favor of the State of Nebraska, Department of Roads shall be provided.
5. Pollution Liability:
  - a. When "hazardous wastes" or contaminated or polluted materials must be handled and/or moved, the Contractor shall obtain Pollution Liability Coverage with minimum limits of \$1,000,000 per occurrence and \$2,000,000 aggregate.
  - b. If, during the course of construction, hazardous wastes, contaminated or polluted material are discovered on the project, the Contractor shall immediately cease any operation that may disturb these materials, and shall immediately notify the Engineer of all facts related to the discovery of these materials.
  - c. Unforeseen work related to the discovery of hazardous, contaminated or polluted materials on the project, and the extra cost, if any, of pollution liability coverage will be handled as "extra work."
6. Additional Requirements:
  - a. The Contractor shall provide and carry any additional insurance required by the Special Provisions.
  - b. Except as otherwise provided herein, all insurance shall be kept in full force and effect until after the State releases the Contractor from all obligations under the contract.
  - c. If any of the work is sublet, equivalent insurance shall be provided by or on behalf of the subcontractor or subcontractors (at any tier) to cover all operations.

- d. Any insurance policy shall be written by an insurance company with a Best's Insurance Guide Rating of A – VII or better.
- e. Prior to execution of the contract, Contractor shall provide the State of Nebraska, Department of Roads evidence of such insurance coverage in effect in the form of an Accord (or equivalent) certificate of insurance executed by a licensed representative of the participating insurer(s). Certificates of insurance shall show the Nebraska Department of Roads as the certificate holders.
- f. For so long as insurance coverage is required under this agreement, the Contractor shall have a duty to notify the Department when the Contractor knows, or has reason to believe, that any insurance coverage required under this agreement will lapse, or may be cancelled or terminated. The Contractor must forward any pertinent notice of cancellation or termination to the Department at the address listed below by mail (return receipt requested), hand-delivery, or facsimile transmission within 2 business days of receipt by Contractor of any such notice from an insurance carrier. Notice shall be sent to:

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

Facsimile No. 402-479-4854

- g. Failure of the owner or any other party to review, approve, and/or reject a certificate of insurance in whole or in part does not waive the requirements of this agreement.
- h. The limits of coverage set forth in this document are suggested minimum limits of coverage. The suggested limits of coverage shall not be construed to be a limitation of the liability on the part of the Contractor or any of its subcontractors/tier subcontractors. The carrying of insurance described shall in no way be interpreted as relieving the Contractor, subcontractor, or tier subcontractors of any responsibility or liability under the contract.
- i. If there is a discrepancy of coverage between this document and any other insurance specification for this project, the greater limit or coverage requirement shall prevail.

## CONSTRUCTION DETAILS

### FUEL COST ADJUSTMENT PAYMENT (B-1-0708)

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

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

F = English

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

Metric

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

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

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

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

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

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

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

### WATER (B-1-0307)

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

Payment shall be made at the established contract unit price.

**EXCAVATION AND EMBANKMENT  
(B-1-0212)**

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

6. Frozen Layers:
  - a. Thin Frozen Layer. A thin soil layer that freezes during the construction of an embankment may remain provided that the layer:
    - (i) had proper density and moisture prior to freezing,
    - (ii) can be readily broke up by a single pass of a tamping (sheepsfoot) roller or track mounted excavator,
    - (iii) is thoroughly scarified into pieces having a single dimension of 3 inches or less, and a second dimension of ½ inch or less, and
    - (iv) is not within 10 inches (measured vertically) of any thin frozen layer that was previously scarified and left in place.
  - b. Thick Frozen Layer. A soil layer that freezes during the construction of an embankment, but does not meet the Thin Frozen Layer requirements:
    - (i) may remain in the embankment provided that the layer is thawed and has proper density and moisture after thawing, or
    - (ii) shall be completely removed from the embankment prior to placing any additional embankment material.

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

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

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

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

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

**TEMPORARY WATER POLLUTION CONTROL  
(B-3-0509)**

Section 204 in the Standard Specifications is void.

**CONSTRUCTION STORMWATER MANAGEMENT CONTROL  
(B-3-0509)**

**General**

1. This Section defines some best management practices (BMPs) for erosion and sediment control measures and construction practices the Contractor shall use to prevent soil erosion and avoid water pollution.
2. The Contractor shall exercise every reasonable precaution throughout the life of the contract to prevent silting of the waters of the state, the project site, and adjacent property. Construction of drainage facilities, as well as performance of other contract work which will contribute to the control of siltation, shall be carried out in conjunction with earthwork operations or as soon thereafter as is practicable.
3. a. The Contractor shall take sufficient precautions to prevent pollution of the waters of the state, the project site, and adjacent property with construction debris, petroleum products, chemicals, or other harmful materials.  
b. The Contractor shall conduct and schedule the operations to avoid interference with any protected species.  
c. The Contractor shall comply with all applicable statutes relating to pollution of the waters of the state and fish and game regulations.
4. All construction debris shall be disposed in a manner that it cannot enter any waterway. Excavation shall be deposited as to protect the waters of the state from siltation.
5. The erosion and sediment control measures shall continue until the permanent drainage facilities have been constructed and the slopes are sufficiently vegetated to be an effective erosion deterrent or until tentative acceptance of the work.
6. All erosion and sediment control measures shall be properly maintained by the Contractor.
7. All erosion and sedimentation resulting from the Contractor's operations and the weather conditions must be corrected by the Contractor.

**LIMITATION OF OPERATIONS  
(B-3-0509)**

**General**

1. The maximum exposed surface area for the Contractor's operations in excavation, borrow, and embankment is 18 acres (72,800 m<sup>2</sup>) plus an equal area of clearing and grubbing/large tree removal. A written request for an increase in the maximum exposed surface area may be approved by the Engineer unless an equal amount of finished grading and seeding has been completed in the previously opened area. This approval will be based on the soil, moisture, seasonal conditions, the Contractor's operation, or other conditions.



2. The Engineer shall have the authority to reduce the maximum exposed surface area when any of the following conditions warrant:
  - a. Soil and moisture conditions are such that erosion is probable.
  - b. Seasonal conditions may force extended delays.
  - c. Proximity to the waters of the state require more stringent controls.
  - d. Equipment and personnel available on the job is not sufficient to properly maintain erosion and dust control measures.
  - e. Any other environmental condition in the area that may exist which would be affected by erosion from the project.
3. Construction operations in rivers, streams, wetlands, and impoundments shall be restricted to those areas specifically shown in the contract. Rivers, streams, wetlands, and impoundments shall be promptly cleared of all false work, piling, debris, or other obstructions placed therein or caused by the construction operations.
4. Fording and operation of construction equipment within live streams and wetlands will not be allowed, unless explicitly allowed in the contract.

## **CONSTRUCTION METHODS (B-3-0509)**

### **General**

1. The Contractor shall conduct all construction activities to control sediment and avoid soil erosion.
2. The Contractor shall incorporate all permanent erosion control features into the project at the earliest practicable time.
3. Construction stormwater management control measures for Contractor obtained construction work areas located outside the right-of-way, such as borrow pit operations, haul roads, plant sites, staging areas, equipment storage sites, etc. are the sole responsibility of the Contractor. All construction stormwater management control measures for these areas are at the Contractor's expense. The Contractor is responsible for securing all required permits for use of these areas.
4. The construction stormwater management procedures contained herein shall be coordinated with any permanent erosion control measures specified elsewhere in the contract to the extent practical to assure economical, effective, and continuous erosion and sediment control throughout the construction period.
5. The Contractor shall be responsible to limit erosion and prevent siltation into the waters of the state during the construction period, as well as during the times that work may be suspended.

6. a. The installation of all erosion and sediment control items shall be installed by qualified personnel who are knowledgeable in the principles and practice of various BMP installations.
- b. The installation of all erosion and sediment control items shall be done under the direct supervision of the Contractor's NDOR-Certified Erosion and Sediment Control Inspector. The Contractor's NDOR-Certified Erosion and Sediment Control Inspector shall be present at each site during installation to direct and inspect all erosion and sediment control BMP installations.
- c. The Contractor shall notify the Engineer of all Contractor NDOR-Certified Erosion and Sediment Control Inspectors who will be on the project to direct and inspect all erosion and sediment control BMP installations.
- d. No payment will be made for any erosion and sediment control item unless a Contractor NDOR Certified Erosion and Sediment Control Inspector was present to directly supervise and inspect the work.
- e. No payment will be made for any erosion and sediment control item that is not properly installed. All erosion and sediment control items shall be installed as per the NDOR Standard Plan or the manufacturer's instructions.

**ENVIRONMENTAL COMMITMENT DOCUMENT  
(B-3-0509)**

**General**

This specification establishes the required documentation included in the Environmental Commitment Document and Project Erosion and Sediment Control Inspection. The Department and the Contractor, as co-permittees, will comply with all conditions required by the current NPDES Construction Storm Water General Permit.

**Environmental Commitment Document**

1. An Environmental Commitment Document will be created by the Department to identify all project specific environmental commitments, when applicable.
  - a. (Pre-Bid) The Department will provide information related to commitments made for but not limited to:

- i. Storm Water Pollution Prevention Plan.
  - ii. U. S. Army Corps of Engineers 404 Permit.
  - iii. Nebraska Department of Environmental Quality 401 Water Quality Certification.
  - iv. State Title 117 Waters (COE Non-Jurisdictional).
  - v. Floodplain Permit.
  - vi. Historic Clearance.
  - vii. Threatened & Endangered Species Clearance.
  - viii. FHWA Environmental Clearance.
  - ix. NPDES Construction Stormwater Permit (within Right-of-Way limits, only).
  - x. Conservation Measures.
  - xi. Migratory Bird Treaty Act.
  - xii. Other pertinent issues.
- b. (Post-Bid) The Contractor shall provide the following information that will be included in the Environmental Commitment Document but not limited to:
- i. Temporary Erosion Control Plan.
  - ii. Spill Prevention and Control Plan.
  - iii. Name and telephone number of the Contractor's representative responsible for the Environmental Commitments.
  - iv. Name and telephone number of the employees that are NDOR-Certified Erosion and Sediment Control Inspectors.
  - v. Construction Schedule/Critical Path.

