



July 23, 2021

Mike Reso
City Project Manager
City of Diamondhead Public Works
5000 Diamondhead Circle
Diamondhead, Ms
Ph: 228-222-4626 Fax: 228-222-4390
Sent via Email to: mreso@diamondhead.ms.gov

Re: NRCS Channel Stabilization at Diamondhead @ Alkii Way - Change Order 1
Pickering Firm, Inc. Project No. 25748.00

Mr. Reso,

Discussions were held on site on Wednesday June 30, 2021 to address concerns presented during construction. During this meeting solutions were presented to help alleviate issues with unsuitable onsite dirt conditions to use for fill. This change order includes the addition of 340 Tons of crushed limestone to build the bottom subgrade to provide a structurally sound base to pour concrete. This will also provide any water in the ditch a medium to flow thru and not build pressure underneath concrete. We are also requesting in this Change order, 20 additional calendar days. This time is requested for the delays caused by weather (5 days) and the delay incurred while finalizing this solution (15 days).

There is possibly unsuitable fill along the top bank that may need to be hauled off. It is questionable if the fill from the east bank will be suitable to rebuild the west bank. Pay item 21-1; Common Excavation (Removed from Site, LVM), can be utilized for removal of unsuitable material. Pay item 23-1; Earthfill (Offsite, LVM), can be utilized for fill material brought in. Quantities needed for this can be assessed as progress continues and any concerns will be brought to the Cities attention.

Attached to this letter, please find a copy of the change order document, a breakdown of the costs associated with this change order, and a letter from ERS, Inc documenting the conditions onsite and requesting to use the crushed limestone. Pickering recommends approval of Change Order No. 1 to ERS, Inc in the additional amount of \$21,420 and 20 calendar days. This brings the contract amount to \$364,325.00 and substantial completion date of September 4, 2021.

We are available should you have any questions regarding this matter or if we can be of any assistance.

Sincerely,
PICKERING FIRM, INC.

A handwritten signature in blue ink, appearing to read "Cara Wagner".

Cara Wagner, PE
Associate Principal Owner
Senior Civil Engineer


Date of Issuance: 7/23/2021 Effective Date: Date of full Execution below
 Owner: City of Diamondhead Owner's Contract No.: _____
 Contractor: ERS, Inc Contractor's Project No.: _____
 Engineer: Pickering Firm, Inc. Engineer's Project No.: 25748.00
 Project: Channel Stabilization at Diamondhead Drive @ Alkii Way Contract Name: _____

The Contract is modified as follows upon execution of this Change Order:

Description: Addition of: 340 Tons Item no CO1-1. Addition of 20 working days to contract time.

Attachments: Cost breakdown, Letter from ERS, Inc.

CHANGE IN CONTRACT PRICE	CHANGE IN CONTRACT TIMES
Original Contract Price: \$ <u>342,905.00</u>	Original Contract Times: Substantial Completion: <u>August 15, 2021</u> Ready for Final Payment: _____
Increase from previously approved Change Orders No. ___ to No. ___: \$ <u>N/A</u>	Increase from previously approved Change Orders No. ___ to No. ___: Substantial Completion: <u>N/A</u> Ready for Final Payment: _____
Contract Price prior to this Change Order: \$ <u>342,905.00</u>	Contract Times prior to this Change Order: Substantial Completion: <u>August 15, 2021</u> Ready for Final Payment: _____
Increase of this Change Order: \$ <u>21,420.00</u>	Increase of this Change Order: Substantial Completion: <u>20 working days</u> Ready for Final Payment: _____
Contract Price incorporating this Change Order: \$ <u>364,325.00</u>	Contract Times with all approved Change Orders: Substantial Completion: <u>September 4, 2021</u> Ready for Final Payment: _____

<p>RECOMMENDED:</p> <p>By: <u></u> By: _____ Title: <u>Associate Principal</u> Title: _____ Date: <u>7/23/2021</u> Date: _____</p>	<p>ACCEPTED:</p> <p>By: _____ By: _____ Title: _____ Title: _____ Date: _____ Date: _____</p>	<p>ACCEPTED:</p> <p>By: _____ By: _____ Title: _____ Title: _____ Date: _____ Date: _____</p>
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Approved by Funding Agency (if applicable)

By: _____ Date: _____
 Title: _____

**Channel Stabilization at Diamondhead Drive @ Alkii Way
Change Order No. 1
Cost Breakdown**

The following new bid item shall be added to the contract

Item No.	Quantity	Unit	Description	Unit Price	Amount of Increase
CO1-1	340	TON	Crushed Limeston	\$ 63.00	\$21,420.00

The Total Increase For New Bid Item:

\$21,420.00

ERS, INC.

