

A d d e n d u m

Iowa Department of Transportation

Date of Letting: October 27, 2015

Office of Contracts

Date of Addendum: October 21, 2015

B.O.	Proposal ID	Proposal Work Type	County	Project Number	Addendum
001	78-0801-372	BRIDGE NEW - STEEL GIRDER	POTTAWATTAMIE	IM-NHS-080-1(372)4--03-78 IM-NHS-080-1(373)4--03-78 IM-NHS-080-1(374)4--03-78 IM-NHS-080-1(375)4--03-78 IM-NHS-080-1(376)4--03-78 IM-NHS-080-1(377)4--03-78 IM-NHS-080-1(420)4--03-78 IM-NHS-080-1(462)4--03-78	27OCT001.A03

Make the following changes to the PROPOSAL SCHEDULE OF PRICES:

Change Proposal Line No. 3160: 2432-0000100 MECHANICALLY STABILIZED EARTH RETAINING WALL:

From: 9,427.000 SF

To: 9,904.000 SF

If the above changes are not made, they will be made as shown here.

Make the following change to the Proposal Special Provisions List and the Proposal Special Provisions Text.:

Add the attached SP-150024 - ALTERNATE BORROW AREAS (LOESS HILLS)

Replace SP-150013 with attached SP-150013a - WORK ON RAILROAD RIGHT-OF-WAY (BNSF RAILWAY)

Capped the flagger reimbursement rate for the Contractors

Replace SP-150014 with attached SP-150014a - WORK ON RAILROAD RIGHT-OF-WAY (CBEC RAILWAY)

Clarify reimbursement to the Contractor.

Replace SP-150015 with attached SP-150015a - WORK ON RAILROAD RIGHT-OF-WAY (IOWA INTERSTATE RAILROAD)

Capped the flagger reimbursement rate for the Contractors

Replace SP 150027 with attached SP -150027a - DRILLED-IN SOLDIER PILE AND LAGGING WALL

Removed the Contractor Qualifications requirement.

Replace Utility Bid Attachment with the attached:

Updated Utility Bid Attachment to provide more current information on status of utility relocations within the project area.

Make the following changes to the plans IM-NHS-80-1(372)4—03-78

Add note to sheet plan sheet 156

IF GUIDE BARS ARE USED TO RESIST UPLIFT FORCE PROVIDED ON THE PLANS FOR "MD" TYPE BEARINGS, THE TRANSVERSE MOVEMENT SHALL BE • INCH IN EACH DIRECTION.

Make the following changes to the plans IM-NHS-80-1(462)4—03-78

Replace Sheet V.2 with the attached plan sheet.

Coping was removed from the plans for Temporary MSE Wall 3150.



**SPECIAL PROVISIONS
FOR
ALTERNATE BORROW AREAS (LOESS HILLS)**

**Pottawattamie County
IM-NHS-080-1(374)4--03-78
IM-NHS-080-1(462)4--03-78**

**Effective Date
October 27, 2015**

THE STANDARD SPECIFICATIONS, SERIES 2012, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

150024.01 DESCRIPTION.

This specification describes the Contractor's responsibilities in regards to locating alternate borrow areas in the Loess Hills region of western Iowa.

Article 2102.03, F, of the Standard Specifications shall apply with modifications and additions contained in this specification.

150024.02 DEFINITIONS.

A. Loess Hills.

Loess Hills is a distinctive topographic region encompassing over 640,000 acres and extending nearly 200 miles in a narrow band adjacent to the Missouri River. Loess material is described as a widespread geologic deposit, but accumulating to depths of 150 feet in places within the Loess Hills landform. Topographic features include distinctive shapes, such as steep, narrow ridge crests, peaks, saddles, and numerous steep side slopes, branching spurs, and precipitous bluffs. Figure 1, attached, shows the Loess Hills landform in relation to the seven principal landform regions of Iowa. Figure 2, attached, shows more specific boundaries of the Loess Hills landform within seven counties of western Iowa.

With the exception of the eastern slope of the Loess Hills, the boundaries shown in Figure 2 will define the Loess Hills landform. Because soil types on the eastern boundary of the Loess Hills tend to be gradational, soil borings will be used to define Loess soils material, using a 50 foot or greater measure to further refine boundaries. Less than 50 foot Loess soils depths will not be considered Loess Hills.

B. Natural Vegetation.

Areas exhibiting natural vegetation cover shall be afforded a higher level of protection than those areas where natural vegetation has been significantly disturbed or removed. Natural vegetation includes herbaceous or woody vegetation that is unmodified by human activities, vegetation

altered in varying degrees by humans, but has retained or regained characteristics of an undisturbed community; or vegetation planted by humans, but is not actively maintained for agricultural or commercial purposes. Natural vegetation includes both native and introduced species, although a higher level of protection will be afforded those areas exhibiting a predominance of native species. Areas cultivated and planted to non-native grasses, legumes, or grass-legume mixtures for purposes of livestock grazing, seed production, or hay crops shall not be given consideration as natural vegetation, except in cases where threatened or endangered species are present or otherwise very high quality habitat is present.

C. Special Landscape Areas and Glenwood Locality.

Special landscape areas and the Glenwood locality shall be afforded the highest level of protection. A general location map, attached, of the twelve special landscape areas is shown on Figure 3A. Figure 3B, attached, shows the location described as the Glenwood locality.

150024.03 CONSTRUCTION.

A. Loess Hills Borrow Material.

1. Avoid or minimize use of borrow material from within the designated Loess Hills boundary. Do not utilize Loess Hills borrow material unless there is no practicable alternative per the discretion of the Engineer. In addition, afford special protection measures for areas within the Loess Hills mapped feature exhibiting native vegetation, previously undisturbed areas, or unique habitat.
2. Do not use of borrow materials from the twelve special landscape areas, Glenwood locality, and west face of the Loess Hills boundary.
3. When borrow sites are necessary within the Loess Hills, shape borrows to blend into the natural surroundings.
4. When land use from the Loess Hills is unavoidable, cultivated land and previously disturbed areas within the Loess Hills can receive less consideration for avoidance and minimization than natural vegetative areas.

B. Alternate Borrow Area Review.

1. The Department, in consultation with the DNR, will review proposed alternate borrow areas within the designated Loess Hills boundary.
2. The DNR will provide input regarding establishing mitigative buffer zones adjacent to areas of natural vegetation.
3. The review process will be completed within 30 calendar days, except under extraordinary circumstances.

150024.04 METHOD OF MEASUREMENT AND BASIS OF PAYMENT.

Work required to comply with this specification shall be considered incidental to Excavation, of the class specified, as shown on the plans.

Attachments

Figure 1 – Landform Regions of Iowa

Figure 2 – Special Landscape Areas in the Loess Hills Landform Region

Figure 3A – Special Landscape Areas

Figure 3B – Nebraska Phase Archeological Sites Within the Glenwood Locality in Mills County

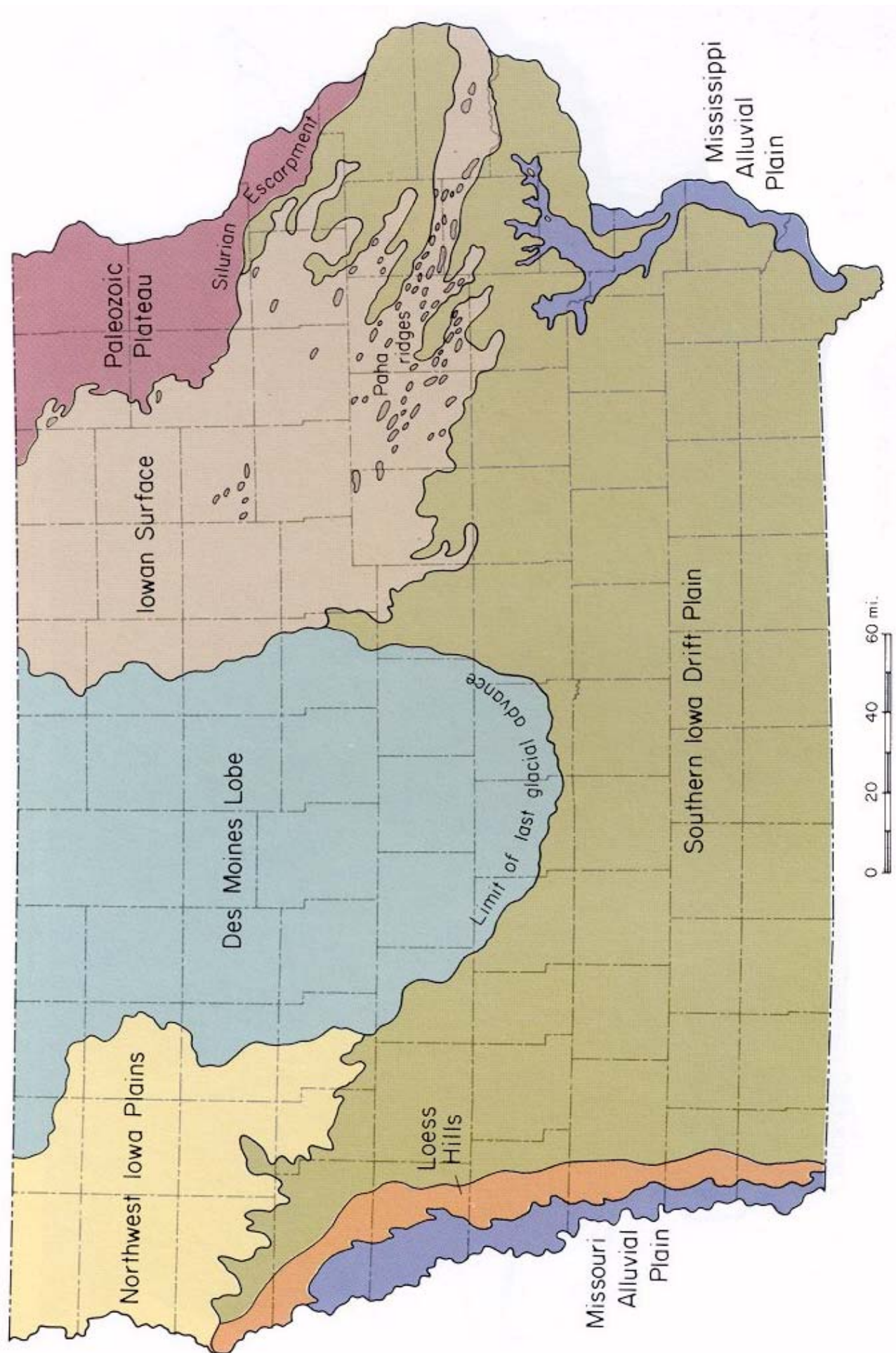
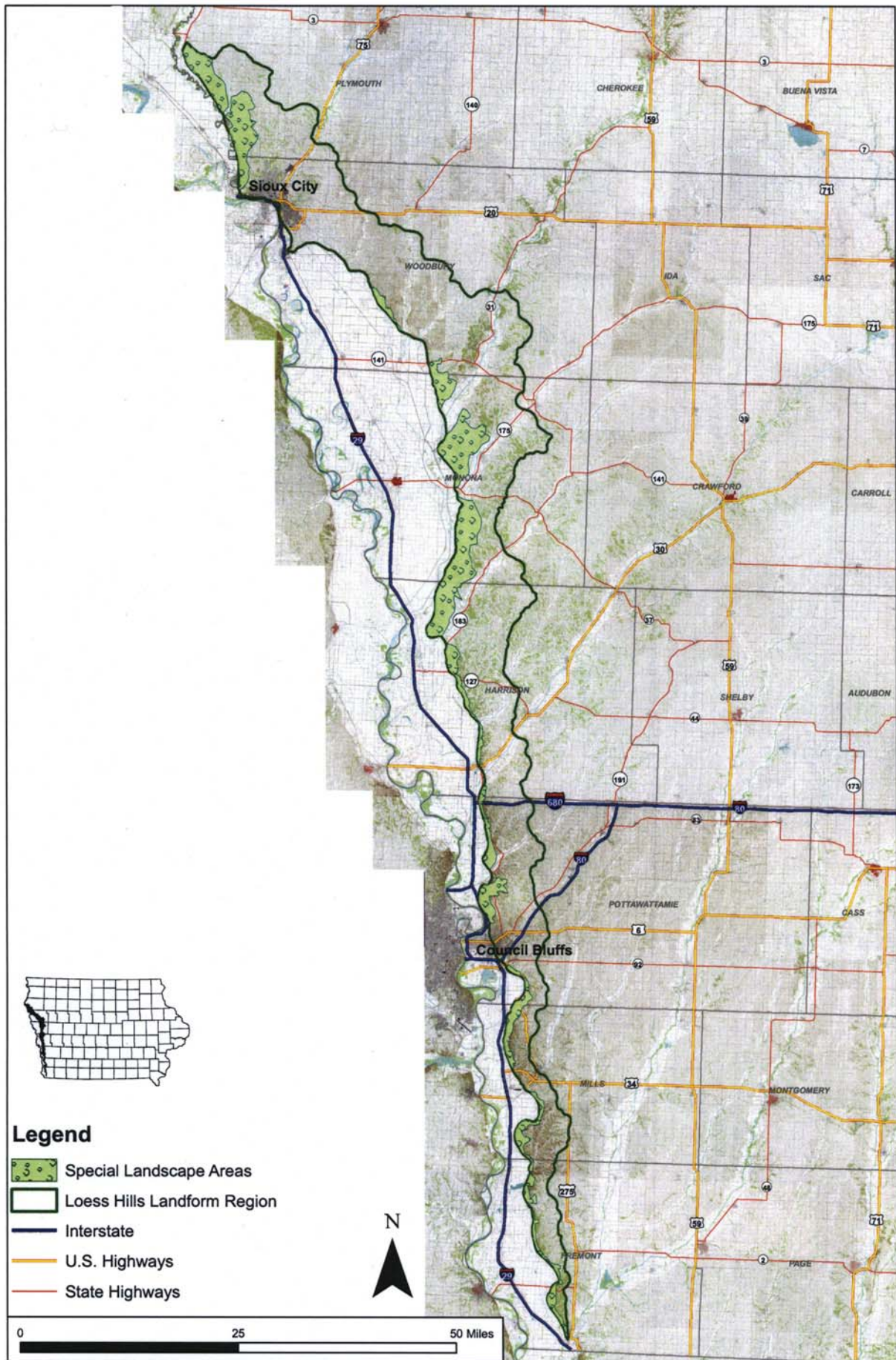
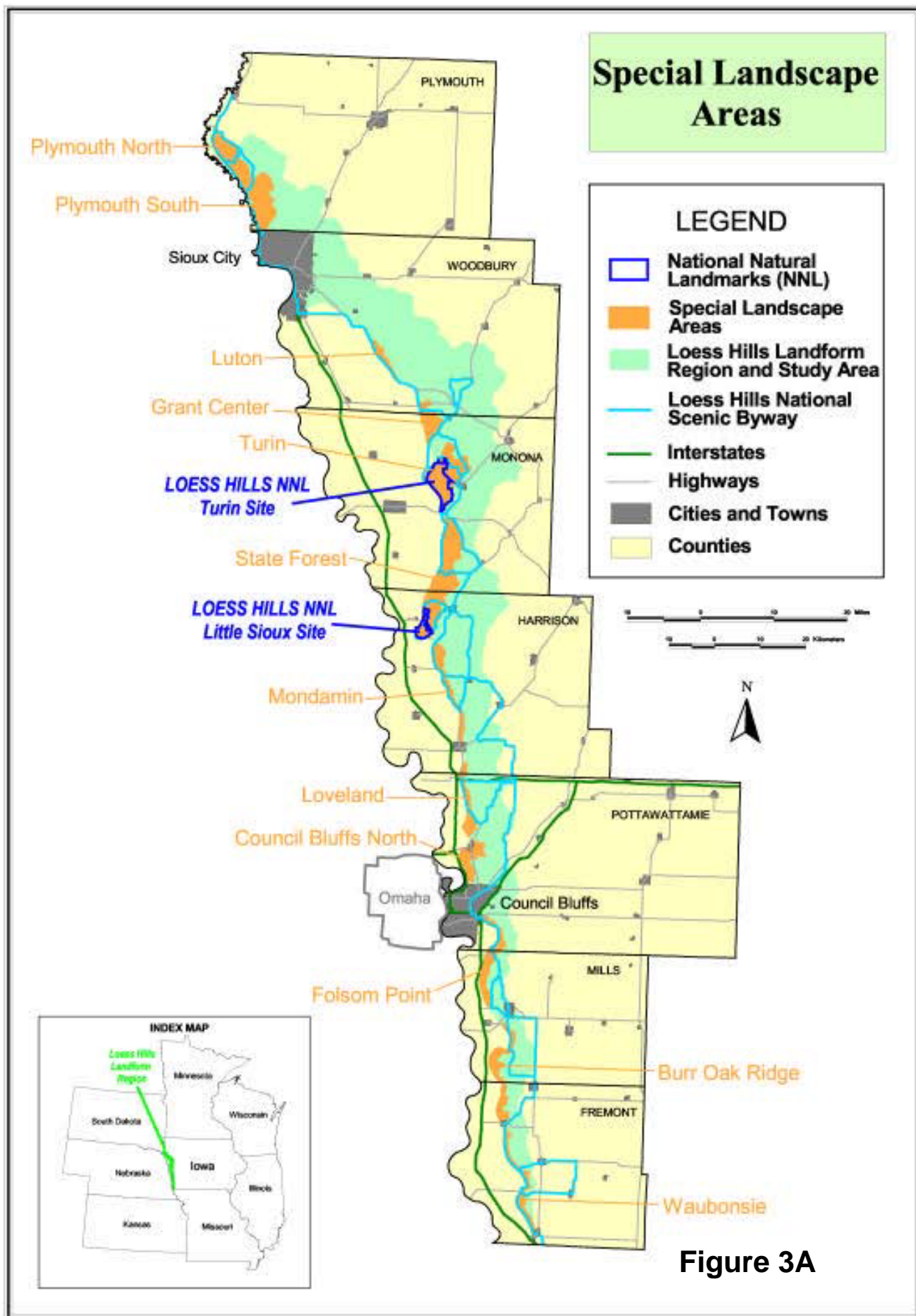


