PROJECT NO. 2011-D-1 SOUTHWEST OUTFALL DRAINAGE CENTRAL COMMUNITY COLLEGE TO THE WOOD RIVER

CONTRACT DOCUMENTS AND SPECIFICATIONS

ENGINEERING DIVISION DEPARTMENT OF PUBLIC WORKS GRAND ISLAND, NEBRASKA

AUGUST 2011



BIDDER CHECKLIST FOR

PROJECT NO. 2011-D-1 SOUTHWEST OUTFALL DRAINAGE CENTRAL COMMUNITY COLLEGE TO THE WOOD RIVER

CITY OF GRAND ISLAND, NEBRASKA

Bids must be received by the City Clerk before 2:00 p.m., (local time) on Thursday, September 13, 2012.

The follow	ving items must be completed for your bid to be considered	dered.	
Î	This completed bidder checklist form.		
Ĩ	A signed original and one copy of the bidding documents. (Pages CB-1 through CB-4)		
Ĩ	Acknowledgment of Addendum(s), if any.		
Ĩ	Firm unit pricing; or lump sum pricing as applicable. (See bid Form)		
ĺ	A certified check, cashiers check or bid bond in a separate envelope attached to the outside of the envelope containing the bid. Each envelope must be clearly marked indicating its contents. Failure to submit the necessary qualifying information in clearly marked and separate envelopes will result in your bid not being opened.		
Bidder Con	empany Name	Date	
Print – Nan	me of Person Completing Bid		
Signature			

TABLE OF CONTENTS

PROJECT NO. 2011-D-1 SOUTHWEST OUTFALL DRAINAGE CENTRAL COMMUNITY COLLEGE TO THE WOOD RIVER

CITY OF GRAND ISLAND, NEBRASKA

1	Bidder	Checklist
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- 2. Table of Contents
- 3. Advertisement to Bids
- 4. Contractor's Bid
- 5. Instructions to Bidders
- 6. Insurance Requirements
- 7. Exempt Sales Certificate
- 8. Purchasing Agent Appointment
- 9. Contract Agreement Form
- 10. Union Pacific Railroad Pipeline Crossing Agreement
- 11. Storm Water Pollution Prevention Plan (SWPPP)
- 12. Construction Dewatering Permit
- 13. Special Provisions
- 14. Division I, General Specifications
- 15. Division II Portland Concrete Cement Specifications
- 16. Division V Storm & Sanitary Sewer
- 17. Applicable Standard Plan Drawings

ADVERTISEMENT TO BIDDERS	

ADVERTISEMENT TO BIDDERS for

PROJECT NO. 2011-D-1 SOUTHWEST OUTFALL DRAINAGE CENTRAL COMMUNITY COLLEGE TO THE WOOD RIVER

for CITY OF GRAND ISLAND, NEBRASKA

Sealed bids will be **received at the office of the City Clerk**, 100 E. First Street., Grand Island, NE 68801 or P.O. Box 1968, Grand Island, Nebraska 68802 until **2:00 p.m., (Local Time), Thursday, September 13, 2012,** for the construction of the **SOUTHWEST OUTFALL DRAINAGE; CENTRAL COMMUNITY COLLEGE TO THE WOOD RIVER,** for the City of Grand Island. Bids will be publicly opened at this time in the Conference Room #1 located on 1st floor of City Hall. Bids received after specified time will be returned unopened to sender.

Bids shall be submitted on forms which will be furnished by the City. Each bidder shall submit with their bid a certified check, a cashiers check or bid bond payable to the City Treasurer in an amount no less than five percent (5%) of the bid price which shall guarantee good faith on the part of the bidder and the entering into a contract within 15 days, at the bid price, if accepted by the City. "Your certified check, cashiers check or bid bond must be submitted in a separate envelope attached to the outside of the envelope containing the bid." Each envelope must be clearly marked indicating its contents. Failure to submit the necessary qualifying information in clearly marked and separate envelopes will result in your bid not being opened or considered. Bid bonds must be issued by surety companies authorized to do business in the State of Nebraska. Please return one original and one copy of each bid sheet.

The successful bidder will be required to comply with fair labor standards as required by Nebraska R.R.S. 73-102 and comply with Nebraska R.R.S. 48-657 pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska.

Successful bidder shall comply with the City's insurance requirements, and supply performance and payment bonds. Successful bidder shall maintain a Drug Free Workplace Policy.

Bids will be evaluated by the Purchaser based on price, quality, adherence to schedule, plan and specification, economy and efficiency of operation, experience and reputation of bidder, ability, capacity, and skill of the bidder to perform contract required and adaptability of the particular items to the specific use intended.

The Purchaser reserves the right to reject any or all bids and to waive irregularities therein and to accept whichever bid that may be in the best interest of the City, at its sole discretion. The Purchaser also reserves the right to reject any section(s) of a selected bid that may be in the best interest of the City, at its sole discretion.

No bidder may withdraw their bid for a period of forty-five (45) days after date of opening bids.

Plans and specifications for use in preparing bids may be obtained from the office of the City Engineer, Second Floor, City Hall, 100 East First Street, Grand Island, NE.

TITLE VI

The City of Grand Island, in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office the Secretary, Part 21, Nondiscrimination in Federally assisted programs of the Department of Transportation issued pursuant to such Act, hereby notified all bidden that it will affirmatively insure that in any contact entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin, sex, age and disability/handicap in consideration for an award.

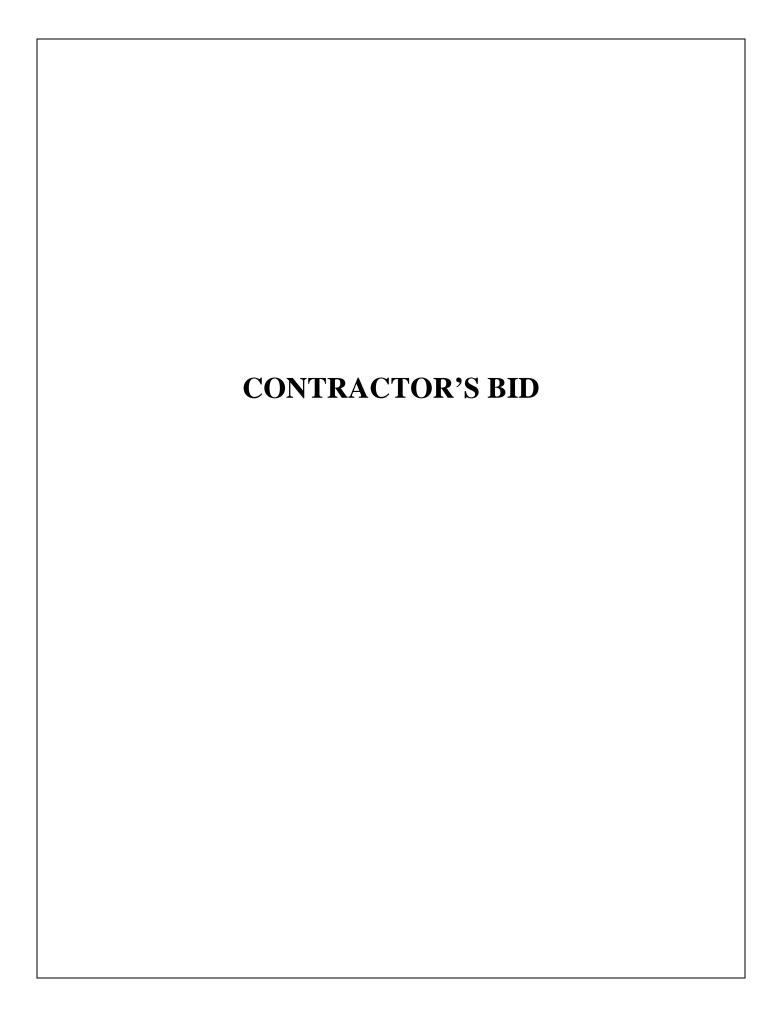
SECTION 504/ADA NOTICE TO THE PUBLIC

The City of Grand Island does not discriminate on the basis of disability in admission of its programs, services, or activities, in access to them, in treatment of individuals with disabilities, or in any aspect of their operations. The City of Grand Island also does not discriminate on the basis of disability in its hiring or employment practices.

This notice is provided as required by Title II of the Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973. Questions, complaints, or requests for additional information or accommodation regarding the ADA and Section 504 may be forwarded to the designated ADA and Section 504 compliance coordinator.

City Administrator 308-385-5444, extension 140 100 East First Street, Grand Island, NE 68801 Monday through Friday; 8:00 a.m. to 5:00 p.m.

RaNae Edwards City Clerk



PROJECT NO. 2011-D-1 SOUTHWEST OUTFALL DRAINAGE CENTRAL COMMUNITY COLLEGE TO THE WOOD RIVER

CITY OF GRAND ISLAND, NEBRASKA

CONTRACTOR'S BID

TO THE MEMBERS OF THE COUNCIL CITY OF GRAND ISLAND GRAND ISLAND, NEBRASKA

THE UNDERSIGNED BIDDER, having examined the plans, specifications, general and special conditions, and other proposed contract documents, and all addenda thereto and being acquainted with and fully understanding (a) the extent and character of the work covered by this Bid, (b) the location, arrangement, and specified requirements for the proposed work, (c) the location, character, and condition of existing streets, roads, highways, railroad, pavements, surfacing, walks, driveways, curbs, gutters, trees, sewers, utilities, drainage courses and structures, and other installations, both surface and underground which may affect or be affected by the proposed work, (d) the nature and extent of the excavations to be made and the handling and re-handling of excavated materials, (e) the location and extent of necessary or probable dewatering requirements, (f) the difficulties and hazards to the work which might be caused by storm and flood water, (g) local conditions relative to labor, transportation, hauling and rail delivery facilities, and (h) all other factors and conditions affecting or which may be affected by the work.

HEREBY PROPOSES to furnish all required materials, supplies, equipment, tools and plans, to perform all necessary labor and supervision, and to construct, install, erect, equip and complete all work stipulated in, required by and in accordance with the contract documents and the plans, specifications and other documents referred to therein (as altered, amended or modified by all addenda thereto) for and in consideration of the following prices:

Item No	Description	ESTIMATED QUANTITY	UNIT	FIRM UNIT PRICE	TOTAL PRICE
1	INSTALL OWNER SUPPLIED 60" ROUND EQUIVALENT R.C. STORM SEWER PIPE	762.00	L.F.		
2	INSTALL OWNER SUPPLIED 60" R.C. STORM SEWER PIPE	58.00	L.F.		
3	INSTALL OWNER SUPPLIED 48" R.C. STORM SEWER PIPE	222.00	L.F.		
4	JACK AND BORE 48" STEEL STORM SEWER PIPE	168.00	L.F.		
5	INSTALL OWNER SUPPLIED 36" R.C. STORM SEWER PIPE	144.00	L.F.		
6	INSTALL OWNER SUPPLIED 15" R.C. STORM SEWER PIPE	81.00	L.F.		
7	INSTALL OWNER SUPPLIED 60" ROUND EQUIVALENT R.C. FLARED END SECTION	1.00	EA.		
8	INSTALL OWNER SUPPLIED 60" R.C. FLARED END SECTION	1.00	EA.		
9	INSTALL OWNER SUPPLIED 48" R.C. FLARED END SECTION	4.00	EA.		
10	INSTALL OWNER SUPPLIED 36" R.C. FLARED END SECTION	8.00	EA.		
11	STORM SEWER MANHOLE WITH FLAP GATE	1.00	EA.		
12	STORM SEWER MANHOLE	1.00	EA.		
13	48" CONCRETE COLLAR	6.00	EA.		
14	15" CONCRETE COLLAR	2.00	EA.		

15	WET CUT-IN (WATER MAIN)	1.00	EA.	
16	12" D.I. WATER MAIN	38.00	L.F.	
17	12" GATE VALVE W/BOX (WATER MAIN)	1.00	EA.	
18	12" M.J. 45 DEG. BEND (WATER MAIN)	4.00	EA.	
19	12" M.J. SOLID SLEEVE (WATER MAIN)	1.00	EA.	
20	WET CUT-IN (SANITARY SEWER FORCE MAIN)	1.00	EA.	
21	12" D.I. SANITARY SEWER FORCE MAIN	38.00	L.F.	
22	12" M.J. 45 DEG. BEND (SANITARY SEWER FORCE MAIN) 12" M.J. TRANSITION SLEEVE (SANITARY	4.00	EA.	
23	SEWER FORCE MAIN)	2.00	EA.	
24	AIR RELEASE ASSEMBLY (SANITARY SEWER FORCE MAIN)	1.00	EA.	
25	REMOVE ASPHALT PAVEMENT & BUILD 6" P.C. CONCRETE PAVEMENT	127.00	S.Y.	
26	REMOVE ASPAHLT TRAIL & BUILD 6" P.C. CONCRETE TRAIL	169.00	S.Y.	
27	REMOVE & REPLACE 4" P.C. CONCRETE SIDEWALK	35.00	S.Y.	
28	GRAVEL SURFACE COURSE	0.90	TNS.	
29	EROSION CONTROL, TYPE 2A	1032.00	S.Y.	
30	EROSION CONTROL, TYPE 1D	788.00	S.Y.	
31	SILT FENCE	168.00	L.F.	
32	SEEDING	13.50	ACS.	
33	ROCK RIPRAP, TYPE B	317.00	TNS.	
34	RAILROAD FLAGGING	10.00	DAY	
35	DEWATERING	1000.00	L.F.	
36	DEWATERING, UPPR CROSSING	1.00	L.S	
37	COMMON EXCAVATION	18800.00	C.Y.	
38	GENERAL CLEARING AND GRUBBING	1	L.S.	

GRAND TOTAL BID		\$	
EXPERIENCE DATA:			
Each bidder shall supply the following da	ata on their experience:		
Name of Bidder:			
Project Owner/Contact/Phone No.	Project Location	Completion Date	
		_	

Additional Data:		
INSURANCE: Bidder ackno	wledges that bid includes comp	bliance with the attached insurance requirements.
ADDENDA: Bidder acknowledges that the	e following Addendums were re	eceived and considered in Bid preparation.
ADDENDUM NO.	<u>DATE</u>	<u>SIGNATURE</u>
Bidder acknowledges that preparation.	Addenda Number(s)	were received and considered in Bio
please reference and attach and supplementary terms. successful bidder to compl	a letter to bid. Reference sha Failure to outline such excep y with these specifications.	tional space is required for exception explanation all not be made to other attachments for exceptions of tions as specifically stated herein will require the line case of conflict between the bid and these diffic exceptions are listed by the bidder.
Exceptions to specifications,	pages	
		
acceptance of this Bid, and for specified requirements. No virequired) are approved by the specified required by the specified requirements.	urther agrees to complete all wo work shall commence until th the City and the contract is ex	and to enter into a contract within 15 days after ork covered by the foregoing bid in accordance with the Certificate of Insurance and bonds (when xecuted. The proposed work can commence after he work in this contract shall be completed no
which the undersigned bidde		unt ofDollars (\$) and become the property of the City of Grand Island ted and a contract be awarded to them and they fa

In submitting the bid it is understood that the right is reserved by the City to reject any and all bids; to waive irregularities therein and to accept whichever bid that may be in the best interest of the City. It is understood that this bid may not be withdrawn until after 45 days from bid opening.

to enter into a contract in the form prescribed and to furnish the required bond within 15 days, but otherwise the

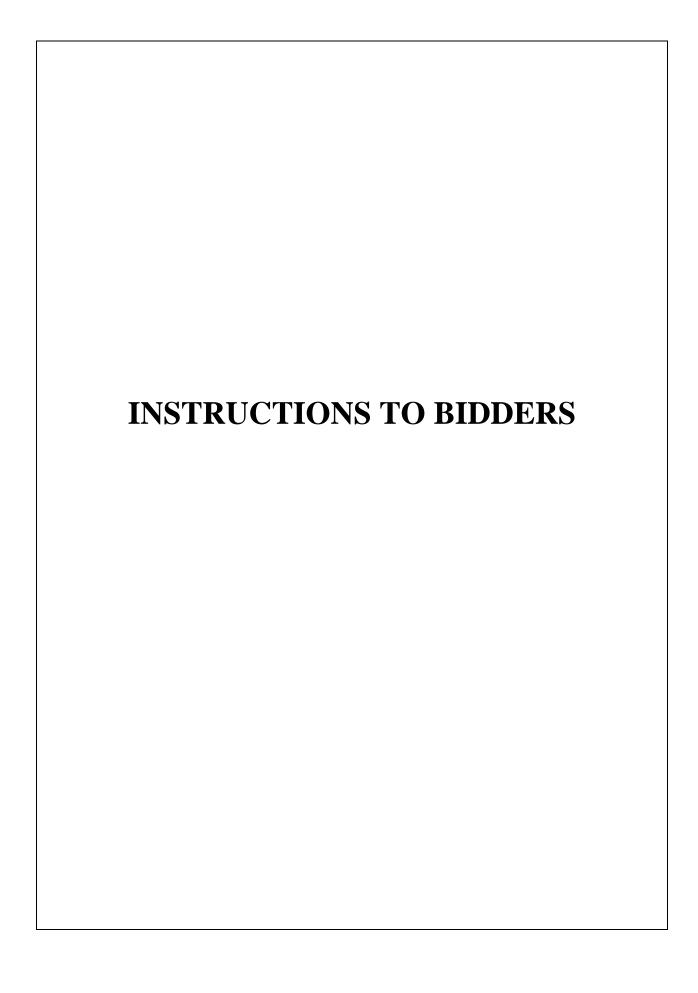
aforesaid bid guarantee will be returned upon signing the contract and delivering the approved bond.

In submitting the bid, the bidder states that bidder fully complies with, and will continue to comply with, applicable State fair labor standards as required by section 73-102 RRS, 1943 and also complies with, and will continue to comply with, section 48-657 RRS, 1943 pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska.

The undersigned bidder hereby certifies (a) that this bid is genuine and is not made in the interest of or in the behalf of any undisclosed person, firm or corporation, and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation, (b) that they have not directly or indirectly induced

FAX NUMBER OF BIDDER

or solicited any person, firm or corporation to refrain from bidding, (c) that they have not sought, by collusion or



INSTRUCTIONS TO BIDDERS

PROJECT NO. 2011-D-1 SOUTHWEST OUTFALL DRAINAGE CENTRAL COMMUNITY COLLEGE TO THE WOOD RIVER

CITY OF GRAND ISLAND, NEBRASKA

EXCEPTIONS TO SPECIFICATIONS: Each bidder shall carefully check all requirements herein set forth and shall offer items which fully comply with these requirements or shall plainly set forth all points, features, conditions, specifications. Bidder must comply with all applicable Federal, State and Local rules and regulations.

SUBMISSION OF BIDS: All bids shall be submitted using the City's bid form. Bids shall be addressed to the City Clerk and plainly marked, "BID FOR SOUTHWEST OUTFALL DRAINAGE – CENTRAL COMMUNITY COLLEGE TO THE WOOD RIVER; PROJECT NO. 2011-D-1".

INSURANCE COVERAGE: The Contractor shall purchase and maintain at their expense as a minimum insurance coverage of such types and in such amounts as are specified herein to protect Contractor and the interest of Owner and others from claims which may arise out of or result from Contractor's operations under the Contract Documents, whether such operations be by Contractor or by any subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be legally liable. Failure of Contractor to maintain proper insurance coverage shall not relieve them of any contractual responsibility or obligation.

BASE BID: The bidder is expected to base their bids on materials and items complying fully with these specifications, and in the event their names in the bid materials or items which do not conform, they will be responsible for furnishing materials and items which fully conform at no change in the bid price.

CHECKS OR BID BONDS: Checks or bid bonds of the unsuccessful bidders will be returned when their bids have been rejected and not to exceed 45 days from the date bids are opened. All bids shall remain in force for this 45-day Period. The check or bid bond of the successful bidder will be returned when the Contracts are signed by both parties and necessary bonds supplied. Should the Purchaser make an award to a Contractor who refuses to enter into Contract and furnish the required bonds within 15 days after notification of acceptance, then the bid security which has been deposited with the Purchaser will be forfeited to the Purchaser as liquidated damages.

PERFORMANCE BOND: When required, on award of the Contract, the successful Contractor shall furnish a Performance Bond which shall be in an amount equal to the full Contract price, guaranteeing faithful compliance with all requirements of the Contract Documents and complete fulfillment of the Contract, and payment of all labor, material and other bills incurred in carrying out this Contract. According to Nebraska Law, the surety company executing the Performance Bond must be authorized to do business in the State of Nebraska.

PAYMENT BOND: When required, on award of the Contract, the successful Contractor shall furnish a Payment Bond which shall be in an amount equal to the full Contract price, guaranteeing protection of all persons supplying labor and materials to the Contractor or its subcontractors for the performance of the work provided for in the Contract. In accordance with Nebraska Law, the surety company executing the Payment Bond must be authorized to do business in the State of Nebraska.

TAXES: This project for the City of Grand Island is exempt from paying local City and State Sales Tax. Refer to Exempt Sale Certificate enclosed for your information. Contractor must pay any other tax which might be applicable.

REQUESTS FOR PAYMENT: The City of Grand Island will make payments only after approval at regularly scheduled City Council meetings. These meetings typically occur the second and fourth Monday each month. Requests for payment must be received no less than ten working days prior to the designated meeting to allow proper review and consideration.

REQUEST FOR INTERPRETATION: If any person, contemplating submitting a bid for this Contract is in doubt as to the true meaning of any part of the specifications or other proposed Contract documents, they may submit to the Purchasing Division of the City Attorney's Office a written request for an interpretation thereof. The person submitting the request will be responsible for its prompt delivery. Any interpretation of the proposed documents will be made only by addendum only issued and/or delivered to each person receiving a set of such documents. The addenda upon closing shall become a part of the Contract. The City will not be responsible for any other explanation or interpretation of the proposed documents.

TIME OF COMPLETION: This work in this contract shall be completed no later than **June 7, 2013.**

CLEANING UP: Contractor shall maintain a clean and safe work area while on site, particularly since pedestrian traffic will be prevalent during construction activities.

ADDENDA: Any addendum to the specifications issued during the time allowed for preparation of bids shall be covered in the bid and shall become a part of the specifications. One copy of each addendum issued before the date of the letting will be sent to all bidders. One signed copy is to be returned immediately to the Purchasing Department (or other department if so designated in the Addendum) as acknowledgment of receipt.

MODIFICATION OF BIDS: Bids may be modified or withdrawn by an appropriate document duly executed in the manner that a bid must be executed and delivered to the place where bids are to be submitted at any time prior to the final time set for receiving bids. Bidders may modify or withdraw bids by Fax communication at any time prior to the time set for receiving bids provided this instruction is positively identified. Any Fax modification should not reveal the amended bid price but should provide only the addition, subtraction or other modifications. A duly-executed document confirming the Fax modification shall be submitted within three days after bids are opened.

BID DATA: Bidders shall submit bid data, if required, on items offered in the Bid by **furnishing one original and one copy of the completed Contractor's Bid form**. The bid sheets shall be filled out legibly in ink to permit reproduction.

BIDDER SECURITY: Bidder security, when required, shall be enclosed in a special envelope marked, "BIDDER SECURITY/BID FOR SOUTHWEST OUTFALL DRAINAGE – CENTRAL COMMUNITY COLLEGE TO THE WOOD RIVER; PROJECT NO. 2011-D-1". The envelope shall contain only a cashier's check, certified check or bidder's bond.

This special envelope shall be attached to a sealed envelope containing the bid and any other bid materials. This second envelope shall be "BID FOR SOUTHWEST OUTFALL DRAINAGE – CENTRAL COMMUNITY COLLEGE TO THE WOOD RIVER; PROJECT NO. 2011-D-1" and be addressed to the City Clerk." Bids of an incomplete nature or subject to multiple interpretation may, at the option of the Purchaser, be rejected as being irregular.

FINANCIAL STATEMENT: If requested the bidder shall furnish a complete financial statement signed by the bidder, if an individual, by all partners if the bidder is a partnership and, by the President or Secretary, if the bidder is a corporation.

DRUG FREE WORKPLACE POLICY: Bidders shall furnish, upon request, a copy of their Drug Free workplace Policy.

EQUAL EMPLOYMENT OPPORTUNITY: The Contractor agrees that during the performance of this Contract not to discriminate in hiring or any other employment practice on the basis of race, color, religion, sex, disability, age or national origin, and to comply with Executive Order 11,246 of September 24, 1965, and the rules, regulations and relevant orders of the Secretary of Labor, and Chapter 20 of the Reissue Revised Statutes of the State of Nebraska.

LOCAL CONDITIONS: Each bidder shall have an authorized representative visit the site of the work and thoroughly inform them of all conditions and factors which would affect the work and the cost thereof, including the arrangement and conditions of existing or proposed structures affecting or affected by the proposed work; the procedure necessary for maintenance of uninterrupted operation; the availability and cost of labor and facilities for transportation, handling, and storage of materials and equipment.

It must be understood and agreed that all such factors have been investigated and considered in the preparation of every bid submitted. No claims for financial adjustment (to any Contract awarded for the work under these Specifications and documents) will be permitted by the City, which are based on lack of such prior information, or its effect on the cost of the work.

CORRESPONDENCE: Correspondence regarding drawings, instruction manuals, and other engineering data shall be clearly marked "FOR ENGINEERING DEPARTMENT" and sent through:

City of Grand Island
Public Works Department/Engineering Division
P.O. Box 1968
Grand Island, NE 68802-1968
(308) 385-5444, Extension 260
publicworks@grand-island.com
Attn: Terry Brown

LOCAL BIDDER PREFERENCE: In case of tied low bids, all other things being equal, preference shall be given in the following order:

- 1. To those bidders who manufacture their products within the limits of the City of Grand Island.
- 2. To those bidders who manufacture their products within the limits of the County of Hall.
- 3. To those bidders who package, process, or through some other substantial operation have employees and facilities for these purposes in the City of Grand Island.
- 4. To those bidders who package, process, or through some other substantial operation have employees and facilities for these purposes in the County of Hall.
- 5. To those bidders who maintain a bona fide business office in the City of Grand Island, whose products may be made outside the confines of the City of Grand Island.
- 6. To those bidders who maintain a bona fide business office in the County of Hall, whose products may be made outside the confines of the County of Hall.
- 7. To those bidders whose commodities are manufactured, mined, produced, or grown within the State of Nebraska, and to all firms, corporations, or individuals doing business as Nebraska firms, corporations or individuals, when quality is equal or better, and delivered price is the same or less than the other bids received.
- 8. To those bidders whose commodities are manufactured, mined, produced, or grown within the United States of America, and to all firms, corporations, or individuals doing business as firms registered in states other than Nebraska, when quality is equal or better, and delivered price is the same or less than the other bids received.

INSURANCE	REQUIREMENTS	

MINIMUM INSURANCE REQUIREMENTS

PROJECT NO. 2011-D-1 SOUTHWEST OUTFALL DRAINAGE CENTRAL COMMUNITY COLLEGE TO THE WOOD RIVER

CITY OF GRAND ISLAND, NEBRASKA

You are urged to include in your bid compliance with the City's minimum insurance requirements; however, any non-compliance must be detailed in the Exceptions Section of the bid. Compliance with the specified OCP coverage is mandatory.

The Bidder shall take out, throughout the duration of the Contract, insurance of such types and in such amounts as may be necessary to protect themselves and the interests of the City against all hazards or risks of loss as hereinafter specified. This insurance shall cover all aspects of the Bidder's operations to the fullest extent possible and provide no exclusions relative to any aspect of the work being performed for the City. The form and limits of such insurance, together with the underwriter thereof in each case, shall be approved by the City but regardless of such approval, it shall be the responsibility of the Bidder to maintain adequate insurance coverage at all times. Failure of the Bidder to maintain adequate coverage shall not relieve them of any contractual responsibility or obligation.

The successful bidder shall obtain insurance from companies authorized to do business in Nebraska of such types and in such amounts as may be necessary to protect the bidder and the interests of the City against hazards or risks of loss as hereinafter specified. This insurance shall cover all aspects of the Bidder's operations and completed operations. Failure to maintain adequate coverage shall not relieve bidder of any contractual responsibility or obligation. Minimum insurance coverage shall be the amounts stated herein or the amounts required by applicable law, whichever are greater.

1. WORKERS COMPENSATION AND EMPLOYER'S LIABILITY

This insurance shall protect the Bidder against all claims under applicable State workers compensation laws. This insurance shall provide coverage in every state in which work for this project might be conducted. The liability limits shall not be less than the following:

Workers Compensation Employers Liability Statutory Limits \$100,000 each accident \$100,000 each employee \$500,000 policy limit

2. BUSINESS AUTOMOBILE LIABILITY

This insurance shall be written in comprehensive form and shall protect the Bidder, Bidder's employees, or subcontractors from claims due to the ownership, maintenance, or use of a motor vehicle. The liability limits shall be not less than the following:

Bodily Injury & Property Damage

\$ 500,000 Combined Single Limit

3. COMPREHENSIVE GENERAL LIABILITY

The comprehensive general liability coverage shall contain no exclusion relative to explosion, collapse, or underground property. The liability limits shall be not less than the following:

Bodily Injury & Property Damage

\$ 500,000 each occurrence \$1,000,000 aggregate

4. UMBRELLA LIABILITY INSURANCE

This insurance shall protect the Bidder against claims in excess of the limits provided under employer's liability, comprehensive automobile liability, and commercial general liability policies. The umbrella policy shall follow the form of the primary insurance, including the application of the primary limits. The liability limits shall not be less than the following:

Bodily Injury & Property Damage

\$1,000,000 each occurrence \$1,000,000 general aggregate

5. ADDITIONAL REQUIREMENTS

The City may require insurance covering a Bidder or subcontractor more or less than the standard requirements set forth herein depending upon the character and extent of the work to be performed by such Bidder or subcontractor.

Insurance as herein required shall be maintained in force until the City releases the Bidder of all obligations under the Contract.

The Bidder shall provide and carry any additional insurance as may be required by special provisions of these specifications.

6. CERTIFICATE OF INSURANCE

Satisfactory certificates of insurance shall be filed with the City prior to starting any work on this Contract. The certificates shall show the City as an additional insured on all coverage except Workers Compensation. The certificate shall state that thirty (30) days written notice shall be given to the City before any policy is cancelled (strike the "endeavor to" wording often shown on certificate forms). If the bidder cannot have the "endeavor to" language stricken, the bidder may elect to provide a new certificate of insurance every 30 days during the contract. Bidder shall immediately notify the City if there is any reduction of coverage because of revised limits or claims paid which affect the aggregate of any policy.

EXEMPT SALES CERTIFICATE	



Nebraska Resale or Exempt Sale Certificate for Sales Tax Exemption

· Read instructions on reverse side/see note below

FORM

NAME AND MAILING ADDRESS OF PURCHASER	NAME AND MAILING ADDRESS OF SELLER		
Name	Name		
Street or Other Mailing Address	Street or Other Mailing Address		
City State Zip Code	City State Zip Code		
Check Type of Certificate Single Purchase Blanket If blanket is checked	, this certificate is valid until revoked in writing by the purchaser.		
I hereby certify that the purchase, lease, or rental by the above pu	rchaser is exempt from the Nebraska sales tax for the following reason:		
Check One ☐ Purchase for Resale (Complete Section A) ☐ Exempt	Purchase (Complete Section B) Contractor (Complete Section C)		
SECTION A — Nebras			
I hereby certify that the purchase, lease, or rental of from the above seller is exempt from the Nebraska sales tax as a purchase form or condition in which purchased, or as an ingredient or component pa			
I further certify that we are engaged in business as a: Who of Description of Product Sold, Leased, or Rented	lesaler Retailer Manufacturer Lessor		
and hold Nebraska Sales Tax Permit Number 01-	If None, State Reason		
or Foreign State Sales Tax Number	State		
SECTION B—Nebraska	Exempt Sale Certificate		
The basis for this exemption is exemption category (Insert a) If exemption category 2 or 5 is claimed, enter the following information (Item(s) Purchased)	opropriate category as described on reverse of this form.) on: Intended Use of Item(s) Purchased		
If exemption categories 3 or 4 are claimed, enter the Nebraska Exemp	tion Certificate number. 05-		
If exemption category 6 is claimed, seller must enter the following inf	ormation and sign this form below:		
Description of Item(s) Sold Date of Seller's Origina	-		
SECTION C—For	Contractors Only		
1. Purchases of Building Materials or Fixtures:			
As an Option 1 or Option 3 contractor, I hereby certify that purchases of Nebraska sales tax. My Nebraska Sales or Consumer's Use Tax Permit N			
2. Purchases Made Under Purchasing Agent Appointment on beh	alf of:		
Pursuant to an attached Purchasing Agent Appointment and Delegation of building materials, and fixtures are exempt from Nebraska sales tax.	of Authority for Sales and Use Tax, Form 17, I hereby certify that purchases		
Any purchaser, or their agent, or other person who completes this certificate for any purchase which is other than for resale, lease, or rental in the regular course of the purchaser's business, or is not otherwise exempted from the sales and use tax under Neb. Rev. Stat. §§77-2701 through 77-27,135, shall in addition to any tax, interest, or penalty otherwise imposed, be subject to a penalty of \$100 or ten times the tax, whichever amount is larger, for each instance of presentation and misuse. With regard to a blanket certificate, this penalty shall apply to each purchase made during the period the blanket certificate is in effect. Under penalties of law, I declare that I am authorized to sign this certificate, and to the best of my knowledge and belief, it is correct and complete.			
sign here Authorized Signature	Title Date		
Authorized Signature	ritie		

NOTE: Sellers must keep this certificate as part of their records. DO NOT SEND TO THE NEBRASKA DEPARTMENT OF REVENUE. Incomplete certificates cannot be accepted.

INSTRUCTIONS

WHO MAY ISSUE A RESALE CERTIFICATE. Form 13, Section A, is to be issued by persons or organizations making purchases of property or taxable services in the **normal** course of their business for the purpose of resale either in the form or condition in which it was purchased, or as an ingredient or component part of other property.

WHO MAY ISSUE AN EXEMPT SALE CERTIFICATE.

Form 13, Section B can only be issued by persons or organizations exempt from payment of the Nebraska sales tax by qualifying for one of the six enumerated Categories of Exemption (see below). Nonprofit organizations that have a 501(c) designation and are exempt from federal and state income tax are not automatically exempt from sales tax. Only the entities listed in the referenced regulations are exempt from paying Nebraska sales tax on their purchases when the exemption certificate is properly completed and provided to the seller. Organizations claiming a sales tax exemption may do so only on items purchased for their own use. For health care organizations, the exemption is limited to the specific level of health care they are licensed for. The exemption is not issued to the entire organization when multiple levels of health care or other activities are provided or owned by the organization. Items purchased by an exempt organization that will be resold must be supported by a properly completed Nebraska Resale Certificate, Form 13, Section A.

Indicate the category which properly reflects the basis for your exemption. Place the corresponding number in the space provided in Section B. If category 2 through 6 is the basis for exemption, you must complete the information requested in Section B.

Nebraska Sales and Use Tax Reg-1-013, Sale for Resale — Resale Certificate, and Reg-1-014, Exempt Sale Certificate, provide additional information on the proper issuance and use of this certificate. These and other regulations referred to in these instructions are available on our Web site: www.revenue.ne.gov/legal/regs/slstaxregs.

Use Form 13E for purchases of energy sources which qualify for exemption. Use Form 13ME for purchases of mobility enhancing equipment on a motor vehicle.

CONTRACTORS. Form 13, Section C, Part 1, must be completed by contractors operating under Option 1 or Option 3 to document their tax-free purchase of building materials or fixtures from their suppliers. Section C, Part 2, may be completed to exempt the purchase of building materials or fixtures pursuant to a <u>Purchasing Agent Appointment</u>, Form 17. See the <u>contractor information guides</u> on our Web site **www.revenue.ne.gov** for additional information.

WHERE TO FILE. Form 13 is given to the seller at the time of the purchase of the property or service or when sales tax is due. The certificate must be retained with the seller's records for audit purposes. Do not send to the Department of Revenue.

SALES TAX NUMBER. A purchaser who completes Section A and is engaged in business as a wholesaler or manufacturer is not required to provide an identification number. Out-of-state purchasers can provide their home state sales tax number. Section B does not require an identification number when exemption category 1, 2, or 5 is indicated.

PROPERLY COMPLETED CERTIFICATE. A purchaser must complete a certificate before issuing it to the seller. To properly complete the certificate, the purchaser must include: (1) identification of the purchaser and seller, (2) a statement whether the certificate is for a single purchase or is a blanket certificate,

(3) a statement of basis for exemption including completion of all information for the basis chosen, (4) the signature of an authorized person, and (5) the date the certificate was issued.

PENALTIES. Any purchaser who gives a Form 13 to a seller for any purchase which is other than for resale, lease, or rental in the **normal** course of the purchaser's business, or is not otherwise exempted from sales and use tax under the Nebraska Revenue Act, shall be subject to a penalty of \$100 or ten times the tax, whichever amount is larger, for each instance of presentation and misuse.

Any purchaser, or their agent, who fraudulently signs a Form 13 may be found guilty of a Class IV misdemeanor.

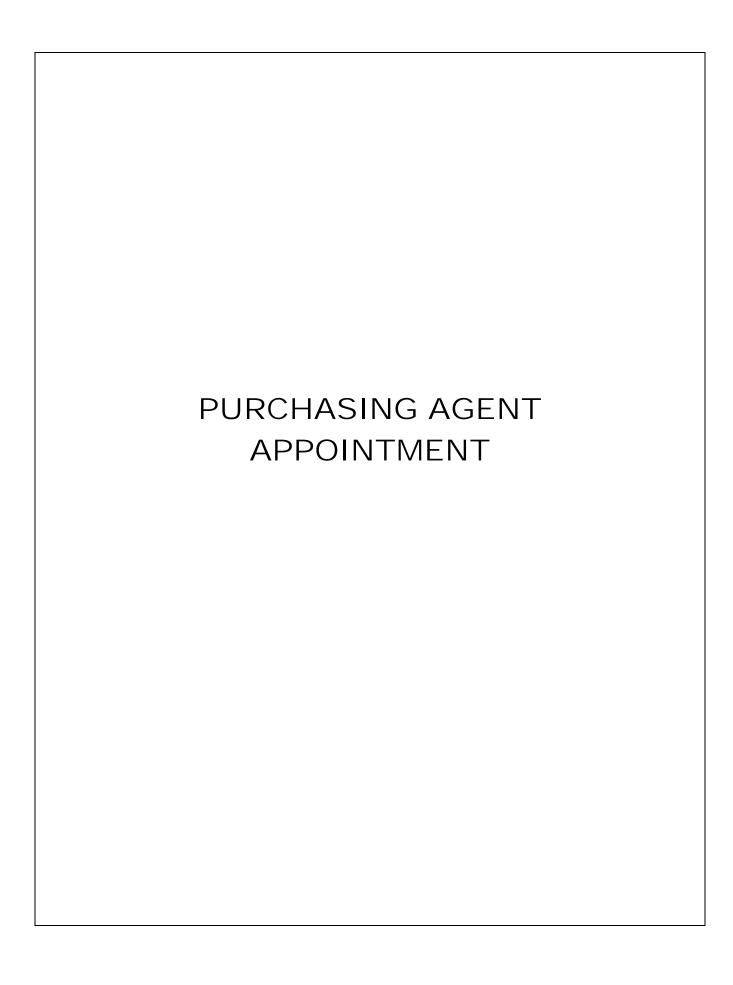
CATEGORIES OF EXEMPTION

 Purchases made directly by certain governmental agencies identified in Nebraska Sales and Use Tax Reg-1-012, Exemptions; Reg-1-072, United States Government and Federal Corporations; and Reg-1-093, Governmental Units, are exempt from sales tax. A list of specific governmental units are provided in the above regulations. Governmental units are not assigned exemption numbers.

Sales to the United States government, its agencies, and corporations wholly owned by the United States government are exempt from sales tax. However, sales to institutions chartered or created under federal authority, but which are not directly operated and controlled by the United States government for the benefit of the public, generally are taxable. Construction projects for federal agencies have specific requirements, see Reg-1-017 Contractors.

Purchases that are **not** exempt from Nebraska sales and use tax include, but are not limited to, governmental units of other states, sanitary and improvement districts, urban renewal authorities, rural water districts, railroad transportation safety districts, and county historical or agricultural societies.

- 2. Purchases when the intended use renders it exempt as set out in paragraph 012.02D of Reg-1-012, Exemptions. Complete the description of the item purchased and the intended use as required on the front of Form 13. Sellers of **repair parts** for agricultural machinery and equipment cannot accept a Form 13 to exempt such sales from tax.
- **3.** Purchases made by organizations that have been issued a Nebraska Exempt Organization Certificate of Exemption are exempt from sales tax. Reg-1-090, Nonprofit Organizations; Reg-1-091, Religious Organizations; and Reg-1-092, Educational Institutions, identify such organizations. These organizations will be issued a Nebraska state exemption identification number. This exemption number must be entered in Section B of the Form 13.
- **4.** Purchases of common or contract carrier vehicles and repair and replacement parts for such vehicles.
- **5.** Purchases of manufacturing machinery or equipment by a taxpayer engaged in business as a manufacturer for use predominantly in manufacturing. This includes the installation, repair, or maintenance of such qualified manufacturing machinery or equipment (see <u>Revenue Ruling 01-08-2</u>).
- **6.** A sale that qualifies as an occasional sale, such as a sale of depreciable machinery and equipment productively used by the seller for more than one year and the seller previously paid tax on the item. The **seller** must sign and give the exemption certificate to the purchaser. The certificate must be retained by the purchaser for audit purposes (see Reg-1-014, Exempt Sale Certificate).





Purchasing Agent Appointment

and Delegation of Authority for Sales and Use Tax

17

		PURCHASING AC	SENT APPOINTMENT		
Name and Address of Prime Contractor			Name and Address of Governmental Unit or Exempt Organization		
Name			Name		
Street or Other Mailing Addr	ess		Street or Other Mailing	Address	
City	State	Zip Code	City	State	Zip Code
N	ame and Location of Project			Appointment Information	
lame			Effective Date (see Instructions)		
Street or Other Mailing Addr	ess		Expiration Date		
City	State	Zip Code	Nebraska Exemption No	umber (Exempt Organizations Only)	
its agent to pu	dersigned governmental unit or exemurchase and pay for building material derivatives and pay for building material unit or E	als that will be annexed to	the above-named contractor real estate by them into the	or and the contractor's delegated subco ne tax exempt construction project stat	ontractors as ed above.
	DELE	GATION OF PRIME	CONTRACTOR'S AUTH	HORITY	
Name	e and Address of Subcontrac			Delegation Information	
lame			Effective Date	<u> </u>	
Street or Other Mailing Address			Expiration Date		
City	State	Zip Code	Portion of Project		
to the above-r	lersigned prime contractor hereby denamed subcontractor. Prime Contractor or Authorized Rep			ie named governmental unit or exempt	_
Signature of	Prime Contractor or Authorized Rep	presentative	Title		Date

INSTRUCTIONS

WHO MUST FILE. Any governmental unit or organization that is **exempt** from sales and use tax may appoint as its agent a prime contractor to purchase building materials and/or fixtures that will be annexed to property that belongs to or will belong to the governmental unit or exempt organization pursuant to a construction contract with the governmental unit or exempt organization. The appointment of the prime contractor as its agent is completed by issuing a Purchasing Agent Appointment and Delegation of Authority for Sales and Use Tax, Form 17, to the prime contractor. The Form 17 is required to be given to the contractor **BEFORE** he or she annexes building materials. The governmental unit or exempt organization must identify the project (e.g., east wing, chapel construction, or new school auditorium). Most

nonprofit organizations are NOT exempt from sales tax in Nebraska. In addition, not all governmental units are exempt from Nebraska sales tax. Refer to <u>Contractor Information</u> on our Web site for additional information on exempt entities. A contractor can confirm the exempt status of a governmental unit or exempt organization by contacting the Nebraska Department of Revenue.

The exemption from the payment of the Nebraska and local option sales and use taxes only applies if the governmental unit or exempt organization directly, or through its contractor, pays for the building materials. **IMPORTANT NOTE:** When an organization that requires licensure in order to be exempt (i.e., nonprofit hospitals), but is not licensed at the time of the construction project, the exempt organization **CANNOT**

issue either a purchasing agent appointment or an exemption certificate. If the exempt organization becomes licensed upon completion of the project, it may apply for a refund of the tax paid or collected by the contractors.

WHENTO FILE. A prime contractor engaging in a construction project with a governmental unit or exempt organization must receive a properly completed and signed Form 17 BEFORE any building materials are annexed. If Form 17 is not issued, the contractor must pay the sales and use taxes and the governmental unit or exempt organization may obtain a refund of the taxes paid by the contractor.

WHERE TO FILE. A copy of the completed form should be retained by the governmental unit or exempt organization issuing the Form 17. The original is to be retained by the prime contractor. Copies of this form must be made by the prime contractor for delegation purposes to any subcontractors working on the project identified on this form.

APPOINTMENT INFORMATION. Enter the dates the purchasing agent appointment will become effective and when it will expire. This appointment will not allow any purchases without payment of the tax by the prime contractor or subcontractor before the effective date or after the expiration date. The dates the delegation becomes effective and the expiration dates must be completed. The phrase "upon completion" or similar phrase is not acceptable as an expiration date. The governmental unit or exempt organization may need to issue another Form 17 if the project is not completed within the prior "effective" and "expiration" dates. Exempt organizations must enter their Nebraska Sales and Use Tax Exemption number.

DELEGATION OF PRIME CONTRACTOR'S AUTHORITY.

The prime contractor may delegate his or her authority to act as the purchasing agent of the governmental unit or exempt organization to a subcontractor. The prime contractor must complete his or her copy of Form 17 for each subcontractor who is delegated authority to act as a purchasing agent. Reproductions of this delegation must be provided to the subcontractor, who must retain a copy for his or her records, and to the governmental unit or exempt organization.

Enter the dates the delegation of the subcontractor will become effective, when it will expire, and the portion of the project delegated. This delegation will not allow any purchases without payment of the tax by the subcontractor before the delegation date or after the expiration date. Any further delegation from a subcontractor to additional subcontractors must be delegated by providing a copy of the Form 17 that they received from the prime contractor and attaching it to a separate Form 17 with any further delegation to other subcontractors. The purchasing agent appointment is limited to the contractor's purchase of building materials and/or fixtures for the specific project and is only valid during the appointment dates shown on the Form 17.

