



UNITED STATES GENERAL ACCOUNTING OFFICE
 REGIONAL OFFICE
 812 FEDERAL OFFICE BUILDING
 FIFTH AND MAIN STREETS
 CINCINNATI, OHIO 45202

120212
~~70,397~~

JUN 1 1979



GHO 00330

May. 68

Major General Thomas P. Lynch
 Commanding General, U.S. Army Armor Center and Fort Knox
 Fort Knox, Kentucky 40121

DLG 01740

Dear General,

A/C

Our recently completed base level procurement audit at Fort Knox disclosed a number of serious deficiencies in planning, estimating, contract format and usage, contractor performance, and inspection. Some of the resulting adverse effects included performance of unneeded work while valid requirements went undone, unbalanced contractor bidding, contract overpayments, potential liability to contractors for damages, failure to meet contract specifications, unsightly conditions, and inadequate documentation to support contract payments. Further, command decisions concerning exterior painting contracts were extremely costly and appear unjustified. We also identified situations involving conflict of interest and potential collusion and fraud.

As deficiencies were documented ^{*They were*} we brought them to the attention of your staff, ^{*members*} who were extremely cooperative and have initiated many corrective actions. In some cases partially effective solutions had been implemented prior to our review. Those deficiencies with potential criminal motivation were referred to the Army Criminal Investigation Division and the Federal Bureau of Investigation.

While Fort Knox officials are to be commended for their cooperation and quick remedial actions, we recommend that Fort Knox management and audit activities ^{*should*} closely monitor these areas to ensure such problems do not recur. ^{*already ensure they don't recur.*} The importance of this continued vigilance is evidenced by our discovery of painting contract related deficiencies which were a recurrence of problems identified and reported to Fort Knox during a 1970 General Accounting Office review. ^{*u.c.m.*}

RELEASED



120212

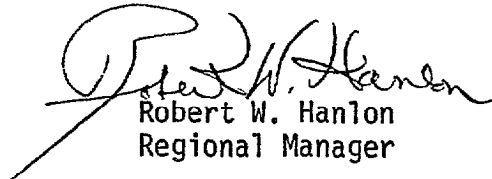
505516

*Requested
 Group III Letter
 Ret.*

120212

The deficiencies and examples of their adverse impacts are outlined in Attachment 1. The corresponding Fort Knox proposed or implemented corrective actions as provided by your staff are enclosed as Attachment 2. We would appreciate that your response to this letter report incorporate any updated information concerning these corrective actions.

Sincerely,



Robert W. Hanlon
Regional Manager

Attachments
as stated

GAO IDENTIFIED DEFICIENCIES AT FORT
KNOX WITH EXAMPLES OF ADVERSE EFFECTS

The following deficiencies and related adverse effects were identified during a limited scope audit of Fort Knox base level procurement. Thus, the examples provided primarily relate to specific areas reviewed in detail, such as roofing and painting contracts. Our findings indicated, however, that several problems were general in nature and not confined to the areas we reviewed. For example, inspection records were usually inadequate regardless of the contract reviewed. Further, problems with contractor performance appeared widespread. Fort Knox management and audit organizations should consider these factors in implementing corrective actions and evaluating their effectiveness, as well as in programming internal reviews to ensure that similar problems do not exist in areas not reviewed by GAO.

The following list does not include some minor deficiencies which were discussed with the appropriate officials, who took corrective actions.

A. Planning

1. An inaccurate data base (computer printout) was used to develop contract requirements estimates.
 - a. Buildings were included for work which had already been performed. This caused unbalanced bidding and in some cases unnecessary work was paid for.
 - b. Buildings needing repair were not included, causing unsightly conditions.
2. Planners did not coordinate with other organizations, thus buildings which no longer existed or were scheduled for demolition were included in contract bid schedules.
 - a. Unbalanced bidding occurred, which may have resulted in unearned profits.
 - b. Work was performed on buildings which were subsequently demolished.
3. Planners did not perform site inspections which should have prevented some of the above problems.

