



## **APEX Directional Drilling, LLC**

*Creating Solutions ... Delivering Results*

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March 12, 2014

Charles Roecklein  
Kurt Gierlich  
City Engineers  
City of Eureka  
531 K Street  
Eureka, CA 95501-1146

**RE: Bid No. 2013-26 – Martin Slough Force Main Drill Project**

Dear Messrs. Gierlich & Roecklein:

Thanks for your calls and for your understanding of the difficulties related to your project.

First, let me assure you that we fully intend to do all we can to finish your project in a way that is acceptable to you, and despite any rumor to the contrary (i.e. your concern that our reamers had been removed by the vendor – they are actually in our yard there in Eureka getting modifications necessary to complete the hole). We believe we have the financial resources to do so; unlike most contractors, we own the vast majority of our equipment out-right and have a number of other jobs underway or expected to start soon.

Where we are:

1. When we bid your project, we thought that it was very straightforward, had an okay profit margin (about 25 percent including overhead), and had a good possibility of resulting in more work. To make it better, we had good dependable subs, the job was drivable for our crew, and it was a good “winter” job (warmer than Colorado or Wyoming!). We felt great about the job both at the pre-bid and the pre-construction meetings. At both, everybody from the City and engineering firms told us moving lay-down areas, roads, etc., from the initial specifications to where we needed them wouldn’t be a problem, and we were assured repeatedly by those with lots of local knowledge (especially the engineers at SHN) that most all of the drilling would be in the Hookton formation and how hard it is and that it has harder material below.
2. We became a little concerned when our sub hit trees and big stumps underneath the road in the first few days, slowing the initial installation of the casing – but went on in good faith, believing we were working with folks that were fair and that if it didn’t work itself out from our cost projection (we paid him a large change order), we would be able to come to a fair compromise with you at the end.

3. Our first big concern came on October 9, 2013, when SHN declared that we were in the Hookton formation (a hard combination of clay, cobble, sand, and organic material that goes very deep) when we were actually still in flow sand and already far below the planned hole profile (as also directed by SHN). As a company, we pride ourselves on completing every hole we've ever started and having happy customers, so we shut up and tried to work through it. We burned up mud motors, had multiple attempts to get back to the original bore profile to stay on bore profile and basically tried every trick in the book. Water and flow sand was all we got. The hole collapsed several times because it was only sand (SHN was given daily soil analysis reports showing pure sand); costs and time added up. Every time we tried to discuss the added costs for the very real and very provable change in ground conditions (not Hookton; flow sand), we were rebuffed. The drill profile continued to change as mother earth (gravity) and the lack of the Hookton formation (for the drill to turn on) continued despite the lightest tooling possible.
4. Finally, on January 11, 2014, our foreman and project manager called an on-site meeting because the ground conditions were so poor it was obvious that the profile changes and lack of a solid formation would change the location of the exit hole about a hundred feet – there was no other choice. At the meeting, all parties were reasonable and agreed to the change – and thereby the subsequent changes to the project. The pilot hole was completed later that day.
5. The last 150 feet of the hole were dead stuck as the ground was waterlogged and mushy. We expressed our great concern about the drill pipe getting stuck multiple times (as did the City), but the engineers were not responsive to needed changes nor the needed urgency; neither the City nor the engineers were responsive to the huge added costs and would agree on changes in meetings or phone calls, but then refused change orders for changes obviously agreed to and needed to complete your project. Every communications issue and lack of responsiveness caused a delay, costing us money and increasing the risk of sticking the drill. The needed changes we recommended and resulting delays were neither Apex's fault nor under Apex's control. Despite many, many warnings, the drill pipe did stick solid before we were authorized in writing to go forward with the project. In fact, we still have no written authority to continue, despite your verbal commands to go forward without permits in environmentally sensitive areas.

Bottom line, though we have tried beyond reason to go the extra mile to give you, our customer, a finished product, we have been stymied countless times by an engineering firm that we are prepared to prove to anyone, improperly designed the drill path and took undue risk by violating all acceptable industry standards for frequency of geo's in their lack of due diligence of the site that we and the City relied upon. They have on multiple occasions intimidated our crews to do things beyond the scope of the contract to cover their design failures. Clearly, we have all had many small and some large communication issues which we take our share of the blame for. Email is simply not a good communication medium when things aren't going well and there have been too many communicators on both sides.

It is time to put all that behind us and move forward to get your project done.

We are a leading expert when it comes to tough bores and have completed many that nobody else could complete or in many cases, even try! But we've never tried a hole in flow sand 140 feet below the surface before, as this job unexpectedly became, so over the past two weeks have consulted with many other drilling experts, as well as equipment manufacturers with global experience to find a way to complete your job. No one else has ever completed a job under these conditions, but we think we have a good chance to do so (over 50%).

We propose to absorb the extra costs and losses to date, which we believe add up to about one million dollars for change in conditions, about two million dollars for standby time, extra pay to subcontractors, extra materials, extra parts, and so forth. We ask you to sign the two change orders you already agreed to sign for the exit casing and a new change order to basically cover everything within our company's ability to get the drill unstuck, ream the hole, and pull back the sewer pipe conduit – we need room to do that, but we will do every trick we know to make the space as small as possible. Our extra costs to do all this with unanticipated hammer rental, extra mud, extra reclaimers and so forth will cost a bit over one million dollars additional (plus unknowns) over the contract. We will split that cost with you and we ask that you sign a new change order for only \$500,000 plus pay the invoice total for all additional mat rental fees incurred after January 22 (as bid.) We will complete the job under the known site conditions, if possible, even if it takes our entire crew until the fourth of July. If something goes surprisingly right with the job and we can complete it in less than six weeks, we will lower our price to you, in good faith.

We believe that with the conditions as now known, this drill path should have been designed far differently. If we are unable to complete the job, it will only be in consultation with you and because it is impossible with current horizontal drilling technology. In which case, we will agree not to come back on the City for our additional costs, losses, or with any other claim – we will expect the same from the City.

When we are successful in completing the project, we would expect to be offered Phase 2 at the price we have already agreed with you on, using our same subcontractors, and be able to start it when our equipment is ready to go and you are satisfied that we can complete the current project.

Best regards,



Mike Lachner  
President, Apex