

DESIGN-BUILD SEMINAR

P R O G R A M M E

FIRST DAY:

- | | | |
|--------------------|-------|--|
| 8.00 - 8.10 a.m. | I. | Introduction of Seminar and Class by Butler (U.K.) Staff. |
| 8.10 - 8.25 a.m. | II. | General Technical Housekeeping (Butler (U.K.) Staff and RJS). |
| 8.25 - 8.40 a.m. | III. | Ground Rules (RJS)

How does the class, Dr. Thomas and Ralph Stephenson do business over the next two days?

A. Specific ground rules and suggestions.

B. Purposes of Seminar.

C. Approach patterns to the philosophy of total design and construction services. |
| 8.40 - 9.30 a.m. | IV. | Basic Concepts of Design-Build (1) (RJS) |
| 9.30 - 10.00 a.m. | V. | Organisational Concepts important to the Design-Build Function (RJS) |
| 10.00 - 10.20 a.m. | | Coffee Break |
| 10.20 - 11.00 a.m. | VI. | Building a Healthy Total Service Organisation (HT) |
| 11.00 - 12.00 Noon | VII. | Basic Marketing Concepts in Design-Build (RJS) |
| 12.00 - 1.00 p.m. | | Luncheon |
| 1.00 - 1.20 p.m. | VIII. | Film Strip on Design-Build (U.K.) Staff |
| 1.20 - 3.00 p.m. | IX. | The People Aspects of Design-Build (HT) |
| 3.00 - 3.20 p.m. | | Coffee Break |
| 3.20 - 4.45 p.m. | X. | Basic Profit Concepts in the Design-Build Function (RJS) |
| 4.45 - 5.00 p.m. | XI. | 4.45 Round-up and Homework Assignment. |
| 5.00 p.m. | | Adjournment. |

SECOND DAY:

- | | |
|--------------------|---|
| 8.00 - 9.00 a.m. | I. Critique on Response to Homework Assignment (HT and RJS). |
| 9.00 - 10.00 a.m. | II. The Psychology of Design-Build Selling (HT). |
| 10.00 - 10.20 a.m. | Coffee Break |
| 10.20 - 11.45 a.m. | III. Profiling, Planning, Proposing and Controlling in the Design-Build Market Place (RJS). |
| 11.45 - 12.00 Noon | IV. 11.45 Round-up and Discussion (HT and RJS). |
| 12.00 - 1.00 p.m. | Luncheon |
| 1.00 - 2.00 p.m. | V. Basic Control Systems and Techniques in Design-Build (RJS) |
| 2.00 - 3.00 p.m. | VI. Controlling Motivation in Sellers (HT). |
| 3.00 - 3.20 p.m. | Coffee Break |
| 3.20 - 4.00 p.m. | VII. Controlling Motivation in Buyers (HT). |
| 4.00 - 4.45 p.m. | VIII. Principles of Preparing a Successful Design-Build Proposal (RJS). |
| 4.45 - 5.00 p.m. | IX. Seminar Wrap-up and Presentation of Certificates (U.K.) Staff. |

Without bidding

Negotiated contract sometimes best

By Forrest M. Holly

Special to The Christian Science Monitor

Escondido, Calif.

People have been educated to the notion that competitive bidding by prime contractors is the only way to safely build.

Less well known is how a negotiated contract may better serve the interests of owner, architect, and contractor.

Where taxpayers' money is used, competitive bidding may be legally mandatory, making an exclusive contract virtually impossible. Negotiated contracts may, therefore, apply to private rather than public construction.

To be sound and safe for the principals, three basic components must be present in a negotiated contract: A fair-minded owner; an honest, experienced builder; a thoroughly competent set of plans and specifications.

A three-wheeled vehicle, such a contract requires that all wheels touch the ground at the same time lest the apple cart be upset.

Before a negotiated contract is signed, owner, architect, and contractor must assure themselves that the others are trustful and trustworthy. The complicated business of building demands attitudes of equity to resolve problems during the course of construction.

Mutual trust and respect, like a lubricant, reduce friction. Honesty, fairness, and experience must exist in depth to warrant the intimacy of an exclusive contract.

Don't skimp on plans

When the plans and specifications are adequate and complete, routine issues remaining are then readily resolved among owner, builder, and architect.

Some owners have said: "I'll spend less on the plans and put that money into something nicer in the construction." This is poor economy and inherent with disenchantments for the owner. He will find it less expensive to make a change on the drawing board than to make one in a room dimension or window location after the framing is in place.

The architect charges an adequate fee to make relevant studies of the owner's needs, translating those findings into a functional, economic, and attractive plan.

A short fee equals a short study; result, unresolved problems which devolve upon owner and contractor to settle during construction.

In any such negotiation someone is at a



distinct disadvantage. In that dilemma, self-will or self-righteousness may upset the happy development of the work as well as strain human relations.

Unstudied planning may involve the use of materials which are more costly than needed or less acceptable than desired. Also, more exact costs can be developed by the contractors from detailed plans.

The veteran builder may estimate a maximum cost when figuring a poor set of plans while the unseasoned contractor may figure a minimum.

Either way someone unnecessarily suffers or it may be the quality of the building itself.

Owners should select an experienced architect, check his performance with previous owners, retaining him at a fee sufficient to perform a thorough design service.

Honesty and fairness

To their remorse some owners have found that an inadequate set of plans costs many times over in construction the purported savings from an inordinately low design fee.

When both owner and contractor are honest and fair, the phenomenon of brotherhood appears. Such an underlying sense results in a just fee to the contractor.

Reciprocating, the trusted builder spontaneously works to achieve the best building at the lowest cost commensurate with quality workmanship and materials.

Who should initiate the concept of an exclusive contract and who should determine if all three wheels of the proposed contract vehicle are on the ground?

The final decision must certainly be that of the owner who pays the bill.

If all three aspects are evident and in depth, then go ahead, build that project on a negotiated contract.

A second article next Friday will develop the construction pricing methods within the negotiated contract itself which achieves maximum economics commensurate with quality.

Negotiated contract: pricing it

By Forrest M. Holly
Special to The Christian Science Monitor

Escondido, Calif.

An exclusive building contract between owner and builder may include disciplined, economic safeguards when the method of establishing costs is enlightened.

Direct construction costs are composed of subcontracts, materials, and labor. These three categories can be oriented into the cost structure keeping the construction nearly nine-tenths competitive.

The prime building contractor sublets to specialists the major portion of the proposed work.

Three or four qualified subcontractors are selected for each category and invited to bid their portion of the work.

The lowest responsible bid is then accepted. Thus grading, concrete, lath and plaster, metals, roofing, painting, paving, plumbing, heating, electric are delegated on a prequalified yet competitive basis.

Labor cost variable

The remainder of the proposed work is divided about equally between materials and labor to be furnished by the prime contractor.

Material lists are accurately taken off the plans and submitted for pricing by three or four responsible qualified suppliers. Bidding for these materials has extended the competitive disciplines, preserving the economic interest of the owners.

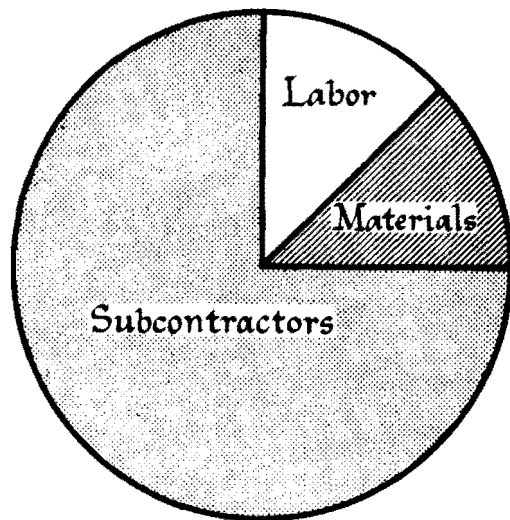
While exact pricing by subcontractors and suppliers is predeterminable, the cost of human labor is not precisely known in advance of performance. Experience and judgment by the contractor form the basis for this estimate.

The efficiency of the prime contractor, his experience and integrity, influence his labor calculation.

Seasoned builder advised

Assurance of labor efficiency comes from selecting in advance a seasoned builder, experienced in the proposed type of work. His tenure as a builder is one gauge for his selection.

Apart from the atmosphere of ordinary competitive bidding, the trustworthy craftsman is bent upon labor economy commensurate with quality. Hurry-up carpentry is



replaced by deliberate haste assuring a workmanlike result.

Should the contractor's labor estimate be incidentally higher than when bidding competitively, it has the dividend of assuring a more perfect building.

The exclusive contract carefully drawn among principals carefully chosen results in teamwork in which the desires and interests of owner, architect, and builder are achieved and protected.

The contractor's profit

The accompanying chart shows cross-hatched the preponderance of competitively bid portions of a construction project. Variations in the remaining minor segment, labor, though not necessarily competitively based, affect but slightly the overall cost picture.

In the negotiations prior to contract signing, the percentage or lump-sum fee for the contractor's services with the approval of the architect is established between owner and builder.

Ten or 15 percent above the builder's direct costs may be found equitable, varying with the magnitude, complexity, and location of the work.

At the option of the principals the build-in contract may be for a fixed amount, may have an incentive or escalator clause for builder and owner, may be with or without an open end.

Disciplined by a fair owner, an honest experienced builder, a thorough set of plans and specifications, and with subcontract and material costs competitively reached, a negotiated contract favors the discriminating owner, gratifies the architect, stimulates the contractor, and enhances the perfection of the building.

Second of two articles on the negotiated contract.



ARCHITECTURE 1982: reversion to master builder?

Comments by B. Kaminker, Partner in the firm of Govan, Kaminker, Langley, Keenleyside, Melick, Devonshire, Wilson, Architects; 10 Price Street, Toronto 5, Ont.

In response to an awakening public demand, should the field of architecture be broadened to include not just the design of the single building but the total environment! Should it include the role of program writer, project manager, quantity surveyor — even contractor — a reversion to the role of master builder?

The architect realizes that the objective of his profession is the creation of a worthy environment and that such an environment cannot be achieved without large scale planning.

He realizes too, however, that the example of a single, imaginative well-executed building may spark the design of a much larger environment.

A demand will create its own supply. If there is a demand for more comprehensive architectural services, it will be filled; either by professional planners or by others.