B. Estimating

1. Cost estimates for painting contained many discrepancies and sand-blasting cost estimates for the 1976 contract were greatly overstated.
 - a. The estimates did not provide procurement officials a valid basis for determining if the low bid was fair and reasonable.

- b. Negotiated contract amendments may have been too costly.
2. Sandblasting estimates were inverse to actual requirements. Buildings requiring little sandblasting were overestimated while conversely, buildings requiring a good deal of sandblasting were underestimated as much as 500 percent.
 - a. Unbalanced bidding may have occurred.
 - b. Too much was paid for actual sandblasting performed.
 3. Paint requirements appear overestimated. For example, the engineers estimated 30 gallons would be required to paint a two story barracks with about 4800 square feet of exterior surface. Conservatively, we estimated that 24 gallons would suffice, while the "Painting and Decorating Craftsman's Manual and Textbook" indicates only 19 gallons would be needed. 1/
 - a. & b, Same as #B.1a & b above.

C. Contract Format and Usage

1. Prior to the 1978 contract, use of representative buildings created the potential for unbalanced bidding and improper payments due to multiple plan number listings and to the inclusion of non-representative buildings under a given contract line item.
 - a. It appears unbalanced bidding occurred.
 - b. Improper payments were made.
 - c. Building substitutions created unsightly conditions.
2. The 1978 contract identified a specific building for each line item; however, the planning deficiencies discussed above created the potential for unbalanced bidding. Further, this contract format violates the intent of a requirements contract,
 - a. Unbalanced bidding and potential collusion resulted.
 - b. New requirements identified during the contract period cannot be painted without a contract modification.
3. The partial sandblasting and painting line items under the 1976 contract were duplicative and inappropriate.

1/ Since the estimate was to repaint buildings painted less than a year before, even less paint may have been required.

- a. The most expensive method of sandblasting and painting was used to reimburse the contractor when a cheaper method was available.
 - b. Buildings were paid for which were not covered by these line items.
4. Exterior painting specifications prohibit painting asbestos-cement surfaces, yet many buildings of this type were ordered for painting and paid for at exorbitant prices for the work performed.
 5. Sandblasting specifications state that payment shall be on a square footage basis with openings not deducted. Buildings comprised 40 percent or more of windows or other areas not requiring sandblasting were ordered, sandblasted and paid for on this basis.
 6. Prior to the 1978 exterior painting contract, delivery orders did not cite specific work. Call orders were used to order the buildings to be worked on. The call orders included many duplicate listings under either the same or different contracts.
 - a. Neither the delivery orders nor the call orders could be used to identify work performed.
 - b. Buildings were paid for twice under the same or different contracts. (We could not determine if the buildings were actually painted twice.)
 7. Contractor billings and inspection reports did not identify the specific work performed.
 - a. Many buildings were paid for under the wrong contract line item at a greater amount. (We found no instance of underpayment.)
 - b. Buildings were paid for twice.
 - c. Work not performed was paid for.
 - d. Inspector math errors (in the contractor's favor) were paid for.
 - e. Certifying officers have certified incorrect data and payments.
 8. Exorbitant prices were paid for many buildings- e.g, \$419 each for several very small buildings.

9. Facilities Engineers used the painting contracts as though they were regular firm fixed priced lump sum instead of requirements contracts.
 - a. By not ordering valid requirements, Fort Knox may be liable to the contractor for damages due to his loss of business.
 - b. The engineers failed to take advantage of better prices.
 - c. There may be some impropriety in the methods used to expend exactly the estimated contract amount.
10. Most contracts we reviewed were awarded on an all-or-none basis. Greater use of split award bid evaluations may reduce unbalanced bidding and also could result in lower prices. We reviewed a limited number of contracts and thus could not quantify this potential; however, we found one contract for which the bids indicated about \$90,000 would have been saved on a split award basis.