EXEMPT SALE CERTIFICATE. A prime contractor who has been appointed to act as a purchasing agent by a governmental unit or exempt organization, and who hires a subcontractor operating as an Option 1 contractor, must provide to that subcontractor a completed copy of Form 17 and a Nebraska Resale or Exempt Sale Certificate, Form 13, with Section C,

Part 2, completed. The subcontractor will retain these forms in his or her records, and will not charge the contractor sales tax on any portion of the invoice involving the annexation of materials to the specific project identified on the Form 17. If these forms are not provided to the subcontractor operating under Option 1, the subcontractor must collect and remit sales tax on the charge for the separately stated building materials portion of the invoice. If the Option 1 subcontractor does not separately state the charge for the building materials from contractor labor, then the entire charge is taxable to the prime contractor.

Contractors operating under Option 2 (maintaining a tax-paid inventory) who have been issued a Form 17 from a governmental unit or an exempt organization, must furnish each vendor a copy of the Form 17 and a Form 13, completing Section C, Part 2, when purchasing building materials that will be annexed to real estate. Forms 13 and 17 must be retained with the vendor's and contractor's records for audit purposes. A contractor or subcontractor may reproduce copies of these documents which will be furnished to the vendors for each invoice or order made by them.

Invoices from vendors for the purchase of building materials by the contractor as purchasing agent, or the authorized subcontractor, must clearly identify that such purchase is for the specific Form 17 project.

CREDIT/REFUND OF SALES AND USETAX. A contractor or subcontractor who has been appointed as a purchasing agent before any materials are annexed, may withdraw sales or use tax-paid materials from inventory that will be annexed to real estate or used to repair property annexed to real estate and receive a credit for the sales or use tax amount previously paid on those materials.

The contractor or subcontractor may take a credit either against his or her current tax liability, or file a <u>Claim for Overpayment of Sales and Use Tax</u>, Form 7, and receive a refund of the sales or use tax paid on those materials.

TOOLS, EQUIPMENT, AND SUPPLIES. The purchase, rental, or lease of tools, supplies, or equipment (i.e., scaffolding, barricades, machinery, etc.) by a contractor for use in the completion of an exempt project CANNOT be purchased tax free, even if the contractor has been issued a Form 17. These items do not become annexed to the real estate.

OPTION 1 CONTRACTOR ONLY. If an Option 1 contractor is the **only** contractor involved in performing work for a governmental unit or exempt organization, a Form 17 is NOT required. The Option 1 contractor must only obtain a Form 13, Section B, from the exempt project owner.

PENALTY. Any person who signs this document with the intent to evade payment of tax is liable for the sales and use tax, interest, and penalty, and may be found guilty of a misdemeanor.

AUTHORIZED SIGNATURE. The purchasing agent appointment must be signed by an officer of the exempt organization or proper government official. The delegation of prime contractor's authority must be signed by the owner, partner, corporate officer, or other individual authorized to sign by a power of attorney on file with the Nebraska Department of Revenue.

CONTRACT A	GREEMENT	

CONTRACT AGREEMENT

THIS AGREEMENT made and entered into thisday of, 2012, by and between, hereinafter called the Contractor, and the City of Grand Island, Nebraska, hereinafter called the City.
WITNESSETH:
THAT, WHEREAS, in accordance with law, the City has caused contract documents to be prepared and an advertisement calling for bids to be published, for construction of SOUTHWEST OUTFALL DRAINAGE ; CENTRAL COMMUNITY COLLEGE TO THE WOOD RIVER ; PROJECT NO. 2011-D-1 ; and
WHEREAS, the City, in the manner prescribed by law, has publicly opened, examined, and canvassed the proposals submitted, and has determined the aforesaid Contractor to be the lowest responsive bidder, and has duly awarded to the said Contractor a contract therefore, for the sum or sums named in the Contractor's bid, a copy thereof being attached to and made a part of this contract;
NOW, THEREFORE, in consideration of the compensation to be paid to the Contractor and of the mutual agreements herein contained, the parties have agreed and hereby agree, the City for itself and its successors, and the Contractor for itself or themselves, and its or their successors, as follows:
ARTICLE I. That the Contractor shall (a) furnish all tools, equipment, superintendence, transportation, and other construction materials, services and facilities; (b) furnish, as agent for the City, all materials, supplies and equipment specified and required to be incorporated in and form a permanent part of the completed work; (c) provide and perform all necessary labor; and (d) in a good substantial and workmanlike manner and in accordance with the requirements, stipulations, provisions, and conditions of the contract documents as listed in the attached General Specifications, said documents forming the contract and being as fully a part thereof as if repeated verbatim herein, perform, execute, construct and complete all work included in and covered by the City's official award of this contract to the said Contractor, such award being based on the acceptance by the City of the Contractor's bid;
ARTICLE II. That the City shall pay to the contractor for the performance of the work embraced in this contract and the contractor will accept as full compensation therefore the sum (subject to adjustment as provided by the contract) of
ARTICLE III. The contractor hereby agrees to act as agent for the City in purchasing materials and supplies for the City for this project. The City shall be obligated to the vendor of the materials and supplies for the purchase price, but the contractor shall handle all payments hereunder on behalf of the City. The vendor shall make demand or claim for payment of the purchase price from the City by submitting an invoice to the contractor. Title to all materials and supplies purchased hereunder shall vest in the City directly from the vendor. Regardless of the method of payment, title shall vest immediately in the City. The contractor shall not acquire title to any materials and supplies incorporated into the project. All invoices shall bear the contractor's name as agent for the City. This paragraph will apply only to these materials and supplies actually incorporated into and becoming a part of the finished product of SOUTHWEST OUTFALL DRAINAGE; CENTRAL COMMUNITY COLLEGE TO THE WOOD RIVER; PROJECT NO. 2011-D-1.
ARTICLE IV. That the contractor shall start work as soon as possible after the contract is signed and the required

bond is approved, and that the work in this contract shall be completed no later than **June 7**, **2013**.

<u>ARTICLE V.</u> The City of Grand Island, Nebraska operates on a fiscal year beginning October 1st and ending on the following September 30th. It is understood and agreed that any portion of this agreement which will be performed in a future fiscal year is contingent upon the City Council adopting budget statements and appropriations sufficient to fund such performance.

<u>ARTICLE VI.</u> The Contractor agrees to comply with all applicable State fair labor standards in the execution of this contract as required by Section 73-102, R.R.S. 1943. The Contractor further agrees to comply with the provisions of Section 48-657, R.R.S. 1943, pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska.

<u>ARTICLE VII.</u> During the performance of this contract, the Contractor and all subcontractors agree not to discriminate in hiring or any other employment practice on the basis of race, color, religion, sex, national origin, age or disability and to comply at all times with all applicable state and federal civil rights acts and executive orders of the President of the United States.

<u>ARTICLE VIII.</u> Every public contractor and their subcontractors who are awarded a contract by the City for the physical performance of services within the State of Nebraska shall register with and use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska.

ARTICLE IX. City Code states that it is unethical for any person to offer, give or agree to give any City employee or former City employee, or for any City employee or former City employee to solicit, demand, accept, or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, or preparation of any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter, pertaining to any program requirement or a contract or subcontract, or to any solicitation or proposal therefore. It shall be unethical for any payment, gratuity, or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor or any person associated therewith, as an inducement for the award of a subcontract or order.

<u>ARTICLE X.</u> The City reserves the right to terminate this contract at any time upon 60 days notice. If the contract is terminated, the contractor will be compensated for any services rendered to date of termination.

ARTICLE XI. FAIR EMPLOYMENT PRACTICES: Each proposer agrees that they will not discriminate against any employee or applicant for employment because of age, race, color, religious creed, ancestry, handicap, sex or political affiliation.

ARTICLE XII. LB 403: Every public consultant and his, her or its subconsultants who are awarded an agreement by the City for the physical performance of services within the State of Nebraska shall register with and use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska.

IN WITNESS WHEREOF, the parties hereto have executed this Contract Agreement as of the date and year first above written.

By	Date
Title	
CITY OF GRAND ISLAND, NEBRASKA,	
ByMayor	Date
Attest: City Clerk	
The contract and bond are in due form according to law and are hereby approved.	
	Date

Contractor:

Attorney for the City

APPENDIX A – TITLE VI NON-DISCRIMINATION -

During the performance of this agreement, the consultant, for itself, its assignees and successors in interest (hereinafter referred to as the "consultant") agrees as follows:

- (1) **Compliance with Regulations:** The consultant shall comply with the Regulation relative to nondiscrimination in Federally-assisted programs of the Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, and the Federal Highway Administration (hereinafter "FHWA") Title 23, Code of Federal Regulations, Part 200 as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this agreement.
- (2) **Nondiscrimination:** The Consultant, with regard to the work performed by it during the agreement, shall not discriminate on the grounds of race, color, or national origin, sex, age, and disability/handicap in the selection and retention of subconsultants, including procurements of materials and leases of equipment. The consultant shall not participate either directly or indirectly in the discrimination prohibited by 49 CFR, section 21.5 of the Regulations, including employment practices when the agreement covers a program set forth in Appendix B of the Regulations.
- (3) Solicitations for Subconsultants, Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the consultant for work to be performed under a subagreement, including procurements of materials or leases of equipment, each potential subconsultant or supplier shall be notified by the consultant of the consultant's obligations under this agreement and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin, sex, age, and disability/handicap.
- (4) **Information and Reports:** The consultant shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the City of Grand Island or the FHWA to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a consultant is in the exclusive possession of another who fails or refuses to furnish this information the consultant shall so certify to the City of Grand Island, or the FHWA as appropriate, and shall set forth what efforts it has made to obtain the information.
- (5) **Sanctions for Noncompliance:** In the event of the consultant's noncompliance with the nondiscrimination provisions of this agreement, the City of Grand Island shall impose such agreement sanctions as it or the FHWA may determine to be appropriate, including, but not limited to:
 - (a.) withholding of payments to the consultant under the agreement until the consultant complies, and/or
 - (b.) cancellation, termination or suspension of the agreement, in whole or in part.
- (6) **Incorporation of Provisions:** The consultant shall include the provisions of paragraphs (1) through (6) in every subagreement, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto.

The consultant shall take such action with respect to any subagreement or procurement as the City of Grand Island or the FHWA may direct as a means of enforcing such provisions including sanctions for non-compliance: Provided, however, that, in the event a consultant becomes involved in, or is threatened with, litigation with a subconsultant or supplier as a result of such direction, the consultant may request the City of Grand Island to enter into such litigation to protect the interests of the City of Grand Island, and, in addition, the consultant may request the United States to enter into such litigation to protect the interests of the United States.



Folder: 2681-63 October 31, 2011

TERRY BROWN GRAND ISLAND, CITY OF 100 E FIRST STREET GRAND ISLAND NE 68802

RE: Proposed Construction of a Storm Water Pipeline Crossing at Mile Post 20.21 on the River Ind Ld at or near Grand Island, Hall County, Nebraska

Terry Brown:

Attached is your original copy of our Agreement, fully executed on behalf of the Railroad Company. When you or your representative enters the Railroad Company's property, a copy of this fully-executed document must be available at the site to be shown on request to any Railroad employee or official.

In accordance with the terms of the Agreement, you are required to notify the following Railroad Company's Manager of Track Maintenance, Manager of Signal Maintenance, and the Telecommunications ("Call Before You Dig") number at least 10 days in advance of the date you plan on entering the right of way for further instructions and approval to commence construction.

RYAN K. COLLINS MGR TRACK MNTCE Cell Phone: 402 289-7583 Patrick O'Brien 601 E S Front St, PO 1246 Grand Island NE 68801

308-389-2244

Telecommunications ("Call Before You Dig"): 1-800-336-9193

As an additional note, the top of the casing must be a minimum of two feet below any existing fiber optic cable. Any open excavation required within five feet of the fiber optic cable must be dug by hand.

All future insurance notices should be forwarded to:

Real Estate Department Folder No: 02681-63 Union Pacific Railroad Company 1400 Douglas Street STOP 1690 Omaha, NE 68179-1690

Sincerely,

Kathleen L. Nesser

Senior Manager - Contracts - Real Estate

Email: KLNESSER@up.com Phone: (402) 544-8549 Pipeline Crossing 080808 Last Modified: 03/29/10 Form Approved, AVP-Law

Folder No. 2681-63

PIPELINE CROSSING AGREEMENT

Mile Post: 20.21, River Ind Ld Location: Grand Island, Hall County, Nebraska

THIS AGREEMENT ("Agreement") is made and entered into as of July 19, 2011, ("Effective Date") by and between UNION PACIFIC RAILROAD COMPANY, a Delaware corporation, ("Licensor") and GRAND ISLAND, CITY OF, a Nebraska municipal corporation to be addressed at 100 E First Street, Grand Island, Nebraska 68802 ("Licensee").

IT IS MUTUALLY AGREED BY AND BETWEEN THE PARTIES HERETO AS FOLLOWS:

Article 1. <u>LICENSOR GRANTS RIGHT.</u>

In consideration of the license fee to be paid by the Licensee and in further consideration of the covenants and agreements herein contained to be by the Licensee kept, observed and performed, the Licensor hereby grants to the Licensee the right to construct and thereafter, during the term hereof, to maintain and operate

one uncased 48 inch pipeline for transporting and conveying storm water only

across Licensor's track(s) and property (the "Pipeline") in the location shown and in conformity with the dimensions and specifications indicated on the print dated July 19, 2011 and marked **Exhibit A**, attached hereto and hereby made a part hereof. Under no circumstances shall Licensee modify the use of the Pipeline for a purpose other than transporting and conveying storm water, and the Pipeline shall not be used to convey any other substance, any fiber optic cable, or for any other use, whether such use is currently technologically possible, or whether such use may come into existence during the life of this Agreement.

Article 2. <u>LICENSE FEE.</u>

Upon execution of this Agreement, the Licensee shall pay to the Licensor a one-time License Fee of **Two Thousand Dollars (\$2,000.00)**.

Article 3. CONSTRUCTION, MAINTENANCE AND OPERATION.

The grant of right herein made to the Licensee is subject to each and all of the terms, provisions, conditions, limitations and covenants set forth herein and in **Exhibit B**, attached hereto and hereby made a part hereof.

Article 4. <u>DEFINITION OF LICENSEE</u>.

For purposes of this Agreement, all references in this Agreement to the Licensee shall include the Licensee's contractors, subcontractors, officers, agents and employees, and others acting under its or their authority. If a contractor is hired by the Licensee for any work performed on the Pipeline (including initial construction and subsequent relocation or maintenance and repair work), then the Licensee shall

provide a copy of this Agreement to its contractor and require its contractor to comply with all the terms and provisions hereof relating to the work to be performed. Any contractor or subcontractor shall be deemed an agent of Licensee for the purpose of this Agreement, and Licensee shall require such contractor or subcontractor to release, defend and indemnify Licensor to the same extent and under the same terms and conditions as Licensee is required to release, defend and indemnify Licensor herein.

Article 5. <u>INSURANCE</u>.

- A. During the life of the Lease, Licensee shall fully comply with the insurance requirements described in **Exhibit C**.
- B. Failure to maintain insurance as required shall entitle, but not require, Licensor to terminate this License immediately.
- C. If the Licensee is subject to statute(s) limiting its insurance liability and/or limiting its ability to obtain insurance in compliance with **Exhibit C** of this lease, those statutes shall apply.
- D. Licensee hereby acknowledges that is has reviewed the requirements of **Exhibit C**, including without limitation the requirement for Railroad Protective Liability Insurance during construction, maintenance, installation, repair or removal of the pipeline which is the subject of this Agreement.

Article 6. TERM.

This Agreement shall take effect as of the Effective Date first herein written and shall continue in full force and effect until terminated as herein provided.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the date first herein written.

UNION PACIFIC RAILROAD COMPANY

Senior Manager - Contracts

By:

Name Printed

Title:

10/25/2011

3.

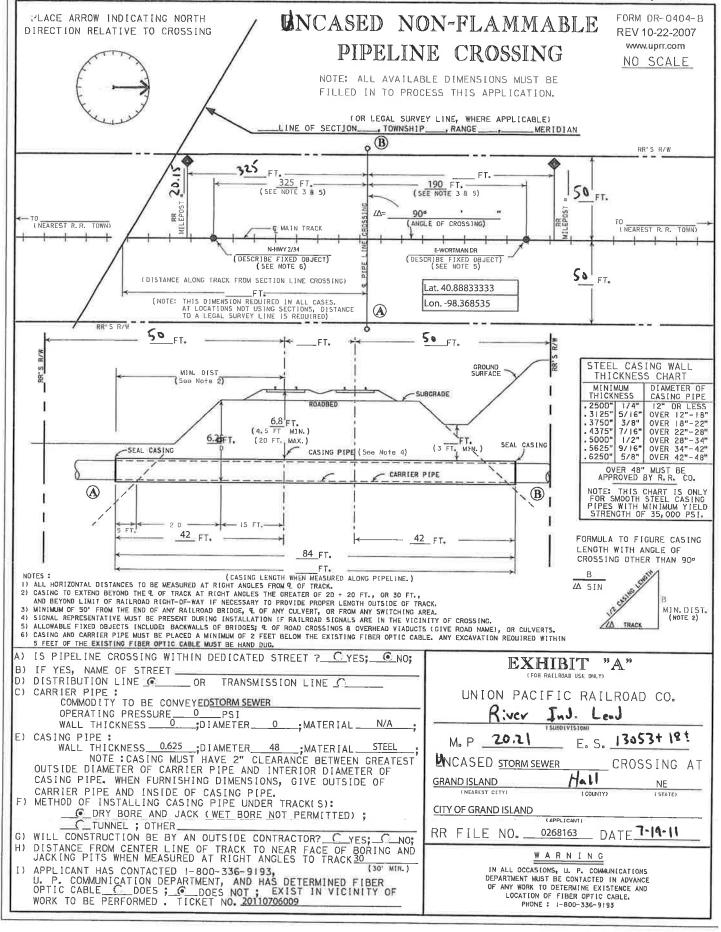
EXHIBIT B

Section 1. <u>LIMITATION AND SUBORDINATION OF RIGHTS GRANTED.</u>

- A. The foregoing grant of right is subject and subordinate to the prior and continuing right and obligation of the Licensor to use and maintain its entire property including the right and power of the Licensor to construct, maintain, repair, renew, use, operate, change, modify or relocate railroad tracks, 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 Licensor without liability to the Licensee or to any other party for compensation or damages.
- B. The foregoing grant is also subject to all outstanding superior rights (including those in favor of licensees and lessees of the Licensor's property, and others) and the right of the Licensor to renew and extend the same, and is made without covenant of title or for quiet enjoyment.

Section 2. CONSTRUCTION, MAINTENANCE AND OPERATION.

- A. The Pipeline shall be designed, constructed, operated, maintained, repaired, renewed, modified and/or reconstructed by the Licensee in strict conformity with (i) Licensor's current standards and specifications ("UP Specifications"), except for variances approved in advance in writing by the Licensor's Assistant Vice President Engineering Design, or his authorized representative; (ii) such other additional safety standards as the Licensor, in its sole discretion, elects to require, including, without limitation, American Railway Engineering and Maintenance-of-Way Association ("AREMA") standards and guidelines (collectively, "UP Additional Requirements"), and (iii) all applicable laws, rules and regulations ("Laws"). If there is any conflict between the requirements of any Law and the UP Specifications or the UP Additional Requirements, the most restrictive will apply.
- B. All work performed on property of the Licensor in connection with the design, construction, maintenance, repair, renewal, modification or reconstruction of the Pipeline shall be done to the satisfaction of the Licensor.
- C. Prior to the commencement of any work in connection with the design, construction, maintenance, repair, renewal, modification, relocation, reconstruction or removal of the Pipeline from Licensor's property, the Licensee shall submit to the Licensor plans setting out the method and manner of handling the work, including the shoring and cribbing, if any, required to protect the Licensor's operations, and shall not proceed with the work until such plans have been approved by the Licensor's Assistant Vice President Engineering Design, or his authorized representative, and then the work shall be done to the satisfaction of the Licensor's Assistant Vice President Engineering Design or his authorized representative. The Licensor shall have the right, if it so elects, to provide such support as it may deem necessary for the safety of its track or tracks during the time of construction, maintenance, repair, renewal, modification, relocation, reconstruction or removal of the Pipeline, and, in the event the Licensor provides such support,



the Licensee shall pay to the Licensor, within fifteen (15) days after bills shall have been rendered therefore, all expenses incurred by the Licensor in connection therewith, which expenses shall include all assignable costs.

- D. The Licensee shall keep and maintain the soil over the Pipeline thoroughly compacted and the grade even with the adjacent surface of the ground.
- E. In the prosecution of any work covered by this Agreement, Licensee shall secure any and all necessary permits and shall comply with all applicable federal, state and local laws, regulations and enactments affecting the work including, without limitation, all applicable Federal Railroad Administration regulations.

Section 3. NOTICE OF COMMENCEMENT OF WORK / LICENSOR REPRESENTATIVE / SUPERVISION / FLAGGING / SAFETY.

A. If an emergency should arise requiring immediate attention, the Licensee shall provide as much notice as practicable to Licensor before commencing any work. In all other situations, the Licensee shall notify the Licensor at least ten (10) days (or such other time as the Licensor may allow) in advance of the commencement of any work upon property of the Licensor in connection with the construction, maintenance, repair, renewal, modification, reconstruction, relocation or removal of the Pipeline. All such work shall be prosecuted diligently to completion. The Licensee will coordinate its initial, and any subsequent work with the following employee of Licensor or his or her duly authorized representative (hereinafter "Licensor Representative"):

RYAN K. COLLINS MGR TRACK MNTCE Cell Phone: 402 289-7583

- B. Licensee, at its own expense, shall adequately police and supervise all work to be performed. The responsibility of Licensee for safe conduct and adequate policing and supervision of work shall not be lessened or otherwise affected by Licensor's approval of plans and specifications involving the work, or by Licensor's collaboration in performance of any work, or by the presence at the work site of a Licensor Representative, or by compliance by Licensee with any requests or recommendations made by the Licensor Representative.
- C. At the request of Licensor, Licensee shall remove from Licensor's property any employee who fails to conform to the instructions of the Licensor Representative in connection with the work on Licensor's property. Licensee shall indemnify Licensor against any claims arising from the removal of any such employee from Licensor's property.
- D. Licensee shall notify the Licensor Representative at least ten (10) working days in advance of proposed performance of any work in which any person or equipment will be within twenty-five (25) feet of any track, or will be near enough to any track that any equipment extension (such as, but not limited to, a crane boom) will reach to within twenty-five (25) feet of any track. No work of any kind shall be performed, and no person, equipment, machinery, tool(s), material(s), vehicle(s), or thing(s) shall be located, operated, placed, or stored within twenty-five (25) feet of any of Licensor's track(s) at any time, for any reason, unless and until a railroad flagman is provided to watch for trains. Upon receipt of such ten (10) day notice, the Licensor Representative will determine and inform Licensor whether a flagman need be present and whether any special protective or safety measures need to be implemented. If flagging or other special protective or safety measures are performed by Licensor, Licensor will bill Licensee for

such expenses incurred by Licensor, unless Licensor and a federal, state or local governmental entity have agreed that Licensor is to bill such expenses to the federal, state or local governmental entity. If Licensor will be sending the bills to Licensee, Licensee shall pay such bills within thirty (30) days of receipt of billing. If Licensor performs any flagging, or other special protective or safety measures are performed by Licensor, Licensee agrees that Licensee is not relieved of any of responsibilities or liabilities set forth in this Agreement.

- E. The rate of pay per hour for each flagman will be the prevailing hourly rate in effect for an eighthour day for the class of flagmen 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 unemployment compensation, supplemental pension, Employees Liability and Property Damage and Administration will be included, computed on actual payroll. The composite charge will be the prevailing composite charge in effect at the time the work is performed. One and one-half times the current hourly rate is paid for overtime, Saturdays and Sundays, and 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 Licensor 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, Licensee (or the governmental entity, as applicable) shall pay on the basis of the new rates and charges.
- F. Reimbursement to Licensor will be required covering the full eight-hour day during which any flagman is furnished, unless the flagman can be assigned to other railroad work during a portion of such day, in which event reimbursement will not be required for the portion of the day during which the flagman is engaged in other railroad work. Reimbursement will also be required for any day not actually worked by the flagman following the flagman's assignment to work on the project for which Licensor is required to pay the flagman and which could not reasonably be avoided by Licensor by assignment of such flagman to other work, even though Licensee may not be working during such time. When it becomes necessary for Licensor to bulletin and assign an employee to a flagging position in compliance with union collective bargaining agreements, Licensee must provide Licensor a minimum of five (5) days notice prior to the cessation of the need for a flagman. If five (5) days notice of cessation is not given, Licensee will still be required to pay flagging charges for the five (5) day notice period required by union agreement to be given to the employee, even though flagging is not required for that period. An additional ten (10) days notice must then be given to Licensor if flagging services are needed again after such five day cessation notice has been given to Licensor.
- G. Safety of personnel, property, rail operations and the public is of paramount importance in the prosecution of the work performed by Licensee or its contractor. Licensee shall be responsible for initiating, maintaining and supervising all safety, operations and programs in connection with the work. Licensee and its contractor shall at a minimum comply with Licensor's safety standards listed in **Exhibit D**, hereto attached, to ensure uniformity with the safety standards followed by Licensor's own forces. As a part of Licensee's safety responsibilities, Licensee shall notify Licensor if it determines that any of Licensor's safety standards are contrary to good safety practices. Licensee and its contractor shall furnish copies of **Exhibit D** to each of its employees before they enter the job site.
- H. Without limitation of the provisions of paragraph G above, Licensee shall keep the job site free from safety and health hazards and ensure that their employees are competent and adequately trained in all safety and health aspects of the job.

- I. Licensee shall have proper first aid supplies available on the job site so that prompt first aid services may be provided to any person injured on the job site. Prompt notification shall be given to Licensor of any U.S. Occupational Safety and Health Administration reportable injuries. Licensee shall have a non-delegable duty to control its employees while they are on the job site or any other property of Licensor, and to be certain they do not use, be under the influence of, or have in their possession any alcoholic beverage, drug or other substance that may inhibit the safe performance of any work.
- J. If and when requested by Licensor, Licensee shall deliver to Licensor a copy of its safety plan for conducting the work (the "Safety Plan"). Licensor shall have the right, but not the obligation, to require Licensee to correct any deficiencies in the Safety Plan. The terms of this Agreement shall control if there are any inconsistencies between this Agreement and the Safety Plan.

Section 4. LICENSEE TO BEAR ENTIRE EXPENSE.

The Licensee shall bear the entire cost and expense incurred in connection with the design, construction, maintenance, repair and renewal and any and all modification, revision, relocation, removal or reconstruction of the Pipeline, including any and all expense which may be incurred by the Licensor in connection therewith for supervision, inspection, flagging, or otherwise.

Section 5. <u>REINFORCEMENT, RELOCATION OR REMOVAL OF PIPELINE.</u>

- A. The license herein granted is subject to the needs and requirements of the Licensor in the safe and efficient operation of its railroad and in the improvement and use of its property. The Licensee shall, at the sole expense of the Licensee, reinforce or otherwise modify the Pipeline, or move all or any portion of the Pipeline to such new location, or remove the Pipeline from the Licensor's property, as the Licensor may designate, whenever, in the furtherance of its needs and requirements, the Licensor, at its sole election, finds such action necessary or desirable.
- B. All the terms, conditions and stipulations herein expressed with reference to the Pipeline on property of the Licensor in the location hereinbefore described shall, so far as the Pipeline remains on the property, apply to the Pipeline as modified, changed or relocated within the contemplation of this section.

Section 6. NO INTERFERENCE WITH LICENSOR'S OPERATION.

- A. The Pipeline and all parts thereof within and outside of the limits of the property of the Licensor shall be designed, constructed and, at all times, maintained, repaired, renewed and operated in such manner as to cause no interference whatsoever with the constant, continuous and uninterrupted use of the tracks, property and facilities of the Licensor and nothing shall be done or suffered to be done by the Licensee at any time that would in any manner impair the safety thereof.
- B. Explosives or other highly flammable substances shall not be stored on Licensor's property without the prior written approval of Licensor.
- C. No additional vehicular crossings (including temporary haul roads) or pedestrian crossings over Licensor's trackage shall be installed or used by Licensor or its contractors without the prior written permission of Licensor.

- D. When not in use, any machinery and materials of Licensee or its contractors shall be kept at least fifty (50) feet from the centerline of Licensor's nearest track.
- E. Operations of Licensor and work performed by Licensor's personnel may cause delays in the work to be performed by Licensee. Licensee accepts this risk and agrees that Licensor shall have no liability to Licensee or any other person or entity for any such delays. Licensee shall coordinate its activities with those of Licensor and third parties so as to avoid interference with railroad operations. The safe operation of Licensor's train movements and other activities by Licensor take precedence over any work to be performed by Licensee.

Section 7. PROTECTION OF FIBER OPTIC CABLE SYSTEMS.

- A. Fiber optic cable systems may be buried on the Licensor'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. Licensee shall telephone the Licensor during normal business hours (7:00 a.m. to 9:00 p.m. Central Time, Monday through Friday, except for holidays) at 1-800-336-9193 (also a 24-hour, 7-day number for emergency calls) to determine if fiber optic cable is buried anywhere on the Licensor's premises to be used by the Licensee. If it is, Licensee will telephone the telecommunications company(ies) involved, arrange for a cable locator, make arrangements for relocation or other protection of the fiber optic cable, all at Licensee's expense, and will commence no work on the Licensor's property until all such protection or relocation has been accomplished. Licensee shall indemnify and hold the Licensor harmless from and against all costs, liability and expense whatsoever (including, without limitation, attorneys' fees, court costs and expenses) arising out of or caused in any way by Licensee's failure to comply with the provisions of this paragraph.
- B. IN ADDITION TO OTHER INDEMNITY PROVISIONS IN THIS AGREEMENT, THE LICENSEE SHALL, AND SHALL CAUSE ITS CONTRACTOR TO, RELEASE, INDEMNIFY, DEFEND AND HOLD THE LICENSOR HARMLESS FROM AND AGAINST ALL COSTS, LIABILITY AND EXPENSE WHATSOEVER (INCLUDING, WITHOUT LIMITATION, ATTORNEYS' FEES, COURT COSTS AND EXPENSES) CAUSED BY THE NEGLIGENCE OF THE LICENSEE, ITS CONTRACTORS, AGENTS AND/OR EMPLOYEES, RESULTING IN (1) ANY DAMAGE TO OR DESTRUCTION OF ANY TELECOMMUNICATIONS SYSTEM ON LICENSOR'S PROPERTY, AND/OR (2) ANY INJURY TO OR DEATH OF ANY PERSON EMPLOYED BY OR ON BEHALF OF ANY TELECOMMUNICATIONS COMPANY, AND/OR ITS CONTRACTOR, AGENTS AND/OR EMPLOYEES, ON LICENSOR'S PROPERTY, EXCEPT IF SUCH COSTS, LIABILITY OR EXPENSES ARE CAUSED SOLELY BY THE DIRECT ACTIVE NEGLIGENCE OF THE LICENSOR. LICENSEE FURTHER AGREES THAT IT SHALL NOT HAVE OR SEEK RECOURSE AGAINST LICENSOR FOR ANY CLAIM OR CAUSE OF ACTION FOR ALLEGED LOSS OF PROFITS OR REVENUE OR LOSS OF SERVICE OR OTHER CONSEQUENTIAL DAMAGE TO A TELECOMMUNICATION COMPANY USING LICENSOR'S PROPERTY OR A CUSTOMER OR USER OF SERVICES OF THE FIBER OPTIC CABLE ON LICENSOR'S PROPERTY.

Section 8. CLAIMS AND LIENS FOR LABOR AND MATERIAL; TAXES.

A. The Licensee shall fully pay for all materials joined or affixed to and labor performed upon property of the Licensor in connection with the construction, maintenance, repair, renewal, modification or reconstruction of the Pipeline, and shall not permit or suffer any mechanic's or

materialman's lien of any kind or nature to be enforced against the property for any work done or materials furnished thereon at the instance or request or on behalf of the Licensee. The Licensee shall indemnify and hold harmless the Licensor against and from any and all liens, claims, demands, costs and expenses of whatsoever nature in any way connected with or growing out of such work done, labor performed, or materials furnished.

B. The Licensee shall promptly pay or discharge all taxes, charges and assessments levied upon, in respect to, or on account of the Pipeline, to prevent the same from becoming a charge or lien upon property of the Licensor, and so that the taxes, charges and assessments levied upon or in respect to such property shall not be increased because of the location, construction or maintenance of the Pipeline or any improvement, appliance or fixture connected therewith placed upon such property, or on account of the Licensee's interest therein. Where such tax, charge or assessment may not be separately made or assessed to the Licensee but shall be included in the assessment of the property of the Licensor, then the Licensee shall pay to the Licensor an equitable proportion of such taxes determined by the value of the Licensee's property upon property of the Licensor as compared with the entire value of such property.

Section 9. RESTORATION OF LICENSOR'S PROPERTY.

In the event the Licensee in any manner moves or disturbs any of the property of the Licensor in connection with the construction, maintenance, repair, renewal, modification, reconstruction, relocation or removal of the Pipeline, then in that event the Licensee shall, as soon as possible and at Licensee's sole expense, restore such property to the same condition as the same were before such property was moved or disturbed, and the Licensee shall indemnify and hold harmless the Licensor, its officers, agents and employees, against and from any and all liability, loss, damages, claims, demands, costs and expenses of whatsoever nature, including court costs and attorneys' fees, which may result from injury to or death of persons whomsoever, or damage to or loss or destruction of property whatsoever, when such injury, death, damage, loss or destruction grows out of or arises from the moving or disturbance of any other property of the Licensor.

Section 10. INDEMNITY.

- A. As used in this Section, "Licensor" includes other railroad companies using the Licensor's property at or near the location of the Licensee's installation 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: (a) injury to or death of persons whomsoever (including the Licensor's officers, agents, and employees, the Licensee's officers, agents, and employees, as well as any other person); and/or (b) damage to or loss or destruction of property whatsoever (including Licensee's property, damage to the roadbed, tracks, equipment, or other property of the Licensor, or property in its care or custody).
- B. AS A MAJOR INDUCEMENT AND IN CONSIDERATION OF THE LICENSE AND PERMISSION HEREIN GRANTED, TO THE FULLEST EXTENT PERMITTED BY LAW, THE LICENSEE SHALL, AND SHALL CAUSE ITS CONTRACTOR TO, RELEASE, INDEMNIFY, DEFEND AND HOLD HARMLESS THE LICENSOR FROM ANY LOSS OR ANY KIND, NATURE OR DESCRIPTION ARISING OUT OF, RESULTING FROM OR RELATED TO (IN WHOLE OR IN PART):
 - 1. THE PROSECUTION OF ANY WORK CONTEMPLATED BY THIS AGREEMENT INCLUDING THE INSTALLATION, CONSTRUCTION, MAINTENANCE, REPAIR,

RENEWAL, MODIFICATION, RECONSTRUCTION, RELOCATION, OR REMOVAL OF THE PIPELINE OR ANY PART THEREOF;

- 2. ANY RIGHTS OR INTERESTS GRANTED PURSUANT TO THIS LICENSE;
- 3. THE PRESENCE, OPERATION, OR USE OF THE PIPELINE OR CONTENTS ESCAPING THEREFROM;
- 4. THE ENVIRONMENTAL STATUS OF THE PROPERTY CAUSED BY OR CONTRIBUTED TO BY LICENSEE;
- 5. ANY ACT OR OMISSION OF LICENSEE OR LICENSEE'S OFFICERS, AGENTS, INVITEES, EMPLOYEES, OR CONTRACTORS OR ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY ANY OF THEM, OR ANYONE THEY CONTROL OR EXERCISE CONTROL OVER; OR
- 6. LICENSEE'S BREACH OF THIS AGREEMENT.

EXCEPT WHERE THE LOSS IS CAUSED BY THE SOLE DIRECT AND ACTIVE NEGLIGENCE OF THE LICENSOR, AS DETERMINED IN A FINAL JUDGMENT BY A COURT OF COMPETENT JURISDICTION, IT BEING THE INTENTION OF THE PARTIES THAT THE ABOVE INDEMNITY WILL OTHERWISE APPLY TO LOSSES CAUSED BY OR ARISING FROM, IN WHOLE OR IN PART, LICENSOR'S NEGLIGENCE.

C. Upon written notice from Licensor, Licensee agrees to assume the defense of any lawsuit of proceeding brought against any indemnitee by any entity, relating to any matter covered by this License for which Licensee has an obligation to assume liability for and/or save and hold harmless any indemnitee. Licensee shall pay all costs incident to such defense, including, but not limited to, reasonable attorney's fees, investigators' fees, litigation and appeal expenses, settlement payments and amounts paid in satisfaction of judgments.

Section 11. REMOVAL OF PIPELINE UPON TERMINATION OF AGREEMENT.

Prior to the termination of this Agreement howsoever, the Licensee shall, at Licensee's sole expense, remove the Pipeline from those portions of the property not occupied by the roadbed and track or tracks of the Licensor and shall restore, to the satisfaction of the Licensor, such portions of such property to as good a condition as they were in at the time of the construction of the Pipeline. If the Licensee fails to do the foregoing, the Licensor may, but is not obligated, to perform such work of removal and restoration at the cost and expense of the Licensee. In the event of the removal by the Licensor of the property of the Licensee and of the restoration of the roadbed and property as herein provided, the Licensor shall in no manner be liable to the Licensee for any damage sustained by the Licensee for or on account thereof, and such removal and restoration shall in no manner prejudice or impair any right of action for damages, or otherwise, that the Licensor may have against the Licensee.

Section 12. WAIVER OF BREACH.

The waiver by the Licensor of the breach of any condition, covenant or agreement herein contained to be kept, observed and performed by the Licensee shall in no way impair the right of the Licensor to avail itself of any remedy for any subsequent breach thereof.

Section 13. TERMINATION.

- A. If the Licensee does not use the right herein granted or the Pipeline for one (1) year, or if the Licensee continues in default in the performance of any covenant or agreement herein contained for a period of thirty (30) days after written notice from the Licensor to the Licensee specifying such default, the Licensor may, at its option, forthwith immediately terminate this Agreement by written notice.
- B. In addition to the provisions of subparagraph (a) above, this Agreement may be terminated by written notice given by either party hereto to the other on any date in such notice stated, not less, however, than thirty (30) days subsequent to the date upon which such notice shall be given.
- C. Notice of default and notice of termination may be served personally upon the Licensee or by mailing to the last known address of the Licensee. Termination of this Agreement for any reason shall not affect any of the rights or obligations of the parties hereto which may have accrued, or liabilities, accrued or otherwise, which may have arisen prior thereto.

Section 14. AGREEMENT NOT TO BE ASSIGNED.

The Licensee shall not assign this Agreement, in whole or in part, or any rights herein granted, without the written consent of the Licensor, and it is agreed that any transfer or assignment or attempted transfer or assignment of this Agreement or any of the rights herein granted, whether voluntary, by operation of law, or otherwise, without such consent in writing, shall be absolutely void and, at the option of the Licensor, shall terminate this Agreement.

Section 15. SUCCESSORS AND ASSIGNS.

Subject to the provisions of Section 14 hereof, this Agreement shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns.

Section 16. SEVERABILITY.

Any provision of this Agreement which is determined by a court of competent jurisdiction to be invalid or unenforceable shall be invalid or unenforceable only to the extent of such determination, which shall not invalidate or otherwise render ineffective any other provision of this Agreement.

Approved: Insurance Group Created: 9/23/05 Last Modified: 03/29/10 Form Approved, AVP-Law

EXHIBIT C

Union Pacific Railroad Company Contract Insurance Requirements

Licensee shall, at its sole cost and expense, procure and maintain during the life of this Lease (except as otherwise provided in this Lease) the following insurance coverage:

A. <u>Commercial General Liability</u> insurance. Commercial general liability (CGL) with a limit of not less than \$2,000,000 each occurrence and an aggregate limit of not less than \$4,000,000. CGL insurance must be written on ISO occurrence form CG 00 01 12 04 (or a substitute form providing equivalent coverage).

The policy must also contain the following endorsement, WHICH MUST 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 "Union Pacific Railroad Company Property" as the Designated Job Site.

Business Automobile Coverage insurance. Business auto coverage written on ISO form CA 00 01 10 01 (or a substitute form providing equivalent liability coverage) with a limit of not less \$2,000,000 for each accident, and coverage must include liability arising out of any auto (including owned, hired, and non-owned autos).

The policy must contain the following endorsements, WHICH MUST 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 "Union Pacific Property" as the Designated Job Site.

C. <u>Workers Compensation and Employers</u> Liability insurance. Coverage must include but not be limited to:

Licensee's statutory liability under the workers' compensation laws of the state(s) affected by this Agreement.

Employers' Liability (Part B) with limits of at least \$500,000 each accident, \$500,000 disease policy limit \$500,000 each employee.

If Licensee is self-insured, evidence of state approval and excess workers compensation coverage must be provided. Coverage must 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.

Railroad Protective Liability insurance. Licensee must maintain "Railroad Protective Liability" insurance written on ISO occurrence form CG 00 35 12 04 (or a substitute form providing equivalent coverage) on behalf of Railroad only as named insured, with a limit of not less than \$2,000,000 per occurrence and an aggregate of \$6,000,000.

The definition of "JOB LOCATION" and "WORK" on the declaration page of the policy shall refer to this Agreement and shall describe all WORK or OPERATIONS performed under this agreement

E. <u>Umbrella or Excess</u> insurance. If Licensee utilizes umbrella or excess policies, and these policies must "follow form" and afford no less coverage than the primary policy.

Other Requirements

- F. All policy(ies) required above (except worker's compensation and employers liability) must include Railroad 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 Railroad as additional insured shall, to the extent provided under ISO Additional Insured Endorsement CG 20 26, and CA 20 48 provide coverage for Railroad's negligence whether sole or partial, active or passive, and shall not be limited by Licensee's liability under the indemnity provisions of this Agreement.
- G. Punitive damages exclusion, if any, must be deleted (and the deletion indicated on the certificate of insurance), unless (a) insurance coverage may not lawfully be obtained for any punitive damages that may arise under this agreement, or (b) all punitive damages are prohibited by all states in which this agreement will be performed.
- **H.** Licensee 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 for damages covered by the workers compensation and employers liability or commercial umbrella or excess liability obtained by Licensee required in this agreement, where permitted by law This waiver must be stated on the certificate of insurance.
- I. All insurance policies must be written by a reputable insurance company acceptable to Railroad or with a current Best's Insurance Guide Rating of A- and Class VII or better, and authorized to do business in the state(s) in which the work is to be performed.
- J. The fact that insurance is obtained by Licensee or by Railroad on behalf of Licensee will not be deemed to release or diminish the liability of Licensee, including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by Railroad from Licensee or any third party will not be limited by the amount of the required insurance coverage.

EXHIBIT D SAFETY STANDARDS

MINIMUM SAFETY REQUIREMENTS

The term "employees" as used herein refer to all employees of Licensee or its contractors, subcontractors, or agents, as well as any subcontractor or agent of any Licensee.

I. Clothing

A. All employees of Licensee will be suitably dressed to perform their duties safely and in a manner that will not interfere with their vision, hearing, or free use of their hands or feet.

Specifically, Licensee's employees must wear:

- (i) Waist-length shirts with sleeves.
- (ii) Trousers that cover the entire leg. If flare-legged trousers are worn, the trouser bottoms must be tied to prevent catching.
- (iii) Footwear that covers their ankles and has a defined heel. Employees working on bridges are required to wear safety-toed footwear that conforms to the American National Standards Institute (ANSI) and FRA footwear requirements.
- B. Employees shall not wear boots (other than work boots), sandals, canvas-type shoes, or other shoes that have thin soles or heels that are higher than normal.
- C. Employees must not wear loose or ragged clothing, neckties, finger rings, or other loose jewelry while operating or working on machinery.

II. Personal Protective Equipment

Licensee shall require its employee to wear personal protective equipment as specified by Railroad rules, regulations, or recommended or requested by the Railroad Representative.

- (i) Hard hat that meets the American National Standard (ANSI) Z89.1 latest revision. Hard hats should be affixed with Licensee's company logo or name.
- (ii) Eye protection that meets American National Standard (ANSI) for occupational and educational eye and face protection, Z87.1 latest revision. Additional eye protection must be provided to meet specific job situations such as welding, grinding, etc.
- (iii) Hearing protection, which affords enough attenuation to give protection from noise levels that will be occurring on the job site. Hearing protection, in the form of plugs or muffs, must be worn when employees are within:
 - 100 feet of a locomotive or roadway/work equipment
 - 15 feet of power operated tools
 - 150 feet of jet blowers or pile drivers

V. General Safety Requirements

- A. Licensee shall ensure that all waste is properly disposed of in accordance with applicable federal and state regulations.
- B. Licensee shall ensure that all employees participate in and comply with a job briefing conducted by the Railroad Representative, if applicable. During this briefing, the Railroad Representative will specify safe work procedures, (including On-Track Safety) and the potential hazards of the job. If any employee has any questions or concerns about the work, the employee must voice them during the job briefing. Additional job briefings will be conducted during the work as conditions, work procedures, or personnel change.
- C. All track work performed by Licensee meets the minimum safety requirements established by the Federal Railroad Administration's Track Safety Standards 49CFR213.
- D. All employees comply with the following safety procedures when working around any railroad track:
 - (i) Always be on the alert for moving equipment. Employees must always expect movement on any track, at any time, in either direction.
 - (ii) Do not step or walk on the top of the rail, frog, switches, guard rails, or other track components.
 - (iii) In passing around the ends of standing cars, engines, roadway machines or work equipment, leave at least 20 feet between yourself and the end of the equipment. Do not go between pieces of equipment of the opening is less than one car length (50 feet).
 - (iv) Avoid walking or standing on a track unless so authorized by the employee in charge.
 - (v) Before stepping over or crossing tracks, look in both directions first.
 - (vi) Do not sit on, lie under, or cross between cars except as required in the performance of your duties and only when track and equipment have been protected against movement.
- E. All employees must comply with all federal and state regulations concerning workplace safety.

RESOLUTION 2011-315

WHEREAS, in connection with the Southwest Drainage Project No. 2011-D-1; Central Community College to the Wood River a Pipeline Crossing Agreement is required by the Union Pacific Railroad in order for the City of Grand Island to cross their right-of-way with one uncased 48 inch pipeline for transporting and conveying storm water only; and

WHEREAS, the agreement also requires, upon execution, a one-time License Fee of \$2,000.00; and

WHEREAS, the agreement has been reviewed and approved by the City's Legal Department.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that the City of Grand Island be, and hereby is, authorized to enter into the Pipeline Crossing Agreement with the Union Pacific Railroad in connection with the Southwest Drainage Project No. 2011-D-1; Central Community College to the Wood River.