Should the architect try to meet this demand?

Or should he concentrate on improving rather than expanding?

Within his sphere of influence there

are many problems requiring his immediate attention.

What should be done to improve the relationship between engineer and architect?

What should be done about the irresponsible contractor, manufacturer, supplier?

What should he do to keep abreast of a rapidly changing technology?

And then most important of all, how does he prevent the human aspect in design from being overwhelmed by technology, management and money?

One thing is certain. The human aspect is the one durable aspect of architecture. If this can be achieved, neither the architect nor the public need have any concern for tomorrow.

What is the best kind of organization to achieve this?

Can it best be achieved by larger and larger architectural firms encompassing within their own organization all the skills and talents necessary for total design and construction?

Or can this best be achieved by the profession narrowing its own field of practice in the interests of a more specialized know-how and calling upon sister professional specialists to act as team mates?

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PARTICIPANTS IN DESIGNING AND BUILDING ENVIRONMENTS

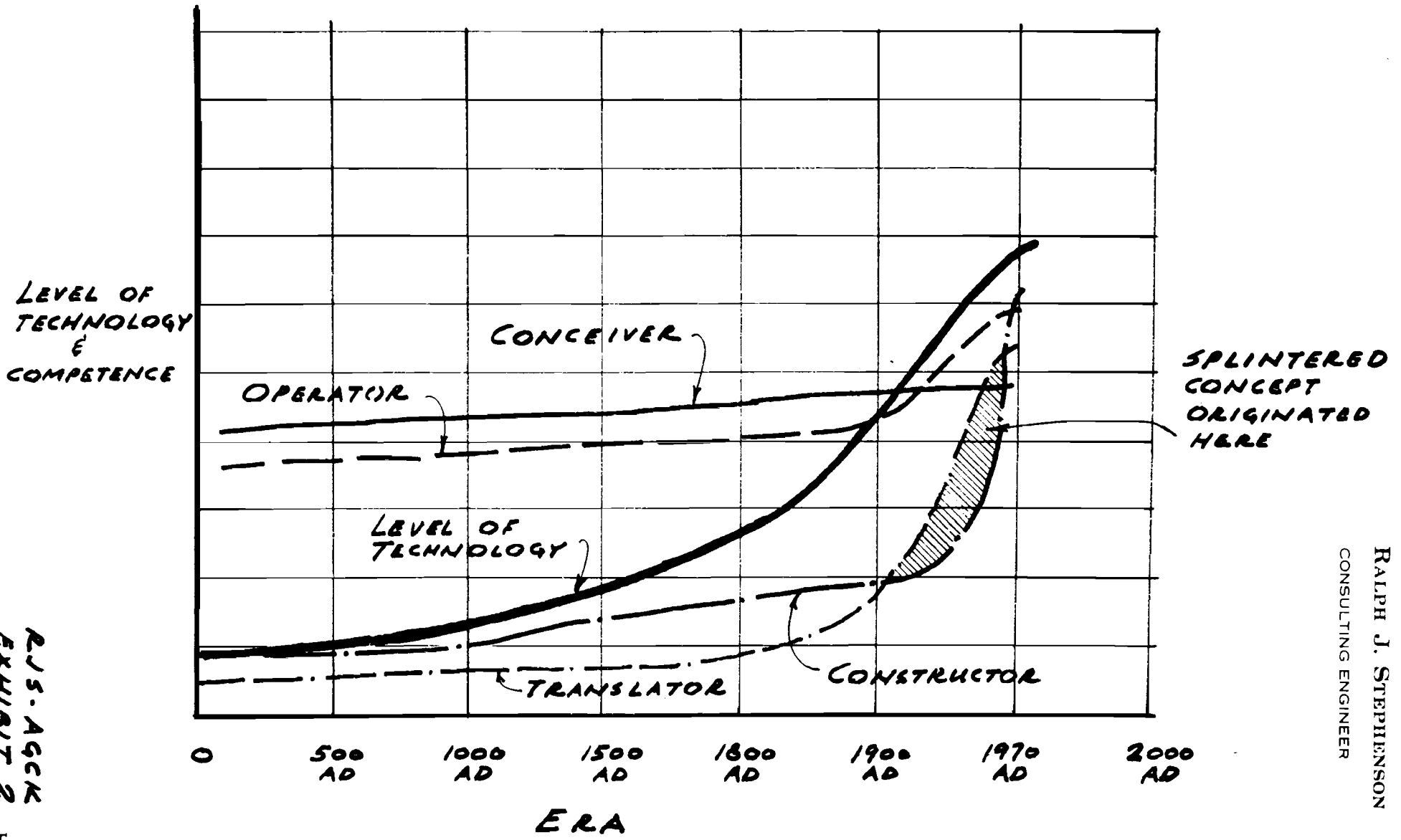
There are four basic participants in the process of designing and building environments. These are the

- Conceivers, - Translators, - Constructors, - Operators

- Conceivers - Those who conceive the idea and provide the wherewithall to bring the environmental program to a successful conclusion. The conceiver may be the owner but it may also be a governmental agency, a financial source, an architect, a contractor, a vendor or even a tenant looking for space. We identify the conceiver since he usually is the key person driving the project on to completion.
- Translators - Those who translate the concept into construction language. Traditionally, we think of the architect/engineer as the translator. However, careful thought on this matter will show that there are many others who translate the conceiver's fundamental idea into some kind of understandable, workable construction language. Sub contractors, suppliers, vendors, manufacturers, contractors, the conceiver, himself, may all play a role in translating.
- Constructors - Those who interpret the construction language and convert it into an actual physical environment. Occupying this role are the general contractor, sub contractors, vendors, suppliers, manufacturers and others who actually put the materials into place in the field.
- Operators - Those who take over the completed physical environment and make it function on a continuing basis. Usually, the party responsible for this is an owner or tenant working through a plant engineer or building supervisor. In some instances the design/build contractor can become involved on a maintenance and operational basis, particularly if he has designed and built under a gross lease contract.

Identification of the parties to a project is important because it assists in defining the most important individuals in a given project situation. By accurate identification of the individuals concerned, their functional authority and responsibility can be established and optimum use made of their assistance.

LEVEL OF TECHNOLOGY



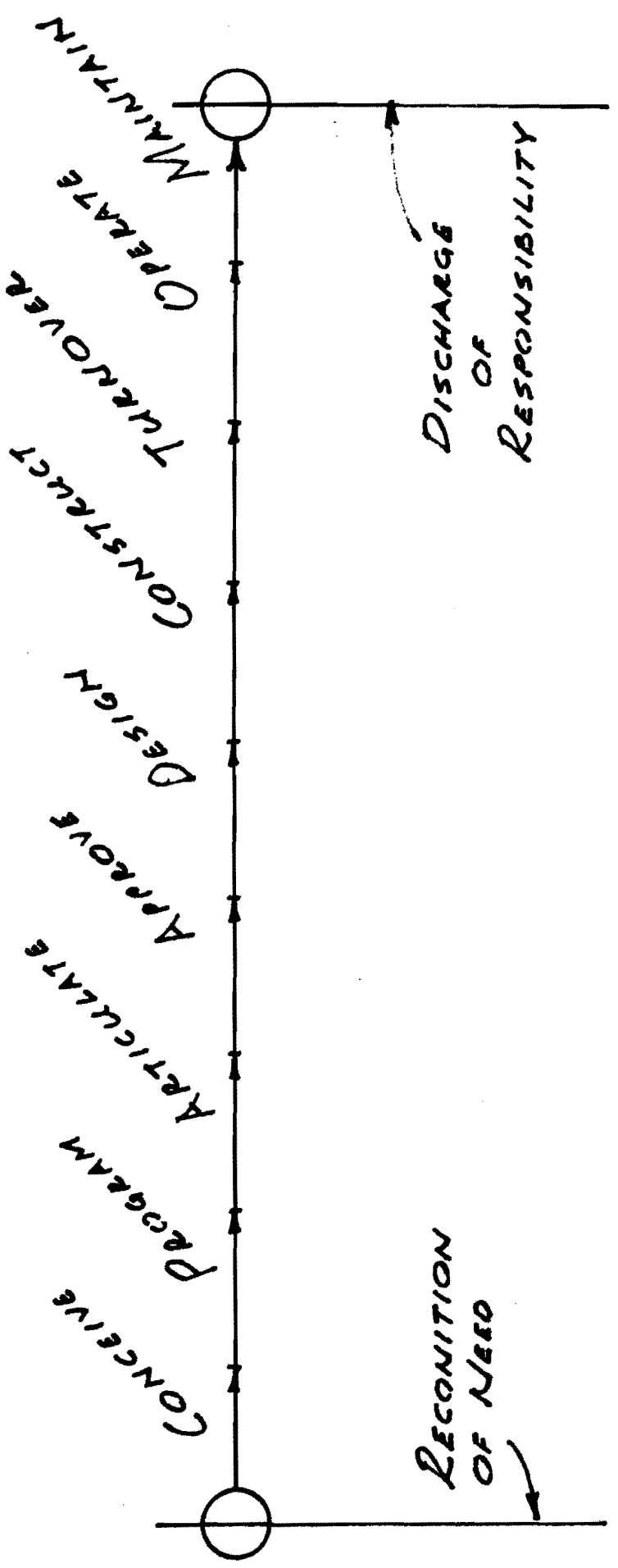
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EXHIBIT 2

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DB 1/20/72

LINE OF ACTION



ELEMENTS OF THE LINE OF ACTION

The line of action is a simple statement of the range of tasks necessary to conceive, design, build and operate an environment. The line begins at a point referred to as the recognition of need with these actions following:

- Conceive
- Program
- Articulate
- Approve
- Design
- Construct
- Turnover
- Operate
- Maintain

These all culminate at an end point called discharge of environmental design and construction responsibility. A brief description of each step is appropriate in understanding their importance to the total design and build concept.

