

PROCUREMENT BY STATE AND MUNICIPAL GOVERNMENTS

7 December, 1948

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Publication No. L49-58

THE INDUSTRIAL COLLEGE OF THE ARMED FORCES

WASHINGTON, D. C.

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## PROCUREMENT BY STATE AND MUNICIPAL GOVERNMENTS

7 December 1948

Because the fundamental principles of purchasing for state and municipal governments are similar we will consider them jointly with special reference to one or the other as the techniques and procedures may differ. Basically, purchasing procedures whether for industry or government employ the following factors: (1) Simplification and standardization; (2) use of specifications; (3) establishment of sources of supply and selection of supplier; (4) receiving of goods; (5) sampling of goods; (6) testing for--acceptance, control, and identification; (7) approving payments and earning cash discount.

If the system of simplifying and standardizing were carried to the nth degree the equipment of one manufacturer could be made to interchange with that of another, thus eliminating waste and permitting mass production. This, of course, would be regimenting of industry, a process which is only justified by an extreme emergency, such as warfare. The application of this principle of standardization during World War II made it possible for our industries to produce sufficient war materiel in the short grace period allotted to us to turn the tide of battle against the enemy. This was nothing short of a miracle of production.

Every large purchasing department should have the facilities for obtaining and developing standards. What is a standard? Clifton E. Mack, Director of Procurement, U.S. Treasury Department, defines it as "a principle, a yardstick, a criterion for comparison. It is used in measure, procedure, value, time, process, dimension, extent, quantity and quality. It is established by authority, custom or general consent. Since that is true, it follows that a specification is merely a spelling out of the standard used. A specification is a specific description of the requisite characteristics for a particular function, a machine, a material, or a part. It must always be remembered that a standard is not necessarily fixed. As a matter of fact it should always be subject to revision so as to take advantage of progress in manufacturing technique or changes in use or need. Purchase specifications should recognize commercial standards as a basic consideration to avoid special order requirements to the extent possible. \*\*\*\*\*The Purchasing Agent is dependent upon competitive goods to do the best buying job. His means of obtaining competition is through standards--the purchase specification."

Occasionally a salesman will ask "Do you buy on bids or do you buy on quality?" This question shows a woeful ignorance of modern purchasing and procedure.

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Concerning the use of specifications in public buying, you would be interested in the recent investigation of purchasing practices of a county highway commission. One commissioner was asked about the purchase of trucks: He answered:

"We buy trucks on specifications only. It hasn't been the custom to ask for bids." This is a most illogical and incongruous statement. It just does not make sense. Buying on specifications means using specifications in requesting bids, so that competition can be obtained. The purchaser then has a basis for determining whether he is getting what he bargained for. The statement that it has not been the custom to ask for bids means simply that whoever bought these trucks apparently selected the ones he wanted and paid the price asked out of the public treasury. Perhaps the specifications he refers to are those of that particular make of truck he purchased. While this is frequently the way in which a private firm or individual buys trucks, or what not, it is not the way public moneys can be spent, if the taxpayers are to receive their money's worth.

In contrast, I have exhibits here of specifications which were used in obtaining bids for 46 garbage truck chassis and 46 garbage packing bodies for these trucks, specifications for a 750 gallon per minute and a 1,000 gallon per minute motor propelled fire pumping engine, specifications for a motor truck chassis for a combination police patrol and ambulance, specifications for a body to be built and mounted thereon;; specifications for four-wheel drive motor truck chassis to be used in connection with a first aid, rescue squad type body, specifications for the special body for this chassis and specifications for motor oil purchased in car lots.

Concerning the garbage packing units, the specifications and bids were divided into two parts, one for the truck chassis and the other for the garbage packing bodies. The truck chassis specifications describe what is wanted; the body specifications describe the detailed requirements. In addition to these body specifications there are specifications describing the method of tests to be conducted of the equipment offered prior to awarding the contract. Although this is complicated equipment, the purchaser is adequately protected against receiving unsuitable equipment.

Referring again to the highway commission purchasing investigation, one of the highway commissioners who took the stand said that he has been employed in his present capacity as commissioner for sixteen years and that it was a "universal" practice to permit highway machinery salesmen and their firms to pay all the bills when the commissioner and highway committee members made trips to inspect equipment.

Another of the highway committee members was asked concerning expenses in connection with his attendance at road shows. He testified that all expenses incurred by him at these shows were paid by salesmen from various machinery companies but he insisted that accepting meals and free hotel rooms did not influence him when the committee was considering purchasing from these companies.

This commissioner said that the highway committee had taken bids on gasoline purchases until a few months ago but had not taken bids on oils and greases.

Question: "Why did you ask for bids on gasoline and not on other items?"

Answer: "Just a custom, I guess."

Question: "Was it a custom to get bids on oils and greases?"

Answer: "No, I don't think so, as long as I have been highway commissioner."

Question: "Wasn't that one of the complaints before you got in, that no bids were taken?"

Answer: "It seems to me it was something like that."

Question: "Don't you think it would have been a good business policy on the part of yourself and the committee to obtain bids?"

Answer: "I have to answer yes and no. To satisfy everyone it would have been a good stroke of business. On the other hand I felt that we had a good grade of oil and grease and while others would have had just as good a grade I don't think we should change while we have a supply on hand. If we would take bids and take the lowest prices we would have oil that I wouldn't put into my car and you wouldn't put in yours. I wouldn't put it in highway trucks."

This commissioner told of a trip to a Chicago laboratory to test oil samples with a representative of a company from which the county has purchased much of its lubricating oil and grease in recent years. Asked if the county men were invited to make the trip he replied: "No, we wanted to get a test; he volunteered to take us. Samples of ten or twelve different brands of oil were taken."

