On one of the early purchases, near the New York State line, we encountered our first rebuff with capable officials and attorneys of one of New York's strongest lending institutions. This firm, which practically controlled the sales negotiations, because of their mortgage interest, was not willing to gamble even for hours, because of the stress of the financial situation in the country at the time. They insisted that the State of Connecticut's check for payment must clear before they would deliver title, as they could not run the risk of the failure of the bank on which the check was drawn. Neither did they wish to run the chance of legal difficulties with the State to collect from it in such an event.

The question of confining the purchase to right-of-way only was constantly with us. It seemed possible in one case to save buying a large area with substantial improvements by granting a right-of-way to the Parkway. This proved to be poor policy. By the use of local men we were able to follow closely every activity. By this method we learned that a combine was being formed to assemble some four hundred or more acres of which the property we did not buy all of was to be a part. This area was to be developed in a fashion quite unacceptable to Greenwich practices and, had it occurred, would have presented an exceptional hardship because of the antagonism that would have been aroused among many of the people in this locality, since they were most active in all matters pertaining to the Parkway.

Many people had established their homes in the section to be improved by the Parkway for perfectly sincere reasons in getting away from the "hurry and bustle" of the city. This, too, was discovered early in the acquisitions when one of the executives of a large New York House started to maneuver by placing negotiation obstacles in our path unless certain agreements were made to help his particular situation. The net that can be drawn by people of influence is tremendous, and when a community is against a project of this sort, the strength of that net-work is appalling.

The objection of the natives, who had for many years and in some cases generations tilled their soil, was a sincere one, and could only be overcome by diplomatic reasoning to set aside the opposition. One of the greatest hardships imposed upon one owner in the Stamford section was the necessity of cutting down a black walnut tree and doing away with a spring, which had been sentimental landmarks for nearly eighty years since his childhood. This type of objection was often more difficult to handle than a plain dollars and cents disagreement, because it was entirely sentimental. The owners did not hesitate to employ the best legal counsel and real estate expert advice at their command.

Some of the properties, because of the stress of the times, were so frightfully financially involved that it was necessary after the deal had been completed with the owner to sell the whole plan all over again to the mortgagees before they would agree to release the portion of the property that was required. In practically every case this had to be handled most carefully.

In some cases, where large areas had been assembled for development purposes, giving thought to the creation of roads, parks and lakes, a great deal of study was necessary before negotiations could even be opened. In these instances weeks would be spent in building up other plans and estimating values of the property as changed, before the owners would be approached. Work of this sort often called for the assistance of people trained in that particular type of subdivision work.

Since we were never able to disclose all of our plans, there was always at first a certain feeling of distrust on the part of the seller. This could only be overcome by time and care to get the seller's confidence and assure him that he would be treated fairly by the State. By carefully checking purchases and sales, we were able, in most instances, to avert speculation.

In most instances the sellers were not particularly concerned over the elevations of the parkway. This was far from true, however, when we reached a property in Stamford. When the financial end of the deal had been agreed to by the State and his firm of attorneys, negotiations reopened all over again to satisfy his desire to protect certain hills and dales, trees and brooks, as well as the beauty of the river passing through his property. Negotiations of this sort required extreme care.

Dealing with a British subject for one acquisition was most difficult due to his being accustomed to laws that varied from ours. His sincerity was unquestioned. It was a real problem to convince him that we had the right to pass through his land.

Petty grievances often presented more trouble than real ones. If, in the line of duty, a surveyor found it necessary to cut or trim some owner's pet tree or bush, this unpleasantness would have to be forced into the background before purchasing negotiations could start.

Farmers often found themselves faced with a most difficult situation. In several instances it would be impossible to maintain the size of their herd on reduced meadow and cultivated land. This often meant that they would either be forced out of business entirely, or would have to move elsewhere as additional acreage was not available for farming purposes, due to the fact that the area in which they lived had become a high-class residential section used for estate purposes.

The type of person who was suspicious and thought of the State as a "big stick" always made things difficult. This type of person, who fortunately was not plentiful along the line, would generally consult many friends and often local officials, so that before you actually concluded the transaction you would find it necessary to sell your plan to ten or a dozen people. The only answer to cases like this was time and patience. In one instance where we had four rather distrusting owners, each having lots that were almost identical, we solved this problem by negotiating all four deals at once and in this way gained the confidence of all, as each saw what the other got and was satisfied.

