RESOLUTION AWARDING LOW BID FOR CAPEHART ROAD, 144TH STREET TO 132ND STREET, PROJECT C-77 (19-09) FOR THE PUBLIC WORKS DEPARTMENT

WHEREAS, pursuant to Neb. Rev. Stat. §23-104(6), the County has the power to do all acts in relation to the concerns of the County necessary to the exercise of its corporate powers; and,

WHEREAS, pursuant to Neb. Rev. Stat. §23-103, the powers of the County as a body are exercised by the County Board; and,

WHEREAS, bids for Capehart Road, 144th Street to 132nd Street, Project C-77 (19-09) have been solicited, made, opened and reviewed pursuant to applicable Nebraska State Statutes; and,

WHEREAS, based on those proceedings, and after a public hearing, this Board has duly deliberated and considered the bids received; and,

WHEREAS, this Board desires to proceed forthwith in order to expedite and facilitate service to the citizens of Sarpy County.

NOW, THEREFORE, be it resolved by this Board of County Commissioners that:

1. The low bid of Luxa Construction Co., Inc. for the Capehart Road, 144th Street to 132nd Street, Project C-77 (19-09) for One Million Two Hundred Ninety Two Thousand Sixty Seven Dollars and Twenty Four Cents ($1,292,067.24) is accepted, ratified, and confirmed.

2. This Board’s Chairman, Clerk, and Attorney are hereby authorized and directed to execute such ancillary documents as may be required to evidence the contract and take any and all steps necessary or required in order to carry out the terms of such contract after said documents have been reviewed by the Attorney, Fiscal Administrator, and County Administrator.

The above resolution was approved by a vote of the Sarpy County Board of Commissioners at a public meeting duly held in accordance with applicable law on the 4th day of December, 2018.

ATTEST:

Sarpy County Board Chairman

Sarpy County Clerk
MEMO

To: Sarpy County Board of Commissioners

From: Beth Garber

Re: Capehart Rd., 144th Street to 132nd Street – Bid Award

On November 20, 2018, six (6) bids were opened for Capehart Road, 144th Street to 132nd Street, Project C-77 (19-09) for the Public Works Department. After review, it is recommended the bid be awarded to the low bidder, Luxa Construction Co., for $1,292,067.24. The bids ranged from the low bid to $1,783,183.48. The engineer’s estimate for the project was $1,519,278. The construction start date will be April 2019 with substantial completion by October 2019.

The attached memo from Public Works defines project reimbursement agreements from all interested parties. Please contact me with any questions at bgarber@sarpy.com.

November 29, 2018

Beth Garber

cc: Dan Hoins
    Scott Bovick
    Brian Hanson
    Deb Houghtaling
    Denny Wilson
MEMORANDUM

TO: Sarpy County Board of Commissioners
FROM: Patrick M. Dowse, PE, Chief Deputy Engineer
DATE: November 29, 2018
SUBJECT: Resolution Awarding Luxa Construction Company Project C-77 (19-9) – Capehart Road, 144th Street to 132nd Street, for the Public Works Department

Six (6) bids were received in the eBid system and were read aloud in the Administration Conference Room at 10:00 am on Tuesday, November 20th, 2018. The lowest responsive bid was received from Luxa Construction Company Incorporated of Blair, Nebraska for $1,292,067.24, which was 15% lower than the Engineer’s Estimate of $1,519,278.00. The bids ranged from the low stated above to $1,783,183.48.

This project will be initially funded by Sarpy County, but the County will be partially reimbursed by several sources. The first source is ASIP Funds to be collected per Resolution 2016-451, an Interlocal Agreement with the City of Papillion, estimated to be $699,630. The second source, Per Resolution 2017-54, Raven Northbrook LLC will be reimburse the County for 100% of the actual costs Highway 50 Improvements, estimated to be $264,210.17. The remainder of the reimbursements are for the actual costs of one lane of grading, drainage and paving of a rural section as well as the City of Papillion will be reimbursing costs for the urban section, which will be determined in a future Interlocal Agreement with the City.

Per Resolution 2018-337, the First Amendment of the Development Agreement with Raven Northbrook, LLC, construction is anticipated to begin in April of 2019, and be substantially completed by October 1, 2019.

The Public Works Department hereby recommends Luxa Construction be awarded the bid at the bid total listed above. Please feel free to let me know if you have any questions.
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<th>State</th>
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**Total Costs:**
- $3,193.45
- $17,636.48
- $3,916.80
- $11,750.40
- $95.12
- $17,121.60
- $17,636.48
- $39.44
- $2.07
- $0.39
- $3,656.44
- $2,364.60
- $18.56
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<th>Hawkins Construction Company</th>
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<td>Sarpy County</td>
<td>City of Lincoln, Nebraska</td>
<td>CARROLL SUPPLY</td>
<td>City of Council Bluffs</td>
<td>Papio Missouri River Natural Resources District</td>
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<td>Brett Waywers</td>
<td>Bill Herr</td>
<td>Craig Aldridge</td>
<td>MIKE BRUCKNER</td>
<td>Matt Cox</td>
<td>Martin Cleveland</td>
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<td><a href="mailto:brett.wawers@lra-inc.com">brett.wawers@lra-inc.com</a></td>
<td><a href="mailto:herrb@sarpy.com">herrb@sarpy.com</a></td>
<td><a href="mailto:calridge@lincoln.ne.gov">calridge@lincoln.ne.gov</a></td>
<td><a href="mailto:MBRUCKNER@CARROLLSUPPLY.COM">MBRUCKNER@CARROLLSUPPLY.COM</a></td>
<td><a href="mailto:mccox@cityofbluffs-ia.gov">mccox@cityofbluffs-ia.gov</a></td>
<td><a href="mailto:mcleland@papionrd.org">mcleland@papionrd.org</a></td>
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<td>(402) 496-2498</td>
<td>(402) 537-6900</td>
<td>(402) 416-5349</td>
<td>(402) 510-7429</td>
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<td>CONSOLIDATED CONCRETE</td>
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<td>City of Valley Nebraska</td>
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<td>Randy Pierce</td>
<td>Allen Schœemaker</td>
<td>AARON LUTH</td>
<td>Mike Kleffner</td>
<td>Greg Perry - City Engineer</td>
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<td><a href="mailto:rpierce@eacg.com">rpierce@eacg.com</a></td>
<td><a href="mailto:rpierce@eacg.com">rpierce@eacg.com</a></td>
<td><a href="mailto:als@blairnebraska.org">als@blairnebraska.org</a></td>
<td><a href="mailto:ALLITHP@CONSOLIDATEDCONCRETE.COM">ALLITHP@CONSOLIDATEDCONCRETE.COM</a></td>
<td><a href="mailto:michael.kleffner@cityofomaha.org">michael.kleffner@cityofomaha.org</a></td>
<td><a href="mailto:GregP@olmstedperry.com">GregP@olmstedperry.com</a></td>
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<td>(402) 895-4700</td>
<td>(402) 426-4191</td>
<td>(402) 690-3866</td>
<td>(402) 444-5109</td>
<td>(402) 399-8552</td>
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<td>SMI Safety</td>
<td>ROADBUILDERS</td>
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<td>Bryan Kratky</td>
<td>Marv Lech</td>
<td>Justin Cremers</td>
<td>DAVE MEYERING</td>
<td>Tim Weander</td>
<td>Dave Vermillion</td>
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<td><a href="mailto:bryan.kratky@lra-inc.com">bryan.kratky@lra-inc.com</a></td>
<td><a href="mailto:marvin.lech@nebraska.gov">marvin.lech@nebraska.gov</a></td>
<td><a href="mailto:justinc@smisafety.com">justinc@smisafety.com</a></td>
<td><a href="mailto:DMMEYERING@ROADBUILDERSMACHINERY.COM">DMMEYERING@ROADBUILDERSMACHINERY.COM</a></td>
<td><a href="mailto:tim.weander@nebraska.gov">tim.weander@nebraska.gov</a></td>
<td><a href="mailto:dvermillion@cityofbluffs-ia.gov">dvermillion@cityofbluffs-ia.gov</a></td>
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<td>(402) 595-2534</td>
<td>(402) 562-5920</td>
<td>(402) 616-1316</td>
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27 Construction successfully completed within the past five (5) years similar in size, scope, and difficulty of construction to the work bid upon.

| 27 | Owner‐City of Valley | Project‐City of Valley E Street / Contract | $1,069,000 / Start‐January 2016 | Complete June 2016Owner‐City of Valley / Project‐Valleymain Street Improvements / Contract | $1,255,000 / Start‐September 2013 | Complete July 2014Owner‐City of Valley / Project‐Papio West Trail / Contract | $2,700,000 / Start January 4, 2018 | Complete October 2, 2018 Owner‐ Fleet Park LLC / Fleet‐Park Parking Veterans Memorial Hwy / Contract | $1,049,555 / Start October 2016 | Complete June 2017Owner‐Fleet Park LLC / Fleet Park Carter Lake / Contract | $537,993 / Start July 2017 | Complete November 2017 |

| 22 | Sarpy County Capehart Road | 2,868,828.00 | 125 days allowed | Owner‐City of Valley / Project‐Papio West Street Improvement | $1,255,000 / Start‐September 2013 | Complete July 2014Owner‐City of Valley / Project‐Papio West Trail / Contract | $2,700,000 / Start January 4, 2018 | Complete October 2, 2018 Owner‐Fleet Park LLC / Fleet‐Park Parking Veterans Memorial Hwy / Contract | $1,049,555 / Start October 2016 | Complete June 2017Owner‐Fleet Park LLC / Fleet Park Carter Lake / Contract | $537,993 / Start July 2017 | Complete November 2017 |

| Sarpy County Giles Road | 1,104,327.00 | 85 days allowed | Owner‐City of Valley / Project‐Valleymain Street Improvements / Contract | $1,255,000 / Start‐September 2013 | Complete July 2014Owner‐City of Valley / Project‐Papio West Trail / Contract | $2,700,000 / Start January 4, 2018 | Complete October 2, 2018 Owner‐Fleet Park LLC / Fleet‐Park Parking Veterans Memorial Hwy / Contract | $1,049,555 / Start October 2016 | Complete June 2017Owner‐Fleet Park LLC / Fleet Park Carter Lake / Contract | $537,993 / Start July 2017 | Complete November 2017 |

| 22 | 2,225,808.00 | 55 days allowed | Owner‐City of Valley / Project‐Valleymain Street Improvements / Contract | $1,255,000 / Start‐September 2013 | Complete July 2014Owner‐City of Valley / Project‐Papio West Trail / Contract | $2,700,000 / Start January 4, 2018 | Complete October 2, 2018 Owner‐Fleet Park LLC / Fleet‐Park Parking Veterans Memorial Hwy / Contract | $1,049,555 / Start October 2016 | Complete June 2017Owner‐Fleet Park LLC / Fleet Park Carter Lake / Contract | $537,993 / Start July 2017 | Complete November 2017 |

2019‐39 Addendum 2 - Page 7
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<tr>
<th>Responding Supplier</th>
<th>Signature Full Name</th>
<th>Signature Email</th>
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<tr>
<td>Luxa Construction Co., Inc.</td>
<td>Travis Mann</td>
<td><a href="mailto:tmann@luxaconstruction.com">tmann@luxaconstruction.com</a></td>
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<tr>
<td>TAB Construction Company</td>
<td>Chris Wilsey</td>
<td><a href="mailto:chrisw@tabholding.com">chrisw@tabholding.com</a></td>
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<tr>
<td>Graham Construction, Inc.</td>
<td>Greg Ritke</td>
<td><a href="mailto:grahamomaha@grahamus.com">grahamomaha@grahamus.com</a></td>
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<td>RPL UTILITY, LLC</td>
<td>TRAVIS LIENEMANN</td>
<td><a href="mailto:TRAVISL@RPLUTILITY.COM">TRAVISL@RPLUTILITY.COM</a></td>
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<tr>
<td>Hawkins Construction Company</td>
<td>Tyler Fehringer</td>
<td><a href="mailto:tfehringer@hawkins1.com">tfehringer@hawkins1.com</a></td>
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<tr>
<td>Valley Corporation</td>
<td>Matt Bevington</td>
<td><a href="mailto:matt@valleycorp.com">matt@valleycorp.com</a></td>
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CONTRACT AGREEMENT

THIS CONTRACT is made and entered into by and between Sarpy County, Nebraska hereinafter called County, and Luxa Construction hereinafter called Contractor.

In consideration of the following mutual agreements and covenants, it is understood and agreed by the parties hereto that:

1. **The Contractor does hereby agree to undertake and construct Sarpy County Project Capehart Road, 144th Street to 132nd Street, Project C-77 (19-09)**
   Also referred to hereinafter as work, in accordance with terms and provisions hereof and subject to the quality provisions in the accepted Proposal of Contractor for the sum of One Million Two Hundred Ninety Two Thousand Sixty Seven Dollars and Twenty Four Cents ($1,292,067.24) under penalty of Performance, Payment and Guarantee Bond.

2. The Contractor shall conform with the applicable plans and specifications, applicable Special Provisions and any applicable change order or addenda pertaining thereto or to this Contract, all of which by reference thereto are made a part hereof. Applicable notice to bidders, Instruction to bidders, Bid Proposal of Contractor, Resolution awarding this Contract, the Performance, Payment and Guarantee Bond and all proceedings by the governing body of the County relating to the aforesaid work are made a part hereto by reference thereto.

3. The County agrees to pay the Contractor in accordance with the provisions of the specifications, the accepted Proposal of the Contractor and the provisions of this Contract.

4. All provisions of each document and item referred to in Paragraph 2 above shall be strictly complied with the same as if rewritten herein, and in the event of conflict among the provisions of said documents, the provisions most favorable to the County shall govern, and substitution or change shall be made except upon written direction, the form of which shall be written "Change Order" of the County; and substitution or change shall in no manner be construed to release either party from any specified or implied obligation of this Contract except as specifically provided for in the Change Order.

5. The Contractor warrants that it has neither employed nor retained any company or person, other than bona fide employee working for Contractor to solicit or secure this Contract, and that Contractor has not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission percentage, brokerage fee, gift or any other consideration, contingent upon or resulting from the award or making of this Contract. For breach or violation of this warranty, County shall have the right to annul this Contract without liability, or in its discretion, to deduct from the Contract price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift or contingent fee.

6. County and Contractor promise and agree to comply with all Federal and State laws and County ordinances, and such other rules and regulations as may apply to this Contract, including but not limited to: the Americans with Disabilities Act of 1990 (29 U.S.C.A. 12101, et seq.); the Rehabilitation Act of 1973 (29 U.S.C.A. 701, et seq.); and the Drug Free Workplace Act of 1988 (41 U.S.C.A. 701, et seq.). Furthermore, pursuant to Neb. Rev. Stat. 73-102, County and Contractor declare, promise, and warrant that they have and will continue to comply fully with
the Title VI of the Civil Rights Act of 1964 as amended (42 U.S.C.A. 1985, et seq.); and the Nebraska Fair Employment Practice Act, Neb. Rev. Stat. 48-1101, et seq., in that there shall be no discrimination against any person who is employed in the performance of this Contract, or against any applicant for such employment, because of age, color, national origin, race, religion, creed, disability or sex.

7. The Contractor shall indemnify and save harmless Sarpy County, its officers, employees, agents and representatives from all claims, suits or actions of every kind and character made upon or brought against the said Sarpy County, its officers, employees, agents and representatives for on or account of any injuries or damages received or sustained by any party or parties by or from the acts or omissions of the said Contractor or its servants, agents, representatives and subcontractors, in doing the work herein contracted for or by or in consequence of any negligence in guarding the same or any improper material used in its construction or by or on account of any act or omission of said Contractor or its servants, agents, representatives and subcontractor or its servants, agents, representatives and subcontractors arising out of any manner connected with the performance of this Contract, and also from all claims or damage for infringement of any patent in fulfilling this Contract.

8. The Contractor agrees to comply with the residency verification requirements of Neb. Rev. Stat. §4-108 through §4-114. The Contractor is required and hereby agrees to use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska. A federal immigration verification system means the electronic verification of the work authorization program authorized by the Illegal Immigration Reform and Immigrant Responsibility Act of 1996, 8 U.S.C. 1324a, known as the E-Verify Program, or an equivalent federal program designated by the United States Department of Homeland Security or other federal agency authorized to verify the work eligibility status of a newly hired employee.

If the Contractor is an individual or sole proprietorship, the following applies:

1. The Contractor must complete the United States Citizenship Attestation Form, available on the Department of Administrative Services website at www.das.state.ne.us.

2. If the Contractor indicates on such attestation form that he or she is a qualified alien, the Contractor agrees to provide the U.S. Citizenship and Immigration Services documentation required to verify the Contractor's lawful presence in the United States using the Systematic Alien Verification for Entitlements (SAVE) Program.

3. The Contractor understands and agrees that lawful presence in the United States is required and the Contractor may be disqualified or the contract terminated if such lawful presence cannot be verified as required by Neb. Rev. Stat. Sect. 4-108.
9. **Insurance Requirements**

The Contractor shall not begin work under this Agreement until all insurance certificates have been filed with the Sarpy County Clerk.

The following insurance coverages shall be kept in force during the life of the Agreement and shall be primary with respect to any insurance or self-insurance programs covering the County, its commissioners/supervisors, officials, agents, representatives and employees. These insurance coverages shall specifically state, or be endorsed to state, that thirty (30) days notice shall be given to the County in the event of cancellation of, or material change in, any of the coverages.

a. **Worker’s Compensation and Employers Liability Insurance**

The minimal acceptable limits shall be the statutory limits as required by the State of Nebraska for Coverage A, Workers’ Compensation and $500,000 each accident for Coverage B, Employers Liability.

b. **Commercial General Liability Insurance**

Coverage should include broad form coverage written on a commercial general liability form and written on an occurrence basis. The coverage must protect against claims for damages resulting from bodily injury, including death, personal injury and property damage.

The minimum acceptable limits of liability shall be $1,000,000 each occurrence. If the coverage contains a general aggregate, such limit shall not be less than $2,000,000. The products/completed operations limit shall not be less than $2,000,000. The County shall be named as an additional insured on the insurance coverage required under this section.

c. **Automobile Liability Insurance**

Coverage shall be against claims for damages resulting from bodily injury, including death and property damage, which may arise from the operations of any owned, hired or non-owned automobile. The minimum acceptable limit of liability shall be $1,000,000 Combined Single Limit for each accident. The County is to be named as an additional insured on the insurance coverage required under this section.

d. **Certificate of Insurance**

The Contractor shall furnish the County with a certificate(s) of insurance evidencing the coverage required in this section. If the certificate(s) is shown to expire prior to completion of all the terms of this Agreement, the Contractor shall furnish a certificate(s) of insurance evidencing renewal of its coverage to the County. The County is to be included as an additional insured on the insurance coverage required under this section.
The Contractor shall require each and every Subcontractor performing work under this Agreement to maintain the same coverages required of the Contractor in this Section, and upon the request of the County, shall furnish the County with a certificate(s) of insurance evidencing the Subcontractor’s insurance coverages required in this section.

e. **Property Insurance**

During the term of the Contract all responsibility for maintenance of property insurance on the work remains solely with the Contractor, who shall, as a minimum requirement, obtain a builder’s “all risk” or equivalent policy form with sufficient limits to cover the total value of the Project, including all the cost of the material, equipment and/or machinery involved under this Contract. This property insurance shall cover portions of the work and materials stored off-site, on-site and in transit.

f. **Insurance Company**

All insurance coverages herein required of the Contractor shall be written by an insurance company or companies transacting business as an admitted insurer in the State of Nebraska or under the Nebraska Surplus Lines Insurance Act. All insurance companies must possess a minimum A.M. Best Insurance Company rating of A-. Upon request by the County, the Contractor shall furnish evidence that the insurance company or companies being used by the Contractor meet the minimum requirements listed in this section.

Upon request by the County, the Contractor shall furnish the County with complete and accurate copies of the insurance policies required within this section. If at any time during the life of this Contract, the Contractor’s insurance coverages and limits do not meet or exceed the minimum insurance requirements presented in this section, the Contractor is required to notify the County of any deviations from the minimum requirements presented in this section.

10. The Contractor shall pay to the Unemployment Compensation Fund of the State of Nebraska unemployment contributions and interest due under the laws of the State of Nebraska on wages paid to individuals employed in the performance of this Contract, and shall submit to Sarpy County written clearance from the Commissioner of Labor of the State of Nebraska certifying that all payments due of contributions and interest which may have arisen under this Contract have been paid by the Contractor or his subcontractor, to the State of Nebraska Unemployment Compensation Fund. Payment of the final five percent (5%) of the total amount of the Contract shall be withheld until this provision have been complied with as required by Section 48-657 R.R.S. 1943, as amended.

11. The Contractor shall not, in performance of this Agreement, discriminate or permit discrimination against any person because of race, sex, age or political or religious opinions or affiliations in violation of federal or state laws or local ordinances and further the Contractor shall comply with Sarpy County ordinances pertaining to civil rights and human relations.
12. The Contractor shall procure a policy or policies of insurance which shall guarantee payment of compensation according to the Workmen's Compensation Laws of Nebraska for all workmen injured in the scope of employment; and further agrees to keep said policy or policies in full force by the Contractor throughout the term of this Contract. Certificates of insurance or copies of policies if required by any department of the County, shall be filed by the Contractor with Sarpy County.

13. Except as may otherwise be required by applicable law payment of any balance due to the Contractor under this Contract shall be made by the County to the Contractor upon completion of the Contractor's work and obligations in accordance with the Contract, upon acceptance thereof by the County, and upon submission of certificate by the Contractor in accordance to above. No payment by the County shall in any way constitute any waiver of any rights of Sarpy County.

14. Pursuant to Neb. Rev. Stat. 23-3113, the Parties hereto declare and affirm that no officer, member, or other employee of the County, and no member of its governing body, and no other public official of the County who exercises any functions or responsibilities in the review or approval of the undertaking described in this Contract, or the performing of services pursuant to this Contract shall participate in any decision relating to this contract which effects his or her personal interest, or any corporation, partnership, or association in which he or she is directly or indirectly interested; nor shall any employee of the County, nor any member of its governing body, have any interest, direct or indirect, in this Contract or the proceeds thereof.

15. Neither County nor Contractor shall engage the services of any person or persons presently in the employ of the other for work covered by this Contract without the express written consent of the employer of such person or persons.

16. Each party declares, represents, warrants and acknowledges that it is not an agent for the other now, nor will it be in the future. Each party is an independent Contractor, and neither party is or will become the employee of the other as a result of the relationship created by this Contract.

17. It is understood and agreed by the parties hereto that is any part, term, condition or provision of this Contract is held to be illegal or in conflict with any law of this State or of the United States, the validity of the remaining parts, terms, conditions, or provisions shall not be affected, and the rights and obligations of the Parties shall be construed and enforced as if the Contract did not contain the particular part, term, condition, or provisions held to be invalid.

18. This Contract and documents incorporated herein by reference contain the entire Contract between the Parties, and there are no other written or oral promises, agreement or warrants which may affect it.

19. The Contractor acknowledges that it is, and will, remain fully obligated under the provisions of this Contract, regardless of any delegation of duties or assignment or benefits hereunder. Contractor further acknowledges and promises that the provisions of this Contract shall be made binding on any Subcontractor(s) it may retain. Contractor shall require that all Subcontractors hold County harmless from any and all claims and causes of action resulting from actions or activities of Subcontractor. Contractor shall require that all Subcontractors comply with any and all applicable State and Federal laws and that Subcontractor(s) obtain any
and all necessary permits or licenses necessary to conduct work under this Contract.

20. Contractor **may not** subcontract or assign any portion of Contract without prior written approval from the County.

21. Contractor expressly guarantees all work and materials as described herein.
This Contract cannot be amended except by written agreement of both parties. Notice to the Parties shall be given in writing to the agents of each party named below:

County: Ms. Deb Houghtaling  
Sarpy County Board Business Office  
1210 Golden Gate Dr., Suite 1250  
Papillion, NE 68046

Contractor: Luxa Construction  
925 E Dixon Rd.  
Blair, NE 68008

IN WITNESS WHEREOF, the parties hereto have caused these instruments to be executed in THREE original counterparts, this as of this 4th day of December 2018.

(SEAL)

ATTEST: ____________________________

CLERK: ____________________________

APPROVED AS TO FORM: ____________________

COUNTY ATTORNEY/DEPUTY

ATTEST: ____________________________

SECRETARY/WITNESS

County of Sarpy, Nebraska  
A Body Politic and Corporate  

CHAIRMAN: ____________________________

CONTRACTOR: Luxa Construction Co. Inc.

PRESIDENT: ____________________________
2019-39 Addendum 2
Luxa Construction Co., Inc.
Supplier Response

Event Information
Number: 2019-39 Addendum 2
Title: Capehart Road, 144th St. to 132nd St., Project C-77 (19-09)
Type: Sealed Bid - Public Works
Issue Date: 10/29/2018
Deadline: 11/20/2018 10:00 AM (CT)

Contact Information
Contact: Beth Garber Purchaser
Address: 1210 Golden Gate Dr.
Papillion, NE 68046
Phone: (402) 593-4476 x
Email: bgarber@sarpy.com
Luxa Construction Co., Inc. Information

Contact: Travis Mann
Address: 925 E Dixon Rd
Blair, NE 68008
Phone: (402) 426-2778
Fax: (402) 426-2778
Email: tmann@luxaconstruction.com

I certify that this bid is submitted in accordance with the specifications issued by Sarpy County. I affirm that the original Specifications have not been altered in any way. Any alteration of the original Specifications, outside of an alternate bid, may be considered grounds for refusal of the bid.

Travis Mann
Signature
tmann@luxaconstruction.com
Email
Submitted at 11/20/2018 8:34:41 AM

Requested Attachments

Bid Bond

Bid Attributes

1 Acknowledgments

2 Standard Terms and Conditions
   I acknowledge reading and understanding the Standard Terms and Conditions.
   [Acknowledged]

3 Sample Contract
   I acknowledge reading and understanding the sample contract.
   [Acknowledged]

4 Specifications
   I acknowledge reading and understanding the specifications.
   [Acknowledged]

5 Company Information

6 Company Information - Years in Business
   40

7 Company Information - Number of Employees
   25

8 Company Information - Total Sales for the Last Three (3) Years
   30,000,000
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<th>Contact Name</th>
<th>Email</th>
<th>Phone Number</th>
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<tr>
<td>Reference #1</td>
<td>Lamp Rynearson</td>
<td>Brett Waywers</td>
<td><a href="mailto:brett.wawers@lra-inc.com">brett.wawers@lra-inc.com</a></td>
<td>(402) 496-2498</td>
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<tr>
<td>Reference #2</td>
<td>E &amp; A Consulting</td>
<td>Randy Pierce</td>
<td><a href="mailto:rpierce@eacg.com">rpierce@eacg.com</a></td>
<td>(402) 895-4700</td>
</tr>
<tr>
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<td>Lamp Rynearson</td>
<td>Bryan Kratky</td>
<td><a href="mailto:bryan.kratky@lra-inc.com">bryan.kratky@lra-inc.com</a></td>
<td>(402) 496-2498</td>
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Start Date

Page 3 of 10 pages
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<th>Name of Project</th>
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Construction successfully completed within the past five (5) years similar in size, scope, and difficulty of construction to the work bid upon.
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<th>TOPSOIL REMOVAL &amp; REPLACEMENT</th>
<th>EXCAVATION ON-SITE</th>
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<td>Unit price: $5.45 Total: $1,362.50</td>
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Sarpy County Capehart Road 2,686,828.00 125 days allowed 109 used
Sarpy County Giles Road 1,104,327.00 85 days allowed 89 used
SID 577 Westbury farm 2,225,808.00 55 days allowed 50 used
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Page 8 of 10 pages
Vendor: Luxa Construction Co., Inc.
2019-39 Addendum 2
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<td>INSTALL EROSION CHECK (WATTLE)</td>
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<td>RENTAL OF BACKHOE, FULLY OPERATED</td>
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<td>RENTAL OF DUMP TRUCK, FULLY OPERATED</td>
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<td>RENTAL OF SKID LOADER, FULLY OPERATED</td>
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<td>RENTAL OF VACUUM TRUCK, FULLY OPERATED</td>
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Response Total: $1,292,067.24
SPECIFICATIONS
Capehart Road Improvements
144th to 132nd
Project: C77 (19-9)

For the

Public Works Department
SARPY COUNTY, NEBRASKA

PROPOSALS DUE:
10:00 a.m., Tuesday, November 20, 2018
General Information

Notice to Contractors

Sarpy County is seeking proposals for Capehart Road, 144th Street to 132nd Street, Project C-77 (19-09) for the Sarpy County Public Works Department. The successful Contractor will enter into a Contract (see attached Exhibit "A") for the specified services.

Sealed bids will be received Monday through Friday 8:00 a.m. to 4:45 p.m. except holidays, until 10:00 a.m. Thursday November 20, 2018. Bids shall be in a sealed envelope, clearly marked “Sealed Bid – Capehart Road, 144th Street to 132nd Street, Project C-77 (19-09)” and shall have the names of the Contractor, and the time and date of the bid opening. **Do not fax bids, only sealed bids will be accepted.**

Bidders may obtain bidding documents at the Sarpy County Purchasing Department by emailing Beth Garber at bgarber@sarpy.com.

Contractors that obtain specifications from the internet sites are responsible for obtaining any addenda that may be added at a later time.

Bids must be sent to:

Deb Houghtaling  
Sarpy County Clerk's Office  
1210 Golden Gate Drive, Suite 1250  
Papillion, NE 68046

Bids not addressed and delivered to the above person will not be considered. Bids received after the above stated time and date will not be considered.

Bid opening will be a public opening to be held at the Sarpy County Administration Conference Room at 1210 Golden Gate Drive, Papillion, NE. The bid opening will be at 10:00 a.m. Thursday November 20, 2018.

All bids submitted shall be valid for a period of sixty (60) days following the final date for submission of bids.

Sarpy County will not be liable for costs incurred by Contractors for proposal preparation, printing, or demonstration. All such costs shall be the responsibility of the Contractor.

The bids shall include all charges and applicable taxes, F.O.B., various locations, Sarpy County, Nebraska. The Contractor need not include sales tax in the bid. Sarpy County will, upon request, furnish the successful Contractor with a completed State of Nebraska Tax Exempt Form 13 upon acceptance of the successful Contractor's proposal.

The Sarpy County Board of Commissioners reserves the right to reject any or all bids and to waive minor informalities.
In the event of conflict between unit price and extended price, unit price shall prevail.

Procedures for Evaluation and Awarding of Bid:

1. Evaluation will be done by Beth Garber, Sarpy County Purchaser and personnel from the Sarpy County Public Works Department. After evaluation the Purchaser will make a recommendation to the County Board of Commissioners for award. This recommendation and pending award will be made at a public meeting of the Board of Commissioners. Agendas are available each Friday afternoon on our internet site www.sarpy.com. The Commissioners award the bid by majority vote.

2. The following factors will be used to consider the award of the bid, where applicable:
   a. Compliance with all requirements.
   b. Price.
   c. The ability, capability, and skills of the Contractor to perform.
   d. The character, integrity, reputation, judgment, experience, and efficiency of the Contractor.
   e. The quality of previous performance.
   f. Whether the Contractor can perform within the time specified.
   g. The previous and existing compliance of the supplier with laws.
   h. The life-cost of the personal property or services in relation to the purchase price and specified use.
   i. The performance of the personal property or service taking into consideration any commonly accepted tests and standards of product, service, usability and user requirements.
   j. The energy efficiency ratio as stated by the supplier.
   k. The life-cycle costs between alternatives for all classes of equipment, the evidence of expected life, the repair and maintenance costs, and the energy consumption on a per year basis.
   l. Such other information as may be secured having a bearing on the decision.