D. Contractor Performance

1. There are widespread deficiencies in the quality of painting performed by the contractors. Review of other type contracts and associated inspection records indicates similar problems, probably to a lesser degree. Further, the records show that engineers and inspectors were approving work scope changes without first obtaining the appropriate contract modification.
 - a. Fort Knox paid for work not meeting contract specifications.
 - b. Unsightly conditions resulted.
 - c. Local contractors who knew specifications did not have to be met had an unfair competitive advantage.

E. Inspection

1. Inspection quality was inadequate. The deficient contractor performance described above was approved by the inspectors. Incomplete work or work not performed at all was approved for payment. Duplicate and otherwise erroneous payments were made due to inspector error. The inspectors apparently did not question exorbitant prices being paid for painting asbestos sided, brick, or very small buildings. Proper approvals and contract modifications were not obtained for work scope changes.
 - a. , b., c., Same as D. 1 a,b,c, above

2. Proper records were not maintained. Records were inaccurate, incomplete and, in some cases, missing. 2/Uniform records keeping standards were not used and supervisory review was inadequate as evidenced by the errors found.
 - a. Work performed could not be determined for several contracts. Thus, the validity of contract payments was not supported. 3/
 - b. Documentation is inadequate should contract litigations occur.
 - c. Computer records updated from inspection records contained invalid data.

F. Miscellaneous Deficiencies

1. The command decision to change the building trim painting scheme 4/ was costly and appears unjustified. The old method had been acceptable and no real benefits were identified for the new method. The 1976 contract solicitation requested bids on both the old and new methods. The low bid for the old method (by a non-local contractor) was \$53,000 less than the low bid for the new method (by a local contractor). Despite this, the installation commander directed the award be made for the new method.
 - a. Many buildings in need of painting which could have been painted for this cost difference, were not painted.
 - b. The new paint scheme was perpetuated in subsequent contracts, with an unquantifiable cost increase.
2. After the 1976 contract was awarded and several buildings painted, the installation commander directed a color change from snow white to bone white. The records do not support the necessity of this.

-
- 2/ Such records are the basis for contract payments and copies should be maintained with the contract files.
 - 3/ Inspection records for one roofing contract contained building measurements made by the inspector. We found nearly all the measurements were overstated and, if they were the basis for payments, the contractor was overpaid. For example, the inspector's measurements for building #78 would have resulted in an overpayment of about \$300.
 - 4/ Formerly the trim painting of fascia board, doors, windows, etc., was done in the same color as the rest of the building. Under the new scheme, this trim work was painted a different color from the rest of the building.

change. The snow white paint had passed laboratory testing and inspections by both inspectors and engineers. The contractor contended additional paint would be required to provide proper coverage using the bone white color and he submitted a cost change proposal for about \$56,000. The explanations given for the additional paint requirements seem incogruous with the data in the files and with physical observations we made. Further, the contractors proposal contains several obvious overstated requirements, yet a negotiated amendment to the contract awarded him exactly what he requested. We found no record of a price negotiation memorandum, nor any evidence of a cost/price analysis to be used as the Fort's position for the negotiation.

- a. The contractor received unwarranted increased payments.
- b. A subsequent contract was issued to repaint the buildings initially painted snow white. It cost more to paint 10 of the buildings the second time than the first, despite the contractor being relieved of surface preparation and painting recently painted buildings. Further, over \$1100 too much was paid for these buildings the first time due to paying for them under the wrong contract line item.
- c. This color scheme has been perpetuated in subsequent contracts at a potential cost increase.

Fraud/Collusion/Conflict of Interest

1. Conflict of interest situations were identified on the part of inspector personnel. 5/
2. Potential collusion and fraud were identified for several contracts. 5/

5/ These matters were referred to the Army Criminal Investigation Division and the Federal Bureau of Investigation.

