BOOK III

HOUSING DESIGN AND CONSTRUCTION

An Analysis of War and Pre-war Experience

Technical Division

National Housing Agency

November 1944

NOTICE

The following 9 pages from Book II are included here to provide information on the sources from which the material in Book III is derived.

LIST OF SOURCES By Identifying Number

The accompanying report is based on information derived from a wide variety of sources. Information on private housing was secured chiefly through the issuance of a questionnaire to 24 representative FHA Field Offices (FHA Field Office Canvass). The questionnaire was prepared by the NHA Technical Division, with the assistance of the FHA Underwriting Division, and was intended to provide a consensus of opinion among FHA field personnel regarding probable practices after the war in private dwelling design and construction. Certain data on pre-war conditions were also secured through the FHA 6000-Case Sample Survey of 1939, and through FHA Operating Statistics.

Information on public housing was derived from an analysis of approximately 45 reports and articles by FPHA personnel, housing managers, and other specialists, and from about 35 "Technical Folders" prepared by the FPHA Regional Offices according to specifications suggested by the NHA Technical Division.

A list of sources is provided below:

PRIVATE HOUSING

Questionnaires were received from each of the following FHA Field Offices. Figures placed after each office represent estimated percentages of post-war residential construction attributed to that region.

Boston	3	Birmingham	3	Chicago	9
New York	12	Jacksonville	4	St. Louis	5
Buffalo	1	Memphis	3	Minneapolis	2
Philadelphia	7	Dallas	6	Denver	1
Pittsburgh	2	Houston	4	Salt Lake City	1
Washington, D. C.	2	New Orleans	3	Seattle	4
Richmond	2	Columbus	4	San Francisco	5
Greensboro	4	Detroit	5	Los Angeles	8

PUBLIC HOUSING

A summary of reports, memoranda and magazine articles is given below, together with a list of projects on which Technical Folders were supplied by the FPHA. Figures placed in front of each item are arbitrary numerical designations for use as reference in connection with the abstracts contained in Appendix Two.

1. - ABSTRACT OF CASE STUDY, ELM HAVEN PROJECT, FPHA CENTRAL OFFICE & NEW HAVEN H.A., MAY 1944.

Contents: (a) explanation of design of project by architects, (b) summary of advantages and disadvantages of project by Director of Local Authority, (c) independent analysis and report by two consulting architects.

2. - DEVELOPMENT ITEMS REQUIRING SPECIAL CONSIDERATION FPHA REGION II, NEW YORK, N.Y. MAY 1943. 25 pp.

Summary and discussion by Regional Management Division of critical items of design, equipment, and construction as indicated by projects in operation in New York, New Jersey and Pennsylvania. (Used as agenda for conference referred to in Item 5 below).

3. - REVIEW OF PLANS & SPECIFICATIONS FOR SYDNEY, N. Y. PROJECT, FPHA CENTRAL OFFICE, WASHINGTON, D. C. NOV. 1943.

One of series of sample studies of individual existing projects by the FPHA Technical Division.

3A. - REPORT ON MEETING OF MANAGERS OF PHILADELPHIA HOUSING AUTHORITIES. (3 pp. Memo. JANUARY 1943).

Discussion of advantages and defects of past standards as indicated by Philadelphia projects.

4. - NOTES ON SITE PLANNING - GROUNDS MAINTENANCE REPORTS ON 13 PROJECTS IN N. Y., N. J., AND PA. - FPHA CENTRAL OFFICE WASHINGTON, D. C. AUGUST 1943.

5. - COMMITTEE REPORTS - REGIONAL CONFERENCE ON MAINTENANCE AND OPERATIONS - FPHA REGION II N. Y. - JULY 1943 - 52 pp.

Summary of conference discussions and recommendations regarding advantages and defects of design, equipment and construction of present projects in New York, New Jersey and Pennsylvania.

6. - QUEEN STREET TRAILERS - FIELD REPORT ON TRAILER MAINTENANCE FPHA REGION III, WASHINGTON, D. C. SEPTEMBER 1943.

7. - LEWIS PARK, NORFOLK - SAME AS ABOVE - OCT. 1943.

8. - REVIEW OF PLANS AND SPECIFICATIONS FOR ABERDEEN, MD. PROJECTS, FPHA CENTRAL OFFICE JANUARY 1944.

One of a series of sample studies of individual existing projects by the FPHA Technical Division.

9. - NOTES ON SITE PLANNING - GROUNDS MAINTENANCE REPORTS ON 17 FLORIDA PROJECTS - FPHA CENTRAL OFFICE, WASHINGTON, D. C. AUGUST 1943.

10. - REPORT - CONFERENCE ON MAINTENANCE - FPHA REGION V, MARCH 1944.

Summary of discussions on management and maintenance methods, including information on advantages and defects of present design, equipment and construction standards based on projects in Kentucky, Michigan, Ohio and West Virginia.

11. - REVIEW OF PLANS AND SPECIFICATIONS FOR YPSILANTI, MICH, PROJECT FPHA CENTRAL OFFICE, WASHINGTON, D. C. DECEMBER 1943.

One of series of sample studies of individual existing projects by the FPHA Technical Division.

12. - GROUND MAINTENANCE REPORT - PROJECTS IN OHIO, KENTUCKY, W.VA. FPHA CENTRAL OFFICE. JULY 1943.

12A. - A SURVEY OF HOME CONDITIONS AT RAMONA GARDENS, HA CITY OF LOS ANGELES. OCTOBER 1942.

Tenant survey made primarily to improve management policy and techniques but containing information of value to planners.

13. - REPORTS ON HOUSING PROJECTS - MADE BY ALBERT MAYER FOR FWA. JANUARY - FEBRUARY 1942.

13A Report on SC-38025
13B " " SC-38023
13C " " CONN-6031
13D " " NC-31026
13E " " NC-31024
13F " " MD-18011
13G " " PA-36061
13H " " PA-36221
13I " " CONN-6051
13J " " NJ-28061

Reports by consulting specialist on adequacy of planning and construction. Similar to items 19 and 20.

14. - SUMMARY BY FPHA CENTRAL OFFICE OF REGIONAL REPLIES TO CIRCULAR MEMORANDUM BY LEE JOHNSON DATED 4/23/43. (COVERING HOUSING PROJECTS IN REGIONS I, II, IV, VIII,) FPHA CENTRAL OFFICE, WASHINGTON, D. C. SEPTEMBER 1943.

The opinion of from 5 to 10 Housing Managers in each Region was sought through the Regional offices as to whether certain projects met or exceeded minimum acceptable standards of design, equipment and construction. Replies from 8 Regions were received.

14(1). - MEMORANDUM FROM C. WALTS, JR., COVERING REGION V AND PROJECT MANAGER COMMENTS ON ABOVE CIRCULAR - JANUARY 1944.

14(2). - MEMORANDUM FROM F. D. BYARS COVERING REGION VII AND PROJECT MANAGER COMMENTS AS ABOVE. SEPTEMBER 1943.

14(3). - MEMORANDUM FROM O. HILL, COVERING REGION X AND PROJECT MANAGER COMMENTS AS ABOVE. AUGUST 1943.

14(4). - MEMORANDUM FROM R. FLOOD, COVERING REGION IX AND PROJECT MANAGER COMMENTS AS ABOVE. SEPTEMBER 1943.

14A. - THE PUBLIC TENANT SPEAKS BY LEONARD KAUMAN - ARCH. FORUM APRIL 1942 pp. 217-222.

Summary of a survey of 30 tenant families living in similarly planned and equipped public dwellings in 8 northern cities.

15. - REPORT OF FIELD STAFF CONFERENCE (PIERCE FOUNDATION INTERVIEWERS) NEW YORK. MARCH 1944. (PRELIMINARY DRAFT)

Summary of three-day informal conference held by family interviewers upon conclusion of their work. Interviewers were retained by Pierce Foundation in connection with forthcoming report on space requirements in war housing. Project references follow:

Project A - MD. SR-6 - Original
Greenbelt Project - Permanent
Project B - MD-18111,2 - Greenbelt
War Housing - Permanent
Project C - VA-44254.1 - NORFOLK, Trailers
Project D - VA-44183 - Alexander Park,
Norfolk - Demountable

Project E - ALA-1038 - Mobile - Trailers
Project F - ALA-1033 - James Place, Mobile - Permanent
Project G - TEX-3-4, TEX-41064 - La Armada, Corpus Christi - Permanent
Project H - CAL-4-5 - Aliso Village, Los Angeles - Permanent
Project I - CAL-4086 - Carquinez Heights, Vallejo - Demountable
Project J - KAN-14024 - Planeview, Wichita - Temporary
Project K - PA-36222 - Monongahela Heights, Pittsburgh, area. - Permanent
Project L - PA-36161 - Shalercrest, Pittsburgh area - Permanent
Project M - ME-17039 - Longcreek Terrace, South Portland - Temporary
Project N - ME-17031 - Red Bank Village, South Portland - Temporary

15A - FINAL REPORT ON ITEM 15 ABOVE, DISTRIBUTED BY ROBERT L. DAVISON ASSOCIATES.

Note: In this Final Report, projects were re-lettered as follows: (See Prelim. Draft, Item 15, for further description of each project)

Project A - Longcreek, South Portland
" B - Red Bank Village, South Portland
" C - Monongahela Heights, Pittsburgh
" D - Shalercrest, Pittsburgh
" E - Planeview, Wichita
" F - Carquinez Heights, Vallejo
" G - Aliso Village, Los Angeles
" H - La Armada, Corpus Christi
" I - James Place, Mobile
" J - Trailer Project, Mobile
" K - Alexander Park, Norfolk
" L - Trailer Project, Norfolk
" M - Greenbelt, original portion, Washington area,
" N - Greenbelt, war housing, Washington area.

16. - GUIDE IN EVALUATION OF PUBLIC HOUSING NAHO JULY 1943.

17. - REPORT ON YESSLER TERRACE PROJECT, SEATTLE, BY SWEND RIMER 1943-44.

18. - EDWARD LANGLEY FELLOWSHIP ARTICLES BY ELIZABETH COIT, A.I.A. OCT. AND NOV. 1941 JOURNAL OF AM. INSTITUTE OF ARCHITECTS.

Report of extensive investigation of adequacy and inadequacy of public subsidized, private limited dividend and philanthropic housing project design, from the standpoint of the tenant.

Information derived from visits to more than a hundred projects over a period of 4 years. (Information summarized also in Arch. Record, April 1942).

19 to 19 G. incl. -REPORTS ON HOUSING PROJECTS MADE BY HENRY CHURCHILL FOR FWA - FEBRUARY 1942.

19A - Report on NY-30031, NY-30032 - Buffalo
19B - Report on PA-36021 - Erie
19C - Report on PA-36011 - Philadelphia
19D - Report on PA-23041 - Audubon, N. J.
19E - Report on VA-44084 - Portsmouth
19F - Report on VA-44086 - Portsmouth
19G - Report on VA-6-1 Norfolk

Reports by consulting specialist on adequacy of planning and construction. Similar to items 13 and 20.

20. - REPORT ON HOUSING PROJECTS MADE BY CATHERINE BAUER TO FWA FEBRUARY 1942. REPORT COVERS THE FOLLOWING 3 PROJECT LOCATIONS:

CAL-4092, San Diego
WASH-45044, WASH-45047, WASH-45048, Bremerton
CAL-4012, CAL-4833, Benecia

21. - REPORT ON DESIGN AND DEVELOPMENT ITEMS (PRELIM. DRAFT) ANNUAL LHA MAINTENANCE CONFERENCE - REGION II NEW YROK, N. Y. JULY 1944.

Summary of recommendations based on experience of housing managers in New York, New Jersey, and Pennsylvania. Similar report issued in 1943 (Item 5) - 36 pp. Final report listed as item 23.

22. - COMMITTEE ON MANAGEMENT ASPECTS OF DESIGN - REPORT ON CONCRETE FLOORING. MAY 1944 - NAHO.

23. - FINAL VERSION OF ITEM 21 ABOVE.

30. - MEMO, DUANE TO GAYLORD, MAY 23, 1944 - "CONDENSATION IN DWELLING UNITS" 6 pp. REGION III FPHA.

31. - MEMO, GAYLORD TO RODIER UNDATED, TRANSMITTING "DEVELOPMENT ITEMS REQUIRING SPECIAL CONSIDERATION" 6 pp. REGION III FPHA.

Information derived from projects in Delaware, District of Columbia, Maryland, Virginia

32. - MEMO LEVY TO BODIER, MARCH 18, 1944, TRANSMITTING "HEATING AND THERMAL QUALITIES OF PERMANENT DWELLINGS" ETC. 5 pp. REGION IV FPHA.

33. - MEMO LEVY TO BODIER, APRIL 29, 1944 "DESIGN AND CONSTRUCTION DETAILS WHICH CREATE MANAGEMENT PROBLEMS" 5 pp. REG. IV FPHA.

Information derived from projects in Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, Tennessee.

34. - MEMO GILBERT TO BODIER, APRIL 21, 1944 "DESIGN AND CONSTRUCTION DETAILS WHICH CREATE MANAGEMENT PROBLEMS" 2 pp. REGION VIII FPHA.

Information derived from projects in Arkansas, Louisiana, New Mexico, Oklahoma, Texas.

35. - MEMO SAMSON TO BODIER, UNDATED 2 pp. REGION VII FPHA.

36. - MEMO FLOOD TO BODIER, JULY 3, 1944 "DESIGN AND CONSTRUCTION DETAILS WHICH CREATE MANAGEMENT PROBLEMS" 4 pp. REGION IX FPHA.

Information derived from projects in Alaska, Idaho, Montana Oregon, Washington.

37. - MEMO BROOME TO BODIER, AUGUST 4, 1944 3 pp. (SIMILAR TO ITEM 33 ABOVE) FPHA REGION IV.

38. - MEMO BROOME TO BODIER, AUGUST 4, 1944 "PROBLEMS RAISED AT A CONFERENCE OF MAINTENANCE SUPERINTENDENTS, ATLANTA, FEB. 1944" 2 pp. REGION IV FPHA.

Information derived from projects as listed in Item 33.

39. - REPORT ON SPRINGFIELD, OHIO MANAGEMENT MAINTENANCE CONFERENCE FEBRUARY 4, 1944 REGION VI FPHA.

Management experience in Illinois, Indiana, Minnesota, South Dakota, Wisconsin.

50. - REPORT TO FPHA ON PROJECT PA-36044 (TEMPORARY) IN BETHLEHEM, PA. BY HENRY CHURCHILL, (PROJECT CONTAINS EXPERIMENTAL BUILDINGS).

Report by consulting specialist.

51. - REPORT TO FPHA ON PROJECT NY-1-1 (PERMANENT), SYRACUSE BY TALBOT HAMLIN.

Report by consulting specialist

52. - ALUMINUM CITY TERRACE HOUSING - PITTSBURGH, ARCH, FORUM JULY 1944.

Includes tenant reactions regarding advantages and defects of modern architectural design.

TECHNICAL FOLDERS

Note: These folders were prepared by the FPHA Regional Offices during July, August and September 1944 as the result of a request by the NHA Technical Division to the FPHA Central Office. Each folder covers a single project and contains the following documents: A selection of the most important building and site plans: outline specifications; cost summary; management budget; summary of project statistics; an analysis of design defects and advantages by the Project Manager, etc.

The last-mentioned document is the source of much of the information contained in the Technical Division's report to the Administrator on design, material, and construction standards.

100. - TECHNICAL FOLDER - TEX-41032 - Permanent

101. - " " - TEX-41076 - Permanent

102. - " " - TEX-41011 - Demountable

103. - " " - ARK-3021 - Demountable

104. - " " - TEX-41373 - Temporary

105. - " " - TEX-41605 - Temporary

106. - " " - TEX-41632 - Trailers

107. - " " - GA-4-3 - Permanent

108. - " " - NC-3-1, NC-3-1A - Permanent

109. - " " - ALA-1101 - Demountable

110. - " " - FLA-8104A - Demountable

111. - " " - NC-31077 - Temporary

112. - " " - GA-9131 - Temporary

113. - " " - MISS-22024-28 - Trailers

114. - " " - WASH-1-4 - Permanent

115.—	TECHNICAL FOLDER	-	WASH-45016	- Temporary
116. -	"	"	- WASH-45209	- Trailers
117. -	"	"	- ILL-5-1	- Permanent
118. -	"	"	MINN-H-4201	- Permanent
119. -	"	"	- ILL-11094	- Demountable
120. -	"	"	- IND-12097	- Demountable
121. -	"	"	- ILL-11072	- Temporary
122. -	"	"	- WISC-47071	- Temporary
123. -	"	"	- IND-12175	- Trailers
124. -	"	"	- OHIO-5-2	- Permanent
125. -	"	"	- OHIO-33081	- Demountable
126. -	"	"	- WASH-45112	- Demountable
128. -	"	"	WASH-45217 (2 folders)	- Temporary
129. -	"	"	- ORE-35029	- Demountable
130. -	"	"	- WASH-5-2 WASH-45014	- Permanent
131 - -	"	"	- WASH-45017	- Temporary
132. -	"	"	- MICH-20033	- Temporary
133. -	"	"	- MICH-20094	- Temporary
134. -	"	"	- W.VA.-3-2	- Temporary
135. -	"	"	- OHIO-33044	- Temporary
136. -	"	"	- OHIO-33191	- Trailers
137. -	"	"	- NJ-21-1	- Permanent

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THIS BOOK

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HARTFORD The detached type of single family dwellings will be in demand rather than the semi-detached, row or end row type. There has been a very favorable reaction to the multi-family 608 type of housing indicating that there will be a strong demand for this type in the post-war period. This will be true, particularly for the middle class income group. The success of this type, however, will depend a great deal upon architectural design, layout of living units and will require dual exits. The two bedroom unit has proved to be very popular. Also, the unit having the living, dining and kitchen facilities on the first floor with bedrooms on the second floor has had a demand slightly greater than the living unit having all rooms on the one level.

It is our opinion that developments containing different types of housing are not desirable. Experience shows that, where single developments contain several of the different building types, there has been an adverse effect upon the value of the single family detached dwellings.

NEW YORK No significant change or trend is anticipated as result of war housing practice.

Developments may be desirable if they contain different types. There is no specific answer to the problem. Each development or subdivision depends on location in relation to city plan, utilities, topography, and the economies of the problem.

PHILADELPHIA Developments in this area are definitely of one type of residence. Any project which embraces any varying types, are accidental, and the occurrences of a few units, were built to use ground that could not be assimilated in the usual type planned for the Project. As practically all developments are built for sale, rather than rentals, builders would not create a development of varying types, owing to an opinion that sales resistance would not be encountered if the project was varied within the same area. Consequently, projects are either of the Single Family Row, Semi-Detached, or Detached types.

Projects are practically determined by their location. Urban developments are usually of the row type, semi-suburban or bordering communities of the semi-detached type, and suburban of the detached type. Urban developments may also differ where Zoning regulations govern the type houses allowable within certain areas.

In all classes, fewer basementless houses and therefore more laundry and storage space. Also increased plumbing facilities and better sewage disposal, storm drainage and private water supply. Probably little change in general construction and mechanical trades, except there will probably be more gas fired, forced warm air heating systems installed, applies to all classes.

DETROIT Due to the fact that war housing was all smaller dwellings and predominately two-bedroom type, the postwar construction will be mostly medium and large size dwellings of which three-bedroom type will predominate.

None, due to the war housing practice. The changes we have indicated are trends which were obvious before the war but which were temporarily arrested by war regulations.

Developments containing detached and semi-detached dwellings are desirable. These may occur in the same project if the project is large enough and properly planned. There is no row housing in this area and we do not recommend its introduction.

The Ford Foundation is a development in Dearborn, Michigan which is an outstanding example where single detached, semi-detached, dwellings and apartment buildings have been successfully built in a single development.

COLUMBUS Single Family detached houses will be in demand from conversations with Builders and Developers.

As a rule developments containing different types should be discouraged. Corner lots could be treated differently and that part of a development on a main highway.

CHICAGO In the pre-war period (1940 and 1941), practically no housing other than single family detached was constructed. A very few semi-detached dwellings were built under FHA and an insignificant number of row and multi-family types were constructed. During the war period under 608 we have had a few multi-family buildings and a great many row and semi-detached. It is my opinion that the desirable features of housing other than detached have been brought to light in this war period, and also the disadvantages of these types have become apparent. I believe that the information gained from this experience will lead to the construction of both row and multi-family types in those instances where minimum cost housing is to be provided.

Row development should be discouraged in all urban sections, even though permitted under existing Zoning codes or building regulations. Row houses are generally built where land is planned in a fixed grid pattern. This, however, should not be the deterrent factor in the breaking down of the continuous row practice. Grouping of houses in a mixture of semi-detached and groups of 4, 6, and 8 units would present a more desirable living condition and lend itself to a better design problem. This character of development would not present sales problems as the variations would not be too great to cause any significant differences.

Experience in mixed developments cannot be cited as all developments in this area are of one type units, and practically every building area in this office, whether it be a first class or third class City, Borough, or Townships of all classifications, having Zoning regulations which restrict the types of houses that can be built. Most suburban areas at this office are definitely restricted to detached house construction, and in many instances where semi-detached are permissible, it would be impossible to build group housing. Consequently, mixed developments embracing all types could not be accomplished unless it was within areas permitting row housing.

Mixing of types even though permissible should not be encouraged in areas where detached houses are constructed, but, as previously stated, where permitted by favorable Zoning regulations, mixing of types is desirable in opposition to solid row construction.

PITTSBURGH This area is predominantly a single-dwelling unit area. We have had no experience with developments containing different types of units. If properly planned, a development of this type would undoubtedly have appeal but to date no development of this type has been attempted.

BUFFALO Believe in building of multi-family, row and end row type, because operators like the rental housing idea which has been in practice during present war period.

Consider this anticipated post war condition desirable.