Terms and Conditions:

1. Bid Bond

Each bid must be accompanied in a SEPARATE SEALED ENVELOPE by a cashier's check on a bank whose deposits are insured by the Federal Deposit Insurance Corporation or a bid bond in the amount of five percent (5%) of the bid price and must be payable without condition to the Sarpy County Treasurer, to protect Sarpy County against failure to perform as bid. The selected Contractor’s security will be retained until satisfactory delivery of performance bond and all Contract documents are signed and received. All other Contractor’s security will be retained for 30 days after bid award. If cashier's check or bid bond as herein set forth is not received with the proposal, the proposal may not be considered.
2. **Performance Bond**

The successful Contractor shall be required to furnish a performance bond, said bond shall be in the amount of 100% of the total amount of the bid, written by a Surety licensed to do business in the State of Nebraska. Said performance bond shall be provided to the Sarpy County Clerk ten (10) days after execution of Contract documents and bid award. Bond may be secured through the Contractor’s usual sources.

3. **Information, Discussion, and Disclosures**

   a. Any information provided by Sarpy County to any Contractor prior to the release of this Request for Proposal (RFP), verbally or in writing, is considered preliminary and is not binding on Sarpy County.

   b. The Contractor must not make available nor discuss any cost information contained in the sealed copy of the proposal to or with any employee of Sarpy County from the date of issuance of this RFP until the Contract award has been announced, unless allowed by the Sarpy County Purchasing Department in writing for the purpose of clarification or evaluation.

   c. No interpretation of the meaning of the specifications, or other bidding documents, nor correction of any ambiguity, inconsistency, or error therein will be made orally to any Contractor.

   d. Every request for such interpretation or correction should be in writing, addressed to the Sarpy County Purchaser, Beth Garber, 1210 Golden Gate Drive, Papillion, NE 68048 or bgarber@sarpy.com. Requests must be received by 12:00 p.m., November 15, 2018 in order for Sarpy County to have time to issue an addendum. Requests received after the deadline may not be considered. In case Sarpy County finds it expedient to supplement, modify, or interpret any portion of the bidding documents prior to the proposed bid date, such procedure will be accomplished by the issuance of written addenda to the RFP which will be mailed or delivered to all prospective Contractors at the respective addresses furnished for such purpose.

4. **Confidentiality of Documents**

Sarpy County considers all information, documentation and other materials requested to be submitted in response to this proposal to be of a non-confidential and/or non-proprietary nature and therefore shall be subject to public disclosure under Neb. Rev. Stat. § 84-712.05(3).

Contractors are hereby notified that Sarpy County strictly adheres to all statutes, court decisions, and opinions of the Nebraska Attorney General with respect to disclosure of RFP information.

Any “proprietary, trade secret, or confidential commercial or financial” information must be clearly identified, in a separate sealed envelope, at the time of bid/proposal submission. Pricing information is not considered financial information and therefore is not considered confidential. Please note: even if Contractor believes pricing information is confidential and
includes it in a separate, sealed envelope, such information will be read aloud and entered into record during the public bid opening. For all other appropriately identified proprietary, trade secrets, or confidential commercial or financial information, the Contractor will be required to fully defend, in all forums, Sarpy County's refusal to produce such information; otherwise, Sarpy County will make such information public upon request.

5. Addenda

a. All addenda will become part of this RFP and be responded to by each Contractor.

b. All addenda must be acknowledged in writing in the bid submitted by the Contractor.

a. This RFP, any subsequent addenda, and any written responses to questions take precedence over any information previously provided.

6. Non-Discrimination Clause

Pursuant to Neb. Rev. Stat. §73-102, Contractor declares, promises, and warrants it has and will continue to comply fully with Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C.A. §1985, et seq.), and the Nebraska Fair Employment Practice Act, Neb. Rev. Stat. §48-1101, et seq., in that there shall be no discrimination against any employee who is employed in the performance of this Contract, or against any applicant for such employment, because of age, color, national origin, race, religion, creed, disability or sex.

7. Conflict of Interest Clause

Pursuant to Neb. Rev. Stat. §23-3113, the parties hereto declare and affirm that no officer, member, or employee of the County, and no member of its governing body, and no other public official of the County who exercises any functions or responsibilities in the review or approval of the undertaking described in this Contract, or the performing of services pursuant to this Contract, shall participate in any decision relating to this Contract which affects his or her personal interest, or any corporation, partnership, or association in which he or she is directly or indirectly interested; nor shall any employee of the County, nor any member of its governing body, have any interest, direct or indirect, in this Contract or the proceeds thereof.

8. Payment Terms

The successful Contractor shall submit an itemized invoice for payment. Sarpy County will make payment to the successful Contractor within thirty (30) days after receipt of invoice and satisfactory services in accordance with the Contract and Special Provisions.

9. Supplemental Terms and Conditions/Modifications

Any supplemental terms, conditions, modifications, or waiver of these terms and conditions must be in writing and signed by the Sarpy County Board Chairman and the Contractor.
10. **Termination**

   Either party may terminate the Contract with ninety (90) days written notice to the other.

11. **Breach**

   Should Contractor breach, violate, or abrogate any term, condition, clause or provision of this agreement, the County shall notify Contractor in writing that such an action has occurred. If satisfactory provision does not occur within ten (10) days from such written notice, the County may, at its option, terminate this agreement and obtain an alternate provider to provide all required materials. This provision shall not preclude the pursuit of other remedies for breach of Contract as allowed by law.

12. **Assignment**

   The Contractor may not assign this agreement without the prior written consent of the County.

13. **Subcontracting**

   Contractor may not subcontract the work to be performed, without prior written consent of the County. If such consent is granted, Contractor will retain responsibility for all work associated with the Contract. The Contractor must identify any subcontractors they intend to use in the execution of this Contract.

14. **Independent Contractor**

   The Contractor shall in the performance of the Contract at all times be an independent contractor and not an employee or agent of the County. The Contractor, its officers, employees and agents shall at no time represent the Contractor to be other than an independent contractor or represent themselves to be other than employees of the Contractor.

15. **Indemnity**

   The Contractor shall indemnify and save harmless Sarpy County, its officers, employees and agents from all loss, claims, suits or actions of every kind and character made upon or brought against Sarpy County, its officers, employees, agents, for or sustained by any party or parties as a result of any act, error, omission or negligence of said Contractor or its servants, agents, and subcontractors; and also from all claims of damage in fulfilling this Contract.

16. **Residency Verification**

   The Contractor agrees to comply with the residency verification requirements of Neb. Rev. Stat. §4-108 through §4-114. The Contractor is required and hereby agrees to use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska. A federal immigration verification system means the electronic verification of the work authorization program authorized by the Illegal Immigration Reform and immigrant Responsibility Act of 1996, 8 U.S.C. 1324a, known as
the E-Verify Program, or an equivalent federal program designated by the United States Department of Homeland Security or other federal agency authorized to verify the work eligibility status of a newly hired employee.

If the Contractor is an individual or sole proprietorship, the following applies:

1. The Contractor must complete the United States Citizenship Attestation Form, available on the Department of Administrative Services website at www.das.state.ne.us.

2. If the Contractor indicates on such attestation form that he or she is a qualified alien, the Contractor agrees to provide the U.S. Citizenship and Immigration Services documentation required to verify the Contractor's lawful presence in the United States using the Systematic Alien Verification for Entitlements (SAVE) Program.

3. The Contractor understands and agrees that lawful presence in the United States is required and the Contractor may be disqualified or the contract terminated if such lawful presence cannot be verified as required by Neb. Rev. Stat. Sect. 4-108.

17. Insurance

The Contractor shall comply with the indemnification and save harmless provisions of the Contract.

18. Guarantee

a. Terms:

The Contractor hereby expressly guarantees the work and materials described herein for the full period of two (2) years from the date of approval and acceptance by the County, and said Contractor binds itself and heirs and assigns for the entire expense of maintaining same in good condition (except normal wear and tear not occasioned by improper methods/materials); and for all repairs or reconstruction which may, from any imperfection in the said work or materials become necessary within the terms of this guarantee. To the extent Contractor was originally responsible for the work or materials (including Supervision) under the Contract documents, the Contractor further agrees to correct and repair promptly during that time all failures of any description and all settlements and shall deliver the work or materials in all respects in good condition and repair.

b. Failure to Make Repairs:

If at any time within the period of guarantee after the completion and acceptance of the work herein contracted for, the work shall, in the judgment of the County, require such repairs or reconstruction as above set out, County shall notify the Contractor. Should the Contractor refuse or neglect to begin to make such repairs within five (5) days from the date of serving such notice, the County shall have the right to cause such repairs or reconstruction to be made in such a manner as County shall deem best, and the cost
thereof shall be paid by the Contractor and Contractor’s sureties or deducted from the reserve fund.

c. Expiration of Guarantee Period:

It shall be the duty of the Contractor to notify the County, in writing, within thirty (30) days prior to the expiration of the guarantee period to inspect the work, and unless the Contractor shall furnish such notice, the obligation to maintain the said improvement in proper condition shall continue in force until thirty (30) days after such notice is sent by the Contractor to the County.

d. Compliance with Laws:

The Contractor shall comply with all Federal and State Laws and County ordinances applicable to work.

e. Onsite Storage:

Sarpy County will not pay the Contractor for stored material(s) on the job site. It will be the responsibility of the Contractor to store materials for the contracted job elsewhere. If the Contractor chooses to store the material(s) on the job site it will be done at their own expense.
COUNTY PROVISIONS

1. **Description of Work**
The work contemplated in this document consists of grading, drainage and paving improvements. Plan sheets provided describe the work required to complete the project.

2. **County Board**
The County Board of Sarpy County, Nebraska shall, in conjunction with the Engineer, be the final arbiter in all controversies concerning the fulfillment of this Contract. No changes in any of the details of the Plans and Specifications shall be made without approval of the Board. The Board shall approve final acceptance of the work and payment of the Contractor.

3. **Retained Percentage**
Sarpy County shall retain ten percent (10%) of estimated amounts earned for partial payments. Upon final payment of the project, all retained monies shall be paid in full, except as specified elsewhere in the contract documents.

4. **Special Provisions**

5. **Field Conditions**
The Contractor shall have carefully examined the construction work sites to establish the field conditions prior to completing the bid. Contractor will not be entitled to additional compensation if it subsequently finds that conditions require methods or equipment other than what the Contractor originally anticipated.

6. **Preconstruction Meeting**
Contractor shall coordinate with Sarpy County’s representative (Engineer) to schedule and run a preconstruction meeting at least 48 hours prior to beginning construction. Representatives from Sarpy County Public Works, the Contractor, any Subcontractors, Utilities, and adjacent businesses shall be invited to discuss upcoming construction activities. Contact information for all representatives is provided in this document. The meeting shall take place at the Sarpy County Public Works building or at an agreed upon location.

7. **Period of Performance and Calendar Days**
Sarpy County and the Contractor shall agree on an expected start date, likely to be no earlier than April 1, 2019. The estimated contract period of performance is specified in the project specific special provisions under the Work Scheduling section.

Calendar days shall refer to all shown on the calendar, including Sundays and holidays, beginning and ending at midnight. Calendar days will only be tabulated in the event substantial completion is not met by the milestone dates specified in the project specific special provisions under the Work Scheduling section.
8. **Taxes**  
Sarpy County will, upon request, furnish the successful Contractor with a completed State of Nebraska Tax Exempt Form 13 upon acceptance of the successful Contractor’s proposal.

9. **Liquidated Damages**  
The time of completion is of the essence of the Contract because the County will be subject to additional financing and administrative expense if the work is not completed within the time period specified in the Agreement.

Therefore, the Contractor shall reimburse the County at the rate of **$1500 per day** for each additional calendar day beyond the milestone dates required to **substantially** complete the work. The time allowed for completion of this Contract shall not be extended except as defined in the project specific Special Provisions, under the **Work Scheduling** section.

Company warrants that pursuant to Neb Rev. Stat. 48-2101, et seq. (1994 Cum. Supp.) it has registered as a Contractor with the State of Nebraska, and that it and any and all subcontractors have obtained any and all necessary licenses and permits required by federal law, state law and/or county ordinances for the work described herein.

10. **Deviations**  
Once the bid has been accepted by Sarpy County, no deviations from the specifications will be accepted without prior written approval of Sarpy County.

11. **Exceptions**  
These specifications are minimum acceptable specifications. You may bid other than what is specified if it is of higher specification than what is requested. Contractor must list any exceptions to the bid specifications on the exceptions/clarifications/comments page provided.

12. **Company Information:**  
Contractor will provide the following company information on the bid form:
   a. Years in business;
   b. Number of employees; and,
   c. Total sales for last three (3) years.

13. **References:**  
Each Contractor must include with their proposal a list of no less than three (3) references that have purchased the specified product or service within the last two (2) years. The list must include the name of the company, and the name and phone number of a contact person for each company.

14. **Equipment/Safety**  
The Contractor shall be responsible for providing all equipment required to protect its employees, the public, surrounding areas, equipment and vehicles including but not limited to the placement of barricades, tarps, plastic flag tape and other safety/traffic control. The cost of such equipment is considered subsidiary to the project and will not be paid for as a separate bid item.
15. **Cleaning**
The Contractor shall keep the premises clean of all rubbish and debris generated by the work involved and shall leave the premises neat and clean.

16. **Maintenance of Traffic/Barricading**
All signing, pavement marking, barricading and traffic control devices shall conform to the State of Nebraska Supplement to the Manual on Uniform Traffic Control Devices, 2011 and the Manual on Uniform Traffic Control Devices, current edition. No lane closures will be allowed without prior authorization from the Engineer.

Control of traffic and protection of the pavement is the responsibility of the Contractor until such time as the work is formally accepted by the Owner. Any damage to the pavement prior to such acceptance shall be remedied by the Contractor at Contractor’s expense.

17. **Damage to Property:**
If any damage occurs to property during the performance of the contract, it shall be the responsibility of the contractor to make repairs and/or replacements.
BOND

KNOW ALL MEN BY THESE PRESENTS, THAT WE

_____________________________________________________________________________________

As principal, and ___________________________________________________________________

_____________________________________________________________________________________

as Surety, are held and firmly bound to the County of Sarpy, Nebraska, in the penal sum of

_____________________________________________________________________________________

to be paid to the COUNTY OF SARPY its successors or assigns, for which payment to be well and truly
made, we bind ourselves and each of us, and each of our heirs, executors, administrators, successors and
assigns, jointly and severally, firmly by these Presents.

Dated this ______ day of____________, 2018

The conditions of this obligation are such that:

WHEREAS, by even date herewith, the said principal has entered into a Contract with the said County of
Sarpy, Nebraska to perform the labor and furnish the material for

_____________________________________________________________________________________

_____________________________________________________________________________________

NOW THEREFORE, the conditions of this obligation are such that if the said principal shall duly perform
and observe all of the stipulations and agreements in said Contract on his part to be performed and
observed, then and in that event, this obligation shall be void and of no effect, but otherwise shall be and
remain in full force and effect. It is expressly agreed that any alterations which may be made therein by
agreement between the said principal and the said County of Sarpy, Nebraska in the terms of said
Contract, or the nature of the work to be done thereunder, or the giving of any extension of time for
performing the said Contract, or of any of the stipulations therein contained, and on the part of the said
principal to be performed, or any other forbearance, shall not in any way release the said surety form this
liability under the above written bond.

It is further expressly agreed and understood that this bond shall stand as surety for the payment of all
accounts and claims that may be due by reason of laborers or mechanics wages for labor that shall be
performed, and for all material which is actually used in performing said Contract.

It is further expressly agreed and understand that this bond shall stand as maintenance surety for the
period of two (2) years on faulty materials and workmanship only. Nothing herein shall be construed to
cover wear and tear occasioned by action of the elements; excepting insofar as such wear and tear
discloses the use of improper materials or construction methods.
In testimony whereof, the said parties hereto have hereunto set their hands this ____ day of ______________________, 2018, and said Surety has caused these presents to be sealed with its Corporate Seal, and duly attested by the signature of its attorney-in-fact, and their authority is attached hereto and made a part thereof.

____________________________________
Principal

_______________________________
Witness

____________________________________
President

_______________________________
Witness

____________________________________
Surety

By:

____________________________________
Attorney-In-Fact
EXCEPTIONS/CLARIFICATIONS/COMMENTS

1. __________________________________________________________________________

2. __________________________________________________________________________

3. __________________________________________________________________________

4. __________________________________________________________________________

5. __________________________________________________________________________

6. __________________________________________________________________________

7. __________________________________________________________________________

8. __________________________________________________________________________

9. __________________________________________________________________________

10. __________________________________________________________________________
Sarpy County, Nebraska
Bid Form
Capehart Road, 144th Street to 132nd Street
Project C-77 (19-09)

The undersigned, having carefully examined the Plans and Specifications, and having examined
the project areas, hereby submit our proposal.

Attached hereto is a Bid Bond in the amount of 5% of the amount bid made payable to the Sarpy
County Treasurer, which is agreed shall be forfeited should the undersigned fail to perform or fail to
furnish bond and securities in accordance with the proposal.

For furnishing all materials, labor, equipment, tools, together with appurtenances and
accessories required to prepare, construct, erect and install the proposed improvements, complete and
ready for operation, our bid as follows:
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<th>QNTY</th>
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<td>66</td>
<td>INSTALL CURB INLET PROTECTION</td>
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<td>67</td>
<td>INSTALL SILT FENCE</td>
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<td>68</td>
<td>INSTALL SEEDING - TYPE B (EROSION CONTROL)</td>
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<td>69</td>
<td>INSTALL TURF REINFORCEMENT MAT - CLASS 1D</td>
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<td>71</td>
<td>RENTAL OF LOADER, FULLY OPERATED</td>
<td>HOUR</td>
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<td>72</td>
<td>RENTAL OF BACKHOE, FULLY OPERATED</td>
<td>HOUR</td>
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<td>73</td>
<td>RENTAL OF DUMP TRUCK, FULLY OPERATED</td>
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<td>RENTAL OF SKID LOADER, FULLY OPERATED</td>
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<td>75</td>
<td>RENTAL OF CRAWLER MOUNTED HYDRAULIC</td>
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<td>EXCAVATOR, FULLY OPERATED</td>
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<td>76</td>
<td>RENTAL OF VACUUM TRUCK, FULLY OPERATED</td>
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GRAND TOTAL $ *

*Prices are to be F.O.B. - Sarpy County, Nebraska

CONTRACTOR START DATE: ____________________________

If notified of acceptance of this proposal and Contract award within sixty (60) days after date stated for receipt of bids, the undersigned agrees to execute a Contract, provide insurance certificates and performance bonds for the above named work and the above stated consideration in the form required within ten (10) days of such proposal acceptance notification; to commence the work within five (5) days of the Contractor’s Notice to Proceed. **Project Substantial Completion must be on or before Tuesday, October 1, 2019 to avoid accrual of liquidated damages.** Final Completion shall be complete within thirty (30) calendar days of Substantial Completion.

Total base bid shall be the basis for establishing the amount of the Performance Bond in this Contract. The Total Base Bid is based on the quantities shown in the Proposal Form and on the dimensions shown in the Plans where specific quantities are not itemized, and is subject to additions or reductions according to the actual construction quantities as determined by the Engineer. Any such change orders shall be made by and become a part of the Engineers Certified Progress Statement(s) of work in progress as well as final completed construction (Project Completion Report(s)).

The undersigned has carefully checked the bid blank quantities against the Plans and Specifications before preparing this Proposal and accepts the said quantities and amounts, as correctly listing the complete work to be done in accordance with the Plans and Specifications.

The County Board reserves the right to waive informalities and irregularities and to award bids which furnish the material and construction that, in their opinion, will serve in the best interest of the County or to reject any/or all bids.
The undersigned also agrees that the time of commencement, rate of progress and time of completion of the work of the Contract are ESSENTIAL CONDITIONS of the Contract and that the Owner may retain a sum of one thousand five hundred dollars ($1500.00) per calendar day from the sum due under the Contract for each calendar day that the Contract remains substantially uncompleted after Thursday, October 1, 2019.

Company Information:

Years in business: _____________________________

# of employees: _____________________________

Total sales last 3 years

References:

Company Name: _____________________________
Address: _____________________________
Contact Name: _____________________________ Phone Number: _____________________________
Date of Purchase: _____________________________

Company Name: _____________________________
Address: _____________________________
Contact Name: _____________________________ Phone Number: _____________________________
Date of Purchase: _____________________________

Company Name: _____________________________
Address: _____________________________
Contact Name: _____________________________ Phone Number: _____________________________
Date of Purchase: _____________________________

Construction successfully completed within the past five (5) years similar in size, scope, and difficulty of construction to the work bid upon.

<table>
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<th>Name of Owner</th>
<th>Name of Project</th>
<th>Amount of Contract</th>
<th># of Contract Days Allowed</th>
<th>Actual # of Days to Complete</th>
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</table>
I certify that this bid is submitted in accordance with the specifications issued by Sarpy County. I affirm that the original Specifications have not been altered in any way. Any alteration of the original Specifications, outside of an alternate bid, may be considered grounds for refusal of the bid.

The undersigned acknowledged receipt of the following addenda (if applicable):

Addendum #1  ________________  
Addendum #2  ________________

Company Name  
Company Representative (Please print)

Authorized Signature  
Telephone Number

Address  
Fax Number

City, State & Zip  
E-Mail Address

*NOTE: Sarpy County is tax exempt and will provide the proper form upon request
EXHIBIT A
CONTRACT AGREEMENT

THIS CONTRACT is made and entered into by and between Sarpy County, Nebraska hereinafter called County, and ______________ hereinafter called Contractor.

In consideration of the following mutual agreements and covenants, it is understood and agreed by the parties hereto that:

1. The Contractor does hereby agree to undertake and construct Sarpy County Project Capehart Road, 144th Street to 132nd Street, Project C-77 (19-09)
Also referred to hereinafter as work, in accordance with terms and provisions hereof and subject to the quality provisions in the accepted Proposal of Contractor for the sum of $_______________________________________________________________________ (written) under penalty of Performance, Payment and Guarantee Bond.

2. The Contractor shall conform with the applicable plans and specifications, applicable Special Provisions and any applicable change order or addenda pertaining thereto or to this Contract, all of which by reference thereto are made a part hereof. Applicable notice to bidders, Instruction to bidders, Bid Proposal of Contractor, Resolution awarding this Contract, the Performance, Payment and Guarantee Bond and all proceedings by the governing body of the County relating to the aforesaid work are made a part hereto by reference thereto.

3. The County agrees to pay the Contractor in accordance with the provisions of the specifications, the accepted Proposal of the Contractor and the provisions of this Contract.

4. All provisions of each document and item referred to in Paragraph 2 above shall be strictly complied with the same as if rewritten herein, and in the event of conflict among the provisions of said documents, the provisions most favorable to the County shall govern, and substitution or change shall be made except upon written direction, the form of which shall be written “Change Order” of the County; and substitution or change shall in no manner be construed to release either party from any specified or implied obligation of this Contract except as specifically provided for in the Change Order.

5. The Contractor warrants that it has neither employed nor retained any company or person, other than bona fide employee working for Contractor to solicit or secure this Contract, and that Contractor has not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission percentage, brokerage fee, gift or any other consideration, contingent upon or resulting from the award or making of this Contract. For breach or violation of this warranty, County shall have the right to annul this Contract without liability, or in its discretion, to deduct from the Contract price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift or contingent fee.

6. County and Contractor promise and agree to comply with all Federal and State laws and County ordinances, and such other rules and regulations as may apply to this Contract, including but not limited to: the Americans with Disabilities Act of 1990 (29 U.S.C.A. 12101, et seq.); the Rehabilitation Act of 1973 (29 U.S.C.A. 701, et seq.); and the Drug Free Workplace Act of 1988 (41
Furthermore, pursuant to Neb. Rev. Stat. §73-102, County and Contractor declare, promise, and warrant that they have and will continue to comply fully with the Title VI of the Civil Rights Act of 1964 as amended (42 U.S.C.A. 1985, et seq.); and the Nebraska Fair Employment Practice Act, Neb. Rev. Stat. §48-1101, et seq., in that there shall be no discrimination against any person who is employed in the performance of this Contract, or against any applicant for such employment, because of age, color, national origin, race, religion, creed, disability or sex.

7. The Contractor shall indemnify and save harmless Sarpy County, its officers, employees, agents and representatives from all claims, suits or actions of every kind and character made upon or brought against the said Sarpy County, its officers, employees, agents and representatives for on or account of any injuries or damages received or sustained by any party or parties by or from the acts or omissions of the said Contractor or its servants, agents, representatives and subcontractors, in doing the work herein contracted for or by or in consequence of any negligence in guarding the same or any improper material used in its construction or by or on account of any act or omission of said Contractor or its servants, agents, representatives and subcontractor or its servants, agents, representatives and subcontractors arising out of any manner connected with the performance of this Contract, and also from all claims or damage for infringement of any patent in fulfilling this Contract.

8. The Contractor agrees to comply with the residency verification requirements of Neb. Rev. Stat. §4-108 through §4-114. The Contractor is required and hereby agrees to use a federal immigration verification system to determine the work eligibility status of new employees physically performing services within the State of Nebraska. A federal immigration verification system means the electronic verification of the work authorization program authorized by the Illegal Immigration Reform and immigrant Responsibility Act of 1996, 8 U.S.C. 1324a, known as the E-Verify Program, or an equivalent federal program designated by the United States Department of Homeland Security or other federal agency authorized to verify the work eligibility status of a newly hired employee.

If the Contractor is an individual or sole proprietorship, the following applies:

1. The Contractor must complete the United States Citizenship Attestation Form, available on the Department of Administrative Services website at www.das.state.ne.us.

2. If the Contractor indicates on such attestation form that he or she is a qualified alien, the Contractor agrees to provide the U.S. Citizenship and Immigration Services documentation required to verify the Contractor’s lawful presence in the United States using the Systematic Alien Verification for Entitlements (SAVE) Program.

3. The Contractor understands and agrees that lawful presence in the United States is required and the Contractor may be disqualified or the contract terminated if such lawful presence cannot be verified as required by Neb. Rev. Stat. Sect. 4-108.
9. **Insurance Requirements**

The Contractor shall not begin work under this Agreement until all insurance certificates have been filed with the Sarpy County Clerk.

The following insurance coverages shall be kept in force during the life of the Agreement and shall be primary with respect to any insurance or self-insurance programs covering the County, its commissioners/supervisors, officials, agents, representatives and employees. These insurance coverages shall specifically state, or be endorsed to state, that thirty (30) days notice shall be given to the County in the event of cancellation of, or material change in, any of the coverages.

a. **Worker’s Compensation and Employers Liability Insurance**

The minimal acceptable limits shall be the statutory limits as required by the State of Nebraska for Coverage A, Workers’ Compensation and $500,000 each accident for Coverage B, Employers Liability.

b. **Commercial General Liability Insurance**

Coverage should include broad form coverage written on a commercial general liability form and written on an occurrence basis. The coverage must protect against claims for damages resulting from bodily injury, including death, personal injury and property damage.

The minimum acceptable limits of liability shall be $1,000,000 each occurrence. If the coverage contains a general aggregate, such limit shall not be less than $2,000,000. The products/completed operations limit shall not be less than $2,000,000. The County shall be named as an additional insured on the insurance coverage required under this section.

c. **Automobile Liability Insurance**

Coverage shall be against claims for damages resulting from bodily injury, including death and property damage, which may arise from the operations of any owned, hired or non-owned automobile. The minimum acceptable limit of liability shall be $1,000,000 Combined Single Limit for each accident. The County is to be named as an additional insured on the insurance coverage required under this section.

d. **Certificate of Insurance**

The Contractor shall furnish the County with a certificate(s) of insurance evidencing the coverage required in this section. If the certificate(s) is shown to expire prior to completion of all the terms of this Agreement, the Contractor shall furnish a certificate(s) of insurance evidencing renewal of its coverage to the County. The County is to be included as an additional insured on the insurance coverage required under this section.
The Contractor shall require each and every Subcontractor performing work under this Agreement to maintain the same coverages required of the Contractor in this Section, and upon the request of the County, shall furnish the County with a certificate(s) of insurance evidencing the Subcontractor’s insurance coverages required in this section.

e. Property Insurance

During the term of the Contract all responsibility for maintenance of property insurance on the work remains solely with the Contractor, who shall, as a minimum requirement, obtain a builder’s “all risk” or equivalent policy form with sufficient limits to cover the total value of the Project, including all the cost of the material, equipment and/or machinery involved under this Contract. This property insurance shall cover portions of the work and materials stored off-site, on-site and in transit.

f. Insurance Company

All insurance coverages herein required of the Contractor shall be written by an insurance company or companies transacting business as an admitted insurer in the State of Nebraska or under the Nebraska Surplus Lines Insurance Act. All insurance companies must possess a minimum A.M. Best Insurance Company rating of A-. Upon request by the County, the Contractor shall furnish evidence that the insurance company or companies being used by the Contractor meet the minimum requirements listed in this section.

Upon request by the County, the Contractor shall furnish the County with complete and accurate copies of the insurance policies required within this section. If at any time during the life of this Contract, the Contractor’s insurance coverages and limits do not meet or exceed the minimum insurance requirements presented in this section, the Contractor is required to notify the County of any deviations from the minimum requirements presented in this section.

10. The Contractor shall pay to the Unemployment Compensation Fund of the State of Nebraska unemployment contributions and interest due under the laws of the State of Nebraska on wages paid to individuals employed in the performance of this Contract, and shall submit to Sarpy County written clearance from the Commissioner of Labor of the State of Nebraska certifying that all payments due of contributions and interest which may have arisen under this Contract have been paid by the Contractor or his subcontractor, to the State of Nebraska Unemployment Compensation Fund. Payment of the final five percent (5%) of the total amount of the Contract shall be withheld until this provision have been complied with as required by Section 48-657 R.R.S. 1943, as amended.

11. The Contractor shall not, in performance of this Agreement, discriminate or permit discrimination against any person because of race, sex, age or political or religious options or affiliations in violation of federal or state laws or local ordinances and further the Contractor shall comply with Sarpy County ordinances pertaining to civil rights and human relations.
12. The Contractor shall procure a policy or policies of insurance which shall guarantee payment of compensation according to the Workmen's Compensation Laws of Nebraska for all workmen injured in the scope of employment; and further agrees to keep said policy or policies in full force by the Contractor throughout the term of this Contract. Certificates of insurance or copies of policies if required by any department of the County, shall be filed by the Contractor with Sarpy County.

13. Except as may otherwise be required by applicable law payment of any balance due to the Contractor under this Contract shall be made by the County to the Contractor upon completion of the Contractor’s work and obligations in accordance with the Contract, upon acceptance thereof by the County, and upon submission of certificate by the Contractor in accordance to above. No payment by the County shall in any way constitute any waiver of any rights of Sarpy County.

