PROPOSAL PACKAGE

CHESTER CREEK BANK STABILIZATION (2016)

City of Duluth, Minnesota
411 West 1st Street
Duluth, MN 55802

City Project #’s 1280, 1281, 1283, 1349, 1350, 1352, 1353

Bid # 2016-0076

Opening Date: April 6, 2016
Time: 2:00 PM
Place (Submit Bids): Room 100
PROPOSAL PACKAGE
INDEX OF DOCUMENTS

- Invitation to Bid
- Instructions to Bidders
- Bid Form (with Schedule of Prices exhibits)
- Responsible Contractor Certification forms
- Notice to Bidders - Suspension/Debarments
- Data for Labor Cost Bidding cover
- Prevailing Wage Rates (rates may be revised by addenda)
- Affidavit of Non-Collusion form
- EEO Compliance form
- Performance Bond form
- Payment Bond form
- Insurance Requirements
- Contract – sample
- Supplemental General Conditions – Part 2
- Project Labor Agreement – sample (with current union wages)
- Special Provisions – project specific
CITY OF DULUTH
INVITATION TO BID

PROJECT NAME/DESCRIPTION: CHESTER CREEK BANK STABILIZATION (2016)

BID NUMBER: 2016-0076
BID OPENING: APRIL 6, 2016 AT 2:00 PM

PROJECT DESCRIPTION: The project consists of post-flood debris clean-up, sediment removal, in-stream bank stabilization, and slope stabilization of Chester Creek between Kenwood Avenue to East Skyline Parkway in Chester [Bowl] Park, and further downstream towards East 8th Street. Work items include: grading, composite rock wood bank protection, J-hook boulder vanes, vegetated reinforced soil slope, rip rap, rock filter dike, trees, shrubs, and turf establishment.

QUESTIONS: Please submit any questions regarding this project to: Tom Pfeffer, Senior Project Engineer at 218-730-5104 or by email at tpfeffer@duluthmn.gov. Responses will be provided to all interested bidders as an addendum to this solicitation.

Each bidder must review the 2016 Edition of the City of Duluth Public Works & Utilities Department/Engineering Division “Construction Standards” available on the city website (www.duluthmn.gov) as these Specifications are incorporated by reference and are deemed to be a part hereof this project as if fully incorporated and set forth herein.

The selected contractor will be issued a construction contract (draft attached). Notice to Proceed will be issued once the agreement is fully executed.

Plans and specifications may be obtained at no cost from the City’s Purchasing Division website at http://www.duluthmn.gov/purchasing/bids-request-for-proposals/ Hard copies of the plans and specifications may be obtained from the City Engineering Office, Room 211 City Hall, 411 West 1st Street, Duluth, MN 55820 for a nominal fee, payable by check or money order.

Plans and specifications are on file for inspection at the City Engineering Office, Duluth Builders Exchange, Minnesota Builder's Exchange, Wisconsin Builder's Exchange, Blue Book Construction Network, and Meda Construction Connection.

Revised 1-20-16
INSTRUCTIONS TO BIDDERS

All bids must be complete, signed, and transmitted in a sealed envelope plainly marked with the bid number, subject matter, and opening date. The City of Duluth reserves the right to split the award where there is a substantial savings to the City, to waive informalities and to reject any and all bids. Bidder must state in their proposal if bid price is based on acceptance of the total order. Do not include sales tax in the unit price. Price may not be the only consideration for bid award. Bids must be firm for a minimum of 60 days.

Sealed bids must be received in Purchasing, Room 100 City Hall, 411 West 1st Street, Duluth, MN 55802 before 2:00 PM local time on the bid opening date specified on the Invitation for Bids. The City Purchasing Agent or her designee will conduct a public bid opening in Room 100 immediately following receipt of the bids. Bid results will be posted online at http://www.duluthmn.gov/purchasing/bids-request-for-proposals/ once all bids have been reviewed.

No alternatives to the specification will be considered unless specifically requested. Erasures or other changes to the bid must be initialed and dated.

The following documents must be submitted with your bid:

1. **Bid Bond** - A certified check or bank draft, payable to the order of the City of Duluth, negotiable U.S. Government Bonds (at par value), or a satisfactory bid bond executed by the bidder and acceptable surety, in an amount equal to five per cent (5%) of the total bid. Bids may be withdrawn without forfeiture of surety if the request is submitted by the Bidder and received at the Purchasing Office in writing or by telephone prior to the scheduled bid opening.

2. **Acknowledgment of Addendum** (if applicable) – any changes to this solicitation will be announced via Addendum. All such Addenda shall become part of the resulting purchase order and/or contract and all bidders shall be bound by such Addenda, whether or not received by the bidders. Acknowledgement of Addenda should be indicated on your bid form by initialing and dating where indicated.

3. **Responsible Contractor** - No construction contract in excess of $50,000 will be awarded unless the Bidder is a “responsible contractor” as defined in Minnesota Statute §16C.285, subdivision 3. All Bidders submitting a proposal for this project must verify that they meet the minimum criteria specified in the statute by submitting a Responsible Contractor Verification and Certification of Compliance form (attached). The owner or officer of the company must sign the form under oath verifying compliance with each of the minimum criteria. Making a false statement under oath will render the Bidder or subcontractor that makes the false statement ineligible to be awarded a construction project and may result in termination of a contract awarded to a Bidder or subcontractor that submits a false statement. Bidders must obtain verification of compliance from all subcontractors. Bidders must submit signed copies of verifications and certifications of compliance from subcontractors at the City’s request.

Please note that the following requirements also apply to this project, and any additional required documents must be submitted prior to award/contract execution. Submitting these documents with your bid will assist in expediting the process.

1. **Insurance** – Contractor must provide proof of Public Liability and Automobile Liability Insurance with limits not less than $1,500,000 Single Limit prior to the commencement of work. The City of Duluth must be named as an additional insured. Please refer to the draft Contract, Section 7.

2. **Affidavit of Non-Collusion** – The successful bidder shall be required to execute the attached affidavit stating that he/she has not entered into a collusive agreement with any other person, firm, or corporation in regard to any bid submitted.

3. **Performance & Payment Bonds** – The successful bidder will be required to submit performance and payments bonds in the full amount of the project cost prior to award.

4. **Affirmative Action/EEO** - The contractor must take affirmative action to ensure that the employees and applicants for employment are not discriminated against because of their race, color, creed, sex or national origin, and must meet the affirmative action goals. Contractors are encouraged to subcontract

5. **Project Labor Agreement (PLA)** - A PLA will be required for any bid that is over or could virtually go over $150,000. A copy of the City standard PLA is included in this package.

6. **Out of State Contractor** - Unless a State of Minnesota Certificate of Exemption is provided, any out-of-state bidder receiving a bid award will have 8% retained from invoice payments on any contracts over $50,000. Contractors must submit a signed copy of the exemption form when submitting Payment and Performance Bonds. This form may be found at the following web address: [http://www.revenue.state.mn.us/Forms_and_Instructions/sde.pdf](http://www.revenue.state.mn.us/Forms_and_Instructions/sde.pdf)

7. **Prevailing Wage** - Not less than the minimum salaries and prevailing wages as set forth in the contract documents must be paid on this project.

The City of Duluth is an Equal Opportunity Employer. Contractor shall comply with all applicable Equal Employment Opportunity laws and regulations.

CITY OF DULUTH

[Signature]

Amanda Ashbach
Purchasing Agent
# BID FORM

<table>
<thead>
<tr>
<th>ITEM</th>
<th>PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refer to Exhibit A Schedule of Unit Prices</td>
<td>$</td>
</tr>
<tr>
<td></td>
<td>$</td>
</tr>
<tr>
<td></td>
<td>$</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$</td>
</tr>
</tbody>
</table>

**TOTAL PRICE IN WRITING**

**ACKNOWLEDGMENT OF ADDENDA**

<table>
<thead>
<tr>
<th>ADDENDUM #</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Signature ________________________________  Date ___________

Name/Title ________________________________________________

Company Name ______________________________________________

Address ________________________________________________

City, State, Zip ___________________________________________

Tel. ______________________________________________________

If your organization is certified as a disadvantaged business enterprise, please check here -  ☐

Revised 1-20-16
<table>
<thead>
<tr>
<th>Line No.</th>
<th>Spec. No.</th>
<th>Description</th>
<th>Unit</th>
<th>Est. Qty</th>
<th>Unit Price</th>
<th>Total Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>Project Mobilization/Demobilization</td>
<td>1.00 LS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>Control of Water</td>
<td>1.00 LS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>Rock Construction Entrance</td>
<td>5 EA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>Maintenance and Restoration of Access Paths</td>
<td>1.00 LS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>E</td>
<td>Clearing and Grubbing</td>
<td>1.00 LS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>Selected Debris Removal and Off-Site Disposal (P)</td>
<td>80 CY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>G</td>
<td>Sediment Removal and On-Site Disposal (P)</td>
<td>740 CY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>H</td>
<td>Sediment Removal and Off-Site Disposal (P)</td>
<td>585 CY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>I</td>
<td>Boulder Vane (Cross and J-Hook)</td>
<td>270 LF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>J</td>
<td>Toewood - Type A</td>
<td>130 LF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>K</td>
<td>Vegetated Reinforced Soil Slope (VRSS) - Type A</td>
<td>1,265 SFF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>K</td>
<td>Vegetated Reinforced Soil Slope (VRSS) - Type B</td>
<td>2,020 SFF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>L</td>
<td>Live Stake</td>
<td>3,533 EA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>M</td>
<td>French Drain</td>
<td>60 LF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>N</td>
<td>Corrugated Polyethylene Drain Tile, 6-inch with Sock</td>
<td>130 LF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>O</td>
<td>Site Grading (P)</td>
<td>260 CY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>P</td>
<td>Common Fill (P)</td>
<td>80 CY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Q</td>
<td>Import Topsoil</td>
<td>298 TON</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>R</td>
<td>Rip-Rap, Class I</td>
<td>4 TON</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>R</td>
<td>Rip-Rap, Class III</td>
<td>145 TON</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>R</td>
<td>Rip-Rap, Class IV</td>
<td>560 TON</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>R</td>
<td>Rip-Rap, Class V</td>
<td>178 TON</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>S</td>
<td>Rock Filter Dike</td>
<td>25 TON</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Line No.</td>
<td>Spec. No.</td>
<td>Description</td>
<td>Unit</td>
<td>Est. Qty</td>
<td>Unit Price</td>
<td>Total Price</td>
</tr>
<tr>
<td>---------</td>
<td>-----------</td>
<td>--------------------------------------------------</td>
<td>------</td>
<td>----------</td>
<td>------------</td>
<td>-------------</td>
</tr>
<tr>
<td>24</td>
<td>T</td>
<td>Concrete Dissipator Structure</td>
<td>1</td>
<td>EA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>U</td>
<td>Silt Fence</td>
<td>1,860</td>
<td>LF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>V</td>
<td>Silt Fence Baffle System</td>
<td>80</td>
<td>LF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>W</td>
<td>Filter Log</td>
<td>428</td>
<td>LF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>X</td>
<td>Erosion Control Blanket, Category 3N-2S</td>
<td>2,670</td>
<td>SY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>X</td>
<td>Erosion Control Blanket, Category 4N-2S</td>
<td>725</td>
<td>SY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Y</td>
<td>Natural Fiber Matting</td>
<td>350</td>
<td>SY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>Z</td>
<td>Straw Mulch</td>
<td>5,776</td>
<td>SY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>AA</td>
<td>Seeding, Native Mix</td>
<td>4,591</td>
<td>SY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>BB</td>
<td>Seeding, Turf</td>
<td>5,056</td>
<td>SY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>CC</td>
<td>Trees</td>
<td>20</td>
<td>EA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>DD</td>
<td>Shrubs, #2 Container</td>
<td>675</td>
<td>EA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>EE</td>
<td>Plugs</td>
<td>100</td>
<td>EA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>FF</td>
<td>Root Rap</td>
<td>45</td>
<td>SY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>GG</td>
<td>Foot Path Construction &amp; Restoration</td>
<td>172</td>
<td>LF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>HH</td>
<td>Deadfall and Debris Removal and Off-Site Disposal</td>
<td>225</td>
<td>SY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>II</td>
<td>Biolog</td>
<td>760</td>
<td>LF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>41</td>
<td>JJ</td>
<td>24-Inch HDPE Culvert with Apron Endwall</td>
<td>16</td>
<td>LF</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL:**
**ATTACHMENT A**  
**PRIME CONTRACTOR RESPONSE**  

**RESPONSIBLE CONTRACTOR VERIFICATION AND CERTIFICATION OF COMPLIANCE**

**STATE PROJECT NUMBER:** ____________________________________________________

This form includes changes by statutory references from the Laws of Minnesota 2015, chapter 64, sections 1-9. This form must be submitted with the response to this solicitation. A response received without this form, will be rejected.

**Minn. Stat. § 16C.285, Subd. 7. IMPLEMENTATION.** … any prime contractor or subcontractor or motor carrier that does not meet the minimum criteria in subdivision 3 or fails to verify that it meets those criteria is not a responsible contractor and is not eligible to be awarded a construction contract for the project or to perform work on the project…

**Minn. Stat. § 16C.285, Subd. 3. RESPONSIBLE CONTRACTOR, MINIMUM CRITERIA.** "Responsible contractor" means a contractor that conforms to the responsibility requirements in the solicitation document for its portion of the work on the project and verifies that it meets the following minimum criteria:

<table>
<thead>
<tr>
<th>(1)</th>
<th>The Contractor:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i)</td>
<td>is in compliance with workers' compensation and unemployment insurance requirements;</td>
</tr>
<tr>
<td>(ii)</td>
<td>is in compliance with Department of Revenue and Department of Employment and Economic Development registration requirements if it has employees;</td>
</tr>
<tr>
<td>(iii)</td>
<td>has a valid federal tax identification number or a valid Social Security number if an individual; and</td>
</tr>
<tr>
<td>(iv)</td>
<td>has filed a certificate of authority to transact business in Minnesota with the Secretary of State if a foreign corporation or cooperative.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(2)</th>
<th>The contractor or related entity is in compliance with and, during the three-year period before submitting the verification, has not violated section 177.24, 177.25, 177.41 to 177.44, 181.13, 181.14, or 181.722, and has not violated United States Code, title 29, sections 201 to 219, or United States Code, title 40, sections 3141 to 3148. For purposes of this clause, a violation occurs when a contractor or related entity:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i)</td>
<td>repeatedly fails to pay statutorily required wages or penalties on one or more separate projects for a total underpayment of $25,000 or more within the three-year period, provided that a failure to pay is “repeated” only if it involves two or more separate and distinct occurrences of underpayment during the three-year period;</td>
</tr>
<tr>
<td>(ii)</td>
<td>has been issued an order to comply by the commissioner of Labor and Industry that has become final;</td>
</tr>
<tr>
<td>(iii)</td>
<td>has been issued at least two determination letters within the three-year period by the Department of Transportation finding an underpayment by the contractor or related entity to its own employees;</td>
</tr>
<tr>
<td>(iv)</td>
<td>has been found by the commissioner of Labor and Industry to have repeatedly or willfully violated any of the sections referenced in this clause pursuant to section 177.27;</td>
</tr>
<tr>
<td>(v)</td>
<td>has been issued a ruling or findings of underpayment by the administrator of the Wage and Hour Division of the United States Department of Labor that have become final or have been upheld by an administrative law judge or the Administrative Review Board; or</td>
</tr>
<tr>
<td>(vi)</td>
<td>has been found liable for underpayment of wages or penalties or misrepresenting a construction worker as an independent contractor in an action brought in a court having jurisdiction. Provided that, if the contractor or related entity contests a determination of underpayment by the Department of Transportation in a contested case proceeding, a violation does not occur until the contested case proceeding has concluded with a determination that the contractor or related entity underpaid wages or penalties;*</td>
</tr>
</tbody>
</table>

---

* Provided that, if the contractor or related entity contests a determination of underpayment by the Department of Transportation in a contested case proceeding, a violation does not occur until the contested case proceeding has concluded with a determination that the contractor or related entity underpaid wages or penalties;
(3) The contractor or related entity is in compliance with and, during the three-year period before submitting the verification, has not violated section 181.723 or chapter 326B. For purposes of this clause, a violation occurs when a contractor or related entity has been issued a final administrative or licensing order;*

(4) The contractor or related entity has not, more than twice during the three-year period before submitting the verification, had a certificate of compliance under section 363A.36 revoked or suspended based on the provisions of section 363A.36, with the revocation or suspension becoming final because it was upheld by the Office of Administrative Hearings or was not appealed to the office;*

(5) The contractor or related entity has not received a final determination assessing a monetary sanction from the Department of Administration or Transportation for failure to meet targeted group business, disadvantaged business enterprise, or veteran-owned business goals, due to a lack of good faith effort, more than once during the three-year period before submitting the verification;*

* Any violations, suspensions, revocations, or sanctions, as defined in clauses (2) to (5), occurring prior to July 1, 2014, shall not be considered in determining whether a contractor or related entity meets the minimum criteria.

(6) The contractor or related entity is not currently suspended or debarred by the federal government or the state of Minnesota or any of its departments, commissions, agencies, or political subdivisions that have authority to debar a contractor; and

(7) All subcontractors and motor carriers that the contractor intends to use to perform project work have verified to the contractor through a signed statement under oath by an owner or officer that they meet the minimum criteria listed in clauses (1) to (6).

Minn. Stat. § 16C.285, Subd. 5. **SUBCONTRACTOR VERIFICATION.**

A prime contractor or subcontractor shall include in its verification of compliance under subdivision 4 a list of all of its first-tier subcontractors that it intends to retain for work on the project. Prior to execution of a construction contract, and as a condition precedent to the execution of a construction contract, the apparent successful prime contractor shall submit to the contracting authority a supplemental verification under oath confirming compliance with subdivision 3, clause (7). Each contractor or subcontractor shall obtain from all subcontractors with which it will have a direct contractual relationship a signed statement under oath by an owner or officer verifying that they meet all of the minimum criteria in subdivision 3 prior to execution of a construction contract with each subcontractor.

If a prime contractor or any subcontractor retains additional subcontractors on the project after submitting its verification of compliance, the prime contractor or subcontractor shall obtain verifications of compliance from each additional subcontractor with which it has a direct contractual relationship and shall submit a supplemental verification confirming compliance with subdivision 3, clause (7), within 14 days of retaining the additional subcontractors.

A prime contractor shall submit to the contracting authority upon request copies of the signed verifications of compliance from all subcontractors of any tier pursuant to subdivision 3, clause (7). A prime contractor and subcontractors shall not be responsible for the false statements of any subcontractor with which they do not have a direct contractual relationship. A prime contractor and subcontractors shall be responsible for false statements by their first-tier subcontractors with which they have a direct contractual relationship only if they accept the verification of compliance with actual knowledge that it contains a false statement.

Subd. 5a. **Motor carrier verification.** A prime contractor or subcontractor shall obtain annually from all motor carriers with which it will have a direct contractual relationship a signed statement under oath by an owner or officer verifying that they meet all of the minimum criteria in subdivision 3 prior to execution of a construction contract with each motor carrier. A prime contractor or subcontractor shall require each such motor carrier to provide it with immediate written notification in the event that the motor carrier no longer meets one or more of the minimum criteria in subdivision 3 after submitting its annual verification. A motor carrier shall be ineligible to perform work on a project covered by this section if it does not meet all the minimum criteria in subdivision 3. Upon request, a prime contractor or subcontractor shall submit to the contracting authority the signed verifications of compliance from all motor carriers providing for-hire transportation of materials, equipment, or supplies for a project.
Minn. Stat. § 16C.285, Subd. 4. **VERIFICATION OF COMPLIANCE.**

A contractor responding to a solicitation document of a contracting authority shall submit to the contracting authority a signed statement under oath by an owner or officer verifying compliance with each of the minimum criteria in subdivision 3, with the exception of clause (7), at the time that it responds to the solicitation document.

A contracting authority may accept a signed statement under oath as sufficient to demonstrate that a contractor is a responsible contractor and shall not be held liable for awarding a contract in reasonable reliance on that statement. A prime contractor, subcontractor, or motor carrier that fails to verify compliance with any one of the required minimum criteria or makes a false statement under oath in a verification of compliance shall be ineligible to be awarded a construction contract on the project for which the verification was submitted.

A false statement under oath verifying compliance with any of the minimum criteria may result in termination of a construction contract that has already been awarded to a prime contractor or subcontractor or motor carrier that submits a false statement. A contracting authority shall not be liable for declining to award a contract or terminating a contract based on a reasonable determination that the contractor failed to verify compliance with the minimum criteria or falsely stated that it meets the minimum criteria. A verification of compliance need not be notarized. An electronic verification of compliance made and submitted as part of an electronic bid shall be an acceptable verification of compliance under this section provided that it contains an electronic signature as defined in section 325L.02, paragraph (h).

**CERTIFICATION**

By signing this document I certify that I am an owner or officer of the company, and I swear under oath that:

1) My company meets each of the Minimum Criteria to be a responsible contractor as defined herein and is in compliance with Minn. Stat. § 16C.285, and

2) if my company is awarded a contract, I will submit Attachment A-1 prior to contract execution, and

3) if my company is awarded a contract, I will also submit Attachment A-2 as required.

<table>
<thead>
<tr>
<th>Authorized Signature of Owner or Officer:</th>
<th>Printed Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Title:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Company Name:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** Minn. Stat. § 16C.285, Subd. 2, (c) If only one prime contractor responds to a solicitation document, a contracting authority may award a construction contract to the responding prime contractor even if the minimum criteria in subdivision 3 are not met.
ATTACHMENT A-1
FIRST-TIER SUBCONTRACTORS LIST
SUBMIT PRIOR TO EXECUTION OF A CONSTRUCTION CONTRACT

STATE PROJECT NUMBER: ____________________________________________________

Minn. Stat. § 16C.285, Subd. 5. A prime contractor or subcontractor shall include in its verification of compliance under subdivision 4 a list of all of its first-tier subcontractors that it intends to retain for work on the project. Prior to execution of a construction contract, and as a condition precedent to the execution of a construction contract, the apparent successful prime contractor shall submit to the contracting authority a supplemental verification under oath confirming compliance with subdivision 3, clause (7). Each contractor or subcontractor shall obtain from all subcontractors with which it will have a direct contractual relationship a signed statement under oath by an owner or officer verifying that they meet all of the minimum criteria in subdivision 3 prior to execution of a construction contract with each subcontractor.

<table>
<thead>
<tr>
<th>FIRST TIER SUBCONTRACTOR NAMES* (Legal name of company as registered with the Secretary of State)</th>
<th>Name of city where company home office is located</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Attach additional sheets as needed for submission of all first-tier subcontractors.

SUPPLEMENTAL CERTIFICATION FOR ATTACHMENT A-1

By signing this document I certify that I am an owner or officer of the company, and I swear under oath that:

All first-tier subcontractors listed on attachment A-1 have verified through a signed statement under oath by an owner or officer that they meet the minimum criteria to be a responsible contractor as defined in Minn. Stat. § 16C.285.

<table>
<thead>
<tr>
<th>Authorized Signature of Owner or Officer:</th>
<th>Printed Name:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Title:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Company Name:</th>
<th></th>
</tr>
</thead>
</table>
ATTACHMENT A-2

ADDITIONAL SUBCONTRACTORS LIST

PRIME CONTRACTOR TO SUBMIT AS SUBCONTRACTORS ARE ADDED TO THE PROJECT

STATE PROJECT NUMBER: ____________________________________________________

This form must be submitted to the Project Manager or individual as identified in the solicitation document.

Minn. Stat. § 16C.285, Subd. 5. … If a prime contractor or any subcontractor retains additional subcontractors on the project after submitting its verification of compliance, the prime contractor or subcontractor shall obtain verifications of compliance from each additional subcontractor with which it has a direct contractual relationship and shall submit a supplemental verification confirming compliance with subdivision 3, clause (7), within 14 days of retaining the additional subcontractors. …

<table>
<thead>
<tr>
<th>ADDITIONAL SUBCONTRACTOR NAMES*</th>
<th>Name of city where company home office is located</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Legal name of company as registered with the Secretary of State</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Attach additional sheets as needed for submission of all additional subcontractors.

SUPPLEMENTAL CERTIFICATION FOR ATTACHMENT A-2

By signing this document I certify that I am an owner or officer of the company, and I swear under oath that:

All additional subcontractors listed on Attachment A-2 have verified through a signed statement under oath by an owner or officer that they meet the minimum criteria to be a responsible contractor as defined in Minn. Stat. § 16C.285.

Authorized Signature of Owner or Officer: Printed Name:

Title: Date:

Company Name:
NOTICE TO BIDDERS
SUSPENSIONS/DEBARMENTS

January 15, 2016
Page 1 of 3

DEPARTMENT OF TRANSPORTATION

NOTICE OF SUSPENSION

NOTICE IS HEREBY GIVEN that MnDOT has ordered that the following vendors be suspended for a period of six (6) months, effective January 14, 2016 until July 14, 2016:

- Jeffrey and Laurie Plzak doing business as Fibertech Incorporated¹, and its affiliates, Loretto, MN

NOTICE OF DEBARMENT

NOTICE IS HEREBY GIVEN that MnDOT has ordered that the following vendors be debarred for a period of three (3) years, effective May 6, 2013 until May 6, 2016:

- Gary Francis Bauerly and his affiliates, Rice, MN
- Gary Bauerly, LLC and its affiliates, Rice, MN
- Watab Hauling Co. and its affiliates, Rice, MN

NOTICE IS HEREBY GIVEN that MnDOT has ordered that the following vendors be debarred for a period of three (3) years, effective September 17, 2014 until September 17, 2017:

- Jeffrey Plzak and his affiliates, Loretto, MN
- Laurie Plzak and her affiliates, Loretto, MN
- Honda Electric Incorporated and its affiliates, Loretto, MN
- Jeffrey and Laurie Plzak doing business as Honda Electric Logistics, and its affiliates, Loretto, MN

NOTICE IS HEREBY GIVEN that MnDOT has ordered that the following vendors be debarred for a period of three (3) years, effective January 12, 2015 until January 12, 2018:

- Marlin Dahl, Granada, MN
- Dahl Trucking, Elmore, MN
- Elmore Truck and Trailer, Inc., Elmore, MN

Minnesota Statute section 161.315 prohibits the Commissioner, counties, towns, or home rule or statutory cities from awarding or approving the award of a contract for goods or services to a person who is suspended or debarred, including:

1) any contract under which a debarred or suspended person will serve as a subcontractor or material supplier,
2) any business or affiliate which the debarred or suspended person exercises substantial influence or control, and
3) any business or entity, which is sold or transferred by a debarred person to a relative or any other party over whose actions the debarred person exercises substantial influence or control, remains ineligible during the duration of the seller’s or transfer’s debarment.

¹ This notice refers only to Fibertech Incorporated of Loretto, Minnesota and is not to be confused with any other businesses not controlled by Jeffrey and Laurie Plzak, including: FiberTech of Parkers Prairie, Minnesota; Fiber Tech Productions of Nisswa, Minnesota; Fiber Technologies Solutions of Georgia; or Fiber-Tech Industries of Cadillac, Michigan.
### NOTICE TO BIDDERS
### SUSPENSIONS/DEBARMENTS

January 15, 2016

Page 2 of 3

---

**DEPARTMENT OF ADMINISTRATION**

As of the date of this notice and in accordance with Minnesota Rules 1230.1150, the Minnesota Department of Administration has debarred and disqualified the following persons and businesses from entering into or receiving a State of Minnesota contract:

<table>
<thead>
<tr>
<th>NAME</th>
<th>DATE OF SUSPENSION</th>
<th>DATE OF DEBARMENT</th>
<th>REINSTATEMENT DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Devos, Ltd. d/b/a Guaranteed Returns</td>
<td>December 5, 2014 through December 31, 2099</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dean Volkes, Donna Fallon &amp; Ronald Carlino</td>
<td>Holbrook, NY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100 Colin Drive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tom Mann</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Best Electric</td>
<td>May 22, 2015 through May 21, 2018</td>
<td>(eligible for reinstatement on May 21, 2019)</td>
<td></td>
</tr>
<tr>
<td>Thomas Clifton and Earl Standafer</td>
<td>9909 S. Shore Drive #155</td>
<td>Plymouth, MN 55441</td>
<td></td>
</tr>
<tr>
<td>Best Used Trucks of Minnesota, Inc.</td>
<td>Nov. 20, 2012 through Nov. 20, 2015</td>
<td>(eligible for reinstatement on Nov. 20, 2016)</td>
<td></td>
</tr>
<tr>
<td>Jason W. Leas</td>
<td>635 Marin Avenue</td>
<td>Crookston, MN 56716</td>
<td></td>
</tr>
<tr>
<td>C &amp; S Electric, Inc.</td>
<td>May 22, 2015 through May 21, 2018</td>
<td>(eligible for reinstatement on May 21, 2019)</td>
<td></td>
</tr>
<tr>
<td>Thomas Clifton and Earl Standafer</td>
<td>9909 S. Shore Drive #155</td>
<td>Plymouth, MN 55441</td>
<td></td>
</tr>
<tr>
<td>Dahl Trucking</td>
<td>Aug. 19, 2014 through January 12, 2018</td>
<td>Marlin Dahl</td>
<td></td>
</tr>
<tr>
<td>305 Highway 169 South</td>
<td></td>
<td>Elmore, MN 56027</td>
<td></td>
</tr>
<tr>
<td>305 Highway 169 South</td>
<td></td>
<td>Elmore, MN 56027</td>
<td></td>
</tr>
<tr>
<td>Groundscape Maintenance, Inc.</td>
<td>February 19, 2015 through February 19, 2016</td>
<td>Rob Sievers</td>
<td>(eligible for reinstatement February 19, 2017)</td>
</tr>
<tr>
<td>1160 County Road 83</td>
<td></td>
<td>Maple Plain, MN 55359</td>
<td></td>
</tr>
<tr>
<td>5075 Nielsen Circle, P.O. Box 236</td>
<td></td>
<td>Loretto, MN 55357</td>
<td></td>
</tr>
<tr>
<td>2751 Hennepin Avenue South, #301</td>
<td></td>
<td>Minneapolis, MN 55408-1002</td>
<td></td>
</tr>
<tr>
<td>MG Carlson Construction Company, Inc.</td>
<td>Sept. 5, 2014 through October 5, 2015</td>
<td>Martin Gerald Carlson</td>
<td>(eligible for reinstatement on April 5, 2016)</td>
</tr>
<tr>
<td>701 East First Street</td>
<td></td>
<td>Fort Worth, TX 76102-3276</td>
<td></td>
</tr>
<tr>
<td>Houston, TX 77047</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ramco Heating and Air Conditioning</td>
<td>March 11, 2015 through March 11, 2017</td>
<td>Mark and Cheryl Ramquist</td>
<td>(eligible for reinstatement March 11, 2017)</td>
</tr>
<tr>
<td>605 Ash Street</td>
<td></td>
<td>Downing, WI 54734</td>
<td></td>
</tr>
</tbody>
</table>

---

*Note: Dates and suspension details are as per the notice.*
Minnesota Administrative Rule part 1230.1150, subpart 6 requires the Materials Management Division to maintain a master list of all suspensions and debarments. The master list must retain all information concerning suspensions and debarments as a public record for at least three (3) years following the end of a suspension or debarment. Refer to the following website for the master list: [http://www.mmd.admin.state.mn.us/debarredreport.asp](http://www.mmd.admin.state.mn.us/debarredreport.asp).

If the project is financed in whole or in part with federal funds, refer to the following website for vendors debarred by federal government agencies: [http://sam.gov](http://sam.gov).

This list does not include preclusion actions taken by cities, counties or local authorities. Consult local authorities to ensure that contractors, subcontractors and materials suppliers are not currently suspended or debarred.
DATA FOR LABOR COST BIDDING

NOTE:
Wage Decisions are subject to change due to lock-in rules and revisions near the bid opening.

Project No.: 1280, 1281, 1283, 1349, 1350, 1352, 1353

Name: CHESTER CREEK BANK STABILIZATION (2016)

City Project Manager: Tom Pfeffer

Bid Opening Date: April 6, 2016

This project is funded by:

State of Minnesota without federal funding
[With or without City of Duluth funding]

The base workweek:

Five 8-hour days AND OT after 40 hours per week

The project [DOES] contain a project labor agreement (PLA).
Should a project contain a project labor agreement:
1) Union scale may not be reflected in the prevailing wage schedule(s)
2) Note Article II Section 10 for trucking labor costs

OVERTIME REQUIREMENTS:
Overtime must be paid on hours worked in excess of eight hours per day. Contractors (including sub-contractors) are not allowed to pay overtime solely on hours in excess of forty per week.

The overtime rate must be paid at NO LESS than the rate of pay as established in the project’s wage decision multiplied by one and one-half OR the base rate the employee is being paid if it is higher than the wage decision base rate.

Project Prevailing Wage Decisions: U S DOL Heavy 3-4-16
State of Minnesota Region 1 Highway-Heavy 12-29-15
State of Minnesota Truck Rental Rates 1-25-16
HEAVY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of $10.15 for calendar year 2016 applies to all contracts subject to the Davis-Bacon Act for which the solicitation was issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least $10.15 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2016. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number     Publication Date
0              01/08/2016
1              03/04/2016

BOIL0647-004 01/01/2013

Rates          Fringes
BOILERMAKER......................$ 32.40            25.37

ST LOUIS COUNTY (Southern 1/3 including Cotton, Floodwood, Fond Du Lac, and Proctor)

Rates          Fringes
CARPENTER (Including Form Work)......................$ 34.11            17.08

ST LOUIS (Duluth)

Rates          Fringes
CARPENTER (Including Form Work)......................$ 34.11            17.08

ST LOUIS COUNTY (Northeast 2/3 including Cook, Cusson, Ely; and Western part including Chisholm, Greaney, and Orr)

Rates          Fringes
CARPENTER (Including Form Work)......................$ 34.11            17.08

* ELEC0242-012 05/31/2015

ST. LOUIS (South part bounded on the north by the north line of Kelsey Township extended east & west)

Rates          Fringes
ELECTRICIAN......................$ 33.90            24.47

ST. LOUIS (North part bounded on the south by the south line of
Ellsburg Township, extended east & west

Rates Fringes

ELECTRICIAN $ 34.68 61.54%

----------------------------------------------------------------

ENGI0049-064 05/01/2015

Rates Fringes

OPERATOR: Power Equipment

Group 2 ................ $ 33.78 17.90
Group 3 ................ $ 33.23 17.90
Group 4 ................ $ 32.93 17.90
Group 5 ................ $ 29.89 17.90
Group 6 ................ $ 28.68 17.90

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 2: Crane with over 135' Boom, excluding jib; Dragline & Hydraulic Backhoe with shovel-type controls, 3 cubic yards and over; Grader/Blade finishing earthwork and bituminous.

GROUP 3: Dragline & Hydraulic Backhoe with shovel-type controls up to 3 cubic yards; Loader 5 cu yd and over; Mechanic; Tandem Scraper; Truck Crane; Crawler Crane

GROUP 4: Bituminous Roller 8 tons & over; Crusher/Crushing Plant; Drill Rig; Elevating Grader; Loader over 1 cu yd; Grader; Pump; Scraper up to 32 cu yd; Farm Tractor with Backhoe attachment; Skid Steer Loader over 1 cu yd with Backhoe attachment; Bulldozer over 50 hp.

GROUP 5: Bituminous Roller under 8 tons; Bituminous Rubber Tire Roller; Loader up to 1 cu yd; Bulldozer 50 hp or less.

GROUP 6: Oiler; Self-Propelled Vibrating Packer 35 hp and over.

CRANE OVER 135' BOOM, EXCLUDING JIB - $ .25 PREMIUM;
CRANE OVER 200' BOOM, EXCLUDING JIB - $ .50 PREMIUM

UNDERGROUND WORK:

UNNELS, SHAFTS, ETC. - $ .25 PREMIUM
UNDER AIR PRESSURE - $ .50 PREMIUM

HAZARDOUS WASTE PROJECTS (PPE Required):

LEVEL A - $1.25 PREMIUM
LEVEL B - $ .90 PREMIUM
LEVEL C - $ .60 PREMIUM

----------------------------------------------------------------

IRON0512-028 05/01/2015

Rates Fringes

IRONWORKER, STRUCTURAL AND REINFORCING $ 31.04 23.45

----------------------------------------------------------------

LABO1091-006 05/01/2014

ST LOUIS (South of T. 55 N)

Rates Fringes

LABORERS

(1) Common or General........ $ 26.97 16.21
(2) Mason Tender
(6) Pipe Layer.............. $ 27.17 16.21

----------------------------------------------------------------

LABO1091-007 05/01/2014

SOUTHERN ST. LOUIS COUNTY

Rates Fringes

LABORER

Common or General (Natural
<table>
<thead>
<tr>
<th>Description</th>
<th>Rates</th>
<th>Fringes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gas Pipeline only)</td>
<td>$26.97</td>
<td>16.21</td>
</tr>
<tr>
<td>LABO1097-002 05/01/2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NORTHERN ST. LOUIS COUNTY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rates Fringes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LABORER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common or General (Natural</td>
<td>$25.02</td>
<td>18.16</td>
</tr>
<tr>
<td>Gas Pipeline only)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LABO1097-005 05/01/2014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST LOUIS (North of T. 55 N)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rates Fringes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LABORERS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Common or General....$</td>
<td>25.02</td>
<td>18.16</td>
</tr>
<tr>
<td>(2) Mason Tender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cement/Concrete……………………$</td>
<td>25.22</td>
<td>18.16</td>
</tr>
<tr>
<td>(6) Pipe Layer……………………$</td>
<td>27.52</td>
<td>18.16</td>
</tr>
<tr>
<td>PLAS0633-036 05/01/2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST. LOUIS COUNTY (North of T 55N)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rates Fringes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEMENT MASON/CONCRETE FINISHER....................</td>
<td>$26.71</td>
<td>14.64</td>
</tr>
<tr>
<td>PLAS0633-039 05/01/2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ST. LOUIS COUNTY (South of T 55N)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rates Fringes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEMENT MASON/CONCRETE FINISHER....................</td>
<td>$32.78</td>
<td>16.80</td>
</tr>
<tr>
<td>TEAM0160-018 05/01/2015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rates Fringes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRUCK DRIVER (DUMP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Articulated Dump Truck..$</td>
<td>28.70</td>
<td>15.20</td>
</tr>
<tr>
<td>(2) 3 Axles/4 Axles; 5 Axles receive $0.30 additional per hour............$</td>
<td>28.15</td>
<td>15.20</td>
</tr>
<tr>
<td>(3) Tandem Axles; &amp; Single Axles $</td>
<td>28.05</td>
<td>15.20</td>
</tr>
<tr>
<td>SUMN2009-072 09/28/2009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rates Fringes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LABORER: Landscape...............................$</td>
<td>12.88</td>
<td>4.61</td>
</tr>
<tr>
<td>SUMN2000-001 07/28/2000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate.
Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.
With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final. 

================================================================
END OF GENERAL DECISION
Construction Type: Highway and Heavy

Region Number: 01

Counties within region:
- CARLTON-09
- COOK-16
- ITASCA-31
- KOOCHICHING-36
- LAKE-38
- PINE-58
- ST. LOUIS-69

Effective: 2015-10-12    Revised: 2015-12-29

This project is covered by Minnesota prevailing wage statutes. Wage rates listed below are the minimum hourly rates to be paid on this project.

All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at a rate of one and one half (1 1/2) times the basic hourly rate.

Violations should be reported to:

Department of Transportation
Office of Construction
Transportation Building MS650
John Ireland Blvd
St. Paul, MN 55155
(651) 366-4209

Refer questions concerning the prevailing wage rates to:

Department of Labor and Industry
Prevailing Wage Section
443 Lafayette Road N
St Paul, MN 55155
(651) 284-5091
DLI.PrevWage@state.mn.us
<table>
<thead>
<tr>
<th>LABORERS (101 - 112) (SPECIAL CRAFTS 701 - 730)</th>
</tr>
</thead>
<tbody>
<tr>
<td>101 LABORER, COMMON (GENERAL LABOR WORK)</td>
</tr>
<tr>
<td>2015-10-12 28.11 16.57 44.68</td>
</tr>
<tr>
<td>2016-05-01 29.23 17.02 46.25</td>
</tr>
<tr>
<td>102 LABORER, SKILLED (ASSISTING SKILLED CRAFT</td>
</tr>
<tr>
<td>JOURNEYMAN)</td>
</tr>
<tr>
<td>2015-10-12 28.11 16.57 44.68</td>
</tr>
<tr>
<td>2016-05-01 29.23 17.02 46.25</td>
</tr>
<tr>
<td>103 LABORER, LANDSCAPING (GARDENER, SOD LAYER</td>
</tr>
<tr>
<td>AND NURSERY OPERATOR)</td>
</tr>
<tr>
<td>2015-10-12 27.64 12.64 40.28</td>
</tr>
<tr>
<td>104 FLAG PERSON</td>
</tr>
<tr>
<td>2015-10-12 28.11 16.57 44.68</td>
</tr>
<tr>
<td>2016-05-01 29.23 17.02 46.25</td>
</tr>
<tr>
<td>105 WATCH PERSON</td>
</tr>
<tr>
<td>2015-10-12 24.56 16.32 40.88</td>
</tr>
<tr>
<td>2016-05-01 25.68 16.77 42.45</td>
</tr>
<tr>
<td>106 BLASTER</td>
</tr>
<tr>
<td>2015-10-12 28.89 15.33 44.22</td>
</tr>
<tr>
<td>107 PIPELAYER (WATER, SEWER AND GAS)</td>
</tr>
<tr>
<td>2015-10-12 30.61 16.57 47.18</td>
</tr>
<tr>
<td>2016-05-01 31.73 17.02 48.75</td>
</tr>
<tr>
<td>108 TUNNEL MINER</td>
</tr>
<tr>
<td>2015-10-12 28.81 16.57 45.38</td>
</tr>
<tr>
<td>2016-05-01 29.93 17.02 46.95</td>
</tr>
<tr>
<td>109 UNDERGROUND AND OPEN DITCH LABORER (EIGHT</td>
</tr>
<tr>
<td>FEET BELOW STARTING GRADE LEVEL)</td>
</tr>
<tr>
<td>2015-10-12 28.81 16.57 45.38</td>
</tr>
<tr>
<td>2016-05-01 29.93 17.02 46.95</td>
</tr>
<tr>
<td>110 SURVEY FIELD TECHNICIAN (OPERATE TOTAL</td>
</tr>
<tr>
<td>STATION, GPS RECEIVER, LEVEL, ROD OR RANGE</td>
</tr>
<tr>
<td>POLES, STEEL TAPE MEASUREMENT; MARK AND</td>
</tr>
<tr>
<td>DRIVE STAKES; HAND OR POWER DIGGING FOR AND</td>
</tr>
<tr>
<td>IDENTIFICATION OF MARKERS OR MONUMENTS;</td>
</tr>
<tr>
<td>2015-10-12 28.11 16.57 44.68</td>
</tr>
<tr>
<td>01/ 4/2016 2</td>
</tr>
</tbody>
</table>
PERFORM AND CHECK CALCULATIONS; REVIEW AND UNDERSTAND CONSTRUCTION PLANS AND LAND SURVEY MATERIALS). THIS CLASSIFICATION DOES NOT APPLY TO THE WORK PERFORMED ON A PREVAILING WAGE PROJECT BY A LAND SURVEYOR WHO IS LICENSED PURSUANT TO MINNESOTA STATUTES, SECTIONS 326.02 TO 326.15.

2016-05-01  29.23  17.02  46.25

111 TRAFFIC CONTROL PERSON (TEMPORARY SIGNAGE) 2015-10-12  28.11  16.57  44.68

2016-05-01  29.23  17.02  46.25

112 QUALITY CONTROL TESTER (FIELD AND COVERED OFF-SITE FACILITIES; TESTING OF AGGREGATE, ASPHALT, AND CONCRETE MATERIALS); LIMITED TO MN DOT HIGHWAY AND HEAVY CONSTRUCTION PROJECTS WHERE THE MN DOT HAS RETAINED QUALITY ASSURANCE PROFESSIONALS TO REVIEW AND INTERPRET THE RESULTS OF QUALITY CONTROL TESTERS. SERVICES PROVIDED BY THE CONTRACTOR.

2015-10-12  32.92  17.20  50.12

SPECIAL EQUIPMENT (201 - 204)

201 ARTICULATED HAULER 2015-10-12  32.93  17.90  50.83

2016-05-01  33.54  18.90  52.44

202 BOOM TRUCK 2015-10-12  32.93  17.90  50.83

2016-05-01  33.54  18.90  52.44

203 LANDSCAPING EQUIPMENT, INCLUDES HYDRO SEEDER OR MULCHER, SOD ROLLER, FARM TRACTOR WITH ATTACHMENT SPECIFICALLY SEEDING, SODDING, OR PLANT, AND TWO-FRAMED FORKLIFT (EXCLUDING FRONT, POSIT-TRACK, AND SKID STEER LOADERS), NO EARTHWORK OR GRADING FOR ELEVATIONS

2015-10-12  20.01  13.54  33.55

2016-05-01  21.17  13.99  35.16

204 OFF-ROAD TRUCK 2015-10-12  31.37  16.70  48.07

205 2015-10-12  28.36  16.36  44.72
PAVEMENT MARKING OR MARKING REMOVAL
equipment (one or two person operators);
self-propelled truck or trailer mounted
units.

HIGHWAY/HEAVY POWER EQUIPMENT OPERATOR

GROUP 2

<table>
<thead>
<tr>
<th>Date</th>
<th>Rate</th>
<th>Hours</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015-10-12</td>
<td>33.78</td>
<td>17.90</td>
<td>51.68</td>
</tr>
<tr>
<td>2016-05-01</td>
<td>34.39</td>
<td>18.90</td>
<td>53.29</td>
</tr>
</tbody>
</table>

302 HELICOPTER PILOT (HIGHWAY AND HEAVY ONLY)
303 CONCRETE PUMP (HIGHWAY AND HEAVY ONLY)
304 ALL CRANES WITH OVER 135-FOOT BOOM, EXCLUDING JIB (HIGHWAY AND HEAVY ONLY)
305 DRAGLINE, CRAWLER, HYDRAULIC BACKHOE (TRACK OR WHEEL MOUNTED) AND/OR
OTHER SIMILAR EQUIPMENT WITH SHOVEL-TYPE CONTROLS THREE CUBIC YARDS AND
OVER MANUFACTURER'S RATED CAPACITY INCLUDING ALL ATTACHMENTS (HIGHWAY
AND HEAVY ONLY)
306 GRADER OR MOTOR PATROL
307 PILE DRIVING (HIGHWAY AND HEAVY ONLY)
308 TUGBOAT 100 H.P. AND OVER WHEN LICENSE REQUIRED (HIGHWAY AND HEAVY ONLY)

GROUP 3

<table>
<thead>
<tr>
<th>Date</th>
<th>Rate</th>
<th>Hours</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015-10-12</td>
<td>33.23</td>
<td>17.90</td>
<td>51.13</td>
</tr>
<tr>
<td>2016-05-01</td>
<td>33.84</td>
<td>18.90</td>
<td>52.74</td>
</tr>
</tbody>
</table>

309 ASPHALT BITUMINOUS STABILIZER PLANT
310 CABLEWAY
311 CONCRETE MIXER, STATIONARY PLANT (HIGHWAY AND HEAVY ONLY)
312 DERRICK (GUY OR STIFFLEG)(POWER)(SKIDS OR STATIONARY) (HIGHWAY AND HEAVY
ONLY)
313 DRAGLINE, CRAWLER, HYDRAULIC BACKHOE (TRACK OR WHEEL MOUNTED) AND/OR
SIMILAR EQUIPMENT WITH SHOVEL-TYPE CONTROLS, UP TO THREE CUBIC YARDS
MANUFACTURER'S RATED CAPACITY INCLUDING ALL ATTACHMENTS (HIGHWAY AND
HEAVY ONLY)
314 DREDGE OR ENGINEERS, DREDGE (POWER) AND ENGINEER
315 FRONT END LOADER, FIVE CUBIC YARDS AND OVER INCLUDING ATTACHMENTS (HIGHWAY
AND HEAVY ONLY)
316 LOCOMOTIVE CRANE OPERATOR
317 MIXER (PAVING) CONCRETE PAVING, ROAD MOLE, INCLUDING MUCKING OPERATIONS,
CONWAY OR SIMILAR TYPE
318 MECHANIC . WELDER ON POWER EQUIPMENT (HIGHWAY AND HEAVY ONLY)

01/ 4/2016
319 TRACTOR . BOOM TYPE (HIGHWAY AND HEAVY ONLY)
320 TANDEM SCRAPER
321 TRUCK CRANE . CRAWLER CRANE (HIGHWAY AND HEAVY ONLY)
322 TUGBOAT 100 H.P AND OVER (HIGHWAY AND HEAVY ONLY)

GROUP 4

<table>
<thead>
<tr>
<th>Date</th>
<th>Rate</th>
<th>Hourly</th>
<th>Weekly</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015-10-12</td>
<td>32.93</td>
<td>17.90</td>
<td>50.83</td>
</tr>
<tr>
<td>2016-05-01</td>
<td>33.54</td>
<td>18.90</td>
<td>52.44</td>
</tr>
</tbody>
</table>

323 AIR TRACK ROCK DRILL
324 AUTOMATIC ROAD MACHINE (CMI OR SIMILAR) (HIGHWAY AND HEAVY ONLY)
325 BACKFILLER OPERATOR
326 CONCRETE BATCH PLANT OPERATOR (HIGHWAY AND HEAVY ONLY)
327 BITUMINOUS ROLLERS, RUBBER TIRED OR STEEL DRUMMED (EIGHT TONS AND OVER)
328 BITUMINOUS SPREADER AND FINISHING MACHINES (POWER), INCLUDING PAVERS, MACRO SURFACING AND MICRO SURFACING, OR SIMILAR TYPES (OPERATOR AND SCREED PERSON)
329 BROKK OR R.T.C. REMOTE CONTROL OR SIMILAR TYPE WITH ALL ATTACHMENTS
330 CAT CHALLENGER TRACTORS OR SIMILAR TYPES PULLING ROCK WAGONS, BULLDOZERS AND SCRAPERS
331 CHIP HARVESTER AND TREE CUTTER
332 CONCRETE DISTRIBUTOR AND SPREADER FINISHING MACHINE, LONGITUDINAL FLOAT, JOINT MACHINE, AND SPRAY MACHINE
333 CONCRETE MIXER ON JOBSITE (HIGHWAY AND HEAVY ONLY)
334 CONCRETE MOBIL (HIGHWAY AND HEAVY ONLY)
335 CRUSHING PLANT (GRAVEL AND STONE) OR GRAVEL WASHING, CRUSHING AND SCREENING PLANT
336 CURB MACHINE
337 DIRECTIONAL BORING MACHINE
338 DOPE MACHINE (PIPELINE)
339 DRILL RIGS, HEAVY ROTARY OR CHURN OR CABLE DRILL (HIGHWAY AND HEAVY ONLY)
340 DUAL TRACTOR
341 ELEVATING GRADER
342 FORK LIFT OR STRADDLE CARRIER (HIGHWAY AND HEAVY ONLY)
343 FORK LIFT OR LUMBER STACKER (HIGHWAY AND HEAVY ONLY)
344 FRONT END, SKID STEER OVER 1 TO 5 C YD
345 GPS REMOTE OPERATING OF EQUIPMENT
346 HOIST ENGINEER (POWER) (HIGHWAY AND HEAVY ONLY)
347 HYDRAULIC TREE PLANTER
348 LAUNCHER PERSON (TANKER PERSON OR PILOT LICENSE)
349  LOCOMOTIVE (HIGHWAY AND HEAVY ONLY)
350  MILLING, GRINDING, PLANNING, FINE GRADE, OR TRIMMER MACHINE
351  MULTIPLE MACHINES, SUCH AS AIR COMPRESSORS, WELDING MACHINES, GENERATORS, PUMPS (HIGHWAY AND HEAVY ONLY)
352  PAVEMENT BREAKER OR TAMPPING MACHINE (POWER DRIVEN) MIGHTY MITE OR SIMILAR TYPE
353  PICKUP SWEEPER, ONE CUBIC YARD AND OVER HOPPER CAPACITY (HIGHWAY AND HEAVY ONLY)
354  PIPELINE WRAPPING, CLEANING OR BENDING MACHINE
355  POWER PLANT ENGINEER, 100 KWH AND OVER (HIGHWAY AND HEAVY ONLY)
356  POWER ACTUATED HORIZONTAL BORING MACHINE, OVER SIX INCHES
357  PUGMILL
358  PUMPCRETE (HIGHWAY AND HEAVY ONLY)
359  RUBBER-TIRED FARM TRACTOR WITH BACKHOE INCLUDING ATTACHMENTS (HIGHWAY AND HEAVY ONLY)
360  SCRAPER
361  SELF-PROPELLED SOIL STABILIZER
362  SLIP FORM (POWER DRIVEN) (PAVING)
363  TIE TAMPER AND BALLAST MACHINE
364  TRACTOR, BULLDOZER (HIGHWAY AND HEAVY ONLY)
365  TRACTOR, WHEEL TYPE, OVER 50 H.P. WITH PTO UNRELATED TO LANDSCAPING (HIGHWAY AND HEAVY ONLY)
366  TRENCHING MACHINE (SEWER, WATER, GAS) EXCLUDES WALK BEHIND TRENCHER (HIGHWAY AND HEAVY ONLY)
367  TUB GRINDER, MORBARK, OR SIMILAR TYPE
368  WELL POINT DISMANTLING OR INSTALLATION (HIGHWAY AND HEAVY ONLY)

GROUP 5

<table>
<thead>
<tr>
<th>Date</th>
<th>Rate 1</th>
<th>Rate 2</th>
<th>Rate 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015-10-12</td>
<td>29.89</td>
<td>17.90</td>
<td>47.79</td>
</tr>
<tr>
<td>2016-05-01</td>
<td>30.50</td>
<td>18.90</td>
<td>49.40</td>
</tr>
</tbody>
</table>

369  AIR COMPRESSOR, 600 CFM OR OVER (HIGHWAY AND HEAVY ONLY)
370  BITUMINOUS ROLLER (UNDER EIGHT TONS)
371  CONCRETE SAW (MULTIPLE BLADE) (POWER OPERATED)
372  FORM TRENCH DIGGER (POWER)
373  FRONT END, SKID STEER UP TO 1C YD
374  GUNITE GUNALL (HIGHWAY AND HEAVY ONLY)
375  HYDRAULIC LOG SPLITTER
376  LOADER (BARBER GREENE OR SIMILAR TYPE)
377  POST HOLE DRIVING MACHINE/POST HOLE AUGER
378  POWER ACTUATED AUGER AND BORING MACHINE
379  POWER ACTUATED JACK
380  PUMP (HIGHWAY AND HEAVY ONLY)
381  SELF-PROPELLED CHIP SPREADER (FLAHERTY OR SIMILAR)
382  SHEEP FOOT COMPACTOR WITH BLADE . 200 H.P. AND OVER
383  SHOULDERING MACHINE (POWER) APSCO OR SIMILAR TYPE INCLUDING SELF-PROPELLED SAND AND CHIP SPREADER
384  STUMP CHIPPER AND TREE CHIPPER
385  TREE FARMER (MACHINE)

GROUP 6

<table>
<thead>
<tr>
<th>Date</th>
<th>Hourly</th>
<th>Daily</th>
<th>Weekly</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015-10-12</td>
<td>28.68</td>
<td>17.90</td>
<td>46.58</td>
</tr>
<tr>
<td>2016-05-01</td>
<td>29.29</td>
<td>18.90</td>
<td>48.19</td>
</tr>
</tbody>
</table>

387  CAT, CHALLENGER, OR SIMILAR TYPE OF TRACTORS, WHEN PULLING DISK OR ROLLER
388  CONVEYOR (HIGHWAY AND HEAVY ONLY)
389  DREDGE DECK HAND
390  FIRE PERSON OR TANK CAR HEATER (HIGHWAY AND HEAVY ONLY)
391  GRAVEL SCREENING PLANT (PORTABLE NOT CRUSHING OR WASHING)
392  GREASER (TRACTOR) (HIGHWAY AND HEAVY ONLY)
393  LEVER PERSON
394  OILER (POWER SHOVEL, CRANE, TRUCK CRANE, DRAGLINE, CRUSHERS, AND MILLING MACHINES, OR OTHER SIMILAR HEAVY EQUIPMENT) (HIGHWAY AND HEAVY ONLY)
395  POWER SWEEPER
396  SHEEP FOOT ROLLER AND ROLLERS ON GRAVEL COMPACTION, INCLUDING VIBRATING ROLLERS
397  TRACTOR, WHEEL TYPE, OVER 50 H.P., UNRELATED TO LANDSCAPING

TRUCK DRIVERS

GROUP 1

<table>
<thead>
<tr>
<th>Date</th>
<th>Hourly</th>
<th>Daily</th>
<th>Weekly</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015-10-12</td>
<td>28.70</td>
<td>15.20</td>
<td>43.90</td>
</tr>
<tr>
<td>2016-05-01</td>
<td>30.15</td>
<td>15.20</td>
<td>45.35</td>
</tr>
</tbody>
</table>

601  MECHANIC . WELDER
602  TRACTOR TRAILER DRIVER
603  TRUCK DRIVER (HAULING MACHINERY INCLUDING OPERATION OF HAND AND POWER OPERATED WINCHES)

GROUP 2

<table>
<thead>
<tr>
<th>Date</th>
<th>Hourly</th>
<th>Daily</th>
<th>Weekly</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015-10-12</td>
<td>26.30</td>
<td>14.40</td>
<td>40.70</td>
</tr>
</tbody>
</table>

604  FOUR OR MORE AXLE UNIT, STRAIGHT BODY TRUCK

01/ 4/2016
### GROUP 3

- **605** BITUMINOUS DISTRIBUTOR DRIVER
- **606** BITUMINOUS DISTRIBUTOR (ONE PERSON OPERATION)
- **607** THREE AXLE UNITS

### GROUP 4

- **608** BITUMINOUS DISTRIBUTOR SPRAY OPERATOR (REAR AND OILER)
- **609** DUMP PERSON
- **610** GREASER
- **611** PILOT CAR DRIVER
- **612** RUBBER-TIRED, SELF-PROPELLED PACKER UNDER 8 TONS
- **613** TWO AXLE UNIT
- **614** SLURRY OPERATOR
- **615** TANK TRUCK HELPER (GAS, OIL, ROAD OIL, AND WATER)
- **616** TRACTOR OPERATOR, UNDER 50 H.P.

### SPECIAL CRAFTS

- **701** HEATING AND FROST INSULATORS  
  - 2015-10-12  26.20  14.40  40.60  
  - 2016-06-06  41.26  15.80  57.06

- **702** BOILERMAKERS  
  - 2015-10-12  34.15  26.37  60.52  
  - 2016-01-01  35.55  26.52  62.07

- **703** BRICKLAYERS  
  - 2015-10-12  32.87  20.96  53.83

- **704** CARPENTERS  
  - 2015-10-12  34.11  17.08  51.19  
  - 2016-05-01  35.65  17.08  52.73

- **705** CARPET LAYERS (LINOLEUM)  
  - 2015-10-12  32.13  12.85  44.98

- **706** CEMENT MASONS  
  - 2015-10-12  33.70  17.38  51.08  
  - 2016-05-01  34.20  17.38  51.58

- **707** ELECTRICIANS  
  - 2015-10-12  33.90  24.13  58.03
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Date</th>
<th>Highest Earned Weekly Rate</th>
<th>Highest Earned Weekly Rate</th>
<th>Highest Earned Weekly Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>711</td>
<td>GROUND PERSON</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2015-10-12</td>
<td>27.44</td>
<td>13.28</td>
<td>40.72</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2016-04-04</td>
<td>28.26</td>
<td>13.92</td>
<td>42.18</td>
</tr>
<tr>
<td>712</td>
<td>IRONWORKERS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2015-10-12</td>
<td>31.04</td>
<td>23.45</td>
<td>54.49</td>
</tr>
<tr>
<td>713</td>
<td>LINEMAN</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2015-10-12</td>
<td>32.27</td>
<td>14.11</td>
<td>46.38</td>
</tr>
<tr>
<td>714</td>
<td>MILLWRIGHT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2015-10-12</td>
<td>36.28</td>
<td>15.33</td>
<td>51.61</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2016-05-01</td>
<td>37.83</td>
<td>15.33</td>
<td>53.16</td>
</tr>
<tr>
<td>715</td>
<td>PAINTERS (INCLUDING HAND BRUSHED, HAND SPRAYED, AND THE Taping OF PAVement MARKINGS)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2015-10-12</td>
<td>26.66</td>
<td>18.77</td>
<td>45.43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2016-05-02</td>
<td>28.01</td>
<td>18.77</td>
<td>46.78</td>
</tr>
<tr>
<td>716</td>
<td>PILEDriver (INCLUDING VIBRATORY DRIVER OR EXTRACTOR FOR PILING AND SHEETING OPERATIONS)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2015-10-12</td>
<td>34.11</td>
<td>17.08</td>
<td>51.19</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2016-05-01</td>
<td>35.65</td>
<td>17.08</td>
<td>52.73</td>
</tr>
<tr>
<td>717</td>
<td>PIPEFITTERS . STEAMFITTERS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2015-10-12</td>
<td>40.95</td>
<td>17.01</td>
<td>57.96</td>
</tr>
<tr>
<td>719</td>
<td>PLUMBERS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2015-10-12</td>
<td>40.25</td>
<td>17.71</td>
<td>57.96</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2016-05-01</td>
<td>41.80</td>
<td>17.71</td>
<td>59.51</td>
</tr>
<tr>
<td>721</td>
<td>SHEET METAL WORKERS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2015-10-12</td>
<td>30.52</td>
<td>25.36</td>
<td>55.88</td>
</tr>
<tr>
<td>723</td>
<td>TERRAZzo WORKERS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>724</td>
<td>TILE SETTERS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>725</td>
<td>TILE FINISHERS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Occupation</td>
<td>Start Date 1</td>
<td>Rate 1</td>
<td>Overtime 1</td>
<td>Total 1</td>
</tr>
<tr>
<td>------</td>
<td>----------------------------------</td>
<td>--------------</td>
<td>---------</td>
<td>-----------</td>
<td>----------</td>
</tr>
<tr>
<td>727</td>
<td>WIRING SYSTEM TECHNICIAN</td>
<td>2015-10-12</td>
<td>36.00</td>
<td>14.43</td>
<td>50.43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2016-07-01</td>
<td>36.90</td>
<td>14.43</td>
<td>51.33</td>
</tr>
<tr>
<td>728</td>
<td>WIRING SYSTEMS INSTALLER</td>
<td>2015-10-12</td>
<td>25.21</td>
<td>12.02</td>
<td>37.23</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2016-07-01</td>
<td>25.84</td>
<td>12.02</td>
<td>37.86</td>
</tr>
<tr>
<td>729</td>
<td>ASBESTOS ABATEMENT WORKER</td>
<td>2015-10-12</td>
<td>28.50</td>
<td>16.88</td>
<td>45.38</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2016-01-01</td>
<td>29.30</td>
<td>17.33</td>
<td>46.63</td>
</tr>
</tbody>
</table>

730  SIGN ERECTOR

For rate call 651-284-5091 or email:
DLI.PREVWAGE@STATE.MN.US
Labor Standards

Prevailing wage minimum truck rental rates: Region 1

The operating costs were determined by survey on a statewide basis. The operating cost for "four or more axle units, straight body trucks" is determined to be $50.82 an hour. The operating cost for "three axle units" is determined to be $37.35 an hour. The operating cost for "tractor only" is determined to be $49.17 an hour. The operating cost for "tractor trailers" is determined to be $60.63 an hour.

Adding the prevailing wage for drivers of these four types of trucks from each of the state's 10 highway and heavy construction areas to the operating costs, the minimum hourly truck rental rate for the four types of trucks in each area is certified to be as follows.

<table>
<thead>
<tr>
<th>Minimum hourly truck rental rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region 1</td>
</tr>
<tr>
<td>Jan. 25, 2016</td>
</tr>
<tr>
<td>Tractor trailer</td>
</tr>
<tr>
<td>4 or more axle</td>
</tr>
<tr>
<td>3 axle</td>
</tr>
<tr>
<td>Tractor only</td>
</tr>
<tr>
<td>May 1, 2016</td>
</tr>
<tr>
<td>$105.98</td>
</tr>
<tr>
<td>$94.52</td>
</tr>
</tbody>
</table>

Select another region (map) | Prevailing wage truck rental rates
AFFIDAVIT AND INFORMATION REQUIRED OF BIDDERS

Affidavit of Non-Collusion:

I hereby swear (or affirm) under penalty of perjury:

1) That I am the bidder (if the bidder is an individual), a partner in the bidder (if the bidder is a partnership), or an officer or employee of the bidding corporation having authority to sign on its behalf (if the bidder is a corporation);

2) That the attached bid or bids have been arrived at by the bidder independently and have been submitted without collusion with and without agreement, understanding, or planned common course of action with any other vendor or materials, supplied, equipment or services described in the invitation to bid, designed to limit independent bidding or competition;

3) That the contents of the bid or bids have not been communicated by the bidder or its employees or agents to any person not an employee or agent of the bidder or its surety on any bond furnished with the bid or bids and will not be communicated to any such person prior to the official opening of the bid or bids; and

4) That I have fully informed myself regarding the accuracy of the statements made in this affidavit.

