

MEMORANDUM

TO: Programs, Projects and Operations Subcommittee

FROM: Martin P. Cleveland, Construction Engineer

SUBJECT: Little Papillion Creek Channel Stabilization Mercy 10R Project Bids

DATE: July 2, 2018

The Little Papillion Creek Channel Stabilization Mercy 10R Project is located along the Little Papio between Mercy Road and Pine Street in Omaha, Nebraska, as shown on the enclosed location map. The project consists of stabilizing a 100 ft. long segment of the existing west bank of Little Papillion Creek and stopping sand boil activity in the streambed through the placement of rock riprap fill and nine mini-relief wells.

On June 26, 2018, the District opened a bid for the Little Papillion Creek Channel Stabilization Mercy 10R Project. A bid of \$912,971.40 was submitted by GeoStabilization International, LLC. Enclosed is a bid summary. An enclosed recommendation letter from HDR Engineering proposes to reject the received bid and rebid the project.

Management recommends that the Programs, Projects and Operations Subcommittee recommend to the Board of Directors that the General Manager be authorized to reject the bid received for the construction of the Little Papillion Creek Channel Stabilization Mercy 10R Project.

July 5, 2018

Mr. Martin Cleveland, PE
Papio-Missouri River Natural Resources District
8901 South 154th Street
Omaha, NE 68138-3621

RE: Little Papillion Creek Channel Stabilization Mercy North 10R
Bid Recommendation and Proposed Modifications to the Design

Dear Mr. Cleveland,

The existing condition at the Little Papillion Creek Channel Stabilization Mercy North 10R (Project) site consists of a confining clay layer which overlies a sand layer that is currently under artesian pressure. The artesian pressure at this location has punctured the confining clay layer, thus relieving the pressure by discharging water into the channel. The underlying sand material is being transported with the artesian water into the channel which has resulted in the formation of a sand boil in the channel. The transport of sand materials into the channel has caused a loss of the slope toe and channel bank sloughing.

The proposed design includes installation of a sheet pile wall to secure the toe of the slope and re-establish the bank, and installation of mini relief wells to alleviate the artesian pressure by providing a controlled release of the upward pressure. The design provides a low maintenance approach without pumping to alleviating the artesian pressures. However, the sequence of construction and the installation requirements in the contract documents are integral to the success of the Project. In addition, this is the first time driven mini relief wells have been used in the Papillion Creek Watershed for this application.

The Project was advertised to bidders and contract documents were made available beginning on June 11, 2018. Five prospective bidders attended the mandatory pre-bid site showing on June 19, 2018. Only one bid was received on June 26, 2018 from those present at the mandatory pre-bid site showing. The single bid from GeoStabilization International, LLC (GSI) totaled \$912,971.40, after making adjustments for arithmetic errors as prescribed in the specifications. The bid was considerably higher than the Engineer's opinion of probable construction cost, which was in the range of \$250,000 to \$300,000.

Input was solicited from the four contractors who did not submit a bid to ascertain their concerns regarding the Project. The contractor's cited the following:

- Short turn around time between pre-bid showing and bid submission deadline. This prevented some contractors from finding, or even contacting, subcontractors who could accommodate the required installation in the contract documents.
- Narrow window to substantially complete the construction (three weeks), which involves well development, placement of sheet piling, pouring concrete and placing riprap in a prescribed sequence of construction. Given the presence of a sand boil and artesian pressures, there was concern of what may be encountered, how the schedule could be impacted, and potential for liquidated damages being imposed.

Letter to M. Cleveland
July 3, 2018
Page 2 of 2

GSI also cited concerns with schedule as justification for their bid amount. Their concerns included insufficient time to contact prospective sub-contractors, short construction window, and the risk potential of working around artesian pressures.