Adopted by the City Council of the City of Grand Island, Nebraska, October 25, 2011.

Jay Vavricek, Mayor

Attest:

RaNae Edwards, City Clerk

Approved as to Form October 24, 2011

Southwest Outfall (CCC to Wood River) 2011-D-1 Drainage Improvement



City of Grand Island Storm Water Pollution Prevention Plan SWPPP

2/1/11

Storm Water Pollution Prevention Plan

For

Southwest Outfall (CCC to Wood River) 2011-D-1 Drainage Improvement

> Project Location Grand Island, NE Hall County

Prepared January 2011

1. Introduction

The purpose of this SWPPP is to provide the following:

- Define the characteristics of the site and the type of construction that will occur.
- Describe the site plan for the planned construction.
- Describe practices to be implemented to control erosion and prevent the release of pollutants into storm water.
- Establish an implementation schedule that ensures the effectiveness of planned practices to reduce erosion, sediment and pollutant levels in storm water discharged from the site.
- Describe the final stabilization practices and maintenance responsibilities allowing for termination of this permit.

SWPPP Content:

- Identification of the SWPPP coordinator and description of duties.
- Identification of the individuals that will assist in implementing the SWPPP during construction.
- Description of existing site conditions including existing land use and any nearby Waters of The State.
- Identification of the receiving water body for runoff from this project.
- Identification of drainage area and potential storm water contaminants.
- Description of storm water management controls and BMPs necessary to prevent or reduce erosion, sediment and pollutants in storm water discharge from this site.
- Description of project monitoring and how BMPs will be coordinated with construction activities.

Provisions for amendments and/or additions to the plan.

2. SWPPP Coordinator and Duties

The City of Grand Island will make application for General Storm Water Permit for Construction Activity (NER 110000) and be listed as "Owner" for the purposes of city owned projects. The City will continue that role until the project is complete. Contractors and subcontractors working on City of Grand Island construction projects will be responsible for following all requirements of the Storm Water Pollution Prevention Plan.

Following completion of vegetative reseeding, the City will submit a "Notice of Termination"; at that time ending the responsibility of the City and its Contractors regarding the project area. The City will retain ownership and maintenance responsibility for any permanent storm water structures constructed as part of the project. The

responsibility for BMP will be the contractor's until the area meets the 70 percent of original cover, in accordance with the requirements of the NPDES permit.

The construction site storm water control evaluations will be provided by the Storm Water Program Technician or appointed representative during the construction project. The Storm Water Program Technician or appointed representative will be identified by name at the preconstruction meeting, and a contact phone number will be made available. The Storm Water Program Technician or appointed representative (City Project Manager) will address issues that arise during construction that impact the waters of the State of Nebraska. The appointed representative will notify the proper regulatory officials as listed below:

City of Grand Island Public Works Department 100 East First Street Grand Island, NE 68802-1968

City of Grand Island Manager of Civil Engineering Services
308-385-5444 ext 268
City of Grand Island Storm Water Tech
308-385-5444 ext 270
Scott A. Sekutera

It will be the responsibility of the respective Storm Water Program Technician or appointed representative (City Project Manager) to provide guidance to the General Contractor about implementing the SWPPP and the Erosion and Sediment Control Program. This includes BMPs undertaken by previous Contractors as part of the SWPPP. The Storm Water Program Technician or appointed representative will:

- Oversee maintenance practices identified as BMPs in the SWPPP.
- Inspect or monitor activities related to the SWPPP as needed.
- Identify additional potential sources of pollutants not included in the SWPPP and take appropriate action to add them to the plan.
- Ensure that any changes made to construction plans are consistent with the goals of the SWPPP.
- To aid in the implementation of the SWPPP, random site visits will occur by the design team as well as an inspector on-site.

The goal of this SWPPP is to reduce or eliminate storm water pollution from construction activity by requiring implementation of appropriate pollution control practices to protect water quality.

CITY OF Grand Island

Public Works Department Engineering Department 100 East First Street Grand Island, Nebraska, 68802-1968

STORM WATER POLLUTION PREVENTION PLAN CCC to Wood River Project 2011-D-1

1	NS ⁻	ΓRΙ	ICT	\Box	NS

The Storm Water Pollution Prevention Plan - Narrative (SWPPP-N) is to be completed in accordance with the current Environment Protection Agency's (EPA) National Pollutants Discharge Elimination System (NPDES) General Storm Water Permit For Construction Activities, State of Nebraska Department of Environmental Quality (NDEQ) – NPDES General Permit for Storm Water Discharges from Construction Sites.

	1.0 SI	TE DESCRIPTION		
1.1 Project Name	And Location			
Provide all informati	on requested below.			
CCC to Wood River Project 2011-D-1		Along the back of CCC property easterly within the northerly/southerly r-o-w to the UPRR. Bore under the railroad along Hwy 34 at 90 deg, to the northerly side of the Hwy 34. Then easterly along Hwy 34 r-o-w, to Diamond pit. Then continuing easterly to the Wood River.		
Project Name NA		Address Grand Island	Hall	
Subdivision Name		City	County	
NA	NA	NE	68802	
Latitude	Longitude	State	Zip Code	
Describe the nature,	Project Description /function of the construction orm water pipe. Minimal impact to		he surrounding environment.	

1.3 Existing Site Conditions
Describe the existing site conditions, with emphasize on environmentally sensitive areas.
Currently all drainage is conveyed by ditches. All runoff that leaves the construction projects will be treated to the maximum extents practical.
There is no environmentally sensitive area located in the vicinity of the project know to us at this time.
1.4 Sequence Of Major Construction Activities
Describe the intended sequence of major construction activities.
Silt fence will be installed at locations (per construction plans)
Establish rock entrance/exit point.
Post SWPPP sign at construction entrance/exit point.
Excavation and directional boring for the installation of the storm water pipe under UPRR.
Install storm water pipe.
Backfill of all excavated areas.
Backfill and Final stabilization practices, (i.e. seeding. Per construction plans.)
1.5 Name Of Receiving Waters
Identifying and name any receiving waters within one mile of the site.
The Wood River
1. 6. Industrial Activities
1.6 Industrial Activities Indicate the location of any starm water discharges associated with industrial activity other than at the site.
Indicate the location of any storm water discharges associated with industrial activity other than at the site (e.g., dedicated asphalt or concrete plants).
None are known at this time.

1.7 Site Data Provide requested site data. Total Site Area (Acres) **Estimated Permit Duration (Months)** Disturbed Area (Acres) Cut Volume (YD^3) Undisturbed Area (Acres) Fill Volume (YD^3) Runoff Coefficient Before Const. Impervious Area Before Const. (%) Impervious Area After Const. (%) Runoff Coefficient After Const. 1.8 Pollution Sources Identify all potential sources of pollution that might affect the quality of storm water discharge from the site. Potential silt running of off disturbed construction areas to Staging and storage areas for construction materials. conveyance ditch systems. Stock pile area will require temporary seeding if unattended for 14 days or longer. Oils and fuels from construction equipment. Waste from construction materials. Sanitary waste from portable job toilets. 1.9 Operators Identify the types of operators (e.g., grading contractor, residential and commercial lot builders; public improvement contactor; sub contractors; suppliers, trades people, etc...) who will be at the site, and the areas over which each operator has control.

General Contractor-The contractor will be responsible for all construction activity associated with this project, All erosion and sediment controls will be the responsibility of the General Contractor.

All construction activities are to be monitored and maintained by the General Contractor. As each new subcontractor comes on-site, the contractor will conduct and document a meeting to ensure awareness of the Storm Water Pollution Prevention Plan (SWPPP). Guidelines for proper handling, storage and disposal of construction site wastes should be posted in storage and use areas, BMP that are present onsite and maintenance requirements, and workers should be trained in these practices to ensure everyone is knowledgeable enough to participate.

2.0 CONTROLS TO REDUCE POLLUTANTS

2.1 Control Measures

For each major activity identified (see section 1.4), describe all control measures, the timing during the construction when measures will be installed, and the operator responsible for accomplishing the installation.

Silt fences will be installed prior to excavation activities where access allows. Silt fencing shall be installed in all areas the project has disturbed at each day's end in accordance with the erosion and sediment control plans. The contractor will be responsible for the installation of proper BMP controls.

Silt fences need to be cleaned, replaced or supplemented when they reach 2/3 capacity (height of control). These actions must occur within 24 hours of discovery or as soon as field conditions allow access to the site.

Any accumulated sediment in inlets that may pass through protection measures shall be cleaned out frequently.

All seeding will be done in conjunction with final stabilization practices and placed in accordance with project specifications.

* Establish and label concrete truck washout area. Plastic lined 1 ft high berm if needed.

*Erosion Control Standard Plans.

2.2 Interim And Permanent Stabilization Practices

Describe all interim and permanent stabilization practices, including installation schedule.

Silt dike or silt fence will be installed in accordance to construction plans and detailed drawings.

Silt dike or silt fence will also be placed in any areas where potential issues arise, pending Storm Water Program Technician or authorized representatives' approval.

Positive Drainage will be maintained at all times.

Special care will be given to maintain vegetation in area not directly affected by construction. Operate only where needed.

All structural Best Management Practices will be installed in accordance to construction plans.

Installation and maintenance of all BMPs will be the responsibility of the general contractor.

2.3 Construction Activity Record Keeping

Maintaining a record of the dates when major grading activity occurs, when construction activity has been temporarily or permanently ceased on a portion of the site, and when stabilization measures are initiated is an integral part of the SWPPP. Explain how the construction activity record keeping will be accomplished for the duration of the permit.

Record keeping will be done by the City of Grand Island or the city project manager. Construction notes will also be kept by the inspecting engineer.

These records will be recorded by with the biweekly project inspection and by onsite construction inspector.

2.4 Structural Practices	
Describe any structural practices used to divert flows from exposed soils, retain/detain flows, or otherwis limit runoff/pollutants from exposed areas.	е
N/A	
2.5 Post-Construction Storm Water Management Controls	
Describe any post-construction storm water management controls to be installed at the site, and identifiany applicable federal/state/local/tribal requirements for design or installation.	у
After project completion all storm water BMPs will be maintained until disturbed areas are 70% reestablished by the contractor.	
Any failed seeding areas will be reseeded by the contractor.	
Any silt dike that reaches 2/3 or silt fencing that reaches 1/2 fence capacity will be cleaned out and repaired. All erosion and sediment controls will be maintained in workable order by the contractor until 70% vegetation has been achieved.	
2.6 Measures/Waste Disposal Practices	
Describe all measures/waste disposal practices to prevent discharge of solid material, including buildin materials, to waters of the U.S.	g
The proper management and disposal of wastes should be practiced on site at all times to reduce pollution storm water runoff. Hazardous waste should always be disposed of through a designated hazardous waste management or recycling facility. Hazardous waste should not be disposed of with ordinary garbage or poured into the sanitary sewer system or onto the ground.	
Containers shall be placed on site for the disposal of any waste materials created during construction. The materials shall be hauled off the site and disposed of in a proper manner.	
Waste containment must remain covered to shed rainwater and prevent blowing debris.	
Any hazardous waste created during construction must be disposed of in accordance with state and local regulations.	

2.7 Sediment Track-out Prevention Practices, Dust Control

Describe measures to minimize off-site tracking of sediments to paved surfaces and the generation of dust.

Construction entrances are to be placed to help limit the amount of sediment leaving the site via vehicle traffic in any staging area, and storage areas that connect to paved surfaces. The entrances may be moved to other areas on the site in order to assist operations if needed.

All track-out to paved areas adjacent to project must be removed and cleaned up immediately.

Dust generated by the project shall be controlled by watering, adding chemical suppressants, or other approved methods. Apply water a minimum of 3 times per day to disturbed areas during dry and/or windy periods.

2.8 Waste Or Construction Materials Storage Practices

Describe any waste or construction materials to be stored onsite, and list all measures to limit exposure, including storage, spill prevention and response practices.

Any waste materials being stored on site shall be stored in an appropriate container provided by those who are storing the materials. Materials shall not be allowed to accumulate on site and shall waste materials disposed of in a proper manner.

Any onsite fueling tanks must be kept in double containment and place in an area least likely to cause pollution due to runoff. All other chemicals stored onsite must be kept in double containment if stored outside.

Keep products in original containers unless they are not able to reseal, the original label and MSDS will be retained. If a product does not have its original label, label it yourself if you are positive of the contents. Make sure products are properly sealed to prevent leaks and spills and stored in a weather proof self contained area when possible.

Clean up spills immediately. For hazardous materials follow cleanup instructions on the package. Use absorbent material such as kitty litter to contain the spill. Spill kits must be on site and should include but not be limited to brooms, dust pans, mops, rags, gloves, goggles, and plastic or metal trash containers specifically for that purpose. Spill areas should be well ventilated.

Containers or equipment that may malfunction and cause leaks or spills should be identified through regular inspection and storage of use areas. Equipment and containers should be inspected regularly for leaks, corrosion, support or foundation failure, or any other signs of deterioration and should be tested for soundness. Any found to be defective should be repaired or replaced immediately.

The contractor will be responsible for providing an inventory for significant materials that will be stored onsite and used throughout the construction process. MSDS shall be kept as part of a spill response plan. The contractor is also responsible the implementation and training of all individuals working on the project in the proper spill response and clean up measures.

A written copy of the spill response and clean-up plan may be requested by the City of Grand Island, NDEQ, or any other regulatory agency at anytime if there are significant materials present onsite with the potential to cause pollution due to rainwater or accidental spills.

Any spill of chemical or fuels must be reported to the City of Grand Island, Storm Water Technician immediately and proper cleanup of spills performed.

2.9 Pollutants From Sources Other Than Construction

Describe controls to minimize pollutants from sources other than construction (e.g., dedicated asphalt or concrete plants).

Construction vehicles should be inspected for leaks daily and repaired immediately in a self contained area designated for vehicle maintenance and repair. Spills must be cleaned up and materials disposed of immediately.

ONON-STORM WATER DISCHARGE MANAGEMENT

Identify & list pollution prevention measures for any allowable non-storm water discharges.

It will be the responsibility of the General Contractor to obtain any needed dewatering permits that apply to the project.

4.0 PERMIT ELIGIBILITY RELATED TO ENDANGERED SPECIES

Document your project's eligibility for permit coverage with regard to endangered species.

U.S. Fish and Wildlife Service

 No Submittals for review were made, but will refer to enclosures for Environmental review. Enclosure for Federally Listed Threatened and Endangered Species and Designated Habitat Occurring in Nebraska.

Nebraska Game and Parks Commission

 No Submittals for review were made. Used Guidance Checklist from NDEQ for NPDES Construction Storm Water General Permit #NER110000.

Nebraska State Historical Society

• No Submittals for review were made.

5.0 PERMIT ELIGIBILITY RELATED TO TOTAL MAXIMUM DAILY LOADS

Document your project's eligibility for permit coverage with regard to discharging to water bodies with an approved TMDL (see The NDEQ website for water bodies under TMDL regulation http://cfpub.epa.gov/npdes/stormwater/cgp.cfm).

To the best of our knowledge no TMDL's are established at this discharge location. According to the EPA approved or established TMDL review website.

6.0 APPLICABLE STATE, TRIBAL OR LOCAL PROGRAMS & REQUIREMENTS

Describe your project's compliance with any applicable state, local or tribal requirements for soil and erosion control and storm water management.

This project, to the best of our knowledge, is in compliance with all local, state, and federal requirements. A CSW-NOI has been filled with and approved by the NDEQ.

Copies of the project SWPPP, Erosion Control Plans, and a copy of the CSW-NOI will be kept at a location provided by the contractor. Active copies of these documents will be kept by the Storm Water Technician or city project manager which can be contacted to view documentation in a reasonable amount of time.

7.0 INSPECTIONS

7.1 Inspection Schedule, Procedures, and Frequency

Describe routine inspection schedules, procedures, and frequency to ensure control measures are operating effectively.

Inspections will be performed every 14 days or within 24hrs of a 0.5 or greater rain event.

The proper maintenance, installation, and effectiveness of all installed BMPs will be evaluated.

All areas of the project will be evaluated as to the need of more control measures, any areas that arise during construction in need of erosion control measures will be evaluated and the proper controls put in place.

All staging, storage, and site entrance/exits will be evaluated.

The Storm Water Technician or city project manager will inform the contractor as to any maintenance issues, installation issues, or the need to install additional controls. The contractor will be responsible for the timely actions in resolving any issues that may arise.

7.2 Personnel Performing Inspections

Indicate who the qualified personnel will be to perform inspections and describe the person's qualifications.

A trained individual must perform a written evaluation of the project site on behalf of the City of Grand Island by the end of the next business day following each measurable storm event (> 0.5 inch) or, every 14 days.

Scott Sekutera (Storm Water Technician) for the City of Grand Island or a city project manager will perform the inspection.

7.3 Report Format

Describe the format for the inspection reports documenting each inspection, including documentation of incidents of noncompliance or certifying full compliance, and indicating who will be authorized to sign the report.

The inspection reports will follow the City of Grand Island, standard Construction Site Inspection Form.

The Construction Inspection form and completed forms will be stored in SWPPP.

The inspector must initially sign the inspection form; pending review from Terry Brown (Manager City Engineering Services) will sign all inspection forms.

Records will be kept on file for three years.

8.0 OPERATOR RESPONSIBILITY & NOTIFICATION

8.1 Responsibility

Describe in detail each operator's (see section 1.9 for a list of operators) responsibility for implementing and maintaining the SWPPP in the APPLICANTS behalf.

The general contractor will be responsible for having all erosion control and pollution prevention measures properly installed and maintained for this site. The general contractor will also be responsible for post-construction maintenance of the all BMPs until the project is 70% vegetated.

It will be the contractor's responsibility to inform all employees and sub-contractors of the SWPPP requirements, and associated practices under the storm water permit NER110000, practices in-place, and procedures to follow.

8.2 Notification

Describe in detail how each operator (see section 1.9 for a list of operators) will be informed of the existence and requirements of the SWPPP. Furthermore, describe how each operator's signature and certification for the SWPPP will be attained and tracked.

The General contractor will be informed of the SWPPP requirements as part of the bid process.

It will then be the responsibility of the contractor to inform all operators, employees, and subs of their responsibilities towards maintaining the SWPPP.

All SWPPP documents will be signed by the General Contractors upon award of the contract and no later than preconstruction meeting, certifying that the General Contractor understand and accepts all responsibilities under the SWPPP.

The city will be responsible to maintain the following information:

- Stating this site is covered under a NDEQ General Storm Water Permit
- Site activities are regulated by a SWPPP
- Contact information for the SWPPP and construction plan documents
- A posted copy of the completed CSW-NOI

9.0 MAINTENANCE OF CONTROLS

9.1 Procedures And Activities

Describe all procedures and activities to be used to accomplish the following: Maintain all identified controls in effective operating condition and maintain controls as soon as possible if site inspections identify controls are not working effectively.

Upon each inspection, the Storm Water Technician or city project manager will take note of any deficiencies in existing controls or note areas in need of controls by the standard inspection log and digital photographs.

The Storm Water Technician or city project manager shall notify the contractor responsible for installing these measures and the contractor shall take care of deficiencies with 48 hours.

9.2 Modifications

Describe in detail a protocol for modifying the SWPPP whenever there is a change in design, construction, operation, or maintenance at the site, or if during inspections or investigations it is determined that the SWPPP is ineffective in minimizing pollutants in the discharges from the site.

If either the contractor or appointed site inspector recognizes that any part of the SWPPP is ineffective, they shall notify the Storm Water Technician immediately.

The City Engineer and Storm Water Technician will then modify the SWPPP accordingly.

All modification to the SWPPP will be recorded under the modification section of the SWPPP binder and cross-referenced to the applicable section.

Modifications will also be recorded on the Erosion and Sediment Control Site Plan.

If control measures need to be modified, modifications must occur within 24 hours and prior to the next storm event whenever practicable.

10.0 MANAGEMENT PRACTICES

10.1 Control Measure Management Practices

Describe the protocol for ensuring that all controls will be properly selected, installed, and Maintained in accordance with manufacturer specification and good engineering practices.

The contractor is in charge of erosion control and will be responsible for the correct installation according to the project construction plan. They will also be responsible for the maintenance of any control measures.

All controls must be properly selected, installed, and maintained in accordance with manufactures specification and good engineering practices.

The Storm Water Technician or appointed representative will be responsible for making checks on these measures and notifying the contractor as to when the control measures need to be maintained or if the site is not in compliance. The Storm Water Technician will also be responsible for making sure that the contractor follows through on any maintenance.

10.2 Off-site Management Practices

Describe the protocol for ensuring off-site accumulations of sediment will be removed as necessary.

The contractor will be responsible for cleaning off-site areas that may accumulate with silt. The City of Grand Island, Storm Water Technician or appointed representative shall monitor areas outside the site to determine if site is responsible for off-site accumulation and will be responsible for notifying contractor areas in where sediment needs removed and where new measures can be installed to reduce sediment leaving the site.

10.3 Litter, debris and chemical Management Practices

Describe the protocol for ensuring Litter, debris, and chemicals shall be prevented from being exposed to storm water.

The contractor shall be responsible for keeping the site clean. Dumpsters or other trash receptacles shall be located on site for the proper disposal of any litter, debris or chemicals.

In all cases litter, debris, and chemicals will be stored in areas that will greatly reduce the chance of contamination to water of the state. When feasible all litter, debris, and chemicals will be stored under cover. Double containment must be provided for all liquid fuels, oils, and chemicals.

The City of Grand Island or appointed representative shall notify contractor if site is not being maintained in an orderly fashion.

10.4 Stabilization Management Practices

Describe the protocol for ensuring portions of the site shall be stabilized where construction activity is temporarily or permanently ceased.

The contractor will stabilize all areas as the project progresses. Backfill and final grading can be completed, but no longer than 14 days where construction activity is temporarily or permanently ceased.

Seeding will be placed in conjunction with final stabilization on areas no longer being affected by work activities and in accordance with NDOR (Type A) mix.

Apply loose straw at a minimum rate of 3,570 kg/ha (4,000 lb/ac), or as indicated in the project's special provisions, either by machine or by hand distribution.

The straw mulch must be evenly distributed on the soil surface. Anchor the mulch by "punching" it into the soil mechanically.

10.5 Maximum Pollutant Removal Management Practices

Describe the protocol for ensuring a combination of sediment and erosion control measures will be used to achieve maximum pollutant removal. Also, when considering use of sediment basins, document any factors considered when determining whether to use sediment basin(s) as a control measure.

The grading plan was created to effectively control problems associated with erosion. If upon inspection, any measures are found ineffective or other measures are needed, the city, project engineer or inspector shall review the SWPPP to better achieve maximum removal of pollutants with approval from the City Engineer.

10.6 Velocity Dissipation Management Practices

Describe the protocol for ensuring velocity dissipation devices will be used at discharge locations and along outfall channels to provide non-erosive flow.

All discharge points created must be stabilized according to the construction drawings within 72 hours of placement, to provide non-erosive flow.

Erosion Control Plan Designer					
☐ Engineer ☐ Architect ☐ L	andscape Architect	Erosion (Control Professional		
OA					
Business Name Tim Golka, OA Engineer	Representative's Email Addr	ess	Phone Number		
Representative's Name 2011-D-1	Address Grand Island	NE	Fax Number 68802-1968		
Project # Assigned By Designer	City	State	Zip Code		
I certify under penalty of law the following: (1) that, I have read or been advised of the conditions contained within State of Nebraska General NPDES Permit Number NER110000; (2) that, to the best of my knowledge and belief information contained in this Erosion Control Plan meets the requirements of said permit; (3) that, all Best Management Practices (BMP) have been adequately designed to handle manufacture suggested runoff loads; (4) that, all items required by the NER110000 permit have been included in the Erosion and Sediment control plan in accordance with (Part III, Section B, 2) that are available at the time of design.					
Erosion Control Plan Designer's Signatu	ıre	 Date			
RESPO	NSIBLE CONTRACTOR				
Business Name	Representative's Email Addr	ess	Phone Number		
Representative's Name	Address		Fax Number		
Project # Assigned By Contractor	City	State	Zip Code		
I certify under penalty of law the following: (1) that, I have read or been advised of the conditions contained within this Storm Water Pollution Prevention Plan and believe that I understand them; (2) that, to the best of my knowledge and belief information contained in this SWPPP is true, complete, and accurate; (3) that, to the best of my knowledge and belief the project narrative has been represented and warranted to conform to all applicable Standards, Criteria, Ordinances, Laws, Rules, and Regulations enacted by the [a] City of Grand Island, [b] Hall County, [c] State of Nebraska, and [d] United States Federal Government; (4) that, sound and established practices were used for the implementation of this narratives; (5) that, under the terms of the permit, there will be reporting requirements; (6) that, the SWPPP will be implemented as the first element of construction; (7) understand my roles as they pertain to the SWPPP documents.					
Contractor's Signature		Date			

☐ Engineer ☐ Architect ☐	Landscape Architect] Erosion	Control Professional
City of Grand Island	ssekutera@grand-island.com		308 385-5444
Business Name Scott Sekutera	Representative's Email Add	dress	Phone Number 308 385-5488
Representative's Name 2011-D-1	Address Grand Island	NE	Fax Number 68802-1968
Project # Assigned By INSPECTOR	City	State	Zip Code
reporting requirements; and (6) that, the SWPPP wi		Date	
NDE	Q PERMIT APPLICANT		
NDE City of Grand Island	Q PERMIT APPLICANT tbrown@grand-island.com		
		ldress	Phone Number 308 385-5444 ext 260
City of Grand Island Business Name Terry Brown	tbrown@grand-island.com Representative's Email Ad	ldress	308 385-5444 ext
City of Grand Island Business Name Terry Brown Interim Public Works Director	tbrown@grand-island.com Representative's Email Ad 100 East First Street	ldress NE	308 385-5444 ext 260
City of Grand Island Business Name Terry Brown Interim Public Works Director Representative's Name	tbrown@grand-island.com Representative's Email Ad 100 East First Street Address Grand Island City	NE State	308 385-5444 ext 260 Fax Number 68802-1968 Zip Code



Wastewater Section

1200 °N° Street, Suite 400, The Atrium PO Box 98922

Lincoln, NE 68509-8922 Tel.: 402-471-4220

Fax:: 402-471-2909

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) General NPDES Permit Number NEG671000

A General NPDES Permit Authorizing Dewatering Discharges

In compliance with the provisions of the Federal Water Pollution Control Act (33 U.S.C. Sections, 1251 ot. seq. as amended to date), the Nebraska Envirouraental Protection Act (Neb. Rev. Stat. Sections 81-1501 et. seq. as amended to date), and the Rules and Regulations promulgated pursuant to these Acts, the Director of the Nebraska Department of Environmental Quality is hereby issuing this general permit authorizing the discharge of pollutants to waters of the State and excluding tribal lands within the State of Nebraska. This general permit establishes prohibitions, limitations and other conditions pertaining to these discharges. This general permit does not relieve permittees of other duties and responsibilities under the Nebraska Environmental Protection Act, as amended, or established by regulations promulgated pursuant thereto.

This general permit establishes prohibitions and other conditions penaining to those types of discharges. This general permit is issued authorizing dewatering discharges from construction excavation sites and wells to waters of the state. Some dewatering discharges may be prohibited to those waters identified in Part IB and C of this permit.

This permit shall become effective on January 1, 2012.

This permit and the authorization to discharge shall expire at midnight, December 31, 2016

Pursuant to the Delegation Memorandum dated January 12, 1999 and signed by the Director, the undersigned hereby executes this document on the behalf of the Director.

Signed this <u>30 Y</u> day of

Marty Link

Acting Water Quality Division Administrator

Table of Contents

PART	I. ELIGIBILITY	3
Α.	DISCHARGES AUTHORIZED BY THIS PERMIT	3
В.	AREA OF APPLICATION	3
C.	LIMITATIONS OF COVERAGE	
D.	PERMIT COMPLIANCE	
PART	II. AUTHORIZATION TO DISCHARGE	3
A.	AUTHORIZATION	3
B.	ADDITIONAL NOTIFICATION REQUIREMENTS THAT APPLY TO SOME FACILITIES.	5
C.	REVOCATION OF DISCHARGE AUTHORIZATION.	6
D.	REQUIRING AN ALTERNATIVE PERMIT AND APPLICATION	
E.	NOTIFICATION OF CHANGES: OWNERSHIP, NAME, OR CONTACTS	
F.	NOTIFICATION OF ACTIVITIES THAT MAY ALTER THE WATER QUALITY OF THE DISCHARGE	6
G.	NOTIFICATION OF PROJECT RELOCATION OR COMPLETION.	
	III. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR DEWATERING	
DISCI	HARGES	7
A.	CONSTRUCTION EXCAVATION DISCHARGE EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS	7
B.	FOUNDATION SUMPS, UTILITY VAULTS OR WELL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS	8
C.	SITE SPECIFIC LIMITATIONS	
D.	ONE-TIME SAMPLING ANALYSIS FOR METALS	9
E.	ONE-TIME SAMPLING ANALYSIS FOR ORGANICS	9
PART	IV. OTHER CONDITIONS AND REQUIREMENTS	9
A.	COMPLIANCE WITH PERMIT TERMS AND CONDITIONS	9
B.	DISCHARGE AFFECTING ENDANGERED OR THREATENED SPECIES.	9
C.	DISCHARGES AFFECTING HISTORICAL PLACES OR ARCHEOLOGICAL SITES	9
D.	PROHIBITED TOXIC DISCHARGES	
E.	PROHIBITED DISCHARGES THAT CAUSE AESTHETIC VIOLATIONS.	9
F.	IMMEDIATE REPORTING REQUIREMENT	10
G.	REDUCTION OF THE MONITORING FREQUENCY	
H.	IMPLEMENTATION OF EROSION CONTROL AND ENERGY DISSIPATION MEASURES.	
I.	GROUNDWATER CONTAMINATION.	
J.	MODIFICATION OF PERMIT ATTACHMENTS	10
V	ADDITIONAL MONITORING REQUIREMENTS	10

Appendix A-- Standard Conditions

Appendix B -- State Resource and Public Drinking Water Supply Streams

Attachment #1 -- DW-NOI Notification of Intent

Attachment #2 – Threatened and Endangered Species Checklist

Attachment #3 – DW-DMR Discharge Monitoring Report

Attachment #4 – PCE-Physical Characteristics Examination Report

Attachment #5 -- NCR Noncompliance Report

Attachment #6 -- DW-RLN Dewatering Site Relocation Notice

Part I. Eligibility

A. Discharges Authorized by this Permit

This permit authorizes ground and surface waters discharges from dewatering construction excavations, foundation sumps, utility vaults or wells provided the water being discharged is groundwater or groundwater mixed with storm water. This permit does not constitute authorization under 33 U.S.C. 1344 (Section 404 of the Clean Water Act) of any stream dredging or filling operations.

B. Area of Application

This permit has application throughout the entire State of Nebraska excluding State Resource Waters and tribal lands within the State of Nebraska.

C. Limitations of Coverage

This permit does not authorize the following discharges and may be the basis for denial or termination of authorization under this general permit. The department shall be consulted prior to your submission of the DW-NOI if any of the following conditions apply:

- 1. Discharges regulated by an existing NPDES permit;
- 2. Direct discharges to classified lakes or impounded waters listed in NDEQ Title 117, Chapter 6;
- 3. State Resource Waters (See Appendix B)
- 4. Discharges to Public Drinking Water (See Appendix B), unless written authorization from the Department is received;
- 5. Discharges to tribal lands within the State of Nebraska;
- 6. The discharges containing sanitary, process wastewater or livestock wastes;
- 7. Discharges in the opinion of the Department, may create potential, negative water quality impacts in the receiving stream, water body; and ground water;
- 8. Discharges that may adversely impact critical habitat of aquatic related, threatened or endangered species as designated by Nebraska Game and Parks Commission (www.ngpc.state.ne.us) or the U.S. Fish and Wildlife Service (www.fws.gov);
- 9. Discharges that may adversely affect properties listed or eligible for listing in the National Register of Historic Places (www.nebraskahistory.org) or affecting known or discovered archeological sites; and
- 10. Storm water discharges associated with industrial activity as defined in Title 119, which includes storm water discharges from construction sites of 1 acre or more.

D. Permit Compliance

Any noncompliance with the requirements of this Permit constitutes a violation of the provisions of the Federal Water Pollution Control Act (33 U.S.C. Secs. 1251 <u>et. seq.</u> as amended to date), the Nebraska Environmental Protection Act (Neb. Rev. Stat. Secs. 81-1501 <u>et. seq.</u> as amended to date), and the Rules and Regulations promulgated pursuant to these Acts.

Part II. Authorization to Discharge

A. Authorization

Eligible facilities are defined by the requirements and limitations in Part I. The eligible facilities may apply for authorization to discharge under this general permit using the Notice of Intent (DW-NOI) (See Attachment #1). You must use the DW-NOI form provided in Attachment #1 (or a photocopy thereof or electronic DW-NOI form that may become available during the term of this permit provided by NDEQ).

- 1. You must use the DW-NOI form to notify the Department that as a Permittee, you intend to meet all conditions of this permit. Complete, accurate, and timely DW-NOI forms shall automatically receive authorization ten (10) calendar days after the post-marked date. The Department shall provide a Discharge Authorization Number for the dewatering site described on the DW-NOI form.
 - a. Ongoing projects authorized under the previous version of this permit shall remain in effect no longer than 180 days after the issue date of this permit. Permittees with ongoing projects shall operate under

all existing terms and conditions of that permit until the project is either terminated or receives authorization under this permit.

- b. You are not prohibited from submitting NOIs after initiating Dewatering. An NOI submitted to the Department after initiating dewatering shall receive authorization consistent with this permit. Authorization of a late NOI shall not preclude the Department from taking enforcement action for discharging pollutants to Waters of the State without a permit.
- c. The Department may request additional information from an applicant for any substantive reason and postpone the assignment of discharge authorization in writing as necessary.
- d. Written authorization shall be required for dewatering when effluent discharge is within 2,500 feet of any water of the state identified in Appendix B of this permit.
- e. Submittal of the NPDES DW-NOI form does not relieve the applicant of the responsibility to comply with the requirements of other government agencies.
- f. The current addresses and telephone number at the time of permit issuance are:

Wastewater Section
Nebraska Department of Environmental Quality
1200 N Street, The Atrium, Suite 400

P.O. Box 98922

Lincoln, Nebraska 68509-8922

Telephone 402-471-4220

Web Site Address: www.deq.state.ne.us/publications/grantsandforms/npdes program/applications

2. Contents of the Notice of Intent

You must provide the following information on the DW-NOI form

Site Information

The following information shall be provided:

- 1) The name of the site;
- 2) The site location in descriptive terms (i.e., street address, or if not available, in relationship to recognizable landmarks);
- 3) A legal description designated in terms of section, township, range and county, provided to the nearest 1/16th of a section, unless the facility occupies a larger area (e.g., NW½, SW¼, S10, T15N, R11E, Douglas County) and/or Global Positioning System (GPS) location;
- 4) Information on the number of outfalls and the discharge volume anticipated from each;
- 5) The source of water (e.g., surface water, storm water runoff and/or ground water);
- 6) The identity of any contamination and/or pollutants that may be present in dewatering discharges.

Receiving Stream

- 1) The name of the stream or water body that will receive the outfall discharges;
- 2) Identify the number of outfalls that discharge into the receiving stream;
- 3) Identify if the receiving stream(s) is listed in Appendix B, and
- 4) Provide a brief description of any controls used to dissipate energy so as to prevent channel erosion and scouring in the receiving stream or drainage way.

The "Certifying Official's" Identity, Mailing Address and Telephone Number The "Authorized Representative's" Identity, Mailing Address and Telephone Number Certification Statement

The following certification statement shall be contained in the Notice of Intent:

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."

I further certify that:

- 1) I or qualified members of my staff, have reviewed and understand the terms and conditions of NPDES General Permit Number NEG671000;
- 2) The facility identified in Section 1 of this DW-NOI (Notice of Intent) meets the "Eligibility" requirements and is not excluded by the "Limitation of Coverage" requirements, set forth in Section C of the permit; and
- 3) I understand that the submission of this DW-NOI (Notice of Intent) obligates the facility identified in Section 1 of this Notice of Intent to comply with the terms and conditions of the Permit NEG671000, provided authorization to discharge is obtained.

Signature Requirements

The owner/operator (person, business, or governmental entity) shall sign and submit the initial Notice of Intent. DW-NOIs for additional sites may be submitted under the signature of the Authorized Representative. The owner/operator must specifically authorize the Authorized Representative to perform this task in a previous DW-NOI or other written documentation.

B. Additional Notification Requirements that Apply to Some Facilities

- 1. The Department may request additional information from the applicant when it is necessary to adequately review the DW-NOI and evaluate the discharge request.
- 2. Facilities that discharge to a public or private storm sewer system are obligated to notify the owner or operator of the storm sewer system.

C. Revocation of Discharge Authorization

- 1. The Director may revoke a permittee's authorization to discharge under the terms and conditions of this permit for any of the following reasons:
 - a. When it becomes necessary to protect the public health and welfare.
 - b. The discharge is adversely affecting a listed endangered or threatened species or its critical habitat;
 - c. The discharge is causing a violation of a surface or ground water quality standard; and
 - d. A permittee fails to submit an alternative permit application requested pursuant to Part II.D.
- 2. The Department may deny authorization to discharge under the terms and conditions of this permit by providing the applicant with a written notice of the denial and an explanation of the basis for the determination.
- 3. The Department may require the submittal of a different Notice of Intent for an alternative general permit. The Department shall provide an explanation of the basis for any such request.
- 4. All permittees must meet the requirements set forth in this permit. Failure to do so shall negate any authorization to discharge.
- 5. Authorization to discharge under the terms and conditions of this permit shall be terminated upon the issuance of the alternative permit or the granting of discharge authorization under another alternative general permit.

D. Requiring an Alternative Permit and Application

- 1. The Director may require any person authorized to discharge under the terms and conditions of this permit to apply for and obtain either a site-specific NPDES permit or an alternative NPDES general permit. The Department shall provide a written notice that an alternative permits application is required. This notice shall include:
 - a. A brief explanation of the basis for the determination;
 - b. An application or Notice of Intent for an alternative permit; and
 - c. A deadline for submitting the application for the alternative permit.
- 2. The Director may grant additional time for the submittal of the alternative application following the initial notice. Conditions that may constitute a basis for requesting an alternative application include, but are not limited to:
 - a. The discharge is a significant contributor of pollution;
 - b. The discharge is to Public Drinking Water Supply (see Appendix B);
 - c. The discharger is not in compliance with the terms and conditions of the permit;
 - d. Additional pollution control or prevention technology has become available;
 - e. The promulgation of new effluent limitations that apply to the source;
 - f. The approval of a water quality management plan containing requirements applicable to the source;
 - g. The identification of conditions or pollutant sources not previously recognized; and
 - h. The issuance of an alternative general permit that applies to the discharge.

E. Notification of Changes: Ownership, Name, or Contacts

The permittee is responsible for notifying the Department within 30 days of any transfer of ownership, facility name change, or changes in the owner/operator or Authorized Representative. The former owner and the new owner must provide written notification of ownership changes.

F. Notification of Activities that may alter the Water Quality of the Discharge

The permittee shall notify the Department immediately of any activities or actions that may alter the water quality of dewatering discharges. For additional reporting requirements relative to spills, leaks, or effluent physical characteristics (Immediate Reporting Requirements) see Part IV.F.

G. Notification of Project Relocation or Completion

1. The permittee shall notify the Wastewater Section within 30 days when a different dewatering site is established. The written notification of these site changes is completed using the NPDES DW-RLN form - Relocation Notice.

- 2. The permittee shall notify the Department prior to initiating dewatering activities if the start-up date varies by more than one week of the anticipated date submitted in the DW-NOI form. Written notification shall be provided to the Department.
- 3. The permittee shall provide the Department with a written notification of the project termination within 30 days after discontinuing the dewatering activities.

Part III. Effluent Limitations and Monitoring Requirements for Dewatering Discharges

A. Construction Excavation Discharge Effluent Limitations and Monitoring Requirements

The dewatering discharges associated with construction excavation sites shall be monitored and subject to the limitations set forth in the following table. Monitoring shall be conducted at the discharge point(s). The Department may specify an alternate or more specific monitoring point(s).

Parameter	Storet #	Units	Discharge	Limitations	Monitoring	Sample
			Monthly Average	Daily Maximum	Frequency (1)	Туре
Flow	50050	MGD	Report	Report (2)	Daily	Calculated or Measured
Physical Characteristics (3)	NA	NA		(3)	Daily	In Situ and Grab (3)
Petroleum Hydrocarbons (4)	82180	mg/L	Report 10		(4)	Grab
Total Suspended Solids	00530	mg/L	Report	90	Weekly	Grab
Metals	NA	mg/L	Varies	Varies Varies (7)		Grab
Organics	NA	mg/L	Varies Varies		(7)	Grab
Parameter	Storet #	Units	Discharge Limitations Minimum Maximum		Monitoring Frequency	Sample Type
pH ⁽⁵⁾	00400	Standard Units	6.5 (6)	9.0 (2)	Weekly	Grab

Footnotes:

- (1) Monitoring shall be initiated within 8 hours after the discharge is started.
- (2) Maximum means the maximum amount discharged.
- The procedures, limits, sampling, record keeping and reporting requirements for this parameter are set forth in the 'Physical Characteristics Examination Procedures' (see Attachment #6 of this permit).
- (4) If a visible hydrocarbon sheen or petroleum free-product is detected during the physical characteristic examination, the petroleum hydrocarbon reporting and limitation requirements apply. The OA-2 test method (University Hygienic Laboratory, Iowa City, IA) shall be used for Total Extractable Hydrocarbon analyses, unless otherwise specified in writing by the NDEQ.
- (5) All pH samples must be analyzed within a 15-minute time period.
- Minimum means the minimum acceptable value. pH is reported as the negative logarithm of the hydrogen ion concentration. pH results cannot be averaged.
- (7) Applicable on a site by site basis

Abbreviations: MGD - million gallons per day mg/L - milligrams per Liter NA - Not Applicable

B. Foundation Sumps, Utility Vaults or Well Effluent Limitations and Monitoring Requirements

The dewatering discharges associated with foundation sumps, utility vaults or wells used to lower ground water levels shall be monitored and subject to the limitations set forth in the following table. Monitoring shall be conducted at the discharge point(s). The Department may specify an alternate or more specific monitoring point(s).

B	G	TT •4		Limitations	Monitoring	Sample
Parameter	Storet #	Units	Monthly Average	Daily Maximum	Frequency (1)	Type
Flow	50050	Gallons per Day	Report	Report (2)	Daily	Calculated or Measured
Physical Characteristics (3)	NA	NA	(3	3)	Daily	In Situ and Grab (3)
Petroleum Hydrocarbons (4)	82180	mg/L	Report	10	(4)	Grab
Total Suspended Solids	00530	mg/L	Report	30	Weekly	Grab
Metals	NA	mg/L	Varies	Varies	(7)	Grab
Organics	NA	mg/L	Varies	Varies	(7)	Grab
Parameter	Storet #	Units	Discharge Limitations Minimum Maximum		Monitoring Frequency	Sample Type
pH ⁽⁵⁾	00400	Standard Units	6.5 (6)	9.0 (2)	Weekly	Grab

Footnotes:

- (1) Monitoring shall be initiated within 8 hours after the discharge is started.
- (2) Maximum means the maximum amount discharged.
- The procedures, limits, sampling, record keeping and reporting requirements for this parameter are set forth in the 'Physical Characteristics Examination Procedures' (see Attachment #6 of this permit).
- (4) If a visible hydrocarbon sheen or petroleum free-product is detected during the physical characteristic examination, the petroleum hydrocarbon reporting and limitation requirements apply. The OA-2 test method (University Hygienic Laboratory, Iowa City, IA) shall be used for Total Extractable Hydrocarbon analyses, unless otherwise specified in writing by the NDEQ.
- (5) All pH samples must be analyzed within a 15-minute time period.
- Minimum means the minimum acceptable value. pH is reported as the negative logarithm of the hydrogen ion concentration. pH results cannot be averaged.
- (7) Applicable on a site by site basis

Abbreviations: MGD - million gallons per day mg/L - milligrams per Liter NA - Not Applicable

C. Site Specific Limitations

Site specific limitations for a parameter may be added on a case-by-case basis that are equivalent to the basic standards and methodologies for surface water, or regulation for effluent limitations, or any other applicable regulation, and would be specified in the certification along with the appropriate monitoring frequency.

D. One-time sampling analysis for Metals

The Department may request a one-time sampling and analysis for specific or all inclusive metals parameters on a site specific/discharge specific basis. The permittee will be required to submit these results to the Department. The Department will then review the data to determine if any certification amendments are necessary based on the effluent monitoring results.

E. One-time sampling analysis for Organics

The Department may request a one-time sampling and analysis for specific or all inclusive organics parameters on a site specific/discharge specific basis. The permittee will be required to submit these results to the Department. The Department will then review the data to determine if any certification amendments are necessary based on the effluent monitoring results.

Part IV. Other Conditions and Requirements

A. Compliance with Permit Terms and Conditions

Compliance with the terms and conditions of this permit does not relieve the permittee from any liability that may arise as a consequence of their discharges.

B. Discharge affecting Endangered or Threatened Species

This permit does not replace or satisfy any review requirements for Endangered or Threatened species from new or expanded discharges that adversely impact or contribute to adverse impacts on a listed endangered or threatened species or adversely modify a designated critical habitat. The permittee must conduct any required review and coordinate with appropriate agencies for any project with the potential of affecting threatened or endangered species, or their critical habitat.

C. Discharges Affecting Historical Places or Archeological Sites

This permit does not replace or satisfy any review requirements for Historic Places or Archeological Sites, from new or expanded discharges which adversely affect properties listed or eligible for listing in the National Register of Historic Places or affecting known or discovered Archeological Sites. The permittee must be in compliance with National Historic Preservation Act and conduct all required review and coordination related to historic preservation, including significant anthropological sites and any burial sites, with the Nebraska Historic Preservation Officer. You must comply with all applicable state, and local laws concerning the protection of historic properties and places. Your discharge authorization under this permit is contingent upon this compliance.

D. Prohibited Toxic Discharges

Discharges shall be free from toxic substances, which alone or in combination with other substances, create conditions unsuitable for aquatic life, except in instances where there is no net increase in the receiving water body of the quantity or concentration of the toxic substance. The exception shall only apply in instances where water is taken from and discharged to the same water body and no increases in pollutant quantities or concentrations occur.