Signed:______________________________

Firm Name:____________________________

Subscribed and sworn to me before this____ day of____________________, __________

NOTARY PUBLIC_______________________________________________________

My commission expires:__________________________________________________

Bidder’s E.I. Number_____________________________________________________

(Number used on employer’s quarterly Federal Tax return)
EQUAL EMPLOYMENT OPPORTUNITY (EEO) AFFIRMATIVE ACTION
POLICY STATEMENT & COMPLIANCE CERTIFICATE

TO: City of Duluth, Minnesota

PROJECT NUMBER & DESCRIPTION ______________________________

__________________________________________________________________________

FROM: _____________________________________________________________________

__________________________________________________________________________

(FIRM’s name, address, telephone number)

A) Employment: It is the policy of the above named FIRM to afford equal opportunity for employment to
all individuals regardless of race, color, creed, religion, national origin, ancestry, age, sex, marital
status, status with respect to public assistance and/or disability. The FIRM will take affirmative action to
ensure that we will: (1) recruit, hire, and promote all job classifications without regard to race, color,
creed, religion, national origin, ancestry, age, sex, marital status, status with respect to public
assistance, and/or disability, except where sex is a bona fide occupational qualification; (2) base
decisions on employment so as to further the principle of equal employment opportunity; (3) ensure
that promotion decisions are in accord with the principles of equal employment opportunity by imposing
only valid requirements for promotional opportunities; (4) ensure that all personnel actions such as
compensation, benefits, transfers, layoffs, return from layoff, FIRM sponsored training, education tuition
assistance, social and recreational programs will be administered without regard to race, color, creed,
religion, national origin, ancestry, age, sex, marital status, status with respect to public assistance,
and/or disability. The FIRM also intends full compliance with Veteran affirmative action requirements.
Additionally, minority and female employees shall be encouraged to participate in all FIRM activities
and refer applicants.

I have designated (name) _______________________________________________ to direct the
establishment of and to monitor the implementation of personnel procedures to guide the FIRM’s
affirmative action program. Where PROJECTS exceed $500,000, this official shall also serve as the
liaison officer that administers the FIRM’s “Minority Business Enterprise Program.” This official is
charged with designing and implementing audit and reporting systems that will keep management
informed on a monthly basis of the status of the equal opportunity area.

Supervisors have been made to understand that their work performance is being evaluated on the
basis of their equal opportunity efforts and results, as well as other criteria. It shall be the responsibility
of the FIRM and its supervisors to take actions to prevent harassment of employees placed through
affirmative action efforts.

B) Reports: Unless exempted by law and regulation, the FIRM shall make available and file those reports
related to equal opportunity as may be required by the City of Duluth and State and Federal compliance
agencies. Requirements and Reports are defined in 41CFR60 “Compliance Responsibility for Equal
Opportunity” published by the U. S. Department of Labor which is incorporated herein by reference.
Additional requirements are defined in various State and Federal Civil Rights Legislation and Rules
promulgated thereunder.

C) Nonsegregated Facilities: The FIRM certifies that it does not maintain or provide for its employees
any segregated facilities at any of its establishments and that it does not permit its employees to
perform their services at any location, under its control, where segregated facilities are maintained.
The FIRM certifies that it will not maintain or provide for its employees any segregated facilities at any
of its establishments and that it will not permit its employees to perform their services at any location,
under its control, where segregated facilities are maintained. The FIRM agrees that a breach of this
certification is a violation of the Equal Opportunity Clause in this certificate. As used in this Certification, the term “segregated facilities” means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation for entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are, in fact, segregated on the basis of race, color, religion, or national origin, because of habit, local custom, or otherwise.

D) **Affirmative Action Compliance Program:** Unless exempted by regulation and law, the FIRM—if the FIRM has 50 or more employees and if the value of current contracts with the City of Duluth exceeds $50,000—shall prepare and maintain a written affirmative action compliance program that meets the requirement as set forth in 41CFR60.

E) **Non-Compliance:** The FIRM certifies that it is not currently in receipt of any outstanding letters of deficiencies, show cause, probable cause, or other such notification of non-compliance with EEO Laws and Regulations.

F) **Employment Goals - “Construction” Projects:** It shall be the goal of the FIRM if the PROJECT is of a construction nature that in all on-site employment generated that no less than 3% of the on-site workforce will be minority employees and that no less than 7% of the on-site workforce will be female employees. Further, it is the goal of the FIRM if the PROJECT is of a construction nature that in all on-site employment generated that no less than 3% of the work hours generated shall be worked by minority employees and that no less than 7% of the work hours generated shall be worked by female employees.

G) **Subcontractors:** The FIRM will for all its PROJECT subcontractors regardless of tier (unless exempted by law and regulation) that received in excess of $2,500 require that: (1) the subcontractor shall execute an “EEO Statement and Certification” similar in nature to this “Statement and Certification”, (2) said documentation to be maintained on file with the FIRM or subcontractor as may be appropriate.

Executed this ________ day of ______________, 20__ by:

________________________________________________________________________
Printed name and title

________________________________________________________________________
Signature

**NOTE:** In addition to the various remedies prescribed for violation of Equal Opportunity Laws, the penalty for false statements is prescribed in 18 U.S.C. 1001.
KNOW ALL MEN BY THESE PRESENTS: That we:

_____________________________________________________________________________

(contractor’s name)

(hereinafter called the “Contractor”) located at:______________________________

_____________________________________________________________________________

(contractor’s address)

and _________________________________________________________________________

(surety’s name)

(a corporation holding a certificate of the Insurance Commissioner of the State of Minnesota showing that it is authorized to contract as a surety, hereinafter called the “Surety”) located at:

_____________________________________________________________________________

(surety’s address)

are held and firmly bound unto the City of Duluth (hereinafter called the “Owner”), in the penal sum of _________________________________________________________________________ Dollars ($___________________) for the payment of which we bind ourselves, our heirs, executors and administrators, successors and assigns, for the faithful performance of a written contract for the purpose of:

_____________________________________________________________________________

_____________________________________________________________________________

_____________________________________________________________________________

(according to plans, profiles, and specifications thereto annexed. A copy of that contract is incorporated herein by reference and is made a part hereof as if fully copied herein.

NOW, THEREFORE, THE CONDITIONS OF THIS OBLIGATION ARE SUCH That,

A) If the Contractor shall in all respects comply with the terms and conditions of the Contract (which includes the contract documents) and such alterations as may be made in said contract as documents therein provide for, and shall complete the contract in accordance with its terms,

B) If the Contractor shall indemnify, defend and save harmless the owner from all costs, expenses, damages, injury or conduct, want or care or skill, negligence or default, including patent infringement on the part of the Contractor, agents or employees, in the execution or performance of the contract,

C) If the Contractor shall indemnify the owner for all costs that may accrue on account of the
enforcing of the terms of the bond, if action is brought on the bond, including reasonable attorney’s fees, in any case where such action is successfully maintained,

D) If the Contractor shall comply with all laws pertaining to doing the work under the contract,

Then, this obligation shall be void; the Contractor and Surety jointly and severally agree to pay to the Owner any difference between the sum to which the Contractor will be entitled on the completion of the contract and that which the Owner may be obliged to pay for the completion of the work by contract or otherwise, and any damages, direct or indirect, or consequential, which the Owner may sustain on account of the work, or on account of the failure of the Contractor to properly and in all things, keep and execute all of the provisions of the Contract, provided however that Surety’s liability to pay damages is limited to the amount of the Performance Bond as set forth above.

And, the said Contractor and Surety hereby further bind themselves, their successors, executors, administrators and assigns, jointly and severally, that they will employ and fully protect the said Owner against and will pay any and all amounts, damages, costs and judgements which may be recovered against or which the Owner may be called upon to pay to any person or corporation by reason of any damage arising from the performance of said work, repair or maintenance thereof, or the manner of doing the same, or the neglect of the said Contractor or his agents or servants, or the improper performance of the said work by the Contractor or his agents or servants, or the infringements of any patent rights by reason of the use of any material furnished or work done, as aforesaid, or otherwise. For the purpose of this paragraph, a subcontractor shall be deemed to be the agent or employee of the Contractor to the extent of his subcontract.

The Contractor and the Sureties do hereby expressly waive any objection that might be interposed as to the right of the Owner to require a bond containing the foregoing provisions, and they do hereby further expressly waive any defense which they or either and any of them might interpose to an action brought hereon by any person, firm, or corporation, including subcontractors, materialmen and third persons, for work, labor, services, supplies or material performed, rendered or furnished as aforesaid, upon the ground that there is no law authorizing the Owner to require the foregoing provisions to be placed in this bond.

And the Surety, for value received, hereby stipulates and agrees that the obligations of the Surety and this bond shall in no way be impaired or affected by any extension of time, modification, omission, addition or change in or to the contract or the work to be performed thereunder, or by any payment thereunder before the time required therein, or by any waiver of any provision thereof, or by any assignment, subletting or other transfer thereof, or of any part thereof, or of any work to be performed, or of any moneys due or to become due thereunder; and
the said Surety does hereby waive notice of any and all such extensions, modifications, omissions, additions, changes, payments, waivers, assignments, subcontracts and transfers, and hereby stipulates and agrees that any and all things done and omitted to be done by and in relation to executors, administrators, successors, assignees, subcontractors and other transferees, shall have the same effect as to said Surety as though done or omitted to be done by and in relation to the Contractor.

Signed this _____ day of ____________________, 20___.

Name of Principal

By

Name of Surety

By ________________________________
Attorney-in-Fact

ACKNOWLEDGEMENTS

State of Minnesota )
 ) ss. Principal – Individual

PERF BOND FORM: Rev. 8/10/09

Page 3 of 4
County of St. Louis  

This instrument was acknowledged before me on _________________________________
by ________________________________.

Notary Seal
Notary Public

State of Minnesota  )
) ss. Principal – Corporate or Partnership
County of St. Louis  

This instrument was acknowledged before me on _________________________________
by ________________________________ as ________________________________
of ________________________________.

Notary Seal
Notary Public

State of Minnesota  )
) ss. Surety
County of St. Louis  

Be It Known, That on this ______ day of ________________ A. D., 20___, came before me personally
_________________________________________________________________, to me personally known, who being
by me duly sworn, did say that he/she is the ________________________________ (title) of
____________________________________________________
the above named corporation which executed the foregoing bond as surety; that the seal affixed to the foregoing
instrument is the corporate seal of said corporation; that said instrument was executed in behalf of said corporation, by
authority of its Board of Directors; that said corporation hold a certificate of the Insurance Commissioner of the State of
Minnesota showing that it is authorized to contract as a surety; and said
________________________________________
acknowledged said instrument to be the free act and deed of said corporation.

Notary Seal
Notary Public

APPROVED AS TO FORM, CORRECTNESS AND VALIDITY HEREOF

Dated this ______ day of ________________, 20___
________________________________________
Assistant City Attorney  Duluth MN

Dated this ______ day of ________________, 20___
________________________________________
Finance Director  Duluth MN
KNOW ALL MEN BY THESE PRESENTS: That we:

__________________________________________
(contractor’s name)
(hereinafter called the “Contractor”) located at: ______________________________________

__________________________________________
(contractor’s address)

and __________________________________________________________________________

__________________________________________
(surety’s name)

(a corporation holding a certificate of the Insurance Commissioner of the State of Minnesota showing that it is authorized to contract as a surety, hereinafter called the “Surety”) located at:

__________________________________________
(surety’s address)

are held and firmly bound unto the City of Duluth (hereinafter called the “Owner”), for the benefit of persons furnishing labor and materials for the contract set forth below, in the penal sum of

______________________________ Dollars ($___________________) for the payment of which we bind ourselves, our heirs, executors and administrators, successors and assigns, for the payment of all labor and materials supplied by any person in the performance of a written contract for the purpose of:

__________________________________________

according to plans, profiles, and specifications thereto annexed. A copy of that contract is incorporated herein by reference and is made a part hereof as if fully copied herein.

NOW, THEREFORE, THE CONDITIONS OF THIS OBLIGATION ARE SUCH That,

A) If the Contractor shall make payments, as they may become due, to all persons supplying “labor and materials,” as defined in Minnesota Statutes Section 574.26, used directly or indirectly by the Contractor, or his Subcontractor, in the prosecution of the work provided for in the contract,

B) If the Contractor shall indemnify the owner or other claimant for all costs that may accrue on account of the enforcing of the terms of the bond, if action is brought on the bond, including reasonable attorney’s fees, in any case where such action is successfully maintained,
Then, this obligation shall be void; otherwise it shall remain in full force and effect.

And, the said Contractor and Surety agree that in accordance with Minnesota Statutes Section 574.26 not only said City, but any person furnishing “labor and materials,” as defined in Minnesota Statutes 574.26, may sue on this bond for their use on account of any sums due them for anything so furnished.

The Contractor and the Sureties do hereby expressly waive any objection that might be interposed as to the right of the Owner to require a bond containing the foregoing provisions, and they do hereby further expressly waive any defense which they or either and any of them might interpose to an action brought hereon by any person, firm, or corporation, including subcontractors, materialmen and third persons, for work, labor, services, supplies or material performed, rendered or furnished as aforesaid, upon the ground that there is no law authorizing the Owner to require the foregoing provisions to be placed in this bond.

And the Surety, for value received, hereby stipulates and agrees that the obligations of the Surety and this bond shall in no way be impaired or affected by any extension of time, modification, omission, addition or change in or to the contract or the work to be performed thereunder, or by any payment thereunder before the time required therein, or by any waiver of any provision thereof, or by any assignment, subletting or other transfer thereof, or of any part thereof, or of any work to be performed, or of any moneys due or to become due thereunder; and the said Surety does hereby waive notice of any and all such extensions, modifications, omissions, additions, changes, payments, waivers, assignments, subcontracts and transfers, and hereby stipulates and agrees that any and all things done and omitted to be done by and in relation to executors, administrators, successors, assignees, subcontractors and other transferees, shall have the same effect as to said Surety as though done or omitted to be done by and in relation to the Contractor.

Signed this _____ day of ____________________, 20___.

_____________________________________________
Name of Principal

By

_____________________________________________
Name of Surety

By _________________________________________
Attorney-in-Fact

ACKNOWLEDGEMENTS
State of Minnesota) ) ss. Principal – Individual
County of St. Louis)

This instrument was acknowledged before me on ______________________________________________
by _______________________________________________________.

Notary Seal    _______________________________________
Notary Public

State of Minnesota) ) ss. Principal – Corporate or Partnership
County of St. Louis)

This instrument was acknowledged before me on _______________________________________________
by __________________________________________ as ______________________________________________
of __________________________________________.

Notary Seal  _______________________________________
Notary Public

State of Minnesota) ) ss.  Surety
County of St. Louis)

Be It Known, That on this ______ day of ________________ A. D., 20___, came before me personally
_________________________________________________________________, to me personally known, who being
by me duly sworn, did say that he/she is the _____________________________________________________ (title)
of

____________________________________________________________________________________________

the above named corporation which executed the foregoing bond as surety; that the seal affixed to the foregoing
instrument is the corporate seal of said corporation; that said instrument was executed in behalf of said corporation, by
authority of its Board of Directors; that said corporation hold a certificate of the Insurance Commissioner of the State of
Minnesota showing that it is authorized to contract as a surety; and said _____________________________________
acknowledged said instrument to be the free act and deed of said corporation.

Notary Seal  _______________________________________
Notary Public

APPROVED AS TO FORM, CORRECTNESS AND VALIDITY HEREOF

Dated this ______ day of ______________, 20 ___
________________________________________
Assistant City Attorney   Duluth MN

Dated this ______ day of ______________, 20 ___
________________________________________
Finance Director   Duluth MN
City of Duluth

Indemnification & Insurance Requirements

INDEMNIFICATION CLAUSE

To the extent allowed by law, Consultant shall defend, indemnify and hold City and its employees, officers, and agents harmless from and against any and all cost or expenses, claims or liabilities, including but not limited to, reasonable attorneys’ fees and expenses in connection with any claims resulting from the Consultant’s a) breach of this agreement or b) its negligence or misconduct or that of its agents or contractors in performing the Services hereunder or c) any claims arising in connection with Consultant’s employees or contractors, or d) the use of any materials supplied by the Consultant to the City unless such material was modified by City and such modification is the cause of such claim. This Section shall survive the termination of this Agreement for any reason.

INSURANCE

a. Contractor shall provide the following minimum amounts of insurance from insurance companies authorized to do business in the state of Minnesota, which insurance shall indemnify Contractor and City from all liability described in the paragraph above, subject to provisions of subparagraph below.

(1) Worker’s compensation in accordance with the laws of the state of Minnesota.

(2) Public Liability and Automobile Liability Insurance with limits not less than $1,500,000 Single Limit, and twice the limits provided when a claim arises out of the release or threatened release of a hazardous substance; shall be in a company approved by the city of Duluth; and shall provide for the following: Liability for Premises, Operations, Completed Operations, Independent Contractors, and Contractual Liability.

(3) City of Duluth shall be named as Additional Insured under the Public Liability, Excess/Umbrella Liability* and Automobile Liability, or as an alternate, Contractor may provide Owners-Contractors Protective policy, naming itself and the City of Duluth. Contractor shall also provide evidence of Statutory Minnesota Worker’s Compensation Insurance. Contractor to provide Certificate of Insurance evidencing such coverage with 30-days’ notice of cancellation, non-renewal or material change provisions included. The City of Duluth does not represent or guarantee that these types or limits of coverage are adequate to protect the Contractor's interests and liabilities.

(4) An umbrella policy with a “following form” provision is acceptable if written verification is provided that the underlying policy names the City of Duluth as an additional insured.

(4) If a certificate of insurance is provided, the form of the certificate shall contain an unconditional requirement that the insurer notify the City without fail not less than 30 days’ prior to any cancellation, non-renewal or modification of the policy or coverages evidenced by said certificate and shall further provide that failure to give such notice to City will render any such change or changes in said policy or coverages ineffective as against the City.

(5) The use of an “Acord” form as a certificate of insurance shall be accompanied by two forms – 1) ISO Additional Insured Endorsement (CG-2010 pre-2004) and 2) Notice of Cancellation Endorsement (IL 7002) or equivalent, as approved by the Duluth City Attorney’s Office.

b. The insurance required herein shall be maintained in full force and effect during the life of this Agreement and shall protect Contractor, its employees, agents and representatives from claims and damages including but not limited to personal injury and death and any act or failure to act by Contractor, its employees, agents and representatives in the negligent performance of work covered by this Agreement.

c. Certificates showing that Contractor is carrying the above described insurance in the specified amounts shall be furnished to the City prior to the execution of this Contract and a certificate showing continued maintenance of such insurance shall be on file with the City during the term of this Contract.

d. The City shall be named as an additional insured on each liability policy other than the workers’ compensation policies of the Contractor.

e. The certificates shall provide that the policies shall not be changed or canceled during the life of this Contract without at least 30 days advanced notice being given to the City.
f. Contractor shall be required to provide insurance meeting the requirements of this Paragraph unless Contractor successfully demonstrates to the satisfaction of the City Attorney, in the exercise of his or her discretion, that such insurance is not reasonably available in the market. If Contractor demonstrates to the satisfaction of the City Attorney that such insurance is not reasonably available, the City attorney may approve an alternative form of insurance which is reasonably available in the market which he or she deems to provide the highest level of insurance protection to the City which is reasonably available.

PRE-2004 CG 2010
A. Section II - Who Is an Insured is amended to include as an insured the person or organization shown in the Schedule, but only with respect to liability arising out of your ongoing operations performed for that insured.

NOTICE OF CANCELLATIONS ENDORSEMENT IL-7002 (10-90)
All Coverage Parts included in this policy are subject to the following condition: If we cancel this policy for any reason other than non-payment of premium, we will mail advance notice to the person(s) or organization(s) as shown in the Schedule.

<table>
<thead>
<tr>
<th>Schedule</th>
<th>Person or Organization (Name and Address)</th>
<th>Advance Notice (Days)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>City of Duluth Purchasing Division</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Room 100 City Hall</td>
<td></td>
</tr>
<tr>
<td></td>
<td>411 West First Street</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Duluth MN 55802</td>
<td></td>
</tr>
</tbody>
</table>
CONTRACTOR

&

CITY OF DULUTH

THIS AGREEMENT, effective as of the date of attestation by the City Clerk, is made by and between the CITY OF DULUTH, a municipal corporation, hereinafter referred to as the "CITY," party of the first part, and Contractor, address, hereinafter referred to as the "Contractor," party of the second part;

WITNESSETH: That the Contractor and the City agree as follows:

1. The following shall be deemed to be part of this contract:
   a. The annexed resolution and legal advertisement of the City Council.
   b. The bid request and specifications, as modified by irreconcilable language in this written contract.
   c. The bid by Contractor, as modified by irreconcilable language in this written contract.
   d. The performance bond and payment bond certification.
   e. All provisions of law applicable to a contract of this nature.

2. The Contractor agrees to furnish and deliver to the Department all labor, supervision, material, equipment, supplies, insurance, performance bond, payment bond and everything else necessary for general construction of Project at location, all in strict accordance with plans and specifications prepared by design co. or city architect, your bid of $ and resolution no. passed on date. Contractor shall not commence performance of any work under this contract until Contractor receives authorization from the City’s Purchasing Agent in writing and dated.

3. The City agrees to pay progress payments and make final payments to the Contractor as stated in the contract specifications. The total amount payable under this contract shall not exceed dollar amount spelled out ($) unless the contract is modified by formal amendment or change order. Payments under this Agreement shall be made from the following funding and RQ no. Due to the dollar amount of this contract, a Project Labor Agreement is or is not included as part of this contract (City Code Section 2-29).

4. The Contractor shall furnish and maintain in full force and effect until this contract is completely performed by the Contractor, a performance bond and payment bond if and when required by law, or if and when required by the City.

5. Inasmuch as this contract concerns work, materials and equipment needed for the public benefit, the provisions of this contract relating to the time of performance and completion of work and delivery of materials or equipment are of the essence of this contract.

6. The Contractor will defend, indemnify and save the City harmless from all costs, charges, damages, and loss of any kind that may grow out of the matters covered by this contract.
Said obligation does not include indemnification of the City for claims of liability arising out of the sole negligent or intentional acts or omissions of City but shall include but not be limited to the obligation to defend, indemnify and save harmless the City in all cases where claims of liability against the City arise out of acts or omissions of City which are derivative of the negligence or intentional acts or omissions of Contractor such as, and including but not limited to, the failure to supervise, the failure to warn, the failure to prevent such act or omission by Contractor and any other such source of liability. In addition Contractor will comply with all local, state and federal laws, rules and regulations applicable to this contract and to the work to be done and things to be supplied hereunder.

7. Insurance

a. Contractor shall provide the following minimum amounts of insurance from insurance companies authorized to do business in the state of Minnesota, which insurance shall indemnify Contractor and City from all liability described in Paragraph 6 above, subject to provisions below.

1. Workers’ compensation insurance in accordance with the laws of the State of Minnesota.

2. Public Liability and Automobile Liability Insurance with limits not less than $1,500,000 Single Limit, and twice the limits provided when a claim arises out of the release or threatened release of a hazardous substance; shall be in a company approved by the city of Duluth; and shall provide for the following: Liability for Premises, Operations, Completed Operations, Independent Contractors, and Contractual Liability.

3. City of Duluth shall be named as Additional Insured under the Public Liability, Excess/Umbrella Liability* and Automobile Liability, or as an alternate, Contractor may provide Owners-Contractors Protective policy, naming itself and the City of Duluth. Contractor shall also provide evidence of Statutory Minnesota Workers Compensation Insurance. Contractor to provide Certificate of Insurance evidencing such coverage with 30-days’ notice of cancellation, non-renewal or material change provisions included. The City of Duluth does not represent or guarantee that these types or limits of coverage are adequate to protect the Contractor’s interests and liabilities.

*An umbrella policy with a “following form” provision is acceptable if written verification is provided that the underlying policy names the City of Duluth as an additional insured.

4. If a certificate of insurance is provided, the form of the certificate shall contain an unconditional requirement that the insurer notify the City without fail not less than 30 days’ prior to any cancellation, non-renewal or modification of the policy or coverages evidenced by said certificate and shall further provide that failure to give such notice to City will render any such change or changes in said policy or coverages ineffective as against the City.
(5) The use of an “ACORD” form as a certificate of insurance shall be accompanied by two forms – 1) ISO Additional Insured Endorsement (CG-2010 pre-2004) and 2) Notice of Cancellation Endorsement (IL 7002) or equivalent, as approved by the Duluth City Attorney’s Office.

b. The insurance required herein shall be maintained in full force and effect during the life of this Agreement and shall protect Contractor, its employees, agents and representatives from claims and damages including but not limited to personal injury and death and any act or failure to act by Contractor, its employees, agents and representatives in the negligent performance of work covered by this Agreement.

c. Certificates showing that Contractor is carrying the above described insurance in the specified amounts shall be furnished to the City prior to the execution of this Contract and a certificate showing continued maintenance of such insurance shall be on file with the City during the term of this Contract.

d. Contractor shall be required to provide insurance meeting the requirements of this Paragraph 7 unless Contractor successfully demonstrates to the satisfaction of the City Attorney, in the exercise of his or her discretion, that such insurance is not reasonably available in the market. If Contractor demonstrates to the satisfaction of the City Attorney that such insurance is not reasonably available, the City Attorney may approve an alternative form of insurance which is reasonably available in the market which he or she deems to provide the highest level of insurance protection to the City which is reasonably available.

8. No claim whatsoever shall be made by the Contractor against any officer, agent or employee of the City for, or on account of, anything done, or omitted to be done, in connection with this contract. If this contract is not made in conformity with mandatory provisions of any statute or of the ordinances and charter of the City of Duluth, the Contractor agrees to raise no defense and make no claim against the City on the basis of ratification, laches, estoppel, or implied contract.

9. The Contractor shall not assign, transfer, convey or otherwise dispose of this contract, or his right to execute it, or his right, title or interest in or to it, or any part thereof, without the consent of the City, evidenced by a resolution duly adopted by the City Council. The prohibition contained in this paragraph shall not be deemed to prevent the contractor from subcontracting. Contractor shall remain primarily responsible for all work performed by any subcontractor.

10. The Contractor agrees that in the hiring of common or skilled labor for the performance of any work under this contract, Contractor will not discriminate by reason of race, creed or color, religion, national origin, sex, marital status, status with regard to public assistance, disability or age.

11. The Contractor agrees that Contractor shall not in any manner discriminate against or intimidate or prevent the employment of any person or persons, or on being hired, prevent or conspire to prevent any person or persons from the performance or work under this contract on account of race, creed or color, religion, national origin, sex, marital status, status with regard to public assistance, disability or age.
12. The contractor agrees that, as provided in Minnesota Statutes 16C.05, Subd. 5, contractor's books, records, documents, and accounting procedures and practices are subject to examination by the City or the state auditor for six years from the date of final payment under this contract.

13. This contract may be cancelled or terminated by the City and all moneys due or to become due hereunder may be forfeited for any failure to perform any terms or conditions of this contract including but not limited to any violation of the terms or conditions of Section 10 or 11 of this contract.

14. Any waiver by any party of any provision of this contract shall not imply a subsequent waiver of that or any other provision.

15. This contract is made in the state of Minnesota and shall be construed and interpreted in accordance with the laws of the State of Minnesota. The appropriate venue and jurisdiction for any litigation hereunder shall be in a court located in St. Louis, County, Minnesota, and the parties to this Agreement waive objection to the jurisdiction of this court, whether based on convenience or otherwise.

16. This Agreement constitutes the entire agreement between the City and the Contractor on the subject matter hereof. It may not be changed, modified, discharged or extended except by written instrument duly executed on behalf of the City and the Contractor. The Contractor agrees that no representations or warranties made by the City shall be binding upon the City unless expressed in writing herein.

17. This Agreement shall not be in force and effect, or in any way binding upon the City until the same shall have been approved by the Department Head, signed by the Mayor, attested by the Clerk, and countersigned by the City Auditor.

18. The Contractor unconditionally guarantees to perform all work pursuant to this contract in a good and workmanlike manner, in strict compliance with the specifications and instructions hereto attached, and to the satisfaction of the City of Duluth.

19. This Agreement may be executed in counterparts, each of which shall be deemed to be original and all of which together shall constitute the binding and enforceable agreement of the parties hereto. This Agreement may be executed and delivered by a party by facsimile or PDF transmission, which transmission copy shall be considered an original and shall be binding and enforceable against such party.
Countersigned:

City Auditor
Approved this______day of ______________

Department Director
Approved this______day of ______________

Purchasing Agent
Approved this______day of ______________

Assistant City Attorney
Approved this______day of ______________

CITY OF DULUTH-Client

By

______________________________
Mayor

Attest:

______________________________
City Clerk
Attested this______day of ______________

CONTRACTOR/COMPANY
Contractor

By

______________________________
Company Representative

Its

______________________________
Title of Representative
Approved this______day of ______________
The following conditions take precedence over any conflicting conditions in this Contract.

### Section 1
**Restrictions on Disbursements**

No money under this Contract shall be disbursed by the City to any Contractor except pursuant to a written contract which incorporates the applicable PART II, Supplementary General Conditions for Federally, State of Minnesota, and/or City Assisted Activities, and unless the Contractor is in compliance with the Federal Agency requirements with regard to accounting and fiscal matters to the extent they are applicable.

**Subcontractors**

(A) The Contractor shall include in any subcontract the clauses set forth in the PART II, Supplementary General Conditions for Federally, State of Minnesota and/or City Assisted Activities in their entirety and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts which they may enter into, together with a clause requiring this insertion in any further subcontracts that may in turn be made.

(B) The Contractor shall not subcontract any part of the work covered by this Contract or permit subcontracted work to be further subcontracted without the City's prior written approval of the subcontractors. The City will not approve any subcontractor for work covered by this Contract who is at the time ineligible under the provisions of any applicable regulations issued by a Federal Agency or the Secretary of Labor, United States Department of Labor, to receive an award of such subcontract.

**Federal Agency Requirements**

Unearned payments under this Contract may be suspended or terminated upon refusal to accept any additional conditions that may be imposed by the Federal Agency at any time; or if the grant, if applicable, to the City under which this Contract is made is suspended or terminated.

**Separability**

If any provisions of this Contract is held invalid, the remainder of this Contract shall not be affected thereby if such remainder would then continue to conform to the terms and requirements of applicable law.

**Property**

Acquisition, use, and disposal of all property, materials and goods acquired as a result of activities made possible by this Contract shall be accomplished in accordance with the applicable provisions of Federal Management Circular (FMC)-74-7, as amended.

### Section 2
**Miscellaneous Provisions**

(A) **Copyrights.** In the event this Contract results in a book or other copyrightable material, the author is free to copyright the work, but Federal Agency and the City reserve a royalty-free, nonexclusive, and irrevocable license to reproduce, publish or otherwise use, all copyrighted material and all material which can be copyrighted.

(B) **Patents.** Any discovery or invention arising out of or developed in the course of work aided by this Contract shall be promptly and fully reported to the Federal Agency and the City for determination by the Federal Agency as to whether patent protection on such invention or discovery shall be sought and how the rights in the invention or discovery, including rights under any patent issued thereon, shall be disposed of and administered in order to protect the public interests.

(C) **Political Activity Prohibited.** None of the funds, materials, property or services provided directly or indirectly under this Contract shall be used in the performance of this Contract on any partisan political activity, or to further the election or defeat of any candidate for public office.

(D) **Lobbying Prohibited.** None of the funds under this Contract shall be used for publicity or propaganda purposes designed to support or defeat legislation pending before the Congress or the City.

(E) **Prohibition of and Elimination of Lead-Based Paint Hazard.** Notwithstanding any other provision, the Agency and Contractor agree to comply with the regulation issued by the Secretary of Housing and Urban Development set forth in 37 F. R. 22732-3 and all applicable rules and orders issued thereunder which prohibit the use of lead-based paint in residential structures undergoing Federally assisted construction or rehabilitation and require the elimination of lead-based paint hazards. Every contract or subcontract, including paint, pursuant to which such Federally assisted construction or rehabilitation is performed shall include appropriate provisions prohibiting the use of lead-based paint.

---

**E-Mail Addresses**

For ease in communication, the e-mail address of the person(s) responsible for preparing certified payroll reports (CPRs) is required from the prime contractor and all subcontractors (regardless of tier). This information will be provided to the project engineer prior to the pre-construction meeting OR with materials required in the Letter of Intent.
(F) **Architectural Barriers Act.** The design for and construction of any facility funded in whole or in part by this Contract shall be in conformance with the American Standard Specification for Making Buildings and Facilities Accessible and Usable by the Physically Handicapped, Number A-117.1-1971, as modified.

(G) **Relocation and Acquisition.** Any relocation or acquisition resulting from activities funded in whole or in part by this Contract shall be in conformance with the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (40 U.S.C. 4601) and the implementing regulations 24CFR Part 42.

(H) **Prohibition Against Payments of Bonus or Commission.** The assistance provided under this Contract shall not be used in the payment of any bonus or commission for the purpose of obtaining Federal Agency approval for such assistance, or Federal Agency approval of applications for additional assistance, or any other approval or concurrence of a Federal Agency required under this Contract, Federal Law or Federal Regulations thereto; provided, however, that reasonable fees or bonafide technical, consultant, managerial or other such services, other than actual solicitation, are not hereby prohibited if otherwise eligible as project costs.

(I) **Hatch Act.** Where applicable, the Contractor will comply with the provisions of the Hatch Act which limits the political activity of the Contractor’s employees.

### Section 3 Definitions

**A** City means the City of Duluth, Contracting Officer, or other persons authorized to act on behalf of the City of Duluth.

**B** Contracting Officer is the delegated representative of the City who has the responsibility for administering the Project.

**C** Contractor means an entity, whether public or private, which furnishes (other than standard commercial supplies, office space or printing services) to the City, products, services or supplies as described in this project Contract.

**D** Federal Agency means the United States, the District of Columbia, and any executive department, independent establishment, administrative agency, or instrumentality of the United States or of the District of Columbia, including any corporation, all or substantially all of the stock of which is beneficially owned by the United States, by the District of Columbia, or by any of the foregoing departments, establishments, agencies, and instrumentalities. The term Federal Agency shall also include the person or persons authorized to act on behalf of said Federal Agency.

**E** Project means the activities to be undertaken by the Contractor as described in this Contract, which from time to time may be amended by mutual consent of the City and Contractor.

**F** Subcontractor means an entity, regardless of tier, which has entered into an agreement with the Contractor or another Subcontractor, to undertake certain Project activities as described in that agreement.

**G** The term labor standards, as used in the Contract, means the requirements of the Davis-Bacon Act, the Contract Work Hours and Safety Standards Act (other than those relating to safety and health), the Copeland Act, and the prevailing wage provisions of the other statutes listed in 20 CFR 5.1.

**H** Work means all labor necessary to produce the construction required by the Contract Documents, all materials and equipment incorporated or to be incorporated in such construction, products, services, or supplies required by the Contract Documents, or any other requirements set forth in the Contract.

**I** Additional Definitions, that are applicable to the Labor Standards provisions - Section 8 - of this Contract can be found in 29CFR5.2 as published by the U.S. Department of Labor and said definitions are hereby incorporated by reference into the provisions of this Contract.

### Section 4 Environmental Provisions

**A** The Contractor agrees to follow the regulations, requirements, policies, goals and procedures set forth by the Council on Environmental Quality (CEQ) under provisions of the National Environmental Policy Act (NEPA) (Pub. L. 91-196, 42 U.S.C. 4321 et seq.), Executive Order 11514, and 40 CFR Part 1500.

**B** **Historic Properties.** The Contractor agrees to follow the regulations, requirements, policies, goals, and procedures set forth under provisions of the National Historic Preservation Act of 1966 (Pub. L. 89-665); Preservation of Historic and Archeological Data Act of 1974 (Pub. L. 93-291); Executive Order 11593; 36 CFR, Part 800 and applicable State legislation or regulations.

**C** **Coastal Zones and Wetlands.** The Contractor agrees to follow the regulations, requirements, policies, goals and procedures set forth under provisions of the Coastal Zone Management Act of 1972 (Pub. L. 92-583) and applicable State legislation or regulations.


**E** **Flood Plain.** The Contractor agrees to comply with the provisions set forth in the Flood Disaster Protection Act of 1973 (Pub. L. 93-234) and implementing regulations; Title 24, Chapter X, Subchapter B, National Flood Insurance Program, Executive Order 11296, and Executive Order 11988 relating to the evaluation of flood hazards.

**F** **Air Quality.** The Contractor agrees to comply with provisions set forth in the Clean Air Act (Pub. L. 90-148) and Clean Air Amendments of 1970 (Pub. L. 91-604); and applicable U.S. Environmental Protection Agency implementing regulations.

**G** **Water Quality.** The Contractor agrees to comply with the provisions set forth in the Federal Water Pollution Control Act (Pub. L. 92-500) and applicable U.S. Environmental Protection Agency implementing regulations, and Executive Order 11288 relating to the prevention, control, and abatement of water pollution.

**H** **Wildlife.** The Contractor agrees to comply with the provisions of the Fish and Wildlife Coordination Act (Pub. L. 85-264).

### Section 5 Contract Compliance

**A** In the event of the Contractor’s noncompliance with the provisions of this Contract or with any of the said regulations, the City may withhold payment(s) until evidence of compliance by the Contractor has been demonstrated, or the Contract may be canceled, terminated or suspended in whole or in part and the Contractor may be declared ineligible for further City contracts.

**B** In the event the Contract is terminated or canceled as a result of noncompliance with any of the provisions of this Contract, the City may subject to bids the remainder of the Project for which this Contract was made. The City shall have the right upon termination or suspension to withhold all further payments under this
Contract to the Contractor. Upon the award of a new contract for the remainder of the Project, the City shall pay to the Contractor an amount no more than the balance remaining due to the Contractor less the sum of the costs incurred by the City which are necessary in preparing the new bid specifications. In the event the amount paid the Contractor prior to the date of termination or cancellation exceeds the full amount of this Contract less the cost of the new contract and the additional costs mentioned above, the Contractor agrees to reimburse the City for such excess amount within ninety days after the new contract is awarded by the above procedures.

(C) Provisions contained in subparagraph (A) and (B) above shall not be interpreted as precluding any authorized Federal, State, or County governmental unit from exercising their legal administrative or other responsibilities in respect to the enforcement by said governmental units of laws or regulations concerning activities of the Contractor.

Section 6
Records

(A) Establishment and Maintenance of Records. Records shall be maintained in accordance with requirements prescribed by the Federal Agency or the City with respect to all matters covered by this Contract. Except as otherwise authorized by the Federal Agency, such records shall be maintained for a period of three years after receipt of final payment under this Contract.

(B) Documentation of Costs. All costs shall be supported by properly executed payrolls, time records, invoices, contracts, or vouchers, or other official documentation evidencing in proper detail the nature and propriety of the charges. All checks, payrolls, invoices, contracts, vouchers, orders, or other accounting documents pertaining in whole or in part to this Contract shall be clearly identified and readily accessible.

Reports and Information
At such times and in such forms as the Federal Agency or the City may require, there shall be furnished to the Federal Agency or the City such statements, records, data and information as the Federal Agency or the City may request pertaining to matters covered by this Contract.

Audits and Inspection
At any time during normal business hours and as often as the City, the Federal Agency and/or the Comptroller General of the United States may deem necessary, there shall be made available to the City, the Federal Agency and/or representatives of the Comptroller General for examination of all its records with respect to all matters covered by this Contract and will permit the City, the Federal Agency and/or representative of the Comptroller General to audit, examine and make excerpts or transcripts from such records, and to make audits of all contracts, invoices, materials, payrolls, records of personnel, conditions of employment, and other data relating to all matters covered by this Contract.

Section 7
Conflict of Interest and Lobbying

(A) Interest of Members, Officers, or Employees of the City, Members of Local Governing Body, or Other Public Officials. No member, officer, or employee of the City, or its designee or agents, or member of the governing body of the City, during his/her tenure of for one year thereafter, shall have any interest, direct or indirect in any contract or subcontract, or the proceeds thereof, for work to be performed in connection with the Project assisted under this Contract. Any contract in which any of the above individuals becomes directly or indirectly, interested, personally or as a member of a firm, or as an officer, director, or stockholder of a corporation, shall be and become absolutely void; and any money which shall have been paid on such contract by the City may be recovered back from any or all persons interested therein, by a joint action or several actions.

(B) The Contractor agrees that he will incorporate into every contract required to be in writing the following provisions: Interest of Contractors and Employees - The Contractor covenants that he presently has no interest and shall not acquire any interest, direct or indirect, in the Project which would conflict in any manner or degree with the performance of this Contract, and no person having any conflicting interest shall be employed. Any interest on the part of the Contractor or his employees must be disclosed to the Federal Agency and the City. Provided, however, that this paragraph shall be interpreted in such a manner as to reasonably impede any statutory requirements that opportunity be provided for employment of and participation by certain residents of a designated geographical area, if applicable.

(C) Interest of Member or of Delegate to Congress. No member of or Delegate to Congress, or Resident Commissioner, shall be admitted to any share or part of this Contract or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this Contract if reasonable impede any statutory requirements that opportunity be provided for employment of and participation by certain residents of a designated geographical area, if applicable.

(D) The Contractor by signing this document certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the Contractor, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the Contractor shall complete and submit Standard Form -LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

The above certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1332, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

(E) The parties to this Contract certify and agree that they are under no contractual or other disability which would prevent them from complying with the terms of this Contract.

Section 8
Labor Standards - Physical Improvement Projects
Where applicable, there shall be included in all construction, rehabilitation, alteration or repair contracts with private entities made possible by or resulting from this Contract, the following Labor Standards provisions;

(A) General Requirements.
(1) **Subcontracts.** The Contractor shall include in any subcontract the clauses set forth in Section 8, Labor Standards, in their entirety and also a clause requiring the subcontractors to include these clauses in any Tower tier subcontract which they may enter into, together with a clause requiring this insertion in any further subcontracts that may in turn be made.

(2) The transporting of materials and supplies to or from the site of the Project or Program to which this Contract pertains by the Employees of the Contractor or of any subcontractor, and the manufacturing or furnishing of materials, articles, supplies, or equipment on the site of the Project or Program to which this Contract pertains by persons employed by the Contractor or by any subcontractor, shall for the purpose of this Contract, and without limiting the generality of the foregoing provisions of this Contract, be deemed to be work to which these Labor Standards provisions are applicable.

(3) No person under the age of eighteen years shall be employed on work covered by this Contract.

(4) In connection with the performance of work under this Contract, the Contractor agrees not to employ any person undergoing sentence of imprisonment except as provided by Public Law 89-176, September 10, 1955 (18 U.S.C. 4082 (c) (2)) and Executive Order 11755, December 29, 1973.

(5) The Contractor will permit authorized representatives of the Federal Agency and the City to interview employees during working hours on the job.

(6) No employee to whom the wage, salary, or other Labor Standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the Labor Standards applicable under this Contract to his employer.

(B) **Safety Standards.** No Contractor or subcontractor contracting for any part of a construction contract shall require any laborer or mechanic, including apprentices and trainees, employed in the performance of the Contract to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous to his health or safety, as determined under construction safety and health standards promulgated by the Secretary of Labor. The Contractor or subcontractor comply with all the rules, regulations, and relevant orders, promulgated by the Secretary of Labor pursuant to Public Law 91-54.

(C) **Davis-Bacon Act - 29 CFR 5.5**

- **Definitions.** For the purposes of this section the following words and phrases shall have the meanings respectively ascribed to them in this section:
  - **Basic hourly rate.** The hourly wage paid to any employee.
  - **Prevailing wage rate.** The basic hourly rate plus fringe benefits prevailing in the city of Duluth as determined by the United States secretary of labor pursuant to the Davis-Bacon act, as amended; provided that whenever employer and employee organizations employing and representing a majority of a class of workers in a particular industry within the city jointly certify that the prevailing basic hourly rate plus fringe benefits of such workers differs from the amount determined by the secretary of labor, the certified rate shall be considered to be the prevailing wage rate for such class of workers in that industry.
  - **Fringe benefits.** Employer contribution for health and welfare benefits, vacation benefits, pension benefits, and all other economic benefits other than the basic hourly rate.
  - **Apprentice.** An employee who is working under a training program which is approved either by the U.S. Department of Labor Bureau of Apprenticeship & Training or the Minnesota Director of Voluntary Apprenticeship; see apprentice ratios on pages 6-7 and HUD 4010 in Section 10.
  - **Trainee.** An employee registered with the U.S. Department of Labor Employment & Training Administration; see HUD 4010 in Section 10.
  - **Project.** Erection, construction, demolition, painting, remodeling or repairing of any public building, highway, sidewalk, bridge, water or gas line, sewer and sewage treatment facility or other public work performed under contract with the city.
  - **Labor, mechanic.** All persons utilized, employed or working on a project who are doing work usually done by mechanics and laborers, including proprietors, partners, and members of cooperatives.

(D) **City of Duluth - Minimum Wage Ordinance 8940, as Amended.**

(1) On a project (as defined below) funded in whole or in part by federal and/or state funds and/or city of Duluth funds, these local provisions shall prevail in those instances where the requirements of the local provisions are equal to or greater than similar minimum labor standards provisions as set forth in applicable federal and/or state laws and regulations.

(2) In all contracts in excess of $2,000 for projects (as defined below), the Contractor's particular attention is called to Ordinance 8940, effective June 8, 1989, respectively coded as Article IV of Chapter 2 of the Duluth City Code, and entitled "An Ordinance Pertaining to Wages and Working Hours of Persons on Public Works in the City of Duluth", as set forth below:

(3) **Definitions.** For the purposes of this section the following words and phrases shall have the meanings respectively ascribed to them in this section:
  - **Basic hourly rate.** The hourly wage paid to any employee.
  - **OR**
  - **Any contract which provides for a project of estimated total cost of over $2,000.00 shall contain a stipulation that no laborer, mechanic or apprentice-trainee employed directly upon the project work site by the contractor or any subcontractor shall be permitted or required to work at a rate of pay less than the prevailing wage rate; nor shall any such employee be permitted or required to work more than 8 hours in any work day OR 40 hours in any work week unless he is paid at a rate of at least 1½ times the basic hourly rate for all hours in excess of 8 per day OR 40 per week (in other words; all hours in excess of eight per day and all hours after 40 per week) and unless he receives fringe benefits that are at least equal to those in the prevailing wage rate; provided that whenever employer and employee organizations employing and representing a majority of a class of workers in a particular industry within the city jointly certify that the maximum number of hours that such persons may work under existing labor agreements before overtime wages must be paid differs from the hours specified in this paragraph, the maximum number of hours specified in such labor agreements shall be substituted for those specified above in applying the provisions of this paragraph to such workers.

EXCEPTIONS: Federal government funding only and HUD (Housing and Urban Development) funding - see point "e"
In summary, if a project is solely funded with city of Duluth monies, city ordinance 8940 as amended allows the employees to work four ten-hour days and be paid at the regular hourly rate for those ten hours; exceeding hours must be paid at the overtime rate. An employer may not withhold overtime payment exclusively until 40 hours per week have been worked. Daily overtime must be paid as it is earned.

- The base workweek hours must be clearly indicated on each payroll. Employees may be assigned a different workweek; however, that must be clearly marked beside the employees’ names.

The following are examples of how these rules apply to different situations.

**OT** refers to the hours worked for which overtime must be paid

**RT** refers to the hours worked at the regular rate of pay (straight time)

**TT** refers to the total time worked on the day or in the week

The base workweek hours must be clearly indicated on each payroll. Employees may be assigned a different workweek; however, that must be clearly marked beside the employees’ names.

**State Funded with or without federal funding Projects**

<table>
<thead>
<tr>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
<th>Thurs</th>
<th>Fri</th>
<th>Sat</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>TT</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>6</td>
<td>46</td>
</tr>
<tr>
<td>RT</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>6</td>
<td>38</td>
</tr>
<tr>
<td>OT</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>8</td>
</tr>
</tbody>
</table>

**City-only Funded Projects (4 ten-hour days)**

<table>
<thead>
<tr>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
<th>Thurs</th>
<th>Fri</th>
<th>Sat</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>TT</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>6</td>
<td>46</td>
</tr>
<tr>
<td>RT</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>0</td>
<td>40</td>
</tr>
<tr>
<td>OT</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

**State Funded with or without federal funding Projects**

<table>
<thead>
<tr>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
<th>Thurs</th>
<th>Fri</th>
<th>Sat</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>TT</td>
<td>0</td>
<td>10</td>
<td>10</td>
<td>0</td>
<td>7</td>
<td>27</td>
</tr>
<tr>
<td>RT</td>
<td>0</td>
<td>8</td>
<td>8</td>
<td>0</td>
<td>7</td>
<td>23</td>
</tr>
<tr>
<td>OT</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

**City-only Funded Projects (4 ten-hour days)**

<table>
<thead>
<tr>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
<th>Thurs</th>
<th>Fri</th>
<th>Sat</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>TT</td>
<td>10</td>
<td>0</td>
<td>12</td>
<td>0</td>
<td>0</td>
<td>32</td>
</tr>
<tr>
<td>RT</td>
<td>10</td>
<td>0</td>
<td>10</td>
<td>10</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>OT</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

c) **Overtime Calculations**

Minnesota Statutes Chapter 177.42, subd 4 specifies that the prevailing hours of labor may not be more than eight hours per day or more than 40 hours per week (as stated above in (b), the City of Duluth does allow for ten hours per day/40 hours per week with City funding only. Example: hours exceeding eight per day are paid at 1.5 times the rate in the contract’s wage decision OR the base rate the employee is being paid if it is higher than the required base rate; once 40-hours in any one week are attained, all hours exceeding that 40 are paid at 1.5 times the rate in the project contract’s wage decision. See example (1) and (2) below.

Minnesota Statutes Chapter 177.42, subd 5 defines the hourly basic rate as the hourly wage paid to any employee. (subd 6): The prevailing wage rate means the hourly basic rate of pay plus the contribution for health and welfare benefits, vacation benefits, pension benefits, and any other economic benefit paid to the largest number of workers engaged in the same class of labor within the area...

Minnesota Statutes Chapter 177.43, subd 1 (1) …employees are permitted to work more hours than the prevailing hours of labor [being] paid for all hours in excess of the prevailing hours at a rate of at least 1-½ times the hourly basic rate of pay. (2) A laborer or mechanic may not be paid a lesser rate of wages than the prevailing wage rate in the same or most similar trade or occupation in the area.

An employer may pay a lower regular time/straight time hourly rate and higher fringe benefit rate— to a bona fide plan— than stated in the contract’s wage decision providing the total of the two rates is equal to or greater than the total in the wage decision; however, the OVERTIME rate must be paid on the higher rate in the contract’s wage decision.

1) **Overtime Calculation with Fringe Benefits Paid to Bona Fide Plans**

For overtime purposes, an employer paying higher fringe benefits to a bona fide plan and paying a lower hourly rate MUST calculate the overtime on the higher hourly rate as stated in the project contract’s wage decision. The fringe benefit amount may be reduced to reflect any increase in the total prevailing wage package if the plan administrator permits such a reduction. This acceptance must be verified in writing by the plan administrator and attached to the appropriate certified payroll report.

2) **Overtime Calculation with Cash Payment of Fringe Benefits**

When the fringe benefit is paid directly to an employee, the prevailing base rate and the fringe benefit rate as established in the project contract’s wage decision for a specific classification are totaled to arrive at the hourly rate. Overtime is calculated at 1.5 x the base rate of the wage decision with the fringe benefit amount added to that rate: base rate of the wage decision x 1.5 + fringe benefit rate = overtime rate.

**Contract Work Hours and Safety Standards Act**

[Refer to page two of this document.] All projects valued at $100,000 or greater are subject to this Act. As with Minnesota Statutes Chapter 177.43, the overtime rate is calculated as in items one and two above OR (e) below.

(d) A contractor shall not reduce a worker’s private, regular rate of pay when the wage rate certified by the U. S. Department of Labor or the Minnesota Department of Labor & Industry is less than the worker’s normal hourly wage [Minnesota Statute 181.03 subdivision 1(2)].
(e) **Regular Time & Overtime Definitions**

- **State of Minnesota** funded projects with or without federal funding *only allow for five eight-hour days per week at regular time*. Overtime is calculated at a rate not less than time and one-half (1.5) of the prevailing base rate as stated in the wage decision OR the base rate the employee is being paid if it is higher than the required base rate–plus the straight time fringe benefit amount. *(see (1) above for example when a lower base rate and higher fringe are paid)*

- **City of Duluth** funded projects do permit four ten-hour work days at regular time–see point 4-a, b for stipulations. Overtime is calculated at a rate not less than time and one-half (1.5) of the prevailing base rate as stated in the wage decision–OR the base rate the employee is being paid if it is higher than the required base rate–plus the straight time fringe benefit amount. *(see (1) above for example when a lower base rate and higher fringe are paid)*

- **Federal** funded only projects allow overtime pay for hours worked in excess of 40 in a workweek at a rate not less than time and one-half (1.5) of the prevailing base rate as stated in the wage decision OR the base rate the employee is being paid if it is higher than the required base rate–plus the straight time fringe benefit amount.

- **HUD funded projects** allow overtime pay for hours worked in excess of 40 in a workweek at a rate not less than time and one-half (1.5) of the prevailing base rate as stated in the wage decision OR the base rate the employee is being paid if it is higher than the required base rate–plus the straight time fringe benefit amount.

**When a combination of funding sources are included in any one project, the most strict requirements will apply.**

(f) The minimum hourly prevailing wages are contained in each project specification. When both federal (general decision rates from the U. S. Department of Labor) and State of Minnesota prevailing wages for state funded construction projects from the Minnesota Department of Labor and Industry are used, the prime contractor and all subcontractors including trucking operations, are required to *pay the higher of the two wages* for all laborers and mechanics [Mn/DOT Contract Administration Manual, Section 5-591.320].

(g) The prime contractor and any lower-tier subcontractor shall review all wage decisions and compensate a worker according to the type of work performed and at the rate that is the greatest.

(h) State of Minnesota prevailing wages typically list two rates for each classification with two effective dates. Should any City of Duluth contract continue to and past the second effective date, that rate and fringe benefit will be in effect through the remainder of the project.

(i) **Mn/DOT Statement of Compliance is required on all city of Duluth construction projects (regardless of the project funding source) with each weekly certified payroll report.** web site: [http://dot.state.mn.us/const/labor/forms.html](http://dot.state.mn.us/const/labor/forms.html)

(j) All contracts for city projects shall have applicable schedules of prevailing wage rates set forth in the contract. Schedules of applicable prevailing wage rates shall be posted on all project job sites for public review and shall be protected from the weather.

(k) Employees on projects shall be paid at least *weekly*. Fringe benefits shall be paid either in cash or to an employee benefit plan that has been approved by the U.S. Department of Labor. *(The fringe benefit package is an integral portion of the prevailing wage. Should the prime contractor or any subcontractor (regardless of tier) become delinquent with any fringe benefit plan administrator’s requirements for monthly payment, the monthly estimate(s) may be withheld until the plan payments are made current. (city ordinance 8940 6-18-89 plus amendments)*

See MnDOT Specification 1906 on page nine and Section 5 of this document: Contract Compliance. See Statement of Compliance and Certified Payroll Report requirements in Section 10, HUD 4010 and web sites in Section 14, Forms.

(l) Any contractor or subcontractor working on a project shall furnish the City with *original* certified payroll reports with *original signatures* relating to the project. Such certified payroll reports shall be *submitted weekly* on U.S. Department of Labor standard forms (WH-347) or their equivalent–using the same format–to the City of Duluth Labor Standards representative. All City of Duluth funded projects must have the base workweek hours indicated on the certified payroll form and/or beside each employee’s name (should some employees be working different base workweeks).

(m) No contractor or subcontractor working on a project shall evade or attempt to evade the provisions of this section through the use of non-recognized training programs. The only employees involved in training programs that shall be allowed to work on projects covered by this section shall be apprentice-trainees as defined by this article.

(n) Any person violating the provisions of this section shall be guilty of a misdemeanor with each day of violation constituting a separate offense. In addition, if the prevailing wage rate and accompanying fringe benefit rate is not paid to employees working on a project, the City of Duluth may withhold contract payments to the prime contractor until such deficiencies are corrected. Should fringe benefits be paid to authorized Plans, the payments must be made within the demands of those Plans. Delinquencies may result in withholding of project funds to the prime contractor.

(o) This section shall not apply to contracts for projects where the total cost of the project is less than $2,000.00; nor to materialmen who do no more than deliver materials to the work site, except that this section shall apply to employees who deliver asphalt, concrete or mineral aggregate such as sand, gravel or stone where such material is incorporated into the project by depositing the material substantially in place, either directly or through spreaders, from the transporting vehicle.

(5) **Helpers**

A helper may perform work only if the helper classification is specified and defined in the federal wage decision and/or State of Minnesota wage decision incorporated into the project contract. Without such a helper classification, the contractor must assign a job classification that is the “same or most similar” [Minnesota Statute 177.44, subdivision 1] and compensate the helper for the actual work performed regardless of the helper’s skill level.

(6) **Apprentice Ratios**

Journeyworkers must be on site with the apprentices and their hours must match.

**FUNDING SOURCE:**

- **City of Duluth and State of Minnesota with or without Federal funding**
  - Apprentices are not permitted to work alone under any circumstances.
  - Working foremen are acceptable as a journeyworker PROVIDING he/she is in the same classification. **Example:** carpenter foreman and carpenter apprentice
  - Ratios are determined by the trade’s labor agreement.
  - In the absence of ratio language, the following State of Minnesota apprenticeship ratios will be applied:
    (apprentice : journeyworker)  1:1  2:4  3:7  4:10, etc.
Employees working in excess of the allowable ratio must be paid the full journeyworker compensation.

Out-of-ratio apprentices will be calculated beginning with the apprentice at the highest level of training and, then, to less senior apprentices in their rank order.

Should two or more out-of-ratio apprentices have the same level of training, whomever was on the work site first will receive journeyworker pay; if the apprentices at the same level of training began work on the project site at the same time, hours worked out-of-ratio for which restitution is due will be divided among those apprentices.

Examples:

- Four apprentices working unsupervised are on site.  Four calls for four apprentices and ten journeyworkers.  
  Correction: all apprentices will receive the full journeyworker compensation as apprentices are not permitted to work alone.

- Three apprentices and two journeyworkers are on site.  Ratio calls for three apprentices and seven journeyworkers.  
  Two journeyworkers may accompany only one apprentice; therefore, the two highest level apprentices are paid the full journeyworker compensation.

Even though this particular job has three apprentices—the second journeyworker is a mute point; a third journeyworker would also be a mute point in this example.

  Correction: the two highest level apprentices are paid the full journeyworker compensation and the third lower level apprentice is considered in ratio.

HUD (CDBG) and Federal funding only

- Apprentices are not permitted to work alone unless the U. S. Department of Labor-approved agreement allows that practice.
- Working foremen are acceptable as a journeyworker PROVIDING he/she is in the same classification.
- Ratios are determined by the trade’s U. S. Department of Labor-approved agreement.
- In the event of the absence of ratio language in the applicable agreement, the Minnesota Department of Labor ratio of one apprentice for the first journeyworker and one apprentice for each three journeyworkers thereafter will be applied, (i.e., 1:1, 2:4, 3:7, 4:10, etc.).

- The legal apprentices are those who first came to work on the job site; in the event that all apprentices begin work on the project site at the same time, hours worked out-of-ratio for which restitution is due will be divided among the apprentices.
- Time cards will be required to substantiate the start times.
- Employees working in excess of the allowable ratio—or for which U. S. Department of Labor-apprentice agreement/certificate is not provided—must be paid the full journeyworker compensation.

Examples:

- Four apprentices and one journeyworker are on site.  Six apprentices and two journeyworkers.  
  Ratio calls for four apprentices and ten journeyworkers.  
  The first apprentice on site is considered in ratio as one journeyworker may only accompany one apprentice [1:1]; this particular job has four apprentices.

  Correction: the second through the fourth apprentices coming on site are paid the full journeyworker compensation.

- Six apprentices and two journeyworkers are on site.  Six apprentices and two journeyworkers.  
  Ratio calls for six apprentices and sixteen journeyworkers.  
  The first apprentice on site is considered in ratio as two journeyworkers may only accompany one apprentice; this particular job has six apprentices— the second journeyworker is a mute point.

  Correction: the second through sixth apprentices coming on site are paid the full journeyworker compensation.

(7) Poster Boards
The prime contractor must construct and display a poster board, which contains all required posters, is legible and is accessible to all workers from the first day of work until the project is 100% complete. Posters must be protected from the weather. Prime contractors are not allowed to place a poster board at an off-site facility location.

(8) Trucking Issues
a) For the purpose of sections seven and eight, the term “owner” includes all persons having an ownership interest in the trucking entity or a partnership interest in the trucking entity and has a legal and rightful title to the vehicle(s) or has an approved lease on the vehicle(s). “Operate” means the owner either physically drives the vehicle or hires another to physically drive the vehicle; yet, maintains the right to direct the day-to-day operations of the vehicle.

b) Trucking Operations Definitions: See MN Rule 5200.1106 web site: https://www.revisor.mn.gov/rules/?id=5200.1106

Independent Trucking Operator: an individual or partnership who owns or holds a vehicle under lease and who contracts that vehicle and the owner’s services to an entity which provides construction services to a public works project. The individual owns or leases and drives the equipment, is responsible for the maintenance of the equipment, bears all operating costs, determines the details and means of performing the services, and enters into a legally binding agreement that specifies the relationship to be that of an independent contractor and not that of an employee.

Multiple Truck Operations: any legal business entity that owns more than one vehicle and hires the vehicles out for services to brokers or contractors on public works projects. The owners of a trucking firm may either drive the vehicles or hire employees to drive the vehicles. Employee drivers are subject to the appropriate prevailing wage rate. The owner driving a vehicle is obligated to account for the value of his/her services as a driver at the appropriate prevailing wage.

Partnerships: a legal business entity where two or more individuals hold vehicles under lease and contract those vehicles and their services to an entity which provides construction services to a public works project. The partners own or lease the equipment, are responsible for maintenance and all operating costs, drive the equipment, determine the details and means of performing the services, and enter a legally binding agreement that specifies the
relationship to be that of a partner and not that of an employee. All partners are subject to the appropriate prevailing wage per city of Duluth ordinance 8940 as amended.

Corporation: any legal business entity that owns or leases vehicles to provide construction services to public works projects. All individuals are employees of the corporation and subject to the appropriate prevailing wage regardless of title or position.

Broker: an individual or firm who (activities include, but are not limited to):
- contracts to provide trucking services (equipment and driver) in the construction industry to users of such services, such as prime contractors and various subcontractors of the prime;
- contracts to obtain services from other trucking operations and dispatches them to various assignments;
- receives payment from the users (such as prime contractors and various subcontractors) in consideration for the trucking services provided; and
- makes payment to the providers (truck operations so contracted with) for their services.

(9) Specific documentation from trucking operations.

Independent Trucking Operators
The owner/operator of a truck must submit a copy of his/her commercial driver’s license (CDL), cab card, and insurance certificate for each truck the owner/operator drives on each construction project before commencing work on that project. These documents must be sent to the prime contractor who will then forward the material to Labor Standards, Engineering Division at the City of Duluth.

Multiple Truck Operators
Weekly certified payrolls and payment of corresponding prevailing wages plus the fringe benefit package will be required for each project where trucks are operating. This covers the owner plus all employees performing work on the project.

Partnerships
Weekly certified payrolls and payment of corresponding prevailing wages plus fringe benefit packages will be required for each project where trucks are operating. This covers all partners of the organization who perform work on the project. Each partner performing work on a project must submit a copy of his/her commercial driver’s license (CDL), cab card, and insurance certificate for the truck being operated with that weekly certified payroll. It is not necessary to repeat such supporting documentation until a different truck is used and/or certificates or licenses have expired. Employees of the partnership are always reported on a weekly certified payroll and paid the appropriate prevailing wage plus fringe benefit package for the work being performed.

Corporations
All persons employed by the corporation are subject to receive payment of the prevailing wage plus the fringe benefit package for the work performed on a project regardless of title or position. Weekly certified payrolls must be submitted for all work performed on the project.

Brokers
Truck ownership and a bonafide contract between the broker and another trucking operation, a prime contractor, or a subcontractor must be identified. Paperwork must be submitted with the month end trucking report to the city of Duluth Labor Standards representative - Engineering. Certified payrolls are not required when the above documentation is provided and approved.

(10) Month End Trucking Report - ONLY REQUIRED WITH STATE OF MINNESOTA FUNDING
The Minnesota Department of Transportation Month End Trucking Report Form A and Form B plus Minnesota Department of Transportation Month End Trucking Report Statement of Compliance are only required on state funded projects.
A guide for completing the forms including definitions and the reports, themselves, may be downloaded from: www.dot.state.mn.us/const/labor/forms.html
Payment to the prime contractor may be withheld until documentation is received and approved.

(11) Truck Rental Rates - ONLY REQUIRED WITH STATE OF MINNESOTA FUNDING
Truck rental rates are listed in the prevailing wage section of the project specifications.

(12) Minnesota Rules 5200.1105 and 5200.1106
These rules are incorporated into this supplementary general conditions part II by reference and are found on these web sites:
www.revisor.mn.gov/rules/?id=5200

(13) Truck Axles web site: https://www.revisor.mn.gov/rules/?id=5200.1100
Per Minnesota Rules 5200.1100 Master Job Classifications, a truck “unit” refers to all axles including the steering axle. A tag axle is also counted as one of the axles. Examples: four rear axles plus one steering axle = five axles total one rear axle plus one steering axle = two axles total

(14) Non-Compliance and Enforcement
a) The prime contractor shall be liable for any unpaid wages to its workers or those of its lower-tier subcontractors, trucking companies/Multiple Truck Owners (MTO’s) and/or Independent Truck Owner/Operator (ITOs) [MnDOT Standard Specifications for Construction, Section 1801].
b) See Section 9, MnDOT Specification 1906 Partial Payments and Section 5, page two of this document.
c) City of Duluth ordinance 8940 as amended.

