

DOCUMENT RESUME

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Construction Problems at the HUD-Insured Naugatuck Apartments Housing Project. CED-78-40; B-114860. January 31, 1978. 6 pp.

Report to Rep. Ronald A. Sarasin; by Henry Eschwege, Director, Community and Economic Development Div.

Issue Area: Domestic Housing and Community Development:  
Minimizing Mortgage Insurance Losses (2108).

Contact: Community and Economic Development Div.

Budget Function: Commerce and Transportation: Mortgage Credit and Thrift Insurance (401).

Organization Concerned: Department of Housing and Urban Development; Naugatuck, Co.

Congressional Relevance: Rep. Ronald A. Sarasin.

The Department of Housing and Urban Development's (HUD's) multifamily housing project in Naugatuck, Connecticut, was begun in 1971. During the early stages of construction, the excavation and construction contractors began having problems with the project. The excavation contractor alleged that test boring results showing the subsoil conditions were false. The construction contractor discovered that the architectural plans did not follow actual land contours for the site. In 1973, the Borough of Naugatuck informed HUD that changes had to be made in the project or it would not meet local building codes. These changes were never made; the sponsor defaulted on its mortgage loan, and the mortgagee assigned the mortgage to HUD. HUD referred the mortgage for foreclosure. Two recent audit reports dealing with the adequacy of HUD's review of architect's plans showed that similar problems with the adequacy of HUD's review of architect's plans showed that similar problems occurred on other HUD-insured multifamily projects. These problems could have been avoided if the Department's design representative properly reviewed the architect's plans and all changes to the original plans. The Secretary of HUD should take steps to ascertain whether the problems and deficiencies discussed are isolated instances or are indicative of nationwide problems in program monitoring and field inspections requiring aggressive corrective action. (RES)



UNITED STATES GENERAL ACCOUNTING OFFICE  
WASHINGTON, D.C. 20548

COMMUNITY AND ECONOMIC  
DEVELOPMENT DIVISION

JAN 31 1978

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B-114860

The Honorable Ronald A. Sarasin  
House of Representatives

Dear Mr. Sarasin:

In accordance with your request of April 11, 1977, and further agreements with your office, as detailed in our letter to you dated May 19, 1977, we have made a limited review of the problems encountered in the construction of the Department of Housing and Urban Development sponsored multifamily housing project in Naugatuck, Connecticut. As agreed, we limited our work to reviewing the Department's records on the Naugatuck project to determine its problems and compared these problems with those encountered at other Department-sponsored housing projects that we have reviewed.

At your request, we did not take the additional time to obtain written agency comments. The matters covered in the report, however, were discussed with agency officials and their comments have been incorporated where appropriate.

PROBLEMS WITH THE NAUGATUCK PROJECT

The Naugatuck project was designed as a 134-unit multifamily housing complex, with 30 one-bedroom, 74 two-bedroom, and 30 three-bedroom apartments located in 13 separate two-story-plus basement buildings on a 13.5 acre site in Naugatuck, Connecticut. The Department insured the mortgage for \$2,543,000 under section 236 of the National Housing Act.

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(990516)

Construction on the project started in December 1971. During the early stages of construction, the excavation and construction contractors began having problems with the project. The excavation contractor, after encountering an unexpected high incidence of rock, alleged that the test boring reports showing subsoil conditions for the site were false. The Department's Office of Inspector General has investigated this allegation and found conflicting evidence as to the validity of some of the subsoil condition reports. In October 1977, the Inspector General forwarded his findings to the Department of Justice for its consideration. In light of the current situation, it would be inappropriate for us to comment any further concerning the allegation.

The construction contractor discovered that the architectural plans did not follow the actual land contours for the site. The Department's records showed that the original set of architectural plans for the project, which the Department reviewed and approved in fiscal year 1972, were based on land contours taken from a U.S. Coast and Geodetic Survey Map. Department regulations require that land contours for project drawings be based on an actual rod and level (topographic) survey taken by a competent surveyor or engineer. The U.S. Coast and Geodetic Survey Map showed land contours for a general geographic area; whereas, an actual rod and level survey would be limited to a specific construction site. The result was that the actual contours of the site as determined later by a rod and level survey were 5 to 7 feet higher than those shown on the U.S. Coast and Geodetic Survey Map.

Many changes were made during construction to overcome the rock and land contour problems. The architect submitted the necessary changes to correct the problems for the Department's approval. The Department's insuring office officials reviewed and approved these changes. In the latter part of 1973, the Borough of Naugatuck informed the sponsor that additional changes, including revising the storm drainage system and installing highway guardrails, parking barriers, and retaining walls, had to be made; otherwise, the project would not meet local building codes.

These changes were never made. Eventually, the sponsor defaulted on its loan and the mortgagee assigned the mortgage to the Department. In June 1975, the Department referred the mortgage to the Department of Justice for foreclosure. As of January 20, 1978, final foreclosure proceedings had not been completed.