### **Temporary Erosion Control Plan**

1. The Contractor shall prepare and submit the Temporary Erosion Control Plan prior to the start of any work. The Contractor shall not begin work until the Temporary Erosion Control Plan has been submitted to the Engineer and appropriate erosion control measures are in place. Payment for any work on the contract will be withheld if erosion control measures are not in place or properly maintained.
2. The submittal of the Temporary Erosion Control Plan, the approval to increase the maximum surface area, or any payment for or acceptance of any or all of the work shall not operate as a waiver of the Contractor's responsibility under this specification.
3. The Temporary Erosion Control Plan shall be amended as work progresses and site conditions change.
4. The Temporary Erosion Control Plan will be reviewed at the project progress meeting. All active Contractors will have their Inspectors present, and work as a team to determine Temporary Erosion Control BMP's as they are needed.
5. Payment for preparing the Temporary Erosion Control Plan is subsidiary to items that direct payment is made.

### **Spill Prevention and Control Plan**

1. The Contractor shall prepare and submit the Spill Prevention and Control Plan prior to the start of any work. The Contractor shall not begin work until the Spill Prevention and Control Plan has been submitted to the Engineer and appropriate Spill Prevention and Control measures are in place.
  - a. Spill Prevention and Control Plan should clearly state measures to stop the source of the spill, contain the spill, clean up the spill, dispose of contaminated materials, and train personnel to prevent and control future spills.
  - b. Spill Prevention and Control Plans are applicable to construction sites where hazardous wastes are stored or used. Hazardous wastes include, but not limited to: pesticides, paints, cleaners, petroleum products, fertilizers, and solvents.
2. The Spill Prevention and Control Plan will be included in the Environmental Commitment Document.
3. Direct payment will not be made for the Spill Prevention and Control Plan.

### **Storm Water Pollution Prevention Plan (SWPPP)**

1. The Contractor shall comply with all conditions required by the current NPDES Construction Storm Water General Permit.
2. The Department will prepare the NDOR Project SWPPP for construction activities causing a land disturbance within the Right-of-Way, temporary easements, and permanent easements of one (1) acre or more.
  - a. Areas of construction support activities located on private property, obtained by the Contractor, are not included in the NDOR Project SWPPP.
3. The Engineer and the Contractor will perform inspections as required by the current NPDES Construction Storm Water General Permit. Payment for project inspection is subsidiary to items that direct payment is made.
4. The SWPPP will be maintained and updated by the Engineer as work progresses and site conditions change, to accurately describe the BMPs that are currently in place.
5. The Contractor's participation in SWPPP inspections, maintenance and updates shall begin on the first day construction activities cause land disturbance and end on the date of project completion as evidenced as the completion date in the District Engineer's Letter of Tentative Acceptance.

### **Project Erosion and Sediment Control Inspection**

1. Inspections must be conducted by a NDOR-Certified Erosion and Sediment Control Inspector. The Contractor and the Engineer shall conduct inspections in accordance with the NPDES Construction Storm Water General Permit.

2. The NDOR-Certified Erosion and Sediment Control Inspector certification is obtained by completing an erosion and sediment control inspector training course provided by the Nebraska Department of Roads and passing the examination that accompanies the training.
3. The Contractor's NDOR-Certified Erosion and Sediment Control Inspector shall be responsible for ensuring that all BMPs are installed in accordance with NDOR Specifications, Special Provisions, NDOR Standard Plans, or the manufacturers' recommended installation instructions. The Contractor's NDOR-Certified Erosion and Sediment Control Inspector shall be capable of reading and interpreting these documents. The Inspector shall be familiar with product and structural BMPs. The Contractor's NDOR-Certified Erosion and Sediment Control Inspector is required to inspect, assess, and supervise the maintenance of erosion and sediment control BMPs to ensure compliance with the NPDES Construction Storm Water General Permit while preserving BMP functionality.
4. Payment for project inspection is subsidiary to items that direct payment is made.

**ENVIRONMENTAL COMMITMENT DOCUMENT ENFORCEMENT  
(B-3-0509)**

**General**

1. This specification establishes a disincentive assessment for the Contractor's failure to comply with Environmental Commitments.
2. Deficiencies are described but not limited to:
  - a. Failure to install pollution prevention control BMPs as work progresses or as described in the SWPPP.
  - b. Failure to maintain existing pollution prevention control BMPs.
  - c. Failure to remove non-functioning pollution prevention control BMPs.
  - d. Failure to comply with U. S. Army Corps of Engineers 404 Permit requirements.
  - e. Failure to comply with NPDES Construction Storm Water General Permit requirements.
  - f. Failure to comply with all applicable statutes relating to pollution of the waters of the state.
  - g. Exceeding the maximum exposed surface area for excavation of 18 Acres without written request for permission and written approval.
  - h. Failure to comply with Plans, Specifications, and Contract requirements for the Environmental Commitment Document.

## Conditions

1. a. The count of Working Days and Calendar Days shall continue during the time period that corrective work is being performed.
  - i. Delays to the project as a result of the Contractor conducting corrective actions for the Environmental Commitment Document shall not constitute a valid reason for an extension of the contract time allowance.
- b. The Contractor shall begin maintenance operations, provide adequate equipment and personnel, and diligently pursue the work without cessation until all deficiencies have been corrected.

## Corrective Actions

1. a. Deficiencies shall be corrected within seven calendar days of notification. When deficiencies are not corrected within seven calendar days, the Engineer will make a disincentive assessment to the contract as stated herein.
2. If soil, weather, or other conditions prevent the Contractor from completing the corrective actions within seven calendar days, the Contractor shall notify the Engineer in writing. The Contractor's letter shall state the reasons preventing corrective action within the time allowed. The Contractor shall propose a Corrective Action Plan within 48 hours. Corrective work shall continue while the Plan is developed. The Contractor's Corrective Action Plan must contain a course of action and a time frame for completion. If the reasons and the Corrective Action Plan are acceptable to the Engineer, the Contractor will be allowed to proceed with the plan as proposed without incurring a disincentive assessment. If work described in the approved Corrective Action Plan does not commence as proposed, the Engineer may immediately invoke the NDOR Environmental Commitment Control Deficiency Notification Shut-Down Notice.
3. The Engineer may require the Contractor to provide a written Procedures Plan. The Procedures Plan shall detail the process to prevent reoccurrence of deficiencies. The written Procedures Plan shall be provided within seven calendar days of the request. Failure to correct all deficiencies and provide a Procedures Plan may result in payments being withheld until such time that procedures are outlined.

## Notification

1. Deficiencies will be documented using the NDOR Environmental Commitment Deficiency Notification Form and the Corrective Action Log.
2. Initial Notice:
  - a. The Initial Notice will notify the Contractor of Environmental Commitment deficiencies and direct that they be corrected.
  - b. If all corrective work is completed within the time allowance shown in the initial notice or time shown in the Contractor's approved Corrective Action Plan, a disincentive assessment will not be imposed upon the Contractor.

3. Shut-Down Notice:
  - a. If all corrective work identified in the Corrective Action Log attached to the Initial Notice has not been completed at the end of the seventh calendar day after the Initial Notice Date, a Shut-Down Notice will become effective on the eighth calendar day after the Initial Notice Date.
  - b. All current operations shall cease as of the date and time cited by the Shut-Down Notice. The Contractor shall only work on Environmental Commitment deficiencies. After the Shut-Down Notice, the penalty day assessment will be counted as a Calendar Day.

**Disincentive Assessments**

1. If the corrective work is not complete within seven Calendar Days after the Initial Notice, a disincentive assessment of \$250.00 per Deficiency Location per Calendar Day for each Deficiency Location remaining uncorrected will begin on the eighth calendar day after the Initial Notice Date and continue through and count the day the last corrective work was completed for each Deficiency Location.

**Corrective Action Incentive**

1. The Contractor shall comply with the NPDES Construction Storm Water General Permit to correct all pollution prevention control deficiencies within 7 calendar days from when the Contractor was notified of the Environmental Commitment deficiencies and prior to the next storm event. The Contractor shall begin maintenance operations, provide adequate equipment and personnel, and diligently pursue the work --- without cessation --- until all deficiencies have been corrected.
2. The Department will pay an incentive as outlined in Table A when the Contractor is notified by the Environmental Commitment Deficiency Notification and Corrective Action Log and commences work to correct deficiencies resulting from a storm event that exceeded 0.50 inch of rain. One payment per notification will be made. Multiple deficiencies may be included in one notification.

<b>Table A</b>	
<b>Corrective Action Incentive Payment Schedule</b>	
Incentive to commence corrective work within:	
24 Hours of Notification	\$300.00
48 Hours of Notification	\$200.00

3. An incentive payment will not be paid if corrective work does not commence as outlined in Table A and completed within 7 days, or if an unscheduled visit coincides with a normally scheduled visit.
4. An incentive payment will not be paid for scheduled maintenance visits, expected to occur every 14 days, or pollution prevention BMP installations, maintenance, and removals required due to daily Contractor operations.

5. Immediate Action Deficiencies are not eligible for incentive payment.

### **Immediate Action Deficiencies**

1. Deficiencies that pose an imminent threat to the environment are considered an emergency situation. These deficiencies will be identified in the Immediate Action Deficiencies section of the Environmental Commitment Notification Form. The corrective work for Immediate Action Deficiencies shall begin immediately and continue without cessation until completed.
2. The Contractor will be assessed a disincentive assessment of \$500.00 per Deficiency per Calendar Day for failure to begin corrective actions or failing to continue to completion.
3. Examples of Immediate Action Deficiencies include but not limited to:
  - a. Threatened & Endangered Species habitat protection deficiencies
  - b. U. S. Army Corps of Engineers 404 Permit Noncompliance
  - c. Petroleum Spills/Tank Leakage
  - d. Hazardous Material Spills

### **Rights Reserved**

1. The Department reserves the right to initiate and perform corrective action on any deficiencies and then assess the costs to perform the work against the Contractor.
2. The Contractor shall be liable to the Department for any and all costs incurred by the Department as a result of the Contractor's actions, inactions, or for failure to comply with the NPDES Construction Storm Water General Permit, U. S. Army Corps of Engineers 404 Permit, or any other applicable permit.
3. It is expressly understood that the provisions of this specification will not relieve the Contractor of his/her responsibilities nor shall it relieve the surety of its obligation for and concerning any just claim.