E. Prohibited Discharges that Cause Aesthetic Violations

Discharges shall not contain pollutants at concentrations or levels that produce objectionable films, foam, colors, turbidity or deposits, or noxious odors in the receiving stream or waterway, except in instances where there is no net increase in pollutant quantities or concentrations in the receiving water body. The exception shall only apply in instances where water is taken from and discharged to the same water body and no increases in pollutant quantities or concentrations occur.

F. Immediate Reporting Requirement

The permittees shall report immediately by telephone upon becoming aware of any of the following:

- 1. Evidence indicating a possible violation of the effluent limitations and requirements listed in Effluent Limitations and Monitoring Requirements for Dewatering Discharges;
- 2. Evidence of oil or petroleum product contamination in the effluent (e.g., a visible oil sheen);
- 3. Any physical characteristic in the effluent that could indicate the presence of a pollutant or pollutants not previously identified or anticipated; and
- 4. The occurrence, or new knowledge of, any spills, leaks or contamination in the vicinity of the project that could impact the water quality of the effluent.

The telephone numbers are listed in Part II. A. 1. f

G. Reduction of the Monitoring Frequency

1. Excavation Dewatering

If continuous dewatering is conducted for a period of 30 days, the permittee may request a reduction in the monitoring frequency. The request shall be submitted in writing. The compliance limitations and requirements criteria will be used to evaluate the frequency reduction.

2. Dewatering using Wells to depress the water level

After dewatering wells have been operated continuously for a one-week period, the permittee may request a reduction in the monitoring frequency. The request shall be submitted in writing. The compliance limitations and requirements criteria will be used to evaluate the frequency reduction.

H. Implementation of Erosion Control and Energy Dissipation Measures

Permittees shall implement erosion control and energy dissipation measures as necessary to prevent excessive erosion and channel scouring that may result from the discharge flow.

I. Groundwater Contamination

If groundwater contamination is encountered, then the permittee is to contact the department and, if appropriate, the owner of the collection system receiving the discharge. Since this discharge of contaminated groundwater is not covered under this permit, the permittee shall immediately cease dewatering and apply for a treated groundwater remediation discharge permit.

J. Modification of Permit Attachments

The Department may modify the permit attachments (i.e., DW-NOI, DW-DMR, and DW-RLN forms). The modified forms satisfy the notification and reporting requirements set forth in this permit. If information is submitted on an outdated form, opportunity to resubmit the information shall be provided the permittee, or, at the discretion of the Department, submittals on outdated forms may be accepted.

K. Additional Monitoring Requirements

In addition to monitoring requirements set forth, the Department may request more frequent monitoring.



1200 'N' Street, Suite 400, The Atrium PO Box 98922 Lincoln, NE 68509-8922 Tel. 402/471-4220 Fax 402/471-2909

DW-NOI

Notice of Intent (NOI) for Requesting Dewatering Discharges Authorization Under the General NPDES Permit NEG671000

Submission of this Notice of Intent fulfills the requirements set forth in Part II of NPDES General Permit Number NEG671000. By submission of this Notice of Intent the applicant is requesting authorization to discharge under the terms and conditions of said permit, and is agreeing to meet all of the terms and conditions set forth in said permit.

Once authorization to discharge is granted violations of the terms and conditions of the permit may result in the initiation of enforcement proceedings pursuant to sections 81-1508 through 81-1508.02 of the Nebraska Environmental Protection Act (Reissue 1987 and Cum. Supp. 1994). Among the enforcement options authorized by the Act are civil penalties of up to \$10,000 per day per violation.

The permit should be consulted for additional information on the completion of this NOI. Questions concerning the NOI or the permit should be directed to the Wastewater Section at (402) 471-4220. Written requests and submittals should be sent to the Wastewater Section at the address set forth on page 4 of this NOI.

1. Facility Certifying Official / Owner or Operator

2.

If both the owner and the operator are to be jointly responsible for permit compliance, then both must be identified. If not, only the owner or the operator, whichever meets the requirements as certifying official, is responsible for permit compliance should be identified.

O	wner or Operator Name:
Id	entification and Location of Sources
a.	Facility Name:
b.	Facility Location: (location description, not mail address):
c.	Legal Description:
	Quarter of the Quarter, Section, Township N, Range (E or W),
Co	ounty
d.	Receiving Stream or Waterbody:

3.

e.	(If yes, written notification from the departmen will be allowed to State Resource Waters. The quality impacts. Addition information concerni water quality may be required.)	t for authori discharge sit	zation to discharge is required. te may be denied due to potentia	al for wa	iter
f.	Is this a direct discharge into a waterbody lis	sted in NDE	Q Title 117, Chapter 6?	Yes	No
g.	Is the dewatering discharge to a Municipal S	Separate Sto	orm Sewer System?	Yes	No
h.	Have you notified the Municipal Separate St	orm Sewer	System operator?	Yes	No
i.	Have you contacted the Nebraska Game and concerning impact(s) to the listed endangere habitat(s)?			Yes	No
j.	Have you contacted the Nebraska Historical sites?	Society con	ncerning impact(s) to historic	Yes	No
k.	Please provide a brief description of any con erosion and scouring in the receiving stream		o dissipate energy so as to pre	event cha	annel
Th for cor Re	rtifying Official and Authorized Representation responsibilities and requirements of the "Certification on page 4 of this NOI. If both the owner and impliance, then an Authorized Representative for presentative can be specified. An Authorized Reshes to be the sole contact for the Department.	Tying Officia the operator both must b	are to be jointly responsible for e identified. Only one Authoriz	r permit zed	
a.	Certifying Official				
	Name:		Title:		
	Mail Address:				
	City:				
	Telephone:		Email(optional)		
b.	Authorized Representative				
	Name:		Title:		
	Mail Address:				
	City:	_ State:	Zip Code:		
	Telephone:		Email(optional)		

4. Discharge Information a. How many discharge outfalls are present? For each outfall, identify the following information: b. Outfall 1: 1) What is the source of the discharge? (i.e. chlorinated municipal water, storm water, surface water or ground water): 2) Anticipated Start-Up Date: _____ Anticipated Completion Date: _____ 3) Anticipated Discharge Flow Rate: Anticipated Discharge Frequency c. Outfall 2: 1) What is the source of the discharge? (i.e. chlorinated municipal water, storm water, surface water or ground water): 2) Anticipated Start-Up Date: _____ Anticipated Completion Date: _____ 3) Anticipated Discharge Flow Rate: ______ Anticipated Discharge Frequency _____ d. Outfall 3: 1) What is the source of the discharge? (i.e. chlorinated municipal water, storm water, surface water or ground water): 2) Anticipated Start-Up Date: _____ Anticipated Completion Date: 3) Anticipated Discharge Flow Rate: Anticipated Discharge Frequency 5. Identification of Potential Pollutants in the Discharge Identify any pollutants that you know may be potentially present in the discharge or any materials stored in the vicinity that if spilled could contaminate the discharge. Also identify any ground water contamination plumes, previous spills or other events that you know have occurred and that may contribute pollutants to the discharge.

6. Certification

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

I further certify that:

I, or qualified members of my staff, have reviewed and understand the terms and conditions of NPDES General Permit Number NEG671000;

The facility identified in Section 1 of this NOI meets the "Eligibility" requirements and is not excluded by the "Limitation of Coverage" requirements, set forth in Part I. C. of the permit; and

I understand that the submission of this NOI obligates the facility identified in Section 1 of this NOI to comply with the terms and conditions of the Permit NEG671000, provided authorization to discharge is obtained.

Certifying Official's Signature	Date Signed
	-
Certifying Official's Printed Name	Title

Qualifications and Responsibilities of the "Certifying Official" and the "Authorized Representative" The qualifications and responsibilities of the "Certifying Official" are set forth in NDEQ Title 119 Chapter 13 002:

All permit applications submitted to the Department shall be signed:

002.01 – For a corporation by a responsible corporate officer;

002.02 - For a partnership or in the case of a sole proprietorship by a general partner or the proprietor; and

<u>002.03</u> - For a municipal, State, Federal, or other public facility by either a principal executive officer or ranking elected official.

The qualifications and responsibilities for the "authorized representative" are set forth in NDEQ Title 119 Chapter 13 003. All other correspondence, reports and DW-DMR's shall be signed by a person designated in 002.01 through 002.03 or a duly authorized representative if such representative is responsible for the overall operation of the facility from which the discharge originates; the authorization is made in writing by the person designated under 002.01 through 002.03 and the written authorization is submitted to the Director. The authorized representative may also sign DW-NOIs, if the Owner/Operator has specifically authorized them to perform this task in a previous DW-NOI or in other written documentation.

Submit the completed NOI to:

U.S. Postal Service Address:

Wastewater Section Nebraska Department of Environmental Quality PO Box 98922 Lincoln, NE 68509-8922

Lincoln, NE 68509-8922 Telephone: (402) 471-4220 Alternate Carrier Address:

Wastewater Section Nebraska Department of Environmental Quality 1200 'N' Street, The Atrium, Suite 400 Lincoln, NE 68509

THREATENED & ENDANGERED SPECIES GUIDANCE CHECKLIST For NPDES Industrial Storm Water General Permit #NER900000 (For New or Expanded Dischargers)

Disclaimer: This checklist was developed for guidance purposes only in an effort to assist permit applicants to identify potential locations of threatened and endangered species that could be affected by discharge activities. Completion of this checklist is not a requirement for permit authorization and is not intended to be used as a substitute for a professional environmental review. The use of this form does not relieve the permittee from further review or enforcement action by the Nebraska Department of Environmental Quality (NDEQ) or the Nebraska Game and Parks Commission (NGPC)

1.	Does the action area drain to a stream of concern? (See attached Stream and River Reaches of Concern for Nebraska Fish Species map.)	□ Yes	□ No
2.	Does the action area drain to rivers, streams, ponds, lakes or wetlands within the range of American burying beetle? (See attached American Burying Beetle Distribution map.)	□ Yes	□ No
3.	Does the action area drain to a Salt Creek, Little Salt Creek, Rock Creek or saline wetlands in Lancaster or Saunders County?	□ Yes	□ No
4.	Does the action area drain to Lodgepole Creek from Kimball to the Wyoming State line?	□ Yes	□ No
5.	Does the action area drain to wetlands or wet meadows in the range of the western prairie fringed orchid or small white lady's slipper. (<i>These are both species of orchids. See attached Orchid Distribution map.</i>)	□ Yes	□ No
6.	Does the action area drain to a river within the range of interior least tern or piping plover? (See attached Tern & Plover Distribution map.)	□ Yes	□ No
7.	Does the action area drain to a river, stream, lake, pond, or wetland within the range of massasauga? (See attached Massasauga Distribution map.)	□ Yes	□ No
8.	Does the action area drain to a river within the range of river otter? (See attached River Otter Distribution map.)	□ Yes	□ No
9. If x	Does the action drain to wetlands or to the Republican, Platte, Loup, Middle Loup, North Loup, or Niobrara Rivers within the primary whooping crane migration corridor? (See attached Primary Migration Corridor of Whooping Crane map.) you answered "no" to all questions, a review by NGPC may not be needed (see disclaimer all	□ Yes	□ No
)	to a mismored in to an questions, a review by 1961 c may not be needed (see discidiment at	ovej. menu	ide uns ionn with

h your permit application.

If you answered "yes" to any of these questions, consultation with the Nebraska Game and Parks Commission may be necessary. Include this form with your permit application. Permit authorizations will vary from those identified in Table 1-2 depending on the additional time required to evaluate potential impacts.

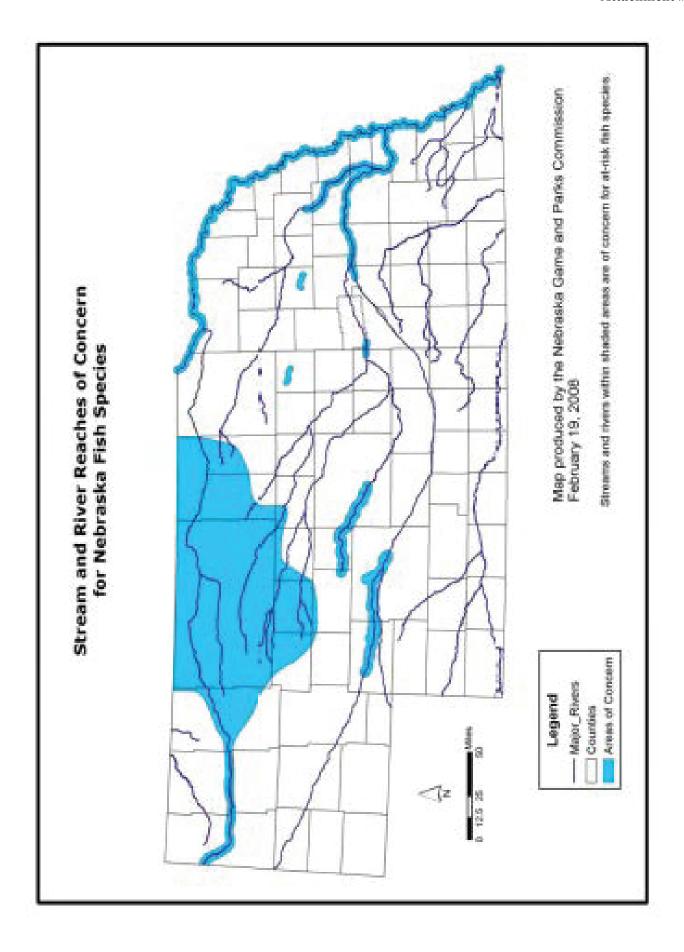
All NOI submissions received without documentation relating to threatened and endangered species will be considered incomplete.

If you have questions, please call the Environmental Analyst Supervisor at (402) 471-5438.

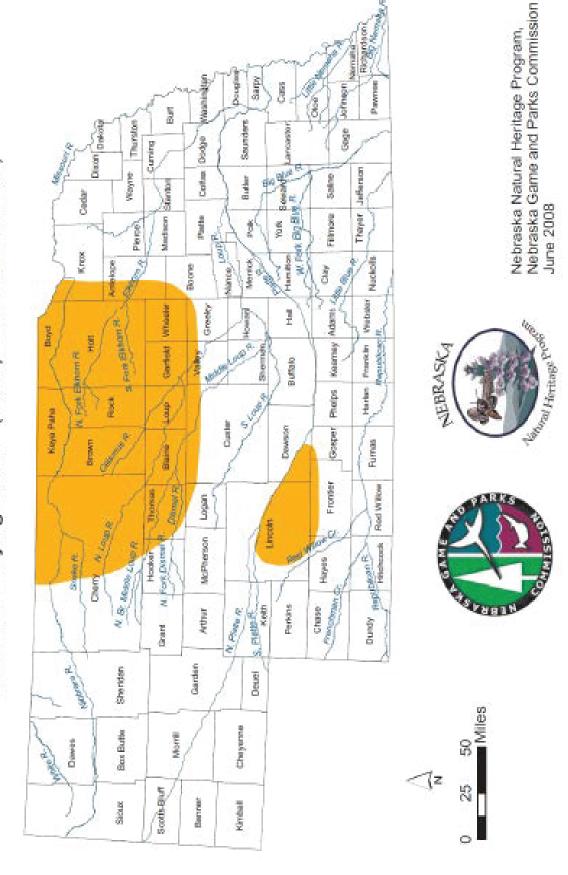
Additional Resources

- Nebraska Game and Parks Commission Nongame and Endangered Species http://outdoornebraska.ne.gov/wildlife/programs/nongame/pdf/E T Species List.pdf
- Range Maps for Nebraska's Threatened and Endangered Species (includes listing by county) http://digitalcommons.unl.edu/nebgamewhitepap/30/
- Endangered, threatened, proposed, and Candidate species in Nebraska Counties (USFWS) http://www.fws.gov/mountain-prairie/endspp/CountyLists/Nebraska.pdf
- Listings and occurrences for Nebraska (USFWS)

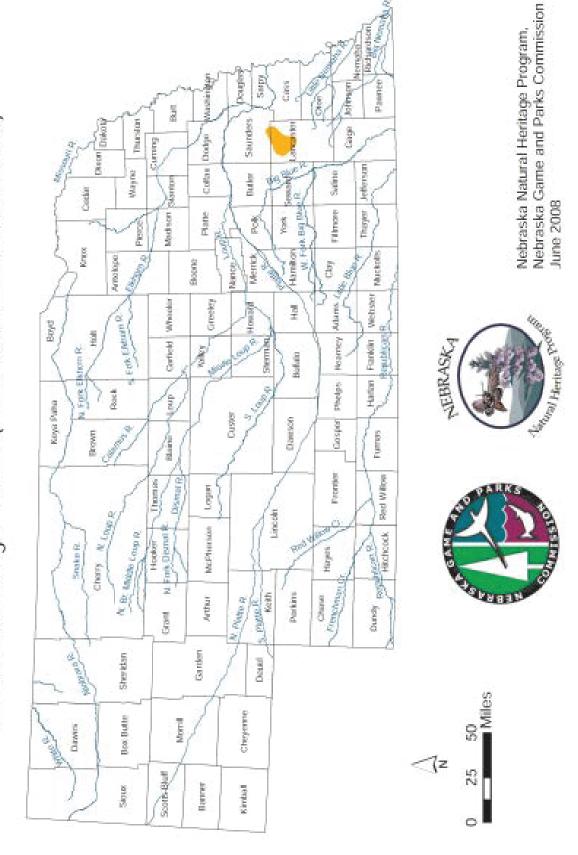
http://ecos.fws.gov/tess_public/pub/stateListingAndOccurrenceIndividual.jsp?state=NE



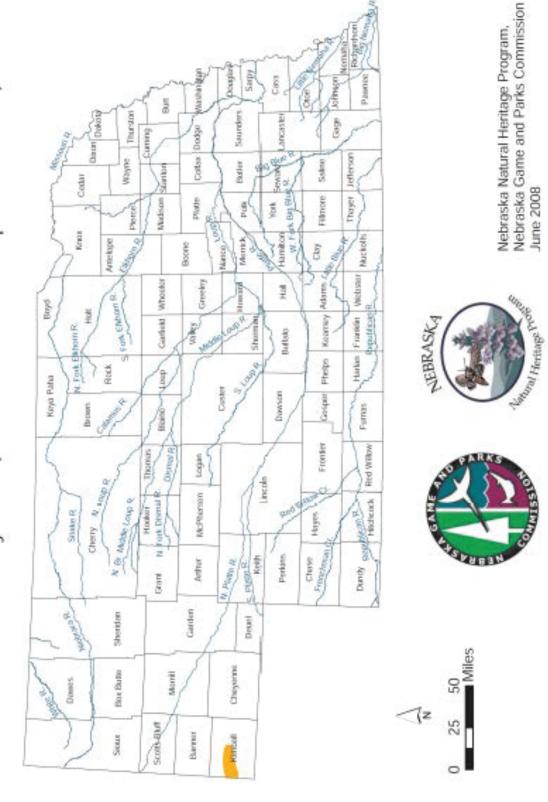
American Burying Beetle (Nicrophorus americanus) Estimated Current Range of



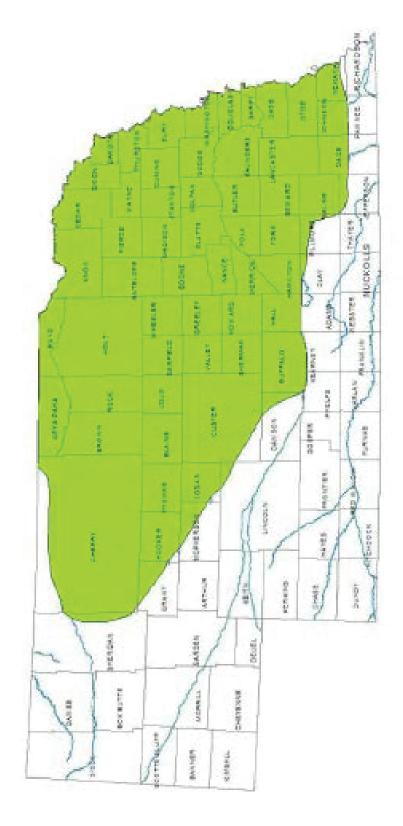
and Salt Creek Tiger Beetle (Cicindela nevadica lincolniana) Estimated Current Range of Saltwort (Salicornia rubra)



Colorado Butterfly Plant (Gaura neomexicana ssp. coloradensis) Estimated Current Range of

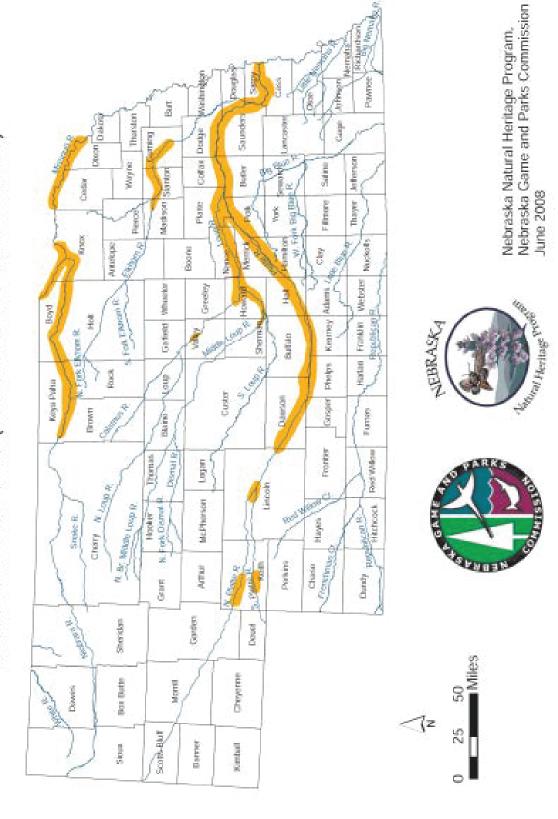


Orchid Distribution

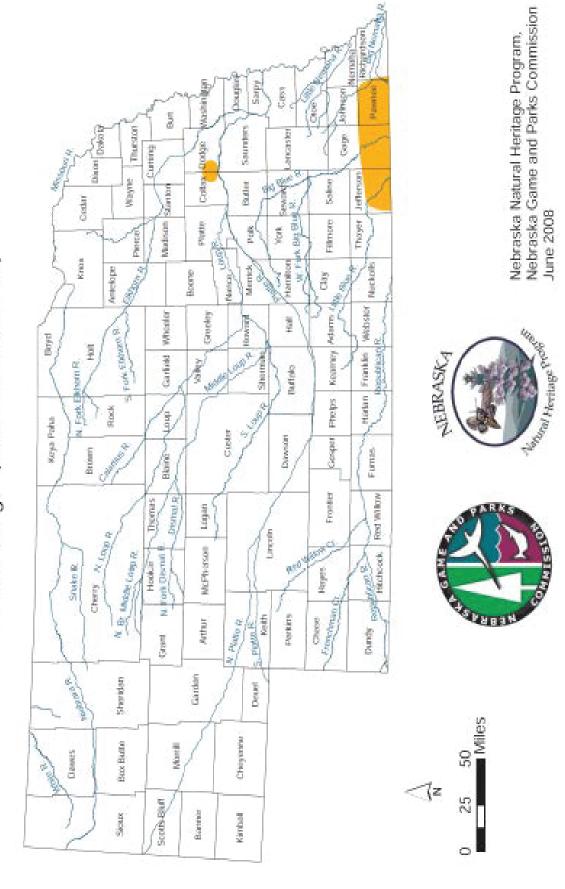


Nebraska Game and Parks Commission 2008

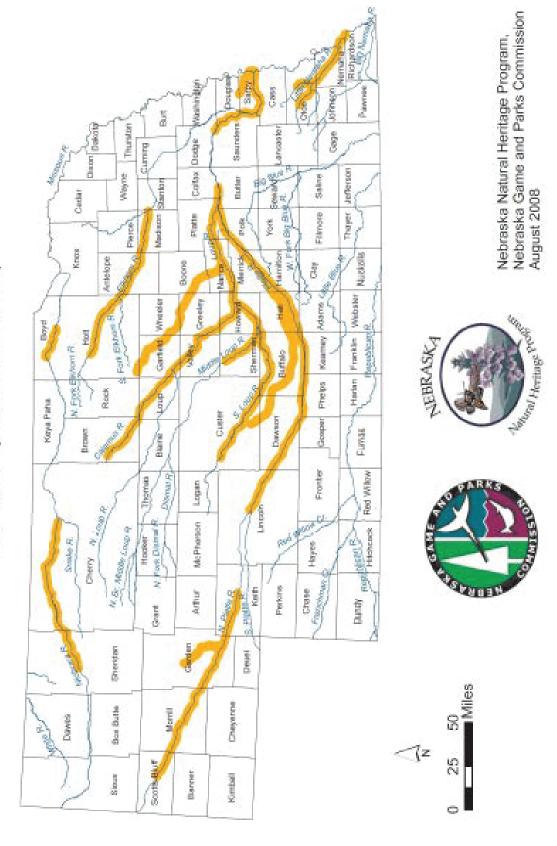
Estimated Current Range of Piping Plover (Charadrius melodus) and Interior Least Tern (Sternula antillarum athalassos)



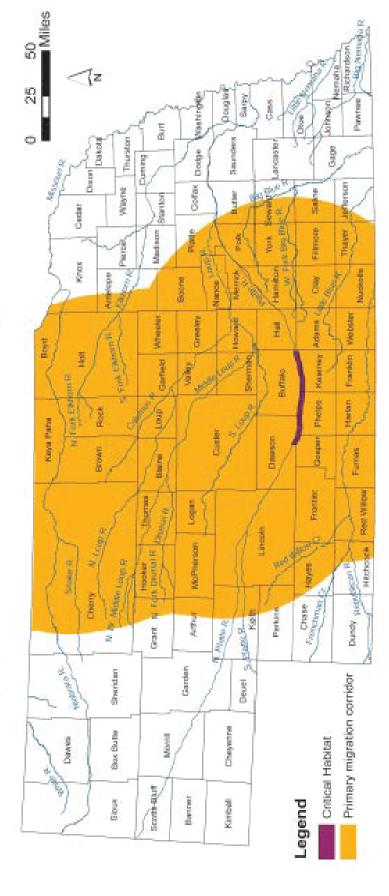
Estimated Current Range of Massasauga (Sistrurus catenatus)



Estimated Current Range of River Otter (Lutra canadensis)



Primary migration corridor and USFWS-designated Critical Habitat Whooping Crane (Grus americana):



The primary migration corridor is the area identified by the U.S. Fish and Wildlife Service (USFWS) as encompassing 95% of documented Whooping Crane migratory stopowers between 1975 and 2007. Whooping Cranes have been documented far outside of this conflor in Nebraska. Data source: U.S. Fish and Wildlife Service. State-specific Nebraska flyway for Whooping Crane. Vector digital data. Unpublished shapefile received October 27, 2008 from Martha Tacha, USFWS, Region 6, Grand Island, Nebraska.

Critical Habitat areas are considered essential for the conservation of a listed species. Data source: U.S. Fish and Wildlife Service, Region 2, 2003. Whooping Chane critical habitat. Vector digital data. Downloaded October 29, 2008 from http://crititata.tws.gov.









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DW-DMR

Dewater Discharges Discharge Monitoring Report (DMR) Authorized Under NPDES General Permit NEG671000

This DW-DMR is to be submitted monthly (i.e., within 28 days after the end of each calendar month), unless alternative submittal arrangements are approved. Any pH, Oil & Grease, or Total Suspended Solids monitoring results that are not in compliance with the permit effluent limits shall be reported to the Department within 24 hours (Telephone 402/471-4220) and a written non-compliance report must be submitted within 5 days (See Appendix A, Sections D.8 and D.9 in the permit). If the appropriate information is included on this form, it may be used as a non-compliance report form and to provide notification of project completion. Be sure to fill in all of the appropriate blanks below and sign on the back of this form.

NPDES Tracking Number: NEG671 R
Project Owner or Operator:
Project Name & Location:
When was the discharge initiated? (mo/day/yr)
Is the discharge continuing? If not, when was it discontinued?
Is this a dewatering well site?
If yes, the total suspended solids maximum limitations should 30 mg/L. If no, the 90mg/L limitation shall apply.
If the prior question is not true, please explain:
What is the Outfall Designations:
What is the Source of the outfall? (i.e. well, pit, foundation pump, etc.)

Circle the Calendar Quarter to which this report applies:

July through September

January through March
October through December

Discharge Report for the month (Specify Calendar Month)

April through June

Discharge Limitations		Discharge Co	oncentration	Number	Sample	
Pollutant	30-Day Average	Daily Average	30-Day Average ⁽²⁾	Daily Average ⁽²⁾	of Samples	Type
Flow (1)	Report as MGD	Report as MGD				
Total Petroleum Hydrocarbons	Report as mg/L	10 mg/L				
Total Suspended Solids (4)	Report as mg/L	30 or 90 mg/L				
pН	6.5 Standard Units	9.0 Standard Units				

Discharge Report for the month (Specify Calendar Month)

Pollutant Discharge Limitations		Limitations	Discharge Co	oncentration	Number	Sample
Tonutant	30-Day Average	Daily Average	30-Day Average ⁽²⁾	Daily Average ⁽²⁾	of Samples	Type
Flow (1)	Report as MGD	Report as MGD				
Total Petroleum Hydrocarbons	Report as mg/L	10 mg/L				
Total Suspended Solids ⁽⁴⁾	Report as mg/L	30 or 90 mg/L				
рН	6.5 Standard Units	9.0 Standard Units				

Discharge Report for the month (Specify Calendar Month)

Discharge Limitations		Discharge Co	oncentration	Number	Sample	
Tonutant	ollutant 30-Day Average		30-Day Average ⁽²⁾	Daily Average ⁽²⁾	of Samples	Type
Flow (1)	Report as MGD	Report as MGD				
Total Petroleum Hydrocarbons	Report as mg/L	10 mg/L				
Total Suspended Solids ⁽⁴⁾	Report as mg/L	30 or 90 mg/L				
pН	6.5 Standard Units	9.0 Standard Units				

Footnote:

- (1) If there is no flow during calendar month, enter "0" in the Monthly Average and Daily Average boxes for flow. The other reporting boxes in that month's table may be left blank
- (2) The calculated valued determined by averaging the monitoring results for any given pollutant obtained during a 24-hour day.
- (3) The calculated valued determined by averaging the monitoring results for any given pollutant obtained during calendar month.
- (4) The Daily Average Limitation is 90 mg/L for construction excavation site discharges and 30 mg/L for other sites.

Abbreviations: MGD = M

MGD = Million gallons per day

mg/L = milligrams per Liter

Summary of Physical Characteristic Examination Findings or Other Information:

Drint Nama	Title
Certifying Official's Signature or Authorized Representative	Date Signed
false information including the possibility of fine and imprisonment for l	
those persons directly responsible for gathering the information, the information was knowledge and belief, true, accurate and complete. I am aware that there	rmation submitted is, to the best of my
evaluated the information submitted. Based on my inquiry of the person	1 1 5 0
I certify under penalty of law, that this document and all attachments we supervision in accordance with a system designed to assure that qualified	
Certification	
Discharge Report for week or month(s) of	
including any additional monitoring results requested by the Department	
explain non-compliances or unusual conditions, request termination of p	

PCE results may be summarized herein or the PCE form may be attached. Examples of "Other Information":

Requirements for and Responsibilities of Certifying Official and Authorized Representative

The "Certifying Official" is responsible for signing all permit applications and must meet the requirements set forth in NDEQ Title 119 Chapter, 13 <u>002</u>:

"All permit applications submitted to the Department shall be signed:

002.01 – For a corporation, by a responsible corporate officer;

002.02 - For a partnership or a sole proprietorship by a general partner or the proprietor; and

<u>002.03</u> - For a municipal, State, Federal, or other public facility by either a principal executive officer or ranking elected official."

The qualifications and responsibilities for the "authorized representative" are set forth in NDEQ Title 119 Chapter 13 003. All other correspondence, reports and DW-DMR's shall be signed by a person designated in 002.01 through 002.03 or a duly authorized representative if such representative is responsible for the overall operation of the facility from which the discharge originates; the authorization is made in writing by the person designated under 002.01 through 002.03 and the written authorization is submitted to the Director. The authorized representative may also sign DW-NOIs, if the Owner/Operator has specifically authorized them to perform this task in a previous DW-NOI or in other written documentation as set forth in permit Section C.2.g.

Submit the completed DW-DMR form to one of the following addresses:

US Postal Service Address

Wastewater Section Nebraska Department of Environmental Quality PO Box 98922 Lincoln, NE 68509-8922

Alternate Carrier Address

Wastewater Section Nebraska Department of Environmental Quality The Atrium, 1200 N Street, Suite 400 Lincoln, NE 68509



1200 'N' Street, Suite 400, The Atrium PO Box 98922 Lincoln, NE 68509-8922 Tel. 402/471-4220 Fax 402/471-2909

Physical Characteristics Examination (PCE) Instructions Authorized by NPDES General Permit NEG671000

The General Dewatering Permit requires that Physical Characteristic Examinations be made in addition to the monitoring required in the general permit. Discharge authorizations are contingent upon the conductance of these examinations (i.e., Physical Characteristic Examinations are required).

1. Physical Characteristic Examination (PCE) Procedure

This procedure involves qualitative observations for characteristics of color, turbidity, odors, surface sheens, septic conditions, or any other unusual conditions (e.g., off-gassing). PCE observations are to be made both *in situ* and on grab samples. PCE results are to be recorded on the attached report form or other approved format. PCE results are to be used as indicators of potential pollution problems. If none of the previous listed characteristics are noted a report is not required.

2. Immediate Notification and Follow-Up

- a. When a discharge displays, any of these characteristics: turbidity, color, off gassing, sheens, films, hydrocarbon contamination, or foaming and odors.
- b. This may indicate possible presence of excessive pollution. At these concentrations or amounts that are indicated requires that the discharge be discontinued immediately and the Department notified.
- c. The discharge shall be discontinued immediately and the NDEQ shall be contacted: If there is any evidence the discharge is causing distress to fish, aquatic organisms, plant life, wildlife and/or livestock, or creating a public health concern.
- d. Following the notification, the permittee shall take appropriate follow-up actions as specified by the Department. These actions may include, but are not necessarily limited to: a follow-up investigation, additional testing, alternative disposal options, and/or treatment. It is also possible that the discharge may be allowed without further action if it is determined that the discharge would not result in excessive pollution.
- e. Excessive pollution is defined as pollution in amounts that would result in a violation of a permit limit or of water quality criteria set forth in NDEQ Title 117 and 118. "Water shall be free from human-induced pollution which causes". These narrative and aesthetic standards for surface waters include:
 - 1) Noxious odors;
 - 2) Floating, suspended, colloidal, or settleable materials that produce objectionable films, colors, turbidity, or deposits; and
 - B) The occurrence of undesirable or nuisance aquatic life (e.g., algal blooms).

3. Periodic Reporting

In addition to the immediate notification requirements described above, a summary report of the findings of the Physical Characteristic Examination procedure results is to be submitted as an attachment to the discharge monitoring reports (DW-DMR's) that are required pursuant to Appendix A, Subsection D of the NPDES permit.

4. Record Keeping

Records of the physical examination results need to be kept and need to include the following information:

- a. The date and time of the observation
- b. Name of the observer; and
- c. Summary information on the observations made.



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PCE - Physical Examination Characteristic Examination Report

This form may be used to record observations of the physical characteristics of water discharges as required on some NPDES permit. The use of this form is generally not required by NPDES permits. Therefore an alternative report form containing the same information may be used.

	e:eservation:
Parameter	Observations
Turbidity	
Color	
Odor	
Petroleum or Hydrocarbons Present	
Sheens or Films	
Foam or Foaming Below Discharge	
Floating Solids	
Off-Gassing	
Record any other obs	ervations or additional information:
s there evidence or p	potential evidence of excessive pollution as defined in the PCE procedure:



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NCR Non-Compliance Report Instructions

The Non-Compliance Report form needs to be submitted within 5 days of becoming aware of any permit violation. In addition, an oral report of the violation needs to be made within 24 hours of becoming aware of a permit violation. Other reporting requirements may also apply; see the Reporting Requirements and Standard Conditions in your NPDES permit for more details.

Complete the heading on the report, including: permittee or facility name, NPDES permits number, outfall number, and the date(s) on which sampling was conducted.

In the left column, list the parameter(s) for which the noncompliance(s) occurred. In the columns to the right, provide the requested information on the monitoring values found, the permit limits, their units and the frequency of analysis, and the sample type (e.g., grab or 24 hour composite). Be sure to provide the flow data requested in the last row, as well.

Also provide on the form or in an attachment (e.g., a laboratory report) monitoring information on the other parameters tested at the same time or over the same time period.

Provide an explanation of what caused the non-compliance, and what actions were taken to correct and to prevent a reoccurrence of the non-compliance. If necessary, provide additional information on the nature of the violation, the exact time frame over which it occurred, and any impacts that were observed in the receiving stream. Attachments may be used as needed.

The Certifying Official or Authorized Representative, who meet the following qualifications, must sign the form. The "Certifying Official", who meets the requirements set forth in NDEQ Title 119, Chapter 13 <u>002</u> is responsible for signing all permit applications. "All permit applications submitted to the Department shall be signed:

- 002.01 For a corporation by a responsible corporate officer;
- <u>002.02</u> For a partnership or in a sole proprietorship by a general partner or the proprietor; and
- <u>002.03</u> For a municipal, State, Federal; or other public facility by either a principal executive officer or ranking elected official."

The qualifications and responsibilities for the "authorized representative" are set forth in NDEQ Title 119 Chapter 13 003. All other correspondence, reports and DW-DMR's shall be signed by a person designated in 002.01 through 002.03 or a duly authorized representative if such representative is responsible for the overall operation of the facility from which the discharge originates; the authorization is made in writing by the person designated under 002.01 through 002.03 and the written authorization is submitted to the Director. The authorized representative may also sign DW-NOIs, if the Owner/Operator has specifically authorized them to perform this task in a previous DW-NOI or in other written documentation as set forth in permit Section C.2.g.

Return the completed form to one of the following addresses:

US Postal Service Address

Wastewater Section Nebraska Department of Environmental Quality PO Box 98922 Lincoln, NE 68509-8922

Alternate Carrier Address

Wastewater Section Nebraska Department of Environmental Quality The Atrium, 1200 N Street, Suite 400 Lincoln, NE 68509



Facility Name:

Wastewater Section

1200 'N' Street, Suite 400, The Atrium PO Box 98922 Lincoln, NE 68509-8922 Tel. 402/471-4220

NCR Non-Compliance Report

This non-compliance form needs to be submitted within 5 days of becoming aware of any permit violation. In addition, an oral report of the violation needs to be made within 24 hours of becoming aware of a permit violation. Other reporting requirements may also apply; see Appendix A, Section D of your permit for more details.

Facility Location:					
NPDES Tracking Number: NEG671 Outfall Number:					
Parameter	Date(s) Monitored	Type of Limitation: Minimum, Average or Maximum	Permit Limit (Include Units e.g., mg/L or kg/day)	Test Result (Include Units e.g., mg/L or kg/day)	Flow (MGD) or Volume (gallons)

Attachment # 5

Provide an explanation of what caused the non-compliance and what actions were taken to correct and to preven a reoccurrence the non-compliance. If necessary, provide additional information on the nature of the violation, the exact time frame over which it occurred, and any impacts that were observed in the receiving stream. Attachments may be used as needed.			
Certification: I certify that I am familiar with the information in t and belief this report is true, complete and accurate.	his report and that to the best of my knowledge		
Signature of Certifying Official or Authorized Representative*	Date		
Printed Name of Signatory			

The "Certifying Official", who meets the requirements set forth in NDEQ Title 119, Chapter 13 <u>002</u> is responsible for signing all permit applications. "All permit applications submitted to the Department shall be signed:

- 002.01 For a corporation by a responsible corporate officer;
- <u>002.02</u> For a partnership or in a sole proprietorship by a general partner or the proprietor; and
- <u>002.03</u> For a municipal, State, Federal, or other public facility by either a principal executive officer or ranking elected official."

The qualifications and responsibilities for the "authorized representative" are set forth in NDEQ Title 119 Chapter 13 003. All other correspondence, reports and DW-DMR's shall be signed by a person designated in 002.01 through 002.03 or a duly authorized representative if such representative is responsible for the overall operation of the facility from which the discharge originates; the authorization is made in writing by the person designated under 002.01 through 002.03 and the written authorization is submitted to the Director. The authorized representative may also sign DW-NOIs, if the Owner/Operator has specifically authorized them to perform this task in a previous DW-NOI or in other written documentation as set forth in permit Section C.2.g.



The Atrium Building, Suite 400, 1200 N Street PO Box 98922 Lincoln, NE 68509-8922 Tel. 402/471-4220 Fax 402/471-2909

DW-RLN Dewatering Discharges Relocation Notice Authorized Under NPDES General Permit NEG671000

This form is intended for use by facilities subject to NPDES General Permit for Dewatering Discharges. The second page of this form contains sections that apply specifically to this NPDES program.

Questions concerning the completion of this form should be directed to Wastewater Section at 402/471-4220.

1.	Certifying Official Identification
	Certifying Official:
	Title:
	Address:
	Telephone Number:Email:
2.	Authorization Number NEG671
3.	Facility Identification Facility Name:
	SIC Code: Facility Type:
4.	Relocation Site Street Address or brief narrative description of the facility location (not the mail address):
5.	Legal Description: Quarter of the Quarter of Section, TownshipN, Range(E or W)
	County
6.	Relocation Schedule – Provide the anticipated dates for the following:
	Start Date:
	Stop Date:

7.	Receiving Waters: Name of receiving water of the dewatering water:					
	Is the receiving water identified in Appendix B of the NPDES permit?	Is the receiving water identified in Appendix B of the NPDES permit?				
	If yes, written notification from the Department for authorization to discharge is required. No discharges are allowed to State Resource Waters. The relocation site may be denied due to the potential of water quality impacts. Additional information concerning the dewatering discharge and potential impact of the discharge on water quality may be required.					
	Is the dewatering water being land applied?					
Have measures been taken to prevent soil erosion from the discharge?						
What preventative measures were used?						
8.	Certification I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best only knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.					
	Signature of Certifying Official or Authorized Representative	Date Signed				
	Printed Name	Title				
	Submit the completed form to:					
	US Postal Service Address Alternate Carrie	er Address				

Wastewater Section Nebraska Department of Environmental Quality PO Box 98922 Lincoln, NE 68509-8922 Wastewater Section Nebraska Department of Environmental Quality The Atrium, 1200 N Street, Suite 400 Lincoln, NE 68509 Appendix A Page A1 of A14

Appendix A – Standard Conditions that Apply to NPDES and NPP Permits

These general conditions are applicable to all NPDES and NPP permits. These conditions shall not preempt any more stringent requirements found elsewhere in this permit.

A. General Conditions

1. Information Available

All permit applications, fact sheets, permits, discharge data, monitoring reports, and any public comments concerning such shall be available to the public for inspection and copying, unless such information about methods or processes is entitled to protection as trade secrets of the owner or operator under Neb. Rev. Stat. §81-1527, (Reissue 1999) and NDEQ Title 115, Chapter 4.

2. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Federal Clean Water Act and the State Act and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal even if the permit has not yet been modified to incorporate the requirement.

3. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.

4. Need to Halt or Reduce Activity is not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

5. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

6. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

7. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

8. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

Appendix A Page A2 of A14

9. Duty to Provide Information

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Director upon request copies of records required to be kept by this permit.

10. Inspection and Entry

The permittee shall allow the Director or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

11. Land Application of Wastewater Effluent

The permittee shall be permitted to discharge treated domestic wastewater effluent by means of land application in accordance with the regulations and standards set forth in NDEQ Title 119, Chapter 12 <u>002</u>. The Wastewater Section of the Department must be notified in writing if the permittee chooses to land apply effluent.

12. Toxic Pollutants

The permittee shall not discharge pollutants to waters of the state that cause a violation of the standards established in NDEQ Titles 117, 118 or 119. All discharges to surface waters of the state shall be free of toxic (acute or chronic) substances which alone or in combination with other substances, create conditions unsuitable for aquatic life outside the appropriate mixing zone.

13. Oil and Hazardous Substances/Spill Notification

Nothing in this permit shall preclude the initiation of any legal action or relieve the permittee from any responsibilities, liabilities or penalties under section 311 of the Clean Water Act. The permittee shall conform to the provisions set forth in NDEQ Title 126, *Rules and Regulations Pertaining to the Management of Wastes*. If the permittee knows, or has reason to believe, that oil or hazardous substances were released at the facility and could enter waters of the state or any of the outfall discharges authorized in this permit, the permittee shall immediately notify the Department of a release of oil or hazardous substances. During Department office hours (i.e., 8:00 a.m. to 5:00 p.m., Monday through Friday, except holidays), notification shall be made to the Nebraska Department of Environmental Quality at telephone numbers (402) 471-2186 or (877) 253-2603 (toll free). When NDEQ cannot be contacted, the permittee shall report to the Nebraska State Patrol for referral to the NDEQ Immediate Response Team at telephone number (402) 471-4545. It shall be the permittee's responsibility to maintain current telephone numbers necessary to carry out the notification requirements set forth in this paragraph.

Appendix A Page A3 of A14

14. Unlawful Acts; Civil Penalty

- a. It shall be unlawful for any person:
 - i) To refuse the right of entry and inspection to any authorized representative of the department when the representative is acting under the provisions of a permit issued by the department;
 - ii) To violate any air, water, or land quality standards, any emission or effluent standards or limitations, any permit or license condition or limitation, any order of the director, or any monitoring, reporting, or record-keeping requirements contained in or issued or entered into pursuant to the Environmental Protection Act, the Integrated Solid Waste Management Act, or the Livestock Waste Management Act or the rules or regulations adopted and promulgated pursuant to such acts:
 - iii) To make any false statement, representation, or certification in any application, label, record, report, plan, or other document required to be filed or maintained by such acts, rules, or regulations;
 - iv) To falsify, tamper with, or render inaccurate any monitoring device or method used or required for compliance with a permit or license or such acts, rules, or regulations; or
 - v) To violate any other provision of or fail to perform any other duty imposed by such acts, rules, or regulations.
- b. Each violation of this section or of Neb. Rev. Stat § 81-1506 shall subject a person to a civil penalty of no more than \$10,000 per day. In case of a continuing violation, each day shall constitute a separate offense. In assessing the amount of the fine, the court shall consider the degree and extent of the violation, the size of the operation, and any economic benefit derived from noncompliance to violate any air, water, or land quality standards, any emission or effluent standards or limitations, any permit or license condition or limitation, any order of the Director, or any monitoring, reporting, or record-keeping requirements contained in or issued or entered into pursuant to the Environmental Protection Act, the Integrated Solid Waste Management Act, or the Livestock Waste Management Act or the rules or regulations adopted and promulgated pursuant to such acts. Violations may also result in federal prosecution.