Recognition of need is the point at which a requirement for a new environment is first felt. The good design build operation tries to become involved in this creative stage. There is a danger of getting in too early and giving away so much of the early work that the job may be lost through over-exposure at a later date. However, recognition of needs is the starting point and the sales activity starts here. Taking the points in order -

- | | | |
|----------|---|---|
| Conceive | - | During the conceptual period the need which may be for increased facilities, larger dollar volume, more efficient handling systems or a variety of other demands is visualized and put down in some rough form. It may be a pencil sketch or may remain an idea in someone's mind. Here the project sees its origin and it is this early idea that often carries through the entire project. A good conceptual grasp is essential if the project is to be successfully completed. |
| Program | - | During the programming phase, the needs of the concept are put into easily understood tabular form so many square feet for storage, so many square feet for office, so much height for shipping facilities, etc. The actual physical demands of the environment are set forth in the project program or project bible. |

- Articulate - Now the concept and program are combined into preliminary construction language. Floor plans are drawn in accordance with requirements. The functional arrangement is shown in accordance with the project bible. Materials are called out in terms of the demands of the concept.
- Approve - This is a critical point in the line of action. By now sufficient work has taken place so the manager can understand the project and say: "I like this or I don't; change this, revise this; let's increase that a bit; let's cut down here." Finally saying: "OK, I'm satisfied with this set of ideas showing the concept and the program - let's move on!" Approval unlocks the design and construction period.
- Design - In the design phase, products of the previous four steps are utilized concurrently to prepare a set of working drawings and specifications that translate concept into steel, concrete and space.
- Construct - Next, the actual environment is built. Construction is the first point where something major and tangible happens as a result of the concept.
- Turnover - When the project has been built, it is turned over with the appropriate operating manuals to the owner or tenant. Turnover is an important step since if done properly it insures that a valuable commodity, the completed environment, is properly given to those who must use it.

Neglect of good turnover procedures is often the cause of serious callback problems. We certainly wouldn't turn a complex piece of machinery over to

Turnover - (Continued)

an amateur operator and expect he would make it perform 100% right from the start. Neither should we assume that an owner can take a new environment that has just been built for him and immediately operate it at full efficiency. Time should be spent during turnover to explain how this environment is to function.

Operate - The environment is now run-in and begins to achieve its full purpose. Operation can be an important responsibility although the design/build contractor should furnish his operational functions in connection with a new environment only on a paid contract arrangement and provided he is competent to operate the facility.

Maintain - Maintenance of the physical environment is the door opener for future projects. It also assures that the environment that has been nursed through the previous eight stages will be maintained correctly so as to work at its best for those who must use it. The maintenance contract is perhaps one of the least explored areas in the more sophisticated approaches to environmental design and construction.

The end of the line of action is when the designer and builder of environments has discharged his responsibilities. In a continuing trustworthy relationship, the line of action will have no end since before it is finished, a competent professional will be re-involved in another program at its beginning.

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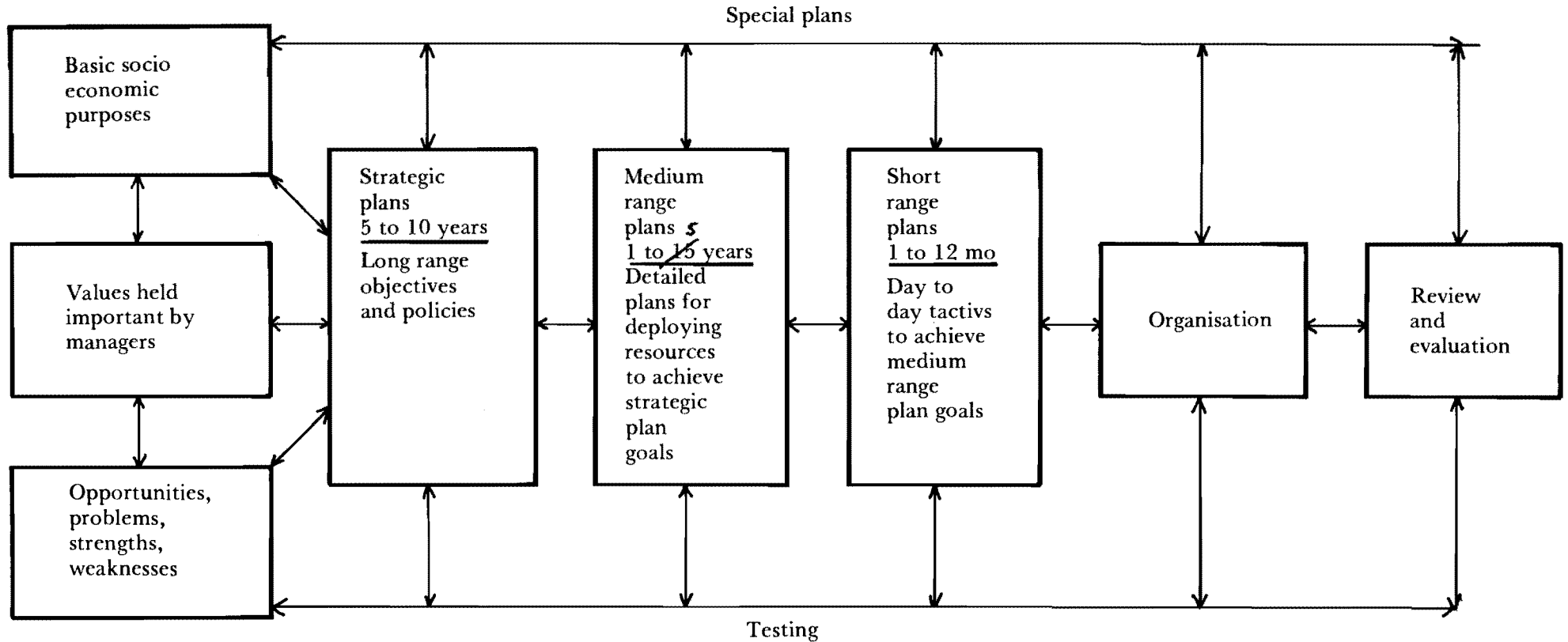
QUESTIONS OF HELP IN SETTING OBJECTIVES FOR BUSINESS MODEL

1. What business are we in?
2. What is our principal product or service?
3. What market do we serve?
4. What common qualities define our customers?
5. What is our predominant image with clients?
6. What is our major competitive edge over others in our business?
7. Where are we at a disadvantage in comparison to our competitors?
8. What business do we want to be in 5 years from now?
9. What major changes will we need to make to get there?
10. What is our present return on investment?
11. What return on investment is reasonable for persons in our kind of business?
12. What share of market do we now have?
13. What share of market do we want next month? Next year?
14. What is the major strength of our organization? How are we using it?
15. What is our major organizational weakness?
16. How can we solve it?
17. What are our specific goals for profit improvement?
18. In what ways do our personnel policies chafe our employees?
19. To what degree can we count on our key people?
20. How can we finance growth?

The above are habit forming questions designed to force you to look ahead.

A SIMPLIFIED MODEL OF ANY BUSINESS

Adapted from George A. Steiner.. Top Management Planning



THESE ARE THE PREMISES FROM WHICH YOUR BUSINESS DERIVES ITS CHARACTER

THESE ARE THE PLANS WHICH SHOW HOW RESOURCES, TACTICS AND STRATEGY ARE USED TO ACHIEVE YOUR BUSINESS OBJECTIVES

THESE ARE THE IMPLEMENTATION AND REVIEW METHODS THAT TRANSLATE YOUR PLANS INTO ACTION

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THE BUSINESS MODEL - TYPICAL ELEMENTS

When constructing a business model confusion often arises as to the method of statement and degree of explicitness in stating premises, plans and objectives. The sample statements below are guides to formulating an approach to the construction of a business model. These statements are intended to provide a pattern by which you can be specific about the characteristics of your business.

1. Premises

The basic premises upon which your business is built determine its character. These consist of three major classifications - basic socio-economic purposes, value systems of your employees and managers, and the opportunities, problems, strengths and weaknesses of the organization. Examples of how each might be stated are given below.

a) Basic socio-economic purposes

- to practice contributive design and construction in such fashion as to serve the public, health, welfare and safety, be of value to our clients and provide our company staff a sense of worth and accomplishment.
- to design and construct competently so the extra value return on excellent work will accrue to the employees.

Socio-economic purpose statements should reflect the obligation that your company has to society and the corresponding return on this investment you expect from society. They state your justification for remaining in business.

b) Values held important by employees and managers

The values displayed by individuals in any company paint a picture of that organization's attitudes. What the employee or manager considers of high value will ultimately reflect itself in an appreciation of that same trait in those with whom he must deal. Typical values that may be exhibited and are to be noted in this session of the model include:

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- Pride of workmanship
- Belief in generating positive values in others
- Mutual internal trust
- Strong desire for contributive social career
- Highly money oriented
- Work of firm low on action priority list
- Belief in straightforward, honest buying procedures
- Retaliatory

The overall statement of values collected by analyzing each key person in the company often paints an excellent collective picture of the total firm value structure.

c) Opportunities, problems, strengths and weaknesses

Occasionally confusion exists about the differences in opportunities and strengths as well as in problems and weaknesses. Opportunities represent the chance to convert a prospect into a client, the chance to make a good return on a real estate investment, the possibility, by a few extra hours at work, of meeting a specially good prospect. Strengths are those characteristics inherent within the company and individuals in the company that allow good opportunities to become profitable realities.

Problems and weaknesses have the same relationship. Problems are those specific occurrences or sometimes lack of occurrences that are causing trouble. They may include excessive warehouse pilferage, too many one-project clients or excessively high sub contract costs. The weaknesses concern characteristics of the company and individuals in approaching these problems and solving them. As with strengths, weaknesses are inherent in the company.