### **EXCESS EXCAVATION**

Excess excavation is to be placed in an area right of Station 7014+80 to Station 7019+17. The excess excavation shall be placed within 106 feet of the baseline, and shall not exceed elevation 1114.00. Any additional material shall be wasted on site as directed by the Engineer. This work shall be considered subsidiary to the item "Excavation (Established Quantity)".

### **TYPE B HIGH INTENSITY WARNING LIGHTS (D-6-0307)**

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



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

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

- d. (1) Reflectorized drums used for traffic warning or channelization shall be constructed of lightweight, flexible, and deformable materials, be a minimum of 36 inches (900 mm) in height, and have a minimum width of 18 inches (450 mm), regardless of orientation. The predominant color of the drum shall be orange.
- (2) Steel drums shall not be used.
- (3) The markings on drums shall be horizontal, shall be circumferential, and shall display four 6-inch (150 mm) wide bands of retroreflective sheeting, alternating fluorescent orange - white – fluorescent orange - white. The fluorescent orange sheeting shall meet the luminance requirements of the following table.

**FHWA Luminance Factor**

Luminance Factor $Y_T$			
Sheeting Type	Min	Max	Fluorescence Luminance Factor Limit, $Y_F$
Fluorescent Orange	25	None	15

- e. When approved by the Engineer or shown in the plans, 42" (1070 mm) reflective cones may be used in lieu of Type II Barricades or Reflectorized Drums. 42" (1070 mm) reflective cones shall include a 30-pound (14 kg) rubber base and display four 6-inch (150 mm) wide bands of retroreflective sheeting, alternating fluorescent orange - white - fluorescent orange - white. 42" (1070 mm) reflective cones shall not be used for lane-closure tapers or shifts.
- f. Rubber base-mounted 36-inch vertical panels shall not be used for channelization when the speed limit exceeds 40 miles per hour.

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

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

Paragraph 2.c. of Subsection 422.04 of the Standard Specifications is amended to include Reflectorized Drums.

Paragraphs 3. and 4. of Subsection 422.05 of the Standard Specifications are void and superseded by the following:

3. a. The pay item "Barricade, Type II" is used to pay for three items ("Barricades, Type II", "42" (1070 mm) Reflectorized Cones", and "Reflectorized Drums").
- b. "Barricades, Type II", which includes "42" (1070 mm) Reflectorized Cones", and "Reflectorized Drums", is paid for as an "established" contract unit price item. The established unit price is identified on the "Schedule of Items" shown in the Proposal.
4. Payment for vertical panels includes all posts, brackets, or hardware necessary to install and maintain the vertical panel units.

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

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

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

### **CULVERT STOP LOG STRUCTURE**

This work shall consist of constructing the culvert stop log structure as shown in the plans. This work shall also include all the work to modify the culvert pipe and includes the 5 timber planks, as shown in the plans. All work and materials not paid for directly shall be considered subsidiary to Group 4 work.

## SEEDING

Subsection 803.02 in the Standard Specifications is amended to include the following:

Type "Wetland"	Minimum Purity	Broadcast Application Rate in lb. of Pure Live Seed/Acre	Approved Mechanical Drill Application Rate in lb. of Pure Live Seed/Acre
Virginia wildrye – Omaha, Neb. or IA native	85	4.5	4
Canada wildrye – Mandan, Neb. or IA native	85	4	3.5
Fowl mannagrass ( <i>Glyceria striata</i> )	85	0.2	0.2
Blue joint ( <i>Calamagrostis canadensis</i> )	75	0.2	0.2
Big bluestem – Pawnee, Roundtree, Bonanza	60	5	4
Indiangrass – NE-54, Oto, Holt	90	3	2
Switchgrass – Pathfinder, Trailblazer, Blackwell, Shawnee	90	2	1.5
Prairie cordgrass ( <i>Spartina pectinata</i> )	75	1	1
Fox sedge ( <i>Carex vulpinoidea</i> )	75	0.5	0.25
Giant bur-reed ( <i>Sparganium eurycarpum</i> )	75	0.5	0.5
Swamp milkweed ( <i>Asclepias incarnata</i> )	90	0.2	0.1
Water plantain ( <i>Alisma subcordatum</i> )	60	2	2
Arrowhead ( <i>Sagittaria cuneata</i> or <i>S. latifolia</i> )	60	4	4
Blazing star ( <i>Liatris pycnostachya</i> )	85	0.1	0.1
New England aster ( <i>Aster novae-angliae</i> )	85	0.2	0.2

**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.**

Rate of application of commercial inorganic fertilizer shall be:

	Rate of Application per Acre (Minimum)
Available Nitrogen (N <sub>2</sub> )	0 lbs.
Available Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> )	0 lbs.

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

Nitrogen (Total Available)	0 lbs.
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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)	0 lbs.
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## EROSION CONTROL

Subsection 807.02 in the Standard Specifications is amended to include the following:

Erosion Control "Class 1D"	Minimum Purity	Application Rate in lb of Pure Live Seed/1000 sq. yard
Perennial ryegrass – Linn	85	1.25
Western wheatgrass – Barton, Flintlock	85	1.25
Slender wheatgrass	85	1.25
Canada wildrye – Mandan, Nebr. Native	85	1
Fox sedge (Carex vulpinoidea)	85	0.1
Switchgrass – Blackwell, Pathfinder, Shawnee, Trailblazer	90	0.25
Big bluestem – Bonanza, Pawnee, Roundtree	60	0.75
Little bluestem – Aldous, Blaze, Camper	60	0.5
Prairie cordgrass (Spartina pectinata)	85	0.4
Sideoats grama – Butte, El Reno, Trailway	75	1
Oats/Wheat*	90	6

\* wheat in the fall

**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.**

Rate of application of commercial inorganic fertilizer shall be:

	Rate of Application per 1000 SY (Minimum)
Available Nitrogen (N <sub>2</sub> )	0 lb.
Available Phosphoric Acid (P <sub>2</sub> O <sub>5</sub> )	0 lb.

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

Nitrogen (Total Available)	0 lb.
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## EROSION CONTROL

Subsection 807.01 is void and superseded by the following:

This work shall consist of the preparation of slopes and waterways and the furnishing and application of soil retention blankets at all locations of disturbed soils that are dry enough to facilitate the installation of the blanket.

Subsection 807.02

Paragraphs 2, 2.a., 2.b., and 2.c. are void and superseded by the following:

Wire staples shall be used for anchoring the soil retention blanket. The staples shall be a minimum of 13 gauge U-shaped steel wire with a 1 inch or larger throat with at least 6 inch long legs.

Paragraph 5 is void.

Subsection 807.03

Paragraph 6c is void.

Paragraphs 7.a.i. and 7.a.ii. are void.

Paragraph 8 is void.

Paragraph 1. of Subsection 807.05 is amended to include the following:

Pay Item	Pay Unit
Erosion Control, Class _____	Square Yard (SY)

### **EROSION CHECKS**

Subsection 808.01 is void and superseded by the following:

This work shall consist of seeding, trenching, furnishing and placing soil retention blankets, and furnishing and placing hay bales to construct erosion checks at the locations shown in the plans. There are two separate and distinct types of erosion checks – “Erosion Checks” which are permanent and placed as shown in the plans or as directed by the Engineer after final grading is complete; and “Temporary Silt Checks” which are temporary and placed as shown in the plans or as directed by the Engineer when rough grading is begun or as necessary.

Subsection 808.02

Paragraph 4 is void.

Paragraph 5a. is void and superseded by the following:

The “Temporary Silt Checks” shall be on the NDR Approved Products List.

Paragraph 5b. is void and superseded by the following:

The wire staples for “Temporary Silt Checks” shall be a minimum of 13 gauge steel wire with a 1 inch (25 mm) or larger throat and 6 inch (150 mm) legs.

Subsection 808.03

Paragraph 3 is void.

Paragraph 4 is void.

Paragraph 6b. is void.

Paragraph 7 is void and superseded by the following:

The hay bales shall then be placed in the trench over the soil retention blanket with bale ties up and backfilled to the level of the finished ditch elevation.

Paragraph 12, 12a, 12b, 12c, and 12d are void and superseded by the following:

Paragraph 12. Temporary Silt Checks

- a. The "Temporary Silt Checks" shall be installed at the locations shown in the plans, and as directed by the Engineer. The upstream edge shall be slightly buried and pinned with wire staples on approximately 24 inch (600 mm) spacings. The pins may be may be left slightly exposed for easier removal. The triangular portion shall be pinned on 3 foot (1 m) centers.
- b. The "Temporary Silt Check" shall be in place immediately after the rough grading is completed in that area.
- c. The "Temporary Silt Check" shall be left in place until the finish grading begins. Reinstall the "Temporary Silt Checks" as soon as finish grading is complete unless the permanent erosion control is initiated immediately after finish grading. "Temporary Silt Checks" should be in place at all times after finish grading until the permanent "Erosion Checks" are in place.
- d. At the completion of the project, the "Temporary Silt Checks" shall remain the property of the Contractor.

Subsection 808.04

Paragraph 2 is void and superseded by the following:

"Temporary Silt Checks" shall be measured by the linear foot (meter) for the initial installation. The removing or relocating of the "Temporary Silt Checks" will not be measured for payment, but will be considered subsidiary to the initial installation.

Subsection 808.05

Paragraphs 1, 2, and 3 are void and superseded by the following:

1. Pay Item	Pay Unit
Erosion Check	Bale
Erosion Checks, Type _____	Bale
Erosion Checks, Type Wattle	Linear Foot (LF) [Meter (m)]
Erosion Check "Type Synthetic"	Linear Foot (LF) [Meter (m)]
Temporary Silt Check	Linear Foot (LF) [Meter (m)]
Erosion Checks, Type _____	Linear Foot (LF) [Meter (m)]

2. If cleanout of an "Erosion Check" or "Temporary Silt Check" is required, it will be paid as equipment rental as prescribed in Subsections 809.04 and 809.05.