15. Severability

If any provision of this permit is held invalid, the remainder of this permit shall not be affected.

16. Other Rules and Regulations Liability

The issuance of this permit in no way relieves the obligation of the permittee to comply with other rules and regulations of the Department.

Appendix A Page A4 of A14

B. Signatory Requirements

1. Applications

- a. Applications, reports, or information submitted to the Director shall be signed and certified.
- b. All permit applications shall be signed as follows:
 - i) For a corporation

By a responsible corporate officer: For the purpose of this section, a responsible corporate officer means:

- (a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or
- (b) The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- ii) For a partnership or sole proprietorship

By a general partner or the proprietor.

iii) For a municipality, State, Federal, or other public agency

By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

- (a) The chief executive officer of the agency, or
- (b) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).
- c. All reports required by permits, and other information requested by the Director shall be signed by a person described in this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - i) The authorization is made in writing by a person described in paragraphs B.1.b.(i), b.(ii), orb.(iii);
 - ii) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company, (a duly authorized representative may thus be either a named individual or any individual occupying a named position) and;
 - iii) The written authorization is submitted to the Director.

2. Changes to Authorization

If an authorization of paragraphs B.1.b.(i), b.(ii), or b.(iii) is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

Appendix A Page A5 of A14

3. Certification

All applications, reports and information submitted as a requirement of this permit shall contain the following certification statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

C. Monitoring and Records

1. Samples

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

2. Records

Records of monitoring information shall include:

- a. The date(s), exact place, and time and methods of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of such analyses.

3. Test Methods

Monitoring must be conducted according to test procedures approved in NDEQ Title 119, Chapter 27 <u>002</u> unless another method is required under 40 CFR subchapter N – <u>Effluent Guidelines and Standards</u> Parts 425 to 471 and subchapter O – <u>Sewer Sludge</u> Parts 501 and 503.

4. Record Retention

Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

Appendix A Page A6 of A14

5. Representative Sampling

Samples and measurements taken as required within this permit shall be representative of the discharge. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water or substance. Monitoring points shall not be changed without notification to the Department and with the written approval of the Director.

- a. Composite sampling shall be conducted in one of the following manners
 - i) Continuous discharge a minimum of one discrete aliquot collected every three hours,
 - ii) Less than 24 hours a minimum of hourly discrete aliquots or a continuously drawn sample shall be collected during the discharge, or
 - iii) Batch discharge a minimum of three discrete aliquots shall be collected during each discharge.
- b. Composite samples shall be collected in one of the following manners:
 - i) The volume of each aliquot must be proportional to either the waste stream flow at the time of sampling or the total waste stream flow since collection of the previous aliquot,
 - ii) A number of equal volume aliquots taken at varying time intervals in proportion to flow,
 - iii) A sample continuously collected in proportion to flow, and
 - iv) Where flow proportional sampling is infeasible or nonrepresentative of the pollutant loadings, the Department may approve the use of time composite samples.
- c. Grab samples shall consist of a single aliquot collected over a time period not exceeding 15 minutes.
- d. All sample preservation techniques shall conform to the methods adopted in NDEQ Title 119, Chapter 21 006 unless:
 - i) In the case of sludge samples, alternative techniques are specified in the 40 CFR, Part 503, or
 - ii) Other procedures are specified in this permit.

e. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be used to insure the accuracy and reliability of measurements. The devices shall be installed, calibrated and maintained to insure that the accuracy of the measurements. The accepted capability shall be consistent with that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of +/- 10%. The amount of deviation shall be from the true discharge rates throughout the range of expected discharge volumes. Guidance can be obtained from the following references for the selection, installation, calibration and operation of acceptable flow measurement devices:

- i) *Water Management Manual*, U. S. Department of Interior, Bureau of Reclamation, Second Edition, Revised Reprint, 2001, 327 pp. Available on the Department of Interior, Bureau of Reclamation (website http://www.usbr.gov/pmts/hydraulicslab/pubs/wmm/).
- ii) NPDES Compliance Inspection Manual, U. S. Environmental Protection Agency, Office of Enforcement and Compliance Assurance, Publication EPA 305-X-04-001 July 2004. This document is available on EPA website:
 - http://www.epa.gov/compliance/resources/publications/monitoring/cwa/inspections/npdesinspect/npdesmanual.html

Appendix A Page A7 of A14

D. Reporting Requirements

1. Planned Changes

The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in NDEQ Title 119, Chapter 4;
- b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements in NDEQ Title 119, Chapter 4; or
- c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

2. Anticipated Noncompliance

The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Transfers

This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary in NDEQ Title 119, Chapter 24; in some cases, modification or revocation and reissuance is mandatory.

4. Monitoring Reports

Monitoring results shall be reported at the intervals specified elsewhere in this permit.

- a. Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director.
- b. If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under in NDEQ Title 119, Chapter 27 <u>002</u>, or another method required for an industry-specific waste stream under 40 CFR subchapter N <u>Effluent Guidelines and Standards</u> Parts 425 to 471 and subchapter O <u>Sewer Sludge</u> Parts 501 and 503, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Director.
- c. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.

5. Quarterly Discharge Monitoring Reports (DMRs)

The permittee shall report the monitoring results required by this permit on a DMR form supplied or approved by the Department. Monitoring results shall be submitted on a quarterly basis using the reporting schedule set forth below, unless otherwise specified in this permit or by the Department.

Monitoring Quarters	DMR Reporting Deadlines	
January - March	April 28	
April - June	July 28	
July - September	October 28	
October - December	January 28	

If the permittee monitors any pollutant more frequently than required by this permit, using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted on the DMR. The frequency of the analysis shall also be reported on the DMR.

Appendix A Page A8 of A14

6. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

7. Immediate Notification

- a. NPP permittees shall report immediately to the publicly owned treatment works (POTW), any discharge to the POTW that may result in a violation of NDEQ Title 119, Chapter 26.
- b. All permittees shall report immediately to the NDEQ:
 - i) Discharges of oil or hazardous substances which threaten waters of the state or public health and welfare, and
 - ii) Discharges causing in-stream toxicity (i.e., a fish kill) or an immediate threat to human health.

Initial notification may be verbal. A written noncompliance notification shall be submitted as set forth in Section D. 9. of this Appendix.

8. Twenty-four Hour Reporting

- a. The permittee shall report any noncompliance which may endanger human health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
- b. The following shall be included as information which must be reported within 24 hours under this paragraph.
 - i) Any unanticipated bypass which exceeds any effluent limitation in the permit.
 - ii) Any upset which exceeds any effluent limitation in the permit.
 - iii) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours.
- c. The Director may waive the written report on a case-by-case basis for reports under Section D if the oral report has been received within 24 hours.

9. Written Noncompliance Notification

The permittee shall submit a written noncompliance report to the NDEQ:

- a. Within five days of becoming aware of any noncompliance with the:
 - i) NPP effluent limitations or requirements set forth in this permit, or
 - ii) NPDES toxic pollutant effluent limitations or requirements set forth in this permit.
- b. Within seven days of becoming aware of any other noncompliance with the NPDES requirements and/or effluent limitations set forth in this permit. The written notification shall be submitted on a noncompliance form supplied by the Department and shall include:
 - i) A description of the discharge and cause of noncompliance,
 - ii) The period of noncompliance, including exact dates and times, or if not corrected, the anticipated time the noncompliance is expected to continue, and
 - iii) The steps taken to reduce, eliminate, and prevent the reoccurrence of the noncompliance.
- c. The submittal of a written noncompliance report does not relieve the permittee of any liability from enforcement proceedings that may result from the violation of permit or regulatory requirements.

Appendix A Page A9 of A14

10. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under paragraph D.7. at the time discharge monitoring reports are submitted.

11. Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

E. Bypass

1. Definitions

- a. **Bypass** means the intentional diversion of waste streams from any portion of a treatment facility.
- b. **Severe property damage** means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

2. Bypass not Exceeding Limitations

The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs E.3. and E.4. of this section.

3. Notice

- a. Anticipated bypass: If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
- b. Unanticipated bypass: The permittee shall submit notice of an unanticipated bypass as required in the 24-hour notice (paragraph D. 7.).

4. Prohibition of Bypass

Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

- a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
- c. The permittee submitted notices as required under paragraph E.3. of this section.

The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed in paragraph E.4.a., b., and c. of this section.

Appendix A Page A10 of A14

F. Upset

1. Definition

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

2. Effect of an Upset

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph F. 3 of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

3. Conditions Necessary for a Demonstration of Upset

A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- a. An upset occurred and that the permittee can identify the cause(s) of the upset;
- b. The permitted facility was at the time being properly operated;
- c. The permittee submitted notice of the upset as required in paragraph D.7.b. (24-hour notice); and
- d. Permittee complied with any remedial measures required under A.5.

4. Burden of Proof

In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

G. Operation and Maintenance

1. Proper Operation and Maintenance

The permittee shall, at all times, maintain in good working order and operate as efficiently as possible, any facilities or systems of control installed by the permittee in order to achieve compliance with the terms and conditions of this permit. This would include, but not be limited to, effective performance based on designed facility removals, effective management, adequate operator staffing and training, adequate laboratory and process controls, and adequate funding that reflects proper user fee schedules.

2. Removed Substances

Solids, sludge, filter backwash or other pollutants removed in the course of treatment or control of wastewater shall be disposed of at a site and in a manner approved by the Nebraska Department of Environmental Quality. The disposal of nonhazardous industrial sludges shall conform to the standards established in or to the regulations established pursuant to 40 CFR, Part 257. The disposal of sludge shall conform to the standards established in or to the regulations established pursuant to 40 CFR, Part 503. If solids are disposed of in a licensed sanitary landfill, the disposal of solids shall conform to the standards established in NDEQ Title 132. Publicly owned treatment works shall dispose of sewage sludge in a manner that protects public health and the environment from any adverse effects which may occur from toxic pollutants as defined in Section 307 of the Clean Water Act. This permit may be modified or revoked and reissued to incorporate regulatory limitations established pursuant to 40 CFR, Part 503.

Appendix A Page A11 of A14

3. Changes in Discharge

Any facility expansion, production increases or process modifications which will result in new or substantially increased discharges of pollutants or a change in the nature of the discharge of pollutants must be reported by the permittee 180 days prior to the expansion, increases or modifications, either by amending the original application or by submitting a new application. This permit may be modified or revoked and reissued as a result of this notification to maintain compliance with applicable state or federal regulations.

4. Changes in Toxic Discharges from Manufacturing, Commercial, Mining and Silvicultural Facilities Permittees discharging from manufacturing, commercial, mining and silvicultural facilities shall report to

the Department:

- a. If any toxic pollutant not limited in this permit is discharged from any NPDES outfall as a result of any activity that will or has occurred and results in its routine or frequent discharge. The Department shall be informed if that discharge exceeds the following notification levels:
 - i) 100 micrograms per liter (0.1 mg/L) for any toxic pollutant,
 - ii) 200 micrograms per liter for acrolein and acrylonitrile (0.2 mg/L),
 - iii) 500 micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol (0.5 mg/L),
 - iv) 1000 micrograms per liter for antimony (1 mg/L),
 - v) Five times the maximum concentration value reported for that pollutant in the permit application or
 - vi) An alternative level established by the Director, and
- b. If any toxic pollutant not limited in this permit is discharged from an NPDES outfall as a result of any activity that will or has occurred and results in its nonroutine discharge. The Department shall be informed if that discharge exceeds the following notification levels:
 - i) 500 micrograms per liter (0.5 mg/L) for any toxic pollutant,
 - ii) 1000 micrograms for antimony (1 mg/L),
 - iii) Ten times the maximum concentration value reported for that pollutant in the permit application, or
 - iv) An alternative level established by the Director.

5. Changes in Sludge Quality

The permittee shall provide written notice to the Department of any alteration or addition that result in a significant change in the permittee's sludge use or disposal practices. This permit may be modified or revoked and reissued as a result of this notification to maintain compliance with applicable state or federal regulations.

6. Changes of Loadings to Publicly Owned Treatment Work (POTW)

All POTWs must provide adequate notice to the Director of the following:

- a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to NDEQ Title 119, Chapter 26, if it were directly discharging those pollutants; and
- b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.

For purposes of this paragraph, adequate notice shall include information on the quality and quantity of effluent introduced into the POTW, and any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

Appendix A Page A12 of A14

H. Definitions

Administrator: The Administrator of the USEPA.

Aliquot: An individual sample having a minimum volume of 100 milliliters that is collected either manually or in an automatic sampling device.

Annually: Once every calendar year.

Authorized Representative: Individual or position designated the authorization to submit reports, notifications, or other information requested by the Director on behalf of the Owner under the circumstances that the authorization is made in writing by the Owner, the authorization specifies the individual or postion who is duly authorized, and the authorization is submitted to the Director.

Bimonthly: Once every other month.

Biosolids: Sewage sludge that is used or disposed through land application, surface disposal, incineration, or disposal in a municipal solid waste landfill.

Biweekly: Once every other week.

Bypass: The intentional diversion of wastes from any portion of a treatment facility.

Certifying Official: <u>For a corporation</u>, Certifying Official means a responsible corporate officer which means a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions, or

The manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

For a partnership or sole proprietorship, Certifying Official means a general partner or proprietor, respectively.

<u>For a municipality, State, Federal, or other public agency,</u> Certifying Official means a principal executive officer of the agency, or a senior executive officer having responsibility for the operations of a principal geographic unit of the agency.

Daily Average: An effluent limitation that cannot be exceeded and is calculated by averaging the monitoring results for any given pollutant parameter obtained during a 24-hour day.

Department: Nebraska Department of Environmental Quality.

Director: The Director of the Nebraska Department of Environmental Quality.

Industrial Discharge: Wastewater that originates from an industrial process and / or is noncontact cooling water and / or is boiler blowdown.

Industrial User: A source of indirect discharge (a pretreatment facility).

Monthly Average: An effluent limitation that cannot be exceeded. It is calculated by averaging any given pollutant parameter monitoring results obtained during a calendar month.

Operator: A person (often the general contractor) designated by the owner who has day to day operational control and/or the ability to modify project plans and specifications related to the facility.

Owner: A person or party possessing the title of the land on which the activities will occur; or if the activity is for a lease holder, the party or individual identified as the lease holder; or the contracting government agency responsible for the activity.

Outfall: A discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, or container from which pollutants are or may be discharged into Waters of the State

Passive Discharge: A discharge from a POTW that occurs in the absence of an affirmative action and is not authorized by the NPDES permit (e.g. discharges due to a leaking valve, discharges from an overflow

Appendix A Page A13 of A14

structure) and / or is a discharge from an overflow structure not designed as part of the POTW (e.g. discharges resulting from lagoon berm / dike breaches).

- **Publicly Owned Treatment Works (POTW):** A treatment works as defined by Section 212 of the Clean Water Act (Public Law 100-4) which is owned by the state or municipality, excluding any sewers or other conveyances not leading to a facility providing treatment.
- Semiannually: Twice every year
- **Significant Industrial User (SIU):** All industrial users subject to Categorical Pretreatment Standards or any industrial user that, unless exempted under Chapter 1, Section <u>105</u> of NDEQ Title 119, discharges an average of 25,000 gallons per day or more of process water; or contributes a process waste stream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW; or is designated as such by the Director on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any National Pretreatment Standard or requirement.
- **Sludge:** Any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility or any other such waste having similar characteristics and effect.
- **30-Day Average:** An effluent limitation that cannot be exceeded. It is calculated by averaging any given pollutant parameter monitoring results obtained during a calendar month.
- **Total Toxic Organics (TTO):** The summation of all quantifiable values greater than 0.01 milligrams per liter (mg/l) for toxic organic compounds that may be identified elsewhere in this permit. (If this term has application in this permit, the list of toxic organic compounds will be identified, typically in the Limitations and Monitoring Section(s) and/or in an additional Appendix to this permit.)
- **Toxic Pollutant:** Those pollutants or combination of pollutants, including disease causing agents, after discharge and upon exposure, ingestion, inhalation or assimilation into an organism, either directly from the environment or indirectly by ingestion through food chains will, on the basis of information available to the administrator, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunction (including malfunctions in reproduction) or physical deformations in such organisms or their offspring.
- **Upset:** An exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee, excluding such factors as operational error, improperly designed or inadequate treatment facilities or improper operation and maintenance or lack thereof.
- **Volatile Organic Compounds (VOC):** The summation of all quantifiable values greater than 0.01 milligrams per liter (mg/l) for volatile, toxic organic compounds that may be identified elsewhere in this permit. (See the definition for Total Toxic Organics above. In many instances, VOCs are defined as the volatile fraction of the TTO parameter. If the term "VOC" has application in this permit, the list of toxic organic compounds will be identified, typically in the Limitations and Monitoring Section(s) and/or in an additional Appendix to this permit.)
- Waters of the State: All waters within the jurisdiction of this state including all streams, lakes, ponds, impounding reservoirs, marshes, wetlands, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, situated wholly or partly within or bordering upon the state.
- **Weekly Average:** An effluent limitation that cannot be exceeded. It is calculated by averaging any given pollutant parameter monitoring results obtained during a fixed calendar week. The permittee may start their week on any weekday but the weekday must remain fixed. The Department approval is required for any change of the starting day.
- "X" Day Average: An effluent limitation defined as the maximum allowable "X" day average of consecutive monitoring results during any monitoring period where "X" is a number in the range of one to seven days.

Appendix A Page A14 of A14

I. Abbreviations

CFR: Code of Federal Regulations

kg/Day: Kilograms per DayMGD: Million Gallons per Daymg/L: Milligrams per Liter

NOI: Notice of Intent

NDEQ: Nebraska Department of Environmental Quality **NDEQ Title 115:** *Rules of Practice and Procedure*

NDEQ Title 117: Nebraska Surface Water Quality Standards

NDEQ Title 118: Ground Water Quality Standards and Use Classification

NDEQ Title 119: Rules and Regulations Pertaining to the Issuance of Permits under the National Pollutant

Discharge Elimination System

NDEQ Title 126: Rules and Regulations Pertaining to the Management of Wastes

NDEQ Title 132: Integrated Solid Waste Management Regulations

NPDES: National Pollutant Discharge Elimination System

NPP: Nebraska Pretreatment Program **POTW:** Publicly Owned Treatment Works

μg/L: Micrograms per Liter

WWTF: Wastewater Treatment Facility

Appendix B Page 1 of 4

Appendix B – State Resource and Public Drinking Water Supply Streams

This appendix identifies stream segments and water bodies that must be identified as State Resource Waters or Public Drinking Water Supplies on the Notice of Intent for NPDES permit NEG671000. This information will be used by the Department to determine if additional review of the NOI or other procedures as described in permit. Discharges to state resource waters (listed in **bold**) are not allowed.

This appendix references stream segments by County to facilitate the completion of the Notice of Intent and Relocation Notice forms. In filling out these forms, the applicant need only identify the stream segment or water body by name; the other information supplied is not needed on the forms.

Adams County

<u>Platte River</u> Kearney County line to the Hall County Line – Public Drinking Water; (Stream Segment MP2-10000)

Boyd County

<u>Missouri River</u> from the South Dakota border to the Knox County line - Class A State Resource Water; (Stream segment: NI1-10000)

Brown County

<u>Calamus River</u> from its headwaters to the Rock County line - Class B State Resource Water; (Stream segments: LO2-11300, LO2-11400, LO2-11500 & LO2-11600)

<u>Niobrara River</u> from Rock Creek to the Highway 137 Bridge; Class A State Resource Water; (Stream Segment: NI3-10000)

<u>Long Pine Creek</u> from its headwaters to the confluence of Bone Creek; Class B State Resource Water; (Stream segments: NI3-12400 and NI3-12500)

Buffalo County

<u>Platte River</u> from the Kearney Canal Return to the Hall County Line – Public Drinking Water; (Stream Segment; MP2-10000)

Burt County

<u>Missouri River</u> from the Thurston County Line to the Washington County Line – Public Drinking Water; (Stream Segment: MT1-10000)

Cass County

<u>Platte River</u> from the Saunders County Line to Missouri River - Public Drinking Water; (Stream Segment: LP1-10000)

<u>Missouri River</u> from the Confluence of the Platte River to the Otoe County Line – Public Drinking Water; (Stream Segment: NE1-10000)

<u>Rock Creek</u> from its headwaters to the confluence of the Missouri River – Public Drinking Water; (Stream Segment: NE1-13700)

Cedar County

<u>Missouri River</u> from the Knox County line to the Dixon County line - Class A State Resource Water; Public Drinking Water; (Stream segment: MT2-10000)

Cherry County

<u>Niobrara River</u> from the Borman Bridge (Section 8, T33N, R27W) to Chimney Creek - Class A State Resource Water (Stream Segment: NI3-20000)

Dakota County

<u>Missouri River</u> from the Confluence of the Big Sioux River to the Thurston County Line – Public Drinking Water; (Stream Segment: MT1-10000)

<u>Missouri River</u> from the Dixon County line to the confluence of the Big Sioux River - Class A State Resource Water; Public Drinking Water (Stream Segment: MT2-10000)

Appendix B Page 2 of 4

Dawes County

<u>Chadron Creek</u> from its headwaters to its confluence with the White River - Public Drinking Water Standards; (Stream Segment: WH1-11300)

<u>Cunningham Creek</u> from its headwaters to its confluence with Indian Creek - Class A State Resource Water; (Stream segment: WH1-11710)

<u>Dead Man's Creek</u> from its headwaters to the Sioux County line - Public Drinking Water Standards; (Stream Segment: WH1-30100)

Soldier Creek from the Sioux County line to its confluence with the White River - Class A State Resource Water; Public Drinking Water; (Stream segment: WH1-20300)

<u>Squaw Creek</u> from its headwaters to the National Forest Boundary - Class A State Resource Water; (Stream segment WH1-20120)

White River from the Sioux County line to its confluence with Soldier Creek - Class B State Resource Water; Public Drinking Water; (Stream segment: WH1-30000)

White River from Soldier Creek to the South Dakota border - Public Drinking Water standards; (Stream segments: WH1-10000 and WH1-20000)

Dixon County

<u>Missouri River</u> from the Cedar County line to the Dakota County line - Class A State Resource Water; Public Drinking Water (Stream Segment: MT2-10000)

Douglas County

<u>Missouri River</u> from the Washington County Line to the Sarpy County Line – Public Drinking Water; (Stream Segment MT1-10000)

Garfield County

<u>Calamus River</u> from the Loup County line to the confluence with North Loup River - Class B State Resource Water; (Stream segment: LO2-11300)

Hall County

<u>Platte River</u> from Buffalo County Line to Merrick County Line - Public Drinking Water; (Stream Segment; MP2-10000)

Hamilton County

<u>Platte River</u> from Hall County Line to the confluence of Wood River – Public Drinking Water; (Stream Segment MP2-10000)

Holt County

<u>Elkhorn River</u> from the confluence of the North and South Forks to Holt Creek - Class B State Resource Water; (Stream segment: EL4-40000)

Keith County

North Platte River from Kingsley Dam to the confluence of Whitetail Creek - Class B State Resource Water; (Stream segment: NP1-40000)

Otter Creek from its headwaters to Lake C.W. McConaughy - Class B State Resource Water; (Stream segment: NP2-10300)

Jefferson County

<u>Little Blue River</u> from Big Sandy Creek to Nebraska-Kansas border – Public Drinking Water; (Stream segment LB1-10000)

Kearney County

<u>Platte River</u> from the Kearney Canal Return to the Hall County Line – Public Drinking Water; (Stream Segment; MP2-10000)

Appendix B Page 3 of 4

Keya Paha County

<u>Niobrara River</u> from the Cherry County line to Chimney Creek and from Rock Creek to the State Highway 137 Bridge - Class A State Resource Water; (Stream Segment: NI3-20000 & NI3-10000)

Knox County

<u>Missouri River</u> from the Boyd County Line to the Cedar County line - Class A State Resource Water; Public Drinking Water; (Stream Segment: MT2-10000)

<u>Niobrara River</u> from the Boyd/Holt County line to its confluence with the Missouri River - Class A State Resource Water (Stream Segment: NI2-10000)

<u>Verdigre Creek</u> from the North boundary of the town of Verdigre (Sec 5, T30N, R6W) to its confluence with the Niobrara River - Class A State Resource Water (Stream Segment: NI2-10100)

Loup County

<u>Calamus River</u> from the Rock County line to the Garfield County line - Class B State Resource Water; (Stream Segment: LO2-11300)

Merrick County

<u>Platte River</u> from Hall County Line to the confluence of the Wood River – Public Drinking Water; (Stream Segment MP2-10000)

Nemaha County

<u>Missouri River</u> from the Otoe County line to the Richardson County line – Public Drinking Water; (Stream Segment: NE1-10000)

Otoe County

<u>Missouri River</u> from the Cass County line to the Nemaha County line – Public Drinking Water; (Stream Segment: NE1-10000)

Richardson County

Unnamed creek running through Indian Cave State Park (Headwaters originate on private property near the park.) - Class A State Resource Water, (Stream Segment: NE1-10700)

<u>Missouri River</u> from the Nemaha County Line to the Kansas State line – Public Drinking Water; (Stream Segment: NE1-10000)

Rock County

<u>Calamus River</u> from the Brown County line to the Loup County line - Class B State Resource Water; (Stream Segment: LO2-11300)

<u>Long Pine Creek</u> segments near the Brown County line (Long Pine Creek is located in Brown County, but drainage from Rock County flows to it.) - Class B State Resource Water; (Stream segments: NI3-12400 and NI3-12500)

<u>Niobrara River</u> from the Brown County line to the State Highway 137 Bridge - Class A State Resource Water; (Stream Segment: NI3-10000)

Sarpy County

<u>Platte River</u> from the confluence of the Elkhorn River to Missouri River- Public Drinking Water; (Stream Segment: LP1-10000)

<u>Missouri River</u> from the Douglas County Line to the Confluence of the Platte River – Public Drinking Water; (Stream Segment: MT1-10000)

Appendix B Page 4 of 4

Saunders County

<u>Platte River</u> from the confluence of the Elkhorn River to Cass County Line- Public Drinking Water; (Stream Segment: LP1-10000)

<u>Platte River</u> from the Confluence of Clear Creek to the Elkhorn River – Public Drinking Water; (Stream Segment: LP1-20000)

Sioux County

<u>Dead Man's Creek</u> from the Dawes County line to its confluence with the White River; Public Drinking Water Standards - (Stream Segment: WH1-30100)

<u>Middle Fork Soldier Creek</u> from its headwaters to its confluence with Soldier Creek - Class A State Resource Water; (Stream segment: WH1-20310)

<u>Soldier Creek</u> from its headwaters to the Dawes County line - Class A State Resource Water; (Stream segments: WH1-20300 & WH1-20400)

White River from its headwaters to the Dawes County line - Class B State Resource Water; Public Drinking Water standard; (Stream segments: WH1-30000 & WH1-40000)

Thurston County

<u>Missouri River</u> from the Dakota County Line to the Burt County Line – Public Drinking Water; (Stream Segment MT1-10000)

Washington County

<u>Missouri River</u> from the Burt County Line to the Douglas County Line – Public Drinking Water; (Stream Segment MT1-10000)

<u>DIVISION IA – SPECIAL PROVISIONS</u>

SOUTHWEST DRAINAGE 2011-D-1 STORM WATER IMPROVEMENTS CITY OF GRAND ISLAND, NEBRASKA

SECTION 100 -- GENERAL

100.01 <u>Description of Work</u>. The work to be performed under the provisions of these Contract documents includes, but is not limited to: furnishing all material, equipment, labor, and appurtenances thereto for the complete installation of Southwest Drainage 2011-D-1; with the exception of the reinforced concrete pipe and the reinforced concrete flared-end sections. The City of Grand Island has purchased the reinforced concrete pipe and the reinforced concrete flared-end sections and the material is currently stockpiled on-site. The contractor shall furnish all equipment, labor, and appurtenances to complete the installation of the owner supplied reinforced concrete pipe and reinforced concrete flared-end sections.

Location of Work. The storm water improvements to be performed under this Contract are generally located in the southwestern portion of Grand Island. The outlet is located in the Wood River north of Highway 34 and continues west along Highway 34 and crosses under the UPPR spur line and City of Grand Island bike trail; thence north adjacent and parallel to the City of Grand Island bike trail to the Brentwood Lake outlet pipe. The project also continues west of the City of Grand Island bike trail located within the City of Grand Island utility right-of-way, north of Central Community College and College Park to U.S Highway 281 right-of-way. The project ends in the east right-of-way of U.S. Highway 281. Refer to the plans for exact location and alignment.

100.03 <u>Pre-Construction Conference</u>. As soon as practical after the Contract is awarded, a preconstruction conference shall be scheduled with the Contractor. The purpose of the conference is to discuss: the project plans and specifications, any unusual conditions, erosion controls, the Contractor's plan and schedule of operation, materials, maintenance of traffic and access, and other items that will result in a complete job.

At the pre-construction conference, the Contractor shall be required to submit for review by the Public Works Department:

- A written construction schedule. The Contractor shall use the schedule to notify the affected
 property management of the impending activities ten (10) business days in advance of
 commencing work on any section. If the Contractor desires to make modifications, or the
 schedule fails to reflect actual progress, a revised schedule shall be re-submitted to the Public
 Works Department ten (10) business days prior to the revised operations;
- A list of Contractor's key personnel, including any subcontractors, and a list of their qualifications, experience, and cell phone contact numbers.
- Material manufacturer's standard data sheets.
- An environmental protection plan and an emergency procedure plan, including a list of the appropriate governmental agencies to be notified.

100.04 <u>Specifications and Standard Plan Drawings</u>. All Divisions of the City of Grand Island Specifications and Standard Plan Drawings shall be considered a part of this Contract, whether or not attached into these specifications, and shall be supplemented by the Nebraska Department of Roads 2007 English Edition of the Standard Specifications for Highway Construction. In case of a discrepancy: 1. The City of Grand Island Standard Specifications shall govern over the Nebraska Department of Roads 2007 English Edition of the Standard Specifications for Highway Construction; 2. Special Provisions shall

govern over the City of Grand Island Standard Specifications; and 3. The plans shall govern over the Special Provisions. It shall be the Contractor's responsibility to comply with all requirements thereof. No attempt has been made in these specifications to segregate work to be performed by any trade or subcontractor. Any segregation between the trades or crafts will be solely a matter for agreement between the Contractor and their employees or their subcontractors. The specifications as a whole will govern construction of the entire work. The applicable provisions whereof will govern work to be performed under each section.

- 100.05 <u>Sufficient People and Equipment</u>. It is the intent of these specifications that the Contractor has sufficient people and equipment on the job site capable of completing the job as specified. The Contractor must demonstrate this capability to the satisfaction of the Public Works Department. If at any time during the performance of the work, the Contractor's progress on any phase of the work shall fall behind that necessary to enable the Contractor to complete it in accordance with the date or calendar days set out in the bid, the Contractor, at no extra expense to the City, shall take such action as necessary to meet those completion dates including, but not limited to, working additional or longer shifts and employing more labor and equipment and/or to increase the efficiency of, improve the character of, augment the number of, or to substitute new tools, plant or equipment of the Contractor as the case might be so as to secure the quality of work required.
- 100.06 <u>Time Frame</u>. No work shall commence until the Certificate of Insurance and bonds (when required) are approved by the City, the Contract is executed, and a Notice to Proceed is issued. The Contractor shall coordinate with the City of Grand Island relative to scheduling work. Completion of all work, including restoration, shall be completed by the date stated in the Contract Agreement.
- 100.07 <u>Property Corners</u>. It shall be the Contractor's responsibility to protect existing property corners and government surveying monuments. If property corners are disturbed or destroyed during construction, it shall be the Contractor's obligation to employ a licensed land surveyor to replace those damaged or destroyed corners. No extra or additional payment will be made for restoration of property corners.
- 100.08 <u>Baselines, Benchmarks, and Control Points</u>. All storm water improvements shall be laid out from existing section corners, benchmarks, and control points established on the plans. The Contractor shall be responsible for executing the work to the lines and grades established. It shall be the Contractor's responsibility to maintain and preserve all baselines and control points. If such marks are destroyed by the Contractor without authorization by the Public Works Department, all such lines, points, monuments and stakes shall be re-established by the Public Works Department, and the expense charged to the Contractor.
- 100.09 <u>Protection of Property and Surface Structures</u>. All property and structures shall be protected unless their removal is shown on the Contract drawings or authorized by the City.
- 100.10 <u>Miscellaneous Removal Items</u>. It shall be the Contractor's responsibility to notify the property owners within the project area, a minimum of ten (10) days ahead of construction, so the property owners may remove small trees, bushes, shrubs, fences, sod, sprinkler systems, etc., from the construction limits if they wish to save them.
- 100.11 <u>Power Lines</u>. There are existing energized high-voltage electric power lines in the work area for this Contract. The Contractor shall use extreme caution such that personal safety is not jeopardized and electric continuity is maintained. Due to soil conditions and proximity, all poles and underground cables shall be supported during excavation, properly backfilled and compacted to protect from damage.

Any time the Contractor, sub-contractors, or their employees are working near overhead or underground power lines, they will be required to comply with the *Grand Island Electric Department Recloser Disabling and Transmission Line Outage Policy.*

100.12 <u>Underground Installations</u>. Existing underground installations (such as water mains, sanitary sewer force mains, gas mains, sewers, telephone lines, power lines, and buried structures) in the vicinity of the work are to be checked by the Contractor. The Contractor shall be solely responsible for locating all existing underground installations. The Contractor shall use their own information and shall not rely upon any information indicated on the drawings concerning existing underground installations.

The Contractor shall proceed with caution in the excavation and preparation of the trench so that the exact location of all such utilities, both known and unknown may be determined, and the Contractor shall be held responsible for the repair of such utilities when broken or otherwise damaged. All such utilities shall be accurately located, including hand excavating by the Contractor as required, as incidental to the Contract and performed prior to machine excavation in the vicinity.

Any delay, additional work, or extra cost to the Contractor caused by existing installations shall not constitute a claim for extra work, additional payment or damages.

100.13 Relations with Other Contractors. The Contractor shall cooperate with all other contractors and City crews who may be performing work in the vicinity of the work under this Contract; and shall conduct their operations to minimize interference with the work of such contractors or employees. The Contractor shall promptly make good, at Contractor's own expense, any injury or damage that may be sustained to other contractors or employees of the City, caused by Contractor's actions or inactions.

Any difference or conflict, which may arise between the Contractor and other contractors, or between the Contractor and employees of the City, in regard to their work, shall be resolved as determined by the City. If the work of the Contractor is delayed because of any acts or omissions of any other contractor, the Contractor shall have no claim against the City.

100.14 <u>Emergency Response.</u> The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs for their employees in order to respond rapidly and successfully to an emergency situation. The Contractor's personnel must know the steps that need to be followed before, during, and after they occur. This includes the roles and responsibilities of the different responding agencies, the location and availability of response resources, the process for conducting the response, and other actions as necessary.

If a hazardous situation is detected, the Contractor shall notify the appropriate police, fire, and/or other such first response team as necessary to mitigate the hazard. Additionally, all such incidents shall be reported immediately to the Phelps Control Center, (308) 385-5460. The Contractor shall document such incidents and provide a written report to the Public Works' Project Inspector.

100.15 Not Used

- 100.16 <u>Air Quality and Opening Burning.</u> The Contractor must comply with the Nebraska Department of Environmental Quality Rules and Regulations for the control of air quality as promulgated in Title 129 of the Nebraska Administrative Code. Open fires are prohibited. All solid waste generated by the project will be disposed of in accordance with Title 132, Integrated Solid Waste Management.
- 100.17 <u>Best Management Practices.</u> The Contractor shall follow guidelines established in City of Grand Island City Code; Chapter 40, Storm Water Management. The utility construction defined in 40.11, A thru D; shall comply with guidelines listed as disturbing greater than one (1) acre.

The Contractor shall exercise every reasonable precaution to protect channels, storm drains, and bodies of water from pollution. It shall conduct and schedule operations so as to minimize or avoid muddying and silting of said channels, drains, and waters. Water pollution control work shall consist of constructing those facilities which may be required to provide prevention, control, and abatement of water pollution.

SECTION 200 -- TRAFFIC AND ACCESS

200.01 <u>Work Site.</u> Public relations are a very important part of this Contract. The Contractor and Contractor's employees shall recognize the necessity to be courteous to the public and especially to landowners on whose property or near whose property they are working, and shall confine their operations to the immediate construction area.

Good housekeeping is essential, and shall be practiced throughout the construction period. The Contractor and Contractor's employees shall maintain a clean and safe work site free from trash and debris. They shall use due care in placing construction tools, equipment, excavated materials, and construction materials and supplies so as to cause the least possible damage to the property. The Contractor shall furnish and maintain all necessary safety equipment (such as barriers, signs, warning light and guards) and to provide adequate protection of persons and property.

The Contractor shall abate dust nuisance by sweeping, or other means as necessary, to keep paved areas acceptably cleaned until such time as restoration is completed. Construction actives which result in mud on hard surfaced areas will not be permitted. No additional compensation shall be allowed for site cleanup.

Pedestrian and vehicular traffic shall be protected from work activities, equipment, and materials stockpiled and waiting installation. This may require barricades, fencing, bracing, shoring, or lateral supports in the immediate area.

Following completion of the project, all materials, trash, and debris shall be removed by the Contractor.

200.02 <u>Limits of Construction</u>. The project is located within City of Grand Island, Hall County, and Nebraska Department of Roads right-of-ways. The Contractor shall confine all work activities to the public road right-of-ways, permanent easements and temporary construction easements. Failure to restrict construction activities to the project limits may result in damage to private property and bad public relations.

Any property damage done by the Contractor beyond these limits shall be immediately repaired at the Contractor's expense.

200.03 <u>Project Site Access</u>. Access to roads, streets, highways, and driveways shall be maintained except when necessary construction activities prevent such access for a limited period of time.

The Contractor shall fully cooperate with the various commercial businesses, private residents and property owners, emergency departments, agencies or parties involved with delivery of mail or packages, and the collection and removal of trash and garbage. The Contractor shall coordinate construction operations so existing schedules for such activities shall be maintained.

200.04 <u>Right-of-Way Permits</u>. The City of Grand Island has obtained a permit for the required storm water improvements from the Nebraska Department of Roads. The Contractor shall be responsible for complying with all requirements of the associated permit.

Refer to Section 11 for details.

200.05 <u>Temporary Traffic Control</u>. Part VI of the Manual of Uniform Traffic Control Devices (MUTCD) is the national standard for work zone traffic control. The current version that has been adopted by the Nebraska Department of Roads shall be followed.

Any crews, contractors, utility companies, or any other person, firm or corporation performing work within the right-of-way of any public street, public way, or alley shall install and maintain Temporary Traffic Control (TTC) in accordance with the standards of the MUTCD.

The individual responsible for installing and maintaining the TTC shall be available 24 hours per day, seven days per week. These individuals shall be responsible for repair, correction, replacement and maintenance of the traffic control devices. These individuals shall perform inspections of the TTC at the site a minimum of twice during the day and once during the right every day until the work is completed and the right-of-way is cleared.

The contractor is shall develop and implement Temporary Traffic Control Plans for the closure of Garland Street, U.S. Highway 281 work within the right-of-way and all pedestrian facilities.

Temporary Traffic Control shall not be paid for directly and shall be considered subsidiary to other items which direct payment is made.

200.05.1 Not Used.

200.05.1 <u>Barricades and Warning Signs</u>. The Contractor shall be responsible for furnishing, installing and maintaining all barricades, warning signs, or flashing lights adjacent to all work areas and/or coordination of any required detours. Placement and use of reflectorized materials, etc. shall be according to the MUTCD and all revisions thereto published under the direction of the Federal Highway Administration.

In situations where sight distance is limited or where other safety conditions dictate, the Contractor shall provide additional means of controlling traffic including but not limited to furnishing flaggers. Flaggers shall be properly attired with vest, head gear and stop/slow paddles, and used according to MUTCD flagging and signage procedures.

200.06 <u>Personal Protective Equipment</u>. During all phases of the project, all personnel working within the construction limits shall be suitably dressed to perform their duties safely and in such a manner that will not interfere with their vision, hearing, and use of hands and feet.

As a minimum, all workers shall be required to wear:

- Hard hats that meets the American National Standard (ANSI) Z89.1 latest revision.
- High-visibility and reflective personal protective safety clothing. Such clothing shall be suitable
 during both daytime and nighttime usage, and meet the performance Class 2 or Class 3
 requirements of ANSI/ISEA 107-2004 publication entitled "American National Standards for HighVisibility Safety Apparel and Headwear".

200.07 <u>Notice of Closing</u>. When it becomes necessary to close a portion of a street during the execution of this work, the Contractor shall notify the Authority Having Jurisdiction and Engineer's office (Olsson Associates), at least seventy two (72) hours in advance. The closing of individual roadways or intersections will only be allowed with **prior approval of the appropriate Authority Having Jurisdiction (AHJ)**.

When it becomes necessary to close any private driveway during the execution of this work, the Contractor shall make arrangements with the affected property management, at least five (5) business days in advance.

200.08 <u>Work within the Right-of-Way</u>. All supplies, materials and/or equipment that may serve as obstructions to traffic shall be properly protected and enclosed by fences or barricades, and not stored within the right-of-way. However, materials waiting to be installed during the construction work day may be placed within the right-of-way, provided they do not limit nor interfere with public access and safety.

Vehicles and equipment, when not in use with the construction work within the right-of-way, shall be kept a minimum of thirty (30) feet from the edge of the surfaced shoulder or roadway.

All workers within the right-of-way, who are exposed to vehicles using the right-of-way or to construction equipment within the work area, shall wear high-visibility and reflective personal protective safety clothing. Such clothing shall be suitable during both daytime and nighttime usage, and meet the performance Class 2 or Class 3 requirements of ANSI / ISEA 107-2004 publication entitled "American National Standards for High-Visibility Safety Apparel and Headwear."

- 200.09 <u>Roadway and Driveways Restoration</u>. Hard surfaced pavement restoration for roadways and driveways whether concrete, asphalt, or concrete with an asphalt overlay shall be replaced, as identified on the plans to the grade of the existing adjacent surfacing.
- 200.10 <u>Cold Weather Concreting.</u> When average daily temperatures are below 40°F (4.5°C) for more than three (3) consecutive days, the Contractor shall use approved practices and procedures that will assure that placed concrete will be sufficiently strong and durable to fully meet design requirements. The use of insulating coverings, accelerating admixtures, high-early strength cement or additional cement may be used to develop the level of strength required. All such methods shall fully conform to the American Concrete Institute's "Recommended Practice for Cold Weather Concreting." There shall be no additional payment if such cold weather techniques are required.
- 200.11 Not Used.
- 200.12 <u>Staging Area.</u> The Contractor shall be responsible for obtaining and maintaining an area for material storage and staging of construction activities for the duration of this project. When not in use, all construction material, equipment, etc. shall be stored in this area and not in the public roadway right-ofway.

Upon completion of the project, the Contractor shall restore the staging area to equal or better than original condition. No separate payment shall be made for obtaining, maintaining and or restoring the stage area, but shall be considered incidental to the project.

- 200.12.1 <u>Temporary Staging Area Fencing</u>. All storage and staging areas shall be enclosed with temporary fencing. Temporary site fencing material as a minimum shall be commercial grade, heavy-duty plastic mesh design, and highly visible orange in color. The fence shall be a minimum of four (4) feet in height with a smooth top and bottom for safety and aesthetic appeal. The fence shall be installed plumb for the entire length, strung taut between posts, and properly maintained during the entire project.
- 200.12.2 <u>Sanitation</u>. The Contractor shall provide and maintain enclosed toilets for the use of personnel engaged in the work area. These accommodations shall be maintained in a neat and sanitary condition. They shall also comply with all applicable laws, ordinances, and regulations pertaining to public health and sanitation of dwellings and camps.

SECTION 300 - UNION PACIFIC RAILROAD CROSSING

- 300.01 <u>General</u>. See Section 10 for the Union Pacific Railroad agreement with the City of Grand Island.
- 300.02 <u>Construction Coordination</u>. The contractor shall contact the Railroad ten (10) working days in advance of any construction activities planned on railroad right-of-way. The contractor shall also coordinate with railroad personnel during construction activities on railroad right-of-way.
- 300.03 Flagman. The contractor shall pay for flagman when required by the railroad company.
- 300.04 <u>Insurance</u>. The contractor shall obtain railroad insurance at contractor's expense, and list City and the Engineer as additional insured. The contractor shall meet the railroad insurance requirements and limits needed for construction as listed in Exhibit 'C' for the Union Pacific Railroad with the City of Grand Island. See Section 10.

300.05 <u>Pipeline Material</u>. The contractor shall jack and bore 48" x 0.625" WT smooth steel casing pipe with minimum yield strength of 35,000 psi.

SECTION 400 -- DEWATERING

400.01 <u>General</u>. When required, this section will be used in conjunction with Division VI, Section 36, Dewatering. It shall be the Contractor's responsibility for devising and operating a construction dewatering system.

400.02 <u>Discharge Permit</u>. The City of Grand Island has a Construction Dewatering Permit from the State of Nebraska Department of Environmental Control. A copy of permit number NEG671000 is contained in Section 12.

400.03 <u>Discharge Water</u>. All dewatering discharge water shall be conveyed to the Wood River or locations as previously approved by authorities having jurisdiction. It will be the Contractor's responsibility to make driveway and street crossings in such a manner as to not interfere with normal use. The Contractor will not be allowed to utilize the right-of-way ditches for open conveyance of discharge water.

SECTION 500 -- SALVAGING AND REPLACEMENT OF TOPSOIL

500.01 <u>General</u>. This work shall consist of salvaging topsoil from areas requiring excavations, and replacing the topsoil after construction.

500.02 <u>Quality of Topsoil</u>. Topsoil shall consist of friable surface soil up to one (1) foot in depth, reasonably free of grass, roots, weeds, sticks, stones, and other foreign materials.

500.03 <u>Excavation</u>. After the site has been cleared and grubbed, the topsoil shall be removed to the depth of one (1) foot from the designated areas and shall be stockpiled. Objectionable materials encountered during excavation shall be removed from the construction site. Additional materials required to re-establish grade shall be supplied by the Contractor.