Strengths and weaknesses must be amplified or corrected by working with the individuals concerned. Opportunities and problems are handled best by utilizing the strengths possessed by the organization. Examples of each follow:

- Opportunities
 - Can purchase sizable real estate acreage inexpensively
 - Have ready pool of graduate engineers from local college
 - Have market control over high demand project

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- Strengths
 - Excellent financing know how available
 - Good staff understanding of design/build estimating
 - Excellent training and education program
 - Good presentation techniques
- Problems
 - Inaccurate estimating
 - Construction supervision inadequately trained
 - Poor middle management structure
- Weaknesses
 - Lack of leadership in construction division
 - Accounting department's judgment faulty
 - Board of directors unresponsive to construction company needs
 - Experience limited, staff able to build only small steel framed buildings
 - Excessive paternalism at top management levels
 - Over-dependency upon company president

2. Plans and Objectives

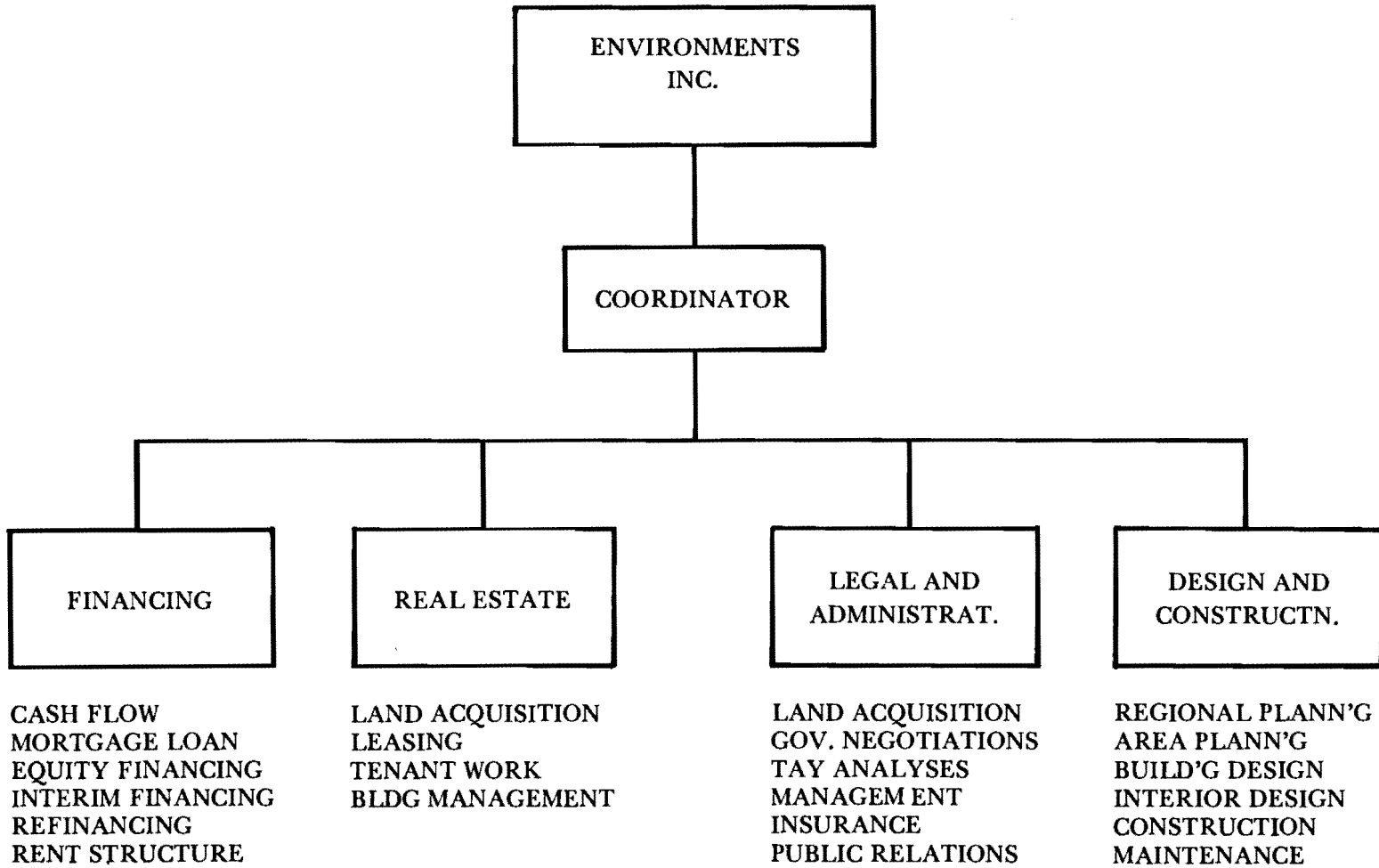
Plans and objectives are divided basically into three types - strategic plans, covering a 5 to 10 year period in the future; medium range plans covering a 1 to 5 year period in the future; and short range or tactical plans covering from now to 12 months in the future. Typical plan statements might be as follows:

- Strategic plan objectives
 - to expand geographically by deliberate diversification and strengthening of related business activities. Geographic expansion should be in response to market place demand stimulated by institutional and response advertising. The market area should be increased in 10 years to an approximate radius of 300 miles from the home base office. The five to ten year plan should also anticipate expansion to a Canadian market in or near Toronto and to within a 50 mile radius of that metropolitan area.

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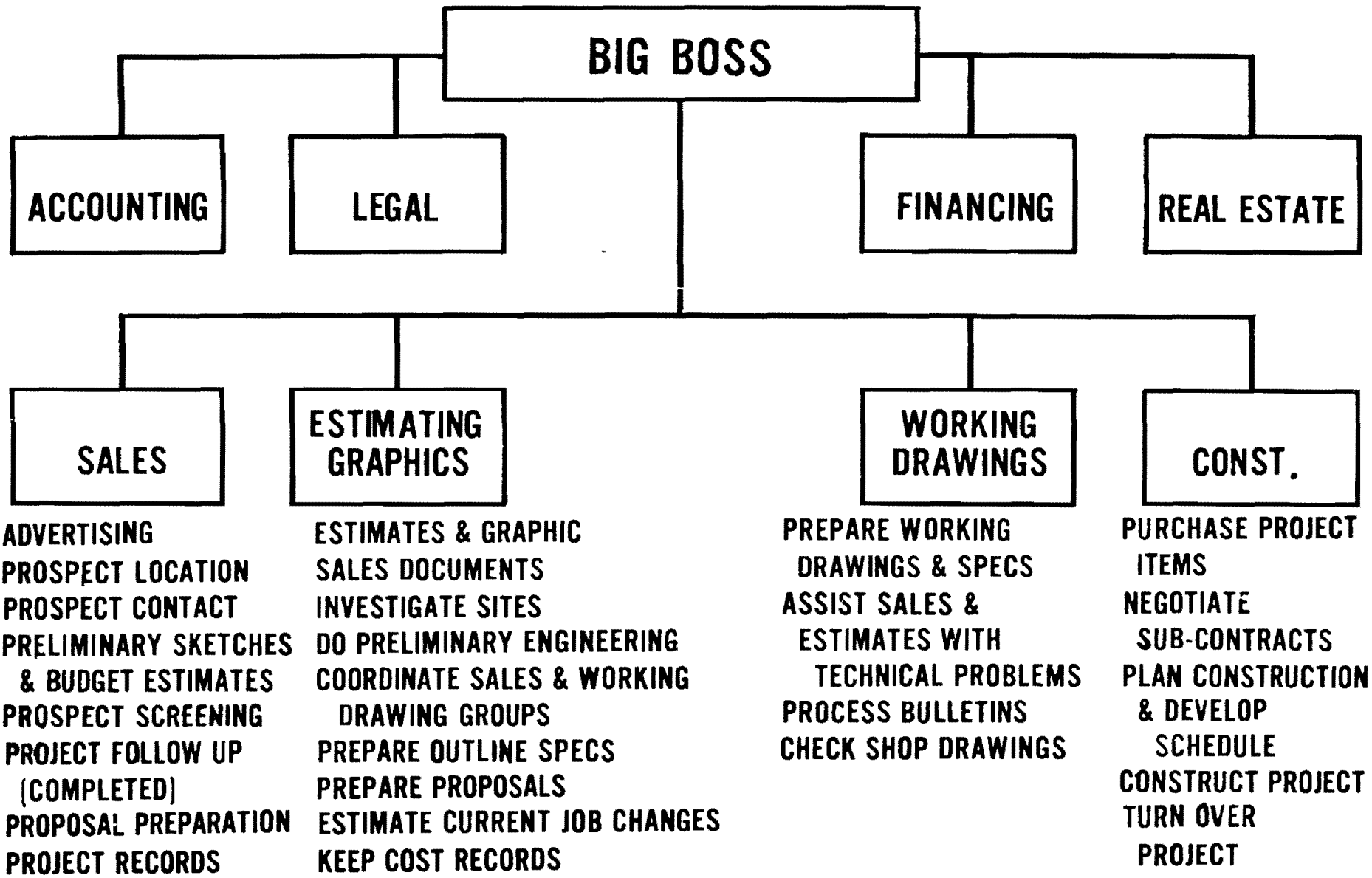
- Strategic plan objectives (continued)
 - to provide all personnel in the company a stock plan by which the employees' investment portfolios can be built of internally generated financial opportunities. In today's dollars the initial employee investment gift should range between \$100 and \$5,000 depending upon his position and responsibility. The investment opportunity should be one that returns him a yearly income at least equal to 5% of his basic salary. Investments should be financed jointly by the employee and the company.
- Medium range plans
 - to generate a series of held organizations performing the functions of real estate, acquisition and sales, financing of industrial properties, and holding and developing of commercial and industrial properties. These organizations should be separate companies with majority stock control held by the parent firm's management. Held company management should be autonomous.
 - to expand geographic operations to a radius of 150 miles from the home base operation. This demands a planned sales effort to penetrate the market and generate level 1 selling prospects. Sales force upgrading and additions will be necessary for this penetration.
- Short range plans
 - to initiate a comprehensive and immediate study and analysis of investment opportunities based upon present worth position. This should include real estate for industrial development, real estate for commercial development, real estate for residential development, financing of construction by syndication, and manufacture of all wood and flexible plastic products used in our basic construction methods.
 - to completely evaluate and revise the present estimating system from a trade orientation to a task orientation. This, to conform to our recently adopted scheduling and cash flow techniques.
 - to retain one architect and one mechanical/electrical engineer on the in-house staff to better provide design and build services.

PROJECT ?



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EXHIBIT 7

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WHAT IS NEEDED TO MOVE INTO DESIGN AND BUILD?

A. Functional needs to be filled.

1. Sales
2. Engineering
3. Architecture
4. Estimating
5. Real estate
6. Finance
7. Legal
8. Graphics
9. Construction
10. Maintenance

All These Functions Must Be Filled In A Total Design Build Operation Irrespective Of Size Of Project Or Size Of Firm
 All Are Necessary.

