

June 29, 2021

Re: Baird Park Recreational Trail  
Aberdeen, South Dakota  
A-8139

Bid Opening: **July 1, 2021**  
**2:00 pm Local Time**

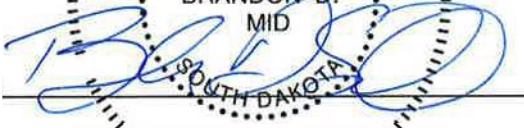
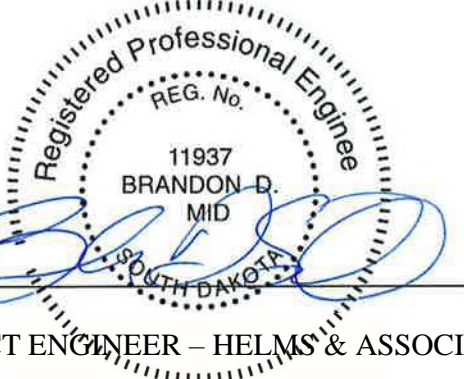
### ADDENDUM NUMBER 1

The following modifications become a part of the original plans and specifications, taking precedence over the items that may conflict. The bidder shall note receipt and make acknowledgement of the addendum on his bid form, incorporating its provisions in his bid.

### CONTRACT DOCUMENTS AND TECHNICAL SPECIFICATIONS

- 1. BIDDING DOCUMENTS, Section 00 42 43- Bid Form, Article 5, Alternate Bid Form:** *Strike the words "including concrete" from Bid Item A3*
- 2. SECTION 00 70 00 GENERAL CONDITIONS, Section 00 73 00, Article 6, SC-6.03,** *The Excess or Umbrella Liability shall be \$1,000,000*
- 3. PART 2, Construction Requirements:** *Add in the attached specifications for the geotextile separator fabric*

### ALL OTHER ITEMS OF THE PLANS AND SPECIFICATIONS REMAIN UNCHANGED

BY:   


PROJECT ENGINEER – HELMS & ASSOCIATES

**Acknowledge receipt of the Addendum by inserting its number on the Bid Form. Failure to do so may subject bidder to disqualification. This Addendum forms a part of the Contract Documents. It modifies them as above.**

# SECTION 31 34 19 – GEOTEXTILE FABRICS

## **PART 1 GENERAL**

### 1.01 SUMMARY

- A. This section includes the requirements for furnishing and installing geotextile fabric as shown on the plans.

### 1.02 RELATED DOCUMENTS

- A. The general provisions of the Contract, including General and Supplementary Conditions, apply to the Work specified in this section.

- B. Related Work specified elsewhere:

- 1. Aggregate Base Course - Section 32 11 23

### 1.03 QUALITY ASSURANCE

- A. When geotextile meeting or exceeding the required property values have been submitted and approved, the properties used for quality control shall be properties established by geotextile manufacturer for this type of product and not the values specified herein.

### 1.04 DELIVERY, HANDLING, AND STORAGE

- A. Geotextile shall be provided in rolls wrapped in relatively impermeable and opaque protective covers with the following clearly marked on each roll.

- 1. Manufacturer's name.
  - 2. Product identification.
  - 3. Lot and roll number.
  - 4. Roll dimensions.

- B. Geotextile shall be stored in a dry location above the ground surface. Geotextile shall not be stored directly on the ground.

- C. Geotextile shall be handled in accordance with the manufacturer's recommendations to prevent damage to material during unloading, handling, and installation operations.

## **PART 2 PRODUCTS**

### 2.01 GENERAL

- A. The Contractor shall furnish materials whose minimum roll values meet or exceed project requirements.

- B. The geotextile fabric shall have polymeric yarns or fibers oriented into a stable network to retain relative structure during handling, placement, and service.

### 2.02 GEOTEXTILE FABRIC PROPERTIES

- A. The Contractor shall provide a Certificate of Compliance verifying that the material meets the following specifications or documentation that the material is listed on the approved products list. All values listed are Minimum Average Roll Values (MARV) unless otherwise specified.

- B. The geotextile shall be furnished and stored at the site in a protective wrapping which shall protect the fabric from ultraviolet radiation and from abrasion due to shipping and handling. If the geotextile is to be exposed directly to sunlight in excess of two weeks, the fabric shall be ultraviolet stabilized.