Question: "Do you think it was a fair test to have this man take you to a laboratory of his own choosing?"

Answer: "I had the samples numbered and I was the only one who knew which was which."

Why wasn't motor oil and gasoline purchased on specification and competitive bids? There can be no valid reason for not doing so. The Federal Government has adequate specifications for both. The purchaser is adequately protected because of conditions set up in the specifications Uncle Sam's motor oil tests provide for the protection of the hundreds of thousands of vehicles used by the Federal Government. What the highway commissioner says about buying on bids and getting poor products is one of the oldest and tritest excuses I have ever heard used against centraliz purchasing. It doesn't hold water today because of the protection which th purchaser has in adequate specifications and tests. For example: Here is a copy of Federal Specifications for Motor Oil which my city has modified to meet our particular requirements. This specification was built around U.S. Army Specifications 2-104B, dated 6 May 1943 and amended 18 October 1943 and further amended by the city of Milwaukee in accordance with the specification exhibited herewith. This further amendment covers a modifie table plus two qualification tests. These qualification tests are neces- sary because the city of Milwaukee does not have facilities for making the practical physical tests provided for by 2-104B. We therefore require the following under qualification tests:

"The vendor shall submit:

1. An affidavit with his bid, sworn to before a notary public, certifying therein that the oil he proposes to furnish has met the qualification test prescribed in United States Army Specification 2-104B and that no change has been made in the amount or type of additive or type of base stock.

2. Analyses with his bid stating for each oil the following:

Test	Method of Testing, ASTM
Gravity, A.P.I.	D287-39
Carbon Residue	D189-41
Flash Point	D92-33
Pour Point	D97-39
Viscosity	D88-38
Viscosity Index	D567-41

These several specifications all cover complicated equipment products and materials. They illustrate how full competitive bids can be obtained and how the purchaser can be assured of receiving suitable merchandise of the proper quality. At least two important objectives are gained through this competitive system: (1) It was originally estimated and later proved

by no less a purchasing authority than Dr. Russell Forbes, former Commissioner of Purchase of the City of New York, that approximately fifteen percent is saved by the proper application of the principles of centralized public purchasing procedure, and (2) every responsible firm having a product meeting the design and quality of that required by a public purchaser should be entitled as a taxpayer to bid on these requirements. I do not mean to imply that these companies have a vested right to obtain this business but they do have a vested right as taxpayers to bid for the business if they are properly qualified and are determined by the purchasing authority to be the lowest responsible bidders complying with the official specifications.\* A third advantage which is incidental to these two basic advantages is the fact that when competitive bids are made the purchaser frequently obtains valuable information concerning newly developed designs and special features of equipment which will aid him in preparing future specifications. New designs and features are constantly being developed and added to existing models of equipment. They are usually brought forward at a time when it is believed an advantage can be gained over a competitor. The purchaser may decide to revamp his specifications to include some of these desirable features.

The procedure used in the purchase of the 46 mobile garbage packing units referred to would be of interest. The following three considerations were involved:

1. Mobile packing units have been built for so short a time that there is still a great deal of room for improvement in the mechanism employed. Open specifications must be employed to take advantage of current improvements.
2. The procedure for making tests must be spelled out in detail in the specifications.
3. Comparative field tests are needed to assure the purchaser of receiving equipment which will economically accomplish his purpose and will also represent the best value for his dollar.

Without going into the specifications for the equipment in detail, suffice to say that they were complete in that they provided for all of the detailed requirements of the city and still they were open to competition. The purchase cost was \$2,357.50 for each body and \$4,544.12 for each chassis or a total of \$6,901.62 for a complete unit, making a total cost of \$108,445 for 46 bodies and \$209,029.52 for 46 chassis or grand total of \$317,474.52 for the units. As this was a good size purchase and the equipment must give good service for at least fifteen years it was necessary to exercise the utmost care in making this purchase. Our tests

\* ("Criteria For Awarding Public Contracts to the Lowest Responsible Bidder" by Nelson Rosenbaum, former Special Legal Assistant, City of New York.)

were to prove to us not only whether this equipment would do what we expect it to do, but also, which was the lowest responsible bidder. If we had followed the reasoning of the highway commissioner, referred to, we would have picked out a garbage packing truck which we liked and would have purchased it without bids. In so doing we may have believed that we were getting what we wanted. However, after we had used it for a while we might have discovered that it was entirely unsuited and unsatisfactory for the purpose. Then of course it would be too late to do anything about it. Briefly the procedure of making this purchase was as follows: Bid requests for the truck chassis were advertised and copies of specifications and bid forms were sent to qualified bidders. The same thing was done with manufacturers of garbage packing bodies. When the formal sealed bids had been opened publicly at the stated time and tabulated they were examined by our engineers and tests were conducted to determine the factors mentioned heretofore. Copies of these documents are exhibited herewith for your information. Please note the detailed information concerning the tests on the garbage packing bodies which as you will note were used in the field for many weeks before a determination was reached. Upon receipt of the data from our engineers as to compliance with city specifications performance in the field, the award was made to the lowest responsible bidder for the truck chassis and for the garbage packing bodies. This represents a purchase on the basis recommended by those public purchasing officials who know the value of full competitive bids, and who also know that specialized, complicated equipment can be purchased on bids.

What about the machinery necessary to operate a public purchasing department properly?