B. What talents are required to move into design and build?

1. Sales

- a. Prospects must be located and screened early
- b. Must avoid pure competitive price bidding (single value competition)
- c. Salesmen must know design build business thoroughly
- d. Salesmen must know how to use technical assistance, and technical assistance must be available throughout sales period
- e. Good judgment required of salesmen to avoid misuse of material and assistance submitted to clients
- f. Good presentation techniques essential

2. Technical

- a. Must have competent engineering and architectural capabilities or sources available currently
- b. Should have real estate know-how and available real estate services and advice; detail knowledge not essential but helpful
- c. Should know financing techniques; detail knowledge not essential but helpful
- d. Must have construction staff sympathetic to systems design and other design-build concepts. Technical staff must, in turn, be sympathetic towards construction and understand how design and construction fit together
- e. Must have good estimators capable of translating concepts into costs and costs into design documents for construction
- f. Organization must be mobile with interchangeable talents
- g. Graphic and writing talents should be available, preferably on internal staff
- h. Should have good legal advice source currently available
- i. Should have good cost accounting system well related to construction operation

WHAT IS NEEDED TO MOVE INTO DESIGN AND BUILD?
(Continued)

3. Administrative

- a. Good grasp of a multitude of business techniques essential
- b. Executives must understand and be sympathetic to sales, design, construction and the total service concept
- c. Administrators should know real estate and financing elements of environmental construction
- d. Executives must have a grasp of selling construction to laymen. A design build firm often deals with persons unfamiliar with design and construction

4. Construction capacity

- a. Must know how to manage construction
- b. Must have good buying abilities (not sharp or shopping oriented, but good)
- c. Superintendents should strive for good project liaison and understand the importance of continuing sales on the job
- d. Must minimize callbacks by doing a good job initially. Single responsibility pattern makes it imperative that you as a design build firm complete the work so it performs well
- e. All field and office personnel must be sympathetic and understand the design-build concept

THE ELEMENTS OF A SALE

PRE-SALE PREPARATION

CUSTOMER CONTACT

GAINING CUSTOMER CONFIDENCE

IDENTIFYING THE CUSTOMER'S NEED OR PROBLEM

ESTABLISHING MUTUAL SATISFACTIONS

OBTAINING AGREEMENT OR CONVICTION

GAINING PREFERENCE OVER COMPETITION

GAINING PRIORITY OVER OTHER CUSTOMER NEEDS

ASKING FOR THE ORDER

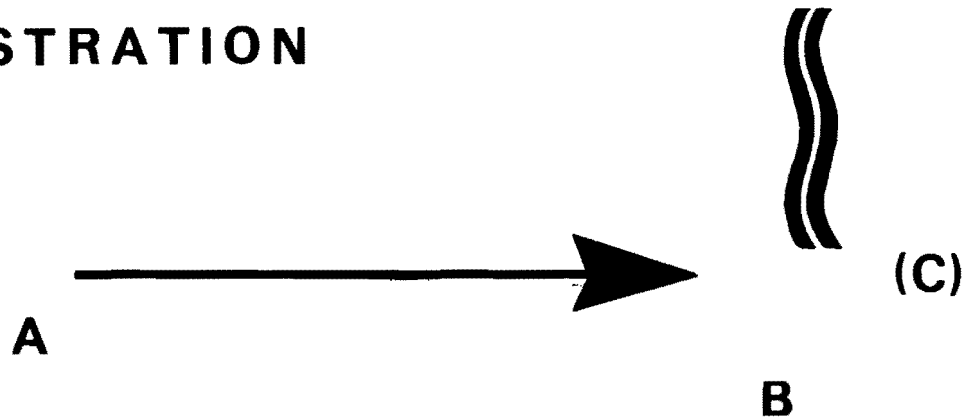
TAKING THE ORDER

WORKING FOR CONTINUITY

**MASLOW'S
HIERARCHY
OF NEEDS**



FRUSTRATION



INDIVIDUAL "A" IS MOTIVATED TOWARD GOAL "C".
BARRIER "B" INTERVENES AND PREVENTS DIRECT
ACCESS TO GOAL.

BARRIERS MAY BE:
PHYSICAL
SOCIAL
PERSONAL LIMITATION

COMMON REACTIONS TO STRESS

REACTIONS TO FRUSTRATION

Acceptance of substitute goals

Lowered aspiration

Restricted field of operation

Apathy, regression

Fantasy, symbolic
satisfactions

REACTIONS TO CONFLICT

Vacillation, indecision

Anxiety, discouragement

Postponement of decision

Inability to accept either
alternative wholeheartedly

Escape through sickness
or divertive activities

REACTIONS TO PRESSURE

Resistance

Defiance, destructiveness

Dawdling, helplessness (in
children)

Increased effort, physical
and psychological strain

Apathy, fantasy

TYPICAL PATTERNS OF DEFENSE MECHANISMS

STRESS CENTERING

COMMON EGO DEFENSE

AROUND:

MECHANISMS:

