



August 21, 2023
PA003000-23090

VIA ELECTRONIC MAIL

Mr. Robert Nuss
Practice Leader for Transportation and Highways
KCI Technologies, Inc.
5001 Louise Drive Ste 201
Mechanicsburg, PA 17055

Subject: Revised Additional Proposal and Cost Estimate Supplement
Franklin Road Utility Relocation
Cranberry Township,
Butler County, Pennsylvania

Dear Mr. Nuss,

Penn Environmental & Remediation, Inc. (Penn E&R) has prepared this requested proposal supplement for technical assistance on the routing, design, and environmental permitting of the Cranberry Township Utility Relocation S.R. 3021 Franklin Road Project. Penn E&R's initial proposal was to handle waterline and sewer line relocations for Cranberry Township due to initial proposed conflicts from the proposed PennDOT project. Significant changes were made to the proposed PennDOT project and to proposed utility conflicts during the first half of 2023. The project's initial submission deadline was pushed back accordingly, from April 15th to May 30th and then finally to July 20th. It is our understanding the project's final plan submission deadline is September 14th.

Penn E&R worked on conflict resolution and attended a few project meetings before the significant changes were made to the proposed PennDOT project. Temporary benching excavation was initially added to the PennDOT project and affected utility impacts in February. Coordination for an upcoming Township force main project was added to the project scope in February and will be handled with the sewer relocation design. In February, Penn E&R was also asked to provide marked plans indicating proposed Subsurface Utility Engineering (SUE) test holes for KCI to perform to assist with the conflict resolutions.

The proposed PennDOT project underwent significant changes again in April, which resulted in a new plan moving forward. This plan includes biweekly meetings with all parties. The proposed PennDOT project now requires overexcavation due to poor soil conditions and nearly the entire waterline will be affected. The project is now a waterline replacement project for the entire project length, ~8,000+ linear feet of waterline along S.R. 3021 and portions of Township Roads Mars Road and Peters Road. The sewer relocations will be adjusted based on the overexcavation and new project layout. Penn E&R's utility relocation plans will be updated per adjustments made to PennDOT base design plans and other utility relocation plans, with some anticipated as late as June 29th. Waterline profiles will be adjusted based on final PennDOT plan adjustments.

Penn E&R was asked to also handle Chapter 105 environmental permitting for the proposed water and sewer work. The aquatic resources report for the project was presented to Penn E&R and the identified streams and wetlands will be added to Penn E&R plans. Penn E&R will evaluate if any Chapter 105 permitting is required. This involves evaluating proposed utilities versus the identified wetlands, streams, and floodways. Stream drainage areas will be calculated to confirm if affected streams will need permitted or are waiver-eligible and do not require a Chapter 105 permit. Finally, email confirmation from the Butler County Conservation District Manager will confirm if Chapter 105 permitting is required for this project.

Penn E&R was asked to assist with the Project's Utility Relocation Management System (URMS) and will attend meetings and assist all parties with this, as requested. Penn E&R was also asked to prepare Conflict Impact Matrix files which document the project conflicts, their locations, and proposed resolutions. This was completed for the initial conflicts laid out and will be updated to account for the updated conflicts associated with the waterline replacement throughout the entire project length. Penn E&R will evaluate betterment areas and associated costs and waterline abandonment plans and construction time estimates to assist KCI with cost estimating and cost sharing. Attached is a further detailed justification for this supplement.

SCHEDULE

Penn E&R will complete the additional design efforts by July 20, 2023. This will include water and sewer cost estimates and PDF Also Plans and profiles for PennDOT submission. Per KCI, edits can be made to the construction plan sets after July 20th, as needed and allowable. We assume the construction plan sets are due September 14th.

ESTIMATED COSTS

Penn E&R proposes to complete the services outlined above on a time-and-materials basis, except where noted. The individual task costs and the total estimated cost are provided in the following table. If the project circumstances require additional work and increased costs, Penn E&R will inform KCI of such matters in writing and will not proceed without prior written authorization.

Item No.	Description	Total
1.	Additional 30 Project Meetings	\$11,000
2.	Chapter 105 Permitting Requirements	\$3,500
3.	Waterline Replacement and Sewer Final Design	\$40,500
	Total	\$55,000

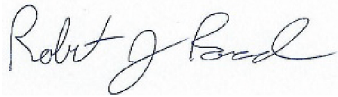
Penn E&R requests a change order in an amount not to exceed \$55,000 to attend an additional thirty (30) project meetings, evaluate Chapter 105 permitting requirements for the water and sewer projects, and handle additional tasks requested to complete the waterline replacement and sewer relocations and improvements designs.

