

“RESPONSIBILITY OF THE ENGINEER IN THE FIELD”

Hon. John A. Keck, Commissioner of Highways

Any discussion of the responsibilities of our field engineers must of necessity fall into several separate parts. The duties of you men are so varied in character that some things may or may not apply to your particular job but there are certain overall responsibilities which fall alike on all of us who serve our state in a public capacity.

The first responsibility of any field engineer is to see accomplished the work which has been entrusted to him in a manner best serving the public interest. If you are a resident engineer your relations with the contractor and your method of laying out the work will be your greatest responsibility. We do not employ you men with the expectation that we must, or will be able to advise you regarding every step you must take in doing your job. Your background of training, experience and judgment is presumed to have prepared you for your work. If this is not so you do not belong in a position of responsibility. On the other hand, we do not expect you to walk off with the job and ignore your District Engineers. Not only are they presumed by experience and training to be men of superior judgment but they also have access to the policy making decisions of the Central Office, a relation which, of course, is impractical for all employees.

Just where and when do your responsibilities begin? First of all, it is advisable that you look for errors in the plans before the work begins, also for possible betterments which might be made in either the plans or the location of the road. Such things you will call to the attention of your District Engineer. It is then his duty to decide these matters. It is your responsibility to study and thoroughly understand the plans and specifications which govern each particular job. Such plans and specifications are actually a part of the contract which you are to supervise and it is very important that you understand them fully. Any points which are not clear should be taken to your district office for clarification. Once you are familiar with the plans for the work your next responsibility is to lay out the work for the contractor in an accurate manner. A sloppy job of stake setting will result in sloppy execution of the work and worse still, it will result in a lack of respect on the part of the contractor for your ability and intentions. If you are lax in your work he certainly will not expect you to be alert to the manner in which he executes his contract. If you feel that there

are others who have better methods than you for the various operations you must perform, do not hesitate to ask either them or your District Engineer to advise you regarding them. There are none of us who cannot learn something from others and you will not lose their respect by asking for help.

The most trying of all of your responsibilities at times, and the most satisfying in the long run, are your relations with the contractor. If, by your attitude and by the way in which you perform your engineering duties, you have impressed him as a capable and conscientious engineer, interested in your work and fully understanding it, your battle is half won. Courtesy and fair dealing will go a long way toward winning the other half. Certainly disputes may arise regarding interpretations of plans and specifications. It could not be otherwise where the interest of the contractor may at times conflict with the best interest of the Department but these generally may be resolved by a calm sensible discussion of the matter. Adopting an arbitrary, combative attitude or going about with a chip on the shoulder is a poor way to earn the respect you must have if you are to be a successful and respected engineer. Nor can a yielding, wishy-washy person maintain this respect. Be sure you are right, then explain and insist on your method but if the contractor feels it is unfair, do not hesitate to take the matter up with your District Engineer for solution. That is one of his major responsibilities. Once a matter has been decided you naturally will follow the decision. So long as you are dealing with the same contractor there will likely be no further difficulty on this point but do not expect another contractor to readily accept this decision. You may have to again go to headquarters with him to settle the matter. Your District Engineer, of course, knows why you must come to him more than once with such matters but he will not look on you with favor if you continue to bother him with every detail of the job. There are many matters which you need not take up with him. If the estimated length of a pipe is wrong, wouldn't it be a waste of time to rush into the district office to find out what to do? If the flow line of a culvert as shown on the plans is too low or too high there is no reason why you should not make the necessary changes. The same thing goes for minor grade changes where no great change in cost will result.

You have another responsibility which must be assumed if you expect to have an efficient, well organized field party which will reflect credit on you; that is the proper training of engineering helpers. A little time spent in explaining and teaching your green recruits will pay big dividends when, as some of our men say, "the dirt begins to

fly down your neck". Don't be afraid that you will be giving away a lot of hard earned engineering knowledge if you teach a young man the proper method of using a steel tape or how to handle a rod or how to read the degrees on a transit. If you don't need him for that purpose give him other duties, but if you do need him see that he is capable of performing the duties you give him. Not only will you benefit but the Department will benefit as a result of your interest in imparting knowledge to new men.