14. Pursuant to Neb. Rev. Stat. 23-3113, the Parties hereto declare and affirm that no officer, member, or other employee of the County, and no member of its governing body, and no other public official of the County who exercises any functions or responsibilities in the review or approval of the undertaking described in this Contract, or the performing of services pursuant to this Contract shall participate in any decision relating to this contract which effects his or her personal interest, or any corporation, partnership, or association in which he or she is directly or indirectly interested; nor shall any employee of the County, nor any member of its governing body, have any interest, direct or indirect, in this Contract or the proceeds thereof.

15. Neither County nor Contractor shall engage the services of any person or persons presently in the employ of the other for work covered by this Contract without the express written consent of the employer of such person or persons.

16. Each party declares, represents, warrants and acknowledges that it is not an agent for the other now, nor will it be in the future. Each party is an independent Contractor, and neither party is or will become the employee of the other as a result of the relationship created by this Contract.

17. It is understood and agreed by the parties hereto that any part, term, condition or provision of this Contract is held to be illegal or in conflict with any law of this State or of the United States, the validity of the remaining parts, terms, conditions, or provisions shall not be affected, and the rights and obligations of the Parties shall be construed and enforced as if the Contract did not contain the particular part, term, condition, or provisions held to be invalid.

18. This Contract and documents incorporated herein by reference contain the entire Contract between the Parties, and there are no other written or oral promises, agreement or warrants which may affect it.

19. The Contractor acknowledges that it is, and will, remain fully obligated under the provisions of this Contract, regardless of any delegation of duties or assignment or benefits hereunder. Contractor further acknowledges and promises that the provisions of this Contract shall be made binding on any Subcontractor(s) it may retain. Contractor shall require that all Subcontractors hold County harmless from any and all claims and causes of action resulting from actions or activities of Subcontractor. Contractor shall require that all Subcontractors comply with any
and all applicable State and Federal laws and that Subcontractor(s) obtain any and all necessary permits or licenses necessary to conduct work under this Contract.

20. Contractor **may not** subcontract or assign any portion of Contract without prior written approval from the County.

21. Contractor expressly guarantees all work and materials as described herein.
This Contract cannot be amended except by written agreement of both parties. Notice to the Parties shall be given in writing to the agents of each party named below:

County: Ms. Deb Houghtaling
Sarpy County Board Business Office
1210 Golden Gate Dr., Suite 1250
Papillion, NE 68046

Contractor: __________________________
____________________________
____________________________
____________________________
____________________________

IN WITNESS WHEREOF, the parties hereto have caused these instruments to be executed in THREE original counterparts, this as of this ___ day of ____________, 2018.

County of Sarpy, Nebraska
(SEAL)
A Body Politic and Corporate

CHAIRMAN: __________________________

ATTEST: __________________________

CLERK: __________________________

APPROVED AS TO FORM:

____________________________
COUNTY ATTORNEY/DEPUTY

____________________________
CONTRACTOR: __________________________

ATTEST:

____________________________
SECRETARY/WITNESS

____________________________
PRESIDENT: __________________________
The undersigned, having carefully examined the Plans and Specifications, and having examined the project areas, hereby submit our proposal.

Attached hereto is a Bid Bond in the amount of 5% of the amount bid made payable to the Sarpy County Treasurer, which is agreed shall be forfeited should the undersigned fail to perform or fail to furnish bond and securities in accordance with the proposal.

For furnishing all materials, labor, equipment, tools, together with appurtenances and accessories required to prepare, construct, erect and install the proposed improvements, complete and ready for operation, our bid as follows:
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<thead>
<tr>
<th>#</th>
<th>ITEM</th>
<th>UNIT</th>
<th>QNTY</th>
<th>UNIT PRICE</th>
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<td>13</td>
<td>REMOVE 18&quot; OR SMALLER CULVERT PIPE</td>
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<td>REMOVE PAVEMENT MARKING</td>
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<td>INSTALL TRAFFIC SIGNS &amp; POSTS, SIGNS PROVIDED BY CONTRACTOR</td>
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<td>INSTALL SILT FENCE</td>
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<td>INSTALL TURF REINFORCEMENT MAT - CLASS 1D</td>
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<td>71</td>
<td>RENTAL OF LOADER, FULLY OPERATED</td>
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<tr>
<td>72</td>
<td>RENTAL OF BACKHOE, FULLY OPERATED</td>
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<tr>
<td>73</td>
<td>RENTAL OF DUMP TRUCK, FULLY OPERATED</td>
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<td>74</td>
<td>RENTAL OF SKID LOADER, FULLY OPERATED</td>
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<td>RENTAL OF CRAWLER MOUNTED HYDRAULIC EXCAVATOR, FULLY OPERATED</td>
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<tr>
<td>76</td>
<td>RENTAL OF VACUUM TRUCK, FULLY OPERATED</td>
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<td>GRAND TOTAL</td>
<td></td>
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<td>$</td>
</tr>
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</table>

*Prices are to be F.O.B. - Sarpy County, Nebraska*

**CONTRACTOR START DATE:**

If notified of acceptance of this proposal and Contract award within sixty (60) days after date stated for receipt of bids, the undersigned agrees to execute a Contract, provide insurance certificates and performance bonds for the above named work and the above stated consideration in the form required within ten (10) days of such proposal acceptance notification; to commence the work within five (5) days of the Contractor’s Notice to Proceed. **Project Substantial Completion must be on or before Tuesday, October 1, 2019 to avoid accrual of liquidated damages.** **Final Completion shall be complete within thirty (30) calendar days of Substantial Completion.**

Total base bid shall be the basis for establishing the amount of the Performance Bond in this Contract. The Total Base Bid is based on the quantities shown in the Proposal Form and on the dimensions shown in the Plans where specific quantities are not itemized, and is subject to additions or reductions according to the actual construction quantities as determined by the Engineer. Any such change orders shall be made by and become a part of the Engineers Certified Progress Statement(s) of work in progress as well as final completed construction (Project Completion Report(s)).

The undersigned has carefully checked the bid blank quantities against the Plans and Specifications before preparing this Proposal and accepts the said quantities and amounts, as correctly listing the complete work to be done in accordance with the Plans and Specifications.

The County Board reserves the right to waive informalities and irregularities and to award bids which furnish the material and construction that, in their opinion, will serve in the best interest of the County or to reject any/or all bids.
The undersigned also agrees that the time of commencement, rate of progress and time of completion of the work of the Contract are ESSENTIAL CONDITIONS of the Contract and that the Owner may retain a sum of one thousand five hundred dollars ($1500.00) per calendar day from the sum due under the Contract for each calendar day that the Contract remains substantially uncompleted after Tuesday, October 1, 2019.

Company Information:

Years in business: _____________________________

# of employees _____________________________

Total sales last 3 years _____________________________

References:

Company Name: __________________________________________
Address: __________________________________________
Contact Name: _____________________________ Phone Number: _____________________________
Date of Purchase: _____________________________

Company Name: __________________________________________
Address: __________________________________________
Contact Name: _____________________________ Phone Number: _____________________________
Date of Purchase: _____________________________

Company Name: __________________________________________
Address: __________________________________________
Contact Name: _____________________________ Phone Number: _____________________________
Date of Purchase: _____________________________

Construction successfully completed within the past five (5) years similar in size, scope, and difficulty of construction to the work bid upon.

<table>
<thead>
<tr>
<th>Name of Owner</th>
<th>Name of Project</th>
<th>Amount of Contract</th>
<th># of Contract Days Allowed</th>
<th>Actual # of Days to Complete</th>
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</tbody>
</table>
I certify that this bid is submitted in accordance with the specifications issued by Sarpy County. I affirm that the original Specifications have not been altered in any way. Any alteration of the original Specifications, outside of an alternate bid, may be considered grounds for refusal of the bid.

The undersigned acknowledged receipt of the following addenda (if applicable):

Addendum #1 ___________________
Addendum #2 ___________________

____________________________________________________________________
Company Name                                                              Company Representative (Please print)

____________________________________________________________________
Authorized Signature                                                     Telephone Number

____________________________________________________________________
Address                                                                  Email Address

____________________________________________________________________
City, State & Zip

*NOTE: Sarpy County is tax exempt and will provide the proper form upon request
Contract Special Provisions

SARPY COUNTY, NEBRASKA (2018)
CAPEHART ROAD IMPROVEMENTS
144TH TO 132ND
PROJECT: C77 (19-9)

October 2018
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I. CONTRACTOR PRE-QUALIFICATION

The Contractor (general contractor only) shall be Class 3 Concrete Pavement or Class 10 General prequalified by the Nebraska Department of Transportation at the time of bidding. Any proposals received from general contractors that are not pre-qualified at the time proposals are received will be rejected.

II. GENERAL PROJECT DESCRIPTION

The Sarpy County Capehart Road Improvements Project will generally consist of the following:

The extents of the project are along Capehart Road, starting at Highway 50 (144th Street) and continuing east approximately ½ mile, and along Hwy 50, generally just south of the Capehart Road intersection. The project includes construction of an urban 2-lane section on Capehart Road, and of a northbound, offset right-turn lane on Hwy 50.

The project will also include, but is not limited to, grading, drainage culverts, storm sewer, recreational trail reconstruction, driveway construction, signing and striping, seeding, BMPs, and other related work.

III. STANDARD SPECIFICATIONS AND MATERIALS TESTING

This project is governed by the most recent version of the City of Omaha Standard Specifications for Public Works Construction, 2014, the City of Omaha Materials and Testing Manual for Public Works Construction, and the Nebraska Department of Transportation Standard Specifications for Highway Construction, 2017 Edition, including any published changes or addendum, and shall be used on the Project, except as modified by the Contract Documents. Any units identified by the Contract Documents in units other than English units shall be converted to the appropriate English unit indicated in the Contract Documents or as defined by the Engineer.
IV. CRITICAL PATH METHOD (CPM) SCHEDULE

See Section 108.07, Contractor’s Work Schedule, in the Nebraska Department of Transportation Standard Specifications for Highway Construction 2017, or Later Edition including all Addenda.

The Contractor’s CPM schedule shall include the activities of all utility companies having facilities on the project.

The Contractor shall submit a revised CPM schedule whenever the Contractor’s progress falls behind his/her schedule. The Contractor shall submit the revised schedule within seven (7) days of falling behind his/her schedule.

V. PROGRESSION OF WORK

The Contractor is made aware of the Migratory Bird Treaty Act. The Contractor should schedule clearing and grubbing outside of the primary nesting season, generally occurring between April 1st and July 15th, to the extent practicable. Should it appear that clearing and grubbing will result in unavoidable conflict with a nesting bird’s eggs or young, the Contractor will be required to complete a nesting survey. This may require the Contractor to restructure their activities to avoid an area, thereby allowing fledging of the nest.

The Contractor shall only close lanes on Hwy 50 during active work on the project. At least one through lane shall be open to traffic in each direction at all times.

The Contractor shall coordinate with the adjacent businesses (including Facebook Contractors) and property owners impacted by roadway or driveway closures to clearly identify routes for ingress and egress to the properties as required throughout all phases of the project. The Contractor shall notify all adjacent property owners in writing a minimum of forty-eight (48) hours in advance of any changes in access, parking, or use of their property that may be required to complete the work throughout the duration of the project. A copy of the written notice shall be provided to the Engineer for approval prior to property notification. The Contractor shall place signs along the roadways a minimum of five (5) calendar days in advance of the start of work that would close or shift traffic along the public roadways (subsidiary to Barricades and Warning Signs).

The Contractor shall maintain local access at all times to the six properties accessing Capehart Road (approximate stationing 137+98 Rt., 139+34 Rt., 143+71 and 144+81 Lt. (one property), 149+79 and 153+24 Rt. (one property), 160+92 Rt., and 161+92 Lt.). The Contractor shall also coordinate access with the adjacent data center site contractor (Facebook) throughout the project timeline, which may include access points at approximate stationing 137+98 Lt. and 160+00 Lt.

The Contractor shall focus work at the beginning of the project in order to complete the grading on Capehart Road between stations 150+00 and 158+00, and the installation of the 72-inch culvert at approximate station 154+10. This is necessary to accommodate the anticipated settlement of the roadway embankment on Capehart Road within this area. Additionally, the roadway shall be complete and open to traffic from station 159+00 to the east by July 1st, to allow Facebook permanent site access.

See the “UTILITIES” section of these special provisions for a description and anticipated schedule for completion of the utility work on the project.
VI. WORK SCHEDULING

PURPOSE OF THIS SPECIAL PROVISION

This section of these Special Provisions contains terms and conditions that govern the Contractor's time of performance and failure to perform within the time established. All sections of these Special Provisions are contractual and legally binding.

The Contractor is advised that this project is an integral part of the Sarpy County street network and time is of the essence in completing the work required by the Contract Documents. The Contractor understands that these Special Provisions are necessary because the project as designed will result in prolonged disruption of traffic for the traveling public throughout the length and duration of the project.

The Contractor shall plan and diligently prosecute the work according to the Contract Documents to ensure that the project is completed within the time allowed and that inconvenience to the public is minimized.

The Contractor shall keep the Engineer informed of the most current work schedule on a weekly basis.

NOTICE TO PROCEED/LIMITATIONS/RESPONSIBILITIES

Sarpy County will issue the Notice to Proceed on or before April 1st, 2019, provided that all permits have been acquired, and that the Contractor executes a Contract with Sarpy County for the work and complies with all the requirements of the Contract Documents relating to the issuance of the Notice to Proceed. Any delay in issuing the notice to Proceed on or before April 1st, 2019 due to Contractor-caused circumstances shall not be cause for adding additional days to the completion date.

In order to expedite execution of the Contract, it is required that the Contractor hand-deliver the required Contract Documents to Sarpy County.
GENERAL PROVISION REGARDING TIME OF PERFORMANCE

No Extensions. The establishment of a specified number of calendar days for completing all work except as previously stipulated makes completion of the specified work within the specified timeframe an essential part of the contract. Except as described in Section 108 of the Nebraska Department of Transportation Standard Specifications, no extension of time beyond the specified number of calendar days will be granted to the Contractor for any cause, condition, or event including, but not limited to the following:

- additions to the Contract of necessary repair items discovered during construction;
- weather;
- material shortages;
- coordination with other contractors or utility providers working within the project area. The Contractor shall take into consideration this coordination effort as part of their planned prosecution of work and unit costs in meeting the contract requirements;
- or other limiting factors.

Extra or Additional Work. Extra or additional work including, but not limited to, that work made necessary by alteration of the Plans may be added to the Contract. Any such work will be paid for, but the Contractor is expected to absorb the completion of minor alterations in the Contract Documents without any adjustment to the calendar days specified for completion of the work identified within the Contract. Requests for additional time due to significant alterations in the Contract Documents or differences in site conditions shall be submitted in writing to the Engineer for consideration within five (5) calendar days of verbal or written notification or identification of the alteration or difference.

TOTAL PROJECT COMPLETION DATE

The project shall have two Substantial completions and a Final completion date. The Contractor shall be substantially complete with all work within the number of calendar days specified in the Contract. Substantially complete shall mean open to traffic and include, but not be limited to, the following items in the contract:

- All preparatory items;
- All earthwork items, including settlement grading;
- All pavement, driveway, and related items;
- All drainage/storm sewer items;
- All utility items;
- All signing and striping;
The Contractor shall be complete with all work within the number of calendar days specified in the Contract. Complete shall include, but not be limited to the following items in the contract:

- All substantially complete items;
- All seeding, BMP and fine grading items.

In addition, complete shall include any extra work not contemplated in the original contract or additional quantities of contract items that may be required.

The Contractor shall submit to the Engineer a detailed project schedule for all items necessary to achieve completion a minimum of one (1) week prior to the pre-construction meeting. The Contractor shall provide the Engineer with an updated schedule each week by noon of Thursday for the following week’s work or after any delays that will alter the schedule significantly as determined by the Engineer.

The Contractor shall attend weekly scheduling meetings with the Engineer at a mutually agreed upon location and time. The Contractor shall also coordinate the schedule and progression of work with the Engineer on a daily basis and no alterations shall be made without prior consent by the Engineer. The Contractor shall notify the Engineer prior to the progression of any work no matter how insignificant it may seem. The Engineer shall maintain the meeting minutes and provide an electronic copy of the meeting minutes to the Contractor, Sarpy County, and all meeting attendees.

**LIQUIDATED DAMAGES**

Time is of the essence for the faithful and timely performance of the terms of the Contract. The parties hereto agree that it is not possible to predetermine an amount in actual damages due Sarpy County whenever timely completion is not accomplished; therefore, in lieu of actual damages, the parties to this Contract agree, specified liquidated damages will be deducted from progress payments or retainage for each calendar day the contract remains incomplete after each milestone date and/or the contract period including approved time extensions. Work that continues after the specified contract period does not waive the County’s rights as defined by the Contract Documents. The Engineer reserves the right to suspend time charges on calendar day contracts. The Contractor shall complete all remaining work with diligence. The Engineer has sole authority to determine the date upon which milestone completion has been achieved. Liquidated Damages shall be charged at a rate of **One Thousand Five Hundred Dollars ($1,500.00) per calendar day** for each day that the construction of this project extends beyond the number of calendar days as specified for each milestone in the Contract with any additional days granted by the engineer, provided that full safe use of the newly constructed phase of the facility is denied the public.

<table>
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<tr>
<th>Milestone</th>
<th>Calendar Days</th>
<th>Anticipated Date</th>
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<tr>
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<td>Notice to Proceed</td>
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<tr>
<td>Phase 1A Substantial Complete</td>
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<td>July 1, 2019</td>
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<tr>
<td>Substantial Complete</td>
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<td>October 1, 2019</td>
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<tr>
<td>Final Completion</td>
<td>213</td>
<td>October 30, 2019</td>
</tr>
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</table>

Final Completion shall consist of all work covered in the contract.
VII. UTILITIES

Utility facilities, aerial and/or underground exist within the project limits. The Contractor should request a utility status update at the project preconstruction conference, and/or prior to starting work. The Contractor shall coordinate all construction activities with affected utilities that have identified relocations that are to be completed concurrent with construction.

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

The Contractor shall arrange for utilities to locate and flag their underground facilities prior to digging. Contact the Diggers Hotline of Nebraska at 1-800-331-5666, or for Metro Omaha, at 334-3565, at least forty-eight (48) hours in advance of the commencement of work at any site to allow member utilities to examine the construction site and mark the location of the utilities’ respective facilities.

The Contractor acknowledges that some (or all) of the utility companies, with facilities shown on the drawings may not be members of the Hotline and, therefore, not automatically contacted by the above-referenced telephone number. The Contractor shall be responsible for making itself aware of utility company facilities not reported by the Hotline. The Contractor shall also be responsible for verifying that each utility has responded to such notification.

The Contractor shall coordinate the work and schedule with the utilities.

The following utilities are known to exist within the Project limits, and shall be relocated as a result of the Project by the utility owner. The Contractor shall take into consideration the associated durations of utility relocations, and these durations should be considered in the Contractor’s schedule. The Contractor shall conduct ongoing coordination meetings with all utility owners to facilitate these relocations.

OMAHA PUBLIC POWER DISTRICT (OPPD)

Sarpy County will need to acquire permanent ROW prior to the required OPPD distribution line relocation work. The necessary acquisition is anticipated prior to the construction start date for the project, however portions of the relocation will occur concurrently.

OPPD has a 3-phase overhead line along the south side of Capehart Road from Hwy 50 to approximately station 150+00, then switches to the north side through the remainder of the project. It is anticipated the 13.8kV line along of Capehart Road, will be relocated 1 foot inside the County’s right-of-way line (approximately 49 feet) either side of the centerline of Capehart Road prior to, however, portions of the relocation may need to be done concurrently due to the large cuts. It is anticipated that grading around poles located in the cut sections will be necessary. Some poles will need to be graded around in the fill sections. The Contractor will take care not to damage these poles.

Contact Todd Mclochlin with OPPD at (402) 636-3363 to coordinate.
METROPOLITAN UTILITIES DISTRICT (MUD)
A proposed 12-inch water main will run approximately 120 feet north of the centerline of Capehart Road, generally on private easement.

Construction of the water main may be concurrent with construction, or following roadway construction, as grading will need to be accomplished prior to installation. It is anticipated the installation will begin in mid-June and take approximately 6 weeks pending weather conditions.

Contact John Velehradsky at (402) 504-7914 for coordination.

CENTURYLINK
CenturyLink has a copper line buried just inside ROW until station 144+00, then moves to the centerline of Capehart Road continuing east. The portion of line under the roadway will be replaced. The line services all the properties along the corridor and will require temporary line during relocation. Additionally, a fiber optic line runs along the north side of Capehart Road, which is believed to be deep enough to avoid conflicts. Another fiber optic line runs north-south along the east side of Hwy 50. This work is anticipated to be complete prior to start of roadway construction.

Contact Jack Dodendorf at (402) 572-5814 for coordination.

Verizon & Zayo
Verizon and Zayo have joint facilities along Capehart Road. There are 5 ducts (1-2” and 4-1” lines) running east-west on the south side. The facilities will need to be lowered within the cut sections, specifically between stations 141+40 to 144+75, and 145+00 to 147+00. They will need raised over the 72” culvert around stations 153+90 to 154+23. The lines will need lowered or rebuilt between station 158+00 to the east. This will need to be concurrent with construction and require coordination with grading operations. Additionally, a fiber line runs south along the east side of Hwy 50. Impacts are not anticipated.

Contact Darrel Swenson at (402) 672-0000 for coordination with Verizon.  
Contact Thomas Adams at (816) 699-0320 for coordination with Zayo.

Level 3
Level 3 is located on the east side of Hwy 50 coming north from Fairview Road. The fiber optic line is east of the recreational trail and crosses to the northeast corner of the intersection, then crosses Hwy 50 to the northwest corner. Impacts to the fiber line are not anticipated at this time, however, the vault in the northeast corner may need adjusted to grade.

Contact John Linton at (402) 616-7388 for coordination.  
Contact Tim Huttman at (402) 616-3809 for coordination.

A coordination meeting with the utility companies will be required prior to the pre-construction meeting, and the Contractor’s attendance is mandatory.
VIII. STATUS OF RIGHT-OF-WAY

Negotiations with the adjacent property owners are under way to acquire the additional right-of-way and easements necessary to construct the project. The status of the unacquired right-of-way tracts is estimated as follows:

<table>
<thead>
<tr>
<th>TRACT ID NO.</th>
<th>TYPE</th>
<th>ACQUISITION STATUS</th>
<th>ANTICIPATED ACQUISITION DATE</th>
<th>RIGHT OF ENTRY SIGNED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Construction Easement</td>
<td>Dedicated</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>1A</td>
<td>Permanent Easement</td>
<td>Dedicated</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>Permanent Easement</td>
<td>In process</td>
<td>December 5, 2018</td>
<td>N/A</td>
</tr>
<tr>
<td>2</td>
<td>Construction Easement</td>
<td>In process</td>
<td>December 5, 2018</td>
<td>N/A</td>
</tr>
<tr>
<td>2A</td>
<td>Permanent Easement</td>
<td>In process</td>
<td>December 5, 2018</td>
<td>N/A</td>
</tr>
<tr>
<td>3</td>
<td>ROW</td>
<td>In process</td>
<td>December 5, 2018</td>
<td>N/A</td>
</tr>
<tr>
<td>3</td>
<td>Permanent Easement</td>
<td>In process</td>
<td>December 5, 2018</td>
<td>N/A</td>
</tr>
<tr>
<td>3</td>
<td>Construction Easement</td>
<td>In process</td>
<td>December 5, 2018</td>
<td>N/A</td>
</tr>
<tr>
<td>4</td>
<td>Permanent Easement</td>
<td>In process</td>
<td>December 5, 2018</td>
<td>N/A</td>
</tr>
<tr>
<td>4</td>
<td>Construction Easement</td>
<td>In process</td>
<td>December 5, 2018</td>
<td>N/A</td>
</tr>
<tr>
<td>5</td>
<td>Construction Easement</td>
<td>In process</td>
<td>December 5, 2018</td>
<td>N/A</td>
</tr>
<tr>
<td>6</td>
<td>Construction Easement</td>
<td>In process</td>
<td>December 5, 2018</td>
<td>N/A</td>
</tr>
<tr>
<td>7</td>
<td>ROW</td>
<td>In process</td>
<td>December 5, 2018</td>
<td>N/A</td>
</tr>
<tr>
<td>8</td>
<td>ROW</td>
<td>In process</td>
<td>December 5, 2018</td>
<td>N/A</td>
</tr>
<tr>
<td>8</td>
<td>Construction Easement</td>
<td>In process</td>
<td>December 5, 2018</td>
<td>N/A</td>
</tr>
</tbody>
</table>

If not all right-of-way is acquired and physical possession held by the County prior to the tentative starting date shown elsewhere in these special provisions, other work associated with the project can be completed within existing right-of-way and the Contractor will be allowed to begin work in these areas once a notice to proceed is given. If necessary, the Contractor will be granted an extension of time for completion of work on the various phases of the project if it is substantiated by the Contractor that a delay in the completion of the particular phase of work is caused because of the above tract(s) not being acquired by the anticipated acquisition date.

IX. EXPOSING UTILITIES

The Contractor shall, without extra compensations, furnish all labor, and equipment to make all test holes, excavations, and other work required at any time when directed by the Engineer for the purpose of determining the location and elevation of existing conduits or other structures located beneath the surface of the ground.
X. DUST CONTROL

For dust control, the Contractor shall use any of the following measures or a combination, if necessary:

- tank truck or other such equipment to spread water on the stripped areas;
- tank truck or other such equipment to spread water on haul areas;
- decrease vehicular speed on haul roads; and/or
- as directed by the Engineer.

Dust control will not be paid for directly, but shall be considered subsidiary to items for which the Contract provides direct payment.

XI. STORM WATER DISCHARGES

In compliance with the Federal Water Pollution Control Act, authorization to discharge storm water on this project has been granted under National Pollutant Discharge Elimination System (NPDES) General NPDES Permit Number NER160000 for Storm Water Discharges from Construction Sites to Waters of the State of Nebraska. This permit became effective on November 1, 2016.

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

When required for these locations, the filing of a "Notice of Intent" shall be made by the Contractor directly to the NDEQ.

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

The NDEQ may be contacted at 402-471-8330 for additional information.

XII. STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

The Contractor shall understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit that authorizes the storm water discharges associated with the industrial activity from the construction site. For reference, see the Nebraska Department of Environmental Quality website (www.deq.state.ne.us), Permits & Authorizations.
Additionally, the Contractor, as evidenced by their signature on this proposal, agrees and understands that, if awarded the contract on this project, he/she:

- becomes a co-permittee, along with the Owner(s), to the Nebraska Department of Environmental Quality NPDES General Permit for Storm Water Discharge from construction sites on this project;
- is legally bound to comply with the Clean Water Act to endure compliance with the terms and conditions of the storm water pollution prevention plan and developed under the NPDES permit and the terms of the NPDES permit;
- will hold the Owners harmless for damages or fines arising as a result of non-compliance with the terms if the storm water permits and authorizations associated with the work on this project;
- shall be responsible for maintenance of the sediment control measures until permanent stabilization and covercrop is established;
- shall complete permanent or temporary stabilization within seven (7) calendar days of soil disturbance to the surface of all perimeter controls, topsoil stockpiles, and any other disturbed or graded areas on the project site which are not being used for material storage, or on which actual earth moving activities are not being performed;
- shall complete the approved inspection forms and inspect/maintain all sediment or erosion control practices required under this contract at least once every seven (7) calendar days and after any storm event of greater than 0.5" of precipitation, on the site, during any twenty-four (24) hour period; any necessary repairs or cleanup to maintain the effectiveness of the best management practices shall be made by the Contractor immediately;
- shall update the approved SWPPP plan immediately following any changes or additions to the plan, keep all inspection forms with the SWPPP plan, preferably on site in a mailbox, and provide copies of all inspection forms and modifications to the SWPPP plan to the Owner’s Construction Project Manager, within forty-eight (48) hours of inspection; and
- shall be responsible for the stabilization for a period one-hundred eighty (180) days beyond the date that the NPDES permit has been closed and shall re-stabilize any areas found to be unsuitable by the Engineer at no additional cost to the owner.

XIII. SHOP DRAWINGS

The Contractor shall submit electronic copies of all shop drawings to the Engineer for review. The Engineer will return an electronic copy to the Contractor upon completion of review. Allow ten (10) calendar days for initial review of each submittal.
TECHNICAL PROVISIONS


The Contractor shall not take advantage of any apparent error or omission in the plans or specifications. Upon discovery of such an error or omission, The Contractor shall notify the Engineer immediately. The Engineer will then make such corrections or interpretations necessary to fulfill the intent of the plans and specifications.

I. MOBILIZATION

PART 1 GENERAL

A. Description

1. This item shall consist of all preparatory work and operations associated with the necessary movement of personnel, equipment, supplies and incidentals to the project site and for all the work and operations which must be performed or costs that are necessarily incurred prior to commencing the work. The Contractor shall include all expected costs for movement of their and any subcontractors’ equipment and material necessary to prosecute the work to completion, including any demobilization. Additional payments will not be made for interruptions in the prosecution of the project or if the Contractor fails to adequately assess the actual costs of mobilization.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

A. Method of Measurement and Basis of Payment

1. No measurement for mobilization is required. Fifty percent (50%) payment of the contract unit price per Lump Sum for the item “Mobilization” will be paid with the initial pay estimate. The balance of the item for mobilization will be paid when twenty percent (20%) of the value of the work has been completed. The bid amount for mobilization cannot exceed ten percent (10%) of the total bid amount (including mobilization).
II. CLEARING AND GRUBBING

PART 1 GENERAL

A. Description

1. This item shall consist of clearing the right-of-way to the extent necessary for the construction of the project, per Section 102 of the City of Omaha Standard Specifications for Public Works Construction, 2014, with the exception that trees removed with diameters greater than nine (9) inches and stumps removed with diameters greater than twelve (12) inches shall be included with general clearing and grubbing.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

A. Method of Measurement and Basis of Payment

1. Measurement and payment shall be at the contract unit price per Lump Sum for the item “General Clearing and Grubbing”. Payment shall be full compensation for removal and disposal of vegetation, trees, stumps, and all other objectionable or unwanted material, backfilling, and for furnishing all materials, equipment, tools, labor, and incidentals necessary to complete the work.

III. TOPSOIL REMOVAL AND PLACEMENT

PART 1 GENERAL

A. Description

1. This item shall include the removal of six (6) inches of topsoil from cut areas or areas to be covered by embankments in such quantity as required to cover the slopes, ditches, and shoulders in accordance with the details shown in the plans; loading, hauling, stockpiling if necessary; and the subsequent placing, spreading and finishing of the topsoil material in accordance with Section 801 – Topsoil of the City of Omaha Standard Specifications for Public Works Construction, 2014.

PART 2 PRODUCTS

Not Used.
PART 3  EXECUTION

A. Method of Measurement and Basis of Payment

1. Measurement and payment shall be made at the contract unit price per Square Yard of topsoil placed as surface treatment for the item “Topsoil Removal and Placement”. Payment shall be full compensation for all excavating, loading and hauling, stockpiling and reclaiming the material; for furnishing- and applying water; for disposing of excess material; and for all labor, equipment, tools and incidentals necessary to complete the work.

IV. TEMPORARY CRUSHED ROCK SURFACING

PART 1  GENERAL

A. Description

1. This item shall consist of all work necessary for subgrade preparation, furnishing, hauling, placing, compacting, maintaining, and removing temporary surfacing as shown in the plans, or as directed by the Engineer. Temporary crushed rock surfacing shall be of 3” depth and shall meet the material requirements of Section 302 – Aggregate Surface Course of the City of Omaha Standard Specifications for Public Works Construction, 2014.