(15) IC-134 form - Withholding Affidavit for Contractors
The IC-134 form will be required from all Multiple Truck Operators, Partnerships, and Corporations performing trucking services on a project before the retainage or all remaining funds can be released. Web site for completing form online: www.mndot.state.mn.us
The form, itself, is found at: and www.taxes.state.mn.us/Forms_and_Instructions/ic134.pdf

(16) Owners, Supervisors, Foremen listed on certified payrolls.
All persons working on a City of Duluth project including owners, partners, supervisors, salaried persons, and working foremen who perform laborer and/or mechanic work shall be reported on the weekly certified payroll reports including all data required of any laborer or mechanic. (ordinance 8731, 6/24/85 and 8940 as amended).
Supporting documentation.
At his/her discretion, the City of Duluth employee responsible for prevailing wage labor standards may demand proof of payment of the prevailing wage which may include copies of a payroll register, itemized time sheet and matching cancelled check, or any other supporting documents as stipulated. Payment to the prime contractor may be withheld until documentation is received and approved.

Kickbacks from Public Works employees prohibited.
No contractor working on a project or other person shall, by force intimidation, or threat of termination of employment, cause any employee working on a project to give up any part of the compensation to which he is entitled under his contract of employment.

Section 9
Minnesota Department of Transportation Specification 1906 Partial Payments
Process For “Withholding Contract Monies” and “Default and Termination of a Contract” 11/5/04

Mn/DOT Specification 1906 Partial Payments describes the Commissioner’s authority to withhold funds to protect the Department’s interests. In addition, Specification 1808 Default and Termination of a Contract describes the Commissioner’s authority to take the prosecution of the work out of the hands of the Contractor.

Additionally, on projects funded in whole or part with federal funds and in accordance with the Required Contract Provisions Federal-Aid Construction Contracts Form – 1273, Section IV, Subpart 6, “Withholding”, incorporated into federal aid contracts, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance or guarantee of funds until such violations have ceased.

However, the Department must give the Contractor, and it’s Sureties due notice prior to exercising these authorities. The withholding of contract funds, in accordance with Specification 1906 or the Required Contract Provisions Federal-Aid Construction Contracts Form – 1273, Section IV, Subpart 6, “Withholding”, should be implemented as soon as possible. Failure to finalize the contract, in accordance with Specification 1808, should only be exercised as a “last resort” if the Contractor is not willing to comply.

Definitions
Commissioner: The Commissioner of the Minnesota Department of Transportation, or the chief executive of the department or agency constituted for administration of Contract work with its jurisdiction.
Contractor: The individual, firm or corporation Contracting for and undertaking prosecution of the prescribed work; the party of the second part to the Contract, acting directly or through a duly authorized representative.
Department: The Department of Transportation or the State of Minnesota, or the political subdivision, governmental body, board, commission, office, department, division, or agency constituted for administration of the Contract work within its jurisdiction.

Contracting Officer: The individual, a duly appointed successor or authorized representative who is designated and authorized to enter into Contracts on behalf of the Federal Agency and/or the City of Duluth.

Important Considerations

1. Upon completion of the work under an agreement, the department should consider issuing the final voucher as soon as possible. Failure to finalize a contract expeditiously could result in subsequent claims that would prevent the department from finalizing the contract. However, before issuance of the final voucher, the department must be able to ensure that the terms of the contract have been satisfied. Failure on the part of the department to ensure compliance could result in the Mn/DOT state aid division retaining funds from the department in accordance with Minnesota Rules 8820.3000, subpart 5.

2. On every contract, the department should withhold the final retainage in accordance with the following guidelines: (1) if the total amount of the contract is $1,000,000 or more, the department should retain funds not more than $50,000, (2) if the total amount of the contract is less than $1,000,000, the department should retain 5% of the total contract, (3) retainage should be withheld until the department can ensure that the contractor has met the terms of the contract or until the finalization of the contract.

3. This guide specifies that the department verbally notify the bonding company early in the process. Generally, as a “rule of thumb”, notifying the bonding company is usually the “last resort”. However, the justification for the early notification is related to the language found in Minnesota statute 574.31, subdivision 2, which summarizes that if an individual or the department does not submit a claim on the payment bond within 120 days after the completion of work under the contract, the claim can be denied.

The following are general guidelines that should be followed prior to placing a Contractor in default:

Step 1: Upon verbal or written notification that a possible prevailing wage violation exists, the Department should give written notice to the Contractor regarding the nature of the claim, along with the Department’s intent to withhold monies until the claim is investigated and determined to be in compliance. Additionally, the Department should inform the Contractor that the bonding company has been verbally notified of the claim. Please be aware, the Department should ensure employee confidentiality at all times.

Step 2: Upon a preliminary determination surrounding the financial extent of the claim, the Department should consider retaining a “reasonable” portion of one or more partial estimates in accordance with Mn/DOT’s 2000 Standard Specifications for Construction, Section 1906; or on federal aid contracts, in accordance with the Required Contract Provisions Federal-Aid Construction Contracts Form – 1273, Section IV, Subpart 6, “Withholding”.

Step 3: If it is determined that the claim is valid, the Department should schedule a meeting with the Contractor and attempt to resolve the matter. If the claim is determined to be invalid, the Department should release any partial estimates that may have been held as a result of the claim. However, the Department should continue to withhold the final retainage in accordance with the above-mentioned: Important Considerations.

Step 4: If resolution cannot be obtained through a meeting, the Department should order the Contractor, in writing, to complete their obligations under the contract. The letter should clearly state the circumstances under which the Department has deemed that the Contractor has not met the terms of the contract. Additionally, the Department should include a reasonable deadline for this obligation to be completed. A copy of this letter should be forwarded to the Surety, District State Aid Engineer (DSEA), Labor Compliance Unit and the Department’s Attorney.

Step 5: In the event that the Contractor does not respond to the Department’s written order, the Department should send a similar letter, requesting that the Contractor respond immediately, in writing, regarding the Contractor’s intention to comply or not comply with the order. A copy of this letter should be forwarded to the Surety, District State Aid Engineer (DSEA), Labor Compliance Unit and the Department’s Attorney.

Step 6: If the Department still does not get a proper response from the Contractor, the Department should write another letter, addressed to both the Contractor and the Surety, specifying all the facts of the alleged breach, demanding that the Contractor, or its Surety, respond satisfactorily within 10 days or the Department may exercise its authority to Default and Terminate the Contract in accordance within/DOT’s 2000 Specifications for Construction, Section
1808. It’s important to provide sufficient detail so that the Surety understands the situation. This notification should be sent by certified mail. A copy of this letter should be forwarded to the Surety, District State Aid Engineer (DSAE), Labor Compliance Unit and the Department’s Attorney.

Step 7: If the Contractor or Surety is unresponsive after 10 days, the Department should consult with their attorney to consider proceeding with Default and Termination of the Contract.

Step 8: Upon termination of the contract, the Department provides a written order to the Surety, requiring the Surety to bring resolution to the prevailing wage violation.

Step 9: The Department places the Contractor on a Non-Responsible Bidder’s List and rejects any future awards.

Section 10
Previous editions are obsolete Page 1 of 5 form HUD-4010 (06/2009) ref. Handbook 1344.1

Applicability
The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

A. 1. (i) Minimum Wages. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section (b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer’s payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conforming to 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible, place where it can be easily seen by the workers.

(ii) (a) Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

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

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

(b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

(c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(iii)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part Previous editions are obsolete Page 2 of 5 form HUD-4010 (06/2009) ref. Handbook 1344.1 of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

2. Withholding. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract in the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work, all or part of the wages required by the contract, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.
3. (i) Payrolls and basic records. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section (b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section (b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

(ii) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i)) except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee’s social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/whd/wh347.pdf or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this subparagraph for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to HUD or its designee. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)

(b) Each payroll submitted shall be accompanied by a “Statement of Compliance,” signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5 (a)(3)(i)), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(ii)), and that such information is correct and complete;

Previous editions are obsolete; Page 3 of 5 form HUD-4010 (06/2009) ref. Handbook 1344.1

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed in the applicable wage determination incorporated into the contract.

(c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the “Statement of Compliance” required by subparagraph A.3.(ii)(b).

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under subparagraph A.3.(i) available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and Trainees.

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. Any apprentice who is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed as percentages of the journeyman’s hourly rate) specified in the contractor’s or subcontractor’s registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice’s level of progress, expressed as a percentage of the journeyman’s hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received the prior approval, evidence of formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee’s level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding
journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under 29 CFR Part 5 shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in this contract

6. Subcontracts. The contractor or subcontractor will insert in any subcontracts the clauses contained in subparagraphs 1 through 11 in this paragraph A and such other clauses as HUD or its designee may by appropriate instructions require, and a copy of the applicable prevailing wage decision, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this paragraph.

7. Contract termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

10. (i) Certification of Eligibility. By entering into this contract the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor’s firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1 01 0, Title 18, U.S.C., “Federal Housing Administration transactions", provides in part: “Whoever, for the purpose of . . . influencing in any way the action of such Administration..... makes, utter or publishes any statement knowing the same to be false..... shall be fined not more than $5,000 or imprisoned not more than two years, or both.”

11. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

B. Contract Work Hours and Safety Standards Act. The provisions of this paragraph B are applicable where the amount of the prime contract exceeds $100,000. As used in this paragraph, the terms “laborers” and “mechanics” include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of 40 hours in such workweek.

Previous editions are obsolete

12. (i) Certification of Eligibility. By entering into this contract the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor’s firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1 01 0, Title 18, U.S.C., “Federal Housing Administration transactions", provides in part: “Whoever, for the purpose of . . . influencing in any way the action of such Administration..... makes, utter or publishes any statement knowing the same to be false..... shall be fined not more than $5,000 or imprisoned not more than two years, or both.”

11. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

B. Contract Work Hours and Safety Standards Act. The provisions of this paragraph B are applicable where the amount of the prime contract exceeds $100,000. As used in this paragraph, the terms “laborers” and “mechanics” include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in sub paragraph (1) of this paragraph.

Previous editions are obsolete Page 5 of 5 form HUD-4010 (06/2009) ref. Handbook 1344.1

(3) Withholding for unpaid wages and liquidated damages. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

C. Health and Safety. The provisions of this paragraph C are applicable where the amount of the prime contract exceeds $100,000.
(1) No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

(2) The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, (Public Law 91-54, 83 Stat 96), 40 USC 3701 et seq.

(3) The contractor shall include the provisions of this paragraph in every subcontract so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontractor as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

Section 11
Equal Opportunity Laws and Regulations

(A) In addition to Contract specifications set forth below, the Contractor shall conduct and administer this Contract in compliance with:
   (1) Title VI of the Civil Rights Act of 1964 (Pub. L. 88-352) and implementing regulations issued at 24 CFR Part 1;
   (2) Title VIII of the Civil Rights Act of 1968 (Pub. L. 90-284), as amended, and implementing regulations;
   (3) Section 109 of the Housing and Community Development Act of 1974, as amended; and the regulations issued pursuant thereto (24 CFR Section 570.601);
   (4) Section 3 of the Housing and Urban Development Act of 1968, as amended, and implementing regulations of 24 CFR Part 135;
   (5) Executive Order 11246, as amended by Executive Order 11375 and 12086 and implementing regulations at 41 CFR Chapter 60;
   (6) Executive Order 11063, as amended by Executive Order 12259 and implementing regulations at 24 CFR Part 107;
   (7) Section 504 of the Rehabilitation Act of 1973 (Pub. L. 93-112), as amended, and implementing regulations when published for effect;
   (8) The Age Discrimination Act of 1975, as amended, (Pub. L. 94-135) and implementing regulations when published for effect;

Equal Opportunity and Affirmative Action

(A) Contractors and Subcontractors that have a work force in excess of fifty (50) employees and a contract in excess of $50,000.00 shall prepare and maintain an appropriate affirmative action plan in accordance with the provisions of 41 CFR 60 “Compliance Responsibility for Equal Opportunity”.

(B) Non-segregated Facilities. The Contractor shall certify that he does not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The Contractor covenants that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and he will not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. As used in this paragraph the term “segregated facilities” means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, color, creed, religion, national origin, ancestry, age, marital status, status with respect to public assistance, and/or disability because of habit, local custom, or otherwise.

General Provisions Against Discrimination

(A) In all hiring or employment made possible by or resulting from this Contract, there:
   (1) will not be any discrimination against any employee or applicant for employment because of race, color, creed, religion, national origin, ancestry, age, sex, marital status, status with respect to public assistance, and/or disability.
   (2) affirmative action will be taken to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, creed, religion, national origin, ancestry, age, sex, marital status, status with respect to public assistance, and/or disability. This requirement shall apply to, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; lay-off or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. There shall be posted in conspicuous places available to employees and applicants for employment, notices setting forth the provisions of this clause. All solicitations or advertisements for employees shall state that all qualified applicants will receive consideration for employment without regard to race, color, creed, religion, national origin, ancestry, age, sex, marital status, status with respect to public assistance, and/or disability.

(B) No person in the United States shall, on the grounds of race, color, creed, religion, national origin, age, sex, marital status, status with respect to public assistance, and/or disability, be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity made possible by or resulting from this Contract. The Contractor and each employer will comply with all requirements imposed by or pursuant to the regulations of the Federal Agency effectuating Title VI of the Civil Rights Act of 1966. The Contractor will note this requirement in all solicitations or advertisements for employees. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices of the provisions of this nondiscrimination clause.

(C) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice advising the labor union or workers’ representative of the Contractor’s commitments under these provisions, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(D) The Contractor hereby agrees that he will incorporate into any contract for construction work, or modification thereof, as defined in the regulations of the Secretary of Labor at 41 CFR Chapter 60, which is paid for in whole or in part with funds obtained pursuant to this Contract, the equal opportunity clause which is a part of these Contract Documents.

(E) The Contractor further agrees that he will be bound by the equal opportunity clause and other provisions of 41 CFR Chapter 60, with respect to his own employment practices when he participates in federally assisted construction work: Provided: That of the Contractor so participating is a State or Local Government, the above equal opportunity clause is not applicable to any agency, instrumentality, or subdivision of such government which does not participate in work on or under the Contract. Also, the Contractor will make his files available to inspection by appropriate government agencies and shall furnish those reports as may be required by said agencies.

(F) The Contractor agrees that he will assist and cooperate actively with the Federal Agency and the Secretary of Labor in obtaining the compliance of subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that he will furnish the Federal Agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that he will otherwise assist the Federal Agency in the discharge of its primary responsibility for securing compliance.
(G) The Contractor further agrees that he will refrain from entering into any contract or any contract modification subject to Executive Order 11246 of September 24, 1965, with a subcontractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order. In addition, the Contractor agrees that if he fails or refuses to comply with these undertakings, the City or the Federal Agency may take any or all of the following actions: Terminate or suspend in whole or in part this Contract; refrain from extending any further assistance to the Contractor under the Project with respect to which the failure or refusal occurred until satisfactory assurance of future compliance has been received from such Contractor and refer the case to the Department of Justice for appropriate legal proceedings.

Affirmative Action - “Construction Contracts” over $10,000
Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity
(Executive Order 11246)

1. The Offeror’s or Bidder’s attention is called to the “Equal Opportunity Clause” and the “Standard Federal Equal Employment Opportunity Construction Contract Specifications” set forth herein.

2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor’s aggregate workforce in each trade on all construction work in the covered area, are as follows:

<table>
<thead>
<tr>
<th>Timetables</th>
<th>Goals for minority participation (percent)</th>
<th>Goals for female participation (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>From April 1, 1980 until revised</td>
<td>3.0</td>
<td>6.9</td>
</tr>
</tbody>
</table>

These goals are applicable to all the Contractor’s construction work (whether or not it is Federal or federally assisted) performed in the covered area.

The Contractor’s compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3 (a), and its efforts to meet the goals established for the geographical area where the contract resulting from this solicitation is to be performed. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor’s goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the City and to the Director of the Office of Federal Contract Compliance Programs; U.S. Department of Labor, ESA/OFCCP, 1600 16th Floor, 230 South Dearborn Street, Chicago, Illinois, 60604, within 10 working days of award of any construction subcontract and/or subcontract in excess of $10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the contractor and/or subcontractor; employer identification number; estimated dollar amount of the prime contract; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed.

4. As used in this Notice, and in the Contract, the “covered area” is all work under a contract currently held with the City of Duluth, Minnesota.

Standard Federal Equal Employment Opportunity
Construction Contract Specifications (Executive Order 11246)

1. As used in these specifications:
   a) “Director” means Director, Office of Federal Contract Compliance Programs, United States Department of Labor; or any person to whom the Director delegates authority;
   c) “Minority” includes:
      (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
      (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
      (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
      (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of $10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.

3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in approved Plan does not excuse any covered Contractor’s or Subcontractor’s failure to take good faith efforts to achieve the Plan goals and timetables.

4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor’s obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

6. In order for the non-working training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
7. The Contractor shall take specific affirmative action to ensure equal employment opportunity. The evaluation of the Contractor’s compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
   a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor’s employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor’s obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
   b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations’ responses.
   c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have taken.
   d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor’s efforts to meet its obligations.
   e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeships and trainee programs relevant to the Contractor’s employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notices of these programs to the sources compiled under 7b above.
   f. Disseminate the Contractor’s EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
   g. Review, at least annually, the company’s EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
   h. Disseminate the Contractor’s EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor’s EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
   i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female communities, and to minority recruitment and training programs serving the Contractor’s recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
   j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor’s work force.
   k. Validate all tests and other selection requirement where there is an obligation to do so under 41 CFR Part 60-3.
   l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
   m. Ensure that seniority practices, job classifications, work assignments and personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor’s obligations under these specifications are being carried out.
   n. Ensure that facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided on an equal opportunity basis and within the reasonable time and place of the work force.
   o. Document and maintain a record of all solicitations of officers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
   p. Conduct a review, at least annually, of all supervisor’s adherence to and performance under the Contractor’s EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor’s minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor’s and failure of such a group to fulfill an obligation shall not be a defense for the Contractor’s noncompliance.

9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be violation of the Executive Order if a specific minority group of women is underutilized).

10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, creed, religion, national origin, sex, ancestry, age, marital status, status with respect to public assistance and/or disability.

11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails
to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

14. The Contractor shall designate a responsible official to monitor all employment-related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

Affirmative Action for Handicapped Workers
(applies to contracts in excess of $2,500)

(A) The Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap in regard to any position for which the employee or applicant is qualified. The Contractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified handicapped individuals without discrimination based upon their physical or mental handicap in all employment practices such as the following: Employment, upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.

(B) The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.

(C) In the event of the Contractor’s noncompliance with the requirements of this clause, actions for noncompliance may be taken in accordance with the rules, regulations and relevant orders of the Secretary of Labor issued pursuant to the Act.

(D) The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the Director, provided by or through the contracting officer. Such notices shall state the Contractor’s obligation under the law to take affirmative action to employ and advance in employment qualified handicapped employees and applicants for employment, and the rights of applicants and employees.

(E) The Contractor will notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of Section 503 of the Rehabilitation Act of 1973, and is committed to take affirmative action to employ and advance in employment physically and mentally handicapped individuals.

(F) The Contractor will include the provisions of this clause in every subcontract or purchase order of $2,500 or more unless exempted by rules, regulations, or orders of the Secretary issued pursuant to Section 503 of the Act, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the Director of the Office of Federal Contract Compliance Programs may direct to enforce such provisions, including action for noncompliance.

Affirmative Action for Disabled Veterans and Veterans of the Vietnam Era
(applies to contracts in excess of $10,000)

(A) The Contractor will not discriminate against any employee or applicant for employment because he or she is a disabled veteran or veteran of the Vietnam era in regard to any position for which the employee or applicant is qualified. The Contractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified disabled veterans and veterans of the Vietnam era without discrimination based upon their disability or veterans status in all employment practices such as the following: Employment, upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.

(B) The Contractor agrees that all suitable employment openings of the Contractor which exist at the time of the execution of this contract and those which occur during the performance of this contract, including those not generated by this contract and including those occurring at an establishment of the Contractor other than the one wherein the contract is being performed but excluding those of independently operated corporate affiliates, shall be listed at an appropriate local office of the State employment service system wherein the opening occurs. The Contractor further agrees to provide such reports to such local office regarding employment openings and hires as may be required.

State and local government agencies holding Federal contracts of $10,000 or more shall also list all their suitable openings with the appropriate office of the State employment service, but are not required to provide those reports set forth in paragraphs (D) and (E).

(C) Listing of employment openings with the employment service system pursuant to this clause shall be made at least concurrently with the use of any other recruitment source or effort and shall involve the normal obligations which attach to the placing of a bona fide job order, including the acceptance of referrals of veterans and non-veterans. The listing of employment openings does not require the hiring of any particular job applicant or from any particular group of job applicants, and nothing herein is intended to relieve the Contractor from any requirements in Executive Orders of regulations regarding nondiscrimination in employment.

(D) The reports required by paragraph (B) of this clause shall include, but not be limited to, periodic reports which shall be filed at least quarterly with the appropriate local office or, where the Contractor has more than one hiring location in a State, with the central office of that State employment service. Such reports shall indicate for each hiring location (1) the number of individuals hired during the reporting period, (2) the number of non-disabled veterans of the Vietnam era hired, (3) the number of disabled veterans of the Vietnam era hired, and (4) the total number of disabled veterans hired. The reports should include covered veterans hired for on-the-job training under 38 U.S.C. 1787. The Contractor shall maintain at each hiring location copies of the reports submitted until the expiration of one year after final payment under the contract, during which time these reports and related documentation shall be made available, upon request, for examination by any authorized representatives of the contracting officer of the Secretary of Labor. Documentation would include personnel records respecting job openings, recruitment and placement.

(E) Whenever the Contractor becomes contractually bound to the listing provisions of this clause, it shall advise the employment service system in each State where it has establishments of name and location of each hiring location in the State. As long as the Contractor is contractually bound to these provisions, and has so
advised the State system, there is no need to advise the State system of subsequent contracts. The Contractor may advise the State system when it is no longer bound by this contract clause.

(F) This clause does not apply to the listing of employment openings which occur and are filled outside of the 50 States, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands.

(G) The provisions of paragraphs (B), (C), (D), and (E) of this clause do not apply to openings which the Contractor proposes to fill from within his own organization or to fill pursuant to a customary and traditional employer-union hiring arrangement for that opening.

(H) As used in this clause:

(1) “All suitable employment openings” includes, but is not limited to, openings which occur in the following job categories: Production and non-production; plant and office; laborers and mechanics; supervisory and non-supervisory; technical; and executive, administrative, and professional openings as are compensated on a salary basis of less than $25,000 per year. This term includes full-time employment, temporary employment of more than 3 days’ duration, and part-time employment. It does not include openings which the Contractor proposes to fill from within his own organization or to fill pursuant to a customary and traditional employer-union hiring arrangement nor openings in an educational institution which are restricted to students of that institution. Under the most compelling circumstances an employment opening may not be suitable for listing, including such situations where the needs of the Government cannot reasonably be otherwise supplied, where listing would be contrary to national security, or where the requirement of listing would otherwise not be for the best interest of the Government.

(2) “Appropriate office of the State employment service system” means the local office of the Federal-State national system of public employment offices with assigned responsibility for serving the area where the employment opening is to be filled, including the District of Columbia, Guam, Puerto Rico, and the Virgin Islands.

(3) “Openings which the Contractor proposes to fill from within his own organization” means employment openings for which no consideration will be given to persons outside the Contractor’s organization (including any affiliates, subsidiaries, and the parent companies) and includes any openings which the Contractor proposes to fill from regularly established “recall” lists.

(4) “Openings which the Contractor proposes to fill pursuant to a customary and traditional employer-union hiring arrangement” means employment openings which the Contractor proposes to fill from union halls, which is part of the customary and traditional hiring relationship which exists between the Contractor and representatives of his employees.

(I) The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.

(J) In the event of the Contractor’s noncompliance with the requirements of this clause, actions for noncompliance may be taken in accordance with the rules, regulations and relevant orders of the Secretary of Labor issued pursuant to the Act.

(K) The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the Director, provided by or through the contracting officer. Such notices shall state the Contractor’s obligation under the law to take affirmative action to employ and advance in employment qualified disabled veterans and veterans of the Vietnam era for employment, and the rights of applicants and employees.

(L) The Contractor will notify each labor union representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of the Vietnam Era Veterans Readjustment Assistance Act, and is committed to take affirmative action to employ and advance qualified disabled veterans and veterans of the Vietnam era.

(M) The Contractor will include the provisions of this clause in every subcontract or purchase order of $10,000 or more unless exempted by rules, regulations, or orders of the Secretary issued pursuant to the Act, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the Director of the Office of Federal Contract Compliance Programs may direct to enforce such provisions, including action for noncompliance.

Section 12

Employment Opportunities - “HUD Section 3”

General

These requirements apply to the City of Duluth contracts receiving assistance under the U.S. Department of Housing and Urban Development (HUD) Community Development Block Grant (CDBG) Program.

Type of Covered Projects

24CFR570.607 (b) of the HUD CDBG Program Regulations state in part “... that employment and other economic opportunities arising in connection with housing rehabilitation, housing construction, or other public construction projects shall to the greatest extent feasible, and consistent with existing Federal, State, and local laws and regulations be given to low- and very low-income persons.

Thresholds

In accordance with the provisions of 24CFR135.3(a) (3) (i) (A), the requirements of this Section apply to those recipients as defined at 24CFR135.5 when the amount of this contract exceeds $200,000.

In addition, in accordance with the provisions of 24CFR135.3(a) (3) (ii) (B), the requirements of this Section apply to any contractor or subcontractor whose contract exceeds $100,000 as a result of assistance provided under this contract.

Requirements (Section 3 Clause)

(A) The work to be performed under this contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (section 3). The purpose of Section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.

(B) The parties to this contract agree to comply with HUD’s regulations in 24 CFR part 135, which implement section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 135 regulations.

(C) The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement, or other understanding, if any, a notice advising the labor organization or workers’ representative of the contractor’s commitments under this section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The
notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.

(D) The Contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR part 135.

(E) The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 135 require employment opportunities to be directed, were not filled to circumvent the contractor’s obligation under 24 CFR part 135.

(F) Noncompliance with HUD’s regulations in 24 CFR part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD-assisted contracts.

Section 13

Federal Requirements for Minority/Women Business Enterprises Contract Guidance - MPFA

General

Municipalities that receive loan funding must comply with Federal requirements concerning utilization of Minority Business Enterprises (MBE) and Women’s Business Enterprises (WBE). These requirements are designed to encourage the prime contractors to utilize MBEs and WBEs whenever procurement opportunities occur.

Regulation

40 C.F.R. Section 35.3145(d) Application of other Federal Authorities, M/WBE Requirements

Executive Orders No. 11625, 12138 and 12432 - Promoting the use of M/WBEs

Section 129 of Public Law 100-590 - Small Business Administration Reauthorization and Amendment Act of 1988

Regulations detailed in the EPA’s Cross-Cutting Federal Authorities - Clean Water Act State Revolving Fund Program and Safe Drinking Water Act State Revolving Fund Program

Implementation

The “fair share” target percentage participation proposed for this project is 3.5 percent (3.5%) for MBE and 11.5 percent (11.5%) for WBE.

If the Contractor intends to let any subcontractors for a portion of the work, the Contractor shall take affirmative steps to assure that minority and women businesses are utilized when possible as sources of supplies, equipment, construction and services. Affirmative steps shall include the following:

a) Include qualified minority businesses on solicitation lists.

b) Assure that minority businesses are solicited whenever they are potential sources.

c) When economically feasible, divide total requirements into smaller tasks or quantities so as to permit maximum small and minority business participation.

d) Where the requirement permits, establish delivery schedules, which will encourage participation by minority businesses.

e) Use the services and assistance of the Office of Minority Business Enterprise of the Department of Commerce.

The low bidder will be required to submit to the City of Duluth documentation of his good faith efforts to meet the targeted goals of utilizing MBEs and WBEs.

Section 14 - Forms

Minnesota Department of Transportation and City of Duluth, Minnesota funded certified payroll forms

- MnDOT Prime Contractor’s-Subcontractor’s Statement of Compliance form (12/2010)
  - www.dot.state.mn.us/const/labor/forms.html
- Certified Payroll Forms
  - use front side only

U. S. Department of Housing and Urban Development and federal government funded certified payroll forms

- Statement of Compliance Form & Certified Payroll Forms
  - (use reverse side for Statement of Compliance form)
- MnDOT Prime Contractor’s-Subcontractor’s Statement of Compliance form (12/2010)
  - www.dot.state.mn.us/const/labor/forms.html

Minnesota Department of Transportation Trucking Requirements

- Month End Trucking Report Form A and Form B
- Month End Trucking Report Statement of Compliance
- Definitions, instructions, forms:
  - www.dot.state.mn.us/const/labor/forms.html
PROJECT LABOR AGREEMENT
NO STRIKE, NO LOCKOUT

PUBLIC SECTOR

CITY OF DULUTH

&

Vendor

Project name

Project No.
<table>
<thead>
<tr>
<th>INDEX</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AGREEMENT</td>
<td>1</td>
</tr>
<tr>
<td>ARTICLE I - PURPOSE</td>
<td>2</td>
</tr>
<tr>
<td>ARTICLE II - SCOPE OF THE AGREEMENT</td>
<td>2</td>
</tr>
<tr>
<td>ARTICLE III - UNION RECOGNITION AND REPRESENTATION</td>
<td>4</td>
</tr>
<tr>
<td>ARTICLE IV - LABOR HARMONY CLAUSE</td>
<td>5</td>
</tr>
<tr>
<td>ARTICLE V - WORK STOPIAGES AND LOCKOUTS</td>
<td>6</td>
</tr>
<tr>
<td>ARTICLE VI - DISPUTES AND GRIEVANCES</td>
<td>6</td>
</tr>
<tr>
<td>ARTICLE VII - JURISDICTIONAL DISPUTES</td>
<td>6</td>
</tr>
<tr>
<td>ARTICLE VIII - NO DISCRIMINATION</td>
<td>7</td>
</tr>
<tr>
<td>ARTICLE IX - SAVINGS AND SEPARABILITY</td>
<td>7</td>
</tr>
<tr>
<td>ARTICLE X - DURATION OF THE AGREEMENT</td>
<td>7</td>
</tr>
<tr>
<td>SCHEDULE “A”</td>
<td>10</td>
</tr>
</tbody>
</table>
AGREEMENT

This Project Labor Agreement (hereinafter, the “Agreement”), effective as of the date of attestation by the City Clerk, by and between the various contractors engaged in the construction of facilities to be known as the (Project). The parties to this Agreement are the Building and Construction Trades Council, on behalf of its affiliated Local Unions (hereinafter “Union” or “Unions”), the City of Duluth (hereinafter “Owner”) and Contractor (hereinafter “Construction Manager/General Manager,” “Contractor,” and “Contractors”).

It is understood by the parties to this Agreement that it is the policy of the Owner that the construction work covered by this Agreement shall be contracted to Contractors who agree to be bound by the terms of this Agreement. Therefore, the Union agrees that other Contractors may execute the Agreement for the purpose of covering that work. The Construction Manager/General Contractor shall monitor compliance with this Agreement by all Contractors who through their execution of this Agreement, together with their subcontractors, have become bound hereto.

The term “Contractor” shall include all Contractors and subcontractors of whatever tier engaged in on-site construction work within the scope of this Agreement.

The Union and all signatory Contractors agree to abide by the terms and conditions contained in this Agreement with respect to the administration of the Agreement by the Owner and the performance of the construction by the Contractor of the Project. This Agreement represents the complete understanding of the parties, and it is further understood that no Contractor party is required to sign any other agreement as a condition of performing work within the scope of this Agreement. No practice, understanding or agreement between a Contractor and a Union party which is not explicitly set forth in this Agreement shall be binding on any other party unless endorsed in writing by the Project Contractor.
ARTICLE I - PURPOSE

The (Project), an undertaking of the Owner, is a public project which will employ numbers of skilled and unskilled workers. Construction of the Project will entail utilization of the construction industry in an area having multiple labor contracts and employer associations. Consequently, conflicts within labor-management relations could cause delay or disruption of the efficient completion of the project unless maximum cooperation of all segments of the construction industry is obtained. This Agreement is to establish as the minimum standards on the Project the hours and working conditions as those prevailing for the largest number of workers engaged in the same classes of work within the area.

It is in the public interest that the Project progress and be completed in an expeditious and efficient manner, free of disruption or delay of any kind. Therefore, it is essential to secure optimum productivity and to eliminate any delays in the work. In recognition of the special needs of this Project and to maintain a spirit of harmony, labor-management peace and stability during the term of this Project Labor Agreement, the parties agree to establish effective and binding methods for the settlement of all misunderstandings, disputes or grievances which may arise. Therefore, the Unions agree not to engage in any strike, slowdown or interruption of work and the Contractor agrees not to engage in any lockout.

ARTICLE II - SCOPE OF THE AGREEMENT

Section 1. This Agreement, hereinafter designated as the “Project Labor Agreement” or “Agreement,” shall apply and is limited to all construction work included in all Bid Categories for the (Project), under the direction of the signatory Contractors and performed by those Contractor(s) of whatever tier which have contracts awarded for such work on and after the effective date of this Agreement with regard to the Project.

Such Project is generally described as the construction of: Project
Section 2. It is agreed that all direct subcontractors of a Contractor, of whatever tier, who have been awarded contracts for work covered by this Agreement on or after the effective date of this Agreement shall be required to accept and be bound by the terms and conditions of the Project Labor Agreement.

Section 3. The provisions of this Project Labor Agreement shall apply to all craft employees represented by any Union listed in Schedule A hereto attached and shall not apply to other field personnel or managerial or supervisory employees as defined by the National Labor Relations Act.

Section 4. All employees covered by this Agreement shall be classified in accordance with work performed and paid the base hourly wage rates for those classifications as specified in the attached Schedule A.

Section 5. The Contractors agree to pay contributions to the established employee benefit funds in the amounts designated in the appropriate Schedule A.

Contractors that are not signatory to a collective bargaining agreement beyond the scope of this Agreement (“PLA contractor”) may select to participate in the legally established industry health reimbursement arrangement (“HRA”) plan, in lieu of contributing to the respective bona fide benefit funds as designated in Schedule A. The amount of the contribution is based on the difference between the contribution amount of the bona fide Schedule A benefit funds and the cost of the PLA contractor's bona fide non-discretionary plans. Contributions must be made on behalf of named employees. Participating contractors will submit to the Trustees of the HRA trust and plan a copy of their plan, summary plan description, and the premium structure for workers covered under the PLA contractor's bona fide, non-discretionary plans. The value of the PLA contractor's benefit plans are subject to confirmation by the Trustees of the HRA trust and plan. This may include an independent audit according to a policy as established by the Trustees. Contractors are required to submit certified payroll reports to the Trustees or authorized administrator in order to confirm compliance with the terms of the HRA trust and plan.
The Contractors adopt and agree to be bound by the written terms of the legally-established Trust Agreements (or in lieu thereof, the aforementioned HRA plan and trust including any policies) specifying the detailed basis on which payments are to be made into, and benefits paid out of, such Trust Funds. The Contractors authorize the parties to such Trust Agreements to appoint trustees and successor trustees to administer the Trust funds and hereby ratify and accept the Trustees so appointed as if made by the Contractors.

Section 6. In the event of any conflict between any provisions of this Agreement and in the Local Area Agreements, the terms of this Agreement will be applied. In other words, where a subject covered by the provisions of this Project Labor Agreement is also covered by the Local Area Agreement the provisions of this Project Labor Agreement shall prevail. Where a subject is covered by the Local Area Agreement and not covered by this Project Labor Agreement, the Local Area Agreement provisions shall prevail.

Section 7. This Agreement shall only be binding on the signatory parties hereto and shall not apply to the parents, affiliates, subsidiaries, or other ventures of any such party.

Section 8. This Agreement shall be limited to work historically recognized as construction work. Nothing contained herein shall be construed to prohibit, restrict, or interfere with the performance of any other operation, work or function which may occur in or around the Project site or be associated with the development of the Project, or with the ongoing operations of the Owner.

Section 9. It is understood that the liability of any Contractor and the liability of the separate Unions under this Agreement shall be several and not joint. The Union agrees that this Agreement does not have the effect of creating any joint employment status between or among Owner and any Contractor.

Section 10. All workers delivering fill, sand, gravel, crushed rock, transit/concrete mix, asphalt or other similar materials and all workers removing any materials from the construction site as required by the specifications are subject to the provisions of the Minnesota state
prevailing wage law and are entitled to the appropriate area standard wage. For purposes of this contract, such materials are for specified future use and per Minnesota state prevailing wage law delivery and pickup of the above-listed materials constitutes incorporation.

ARTICLE III - UNION RECOGNITION AND REPRESENTATION

Section 1. The Contractor recognizes the Union as the sole and exclusive bargaining representative of all craft employees working on facilities within the scope of this Agreement.

Section 2. Authorized representatives of the Union shall have access to the Project, provided they do not interfere with the work of employees and further provided that such representatives fully comply with the posted visitor and security and safety rules of the Project.

ARTICLE IV - LABOR HARMONY CLAUSE

The contractor shall furnish labor that can work in harmony with all other elements of labor employed on that (Project) and shall submit a labor harmony plan to demonstrate how this will be done. “Harmony” shall include the provision of labor that will not, either directly or indirectly, cause or give rise to any work disruptions, slow downs, picketing, stoppages, or any violence or harm to any person or property while performing any work, or activities incidental thereto at the (project). The labor harmony plan should include the company's labor management policies, collective bargaining agreements if any and their expiration dates, past labor relations history, a listing of activities anticipated under this contract that may potentially cause friction with on-site workers, and procedures the company will undertake to eliminate this friction.

The contractor agrees that it shall require every lower-tier subcontractor to provide labor that will work in harmony with all other elements of labor employed in the work, and will include the provisions contained in the paragraph above, in every lower-tier subcontract let for work under this contract.
The requirement to provide labor that can work in harmony with all other elements of labor employed in the work throughout the contract performance is a material element of this contract. Failure by the contractor or any of its lower tier subcontractors to comply with this requirement shall be deemed a material breach of the contract which will subject the contractor to all rights and remedies the city of Duluth may have, including without limitation the right to terminate the contract.

ARTICLE V - WORK STOPPAGES AND LOCKOUTS

Section 1. There shall be no strike, picketing, work stoppages, slowdowns or other disruptive, activity for any reason by the Union or employees against any Contractor covered under this Agreement, and there shall be no lockout by the Contractor. Failure of any Union or employee to cross any picket line established by any union, signatory or non-signatory, or any other organization, at or in proximity to the Project site is a violation of this Article.

Section 2. Any party alleging a breach of Section 1, of Article IV shall have the right to petition a court for temporary and permanent injunctive relief. The moving party need not show the existence of irreparable harm, and shall be required to post bond only to secure payment of court costs and attorney fees as may be awarded by the court.

ARTICLE VI - DISPUTES AND GRIEVANCES

Section 1. This Agreement is intended to provide close cooperation between management and labor. The Construction Manager/General Contractor and the Building and Construction Trades Council shall each assign a representative to this Project for the purpose of assisting the Local Unions, together with the Contractor, to complete the construction of the Project economically, efficiently, continuously and without interruption, delays or work stoppages. Each Contractor shall hold a pre-job conference with the Union and Construction Manager/General Contractor to clear up any project question and work assignments in which there is thought to be a difference in opinion. Every effort will be made to hold such conference well in advance of actual work performance.
Section 2. The Contractor, Union, and employees collectively and individually, realize the importance to all parties to maintain continuous and uninterrupted performance of the work of the Project, and agree to resolve disputes over grievances in accordance with the arbitration provisions set forth in the Local Area Agreements in effect with the Unions listed in Schedule A attached hereto.

ARTICLE VII - JURISDICTIONAL DISPUTES

Section 1. There will be no strikes, work stoppages, slowdowns, or other disruptive activity arising out of any jurisdictional dispute. Pending the resolution of the dispute, the work shall continue uninterrupted as assigned by the Contractor.

Section 2. Building construction work shall be assigned by the Contractor in accordance with the procedural rules of the Plan for the Settlement of Jurisdictional Disputes in the Construction Industry (hereinafter the “Plan”). Any jurisdictional dispute over the Contractor's assignment of work shall be settled in accordance with the provisions of the Plan.

Section 3. Where a jurisdictional dispute involves the International Brotherhood of Teamsters, it shall be referred for resolution to that International Union and the disputing International Union. The resolution of the dispute shall be reduced to writing, signed by the authorized representative of the International Unions and the Contractor. The assignments made by the Contractor shall be followed until such time as the dispute is resolved in accordance with this Section.

ARTICLE VIII - NO DISCRIMINATION

Section 1. The Contractor and Union agree that they will not discriminate against any employee or applicant for employment because of his or her membership or nonmembership in a Union or based upon race, color, religion, sex, national origin or age in any manner prohibited by law or regulation.
Section 2. Any complaints regarding application of the provisions of Section 1 should be brought to the immediate attention of the involved Contractor for consideration and resolution.

Section 3. The use of the masculine or feminine gender in this Agreement shall be construed as including both genders.

ARTICLE IX - SAVINGS AND SEPARABILITY

It is not the intention of the parties to violate any laws governing the subject matter of this Agreement. The parties hereto agree that in the event any provisions of the Agreement are finally held determined to be illegal or void as being in contravention of any applicable law, the remainder of the Agreement shall remain in full force and effect unless the part or parts so found to be void are wholly inseparable from the remaining portions of this Agreement. Further, the contractor and Union agree that if and when any and all provisions of this Agreement are finally held or determined to be illegal or void by Court of competent jurisdiction, the parties will promptly enter into negotiations concerning the substance affected by such decision for the purpose of achieving conformity with the requirements of an applicable law and the intent of the parties hereto.

ARTICLE X DURATION OF THE AGREEMENT

The Project Labor Agreement shall be effective as of the date of attestation by the City Clerk, and shall continue in effect for the duration of the Project construction work described in Article II hereof. Construction of any phase, portion, section or segment of the project shall be deemed complete when such phase, portion, section or segment has been turned over to the Owner and has received the final acceptance from the Owner's representative.

Since there are provisions herein for no strikes or lockouts in the event any changes are negotiated and implemented under a Local Area Agreement during the term of this Agreement, the Contractor agrees that, except as specified herein, such changes shall be recognized and shall apply retroactively to the termination date in the particular Local Agreement involved. Each Contractor which has a Local Agreement with a Union at the time that its contract at the project
commences shall continue it in effect with each said Union so long as the Contractor remains on the project. In the event any such Local Area Agreement expires, the Contractor shall abide by all of the terms of the expired Local Agreement until agreement is reached on a new Local Agreement, with any changes being subject to the provisions of this Agreement.

The Union agrees that there will be no strikes, work stoppages, sympathy actions, picketing, slowdowns or other disruptive activity affecting the Project by any Union involved in the negotiation of a Local Area Agreement nor shall there be any lockout on this Project affecting the Union during the course of such negotiations.
IN WITNESS WHEREOF the parties have entered into this Agreement to be effective as of the day and year above written.

DULUTH BUILDING AND CONSTRUCTION TRADES COUNCIL

By: _________________________________
Its __________________________________
(Printed Name/Title)
Date: ________________

VENDOR

By: _________________________________
Its __________________________________
(Printed Name/Title)
Date: ________________

CITY OF DULUTH

By: _________________________________
Mayor

Attest:

City Clerk
Date: ________________

City Auditor
Date: ________________

Assistant City Attorney
Date: ________________
SCHEDULE “A”

A1  Asbestos Workers Local 49
A-2  Boilermakers Local 647
A-3  BAC Local 1 Chapter 3 Duluth & Iron Range
A-4  Carpenters Local 361
A-5  Cements Masons/Plasterers Local 633
A-6  Elevator Constructors Local 9
A-7  IBEW Local 242
A-8  Iron Workers Local 512
A-9  Laborers Local 1091
A-10 Millwrights & Machinery Erectors Local 1348
A-11 Operating Engineers Local 49
A-12 Painters & Allied Trades Local 106
A-13 Plumbers & Fitters Local 11
A-14 Roofers Local 96
A-15 Sheet Metal Workers Local 10
A-16 Sprinkler Fitters Local 669
A-17 Teamsters Local 346
Building Trades Affiliates
Contract Expirations

Heat & Frost Insulators Local 49   May 31, 2017
Boilermakers Local 647            December 31, 2016
Bricklayers Local 1               April 30, 2016
Carpenters Local 361              May 30, 2017
Cement Masons Local 633           April 30, 2017
Elevator Constructors Local 9     July 8, 2017
Glaziers Local 106                April 30, 2017
IBEW Local 242                    May 31, 2019
Iron Workers Local 512            April 30, 2016
Laborers Local 1091               April 30, 2017
Operator Engineers Local 49 (Bldrs) April 30, 2016
                                  (Hwy Heavy) April 30, 2017
Painters Local 106                April 30, 2017
Plumbers & Steamfitters Local 11  April 30, 2017
Roofers Local 96                  June 30, 2016
Sheet Metal Local 10              April 30, 2016
Sprinkler Fitters Local 669       March 31, 2016
Teamsters Local 346               April 30, 2017

Updated 9/4/2015
ASBESTOS WORKERS LOCAL 49
Dave Cartwright
2002 London Road #210
Duluth, MN 55812
(218) 724-3223 / Fax# 724-1870
dave@insulatorslocal49.org

BOILERMAKERS LOCAL 647
Bill Polchow
1007 NW 4th Street, Ste C
Grand Rapids, MN 55744
(218) 326-2522 / Fax# SAME
bpolchow647@outlook.com

BAC LOCAL #1 CHAPTER 3
DULUTH & IRON RANGE
Stan (Ogie) Paczynski
2002 London Road #100
Duluth, MN 55812
(218) 724-8374 / Fax# 724-8341
spaczynski@bac1.mn-nd.org

CARPENTERS LOCAL 361
Steve Risacher & Chris Hill
5238 Miller Trunk Hwy
Hermantown, MN 55811
(218) 724-3297 / Fax# 724-8536
srisacher@nscrcc.org
christ@nscrcc.org

CEMENT MASON LOCAL 633
Michael Syversrud
2002 London Road #112
Duluth, MN 55812
(218) 724-2323 / Fax# 724-2472
mikey@local633.org

ELEVATOR CONSTRUCTORS
LOCAL 9
Dave Aaserud
433 Little Canada Rd E
Little Canada, MN 55117
(651) 287-0817 / Fax# 287-0820
d.aaserud@local9.com

IBEW LOCAL 242
Don Smith
2002 London Road #111
Duluth, MN 55812
(218) 726-6895 / Fax# 728-1965
dsmith242@unions-america.com

IRON WORKERS LOCAL 512
Darrell Godbout, Vice President
3752 Midway Road
Hermantown, MN 55810
(218) 724-5073 / Fax# 724-1525
darrell@iron512.com

LABORERS LOCAL 1091
Dan Olson, Secretary
2002 London Road #119
Duluth, MN 55812
(218) 728-5151 / Fax# 728-2431
labors@local1091.com

MILLRIGHTS & MACHINERY
ERECTORS LOCAL 1348
Wayne Nordin
307 N 1st Street
Virginia, MN 55792
(218) 741-6314 / Fax# 741-6017
wnordin@nscrcc.org

OPERATING ENGINEERS
LOCAL 49
Brent Pykkenen
2002 London Road #116
Duluth, MN 55812
(218) 724-3840 / Fax# 728-1441
president@duluthbuildingtrades.com
pyke49@yahoo.com

PAINTERS LOCAL 106
Craig Olson, President
2002 London Road #106
Duluth, MN 55812
(218) 724-6466 / Fax# 724-7359
painters@duluthbuildingtrades.com

PLUMBERS & FITTERS LOCAL 11
Jeff Daveau, Treasurer
4402 Airpark Boulevard
Duluth, MN 55811
(218) 727-2199 / Fax# 727-2298
jeff@ualocal11.com

ROOFERS LOCAL 96
Vance Anderson
1145 Villa Vista Circle
Cromwell MN 55726
(218) 644-1096 / Fax# SAME
valocal96@yahoo.com

SPRINKLER FITTERS LOCAL 669
James Westby
PO Box 398
Mabel, MN 55954
(507) 493-5671 / Fax# 493-5481
westby@mabeltel.coop

SHEET METAL WORKERS
LOCAL 10
Doug Christie
6279 Industrial Road
Saginaw, MN 55779
(218) 724-6873 / Fax# SAME
dchristy@smw10.org

TEAMSTERS LOCAL 346
Rod Alstead
2802 West 1st Street
Duluth, MN 55806
(218) 628-1034 / Fax# 628-0246
team346@qwest.net
TO WHOM IT MAY CONCERN:

The following wage package changes listed below become effective 01/01/2016 thru 12/31/2016 for Boilermakers Local Lodge #647. Per the Great Lakes Articles of Agreement for the year of 2016, there is a $1.40 increase to be allocated by the membership. The $1.40 has been allocated as follows: $1.00 will go to a wage increase, $.40 will go to an Annuity increase. Per Article 24.4, the 647 Development and Training Fund (D&T) will increase $.05 for a total contribution of $.51.

### CHANGES AS OF: January 1, 2016

<table>
<thead>
<tr>
<th>Increase General Foreman</th>
<th>$ 1.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase Foreman</td>
<td>1.00</td>
</tr>
<tr>
<td>Increase Journeymen</td>
<td>1.00</td>
</tr>
<tr>
<td>Increase Annuity</td>
<td>.40</td>
</tr>
<tr>
<td>Increase 647 D&amp;T</td>
<td>.05</td>
</tr>
<tr>
<td>Increase Vacation Fund Deduction</td>
<td>.95</td>
</tr>
<tr>
<td>Increase Subsistence</td>
<td>5.00</td>
</tr>
</tbody>
</table>

### Effective: 01/01/2016

| General Foreman Wage       | $ 39.65 |
| Foreman Wage               | 37.65   |
| Journeymen Wage            | 35.15   |
| Pension Trust              | 14.14   |
| Annuity Trust              | 4.40    |
| Health & Welfare Fund      | 7.07    |
| Retiree Welfare Plan       | .50     |
| Apprenticeship Fund        | .40     |
| MOST                       | .34     |
| 647 D&T                    | .51     |
| Deductions (after tax)     |         |
| Vacation Trust             | 2.00    |
| 647 Political Action Fund  | .05     |

All other benefits and deductions remain the same for the Great Lakes Articles of Agreement as listed further in this letter.

Subsistence will be paid under the terms and conditions of the Great Lakes Articles of Agreement. For the provisions of the agreement on subsistence, Addendum A of the agreement states effective 01/01/2016 thru 12/31/2016 the daily rate of Subsistence is $65.00 per day if a Boilermaker's permanent address is 50 miles from the jobsite.

Boilermaker-Blacksmith National Pension Trust ($14.14), National Annuity ($4.40), National Health & Welfare Fund ($7.07), Boilermakers Great Lakes Region Retiree Welfare Plan ($0.50), Boilermakers 647 D&T Fund ($0.51), Boilermakers 647 Political Action Fund ($0.05 deducted after taxes), to be paid on hours PAID, not hours worked.
Vacation Trust ($2.00 deducted after taxes), Apprenticeship Fund ($0.40) and MOST ($0.34) are to be paid on hours WORKED.

647 Political Action Fund and 647 D&T Fund monies will be submitted to Local 647 on separate forms and will require separate checks for each fund.

Boilermakers receive time and one-half over the established workday of eight hours and all time worked on Saturdays. All time worked on Sundays and holidays are double time.

Effective November 1, 2011, Field Dues increased to 4.25% of the gross pay, which is remitted to Local 647.

An Emergency Work Addendum has been added to the Great Lakes Articles of Agreement which provides for time and one half rate of pay for unscheduled emergency outages. If you would like a copy of this addendum please contact Local 647.

This is the third and final year of the agreement.

If you have any questions please call me at 763-712-9930.

Very truly yours,

[Signature]

Luke A. Voigt
Business Manager/Secretary Treasurer
Boilermakers Local Lodge #647

LAV/vm
opeiu #12
Bricklayers and Allied Craftworkers

Local Union 1 Minnesota / North Dakota

312 Central Avenue, Suite 328
Minneapolis, Minnesota 55414

"Building For the Future"

MICHAEL J COOK
President/Secretary-Treasurer

TELEPHONE: 612/379-2966
FAX: 612/379-8754

To: All Associated General Contractors
Minnesota Masonry Contractors
Independent Contractors
Chapter #3
Duluth Area

January 28, 2015

Scope of the Agreement
This agreement shall cover all of the part of St. Louis County, south of a line between townships 54 and 55 (two miles north of Cotton), also the eastern half of Aitkin County on a line with the northeast boundary line of Mille Lacs County, also Carlton, Lake, Cook, Pine and Kanabec.

BRICKLAYERS AND ALLIED CRAFTWORKERS
LOCAL UNION 1 MINNESOTA / NORTH DAKOTA
DULUTH AREA – BRICKLAYERS, BLOCKLAYERS AND P.C.C.'S

This is to advise you that the new working agreement calls for a $1.00 increase per hour on May 1, 2015. Please inform your bookkeeping department of the following rates.

The total wage rate effective May 1, 2015 for members of the Bricklayers and Allied Craftworkers will be as follows:

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>IU &amp; PPA</th>
<th>LOCAL</th>
<th>DUL</th>
<th>DUL</th>
</tr>
</thead>
<tbody>
<tr>
<td>WAGES</td>
<td>$BANK - RPP</td>
<td>HRA</td>
<td>PENSION</td>
<td>PENSION</td>
</tr>
<tr>
<td>29.64</td>
<td>(5.65 + 1.10)</td>
<td>.88</td>
<td>(1.50 + .44)</td>
<td>6.70</td>
</tr>
</tbody>
</table>

Base Rate: $29.64
Vacation, Dues Check Off: $3.23
Taxable Amount: $32.87

FOREMAN RATE - The Foreman rate shall be an additional $3.00 above the scale.
REFRACTORY - The Refractory Base Wage rate shall be $31.14 with above fringe benefits.
VACATION PAY - Vacation Pay shall be pyramided in all overtime pay. Time and one-half = $3.00
Double-time = $4.00

Sincerely,

Michael J Cook
President / Secretary - Treasurer
Bricklayers and Allied Craftworkers
Local Union 1 Minnesota / North Dakota
8 - 2015

APPRENTICE WAGES

<table>
<thead>
<tr>
<th>BASE WAGE</th>
<th>TAXABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st 1000 hours 50% - $14.82</td>
<td>$18.05*</td>
</tr>
<tr>
<td>2nd 1000 hours 55% - $16.30</td>
<td>$19.53*</td>
</tr>
<tr>
<td>3rd 1000 hours 65% - $19.27</td>
<td>$22.50*</td>
</tr>
<tr>
<td>4th 1000 hours 75% - $22.23</td>
<td>$25.46*</td>
</tr>
<tr>
<td>5th 1000 hours 85% - $25.19</td>
<td>$28.42*</td>
</tr>
<tr>
<td>6th 1000 hours 95% - $28.16</td>
<td>$31.39*</td>
</tr>
</tbody>
</table>

* Taxable wage - Includes Vacation and Dues
To: All Associated General Contractors
    Minnesota Tile Contractors
    Independent Contractors
    Chapter #3
    Duluth Area

March 5, 2015

BRICKLAYERS AND ALLIED CRAFTWORKERS
LOCAL UNION 1 MINNESOTA / NORTH DAKOTA

DULUTH AREA — TILE LAYERS

This is to advise you that the new working agreement calls for a $1.06 increase per hour on May 1, 2015. Please inform your bookkeeping department of the following rates.

The total wage rate effective May 1, 2015 for members of the Bricklayers and Allied Craftworkers will be as follows:

<table>
<thead>
<tr>
<th>HEALTH WAGES</th>
<th>$BANK - RPP</th>
<th>HRA</th>
<th>PENSION</th>
<th>LOCAL PENSION</th>
<th>ANNUITY</th>
<th>VAC. DUES</th>
<th>IMI</th>
<th>APPR</th>
<th>FCF</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>23.02</td>
<td>(5.65 + 1.10)</td>
<td>.71</td>
<td>(1.50 + .44)</td>
<td>6.70</td>
<td>4.68</td>
<td>.50</td>
<td>.07</td>
<td>.46</td>
<td>.20</td>
<td>.02</td>
</tr>
</tbody>
</table>

Base Rate: $23.02
Vacation, Dues Check Off: $1.57
Taxable Amount: $24.59

Foreman shall receive an additional $1.00 above the scale.

Sincerely,

Michael J. Cook
President / Secretary - Treasurer
Bricklayers and Allied Craftworkers
Local Union 1 Minnesota / North Dakota

APPRENTICESHIP WAGES

<table>
<thead>
<tr>
<th>BASE WAGE</th>
<th>TAXABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st 2000 hours 91% - $20.95</td>
<td>$22.52 *</td>
</tr>
<tr>
<td>2nd 2000 hours 94% - $21.64</td>
<td>$23.21 *</td>
</tr>
<tr>
<td>3rd 2000 hours 97% - $22.33</td>
<td>$23.90 *</td>
</tr>
</tbody>
</table>

* Taxable wage = includes Dues

46-2015
Scope of the Agreement
This agreement shall cover the counties of St. Louis, Koochiching, Itasca, Aitkin, Carlton, Lake, and Cook. The agreement shall also cover all of the part of Pine County north of County Road 30 and include the city of Sandstone.

March 5, 2015

BRICKLAYERS AND ALLIED CRAFTWORKERS
LOCAL UNION 1 MINNESOTA / NORTH DAKOTA
DULUTH AREA - TILE FINISHERS

This is to advise you that the new working agreement calls for a $.80 increase per hour on May 1, 2015. Please inform your bookkeeping department of the following rates.

The total wage rate effective May 1, 2015 for members of the Bricklayers and Allied Craftworkers will be as follows:

<table>
<thead>
<tr>
<th>HEALTH WAGES</th>
<th>$BANK - RPP</th>
<th>IU &amp; PPA</th>
<th>LOCAL PENSION</th>
<th>LOCAL PENSION</th>
<th>LOCAL ANNUITY</th>
<th>VAC.</th>
<th>DUES</th>
<th>IMI</th>
<th>APPR</th>
<th>FCF</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.24</td>
<td>(5.65 + 1.10)</td>
<td>.50</td>
<td>(1.50 + .44)</td>
<td>6.70</td>
<td>.50</td>
<td>.50</td>
<td>.85</td>
<td>.35</td>
<td>.20</td>
<td>.02</td>
<td>34.55</td>
</tr>
</tbody>
</table>

Base Rate: $16.24
Vacation, Dues Check Off: $1.35
Taxable Amount: $17.59

Sincerely,

Michael J. Cook

Michael J. Cook
President / Secretary - Treasurer
Bricklayers and Allied Craftworkers
Local Union 1 Minnesota / North Dakota

APPRENTICESHIP WAGES

<table>
<thead>
<tr>
<th>BASE WAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st 1000 hours 60% - $9.74</td>
</tr>
<tr>
<td>2nd 1000 hours 70% - $11.37</td>
</tr>
<tr>
<td>3rd 1000 hours 80% - $12.99</td>
</tr>
<tr>
<td>4th 1000 hours 90% - $14.62</td>
</tr>
</tbody>
</table>

* Taxable wage = Includes Dues

47-2015
Accordingly, residential work is defined as single family/duplex or smaller. All other work is considered commercial and should be paid

<table>
<thead>
<tr>
<th>Pay Scale</th>
<th>Contracting</th>
<th>Fair</th>
<th>Apprentice</th>
<th>DC Pension</th>
<th>DB Pension</th>
<th>Health</th>
<th>Dues</th>
<th>Savings</th>
<th>Gross Wages</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$32,472</td>
<td>8%</td>
<td>16%</td>
<td>63%</td>
<td>5%</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
<td>1%</td>
<td>6%</td>
<td>10%</td>
</tr>
<tr>
<td>$33,479</td>
<td>8%</td>
<td>16%</td>
<td>63%</td>
<td>5%</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
<td>1%</td>
<td>6%</td>
<td>10%</td>
</tr>
<tr>
<td>$35,019</td>
<td>8%</td>
<td>16%</td>
<td>63%</td>
<td>5%</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
<td>1%</td>
<td>6%</td>
<td>10%</td>
</tr>
<tr>
<td>$36,599</td>
<td>8%</td>
<td>16%</td>
<td>63%</td>
<td>5%</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
<td>1%</td>
<td>6%</td>
<td>10%</td>
</tr>
<tr>
<td>$38,149</td>
<td>8%</td>
<td>16%</td>
<td>63%</td>
<td>5%</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
<td>1%</td>
<td>6%</td>
<td>10%</td>
</tr>
<tr>
<td>$39,769</td>
<td>8%</td>
<td>16%</td>
<td>63%</td>
<td>5%</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
<td>1%</td>
<td>6%</td>
<td>10%</td>
</tr>
<tr>
<td>$41,429</td>
<td>8%</td>
<td>16%</td>
<td>63%</td>
<td>5%</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
<td>1%</td>
<td>6%</td>
<td>10%</td>
</tr>
<tr>
<td>$43,229</td>
<td>8%</td>
<td>16%</td>
<td>63%</td>
<td>5%</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
<td>1%</td>
<td>6%</td>
<td>10%</td>
</tr>
<tr>
<td>$45,059</td>
<td>8%</td>
<td>16%</td>
<td>63%</td>
<td>5%</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
<td>1%</td>
<td>6%</td>
<td>10%</td>
</tr>
<tr>
<td>$47,699</td>
<td>8%</td>
<td>16%</td>
<td>63%</td>
<td>5%</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
<td>1%</td>
<td>6%</td>
<td>10%</td>
</tr>
<tr>
<td>$50,539</td>
<td>8%</td>
<td>16%</td>
<td>63%</td>
<td>5%</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
<td>1%</td>
<td>6%</td>
<td>10%</td>
</tr>
<tr>
<td>$53,479</td>
<td>8%</td>
<td>16%</td>
<td>63%</td>
<td>5%</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
<td>1%</td>
<td>6%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Classifications

Commercial Apprentice
Commercial Pension
Commercial Pension (2+ years above)
Residential Apprentice
Residential Pension
Residential Pension (2+ years above)

Effective May 1, 2015

Carpenters
Regional Council of
North Central States

Northern Minnesota

Local 361
May 1, 2015 Increase: $1.61 per day for use of personal equipment and $0.10 per day for use of air compressor.

Districts 1, 2, 3, 4, 5, 6:

Dues: $1.00 per day for use of personal equipment.

Salary: $0.10 per day for personal equipment.

The following rules are per hour above Journeyman's Apprentice.

Districts 1, 2, 3, 4, 5, 6:

Apprentice: $1.00 per day for personal equipment.

Journeyman: $0.10 per day for personal equipment.

NOTE: Cross wages for Predietor Apprentice/Benefit allocations are also the same as a District 1, Predietor Journeyman.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Total</th>
<th>Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predietor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Journeyman</td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Apprentice</td>
<td></td>
<td>99%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>98%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>97%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>96%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>95%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>94%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>93%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>92%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>91%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>90%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>89%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>88%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>87%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>86%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>85%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>84%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>83%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>82%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>81%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>80%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>79%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>78%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>77%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>76%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>75%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>74%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>73%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>72%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>71%</td>
</tr>
<tr>
<td>Predietor</td>
<td></td>
<td>70%</td>
</tr>
</tbody>
</table>

Effective May 1, 2015

CARPENTERS
Regional Council of
North Central States

Minnesota Highway Heavy
May 1, 2016 Increase: $1.54 to be allocated

They are intended. Please check with local training centers to find correct jurisdictional company ratios. IMPORTANT NOTE TO CONTRACTORS: When percentages for Apprentices only match rates in the jurisdiction in which

<table>
<thead>
<tr>
<th>District</th>
<th>Total</th>
<th>Contracting</th>
<th>Fair</th>
<th>Apprentice</th>
<th>DC Pension</th>
<th>DB Pension</th>
<th>Health</th>
<th>Dues</th>
<th>Savings</th>
<th>Gross Wages</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>District 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Minneapolis Highway Heavy

Carpenters
Regional Council of
Northeastern States

Effective May 1, 2015
TO:    ALL NORTHERN MINNESOTA & NORTHWESTERN WISCONSIN
PLASTERING CONTRACTORS

ATTN: PAYROLL DEPT, 2015 WAGE RATES

This Agreement shall govern work done in the areas defined as follows:
All of the following counties: Aitkin, Carlton, Cook, Itasca, Lake, St. Louis,
and that part of Pine County north of T.24N, as well as the following
counties in Wisconsin: Ashland, Bayfield, Douglas, Iron, Sawyer,
Washburn, Burnett, and Price.

EFFECTIVE MAY 1, 2015

<table>
<thead>
<tr>
<th>BASIC WAGE*</th>
<th>HEALTH &amp; HRA WELFARE</th>
<th>PENSION</th>
<th>SAVINGS*</th>
<th>TRAINING</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>31.24</td>
<td>7.23</td>
<td>2.00</td>
<td>7.94</td>
<td>(3.60)</td>
<td>.46</td>
</tr>
</tbody>
</table>

*The Basic Wage before the deduction of savings is the straight time wage
used in determining overtime. (EXAMPLE: 1.5 X $31.24 = $46.86 TAXED,
THEN MINUS $3.60 FOR SAVINGS EACH HOUR) After all taxes are
deducted from the Basic Wage rate, $3.60 per hour for each hour worked
shall be deducted and applied to the Minnesota Cement Masons Savings
Plan.