Figure 1



Special Landscape Areas in the Loess Hills Landform Region

Figure 2



NEBRASKA PHASE ARCHEOLOGICAL SITES WITHIN THE GLENWOOD LOCALITY IN MILLS COUNTY

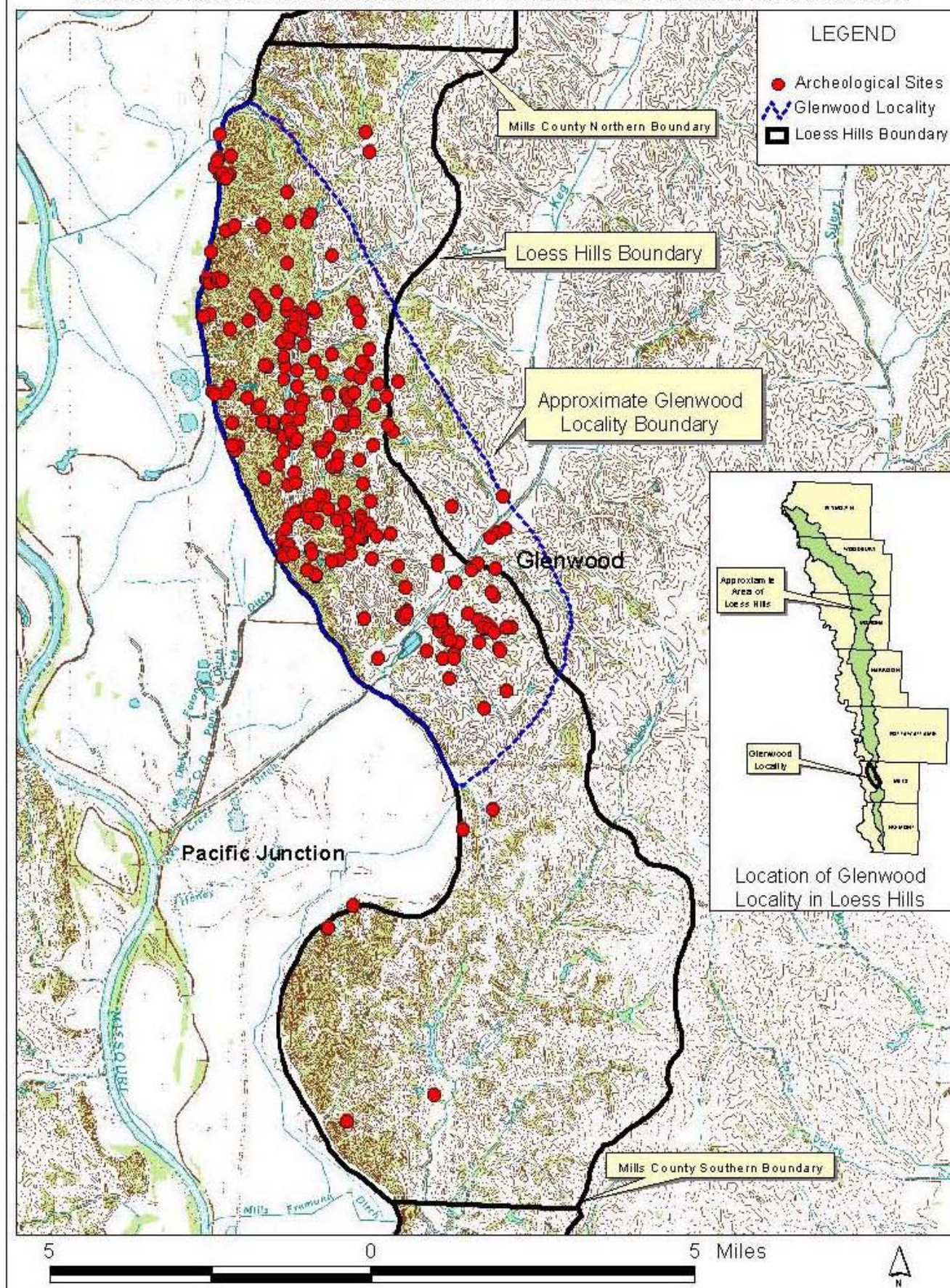


Figure 3B



**SPECIAL PROVISIONS
FOR
WORK ON RAILROAD RIGHT-OF-WAY (BNSF RAILWAY)**

**Pottawattamie County
IM-NHS-080-1(372)4--03-78
IM-NHS-080-1(377)4--03-78**

**Effective Date
October 27, 2015**

THE STANDARD SPECIFICATIONS, SERIES 2015, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

1.01 General

1.01.01 The Contractor shall cooperate with the BNSF Railway Company, hereinafter referred to as "Railroad" where work is over, under, on, or adjacent to Railroad property, and/or right-of-way, hereafter referred to as Railroad property, during the work which shall not interfere with the movement of trains on Railroad property.

1.01.02 The Contractor's right to enter Railroad's property is subject to the absolute right of the Railroad to cause the Contractor's work on Railroad's property to cease if, in the opinion of Railroad, Contractor's activities create a hazard to Railroad's property, employees, and/or operations.

1.01.03 The Contractor shall notify the Engineer and also the Railroad's Manager Public Projects, Calvin Nutt, BNSF Railway Company, 80-44th Avenue NE, Minneapolis, MN 55421, telephone number: 763.782.3495; at least 10 calendar days before commencing work over, under, on, or adjacent to Railroad property. Contractor's notification to Railroad shall refer to Railroad's file numbers.

1.01.04 Falsework above tracks or excavations located, whichever is greater, within 25 feet of the nearest track or intersecting a slope from the plane of the top of rail on a 1.5 horizontal to 1 vertical slope beginning 11 feet from centerline of the nearest track, both measured perpendicular to center line of track, the Contractor shall furnish the Railroad five sets of working drawings showing details of construction affecting railroad tracks and property. The working drawings shall include the proposed method of installation and removal of falsework, shoring, or cribbing, not included in the contract plans and two sets of structural calculations of any, falsework, shoring, or cribbing. All calculations shall take into consideration railroad surcharge loading and shall be designed to meet American Railway Engineering and Maintenance-of-Way Association Coopers E-80 live loading standard. All drawings and calculations shall be stamped by a registered Professional Engineer licensed in the state of Iowa. The Contractor shall not begin work until notified by the Railroad that plans have been approved. The

Contractor shall use lifting devices such as, cranes and/or winches to place or to remove falsework over Railroad's tracks. The Contractor will not be relieved of responsibility for results obtained by the implementation of said approved plans.

1.01.05 The Railroad will cooperate with the Contractor such that the work may be handled and performed in an efficient manner.

1.02 Railroad Requirements

1.02.01 The Contractor shall comply with the rules and regulations of Railroad and the instructions of the Railroad's representatives in relation to the proper manner of protecting the tracks and property of Railroad and the traffic moving on such tracks, as well as the wires, signals, and other property of Railroad, its tenants or licensees, at and in the vicinity of the work area during construction.

1.02.02 The Contractor shall perform work in such manner and at such times that shall not endanger, delay, or interfere with the safe and timely operation of the tracks and property of Railroad and the traffic moving on such tracks, as well as the wires, signals, and other property of Railroad, its tenants, or licensees.

1.02.03 The Contractor shall take protective measures as are necessary to keep railroad facilities, including track ballast, free of sand, debris, and other foreign objects and materials resulting from the construction operations. Any damage to Railroad facilities resulting from Contractor's operations will be repaired or replaced by Railroad and the cost of such repairs or replacement shall be paid by the Contractor.

1.02.04 The Contractor shall notify the Railroad's Division Superintendent at Lincoln, NE, (telephone number: 402.458.7500), and provide blasting plans to the Railroad for review a minimum of 7 calendar days prior to conducting blasting operations adjacent to or on Railroad's property.

1.02.05 The Contractor shall abide by the following clearances during the course of construction:

- 25.0 feet horizontally from centerline of nearest track,
- 22.5 feet vertically above top of rail (Temporary Falsework Clearance may be reduced to 21.5 feet subject to Railroad and Public Utilities Commission approval),
- 27.0 feet vertically above top of rail for electric wires carrying less than 750 V,
- 28.0 feet vertically above top of rail for electric wires carrying 750 V to 15 kV,
- 30.0 feet vertically above top of rail for electric wires carrying 15 kV to 20 kV, and
- 34.0 feet vertically above top of rail for electric wires carrying more than 20 kV.

1.02.06 Any desired infringement within clearances due to the Contractor's operations shall be submitted to the Railroad and Engineer and shall not be undertaken until approved in writing by the Railroad and Engineer. No extra compensation will be allowed in the event the Contractor's work is delayed pending approval.

1.02.07 In the case of impaired vertical clearance above top of rail, Railroad will have the option of installing tell-tales or other protective devices Railroad deems necessary for protection of Railroad employees or rail traffic. The cost of tell-tales or protective devices shall be borne by the Contractor.

1.02.08 The details of construction affecting the Railroad's tracks and property not included in the contract plans shall be submitted to the Railroad by the Engineer for approval before work is undertaken and this work shall not be undertaken until approved by the Railroad.

1.02.09 At other than public road crossings, the Contractor shall not move equipment or materials across Railroad's tracks until permission has been obtained from Railroad. Contractor shall obtain a temporary private crossing agreement from Railroad prior to moving equipment or materials across Railroad's tracks. Temporary private crossing shall be gated and locked at all times when not required

for use by the Contractor. Temporary private crossing for use of the Contractor shall be at the expense of the Contractor.

1.02.10 The Contractor, upon completion of the work, shall promptly remove from the premises of Railroad all of Contractor's tools, implements, and other materials, whether brought upon said premises by said Contractor or any subcontractor, employee, or agent of Contractor or of any subcontractor, and shall cause said premises to be left in a condition acceptable to the Railroad's representative.

1.03 Protection of Railroad Facilities and Railroad Flagger Services

The Railroad shall have the right to provide, at the expense of the Contractor, a flagman or flagmen or other protective services at any time during construction of that portion of the project on or near Railroad right-of-way when, in the opinion of the Railroad, it is necessary as a matter of protection and safety to track and train operations.

1.03.01 The Contractor shall give a minimum of 30 working days notice to the Railroad's Roadmaster, Jerrod Chapple (telephone number: 402.422.5249), in advance of when flagging services will be required.

1.03.02 Railroad flagger and protective services and devices will be required and furnished when Contractor's work activities are located over, under, or within 25 feet measured horizontally from center line of the nearest track, and when cranes or similar equipment are positioned outside of 25 feet measured horizontally from the track center line that could foul the track in the event of tip over or other catastrophic occurrence, but not limited thereto, for the following conditions:

1.03.02a When in the opinion of the Railroad's Representative it is necessary to safeguard Railroad's employees, trains, engines, facilities, and property.

1.03.02b When any excavation is performed below the bottom of tie elevation, if, in the opinion of Railroad's representative, track or other Railroad facilities may be subject to movement or settlement.

1.03.02c When work, in any way interferes with the safe operation of trains at timetable speeds.

1.03.02d When any hazard is presented to Railroad track, communications, signal, electrical, or other facilities either due to persons, material, equipment, or blasting in the vicinity.

1.03.02e Special permission shall be requested from the Railroad before moving heavy or cumbersome objects or equipment which might result in making the track impassable.

1.03.03 Flagging services will be performed by qualified railroad flaggers. The cost per day for one flagger is approximately \$800.00, which includes vacation allowance, paid holidays, Railroad and Unemployment Insurance, Public Liability and Property Damage Insurance, Health and Welfare Benefits, transportation, meals, lodging, and supervision, for an eight-hour basic day, with time and one-half or double time for overtime, rest days, and holidays. These rates are subject to increases which may result from Railroad Employees-Railroad Management negotiations or which may be authorized by Federal authorities. The Contractor will be billed on actual costs in effect at the time the work is performed.

1.03.03a Flagging crew generally consists of one employee. Additional personnel may be required to protect Railroad operations and property, if deemed necessary by the Railroad's Representative.

1.03.03b Each time a flagger is called the minimum period for billing will be the eight-hour basic day.

1.03.03c The cost of flagger services provided by the Railroad, as deemed necessary by the Railroad's representative, shall be borne by the Contractor.

1.03.03c1 Reimbursement to the Railroad.

Reimbursement to the Railroad, by the Contractor, shall cover the full eight hour day during which any flagger is furnished, unless they can be assigned to other Railroad work during a portion of such day. Reimbursement will not be required for the portion of the day during which the flagger is engaged in other Railroad work. Reimbursement will also be required for any day not actually worked by said flagger following assignment to work on the project for which the Railroad is required to pay the flagger and which could not reasonably be avoided by the Railroad by assignment of such flagger to other work, even though the Contractor may not be working during such time.

In the event the Contractor fails to reimburse the Railroad, the Contracting Authority will reimburse the Railroad within 30 calendar days of the Contractor defaulting on the payment (default is defined as non-payment within 30 calendar days of final billing by the Railroad to the Contractor). Failure of the Contractor to reimburse the Railroad may result in a reduction or suspension of the Contractors bidding qualifications according to Article 1102.03 of the Standard Specifications.

1.03.03c2 Documentation and Reimbursement to the Contractor.

The Contractor shall initially pay invoices for all flagging costs in conjunction with railroad flaggers when any of the conditions identified in this Special Provision, warrant a flagger. The Contracting Authority will reimburse the Contractor for any daily cost that exceeds \$800 per day for the cost of flagger services provided by the Railroad. The Contracting Authority will reimburse the Contractor 100% of the total cost of flagger services, as deemed necessary by the Railroad, that does not meet any of the conditions identified in this Special Provision, unless the flagger's presence on the project was a result of the Contractor's communication, or lack of communication, with the Railroad. The Contracting Authority will reimburse the Contractor following receipt of documentation verifying the Railroad invoices have been paid.

For each day that railroad flaggers have been provided, the Contractor shall document daily the conditions on the project site that warrant the flagger. The Contractor shall submit the daily records to the Engineer each week. The Engineer will review the daily logs and promptly notify the Contractor if any information in the daily log is believed to be incorrect.

Contractor shall forward copies of the invoices received from the Railroad for flaggers and a summary of the flagging costs incurred that exceed the Contractors' requirements described in this Special Provision, to the Engineer with a request for payment for the additional railroad flagger costs. The Engineer will review the Contractor's daily logs against the Railroad's invoice and make payment for the eligible costs in accordance with Article 1109.03 of the Standard Specifications.

Contractor shall be responsible to Railroad for all flagging costs. Flagging costs for subcontracted work shall be the responsibility of the Contractor. Reimbursement from subcontractors to the Contractor shall be the sole responsibility of the Contractor.

Contractor shall forward, to the Engineer, copies of payments made to Railroad for flagging costs.

1.03.03d Final payment to the Contractor will not be made by the Engineer until all flagging or other protective services and/or temporary grade crossing expenses have been billed and paid to the Railroad. Contractor shall provide to the Engineer monthly copies of invoices and evidence of payment to the Railroad.