3. Payment for "Temporary Silt Checks" includes any costs incurred to reinstall the "Temporary Silt Checks" once the area is finished graded.

**FABRIC SILT FENCE  
(HIGH POROSITY AND LOW POROSITY)**

Paragraph 3. of Subsection 809.03 in the Standard Specifications is amended to include the following:

Silt Fence may be installed mechanically with a silt fence plow in lieu of the trenching procedures.

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

At the completion of the project, the silt fence shall be left in good working condition.

**PORTLAND CEMENT CONCRETE  
(J-15-0813)**

Paragraph 1. of Subsection 1002.02 in the Standard Specifications is amended to include the following:

- b. Concrete mixes will be in accordance of Table 1002.02.

Paragraph 3. of Subsection 1002.02 is void and superseded by the following:

- 3. Type 1PF and 1PN cement shall be used for all classes of concrete except for pavement repair. Pavement repair shall include Type I/II Portland cement for Class PR1 concrete and Type III Portland cement shall be used in Class PR3 concrete. Type 1P cement shall meet all requirements of ASTM C 595.

Tables 1002.02, 1002.02M and 1002.03 in Subsection 1002.02 are void and superseded by the following:

**ENGLISH  
TABLE 1002.02**

**Concrete Mixes (Cubic Yard Batch)**

Class of Concrete (1)	Base Cement Type*	Portland Cement (Min. lb/cy)	Pre-Blended Class F Fly Ash or Pozzolan* (Min. lb/cy)	Slag Cement (Min. lb/cy)	Class C Fly Ash (Min. lb/cy)	Silica Fume (Min. lb/cy)	Total Cementitious Materials (Min. lb/cy)	Total Agg. (Min. lb/cy)	Total Agg. (Max. lb/cy)	Coarse Agg. (%) (3)	Type of Coarse Agg.****	Air Content (% Min.-Max.) (2)	Water/Cement Ratio Max. (4)	Required Strength (Min. psi) (7)
47B**	1PF/1PN	423	141	0	0	0	564	2850	3150	30±3	Limestone	7.5 -10.0	0.48	3500
47B***	1PF/1PN	423	141	0	0	0	564	2850	3150	30±3	Limestone	6.0 - 8.5	0.48	3500
47BD	1PF/1PN	494	164	0	0	0	658	2500	3000	30±3	Limestone	6.0 - 8.5	0.42	4000
PR1	I/II	752	0	0	0	0	752	2500	2950	30±3	Limestone	6.0 - 8.5	0.36	3500
PR3	III	799	0	0	0	0	799	2500	2950	30±3	Limestone	6.0 - 8.5	0.45	3500
SF	I/II	564	0	0	0	25	589	2850	3200	50±3	Limestone	6.0 - 8.5	0.36	4000
47BHE	1PF/1PN	564	188	0	0	0	752	2500	3000	30±3	Limestone	6.0 - 8.5	0.40	3500
BX <sub>(6)</sub>	1PF/1PN	423	141	0	0	0	564	2850	3150	0	0 (5)	6.0 - 8.5	0.48	3500
47BFS** <sub>(6)</sub>	1PF/1PN	338	113	113	0	0	564	2850	3150	30±3	Limestone	7.5 -10.0	0.48	3500
47BFS*** <sub>(6)</sub>	1PF/1PN	338	113	113	0	0	564	2850	3150	30±3	Limestone	6.0 - 8.5	0.48	3500
47BDFS <sub>(6)</sub>	1PF/1PN	396	131	131	0	0	658	2850	3000	30±3	Limestone	6.0 - 8.5	0.42	3500

- (1) Each class shall identify the minimum strength requirement. (For example, 47B-3500, where the last four digits indicate the strength in pounds per square inch. In the chart, strength of 3500 psi is indicated for 47B-3500; however, other strengths may be authorized elsewhere in the contract. The classes shown in the chart are typical examples.)  
All classes of concrete shall be air-entrained, and a water-reducing admixture shall be used.  
A slump test shall be performed to check for consistency and/or workability. Any increase in slump must be pre-approved by the Engineer.  
A water reducer admixture shall be used at the manufacturer's recommendations.
- (2) As determined by ASTM C 138 or ASTM C 231.  
FOR INFORMATION ONLY. The Contractor may develop a Quality Control Program to check the quantity of air content on any given project; such as checking the air content behind the paver.
- (3) Coarse aggregate shall be limestone unless otherwise specified.
- (4) The Contractor is responsible to adjust the water/cement ratio so that the concrete supplied achieves the required compressive strength without exceeding the maximum water/cement ratio. The minimum water/cement ratio for any slip form concrete pavement is 0.38, unless the Contractor obtains written approval from the NDR Materials & Research Division prior to any placement on the project. The Contractor may request approval from Materials & Research in writing to change the water/cement ratio to 0.36.
- (5) Single aggregate (sand-gravel) used for these classes of concrete.
- (6) 47BFS is an acceptable substitute for 47B and 47BDFS is an acceptable substitute for 47BD.
- (7) For acceptance of each class of concrete, refer to the specifications.
- (8) For temporary surfacing, straight Type I/II cement is allowed.
- (\*) Mixes with Type 1PF and 1PN are pre-blended or interground with Class F fly ash or Class N Pozzolan by the cement mill producer at a rate of 25%±2%, no additional Class F fly ash or Class N Pozzolan is added at the batch plant. Lithium Nitrate may be used in place of Class F fly ash or Class N Pozzolan, see Section 1007 of the Standard Specifications as modified in these Special Provisions.
- (\*\*) For slip form applications.
- (\*\*\*) For hand-pours and substructures applications.
- (\*\*\*\*) Quartzite aggregate can be used in place of limestone providing the aggregate meets Paragraph 3.b. of Subsection 1033.02.



**METRIC  
TABLE 1002.02**

<b>Concrete Mixes (Cubic Meter Batch)</b>														
Class of Concrete (1)	Base Cement Type*	Portland Cement (Min. kg/m <sup>3</sup> )	Pre-Blended Class F Fly Ash or Pozzolan* (Min. kg/m <sup>3</sup> )	Slag Cement (Min. kg/m <sup>3</sup> )	Class C Fly Ash (Min. kg/m <sup>3</sup> )	Silica Fume (Min. kg/m <sup>3</sup> )	Total Cementitious Materials (Min. kg/m <sup>3</sup> )	Total Agg. (Min. kg/m <sup>3</sup> )	Total Agg. (Max. kg/m <sup>3</sup> )	Coarse Agg. (%) (3)	Type of Coarse Agg.****	Air Content (% Min.-Max.) (2)	Water/Cement Ratio Max. (4)	Required Strength (Min. Mpa) (7)
47B**	1PF/1PN	251	84	0	0	0	335	1691	1869	30±3	Limestone	7.5 -10.0	0.48	25
47B***	1PF/1PN	251	84	0	0	0	335	1691	1869	30±3	Limestone	6.0 - 8.5	0.48	25
47BD	1PF/1PN	293	97	0	0	0	390	1483	1780	30±3	Limestone	6.0 - 8.5	0.42	30
PR1	I/II	446	0	0	0	0	446	1483	1750	30±3	Limestone	6.0 - 8.5	0.36	25
PR3	III	474	0	0	0	0	474	1483	1750	30±3	Limestone	6.0 - 8.5	0.45	25
SF	I/II	335	0	0	0	15	349	1483	1899	50±3	Limestone	6.0 - 8.5	0.36	30
47BHE	1PF/1PN	335	112	0	0	0	446	1483	1780	30±3	Limestone	6.0 - 8.5	0.40	25
BX <sup>(8)</sup>	1PF/1PN	251	84	0	0	0	335	1691	1869	0	0 (5)	7.5 - 8.5	0.48	25
47BFS** <sup>(6)</sup>	1PF/1PN	201	67	67	0	0	335	1691	1869	30±3	Limestone	7.5 -10.0	0.48	25
47BFS*** <sup>(6)</sup>	1PF/1PN	201	67	67	0	0	335	1691	1869	30±3	Limestone	6.0 - 8.5	0.48	25
47BDFS <sup>(6)</sup>	1PF/1PN	234	78	78	0	0	390	1483	1780	30±3	Limestone	6.0 - 8.5	0.42	30

- (1) Each class shall identify the minimum strength requirement. (For example, 47B-25, where the last two digits indicate the strength in MPa. In the chart, strength of 25 MPa is indicated for 47B-25; however, other strengths may be authorized elsewhere in the contract. The classes shown in the chart are typical examples.)  
All classes of concrete shall be air-entrained, and a water-reducing admixture shall be used.  
A slump test shall be performed to check for consistency and/or workability. Any increase in slump must be pre-approved by the Engineer.  
A water reducer admixture shall be used at the manufacturer's recommendations.
- (2) As determined by ASTM C 138 or ASTM C 231.  
FOR INFORMATION ONLY. The Contractor may develop a Quality Control Program to check the quantity of air content on any given project; such as checking the air content behind the paver.
- (3) Coarse aggregate shall be limestone unless otherwise specified.
- (4) The Contractor is responsible to adjust the water/cement ratio so that the concrete supplied achieves the required compressive strength without exceeding the maximum water/cement ratio. The minimum water/cement ratio for any slip form concrete pavement is 0.38, unless the Contractor obtains written approval from the NDR Materials & Research Division prior to any placement on the project. The Contractor may request approval from Materials & Research in writing to change the water/cement ratio to 0.36..
- (5) Single aggregate (sand-gravel) used for these classes of concrete.
- (6) 47BFS is an acceptable substitute for 47B and 47BDFS is an acceptable substitute for 47BD.
- (7) For acceptance of each class of concrete, refer to the specifications.
- (8) For temporary surfacing, straight Type I/II cement is allowed.
- (\*) Mixes with Type 1PF and 1PN are pre-blended or interground with Class F fly ash or Class N Pozzolan by the cement mill producer at a rate of 25%±2%, no additional Class F fly ash or Class N Pozzolan is added at the batch plant. Lithium Nitrate may be used in place of Class F fly ash or Class N Pozzolan, see Section 1007 of the Standard Specifications as modified in these Special Provisions.
- (\*\*) For slip form applications.
- (\*\*\*) For hand-pours and substructures applications.
- (\*\*\*\*) Quartzite aggregate can be used in place of limestone providing the aggregate meets Paragraph 3.b. of Subsection 1033.02.