Foreman: $1.50 above basic wage

APPRENTICE RATES:

<table>
<thead>
<tr>
<th>UP TO 1000 HRS</th>
<th>70%</th>
<th>21.87</th>
</tr>
</thead>
<tbody>
<tr>
<td>1001-2000 HRS</td>
<td>75%</td>
<td>23.43</td>
</tr>
<tr>
<td>2001-3000 HRS</td>
<td>80%</td>
<td>24.99</td>
</tr>
<tr>
<td>3001-4000 HRS</td>
<td>85%</td>
<td>26.55</td>
</tr>
<tr>
<td>4001-5000 HRS</td>
<td>90%</td>
<td>28.12</td>
</tr>
<tr>
<td>5001-6000 HRS</td>
<td>95%</td>
<td>29.68</td>
</tr>
</tbody>
</table>

TO:    ALL IRON RANGE AREA CONTRACTORS
TO: ALL DULUTH AREA CONTRACTORS

ATTN: PAYROLL DEPT

RE: 2015 WAGE RATES - HIGHWAY/HEAVY DIVISION

This Agreement shall govern work done in the areas defined as follows: All of the following counties: Aitkin, Carlton, Cook, Lake and that part of Pine County north of T.24N, and that part of St. Louis County south of T.55N, as well as the following counties in Wisconsin: Ashland, Douglas, Bayfield, Burnett, Iron, Washburn, Sawyer and Price.

EFFECTIVE MAY 1, 2015

<table>
<thead>
<tr>
<th>BASIC WAGE*</th>
<th>HEALTH &amp; WELFARE</th>
<th>HRA</th>
<th>PENSION</th>
<th>SAVINGS</th>
<th>TRAINING</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>33.70</td>
<td>7.23</td>
<td>1.75</td>
<td>7.94</td>
<td>(5.42)</td>
<td>.46</td>
<td>51.08</td>
</tr>
</tbody>
</table>

*The Basic Wage before the deduction of savings is the straight time wage used in determining overtime. (EXAMPLE: 1.5 X $33.70 = $50.55, TAXED, THEN MINUS $5.42 FOR SAVINGS EACH HOUR) After all taxes are deducted from the Basic Wages, $5.42 per hour for each hour worked shall be deducted and applied to the Minnesota Cement Masons Savings Plan.

Foreman: $1.50 above basic wage

APPRENTICE RATES:

<table>
<thead>
<tr>
<th>HOURS</th>
<th>RATE</th>
<th>DEDUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>UP TO 1000 HRS</td>
<td>70%</td>
<td>23.59</td>
</tr>
<tr>
<td>1001-2000 HRS</td>
<td>75%</td>
<td>25.28</td>
</tr>
<tr>
<td>2001-3000 HRS</td>
<td>80%</td>
<td>26.96</td>
</tr>
<tr>
<td>3001-4000 HRS</td>
<td>85%</td>
<td>28.65</td>
</tr>
<tr>
<td>4001-5000 HRS</td>
<td>90%</td>
<td>30.33</td>
</tr>
<tr>
<td>5001-6000 HRS</td>
<td>95%</td>
<td>32.02</td>
</tr>
</tbody>
</table>
ANNUAL WAGES

CEMENT MASON, PLASTERERS AND SHOPOHANDS
Local No. 633
of Minnesota, North Dakota, and NW Wisconsin - AFL-CIO
312 Central Avenue · Room 376 · Minneapolis, Minnesota 55414
Phone (612)379-1558 · Fax (612)379-1559

TO: ALL DULUTH AREA CONTRACTORS

ATTN: PAYROLL DEPT

RE: 2015 WAGE RATES - BUILDERS DIVISION

This Agreement shall govern work done in the areas defined as follows: All of the following counties: Aitkin, Carlton, Cook, Lake and that part of Pine County north of the northern boundaries of Dell Grove, Sandstone and Danforth townships, and that part of St. Louis County south of Co Rd 967 which is two miles north of cotton on Hwy #63, as well as the following counties in Wisconsin: Douglas, Bayfield, Washburn, Sawyer and Price.

EFFECTIVE MAY 1, 2015

<table>
<thead>
<tr>
<th>BASIC WAGE*</th>
<th>HEALTH &amp; WELFARE</th>
<th>HRA</th>
<th>PENSION</th>
<th>SAVINGS</th>
<th>TRAINING</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>30.61</td>
<td>7.23</td>
<td>1.25</td>
<td>7.94</td>
<td>(5.02)</td>
<td>.46</td>
<td>47.49</td>
</tr>
</tbody>
</table>

*The Basic Wage before the deduction of savings is the straight time wage used in determining overtime. (EXAMPLE: 1.5 X $30.61 = $45.92 TAXED, THEN MINUS $5.02 FOR SAVINGS EACH HOUR)
After all taxes are deducted from the Basic Wage rate, $5.02 per hour for each hour worked shall be deducted and applied to the Minnesota Cement Masons Savings Plan.

Foreman: $2.00 above basic wage

APPRENTICE RATES:

<table>
<thead>
<tr>
<th>UP TO 1000 HRS</th>
<th>70%</th>
<th>21.43</th>
</tr>
</thead>
<tbody>
<tr>
<td>1001-2000 HRS</td>
<td>75%</td>
<td>22.96</td>
</tr>
<tr>
<td>2001-3000 HRS</td>
<td>80%</td>
<td>24.49</td>
</tr>
<tr>
<td>3001-4000 HRS</td>
<td>85%</td>
<td>26.02</td>
</tr>
<tr>
<td>4001-5000 HRS</td>
<td>90%</td>
<td>27.55</td>
</tr>
<tr>
<td>5001-6000 HRS</td>
<td>95%</td>
<td>29.08</td>
</tr>
</tbody>
</table>
Wage & Fringe Benefits: January 1, 2015

To: All Employers doing Business within the Jurisdiction of IUEC Local 9
Subject: Wage rates effective January 1, 2015 – IUEC Local 9

Minneapolis, North Dakota and Western Wisconsin

In accordance with the provisions of Article V of the current labor agreement (2012-2017) between all signatory employers and the International Union of Elevator Constructors, the following rates shall be effective on January 1, 2015:

- Mechanic In Charge ......................................................... (112.5%) $50.55
- Mechanic ................................................................. (100.0%) $44.93
- 4th Year Apprentice ...................................................(80.0%) $35.94
- 3rd Year Apprentice .....................................................(70.0%) $31.45
- 2nd Year Apprentice .....................................................(65.0%) $29.20
- 1st Year Apprentice .....................................................(55.0%) $24.71
- Probationary Apprentice ....................................................(50.0%) $22.47
- Helper ................................................................. (70.0%) $31.45

The company will make fringe benefit contributions per hour worked in accordance with the following schedule:

- Health Benefit Plan ........................................................ $13.575
- Pension ................................................................. $8.46
- Annuity ................................................................. $5.75
- Education ................................................................. $0.60
- Elevator Ind. Work Preservation Fund ................................ $0.30

TOTAL ................................................................. $28.685

Vacation: 6% Hourly pay under 5 years
8% Hourly pay over 5 years
# Local 106 Glaziers Wage Rates

**Effective May 4, 2015**

## Journeyperson Wage Rates:

<table>
<thead>
<tr>
<th>Glaziers</th>
<th>Base</th>
<th>Welfare</th>
<th>Pension</th>
<th>Annuity</th>
<th>Industry &amp; Appr</th>
<th>STAR</th>
<th>DC82/FCF</th>
<th>Total</th>
<th>Vac</th>
<th>Dues**</th>
</tr>
</thead>
<tbody>
<tr>
<td>$29.67</td>
<td>$6.85</td>
<td>$5.67</td>
<td>$3.65</td>
<td>$0.56</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$46.51</td>
<td>$2.30</td>
<td>$1.83</td>
<td></td>
</tr>
<tr>
<td>Auto Glass</td>
<td>$23.74</td>
<td>$6.85</td>
<td>$5.67</td>
<td>$3.65</td>
<td>$0.56</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$40.58</td>
<td>$2.30</td>
<td>$1.62</td>
</tr>
</tbody>
</table>

## Apprentices Indentured BEFORE May 1, 2014:

<table>
<thead>
<tr>
<th>Hours</th>
<th>%</th>
<th>Base</th>
<th>Welfare</th>
<th>Pension</th>
<th>Annuity</th>
<th>Industry &amp; Appr</th>
<th>STAR</th>
<th>DC82/FCF</th>
<th>Total</th>
<th>Vac</th>
<th>Dues**</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1000</td>
<td>50</td>
<td>$14.84</td>
<td>$6.85</td>
<td>$5.67</td>
<td>$3.65</td>
<td>$0.56</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$31.68</td>
<td>$1.15</td>
<td>$1.31</td>
</tr>
<tr>
<td>1001-2000</td>
<td>55</td>
<td>$16.32</td>
<td>$6.85</td>
<td>$5.67</td>
<td>$3.65</td>
<td>$0.56</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$33.16</td>
<td>$1.27</td>
<td>$1.36</td>
</tr>
<tr>
<td>2001-3000</td>
<td>60</td>
<td>$17.81</td>
<td>$6.85</td>
<td>$5.67</td>
<td>$3.65</td>
<td>$0.56</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$34.65</td>
<td>$1.38</td>
<td>$1.42</td>
</tr>
<tr>
<td>3001-4000</td>
<td>70</td>
<td>$20.77</td>
<td>$6.85</td>
<td>$5.67</td>
<td>$3.65</td>
<td>$0.56</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$37.61</td>
<td>$1.61</td>
<td>$1.52</td>
</tr>
<tr>
<td>4001-5000</td>
<td>80</td>
<td>$23.74</td>
<td>$6.85</td>
<td>$5.67</td>
<td>$3.65</td>
<td>$0.56</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$40.58</td>
<td>$1.84</td>
<td>$1.62</td>
</tr>
<tr>
<td>5001-6000</td>
<td>90</td>
<td>$26.71</td>
<td>$6.85</td>
<td>$5.67</td>
<td>$3.65</td>
<td>$0.56</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$43.55</td>
<td>$2.07</td>
<td>$1.73</td>
</tr>
</tbody>
</table>

## Apprentices Indentured on or AFTER May 1, 2014:

<table>
<thead>
<tr>
<th>Hours</th>
<th>%</th>
<th>Base</th>
<th>Welfare</th>
<th>Pension</th>
<th>Annuity</th>
<th>Industry &amp; Appr</th>
<th>STAR</th>
<th>DC82/FCF</th>
<th>Total</th>
<th>Vac</th>
<th>Dues**</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1000</td>
<td>50</td>
<td>$14.84</td>
<td>$6.85</td>
<td>$5.67</td>
<td>$1.83</td>
<td>$0.56</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$29.86</td>
<td>$1.15</td>
<td>$1.25</td>
</tr>
<tr>
<td>1001-2000</td>
<td>55</td>
<td>$16.32</td>
<td>$6.85</td>
<td>$5.67</td>
<td>$2.01</td>
<td>$0.56</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$31.52</td>
<td>$1.27</td>
<td>$1.31</td>
</tr>
<tr>
<td>2001-3000</td>
<td>60</td>
<td>$17.81</td>
<td>$6.85</td>
<td>$5.67</td>
<td>$2.19</td>
<td>$0.56</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$33.19</td>
<td>$1.38</td>
<td>$1.37</td>
</tr>
<tr>
<td>3001-4000</td>
<td>70</td>
<td>$20.77</td>
<td>$6.85</td>
<td>$5.67</td>
<td>$2.56</td>
<td>$0.56</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$36.52</td>
<td>$1.61</td>
<td>$1.48</td>
</tr>
<tr>
<td>4001-5000</td>
<td>80</td>
<td>$23.74</td>
<td>$6.85</td>
<td>$5.67</td>
<td>$2.92</td>
<td>$0.56</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$39.85</td>
<td>$1.84</td>
<td>$1.60</td>
</tr>
<tr>
<td>5001-6000</td>
<td>90</td>
<td>$26.71</td>
<td>$6.85</td>
<td>$5.67</td>
<td>$3.29</td>
<td>$0.56</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$43.19</td>
<td>$2.07</td>
<td>$1.72</td>
</tr>
</tbody>
</table>

*The Vacation Contribution is included in the taxable wage listed above, then deducted and remitted along with your Health & Welfare Contribution.*
<table>
<thead>
<tr>
<th>Date</th>
<th>Package 1</th>
<th>Package 2</th>
<th>Package 3</th>
<th>Package 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>05/31/15</td>
<td>$35,920</td>
<td>$35,920</td>
<td>$35,920</td>
<td>$35,920</td>
</tr>
<tr>
<td>05/29/16</td>
<td>$35,920</td>
<td>$35,920</td>
<td>$35,920</td>
<td>$35,920</td>
</tr>
<tr>
<td>05/31/17</td>
<td>$35,920</td>
<td>$35,920</td>
<td>$35,920</td>
<td>$35,920</td>
</tr>
<tr>
<td>05/31/18</td>
<td>$35,920</td>
<td>$35,920</td>
<td>$35,920</td>
<td>$35,920</td>
</tr>
</tbody>
</table>

**Notes:**
- **Total Package %:** Includes all benefits and wages.
- **Local Package:** Employee paid.
- **Local Package + **:** Employer paid.
- **Increased NMC Employee Pay:** 0.12%
- **Additional Benefits:**
  - Annuity
  - Local Pension
  - H & W
  - NEB
  - General Foreman
  - Project Foreman
  - JW Rate
  - Effective Dates

**Revised 5/4/15**
May 28, 2015

To whom it may concern,

The allocation of the wage increase effective June 1st 2015 is as follows:

<table>
<thead>
<tr>
<th></th>
<th>$27.82</th>
<th>$21.18</th>
<th>$18.64</th>
<th>$16.14</th>
<th>$13.59</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Wage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Savings</td>
<td>$8.00</td>
<td>$6.00</td>
<td>$4.76</td>
<td>$3.50</td>
<td>$2.26</td>
</tr>
<tr>
<td>Union Dues</td>
<td>$3.49</td>
<td>$2.79</td>
<td>$2.44</td>
<td>$2.09</td>
<td>$1.75</td>
</tr>
<tr>
<td>Pension</td>
<td>$9.00</td>
<td>$7.20</td>
<td>$5.76</td>
<td>$4.30</td>
<td>$2.86</td>
</tr>
<tr>
<td>Local Training</td>
<td>$0.30</td>
<td>$0.30</td>
<td>$0.30</td>
<td>$0.30</td>
<td>$0.30</td>
</tr>
<tr>
<td>Nat'l Training</td>
<td>$0.05</td>
<td>$0.05</td>
<td>$0.05</td>
<td>$0.05</td>
<td>$0.05</td>
</tr>
<tr>
<td>Industry Fund</td>
<td>$0.15</td>
<td>$0.15</td>
<td>$0.15</td>
<td>$0.15</td>
<td>$0.15</td>
</tr>
<tr>
<td>LMCT</td>
<td>$0.05</td>
<td>$0.05</td>
<td>$0.05</td>
<td>$0.05</td>
<td>$0.05</td>
</tr>
<tr>
<td>Total</td>
<td>$55.71</td>
<td>$44.57</td>
<td>$39.00</td>
<td>$33.43</td>
<td>$27.86</td>
</tr>
<tr>
<td>Total Taxable</td>
<td>$39.31</td>
<td>$29.97</td>
<td>$25.84</td>
<td>$21.73</td>
<td>$17.60</td>
</tr>
</tbody>
</table>

Please feel free to call the Local office with questions or concerns.

Sincerely,

[Signature]

David Cartwright
Business Manager
Attention: Payroll Department

Enclosed is the following wage information regarding Ironworkers Local No. 512 apprentices:

- Applicable wage and percentage rates for apprentices effective May 1, 2015

- List of apprentices graduating to journeyperson status effective May 1, 2015.

- List of apprentices with the applicable pay and percentage rates for Regions A, B and C. Please use this updated list because there may be first year apprentices that have received credit for past work experience and education since the last mailing.

- Apprentice Performance Report – please have the foreman/superintendent complete one for each apprentice and email or fax back to the Training Center. This will enable us to ensure that the apprentices are receiving the necessary training for the job.

Please adjust your payroll records accordingly.

In addition, we would like to email the wage information to your company instead of via mail. Please email Lori at lori@iw512jac.com the email address you would like to use to receive information on apprentices’ wages. Thank you.

If you have any questions, please contact me.

Sincerely,

Larry Gilbertson
Director of Training
APPRENTICE WAGE SCALE

The wage scale listed below is effective 5/1/15 to 10/31/15.

Regions A, B & C wages are as follows:

<table>
<thead>
<tr>
<th>PERIOD</th>
<th>%</th>
<th>REGION A RATE EFFECTIVE 5/1/15</th>
<th>REGION B RATE EFFECTIVE 5/1/15</th>
<th>REGION C RATE EFFECTIVE 5/1/15</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st - 6 months</td>
<td>70</td>
<td>$24.85</td>
<td>$21.73</td>
<td>$20.86</td>
</tr>
<tr>
<td>2nd - 6 months</td>
<td>75</td>
<td>$26.63</td>
<td>$23.28</td>
<td>$22.35</td>
</tr>
<tr>
<td>3rd - 6 months</td>
<td>80</td>
<td>$28.40</td>
<td>$24.83</td>
<td>$23.84</td>
</tr>
<tr>
<td>4th - 6 months</td>
<td>85</td>
<td>$30.17</td>
<td>$26.38</td>
<td>$25.33</td>
</tr>
<tr>
<td>5th - 6 months</td>
<td>90</td>
<td>$31.95</td>
<td>$27.94</td>
<td>$26.82</td>
</tr>
<tr>
<td>6th - 6 months</td>
<td>95</td>
<td>$33.72</td>
<td>$29.49</td>
<td>$28.31</td>
</tr>
</tbody>
</table>

Apprentices receive all fringe benefits listed below:

<table>
<thead>
<tr>
<th></th>
<th>DEFINED BENEFIT PENSION</th>
<th>DEFINED CONTRIBUTION PENSION</th>
<th>HEALTH &amp; WELFARE</th>
<th>APPRENTICE/ TRAINING FUND</th>
<th>FAIR CONTRACTING FOUNDATION</th>
<th>TOTAL PACKAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region A</td>
<td>$9.75</td>
<td>$5.00</td>
<td>$7.90</td>
<td>$0.80</td>
<td>$0.27</td>
<td>$23.74</td>
</tr>
<tr>
<td>Region B</td>
<td>$9.75</td>
<td>$5.00</td>
<td>$7.90</td>
<td>$0.80</td>
<td>$0.27</td>
<td>$23.74</td>
</tr>
<tr>
<td>Region C</td>
<td>$9.75</td>
<td>$5.00</td>
<td>$7.90</td>
<td>$0.80</td>
<td>$0.27</td>
<td>$23.74</td>
</tr>
</tbody>
</table>

Region A Journeyman rate is $35.50 effective 5/1/15
Region B Journeyman rate is $31.04 effective 5/1/15
Region C Journeyman rate is $29.80 effective 5/1/15
May 1, 2015

The following seventy (70) graduating apprentices from Regions A, B and C will be upgraded to journeyperson status effective May 1, 2015.

**REGION A**

1. Arnal, Mike  
2. Bertilson, Jesse  
3. Blair, Nate  
4. Bourgal II, Tom  
5. Breitenbacher, Dan  
6. Buchanan, Robert  
7. Burke, Sam  
8. Conrad, Nick  
9. Cook, Brian  
10. Cooke, Cody  
11. Dalager, Dale  
12. DeMarre, Nick  
13. Dinsmore, William  
14. Downs, Megan  
15. Duscher, Brian  
16. Filipczak, Michael  
17. Haack, Nate  
18. Hackett, BillieRae  
19. Hellquist, Jon  
20. Hite, Jr., Todd  
21. Jochim, Michael  
22. Johnson, Ivan  
23. Justen, Tyler  
24. Linder, Glen  
25. Mangum, Matt  
26. Maull, Danell  
27. Mickle Van Sickle, Shawn  
28. Miskavige, Jacob  
29. Miskavige, Jr., Tim  
30. Monson, Neil  
31. Novotny, Dustin  
32. Pearson, Matt  
33. Pederson, Jordan  
34. Peters, Ben  
35. Rodeck, Ryan  
36. Roden, Derek  
37. Sanders, Andrew  
38. Sanders, Garrett  
39. Seidel, Buster  
40. Sigala, Alex  
41. Sozio, Chris  
42. Steffens, Alex  
43. Stellick, Kyle  
44. Tripp, Jeremiah  
45. Vieths, Stephen  
46. Warner, Joe  
47. West, Dakota

**REGION B**

1. Anderson, Isaac  
2. Asuma, Michael  
3. Bragee, Matt  
4. Buskala, Ashlee  
5. Fischer, Andrew  
6. Godbout, Jamie  
7. Johnson, Marcus  
8. Koivisto, Shay  
9. Landwehr, Matt  
10. Larson, Tyler  
11. Lyons II, James  
12. Olson, Dain  
13. Pearson, Ken  
14. Povhe, Ben  
15. Prentice, Grant  
16. Spindler, Cole  
17. Switzer, Tom  
18. Trader, Erik  
19. Vollmer, Jake

**REGION C**

1. Early, Sean  
2. Morris, Russell  
3. Roden, Tyler  
4. Gross, Kurtis
23. North, Alex
22. New, Michael
21. Neubauer, Donald
20. Nelson, Nicholas
19. Monahan, Michael
18. Mooney, Michael
17. Moore, Edward
16. Meritt, Anthony
15. Mahowald, Matthew
14. Lenard, Roy
13. Leimeux, Andy
12. Letkiewicz, Michael
11. Lapham, Joseph
10. Kohn, Karl
9. Johnson, Arnie
8. Johnson, Brian
7. Jacob, Michael
6. Horsey, Kristopher
5. Hoitenga, Justine
4. Gill, Jay
3. Fidler, Melissa
2. Dinsil, Bill (Willylham)
1. Cook, Cory

ST. PAUL, MN
REGION A APRENTICES

90%=533.95
95%=533.72
23. Fitzhen, Clay
22. Paluni, Anthony
21. McCombs, Jonathan
20. Meador, Chad
19. Lovelad, Zacary
18. Kold, Jonathan
17. Johnson, Chase
16. Johnson, Jered
15. Johnson, Chris
14. Jackson, Hector
13. Holuck, Adam
12. Hink, William
11. Gusterston, Tyler
10. Gibson, Thomas
 9. Forrest, Thomas
 8. Fogerbeer, David
 7. Follo, Jake
 6. Davin, Nathan
 5. Cooper, Jonathan
 4. Conway, Patrick
 3. Boswell, Justin
 2. Bean, Kyle
 1. Almer, Garrett

75% = 523.28
80% = 524.83
17. Zinke, Logan
16. Whitlock, Derek
15. Rawley, John
14. Porter, Jr., Dwayne
13. Porter, Jacob
12. Prechter, David
11. Owens, Pllb
10. Milich, Jacob
9. Matheson, Michael
8. Lux, Dylan
7. Komrosky, Edwin
6. Gustman, Damar
5. Green, Dustin
4. Gapper, Dylan
3. Branchette, Ben
2. Batchle, Ryan
1. Anlong, Ruben

Mandan, ND
Region C Apprentices

11. Zinke, Lane
10. Warren, Kenny
9. Woghele, Brandon
8. Snyder, Matt
7. Singleton, Matt
6. Salgado, Henry
5. Medina, Jose
4. Loken, Christopher
3. Hatton, Michael
2. Bachiochi, Jake
1. Augustyn, Jacob

90% = 526.82
80% = 523.84
95% = 528.31
1. Airhart, Joseph
2. Bjerkness, Brandon
3. Estable-Mora, Juan
4. Grounds, Jon
5. Herbst, Jeff
6. Linstad, Cody
7. Lobato, Julian
8. Mittlesteadt, Matthew
9. Olson, Lee
10. Pavlick, Zach
11. Peltier, Wyatt
12. Pike, Zach
13. Pritchard, Jeremiah
14. Runge, Ryan
15. Runge, Ryan
16. Schweigert, Eric
<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATTENDANCE &amp; TARDINESS</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>ON THE JOB PERFORMANCE (Reliability)</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>ATTITUDE (Positive Attitude, Shows Leadership Ability)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INITIATIVE &amp; PRODUCTIVITY (Ambition &amp; Effort)</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>COMPREHENSION &amp; ABILITY (Shows interest in learning job)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COOPERATION &amp; CONDUCT (Ability to work with others)</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>SAFETY &amp; AWARENESS</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>QUALITY OF WORK &amp; ACCURACY</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>TOOLS: FEW SOME MANY</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>CONDITION: POOR OK EXCELLENT</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

REVIEWED BY Forman/Supervisor

DATE:

PLEASE MAIL OR FAX THIS REPORT TO THE FOLLOWING:
Twin Cities Ironworkers Apprenticeship & Training Program
835 Butler Route – St. Paul, MN. 55104
JATC Office & Training Center Phone: 651-489-3829 – Fax: 651-489-1440
Pete Teigland, Training Coordinator – Region A
Brian Nelson – Training Coordinator – Region B
**BUILDING WAGE RATES**
Duluth/Cloquet Local #1091

Effective May 1, 2015:

<table>
<thead>
<tr>
<th>Class</th>
<th>Wages</th>
<th>Vacation</th>
<th>H &amp; W</th>
<th>Pension</th>
<th>Trng/Appr</th>
<th>LECET</th>
<th>SAFE</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$23.54</td>
<td>$2.10</td>
<td>$7.55</td>
<td>$6.40</td>
<td>$0.22</td>
<td>$0.08</td>
<td>$0.15</td>
<td>$40.04</td>
</tr>
<tr>
<td>2</td>
<td>$23.64</td>
<td>$2.10</td>
<td>$7.55</td>
<td>$6.40</td>
<td>$0.22</td>
<td>$0.08</td>
<td>$0.15</td>
<td>$40.14</td>
</tr>
<tr>
<td>3</td>
<td>$23.94</td>
<td>$2.10</td>
<td>$7.55</td>
<td>$6.40</td>
<td>$0.22</td>
<td>$0.08</td>
<td>$0.15</td>
<td>$40.44</td>
</tr>
<tr>
<td>4</td>
<td>$24.24</td>
<td>$2.10</td>
<td>$7.55</td>
<td>$6.40</td>
<td>$0.22</td>
<td>$0.08</td>
<td>$0.15</td>
<td>$40.74</td>
</tr>
<tr>
<td>5</td>
<td>$21.19</td>
<td>$2.10</td>
<td>$7.55</td>
<td>$6.40</td>
<td>$0.22</td>
<td>$0.08</td>
<td>$0.15</td>
<td>$37.69</td>
</tr>
</tbody>
</table>

**Example:** Apprentice at 80% of Class 1 ONLY

| Class 1 | $18.83 | $2.10 | $7.55 | $6.40 | $0.22 | $0.08 | $0.15 | $35.33 |

Foreman/Leadman $1.50 above highest classification employed in.

Effective May 1, 2016 - $1.25 increase per hour

*** Vacation is a taxable wage and shall be paid for all hours worked and at 1 1/2 or 2 times the hourly rate when overtime is worked.

"All" Fringes are to be sent to:

Minnesota Laborers' Fringe Benefits Fund
P. O. Box 124
Minneapolis, MN  55440-0124
(651) 256-1800
###HIGHWAY HEAVY WAGE RATES

**District 2A - Duluth Local #1091**

####Effective May 1, 2015:

<table>
<thead>
<tr>
<th>Class</th>
<th>Wages</th>
<th>Vacation</th>
<th>H &amp; W</th>
<th>Pension</th>
<th>Trng/Appr</th>
<th>LECET</th>
<th>FCF</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$28.11</td>
<td>$2.30</td>
<td>$7.55</td>
<td>$6.50</td>
<td>$0.22</td>
<td>$0.08</td>
<td>$0.02</td>
<td>$44.78</td>
</tr>
<tr>
<td>2</td>
<td>$28.31</td>
<td>$2.30</td>
<td>$7.55</td>
<td>$6.50</td>
<td>$0.22</td>
<td>$0.08</td>
<td>$0.02</td>
<td>$44.98</td>
</tr>
<tr>
<td>3</td>
<td>$28.46</td>
<td>$2.30</td>
<td>$7.55</td>
<td>$6.50</td>
<td>$0.22</td>
<td>$0.08</td>
<td>$0.02</td>
<td>$45.13</td>
</tr>
<tr>
<td>4</td>
<td>$28.56</td>
<td>$2.30</td>
<td>$7.55</td>
<td>$6.50</td>
<td>$0.22</td>
<td>$0.08</td>
<td>$0.02</td>
<td>$45.23</td>
</tr>
<tr>
<td>5</td>
<td>$28.81</td>
<td>$2.30</td>
<td>$7.55</td>
<td>$6.50</td>
<td>$0.22</td>
<td>$0.08</td>
<td>$0.02</td>
<td>$45.48</td>
</tr>
<tr>
<td>6</td>
<td>$30.61</td>
<td>$2.30</td>
<td>$7.55</td>
<td>$6.50</td>
<td>$0.22</td>
<td>$0.08</td>
<td>$0.02</td>
<td>$47.28</td>
</tr>
<tr>
<td>7</td>
<td>$24.56</td>
<td>$2.30</td>
<td>$7.55</td>
<td>$6.25</td>
<td>$0.22</td>
<td>$0.08</td>
<td>$0.02</td>
<td>$40.98</td>
</tr>
</tbody>
</table>

Increase May 1, 2016: $1.57  Allocation of increase TBD

**Example:** *Apprentice at 80% of Class 1 ONLY*

Class 1  $22.49 $2.30 $7.55 $6.50 $0.22 $0.08 $0.02 .......... $39.16

**Pipelaye, Laser Beam (sewer, water, gas) Classification 6 rate.**
Foreman/Leadman $1.50 above highest classification employed in.
General Foreman $2.25 above Foreman scale (appointed at employers discretion).

*** Vacation is a taxable fringe and part of the gross wage, it shall be paid for all hours worked and at 1 1/2 or 2 times the hourly rate when overtime is worked

###"All" Fringes are to be sent to:

Minnesota Laborers' Fringe Benefits Fund  
P. O. Box 124  
Minneapolis, MN  55440-0124  
(651) 256-1800
### Local 1348 Millwright Agreement

#### Northern Minnesota

**Millwrights & Machine Erector Wage Rates**

<table>
<thead>
<tr>
<th>Classification</th>
<th>Deductions</th>
<th>Fringe Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percent (%)</td>
<td>Gross Wages</td>
</tr>
<tr>
<td>General Foreman F + $1.75</td>
<td>100%</td>
<td>$36.57</td>
</tr>
<tr>
<td>Foreman JP + $2.25</td>
<td>100%</td>
<td>$34.82</td>
</tr>
<tr>
<td>Journeyperson</td>
<td>100%</td>
<td>$32.57</td>
</tr>
<tr>
<td>Apprentice</td>
<td>6001-7000</td>
<td>95%</td>
</tr>
<tr>
<td></td>
<td>5001-6000</td>
<td>90%</td>
</tr>
<tr>
<td></td>
<td>4001-5000</td>
<td>85%</td>
</tr>
<tr>
<td></td>
<td>3001-4000</td>
<td>80%</td>
</tr>
<tr>
<td></td>
<td>2001-3000</td>
<td>75%</td>
</tr>
<tr>
<td></td>
<td>1001-2000</td>
<td>70%</td>
</tr>
<tr>
<td></td>
<td>0 - 1000</td>
<td>65%</td>
</tr>
</tbody>
</table>

Covering the following Counties in the State of Minnesota, Aitkin, Becker, Beltrami, Carlton, Cass, Clearwater, Cook, Lake, Crow Wing, Hubbard, Itasca, Kittson, Koochiching, Lake of the Woods, Manomen, Marshall, Norman, Otter Tail, Pennington, Red Lake, Roseau, St. Louis, Wadena, Wilkin and that part of Clay County outside of a 5 mile radius of Moorhead and that part of Polk County outside of a 5 mile radius of East Grand Forks. In Wisconsin the County of Douglas and that portion of Bayfield County west of Highway 63, and west of a line drawn between Drummond and Herbster and the Lake Superior shore, including the cities of Drummond and Herbster.

May 1, 2016 Increase: $1.75 Allocation TBD  
May 7, 2017 Increase: $1.85 Allocation TBD
INTERNATIONAL UNION OF OPERATING ENGINEERS, LOCAL No. 49
FOR THE:

HIGHWAY AND HEAVY WAGES EFFECTIVE MAY 1, 2015

EASTERN METROPOLITAN ZONE-(ZONE 1) -See Wage District Map-

<table>
<thead>
<tr>
<th>Group</th>
<th>Wages</th>
<th>Fringes</th>
<th>H/W</th>
<th>HRA</th>
<th>Pension</th>
<th>Appren.</th>
<th>Totals</th>
<th>FCF $.02</th>
<th>IPF $.04</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$34.78**</td>
<td>$8.70</td>
<td>$1.00</td>
<td>$7.70</td>
<td>$.50</td>
<td>$52.68</td>
<td>$.02</td>
<td>$.04</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>33.78**</td>
<td>8.70</td>
<td>1.00</td>
<td>7.70</td>
<td>.50</td>
<td>51.68</td>
<td>.02</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>33.23**</td>
<td>8.70</td>
<td>1.00</td>
<td>7.70</td>
<td>.50</td>
<td>51.13</td>
<td>.02</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>32.93**</td>
<td>8.70</td>
<td>1.00</td>
<td>7.70</td>
<td>.50</td>
<td>50.83</td>
<td>.02</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>29.89**</td>
<td>8.70</td>
<td>1.00</td>
<td>7.70</td>
<td>.50</td>
<td>47.79</td>
<td>.02</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>28.68**</td>
<td>8.70</td>
<td>1.00</td>
<td>7.70</td>
<td>.50</td>
<td>46.58</td>
<td>.02</td>
<td>.04</td>
<td></td>
</tr>
</tbody>
</table>

REMAINDER OF EASTERN ZONE-(ZONE 2) -See Wage District Map-

<table>
<thead>
<tr>
<th>Group</th>
<th>Wages</th>
<th>Fringes</th>
<th>H/W</th>
<th>HRA</th>
<th>Pension</th>
<th>Appren.</th>
<th>Totals</th>
<th>FCF $.02</th>
<th>IPF $.04</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$32.12**</td>
<td>$8.70</td>
<td>$1.00</td>
<td>$7.70</td>
<td>$.50</td>
<td>$50.02</td>
<td>$.02</td>
<td>$.04</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>31.12**</td>
<td>8.70</td>
<td>1.00</td>
<td>7.70</td>
<td>.50</td>
<td>49.02</td>
<td>.02</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>30.67**</td>
<td>8.70</td>
<td>1.00</td>
<td>7.70</td>
<td>.50</td>
<td>48.57</td>
<td>.02</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>30.37**</td>
<td>8.70</td>
<td>1.00</td>
<td>7.70</td>
<td>.50</td>
<td>48.27</td>
<td>.02</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>27.80**</td>
<td>8.70</td>
<td>1.00</td>
<td>7.70</td>
<td>.50</td>
<td>45.70</td>
<td>.02</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>26.93**</td>
<td>8.70</td>
<td>1.00</td>
<td>7.70</td>
<td>.50</td>
<td>44.83</td>
<td>.02</td>
<td>.04</td>
<td></td>
</tr>
</tbody>
</table>

WESTERN ZONE-(ZONE 3) -See Wage District Map-

<table>
<thead>
<tr>
<th>Group</th>
<th>Wages</th>
<th>Fringes</th>
<th>H/W</th>
<th>HRA</th>
<th>Pension</th>
<th>Appren.</th>
<th>Totals</th>
<th>FCF $.02</th>
<th>IPF $.04</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$26.85**</td>
<td>$8.70</td>
<td>$1.00</td>
<td>$7.70</td>
<td>$.50</td>
<td>$44.75</td>
<td>$.02</td>
<td>$.04</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>25.85**</td>
<td>8.70</td>
<td>1.00</td>
<td>7.70</td>
<td>.50</td>
<td>43.75</td>
<td>.02</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>24.92**</td>
<td>8.70</td>
<td>1.00</td>
<td>7.70</td>
<td>.50</td>
<td>42.82</td>
<td>.02</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>24.61**</td>
<td>8.70</td>
<td>1.00</td>
<td>7.70</td>
<td>.50</td>
<td>42.51</td>
<td>.02</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>22.90**</td>
<td>8.70</td>
<td>1.00</td>
<td>7.70</td>
<td>.50</td>
<td>40.80</td>
<td>.02</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>22.30**</td>
<td>8.70</td>
<td>1.00</td>
<td>7.70</td>
<td>.50</td>
<td>40.20</td>
<td>.02</td>
<td>.04</td>
<td></td>
</tr>
</tbody>
</table>
INTERNATIONAL UNION OF OPERATING ENGINEERS, LOCAL NO. 49
RATES FOR THE:

BUILDERS AGREEMENT – MINNESOTA

WAGES EFFECTIVE MAY 1, 2015 - ZONE 1

<table>
<thead>
<tr>
<th>Group</th>
<th>Wages</th>
<th>Fringes</th>
<th>H&amp;W</th>
<th>HRA</th>
<th>Pension</th>
<th>Apprenticeship</th>
<th>Total</th>
<th>FCF $.02***</th>
<th>C.A.F. $.04**</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$37.74*</td>
<td>$8.70</td>
<td>$.25</td>
<td>$7.70</td>
<td>$.50</td>
<td>$54.89</td>
<td>$.02</td>
<td>$0.02</td>
<td>$0.04</td>
</tr>
<tr>
<td>2</td>
<td>$37.40*</td>
<td>$8.70</td>
<td>$.25</td>
<td>$7.70</td>
<td>$.50</td>
<td>$54.55</td>
<td>$.02</td>
<td>$0.02</td>
<td>$0.04</td>
</tr>
<tr>
<td>3</td>
<td>$35.99*</td>
<td>$8.70</td>
<td>$.25</td>
<td>$7.70</td>
<td>$.50</td>
<td>$53.14</td>
<td>$.02</td>
<td>$0.02</td>
<td>$0.04</td>
</tr>
<tr>
<td>4</td>
<td>$35.65*</td>
<td>$8.70</td>
<td>$.25</td>
<td>$7.70</td>
<td>$.50</td>
<td>$52.80</td>
<td>$.02</td>
<td>$0.02</td>
<td>$0.04</td>
</tr>
<tr>
<td>5</td>
<td>$35.48*</td>
<td>$8.70</td>
<td>$.25</td>
<td>$7.70</td>
<td>$.50</td>
<td>$52.63</td>
<td>$.02</td>
<td>$0.02</td>
<td>$0.04</td>
</tr>
<tr>
<td>6</td>
<td>$33.97*</td>
<td>$8.70</td>
<td>$.25</td>
<td>$7.70</td>
<td>$.50</td>
<td>$51.12</td>
<td>$.02</td>
<td>$0.02</td>
<td>$0.04</td>
</tr>
<tr>
<td>7</td>
<td>$32.85*</td>
<td>$8.70</td>
<td>$.25</td>
<td>$7.70</td>
<td>$.50</td>
<td>$50.00</td>
<td>$.02</td>
<td>$0.02</td>
<td>$0.04</td>
</tr>
<tr>
<td>8</td>
<td>$30.84*</td>
<td>$8.70</td>
<td>$.25</td>
<td>$7.70</td>
<td>$.50</td>
<td>$47.99</td>
<td>$.02</td>
<td>$0.02</td>
<td>$0.04</td>
</tr>
</tbody>
</table>

WAGES EFFECTIVE MAY 1, 2015 - ZONE 2

<table>
<thead>
<tr>
<th>Group</th>
<th>Wages</th>
<th>Fringes</th>
<th>H&amp;W</th>
<th>HRA</th>
<th>Pension</th>
<th>Apprenticeship</th>
<th>Total</th>
<th>FCF $.02***</th>
<th>C.A.F. $.04**</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$35.85*</td>
<td>$8.70</td>
<td>$.25</td>
<td>$7.70</td>
<td>$.50</td>
<td>$53.00</td>
<td>$.02</td>
<td>$0.02</td>
<td>$0.04</td>
</tr>
<tr>
<td>2</td>
<td>$35.53*</td>
<td>$8.70</td>
<td>$.25</td>
<td>$7.70</td>
<td>$.50</td>
<td>$52.68</td>
<td>$.02</td>
<td>$0.02</td>
<td>$0.04</td>
</tr>
<tr>
<td>3</td>
<td>$34.20*</td>
<td>$8.70</td>
<td>$.25</td>
<td>$7.70</td>
<td>$.50</td>
<td>$51.35</td>
<td>$.02</td>
<td>$0.02</td>
<td>$0.04</td>
</tr>
<tr>
<td>4</td>
<td>$33.88*</td>
<td>$8.70</td>
<td>$.25</td>
<td>$7.70</td>
<td>$.50</td>
<td>$51.03</td>
<td>$.02</td>
<td>$0.02</td>
<td>$0.04</td>
</tr>
<tr>
<td>5</td>
<td>$33.72*</td>
<td>$8.70</td>
<td>$.25</td>
<td>$7.70</td>
<td>$.50</td>
<td>$50.87</td>
<td>$.02</td>
<td>$0.02</td>
<td>$0.04</td>
</tr>
<tr>
<td>6</td>
<td>$32.30*</td>
<td>$8.70</td>
<td>$.25</td>
<td>$7.70</td>
<td>$.50</td>
<td>$49.45</td>
<td>$.02</td>
<td>$0.02</td>
<td>$0.04</td>
</tr>
<tr>
<td>7</td>
<td>$31.24*</td>
<td>$8.70</td>
<td>$.25</td>
<td>$7.70</td>
<td>$.50</td>
<td>$48.39</td>
<td>$.02</td>
<td>$0.02</td>
<td>$0.04</td>
</tr>
<tr>
<td>8</td>
<td>$29.35*</td>
<td>$8.70</td>
<td>$.25</td>
<td>$7.70</td>
<td>$.50</td>
<td>$46.50</td>
<td>$.02</td>
<td>$0.02</td>
<td>$0.04</td>
</tr>
<tr>
<td>Res., Comm. &amp; Indus. Repaint</td>
<td>Health &amp; Check-off</td>
<td>Base</td>
<td>Welfare</td>
<td>Pension</td>
<td>Annuity</td>
<td>FTI/UM</td>
<td>FTI/NT'L</td>
<td>FCF</td>
<td>LMCI</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-------------------</td>
<td>------</td>
<td>---------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>-----</td>
<td>------</td>
</tr>
<tr>
<td>Class I</td>
<td>$27.86</td>
<td>$6.85</td>
<td>$5.15</td>
<td>$3.50</td>
<td>$0.37</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$0.03</td>
<td>$0.10</td>
</tr>
<tr>
<td>Class II</td>
<td>$28.46</td>
<td>$6.85</td>
<td>$5.15</td>
<td>$3.50</td>
<td>$0.37</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$0.03</td>
<td>$0.10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>New Comm. &amp; New Indus.</th>
<th>Health &amp; Check-off</th>
<th>Base</th>
<th>Welfare</th>
<th>Pension</th>
<th>Annuity</th>
<th>FTI/UM</th>
<th>FTI/NT'L</th>
<th>FCF</th>
<th>LMCI</th>
<th>MPWEA</th>
<th>STAR</th>
<th>DC82/FCF</th>
<th>Total</th>
<th>Vac *</th>
<th>Dues**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class I</td>
<td>$29.36</td>
<td>$6.85</td>
<td>$5.15</td>
<td>$3.50</td>
<td>$0.37</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$0.03</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$45.58</td>
<td>$2.70</td>
<td>$1.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class II</td>
<td>$29.96</td>
<td>$6.85</td>
<td>$5.15</td>
<td>$3.50</td>
<td>$0.37</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$0.03</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$46.18</td>
<td>$2.70</td>
<td>$1.82</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Foremen in charge of five (5) or more journeypersons shall be paid $1.00 per hour over the journeyperson rate.

Fair Contracting Foundation: $0.01 paid by employer, $0.01 paid by employee from Total Package.

**Painter Apprentice**

<table>
<thead>
<tr>
<th>Hours</th>
<th>%</th>
<th>Base</th>
<th>Welfare</th>
<th>Pension</th>
<th>Annuity</th>
<th>FTI/UM</th>
<th>FTI/NT'L</th>
<th>FCF</th>
<th>LMCI</th>
<th>MPWEA</th>
<th>STAR</th>
<th>DC82/FCF</th>
<th>Total</th>
<th>Vac *</th>
<th>Dues**</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1000</td>
<td>50</td>
<td>$14.68</td>
<td>$6.85</td>
<td>$5.15</td>
<td>$3.50</td>
<td>$0.37</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$0.03</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$30.90</td>
<td>$2.70</td>
<td>$1.28</td>
<td></td>
</tr>
<tr>
<td>1001-2000</td>
<td>55</td>
<td>$16.15</td>
<td>$6.85</td>
<td>$5.15</td>
<td>$3.50</td>
<td>$0.37</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$0.03</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$32.37</td>
<td>$2.70</td>
<td>$1.33</td>
<td></td>
</tr>
<tr>
<td>2001-3000</td>
<td>60</td>
<td>$17.62</td>
<td>$6.85</td>
<td>$5.15</td>
<td>$3.50</td>
<td>$0.37</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$0.03</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$33.84</td>
<td>$2.70</td>
<td>$1.38</td>
<td></td>
</tr>
<tr>
<td>3001-4000</td>
<td>70</td>
<td>$20.55</td>
<td>$6.85</td>
<td>$5.15</td>
<td>$3.50</td>
<td>$0.37</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$0.03</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$36.77</td>
<td>$2.70</td>
<td>$1.49</td>
<td></td>
</tr>
<tr>
<td>4001-5000</td>
<td>80</td>
<td>$23.49</td>
<td>$6.85</td>
<td>$5.15</td>
<td>$3.50</td>
<td>$0.37</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$0.03</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$39.71</td>
<td>$2.70</td>
<td>$1.59</td>
<td></td>
</tr>
<tr>
<td>5001-6000</td>
<td>90</td>
<td>$26.42</td>
<td>$6.85</td>
<td>$5.15</td>
<td>$3.50</td>
<td>$0.37</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$0.03</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$42.64</td>
<td>$2.70</td>
<td>$1.69</td>
<td></td>
</tr>
</tbody>
</table>

**Drywall Taper Appr**

<table>
<thead>
<tr>
<th>Hours</th>
<th>%</th>
<th>Base</th>
<th>Welfare</th>
<th>Pension</th>
<th>Annuity</th>
<th>FTI/UM</th>
<th>FTI/NT'L</th>
<th>FCF</th>
<th>LMCI</th>
<th>MPWEA</th>
<th>STAR</th>
<th>DC82/FCF</th>
<th>Total</th>
<th>Vac *</th>
<th>Dues**</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-500</td>
<td>50</td>
<td>$14.98</td>
<td>$6.85</td>
<td>$5.15</td>
<td>$3.50</td>
<td>$0.37</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$0.03</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$31.20</td>
<td>$2.70</td>
<td>$1.29</td>
<td></td>
</tr>
<tr>
<td>501-1000</td>
<td>60</td>
<td>$17.98</td>
<td>$6.85</td>
<td>$5.15</td>
<td>$3.50</td>
<td>$0.37</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$0.03</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$34.20</td>
<td>$2.70</td>
<td>$1.40</td>
<td></td>
</tr>
<tr>
<td>1001-1500</td>
<td>70</td>
<td>$20.97</td>
<td>$6.85</td>
<td>$5.15</td>
<td>$3.50</td>
<td>$0.37</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$0.03</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$37.19</td>
<td>$2.70</td>
<td>$1.50</td>
<td></td>
</tr>
<tr>
<td>1501-2000</td>
<td>75</td>
<td>$22.47</td>
<td>$6.85</td>
<td>$5.15</td>
<td>$3.50</td>
<td>$0.37</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$0.03</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$38.69</td>
<td>$2.70</td>
<td>$1.55</td>
<td></td>
</tr>
<tr>
<td>2001-2500</td>
<td>80</td>
<td>$23.97</td>
<td>$6.85</td>
<td>$5.15</td>
<td>$3.50</td>
<td>$0.37</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$0.03</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$40.19</td>
<td>$2.70</td>
<td>$1.61</td>
<td></td>
</tr>
<tr>
<td>2501-3000</td>
<td>85</td>
<td>$25.47</td>
<td>$6.85</td>
<td>$5.15</td>
<td>$3.50</td>
<td>$0.37</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$0.03</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$41.69</td>
<td>$2.70</td>
<td>$1.66</td>
<td></td>
</tr>
<tr>
<td>3001-3500</td>
<td>90</td>
<td>$26.96</td>
<td>$6.85</td>
<td>$5.15</td>
<td>$3.50</td>
<td>$0.37</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$0.03</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$43.18</td>
<td>$2.70</td>
<td>$1.71</td>
<td></td>
</tr>
<tr>
<td>3501-4000</td>
<td>95</td>
<td>$28.46</td>
<td>$6.85</td>
<td>$5.15</td>
<td>$3.50</td>
<td>$0.37</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$0.03</td>
<td>$0.10</td>
<td>$0.01</td>
<td>$44.68</td>
<td>$2.70</td>
<td>$1.76</td>
<td></td>
</tr>
</tbody>
</table>

*This Vacation Contribution is included in the taxable wage listed above, then deducted and remitted along with your Health & Welfare contribution.*
**PLUMBERS & STEAMFITTERS LOCAL #11**
4402 AIRPARK BLVD.
DULUTH, MN 55811

JEFFREY DAVEAU SR.
BUSINESS MANAGER

218-727-2199 PHONE
218-727-2298 FAX

---

**WAGE & BENEFIT REVISION EFFECTIVE MAY 4, 2015**

**BUILDING TRADES JOURNEYMAN**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Pay</td>
<td>$34.79</td>
</tr>
<tr>
<td>Savings Fund</td>
<td>2.00</td>
</tr>
<tr>
<td>Dues Check off</td>
<td>.96</td>
</tr>
<tr>
<td>Building Fund</td>
<td>.20</td>
</tr>
<tr>
<td>Organizing Fund</td>
<td>.15</td>
</tr>
<tr>
<td>UA-PEC</td>
<td>.05</td>
</tr>
<tr>
<td>Local PAC</td>
<td>.01</td>
</tr>
<tr>
<td>Death Assessment</td>
<td>.01</td>
</tr>
<tr>
<td><strong>Total Taxable</strong></td>
<td><strong>$38.17</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fringes</td>
<td></td>
</tr>
<tr>
<td>Health &amp; welfare</td>
<td>6.85</td>
</tr>
<tr>
<td>H R Fund</td>
<td>.15</td>
</tr>
<tr>
<td>Local Pension</td>
<td>6.00</td>
</tr>
<tr>
<td>National Pension</td>
<td>.78</td>
</tr>
<tr>
<td>Money Purchase</td>
<td>3.50</td>
</tr>
<tr>
<td>Training Fund</td>
<td>.50</td>
</tr>
<tr>
<td>International Training Fund</td>
<td>.10</td>
</tr>
<tr>
<td>Industry Fund</td>
<td>.35</td>
</tr>
<tr>
<td>H.V.A.C</td>
<td>.25</td>
</tr>
<tr>
<td><strong>Total Fringes</strong></td>
<td><strong>$18.48</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total package</strong></td>
<td><strong>$56.65</strong></td>
</tr>
</tbody>
</table>

**Foreman** $2.50 over Base Pay  
**General Foreman** $3.50 over Base Pay
<table>
<thead>
<tr>
<th>WAGES AS OF 5-4-2015</th>
<th>JOURNEYMAN</th>
<th>95%</th>
<th>90%</th>
<th>85%</th>
<th>80%</th>
<th>75%</th>
<th>70%</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAXABLE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BASE PAY</td>
<td>$ 34.79</td>
<td>$ 33.05</td>
<td>$ 31.31</td>
<td>$ 29.57</td>
<td>$ 27.83</td>
<td>$ 26.09</td>
<td>$ 24.35</td>
</tr>
<tr>
<td>SAVINGS FUND</td>
<td>$ 2.00</td>
<td>$ 1.90</td>
<td>$ 1.80</td>
<td>$ 1.70</td>
<td>$ 1.60</td>
<td>$ 1.50</td>
<td>$ 1.40</td>
</tr>
<tr>
<td>UNION DUES &amp; ASSESSMENTS</td>
<td>$ 1.38</td>
<td>$ 1.38</td>
<td>$ 1.38</td>
<td>$ 1.38</td>
<td>$ 1.38</td>
<td>$ 1.38</td>
<td>$ 1.38</td>
</tr>
<tr>
<td>TOTAL TAXABLE</td>
<td>$ 38.17</td>
<td>$ 36.33</td>
<td>$ 34.49</td>
<td>$ 32.65</td>
<td>$ 30.81</td>
<td>$ 28.97</td>
<td>$ 27.13</td>
</tr>
<tr>
<td>FRINGES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRAINING FUND</td>
<td>$ 0.50</td>
<td>$ 0.50</td>
<td>$ 0.50</td>
<td>$ 0.50</td>
<td>$ 0.50</td>
<td>$ 0.50</td>
<td>$ 0.50</td>
</tr>
<tr>
<td>HR FUND</td>
<td>$ 0.15</td>
<td>$ 0.15</td>
<td>$ 0.15</td>
<td>$ 0.15</td>
<td>$ 0.15</td>
<td>$ 0.15</td>
<td>$ 0.15</td>
</tr>
<tr>
<td>HVAC</td>
<td>$ 0.25</td>
<td>$ 0.25</td>
<td>$ 0.25</td>
<td>$ 0.25</td>
<td>$ 0.25</td>
<td>$ 0.25</td>
<td>$ 0.25</td>
</tr>
<tr>
<td>UA TRAINING FUND</td>
<td>$ 0.10</td>
<td>$ 0.10</td>
<td>$ 0.10</td>
<td>$ 0.10</td>
<td>$ 0.10</td>
<td>$ 0.10</td>
<td>$ 0.10</td>
</tr>
<tr>
<td>UA PENSION</td>
<td>$ 0.78</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>LOCAL PENSION</td>
<td>$ 6.00</td>
<td>$ 6.00</td>
<td>$ 6.00</td>
<td>$ 6.00</td>
<td>$ 6.00</td>
<td>$ 6.00</td>
<td>$ 6.00</td>
</tr>
<tr>
<td>MONEY PURCHASE</td>
<td>$ 3.50</td>
<td>$ 3.33</td>
<td>$ 3.15</td>
<td>$ 2.98</td>
<td>$ 2.80</td>
<td>$ 2.63</td>
<td>$ 2.45</td>
</tr>
<tr>
<td>INDUSTRY DEVELOPMENT</td>
<td>$ 0.35</td>
<td>$ 0.35</td>
<td>$ 0.35</td>
<td>$ 0.35</td>
<td>$ 0.35</td>
<td>$ 0.35</td>
<td>$ 0.35</td>
</tr>
<tr>
<td>TOTAL FRINGES</td>
<td>$ 18.48</td>
<td>$ 17.53</td>
<td>$ 17.35</td>
<td>$ 17.18</td>
<td>$ 17.00</td>
<td>$ 16.83</td>
<td>$ 16.65</td>
</tr>
<tr>
<td>TOTAL PACKAGE</td>
<td>$ 56.65</td>
<td>$ 53.86</td>
<td>$ 51.84</td>
<td>$ 49.83</td>
<td>$ 47.81</td>
<td>$ 45.80</td>
<td>$ 43.78</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WAGES AS OF 5-4-2015</th>
<th>65%</th>
<th>60%</th>
<th>55%</th>
<th>50%</th>
<th>45%</th>
<th>40%</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAXABLE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BASE PAY</td>
<td>$ 22.61</td>
<td>$ 20.87</td>
<td>$ 19.13</td>
<td>$ 17.40</td>
<td>$ 15.66</td>
<td>$ 13.92</td>
</tr>
<tr>
<td>SAVINGS FUND</td>
<td>$ 1.30</td>
<td>$ 1.20</td>
<td>$ 1.10</td>
<td>$ 1.00</td>
<td>$ 0.90</td>
<td>$ 0.80</td>
</tr>
<tr>
<td>UNION DUES AND ASSESSMENTS</td>
<td>$ 1.38</td>
<td>$ 1.38</td>
<td>$ 1.38</td>
<td>$ 1.38</td>
<td>$ 1.38</td>
<td>$ 1.38</td>
</tr>
<tr>
<td>TOTAL TAXABLE</td>
<td>$ 25.29</td>
<td>$ 23.45</td>
<td>$ 21.61</td>
<td>$ 19.78</td>
<td>$ 17.94</td>
<td>$ 16.10</td>
</tr>
<tr>
<td>FRINGES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRAINING FUND</td>
<td>$ 0.50</td>
<td>$ 0.50</td>
<td>$ 0.50</td>
<td>$ 0.50</td>
<td>$ 0.50</td>
<td>$ 0.50</td>
</tr>
<tr>
<td>HR FUND</td>
<td>$ 0.15</td>
<td>$ 0.15</td>
<td>$ 0.15</td>
<td>$ 0.15</td>
<td>$ 0.15</td>
<td>$ 0.15</td>
</tr>
<tr>
<td>HVAC</td>
<td>$ 0.25</td>
<td>$ 0.25</td>
<td>$ 0.25</td>
<td>$ 0.25</td>
<td>$ 0.25</td>
<td>$ 0.25</td>
</tr>
<tr>
<td>UA TRAINING FUND</td>
<td>$ 0.10</td>
<td>$ 0.10</td>
<td>$ 0.10</td>
<td>$ 0.10</td>
<td>$ 0.10</td>
<td>$ 0.10</td>
</tr>
<tr>
<td>UA PENSION</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>LOCAL PENSION</td>
<td>$ 6.00</td>
<td>$ 6.00</td>
<td>$ 6.00</td>
<td>$ 6.00</td>
<td>$ 6.00</td>
<td>$ 6.00</td>
</tr>
<tr>
<td>MONEY PURCHASE</td>
<td>$ 2.28</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>INDUSTRY DEVELOPMENT</td>
<td>$ 0.35</td>
<td>$ 0.35</td>
<td>$ 0.35</td>
<td>$ 0.35</td>
<td>$ 0.35</td>
<td>$ 0.35</td>
</tr>
<tr>
<td>TOTAL PACKAGE</td>
<td>$ 41.77</td>
<td>$ 37.65</td>
<td>$ 35.81</td>
<td>$ 33.98</td>
<td>$ 32.14</td>
<td>$ 30.30</td>
</tr>
</tbody>
</table>

WAGE BREAKDOWN FOR LOCAL UNION # 11 APPRENTICES - BEGINNING MAY 4, 2015
## Wages/Benefits Roofers Local Union 96 - Duluth Area

Effective July 1, 2014
Through June 30, 2015

<table>
<thead>
<tr>
<th>Classification</th>
<th>Basic Hourly Wage</th>
<th>Vac. After Wage</th>
<th>Assess. After Wage</th>
<th>Taxable Rate</th>
<th>National Pension Rate</th>
<th>Educ Fund Rate</th>
<th>Annuity Fund Rate</th>
<th>Health/ Welfare Fund Rate</th>
<th>H&amp;W Fund Rate</th>
<th>Appr. Rate</th>
<th>Roofing Industry Rate</th>
<th>Total Cost to Employer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journeymen</td>
<td>28.65</td>
<td>2.50</td>
<td>0.50</td>
<td>31.65</td>
<td>3.40</td>
<td>0.03</td>
<td>3.09</td>
<td>7.10</td>
<td>0.50</td>
<td>0.25</td>
<td>0.30</td>
<td>46.32</td>
</tr>
<tr>
<td>Foreman</td>
<td>30.40</td>
<td>2.50</td>
<td>0.50</td>
<td>33.40</td>
<td>3.65</td>
<td>0.03</td>
<td>3.09</td>
<td>7.10</td>
<td>0.50</td>
<td>0.25</td>
<td>0.30</td>
<td>48.32</td>
</tr>
</tbody>
</table>

Apprentice Percentages Based on Hours Worked for Advancement:

<table>
<thead>
<tr>
<th>Percent</th>
<th>Hours</th>
<th>Basic Hourly Rate</th>
<th>Vac. After Wage</th>
<th>Assess. After Wage</th>
<th>Taxable Rate</th>
<th>National Pension Rate</th>
<th>Educ Fund Rate</th>
<th>Annuity Fund Rate</th>
<th>Health/ Welfare Fund Rate</th>
<th>H&amp;W Fund Rate</th>
<th>Appr. Rate</th>
<th>Roofing Industry Rate</th>
<th>Total Cost to Employer</th>
</tr>
</thead>
<tbody>
<tr>
<td>45%</td>
<td>A 0-250</td>
<td>14.04</td>
<td>0.20</td>
<td>14.24</td>
<td>0.25</td>
<td>0.03</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.25</td>
<td>0.30</td>
<td>15.07</td>
</tr>
<tr>
<td>45%</td>
<td>B 251-1500</td>
<td>13.74</td>
<td>0.50</td>
<td>14.24</td>
<td>0.25</td>
<td>0.03</td>
<td></td>
<td></td>
<td>5.50</td>
<td></td>
<td>0.25</td>
<td>0.30</td>
<td>20.57</td>
</tr>
<tr>
<td>50%</td>
<td>1501-2500</td>
<td>15.33</td>
<td>0.50</td>
<td>15.83</td>
<td>0.25</td>
<td>0.03</td>
<td>0.25</td>
<td>6.50</td>
<td></td>
<td></td>
<td>0.25</td>
<td>0.30</td>
<td>23.41</td>
</tr>
</tbody>
</table>

Freeze Unless 144 Hours (Phase 1) of Related Training is Completed:

<table>
<thead>
<tr>
<th>Percent</th>
<th>Hours</th>
<th>Basic Hourly Rate</th>
<th>Vac. After Wage</th>
<th>Assess. After Wage</th>
<th>Taxable Rate</th>
<th>National Pension Rate</th>
<th>Educ Fund Rate</th>
<th>Annuity Fund Rate</th>
<th>Health/ Welfare Fund Rate</th>
<th>H&amp;W Fund Rate</th>
<th>Appr. Rate</th>
<th>Roofing Industry Rate</th>
<th>Total Cost to Employer</th>
</tr>
</thead>
<tbody>
<tr>
<td>60%</td>
<td>2501-3000</td>
<td>18.49</td>
<td>0.50</td>
<td>18.99</td>
<td>0.50</td>
<td>0.03</td>
<td>0.50</td>
<td>7.10</td>
<td>0.50</td>
<td></td>
<td>0.25</td>
<td>0.30</td>
<td>28.17</td>
</tr>
<tr>
<td>70%</td>
<td>3001-3500</td>
<td>21.66</td>
<td>0.50</td>
<td>22.16</td>
<td>0.50</td>
<td>0.03</td>
<td>0.50</td>
<td>7.10</td>
<td>0.50</td>
<td></td>
<td>0.25</td>
<td>0.30</td>
<td>31.34</td>
</tr>
<tr>
<td>75%</td>
<td>3501-4000</td>
<td>23.24</td>
<td>0.50</td>
<td>23.74</td>
<td>0.50</td>
<td>0.03</td>
<td>0.50</td>
<td>7.10</td>
<td>0.50</td>
<td></td>
<td>0.25</td>
<td>0.30</td>
<td>32.92</td>
</tr>
<tr>
<td>80%</td>
<td>4001-4500</td>
<td>22.32</td>
<td>2.50</td>
<td>25.32</td>
<td>0.75</td>
<td>0.03</td>
<td>0.75</td>
<td>7.10</td>
<td>0.50</td>
<td></td>
<td>0.25</td>
<td>0.30</td>
<td>35.00</td>
</tr>
</tbody>
</table>

Freeze Unless 288 Hours (Phase 2) of Related Training is Completed:

<table>
<thead>
<tr>
<th>Percent</th>
<th>Hours</th>
<th>Basic Hourly Rate</th>
<th>Vac. After Wage</th>
<th>Assess. After Wage</th>
<th>Taxable Rate</th>
<th>National Pension Rate</th>
<th>Educ Fund Rate</th>
<th>Annuity Fund Rate</th>
<th>Health/ Welfare Fund Rate</th>
<th>H&amp;W Fund Rate</th>
<th>Appr. Rate</th>
<th>Roofing Industry Rate</th>
<th>Total Cost to Employer</th>
</tr>
</thead>
<tbody>
<tr>
<td>85%</td>
<td>4501-5000</td>
<td>23.90</td>
<td>2.50</td>
<td>26.90</td>
<td>0.75</td>
<td>0.03</td>
<td>0.75</td>
<td>7.10</td>
<td>0.50</td>
<td></td>
<td>0.25</td>
<td>0.30</td>
<td>36.58</td>
</tr>
<tr>
<td>90%</td>
<td>5001-5500</td>
<td>25.49</td>
<td>2.50</td>
<td>28.99</td>
<td>1.00</td>
<td>0.03</td>
<td>0.75</td>
<td>7.10</td>
<td>0.50</td>
<td></td>
<td>0.25</td>
<td>0.30</td>
<td>38.42</td>
</tr>
<tr>
<td>95%</td>
<td>5501-6000</td>
<td>27.07</td>
<td>2.50</td>
<td>30.07</td>
<td>1.00</td>
<td>0.03</td>
<td>0.75</td>
<td>7.10</td>
<td>0.50</td>
<td></td>
<td>0.25</td>
<td>0.30</td>
<td>40.00</td>
</tr>
</tbody>
</table>

Advancement to Journeymen if All Related Training (Phase 3) is Completed and **6000** Hours Worked

Due: July 1, 2015: $0.80

Expiration date: June 30, 2016
**DULUTH**  
**COMMERCIAL & INDUSTRIAL**  
**SHEET METAL WAGE RATES**  
**EFFECTIVE MAY 4, 2015 - April 30, 2016**

**SOUTHERN ST. LOUIS, AITKIN, CARLTON, LAKE, COOK, AND DOUGLAS COUNTIES**

<table>
<thead>
<tr>
<th>Hours</th>
<th>0-1000</th>
<th>1001-2000</th>
<th>2001-3000</th>
<th>3001-4000</th>
<th>4001-5000</th>
<th>5001-6000</th>
<th>6001-7000</th>
<th>7001-8000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apprentice</td>
<td>55</td>
<td>59</td>
<td>63</td>
<td>68</td>
<td>72</td>
<td>76</td>
<td>80</td>
<td>84</td>
</tr>
<tr>
<td></td>
<td>1.01</td>
<td>1.06</td>
<td>1.11</td>
<td>1.18</td>
<td>1.23</td>
<td>1.29</td>
<td>1.34</td>
<td>1.40</td>
</tr>
<tr>
<td></td>
<td>9.02</td>
<td>9.02</td>
<td>9.02</td>
<td>9.02</td>
<td>9.02</td>
<td>9.02</td>
<td>9.02</td>
<td>9.02</td>
</tr>
<tr>
<td></td>
<td>5.75</td>
<td>6.17</td>
<td>6.58</td>
<td>7.11</td>
<td>7.52</td>
<td>7.94</td>
<td>8.36</td>
<td>8.78</td>
</tr>
<tr>
<td></td>
<td>1.18</td>
<td>1.27</td>
<td>1.35</td>
<td>1.46</td>
<td>1.55</td>
<td>1.63</td>
<td>1.72</td>
<td>1.81</td>
</tr>
<tr>
<td></td>
<td>0.25</td>
<td>0.27</td>
<td>0.28</td>
<td>0.31</td>
<td>0.32</td>
<td>0.34</td>
<td>0.36</td>
<td>0.38</td>
</tr>
<tr>
<td></td>
<td>0.64</td>
<td>0.64</td>
<td>0.64</td>
<td>0.64</td>
<td>0.64</td>
<td>0.64</td>
<td>0.64</td>
<td>0.64</td>
</tr>
<tr>
<td></td>
<td>0.17</td>
<td>0.17</td>
<td>0.17</td>
<td>0.17</td>
<td>0.17</td>
<td>0.17</td>
<td>0.17</td>
<td>0.17</td>
</tr>
<tr>
<td></td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
<td>0.23</td>
</tr>
<tr>
<td></td>
<td>35.61</td>
<td>37.45</td>
<td>39.26</td>
<td>41.58</td>
<td>43.40</td>
<td>45.25</td>
<td>47.09</td>
<td>48.94</td>
</tr>
</tbody>
</table>

**Apprentice**

*The Taxable Base Pay rate includes $2.58 Vacation and Organizing deduction for journeymen and $1.58 for apprentices. The Vacation Fund deduction is $2.00 per hour for journeymen ($1.00 per hour for apprentices) and $.58 per hour for Organizing for both Journeymen and apprentices. For classified workers, the Vacation Fund deduction is $.55 per hour and there is a $.23 deduction for Organizing for a total deduction of $.78.

