

2.2. SKETCH OF
MANUAL
for
LAYOUT OF OFFICE FURNITURE

~~(C)~~
~~Center for Environmental Structure~~
~~1985~~

~~draft~~
~~for experimental purposes only~~
~~not for publication.~~

INTRODUCTION

This manual is addressed to the workers and managers in an office.

The purpose of the manual is to allow people who work in offices, to create a new, and better environment for themselves.

In order to do it, please follow the instructions by answering certain simple questions.

We will then install a new type of furniture which will satisfy your needs as closely as possible.

[Since we are at present working on the early stages of this project, we shall install a very rudimentary type of furniture, as a mockup only]

GENERAL BACKGROUND

The general nature of the type of environment we hope to create for you, is described in the draft report pattern language for office furniture.

A copy of this draft pattern language is available for you to look at.

PROCEDURE

The procedure we shall ask you to follow, consists of nine steps.

In each step, we ask you to make certain decisions. The first steps involves decisions which must probably be made by the group as a whole. The last steps involve decisions which need to be made by individuals. The very last step needs some work by groups again.

- STEP 1. DEFINITION OF WORK-PLACE FOR EACH WORKING GROUP
- STEP 2. DEFINITION OF COMMON SPACE WHICH IS TO BE SHARED BY ALL GROUPS
- STEP 3. DEFINITION OF BOUNDARIES
- STEP 4. DEFINITION OF THE MAIN CENTER FOR EACH WORKING GROUP
- STEP 5. SIZE AND LOCATION OF INDIVIDUAL WORKPLACES
- STEP 6. CHOICE OF FURNITURE FOR COMMON SPACE, WITH DIMENSIONS
- STEP 7. CHOICE OF FURNITURE FOR INDIVIDUAL WORKPLACES, WITH DIMENSIONS
- STEP 8. ARRANGEMENT OF FURNITURE IN INDIVIDUAL WORKPLACES.
- STEP 9. CLOSING THE ARRANGEMENT, AND MAKING IT WHOLE.

The whole procedure is meant to be quick, fun, and effective. We do not want you to spend more than half an hour on group discussion to settle steps 1-6, and then no more than 20 minutes by yourself to settle steps 7 and 8. The last step should not take more than 10 minutes, in a final group discussion.

After you have made the necessary choices, we shall draw a sketch design of the whole thing which is generated by your decisions. When you approve it, we shall start to build it for you

NOTE. Since this procedure is in an experimental stage, there will be many cases where the process doesn't quite work, or where we have to revise what we have done, in order to make the process better.

Please bear with us.

STEP 1. DEFINITION OF WORK-PLACE FOR EACH
WORKING GROUP

In this step we want you to decide the best working groups.

We assume here, that each working group will, when we are finished, have a rather well defined space of its own: its own territory.

To some degree, the space of each workgroup will be surrounded by a boundary, which provides some acoustic and visual privacy. It does not mean that each group will be in a totally isolated room. The precise degree of enclosure and separation between groups, will be decided in step 3.

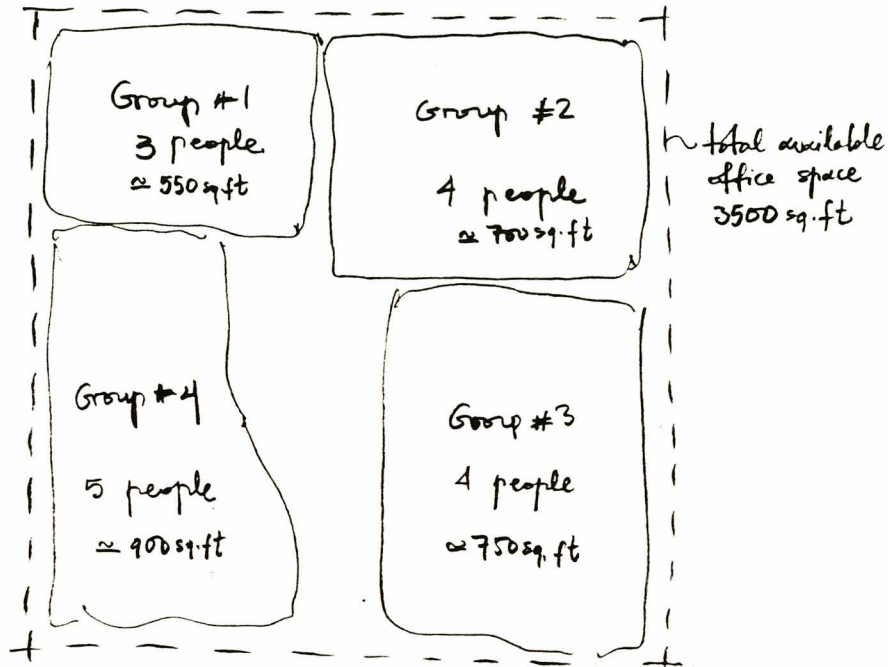
We should like you to define the number of people who belong to each small work group, as well as the approximate size of the space that each small group will occupy. The number 180 sq.ft. per person, as an average, will help you to define roughly the size of each small work group space.

It is extremely important to lay out the work group spaces with the following thing in mind: the work group which functions as the heart of your operation should be located in a central position; it should be the center--geometrically, as well as functionally-- of your whole organization.

Now, you should make a simple and rough sketch which will indicate the location of each small work group.

(6.1)

AN EXAMPLE



SKETCH OF LOCATION AND SIZE OF WORK GROUPS
IN YOUR OFFICE

STEP 2. DEFINITION OF COMMON SPACE WHICH IS
TO BE SHARED BY ALL GROUPS

In this stage, we want you to identify the size, and nature of common group areas you would like to have; these areas will be shared by all groups of your organization.

These would be areas where anyone can work, or where anyone can relax, or where meetings will take place.