Your attention is directed to Exhibit A being an organization chart of the Central Board of Purchases and Purchasing Department which illustrates how any state, county or municipal agency can function as efficiently as any private purchasing agency. Exhibit B shows the layout of the quarters of this department. Exhibit C shows the duties assigned to each of the buyers in this department. Exhibit D shows the routing of requisitions to this department. Exhibit E shows the style of specification file being used which follows that of the Federal Government. It will be noted that approximately 1,000 copies of specifications are indexed according to eleven classifications, such as A. Animal Products; B. Vegetable Food Products and Beverages; C. Vegetable Products (except foods, fibers and wood); D. Chemical and Allied Products; E. Textiles; F. Wood and Paper Products; G. Minerals--nonmetallic; H. Ores and Metals and Manufactures (except Vehicles and Electrical Supplies); I. Machinery and Vehicles, Electrical Equipment; J. Scientific and Professional Apparatus; and K. Specifications not Listed Elsewhere. A subdivision of one of these specifications is illustrated. A sample of a simple specification for joint sealer which has been adapted from federal specifications is shown under Exhibit F.

It will be noted that this specification also includes a method of test. It is important that the method of test shall be included in specifications in order that tests shall be conducted in the manner agreed upon at the time bids are received, thus avoiding a controversy as to what was wanted in the first place.

The purchasing problem of a municipality are similar to those of a county or a state and the recommended basic procedure is the same. These principles of efficient purchasing should be carried out so far as possible in making purchases of materiel wherever possible. While it is true that during the stress of war, time is of the essence, yet it is folly to cast safeguards to the winds in order to meet deadlines of delivery when these safeguards can be employed and the deadlines met. During World War II much negotiated buying was conducted. That was due to the urgency of meeting deadlines. The Federal Government waived its requirements of advertising for bids for a stated period of time and authorized its procurement officers to negotiate directly with producers and sales agencies in order to maintain delivery schedules. This procedure, however, does not preclude the possibility of obtaining competitive offers except where there is a shortage of materials or facilities for producing materials; then of course the search narrows down to getting a supplier who will make delivery on time. There were many instances such as the latter which prevented the functioning of orthodox purchasing procedures. It should be borne in mind that in order to protect the taxpayers' interests, the competitive procedures should be employed wherever possible and practicable. It might be thought that because of the many thousands of small items which the procurement officer must obtain that these small items would not warrant the expenditure of time, effort, and office stationery to obtain competitive bids. However, if these items are classified according to commodity groups and the requisitions are pooled, it will be found that usually there are sufficient quantities to warrant taking competitive bids. Not only will this procedure result in lower prices because of the larger quantities, but it will cut down the number of orders and vendors' deliveries. He considers these in making up his bid. It will also greatly reduce the work load of the procurement officer.

What are the pressing problems of state purchasing agencies? This week at Sarasota, Florida, a group of state purchasing officials is considering the following subjects and problems:

1. Should the state purchasing director be under the "merit system" or serve at the pleasure of the governor as a top administrative official and department head?
2. Should centralized purchasing ever exercise any control over the operating of departments?

3. How can budgeting and purchasing be coordinated for better over-all results?
4. Effects on state purchasing of possible economic development and national defense and foreign aid programs. These effects might be, for example, expanded or curtailed state activity; price and supply trends: federal surplus food and property disposal; rationing, price control, and allocations.
5. Proper organization and staff of purchasing office (best combination of functions, types of skills required; training buyers; salaries).
6. Simplified operating procedures and minimum records to do an effective job; unit cost analysis.
7. More effective purchasing by making the state a better customer. Steps in this direction might be negotiated contracts; eliminating deposits and bonds with bids and contracts; higher limit for spot-market buying; using commercial specifications; more latitude in making awards and more prompt payment.
8. Approved reporting and public relations programs with the departments served, the legislature, vendors and contractors, trade and civic groups, and the general public.
9. Anticipation of requirements and types of contracts.
10. Specifications and test programs.
11. Housekeeping services; property inventory; central mailing; printing, car pool management; central stores and warehouses.
12. Prospective federal procurement and surplus property disposal programs.
13. Special technical buying problems in any commodity field including steel, tabulating equipment, oil, tires, batteries, typewriters, drugs, cleaning materials, etc.
14. The effect of the steel basing point decision on state buying.

In October of this year at Philadelphia, Pennsylvania, the National Institute of Governmental Purchasing, which includes purchasing agencies of federal, state, county and municipal and other tax supported units of government, considered the following subjects and problems:

1. Progress of the National Academy for Public Purchasing of Washington, D. C.
2. Standards and Specifications; Their Sources, Use and Value.1/
3. Buying on Specifications, (a) Performance, Brand or on Combinations of these three methods, and (b) Reasons for selecting each method or combination.2/
4. Report of National Survey of Salaries and Responsibilities of Public Purchasing Officials.3/
5. Organizing and Operating a New Public Purchasing Department.4/
6. Eliminating Bid Deposits and Performance Bonds.5/
7. Assistance of graduate students given to state and local units of government, including research and preparation of reports.6/
8. Procedures and Systems in a Public Purchasing Office.7/
9. The Fiscal Problem of Cities.8/

It will be observed from these programs that the problems of state purchasing are similar to those of local units of government. They are also similar to those of the Federal Government.

The buying problems of the county highway commission previously discussed could have been due to (1) an ignorance of modern purchasing methods and techniques, (2) lack of centralized buying authority and responsibility, and (c) lack of suitable rules and regulations governing the procurement function.