1635 Lelia Drive, Suite 202
Jackson, MS 39216
601-982-7788
ersinc@earthlink.net

July 1, 2021

PICKERING FIRM, INC.

126 Rue Magnolia
Biloxi, MS 39530

Attn: Ms. Cara Wagner, P.E.

Re: *Channel Stabilization at Diamondhead Dr @ Alkii Way
Unsuitable Onsite Dirt Conditions*

Dear Cara,

Per our visit on the job yesterday with Ron, please find this letter regarding the issues and our recommendations.

Per Note #4 on Sheet XS_01 of the drawings; "Project intent is such that no cut material will leave the site and no import material will be required. Values for "common excavation (removed from site, LVM) and earthfill (offsite, LVM) provided in proposal are to accommodate removal and replacement of unsuitable materials."

The following are the issues that have arisen and need to be addressed:

1. While we recognize there is some usable dirt in east bank to rebuild the west slope; the majority of the dirt is unsuitable to use for fill. It is wet, soft and full of deleterious matter. We had a section of ditch coffered off, pumped out and mucked yesterday and what little suitable dirt we had turned to mud when we started compacting it. There is water weeping out of the lower slopes which is keeping the water in the ditch. The ditch had 6 inches of water in it within an hour after we had it dry due to this weeping.
2. We have a considerable amount of this unsuitable material on the top bank that needs to be hauled off due to limited working room. Also, it is evident that we need to start bringing in good material to start constructing the west slope immediately (thus using the proposal items mentioned in paragraph 2 above.
3. Per our visit with Ron; we believe that by building the bottom with crushed limestone will give the following benefits:
 - A) Build bottom subgrade with crushed limestone to provide structurally sound base to pour concrete bottom and serve as footer to receive the concrete slopes.
 - B) The aggregate base will give the ground/weep water a medium to flow thru and not build pressure underneath the concrete (even though you have weep holes designed in the bottom slab). A vibratory plate would be run across the aggregate to consolidate it.
 - C) By installing the aggregate to subgrade to pour the concrete on... this is the quickest, most structurally sound way to get this job built and moving forward. At this point we are basically shut down until we get this resolved. The more we unnecessarily handle the dirt onsite... what good dirt we have will become unusable due to exposure, etc...

In summary, we need to haul off the bad dirt, bring in Arema 4A crushed stone to build a stable subgrade, then bring in good fill material to build the west slope. While it is difficult to know how much stone is needed, due to the varying widths and depths dictated by the existing conditions (ie, the existing ditch bottom is as much as 6' wide in some parts) we propose to furnish and install the crushed stone base for \$63.00/ton.

By virtue of this letter, please be informed that until these issues are resolved, we are pretty much at a point of standstill. Time is of the essence and I look forward to a quick resolution so we get this project completed.

Sincerely,

A handwritten signature in blue ink, appearing to read "Todd Roberts". The signature is stylized and cursive.

Todd Roberts
President



Material Data Sheet
AREMA 4A
Product Code 401

Sieve Size		Specification	Sieve Size		Typical Gradation
Inch	Metric	% Passing	Inch	Metric	% Passing
2 1/2"	63 mm	100	2 1/2"	63 mm	100
2"	50 mm	90-100	2"	50 mm	95
1 1/2"	37.5 mm	60-90	1 1/2"	37.5 mm	71
1"	25 mm	10-30	1"	25 mm	21
3/4"	19 mm	0-10	3/4"	19 mm	9
3/8"	9.5 mm	0-3	3/8"	9.5 mm	1.9

	Specific Gravity	
Dry Bulk	2.678	ASTM C127 and AASHTO T85
S.S.D.	2.691	ASTM C127 and AASHTO T85
APP	2.712	ASTM C127 and AASHTO T85
Absorption	0.47	ASTM C127 and AASHTO T85

	Los Angeles Abrasion	
LA Abrasion	21	ASTM C131 and AASHTO T96

	Sodium Sulfate Soundness	
Sodium Sulfate Soundness	0.8	ASTM C88 and AASHTO T104

	Unit WT. Lb. Cubic Foot	
Dry Loose	86	ASTM C29 and AASHTO T19
Dry Rodded	96	ASTM C29 and AASHTO T19

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