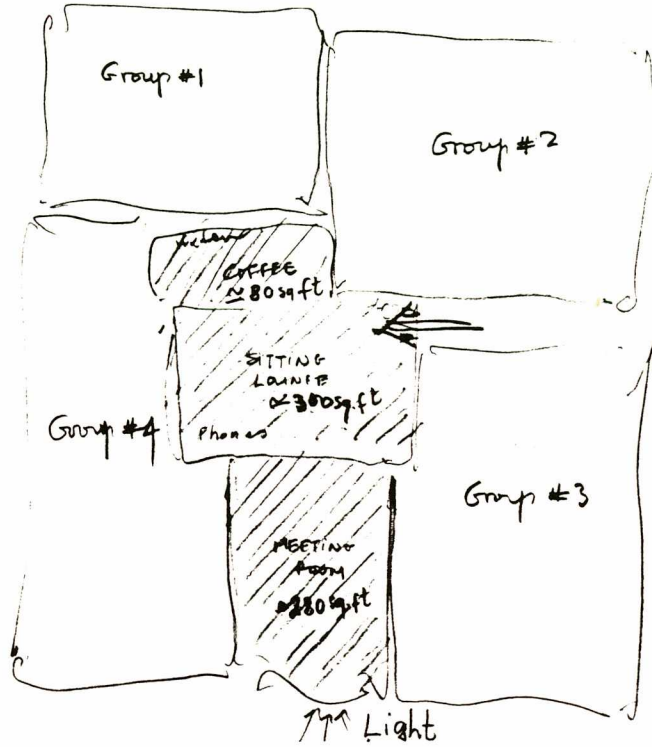
The common group areas should occupy about 15%-20% of the total available space.

We should also like you to define, roughly, where these group areas should be, and roughly how large they should be, and anything special about their character which is important -- for example, daylight, sun, access, special facilities, water etc.

Now, you should locate the common group areas within the available office space.

{7.1}

AN EXAMPLE



SKETCH OF COMMON SPACES

STEP 3. DEFINITION OF BOUNDARIES

We now have a general layout of common group spaces, and spaces for individual work groups.

At this third step, we want you to determine the degree of connection and separation between groups.

In order to do it, you must use the layout sketch that you already have, and then indicate the nature of each boundary of the plan, according to the following code:
[As in sketch #1]

A DOUBLE SOLID LINE: it indicates a thick and solid boundary, which is about 75% enclosed; like a thick wall with built-in furniture --counters, cabinets, drawers, with small openings, and so on.....

A SINGLE SOLID LINE: it indicates a solid boundary again, with more openings however, which is about 50% enclosed; like a wall with large doorways, or sliding doors, or a series of thick columns with walls and/or solid furniture pieces built in the openings -- at least half of them, and so on.....

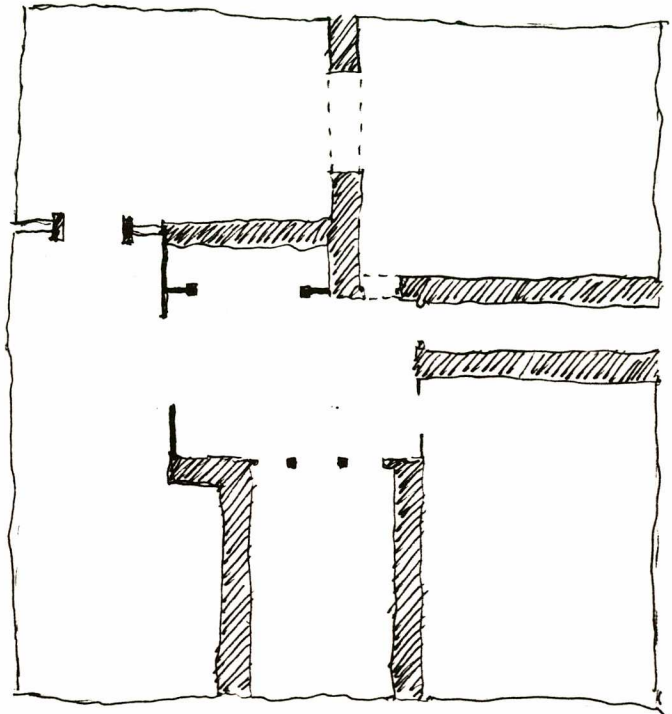
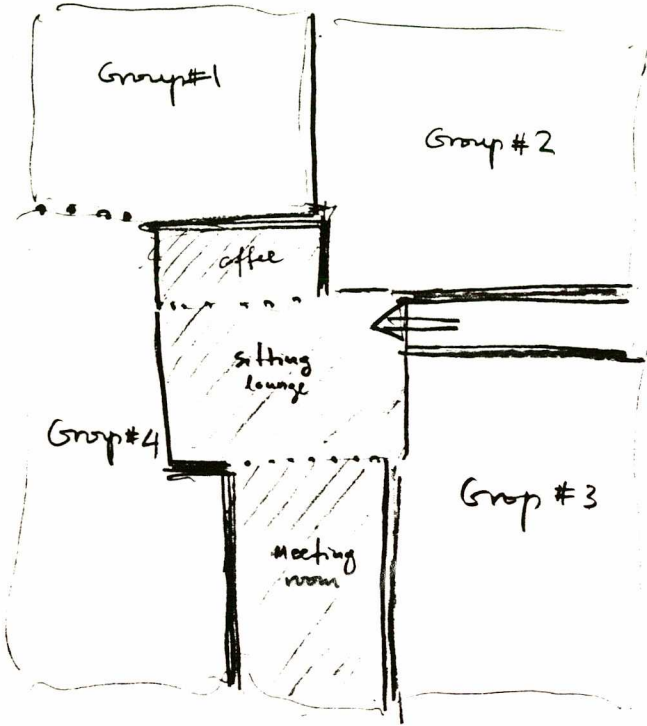
A DOTTED LINE: it indicates a boundary that induces connection more than separation between adjacent spaces, about 25% enclosed; like a series of columns with low walls in between, or a wall trellis, or a wall which is partly defined by drapes or shades, or a series of low cabinets, and so on.....