**SASMI NOTE:** The SASMI rate for Foreman and General Foreman are the same as the rate for Journeymen and there is no longer a different SASMI rate for overtime hours on any classification. All SASMI hours are paid at the straight time rate.

The current IRS mileage rate is $.575

*April 17, 2015*  
Contract expires May 1, 2016
Minnesota Breakdown of Wage and Benefit Package

<table>
<thead>
<tr>
<th>Wage Rate</th>
<th>4/1/13</th>
<th>7/1/13</th>
<th>4/1/14</th>
<th>4/1/15</th>
</tr>
</thead>
<tbody>
<tr>
<td>$31.88</td>
<td>$32.52</td>
<td>$33.17</td>
<td>$33.83</td>
<td></td>
</tr>
</tbody>
</table>

Foreman’s Rate: $2.75 above journeyman scale
General Foreman: $5.00 above journeyman scale (22+ men on job)
Local Union 669 has a 5% dues check-off; 2 1/2% for Apprentices Class 1-4

**Extended Benefit Fund:** $.25 per hour for all hours worked payable to Local Union 669

**Industry Advancement-State of Minnesota**
Class 5 and higher $.25 per hour for all hours worked payable to Local Union 669

**Benefit Package**

<table>
<thead>
<tr>
<th>Benefit</th>
<th>4/1/13</th>
<th>1/1/14</th>
<th>1/1/15</th>
<th>1/1/16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health &amp; Welfare</td>
<td>$8.42 per hour for all hours worked</td>
<td>$8.52 per hour for all hours worked</td>
<td>&lt;To be determined&gt;</td>
<td>&lt;To be determined&gt;</td>
</tr>
<tr>
<td>Pension</td>
<td>$5.50 per hour for all hours worked</td>
<td>$5.75 per hour for all hours worked</td>
<td>$5.90 per hour for all hours worked</td>
<td>$6.05 per hour for all hours worked</td>
</tr>
<tr>
<td>Education</td>
<td>$.35 per hour for all hours worked</td>
<td>$.10 per hour for all hours worked</td>
<td>$.25 per hour for all hours worked</td>
<td>$.25 per hour for all hours worked</td>
</tr>
<tr>
<td>International Training</td>
<td>$2.50 per hour for all hours worked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry Promotion</td>
<td>$2.50 per hour for all hours worked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supplemental Pension</td>
<td>$2.50 per hour for all hours worked</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Travel Expenses**

<table>
<thead>
<tr>
<th>Distance</th>
<th>4/1/13</th>
<th>4/1/14</th>
<th>4/1/15</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-60 miles</td>
<td>No expenses</td>
<td>No expenses</td>
<td>No expenses</td>
</tr>
<tr>
<td>60-80 miles</td>
<td>$15.00</td>
<td>$16.50</td>
<td>$17.50</td>
</tr>
<tr>
<td>80-100 miles</td>
<td>$25.00</td>
<td>$26.50</td>
<td>$27.50</td>
</tr>
<tr>
<td>100+ miles</td>
<td>$75.00</td>
<td>$80.00</td>
<td>$80.00</td>
</tr>
</tbody>
</table>

If you should have any additional questions, please feel free to contact Business Agent James Westby at (507) 493-5671 or this office.

Created June 2013
Road Sprinkler Fitters Local Union No. 669
7050 Oakland Mills Road • Suite 200 • Columbia, Maryland 21046
(410) 381-4300 • fax: (301) 621-8045 • www.sprinklerfitters669.org
SPECIAL PROVISIONS

CHESTER CREEK BANK STABILIZATION (2016)

City Project #’s 1280, 1281, 1283, 1349, 1350, 1352, 1353

City of Duluth, Minnesota
411 West 1st Street
Duluth, MN  55802
SPECIAL PROVISIONS
City Job Number: 1280, 1281, 1283, 1349, 1350, 1352, 1353
CHESTER CREEK BANK STABILIZATION
March 4, 2016

CERTIFICATION

I HEREBY CERTIFY that this SPECIFICATION was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Thomas M. Pfeffer
Signature

March 4, 2016
Date

Thomas M. Pfeffer
Typed or Printed Name

22442
License No.
**TABLE OF CONTENTS**

<table>
<thead>
<tr>
<th>SP</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP-1</td>
<td>NOTICE TO ALL BIDDERS</td>
<td>1</td>
</tr>
<tr>
<td>SP-2</td>
<td>SCOPE OF WORK</td>
<td>1</td>
</tr>
<tr>
<td>SP-3</td>
<td>CONTACT INFORMATION</td>
<td>1</td>
</tr>
<tr>
<td>SP-4</td>
<td>(1505) COOPERATION BY CONTRACTORS</td>
<td>1</td>
</tr>
<tr>
<td>SP-5</td>
<td>(1507) UTILITY PROPERTY AND SERVICE</td>
<td>1</td>
</tr>
<tr>
<td>SP-6</td>
<td>(1702) PERMITS, LICENSES, AND TAXES</td>
<td>1</td>
</tr>
<tr>
<td>SP-7</td>
<td>(1803) LIMITATIONS OF OPERATIONS – FISHERY PROTECTION</td>
<td>2</td>
</tr>
<tr>
<td>SP-8</td>
<td>(1806) COMMUNITY/PARK EVENTS - WORK RESTRICTIONS</td>
<td>2</td>
</tr>
<tr>
<td>SP-9</td>
<td>(1806) DETERMINATION AND EXTENSION OF CONTRACT TIME</td>
<td>3</td>
</tr>
<tr>
<td>SP-10</td>
<td>(1807) FAILURE TO COMPLETE WORK ON TIME</td>
<td>4</td>
</tr>
<tr>
<td>SP-11</td>
<td>(1901) MEASUREMENT AND PAYMENT</td>
<td>4</td>
</tr>
</tbody>
</table>

Appendix A  Technical Special Provisions  
Appendix B  Permits  
Appendix C  Storm Water Pollution Prevention Plan
The following forms and regulations/rules/statutes and interpretations, which are incorporated by reference in this contract, are available on the World Wide Web at the sites listed below. The City of Duluth will use its best efforts to ensure that the most recent, applicable forms and regulations/rules/statutes and interpretations are included on the web sites provided; however, if you are the successful bidder, prior to signing the contract, you are responsible for comparing the versions of the forms and regulations/rules/statutes and interpretations attached to the contract which you are signing with the versions on the web to ensure conformity. Hard copies of all forms are available at the Engineering Division.

THE VERSIONS OF THE FORMS AND REGULATIONS/RULES/STATUTES and INTERPRETATION ATTACHED TO THE CONTRACT WILL BE CONTROLLING.

<table>
<thead>
<tr>
<th>FORM</th>
<th>FUND</th>
<th>WEB SITE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affidavit of Non-Collusion (required by awarded contractor only)</td>
<td>All</td>
<td><a href="http://www.duluthmn.gov/engineering/standard-construction-specifications/construction-documents/">http://www.duluthmn.gov/engineering/standard-construction-specifications/construction-documents/</a></td>
</tr>
<tr>
<td>Certified Payroll Form WH347</td>
<td>All</td>
<td><a href="http://www.dol.gov/whd/forms/">http://www.dol.gov/whd/forms/</a></td>
</tr>
<tr>
<td>Contractor’s Haul Route</td>
<td>All</td>
<td><a href="http://www.duluthmn.gov/engineering/standard-construction-specifications/construction-documents/">http://www.duluthmn.gov/engineering/standard-construction-specifications/construction-documents/</a></td>
</tr>
<tr>
<td>Debarment/Suspension Notice (most current version)</td>
<td>All</td>
<td><a href="http://www.dot.state.mn.us/bidlet/howtobid.html">http://www.dot.state.mn.us/bidlet/howtobid.html</a></td>
</tr>
<tr>
<td>IC-134 Contractor Affidavit - Form</td>
<td>All</td>
<td><a href="http://www.revenue.state.mn.us/Forms_and_Instructions/ic134.pdf">http://www.revenue.state.mn.us/Forms_and_Instructions/ic134.pdf</a></td>
</tr>
<tr>
<td>IC-134 Contractor Affidavit – Online</td>
<td>All</td>
<td><a href="https://www.mndor.state.mn.us/tp/contractoraffidavit/">https://www.mndor.state.mn.us/tp/contractoraffidavit/</a></td>
</tr>
<tr>
<td>MN Rules 5200.1105</td>
<td>All</td>
<td><a href="https://www.revisor.mn.gov/rules/?id=5200.1105">https://www.revisor.mn.gov/rules/?id=5200.1105</a></td>
</tr>
<tr>
<td>MN Rules 5200. 1106</td>
<td>All</td>
<td><a href="https://www.revisor.mn.gov/rules/?id=5200.1106">https://www.revisor.mn.gov/rules/?id=5200.1106</a></td>
</tr>
<tr>
<td>MN Statutes 177.41 to 177.44</td>
<td>All</td>
<td><a href="https://www.revisor.mn.gov/statutes/?id=177">https://www.revisor.mn.gov/statutes/?id=177</a></td>
</tr>
<tr>
<td>One-Call Instructions</td>
<td>All</td>
<td><a href="http://www.duluthmn.gov/engineering/standard-construction-specifications/construction-documents/">http://www.duluthmn.gov/engineering/standard-construction-specifications/construction-documents/</a></td>
</tr>
<tr>
<td>Request to Sublet TP-21834</td>
<td>All</td>
<td><a href="http://www.dot.state.mn.us/const/labor/forms.html">http://www.dot.state.mn.us/const/labor/forms.html</a></td>
</tr>
<tr>
<td>Request to Sublet Summary</td>
<td>All</td>
<td><a href="http://www.dot.state.mn.us/const/labor/forms.html">http://www.dot.state.mn.us/const/labor/forms.html</a></td>
</tr>
<tr>
<td>Statement of Compliance Form (8-2013)</td>
<td>All</td>
<td><a href="http://www.dot.state.mn.us/const/labor/forms.html">http://www.dot.state.mn.us/const/labor/forms.html</a></td>
</tr>
<tr>
<td>Truck Rental Rates</td>
<td>State</td>
<td><a href="http://www.doli.state.mn.us/LS/PrevWageTR1.asp">http://www.doli.state.mn.us/LS/PrevWageTR1.asp</a></td>
</tr>
<tr>
<td>Description</td>
<td>State/Federal</td>
<td>URL</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td>-----</td>
</tr>
<tr>
<td>Contractor/Vendor Form</td>
<td>State</td>
<td><a href="http://www.dot.state.mn.us/const/labor/forms.html">http://www.dot.state.mn.us/const/labor/forms.html</a></td>
</tr>
<tr>
<td>Trucking Com/Vendor Form</td>
<td>State</td>
<td><a href="http://www.dot.state.mn.us/const/labor/forms.html">http://www.dot.state.mn.us/const/labor/forms.html</a></td>
</tr>
<tr>
<td>Month End Trucking Report Form A &amp; B (12-10)</td>
<td>State</td>
<td><a href="http://www.dot.state.mn.us/const/labor/forms.html">http://www.dot.state.mn.us/const/labor/forms.html</a></td>
</tr>
<tr>
<td>Month-End Trucking Report Statement of Compliance (12-10)</td>
<td>State</td>
<td><a href="http://www.dot.state.mn.us/const/labor/forms.html">http://www.dot.state.mn.us/const/labor/forms.html</a></td>
</tr>
</tbody>
</table>
SPECIAL PROVISIONS
City Job Number: 1280, 1281, 1283, 1349, 1350, 1352, 1353
CHESTER CREEK BANK STABILIZATION
March 4, 2016

SP-1 NOTICE TO ALL BIDDERS
The 2016 Edition of the City of Duluth Public Works & Utilities Department/Engineering Division “Construction Standards” book and any addendums or supplements is incorporated by reference and is deemed to be a part hereof as if fully incorporated and set forth herein. The ‘Construction Standards’ is available on the City website at: http://www.duluthmn.gov/engineering/standard-construction-specifications/.

SP-2 SCOPE OF WORK
The project consists of post-flood debris clean-up, sediment removal, in-stream bank stabilization, and slope stabilization of Chester Creek between Kenwood Avenue to East Skyline Parkway in Chester [Bowl] Park, and further downstream towards East 8th Street. Work items include: grading, composite rock wood bank protection, J-hook boulder vanes, vegetated reinforced soil slope, rip rap, rock filter dike, trees, shrubs, and turf establishment.

SP-3 CONTACT INFORMATION
Questions regarding this project should be directed to: Tom Pfeffer, Senior Project Engineer, 218-730-5104, and by email at: tpfeffer@duluthmn.gov

SP-4 (1505) COOPERATION BY CONTRACTORS
The Contractor shall make a reasonable effort to coordinate his work activities with relevant construction projects in the area so that the work under this Contract is completed prior to the contract completion date. Some projects planned for construction in this area include:

- St. Louis County & City of Duluth – 4th Street from 6th Avenue East to 20th Avenue East
- City of Duluth – Chester Creek Walking Path Repairs from Skyline Parkway to 8th Street
- City of Duluth – East Skyline Parkway from Mesaba Avenue to Kenwood Avenue

SP-5 (1507) UTILITY PROPERTY AND SERVICE
There are no known utility relocations associated with this project.

SP-6 (1702) PERMITS, LICENSES, AND TAXES
The Contractor shall comply with all terms and requirements the following permits which are attached in Appendix B:

- US/ACOE [404 Clean Water] General Permit (RGP-003-MN)
- MN/DNR Public Waters Work Permit

The Contractor shall comply with all terms and requirements of the following erosion and sediment control permits:

- MPCA/NPDES Construction Activities Storm Water Permit (contractor to obtain)
- City of Duluth/MS4 Erosion and Sediment Control Permit (contractor to obtain)

A draft Storm Water Pollution Prevention Plan (SWPPP) is included in Appendix C.
SP-7  **(1803) LIMITATIONS OF OPERATIONS –FISHERY PROTECTION**

The provisions of MN/DOT 1803 are supplemented with the following: Chester Creek is a designated trout stream. No activity affecting the bed of the protected water may be conducted between April 1st and June 30th, to minimize impacts of fish spawning and migration. Further, in order to minimize impacts on the fish spawning and migration, the Contractor is restricted from performing work in tributary 6 (site 582J) [no work] during the period between September 15th through June 30th.

SP-8  **(1806) COMMUNITY/PARK EVENTS - WORK RESTRICTIONS**

The City of Duluth supports numerous community and city planned events throughout the year that are located in Chester Park and access/park along Chester Bowl Drive. Further, Skyline Parkway, which is the only vehicle access to Chester Park, shall be kept ‘open to traffic’ at all times. The Contractor shall coordinate and restrict work activities so that the events listed below are able to proceed safely and conveniently. To help ensure compliance, the following work restrictions shall apply to this project:

1)  **2016 Chester Park Concert Series** (Tuesdays, June 7,14,21,28; July 5,12,19,26; and August 2,9,16,18). **No construction equipment or haul trucks shall operate on Chester Bowl Drive after 4:00pm on ‘Concert Tuesdays’; AND no noise generating construction equipment (serving sites 582H, 582J, 582K, or 582L) shall be operated after 5:00pm on ‘Concert Tuesdays’.** Prior to the event, the Contractor shall move ALL equipment, materials, and temporary facilities to storage locations completely off of the park drive. Further, the Contractor shall confirm the drive pavement is swept clean of vehicle tracking and construction debris before leaving the project prior to the event.

2)  **Northern MN Track Club Race** (Wednesday, June 15, 2016). **No construction equipment or haul trucks shall operate on Chester Bowl Drive after 3:00pm on the day of the event; AND no work shall be performed at sites 582H, 582J, 582K, or 582L after 3:00pm on the day of the event.** Prior to the event, the Contractor shall move ALL equipment, materials, and temporary facilities to storage locations completely off of the park drive. Further, the Contractor shall confirm the drive pavement is swept clean of vehicle tracking and construction debris before leaving the project prior to the event.

3)  **Duluth Preservation Alliance** (Sunday, July 31, 2016). **No work shall be performed at sites 582H, 582J, 582K, or 582L on the day of the event.** Prior to the event, the Contractor shall move ALL equipment, materials, and temporary facilities to storage locations completely off of the park drive. Further, the Contractor shall confirm the drive pavement is swept clean of vehicle tracking and construction debris before leaving the project prior to the event.

4)  **UMD Freshman Orientation Picnic** (Saturday, September 3, 2016). **No work shall be performed at sites 582H, 582J, 582K, or 582L on the day of the event.** Prior to the event, the Contractor shall move ALL equipment, materials, and temporary facilities to storage locations completely off of the park drive. Further, the Contractor shall confirm the drive pavement is swept clean of vehicle tracking and construction debris before leaving the project prior to the event.

5)  **Fall Festival** (Saturday, September 17, 2016 and Sunday, September 18, 2016). **No work shall be performed at sites 582H, 582J, 582K, or 582L between 12:00 Noon on the**
Friday preceding the event and 7:00am on the day following the event. Prior to the event, the Contractor shall move ALL equipment, materials, and temporary facilities to storage locations completely off of the park drive. Further, the Contractor shall confirm the drive pavement is swept clean of vehicle tracking and construction debris before leaving the project prior to the event.

6) Duluth Forestry Field Day (Tuesday, September 20, 2016 or Wednesday, September 21, 2016). No work shall be performed at sites 582H, 582J, 582K, or 582L on the day of the event. Prior to the event, the Contractor shall move ALL equipment, materials, and temporary facilities to storage locations completely off of the park drive. Further, the Contractor shall confirm the drive pavement is swept clean of vehicle tracking and construction debris before leaving the project prior to the event.

7) Chester Bowl Improvement Club – Summer Camp Series (Monday through Friday, 8:00am to 5:00pm, June 8th through August 27th). The ‘camp’ operates daily in the general area near the buildings and adjacent to the “open field” immediately east of site 582J and south of site 582K. All work zones near this area shall be adequately delineated and monitored to help keep camp patrons safely out of the work zone; AND ALL construction equipment and hauling truck OPERATORS shall take EXTRAORDINARY CARE when operating/driving in this area.

8) AYSA Youth Soccer (Tuesday and Thursday Evenings; Saturday and Sunday Afternoons; July through September 18th). The soccer league has games in the “open field” immediately east of site 582J and south of site 582K. All work zones near this area shall be adequately delineated and monitored to help keep soccer participants safely out of the work zone; AND ALL construction equipment and hauling truck OPERATORS shall take EXTRAORDINARY CARE when operating/driving in this area.

All requests for deviation from these work restrictions must be requested at least 7 days prior to event, AND no deviations from these work restrictions will be allowed without the written authorization of the Engineer.

SP-9 (1806) DETERMINATION AND EXTENSION OF CONTRACT TIME

The Contract Time will be determined in accordance with the provisions of MN/DOT 1806 and the following:

1. Construction operations shall be started on or before May 23, 2016 or within ten (10) calendar days after the date of Notice to Proceed, whichever is later.

2. Substantial Completion. All work under this Contract shall be substantially complete on or before September 15, 2016. For this project, Substantial Completion shall be deemed to include ALL work in the Contract, except the following items: restore access paths & haul roads, trees, and shrubs.

3. Final Completion. ALL work required under this Contract shall be complete on or before October 14, 2016.
SPECIAL PROVISIONS
City Job Number: 1280, 1281, 1283, 1349, 1350, 1352, 1353
CHESTER CREEK BANK STABILIZATION
March 4, 2016

4. The third exemption listed under the second paragraph of the provisions of MN/DOT 1806.3 is modified to the extent that the phrase “(3) During the inclusive period from November 15 through April 15, except as specified in 1806.1...“ is deleted.

5. No work which will restrict or interfere with traffic shall be performed between 12:00 noon on the day preceding and 6:30 a.m. on the day following any consecutive combination of a Saturday, Sunday, and legal holiday without written permission from the Engineer.

(A) If the Contractor chooses not to work at all on the day preceding the holiday period, no working day charges will be assessed.

(B) If the Contractor chooses to work prior to 12:00 noon on the day preceding the holiday period or if the Contractor obtains written permission to work after 12:00 noon on the day preceding the holiday period, working day charges will be assessed only for the actual hours worked.

6. When all, or a portion, of the Contract Time is specified as a calendar completion date, the time is presumed to have been determined by considering the Proposal quantities, normal weather for the locality and season of the year, and the necessity of having the work completed by the specified date. The time may be extended by the Engineer only if the delay is considered “Excusable” in accordance with MN/DOT 1806.2 Types of Delays.

SP-10 (1807) FAILURE TO COMPLETE WORK ON TIME
The provisions of MN/DOT 1807 shall apply in full to both the Substantial Completion Date and the Final Completion Date.

SP-11 (1901) MEASUREMENT AND PAYMENT
The provisions of MN/DOT 1901 are supplemented with the following:

The work under these projects will be measured in accordance with section 012200 of Appendix A of these special provisions.

- END -
APPENDIX A
TECHNICAL SPECIAL PROVISIONS

CHESTER CREEK BANK
STABILIZATION

City Project #'s: 1280, 1281, 1283, 1349, 1350, 1351, 1352, 1353
CERTIFICATION

I HEREBY CERTIFY THAT THIS plan, SPECIFICATION or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Signature

Typed or Printed Name

Date

License No.

---

I HEREBY CERTIFY THAT THIS plan, SPECIFICATION or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Signature

Typed or Printed Name

Date

License No.
APPENDIX A
TECHNICAL SPECIAL PROVISIONS
City Job Number: 1280, 1281, 1283, 1349, 1350, 1351, 1352, 1353
CHESTER CREEK BANK STABILIZATION
February 22, 2016

Table of Contents

01 22 00 Measurement and Payment................................................................. 12 pages
01 33 00 Submittal Procedures ........................................................................... 6 pages
01 51 36 Control of Water .................................................................................. 3 pages
01 55 00 Access Roads and Parking .................................................................. 4 pages
01 56 39 Temporary Tree and Plant Protection .................................................... 3 pages
02 41 00 Demolition ............................................................................................ 3 pages
03 30 00 Cast-in-Place Concrete ........................................................................ 12 pages
31 10 00 Site Preparation ................................................................................... 3 pages
31 11 00 Clearing and Grubbing ........................................................................ 4 pages
31 20 00 Earth Moving ......................................................................................... 8 pages
31 25 00 Erosion and Sedimentation Control ....................................................... 6 pages
31 37 00 Riprap and Boulders ........................................................................... 3 pages
32 90 00 Site Restoration ................................................................................... 16 pages
32 95 00 Establishment Period Maintenance and Management .......................... 4 pages
33 41 13 Public Storm Utility Drainage Piping .................................................... 3 pages
35 31 00 Shoreline Protection ............................................................................. 12 pages
SECTION 01 22 00
MEASUREMENT AND PAYMENT

PART 1: GENERAL

1.01 GENERAL

A. This Section of the Specifications describes the measurement and payment for the Work to be done under the items listed on Exhibit A.

B. Each unit or lump sum price stated on Exhibit A shall constitute full compensation as herein specified for each item of work completed in accordance with the requirements of the Contract Documents including Drawings and Specifications, including all clean up and restoration.

C. All costs in connection with the Work, including furnishing all materials, machinery, supplies and appurtenances; providing all construction equipment and tools; and performing all necessary labor, coordination, supervision, and management to fully complete the Work shall be included in the unit or lump sum prices quoted on Exhibit A. All Work not specifically set forth as a separate bid item herein shall be considered a subsidiary obligation of the Contractor and all costs in connection therewith shall be included in the amounts and prices submitted on Exhibit A. The price on Exhibit A shall include all work necessary to complete all of the Work.

1.02 ESTIMATED QUANTITIES

A. The “Extension” price shall constitute full payment to the Contractor for each Bid Item listed on Exhibit A. The Extension price shall be sufficient to cover all the work outlined for that Bid Item in the Contract Documents and shall include all labor, materials, storing, equipment, overhead, profit, insurance, tags, etc. necessary to complete the work as specified. Adjustments to the Extension price shall only be made if there is a change to the Drawings. In the case of changes made in accordance with the Contract Documents, the new Extension price shall be computed as the product of the Contractor Bid Quantity, plus or minus the plan quantity change, and the Unit Price. Actual quantities shall not be measured in the field as the basis for payment unless specifically indicated in the Specifications for the individual Bid Items as indicated by the term “measured in the field.” Payment for certain specific Bid Items shall be on a unit price basis as indicated by the term “measured in the field” on the measurement description line for the Bid Item. Payment for these Bid Items shall be the product of the actual field-measured quantity and the Unit Price. The Unit Price shall include all labor, materials, storing, equipment, overhead, profit, insurance, tags, etc. necessary to complete the work as specified.

1.03 INTENT OF EXHIBIT A ORGANIZATION

A. Payment for all Work shall be in accordance with the terms and conditions set forth elsewhere in the Contract Documents and the Contractor's Bid prices set forth in Contractor's conformed bids on Exhibit A. The Bid items set forth in Exhibit A subdivide the Project for purposes of measurement and payment only, and are intended to represent the entire and complete Project as set forth in the Contract Documents. The Bid items set forth in Exhibits
Exhibit A shall constitute full compensation to Contractor for providing all supervision, labor, material, equipment, tools, supplies, and overhead and profit to complete the Work in complete accordance with the Contract Documents.

B. The following paragraphs provide additional descriptions of the Work included in each of the Bid items subject to the provisions of paragraphs 1.01, 1.02, and 1.03 of this Section

1. Some of the Bid items are based on unit lump sum prices. Partial progress payment for those unit lump sum items shall be made in accordance with monthly estimates of percent completed for each item based on the breakdown of the lump sum price in Contractor's approved Schedule of Values. If Contractor does not provide a breakdown of a lump sum price on the approved Schedule of Values, the lump sum price will not be paid, in whole or in part, until all work included in the lump sum item has been completed.

2. Other Bid items are based on Unit Prices. For those items, progress payments shall be based on the actual quantities of each item of Work completed in accordance with the Contract Documents.

C. Additional procedures for submitting and processing progress payments are set forth elsewhere in the Contract Documents.

1.04 BID ITEMS FOR 2016 CHESTER CREEK BANK STABILIZATION PROJECTS

A. Project Mobilization/Demobilization

1. Method of Measurement: Project Mobilization/Demobilization will be measured on the basis of unit lump sum (LS).

2. Basis of Payment: Contractor will be paid a unit lump sum (L.S.) price for project mobilization/demobilization. The lump sum price shall be payment in full for the costs of all supervision, labor, materials, equipment, overhead and profit, and performing all operations as are necessary for mobilization and demobilization, all complete as specified. Project mobilization/demobilization shall include the Contractor’s premium for performance and payment bonds and/or any special insurance obtained for this project; development, implementation and maintenance of appropriate health and safety plan; implementation of all safety precautions; preparing and transmitting the required submittals; obtaining all permits required of the Contractor; furnishing, installing and maintaining Contractor’s facilities; providing all work area security; providing all electrical, water and telephone services needed by Contractor; furnishing materials at Contractor’s expense where required; furnishing and installing project sign for Chester Creek Bank Stabilization; identifying and locating existing utilities; incidental removals; required meetings and coordination; all traffic safety precautions; control of dust arising during performance of the Work; regular street sweeping; implementing best management practices (BMP’s) for erosion control not included in other Bid Items; regular site cleanup; project closeout upon completion of the Work, and other items not specifically paid for but included in the total scope of the Work.

B. Control of Water

1. Method of Measurement: Control of Water will be measured on the basis of unit lump sum (LS).
2. **Basis of Payment**: Contractor will be paid a unit lump sum (LS) price for control of water. This lump sum price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to control water in the work areas shown on the Drawings and specified herein. Control of water shall include the provision, operation and maintenance of pumps and/or dewatering systems along with any temporary barriers, water plugs, temporary piping, and energy dissipation at outlets as necessary to allow the proper construction of the Work.

C. **Rock Construction Entrance**

1. **Method of Measurement**: Rock Construction Entrance, will be measured per each (EA) Rock Construction Entrance installed as measured in the field.

2. **Basis of Payment**: Contractor will be paid a unit price per each (EA) rock construction entrance installed, all complete as specified. This unit price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to furnish, install, and maintain the construction entrance for the duration of the Work, all complete as specified. Eighty (80) percent of the unit price will be paid for furnishing and installing the rock erosion control construction entrance and twenty (20) percent of the unit price will be paid upon removal of the rock erosion control entrance and restoration of the area at the completion of the project.

D. **Maintenance and Restoration of Access Paths**

1. **Method of Measurement**: Maintenance and Restoration of Access Paths will be measured on the basis of unit lump sum (LS).

2. **Basis of Payment**: Contractor will be paid a unit lump sum (LS) price for Maintenance and Restoration of Access Paths, all complete as specified. This lump sum price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations necessary to install, maintain, and remove access paths at the completion of the Work, all complete as specified.

E. **Clearing and Grubbing**

1. **Method of Measurement**: Clearing and Grubbing will be measured on the basis of unit lump sum (LS).

2. **Basis of Payment**: Contractor will be paid a unit lump sum (LS) for clearing, grubbing and disposal of trees and brush, all complete as specified. This lump sum price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to remove and disposal of brush and trees and perform buckthorn stump treatment as indicated on the Drawings and as marked in the field by Engineer, all complete as specified.

F. **Selected Debris Removal and Off-Site Disposal**

1. **Method of Measurement**: Selected Debris Removal and Off-Site Disposal will be measured on the basis of plan quantities of proposed in-place volume in cubic yards rounded to the nearest cubic yard (CY) as measured on the Drawings.
2. **Basis of Payment**: Contractor will be paid a unit price per cubic yard (CY) for selected debris removal and off-site disposal, all complete as specified. This lump sum price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to remove selected debris from the existing creek channel and properly dispose of materials off-site at a location selected by Contractor and approved by Engineer and Engineer, all complete as specified.

G. Sediment Removal and On-site Disposal

1. **Method of Measurement**: Sediment Removal and On-site Disposal will be measured on the basis of **plan quantities of proposed in-place volume** in cubic yards rounded to the nearest cubic yard (CY) as measured on the Drawings.

2. **Basis of Payment**: Contractor will be paid a unit lump sum (CY) price for the removal and on-site disposal of excavated sediment material, all complete as specified. This lump sum price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to remove and dispose of sediment material as shown on the Drawings or as directed by the Engineer in the field, all complete as specified.

H. Sediment Removal and Off-site Disposal

1. **Method of Measurement**: Sediment Removal and Off-site Disposal will be measured on the basis of **plan quantities of proposed in-place volume** in cubic yards rounded to the nearest cubic yard (CY) as measured on the Drawings.

2. **Basis of Payment**: Contractor will be paid a unit price per cubic yard (CY) for the removal and off-site disposal of excavated sediment material, all complete as specified. This lump sum price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to remove and dispose of sediment material off-site at a location selected by Contractor and approved by Engineer and Engineer, all complete as specified.

I. Boulder Vane (Cross and J-Hook)

1. **Method of Measurement**: Boulder Vane will be measured on the basis of unit length in linear feet (LF) as measured in the field by actual horizontal survey or other measurement by Engineer and rounded off to the nearest whole foot. Measurement shall be along the centerline of the uppermost course of boulders, end to end.

2. **Basis of Payment**: Contractor will be paid a unit price per linear foot (LF) of boulder vane installed, all complete as specified. This unit price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to furnish and install cross vanes and J-hook vanes, including but not limited to sub-cutting base, bank grading, riprap for bedding, filter rock or fabric, and boulders set at grades shown in the Drawings and as directed by Engineer, including excavation and transport of excess materials to soils storage area, all complete as specified.
J. Toewood
1. **Method of Measurement**: Toewood will be measured on the basis of unit length in linear feet (LF) along the stream bank as measured in the field by actual horizontal survey or other measurement by Engineer and rounded off to the nearest whole foot.

2. **Basis of Payment**: Contractor will be paid a unit price per linear foot (LF) of toe wood installed, all complete as specified. This unit price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to furnish and install toe wood, including but not limited to excavation, subgrade preparation, placement of footer logs, root wads, woody debris, live cuttings, sill logs, boulders, and backfilling as shown on the Drawings and as directed by Engineer, all complete as specified. This unit price shall include the furnishing of logs, tree trunks, rootballs and woody debris for constructing the toewood section as shown in the drawings. The soil lifts and live stakes shown in the toewood detail shall be paid for under the Vegetated Reinforced Soil Slope (VRSS) and Live Stakes pay items.

K. Vegetated Reinforced Soil Slope (VRSS)
1. **Method of Measurement**: Vegetated Reinforced Soil Stabilization will be measured on the basis of in place area in square foot face (SFF) as measured in the field by actual horizontal survey or other measurement by Engineer and rounded off to the nearest whole square foot. The VRSS height shall be measured as shown on the plans, and the length shall be measured from upstream starting point to downstream ending point of the VRSS.

2. **Basis of Payment**: Contractor will be paid a unit price per square foot face (SFF) of the vegetated reinforced stabilized slope installed, all complete as specified. This unit price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to furnish and install VRSS, including but not limited to rip rap, fabric, streambed gravel, filter, fertilizer, dormant cuttings, wood stakes, seed and fill to grades shown in the Drawings and as directed by Engineer, including excavation and transport of excess materials to soils storage area, all complete as specified.

L. Live Stake
1. **Method of Measurement**: Live Stake will be measured per each (EA) Live Stake installed as recorded in the field by Engineer.

2. **Basis of Payment**: Contractor will be paid a unit price per each (EA) live stake installed, all complete as specified. This unit price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to furnish, install, and maintain the live stakes for the duration of the Work, all complete as specified.

M. French Drain
1. **Method of Measurement**: French Drain, will be measured on the basis of unit length in linear feet (LF) as measured in the field by actual horizontal survey or other measurement by Engineer and rounded off to the nearest whole foot.
2. **Basis of Payment**: Contractor will be paid a unit price per in linear feet (LF) for the installed French drain, all complete as specified. This unit price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to furnish, install, and maintain the French drain for the duration of the Work, all complete as specified including but not limited to geotextile fabric, washed rock, and corrugated drain tile to grades shown in the Drawings and as directed by Engineer, including excavation and transport of excess materials to disposal area, all complete as specified.

N. **Corrugated Polyethylene Drain Tile with Sock**

1. **Method of Measurement**: Corrugated Polyethylene Drain Tile with Sock, will be measured on the basis of unit length in linear feet (LF) as measured in the field by actual horizontal survey or other measurement by Engineer and rounded off to the nearest whole foot.

2. **Basis of Payment**: Contractor will be paid a unit price per in linear feet (LF) for the installed corrugated polyethylene drain tile, all complete as specified for the diameter of pipe indicated in the drawings. This unit price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to furnish, install, and maintain the drain tile for the duration of the Work, all complete as specified including but not limited to corrugated drain tile, rodent guard and fabric sock to grades shown in the Drawings and as directed by Engineer, including excavation and transport of excess materials to disposal area, all complete as specified.

O. **Site Grading**

1. **Method of Measurement**: Site Grading will be measured on the basis of plan quantities of proposed in-place volume in cubic yards rounded to the nearest cubic yard (CY) as measured on the Drawings.

2. **Basis of Payment**: Contractor will be paid a unit price per cubic yard (CY) for site grading as specified. This unit price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations necessary to excavate, fill, haul, stockpile excavated material, and compact fill; and strip, stockpile and install existing topsoil to the grades shown in the Drawings and all complete as specified.

P. **Common Fill**

1. **Method of Measurement**: Common Fill will be measured on the basis of plan quantities of proposed in-place volume in cubic yards rounded to the nearest cubic yard (CY) as measured on the Drawings.

2. **Basis of Payment**: Contractor will be paid a unit price per cubic yard (CY) for common fill as specified. This unit price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations necessary to furnish, haul, temporarily stockpile, fill, and compact fill; and strip, stockpile and install existing topsoil to the grades shown in the Drawings and all complete as specified.
Q. Import Topsoil

1. **Method of Measurement**: Import Topsoil will be measured on the basis of weight in tons (TON) of topsoil as measured in the field and rounded to the nearest 0.1 ton.

2. **Basis of Payment**: Contractor will be paid a unit price per ton (TON) for imported select topsoil determined based on weigh tickets, provided to the Engineer by Contractor from a certified scale. Tickets will be added together and rounded to the nearest 0.1 ton. Only weigh tickets for loads of topsoil used for construction as shown on the Drawings or as directed by the Engineer will be included in the measurement. Loads will not be included in the measurement unless a weigh ticket accompanies the load and a copy is provided to the Engineer by the end of the next working day. Contractor will be paid a unit price per ton for providing select topsoil, all complete as specified. This unit price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations necessary to furnish, verify material properties with testing, load, haul and place imported select topsoil all complete to the grades shown in the Drawings and in accordance with the Specifications, all complete as specified.

R. Riprap

1. **Method of Measurement**: Riprap will be measured on the basis of unit weight in tons (TON) of riprap as measured in the field and rounded to the nearest 0.1 ton.

2. **Basis of Payment**: Contractor will be paid a unit price per ton (TON) for the class of riprap indicated in the drawings determined based on weigh tickets, provided to the Engineer by Contractor from a certified scale. Tickets will be added together and rounded to the nearest 0.1 ton. Only weigh tickets for loads of riprap used for construction as shown on the Drawings or as directed by the Engineer will be included in the measurement. Loads will not be included in the measurement unless a weigh ticket accompanies the load and a copy is provided to the Engineer by the end of the next working day. Contractor will be paid a unit price per ton for providing riprap, of the type and class specified, all complete as specified. This unit price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations necessary to furnish and install riprap, verify material properties with testing, and furnish and install granular filter aggregate and/or filter fabric (incidental as shown on the Drawings) all complete to the grades shown in the Drawings and in accordance with the Specifications, all complete as specified.

S. Rock Filter Dike

1. **Method of Measurement**: Rock Filter Dike will be measured on the basis of unit weight in tons (TON) of rock filter dike as measured in the field and rounded to the nearest 0.1 ton.

2. **Basis of Payment**: Contractor will be paid a unit price per ton (TON) for rock filter dike determined based on weigh tickets, provided to the Engineer by Contractor from a certified scale. Tickets will be added together and rounded to the nearest 0.1 ton. Only weigh tickets for loads of rock filter dike used for construction as shown on the Drawings or as directed by the Engineer will be included in the measurement. Loads will not be included in the measurement unless a weigh ticket accompanies the load and a copy is provided to the Engineer by the end of the next working day. Contractor will be paid a unit price per ton for providing rock filter dike, of the type and class specified, all
complete as specified. This unit price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations necessary to furnish and install rock filter dike, all complete to the grades shown in the Drawings and in accordance with the Specifications and removal of rock filter dike following the Work, all complete as specified. Eighty (80) percent of the unit price will be paid for furnishing and installing the rock filter dike and twenty (20) percent of the unit price will be paid upon removal of the rock filter dike at the completion of the project.

T. Apron Endwall and Concrete Dissipator Structure

1. **Method of Measurement**: Apron Endwall and Concrete Dissipator Structure will be measured per each (EA) Apron Endwall and Concrete Dissipator Structure installed.

2. **Basis of Payment**: Contractor will be paid a unit price per each (EA) apron endwall and per each (EA) concrete dissipator based on the sizes identified in the drawings and specifications all complete as specified. The unit price shall be payment in full for the costs of all excavation, supervision, material, equipment, labor, supplies, profit, overhead, and preforming all operations as are necessary to furnish, install and maintain the apron endwall and concrete dissipator structure. This unit price for apron endwall shall include a poured concrete toe and connection to existing storm sewer. The unit price for concrete dissipator structure shall include granular base and connection to existing storm sewer.

U. Silt Fence

1. **Method of Measurement**: Silt Fence will be measured on the basis of unit length in linear feet (LF) as measured in the field by actual horizontal survey or other measurement by Engineer and rounded to the nearest whole foot. Measurement shall be for a single row, end to end, with no allowance for overlapping.

2. **Basis of Payment**: Contractor will be paid a unit price per linear foot (LF) for silt fencing, all complete as specified. This unit price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to furnish, install, maintain the silt fence for the duration of the Work, and removal of the silt fence following the Work, all complete as specified. Eighty (80) percent of the unit price will be paid for furnishing and installing the silt fencing and twenty (20) percent of the unit price will be paid upon removal of the silt fencing at the completion of the project.

V. Silt Fence Baffle

1. **Method of Measurement**: Silt Fence Baffle will be measured on the basis of unit length in linear feet (LF) as measured in the field by actual horizontal survey or other measurement by Engineer and rounded to the nearest whole foot. Measurement shall be for a single row, end to end, with no allowance for overlapping.

2. **Basis of Payment**: Contractor will be paid a unit price per linear foot (LF) for silt fence baffle, all complete as specified. This unit price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to furnish, install, maintain the silt fence baffle for the duration of the Work, and removal of the silt fence baffle following the Work, all
complete as specified. Eighty (80) percent of the unit price will be paid for furnishing and installing the silt fencing and twenty (20) percent of the unit price will be paid upon removal of the silt fencing at the completion of the project.

W. Filter Log

1. **Method of Measurement:** Filter Log will be measured on the basis of unit length in linear feet (LF) **as measured in the field** by actual horizontal survey or other measurement by Engineer and rounded to the nearest whole foot. Measurement shall be for a single row, end to end, with no allowance for overlapping.

2. **Basis of Payment:** Contractor will be paid a unit price per linear foot (LF) for filter log, all complete as specified. This unit price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to furnish, install, maintain the filter log for the duration of the Work, and removal of the filter log following the Work, all complete as specified. Eighty (80) percent of the unit price will be paid for furnishing and installing the filter log and twenty (20) percent of the unit price will be paid upon removal of the filter log at the completion of the project.

X. Erosion Control Blanket

1. **Method of Measurement:** Erosion Control Blanket will be measured on the basis of unit area in square yards (SY) **as measured in the field** by actual horizontal survey or other measurement by Engineer and rounded to the nearest square yard. Measurement will be of the extent, with no allowance for overlapping.

2. **Basis of Payment:** Contractor will be paid a unit price per square yard (SY) for erosion control blanket, all complete as specified for the type indicated in the drawings. This unit price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to furnish, install, anchor in accordance with manufacturer’s recommendations, and maintain the erosion control blanket for the duration of the Work, all complete as specified.

Y. Natural Fiber Matting

1. **Method of Measurement:** Natural Fiber Matting will be measured on the basis of unit area in square yards (SY) **as measured in the field** by actual horizontal survey or other measurement by Engineer and rounded to the nearest square yard. Measurement will be of the extent, with no allowance for overlapping.

2. **Basis of Payment:** Contractor will be paid a unit price per square yard (SY) for Natural Fiber Matting, all complete as specified. This unit price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to furnish, install, anchor in accordance with manufacturer’s recommendations, and maintain the Natural Fiber Matting for the duration of the Work, all complete as specified.

Z. Straw Mulch

1. **Method of Measurement:** Straw Mulch will be measured on the basis of unit area in
square yards (SY) **as measured in the field** by actual horizontal survey or other measurement by Engineer and rounded to the nearest square yard. Measurement will be of the extent, with no allowance for overlapping.

2. **Basis of Payment**: Contractor will be paid a unit price per square yard (SY) for straw mulch, all complete as specified. This unit price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to furnish, install, and maintain the straw mulch for the duration of the Work, all complete as specified.

**AA. Seeding, Native Mix**

1. **Method of Measurement**: Seeding Native Mix will be measured on the basis of **planed quantity by weight** or other measurement by Engineer and rounded to the nearest square pound.

2. **Basis of Payment**: Contractor will be paid a unit price per square yard (SY) for seeding area with all appropriate mixes, all complete as specified. This unit price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to furnish and install seeding (seed) as shown in the Drawings and in accordance with the Specifications, all complete as specified.

**BB. Seeding, Turf**

1. **Method of Measurement**: Seeding Turf will be measured on the basis of area seeded in square yards (SY) **as measured in the field** by actual horizontal survey or other measurement by Engineer and rounded to the nearest square yard.

2. **Basis of Payment**: Contractor will be paid a unit price per square yard (SY) for seeding area with all appropriate mixes, all complete as specified. This unit price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to furnish and install seeding (seed) as shown in the Drawings and in accordance with the Specifications, all complete as specified.

**CC. Trees**

1. **Method of Measurement**: Trees will be measured per each (EA) tree furnished and installed.

2. **Basis of Payment**: Contractor will be paid a unit price per each (EA) tree based on sizes identified in the Drawings and Specifications, all complete as specified. This unit price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to furnish, install, and maintain the tree, all complete as specified.

**DD. Shrubs**

1. **Method of Measurement**: Shrubs will be measured per each (EA) shrub furnished and installed.
2. Basis of Payment: Contractor will be paid a unit price per each (EA) shrub based on sizes identified in the Drawings and Specifications, all complete as specified. This unit price will be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to furnish, install, and maintain the shrub, all complete as specified.

EE. Plugs

1. Method of Measurement: Plugs will be measured per each (EA) plug furnished and installed.

2. Basis of Payment: Contractor will be paid a unit price per each (EA) plug based on sizes identified in the Drawings and Specifications, all complete as specified. This unit price will be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to furnish, install, and maintain the plug, all complete as specified.

FF. Root Rap

1. Method of Measurement: Root Rap will be measured on the basis of unit area in square yards (SY) as measured in the field by actual horizontal survey or other measurement by Engineer and rounded to the nearest square yard.

2. Basis of Payment: Contractor will be paid a unit price per square yard (SY) for Root Rap, all complete as specified. This unit price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to furnish and install root rap as shown in the Drawings and in accordance with the Specifications, all complete as specified. The unit price for root rap shall include topsoil mixture as specified in the Drawings.

GG. Foot Path Construction & Restoration

1. Method of Measurement: Foot Path Construction & Restoration will be measured on the basis of lineal foot (LF) as measured in the field by actual horizontal survey or other measurement by Engineer and rounded to the nearest lineal foot.

2. Basis of Payment: Contractor will be paid a unit price per lineal foot (LF) for foot path construction and restoration, all complete as specified. This unit price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to furnish and install foot paths as shown in the Drawings and in accordance with the Specifications, all complete as specified. The unit price for foot path construction & restoration shall include clearing and grubbing, excavation, aggregate, seed mixture, topsoil and erosion control measures.

HH. Deadfall and Debris Removal and Off-Site Disposal

1. Method of Measurement: Deadfall and Debris Removal and Off-Site Disposal will be measured on the basis of unit area in square yards (SY) as measured in the field by actual horizontal survey or other measurement by Engineer and rounded to the nearest square yard.
2. **Basis of Payment**: Contractor will be paid a unit price per square yard (SY) for deadfall and debris removal and off-site disposal all complete as specified. This unit price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit, and overhead, and performing all operations as are necessary to remove and dispose of deadfall and debris off-site as shown in the drawings and in accordance with the specifications, all complete as specified.

II. **Biolog**

1. **Method of Measurement**: Biolog will be measured on the basis of unit length in linear feet (LF) **as measured in the field** by actual horizontal survey or other measurement by Engineer and rounded off to the nearest whole foot. Measurement shall be for a single row, end to end, with no allowance for overlapping.

2. **Basis of Payment**: Contractor will be paid a unit price per linear foot (LF) for a single row of biolog (biodegradable erosion control log), all complete as specified. This unit price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to furnish, install, anchor in accordance with manufacturer’s recommendations, and maintain the biologs for the duration of the Work, all complete as specified. The unit price shall include regular maintenance and repair, if required.

JJ. **24” HDPE Culvert**

1. **Method of Measurement**: 24” HDPE Culvert will be measured on the basis of planned quantity.

2. **Basis of Payment**: Contractor will be paid a unit price per planned quantity for a single 24” HDPE culvert, all complete as specified. This unit price shall be payment in full for the costs of all supervision, materials, equipment, labor, supplies, profit and overhead, and performing all operations as are necessary to furnish, install, and maintain the 24” HDPE culvert for the duration of the Work, all complete as specified. The unit price shall include regular maintenance and repair, if required.

1.05 **SUBMITTALS**

A. No submittals are necessary for this section.

1.06 **BASIS FOR COMPENSATION**

A. All costs to comply with the requirements of this Section of the Specifications shall be considered to be included in the Contract Price and no additional compensation will be provided.

**PART 2: PRODUCTS [NOT USED]**

**PART 3: EXECUTION [NOT USED]**

**END OF SECTION 01 22 00**
SECTION 01 33 00

SUBMITTAL PROCEDURES

PART 1: GENERAL

1.01 GENERAL SUBMITTAL PROCEDURES

A. The Contractor shall:

1. Transmit a minimum of one copy of each submittal labeled with the Project name, name of the submittal, and Section and page number of these Contract Documents in which the submittal was requested. Indicate the type or purpose of the submittal as more fully described elsewhere in this Section with regard to the Schedule of Submittals. Transmit the correct number of copies as described below for each type of submittal. A transmittal letter stating the same information shall accompany each submittal.

2. Transmit all hard copy submittals to Engineer.

3. Transmit all electronic submittals to the attention of the Engineer via e-mail with Adobe PDF attachments.

4. Apply Contractor’s stamp, signed or initialed certifying that review and verification of products required, field dimensions, adjacent construction work, and coordination of information, is in accordance with the requirements of the Work and Contract Documents. Unstamped or unsigned submittals and submittals that have not been thoroughly checked by Contractor will be returned without action. Submittals from Subcontractors or vendors will be returned without action.

5. Schedule submittals to expedite Project and in accordance with the Schedule of Submittals to be prepared by Contractor. Coordinate submission of related items.

6. Identify all variations or deviations from the Contract Documents and identify alternative products or system limitations that may be detrimental to successful performance of the completed Work.

7. Provide space for Engineer’s review, stamps and comments.

8. Revise and resubmit submittals as required in a timely manner. Identify all changes made since previous submittal.

9. Promptly distribute copies of reviewed submittals to Subcontractors, Suppliers, and other concerned parties. Instruct parties to promptly report any inability to comply with provisions.

10. Contractor shall not proceed with any Work requiring review by Engineer or Engineer until satisfactory submittals have been reviewed and returned to Contractor.

11. Allow a minimum of 7 calendar days for Engineer or Engineer review of submittals.
B. All submittals that are made that are not specifically required by the Contract Documents will be returned without action.

C. All submittals shall come from the Contractor and submittals directly from Subcontractors or vendors will be returned without action.

1.02 PROGRESS SCHEDULE & SCHEDULE OF OPERATIONS [NOT USED]

1.03 SCHEDULE OF VALUES [NOT USED]

1.04 SCHEDULE OF SUBMITTALS [NOT USED]

1.05 REVIEW OF SUBMITTALS

A. The Engineer’s review of engineering data will cover only general conformity of the data to the Specifications and Contract Documents, external connections, and interfaces with equipment and materials furnished under separate specifications. The Engineer’s review does not indicate a thorough review of all dimensions, quantities, and details of the equipment, material, device, or item indicated or the accuracy of the information or documentation submitted; nor shall review or approval by the Engineer be construed as relieving the Contractor from any and all responsibility for errors or deviations from the requirements of the Contract Documents.

B. All engineering data submitted, after final processing by the Engineer shall become a part of the Contract Documents and the work indicated or described thereby shall be performed in conformity therewith unless otherwise required by the Engineer.

1.06 SUBMITTAL FOR INFORMATION OR DOCUMENTATION

A. Submit one copy to Engineer.

B. Submittal shall be made at least 7 calendar days before the subject of the submittal is to be incorporated into the Work.

C. Submittal is for the purpose of formal verification that the subject of the submittal conforms to the requirements of the Specifications, for formal documentation of the Work, or both.

D. No action is required by Engineer. Engineer will generally notify Contractor if deficiencies are identified; however Contractor is solely responsible for ensuring that the subject of the submittal conforms to the requirements of the Specifications.

1.07 SUBMITTAL FOR REVIEW

A. Submit one copy to the Engineer.

B. Submittal shall be made at least 14 calendar days before the subject of the submittal is to be incorporated into the Work. Engineer will respond within 7 calendar days from receipt of submittal.

C. Submittal is for the purpose of providing opportunity to Engineer for review and comment on the subject of the submittal.
D. Engineer will respond to the submittal either with a list of comments or indicating no comments.

E. If Engineer’s comments indicate a deficiency with respect to the requirement of the Specifications, Contractor shall amend the submittal and resubmit. Engineer will again respond to the resubmittal.

F. If Engineer’s comments are in regards to an issue which based upon the Contract Documents is at Contractor’s discretion, Contractor shall furnish additional information provide justification, and otherwise cooperate in addressing and resolving Engineer’s comments.

G. Contractor shall remain solely responsible for ensuring that the subject of the submittal conforms to the requirements of the Specifications.

1.08 SUBMITTAL FOR APPROVAL

A. Submit one copy to the Engineer.

B. Submittal shall be made at least 14 calendar days before the subject of the submittal is to be incorporated into the Work. Engineer will respond within 7 calendar days from receipt of submittal.

C. Submittals shall be stamped with Contractor’s approval. Contractor’s stamp shall be a representation that Contractor has assumed full responsibility for determining the submittal requirements and verifying that the subject of the submittal conforms to the requirements of the Specifications. Submittals not bearing Contractor’s stamp will be returned without review or action.

D. Engineer will review, make notations as appropriate, stamp, and return submittals to Contractor. Engineer’s stamp and Contractor’s required action are described below:

1. NO EXCEPTIONS TAKEN. Contractor may proceed without further action.

2. RECOMMENDED REVISIONS NOTED. Contractor shall review Engineer’s notations and revise subject of submittal as required to conform to the requirements of the Drawings and Specifications before proceeding with the Work. Resubmittal is not required.

3. RESUBMIT. Contractor shall review Engineer’s notations, revise subject of submittal as required to conform to the requirements of the Drawings and Specifications, and resubmit to Engineer for additional action.

4. REVIEW COMPLETE, FURNISH THREE FILE COPIES. Contractor shall furnish the requested number of copies and may proceed without further action.

E. No work shall be performed in connection with the fabrication or manufacture of equipment and materials until the data have been reviewed by the Engineer except at the Contractor’s own risk and responsibility. Work may proceed when submittals have been returned marked RECOMMENDED REVISIONS NOTED, provided the work is performed in accordance with the Engineer’s notations, or NO EXCEPTIONS TAKEN.
F. If changes are made at the project site to correct manufacturing errors, revised drawings incorporating the changes shall be prepared and submitted to the Engineer.

G. Drawings shall be in sufficient detail to indicate the kind, size, and arrangement of component materials and devices; the external connections, anchorages, and supports required; the dimensions needed for installation and correlation with the foundations; and other information specifically requested herein.

H. Each drawing submitted shall be black line on white background or blue line on white background. Print size shall not exceed 24 inches by 36 inches.

I. Each drawing submitted shall be clearly marked with the name of the project, the specification title, the specification number, the Engineer’s assigned number when so advised, and the Contractor’s name. If catalog pages are submitted, the applicable items shall be indicated.

1.09 SUBMITTAL OF SHOP DRAWINGS

A. When required in individual sections of these specifications, submit one opaque reproductions of Shop Drawings in accordance with the Schedule of Submittals.

B. Contractor shall comply with all requirements of the contract documents and the General Submittal Procedures described elsewhere in this Section.

C. The data shown on the Shop Drawings shall be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer that the materials and equipment Contractor proposes to provide meet the requirements of the Contract Documents and to enable Engineer to review the information for the limited purposes indicated below.

D. Before submitting each Shop Drawing, Contractor shall have determined, verified, and certified the following:

1. All field measurements, quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers, and similar information;

2. All issues regarding fitness for intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the Work; and

3. All information relative to Contractor’s sole responsibilities in respect of means, methods, techniques, sequences, and procedures of construction and safety precautions and programs incident thereto.

E. Contractor shall also have reviewed and coordinated each Shop Drawing with other Shop Drawings and with the requirements of the Work and the Contract Documents. Any disclaimers on Contractor’s stamp or otherwise stated by Contractor on Shop Drawings shall not limit Contractor’s responsibilities set forth above.

F. Engineer’s review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed
G. Engineer will review and return one marked copies to Contractor within seven (7) calendar days following receipt. Contractor shall not proceed with related Work until approved submittal is returned.

H. If Engineer’s comments require resubmittal, Contractor shall make the revisions indicated and resubmit as for an original submittal. Engineer will review as for an original submittal.

I. Engineer’s comments do not require resubmittal, Contractor shall make the revisions indicated and transmit to Engineer one (1) reproducible transparency (if larger than 11 inches by 17 inches) or one clean first generation copy suitable for reproduction. This original shall bear Contractor’s certification in accordance with the requirements of the contract documents.

J. Following preparation and submittal of final corrected reproducible, Contractor shall reproduce and distribute to Subcontractors and/or Suppliers.

K. If actual installation does not conform to approved Shop Drawings, notify Engineer. Note revisions on reproducible and submit with record documents.

1.10 ALTERNATE PRODUCTS [NOT USED]

1.11 RECORD DOCUMENTS [NOT USED]

1.12 PRODUCT WARRANTY SUBMITTAL REQUIREMENTS

A. Submit three (3) executed copies prior to Substantial Completion.

B. All warranty or guarantee certificates shall be signed by Contractor and all other parties as requested in specific sections.

C. All product warranty submittals shall conform to the applicable requirements of this section and the other administrative and procedural requirements specified in the individual specification sections.

1.13 BASIS FOR COMPENSATION

A. All costs to comply with the requirements of this Section of the Specifications shall be considered to be included in the Contract Price and no additional compensation will be provided.

PART 2: PRODUCTS [NOT USED]
PART 3: EXECUTION [NOT USED]

END OF SECTION 01 33 00
SECTION 01 51 36

CONTROL OF WATER

PART 1: GENERAL

1.01 SUMMARY

A. All Work included in this Section shall be performed in accordance with the following paragraphs, the General Requirements set forth in Division 1 of these Specifications, and the provisions of the other Contract Documents.

B. This section includes furnishing all labor, equipment, materials, and performing all operations necessary to control water in the work areas shown on the Drawings and specified herein. This work shall include the provision, operation and maintenance of pumps and/or diversion systems along with any temporary barriers, water plugs, or temporary piping necessary to allow the proper construction of the Work.

C. Contractor shall restore any affected areas to a condition equal to or better than the condition prior to commencement of construction.

1.02 ENVIRONMENTAL REQUIREMENTS

A. Contractor shall carry out the control of water in compliance with all federal, state and local applicable stream discharge and pollution requirements.

1.03 REFERENCES

A. Stormwater Pollution Prevention Plan (SWPPP) for the Work.

1.04 SUBMITTALS

A. At least 5 days before mobilization, Contractor shall submit its proposed water management plan to Engineer for review. This water management plan shall address control of surface water and seepage, provisions to maintain flows past the water control structure sites, and construction procedures.

B. Review and approval of water management plan does not relieve Contractor from complete responsibility for water management at the site.

1.05 SEQUENCING AND SCHEDULING

A. Water control operations shall be coordinated with the Engineer.

B. Contractor shall place erosion and sediment control measures before placing any barriers, berming or runoff diversion in accordance with Section 31 25 00 Erosion and Sedimentation Control of the Specifications.
1.06 BASIS FOR COMPENSATION

A. Compensation for all Work covered under this Section of these Specifications shall be in accordance with the provisions set forth in Section 012200 Measurement and Payment.

1.07 RELATED SECTIONS

A. Section 31 25 00 Erosion and Sedimentation Control

PART 2: PRODUCTS [NOT USED]

PART 3: EXECUTION

3.01 CONTROL OF WATER

A. Contractor will be required to manage the work area during construction to account for fluctuations in water flow and creek water levels as necessary to protect the Work and Contractor’s equipment, material, and personnel, and according to all applicable laws and regulations.

B. Contractor shall be responsible for detailed development of sequencing and staging of construction, demolition, and control of water in the work area.

C. Contractor must be aware that significant changes in flow and water level can occur in the project area at any given time. Contractor is responsible for any impacts that could result from changing water flow/level conditions.

D. Water levels and flow volumes shall be controlled in the work area by pumping or by-passing to an extent that the permanent works being performed are not adversely affected. Contractor shall provide energy dissipation measures where pumped or by-passed water re-enters the creek.

E. Contractor shall include adequate costs in the Contract Price to assure that the water in the work areas can be controlled and the work completed.

F. Contractor shall maintain all systems for controlling water for the period required to complete the Work.

G. Contractor shall remove all systems for controlling water and restore these areas to their prior level of service as part of this Work.

H. Contractor shall be solely responsible for mean and methods, integrity of any cofferdams or dewatering methods, etc. including maintaining integrity of creek function and ensuring safety of public and workers.

3.02 RESTORATION

A. Contractor shall be responsible for re-grading, filling or otherwise removing interim drainage and water control features upon completion of that portion of the water control Work. The areas shall be permanently restored as shown on the Drawings and as specified.
B. Contractor shall restore the areas affected by the control of water work to minimize erosion of exposed surfaces in accordance with the following sections of these Specifications:

1. Section 31 25 00 Erosion and Sedimentation Control
2. Section 32 90 00 Site Restoration
3. Remove all control of water facilities and sediment control measures at the completion of the work unless otherwise approved by the Engineer.

END OF SECTION 01 51 36
SECTION 01 55 00

ACCESS ROADS AND PARKING

PART 1: GENERAL

1.01 DESCRIPTION OF WORK

A. Access to the properties on which Contractor is to perform Work is provided by public roadways, public property, easements over private property, and written permission to Work on private property.

B. Where appropriate, Contractor shall comply with Laws and Regulations applicable to use of public roadways including parking of cars, trucks, and equipment; load limits; and road maintenance.

C. Any permits and fees required by Laws and Regulations for Contractor’s use of public roadways or easements shall be obtained by and paid for by Contractor.

D. Any and all damage or adverse impacts to public or private roadways, trails or parking areas, as a result of Contractor activities and operations shall be repaired or mitigated, at Contractor’s expense, to the satisfaction of the governmental agency having jurisdiction over the damaged roadway, trail, or parking areas. This includes, but is not limited to, the following:

1. City of Duluth requirements for the maintenance of roadways and traffic within their respective boundaries.

2. St. Louis County’s requirements for the maintenance of roadways and traffic on all St. Louis County roads.

3. Minnesota Department of Transportation (Mn/DOT) Standards for the maintenance of roadways and traffic on all Mn/DOT roads.

E. Access to the Site shall be limited to the Site access locations shown on the Drawings and as indicated in these Specifications.

F. Contractor is responsible for verifying access routes and restrictions for access to the Project Site, including established or practical limits on weight, haul widths, and any other limitations established by the agency or entity having jurisdiction over the roadway.

G. Contractor shall protect the existing access roads to the Project Site. Access roads shall be in a condition that allows entrance to the Site by Engineer, inspectors, and agencies at all times.