500.04 <u>Spreading</u>. Spreading shall not be done when the ground or topsoil is frozen, excessively wet or otherwise in the condition detrimental to the work. Surfaces designated to be covered shall be lightly scarified just prior to the spreading operation. Where compacted fills are designated to be covered by topsoil, the topsoil shall be placed concurrently with the fill and shall be bonded to the compacted fill with the compacting equipment.

After placement is completed, the surface of the topsoil shall be restored to the grade prior to construction.

SECTION 600 - TEMPORARY EROSION CONTROL

600.01 <u>Phase II Construction Requirements</u>. When required, the Contractor shall fully comply with all Phase II Construction Requirements.

Phase II of the storm water program applies to all construction activities disturbing one or more acres of land, or if the site is less than one acre but part of a larger common plan of development (such as a large subdivision). These sites must obtain an NPDES permit before any earthmoving activities begin. The NDEQ may require construction sites disturbing less than one acre of land to obtain a storm water discharge permit if such activities would adversely affect water quality.

In order to comply with Phase II of the storm water program, review all requirements contained in the NDEQ construction permit. The steps below are a brief outline of what must be done as part of your

permitting process. These steps are not inclusive and the NDEQ construction permit must be referenced and followed for full compliance:

Determine which parties are considered "operators" responsible for complying with the Phase II requirements.

The City of Grand Island has completed and submitted a Notice of Intent (NOI) with all required form work to NDEQ.

The City of Grand Island has developed a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP does not need to be submitted to NDEQ, but must be kept on the construction site and accessible to everyone during construction activities.

The City of Grand Island will complete inspection reports and the contractor shall implement the SWPPP at the direction of the City of Grand Island.

Complete final stabilization of the site.

Complete and submit a Notice of Termination (NOT) to the NDEQ.

600.02 <u>Best Management Practices (BMPs)</u>. The Contractor shall implement and maintain such BMPs as relevant to conduct the operations and maintain the work so that adequate drainage and erosion control are in place at all times. Techniques will be employed for wind erosion control, sediment control, non-storm water control, and waste management and materials pollution; including preventing petroleum products, chemicals, harmful materials, construction debris, and excessive suspended solids from entering waterways.

600.03 <u>Drainage and Erosion Controls.</u> The Contractor shall be responsible for evaluating the construction site and determining the need to prevent soil erosion and avoid water pollution, including but not limited to, taking temporary measures and/or installing permanent erosion control structures such as sediment traps, silt fence, ditch checks, etc. Such features shall be incorporated into the project at the earliest practicable time and shall be properly maintained by the Contractor.

The Contractor shall exercise every reasonable precaution throughout the Contract to provide adequate drainage and erosion controls on the project site and adjacent properties. Construction of drainage facilities, as well as performance of other Contract work which will contribute to the control of siltation, shall be carried out in conjunction with other project operations, or as soon thereafter as is practicable.

All erosion resulting from the Contractor's operations and the elements must be corrected by the Contractor at no additional cost to the City. The Contractor shall conduct all construction activities so as to avoid soil erosion. Each day, areas shall be protected so that storm runoff will not erode soil.

SECTION 700 - SEEDING

Disturbed residential lawn & turf areas shall be seeded as shown on the plans with Type 'A' Seeding. The following seed mixture shall be used:

Arrow Seed Co., Inc. P.O. Box 722 Broken Bow, NE 68822 Phone: 800-622-4727

Duraturf Plus 2 Mixture or an approved equal: 22.5% Rembrandt or Barerra Tall Fescue 22.5% Crossfire II Tall Fescue

22.5% Millennium Tall Fescue22.5% Wildfire Tall Fescue7.0% Rambo or Caliber Kentucky Bluegrass5.0% Prizm or Fiesta III Perennial Ryegrass

Sow seed at the rate of 8-10 lbs/1,000 square feet.

All seed shall be origin Nebraska, adjoining states, or as specified. A Contractor proposing to use a substitute variety, or origin shall submit for the Engineer's consideration a seed tag representing the seed which shows the variety, origin and analysis of the seed.

Rate of application of commercial inorganic fertilizer shall be:

	Rate of Application Per Acre (Minimum)
Available Nitrogen (N ₂)	30 or 35 LB
Available Phosphoric Acid (P ₂ O ₅)	90 or 95 LB

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

The Contractor may, at his option, apply granular urea formaldehyde in lieu of the sulphur-coated urea fertilizer at the following rate:

Nitrogen (total available)	60 LB

All areas which are seeded shall be covered with mulch. Mulching shall be in accordance with the requirements of Section 805 of the Nebraska Department of Roads Standard Specification. Mulching shall not be measured and paid for directly but shall be considered subsidiary to the pay item for "Seeding".

SECTION 800 - PAY ITEMS

- 800.01 Owner Supplied Reinforced Concrete Pipe shall include all labor, equipment, excavation, subgrade preparation, backfill, and incidental items necessary to install pipe of the diameter(s) as required under the contract. City of Grand Island has purchased all reinforced concrete pipe and the material is stockpiled on-site as listed on the plans. The pay item is one linear foot of each diameter(s) listed in the bid form, in place, measured between the ends of the pipe as planned.
- 800.02 <u>Jack & Bore 48" Steel Pipe</u> shall include all labor, equipment, material, accessories, excavation, subgrade preparation, joints, backfill, and incidental items necessary to jack and bore pipe of the diameter(s) as required under the contract. <u>The pay item is one linear foot</u> of each diameter(s) listed in the bid form, in place, measured between the ends of the pipe as planned.
- 800.03 Owner Supplied Reinforced Concrete Flared-End Sections shall include all labor, equipment, unclassified excavation, subgrade preparation, jointing, accessories, proper backfill, and compactions, grading, handling of water, and all related work required to install a flared-end section in accordance with the contract documents. City of Grand Island has purchased all reinforced concrete flared-end sections and the material is stockpiled on-site as listed on the plans. The pay item is one each, for the size(s) listed on the bid form, complete in place.
- 800.04 <u>Storm Sewer Manhole with Flap Gate</u> shall include all labor, materials, equipment, unclassified excavation, concrete, reinforcement, backfill, ring and cover, flap gate and incidental items to

construct storm sewer manhole with flap gate in accordance with the plans and specifications. The pay item is one (1) each listed on the bid form, complete in place.

- 800.05 <u>Storm Sewer Manhole</u> shall include all labor, materials, equipment, unclassified excavation, concrete, reinforcement, backfill, ring and cover and incidental items to construct storm sewer manhole with flap gate in accordance with the plans and specifications. <u>The pay item is one (1) each listed on the bid form, complete in place.</u>
- 800.06 <u>Concrete Collar</u> shall include all labor, materials, equipment, unclassified excavation, concrete, reinforcement, backfill, and incidental items to construct concrete collar for storm sewer connections in accordance with the plans and specifications. <u>The pay item is one (1) each</u>, for the size(s) listed on the bid form, complete in place.
- 800.07 <u>Wet Cut-In (Watermain)</u> shall include all labor, materials, equipment, unclassified excavation, fitting/pipe removal, backfill, testing, disinfection, and incidental items for cutting and making connection to, or disconnection from, existing mains of various sizes containing water but not normally under pressure. The pay item is one (1) each listed on the bid form.
- 800.08 <u>Ductile Iron Watermain Pipe</u> shall include all labor, materials, equipment, unclassified excavation, subgrade preparation, pipe installation, reaction blocking, thrust restraints, disinfection, testing, backfill, trench compaction, and incidental items for the installation of ductile iron water main in accordance with the plans and specifications. <u>The pay item is one (1) linear foot</u>, for the size(s) listed on the bid form, complete in place.
- 800.09 <u>Gate Valve with Box (Watermain)</u> shall include all labor, materials, equipement, unclassified excavation, subgrade preparation, thrust restraints, disinfection, testing, backfill, concrete, and incidental items for furnishing and placing gate valves and valve boxes in accordance with the plans and specifications. The pay item is one (1) gate valve with box, for the size(s) listed on the bid form, complete in place.
- 800.10 <u>Ductile Iron Watermain Fittings</u> shall include all labor, material, equipment, unclassified excavation, thrust restraints, testing, disinfection, backfill and all necessary incidental items for furnishing and installing watermain fittings as specified and shown on the plans. <u>The pay item is one (1) each,</u> for the type(s) and size(s) listed on the bid form, complete in place.
- 800.11 <u>Wet Cut-In (Sanitary Sewer Force Main)</u> shall include all labor, materials, equipment, unclassified excavation, fitting/pipe removal, backfill, testing, disinfection, and incidental items for cutting and making connection to, or disconnection from, existing mains of various sizes but not normally under pressure. The pay item is one (1) each listed on the bid form.
- 800.12 <u>Ductile Iron Sanitary Sewer Force Main Pipe</u> shall include all labor, materials, equipment, unclassified excavation, subgrade preparation, pipe installation, reaction blocking, thrust restraints, disinfection, testing, backfill, trench compaction, and incidental items for the installation of ductile iron sanitary sewer force main pipe in accordance with the plans and specifications. <u>The pay item is one (1)</u> linear foot, for the size(s) listed on the bid form, complete in place.
- 800.13 <u>Ductile Iron Sanitary Sewer Force Main Fittings</u> shall include all labor, material, equipment, unclassified excavation, thrust restraints, testing, disinfection, backfill and all necessary incidental items for furnishing and installing sanitary sewer force main fittings as specified and shown on the plans. <u>The pay item is one (1) each</u>, for the type(s) and size(s) listed on the bid form, complete in place.
- 800.14 <u>Air Release Assembly</u> shall include all labor, materials, equipment, unclassified excavation, backfill, corporation stop and saddle, polyethylene water service tubing, fittings, ball valve, air release valve, copper tubing, and incidental items necessary to complete air release assembly in accordance with the plans and specifications. <u>The pay item is one (1) air release assembly</u>, listed on the bid form, complete in place.

- 800.15 Remove and Build Surfacing shall include all necessary materials, labor, equipment, unclassified excavation, saw cutting, concrete removal, asphalt removal, disposal, subgrade preparation, tie bars, expansion material, joint sealant, fine grading, and incidental work for removing and replacing the existing surfacing in accordance with the plans and specifications. The <u>pay item is one (1) square yard</u>, for the type(s) and depth(s) listed on the bid form, complete in place.
- 800.16 <u>Gravel Surface Course</u> shall include all necessary labor, equipment, materials, subgrade preparation, compaction and incidental work for placing gravel surfacing in accordance with the plans and specifications. <u>The pay item is one (1) ton</u>, listed on the bid form, complete in place.
- 800.17 <u>Erosion Control Blanket</u> shall include all labor, equipment, materials, subgrade preparation, trenching, anchoring, and incidental work necessary to complete installation of filter fabric as required under the contract. <u>The pay item is one square yard</u>, for the NDOR type(s) listed on the bid form, complete in place.
- 800.18 <u>Silt Fence</u> shall include all labor, equipment, materials, excavation, subgrade preparation, proper backfill, periodic cleanout and disposal of sediment, maintenance, removal at project completion, and related work required to construct and maintain silt fence in accordance with the plans and specifications. The pay item is one (1) linear foot, listed on the bid form.
- 800.19 <u>Seeding</u> shall include all labor, equipment, material, subgrade preparation, mulching, and related work necessary to establish and maintain planned vegetation turf areas in accordance with the plans and specifications. The pay item is one (1) acre, listed on the bid form.
- 800.20 <u>Rock Riprap</u> shall include all labor, equipment, materials, excavation, subgrade preparation, and incidental items necessary to complete limestone riprap construction in accordance with the plans and specifications. <u>The pay item is one (1) ton</u>, for the NDOR type(s) listed on the bid form, complete in place.
- 800.21 Railroad Flagging shall include all necessary labor and equipment to be provided as required by Union Pacific Railroad to work in their right of way on a daily basis. The pay item is one (1) day, listed on the bid form.
- 800.22 <u>Dewatering</u> shall include all labor, equipment, permitting, piping, wells, and incidental work to dewater for installation of pipe or structures. The contractor shall obtain approval of the City of Grand Island Public Works Director before dewatering activities will be allowed on this project. <u>The pay item is one (1) lineal foot, listed on the bid form.</u>
- 800.23 <u>Dewatering, UPPR Crossing</u> shall include all labor, equipment, permitting, piping, wells, and incidental work to dewater the pipe installation at the UPRR crossing. The contractor shall obtain approval of the City of Grand Island Public Works Director before dewatering activities will be allowed on this project. The pay item is one (1) lump sum, listed on the bid form.
- 800.24 <u>Common Excavation</u> shall include all labor, equipment, stockpiling, and incidental items necessary to complete excavation of soil material. Stockpile site will be available on-site, location will be directed by the City of Grand Island. <u>The pay item is one (1) cubic yard</u> as measured and computed from project cross-sections and contour maps.
- 800.25 <u>General Clearing and Grubbing</u> shall include all labor, equipment, materials, disposal, and incidental items necessary to complete the clearing and grubbing of trees, shrubs, other vegetation, debris, and trash or rubbish in accordance with the plans and specifications. Clearing and Grubbing shall be contained within the limits of construction, or as approved by the Owner and Engineer. <u>The pay item is one (1) lump sum</u>, listed on the bid form.

DIVISION I

GENERAL SPECIFICATIONS

APPLICABLE TO ALL CONSTRUCTION CONTRACTS

DIVISION I GENERAL SPECIFICATIONS

CONTENTS

Section	Description
1	DEFINITIONS OF WORDS AND TERMS
1.01	Abbreviations
1.02	Advertisement
1.03	Award
1.04	Backslope
1.05	Bidder
1.06	Calendar Day
1.07	Change Order
1.08	City
1.09	Contract
1.10	Contract or Performance Bond
1.11	Contract Item
1.12	Contract Period
1.13	Contractor
1.14	Cul-de-sac Street
1.15	Culvert
1.16	Easement (Right-of-way)
1.17	Employee
1.18	Engineer
1.19	Extra Work
1.20	Holidays
1.21	Inspector
1.22	Laboratory
1.23	Notice to Bidders
1.24	Plans
1.25	Project
1.26	Bid
1.27	Bid Form
1.28	Bid Guarantee
1.29	Right-of-way
1.30	Special Provisions
1.31	Specifications
1.32	Subcontractor
1.33	Superintendent
1.34	Supplemental Agreements
1.35	Supplemental Specifications
1.36	Surety
1.37	Work
1.38	Working Day
1.39	Working Drawings
1.40	Work Order
1.41	Completion of the Work and Formal Acceptance by the City
1.42	Final Acceptance of the Work
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Revised 1-25-2011

Section	Description
2 2.01	BID REQUIREMENTS AND CONDITIONS Contents of Bid Forms
2.01	Interpretation of Quantities in Bid Forms
2.03	Examination of Plans, Specifications, Special
0.04	Provisions and Site of Work
2.04 2.05	Preparation of Bid Statement of Bidder's Plant and Financial Conditions
2.06	Certified, Check, Cashier's Check, or Bid Bond
2.07	Filing of Bid
2.08	Withdrawal of Bid
2.09	Public Opening of Bids
2.10	Material Guarantee
3	AWARD AND EXECUTION OF THE CONTRACT
3.01	Consideration of Bids
3.02	Award of Contract
3.03	Cancellation of Award
3.04	Return of Bid Guarantee
3.05	Performance Bond
3.06	Contract Documents Revised 1-25-2011
3.07	Failure to Execute Contract
4	SCOPE OF WORK
4.01	Intent of Plans and Specifications
4.02	Special Work
4.03	Increased or Decreased Quantities of Work
4.04	Revised 1-25-2011
4.04 4.05	Extra Work
4.06	Maintenance of Detours Temporary Traffic Control
4.00	Revised 1-25-2011
4.07	Maintenance of Traffic
4.08	Street Closing
4.09	Miscellaneous Removal Items
4.10	Removal and Replacement of Property Stakes
4.11	Removal and Disposal of Structures and Obstructions
4.12	Rights In and Use of Materials Found on the Right-of-Way
4.13	Construction and Demolition Debris
4.14 4.15	Final Cleaning Up Right-of-way
4.16	Railroad Crossings
4.17	Safety and Health Regulations for Constructions
_	, ·
5	CONTROL OF WORK
5.01	Authority of Engineer
5.02 5.03	Plans and Working Drawings Alteration of Plans or of Character of Work
5.03 5.04	Coordination of Plans, Specifications, Special
J.U T	Provisions, and Supplemental Specifications
5.05	Cooperation of Contractor
	•

Section	Description
5.06 5.07 5.08 5.09 5.10	Surveys Authority and Duties of Inspector Inspection of Work Removal of Defective Work Final Inspection
6 6.01 6.02 6.03 6.04 6.05 6.06	CONTROL OF MATERIALS Source of Supply and Quality Requirements Methods of Sampling and Testing, and Cited Specifications Storage of Materials Unacceptable Materials Guarantee "Or Equal" Clause
7	LEGAL RELATIONS AND RESPONSIBILITY TO THE
7.01 7.02 7.03 7.04 7.05 7.06 7.07 7.08 7.09 7.10 7.11 7.12 7.13	PUBLIC Laws to be Observed State and City Fair Labor Standards Anti-discrimination Permits Patents Restoration of Surface Opened by Permit Safety, Health, and Sanitation Barricades and Warning Signs Use of Explosives Claims for Labor and Materials Contractor's Insurance Proof of Carriage of Insurance Contractor's Responsibility for Utility Property and Services No Waiver of Legal Rights Exposure of Pipe or Manholes
8 8.01 8.02 8.03 8.04 8.05 8.06 8.07 8.08 8.09	PROSECUTION AND PROGRESS Subletting or Assigning of Contract Prosecution of Work Limitations of Operations Methods and Equipment Temporary Suspension of Work Liquidated Damages Extension of Contract Period Abrogation Termination of Contractor's Responsibility
9 9.01 9.02 9.03 9.04	MEASUREMENT AND PAYMENT Payments Payments Withheld Acceptance and Final Payment Payment for Extra Work
	Pavisad 1-25-201

Revised 1-25-2011

DIVISION I GENERAL SPECIFICATIONS

SECTION 1 - DEFINITIONS OF WORDS AND TERMS

Wherever in these specifications or in other contract documents the following terms or pronouns in place of them are used, the intent and meaning shall be interpreted as follows:

1.01 <u>Abbreviations.</u>

AASHTO American Association of State Highway And

Transportation Officials

ASTM American Society for Testing and Materials
ANSI American National Standards Institute
AWWA American Water Works Association
Apply
App

AREA American Railway Engineering Association

AWS American Welding Society

AAN American Association of Nurserymen

- 1.02 <u>Advertisement</u>. The advertisement for work or materials on which bids are to be received.
- 1.03 <u>Award</u>. The decision of the City to accept the bid of the lowest responsible bidder for the work, subject to the execution and approval of a satisfactory contract therefor and bond to secure the performance thereof and to such other conditions as may be specified or otherwise required by law.
- 1.04 <u>Backslope</u>. The sloping surface of a cut, the downward inclination of which is toward the roadbed.
- 1.05 <u>Bidder</u>. Any individual, firm, or corporation formally submitting a bid for the work contemplated, acting directly or through a duly authorized representative.
- 1.06 Calendar Day. Every day shown on the calendar, Sundays and holidays included.
- 1.07 <u>Change Order</u>. A written order to the Contractor, signed by the Engineer, ordering a change in the work from that originally shown in the plans and specifications.
- 1.08 <u>City</u>. The word "City" as used in these specifications refers to the City of Grand Island, Nebraska, acting through its City Council.
- 1.09 <u>Contract</u>. The written agreement executed between the City and the Contractor, covering the performance of the work and the furnishing of labor and materials, by which the Contractor is bound to perform the work and furnish the labor and materials, and by which the City is obligated to compensate Contractor therefor at the mutually established and accepted rate or price.

The contract shall include the "Notice to Bidders", these specifications, the Contractor's bond, the general and detailed plans, the bid, special provisions, and supplemental agreements.

- 1.10 <u>Contract or Performance Bond</u>. The approved form of security, executed by the Contractor and their surety or sureties, guaranteeing complete execution of the contract and all supplemental agreements pertaining thereto and the payment of all legal debts pertaining to the construction of the project.
- 1.11 <u>Contract Item</u>. An item of work specifically described and for which a price, either unit or lump sum, is provided. It includes the performance of all work and the furnishing of all labor, equipment, and materials described in the text of a specification item included in the contract or described in any subdivision of the text of the supplemental specification or special provision of the contract.
- 1.12 <u>Contract Period</u>. The period from the date specified in the contract for the commencement of the work to the date specified for its completion, both dates inclusive.
- 1.13 <u>Contractor</u>. The party of the second part to the contract; the individual, firm, or corporation undertaking the execution of the work under the terms of the contract and acting directly or through Contractor's agents or authorized employees.
- 1.14 <u>Cul-de-sac Street</u>. A local street open at one end only and with special provision for turning around.
- 1.15 <u>Culvert</u>. Any structure not classified as a bridge which provides an opening under any street.
- 1.16 <u>Easement (Right-of-way)</u>. A right acquired by public authority to use or control property for a designated purpose.
- 1.17 <u>Employee</u>. Any person working on the project mentioned in the contract of which these specifications are a part, and who is under the direction or control or receives compensation from the Contractor or Contractor's subcontractor.
- 1.18 <u>Engineer</u>. The City Engineer, acting either directly or through an assistant or other representative duly authorized by the City Engineer, such assistant or representative acting within the scope of the particular duties assigned or with the authority given.
- 1.19 <u>Extra Work</u>. Work performed by the Contractor in order to complete the contract in an acceptable manner but for which there is no basis of payment provided in the contract.
- 1.20 <u>Holidays</u>. In the State of Nebraska, holidays occur on: January 1, Martin Luther King, Jr. Day in January, Presidents' Day in February, Arbor Day in April, Memorial Day in May, July 4, Labor Day in September, Columbus Day in October, Veterans Day and Thanksgiving Day in November, and December 25. If any of said dates fall on Sunday, the following Monday shall be a holiday. If any of said dates fall on Saturday, the previous Friday shall be a holiday.
- 1.21 <u>Inspector</u>. An authorized representative of the Engineer assigned to make detailed inspection of any or all portions of the work performed and materials furnished by the Contractor.
- 1.22 <u>Laboratory</u>. The testing laboratory of the City or any other testing laboratory which may be designated by the Engineer.

- 1.23 <u>Notice to Bidders</u>. The provisions, requirements, and instructions pertaining to the work to be awarded, manner and time of submitting bids, quantities of the major items or work required, as prepared for the information of bidders.
- 1.24 <u>Plans</u>. The official plans, profiles, typical cross sections, general cross sections, working drawings, and supplemental drawings, or exact reproductions thereof, approved by the Engineer, which show the location, character, dimensions, and details of the work to be done, and which are to be considered as a part of the contract supplementary to these specifications.
- 1.25 Project. All work necessary to be performed under the contract.
- 1.26 <u>Bid.</u> The offer of the bidder, submitted on the prescribed bid form, to perform the work and to furnish the labor and materials at the prices quoted by the bidder.
- 1.27 Bid <u>Form</u>. The approved form on which the City requires formal bids be prepared and submitted.
- 1.28 Bid <u>Guarantee</u>. The security furnished by the Bidder with Bidder's bid for a project as a guarantee that Bidder will enter into a contract for the work if said bid is accepted.
- 1.29 <u>Right-of-way</u>. The land area which is reserved or secured by the City for constructing the work or for obtaining material therefor.
- 1.30 <u>Special Provisions</u>. Special directions, provisions, or requirements peculiar to the project under consideration and not otherwise thoroughly or satisfactorily detailed or set forth in the specifications.
- 1.31 <u>Specifications</u>. The general term comprising all the directions, provisions, and requirements contained herein, together with such as may be added or adopted as supplemental specifications or special provisions, all of which are necessary for the proper performance of the contract.
- 1.32 <u>Subcontractor</u>. Any individual, firm, or corporation to whom the Contractor, with the written consent of the City, sublets any part of the contract.
- 1.33 <u>Superintendent</u>. The representative of the Contractor, present on the work at all times during progress, authorized to receive and fulfill instructions from the Engineer and capable of superintending the work efficiently.
- 1.34 <u>Supplemental Agreements</u>. Written agreements executed by the Contractor and the City subsequent to having entered into the contract, covering alterations in the plans or unforeseen items of construction.
- 1.35 <u>Supplemental Specifications</u>. Specifications adopted subsequent to the publication of this book. They generally involve new construction items or substantial changes in the approved specifications. Supplemental specifications shall prevail over those published in this book whenever in conflict therewith.
- 1.36 <u>Surety</u>. The corporate body bound with and for the Contractor for the acceptable performance of the contract, the completion of the work, and for payment of all just claims arising therefrom.

- 1.37 <u>Work.</u> Work shall be understood to mean the furnishing of all labor, materials, equipment, and other incidentals necessary or convenient to the successful completion of the project by the Contractor and the carrying out of all the duties and obligations imposed by the contract.
- 1.38 Working Day. Any day, except Saturdays, Sundays, and Nebraska holidays, on which the Contractor is not prevented by weather, soil conditions, or other conditions beyond the Contractor's control, adverse to the current controlling operation or operations, as determined by the Engineer, from proceeding with at least 80 percent of the labor and equipment force normally engaged in such operation or operations for at least 50 percent of the full number of hours in Contractor's normal daily schedule. Also, a Saturday, Sunday, or Nebraska holiday on which any work is performed on the current controlling operation or operations unless the Contractor is prevented by weather, soil conditions, or other conditions beyond the Contractor's control as determined by the Engineer, from proceeding for at least 50 percent of the full number of hours in their normal schedule with 80 percent of the normal working force.
- 1.39 <u>Working Drawings</u>. Stress sheets, shop drawings, erection plans, falsework plans, framework plans, cofferdam plans, bending diagrams for reinforcing steel, or any other supplementary plans for similar data which the Contractor is required to submit to the Engineer for approval.
- 1.40 <u>Work Order</u>. A written order signed by the Engineer, of a contractual status requiring performance by the Contractor without negotiation of any sort and may involve starting, resuming, or the suspension of work. (Not to be confused with extra work order).
- 1.41 <u>Completion of the Work and Formal Acceptance by the City</u>. Whenever the term "completion of the work and formal acceptance by the City" is used, it refers to and means the formal acceptance of the work by the Engineer and the City at the time the Contractor has all work under the contract completed and in place.
- 1.42 <u>Final Acceptance of the Work</u>. Whenever the term "final acceptance of the work" is used, it refers to and means the time when the Engineer and the City finally accept the work. The contractor guarantee shall remain in force from the City's final acceptance for a period of one year.

Revised 1-25-2011

SECTION 2 – BID REQUIREMENTS AND CONDITIONS

- 2.01 <u>Contents of Bid Forms</u>. Bidders will be furnished with bid forms which will state the location and description of the contemplated work and will show the estimate of the various quantities and kinds of work to be performed or materials to be furnished, with a schedule of items for which unit bid prices are asked, the time in which the work must be completed and the date, time, and place of opening bids. All special provisions and required provisions will be grouped together and bound with or included through reference in the bid form.
- 2.02 <u>Interpretation of Quantities in Bid Forms</u>. The quantities listed in the bid forms are to be considered as approximate, unless otherwise provided by special provision. It is understood that the quantities of work to be done and materials to be furnished may each be increased, diminished, or omitted as hereinafter provided without in any way invalidating the unit bid prices, except as provided in the section in these specifications entitled Increased or Decreased Quantities of Work.

- 2.03 <u>Examination of Plans, Specifications, Special Provisions, and Site of Work.</u> The bidder is required to examine carefully the site, the bid, plans, specifications, special provisions, and contract form for the work contemplated, and it will be assumed that the bidder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality, and quantities of work to be performed and materials to be furnished and as to the requirements of these specifications, the special provisions, and contract. It is mutually agreed that the submission of a bid shall be considered prima facie evidence that the bidder has made such examination.
- 2.04 <u>Preparation of Bid.</u> Bidders shall submit their bids on blank forms furnished by the Engineer with the full name and address and the place of business or residence of the bidder. If the bidder is co-partnership, the signature shall be by a member of the firm with the names and addresses of each member. If the bidder is a corporation, the signature shall be by an officer of the corporation in the corporate name and with the corporate name and the corporate seal attached thereto.

All blank spaces in the form shall be fully filled; numbers shall be stated in legible figures and writing when required; the signature shall be longhand; and the complete form shall be without interlineation, alteration, or erasure.

No oral, telegraphic, or telephonic bids or modifications will be considered.

When certain alternative prices, for both increasing and decreasing the cost, are required, as called for in the bid sheet, it must be understood that all materials and workmanship required shall be the best of their respective kinds and in all cases shall correspond with similar work herein specified and, if accepted, the work shall be done under the general terms of the specifications.

- 2.05 <u>Statement of Bidder's Plant and Financial Conditions</u>. Each bidder may submit with bid and, in any event, the City may, after bids are opened and prior to award of contract, require any bidder to submit the following data:
- 1. A statement that the bidder maintains a permanent place of business and address thereof:
- 2. A statement of equipment which the bidder proposes to use on the project, together with a statement noting that equipment previously mentioned which the bidder owns and that which bidder does not own but is certain bidder will be able to rent or otherwise procure for use on the project;
- 3. A financial statement, duly sworn to in a form approved by the City, listing assets and liabilities;
- 4. Statement listing projects of similar nature which the bidder has constructed or in the construction of which the bidder was actively engaged in a responsible capacity. Any bidder may be required by the City to submit additional data to satisfy the City that such bidder is prepared to fulfill the contract if it is awarded to them.
- 2.06 <u>Certified Check, Cashier's Check, or Bid Bond</u>. Each bidder must submit with the bid a certified check, cashier's check, or bid bond in the amount of not less than five percent (5%) of the amount bid, drawn to the order of the City Treasurer, Grand Island, Nebraska, guaranteeing the execution of the contract and bond required within ten (10) days of the notification of award. Any certified check must be issued by a bank in the State of Nebraska.

2.07 <u>Filing of Bid.</u> Bidders shall submit bid data on items offered in the Bid by filling in one set of data sheets supplied by the Engineering Department. The bid sheets shall be filled out legibly in <u>black ink</u> to permit reproduction.

Bidder security, when required, shall be enclosed in a special envelope marked, "BIDDER SECURITY/BID FOR _______." The envelope shall contain only a cashier's check or bidder's bond. This special envelope shall be attached to a sealed envelope containing the bid, filled out specifications, descriptive information drawings, qualification list and any other bid materials. This second envelope shall be marked "BID FOR ______." Bids of an incomplete nature or subject to multiple interpretations may, at the option of the Purchaser, be rejected as being irregular.

All bids shall be filed with the City at the place designated in the Notice to Bidders, prior to the time advertised for the opening of bids.

- 2.08 <u>Withdrawal of Bid.</u> A bidder will be permitted to withdraw said bid unopened after it has been submitted, if bidder's request for withdrawal is made in writing and delivered personally by the bidder or bidders' authorized representative prior to the time specified for opening of bids.
- 2.09 <u>Public Opening of Bids.</u> Bids will be publicly opened and read at the time and place stipulated in the Notice to Bidders.
- 2.10 <u>Material Guarantee</u>. Before any contract is awarded, the bidder may be required to furnish a complete statement of the origin, composition, and manufacture of any or all materials to be used in the construction of the work together with samples, which samples may be subjected to the test provided for in these specifications to determine their quality and fitness for the work.

SECTION 3 - AWARD AND EXECUTION OF THE CONTRACT

3.01 <u>Consideration of Bids.</u> After the bids are opened and read, they will be compared on the basis of the summation of the products and the quantities shown in the bid schedule by the unit bid prices. The results of such comparisons will be immediately available to the public.

The right is reserved to reject any and all bids and to waive technical errors as may be deemed best for the interest of the City.

3.02 <u>Award of Contract</u>. In the award of contract, consideration will be given not only to the prices bid but also the mechanical and other equipment available to the bidder, the financial responsibility of the bidder, and bidder's ability and experience in the performance of like or similar contracts.

Award of contracts will be made as promptly as practical after bids have been opened and read. The City reserves the right to delay the award for such time as is needed for the consideration of the bids and for the receipt of concurrence in recommended contract awards from other governmental agencies whose concurrence may be required.

- 3.03 <u>Cancellation of Award</u>. The City reserves the right to cancel the award of any contract at any time before execution of the said contract by all parties without any liability against the City.
- 3.04 <u>Return of Bid Guarantee</u>. Bid guaranties will be returned to the unsuccessful bidders by mail promptly after the signing of the contract has been made. Return to the successful bidder will be made after the signing of the contract and filing of the contract bond.

- 3.05 <u>Performance Bond</u>. The Contractor shall furnish a performance bond with a company having the approval of the City in an amount of 100 percent of the contract price guaranteeing complete and faithful performance of the contract, payment of all bills of whatever nature which could become a lien against the property, and guaranteeing replacement of defective materials and workmanship for a period of one year after completion of the contract.
- 3.06 <u>Contract Documents</u>. Three (3) copies of Contract Documents shall be made, executed, and distributed as follows:

One copy to City Clerk

One copy to Contractor One copy to Engineer

The following documents are a part of the contract:

*Bid *Supplemental Specifications

*Detailed Specifications *Performance Bond

*Contract *Additional Drawings as required

to make clear the intent of the contract

Revised 1-25-2011

3.07 <u>Failure to Execute Contract</u>. Failure to execute a contract and file an acceptable performance bond as provided herein within ten (10) days from date of award shall be just cause for the annulment of the award and the forfeiture of the certified check or cashier's check to the City, not as a penalty but in liquidation of damages sustained.

SECTION 4 - SCOPE OF WORK

4.01 <u>Intent of Plans and Specifications</u>. The intent of the plans and specifications is to provide for the construction and completion of every detail of the work described therein. It shall be understood by the Contractor that Contractor will furnish all labor, materials, tools, transportation, and supplies required for all or any part of the work to make each item complete in accordance with the spirit of the contract. It is understood that the apparent silence of the specifications as to any detail or the apparent omission of a detailed description concerning any point shall be regarded as meaning that only the best general practice is to prevail and that only materials and workmanship of the first quality are to be used.

For the purpose of design and the preparation of the Engineer's Estimate, the City may perform a reasonable amount of exploratory work to gain information relative to surface and subsurface conditions relating to type of soil, moisture content, and types and extent of rock strata.

This information when shown on the plan represents to the best of the City's knowledge conditions as of the date the survey was made. The appearance of this information on the plan will not constitute a guarantee that conditions other than those indicated will not be encountered at the time of construction.

The bidder may utilize this information as they see fit. Any bidder interested in the work is authorized to make whatever investigation they considers advisable.

In making such additional investigation, the bidder is directed to the Engineer for information relating to available right-of-way. If there are, at that time, any parcels of land over which the City does not have jurisdiction, right of entry must be secured by the prospective bidder from those authorized to grant such permission. Investigational work, performed by a prospective bidder on existing streets open to traffic, shall be performed in compliance with the

requirements of the current Manual on Uniform Control Devices for Street and Highways. All such additional investigational work shall be performed without costing or obligating the City in any way.

- 4.02 <u>Special Work</u>. Any conditions not covered by these standard specifications are stated in the special provisions.
- 4.03 Increased or Decreased Quantities of Work. The Engineer reserves the right to alter the quantities of contract items for which there are bid prices. Such increases or decreases in quantities shall be made as the City considers necessary or desirable without waiving or invalidating any of the provisions of the contract. All such alterations must be ordered in writing and a supplemental agreement must be executed with the Contractor for the item or items involved when such alterations involve an increase or decrease of more than 20 percent of the total cost of the work of any group of the contract calculated from the original bid quantities and the contract unit prices. The Contractor shall not start work on any alteration requiring a supplemental agreement until the agreement setting forth an equitable adjustment of compensation, satisfactory to both parties, shall have been executed by the Engineer and the Contractor and approved by City Council.

Revised 1-25-2011

- 4.04 <u>Extra Work</u>. The City reserves the right to order the performance of work of a class not contemplated in the bid but which may be considered necessary to complete satisfactorily the work included in the contract. Such extra work will be paid for as provided in these specifications under section entitled Payment for Extra Work.
- 4.05 <u>Maintenance of Detours</u>. Unless so required by the plans or the special provisions, the Contractor will not be required to assume any responsibility in connection with the maintenance or marking of suitable detours.
- 4.06 <u>Temporary Traffic Control.</u> Part VI of the Manual of Uniform Traffic Control Devices (MUTCD) is the national standard for work zone traffic control. The current version that has been adopted by the Nebraska Department of Roads is also applicable to the City of Grand Island and shall be followed.

Any City crews, contractors, utility company, or any other person, firm or corporation performing work within the right-of-way of any public street, public way, or alley in the City of Grand Island shall install and maintain Temporary Traffic Control (TTC) in accordance with the standards of the MUTCD.

The Public Works Director or their representative shall have the authority to direct corrective actions for any TTC not in compliance with the MUTCD and these provisions. These actions may include suspending operations and requiring removal of all equipment or materials from the right-of-way.

If the TTC is left in place longer than four (4) hours and no personnel are on the site, the individual responsible for installing the TTC shall provide telephone numbers of personnel who will be available on a 24 hours per day, seven days per week basis to the Public Works Director. These individuals shall be responsible for repair, correction, replacement and maintenance of the traffic control devices. These individuals shall perform inspections of the TTC at the site a minimum of twice during the day and once during the night every day until the work is completed and the right-of-way is cleared.

Subsidiary: Unless contract pay items are included with the bid specifications, direct payment for providing, installing, maintaining, and performing site inspections of TTC devices will not be made but are considered subsidiary to other items for which direct payment is

provided. When the contract contains a pay item for TTC, the NDOR standard items, specifications, etc. will be used.

Revised 1-25-2011

- Maintenance of Traffic. The Contractor shall conduct the work so as to interfere as little as possible with public travel, whether vehicular or pedestrian. Whenever it is necessary to cross, obstruct, or close roads, driveways, and walks, whether public or private, the Contractor shall, at Contractor's expense, provide and maintain suitable and safe bridges, detours, or other temporary expedients for the accommodation of public and private travel, and shall give reasonable notice to owners of private drives before interfering with them. Such maintenance of travel will not be required when the Contractor has obtained permission from the owner or tenant of private property or from the authority having jurisdiction over public property involved to obstruct traffic at the designated area.
- 4.08 <u>Street Closing</u>. In the event it is deemed necessary for the Contractor to close any streets during the execution of said work, the Contractor shall notify the owner of such street closing 72 hours in advance, prior to any street closing due to open cut street crossing.
- 4.09 <u>Miscellaneous Removal Items</u>. The Contractor shall inform the Engineer sufficiently ahead of construction so landowners can be notified to remove small trees, shrubs, and fences from the construction limits if the landowners desire to save them.
- 4.10 <u>Removal and Replacement of Property Stakes</u>. If it is necessary to remove any property corners or markers during construction operations, the Contractor shall notify the Engineer so the Engineer can establish reference ties. Any markers removed without notice to the Engineer shall be replaced at the Contractor's expense in accordance with the proper land surveying techniques.
- 4.11 <u>Removal and Disposal of Structures and Obstructions.</u> The Contractor for bridge and culvert work shall remove any existing structure or part of structure that in any way interferes with the new construction. If specific payment for such work has not been provided in the contract, it will be paid for as extra work.

The Contractor shall remove any materials or structures found on the right-of-way which are not to remain in place or which have not been designated for use in the new construction. The removal and disposal of pipe culverts will not be paid for directly but shall be considered as incidental work, and the cost of such removal and disposal shall be considered to be included in the contract price for other items. Pipe culverts shall be removed by methods that will cause a minimum of damage to the pipe culverts. The removal and disposal of bridges or other masonry or monolithic concrete construction will be paid for. If the contract does not contain an item for such work, it will be paid for as extra work.

A.12 Rights In and Use of Materials Found on the Right-of-way. Unless stated to the contrary in the contract documents, all materials, such as stone, gravel, sand, timber, and structures or parts of structures, found on the right-of-way of the street or on land acquired for the work, are the property of the City or the owner of the fee title to the land, and shall not be used or destroyed by the Contractor without special permission from the Engineer. When the Contractor is permitted to use materials found on the right-of-way, any excavations that they make below the grade elevation shall be backfilled with other suitable materials so the finished street will conform to the grade shown on the plans. No extra compensation will be allowed for such backfilling.

When rock excavation is encountered, any portion of rock excavation which would otherwise be deposited in waste areas and not be incorporated in the embankments may be processed and used, royalty free, by the Contractor in any other portion of the construction in which material of that quality would be acceptable. No deduction will be made from excavation quantities for rock so used.

- 4.13 <u>Construction and Demolition Debris.</u> Debris from any City awarded project, as well as Municipal Solid Waste (that is not recycled), shall be disposed of at the City's Solid Waste facilities.
- 4.14 <u>Final Cleaning Up.</u> Upon completion of the work and before acceptance and final payment, the Contractor shall clean the street, borrow pits, and all ground occupied by Contractor in connection with the work of all rubbish, excess materials, falsework, temporary structures, and equipment, and all parts of the work, shall be left in a neat and presentable condition.

When required in the plans, the Contractor shall, at Contractor's expense, replace waste material or stripping back into borrow and material pits as directed by the Engineer. Trees, tree stumps and material placed on property adjacent to the street during the execution of the work shall be disposed of by the Contractor.

- 4.15 <u>Right-of-way</u>. Right-of-way for the work will be provided without cost to the Contractor. Right-of-way will be made available to the Contractor on or before the date specified for the commencement of the work unless a later date for the right-of-way to be made available to the Contractor is designated in the contract documents.
- 4.16 <u>Railroad Crossings</u>. Whenever the work involves construction with which railroad companies are concerned, the performance of the work is contingent upon arrangements with the railroad companies for the proposed construction. No claims will be allowed for loss or damage caused by failure to complete such arrangements.
- 4.17 <u>Safety and Health Regulations for Construction</u>. Occupational Safety and Health Standards for the Construction Industry (29 CFR Part 1926) with amendments as of February 1, 1999 promulgated by the Occupational Safety and Health Administration, United States Department of Labor, Washington, D.C. are incorporated herein as a part of the contract documents.

SECTION 5 - CONTROL OF WORK

- Authority of Engineer. The Engineer will have general supervision of the work and will decide any questions that arise with reference to the intent of the contract documents and compliance therewith. Said Engineer will relay all questions relating to materials, work, progress, disputes and mutual rights between contractors, fulfillment of contract, and compensation, in accordance with the provisions of these specifications.
- 5.02 <u>Plans and Working Drawings</u>. The approved plans will be supplemented by such working drawings as are necessary to adequately control the work. It is mutually agreed that all authorized alterations affecting the requirements and information given in the approved plans shall be in writing.

Working drawings for any structure shall consist of such detailed plans as may be required of the Contractor for the prosecution of the work. These are not included in the plans

furnished by the Engineer. They shall include shop details, erection plans, masonry, and form work. The Engineer's prior approval of the shop details must be obtained before any fabrication work involving these plans is performed. Erection plans, masonry layout diagrams, and plans for cribs, cofferdams, falsework, centering, and form work, as well as any other working drawings not previously mentioned, may be required of the Contractor and shall be subject to the Engineer's approval.

No changes shall be made in any plan or drawing after it has been approved except by consent or direction of the Engineer in writing. It is expressly understood that the approval by the Engineer of the Contractor's working drawings will not relieve the Contractor from any responsibility.

The contract price shall include the cost of furnishing all working drawings, and the Contractor will be allowed no extra compensation for such drawings.

Shop plans shall be made on 22"x36" sheet with ½" margin on all sides except the left which shall be 2". The margin lines shall measure 21"x33 ½". The marking shall be in accordance with the special plans or as may be required by the Engineer. All blueprint plans which are furnished to the Engineer shall be clear and distinct and acceptable to the Engineer and shall be neatly trimmed. The Contractor shall furnish the Engineer as many extra copies of working drawings as the Engineer may direct.

The Engineer may require reproducible prints of all approved shop plans, which shall be furnished by the Contractor without cost to the Engineer. Such reproducible prints shall not be folded but shall be mailed in tubes sized to accommodate these plans without injuring them. No preliminary working drawings will be accepted by the Engineer unless they have been carefully checked by the Contractor. Drawings showing gross errors will be returned for recheck before examination by the Engineer. The name of the shop or company furnishing the drawings shall be on the tracing.

- Alteration of Plans or of Character of Work. The Engineer shall have the right to make alterations in plans or character of work as may be considered necessary or desirable during the progress of the work to satisfactorily complete the proposed construction. Such alterations shall not be considered as a waiver of any conditions of the contract or invalidate any of the provisions thereof.
- 5.04 <u>Coordination of Plans, Specifications, Special Provisions, and Supplemental Specifications.</u> These specifications, the supplemental specifications, the plans, special provisions, and all supplementary documents are essential parts of the contract, and a requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete work. In case of discrepancy, figured dimensions shall govern over scaled dimensions, plans shall govern over specifications, special plans shall govern over standard plans, supplemental specifications shall govern over standard specifications, and special provisions shall govern over specifications, supplemental specifications, and the plans.
- 5.05 <u>Cooperation of Contractor</u>. The Contractor will be supplied with a minimum of two sets of approved plans and contract assemblies, including special provisions, one set of which the Contractor shall keep available on the work at all times.

The Contractor shall give the work the constant attention necessary to facilitate the progress thereof and shall cooperate with the Engineer and other contractors in every way possible.

The Contractor shall at all times have at the work site, as Contractor's agent, a competent superintendent capable of reading and thoroughly understanding the plans and specifications, thoroughly experienced in the type of work being performed, who shall receive

instructions from the Engineer or Engineer's authorized representatives. The superintendent shall have full authority to execute the orders or directions of the Engineer without delay, and to promptly supply materials, equipment, tools, labor, and incidentals as may be required. Such superintendence shall be furnished irrespective of the amount of work sublet.

- 5.06 <u>Surveys</u>. Lines and elevations shall be established by the Engineer before the work commences and the Contractor shall obtain lines and elevations from the points so set by the Engineer. The Contractor shall furnish all stakes necessary for lines and elevations and cooperate with the Engineer in setting same.
- Authority and Duties of Inspector. The City may appoint inspectors to represent the Engineer in the inspection of all materials used in and all work done under the contract. Such inspection may extend to any part of the work and to the preparation or manufacture of the materials to be used. The inspector will not be permitted to modify in any way the provisions of the contract documents, nor to delay the work by failing to inspect materials and work with reasonable promptness. An inspector is placed at the work site to keep the Engineer informed as to its progress and the manner in which it is being done and to call the Contractor's attention to any infringements of the contract documents. The inspector will not act as foreman or perform other duties for the Contractor nor improperly interfere with the management of the work. They will not be authorized to approve or accept any portion of the work. In case of dispute between the Contractor and the inspector as to quality of materials or the manner of performing the work, the inspector shall have the authority to reject materials or suspend the work until the question at issue can be decided by the Engineer. Written notice of the suspension of work will be given to the Engineer and the Contractor.
- Inspection of Work. The Contractor shall furnish the Engineer with every reasonable facility for ascertaining whether the work is being performed in conformance with the contract documents. At any time before acceptance of the work, upon request of the Engineer, the Contractor shall remove or uncover such portions of the finished work as the Engineer may direct. After examination has been made, the Contractor shall restore such portions of the work to the standard required by the contract documents.