<b>Table 1002.03</b>	
<b>Table of Acceptable Concrete Class</b>	
<b>Class</b>	<b>Acceptable Class for</b>
<b>BX</b>	<b>47B, 47BD, or 47B-HE</b>
<b>47B</b>	<b>47BD, or 47B-HE</b>

Paragraph 5, 6, 7, 8, 9, and 10 of Subsection 1002.02 are void and superseded by the following:

5. Class PR1 and PR3 Concrete:
  - a. The calcium chloride for use in PR concrete shall be either:
    - (1) A commercially prepared solution with a concentration of approximately 32 percent by weight.
    - (2) A Contractor prepared solution made by dissolving 4.5 pounds (0.54 Kg) of Grade 2 or 6.2 pounds (0.74 Kg) of Grade 1 calcium chloride per gallon (liter) of water to provide a solution of approximately 32 percent by weight.
  - b. The 7.4 pounds (10.89 Kg) of water in each gallon (liter) of solution shall be considered part of the total water per batch of concrete.
  - c. The calcium chloride solution shall be added, just prior to placement, at a rate of 0.375 gallons/100 pounds of cement (1.4 lb. calcium chloride per 100 lb. cement) [3.13 L/100 Kg of cement (1.4 Kg calcium chloride per 100 Kg cement)].
  - d. Class A, Flaked or Pellet Calcium Chloride shall be added at a rate not to exceed 2.0 percent of the weight of the cement for Grade 1, or 1.6 percent of the weight of the cement for Grade 2. Grade 1 Calcium Chloride purity is between 70 and 90 percent and Grade 2 Calcium Chloride is between 91 and 100 percent.
  - e. Where mixing trucks are used:
    - (1) For Class PR3 concrete, calcium chloride shall be thoroughly mixed into the concrete before placement. The minimum mixing time is 2 minutes.
    - (2) For Class PR1 concrete, calcium chloride shall be added first and then the concrete mixed at least 2 minutes or as required by manufacturer. Next, the Type F high range water-reducer admixture is added and the concrete is mixed an additional 5 minutes.
  - f. Where continuous batching equipment is employed, such as a concrete mobile mixer, the calcium chloride solution and Type F high range water-reducer admixture shall be incorporated in the concrete through a flow meter.

6. Class High Early (HE) Concrete
  - a. High Early (HE) strength concrete shall be cured as prescribed in Subsection 603.03, Paragraph 7. The Contractor shall take necessary curing measures so the required strength is achieved.
  - b. High Early concrete shall achieve a compressive strength of 3,500 psi (25 MPa) at 48 hours after placement.
  - c. The 48-hour compressive strengths shall be used to determine pay factor deductions for high early concrete in accordance with Table 603.03.
  - d. A non-calcium chloride accelerator shall be used when the ambient temperature at the time of the placement of concrete is 70°F or less.
  - e. When requested by the Contractor, the maturity method, as provided in NDR C 1074, may be used in lieu of the requirements of Subsection 603.03, Paragraphs 11.c. and d. to determine the strength of concrete pavement for the purpose of early opening to traffic and acceptance. Requests by the Contractor for use of the maturity method shall be on a project basis and shall be made in writing to the Engineer.
7. The yield of the concrete proportions shall be determined and adjusted by the Producer or Engineer.

Subsection 1002.02 is amended to include the following:

11. All Classes of Concrete with the exception of PR1 and PR3 shall have a Durability Factor not less than 70 and a mass loss not greater than five percent after 300 freeze/thaw cycles when tested in accordance with ASTM C 666. The freeze/thaw testing shall be conducted according to Procedure A.

Paragraph 1. and 2. of Subsection 1002.03 is void and superseded by the following:

1. The Contractor shall identify the plant that will supply the concrete 14 days before use and be entirely responsible for its calibration, batching of concrete, aggregate and sampling of cement per NDR Sampling Guide.
  - a. The Contractor shall be responsible for the following:
    - 1) Batching concrete.
    - 2) Contractor shall sample aggregate from the conveyor belt or stockpile. Gradations from a split sample shall be reported to the Engineer at the frequency required by the Materials Sampling Guide.
      - i. Contractor shall retain possession of the split samples on-site at the Contractor's facility until such a time as determined by the Engineer.
        - a) At the pre-construction meeting:
          - 1) Contractor shall determine the location of testing and report the names of the technician performing the sampling and testing.

- 2) Engineer will notify the Contractor of the retrieval of the split samples.
    - ii. The Contractor shall immediately seal the split sample after splitting and before testing has begun. The cloth sample bag shall be supplied by the Contractor.
    - iii. The sampling splitting and placement of the security seal of aggregate samples shall be witnessed by certified Department personnel.
    - iv. Contractor shall secure the split sample using a consecutively numbered security seal of 75 pounds breaking strength provided by the Department. The Contractor shall use the consecutively numbered security seals to identify and track each Aggregate Class. Samples that are not consecutively numbered will be investigated for custody of the sample and the Engineer may cease production until it is determined what action will be required.
    - v. The Contractor shall report the security seal tracking number with the split sample gradation.
  - b. The following training shall be required for personnel who oversee the batching of the concrete:
    - 1) Concrete technician personnel.
      - i. Concrete Plant Technician
    - 2) Portland cement sampler.
      - i. NDR Portland Cement Sampler.
2. Portland Cement Concrete shall be supplied by certified Ready Mix Plants that are in compliance with the requirements in the *Quality Control Manual*, Section 3, -- Certification of Ready Mixed Concrete Production Facilities published by the National Ready Mixed Concrete Association. Refer to NDR Material Sampling Guide for the policy on stationary and portable plants.

Paragraph 4. of Subsection 1002.03 is void and superseded by the following:

4.
  - a. Mix times shall meet the requirements of ASTM C 94. Mixing time tests shall be repeated whenever the concrete appearance indicates that mixing was inadequate.
  - b. Batch plants that are transporting the concrete in non-agitating trucks, the mixing time will not be less than 60 seconds, and for agitating trucks, the mixing time will not be less than 45 seconds.
  - c. The Certification of stationary and portable ready mix plants will conform to the tests that are required in the NDR Materials Sampling Guide.

Paragraph 6. of Subsection 1002.03 is void and superseded by the following:

6. Batch tickets shall be prepared as prescribed in the National Ready Mixed Concrete Associations *Quality Control Manual*. The Contractor shall keep all gradations and batch tickets until final acceptance by the Department. Projects that have less than 200 cubic yards of concrete placed will be allowed to have handwritten tickets. The concrete batch tickets shall show batch weights,

aggregate moisture, admixtures used, water, and mix design calculations. A copy of the batch ticket shall be given to the Engineer upon delivery of concrete.

Paragraph 8. of Subsection 1002.03 is void and superseded by the following:

8. Aggregate from a dry pit and coarse aggregate shall be uniformly saturated with water before it is used. The wetting shall begin 24 hours before concrete mixing to allow complete saturation.

Paragraph 1.b. of Subsection 1002.04 is void.

Paragraph 6 of Subsection 1002.04 is void and superseded by the following:

6. Compressive strength tests shall be made in accordance with ASTM C 39. Compressive strength cylinders shall be cured in accordance with ASTM C 31 paragraph 10. The compressive strength requirements shall be as specified. In general, 7-day compressive strength should be 70 percent of the 28-day compressive strength.

Subsection 1002.04 is amended to include the following:

8. Aggregate Acceptance, Verification, Sampling and Testing:
  - a. The aggregate will be accepted based on the Contractor's testing results except as noted below.
  - b. The aggregate verification sampling and testing by the Department will be randomly selected and tested according to subplot sizes in Table 1002.5

Table 1002.05

Aggregate Class	Lot	Sublot
E and F	3000 tons	1000 tons
A, B and C	6000 tons	2000 tons

- c. The results of Contractor split sample will be verified by the Department's verification tests. Any samples outside of the tolerances as specified according to the Materials Sampling Guide, Section 28 under the *Acceptable Tolerance Limits for Independent Assurance* will result in an Independent Assurance (IA) review of testing and may result in the Department test results being applied.
- d. On any given Lot, if the results of the gradation from the verification test are within Department's specification, the Contractor's results will be used for the entire lot. On any given Lot, if the gradation results from the verification test are outside Department's specification, further investigation will be initiated by the Engineer for that subplot. Any or all of the remaining Department subplot samples may be tested and the Department subplot test results may be applied to the respective subplot and the acceptance will apply.

- e. When verification tests are within testing tolerance but results show a consistent pattern of deviation from the split sample results, the Engineer will exercise one or more of the following:
  - Cease production
  - Request additional verification testing
  - Initiate a complete IA review
  
- f. Independent Assurance (IA) Review of Testing:
  - 1) The Contractor shall allow the Department personnel access to the Contractor's laboratory to conduct IA review of technician testing procedures and apparatus. Any deficiencies discovered in the Contractor's testing procedures will be reported to the Contractor and corrected by the Contractor.
  - 2) During IA review, the Department personnel and the Contractor shall split a sample for the purpose of IA testing. The samples selected will be tested in the Department's Branch Laboratory. Any IA test results found to be outside of defined testing tolerances as stated in Paragraph 8.c. of Subsection 1002.04 will be reported to the Contractor. The Contractor shall immediately correct any deficiencies found during the IA review.
  
- g. If the project personnel and the Contractor cannot reach agreement on the accuracy of the test results, the Department Central Laboratory will be asked to resolve the dispute, which will be final. All dispute resolutions will be in accordance with the Quality Assurance Program requirements in the NDR Materials Sampling Guide.

## **PORTLAND CEMENT (J-15-0812)**

Section 1004 in the Standard Specifications is void and superseded by the following:

### **1004.01 – Description**

- 1. Portland cement is the binder in concrete, locking the aggregate into a solid structure. It is manufactured from lime, silica, and alumina (with a small amount of plaster of gypsum).
- 2. Equivalent alkali referred to herein is hereby defined as the sum of the sodium oxide ( $\text{Na}_2\text{O}_e$ ) and the potassium oxide ( $\text{K}_2\text{O}$ ) calculated as sodium oxide (equivalent alkali as  $\text{Na}_2\text{O}_e = \text{Na}_2\text{O} + 0.658 \text{K}_2\text{O}$ ).