- 1/ Willis McLeod, Deputy Director, Standards Branch Bureau of Federal Supply, U.S. Treasury Dept, Washington, D.C. & Dr. G. W. Winchell, Service Division, U.S. Testing Co., & former Supervisor of Testing Bureau, State of N. J., Trenton, N. J.
- 2/ Miss Mary E. O'Connor, Director of Purchase, N.Y. State Division of Standards and Purchase, Albany, N. Y.
- 3/ David Joseph, Special Survey Director & Certified Public Accountant, New York City.
- 4/ Leo A. Murray, City Purchasing Agent, Chicago, Illinois.
- 5/ John Splain, Commissioner of Purchase of the City of New York and Omar T. McMahon, Asst. City Attorney, Milwaukee, Wisconsin.
- 6/ Dr. Stephen B. Sweeney, Director of the Institute of Local and State Government, University of Pennsylvania, Philadelphia.
- 7/ Richard Neumaier, Systems Analyst and Consultant, Philadelphia.
- 8/ Carl H. Chatters, Executive Director, American Municipal Assoc., Chicago, Illinois.

A better case for the need of efficient centralized purchasing could not be presented. The procedure of buying elicited by the questions of these highway commission witnesses illustrates how public buying should not be done. If this information serves as a warning to others that slipshod and inefficient purchasing practices will not be tolerated and that favoritism has no place in public buying, it will have served its purpose.

The problem similar to those posed by this county highway commission are sometimes the result of political pressures. Purchasing officials should be insulated from these pressures if possible. The setting up of a board or committee of procurement which would set the procurement at least one step removed, from the legislative branch of the government, would assist in relieving political pressures from purchasing officials. Purchasing officials should further insulate themselves and their offices from political pressures by establishing sound business rules and regulations governing the conduct of their office. These rules and procedures should be set forth in an office manual to be referred to by all employees of the office and representatives of other public offices. Every department head and every vendor will then be given the same fair treatment. In setting up these rules it should be borne in mind that the responsibility of buying articles suitable for the intended purposes is squarely on the shoulders of the purchasing official and his staff. The burden of proof that an article offered by a vendor complies with specifications is on the vendor's shoulders. The judge of compliance is the purchasing official. It should be borne in mind that the merits of any controversial matter relating to an impending award of contract should be judged carefully and the interests of the public be kept uppermost. Unless an aggrieved vendor can fully establish his position as low responsible bidder and can satisfy fully the requirements of the official specifications used by the purchasing agency, his interests should not supersede those of the taxpayers. A good rule to follow is; "When in doubt as to the merits of a case, reject bids. Then prepare more definite specifications clarifying the moot point or points and readvertise." The chief strength in existing efficient purchasing systems lies in these established procedures. The chief weakness of others lies in the fact that many are not firmly established by law, rule and regulation and consequently are made political footballs through the machinations of politicians within and without the purchasing agency. The day when public purchases are completely exempt from this type of political pressure will indeed be a bright one. That is the goal for which the National Institute of Governmental Purchasing is constantly striving. It is our belief that through the education of public officials and the public in general we shall eventually create a realization on the part of those having to do with public purchasing that this function is a strictly business profession which has no place in political deals. Such

a universal concept of public purchasing will also encourage better qualified purchasing agents to seek public purchasing as a career. Unless such insulation against political maneuvering and favoritism can be assured those contemplating such a career, I would be the last one to recommend it to them.<sup>1/</sup>

Thank you.

QUESTION: I would like to know what effective means you have run across for detecting and overcoming evidences of collusion when you open the bids and find they are identical?

MR. NICHOLSON: Our procedure is to report them to NIGP, the Federal Trade Commission, and the United States Department of Justice. I can say this without divulging any secret information, that FBI representatives are coming into our office next week and will probably spend two weeks there studying that very problem. They did the same thing two years ago. These are spot checks that are made to see whether there is any evidence of collusion. I recommend that to you all.

When I do that, I report to my board that I have done it. I am always happy to see the evidence of results. I was told, when I reported that to the FTC, that nothing would come of it. I was happy to note that a great deal has come of it. You probably have read about the case in Cleveland concerning electric fixtures. That is now going to trial.

QUESTION: Do you use any contracts with escalation clauses? Do you have to in order to get material?

MR. NICHOLSON: We have one or two where it was impossible to obtain the materials without escalation. One specifically is coal. We do permit escalation in other contracts due to causes which are general in the industry and which are beyond the control of the supplier, for instance, an increase in freight rates or an increase at the mines. But basically our law prevents us from buying with escalator clauses.

<sup>1/</sup> "The Purchasing Agent who must scheme to hold his job from year to year, whose tenure of office depends on party success at the polls, will usually be more of a politician than a buyer. His chief concern will be to save his job rather than the taxpayers' money." From "The Need for Business Principles in Government Buying" by L. F. Boffey.

We have one particular item, water pipes, which cannot be purchased without escalation. Our law permits us by a two-thirds vote of the council elect to buy without a formal contract. We have bought close to two million dollars worth of pipe with an escalator clause because we had to have the pipe and we couldn't buy it without the escalator clause. There are not enough people in the business, and they are loaded right up. In other words, they call the tunes.

QUESTION: Just a question on programming your requirements. How do you go about establishing requirements? Do you work them up with the procurement agent, or are they supplied to you every six months in advance, or twelve months, or how do you arrive at those?

MR. NICHOLSON: We work on a strict budget. Amounts are set up each year. Our budget is established the 1st of January. We don't wait until that time. We wait until the 25th of November, when the budgets are approved by the common council. They do not become effective, as I said, until the 1st of January. Our law permits us to anticipate requirements. We anticipate our major contracts when the market conditions are favorable. If prices are high, as they are now, we are going to wait and we will wait as long as we can before we advertise for bids.

