

**RE: Amendment for County Project 97-218**

Dear Mr. Ahmed:

On October 8, 2023, Dakota County signed the contract with Alliant to provide design engineering consultant services for county project 97-218, which included evaluation and replacement of existing retaining walls on CSAH 38 in Apple Valley. Since that time, the scope of the project has evolved with numerous wall offsets and wall materials being evaluated as well as the duration of the project has been extended.

The sections below describe each major work task remaining along with key assumptions. A detailed spreadsheet documenting the hours and fee associated with each task is also included with this letter.

Alliant Engineering appreciates the opportunity to continue to work with Dakota County to deliver the CSAH 38 retaining wall replacement project.

## SCOPE OF SERVICES

The contract was signed in October 2023 with a schedule to have construction start in 2024. Months have been spent on reviewing different wall types and locations as well as construction methods, including the use of soil solidification instead of sheet piling. Longer design duration leads to more time spent on meetings and coordination as well as changes in billable rates. Below is a summary of efforts remaining on specific tasks.

### TASK 1 – PROJECT MANAGEMENT

Original Scope: The project started in October 2023 with design complete in April 2024.

Change in Scope: Due to schedule delays and additional design iterations, design will now be complete in December 2025.

Justification of additional work to complete the project: Due to the time extension, additional meetings and coordination are needed for a longer duration.

Task includes:

- Assume up to 4 PMT calls (1 hour duration).
- 30 minute biweekly calls July – December 2025. Assume up to 10 calls.
- QA/QC of retaining walls to be preformed by TKDA and is included as an expense at the end of the amendment.
- Alliant internal reviews

**Design Fee:** \$18,240

August 14, 2025

**Imran Ahmed**

*Dakota County Transportation Dept  
14955 Galaxie Avenue, 3<sup>rd</sup> Floor  
Apple Valley, MN 55124*

**Alliant Engineering, Inc.**

**733 Marquette Avenue Suite 700  
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**612.758.3080**

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## TASK 2 – PUBLIC AND AGENCY INVOLVEMENT

Original Scope: Five small group meetings were originally anticipated to meet with the adjacent property owners.

Change in Scope: It has been decided to hold one larger open house meeting instead of small property owner specific meetings.

Justification of additional work to complete the project: A larger open house has additional costs including preparing materials and mailers and rental space to hold the meeting.

See expense section for location rental and mailings.

**Design Fee:** \$3,680

## TASK 3 – SURVEYS AND MAPPING

Original Scope: Survey was completed with the guidance that the walls would be replaced in their current location.

Change in Scope: Walls 11 and 14 will impact the trail which was not included in the initial survey. Walls 12 and 13 are being relocated further from CSAH 38 to allow for a future trail.

Justification of additional work to complete the project: To have accurate design of the trail and retaining wall heights, additional survey is needed.

**Design Fee:** \$4,160

## TASK 6 – PUBLIC AND PRIVATE UTILITY IDENTIFICATION AND COORDINATION

Original Scope: The walls were to be replaced in their existing location.

Change in Scope: Walls 11 and 14 will be placed in front of the existing wall and walls 12 and 13 will be pushed back from their current location with all four walls being cast in place (CIP).

Justification of additional work to complete the project: The new wall locations and wall type (cast in place (CIP)) includes a wider footing than a block wall and cause greater impacts to existing utilities than originally anticipated.

The task includes gathering existing utility information and including the utility information in the plan, evaluation of potential impacts, utility meeting to discuss project as well as impacts and timing for relocation. Design team will follow up with utility companies impacts to solidify a relocation schedule.

**Design Fee:** \$4,480

## TASK 7 – RIGHT OF WAY

Original Scope: Prepare right of way and easement lines for the wall replacement work and prepare parcel sketches.

Change in Scope: Numerous iterations and updates to the parcel sketches were provided.

Justification of additional work to complete the project: The wall type and location changes resulted in the construction limits changing which impacts the easements and parcel sketches.

Task is assumed complete, but numerous small changes continue to be requested.