Believe there will result more detached, single family, and multi-family row houses and apartments, generally larger rooms, better dining facilities and more bed rooms in all classes. This applies to both one and more than one story types.

I believe the location of these types is quite important and that the value of close-in locations has been demonstrated. There will undoubtedly be some effort on the part of builders to build these types in outlying districts, and except for small towns where such accommodations are not provided and where there is a sufficient demand, we should generally discourage location of row and multi-family dwellings except in close-in neighborhoods well situated with respect to transportation, utilities, schools, etc.

MINNEAPOLIS War housing in Minnesota having been limited to a small number, the war housing practice will have limited effect in this area.

The trend in this locality is predominately the single-family detached dwelling constructed on a lot 55' x 120'.

ST. LOUIS We have many large developments or subdivisions where mixed types are not considered objectionable. For example -- Holly Hills, St. Louis Hills, University Park and Pasadena Hills -- are among our best subdivisions and they contain different building types. To be acceptable the development should be large enough to permit segregation of each type of dwelling and, of course, it must be well planned.

WASHINGTON There is no reason why an orderly development including all building types could not be successful. This has never been tried in great volume in this area. On the contrary, trend has been toward the segregation of the several types into communities. Proper design and careful study of subdivision plans would make possible, through coordination, the use of all building types in one community, therefore, making available to potential occupants desirable community advantages that are now lacking some instances and over-abundantly present in others.

RICHMOND Little change is anticipated with reference to dwelling types. The subject area is predominantly opposed to row type developments. Two family dwellings, not semi-detached, have proved to be popular and doubtless will continue in the post-war era.

(Mixed types are not desirable) unless adequate protection with reference to landscaping or topography is provided. This type development has not been typical in this area, and is generally discouraged.

GREENSBORO Do not consider war housing practice will have any effect. Do not consider that developments containing different types are desirable. In fact, such should be discouraged unless such development is of sufficient size to set up self-contained neighborhoods for each type.

BIRMINGHAM Use of multi-family war housing has resulted in a reaction to single family preference.

We have had only one subdivision with mixed types. Experience not satisfactory.

JACKSONVILLE Believe practices of latter part of 1941 will be resumed. Single family detached only for this area. Land is plentiful and reasonable in cost.

Full ventilation is needed and single family detached best affords good ventilation.

We expect our heavier demand to be for medium and large class housing, with very little demand for any other type than single family detached.

The percentage of multi-family dwellings in Florida has always been small except in the winter tourist sections, because of climatic conditions and the desirability of all possible circulation of air. Reasonably priced lots in sufficient numbers have made it possible to satisfy this demand for detached single-family houses, and there is still no lack of land available for subdivision within fifteen to twenty minutes' driving range of the largest centers of population. Title VI has built enough good duplexes and four-unit apartments to take care of any apartment house demand during the first post war year. We expect the heaviest demand, by far, to be for single family medium one-story and large one and two-story detached. There is a four-year backed up demand for this type, with more prospective purchasers in better financial condition to go ahead with plans than at that time.

MEMPHIS In our opinion, there will be a strong increase in the number of apartments to be built immediately following the war. This, we believe, will be brought about by reason of the fact that few apartments of four or more units have been built in several years, none during 1940 and 1941. There seems to be an increasing number of small families that prefer apartment quarters. This group is primarily confined to young married couples and older couples whose children are grown up, married, and moved away from home. We feel that a modest number of apartments are to be desired.

We do not believe that it would be practical to combine single-family detached and row houses in a development; however, there will be subdivisions in connection with which it would appear to be practical to include with the single-family detached units a few duplexes on lots that are particularly adapted to that type of unit. To some extent, we have experience with a development of this type in Kingsport, Tennessee, which combined both duplexes and single-family units. So far, it has been successful and has met with a satisfactory reaction from the public. We do not mean to imply that such is practical in all projects, but we feel that there may be some localities where such a situation would represent sound mortgage financing.

NEW ORLEANS Residential construction prior to the war was confined almost exclusively to single family structures. A negligible percentage of two story, two family houses was built in New Orleans and two small apartment projects embracing a total of 170 odd units were built. A few four family structures were built in New Orleans and Shreveport. Shreveport has one apartment project of 120 units.

Multiple dwelling units in this state are not very desirable for investment purposes except in several of our largest cities. The mixing of widely different types is undesirable. We find that the structure commonly known as the "Duplex", which contains a complete living unit on the first and second floors is not objectionable in medium priced single family areas. However, the new areas are inclined to restrict themselves to single family structures without exception.

HOUSTON No change anticipated.

War housing practice will not significantly change the pre-war trend in this area which already produced a small floor area dwelling.

There are no developments here with mixed types. I do not feel that they are desirable in this area.

DALLAS A larger percentage of the dwelling units will be in single-family detached houses in the medium class area, with a larger percentage of three bedroom units, as a majority of the war units were in two and four family structures, with one and two bedrooms.

We do not believe that developments containing different types are desirable. Our experience has been limited with developments containing more than one type. The better class developments in this area have only one type and are generally made up of single-family detached owner-occupied units.

DENVER It is expected that war housing practice in itself will produce little significant results in housing practice.

We do not feel that a mixture of types is desirable for this area. Practically all new development has been with single family detached structures which is a reflection of the attitude of the housing market. We do feel, however, that variation in design to eliminate monotony and produce greater individuality in the houses is an important objective in residential development.

SALT LAKE CITY No change anticipated.

Developments containing different types generally are not desirable if objectives of best planning are to be accomplished, although broad generalities cannot be made. There are instances where, within one subdivision, different types can be incorporated when properly planned; but unless a subdivision is properly planned, the mixture of types is undesirable. Generally speaking, our experience indicates that rental properties are not well landscaped nor well maintained and have a destroying influence on surrounding properties, which largely makes it advisable for the single-type of development.

LOS ANGELES Have little demand in immediate post war period for small area, strong demand for medium and large area - single family detached homes.

Single family detached proven most desirable in area.

SAN FRANCISCO A lesser percentage of multi-family dwelling units will be constructed.

SEATTLE No change anticipated.

In general it does not appear that developments containing distinctly different types of housing would be acceptable or desirable.

HARTFORD War housing practice indicates that the small area, one-story structure having only two bedrooms with no provision for future expansion such as stairs to the attic space for future bedrooms will meet with market resistance. The two bedroom house with stairs to the attic and sufficient pitch to the roof for ample headroom will be in strong demand. In the immediate post-war period, the greatest demand will be in other than the small area and low priced house insofar as new construction is concerned.

NEW YORK Post-war market prices - 30% higher.

PHILADELPHIA 20% higher. Higher than pre-war, owing to the upward differential in production costs which undoubtedly will be maintained for an unpredictable period.

PITTSBURGH 10% higher.

BUFFALO 15% higher.

DETROIT 15% higher.

COLUMBUS 20% higher.

CHICAGO 12% higher. Construction during the war period under the regulations of the War Production Board has resulted in the very smallest type of dwellings which can provide adequate accommodations. In general, the rooms are smaller than the average family would consider desirable, but the fact remains that these small rooms do provide sufficient space for minimum furniture. In those cases in the post-war period where construction must be kept to the very minimum, this experience will point the way to sound planning but generally I believe that the public will demand larger rooms.

MINNEAPOLIS 15% higher.

ST. LOUIS 20% higher.

WASHINGTON 30% higher.

RICHMOND 10% higher. It may be predicted that square foot areas will be increased. Market prices will be affected accordingly.

GREENSBORO 25% higher.

BIRMINGHAM 20% increase. Also return to larger floor areas and larger rooms.

JACKSONVILLE The 20% increase in costs we have forecast will mean a capital cost increase of $600 on the small unit, $1250 on the medium and $1850 on the large. This will increase operating and maintenance expense $2.10 per month for the first, $4.50 for the second, and $7.00 for the third, as close as we can estimate.

There will be no increase in cost of current or gas or water, and little in heating where oil is used. In Florida there is a $5,000 tax exemption on homesteads, and there will be no taxes on the small house other than a small payment to bonded indebtedness, a total tax of $3.00 to $5.00 a year. On the medium and large class houses we dn not expect an increase in tax assessment, due to added cost, but there has been an increase of about 20% in millage in both county and city taxes.

MEMPHIS 25% increase. The cost of operating and maintaining such apartment units will undoubtedly be higher than that experienced before the war; however, the increased operating and maintenance costs can and no doubt will be offset by an increase in rentals which the average tenant will be able to successfully pay. The restrictions as to size, type, and setback thereon around all housing as a result of the war effort have contributed to a desire on the part of the average operative builder to furnish the post-war market with more commodious and livable quarters. We believe that the average builder will want to return to building the larger, more spacious house as quickly as possible after the war ends.

NEW ORLEANS Most construction of the single family type will fall in the medium class type. Typical houses in this state are rarely built with less than 900 square feet of area except during the emergency.

We expect post-war prices to be rather stable and approximately 10% higher than that experienced in 1941. This will be true for practically the entire state - the only exception being several areas where an excess of war housing was constructed.

HOUSTON 20% increase.

DALLAS 18% increase.

DENVER 35% increase. The effect of the war period on costs and prices is expected to result in relatively high market prices and construction costs.

SALT LAKE CITY 30% increase. Cost of material and labor have increased approximately 30%. The home building industry in this area has been highly unionized and indications point to a stabilized cost on this level.

LOS ANGELES 25% increase.

SAN FRANCISCO 30% increase.

SEATTLE 10% increase.

HARTFORD No change anticipated.

NEW YORK No change anticipated.

PHILADELPHIA No change anticipated.

PITTSBURGH No change anticipated.

BUFFALO No change anticipated.

CHICAGO One, one and one-half and two-story structures have been built during the war period. No significant advantage has been developed for any one type. The general tendency appears to be developing toward more one-story structures in the medium and large class, principally on account of the tendency toward larger lots. In the small class several highly desirable two-story plans have been used, and it is felt that the introduction of this type into the small class may have the effect of encouraging such construction in the post-war period.

JACKSONVILLE No change anticipated.

NEW ORLEANS Very few residences of the two story type are built in this state unless four or more bedrooms are desired.

NOTE: Cities not listed made no comment on this item.

HARTFORD No change anticipated.

NEW YORK No change anticipated.

PHILADELPHIA No change anticipated.

PITTSBURGH No change anticipated.

BUFFALO Probably three-bedrooms minimum for all classes even though one-bedroom at time of occupancy may be used for other purposes. Experience shows definite lack of room accommodations.

CHICAGO The war period has demonstrated the necessity for houses with more than two-bedrooms in the small and medium class. I believe that post-war conditions will require this type of dwelling.

ST. LOUIS An unusually large demand is anticipated for better homes of three and four bedrooms.

BIRMINGHAM Emphasis on three-bedroom houses.

JACKSONVILLE No change anticipated.

MEMPHIS The number of three bedroom houses constructed in the medium class group in pre-war days should encourage builders in the post-war period to construct more three-bedroom units. In the larger class houses, it is felt that there will be a strong trend toward the three-bedroom type with fewer and fewer two-bedroom, one-bath houses being constructed in that category.

NEW ORLEANS The popular residential structure will contain two or three bedrooms. It is believed the three bedroom structure will predominate, due to the fact that no such types have been built in this area during the emergency.

NOTE: Cities not listed made no comment on this item.

HARTFORD Increase in size for living rooms and kitchens.

NEW YORK No change anticipated.

PHILADELPHIA No change anticipated.

PITTSBURGH No change anticipated.

BUFFALO All room sizes are inadequate for small and medium class houses, especially as to bedrooms and dining areas.

CHICAGO The room sizes of pre-war housing were generally satisfactory, and I believe that the general advantages as shown by this schedule will be maintained without change in the post-war period.

BIRMINGHAM Larger rooms.

JACKSONVILLE No change anticipated.

NEW ORLEANS There will be no changes in typical room sizes. We believe they will continue to be around 20% larger per room than the minimum established in Property Standards.

NOTE: Cities not listed made no comment on this item.

HARTFORD For some years in the pre-war period there seemed to be an indication of a trend away from a dining room. We have noticed, however, in a number of war housing dwellings, that one of the bedrooms on the first floor was being used as a dining room, even though such space was not planned for this purpose. It appears that there will be a trend toward a dining room or adequate dining space other than in the kitchen or living room.

NEW YORK No change anticipated.

PHILADELPHIA No change anticipated.

PITTSBURGH No change anticipated.

BUFFALO Trend shows preference for dining alcove rather than for dining room which is seldom used because of scarcity and quality of domestic help. In large class houses, there is a preference for dining area, supplementary to living area, rather than for a separate dining room.

CHICAGO Dining space in the kitchen or in a living room or dining alcove has not proven entirely satisfactory in war-time houses. In most instances, dual-purpose rooms which might be used either as a dining room or bedroom have been found to be used only as a dining room. I believe that the average home owner in the post-war period will prefer a separate dining room.

BIRMINGHAM Trend will be away from separate dining rooms in smaller houses.

JACKSONVILLE No change anticipated.

NEW ORLEANS The popularity of dining rooms is diminishing in the typical two bedroom houses. Dining alcoves in the kitchen or attached to the living room seem to be predominate. Structures with three or more bedrooms will without exception, be built with a standard sized dining room.

NOTE: Cities not listed made no comment on this item.

HARTFORD No change.

NEW YORK No change.

BUFFALO Also full basement desirable to help eliminate dampness in all ground floor rooms all classes. Full basement insures adequate storage and laundry space, also play space in houses of all classes, especially in medium and large class.

Where utility room occurs in basementless houses, its size should be greatly increased in all classes to provide adequate heating, storage and laundry space.

COLUMBUS No change.

CHICAGO Average family wants a utility area large enough to accommodate all service functions adequately, and also to provide secondary use as recreation room for children as well as adults. An area of this size cannot be provided on the first floor, because average lot is not large enough and because cost of much space on first floor is prohibitive. Basement also preferred because it eliminates cold floors of no-basement house. In post-war period, basements will probably be provided for practically all houses served by public sewer. In septic tank areas, no-basement houses will predominate.

ST. LOUIS No change.

WASHINGTON Custom practice in this area, because of restricted lot size and economy, make the inclusion of a basement in small and medium class houses a necessity. Basement areas, principally used for storage and laundry purposes, have in some instances been subjected to the usual play-room finish.

RICHMOND Basements are believed necessary in small and medium class houses - with particular reference to the medium class for the following purposes:

Local Custom
For use as a laundry
Servants' toilet facilities
For the drying of clothes in inclement weather
Fuel storage and heating equipment
As a play space for children
Storage purpose for certain items
Because of a growing demand for recreation rooms
Reduces probability of termites

A basement, if properly lighted and ventilated, is well suited for the above purposes in that it is warm in winter and cool in summer.

Local custom indicates a decided preference for basements, with strong reference to the medium houses. The smaller types show less demend because of the usual differential in cost.

BIRMINGHAM Basements not popular in small houses in this section, due to dampness. More or less open climate makes laundry activities, etc. possible outside a great portion of the time.

MEMPHIS Basements are not used in either the small or medium class houses in the locality selected for this report. It must be pointed out, however, that a different situation prevails in middle and eastern Tennessee, including Nashville, Chattanooga, and Knoxville. The established practice in those areas is to construct a partial basement in the majority of the houses. We find, however, what appears to be an increasing desire on the part of the average individual to eliminate the basement entirely and to provide a utility heating room. In the large class houses there appears to be a growing tendency towards no basements, with a corresponding decrease in the partial basement construction. Probably the primary cause for this trend is the difficulty of controlling dampness and the fact that the use of a basement as a storage space appears to be declining.

NEW ORLEANS Residences in Louisiana are not now being built with basements. Old type structures in New Orleans were built with basements above grade and were known as "Raised Cottages". These basements were used for automobile storage, laundry facilities, drying areas, servants's quarters and storage. The new structures will not use basements. The various facilities referred to above will be located in rooms on rear porches of new structures or in garages attached or detached. One type of structure in New Orleans, known as the "Hi-Lo" with the garage built under two of the bedrooms, will continue to be popular and to a degree amounts to a basement above grade.

HOUSTON No change.

DALLAS The absence of adequate laundry and storage facilities and living porches in war units has created a greater demand for same in post-war units.

DENVER No change.

HARTFORD No change.

NEW YORK No change.

BUFFALO See comment on "basements".

COLUMBUS No change.

CHICAGO Most pre-war small and medium class houses have inadequate storage space. FHA Minimum Requirement for storage space is generally inadequate. A living room closet of sample size, a utility closet located in the kitchen or service hall, and a linen closet, should be required in post-war houses in addition to bedroom closets. An extra clothes closet for storage of out-of-season clothing should also be provided. More cabinet space required in kitchen, which may necessitate somewhat larger area for kitchens. In small houses, a pantry may suffice, although the general tendency is away from kitchen pantries. Sewing machine usually kept in dining room or bedroom. Vacuum cleaner, brooms, etc. kept in utility closet, if available, but often found in attic stairway, clothes closet, or pantry.

ST. LOUIS No change.

WASHINGTON Storage space in basement areas is not satisfactory in this climate and should be provided elsewhere in the house above the grade level. Home equipment is usually stored throughout the house at points of convenience.

RICHMOND Storage space is preferably in a basement or attic. For many items, such as furniture, clothing, etc. an attic is more desirable. In the smaller houses attics predominate. Sewing machines are generally considered as an item of furniture and are in the bedrooms. Adequate storage space should be provided for brooms and vacuum cleaners, preferably on each floor.

GREENSBORO Majority of houses, in both small and medium class, do not have sufficient storage space. This could be largely overcome by the installation of a disappearing stairway and sub-flooring a portion of attic space. Minimum cost $50 to $60, covering installation of stair, sub-floor and increasing size of ceiling joists. Provision

in every floor plan, with the possible exception of the small class, of a utility storage closet on main floor level. This closet is an addition to the customary coat, bedroom and linen closet.

BIRMINGHAM Storage Space is preferred in an additional room on back porch or in garage. Brooms, vacuum cleaner, etc. are kept there. Sewing machine in a large closet in the house or in a bedroom.

MEMPHIS In the small and medium class houses, storage space in the pre-war units was largely limited to the attic which usually had some 150 square feet of floor space in it. This, we believe to be inadequate and feel that builders in the post-war period should be encouraged to increase that amount of attic storage space and to eliminate the disappearing stairway in favor of a permanent stairway. We feel also that additional storage space adjacent to the kitchen should be encouraged. The average broom or mop closet has generally been too small for any practical purpose and could be enlarged to a more adequate capacity at very little cost. In the large class houses the addition of a real storage or utility room on the ground floor should be definitely encouraged. Access to this storage space would be through the kitchen. The vacuum cleaner, brooms, mops, etc., are generally kept in a hall closet if such is available. Otherwise in either the kitchen closet or a bedroom closet. These items could and should be stored in a space provided for them adjacent to the kitchen.

NEW ORLEANS The importance of storage space is more fully recognized by our builders than several years ago and it will be provided in the structure or the garage.

HOUSTON No change.

DALLAS The absence of adequate laundry and storage facilities and living porches in war units has created a greater demand for same in post-war units.

DENVER No change.

HARTFORD No Change.

NEW YORK No Change.

BUFFALO See comment on "basements."

COLUMBUS No change.

CHICAGO Dryers, washing machines, ironing boards, and mangles usually located in basement. No change anticipated.

ST. LOUIS No change..

WASHINGTON Mechanical driers, washing machines, ironing boards, and mangles could best be stored in work space provided adjacent to the kitchen. At present such facilities are customarily found in the basement.

RICHMOND Local preference indicates a strong preference for a basement for the storage of mechanical dryers, washing machines, ironing boards and mangles. The smaller homes at present utilize kitchens and back porches for this purpose.

GREENSBORO Laundry facilities should be provided in the better price ranges of the medium and large classes, either in the basement or by addition off kitchen.

BIRMINGHAM Future laundry equipment would most naturally go into the back porch storage room accessible to kitchen.

MEMPHIS Laundry facilities were almost completely lacking in the pre-war house in the small and medium class. With the advent of the war and the attendant servant problem in this area, the lack of such facilities has been painfully brought to the attention of most property owners.

The construction of a laundry or utility room adjacent to the kitchen or in some other appropriate first floor level should be a "must" in all post-war houses. It is believed that the typical owner in these two groups will be slow to revert to the use of domestic servants for laundering. It is likewise felt that the property owner in the large class group will insist on laundry facilities in a spot other than the basement. This laundry room will in many cases, no doubt, be located in a garage or an attachment thereto. It may be possible in many cases to provide space for washing machines in the kitchen where the builders desire to reduce costs by reducing the area of the house.

NEW ORLEANS Laundry facilities now receive more consideration by the builders than orginally. It is believed this function will be more generally located in the garage.

HOUSTON No change.

DALLAS The absence of adequate laundry and storage facilities and living porches in war units has created a greater demand for same in post-war units.

DENVER No change.

HARTFORD No change.

NEW YORK No change.

COLUMBUS No change.

CHICAGO No difference in type and number of fixtures provided in detached, semi-detached, and row houses.

War housing practice does not seem to have altered the general trend toward more bathrooms.

ST. LOUIS No change.

WASHINGTON The usual complement of fixtures does not vary greatly according to house type. Size and price are the governing factors.

RICHMOND There is no appreciable difference in type and number of fixtures provided in detached, semi-detached, and row house types.

GREENSBORO Servants toilet should be provided in the better price ranges of the medium and large classes, cost approximately $60 to $75. Two or more full baths should be provided in the better price ranges of the medium and large classes, each extra bath cost approximately $225 to $250. In some cases half bath rooms should be added instead of full baths, cost approximately $125 to $150. Where two or more baths are had one should have shower stall.

BIRMINGHAM Single family houses are the rule here.

MEMPHIS No change.

NEW ORLEANS The average two bedroom house will continue to have only one group of bathroom fixtures in the structure. A high percentage will have additional toilet facilities in the garage for servants use and occasionally a servant's room will be located in the garage. Practically all structures having three or more bedrooms will be provided with more than one bathroom unit.