I have in mind one of the state purchasing agencies which immediately after the first of the year published huge lists of materials, I happened to be there. I read those huge lists. Irrespective of market conditions, this purchasing agent merely listed everything he wanted. He wanted to get it under contract as quickly as he could. That is not a good buying job, as you know. So we watch the market.

For example, the matter of delivery is important. We had a case of anti-freeze, which is scarce, and skid chains, which are very hard to get. So in March of this year we bought skid chains and alcohol for this winter.

QUESTION: Do you make any joint purchases with other municipalities, or is your purchasing all for your own service?

MR. NICHOLSON: Yes, we do. We, for example, make a contract for light bulbs, which is participated in by independent agencies in our jurisdiction, including the county. We let contracts for coal in the same manner. We do the same in the purchasing of paper and many other items. We find it very beneficial. It increases our quantities and they are very happy because they get the benefit of our low price.

QUESTION: How far would you patronize, say, the industries within the city as opposed to those outside? Will the state patronize those enterprises within the state in purchasing as opposed to those outside?

MR. NICHOLSON: We have a policy--it is written out so we can't change the rules as we go along--that, all other things--price, quality, and service--being equal, business shall be awarded on a public drawing of lots--we have a machine for drawing so there can be no finagling. First, we consider those with a city of Milwaukee address--must be in the telephone book, next the county, and next the state. Since we adopted that policy, we haven't had any difficulty.

When we award a contract for lumber say, on a differential of five dollars on a big contract and it goes down to some place in Georgia, we do get a little complaint from local people that we should have overlocked that five dollars and given the contract to local taxpayers. But I always point out the fact that during the business depression our Milwaukee industries were able to get along because of business mainly from the outside. I have in mind a bridge that was built for the State of Missouri by a Milwaukee company when everyone was sitting on his hands, and about 2,500 Milwaukee men were employed in that plant as a result of that. Now, if Missouri had decided it would keep its business in Missouri, we would not have gotten that order. We do not want to feel that Milwaukee has built a Chinese wall about itself.

I am glad you brought that question up, because it comes up constantly in public buying. These taxpayers will come in with an alderman or supervisor and say, "wait a minute" and try to make you believe that because they are taxpayers, they ought to get that business. But I will say, "This is a business office. If you have the stuff and you are low, you will get the business." They all know that. Once they know that is the policy, they say, "There is no use going to talk to Mr. Nicholson. He won't do a thing about it." Well, that is the end of it. In other words, we have to be tough. They think I am pretty tough. They say I can send them out of the office with a smile but "He is a tough cookie."

QUESTION: If it becomes desirable or necessary to accept other than the low bid, who takes the responsibility? The second part, having taken the responsibility of accepting other than the low bid, how do you handle the squawks?

MR. NICHOLSON: Well, in a matter of importance, advertising a contract, if the low bid is not satisfactory, our board decides, on my recommendation as a rule, that the low bid is not satisfactory and should be rejected. If the low bid, however, complies with the specifications, then we decide to prepare new specifications and readvertise, because if the specifications as written are not giving us what we want, we should not use a subterfuge to reject that low bid and award it to the next lowest bidder. That is not fair to the low bidder who could have bid on the correct specifications in the first place. So we revise the specifications and readvertise and award the contract.

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Now, to avoid that difficulty we found that in controversial items, say, a large purchase of equipment, it is best to get the specifications out before advertising, get them out in the field to the persons who are expected to bid on them, get your engineers in and talk it over with them, let them bring up their points then, and in that way you more or less get a meeting of the minds before you advertise. You get the bugs out of your specifications that way. What was the last part of your question?

QUESTION: If having decided to take other than the low bid—I was thinking not so much along the line you were talking about—but suppose you were buying a large power shovel and you already had two or three comparatively new. Somebody comes along and decides to give you a bid on one of the other makes for \$50 less. It is going to cost you several hundred dollars extra for spare parts. You might decide that you might want to take other than the low bid. How would you take care of that problem?

MR. NICHOLSON: Of course, as I mentioned before, under the two-thirds vote the council could permit an award to other than the low bidder. It has been our experience when we have gone before the council, as we did years ago, and have asked permission to buy that other shovel, we got something that wasn't even bid on. They would decide what they would buy.