H. Contractor shall not use or obstruct any public or private roadway or driveway or portion without prior written approval. Any and all damage to such roadways or driveways as a result of Contractor activities and operations shall be repaired, at Contractor’s expense, to the satisfaction of the property Engineer.

I. Contractor shall park within staging areas designated in the Drawings.
J. The Contractor shall provide all equipment and materials necessary for the control of dust arising during the performance of the Work. Dust shall be controlled so as not to be a nuisance to homeowners, adjacent property owners, and the public. When requested by Engineer, or at other times as necessary, Contractor shall take measures to reduce dust. These measures may include, but are not limited to:

1. Sweeping and washing road
2. Watering source areas of dust
3. Temporary surfacing such as paving or sodding source areas.

K. The Contractor shall participate in pre-construction and post-construction inspections to inventory and assess road and trail conditions, and determine any corrective actions necessary to address degradation or damage caused by Contractor’s activities.

1.02 RELATED WORK

A. Section 32 90 00 Site Restoration

1.03 SUBMITTALS

A. Pre-Construction Roadway Documentation and Repair: Contractor shall submit to Engineer the documentation gathered during inspection of roadways.

B. Prior to construction, Contractor shall submit to Engineer for approval a Construction Staging/Laydown Plan.

C. During construction, Contractor shall submit to Engineer for approval any significant or substantial changes to the Staging/Laydown Plan or construction limits.

1.04 BASIS FOR COMPENSATION

A. Compensation for all Work covered under this Section of these Specifications shall be incidental to the project.

PART 2: PRODUCTS [NOT USED]

PART 3: EXECUTION

3.01 PRIMARY REGIONAL ACCESS ROADS

A. Contractor shall follow all Mn/DOT requirements and restrictions for access roads as shown on the Drawings and described in these Specifications as necessary to complete the Work.

B. Upon completion of the Project Work, Contractor shall make improvements or maintenance as necessary to leave the access roads in the same conditions as prior to start of work as per Mn/DOT standards.

3.02 SECONDARY LOCAL ACCESS ROADS

A. Contractor shall follow all City of Duluth requirements and restrictions for access roads as
shown on the Drawings and described in these Specifications as necessary to complete the Work.

B. Upon completion of the Project Work, Contractor shall make improvements or maintenance as necessary to leave the access roads in the same conditions as prior to start of work as per City of Duluth standards.

3.03 PROJECT ACCESS/HAUL ROADS

A. Contractor shall improve, maintain, and develop access roads as shown on the DRAWINGS and described in these Specifications as necessary to complete the Work.

B. Upon completion of the Project Work, Contractor shall make improvements or maintenance as necessary to leave the access roads in the conditions shown on the Drawings for Engineer's use, including adequate gravel bed material, grading, and minimum road widths.

C. Upon Completion of the Project, access roads shall be free of ruts, erosion, or pot holes.

D. All project access and haul roads shall be within designated right of way or temporary construction easements.

3.04 STAGING AREAS

A. Staging areas shall be staked according to locations as identified on the Drawings prior to start of work.

B. Contractor shall improve, maintain, and develop staging areas as shown on the Drawings and described in these Specifications as necessary to complete the Work.

C. Upon completion of the Project Work, Contractor shall restore all staging areas as indicated on the Drawings.

3.05 DUST CONTROL

A. Contractor shall keep the surface of any and all construction Work areas and haul roads moist by spraying with uncontaminated water so as to prevent, not just reduce, airborne dust. This responsibility shall require Contractor to suspend construction or haul traffic until such time as Contractor can and does prevent airborne dust. Contractor shall not overspray so as to create problems, such as tracking of material onto paved surfaces, or muddy haul roads, due to the application of excess moisture. Dust control may be necessary several times per day. Dust control shall be considered incidental to the Project with no additional compensation.

3.06 PRECONSTRUCTION ROADWAY DOCUMENTATION AND REPAIR

A. Contractor shall identify all access routes and notify respective roadway Owners of preconstruction meeting.
B. Preconstruction meeting will include the following discussion and notification relevant to Site access:

1. Contractor shall indicate what roads they anticipate hauling on
2. 48 hour notification required prior to hauling
3. Hauling hour restriction
4. Dust Control
5. Noise Control

C. Contractor shall make repairs to roadways damaged as a result of Contractor’s activities. Necessary repairs identified by the assessment shall be repaired at Contractor’s expense. Coordination with City, County and Mn/DOT officials shall be performed at Contractor’s expense.

3.07 RESTORATION OF ACCESS PATHS AND HAUL ROADS

A. Access path and haul road restoration shall be in accordance with Section 32 90 00 Site Restoration of these Specifications and as shown on the Drawings.

END OF SECTION 01 55 00
SECTION 01 56 39
TEMPORARY TREE AND PLANT PROTECTION

PART 1: GENERAL

1.01 SUMMARY
   A. All Work included in this Section shall be performed in accordance with the following paragraphs and the provisions of the other Contract Documents.
   B. This Section includes guidelines to maximize tree health and minimize tree damage throughout the construction process.

1.02 REFERENCES
      1. Mn/DOT Spec. 2101 – Clearing and Grubbing.

1.03 SUBMITTALS [NOT USED]

1.04 SEQUENCING AND SCHEDULING
   A. Meet with Engineer’s Arborist prior to starting construction to review the extent of the tree protection requirements.
   B. Complete before or sufficiently ahead of on-going rough grading, excavation, and backfill.
   C. Install temporary erosion control measures following Work of this Section.
   D. Access routes and laydown areas that require wood chip placement to prevent soil compaction shall have wood chips spread prior to accessing the site.

1.05 BASIS FOR COMPENSATION
   A. Compensation for all Work covered under this Section of these Specifications shall be incidental to the project.

1.06 RELATED SECTIONS
   A. Section 02 41 00 Demolition
   B. Section 31 11 00 Clearing and Grubbing
1.07 DEFINITIONS

A. Brush: All bushes, shrubs, and other vegetation that can be cut with a brush scythe or mowing machine, including small isolated trees having a diameter of 4 inches or less at a point 2 feet above the ground surface.

B. Trees: Trees having a diameter of 4 inches or more at a point 2 feet above the ground surface.

1.08 QUALITY ASSURANCE

A. Conform to all local regulations.

1.09 PROJECT/SITE CONDITIONS

A. The construction site will include not only the trees that will be impacted directly by the construction process, but also perimeter trees in the surrounding site. Every reasonable effort will be made to protect trees on the construction site.

B. No removing, cutting or trimming of trees shall be performed without prior approval from Engineer’s Arborist.

C. Soil Compaction damage will be controlled by:

1. No unnecessary equipment or materials will be allowed to park on, drive over, or be piled on areas or perimeter areas that will impact trees’ root system. An example of this would be a pickup truck parked in a shaded area of a project instead of a hard surface parking lot area.

2. Within the construction zone, every effort will be made to use a one-entry—one-exit traffic or loading zone area rather than multiple entries and exits which can impact all the surrounding trees.

3. Debris or construction materials will not be stored underneath or around trees. This not only prevents compaction but also prevents damage to the trunks of trees and branches through scraping or scuffing of the bark.

4. Any necessary excavation materials will not be left for extended periods, but will be disposed of in an expedient fashion to prevent compaction of soils and minimize damage to trees.

5. Any periods of heavy rains, which saturate soils, may delay construction traffic until soils dry out. Wet soils will magnify compaction problems and magnify tree damage.

6. Access routes that require equipment to travel within the drip line of existing trees shall have a travel-way constructed of a 6 inch layer of wood chips. In wooded areas the wood chips will remain in place following completion of construction activities.
PART 2: PRODUCTS

2.01 TEMPORARY TREE PROTECTION FENCE

A. Contractor shall provide temporary fence for protection of work areas and trees as directed by Engineer and as shown on the Drawings.

B. Fencing shall be a woven, highly visible, plastic fabric with metal posts as approved by Engineer.

2.02 WOOD CHIPS

A. Wood chips shall be as furnished by the contractor.

PART 3: EXECUTION

3.01 GENERAL

A. Review protection in the field with Engineer’s Arborist prior to doing Work. Protection limits will be clearly marked by Engineer’s Arborist.

3.02 PROTECTION

A. Conduct operations so as not to damage surrounding private property.

B. Protect trees intended to be saved from injury or defacement during operations.

C. Install temporary fencing at the construction limits, perimeter of construction access, and drip lines of trees to be protected prior to any construction activities in order to protect vegetation.

D. Engineer’s Arborist may require areas of mulch to be spread to minimize compaction when or where compaction cannot be avoided.

E. Where root severing has to occur, the root cutting will be clean cuts—not jagged or ripped. Contractor shall use a trenching machine, vibratory knife, or rock saw to a depth of 18 inches along the outside limits of disturbance in the vicinity of existing trees prior to clearing and grubbing. When a trenching machine is used, the trench shall be immediately backfilled. All exposed roots should be covered as soon as possible.

F. Transplanted or re-located trees will be moved using the proper size tree spade to accommodate the tree size and proper follow-up care will be done. This would include mulching and watering as needed.

G. Contractor shall maintain the temporary fence for the duration of the project. Contractor shall remove all temporary fencing prior to completion of project.

3.03 MEASUREMENT AND PAYMENT

A. All Work and cost of this section shall be incidental to the project.

END OF SECTION 01 56 39
SECTION 02 41 00

DEMOLITION

PART 1: GENERAL

1.01 SUMMARY

A. All Work included in this Section shall be performed in accordance with the following paragraphs, the General Requirements set forth in Division 1 of these Specifications, and the provisions of the other Contract Documents.

B. This Section includes furnishing all equipment and materials and performing all labor for all demolition and removals as shown on the Drawings and specified herein.

C. Demolition shall include the following:
   1. Removal and disposal of all non-woody debris
   2. Removal and disposal of existing woody debris
   3. Protection of items adjacent to demolition that are to remain in place, including selected trees, buildings, existing stone walls, existing pipes and manholes, existing pavement, and other utilities and appurtenances

1.02 REFERENCES [NOT USED]

1.03 SUBMITTALS [NOT USED]

1.04 SEQUENCING AND SCHEDULING

A. Prior to disturbing existing vegetation or soils, temporary erosion control measures shall be in place in accordance with Section 31 25 00 Erosion and Sedimentation Controls of the Specifications.

B. Prior to any earth-disturbing activities in the active creek bed, water control measures shall be in place in accordance with Section 01 51 36 Control of Water of the Specifications and in-creek sedimentation devices shall be in place in accordance with Section 31 25 00 Erosion and Sedimentation Controls of the Specifications.

1.05 BASIS FOR COMPENSATION

A. Compensation for all Work covered under this Section of these Specifications shall be as set forth in Section 01 22 00 Measurement and Payment.
1.06 RELATED SECTIONS

A. Section 01 51 36 Control of Water
B. Section 01 56 39 Temporary Tree and Plant Protection
C. Section 31 11 00 Clearing and Grubbing
D. Section 31 25 00 Erosion and Sedimentation Control

1.07 QUALITY ASSURANCE

A. Contractor shall assume full responsibility for any and all damages resulting from preparation for, performance of or clean-up after Work.
B. Contractor shall repair or remove items that are damaged. Repair and installation of damaged items will be performed to condition at least equal to that which existed prior to start of Work at no additional cost to Engineer.
C. Contractor shall provide protection of persons and property throughout progress of Work. Contractor shall proceed in such manner as to minimize spread of dust and flying particles and to provide safe working conditions for personnel.
D. Contractor shall obtain permission from Engineer before abandoning or removing any existing structures, conduit, materials, equipment, and appurtenances.

PART 2: PRODUCTS [NOT USED]

PART 3: EXECUTION

3.01 GENERAL

A. Contractor shall demolish structures in a safe, orderly manner, which includes the use of temporary rails and barricades in accordance with applicable federal, state, and local regulations; and shall protect all adjacent structures, utilities, and services during demolition.
B. Precautions shall be taken to prevent damage to existing Work, which is to remain in place, be reused or remain the property of Engineer and to any new Work constructed or installed under this Contract. Any damage to such Work shall be repaired or replaced as approved by Engineer at no additional cost to Owner. Contractor shall ensure that structural elements are not overloaded as a result of the demolition Work. Shoring, bracing, and temporary supports shall be designed, installed, and maintained as required to maintain structural integrity.
C. Dust resulting from demolition shall be controlled to avoid creation of a nuisance in the surrounding area. The use of water will not be permitted when it would result in or create hazardous or objectionable conditions such as erosion, transport of sediments into river, pollution, flooding, or ice.
D. The burning of refuse and debris on the project site will not be permitted.
E. The use of explosives will not be permitted.
F. Off-site disposal of fencing, concrete and bituminous material shall be the responsibility of Contractor. Demolished materials shall be immediately disposed of off-site unless approved otherwise by Engineer.

3.02 REMOVE NON-WOODY DEBRIS

A. Contractor shall remove all trash and non-woody debris from the work site as shown on the Drawings or directed by the Engineer and dispose of properly in accordance with applicable federal, state, county, and local regulations.

B. Non-woody debris to be placed on-site shall be done as directed by the Engineer.

3.03 REMOVE WOODY DEBRIS

A. Contractor shall remove woody debris from the stream channel as shown on the Drawings directed by Engineer.

B. Woody debris to remain on-site shall be used for shoreline protection measures or placed as shown on the Drawings directed by Engineer.

C. The burning of woody debris on the project site will not be permitted.

D. Woody debris for off-site disposal shall be disposed of properly in accordance with applicable federal, state, county, and local regulations.

END OF SECTION 02 41 00
SECTION 03 30 00

CAST-IN-PLACE CONCRETE

PART 1 GENERAL

1.01 SUMMARY
   A. Work covered under this section includes providing all materials, equipment, and labor to provide cast in place concrete as shown on the drawings and specified herein.

1.02 REFERENCES

1.03 RELATED WORK ELSEWHERE
   A. Procurement and Contracting Requirements - Division 00 (All Sections)
   B. Submittals – Procedures – Division 01

1.04 SUBMITTALS
   A. Submit such product literature and catalog cuts of materials to be supplied to relate these materials to the specification. Information shall be in conformance with requirements of Submittals - Division 01 of these specifications.
   B. Concrete Design Mix
      1. Prior to the start of placing of concrete, submit the design mix for each class of concrete, indicating that the concrete constituents and proportions will result in a concrete mix meeting the physical requirements for each class of concrete specified. Submit with the design mix, laboratory test reports and manufacturer’s certificates attesting the conformance of constituents with these specifications.
      2. Do not vary the proportions of the constituents or source of material of the approved mix without submitting corresponding test result documentation to the Engineer for review and approval.
      3. Design mix shall indicate proportions of cement, aggregate and water, and names and proportions of admixtures and air-entraining agents.
      4. Provide certification that the design mix complies with all ACI and ASTM requirements.

PART 2 PRODUCTS AND MATERIALS

2.01 CONCRETE
   A. Cast in Place Concrete shall be Type 3, Grade B in accordance with the requirements of
the MnDOT Standard Specifications.

2.02 CEMENT
A. Cement shall be Portland Cement ASTM C150 Type I or IA, except as otherwise noted or approved. Type III cement shall only be used for Class L concrete, or when approved by the Engineer.

B. A singular brand and manufacturer of cement shall be used for the entire work.

2.03 FLY ASH
A. Fly ash shall conform to ASTM C618 Class C.

B. A singular source of fly ash shall be used for the entire work.

2.04 SLAG
A. Slag shall be ground granulated blast furnace slag conforming to ASTM C989.

2.05 AGGREGATE
A. Aggregate shall consist of clean, hard durable sand, gravel, crushed gravel or crushed rock.

B. Aggregate shall conform to the requirements of ASTM C33. Fine and coarse aggregate shall meet ASTM C33 grading requirements. Coarse aggregates shall be graded in accordance with ASTM gradations as follows:
   1. 3/4 inch maximum coarse aggregate - ASTM No. 67
   2. 1-1/2 inch maximum coarse aggregate - ASTM No. 467

C. Maximum aggregate size shall be as defined in the Concrete Schedule, or where not defined in the Concrete Schedule, as defined by dimensional constraints for cast-in-place concrete as follows.
   1. Not larger than one-fifth of the narrowest dimension between sides of the forms;
   2. Not larger than one-third the thickness of the slab;
   3. Not larger than three-fourths of the minimum clear spacing between individual reinforcing bars or wire, bundles of bars, or prestressing tendons or ducts.

2.06 MIXING WATER
A. Mixing water shall be natural or treated water, clean and free from injurious amount of oil, acid, alkali, chlorides and sulfates, other common salts, organic matter or other deleterious substances.

B. Mixing water shall yield cement paste complying with the requirements ASTM C109 and ASTM C191.
2.07 ADMIXTURES

A. All admixtures are subject to the written approval of the Engineer and shall be used in strict accordance with the manufacturer’s recommendations.

1. Air-Entraining Admixture
   a. All concrete exposed to weather and freeze-thaw cycles shall be air-entrained, unless otherwise specified.
   b. Air-Entraining admixture shall conform to ASTM C260.
   c. Air-Entrainment shall be as indicated for each class as in the Concrete Schedule.

2. Water-Reducing, Set-Controlling Admixtures
   a. Water-Reducing, Set-Controlling admixtures shall conform to ASTM C494, Type A for water-reducing, Type C for accelerating, Type D for water-reducing and retarding, and Type E for water-reducing and accelerating.

B. Admixtures containing calcium chloride or soluble chloride shall not be used.

2.08 CURING COMPOUND - EXTERIOR

A. Curing compound shall comply with ASTM C309, Type 2; resin, white pigmented.

PART 3 CONSTRUCTION METHODS

3.01 COORDINATION

A. Examine the drawings and specifications for work of other sections or other contractors and coordinate such work with the requirements of this Section; make provisions for installation of such items as sleeves, pipes, conduits, inserts and hangers in a manner that will not impair or weaken concrete construction.

3.02 READI-MIX CONCRETE

A. Acceptability and Use. Readi-mix concrete shall be designed on the basis of strength, durability, impermeability, and exposure condition, as required for the intended use of the structure by methods specified in ACI 211.1 and ACI 318. All readi-mix concrete shall comply with the water-cement ratio for each specific class of concrete as specified in the Concrete Schedule. Concrete design mix, complete with sample test results shall be submitted to the Engineer for approval prior to placing any concrete.

1. Failure to Meet Strength Requirements. Failure to meet strength requirements shall be as defined in Concrete Quality Control- Division 01 of these specifications.

B. Mix Proportioning. Mix proportioning shall be the responsibility of the Contractor and shall be submitted for review and approval by the Engineer, in accordance with these specifications.

1. Select proportions for concrete to obtain the quality requirements for the class of concrete as specified in the Concrete Schedule. Contractor, at their expense, shall have an approved independent laboratory prepare design mixes for each specified concrete class.
2. **Slump.** Slump for class of concrete shall be as specified in the Concrete Schedule. The Contractor shall at their expense, make field slump tests in accordance with ASTM C143 and Concrete Quality Control-Division 01 of these specifications.

3. **Adjustment to Concrete Mixes.** Design mix adjustments may be requested by the Contractor when characteristics of materials, conditions, weather, test results, or other circumstances warrant. Laboratory test data for revised design mixes and strength results shall be submitted and approved before using in the work. No change in contract price will be allowed for these changes.

4. **Addition of Water to the Batch.** Addition of water to the batch delivered to the site shall be in strict accordance with ASTM C94. This shall be the Contractor's responsibility and by their direction, following consultation with the Engineer.
   a. Addition of water to the batch shall be one time only. Total gallons of water added to the batch shall be recorded on the load ticket, which shall be supplied to the Engineer prior to that delivery truck leaving the site. If water is permitted to be added to mixed concrete upon arrival at the job, an additional mixing of 30 revolutions of the drum shall be required.
   b. Contractor shall adjust the water-cement ratio of the batch to the corresponding value based on the addition of water to the batch and shall submit this information to the Engineer with adjusted strength data for the final batch proportion.
   c. At no time shall the addition of water cause the water-cement ratio specified in the concrete class schedule to be exceeded.

3.03 GENERAL

A. Unless otherwise specified, conform to ACI 304, 305, and 306 for concrete installation requirements such as preparation, mixing, conveying, depositing, curing, and cold and hot weather requirements; consolidate concrete in accordance with ACI 309.

B. Concrete not placed within 90 minutes or 300 revolutions, whichever occurs first, after the first mixing of the cement and aggregates will be rejected.

C. Contractor shall indicate on record set of Drawings at site, for review prior to installation, a pouring program for concrete work showing unit of operation, method of pouring, installation of construction/control joints, expansion joints and all necessary work.

D. Proper grade marker or stakes shall be used by Contractor to establish grades for ramps, platforms, sidewalks, slopes to drains, inlets, etc.

E. Trenches, forms, conveying equipment shall be prepared to receive concrete in accordance with ACI 304.

F. Place concrete footings upon undistributed clean surfaces, free from frost, ice, mud and water; when foundation is on dry soil or pervious material, lay waterproof sheathing paper over earth surfaces to receive concrete.

G. Rock surfaces upon which concrete is to be placed, make level, clean, free from all objectionable coatings, water, mud, debris, loose semi-detached or unsound fragments; level surfaces to receive sand cushion placed to minimum thickness of 2 inches.
H. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperature and mechanical injury; maintain with minimum moisture loss and relatively constant temperature for the period necessary for hydration of the cement and hardening of the concrete.

I. All freshly cast concrete shall be protected from damaging effects of the elements freezing, rapid drop in temperature and loss of moisture and from future construction operations.

3.04 PREPARATION OF EQUIPMENT AND PLACE OF DEPOSIT

A. Before placement, clean equipment for mixing and transporting the concrete; remove debris and ice from all surfaces upon which concrete is placed; clean reinforcement of dirt, loose rust, and mill scale, or other coatings.

B. Remove water from all areas before depositing concrete; before depositing new concrete on or against concrete that has set, thoroughly roughen; clean existing surfaces of laitance, foreign matter or loose particles; retighten forms; slush existing surfaces with neat cement grout coat; place new concrete before grout has attained initial set; give horizontal construction joints grout brush coat of cement, fine aggregate, in same proportions as concrete to be placed.

C. Thoroughly wet the stone base on which slabs are to be placed where no vapor barrier is indicated.

D. Check compaction of fill and proper grade for slabs-on-grade. Check screeds and exercise care to prevent disturbing screeds during placement. Provide for construction joints in slabs-on-grade at 20 feet maximum in each direction unless shown otherwise on the contract drawings. Place expansion joint material at junctures of slabs-on-grade with vertical walls and as otherwise shown.

E. Remove debris, excess form oil, and water from formwork; avoid washing newly deposited concrete.

3.05 MIXING

A. Ready-mixed concrete shall be mixed and delivered in accordance with ASTM C94 and ACI 304. The production facilities shall comply with the requirements of the National Ready Mixed Concrete Association Certification Plan as regards materials storage and handling, batching equipment, central mixer, truck mixers, agitators, non-agitating units, ticketing system, etc.

B. Do not over-mix; do not use concrete which is retained in mixers so long as to require additional water in excess of design mix water to permit satisfactory placing; retempering of mix is not permitted.

C. Concrete shall be delivered to the site of the work and the mixed concrete discharged completely within 1-1/2 hours after water has been added to cement. In hot weather, or under conditions contributing to quick stiffening of concrete, this time may be reduced by the Engineer.
D. Concrete delivered shall arrive at the site having a temperature not less than 50 Degrees F nor greater than 85 Degrees F, unless otherwise permitted by the Engineer.

3.06 CONVEYING

A. Convey concrete from the mixer to the final deposit by methods that will prevent segregation or loss of materials.

B. Use of aluminum conveyances is not permitted.

3.07 CONCRETE PLACEMENT

A. Place concrete, including drops greater than 60 inches using recommended practices in accordance with ACI 304 and ACI 318. Once pouring operation commences, it shall be carried out as a continuous operation until a section is completed.

B. Deposit concrete as nearly as practical in its final position to avoid segregation due to rehandling or flowing; do not use vibrators to move concrete horizontally within the forms.

C. Do not use retempered concrete or concrete contaminated by foreign material.

D. Plan and conduct concrete placement to insure that the concrete is kept plastic and that the concrete is free of cold joints.

E. Where there is a time delay greater than 45-minutes between adjacent concrete placement, a bulkhead construction joint, complete with waterstops where required, must be installed.

F. Do not commence placing when the sun, heat, wind or limitations of facilities provided prevent proper finishing or curing.

G. Discontinue concreting when the descending natural air temperature falls lower than 40 Degrees Fahrenheit unless preparations are made and in place to heat or insulate concrete in accordance with the cold weather concreting requirements of this specification.

H. Concrete for walls shall be deposited in approximately horizontal layers not to exceed 18 inches in height to avoid segregation due to rehandling and flowing.

I. Concrete shall not be placed or poured in water. Water level shall be removed or lowered in a manner approved by Engineer. Excess water shall not be permitted. Powdering a mixture of cement to absorb excess water shall not be permitted.
J. Concrete shall be placed before initial set has occurred. Placing should be carried on in such manner that the concrete in the form is still plastic and can be integrated with fresh concrete.

K. Contractor shall notify Engineer of concrete pouring schedule one day in advance of pour to allow for inspection of reinforcing and forms.

L. Bottom dump buckets may be used for transporting mixed concrete to the desired location. Particular care shall be taken to avoid jarring or bumping as this may cause segregation.

M. Where chutes are used to transport concrete, they shall be of metal or wood with metal lining and should have a slope not exceeding 1 vertical to 2 horizontal and not less than 1 vertical to 3 horizontal so that the concrete will travel fast enough to keep the chute clean but slow enough to avoid segregation of materials. The end of each chute shall be provided with a baffle to help prevent segregation, or the concrete should be discharged through a tremie or elephant trunk directly into the form.

N. Elephant trunks and/or tremies shall be used in walls and columns to prevent free fall of the concrete and to allow the concrete to be placed through the cage of reinforcing steel.

O. Pumping equipment shall be of suitable type, without Y-sections, and with adequate pumping capacity. Loss of slump in pumping shall not exceed 1-1/2 inches.

3.08 CONSOLIDATION

A. Each concrete layer placed shall be compacted by mechanical internal vibrating equipment supplemented by hand spading, rodding, or tamping.

B. The period of concrete vibration shall not be less than two seconds nor more than five seconds at any one point.

C. Consolidate concrete thoroughly as it is placed in order to secure a dense mass; work concrete well around the reinforcement and embedded items and into the corners of the forms.

D. Use internal vibrators inserted vertically over the entire area of the placement; form vibrators not permitted; internal vibrators shall maintain a minimum of 5000 impulses when submerged in concrete.

E. Vibrate until voids are eliminated, coarse aggregate is suspended in mortar, and entrapped air bubbles begin to rise to the surface; concrete should move back into the space vacated by the vibrator; vibration duration shall be limited only to the time necessary to produce consolidation without causing segregation.

F. Space vibrator insertions such that the area visibly affected by the vibrator overlaps the adjacent just-vibrated area by a few inches.

G. Penetrate at least 6 inches into previously placed layers in order to bond between layers and avoid cold joints.
H. Take care not to over-vibrate air entrained concrete; place vibrator to eliminate honeycombing but avoid excess vibrating that bleeds all entrapped air from the mix.

I. Do not use vibrators to transport concrete.

3.09 JOINTS AND KEYWAYS

A. Construct expansion, control, and isolation joints and keyways only where indicated on the drawings or at additional locations approved by the Engineer (and as shown on the Standard Details).

B. Where the placing of concrete is discontinued, clean off laitance and other objectionable material to a sufficient depth to expose sound concrete as soon as concrete is firm enough to retain its form; smooth the top surface of concrete adjacent to the forms with a trowel to minimize visible joints on exposed faces.

C. Immediately upon completion of the work of placing concrete, remove accumulations splashed upon the reinforcement and the surfaces of the forms; perform this removal before concrete takes its initial set; clean reinforcing steel carefully to prevent damage to the concrete steel bond.

D. Do not halt work within 18 inches of the top of any face.

E. For bonded horizontal joint construction, roughen the surface and expose the aggregate; clean the surface thoroughly by wet sandblasting, by cutting with high-pressure water jet or by other approved methods; perform cleaning after the concrete has hardened to prevent raveling of the surface below the desired depth.

F. Before bonding concrete is placed, clean the surface of loose or soft particles or other objectionable materials and keep wet for a minimum period of 12 hours.

G. Cover the cleaned and saturated surface with a coating of neat cement grout and deposit new concrete before the grout has attained its initial set.

3.10 CURING

A. Concrete shall be wet cured by immersion of moisture-retaining covers in conformance with ACI 308 or shall receive curing compound in accordance with ACI 309.

B. Water curing is the preferred method of protection for curing concrete other than under hot weather conditions; cover exposed surfaces with a saturated material (burlap or cotton mats) and keep wet continuously with a soil soaker hose for 7 curing days for all concrete except high early strength concrete; leave covering in place, without wetting, for an additional 3 days.

C. A curing day is defined as 24-hour day when the concrete surfaces are kept moist and the uniform temperature of the concrete mass is between 55 Degrees Fahrenheit and 75 Degrees Fahrenheit.

D. Curing shall start as soon as free surface water disappears after finishing. Where forms
are not removed immediately, curing shall be accomplished in a manner acceptable to the Engineer.

E. Curing compounds may not be used on surfaces that are to receive additional concrete, paint or tile.

F. Curing and sealing compound shall not be applied to steel reinforcing anchors, water stops, construction joints, or surfaces to be bonded to other concrete.

G. When using a curing compound, keep surfaces moist after the forms are removed, and the form tie holes repaired; after the surfaces are finished, apply the curing compound according to the manufacturer’s recommendations; remove forms only as required to advance repair of tie holes and minor defects.

H. Slabs: Immediately following slab finishing, apply liquid membrane-forming curing compound or begin water curing before the surface becomes dry.

I. Vertical Surfaces: When the forms are removed entirely, spray the surface with water and allow it to reach a uniformly damp appearance with no free water on the surface; apply curing compound or begin water curing.

J. For curing concrete under hot weather conditions, see Hot Weather Requirements in this section.

K. For curing concrete under cold weather conditions, see Cold Weather Requirements in this section.

### 3.11 CONCRETE FINISHES

A. Complete screeding and darbying of top of walls before excess moisture or bleeding water is present on the surface.

B. Do not begin subsequent finishing operations until surface water has disappeared.

C. Finish type for the Storm Sewer Energy Dissipater Structure shall be as follows:
   1. Rough Form Finish:
      a. No form facing materials specified.
      b. Patch tie holes and defects.
      c. Chip off fins 1/4 inch or more in height.

### 3.12 HOT WEATHER REQUIREMENTS

A. Comply with ACI 305R unless otherwise specified herein below.

B. Hot weather conditions are deemed to exist when the temperature in the forms is 75 Degrees Fahrenheit or above, or a combination of high air temperature, low relative humidity and wind velocity impair the quality of fresh or hardened concrete; take protective measures for mixing, transporting and placing concrete in accordance with ACI 305R.
C. The temperature of the concrete at the place of discharge may not exceed 85 Degrees Fahrenheit.
   1. If ice is used to lower temperature, place crushed, shaved or chipped ice directly into the mixer as part or all of the mixing water; mix until ice is completely melted.
   2. Record the concrete temperature at the time of discharge.

D. Do not add water that will cause the proportions to exceed the maximum water-cement ratio shown in Table I.
   1. Notify the Engineer before adding any water to the concrete mix.
   2. Record the amount of water added to the concrete at the jobsite.

E. Discharge concrete within 45 minutes or 100 revolutions, whichever occurs first, after the first mixing of cement and aggregates.

F. Placing and Curing:
   1. Place concrete promptly upon arrival.
   2. Provide at least one standby vibrator for each 3 vibrators in use.
   3. Protect concrete from direct sunlight; keep forms covered and moist by means of water sprinkling or the application of continuously wetted burlap or cotton mats for a minimum of 24 hours. Windbreaks and/or sunshades shall be provided as directed by the Engineer.
   4. When forms are removed, provide wet cover to the newly exposed surfaces to avoid exposure to hot sun and wind.
   5. Continue specified water curing methods for 10 days; leave covering in place 4 additional days; do not permit alternate wetting and drying cycles.
   6. For slabs on grade, beam and deck concrete, and other horizontal placements protect the surface between finishing operations using one or more of the following methods:
      a. Careful use of a fog nozzle.
      b. Spreading and removing polyethylene sheeting between finishing operations.
      c. Application of mono-molecular film after the strike-off.

G. During extremes in weather, floor slabs shall not be cast unless the slab is protected by a roof and other suitable protective measures are provided. After curing has been completed, the floor shall be exposed to the air for 48 hours prior to allowing traffic on the floors.

3.13 COLD WEATHER REQUIREMENTS

A. Comply with ACI 306.1 (R2002) unless otherwise specified herein below.

B. Cold weather is defined any time when the daily temperature is 40 Degrees Fahrenheit or lower during placement and the protection period. If at any time during the progress of the work, the temperature drops below 40 Degrees F., the Contractor shall make suitable provisions to protect the concrete by use of insulation materials such as blankets, mats, etc., and equipment for providing artificial heat.
C. Combustion type temporary heating devices shall be vented outside of any temporary enclosure and building envelope. Combustion gases shall not be allowed in any temporary enclosure and building envelope.

D. Protect concrete surfaces from freezing for at least 24 hours after placement.

E. All surfaces in contact with newly-placed concrete including formwork, reinforcement and subgrade must be above 35 Degrees Fahrenheit.

F. Use preparation methods capable of producing concrete with a temperature not more than 85 Degrees Fahrenheit, and not less than 55 Degrees Fahrenheit, at the time of placement.

G. Do not heat concrete ingredients to a temperature higher than that necessary to keep the temperature of the mixed concrete, as placed, within the specified temperatures. (Do not heat water in excess of 140 Degrees Fahrenheit.)

H. Concrete shall have a temperature of not less than 55 Degrees Fahrenheit when placed; mix concrete at a temperature between:
   1. 60 Degrees Fahrenheit and 70 Degrees Fahrenheit when outside air temperature is above 30 Degrees Fahrenheit.
   2. 65 Degrees Fahrenheit and 75 Degrees Fahrenheit when outside air temperature is between 0 Degrees Fahrenheit and 30 Degrees Fahrenheit.
   3. 70 Degrees Fahrenheit and 80 Degrees Fahrenheit when outside air temperature is below 0 Degrees Fahrenheit.

I. Follow concrete placement with tarpaulins or other readily movable coverings, so only a few feet of concrete is exposed to the outside air at any time.

J. Maintain the temperature and moisture conditions specified in all parts of the newly placed concrete by covering, insulating, housing or heating; arrange for protection methods in advance of placement.

K. Maintain concrete at a temperature of not less than 55 Degrees Fahrenheit nor more than 70 Degrees Fahrenheit for a period of 3 days after placement.

L. A thermometer accurate to plus or minus 2 Degrees F shall be placed under the curing blanket. Additional insulation shall be supplied as required to maintain the temperature above 55 Degrees F.

M. After the curing period, the temperature of the exposed surface shall not be permitted to drop faster than 30 Degrees F in 24 hours.

N. Do not remove forms during the initial protection period.

O. Protect insulation against wetting that will impair its insulating value using moisture-proof cover material; keep insulation in close contact with concrete.

P. Construct enclosure to withstand wind and snow loads and be reasonably airtight; provide sufficient space between the concrete and enclosure to permit free circulation of heated air.
Q. Use vented heaters; do not permit heaters to heat or dry concrete locally. Unvented salamanders or other heaters which produce carbon dioxide as by-products shall not be permitted within enclosures or inside buildings. If heaters are used, precautions shall be taken to prevent drying of the slab through the use of water jackets or other suitable methods.

R. Maintain relative humidity above 40% within heated enclosures before construction supports are removed.

S. Monitor temperature to insure concrete is kept within specified limits recording time and concrete temperature every 8 hours.

T. Assure concrete has developed necessary strength before removing forms; provide additional test cylinders with the same protection as the structure they represent to verify concrete strength before construction supports are removed.

U. If water curing is used, terminate at least 12-hours before end of temperature protection period. Permit concrete to dry.

V. After the required protection period gradually reduce the concrete temperature within an enclosure or insulation at a rate not to exceed 20 Degrees Fahrenheit per day until the outside temperature has been reached.

W. Apply membrane forming curing compound to concrete surfaces during the first period of above-freezing temperatures after forms are stripped and before air temperature rises to 50 Degrees Fahrenheit; apply membrane forming curing compound to slabs as soon as finishing operations are completed, except where live steam curing is used.

3.14 DELIVERY TICKETS

A. With each load of concrete delivered to the job there shall be furnished by the ready-mixed concrete producer duplicate delivery tickets, one for the Contractor and one for the Engineer. Delivery tickets shall provide the following information:
1. Date and serial number of ticket;
2. Name of ready-mixed concrete plant;
3. Job location;
4. Contractor;
5. Type and brand name of cement;
6. Mix number or specified cement content in bags per cubic yard of concrete;
7. Truck number;
8. Time dispatched stamped by a time clock;
9. Amount of concrete in load in cubic yards;
10. Admixtures in concrete, if any;
11. Maximum size of aggregate;
12. Water added at job, if any;
13. Slump of concrete ordered

END OF SECTION 03 30 00
SECTION 31 10 00

SITE PREPARATION

PART 1: GENERAL

1.01 DESCRIPTION

A. Work covered under this Section includes providing all materials, equipment, and labor to prepare the Site for construction, including, but not limited to:

1. Modifications to site access
2. Locating existing on-site utilities
3. Development of staging areas
4. Development of stockpile areas
5. Securing project site

1.02 RELATED WORK

A. Section 01 55 00 – Access Roads and Parking
B. Section 02 41 00 – Demolition
C. Section 31 25 00 – Erosion and Sedimentation Control
D. Section 31 11 00 – Clearing and Grubbing
E. Section 31 20 00 – Earth Moving
F. Section 32 90 00 – Site Restoration

1.03 REFERENCES

B. All applicable Federal, State, and Local laws, regulations and ordinances related to protection of human health and the environment.

1.04 SEQUENCING AND SCHEDULING

A. In addition to the requirements of the other Contract Documents, before performing other Work Contractor shall:

1. Obtain Notice to Proceed from Engineer.
2. Obtain any required permits, not otherwise provided, as set forth in the Contract
Documents for Work to proceed.

3. Locate all on site utilities. Prior to any excavation a notice must be given to Gopher One Call (1-800-252-1166). All existing utilities shall be located and sufficiently marked. It shall be the sole responsibility of Contractor to protect and maintain these markings. The Contractor shall protect all existing utilities from damage due to construction. If damage does occur, Contractor shall be responsible for the immediate repair and any associated costs.

4. Complete preparation of site access and furnishing and installing fencing, signage, and other warning markers and safety precautions.


B. Erosion control measures shall be properly furnished and installed by Contractor as set forth in Section 31 25 00 Erosion and Sedimentation Controls prior to disturbing existing vegetation and soils.

1.05 BASIS FOR COMPENSATION

A. Compensation for all Work covered under this Section of these Specifications shall be incidental to the project.

PART 2: PRODUCTS

2.01 MATERIALS

A. Orange Construction Fence: 4’ High UV Stabilized Extruded Polypropylene

PART 3: EXECUTION

3.01 GENERAL

A. Contractor shall take measures to prepare the Site access and Site conditions necessary to perform the Work, all in accordance with the Drawings and these Specifications.

B. Contractor shall take measures as necessary to secure the Project Site from public access to protect Contractor’s materials and equipment, and Project Work areas. This includes the use of existing gates or other security measures that limit public access to the Site, as well as additional measures that may be necessary during construction activities.

C. Contractor shall protect Work areas from public access that may pose danger or hazard to the public. Construction limits, in critical areas as determined by Engineer shall be defined with orange construction fence as indicated on the Drawings.

D. Contractor shall take measures to prevent access or use of areas outside Construction Limits or designated access roads, staging areas, borrow areas, as well as preventing access or Work in areas designated as protected, no-touch zones, or no access areas designated on the Drawings.
E. Access to the Project site shall be limited to the Site access locations shown on the Drawings and or as indicated in these Specifications.

F. Contractor shall park within staging areas designated in the Drawings.

3.02 CONSTRUCTION FENCING

A. Install temporary construction fencing in locations as indicated on the plans. Fencing shall be installed in accordance with manufacturer’s recommendations.

B. Contractor shall remove temporary construction fencing at the Completion of the Project.

3.03 RESTORATION OF ACCESS PATHS AND HAUL ROADS

A. Access path and haul road restoration shall be in accordance with Section 32 90 00 Site Restoration of these Specifications.

END OF SECTION 31 10 00
SECTION 31 11 00
CLEARING AND GRUBBING

PART 1: GENERAL

1.01 SUMMARY

A. All Work included in this Section shall be performed in accordance with the following paragraphs and the provisions of all other Contract Documents.

B. This Section includes providing all materials, equipment, and labor to clear and grub stumps, trees, sticks, brush, and rocks within the clearing limits. Clearing limits are identified on the Drawings. Work includes but is not limited to:

1. Cutting, excavating, and salvaging selected trees for use elsewhere on the Site.

2. Clearing and grubbing of selected trees, brush, and stumps.


4. Removal of stumps/large trees and excess brush to a disposal location determined by Contractor.

1.02 Related Sections

A. Section 01 56 39 Temporary Tree and Plant Protection

B. Section 31 25 00 Erosion and Sedimentation Control

1.03 REFERENCES


1.04 SUBMITTALS [NOT USED]

1.05 SEQUENCING AND SCHEDULING

A. Contractor shall obtain Notice to Proceed from Engineer before beginning any clearing and grubbing operations.

B. Contractor shall perform the clearing and grubbing operation in accordance with the schedule of work to be submitted in accordance with Section 01 33 00 Submittal Procedures of the Specifications.
1.06 BASIS FOR COMPENSATION

A. Compensation for all Work covered under this Section of these Specifications shall be as set forth in Section 01 22 00 Measurement and Payment.

PART 2: PRODUCTS

2.01 ROOT WADS, FOOTER LOGS, AND LARGE WOODY DEBRIS

A. Root Wads shall be from select trees to be removed from the project site or imported from off site.

B. Root wads shall be from the lower portion of tree, preferably of hardwood species and no elm trees shall be allowed for use as root wads.

C. The root fan shall have a minimum diameter of roughly 2 feet. The fan shall have no maximum size and may be trimmed to fit site needs. The root fan shall have relatively few broken roots and be securely attached to the trunk.

D. The trunk should be relatively straight and free of breaks and splits. For use in Type A Toe Wood trunks shall have a minimum length of 10 feet and a maximum length of 20 feet as measured up from the highest root and be a minimum of 10 inches in diameter at the end of the trunk. For use in Type B Toe Wood trunk dimensions shall be as shown on the Drawings.

E. For use in Type A Toe Wood footer logs and large woody debris shall be a minimum of 8 inches in diameter and meet the same specifications as the root wad trunk above. Required length will be 8 feet minimum. For use in Type B Toe Wood footer logs and large woody debris shall be as shown on the Drawings.

2.02 HERBICIDE

A. Contractor shall use Garlon 3A herbicide with a brightly colored dye added to the mixture. The DNR has recommended and approved this product for use near bodies of water. Contractor shall follow manufactures specifications; federal and state laws and regulations for applying the herbicide in a manner that will not adversely affect the environment.

B. Chemical such as the herbicide shall be stored in a confinement area to prevent spills from entering nearby waterbodies.

PART 3: EXECUTION

3.01 CLEARING TREES FOR REMOVAL

A. Contractor shall remove trees and brush selected by Engineer for proper performance of the Work as shown on the Drawings.

B. Trees larger than 6 inches in diameter will be marked in the field by Engineer for removal. All trees larger than 6 inches in diameter that are not marked in the field by Engineer shall be left in place and protected during construction.
C. Trees and brush marked for removal in the clear and grub limit will be cut at ground surface grade and only those with a diameter greater than 2 inches will have roots removed, or as directed by Engineer.

D. Where root severing must occur, the root cutting will be clean cuts, not jagged or ripped. Contractor shall use a trenching machine, vibratory knife, or rock saw to a depth of 18 inches along the outside limits of disturbance in the vicinity of existing trees prior to clearing and grubbing. When a trenching machine is used, the trench shall be immediately backfilled. All exposed roots shall be covered as soon as possible.

E. Contractor shall dispose of the cleared trees, in accordance with Laws and Regulations, at an off-site location selected by Contractor.

3.02 CLEARING TREES FOR SALVAGE

A. The Contractor shall cut and fall selected trees for re-use elsewhere on the site as root wads or footer logs. Elms shall not be salvaged.

B. The excavated root wad and stump shall remain intact for trees cleared for root wads. The size of the root wad shall be as shown on the Drawings. The salvaged root wad and stump shall be stockpiled for re-use elsewhere on the site and protected from damage.

C. Footer logs salvaged from tree trunks of hardwood species shall be stockpiled for re-use elsewhere on the site and protected from damage (excluding elms). Footer logs shall meet the same specifications as the root wad trunk above. The size of the footer logs shall be as shown on the Drawings.

3.03 GRUBBING

A. Grubbing shall consist of the removal of Engineer-selected stumps, sticks, and brush remaining after clearing operations has been completed. Contractor shall dispose of the grubbed materials, in accordance with Laws and Regulations, at an off-site location selected by Contractor.

B. Stumps shall be disposed of off-site at an appropriate location to be determined by Contractor.

C. Grubbing shall be completed to the satisfaction of Engineer, and completed before earthwork begins.

D. To minimize the disturbance of existing ground surface, grubbing of roots of trees with a diameter less than 2 inches in diameter will not be required.

3.04 BUCKTHORN STUMP TREATMENT

A. Buckthorn stump treatment shall be performed wherever buckthorn plants are cut within the clearing and grubbing limits, and shall be incidental to the clearing and grubbing operations.

B. Contractor shall treat all buckthorn stumps of trees and brush cut flush with ground and left in place with Garlon 3A to prevent sprouting. The Garlon 3A mixture shall contain a brightly colored dye that will mark the stumps and brush that has been treated. Contractor shall
follow manufactures specifications, federal and state laws and regulations for applying the herbicide in a manner that will not adversely affect the environment.

C. Contractor shall spray or paint the cut surfaces of freshly cut stumps and stubs with undiluted Garlon 3A. The cambium area next to the bark is the most vital area to wet.

3.05 DEADFALL AND DEBRIS REMOVAL AND OFF-SITE DISPOSAL

A. The Contractor shall remove selected deadfall and debris as shown on the Drawings.

B. The Contractor shall dispose of the deadfall and debris material, in accordance with Laws and Regulations, at an off-site location selected by the Contractor.

END OF SECTION 31 11 00
SECTION 31 20 00

EARTH MOVING

PART 1: GENERAL

1.01 SUMMARY

A. All Work included in this Section shall be performed in accordance with the following paragraphs and the provisions of the other Contract Documents.

B. This Section includes furnishing all supervision, labor, materials, and equipment required to complete all general or miscellaneous earthwork and site grading at the site including, but not limited to:

1. Sediment removal for on-site or off-site disposal

2. Excavate and haul earth as required for bank stabilization measures

3. Importing and placing common fill and topsoil

4. Fill, compact, and regrade stream bank slopes, floodplain and embankments

5. Strip, stockpile and install topsoil

6. Excavate for the construction of proposed structures

7. Furnish and install topsoil

1.02 REFERENCES


1.03 SUBMITTALS

A. Contractor will submit test results for each type of off-site soil material used for the stream bank stabilization.

B. One sample will be collected and tested for grain size distribution from each off-site location for each type of material.

C. Test results will be submitted 5 days prior to hauling on site. Materials not meeting the specifications will be rejected. No material will be hauled to the site until test results from that specific material conform to the specified requirements.

D. Contractor shall submit for approval a designated location for disposal of excess soil and sediment identified for off-site disposal.
1.04  SEQUENCING AND SCHEDULING

A. Erosion control measures shall be properly furnished and installed by Contractor as set forth in Section 31 25 00 Erosion and Sedimentation Controls prior to disturbing existing vegetation and soils.

1.05  BASIS FOR COMPENSATION

A. Compensation for all Work covered under this Section of these Specifications shall be as set forth in Section 01 22 00 Measurement and Payment.

1.06  JOB CONDITIONS

A. It shall be Contractor’s sole responsibility to review available tests and reports, conduct additional tests, and otherwise determine to its own satisfaction the location and nature of all surface and subsurface features and the soil and water conditions that will be encountered, as more fully set forth elsewhere in the Contract Documents.

B. Contractor shall be solely responsible for determining the means and methods for meeting the compaction requirements specified herein, except that compaction by flooding or puddling or other means that involve saturation or over-wetting the soil will not be permitted. Contractor shall be solely responsible for utilizing means and methods that protect adjacent structures and utilities from damage resulting from Contractor’s operations, specifically including, but not limited to, settlement, consolidation, displacement, cracking, vibration, undermining, washout, and uplift caused by excavating, compaction, dewatering, or any other operation.

C. Provide all shoring, bracing, trench boxes, and other measures required to perform all Work in accordance with Laws and Regulations. Specifically, Contractor shall be responsible to assure that all excavations conform to the requirements of OSHA including without limitation those set forth in 29 CFR 1926, Subpart P (Occupational Safety and Health Standards – Excavations).

1.07  TESTING

A. A qualified testing laboratory will conduct all sampling and testing of backfill and base materials as specified in these specifications. The firm will be selected and contracted by Contractor, but with prior approval by Engineer. The testing laboratory will perform appropriate tests including gradation testing, standard proctor density testing, and in-place density testing.

B. The following minimum number of tests will be conducted:

1. Gradation testing will be performed at least every 200 cubic yards for random fill and base materials. At least two gradation tests shall be taken from each source location.

2. At least two proctor density tests will be performed for each source location.

3. For each in-place density test, reports will include a statement on whether test has passed or failed. If any test has failed, statements will be made as to what actions were taken to correct material compaction, and additional tests will be submitted demonstrating acceptable (passed) compaction.
4. Only passing tests will be considered in the count of material tests taken, as specified above.

PART 2: PRODUCTS

2.01 SOIL MATERIALS

A. Common Fill

1. Common fill shall be excavated native mineral soil from the site that is free draining, free from excessive moisture, debris, roots, organic material, frozen soil, or rocks larger than 2 inches in diameter.

B. Select Granular Backfill

1. Select granular backfill shall be a mineral product consisting of sound durable particles and excluding crushed carbonate quarry rock, crushed concrete, and salvaged bituminous mixture and shall be free of all organic material. The select granular backfill shall be uniformly graded from fine to coarse and shall conform to the following gradation requirements:

<table>
<thead>
<tr>
<th>U.S. Standard Sieve Size</th>
<th>Percent Passing (dry weight)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1”</td>
<td>100</td>
</tr>
<tr>
<td>3/4”</td>
<td>90-100</td>
</tr>
<tr>
<td>3/8”</td>
<td>50-90</td>
</tr>
<tr>
<td>No. 4</td>
<td>35-80</td>
</tr>
<tr>
<td>No. 10</td>
<td>20-65</td>
</tr>
<tr>
<td>No. 40</td>
<td>10-35</td>
</tr>
<tr>
<td>No. 200</td>
<td>0-5</td>
</tr>
</tbody>
</table>

C. Topsoil (Topsoil Borrow or Import Topsoil)

1. Topsoil Borrow shall be soil existing in the earth stratum immediately below the existing vegetated surface layer, consisting of some organic material, generally darker color than underlying mineral soil. The depth of existing topsoil is variable. Material existing below 6 inches under existing grade shall not be considered Topsoil Borrow unless approved by Engineer.

2. Import Topsoil shall be in accordance with Mn/DOT Standard Specification 3877.2.A; Topsoil Borrow, with min. 85% material passing 2.00 mm (#10) sieve, between 3% and 20% organic matter, and pH between 6.1 and 7.8. Import topsoil shall be weed seed free.

PART 3: EXECUTION

3.01 EXAMINATION

A. Contractor shall examine the area and conditions for performing earthwork. If unsatisfactory conditions occur during the work, Contractor shall not proceed with the work until unsatisfactory conditions have been corrected.
B. It shall be Contractor’s responsibility to determine to its own satisfaction the location and nature of all surface and subsurface obstacles and the soil and water conditions that will be encountered during construction.

C. Locations of Utilities and Underground Facilities shown on Drawings are approximate and Engineer shall not make any representations as to the accuracy or completeness thereof. It shall be Contractor’s sole responsibility to determine the locations.

3.02 PREPARATION

A. Contractor shall make arrangements to locate all existing Utilities and Underground Facilities in the areas of work. If any are to remain in place, Contractor shall provide adequate means of protection during earthwork operations.

B. Contractor shall protect structures, driveways, parking lots, fences, utilities, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.

3.03 TOPSOIL STRIPPING, STOCKPILING AND PLACEMENT

A. Contractor shall strip the existing topsoil from areas to be graded in accordance with Mn/DOT Standard Specification 2105, to a maximum depth of 6 inches below existing grade or as directed by Engineer.

B. Salvaged topsoil shall be stockpiled as indicated on the Drawings.

C. Salvaged and imported topsoil shall be placed to the depths shown in the Drawings below finished grade and as specified in Section 32 90 00 Site Restoration of these Specifications.

3.04 SITE GRADING

A. Grade the area along the proposed stream bank and flood plain as necessary to match the slopes and elevations described and/or shown on the Drawings.

B. Smooth-grade finished ground disturbed by Contractor’s activities to slopes and elevations shown in the Drawings such as to blend smoothly into existing ground.

3.05 EXCAVATION

A. Excavate to the lines, elevation, grades, and dimensions shown on the Drawings, or as necessary to complete the work shown on the Drawings.

B. Stability of Excavations:

1. Slope sides of excavations to comply with applicable Laws and Regulations and to provide access for compaction equipment.

2. Provide shoring and bracing where required to comply with Laws and Regulations, or to protect adjacent surface or subsurface features, or to limit activity within construction limits. Contractor shall design shoring and bracing and provide all materials, including piling, uprights, stringers, and cross-bracing in good condition at no additional cost to
3. Remove all temporary shoring and bracing not specifically indicated in the Drawings or these Specifications to remain.

C. Water Controls:

1. Provide all temporary controls, including diversions as Contractor deems necessary, to prevent surface water from flowing into excavations.

D. Material Storage:

1. Stockpile materials required for backfill away from edge of excavations and trenches. Shape and grade to provide drainage and minimize erosion. Provide temporary erosion control and diversions around base as necessary.

2. Dispose of demolition debris, excess and unsuitable material off-site promptly following excavation.

E. Excavation Limits:

1. Excavate existing soil to lines, grades, elevations, and dimensions show on the Drawings, or as necessary to complete the work as shown on the Drawings.

2. Excavation beyond the lines and grades shown in the Drawings or described herein without the specific direction of Engineer will be considered unauthorized excavation and shall be remedied at Contractor’s expense by backfilling and compacting as specified for the appropriate situation described herein or shown on the Drawings.

F. Protect excavation bottoms against freezing when atmospheric temperature is below 35°F.

3.06 BACKFILL AND FILL

A. General:

1. Provide compaction appropriate for the location as specified elsewhere in this Section.

2. Backfill shall be deposited, spread, and compacted to the total specified thickness shown on the Drawings.

3. Backfill shall proceed as promptly as possible, but not before completion of the following:

   (a) Removal of temporary bracing, and backfilling of voids with satisfactory materials.

   (b) Removal of trash and debris.

   (c) Permanent or temporary bracing is in place to support walls or other components.

B. Place backfill and fill materials in layers not more than 8 inches in loose depth. Before compaction, moisten or aerate each layer as necessary to provide the optimum moisture content. Compact each layer to required percentage of maximum density for each area.
classification. Do not place backfill or fill material on surfaces that are soft, muddy, frozen, or contain frost or ice.

C. Place backfill and fill materials evenly adjacent to structures, to required elevations. Take care to prevent wedging action of backfill against structures by carrying the material uniformly around structure to approximately same elevation in each lift. Notify Engineer of any damage and repair as approved before proceeding.

D. Do not place frozen soil or any material containing organic matter, trash, debris, large rocks, or other deleterious substances.

E. Slope Fill

1. Fill used for backfill on slopes shall be placed in lifts no greater than 12 inches.

3.07 COMPACATION

A. General:

1. Furnish equipment suitable for soil conditions and compactive effort required to meet compaction criteria specified herein.

2. Control moisture content for placement at optimum (+ 3 percent, - 2 percent).

B. Where backfill, subgrade, or layer of soil material must be moisture conditioned before compaction, uniformly apply water to surface of backfill, subgrade, or layer of soil to prevent free water appearing on surface during or subsequent to compaction operations. Disc or otherwise thoroughly mix to distribute added water.

C. Remove and replace soil material that is too wet to permit compaction as specified.

D. Stream bank:

1. Compact fill in stream bank regarding areas as specified in the Drawings to an in place density as measured by ASTM D1556 of 90 percent of Standard Proctor density.

2. Prior to placement of fill, compact native soil to obtain 90 percent of Standard Proctor density at depth of 12 inches.

E. Around Structures:

1. Compact fill around structures (including culverts, walls, piles and etc.) as specified in the Drawings to an in place density as measured by ASTM D1556 of 95 percent of Standard Proctor density.

2. Prior to placement of fill, compact native soil to obtain 95 percent of Standard Proctor density at depth of 12 inches.

3.08 DISPOSAL OF EXCAVATED SOIL AND SEDIMENT

A. Excess soil or stream sediment identified for onsite disposal shall be disposed at onsite location(s) as indicated on the Drawings and approved by the Engineer.
B. All excavated materials for onsite disposal not incorporated into the construction shall be disposed of in the designated stockpile areas as directed by the Engineer. All stockpile areas used by the Contractor shall be appropriately graded so as to provide proper drainage and left in a neat condition.

C. Stockpiles of excavated materials shall conform to the requirements of Section 31 25 00 Erosion and Sedimentation Control of these Specifications.

D. Excess soil or stream sediment identified for offsite disposal shall be disposed at a location selected by Contractor and approved by Engineer.

3.09 TOLERANCES

A. Surface of all trails shall be 0 to +0.25 feet of proposed elevations as shown on the Drawings.

B. Grading tolerances for sub-base and base shall be 0 to -0.25 feet of proposed elevations, as shown on the Drawings.

C. Finished grade elevation to be -0.25 to +0.25 feet above grades shown on the Drawings.

D. Horizontal tolerance for grading areas shall be within -2.0 to +2.0 feet as shown on the Drawings.

E. Any changes to grade must be approved by Engineer.

3.10 FIELD QUALITY CONTROL

A. Contractor shall utilize equipment, materials, and procedures which are anticipated to meet the quality requirements specified.

B. Contractor shall permit Engineer to observe subgrades and fill layers before further construction work is performed thereon. Tests of subgrades and fill layers may be taken by Engineer.

3.11 MAINTENANCE

A. Contractor shall repair and reestablish grades in settled, eroded, and rutted areas to specified tolerances.

B. Contractor shall maintain erosion control measures as set forth in Section 31 25 00 Erosion and Sedimentation Controls until seeding and planting is accepted by Engineer.

C. Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, Contractor shall scarify surface, reshape, and compact to required density prior to further construction.

3.12 DUST CONTROL

A. Contractor shall keep the surface of any and all construction work areas and haul roads moist by spraying with uncontaminated water so as to prevent, not just reduce, airborne dust. This responsibility shall require Contractor to suspend construction or haul traffic until such
time as Contractor can and does prevent airborne dust. Contractor shall not overspray so as to create problems, such as tracking of material onto paved surfaces, or muddy haul roads, due to the application of excess moisture.

END OF SECTION 31 20 00
SECTION 31 25 00
EROSION AND SEDIMENTATION CONTROL

PART 1: GENERAL

1.01 SUMMARY

A. All Work included in this Section shall be performed in accordance with the following paragraphs and the provisions of the other Contract Documents.

B. This Section includes providing all materials, equipment, and labor to protect slopes including, but not limited to:

1. Obtain all erosion control permits for the site (if required).

2. Provide temporary erosion control to meet the requirements of the erosion control permit (if required).

3. Provide temporary erosion control to prevent transport of soil materials from the sites of the Work in compliance with this Section of the Specifications.

4. Furnish and install Rock Filter Dike.

5. Furnish and install Rock Construction Entrance.

6. Furnish and install Silt Fence and Filter Log.

7. Furnish and install Silt Fence Baffle

1.02 REFERENCES


C. Authorization to Discharge Stormwater Associated with Construction Activity Under the National Pollutant Discharge Elimination System/State Disposal System Permit Program.


1.03 SEQUENCING AND SCHEDULING

A. Construct erosion control measures specified in this Section or as directed by Engineer prior to commencing activities related to clearing and grubbing or excavation.

B. Maintain and replace the erosion controls for the duration of the construction as necessary in accordance with this Section of the Specifications as directed by Engineer.

C. Contractor shall coordinate grading work and erosion control measures with placement of
erosion control blanket as detailed in Section 32 90 00 Site Restoration of these Specifications.

1.04 QUALITY ASSURANCE

A. Engineer may stop work on the project if Contractor is operating in violation of the plans and specifications. Contractor shall, within 24 hours, commence to diligently restore the project to conform to the conditions of the plans and specifications. If, in Engineer's opinion, Contractor has not, within 24 hours after to work stoppage, commenced to diligently restore the project to conform to the conditions of the plans and specifications, then Engineer may, without further notice to Contractor, take actions to immediately restore the project to the conditions of the plans and specifications. The cost of actions by Engineer required to restore the project to the conditions of plans and specifications will be paid by Contractor.

1.05 PROJECT CONDITIONS

A. The project Contract Documents and permits shall be available at the construction site in either the field office, or the inspector’s vehicle, or the Contractor's vehicle, for inspection by federal, state, and local officials as required by the permit for the duration of the Project.

B. The Contractor shall maintain a record of all inspections of the site as required by the permit, and shall include:

1. Date and time of inspections
2. Findings of inspections
3. Corrective actions taken (including date and time)
5. Date of all rainfall events (including total precipitation)

1.06 BASIS FOR COMPENSATION

A. Compensation for all Work covered under this Section of these Specifications shall be as set forth in Section 01 22 00 Measurement and Payment.

PART 2: PRODUCTS

2.01 MATERIALS

A. Rock Filter Dike

1. Rock Filter Dike shall be constructed of river run gravel with rock sizes ¾” to 1-1/2” evenly graded, clear and washed.

B. Rock Construction Entrance

1. Rock construction entrances shall conform to the requirements indicated on the
Drawings. The course aggregate shall not consist of crushed concrete or bituminous materials. Gradation of the course aggregate shall conform to the aggregate fraction of CA-1 and CA-2 on Table 3137-1 of MnDOT Specification 3137. The Contractor shall sweep roads free of all sediment which is transported onto them as a result of construction. Sweeping shall be done at least weekly if sediment is on the streets or more frequently if requested by the City or County Highway Department. The cost for sweeping shall be at the Contractor’s expense.

C. Silt Fence

1. Silt fence for land applications shall conform to Mn/DOT Standard Specification 3886 for heavy duty silt fence, except that support posts shall be no further than 1.2 meters (4 feet) apart.

2. Silt fence used for in-stream silt fence baffle shall conform to Mn/DOT Standard Specification 3886 for heavy duty silt fence, except that support posts shall be no further than 0.6 meters (2 feet) apart.

D. Filter Log

1. Filter log shall conform to Mn/DOT Standard Specification 3897 for wood fiber bioroll.

PART 3: EXECUTION

3.01 TEMPORARY EROSION AND SEDIMENT CONTROL

A. Temporary erosion and sediment control activities will be required through the duration of the project. Contractor shall use Best Management Practices (BMPs) for erosion control as specified on the Drawings.

B. Unless precluded by snow cover, all exposed soil areas with a continuous positive slope within permanent drainage ditch or other storm water conveyance system, which is connected to a surface water, shall have temporary protection or permanent cover for the exposed soil areas within the following time frames:

1. Type of Slope  Temporary protection or permanent cover where the area has not been, or will not be, worked by Contractor for:

   - Steeper than 3:1  7 days
   - 10:1 to 3:1  7 days
   - Flatter than 10:1  7 days

2. For the purposes of this provision, exposed soil areas do not include stockpiles of sand, gravel, aggregate, concrete or bituminous.

C. The bottom of any temporary or permanent drainage ditch constructed to drain water from a construction site must be stabilized within 100 lineal feet from a surface water state. Stabilization must be initiated within 24 hours of connecting the drainage ditch to a water of the state, existing gutter, storm sewer inlet, drainage ditch, or other storm water conveyance system which discharges to surface water and be completed within five calendar days.
D. Prior to connecting any pipe to a surface water or drainage ditch, the pipe’s outlet must be provided with temporary or permanent energy dissipation to prevent erosion.

E. Perform temporary erosion control to conform to the requirements of Engineer, and any erosion control permit that may apply to the Site, including:

1. Furnish, install, and maintain silt fence and other temporary erosion controls necessary to prevent the erosion and transport of soils, silt, mud, and debris off site or to other areas of the site where damage could result.

2. Temporary erosion controls include silt fences, hay bales, flotation silt curtain, and other means necessary to control erosion. If necessary, silt fence shall be installed according to Mn/DOT Specification 3886 and according to manufacturer’s recommendations.

3. Construct temporary erosion controls where there is evidence that sediment is being transported from the work area, where drainageways flow from the work area, and elsewhere as required to control erosion.

4. Schedule operations to minimize the amount of area disturbed and thus susceptible to erosion at any given time.

5. Remove and dispose of all temporary erosion controls when turf has been fully established or when earthwork such as diversion dikes have eliminated the possibility of sediment transport from the work area.