HOUSTON No change.

DENVER No change.

HARTFORD No change.

COLUMBUS No change.

CHICAGO Elimination of porches in war housing has demonstrated very clearly that this desirable feature will be demanded in post-war work. Advantages are gained both in Livability and Architectural attractiveness.

ST. LOUIS No change.

WASHINGTON No change.

MEMPHIS There will be a demand for living porches in all classes with a decreasing demand for the sitting terrace in all classes. While the addition of the porch will increase the cost, such cost will, in the minds of the average purchaser, be more than offset by the improved appearance of the structure, and the added comfort and convenience.

NEW ORLEANS Residences in this climate do not serve the needs of the typical occupant unless provisions are made for a generous size screen porch on the front or side of the structure and in addition thereto a utility or kitchen porch, which is usually served with storage facilities and quite often used for laundry purposes.

HOUSTON No change.

DENVER No change.

(Includes comments on SUBDIVISION REVIEW, COVERAGE OF PROTECTIVE COVENANTS, FEATURES OF PROTECTIVE COVENANTS, DISTRIBUTION OF LAND WITHIN THE SUBDIVISION, LOCATION OF HOUSES, TYPICAL LOT SIZES, PUBLIC ALLEYS, STREET LAYOUT, STORM DRAINAGE, STREET PAVING, CURB AND GUTTER, LOCATION OR SIDEWALK, SIDEWALK CONSTRUCTION, TREES IN STREET RIGHT-OF-WAY.)

HARTFORD No change from pre-war practice.

NEW YORK No change.

BUFFALO No change.

COLUMBUS No change.

CHICAGO The City of Chicago being the first of the large metropolitan areas to accept FHA Minimum Construction Requirements as a code for the duration resulted in a gentlemen's agreement in relationship to the war housing programs, to wit: Field inspections would be made before priorities would be allocated in an effort to protect existing values and effect good conformity with existing construction. War Production Board utility use limitations, i.e. (two or more utilities contiguous to the site in detached single family) plus the fact that primary war plants were located on the periphery of Chicago brought about a large absorption of unified controlled and scattered sites in partially developed subdivisions. As the war housing program continued to develop it became progressively necessary to plan the use of raw land. This was particularly true in areas in close proximity to the aforesaid new war plants where partially developed subdivisions were in lengthy defalcation on general taxes and special assessments. These conditions created a delay in use as well as a cost per site beyond warranted prices with due consideration to available financing limitations under Title VI. Subdivision review by FHA, accepted by local government, has been employed to a great extent in war housing. Benefits derived from a review, especially in those instances where replanning was feasible, have been clearly demonstrated by this war-time practice. Post-war practice will be favorably influenced by these results, especially in the small and medium classes where heretofore too little attention was paid to subdivision requirements. The FHA policy of requiring review of all subdivisions will be followed to a considerable degree by local government. In the City of Chicago an active plan commission is now working on rehabilitation of blighted areas. This commission is also concerned with

Overall replanning of the City, and while much of this work will not be done in the immediate post-war period, developments will undoubtedly follow the general pattern for improvement as developed by this branch of local government. In considering this topic of Schedule H, we have based the percentages built in the pre-war period only on those houses built in new or revived subdivisions, and not on the total volume of houses built in the pre-war period.

Coverage of Protective Covenants

The change to volume building during the war period will be continued in the post-war period, and consequently coverage of protective covenants will be applied in increasing volume to sections of tract and entire tract. It is felt that volume building will be extended into the large class to some extent and protective covenants for the entire tract will be established whenever possible, following the example set by war housing practice in the small and medium classes.

Features of Protective Covenants

Generally wherever it has been possible to provide for the use of protective covenants, the standards established by the Federal Housing Administration have applied. The feature of Architectural Control has been expanded in war housing covenants. While the need for this feature has not been great because of volume building, the adoption and expansion of this feature will undoubtedly continue in post-war covenants where it will be of greater value. Due to the elimination of alleys in many war projects, easements for utilities have increased. There will be a strong post-war tendency toward the elimination of alleys, and consequently the influence of the war-time practice will manifest itself.

Distribution of Land in a Subdivision, etc.

Due to the number of planned communities for war housing there has been a definite decrease in the amount of land set aside for street purposes and a definite increase in the amount of land made available for residential use, and also an increase in the areas set aside for public use such as parks, playgrounds and school sites. In the larger projects there has been a tendency to set aside areas for business and parking. All of these influences will be felt in the post-war period.

Location of Houses

Since a large proportion of the available land for small and medium classes within the principal city limits has been used up by war housing, such post-war building of these two classes will be carried on largely in the contiguous

suburbs. This may be counteracted to some extent by slum clearance, but since this program has not yet been established it is unlikely that this influence will be felt during the first twelve months after the war.

Typical Lot Sizes, etc.

While the efforts of the Federal Housing Administration in obtaining wider lots for war housing have not been entirely successful due to high acquisition costs, there has been a definite accomplishment in this respect during the war period. In post-war work there will, of course, be some reversion to narrow lots, especially in those projects which are built without FHA financing, but in general the trend toward wider lots will be continued.

Public Rear Alleys and Public Service Drives

War-time practice has demonstrated the feasibility of the elimination of public rear alleys and public service driveways, and this tendency will be continued in the post-war period.

Street Layout

Numerous very attractive war projects have been laid out with curvilinear streets, and these projects have demonstrated to the builders the saving to be derived from this type of development. This will undoubtedly be continued on a larger scale in post-war planning.

Storm Drainage

In subdivision review by this office, preference has been given to those localities where storm drainage is provided for by means of underground storm sewers, and in a number of instances subdivisions having open channel storm drainage have been declared ineligible. This attitude of the FHA during the war time will have a definite effect upon post-war work and will probably lead to more installations of underground storm sewers.

Street paving

Cost limitations prohibited concrete streets for war-time construction. In the early period bituminous macadam was also not available due to WPB restrictions, and as a consequence some gravel and slag streets in the form of water bound macadam were installed. These streets have not proven to be satisfactory. Recently, due to the relaxation of the restriction against the use of asphalt, bituminous macadam streets have been obtainable. They have also been generally adopted by local government for residential streets, and it is very likely that this type of pavement will predominate in post-war work.

Curb and Gutter

In the development of raw land, concrete curbs and gutters of the roll type were made a standard requirement. This will continue in post-war developments.

Location of Sidewalk

Due to the need for economy in land improvements in certain war housing projects, integral curbs and sidewalks were constructed. However, these have not proven very satisfactory due to drainage conditions and also the difficulty of providing adequate driveways. Because of this, it is very likely that this type of construction will be eliminated in post-war housing.

Trees in Street Right-Of-Way

It has been the practice in connection with war housing that where hardy long-lived trees were nonexistent in the parkway, to require trees to be planted by the builder. This practice will continue in post-war.

ST. LOUIS No significant change.

GREENSBORO No change.

BIRMINGHAM Trend will be towards more comprehensive land planning and restrictions. Wider lots. Better street improvements and drainage and sewer facilities.

HOUSTON DISTRIBUTION OF LAND IN A SUBDIVISION BETWEEN THE FOLLOWING:

We expect a strong trend in the medium and large price classes in post-war development in locating near parks and playgrounds. Congested cities have accentuated the necessity for more light and air and play facilities for children. Outdoor life and the stress placed on health and physical development will create a demand for such sites.

Street Layout

Strong post-war trend indicated in adoption of curvilinear street layout has already been noted in this city in small and medium priced areas. The additional cost is slight, mostly engineering fees, and the value of property increased and sustaining.

Storm Drainage

Storm drainage is a city requirement where pavement is installed. In this city it is absolutely necessary and very desirable because of the low elevation. Cost is considerable but is justified.

Street Paving and Curb and Gutter

In all classes permanent street paving will be done in nearly all subdivisions after the war. All classes are demanding it and the cost to the city from a maintenance point of view is actually less in the longer period of physical life over a gravel or shell road. Few developers that build for the trade will attempt a development without permanent paving curb and gutter.

Location of Sidewalk

Post-war will notice a return to the old location of the sidewalk with a planting strip between it and the curb. Autos were always parked on the walk, rather than at the curb.

Trees

Trees will be planted more and more by the builder as they can be cheaply provided and always enhance the appeal of a development. The cost is not over $5 or $6 per unit for developers at the most.

DALLAS Dallas City Plan Commission, Dallas Public Works Department, Lending Agencies and Federal Housing Administration are cooperating to continually improve all factors listed under Schedules H and J. It is certain that a weak to strong improvement will be shown in all the features covered under these headings.

DENVER No change.

LOS ANGELES No significant change or major change is anticipated.

(Includes comments on DWELLING ARRANGEMENTS, GARAGES, and PLANTING).

HARTFORD No change

NEW YORK No significant trend or major change is anticipated.

BUFFALO No change

COLUMBUS No change

CHICAGO Garages

While occupants of war housing have been able to get along without garages, it is very evident that a garage is a necessity in this area. Many buyers of war houses have subsequently constructed garages, and in some instances tenants under contract to purchase have constructed garages. For the type of dwelling in which FHA has been interested, there seems to be a clean indication that at least one car will be owned by the occupant. In many instances these families operate two cars, and there will definitely be a strong tendency toward two-car garages, especially in the medium and large classes.

Allowance for Planting, Seed, Sodding

Valuations for war housing have reflected the allowances for planting, seeding, and sodding, and as a consequence many projects included these items. These allowances were specific requirements in those cases where a subdivision analysis was made, and in a great many individual cases where subdivision analysis was not made these same requirements were made and suitable allowances set up for the costs involved. It is expected that this practice will continue in the post-war period.

ST. LOUIS No significant Change.

RICHMOND No change

GREENSBORO No change

MEMPHIS No change

HOUSTON **Garages**

In the smaller classes where cost is a factor and in this mild climate carports will be used more. The trend was noticeable at the beginning of the war. There will also be an increase in the attached garage in the smaller and medium price classes. It gives the very small house a larger appearance and breaks the roof lines usually - There is actually less cost to the attached garage and it is also used as a storeroom. There will be a noticeable trend in the medium price to turn the garage entrance to the side so as not to detract from the frnnt entrance.

Planting Allowance

Builders are placing stress on selling a completed package to the home owner and can secure the job more economically than the average home owner and planting of grass and landscaping is being more prevalent in selling.

DALLAS No change

DENVER No change

LOS ANGELES No change

NOTE: Cities not listed made no comment in this item.

(Includes comments of METHOD OF SEWAGE DISPOSAL, WATER SUPPLY, and ELECTRICAL DISTRIBUTION SYSTEM).

HARTFORD No Change

NEW YORK No significant trend or major change.

BUFFALO No Change

COLUMBUS No Change

CHICAGO Utilities

War housing has no influence on the method of sewage disposal, nor on the type of water supply.

ST. LOUIS No significant change.

RICHMOND No Change

GREENSBORO No Change

MEMPHIS No Change

HOUSTON Sewage Disposal

Septic tanks are not satisfactory in this area.

DENVER No Change

Note: Cities not listed made no comment in this item.

(Includes comments on DAMP PROOFING AND WATERPROOFING BASEMENT WALLS, TERMITE PROTECTION, EXTERIOR WALLS, WALL SHEATHING, FLOOR FRAMING, SUBFLOORING, FINISH FLOORING, PARTITION FRAMING, ROOFING SLOPING ROOF, ROOFING FLAT ROOF, GUTTERS AND DOWNSPOUTS, VAPOR BARRIERS, SOUND INSULATION, INTERIOR FINISH, WINDOW TYPES, WINDOW INSULATION, and INSULATION).

HARTFORD No Change

NEW YORK No significant trend or major change.

PHILADELPHIA

Public demand regardless of classification are for tile bathroom, tile floors usually of ceramic tile, and wainscot 4'0" high and 6'0" high at tubs. Walls above wainscot are generally of plaster - painted.

A recognizable trend is evident in the architectural treatment of the roofs of row housing. The roofs of this type were generally flat with a slate covered pent above 5'0" high on the front facade. Row housing roof treatment in pre-war periods created a very monotonous effect, and not very pleasing architecturally. The present trend indicates a movement towards the adoption of hip roofs, with a possible variation of both flat and hip roofs, in an attempt to break up the continuity of design.

PITTSBURGH

War Housing practice has demonstrated the value of insulation to both Builder and Home Owner in economy of the original installation of the heating plant and the cost of operation to the owner. This, we believe, will be more keenly felt in future construction in Post-War building and will be more in demand by purchasers of Post-War Homes.

COLUMBUS No Change

CHICAGO Exterior Walls

War Housing in this area has been confined to masonry construction. In many areas this was an innovation. The advantages of this type of construction have been demonstrated by war housing, and in certain localities there will undoubtedly be a continuation of this type of building. This change will be particularly noticeable in the small and medium classes where heretofore frame construction was used extensively.

Floor Framing

Recently several builders have used concrete floors for war housing, and in the three instances in Chicago where such floors have been installed the builders appear to be quite satisfied with the results. The cost has been relatively the same as wood floors in those instances where asphalt tile has been used as a floor covering. In the pre-war period some of the builders in the medium and large classes always used concrete for the first floor. This practice will probably be continued by these builders, and in addition, the experience gained in war-time construction may lead to construction of concrete second floors.

Partition Framing

The use of solid plaster partitions with Gypsum lath was undertaken within the past year in a large 608 project. This has led to the adoption of this method of partition framing in several current 603 projects, and advantages for this type of construction are being demonstrated. Post-war work will undoubtedly be influenced by this innovation, and it is anticipated that builders will avail themselves of the advantages. Some saving in cost has been developed. No significant defects have as yet been noticed.

Vapor Barriers

Vapor barriers were not required in the pre-war period. They have been required in war housing generally, and if the requirements for insulation are continued, vapor barriers will, of course, be a necessity.

Interior Finish-Other Than Bath

In the pre-war period many localities did not permit dry wall construction. During the war this prohibition has been relaxed in some instances, and there is a likelihood that local codes will be revised in the post-war period to permit the use of Gypsum and plywood dry wall finish. If such is the case, there will probably be an increase in this type of construction, especially in the small class, and to some extent in the medium class. I doubt if there will be any significant change in the large class unless these materials are developed to a much higher degree than now exists.

Window Types

In the small and medium classes, practically all windows were wood double hung, with a somewhat larger proportion of casement windows in the large class. Changes in design, as well as the resumption of the manufacture of steel windows, will probably lead to a greater use of casement windows. In this locality wood casements are not generally used except in such locations where a double hung window is not feasible. I believe that in addition to casement windows we will have some slide windows, especially in houses of modern design.

Window Insulation

In order to reduce heat losses in some instances in war housing, it has been found necessary to provide storm sash. The advantages have been demonstrated in small houses, and this will undoubtedly continue in the post-war period. We have always had a large proportion of medium and large class houses equipped with storm sash, and this, of course, will continue in the post-war period. Double glazing was not used in the pre-war period, due largely to the fact that this material had not at that time been fully developed and tested. It now appears practical, and in many instances double glazing will be used in medium and large class houses. Weatherstripping was almost universally used in the larger houses, and infrequently in the small houses. Prefabricated windows, if their use is permitted by the labor unions, will probably be equipped with some type of weatherstripping, and this may lead to a rather extensive use of weatherstripping in all classes of houses.

Insulation

Small houses were not generally insulated in the pre-war period. A good many of the medium class had sufficient insulation, and practically all of the large class were insulated properly. The insulation requirements for war housing have set a precedent which probably will be closely followed in the post-war period, resulting in adequate insulation for all classes of houses.

ST. LOUIS No significant change.

RICHMOND Bathrooms

Small Class: 90% used - painted plastered walls and ceilings.

10% same as above, but with tile floors and wainscoting.

Medium Class: Same finishes as above, but percentages 40% and 60%, respectively.

Large Class: Same finishes as above, but practically 100% tile floors and wainscoting.

Trend: Small and medium is to the tile bath.

GREENSBORO No change. Encourage use of better roofing material on better class homes, the added cost being proportionately small.

BIRMINGHAM Distinct swing back from war time limitations to higher quality materials and finish than ever before.

Interior Finish for Bathrooms

	S	M	L
Keone Cement	50%	25	5
Compressed Wall Board	25	50	5
Full Tile	25	25	90

Ceiling insulation will tend to become universally demanded in this climate.

MEMPHIS No Change.

HOUSTON Floor Framing

Concrete slabs have proven in small dwellings very popular and give less trouble from a foundation standpoint than piers and joists. It is also a cheaper method of construction. No termite trouble has been experienced and ventilation is no problem.

Interior Finish Other Than Bath

Dry wall or gypsum board construction is favored here and in our opinion will increase after the war. It gives a nice finish a warmer house and a better wearing surface than wall paper on canvas over lumber.

Insulation

Insulation has proven its worth and the use will be in nearly every home in this section after the war - not to keep the heat in so much as to keep the interior cool. The cost will approximate $50.00 for the small ceiling installation to $150.00 for complete installation per unit.

DALLAS There will be an increase in the number of brick-veneer structures in the medium class area, as a majority of the units constructed during the war were of wood siding exterior walls and in the small class area.

There will be an increase in the application of metal gutters and down-spouts for all units, as this will probably be a mandatory requirement by the F.H.A. to provide better drainage around the structures.

The use of steel casement windows in war housing units has created an increasing demand for same in post-war units.

The beneficial results obtained by insulating ceilings and walls in war units has created a demand for the continuation of this practice in post-war units and this will probably be a mandatory requirement by the F.H.A.

DENVER No change.

NOTE: Cities not listed made no comment in this item.

HARTFORD No Change.

NEW YORK No significant trend or major change.

PHILADELPHIA Restrictions of materials, particularly as it applied to metallic items, were not developed satisfactorily in substitute forms.

BUFFALO Possible increase in the use of copper and brass pipe and tubing in medium and large better houses.

CHICAGO No change.

COLUMBUS No Change.

ST. LOUIS No significant change.

RICHMOND Water piping will change to copper tubing when materials become available.

GREENSBORO No change.

DALLAS Unsatisfactory results have followed from the use of galvanized steel water pipe in this area, and it is possible that the F.H.A. may require the use of copper water pipe in post-war units.

DENVER No change.

NOTE: Cities not listed made no comment in this item.

(Includes comments on TYPE OF WIRING, and LIGHTING FIXTURES, SWITCHES and CONVENIENCE RECEPTACLES).

HARTFORD No change.

NEW YORK No change.

BUFFALO Lighting outlets will probably increase as sale of utility and luxury equipment increases.

COLUMBUS No change.

ST. LOUIS No significant change.

RICHMOND Electric wiring will return to flexible metallic sheathing cable when materials are available. More outlets will be used.

Greensboro No change.

MEMPHIS No change.

DENVER No change.

NOTE: Cities not listed made no comment in this item.

(Includes comments on TYPE OF SYSTEM, DOMESTIC WATER HEATERS, TYPE OF FUEL AND METHOD OF FIRING SUMMER COOLING, VENTILATING FANS, AND RE* FRIGERATORS).

HARTFORD No change.

NEW YORK Type of Heating System

There has been a trend away from steam heating systems and towards forced warm air and forced hot water due to increasing efficiency and lowering of costs of the two latter systems.

Domestic Hot Water

The trend has been and will continue to be towards automatic firing.

Type of Fuel & Method of Firing Heating System

The trend has been away from coal towards oil and gas.

PHILADELPHIA: The use of copper, brass and aluminum will again be universally adopted for use in equipment.

BUFFALO Heating and Ventilating

Floor pipless furnaces used only in small class one story houses chiefly for economy use will not be encouraged in post war houses.

Use of forced air furnaces will probably increase in all classes and there will be even fewer hot water systems installed.

Water heater storage tanks will probably continue to be insulated with an increased trend.

Probably more gas fired domestic water heaters will be in use than in pre-war period for small houses. Coal fired equipment except where no gas or electricity is available, will decrease slightly.

Manual water heating will decrease in favor of automatic in post war period.

Use of warm air furnace, coal fired will decrease wherever gas is available.

Oil fired warm air furnaces will increase slightly. Same applies to hot water boilers where installed.

Few, if any, coal stokers used in house heating in this section.

COLUMBUS No change.

CHICAGO Type of System.

Since most of our houses have been provided with basements, practically all heating has been of the gravity warm air type. Local installers have become quite proficient in making installations of this type, and the results have been highly satisfactory. It may be that future small class, and to some extent the medium class houses, will be influenced by this experience to the extent that a change to other types will be held back, although it is quite possible that increased activities on the part of manufacturers of forced systems will result in a decrease in the number of gravity warm air systems installed. Just before the war, several installations of panel heating were made. In some instances these proved satisfactory, but in most cases auxiliary heat was found necessary. Perhaps a combination system, part panel or radiant, and part direct, will prove acceptable, especially for no-basement houses.

Domestic Water Heater

Improvements in design and reduction in costs may bring the automatic insulated domestic water heater into the small class, especially in those localities where gas is available as a fuel. In larger houses electricity may be employed to some extent, especially in those cases where electricity is also used as fuel for the cooking range.

Type of Fuel & Method of Firing

War housing practice does not seem to have any effect on the various types of fuel used in warm air furnaces and hot water boilers, since coal has been the only available material. Just as soon as gas and oil are available, these fuels will come into use again, especially in the medium and large classes.

Ventilation Fans

There is no apparent effect upon the use of ventilating fans, nor on the type of fuel for ranges.

Type of Refrigerators

A good many modern ice boxes have been installed in war housing, resulting in a probable increase in ice delivery service. While it is possible that this may affect the use of electric and gas refrigerators, I believe that just as soon as mechanical refrigerators are available these ice boxes will be discarded.

ST. LOUIS No significant change.

RICHMOND A strong increase in anticipated in the use of oil-fired heating equipment in all sized houses.

GREENSBORO No change.