1.03.04 Railroad will notify the Engineer and Contractor when non-compliance is reported by

Railroad train crews or other Railroad employees. Contractor work performed without proper flagging services, when such flagging is required, will be subject to a \$5,000.00 per day price adjustment to Contractor, and may result in the removal of Contractor by Railroad or Engineer from the project.

1.04 Contractor General Safety Requirements

1.04.01 Safety is of the utmost importance in performing work on the Railroad's property. The Railroad does not assume the control or responsibility of the Contractor to provide safe working conditions for the Contractor or subcontractors in requiring the Contractor to follow the Railroad's General Safety Requirements.

1.04.02 Work in the proximity of a railroad track is potentially dangerous. The Contractor, subcontractors, and invitees are governed by the following Safety Rules and General Safety Requirements while on Railroad property. The Contractor is responsible for enforcement of these Safety Rules and Requirements. The Railroad has the right to bar the Contractor, subcontractors, and invitees from working on Railroad property if the Railroad deems such persons are acting in an unsafe manner. If at any time the Engineer or Railroad are of the opinion that work of the Contractor is being or is about to be done or prosecuted without due regard and precaution for safety and security, the Engineer may suspend work until proper protective measures are adopted and provided.

1.04.03 Before beginning any task on Railroad property, a complete job safety briefing shall be conducted with all individuals involved with the task, and again if the task changes. If the task is within 25 feet of any track, the job briefing shall include the Railroad's flagger and include the procedures the Contractor will use to protect its employees, subcontractors, agents, or invitees from moving any equipment adjacent to or across any railroad tracks.

1.04.04 The Contractor shall ensure that prior to any employee entering Railroad property they have completed the safety orientation found on the following website: www.contractororientation.com. This course shall be completed annually for contracts exceeding one year.

1.04.04a Employees of the Contractor, subcontractors, agents, and invitees shall receive Safety Orientation from the Contractor's Safety Officer or a qualified Railroad representative prior to the start of any work. The Contractor's Safety Officer shall review the safety guidelines contained below to familiarize their employees with safety issues that exist when working in a railroad environment. This should be reviewed at least weekly, and with any new employee working on Railroad property. It is the responsibility of the Contractor's Supervisor and/or Safety Officer to instruct their employees on the Railroad's Safety guidelines and to require compliance with these guidelines.

1.04.05 Safety rules cannot be all-inclusive. Workers shall refrain from unsafe and improper practices, including the violation and/or disregard of written rules and regulations, and rules of common sense.

1.04.05a The use of alcoholic beverages, intoxicants, narcotics, marijuana, and other controlled substances by employees subject to duty or their possession or use while on duty or on Railroad's property is prohibited. Workers shall not report for duty under the influence of any alcoholic beverage, intoxicant, narcotic, marijuana, or other controlled substance, or medication, including those prescribed by a doctor, that may in any way adversely affect their alertness, coordination, reaction, response, or safety.

1.04.05b Damage to Railroad property, or if a hazard is noticed on passing trains, shall be reported immediately to the Railroad's representative. A vehicle or machine which may come in contact with a track, signal equipment, or structure (bridge) could result in a train derailment and shall be reported by the quickest means possible to the Railroad representative and to the Railroad's Network Operations Center at (telephone number: 800.832.5452). Local emergency

numbers shall be obtained from the Railroad representative prior to the start of any work and shall be posted at the job site.

1.04.05c All persons are prohibited from having firearms or other deadly weapons, including knives with a blade in excess of three inches, in their possession while working on Railroad's property, except those authorized to have them in the performance of their duties or those given special permission.

1.04.05d When working on Railroad's property, the Contractor's employees shall wear eye protection meeting ANSI 287.1, however additional eye protection shall be provided to meet specific job situations such as welding, grinding, burning, etc.; hearing protection which affords enough attenuation to give protection from noise levels that will be occurring on the job site; protective headgear meeting ANSI 289.1; and above-the-ankle, lace-up, hardened toe safety boots with a defined heel, all approved by OSHA. Only waist length shirts with sleeves and trousers covering the entire leg shall be worn. Flare-legged trouser bottoms shall be tied to prevent catching.

High visibility retroreflective orange vests are required in certain locations as specified by the Railroad's representative. Particular attention to footing and the use of proper footwear is essential when working in snow or other slippery conditions. Hearing protection, fall protection, and respirators shall be worn as required by State and Federal regulations.

1.04.05e Workers shall not work nearer than 25 feet to the centerline of any track without proper flag/work protection provided by the Railroad, unless the track is protected by track bulletin and work has been authorized by the Railroad. If flag/work protection is provided, every employee shall know: (1) who the Railroad flagger is, and how to contact the flagger, (2) limits of the flag/work protection, (3) the method of communication to stop and resume work, and (4) entry into flag/work limits when designated. Workers or equipment entering flag/work limits that were not previously job briefed shall notify the flagger immediately, and be given a job briefing if working at less than 25 feet from center line of track.

1.04.05f Contractor shall not pile or store any materials, or equipment closer than 25 feet to the centerline of the nearest Railroad track.

1.04.05g Machines or vehicles shall not be left unattended with the engine running. Parked machines or equipment shall be in gear with brakes set and if equipped with blade, pan, or bucket, they shall be lowered to the ground. All machinery and equipment left unattended on Railroad right-of-way shall be left inoperable and secured against movement. Heavy equipment operating within Railroad right-of-way shall be equipped with audible back-up warning devices. If in the opinion of the Railroad the Contractor's equipment is unsafe for use on Railroad right-of-way, Contractor shall remove such equipment from Railroad right-of-way.

1.04.05h Machinery or equipment shall not be stored or left temporarily near a highway/rail at-grade crossing in a manner to interfere with the sight distances of motorists approaching the crossing. Prior to beginning work, the Contractor shall establish a storage area with concurrence of the Railroad's representative.

1.04.05i Contaminates shall not be discharged on Railroad property. Should any discharge occur, the Contractor shall report by the quickest means possible to the Railroad's representative. (This includes oils, diesel fuel, gasoline, etc.).

1.04.05j Workers shall not create and leave any conditions at the work site that would interfere with water drainage.

1.04.05k Safeguards and safety signs shall be kept in place and in good condition. It is the responsibility of the Contractor to provide same.

1.04.05l Before excavating, it shall be ascertained by the Contractor if there are any underground pipe lines, electric wires, or cables, including fiber optic cable systems that either cross or run parallel with the track which are located within the project's work area. Excavating on right-of-way could result in damage to buried cables resulting in delay to railroad traffic, including disruption of service to users resulting in business interruptions involving loss of revenue and profits. Before any excavation commences, the Contractor shall provide written notification to the Railroad's Signal Supervisor and Roadmaster at least 10 working days. Underground and overhead wires shall be considered high voltage and dangerous until verified with the company having ownership of the line. The Contractor shall notify any other companies that have underground utilities in the area and arrange for the location of all underground utilities before excavating.

1.04.05m The Contractor shall cease work and the Railroad shall be notified immediately before continuing excavation in the area if obstructions are encountered that do not appear on drawings. If the obstruction is a utility, and the owner of the utility can be identified, then the owner should also be notified immediately. If there is any doubt about the location of underground cables or lines of any kind, no work shall be performed until the exact location has been determined. There will be no exceptions to these instructions.

1.04.05n Excavations, regardless of depth shall be shored where there is any danger to tracks, structures, or employees.

1.04.05o Excavations, holes, or trenches on the Railroad's property shall be covered, guarded, and/or protected when not being worked on. When leaving work site areas at night and over weekends, the areas shall be secured and left in a condition that will ensure that railroad employees who might be working in the area are protected from all hazards. All excavations shall be back filled as soon as possible.

1.04.05p All power line wires shall be considered dangerous and of high voltage unless informed to the contrary by proper authority. For lines rated 50 kV or below, minimum clearance between the lines and any part of the equipment or load shall be 10 feet. For lines rated over 50 kV, minimum clearance between the line and any part of equipment or load shall be 10 feet plus 0.4 inches for each 1 kV over 50 kV. If the capacity of the line is not known, minimum clearance of 20 feet shall be maintained. The Contractor shall designate a person to observe clearance of the equipment and give a timely warning for all operations where it is difficult for an operator to maintain the desired clearance by visual means.

1.04.05q When Contractor employees are required to work on the Railroad property after normal working hours or on weekends, the Railroad's representative shall be notified. A minimum of two employees shall be present at all times.

1.04.05r In all cases of doubt or uncertainty, the safest course shall be taken.

1.05 Personal Injury Reporting

1.05.01 The Railroad is required to report certain injuries as a part of compliance with Federal reporting requirements. Any personal injury sustained by an employee of the Contractor, subcontractor, or invitees while on the Railroad's property shall be reported immediately (by phone, mail if unable to contact in person) to the Railroad's representative. The Injury Report Form contained herein shall be completed and sent by Fax to the Railroad (fax number: 817.352.7595), no later than the close of shift on the date of the injury.

1.06 Indemnification.

As used in this section, Railroad includes other railroad companies using the Railroad's property at or near the location of the Contractor's work and their officers, agents, and employees; "Loss" includes loss, damage, claims, demands, actions, causes of action, penalties, costs, and expenses of whatsoever nature, including court costs and attorneys' fees, which may result from the following:

- Injury to or death of persons whomsoever (including the Railroad's officers, agents, and employees, the Contractor's officers, agents, and employees, as well as any other person); and
- Damage to or loss or destruction of property whatsoever (including Contractor property, damage to the roadbed, tracks, equipment, or other property of the Railroad, or property in its care or custody)

1.06.01 To the fullest extent permitted by law, the Contractor shall release, indemnify, defend, and hold harmless the Railroad and its affiliated companies, partners, successors, assigns, legal representatives, officers, directors, shareholders, employees and agents (collectively, "indemnitees") for, from and against any and all claims, liabilities, fines, penalties, costs, damages, losses, liens, causes of action, suits, demands, judgments and expenses (including, without limitation, court costs, attorneys' fees and costs of investigation, removal and remediation and governmental oversight costs) environmental or otherwise (collectively, "liabilities") of any nature, kind or description of any person or entity directly or indirectly arising out of, resulting from or related to (in whole or in part):

- (a) this specification, including, without limitation, its environmental provisions,
- (b) any rights or interests granted pursuant to this specification,
- (c) occupation and use of the premises by the Contractors, or anyone directly or indirectly employed by them, or anyone they control or exercise control over,
- (d) the environmental condition and status of the premises caused by or contributed to by the Contractor, or
- (e) any act or omission of the Contractor.

Even if such liabilities arise from or are attributed to, in whole or in part, any negligence of any indemnitee. The only liabilities with respect to which the Contractor's obligation to indemnify the indemnitees does not apply are liabilities to the extent proximately caused by the gross negligence, or willful misconduct of an indemnitee.

1.06.02 The Contractor shall now and forever waive any and all claims, regardless whether based on strict liability, negligence or otherwise, that the Railroad is an "owner", "operator", "arranger", or "transporter" with respect to the improvements for the purposes of CERCLA or other environmental laws.

1.06.03 The Contractor shall to the fullest extent permitted by law indemnify and hold harmless the indemnitees against and assume the defense of any liabilities asserted against or suffered by any indemnitee under or related to the Federal Employers' Liability Act (FELA) whenever employees of grantee or any of its agents, invitees, contractors claim or allege that they are employees of any indemnitee or otherwise. This indemnity shall also extend, on the same basis, to FELA claims based on actual or alleged violations of any federal, state or local laws or regulations, including but not limited to the safety appliance act, the boiler inspection act, the occupational health and safety act, the resource conservation and recovery act, and any similar state or federal statute.

1.07 Insurance Form and Submittal

Before the contract is awarded, Contractor shall submit to the Department a certificate of insurance evidencing the coverage. The certificate shall identify the insurance company firm name and address, Contractor firm name, policy period, type of policy, limits of coverage, and scope of work covered (including project number). Policies shall provide no less than 30 calendar days prior written notice to Contracting Authority and Railroad of cancellation or material change in policies. Following award of the Contract, the Contractor shall submit a certificate of insurance evidencing the foregoing coverage to the Railroad and Contracting Authority (if other than the Department), and a certified, true, and complete copy of policy or policies to the Contracting Authority and Railroad. Upon request from either the Contracting Authority or Railroad, a certified duplicate original of any required certificate or policy shall be furnished at

no cost to the Contracting Authority or Railroad. The Contractor shall not begin work upon or over Railroad's ROW until the Railroad has notified the Engineer that such insurance provisions are in accordance with the contract documents. The insurance shall be kept in full force and effect during the performance of work and thereafter until the Contractor removes all tools, equipment, and material from Railroad's property and cleans the premises in a manner reasonably satisfactory to Railroad.

1.07.01 The Contractor shall procure and maintain, from beginning to end of construction work on or about Railroad property, the following insurance coverage types and limits:

1.07.01a Railroad Protective Insurance

The Contractor shall provide for and on behalf of the Railroad, Railroad Protective Insurance as stated in the Code of Federal Regulations, Title 23, Part 646, and any revisions thereto issued by the Federal Highway Administration for damages due to bodily injury or death of persons, and injury to or destruction of property resulting from the operations of the Contractor, subcontractors, or their agents, officers, or employees on this project.

Railroad Protective Liability Insurance is required if there is any construction or demolition activities. This insurance shall name only the Railway as the Insured with coverage of at least \$5,000,000 per occurrence and \$10,000,000 in the aggregate. The policy shall be issued on a standard ISO form CG 00 35 10 93 and include the following:

- ◆ Endorsed to include the Pollution Exclusion Amendment (ISO form CG 28 31 10 93) and on ISO form CG 28 31 10 93.
- ◆ Endorsed to include the Limited Seepage and Pollution Endorsement.
- ◆ Endorsed to include Evacuation Expense Coverage Endorsement.
- ◆ No other endorsements restricting coverage may be added.
- ◆ The original policy shall be provided to the Engineer and Railway prior to performing work.

If available and in lieu of providing a Railroad Protective Liability Policy, the Contractor may participate in the Railroad's Blanket Railroad Protective Liability Insurance Policy available to the Contractor. The limits of coverage are the same as above.

1.07.01b Commercial General Liability Insurance

This insurance shall contain broad form contractual liability with a combined single limit of a minimum of \$5,000,000 each occurrence and an aggregate limit of at least \$10,000,000. Coverage shall be purchased on ISO occurrence form CG 00 01 12 04 or a substitute form providing equivalent coverage. This policy shall also contain the following endorsements, which shall be indicated on the certificate of insurance:

- ◆ Contractual Liability Railroads ISO Form CG 24 17 10 01 (or a substitute form providing equivalent coverage) showing "BNSF Railway Property" as the designated job site.
- ◆ Designated Construction Project(s) General Aggregate Limit ISO Form CG 25 03 03 97 (or a substitute form providing equivalent coverage) showing the project on the form schedule.

1.07.01c Business Automobile Insurance

This insurance shall be written on ISO Form CA 00 01 (or a substitute form providing equivalent coverage) and shall contain a combined single limit of at least \$5,000,000 per occurrence. The policy shall contain the following endorsements, which shall be stated on the certificate of insurance:

- ◆ Coverage for Certain Operations in Connection with Railroads ISO Form CA 20 70 10 01 (or a substitute form providing equivalent coverage) showing "BNSF Railway Property" as the designated job site
- ◆ Motor Carrier Act Endorsement-Hazardous materials clean up (MCS-90), if required by law

1.07.01d Workers Compensation and Employers Liability Insurance

Workers Compensation and Employers Liability insurance including coverage for, but not limited to:

- ◆ Contractor's statutory liability under the worker's compensation laws of the state(s) in which the work is to be performed. If optional under State law, the insurance shall cover all employees anyway.
- ◆ Employers' Liability (Part B) with limits of at least \$500,000 each accident, \$500,000 by disease policy limit, \$500,000 by disease each employee.

1.07.01e Umbrella or Excess Insurance

If the Contractor utilizes umbrella or excess policies, these policies shall "follow form" and afford no less coverage than the primary policy.

1.07.01f Other Requirements

Where allowable by law, all policies (applying to coverage listed above) shall contain no exclusion for punitive damages and certificates of insurance shall reflect that no exclusion exists.

Any insurance policy shall be written by a reputable insurance company acceptable to Railroad or with a current Best's Guide Rating of A- and Class VII or better, and authorized to do business in the State of Iowa. If any portion of the operation is to be subcontracted by Contractor, Contractor shall require that the subcontractor shall provide and maintain insurance coverage as set forth herein, naming Railroad as an additional insured, and shall require that the subcontractor shall release, defend and indemnify Railroad to the same extent and under the same terms and conditions as Contractor is required to release, defend and indemnify Railroad herein. Failure to provide evidence as required by this section shall entitle, but not require, Railroad to remove contractor from or deny entry of Contractor to Railroad property immediately. Acceptance of a certificate that does not comply with this section shall not operate as a waiver of Contractor's obligations hereunder. The fact that insurance (including, without limitation, self-insurance) is obtained by Contractor shall not be deemed to release or diminish the liability of Contractor including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by Railroad shall not be limited by the amount of the required insurance coverage.