**TABLE 1 - GEOTEXTILE AND IMPERMEABLE PLASTIC**

Fabric and Membrane Property		Non-Woven
PERFORMANCE CRITERIA DURING SERVICE LIFE		
Equivalent or Apparent Opening Size, US Standard Sieve	ASTM D4751	40-100
Thickness, Mils	ASTM D1777	---
Permittivity, Sec-1	ASTM D4491	0.1 Min
STRENGTH REQUIREMENTS		
Wide Width Strip Tensile Strength, lbs/inch Machine & X-Machine Direction	ASTM D4595 <sup>(2)</sup>	65
Grab Strength, lbs Machine & X-Machine Direction	ASTM D4632	---
Elongation at Failure, % Machine & X-Machine Direction	ASTM D4595 <sup>(2)</sup>	20 Min
Burst Strength, psi	ASTM D3786 Diaphragm Method	210
Trapezoid Tear Strength, lbs	ASTM D4533 Any Direction	40
Puncture Strength, lbs	ASTM D4833 <sup>(3)</sup>	50
ENVIRONMENTAL REQUIREMENTS		
Mildew/Rot Resistance, %	AATCC 30 1988 <sup>(5)</sup>	100
Insect/Rodent Resistance, %	AATCC 24 1985 <sup>(5)</sup>	100
Ultraviolet Resistance, % Strength Retention	ASTM D4355	-4
TYPICAL USES		
		d

\*Note: The actual AOS of the silt fence should only have one value for AOS on the certification. To be approved the value shall be within the allowable range specified above.

<sup>(2)</sup> 8" wide x 4" length (200 x 100 mm) specimen tested at a strain rate of 10% (0.4 inch) (10 mm) per minute.

<sup>(3)</sup> Using 5/16" (8 mm) diameter flat tipped steel cylinder centered with ring clamp.

<sup>(4)</sup> Non-stabilized or low susceptible geotextiles should not be exposed to ultraviolet radiation for more than 5 days.

<sup>(5)</sup> American Association of Textile Chemists and Colorists test procedures.

<sup>(6)</sup> Permeability Coefficient (ASTM D 4491).

(d) Subgrades, embankments, etc. Used to separate granular material from subgrade.

### 2.03 STAPLES

A. Staples for the filter fabric, if used, shall be made of 11-gauge or heavier steel wire. The staples shall be "U" shaped with a 1-inch crown, and legs with a minimum of 8-inches in length.

B. Installation shall be in accordance with the manufacturer's recommendations.

## **PART 3 EXECUTION**

### 3.01 GEOTEXTILE INSTALLATION

- A. The Contractor shall install all geotextile fabrics according to manufacturer's recommendations and as specified herein.
- B. In presence of wind, Contractor shall weight geotextile during placement with sufficient sand bags, or equivalent, to keep geotextile in place during placement of granular materials.
- C. During placement of geotextile, care shall be taken not to entrap in or under geotextile, stones, excessive dust, or moisture that could damage clay liner or hamper subsequent seaming operations.
- D. Do not expose geotextile to precipitation prior to or during installation, and do not expose geotextile to direct sunlight for more than 15 days, unless otherwise specified.
- E. All overlaps of geotextile fabrics shall be oriented in direction of earth filling.
- F. The Contractor shall repair all tears in geotextile prior to installation of granular materials. The repair procedures shall be as recommended by manufacturer and as outlined below.
  - 1. Should any tear exceed 10% of the roll width, the roll shall be removed from the slope and replaced.
  - 2. On non-slopes, the fabric patch may be spot sewn with a minimum overlap of 24 inches in each direction.
  - 3. All soil or granular material, which may have penetrated torn geotextile shall be removed and the area grade smooth.
- G. Geotextile shall be installed around all appurtenances protruding through geotextile as recommended by manufacturer and as specified below.
  - 1. Holes for pipes and appurtenances shall be the minimum size necessary for installation.
  - 2. The Contractor shall patch, seam, sew, or overlap the geotextile material around the pipe or appurtenances to provide a barrier against particle migration into or out of the geotextile fabric.

## **PART 4 MEASUREMENT AND PAYMENT**

### 4.01 METHOD OF MEASUREMENT

- A. Measurement for geotextile fabric shall be for the area covered as shown on the plans or as adjusted in the field. Measurement shall be on a square yard basis to the nearest whole number.

### 4.02 BASIS OF PAYMENT

- A. Payment for geotextile fabric shall be at the Contract Unit Price, as indicated in the Bid Form, for all work and material required to furnish and install fabric as shown on the plans. Overlaps of fabric rolls are not included in quantities for payment.

\* \* \* END OF SECTION \* \* \*