PART 2  PRODUCTS

Not Used.

PART 3  EXECUTION

A. Method of Measurement and Basis of Payment

1. Measurement and payment shall be made at the contract unit price per Ton for the item "Temporary Crushed Rock Surfacing". Payment shall be full compensation to install, maintain, and remove the temporary surfacing, and for all materials, equipment, tools, labor, and incidentals necessary to complete the work.
V. SUBGRADE PREPARATION

PART 1 GENERAL

A. Description

1. This item shall consist of all work necessary for subgrade preparation including minor grading, shaping, scarifying, drying, watering, reshaping, compacting, and finishing embankments and excavated areas in the roadbed using grading equipment and hand work to produce a smooth surface conforming to the lines, grades, and typical cross sections as indicated in the plans. This work includes reconstructing the subgrade after removing existing pavements in preparation for pavement construction.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

A. Method of Measurement and Basis of Payment

1. Materials, equipment, tools, labor, and incidentals necessary to complete the work shall not be paid for directly, but shall be considered subsidiary to items for which the Contract provides direct payment.
VI. SETTLEMENT GRADING

PART 1    GENERAL

A. Description

1. This item shall include all work necessary to perform earthwork construction in order to bring the initial roadway grading back to the final roadway grading elevation in areas where settlement has occurred and shall meet material requirements and construction methods of Section 201 – Excavation and Embankment of the City of Omaha Standard Specifications for Public Works Construction, 2014. It is anticipated that approximately 775 Cubic Yards of earthwork will be required to accommodate the settlement on Capehart Road (Sta. 150+00 to 158+00).

2. The Contractor shall be responsible for supplying the necessary material to complete this work. If excess material is available on site, it may be used. If material is be brought from off site, a sample will be required for analysis of suitability.

3. The estimated settlement amounts and periods necessary for this location, as well as settlement monitoring process are described in the Geotechnical Report for the project. The document is made part of the bid documents and also available for review by the Contractor at the Sarpy County Engineer's Office located at 15100 South 84th Street, Papillion, NE, 68046.

PART 2    PRODUCTS

Not Used.

PART 3    EXECUTION

A. Method of Measurement and Basis of Payment

4. Excavating, embankment construction, material hauling, stockpiling, preparing slopes, stepping, disposal of surplus and unsuitable material, grading, shaping, manipulation of excavation or embankment materials, compacting, watering, re-compacting, finishing, settlement monitoring and for all materials, equipment, tools, labor, and incidentals necessary to complete the work shall not be paid for directly, but shall be considered subsidiary to items for which the Contract provides direct payment.
VII. FLUMES & INLETS

PART 1 GENERAL

1. Work shall be performed in accordance with Section 908 Concrete Slope Protection, Ditch Lining, Flumes and Discharge Structures, and Section 916 Catch Basins, Manholes, Inlets, and Junction Boxes of the Nebraska Department of Transportation Standard Specifications for Highway Construction, 2017 Edition, including all Addenda. The sections are amended to include the following.

2. Contractor may submit shop drawings of precast alternatives for review and approval by the Engineer.

PART 2 PRODUCTS

1. Concrete shall be City of Omaha L65M.

PART 3 EXECUTION

A. Method of Measurement and Basis of Payment

1. Measurement and payment shall be made at the contract unit price per Each for the item “Concrete Flume, Type _”. Payment shall be full compensation for all materials, equipment, tools, labor, and incidentals necessary to complete the work.

2. Measurement and payment shall be made at the contract unit price per Each for the item “Reinforced Curb Inlet, Type _”. Payment shall be full compensation for all materials, equipment, tools, labor, and incidentals necessary to complete the work.

3. Measurement and payment shall be made at the contract unit price per Each for the item “Curb Inlet, Type _”. Payment shall be full compensation for all materials, equipment, tools, labor, and incidentals necessary to complete the work.

4. Measurement and payment shall be made at the contract unit price per Each for the item “Area Inlet, Type _”. Payment shall be full compensation for all materials, equipment, tools, labor, and incidentals necessary to complete the work.
VIII. CONSTRUCT ROCK RIP-RAP

PART 1 GENERAL

A. Description

1. This item shall consist of all work necessary to furnish and install Rock Rip-rap, which shall meet material requirements and construction methods of Section 905 of the Nebraska Department of Transportation Standard Specifications for Highway Construction, 2017. Rip-rap filter fabric shall meet material requirements of Section 728 of the Nebraska Department of Transportation Standard Specifications for Highway Construction, 2017.

2. The Rock Rip-rap shall be grouted in place, which shall meet material requirement and construction methods of Section 700 of the City of Omaha Standard Specifications for Public Works Construction, 2014.

PART 2 PRODUCTS

A. Material Specifications

1. Grout:
   a. All grout shall have a minimum 28-day compressive strength equal to 3000 psi.
   b. One cubic yard of grout shall have a minimum of six (6) sacks of type II Portland Cement.
   c. A maximum of 25% type F flyash may be substituted for Portland Cement.
   d. The aggregate shall be comprised of 70% natural sand (fines) and 30% 3/8-inch rock (coarse).
   e. The grout slump shall be between 4-inches to 6-inches.
   f. Air entrainment shall be between 5.5% and 7.5%
   g. To control shrinkage and cracking, 1.5 pounds of fibermesh, or approved equivalent, shall be used per cubic yard of grout.

PART 3 EXECUTION

A. Method of Measurement and Basis of Payment

1. Measurement and payment shall be made at the contract unit price per Ton for the item “Construct Rock Rip-rap - Type ‘_’”. Payment shall be full compensation for all materials, equipment, tools, labor, and incidentals necessary to complete the work.

2. Rip-rap filter fabric shall not be paid for directly, but shall be considered subsidiary to items for which the Contract provides direct payment.

3. Grout shall not be paid for directly, but shall be considered subsidiary to items for which the Contract provides direct payment.
IX. SEWER CERTIFICATION

PART 1 GENERAL

A. Description

1. Sewer certifications for this project shall be certified under the American Concrete Pipe Association (ACPA) Q-Cast Certification Program, or the National Precast Concrete Association (NPCA) Certification Program. Materials shall be stamped with the “Q-Cast” or NPCA Certification stamp.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

X. MANHOLE COVERS

PART 1 GENERAL

A. Description

1. Solid manhole covers shall be used on this project. All manhole rings and covers shall meet City of Papillion requirements. City of Omaha manhole design shall not be used.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.
XI. CULVERTS

PART 1 GENERAL

1. See Section 718 – Culvert Pipe, Section 719 – Flexible Pipe Culverts, Section 720 – Concrete Pipe Culverts, and Section 721 – Driveway Culvert Pipe of the Nebraska Department of Roads Standard Specifications for Highway Construction, 2007 Edition, including all Addenda. The sections are amended to include the following.

2. Excavation and backfilling for culvert pipe will not be measured for payment, but shall be considered subsidiary to the appropriate pipe bid item.

3. Pipe couplers for pipe joints shall be considered subsidiary to the appropriate pipe bid item.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

XII. AGGREGATE BEDDING

PART 1 GENERAL

A. Description

1. This item shall consist of all work necessary for ground preparation, furnishing, hauling, placing, and compacting aggregate bedding, required for storm sewer pipes, which shall meet material requirements and construction methods of Section 701 – Sewer Construction of the City of Omaha Standard Specifications for Public Works Construction, 2014 and City of Omaha Standard Plate 700-01.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

A. Method of Measurement and Basis of Payment

1. Measurement and payment shall be made at the contract unit price per Linear Feet for the item “Aggregate Bedding”. Payment shall be full compensation for ground preparation, furnishing, hauling, placing, and compacting aggregate bedding, and for all materials, equipment, tools, labor, and incidentals necessary to complete the work.
XIII. SEEDING

PART 1 GENERAL

A. Description

1. See Section 803 – Seeding of the Nebraska Department of Transportation Standard Specifications for Highway Construction, 2017 Edition, including all Addenda. The sections are amended to include the following.

PART 2 PRODUCTS

A. Material Requirements

1. All seeds shall comply with applicable State and Federal seed laws.

2. Seed proposed for use shall not be planted without the prior approval of the Engineer.

3. The Contractor shall obtain from the seed dealer and furnish to the Engineer, an analysis of each type and lot of seed he proposes to use. The analysis shall provide complete information on the seed as required by State and Federal seed laws. The engineer may approve use of the seed if the information on the analysis is satisfactory.

4. Erosion control blanket shall be placed over all seeded areas. The erosion control mat (blanket) shall be one-hundred percent (100%) agricultural straw blanket as specified herein and free from all noxious weeds and relatively free from all other weeds and applied as required in these special provisions.

B. Seed

1. Seed shall comply with the following requirements and shall be applied at the rate shown:

<table>
<thead>
<tr>
<th>Type B (NDOR Type B Mix)</th>
<th>Minimum Purity %</th>
<th>Broadcast or Hydraulic Seeded Application Rate in Lbs of Pure Live Seed/Acre</th>
<th>Approved Mech. Drill Application Rate in Lbs of Pure Live Seed/Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perennial Ryegrass - Linn</td>
<td>85</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Slender Wheatgrass</td>
<td>85</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Western Wheatgrass – Flintlock, Barton</td>
<td>85</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Kentucky Fescue</td>
<td>85</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Buffalograss – Cody, Bison,</td>
<td>80</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Sharp’s Improved, Texoka</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sideoats Grama – Trailway, Butte</td>
<td>75</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Sand Dropseed</td>
<td>90</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>(Sporobolus cryptandrus)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oats/Wheat (wheat in fall)</td>
<td>90</td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

a. All of the above are to be planted as one mixture. If any of these species are not available, contact the local Soil Conservation Service Field Office for the necessary information to adjust the seeding mixture.
PART 3 EXECUTION

A. Construction Methods

1. The Contractor shall notify the Engineer at least forty-eight (48) hours in advance of the time they intend to begin work and shall not proceed with such work until permission to do so has been granted by the Engineer.

2. Erosion control mat shall be placed in accordance with Section XIV - Erosion Control of these special provisions. The erosion control mat (blanket) shall be one-hundred percent (100%) agricultural straw blanket (Class 1B) as specified herein and free from all noxious weeds and relatively free from all other weeds and applied as required in these special provisions.

B. Establishment Period

1. The Contractor shall thoroughly water all seeded areas immediately after seeding. The Contractor shall keep all seeded areas thoroughly watered for a period of fourteen (14) calendar days after seeding and as often as required thereafter until all other items of work in the contract have been completed. All grass must be moist and growing at the time of acceptance. Areas of the seeded area which are not growing shall be reseeded and watered for another fourteen (14) calendar days.

C. Method of Measurement

1. The work of seeding will be measured by the Acre, surface measurement, or surface seeded in accordance with these Specifications.

D. Basis of Payment

1. Payment for completed and accepted work, measured as provided herein, shall be made at the contract unit price for the item “Seeding, Type B (erosion control)”. Accepted work shall mean that the grass is “green and growing” to the satisfaction of the Engineer. If the grass seed is not growing to the satisfaction of the Engineer, and the Contractor has not yet reseeded the unsatisfactory areas, a sufficient amount equal to the cost of the seeding item will be retained after the last payment for a period of ninety (90) days or until the grass is growing. Payment shall be full compensation for the furnishing and applying of fertilizer, furnishing and sowing seed, furnishing and applying erosion control mat, preparation of the seedbed, and for all materials, equipment, tools, labor, and incidentals necessary to complete the work.
XIV. EROSION CONTROL

PART 1 GENERAL

1. See Section 810 – Erosion Control of the Nebraska Department of Transportation Standard Specifications for Highway Construction, 2017 Edition, including all Addenda. The section is amended to include the following.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

XV. EROSION CHECKS

PART 1 GENERAL

1. See Section 812 – Silt Checks of the Nebraska Department of Transportation Standard Specifications for Highway Construction, 2017 Edition, including all Addenda. The section is amended to include the following.

2. Section 812.05 is amended to include the following:

Basis of Payment

1. Pay Item                  Pay Unit
   Rental of Vacuum Truck, Fully Operated     Hour

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.
XVI. EROSION AND SEDIMENTATION CONTROL (INCLUDING SWPPP)

PART 1 GENERAL

A. Description

1. Section Includes:
   a. Installation of temporary and permanent erosion and sedimentation control systems.
   b. Installation of temporary and permanent slope protection systems.
   c. Storm Water Pollution Prevention Plan (SWPPP).

2. Related Specifications Sections:
   b. City of Omaha Standard Specification Chapter 500 – Portland Concrete Pavement
   c. City of Omaha Standard Specification Chapter 700 – Storm Sewers
   d. City of Omaha Standard Specification Chapter 800 – Roadside Improvement and Erosion Control
   e. Nebraska Department of Transportation Standard Specification Section 204 – Temporary Water Pollution Control
   f. Nebraska Department of Transportation Standard Specification Division 800 – Roadside Development and Erosion Control
   g. Project Special Provisions for temporary erosion control, erosion control blanket, fertilizing, seeding, and mulching requirements.

B. Environmental Requirements

1. Protect adjacent properties, any identified endangered or threatened species or critical habitat, any identified cultural or historic resources, and receiving water resources from erosion and sediment damage until final stabilization is complete and permanent vegetative cover or sediment and erosion control is established.

PART 2 PRODUCTS

A. Material Requirements

1. Seed, sod, and ground covers for the establishment of vegetation shall be completed immediately upon completion of the finish grading for the project in accordance with the Standard Specifications and the Contract Technical Provisions. Seed material and sod shall be as specified in the Contract Technical Provisions.
2. Silt fence and other erosion control devices for sedimentation control as specified on the construction drawings and as specified in the Special Provisions (permanent and temporary).

3. Erosion control products in accordance with Construction Drawings and as listed on the Nebraska Department of Transportation approved products list.

4. Temporary mulches, such as loose straw, wood cellulose, or agricultural silage.

5. Temporary and permanent outfall structures as specified on the Construction Drawings.

PART 3 EXECUTION

A. General

1. Subsection 101.03 (A) of the City of Omaha Standard Specifications for Public Works Construction, 2014, is amended to include the following:

   The Contractor shall follow the approved Storm Water Pollution Prevention Plan (SWPPP) to: minimize erosion on disturbed areas; minimize the discharge of sediment and other pollutants in storm water runoff; and maintain compliance with the requirements of NPDES General Permit NER160000. The authorization number is CSW-201803089. The Contractor shall familiarize himself with the requirements of NPDES General Permit CSW-201803089, particularly sections relating to the SWPPP and periodic reporting and record keeping requirements. The word “permittee” shall be replaced with “Contractor” in the above referenced sections of NPDES CSW-201803089.

2. The Contractor shall be solely responsible for implementing and maintaining all required measures of the Storm Water Permit. To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless Owner and Engineer and the officers, directors, partners and employees from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, attorneys, and other professionals and all court or arbitration or other disputed resolution costs) arising out of or relating to the Contractor’s failure to comply with the conditions and requirements of the Storm Water Permit.

3. Silt fence, as shown in the plans, must be installed prior to the commencement of grading operations. Short segments of silt fence may be temporarily taken down to facilitate construction, but the silt fence must be reinstalled when grading operations are stopped for the day. Payment for work done shall be withheld until, in the opinion of the Engineer, adequate erosion control measures are in place.

4. Failure of the Contractor to furnish, install and maintain temporary erosion control devices may result in the Engineer directing the Contractor to cease construction at the site until all deficiencies in the temporary erosion control plan have been corrected. Any work stoppage resulting from the Contractor’s failure to implement and adequately maintain temporary erosion and sediment control measures shall not be grounds for an extension in contract time.
5. Review the Construction Drawings and SWPPP. The SWPPP is available for review at the Olsson Associates office, 2111 S. 67th Street, Suite 200, Omaha, NE 68106.

6. Revise SWPPP if necessary to address potential pollution from site identified after issuance of the SWPPP at no additional cost to the Owner.

7. The Contractor shall be required to provide access drives to the construction site consisting of crushed rock or crushed concrete surfacing to minimize the tracking of mud onto public roadways. Crushed rock surfacing shall also be used at all areas where the Contractor parks equipment or other vehicles. The crushed rock surfacing shall be maintained throughout the course of the construction so that tracking of mud onto public roadways is minimized. Crushed rock used to build the construction drives and equipment parking areas shall not be paid for directly, but shall be considered subsidiary to items for which the Contract provides direct payment.

B. Erosion and Sedimentation Control and Slope Protection Implementation

1. Place erosion control systems in accordance with the drawings and the SWPPP or as may be dictated by site conditions in order to maintain the intent of the Specifications, Project Special Provisions and permits.

2. Deficiencies or changes on the drawings or SWPPP shall be corrected or implemented as site conditions change. Changes during construction shall be noted in the SWPPP and posted in the drawings (Site Map).

3. The Contractor shall schedule clearing and grubbing activities on the project to limit the amount of disturbed or exposed ground that is susceptible to erosion. Permanent seeding shall be implemented at all exposed areas where construction work has been completed or where further work will not be occurring within the next twenty-one (21) days.

4. The Contractor shall implement construction techniques that utilize natural buffer areas consisting of existing vegetation at the perimeter of the construction site and adjacent to any natural discharge points to minimize or eliminate discharge of potential sediment from the construction site. Buffer areas shall be a minimum of thirty feet (30') where practical and shall be used in conjunction with silt fence and other sediment control devices as part of the temporary erosion control plan.

5. Owner has authority to limit surface area of erodible earth material exposed by clearing and grubbing, excavation, borrow and embankment operations and to direct Contractor to provide immediate permanent or temporary pollution control measures.

6. Inspect and maintain temporary erosion and sedimentation control systems as dictated by site conditions, as indicated in the construction documents, or as directed by governing authorities or Owner to control sediment until final stabilization. Contractor shall respond to maintenance or additional work ordered by Owner or governing authorities immediately. If extenuating circumstances exist, additional response time may be permitted by the Owner or the Project Engineer, but never more than seven (7) days. Additional response time for implementing, maintaining, or repairing erosion control measures shall not be at the expense of the Owner.
7. The Contractor shall be required to cleanup any mud that is tracked onto public roadways at the end of each workday, or as directed by the Engineer. If the Contractor is directed by the Engineer to clear mud from the roadways, then the Contractor shall complete this work within twenty-four (24) hours from the time notification was given. If the Contractor does not comply with the Engineer’s direction to clear the mud from the streets within the allotted time period, then the Engineer may elect to have the County/State clean the streets and all costs associated with cleaning mud from the streets shall be deducted from contract payments to the Contractor. No direct payment shall be made for cleanup of mud that is tracked on to the public roadways and all costs associated with this work shall be considered subsidiary to other items for which direct payment is made.

8. The Contractor shall install and maintain temporary sediment control devices around all inlets to existing storm sewer system during the removal of the pavement and portions of the existing storm sewer. This may include installation of temporary silt fence or other approved sediment barriers at the end of the work day at open ends of existing storm sewers, inlets or manholes that are to remain in place to prevent discharge of material into the existing storm sewer system.

9. The Contractor shall install and maintain temporary sediment control devices around all ends of new storm sewers at the end of each work day to prevent discharge of sediment into the storm sewer system.

10. Contractor shall incorporate permanent erosion control features, paving, permanent slope stabilization, and vegetation into project at earliest practical time to minimize need for temporary controls.

11. Permanently seed and mulch cut slopes as excavation proceeds to extent considered desirable and practical.

12. Failure of the Contractor to furnish, install and maintain erosion control devices, including temporary construction access drives, may result in the Engineer directing the Contractor to cease construction at the site until all deficiencies in the erosion control plan have been corrected. Any work stoppage resulting from the Contractor’s failure to implement and adequately maintain erosion and sediment control measures shall not be grounds for an extension in contract time.

13. Unless required within a shorter timeframe by the applicable General Permit for Storm Water Discharges Associated with Construction Activity, slopes that erode easily or that will not be graded for a period of fourteen (14) days or more shall be temporarily stabilized as work progresses with mulch as stipulated in the special provisions or by other acceptable means as directed by the Engineer. In the event it is not practical to seed areas, slopes must be stabilized with mulch and tackifier, bonded fiber matrix, netting, blankets or other means to reduce the erosive potential of the area.

14. The Contractor shall maintain all permanent seeding as stipulated in the Project Special Provisions. This shall include fertilizing, watering, weed control and cutting of the grasses as necessary until the vegetation has established sufficient ground cover as required by the NPDES Permit. Weed control and cutting of seeded or sodded areas
shall continue upon establishment of the grasses in accordance with the requirements outlined in the City Standard Specifications and the Project Special Provisions.

XVII. CRUSHED ROCK FOR ROADWAY SURFACING

PART 1 GENERAL

A. Description

1. This item shall consist of all work necessary for subgrade preparation, furnishing, hauling, placing, and compacting crushed rock surfacing for roadways as shown in the plans, or as directed by the Engineer. Crushed rock roadway surfacing shall consist of a 3" base thickness of 1-1/2" crusher run limestone that is rolled in with a sheep's foot roller or similar equipment to get the rock worked into the subgrade and a 3" surface thickness of 3/4" crusher run limestone that is spread in a uniform thickness.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

A. Method of Measurement and Basis of Payment

1. Measurement and payment shall be made at the contract unit price per Square Yard for the item "Crushed Rock Surfacing". Payment shall be full compensation to install the crushed rock roadway surfacing, and for all materials, equipment, tools, labor, and incidentals necessary to complete the work.
XVIII. CRUSHED ROCK FOR RECREATIONAL TRAIL

PART 1 GENERAL

A. Description

1. This item shall consist of all work necessary for subgrade preparation, furnishing, hauling, placing, and compacting crushed rock embedment and surface course for recreational trails as shown in the plans, or as directed by the Engineer.

2. Crushed rock embedment shall generally follow Section 313 – Crushed Rock Embedment of the Nebraska Department of Transportation Standard Specifications for Highway Construction, 2017 Edition, including all Addenda.

3. Crushed rock surfacing shall generally follow Section 310 – Rock or Gravel Surfacing of the Nebraska Department of Transportation Standard Specifications for Highway Construction, 2017 Edition, including all Addenda.

PART 2 PRODUCTS

A. Material Requirements

Crushed rock for recreational trail surfacing shall meet the following gradation requirements:

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<th>Percent Passing</th>
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<tr>
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</table>

PART 3 EXECUTION

A. Method of Measurement and Basis of Payment

1. Measurement and payment shall be made at the contract unit price per Square Yard for the item "Construct Recreational Trail Surfacing". Payment shall be full compensation to embed the crushed rock, install the crushed rock roadway surfacing, and for all materials, equipment, tools, labor, and incidentals necessary to complete the work.
XIX. WORK ZONE TRAFFIC CONTROL

PART 1 GENERAL

A. Summary

1. See Section 422 – Temporary Traffic Control Signs and Devices of the Nebraska Department of Transportation Standard Specifications for Highway Construction, 2017 Edition, including all Addenda. The section is amended to include the following.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

A. Traffic Control Plans

1. Construction Staging and/or Phasing

a. The Contractor shall coordinate with the Engineer to determine the site-specific staging and/or phasing requirements. The Contractor shall schedule the work in such a manner as to comply with the staging and/or phasing requirements contained in the Contract Documents.

2. Submission

a. The Contractor shall submit Traffic Control Plans in drawing form for the review and approval of the Engineer, two (2) weeks prior to proposed work. No phase of construction shall commence until the Traffic Control Plans have been approved. Approved Traffic Control Plans shall not be revised without prior approval of the Engineer. Revisions shall be submitted in accordance with the above requirements. The development of Traffic Control Plans shall not be paid for directly, but shall be considered subsidiary to items for which the Contract provides direct payment.

b. Traffic Control Plans for street closure and major detours of local and/or through traffic shall be submitted to the Engineer at least ten (10) calendar days in advance of the closure or detouring. Traffic Control Plans not involving closures or major detours shall be submitted a minimum of three (3) business days prior to implementation.

c. The Traffic Control Supervisor shall provide a night telephone number to assure twenty-four (24) hour availability.

3. Format

a. Traffic Control Plans shall include detailed signing, barricading, traffic detouring information, and pedestrian routing information for each phase or stage of construction including as a minimum: type and number of devices as specified in...
the MUTCD, working hours, number and location of flaggers, new striping and signing locations, and time restrictions, if any. Traffic Control Plans shall either be on 11" x 17" or 22" x 34" paper or mylar to an appropriate scale, as determined by the Engineer.

4. Availability
   a. Two (2) copies of the approved Traffic Control Plans shall be available on-site at all times; the Contractor shall provide three (3) copies to the Engineer.

5. Work Limits
   a. The Contractor shall not exceed the work limits specified for each phase or stage of construction, unless approval to do so is granted by the Engineer. Approval of such a change will only be granted subject to the requirements stated in the Construction Phasing section of these Special Provisions. Any work beyond the limits of public right-of-way and/or easements shall be approved in writing by the property owner and approved by the Engineer.
   b. Should the Contractor fail to maintain the work within the specified limits, the Engineer shall direct that all operations be suspended until the work is returned to the specified limits. Any costs incurred by the Contractor due to such suspension shall be at the Contractor’s expense and no additional compensation or time extensions shall be made therefore.

6. Notification
   a. The Contractor shall provide any changes and/or information to the Engineer on a daily basis, and if required by the approved Traffic Control Plans, shall also provide news release and/or public contact.

B. Traffic Control Supervisor

1. Qualifications
   a. The Contractor shall designate a Traffic Control Supervisor who shall perform the traffic control management and shall be responsible for maintaining all traffic control devices in compliance with the approved Traffic Control Plans.
   b. The Traffic Control Supervisor shall be either an employee of the Contractor, other than the Superintendent, or an employee of a firm that has a subcontract for the overall traffic control management for the project.
   c. The name of the Traffic Control Supervisor shall be submitted to the Engineer and the Engineer’s approval shall be obtained prior to commencing construction. The Traffic Control Supervisor shall have an up-to-date copy of part VI of the MUTCD (and revisions thereof) and City of Omaha Manual of Barricading Standards, Specifications, Methods and Materials available on-site at all times.
2. Working Hours and Emergency Contact

a. The Traffic Control Supervisor shall be available on a twenty-four (24) hour per day basis. The Contractor shall make arrangements so that the Traffic Control Supervisor, or their representative as approved by the Engineer, will be available on every working day and upon the request of the Engineer.

b. The Contractor shall maintain a twenty-four (24) hour, seven (7) days a week (including weekends and holidays) emergency service to remove, install, relocate, and maintain warning devices. The Contractor shall furnish to the Engineer the name and telephone number of the Traffic Control Supervisor responsible for emergency service.

c. In the event the Traffic Control Supervisor does not respond within two (2) hours, or the Engineer deems it necessary to call out other forces to accomplish emergency services, the Contractor will be held responsible for the cost of such emergency services, without reimbursement.

3. Duties

a. The Traffic Control Supervisor duties shall include, but not be limited to:

   i. Preparing, revising, and submitting the Traffic Control Plans as required.

   ii. Direct supervision of project flaggers.

   iii. Coordinating all traffic control operations, including those of subcontractors and suppliers.

   iv. Coordinating project activities with appropriate police and fire control agencies.

   v. Inspecting traffic control devices on every calendar day that traffic control devices are in use (to be performed by the Traffic Control Supervisor or their approved representative).

   vi. Insuring that traffic control devices are functioning as required.

   vii. Overseeing all requirements covered by the plans and specifications that contribute to the convenience, safety, and orderly movement of traffic.

C. Access to Adjacent Properties

1. The Contractor shall notify all affected residents and/or property owners a minimum of forty-eight (48) hours prior to restricting normal access from public streets to adjacent properties. The Contractor shall inform each resident and/or property owner of the nature of the access restriction, the approximate duration of the restriction, and the best alternate access route for that particular property. Any closure of access to or from adjacent property shall be submitted to the Engineer and approved prior to implementation.
D. Re-Opening to Traffic

1. Before reopening any portion of the public streets to vehicular traffic, the Contractor shall restore the pavement as required by the Plans and Specifications, shall reset all signs, and shall restore all pavement markings. If necessary, a temporary asphalt concrete surface and temporary pavement markings shall be installed and maintained by the Contractor at their expense. Any signs damaged as a result of the Contractor's work shall be repaired or replaced to the requirements of the Engineer; said repair or replacement shall be at the Contractor's expense.

E. Non-Compliance

1. Failure to comply with any of the requirements for safety and traffic control of this Contract shall result in suspension of work and/or payment reduction for non-compliance.

2. Any action on the part of the Contractor that results in non-compliance with the approved Traffic Control Plans and/or the requirements of this section may be cause for reduction in payment. Non-compliance shall include failure to have the Traffic Control Plans on the job site at all times when in effect and failure to be able to produce the Traffic Control Plans upon request of the Engineer or his/her authorized representative.

3. The payment shall be reduced by an amount equal to the total of the sum of the traffic control bid items ("Install Traffic Control"). The total of the sum of the traffic control bid items amount divided by the total number of contract days as stated in the bid documents multiplied by the number of days when the Contractor is not in compliance with the approved Traffic Control Plans and/or the requirements of this section. In no case shall the amount of the reduction in payment per day be less than one percent (1%) of the total of the sum of the traffic control bid items.

4. The Contractor shall not close any portion of the public roads or begin any work which may impact drive access to adjacent properties without the permission of the Engineer.

F. Method of Measurement and Basis of Payment

1. Measurement and payment for flashing arrow panels shall be made at the contract unit price per Day (per each unit per calendar day when in use) for the item "Furnishing and Operating Flashing Arrow Panel". Payment shall be full compensation for furnishing, placing, maintaining, relocating, and for all other materials, equipment, tools, labor, and incidentals necessary to complete the work.

2. Measurement and payment for changeable message signs shall be made at the contract unit price per Day (per each unit per calendar day when in use) for the item "Changeable Message Sign". Payment shall be full compensation for furnishing, placing, maintaining, relocating, and for all other materials, equipment, tools, labor, and incidentals necessary to complete the work.

3. Measurement and payment for providing temporary traffic control shall be by a Lump Sum for the item "Temporary Traffic Control." This shall include temporary traffic control devices (barricades and warning signs) furnished, erected, maintained, removed, and accepted. Individual traffic control devices will not be measured separately.
quantity of traffic control devices required shall include, but not be limited to, the type and amount of devices shown on the traffic control plans in the Contract Documents, and additional traffic control devices as directed by the Engineer. Payment shall be full compensation for furnishing, placing, maintaining, relocating, removal, and for all other materials, equipment, tools, labor, and incidentals necessary to complete the work.

XX. PREFORMED PAVEMENT MARKINGS

PART 1 GENERAL

A. Description

1. This item shall include all work necessary to perform preformed pavement markings as shown in the plans and shall meet material requirements and construction methods of Section 423 – Permanent Pavement Marking of the NDOT Standard Specifications for Highway Construction, 2017 Edition.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

Not Used.

XXI. PAINTED PAVEMENT MARKINGS

PART 1 GENERAL

A. Description

1. This item shall include all work necessary to perform painted pavement markings as shown in the plans and shall meet material requirements and construction methods of Section 905 – Pavement Markings of the City of Omaha Standard Specifications for Public Works Construction, 2014.

2. The painted markings specified as grooved, shall be placed within grooved channels or recesses to the specifications defined in Table 905.05 – Groove Requirements.