Contractor agrees to waive its right of recovery against Railroad for all claims and suits against Railroad except in those instances of gross negligence or intentional misconduct. In addition, its insurers, through policy endorsement, to waive their right of subrogation against Railroad for all claims and suits. The certificate of insurance shall reflect waiver of subrogation endorsement. Contractor shall waive its right of recovery, and its insurers also waive their right of subrogation against Railroad for loss of its owned or leased property or property under its care, custody, or control. Contractor's insurance policies through policy endorsement, shall include wording which states that the policy shall be primary and non-contributing with respect to any insurance carried by Railroad. The certificate of insurance shall reflect that the above wording is included in evidenced policies.

All policy(ies) required above (excluding Workers Compensation and employers Liability), shall include a severability of interest endorsement and shall name Railroad as an additional insured using ISO Additional Insured Endorsements CG 20 26, and CA 20 48 (or substitute forms providing equivalent Coverage). The coverage provided to Railroad as additional insured shall, to the extent provided under ISO Additional Insured Endorsement CG 20 26, and CA 20 48 provide coverage for the Railroad's negligence whether sole or partial, active or passive, and shall not be limited to Contractor's liability under the indemnity provisions contained above. Severability of interest and naming Railroad as an additional insured shall be indicated on the certificate of insurance.

Contractor will not be allowed to self-insure without the prior written consent of Railroad. If granted, any deductible, self-insured retention, or other financial responsibility for claims shall be covered directly by Contractor in lieu of insurance. All Railroad liabilities that would otherwise, in

accordance with the provisions of this specification, be covered by Contractor's insurance shall be covered as if Contractor elected not to include a deductible, self-insured retention or other financial responsibility for claims.

Contractor represents that this specification has been thoroughly reviewed by Contractor's insurance agent(s)/broker(s), who have been instructed by Contractor to procure the insurance coverage required by the contract documents. Allocated Loss Expense shall be in addition to all policy limits for coverages referenced above.

For purposes of this section, Railroad shall mean "Burlington Northern Santa Fe Corporation", "BNSF Railway" and the subsidiaries, successors, assigns, and affiliates of each.

1.07.02 Insurance policy(ies) and a copy of the Certificate of Liability shall be sent to BNSF Risk Management, BNSF Railway Company, 2500 Lou Menk Drive, Building AOB-1, Ft. Worth, Texas 76131. Copy(ies) shall also be sent to the Iowa DOT, Office of Accounting, 800 Lincoln Way, Ames, IA 50010.

1.08 Company Operations.

Contractor shall be advised that trains or equipment are expected on any track, at any time, in either direction. Contractor shall become familiar with train schedules in this location and times when truck traffic increases due to intermodal transfers and structure its bid assuming intermittent track windows in this period, as defined below. All railroad tracks within and adjacent to the work are active and rail traffic over these tracks shall be maintained throughout the contract. Activities may include intermodal transfers, through moves and switching moves to local customers. Railroad traffic and operations may occur continuously throughout the day and night on these tracks and shall be maintained at all times. The Contractor shall coordinate and schedule the work so construction activities do not interfere with Railroad operations. Work windows for this contract shall be coordinated with the Engineer. Types of work windows include Conditional Work Windows and Absolute Work Windows, as defined below:

1.08.01 Conditional Work Window

A period of time that Railroad operations have priority over construction activities. When construction activities may occur on or adjacent to railroad tracks within 25 feet of the nearest track, a Railroad flagger will be required. At the direction of the Railroad flagger, upon approach of a train, and when trains are present, tracks shall be cleared (i.e., no construction equipment, materials, or personnel within 25 feet, or as directed by the Railroad, from the tracks). Conditional Work Windows are available for the contract.

1.08.02 Absolute Work Window

A period of time that construction activities are given priority over Railroad operations. During this time frame the designated tracks will be inactive for train movements and may be fouled by the Contractor. At the end of an Absolute Work Window the tracks or signals shall be completely operational for train operations and all Railroad and Federal Railroad Administration requirements, codes, and regulations for operational tracks shall be met. In the situation where the operating tracks or signals have been affected, the Railroad will perform inspections of the work prior to placing back into service. Railroad flaggers will be required for construction activities requiring an Absolute Work Window. Absolute Work Windows will not generally be granted. Any request will require a detailed explanation for Railroad review.

1.08.03 Requests

Contractor shall make requests in writing for both Absolute and Conditional Work Windows, at least two weeks in advance of the work for which the request is being made. The request shall include:

- Exactly what the work entails.
- Days and hours the work will be performed.
- Exact location of work, and proximity to the tracks.
- Type of window requested and amount of time requested.
- The Contractor's designated contact person.

Contractor shall provide written notice to the Railroad at least 48 hours before commencing work in connection with approved work windows when work will be performed within 25 feet of any track center line.

1.09 Method of Measurement and Basis of Payment

Railroad Protective Liability Insurance for BNSF Railway Company will be paid for as a Lump Sum bid item. The Contractor will be paid the Lump Sum bid item price within 30 calendar days after receipt of a signed contract, provided that all necessary certificates of insurance have been submitted to the Department per Article SP-150013a (1.07).

NON-EMPLOYEE PERSONAL INJURY DATA COLLECTION

INFORMATION REQUIRED TO BE COLLECTED PURSUANT TO FEDERAL REGULATION. IT SHOULD BE USED FOR COMPLIANCE WITH FEDERAL REGULATIONS ONLY AND IS NOT INTENDED TO PRESUME ACCEPTANCE OF RESPONSIBILITY OR LIABILITY.

1. Accident City/St: _____ 2. Date: _____ Time: _____
- County: _____ 3. Temperature: _____ 4. Weather: _____
(if non-BNSF location)
5. Social Security #: _____
6. Name (last, first, mi): _____
7. Address: Street: _____ City: _____ St: _____ Zip: _____
8. Date of Birth: _____ and/or Age: _____ Gender: _____
(if available)
9. (a) Injury: _____ (b) Body Part: _____
(i.e. (a) Laceration (b) Hand)
10. Description of accident (To include location, action, result, etc.):

11. Treatment:
 - ☐ First Aid Only
 - ☐ Required Medical Treatment
 - ☐ Other Medical Treatment
12. Dr. Name: _____ 13. Date: _____
14. Dr. Address:
 - Street: _____ City: _____ St: _____ Zip: _____
15. Hospital Name:
16. Hospital Address:
 - Street: _____ City: _____ St: _____ Zip: _____
17. Diagnosis:



**SPECIAL PROVISIONS
FOR
WORK ON RAILROAD RIGHT-OF-WAY (CBEC RAILWAY)**

**Pottawattamie County
IM-NHS-080-1(372)4--03-78
IM-NHS-080-1(373)4--03-78
IM-NHS-080-1(374)4--03-78
IM-NHS-080-1(377)4--03-78**

**Effective Date
October 27, 2015**

THE STANDARD SPECIFICATIONS, SERIES 2015, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

A. DESCRIPTION.

This specification involves maintenance of roadways that do not require additional property rights or facility adjustments from the CBEC Railway Inc. (CBEC).

This specification describes the requirements when work is within the Right-of-way (ROW) or properties of the CBEC and adjacent to tracks, wire lines, and other facilities. This specification describes the coordination with CBEC when work by the Contractor will be performed upon, over, or under the CBEC ROW, or may impact current or future CBEC operations. The Contractor shall coordinate with the CBEC while performing work on CBEC ROW.

The CBEC representative will be: Mark Woofter, CBEC Railway Inc., 4299 NW Urbandale Drive, Urbandale, Iowa 50322; telephone number: 515.242.4203.

The Contractor is not required to enter into an agreement with the CBEC.

The Contractor shall provide track protection for equipment operating within 25 feet from nearest rail.

B. REQUESTS FOR INFORMATION.

Requests for information involving work within CBEC ROW shall be in accordance with the procedures listed in the contract documents. Requests shall be submitted to the Engineer. The Engineer will forward the request to the CBEC as necessary.

C. CONSTRUCTION SCHEDULE NOTICE.

A construction schedule, including the proposed temporary horizontal and vertical clearances and construction sequence for work to be performed, shall be provided to the Engineer for submittal to the CBEC prior to commencement of work. When construction activities are on or about railroad property this schedule shall also include the anticipated dates when the CBEC facilities may be impacted by construction

activities.

D. CBEC REPRESENTATIVES.

CBEC representatives will be provided at the expense of the Contractor to protect CBEC facilities, property, and movements of its trains or engines. In general, CBEC will furnish such personnel or other protective services as follows:

- When any part of equipment is standing or being operated within 25 feet, measured horizontally, from centerline of any track on which trains may operate, or when any object is off the ground and any dimension thereof could extend inside the 25 foot limit, or when any erection or construction activities are in progress within such limits, regardless of elevation above or below track.
- For excavation below elevation of track subgrade if, in the opinion of CBEC, track or other CBEC facilities may be subject to settlement or movement.
- During any clearing, grubbing, excavation, or grading in proximity to CBEC facilities, which, in the opinion of CBEC, may endanger CBEC facilities or operations.
- During the Contractor's operations when, in the opinion of CBEC, CBEC facilities, including, but not limited to, tracks, buildings, signals, wire lines, or pipe lines, may be endangered.
- The Contractor shall arrange with the CBEC to provide the adequate number of flag persons to accomplish the work.

E. INSURANCE.

Before the contract is awarded, Contractor shall submit to the Department a certificate of insurance evidencing the coverage. The certificate shall identify the insurance company firm name and address, Contractor firm name, policy period, type of policy, limits of coverage, and scope of work covered (including project number). Policies shall provide no less than 30 calendar days prior written notice to Contracting Authority and Railroad of cancellation or material change in policies. Following award of the Contract, the Contractor shall submit a certificate of insurance evidencing the foregoing coverage to the Railroad and Contracting Authority (if other than the Department), and a certified, true, and complete copy of policy or policies to the Contracting Authority and Railroad. Upon request from either the Contracting Authority or Railroad, a certified duplicate original of any required certificate or policy shall be furnished at no cost to the Contracting Authority or Railroad. The Contractor shall not begin work upon or over Railroad's ROW until the Railroad has notified the Engineer that such insurance provisions are in accordance with the contract documents. The insurance shall be kept in full force and effect during the performance of work and thereafter until the Contractor removes all tools, equipment, and material from Railroad's property and cleans the premises in a manner reasonably satisfactory to Railroad.

In addition to providing to CBEC the insurance binders, endorsements, and certificates described below, the Contractor shall also provide the subcontractor insurance endorsements that are described in Article F; ASSIGNMENT, SUBCONTRACTING, AND INSURANCE ENDORSEMENTS.

The Contractor shall provide the following kinds of insurance in addition to the requirements of Article 1107.02 of the Standard Specifications.

1. Commercial General Liability Insurance.

Commercial general liability (CGL) with a limit of not less than \$5,000,000 each occurrence and an aggregate limit of not less than \$10,000,000. CGL insurance shall be written on ISO occurrence form CG 00 01 12 04 (or a substitute form providing equivalent coverage).

The policy shall also contain the following endorsement, which shall be stated on the certificate of insurance:

- Contractual Liability Railroads ISO form CG 24 17 10 01 (or a substitute form providing equivalent coverage) showing "CBEC Railroad Company Property" as the Designated Job Site.
- Designated Construction Project(s) General Aggregate Limit ISO Form CG 25 03 03 97 (or a substitute form providing equivalent coverage) showing the project on the form schedule.

2. **Railroad Protective Liability Insurance.** Railroad Protective Liability Insurance naming only the COMPANY as the insured with coverage of at least \$5,000,000 per occurrence and \$10,000,000 in the aggregate. The policy must be issued on a standard ISO form CG 00 35 10 93 and include the following:

- Endorsed to include the Pollution Exclusion Amendment (ISO form CG 28 31 10 93);
- Endorsed to include the Limited Seepage and Pollution Endorsement;
- Endorsed to remove any exclusion for punitive damages;
- No other endorsements restricting coverage may be added;
- The original policy must be provided to the COMPANY prior to performing and work or service under this Agreement.

3. **Business Automobile Coverage Insurance.**

Business auto coverage written on ISO form CA 00 01 (or a substitute form providing equivalent liability coverage) with a combined single limit of not less \$5,000,000 per occurrence.

The policy shall contain the following endorsements, which shall be stated on the certificate of insurance:

- Coverage For Certain Operations In Connection With Railroads ISO form CA 20 70 10 01 (or a substitute form providing equivalent coverage) showing "CBEC Property" as the Designated Job Site.
- Motor Carrier Act Endorsement - Hazardous materials clean up (MCS-90), if required by law.

NOTE: Alternate Liability Insurance Limits: The CBEC will accept Contractor's Commercial General Liability insurance limits of at least \$2,000,000 each occurrence or claim and an aggregate limit of at least \$2,000,000, and will accept Business Automobile Insurance containing a combined single limit of at least \$2,000,000 per occurrence or claim if the Contractor secures Railroad Protective Liability Insurance coverage with a combined single limit of \$5,000,000 per occurrence with a \$10,000,000 aggregate instead of the limits described in Article 1107.02, B, of the Standard Specifications.

4. **Workers Compensation and Employers Liability Insurance.**

Coverage shall include, but not limited to:

- The Contractor's statutory liability under the workers' compensation laws of the State of Iowa.
- Employers' Liability (Part B) with limits of at least \$500,000 each accident, \$500,000 disease policy limit, \$500,000 each employee.

If the Contractor is self-insured, evidence of the State of Iowa's approval and excess workers compensation coverage shall be provided. Coverage shall include liability arising out of the U. S. Longshoremen's and Harbor Workers' Act, the Jones Act, and the Outer Continental Shelf Land Act, if applicable.

The policy shall contain the following endorsement, which shall be stated on the certificate of insurance:

Alternate Employer endorsement ISO form WC 00 03 01 A (or a substitute form providing equivalent coverage) showing CBEC in the schedule as the alternate employer (or a substitute form providing equivalent coverage).

5. **Umbrella or Excess Insurance.**

If the Contractor utilizes umbrella or excess policies, these policies shall "follow form" and afford no less coverage than the primary policy.

6. All policy(ies) required above (except worker's compensation and employers liability shall include the CBEC as "Additional Insured" using ISO Additional Insured Endorsements CG 20 26, and CA 20 48 (or substitute forms providing equivalent coverage). The coverage provided to the CBEC as additional insured shall, to the extent provided under ISO Additional Insured Endorsement CG 20

26, and CA 20 48 provide coverage for the CBEC's negligence whether sole or partial, active or passive, and shall not be limited by Contractor's liability under the indemnity provisions contained in the specifications.

7. Punitive damages exclusion, if any, shall be deleted (and the deletion indicated on the certificate of insurance), unless the law governing prohibits all punitive damages that might arise in connection with this contract.
8. The Contractor waives all rights of recovery, and its insurers also waive all rights of subrogation of damages against Railroad and its agents, officers, directors, and employees. This waiver shall be stated on the certificate of insurance.
9. Insurance policies shall be written by a reputable insurance company acceptable to the CBEC or with a current Best's Insurance Guide Rating of A- and Class VII or better, and authorized to do business in the State of Iowa.
10. The fact that insurance is obtained by the Contractor or by the CBEC on behalf of the Contractor shall not be deemed to release or diminish the liability of the Contractor, including, without limitation, liability under the indemnity provisions of this contract. Damages recoverable by the CBEC from the Contractor or any third party shall not be limited by the amount of the required insurance coverage.

F. ASSIGNMENT, SUBCONTRACTING, AND INSURANCE ENDORSEMENTS.

The Contractor shall not assign or subcontract the provisions of this specification, or any interest therein, without the written consent of the Engineer. The Contractor shall be responsible for the acts and omissions of all subcontractors. Before the Contractor commences any work, they shall, except to the extent prohibited by law; (1) require each subcontractor to include the Contractor as "Additional Insured" in the subcontractor's Commercial General Liability policy and Business Automobile policies with respect to all liabilities arising out of the subcontractor's performance of work on behalf of the Contractor by endorsing these policies with ISO Additional Insured Endorsements CG 20 26, and CA 20 48 (or substitute forms providing equivalent coverage); (2) require each subcontractor to endorse their Commercial General Liability Policy with "Contractual Liability Railroads" ISO Form CG 24 17 10 01 (or a substitute form providing equivalent coverage) for the job site; and (3) require each subcontractor to endorse their Business Automobile Policy with "Coverage For Certain Operations In Connection With Railroads" ISO Form CA 20 70 10 01 (or a substitute form providing equivalent coverage) for the job site.