You shall now try to depict the physical character of the boundaries you have envisioned, in a rough layout sketch, indicating major doorways, openings, columns. [As in sketch #2]. Do not spend time to make things perfect; it is almost certain that modifications and adjustments will occur after you have completed the following steps.

AN EXAMPLE

Sketch #1

Sketch #2



SKETCH OF BOUNDARIES IN YOUR LAYOUT

Sketch #1

Sketch #2

STEP 4. DEFINITION OF THE MAIN CENTER FOR EACH
WORKING GROUP

You know now, where each working group is going to work, and roughly how much total space is given to each one.

Now, you must do the most important thing: Fix the main group center for each working group.

Almost every working group needs some kind of center. It may be something big and elaborate, if the people in the group work together a great deal of the time.

But even if the members of a group spend most of their time working individually, still some kind of place may be needed for working together.

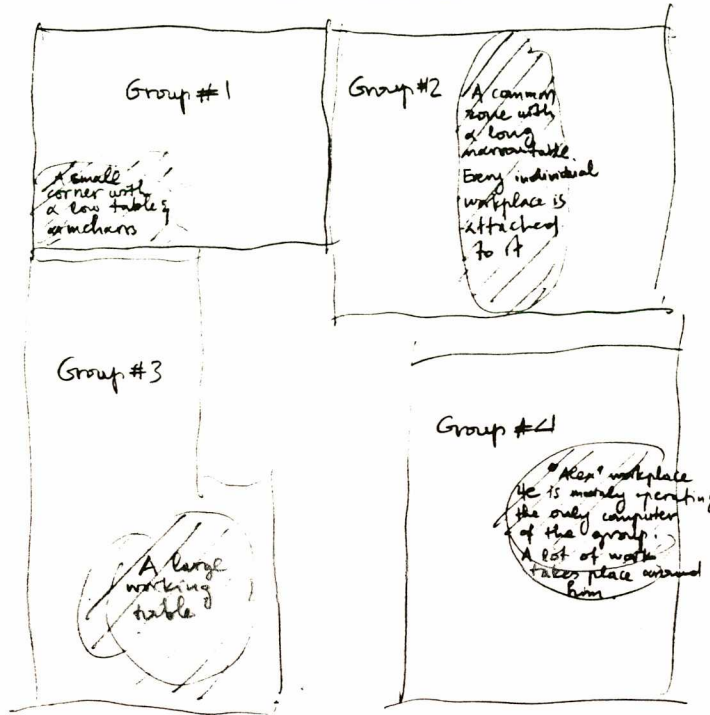
It may be no more than a table.

In an extreme case, it might even be the desk of one of the people in the group, and the others gather round it whenever they work together. But even in this case, it should be clear where the main center of the group is, and what its character is.

This center is the thing which holds the group together.

Now, make a rough sketch of each individual working group space and indicate the location and size of its main center, as well as of what it consists of.

AN EXAMPLE



SKETCH OF YOUR WORKING GROUP SPACE WITH ITS MAIN CENTER

STEP 5. SIZE AND LOCATION OF INDIVIDUAL WORKPLACES

Within the rough boundary positions of the individual group spaces you have chosen, we now want each person to choose his workplace.

Three things are important about the workplace.

1. SIZE.

It has to be the right size. You must decide, together with Anna or Josie, how much space you can be allotted, in square feet.

Of course, each workgroup must have a total working area which is about right. We assume that that decision has already been made. Within the area for your workgroup, each of you must now have a workable amount of space.

As a rule of thumb, you should assume that the areas of your individual workspaces, should add up to about 60% of the total area devoted to your group.

2. ORIENTATION

You must decide which way you want to face. You cannot be sure about the position you have chosen, until you know how you are going to sit there, or work there.

3. ENCLOSURE

You must decide how open or how enclosed you want your individual workplace to be. Already the boundaries of the group work space have contributed to the enclosure of your individual workplace. However, you might need more privacy, more separation between you and your neighbor. This has to be a light form of enclosure that won't disrupt the unity of the group as a whole; it will have to allow more for connection than inducing separation.

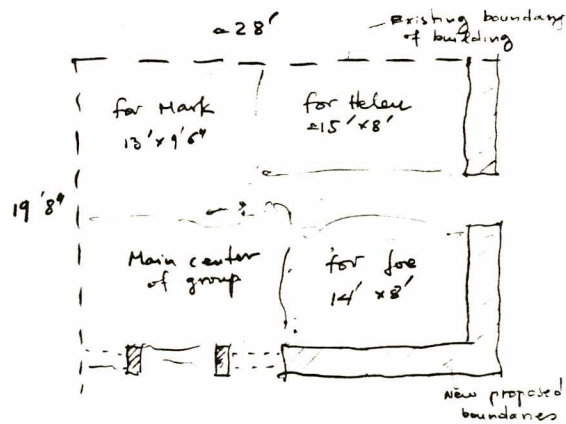
It might be a low wall, or a trellis wall, or some furniture, or columns, or curtains or movable shades....or a combination of these, or finally something else that you might have in mind.

Now make three rough sketches: the first will indicate the location and size of each individual workplace in your group; the second will indicate the orientation of people while working; the third will indicate the areas where enclosures around individual workplaces need reinforcement.

