AMENDMENT NO. 1 TO AGREEMENT

Project: Tower Road Stabilization Project
Project No. 19-2537/CIP No. 51254

Background Data: Effective Date of Agreement: July 30, 2021
Owner: City of Rapid City
Engineer: GeoStabilization International

Nature of Amendment:
The amendment to the agreement includes adjustment of the project schedule and adjustment of contract amount to reflect additional project tasks determined necessary to be completed during the design/build of the retaining wall system, as reflected in attached Exhibits. The new contract completion date shall be September 22, 2021.

Current Contract Amount: $294,500.00
Change Requested: $19,500.00
New Contract Amount: $314,000.00

Owner and Engineer hereby agree to modify the above referenced Agreement as set forth in this Amendment. All provisions of the Agreement not modified by this or previous Amendments remain in effect. The effective date of this Amendment is:

CITY OF RAPID CITY:
By: ____________________________  Engineer:
    Steve Allender, Mayor
Date Signed: ____________________  Date Signed: 8/24/2021

ATTEST:
By: ____________________________
    Pauline Sumption, Finance Director
Date Signed: ____________________
August 18, 2021

Mary Bosworth, PE
Rapid City Public Works
300 6th Street
Rapid City, SD 57701

Subject: PROPOSED CHANGE ORDER FOR TOWER ROAD STABILIZATION
Project Number: 19-2537 / CIP 51254
Rapid City, South Dakota

Dear Ms. Bosworth:

GeoStabilization International® (GSI®) is pleased to offer this Change Order Proposal for the referenced project. This proposal is based on the Request for Price No. 1 we received for the Utility Trench Drain on August 16 by Jason Hinds, PE.

BACKGROUND

We understand that water may be accumulating in the vicinity of the proposed slide repair since the water line invert is at a low point in the system, and bedding may transport water to this location.

SCOPE OF WORK

We proposed to locate the waterline at 2 locations shown on the drawings provided using a hydrovac. After our micropiles are installed and the mud mat is placed in the bottom of our excavation, we will use an excavator and hand equipment to install the perforated pipes using a trench box perpendicular to the water line. We will install the perforated pipes in drainage stone surrounded by filter fabric, and then connect the drains to solid PVC pipe as shown. We will install a precast concrete headwall with rodent screen, and then backfill the excavation with additional stone while we construct the GCS wall.

If a precast concrete headwall is not available while we are on site, we will construct the headwall in substantial conformance to the plans using shotcrete and the reinforcing steel shown on the drawings.

We plan to perform this work while maintaining one lane of traffic using traffic control.

The work will be performed in accordance with the terms and conditions of our contract with the City of Rapid City.

COST

We proposed to perform the work described herein for a lump sum cost of $19,500.
SCHEDULE

The installation of the work described herein will add 1 ½ days to our schedule.

Sincerely,

GEOSTABILIZATION INTERNATIONAL

[Signature]

Wes Dickhut, M.S., P.E.
wes.dickhut@gsi.us | 701.934.1618
August 16, 2021

Attn: Eric List
GeoStabilization International (GSI)
PO Box 4709
Grand Junction, CO 81502
Email: eric.list@gsi.us

RE: City of Rapid City Project No. 19-2537 / CIP 51254
Tower Road Slope Stabilization
Request for Price No. 1 – Utility Trench Drain

Dear Mr. List:

Please review the following and provide a price for the work as described. After discussions with the City, it has been proposed to construct a drainage system to provide drainage for potential water building with an existing utility trench. The existing City water main utility trench is located just upslope of the stabilization limits of the project and as it is a low point in the system, has the potential to buildup water within the existing utility trench bedding.

Specifically, please provide a price for furnishing and installation the drainage system as shown on the attached figures.

Please provide a lump sum cost for all items and work necessary to furnish and install the drainage system as discussed.

If approved, a new lump sum bid item will be added for “Water Main Utility Trench Drainage”. Payment shall be made at the lump sum price and no extra payment will be made.

Please feel free to contact me if you have any questions or need additional information.

FMG Engineering

Jason Hinds, P.E.

Cc: Mary Bosworth, P.E., City of Rapid City
Wes Dickhut, P.E., GSI
Jimmy Migletz, GSI
EXISTING ROAD SURFACE

GUARDRAIL, BY OTHERS

BASE COURSE MATERIAL
FOR TEMPORARY WEARING SURFACE

VARIABLE 12'-17'

30' MIN

GEOSYNTHETIC REINFORCEMENT
SPACED EVERY 8"
CAP BLOCK

CMU BLOCK FACING

REINFORCED CONCRETE
2x1' MICROPILE CAP

SILT FENCE
BELOW BASE OF EXCAVATION

FILL MATERIAL
Existing Water Main

4" Sch 40 PVC Perforated Pipe
Surrounded in Min 1" of Open Graded 1" Clay Rock, Wrapped in Type B Drainage Fabric

RESIDUUM - CH

1:1 TEMPORARY BACKSLOPE

FLOWABLE FILL MUD MAT

4" Sch 40 PVC Solid Pipe

FALL RIVER FM

SLOPE EXCAVATION BELOW WALL FOR POSITIVE DRAINAGE, PLACE SEED AND STRAW AFTER WALL CONSTRUCTION.

SuperMicropile™, TYP.
(UP TO 20' EMBEDMENT LENGTH)

15'/6.5', TYP.

A TYPICAL SECTION
SCALE: 1" = 5'
GENERAL NOTES:

The concrete will be Class M6. The concrete will conform to the requirements of Section 462 of the Specifications except the minimum curing time will be 72 hours. It is estimated that 0.55 cubic yards of concrete is required for each unit.

Four cast-in-place or drilled-in \( \frac{3}{8} \)" galvanized anchors will be placed in the headwall. Each galvanized anchor will be placed approximately 1" from the outside corner of the rodent screen. It is preferred that the anchor location be centered at an opening in the rodent screen.

All reinforcing steel will conform to ASTM A615, Grade 60. It is estimated that 25.7 pounds of reinforcing steel is required for each unit.

The underdrain pipe will be placed in the concrete headwall with the pipe end flush with the concrete surface adjacent to the rodent screen.

The 8"x8" rodent screen will be galvanized 13 Ga. steel with a diamond shaped flattened mesh pattern. The size will be \( \frac{1}{2} \)". The size refers to the measurement across the smallest diamond shaped opening measured from the centers of the wires. The rodent screen will be centered about the hole in the headwall and fastened to the headwall with the appropriate bolts or nuts with washers.

A 4"x4"x6' marker post will be placed at the approximate location as depicted in the above drawings for each concrete headwall. The marker post will project 3'± above the ground line. The marker post will be cedar or treated with a wood preservative and will be painted with two coats of white paint.

All costs for furnishing and installing the concrete headwall including equipment, labor, and materials including concrete, reinforcing steel, rodent screen, anchors, and marker post will be incidental to the contract unit price per each for "Concrete Headwall for Underdrain".

December 23, 2019
Marker Post Not Required

4"x4"x6'
Marker Post

D = Diameter of Underdrain Pipe

8"x8" Rodent Screen

½" Galvanized Anchor (Typ.)

Underdrain Pipe

1'0"
f

d

e

2'-0"

3'-0"

SECTION A-A

REINFORCING SCHEDULE

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NOTE:
All dimensions are out to out of bars.

December 23, 2019