G. ADDITIONAL SAFETY REQUIREMENTS.

Personnel employed by the Contractor or subcontractors shall complete the course, "Orientation for Contractor's Safety," and be registered prior to working on CBEC ROW. This orientation is available at www.contractororientation.com. This course shall be completed annually.

Contractor shall require its employees to be suitably dressed to perform their duties safely. Contractor shall require workers to wear personal protective equipment as specified by CBEC rules and regulations. Protective equipment shall include, but not be limited to the following: protective headgear meeting ANSI 289.1; eye protection meeting ANSI 287.1, however additional eye protection shall be provided to meet specific job situations such as welding, grinding, burning, etc.; and hearing protection which affords enough attenuation to give protection from noise levels that will be occurring on the job site. Only waist length shirts with sleeves and trousers covering the entire leg shall be worn. Flare-legged trouser bottoms shall be tied to prevent catching.

Heavy equipment operating within CBEC ROW shall be equipped with audible back-up warning devices. If in the opinion of the CBEC the Contractor's equipment is unsafe for use on the CBEC's ROW, the Contractor shall remove such equipment from the CBEC ROW.

The Contractor shall promptly notify the CBEC of any U.S. OSHA reportable injuries occurring to any employee that arises during the work performed on the work site within CBEC ROW.

If at any time the Engineer or the CBEC are of the opinion that any work of the Contractor is being or is about to be done or prosecuted without due regard and precaution for safety and security, the Engineer may suspend the work until suitable, adequate, and proper protective measures are adopted and provided.

H. SAFETY MEASURES-PROTECTION OF OPERATIONS.

The Contractor shall perform work in a safe manner and in conformity with the following standards:

1. Obstructions to View.

Except as otherwise provided herein, the Contractor shall not cause or permit the view along the tracks of the CBEC to be obstructed, nor place any combustible material on the crossing area, nor erect any structures thereon except as allowed by the contract documents.

2. Excavation.

The Contractor shall not excavate from existing slopes nor construct new slopes which are excessive and may create hazards of slides or falling rock, impair, or endanger the clearance between existing or new slopes and the tracks of the CBEC. The Contractor shall not perform any work that may disturb the stability of any area that may adversely affect the CBEC's tracks or facilities. The Contractor, at its own expense, shall install and maintain adequate shoring and cribbing for all excavation or trenching performed by them in connection with construction, maintenance, or other work. The shoring and cribbing shall be constructed and maintained with materials and in a manner approved by the CBEC to withstand all stresses likely to be encountered, including any stresses resulting from vibrations caused by the CBEC's operations in the vicinity.

3. Drainage.

The Contractor, at its expense, shall provide and maintain suitable facilities for draining the highway and its appurtenances, and shall not suffer or permit drainage water to flow or collect upon property of the CBEC so as to adversely affect any of the CBEC's operations, equipment or any third parties with permitted facilities on the CBEC's ROW. The Contractor, at its own expense, shall provide adequate passageway for the waters of any streams, bodies of water, and drainage facilities (either natural or artificial, and including water from the CBEC's culverts and drainage facilities), so that said waters may not, because of any facilities or work of the Contractor, be impeded, obstructed, diverted, or caused to back up, overflow or damage the property of the CBEC or any part thereof, or property of others. The Contractor shall not obstruct or interfere with existing ditches or drainage facilities.

I. WALKWAYS.

Along the outer side of each exterior track of multiple operated track, and on each side of single operated track, an unobstructed continuous space suitable for CBEC's use in walking along trains, extending to a line not less than 12 feet from centerline of track, shall be maintained. Any temporary impediments to walkways and track drainage encroachments or obstructions allowed during work hours while CBEC's flagging service is provided shall be removed before the close of each work day. Walkways with railings shall be constructed by Contractor over open excavations when in close proximity of track, and railings shall not be closer than 8.5 feet horizontally from center line of tangent track or 9.5 feet horizontally from centerline of curved track.

J. NO INTERFERENCE WITH CBEC'S OPERATION.

The Contractor shall not interfere with the constant, continuous, and uninterrupted use of the tracks, property, and facilities of the CBEC its lessees, licensees, or others, unless specifically permitted by this specification, or specifically authorized in advance by the CBEC. When not in use, the Contractor's machinery and materials shall be kept at least 50 feet from the centerline of CBEC's nearest active track, and there shall be no crossings of CBEC's tracks except at existing open public crossings or as provided by agreement.

K. TRAFFIC CONTROL.

The Contractor's operations that control traffic across or around CBEC facilities shall be coordinated with

and approved by the CBEC.

L. INDEMNITY.

As used in this Article, "CBEC" includes other railroad companies using the CBEC's property at or near the location of the Contractor's work and their officers, agents, and employees; "Loss" includes loss, damage, claims, demands, actions, causes of action, penalties, costs, and expenses of whatsoever nature, including court costs and attorneys' fees, which may result from the following:

- Injury to or death of persons whomsoever (including the CBEC's officers, agents, and employees, the Contractor's officers, agents, and employees, as well as any other person); and
- Damage to or loss or destruction of property whatsoever (including Contractor property, damage to the roadbed, tracks, equipment, or other property of the CBEC, or property in its care or custody).

The Contractor shall indemnify, hold harmless, and defend to the extent allowed by law the CBEC from any loss which is due to or arises from any cause and is associated in whole or in part with the work, a breach of the contract or the failure to observe the health and safety provisions herein, or any activity or omission arising out of performance or nonperformance; except when caused by the sole negligence of the CBEC, or except to the extent caused by the gross negligence or willful misconduct of the CBEC.

M. MAINTENANCE OF CBEC FACILITIES.

The Contractor shall maintain ditches and drainage structures free of silt or other obstructions which may result from its operations, promptly repair eroded areas within CBEC's ROW, and repair any other damage to CBEC property, or its tenants; at no additional cost to the CBEC.

N. COMMUNICATIONS AND SIGNAL LINES.

If required, CBEC will rearrange its communications and signal lines, grade crossing warning devices, train signals and tracks, and facilities that are in use and maintained by CBEC's forces in connection with its operation at the expense of the Contracting Authority. This work will be performed by the CBEC and it is not a part of the contract.

O. FIBER OPTIC CABLE SYSTEMS.

Fiber optic cable systems may be buried on the CBEC's property. Protection of the fiber optic cable systems is of extreme importance since any break could disrupt service to users resulting in business interruption and loss of revenue and profits. The Contractor shall contact the CBEC to determine if fiber optic cable is buried anywhere on the CBEC's Crossing Area to be used by the Contractor. If it is, the Contractor shall telephone the telecommunications company involved, arrange for a cable locator, and make arrangements for relocation or other protection of the fiber optic cable prior to beginning any work on the CBEC's Crossing Area.

P. COOPERATION.

The CBEC will cooperate with the Contractor so that work may be conducted in an efficient manner, and will cooperate with the Contractor in enabling use of CBEC's ROW in performing the work.

Q. WAIVER OF BREACH.

The waiver by the CBEC of the breach of any condition, covenant, or specification herein contained to be kept, observed and performed by the Contractor shall in no way impair the right of the CBEC to avail itself of any subsequent breach thereof.

R. RAILROAD FLAGGING.

1. Flagging and Notification.

The Contractor shall notify the CBEC and Engineer at least 15 working days in advance of the commencement of work and at least ten working days in advance of proposed performance of any work by the Contractor in which any person or equipment will be within 25 feet of any track, or near enough to any track that any equipment extension (such as, but not limited to, a crane boom) will reach to within 25 feet of any track. This notice shall include the following:

- Project Number

- Contractor's name
- Date flagging is needed
- Location of flagging services to be provided
- Duration of flagging

No work shall be performed, and no person, equipment, machinery, tools, materials, vehicles, or things shall be located, operated, placed, or stored within 25 feet of any of CBEC's track at any time, for any reason, unless and until a railroad flagger is provided to watch for trains.

Upon receipt of such ten day notice, the CBEC will determine and inform the Contractor whether a flagger need be present and whether the Contractor need implement any special protective or safety measures. If flagging or other special protective or safety measures are performed by the CBEC, such services will be provided at Contractor's expense with the understanding that if the CBEC provides any flagging or other services, the Contractor shall not be relieved of any of its responsibilities or liabilities set forth herein. All flagging charges shall be handled directly between the City's Contractor and CBEC's agent, Iowa Interstate. The Contractor will be responsible to pay

CBEC or its agent directly for all flagging charges associated with this project within 30 calendar days of receipt of the CBEC's or its agent's billing.

Railroad will notify the Engineer and Contractor when non-compliance is reported by Railroad train crews or other Railroad employees. Contractor work performed without proper flagging services, when such flagging is required, will be subject to a \$5,000.00 per day price adjustment to Contractor, and may result in the removal of Contractor by Railroad or Engineer from the project.

Contractor shall provide the CBEC a minimum of two working days notice prior to the completion of work for which the flagging services were requested.

2. Flagger Rate of Pay.

The rate of pay per hour for each flagger will be the prevailing hourly rate in effect for an eight hour day for the class of worker used during regularly assigned hours and overtime in accordance with Labor Agreements and Schedules in effect at the time the work is performed. In addition to the cost of such labor, a composite charge for vacation, holiday, health and welfare, supplemental sickness, Railroad Retirement and UC, supplemental pension, Employee, Liability and Property Damage, and Administration will be included, computed on actual payroll. The composite charge will be the prevailing composite charge in effect on the day of execution of the agreement between the CBEC and the Contracting Authority. One and one-half times the current hourly rate is paid for overtime, Saturdays and Sundays; two and one-half times current hourly rate for holidays. Wage rates are subject to change, at any time, by law or by agreement between the CBEC and its employees, and may be retroactive as a result of negotiations or a ruling of an authorized Governmental Agency. Additional charges on labor are also subject to change. If the wage rate or additional charges are changed, the Contractor shall pay on the basis of the new rates and charges.

3. Reimbursement to the CBEC.

Reimbursement to the CBEC' agent, Iowa Interstate, by the Contractor, shall cover the full eight hour day during which any flagger is furnished, unless they can be assigned to other CBEC work during a portion of such day. Reimbursement will not be required for the portion of the day during which the flagger is engaged in other CBEC work. Reimbursement will also be required for any day not actually worked by said flagger following assignment to work on the project for which the CBEC is required to pay the flagger and which could not reasonably be avoided by the CBEC by assignment of such flagger to other work, even though the Contractor may not be working during such time.

In the event the Contractor fails to reimburse the CBEC or its agent, the Contracting Authority will reimburse the CBEC within 30 calendar days of the Contractor defaulting on the payment (default is

defined as non-payment within 30 calendar days of final billing by the CBEC to the Contractor). Failure of the Contractor to reimburse the CBEC may result in a reduction or suspension of the Contractors bidding qualifications according to Article 1102.03 of the Standard Specifications.

4. Documentation and Reimbursement to the Contractor.

The Contractor shall initially pay invoices for all flagging costs in conjunction with railroad flaggers when any of the conditions identified in this Special Provision, warrant a flagger. The Contracting Authority will reimburse the Contractor for any daily cost that exceeds \$700 per day for the cost of flagger services provided by the CBEC. The Contracting Authority will reimburse the Contractor 100% of the total cost of flagger services, as deemed necessary by the CBEC, that does not meet any of the conditions identified in this Special Provision, unless the flagger's presence on the project was a result of the Contractor's communication, or lack of communication, with the CBEC. The Contracting Authority will reimburse the Contractor following ~~completion of all work necessitating flagging operations by the CBEC and~~ receipt of documentation verifying the CBEC invoices have been paid.

For each day that railroad flaggers have been provided, the Contractor shall document daily the conditions on the project site that warrant the flagger. The Contractor shall submit the daily records to the Engineer each week. The Engineer will review the daily logs and promptly notify the Contractor if any information in the daily log is believed to be incorrect.

Contractor shall forward copies of the invoices received from the CBEC for flaggers and a summary of the flagging costs incurred that exceed the Contractors' requirements described in this Special Provision, to the Engineer with a request for payment for the additional railroad flagger costs. The Engineer will review the Contractor's daily logs against the CBEC's invoice and make payment for the eligible costs in accordance with Article 1109.03, of the Standard Specifications.

Contractor shall be responsible to CBEC for all flagging costs. Flagging costs for subcontracted work shall be the responsibility of the Contractor. Reimbursement from subcontractors to the Contractor shall be the sole responsibility of the Contractor.

Contractor shall forward, to the Engineer, copies of payments made to CBEC for flagging costs.

S. TEMPORARY CROSSINGS.

At other than established public road crossings, the Contractor shall not move any equipment or materials across the CBEC's tracks until written permission has been obtained from the CBEC.

If Contractor requires a temporary railroad crossing the Contractor shall arrange for the crossing installation at a mutually acceptable location at the Contractor's expense to include all CBEC costs of installation, maintenance, removal, and track restoration. The temporary crossing shall be gated and locked at all times when not required for use by the Contractor. Flagging will always be required during use of a temporary crossing. The billing, Contractor payment provisions, and final Contractor payment requirements for crossing costs except flagging are to be covered as agreed to in a separate agreement between the Contractor and CBEC. Prior notice of need for a temporary crossing needs to allow for CBEC site review, cost estimating, securing material, and work crew scheduling and will vary. The Contractor should contact the CBEC prior to making a bid when a temporary crossing is required.

T. LIMITATION OF RIGHTS GRANTED.

The Contract, any Temporary Easement, and Permanent Easement are all subject to the prior and continuing right and obligation of the CBEC to use and maintain its property, not inconsistent with highway purposes, including the right and power of the CBEC to construct, maintain, repair, renew, use, operate, change, modify, or relocate CBEC tracks, roadways, signal, communication, fiber optics, or other wirelines, pipelines, and other facilities upon, along, or across any or all parts of its property, all or any of which may be freely done at any time or times by the CBEC, not inconsistent with highway purposes and at CBEC's sole cost and expense.

The Contract, Temporary Construction Easement, and Permanent Easement, whether recorded or unrecorded, are subject to all outstanding rights (including those in favor of licensees and lessees of CBEC's property, and others) and the right of CBEC to renew and extend the same, and is made without covenant of title or for quiet enjoyment.

U. MECHANICS' LIENS.

The Contractor shall not permit or suffer any mechanic's or material supplier's liens of any kind or nature to be enforced against any property of CBEC for any work performed. The Contractor shall indemnify and hold harmless CBEC from and against any liens, claims, demands, costs, or expenses of whatsoever nature in any way connected with or growing out of such work done, labor performed, or materials furnished. It is understood that this specification may be recorded in the county in which the work is to be performed and such recording shall serve as public notice that no Contractor, subcontractor, or material supplier shall file any notice of a mechanic's or material supplier's lien or permit or suffer any mechanic's lien or material supplier's lien on the property of CBEC to the extent permitted by law.

V. METHOD OF MEASUREMENT AND BASIS OF PAYMENT.

Railroad Protective Liability Insurance for CBEC Railway Inc. will be paid for as a Lump Sum bid item. The Contractor will be paid the Lump Sum bid item price within 30 calendar days after receipt of a signed contract, provided that all necessary certificates of insurance have been submitted to the Department per Article SP-150014a, E.



**SPECIAL PROVISIONS
FOR
WORK ON RAILROAD RIGHT-OF-WAY (IOWA INTERSTATE RAILROAD)**

**Pottawattamie County
IM-NHS-080-1(372)4--03-78
IM-NHS-080-1(377)4--03-78**

**Effective Date
October 27, 2015**

THE STANDARD SPECIFICATIONS, SERIES 2015, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

1.01 General

1.01.01 The Contractor shall cooperate with the Iowa Interstate Railroad Company, Ltd. (IAIS), hereinafter referred to as "Railroad" where work is over, under, on, or adjacent to Railroad property, and/or right-of-way, hereafter referred to as Railroad property, during the work which shall not interfere with the movement of trains on Railroad property.

1.01.02 The Contractor's right to enter Railroad's property is subject to the absolute right of the Railroad to cause the Contractor's work on Railroad's property to cease if, in the opinion of Railroad, Contractor's activities create a hazard to Railroad's property, employees, and/or operations.

1.01.03 The Contractor shall notify the Engineer and also the Railroad's, S.F. Woodward, Chief Engineer, Iowa Interstate Railroad Company, 5900 6th Street SW, Cedar Rapids, IA, telephone number: 319.298.5436; at least 10 calendar days before commencing work over, under, on, or adjacent to Railroad property. Contractor's notification to Railroad shall refer to Railroad's file numbers.