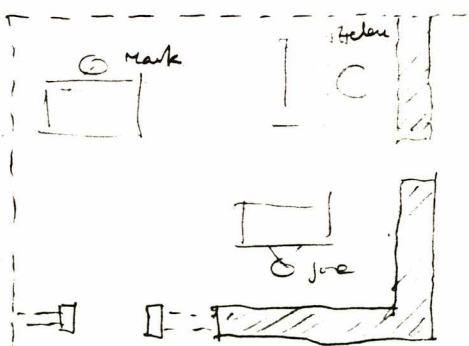
AN EXAMPLE

Group # 1
Number of people: 3
Work area: 2550 sq. ft

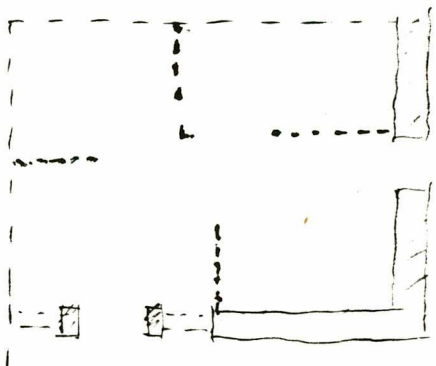
1. SIZE & LOCATION



2. ORIENTATION



3. ENCLOSURE



{10.2}

SKETCH OF INDIVIDUAL WORKPLACES
WITHIN A GROUP

Group #:
Number of people:
Work area: sq.ft.

1. SIZE AND LOCATION

2. ORIENTATION

3. ENCLOSURES

STEP 6. CHOICE OF FURNITURE FOR COMMON SPACE,
WITH DIMENSIONS

In this stage, we want you to choose the elements of furniture which will be needed to make the COMMON GROUP spaces pleasant.

In order to do it, you follow exactly the same procedure that is laid out in step 7 below, and make your choices from the same list of available elements, giving dimensions to each element, as you are requested.

However, in this case, unlike step 7, you do it together, as a group. Also, the number of relevant pieces of furniture will tend to be fairly small.

-o0o-

The cost of the individual piece of furniture is not an object. (Total cost will be estimated on the basis of an average cost per square meter of furnished space.)

-o0o-

FINAL NOTE ON STEPS 1-6.

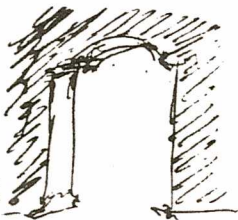
If, at any time, the group process becomes burdensome, questions lead to endless further questions etc, we recommend that Anna and Josie then take over and make the remaining decisions for you, since this will go faster.

The process is only useful so long as it is fun. If it becomes tiresome and difficult, just stop.

You may choose any of the following items, and as many different ones as you need. Each one has certain critical dimensions which will fix its size, shape, and character. You may fix these dimensions, simply by filling in the appropriate boxes in the chart. The furniture will be built to the dimensions you choose. To help you visualise the items, there is a small sketch of each one, along with the description.

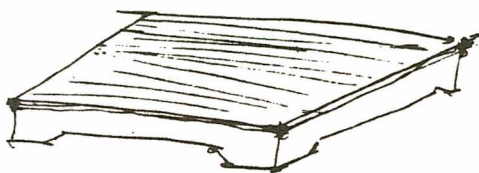
Please write all dimensions in inches

1. Doorways -- a thick doorway.



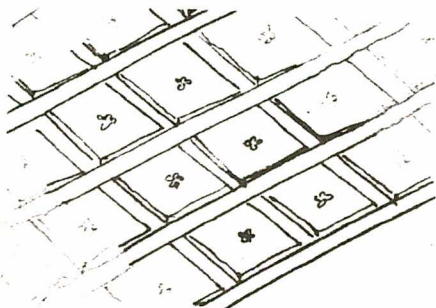
Height of opening
Width of opening

2. A platform -- an elevated wood platform, on top of which the individual workplace is positioned.



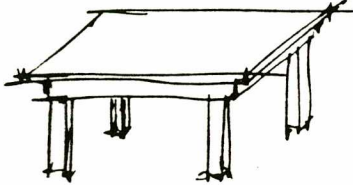
Height of platform
Length of platform
Depth of platform

3. Ceiling -- a gently domed or vaulted ceiling.



Domed or vaulted ceiling
Depth of coffer
Length of coffer
Width of coffer

4. Table -- a conference table, to sit around and talk.



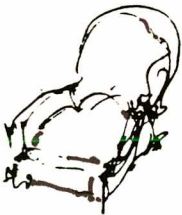
Height
Depth of top
Breadth of top

5. Chair -- an ordinary chair.



Height of the seat
Depth of the seat
Breadth of the seat
Height of the back

6. Armchair -- a more comfortable chair.



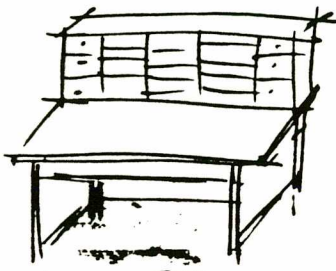
Height of the seat
Depth of the seat
Breadth of the seat
Height of the back

7. Footrest.



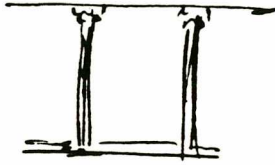
Height
Width
Number of steps
Size of steps

8. Desk -- a top, like a table, with shelves and drawers behind, above.



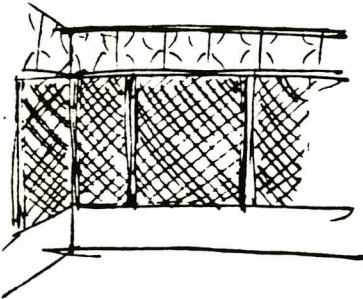
Height
Depth of top
Breadth of top
Back or no back
Height of back
Number of drawers
Size of drawers
Number of shelves
Size of shelves

10. Columns -- simple columns, arising out of wall, and stiff and fairly thick.



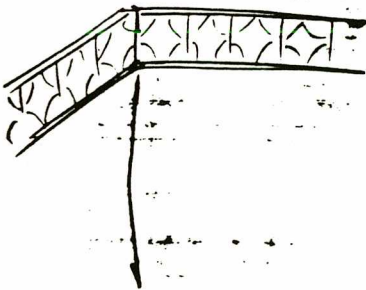
Number of columns
 Height of columns
 Dimensions of column section