### **1004.02 – Material Characteristics**

- 1. Type I, Type II and Type III Portland cement shall conform to the requirements in ASTM C 150 with the following additional requirements:
  - a. Portland cement shall not contain more than 0.60 percent equivalent alkali.
  - b. Processing additions may be used in the manufacture of the cement, provided such materials have been shown to meet the requirements of ASTM C 465 and

the total amount does not exceed 1 percent of the weight of Portland cement clinker.

2. Type 1PF or 1PN shall be a Type 1P made exclusively with Class "F" fly ash or Class N as the pozzolan. Type 1P cement shall conform to the requirements as prescribed in ASTM C 595 and the following requirements:
  - a. The pozzolan content shall be  $25\pm 2$  percent of the cementitious materials by weight.
  - b. The pozzolan shall be Class F fly ash or Class N pozzolan.
  - c. Additional fly ash substitution shall not be allowed with Type 1P cement containing Class F fly ash or Class N pozzolan.

#### **1004.03 – Procedures**

1. The Contractor shall provide adequate protection for the cement against dampness.
  - a. Cement shall be hauled or stored in railroad cars, dry bulk trailers or in suitable moisture-proof buildings.
  - b. The use of tarpaulins for the protection of the cement against moisture will not be allowed.
2. No cement which has become caked or lumpy shall be used.
3. Cement which has been spilled shall not be used.
4. Accepted cement which has been held in storage at the concrete mix plant more than 90 days shall be retested.
5. Cement coming directly from the manufacturer shall not be used until the temperature is 150°F (66°C) or less.

#### **1004.04 – Acceptance Requirements**

1. a. Cements for use on NDR projects must be on the NDR Approved Products List.
  - b. Cements will be placed on the NDR Approved Products List based on conformance with the NDR Acceptance Policy for Portland and Blended Cements. This information can be found on the NDR Materials and Research website.
2. Portland cement chemical and physical test requirements shall conform to NDR Acceptance Policy for Portland and Blended Cements contained in the NDR's Materials Sampling Guide.
3. All cements shall be sampled and tested at the rate as described in the NDR's Materials Sampling Guide.
  - a. NDR will inform the Contractor when a sample is required.

- b. A sample shall be taken by a Contractor's Certified Portland Cement Sampler and must be under the supervision of NDR certified personnel.
  - c. The sample shall be taken at the plant from a bulk shipment of a rail car, dry bulk trailer, batch plant silo or from the line between the bulk truck and the silo. Upon sampling, NDR will take custody of the sample.
4. a. Blended cements shall be tested according to the provisions of ASTM C 1567. The mortar bars shall be composed of the Type 1PF/1PN cement and sand/gravel from a Platte River Valley source approved by NDR Materials and Research Division. The mortar bars for the ASTM C 1567 shall not exceed 0.10% expansion at 28-days. To accommodate precision within multi-laboratory testing, expansion up to and including 0.13% will be accepted for use. If the expansion is above 0.13%, the material will be noncompliant.
- b. Noncompliant material from the terminal or mill will be temporarily removed from the Approved Products List pending further investigation.
5. If the noncompliant cement is removed from the Approval Products List, all shipments from the supplier will be held until the investigation of the failing samples have been completed by the NDR Materials and Research Division. These procedures shall be in accordance with NDR Acceptance Policy for Portland and Blended Cements in the NDR's Material Sampling Guide.

### **WATER FOR CONCRETE (J-15-0512)**

Section 1005 in the Standard Specifications is void and superseded by the following:

#### **1005.01 – Description**

Water shall be free from objectionable quantities of oil, acid, alkali, salt, organic matter, or other deleterious materials and shall not be used until the source of supply has been approved.

#### **1005.02 – Material Characteristics**

1. Water which contains more than 0.25 percent total solids by weight shall not be used.
2. When required by the Engineer, the quality of mixing water shall be determined by ASTM C 1603, ASTM C 114 and ASTM C 1602.
3. Upon written request by the concrete producer and approval by Materials and Research, the concrete producer may utilize up to 10% wash water for batching fresh concrete, only in mixes using 1P under the following conditions:
  - a. Wash water shall conform to the requirements in NDR's Material Sampling Guide.
  - b. Wash water must be clarified wash water that has been passed through a settling pond system.



- c. Wash water must be scalped off of a settling basin that has been undisturbed for a minimum of 12 hours.
- d. Wash water must be metered into each load.
- e. Wash water quantities shall be shown on the batch ticket.

### **CALCIUM CHLORIDE (J-15-0307)**

Section 1006 of the Standard Specifications is void and superseded by the following:

#### **1006.01 – Description**

Calcium Chloride shall be Type S (Solid) or Type L (Liquid). Calcium Chloride can be used for, but not limited to, dust control and acceleration of the set of concrete.

#### **1006.02 – Material Characteristics**

The requirements for calcium chloride shall be as shown in ASTM D 98.

#### **1006.03 – Acceptance Requirements**

Acceptance shall be based on sampling and testing in accordance with AASHTO T 143 and requirements contained in the NDR Materials Sampling Guide.

### **SECTION 1007 -- CHEMICAL ADMIXTURES (J-15-0211)**

Section 1007 in the Standard Specifications is void and superseded by the following:

#### **1007.01 -- Description**

- 1. Admixtures are materials added to Portland cement concrete to change characteristics such as workability, strength, imperviousness, freezing point, and curing.
- 2. The Department's concrete admixture types are:
  - a. Type A - Water-Reducing Admixture - An admixture that reduces the quantity of mixing water required to produce concrete of a given slump.
  - b. Type B - Retarding Admixture - An admixture that slows the setting of concrete.
  - c. Type C - Accelerating Admixture - An admixture that speeds the setting and early strength development of concrete.
  - d. Type D - Water-Reducing and Retarding Admixture - An admixture that reduces the quantity of mixing water required to produce concrete of a given slump and slows the setting of concrete.

- e. Type E - Water-Reducing and Accelerating Admixture - An admixture that reduces the quantity of mixing water required to produce concrete of a given slump and speeds the setting and early strength development of concrete.
- f. Type F - Water-Reducing, High Range Admixture - An admixture that reduces the quantity of mixing water required to produce concrete of a given slump by 12 percent or greater.
- g. Type G - Water-Reducing, High Range and Retarding Admixture - An admixture that reduces the quantity of mixing water required to produce concrete of a given slump by 12 percent or greater and slows the setting of concrete.
- h. Air-Entraining - An admixture that encapsulates air in the concrete.
- i. Lithium Nitrate – An admixture used to control the Akali-Silica-Reaction (ASR) in concrete.

**1007.02 -- Material Characteristics**

- 1. Type A through G admixtures shall meet the requirements in ASTM C 494.
- 2. Air-entraining admixtures shall meet the requirements in ASTM C 260.
- 3. Use of admixtures other than those cited may be requested by the Contractor.
- 4. Admixtures shall not contain more than 1 percent of chlorides calculated as calcium chloride.
- 5. Admixtures shall be used at the manufacturer's recommended dosage rates.
- 6. The air-entraining admixture characteristics shall produce concrete with satisfactory workability and a total air content as prescribed in Table 1002.02.
- 7. a. When using the Lithium Nitrate admixture, the Contractor shall submit to the Engineer:
  - (i) A five pound sample of cement that will be used on the project.
  - (ii) The Manufacturer's method for determining the recommendation for the required dose rate based on the equivalent alkali content.
  - (iii) Water content of the Lithium Nitrate admixture solution.
- b. The Engineer will report the equivalent alkali content to the Contractor. The Contractor shall use the reported equivalent alkali content to determine the required dose rate based on the manufacturer's recommendation.

**1007.03 -- Procedures**

1. The process for adding admixtures to a ready mix truck on the project site involves positioning the load of concrete up to the truck chute, stopping short of discharge.
  - a. The admixture is then poured over the surface of the concrete and mixed for at least 5 minutes.
  - b. No more than 1.3 gallons (5L) of water shall be used to rinse the admixture from the fins and top chute. This water must be shown on the proportioning report and shall not exceed the water cement ratio.
  - c. When Lithium Nitrate is used, the portion of the admixture that is water will be shown on the proportioning report and shall not exceed the water cement ratio.
  - d. The Contractor is responsible for the addition of the admixture.
2. a. If the air content is less than the minimum specified, addition of air-entraining admixtures is allowed.
  - b. The Contractor shall take measures based on manufacturer's recommendations, that are within compliance of NDR Specifications, to bring the load of concrete into NDR prescribed limits according to Table 1002.02.
  - c. If the air content is then outside the limits in Table 1002.02, the load of concrete shall be rejected.

**1007.04 -- Acceptance Requirements**

1. a. Approved chemical admixtures are shown on the NDR Approved Products List.
  - b. Admixture approval shall be based upon annual certifications and certified test results submitted to the NDR Materials and Research Division.
2. The admixture must be essentially identical in concentration, composition, and performance to the admixture tested for certification.
3. Admixtures not identified on the NDR Approved Products List may be used under the following conditions:
  - a. A certificate of compliance and certified test results must be submitted to the NDR Materials and Research Division, and;
  - b. Approval for use must be given by the NDR Materials and Research Division.

**FLY ASH AND CALCINED NATURAL POZZOLAN  
(J-15-0512)**

Subsection 1008.02 in the Standard Specifications is void and superseded by the following:

**1008.02 – Material Characteristics**

1. All fly ash and calcined clay natural pozzolan will be acceptance tested by the NDR Materials and Research Division. This includes production plant samples and field samples.
2. Fly ash shall conform to the requirements of Class C, Class F, and Class N pozzolan as defined in ASTM C 618 except that the maximum loss on ignition for Class F pozzolan shall be 3.0 percent. Either class of fly ash shall not contain more than 1.5 percent of available alkalis as  $\text{Na}_2\text{O}_e$ .
3. Fly ash produced in furnace operations utilizing liming materials or soda ash (sodium carbonate) as an additive will not be acceptable.