**Design Fee:** \$2,040

## TASK 8 – RETAINING WALL EVALUATION

Original Scope: Evaluate 20 existing retaining walls and provide recommendations for corrective action.

Change in Scope: No change in scope.

Justification of additional work to complete the project: The extent of work was more than originally anticipated.

Field data has been gathered. Scope will finish the retaining wall evaluation for 20 retaining walls.

**Design Fee:** \$3,600

## TASK 9 – FINAL CONSTRUCTION PLANS

Original Scope: The initial design approach was to replace the existing small block retaining walls, in their current locations/alignment with a large block style retaining wall.

Change in Scope: Additional iterations of wall type and location were completed over a longer period than assumed in the original contract.

Justification of additional work to complete the project: The additional iterations over a longer duration has depleted the budget. The wall locations and types have now been decided and design can continue. All four walls will be cast in place (CIP). Walls 11 and 14 require specialty design with a shorter footing to avoid impacting the existing wall which will remain in place. The trail at walls 11 and 14 will need to be relocated to keep necessary clearance to the wall. Walls 12 and 13 will be placed 16' from the curb to allow for future trail placement.

Alliant will perform the following work under this task:

The initial design approach was to replace the existing small block retaining walls, in their current locations/alignment with a large block style retaining wall. Walls 11, 12, 13, and 14 resulted in a different approach which is summarized below.

### 9.1 Wall 11

- The initial design approach was a large block retaining wall at the existing small block wall alignment. After progressing the wall design, it was determined that the construction limits generated by the necessary excavation were impacting trees and close to houses.
- The next option was a cast in place retaining wall located at the front of the existing small block wall, leaving the existing wall in place. This option does not provide the necessary buffer to the existing trail so the trail will need to be realigned to provide an 8-foot trail and 2-foot buffer to the wall. Fee assumes three standalone removal/construction sheets, pavement section and typical for the trail. The wall placement causes the back of the footing to be a specialty design to fit within the limits of the existing retaining wall. Realigning the trail and design of the specialty cast in place wall are considered additional scope.
- The cast in place wall will create a low point behind the wall which will need a drainage design. A roadway catch basin will also be impacted.

### 9.2 Wall 12

- The initial design approach was a large block retaining wall at the existing small block wall alignment. After progressing the wall design, it was determined that the construction limits generated by the necessary excavation were too large and impacting many trees.
- The next option was a cast in place retaining wall located at the front of the existing small block wall, leaving the existing wall in place. The larger toe of the cast in place wall causes roadway impacts and it was determined that having a boulevard of less than 2-feet is not desirable.
- It was decided to drive sheet piling to reduce tree and property impacts, remove the existing small block wall and construct the cast in place wall at the same alignment as the existing wall. This design would maintain the existing boulevard width. Future discussion took place regarding concerns about driving sheet piling and the noise/vibration impacts to the residents. Alliant consulted with construction and Geotech to investigate other options including soil solidification options. It is still not clear if the use of soil solidification will be too costly.
- June 6, 2025 a PMT discussion resulted in the City wanting to have a wider enough boulevard for a future trail. The county is in support of the new wall being 16' from the curb to allow for 4' boulevard, 10' trail and 2' clear to the wall for future trail construction.
- Design assumes the roadway will not be impacted by the retaining wall construction.
- It is assumed no impacts to roadway drainage or catch basins. Drainage work is limited to the retaining wall subdrain.

### 9.3 Wall 13

- The initial design approach was a large block retaining wall at the existing small block wall alignment. After progressing the wall design, it was determined that the construction limits generated by the necessary excavation were too large and impacting many trees.
- The next option was a cast in place retaining wall located at the front of the existing small block wall, leaving the existing wall in place. The larger toe of the cast in place wall causes roadway impacts and it was determined that having a boulevard of less than 2-feet is not desirable.