If you are a location engineer you will not have the responsibility of dealing with contractors but you will have the very important task of making every effort to obtain the best information available regarding possible routes, high water, property lines, ownership and other pertinent data. Also you are expected to perform your work in a highly accurate manner so that errors will not develop in the plans and make costly changes necessary on construction. Your dealings with property owners and the public generally constitute a great responsibility since the Department as a whole may be judged by your attitude. It is expected that you will consult with and go over any proposed survey with your Zone Chief if possible before beginning work, but once having settled on the broad plan of procedure you should be able to carry on with the remainder of the job. Special problems will arise at times which must be taken to your Zone Chief for solution but I want to encourage you to use your best efforts to solve your problems without continual requests for advice.

The responsibilities of the District Engineer need not be enumerated in detail. In fact, I seriously doubt if they could be listed one by one in the time allotted for this meeting. Without exception our District Engineers are men of considerable experience in all phases of the work in the field and are qualified to render decisions on any problems that arise from time to time. Being in the position of liaison officer between the Central Office and the actual work on the job, the District Engineer is thoroughly familiar with Departmental policies. It is desired and expected that he will use the authority vested in his position to the best interests of the Department, the taxpayers and the contractors.

A few weeks ago a bulletin was issued requesting more prompt attention to correspondence from the Central Office. I am well pleased with your response to this request, however, I wish to stress the importance of this phase of our work. Only through you men in the field can we in the Central Office know the true facts regarding the numerous requests and complaints we receive. A prompt and accurate re-

port from you enables us to make our decisions and inform the interested persons within a reasonable length of time after we receive the inquiry. I fully realize that each of you could use six or seven additional hours each day and still not be able to have your desks cleared when you leave the office because we in Frankfort have this same difficulty. I assure you that I will appreciate your best efforts in this matter of reports.

There is a set of responsibilities which in some degree must be assumed by each of us who serves the public; that is found in our relations with the public. True enough, we as individuals are not the whole Department of Highways but each of us represents the Department in the public mind. Our acts as individuals certainly will be thought to reflect the attitude and policy of the Department and can bring either credit or censure. In this classification I would place relations with the traveling public first, since our primary duty is to those using the highways. Here I would stress courtesy, helpfulness and remembrance that they actually "pay the freight" as far as roads are concerned. Be prepared at all times to provide accurate information to road users. Keep familiar with road conditions in your section and know where to refer inquiries in case you are unable to give the required information. Keep a few road maps and booklets in your office and car for suitable distribution. Keep an eye out for misplaced or destroyed road markers that might cause trouble to the public even though this may be the regular duty of someone else. Be alert to emergency conditions that may arise and report them promptly.

It may be that you will be asked for information by local persons or newspapers. We do not prohibit this but would like to call your attention to the fact that we have a very efficient Division of Information which makes every effort to keep the public well informed on all kinds of road activities. Such information as you may give should be limited to statement of known facts and approved policies of the Department and you should avoid personal opinion or speculation. Even though you might stress the fact that a statement is your personal opinion it may not be quoted or understood by the public as such. Should you find that the Department apparently has made a mistake in some matter of local policy we ask that you report it to your District Engineer.

In summation I would say that we assume that each of you holding a position of responsibility has so fitted yourself for that position by training and experience that you know the reasonable limit of your responsibilities and are willing to assume them to that limit. We

expect you to use initiative seasoned with judgment. It is far better to have done your best and made an honest mistake than to have done nothing at all.

There is one other matter that I particularly want to stress to our highway employees before closing and that is the question of diplomacy and good taste which you exhibit toward other employees and officials of the State and toward everyone, in fact, whom you have occasion to contact in your official duties whether the contact be made orally or by letter. This comes back to the old adage that "it is not so much what you say as how you say it". If you have occasion in your work to say "no" or to disagree with some statement or request made to you either orally or in writing, you should make every possible effort to word your reply in such language or in such a manner that the least possible offense, if any, will be given.

Without the initiative of you men and your willing acceptance of your responsibilities it is doubtful if our Department could now point to its brilliant accomplishments of the recent past.