**SILICA FUME  
(J-15-0307)**

Paragraph 2 of Subsection 1009.03 in the Standard Specifications is void and superseded by the following:

2. Silica fume shall be protected from temperatures in excess of 90°F (32°C).

**LIQUID MEMBRANE-FORMING COMPOUNDS FOR CURING CONCRETE  
(J-15-0307)**

Subsection 1012.03 in the Standard Specifications is void and superseded by the following:

**1012.03 – Acceptance Requirements**

1. All curing compounds to be approved must be from the current calendar year with no carry-over from the previous years.
2. Approved compounds are on the NDR Approved Products List.
3. Products not on the NDR Approved Products List shall be sampled and tested in accordance with requirements of the NDR Materials Sampling Guide.

## **BITUMINOUS LIQUID COMPOUNDS FOR CURING CONCRETE (J-15-1007)**

Section 1013 in the Standard Specifications is void and superseded by the following:

### **1013.01 – Description**

The compound shall consist essentially of an asphaltic base and shall be of a consistency suitable for spraying at temperatures existing at the time of construction operations. It shall form a continuous, uniform film. It shall be free of precipitated matter caused by conditions of storage or temperature. The compounds shall be relatively nontoxic.

### **1013.02 – Material Characteristics**

- a. When tested in accordance with AASHTO T 155, the loss of water shall not be more than 0.11 lb/ft<sup>2</sup> (0.55 kg/m<sup>2</sup>) of surface area at 3 days, unless otherwise specified by the Engineer.
- b. The Contractor has the option of using bituminous tack coat. The tack coat shall conform to all requirements of Section 504.

### **1013.03 – Acceptance Requirements**

Products shall be sampled and tested in accordance with requirements of the NDR Materials Sampling Guide.

## **JOINT AND CRACK SEALING FILLER (J-15-0813)**

Section 1014 in the Standard Specifications is void and superseded by the following:

### **1014.01 – Description**

Joint sealing filler shall be either a cold applied silicone product or an asphalt product (hot pour) conforming to the requirements of this Section. The type of joint filler to be used shall be as specified in the plans or special provisions. If not specified, any of the joint sealing fillers in this Section may be used.

Crack sealing filler shall be a hot pour sealer conforming to the requirements of this Section.

### **1014.02 -- Material Characteristics**

1. NE-3405 and NE-3405LM (hot pour)
  - a. NE-3405 joint and crack sealer shall conform to the requirements of ASTM D6690, Type II. The material shall conform to the requirements of Table 1 with the following exception:
    - (i) The test of Bond, non-immersed, ASTM D5329, 3 specimens through 3 cycles shall be run at 0°F (-18°C), 100% extension.

- b. NE-3405LM (Low Modulus) joint and crack sealer shall conform to the requirements of ASTM D6690, Type IV. The material shall conform to the requirements of Table 1.
- c. The test of Bond, non-immersed, ASTM-D5329, will be tested on concrete blocks that will be constructed by the NDR Concrete Laboratory. The concrete blocks will be made of a 47B concrete mixture as prescribed in Section 1002 in the NDR Standard Specifications. The design is amended so that no fly ash is used in the mixture. All other specifications for Portland Cement Concrete apply.
- d. Sample conditioning, preparation and heating shall be in accordance with ASTM D 5167 with the following exceptions:
  - (i) The following sentence of Section 8.1.2, "Also, if present, remove container liner by cutting it away", is void and superseded by the following:

"Also, if present, as much of the polyethylene bag as possible, shall be removed by cutting it away. Wholly-meltable type container in contact with the sample section shall be left in place."
  - (ii) The last sentence of Section 8.1.2 "Solid Materials" is void and superseded by the following:

The entire vertical section which has been cut, shall be placed into the pot for melting.
  - (iii) The Section of 8.2.2.1 "Solid Materials" is void.
  - (iv) The Section of 8.2.3 is void and superseded by the following:

After the solid segment is added to the melter, the material shall be allowed to minimally melt to a uniform viscous state suitable for the installation of the stirrer or paddle. The sample shall then be stirred for one full hour. The oil bath temperature shall be regulated to bring the material to the maximum heating temperature within the one hour of stirring.
  - (v) The Section of 8.2.4.1 is void and superseded by the following:

During the one full hour of stirring, check the temperature of the material at maximum 15 minute intervals using a Type K thermocouple with the calibration verified in accordance with Section 6.1.7 to ensure conformance with specified temperature requirements. Stop the mechanical stirrer when measuring temperatures. If material temperatures ever exceed the maximum heating temperature, or ever drop below the minimum application temperature after the maximum heating temperature was reached, discard the sample and re-do the heating. Maintain appropriate records of times and temperatures to verify conformance with specification requirements.
  - (vi) The Section of 8.2.4.2 is void.

- e. ASTM D 5329 shall include the following changes:
- (i) Sections 6.4 and 12.4 "Specimen Preparation" shall have the reference of "177 ml (6 oz.)" replaced with "3 oz."
  - (ii) Section 6 "Cone Penetration, Non-Immersed" shall be superseded with the following exceptions:
    - 1. Section 6.5 "Procedure" is void and superseded by the following:

Place the specimen in a water bath maintained at 77 +/- 0.2°F (25 +/- 0.1°C) for two hours immediately before testing. Remove the specimen from the bath and dry the surface by shaking gently to remove free water from the surface of the specimen. Using the apparatus described in Section 6.3, make one determination at or near the center of the specimen. Take care to ensure the cone point is placed on a point in the specimen that is representative of the material itself, and is free of dust, water, bubbles, or other foreign material.
    - 2. Section 6.6 "Report" is void and superseded by the following:

Record the value as penetration of the specimen in dmm units.
  - (iii) Section 12 "Resilience" shall be superseded with the following exceptions:
    - 1. Section 12.5 "Procedure", void the sentence "Make determinations at three points equally spaced from each other and less than 13mm (½ inch) from the container rim" and supersede with the sentence "Make one determination at or near the center of the tin."
    - 2. Section 12.6 "Report" is void.

2. Silicone Joint Sealer (cold applied)
  - a. Silicone joint sealers may be either self-leveling or non-sag and shall meet the requirements in Table 1014.01.

**Table 1014.01**

<b>Silicone Joint Sealer Requirement</b>		
<b>Property</b>	<b>Requirement</b>	<b>Test</b>
As supplied:		
Specific Gravity	1.010-1.515	ASTM D792
Work Time, minimum	10 minutes	
Tack-Free, at 25°C	20-360 minutes	
Cure Time, at 25°C, maximum	14 days	
Full Adhesion, maximum	21 days	
As cured, at 25°C + 1.5		
Elongation, minimum	800%	ASTM D412
Durometer		
Non-Sag, Shore A	10-25	ASTM D2240
Self-Leveling, Shore 00, minimum	40	ASTM D2240
Joint Movement Capacity	+100% to -50%	ASTM C719
Tensile Stress, at 150% Elongation	45 psi	ASTM D412

**1014.03 -- Packaging**

1. NE-3405 and NE-3405LM
  - a. The joint and crack sealer can be packaged in either cardboard box of wholly-meltable type containers.
    - (i) Cardboard box containers shall be manufactured from double wall kraft board producing a minimum bursting test certification of 350 PSI (241 N/cm<sup>2</sup>) and using water-resistant adhesives. The use of metal staples or fasteners of any kind will be prohibited for closing the lids of the boxes. Tape or other like material is acceptable.
      1. The joint and crack sealer shall be in meltable [300°F (149°C)] polyethylene bag(s).
    - (ii) Wholly-meltable type containers, and any of their components, shall be fully meltable and integrational with the joint and crack sealer by the time the manufacturer's minimum application temperature is reached.
      1. The wholly-melted and integrated container must not adversely affect the test specifications of the joint and crack sealer.
2. Silicone Joint Sealer
  - a. Each container shall include information regarding manufacturer and product name.



#### 1014.04 -- Acceptance Requirements

1. NE-3405 and NE-3405LM
  - a. Acceptance of the manufactured material is based on pre-approval by either on or off-site sampling. Acceptable hot pour sealant lots are listed on the NDR Approved Products List.
    - (i) NDR on-site field sampling shall be in accordance with the NDR Materials Sampling Guide.
    - (ii) Off-site (Proxy) sampling shall be in accordance with ASTM D 6690.
      1. Proxy sampling shall be overseen by an outside party approved by the NDR, preferably another DOT Agency. Proxy samples shall include a manufacturer's Certificate of Compliance. Proxy samples shall also include a dated signature of origin by the Representative that is not affiliated with the manufacturer, and can either be on the Certificate of Compliance, or separate letter.
      2. For convenience in both sampling and shipping samples, sample containers smaller than a manufacturer's usual production containers are allowed, as long as the sample is 1500 grams min.
      3. Samples shall be sent to the NDR Bituminous Laboratory, or alternatively, sent to an NDR-approved independent laboratory for testing which will be at no cost to the Department. If a NDR-approved independent laboratory will be used for testing purposes, the NDR Bituminous Laboratory must be notified so that NDR concrete blocks for Bond testing can be sent to it.
2. Silicone Joint Sealer
  - a. Acceptance of applied silicone joint sealers shall be in accordance with the NDR *Materials Sampling Guide*.
  - b. Acceptable silicone joint sealer manufacturer products are listed on the NDR Approved Products List.
    - (i) For products that are not listed, approval may be based upon test results from an independent laboratory submitted to the NDR Concrete Materials Section by the manufacturer, and testing by the NDR. Approval must be made prior to product use.

## **EPOXY COMPOUNDS AND ADHESIVES (J-15-0308)**

Section 1018 in the Standard Specifications is void and superseded by the following:

### **1018.01 – Description**

This specification provides requirements for two-component, epoxy-resin bonding systems for use in non-load bearing applications and resin adhesives for application to Portland cement concrete.

