**Purchasing Division**
*Finance Department*

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**Addendum 4**
**Solicitation 24-99200**
**Lower Spirit Nordic Trail Construction**

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

- The bid due date has been changed to Wednesday, February 14 at 2:00 PM

**Questions:** The following questions have been asked and are answered in *italics*

1. Please provide a detail of what the bentonite cutoff collars should look like (SP23, 24) – it seems almost all of the proposed culverts have them except 3.
    a. *The Special Provisions are revised to the following:*

***SP-23**: REMOVE "Install 6-inch-thick bentonite cut-off collar through encasement zone approximately 5 feet upstream/downstream of pipe aprons and in the center of the pipe."*

***SP-24**: REMOVE "Install 6-inch thick bentonite cut-off collar around pipe encasement area for steep culverts, in three locations: 5 feet from aprons (approximately at the edge of the rail) and at pipe midline."*

***SP-24:** ADD "HDPE pipe culverts shall be installed to match existing flowlines of ephemeral drainage or topography as close as possible but will not exceed the following maximum slope limits (based on a velocity of 19 ft/sec):*

| *HDPE Culvert Size* | *Maximum Allowable Slope* |
|---|---|
| *12"* | *8.30%* |
| *15"* | *6.20%* |
| *18"* | *4.80%* |
| *24"* | *3.30%* |
| *30"* | *2.40%* |

*Sheet C000: Eliminate references to Note AA in the Culvert Table Notes column.*

***Sheet C001:** REMOVE Note AA in the Drainage Notes Table.*

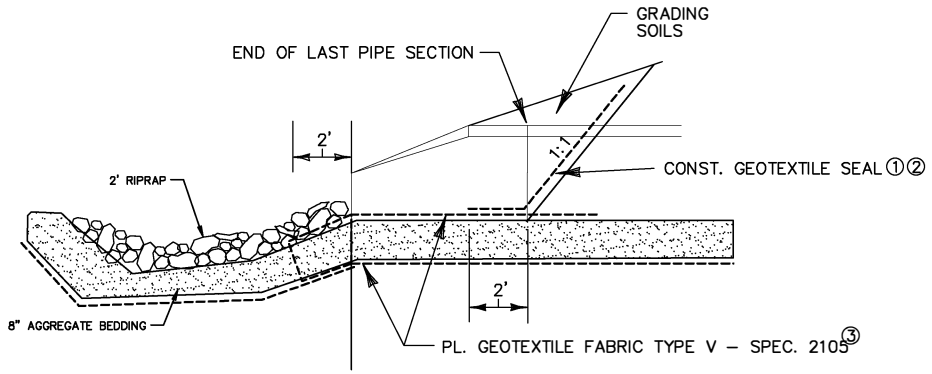
2. Please provide a detail of the high velocity outlet treatment (geotextile seal)
    a. *Please see the High Velocity End Treatment drawing attached to this addendum.*

3. Are waterstop gaskets required for culverts?
    a. *No, they are not required*

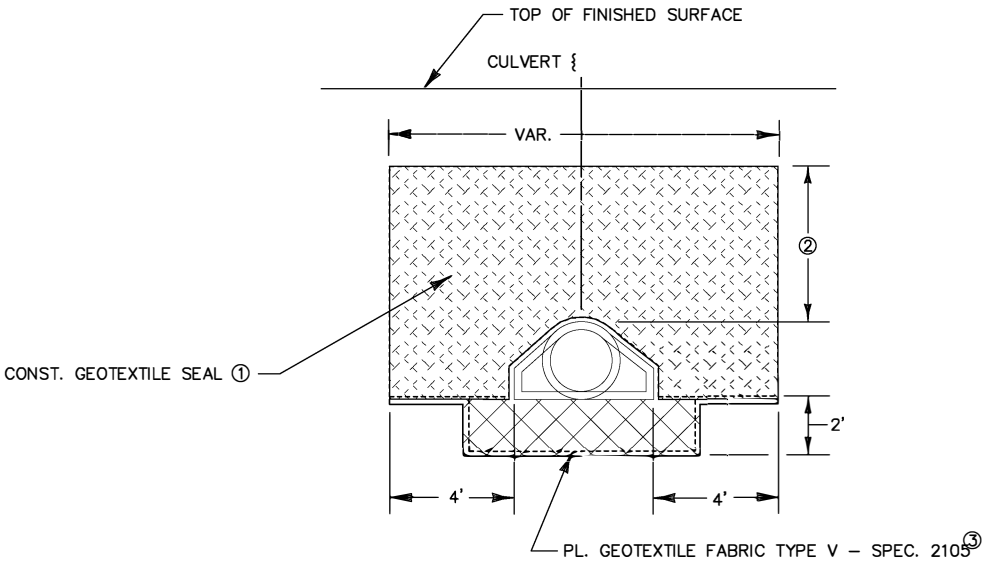
Please acknowledge receipt of this Addendum by checking the acknowledgement box within the www.bidexpress.com solicitation.

Posted: **February 12, 2024**

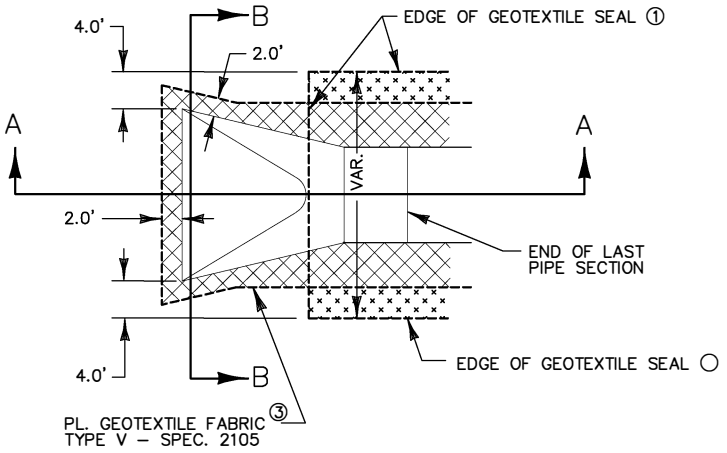
# DETAIL - HIGH VELOCITY END TREATMENT - ADDENDUM 4 2/12/2024




## SECTION A–A




## SECTION B–B




## PLAN VIEW

LEGEND

- GEOTEXTILE SEAL ①
- AGGREGATE BEDDING

① GEOTEXTILE SEAL CONSTRUCTED WITH GEOTEXTILE FABRIC TYPE V. (INCIDENTAL)

② GEOTEXTILE SEAL FABRIC TO EXTEND 5.0' ABOVE TOP OF PIPE OR TO 1.0' BELOW SHOULDER P.I. WHICHEVER IS LOWER.

③ QUANTITIES FOR GEOTEXTILE FABRIC TYPE V PLACED IN TRENCH AND AROUND AGGREGATE BEDDING IS INCIDENTAL. SEE CULVERT TREATMENT DETAIL FOR ADDITIONAL INFORMATION.

DRAWN BY: ACO
DESIGNER: ACO
CHECKED BY: MDW
DESIGN TEAM

| NO. | BY | DATE | REVISIONS |
|---|---|---|---|

I HEREBY CERTIFY THAT THIS PLAN 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.
Mark D. Wallis, PE
Date: 02/07/2018 Lic. No. 19145

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DULUTH, MINNESOTA

GRAND AVENUE NORDIC CENTER CONSTRUCTION DETAILS

FILE NO. DULUT 140414

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