- It was decided to drive sheet piling to reduce tree and property impacts, remove the existing small block wall and construct the cast in place wall at the same alignment as the existing wall. This design will maintain the existing boulevard width. Future discussion took place regarding concerns about driving sheet piling and the noise/vibration impacts to the residents. Alliant consulted with construction and Geotech to investigate other options including soil solidification options. It is still not clear if the use of soil solidification will be too costly.
- June 6, 2025 a PMT discussion resulted in the City wanting to have a widen enough boulevard for a future trail. The county is in support of the new wall being 16' from the curb to allow for 4' boulevard, 10' trail and 2' clear to the wall for future trail construction.
- Desing assumes the roadway will not be impacted by the retaining wall construction.
- Drainage work includes drainage from low point behind wall and adjustments to roadway catch basins. The drainage design is more effort than originally estimated.

#### 9.4 Wall 14

- The initial design approach was a large block retaining wall at the existing small block wall alignment. After progressing the wall design, it was determined that the construction limits generated by the necessary excavation were impacting trees and close to houses.
- The next option was a cast in place retaining wall located at the front of the existing small block wall, leaving the existing wall in place. This option does not provide the necessary buffer to the trail so the trail will need to be realigned to provide an 8-foot trail and 2-foot buffer to the wall. The county provided additional direction on February 25, 2025 that there is a sightline issue at the intersection of Diamond Path and CSAH 38 and the new wall cannot be constructed closer to CSAH 38 than the existing condition. The alignment at the beginning of the wall will need to be adjusted and a portion of the existing small block wall removed to accommodate this. Fee assumes two standalone removal/construction sheets, pavement section and typical for the trail. The wall placement causes the back of the footing to be a specialty design to fit within the limits of the existing retaining wall. Realigning the trail and design of the specialty cast in place wall are considered additional scope.
- It is assumed no impacts to roadway drainage or catch basins. Drainage work is limited to the retaining wall subdrain.

#### 9.4 Overall Plan Production

- Task include overall plan production and specifications not covered in tasks 9.1-9.4.

**Design Fee: \$83,300**

## TASK 10 – CONSTRUCTION STAGING AND DETOUR PLAN

Original Scope: The original scope assumed standard MMUTCD Field Manual with shoulder/lane restrictions.

Change in Scope: No change in scope.

Justification of additional work to complete the project: The anticipated design cost has been reduced from the original contract amount.

This task assumes standard MMUTCD Field Manual with shoulder/lane restrictions will be used. No detours assumed.

**Design Fee:** \$3,560

## TASK 11 – PROJECT SUBMITTAL

Task assumes the same hours as shown in the contract. No change to task.

**Design Fee:** \$8,160

## TASK 12 – PERMITS AND APPROVALS

Task assumes the same hours as shown in the contract. No change to task.

**Design Fee:** \$3,600

## TASK 13 – ADDITIONAL TASKS

Original Scope: To provide staff to coordinate construction activities such as shop drawing review, preparation of change orders and review of reports.

Change in Scope: Scope is refined to provide shop drawing review for retaining walls and storm sewer.

Justification of additional work to complete the project: The anticipated design cost has been reduced from the original contract amount.

Task assumes review of wall and storm sewer shop drawings.

**Design Fee:** \$2,880

Expenses:

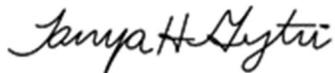
- Open house rental with up to 50 mailed invites. \$550
- Braun to update recommendations in the report and include recommendations for vibration mitigation for sheet pile installation. \$5,000
- TKDA has been added as a subconsultant to do QA/QC on the retaining wall design/deliverables. \$16,100

|                           |                     |
|---------------------------|---------------------|
| Original Contract Fee     | \$254,761.00        |
| Work billed to date       | \$227,392.62        |
| Unbilled fee              | \$16,580.00         |
| Remainder                 | \$10,787.76         |
| Estimated fee to complete | \$159,350           |
| <b>Amendment request</b>  | <b>\$148,562.24</b> |

We again thank you for the opportunity to continuing working with Dakota County and we are ready and eager to continue the work. If you have any questions about this scope and fee or want to discuss in further detail, please contact me at the email address or phone number listed below.

Sincerely,

Alliant Engineering, Inc.