1.01.04 Falsework above tracks or excavations located, whichever is greater, within 25 feet of the nearest track or intersecting a slope from the plane of the top of rail on a 1.5 horizontal to 1 vertical slope beginning 11 feet from centerline of the nearest track, both measured perpendicular to center line of track, the Contractor shall furnish the Railroad five sets of working drawings showing details of construction affecting railroad tracks and property. The working drawings shall include the proposed method of installation and removal of falsework, shoring, or cribbing, not included in the contract plans and two sets of structural calculations of any, falsework, shoring, or cribbing. All calculations shall take into consideration railroad surcharge loading and shall be designed to meet American Railway Engineering and Maintenance-of-Way Association Coopers E-80 live loading standard. All drawings and calculations shall be stamped by a registered Professional Engineer licensed in the state of Iowa. The Contractor shall not begin work until notified by the Railroad that plans have been approved. The

Contractor shall use lifting devices such as, cranes and/or winches to place or to remove falsework over Railroad's tracks. The Contractor will not be relieved of responsibility for results obtained by the implementation of said approved plans.

1.01.05 The Railroad will cooperate with the Contractor such that the work may be handled and performed in an efficient manner.

1.02 Railroad Requirements

1.02.01 The Contractor shall comply with the rules and regulations of Railroad and the instructions of the Railroad's representatives in relation to the proper manner of protecting the tracks and property of Railroad and the traffic moving on such tracks, as well as the wires, signals, and other property of Railroad, its tenants or licensees, at and in the vicinity of the work area during construction.

1.02.02 The Contractor shall perform work in such manner and at such times that shall not endanger, delay, or interfere with the safe and timely operation of the tracks and property of Railroad and the traffic moving on such tracks, as well as the wires, signals, and other property of Railroad, its tenants, or licensees.

1.02.03 The Contractor shall take protective measures as are necessary to keep railroad facilities, including track ballast, free of sand, debris, and other foreign objects and materials resulting from the construction operations. Any damage to Railroad facilities resulting from Contractor's operations will be repaired or replaced by Railroad and the cost of such repairs or replacement shall be paid by the Contractor.

1.02.04 The Contractor shall notify the Railroad's, S.F. Woodward, Chief Engineer, Iowa Interstate Railroad Company, 5900 6th Street SW, Cedar Rapids, IA, telephone number: 319.298.5436; and provide blasting plans to the Railroad for review a minimum of 10 calendar days prior to conducting blasting operations adjacent to or on Railroad's property.

1.02.05 The Contractor shall abide by the following clearances during the course of construction:

- 25.0 feet horizontally from centerline of nearest track,
- 22.5 feet vertically above top of rail (Temporary Falsework Clearance may be reduced to 21.5 feet subject to Railroad and Public Utilities Commission approval),
- 27.0 feet vertically above top of rail for electric wires carrying less than 750 V,
- 28.0 feet vertically above top of rail for electric wires carrying 750 V to 15 kV,
- 30.0 feet vertically above top of rail for electric wires carrying 15 kV to 20 kV, and
- 34.0 feet vertically above top of rail for electric wires carrying more than 20 kV.

1.02.06 Any desired infringement within clearances due to the Contractor's operations shall be submitted to the Railroad and Engineer and shall not be undertaken until approved in writing by the Railroad and Engineer. No extra compensation will be allowed in the event the Contractor's work is delayed pending approval.

1.02.07 In the case of impaired vertical clearance above top of rail, Railroad will have the option of installing tell-tales or other protective devices Railroad deems necessary for protection of Railroad employees or rail traffic. The cost of tell-tales or protective devices shall be borne by the Contractor.

1.02.08 The details of construction affecting the Railroad's tracks and property not included in the contract plans shall be submitted to the Railroad by the Engineer for approval before work is undertaken and this work shall not be undertaken until approved by the Railroad.

1.02.09 At other than public road crossings, the Contractor shall not move equipment or materials across Railroad's tracks until permission has been obtained from Railroad. Contractor shall obtain a temporary private crossing agreement from Railroad prior to moving equipment or materials across

Railroad's tracks. Temporary private crossing shall be gated and locked at all times when not required for use by the Contractor. Temporary private crossing for use of the Contractor shall be at the expense of the Contractor.

1.02.10 The Contractor, upon completion of the work, shall promptly remove from the premises of Railroad all of Contractor's tools, implements, and other materials, whether brought upon said premises by said Contractor or any subcontractor, employee, or agent of Contractor or of any subcontractor, and shall cause said premises to be left in a condition acceptable to the Railroad's representative.

1.03 Protection of Railroad Facilities and Railroad Flagger Services

The Railroad shall have the right to provide, at the expense of the Contractor, a flagman or flagmen or other protective services at any time during construction of that portion of the project on or near Railroad right-of-way when, in the opinion of the Railroad, it is necessary as a matter of protection and safety to track and train operations.

1.03.01 The Contractor shall give a minimum of 10 working days notice to the Railroad's, S.F. Woodward, Chief Engineer, Iowa Interstate Railroad Company, 5900 6th Street SW, Cedar Rapids, IA, telephone number: 319.298.5436; in advance of when flagging services will be required.

1.03.02 Railroad flagger and protective services and devices will be required and furnished when Contractor's work activities are located over, under, or within 25 feet measured horizontally from center line of the nearest track, and when cranes or similar equipment are positioned outside of 25 feet measured horizontally from the track center line that could foul the track in the event of tip over or other catastrophic occurrence, but not limited thereto, for the following conditions:

1.03.02a When in the opinion of the Railroad's Representative it is necessary to safeguard Railroad's employees, trains, engines, facilities, and property.

1.03.02b When any excavation is performed below the bottom of tie elevation, if, in the opinion of Railroad's representative, track or other Railroad facilities may be subject to movement or settlement.

1.03.02c When work, in any way interferes with the safe operation of trains at timetable speeds.

1.03.02d When any hazard is presented to Railroad track, communications, signal, electrical, or other facilities either due to persons, material, equipment, or blasting in the vicinity.

1.03.02e Special permission shall be requested from the Railroad before moving heavy or cumbersome objects or equipment which might result in making the track impassable.

1.03.03 Flagging services will be performed by qualified railroad flaggers. The cost per day for one flagger is approximately \$800.00, which includes vacation allowance, paid holidays, Railroad and Unemployment Insurance, Public Liability and Property Damage Insurance, Health and Welfare Benefits, transportation, meals, lodging, and supervision, for an eight-hour basic day, with time and one-half or double time for overtime, rest days, and holidays. These rates are subject to increases which may result from Railroad Employees-Railroad Management negotiations or which may be authorized by Federal authorities. The Contractor will be billed on actual costs in effect at the time the work is performed.

1.03.03a Flagging crew generally consists of one employee. Additional personnel may be required to protect Railroad operations and property, if deemed necessary by the Railroad's Representative.

1.03.03b Each time a flagger is called the minimum period for billing will be the eight-hour basic day.

1.03.03c The cost of flagger services provided by the Railroad, as deemed necessary by the Railroad's representative, shall be borne by the Contractor.

1.03.03c1 Reimbursement to the Railroad.

Reimbursement to the Railroad, by the Contractor, shall cover the full eight hour day during which any flagger is furnished, unless they can be assigned to other Railroad work during a portion of such day. Reimbursement will not be required for the portion of the day during which the flagger is engaged in other Railroad work. Reimbursement will also be required for any day not actually worked by said flagger following assignment to work on the project for which the Railroad is required to pay the flagger and which could not reasonably be avoided by the Railroad by assignment of such flagger to other work, even though the Contractor may not be working during such time.

In the event the Contractor fails to reimburse the Railroad, the Contracting Authority will reimburse the Railroad within 30 calendar days of the Contractor defaulting on the payment (default is defined as non-payment within 30 calendar days of final billing by the Railroad to the Contractor). Failure of the Contractor to reimburse the Railroad may result in a reduction or suspension of the Contractors bidding qualifications according to Article 1102.03 of the Standard Specifications.

1.03.03c2 Documentation and Reimbursement to the Contractor.

The Contractor shall initially pay invoices for all flagging costs in conjunction with railroad flaggers when any of the conditions identified in this Special Provision, warrant a flagger. The Contracting Authority will reimburse the Contractor for any daily cost that exceeds \$800 per day for the cost of flagger services provided by the Railroad. The Contracting Authority will reimburse the Contractor 100% of the total cost of flagger services, as deemed necessary by the Railroad, that does not meet any of the conditions identified in this Special Provision, unless the flagger's presence on the project was a result of the Contractor's communication, or lack of communication, with the Railroad. The Contracting Authority will reimburse the Contractor following receipt of documentation verifying the Railroad invoices have been paid.

For each day that railroad flaggers have been provided, the Contractor shall document daily the conditions on the project site that warrant the flagger. The Contractor shall submit the daily records to the Engineer each week. The Engineer will review the daily logs and promptly notify the Contractor if any information in the daily log is believed to be incorrect.

Contractor shall forward copies of the invoices received from the Railroad for flaggers and a summary of the flagging costs incurred that exceed the Contractors' requirements described in this Special Provision, to the Engineer with a request for payment for the additional railroad flagger costs. The Engineer will review the Contractor's daily logs against the Railroad's invoice and make payment for the eligible costs in accordance with Article 1109.03 of the Standard Specifications.

Contractor shall be responsible to Railroad for all flagging costs. Flagging costs for subcontracted work shall be the responsibility of the Contractor. Reimbursement from subcontractors to the Contractor shall be the sole responsibility of the Contractor.

Contractor shall forward, to the Engineer, copies of payments made to Railroad for flagging costs.

1.03.03d Final payment to the Contractor will not be made by the Engineer until all flagging or other protective services and/or temporary grade crossing expenses have been billed and paid to the Railroad. Contractor shall provide to the Engineer monthly copies of invoices and evidence of payment to the Railroad.

1.03.03e Railroad will notify the Engineer and Contractor when non-compliance is reported by Railroad train crews or other Railroad employees. Contractor work performed without proper flagging services, when such flagging is required, will be subject to a \$5,000.00 per day price adjustment to Contractor, and may result in the removal of Contractor by Railroad or Engineer from the project.

1.04 Contractor General Safety Requirements

1.04.01 Safety is of the utmost importance in performing work on the Railroad's property. The Railroad does not assume the control or responsibility of the Contractor to provide safe working conditions for the Contractor or subcontractors in requiring the Contractor to follow the Railroad's General Safety Requirements.

1.04.02 Work in the proximity of a railroad track is potentially dangerous. The Contractor, subcontractors, and invitees are governed by the following Safety Rules and General Safety Requirements while on Railroad property. The Contractor is responsible for enforcement of these Safety Rules and Requirements. The Railroad has the right to bar the Contractor, subcontractors, and invitees from working on Railroad property if the Railroad deems such persons are acting in an unsafe manner. If at any time the Engineer or Railroad are of the opinion that work of the Contractor is being or is about to be done or prosecuted without due regard and precaution for safety and security, the Engineer may suspend work until proper protective measures are adopted and provided.

1.04.03 Before beginning any task on Railroad property, a complete job safety briefing shall be conducted with all individuals involved with the task, and again if the task changes. If the task is within 25 feet of any track, the job briefing shall include the Railroad's flagger and include the procedures the Contractor will use to protect its employees, subcontractors, agents, or invitees from moving any equipment adjacent to or across any railroad tracks.

1.04.04 The Contractor shall ensure that prior to any employee entering Railroad property they have completed the safety orientation found on the following website: www.contractororientation.com. This course shall be completed annually for contracts exceeding one year.

1.04.04a Employees of the Contractor, subcontractors, agents, and invitees shall receive Safety Orientation from the Contractor's Safety Officer or a qualified Railroad representative prior to the start of any work. The Contractor's Safety Officer shall review the safety guidelines contained below to familiarize their employees with safety issues that exist when working in a railroad environment. This should be reviewed at least weekly, and with any new employee working on Railroad property. It is the responsibility of the Contractor's Supervisor and/or Safety Officer to instruct their employees on the Railroad's Safety guidelines and to require compliance with these guidelines.

1.04.05 Safety rules cannot be all-inclusive. Workers shall refrain from unsafe and improper practices, including the violation and/or disregard of written rules and regulations, and rules of common sense.

1.04.05a The use of alcoholic beverages, intoxicants, narcotics, marijuana, and other controlled substances by employees subject to duty or their possession or use while on duty or on Railroad's property is prohibited. Workers shall not report for duty under the influence of any alcoholic beverage, intoxicant, narcotic, marijuana, or other controlled substance, or medication, including those prescribed by a doctor, that may in any way adversely affect their alertness, coordination, reaction, response, or safety.

1.04.05b Damage to Railroad property, or if a hazard is noticed on passing trains, shall be reported immediately to the Railroad's representative. A vehicle or machine which may come in contact with a track, signal equipment, or structure (bridge) could result in a train derailment and shall be reported by the quickest means possible to the Railroad representative, S.F. Woodward,

telephone number: 319.298.5436. Local emergency numbers shall be obtained from the Railroad representative prior to the start of any work and shall be posted at the job site.

1.04.05c All persons are prohibited from having firearms or other deadly weapons, including knives with a blade in excess of three inches, in their possession while working on Railroad's property, except those authorized to have them in the performance of their duties or those given special permission.

1.04.05d When working on Railroad's property, the Contractor's employees shall wear eye protection meeting ANSI 287.1, however additional eye protection shall be provided to meet specific job situations such as welding, grinding, burning, etc.; hearing protection which affords enough attenuation to give protection from noise levels that will be occurring on the job site; protective headgear meeting ANSI 289.1; and above-the-ankle, lace-up, hardened toe safety boots with a defined heel, all approved by OSHA. Only waist length shirts with sleeves and trousers covering the entire leg shall be worn. Flare-legged trouser bottoms shall be tied to prevent catching.

High visibility retroreflective orange vests are required in certain locations as specified by the Railroad's representative. Particular attention to footing and the use of proper footwear is essential when working in snow or other slippery conditions. Hearing protection, fall protection, and respirators shall be worn as required by State and Federal regulations.

1.04.05e Workers shall not work nearer than 25 feet to the centerline of any track without proper flag/work protection provided by the Railroad, unless the track is protected by track bulletin and work has been authorized by the Railroad. If flag/work protection is provided, every employee shall know: (1) who the Railroad flagger is, and how to contact the flagger, (2) limits of the flag/work protection, (3) the method of communication to stop and resume work, and (4) entry into flag/work limits when designated. Workers or equipment entering flag/work limits that were not previously job briefed shall notify the flagger immediately, and be given a job briefing if working at less than 25 feet from center line of track.

1.04.05f Contractor shall not pile or store any materials or equipment closer than 25 feet to the centerline of the nearest Railroad track.

1.04.05g Machines or vehicles shall not be left unattended with the engine running. Parked machines or equipment shall be in gear with brakes set and if equipped with blade, pan, or bucket, they shall be lowered to the ground. All machinery and equipment left unattended on Railroad right-of-way shall be left inoperable and secured against movement. Heavy equipment operating within Railroad right-of-way shall be equipped with audible back-up warning devices. If in the opinion of the Railroad the Contractor's equipment is unsafe for use on Railroad right-of-way, Contractor shall remove such equipment from Railroad right-of-way.

1.04.05h Machinery or equipment shall not be stored or left temporarily near a highway/rail at-grade crossing in a manner to interfere with the sight distances of motorists approaching the crossing. Prior to beginning work, the Contractor shall establish a storage area with concurrence of the Railroad's representative.

1.04.05i Contaminates shall not be discharged on Railroad property. Should any discharge occur, the Contractor shall report by the quickest means possible to the Railroad's representative. (This includes oils, diesel fuel, gasoline, etc.).

1.04.05j Workers shall not create and leave any conditions at the work site that would interfere with water drainage.

1.04.05k Safeguards and safety signs shall be kept in place and in good condition. It is the responsibility of the Contractor to provide same.

1.04.05l Before excavating, it shall be ascertained by the Contractor if there are any underground pipe lines, electric wires, or cables, including fiber optic cable systems that either cross or run parallel with the track which are located within the project's work area. Excavating on right-of-way could result in damage to buried cables resulting in delay to railroad traffic, including disruption of service to users resulting in business interruptions involving loss of revenue and profits. Before any excavation commences, the Contractor shall provide written notification to the Railroad's Signal Supervisor and Roadmaster at least 10 working days. Underground and overhead wires shall be considered high voltage and dangerous until verified with the company having ownership of the line. The Contractor shall notify any other companies that have underground utilities in the area and arrange for the location of all underground utilities before excavating.