11. A wall trellis -- a wall between columns, with thin bracing in it.



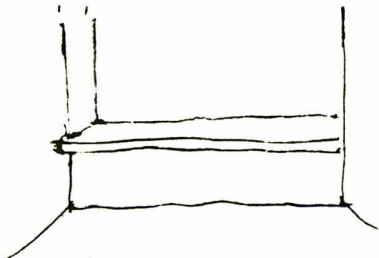
Height of wall
 Length of wall

12. Frieze -- a thing which goes around the wall below the ceiling -- with ornaments, or painted decorations on it.



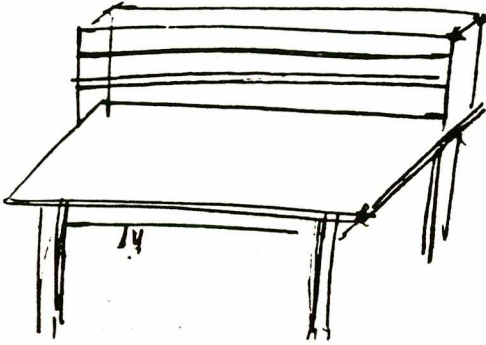
Height of frieze
 Length of frieze

9. Low wall -- a platform thick wall, about 2 feet high.



Height of wall
 Length of wall
 Thickness of wall

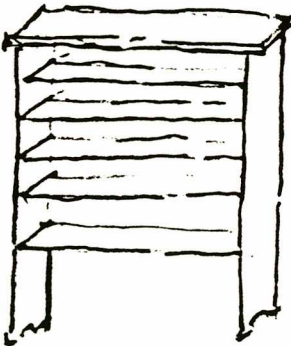
13. Layout table -- a larger table, like desk, but deeper, and backed with open shelves.



Height
Depth of top
Breadth of top

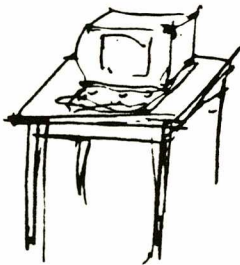
Number of shelves
Size of shelves
Back or no back
Height of back

14. Open shelves -- a wall cabinet like bookcase.



Total height
Back or no back
Number of shelves
Size of shelves

15. A computer table -- small table, just right size for computer, and quite sturdy.



Height
Depth of top
Breadth of top

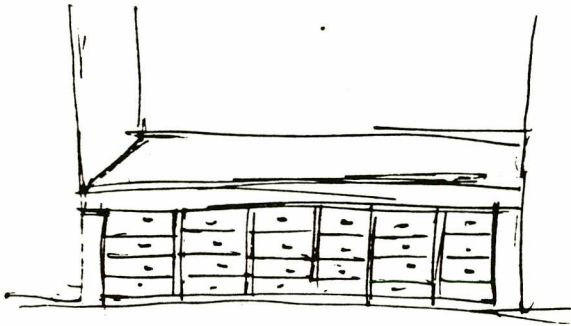
16. Small cabinet -- a thing like a tool cabinet, that goes below a desk or table.



Height
Depth
Breadth

Number of drawers
Number of shelves

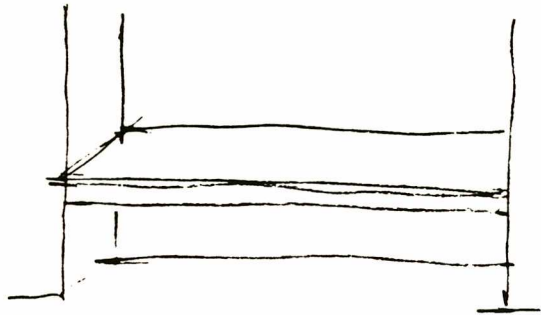
17. Counter -- a counter top with shelves underneath it, or drawers.



Height
Depth of top
Breadth of top

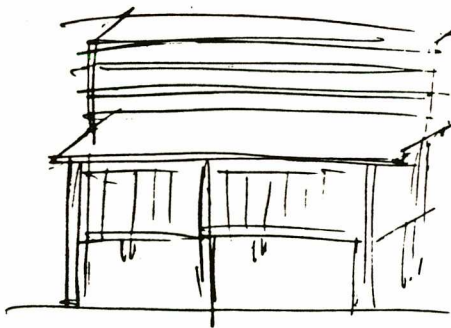
Number of drawers
Size of drawers
Number of shelves
Size of shelves

18. Working counter -- a counter top with no legs stretched between two other non-movable elements.



Height
Depth of top
Breadth of top

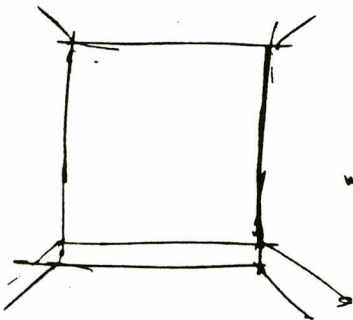
19. High counter -- a higher counter, on legs, with a series of vertical compartments, like record cabinet, and with bookshelves above it.