In some instances where estates held property, we could not always locate all of the owners. In one case our investigation disclosed that some of the members of the family were deceased, although the other members were not aware of it. In large family ownerships of this sort, negotiations were many times as cumbersome as dealing with just one person. These transactions took a great deal of time to handle.

In certain cases the coming of the Parkway definitely prevented the expansion of industrial growth of existing factories. This required a great deal of research to establish fair dealing to both the State and the seller, but was worked out by the advice and counsel of experts in that field. In cases of merchandising concerns, the big chain store organizations were most willing to give us the benefit of their records. This assisted us particularly in our computations for one case which affected an independent dealer whose records were most sparingly kept, thereby making it difficult to form conclusions from them. The chain store organization procedure was an excellent guide in the task at hand.

The presence of rights of way over properties required often complicated the actual closing. Very frequently the owner assumed the attitude that we were buying the property from an unwilling seller and if title encumbrances annoy us, it is our job to overcome them. This meant that a great deal of time must be spent not on actual sales negotiations, but in the task of the mechanics of the acquisition. One transaction in Westport necessitated getting the approval of sixteen individuals after the State and the owner had come to an agreement in their negotiations. This was most difficult, as the other people that were being asked to acquiesce could see little or no benefits and had to be thoroughly sold in every instance before they agreed.

At the time of negotiations, we were often confronted with the argument that the seller sincerely objected to the presence of the Parkway and wouldn't remain on the property that was left if we failed to buy the entire tract. This has been proven to actually be true in several cases where owners have sold their remaining holdings or are offering it for sale at a substantial loss in order to seek a new location that will have the same quietness and peacefulness of their old location, prior to the coming of the parkway.

Where technical problems were involved the services of a specialist in the field were always used. In Fairfield it was necessary to purchase a productive orchard that furnished the owner's livelihood. Little progress was made on this deal until an expert residing in the County was brought in for consultation. This gentleman had the respect of the seller and the confidence of the State. Even though his decisions in practically every instance were against the seller, they were accepted because his knowledge of the question was not disputed.

The cases that have been cited have all been ones that presented problems. They should not be accepted, however, as a criterion for the entire group. In many instances the owners were exceedingly reasonable and realized that the coming of the Parkway could not be prevented and only wanted what was fairly due them. Like good health, these instances were accepted without comment, but we are grateful to these people for their coöperation and helpfulness in making the task pleasanter and quickening the completion of the Parkway project.

All of the preliminary steps were essential in laying the ground work for the detailed design of the Parkway and the associated structures. The final design of the roadway resulted from an exhaustive study of parkways already constructed in America and abroad. The weaknesses of those constructed were eliminated, and the better features incorporated. The "insulated" Parkway was decided upon, and you probably are as familiar with these details as I am, and I will not burden you with a repetition of that information.

It was evident that a great deal of attention must be directed toward solving the problems of surface drainage, for both pavements drain to the cutside gutters and to the curbs confining the center park. The park, likewise, drains to the curbs confining it. Thus, the parkway has four distinct lines of longitudinal water concentration.

To take this water off, storm sewers are proposed at certain points throughout the project and located in the center of the park. These sewers are of reinforced concrete pipe of varying diameters and are fed by connecting reinforced concrete pipes running laterally in a general V-shaped manner from catch basins located immediately back of the outside and inside curbs. These catch basins take the water from the gutters to manholes in the center of the park which discharge into the storm sewers which outlet at suitable locations through cross culverts.

The distances between catch basins vary from about three hundred feet in cuts to about four hundred feet on fills. In locating cross culverts carrying streams under the embankments, and placed to free impounded water, it has been necessary to use extreme precision on account of the great lengths of these drainage structures and also because they must be placed at such an elevation as to permit of extension at such time as the unit south of the base line is constructed.

Where rock is encountered in excavation it is taken out to a depth of two feet below subgrade. Backfill to provide suitable foundation is made either by placing twenty-four inch gravel fill sub-base under the paved lanes, this fill extending six inches beyond the back face of the curb, or six inches of gravel fill on top of eighteen inches of stone fill sub-base, both courses extending twelve inches beyond the back face of the curb. Under the park, earth backfill is placed to within ten inches of the surface, and loam backfill is used to bring it to grade.