BIRMINGHAM Trend toward more efficient automatic heating and ventilating equipment.

JACKSONVILLE Due to cost of operation and installation there have been few installations of mechanical refrigeration for air conditioning homes. Fans, both attic and kitchen, give excellent results for comparatively small costs and we see a very considerable increase in their use. Increased availability of electricity and gas, especially the former, will increase the use of mechanical refrigerators at the expense of ice boxes.

MEMPHIS Central heating plants in all three-bedroom units falling within the medium class group should be required. In this locality where natural gas is available, some builders have sought to install floor furnaces in three-bedroom houses largely because of the difference in cost between floor furnace installation and the gas fired central heating plant, which amounts to about $300. We do not feel that floor furnaces are in keeping with the average three-bedroom house.
The above comment applies to Memphis. In other areas in the state, including Nashville, Chattanooga and Knoxville, where gas is not available, for fuel, they will use coal or oil, but that heat can be provided by utility room and central heating plant in most cases.

Ventilation Fans

A very small percentage of pre-war units in the three class groups provided either attic fans or kitchen fans. The typical purchaser in each of these three groups will unquestionably demand and be willing to pay for the comfort provided by this type of mechanical equipment. Many of the purchasers of pre-war houses have, since buying, installed attic ventilation themselves at considerably more cost than the unit could have been installed for when the house was built.

Type of Refrigerature

We are not clear as to just what this item proposes to show. If it means type of refrigeration installed in pre-war houses by the builder, the

answer is, of course, none. If it means, however, the type of refrigeration ultimately installed, the percentages indicated are nearly correct. We feel that the installation of mechanical refrigeration in all types should be encouraged. Many thousands of prospective home owners do not own such equipment and upon purchasing a house would have to buy it, usually financing it through some small loan company arrangement at a high percentage. The advantage of buying equipment already installed with the payment for the same being spread over a much longer period than is usually available would readily be apparent to any home purchaser.

HOUSTON Strong increases will be noted in the use of heating and ventilation systems post war. Open gas space heaters are dangerous and with more attention paid to insulation of homes, proper venting of heating equipment is essential. The cost will vary greatly with the many types and methods.

Ventilation Fans

The use of ventilating fans will greatly increase after the war and most houses are built with hall grids installed for their use. Cooling is of much more importance here than the two or two and one-half months of light winter weather and the cost of installation is less than $100 in most medium priced dwellings.

DALLAS A majority of the post-war units will have vented heating equipment, and this will be a mandatory requirement with the F.H.A. in post-war units. There will be an increase in the installation of attic fans and kitchen fans in the medium class area, as this trend had shown up in the last few years immediately prior to the war.

DENVER No change.

SALT LAKE CITY

Small Class:
#1. Trend is especially toward a more uniform heat distribution which is not very often found in overflow type of system.
Medium Class:
#2. There will be a strong increase in forced warm air distribution systems because of the installation of filters and air condition features.
Large Class:
#3. Because of the improvement in radiant heating equipment, a considerable interest is being shown.

NOTE: Cities not listed made no comment in this item.

(Includes comments on ANNUAL CONSTRUCTION VOLUME AND CONSTRUCTION METHODS)

HARTFORD No change.

NEW YORK No significant trends or major changes.

PHILADELPHIA Post-war construction will proceed largely along pre-war methods, particularly as it applies to the cities and larger communities. Prefabricated houses will be given an impetus as a post-war industrial development and will possibly make greater strides than in any former period. In connection with development of housing on the assembly line, it is reasonable to anticipate lower production costs than are possible under present day methods of field assembly.

PITTSBURGH Many contractors who previously limited their operations to contract building have, because of the (war housing) restrictions, become investment and speculative builders.
We believe that the post-war operations of the builder will be largely influenced by their experience in developing the typical defense dwelling.

COLUMBUS Post-war housing will probably be done by builders with capacity and facilities.

ST. LOUIS No significant change.

RICHMOND Due to the experience gained in developing large scale housing, more builders are going to build in larger volume.

MEMPHIS Valuable lessons in building have been learned due to the fact that most war housing has been produced on a project basis involving from ten to as many as five hundred units in each project. The economies and sound short cuts learned through experience will be carried on into the post-war period. This will be particularly true in the small class group.

NOTE: Cities not listed made no comment in this item.

COLUMBUS No Change.

CHICAGO

Inadequate Provisions: No codes for unincorporated areas.
Desirable Change: State Building and Sanitary Codes.
Excessive requirements for Wiring Interior Finish and Plumbing Vents.
Revise Codes to conform to N.E.C., B.M.S. 88 and permit Dry Wall Construction.

ST. LOUIS No significant change.

RICHMOND

Chesterfield County's plumbing, electrical, heating and building codes are inadequate.
Desirable Change: More instructive codes.

GREENSBORO State-wide practical codes should be had with adequate provision for inspections and enforcement.

HOUSTON

Inadequate Provisions: Unenforcible Codes.
Desirable Change: Re-write into standard code to make understandable.
Prohibit new methods based on personal and trade preferences.
Re-write into standard code, basing restriction on safety only.

DALLAS Inadequate regulations and supervision for installation of septic tanks.
Codes do not require installation of vented heating equipment.
Majority of installations are open face, gas fired, radiant Heaters.

DENVER The building code of the City of Denver is far too restrictive and should be revised.
Masonry walls (not brick veneer) are required except in a few designated frame areas.
It is impossible to build a story and half house as the walls surrounding the second story must be masonry. Only one frame dormer, not exceeding six feet in length is permitted on each side of the house. The Mansard (Dutch Colonial) roof is not permitted unless masonry walls are extended to second story cornice.
Basement walls for one story masonry houses must be 12" in thickness, double formed and waterproofed.
Plumbing, electrical and heating codes are too restrictive.

LOS ANGELES

Inadequate Provisions: Most ordinances provide for cesspools contrary to recommendations of Health Department.
Desirable Change: Amend ordinance per FHA M.C.R.
Too Restrictive Provisions: Santa Ana - Solid sheathing of exterior walls San Marino - 8" brick chimney with T. C. lining unwarranted restriction on clearances and access to forced air furnaces.
All plumbing codes need modernizing.
Desirable Change: Change Bldg. Inspector who is extremely arbitrary in interpretations and enforcement.
Uniform plumbing codes for all Areas in State.

NOTE: Cities not listed made no comment in this item.

HARTFORD Post-War Controls

It is believed that adequate controls of development and construction exist in Connecticut through various agencies to assure development and construction according to sound practice. It must be admitted however, that these controls are not always properly administered in some towns.

NEW YORK No post-war control recommended.

PHILADELPHIA Post-War Control

Control of Residential Development and Construction is highly essential to the forces which create the Housing needs of every community; to give direction where public demand exists, predicated upon growth or population, or other contributing factors, and to deter an excessive or over supply of housing in areas where no demand exists. A control of this character should not be considered as purely cautionary, but should act, equally, as a medium to stimulate and accelerate where requirements were definitely present. Machinery of this nature is not available in this area by any local Bodies, Lending Institution, or Governmental Agencies for exercising Control, or to supply definite information resulting from surveys and research which would indicate the annual area requirements particularly dealing with the current period.

The Building Industry, as it is associated and identified with the construction of housing for the populace above the sub-standard category, has always operated on the theory of supply and demand, largely attempting to guess the economic structure for whatever housing demands might or did exist. This process is grievously, "hit and miss", and dangerous to the stabilization and sound growth of the community's needs. The Federal Housing Administration has functioned as a stabilizer and curb to an over-supply situation by its non-issuance, or slowing up in issuing, of commitments for new construction, when it felt the market was saturated. This process, however, is that of deduction, concluded by observation which might be, or not be correct, being definitely opinionated and not the proper foundation for sound practice.

The Performance of the Residential Construction Industry in the future will not differ from pre-war periods, unless it is given direction. As the desires of the peoples of this country are to grasp every facility or commodity which offers conditions for better living, it is of extreme importance at this time to recognize the fact that many items will crowd the market, and their adaptability and coordination with Pre-War concepts of Design, Planning, Materials, etc., will keep the public and the building industry alert to ascertain their practicability for general usage.

The possible non-availability of materials, now part of common and accepted practice, may force the adoption of materials which are either metallic, plastic or composition, and also a more general use of prefabricated sub-assemblies. These variations will be some of the problems to plague the industry in its Post War activities.

Control is also important in lending itself to a broad policy of projected area development wherein it would be possible to forecast the directional flow of population, which can readily be swerved from its natural path by growth of factors unforeseen in the scientific development of everything affecting the modes and manners of living conditions which are ever present in a people of aggressive and inventive genius. Control should be very definite. It should attempt to keep the requirements constant with public needs, and be directional as a factor in keeping the standards of housing in step with progress; also in the use of materials, both as to their availability and their adaptability.

PITTSBURGH Post-War Controls

The present controls of construction through local public bodies and government agencies to assure development in construction according to sound practice are adequate if properly enforced.

BUFFALO Post-War Controls

Believe that adequate controls exist. But modifications should be made in local codes toward a standardization of building development and construction requirements. Also supervision should be given greater consideration. That is, more frequent and thorough inspections made. Higher standard of architectural design should be required.

DETROIT Post-War Controls

Inadequate controls exist in rural and some suburban areas. We believe that housing standards could be improved by State and Township Zoning Laws, Housing Standards and Building Codes.

COLUMBUS Post-war housing will probably be done by builders with capacity and facilities. Consequently, little additional controls are needed in construction development.

CHICAGO Post-War Control

Construction, generally, is fairly well controlled by existing ordinances, and in general, these ordinances are satisfactory. Zoning ordinance, however, need a great deal of remodeling, and in some localities entirely new zoning legislation is required. The greatest difficulty in this connection exists in unincorporated areas where no building or sanitary regulations exist and where zoning is extremely sketchy. If the trend toward outlying areas continues, and it probably will do so, immediate steps should be taken to provide proper safeguards for such unincorporated areas. In some instances building codes are slightly excessive in their requirements, and in some instances they are contradictory.

MINNEAPOLIS Post-War Controls

Our office is of the opinion that adequate controls of the development and construction exist through public bodies, lending institutions and Government Agencies to assure development and construction according to sound practices, we believe however the Rent Control Program of the Federal Government should be continued for a period of time in the post-war period when real estate prices will tend to rise.

ST. LOUIS Present controls adequate provided FHA promulgates new complete MCR's and Property Standards to definitely eliminate the effect of lowered standards of construction and materials made necessary by war regulations.

WASHINGTON Post-War Controls

Municipal control of building as now effective in this area should prove adequate. Long-range planning on the part of the municipal government will have a most desirable effect. However, the power of the municipality is definitely limited as to its scope and can do no more than to establish major roads system, parks, schools and other municipal facilities outside of the house itself. Controls found necessary during the war period have no place in the post-war program. Supply and demand as developed and provided for through free enterprise should be adequate to control the post-war housing economy.

RICHMOND Post-War Controls

No. The counties surrounding Richmond should have the same planning and construction codes as the city.

GREENSBORO

a. Very few towns and cities have zoning and planning commissions.
b. No controls are attempted by lending institutions. Some lending institutions will consider applications only in cities of certain size, and then only in approved areas.
c. Government agency control is adequate, but only to the extent it can be effective by requirements imposed as to individual applications.
d. Efforts should be made by educational publicity to establish effective zoning and planning commission in such towns and cities as size may warrant.
e. Efforts should be made by educational publicity to secure recognition by all lending institutions of sustained value which results from good land planning, adequate protective covenants, and well designed and properly constructed houses.

BIRMINGHAM Yes.

JACKSONVILLE Post-War Controls

We believe that existing controls are adequate.

MEMPHIS Post-War Controls

We believe that local Planning Commissions, zoning ordinances, and the policy of lending institutions, together with requirements of interested governmental agencies, will undoubtedly provide adequate control of type of construction, so as to maintain sound construction requirements. In this area, the Chamber of Commerce, with the endorsement of the city administration, has formed a committee, Home Planning Institute Program, composed of public officials, builders, financial institutions, and other civic-minded individuals. It is at this time conducting a study and organizing for a long-term program to determine the extent of possible post-war residential building, and is offering in lectures at various schoolhouses throughout the community advice from architects, mortgage lenders, land planners, interior decorators, realtors and others, to the public, on how to go about making selections of locations and types of houses to build. All of this will have a wonderful effect in the control of type of construction. Furthermore, the city administration is now causing study to be given to revision of the building codes to provide a minimum standard of construction. Therefore, we are of the opinion that, insofar as soundness of construction is concerned, the controls will be adequate.

However, we are much concerned over the ability to control the volume of business. To safeguard the real estate structure and to protect values, it is going to be necessary to devise some method of controlling the volume of business. With a number of agencies now working towards providing houses, no set-up is yet available for the control of the volume. We believe that the FHA can play an important part in this by furnishing periodically to lending institutions, builders, and to the city officials, as statement showing number of houses under construction at such periods, divided into various price ranges and giving the number which have been completed and remain unsold for thirty days, sixty days, ninety days, or more; also to use this method of advising individual builders of what other builders are doing so that they may be cautioned not to proceed too rapidly. The FHA can control its own business by declining to issue commitments for dwellings within a given price range when the market is being overdone, but this would not apply to lenders on non-insured mortgages. However, the effect of such information would influence such lending agencies also. To this end, we recommend that Federal Housing Administration give thought to providing a system of assembling and disseminating such information. Where strong organizations of lenders or builders exist, the matter can be handled largely through and with them.

NEW ORLEANS Post-War Controls

If we are to assume that during the first year after the war is over, the supply of materials and labor is adequate for the demand, we would suggest no additional controls over development and construction than are now provided through local public bodies, lending institutions and Government agencies. It is recommended that as little regulatory limits be enforced as possible. It will be far more satisfactory if private initiative can once more operate with a feeling of freedom of activity. It is true that some towns and cities show considerable political favoritism to some where compliance with local codes, ordinances, etc. are exacted by law. It is believed that this Agency can tend to counter-act this unfavorable condition which is not generally prevalent.

HOUSTON Post-War Controls

No major revisions necessary - Better sanitation, more light and air, greater attention to conveniences both in the home and out will be demanded by a more discerning public and the existing controls such as zoning laws, protective covenants, etc. will be made more effective by the education for home-mindedness generally being conducted throughout the nation by the press, radio, magazines, etc.

DALLAS Adequate controls now exist through local public bodies, lending institutions and Government agencies.

DENVER Within the corporate limits of Denver the controls are adequate except that some of the building code requirements are considered too rigid as indicated by comments on Schedule P. Outside the city limits the controls both as to land development and housing construction are inadequate. The adjoining counties need to establish adequate planning controls and building requirements for development extending into their jurisdictions.

SALT LAKE CITY Post-War Controls

I believe that adequate controls governing development and construction exist and are satisfactory as far as the Federal Housing Administration is concerned; but homes built through other financing methods have inadequate supervision, particularly outside of incorporated areas. Some local control might be exercised over construction methods and use of land through local ordinance which can be supported by the interested governmental agency. Legislation has been passed enabling unincorporated communities in Utah to pass zoning ordinances, but little has actually been accomplished under this legislation. County Planning Boards are starting to function and excellent results can be expected through the activities of these bodies.

LOS ANGELES Yes.

SEATTLE In our opinion adequate controls of development and construction now exist through the various public bodies, lending institutions and government agencies. Closer co-operation between these various bodies is desirable.

NOTE: Cities not listed made no comment in this item.

HARTFORD Non-Regulatory Action

Further action of a non-regulatory nature is needed to assure satisfactory planning, design, construction, equipment and lower costs in post-war residential construction.

The FHA program in the past has made a valuable contribution in this respect. This program should be not only continued but enlarged, particularly in reference to more frequent contacts with local public officials who exercise control over development and construction. The FHA influence has been felt in a number of towns in Connecticut and has resulted in the adoption of zoning ordinances, building codes, planning commissions and, in a very large number of cases, more careful attention to private sewage disposal systems. In respect to the last item, there have been cases where towns have engaged the services of sanitary engineers due to our insistence of local approval by the health authorities of plans and installations of private sewage disposal systems. There are other cases where the educational campaign of this office has resulted in adoption by the towns of our Minimum Construction Requirements, more attention to plumbing installations, construction requirements within the public-right-of-way, set-back lines, sideyard lines, lot sizes, etc.

NEW YORK Resumption of publicity by FHA to inform and educate the public as to its operations, theory of land planning, subdivision control, adequate zoning protection, protective covenants, sound construction, etc., is the greatest force for better housing standards and city growth. A most beneficial over-all result will be obtained by keeping these ideas before the public even though building and financing is done without benefit of FHA insurance.

PHILADELPHIA Non-Regulatory Action

The Building Industry, in its association with Housing, in this area, has been instrumental in establishing the requirements of the average family's needs. The major portion of all housing constructed, is the creation of the Operative Builder. This procedure has been the practice over a long period. The Builder assumes the risk that his product will be readily accepted by the Public in respect to Design, Planning, Construction and equipment. He operates in all categories of residential construction, for small, medium and large residences. The Custom Built house in which Client, Architect and Contractor participate, are in the vast minority. In this area particularly where the Operative Builder has assumed leadership in providing the public's living requirements, it is of extreme importance that extensive publicity be given, and information disseminated on the subject of Planning, Design, Construction and Equipment.

Construction costs in this area have always been considered favorable, and represent, to a large degree, the result of large scale production, which has been accomplished by the development of sub-contractors for each of the many operations in connection with the total assembly.

Post War Construction of residences will proceed largely along Pre-War methods, particularly as it applies to the cities and larger communities. The greater part of all research in connection with materials is being done by the major industries, and the Bureau of Standards. Prefabricated houses will be given an impetus as a Post War industrial development and will possibly make greater strides than in any former periods. In connection with development of housing, on the assembly line, it is reasonable to anticipate lower production costs, than are possible under present day methods of field assembly.

Planning and Design has been given considerable thought by the Architectural Profession during the past 10 years, in its efforts to create better housing. There is an indicated trend away from conventional Pre-War housing toward planning and design which may possess more functional factors. This process will be evolutionary as it always has been, and the transition will move along in steps. It is imperative that the condition of change be recognized. As the Federal Housing Administration stands out today as the Beacon Light of direction to the housing industry providing homes for the largest unit of population of every Community, it should enlarge its scope and project its force to a far greater degree than it has in the past, in planning and Design, and offer every possible form of assistance to the industry to keep it abreast with trends and progress.

PITTSBURGH Non-Regulatory Action

Further action of non-regulatory nature would be very helpful to satisfactory planning, design, equipment and construction in Post War Residential Construction.

This task must necessarily be performed by the manufacturers and distributors of building materials and equipment. Home Builders' Associations, American Institute of Architects and the Associate Building Industries and Periodicals and Government Agencies devoted to the industry.

BUFFALO Non-Regulatory Action

More research action would help to assure desired results: continuance of research service from government agencies, builders associations and A.I.A. programs should prepare and sponsor Educational Programs.

DETROIT Beneficial results could be obtained by educational publicity by government.

COLUMBUS In land planning much can be accomplished and this should be further developed through FHA by means of publicity and education.

CHICAGO Non-Regulatory Action

In order to assure satisfactory planning, etc., I believe that the Technical Section of the Federal Housing Administration should be expanded so that it will be in a position to do a considerable amount of research and prepare informative literature for distribution to the General Public. Other material, specific in nature and authoritative in context, should be prepared for distribution to those engaged in the technical details of planning residential construction. Co-operation of the American Institute of Architects should be obtained in this field, as well as the co-operation of the organizations representing home builders. Local FHA offices should be given the personnel to permit them to carry on a moderate publicity program.

MINNEAPOLIS Non-Regulatory Action

The preamble to the National Housing Act contains the statement "to encourage improvements in housing standards and conditions****and for other purposes", suggests that FHA expand its activities in making surveys and studies of housing materials and methods and publish them for the benefit of the public and industry. FHA should have an aggressive and helpful research department to more fully accomplish these objectives,--"encourage improvements in housing standards and conditions".

ST. LOUIS FHA should immediately (before the rush of post-war construction) start working through the mortgagees with the larger potential builders to develop better plans and design by encouraging them to come in so we may make a preliminary study of their proposed projects. Unless this is done, we find that we have insufficient time and personnel to properly handle this work, with the result that we will get and take many projects that could and should be improved if the time and study was devoted to making a better development.

WASHINGTON Non-Regulatory Action

Public education through magazine and newspaper articles, architectural journals and other housing news mediums should be encouraged so that the public generally, architects and builders in particular, can be kept

appraised of desirable improvement in housing. Only through public thinking in a manner that will result in more orderly development of land and the building of housing units incorporating the new and modern housing ideas now being developed.

RICHMOND Non-Regulatory Action

Yes. Public education through newspapers, radio, and research should be conducted by government agencies, lending institutions, and materials manufacturers.

GREENSBORO Yes. The National Housing Agency should have an adequate annual appropriation with which to set up and maintain a bureau of research to encourage and work with private capital to accomplish a lowered housing cost comparable to that attained in the last twenty years in automobiles, so as to provide satisfactory modern housing for the lower income groups for owner occupancy. Cooperation of architects should be sought in small house planning at a minimum cost.

BIRMINGHAM Yes.

JACKSONVILLE No further action needed.

MEMPHIS Non-Regulatory Action

Sound research, the dissemination of correct information through the newspapers, radio, and other means, are a constant need in the satisfactory planning, design, and construction in the residential field. The buying public should be informed of new methods, new materials, and new types of equipment, without being led to believe that it is possible to achieve the ultra in moderately-priced houses.

NEW ORLEANS Non-Regulatory Action

We have only one suggestion to make under this topic and that is to publicize the need for architectural research and planning of residential structures. It has been very difficult in this state to interest the architectural profession in the planning of homes. A high percentage of our structures are prepared by contractors and draftsmen who know little about incorporating the desired appeal and livability into a home.