Height
Depth of top
Breadth of top
Back or no back
Height of back

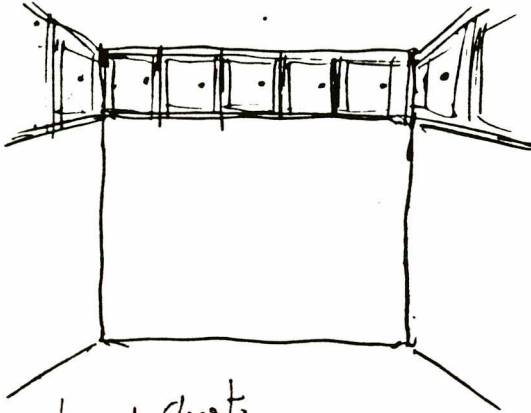
Number of shelves
Size of shelves
Number of compartments

20. Wall surface -- a solid plastered wall.



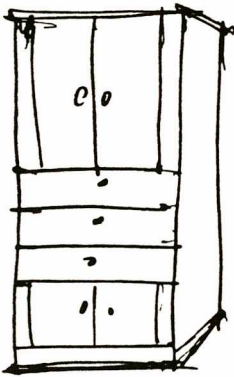
Height of wall
Length of wall

22. Small compartments, above wall.



Number of compartments
Size of compartments

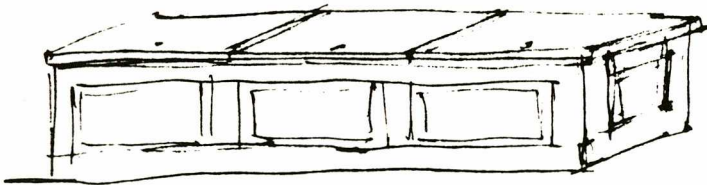
23. ~~Chest~~ ^{Cupboard chest} -- wall storage with enclosed compartments and drawers.



Height
Depth
Breadth

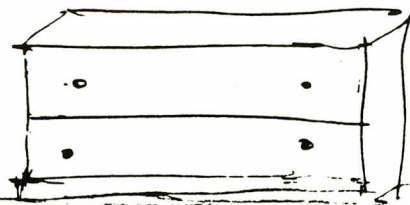
Number of drawers
Size of drawers
Number of compartments
Size of compartments

23. Seat -- a long bench, all enclosed, to provide for storage.



Height
Length
Depth
Height of back

24. Filing cabinet -- a long and narrow cabinet with filing drawers.



Height
Size of drawers

Number of drawers

25. Stool



Height
Size of seat

26. Mailbox cabinet -- an open cabinet with individual mail boxes.



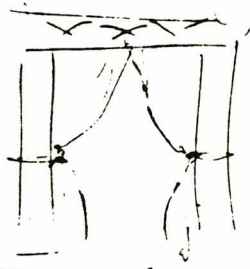
Number of mailboxes
Size of mailbox

27. Ladder -- a library-like ladder to reach storage compartments, high on the wall.



Height of ladder
Width of ladder

28. Drapes, shades...-- a curtain-like enclosure, on a wall opening or between columns.



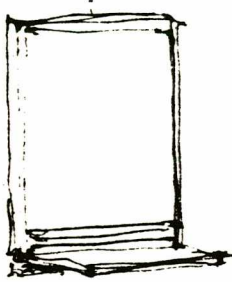
Height of opening
Width of opening

29. Blackboard -- a real slate blackboard for drawing, writing.



Height of whiteboard
Width of whiteboard

30. Information board -- a wall board made of cork or other soft material appropriate for pinning up paper.



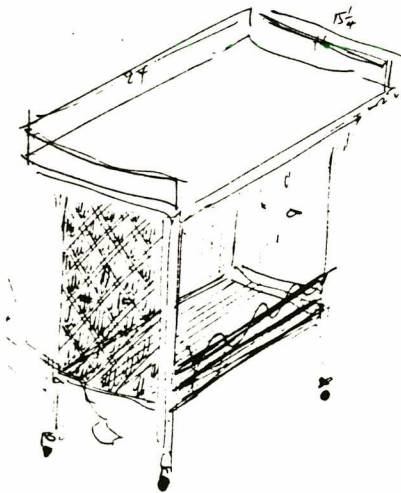
Height of board
Width of board

31. Movable lights -- table and desk lights

32. Fixed lights -- wall and ceiling lights

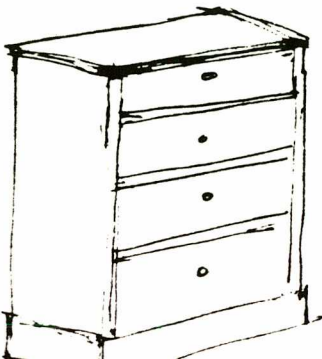


33. Small layout table -- a side movable table for auxiliary uses.



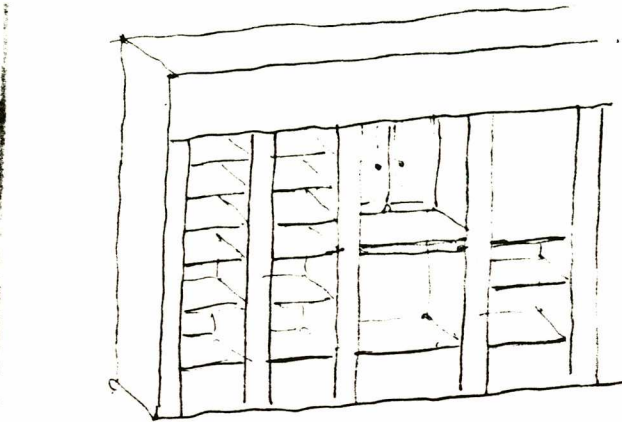
Height of table
Width of top

34. Drawers -- a chest of drawers, built in the wall.



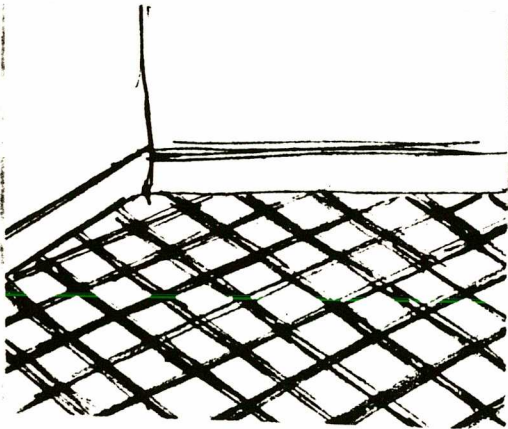
Number of drawers
Depth of drawers
Width of drawers

35. Thick wall -- a thick enclosure for individual and group work with built-in shelves, drawers, cupboards, counter tops.