F. Schedule operations to minimize the amount of area disturbed and thus susceptible to erosion at any given time.

G. Maintain the appearance and functionality of the temporary erosion control measures throughout the duration of the Work.

3.02 ROCK FILTER DIKE

A. Rock filter dikes shall be placed as temporary sediment control method as indicated in the plans, or directed by Engineer.

B. Rock filter dike shall be cleaned and maintained as required throughout the duration of the Work. Accumulated sediment and debris shall be removed, and rock shall be replaced as required.

C. Removal of rock filter dike shall be performed:

1. As directed by the Engineer to provide for normal flow and water levels throughout the Work.

2. No rock filter dike or portion of the rock filter dike shall be removed more than 4 hours prior to time and on the same day as seed and mulch or erosion control blanket will be placed at that location within the construction limits.

3. Generally not less than 30 growing days or more than 60 growing days after seed and mulch is installed, however, never before it is determined that germination of seed has
resulted in acceptable coverage rate and does not need to be reseeded.

3.03 ROCK CONSTRUCTION ENTRANCE

A. Construction entrances shall be constructed to the dimensions and material thicknesses shown on the Drawings to reduce the amount of sediment tracked off site by vehicles.

B. Construction entrances and crossings, including on roadways and trails, shall be cleaned and maintained at the end of each work day.

C. Bituminous surface of construction entrances shall be swept within a 24-hour period of any construction activities that produce sediment that may be tracked off site or a minimum of twice a day during peak construction activities as directed by Engineer.

D. Contractor shall be responsible for removal and disposal of construction entrances.

3.04 SILT FENCE

A. Silt fence shall be installed at locations shown on the Drawings and down gradient of all excavations, or as instructed in the field by the Engineer.

B. Silt fence shall be installed in accordance with Mn/DOT Standard Specification 2573 for machine sliced or heavy duty silt fence.

C. Removal of silt fencing shall be performed as follows:

1. No silt fencing or portion of the silt fencing shall be removed more than 4 hours prior to time and on the same day as seed and mulch or erosion control blanket will be placed at that location within the construction limits.

2. Generally not less than 30 growing days or more than 60 growing days after seed and mulch is installed, however, never before it is determined that germination of seed has resulted in acceptable coverage rate and does not need to be reseeded.

3.05 SILT FENCE BAFFLE

A. Silt fence baffle shall be installed at locations shown on the Drawings and down gradient of all excavations, or as instructed in the field by the Engineer.

B. Removal of silt fence baffle shall be performed as follows:

1. As directed by the Engineer to provide for normal flow and water levels throughout the Work.

2. No silt fencing or portion of the silt fencing shall be removed more than 4 hours prior to time and on the same day as seed and mulch or erosion control blanket will be placed at that location within the construction limits.

3. Generally not less than 30 growing days or more than 60 growing days after seed and mulch is installed, however, never before it is determined that germination of seed has resulted in acceptable coverage rate and does not need to be reseeded.
3.06  FILTER LOG

A. Filter log shall be installed at locations shown on the Drawings and down gradient of all excavations, or as instructed in the field by the Engineer.

B. Filter log shall be installed in accordance with Mn/DOT Standard Specification 2573.

C. Removal of filter log shall be performed as follows:

1. No filter log or portion of the filter log shall be removed more than 4 hours prior to time and on the same day as seed and mulch or erosion control blanket will be placed at that location within the construction limits.

2. Generally not less than 30 growing days or more than 60 growing days after seed and mulch is installed, however, never before it is determined that germination of seed has resulted in acceptable coverage rate and does not need to be reseeded.

END OF SECTION 31 25 00
SECTION 31 37 00
RIPRAP AND BOULDERS

PART 1: GENERAL

1.01 SUMMARY

A. All Work included in this Section shall be performed in accordance with the following paragraphs and the provisions of the other Contract Documents.

B. This Section includes providing all materials, equipment, and labor to furnish and install riprap and stream stabilization materials including, but not limited to:

1. Granular filter aggregate
2. Riprap (all classes)
3. Salvage and install boulders
4. Igneous boulders for rock vanes
5. Installing boulder vanes and cross vanes
6. Root Rap

1.02 REFERENCES


1.03 SUBMITTALS

A. Test Results/Certificates—Submit the following test results and/or certificates in accordance with the general procedures set forth in Division 1 of these Specifications. At least 2 weeks prior to delivery to Site, Contractor shall provide Engineer with:

1. A certificate indicating compliance with Specifications for granular filter aggregate, each applicable class of riprap, and igneous boulders.

2. For each rock material, test results for at least two random samples showing gradation (ASTM D422) and classification (ASTM D2487).

3. Source identification of all materials (i.e., address, vendor, etc.) so that Engineer can sample if desired.
1.04 SEQUENCING AND SCHEDULING [NOT USED]

1.05 BASIS FOR COMPENSATION

A. Compensation for all Work covered under this Section of these Specifications shall be as set forth in Section 01 22 00 Unit Price Measurement and Payment.

PART 2: PRODUCTS

2.01 GENERAL

A. Materials used for riprap shall be durable angular rock or field stone (round) as specified on the Drawings, of approved quality, sound, hard, and free of seams, cracks, and other structural defects. The stone shall be free of contamination by soil and other debris prior to incorporation in the Work.

2.02 GRANULAR FILTER AGGREGATE

A. Granular filter aggregate shall conform to Mn/DOT Standard Specification 3601, Table 3601-2 for granular filter material.

2.03 RIPRAP

A. Riprap shall be angular rock or field stone as specified on the Drawings. If not specified, angular or field stone riprap may be used.

B. Riprap shall conform to the gradation requirements of Mn/DOT Standard Specification 3601, Table 3601-1 for the Class indicated on the Drawings.

2.04 IGNEOUS BOULDERS

A. Igneous boulders shall be sound, hard, and free of defects. Limestone or sandstone will not be permitted.

B. Imported boulders shall have a mean diameter of 24 inches with less than 10 percent finer than 24 inches in diameter and 100 percent finer than 36 inches in diameter. The 50 percent size shall not be smaller than 24 inches and not greater than 30 inches.

C. On-site boulders for salvage and re-use shall be identified in the field by the Engineer.

PART 3: EXECUTION

3.01 GENERAL

A. Riprap and boulder materials shall be installed in accordance with Mn/DOT Standard Specification 2511 with a thickness and to the limits shown on the Drawings and as directed by Engineer.
3.02 GRANULAR FILTER AGGREGATE
A. Granular filter aggregate shall be installed in accordance with Mn/DOT Standard Specification 2511 with a thickness and to the limits shown on the Drawings and as directed by Engineer.

3.03 RIPRAP
A. Riprap shall be installed in accordance with Mn/DOT Standard Specification 2511 with a thickness and to the limits shown on the Drawings and as directed by Engineer.
B. Riprap in Scarp E-4 at Chester Creek shall be placed in 15-inch lifts. Excess excavated material from the installation of the rock riprap toe upstream of Scarp E-5 shall be spread evenly over each layer of riprap to fill voids, but not prevent layers of riprap from interfacing.

3.04 CROSS VANES AND J-HOOK BOULDER VANES
A. Cross vanes and boulder vanes shall be installed with a thickness and to the grades and limits shown on the Drawings and as directed by Engineer.
B. As boulders are being installed, Engineer may determine that placement of boulder needs to be adjusted by repositioning or rotating the boulders. Contractor shall reposition or rotate boulder until placement is acceptable to Engineer.
C. Place riprap bedding material to an elevation 0.1 to 0.2 feet below the boulder top at the upstream face, ensuring that any voids between the boulders are filled. Manually place granular filter aggregate on the upstream face of the riprap bedding to fill gaps between the stones.

3.05 IGNEOUS BOULDERS
A. Igneous boulders shall be installed in accordance with the plans and as directed by Engineer.
B. As boulders are being installed, Engineer may determine that placement of boulder needs to be adjusted by repositioning or rotating the boulders. Contractor shall reposition or rotate boulder until placement is acceptable to Engineer.
C. Boulders shall be placed as indicated on the Drawings at site #582 J.

3.06 ROOT RAP
A. Root Rap shall be installed in accordance with MN/DOT Standards Specification 2577.3 with a thickness and to the limits shown on the Drawings and as directed by Engineer.

END SECTION 31 37 00
SECTION 32 90 00
SITE RESTORATION

PART 1: GENERAL

1.01 DESCRIPTION

A. All Work included in this Section shall be performed in accordance with the following paragraphs and the provisions of the other Contract Documents.

B. Work covered under this Section includes providing all materials, equipment, and labor to restore all disturbed areas, and includes soil preparation, seeding, mulching, erosion control blanket and all other work as may be necessary, all in accordance with the Contract Documents including, but not limited to:

1. Restoring all areas disturbed as a result of Contractor’s performance of the Work.

2. Seed and place erosion control blanket in areas as shown on the Drawings or as directed by the Engineer.

3. Restoring access paths, storage and laydown areas, and haul roads.

4. Areas disturbed by Contractor outside the construction limits shown on the Drawings, or used as laydown areas are to be restored in kind at the Contractor’s expense.

5. Furnish and install trees, shrubs and other plants at locations as shown on the Drawings or as directed by the Engineer.

1.02 REFERENCES


D. Seeding Manual 2014 Edition. Minnesota Department of Transportation, Office of Environmental Stewardship, Erosion Control Engineering Unit

1.03 SUBMITTALS

A. Contractor shall submit all product information a minimum of two weeks prior to the Work.
B. Contractor shall submit test results for topsoil from off-site source to be incorporated into the work a minimum of 2 weeks prior to use on the site. Imported topsoil must be certified free of noxious weed seeds.

C. Contractor shall provide seeds blended by the vendor and the mixture and ratio shall be guaranteed in writing to be as specified by percentage or weight in the Seed and Plant Lists. Seed testing indicating an 80% or higher viability must be supplied to Engineer for approval. This submittal is required of the Contractor prior to final payout.

1.04 SEQUENCING AND SCHEDULING

A. Contractor to coordinate the planting work with site grading work, with the goal of minimizing lag time between completion of grading and restoration work.

B. Contractor to notify Engineer when planting operations will occur, a minimum of three (3) days in advance.

C. It is the Contractor’s responsibility to contact the local utility companies for verification of the location of all underground utility lines in the area of work.

1.05 QUALITY ASSURANCE

A. Codes: Trees shall comply with local, state and federal laws relating to inspection for diseases and insect infestation.

B. Grading Standards: Trees shall meet the requirements set forth in these Contract Documents. In addition, they shall meet the requirements recommended by ANSI Z60.1.

C. Inspection: The Engineer’s Arborist reserve the right to inspect the seeds and plants, either at place of growth or at site before planting, for compliance with requirements for name, variety, size, quantity, quality, and mix proportion. Approval of material at those times does not preclude the right of inspection and rejection during progress of the planting work.

D. Delivery and Storage of Plants:

1. Contractor shall have the plants shipped and stored with protection from weather or other conditions which would damage or impair the effectiveness of the product.

2. Plants shall be packed in such a manner as to ensure adequate protection against damage while in transit.

3. When plant shipment is made by enclosed vehicle, the vehicle shall be adequately ventilated to maintain the plant storage area at less than 70 degrees F in transit.

4. Engineer will inspect all plants. Items which have become wet, moldy, or otherwise damaged in transit or in storage, will be rejected.

5. Protect plant material from heat and drying out if not planted immediately upon delivery. Set plant material on the ground, and keep continually moist and/or protect with a covering of soil, mulch, or other acceptable material. Material that is not protected in this manner is subject to rejection by the Engineer’s Arborist.
6. Contractor shall time delivery so that plants will be planted within 24 hours after delivery. Protect plugs against drying and damage prior to planting.

7. Each species shall be handled and packed in the manner approved for that plant, having regard for the soil and climatic conditions at the time and place of digging and delivery, and to the time that will be consumed while in transit or delivery. All precautions that are customary in good trade practice shall be taken to insure the arrival of plants in good condition.

E. Handling Trees:

1. Lift balled and burlap material from the bottom only, using straps or webbing to avoid cutting into the root ball.

2. Tying of branches shall be done with rope or twine only, and in such a manner that no damage will occur to the bark or branches.

3. Protect plants from wind and sun at all times by using tarpaulins or covers to prevent foliage, branches, and roots from drying out.

F. Foreman to have a minimum of five years of experience in landscape installation and restoration and have horticultural or ecological restoration training. All crews to be familiar with planting procedures and be under the supervision of a qualified foreman. Foreman must be able to take direction from and communicate with the Engineer.

1.06 BASIS FOR COMPENSATION

A. Compensation for all Work covered under this Section of these Specifications shall be as set forth in Section 01 22 00 Measurement and Payment.

1.07 RELATED SECTIONS

A. Section 31 20 00 Earth Moving

B. Section 35 31 00 Shoreline Protection

C. Section 32 95 00 Establishment Period Maintenance and Management

PART 2: PRODUCTS

2.01 TOPSOIL

A. Topsoil may be obtained from topsoil stockpiled during site preparation work. Any imported topsoil furnished by Contractor shall conform to the requirements of Mn/DOT Standard Specification 3877.2A Topsoil Borrow and shall be weed seed free.
2.02 TURF SEED

A. The turf grass seed mixture shall be State Seed Mix 25-131 Low Maintenance Turf, applied at the rate specified below as specified in Mn/DOT Standard Specification 3876.2F.

<table>
<thead>
<tr>
<th>Seed Mix No. 25-131</th>
<th>Pounds per Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>220</td>
</tr>
</tbody>
</table>

B. Fall seeding dates shall be July 20 to September 20. Dormant seeding dates shall be October 20 to November 15.

2.03 RESTORATION AREA SEED

A. Seed Mixes

1. Backslope Cut Seed Mix: The seed mixture for revegetating disturbed areas as specified on the Drawings at eight (8) pounds per acre.

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>% of Mix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asclepias incarnata</td>
<td>Swamp milkweed</td>
<td>1.6%</td>
</tr>
<tr>
<td>Aster novea-angliae</td>
<td>New England aster</td>
<td>3.1%</td>
</tr>
<tr>
<td>Bidens cernua</td>
<td>Beggartick</td>
<td>2.1%</td>
</tr>
<tr>
<td>Calamagrostis canadensis</td>
<td>Blue Joint Grass</td>
<td>13.6%</td>
</tr>
<tr>
<td>Carex lacustris</td>
<td>Lake sedge</td>
<td>3.6%</td>
</tr>
<tr>
<td>Eupatorium maculatum</td>
<td>Joe-pye weed</td>
<td>8.2%</td>
</tr>
<tr>
<td>Eupatorium perfoliatum</td>
<td>Boneset</td>
<td>6.8%</td>
</tr>
<tr>
<td>Glyceria grandis</td>
<td>Giant manna grass</td>
<td>11.3%</td>
</tr>
<tr>
<td>Leersia oryzoides</td>
<td>Rice Cut Grass</td>
<td>16.7%</td>
</tr>
<tr>
<td>Scirpus cypernius</td>
<td>Woolgrass</td>
<td>9.5%</td>
</tr>
</tbody>
</table>

2.
3. **VRSS Seed Mix**: The seed mixture for seeding VRSS areas as specified on the Drawings at thirty (30) pounds per acre (0.7 pounds per 1000 square feet).

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>% of Mix</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Leersia oryzoides</em></td>
<td>Rice Cut Grass</td>
<td>30.0%</td>
</tr>
<tr>
<td><em>Calamagrostis canadensis</em></td>
<td>Blue Joint Grass</td>
<td>20.0%</td>
</tr>
<tr>
<td><em>Scirpus cyperinus</em></td>
<td>Woolgrass</td>
<td>20.0%</td>
</tr>
<tr>
<td><em>Spartina pectinatus</em></td>
<td>Cord Grass</td>
<td>30.0%</td>
</tr>
</tbody>
</table>

4. **State Seed Mix No. 32-341 Native Construction Seed Mix**: The seed mixture for revegetating disturbed areas as specified on the Drawings one-half (0.5) pounds of forb mix per acre and twelve and one-half (12.5) pounds per acre for grass mixture. Cover crop shall be and Winter Wheat at 25 pounds per acre seeding rate.

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Rate (lb/ac)</th>
</tr>
</thead>
<tbody>
<tr>
<td>slender wheatgrass</td>
<td><em>Elymus trachycaulus</em></td>
<td>2.50</td>
</tr>
<tr>
<td>nodding wild rye</td>
<td><em>Elymus canadensis</em></td>
<td>2.00</td>
</tr>
<tr>
<td>Virginia wild rye</td>
<td><em>Elymus virginicus</em></td>
<td>2.00</td>
</tr>
<tr>
<td>fringed brome</td>
<td><em>Bromus ciliatus</em></td>
<td>1.40</td>
</tr>
<tr>
<td>big bluestem</td>
<td><em>Andropogon gerardii</em></td>
<td>1.25</td>
</tr>
<tr>
<td>side-oats grama</td>
<td><em>Bouteloua curtipendula</em></td>
<td>1.00</td>
</tr>
<tr>
<td>Indian grass</td>
<td><em>Sorghastrum nutans</em></td>
<td>1.00</td>
</tr>
<tr>
<td>switchgrass</td>
<td><em>Panicum virgatum</em></td>
<td>0.75</td>
</tr>
<tr>
<td>fowl bluegrass</td>
<td><em>Poa palustris</em></td>
<td>0.60</td>
</tr>
</tbody>
</table>

**Total Grasses**: 12.50

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Rate (lb/ac)</th>
</tr>
</thead>
<tbody>
<tr>
<td>partridge pea</td>
<td><em>Chamaecrista fasiculata</em></td>
<td>0.27</td>
</tr>
<tr>
<td>black-eyed susan</td>
<td><em>Rudbeckia hirta</em></td>
<td>0.09</td>
</tr>
<tr>
<td>Canada tick trefoil</td>
<td><em>Desmodium canadense</em></td>
<td>0.07</td>
</tr>
<tr>
<td>hoary vervain</td>
<td><em>Verbena stricta</em></td>
<td>0.05</td>
</tr>
<tr>
<td>wild bergamot</td>
<td><em>Monarda fistulosa</em></td>
<td>0.02</td>
</tr>
</tbody>
</table>

**Total Forbs**: 0.50
5. State Seed Mix No. 34-361 Riparian Northeast Seed Mix: The seed mixture for revegetating disturbed areas as specified on the Drawings five and one-quarter (5.25) pounds per acre of grasses mixture, one-half (.5) pounds per acre of sedges and rushes mixture, three-quarter (.75) pounds per acre of forbs mixture. Cover crop shall be and Winter Wheat at twenty-five (25) pounds per acre seeding rate.

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Rate (lb/ac)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virginia wild rye</td>
<td>Elymus virginicus</td>
<td>2.00</td>
</tr>
<tr>
<td>American slough grass</td>
<td>Beckmannia syzigachne</td>
<td>1.50</td>
</tr>
<tr>
<td>fowl bluegrass</td>
<td>Poa palustris</td>
<td>0.70</td>
</tr>
<tr>
<td>riverbank wild rye</td>
<td>Elymus riparius</td>
<td>0.50</td>
</tr>
<tr>
<td>tall manna grass</td>
<td>Glyceria grandis</td>
<td>0.25</td>
</tr>
<tr>
<td>rice cut grass</td>
<td>Leersia oryzoides</td>
<td>0.15</td>
</tr>
<tr>
<td>fowl manna grass</td>
<td>Glyceria striata</td>
<td>0.09</td>
</tr>
<tr>
<td>bluejoint</td>
<td>Calamagrostis canadensis</td>
<td>0.06</td>
</tr>
<tr>
<td><strong>Total Grasses</strong></td>
<td></td>
<td><strong>5.25</strong></td>
</tr>
<tr>
<td>fox sedge</td>
<td>Carex vulpinoidea</td>
<td>0.20</td>
</tr>
<tr>
<td>dark green bulrush</td>
<td>Scirpus atrovirens</td>
<td>0.12</td>
</tr>
<tr>
<td>pointed broom sedge</td>
<td>Carex scoparia</td>
<td>0.06</td>
</tr>
<tr>
<td>woolgrass</td>
<td>Scirpus cyperinus</td>
<td>0.05</td>
</tr>
<tr>
<td>tussock sedge</td>
<td>Carex stricta</td>
<td>0.04</td>
</tr>
<tr>
<td>path rush</td>
<td>Juncus tenuis</td>
<td>0.03</td>
</tr>
<tr>
<td><strong>Total Sedges &amp; Rushes</strong></td>
<td></td>
<td><strong>0.50</strong></td>
</tr>
<tr>
<td>blue vervain</td>
<td>Verbena hastata</td>
<td>0.22</td>
</tr>
<tr>
<td>marsh milkweed</td>
<td>Asclepias incarnata</td>
<td>0.12</td>
</tr>
<tr>
<td>spotted Joe pye weed</td>
<td>Eutrochium maculatum</td>
<td>0.11</td>
</tr>
<tr>
<td>grass-leaved goldenrod</td>
<td>Euthamia graminifolia</td>
<td>0.07</td>
</tr>
<tr>
<td>giant sunflower</td>
<td>Helianthus giganteus</td>
<td>0.07</td>
</tr>
<tr>
<td>common boneset</td>
<td>Eupatorium perfoliatium</td>
<td>0.05</td>
</tr>
<tr>
<td>flat-topped aster</td>
<td>Doellingeria umbellata</td>
<td>0.04</td>
</tr>
<tr>
<td>spotted touch-me-not</td>
<td>Impatiens capensis</td>
<td>0.03</td>
</tr>
<tr>
<td>blue monkey flower</td>
<td>Mimulus ringens</td>
<td>0.02</td>
</tr>
<tr>
<td>giant goldenrod</td>
<td>Solidago gigantea</td>
<td>0.02</td>
</tr>
<tr>
<td><strong>Total Forbs</strong></td>
<td></td>
<td><strong>0.75</strong></td>
</tr>
</tbody>
</table>
5. State Seed Mix No. 35-221 Dry Prairie General Seed Mix: The seed mixture for revegetating disturbed areas as specified on the Drawings one and one-half (1.5) pounds of forb mix per acre and ten (10) pounds per acre for grass mixture. Cover crop shall be and Winter Wheat at 25 pounds per acre seeding rate.

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Rate (lb/ac)</th>
</tr>
</thead>
<tbody>
<tr>
<td>side-oats grama</td>
<td>Bouteloua curtipendula</td>
<td>3.00</td>
</tr>
<tr>
<td>little bluestem</td>
<td>Schizachyrium scoparium</td>
<td>3.00</td>
</tr>
<tr>
<td>nodding wild rye</td>
<td>Elymus canadensis</td>
<td>1.00</td>
</tr>
<tr>
<td>kalm's broom</td>
<td>Bromus kalmii</td>
<td>0.73</td>
</tr>
<tr>
<td>big bluestem</td>
<td>Andropogon gerardii</td>
<td>0.70</td>
</tr>
<tr>
<td>Indian grass</td>
<td>Sorghastrum nutans</td>
<td>0.70</td>
</tr>
<tr>
<td>blue grama</td>
<td>Bouteloua gracilis</td>
<td>0.50</td>
</tr>
<tr>
<td>junegrass</td>
<td>Koelreana macrantha</td>
<td>0.25</td>
</tr>
<tr>
<td>prairie dropseed</td>
<td>Sporobolus heterolepis</td>
<td>0.12</td>
</tr>
<tr>
<td><strong>Total Grasses</strong></td>
<td></td>
<td><strong>10.00</strong></td>
</tr>
<tr>
<td>black-eyed susan</td>
<td>Rudbeckia hirta</td>
<td>0.31</td>
</tr>
<tr>
<td>purple prairie clover</td>
<td>Dalea purpurea</td>
<td>0.19</td>
</tr>
<tr>
<td>hoary vervain</td>
<td>Verbena stricta</td>
<td>0.13</td>
</tr>
<tr>
<td>lead plant</td>
<td>Amorpha canescens</td>
<td>0.09</td>
</tr>
<tr>
<td>blue giant hyssop</td>
<td>Agastache foeniculum</td>
<td>0.06</td>
</tr>
<tr>
<td>butterfly milkweed</td>
<td>Asclepias tuberosa</td>
<td>0.06</td>
</tr>
<tr>
<td>Canada milk vetch</td>
<td>Astragalus canadensis</td>
<td>0.06</td>
</tr>
<tr>
<td>bird's foot coreopsis</td>
<td>Coreopsis palmata</td>
<td>0.06</td>
</tr>
<tr>
<td>white prairie clover</td>
<td>Dalea candida</td>
<td>0.06</td>
</tr>
<tr>
<td>Canada tick trefoil</td>
<td>Desmodium canadense</td>
<td>0.06</td>
</tr>
<tr>
<td>stiff sunflower</td>
<td>Helianthus pauciflorus</td>
<td>0.06</td>
</tr>
<tr>
<td>wild bergamot</td>
<td>Monarda fistulosa</td>
<td>0.06</td>
</tr>
<tr>
<td>stiff goldenrod</td>
<td>Oligomeris rigidum</td>
<td>0.06</td>
</tr>
<tr>
<td>large-flowered beard tongue</td>
<td>Penstemon grandiflorus</td>
<td>0.06</td>
</tr>
<tr>
<td>smooth aster</td>
<td>Symphyotrichum laeve</td>
<td>0.06</td>
</tr>
<tr>
<td>rough blazing star</td>
<td>Liatris aspera</td>
<td>0.04</td>
</tr>
<tr>
<td>gray goldenrod</td>
<td>Solidago nemoralis</td>
<td>0.04</td>
</tr>
<tr>
<td>heath aster</td>
<td>Symphyotrichum ericoides</td>
<td>0.04</td>
</tr>
<tr>
<td><strong>Total Forbs</strong></td>
<td></td>
<td><strong>1.50</strong></td>
</tr>
</tbody>
</table>
6. State Seed Mix No. 35-421 Dry Prairie Northwest Seed Mix: The seed mixture for revegetating disturbed areas as specified on the Drawings three-quarters (0.75) pounds of forb mix per acre and seven and one-quarter (7.25) pounds per acre for grass mixture. Cover crop shall be Winter Wheat at 3 pounds per acre seeding rate.

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Rate (lb/ac)</th>
</tr>
</thead>
<tbody>
<tr>
<td>little bluestem</td>
<td><em>Schizachyrium scoparium</em></td>
<td>1.50</td>
</tr>
<tr>
<td>side-oats grama</td>
<td><em>Bouteloua curtipendula</em></td>
<td>1.20</td>
</tr>
<tr>
<td>nodding wild rye</td>
<td><em>Elymus canadensis</em></td>
<td>1.00</td>
</tr>
<tr>
<td>slender wheatgrass</td>
<td><em>Elymus trachycaulus</em></td>
<td>1.00</td>
</tr>
<tr>
<td>kalm's brome</td>
<td><em>Bromus kalmii</em></td>
<td>0.90</td>
</tr>
<tr>
<td>blue grama</td>
<td><em>Bouteloua gracilis</em></td>
<td>0.75</td>
</tr>
<tr>
<td>porcupine grass</td>
<td><em>Hesperostipa spartea</em></td>
<td>0.45</td>
</tr>
<tr>
<td>junegrass</td>
<td><em>Koeleria macrantha</em></td>
<td>0.25</td>
</tr>
<tr>
<td>sand dropseed</td>
<td><em>Sporobolus cryptandrus</em></td>
<td>0.20</td>
</tr>
<tr>
<td><strong>Total Grasses</strong></td>
<td></td>
<td><strong>7.25</strong></td>
</tr>
<tr>
<td>purple prairie clover</td>
<td><em>Dalea purpurea</em></td>
<td>0.11</td>
</tr>
<tr>
<td>Canada milk vetch</td>
<td><em>Astragalus canadensis</em></td>
<td>0.07</td>
</tr>
<tr>
<td>white prairie clover</td>
<td><em>Dalea candida</em></td>
<td>0.06</td>
</tr>
<tr>
<td>Early Sunflower</td>
<td><em>Helianthus helianthoides</em></td>
<td>0.06</td>
</tr>
<tr>
<td>prairie coneflower</td>
<td><em>Ratibida columnifera</em></td>
<td>0.06</td>
</tr>
<tr>
<td>black-eyed susan</td>
<td><em>Rudbeckia hirta</em></td>
<td>0.06</td>
</tr>
<tr>
<td>Canada tick trefoil</td>
<td><em>Desmodium canadense</em></td>
<td>0.05</td>
</tr>
<tr>
<td>heart-leaved alexanders</td>
<td><em>Zizia aptera</em></td>
<td>0.05</td>
</tr>
<tr>
<td>Prairie Wild Onion</td>
<td><em>Allium stellatum</em></td>
<td>0.03</td>
</tr>
<tr>
<td>stiff sunflower</td>
<td><em>Helianthus pauciflorus</em></td>
<td>0.03</td>
</tr>
<tr>
<td>rough blazing star</td>
<td><em>Liatris aspera</em></td>
<td>0.03</td>
</tr>
<tr>
<td>wild bergamot</td>
<td><em>Monarda fistulosa</em></td>
<td>0.03</td>
</tr>
<tr>
<td>stiff goldenrod</td>
<td><em>Oligoneuron rigidum</em></td>
<td>0.03</td>
</tr>
<tr>
<td>smooth aster</td>
<td><em>Symphyotrichum laeve</em></td>
<td>0.03</td>
</tr>
<tr>
<td>dotted blazing star</td>
<td><em>Liatris punctata</em></td>
<td>0.02</td>
</tr>
<tr>
<td>gray goldenrod</td>
<td><em>Solidago nemoralis</em></td>
<td>0.02</td>
</tr>
<tr>
<td>heath aster</td>
<td><em>Symphyotrichum ericoides</em></td>
<td>0.01</td>
</tr>
<tr>
<td><strong>Total Forbs</strong></td>
<td></td>
<td><strong>0.75</strong></td>
</tr>
</tbody>
</table>
7. State Seed Mix No. 36-311 Woodland Edge Northeast Seed Mix: The seed mixture for revegetating disturbed areas as specified on the Drawings one and one-half (1.5) pounds of forb mix per acre and seven (7.0) pounds per acre for grass mixture. Cover crop shall be Winter Wheat at 25 pounds per acre seeding rate.

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Rate (lb/ac)</th>
</tr>
</thead>
<tbody>
<tr>
<td>fringed brome</td>
<td>Bromus ciliatus</td>
<td>2.00</td>
</tr>
<tr>
<td>slender wheatgrass</td>
<td>Elymus trachycaulus</td>
<td>2.00</td>
</tr>
<tr>
<td>nodding wild rye</td>
<td>Elymus canadensis</td>
<td>1.25</td>
</tr>
<tr>
<td>fowl bluegrass</td>
<td>Poa palustris</td>
<td>0.87</td>
</tr>
<tr>
<td>poverty grass</td>
<td>Danthonia spicata</td>
<td>0.50</td>
</tr>
<tr>
<td>False Melic</td>
<td>Schizachne purpurascens</td>
<td>0.25</td>
</tr>
<tr>
<td>bluejoint</td>
<td>Calamagrostis canadensis</td>
<td>0.13</td>
</tr>
<tr>
<td><strong>Total Grasses</strong></td>
<td></td>
<td><strong>7.00</strong></td>
</tr>
<tr>
<td>American vetch</td>
<td>Vicia americana</td>
<td>0.50</td>
</tr>
<tr>
<td>black-eyed susan</td>
<td>Rudbeckia hirta</td>
<td>0.26</td>
</tr>
<tr>
<td>smooth wild rose</td>
<td>Rosa blanda</td>
<td>0.16</td>
</tr>
<tr>
<td>stiff goldenrod</td>
<td>Oligoneuron rigidum</td>
<td>0.14</td>
</tr>
<tr>
<td>smooth aster</td>
<td>Symphyotrichum laeve</td>
<td>0.14</td>
</tr>
<tr>
<td>tall cinquefoil</td>
<td>Drymocallis arguta</td>
<td>0.06</td>
</tr>
<tr>
<td>gray goldenrod</td>
<td>Solidago nemoralis</td>
<td>0.06</td>
</tr>
<tr>
<td>flat-topped aster</td>
<td>Doellingeria umbellata</td>
<td>0.04</td>
</tr>
<tr>
<td>upland white aster</td>
<td>Solidago ptarmicoides</td>
<td>0.04</td>
</tr>
<tr>
<td>common yarrow</td>
<td>Achillea millefolium</td>
<td>0.03</td>
</tr>
<tr>
<td>Lindley’s Aster</td>
<td>Symphyotrichum ciliatum</td>
<td>0.03</td>
</tr>
<tr>
<td>pearly everlasting</td>
<td>Anaphalis margarithaea</td>
<td>0.02</td>
</tr>
<tr>
<td>large-leaved aster</td>
<td>Eurybia macrophylla</td>
<td>0.02</td>
</tr>
<tr>
<td><strong>Total Forbs</strong></td>
<td></td>
<td><strong>1.50</strong></td>
</tr>
</tbody>
</table>
8. State Seed Mix No. 36-311 Woodland Edge Northeast Grasses Only Seed Mix: The seed mixture for revegetating disturbed trail areas as specified on the Drawings and seven (7.0) pounds per acre for grass mixture. Cover crop shall be and Winter Wheat at 25 pounds per acre seeding rate.

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Rate (lb/ac)</th>
</tr>
</thead>
<tbody>
<tr>
<td>fringed brome</td>
<td>Bromus ciliatus</td>
<td>2.00</td>
</tr>
<tr>
<td>slender wheatgrass</td>
<td>Elymus trachycaulus</td>
<td>2.00</td>
</tr>
<tr>
<td>nodding wild rye</td>
<td>Elymus canadensis</td>
<td>1.25</td>
</tr>
<tr>
<td>fowl bluegrass</td>
<td>Poa palustris</td>
<td>0.87</td>
</tr>
<tr>
<td>poverty grass</td>
<td>Danthonia spicata</td>
<td>0.50</td>
</tr>
<tr>
<td>False Melic</td>
<td>Schizachne purpurascens</td>
<td>0.25</td>
</tr>
<tr>
<td>bluejoint</td>
<td>Calamagrostis canadensis</td>
<td>0.13</td>
</tr>
</tbody>
</table>

**Total Grasses** 7.00

9. Fescue Seed Mix: The seed mixture for revegetating bare soil as specified on the Drawings.

<table>
<thead>
<tr>
<th>Common Name</th>
<th>% Seed Mix</th>
<th>Seeding Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creeping Red Fescue</td>
<td>25</td>
<td>50 lbs/ac.</td>
</tr>
<tr>
<td>Wendy Jean Creeping Red Fescue</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Aurora 2 Hard Fescue</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Monolea Chewing Fescue</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Sheeps Fescue</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Shadows 2 Chewing Fescue</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

2.04 FERTILIZER

A. Fertilizer shall be applied at a rate of 500 pounds per acre (11.5 pounds per 1,000 square feet) of 10-20-20 as specified in the Mn/DOT Standard Specification 3882.2 and as shown on the Drawings for VRSS seeding areas.

B. Fertilizer shall be applied at a rate of 350 pounds per acre of 20-10-20 as specified in the Mn/DOT Standard Specification 3882.2 and as shown on the Drawings for turf grass areas.

2.05 EROSION CONTROL BLANKET

A. Erosion control blanket shall be Mn/DOT Standard Specification 3885.3, Category 3 type 2S 3N wood fiber or straw blanket. The fibers shall be made into blanket from organic netting.
The blanket fibers shall be of consistent thickness and evenly distributed throughout the blanket and shall be a 100% biodegradable erosion control blanket.

B. Erosion control blanket shall be Mn/DOT Standard Specification 3885, Category 3N type 2S wood fiber or straw blanket where shown on the Drawings. The fibers shall be made into blanket from organic netting. The blanket fibers shall be of consistent thickness and evenly distributed throughout the blanket and shall be a 100% biodegradable erosion control blanket.

C. Erosion control blanket shall be Mn/DOT Standard Specification 3885, Category 4N type 2S coconut-straw blanket where shown on the Drawings. The fibers shall be made into blanket from organic netting. The blanket fibers shall be of consistent thickness and evenly distributed throughout the blanket and shall be a 100% biodegradable erosion control blanket.

2.06 MULCH

A. Mulch material for seeding areas shall be Type 3 clean straw mulch as specified in the Mn/DOT Standard Specification 3882.2. All mulch shall be free of noxious weed seed.

B. Mulch material for trees and shrubs shall be Type 6 mulch (wood chips) as specified in the Mn/DOT Standard Specification 3882.2, or VisPore® Tree Mats or an approved equal.

C. Mulch material for hydroseeding areas shall be Type 5 hydromulch as specified in the Mn/DOT Standard Specification 3884.2.

2.07 TREES, SHRUBS AND PLUGS

A. All new trees, shrubs and plugs shall conform to the requirements of Mn/DOT Standard Specification 3861 Plant Stock or equal approved by the Engineer.

B. Contractor shall provide nursery grown plants. No wild collected plants will be accepted. Do not use materials which have been in cold storage for longer than 45 days.

C. Contractor shall deliver plants after preparations for planting have been completed and plant immediately. If planting is delayed more than 6 hours after delivery, set plants in shade, protect from weather and mechanical damage, and keep moist and cool.

D. Contractor shall not remove container grown stock from containers until planting time.

E. Contractor shall label at least one plant of each variety in each planting area with a securely attached waterproof tag bearing legible designation of botanical and common name.

F. All plants shall be true to type and have a vigorous root system.

G. Plants shall be free from insects and diseases and must show appearance of normal health and vigor.

H. Plants shall be true to their name as specified. The genetic origin of all plants shall be from as close to the project location as possible but no farther than a 150 mile radius. No re-labeled or re-bagged plants from beyond this mileage limit will be accepted without prior written approval by Engineer.
I. All plants shall comply with the State and Federal laws with respect to inspection for plant diseases and insect infestations.

PART 3: EXECUTION

3.03 GENERAL

A. After work in a particular area has been completed, the areas shall be final-graded as shown on the Drawings. Grading shall be performed in a manner that will minimize erosion. After final grading, all disturbed areas shall be covered with topsoil, seeded, fertilized and mulched, or sodded. Restoration shall be in accordance with Mn/DOT Standard Specifications 2575 and as specified herein.

B. Coordinate the vegetation establishment work with the grading and finishing operations to provide protection as soon as possible after areas have been graded.

3.04 TOPSOIL PLACEMENT AND GRADING

A. Contractor to cover all areas to be seeded with a uniform mixture of topsoil to the depths shown in the Drawings.

B. Place stockpiled topsoil uniformly over entire area to be seeded. In the event that topsoil has been disturbed or is not of acceptable depth prior to application of seed, supplement topsoil should be added in area to bring it up to the required depth. All areas receiving seed shall be worked until the soil is completely fined and in a mellow condition, and to a smooth, even finish grade. All holes, depressions and rivulets shall be filled in to ensure no disruption of established drainage patterns. All rubble, sticks, branches, or stones and extraneous material over ¾-inch diameter on the surface, which will interfere with the seeding shall be picked up and removed.

C. Immediately prior to seeding, Contractor shall loosen topsoil to a depth of 6 inches, or to maximum depth of topsoil, if less than 6” on all areas except slopes steeper than 2 horizontally to 1 vertically using discs, harrows, tiller rakes to produce fine grade. On slopes steeper than 2:1, use cultivating equipment in general direction at right angles to the direction of surface drainage wherever practical.

D. For all areas to be turf seeded, apply dry, free flowing fertilizer using a mechanical spreader, and thoroughly mix in to the top 3 inches of soil using a meeker harrow or similar device.

E. Prepare ground so top of new seeded area will be flush with adjacent soil, adjacent walks, and permanent surfacing.

3.05 SEEDING

A. Seeding Dates and Cover Crop

6. Fall (September 1 – October 20) or Dormant (October 20 – November 15) Seeding: The seed mixture for revegetating disturbed areas as specified and Winter Wheat as a cover crop at pounds per acre as specified for each seed mix.
B. Seed shall be sown in accordance with Mn/DOT Standard Specifications 2575.3B and as specified herein. The soil shall be prepared less than 48 hours prior to seeding. Seed shall be applied at the rate specified.

C. Seeding operations are to be conducted under favorable weather between September 1 and November 15. Engineer may adjust specified dates depending on the prevailing weather conditions.

D. Seed prior to applying mulch or installing erosion control blanket.

E. The specified seed mixture shall be a uniform blend of the designated seeds, and shall be uniformly spread and sown by means of mechanical equipment. All mechanical equipment used in the seeding operation shall be operated in a general direction at right angles to the direction of surface drainage whenever practical. Provisions shall be made by markers or other means to ensure that the successive seeded strips will overlap. Seeding shall be done before the soil prepared for seeding becomes eroded, crusted over, or dried out. Seeding activities will be suspended or altered as directed by Engineer when soil conditions become excessively wet or dry.

F. Seeding shall be performed mechanically with equipment designed for even distribution of seed for native seed mixes. The seed may be applied by a tractor-drawn rotary spreader or seed drill (except that tractor-drawn equipment will not be permitted on previously seeded and mulched areas), or a hand-operated or manually pushed mechanical spreader. The use of hand-operated or manually pushed mechanical spreaders will be permitted in areas where it is inaccessible for other equipment. Hand seeding will be allowed for small areas but all seed must be hand raked to ensure good seed-to-soil contact. Hydroseeding is not to be used for native seed mixtures.

G. Turf seeding shall be performed mechanically with equipment designed for even distribution of seed. During windy weather, no seeding shall be done with hydroseeding devices.

H. Hydroseeding shall be performed in accordance with Mn/DOT Standard Specifications 2575.3B4 and in combination with hydromulching as specified herein.

I. All seeded areas shall have the seed bed firmed after seeding and prior to mulching. In these areas, soil firming shall be performed using a corrugated cultipacker or other Engineer-approved soil-firming equipment. Soil firming shall be accomplished the day seed is applied.

3.06 MULCHING

A. All seeded surfaces not covered by erosion control blanket shall be mulched the same day seed is applied.

B. On areas not identified on the Drawings for hydromulching, mulch shall be Type 3, applied in accordance with Mn/DOT Standard Specifications 2575.3C; the rate of application shall be 2 tons per acre and as specified herein. Approximately 10 percent of the soil surface shall be visible through the mulched areas. Disk anchor as specified in Mn/DOT 2575.3D. Should mulch application be delayed to the next day, the area shall be reseeded and refirmed at the Contractor’s expense.

C. On areas identified on the Drawings for hydromulching, Type 5 hydromulch shall be applied
in accordance with Mn/DOT Standard Specifications 2575.3E, applied at a rate of 2100 pounds per acre.

D. Following the mulching operation, precautions shall be taken to prohibit pedestrian or vehicular traffic over the mulched area. Any mulch which is displaced by such activities shall be replaced at once, but only after the work preceding the mulching, which may have been damaged as a result of the displacement, has been acceptably repaired. Mulching activities will be suspended or altered as directed by Engineer when soil conditions become excessively wet or dry.

3.07 EROSION CONTROL BLANKET

A. Erosion control blanket shall be installed in all areas as shown on Drawings in accordance with Mn/DOT Standard Specifications 2575.3. Blankets are to be installed vertically on the slope. Where more than one width is required, a minimum six inch (6”) overlap should be used. Secure the outer most stitch of each blanket with a common row of staples. Blankets shall be trenched at the head of the slope if the blanket cannot be extended three feet over the slope crest or if overland flow is anticipated from upslope areas.

3.08 TIME OF PLANTING

A. Tree, shrub and plug planting operations are to be conducted under favorable weather conditions during the following planting seasons:

6. Fall: September 30 to November 30

3.09 LAYOUT OF TREES, SHRUBS AND PLUGS

A. Engineer will stake tree, shrub and plug locations prior to any digging. This does not apply to VRSS plantings and live cutting placements.

3.10 PLANTING OF TREES, SHRUBS AND PLUGS

A. Planting of trees, shrubs and plugs mulching shall conform to the requirements of Mn/DOT Standard Specification 2571.

B. Contractor shall water plantings within 8 hours of installation. Contractor is responsible for keeping trees and shrubs watered through the guarantee period. Watering of trees and shrubs shall be considered incidental to plant installation and maintenance.

C. All trees and shrubs will be mulched with wood chips or tree mats as shown on the Drawings.

3.11 RESTORATION OF ACCESS PATHS AND HAUL ROADS

A. Access paths, storage and laydown areas, and haul roads shall be restored as shown on the Drawings and as directed by Engineer.

B. Seed mixes for access paths, storage and laydown areas, and haul roads shall be as shown on the Drawings and as specified herein.

C. Mulch and erosion control fabric for access paths, storage and laydown areas, and haul roads shall be as shown on the Drawings and as specified herein.
3.12 FOOT PATH CONSTRUCTION AND RESTORATION

A. Foot Paths shall be constructed and restored as shown on the Drawings and as directed by Engineer.

B. Seed mixes for restoration areas along the foot path shall be as shown on the Drawings and as specified herein.

C. Erosion control blanket for restoration areas along the foot path shall be as shown on the Drawings and specified herein.

3.13 CLEAN UP

A. Clean-up the entire area around planting operations and restore to its original condition. This work shall include replacement of sod damaged by Contractor’s planting operations.

3.14 INSPECTION AND ACCEPTANCE

A. Contractor to request an inspection by Engineer of completed work. Engineer will produce a punch list following the inspection. The punch list will note all repairs, replacements, or work completions which may appear at the time to be necessary in the judgment of the Engineer. Engineer will deliver a copy of the punch list to the Contractor. Upon completion of all work identified on the punch list, a second inspection will be made. Such procedure will continue until all items of the punch list are corrected. Upon completion of a satisfactory inspection, the Engineer will accept the work as complete, provided all requirements of the extended maintenance and guarantee are met.

3.15 MAINTENANCE AND GUARANTEE

A. Contractor shall provide maintenance and management of all planting as described in Section 329500 Establishment Period Maintenance and Management of these Specifications, or otherwise indicated on Drawings.

B. Contractor to guarantee all trees and shrubs under this contract for a minimum of one full year from the time of Engineer acceptance.

6. Replacements: At the end of the Guarantee Period, all plants shall fulfill all the requirements of these specifications with regard to quality and condition; further, they shall be free of dead branches and twigs and shall bear a minimum of 50% of the foliage present when planted having normal density, size, shape and color as determined by the City. Any plants failing to satisfy all these conditions shall be replaced as soon as possible. Plants may be replaced prior to the end of their guarantee Period if such an agreement exists between the Contractor and the Engineer. Replacement stock shall be subject to all requirements as to selection, inspections, preparation, planting and maintenance operations. Replacements shall match caliper and/or height attained by other stock of the original planting.

7. Replacement Guarantee: Replacement stock shall not be guaranteed.

8. Final Acceptance and Payment: A final inspection will be held after the end of the Guarantee period and after all replacements are complete. Final acceptance will be
submitted in writing by the Engineer and payment will be issued for the amount of the maintenance period retainage.

C. Condition Standards: Contractor to request inspection of seeding and planting work by Engineer not less than 40 days after completion, or after May 15th the following year to verify that seeding areas are free of dead or dying patches larger than 9 square feet, and show foliage of normal density, size and color.

D. Coverage Standards: Growth and coverage of seeding shall meet the following standards:

6. STAGE 1 (End of 1st full growing season or later depending upon date of seeding):
   (a) Seedlings of at least three native grass species and five native forb species shall be widely dispersed through seeded area. No areas of bare soil larger than nine square feet shall exist.
   (b) No bare patches of soil larger than four square feet shall exist.

E. Inspection and Reporting During Warranty Period:

6. Upon completion of the seeding and plant establishment work, request a review by the Engineer to determine whether the work conforms to the requirements of the specifications.

7. Request a review by the Engineer during the growing season not less than 40 days after completion, or after May 15th the following year after planted to confirm plant and seed establishment success.

8. The Engineer will review all seeded and planted areas for acceptance at the end of each growing season and for final acceptance at the end of the warranty period.

9. If the condition and coverage criteria listed above are met by the growth of acceptable species, then the work will be accepted.

10. Following each review, Engineer will submit to Contractor written notification of acceptance or of corrective action required.

F. Corrective Work During Warranty Period:

6. Reseed, replant, and otherwise correct work which does not meet the Condition and Coverage standards during each year and at the end of the Warranty period, without cost to the Engineer.

7. Perform corrective work in conformance with the requirements of this Specification.

G. Delays: Delays in completion of planting operations, which extend the planting into more than one planting season, shall extend the Warranty period correspondingly.

H. Exceptions: Contractor shall not be held responsible for failures due to vandalism.

END OF SECTION 32 90 00
SECTION 32 95 00

ESTABLISHMENT PERIOD MAINTENANCE AND MANAGEMENT

PART 1: GENERAL

1.01 SUMMARY

A. All Work included in this Section shall be performed in accordance with the following paragraphs and the provisions of the other Contract Documents.

B. All work shall be performed by Contractor meeting minimum qualifications described herein, demonstrating streambank restoration experience, natural resources education, and extensive plant knowledge.

C. This Section includes providing all materials, equipment, and labor necessary for herbaceous plant maintenance for a period of one year including, but not limited to:

1. Inspection and reporting

2. Weed Control (as necessary)

1.02 REFERENCES


1.03 SUBMITTALS

A. Submit the following during the 1 year maintenance period, at the time the work is requested:

1. Procedures plan for herbicide and/or pesticide treatments, including a list of the targeted weeds, insects, and pests; neighbor notification and on-site postings method; list of products, rate of application, limitations or restrictions on product use; and copy of applicator license (if supervisor has changed from project inception).

1.04 SEQUENCING AND SCHEDULING [NOT USED]

1.05 FOR COMPENSATION

A. Compensation for all Work covered under this Section of these Specifications shall be as set forth in Section 01 22 00 Measurement and Payment.
1.06 QUALIFICATIONS

A. Contractor shall perform all work under the direct control of a superintendent conforming to the minimum qualifications, including streambank restoration experience, natural resources education, and extensive plant knowledge.

B. Contractor shall not change superintendents without the written approval of Engineer.

C. If Contractor, in opinion of Engineer, fails to provide a superintendent conforming to the minimum qualifications Contractor shall be considered in breach of the Agreement.

1.07 EROSION CONTROL

A. Contractor is required to continue erosion control methods and maintain previously installed materials, and to install where necessary additional protection to control erosion and sedimentation during their work on the site. Additional erosion control measures shall be considered incidental to plant maintenance.

PART 2: PRODUCTS [NOT USED]

PART 3: EXECUTION

3.01 ONE-YEAR MAINTENANCE PERIOD

A. Maintenance Period:

1. At the direction of Engineer, perform the maintenance work described below during a one-year maintenance period commencing with preliminary acceptance of the work defined above as the receipt by the Installation Contractor of a written notice from Engineer that the installation work conforms to the requirements of the Specifications.

2. Contractor shall fulfill all mandatory requirements without notification of Engineer.

3. Engineer will request additional work from Contractor during the 1 year maintenance period, as deemed necessary by Engineer. This work includes herbicide application and manual weed removal.

B. General Requirements (Mandatory):

1. Protection of Existing Conditions: Use every reasonable precaution to prevent damage to existing conditions such as structures, utilities, plant materials and walks on or adjacent to the site of the work. Any damage caused by Contractor shall be repaired at Contractor’s expense.

2. Barriers: Maintain existing fences or provide additional barricades, fences or other barriers as necessary to protect existing conditions from damage during maintenance operations.

3. Hazardous Operations: Do not store materials or equipment, do not allow operation or parking of equipment under the branches of trees and shrubs.
4. Notification: Submit to Engineer written notification of any damaged plants and/or structures.

C. Inspection and Reporting (Mandatory):

1. Contractor shall notify Engineer at least 24 hours in advance of inspection in order to facilitate coordinated inspection.

2. Once a month (May through October), Contractor shall inspect for invasive weed encroachment, dead plants and erosion problems, and to determine condition of the work and need for maintenance activities.

3. After each inspection, Contractor shall prepare and submit to Engineer a telephone report, e-mail report, or written report describing the results of the inspection and recommendations for further maintenance activities. Report shall be submitted to Engineer within 5 days of completing the inspection and prior to the following month’s inspection.

D. Herbicide or Manual Treatment (As Necessary):

1. Upon discovery of invasive species during scheduled inspections conduct herbicide and/or manual treatments for weed control.

2. Herbicide and/or manual treatments may be required monthly (May - October) for the first 2 seasons, or not at all, depending upon site conditions.

E. Mowing: (As Necessary)

1. At the request and direction of Engineer, conduct mowing operations at the site.

2. Mowing may be requested one or more times per year or not at all, depending upon weed growth and whether burning is performed.

3. Use a flail-type mower to prevent creation of mats of clippings.

4. Use low-profile equipment appropriate to slope conditions and to minimize the damage to soils and vegetation.

5. Mow at a height of 6 to 8 inches. Do not mow shorter than 6 inches.

F. Final Review:

1. At the end of the 1 year maintenance period, Contractor shall request a review by Engineer to determine whether the work conforms to the requirements of the Specifications.

2. If Engineer determines that work does not conform to the requirements of the Specifications, Contractor will receive written notification of required corrections.

3. Contractor shall perform corrective work within ten calendar days of Final Review.

4. Upon completion of the corrective work, Contractor shall request another Final
Review by Engineer, who will determine whether the work conforms to the requirements of the Specifications.

G. Final Acceptance: Contractor will receive a written notification of Final Acceptance when Engineer determines that the work conforms to the requirements of the Specifications.

END OF SECTION 32 95 00
SECTION 33 41 13
PUBLIC STORM UTILITY DRAINAGE PIPING

PART 1 GENERAL

1.00 APPLICABLE PROVISIONS

A. Applicable provisions of Division 01 shall govern work of this section.

1.01 REFERENCES

A. The following publications of the issues listed below, but referred to thereafter by basic designation only, form a part of this specification to the extent indicated by the reference thereto.


1.02 DESCRIPTION OF WORK

A. The work covered under this section shall consist of furnishing all material, equipment, and labor required to install the storm sewer for this project.

1.03 RELATED WORK ELSEWHERE

A. Procurement and Contracting Requirements - Division 00 (All Sections)
B. Control of Water – Division 01
C. Earthmoving – Division 31

1.04 SUBMITTALS

A. Contractor shall submit such product literature and catalog cuts of materials to be supplied to relate these materials to the specifications. Information shall be in conformance with requirements of Submittals - Division 01 of these specifications.

PART 2 PRODUCTS AND MATERIALS

2.01 CONCRETE PIPE

A. Reinforced concrete pipe shall conform to the requirements of Section 3236 of the Mn/DOT Specifications.
2.02 HIGH DENSITY POLYETHYLENE PIPE (HDPE)

A. Polyethylene pipe shall conform to the requirement of Section 3247 of the Mn/DOT specification.

B. All polyethylene shall have a smooth interior.

PART 3 CONSTRUCTION METHODS

3.01 GENERAL

A. Construction of the storm sewer shall include all excavation, backfilling, compacting of trenches and breaking into existing manholes, inlets or storm sewers required to provide a completed storm sewer at the locations shown on the plans.

3.02 PROTECTION OF EXISTING UTILITIES

A. Utility locations shown on plans and profile are approximate. Contractor shall contact all utility companies at least three working days prior to excavation for locations of all buried utilities owned by them. Should utilities be unexpectedly encountered during excavation, consult Engineer immediately for directions as to procedure. Cooperate with the Owner and public and private utility companies in keeping their respective services and facilities in operation. Repair damaged utilities to the satisfaction of the utility owner. Contractor shall be responsible for the cost of repairing damaged utilities.

3.03 CONCRETE STORM SEWER

A. Concrete storm sewer shall be constructed as shown on the plans and in accordance with the Mn/DOT Specifications, with the following exceptions and additions:
   1. Joints shall be of flexible watertight rubber gaskets installed as per manufacturer’s instructions.
   2. Flexible watertight gaskets will not be required for elliptical storm sewer. Elliptical joints shall be sealed with trowellables “Daubert” chemical joint compound, or equal.
   3. Backfill shall be as indicated on the plans and specified in Trenching and Backfilling - Division 31 and Special Procedures - Division 01. Backfill shall be incidental to storm sewer construction.
   4. If no embedment class is specified, then Class B embedment with a shaped subgrade shall be used.
   5. Joint ties shall be installed on apron endwall joints and the adjacent two pipe joints.

3.04 HIGH DENSITY POLYETHYLENE PIPE (HDPE)

A. High density polyethylene pipe shall be constructed as shown on the plans and, in accordance with the Special Procedures - Division 01 and with the Mn/DOT Specifications. Standard practice for underground installation of flexible sewer pipe (ASTM D 2321) with the following exceptions and additions:
   1. Joints for sewer pipe shall be sealed to be soil tight in accordance with AASHTO Standard Specifications for Highway Bridges, Section 26.4.2.4.
2. Embedment shall be Class II or as indicated in Special Procedures - Division 01 and shall be incidental to storm sewer construction.

3. Backfill shall be Type II as specified in Trenching and Backfilling - Division 31 or as indicated in Special Procedures - Division 01. Backfill shall be incidental to storm sewer construction.

3.05 TESTING

A. Leakage Testing. All storm sewers shall be tested for excessive infiltration and sand leakage. All sand leaks shall be repaired by the Contractor at his expense. If in the judgment of the Engineer the infiltration will cause a continued maintenance problem, the sewer shall be repaired by the Contractor at his expense.

B. Alignment and Grade shall be checked by lamping method to detect poor alignment, offset joints, sags, kinks, or open joints; defects shall be corrected by the Contractor before final acceptance. If closer inspection is warranted, the Owner may arrange for a televised inspection. The Owner will assume the cost of televised inspection if no serious defect is found. If defects are found which the Engineer attributes to the failure of proper installation or sound materials, the Contractor shall pay for the test. Defects shall be promptly corrected.

C. Deflection Limitation. Deflections in corrugated metal pipe and HDPE pipe shall be limited to 5 percent of the nominal pipe diameter. If visual inspection indicates a greater deflection, the Contractor shall supply and pull a rigid ball or mandrel with a diameter 5 percent less than the nominal pipe size through the sewer. Failure of the ball to freely pass through shall be cause for rejection of the sewer.

3.06 PROTECTING OPENINGS

A. Fences shall be provided around all openings and whenever required for the protection of the public. They shall be neat and substantial. All openings, fences, and surface obstructions shall be guarded and shall be indicated at night by suitable flashers.

END OF SECTION 33 41 13
SECTION 35 31 00
SHORELINE PROTECTION

PART 1: GENERAL

1.01 SUMMARY

A. All Work included in this Section shall be performed in accordance with the following paragraphs and the provisions of the other Contract Documents.

B. This Section includes furnishing all materials and equipment and performing all labor necessary for shoreline protection as shown on the Drawings and specified herein, including but not limited to:

1. Logs imported for footer logs, root wads, or large woody debris
2. Installation of Root Wads
3. Installation of Composite Rock Wood Bank Protection
4. Installation of Toewood
5. Installation of Vegetated Reinforced Soil Slope (VRSS)
6. Harvesting and installation of Dormant Cuttings and Live Stakes
7. Installation of Filter Log and Biolog
8. Installation of French drain
9. Installation of Corrugated Polyethylene Drain Tile

1.02 REFERENCES


1.03 BASIS FOR COMPENSATION

A. Compensation for all Work covered under this Section of these Specifications shall be as set forth in Section 01 22 00 Measurement and Payment.

1.04 RELATED SECTIONS

A. Section 31 11 00 Clearing and Grubbing
B. Section 31 20 00 Earth Moving
C. Section 31 37 00 Riprap and Boulders
1.05 DEFINITIONS

A. Root Wad – The lower portion of a tree, preferably hardwood species, consisting of a root fan and trunk.

B. Toe wood – Constructed soil lifts (VRSS) above a streambank toe protection. The toe protection consists of root wads, large woody debris, woody debris, and granular fill.

C. Vegetated Reinforced Soil Slopes (VRSS) – Constructed soil lifts above a streambank toe protection; the soil lifts are comprised of material suitable for plant growth wrapped in natural fiber matting, seeded with specified seed mixes, with dormant cuttings and topsoil placed between the lifts.

D. Brush Mattress – A layer (mattress) of interlaced dormant cuttings placed on a bank face or above toe protection measures such as riprap.

E. Filter Log – A fiber log consisting of coconut fibers (or approved equal) that have been compressed and stuffed into a netting, with a minimum diameter of 12 inches, staked to the slope.

F. Biolog – A fiber log consisting of coconut fibers (or approved equal) that have been compressed and stuffed into a netting, with a minimum diameter of 12 inches, staked to the slope.

G. Live Stakes – Field harvested, dormant stakes with 1 to 2 inch diameter; length determined by application; typically 3 feet in length.

H. Dormant Cuttings – Locally harvested dormant woody vegetation, 1/2 to 2 inch diameter, live stakes; harvested at 6' to 8' in length and trimmed to length at time of installation 1-2 feet longer than the width of proposed soil lift. Used in VRSS installations and brush mattress.

1.06 QUALITY ASSURANCE

A. Harvesting of dormant cuttings and live stakes may be undertaken at locations within the project area as designated by Engineer. All red-osier dogwood and willow dormant cuttings will be obtained from approved harvest locations.

B. Communication between Contractor and Engineer:

1. Contractor to notify Engineer at least 3 days in advance of any work to be performed at site, or of any inspections necessary to conform to Specifications.

1.07 WARRANTY OF PLANTING WORK

A. Contractor shall warrant that plantings will meet the Condition Standards defined below after planting is complete.
PART 2: PRODUCTS

2.01 ROOT WADS

A. The root fan shall have a minimum diameter of roughly 2 feet. The root fan shall have no maximum size and may be trimmed to fit site needs. The root fan shall have relatively few broken branches and be securely attached to the trunk. For use in Type A Toe Wood trunks shall be relatively straight and free of breaks and splits. Trunks should have a minimum length of 10 feet and a maximum length of 20 feet. Trunks should have a minimum diameter of 10 inches. For use in Type B Toe Wood trunk dimensions shall be as shown on the Drawings.

B. For use in Type A Toe Wood Footer logs will should be a minimum of 8 inches in diameter and meet the same specifications as the root wad trunk above. Required length will be 8 feet minimum. For use in Type B Toe Wood footer log dimensions shall be as shown on the Drawings.

C. For use in Type A Toe Wood boulders with a minimum diameter of 12 inches will be used as root wad anchors. For use in Type B Toe Wood boulder dimensions shall be as shown on the Drawings.

2.02 MATERIAL FOR WOODY DEBRIS

A. Woody material for fill shall be small limbs and branches, with a maximum diameter of 4 inches.

B. Woody debris material shall not be rotten.

2.03 DORMANT CUTTINGS

A. Dormant cuttings shall be locally harvested when dormant. All red-osier dogwood and willow spp. dormant cuttings will be obtained from approved harvest locations.

B. Minimum stem diameter shall be ½ to 2 inch diameter; 1 to 2 feet longer than the width of proposed soil lift. The live branches should be relatively straight, with no visible signs of disease, damage or deformity.

C. Dormant cuttings must be harvested after leaf drop in the fall and before bud break in the spring.

2.04 FRENCH DRAIN

A. The perforated drain tubing (tile) shall have a sock conforming to the material requirements of Mn/DOT Standard Specification 3733, Type I Knit Sock.

B. The trench shall be lined with non-woven geotextile meeting the material requirements of Mn/DOT 3733, Type I Non-woven geotextile.

C. The perforated drain tubing shall be surrounded by 1-inch minus washed rock. Coarse filter aggregate meeting the requirements of Mn/DOT Standard Specification 3149.2H, Coarse Filter Aggregate, is an approved material.
2.05 CORRUGATED POLYETHYLENE DRAIN TUBING

A. Corrugated polyethylene tubing and fittings shall conform to the material requirements as in Mn/DOT Standard Specification 3247, Corrugated Polyethylene Pipe.

B. When perforations are specified, the water inlet area shall be a minimum of 1 square inch per lineal foot of tubing. The inlets either shall be circular perforations or slots equally spaced along the length and circumference of the tubing. Unless otherwise specified, circular perforations shall not exceed 3/16 inch in diameter, and slot perforations shall not be more that 1/8 inch wide.

C. Geotextile filter socks, when required, shall meet the material requirements of Mn/DOT Standard Specification 3733, Type I Knit Sock.

D. Granular bedding material, when specified, shall conform to the requirements specified in MNDOT Specification 3149.2F, Granular Bedding.

E. Hinged animal guard shall be placed at drain outlet.

2.06 LIVE STAKES

A. Live stakes shall be field harvested dormant cuttings.

B. Live stakes shall have minimum stem diameters ranging from 1 to 2 inches; length determined by application. The live stakes should be relatively straight, with no visible signs of disease, damage or deformity. The stakes should have all side branches removed.

C. The bottom or basal end of the live stakes should be cleanly cut at a 45 degree or sharper angle and the top end should be cut square (flat).

D. Dormant cuttings must be harvested after leaf drop in the fall and before bud break in the spring.

2.07 FILTER LOGS

A. Filter Logs shall be a fiber log consisting of natural fibers (or approved equal) that have been compressed and stuffed into a netting, with a minimum diameter of 12 inches, and in accordance with Mn/DOT Standard Specification 3897.2 (A, B, D). Filter log anchorage shall be in accordance with the manufacturer’s recommendations and as shown on the Drawings.

2.08 BIOLOGS

A. Biolog shall be a fiber log consisting of coconut fibers (or approved equal) that have been compressed and stuffed into a netting, with a minimum diameter of 12 inches, and in accordance with Mn/DOT Standard Specification 3897.2 (A, B, D). Biolog anchorage shall be in accordance with the manufacturer’s recommendations and as shown on the Drawings.

2.09 LIVE PLANTS

A. Live plants for Shoreline Protection measures shall be as specified in Section 32 90 00 Site Restoration of these Specifications.
2.10 SEED MIXES
   A. Seed mixes for Shoreline Protection measures shall be as specified in Section 32 90 00 Site Restoration of these Specifications.