HOUSTON Non-Regulatory Action

The tools for proper planning of homes and developments are available in the F.H.A. and the strides made over the past few years have certainly indicated they are beneficial to a sound mortgage market, better and more sustaining values for homes and eventually should result in less risk in home ownership.

DALLAS Yes. Local real estate Board, City Planning Commission, and local lending institutions should create a Committee representing these groups and promulgate an educational program.

DENVER There is need for further encouragement and education on the part of local governmental and financing agencies toward better planning and construction provisions in housing production.

SALT LAKE CITY Non-Regulatory Action

In my opinion, considerable work can be done through publicity and education with lending institutions, builders, and local public bodies. Support of a locally sponsored program should be given by the interested governmental agency. However, sponsorship in my opinion, should definitely come from the local community.

LOS ANGELES General Education.

SEATTLE There does appear to be a need for additional publicity, research and education to assure satisfactory planning, design, etc. It would appear, however, that the existing public bodies and agencies are equipped to carry on such research and disseminate such information as conditions may require.

NOTE: Cities not listed made no comment in this item.

Distribution of Dwelling Types, FHA.

Dwelling Types	Number of FHA offices reporting use of type	Minimum percent reported	Maximum percent reported	Percent built pre-war	Reporting areas of trend of type: increasing	decreasing	no change anticipated
Single Family Detached	24	[illegible]	100	[illegible]	26	[illegible]	[illegible]
Single Family Semidetached	13	1	12	2.9	12	48	40
Single Family Row Type	4	5	55	7.7	21	-	79
Multifamily Row Type	4	2	6	1.0	12	21	67
Multifamily Flats or Apartments	20	1	72	9.0	59	17	24
Total Dwelling Construction				100.0%			

Single Family Detached houses, as will be noted in tabulation above, constitute the predominate and most popular type of housing throughout the country but a declining trend is noted in favor of multifamily flats and apartments. Seven offices, representing 26% of single family detached houses built pre-war, anticipate a trend post-war toward this type but eight offices, representing 38% of pre-war single family detached houses report a trend away from this type and nine offices representing the remainder anticipate no change.

Single Family Semidetached house construction is reported by 13 of the 24 FHA field offices canvassed and represents only 2.9% of total house construction pre-war. Only three offices representing 12% of this type of housing, report a slight trend toward their construction. Six offices, accounting for 48% of semidetached houses, report their decreasing popularity and five offices report no change anticipated.

Single Family Row House construction, pre-war, is reported by only 4 of the 24 offices canvassed although an insignificant amount may have been constructed in other areas. These four offices which account for all of the single family row house construction are anticipated to have 23% of all post-war housing. These offices represent the larger metropolitan areas where row type housing has been somewhat traditional, one office reporting an increasing trend and the others anticipating no change.

Multifamily Row housing accounts for only 1% of all housing built pre-war, four offices reporting its use. One office, representing 12% of pre-war construction, reported an increasing trend; one office reported a decreasing trend and two offices no change.

Multifamily Flats and Apartments continue in favor by the renting public and constituted 10% of the pre-war house construction. An increasing trend for this type house is discernable. Eight offices, representing 59% of multi-family flats and apartments report an increasing demand as do two offices which reported that only an insignificant amount had been built pre-war; five offices, representing only 17% of this type, report a declining demand and seven offices, accounting for 24%, report no significant change.

AREA AND MARKET PRICE

SMALL CLASS HOUSES

DESCRIPTION OF HOUSE		AREA IN SQUARE FEET			MARKET PRICE		
		Minimum	Maximum	Wt. Average	Minimum	Maximum	Wt. Average
1 Story - 2 Bedrooms							
(Reported by 24 offices)	Low	600 (4 Offices)	766 (Philadelphia)	717 (Boston)	$1400 (Greensboro)	$3000 (Greensboro)	$2200 (Greensboro)
	High	780 (Columbus)	900 (9 Offices)	850 (Dallas)	5000 (Columbus)	6900 (Buffalo)	5750 (New York)
National Average		683 Sq. Ft.	881 Sq. Ft.	792 Sq. Ft.	$3388	$4065	$4369
2 Story - 2 Bedrooms							
(Reported by 7 Offices)	Low	654 (Buffalo)	874 (Buffalo)	714 (Buffalo)	$4115 (Buffalo)	$5000 (Detroit)	$4600 (Buffalo)
	High	850 (St. Louis)	900 (5 Offices)	891 (Pittsburg)	5500 (Columbus)	$6500 (2 Offices)	6000 (Columbus)
National Average		804 Sq. Ft.	896 Sq. Ft.	872 Sq. Ft.	$4377	$5835	$5370
1 Story - 3 Bedrooms							
(Reported by [illegible] offices)	Low	640 (Buffalo)	8[illegible]8 (Buffalo)	786 (Buffalo)	$4200 (Buffalo)	$5930 (Buffalo)	$5200 (Buffalo)
	High	820 (Columbus)	900 (2 Offices)	870 (Chicago)	6000 (2 Offices)	6500 (2 Offices)	6250 (Chicago)
National Average		795 Sq. Ft.	892 Sq. Ft.	8[illegible]4 Sq. Ft.	$[illegible]	$6410	$6100
2 Story - 3 Bedrooms							
(Reported by 2 offices)	Low	[illegible] (Buffalo)	[illegible] (Buffalo)	640 (Buffalo)	$3358 (Buffalo)	$3[illegible] (Buffalo)	$3[illegible] (Buffalo)
	High	[illegible] (Columbus)	[illegible] (Columbus)	882 (Columbus)	6500 (Columbus)	7500 (Columbus)	7[illegible] (Columbus)
National Average		81[illegible] Sq. Ft.	[illegible] Sq. Ft.	[illegible] Sq. Ft.	$5832	$[illegible]	$[illegible]

AREA AND MARKET PRICE

MEDIUM CLASS HOUSES

DESCRIPTION OF HOMES		AREA IN SQUARE FEET			MARKET PRICE		
		Minimum	Maximum	Wt. Average	Minimum	Maximum	Wt. Average
1 Story - 2 Bedrooms							
(Reported by 24 offices)	Low	900 (17 Offices)	978 (D.C.)	930 (Hartford)	$3600 (Greensboro)	$4300 (Greensboro)	$3480 (Greensboro)
	High	1100 (Detroit)	1600 (7 Offices)	1220 (Detroit)	6500 (Columbus)	15000 (Seattle)	7500 (3 Offices)
National Average		928 Sq. Ft.	1354 Sq. Ft.	1076 Sq. Ft.	$4927	$7935	$5135
2 Story - 2 Bedrooms							
(Reported by 18 Offices)	Low	900 (4 Offices)	1025 (D.C.)	977 (D.C.)	$4500 (Greensboro)	$5600 (Detroit)	$5150 (Greensboro)
	High	1300 (2 Offices)	1600 (5 Offices)	1516 (Houston)	7500 (Columbus)	12500 (Seattle)	8500 (Columbus)
National Average		1021 Sq. Ft.	1400 Sq. Ft.	1195 Sq. Ft.	5550	7980	$6580
1 Story - 3 Bedrooms							
(Reported by 20 offices)	Low	900 (5 Offices)	1138 (Buffalo)	970 (Hartford)	$3500 (Greensboro)	$5500 (Greensboro)	$4405 (Greensboro)
	High	1300 (Memphis)	1600 (12 Offices)	1520 (Dallas)	7500 (Denver)	13000 (Seattle)	9500 (Seattle)
National Average		1041 Sq. Ft.	1510 Sq. Ft.	1300 Sq. Ft.	$5450	$8425	$7325
2 Story - 3 Bedrooms							
(Reported by 20 offices)	Low	900 (Minneapolis)	1382 (New Orleans)	1083 (D.C.)	$3900 (Philadelphia)	$6350 (Detroit)	$4500 (Philadelphia)
	High	1530 (Dallas)	1600 (12 Offices)	1575 (Dallas)	9500 (Denver)	15000 (Seattle)	9500 (Columbus)
National Average		1208 Sq. Ft.	1570 Sq. Ft.	1387 Sq. Ft.	$6150	$9850	$7190

AREA AND MARKET PRICE

LARGE CLASS HOUSE

DESCRIPTION OF HOUSE		AREA IN SQUARE FEET			MARKET PRICE		
		Minimum	Maximum	Wt. Average	Minimum	Maximum	Wt. Average
1 Story - 2 Bedrooms							
(Reported by 4 offices)	Low	1600(3 offices)	1700 (Dallas)	1625(Dallas)	$6000(Houston)	$[illegible](Houston)	$6250 (Houston)
National Average	High	1700(1 office)	2000 (2 offices)	1870(San Fran.)	9975(San Fran.)	15000(St. Louis)	13075(San Francisco)
		1625 Sq. Ft.	1855 Sq. Ft.	1707 Sq. Ft.	$8042	$10750	$9[illegible]
2 Story - 2 Bedrooms							
(Reported by 6 offices)	Low	1600 (3 offices)	1644 (Buffalo)	1625 (Dallas)	$6500 (Houston)	$7125(Buffalo)	$7000 (Houston)
National Average	High	1700 (San Fran.)	2100 (San Fran.)	1810 (San Fran.)	9500 (San Fran.)	16500(St. Louis)	11800(San Francisco)
		1630 Sq. Ft.	1885 Sq. Ft.	1720 Sq. Ft.	$8157	$[illegible]	$9[illegible]
1 Story - 3 Bedrooms							
(Reported by 13 offices)	Low	1600(10 offices)	1650(Seattle)	1620 (Seattle)	$5500(Greensboro)	$6750(Houston)	$[illegible](Greensboro)
National Average	High	1650(Memphis)	2750(Memphis)	2016 (Memphis)	12000(Birmingham)	22000(Seattle)	14200(Seattle)
		1610 Sq. Ft.	2100 Sq. Ft.	1793 Sq. Ft.	$8730	$[illegible]	$10400
2 Story- 3 Bedrooms							
(Reported by 24 offices)	Low	1600(14 offices)	1850 (2 offices)	1710 (Buffalo)	$5250 (Phila.)	$10000(Greensboro)	$6726 (Philadelphia)
National Average	High	2270(Detroit)	3700 (Richmond)	2800 (Richmond)	14500(Denver)	25000(2 offices)	17250(Richmond)
		1684 Sq. Ft.	2475 Sq. Ft.	1997 Sq. Ft.	$9[illegible]	$17300	$12567

"Small","Medium" and "Large Class" houses, as shown in the above tabulations, were based on the following square feet areas of house: "Small Class" was defined as a housing having an area of less than 900 sq. ft.; "Medium Class" as a house having an area between 900 and 1600 sq. ft.; "Large Class" as having an area over 1600 sq. ft.

In relation to story heights, two story houses were defined as those houses having more than one story, e.g., a one and a half story house being considered, for the purpose of this canvass, a two story house.

While data on floor area and market price were not requested for houses with four or more bedrooms, it is probable that the reports for the three bedroom large class houses cover both three and more than three bedroom houses, particularly in the two story type where the report shows a national average of almost 2000 square feet.

With a range of area between 600 and 900 sq. ft. being considered a "Small Class" house, the minimum and maximum area of the house varied considerably in the different localities. For example, the one story two bedroom house varied, in the "Small Class", from 600 sq. ft. area reported by four offices as the minimum, to 780 sq. ft. reported by the Columbus office, the national weighted average minimum being 683 sq. ft. Similarly in the maximum area reported, Philadelphia reported 766 sq. ft. to 900 sq. ft. reported by nine other offices, the national weighted average maximum being 881 sq. ft. The national weighted average of all one story two bedroom houses "Small Class" was 792 sq. ft.

Similar but more pronounced variations occurred in "Market Price" due to cost variations in land, materials and labor, availability of labor, source of materials, variation in house area, climatic conditions, required equipment, etc.

In connection with anticipated post-war prices each reporting office was requested to express its opinion as to whether housing prices would be higher or lower than the estimated average prices of [illegible]-1941. All offices reported an anticipated increase. The weighted average, based upon the anticipated volume of post-war construction in each of the offices, indicates that prices post-war will be approximately 20% higher than pre-war, the opinions ranging from a low of 10% increase reported by four offices to 35% reported by the Denver office.

Under the heading "Description of House" it is noted how many offices submitted the necessary data. Data was not submitted by a number of offices because the house described was not built in any significant amount in their areas and, in a few cases, the data was omitted inadvertently.

The offices canvassed were asked to express an opinion as to whether one story houses were higher or lower in cost than houses of equivalent area of more than one story. Ten of the 24 offices, representing 41% of new construction reported no significant difference in cost; nine offices, representing 40% of construction, reported that one story houses cost approximately 10% more and 5 offices, representing 19% of construction, reported 10% less. This would give a national weighted average of 2% higher cost for one story houses. However, as shown in the recapitulated data received as to the percentage of one story houses constructed, many areas show a preference for one story houses in the "Small Class" even at a slightly higher cost.

[illegible]

[illegible]	[illegible] Reporting Use of Type	Minimum Percentage Reported	[illegible] Percentage Reported	Percentage Built Pre-War	Reported Trend in Percentage of Type: Inc.	Dec.	No Change
Single Family Detached	24	75	100	96.6	14	16	70
Single Family Semi-detached	12	1	25	3.1	16	41	43
Single Family Row Type	2	8	9	0.3	100	—	—
Total Single Family Dwellings				100.0			

SMALL CLASS HOUSES:

Single Family Detached houses, as will be noted in the above tabulation, constitute the predominate type of single family housing; 5 offices, representing 14% of single family detached houses constructed pre-war, report an increasing trend toward this type of housing; 3 offices, accounting for 16% of the detached houses, report a decreasing demand and 16 offices, accounting for 70% of the detached houses, state that no change in the trend is anticipated. The slight decrease in anticipated demand is centered in metropolitan areas, and of the 3 offices anticipating a decrease, 2 offices anticipate more row housing, the other office trending toward semi-detached houses.

Single Family Semi-detached houses are rapidly declining in favor. Only 12 of the 24 offices canvassed, representing 36% of all houses constructed, reported any significant amount of this type. Only one office reported an anticipated increased demand, this office accounting for 16% of semi-detached houses built pre-war; 6 offices, representing 41% of the type housing and 17% of all housing, reported a decreasing demand; 5 offices reported no anticipated change.

Single Family Row houses. Only 2 offices reported the construction of any significant amount of single family row housing in the small class although one office, where an insignificant amount had been built pre-war; reported a trend toward this type. The 2 offices reporting row houses account for only 4% of all types but 100% of the row type which in itself constituted a very small percentage of small house construction. The trend in these areas, however, continues favorable toward their construction.

DWELLING TYPES CLASSIFIED
MEDIUM CLASS HOUSES

DWELLING TYPES	Number of MEA Offices Reporting Use of Type	Minimum Percentage Reported	Maximum Percentage Reported	Percentage Built Pre-War	Reported Trends in Percentage of Type		
					Inc. Trend	Dec. Trend	No Change Anticipated
Single Family Detached	24	31	100	38.2	18	10	72
Single Family Semi-detached	12	1	99	[illegible]	[illegible]	76	22
Single Family Row Types	6	[illegible]	[illegible]	[illegible]	2	2	96
Total Single Family Dwellings				100.0			

MEDIUM CLASS HOUSES

Single Family Detached houses in the Medium Class show a slight increasing trend at the expense of semi- detached houses, 5 offices representing 18% of this type reporting an increasing trend, one office representing 10% reporting a declining trend and 18 offices reporting no change in the present pattern. The one office reporting a declining trend had almost 100% of its meduim class houses of this type and reports a slight trend post-war toward semi-detached and row housing.

Single Family Semi-detached house construction was reported by only 12 of the 24 offices canvassed. Only one of the reporting offices, accounting for 5% of the semi-detached houses, noted a slight trend toward this type. 6 offices, representing 76% of semi-detached houses, reported a decreasing trend, the other 5 offices reporting no significant change.

Single Family Row or End Row Type. Only 6 offices, representing 36% of total house construction, reported the construction of this type pre-war. 2 offices, accounting for 2% of row housing, reported an increasing trend; one office, also accounting for 2%, reported a decreasing trend and 3 offices, in which the bulk (96%) of row housing was constructed, reported no change in trend.

DWELLING TYPES CLASSIFIED
LARGE CLASS HOUSES

DWELLING TYPES	Number of NHA Offices Reporting use of Type	Minimum Percentage Reported	Maximum Percentage Reported	Percentage Built Pre-War	Reported Trends in Percentage of Type		
					Inc. Trend	Dec. Trend	No change anticipated
Single Family Detached	24	60	100	98.3	4	—	96
Single Family Semi-detached	3	1	35	1.5	—	95	5
Single Family Row Type	2	2	5	0.2	—	100	—
Total Single Family Dwellings				100.0			

LARGE CLASS HOUSES

Single Family Detached houses constitute over 98% of all housing built in the large class, all of the offices, representing 96% of this type housing, [illegible] detached and foresee no change in the trend.

Single Family Semi-detached houses. Only 3 offices reported the construction of this type house pre-war, of which one office accounted for 85%. All 3 offices report a strong decreasing trend in this construction post-war.

Single Family Row Type houses. Two offices only reported any significant construction of row type housing. Both offices anticipate a strongly decreasing desire for this type of housing in the large class post-war.

PERCENTAGE OF ONE STORY HOUSES

	Minimum Percent Reported	Maximum Percent Reported	Weighted Average Percent	Reported Trends in Percent of Each Class: Increasing Trend	Decreasing Trend	No Change Anticipated
Small Class Houses	1 (Philadelphia)	100 (12 offices)	87.1%	5	20	75
Medium Class Houses	2 (Philadelphia)	98 (2 offices)	55.5	19	3	78
Large Class Houses	0 (6 offices)	60 (Minneapolis)	25.7	15	3	82

SMALL CLASS HOUSES:

All but four of the twenty-four offices reported, that of the Small Class house, 75% or more was of the one story type; only one office reported less than 50%. In the Southern area, mountain states and on the West coast, one story houses predominate, averaging close to 100%. Five offices, representing 5% of the small class one story houses, reported an increasing trend; four offices, representing 20%, reported a decreasing trend and the other offices, representing the majority one story house construction, reported no significant change. Although there is a decreasing trend in the construction of one story houses, twenty of the twenty-four offices reported an appreciable preference for this type, particularly in the Small Class.

MEDIUM CLASS HOUSES:

55.5% of this class were one story houses. Six offices, representing approximately 19% of the Class one story houses, anticipate an increasing trend; two offices, representing 3%, report a decreasing trend; 16 offices, 78% anticipate no change.

LARGE CLASS HOUSES:

Six offices, representing 30% of all single family house construction, reported that no significant percent of one story houses in the Large Class were built. Of the remaining 14 offices, four offices, representing 15% of the one story large class houses, reported an increasing trend for this type; one offices, representing 3%, reported a decreasing trend and the others reported no change.

NUMBER OF BEDROOMS

	Minimum Percent Reported	Maximum Percent Reported	Weighted Average Percent	Reported Trends in Percent of Each Class: Increasing Trend	Decreasing Trend	No Change Anticipated
LARGE CLASS HOUSE				—	—	—
One bedroom	none	none	none	—	30	70
Two bedrooms	0(13 offices)	80(Houston)	8.2	36	3	61
Three bedrooms	0(1 office)	99(New Orleans)	65.2	21	17	62
Four or more bedrooms	0(2 offices)	100(Phila.)	26.6			
			100.0%			

LARGE CLASS HOUSE:

No one bedroom houses were constructed in the large class.

Eleven offices reported the construction of two bedroom houses; seven offices, representing 30% of this type, reported a decreasing trend; four offices reported no change.

Sixty-five percent of the large class houses contained three bedrooms; seven offices, accounting for 36% of this type, reported an increasing trend; one office reported a decreasing trend in favor of four bedroom houses; fifteen offices reported no change.

Houses containing four or more bedrooms accounted for more than 26% of the large houses built, although two offices reported that none were constructed. Seven offices, representing 21% of this type, reported an increasing trend; two offices, representing 17%, reported a decreasing trend, thirteen offices reported no change.

One office (Birmingham), reporting 40% two bedroom and 60% three bedroom houses, stated that 10% of the large houses failed to provide sufficient bedrooms for the families housed.

NUMBER OF BEDROOMS

	Minimum Percent Reported	Maximum Percent Reported	Weighted Average Percent	Reported Trends in Percent of Each Class		
				Increasing Trend	Decreasing Trend	No Change Anticipated
MEDIUM CLASS HOUSE						
One Bedroom	0(21 offices)	10(D.C.)	0.4	—	86	14
Two Bedrooms	0(1 offices)	97(Memphis)	53.1	6	57	37
Three Bedrooms	3(Memphis)	98(Birmingham)	45.4	42	1	47
Four or more Bedrooms	0(20 Offices)	20(Columbus)	1.1	75	23	2
			100.0%			

MEDIUM CLASS HOUSE:

Practically no one bedroom houses were built in this class: only three offices reported any significant amount and indicated a decreasing trend.

Two bedroom houses constituted over 50% of the houses built in the Medium Class although one office reported none of this type; three offices, representing 6% reported an increasing trend; eleven offices, representing 57%, reported a decreasing trend and nine offices reported no change.

There were almost as many three bedroom houses reported as there were two bedroom; fourteen offices, representing 42% of this type, reported an increasing trend; one office, accounting for a very small amount (1%), indicated a decreasing trend; nine offices indicated no change.

Four offices reported the construction of four bedroom houses and indicated an increasing trend in their construction.

Eleven offices representing 39% of the anticipated post-war house construction reported that 24% of the medium class houses, as built pre-war, failed to provide sufficient bedrooms for the families housed, the estimated insufficiency running as high as 50% reported by Columbus.