Part of the land contour problems could have been avoided had the Department insisted that the architectural plans be based on a land surveyor's rod and level survey. Department officials said that they approved the project knowing that the architect designed the project using the U.S. Coast and Geodetic Survey Map and that this was a mistake. As to the code violations, Department officials said that the sponsor's architect is responsible for conforming project plans to local building codes and ordinances and to the Department's minimum property standards. Also, the Department's design representative is responsible for assuring that the architect's plans clearly define the project and that the plans comply with the Department's minimum property standards.

While Department officials agreed that (1) the Department had mistakenly accepted the architectural plans based on U.S. Coast and Geodetic Survey Maps instead of requiring a transit survey and (2) the unexpected high incidence of rock resulted in many problems during construction, they said that other factors also contributed to the default of the project. They believe that after the construction of the project started, influential townspeople became opposed to subsidized housing in their borough and that the sponsor was stubbornly defiant in his dealings with borough officials. In addition, they believed the general contractor acted irresponsibly when he abandoned the project after he fell behind in grading the site, building the parking lots, etc. They recognize, however, that he had encountered many difficulties in adapting the architectural plans to the site contours and had to cope with adverse weather conditions, the effects of which were exacerbated by the steep contours of the site. Although the Department officials' opinions may have merit, there was no information in the Department's records to substantiate their opinions.

SIMILAR PROBLEMS WITH  
OTHER DEPARTMENT PROJECTS

Two recent audit reports dealing with the adequacy of the Department's review of the architect's plans showed that problems similar to the Naugatuck project occurred on other Department-insured multifamily projects. These problems could have been avoided had the Department's design representative properly reviewed the architect's plans and all changes to the original plans.

Similar Problems Reported By GAO

On June 3, 1977, we reported on problems with the design and construction of a Department-insured multifamily housing project in Woonsocket, Rhode Island. The Woonsocket project, called Rock Ridge Apartments, was insured and subsidized under section 236 of the National Housing Act. Rock Ridge Apartments, a garden type apartment complex, has 151 one-, two-, and three- bedroom apartments in 14 two-story buildings. Construction began on the \$3.3 million complex in March 1973, and it has been occupied since July 1974.

Soon after the project was completed, many problems, such as frozen water pipes, inefficient heating systems, improper drainage of runoff water, and soil erosion, began to occur. We concluded that these problems occurred because the project's plans and specifications contained structural design errors and because some of the construction work did not meet acceptable construction standards. We found that the Department did not make a thorough review of the project's plans and specifications and that Department inspectors made less than adequate inspections.

We recommended that the Secretary of the Department determine whether the problems noted at the Rock Ridge Apartments were indicative of a nationwide problem requiring aggressive corrective action to protect the interests of the Government and the tenants of Department-subsidized

projects. The Acting Deputy Assistant Secretary replied that each regional office had developed a monitoring system to review the performance of the field offices and that field office reviews adequately precluded any nationwide problem. We pointed out that the monitoring system referred to was established in 1972, about a year before the construction of the Rock Ridge project began, and apparently it did not preclude the problems from occurring at Rock Ridge.

Similar Problems Reported By The Department's  
Office Of Inspector General

In October 1977, the Department's Office of Inspector General reported on the need to improve the Department's monitoring and control over architectural services on multifamily projects. The Inspector General reported that the majority of the design architects on the projects reviewed did not comply with the Department's requirements to conform project plans to local codes and ordinances and the Department's minimum property standards. Also the Department's design representatives had not detected variances from the Department's minimum property standards. When corrective actions were taken, they were generally implemented through construction change orders, the cost of which was included in the insured mortgage amounts.

Some examples of deficiencies found by the Inspector General were improper drainage and grading of project sites, resulting in severe soil erosion and water damage to basements, cellars, etc. In one case, 28 lower level apartments in one project were uninhabitable because of sewerage backup created by underdesigned sewer lines. The Inspector General recommended stricter monitoring and control over architectural services, including review of all plans and specifications to assure compliance with minimum property standards and other applicable Department requirements.

In summary, on the basis of our findings and those reported by the Department's Inspector General, we plan to reaffirm by letter to the Secretary of Housing and Urban

Development our previous recommendation that the Secretary take immediate steps to ascertain whether the problems and deficiencies discussed are isolated instances or are indicative of nationwide problems in program monitoring and field inspections requiring aggressive corrective action to protect the interests of the Government and the tenants of Department-subsidized projects.

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Unless you publicly announce the contents of this report earlier, we plan no further distribution of it until 14 days from the date of the report. At that time, we will send copies to the Department and to interested congressional parties and make copies available to others upon request.

Sincerely yours,

A handwritten signature in cursive script that reads "Henry Eschwege". The signature is written in dark ink and is positioned above the typed name.

Henry Eschwege  
Director