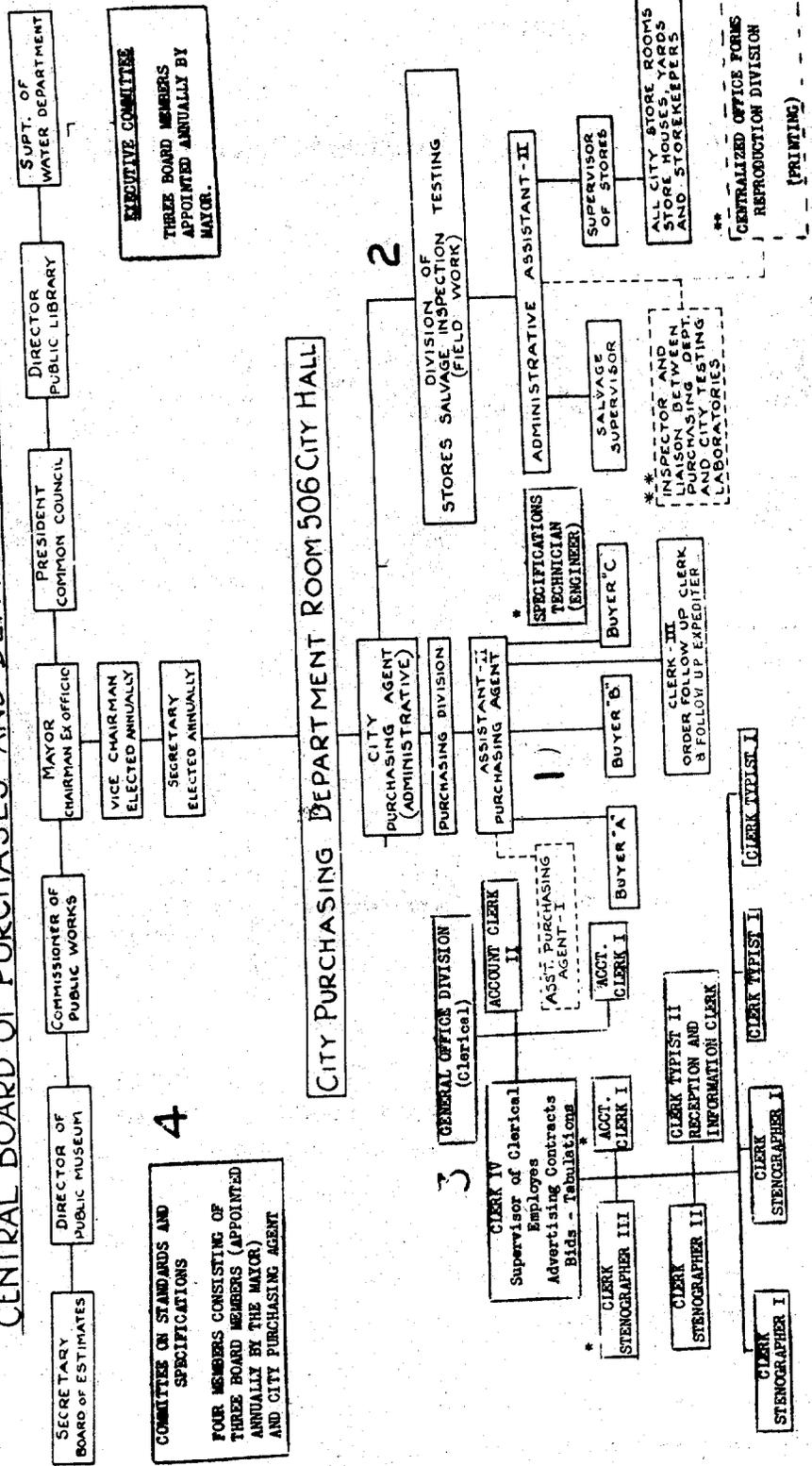
So if we decide that is what we want, we have these men in the board room and we tell them, "Gentlemen, we appreciate your bidding, we are awfully glad you came in, but we have decided that it will cost more, because of this little difference, to award this contract to the low bidder. So we are going to readvertise this job"—or we are going to the council, one or the other. If I had my say, we would not go to the council. We would get specifications that would stick and we would stick by the low bid. We do that right along. You would be surprised how many of these items that you get on a low bid are actually better than what you have been using. People are sold on an item and that is what they want.

GENERAL HOLMAN: Mr. Nicholson, speaking for the faculty and students of the College and our guests this morning, we are deeply appreciative of this very splendid talk and discussion, the treatment of the questions in your frank answers. We certainly appreciate your coming here and being with us today. Thank you.

(25 January 1949—450) S./mmg

EXHIBIT A

# CENTRAL BOARD OF PURCHASES AND DEPARTMENT OF PURCHASES



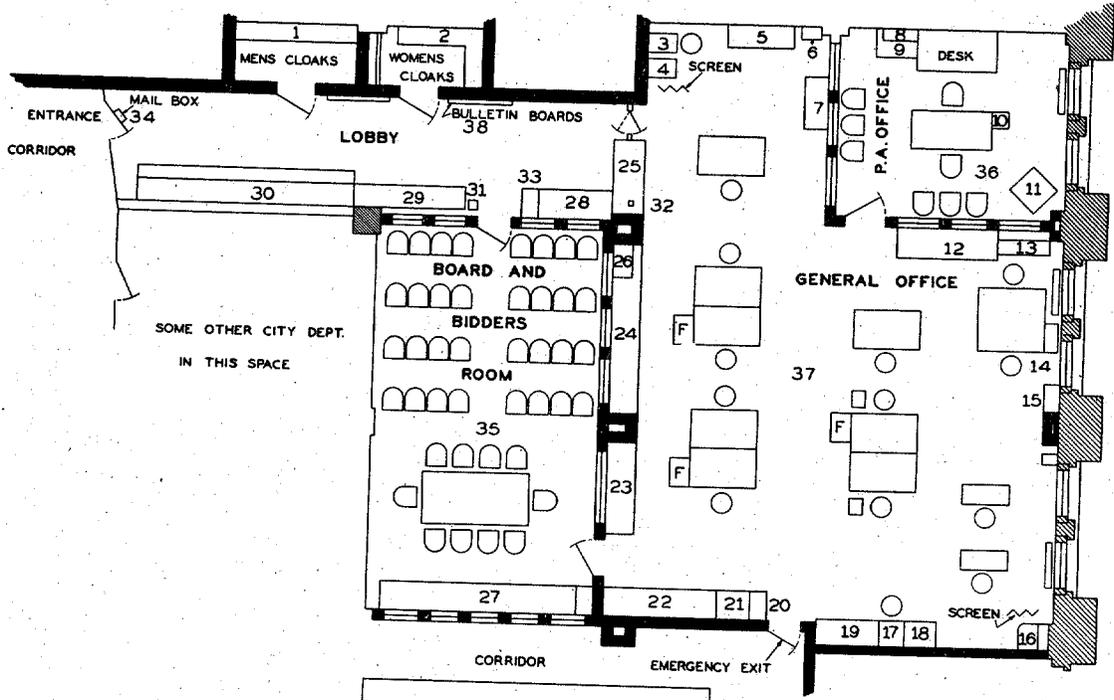
DRAWN BY W.T. HARRIS. REVISED 7-22-1948

\* Proposed new positions for 1949 budget.  
\*\* Projected for later date.