Failure

Rationalization, projection, compensation

Guilt

Rationalization, projection, undoing

Hostility

Fantasy, displacement, repression, reaction formation

Inferiority

Identification, compensation, fantasy

Disappointment in Love

Insulation, rationalization, fantasy

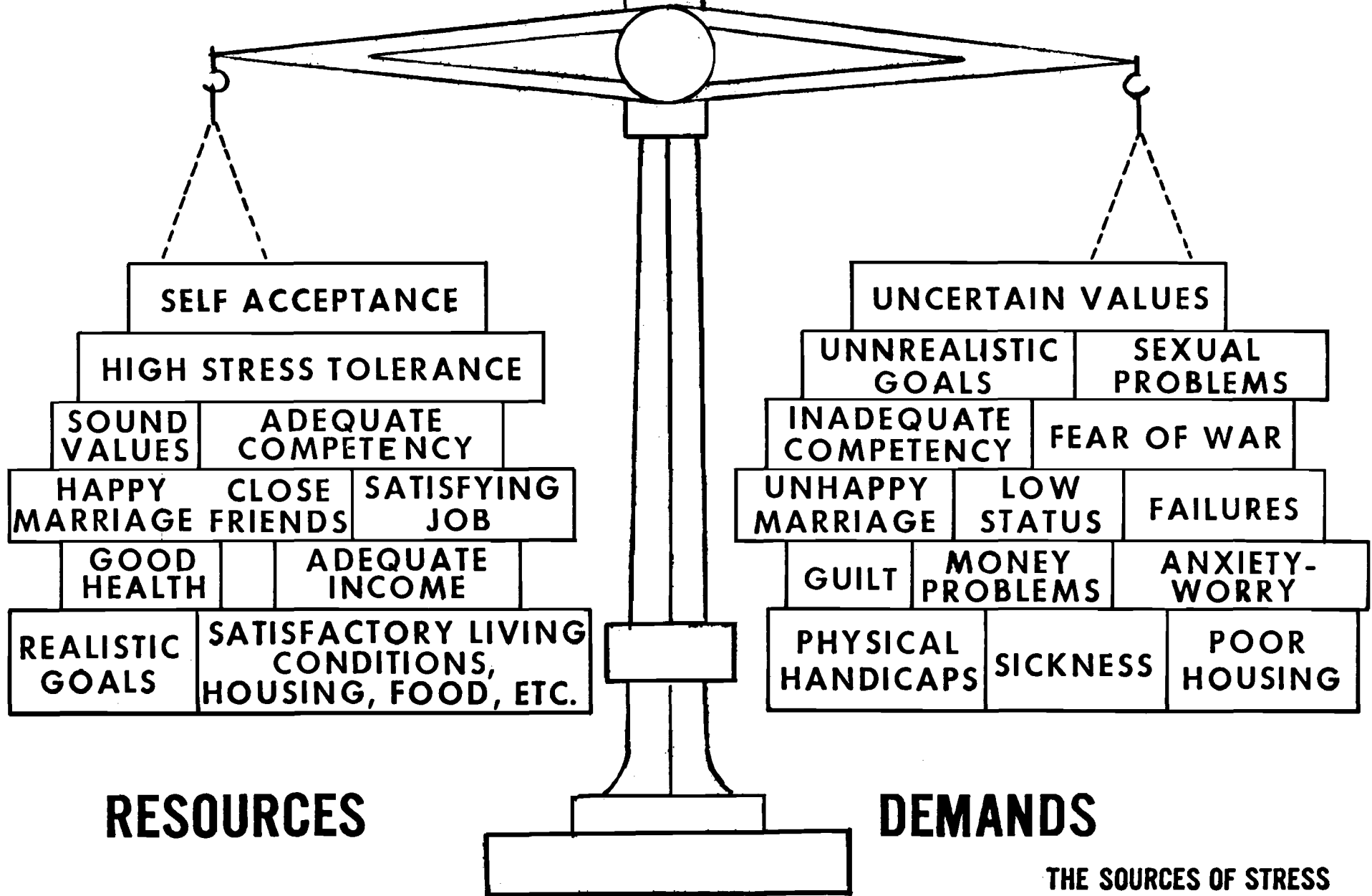
Personal Limitations

Denial of reality, fantasy, compensation

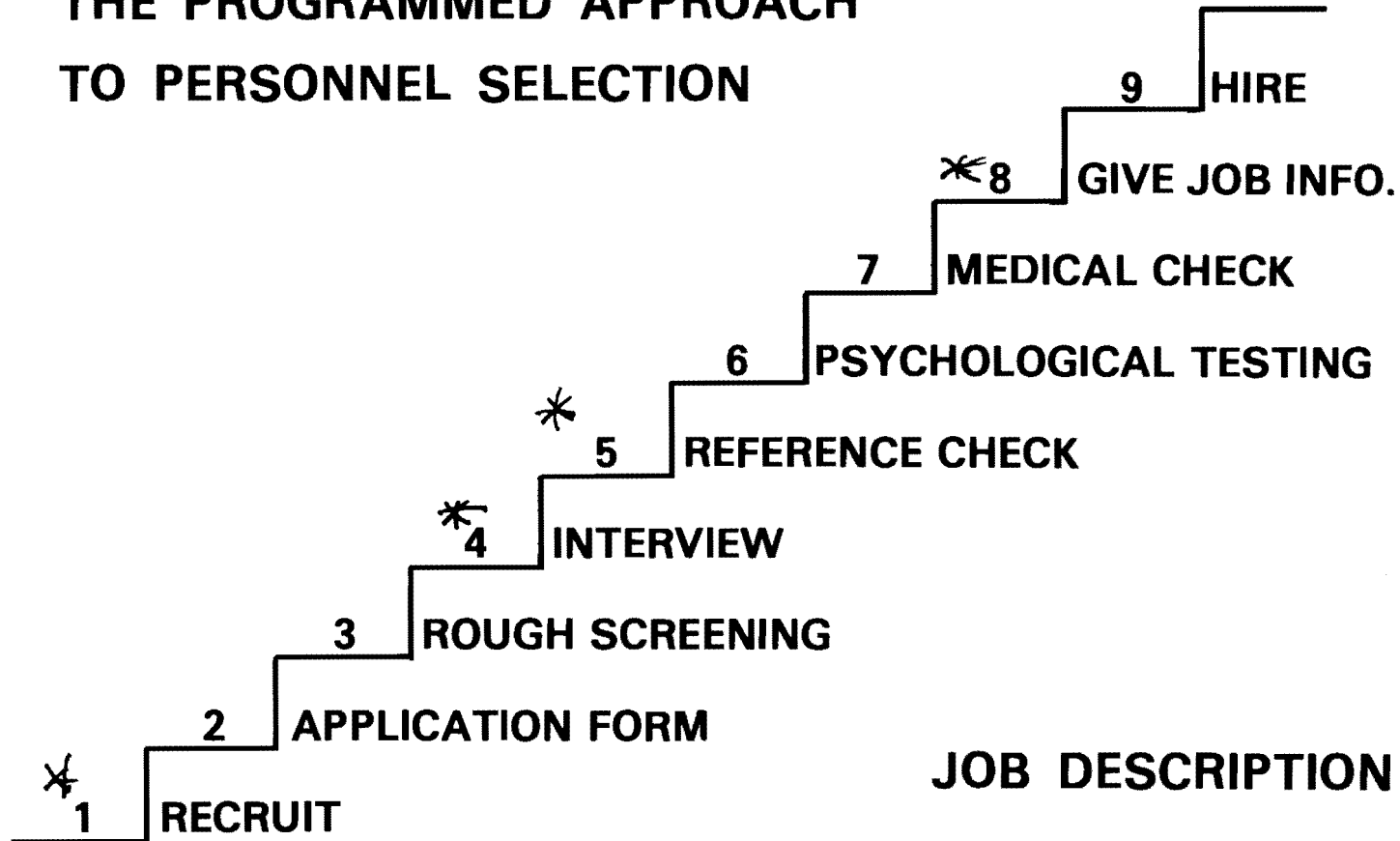
Sex

Rationalization, repression, reaction formation

ADJUSTIVE DEMANDS AND PERSONAL RESOURCES



THE PROGRAMMED APPROACH TO PERSONNEL SELECTION



** Particularly critical*

TELEPHONE REFERENCE CHECK WITH EMPLOYERS
FORM NO. 73

Applicant's Name _____

Previous Employer _____ Telephone Number _____

Supervisor _____ Title _____

Mr. (name of applicant) has applied for employment with us and tells us that he previously worked for you. I should like to *verify* some of the information he has given us. Do you have time to answer a few questions?

1. He states that he worked for your company from _____ 19____ to _____ 19____

Is that correct? (If not, show correct dates.) From _____ 19____ to _____ 19____

2. What was his job when he started to work for you? _____

What was his job when he left? _____

3. He shows his earnings as \$ _____
per _____ Is that correct? Yes. No. Actual rate \$ _____ per _____

4. What did you think of the quality of his work? How accurate was he? _____

5. What quantity did he turn out? How well did he apply himself? _____

6. How regular and punctual in attendance was he? _____

7. How did he get along with others? _____

8. What are his strong points? _____

9. What are his weak points? _____

10. Did he have any domestic or personal trouble which interfered with his work? Yes. No. (If yes, explain) _____

11. Why did he leave your company? _____

12. Would you re-employ him? Yes. No. (If not, why not?) _____

Additional information _____

A. Definitions

1. Phase 1 Selling - Activities aimed at locating prospects and generating general knowledge about them prior to specific projects being available. Includes informing the prospect about you.
2. Phase 2 Selling - Activities geared to proposing and obtaining specific project commissions from prospects.
3. Profiling - A selective, flexible, dynamic, operable system of screening prospects and projects for optimum results in phase 1 and phase 2 selling.

B. Phase 1 Selling Techniques

1. Phone calls
 - a. Should, if appropriate and possible, lead to a personal visit.
 - b. Use phone to open doors that lead to personal visits with legitimate and likely prospects.
 - c. Phone calls should usually result in a decision, recommendation or job award.
2. Correspondence
 - a. Use project correspondence as a basic tool, not as a casual communication medium. Reading time is at a premium.
 - b. Follow decision phone calls by a confirming letter to avoid later misunderstanding.
3. Personal visits
 - a. Keep visits short and valuable to prospect. Always ask "How am I helping the prospect do his job better?"
 - b. Show graphic material about your company.
 - c. Show examples of your work. (clear with other owners if necessary)
 - d. Stress single responsibility pattern.
 - e. Answer questions accurately, honestly, briefly. Don't dally; a prospect's time is valuable.
 - f. Leave something interesting and useful with the prospect.
 - g. See all the decision makers possible when you visit the prospect, but start with the top man or woman.
4. Use of your staff
 - a. Where prospect is good (likely to build), utilize useful staff talents in phase 1 selling visits.
 - b. Brief staff members before such meetings.
 - c. Have a good reason for staff members to accompany you when visiting prospect.
 - d. Introduce staff members fully to the prospect. Make certain he understands who they are and how they relate to him.
 - e. Remember the importance of generating confidence. Make certain staff members accompanying you understand this.

FINDING AND SELLING-TO DESIGN/BUILD PROSPECTS
(Continued)

- C. Phase 1 Profiling
1. Financial report analysis
 2. Response mailing
 3. Control point use
 - a. Available industrial parks
 - b. Available financing
 - c. Available tenants
 - d. Available land
 - e. Available services
 4. Prospect financial strength analysis
 5. Prospect growth analysis
 6. Prospect SIC classification
- D. Phase 2 Selling Techniques (When proposing on a specific project)
1. Proper determination of scope of work is essential. If project outline specification is available, take advantage of it. You may have a ready-made scope of work immediately.
 2. As you determine project characteristics with prospect, be specific, and make him be explicit.
 3. Visit the project location and make a site and area evaluation.
 4. Obtain local codes and ordinances.
 5. Learn about sub-contractors you are likely to deal with in the area.
 6. Acquire labor and material costs in the area.
 7. Learn all about any competition you have or might have.
 8. Do not indiscriminately give away information that might be used against you to generate single value competition.
 9. If you can't collect proper data about the project because of lack of time, experience or knowledge, get someone on the job who can.
 10. Make certain the prospect knows you are collecting information. This is one direct method of showing how competent you really are, particularly if it is your first technical contact with the prospect.
 11. Keep prospect generally notified of your progress.
 12. Sell the prospect's entire decision-making organization throughout the Phase 2 period - you are getting close to a contract.
 13. Find all control points that give you unique advantages; these may include financing, land, or others.

FINDING AND SELLING-TO DESIGN/BUILD PROSPECTS
(Continued)

14. Use graphic aids for Phase 2 selling, and use them continually. Such helps as network plans, decision tables, curves, charts, anything the owner or prospect can understand quickly and use himself will be of value to you and him.
 15. Personally present your proposal to the prospect decision-makers.
 16. Know the project.
- E. Phase 2 Profiling
1. Project type
 2. Project size
 3. Project cost
 4. Project location
 5. Your current work load
 6. Management objectives of you and prospect
 7. History of success in similar projects
 8. Current chances of getting project
 9. Type of contract possible

REMEMBER -

- The prospect must ultimately trust somebody, MAKE IT YOU, NOW.
- Mutual confidence and trust - the prospect's in you and yours in the prospect - is the best protection you have against him shopping your sales and contract information.

RALPH J. STEPHENSON, P. E.
CONSULTING ENGINEER

SALES/PROFITS ANALYSIS

Combinations Possible

Sales Up
Profits Up

Built new plant(s) recently

Sales Up
Profits Down

Remodeled existing plant(s) recently

Sales Down
Profits Down

Acquired existing plant(s) from others recently

Sales Down
Profits Up

Sold existing plant(s) of theirs recently

Have not built new plant(s) or remodeled recently

Apply on Business Unit Basis

Sales Up

Profits Up

1. May stabilize - no new construction
2. Probably diversify - business acquisition
3. May thrust into traditionally popular market - expand plant
4. May construct luxury facilities
5. May acquire balance businesses

Definitely interested in new construction (new potential)

Sales Up

Profits Down

1. Will seek to lower production costs
2. Will thin existing product line
3. May add acquired product lines proven successful
4. Will re-examine internal policies

Probably not interested in new construction but in rehabilitation of old facilities (Gradual potential)

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CONSULTING ENGINEER

SALES/PROFITS ANALYSIS
(Continued)

Sales Down	<ol style="list-style-type: none"> 1. Will seek to improve marketing procedures 2. Will seek product diversification 3. Will thin existing product line 	Probably not interested in new construction now but will be very shortly or out of business (explosive potential)	
Profits Down	<ol style="list-style-type: none"> 4. May add acquired product line proven successful (doubtful) 5. Will totally re-examine internal policies 		
Sales Down	<ol style="list-style-type: none"> 1. Will diversify product line 2. Will strengthen sales program 3. Will maintain present status on facilities (temporary) 		Probably no new construction now but need will pressure additional facilities in moderate future (near future potential)
Profits Up	<ol style="list-style-type: none"> 4. Will acquire balance businesses 5. Will actively plan expansion 		

Ralph J. Stephenson, P.E.