If the work thus exposed or examined proves acceptable, the uncovering or removing and replacing of the covering or the restoring of the parts removed shall be paid for as extra work, except that no payment will be made for the work involved in checking the smoothness of pavement surfaces. If the work thus exposed and examined proves unacceptable, the Contractor shall replace the defective work in accordance with the specifications and will be paid only the contract price for the work as finally accepted. Work done or materials used without the Engineer having been afforded ample opportunity to provide suitable inspection may be ordered removed and replaced at the Contractor's expense or may be excluded from the quantities measured for payment.

Removal of Defective Work. Any defective work shall be removed and replaced at the Contractor's expense. Should the Contractor fail or refuse to remove defective work when so ordered by the Engineer, the Engineer shall have authority to order the Contractor to suspend further operations and may withhold payment on estimates until such defective work has been removed and replaced in accordance with the plans and specifications. Continued failure or refusal on the part of the Contractor to correct defective work promptly shall be sufficient cause for the City to declare the contract in default and to proceed to have the work completed in accordance with these specifications under section entitled Abrogation.

5.10 <u>Final Inspection</u>. Upon notification by the Contractor or Contractor's authorized representative that the work is completed, the Engineer shall make prompt final inspection of each item of work included in the contract. If the work is found to not be in accordance with the contract documents, the Contractor will be advised as to the particular defects to be remedied.

SECTION 6 - CONTROL OF MATERIALS

Source of Supply and Quality Requirements. The materials used on the work shall meet all quality requirements of the contract. In order to expedite the inspection and testing of materials, the Contractor shall notify the Engineer of Contractor's proposed sources of materials prior to delivery. At the option of the Engineer, approval of the source or approval of materials at the source prior to delivery may be required. If it is found after trial that sources of supply for previously approved materials do not produce specified products or when conditions are such that the use of unfit materials cannot be prevented except by extraordinary inspection methods, the Contractor shall

furnish materials from other sources. Before delivery is started and at any time during the process of preparation and use, the materials shall be subject to the approval of the Engineer.

6.02 <u>Methods of Sampling and Testing, and Cited Specifications</u>. Sampling and testing of all materials and the laboratory methods and testing equipment required under these specifications shall be in accordance with the latest published standard method of the AASHTO, except as otherwise provided.

The sampling and testing of all materials not covered by the AASHTO, but not otherwise provided for, shall conform to the latest published standard or tentative methods of the ASTM.

- 6.03 <u>Storage of Materials</u>. The Contractor shall be responsible for the care and storage of materials delivered at the work site or purchased for use thereon. Any material that has been delivered to the work site and has become damaged before actual incorporation in the work may be rejected by the Engineer even though it may previously have been accepted. Stored materials shall be so located as to facilitate thorough inspection.
- 6.04 <u>Unacceptable Materials</u>. All materials not conforming to the requirements of the specifications at the time they are to be used shall be considered as unacceptable, and all such materials will be rejected and shall be removed immediately from the site of the work unless otherwise instructed by the Engineer. No rejected materials, the defects of which have been corrected, shall be used until approval has been given.
- 6.05 <u>Guarantee</u>. The Contractor shall be responsible for any and all defects which may develop in any part of the entire installation furnished by said Contractor and, upon receipt of written notice from the Engineer, shall immediately replace and make good without expense to the City any such faulty part or parts and damage done by reason of same during a period of one (1) year from the date of formal acceptance of the installation (except when specific guarantee for another length of time is elsewhere specified).

The acceptance of the installation, or any part of it, shall not act to waive this liability on the part of the Contractor.

Upon completion and formal acceptance of the work, the Contractor may furnish a satisfactory bond in an amount of fifteen percent (15%) of contract price to insure the provisions of this guarantee. Otherwise, the original bond shall remain in full force and effect until final acceptance of the work, which acceptance shall be made one (1) year after the formal acceptance of the work as provided herein.

6.06 "Or Equal" Clause. Whenever, in any section of the contract documents, plans, or specifications, any article, material, or equipment is defined by describing a proprietary product or by using the name of a manufacturer or vendor, the term "or approved equal", if not inserted, shall be implied. The specific article, material, or equipment mentioned shall be understood as indicating the type, function, minimum standard or design, efficiency, and quality desired and shall not be construed in such a manner as to exclude manufacturer's products of comparable quality, design, and efficiency. The Engineer shall determine the acceptability of articles, materials, or equipment proposed as equals.

SECTION 7 - LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

- Laws to be Observed. The Contractor shall keep fully informed of and, at all times, shall observe and comply with all Federal and State laws, all local bylaws, ordinances, and regulations, and all orders and decrees of bodies or tribunals having any jurisdiction or authority which in any manner affect those engaged or employed on the project, or which in any way affect the project. The Contractor shall protect and indemnify the City and its representatives against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by said Contractor or Contractor's employees. It shall be the responsibility of the Contractor to provide all safeguards, safety devices, and protective equipment and to take any other needed actions as are reasonably necessary to protect the life and health of employees on the project.
- 7.02 <u>State and City Fair Labor Standards</u>. The Contractor agrees to comply with all applicable State and City fair labor standards in the execution of the contract, including compliance with Section 73-102, R.R.S. 1943. The Contractor further agrees to comply with the provisions of Section 48-657, R.R.S. 1943, pertaining to contributions to the Unemployment Compensation Fund of the State of Nebraska. In addition, the Contractor agrees to comply with the provisions of Section 52-118, R.R.S. 1948, pertaining to payment of all labor performed and for payment for materials and equipment rental which is actually used in performing this contract.
- 7.03 <u>Anti-discrimination</u>. During the performance of the work, the Contractor agrees not to discriminate against any employee or application for employment because of race, color, age, religion, sex, or national origin.
- 7.04 <u>Permits.</u> The Contractor shall procure and pay for all permits, licenses, and bonds necessary for the prosecution of Contractor's work and/or required for municipal, State, and Federal regulations and laws.
- 7.05 <u>Patents</u>. The Contractor and the surety in all cases shall indemnify and save harmless the City for any costs, expenses, and damages which it may be obligated to pay by reason of any such infringement at any time during the prosecution of or after the completion of the project.
- 7.06 Restoration of Surfaces Opened by Permit. Upon the presentation of a duly authorized and satisfactory permit from the City which provides that all necessary repair work will be paid for by the party to whom such permit is issued, the Engineer may authorize the Contractor to allow parties bearing such permits to make openings in the street. The Contractor shall, when ordered by the Engineer in writing, make in an acceptable manner all necessary repairs due to such openings, and such necessary work ordered by the Engineer shall be paid for on the basis of "Extra Work" as provided for in these specifications and shall be subject to the same conditions as original work performed.

- 7.07 <u>Safety, Health, and Sanitation</u>. In the performance of the contract, the Contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation. The Contractor shall furnish such additional safeguards, safety devices, and protective equipment and shall take actions as the Engineer may determine as being reasonably necessary to protect the life and health of Contractor's employees and the public.
- 7.08 <u>Barricades and Warning Signs</u>. Except as otherwise provided specifically in this section, the Contractor shall provide and maintain barricades, danger and warning signs, and suitable and efficient lights, and shall take every reasonable precaution to prevent accidents. The name of the Contractor shall be clearly visible on the barricades. The Contractor shall provide, at their own expense, such watchmen as are necessary to protect their equipment and to maintain proper lights.

Watchmen who may be necessary to direct traffic or prevent travel on any portion of the street shall be provided by the Contractor on written order from the Engineer. Unless the contract specifically provides that such watchmen are to be furnished by the Contractor, this expense shall be paid for as provided in "Extra Work."

- 7.09 <u>Use of Explosives</u>. When the use of explosives is necessary for the prosecution of the work, the Contractor shall use the utmost care not to endanger life or property. All explosives shall be stored in a secure manner, and storage places shall be clearly marked "DANGER--EXPLOSIVES."
- Claims for Labor and Materials. The Contractor shall indemnify and save harmless the City from all claims for labor and materials furnished under this contract. When requested by the City, the Contractor shall submit satisfactory evidence that all persons, firms, or corporations who have done work or furnished materials under this contract, for which the City may become liable under the laws of the State, have been fully paid or satisfactorily secured. In case such evidence is not furnished or is not satisfactory, an amount will be retained from money due the Contractor which, in addition to any other sums that may be retained, will be sufficient, in the opinion of the City, to meet all claims of the persons, firms, and corporations as aforesaid. Such sum shall be retained until the liabilities as aforesaid are fully discharged or satisfactorily secured.
- Contractor's Insurance. The Contractor shall secure and maintain throughout the duration of this contract insurance, from companies authorized to do business in Nebraska, of such types and in such amounts as may be necessary to protect themselves and the interests of the City against all hazards or risks of loss as hereinafter specified. This insurance shall cover all aspects of the Contractor's operations and completed operations. The form and limits of such insurance, together with the underwriter thereof in each case, shall be approved by the City, but regardless of such approval it shall be the responsibility of the Contractor to maintain adequate insurance coverage at all times. Failure of the Contractor to maintain adequate coverage shall not relieve them of any contractual responsibility or obligation. Minimum insurance coverage shall be the amounts stated herein or the amounts required by applicable law, whichever are greater.
- 1. "Worker's Compensation and Employer's Liability." This insurance shall protect the Contractor against all claims under applicable State worker's compensation laws. This insurance shall provide coverage in every state in which work for this project might be conducted. The Contractor shall also be protected against claims for injury, disease, or death of employees which, for any reason, may not fall within the provisions of a worker's compensation

law. This policy shall include an "all states" endorsement. The liability limits shall be not less than the following:

Worker's Compensation Employer's Liability Statutory Limits \$100,000 each accident \$100,000 each employee \$500,000 policy limit

2. "Business Automobile Liability." This insurance shall be written in comprehensive form and shall protect the Contractor, Contractor's employees, or subcontractors from claims due to the ownership, maintenance, or use of a motor vehicle. The liability limits shall be not less than the following:

Bodily Injury & Property Damage \$500,000 Combined Single Limit

3. "Comprehensive General Liability." The comprehensive general liability coverage shall contain no exclusion relative to explosion, collapse, or underground property. The liability limits shall be not less than the following:

Bodily Injury & Property Damage \$ 500,000 each occurrence \$1,000,000 aggregate

4. "Umbrella Liability Insurance." This insurance shall protect the Contractor against claims in excess of the limits provided under employer's liability, comprehensive automobile liability, and commercial general liability policies. The umbrella policy shall follow the form of the primary insurance, including the application of the primary limits. The liability limits shall not be less than the following:

Bodily Injury & Property Damage \$1,000,000 each occurrence \$1,000,000 general aggregate

5. Additional Requirements. The City may require insurance covering a Contractor or Subcontractor more or less than the standard requirements set forth herein depending upon the character and extent of the work to be performed by such Contractor or Subcontractor.

Insurance as herein required shall be maintained in force until the City releases the Contractor of all obligations under the contract.

The Contractor shall provide and carry any additional insurance as may be required by special provisions of these specifications.

6. Certificate of Insurance. Satisfactory certificates of insurance shall be filed with the City prior to starting any work on this contract. The certificates shall show the City as an additional insured on all coverage except Workers Compensation. The certificate shall state that thirty (30) days written notice shall be given to the City before any policy is cancelled (strike the "endeavor to" wording often shown on certificate forms). If the Contractor cannot have the "endeavor to" language stricken, the Contractor may elect to provide a new certificate of insurance every thirty (30) days during the contract. The Contractor shall immediately notify the City if there is any reduction of coverage because of revised limits or claims paid which affect the aggregate of any policy.

- 7.12 <u>Proof of Carriage of Insurance</u>. Satisfactory certificates of insurance shall be filed with the City prior to starting any construction work on this contract. The certificates shall show the City as "Additionally Insured." The certificates shall state that thirty (30) days written notice shall be given to the City before any policy covered thereby is changed or canceled (strike the "endeavor to" wording often shown on certificate forms).
- 7.13 <u>Contractor's Responsibility for Utility Property and Services</u>. At points where the Contractor's operations are adjacent to properties of railway, telegraph, telephone, and power companies or adjacent to other property to which damage might result, work shall not be commenced until all arrangements necessary for the protection thereof have been made.

The Contractor shall cooperate with the owners of any underground or overhead utility lines in their removal and rearrangement operations in order that these operations may progress in a reasonable manner, that duplication of rearrangement work may be reduced to a minimum, and that services rendered by those parties will not be unnecessarily interrupted.

In the event of interruption to water or utility services as a result of accidental breakage or as result of being exposed or unsupported, the Contractor shall promptly notify the proper authority. Contractor shall cooperate with said authority in the restoration of service as promptly as possible. In no case shall interruption to water service be allowed to exist outside of working hours. Fire hydrants shall be kept accessible to the Fire Department at all times and no materials shall be kept or stockpiled within fifteen (15) feet of any fire hydrant.

The Contractor must cooperate with the utility companies and schedule work in such a manner as to protect the existing utility facilities until the facilities are abandoned or replacement facilities are completed. In instances where partial grading is necessary before a utility can install its facilities, the Contractor shall consult with the utility and plan the work so reasonable time can be allowed the utility for completing its work.

- No Waiver of Legal Rights. The City shall not be precluded or estopped by any measurement, estimate, or certificate made either before or after the completion and acceptance of the work and payment therefor from showing the true amount and character of the work performed and materials furnished by the Contractor, nor from showing that such measurement, estimate, or certificate is untrue or is incorrectly made, nor that the work or materials do not in fact conform to the contract. The City shall not be precluded or estopped, notwithstanding any such measurement, estimate, or certificate and payment in accordance therewith, from recovering from the Contractor or Contractor's sureties, or both, such damage as it may sustain by reason of Contractor's failure to comply with the terms of the contract. Neither the acceptance by the City or any representative of the City, nor any payment for or acceptance of the whole or any part of the work, nor any extension of time, nor any possession taken by the City shall operate as a waiver of any portion of the contract or of any power herein reserved or of any right to damages. A waiver of any breach of the contract shall not be held to be a waiver of any other or subsequent breach.
- 7.15 Exposure of Pipe or Manholes. The Contractor shall conduct the work at all times in such a manner as will insure no disruption to the normal function of the sanitary sewer collection system. Particular attention shall be paid to the threat of introduction of storm water or other waters to the piping and manholes of the collection system. The Contractor shall take whatever precautions are necessary, such as, but not limited to installation of plugs in exposed pipes and manholes when work is not in progress or when leaving the work site. The Contractor will be held responsible for damages which may occur to either the collection system or to private property through introduction of storm water or other waters to exposed piping or manholes relating to the construction work.

SECTION 8 - PROSECUTION AND PROGRESS

8.01 <u>Subletting or Assigning of Contract</u>. The Contractor will not be permitted to sublet, assign, sell, transfer, or otherwise dispose of the contract or any portion thereof or Contractor's right, title, or interest therein or to either legally or equitably assign any of the money payable under Contractor's contract or claim thereto without the written consent of Contractor's surety and the Engineer. The Contractor will not be relieved of any responsibility through any of the above actions.

8.02 <u>Prosecution of Work.</u> The bid for each project will show the contract period. The progress of the work shall be at a rate sufficient to complete the contract within the contract period. If it appears that the rate of progress is such that the contract will not be completed within the contract period or if the work is not being executed in a satisfactory and workmanlike manner, the City may order the Contractor to take such steps as it considers necessary to complete the contract within the period of time specified or to prosecute the work in a satisfactory manner. If the Contractor fails to comply with such order within two (2) weeks after receipt of the order, Contractor shall automatically be disqualified from receiving any additional contract awards, and the City shall have the right to declare the contract in default and to complete the work in accordance with these specifications under section entitled Abrogation.

The Contractor's sequence of operations shall be such as to cause as little inconvenience to the general public as possible.

The Contractor will be granted additional and suitable time for the prosecution of the work, as was lost by reason of a delay or delays attributable to other parties authorized to do work on the project over which the Contractor had no control or jurisdiction, as provided in these specifications under section entitled Extension of Contract Period.

- 8.03 <u>Limitations of Operations</u>. The Contractor shall conduct the work at all times in such a manner and in such sequence as will insure the least interference with traffic. Contractor shall have due regard to the location of detours and to the provisions of handling traffic. Contractor shall not open up work to the prejudice of work already started, and the Engineer may require the Contractor to finish a section on which work is in progress before work is started on any additional section. The Contractor shall so conduct operations and maintain the work in such condition that adequate drainage shall be in effect at all times.
- 8.04 <u>Methods and Equipment</u>. The methods, equipment, and appliances used shall produce a satisfactory quality of work and shall be adequate to maintain the schedule of progress specified. Equipment used on any portion of the project shall be such that no injury to the roadway, adjacent property, or other streets will result from its use.

When the methods and equipment to be used by the Contractor in accomplishing the construction are not prescribed in the contract, the Contractor is free to use any methods or equipment that is demonstrated to accomplish the contract work in conformity with the requirements of the contract to the satisfaction of the Engineer.

When the contract specifies that the construction be performed by the use of certain methods and equipment, such methods and equipment shall be used unless others are authorized by the Engineer. If the Contractor desires to use a method or type of equipment other than those specified in the contract, a request may be made to the Engineer for authority to do so. The request shall be in writing and shall include a full description of the methods and equipment proposed to be used and an explanation of the reasons for desiring to make the change. If approval is given, it will be on the condition that the contractor will be fully responsible for producing construction work in conformity with contract requirements. If, after trial use of the substituted methods or equipment, the Engineer determines that the work produced does not

meet contract requirements, the Contractor shall discontinue the use of the substitute method or equipment and shall complete the remaining construction with the specified methods and equipment. The Contractor shall remove the deficient work and replace it with work of specified quality or take such other corrective action as the Engineer may direct. No change will be made in basis of payment for the construction items involved nor in contract time as result of authorizing a change in methods or equipment under these provisions.

8.05 Temporary Suspension of Work. Work shall be suspended wholly or in part when, in the opinion of the Engineer, weather or other conditions are unfavorable to its satisfactory prosecution. Work shall also be suspended at the direction of the Engineer pending settlement of disputes arising out of failure of the Contractor to comply with the provisions of the contract. Written notice of suspension of work shall be given by the Engineer. When the conditions causing suspension no longer exist, such written notice shall be given to the Contractor by the Engineer. Promptly after such written notice, the Contractor shall resume prosecution of the work as provided in these specifications under section entitled Prosecution of Work.

8.06 <u>Liquidated Damages</u>. Time is an essential element of the contract, and it is important that the work be pressed vigorously to completion.

For each calendar day that any work shall remain uncompleted after the end of the contract period, the amount per calendar day specified in the bid form will be assessed, not as a penalty but as predetermined and agreed liquidated damages. The City will prepare and forward to the Contractor an invoice for such liquidated damages. The final payment will be withheld until payment shall have been made of this invoice.

Due account shall be taken of any adjustment of the contract period granted under the section of these specifications entitled Extension of Contract Period.

The assessment of liquidated damages for failure to complete the work within the contract period shall not constitute a waiver of the City's right to collect any additional damages which the City may sustain by failure of the Contractor to carry out the terms of the contract.

- 8.07 <u>Extension of Contract Period</u>. An extension of the contract period may be granted by the City for any of the following reasons:
 - 1. Additional work resulting from a modification of the plans for the project
 - 2. Delays caused by the City
- 3. Other reasons beyond the control of the Contractor which, in the City's judgment, would justify such extension.

No extension of contract period will be allowed for variations between contract quantities and actual quantities which cannot be predetermined and which amount to less than twenty percent (20%) of the contract quantities.

8.08 <u>Abrogation</u>. If the Contractor abandons, sublets, or assigns the work under this contract without the consent of the City, or if Contractor fails to give - personal attention to it, or if it is the Engineer's opinion, and is so certified in writing to the Contractor and the City, that the Contractor is violating any of the provisions of this contract or that Contractor is not prosecuting the work in good faith or at the rate of progress specified, or that Contractor has unnecessarily or unreasonably delayed or neglected the work or any part of it, written notice to that effect is to be given to the Contractor by the Engineer. After such notice, no materials or equipment shall be removed from the work. If, within five (5) days thereafter, the Contractor does not take steps, which in the judgment of the Engineer will insure the satisfactory completion of the work, then the City may declare this contract null and void and the security forfeited and may notify the Contractor in writing to discontinue the work or any part of it; thereupon ceasing the Contractor's right of possession of the ground and of all materials and equipment thereon. The City then, at

their option, may enter upon and take possession of the work with all materials, supplies, and equipment remaining thereon and by contract or otherwise, as the City may determine, may complete the work or the part of it designated and charge the expense thereof to the Contractor using any materials or equipment found on the site. The expense so charged, together with all damages incurred, will be deducted from any funds due or to become due under this contract and, should the unexpended balance of these funds be insufficient, the excess shall be at the cost of the Contractor and sureties on the Contractor's bond. Neither completion of a part of the work nor the extension for any reason of the time of the completion of the work is to be considered a waiver of this right to abrogate the contract for abandonment, delay, or unsatisfactory work.

8.09 <u>Termination of Contractor's Responsibility</u>. The contract shall be considered completed when the work has been accepted in writing by the City. Such acceptance shall release the Contractor from all further obligation with respect thereto, except as to conditions and requirement set forth in Contractor's bond.

SECTION 9 - MEASUREMENT AND PAYMENT

9.01 <u>Payments</u>. Payments for estimated work completed will be made only on certificates of the Engineer at a regular City Council meeting.

The City, at its discretion, may include in such estimates payments for materials that will eventually be incorporated in the project, provided that such materials are suitably stored on the site of the project at the time of preparing estimates for payment. Such payment is to be based upon the estimated value thereof as ascertained by the Engineer. Such material when so paid for by the City shall not be removed from the project without consent of the City and, in case of default on the part of the Contractor; the City may use or cause to be used by others these materials in construction of the project.

The City will retain five percent (5%) of the estimated amount of work executed in an approved manner and of the approved materials and apparatus suitably stored on the site.

Payment of the retained five percent (5%) will be made within sixty (60) days after the formal approval and acceptance by the Engineer of all apparatus, materials, and work embraced in the contract.

- 9.02 <u>Payments Withheld</u>. The City may withhold or, on account of subsequently discovered evidence, nullify the whole or a part of any certificate to such extent as may be necessary to protect itself from loss on account of:
 - 1. Defective work not remedied
 - 2. Claims filed or reasonable evidence indicating probable filing of claims
 - 3. Failure of the Contractor to make payments properly to subcontractors or for materials or labor
 - 4. A reasonable doubt that the contract can be completed for the balance then unpaid
 - 5. Damage to another contractor.

When the above grounds are removed, payment shall be made for amounts withheld because of them.

9.03 <u>Acceptance and Final Payment</u>. If final inspection reveals that all details of the work have been completed satisfactorily, the Engineer shall tentatively accept the work, in writing, relieving the Contractor of further responsibility for the care and maintenance of the completed work and, provided that all equipment and materials have been removed from the right-of-way, shall also relieve the Contractor of further public liability. As soon as possible after tentative

acceptance of the work, the Engineer shall measure the completed work and compute the quantities of work for which payment is to be made. Before final settlement is made, the City shall be satisfied with the completed work. When the Engineer is satisfied that all items of the work have been found to be consistent with the terms of the contract and specifications, a final estimate including the retained percentage due the Contractor shall be released for payment. Release of the final estimate shall constitute final acceptance of the work.

All prior partial estimates and payments shall be subject to correction in the final estimate and payment.

Extra work - See these specifications under section entitled Extra Work.

- 9.04 <u>Payment for Extra Work</u>. The Contractor will receive and accept payment for work performed under the contract as follows:
- 1. Items of work performed which are covered by definite prices stipulated in the contract. For all items of work performed which are covered by definite unit prices or lump sum amounts specified in the contract, the Contractor shall receive and accept compensation at the rate specified in the contract.
- 2. Extra work ordered by the Engineer, of a quality or class not covered by the contract, will be paid for at an agreed price. For extra work ordered by the Engineer and performed on an agreed price basis, the Engineer and the Contractor shall enter into a written agreement, and have City Council approval, before such work is undertaken. This written agreement shall describe the extra work that is to be done and shall specify the agreed price or prices therefore.

Revised 1-25-2011

DIVISION II

PORTLAND CEMENT CONCRETE PAVEMENT

DIVISION II PORTLAND CEMENT CONCRETE PAVEMENT

CONTENTS

Section	Description
10	SCOPE OF WORK
11 11.04 11.02 11.03 11.04 11.05 11.06 11.07 11.08 11.09 11.10	MATERIALS Cement47-B (Modified) and ABX (Modified) Concrete Portland Cement Mixing Water Fine Aggregate for 47-B (Modified) Concrete Coarse Aggregate for 47-B (Modified) Concrete Aggregate for ABX (Modified) Concrete Granular Foundation Course Joint Filler Joint Sealing Material Curing Compound
12 12.01 12.02	CONSTRUCTION METHODS Clearing and Grubbing Site Preparation
12.03 12.04	Revised 1-18-2010 Subgrade Preparation Water Main and Sanitary Sewer Pipe Bedding and Backfill
12.05 12.06 12.07	Granular Foundation Course Surplus Earth Adjustment of Manholes Revised 1-18-2010
12.08 12.09	Adjustment of Storm Sewer Inlets Integral Curb
13 13.01 13.02 13.03 13.04 13.05 13.06 13.07 13.08 13.9 13.10 13.11 13.12 13.13 13.14 13.15 13.16	CONCRETE CONSTRUCTION Forms and Form Setting Air Entraining Consistency Mixing Placing and Finishing Surface Test Headers Transverse Construction Joints Transverse Expansion Joints Transverse Contraction Joints Curing Sealing of Joints Protection Opening to Traffic Acceptance

Section	Description
14	METHOD OF MEASUREMENT AND BASIS OF PAYMENT
14.01	Clearing and Grubbing
14.02	Site Preparation
14.03	Grading, Surplus Earth, Embankment
14.04	Granular Foundation Course
14.05	Manholes
14.06	Storm Sewer Inlets
14.07	Integral Cub
14.08	Concrete Pavement
14.09	Beams
14.10	Headers
14.11	Transverse Expansion and Miscellaneous Joints
14.12	Concrete Test Cylinders
14.13	Testing
14.14	Miscellaneous

DIVISION II PORTLAND CEMENT CONCRETE PAVEMENT

SECTION 10 - SCOPE OF WORK

The work covered by this division of the specifications consists of furnishing all labor, plant, equipment, appliances, and materials and performing all operations necessary to construct and complete concrete pavement and appurtenances in strict accordance with these specifications, the applicable drawings, and subject to the terms and conditions of the contract.

SECTION 11 - MATERIALS

- 11.01 <u>Cement 47-B (Modified) and ABX (Modified) Concrete</u>. The specifications for 47-B (Modified) and ABX (Modified) concrete shall be as specified in Section 1002 "Portland Cement Concrete" of the most current State of Nebraska Department of Roads Standard Specifications for Highway Construction with the following exceptions.
 - 1. Paragraph 1 of Section 1002.04 is deleted and the following added:

For 47-B (Modified) concrete no more than 50 lbs. of total water will be added for each 100 lbs. of cement (water to cement ratio not to exceed 0.50). For ABX (Modified) concrete no more than 47 lbs. of total water will be added for each 100 lbs. of cement (water to cement ratio not to exceed 0.47).

Concrete with water to cement ratios greater than specified above will be rejected. If any water is added to the concrete at any time without the permission of the Engineer, the concrete will be rejected.

2. Portland Cement Concrete for pavement shall meet the following requirements:

Compressive Strength Requirements

impressive Sire	ingin Requirements			
in Pounds per Square Inch				
7 days	28 days			
2100	3600			
2300	3800			
	in Pounds 7 days 2100			

- 11.02 <u>Portland Cement</u>. Shall be as specified in Section 1004 "Portland Cement" of the most current Nebraska Department of Roads specifications.
- 11.03 <u>Mixing Water</u>. Shall be as specified in Section 1005 "Water for Concrete" of the most current Nebraska Department of Roads specifications.
- 11.04 <u>Fine Aggregate for 47-B (Modified) Concrete</u>. Shall be as specified in Section 1033 "Aggregates", Table 1033.02A "Gradation Limits" of the most current Nebraska Department of Roads specifications.
- 11.05 <u>Coarse Aggregate for 47-B (Modified) Concrete</u>. Shall be as specified in Section 1033 "Aggregates", Table 1033.03A, of the most current Nebraska Department of Roads specifications.

11.06 <u>Aggregate for ABX (Modified) Concrete</u>. Shall be as specified in Section 1033 "Aggregates" of the most current Nebraska Department of Roads specifications with below noted additions.

It shall be the responsibility of the Contractor to submit test results conforming to ASTM C295 that indicate the aggregate to be used in ABX Modified concrete is non-reactive with the alkalis in cement. If the results of this test are not conclusive, then results shall be submitted that conform to ASTM C227 (Mortar Bar) which remove all doubt as to the acceptability of the aggregate for Portland cement concrete.

These results must be submitted prior to any concrete being used from any source of aggregate. New test results must be submitted each time the aggregate comes from a new source or for each 700 cubic yards of concrete poured.

In the event that non-reactive aggregate is not available, the Contractor will not be allowed to use the sand-gravel mix but will be required to use 47-B Modified Portland cement concrete as specified in these specifications under section entitled Cement - 47-B (Modified) and ABX (Modified) Concrete.

11.07 <u>Granular Foundation Course</u>. The granular materials shall be sand from local pits that are shown on the plans, or it may be a coarse sand, fine sand, loamy soil, or any mixture of any of these materials that conforms to the following requirements:

	<u>Minimum</u>	<u>Maximum</u>
Total Percent Retained on #200 Sieve	80	92
Plasticity Index		6

- 11.08 <u>Joint Filler</u>. Joint filler shall consist of premoulded bituminous fiber uniformly impregnated with between 35% and 50% durable asphalt by weight and be furnished in strips of the dimensions specified in the plans. A one (1) inch thick sample when compressed to 50% of original thickness at rate of 1/10 inch per minute and released shall show at least 70% recovery within one hour after compression and shall not have required more than 500 pounds per square inch compression load and extrusion of not more than 1/8 inch.
- 11.09 <u>Joint Sealing Material</u>. The hot pour joint material shall be of the rubber-asphalt type and shall be melted in a double jacket kettle equipped with an agitator for stirring the material during melting and pouring. The rubber-asphalt shall meet Federal Specification SS-S-164 or subsequent revisions.
- 11.10 <u>Curing Compound</u>. The curing compound shall consist of a nonbituminous pigmented liquid conforming to AASHTO Designation M148-49 or subsequent revisions.

SECTION 12 - CONSTRUCTION METHODS

12.01 <u>Clearing and Grubbing</u>. Except for trees, shrubs, and grasses which are to be preserved as indicated on the plans or as designated by the Engineer, all trees, stumps, hedges, shrubs, weeds, grass, other herbaceous vegetation, and rubbish shall be removed from the right-of-way and from borrow pits furnished by the contracting authority. This work shall be classified as follows:

Clearing shall consist of the cutting, removal, and disposal of trees six (6) inches or more in diameter.

Grubbing shall consist of the removal and disposal of stumps, including roots. Hedge removal shall consist of the pulling or grubbing and disposal of hedges or other shrubs planted close together in rows. If any individual tree of those composing a hedge has a diameter greater than four (4) inches, it shall be measured separately as a tree.

Weed and rubbish removal shall consist of the removal and disposal of all weeds, grass, other herbaceous vegetation, and all rubbish encountered on the work.

12.02 <u>Site Preparation</u>. This work shall consist of removal and disposal of all crosswalks, private walks, driveway approaches, curbs, curb and gutter, and headers as indicated on the plans or as directed by the Engineer.

Topsoil shall be carefully removed and deposited in storage piles convenient to the area which will subsequently receive topsoil. Topsoil shall be kept separate from other excavated materials and shall be piled free from roots, stones, and other undesirable materials.

The backfill over all existing utility lines shall be consolidated when shown on the plans or directed by the Engineer. This shall be done by water jetting and vibration to the full depth of the utility lines unless other methods are approved by the Engineer. When compaction over existing utility lines is not shown on the plans or is not a bid item and is directed to be done by the Engineer, the work shall be negotiated for in writing before any work is commenced and will be paid for as a single unit.

All sanitary and storm sewers will be televised before a street is paved or repaved to insure that the street will not have to be torn up to repair the sewer in the near future.

Revised 1-18-2010

12.03 <u>Subgrade Preparation</u>. All paving subgrade shall be brought to the exact lines, grades, and cross sections shown on the plans or as directed by the Engineer.

The subgrade shall be constructed to have a uniform density throughout its entire width. All soft or yielding material and other portions of the subgrade which will not compact readily shall be removed as directed. All hollow places, settlements, or other imperfections shall be filled with approved material and compacted.

In all places where embankment may be required to bring the subgrade to the required height, it shall be constructed in horizontal layers not to exceed six (6) inches in depth before rolling. Each successive layer of material placed as described shall be wetted to within 3% of the optimum moisture content and compacted to at least 95% of the maximum dry density obtained at optimum moisture content as determined by AASHTO Method T99.

In all embankment areas where highly expansive soils are encountered, materials shall be wetted at one percent (1%) to three percent (3%) above optimum moisture.

In cuts when the undisturbed earth is suitable for the subgrade, manipulation other than rolling will not be required, provided the upper three (3) inches is at 95% maximum dry density as called for in embankments.

12.04 <u>Water Main, Storm and Sanitary Sewer Pipe Bedding and Backfill</u>. The pipe bedding and backfill shall be Type "C" as required by Division V, Pipe Bedding, Trench Backfill, and Nonshrinkable Backfill. The completion of the trench backfill under pavement shall be adequate to provide 95% of maximum dry density and shall be wetted to within 3% optimum moisture as specified in this division under Subgrade Preparation.

- 12.05 <u>Granular Foundation Course</u>. This work shall consist of the construction of a compacted foundation course of granular material to the lines, grade, and dimensions shown on the plans on a previously prepared and approved subgrade.
- 12.06 <u>Surplus Earth</u>. All surplus earth shall be stockpiled by the Contractor at the location or locations designated on the plans or as the Engineer shall direct.
- 12.07 <u>Adjustment of Manholes</u>. All manholes encountered whether shown on the plans or not shall be brought to the proper grade by removing the castings and adjusting the tops of the existing manholes by removal or addition of concrete or brick, as the case may be, and resetting the frames and covers.

Brick masonry shall consist of the type of brick satisfactory to the Engineer, laid in 1:2 cement mortar. All brick must be wetted before being laid. All joints shall be completely filled with mortar and shall not be less than 1/4 inch and not more than 1/2 inch in thickness.

Contractors are instructed to use plastic or concrete risers to bring manhole ring and covers to grade. Using pieces of wood, concrete or bricks and then filing with concrete mortar will no longer be accepted.

All manholes will be inspected before and after a concrete or asphalt street is laid down to insure that no foreign material is in the flow line or at the bottom of a manhole.

Revised 1-18-2010

12.08 Adjustment of Storm Sewer Inlets. All storm sewer inlets shall be adjusted to line and grade by removing the castings and adjusting the tops of the existing storm sewer inlets by removing or adding concrete or bricks, as the case may be, and resetting the castings.

Brick masonry shall consist of the type of brick satisfactory to the Engineer, laid in 1:2 cement mortar. All brick must be wetted before being laid. All joints shall be completely filled with mortar and shall not be less than 1/4 inch and not more than 1/2 inch in thickness.

12.09 Integral Curb. Integral curb shall be constructed on the edge of the concrete slab in accordance with the plans and typical cross section. This curb shall be placed immediately after the concrete on the pavement has been placed and finished and before it takes its initial set. That part of the pavement which is to be covered by the integral curb shall be cleaned of all laitance and shall be roughened. Integral Curb will be required on all new pavement construction. If construction is a very short section, the Director of Public Works may allow an exception upon written request.

SECTION 13 - CONCRETE CONSTRUCTION

13.01 Forms and Form Setting. On all new mainline pavement construction, slip form process will be required. If the Contractor wants to use standard forms rather than slip forms because the area is small, they must submit a written request to the Director of Public Works for an exception. If the request is granted, the contractor will be required to meet certain requirements as listed herein. Outside forms shall be metal, of depth equal to the design thickness of the pavement at its edge, and straight and free from warp. When integral curb is required, the additional height represented by the curb may be obtained by bolting extra forms upon the top of the main form. Wood forms or flexible or curbed metal forms of proper radii shall be used for curves having radii of less than 100 feet. The forms shall be neatly, tightly, and securely pinned and staked to the line and grade furnished by the Engineer. They shall not at any time show a variation of more than 1/8 inch in a ten (10) foot length from the true plane of top of forms. Shimming with loose earth, pebbles, etc. will not be permitted.

Forms shall be cleaned and oiled before concrete is placed against them. When pavement is being laid contiguous to previously finished concrete pavement of the same finish grade elevation or contiguous to previously finished independent curb and gutter, such finished pavement or curb and gutter may be made to serve as side forms and as a guide for striking, tamping, and finishing equipment.

- 13.02 <u>Air Entraining</u>. When using specifications for State of Nebraska 47-B concrete, the total air content shall be 6% plus or minus 1-1/2% by volume of the wet concrete as determined by AASHTO Standard Method T-121 or ASTM Method C-231 and up to 9% for sand and gravel mix.
- 13.03 <u>Consistency</u>. The quantity of water shall be determined by the Engineer in accordance with these specifications under section entitled Cement 47-B (Modified) and ABX (Modified) Concrete and not varied without the Engineer's consent. The Contractor shall furnish and use with the mixer an approved adjustable water measuring device which will prevent excess water flowing into the mixer so the consistency may be under positive control and all batches may be of the same consistency.

In general, the minimum amount of water shall be used which will produce the required workability. The mortar shall cling to the coarse aggregate and shall show no free water when removed from the mixer. The upper surface of the set concrete shall show a cement film upon the surface and shall be free from all laitance. In no case shall an amount of water be used sufficient to cause the collection of a surplus on the surface or to cause segregation during the transportation to place of deposit. The concrete must be of workable consistency when placed.

13.04 <u>Mixing</u>. The mixing shall be done in a batch-mixer of approved type which will insure the uniform distribution of the material throughout the mass so the mixture is uniform in color and smooth in appearance. No mixer which has a capacity of less than one-sack batch shall be used on any work. The concrete shall be mixed in quantities required for immediate use. Concrete which has developed initial set or is not in place within thirty (30) minutes after the water has been added shall not be used. Retempering concrete by adding water or by other means will not be permitted.

The concrete shall be mixed for a period of at least one (1) minute after all the ingredients are assembled in the drum with the drum revolving at a rate for which the mixer was designed but, in no case, shall it be less than twelve (12) nor more than twenty (20) resolutions per minute. The mixer shall be equipped with an attachment for satisfactorily locking the discharging device to prevent the emptying before the minimum time required. The entire contents of the drum shall be discharged before any materials for the succeeding batch are placed therein.

No concrete shall be mixed while the air temperature is at or below 40 degrees Fahrenheit, except when specifically permitted by the Engineer. In such case, all water used for mixing concrete shall be heated to a temperature of at least 70 degrees but not over 150 degrees Fahrenheit. When artificial heat is applied and the air temperature is above 32 degrees Fahrenheit, the mixed concrete shall not be less than 70 degrees Fahrenheit at the time of the placing in the forms, and no concrete shall be placed in the forms when the air temperature is below 32 degrees Fahrenheit. In no case shall material containing frost or lumps of hardened material be used. When ready-mixed concrete is to be produced, the Contractor shall notify the Engineer in writing at least fourteen (14) days in advance of mixing operations as to location, type of plant and equipment which they propose to use in proportioning, mixing, and hauling concrete.

The Contractor shall furnish at least eight (8) standard 50 pound weights for calibrating and testing scales used in weighing aggregates and cement.

Ready-mixed concrete shall be mixed and delivered to the site of work by means of one of the following combinations of operations:

- Mixed completely at a central mixing plant and the mixed concrete transported to the point of delivery in a truck agitator or in a truck mixer operating at agitator speed or in approved non-agitating equipment (known as central-mixed concrete).
- 2. Mixed partially at a central mixing plant and mixing completed in a truck mixer (known as transit-mixed concrete).
- 3. Aggregates and cement proportioned in a central plant and mixed completely in a truck mixer (known as transit-mixed concrete).

All mixers and agitators shall be operated within the limits of the manufacturer's rated capacity. They shall be operated at the speed of rotation for which the equipment was designed. Attached to each truck mixer and truck agitator shall be a metal plate on which is stated the manufacturer's capacities in terms of volume of mixed concrete and the manufacturer's stated speed of rotation for both mixing and agitation.

The truck mixer or agitator shall consist of a closed water-tight revolving drum suitably mounted and fitted with adequate revolving blades. Truck mixers shall be capable of combining aggregates, cement, and water into a thoroughly mixed and uniform mass of concrete and of discharging the concrete without segregation. Truck agitators shall be capable of transporting and discharging concrete without segregation.

For revolving drum type mixers the mixing speed shall not be less than seven (7) revolutions per minute of the drum nor greater than that which will produce a peripheral velocity of more than 225 feet per minute. For revolving blade type mixers, the mixer speed shall not be less than six (6) nor more than sixteen (16) revolutions per minute of the mixing blades. Agitation speed shall not be less than two (2) nor more than six (6) revolutions per minute of the drum or mixing blades.

Concrete transported without agitation shall not be used if the period elapsed between the time the concrete is discharged from the mixer and the time it is placed is greater than thirty (30) minutes. Concrete transported with agitation shall not be used when the cement has been in contact with the aggregate more than 1-1/2 hours before it is placed.

13.05 Placing and Finishing. The concrete shall be deposited on the prepared subgrade or on the granular foundation course so there shall be no separation of the mortar and the aggregate, and then shall be spread to the required depth and for the entire width of the pavement by approved methods, struck off, and finished. The subgrade templet shall be drawn over the subgrade or foundation course ahead of the point where concrete is being placed and shall be kept in position while the concrete is being placed. The concrete shall be deposited on the subgrade or granular foundation course between the forms in position and in such quantity as to make a uniform layer of about one (1) inch greater than the required thickness. During the operation of striking off the concrete, a uniform ridge of concrete at least three (3) inches in depth shall be maintained ahead of the vibratory strike-off screed for its entire length. After being deposited, it shall be consolidated along the forms and along all joints. At the end of the day or in case of unavoidable interruption of more than thirty (30) minutes, a transverse construction joint shall be placed at the point of stopping work, provided the section on which the work has been suspended shall not be less than ten (10) feet in length. The working edge of the screed shall be shaped to the required cross section of the pavement. After the concrete has been properly consolidated and struck off, the entire surface shall be floated longitudinally, from bridges, with a float at least twelve (12) feet long and twelve (12) inches wide. If made of wood, this float shall be two (2) inches thick. If made of metal, it shall have a weight approximately equal to a similar float made of two (2) inch plank and shall be lined on its bottom face with wood, having rounded edges. The float shall be operated by two men, one at each end, each man standing on a bridge spanning the pavement. The longitudinal and transverse motion shall be passed slowly from one side of the pavement to the other a sufficient number of times, at least twice, until the float on its last passage shall show contact with the concrete throughout its entire length. The bottom surface of the float shall remain flat on the surface of the concrete during the entire operation of longitudinal floating. The next section to be floated shall overlap the one previously floated by half the length of the float.

After the concrete has been floated longitudinally, the surface shall be floated transversely using a float of 1"x12" material three (3) to four (4) feet in length and fitted with a handle of sufficient length to permit the float to reach just beyond the center line. Any high or low areas exposed as a result of this floating shall be corrected prior to belt finishing.

After the concrete has been floated transversely and the water sheen has disappeared from the surface of the pavement, the final finish shall be given with a canvas or rubber belt, burlap drag or brooming, or any combination of the above as directed by the Engineer.

If belting is selected, it shall be accomplished with a belt of two to four ply having a width of not less than six (6) inches and a length at least two (2) feet greater than the width of the pavement. The belt shall be operated with a combined crosswise and longitudinal motion, care being taken not to work the crown out of the pavement or to permit the edges of the belt to dip into the surface of the concrete.

If a broom finish is selected, it shall be accomplished by drawing a broom across the surface from the center line toward each side with the broom held perpendicular to the surface with only one stroke of the broom on each portion of the surface. (If the pavement is being constructed lane-at-a-time, the broom shall be drawn across the full width of each lane in one operation.) The broom shall be of the push broom type not less than 18" wide made from bass or bassine fiber not more than five (5) inches long and with a handle at least one (1) foot longer than the width of pavement being broomed in one operation. The brooming operations shall be executed so the corrugation will be uniform in appearance and not more than 1/16 inch in depth.

If a burlap drag finish is selected, it shall be accomplished by drawing a wet burlap, carpet, or canvas drag over the surface in a longitudinal direction. The drag shall be at least two (2) feet longer than the width of the slab being placed and shall be wide enough so about three (3) feet will be in contact with the pavement while it is in use. If burlap is used, the drag shall consist of not less than two (2) layers. Drags shall be rinsed or washed as often as necessary to remove hardened particles which would mar the uniform surface that would be obtained with a clean drag.

13.06 <u>Surface Test</u>. Before final finishing and previous to initial set, the surface of the pavement shall be tested under the supervision of the Engineer. All irregularities or undulations not within the tolerance of the following test shall be corrected with fresh concrete and the affected surface brought within the requirement of the test and refinished if necessary. The test shall be made with a transverse testing templet and straightedge at least ten (10) feet long. The templet shall be accurately shaped in conformity with the typical cross section and shall be subject to the approval of the Engineer. The templet shall be used to test the shape of the surface transversely, the straightedge for longitudinal trueness. The straightedge shall be placed parallel to the center line so as to bridge any depressions and touch any high spots. Ordinates exceeding one fourth inch measured from the face of the templet or straightedge when in position at any point shall be eliminated by means of a long-handled wood float.

As soon as the pavement has set sufficiently to permit walking on it and not later than 10:00 a.m. of the day following the placing of the concrete, it shall be thoroughly checked by the inspector with a straightedge. All variations in excess of one fourth inch measured from the surface of the straightedge when it is placed parallel to the center line shall be plainly marked. The Contractor shall at once eliminate such variations by the use of approved grinding tools or carborundum brick and water. The work of grinding or rubbing shall not be performed in such manner or carried to such extremes that the bond of the concrete shall be broken. The use of brush hammer or similar device to remove irregularities after the concrete has taken its final set will not be permitted. All templets, straightedges, and other testing devices shall be furnished by the Contractor.