NUMBER OF BEDROOMS

SMALL CLASS HOUSE	Minimum Percent Reported	Maximum Percent Reported	Weighted Average Percent	Reported Trends in Percent of Each Class: Increasing Trend	Decreasing Trend	No Change Anticipated
One bedroom	0(5 offices)	70(D.C.)	6.0%	4	72	24
Two bedrooms	30(D.C.)	100(2 offices)	91.5%	30	14	56
Three bedrooms	0(15 offices)	20(Buffalo)	2.5%	62	13	25
Four or more bedrooms	none	none	none	—	—	—
			100.0%			

SMALL CLASS HOUSE:

Five offices representing 27% of single family house construction, reported that no one bedroom houses were were built in the small class. Three offices, representing 4% of this type housing, reported weak trend toward one bedroom houses; 8 offices, representing 72% of one bedroom houses, reported a decreasing trend; 3 offices reported no change.

In the two bedroom type, nine offices, representing 30% of this type, reported an increasing trend; two offices, representing 14%, reported a decreasing trend and the other offices reported no change anticipated in the percentage of two bedroom houses.

In the three bedroom type, 15 offices, representing 62% of house construction, reported that no significant amount of three bedroom houses was built; four offices, representing 62% of this type, reported an increasing trend, two offices, representing 13%, reported a decreasing trend and three offices reported no change.

No four bedroom houses were built in this class.

Twelve offices, representing 47% of anticipated post war construction, reported that almost 55% of pre-war small class houses failed to provide sufficient bedrooms for the families housed, Pittsburg reporting 95% deficiency; Buffalo, Greensboro, Columbus and Chicago, each reporting 75%.

TYPICAL ROOM SIZE
IN SQUARE FEET

SMALL CLASS	Minimum Area Reported	Maximum Area Reported	Weighted Average	Reported Trends by Offices: Increasing Trend Offices	Increasing Trend Vol.*	Decreasing Trend Offices	Decreasing Trend Vol.	No Change Anticipated Offices	No Change Anticipated Vol.
Living room	140(2 offices)	220(Los Angles)	175	2	3%	1	3%	20	92%
Bedroom No. 1	100(2 offices)	160(Philadelphia)	132	3	6	-	-	20	92
Bedroom No. 2	70(Buffalo)	140(New Orleans)	107	3	6	-	-	20	92
Bedroom No. 3	0(18 offices)	72 (Columbus)	71	2	3	-	-	3	18
Kitchen	60(D.C.)	130(New Orleans)	83	2	3	1	-	20	95
Dining Space	30(Boston)	120(2 offices)	70	2	5	-	-	21	93

*Twenty three offices, representing 98% of anticipated post-war house construction, submitted data on typical room sizes. The abbreviation Vol. indicates the total volume of construction anticipated to be built by the number of offices shown.

Living Room: Buffalo, with a typical floor area of 140 sq. ft. in the pre-war living room, anticipates an increase in room size; Richmond, also anticipates an increased area in the living room, altho pre-war houses were constructed with a typical living room area of 180 sq. ft. Boston, with an area of 180 sq. ft., anticipates a decreasing trend; twenty other offices with living room space varying from 140 sq. ft. in Columbus to 220 sq. ft. in Los Angeles anticipate no change.

Bedroom No. 1: Buffalo, with a typical bedroom area of 100 sq. ft., Boston, with an area of 120 sq. ft. and Richmond, with an area of 130 sq. ft., anticipate an ~~increasing~~ trend for a larger bedroom: the remaining twenty offices, representing 92% of post-war construction and having the first bedroom varying in size from 100 sq. ft. to 160 sq. ft., anticipate no change in size.

Bedroom No. 2: The same three offices noted above in bedroom No. 1, with the second bedroom area ~~varying~~ from 70 sq. ft. in Buffalo to 110 sq. ft. in Richmond, anticipate an ~~increased~~ trend for larger rooms: the remaining twenty offices reporting no change.

Bedroom No. 3: Only five offices, representing 21% of post-war volume, reported on the size of bedroom No. 3, altho four other offices, representing 16% of post-war volume, reported the construction of a small amount of small class three bedroom houses. Of the five offices reporting, two offices anticipate an increasing trend in area of room and the remaining three offices anticipate no change. One of the three offices, Detroit, reports that the third bedroom is provided in the attic only.

Kitchen: The kitchen area ranges from 60 sq. ft. in the District of Columbus, 65 sq. ft. in St. Louis and 70 sq. ft. reported by six offices, to 126 sq. ft. in Minneapolis and 130 sq. ft. in New Orleans. Buffalo and Richmond report a trend for more space; Boston with 100 sq. ft. reports a declining trend in favor of more space in a dining room or alcove. Other offices report no change.

Dining space: Buffalo, with the smallest typical living room (140 sq. ft.) and an 80 sq. ft. kitchen, reports 100% use of the kitchen for dining facilities; Minneapolis, with a 126 sq. ft. kitchen reports 95% use of that room for dining facilities; the other 21 offices report dining space ~~ranging~~ varying from 30 sq. ft. in Boston, 50 sq. ft. in St. Louis and Denver, 60 sq. ft. in four offices, to 120 sq. ft. each in Birmingham and Jacksonville. Two offices report a trend for more dining space -- the District of Columbia with 30 sq. ft. and Richmond with 80 sq. ft.; all other offices reporting no change.

TYPICAL ROOM SIZES IN SQUARE FEET

MEDIUM CLASS	Minimum Area Reported	Maximum Area Reported	Weighted Average	Reported Trends by Offices: Increasing Trend Offices	Increasing Trend Vol.*	Decreasing Trend Offices	Decreasing Trend Vol.*	No Change Anticipated Offices	No Change Anticipated Vol.*
Living Room	160(Buffalo)	320(Richmond)	235	3	6%	none		20	92%
Bedroom No. 1	110(Buffalo)	220(Richmond)	168	3	6	none		20	92
Bedroom No. 2	70(Buffalo)	162(Dallas)	133	3	6	none		20	92
Bedroom No. 3	70(Buffalo)	150(Houston)	112	3	6	none		20	92
Kitchen	60(Buffalo)	127(New Orleans)	98	3	6	none		20	92
Dining Space	25(Buffalo)	168(2 Offices)	129	3	6	none		20	92

*Twenty-three offices, representing 98% of anticipated post-war house construction, submitted data on typical room sizes. The abbreviation Vol. indicates the total volume of construction anticipated to be built by the number of offices shown.

Living Room: Buffalo with 160 sq. ft., Boston with 240 sq. ft. and Richmond with 320 sq. ft. floor area anticipates an increase in the area of the living rooms; all other offices, representing 92% of post-war construction anticipate no change. The areas vary from a low of 160 sq. ft. in Buffalo, 187 sq. ft. in New Orleans, 190 sq. ft. in Detroit and 200 sq. ft. in St. Louis to 285 sq. ft. in Memphis and 320 sq. ft. in Richmond.

Bedroom No. 1: Buffalo, with a typical floor area of 110 sq. ft., Boston, with 150 sq. ft., and Richmond, with 220 sq. ft., anticipate an increased area post-war; all other offices anticipate no change. Bedroom areas vary from 110 sq. ft. in Buffalo, 130 sq. ft. in St. Louis and 140 sq. ft. reported by three offices, to 200 sq. ft. reported by Philadelphia and 220 sq. ft. reported by Richmond.

Bedroom No. 2: The same three offices noted above anticipate an increase in area of the second bedroom, all other offices reporting no change. The area vary from 70 sq. ft. reported by Buffalo, 110 sq. ft. reported by three offices and 120 sq. ft. reported by six offices, to 150 sq. ft. reported by three offices, 157 sq. ft. reported by New Orleans and 162 sq. ft. by Dallas.

Bedroom No. 3: Buffalo, Boston and Richmond report an increasing trend in the area of the third bedroom, all other offices reporting no change. The areas vary from 70 sq. ft. reported by Buffalo, 90 sq. ft. by two offices and 100 sq. ft. by five offices, to 140 sq. ft. reported by two offices and 150 sq. ft. by Houston.

Kitchen: Buffalo, with 60 sq. ft. kitchen area, Boston, with 100 sq. ft., and Richmond, with 125 sq. ft.,

anticipate increasing areas, all other offices reporting no change. The kitchen areas vary from 60 sq. ft. in Buffalo and 80 sq. ft. reported by three offices to 120 sq. ft. reported by four offices, 125 sq. ft. in Richmond and 127 sq. ft. in New Orleans.

Dining Room or Space: Buffalo reports 25 sq. ft. used for dining space, the kitchen being used for dining facilities in 75% of the houses, and in a dining alcove for the others. The space used for dining facilities vary from a low of 25 sq. ft. in Buffalo, 85 sq. ft. in Seattle and 100 sq. ft. reported by two offices, to 160 sq. ft. in Philadelphia, 165 sq. ft. in Dallas and 168 sq. ft. in Richmond and Jacksonville.

TYPICAL ROOM SIZES IN SQUARE FEET

LARGE CLASS:	Minimum Area Reported	Maximum Area Reported	Weighted Average	Reported Trends by Offices: Increasing Trend Offices	Vol.*	Decreasing Trend Offices	Vol.*	No Change Anticipated Offices	Vol.*
Living Room	240 (New Orleans)	430 (Greensboro)	322	2	3%	-	-	21	95%
Bedroom No. 1	140 (Buffalo)	360 (Greensboro)	218	1	1	-	-	22	97
Bedroom No. 2	100(Buffalo)	250 (Greensboro)	170	1	1	-	-	22	97
Bedroom No. 3	100 (Buffalo)	224 (Richmond)	141	1	1	-	-	22	97
Kitchen	90(Buffalo)	175 (Richmond)	120	1	1	-	-	22	97
Dining Space	120 (Buffalo)	224 (2 Offices)	172	1	1	-	-	22	97

*Twenty-three offices, representing 98% of anticipated post-war house constrution, submitted data on typical room sizes. The abbreviation Vol. indicates the total volume of construction anticipated to be built by the number of offices shown.

Living Room: Buffalo with 250 sq. ft. floor area and Minneapolis, with 238 sq. ft., anticipate an increase in the area of the living room; all other offices reported no change. The areas of the living room vary from a low of 240 sq. ft. reported by New Orleans, 250 sq. ft. by Buffalo and St. Louis, and 275 sq. ft. by New York and Detroit, to 384 sq. ft. reported by Richmond and Columbus, 400 sq. ft. by Jacksonville and Salt Lake City, and 430 sq. ft. by Greensboro.

Bedroom No. 1: Buffalo, with 140 sq. ft. floor area, anticipates an increased area post-war; all other offices report no anticipated change. The floor areas vary from a low of 140 sq. ft. reported by Buffalo, 165 sq. ft. reported by Denver, and 170 sq. ft. by St. Louis, to 320 sq. ft. reported by Jacksonville and Richmond, and 360 sq. ft. by Greensboro.

Bedroom No. 2: Buffalo, with 100 sq. ft. floor area, anticipates an increased area post-war: all other offices report no change. The floor areas vary from 100 sq. ft. reported by Buffalo, 130 sq. ft. by St. Louis, and 140 sq. ft. by Denver and Los Angeles, to 196 sq. ft. reported by Dallas, 224 sq. ft. by Richmond and 250 sq. ft. by Greensboro.

Bedroom No. 3: Buffalo, with 100 sq. ft. floor area, anticipates an increased area post-war: all other offices report no change. The floor areas vary from 100 sq. ft. reported by Buffalo, 110 sq. ft. by St. Louis and 140 sq. ft. by six offices, to 130 sq. ft. reported by two offices and 224 sq. ft. reported by Richmond.

Kitchen: Buffalo, with 90 sq. ft. floor area, anticipates an increase area, post-war; all other offices report no change. The floor areas vary from 90 sq. ft. reported by Buffalo, 100 sq. ft. by New York and Dallas, and 110 sq. ft. by Denver and San Francisco, to 144 sq. ft. reported by Jacksonville, 168 sq. ft. by Minneapolis and 175 sq. ft. by Richmond.

Dining Room: Two offices, Buffalo, with 120 sq. ft. dining room and Minneapolis with 168 sq. ft., anticipate an increase in the area of this room, post-war; all other offices report no change. The floor areas vary from 120 sq. ft., reported by Buffalo, 144 sq. ft. by Jacksonville, and 150 sq. ft. reported by three offices, to 200 sq. ft. reported by Dallas and 224 sq. ft. reported by two offices.

LOCATION OF DINING FACILITES

	Minimum Percent Reported	Maximum Percent Reported	Weighted Average Percent	Reported Trends in Percent of Location: Increasing Trend	Decreasing Trend	No Change Anticipated
Small Class						
Dining Room	0(9 offices)	100(Philadelphia)	25.8%	35%	6%	59%
Kitchen	0(2 offices)	100(Buffalo)	33.6	2	28	70
Living Rm. or Alcove	0(2 offices)	90(Houston)	40.6	20	-	80
			100.0%			

Dining Facilities in small class houses constructed pre-war, were provided for in a dining room in 25.8% of the houses; in the kitchen in 33.6%; and in the living room or a dining alcove in 40.6%.

In Dining Room: Fifteen offices, representing 61% of construction, reported that separate dining rooms were provided in a percentage of the houses varying from 5% reported by Richmond and 10% by Houston, to 90% reported by Jacksonville and 100% by Philadelphia. Five offices, representing 10% of construction and 35% of the houses provided with a separate dining room, reported an increasing trend to dining rooms; one office, representing 6% of houses with a separate dining room reported a decreasing trend; nine offices reported no change.

In Kitchn: The percentage of houses providing dining facilities in the kitchen varied from 10% reported by three offices, to 95% reported by Minneapolis and 100% by Buffalo. Only one office, representing 2%, reported a trend toward providing additional facilities in the kitchen; seven offices, representing 28% of those houses where dining facilities were provided in the kitchen, reported a decreasing trend; thirteen offices reported no change in the percentage.

In Living Room or Dining Alcove: The percentage of houses providing dining facilites in the living room or a dining alcove varied from 5% reported by Minneapolis and 10% by two offices, to 85% reported by Richmond and 90% by Houston. Six offices, representing 20% of the houses providing dining facilities in the living room or dining alcove, reported an increasing trend to provide dining facilities in these areas; sixteen offices reported no change in the present practice and two offices reported no use of the living room for dining facilities.

LOCATION OF DINING FACILITIES

Medium Class	Minimum Percent Reported	Maximum Percent Reported	Weighted Average Percent	Reported Trends in Percent of Location: Increasing Trend	Decreasing Trend	No Change Anticipated
Dining Room	0(1 office)	100(Philadelphia)	80.3%	15%	29%	56%
Kitchen	0(11 offices)	75(Buffalo)	2.4	8	63	29
Living Rm. or Alcove	0(2 offices)	45(Columbus)	17.3	41	1	58
			100.0%			

Dining Facilities, in medium class houses constructed pre-war, were provided for in a dining room in 80.3% of the houses; in the kitchen in 2.4%; and in the living room or a dining alcove in 17.3%.

In Dining Room: All but one office reported that separate dining rooms were provided in a large percentage of the medium class houses, varying from 40% reported by Salt Lake City and 50% by three other offices to 95% reported by three offices and 100% by two offices. Pittsburgh, Chicago and Richmond reported an increasing trend for a dining room; six offices, representing 29% of houses with dining rooms, reported a declining trend; fourteen offices, representing 56%, reported no change.

In Kitchen: Eleven offices, representing 37% of house construction, reported some use of the kitchen for dining facilities, the percentage of use varying from 1% reported by Seattle to 75% reported by Buffalo. Birmingham, with 8% of the houses providing dining facilities in the kitchen, anticipates an increased use; five offices, representing 63%, reported a decreasing trend; five offices reported no change.

In Living Room or Dining Alcove: All but one office reported some use of living rooms or dining alcoves for dining facilities varying from 4% reported by Seattle and 5% by three other offices to 40% reported by three offices, 45% by Columbus and 50% by Detroit. Ten offices, representing 41% of the houses having dining facilities in the living room, report an increasing trend; Richmond, representing 1%, reported a decreasing trend; eleven offices reported no change.

LOCATION OF DINING FACILITIES

	Minimum Percent Reported	Maximum Percent Reported	Weighted Average Percent	Reported Trends in Percent of Location: Increasing Trend	Decreasing Trend	No Change Anticipated
Large Class						
Dining Room	76(San Francisco)	100(21 offices)	98.3%	-	-	100%
Kitchen	None	None	-	-	-	-
Living Rm. or Alcove	0(21 offices)	24(San Francisco)	1.7	-	-	100
			100.0%			

Dining Facilities, in large class houses were provided 100% in a dining room except for San Francisco 76%, Columbus 90% and Pittsburgh 95%, where dining facilities were provided in the living room or a dining alcove. No change is anticipated.

ABSTRACTS OF REPORTS ON PUBLIC PROJECTS

ABBREVIATIONS

NUMBER AND TYPE OF PROJECTS TO WHICH COMMENTS APPLY:

1 P. Perm. - One project, Permanent Construction

2 P. Perm. - Two projects, " "
(etc.)

1 P. Temp. - One Project, Temporary "

1 P. Dem. - " " Demountable "

1 P. Trailer - One project, Trailer

An abbreviation for the state in which the project is located follows the above designations.

examples: 2 P. Trailer N.C. 4 P. Perm. N. J.

ORIGIN OF COMMENTS:

Mgr. (Manager) - Comment made by a manager of a project or projects.

Mgt. Supvry. - (Management Supervisor) Comment made by a management employee of the FPHA whose jurisdiction covers several or many projects.

Tech. Rev. - (Technical Reviewer) Comment made by technical, architectural, or engineering member of FPHA staff (as distinguished from management employee).

Reg. I, II, III, etc. - Comment represents either the opinion of a Regional Office, or of one of its Divisions or Sections (i.e. Management Division, Development Division, etc.).

Interviewer - Comment made by a person who has conducted a survey by means of personal interviews.

Specialist - Comment made by an expert or specialist who has usually been retained to make a report on the project or projects.

The above appreviations (with the use of plurals, when necessary) cover all types of origin, but are supplemented by more specific references when considered desirable.

Dwelling Types

	Source	Page
Trailers do not provide comfortable quarters in Texas area because they are hot. Better insulation and larger and lower windows are suggested. Otherwise, trailers are apparently reasonably satisfactory, except for theft of government property in service units and depreciation of commonly used facilities creating maintenance problem and expense. 1P. Trailer, Tex. Mgr.	106	
Tenants like project very much, some prefer trailers to dwelling units. 1P. Trailers, Miss. Mgr.	113	
Efficiency Apts: Those living in trailers consider them more private than efficiency apartments because of common wall of efficiency apartment; also object to coal stove for cooking because of heat in summer and inconvenience and placement which cuts into space, but private bath considered very desirable. Interviewers.	15	26
Couples without children in trailers were enthusiastic about V hut as described to them, many stating that they would prefer it to a house because they would not have to buy furniture. (Interviewers thought that private washstand and toilet even without running water would be acceptable.) Interviewers	15	27

DWELLING TYPES

	Source	Page
Size Distribution: 2 bedroom - 245 units; 3 bedroom 105 units. Management thinks some one-bedroom units would be desirable. 1P. Dem. S.C. Specialist	13A	8

DWELLING TYPES (CONTINUED)

	Source	Page
The different heights - 1 and 2 stories "are effective even though carelessly used. Properly used for occasional emphasis or to help a grading condition they could be much finer, but manager believes it is a mistake to mix the buildings with different number of stories, since people complain on higher floors, bring doctor's certificates (to prove they cannot walk stairs, etc.) 1P. Perm. S.C. Specialist	13B	6
Size distribution: 16-1BR Manager thinks need 36-1BR 60-2BR would be better 50-2BR 24-3BR met by: 14-3BR Specialist disagrees - thinks possibly a few more 1BR - But young couples in project will soon have families, need 2BR units. 1P. Perm. Pa. Specialist	13G	6
Size Distribution: 1BR - 74 more 3 & some 4BR required 2BR -285 8 person families in 3BR 3BR - 11 houses, some 5 & 6 person in 2 BR. However, it is questionable whether any closer approximation could have been reached, or weather 4BR could have been built under budgetary limitations. Suggestions: 1) that on some projects a few 4BR units be included, 2) or - that flexible unit layouts be devised in which a bedroom could be swung either way so as to create 4BR units if required. 1P. Perm. Pa. Specialist	13H	7
Size Distribution: 2 BR 230 3 BR 70 Manager reports "little or no" demand for larger or smaller units. Most 2 BR occupied by couples-but manager feels this may prove economy: since they may take lodgers if demand for shelter for single men become acute. 1P. Perm. Md. Specialist	13F	9

DWELLING TYPES - (CONTINUED)

	Source	Page
Size distribution: Existing 15% - 1 BR. 66% - 2 BR. 19% - 3 BR. Management states more 1s and 3s would have met demand better. 2P. Perm. N.C. Specialist	13D	8
More 2 person units and some more 4 bedroom units needed. 2P. Perm. N. Y. Specialist	19	3
"About 2% of four bedroom units badly needed". 1P. Perm. Va. Specialist	19E	2
Serious shortage of 1 bedroom units. 1P. Perm. Pa. Specialist	19C	2
Do not use 0 Bedroom units, especially in a graded rent program. Region IV	33	2
Need for more two person units. 2P. Perm. N.Y. Specialist	19A	3
Demand for two person units exceeds the supply. 1P. Perm. Pa. Specialist	19B	2
Local authority studied a thousand enlisted personnel families before determining percentage of units. The distribution is as follows: 168 - 1 BR 248 - 2 BR 68 - 3 BR 16 - 4 BR 1P. Perm. Va. Specialist	19G	2
Size distribution: Manager feels a very small percentage of 4 bedroom units would be desirable. Actual distribution: BR 1 - 192 2 - 264 3 - 144 1P. Perm. S. C. Specialist	13B	6
Criticism of 3 BR twins, because it makes too many children all together. Need for more than 3 BR. 3P. Perm. and Dem. Wash. and Cal. Specialist	20	11

