
Bid Audit Before Execution – Why is it Essential?

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A high-quality project is generally considered to be one that meets three elements – time, quality and budget.

Surprisingly, everybody buries their head in the sand and incomprehensibly, often due to political considerations alone, they decide to quickly execute projects under pressure without ensuring quality of planning. As a result, tenders, which are the last station before execution, are issued in a sloppy and substandard manner.

Let's make it clear:

The tender materials have a definite, clear and unambiguous influence on all project metrics: time, quality and budget.

And not only that, hastily issuing tenders, as a result of pressure by other entities to show progress, is an injustice to the project and the quality metrics on which it was based.

Those at the top of the pyramid must be made aware of the issue, so that the damage they cause is known to everyone.

There is no practical or theoretical option to substantially shorten the schedules for planning and preparing the tender and pushing the project forward. On the contrary, when a tender is issued that isn't "airtight" in the professional sense it may seem that two or three months have been shaved off the process, but at the end of the day this carries with it significantly higher costs, longer execution times and failures in the work performed.

I will now explain why.

Schedules – At first sight, the tender for the large interchange came out about two months early due to the efforts and the pressure to officially announce it, however, various coordination efforts between plans were forgotten along the way, such as the removal of necessary obstructions, or the irrigation sleeves needed, or a land survey report that meant that later on massive land replacement was necessary on-site, including a large bed of ballast, costing such a big project millions of Shekels extra. Down the road, handling these deficiencies, waiting for planning updates in the field, mistakes that need to be torn down and reinstalled, all mean that shortening the schedule actually extended it significantly; for instance, when an old and forgotten water line needs to be relocated and the contractor is on-site and cannot work until the water line is moved. It was also winter, the soil was muddy and shaky and stabilizing the layers proved difficult, and then the land consultant is paged to provide a quick fix, while the contractor wasn't prepared, etc.

Or how about when the electrical planner wrote "see construction engineering specifications" on the foundations for high-mast lighting, and now everybody is waiting around for reinforced concrete that isn't available because... there is no construction engineer on the team, who even needs a construction engineer for a road, why plan for a construction engineer, if it isn't certain to happen? Everybody knows there aren't any construction engineers in Israel... and more such delays.

Budget – Here the issue is clear and much more tangible – quantities not checked during the tender, extraordinary and unplanned works that cost a lot of money and all because no one thought to coordinate between the plans and the bill of quantities in advance, or between the specifications and the bill of quantities

and the plans from each field, and more work that wasn't even accounted for because landscaping plans weren't ready when the tender was pushed out, etc.

Quality – How can quality possibly be affected by a few pieces of paper that aren't in order? That's a good one.

As we have already said, haste is waste. It causes projects to go over budget, which in turn puts even more pressure on those involved who are now thinking how to save money, reduce workloads, and stay within a budget that has already been significantly exceeded.

Younger trees at the expense of fully developed ones, less landscaping in general, open-cutting new roads and digging them up just to put in the sleeves that were forgotten, lower quality tiling than originally planned for, maybe lower quality asphalt, maybe even convincing the planner to waive some of the requirements and God knows what else.

How can all this be prevented?

The best remedy, an interim remedy at that [because obviously it would be best to have a professional project manager and a properly supportive system], is a quality tender audit by an independent outside entity.

A professional assessment by experienced engineers for whom “auditing is an art form” can prevent faults and improve material quality significantly.

This knowledge of tender audits, which is a result of many years of supervision in the field, project management, planning and specializing in assessing tenders, makes it so situations can be amended within a short and efficient period of time.

I truly believe, and this is no exaggeration on my part, that the financial savings, as well as time and quality improvements, resulting from such audits can reach very significant and proven sums.

The savings come from various sources:

Savings as a result of identifying planning failures, and giving notice in time means that expensive extra work is prevented down the road.

Savings by identifying exaggerated quantities – experience dictates that contractors usually ‘line up’ with the bill of quantities, meaning: exaggerated quantities that are beyond a few percentages taken as safety precautions. Regretful as this may be, in many projects such exaggerated quantities are even approved in the bills. Savings due to the bill of quantities containing redundant sections that list things twice in different columns and under various pricing items, contradicting the specifications written by the exact same person. For example, a support wall in the specifications is said to include the digging, layers and pouring, but in the bill of quantities all these sections appear separately and are priced independently of one another, and then the bill of quantities prevails over the specifications and more money is paid to the contractor for no reason whatsoever.

Identifying missing plans and as a result – omissions in the bill of quantities.

And of course, a ‘registered patent’ of mine, or rather a discovery that made waves in the market: topsoil removal includes in its work description 20cm of digging, and it turns out that this isn't known to everyone and therefore many projects across Israel don't deduct these 20cm from the contractor's payment. Many don't even understand why the Blue Book includes this instruction – to include 20cm of digging in the topsoil removal works. When a contractor's digging works are priced, payment begins at 20cm below ground level [this is a lot of money]. The reason this was specified in the Blue Book is to prevent arguments between the supervisor and

the contractor as to how much topsoil was removed by the contractor, and whether topsoil removal is even necessary. The legislator ruled that in each project with a directive by the planner to remove topsoil and the topsoil is written in the bill of quantities and a price is set and nothing states otherwise in the specifications – then the contractor must remove the topsoil and all vegetation roots to a theoretical depth of 20cm without any discretion whatsoever!

This is to prevent endless arguments between supervisor and contractors as to what depth is actually required. As such, even if topsoil removal is indicated in a project and there are no weeds at all, the contractor will remove topsoil, even 5cm, and as for payment he will be deducted the entire 20cm. Theoretically, even if the contractor decided that no topsoil removal is necessary, and it is written in the specifications and the bill of quantities, he should still be deducted the 20cm.

In an outpatient clinic construction project we assessed for an HMO, we found many structural omissions in the bill of quantities, resulting in redundant and overlapping sections, meaning that the report we issued potentially saved them 2 million NIS in a project estimated at 30 million NIS. Another significant saving was a result of identifying a city road for which a 38cm asphalt layer was planned, claiming this was due to the road previously sinking, without actually checking why the road had previously sunk.

Thankfully, many powerful entities have already recognized the importance of these audits, leaving behind the old mantras of “why pay more money for a service that is supposed to be provided to us by planners and project managers” or “it will just delay us”, etc.

The answer to such claims is simple – everybody knows that the work has become more complex over the years, as has the project manager’s job, while also being paid less with greater responsibility, and we also live in a reality where not all project managers and planning crews are at the same level.

The bottom line is what’s important, though. The exact reason is secondary to the fact that tender audits have proven to be efficient, important and economical.

The Ministry of Housing, Netivei Israel, Moriah, etc. have all started to audit tenders, and this field is gaining traction. I believe this is a very targeted service, in which you invest a relatively low sum of money when compared to the cost of the entire project, but save hundreds of thousands of Shekels, or even millions!

The cost at this stage of the project begs for itself and is recommended to any client who knows and understands that this article greatly reflects the reality of most construction and infrastructure projects in Israel. Just one more word on the international experience I have gained these past few years, this is a global phenomenon and we are not the only place in the world dealing with this problem. Tender documents have been recognized as flawed in an article by Reading University in England published in 2011, as well as in the lecture given by Mr. Michael Horodniceanu, president of MTA Capital Construction, in the last conference held by Netivei Israel, and in dozens of articles I have collected on the matter over the years. The whole world knows, but doesn’t always understand how to tackle the problem.

Take it as a half-hearted consolation, at least we are not alone...