13.07 <u>Headers</u>. Concrete headers extending to full depth and width of the pavement shall be constructed at locations shown on the plans. They shall be constructed to the dimensions and design called for in the plans.

13.08 <u>Transverse Construction Joints</u>. Whenever concreting is stopped for a period of over thirty (30) minutes, a transverse construction joint shall be formed by finishing the concrete to a bulkhead made of two (2) inch material cut to the exact cross section of the pavement slab, as shown in the plans. When the concreting is resumed, the bulkhead shall be moved taking care not to disturb any concrete placed. The joints shall be constructed perpendicular to both the center line and the surface of the pavement. In no case shall an emergency construction joint be allowed within ten (10) feet after placing a regular expansion or construction joint. If the joint falls within this limit, the concrete shall be removed back to the previously installed joint.

When a construction joint is placed at a location where integral curb is being constructed, a piece of pre-formed joint material one half inch in thickness and conforming to the cross section of the curb shall be placed through the curb at the construction joint. The edges of the concrete shall be rounded to a radius of not more than one fourth inch.

13.9 <u>Transverse Expansion Joints</u>. Expansion joints shall be of a premoulded bituminous fiber type conforming to these specifications under the section entitled Joint Filler.

The joint shall extend entirely through the pavement and the joint filler shall be placed so the top edge will be one half inch below the surface of the finished pavement. No section of the joint material shall be shorter than the width of pavement strip between longitudinal joints. Before the pavement is opened to traffic, this space shall be swept, cleaned, and filled with approved joint sealing material.

The pre-formed expansion joint material shall be held securely by means of a special metal joint holder and removable cap, perpendicular to both the center line and the surface of the pavement. The metal joint holder and cap shall remain in place until after the passage of the concrete spreader. After the concrete has been finished, the metal joint holder and cap shall be removed and the edge of the concrete rounded to a radius of not more than one fourth inch. When integral curb is being constructed, an additional piece of pre-formed material of the same cross section as the curb shall be extended through the curb and to the top surface of the pavement. The joints shall be so installed and finished to insure complete separation of the slabs.

- 13.10 <u>Transverse Contraction Joints</u>. Transverse contraction joints shall be constructed at intervals of not less than ten (10) feet or more than sixteen (16) feet. The joints shall be true and straight to the center line and surface of the pavement. Variation of more than one half inch in ten (10) feet from a straight line will not be permitted. The joint shall be placed so its junction with the longitudinal joint will be a neat fitting connection. All transverse contraction joints shall be done by the saw cut method. To prevent the development of random cracks, joints at approximately eighty (80) feet intervals shall be sawed the same day as the pour is made. All other transverse contraction joints shall be sawed the following afternoon.
- 13.11 <u>Longitudinal Joints</u>. Longitudinal contraction joints, when required, shall be in accordance with the requirements for transverse contraction joints.

All sawed longitudinal joints shall be sawed before the concrete has attained an age of seven (7) days and before the pavement is opened to any vehicular traffic.

13.12 <u>Curing.</u> As soon as the concrete has hardened sufficiently to prevent excessive marring of the surface or adherence thereto, the concrete shall be protected with a single covering of burlap, placed and kept saturated for at least twelve (12) hours. As soon as the burlap is removed, the top surface and the edges of the pavement shall be covered with a continuous uniform nonbituminous impervious coating. The curing compound may be applied in either one or two applications in accordance with the directions of the manufacturer. However, if applied in two coatings, the second shall be applied not later than thirty (30) minutes after the first. In no case shall the rate of application be less than one (1) gallon per fifteen (15) square yards of surface area.

The sides of the pavement slab or back side of integral curb shall be covered with the curing compound within thirty (30) minutes after removal of the form.

When wet cotton mats, wet jute felt mats, paper, or any other method than curing compound is to be used for curing, the Contractor shall notify the Engineer in writing at least fourteen (14) days in advance giving the type and specifications of material and method to be used.

When it is expected that during the progress of the work the temperature may fall below 40 degrees Fahrenheit, a sufficient supply of straw, hay, grass, or other material suitable, in the judgment of the Engineer, must be maintained on hand to cover the concrete and to sufficiently protect the surface and edges against freezing until it is at least ten (10) days old. In such case, at the discretion of the Engineer, wetting and spraying may be omitted. Manure shall not be used as a protection for green concrete. Whenever the temperature falls below 40 degrees Fahrenheit, freshly finished concrete shall be protected by frames enclosed by canvas or other type of housing and the temperature of the air surrounding the concrete shall be maintained at not less than 45 degrees Fahrenheit. Sufficient heating apparatus, such as lanterns, suitable stoves, or steam equipment, shall be furnished and maintained by the Contractor. Any concrete showing injury by freezing on uncovering shall be removed and replaced at the expense of the Contractor.

13.13 <u>Sealing of Joints.</u> Joint sealing operations shall not be started until after final curing is completed. All joints which require sealing shall be thoroughly cleaned by a jet of compressed air. Any excess mortar or concrete shall be cut out with chisels. Joints shall be filled only when completely dry. The filler used shall be material as specified in these specifications under the section entitled Joint Sealing Material. The cleaning and filling shall be carefully done with proper equipment and a neat workmanlike joint obtained, free from excess and unsightly filler.

The joint sealing material shall be melted uniformly and with constant stirring in an asphalt kettle of such design that direct flames are not applied to the immediate surfaces of the kettle which are in contact with the joint sealing material. The material shall be furnished or prepared in pieces of such size and shape that the material can be melted readily to the proper pouring consistency. The heating of the material shall be arranged to minimize the length of time during which the temperature of the material exceeds 350 degrees Fahrenheit. In no case shall the temperature exceed the maximum recommended by the manufacturer. The joints shall be filled with the use of a pouring device which is satisfactory to the Engineer. Precautions shall be taken to prevent spilling material on surfaces of the pavement adjacent to the joint.

13.14 <u>Protection</u>. The Contractor shall provide and maintain substantial barricades, warning signs, and flares to provide the public and the construction work adequate protection and keep all traffic off the pavement.

13.15 Opening to Traffic. Before any traffic is permitted on the concrete, all curing and protecting materials other than membrane shall be carefully removed from the finished work and the concrete shall be swept clean. No section of pavement shall be opened to traffic until the concrete has reached a minimum age of fourteen (14) days or compression strength of 3000 psi.

The Contractor's forces may be allowed on the pavement for the purpose of clean up work any time after the concrete has reached a minimum age of seven (7) days.

13.16 Acceptance. The Contractor shall furnish a minimum of two (2) cores at locations designated by the Engineer for each 1000 square yards of pavement placed, and the acceptance of the pavement may be governed by the quality and thickness as shown by the cores. Slabs of pavement which are found to be more than one half inch short of the specified thickness shall be removed and replaced at the Contractor's expense with concrete of specified quality and thickness. If, however, in the opinion of the Engineer, there is no probability of immediate failure of such deficient slabs, they may allow the Contractor the choice of leaving the defective slabs in place and receiving no compensation or payment for the same or of replacing the pavement slab as provided above.

If the average strength of test cores or test cylinders, cured at a temperature within the range of 60 to 80 degrees Fahrenheit, is more than ten percent (10%) below the required strength, the Engineer may elect either to permit such pavement to remain in place and limit the payment for such defective work to a maximum of 90% of the contract unit price or require the Contractor, at Contractor's expense, to remove the pavement area deficient in the specified strength and replace it with pavement of satisfactory quality.

SECTION 14 - METHOD OF MEASUREMENT AND BASIS OF PAYMENT

14.01 <u>Clearing and Grubbing</u>. Clearing and grubbing of trees larger than six (6) inches in diameter will be measured for payment by counting the actual number of trees removed. The diameters of trees will be computed by measuring the circumference and dividing by 3.14. Payment shall be made at the contract unit price per each tree at the diameter or group of diameters shown in the bid.

Stumps will be measured for payment by taking the average diameter at cutoff. Payment shall be made at the contract unit price per each stump at the diameter or group of diameters shown in the bid.

Hedge removal will be measured for payment in lineal feet of a row of hedges.

Weeds, rubbish, and other herbaceous vegetation will not be measured for payment but will be considered as subsidiary to the contract work.

14.02 <u>Site Preparation</u>. Crosswalks and private walks to be removed within the area between construction lines will be measured for payment in square feet in their original position. Driveway approaches will be measured for payment in square yards in their original position.

Existing straight curb and curb and gutter to be removed will be measured for payment by length in lineal feet. Measurements for the straight curb will be made along the front face of the curb. Measurements for curb and gutter will be made along the flow line of the gutter.

Removal of existing pavement headers will be measured for payment by length in lineal feet.

Compaction over all existing utility lines will be measured for payment as a single unit except when in clay soil. In clay soil, excavation, additional materials, and recompaction over utility lines will be paid for as additional excavation.

- 14.03 <u>Grading, Surplus Earth, Embankment</u>. All grading, removal of surplus earth, and embankment will not be measured for payment but shall be subsidiary to the paying.
- 14.04 <u>Granular Foundation Course</u>. Granular foundation course will be measured for payment by area in square yards or cubic yards.
- 14.05 <u>Manholes</u>. Adjusting manholes to grade will be measured for payment as a single unit for each manhole that is adjusted to grade as shown in the plans or as directed by the Engineer.
- 14.06 <u>Storm Sewer Inlets</u>. Adjusting storm sewer inlets to line and grade will be measured for payment as a single unit.
- 14.07 <u>Integral Curb</u>. Integral curb will be measured for payment by length in lineal feet. Measurement will be made along the back side of the curb.
- 14.08 <u>Concrete Pavement</u>. Concrete pavement will be measured for payment by area in square yards. Concrete pavement shall include all joints, curing, sealing, etc. not specifically designated as separate items.
- 14.09 <u>Beams</u>. Concrete pavement beams will be measured for payment by length in lineal feet.
- 14.10 <u>Headers</u>. Concrete headers constructed as part of the project will be measured for payment by length in lineal feet.
- 14.11 <u>Transverse Expansion and Miscellaneous Joints</u>. Transverse expansion joints and all miscellaneous joints using premoulded bituminous fiber will be considered incidental to the paving construction and not as a separate pay item.
- 14.12 <u>Concrete Test Cylinders</u>. Three (3) concrete test cylinders shall be required for each block of concrete pavement placed or as directed by the Engineer.
- 14.13 <u>Testing</u>. The Engineer may require testing of coarse and fine aggregates and cement before they are used in the work. If so ordered, the Contractor shall pay the cost thereof.

The testing of cylinders shall be paid for by the Contractor.

14.14 <u>Miscellaneous</u>. Any item listed in the Engineer's Estimate and not covered in the specifications will be measured in the most workmanlike manner for payment according to the designation listed such as cubic yards, square feet, square yards, lineal feet, gallons, each, etc.

DIVISION V

STORM AND SANITARY SEWER

DIVISION V STORM AND SANITARY SEWERS

CONTENTS

SECTION 25	DESCRIPTION SCOPE OF WORK	
26 26.01 26.02	MATERIALS Reinforced Concrete Pipe Concrete Pipe Joints	Revised 1-18-2010
26.03 26.04 26.05 26.06 26.07	Vitrified Clay Pipe Vitrified Clay Pipe Factory-Fabricated Joints Cast Iron Pipe and Fittings Cast Iron Pipe Joints Portland Cement Concrete	Reviseu 1-10-2010
26.08 26.09 26.10 26.11	Reinforcement Structural Brick Storm Sewer Inlet Frames and Grates Manhole Rings and Cover	
26.12	Grout	Revised 1-18-2010
26.13 26.14	Manholes Core Drilling	Revised 1-18-2010
26.15	Sulfate Resistance Concrete Specifications	
27 27.01 27.02 27.03 27.04	CONSTRUCTION METHODS Excavation Protection of Existing Utilities Pipe Laying and Jointing Manholes	
27.05 27.06 27.07 27.08 27.09	Storm Sewer Inlets Pipe Bedding Trench Backfill Backfilling Under Pavement Nonshrinkable Backfill	Revised 1-18-2010
27.10 27.11 27.12 27.13 27.14	Stacks Separation from Water Mains Testing Exfiltration and Air Testing Television Inspection	Revised 1-18-2010
27.15	Exposure of Pipe or Manholes	Nevised 1-10-2010
28 28.01 28.02 28.03 28.04	DRAINAGE STRUCTURE CONSTRUCTION Concrete Work Brick Work Precast Manhole Sections Acceptance	N Revised 1-18-2010

29	METHOD OF MEASUREMENT AND BASIS OF PAYMENT
29.01	Sewer Pipe in Place
29.02	Wyes
29.03	Manholes
29.04	Storm Sewer Inlets

DIVISION V STORM AND SANITARY SEWERS

This division is written so that ordinarily the type of construction described is complete but, where applicable, other divisions are considered a part of this specification.

SECTION 25 - SCOPE OF WORK

The work covered by this division of the specifications consists of furnishing all labor, plant, equipment, appliances, and materials and performing all operations necessary to construct and complete storm and sanitary sewers and appurtenances in strict accordance with these specifications, the applicable drawings, and subject to the terms and conditions of the contract.

SECTION 26 - MATERIALS

26.01 <u>Reinforced Concrete Pipe</u>. All reinforced concrete pipe shall meet the requirements and specifications of Reinforced Concrete Culvert, Storm Drain and Sewer Pipe, ASTM C76, Class III, and subsequent revisions, or as otherwise shown in the plans.

26.02 Concrete Pipe Joints.

- 1. <u>Rubber Joint Filler</u>. Rubber based joint filler shall be used on all concrete pipe joints unless otherwise specified.
- Gasket Type Joints. When gasket type joints are required, they shall be as follows: Bell and Spigot Pipe Joints, ASTM C361, and subsequent revisions Tongue and Groove Pipe Joints, ASTM C443, and subsequent revisions.

All new storm sewer piping will be plastic or concrete where possible.

Revised 1-18-2010

- 26.03 <u>Vitrified Clay Pipe</u>. All vitrified clay pipe shall meet the requirements and specifications for Extra Strength Clay Sewer Pipe conforming to ASTM C700 or C425 compression joint and subsequent revisions or as otherwise shown on the plans.
- 26.04 <u>Vitrified Clay Pipe Factory-Fabricated Joints</u>. All vitrified clay pipe shall have O-ring gasket factory-fabricated joints that meet the requirements and specifications for Vitrified Clay Pipe Joints Using Materials Having Resilient Properties, ASTM C700 and subsequent revisions or as otherwise shown on the plans.
- 26.05 Cast Iron Pipe and Fittings. See Division VI, Water Mains.
- 26.06 Cast Iron Pipe Joints. See Division VI, Water Mains.
- 26.07 <u>Portland Cement Concrete</u>. The concrete shall be air-entrained as specified in Division III, Curb and Gutter, Sidewalks, and Driveways, in the section entitled Materials -- Sand-Gravel.
- 26.08 Reinforcement. The deformed bars that are used in reinforcing shall be Type B, Grade 2.
- 26.09 <u>Structural Brick</u>. Bricks shall be of the type that are satisfactory to the Engineer and shall be laid in 1:2 cement mortar.

- 26.10 <u>Storm Sewer Inlet Frames and Grates</u>. The frames and grates shall be of cast iron with tensile strength test not less than Class 25.
- 26.11 <u>Manhole Rings and Covers</u>. Unless shown otherwise on the plans, the rings and covers for manholes shall be 450 pound cast iron machined rings and covers with tensile strength test not less than Class 25.

All manholes will be inspected when any work is being done around the manhole ring and/or cover.

Revised 1-18-2010

- 26.12 <u>Grout</u>. Grout, where required, shall consist of equal parts of sand and cement with sufficient water to produce the proper consistency.
- 26.13 <u>Manholes.</u> All concrete used in the construction of manholes shall be in accordance with the following Sulfate Resistant Concrete Specifications, Section 26.15, dated March 20, 2002. This shall include all concrete used in the construction of pre-case manholes, manhole bases, and manhole inverts.
- 26.14 <u>Core Drilling.</u> If a sewer service is installed by core drilling into the public sanitary sewer main, the connection will be televised at the Contractor's expense prior to acceptance by the City.

Revised 1-18-2010

26.15 Sulfate Resistant Concrete Specifications

March 20, 2002 SUBMITTALS

A. Shop Drawings:

- 1. Curing compound data
- 2. Complete data on the concrete mix, including aggregate gradations and admixtures, in accordance with ASTM C94
- B. Quality Control Submittals:
 - 1. Manufacturer's application instructions for curing compound.
 - 2. Ready-mix delivery tickets for each truck in accordance with ASTM C94.

QUALITY ASSURANCE

- A. Concrete and Reinforcement: Unless otherwise specified. Meet the requirements of ACI 301 and 318/318R
- B. Precast Reinforced Concrete: Unless otherwise specified. Meet the requirements of ASTM C478
- C. Formwork: Unless otherwise specified, follow the recommendations of ACI 347.
- D. Hot Weather Concreting: Conform to ACI 305R
- E. Cold Weather Concreting: Conform to ACI 306R

ENVIRONMENTAL REQUIREMENTS

- A. Do not place Concrete when the ambient temperature is below 40 degrees F or approaching 40 degrees F and air temperature less than 40 degrees F for the first 7 days, without special protection to keep Concrete above 40 degrees F.
- B. Do not use curing compound where solvents in the curing compounds are prohibited by state or federal air quality laws. Use only water curing methods.

CONCRETE

- A. Ready-mixed meeting ASTM C94, Option A.
- B. Portland Cement: ASTM C595, Type IP containing less than 8 percent tricalcium aluminate.

C. Admixtures:

- 1. Air-Entraining; ASTM C260.
- 2. Water-Reducing; ASTM C494, Type A or D.
- 3. Superplasticizer: ASTM C494, Type for G.
- 4. Fly Ash: ASTM C618, Class C or F; not to exceed 25% total pozzolan by weight.

D. Mix Design:

- 1. Minimum Allowable 28 day Compressive Field Strength: 4,000 psi when cured and tested in accordance with ASTM C31 and C39.
- 2. Coarse Aggregate Size: 0.5-inch and smaller, 40% Limestone by volume minimum; State of Nebraska approved source.
- 3. Water/Cement Ratio: 0.38%.
- 4. Air Entrainment: Between 5.0 to 7.5%.
- 5. Water Reducers: Use in all concrete as per manufactures recommended guidelines.
- 6. Suerplasticizer: Use in all walls. Use in slabs at CONTRACTOR's option.
- 7. Slump Range: 1 to 4 inches; before addition of Suerplasticizer.
- 8. Slump Range: 5 to 9 inches; after addition of Suerplasticizer.
- E. Mixing: Minimum 70 and maximum 270 revolutions of mixing drum. Nonagitating equipment is not allowed.

REINFORCING STEEL

A. Deformed Bars: ASTM A615, Grade 60.

ANCILLARY MATERIALS

A. Nonshrink Grout:

- 1. Color: To match concrete.
- 2. Manufacturers and Products
 - a. Master Builders Co., Cleveland, OH; Master Flow 928.
 - b. Euclid Chemical Co., Cleveland, OH; Hi-flow Grout
 - c. Or equal
- B. Grout for Slipliner Invert Rehabilitation:
 - 1. Description: Rapid strength repair mortar.
 - 2. Final Set Time: 20 to 36 minutes.
 - 3. Manufacturers and Products:
 - a. Master Builders Co., Cleveland, OH; EMACO T415
 - b. Or equal
- C. Protective Epoxy Coating for Exposed Grout at Slipliner Invert Rehabilitation:
 - 1. Strong Seal System by Johnson Service Co.; Kearney, NE 68848
- D. Curing Compound: Required for Cast In Place Concrete
 - 1. Material: Solvent based containing chlorinated rubber solids in accordance with ASTM C309, with additional requirements that the moisture loss not exceed 0.030 grams per centimeter squared per 72 hours.
 - 2. Manufacturers and Products:
 - a. Master Builders Co., Masterkure N Seal HS.
 - b. Euclid Chemical Co.; Euco Super Floor Coat.
 - c. Or Equal

FORMWORK

- A. Form Material
 - 1. Use hard plastic finished plywood for exposed areas, and new shiplap or plywood for unexposed areas.
 - 2. Earth cuts may be used for forming footings.
- B. Form Ties:
 - 1. Fixed conical or spherical type inserts that remain in contact with forming material and allow for dry packing of form ties holes.
 - 2. Ties shall withstand pressures and limit deflection of forms to acceptable limits.
 - 3. Wire ties are not acceptable.

C. Construction:

- 1. In accordance with ACI 347.
- 2. Make joints tight to prevent escape of mortar and to avoid formation of fins.
- 3. Brace as required to prevent distortion during concrete placement.
- 4. Brace as required to prevent distortion during concrete placement. On exposed surfaces locate form ties in uniform pattern or as shown. Construct so ties remain embedded in the wall with no metal within 1 inches of concrete surface when forms, inserts, and tie ends are removed.

D. Form Removal:

1. Remove forms with care to prevent scarring and damaging the surface.

PLACING REINFORCING STEEL

- A. Unless otherwise specified, place reinforcing steel in accordance with CRSI Recommended practice for placing Reinforcing Bars.
- B. Splices and Laps:
 - 1. Top Bars: Horizontal bars placed such that 12 inches of fresh concrete is cast below in single placement.
 - 2. Horizontal wall bars are considered top bars.
 - 3. Laptop bars 42 diameters or minimum 24 inches.
 - 4. Lap all other bars 30 diameters or minimum 18 inches. Tie splices with 18gauge annealed wire as specified in CRSI Standard.

PLACING CONCRETE

- A. Place concrete in accordance with ACI 301.
- B. Prior to placing concrete, remove water from excavation and debris and foreign material from forms. Check reinforcing steel for proper placement and correct discrepancies.
- C. Before depositing new concrete on old concrete, clean surface using sandblast or bush hammer or other mechanical means to obtain a ¼-inch rough profile.
- D. Place concrete as soon as possible after leaving mixer, without segregation or loss of ingredients, without splashing forms or steel above, and in layers not over 2 feet deep. Place within 1-1/2 hours after adding cement mix.
- E. 8 feet maximum vertical drop to final placement, when not guided with chutes or other devices to prevent segregation due to impact with reinforcing.

COMPACTION

- A. Vibrate concrete as follows:
 - 1. Apply approves vibrator at points spaced not farther apart than vibrator's effective radius.
 - 2. Apply close enough to forms to vibrate surface effectively but not damage form surfaces.
 - 3. Vibrate until concrete becomes uniformly plastic.
 - 4. Vibrator must penetrate fresh placed concrete and into previous layer of fresh concrete below.

CONSTRUCTION JOINTS

A. Locate as shown or as approved.

FINISHING

- A. Floor Slabs and Tops of Walls
 - 1. Screed surface to true level planes.
 - 2. After initial water has been absorbed, float with wood float and trowel with steel trowel to smooth finish free from trowel marks.
 - 3. Do not absorb wet spots with neat cement.
- B. Unexposed Slab Surfaces: Screed to true surface, bull float with wood float, and wood trowel to seal surface.

PROTECTION AND CURING

- A. Protect fresh concrete from direct rays of sunlight, drying winds, and wash by rain.
- B. Keep concrete slabs continuously wet for a 7-day period. Intermittent wetting is not acceptable or use curing compound only where approved by ENGINEER. Cure formed surfaces with curing compound applied in accordance with manufacturer's directions as soon as forms are removed and finishing is completed.
- C. Remove and replace concrete damaged by freezing.

FIELD TESTS

A. Evaluation of Concrete Field Strength: In accordance with ACI 318/318R

SECTION 27 - CONSTRUCTION METHODS

27.01 Excavation. The ditch shall be excavated along the lines and to the depth as designated by the Engineer. The Contractor shall furnish, at Contractor's expense, all planks, stakes, spikes, grade boards, and twine that may be required. The Engineer shall have the right to limit the amount of trench that may be opened in advance of the line of work. Should the trench be excavated to a greater depth than that given by the Engineer, the Contractor shall refill to grade, at Contractor's expense, with good, well-tamped material. Trenches, where required, shall be properly sheeted and braced. The bottom of the trench under each pipe shall be shaped to receive the bottom quadrant of the pipe barrel. Bell holes shall be excavated so, after placement, only the barrel of the pipe receives bearing pressure from the trench bottom.

Whenever wet or unstable soil that is incapable of properly supporting the pipe, as determined by the Engineer, is encountered in the trench bottom, such soil shall be removed to the depth and length determined by the Engineer and the trench backfilled to grade with sand, gravel, or other suitable material.

All grading in the vicinity of trench excavation shall be controlled to prevent surface water from flowing into the trench. Any water accumulating in the trench shall be removed by pumping or other approved method. Material excavated from the trench shall be stacked in an orderly manner a sufficient distance back from the edge of the trench to avoid overloading and to prevent slides or cave-ins. Materials unsuitable for backfilling shall be wasted by the Contractor as directed by the Engineer.

A minimum of one foot of topsoil (unless otherwise noted on the plans) shall be removed in any and all areas covered by vegetation. This topsoil shall be stockpiled separately from the material removed from the remainder of the trench. After the pipe is installed and the trench backfilled to an elevation one foot (unless otherwise noted on the plans) below grade, the topsoil shall be replaced and compacted as previously described.

Excavation will not be classified. Whatever material is encountered shall be excavated to the proper grades and, if in any location such material is not sufficient to provide a uniform, even bed for the pipe, the trench shall be excavated at least three (3) inches deeper than the grade at the bottom of the pipe and the space thus excavated shall be refilled with earth or sand and thoroughly compacted.

Trench excavation shall not be paid for separately but shall be considered incidental to the sewer in place.

27.02 <u>Protection of Existing Utilities.</u> The accuracy of location of existing underground utilities as shown on the plans is not guaranteed. It shall be the duty of the Contractor to locate these utilities in advance of excavation and to protect them from damage after uncovering. No house service lines are shown on the plans. The Contractor shall contact the owners of the utilities for assistance in locating these service lines. Any expense incurred by reason of damaged or broken lines shall be the responsibility of the Contractor.

<u>Pipe Laying and Jointing</u>. Pipe shall be protected at all times against impact shocks and free fall. Laying of pipe in finished trenches shall be commenced at the lowest point with the spigot ends on bell-and-spigot pipe and tongue ends on tongue-and-groove pipe pointing in the direction of the flow. Pipe shall be set firmly to line and grade and, preparatory to making pipe joints, all surface of the pipe to be jointed shall be cleaned and dried. Joints shall be made tight to meet requirements of tests specified in the section of these specifications entitled Exfiltration, Infiltration, and Air Testing.

Sewer trenches shall be kept free from water by a method approved by the Engineer. The Contractor shall not pump sewage into a street or pump to a storm sewer unless authorized by the Engineer. Sanitary sewage must be returned to the sanitary sewer by means of pipe and hoses unless it is impossible to do so. In that instance, disposal must be approved by the Engineer.

27.04 <u>Manholes</u>. Manholes shall be constructed as indicated on the plans. Tops shall be fitted with cast iron rings and covers weighing approximately 450 pounds and satisfactory to the Engineer. Manholes over three (3) feet in depth shall be equipped with cast iron steps placed on approximately sixteen (16) inch centers. Drop inlet manholes shall be constructed where indicated on the plans.

Manholes of Precast sections conforming to ASTM C478 specifications may be used. The three (3) types of manhole construction which have been approved are as follows:

- Type 1 Standard Manhole
- Type 2 Manhole with ConShield
- Type 3 Manhole with ConShield and Epoxy Coating

Any substitutes must be approved by the Public Works Director.

Revised 1-18-2010

27.05 <u>Storm Sewer Inlets</u>. Storm sewer inlets shall be of the type as shown on the plans and constructed as per the detailed drawings.

27.06 <u>Pipe Bedding</u>. For Class "C" bedding, the space between the pipe and the side of the excavation up to one (1) foot above the top of the pipe shall be filled with sand or fine earth in layers of not more than six (6) inches thick and carefully tamped to form a solid bedding.

For Class "B" bedding, the trench shall be backfilled with a granular fill of crushed stone or pea gravel to an elevation which is half the diameter of the pipe, and the remaining distance from half the diameter of the pipe to one (1) foot above top of pipe shall be a tamped backfill as specified for Class "C" bedding. The granular fill shall have not less than 95% passing 1/2" and not less than 95% retained on a #4 sieve, shall be placed in not more than six (6) inch layers and compacted by slicing with a shovel.

27.07 <u>Trench Backfill</u>. The area more than one foot over the top of pipe shall be designated as trench backfill. Trenches shall not be backfilled until all required tests are performed and until the system installed conforms to the requirements of the plans and specifications. The trenches shall then be carefully backfilled up to one foot above the top of the pipe as specified in the section entitled Pipe Bedding. The balance of the excavated material shall be consolidated in the following manner. As backfilling proceeds, the entire mass shall be vibrated with a mechanical vibrator, provided, however, in all locations where plastic soils are encountered, the backfill material shall not be placed until the moisture content is low enough to obtain maximum density when tamped into place with mechanical tampers. Materials for tamped backfill and the method of placement and compaction thereof shall be specified for Class "C" pipe bedding. The completion of the trench backfill under pavement shall be done according to the section of these specifications entitled Backfilling Under Pavement.

Trench backfill and compaction testing shall adhere to the following requirements:

- A. Public Right-of-Way: Backfill shall be compacted to at least 95% of the maximum dry density (obtained at optimum moisture content plus or minus 2% for silt or clay with no required moisture content for sand) as determined by AASHTO Method T99. The minimum frequency shall be one test for every 12" compacted lift for an area or length worked, but no more than 300' apart. A minimum of one test shall be taken for every 12" compacted lift for each street crossing regardless of the length.
- B. Public Utility Easement: Backfill shall be compacted to at least 90% of the maximum dry density (obtained at optimum moisture content plus or minus 2% for silt or clay with no required moisture content for sand) as determined by AASHTO Method T99. The frequency shall be the same as that for public right-of-way. A minimum of one test shall be taken for every 12" lift for each easement crossing, regardless of the length.

The Engineer in charge shall be furnished a copy of the density testing results. Information on length or area worked, material identification and description, test thickness such as probe length or sample depth, location of sample, elevation of sample, etc. shall be recorded for each sample.

In unimproved areas such as easements and alleys, the trench or opening may be backfilled with sand which shall be flushed into place with water, provided the top twelve (12) inches of backfill shall be made of the excavated topsoil.

No separate or additional payment will be made for backfill compaction and density testing.

27.08 <u>Backfilling Under Pavement</u>. Nonshrinkable backfill will be required under all street sections, existing or proposed, unless the Director of Public Works approves the standard backfill methods. Standard backfill methods shall be as specified in the section of these specifications entitled Trench Backfill. When standard backfill methods are used, density tests will be required for each twelve (12) inch lift of compacted material placed and for each 300 lineal feet of trench regardless of the length Density test results shall be submitted to the Engineer before acceptance of the project by the City.

Trenches shall not be backfilled until all required tests are performed and the system conforms to the plans and specifications. The Contractor shall maintain the sewer trench backfill for one (1) year from the date of acceptance of the project by the City.

27.09 <u>Nonshrinkable Backfill</u>. All excavations where a sidewalk, curb, gutter, or paved street has been cut or where new paving (concrete or asphalt) will be placed shall be backfilled using nonshrinkable backfill. The backfill shall be filled to the subgrade of the undisturbed sidewalk, curb, gutter, paving, or earth surface.

The nonshrinkable backfill shall be a mixture of sand, gravel, Portland cement, and water which flows easily around the utility being covered and develops a 28 day compressive strength of from 30 to 200 psi. No nonshrinkable backfill mix designs shall be used without the approval of the Director of Public Works. Fly ash may be approved in the mix if test data are submitted to indicate the above characteristics are met.

27.10 <u>Stacks</u>. Where indicated on the plans or directed by the Engineer, six (6) inch stacks will be furnished and constructed complete with clay stoppers to within ten (10) feet of ground surface or above underground water surface. All stacks will be constructed in accordance with the standard plan entitled Stack Construction Details in Division VIII, Standard Plan Drawings.

A separate stack shall be constructed for each house connection and in no case shall two service connections be connected to the same stack.

27.11 Relation to Water Mains.

Horizontal and Vertical Separation. Sewers shall be laid at least 10 feet horizontally from any existing or proposed water main. The distance shall be measured edge to edge. In cases where it is not practical to maintain a 10 foot separation, the appropriate reviewing agency may allow deviation on a case-by-case basis, if supported by data from the design engineer. Such deviation may allow installation of the sewer closer to a water main, provided that the water main is in a separate trench or on an undisturbed earth shelf located on one side of the sewer and at an elevation so the bottom of the water main is at least 18 inches (460 mm) above the top of the sewer.

If it is impossible to obtain proper horizontal and vertical separation as described above, both the water main and sewer must be constructed of slip-on or mechanical joint pipe complying with public water supply design standards of the agency and be pressure tested to 150 psi (1034 kPa) to assure watertightness before backfilling.

<u>Crossings.</u> Sewers crossing water mains shall be laid to provide a minimum vertical distance of 18 inches (460 mm) between the outside of the water main and the outside of the sewer. This shall be the case where the water main is either above or below the sewer. The crossing shall be arranged so that the sewer joints will be equidistant and as far as possible from the water main joints. Where a water main crosses under a sewer, adequate structural support shall be provided for the sewer to maintain line and grade.

When it is impossible to obtain proper horizontal and vertical separation as stipulated above, one of the following methods must be specified:

- a. The sewer shall be designed and constructed of PVC pipe and equal to water pipe, and shall be pressure tested at 150 psi (1034 kPa) to assure water tightness prior to backfilling.
- b. Either the water main or the sewer line may be encased in a watertight carrier pipe which extends 10 feet (3 m) on both sides of the crossing, measured perpendicular to the water main. The carrier pipe shall be of materials approved by the regulatory agency for use in water main construction.
- 27.12 <u>Testing</u>. Upon completion of sewer, each pipe line and manhole will be tested as specified by the Engineer in charge. The Contractor shall furnish such tools, hose, and other equipment necessary for making such tests and shall be present during the inspection to note any deficiencies that may exist. Before final acceptance, all sewers shall be clean, shall comply with the specifications and all contract documents, and shall be acceptable to the Engineer and municipal authorities.
- 27.13 <u>Exfiltration and Air Testing</u>. Both the sewer pipe line and the manholes shall be tested. Manholes shall be exfiltration tested only. Sewer pipe lines shall be air tested only.

The first line between manholes shall be tested before backfilling and before any sewer pipe is installed in the remainder of the work. Thereafter, individual or multiple lines (optional to the Contractor with approval of the Engineer) shall be tested.

<u>Exfiltration Test</u>. This test shall be performed according to stated procedures and under the supervision of the Engineer. The test shall be conducted by blocking off all manhole openings, filling the manhole, and measuring the water level in the manhole for reference. The head above the pipe invert shall be about ten (10) feet. The head shall not exceed twenty-five (25) feet or be less than five (5) feet. The parameters for infiltration are similar. When the ground water level is above the pipe invert, the head shall be measured from ground water elevation. The total exfiltration shall not exceed 200 gallons per inch of diameter per mile of pipe per day. Manholes shall be considered as sections of 48 inch or 60 inch pipe. The exfiltration test shall be maintained for at least two (2) hours or as long as necessary to locate all leaks, as directed by the Engineer. If the leakage in any reach exceeds the allowable maximum, it shall be retested after the leaks are repaired.

<u>Air Test</u>. This test shall be performed according to stated procedures and under the supervision of the Engineer.

Equipment used shall meet the following minimum requirements: (a) Pneumatic plugs shall have a sealing length equal to or greater than the diameter of the pipe to be tested, (b) pneumatic plugs shall resist internal testing pressure without requiring external bracing or blocking, (c) all air used shall pass through a single control unit, and (d) individual hoses shall be used for the following connections: (1) from control unit to pneumatic plugs for inflation, (2) from control unit to sealed line for introducing the low pressure air, and (3) from sealed line to control unit for continually monitoring the air pressure inside the pipe being tested.

Procedures: All pneumatic lugs shall be seal tested before being used in the actual test installation. One length of pipe shall be laid on the ground and sealed at both ends with the pneumatic plugs to be checked. Air shall be pressurized to 25 psig. The sealed pipe shall be pressurized to 5 psig. The plugs shall hold against this pressure without movement of the plugs out of the pipe.

After a manhole to manhole reach of pipe has been backfilled and cleaned and the pneumatic plugs are checked by the above procedures, the plugs shall be placed in the line at each manhole and inflated to 25 psig. Low pressure air shall be introduced into this sealed line until the internal air pressure reaches 4 psig greater than the average back pressure of any ground water that may be over the pipe.

After a manhole to manhole reach of pipe has been backfilled and cleaned and the pneumatic plugs are checked by the above procedures, the plugs shall be placed in the line at each manhole and inflated to 25 psig. Low pressure air shall be introduced into this sealed line until the internal air pressure reaches 4 psig greater than the average back pressure of any ground water that may be over the pipe.

At least two (2) minutes shall be allowed for the air pressure to stabilize.

After the stabilization period (3.5 psig minimum pressure in the pipe), the air hose from the control unit to the air supply shall be disconnected. The portion of line being tested shall be termed "acceptable" if the time required in minutes for the pressure to decrease from 3.5 to 3.0 psig (greater than the average back pressure of any ground water that may be over the pipe) shall not be less than the time shown for the given diameters in the following table:

			SPECIFICATION TIME FOR LENGTH (L) SHOWN (MIN:SEC)								
1 Pipe Diameter (in.)	2 Minimum Time (Min: sec)	3 Length for Minimum Time (ft)	4 Time for Longer Length (sec)	100 FT	150 FT	200 FT	250 FT	300 FT	350 FT	400 FT	450 FT
	4.50	507	4001	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50
4	1:53	597	.190L	1:53	1:53	1:53	1:53	1:53	1:53	1:53	1:53
6	2:50	398	.427L	2:50	2:50	2:50	2:50	2:50	2:50	2:51	3:12
8	3:47	298	.760L	3:47	3:47	3:47	3:47	3:48	4:26	5:04	5:42
10	4:43	239	1.187L	4:43	4:43	4:43	4:57	5:56	6:55	7:54	8:54
12	5:40	199	1.709L	5:40	5:40	5:42	7:08	8:33	9:58	11:24	12:50
15	7.05	159	2.671L	7:05	7:05	8:54	11:08	13:21	15:35	17:48	20:02
18	8:30	133	3.846L	8:30	9:37	12:49	16:01	19:14	22:26	25:38	28:51
21	9:55	114	5.235L	9:55	13:05	17:27	21:49	26:11	30:32	34:54	39:16
24	11:20	99	6.837L	11:24	17:57	22:48	28:30	34:11	39:53	45:35	51:17
27	12:45	88	8.653L	14:25	21:38	28:51	36:40	43:16	50:30	57:42	64:89
30	14:10	80	10.683L	17:28	26:43	35:37	44:31	53:25	62:19	71:13	80:07
33	15:35	72	12.926L	21:33	32:19	43:56	53:52	64:38	75:24	86:10	96:57
36	17:00	66	15.384L	25:39	38:28	51:17	64:06	76:55	89:44	102:34	115:23

In areas where ground water is known to exist, the Contractor shall determine the water elevation prior to running the test. The height of water over the invert of the pipe shall be divided by 2.3 to establish the pounds of pressure that will be added to all readings. For example, if the height of the water is 11-1/2 feet, then the added pressure will be 5 psig. This increases the 3.5 psig to 8.5 psig and the 3.0 psig to 8.0 psig. The allowable drop of one half pound and the timing remain the same. For safety reasons, do not exceed 9.0 psig.

If the installation fails to meet this requirement, the Contractor shall, at Contractor's expense, determine the source of the leakage. Contractor shall then repair or replace all defective materials and/or workmanship. Air testing shall then be performed on the repaired line to meet the above specifications.

27.14 Television Inspection. Television inspection shall be required to determine if any defects exist prior to final acceptance. A minimum of 30 days shall lapse between completion of construction and television inspection.

Mobile closed circuit television inspection equipment shall be used to televise sewer lines between manholes. The camera shall be pulled through the line. Push type cameras are not acceptable. Robotic type camera equipment shall be used to televise stubouts.

The television camera used for the inspection shall be a color camera specifically designed and constructed for such inspection. Lighting for the camera shall be suitable to allow a clear picture for the entire periphery of the pipe. Picture quality and definition shall be satisfactory to the Engineer. Inspection operations shall cease if the quality of the image on the screen is unsatisfactory. No payment will be made for unsatisfactory inspections.

A continuous image for viewing shall be produced. The images shall be of first rate quality according to the currently accepted standards for television inspection of sewers. A system, which displays the camera location in feet on the monitor with respect to the starting manhole's centerline, shall be used. This system shall automatically update the camera location display as the camera is pulled forward or backward through the sewer line.

Measurement for location of observations to be recorded shall be made at the ground level by means of a meter device. Measurement meters shall be accurate to one-half (0.5) foot. Measurements shall be referenced from the center of the manhole where the camera is started to the center of the manhole where observations are terminated. The measurements shall be checked at the completion of the observations by measuring the distance between manhole centers at the ground level. The observed measurements made by the meter and the ground level measurements shall correspond to within plus or minus one foot. Surface measurements shall be made by the contractor in the presence of the Engineer's representative.

The television camera shall be moved through the line at a uniform slow rate. During the inspection the camera shall be stopped at the points where one or more of the following conditions are observed and distances recorded.

- 1. Service line tees, wyes or taps.
- 2. Infiltration/inflow sources.
- 3. Structural defects, including broken pipe, collapsed pipe, cracks, punctures, settling, etc.
- 4. Abnormal joint conditions, such as horizontal and vertical misalignment, open joints, joints not fully sealed, etc.
- 5. Unusual conditions.

All such conditions shall be photographed as determined by the Engineer. Photographs of all questionable conditions shall be taken for subsequent review. The photographs shall be taken from the image on the TV monitor with a Polaroid, a 35 mm camera, or other approved methods. Before taking the photographs, the TV camera shall be properly positioned so the optimum view can be obtained. The image size of photographs shall be no smaller than three inches by four inches.

All photographs shall be identified by location, date taken, and names of the owner's and Contractor's representative. The location of all photographs shall be identified by recording the distance from each defect or point of interest to the center of the reference manhole. All photographs shall be submitted as specified.

A DVD/CD with a clear and audible voice narrative of the entire TV monitoring shall be furnished. Each disk will be delivered to the Engineer in charge. Each disk shall be titled on the screen with the date, manhole numbers, pipe size, district or project number. The camera shall be set to begin at the center of the manhole and the footage zeroed out.

The title shall change at each manhole and the footage zeroed out again before starting a new pull when more than one section of sewer is televised in succession. Defects in the sewer line shall be repaired or replaced by the Contractor, as directed by the Engineer, at no cost to the City.

One bound copy of the final inspection report shall be submitted to the Engineer. Included in the report shall be a map showing the work area, a wye location report, a television inspection report, and a DVD/CD and all pictures.

Television inspection shall be measured and paid for on the basis of unit price as set forth in the bid. Such unit price payment shall be full compensation for all reports, photographs, and other work related work to complete the closed circuit television monitoring.

Revised 1-18-2010

27.15 Exposure of Pipe or Manholes. The Contractor shall conduct the work at all times in such a manner as will insure no disruption to the normal function of the sanitary sewer collection system. Particular attention shall be paid to the threat of introduction of storm water or other waters to the piping and manholes of the collection system. The Contractor shall take whatever precautions are necessary, such as, but not limited to, installation of plugs in exposed pipes and manholes when work is not in progress or when leaving the work site. The Contractor will be held responsible for damages which may occur to either the collection system or to private property through introduction of storm water or other waters to exposed piping or manholes relating to the construction work.

SECTION 28 - DRAINAGE STRUCTURE CONSTRUCTION

- 28.01 <u>Concrete Work</u>. The construction of forms, mixing, placing, finishing, and curing of concrete work, as well as the fabrication, placement, protection, and cleaning of reinforcement, shall conform to the applicable parts of Division II, Portland Cement Concrete Pavement.
- 28.02 <u>Brick Work</u>. All brick shall be wetted before being laid in a 1:2 cement mortar. All joints shall be completely filled with mortar and shall not be less than 1/4 inch and not more than 1/2 inch in thickness. The joints shall be completely filled, smooth and free from surplus mortar on the inside of the walls. Bricks shall be laid radically with every sixth course laid as a stretcher course. Brick shall be plastered with 1/2 inch of mortar over the entire outside surface of wall.
- 28.03 <u>Precast Manhole Sections</u>. Precast concrete sections for manholes shall be installed with bituminous joint filler.
- 28.04 <u>Acceptance</u>. Upon completion of a job, all debris and surplus materials shall be removed from the job by the Contractor. The Engineer shall be notified, and shall make an inspection of the work. The City will be notified in writing as to the acceptability of the work.

Prior to City acceptance all storm and sanitary sewers will be televised by the City. Payment will be per foot for televising. Fifteen (15) days after any dewatering wells have been turned off the televising can be performed.

Any cleaning performed by the City will be charged by the hour to the Contractor.

Revised 1-18-2010

SECTION 29 - METHOD OF MEASUREMENT AND BASIS OF PAYMENT

- 29.01 <u>Sewer Pipe in Place</u>. Sewer pipe shall be measured and paid for at the contract unit price per lineal foot for various sizes including excavation and backfill complete in place. Sewer pipe shall be measured for payment after installation of the sewer through all line manholes and through the walls of structures and existing manholes and shall include the portion of all wyes considered as main line sewer. Such payment shall be full compensation for all labor, plant, equipment, and materials necessary for a complete and acceptable project, including removal of all debris and final cleanup of the job.
- 29.02 <u>Wyes.</u> Wyes shall be paid for at the contract unit price for various size wyes. Measurement for payment shall include that portion of the wye from the barrel of the main line sewer to the end of the wye. A 1" x 4" lumber sufficient in length to reach the ground surface shall be placed vertically at the end of each wye.
- 29.03 <u>Manholes</u>. Manholes shall be paid for at the contract unit price bid per manhole for a depth of five (5) feet which payment shall include base, stubouts, and ring cover. Additional payment shall be made for manholes more than five (5) feet in depth, measured from flow line to top of cover, at the contract unit price for each vertical foot or fraction thereof in excess of five (5) feet.
- 29.04 <u>Storm Sewer Inlets</u>. Storm sewer inlets shall be paid for at the contract unit price bid per inlet.

STANDARD PLAN DRAWINGS