HEADQUARTERS US ARMY ARMOR CENTER AND FORT KNOX
FORT KNOX, KENTUCKY 40121GAO SURVEY OF LOCAL OR BASE LEVEL PROCUREMENT
ACTIVITIES - CORRECTIVE ACTION COMMENTS IN RESPONSE
TO DRAFT PAPER ON GAO IDENTIFIED DEFICIENCIES

DATE: 4 May 1979

1. The following corrective action comments are keyed to the format outlined in the GAO draft paper:

A. PLANNING.

1. Source records have been improved to provide a more accurate data base for contract requirements. Duplicate records have been eliminated in that only the Engineer Plans and Services building printout is being used for the paint contracts. The accuracy and timeliness of input to the printout have been improved. The printout will be updated at least monthly. Based on inspectors' reports of buildings and other source data, a field survey will be implemented before a contract is written to ensure that requirements are accurate.

2. Steps have been taken to improve coordination between the Real Property, Master Planning and Engineering Plans offices regarding buildings proposed or scheduled for demolition. Buildings programed for demolition on master planning documents will be eliminated from contract requirements.

3. A field survey will be implemented before contract requirements are prepared to verify building and structure conditions. The survey will include on-site inspections.

B. ESTIMATING.

1. Historical data will continue to be used in developing cost estimates. Computation of cost estimates will be made, however, by averaging prices by type of buildings over a period of three years instead of considering only the most recent price. More emphasis on field survey inspections will be made to ensure accurate cost estimates.

2 and 3. A closer investigation will be made by the designer of the actual condition of buildings to be sandblasted and/or painted. More concentration of work effort will be placed on physical inspection of buildings before contract requirements are written to ensure that painting and sandblasting estimates are valid and accurate.

1 and 2. The use of representative type buildings was discontinued prior to award of the FY 78 contract in an effort to identify and control the specific buildings to be painted and provide an ordering document upon which to base payment. Since that effort did not correct the unbalanced bidding problem and possibility of improper payments still existed because of substitutions, the use of requirements contracts for this type of contracting has been discontinued in favor of a lump sum contract for a group or groups of buildings, and/or indefinite quantity contract for identified groups of buildings. This will virtually eliminate the possibility of unbalanced bidding, except for a true risk factor, and provide complete control of the buildings to be painted and payments to be made. Any necessary substitutions for reasons of priority are now documented by change order to the delivery order and/or contract. Contract bid sheets will be more specific with more detail information and more accurate estimates of quantity requirements. Requirements type contracts will be used only where appropriate, i.e., family housing where actual quarters are unknown.

3. Requirements type contract for exterior and interior painting will be eliminated except as noted above for family housing. Inspection and enforcement of contractor performance will be emphasized. Contractor will now be required to list each building and the work done before payment is made.

4. Contract bid sheet for painting contracts will be improved by making it include more detailed information and more accurate estimates of quantity requirements. Inspection and enforcement of contractor performance is being strengthened.

5. The sandblasting contract specifications and bid sheet will be revised to allow contractor payment for only the surface (square footage) actually sandblasted. Also the inspection and enforcement of contractor performance will be strengthened.

6 and 7. A new delivery order procedure and method of payment to contractors has recently been implemented. Heretofore contractors submitted an invoice for a total dollar value, as agreed to with the inspector in the field (progress payment method), and a DD Form 250 Receiving Report was submitted. Based on these two documents the contracting officer approved payment to the contractor. This process has been discontinued not only on the painting contracts but on any contract providing unit prices as a basis for payment. Contractors are now required to submit a claim (invoice) for work which they state has been completed. This invoice will then be cleared against inspection and acceptance records. Inspectors will no longer have to be concerned with advance agreement with the contractor as to the amounts due. As contractor claims are submitted, inspectors only need to check their records for completion and acceptance. This procedure should virtually eliminate the possibility of a duplicate payment.

Also, a new system of record keeping has been implemented for inspectors. More specific contract information is being included with the monthly progress report. In addition, a new log book system is in use and will show a complete record of all work completed and paid for. The log book system will provide a complete and effective audit trail.