### **1018.02 – Material Characteristics**

1. Epoxy-resin bonding systems shall conform to the requirements of ASTM C 881. Approved systems are shown on the NDR Approved Products List.
2. The classification of Epoxy-Resin Bonding Systems is as follows:
  - a. Type I For use in non-load bearing applications for bonding hardened concrete and other material to hardened concrete.
  - Type II For use in non-load bearing applications for bonding freshly mixed concrete to hardened concrete.
  - Type III For use in bonding skid resistant materials to hardened concrete, and as a binder in epoxy mortars or epoxy concretes.
  - b. Grade 1 Low viscosity.
  - Grade 2 Medium viscosity.
  - Grade 3 Non-sagging consistency.
  - c. Class A For use below 40°F (4°C); the lowest allowable temperature to be defined by the manufacturer of the product.
  - Class B For use between 40°F and 60°F (4°C and 15°C).
  - Class C For use above 60°F (15°C); the highest allowable temperature to be defined by the manufacturer of the product.
  - Class D For use between 40°F and 65°F (4°C and 18°C).
  - Class E For use between 60°F and 80°F (15°C and 26°C)
  - Class F For use between 75°F and 90°F (24°C and 32°C)
3. Resin adhesives for embedding dowel bars, threaded rods, rebars and other fixtures in hardened concrete are shown on the NDR Approved Products List.

### **1018.03 – Procedures**

1. The compounds shall be of the type and grade specified in the plans or as directed by the Engineer.
2. The class of the compounds shall be selected for use according to climatic conditions at the time of application.
3. All bonding surfaces shall be clean and free of all oil, dirt, grease, or any other materials which would prevent bonding.
4. Mixing and application shall be in strict accordance with the manufacturer's instructions.

### **1018.04 – Acceptance Requirements**

1. Epoxy-resin bonding systems and resin adhesives approved for use are shown on the NDR Approved Products List.
2. Epoxy-resin bonding systems that are not on the NDR Approved Products List may be accepted based on a manufacturer's certificate of compliance.

**DEFORMED METAL CENTER JOINT AND METAL KEYWAY  
(J-15-0307)**

Paragraph 1 a. of Subsection 1027.01 in the Standard Specifications is void and superseded by the following:

a. Metal Center Joint:

Metal center joint sections shall be manufactured from sheets no less than 18 gauge [0.05 inch (1.3 mm)] thick and shall be of the size and trapezoidal shape shown in the plans. The sections shall be punched along the centerline of the narrow face of the trapezoid to admit the tie bars required by the plans and also at intervals of not greater than 2 feet (600 mm) to receive pins that are driven vertically into the subgrade to support the metal center joint.

**AGGREGATES  
(J-15-1112)**

Table 1033.02B of Subsection 1033.02 in the Standard Specifications is void and superseded by the following:

<b>Table 1033.02B</b>	
<b>Aggregate Classes and Uses</b>	
<b>Aggregate Class</b>	<b>Concrete Description</b>
A	Overlay Concrete SF
B	47B, 47B-HE, 47BD, PR 1, and PR 3
C	BX

Table 1033.03B of Subsection 1033.03 in the Standard Specifications is void and superseded by the following:

<b>Table 1033.03B</b>	
<b>Aggregate Classes and Uses</b>	
<b>Aggregate Class</b>	<b>Concrete Description</b>
E	47B, and 47B-HE 47BD, PR 1, and PR 3
F	Overlay Concrete SF

Paragraph 3.a.(3) of Subsection 1033.02 is void and superseded by the following:

- (3) Aggregates from a dry pit shall be washed and have a sand equivalent not less than 90 percent.

**SLAG CEMENT  
(J-15-0512)**

**Description**

Slag cement shall meet the requirements of ASTM C 989, Grade 120.

**Material Characteristics**

1. All Slag cement will be acceptance tested by the NDR Materials and Research Division. This includes production plant samples and field samples.

**Procedures**

1. Slag cement shall be protected, stored, handled, and sampled in the same manner as specified for Portland Cement in Sections 1002 and 1004 and the NDR *Materials Sampling Guide*.
2. Each shipment of Slag cement sent to the project or ready mix plant shall be accompanied with a certificate of compliance from the supplier or manufacturing plant. The certificate must include the following information:
  - a. Name of the supplier or manufacturer.
  - b. Source of the Slag cement.
  - c. Consignee and destination of the shipment.
  - d. Project number to be used on, if available, and date shipped.
  - e. Railroad car number or truck identification number.
  - f. Weight of the shipment.
  - g. Certified test number representing the material being shipped.
  - h. An unrepeated order number or other identification number so that each shipment is separately identified.
  - i. The NDR specifications that the product is in compliance with.
3. The following signed certification statement, or similar wording, must also be included on the form:

"This is to certify that this shipment of Slag Cement meets the Specification Requirements of the Nebraska Department of Roads for Slag Cement, Grade 120."

Signed \_\_\_\_\_

For \_\_\_\_\_  
(Supplier)

4. Two copies of the certificate of compliance shall be sent with the shipment for the Engineer. The Engineer will retain one copy for his/her file and send the other copy to the NDR Materials and Research Division to serve as notification of receipt and identification of the Slag cement.

5. Slag cement may be used as soon as it is received; provided it is accompanied by the proper certificate of compliance and the results of previous tests indicate a satisfactory product.

### **Acceptance Requirements**

1.
  - a. Approved Slag cement will be on the NDR Approved Products List.
  - b. Slag cement may be added to the NDR Approved Products List if it is in conformance with the NDR Acceptance Policy for Slag cement. This information is available upon request from the Department's Concrete Materials Section.
2.
  - a. Should any sample indicate noncompliance with the specifications, use of material from that source based on certification only may be withheld. It will be necessary that the Slag cement be held in special silos or bins at the plant or some facility under control of the company furnishing the Slag cement until such time that test results show compliance.
  - b. When it can be shown that continuing production from that plant has a high assurance of meeting specifications, material acceptance may once again be based on certification only.
3.
  - a. If tests made on field samples taken by the Department fail to meet any of the specification requirements, all shipments from the supplier will be held until tests have been completed by the NDR Materials and Research Division and approval for use is issued.
  - b. This procedure will be continued until it can reasonably be assured that the Slag cement from the supplier will again continue to meet contract requirements.

### **DOWEL BARS (J-15-0812)**

Paragraph 1.c. of Subsection 1022.01 in the Standard Specifications is void and superseded by the following:

1. c. Both Type A and Type B coated dowel bars shall be coated with a bond breaker shown on the NDR Approved Products List, dipped in asphalt or paraffin, or greased in accordance with the specified requirements as shown in the Standard Plans.

### **EPOXY COATED REINFORCING STEEL (J-15-0509)**

Paragraph 5. of Subsection 1021.03 in the Standard Specifications is void and superseded by the following:

5. In order to protect the coated reinforcement from damage, the Contractor shall use padded or nonmetallic slings and padded straps. Bundled bars shall be handled in a manner which will prevent excessive sagging of bars which will damage the coating. If circumstances require storing coated steel reinforcing bars outdoors for more than two months, protective storage measures shall be implemented to protect the material from sunlight, salt spray and weather exposure. Coated steel reinforcing bars, whether individual bars or bundles of bars, or both, shall be covered with opaque polyethylene sheeting or other suitable opaque protective material. For stacked bundles, the protective covering shall be draped around the perimeter of the stack. The covering shall be secured adequately, and allow for air circulation around the bars to minimize condensation under the covering. Coated steel reinforcing bars, whether individual bars or bundles of bars, or both, shall be stored off the ground on protective cribbing. The bundled bars shall not be dropped or dragged. If, in the opinion of the Engineer, the coated bars have been extensively damaged, the material will be rejected. The Contractor may propose, for the approval of the Engineer, alternate precautionary measures.

**PROPOSAL GUARANTY  
(A-40-0307)**

As an evidence of good faith in submitting a bid for this work, the bidder shall indicate the type of bid bond applied to this project in accordance with the Proposal Guaranty Bid Bond Section of these Special Provisions.

\* \* \* \* \*

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PAGE: 1  
DATE: 08/01/13

SCHEDULE OF ITEMS

CONTRACT ID: 2502

PROJECT(S): MISC-92-6(1020)

CALL ORDER NO. : 200

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
SECTION 0001 GROUP 4 CULVERTS						
0001	0030.40 MOBILIZATION	LUMP	LUMP			.
0002	1009.00 GENERAL CLEARING AND GRUBBING	LUMP	LUMP			.
0003	1010.01 EXCAVATION (ESTABLISHED QUANTITY)	CY	352.000	.		.
0004	4050.01 EXCAVATION FOR PIPE, PIPE-ARCH CULVERTS, AND HEADWALLS	CY	167.000	.		.
0005	4100.06 CLASS 47B-3000 CONCRETE FOR HEADWALL	CY	1.220	.		.
0006	4150.00 REINFORCING STEEL FOR HEADWALL	LB	182.000	.		.
0007	6086.00 STRUCTURAL STEEL	LB	105.000	.		.
0008	9110.01 RENTAL OF LOADER, FULLY OPERATED	HOUR	10.000	.		.
0009	9110.02 RENTAL OF MOTOR GRADER, FULLY OPERATED	HOUR	10.000	.		.
0010	9110.03 RENTAL OF DUMP TRUCK, FULLY OPERATED	HOUR	10.000	.		.

NEBRASKA DEPARTMENT OF ROADS

PAGE: 2  
DATE: 08/01/13

SCHEDULE OF ITEMS

CONTRACT ID: 2502

PROJECT(S): MISC-92-6(1020)

CALL ORDER NO. : 200

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0011	9110.27 RENTAL OF CRAWLER MOUNTED HYDRAULIC EXCAVATOR, FULLY OPERATED	10.000 HOUR	.		.	
0012	L001.17 SEEDING, TYPE WETLAND	0.200 ACRE	.		.	
0013	L019.13 EROSION CONTROL, CLASS 1D	206.000 SY	.		.	
0014	L022.75 TEMPORARY SILT CHECK	200.000 LF	.		.	
0015	L022.90 TEMPORARY SILT FENCE	300.000 LF	.		.	
0016	P375.48 48" ROUND EQUIVALENT CULVERT PIPE, TYPE 3,4,OR 5	114.000 LF	.		.	
	SECTION 0001 TOTAL				.	
	TOTAL BID				.	