		Have not built or remodeled lately				Have built new plant recently				Remodeled existing plant recently				Acquired existing plant from others recently				Have sold existing plants of theirs recently			
		Y	Y	N	N	Y	Y	N	N	Y	Y	N	N	Y	Y	N	N	Y	Y	N	N
Are sales up?		Y	Y	N	N	Y	Y	N	N	Y	Y	N	N	Y	Y	N	N	Y	Y	N	N
Are profits up?		Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
Prospect action	Your action																				
Investigate new construction now	Make personal call now	X								X		X						X	X		
Investigate rehabilitation of existing now - new facilities later	Write or phone now - personal call in 6 months or sooner		X												X						
No new facilities now but in near future	Write or phone now - personal call in 6 months or sooner			X		X									X		X				
No new facilities now but suddenly in future	Write or phone now and periodically				X								X		X		X				X
Investigate new facilities in moderate future, some study now	Write or phone periodically							X												X	
Defer new construction investigation in immediate future	Hold off heavy sales contract for now					X		X		X											

Exhibit 2.02 SWS-1 RJS

1 2 3 4 5

Note:

If answer to any of first three questions is no, don't propose on D & B basis

Negotiated or qualified arrangement possible?	Y	Y	Y	Y	Y			
Private project?	Y	Y	Y	Y	Y			
Do we have good A/E and all trade estimating services available?	Y	Y	Y	Y	Y			
Can we provide time to prepare good D/B proposal?	Y	N	N	N	N			
Do we control land and/or financing?	-	-	-	-	-			
Is prospect engineering or management oriented?	-	Y	N	N	N			
Have we built successfully for prospect previously?	-	-	Y	-	N			
Have we built similar D/B project previously?	-	-	Y	N	Y			
Propose on D/B	x	x	x					
Don't propose on D/B basis				x	x			
Go to plan commitment table								
Go to supply only table								
Go to supply & erect table								
Go to limited trades only table								
Go to all trades table								

RALPH J. STEPHENSON
 Consulting Engineer

Characteristics of a Contract

Quality of Arrangements Possible

- 1. Negotiated - value competition only
- 2. Qualified - limited multiple -- value competition possible
- 3. Unqualified - single value competition demanded

Services & Materials Provided

- | | | |
|--|--|--|
| <ul style="list-style-type: none"> 1. Provide all labor, material and management 2. Provide some labor, material and management 3. Provide management only 4. Provide material only 5. Provide labor only | | <ul style="list-style-type: none"> a. Limited trades b. All trades |
|--|--|--|

Type of Contract Possible

- | | | |
|---|--|--|
| <ul style="list-style-type: none"> 1. Fixed cost - limited trades 2. Fixed cost - all trades 3. Fixed cost - limited trades plus fee for other trades management 4. Time and material plus fee - limited trades 5. Time and material plus fee - all trades | | <ul style="list-style-type: none"> a. With upset price b. With upset price and shared saving c. With no upset price |
|---|--|--|

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SALES PROBLEM No. 1

Jasper Bag Company

D & B Ratings

1968	C 26 43	Jasper Bag Company	A 1
1969	C 26 43	" " "	A/A1
1965	C 26 43	" " "	B/1

Jasper Bag Company started in business in 1925. Have grown steadily but have not built a new plant since 1938. Have expanded plant area from original 15,000 sq. ft. in 1938, to 75,000 sq. ft. in 1960. All random additions.

No new work constructed since 1960 but have continued to remodel existing facility on a regular basis. You have been calling on Jasper since 1965 and they are well acquainted with you through your phase 1 sales efforts.

Their recent financial statements show the following:

	<u>1971 July</u>	<u>1972 January</u>
Sales	\$ 10,520,000	\$ 12,578,000
Profits	\$ 325,000	\$ 320,000

What are your sales actions?

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SALES PROBLEM No. 2

- Use your own firm as the model in this problem.
- If you are a Butler staff member, assume a buildership of \$1,200,000 volume/year with full design/build capabilities. Sales staff available and aggressive. Do a moderate business in remodeling work.

Little Manufacturing Company

Characteristics of prospect

- Located in your sales area
- Manufactures low profit margin kitchen hand appliances
- Involved in a highly competitive field
- Present plant a 2 story steel frame building, total 60,000 sq. ft., masonry walls, concrete floors, sturdy but with small bays and limited headroom. Recently remodeled material handling system and shipping/receiving facilities.

Present building works well but is unattractive and site offers little room for expansion. Dun & Bradstreet says family management with fairly good record over past 20 years. Business started 50 years ago. Office located in plant.

In a search of SIC numbers, this firm comes up in a category you want to cultivate.

<u>Financial Data</u>	<u>July 1971</u>	<u>December 1971</u>
Sales	\$ 4,265,000	\$ 5,600,250
Profit	\$ 150,000	\$ 145,000

Your banker was able to get the above 6 month sales/profit data for you without violating any confidence or standard of conduct.

- Describe:
- Your analysis of the prospect for sales potential to you
 - Your level 1 sales activities

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SALES PROBLEM No. 3

Little Manufacturing Company

Little Manufacturing decides they need a new plant, operative in one to one and one half years, (basically due to your sales efforts at level 1). You are called in by the president, Mr. Little, who asks for a proposal from you. Presently your estimators are loaded with work, most of it with a 50% chance of becoming a job for you.

Mr. Little says he is impressed with your work. (You did some minor office remodeling about 4 months ago after your second level 1 call) He wants you to work to a basic building size of about 80,000 sq. ft. with future expansion to twice the size.

Mr. Little's son, an engineering graduate, is now acting as Director of Purchasing as part of his long range executive training program.

- What is your action now?
- What is your action 2 months from now?
- What is your action 6 months from now?
- (Do you propose?
(
- (When?

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SALES PROBLEM No. 4

Little Manufacturing Company

Suppose a non metal building design/build contractor (a competitor of yours) was the contractor involved in problems 2 and 3. You have been called out of the blue by Tom Little, Mr. Little's son, and asked to come to their office. At the meeting in his office he asks you to prepare a design/build proposal. You find out (not from the Littles, but from the plant manager, a friend of yours) what has happened up to this point.

- Do you propose?
- If so, when? How?
- What are your future actions?

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WHAT FACTORS INFLUENCE PROFIT?

Business Volume	Size of Project
Field Efficiency (Effectiveness)	Quality of Dwg's & Specs
Office Efficiency (Effectiveness)	Location
Executive Competence	Labor Relations
Executive Interest	Caliber of Field Managers
Diversity of Operation (Hedging)	Expediting Effectiveness
Types of Contracts	Project Planning
Quality of Estimating	Project Scheduling
Unit Costs	Withheld Amounts
Area Work Volume	Availability of Labor
Season of Year	Billing Procedures
Local Economy	Inventory Practices
National Economy	Internal Education
Governmental Policies	Internal Training
Caliber of Participating Contractors	Type of Business
Caliber of Competing Contractors	Experience
Caliber of Suppliers	Reputation
Delivery Dates	Staff Honesty
Amount of Warranty Work	Caliber of Purchasing Skills
Caliber of Owner or Client	Profiling Procedures
Type of Project	Organizational Plans

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KINDS OF ESTIMATES

Estimating can be defined as an approximate statement of what would be charged for certain work to be done submitted by one ready to undertake the work. Other definitions have been proposed but they all lead to the conclusion that estimating is fundamentally the art and science of predicting what the total cost actually will be. This estimate classification system takes into account the functional characteristics of the specific estimate to be made. It considers ten elements.

1. Point in time at which estimate is prepared
2. Scale of detail required
3. Estimating methodology
4. Life span covered by costing
5. Data available
6. Ultimate use of estimate
7. Number of elements estimated relative to total
8. Competitive situation
9. Role of estimate in setting final cost
10. Control position occupied

A meaningful classification system results if we assign values or weights to identify the requirements of the specific estimating situation.

1. Point in time at which estimate is prepared

- 1) Conceive
- 2) Program
- 3) Articulate
- 4) Approve
- 5) Design
- 6) Construct
- 7) Turnover
- 8) Operate
- 9) Maintain

2. Scale of detail required

- 1) Very rough detail, using general rules of thumb
- 2) Generalized combination system in rough detail
- 3) Moderate detail by unit or component modified with general historical and current data
- 4) Great detail modified with specific historical and detail current data

3. Estimating methodology

- 1) Replacement or appraisal technique
- 2) Historical unit area or volume figures indexed for current use
- 3) Major component costing and assembly indexed for current use
- 4) Detailed component costing and assembly indexed for current use

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3. Estimating methodology (Cont.)

- 5) Detailed time and material estimates of elemental units (individually assembled at time of estimating)

The fundamental difference between component costing and costing from elemental units is that in the first the elemental units are pre-assembled and pre-estimated so that they are not evaluated each time the component is encountered in the project.

4. Life span covered by costing

- 1) Cost of initial installation only
- 2) Cost of installation, and short operating and maintenance cycle
- 3) Cost of installation, and long operation and maintenance cycle
- 4) Cost of installation, and total operation and maintenance over life of investment

5. Data available

- 1) Very little
- 2) Moderately adequate with supplementary research
- 3) Generally adequate
- 4) As much as required

6. Ultimate use of estimate

- 1) Conceptualizing - to gain basic idea of scope - usually very rough figures
- 2) Comparative evaluation - to measure on an equal basis several elements or combinations, all relative to a common datum
- 3) Budgeting - to provide a basis for allocating capital funds, maintenance or operating costs or other expenditures on a given program prior to its final design but after its conception
- 4) Competitive - to give the ultimate decision-maker in an environmental design and construction program comparable, firm values by which he can select all elements of the program to optimize its effectiveness

7. Number of elements estimated relative to total

- 1) Small part of total
- 2) Moderate part of total
- 3) Major part of total
- 4) Most or all of total

8. Competitive situation

- 1) No competition
- 2) Moderate multi value competition
- 3) Heavy single value competition

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8. Competitive situation (Cont.)

Multi value competition is a relative evaluation based upon several factors such as size, quality of management, experience, present work load and financial strength.

In single value competition, all of these are reduced to a lone evaluation of the ultimate value expressed in the money bid. Such is the case on public projects where the only requirement to be on the bidding list is that an adequate bond be available.

9. Role of estimate in setting final cost

- 1) To set capital costs only
- 2) To set financing, operating and maintenance costs only
- 3) To set all project costs through a specified period of time

10. Control position occupied

- 1) No control exerted
- 2) Minor controls possible
- 3) Major controls possible
- 4) Total control of program

Much elaboration is possible on control positions. The code suggested is a simplistic approach and in actual use might be modified to reflect to what the control is applied. Control position may extend to labor, material, land, money, design, construction or sub contractors among others.

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NETWORK PLANNING MINITEXT

Symbols

1. Arrow or task \longrightarrow
A single definable action (or a single grouping of a number of definable actions) requiring resources.
2. Circle or node \bigcirc
The starting or ending point of a task a momentary point in time.
3. Dotted or dummy arrow $-----\rightarrow$
A symbol representing the existence of a relationship between tasks. Dummies have no resources allocated.