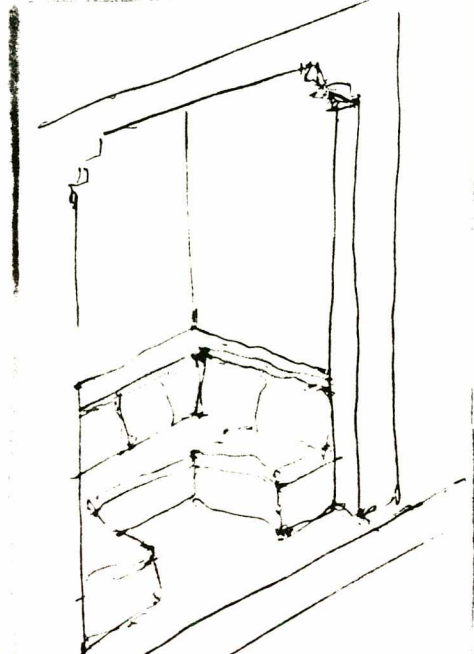


Length of wall
 Height of wall
 Depth of wall
 Kind of built-ins
 - Number of shelves
 - Number of drawers
 - Number of cupboards

36. Floor -- a floor with simple patterns

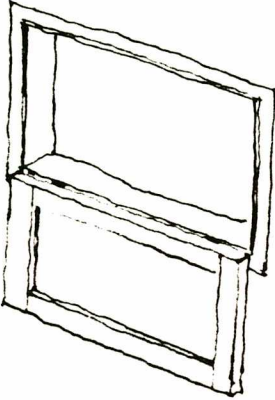


37. Alcove -- a small place, part of a group workspace for private discussions, phone calls...with built-in furniture.



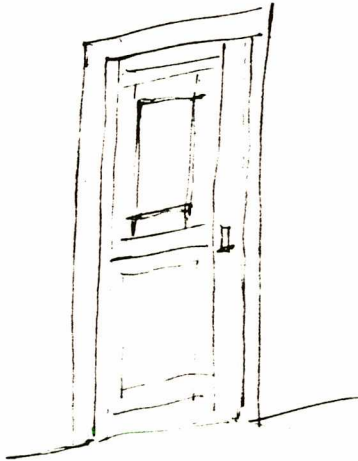
Length of alcove
 Height of alcove
 Depth of alcove
 Type of built-in furniture
 - Seat
 - Counter
 - Small table

38. Interior window -- an opening between workplaces, glazed or solid.



Height of window
Width of window

39. Door -- a regular opening door, or a sliding door, single or double.



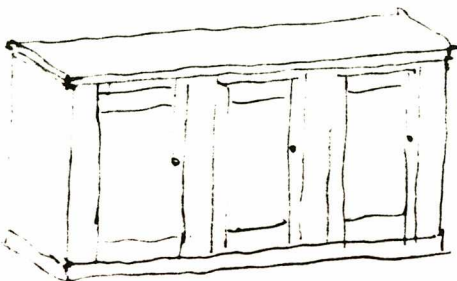
Height of door
Width of door
Window or no window

40. Sofa -- a comfortable upholstered couch, with pillows.



Length of sofa
Depth of sofa

41. Cupboards -- a chest of shelved cupboards.



Number of cupboards
Height of cupboard
Depth of cupboard
Width of cupboard
Number of enclosed shelves

STEP 8. ARRANGEMENT OF FURNITURE IN INDIVIDUAL
WORKPLACES.

Now you must show us how you want to arrange the furniture in your workplace. Please do this step and step 7 at the same time, so that you get the right sizes for the different items.

It is the arrangement of the furniture, and the comfortable feeling of the arrangement AS A WHOLE, which will tell you exactly how big to make the various items.

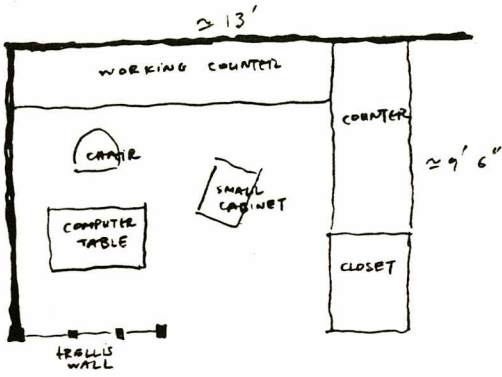
Make a sketch of the arrangement on the chart we have given you.

Don't worry too much about making the arrangement perfect. You will have another opportunity to fine-tune the arrangement, while the furniture is being built. Anything that doesn't seem quite right, will be adjusted then.

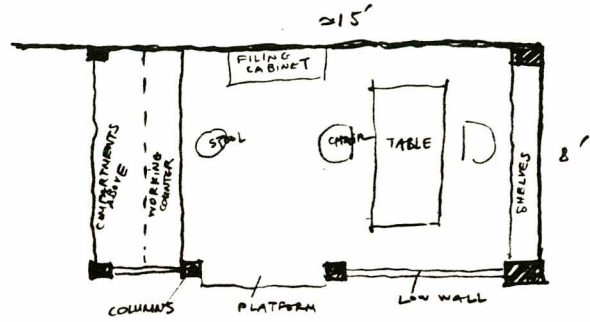
23.1
(21.1)

SOME EXAMPLES

MARE'S WORKPLACE



HELEN'S WORKPLACE



SKETCH OF YOUR INDIVIDUAL WORKPLACE

STEP 9. CLOSING THE ARRANGEMENT, AND MAKING IT WHOLE.

At this stage everything is almost complete. Each person has an arrangement of furniture and a workplace, and the members of each group have a common workplace together.

The only possible problem now, is a little roughness at the edges. In an ideal arrangement, the boundary, the doorways, the common storage space around the edge, the common table, the barriers, and boundaries, all work together smoothly to create a harmonious whole.

Thus what you have done in steps 7 and 8 may need some finishing touches, some final adjustment, to create this kind of harmonious "smoothness" in the whole.