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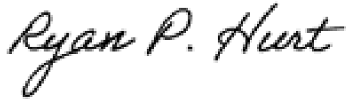
Should you have any questions regarding this cost estimate or require any additional information, please do not hesitate to contact either of the undersigned at (412) 722-1222. Penn E&R appreciates the opportunity to be of service and we look forward to the successful completion of this project.

Respectfully submitted,

PENN ENVIRONMENTAL & REMEDIATION, INC.

A handwritten signature in black ink, appearing to read "Robert J. Roach".

Robert J. Roach, P.E.
Senior Project Engineer

A handwritten signature in black ink, appearing to read "Ryan P. Hurt".

Ryan Hurt, P.E., M.B.A.
Senior Vice President

Enclosures

Supplement Justification

The original Franklin Road proposal was for utility conflict resolutions for the Township's water and sewer lines along the project limits. Penn E&R anticipated our role in this job would be similar to Bob Roach's role with the Freedom Road project. That is why we included a couple of meetings and a couple of site visits in our proposal. That was consistent with Freedom Road, where there were 2-3 virtual meetings, and a couple site visits. We anticipated we would design the utility relocations and not be involved with much else with the project, like Freedom Road. At the time of the initial proposal, it was understood the conflicts were not finalized yet and would likely change and reduce. Penn E&R was told communications could be directly with the Township and did not need to go through KCI.

The initial scope did not anticipate two sets of Also Plans (water and sewer).

For cost reference, we sent a proposal for a 7,000 LF waterline replacement project along a state road in Cranberry Township and it was for \$90,000 and we were awarded the project. This Franklin Road project became 8,000+ LF waterline replacement and sewer line conflict coordination while dealing with multiple proposed changes from PennDOT storm drainage and excavation, gas companies, and telephone poles and included assisting with URMS and conflict matrices and betterment cost breakdowns for conflict coordination.

Once the project was initiated, the originally identified conflicts had not changed much, and the number of conflicts increased slightly. Some road and drainage design changes were made, but nothing significant. The conflict resolution scope was to be completed by PennDOT's deadline, April 15th.

Penn E&R attended three in person meetings in January, after project initiation. It became clear that in person meetings were going to be consistently used throughout the project and Penn E&R let KCI know and requested \$3,000 additional to the project scope for some additional meetings. This was not going to be approved by the Township at this time but was verbally agreed. In January, Penn E&R reviewed the project, attended and led meetings, and converted DGN files provided and set up project plan sheets.

Significant base plan changes were made on February 20 by others. Preliminary benching was added to the base plans which affected the existing waterline and other utilities which will now need to relocate. KCI recommended the Township ask for a schedule extension based on these impacts and the Township indicated they would.

Preliminary natural gas relocation plans were shared from the three natural gas companies involved with the project. These plans were preliminary and were reviewed at KCI's request.

On February 13th KCI requested Penn E&R provide locations for SUE work which could be done to properly locate the Township's infrastructure. Penn E&R worked on this and sent it to KCI.

On February 13 the project deadline was changed from April 14 to June 6. PennDOT stated, "At this time we do not anticipate any additional changes that would cause any additional utility

impacts. We cannot finalize our plans until we get all the utility resolutions added to them so our plan will continue to change as we finalize the design.” Additional changes causing additional impacts to utilities would occur in the future, though.

Penn E&R provided a Conflict Matrix Excel sheet as requested by KCI (not in scope, not done on Freedom Road) and conflict resolution layout and updated SUE locations on March 1.

On March 2, PennDOT stated AECOM planned to tweak their proposed benching. The planned March 3, 10, 17, 24, 31, April 7 weekly meetings were cancelled as we waited for this updated design. We planned to review updated AECOM plans and SUE locations and conflicts at the next meeting once the updated plans were received.

On March 9, the Township again requested a time extension because the updated plans were not yet received.

April 4 virtual meeting scheduled with AECOM and PennDOT to review updated plan with them. This updated plan included planned overexcavation along the entire project (full depth widened road shoulders) and some full width reconstruction along the road.

Penn E&R reviewed these plans and adjusted the conflicts based on these design changes in advance of the April 14 meeting.

The project deadline was extended to a hard deadline of July 20th due to the additional design changes.

The April 14 weekly meetings resumed, and the decision was made to replace all existing waterline on the project (8,000+ LF). This was the largest scope change and led to a new design plan for the waterline. Nearly all waterline work after this point was out of scope (3+ months of work). Base plans had to be updated based on AECOM’s latest updated plans, with the overexcavation and other drainage changes added. AECOM prepared updated cross sections dated April 17.