Based on the available information, we recommend rejecting the bid and re-advertising. In addition, we recommend making the following adjustments:

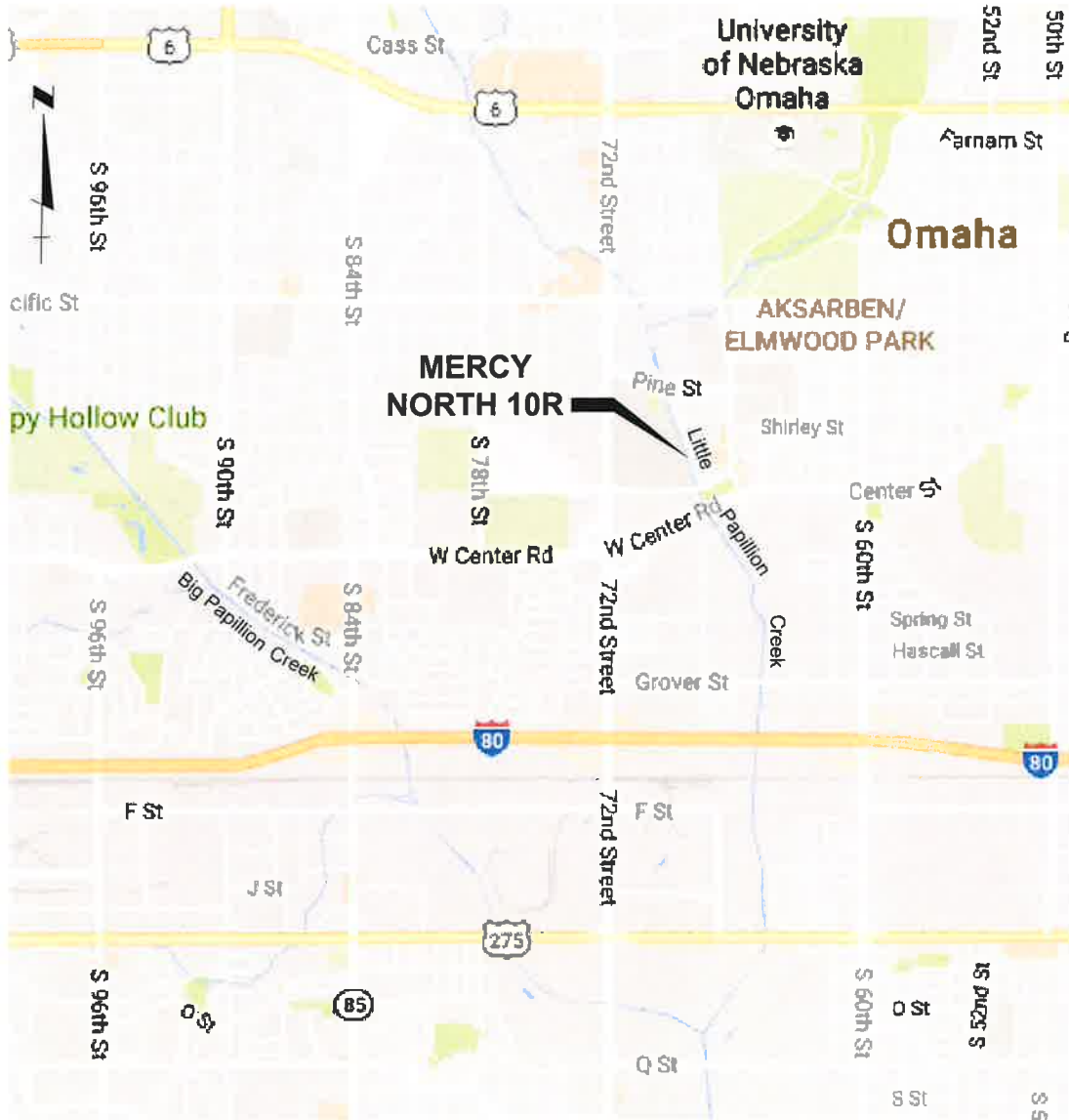
- Modify the bid submission schedule to maximize time between advertisement, pre-bid site showing, and bid receipt.
- Increase the allowable construction window to schedule work and substantially complete the work from three (3) weeks to six (6) weeks.