8. Occurrence of this deficiency will be prevented in the future by implementation of the field survey before contract requirements are prepared to verify actual building and structure conditions.

9. As discussed in C-1 and 2 above, this deficiency will be precluded from occurring in the future through usage of a lump sum contract or indefinite quantity contracts. Also, the inspection function will be strengthened and monitored.

10. Use of split awards may or may not have resulted in savings. There is no assurance that the unit prices on those contracts reviewed would have been the same had the contractor not been told in the award criteria that award would be made on an all-or-none basis. The use of requirements contracts and this award procedure was put into effect as a result of bidding in prior years, or a firm fixed price basis, with awards made on individual item basis to the extent of funds available. In most instances this resulted in multiple awards to "selected" bidders with the remaining items cancelled. Multiple award provisions will be considered for inclusion in future solicitations for these type services.

D. CONTRACTOR PERFORMANCE.

1. Strict enforcement of contract specifications will be implemented to improve the quality of contractor performance. Coordination on attainment of strict contractor compliance with specifications will be maintained by the inspectors, the project engineer, the contracting officer's representative, and the contracting officer. Standards of inspection will be strengthened through additional training of the inspectors (Army sponsored schools, in-house training, suppliers' seminars), assignment of specialized duties, and recent implementation of the new log book records system. Also, new job descriptions are being written for inspectors requiring more specialized duties. All of these actions will assist in obtaining maximum contractor performance.

The contracting officer and construction section personnel are now participating more fully in the development of the solicitation package and inspections of work performed by physical visits to the job site and participating in the training process of inspector personnel.

Regarding the quality of painting performed by contractors, representatives from the Department of Army Office of Chief Engineer and the Construction Engineering Research Laboratory have visited Fort Knox at our request to discuss/advise corrective measures and methods to prevent paint peeling on buildings. We are continuing to implement their suggestions.

1 and 2. All of the actions identified under D above are being or will be implemented to strengthen the quality of inspection. Emphasis is being given to enforcing stricter inspection standards and monitoring of inspectors' work. The recent implementation of the new log book record system will further improve the inspection effort and provide adequate records in documenting good or poor contractor performance.

F. MISCELLANEOUS DEFICIENCIES.

1 and 2. The changes in painting scheme and paint color was a command decision based on the direction of the installation commander. The additional cost for both factors, change from Scheme A to Scheme B and change from snow white to bone white, was made known to the command and the contract files were documented to show this. No price negotiation memorandum was prepared since no real negotiation took place other than a review and verification of the additional quantities of paint required. The priorities established and directions issued did not provide the opportunity for meaningful negotiations.

FRAUD/COLLUSION/CONFLICT OF INTEREST.

When the potential fraud/collusion problem was identified, responsive command action was taken to refer the matter to the Criminal Investigation Division (CID) which subsequently made the referral to the FBI.

When the conflict of interest situation was identified, responsive command action was taken to relieve the individual involved as inspector from the applicable contract jobs, and to inform the Office of Staff Judge Advocate of the situation. Guidelines have been established to preclude a similar type of situation from occurring. Inspectors will be instructed of circumstances when a potential conflict of interest may exist, and will be informed of the appropriate action to be taken in these circumstances.

Upon completion of the ongoing FBI investigation or upon release by that agency, this command will pursue recovery for contract overpayments.

2. A follow-up review will be made on deficiencies identified in the final report by the installation Internal Review office to determine if responsive corrective actions have been taken. Also, internal review activity in the procurement and contract administration areas will be programed for inclusion in the FY 1980 Internal Review Program.

3. These corrective action comments were prepared by the Internal Review Division, Comptroller based on input from the Directorate of Facilities Engineering and the Procurement Division, Directorate of Industrial Operations.

Dan Boone

DAN BOONE
Chief, Internal Review Div, Compt