DWELLING TYPES

	Source	Page
Dwelling types - more 5-room and less one-bedroom units needed. The latter are good only for old couples. Pa. Mgrs.	3A	2
1 and 2 room suites on first floor work well for elderly people, particularly with direct access to outside. They can thus avoid stairs and see what is going on outside. Specialist	18	19
"Continuation of the normal-sized apartment one story higher than is advisable for mothers with young children would provide for many an adult family of normal type or for groups of friends". Specialist	18	19
Large DU should not be placed together as it concentrates child population. 1P. Perm. Conn. Specialist	1	31
Effect of 1-story double houses good in loosening up monotony of 2-story rows. 17P. Perm. Fla. Tech. Rev.	9	
Little call for 1-bedroom units in war housing. Rural families unwilling to accept war housing space standards. Recommended 30% - 3 BR, 50% - 2 BR, 20% - 1 BR. Reg. 2	2	24,25
Family size American average is small - 4.1 in 1930 - now estimated at 3.79 Specialist	18	17
Workers who are away all day and (if they have no children) can go away for the week-end, benefit less from a preferred exposure. Ground floor for elderly couples, 4th floor for workers (cost less in maintenance) they are apt to have talents, knowledge and leadership, thus contribute to community life. They dilute otherwise too purely parent-child community. Since family dwelling requires about same amount of plumbing and other cost consuming equipment, whether large or small it might well become the basis of the "room." Specialist	18	19
Universal preference for 1 story over 2 story. Main reason is probably the difficulty of 2 stories where there are small children. Preference for detached over row type almost completely due to noise through party walls. 3P. Perm. and Dem. Wash. and Cal. Specialist	20	11

DWELLING USE

	Source	Page
Dwelling Use: Circulation: On entering front door, all members of the family go to kitchen, tracking dirt and rain water on living room floor. 8 Northern Cities, Interviewers	14A	221
Child Guests: 17% would like to let children bring home friends if there were an additional room - (NB larger room would not satisfy). 1P. Perm. Wash. Interviewer	17	57
Child Care: "Lack of privacy for children". 1P. Perm. Wash. Interviewer	17	18
26% missed for children "a room of their own"; 22% specially furnished corner for play, hobby or study"; 11% "a play space where they can be noisy & careless. 1P. Perm. Wash. Interviewer	17	45
Child Illness: Difficulty in arranging for isolation, 12%. 1P. Perm. Wash. Interviewer	17	46
Much space is unoccupied - Living room & bedroom idle much of the day - bedroom used only 1/3 to 1/2 of 24 hours. Dwelling should be designed in terms of use rather than traditional room names. Thus there could be a children's room (instead of a bedroom) for play, eating, storage for toys as well as clothing, sleeping and proper furnishings. Specialist	18	21
Room arrangement: Where kitchen was cramped for dining tenants removed doors from kitchen leaving through-opening between kitchen and utility room, and putting curtains between kitchen and living room. 1P. Perm. N.J. Specialist	19D	4
Good to have work bench, as many tenants are skilled mechanics and like to make things. Room for it should be screened off - 30' sq. ft. seems ample. 8P. Perm. Reg. II & III Specialist	19(letter)	4

DWELLING USE

	Source	Page
Projects L,H,K: "Serious objections" to need to carry garbage, clothes, etc. from kitchen through living room to each yard. Necessary also to carry coal through to kitchen. (This was not planned for, but gas was not available. L - 1P. Perm., Pa., H - 1P. Perm. Tex. K - 1P. Perm. Pa., Interviewer	15	13
No reason for not entering kitchen direct, and tenants do not like carrying wash across living room: House should be reversed. 1P. Perm. Va., Specialist	19E	3
Dwelling arrangement: Living room in front with kitchen in rear is satisfactory for laundry and other services, but necessitates garbage piles and trash cans at front steps. There is no objection to this when proper screening is provided. 2P. Perm. N. Y. Specialist	19A	2
Approach to bath through bedroom is bad - eliminates possible use of living room as sleeping room. 1P. Perm. N. Y. Specialist	51	13
Arrangement: Stairs parallel to length is well liked, gives feeling of space and maximum efficiency to plan above. Closing off stairs from living room cuts down draft, gives more usable wall space. Bathroom heat riser comes up between living room and closet doors, destroying value of this wall for furniture. 1P. Perm. N.Y. Specialist	51	15

DWELLING USE

	Source	Page
Kitchen, Dining: Project F - general complaint re: lack of door in wall between living room and kitchen; because small kitchen, it is necessary to eat in the living room, walking the entire length of kitchen and back again in the living room to reach the eating space. As a result, a larger kitchen and smaller living room is asked for. 1F. Temp. Ne. Interviewers	15	12
Children's Playspace - Indoor: Inadequate - kitchen, dining, living space for 0-BR. units is 180 sq. ft. - for 1 & 2 BR units is 240 sq. ft. 1F. Temp. Ill. Mgt. Superv.	121	
Room Arrangement: Though rooms are small, arrangement is good. (Kitchen is generous for dining, but living room has to be traversed to get to bathroom from either bedroom.) 1F. Temp. Wis. Mgr.	122	
Bathtub vs. showers: Consistent definite preference for tubs over showers, in all projects among women interviewed. This emphasized in projects (which have showers only) on basis of difficulty of bathing young children in showers. Many women prefer showers in summer and baths in winter, but if choice is imperative, would take tub. 2F. Temp. Kans. & Ne. Interviewers	15	18

ROOM SIZES

	Source	Page
Room Sizes: Have diminished over the past 100 years - reasons are: families are smaller; less home industry; amusement and entertainment occurs more often outside the home. Specialist	18	25
Present minimums are too small. Specialist	18	23,24,25
Room Size: Suggests living room or bedroom 20 sq. ft. larger fwr some 2 and 3 bedroom units, especially for children's indoor play in bad weather. 3P. Perm. N.C., S.C. Comm. Specialist	13A 13D	2 2
Same sizes but since tenants (negroes) have practically no furniture, size adequate. 1P. Perm. N.C. Specialist	13E	
Most defense workers have not brought along much furniture, "hence in most cases adequacy of room sizes and wall spaces not critically listed" (Comments largely reviewers personal opinion) (Regions I, II, and III). 9P Perm. Region I, II, III Specialist	13	
Kitchens measuring 9' -9" X 12' -0' are totally inadequate for use as dining, cooking and laundry space. 1P. Perm. N.C. Mgr.	108	
Room Size: Sizes adequate except that dining space is too small. (Kitchen, dining sizes, 1 B.R. -72 and 90, 2 B.R., 83 and 98, 3 rooms - 98) 1P. Perm. Ga. Mgr.	107	
Design bedrooms approaching 9' width so door can swing past bedstead set across room. 1P. Perm. N. Y. Specialist	51	13
Good: (Typical 2 BR unit: Kitchen - 17' x 10' 6"; LR - 12 x 13, BR - 10 x 11, BR 8'6" x 11') 1P. Perm. Minn. Mgr.	118	
Kitchens - 9'0" x 6'6" too small in 12% of project. Arrangement good. 1P. Perm. Wash. Mgr.	114	
Living - Dining Room, 10' x 19' (scales 10' x 17' on plan) in 3 room unit is very livable, but perhaps out of scale with the much more closely limited areas in rest of project. "It is a tragic comment on present conditions that these attractive and livable units. . . . . should give the impression of being unjustly extravagant." 1P. Perm. N.Y. Specialist	51	13

ROOM SIZES (cont.)	Source	Page
General Room Arrangement: Well liked by 20 out of 25 tenants; 4 did not like it; 1 was uncertain. (Open plan of kitchen-dining-living room, with only a low partition separating kitchen). Reasons for liking: easier to clean, when entertaining guests, you don't have to leave them when you go into the kitchen, easy to watch baby. 1P. Perm. Pa. Interviewer	52	71
In two bedroom units, both bedrooms should be 120 sq. ft. to avoid cramping living-room and kitchen. 8P. Perm. Reg. II and III, Specialist	19-190 (letter)	4

ROOM SIZE	Source	Page
Trailer size and arrangement: Size adequate for two people, not much more. Those with sufficient clearance at one end to be used as sitting room are much to be preferred. 1P. Trailer Wash. Manager	116	1
Room size and arrangement: Adequate size for war housing. Arrangement satisfactory. Location of dining space e.k. (Kitchen - dining - living combination (12'x20'). 1P. Temp. - R.M.S. - FPHA - MICH.	132	

ROOM SIZES	Source	Page
Room sizes and arrangement good. 1P. Dem. Ala. Manager	109	
Bathrooms too small in 2-bedroom units. Bedrooms too small in 3-bedroom units since neither will accommodate double sized bed. Overall enlargement of house recommended. 1P. Dem. Ill. Manager	119	
Rooms are generally of fair size and shape with exception of third bedroom in 3 bedroom units. 1P. Dem. Ala. Manager	109	
Room sizes too small - Living, Dining - 197 sq. ft. Bedroom #3 - 71 sq. ft. Utility storage - 38 sq. ft. These sizes seem to deserve criticism. Otherwise rooms are considerably larger than subsequent war standards and exceed USHA. Criticism based somewhat on comparison with ordinary dwelling zones. 1P. Dem. Fla. Manager	110	

ROOM SIZES

	Source	Page
Rooms too small, storage, storage inadequate though they follow standard plans of Series TDU-3-11/9/42. 1P. Temp. GA. Manager	112	
Kitchen - Living room too small - many tenants remove cupboard divider to increase room space. 1P. Temp. Wash. Manager	128	1
Dwelling livable. Separate entrance halls at kitchen would be preferable, though no complaints have been made. Room sizes inadequate. 1P. Temp Pa. Specialist	50	10
Adequate for war housing. Kitchens small for large families. (Kitchen in 3 B.R. unit 11' x 7'4"). 1P. Temp. Mich. Manager	133	1
Living, - dining- kitchen; combined space is 180 sq. ft. for 1 & 2 BR units. Inadequate for these activities. Eating in living space reduces sitting space considerably, for 0 BR. units - 240 sq. ft. for living, dining, kitchen & bedrooms. Bedrooms adequate. 1P. Temp. Ill. Manager	121	
Adequate on an emergency basis for one-bedroom units only. Families needing two or more rooms find living difficult. 1P. Temp. Wash. Manager	115	

ENTRANCES

	Source	Page
Entrance steps: Wood, on concrete posts, open under. "As usual" tenants store firewood, etc. under. Disorderly. 1P. Perm. Pa. Specialist	13G	3
Entrances: Front porches with diagonally set latticed steel step-posts - "wholly delightful". Should be deeper for safe steps. 1P. Perm. N. Y. Specialist	51	21
Entrances: Single and entrance door for end units "Seems o.k." 1F. Perm. Md. Specialist	13G	2
Entrance Steps: Concrete. Never more than 2. No platform. Door opens right on steps. Specialist comments that this seems dangerous, but manager reports "No complaints or accidents". 1P. Perm. Pa. Specialist	13H	4
Entrance Hall: "It is interesting to observe the tremendous increase in apparent size and attractiveness, and the gain in privacy, in that apartment of the pair in which the living room is entered from the public hall through a small foyer". 1P. Perm. N.Y. Specialist	51	13
Small projections acting as front entrance roofs fail to prevent rain from blowing under front door, thereby ruining rugs. 1P. Perm. Tenn. Mgt. Superv.	14	
Lack of handrails for less than 4 steps on back porches extremely dangerous, especially in icy weather. 4P. Perm. N.J. Mgt. Superv.	14	
All group or row houses should have both front and rear entrances. Reg. II	14	
Front and rear entrances 2 steps above grade with no handrail have proven very dangerous. Many people have fallen, especially children, and some rather serious injuries have resulted.	14	

ENTRANCES

	Source	Page
Canopies are so small that rain drives in, damaging floors. 1P. Perm. Texas Mgt. Superv.		
There should be both front and rear entrances. With only one entrance everything, even ashes and coal, have to go through house, and children track dirt all through house, increasing maintenance and repair costs. The design of entrance porches provides no storm protection; consequently, rain drives in. 4P. Perm. N.J. Mgt. Superv.	14	
There should be handrails at dwelling unit entrances where 4 or more risers. Region I	14	

ENTRANCES

	Source	Page
Entrances: All dwellings are 2 house units with single end entrance. Goes into living room only. Objection to tracking mud and dirt. (Mayer suggests arrangement with entrance into passage between living room and kitchen, since saving seems worthwhile, and some tenants definitely prefer this arrangement as it makes it easier to watch children).	13A	3

1P. Dem. S.C. Specialist

ENTRANCES

	Source	Page
Entrance and Approach: Ground floor units have access front and rear; This is o.k. 2nd floor units are entered from rear only: This is not satisfactory. It is recommended that all units have two entrances. 1P. Temp. Ill. Mgt. Superv. FPHA	121	
Entrance platforms: Too small for outside sitting space, which tenants want located on street side where people pass and children play. Back platforms are too small and useless also. No protecting hoods. Front "stoop" is still liked in the small town and it costs very little. 1P. Temp. Pa. Specialist	50	11
Exterior lights needed at front door; dangerous without them, and visitors can't find units. 2P. Temp. Vt. Mgt. Superv.	14	

ENTRANCES

	Source	Page
Trailer Entrances: One door only creates fire hazard (Note - second being cut). Interviewers	15	23

CORRIDOR & FOYER

	Source	Page
Front Doors - Should preferably open into a foyer. 1P. Perm. Conn. Specialist	1	30
A vestibule at front entrance or a door between kitchen and living room would break the draft between front and back doors and help the heating situation. Pa. Mgrs.	3A	2
Halls: Not liked, they are considered waste space. 1P. Perm. Va. Specialist	19E	3
Halls: Long entry past kitchen in 2-story 2 B.R. house unsatisfactory. (Spec. remarks that this is difficult to avoid in this design solution.) 1P. Perm. Pa. Specialist	13G	1

LIVING ROOM

	Source	Page
Kitchen - L.R. in 2½ room units made less adaptable by projection of a solum (into the width of the room, by front entrance, at about ½ bedroom depth). Room in any case would be improved by a foot added to its width. (Now 12'6" wide, and strip of kitchen equipment comes out of this). 1P. Perm. N. Y. Specialist	51	13

LIVING ROOM

	Source	Page
Leisure activities: Privacy in connection with these considerably improved by move to project. 15% would like room for hobby, 11% for workshop; 17% for radio listening. For 11% utility space would accommodate satisfactorily the above activities. 1P. Perm. Wash. Interviewer	17	52
Living rooms: In Ramona Gardens 57 out of 599 families used living room for sleeping. 1P. Perm. Cal. - Interviewer	12A	5
Living Room: Too much has to go on in it. Specialist	18	20
Living Room: At present it is used mainly as a sleeping and reception room so it it should be better designed as such. Specialist	18	22
Living room: Should be planned so that it is not mere access or circulation to other rooms. Specialist	18	23
10 out of 30 housewives liked a not too large living room because: they need less furniture; cosy; intimate enough for easy conversation. A few want more space for: pianos; play space for children. Various sized living rooms should be provided for various family requirements. This should be followed by careful dwelling assignment. Projects in 8 northern cities - Interviewer	14A	217
Living room should not be so small and cut up that it cannot be adequately furnished. 2P. Perm. N. Y. Specialist	19	6
Tenants almost unanimously preferred a definite separation between kitchen and living room. 2P. Perm. N. Y. Specialist	19A	5
Since L. R. is so frequently furnished with a davanport to accommodate sleeping guests, room should be planned so that this will be possible. 3P. Perm. and Dem., California and Wash. Specialist	20	13

BEDROOM

	Source	Page
Ventilation: In projects G (Perm. Tex.) and M (Temp. Me.) there is lack of sufficient windows in bedroom. 1P. Perm. Tex. 1P. Temp. Me. - Interveiwers	15	16
In almost all projects one bedroom of the 2-bedroom units was too small. In Project M, (Temp. Me) one bedroom is so small that there is room only for a bed and very small chest. Necessary to push bed (double) directly against wall. In project G (Perm. Tex.) one bedroom is so small that it was not used for sleeping but for workshops, studies etc - appreciated for this use. Note: State law requires sex separation from infancy. 1P. Perm. Tex. 1P. Temp. Me. - Interviewers	15	17
Bedrooms: In project G La Armada-Corpus Christi, Texas one bedroom is "unusable because it is only big enough for a cot" and no through or corner ventilation (9'6" x 10' 2") 1P. Perm. Tex. Interviewers	15	15 (Note Climate)
Sleeping: Entrances all on one side keeps bedroom side quiet especially for daytime sleeping for night shift workers; but this arrangement is objected to on other grounds. On project H(Aliso Village) bedrooms are "poorly arranged" (ventilation) 1P. Perm. Cal. Interviewers	15	14, 16
Sleeping: Difficulties in accommodating overnight guests. 1P. Perm. Wash. Interviewers	17	29
In Ramona Gardens 52 out of 599 families had one bed room unused for sleeping; 20 families used bedroom for playroom, workshop, or sewing room; 15 families had no furniture to make it usable. 1P. Perm. Cal. Specialist	12A	5
Size: 1 person bedroom (8' x 9'5") desirable from standpoint of cost and livability for a three person family. 1P. Perm. Conn. Specialist	1	31
After rehousing least complaints about sleeping (hygiene) 1P. Perm. Wash. Interviewer	17	13
12% crowded for dressing space. 15% distrubed by noise from street. 1P. Perm. Wash. Interviewer	17	39

BEDROOM

	Source	Page
Some families would like them larger for other activities (20%) 1P. Perm. Wash. Interviewer	17	39

BEDROOM (continued)

	Source	Page
Sleeping: Sound disturbances partly due to "poor arrangements" of dwelling bedrooms: In projects H. I. J. & L, childrens' play chief factor (daytime sleeping of night-shift workers) In H, outside balconies cause difficulty: children upset garbage cans which must be kept there. Both master bedroom and living room open (only?) on balcony: windows are kept shut to eliminate noise. 1P Perm. Cal. 1P Temp. Kan. 1P Perm. Pa 1P Dem. Cal. - Interviewers	15	16
In project L, bedroom on 1st floor apt. is under 2nd floor apt. living room. In project N arrangement good for sleeping (Red Bank, Portland, Me.) 1P Perm. Pa. 1P.Temp. Me. - Interviewers	15	16
Bedroom: Area O.K., except none in 2 Br. or 3 BR. units can take standard 9 x 12 carpet and people who have these are disappointed. 2P. Perm. N.C. 1P. Dem. S.C. - Specialist	13a 13d 13e	2 2 2
Bedrooms: Too small for 9 x 12 rug which tenants have and use, rolling up extra length. 1P. Perm. Pa. Specialist	13G	1
Bedrooms: OK for double bed "and lots of furniture" On all projects visited no twin beds seen. (Preference or lack of space? - See Pierce Survey) 1P. Perm. Pa. Specialist	13H	2

BEDROOMS

	Source	Page
Bedrooms: Some are virtually unfurnishable. Twin beds are rare exception. 1P. Temp. Pa. Specialist	50	10, 4
Room Sizes: Bedrooms inadequate. One bedroom in TDU-1 won't accommodate even addition of baby bed. Second and third bedrooms of other units inadequate. One suggests addition of 1 foot in each dimension. Won't accommodate ordinary furniture. 2P. Dem. Conn-6018, 6126; 4P.P. NJ-28051-52-91-92; 1P.P. Tex-41051; Reg. VIII-Tdu-1 1P. Dem. Ar.-3041 Mgt. Superv.		14

BED ROOMS

	Source	Page
Trailers Sleeping: Lack of privacy, in standard trailers, with resulting tensions. Some trailers do have sliding door; others have closet doors that meet when opened to shut off bedroom space. Expansible trailers give greater feeling of privacy in bedroom area.	15	23
Interviewers		

BATHROOM

	Source	Page
Bathroom: Project I, Carquinez Hts. experimental houses. Some objection to bathroom next to living room. 1 P. Dem. Cal. Interviewers	15	14
Placement of shower stall over portion of bathroom window, criticized by housewives. 1 P. Dem. Ohio, Mgt. Superv.	125	2
Comparatively large. 1 P. Dem. Ala. Mgt. Superv.	109	

BATHROOM

	Source	Page
Most bathrooms 5'X7'. Most tenants considered them too small but especial objection noticeable in project M where bathroom is 4'4" X 6'4". 1P. Temp. Me. Interviewers	15	17,18
Bathrooms should be large enough to wash child, and contain a hamper. 1P. Temp. Pa. Specialist		

BATHROOM

	Source	Page
Community bathroom facilities violently objected to - not because of distance, but lack of privacy - especially with regard to effect on young children - and insanitary conditions. In Highland Trailers, Norfolk, Virginia, bath houses are cleaner than in E (Mobile, Ala.) apparently due to the fact that fewer people use those in C. Showers preferred to tubs because less danger of disease. Many parents did not have children use community facilities - (complaints re: lack of heat and hot water in public bath houses) (light bulbs stolen). In project E (Mobile trailers, women often used bathrooms because so few tubs are available in wash houses. 2P. Trailer, Ala. & Va. Interviewers	15	24

BATHROOM

	Source	Page
Bathroom — "After rehousing, perfect satisfaction is expressed with such items as location of bathroom". "No interference between morning toilet and other activities". 1P. Perm. Wash. Interviewer	17	12
Window over bathtub: Child and short adult cannot open window over the tub without getting into it. This arrangement does however, give the most economical bathroom arrangement. A hung sash operated by a removable handle is recommended. Specialist	18	29
Bathroom at top of steps: Considered dangerous for children. 1P. Perm. Pa. Interviewers	15	15
Window above tub: Difficult to open. In project H a skylight is used: Advantages: no curtains required, diffused light, privacy. Disadvantages: must be closed in rain, generally difficult to open. Window even over bath tub appeared more acceptable. 1P. Perm. Cal. Interviewers.	15	18
Location of bathroom in plans: 1 type has bathroom on corners. This is not economical nor best use of end exposures. 1P. Perm. S. C. Specialist	13C	2