1.04.05m The Contractor shall cease work and the Railroad shall be notified immediately before continuing excavation in the area if obstructions are encountered that do not appear on drawings. If the obstruction is a utility, and the owner of the utility can be identified, then the owner should also be notified immediately. If there is any doubt about the location of underground cables or lines of any kind, no work shall be performed until the exact location has been determined. There will be no exceptions to these instructions.

1.04.05n Excavations, regardless of depth shall be shored where there is any danger to tracks, structures, or employees.

1.04.05o Excavations, holes, or trenches on the Railroad's property shall be covered, guarded, and/or protected when not being worked on. When leaving work site areas at night and over weekends, the areas shall be secured and left in a condition that will ensure that railroad employees who might be working in the area are protected from all hazards. All excavations shall be back filled as soon as possible.

1.04.05p All power line wires shall be considered dangerous and of high voltage unless informed to the contrary by proper authority. For lines rated 50 kV or below, minimum clearance between the lines and any part of the equipment or load shall be 10 feet. For lines rated over 50 kV, minimum clearance between the line and any part of equipment or load shall be 10 feet plus 0.4 inches for each 1 kV over 50 kV. If the capacity of the line is not known, minimum clearance of 20 feet shall be maintained. The Contractor shall designate a person to observe clearance of the equipment and give a timely warning for all operations where it is difficult for an operator to maintain the desired clearance by visual means.

1.04.05q When Contractor employees are required to work on the Railroad property after normal working hours or on weekends, the Railroad's representative shall be notified. A minimum of two employees shall be present at all times.

1.04.05r In all cases of doubt or uncertainty, the safest course shall be taken.

1.05 Personal Injury Reporting

The Railroad is required to report certain injuries as a part of compliance with Federal reporting requirements. Any personal injury sustained by an employee of the Contractor, subcontractor, or invitees while on the Railroad's property shall be reported immediately (by phone, mail if unable to contact in person) to the Railroad's representative.

1.06 Indemnification.

As used in this section, Railroad includes other railroad companies using the Railroad's property at or near the location of the Contractor's work and their officers, agents, and employees; "Loss" includes loss, damage, claims, demands, actions, causes of action, penalties, costs, and expenses of whatsoever nature, including court costs and attorneys' fees, which may result from the following:

- Injury to or death of persons whomsoever (including the Railroad's officers, agents, and employees, the Contractor's officers, agents, and employees, as well as any other person); and

- Damage to or loss or destruction of property whatsoever (including Contractor property, damage to the roadbed, tracks, equipment, or other property of the Railroad, or property in its care or custody)

1.06.01 To the fullest extent permitted by law, the Contractor shall release, indemnify, defend, and hold harmless the Railroad and its affiliated companies, partners, successors, assigns, legal representatives, officers, directors, shareholders, employees and agents (collectively, "indemnitees") for, from and against any and all claims, liabilities, fines, penalties, costs, damages, losses, liens, causes of action, suits, demands, judgments and expenses (including, without limitation, court costs, attorneys' fees and costs of investigation, removal and remediation and governmental oversight costs) environmental or otherwise (collectively, "liabilities") of any nature, kind or description of any person or entity directly or indirectly arising out of, resulting from or related to (in whole or in part):

- (a) this specification, including, without limitation, its environmental provisions,
- (b) any rights or interests granted pursuant to this specification,
- (c) occupation and use of the premises by the Contractors, or anyone directly or indirectly employed by them, or anyone they control or exercise control over,
- (d) the environmental condition and status of the premises caused by or contributed to by the Contractor, or
- (e) any act or omission of the Contractor.

Even if such liabilities arise from or are attributed to, in whole or in part, any negligence of any indemnitee. The only liabilities with respect to which the Contractor's obligation to indemnify the indemnitees does not apply are liabilities to the extent proximately caused by the gross negligence, or willful misconduct of an indemnitee.

1.06.02 The Contractor shall now and forever waive any and all claims, regardless whether based on strict liability, negligence or otherwise, that the Railroad is an "owner", "operator", "arranger", or "transporter" with respect to the improvements for the purposes of CERCLA or other environmental laws.

1.06.03 The Contractor shall to the fullest extent permitted by law indemnify and hold harmless the indemnitees against and assume the defense of any liabilities asserted against or suffered by any indemnitee under or related to the Federal Employers' Liability Act (FELA) whenever employees of grantee or any of its agents, invitees, contractors claim or allege that they are employees of any indemnitee or otherwise. This indemnity shall also extend, on the same basis, to FELA claims based on actual or alleged violations of any federal, state or local laws or regulations, including but not limited to the safety appliance act, the boiler inspection act, the occupational health and safety act, the resource conservation and recovery act, and any similar state or federal statute.

1.07 Insurance Form and Submittal

Before the contract is awarded, Contractor shall submit to the Department a certificate of insurance evidencing the coverage. The certificate shall identify the insurance company firm name and address, Contractor firm name, policy period, type of policy, limits of coverage, and scope of work covered (including project number). Policies shall provide no less than 30 calendar days prior written notice to Contracting Authority and Railroad of cancellation or material change in policies. Following award of the Contract, the Contractor shall submit a certificate of insurance evidencing the foregoing coverage to the Railroad and Contracting Authority (if other than the Department), and a certified, true, and complete copy of policy or policies to the Contracting Authority and Railroad. Upon request from either the Contracting Authority or Railroad, a certified duplicate original of any required certificate or policy shall be furnished at no cost to the Contracting Authority or Railroad. The Contractor shall not begin work upon or over Railroad's ROW until the Railroad has notified the Engineer that such insurance provisions are in

accordance with the contract documents. The insurance shall be kept in full force and effect during the performance of work and thereafter until the Contractor removes all tools, equipment, and material from Railroad's property and cleans the premises in a manner reasonably satisfactory to Railroad.

1.07.01 The Contractor shall procure and maintain, from beginning to end of construction work on or about Railroad property, the following insurance coverage types and limits:

1.07.01a Railroad Protective Insurance

The Contractor shall provide for and on behalf of the Railroad, Railroad Protective Insurance as stated in the Code of Federal Regulations, Title 23, Part 646, and any revisions thereto issued by the Federal Highway Administration for damages due to bodily injury or death of persons, and injury to or destruction of property resulting from the operations of the Contractor, subcontractors, or their agents, officers, or employees on this project.

Railroad Protective Liability Insurance is required if there is any construction or demolition activities. This insurance shall name only the Railway as the Insured with coverage of at least \$5,000,000 per occurrence and \$10,000,000 in the aggregate. The policy shall be issued on a standard ISO form CG 00 35 10 93 and include the following:

- ◆ Endorsed to include the Pollution Exclusion Amendment (ISO form CG 28 31 10 93) and on ISO form CG 28 31 10 93.
- ◆ Endorsed to include the Limited Seepage and Pollution Endorsement.
- ◆ Endorsed to include Evacuation Expense Coverage Endorsement.
- ◆ No other endorsements restricting coverage may be added.
- ◆ The original policy shall be provided to the Engineer and Railway prior to performing work.

If available and in lieu of providing a Railroad Protective Liability Policy, the Contractor may participate in the Railroad's Blanket Railroad Protective Liability Insurance Policy available to the Contractor. The limits of coverage are the same as above.

1.07.01b Commercial General Liability Insurance

This insurance shall contain broad form contractual liability with a combined single limit of a minimum of \$5,000,000 each occurrence and an aggregate limit of at least \$10,000,000.

Coverage shall be purchased on ISO occurrence form CG 00 01 12 04 or a substitute form providing equivalent coverage. This policy shall also contain the following endorsements, which shall be indicated on the certificate of insurance:

- ◆ Contractual Liability Railroads ISO Form CG 24 17 10 01 (or a substitute form providing equivalent coverage) showing "IAIS Railway Property" as the designated job site.
- ◆ Designated Construction Project(s) General Aggregate Limit ISO Form CG 25 03 03 97 (or a substitute form providing equivalent coverage) showing the project on the form schedule.

1.07.01c Business Automobile Insurance

This insurance shall be written on ISO Form CA 00 01 (or a substitute form providing equivalent coverage) and shall contain a combined single limit of at least \$5,000,000 per occurrence. The policy shall contain the following endorsements, which shall be stated on the certificate of insurance:

- ◆ Coverage for Certain Operations in Connection with Railroads ISO Form CA 20 70 10 01 (or a substitute form providing equivalent coverage) showing "IAIS Railway Property" as the designated job site
- ◆ Motor Carrier Act Endorsement-Hazardous materials clean up (MCS-90), if required by law

1.07.01d Workers Compensation and Employers Liability Insurance

Workers Compensation and Employers Liability insurance including coverage for, but not limited to:

- ◆ Contractor's statutory liability under the worker's compensation laws of the state(s) in which the work is to be performed. If optional under State law, the insurance shall cover all employees anyway.
- ◆ Employers' Liability (Part B) with limits of at least \$500,000 each accident, \$500,000 by disease policy limit, \$500,000 by disease each employee.

1.07.01e Umbrella or Excess Insurance

If the Contractor utilizes umbrella or excess policies, these policies shall "follow form" and afford no less coverage than the primary policy.

1.07.01f Other Requirements

Where allowable by law, all policies (applying to coverage listed above) shall contain no exclusion for punitive damages and certificates of insurance shall reflect that no exclusion exists.

Any insurance policy shall be written by a reputable insurance company acceptable to Railroad or with a current Best's Guide Rating of A- and Class VII or better, and authorized to do business in the State of Iowa. If any portion of the operation is to be subcontracted by Contractor, Contractor shall require that the subcontractor shall provide and maintain insurance coverage as set forth herein, naming Railroad as an additional insured, and shall require that the subcontractor shall release, defend and indemnify Railroad to the same extent and under the same terms and conditions as Contractor is required to release, defend and indemnify Railroad herein. Failure to provide evidence as required by this section shall entitle, but not require, Railroad to remove contractor from or deny entry of Contractor to Railroad property immediately. Acceptance of a certificate that does not comply with this section shall not operate as a waiver of Contractor's obligations hereunder. The fact that insurance (including, without limitation, self-insurance) is obtained by Contractor shall not be deemed to release or diminish the liability of Contractor including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by Railroad shall not be limited by the amount of the required insurance coverage.

Contractor agrees to waive its right of recovery against Railroad for all claims and suits against Railroad except in those instances of gross negligence or intentional misconduct. In addition, its insurers, through policy endorsement, to waive their right of subrogation against Railroad for all claims and suits. The certificate of insurance shall reflect waiver of subrogation endorsement. Contractor shall waive its right of recovery, and its insurers also waive their right of subrogation against Railroad for loss of its owned or leased property or property under its care, custody, or control. Contractor's insurance policies through policy endorsement, shall include wording which states that the policy shall be primary and non-contributing with respect to any insurance carried by Railroad. The certificate of insurance shall reflect that the above wording is included in evidenced policies.

All policy(ies) required above (excluding Workers Compensation and employers Liability), shall include a severability of interest endorsement and shall name Railroad as an additional insured using ISO Additional Insured Endorsements CG 20 26, and CA 20 48 (or substitute forms providing equivalent Coverage). The coverage provided to Railroad as additional insured shall, to the extent provided under ISO Additional Insured Endorsement CG 20 26, and CA 20 48 provide coverage for the Railroad's negligence whether sole or partial, active or passive, and shall not be limited to Contractor's liability under the indemnity provisions contained above. Severability of interest and naming Railroad as an additional insured shall be indicated on the certificate of insurance.

Contractor will not be allowed to self-insure without the prior written consent of Railroad. If granted, any deductible, self-insured retention, or other financial responsibility for claims shall be covered directly by Contractor in lieu of insurance. All Railroad liabilities that would otherwise, in accordance with the provisions of this specification, be covered by Contractor's insurance shall be covered as if Contractor elected not to include a deductible, self-insured retention or other financial responsibility for claims.

Contractor represents that this specification has been thoroughly reviewed by Contractor's insurance agent(s)/broker(s), who have been instructed by Contractor to procure the insurance coverage required by the contract documents. Allocated Loss Expense shall be in addition to all policy limits for coverages referenced above.

For purposes of this section, Railroad shall mean "IAIS Railway Inc. and the subsidiaries, successors, assigns, and affiliates of each.

1.07.02 Insurance policy(ies) and a copy of the Certificate of Liability shall be sent to Railroad's, S.F. Woodward, Chief Engineer, Iowa Interstate Railroad Company, 5900 6th Street SW, Cedar Rapids, IA, telephone number: 319.298.5436. Copy(ies) shall also be sent to the Iowa DOT, Office of Accounting, 800 Lincoln Way, Ames, IA 50010.

1.08 Company Operations.

Contractor shall be advised that trains or equipment are expected on any track, at any time, in either direction. Contractor shall become familiar with train schedules in this location and times when truck traffic increases due to intermodal transfers and structure its bid assuming intermittent track windows in this period, as defined below. All railroad tracks within and adjacent to the work are active and rail traffic over these tracks shall be maintained throughout the contract. Activities may include intermodal transfers, through moves and switching moves to local customers. Railroad traffic and operations may occur continuously throughout the day and night on these tracks and shall be maintained at all times. The Contractor shall coordinate and schedule the work so construction activities do not interfere with Railroad operations. Work windows for this contract shall be coordinated with the Engineer. Types of work windows include Conditional Work Windows and Absolute Work Windows, as defined below:

1.08.01 Conditional Work Window

A period of time that Railroad operations have priority over construction activities. When construction activities may occur on or adjacent to railroad tracks within 25 feet of the nearest track, a Railroad flagger will be required. At the direction of the Railroad flagger, upon approach of a train, and when trains are present, tracks shall be cleared (i.e., no construction equipment, materials, or personnel within 25 feet, or as directed by the Railroad, from the tracks). Conditional Work Windows are available for the contract.

1.08.02 Absolute Work Window

A period of time that construction activities are given priority over Railroad operations. During this time frame the designated tracks will be inactive for train movements and may be fouled by the Contractor. At the end of an Absolute Work Window the tracks or signals shall be completely operational for train operations and all Railroad and Federal Railroad Administration requirements, codes, and regulations for operational tracks shall be met. In the situation where the operating tracks or signals have been affected, the Railroad will perform inspections of the work prior to placing back into service. Railroad flaggers will be required for construction activities requiring an Absolute Work Window. Absolute Work Windows will not generally be granted. Any request will require a detailed explanation for Railroad review.

1.08.03 Requests

Contractor shall make requests in writing for both Absolute and Conditional Work Windows, at least two weeks in advance of the work for which the request is being made. The request shall include:

- Exactly what the work entails.
- Days and hours the work will be performed.
- Exact location of work, and proximity to the tracks.
- Type of window requested and amount of time requested.
- The Contractor's designated contact person.

Contractor shall provide written notice to the Railroad at least 48 hours before commencing work in connection with approved work windows when work will be performed within 25 feet of any track center line.

1.09 Method of Measurement and Basis of Payment

Railroad Protective Liability Insurance for Iowa Interstate Railroad Ltd. will be paid for as a Lump Sum bid item. The Contractor will be paid the Lump Sum bid item price within 30 calendar days after receipt of a signed contract, provided that all necessary certificates of insurance have been submitted to the Department per Article SP-150015a (1.07).



**SPECIAL PROVISIONS
FOR
DRILLED-IN SOLDIER PILE AND LAGGING WALL**

**Pottawattamie County
IM-NHS-080-1(462)4--03-78**

**Effective Date
October 27, 2015**

THE STANDARD SPECIFICATIONS, SERIES 2015, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

150027a.01 DESCRIPTION.

- A.** This work shall consist of furnishing and constructing drilled-in soldier pile and lagging walls in accordance with this special provision and with the lines, grades and dimensions shown on the contract drawings and per the shop drawings prepared by the specialty wall Contractor.
- B.** A drilled-in soldier pile and lagging wall is a cut retaining wall system composed of drilled-in steel soldier piles placed in pre-bored holes. The portion of the piles that will be embedded below the excavation are encased in structural concrete while controlled low strength material (CLSM) or approved equivalent encase the portion of the soldier piles above the proposed bottom of excavation. After the soldier piles are installed, timber lagging is placed between the soldier piles to transfer lateral loads from the soil to the soldier piles.
- C.** Sequence of construction for the drilled-in soldier pile and lagging wall is shown on the contract drawings. The soldier piles will be drilled in from the existing grade to the tip elevation, followed by filling of the pre-drilled hole with structural concrete and CLSM around the steel element. Sequential excavation and placement of the timber lagging will follow. As necessary, granular fill or approved equivalent will be used to fill any voids between the timber lagging and retained soil.

150027a.02 MATERIALS.