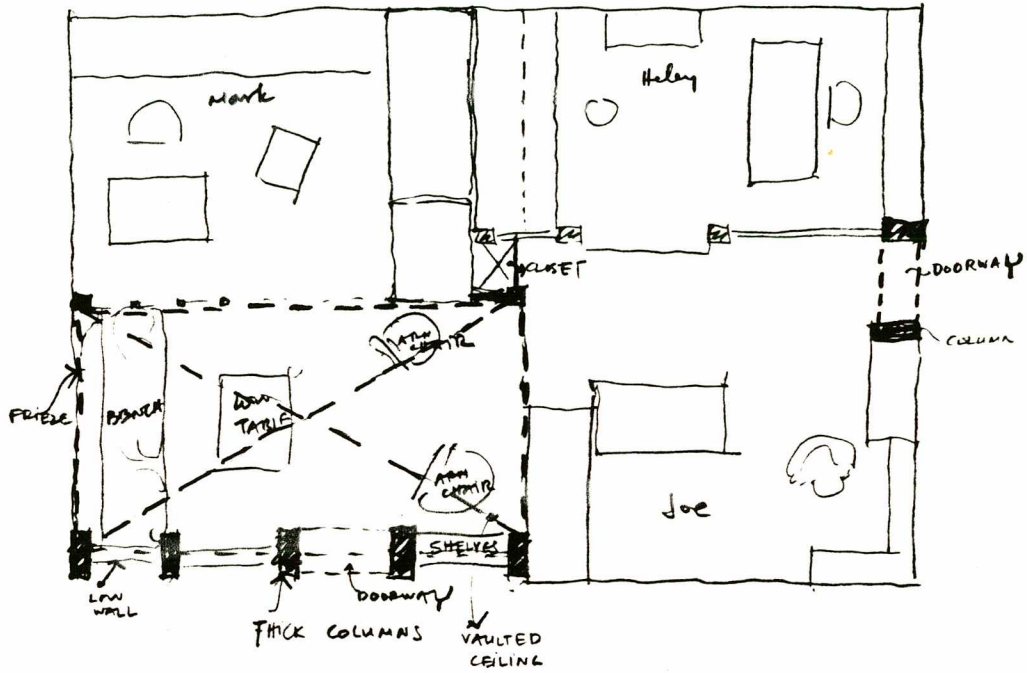
The members of your workgroup should get together to make a common decision about this; the additional elements won't be extensive --they will refer to elements of enclosure of the small group work space as a whole, which have not been considered by the individuals, like doorways, dome, frieze,....

In order to do it, follow exactly the same procedure that is laid out in step 7, and make your choices from the same list of available elements, giving dimensions to each element, as you are requested.

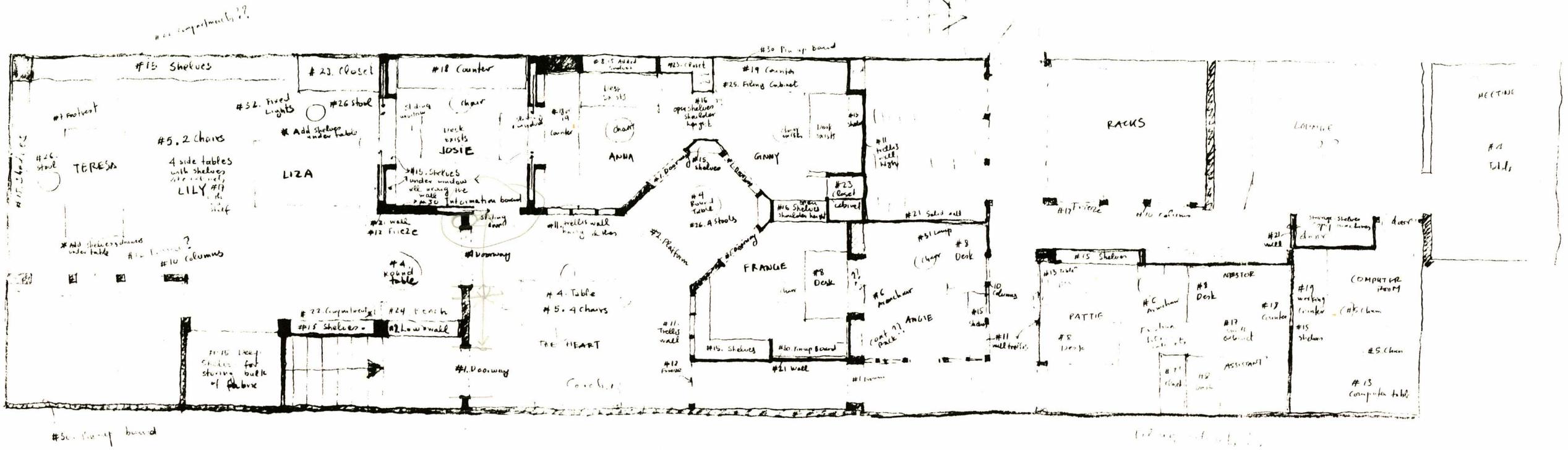
Finally, make a sketch of the small group work area, that shows the arrangement of the additional furniture and enclosure elements. Again, don't worry too much about making the arrangement perfect.

27.1
(22.1)

AN EXAMPLE



SKETCH OF FINAL ADJUSTMENTS IN YOUR GROUP SPACE



#22 cupboard?

#1 stool

#5.2 chairs
4 side tables
with shelves
into them
LILY #11
etc.

LIZA

JOSIE

ANNA

GINNY

FRANKE

ANGIE

PATTIE

ASSISTANT

COMPUTER ROOM

MEETING

#4 table

#30 Pin up board

#13 clock

FABRIC
JUNK
400

STAIRS

Design

product



Francie

Racks

Angie

Computer

credit

acc
acct

Racks

Lower
Level
of area
unit



conference