Note: 95% of time a dummy goes from end of one task to start of another.

KEEP SYMBOLS SIMPLE !

Rules of Job Planning

1. All tasks preceding any single task must be complete before that single task can start.
2. The logic plan represented by a series of single tasks, nodes and dummies must be explicit.

Steps in Network Planning

1. Define scope of work.
2. Draw logic plan.
3. Approve logic plan.
4. Assign durations.
5. Compute ES, LF and TF
6. Analyze and recompute, if necessary. (May make additional resource allocation)
7. Issue.

Rules for Numbering Nodes

1. It is recommended the numbering sequence move down and to the right.
2. Normally, twenty numbers per hundred should be reserved for future use, and noted on diagram.
3. A node, having two or more arrows entering, or two or more arrows leaving, is numbered.
4. A node, having a single arrow entering, and a single arrow leaving, does not have to be numbered unless required by rule 5.
5. No more than one node in a sequence should be without a number.

Note: Node numbers are used to identify tasks. The final measure of whether node numbers are assigned correctly is whether any task in the network can be identified uniquely (the only one in the network) by its pair of node numbers.

i is the initial node number designation.

j is the end node number designation.

2-YR WORKING-DAY CALENDAR STARTING JAN. 2, 1975

DATE W/D	DATE W/D	DATE W/D	DATE W/D	DATE W/D
JAN 1975	14 52	28 104	08 155	22 207
02 1	17 53	29 105	11 156	23 208
03 2	18 54	30 106	12 157	24 209
06 3	19 55	JUNE	13 158	27 210
07 4	20 56	02 107	14 159	28 211
08 5	21 57	03 108	15 160	29 212
09 6	24 58	04 109	18 161	30 213
10 7	25 59	05 110	19 162	31 214
13 8	26 60	06 111	20 163	NOV
14 9	27 61	09 112	21 164	03 215
15 10	28 62	10 113	22 165	04 216
16 11	31 63	11 114	25 166	05 217
17 12	APR	12 115	26 167	06 218
20 13	01 64	13 116	27 168	07 219
21 14	02 65	16 117	28 169	10 220
22 15	03 66	17 118	29 170	11 221
23 16	04 67	18 119	SEP	12 222
24 17	07 68	19 120	02 171	13 223
27 18	08 69	20 121	03 172	14 224
28 19	09 70	23 122	04 173	17 225
29 20	10 71	24 123	05 174	18 226
30 21	11 72	25 124	08 175	19 227
31 22	14 73	26 125	09 176	20 228
03 23	15 74	27 126	10 177	21 229
04 24	16 75	30 127	11 178	24 230
05 25	17 76	JULY	12 179	25 231
06 26	18 77	01 128	15 180	26 232
07 27	21 78	02 129	16 181	28 233
10 28	22 79	03 130	17 182	DEC
11 29	23 80	07 131	18 183	01 234
12 30	24 81	08 132	19 184	02 235
13 31	25 82	09 133	22 185	03 236
14 32	28 83	10 134	23 186	04 237
17 33	29 84	11 135	24 187	05 238
18 34	30 85	14 136	25 188	08 239
19 35	MAY	15 137	26 189	09 240
20 36	01 86	16 138	29 190	10 241
21 37	02 87	17 139	30 191	11 242
24 38	05 88	18 140	OCT	12 243
25 39	06 89	21 141	01 192	15 244
26 40	07 90	22 142	02 193	16 245
27 41	08 91	23 143	03 194	17 246
28 42	09 92	24 144	06 195	18 247
MAR	12 93	25 145	07 196	19 248
03 43	13 94	28 146	08 197	22 249
04 44	14 95	29 147	09 198	23 250
05 45	15 96	30 148	10 199	24 251
06 46	16 97	31 149	13 200	26 252
07 47	19 98	AUG	14 201	29 253
10 48	20 99	01 150	15 202	30 254
11 49	21 100	04 151	16 203	31 255
12 50	22 101	05 152	17 204	
13 51	23 102	06 153	20 205	
	27 103	07 154	21 206	

RALPH J. STEPHENSON

Consulting Engineer

The Project Program(Project Bible)is

A narrative oriented statement of the character of the prospect's operation, the requirements of the prospect, and the character of the environment you are about to design and construct. It is in part derived from phase 1 and 2 selling efforts and from the information obtained by use of the building requirements check list.

Contents of A ProjectProgram (Project Bible)Should contain specific data about:

1. Name of project
2. Location of project
3. Nature of project (What is it supposed to do?)
4. Participants
5. Addresses and phone numbers
6. Codes and ordinances applicable

Contents of A Project

Program (Project Bible)

Should contain specific data about: (Continued)

7. Expansion needs

8. Community needs

9. Dimensional characteristics

10. Cost goals

11. Functional needs

12. Material handling needs

13. Receiving needs

14. Shipping needs

15. Parking needs

16. Advertising needs

17. Aesthetic needs

18. Structural needs

Contents of A Project

Program (Project Bible)

<u>Should contain specific data about:</u> (Continued)	<i>Must</i>	<i>Functionally desirable</i>	<i>Desirable</i>
19. Communication needs			
20. Storage needs			
21. Trash disposal needs			
22. Special hazard problems			
23. Heating and air conditioning needs	<i>Heat when off Blow 65° OFF 70°</i>	<i>Air cond off OFF 75°</i>	<i>Air cond when 70°</i>
24. Lighting needs			
25. Power needs			
26. Recreational needs			
27. Plumbing needs			

May 15, 1975

Mr. Oliver K. Stimson, President
Stimson Manufacturing Company
Leeds, Ohio 21639

Re: Proposal for Construction of New Plant and Office Facility
in Crowfoot, Ohio

Proposal: #3642-69

Dear Mr. Stimson:

We are pleased to submit our proposal for the construction of your new plant and office building in Crowfoot, Ohio. This proposal includes all services required to design, construct and turn over this facility to you complete. Design and construction will be in accordance with the accompanying proposal documents:

Drawing 1	General Site Plan
Drawing 2	Manufacturing Plant Floor Plan
Drawing 3	Office Floor Plan
Drawing 4	Sections and Elevations of Office and Plant
Drawing 5	Summary Construction Network Diagram
Specifications	Project performance specification dated December 20, 1975 entitled <u>Performance Project Specification for New Manufacturing and Office Plant, Stimson Manufacturing Company, Crowfoot, Ohio. Project #3642-69</u>

Full information regarding items to be furnished, descriptions of the procedures to be followed, a network plan of the project showing tentative completion dates along with a full outline of the performance expected of this facility are contained in the drawings and specification listed above. We have discussed with you in detail the various contract methods of providing services on this facility and it is our opinion that a firm price would best accomplish your management objectives and insure construction of the project within your financial requirements. We propose to provide all design, construction management, coordination, and turn-over services for the total sum of Three Hundred Ninety Eight Thousand Six Hundred Twenty Eight Dollars (\$398,628.00). Design and engineering work on this project

Mr. Oliver K. Stimson
Leeds, Ohio 21639

Page two

May 15, 1975

Re: Proposal for Construction of New Plant and Office Facility
in Crowfoot, Ohio

Proposal: 3642-69

requiring the services of registered professional personnel will be furnished in accordance with these requirements. Method of payment is as described in the Project Specification under Payment - Page 3.

Your signature of acceptance on this proposal letter will be sufficient to initiate our work in the preparation of design documents and construction on the Crowfoot Plant.

We appreciate your trust and confidence in our ability to provide this significant addition to your present plant and thank you for the privilege of working with you.

Sincerely yours,



Leonard A. Ballentine, President
Ballentine Construction Company

Accepted by _____

this _____ day of _____ 19 _____.

LAB/m

March 15, 1975

Mr. James T. Donnelly
 President & General Manager
 Donnelly, Inc.
 Hull, Georgia 46235

Re: Proposal for Construction of New Office Building in Coster, Georgia
 Project 69-325

Dear Mr. Donnelly:

We propose to provide the professional design and construction services required to build and turn over to you your new office building to be located in Coster, Georgia at the intersection of LaGrange and Peach Roads. Performance specifications for your new facility, along with the drawings and site plans necessary to define the scope of work, are contained in the attached documents. These include:

Drawing 1	-	General area plan
Drawing 2	-	Building and facilities site plan
Drawing 3	-	Floor plan
Drawing 4	-	Elevations and sections
Drawing 5	-	Details of future horizontal expansion
Specifications	-	Outline performance specification

All documents listed above are dated December 20, 1974 and bear the name of the project.

After a detailed review with you and your executive staff, we feel that our services would best be furnished on a management arrangement whereby we provide the labor and material for construction of foundations, floor slabs on grade and erection of super structure and close-in. We also will install, with our own forces, all rough and finish carpentry work, all masonry work and all interior painting.

For construction operations directly under our control as outlined above, we will charge you at cost in accordance with job records which will be maintained throughout the length of the project and submitted to you with

Mr. James T. Donnelly
Hull, Georgia 46235

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March 15, 1975

Re: Proposal for Construction of New Office Building in Coster, Georgia
Project 69-325

our monthly request for payment. All job cost records will be open for your inspection at any time. The breakdown of items to be charged on a time and material basis is detailed in the performance outline specification on Page 40 under Items Included in Time and Material Charges to the Project. Remaining work will be let to sub-contractors mutually selected by our respective organizations and at a cost approved by both. We will let all such contractors supervise their execution and process all payments to them as your agent.

For the above services we shall receive from you a management fee in the amount of Eighteen Thousand Dollars (\$18,000) - payable on a proportionate basis to the billing each month relative to the estimated total cost. This fee will include design and engineering services, construction overhead, profit and general condition costs, as defined in the previously mentioned section of the performance description.

We are very pleased to work with you on this program, particularly since it represents an expression of mutual trust. I am certain it will also result in lowered job costs.

All engineering and technical services provided will be under the supervision of a registered architect or engineer.

We are looking forward to beginning our work in the very near future and your signature in the space provided below will be sufficient for us to initiate our work on the design documents.

Thank you very much for your confidence.

Sincerely yours,

Walter Gimstone
Walter Gimstone, President
Gimstone Construction Services

Accepted by _____

this _____ day of _____ 19 _____.

WG/m

Exhibit 2.14 SWS-1

RJS

h/o 58