Tanya Gytri, PE  
*Project Manager*

✉ **EMAIL** tgytri@alliant-inc.com

☎ **DIRECT** 612.428.7344

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|  |                                      |              |  |  |  |  |  |  |  |  |
|--|--------------------------------------|--------------|--|--|--|--|--|--|--|--|
| <b>Alliant Engineering</b>                                 |                                      |              |  |  |  |  |  |  |  |  |
| <b>Dakota County CSAH 38 Retaining Wall - Trail Design</b> |                                      |              |  |  |  |  |  |  |  |  |
| <b>Hours and Fee Estimate</b>                              |                                      |              |  |  |  |  |  |  |  |  |
|  | <b>Original Contract Fee</b>         | \$254,761.00 |  |  |  |  |  |  |  |  |
|  | <b>Work billed to date thru June</b> | \$227,392.62 |  |  |  |  |  |  |  |  |
|  | <b>Unbilled fee</b>                  | \$16,580.62  |  |  |  |  |  |  |  |  |
|  | <b>Remainder</b>                     | \$10,787.76  |  |  |  |  |  |  |  |  |
|  | <b>Estimated fee to complete</b>     | \$159,350.00 |  |  |  |  |  |  |  |  |
|  | <b>Amendment request</b>             | \$148,562.24 |  |  |  |  |  |  |  |  |