April 17, Penn E&R was instructed to handle Chapter 105 permitting for the utility work. This was additional scope. Penn E&R handled this by receiving and cleaning up and bringing in AECOM wetlands and streams DGN files and reviewing their drainage areas and floodways and confirming with Butler County Conservation District that Chapter 105 permitting is not required.

April 27-28 PennDOT provided waterline abandonment guidance to the Township. Penn E&R went through all existing waterline (8,000+ LF) based on PennDOT guidance and sent recommendations to the Township where it could request waivers and avoid flowable fill. This and all future abandonment work was not accounted for in project scope since it was not a part of the Freedom Road scope. Future abandonment work included reviewing and adding to plans where waterline was within Township easements and where it should be removed and where it must be filled with flowable fill.

Penn E&R went through 2002 As Built plans from the Township to accurately confirm the location of water service lines shown on the base plans provided. Past as built plans were also used to determine approximate waterline depths to determine if existing waterlines may have enough

cover over them during the proposed overexcavation. This work was added due to the overexcavation added to the base plans. This work was unanticipated.

Additional AECOM Design files were shared on May 5th for their latest base plan designs. These would later be updated again.

Preliminary waterline plans were shared with AECOM and comments were received on May 10th, coordination with AECOM/PennDOT was not anticipated for this project as it did not occur on the Freedom Road project. This project had a lot of moving parts and changes to base plan design which required pivoting and multiple design changes on our project plans and profiles throughout the project. Every change that was presented caused significant time to update our CAD plans and adjust as needed.

The proposed utility file was sent May 22 from AECOM, depicting other proposed utility relocations.

Penn E&R was again requested by KCI to complete the Conflict Impact Matrix for water and sewer now that AECOM plans were updated and supposed to be final, taking the list of conflicts recorded by AECOM and detailing their location, length, and plan to resolve. This work was not anticipated.

Coordination with the Township's upcoming force main project on Peters Road was discussed and it was decided it needs to be added to our sewer plans. This was coordinated with HRG and the Township. This was additional work added to our scope.

May 25, AECOM told Penn E&R they will send over drainage inverts (for Penn E&R profiles) the following week. On June 6 AECOM stated there were pavement designs and inverts still being adjusted. Invert info was sent to Penn E&R on 6/13/23. They unexpectedly sent exact storm line elevations at our proposed waterline crossings, instead of providing inverts for all inlets. So, when future adjustments were made, these elevations became void. On June 13th AECOM provided invert information we could use in our CAD file for profiles.

We assisted KCI with a breakdown of proposed waterline within and outside the existing Township easements, for appropriate cost sharing purposes. We provided betterment cost breakdowns for proposed work, which is an improvement to the existing Township infrastructure, for appropriate cost sharing purposes. These were not anticipated in our scope and were not a part of the Freedom project.

On June 6th AECOM stated PennDOT's initial Geotech recommendations for overexcavation should be followed on Mars and Peters Roads – additional waterline will need replaced based on this overexcavation – Penn E&R tried to avoid this to save cost. AECOM also stated the proposed overexcavation was revised after speaking with the district, and updated cross sections would be provided once updated. They were sent June 8th.

On June 29th AECOM sent five updated DGN files, files that need updated on Penn E&R plans (changes to ROW, pavement, proposed utilities, road, 11+ changes made to drainage). This led to

changes in our base plan drawings and very significant changes to our profiles, which now needed to be redone.

In July Penn E&R was notified the existing waterline at the proposed tie in start of the project is encased in steel. We had to review as built and come up with alternative tie in locations for the Township to choose from.

July 14, we received an updated proposed utility file from AECOM and their input on existing waterline which can be removed during their drainage and roadway work.

We submitted water and sewer plans on July 20th as required with the understanding additional changes will need to be made. We received a few comments on these plans from AECOM on August 2nd. We did not understand AECOM wanted their comments addressed for their PS&E submission on August 9th until August 8th. We addressed the comments the best we could on August 9th and sent them before their submission.

August 4th Penn E&R attended a call with PennDOT and KCI to discuss betterment costs for fire hydrants and further detail all improvements to the system. Penn E&R attended approximately 5 meetings with KCI/PennDOT/AECOM to discuss URMS items for appropriate conflict identification and resolution and cost breakdown and sharing. This URMS coordination was not handled on the Freedom Road project and was not in the original project scope.

It is our understanding we will receive comments from PennDOT in August and will need construction plan sets submitted by September 14th. PennDOT comments will be addressed, and plans will be reviewed with the Township before the September 14th construction sets are submitted.