PART 2 PRODUCTS

Not Used.
PART 3  EXECUTION

A. Method of Measurement and Basis of Payment

1. Measurement and payment for linear markings shall be made at the contract unit price per Linear Feet for the item “Permanent Painted Pavement Marking - ___” based on established plan quantities. Payment shall be full compensation for all materials, equipment, tools, labor, and incidentals necessary to complete the work.

2. Measurement and payment for non-linear markings shall be made at the contract unit price per Linear Feet for the item “Permanent Painted Pavement Marking - ___” based on established plan quantities. Payment shall be full compensation for all materials, equipment, tools, labor, and incidentals necessary to complete the work.

3. Measurement and payment for marking symbols shall be made at the contract unit price per each for the item “Permanent Painted Pavement Marking Symbol - ___” based on established plan quantities. Payment shall be full compensation for all materials, equipment, tools, labor, and incidentals necessary to complete the work.

4. Payment will be made under the following unless otherwise indicated in the Contract Documents. This price shall be full compensation for the cost for grooving, furnishing and installing the pavement markings, and furnishing and installing primer; and all materials, labor, equipment, tools, and incidentals necessary to complete the work.
SARONT
OR S DEPARTMENT
2111 South 67th Street,
Suite 200
Omaha, NE 68106
TEL 402.341.1116
FAX 402.341.5895

CAPEHART ROAD | FROM 144TH ST. TO 132ND ST.
FINAL PLANS

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2. GENERAL NOTES & SUMMARY OF APPROX. QUANTITIES
3-4. VERTICAL & HORIZONTAL CONTROL
5-6./miter AND CURB DETAILS
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10-17. DRAINAGE, CUTS, AND GRADES
18-23. DRAINAGE AND CONSTRUCTION
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APPLICABLE NDOT STANDARD PLANS

IN CASE OF A DISCREPANCY:
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2. SPECIAL PROVISIONS SHALL GOVERN OVER THE PROJECT PLANS
3. PROJECT PLANS SHALL GOVERN OVER STANDARD PLANS

C-77 (19-9)
### CAPEHART ROAD

#### CAPEHART DRIVEWAY

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#### HIGHWAY 50

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#### CONTROL POINTS

1. **Horizontal Control**
   - SHEET 2111 South 67th Street, Suite 200, Omaha, NE 68106
   - TEL 402.341.1116
   - FAX 402.341.5895

---

**SECTION CORNERS**

1. **CAPEHART ROAD**
   - SHEET C-77 (19-9)
   - **CAPEHART DRIVEWAY**
     - STARTING AT SILO #1
     - ENDING AT SILO #2
   - **HIGHWAY 50**
     - STARTING AT SILO #3
     - ENDING AT SILO #4

---

**HORIZONTAL CONTROL**

- **SCHEMATIC**
- **SCALE 1:500**
- **DRAWN BY**
- **CHECKED BY**
- **SIGNED**
- **DATE**

CAPEHART ROAD

MATCHLINE          STA. 139+00

MATCHLINE          STA. 309+00

GEOMETRIC DATA
POINT STA. 135+95.00, 32.00' LT; N 491981.05, E 2704760.69
POINT STA. 136+05.00, 32.00' LT; N 491981.42, E 2704770.68

GEOMETRICS, JOINTS, & GRADES
CURB TAPER - PER STD. PLT. 500-52
POINT STA. 137+38.33, 53.05'' RT; N 491901.42, E 2704907.09
POINT STA. 137+56.20, 74.41'  RT; N 491880.75, E 2704925.75
POINT STA. 137+58.41, 72.64'  RT; N 491882.60, E 2704927.90
POINT STA. 137+72.16, 88.57'  RT; N 491867.19, E 2704942.23

P.I. STA. 138+08.87, 43.89' RT; N 491913.21, E 2704977.25
P.C. STA. 138+08.87, 43.89' RT; N 491913.21, E 2704977.25
P.T. STA. 138+33.78, 21.00' RT; N 491937.03, E 2705001.28

R = 36.00' DELTA = 45° 08' 33", L = 28.36', T = 14.96'
P.C. STA. 137+96.15, 68.43' RT; N 491888.22, E 2704965.45
P.T. STA. 138+08.87, 43.89' RT; N 491913.21, E 2704977.25

25.00' R.P. STA. 138+33.77, 346.00' RT; N 491912.03, E 2705002.21
P.C. STA. 138+08.87, 43.89' RT; N 491913.21, E 2704977.25
P.T. STA. 138+33.78, 21.00' RT; N 491937.03, E 2705001.28

P.I. STA. 135+95.00, 58.13' RT ; N 491890.98, E 2704764.06
R = 100.00' DELTA = 154° 22' 12", L = 49.20', T = 22.75'
P.C. STA. 136+05.00, 35.39' RT; N 491914.08, E 2704773.20
P.T. STA. 135+94.18, 82.97' RT; N 491866.13, E 2704764.17
P.I. STA. 136+05.00, 60.41' RT ; N 491889.08, E 2704774.14
R = 110.00' DELTA = 154° 22' 12", L = 44.73', T = 25.02'
P.C. STA. 135+95.00, 35.39' RT; N 491913.71, E 2704763.21
P.T. STA. 135+85.16, 78.64' RT; N 491870.11, E 2704755.00

14.00' R.P. STA. 137+73.72, 34.84' RT; N 491920.94, E 2704941.78
P.C. STA. 137+73.72, 21.00' RT; N 491866.07, E 2704941.27
P.T. STA. 137+73.72, 49.00' RT; N 491906.79, E 2704942.31

10.00' R.P. STA. 137+46.58, 58.00' RT; N 491895.78, E 2704953.57
P.C. STA. 137+45.58, 46.00' RT; N 491938.78, E 2704943.19
P.T. STA. 137+45.00, 32.00' RT; N 491918.02, E 2704948.42
P.O. STA. 137+45.00, 32.55' LT; N 491979.72, E 2704710.70
P.T. STA. 137+45.00, 32.55' LT; N 491979.72, E 2704710.70
P.C. STA. 136+05.00, 32.55' LT; N 491981.97, E 2704770.66
P.T. STA 135+81.13, 80.45' LT; N 492028.94, E 2704745.01

LIP CURB THROUGH DRIVEWAYS
DROP CURB THROUGH CURB RAMPS
CURB TRANSITION TO LIP CURB

NOTE: 1. DRAWING SHOWS ONE OF FOUR QUADRANTS. CURB, DRIVEWAY,們NTERSECTION Details ARE SHOWN IN 0.25' STAGES. Any details AND Details SHOWN ARE NOT COMPLETE AND ARE Meant FOR USE IN THE FIELD. MECHANICAL, ELECTRICAL, OR PIPING DETAILS ARE SHOWN IN THE FIELD. DETAILS SHOWN ARE SUBJECT TO CHANGE.
2. Details ShOWN ARE NOT Complete AND ARE Meant FOR USE IN THE FIELD. DETAILS SHOWN ARE SUBJECT TO CHANGE.
3. TYPICAL CrossSections SHOWN ALONG ROCKINGS IN TO SHOW CURB TRANSITION SPECIFIED.
CAPEHART ROAD

GEOMETRIC DATA

25.00' R.P. STA. 139+08.19, 54.73' RT; N 491906.10, E 2705076.91
P.C. STA. 139+39.70, 44.33' RT; N 491917.67, E 2705108.00
P.T. STA. 139+64.64, 21.00' RT; N 491941.92, E 2705132.05

25.00' R.P. STA. 139+64.65, 46.00' LT; N 491917.99, E 2705132.99
P.C. STA. 139+39.70, 44.33' RT; N 491917.67, E 2705108.00
P.T. STA. 139+64.64, 21.00' RT; N 491941.92, E 2705132.05

25.00' R.P. STA. 143+44.54, 21.00' LT; N 492014.37, E 2705550.06
P.C. STA. 143+44.49, 21.00' LT; N 492014.37, E 2705550.06
P.T. STA. 143+44.53, 21.00' LT; N 492014.37, E 2705550.06

25.00' R.P. STA. 143+77.473, 100.00' LT; N 492078.28, E 2705540.02
P.C. STA. 143+89.28, 98.09' LT; N 492076.82, E 270555.93
P.T. STA. 143+89.29, 98.09' LT; N 492076.82, E 270555.93

25.00' R.P. STA. 144+06.23, 46.00' LT; N 492025.38, E 2705570.82
P.C. STA. 144+06.22, 21.00' LT; N 492000.43, E 2705571.75
P.T. STA. 143+81.52, 42.00' LT; N 492028.45, E 2705545.99

25.00' R.P. STA. 144+54.66, 46.02' LT; N 492027.23, E 2705540.02
P.C. STA. 144+54.59, 21.00' LT; N 492002.27, E 2705620.09
P.T. STA. 144+78.79, 39.80' LT; N 492021.91, E 2705643.56

POINT STA. 144+82.73, 55.18' LT; N 492037.43, E 2705646.92
POINT STA. 144+94.02, 99.29' LT; N 492081.93, E 2705656.56
POINT STA. 144+94.02, 99.29' LT; N 492081.93, E 2705656.56

POINT STA. 145+05.65, 96.31' RT; N 492079.39, E 2705668.29
POINT STA. 145+05.65, 96.31' RT; N 492079.39, E 2705668.29
POINT STA. 145+05.65, 96.31' RT; N 492079.39, E 2705668.29

GEOMETRICS, JOINTS, & GRADES

LIP CURB THROUGH DRIVEWAYS

CURB TAPER - PER STD. PLT. 500-52
CAPEHART ROAD

GEOMETRIC DATA

1. 125.00' R.P. STA. 145+00, 33.00' RT; N 491966.67, E 2706113.18
   P.C. STA. 145+00, 8.00' RT; N 491991.63, E 2706112.23
2. P.T. STA. 145+00, 33.00' RT; N 491967.58, E 2706138.15
   POINT STA. 146+00, 75.00' RT; N 491925.61, E 2706139.72
3. 25.00' R.P. STA. 150+11.98, 33.00' RT; N 491969.12, E 2706179.12
   P.C. STA. 150+11.99, 8.00' RT; N 491994.10, E 2706178.19
   P.T. STA. 149+87.00, 33.00' RT; N 491968.18, E 2706154.14
   POINT STA. 150+87.00, 75.00' RT; N 491966.21, E 2706155.71
4. 25.00' R.P. STA. 150+11.98, 33.00' RT; N 491969.12, E 2706179.12
   P.C. STA. 150+11.99, 8.00' RT; N 491994.10, E 2706178.19
   P.T. STA. 149+87.00, 33.00' RT; N 491968.18, E 2706154.14

GEOMETRICS, JOINTS, & GRADES

1. LIP CURB THROUGH DRIVEWAYS

DRAWN:                   CHECKED:                   APPROVED:
D. W. GOPPEL, PE           D. W. GOPPEL, PE           J. ROYlinky, PE
C-77 (19-9)  SHEET 2111 South 67th Street, Suite 200 Omaha, NE 68106  TEL 402.341.1116  FAX 402.341.5895

CAPEHART ROAD

GEOMETRIC DATA

25.00' R.P. STA. 152+78.00, 33.00' RT; N 491979.06, E 2706444.94
P.C. STA. 152+78.00, 33.00' RT; N 491980.00, E 2706469.92
P.T. STA. 152+80.00, 33.00' RT; N 492006.31, E 2706515.80

P.C. STA. 153+03.00, 8.00' RT; N 492004.04, E 2706444.00
P.T. STA. 153+05.00, 33.00' RT; N 491980.00, E 2706469.92

P.C. STA. 153+03.88, 48.11' RT; N 491965.52, E 2706487.11
P.T. STA. 153+19.63, 42.00' RT; N 491974.33, E 2706528.11

P.C. STA. 153+03.88, 50.88' RT; N 491962.16, E 2706471.46
P.T. STA. 153+19.00, 40.84' RT; N 491972.76, E 2706486.20

P.C. STA. 153+19.00, 33.00' RT; N 491980.59, E 2706485.91
P.T. STA. 153+37.02, 147.06' RT; N 491867.29, E 2706508.18

58.00' R.P. STA. 153+60.93, 40.84' RT; N 491974.33, E 2706528.11
P.C. STA. 153+60.93, 42.00' RT; N 491975.43, E 2706544.62
P.T. STA. 153+60.93, 40.84' RT; N 491972.76, E 2706486.20

P.C. STA. 153+13.63, 48.11' RT; N 491965.52, E 2706487.11
P.T. STA. 153+18.00, 42.00' RT; N 491975.43, E 2706544.62

25.00' R.P. STA. 153+44.00, 33.00' RT; N 491981.53, E 2706510.89
P.C. STA. 153+44.00, 33.00' RT; N 491980.59, E 2706485.91
P.T. STA. 153+44.00, 8.00' RT; N 491980.00, E 2706480.90

GEOMETRICS, JOINTS, & GRADES

CAPEHART ROAD  C-77 (19-9)  SHEET 13

DIMENSIONS: DIMENSIONS THROUGH DRIVEWAYS
GEOMETRIC DATA

25.00' R.P. STA. 160+69.59, 33.00' RT; N 492008.65, E 2707223.90
P.C. STA. 160+69.53, 8.00' RT; N 492033.63, E 2707234.97
P.T. STA. 160+92.78, 23.85' RT; N 492018.66, E 2707258.81

POINT STA. 161+02.28, 48.00' RT; N 491994.88, E 2707269.20

P.I. STA. 161+30.90, 120.78' RT; N 491923.23, E 2707300.52

R = 342.00' , DELTA = 157° 22' 12", L = 135.11', T = 68.44'
P.C. STA. 161+05.85, 57.09' RT; N 491985.94, E 2707273.11
P.T. STA. 161+29.50, 189.21' RT; N 491854.79, E 2707301.69

P.C. STA. 161+40.43, 33.00' RT; N 492011.30, E 2707306.77

P.T. STA. 161+40.43, 8.00' RT; N 492011.30, E 2707306.77

P.T. STA. 161+17.17, 42.15' RT; N 492011.30, E 2707306.77

R = 358.00', DELTA = 157° 22' 12", L = 141.43', T = 71.65'
P.C. STA. 161+20.74, 51.23' RT; N 491992.35, E 2707287.77
P.T. STA. 161+45.50, 189.54' RT; N 491855.06, E 2707317.69

P.T. STA. 161+46.96, 117.90' RT; N 491926.71, E 2707316.47

25.00' R.P. STA. 161+66.26, 57.86' LT; N 492103.06, E 2707329.10
P.C. STA. 161+86.28, 42.96' LT; N 492088.93, E 2707349.72
P.T. STA. 161+91.10, 55.56' LT; N 492101.71, E 2707354.06

POINT STA. 161+92.27, 68.24' LT; N 492114.42, E 2707354.75

POINT STA. 162+01.87, 172.37' LT; N 492218.84, E 2707360.41

POINT STA. 162+13.82, 171.27' LT; N 492218.19, E 2707372.39

POINT STA. 162+04.22, 67.14' LT; N 492113.77, E 2707366.73

19.00' R.P. STA. 162+06.46, 102.04' LT; N 492148.74, E 2707367.65
P.C. STA. 162+12.13, 93.98' LT; N 492138.08, E 2707363.32
P.T. STA. 162+24.68, 83.70' LT; N 492135.01, E 2707358.03

POINT STA. 163+03.80, 21.00' LT; N 492218.84, E 2707360.41

POINT STA. 163+12.25, 82.63' LT; N 492113.77, E 2707366.73

25.00' R.P. STA. 163+34.61, 46.00' LT; N 492093.80, E 2707397.90
P.C. STA. 164+13.33, 60.00' LT; N 492136.52, E 2707377.27
P.T. STA. 164+24.64, 21.00' LT; N 492096.82, E 2707389.05

14.00' R.P. STA. 164+26.64, 21.00' LT; N 492150.94, E 2707391.77
P.C. STA. 165+33.33, 60.00' LT; N 492136.52, E 2707377.27
P.T. STA. 165+44.64, 21.00' LT; N 492096.82, E 2707389.05

LIP CURB THROUGH DRIVEWAYS

NOTES:
1. DRAWING SHOWN ARE AN EXTREME CASE GEOMETRIC DATA. FUTURE DATUMS ARE TO BE ASSUMED FOR QUIET. HANDLED AS SHOWN TO DATE. HEI DIAMIOR TO BE DETERMINE AFTER COMPLETION.
2. ALL DRIP CURB MODIFICATIONS ARE TO BE DONED UPON COMPLETION.
3. SPECIAL HANDHELD CURB SPANS ALONG SCAFFOLD IS TO BE HANDHELD.
4. MAXIMUM CURB HIGH SCHOOL TO BE 8".
MATCHLINE
STA 163.00

GEOMETRIC DATA
1. POINT STA. 167+75.00, 16.47' LT; N 492084.73, E 2707939.03
2. POINT STA. 167+75.00, 10.53' RT; N 492057.75, E 2707940.05

CURB TAPER - PER STD. PLT. 500-52

GEOMETRICS, JOINTS, & GRADES

SCALE 1 FT = 1"
HIGHWAY 50

GEOMETRIC DATA

1. POINT STA. 300+61.40, 29.47' RT; N 491009.80, E 2704726.95
2. POINT STA. 300+61.41, 37.29' RT; N 491010.46, E 2704734.74
3. POINT STA. 301+55.06, 37.21' RT; N 491103.77, E 2704726.85

NOTES:
1. ELEVATIONS SHOWN ARE AT TOP OF EARTH-CAP TRENCH.  Ramped grades are shown on 20" W baseplate and measured.
2. HEIGHT OF CYLINDERS IS FOR OIL BASED CONCRETE.
3. POINTS FOR DRAINAGE ARE FOR OIL BASED AND GRADED.
4. EXTRATERRESTRIAL POINTS ARE NOT SHOWN.
5. GEOMETRICS, JOINTS, & GRADES
GEOMETRIC DATA

POINT STA. 304+03.60, 28.15' RT; N 491350.60, E 2704697.08

POINT STA. 306+46.30, 30.68' RT; N 491592.72, E 2704680.16

POINT STA. 306+46.30, 27.68' RT; N 491592.40, E 2704677.17

POINT STA. 308+09.94, 151.75' RT; N 491796.15, E 2704733.53

POINT STA. 308+70.94, 151.63' RT; N 491796.64, E 2704743.52

GEOTRANSF. STA. 136+30.87, 145.20' RT; N 491805.31, E 2704803.16

P.C. STA. 135+67.75, 114.93' RT; N 491833.20, E 2704738.96

P.T. STA. 135+60.87, 146.06' RT; N 491801.83, E 2704733.25

60.00' R.P. STA. 136+30.87, 145.20' RT; N 491805.31, E 2704803.16

P.C. STA. 135+76.77, 119.25' RT; N 491829.22, E 2704748.13

P.T. STA. 135+70.87, 145.94' RT; N 491802.33, E 2704743.23

70.00' R.P. STA. 136+30.87, 145.20' RT; N 491805.31, E 2704803.16

P.C. STA. 135+67.75, 114.93' RT; N 491833.20, E 2704738.96

P.T. STA. 135+60.87, 146.06' RT; N 491801.83, E 2704733.25
## Capehart Road

### Preliminary Plan

#### Removals & Construction

- **Remove Culvert Pipe Over 24" to 30"**
- **Remove & Reinstall Mailbox Post**
- **Remove Sign**

#### Concretes & Driveways

- **9" Concrete Pavement (47B-3500)**
- **6" Concrete Driveway (47B-3500)**
- **6" Crushed Rock Surfacing**
- **Remove Drive**
- **Concrete Header**

### Locations

<table>
<thead>
<tr>
<th>Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>STA 139+00</td>
<td>Remove Culvert Pipe Over 24&quot; to 30&quot;</td>
</tr>
<tr>
<td>STA 140+00</td>
<td>Remove &amp; Reinstall Mailbox Post</td>
</tr>
<tr>
<td>STA 141+00</td>
<td>Remove Sign</td>
</tr>
<tr>
<td>STA 138+00</td>
<td>Remove Concrete Pavement (47B-3500)</td>
</tr>
<tr>
<td>STA 139+00</td>
<td>Remove Concrete Driveway (47B-3500)</td>
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<tr>
<td>STA 140+00</td>
<td>Remove Crushed Rock Surfacing</td>
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<tr>
<td>STA 140+00</td>
<td>Remove Drive</td>
</tr>
<tr>
<td>STA 141+00</td>
<td>Concrete Header</td>
</tr>
</tbody>
</table>

### Additional Details

- **MATCHLINE** at STA 145+00
- **MATCHLINE** at STA 139+00

---

**Scale:** 1/12" = 1' (in feet)

**Olsson**

C-77 (19-9)
HIGHWAY 50

MATCHLINE          STA. 303+00

REMOVE PAVEMENT
SAW CUT - FULL DEPTH
DRILL & GROUT TIE BARS
10" DOWELED CONCRETE PAVEMENT (47B-3500)
4" FO: MEATION - O: RSE
4" FO: MEATION - O: RSE

REMOVALS & CONSTRUCTION

CARTWRIGHT ROAD

SCALE 1:500

ST. 200.00
HIGHWAY 50

REMOVALS & CONSTRUCTION

MATCHLINE          STA. 303+00
LOCATION          51
PL 303400.00 STA 303400.00, 87 852

MATCHLINE          STA. 309+00
LOCATION          51
PL 309400.00 STA 309400.00, 87 1427.07 91

REMOVE PAVEMENT
SAW CUT - FULL DEPTH
REMOVE SIGN
DRILL & GROUT TIE BARS
10" DOWELED CONCRETE PAVEMENT (47B-3500)
4" FOUNDATION COURSE
6" CRUSHED ROCK EMBEDMENT - RECREATIONAL TRAIL
CAPEHART ROAD

PRELIMINARY PLAN

MATCHLINE          STA. 145+00

MATCHLINE          STA. 139+00

CONSTRUCT STORM SEWER TAP - STD. PLT. 700-23

CONSTRUCT CURB INLET - STD. PLT. 700-21

CONSTRUCT REINFORCED CONCRETE PIPE, CLASS III

CONSTRUCT R.C. FLARED END SECTION

CONSTRUCT REINFORCED CONCRETE PIPE, D(0.01)=1,350

CONSTRUCT RIPRAP, TYPE "B"

DRAINAGE

LOCATION

SCALE 1" = 10' 0"

OLSON

C-77 (19-9)
NOTE: NO DRAINAGE ITEMS PRESENT ON THIS SHEET
CAPEHART ROAD

MATCHLINE          STA. 151+00

CONSTR. - T. P. INLET - STD. LT. 790.21

NO. LOCATION    TYPE    "C"    FLA
C1 168-954 152-918 1144.59 (0.59) 151.00
C2 168-954 152-918 1144.59 (0.59) 151.00
C3 168-954 152-918 1144.59 (0.59) 151.00

CONSTR. - T. AREA INLET - STD. LT. 790.17

NO. LOCATION    TYPE    "C"    FLA
C1 168-954 152-918 1141.00 (0.59) 151.00
C2 168-954 152-918 1141.00 (0.59) 151.00
C3 168-954 152-918 1141.00 (0.59) 151.00

CONSTR. - T. STORM SE. ER TA. - STD. LT. 790.23

NO. LOCATION    TYPE    "C"    FLA
C1 168-954 152-918 1120.99 (0.59) 151.00
C2 168-954 152-918 1120.99 (0.59) 151.00

CONSTR. - T. R. FLARED END SECTION

NO. LOCATION    TYPE    "C"    FLA
C1 168-954 152-918 1141.00 (0.59) 151.00
C2 168-954 152-918 1141.00 (0.59) 151.00

CONSTR. - T. R. REFL. ON RETIE - I.E. LAS R.I.

LOCATION    TYPE    SQUARES    EA
C1 152-918 1141.00 (0.59) 116.55
C2 152-918 1120.99 (0.59) 116.55

ONST. - T. REFL. ON RETIE - I.E. D. 0.01:1.350

LOCATION    TYPE    SQUARES    EA
C1 152-918 1141.00 (0.59) 116.55
C2 152-918 1120.99 (0.59) 116.55


LOCATION    TYPE    SQUARES    EA
C1 152-918 1141.00 (0.59) 116.55
C2 152-918 1120.99 (0.59) 116.55

CONSTR. - T. REINFOR. ED. ON RETIE - I.E. LAS R.I.
NOTE: NO DRAINAGE ITEMS PRESENT ON THIS SHEET
CONSTRUCT CURB INLET - STD. PLT. 700-21
CONSTRUCT REINFORCED CONCRETE PIPE, CLASS III
D1
D2
CONSTRUCT CONCRETE FLUME - TYPE III (SPECIAL PLAN 1)
CONSTRUCT R.C. FLARED END SECTION
CONSTRUCT RIPRAP, TYPE "B"
CONSTRUCT AREA INLET - STD. PLT. 700-17
NOTE: NO DRAINAGE ITEMS RESENT ON THIS SHEET
HIGHWAY 50

ONSTR: T.R. FLARED END SECTION

<table>
<thead>
<tr>
<th>Location</th>
<th>Flow</th>
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</thead>
<tbody>
<tr>
<td>STA 303+00</td>
<td>FL</td>
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</table>

ONSTR: CONCRETE FLUME - TYPE I (SPECIAL PLAN 1)

ONSTR: RIPRAP, TYPE "B"

LOCATION: TR: A; T: E"
CAPEHART ROAD

PRELIMINARY PLAN
EROSION CONTROL

MATCHLINE STA. 139+00
MATCHLINE STA. 309+00

INSTALL SEEDING TYPE B (EROSION CONTROL)
INSTALL SLOPE EROSION CHECK (WATTLE)
INSTALL SILT FENCE
INSTALL INLET PROTECTION
INSTALL TURF REINFORCEMENT (CLASS 1D)

MATCHLINE STA. 139+00
MATCHLINE STA. 309+00

CAPEHART ROAD

48

SCALE 1" = 100'
MATCHLINE          STA. 145+00
MATCHLINE          STA. 151+00

CAPEHART ROAD

INSTALL SEEDING TYPE B (EROSION CONTROL)
INSTALL SILT FENCE

EROSION CONTROL

SCALE 1/8" = 1'-0"
HIGHWAY 50

MATCHLINE          STA. 303+00

INSTALL SEEDING TYPE B (EROSION CONTROL)
INSTALL SLOPE EROSION CONTROL
INSTALL WATTLE
INSTALL SILT FENCE
CAPEHART ROAD

MARKING AND SIGNING

MATCHLINE          STA. 139+00
CAPEHART ROAD
HIGHWAY 50
57
MATCHLINE          STA. 309+00
C-77 (19-9)
SHEET

17" SOLE WHITE IN 4 FT SPACING
12" SOLE WHITE
17" SOLE WHITE IN 4 FT SPACING
5' DOUBLE YELLOW
12" SOLE WHITE
17" SOLE WHITE IN 4 FT SPACING
5' DOUBLE YELLOW
12" SOLE WHITE
17" SOLE WHITE IN 4 FT SPACING
5' DOUBLE YELLOW
12" SOLE WHITE
17" SOLE WHITE IN 4 FT SPACING
5' DOUBLE YELLOW
12" SOLE WHITE

MATCHLINE STA. 139.00
MATCHLINE STA. 309.00

SIGNING QUANTITIES

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<tr>
<td>60 MPH SPEED LIMIT (3EA)</td>
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<td>10 MPH PED (1EA)</td>
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<td>5 MPH PED (1EA)</td>
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<td>10 MPH TRAFFIC LANE TURNS (3EA)</td>
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<td>10 MPH TRAFFIC/LANDSCAPE (1EA)</td>
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PAVEMENT MARKING QUANTITIES

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<tr>
<td>NET SELECTIVE PAVEMENT MARKING - 5'E X 12' Wide</td>
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<td>NET SELECTIVE PAVEMENT MARKING - 5'E X 8' Wide</td>
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<td>NET SELECTIVE PAVEMENT MARKING - 5'E X 5' Wide</td>
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<td>NET SELECTIVE PAVEMENT MARKING - 5'E X 2' Yellow</td>
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<td>5' WHITE PERMANENT PAINTED MARKING</td>
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<td>NET SELECTIVE PAVEMENT MARKING SCHEDULE - DOUBLE DOTTED LANE DIVIDERS</td>
<td>2 EA</td>
</tr>
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<td>NET SELECTIVE PAVEMENT MARKING SCHEDULE - MEDIAN</td>
<td>1 EA</td>
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17" SOLE WHITE IN 4 FT SPACING
12" SOLE WHITE
MARKING AND SIGNING

MATCHLINE          STA. 151+00
MATCHLINE          STA. 157+00
CAPEHART ROAD

60
C-77 (19-9)
SHEET

2111 South 67th Street,
Suite 200
Omaha, NE 68106
TEL 402.341.1116
FAX 402.341.5895

CAPEHART ROAD

PRELIMINARY PLAN

Pavement Marking Quantities

<table>
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<th>Description</th>
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<td>3&quot; YELLOW PERMANENT PAVEMENT MARKER PAINT</td>
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SCALE 1 FT = 1 FT
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<tr>
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<th>TEL AREA (SF)</th>
<th>VOL CUT (CY)</th>
<th>VOL TEL (CY)</th>
<th>VOL TEL VOL (CY)</th>
<th>NET VOL (CY)</th>
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### CAPEHART EAST EARTHWORK QUANTITIES

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### HWY 50 - TOTAL EARTHWORK VOLUME

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NOTES:
CONCRETE FLUME SHALL BE PLACED FOR AS ONE UNIT.

JOINT KILLER AND SEALANT MATERIALS ARE
SUFFICIENT TO THE FLUME.

ALL MACHINES TO CONFORM TO APPLICATOR
SHOWN AS

ALL CONCRETE SHALL BE GRADE 400-500.

CONCRETE FLUME, TYPE 1
SHEET 1 OF 3

SPECIAL PLAN 1
C-77 (19-9)
CONCRETE FLUME

E HEADWAY

6 x 6 - HDG x HDG
INCLINED WIRE FABRIC

36" Z.O., PER AREA
1/2" X 1/2" MILD STEEL

PLAN

SECTION A-A

J O I N T DET A I L

CONCRETE CURB

DETAIL "A"

NOT TO SCALE

6 x 6 - HDG x HDG
INCLINED WIRE FABRIC

CONCRETE FLUME, TYPE II
SPECIAL PLAN 1
Sheet 2 of 5
C-77 (19-9)

NOTES:
CONCRETE FLUME SHALL BE PAVED FOR A
ONE FEET.

JOINT FILLER AND SEALANT MATERIALS ARE
SUBJECT TO THE FLUME.

ALL REINFORCING STEEL TO CONFORM TO ASHRAE
STANDARD.

ALL CONCRETE USED SHALL BE CLASS V-3A.
CONCRETE FLUME

NOTE:
- CONCRETE FLUME SHALL BE PLACED FOR USE AS DRY FLOOD.
- JOINT FILLER AND SEALANT MATERIALS ARE SUBMITTED TO THE FLUME.
- ALL REINFORCING STEEL TO CONFORM TO ASSOCIATED SHEET NO.
- ALL CONCRETE USED SHALL BE CLASS L20A.

