Addendum 2
Solicitation 20-99512
Fiber Optic Connection along Lake Avenue

This addendum serves to notify all bidders of the following changes to the solicitation documents:

1. Changes have been made to sheets 2, 9 and 10 of the planset and are identified by revision bubbles. The revised sheets are attached and are hereby included in the bid documents. Changes include:
   a. Updated plans to clarify location and lengths of slack fiber service loops
   b. Updated plans with conduit size (varies) and type (changed to RSC)
   c. Added note to plans to require approval prior to any drilling into the lift bridge
   d. Updated plans to include new cabinets on bridge towers. See new “Cabinet” section of special provisions Division SZ for detailed requirements (power connection, mounting, drainage, etc.)
   e. Updated plans to include new cabinet in south tower office. See new “Cabinet” section of special provisions Division SZ for detailed requirements (power connection, etc.)

2. The attached special provisions section SZ-19 is hereby included in the bid documents.

3. Changes to item number 5 of Addendum 1 (the questions, answers and additional information provided from the pre-bid meeting) are listed below. All other information provided in addendum 1 is unchanged. The information below is different from Addendum 1 by striking out old language and underlining new language.

Following are questions, answers and additional information from the pre-bid meeting:

Q1. How long is the current umbilical on the bridge?
A1. Considerations should be made for the height of the bridge and the distance to the pilot house. The current moveable umbilical (festoon) is 125 ft. Padding and consideration for connection to the pilot house should be included.

Q2. The plan indicated a 70ft service loop in each hand hole – is this correct or is a service loop only needed in the vaults?
A2. A 70ft coiled service loop is only required in the new vaults, in the MN Power vault at the base of the bridge, and the base office in the south tower. Existing hand holes do not need a service loop. Please see revised plans.
Q3. Do you want the fiber covered on the way up the bridge?
A3. The fiber should be protected as much as possible. Please see revised plans.

Q4. Are there any specifications for the enclosures within the dog houses at the top of the bridge?
A4. City will provide enclosures after bid is awarded in cooperation with vendor suggestions. Please see revised plans.

Q5. How thick are the concrete walls that require core drilling?
A5. Concrete walls are 14 inches thick.

Additional information provided during pre-bid:
- A lift may be used on the bridge for 15-minute increments. If bridge closure is properly coordinated and advertised, this may be extended to 30 minutes after midnight.
- Consideration must be given for the weight of ice on conduits and cabling on the bridge.
- Aerial Lift Bridge Tower Heights are 225ft to the top, 180 feet to the bottom of the span, and 390 feet between spans.
- For the section of conduit that is owned by MNPower – MNPower will need to pull. MNPower will need to be onsite for any core drilling in the MNPower vault.

Please acknowledge receipt of this Addendum by checking the acknowledgment box within the www.bidexpress.com solicitation.

Posted: **October 22, 2020**
(2550) CABINET

Furnish and install Cabinet in accordance with the MnDOT Standard Specifications, MnDOT Standard Plans/Plates, the Plans, and the following:

SZ-19.1 See GROUNDING on page 6-SZ for grounding specifications.

SZ-19.2 See LABELING on page 8-SZ for labeling specifications.

SZ-19.3 For cabinets located on top of the lift bridge towers furnish and install a Hoffman CSD242412SS enclosure with added lockable handle and DIN rail.

(A) Furnish and install cabinets and connecting conduits in a matter to ensure that moisture/condensation/water does not accumulate in the cabinets or conduit. This includes:

   a. Construct conduit openings in bottom of cabinet.
   b. Construct weep holes in cabinet (if necessary).

(B) Construct a power connection from the in place wooden cabinets to the new cabinets. Furnish and install a 2-gang outlet inside each new cabinet. This includes all necessary materials (conduit, power cables, 2-gang outlet, mounting hardware, etc.) to construct and provide an operational 2-gang outlet inside each new cabinet.

SZ-19.4 For the cabinet located in the south tower office furnish and install a Hoffman EWMW362825 enclosure.

(A) Construct a power connection from the in place south tower office load center to the new cabinet. Furnish and install a 2-gang outlet inside the new cabinet. This includes all necessary materials (conduit, power cables, 2-gang outlet, mounting hardware, etc.) to construct and provide an operational 2-gang outlet inside the new cabinet.
### Fiber Optic Interconnect Tabulation

<table>
<thead>
<tr>
<th>Item</th>
<th>Note</th>
<th>Unit</th>
<th>Estimated Quantity</th>
</tr>
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<tbody>
<tr>
<td>As Built</td>
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<td>LUMP SUM</td>
<td>1</td>
</tr>
<tr>
<td>Mobilization</td>
<td>LUMP SUM</td>
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<td>Remove Cables</td>
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<td>Remove Concrete Walk</td>
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<td>Aggregate Base (CV) Class 5</td>
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<tr>
<td>Concrete Walk</td>
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<tr>
<td>Outdoor Fiber Splice Enclosure</td>
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<tr>
<td>1&quot; Rigid Steel Conduit</td>
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<tr>
<td>2&quot; Non-Metallic Conduit</td>
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<td>Fiber Optic Cable Testing</td>
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<tr>
<td>Cabinet</td>
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<tr>
<td>Fiber Optic Splice / Patch Panel</td>
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<td>Pull Vault</td>
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<tr>
<td>Traffic Control</td>
<td>LUMP SUM</td>
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</table>

### Notes:
1. Follow the MINDOT Traffic Management System (TMS) as-built requirements for as built.
2. Replace sidewalk, toad, and for use on lift bridge.
3. Includes concrete wall penetrations.
4. Includes power connection from inplace wooden cabinet for cabinets on top of towers.
5. See special provisions division 62 for detailed requirements.
6. Includes one 1/24 fiber optic splice / patch panel.
7. Fiber optic termination quantity is based on the number of fiber optic cables terminated.
8. See communication schematics for number of individual fiber terminations.
9. Fiber optic cable splicing quantity is based on the number of splicing locations.
10. Pull vaults located in sidewalks require an additional extension, lid, and reinforcement. See detail drawings.
11. Pigtails include factory terminated patch blocks. Three pigtails are for underground use to signal cabinets.
12. Pigtails are for aerial use (to lift bridge towers). 1 pigtail is for traveling use (to lift bridge pilot house).
13. Measure proposed cable route to determine the length of the cable before ordering.
14. Provide traffic control in accordance with the Minnesota Transportation Control manual.

Quantities provided are for information only. The project will be bid and paid for as one lump sum item.

Coordinated construction of Fiber Optic Cable along Lake Avenue with City of Duluth Signal

Janelle Stedman - (218) 349-1649 (Mobile)

Coordinated construction of Fiber Optic Cable at lift bridge with City of Duluth:

Jody Campbell - (218) 222-3371 (Office) or (218) 943-6355 (Mobile)

Complete work across top of lift bridge during winter months.