2.11 SUBSTITUTIONS
   A. Species to be planted shall be as specified. For any proposed substitutions Contractor shall submit written application and comply with requirements of the contract documents.
   B. If acceptable proof is submitted to Engineer, that any seed or plant specified is not obtainable, due to conditions beyond the control of Contractor and for reasons other than cost changes since submittal of Contractor’s Bid, a proposal will be considered for use of the nearest equivalent variety with an appropriate adjustment of the unit price.

2.12 TOPSOIL
   A. Topsoil may be obtained from topsoil stockpiled during earth moving work. Any imported topsoil furnished by Contractor shall conform to the requirements of Mn/DOT Standard Specification 3877.2A Topsoil Borrow and shall be weed seed free.

2.13 FERTILIZER
   A. Fertilizer for Shoreline Protection measures shall be as specified in Section 32 90 00 Site Restoration of these Specifications.

2.14 NATURAL FIBER MATTING
   A. The outer exposed fiber matting layer of each soil lift shall be a machine produced woven unseamed degradable natural fiber fabric such as GEOCOIR®/DeKowe® 900 woven coconut fiber mesh, BioD-MatTM 90, or an approved equivalent having a functional longevity of 4 to 6 years.
   B. The inner layer of each soil lift shall be BioNet® C125BN (North American Green) long-term erosion control blanket is constructed of 100 percent biodegradable materials containing a 100 percent coconut fiber matrix, or an approved equivalent having a functional longevity of up to 24 months.

2.15 WOODEN STAKES
   A. Wood stakes should be 2 by 4 inch lumber cut on the diagonal to a length of 3 feet.

PART 3: EXECUTION

3.01 LOCATION OF WORK
   A. Engineer will determine in field exact location of work.

3.02 SITE PREPARATION
   A. Contractor to notify Engineer a minimum of 3 days in advance of any work to occur on site.
3.03 INSTALLATION

A. SEED AND LIVE PLANTS

1. All seeding shall be performed as directed by Engineer and as specified in Section 32 90 00 Site Restoration of these Specifications and in Mn/DOT Standard Specifications 2575.

2. All trees and shrubs shall be installed as directed by Engineer and as specified in Section 32 90 00 Site Restoration of these Specifications and in Mn/DOT Standard Specifications 2571.

B. DORMANT CUTTINGS

1. Dormant cuttings shall be installed at part of the VRSS installation as shown on the Drawings and as specified herein.

C. TOEWOOD

1. Engineer must be notified at least 3 days prior to toewood installation and must be on site during installation.

2. To the extent possible, toewood should be created from trees and brush that will be removed from the sites within the project area.

3. Construction should proceed from downstream to upstream in areas as shown on the Drawings.

4. Excavate a level bench along the stream bank toe.

5. Place footer logs (if using) in the appropriate order and at the proper angles to the banks as shown on the Drawings or as directed by the Engineer.

6. Either drive the root wad into the bank, or with the authorization of Engineer excavate a trench in which to place the root wad. If the root wad is driven into the bank, sharpen the end of the root wad to a point.

7. The root wad must be placed in the bank so that the back of the root fan overhangs the footer log (if used) or the face of the excavated bench, as shown on the Drawings.

8. The root fan must be placed such that the fan is directed upstream at approximately 30-degrees from the bank, as directed by Engineer.

9. Moving upstream, the process is repeated for each additional root wad as shown on the Drawings.

10. Place large woody debris between the root wads and perpendicular to the root wads as shown on the Drawings.

11. Place small woody debris between the footer logs (if using), root wads, and large woody debris. Woody debris shall fill all gaps between the larger logs and extend no higher than the low water elevation as shown on the Drawings. Placement of woody debris shall be inspected by the Engineer before counterweights or backfill are placed.
12. If needed, place temporary counterweights on top of the woody debris in order to submerge both root wads and woody debris. Counterweights shall be placed so as not to interfere with the placement of backfill material.

13. Granular backfill shall be placed over woody debris to make a flat surface 2 to 5 inches above the low water elevation. Backfill shall consist of Common Fill or Random Fill and shall be placed while counterweights are in place (if used) and compacted to minimize future settling of backfill. Backfill shall submerge the woody debris below the low water elevation.

14. Counterweights (if used) shall be removed before placing cuttings as directed by the Engineer.

15. Soak live cuttings (if used) for a minimum of 24 hours in flowing water before planting. Soaking for 5 to 7 days is considered ideal. The live cuttings should only be installed during the dormant season, after leaf drop in the fall and before bud break in the spring.

16. Live cuttings or brush mattress (if used) shall be placed parallel to root wads and woody debris with direction of growth facing channel. Place cuttings at 10 branches per linear foot; cuttings must completely cover the backfill layer. No more than 6 inches of the budding end of the live branch should extend past the front of the backfill layer. Cover the live cuttings with 2 to 4 inches of topsoil to create an even surface for the construction of the first soil lift.

17. Construct vegetated reinforced soil slope (VRSS or soil lifts) above the live cuttings as shown on the Drawings and as discussed for VRSS below.

D. ROOT WADS

1. Engineer must be notified at least 3 days prior to root wad installation and must be on site during installation.

2. To the extent possible, root wads should be created from trees that will be removed from the sites within the project area.

3. Construction should proceed from downstream to upstream in areas where more than one root wad will be installed as shown on the Drawings.

4. Excavate a trench along the streambank toe for the footer logs. Place coarse filter aggregate (Mn/DOT Standard Specification 3149.2H) as necessary to provide a stable foundation for footer logs and boulders (incidental).

5. Place the footer logs into the trench, with the tops of the logs at specified elevations as shown on the Drawings for each site.

6. Either drive the root wad into the bank, or with the authorization of Engineer excavate a trench in which to place the root wad. If the root wad is driven into the bank, sharpen the end of the root wad to a point.

7. The root wad must be placed in the bank so that the back of the root fan rests against the front of the footer log.
8. The root fan must be placed such that the fan is directed upstream, as directed by
Engineer.

9. Moving upstream, the process is repeated for each additional root wad as shown on the
Drawings.

10. Large boulders are placed at the ends of each footer log and on either side of the trunk of
each root wad.

11. Place back fill over the boulders as necessary and match existing grade with 6 inches of
topsoil.

12. Re-vegetate and stabilize with erosion control blanket as specified for each site as shown
in the Drawings and directed by Engineer.

13. Trim the roots that extends above the streambank to a height slightly below bank height
as directed by Engineer.

E. VEGETATED REINFORCED SOIL SLOPE (SOIL LIFTS)

1. Engineer must be notified at least 3 days prior to VRSS installation and must be on site
during installation.

2. Soak dormant cuttings for a minimum of 24 hours in flowing water before planting.
Soaking for 5 to 7 days is considered ideal. The dormant cuttings should only be installed
during the dormant season, after leaf drop in the fall and before bud break in the spring.

3. Install toe wood as specified above and as shown on the Drawings. Follow the steps
below for constructing VRSS soil lifts within the stream channel for the toe wood and
above the bankfull bench for slope repair.

4. For slope repair, excavate the existing streambank slope shoreward from and level with
the bankfull bench to form a stable, undisturbed surface. A flat bench should be created
from the toe of the stable cut slope to the top of the proposed stream bank.

5. Dormant cuttings are to be placed on top of the riprap excavated bench at 3 branches per
linear foot; the basal end of the cuttings should extend at least 2 feet past the back of the
riprap. No more than 6 inches of the budding end of the live branch should extend past
the front of the riprap. Cover the dormant cuttings with 2 to 4 inches of topsoil to create
an even surface for the construction of the first soil lift.

6. Lay natural fiber matting on bottom of the bench or above the toe wood brush mattress,
overlapping adjacent mats by 1 foot. The outer exposed fiber matting layer of each soil
lift shall be GEOCOIR®/DeKowe® 900 woven coconut fiber mesh, BioD-MatTM 90, or
an Engineer approved equivalent. Use of a batten board or constructed jig may assist on
this process.

7. The inner layer of each soil lift shall be BioNet® C125BN or an Engineer approved
equivalent. Lay the inner layer of BioNet on top of natural fiber matting of each soil lift.
Fabric should be installed smooth with no unnecessary folds or wrinkles. Stake the
shoreward end of the fiber matting in place with wooden stakes spaced every three feet as
8. The first 6 to 8 inches of the bottom soil lift shall be filled with gravel and sand material excavated from the stream bed as indicated by the Engineer or shown on the Drawings. The top 6 to 8 inches on the front of surface layer should be comprised of topsoil mix as shown on the Drawings.

9. The topsoil layer shall be seeded as shown on the Drawings and as specified in Section 32 90 00 Site Restoration of these Specifications.

10. Fold the fiber matting over the fill material and stake in place so the fabric is taut and smooth with no unnecessary folds or wrinkles. Backfill behind the bottom soil lift with granular filter material to meet the existing slope as shown on the Drawings.

11. The face of the second soil lift shall be offset shoreward by 1 foot from the face of the bottom soil lift. The first 6 to 8 inches of the second soil lift shall be filled with common fill material as shown on the Drawings. The top 6 to 8 inches on the front and top layer should be comprised of topsoil mix as shown on the Drawings. Common fill and topsoil shall be hand tamped and not mechanically compacted to ensure vegetative success.

12. Fertilizer shall be placed at the middle of wrap layers between the backfill and topsoil during placement of fill material. Fertilizer shall be applied along the entire length of each wrap layer at a rate of 2.9 lbs. per 50 foot long, 5 foot wide lift wrap.

13. The topsoil layer shall be seeded as shown on the Drawings and as specified in Section 32 90 00 Site Restoration of these Specifications.

14. Fold the fiber matting over the fill material and stake in place so the fabric is taut and smooth with no unnecessary folds or wrinkles. Backfill behind the soil lift with common fill material to meet the existing slope as shown on the Drawings. Fill placed behind the second and third soil lifts should be placed in 8 inch lifts and properly compacted; hand tamped and not mechanically compacted to ensure vegetative success.

15. On both terminal ends of the soil lifts, excess matting shall be used to fold over the ends of the lift and staked firmly. On the first lift layer backfill with or fill adjacent to the end of the lift and compact to secure it firmly.

16. In locations where additional soil lifts are shown in the Drawings, each soil lift shall be constructed in the same manner. The face of each soil lift shall be offset shoreward by 1 foot from the face of the previous soil lift. Dormant cuttings are not placed on top of the upper soil lift.

17. The final slope shall be shaped above the top soil lift as shown on the Drawings. Common fill with a 4 to 6 inch topsoil layer shall be used to form the final slope. The slope shall be seeded and stabilized as shown on the Drawings and as specified in Section 32 90 00 Site Restoration.

F. LIVE STAKES

1. Installation must occur in the dormant season, generally September to March.
2. All woody plant cuttings collected more than 12 hr prior to installation, must be carefully bound, secured, and stored submerged in clean fresh water for a minimum of 24 hours before planting. Soaking for 5-7 days is considered ideal.

3. Live stakes shall be placed at the intervals as indicated on the Drawings and as directed by the Engineer.

4. Eighty percent of the stake shall be installed below ground, leaving only twenty percent of the stake extending above ground.

5. The soil around the live stake shall be tamped to insure contact with the soil.

G. FILTER LOGS

1. Filter log shall be placed as directed by the Engineer.

2. Filter log shall be installed, anchored, and maintained in accordance with MN/DOT Standard Specification 3897 and manufacturer’s recommendations.

H. BIOLOGS

1. Biolog shall be placed as directed by the Engineer.

2. Biolog shall be installed, anchored, and maintained in accordance with MN/DOT Standard Specification 2573 and manufacturer’s recommendations.

I. FRENCH DRAIN

1. French drain shall be placed as directed by the Engineer and in accordance with Mn/DOT Standard Specification 2502.

2. French drain shall be installed in the locations and to the dimensions shown on the drawings. The base grade of the trench shall slope in the same general direction as the drain tubing.

J. CORRUGATED POLYETHYLENE DRAIN TILE (CPDT)

1. CPDT shall be placed as directed by the Engineer and in accordance with Mn/DOT Standard Specification 2502.

2. The tubing shall be appropriately marked with ASTM or AASHTO designation.

3. Tubing shall be delivered to the job site and handled by means that provide adequate support to the tubing and do not subject it to undue stresses or damage. When handling and placing corrugated polyethylene tubing, care shall be taken to prevent impact blows, abrasion damage, and gouging or cutting (by metal edges and/or surface or rocks). The manufacturer's special handling requirements shall be strictly observed. Special care shall be taken to avoid impact when the pipe must be handled at a temperature of 40 degrees Fahrenheit or less.

4. Tubing shall be stored on a relatively flat surface so that the full length of the tube
is evenly supported. Unless the tube is specifically manufactured to withstand exposure to ultraviolet radiation, it shall be covered with an opaque material when stored outdoors for 15 days or longer.

5. Unless otherwise specified or approved by the engineer, excavation for and subsequent installation of each tube line shall begin at the outlet end and progress upgrade. The trench or excavation for the tubing shall be constructed to the lines, depths, cross sections, and grade shown on the drawings.

6. When a filter or envelope is specified, the shape of the bottom of the trench, gradation, and the thickness of the filter or envelope material to be placed around the tubing shall be as shown on the drawings. The filter or envelope material shall be placed in the bottom of the trench just prior to the laying of the tubing. The tubing shall then be laid and the filter or envelope material placed over the tubing as shown in the drawings. Unless otherwise specified on the drawings, the gradation of the envelope material shall be:

<table>
<thead>
<tr>
<th>Sieve Size</th>
<th>% Passing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 ½”</td>
<td>100</td>
</tr>
<tr>
<td>No. 60</td>
<td>30</td>
</tr>
<tr>
<td>No. 200</td>
<td>5</td>
</tr>
</tbody>
</table>

Aggregates meeting the requirements for MNDOT 3126, Fine Aggregate for Portland Cement Concrete or ASTM C33, Fine Aggregate for concrete are acceptable.

7. Tubing shall not be laid on rock foundation. In the event that boulders, rocks or ledge rock, or cemented materials that prevent satisfactory bedding are encountered at the required grade, the trench shall be excavated to a depth of at least 6 inches below grade and backfilled to grade with a sand-gravel mixture or other approved material. The bedding material shall be compacted and shaped to grade.

8. Unless otherwise specified by the Engineer, connections are made with manufactured junctions comparable in strength with the specified tubing. All split fittings shall be securely fastened with nylon cord or plastic zip ties before any backfill is placed. All buried ends shall be supplied with end caps unless otherwise approved by the Engineer.

9. Unless otherwise specified by the Engineer, backfilling of the trench shall be as shown on the drawings and completed as rapidly as is consistent with the soil conditions. Backfill shall extend above the ground surface and be well rounded and centered over the trench.

10. Unless otherwise specified, where tubing is laid under roads, terraces, and at other designated locations shown on the drawings, the backfill shall be placed in successive layers of not more than 6 inches and each layer shall be tamped before the next layer is placed.

11. A hinged rodent guard shall be installed at the outlet of the CPDT.
3.04 CLEAN-UP

A. Daily: Contractor shall keep Work areas clean, neat, and orderly.

B. Final: Contractor shall clean up and remove deleterious materials and debris from the entire Work area prior to Final Completion.

END OF SECTION 35 31 00
APPENDIX B

PERMITS

CHESTER CREEK BANK STABILIZATION
(2016)

City Project #'s: 1280, 1281, 1283, 1349, 1350, 1352, 1353
November 6, 2015

Dear Mr. Kleist:

We have reviewed information about a project of the City of Duluth to provide bank stabilization at multiple reaches (5) within Chester Creek for the overall purpose of restoring impacted sections of the creek that were eroded by high water due to the 2012 Flood event (MNDNR #2015-1492). The project will result in the permanent discharge of dredged and fill materials into 9,792 square feet on the bed of the creek; the excavation of dredged material from the bed of the creek in an area of 4,878 square feet; and the temporary excavation of dredged and/or fill materials from the bed of the creek in an area of 1,054 square feet. The project site is located in Sec. 14 and 15, T. 50N., R. 14W., Saint Louis County, Minnesota.

Department of the Army Regional General Permit-003-MN (RGP-003-MN) provides authorization under section 404 of the Clean Water Act for certain categories of activities involving the discharge of dredged or fill material into waters of the U.S. or activities conducted in/over/under waters covered by Section 10 of the Rivers and Harbors Act. We have determined that the described work, as shown on the enclosed drawings labeled 2015-01248-DWW, Drawings 1 of 6 through 6 of 6, is authorized by RGP-003-MN-(B), provided the attached Standard Conditions and the following special condition are followed:

1. Northern Long-Eared Bat: To minimize potential adverse effects to the northern long-eared bat, a federally-listed threatened species, there shall be no clearing or removal of trees greater than 3 inches dbh (diameter at breast height) during the roosting season between April 1 and September 30. Tree removal may take place from October 1 through March 31. This is to include the removal of deadfall and debris along the corridor which has a dbh of 3 inches or greater.

This determination covers only the project as described above. If the design, location, or purpose of the project is changed, our office should be contacted to make sure the work would not result in a violation of Federal law.
Operations
Regulatory (2015-01248-DWW)

If your project will require off-site fill material that is not obtained from a licensed commercial facility, you must notify us at least five working days before start of work. A cultural resources survey may be required if a licensed commercial facility is not used.

This General Permit is valid until January 31, 2017, unless modified, reissued, or revoked. The time limit for completing the work described above ends on that day. It is the permittee's responsibility to remain informed of changes to the General Permit program. If this authorized work is not undertaken within the above time period, or the project specifications have changed, our office must be contacted to determine the need for further approval or re-verification.

It is the permittee's responsibility to ensure that the work complies with the terms of this letter and any enclosures, AND THAT ALL REQUIRED STATE AND LOCAL PERMITS AND APPROVALS ARE OBTAINED BEFORE WORK PROCEEDS.

A preliminary jurisdictional determination (JD) has been prepared for the site of your project. The preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps representative identified in the final paragraph of this letter. You also may provide new information for further consideration by the Corps to reevaluate the JD. If this JD is acceptable, please sign and date both copies of the Preliminary Jurisdictional Determination Form and return one copy to the address below within 15 days from the date of this letter.

U.S. Army Corps of Engineers
St. Paul District
600 South Lake Avenue
Duluth, Minnesota 55802
Attn: Daryl Wierzbinski

If you have any questions, contact Daryl W. Wierzbinski in our Duluth office at (218) 720-5291 ext. 35401. In any correspondence or inquiries, please refer to the Regulatory number shown above.

Sincerely,

[Signature]
Tamara E. Cameron
Chief, Regulatory Branch

Enclosure
2015-01248-DWW, Drawings 1 of 6 through 6 of 6
Category B and Standard Conditions
Section 401 Conditions
HEREBY CERTIFY THAT THIS PLAN, REPORT, OR SPECIFICATION WAS PREPARED BY ME OR UNDER MY DIRECT MANDATE PERMITTING COMMENTS.

I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Date License No.

OVERVIEW

CHESER CREEK BANK STABILIZATION

CP NO. 1349, 1350, 1352, 1353

06616087

05/20/15

rev 06/15/15

MSA
EXAMPLE OF AREA TO HARVEST ROCKS

EXISTING 30" RCP WITH RC FES

EXISTING 10' X 10' BOX CULVERT

RESTORE EXISTING FOOT PATH AS NECESSARY AFTER SLOPE REPAIR

TOE OF BANK SLOPE (TYP.)

DISTURBANCE LIMITS (TYP.)

TRANSITION AREA

ENGINEER AND WORKER (STAFF STAY)
MARK SELECT STREAM ROCK IN THE FIELD TO BE RECLAIMED AND PLACED ON THE BEDROCK AT THE TOE OF SLOPE
SEE PHOTO "A" THIS SHEET

EX. OF BEDROCK AT THE TOE OF SLOPE

NOTE: ENGINEER SHALL MARK SELECT TREES IN THE FIELD THAT ARE TO BE REMOVED FROM THE EDGE OF THE FAILURE

EROSION CONTROL MAT

V.R.S.S.

RIP RAP

SEE TYPICAL SECTION D/C19

STA. 61+57 OFF RT TO STA. 61+44 OFF 26' RT
RIP RAP SLOPE REPAIR & V.R.S.S. - TYPE B

SEE TYPICAL SECTION D/C17 AND D/C19

NOTE: ENGINEER SHALL MARK SELECT TREES IN THE FIELD THAT ARE TO BE REMOVED FROM THE EDGE OF THE FAILURE

RESTORE EXISTING FOOT PATH AS NECESSARY AFTER SLOPE REPAIR

EXISTING FOOT PATH

STA. 60+29 OFF 27' RT TO STA. 60+81 OFF 26' RT
RIP RAP SLOPE REPAIR & V.R.S.S. - TYPE B

SEE TYPICAL SECTION D/C17 AND D/C19

NOTE: ENGINEER SHALL MARK SELECT TREES IN THE FIELD THAT ARE TO BE REMOVED FROM THE EDGE OF THE FAILURE

CHESIHER CREEK FLOW

SAME SITE TO BE REMOVED FROM THE EDGE OF THE FAILURE

EXAMPLE OF AREA TO HARVEST ROCKS

EXISTING 10' X 10' BOX CULVERT

RECLAIM EXISTING FOOT PATH AS NECESSARY AFTER SLOPE REPAIR

NOTE: ENGINEER SHALL MARK SELECT TREES IN THE FIELD THAT ARE TO BE REMOVED FROM THE EDGE OF THE FAILURE

EROSION CONTROL MAT

V.R.S.S.

2015-01248-DWW
Drawing 2 of 6
EXISTING 36" PLASTIC
E = 1119.87
EXISTING P: PERFORATED CMP
DIRECTLY ABOVE EX. 36" STORM

CONFIRM E = 1121.46
PERFORATED CMP
DIRECTLY ABOVE EX.
36" STORM

INSTALL TOPSOIL, SEED MIXTURE 36-311
EROSION CONTROL BLANKET CATEGORY 5-26
PER MINNOTP 3885 AND LIVE STAKES SPACED 18" APART

INSTALL RIP RAP SLOPE STABILIZATION
TO ELEV 1121 USE MINNOTP TYPE II RIP RAP
MAX SLOPE 2H: 1V

NOTES: BOULDERS WILL BE PAID FOR UNDER CLASS III RIP RAP.

C H A R T E R  C R E E K
F L O O D P L A T E

DEADFALL & DEBRIS REMOVAL AREA

INSTALL SINGLE ROW
OF 2'-3' BOULDERS
(BURIED)

NATURAL TRANSITION
TO CHESTER CREEK
DO NOT DISTURB

NOTES SHEET C 18

B O O L D E R S
W I L L B E P A I D F O R U N D E R C L A S S III R I P R A P.
APPROXIMATE LOCATION OF TRAIL

APPROXIMATE LIMITS OF BANK EROSION
STA. 40+41 OFF 30' RT. TO STA. 40+77 OFF 30' RT.
INSTALL TOPSOIL, SEED MIXTURE 26-31-1, EROSION CONTROL BLANKET AND LIVE STAKES. EROSION CONTROL BLANKET SHALL BE CATEGORY 5-2S PER MNDOE 3885.
LIVE STAKES SHALL BE SPACED APPROX. 18" APART.

DISTURBANCE LIMITS (TYP.)
CURRENT CONDITIONS

PLACE RIP RAP AT TOE OF SLOPE (SEE SECTIONS C-14, C-15)

STA. 21+02 OFF 19' RT. TO STA. 20+00 OFF 7' RT

RIP RAP SLOPE REPAIR & VRSS - TYPE B
SEE DETAILS B/C17 AND D/C19

RELOCATE EXISTING FOOT PATH.
POSITION SHALL BE APPROVED BY THE ENGINEER IN THE FIELD TO MINIMIZE CLEARING, GRUBBING & DISTURBANCE.

NOTE: REMOVE DEADFALL AND DEBRIS FROM STREAM AS APPROVED BY THE ENGINEER AND DNR STAFF. CONTRACTOR SHALL HARVEST LARGE BOULDERS FROM SLOPE TO BE USED ABOVE OHW TO PROVIDE A TOE FOR V.R.S.S. AND SOIL RESTORATION ABOVE. SEE PICTURE THIS SHEET.

EROSION CONTROL MAT
V.R.S.S.
RIP RAP

MSA}

PLAN SHEET
REACH 582 F

CHESTER CREEK
BANK STABILIZATION
CP NO. 1349, 1350, 1352, 1353

C 7

2015-01248-DWW
Drawing 5 of 6
NOTE: RIP RAP FOR CULVERT OUTFALL WILL BE PAID AT THE CONTRACT UNIT PRICE FOR RIP RAP CLASS III. THE CONTRACT UNIT PRICE FOR APRON END WALL SHALL INCLUDE A Poured CONCRETE TOE PER DETAIL A/C21.

EXISTING 15" DIAMETER STORM SEWER

INSTALL 1 L.F. OF 24-INCH HOPE CULVERT WITH APRON ENDWALL S.
RESTORE EXISTING FOOT PATH
SIZE DETAIL A/C21

DISTURBANCE LIMITS (TYP)

1/2 YD DEADFALLS/SруGINS AS DIRECTED BY ENGINEER

NOTE: RIP RAP FOR CULVERT OUTFALL WILL BE PAID AT THE CONTRACT UNIT PRICE FOR RIP RAP CLASS III. THE CONTRACT UNIT PRICE FOR APRON END WALL SHALL INCLUDE A Poured CONCRETE TOE PER DETAIL A/C21.
March 12, 2014

Mr. Chris Kleist
City of Duluth
402 City Hall
Duluth, Minnesota 55802

Dear Mr. Kleist:

We have reviewed information about the City of Duluth’s permit application to discharge dredged and fill material into 1,600 square feet on the bed of Chester Creek for the purpose of enhancing the creek to promote natural channel stability within the project reach. The project site is located between South Skyline Parkway and Chester Park Drive in Sec. 16, T. 50N., R. 14W., St. Louis County, Minnesota.

Department of the Army Regional General Permit-003-MN (RGP-003-MN) provides authorization under Section 404 of the Clean Water Act for certain categories of activities involving the discharge of dredged or fill material into waters of the U.S. or activities conducted in/over/under waters covered by Section 10 of the Rivers and Harbors Act. We have determined that the described work is authorized by RGP-003-MN-(I), provided the attached Standard Conditions are followed.

This determination covers only the project as described above. If the design, location, or purpose of the project is changed, our office should be contacted to make sure the work would not result in a violation of Federal law.

If your project will require off-site fill material that is not obtained from a licensed commercial facility, you must notify us at least five working days before start of work. A cultural resources survey may be required if a licensed commercial facility is not used.

This General Permit is valid until January 31, 2017, unless modified, reissued, or revoked. The time limit for completing the work described above ends on that day. It is the permittee’s responsibility to remain informed of changes to the General Permit program. If this authorized work is not undertaken within the above time period, or the project specifications have changed, our office must be contacted to determine the need for further approval or re-verification.
It is the permittee's responsibility to ensure that the work complies with the terms of this letter and any enclosures, AND THAT ALL REQUIRED STATE AND LOCAL PERMITS AND APPROVALS ARE OBTAINED BEFORE WORK PROCEEDS.

A preliminary jurisdictional determination (JD) has been prepared for the site of your project. The preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps representative identified in the final paragraph of this letter. You also may provide new information for further consideration by the Corps to reevaluate the JD. If this JD is acceptable, please sign and date both copies of the Preliminary Jurisdictional Determination Form and return one copy to the address below within 15 days from the date of this letter.

U.S. Army Corps of Engineers
St. Paul District
1554 Highway 2, Suite 2
Two Harbors, Minnesota 55616
Attn: Daryl W. Wierzbinski

If you have any questions, contact Daryl W. Wierzbinski in our Two Harbors office at (651) 290-5691. In any correspondence or inquiries, please refer to the Regulatory number shown above.

Sincerely,

[Signature]

Tamara E. Cameron
Chief, Regulatory Branch

Enclosure
2014-00247-DWW Drawing 1 of 3 through 3 of 3
RGP-003-MN-(I) Standard Conditions
401 Water Quality Certification Conditions

Copy furnished to:
Heather Wendel, Barr Engineering, Duluth
Patricia Fowler, Minnesota DNR, Two Harbors
Pursuant to Minnesota Statutes, Chapter 103G, and on the basis of statements and information contained in the permit application, letters, maps, and plans submitted by the applicant and other supporting data, all of which are made part hereof by reference, **PERMISSION IS HEREBY GRANTED** to the applicant to perform actions as authorized below.

<table>
<thead>
<tr>
<th>Project Name:</th>
<th>Chester Creek Bank Stabilization</th>
</tr>
</thead>
<tbody>
<tr>
<td>County:</td>
<td>St. Louis</td>
</tr>
<tr>
<td>Watershed:</td>
<td>Lake Superior - South</td>
</tr>
<tr>
<td>Resource:</td>
<td>Stream/River: Chester Creek (S-003); Stream/River: Unnamed Stream (S-003-003); Stream/River: Unnamed Stream (S-003-004); Stream/River: Unnamed Stream (S-003-006)</td>
</tr>
</tbody>
</table>

**Purpose of Permit:**
Erosion Control/Stabilization Fill & Grading

**Authorized Action:**
Bank stabilization work according to plans updated 10/8/2015 and stream channel work according to plans submitted 4/21/2015 and supporting information on file. See special condition regarding project area 582J.

<table>
<thead>
<tr>
<th>Permitee:</th>
<th>CITY OF DULUTH ENGINEERING - STORMWATER CONTACT: KLEIST, CHRIS, (218) 730-4063 411 W 1ST ST ROOM 211 DULUTH, MN 55802 (218) 730-4051</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorized Agent:</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Property Description (land owned or leased or where work will be conducted):**
- UTM zone 15N, 569471m east, 5184324m north (centroid), SWSW of Section 14, T50N, R14W,
- UTM zone 15N, 569422m east, 5184726m north (centroid), NESE of Section 15, T50N, R14W,
- UTM zone 15N, 568869m east, 5184710m north (centroid), NWSE of Section 15, T50N, R14W,
- UTM zone 15N, 568715m east, 5184817m north (centroid), NWSE of Section 15, T50N, R14W,
- UTM zone 15N, 568675m east, 5185099m north (centroid), NWSE of Section 15, T50N, R14W

**Authorized Issuer:**
Patricia Fowler

**Title:**
Area Hydrologist

**Issued Date:**
10/12/2015

**Effective Date:**
10/12/2015

**Expiration Date:**
04/27/2020

This permit is granted subject to the following CONDITIONS:

**APPLICABLE FEDERAL, STATE, OR LOCAL REGULATIONS:** The permittee is not released from any rules, regulations, requirements, or standards of any applicable federal, state, or local agencies; including, but not limited to, the U.S. Army Corps of Engineers, Board of Water and Soil Resources, MN Pollution Control Agency, watershed districts, water management organizations, county, city and township zoning.

**NOT ASSIGNABLE:** This permit is not assignable by the permittee except with the written consent of the Commissioner.

(MPARS revision 10/07/2013, Permit Issuance ID 14609, printed 10/12/2015)
NO CHANGES: The permittee shall make no changes, without written permission or amendment previously obtained from the Commissioner of Natural Resources, in the dimensions, capacity or location of any items of work authorized hereunder.

SITE ACCESS: The permittee shall grant access to the site at all reasonable times during and after construction to authorized representatives of the Commissioner of Natural Resources for inspection of the work authorized hereunder.

TERMINATION: This permit may be terminated by the Commissioner of Natural Resources at any time deemed necessary for the conservation of water resources of the state, or in the interest of public health and welfare, or for violation of any of the conditions or applicable laws, unless otherwise provided in the permit.

COMPLETION DATE: Construction work authorized under this permit shall be completed on or before the date specified above. The permittee may request an extension of the time to complete the project by submitting a written request, stating the reason thereof, to the Commissioner of Natural Resources.

WRITTEN CONSENT: In all cases where the permittee by performing the work authorized by this permit shall involve the taking, using, or damaging of any property rights or interests of any other person or persons, or of any publicly owned lands or improvements thereon or interests therein, the permittee, before proceeding, shall obtain the written consent of all persons, agencies, or authorities concerned, and shall acquire all property, rights, and interests needed for the work.

PERMISSIVE ONLY / NO LIABILITY: This permit is permissive only. No liability shall be imposed by the State of Minnesota or any of its officers, agents or employees, officially or personally, on account of the granting hereof or on account of any damage to any person or property resulting from any act or omission of the permittee or any of its agents, employees, or contractors. This permit shall not be construed as estopping or limiting any legal claims or right of action of any person other than the state against the permittee, its agents, employees, or contractors, for any damage or injury resulting from any such act or omission, or as estopping or limiting any legal claim or right of action of the state against the permittee, its agents, employees, or contractors for violation of or failure to comply with the permit or applicable conditions.

EXTENSION OF PUBLIC WATERS: Any extension of the surface of public waters from work authorized by this permit shall become public waters and left open and unobstructed for use by the public.

WETLAND CONSERVATION ACT: Where the work authorized by this permit involves the draining or filling of wetlands not subject to DNR regulations, the permittee shall not initiate any work under this permit until the permittee has obtained official approval from the responsible local government unit as required by the Minnesota Wetland Conservation Act.

CONTRACTOR RESPONSIBILITY: The permittee shall ensure the contractor has received and thoroughly understands all conditions of this permit. Contractors must obtain a signed statement from the property owner stating that permits required for work have been obtained or that a permit is not required, and mail a copy of the statement to the regional DNR Enforcement office where the proposed work is located. The Landowner Statement and Contractor Responsibility Form can be found at: http://www.bwsr.state.mn.us/wetlands/wca/index.html#general.

INVASIVE SPECIES - EQUIPMENT DECONTAMINATION: All equipment intended for use at a project site must be free of prohibited invasive species and aquatic plants prior to being transported into or within the state and placed into state waters. All equipment used in designated infested waters, shall be inspected by the Permittee or their authorized agent and adequately decontaminated prior to being transported from the worksite. The DNR is available to train inspectors and/or assist in these inspections. For more information refer to the "Best Practices for Preventing the Spread of Aquatic Invasive Species" at http://files.dnr.state.mn.us/publications/ewr/invasives/ais/best_practices_for_prevention_ais.pdf. Contact your regional Invasive Species Specialist for assistance at www.mndnr.gov/invasives/contacts.html. A list of designated infested waters is available at www.mndnr.gov/invasives/ais/infested.html. A list of prohibited invasive species is available at www.mndnr.gov/eco/invasives/laws.html#prohibited.

FISHERY PROTECTION - EXCLUSION DATES: No activity affecting the bed of the protected water may be conducted between April 1 and June 30, to minimize impacts on fish spawning and migration. If work during this time is essential, it shall be done only upon written approval of the Area Fisheries Manager. See contact list at: http://files.dnr.state.mn.us/fisheries/management/dnr_fisheries_managers.pdf. Should work begin elsewhere in the project area within these dates, all exposed soils that are within 200 feet of Public Waters and drain to those waters must complete erosion control measures within 24 hours of its disturbance to prevent sediment from entering Public Waters.
CONDITIONS (Continued from previous page)

TRIBUTARY 6/SITE 582J: Work exclusion dates in this tributary are September 15-June 30 due to documentation of temperatures supportive to fall spawning brook trout. Work in this tributary should limit and replace any bank vegetation removed and limit removal of any in stream deadfall.

cc: Anna Hess, EWR District Manager
    Kipp Duncan, Conservation Officers, Duluth (E)
    Karl Koller, DNR Ecological and Water Resources
    Lynda Peterson, BWSR Wetland Specialists, St. Louis
    Maya Hamady, DNR Regional Nongame Specialists, Northeast
    Rian Reed, DNR Regional Environmental Assessment Ecologist, Region 2
    Chris Balzer, DNR Wildlife, Cloquet
    Deserae Hendrickson, DNR Fisheries, Duluth Area
    Mark Lindhorst, County, St. Louis
    Daryl Wierzbinski, Corps of Engineers, St. Louis (South)
    Catherine Voce, Corps of Engineers, St. Louis (South)
    R.C. Boheim, SWCD, St. Louis SWCD - South
    Cindy Voigt, City, Duluth
    Eric Shaffer, P.E., City, Duluth
    Cari Pedersen, P.E., City, Duluth
    David Montgomery, City, Duluth
    Kieth Hamre, City, Duluth
Chester Creek Bank Stabilization (sites 582e, d, f, k, l, h, j, and xx)
City Project No. 1280, 1281, 1283, 1349, 1350, 1352, 1353

Storm Water Permit Application

The contractor shall submit NPDES *Online Stormwater Permit Application* at the following MPCA web site:


The Contractor shall directly pay the permit application fee of $400.00, payable to Minnesota Pollution Control Agency, must also be included with the Application.

NPDES Declaration

The enclosed **NPDES Declaration** must be completed and mailed with a copy of the above application, and your Contracts and Bonds, to the addresses below:

*City of Duluth*
*Public Works & Utilities / Engineering Division*
*Room 211 City Hall*
*411 W. First Street*
*Duluth, MN 55802*
Chester Creek Bank Stabilization (sites 582e, d, f, k, l, h, j, and xx)
City Project No. 1280, 1281, 1283, 1349, 1350, 1352, 1353

This National Pollution Discharge Elimination Declaration shall be executed by the bidder:

STATE OF MINNESOTA  )
                   ) ss.
COUNTY OF ______________ )

I, ________________________________, do state under penalty of perjury (name of the person signing this declaration) under 28 U.S.C. 1746 of the laws of the United States:

(1) that I am the authorized representative of _____________________________

____________________ (name of the person, partnership or corporation submitting this proposal)

and that I have the authority to make this declaration for and on behalf of said bidder;

(2) that in connection with this proposal, the said bidder has completed the required Application For General Storm Water Permit for Construction Activity (aka National Pollution Discharge Elimination (NPDES) permit);

(3) that the application fee and completed application have been sent to the Minnesota Pollution Control Agency;

(4) that I have fully informed myself regarding the accuracy of the statements in this declaration.

Signed: ___________________________________  __________________
(bidder or authorized representative)          Date
Erosion and Sediment Control Application and Permit
(Required For Land Disturbance of 3,000 sq ft or greater**)
(See City of Duluth UDC Article 2, Section 50-18.1.E) Revised March 2015

<table>
<thead>
<tr>
<th>SITE LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Address:</td>
</tr>
<tr>
<td>Lot: Plat &amp; Parcel:</td>
</tr>
<tr>
<td>Nature of Project</td>
</tr>
<tr>
<td>Est. Start Date: Est. Completion Date:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OWNER / CONTRACTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property Owners Name Email: Telephone No.</td>
</tr>
<tr>
<td>Address City State Zip</td>
</tr>
<tr>
<td>Contractors Name Email: Telephone No.</td>
</tr>
<tr>
<td>Address City State Zip</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CITY USE ONLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Engineer Approval: Date:</td>
</tr>
<tr>
<td>Permit Number: Permit Fee: $150 $300</td>
</tr>
</tbody>
</table>

SEE REVERSE SIDE FOR FEE SCHEDULE AND ADDITIONAL REQUIREMENTS
(Attach the Erosion and Sediment Control Plan (ESCP) to this application page)

**MS-4 Statement of Compliance** (not for permanent stormwater management)
The property owner and the contractor conducting work on the site are responsible for all the construction activities that occur on the site. By signing this permit both parties are required to install and maintain all erosion and sediment control BMPs to ensure that sediment, soil and debris does not leave the construction site. This includes but is not limited to tracking of soil/mud onto public streets and roadways from vehicles leaving the site, soil eroding from the site onto roadways or drainage ditches or onto neighboring property. If sediment, soil/mud and/or debris leaves the site, both parties are responsible for the immediate clean up and all costs and fines associated with it. Both parties are also responsible for the total restoration of vegetation on the site (seed/mulch, sod, gardens…) after construction disturbance is substantially complete, and only after vegetation has been established with vigorous growth can BMPs be cleaned and removed.

/ / 
Property Owner Telephone # Date

/ / 
Contractor Telephone # Date
**EROSION CONTROL PERMIT FEES**

<table>
<thead>
<tr>
<th>Size of Project* (****)</th>
<th>Erosion and Sediment Control Plan / SWPPP ***</th>
<th>Erosion and Sediment Control Permit</th>
<th>FEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Disturbance Area less than 3,000 s.f.**</td>
<td>Specific plan not required, but must follow BMPs</td>
<td>No</td>
<td>No Fee</td>
</tr>
<tr>
<td>Land Disturbance Area greater than 3,000 s.f. and less than 10,000 s.f.</td>
<td>Yes</td>
<td>Yes</td>
<td>$150</td>
</tr>
<tr>
<td>Land Disturbance Area greater than 10,000 s.f. and less than 1 acre.</td>
<td>Yes</td>
<td>Yes</td>
<td>$300</td>
</tr>
<tr>
<td>Land Disturbance Area equal to or greater than 1 acre.</td>
<td>Yes</td>
<td>Yes ****</td>
<td>N/A</td>
</tr>
</tbody>
</table>

* All projects regardless of area disturbed, will be inspected for compliance with Erosion and Sediment Control Best Management Practices (BMPs), see attached.
** If city engineer determines that the proposed development is in a vulnerable area (steep slopes, erodible soils, adjacent to sensitive areas, etc.) and may cause degradation of the waters connected to the City’s storm water system, then the provisions applicable to land disturbance areas between 3,000 and 10,000 sq. ft. shall apply.
*** A site specific Storm Water Pollution Prevention Plan (SWPPP) meeting MPCA NPDES Permit requirements for Construction Activity is required and shall be submitted to the City for review. An individual one-family or two-family residence (that is not part of a common plan of development) with less than 10,000 sq. ft. of disturbance and less than 7,500 sq. ft. of new impervious area does not have to prepare a SWPPP, but shall submit an erosion control plan meeting the requirements of this document and attachments.
**** The MPCA Permit No. MN R 100001 is required (General Permit Authorization to Discharge Stormwater Associated with Construction Activity under the National Pollutant Discharge Elimination), and a copy of permit to be submitted to City. See this page for internet link.
***** Please see the City of Duluth UDC Article Two, Section 50-18.1.E to determine if the proposed project is required to meet permanent stormwater quality and rate control requirements and applicable fees.

**NOTE:** For projects disturbing one acre or more, the MPCA Stormwater Permit for Construction Activity must be completed--not the City of Duluth’s form. [www.pca.state.mn.us/water/stormwater/stormwater-c.html](http://www.pca.state.mn.us/water/stormwater/stormwater-c.html)

The entire MS4 Permit may also be found at the MPCA:
website: [www.pca.state.mn.us/water/stormwater/stormwater-ms4.html#requirements](http://www.pca.state.mn.us/water/stormwater/stormwater-ms4.html#requirements)

**City of Duluth Erosion and Sediment Control Plan Guidelines**

**Erosion and Sediment Control Plan (ESCP)**
The Permit Application should be filled out and the Erosion and Sediment Control Plan should be prepared as follows:
- Complete the attached Narrative form Item No. 1, or use a separate sheet. Fill in all areas as completely as possible.
- Complete a Site Map / Plan showing the items listed below in item No. 2 and see Elements of Erosion Control Plan, Site Map Requirements for further guidance to address specific item for each plan. Additionally see example site map / plan.
- Incomplete Narratives or Site Map / Plans will be returned for additional information and will delay permit approval.

**Erosion and Sediment Control Methods**
Control of sediment is required so that it does not migrate to an adjoining property, roadway, catch basin, or a wetland/watercourse. Diagrams are attached that depict some of the control methods commonly used for erosion and sediment control. Silt fence barriers and crushed rock temporary entrances are common control methods that can be effective for small projects. Additional methods, such as sediment traps and detention structures, are required for some projects and a qualified professional may need to specify the appropriate erosion and sediment control methods. See attached sheet titled Commonly Used Erosion Controls.

**Activities Exempt from the Ordinance**
Minor land disturbing activities are exempt such as: home gardens, landscaping, repairs and maintenance work, utility work, certain septic tank work, fencing, tilling, planting, or harvesting of agricultural, horticultural, or silviculture crops, and certain emergency repairs.
City Erosion/Sediment Control Permit Narrative - rev 2011
These are the absolute minimum submittal requirements for all projects:

(1) NARRATIVE
A) Provide a description of what you are doing and type foundation/disturbance.
(e.g., constructing a 2,000 sq ft house w/full basement; constructing an attached 24x24 garage on slab;
building a 20x15 house addition on frost footings, etc.)

B) How much land are you disturbing?  Total: ______________ square feet
Main soil type? ______________  Are you importing/exporting any fill? ___ Amount_____________

C) Describe the slope of the land and the slope of the adjacent land.

D) Describe all temporary erosion control devices you intend to use and show on an attached drawing where and when you will be installing them. [At a MINIMUM, you must have perimeter control such as silt fence and washed rock construction entrance.] Also, show and protect all stockpiles.

E) Final Stabilization. Date you will sod, or seed & mulch, or otherwise establish vegetation on the disturbed area.
   Method: ___________________________________________  Target Date:_______________
   If site is not vegetated by October 30th, describe below your selected winter-over methods (mulch, erosion blanket, etc.).

(2) DRAWING
A) • Always clearly show the site grading/disturbance limits.
   • Also, show pre- and post-development drainage arrows.

B) Clearly show estimated land contours (hand drawn is acceptable for small projects).

C) Show any/all creeks, ditches, wetlands, or other sensitive areas within 200 feet of your site.
   • If none, so state: __________

D) Clearly show the amount and placement of silt fence, hay bales, construction entrance, etc.

E) Clearly show washed rock construction entrance. [Minimum: 12’ W x 50’ L x 6” deep] OR show mud mat reusable mat - 8’ x 45’ minimum (see Brock White handout).

F) • Show and label streets and adjacent properties.
   • Show catch basins/inlets.
   • Clearly show all protective measures for those areas where sediment could migrate. Protect your neighbor’s property from your construction activity and potential erosion and sediment.

**For Large Projects, Commercial Projects, Complex Projects –
Additional information and design are required - refer to City Ordinance 9365**
Technical assistance: Engineering 730-5200; [Tom Johnson 730-5103]
GENERAL NOTES FOR EROSION CONTROL

STRAW BALES or SILT FENCE
*Put up before any other work is done
*Install on downslope side(s) of site with ends extended up sideslopes a short distance
*Place parallel to the contour of the land
to allow water to pond behind the fence
*Entrench 4 inches deep (see diagram)
*Stake (every 3 feet minimum)
*Leave no gaps/ overlap if necessary
*Inspect often and maintain
*Remove sediment when deposits reach half way up fence or bale

ROCK CONSTRUCTION ENTRANCE
*Install a single construction access using large crushed rock (1 ½ “ to 2 ½ “) to prevent tracking of soils off project site
*Put rock 6 inches deep, 12 feet wide, 50 feet long
* Maintain rock access through project end
*All vehicles to use rock entrance

SEDIMENT CLEANUP
* By the end of each work day, sweep/scrape up soil tracked on roads, alley , sidewalk
* After a storm clean up soil washed off site onto sidewalks, streets, alleys.

REVEGETATION
*Seed & mulch, sod or mulch disturbed area as soon as project is completed

PRESERVING EXISTING VEGETATION
*Preserve existing trees, shrubs, sod, as much as possible

WARNING! Extra measures may be needed if your site:
*Has highly erodible soils
*Is within 200 feet of a river or stream
*Is within 1,000 feet of a lake
*Is steeply sloped
*Receives runoff from adjacent land

For more information on appropriate measures for your site, please call the City of Duluth Engineering Division at 730-5200.
ELEMENTS OF EROSION & SEDIMENT CONTROL PLAN (ESCP)

ESCP Project Narrative
(1) Project description
(2) Phasing of construction
(3) Existing site conditions
(4) Adjacent areas affected by project
(5) Critical areas identified
(6) Erosion and sediment control measures
(7) Soil descriptions
(8) Permanent stabilization methods
(9) Stormwater management considerations
(10) Maintenance schedule for erosion and sediment measures
(11) Calculations
(12) Additional information required by the city engineer

Site Map Requirements
(1) Location Map
(2) North Arrow
(3) Scale (1 inch = 100 ft. or greater detail)
(4) Benchmark
(5) Existing contours at two ft. intervals, 200 ft. beyond boundary - show watercourses/wetlands
(6) Final contours
(7) Existing vegetation - trees, shrubs, grasses
(8) Soil boundaries
(9) Property boundary and lot lines
(10) Elevations and grades - street grades, pond elevations, etc.
(11) Drainage arrows
(12) Critical erosion areas
(13) Clearing and grubbing limits
(14) Utility plans
(15) Location of erosion and sedimentation control practices - basins, swales, silt fence, bales
(16) Location of other practices
(17) Plan preparer’s signature, address and phone number
(18) Responsible party name, address, and phone number
(19) Delineation of applicable zoning boundaries

Criteria to be considered in the ESCP
(1) Stabilization of denuded areas and soil stockpiles
(2) Establishment of permanent vegetation
(3) Protection of adjacent properties
(4) Timing and stabilization of sediment trapping measures
(5) Use of sediment basins
(6) Cut and fill slopes
(7) Stormwater management criteria for controlling off site erosion
(8) Stabilization of waterways and outlets
(9) Stormwater management criteria for controlling off site erosion
(10) Working in or crossing water bodies
(11) Underground utility construction
(12) Construction access routes
(13) Disposition of temporary erosion and sediment
Rock Construction Entrance

Perimeter Control – Bio Rolls
APPENDIX C

Storm Water Pollution Prevention Plan (SWPPP)

COSTER CREEK BANK STABILIZATION (2016)

City Project #’s: 1280, 1281, 1283, 1349, 1350, 1352, 1353
Chester Creek Bank Stabilization Reach  
Stormwater Pollution Prevention Plan

General Construction Activity Information

Project Location: Chester Creek, downstream of Kenwood Ave. and upstream of East 8th Street, within the City of Duluth, St. Louis County, Minnesota

Description of Construction Activity: The bank stabilization project at Chester Creek will include multiple sites repairing continued erosion control damage. These sites have been identified on the construction documents as reaches 582E, D, K, F, L, H, J, and XX. Generally, the construction work includes the excavation and placement of fill material of various classes, removal of miscellaneous deadfall, debris or brush, installation of rip-rap of various classes, boulder/cross vanes within the stream channel, toewood and other woody structures, vegetated reinforced soil slopes (VRSS), live stakes, a concrete energy dissipater and permanent erosion control via seeding. Refer to the construction plans for specific details on each specific site.

Potential locations for discharge of sediment into the stream include all areas that will be disturbed during construction, as well as areas that will be seeded and covered with erosion control blanket or mulch, prior to vegetation establishment.

<table>
<thead>
<tr>
<th>Total Area to be Disturbed:</th>
<th>2.0 acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Construction Impervious Surface:</td>
<td>0.0 acres</td>
</tr>
<tr>
<td>Post-Construction Impervious Surface:</td>
<td>0.0 acres</td>
</tr>
</tbody>
</table>

Chain of Responsibility

<table>
<thead>
<tr>
<th>Owner:</th>
<th>City of Duluth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mailing Address:</td>
<td>402 City Hall, Duluth, MN 55802</td>
</tr>
<tr>
<td>Contact Person:</td>
<td>Tom Pfeffer, Project Engineer</td>
</tr>
<tr>
<td>Phone:</td>
<td>218-730-5104</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contractor:</th>
<th>TBD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mailing Address:</td>
<td>TBD</td>
</tr>
<tr>
<td>Contact Person:</td>
<td>TBD</td>
</tr>
<tr>
<td>Phone:</td>
<td>TBD</td>
</tr>
</tbody>
</table>
## Knowledgeable Persons with Training

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Trained Individual(s)</th>
<th>Applicable Training</th>
<th>Training Documentation Attached?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation of SWPPP</td>
<td>Jennifer Fleming, Barr Engineering Company</td>
<td>Design of Construction SWPPPs (University of Minnesota), January 2011 and April 2014</td>
<td>Yes No</td>
</tr>
<tr>
<td>Preparation of SWPPP</td>
<td>Joseph Jurewicz, MSA Professional Services, Inc.</td>
<td>Design of Construction SWPPPs (University of Minnesota) February 2013 and November 2015</td>
<td>Yes No</td>
</tr>
<tr>
<td>Oversight of SWPPP Implementation, Revision, and Amendment</td>
<td>Contractor TBD</td>
<td>TBD</td>
<td>Yes No</td>
</tr>
<tr>
<td>Performance of SWPPP Inspections</td>
<td>Contractor TBD</td>
<td>TBD</td>
<td>Yes No</td>
</tr>
<tr>
<td>Performance or Supervision of Installation, Maintenance, and Repair of BMPs</td>
<td>Contractor TBD</td>
<td>TBD</td>
<td>Yes No</td>
</tr>
</tbody>
</table>

## Receiving Waters

Receiving Waters (within one mile aerial radius):

<table>
<thead>
<tr>
<th>Water Body ID</th>
<th>Water Body Name</th>
<th>Water Body Type</th>
<th>Special Water?</th>
<th>Impaired Water?*</th>
<th>DNR Work in Water Restrictions?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chester Creek</td>
<td>Stream</td>
<td>✗ Yes, ✗ No</td>
<td>✗ Yes, ✗ No</td>
<td>✗ Yes, ✗ No</td>
<td>✗ Yes, ✗ No</td>
</tr>
</tbody>
</table>

*Waters identified as impaired under Section 303(d) of the federal Clean Water Act for phosphorus (nutrient eutrophication biological indicators), turbidity, dissolved oxygen or aquatic biota (fish bioassessment, aquatic plant bioassessment and aquatic macroinvertebrate bioassessment).
Project Area Soil Type:

- **Map Unit Symbol: E23F**
  Miskoaki-Udifluvents, flooded, complex, 1 to 45 percent slopes

- **Map Unit Symbol: E13E**
  Udifluvents, occasionally flooded-Rollins complex, 0 to 30 percent slopes

- **Map Unit Symbol: F148F**
  Ahmeek- Rock outcrop, Fluvaquents, frequently flooded, complex; 0 to 50 percent slopes

- **Map Unit Symbol: F139F**
  Ahmeek-Consia complex, 0 to 45 percent slopes
Special and Impaired Waters: Chester Creek (trout stream) – Applicable requirements are incorporated per Appendix A, Parts B and C.

DNR Work in Water Restrictions: Chester Creek – October 1 through June 30

Wetland Impacts and Mitigation: This project is not expected to result in adverse impacts to a wetland.

Environmental Review / Endangered or Threatened Species Review / Archeological Site Review: Deemed not applicable

Project Plans and Specifications

<table>
<thead>
<tr>
<th>SWPPP Site Maps / Drawings</th>
<th>Required Feature</th>
<th>Drawing No.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Project location and construction limits</td>
<td>B-1, B-4, C-1</td>
</tr>
<tr>
<td></td>
<td>Existing and final grades, including dividing lines and direction of flow for all pre and post-construction stormwater runoff drainage areas located within the project limits</td>
<td>B-2, 3, 5 through 8; C-4 through 16 (all runoff drains to Chester Creek)</td>
</tr>
<tr>
<td></td>
<td>Steep slopes (&gt;33%)</td>
<td>see notes, various sheets</td>
</tr>
<tr>
<td></td>
<td>Impervious surfaces</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Soil types</td>
<td>Figure 1</td>
</tr>
<tr>
<td></td>
<td>Potential pollution-generating activities</td>
<td>B-01 through 14, C-1 through 20</td>
</tr>
<tr>
<td></td>
<td>Areas not to be disturbed</td>
<td>areas outside of construction limits</td>
</tr>
<tr>
<td></td>
<td>Areas where construction will be phased</td>
<td>Project phases will correspond with each site only</td>
</tr>
<tr>
<td></td>
<td>Portions of the site that drain to a public water with DNR work in water restrictions</td>
<td>all sites drains to Chester Creek</td>
</tr>
<tr>
<td></td>
<td>Temporary and permanent erosion and sediment control BMPs</td>
<td>B-02, 05 through 08; C-5 through 8</td>
</tr>
<tr>
<td></td>
<td>Standard details for erosion and sediment control BMPs</td>
<td>B-9 through 14, C-19 and 20</td>
</tr>
</tbody>
</table>

Estimated Preliminary BMP Quantities: Refer to Drawing No. G-02
Temporary Erosion Prevention Practices

**Timing:**
- Delineate areas of the site not to be disturbed (with flags, stakes, signs, silt fence, etc.) before work begins.
- Construction phasing will be used when possible to minimize concurrent soil exposure and will include staggering of the construction from downstream to upstream beginning with Scarp E-5; stabilizing areas as soon as work is completed; and restoring access paths when they are no longer needed.
- Initiate stabilization immediately whenever any construction activity has permanently or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days.
- Complete stabilization no later than 7 calendar days after the construction activity in that portion of the site has temporarily or permanently ceased
- During the MNDNR work in water restriction fish spawning time frame (October 1 through June 30), complete stabilization within 24 hours for exposed soil areas within 200 feet of the water’s edge.

**BMPs:**
- Maintain an undisturbed buffer zone of not less than 100 linear feet from Chester Creek at all times, except where a water crossing or other encroachment is necessary to complete the project. Encroachment for the work in water on Chester Creek shall be to perform stream stabilization as shown on the construction documents and restored as detailed in the construction documents.
- Erosion control and stabilization practices to be installed are depicted within the construction documents and include: erosion control blanket, vegetation (through seeding and plantings), and rock riprap.
- Stabilize soils stockpiles with fast-growing cover crop and straw mulch.
- Minimize disturbance of steep slopes (>33%) where feasible. Stabilize disturbed steep slopes (>33%) with erosion control blanket and seed as shown on the construction drawings.
- Install riprap at pipe outlets.
- Apply mulch materials to achieve approximately 90 percent ground coverage (typically 2 ton/acre).
- Direct construction site discharges to vegetated areas where feasible.
- Install all BMPs in accordance with relevant manufacturer specifications and accepted engineering practices.
Temporary Sediment Control Practices

Timing:
- Establish sediment control practices on all downgradient perimeters prior to commencing any upgradient land-disturbing activities.
- Install silt fence baffles prior to commencing work on streambank and in water.
- If sediment control practices must be adjusted or removed to accommodate short-term activities, complete the activity as quickly as possible and re-install immediately after the activity has been completed or before the next precipitation event (even if the activity is not yet complete).
- Maintain downgradient sediment control practices until final stabilization has been achieved for upgradient areas.

BMPs:
- Minimize soil compaction where feasible.
- Preserve topsoil where feasible; if topsoil must be removed, store in a segregated stockpile for reuse in site restoration.
- Due to necessity of proximity of work to Chester Creek, it is not possible to preserve a 50 foot natural buffer between the construction site and Chester Creek; therefore redundant sediment controls will be installed.
- Sediment control practices to be installed are depicted on the construction drawings and include silt fence, biolos, silt fence baffles, and vehicle tracking rock construction entrance.
- Install site fence around the perimeter of temporary soil stockpiles.
- Install a rock construction entrance as a vehicle tracking BMP to minimize the track out of sediment from the construction site.
- Monitor adjacent paved surfaces for track out of sediment from construction site and remove sediment via street sweeping if necessary or as directed by the engineer.
- Install all BMPs in accordance with relevant manufacturer specifications and accepted engineering practices.
BMP Design Factors

<table>
<thead>
<tr>
<th>Required Factor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected amount, frequency, intensity, and duration of precipitation</td>
<td>Approximately 2.5 inches of precipitation from the 1-year, 24-hour storm event (NOAA Atlas 14)</td>
</tr>
<tr>
<td>Nature of stormwater runoff and run-on at the site, including factors such as</td>
<td>Run-on from adjacent vegetated slopes into site, with some slopes exceeding 33%, as well as run-on from upstream Chester Creek. All site drainage is internal toward Chester Creek.</td>
</tr>
<tr>
<td>expected flow from impervious surfaces, slopes, and site drainage features</td>
<td></td>
</tr>
<tr>
<td>If any stormwater flow will be channelized at the site, design BMPs to control</td>
<td>Stormwater is naturally channelized within Chester Creek. Peak flow rates and total stormwater volume should not be increased during this project.</td>
</tr>
<tr>
<td>both peak flow rates and total stormwater volume to minimize erosion at outlets</td>
<td></td>
</tr>
<tr>
<td>and to minimize downstream channel and streambank erosion</td>
<td></td>
</tr>
<tr>
<td>Range of soil particle sizes expected to be present on the site</td>
<td>Clays and silts are present in the on-site soil matrix, as well as sands and gravel</td>
</tr>
</tbody>
</table>

Permanent Stormwater Management System

Not applicable; this project does not replace vegetation and/or other pervious surfaces with one or more acres of cumulative impervious surface.

Inspection and Maintenance Activities

**Inspection Requirements:**
- Inspect the entire construction site at least once every 7 days during active construction and within 24 hours after a rainfall event greater than 0.5 inches in 24 hours.
- Where parts of the site have permanent cover, but work remains on other parts of the site, inspection frequency may be reduced to once per month in areas with permanent cover.
- Inspect all erosion prevention and sediment control BMPs and pollution prevention management measures for integrity and effectiveness.
- Inspect surface waters for evidence of erosion and sediment deposition.
- Inspect construction site vehicle exit locations for evidence of off-site sediment tracking onto paved surfaces and inspect streets and other areas adjacent to the project for evidence of off-site accumulations of sediment.
- Inspections must be conducted by an appropriately trained individual.
Maintenance Requirements:

- Repair, replace, or supplement:
  - All nonfunctional BMPs with functional BMPs by the end of the next business day after discovery or as soon as field conditions allow access.
  - All perimeter control devices when they become nonfunctional or the sediment reaches 1/2 of the height of the device.
- Remove all deltas and sediment deposited in surface waters and restabilize the areas where sediment removal results in exposed soil within 7 days of discovery.
- Remove tracked sediment from all paved surfaces both on and off site within 24 hours of discovery.
- Remove off-site accumulations of sediment in a manner and at a frequency sufficient to minimize off-site impacts.
- Maintain all BMPs accordance with relevant manufacturer specifications and accepted engineering practices.

Recordkeeping:

- All inspections and maintenance must be recorded within 24 hours in writing and records must be retained with the SWPPP.
- Records of each inspection and maintenance activity shall include:
  - Date and time of inspections
  - Name of person(s) conducting inspections
  - Findings of inspections, including the specific location where corrective actions are needed
  - Corrective actions taken (including dates, times, and party completing maintenance activities)
  - Date and amount of all rainfall events greater than 0.5 inches in 24 hours; rainfall amounts will be obtained from a properly maintained rain gauge installed onsite, a weather station that is within 1 mile of the site, or a weather reporting system that provides site specific rainfall data from radar summaries.
  - If any discharge is observed to be occurring during the inspection, a record of all points of the property from which there is a discharge must be made, and the discharge should be described (i.e., color, odor, floating, settled, or suspended solids, foam, oil sheen, and other obvious indicators of pollutants) and photographed.
  - Any amendments to the SWPPP proposed as a result of the inspection must be incorporated within 7 calendar days.
Record Retention

- This SWPPP including, all changes to it, and inspections and maintenance records must be kept at the site during construction in either the field office or in an on-site vehicle during normal working hours.
- Upon request make this SWPPP, including all related certificates, reports, records, or other information, available to federal, state, and local officials within 72 hours for the duration of the project and for 3 years following project completion.

Pollution Prevention Management Measures

- Minimize exposure to stormwater of the following products, materials, or wastes:
  - Building products that have potential to leach pollutants are not expected to be present on site, but if present exposure to stormwater will be minimized through coverage with plastic sheeting.
  - Pesticides, herbicides, insecticides, fertilizers, treatment chemicals, and landscape materials through coverage with plastic sheeting.
  - Hazardous materials and toxic waste (including oil, diesel fuel, gasoline, hydraulic fluids, paint solvents, petroleum-based products, wood preservatives, additives, curing compounds, and acids) through proper storage in sealed containers in restricted access storage areas and in compliance with Minn. R. ch. 7045 including secondary containment as applicable.
  - Solid waste through proper storage, collection, and disposal in compliance with Minn. R. ch. 7035.
- Position portable toilets (if needed) so that they are secure and will not be tipped or knocked over.
- Properly dispose of sanitary waste in accordance with Minn. R. ch. 7041.
- Spill Prevention and Response:
  - Take reasonable steps to prevent the discharge of spilled or leaked chemicals.
  - Ensure adequate supplies of absorbent and other dry clean-up materials are available at all times to clean up discharged materials and that an appropriate disposal method is available for recovered spilled materials.
  - Report and clean up spills immediately as required by Minn. Stat. §115.061.
- Fueling and maintenance of equipment and/or vehicles will not occur on-site.
- Washing of vehicles and/or equipment will not occur on-site.
- Washout of concrete and/or other similar wastes (such as stucco, paint, form release oils, curing compounds and other construction materials) will not occur on-site.
Final Stabilization

- Ensure final stabilization of the site.
- For final stabilization to be considered complete, the following must occur:
  - Complete all soil disturbing activities at the site.
  - Stabilize all soils with permanent cover.
  - Remove all temporary synthetic and structural erosion prevention and sediment control BMPs.
- Permanent Cover will consist of perennial vegetative cover and riprap as depicted on Drawing No. C-02 through C-04.
  - Perennial vegetative cover will consist of uniform cover (i.e. evenly distributed, without large bare areas) with a density of 70 percent of the native background vegetative cover for the area.

SWPPP Amendments

<table>
<thead>
<tr>
<th>Date</th>
<th>Amendment</th>
<th>Responsible Individual(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2016</td>
<td>Finalization of draft SWPPP</td>
<td>Jessica Olson, Jennifer Fleming, Barr Engineering Company; Joseph Jurewicz, MSA Professional Services</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

_page_10_of_10