In earth cuts, material is taken out to a depth of twelve inches below subgrade, and backfill is made by placing twelve inches of gravel fill subbase under the paved lanes, this fill extending six inches beyond the back faces of the curbs, the park area being brought up to within ten inches of its surface with earth backfill, and ten inches of loam placed on top of that.

Vertical sight line of five hundred feet or more is planned throughout with the frequent use of long, sweeping vertical curves and the minimum use of tangent grades.

The ruling curvature planned is seven degrees, the ruling gradient seven per cent, with one exception to date, which is an eight per cent grade.

You have had an opportunity today to pass over a certain portion of the Merritt Parkway, more particularly described in the program.

It, no doubt, has been called to your attention that all the entrances to the parkway are confined to public highways, also the absence of any commercial structure or business; and, since this is to be a non-commercial highway, it is my hope that no private entrance will ever be granted, and that gas stations and other commercial enterprises will be confined to the public entrances, entirely off the right-of-way.

The design of the parkway calls for the construction on the north side of the base line, on approximately 150 ft. right-of-way, of two reinforced concrete pavement lanes for traffic in two directions, separated by a center strip, reserving the remaining 150 ft. right-of-way on the south side of the base line for future traffic requirements. It was early discovered by us that in the obtainment of the right-of-way we could pass that way but once.

You have had an opportunity to observe the profile, the curves, the slopes, the effective width of the park strip, the guardrail, the shoulders.

and various other construction details which are apparent on the surface. You have, no doubt, noticed that the typical cross section is somewhat modified where the structures are encountered.

Before construction work started, it was realized that because of the nature of the material and because of the cuts and fills, the question of settlement would have to be considered in planning the work. In the selection of the type of pavement to be used, consideration was given to the factors of durability, appearance, riding quality and maintenance costs. A concrete type of pavement was decided on, being built in four longitudinal sections, thirteen feet eight inches in width. This width, including a six inch bevelled curb on either side of the invidual roadway.

On the first section of pavement a dual drum paver was used followed by a finishing machine equipped with a vibrator that not only levelled the concrete but vibrated the material, making it possible to use a much more economical mix than would have been possible with the old style finishing machine. This machine was followed by a longitudinal mechanical screed that corrected any inequalities in the surface left by the transverse screed. This machine in turn was followed by a machine that cut joints at twenty-five foot intervals. Were the function of a joint to provide for expansion only, the problem would be comparatively simple.

At the expansion joints, located approximately seventy-five feet apart, a modification of the old dowel type of joint was used. This consisted of a closely fitting, round, steel pin, sliding in malleable iron casings embedded in the ends of the concrete slabs, providing stiffness and greater efficiency of load transfer than is possible with the ordinary dowels. These dowels were used in connection with pre-compressed cork filler with a rubber seal at the surface.

By the use of the vibrator, it has been possible to increase the stone content in the mix, thus decreasing the cement factor.

All materials were proportioned by weight, giving a very close control of the factors governing uniformity other than the water content occasioned by rains or showers.

I hope that some day after construction has proceeded, either myself or someone of our able construction engineers will have the opportunity to deliver an additional paper, informing you as to the particular difficulties encountered with the design and construction which you have today observed.

You will hear further relative to the aspects of the bridge designs on the parkway from our able Engineer of Structures, Mr. Sumner. So far twelve major grading and drainage contracts have been let, of which ten are completed; two being surveyed, designed and let, and are now under construction.

Seven major surfacing contracts have been let of which two are completed and five under construction.

Following the planning and construction programs set up early in 1936, it was estimated that late this fall the Merritt Parkway would be opened from the New York line to Norwalk. However, this now seems to be impossible due to the delays encountered.

The main objective of the plan of landscape development on the Merritt Parkway is to assist nature in hiding the scars of construction, and to supplement, where necessary, native plant life already present.

You will have an opportunity a little later on to hear more about the landscaping of the Merritt Parkway from our very able landscape engineer, Mr. Wood.

In telling you of the important factors in connection with this highway, as I referred to in the beginning, I have attempted to avoid repetition.

It has been the sole idea of the Commissioner and all concerned to construct for the public and the State of Connecticut one of America's most beautiful, useful and modern parkways; and I believe that when the work is completed, you will agree with us that the finished product will meet this standard.