- (1) Purchasing and Contract Division
- (2) Field, Stores, Inspection, Testing, Salvage Division
- (3) Clerical Division
- (4) Standards and Specifications

EXHIBIT B

SUGGESTED LAYOUT FOR PURCHASING DEPARTMENT



- |  |                                     |   |                             |
|--|-------------------------------------|---|-----------------------------|
| 1 SAMPLES AND SUPPLIES                   | 11 RECORD CABINET                   | 21 SUPPLY CABINET                                 | 31 MAGAZINE STAND           |
| 2 SUPPLIES                               | 12 CONTRACT AND SPECIFICATION FILES | 22 REQUISITION FILES                              | 32 TIME STAMP               |
| 3 DITTO MACHINE                          | 13 BIDDERS FILES                    | 23 PURCHASE ORDER FILES                           | 33 STEEL FILE FOR BIDS      |
| 4 MIMEOGRAPH MACHINE                     | 14 MISCELLANEOUS FILES              | 24 CORRESPONDENCE SPECIAL ORDER & QUOTATION FILES | 34 MAIL BOX                 |
| 5 MISCELLANEOUS FILES                    | 15 " "                              | 25 CONTRACT FILES                                 | 35 ROOM TO OPEN BIDS        |
| 6 MACHINE FOR SHAVING DICTAPHONE RECORDS | 16 LAVATORY                         | 26 MAIL CABINET                                   | 36 PURCHASING AGENTS OFFICE |
| 7 BENCH FOR SALESMEN                     | 17 VISIBLE CARD RECORD FILE         | 27 CATALOG AND BLUEPRINT FILES                    | 37 GENERAL OFFICE           |
| 8 BOOKCASE                               | 18 SAFE                             | 28 BIDDERS DESK                                   | 38 BULLETIN BOARDS          |
| 9 FILES                                  | 19 MISCELLANEOUS FILE               | 29 BENCH FOR SALESMEN                             | 39 SIGNAL BOARDS            |
| 10 DICTATING MACHINE                     | 20 HOUSE NUMBER CABINET             | 30 SAMPLE CABINET                                 |                             |

EXHIBIT C

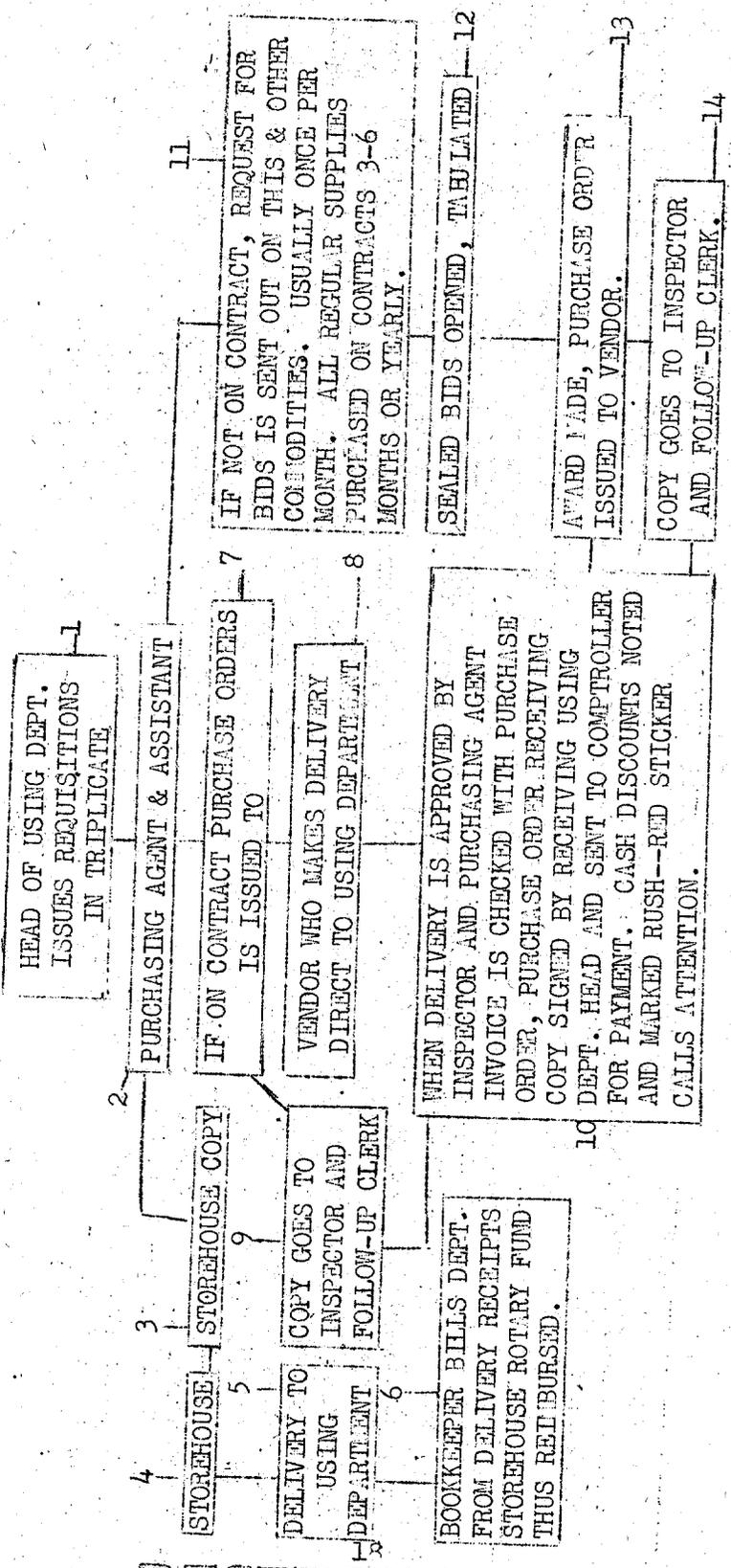
PURCHASING DIVISION  
DISTRIBUTION OF WORK LOAD