| Task       | Description   | Hours               |                              |                       |                   |            |                     |           | TEAM TOTAL | TASK TOTAL COST    |
|------------|---|---------------------|------------------------------|-----------------------|-------------------|------------|---------------------|-----------|------------|--------------------|
|            |   | Alliant Engineering |                              |                       |                   |            |                     |           |            |                    |
|            |   | Project Manager     | Senior Professional Engineer | Professional Engineer | Graduate Engineer | Technician | Wetland Delineation | Survey    |            |                    |
| <b>1.0</b> | <b>Project Management</b>   | <b>48</b>           | <b>40</b>                    | <b>0</b>              | <b>0</b>          | <b>0</b>   | <b>0</b>            | <b>0</b>  | <b>88</b>  | <b>\$18,240.00</b> |
|            | <i>Administration</i>   | 12                  |                              |                       |                   |            |                     |           | 12         | \$2,760.00         |
|            | <i>Coordination</i>   | 12                  |                              |                       |                   |            |                     |           | 12         | \$2,760.00         |
|            | <i>Timely Document Delivery</i>                                   |                     |                              |                       |                   |            |                     |           | 0          | \$0.00             |
|            | <i>Project Meetings</i>   | 16                  | 8                            |                       |                   |            |                     |           | 24         | \$5,120.00         |
|            | <i>QA/QC Functions</i>  | 8                   | 32                           |                       |                   |            |                     |           | 40         | \$7,600.00         |
|            | <i>Deliverables</i>   |                     |                              |                       |                   |            |                     |           | 0          | \$0.00             |
| <b>2.0</b> | <b>Public and Agency Involvement</b>                              | <b>4</b>            | <b>8</b>                     | <b>0</b>              | <b>0</b>          | <b>8</b>   | <b>0</b>            | <b>0</b>  | <b>20</b>  | <b>\$3,680.00</b>  |
|            | <i>Public Involvement</i>   | 4                   | 8                            |                       |                   | 8          |                     |           | 20         | \$3,680.00         |
| <b>3.0</b> | <b>Surveys and Mapping</b>  | <b>0</b>            | <b>0</b>                     | <b>0</b>              | <b>0</b>          | <b>4</b>   | <b>0</b>            | <b>14</b> | <b>18</b>  | <b>\$4,160.00</b>  |
|            | <i>Surveys and Mapping (3)</i>                                    |                     |                              |                       |                   | 4          |                     | 14        | 18         | \$4,160.00         |
| <b>4.0</b> | <b>Geotechnical Information - Included in Braun Intertec Fee</b>  | <b>0</b>            | <b>0</b>                     | <b>0</b>              | <b>0</b>          | <b>0</b>   | <b>0</b>            | <b>0</b>  | <b>0</b>   | <b>\$0.00</b>      |
| <b>5.0</b> | <b>Environmental</b>  | <b>0</b>            | <b>0</b>                     | <b>0</b>              | <b>0</b>          | <b>0</b>   | <b>0</b>            | <b>0</b>  | <b>0</b>   | <b>\$0.00</b>      |
| <b>6.0</b> | <b>Public and Private Utility Identification and Coordination</b> | <b>8</b>            | <b>0</b>                     | <b>0</b>              | <b>24</b>         | <b>0</b>   | <b>0</b>            | <b>0</b>  | <b>32</b>  | <b>\$4,480.00</b>  |
|            | <i>Utility Investigation</i>                                      | 4                   |                              |                       | 16                |            |                     |           | 20         | \$2,680.00         |
|            | <i>Utility Relocation Locate</i>                                  | 4                   |                              |                       | 8                 |            |                     |           | 12         | \$1,800.00         |
| <b>7.0</b> | <b>Right of Way</b>   | <b>0</b>            | <b>4</b>                     | <b>0</b>              | <b>0</b>          | <b>8</b>   | <b>0</b>            | <b>0</b>  | <b>12</b>  | <b>\$2,040.00</b>  |
|            | <i>Parcel Sketches</i>  |                     | 4                            |                       |                   | 8          |                     |           | 12         | \$2,040.00         |
| <b>8.0</b> | <b>Retaining Wall Evaluation</b>                                  | <b>0</b>            | <b>20</b>                    | <b>0</b>              | <b>0</b>          | <b>0</b>   | <b>0</b>            | <b>0</b>  | <b>20</b>  | <b>\$3,600.00</b>  |
|            | <i>Wall Analysis and Design Recommendation</i>                    |                     | 20                           |                       |                   |            |                     |           | 20         | \$3,600.00         |
| <b>9.0</b> | <b>Final Construction Plans (5)</b>                               | <b>44</b>           | <b>244</b>                   | <b>4</b>              | <b>86</b>         | <b>116</b> | <b>0</b>            | <b>0</b>  | <b>494</b> | <b>\$83,300.00</b> |
| 9.1        | Wall 11 - 800 LF (A)  | 8                   | 72                           | 2                     | 26                | 24         | 0                   | 0         | 132        | \$21,950.00        |
| 9.1.1      | Trail Design  |                     |                              | 2                     | 24                |            |                     |           | 26         | \$2,970.00         |
| 9.1.2      | Drainage Design (6)   | 8                   | 24                           |                       | 2                 |            |                     |           | 34         | \$6,380.00         |
| 9.1.3      | MOT/Signing/Striping - SHOW IN TASK 10 TO MATCH SCOPE             |                     |                              |                       |                   |            |                     |           | 0          | \$0.00             |
| 9.1.4      | Road Reconstruction Design - NONE                                 |                     |                              |                       |                   |            |                     |           | 0          | \$0.00             |
| 9.1.5      | Retaining Wall Plan Updates                                       |                     | 48                           |                       |                   | 24         |                     |           | 72         | \$12,600.00        |
| 9.2        | Wall 12 - 180 LF (B)  | 2                   | 42                           | 0                     | 2                 | 16         | 0                   | 0         | 62         | \$10,880.00        |
| 9.2.1      | Trail Design - NONE   |                     |                              |                       |                   |            |                     |           | 0          | \$0.00             |
| 9.2.2      | Drainage Design (7)   | 2                   | 2                            |                       | 2                 |            |                     |           | 6          | \$1,040.00         |
| 9.2.3      | MOT/Signing/Striping - SHOW IN TASK 10 TO MATCH SCOPE             |                     |                              |                       |                   |            |                     |           | 0          | \$0.00             |
| 9.2.4      | Road Reconstruction Design - NONE                                 |                     |                              |                       |                   |            |                     |           | 0          | \$0.00             |
| 9.2.5      | Retaining Wall Plan Updates                                       |                     | 40                           |                       |                   | 16         |                     |           | 56         | \$9,840.00         |