These changes should provide opportunity to increase the number of bids received. If you have any questions, please contact me at (402) 399-4917.

Sincerely,
HDR ENGINEERING, INC.

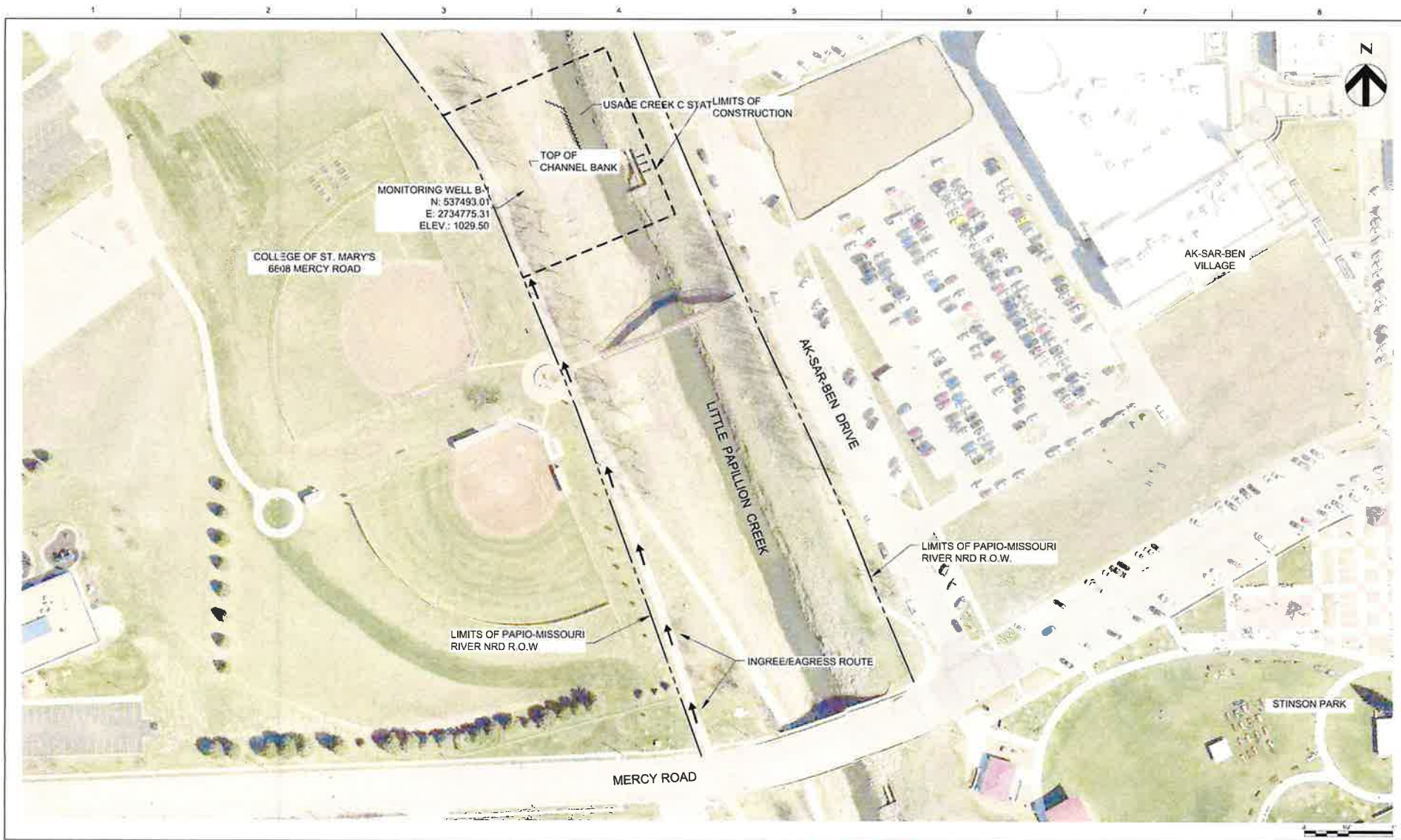
A handwritten signature in black ink, appearing to read "Patrick J. Engelbert". The signature is written in a cursive style with a large initial "P".