PURCHASING AGENT (Formal Contracts)	ASST. PURCHASING AGENT (Informal Contracts, Term and Price Agreements, Emergency Orders)	BUYER	BUYER
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<p>Oils, greases, lubricants.</p> <p>Books, publications and subscriptions (contracts). Fuel: coal, coke, gasoline, fuel oil and wood. Machinery, heavy equipment, motor vehicles, Boats, Radio transmitting equipment (Major) X-Ray equipment. Other major contracts.</p>	<p>Mechanical equipment, machinery parts and supplies.</p> <p>Hose and fittings.</p> <p>Belting.</p> <p>Meter &amp; repair parts; water.</p> <p>Automotive parts and accessories.</p> <p>Precision instruments and gauges.</p> <p>Miscellaneous.</p>	<p>Building materials.</p> <p>Electrical apparatus, accessories and parts.</p> <p>Radio and sound signal apparatus (minor).</p> <p>Welding supplies.</p> <p>Office equipment and furniture.</p> <p>Textiles and wearing apparel.</p> <p>Janitorial supplies.</p> <p>Drugs, acids, chemicals and gases.</p> <p>Foods.</p> <p>Hospital and laboratory apparatus and supplies.</p> <p>Repairs and services.</p> <p>Miscellaneous.</p>	<p>Drafting supplies, Metals, castings, forgings, sheets, bars, plates, shapes.</p> <p>Printing: books, cards and forms.</p> <p>Books and publications (informal). Paper.</p> <p>Office supplies &amp; stationery.</p> <p>Badges, plates, and tags.</p> <p>Cordage; rope, twine cord, hemp, jute, manila, oakum, and cotton.</p> <p>Miscellaneous.</p>
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RESTRICTED

EXHIBIT D  
 PURCHASING PROCEDURE  
 FOR  
 STATE, COUNTY, OR MUNICIPALITY



## APPENDIX NO. 1.

## EXHIBIT E

The specifications file consists of approximately 1,000 copies of specifications that are indexed according to the following classifications:

- A. Animal Products
- B. Vegetable Food Products and Beverages
- C. Vegetable Products (except food, fibers and wood)
- D. Chemical and Allied Products
- E. Textiles
- F. Wood and Paper Products
- G. Minerals--Nonmetallic
- H. Ores and metals and manufactures (except Vehicles and Electrical Supplies)
- I. Machinery and Vehicles, Electrical Equipment
- J. Scientific and Professional Apparatus
- K. Specifications not Listed Elsewhere

and are subdivided more specifically as per example 1/ as follows:

F. WOOD AND PAPER PRODUCTS

F-1 - LUMBER

F-1-1 GENERAL SPECIFICATIONS

F-1-1a Oak

F-1-1a1 White Oak

F-1-1a1-a Bridge plank (also misc.)

F-1-1b Pine

F-1-1b-1 White Pine

F-1-1b-2 Yellow Pine

F-1-1b-2a Dense South, salt-treated Pine

1/ A sample specification is attached. These specifications are obtained from the following institutions: Federal Spec. Board, National Bureau of Standards, Federal Bureau of Supply, American Society for Testing Materials, American Standards Association other municipalities, City of Milwaukee Engineers, Chemists, Department Heads and Technicians.

F-1-c Hemlock

F-1-ld Poplar

F-1-le Spruce

F-1-lf Redwood

F-1-a Wood Poles

F-1-2a Red Cedar

F-1-2a1 Western Red Cedar

F-1-2b Flag Poles

ETC.

## SAMPLE SPECIFICATION

City of Milwaukee  
Spec. No. G-1-2-d1  
May 9, 1946

JOINT SEALER

Joint sealer shall be of the hot poured type for concrete pavement and shall conform to requirements of Federal Specification SS-F-336. It shall be composed of a mixture of materials which will form a resilient and adhesive compound capable of effectively sealing joints in concrete against the infiltration of moisture throughout a complete cycle of expansion and contraction.

When the joint sealer is tested in accordance with methods described in Federal Specification SS-F-336, it shall conform to the following requirements:

- (a) Pour Point--not more than 450 degrees F.
- (b) Melting time--not more than 60 minutes.
- (c) Penetration -
  - (1) At 32 degrees F 200 g., 60 sec.,--not less than 0.28 cm.
  - (2) At 77 degrees F 150 g., 5 sec.,--0.45 to 0.75 cm.
- (d) Flash point--not less than 550 degrees F
- (e) Flow--not more than 0.5 cm.
- (f) Bond test--there shall be no cracking of the joint sealer or failure in bond between the joint sealer and the mortar test blocks at the end of five cycles.

Bureau of Street Construction & Repairs

1070