PLAN
- 6" CONCRETE CURB
- SEE CURB DETAIL "A"
- 5/8" C.D. PIPE II AREA
- DIAZED = STL MC, TENTH

SECTION A-A
- 6" CONCRETE CURB
- SEE CURB DETAIL "A"
- 5/8" C.D. PIPE II AREA
- DIAZED = STL MC, TENTH

JOINT DETAIL
- CONCRETE CURB DETAIL "A"
SILT CHECKS ALL TYPES

PLAN VIEW
FOR FLAT BOTTOM DITCH

SILT CHECK

TOP OF SLOPE

EARTH-SLASH MULCH CHECK
ELEVATION VIEW

TOP OF SLOPE

EARTH-SLASH MULCH PERIMETER BERM
CROSS SECTION

SILT CHECK-SLASH MULCH
OPTION A

SILT TRAP

1" x 2" x 2'-6" NORMAL WOOD STAKE

PLAN VIEW
FOR FLAT BOTTOM DITCH

SILT CHECK

TOP OF SLOPE

EARTH-SLASH MULCH CHECK
ELEVATION VIEW

TOP OF SLOPE

EARTH-SLASH MULCH PERIMETER BERM
CROSS SECTION

SILT CHECK-SLASH MULCH
OPTION A

SILT TRAP

1" x 2" x 2'-6" NORMAL WOOD STAKE

PLAN VIEW
FOR FLAT BOTTOM DITCH

SILT CHECK

TOP OF SLOPE

EARTH-SLASH MULCH CHECK
ELEVATION VIEW

TOP OF SLOPE

EARTH-SLASH MULCH PERIMETER BERM
CROSS SECTION

SILT CHECK-SLASH MULCH
OPTION A

SILT TRAP

1" x 2" x 2'-6" NORMAL WOOD STAKE

SECTION A-A

CROSS SECTION
SILT CHECK-SLASH MULCH
OPTION A

CROSS SECTION
SILT CHECK-SLASH MULCH
OPTION B

SEER STAPLE DETAIL, SHEET 1 OF 4
SILT CHECKS ALL TYPES

PLAN VIEW

SILT CHECK OUTLET PROTECTION

SILT CHECKS SHALL BE TIGHTLY ADHERED WITH NO GAPS (TYPE)

STAKE

PLAN VIEW

SILT CHECK INLET PROTECTION

SILT CHECK INLET FILTER

PERPECTIVE VIEW

SECTION B-B
### CAPEHART ROAD ROW AND EASEMENT ACQUISITION

#### RIGHT OF WAY OWNERSHIP

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**Matching Lines**

**PRELIMINARY PLAN**

ADDRESS:
7222 South 67th Street, Suite 200
Omaha, NE 68106
TEL 402.341.1116
FAX 402.341.5895

**COLORS:**
- **C-77 (19-9) SHEET**
- **MATCHLINE NO. 160+00**
REPORT OF GEOTEchnical EXPLORATION

Sarpy County - Capehart Road Design
Near Capehart Road and 150th Street
Sarpy County, Nebraska

Prepared for
Sarpy County, NE

Prepared by
Olsson Associates

September 11, 2017
Olsson Project No: F16-0727

11627 Virginia Plaza, Suite 103, La Vista, Nebraska • (402) 827-7220 • FAX (402) 827-7223
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A. PROJECT UNDERSTANDING

A.1. GEOTECHNICAL SCOPE

This Report of Geotechnical Exploration was requested and authorized by Sarpy County for evaluating existing subsurface conditions and providing geotechnical design recommendations for the proposed roadway improvements for portions of Capehart Road and 150th Street in Sarpy County, Nebraska.

The scope of this geotechnical exploration included the following:

- Site reconnaissance and review of soil and geologic subsurface information from the USDA Natural Resource Conservation Service (NRCS) for Sarpy County, Nebraska.
- Drilling and sampling of 21 soil test borings extending to depths of 10 to 25 feet below existing grades.
- Laboratory testing (as noted in the appendices) of soil samples obtained during the field operations.
- Completion of a geotechnical engineering evaluation using information obtained from our field observations, soil test borings, and laboratory testing program.
- Preparation of this Report of Geotechnical Exploration presenting the soil test borings, laboratory test results, and a summary of our engineering evaluations and recommendations.

The scope of this geotechnical exploration did not include an environmental assessment for determining the presence of wetlands and/or hazardous or toxic materials in the soil or groundwater on or near this site. Any statements in this report regarding odors, discoloration, or suspicious conditions are strictly for the information of our client.

A.2. SITE LOCATION AND DESCRIPTION

Olsson understands that Sarpy County is proposing to redesign and pave portions of Capehart Road and 150th Street. The roadway improvements include an alignment of 150th Street extending approximately one quarter mile south and 2,650 feet north from the intersection of 150th Street and Capehart Road and Capehart Road extending from 1,100 feet west of 150th street and 4,200 feet east of Highway 50. Most areas of this roadway are currently covered with crushed limestone aggregate. The intersection of Capehart Road and 144th Street is paved with concrete. From this intersection, asphalt pavement was documented extending east approximately 285 feet to the entrance of an acreage property.

Within the proposed improvement area along 150th street there is approximately 78 feet of grade change ranging from a high elevation of 1190 feet near Sta. 236+00 to a low elevation of 1112 feet.
near Sta. 206+00. Along Capehart Road there is approximately 59 feet of grade change ranging from a high elevation of 1177 feet near Sta. 121+25 to a low elevation of 1118 feet near Sta. 170+75. A Site Location Plan and Boring Location Map showing the site layout and boring locations are presented in Appendix A.

A.3. PROJECT INFORMATION

The Capehart Road improvements include grading changes, new culverts, and new concrete pavement. The 150th street improvements include grading changes, new culverts, and new crushed rock surfacing. The centerlines of the existing roads are anticipated to remain unchanged for the new roads. Most of the roadway will remain 2 lanes, however portions of Capehart Road between Sta. 128+53.46 and 133+35.57 and between Sta. 135+73.28 and 140+51.90 will be widened to three lanes.

Proposed grades along 150th Street will include cut depths of up to 8 feet and fill depths of up to 9 feet during the mass grading operation. The proposed grades along Capehart Road will include cut depths up to 14 feet and fill depths up to 12 feet. Multiple culvert replacements and some new culverts are anticipated that may require slightly more earthwork during construction.
B. EXPLORATORY AND TEST PROCEDURES

B.1. FIELD EXPLORATION

Truck-mounted CME-45 and CME-75 drill rigs were used to complete 21 soil test borings for this project. The soil boring locations and depths were modified or shifted in the field only if necessary to avoid underground or overhead utilities, existing structures, site features, or areas of limited access. Refer to the Boring Location Map in Appendix A for the final locations of the soil test borings and the Boring Logs in Appendix B for the depths of each explored boring.

Undisturbed soil samples were obtained at 2.5 to 5-foot depth intervals during the drilling process and returned to the laboratory for additional testing. Undisturbed soil samples designated as "U" samples on the boring logs (Appendix B) were obtained in general accordance with ASTM D-1587 (Thin-Walled Tube Sampling of Soils). Soil samples designated as "SS" were obtained in general accordance with ASTM D-1586 (Penetration Test and Split-Barrel Sampling of Soils). Recovered samples were sealed in sampling tubes, labeled, and protected for transportation to the laboratory for testing.

B.2. LABORATORY TESTING

Soil stratification, as shown on the boring logs, represents soil conditions at the specific boring locations; however, variations may occur between or beyond the borings. The stratification lines represent the approximate boundary between soil types, but the actual transition between soil layers may be gradual.

Laboratory tests were completed to evaluate the engineering properties of recovered soil samples. Moisture content and density tests were completed to determine the existing moisture state and unit weight of subsurface soils. Atterberg limit tests were performed to evaluate soil plasticity. Unconfined compression tests were completed to determine the shear strengths of undisturbed cohesive soils. Consolidation tests were completed to evaluate the soils reaction to changes in loading and moisture content. Laboratory tests were conducted in general accordance with current ASTM test procedures. A summary of the laboratory test results is presented in Appendix C.
C. **Subsurface Conditions**

C.1. **Area Geology**

The project site is located within an area of Nebraska which typically consists of low to moderately plastic, wind-deposited, loess. During most construction activities, loessal soils will be the primary soil formations encountered. The generalized subsurface profile for these sections of 150th Street and Capehart Road consisted of gravel surfacing and some cohesive fill materials overlying Peorian loess. An exception to this was noted in some low-lying areas where alluvial soils were documented. The original geology has been altered by the grading operations that were completed to construct the existing roadways and drainage ditches.

C.2. **Test Borings and Laboratory Summary**

Based on the information obtained from the drilling operations and laboratory testing program, the fill and natural soils were described as soft to very stiff, moist to wet, lean clays with varying sand and gravel contents. Refer to the boring logs presented in *Appendix B* for specific soil profile descriptions and remarks.

C.3. **Soil Properties**

**Fill** – Stiff to very stiff, grayish brown to very dark brown with varying organics, sand, gravel, and iron staining, slightly moist to very moist, lean to fat clay.

<table>
<thead>
<tr>
<th>USCS Classification</th>
<th>Dry Density (pcf)</th>
<th>Moisture Content (%)</th>
<th>Saturation (%)</th>
<th>LL/PI (%)</th>
<th>Unc. Compressive Strength (tsf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL, CH</td>
<td>78.6 – 111.3</td>
<td>14.2 – 27.7</td>
<td>60.8 – 94.6</td>
<td>51/19</td>
<td>0.7 – 3.1</td>
</tr>
</tbody>
</table>

**Alluvium** – Soft to firm, dark brown to dark gray with sand, gravel, and iron staining, very moist to wet, lean clay.

<table>
<thead>
<tr>
<th>USCS Classification</th>
<th>Dry Density (pcf)</th>
<th>Moisture Content (%)</th>
<th>Saturation (%)</th>
<th>LL/PI (%)</th>
<th>Unc. Compressive Strength (tsf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL</td>
<td>79.2 – 95.7</td>
<td>26.3 – 36.0</td>
<td>86.2 – 98.2</td>
<td>N/A</td>
<td>0.6 – 1.4</td>
</tr>
</tbody>
</table>

N/A = Not Applicable

**Peoria Loess** – Soft to very stiff, yellowish brown to dark brown with iron and carbon staining, moist to wet, lean clay.

<table>
<thead>
<tr>
<th>USCS Classification</th>
<th>Dry Density (pcf)</th>
<th>Moisture Content (%)</th>
<th>Saturation (%)</th>
<th>LL/PI (%)</th>
<th>Unc. Compressive Strength (tsf) (SPT Blow Count (N-Value))</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL</td>
<td>84.9 – 104.0</td>
<td>15.5 – 30.6</td>
<td>59.2 – 99.0</td>
<td>35 – 36/15 – 18</td>
<td>0.7 – 3.2 (6 – 13)</td>
</tr>
</tbody>
</table>
C.4. GROUNDWATER SUMMARY

Free water was observed to accumulate in 4 of the 21 soil borings completed during, immediately after drilling, or within 24 hours of completing the drilling. The following table provides the groundwater measurements documented during this exploration. At these measured depths, free or perched groundwater would not be expected to adversely impact site grading or shallow construction activities in the roadway. If deep utility excavations are planned in the base of the large fill areas, groundwater or very moist conditions could be encountered.

<table>
<thead>
<tr>
<th>Boring No.</th>
<th>Groundwater depth while drilling (feet)</th>
<th>Groundwater elevation while drilling (feet)</th>
<th>Groundwater depth 24 hours after drilling (feet)</th>
<th>Groundwater elevation 24 hours after drilling (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-14</td>
<td>14.0</td>
<td>1129.5</td>
<td>11.5</td>
<td>1132.0</td>
</tr>
<tr>
<td>B-16</td>
<td>14.0</td>
<td>1142.0</td>
<td>NP</td>
<td>NA</td>
</tr>
<tr>
<td>B-18</td>
<td>14.0</td>
<td>1123.0</td>
<td>10.0</td>
<td>1127.0</td>
</tr>
<tr>
<td>B-20</td>
<td>16.0</td>
<td>1100.0</td>
<td>NP</td>
<td>NA</td>
</tr>
</tbody>
</table>

NP – Not Performed, NA – Not Applicable

It should be noted groundwater levels (perched or otherwise) typically fluctuate with seasonal variations in precipitation, runoff, snowmelt, irrigation demands, or other factors that may differ from those at the time of the drilling operations.
D. SITE PREPARATION

D.1. GENERAL SITE PREPARATION

At the time of drilling, the project site was a gravel surfaced roadway with grass covered drainage ditches and other shallow rooted vegetation. In new fill and excavation areas, trees (including the root ball), vegetation, topsoil (organics and shallow root zone penetration depth is typically 6 to 10 inches), and other deleterious materials considered unsuitable by an Olsson field representative shall be removed from areas of new construction and replaced with compacted structural fill. Existing vegetation and topsoil should be stripped to a minimum depth of 12 inches from each side of the roadway and removed from the site or stockpiled for later use in non-loaded areas. Isolated areas may require stripping to slightly greater depths. The Olsson field representative can assist with determining the final stripping or removal depths in areas of concern. Stripping operations should only occur during periods of dry weather. Operating heavy equipment on the exposed site soils during periods of wet weather could result in excessive rutting or pumping of the underlying soils.

The existing gravel surfacing should also be removed from the roadway to provide a uniform soil subgrade for the construction of the new road. In new fill areas, the aggregate surfacing removed in cut areas could be thoroughly blended with the native cohesive soils. Olsson recommends using a road reclaimer such as a CAT RM500 or large ripper teeth to complete this task. Upon completion of the mass grading operation, there should be no isolated pockets or layers of granular material below the new roadway or within the new structural fill.

Low-lying areas of the project site, such as ditches, may contain loosely deposited sediment with higher moisture contents. During the grading operations, it is recommended that sediment from these low-lying areas be identified and removed prior to new fill placement. Generally, if these sediments are clean, they are suitable for reuse as general or structural fill. The sediments must be evenly distributed during placement and uniformly blended with undisturbed native soils prior to recompaction. If saturated sediments are encountered, they should be completely removed prior to placing and compacting new fill materials. Based on previous experience, a sediment removal depth of up to 3 feet should be anticipated, but actual removal depths should be based on actual field conditions.

In areas requiring new structural fill, the contractor should scarify the upper 8 inches of resultant subgrade, moisture condition as necessary, and compact the subgrade soils in accordance with the recommendations in Section D.5 of this report. After scarification and compaction, areas to receive new structural fill should be proofrolled with a loaded tandem-axe dump truck, scraper, or similar rubber-tired equipment weighing at least 20 tons. In areas where proofrolling is required, these
operations should be observed and documented by an Olsson field representative. Unstable or unsuitable soils which are revealed by proofrolling and cannot be adequately densified in-place should be documented, removed, and then replaced with new compacted structural fill or be stabilized in accordance with the Section D.5 of this report. The geotechnical engineer should be contacted if additional subgrade stabilization is required to prepare the roadway subgrade for earthwork or construction.

Special attention should be given to areas of uneven new fill placement below the proposed roadway. It is difficult to reduce the potential for reflective cracking when an existing roadway is widened or a greater thickness of new fill is placed along one edge of the road compared to the centerline of the road. To reduce this potential, it is recommended that these areas be allowed to consolidate prior to roadway construction. Generally, a construction delay of 30 to 60 days is necessary for the underlying soils to consolidate from the new fill placement. Depending on the location of the new fill placement, it may also be possible to overexcavate portions of the existing subgrade and carefully bench the new fill soils into the existing grades. This can help reduce the likelihood of a large reflective crack propagating to the pavement surface. Where there is concern for possible reflective cracking to occur, it is recommended that the geotechnical engineer be allowed to review the concerns and provide recommendations specific to these areas. Place areas of deepest fill as early in the earthwork process as possible.

Slopes steeper than 4(H):1(V) should be benched prior to placement of new fill, which provides better interlock of the fill and natural soils during compaction. Benches should be cut as the fill progresses and should have a maximum bench height of three feet. Permanent cut or fill slopes should be no steeper than 3(H):1(V) to maintain long-term stability, reduce erosion, and allow easier maintenance. The crest or toe of cut and/or fill slopes should be no closer than 5 feet from the edge of pavements and no closer than 10 feet from adjacent structures or foundations. It is recommended that permanent slopes be seeded or planted as soon as practical to minimize the potential for erosion. In addition, surface water should not be directed over the crest of the slopes in an uncontrolled manner.

D.2. SETTLEMENT EVALUATION AND MONITORING

The subgrade soils across this site were documented to be compressible and are anticipated to consolidate under the loads associated with new fills. Settlement will vary across the roadway alignments depending on the subsurface soil conditions, compressible stratum thickness, and new structural fill thickness. Up to 12 feet of new structural fill is proposed in some. The one-dimensional consolidation test was used to estimate the settlement potential of on-site soils related to new fill
placement. Olsson evaluated settlement in 4 general areas of the project site, although other areas of the site with similar fill depths should experience similar consolidation related settlement. Fill depths evaluated and estimated settlement potential are summarized in the table below:

<table>
<thead>
<tr>
<th>Location</th>
<th>Nearest Boring</th>
<th>Maximum Fill Height(^{**}) (feet)</th>
<th>Anticipated Settlement (inch)</th>
</tr>
</thead>
<tbody>
<tr>
<td>150&lt;sup&gt;th&lt;/sup&gt; Street, Sta. 208+75 to 214+50</td>
<td>N/A</td>
<td>8.0</td>
<td>Up to 1</td>
</tr>
<tr>
<td>150&lt;sup&gt;th&lt;/sup&gt; Street, Sta. 228+75 to 234+00</td>
<td>B-4</td>
<td>9.0</td>
<td>Up to 1</td>
</tr>
<tr>
<td>Capehart Road, Sta. 110+00 to 115+00</td>
<td>B-9</td>
<td>4.0</td>
<td>Up to 2</td>
</tr>
<tr>
<td>Capehart Road, Sta. 125+00 to 133+50</td>
<td>B-14</td>
<td>9.0 (14.5 in channel)</td>
<td>2 to 5 (up to 10 in channel)</td>
</tr>
<tr>
<td>Capehart Road, Sta. 139+00 to 144+75</td>
<td>B-16</td>
<td>6.5</td>
<td>Up to 1</td>
</tr>
<tr>
<td>Capehart Road, Sta. 151+00 to 158+25</td>
<td>B-18</td>
<td>13</td>
<td>7 to 10</td>
</tr>
<tr>
<td>Capehart Road, Sta. 165+75 to 175+00</td>
<td>B-20</td>
<td>9</td>
<td>Up to 2</td>
</tr>
</tbody>
</table>

\(^{**}\)Fill depth is based on the center of the roadway. Additional fill placement may be needed in the roadside ditches.

Based on the anticipated settlement due to zones of highly compressible alluvium and loess and from local experience in this area, Olsson recommends portions of Capehart Road between stations 125+00 to 133+50 and stations 151+00 to 158+25 be preloaded prior to utility and concrete placement. Construction delays of 30 to 60 days are estimated to allow the consolidation to occur in these areas. It is recommended that a thorough settlement monitoring program be completed to determine when the primary consolidation period is complete and new construction can begin. The remaining areas of the project site are anticipated to experience settlement within tolerable limits for new roadway construction.

Olsson recommends that settlement monuments (settlement plates) be installed, prior to the placement of any structural fill, to document the actual time-rate of consolidation of the underlying compressible soils. This will allow the geotechnical engineer to determine when consolidation is complete and when new construction can begin. It is recommended that at least 2 settlement monuments be installed for each potential construction delay area. The monuments should be positioned by the geotechnical engineer at the time of construction in the areas of deepest fill placement.

We recommend that settlement monitoring continue until the total cumulative settlement over 2, consecutive one-week periods is \(\frac{1}{8}\)-inch or less, or until written approval is provided by Olsson geotechnical engineers. The initial elevations of the settlement plates should be recorded to the
nearest 0.01-foot increment and should be surveyed daily during fill placement and bi-weekly after fill placement is complete.

The settlement monuments will periodically require riser extensions to maintain above-grade survey points. The riser extensions should be installed in 5-foot sections and have initial elevations recorded at the time of installation. The settlement monuments should be surveyed prior to and immediately after installing each additional 5-foot riser extension. This is necessary to record accumulated change in total settlement during and after fill placement. It is also recommended that the ground surface immediately adjacent to the settlement monuments be surveyed during fill placement to document settlement in relation to the thickness of new fill.

Prior to starting roadway or utility construction through the preload areas, the contractor should obtain written approval from the geotechnical engineer documenting that the preload operations were completed as recommended and that the site is approved for construction.

When the monitoring program is complete, the settlement monuments (plates) should be abandoned in place or completely removed. If abandoned, the riser pipes should be cut off or removed at least 2 feet below the base of the new pavements.

During construction, the grading contractor must provide extra effort to achieve proper compaction of the structural fill without damaging the settlement monuments or the underlying subgrade. The use of hand-operated equipment may be necessary to achieve proper compaction in these isolated areas. An Olsson field representative should provide documentation that the compaction around the riser pipes meets or exceeds the project requirements. If proper compaction is not achieved during the placement of structural fill, the earthwork contractor should be responsible for removing and replacing or recompingacting the affected areas, with a full-time Olsson field technician present, at no additional cost to the owner.

If new culverts are proposed in areas of deep fill placement, the culvert can be installed prior to fill placement and allowed to settle with the embankment, or the embankment can be open cut after the construction delay is completed to allow the culverts to be installed. If the culvert is allowed to settle with the embankment, variable settlement/deflection of the culvert is possible and water may pond within the culverts at low points. It may be possible to grade the new culvert if additional slope can be provided to assist in drainage after settlement is complete. If the proposed culvert cannot tolerate variable settlement or deflection, it is recommended the culvert be installed after the construction delay and settlement period are complete. If allowed to settle with the new fill placement, it is recommended that a post settlement inspection be completed to document the culverts are not
damaged and are functioning as designed. If undesirable differential movement occurs or the pipes become damaged, the culvert may need to be repaired, replaced, or adjusted to function as designed.

D.3. CULVERTS
The use of granular pipe bedding for new culverts is acceptable. The base of pipe trenches should be sloped to remove or redirect potential moisture accumulation away from roadways to an off-site discharge point. The remaining pipe trench backfill should consist of compacted cohesive structural fill placed in accordance with Section D.5 of this report.

To prevent voids from developing below and around new culverts, the pipes should be bedded on at least 4 inches of granular bedding materials meeting the specifications of the pipe manufacturer or local requirements. We recommend bedding materials extend up to the springline (middle) of the pipe. It is important that granular bedding materials be compacted around the culverts to fill cavities or voids and reduce the potential for future settlement. The trench may then be backfilled with cohesive structural fill in accordance with Section D.5.

Water should not enter utility trenches before, during, or after construction. Excavations should be backfilled with clean, suitable structural fill to minimize the potential for moisture infiltration. Utility trench backfill should be compacted to a minimum 95 percent of the materials Standard Proctor maximum dry density at a moisture content between -2 and +3 percent of optimum.

D.4. SUBGRADE STABILIZATION (IF REQUIRED)
Soft, unstable, or otherwise unsuitable subgrade soils revealed by proofrolling which cannot be adequately densified in-place should be overexcavated, under the direction of the Olsson field representative, to a depth exposing suitable bearing soils then replaced with compacted structural fill, or be stabilized in place. The identification of areas that may require undercutting and/or stabilization should be based on the actual subgrade conditions at the time of construction and will depend on the location and overall extent of the soft area. New fill materials required to raise site grades should be placed in accordance with the recommendations provided in Section D.5.

In areas of the project site exposing very moist or unstable soils, it may be acceptable to scarify the unstable subgrade, allow them to dry, and compact them in accordance with the recommendations of this report. If additional subgrade stabilization is necessary, 3 to 4-inch thick lifts of crushed aggregates (2 to 3-inch diameter top sized particles) could be driven into the exposed subgrade until stable, using a sheepfoot roller. The use of geosynthetic fabric and/or grid below the aggregates could help reduce the overall aggregate thickness.
Subgrade stabilization may also be required at the base of utility trenches across low lying portions of the project site. The methods of subgrade stabilization described previously also apply to the base of utility trenches; however, a backhoe-mounted, sheepfoot style, trench roller would be the preferred method of compaction for cohesive backfill soils in this application.

It is the responsibility of the earthwork contractor to utilize equipment and procedures that prevent unnecessary deterioration or damage to exposed subgrade soils. It may be necessary to utilize low ground pressure (LGP) equipment in low lying areas, which will minimize disturbance of very moist subgrade soils, during excavation. Heavy, rubber tired construction equipment may not be suitable for use in low lying areas of this site as this equipment is more likely to disturb potentially sensitive subgrade soils. The contractor should provide a uniform and stable soil subgrade as part of the final grading operations. Excessive equipment traffic on very moist or wet subgrade will compound the problem and make extra stabilization efforts necessary. Unstable soil subgrade or instability related to repetitive construction traffic is the responsibility of the contractor to repair or replace at no additional cost to the owner. If unstable soil conditions are encountered, the geotechnical engineer should evaluate and document these unsuitable conditions and will recommend appropriate corrective action for removal and replacement or in-place stabilization.

D.5. STRUCTURAL FILL

During earthwork and construction, we recommend that new fill materials have a liquid limit less than 45 and a plasticity index less than 25. Soils which have a liquid limit greater than 45 and a plasticity index greater than 25 will typically require removal and replacement or blending with less plastic materials to reduce the expansive characteristics. In addition to maintaining the recommended plasticity criteria, the fill soils should be relatively free of organic materials (less than about 2 percent by weight) or other deleterious materials and should not contain particles larger than 2 inches.

Based on laboratory test results, most of the soils sampled during this exploration are within the previously mentioned soil parameters and are suitable for reuse as structural fill if clean and properly moisture conditioned prior to compaction. In isolated areas of the site, the old fill materials were documented to have slightly higher plasticity than the acceptable plasticity range described above. Based on our soil borings, we anticipate most cut areas will consist of either gravel surfacing, or low to moderately plastic loessal soils. It is our opinion that if isolated areas of higher plastic soils (LL>45 and PI >25) are encountered, they will get adequately blended with lower plastic soils during the typical pick-up, transport, and placement of normal scraper/earthwork operations. Olsson field personnel will monitor new cut areas during earthwork and, if significant volumes of high plastic soils
are encountered, will work with the earthwork contractor to establish proper placement and blending procedures.

Suitable fill materials should be placed in thin lifts. Lift thickness depends on the type of compaction equipment, but in general, lifts of 4 to 8-inch loose measurements are recommended. The soil should be compacted using appropriately sized equipment capable of achieving the compaction recommendations of this report. A self-propelled sheepfoot roller, such as a CAT 815, is generally recommended for compacting cohesive soils over large areas. The contractor should take care if working near existing structures, and it may be necessary to restrict or eliminate the use of vibration to prevent damage. Within small excavations, such as in footing trenches, utility trenches, or around manholes, Olsson recommends the use of "Wacker-Packers" or "Rammax" compactors for cohesive soils or vibrating plate compactors for granular soils to achieve the specified compaction. Lift thicknesses should be reduced to 4 inches in small fill areas requiring hand-operated equipment.

During grading operations, representative samples of general and structural fill materials should be initially and periodically checked by laboratory testing to document that the previously mentioned soil parameters are maintained. An Olsson representative should regularly observe and monitor excavation and grading operations and perform field density tests to document that the specified moisture and compaction requirements are being achieved. We recommend that general fill, structural fill, and utility backfill be compacted and moisture conditioned in accordance with the criteria provided in the following table:

<table>
<thead>
<tr>
<th>FILL PLACEMENT/COMPACTION GUIDELINES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Areas of Fill Placement</strong></td>
</tr>
<tr>
<td>-------------------------------</td>
</tr>
<tr>
<td><strong>Structural Fill</strong> – Placed below and within 20 feet of the new roadway and fill embankments</td>
</tr>
<tr>
<td><strong>Pavement Subgrade</strong> – A minimum of 12 inches below pavements or aggregate subbase (if used)</td>
</tr>
<tr>
<td><strong>Utility and Culvert Trenches</strong> – Cohesive backfill (or granular backfill placed in approved locations)</td>
</tr>
<tr>
<td><strong>Non-Structural Fill</strong> – Fill soil placed within 2 feet of the surface beneath non-loaded landscape/grass areas</td>
</tr>
</tbody>
</table>

**As necessary to obtain density for granular materials.**
The moisture content for suitable borrow soils at the time of compaction should generally be maintained between the ranges specified above. More stringent moisture limits may be necessary with certain soils, and some adjustments to moisture contents may be necessary to achieve compaction in accordance with project specifications.

**D.6. DRAINAGE AND GROUNDWATER CONSIDERATIONS**

Free water was observed to accumulate in 4 of the 21 soil borings completed during this exploration. Considering the finished grade elevations anticipated along the proposed roadway alignment, groundwater is not anticipated to adversely impact mass grading, earthwork, or pavement construction. However, very moist and saturated soils may be encountered during the installation of new culverts or culvert extensions and at low lying areas of the roadway alignment.

To minimize concerns related to improper or inadequate drainage, it is recommended that site grading provide efficient removal of rainfall and surface runoff away from new pavements.

**D.7. CONSTRUCTION EQUIPMENT MOBILITY**

The cohesive soils on this site may be susceptible to softening under construction equipment traffic during periods of wet weather. Reducing equipment mobility problems and managing soft surface soils will be greatly dependent on the severity of the circumstances, the soil types, the season in which construction is performed, and prevailing weather conditions.

Some general guidelines for reducing equipment mobility problems and addressing potential soft and wet surface soils are as follows:

- Optimize surface water drainage at the site during construction.
- Whenever possible, wait for dry weather conditions to prevail, and do not operate construction equipment on the site during wet conditions. Rutting the surface soils will aggravate the condition and accelerate subgrade disturbance.
- Disk or scarify wet surface soils during periods of favorable weather to accelerate drying.
- Temporarily compact loose subgrade soils if rain is forecast to promote site drainage and minimize moisture infiltration.
- Use construction equipment that is well-suited for the intended job under the existing site conditions. Heavy, rubber-tired equipment typically requires better site conditions than light, track-mounted equipment.
- Implement a construction schedule that realistically allows for rain days. Pressure to perform earthwork under a tight schedule is frequently counterproductive.

If requested, Olsson engineers can help determine the best approach for stabilizing unsuitable soils at the time of construction.
D.8. TEMPORARY SLOPES AND EXCAVATIONS

Construction site safety is generally the responsibility of the general contractor. The contractor shall also be solely responsible for the means, methods, techniques, sequencing, and operations during construction. Olsson is providing the following information solely as a service to our client. Under no circumstances should Olsson’s provision of the following information be construed to mean that we are assuming responsibility for construction site safety or the contractor’s activities, such responsibility is not implied and should not be inferred.

The contractor should be aware that slope height, slope inclination, and excavation depths (including utility trench excavations) should in no case exceed those specified in local, state, or federal safety regulation; e.g., OSHA Health and Safety Standards for Excavations, 29 CFR Part 1926, or successor regulations. Such regulations are strictly enforced and, if not followed, the owner, the contractor, or earthwork or utility subcontractors could be liable for substantial penalties.
E. PAVEMENTS

E.1. PAVEMENT SUBGRADE PREPARATION

It is important that the pavement subgrade support be relatively uniform, with no abrupt changes in the degree of support. Non-uniform pavement support can occur at the transition from cut to fill areas, as a result of varying soil moisture contents or soil types, or where improperly placed utility backfill extends across or through areas to be paved. Improper subgrade preparation such as inadequate vegetation or demolition debris removal, failure to identify soft or unstable areas by proofrolling, and inadequate or improper compaction can also produce non-uniform subgrade support.