Patrick J. Engelbert, PE
Project Manager



NOT TO SCALE

VICINITY MAP



ISSUE	DATE	DESCRIPTION
1	8/14/21	Issue 1: R1
2	5/25/21	Client Review
3	7/15/21	4th Submittal

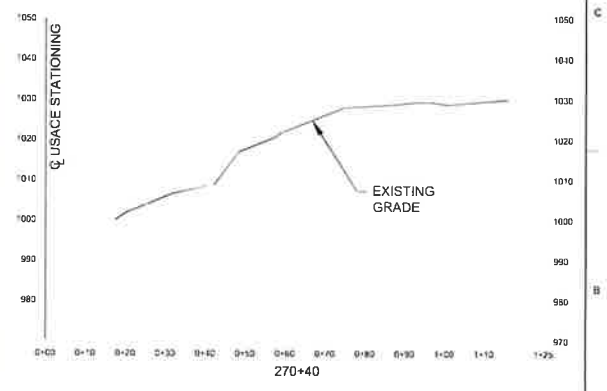
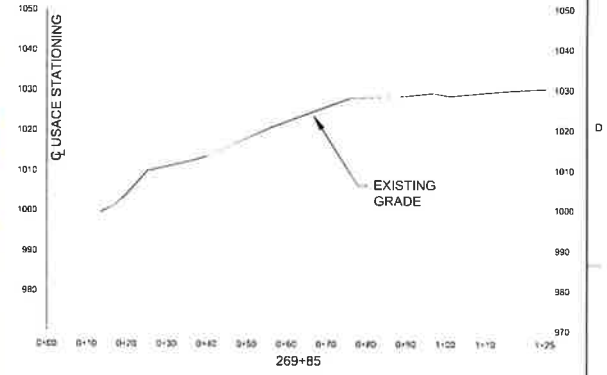
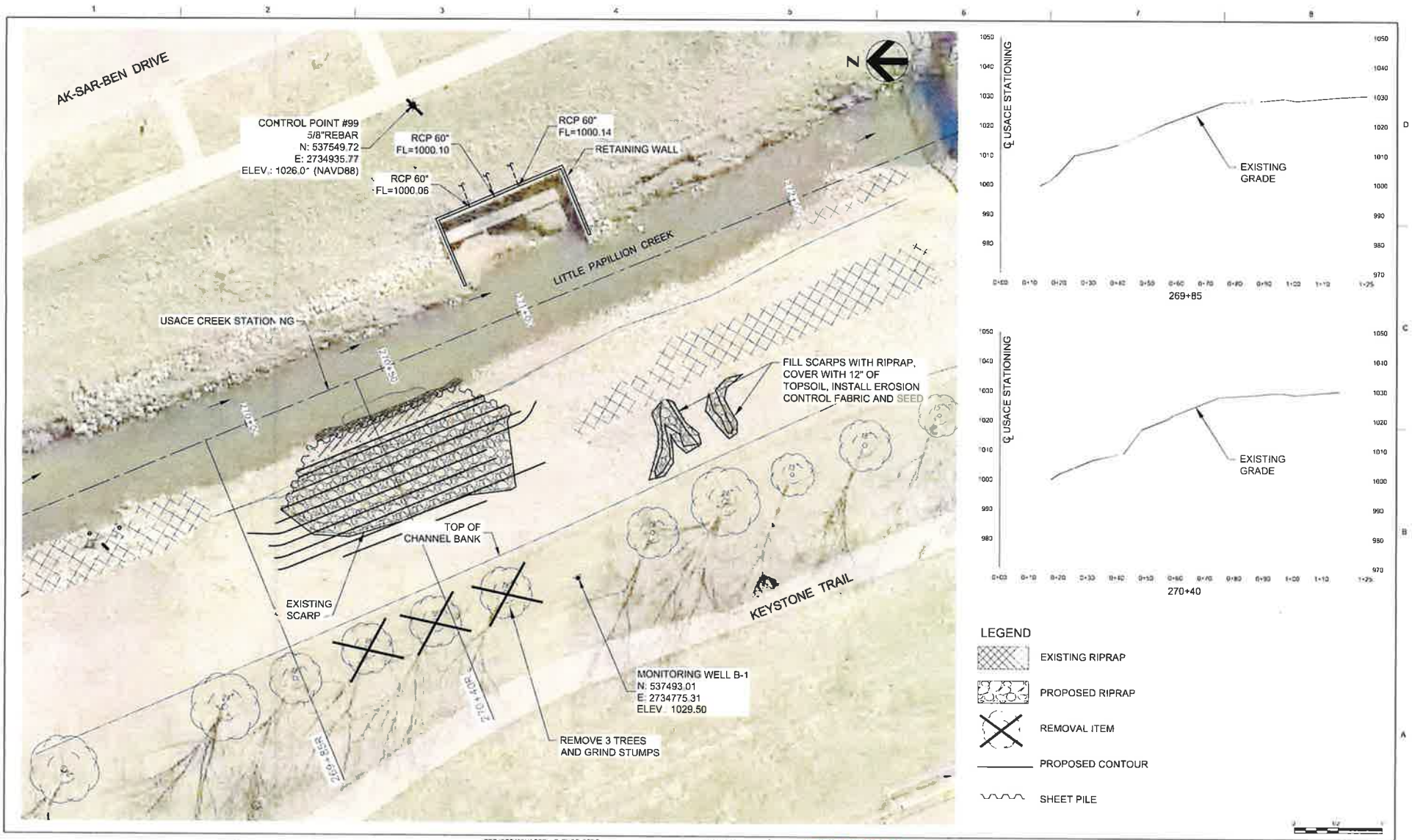
PROJECT MANAGER	PROJECT ENGINEER
PROJECT NUMBER	16043201