A. Steel Soldier Pile.

- 1.** Conform to Section 4167 of the Standard Specifications.
- 2.** Storing, transporting, and handling shall be performed in a manner to prevent bending stresses or other damage.

B. Concrete for Drilled in Soldier Piles.

1. All materials, proportioning, air entraining, mixing, slump, and transporting of PCC shall be according to Section 2403 of the Standard Specifications, except as modified herein.
2. Water/cement ratio: not to exceed 0.45.
3. Drilled-in soldier pile construction: use Class D PCC mixture with a slump of 8 inches \pm 1.5 inches.
4. Portland cement: meet the requirements of ASTM C 150 Type I / II and Section 4101 of the Standard Specifications.
5. Air entrainment: apply Section 2403 of the Standard Specifications.
6. Mid-range water reducer is required according to Materials I.M. 403.
7. Retarder is required according to Materials I.M. 403 to maintain workable concrete.
8. Do not use Ground Granulated Blast Furnace Slag (GGBFS).

C. Timber Lagging.

Graded for extreme fiber stress of at least 1000 psi and with the full dimension thickness shown on the shop drawings.

D. Granular Backfill Material.

Ensure the backfill material meets the requirements of Section 4133 of the Standard Specifications, except that the percent passing the No. 200 sieve is not to exceed 5.0%.

E. Controlled Low Strength Material (CLSM).

Apply Section 2552.02 of the Standard Specifications.

F. Waler.

1. Conform to Section 4167 of the Standard Specifications.
2. Storing, transporting, and handling shall be performed in a manner to prevent bending stresses or other damage.

150027a.03 CONSTRUCTION.

~~A. Contractor Qualifications.~~

~~Prior to initiating construction of the drilled-in soldier pile and lagging wall, the Contractor shall submit to the Engineer a report which identifies the Contractor's personnel who will be performing and supervising the work. The report shall include the names of an engineer-in-charge, on-site supervisors, and drill operators. The report shall also contain a list of employer's names and telephone numbers, location and dates of previous projects, and the extent of work performed. This information must be verifiable.~~

~~1. An on-site supervisor shall be present at the job site at all times during the performance of the work. The on-site supervisor shall have 1 year of construction experience in the installation of soldier pile and lagging walls and shall have supervised the successful installation of three walls. The work experience time period is computed by the addition of all documented durations of the work time on construction projects.~~

~~2. Drill operators shall have successfully installed three soldier pile and lagging walls.~~

B. Submittals.

The Contractor shall submit their proposed drilled-in soldier pile and lagging wall installation plans to the Engineer for review and approval. The submission shall consist of details required to completely describe the retaining wall system and shall include the following:

1. Shop drawings for the drilled-in soldier pile and lagging wall shown on the contract drawings at least 2 weeks before beginning the work, which indicate at a minimum, the following:
 - a. Grade and strengths of all construction materials used.
 - b. Materials, details, arrangement, and method of construction of the proposed soldier pile and lagging retaining wall system.
 - c. Details for the timber lagging.
 - d. Method for installing soldier piles, including pre-drilling procedures. Driven soldier piles are not permitted.
 - e. Mix designs for structural concrete and procedures for placing and verifying installation elevations of the structural concrete in accordance with the contract documents.
 - f. Mix design for the CLSM and procedures for placing the CLSM in accordance with the contract documents.
 - g. Details outlining additional grading to create a working platform (if needed).
 - h. Details outlining traffic control (if needed) to prevent lane closures of the existing Woodbury Avenue Bridge.
 - i. Sequence of construction.
2. Descriptive data and operating procedure for all equipment to be used. This shall include, at a minimum; machinery required to install soldier piles (including drilling procedures), timber lagging, excavate soil, and remove obstructions. Submit all pertinent equipment data including sizes, weights, capacities, torques, and operating frequencies.
3. Review and approval of the above submittals for the soldier pile and lagging retaining wall by the Engineer will not relieve the Contractor from the responsibility for the adequacy of the construction of drilled-in soldier pile and lagging wall to achieve the required results.

C. General Construction Methods.

1. Install and maintain the drilled-in soldier pile and lagging wall in accordance with the design as shown on the contract drawings and on the accepted shop drawings, and in such a manner as to minimize movement, settlement, loss of ground, removal of fines from adjacent ground, and damage to or movement of adjacent structures or utilities.
2. Ensure no gaps or pockets occur between the retained fill and timber lagging.

D. Drilled-in Soldier Pile and Lagging Construction.

1. Excavate or fill as needed to provide a suitable working pad at the proposed location where each soldier pile is to be installed, as shown on the contract drawings.
2. Predrill holes for soldier pile installation. If needed use steel casing to prevent collapse of the hole. Diameter of the pre-drilled holes shall meet the dimensions shown on the contract drawings. Prior to inserting the soldier pile, the Contractor shall make the necessary provisions to allow the Engineer to sound each hole to assure that loose soil has been removed to the Engineer's satisfaction. Once the design depth has been reached and loose soil removed from the bottom of the hole, the bottom of the hole shall be cleaned such that no more than 1 inch of loose/soft soil remains at the bottom. The soldier pile section shall then be lowered into the hole to the tip elevation specified on the contract drawings and structural concrete shall be immediately tremied to the proposed elevation shown on the contract drawings. CLSM is then to be tremied from the top elevation of the structural concrete to the existing grade. If casing is used for the construction of the soldier pile excavation, remove the

casing as concrete placement progresses and throughout concrete placement. The Contractor shall maintain the bottom of the casing at least 3 feet below the level of structural concrete. Drilling for adjacent soldier piles shall not be permitted until concrete and CLSM in adjacent drilled holes has set for a period of at least 24 hours.

3. After installation of the soldier piles, excavate along the proposed wall face in stages to the elevation shown on the contract drawings.
4. Allow no more than 5 feet of unsupported excavation prior to placing lagging. Install lagging as detailed in the contract drawings.
5. Fill any gap between the soldier pile and lagging wall and the retained fill with granular backfill specified in Section 2.

E. Construction Tolerances.

1. Ensure the drilled-in soldier pile is within 3 inches of plan position.
2. Ensure the vertical alignment of soldier pile excavation does not vary from the plan alignment by more than 1/4 inch per foot.
3. Soldier pile excavations and completed soldier piles not constructed within the required tolerances will be considered unacceptable. Correct all unacceptable excavations and completed soldier piles to the Engineer's satisfaction. Furnish materials and work necessary, including engineering analysis and redesign, to complete corrections for out of tolerance excavations (without either cost to the Contracting Authority or an extension of the completion dates of the project).

150027a.04 METHOD OF MEASUREMENT.

- A. The soldier piles will be measured from the finished tip elevation to the top of the soldier pile elevation for payment in units of linear feet, as shown on the contract drawings.
- B. The drilled-in pile will be measured for payment in units of linear feet along the axis of the drilled-in pile from the top of the concrete encasement to the bottom of the drilled-in pile, as shown on the contract drawings.
- C. Installation of timber lagging will be measured by area in units of square yards, as shown on the contract drawings. Includes all costs of furnishing and installing timber lagging, including hardwood shimming, wood spacer plates, nails and clips. No additional payment will be provided to furnish damaged or otherwise unsuitable lagging boards.
- D. Class 20 excavation will be measured by volume in units of cubic yards, as shown on the contract drawings. This includes only the excavation of soil immediately in front (a maximum of 2 feet in front of the finished face of the wall) of the soldier pile wall to install the timber lagging. Excavation does not include the excavation quantity for roadway earthwork that will take place to construct the proposed I-80 west bound lanes. Additional payment will not be provided for furnishing and placing granular backfill specified in Section 2 to fill voids between retained fill and timber lagging due to over-excavation.
- E. The waler will be measured along the horizontal distance across specified piles for payment in units of linear feet, as shown on the contract drawings.

150027a.05 BASIS OF PAYMENT.

- A.** Payment for Piles, Steel, W21X132 shall be made at the contract unit price per linear foot. The unit price bid per vertical linear foot of pile shall include all labor, material, and equipment for furnishing the pile and the cost of one splice per pile (if required).
- B.** Payment for Drilled-in Pile, 30 Inch Diameter shall be made at the contract unit price per linear foot. The unit price bid per vertical linear foot of pile shall include all labor, material and equipment for drilling and installing the drilled-in pile, including structural concrete, and incidental items include CLSM and the cost of centralizers (if necessary). The cost shall include drilled-in pile excavation from ground surface to tip of the pile, including temporary casing (if necessary), disposal of excavated material, water, installing the pile and all other materials, providing equipment for checking the dimensions, and alignment of each hole. No additional payment will be given for site preparation, establishing a working platform, or maintenance of traffic.
- C.** Payment for Timber Lagging, 3 Inch Thick will be made at the contract unit price per square yard. The unit price will constitute full compensation for providing all labor, material, and equipment required for installation.
- D.** Payment for Excavation, Class 20 will be made at the contract unit price per cubic yard. The unit price will constitute full compensation for providing all labor, material, and equipment. Incidental items are to include furnishing and placing of granular material defined in Section 2 to fill voids between retained fill and timber lagging as a result of over excavation.
- E.** Payment for Waler, Steel, W14X34 shall be made at the contract unit price per linear foot. The unit price bid per horizontal linear foot of pile shall include all labor, material, and equipment for furnishing the pile and the cost of welding and shims (if required).



UTILITY BID ATTACHMENT

County:

Pottawattamie

Project Classification:

Point 25

Project No.:

IM-NHS-080-1(374)4--03-78 (CONST)

District Utility Coordinator:

Kurtis D Shackelford

Iowa Department of Transportation

District Utility Coordinator

Highway Route Number or Name:

I 29

2210 E. 7th St.

Atlantic, IA 50022

Segment or Section:

In Council Bluffs from E of Indian Cr to E of Madison Ave &

S to 1.3 mi S of IA 92/275

Utilities:

This project comes under the provisions of IAC 761-Chapter 115.25 Iowa Code.

Some of the utility work described below is dependent on prior work being performed by the Contractor at a specific site. In such situations the Contractor shall provide the Engineer and the affected utility a good faith notice of when the utility is to start work at the site. The notice shall be given 14 calendar days in advance of when the Contractor expects to complete the prior work and the site will be available to the utility. The Contractor shall follow up with a confirmation notice to the Engineer and the utility not less than 3 working days before the site will be ready for the utility to begin its' work.

Additional detailed information regarding the location of relocated utility facilities is available on the permits issued to the utility companies. These permits can be viewed at the District office during normal working hours. Contact the **District Utility Coordinator at 712-243-7652.**

Facilities- Affected:

Black Hills Energy (Gas):

Harry Langdon Boulevard;

Relocation work will start or was started 6/10/2015.

Relocation work was completed or will be completed 7/10/2015.

Plan symbol is "G2". To install a new 2" MDPE pipe by directional bore on the east side of Harry Langdon Blvd maintaining a minimum of 4 feet of cover in bridge areas. In addition, a minimum 10 foot depth is required between the proposed and existing I-80 profile.

The 2" MDPE pipe on the west side of Harry Langdon Blvd is abandoned in place.

South of Madison Avenue; The gas main crossing I-80 south of Madison Avenue is affected but no relocation is required. The utility will remain in place so will need to be protected by the contractor during construction. A Black Hills representative can be on site during construction if needed.

Woodbury Avenue; Relocation work will start or was started 6/1/2015.

Relocation work was completed or will be completed 6/5/2015.

The gas main crossing I-80 was abandoned in place.

Please invite Chris Dewey, Chris.Dewey@blackhillscorp.com (712)325-3022 and Brad Fleming, Brad.fleming@blackhillscorp.com (402)221-2714 to the pre-construction meeting.

CenturyLink (Fiber):

Plan symbol is "T".

Harry Langdon Boulevard; the fiber crossing I-80 is affected but no relocation is required. The utility will remain in place so will need to be protected by the contractor during construction. A CenturyLink representative can be on site during construction if needed.

Woodbury Avenue; Relocation work will start or was started 7/27/2015.

Relocation work was completed or will be completed 7/31/2015.

The fiber crossing I-80 is dead and was abandoned in place.

Please invite Ed Krieger, Edward.Krieger@centurylink.com (402)572-5856 and Patrick Gilman, Patrick.Gilman@centurylink.com (712)328-7693 to the pre-construction meeting.

Council Bluffs Water Works (Water):

Harry Langdon Boulevard; The water main crossing I-80 is affected but no relocation is required. The utility will remain in place so will need to be protected by the contractor during construction. A Council Bluffs Water Works representative can be on site during construction if needed.

Woodbury Avenue;

Relocation work will start or was started 11/2/2015.

Relocation work was completed or will be completed 4/1/2016.

Plan symbol is "W". A new 16" ductile iron water main will be constructed out near the west side of the fence running parallel to Woodbury Avenue. The total length of the new line is about 2,250 feet all the way up to Madison Avenue.

The 16" ductile iron water main running under I-80 will be abandoned in place.

Please invite Brian Cady, bcady@CBWaterWorks.com (712)328-1006 Ext.1039 and Bill Wiggins, bwiggins@cbwaterworks.com to the pre-construction meeting.

Council Bluffs, City of (Sanitary Sewer):

Relocation work will start or was started ~~9/7/2015~~ 10/7/2015.

Relocation work was completed or will be completed 11/30/2015.

Plan symbol is "San". A new 8" PVC sanitary sewer pipe will start near Woodbury Ave at a new 48" manhole and run 260 feet westward to another new 48" manhole. Then continue southward across the interstate 473 feet to another new 48" manhole. Then turn eastward and run 263 feet to the last new 48" manhole. The section under the interstate will be encased with a 20" steel casing.

The 8" cast iron, steel encased sewer pipe running under I-80 will be abandoned in place.

Please invite Dave Vermillion, dvermillion@councilbluffs-ia.gov (712)328-4635 to the pre-construction meeting.

Cox Communications Inc. (Cable TV):

Harry Langdon Boulevard; A new bore under I-80 to replace the overhead line is proposed but no plan has been received at this time.

South of Madison Avenue; the fiber crossing south of Madison Avenue is affected but no relocation is required. The utility will remain in place so will need to be protected by the contractor during construction. A Cox representative can be on site during construction if needed.

Woodbury Avenue; the utility is affected but no relocation is required. The utility including the cabinet just south of the curve near station 7629+00+- will remain in place and need to be protected by the contractor during construction.

Plan symbol is "T2/F07".

Please invite Chris Myre, Chris.Myre@cox.com (402) 934-0371 and Rich Kaldahl, rich.kaldahl@cox.com (402) 934-0675 to the pre-construction meeting.

Iowa Communications Network (Local Fiber Optic):

Relocation work will start or was started 8/4/2015.

Relocation work was completed or will be completed 8/4/2015.

Plan symbol is "F02/F04". ICN spliced into the IDOT/ITS cable just south of Madison Avenue.

The ICN crossing by the swimming pool and new noise wall construction is dead and abandoned in place.

Please invite Larry Klawitter, larry.klawitter@iowa.gov (515) 725-4741 and Tony Taylor, tonytaylor@dot.iowa.gov (515) 239-1902 to the pre-construction meeting.

Iowa DOT IT (Local Fiber Optic):

Plan symbol is "F04B". The fiber crossing I-80 south of Madison Avenue is affected but no relocation is required. The utility will remain in place so will need to be protected by the contractor during construction.

MidAmerican Energy Company (Electric Distribution):

Woodbury Avenue;

~~Relocation work will start or was started 10/1/2015.~~

~~Relocation work was completed or will be completed 10/20/2015.~~

Plan symbol is "E1". Mid-American has decided to remove one pole and bore under Woodbury Avenue near station 7629+00+-. This will be moved up to the next pole to the north and bore under the street. No plan has been received to date.

Harry Langdon Boulevard; the utility crossing I-80 will have a new bore to replace the overhead line but no plan has been received to date.

Please invite Tim Theobald, trtheobald@midamerican.com (712)366-5668 and Wayne Stangl, wfstangl@midamerican.com (712)366-5639 to the pre-construction meeting.

Facilities- Not Affected:

Google Inc. (Local Fiber Optic):

Plan symbol is "F15". The fiber line will remain in place so will need to protect it during construction. A Google representative can be on site during construction if needed.

Please invite Kelley Hannan, tjlocates@aol.com (712)355-8766 and Jerry Steinhoefer, jerrytjcable@aol.com (402)709-8557 to the pre-construction meeting.

Google Inc. (Long Distance Fiber Optic):

Plan symbol is "F15". The fiber line will remain in place so will need to protect it. A Google representative can be on site during construction if needed.

Please invite Kelley Hannan, tjlocates@aol.com (712)355-8766 and Jerry Steinhoefer, jerrytjcable@aol.com (402)709-8557 to the pre-construction meeting.

-- END --