During grading operations and pavement construction, subgrades can deteriorate rapidly as a result of moisture infiltration and repetitive construction traffic. It is recommended, at a minimum, that the upper 12 inches of subgrade soil be scarified, moisture conditioned, and recompacted to a minimum 98 percent of the materials maximum Standard Proctor (ASTM D-698) dry density immediately prior to paving. Pavement subgrade moisture content at the time of compaction should be maintained between -2 to +3 percent of optimum. The final pavement subgrade should be tested for compaction and proofrolled immediately prior to placement of concrete to detect localized areas of instability. Unsuitable or unstable areas should be reworked or removed and replaced as necessary to provide a uniform subgrade. For subgrade soils prepared in this manner, Olsson recommends utilizing an estimated California Bearing Ratio (CBR) value of 3.0 and a modulus of subgrade reaction of 125 pci for pavement design. Areas of the roadway requiring 12 inches or more of documented compacted structural fill during earthwork or grading operations may not need reworked or recompacted unless they have dried out or become disturbed by construction equipment traffic after placement.

It is recommended that the prepared subgrade extend a minimum of 2 feet outside the pavements, where feasible. A representative of the geotechnical engineer should be present during subgrade preparation to observe, document, and test compaction of the materials at the time of placement or rework. As recommended for all prepared soil subgrades, Olsson recommends that heavy, repetitive construction traffic be controlled, especially during periods of wet weather, to minimize disturbance. Unless otherwise directed by the geotechnical engineer, the final prepared subgrade should be proofrolled with a loaded dump truck or similar rubber-tired equipment with a total weight of at least 20 tons, immediately prior to placement of new pavements. Proofrolling operations should be observed by a representative of the geotechnical engineer. Unstable or unsuitable soils revealed by proofrolling should be reworked to provide a stable subgrade or removed and replaced with structural fill under the direction of the geotechnical engineer.
E.2. PAVEMENT DESIGN

The standard typical pavement section utilized by Sarpy County for new road projects is 9 inches of full depth Portland cement concrete. Full depth pavement refers to the 9-inch thickness of concrete bearing directly on the prepared soil subgrade. A formal pavement design was not completed for this project; however, the standard 9 inches of Portland concrete cement is applicable for this project based on previous experience. If the recommendations in this report are followed and the road experiences typical traffic volumes, a design life of 20 years or more should be anticipated.

**Full Depth - Concrete Pavement**

<table>
<thead>
<tr>
<th>Depth (in)</th>
<th>Material Designation</th>
<th>Material Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.0</td>
<td>*Concrete: NDOR Section 1002, Portland Cement Concrete</td>
<td></td>
</tr>
<tr>
<td>12.0</td>
<td>Subgrade: NDOR Section 302, Subgrade Preparation or per Section E.1 of this report</td>
<td></td>
</tr>
</tbody>
</table>

*Reference current editions of the Nebraska Department of Roads Standard Specifications for Highway Construction

Curbs should be backfilled as soon as possible after pavement construction. Backfill should be compacted and should be sloped to prevent water from ponding and/or infiltrating pavement subgrades. Pavement joints should be caulked, and cracks should be quickly patched or sealed as they occur to prevent moisture from infiltrating and softening the subgrade soils.
F. LIMITATIONS

The conclusions and recommendations presented in this report are based on the information available regarding the proposed construction, the results obtained from our soil test borings and sampling procedures, the results of the laboratory testing program, and our experience with similar projects. The soil test borings represent a very small statistical sampling of subsurface soils, and it is possible that conditions may be encountered during construction that are substantially different from those indicated by the soil test borings. In these instances, adjustments to design and construction may be necessary. This geotechnical report is based on the site plan and information provided to Olsson and our understanding of the project as noted in this report. Changes in the location or design of the new roadway could significantly affect the conclusions and recommendations presented in this geotechnical report. Olsson should be contacted in the event of such changes to determine if the recommendations of this report remain appropriate for the revised site design.

This report was prepared under the direction and supervision of a Professional Engineer registered in the State of Nebraska with the firm of Olsson Associates. The conclusions and recommendations contained herein are based on generally accepted, professional geotechnical engineering practices at the time of this report, within this geographic area. No warranty, express or implied, is intended or made. This report has been prepared for the exclusive use of Sarpy County and their authorized representatives for specific application to the 150th Street and Capehart Road improvements proposed. Olsson appreciates the opportunity to provide our services on this project and looks forward to working with you during construction. Should you have any questions, please do not hesitate to contact us.

Respectfully submitted,

Olsson Associates

Joe Svoboda, E.I.
Assistant Engineer

Timothy Jensen, P.E.
Geotechnical Engineer
SYMBOLS AND NOMENCLATURE

DRILLING NOTES

DRILLING AND SAMPLING SYMBOLS

- SS: Split-Spoon Sample (1.375" ID, 2.0" OD)
- U: Thin-Walled Tube Sample (3.0" OD)
- CS: Continuous Sample
- BS: Bulk Sample
- MC: Modified California Sampler
- GB: Grab Sample
- SPT: Standard Penetration Test Blows per 6.0"
- HSA: Hollow Stem Auger
- CFA: Continuous Flight Auger
- HA: Hand Auger
- CPT: Cone Penetration Test
- WB: Wash Bore
- FT: Fish Tail Bit
- RB: Rock Bit
- NE: Not Encountered
- NP: Not Performed
- NA: Not Applicable
- % Rec: Percent of Recovery
- WD: While Drilling
- IAD: Immediately After Drilling
- AD: After Drilling
- CI: Cave-In

DRILLING PROCEDURES

Soil samples designated as “U” samples on the boring logs were obtained in using Thin-Walled Tube Sampling techniques. Soil samples designated as “SS” samples were obtained during Penetration Test using a Split-Spoon Barrel sampler. The standard penetration resistance ‘N’ value is the number of blows of a 140 pound hammer falling 30 inches to drive the Split-Spoon sampler one foot. Soil samples designated as “MC” were obtained in using Thick-Walled, Ring-Lined, Split-Barrel Drive sampling techniques. Recovered samples were sealed in containers, labeled, and protected for transportation to the laboratory for testing.

WATER LEVEL MEASUREMENTS

Water levels indicated on the boring logs are levels measured in the borings at the times indicated. In relatively high permeable materials, the indicated levels may reflect the location of groundwater. In low permeability soils, the accurate determination of groundwater levels is not possible with only short-term observations.

SOIL PROPERTIES & DESCRIPTIONS

Descriptions of the soils encountered in the soil test borings were prepared using Visual-Manual Procedures for Descriptions and Identification of Soils.

PARTICLE SIZE

- Boulders 12 in. +
- Cobbles 12 in.-3 in.
- Gravel 3 in.-4.75mm

- Coarse Sand 4.75mm-2.0mm
- Medium Sand 2.0mm-0.425mm
- Fine Sand 0.425mm-0.075mm

- Silt 0.075mm-0.005mm
- Clay <0.005mm

COHESIVE SOILS

- | Consistency | Unconfined Compressive Strength (Qu) (tsf) | Relative Density | ‘N’ Value | Description | Percent (%) |
- | Very Soft | <0.25 | Very Loose | 0 – 3 | Trace | <5 |
- | Soft | 0.25 – 0.5 | Loose | 4 – 9 | Few | 5 – 10 |
- | Firm | 0.5 – 1.0 | Medium Dense | 10 – 29 | Little | 15 – 25 |
- | Stiff | 1.0 – 2.0 | Dense | 30 – 49 | Some | 30 – 45 |
- | Very Stiff | 2.0 – 4.0 | Very Dense | ≥ 50 | Mostly | 50 – 100 |
- | Hard | > 4.0 | |

COHESIONLESS SOILS

- | Consistency |
- | Very Stiff |
- | Hard |

COMPONENT %

- | Description | Percent (%) |
- | Trace | <5 |
- | Few | 5 – 10 |
- | Little | 15 – 25 |
- | Some | 30 – 45 |
- | Mostly | 50 – 100 |

ROCK QUALITY DESIGNATION (RQD)

- | Description | RQD (%) |
- | Very Poor | 0 – 25 |
- | Poor | 25 – 50 |
- | Fair | 50 – 75 |
- | Good | 75 – 90 |
- | Excellent | 90 – 100 |

PLASTICITY CHART

ROCK QUALITY DESIGNATION (RQD)
## Soil Classification Chart

<table>
<thead>
<tr>
<th>Major Divisions</th>
<th>Symbols</th>
<th>Typical Descriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coarse Grained Soils</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gravel and gravelly soils</td>
<td>GW</td>
<td>Well-graded gravels, gravel - sand mixtures, little or no fines</td>
</tr>
<tr>
<td>(Little or no fines)</td>
<td>GP</td>
<td>Poorly-graded gravels, gravel - sand mixtures, little or no fines</td>
</tr>
<tr>
<td><strong>Fine Grained Soils</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silts and clays</td>
<td>ML</td>
<td>Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity</td>
</tr>
<tr>
<td>Liquid limit less than 50</td>
<td>CL</td>
<td>Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays</td>
</tr>
<tr>
<td><strong>Highly Organic Soils</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silts and clays</td>
<td>MH</td>
<td>Inorganic silts, micaceous or diatomaceous fine sand or silty soils</td>
</tr>
<tr>
<td>Liquid limit greater than 50</td>
<td>CH</td>
<td>Inorganic clays of high plasticity</td>
</tr>
<tr>
<td></td>
<td>OH</td>
<td>Organic clays of medium to high plasticity, organic silts</td>
</tr>
<tr>
<td></td>
<td>PT</td>
<td>Peat, humus, swamp soils with high organic contents</td>
</tr>
</tbody>
</table>

Note: Dual symbols are used to indicate borderline soil classifications.

---

**Legend:**
- GW: Gravel and gravelly soils (clean gravels)
- GP: Gravel and gravelly soils (poorly-graded gravels)
- GM: Gravels with fines (silty gravels)
- GC: Clayey gravels, gravel - sand - clay mixtures
- SW: Clean sands (well-graded sands)
- SP: Sands with fines (poorly-graded sands)
- SM: Silts (silty sands)
- SC: Clayey sands, sand - clay mixtures
- ML: Silts and clays (liquid limit less than 50)
- CL: Silts and clays (liquid limit greater than 50)
- MH: Organic silts and organic clayey silts of low plasticity
- CH: Organic clays of high plasticity
- OH: Organic clays of medium to high plasticity, organic silts
- PT: Peat, humus, swamp soils with high organic contents

---

**Soil Characteristics:**
- **Coarse Grained Soils:**
  - More than 50% of material is larger than No. 200 sieve size
  - Clean gravels
  - Gravels with fines
  - Clean sands
  - Sands with fines

- **Fine Grained Soils:**
  - More than 50% of material is smaller than No. 200 sieve size
  - Silts and clays
  - Silts and clays (liquid limit less than 50)
  - Silts and clays (liquid limit greater than 50)

- **Highly Organic Soils:**
  - Peat, humus, swamp soils with high organic contents

---

**Notes:**
- **GW** and **GP** indicate clean and poorly-graded gravels, respectively.
- **GM** indicates silty gravels.
- **GC** indicates clayey gravels.
- **SW** and **SP** indicate well-graded and poorly-graded sands, respectively.
- **SM** indicates silts.
- **SC** indicates clayey sands.
- **ML**, **CL**, **MH**, **CH**, **OH**, and **PT** indicate various types of silts and clays, with different plasticity levels.
### BOREHOLE REPORT NO. B-1

**Sarpy County Capehart Road Design**

**PROJECT NUMBER**
F16-0727

**LOCATION**
Sarpy County, Nebraska

<table>
<thead>
<tr>
<th>ELEVATION (ft)</th>
<th>MATERIAL DESCRIPTION</th>
<th>GRAPHIC LOG</th>
<th>DEPTH (ft)</th>
<th>SAMPLE TYPE NUMBER</th>
<th>CLASSIFICATION (USCS)</th>
<th>BLOWN&quot;6&quot; N-VALUE</th>
<th>UNCE. STR. (tsf)</th>
<th>MOISTURE (%)</th>
<th>DRY DENSITY (pcf)</th>
<th>LL (%)</th>
<th>LR (%)</th>
<th>ADDITIONAL DATA/REMARKS</th>
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<tr>
<td>1155</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lean clay (CL), brown, moist, stiff, trace iron</td>
<td></td>
<td></td>
<td>U 1</td>
<td>U</td>
<td>22.3</td>
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</tr>
<tr>
<td>1150</td>
<td><strong>PEORIA LOESS</strong></td>
<td></td>
<td>2.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lean clay (CL), yellowish brown, moist, stiff, trace iron</td>
<td></td>
<td></td>
<td>U 2</td>
<td>U</td>
<td>21.9</td>
<td>96.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lean clay (CL), yellowish brown, moist, stiff, trace iron</td>
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<td></td>
<td>U 3</td>
<td>U</td>
<td>1.6</td>
<td>25.0</td>
<td>96.4</td>
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<tr>
<td></td>
<td>Lean clay (CL), yellowish brown, very moist, stiff, trace iron and carbon</td>
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<td></td>
<td>U 4</td>
<td>U</td>
<td>25.4</td>
<td>95.1</td>
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<td></td>
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</table>

**BASE OF BORING AT 10.0 FEET**

---

**WATER LEVEL OBSERVATIONS**

- **WD** Not Encountered
- **IAD** Not Encountered
- **AD** Not Performed

---

**OLSSON ASSOCIATES**
11627 VIRGINIA PLAZA, STE 103
LA VISTA, NEBRASKA 68128

**OLSSON ASSOCIATES**

**STARTED:** 7/21/17  **FINISHED:** 7/21/17
**DRILL CO.:** OLSSON  **DRILL RIG:** CME 45C
**DRILLER:** C. MILLER  **LOGGED BY:** J. RODRIGUEZ
**METHOD:** CONTINUOUS FLIGHT AUGER
### GRAVEL ROADFILL
- Lean clay (CL), dark brown, very moist, firm, trace iron
- **BASE OF BORING AT 10.0 FEET**
- Lean clay (CL), yellowish brown, moist, stiff, trace iron
- Lean clay (CL), yellowish brown, moist, stiff, trace iron

### PEORIA LOESS
- Lean clay (CL), grayish brown, moist, very stiff, trace iron
- Lean clay (CL), yellowish brown, moist, stiff, trace iron

### MATERIAL DESCRIPTION

<table>
<thead>
<tr>
<th>ELEVATION (ft)</th>
<th>GRAPHIC</th>
<th>DEPTH (ft)</th>
<th>SAMPLE TYPE NUMBER</th>
<th>CLASSIFICATION (USCS)</th>
<th>BLOWS/&quot;N-VALUE</th>
<th>MOISTURE (%)</th>
<th>DRY DENSITY (pcf)</th>
<th>LL/PL (%)</th>
<th>ADDITIONAL DATA/REMARKS</th>
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<tr>
<td>1165</td>
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<td>0</td>
<td>U</td>
<td>U</td>
<td>26.2</td>
<td>92.7</td>
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<td>1166.0</td>
<td></td>
<td>5</td>
<td>U</td>
<td>U</td>
<td>3.2</td>
<td>22.9</td>
<td>100.2</td>
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<td>1160</td>
<td></td>
<td>10</td>
<td>U</td>
<td>U</td>
<td>24.0</td>
<td>99.8</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

### WATER LEVEL OBSERVATIONS
- WD: Not Encountered
- IAD: Not Encountered
- AD: Not Performed

### ADDITIONAL DATA
- APPROX. SURFACE ELEV. (ft): 1166.0
- BASE OF BORING AT 10.0 FEET

### ADDITIONAL INFORMATION
- OLSSON ASSOCIATES
  11627 VIRGINIA PLAZA, STE 103
  LA VISTA, NEBRASKA 68128
- PROJECT NUMBER: F16-0727
- LOCATION: Sarpy County, Nebraska
- PROJECT NAME: Sarpy County Capehart Road Design
- CLIENT: Sarpy County
- STARTED: 7/21/17
- FINISHED: 7/21/17
- DRILL RIG: CME 45C
- DRILLER: C. MILLER
- LOGGED BY: J. RODRIGUEZ
- METHOD: CONTINUOUS FLIGHT AUGER
**GRAVEL ROADFILL**

Lean clay (CL), yellowish brown, moist, stiff, trace iron and organics

**PEORIA LOESS**

Lean clay (CL), grayish brown, moist, stiff, trace iron

Lean clay (CL), yellowish brown, moist, firm, trace iron

Lean clay (CL), yellowish brown, moist, firm, trace iron and carbon

**BASE OF BORING AT 10.0 FEET**

<table>
<thead>
<tr>
<th>MATERIAL DESCRIPTION</th>
<th>GRAPHIC LOG</th>
<th>DEPTH (ft)</th>
<th>SAMPLE TYPE NUMBER</th>
<th>CLASSIFICATION (USCS)</th>
<th>BLOWS/6&quot; N-VALUE</th>
<th>UNC. STR. (tsf)</th>
<th>DRY DENSITY (pcf)</th>
<th>MOISTURE (%)</th>
<th>LL/PI (%)</th>
<th>ADDITIONAL DATA/REMARKS</th>
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</thead>
<tbody>
<tr>
<td>GRAVEL ROAD FILL 0.3'</td>
<td>U 1</td>
<td>0</td>
<td>21.9</td>
<td>95.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEORIA LOESS 2.0'</td>
<td>U 2</td>
<td>5</td>
<td>1.3</td>
<td>24.8</td>
<td>96.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lean clay (CL), yellowish brown, moist, firm, trace iron and carbon</td>
<td>SS 3</td>
<td>5</td>
<td>3-3-3</td>
<td>23.5</td>
<td>6</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Lean clay (CL), yellowish brown, moist, firm, trace iron and carbon</td>
<td>U 4</td>
<td>10</td>
<td>23.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**BASE OF BORING AT 10.0 FEET**

Approx. Surface Elev. (ft): 1182.0

---

**WATER LEVEL OBSERVATIONS**

<table>
<thead>
<tr>
<th>ELEVATION (ft)</th>
<th>WD</th>
<th>IAD</th>
<th>AD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1180</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1175</td>
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</tr>
</tbody>
</table>

**PROJECT NUMBER**

F16-0727

**LOCATION**

Sarpy County, Nebraska

**PROJECT NAME**

Sarpy County Capehart Road Design

**CLIENT**

Sarpy County

**STARTED:** 7/21/17  **FINISHED:** 7/21/17

**OLSSON ASSOCIATES**

11627 VIRGINIA PLAZA, STE 103

LA VISTA, NEBRASKA 68128

**DRILL CO.:** OLSSON  **DRILL RIG:** CME 75

**DRILLER:** D. HUMANN  **LOGGED BY:** D. LUDWIG

**METHOD:** CONTINUOUS FLIGHT AUGER
**GRAVEL ROADFILL**

Lean clay (CL), very dark gray, moist, very stiff, some gravel and sand

Lean clay (CL), dark gray, very moist, soft, trace organics

**PEORIA LOESS**

Lean clay (CL), light gray, moist, stiff, iron staining

Lean clay (CL), yellowish brown, very moist, soft, trace carbon, iron staining, and organics

Lean clay (CL), light gray, very moist, firm, iron staining

**BASE OF BORING AT 15.0 FEET**

**WATER LEVEL OBSERVATIONS**

<table>
<thead>
<tr>
<th>ELEVATION (ft)</th>
<th>WD</th>
<th>IAD</th>
<th>AD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1175</td>
<td>Not Encountered</td>
<td>Not Encountered</td>
<td>Not Performed</td>
</tr>
<tr>
<td>1170</td>
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</tr>
<tr>
<td>1165</td>
<td>Not Encountered</td>
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<td>Not Performed</td>
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</table>

**SARPY COUNTY CAPEHART ROAD DESIGN**

**PROJECT NUMBER**

F16-0727

**LOCATION**

Sarpy County, Nebraska

**MOISTURE (%)**

<table>
<thead>
<tr>
<th>CLASSIFICATION (USCS)</th>
<th>GRADE</th>
<th>LL/PI (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shelby Tube</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Split Spoon</td>
<td></td>
<td></td>
</tr>
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</table>

**GRAPHIC LOG**

<table>
<thead>
<tr>
<th>MATERIAL DESCRIPTION</th>
<th>GRAPHIC LOG</th>
<th>MATERIAL DESCRIPTION</th>
</tr>
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<tbody>
<tr>
<td>GRAVEL ROAD FILL</td>
<td></td>
<td>PEORIA LOESS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lean clay (CL), very</td>
<td></td>
<td>Lean clay (CL), light</td>
</tr>
<tr>
<td>dark gray, moist,</td>
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<tr>
<td>very stiff, some</td>
<td></td>
<td>iron staining</td>
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<tr>
<td>gravel and sand</td>
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<td>Lean clay (CL), light</td>
</tr>
<tr>
<td>gray, very moist,</td>
<td></td>
<td>gray, moist, stiff,</td>
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<tr>
<td>soft, trace</td>
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<td>iron staining</td>
</tr>
<tr>
<td>organics</td>
<td></td>
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<tr>
<td>Lean clay (CL), light</td>
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<td>Lean clay (CL), light</td>
</tr>
<tr>
<td>gray, moist, firm,</td>
<td></td>
<td>gray, very moist,</td>
</tr>
<tr>
<td>iron staining</td>
<td></td>
<td>firm, iron staining</td>
</tr>
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</table>

**PROJECT NAME**

Sarpy County Capehart Road Design

**CLIENT**

Sarpy County

**PROJECT NUMBER**

F16-0727

**LOCATION**

Sarpy County, Nebraska

**SAMPLE TYPE NUMBER**

<table>
<thead>
<tr>
<th>DEPTH (ft)</th>
<th>GRAPHIC LOG</th>
<th>MATERIAL DESCRIPTION</th>
</tr>
</thead>
<tbody>
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<td>0</td>
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<td>GRAVEL ROAD FILL</td>
</tr>
<tr>
<td>15</td>
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<td>PEORIA LOESS</td>
</tr>
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**DRY DENSITY (pcf)**

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<thead>
<tr>
<th>DEPTH (ft)</th>
<th>DRY DENSITY (pcf)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>92.9</td>
</tr>
</tbody>
</table>

**DRILL CO.**

OLSSON ASSOCIATES

**DRILLER**

D. HUMANN

**LOGGED BY**

D. LUDWIG

**METHOD**

CONTINUOUS FLIGHT AUGER
### Material Description

<table>
<thead>
<tr>
<th>Elevation (ft)</th>
<th>Material Description</th>
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<tbody>
<tr>
<td>1190</td>
<td>GRAVEL ROAD</td>
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<tr>
<td></td>
<td>0.5'</td>
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<tr>
<td></td>
<td>FILL</td>
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<td></td>
<td>PEORIA LOESS</td>
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<tr>
<td>1185</td>
<td>Lean clay (CL), yellowish brown, moist, firm, trace iron</td>
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<td>1175</td>
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**BASE OF BORING AT 15.0 FEET**

### Graphic Log

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Sample Type Number</th>
<th>Classification (USCS)</th>
<th>Blows/6&quot; N-Value</th>
<th>Moisture (%)</th>
<th>Dry Density (pcf)</th>
<th>LPI (%)</th>
<th>Remarks</th>
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<tbody>
<tr>
<td>0</td>
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<tr>
<td>5</td>
<td>U 2</td>
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<td>23.4</td>
<td>94.3</td>
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<tr>
<td>15</td>
<td>SS 5</td>
<td>CL 5-6.7</td>
<td>22.8</td>
<td>35/18</td>
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</tr>
<tr>
<td>10</td>
<td>U 4</td>
<td></td>
<td>1.9</td>
<td>22.3</td>
<td>97.3</td>
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### Additional Data/Remarks

- APPROX. SURFACE ELEV. (ft): 1190.0
- WATER LEVEL OBSERVATIONS:
  - ELEVATION: 1190.0
  - WD: Not Encountered
  - IAD: Not Encountered
  - AD: Not Performed
### GRAVEL ROADFILL

Lean clay (CL), grayish brown, very moist, stiff, some iron, and trace gravel and carbon

Lean clay (CL), dark brown, very moist, stiff, little gravel

### PEORIA LOESS

Lean clay (CL), grayish brown, moist, stiff, some sand and gravel

Lean clay (CL), yellowish brown, very moist, soft, few iron, and trace organics

---

**BASE OF BORING AT 10.0 FEET**
<table>
<thead>
<tr>
<th>ELEVATION (ft)</th>
<th>MATERIAL DESCRIPTION</th>
<th>GRAPHIC LOG</th>
<th>DEPTH (ft)</th>
<th>SAMPLE TYPE NUMBER</th>
<th>CLASSIFICATION (USCS)</th>
<th>BLOWS/6&quot; N-VALUE</th>
<th>MOISTURE (%)</th>
<th>DRY DENSITY (pcf)</th>
<th>LL (°)</th>
<th>ADDITIONAL DATA/REMARKS</th>
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<tr>
<td>1156.0</td>
<td>GRAVEL ROAD</td>
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<tr>
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<td>PEORIA LOESS</td>
<td></td>
<td>0.3</td>
<td>U 1</td>
<td>U (CL)</td>
<td>23.7</td>
<td></td>
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<tr>
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<td></td>
<td>5</td>
<td>U 2</td>
<td>U (CL)</td>
<td>22.8</td>
<td>87.4</td>
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<td></td>
<td></td>
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<td>U 3</td>
<td>U (CL)</td>
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<td>94.7</td>
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<td>1140</td>
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<td>15</td>
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<td>U (CL)</td>
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<td>92.0</td>
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</table>

**BASE OF BORING AT 20.0 FEET**

**WATER LEVEL OBSERVATIONS**

- WD: Not Encountered
- IAD: Not Encountered
- AD: Not Performed

**OLSSON ASSOCIATES**

11627 VIRGINIA PLAZA, STE 103
LA VISTA, NEBRASKA 68128

**PROJECT NAME:** Sarpy County Capehart Road Design

**CLIENT:** Sarpy County

**PROJECT NUMBER:** F16-0727

**LOCATION:** Sarpy County, Nebraska

**BASE OF BORING AT 20.0 FEET**

- WATER LEVEL OBSERVATIONS
- WD: Not Encountered
- IAD: Not Encountered
- AD: Not Performed

**PROJECT NAME:** Sarpy County Capehart Road Design

**CLIENT:** Sarpy County

**PROJECT NUMBER:** F16-0727

**LOCATION:** Sarpy County, Nebraska

**BASE OF BORING AT 20.0 FEET**

- WATER LEVEL OBSERVATIONS
- WD: Not Encountered
- IAD: Not Encountered
- AD: Not Performed

**PROJECT NAME:** Sarpy County Capehart Road Design

**CLIENT:** Sarpy County

**PROJECT NUMBER:** F16-0727

**LOCATION:** Sarpy County, Nebraska

**BASE OF BORING AT 20.0 FEET**

- WATER LEVEL OBSERVATIONS
- WD: Not Encountered
- IAD: Not Encountered
- AD: Not Performed
GRAVEL ROADFILL
Lean clay (CL), yellowish brown, moist, stiff, trace iron and carbon

PEORIA LOESS
Lean clay (CL), grayish brown, moist, stiff, trace iron and carbon

APPROX. SURFACE ELEV. (ft): 1143.0

BASE OF BORING AT 10.0 FEET
### GRAVEL ROADFILL

- Lean clay (CL), dark brown, moist, stiff, some iron, and trace sand

### ALLUVIUM

- Lean clay (CL), dark brown, very moist, stiff, trace iron

### PEORIA LOESS

- Lean clay (CL), yellowish brown, moist, stiff, trace carbon and iron

---

**BASE OF BORING AT 15.0 FEET**

**ADDITIONAL DATA/REMARKS**

**APPROX. SURFACE ELEV. (ft): 1138.5**

**FINISHED: DRILL RIG: LOGGED BY:**

**CME 45C7/21/17 J. RODRIGUEZ**

**STARTED: DRILL CO.: DRILLER: METHOD:**

**OLSSON ASSOCIATES 11627 VIRGINIA PLAZA, STE 103 LA VISTA, NEBRASKA 68128**

**Not Encountered**

**Not Performed**

**Not Encountered**

**Not Performed**

**Not Encountered**

**Not Encountered**

**Not Encountered**

**Not Encountered**
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<thead>
<tr>
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<tbody>
<tr>
<td>1145</td>
<td><strong>GRAVEL ROAD FILL</strong></td>
</tr>
<tr>
<td></td>
<td>Fat clay (CH), dark brown, moist, firm, some iron</td>
</tr>
<tr>
<td>1140</td>
<td><strong>PEORIA LOESS</strong></td>
</tr>
<tr>
<td></td>
<td>Lean clay (CL), dark brown, very moist, firm, trace iron and gravel</td>
</tr>
<tr>
<td></td>
<td>Lean clay (CL), grayish brown, very moist, firm, trace sand</td>
</tr>
<tr>
<td></td>
<td>Lean clay (CL), dark brown, very moist, firm, trace iron and carbon</td>
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**BASE OF BORING AT 10.0 FEET**

<table>
<thead>
<tr>
<th>Sample Type Number</th>
<th>Sample Type</th>
<th>Classification (USCS)</th>
<th>Blows/6&quot; N-Value</th>
<th>Moisture (%)</th>
<th>Dry Density (pcf)</th>
<th>Lr (%)</th>
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<tr>
<td>1</td>
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<td>95.1</td>
<td>51/32</td>
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<tr>
<td>2</td>
<td>U</td>
<td>0.7</td>
<td>26.7</td>
<td>93.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>U</td>
<td>0.7</td>
<td>26.1</td>
<td>87.1</td>
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<tr>
<td>4</td>
<td>U</td>
<td>25.0</td>
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**WATER LEVEL OBSERVATIONS**

- APPOX. SURFACE ELEV. (ft): 1147.0
- BASE OF BORING AT 10.0 FEET

**ADDITIONAL DATA/REMARKS**

- APPROX. SURFACE ELEV. (ft): 1147.0

**PROJECT NUMBER**: F16-0727
**LOCATION**: Sarpy County, Nebraska

**PROJECT NAME**: Sarpy County Capehart Road Design
**CLIENT**: Sarpy County

**WATER LEVEL OBSERVATIONS**

- WD: Not Encountered
- IAD: Not Encountered
- AD: Not Performed

**OLSSON ASSOCIATES**

11627 VIRGINIA PLAZA,STE 103
LA VISTA,NEBRASKA 68128

- STARTED: 7/21/17
- FINISHED: 7/21/17
- DRILL CO.: OLSSON
- METHOD: CONTINUOUS FLIGHT AUGER
- DRILLER: C. MILLER
- LOGGED BY: J. RODRIGUEZ
### Shelby Tube

#### GRAVEL ROAD

**Peoria Loess**

<table>
<thead>
<tr>
<th>Depth (ft)</th>
<th>Sample Type</th>
<th>Classification (USCS)</th>
<th>Moisture (%)</th>
<th>Dry Density (pcf)</th>
<th>LPI (%)</th>
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</thead>
<tbody>
<tr>
<td>0</td>
<td>U 1</td>
<td>CL, yellowish brown, moist, stiff, trace iron and carbon</td>
<td>22.6</td>
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<tr>
<td>5</td>
<td>U 2</td>
<td>CL, yellowish brown, moist, firm, trace iron and carbon</td>
<td>23.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>U 3</td>
<td>CL, yellowish brown, very moist, firm, trace iron and carbon</td>
<td>26.2</td>
<td>92.2</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>U 5</td>
<td>CL, yellowish brown, very moist, firm, and trace iron</td>
<td>0.7</td>
<td>27.1</td>
<td>90.8</td>
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</table>