**LITTLE PAPILLION CREEK
CHANNEL STABILIZATION
MERCY NORTH 10R**

PROJECT PROPERTY AND
ACCESS MAP

FILENAME	SHEET
SCALE 1"=100'	8 OF 8



- LEGEND**
- EXISTING RIPRAP
 - PROPOSED RIPRAP
 - REMOVAL ITEM
 - PROPOSED CONTOUR
 - SHEET PILE



ISSUE	DATE	DESCRIPTION
1	10/14/18	100% for B.O.
2	5/25/2018	Client Review
3	11/16/2017	High Submittal

PROJECT MANAGER	ENCLOSURE
PROJECT NUMBER	10041351

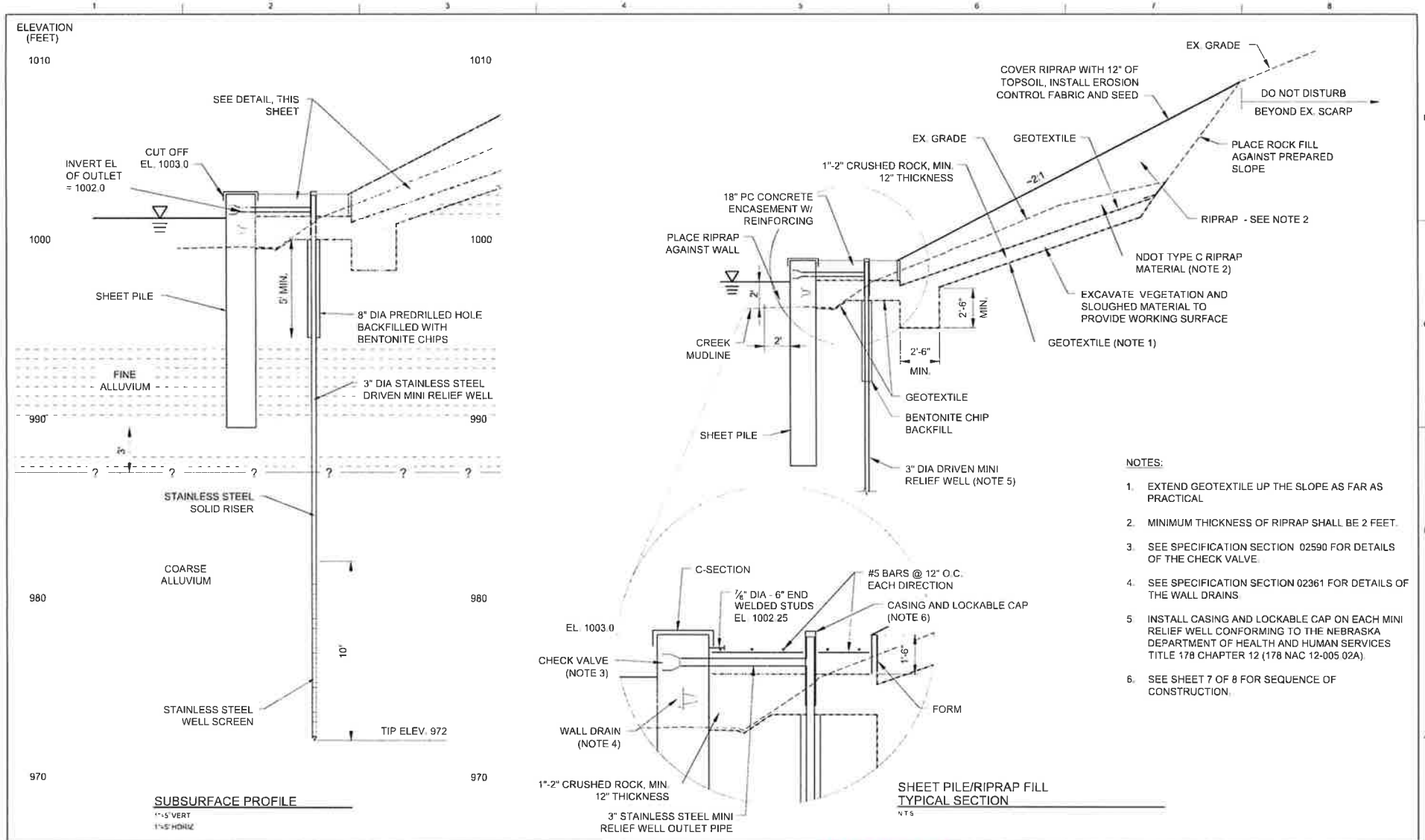


**LITTLE PAPILLION CREEK
CHANNEL STABILIZATION
MERCY NORTH 10R**

SITE PLAN

FILENAME: _____ SHEET: _____

SCALE: 1" = 30' 3 OF 8



PROJECT MANAGER		P. ENGE BERT	
1	1/15/2018	Issue for Bid	
2	5/24/2018	Client Review	
3	8/16/2017	40% Submittal	
ISSUE	DATE	DESCRIPTION	
PROJECT NUMBER		10315201	



**LITTLE PAPILLION CREEK
CHANNEL STABILIZATION
MERCY NORTH 10R**

DETAILS

FILENAME	SHEET
SCALE AS NOTED	5 OF 8

Slough



Little Papio Channel (Mercy to Pine Street)

Station 270+50R

Looking West at Slough April 2016

Boil in Creek Bed