**Base of Boring at 15.0 Feet**

---

**Additional Data/Remarks**

- **Approx. Surface Elev. (ft):** 1170.5
- **Not Encountered**: Not Encountered, Not Performed
- **Water Level Observations**
  - **Elevation (ft)**: 1170, 1165, 1160
  - **Water Level**: Not Encountered, Not Encountered, Not Performed

**Notices**

- **Started**: 7/21/17
- **Finished**: 7/21/17
- **Drill Co.**: Olsson
- **Driller**: C. Miller
- **Logged By**: J. Rodriguez
- **Method**: Continuous Flight Auger
## MATERIAL DESCRIPTION

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<thead>
<tr>
<th>ELEVATION (ft)</th>
<th>MATERIAL DESCRIPTION</th>
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</thead>
<tbody>
<tr>
<td>1175</td>
<td>Lean clay (CL), yellowish brown, moist, firm, trace carbon and iron</td>
</tr>
<tr>
<td>1170</td>
<td>Lean clay (CL), yellowish brown, moist, firm, trace carbon and iron</td>
</tr>
<tr>
<td>1165</td>
<td>Lean clay (CL), yellowish brown, moist, firm, trace carbon and iron</td>
</tr>
<tr>
<td>1160</td>
<td>Lean clay (CL), reddish brown, moist, firm, trace carbon and iron</td>
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**BASE OF BORING AT 20.0 FEET**

**WATER LEVEL OBSERVATIONS**

<table>
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<td>Not Encountered</td>
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<tr>
<td>1160</td>
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</table>

**ADDITIONAL DATA/REMARKS**

- APPROX. SURFACE ELEV. (ft): 1177.5
- BASE OF BORING AT 20.0 FEET
- WATER LEVEL OBSERVATIONS
  - ELEVATION (ft): 1177.5
  - WATER LEVEL OBSERVATIONS: Not Encountered

**LOGGED BY:** J. RODRIGUEZ

**PROJECT NAME:** Sarpy County Capehart Road Design

**CLIENT:** Sarpy County

**PROJECT NUMBER:** F16-0727

**LOCATION:** Sarpy County, Nebraska

**BOREHOLE REPORT NO.:** B-12

**DRILL RIG:** CME 45C

**DRILLER:** C. MILLER

**LOGGED BY:** J. RODRIGUEZ

**METHOD:** CONTINUOUS FLIGHT AUGER

**FINISHED:** 7/21/17

**STARTED:** 7/21/17

**DRILL CO.:** OLSSON

**WATER LEVEL OBSERVATIONS**

<table>
<thead>
<tr>
<th>ELEVATION (ft)</th>
<th>WATER LEVEL OBSERVATIONS</th>
</tr>
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<tbody>
<tr>
<td>1177.5</td>
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<tr>
<td>1170</td>
<td>Not Encountered</td>
</tr>
<tr>
<td>1165</td>
<td>Not Encountered</td>
</tr>
<tr>
<td>1160</td>
<td>Not Performed</td>
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**MATERIAL DESCRIPTION**

<table>
<thead>
<tr>
<th>ELEVATION (ft)</th>
<th>MATERIAL DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1175</td>
<td>Lean clay (CL), yellowish brown, moist, firm, trace carbon and iron</td>
</tr>
<tr>
<td>1170</td>
<td>Lean clay (CL), yellowish brown, moist, firm, trace carbon and iron</td>
</tr>
<tr>
<td>1165</td>
<td>Lean clay (CL), yellowish brown, moist, firm, trace carbon and iron</td>
</tr>
<tr>
<td>1160</td>
<td>Lean clay (CL), reddish brown, moist, firm, trace carbon and iron</td>
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</table>

**BLOWS/6" N-VALUE**

- U1: 22.7
- U2: 24.5
- U3: 23.7
- U4: 23.7
- U5: 1.3
- U6: 0.7

**DENSITIES**

- Dry Density (pcf): 98.3, 84.9, 94.0, 99.4

**DRILL CO.:** OLSSON

**DRILLer:** C. MILLER

**LOGGED BY:** J. RODRIGUEZ

**METHOD:** CONTINUOUS FLIGHT AUGER

**FINISHED:** 7/21/17

**STARTED:** 7/21/17

**DRILL CO.:** OLSSON

**DRILLer:** C. MILLER

**LOGGED BY:** J. RODRIGUEZ

**METHOD:** CONTINUOUS FLIGHT AUGER
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<th>MATERIAL DESCRIPTION</th>
<th>GRAPHIC LOG</th>
<th>DEPTH (ft)</th>
<th>SAMPLE TYPE NUMBER</th>
<th>CLASSIFICATION (USCS)</th>
<th>MOISTURE (%)</th>
<th>DRY DENSITY (pcf)</th>
<th>LL (%)</th>
<th>LR (%)</th>
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<td>LOESS</td>
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<td>Lean clay (CL), medium brown, moist, stiff, trace carbon and iron</td>
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<td>99.7</td>
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<td>Lean clay (CL), yellowish brown, very moist, stiff, trace carbon and iron</td>
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<td></td>
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<td></td>
<td></td>
<td>U 3</td>
<td>10</td>
<td>U</td>
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<td>26.6</td>
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<tr>
<td></td>
<td>Lean clay (CL), yellowish brown, very moist, stiff, trace carbon and iron</td>
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<td>U 4</td>
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</tbody>
</table>

**BASE OF BORING AT 10.0 FEET**
GRAVEL ROAD FILL

Lean clay (CL), yellowish brown, moist, stiff, trace carbon and iron

ALLUVIUM

Lean clay (CL), dark brown, very moist, stiff, trace gravel, and some iron and sand

Lean clay (CL), dark brown, very moist, firm, and trace iron

Lean clay (CL), dark brown, very moist, firm, and trace iron

Lean clay (CL), grayish brown, wet, soft, trace carbon and iron

Lean clay (CL), grayish brown, wet, soft, trace carbon and iron

Sheet 1 of 2

CONTINUED NEXT PAGE

WATER LEVEL OBSERVATIONS

WD 14.0 ft
IAD 13.7 ft after 0 Hrs
AD 11.5 ft after 24 Hrs
<table>
<thead>
<tr>
<th>ELEVATION (ft)</th>
<th>MATERIAL DESCRIPTION</th>
<th>GRAPHIC LOG</th>
<th>DEPTH (ft)</th>
<th>SAMPLE TYPE NUMBER</th>
<th>CLASSIFICATION (USCS)</th>
<th>BLOWS/6' N-VALUE</th>
<th>MOISTURE (%)</th>
<th>DRY DENSITY (pcf)</th>
<th>LL (%)</th>
<th>LL (%)</th>
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<td>Lean clay (CL), grayish brown, wet, soft, trace iron and sand</td>
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<td>20</td>
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<td>7</td>
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BASE OF BORING AT 25.0 FEET

WATER LEVEL OBSERVATIONS

| WD | 14.0 ft |
| IAD | 13.7 ft after 0 Hrs |
| AD | 11.5 ft after 24 Hrs |

OLSSON ASSOCIATES
11627 VIRGINIA PLAZA, STE 103
LA VISTA, NEBRASKA 68128

STARTED: 7/21/17  FINISHED: 7/21/17
DRILL CO.: OLSSON  DRILL RIG: CME 45C
DRILLER: C. MILLER  LOGGED BY: J. RODRIGUEZ
METHOD: CONTINUOUS FLIGHT AUGER
**ASPHALT**

Alteration of Peoria Loess:

- Lean clay (CL), yellowish brown, moist, firm, trace organics and iron

**PEORIA LOESS**

- Lean clay (CL), yellowish brown, moist, very stiff, trace organics and iron
- Lean clay (CL), yellowish brown, very moist, stiff, little iron
- Lean clay (CL), yellowish brown, very moist, firm, few iron

**BASE OF BORING AT 10.0 FEET**

**WATER LEVEL OBSERVATIONS**

- **ELEVATION (ft)**: 1165
- **WATER LEVEL OBSERVATIONS**
  - **ELEVATION (ft)**: 1160
  - **ELEVATION (ft)**: 1165
  - **ELEVATION (ft)**: 1170

**ADDITIONAL DATA/REMARKS**

- **APPROX. SURFACE ELEV. (ft)**: 1167.0
- **DRILL RIG**: OLSSON
- **DRILLER**: C. MILLER
- **LOGGED BY**: J. RODRIGUEZ
- **METHOD**: CONTINUOUS FLIGHT AUGER
Lean clay (CL), dark gray, moist, stiff, many sand and gravel

Lean clay (CL), dark gray, moist, stiff, trace sand

Lean clay (CL), dark brown, very moist, stiff, trace iron and carbon

Lean clay (CL), light gray, wet, stiff, trace iron and sand

BASE OF BORING AT 15.0 FEET
**GRAVEL ROAD PEORIA LOESS**

- Shelby Tube
- **Approx. Surface Elev. (ft):** 1170.0

### MATERIAL DESCRIPTION

<table>
<thead>
<tr>
<th>ELEVATION (ft)</th>
<th>GRAPHIC LOG</th>
</tr>
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<tbody>
<tr>
<td>1170</td>
<td>0.3</td>
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</tbody>
</table>

- **Gravel Road**
  - Lean clay (CL), yellowish brown, moist, stiff, trace iron and carbon
  - Lean clay (CL), yellowish brown, moist, very stiff, some carbon
  - Lean clay (CL), yellowish brown, moist, stiff, trace carbon and iron
  - Lean clay (CL), yellowish brown, moist, stiff, few iron

### WATER LEVEL OBSERVATIONS

- **ELEVATION (ft):**
  - 1167
  - 1160
  - 1154

### BASE OF BORING AT 10.0 FEET

- **Dry Density (pcf):**
  - 3.2
  - 1.0
  - 22.1
  - 1.0

- **Moisture (%):**
  - 18.0
  - 21.6
  - 88.0
  - 23.0

- **Liquidity Limit (LL):**
  - Not Encountered

- **Plasticity Index (PI):**
  - Not Encountered

**ADDITIONAL DATA/REMARKS**

- **Approx. Surface Elev. (ft):** 1170.0

---

**PROJECT NAME:** Sarpy County Capehart Road Design  
**PROJECT NUMBER:** F16-0727  
**LOCATION:** Sarpy County, Nebraska  
**CLIENT:** Sarpy County

---

**WATER LEVEL OBSERVATIONS**

- **ELEVATION (ft):**
  - 1170
  - 1165
  - 1160

- **WD:** Not Encountered
- **IAD:** Not Encountered
- **AD:** Not Performed
### MATERIAL DESCRIPTION

<table>
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<th>Depth (ft)</th>
<th>Material Description</th>
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<tr>
<td>0</td>
<td><strong>GRAVEL ROAD</strong> FILL</td>
<td>Lean clay (CL), dark brown, moist, stiff, and trace iron</td>
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### WATER LEVEL OBSERVATIONS

- **WD**: 14.0 ft
- **IAD**: 11.0 ft after 0 Hrs
- **AD**: 10.0 ft after 24 Hrs
### Graphic Log

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**Base of Boring at 25.0 Feet**

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**Moisture (%)**

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**Additional Data/Remarks**

**Water Level Observations**

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</tr>
<tr>
<td>AD</td>
<td>10.0 ft after 24 Hrs</td>
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**PROJECT NAME**

Sarpy County Capehart Road Design

**PROJECT NUMBER**

F16-0727

**LOCATION**

Sarpy County, Nebraska

**CLIENT**

Sarpy County

**METHOD**

CONTINUOUS FLIGHT AUGER

**OLSSON ASSOCIATES**

11627 VIRGINIA PLAZA, STE 103
LA VISTA, NEBRASKA 68128

**STARTED:** 7/21/17
**FINISHED:** 7/21/17
**DRILL CO.:** OLSSON
**DRILLER:** C. MILLER
**LOGGED BY:** J. RODRIGUEZ
### Sarpy County Capehart Road Design

**PROJECT NUMBER:** F16-0727  
**LOCATION:** Sarpy County, Nebraska

#### Shelby Tube

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<tr>
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**BASE OF BORING AT 20.0 FEET**

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<th>LLI (%)</th>
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**WATER LEVEL OBSERVATIONS**

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**STARTED:** 7/21/17  
**FINISHED:** 7/21/17  
**DRILL CO.:** OLSSON  
**DRILLER:** C. MILLER  
**LOGGED BY:** J. RODRIGUEZ  
**METHOD:** CONTINUOUS FLIGHT AUGER
### Shelby Tube

**ELEVATION** (ft) | **MATERIAL DESCRIPTION** | **GRAPHIC LOG** | **DEPTH** (ft) | **SAMPLE TYPE NUMBER** | **CLASSIFICATION (USCS)** | **BLOWS/6" N-VALUE** | **MOISTURE (%)** | **DRY DENSITY (pcf)** | **LI (%)** | **ADDITIONAL DATA/REMARKS**
--- | --- | --- | --- | --- | --- | --- | --- | --- | --- | ---

**GRAVEL ROAD**

- **FILL**
  - Lean clay (CL), dark brown, moist, stiff, trace sand and iron
- Lean clay (CL), dark brown, moist, stiff, trace coarse sand, small gravel, and iron
- Lean clay (CL), dark brown, very moist, stiff, trace iron

**ALLUVIUM**

- Lean clay (CL), very dark gray, very moist, stiff, trace sand
- Lean clay (CL), brown, very moist, firm, trace sand
- Lean clay (CL), grayish brown, wet, stiff, trace sand and iron

**BASE OF BORING AT 20.0 FEET**

**WATER LEVEL OBSERVATIONS**

- **WD** 16.0 ft
- **IAD** 15.5 ft after 0 Hrs
- **AD** Not Performed

**PROJECT NUMBER** F16-0727  
**LOCATION** Sarpy County, Nebraska  
**PROJECT NAME** Sarpy County Capehart Road Design  
**CLIENT** Sarpy County

**BASE OF BORING AT 20.0 FEET**

**REPORTED BY** Olsson Associates  
**ADDRESS** 11627 Virginia Plaza, Ste 103  
**CITY** La Vista, Nebraska 68128
Lean clay (CL), yellowish brown, moist, stiff, trace sand and iron

Lean clay (CL), yellowish brown, very moist, stiff, trace sand and iron

BASE OF BORING AT 15.0 FEET
<table>
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<th>SAMPLE DEPTH (ft)</th>
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<th>DRY DENSITY (pcf)</th>
<th>VOID RATIO</th>
<th>SATURATION (%)</th>
<th>ATTERBERG LIMITS</th>
<th>UNCONFINED STRENGTH (tsf)</th>
<th>STRAIN (%)</th>
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### SUMMARY OF LABORATORY RESULTS

<table>
<thead>
<tr>
<th>BORING NUMBER</th>
<th>SAMPLE I.D.</th>
<th>SAMPLE DEPTH (ft)</th>
<th>MOISTURE CONTENT (%)</th>
<th>DRY DENSITY (pcf)</th>
<th>VOID RATIO</th>
<th>SATURATION (%)</th>
<th>UNCONFINED STRENGTH (tsf)</th>
<th>STRAIN (%)</th>
<th>ATTERBERG LIMITS</th>
<th>P-200</th>
<th>USCS CLASS.</th>
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<tbody>
<tr>
<td>B-20</td>
<td>U-3</td>
<td>6.0 - 7.5'</td>
<td>26.3</td>
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<tr>
<td>B-20</td>
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<td>8.5 - 10.0'</td>
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<td>1.128</td>
<td>86.3</td>
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<tr>
<td>B-20</td>
<td>U-5</td>
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CONSOLIDATION TEST

Drill Hole No. B-4  Sample No. U-5  Depth: 13.5 - 15
Sample Description Light gray, very moist, firm, iron staining

Initial Water Content (%) 28.4  Dry Unit Weight (pcf) 92.9  Initial Saturation (%) 94.1
Final Water Content (%) 24.5  Specific Gravity 2.7  X  Assumed

Liquid Limit N/A  Plastic Limit N/A  Plasticity Index N/A

Classification Lean clay (CL)

---

Project  Capehart Road Design
Location  Sarpy County, Nebraska
Job No.  F16-0727  Date:  07/31/17
## CONSOLIDATION TEST

<table>
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<th>Drill Hole No.</th>
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<th>Sample No.</th>
<th>U-5</th>
<th>Depth:</th>
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<tr>
<td>Sample Description</td>
<td>Grayish brown, wet, soft, trace carbon and iron</td>
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<tr>
<td>Initial Water Content (%)</td>
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<td>Initial Saturation (%)</td>
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<td>Final Water Content (%)</td>
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<td>Specific Gravity</td>
<td>2.7</td>
<td>X</td>
<td>Assumed</td>
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<td>Plastic Limit</td>
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![Void Ratio vs. Applied Load (tsf) Graph](image)

<table>
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<th>Capehart Road Design</th>
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<td>Location</td>
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<td>Job No.</td>
<td>F16-0727</td>
</tr>
<tr>
<td>Date</td>
<td>07/31/17</td>
</tr>
</tbody>
</table>
## CONSOLIDATION TEST

- **Drill Hole No.:** B-18
- **Sample No.:** U-5
- **Depth:** 13.5 - 15

### Sample Description
- Dark grayish brown, wet, soft, and trace iron

### Initial Properties
- **Initial Water Content (%%):** 34.4
- **Dry Unit Weight (pcf):** 81.1
- **Initial Saturation (%):** 86.2

### Final Properties
- **Final Water Content (%):** 22.1
- **Specific Gravity:** 2.7

### Assumptions
- **Liquid Limit:** N/A
- **Plastic Limit:** N/A
- **Plasticity Index:** N/A

### Classification
- Lean Clay (CL)

### Graph

- **X-Axis:** Applied Load (tsf)
- **Y-Axis:** Void Ratio

### Project Details
- **Project:** Capehart Road Design
- **Location:** Sarpy County, Nebraska
- **Job No.:** F16-0727
- **Date:** 07/31/17
### CONSOLIDATION TEST

<table>
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<th>Drill Hole No.</th>
<th>B-20</th>
<th>Sample No.</th>
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<tr>
<td>Sample Description</td>
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<tr>
<td>Final Water Content (%)</td>
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<td>Specific Gravity</td>
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<tr>
<td>Liquid Limit</td>
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### Graph

![Graph showing consolidation test results](image)

### Project
Capehart Road Design

### Location
Sarpy County, Nebraska

### Job No.
F16-0727

### Date
07/31/17
ADDENDUM NO. 1
Sarpy County, Nebraska (2018)
Capehart Road, 144th to 132nd Street
C77 (19-9)

TO ALL WHO HAVE RECEIVED PLANS AND SPECIFICATIONS FOR THE REFERENCED PROJECT

Listed below please find addendums to the bid documents dated 10/29/2018.

1. Refer to the BID FORM.

   The Bid Form has been revised per this addendum. The revised bid form includes changes in quantities. The bid item numbers have been adjusted accordingly.

   o The following quantities have been revised:
     - Item No. 20, 6” Crushed Rock Surfacing changed to 1,777 SY.
     - Item No. 38, 72” RCP, D (0.01)=1350 changed to 155 LF.
     - Item No. 45, Curb Inlets – Type III changed to 6 EA.
     - Item No. 48, Aggregate Bedding changed to 1535 LF.

   o The following new pay items and quantities have been added:
     - N/A.

   o The following item shall be replaced:
     - N/A.

2. Refer to the Contract Special Provisions.

   The Contract Special Provisions are amended to include the following:

   o No changes.
3. Refer to Plan Sheet 1 Title Sheet
   - Sheet index has been updated.
   - Added City of Omaha Standard Plate 700-83.

4. Refer to Plan Sheet 2 General Notes and Quantities
   - The following quantities have been revised:
     - Item No. 20, 6” Crushed Rock Surfacing changed to 1,777 SY.
     - Item No. 38, 72” RCP, D (0.01)=1350 changed to 155 LF.
     - Item No. 45, Curb Inlets – Type III changed to 6 EA.
     - Item No. 48, Aggregate Bedding changed to 1535 LF.

5. Refer to Plan Sheet 3 Typical Sections
   - Added note defining the recreational trail surfacing specific depths.

6. Refer to Plan Sheet 29 Drainage
   - Added note that all joints on 72-inch RCP shall be tied with pipe couplers.
   - Modified the tab boxes for the 72-inch RCP pipe length and location of the Flared End Sections accordingly.

7. Refer to Plan Sheet 34 Drainage
   - Added note regarding grouting of riprap.

8. Refer to Plan Sheet 46 Drainage Profiles
   - Modified the 72-inch RCP length within the profile.

9. Refer to Plan Sheet 68 Special Plan 1
   - Modified the flume depth of concrete that is adjacent to the roadway.
Clarifications and Answers to Questions

1. Question:
   County Provisions, 4 reads: “The Special Provisions shall govern where any conflict arises between the Special Provisions and the General Specifications.” As used in that paragraph, what does “General Specifications” refer to?

   Answer:
   This provision was intended to define the Special Provisions supersede over the Standard Specs. The provision language now replaces “General” with “Standard”.

2. Question:
   a. Three standards are referenced here. In the event that these provisions differ or conflict, which Specifications should Contractor rely upon? If so, does this need to be factored in when installing?
   b. The City of Omaha Standard Specs for Public Works Construction, 2014 references “Standard General Conditions of the Construction Contract” but states that “This portion of the City of Omaha’s Standard Specs for Public Works Construction is only available by contacting the City of Omaha Public Works Department.” Historically, the terms of these conditions have changed on a project-to-project basis, and are not standardized. Can the Contractor assume that the Standard General Conditions of the Construction Contract portion of the City of Omaha Standard Specs for Public Works Construction, 2014 is excluded from the terms of this Project?

   Answer:
   a. Please refer to page TS-1, first paragraph of the special provisions.
   b. Yes

3. Question:
   Bid Item 20; Rock Surfacing totals 1,777 SY per plan sheets and the bid Item total quantity is only 1,768 SY. Please Verify.

   Answer:
   Bid Item 20, Rock Surfacing total should be 1,777 SY.

4. Question:
   Bid Item 21; Rec. Trail Surfacing. Please verify the depth of embedment rock and surfacing rock?

   Answer:
   A note has been added to the typical sections, page 3, stating the recreational trail surfacing shall consist of 4 inches of rock embedment and 1 inch of surface course.

NOTICE: Only the contractors issued bidding proposals receive this addendum and responsibility for notifying any potential subcontractors or suppliers remains with the contractor.
5. Question:
Special Provision V. Progression of Work, Paragraph 4: Will the contractor be required to maintain both access points to properties that have two driveways into their property? Or will one access point into their property be sufficient.

This scenario happens at multiple locations on this project.

Answer:
One access point into residential properties shall be sufficient.

6. Question:
Bid Item 45, Curb Inlets - Type III have a quantity of 7 EA. Plan sheets only show 6 EA. Please verify.

Answer:
Bid Item 45, Curb Inlets - Type III total should be 6 EA.

7. Question:
Is it the intent to install the proposed 72" culvert at station 154+10 prior to placing the surcharge or wait until the designed settlement has been achieved?

Answer:
The intent is to place the 72" culvert prior to the surcharge with the anticipation of settlement due to the timeline of project. The culvert slope is sufficient to accept the anticipated settlement and still provide positive drainage. The pipe joints shall be tied together with pipe couplers. These shall be considered subsidiary to the bid.

8. Question:
Plan Sheet's 68,69 & 70 Special Plan 1 Concrete Flumes. Section A-A shows a material base 6", 9" and 9" respectively under the concrete flume where the detail 'A' on the right doesn't. Please verify if there is to be an aggregate base under these flumes and if so what type of material.

Answer:
The dimensions referenced are actually depths of concrete for each structure. Special Plan 1, Flume Type I has been modified to 10-inch thickness to match the adjacent pavement thickness. There is no proposed aggregate base under these structures.

9. Question:
Per Technical Specs (TS-7) VIII. Construct Rip Rap, Part 2 Grout. What depth will be required for grouting in the rip rap?

Answer:
Due to the irregularity of the riprap surface, a specific depth is difficult to obtain. However, the Contractor shall aim for an average depth between 4 to 6 inches of grout, such that no voids are present, and the riprap is sealed together.
COUNTY PROVISIONS  
Addendum #1 11/16/18

1. **Description of Work**  
The work contemplated in this document consists of grading, drainage and paving improvements. Plan sheets provided describe the work required to complete the project.

2. **County Board**  
The County Board of Sarpy County, Nebraska shall, in conjunction with the Engineer, be the final arbiter in all controversies concerning the fulfillment of this Contract. No changes in any of the details of the Plans and Specifications shall be made without approval of the Board. The Board shall approve final acceptance of the work and payment of the Contractor.

3. **Retained Percentage**  
Sarpy County shall retain ten percent (10%) of estimated amounts earned for partial payments. Upon final payment of the project, all retained monies shall be paid in full, except as specified elsewhere in the contract documents.

4. **Special Provisions**  

5. **Field Conditions**  
The Contractor shall have carefully examined the construction work sites to establish the field conditions prior to completing the bid. Contractor will not be entitled to additional compensation if it subsequently finds that conditions require methods or equipment other than what the Contractor originally anticipated.

6. **Preconstruction Meeting**  
Contractor shall coordinate with Sarpy County’s representative (Engineer) to schedule and run a preconstruction meeting at least 48 hours prior to beginning construction. Representatives from Sarpy County Public Works, the Contractor, any Subcontractors, Utilities, and adjacent businesses shall be invited to discuss upcoming construction activities. Contact information for all representatives is provided in this document. The meeting shall take place at the Sarpy County Public Works building or at an agreed upon location.

7. **Period of Performance and Calendar Days**  
Sarpy County and the Contractor shall agree on an expected start date, likely to be no earlier than April 1, 2019. The estimated contract period of performance is specified in the project specific special provisions under the **Work Scheduling** section.

Calendar days shall refer to all shown on the calendar, including Sundays and holidays, beginning and ending at midnight. Calendar days will only be tabulated in the event substantial completion is not met by the milestone dates specified in the project specific special provisions under the **Work Scheduling** section.
8. **Taxes**
Sarpy County will, upon request, furnish the successful Contractor with a completed State of Nebraska Tax Exempt Form upon acceptance of the successful Contractor’s proposal.

9. **Liquidated Damages**
The time of completion is of the essence of the Contract because the County will be subject to additional financing and administrative expense if the work is not completed within the time period specified in the Agreement.

Therefore, the Contractor shall reimburse the County at the rate of **$1500 per day** for each additional calendar day beyond the milestone dates required to **substantially** complete the work. The time allowed for completion of this Contract shall not be extended except as defined in the project specific Special Provisions, under the **Work Scheduling** section.

Company warrants that pursuant to Neb Rev. Stat. 48-2101, et seq. (1994 Cum. Supp.) it has registered as a Contractor with the State of Nebraska, and that it and any and all subcontractors have obtained any and all necessary licenses and permits required by federal law, state law and/or county ordinances for the work described herein.

10. **Deviations**
Once the bid has been accepted by Sarpy County, no deviations from the specifications will be accepted without prior written approval of Sarpy County.

11. **Exceptions**
These specifications are minimum acceptable specifications. You may bid other than what is specified if it is of higher specification than what is requested. Contractor must list any exceptions to the bid specifications on the exceptions/clarifications/comments page provided.

12. **Company Information:**
Contractor will provide the following company information on the bid form:
   a. Years in business;
   b. Number of employees; and,
   c. Total sales for last three (3) years.

13. **References:**
Each Contractor must include with their proposal a list of no less than three (3) references that have purchased the specified product or service within the last two (2) years. The list must include the name of the company, and the name and phone number of a contact person for each company.

14. **Equipment/Safety**
The Contractor shall be responsible for providing all equipment required to protect its employees, the public, surrounding areas, equipment and vehicles including but not limited to the placement of barricades, tarps, plastic flag tape and other safety/traffic control. The cost of such equipment is considered subsidiary to the project and will not be paid for as a separate bid item.
15. **Cleaning**
The Contractor shall keep the premises clean of all rubbish and debris generated by the work involved and shall leave the premises neat and clean.

16. **Maintenance of Traffic/Barricading**
All signing, pavement marking, barricading and traffic control devices shall conform to the State of Nebraska Supplement to the Manual on Uniform Traffic Control Devices, 2011 and the Manual on Uniform Traffic Control Devices, current edition. No lane closures will be allowed without prior authorization from the Engineer.

Control of traffic and protection of the pavement is the responsibility of the Contractor until such time as the work is formally accepted by the Owner. Any damage to the pavement prior to such acceptance shall be remedied by the Contractor at Contractor’s expense.

17. **Damage to Property:**
If any damage occurs to property during the performance of the contract, it shall be the responsibility of the contractor to make repairs and/or replacements.
SARONT
SARONT LI ORS DEPARTMENT
77 19.9
A·EHART ROAD FROM 144TH ST. TO 132ND ST.
FINAL PLANS

INDEX OF SHEETS

1. COVER SHEET
2. GENERAL NOTES & SUMMARY OF APPROX. QUANTITIES
3-6. VERTICAL SECTIONS
7-9. TRAFFIC CONTROL
10-17. GEOMETRICS, FRAMES, AND GRADINGS
18-23. DRAINAGE AND CONSTRUCTION
24-32. DRAINAGE DETAILS
33-41. EROSION CONTROL
42-45. DRAINAGE PROFILES
46-50. EROSION CONTROL
51-52. DRAINAGE QUANTITIES
53-54. SEDIMENT CONTROL
55-56. REINFORCED CONCRETE PIPE COUPLERS
57-58. DRAINAGE QUANTITIES
65-70. SPECIAL PLAN 1 - CONCRETE FLAKE
71-74. SPECIAL PLAN 2 - HIC SHEETS ALL TYPES
75. ROW
X-147. CROSS SECTIONS
GENERAL NOTES

1. All project procedures, materials, bonds and reserves shall conform to the provisions of the Nebraska Standard Specifications for Highway Construction, except as amended by the contract documents.

2. The Contractor shall exercise all necessary care to prevent any work done for the project from being injured or damaged. If any work done for the project is injured or damaged, the Contractor shall repair such work or pay the cost thereof.

3. The Contractor shall be responsible for the protection of all existing underground services, and all such services shall be protected in accordance with the Nebraska Standard Specifications for Highway Construction, and all injuries to such services hereby caused shall be repaired by the Contractor at no additional cost to the Owner.

4. The Contractor shall, at no additional cost to the Owner, provide and maintain all necessary traffic control devices, including but not limited to warning signs, barriers, and other devices necessary to ensure the safety of the public and the Contractor's employees.

5. The Contractor shall be responsible for the protection of all existing underground services, and all such services shall be protected in accordance with the Nebraska Standard Specifications for Highway Construction.

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FILL PLACEMENT/COMPACTION GUIDELINES

<table>
<thead>
<tr>
<th>Zone of Fill Placement</th>
<th>Compaction Factor (Coefficient of Compaction)</th>
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This summary to show clearly or provide material.
CONCRETE FLUME

SPECIAL PLAN 1

CONCRETE FLUME

PLAN

SECTION A-A

NOTES:
CONCRETE FLUME SHALL BE PAVED FOR AS ONE EASEL.

JOINT KILLER AND SEALANT MATERIALS ARE
SUBJECT TO THE FLOOD.

ALL MATERIALS SPECIFIED TO CONFORM TO ASH-40628.

ALL CONCRETE USED SHALL BE CLASS 406-3000.