KITCHEN

	Source	Page
Through-opening from kitchen into living room gave inadequate privacy - had to be shut in. 1P. Perm. Conn. Specialist	1	30
Doors from kitchen to living room desired by 50% of those that don't have them. Those that do have them keep better appearance, keep toddlers in kitchen. Noise not a factor. Kitchen-living room combination not liked appearance. Eating in kitchen very acceptable except sometimes for dinner when they would like a dining room. 60% wanted a dinette - reasons: for company, and looking at kitchen mess. Most housewives spend most of their time in the kitchen. Projects in 8 Northern Cities Interviewer	14A	217, 218
After rehousing perfect satisfaction is expressed with such items as location of kitchen. 1P. Perm. Wash. Interviewer	17	12, 17
Crowding at meal times greatly relieved by move to project. But some conflict remains due to small size of kitchen and proximity to living room. Kitchen work interfered with by other activities in 13% of families; play, hobby, eating, washing, hanging around, etc. (p.45) 30% of families refrain from serving meals with guests. (p.56) 1P. Perm. Wash. Interviewer	17	17, 18 (except as noted)
Trailer kitchens quite well liked - but apparently there is need for larger "free" type as well as "efficiency type K. combined with eating space". Interviewers	15	12
Most important part of house, and should have best light, since housewife spends so much time there. Good in Project H in contrast with living room and here activity centered in kitchen. Interviewers	15	11
Windows: Large ones in kitchen are excellent for light and keeping of small children outdoors, they can be watched.	1	38,39
19% of families found kitchen had inadequate work space. 31% found it inadequate regarding storage of perishable food.	17	43

KITCHEN (con't)

	Source	Page
Kitchens for 2-bedroom units should be as big as those provided for 3-bedroom units since 4 or 5 persons frequently live in these units. Pa. Mgrs.	3A	3
Too small: only room for one person. Another cannot help or keep company. 1P. Perm. Wash. Interviewer	17	44
Too much goes on in it(Washing, cooking, eating, dishwashing, drying, steaming, boiling linen, ironing, bathing the baby, changing it, diapers, homework, recreation, informal entertaining). Often used for things that should be done in living room. Specialist	18	20,21
Living Room and Kitchen: When separated only by a curtain it gives good light, ventilation and a sense of space - but cookery fumes from hoodless stove "settle on living room walls and finery." Wide difference of opinion on question of throwing together living room and kitchen. Specialist	18	23
The Kitchen is the room at which most criticism is aimed. Tenants do not want to be in view of unexpected guests. Kitchen used for many things, - work, assembly, eating, etc. - because it is light warm, has washable floor, etc. Interviewers	15	11,12
70% of women reporting to President's Conference Committee on kitchens wanted laundries separate from kitchen. Some want cellars, some utility rooms for some of the activities that now go on in the kitchen. Specialist	18	25
Necessities for the kitchen are more storage space, sanitary provisions, protection from noise, confusion, dirt - there should be an additional washroom. Specialist	18	25
Common complaint is that in spite of good equipment there is no space to work. Specialist	18	26
Most small children play in the kitchen. Older ones study in the kitchen. More table space, better light. Projects in 6 northern cities - Interviewer	14A	218

KITCHEN

	Source	Page
Living room - kitchen opening in experimental unit not liked because of view and spread of kitchen smells. Curtain dividing living room into two different use spaces is never used. 1P. Temp., Pa. - Specialist	50	14
Eating in the kitchen is universal, and the kitchen is really too small for this. Kitchen should be large enough so that its use as thoroughfare doesn't interrupt other activities. 1P. Temp., Pa. - Specialist	50	10

KITCHEN

	Source	Page
Size and equipment o.k. There is objection to wide opening between kitchen and living room: tenants want it smaller. (Note: Is door wanted) 1P. Dem. S.C. Specialist	13A	2
Orderly arrangement and fairly generous dining space. 1P. Dem. Ala. Manager	109	
Dining space in kitchen meets with general approval. (4'6" x 7'6" is available for this propose on type "B" plan 3-bedroom unit). 1P. Dem. Ohio Manager	125	2
Complain of kitchen inadequacy. Greatest objection is lack of space for eating purposes - which tenants prefer in kitchen. 1P. Dem. Conn - 6018; 4P. Perm. N. J.- 28051-52-91-92; 1P. Perm. N.Y. - 30037; 3P. Dem. 31025-27; 1P. Perm. Tenn- 40031; 2P. Perm. Texas-41081, 41063. Management Supervisor	14	

DINING SPACE

	Source	Page
Dining space: Row houses with kitchen space reduced to approximately 55 sq. ft. and separated from interior dining spaces by spur partition on one or both sides are considered by tenants to have an excellent arrangement for dining. Dining area varies from approximately 65 sq. ft. in 2-bedroom unit to approximately 90 sq. ft. in 4-bedroom units. (In order to secure required combined area kitchen wall is projected from front wall 4'0" on 1st floor only.) 1P. Perm. N. Y. Mgt. Superv.	137	3

DINING SPACE

	Space	Page
Suggestion made that 1st. floor bedrooms could be used as dining rooms also. Managers Philadelphia	3A	2
22% crowded at mealtime on "special occasions". 1P. Perm. Wash. Interviewers	17	35
Flexibility of dining table placement proved useful. 1P. Conn. - Local Authority Specialist	1	30
Dining preferred in kitchen handier, less walking on hard floors. Projects in 8 northern cities - Interviewer	14A	217
Too often a so-called "dining foyer" is a poorly lighted, poorly ventilated, congested hallway. Specialist	18	23
Kitchen preferred for dining. "Eating and cooking one function". Do not want to be in view of unexpected guests. But project K satisfactory "L" shaped L.R. 1P. Perm., Pa. - Interviewers	15	12
Some tenants have put their stoves in utility room to provide more space for dining in the kitchen. 1P. Perm. N. J. Specialist	19D	3
Universal preference for eating in kitchen 8 P. Perm. N. Y. Pa., N.J., Va.	19-19G	
All families eat in kitchen, space should be provided, not only for families but also for guests. 2P. Perm. N. Y. Specialist	19	5
Dining in L. R. would be acceptable if really planned for. This system should be carried out especially where washing is done in kitchen. 3P. Perm. and Dem. Cal.-Wash. Specialist	20	12, 13
Dining space: Location and arrangement good. (In 10' x 17' kitchen) 1P. Perm. Minn. Manager	11B	

DINING SPACE

	Source	Page
Small and poorly located (Series TDU 3 11/9/42) 1P. Temp. Ga. Manager	112	
Are arranged well in relation to other activities carried on around them. 1P. Temp. N. C. Manager	111	
Dining: Location and arrangement satisfactory. (In kitchen, approximately 10 x 12). 1P. Temp. Wis. Manager.	122	
Dining space, location and arrangement, o.k. (Placed at end of L.R.) 1P. Temp. Mich. Manager	133	1

LAUNDRY

	Source	Page
Utility Room: Does not seem adequate, especially for clothes drying in bad weather: (8' 4" x 5' 11" in 1 BR unit; 6' 6" x 7' 4" in 3 BR unit). Most housewives have their own washing machines and do not want group laundry facilities. Complaints: Room too small; not being allowed to put in nails so that lines have to be tied to door hinges. But in spite of these difficulties none wanted a community laundry. 1P. Perm. Pa. Specialist	52	72, 73
Clothes in front yard extreme objection. Interviewers	15	9
Clotheslines: In Ramona Gardens about 40% of housewives had insufficient clotheslines. 1P. Perm. Cal. Specialist	12A	17
Drying yards: should be better drained and graded. Service yards having continuous wear and have no walks. Service yards have in some cases paving and walks - other cases not. Back yards badly drained. 5P. Perm. Reg. II Tech. Rev.	4	
A basement compartment without ventilation by means of a fan, and without heating during the summer months, is generally considered inadequate for laundry drying purposes throughout a 12-month period. Heat and ventilation must be provided in about 40 E.D.R. and 150 C.F.M. to get drying fast enough so that two tenants can use a drying compartment in a day. Region II	5	25
Separate and individual laundry drying facilities appear to be best solution. Interviewers	15	7

LAUNDRY

	Source	Page
Interior clothes drying: Complain of lack, for wet weather and winter. One dries in 2nd floor corridor; another in bedroom. "These tenants do not send out laundry; probably couldn't; and really need better arrangements for washing and drying." See report on 13/h for full discussion. 1P. Perm. Pa. Specialist	130	1
Laundry Drying: Facilities good except in winter when they are crowded. (10 x 17 kitchen) 1P. Perm. Minn. Mgr.	118	
Kitchen & Utility Rooms — Washing & Drying: Sizes generally ok except for question of laundry, particularly acute on projects in Alleghany court, due to prevalent ownership of washing machines, smoky air making indoor drying a necessity in all but the most favorable weather. The sink-tub arrangement is not enough here. Generally in these projects the requirements are:	13H	2

1. Utility room large enough for washing machine and if possible for actual washing, adjoining the kitchen. Location ok on this project (Mefflin township PA 36221-Riverview Homes.) In others (of Alleghany County) varies from fairly good to unsatisfactory.

2. Proper ceiling or other drying apparatus — one manager suggested the use of umbrella dryer for both indoor and outdoor drying, so that walking in mud is avoided.

3. Ideally concrete floor and drain in washing machine space, even if not connected up.

4. Kitchen — washing — drying relationship "much more important in north than I had suspected." While sink, range, refrigerator accepted even in eating-kitchen, washing machine is out, for permanent storage. Need for flexible space-use in kitchen — eg. large enough space for tenant owned refrigerator (but some projects insist that project ones be used, regardless.)
Several P. Perm. Pa. Specialist

Apt. & Flats do laundry only in b'mt. rooms. Laundries have coin-in-slot washing machines — much used on scheduled program. All families use drying rooms in winter but there is not enough space. Though ironing boards are provided most people prefer to MM at home. Laundry systems worked pretty well in general but there is too much walking and carrying. 1P. Perm. N. Y. Specialist	51	16

LAUNDRY

	Source	Page
Laundry: Preference for dining in kitchen makes imperative a new solution to laundry problem. 8P. Perm. Reg. II & III Specialist	19 19G (Letter)	3
Separate soapstone washtubs provided in utility room which also contains heating unit and oil tank and opens directly to dry yards. Arrangement liked. See full statement 1P. Perm. N. J. Specialist	19D	3

LAUNDRY

	Source	Page
Laundry in kitchen results in discomfort, contamination of food by laundry spray, steam, wet floor. A bathroom laundry might solve the problem. Laundry could be done without interrupting processes at awkward times to fit the meal schedule.	18	22

Specialist

LAUNDRY

	Source	Page
Laundry - Project F: "Wash House" on porch with entrance from yard not large enough for washing machine, no drain, hot water had to be turned on outside (in kitchen). Used largely for storage of wheeled toys, etc. A source of irritation since it did not serve intended purpose. (Illustrates importance of "finishing touches".) 1P. Perm. Ala. Interviewers	15n	14
Most women iron in kitchen. 8 Northern Cities. Interviewers	14A	220
Suggestion made by one housing manager that every building containing more than four dwellings have common laundry room to be used by all families. Advantages: (a) space could be reduced in each D.U. (b) better laundry facilities could be provided (c) less critical material would be used.	14	
Clothes Drying: Interior space needed. 43% complain of inadequate facilities.	17	29
"It is hard to find a place to dry laundry": 43% state that housework is "strained by inadequate facilities". (p.49) 1P. Perm. Wash. Interviewer	17	44
Community clothes drying facilities essential in some localities (For example: Puget Sound area, where only 28% of days are satisfactory for drying clothes out of doors).	14	
Clothes Drying: Some prefer to do this in the bathroom, over the bathtub - as in many USHA projects - or over toilet as at Parkchester. Space is needed for 2nd drying of clothes after they are ironed. Specialist	18	22
28 out of 30 preferred individual laundries because: can't leave baby alone to go to group laundry, clothes too heavy to carry, things interfere with schedule time, cleaning up after someone else, too much gossip, have to carry removable parts of machine back and forth. Laundry difficult to do in kitchen - vapor, clutter, interference with other kitchen activities. 8 Northern Cities, Interviewer	14A	219
One laundry tray is not enough, even for a small wash. Sink, also, has to be used for heavy things such as blankets and quilts.	18	22

STORAGE	Source	Page
Storage - "Broom closets, wrap closets, in the hall and near the back door, cool storage closets, kitchen closets near the stove and near the work surfaces, linen closets, toy closets...are demanded almost vociferously". Specialist	18	13
(National Safety Research Institute) Danger from storing things in improper space (as cellar stairs) for lack of proper closet space; danger because of using substitutes for a step ladder because there is no place to store one. Specialist	18	13
Should have doors, otherwise dust is apt to settle. Curtains are not sufficient. 30 tenants survey in 8 northern cities - Interviewers	14A	222
3% wanted doors on closets. 1P. Perm. Cal. Specialist	12A	8
Good layout. Adequate size - Projects J and I only. 1P. Perm. Va. & 1P. Temp., Kan. & 1P. Dem., Cal.	15	13
Utility closets: Things put there are: washing machine, ironing board, laundry tub, boiler, laundry basket, iron, clothesline, clothespins, ladder, vacuum cleaner, broom, mop, pail, soaps, play pen, potty chair, folding diaper rack, chalkboard, sled, roller skates, wagon, toys, tricycle, bicycle, perambulator, auto tire, mechanics' tools, canned goods, pots and pans, flour, potatoes, winter clothes, wet cloths, blankets, work clothes, soiled clothes, childrens' coats, rubbers, overshoes. This is a mess. 30 Tenant Survey in 8 northern cities - Interviewers	14A	220
Storage space should be provided under each building for tenant storage, screen doors, etc. Region II	5	
Problems: Bicycles, perambulators, tricycles, washing machine and many other miscellaneous things for which there seems no space. 30 Tenant Survey in 8 northern cities - Interviewers	14A	220
Storage space within dwelling unit should be provided for storm sash. Screens can occupy this space when sash are on windows. Region V	10	14

STORAGE

	Source	Page
Lack of closet doors usually objected to but "degree of objection varied with climate and conditions". 1P. Perm. Pa. Interviewers	15	20
Inadequate in War Housing group or row house without basements. Utility rooms inadequate for required belongings. Region II	2	12
More storage space needed for screens, trash, lawn mowers, etc., things which ordinarily go in the cellar. Phila. Pa. Mgr.-Superv.	3A	2
In Ramona Gardens, 80% of families indicated storage and closets to be completely satisfactory. 7% needed more space. 1P. Perm., Cal. Specialist	12A	33
43% of tenants needed storage "outside the kitchen", such as in basement, or attic. Interviewers - 1P. Perm. Wash.	17	15
30 sq. ft. is generally indicated for storage space though 20 sq. ft. is more frequent found. Specialist	18	9
When there is special baby carriage storage, there should be one space per 7½ families. Manager	18	9
Doorless closets in bedrooms: No complaints. 1P. Perm., Md. Specialist	13F	2
Storage closets: Inadequate size (20 sq. ft.) but location good, just inside kitchen door. 1P. Perm., S.C. Specialist	13B	2
Washing machine space: would like separate compartments or partitions to hide machine from kitchen. 1P. Perm. Md. Specialist	13F	2
Storage closet: Located off bathroom in 3-bedroom house. No complaints (children in families visited had no large wheel toys). In 2-bedroom house no storage closet. Scuttle into attic in both cases. 1P. Perm., Md., Specialist	13F	2

STORAGE

	Source	Page
Closets opening into L.R.: Adequate except for storage closet. Objection to closet opening into living room, especially where doorless, althe other closets without doors seem acceptable to this project. 2P. Perm., N.C. - Specialist	13D 13E	2 2
Storage closet, size and shape: Not adequate unless supplemented by central project storage. Otherwise 35 sq. ft. recommended - long enough to take bikes, etc. These were left outside because (a) Too little space (b) tenants do not want to bring dusty toys into house. Therefore storage space should have outside door or be located just off an entrance. 2P. Perm. N.C. - Specialist	13D 13E	2 2
Storage closet is part of utility room. Acceptable to tenants. Also "usual question" of large toy and bicycle storage, no place for these.	13C	2
Storage closet not shelved. Housewives would like 2 shelves and some hooks. 1P. Perm. Conn. - Specialist		
Storage: This and lack of garage most general complaint. Worst is no good cabinets and place for bicycles and washing machines, etc. "Ideal would be a utility room with stationary tub and room for washing machine, drying in bad weather, bicycles, tools and miscellaneous storage, opening outdoors and into hall or preferably kitchen (preferably with a door between) 3P. Perm. Wash. & Cal. - Specialist	20	11
Closets: In (G) Corpus Christi, lack of doors liked: for better ventilation, for prevention of mildew. 1P. Perm. Tex. Interviewers	15	20
In (K) Monongahela Hts., utility closet, "too small for utility storage". 1P. Perm. Pa. Interviewers	15	20
Closet doors: Closets without doors generally disliked but "degree of objection varied with climate" and atmospheric conditions greatest in Project K - Monongahela Hts., where atmosphere dirt "penetrates any thickness of curtain". "Chiffarobes" purchased by tenants as substitute. 1P. Perm. Pa. Interviewers	15	20

STORAGE

	Source	Page
More attention should be given to livability considerations and to the fact that families expand and accumulate possessions. No thought has been given to the latter in the design of these units. Units are too small - often a few feet added to length or width are greatly needed and would add very little extra cost. Practically all units visited by management were found to be greatly congested with accumulated articles, and this situation has been the source of most frequent complaint. Closets should have doors, not curtains. More space should be provided for linens. Utility room should be larger.	1P. Dem. Ill. Mgr.	119

STORAGE

	Scores	Page
Storage space: More needed for tenant property Region IX	36	3
General storage: General storage is inadequate - 30 ft. for each dwelling unit needed; also outside storage is desirable for tools, wheel toys, etc Region VIII	35	2
Storage general: Some tenants have built a mezzanine into the rear half of the garage, giving ample space for general storage. 1P. Perm. New Jersey - Specialist	19D	3
Central storage: Must be provided for tenant possessions. 4P. Perm. Region II & III Specialist	19 (Letter)	3
Storage: Need for central storage space. Tenants coming from larger places hate to give up their possessions. 1P. Perm. Pa. Specialist	19B	5
Kitchen storage: Grocery storage should be provided so that tenants need do principal shopping only once a week. 2P. Perm. N. Y. Specialist	19	5
General storage: Inadequate except where special storage closet is provided. Very unsatisfactory as part of heater space, dirty and wasteful of space. 2P. Perm. N. Y. Specialist	19	5
Central storage: For furniture and trunks should be provided. 2P. Perm. N. Y. Specialist	19A	6
Cold storage: Should be provided, open to outside air, will help families without mechanical refrigeration. 8P. Perm. Reg. II and III Specialist	19 (Letter)	4
Bicycle storage: Should probably be in some outside location, heater room does not work, bicycle is awkward, crowds heater room, heat deteriorates rubber tires. 8P. Perm. Reg. II and III Specialist	19 (Letter)	3-4

STORAGE

	Source	Page
Storage: Problems: No place for ashes, trash, wheeled toys, makes house fronts unsightly. 2P. Perm. N. Y. Specialist	19	2
Utility closet off kitchen: Lack of curtain or door makes for poor appearance. 2P. Perm. N. Y. Specialist	19A	5
Storage: Lack of garbage can and wheel toy storage looks badly. 2P. Perm. N. Y. Specialist	19A	6
Kitchen storage: Shelving meeting USHA Standards seemed adequate - additional pot storage under sink is recommended and "the elimination of the broom closet as such." 8P. Perm. Reg. II & III Specialist	19 (Letter)	4
Grocery storage: Since most tenants do their shopping once a week, cool storage is desirable. Possibly something open to outer air. 2P. Perm. N. Y. - Specialist	19A	4
Storage space: Advantageous and economical to allow tenants to store screens - out place must be provided. Region II	21	18
General storage: Has been provided in accordance with standards and has proved adequate, but storm sash are bad storage problems. Region III	31	5
Large storage under center stair generally serves only first floor apartments abutting it, producing unfortunate marked inequality in storage space. 1P. Perm. N. Y. Manager	51	14
Closets: Adequate - Half again as much space as required by USHA - Standards. 1P. Perm. WASH. Mngt. Superv.	114	
Extra Storage: Trunks, screens, extra belongings outside D. U. adequate - 400 sq. ft. for common use, basements of 6 buildings, well placed through project. (12 sq. ft. per d. u.) Average 100 ft. from each d.u. 1P. Perm. WASH. Mngt. Superv. USHA		

STORAGE

	Source	Page
Storage closet or closets: 2 storage closets, one in kitchen and one in bedroom passage each a little under 4' sq.: Long toys (bikes, wagons) cannot be stored: Therefore same total space in one area would be better. (This is 2-bedroom unit) 1P. Dem. S.C. Specialist	13A	2
2 bedroom units has one closet off bedroom passage 4' 6" x 9', shape O.K. for toy storage but some tenants refused to take dirty toys across living room("This storage question should be analysed and formulated into more definite standards .... covering 1, location (near entrance, or door to exterior) 2, shape as well as area (e.g minimum length and width for bicycles, baby carriages, etc.) 1P. Dem. S. C. Specialist	13A	2
Storage: Complaints about closets without doors and the expense of curtains (3P. Perm. and Dem. Wash. and Cal. - Specialist). But in damp places people are afraid to use even curtains. 1P. Dem. Wash. Specialist	20	12
Closets: Closets and storage space seems adequate. 1P. Dem. Ala. Mgr. Superv.	109	
Closets, "Closets except for general storage are adequate, doorlessness not objected to". On two bedroom unit closet in living room is objected to, especially because location in "far corner" is awkward. 1P. Dem. S. C. Specialist	13A	2
Storage within dwelling in general O.K., but inadequately equipped with shelves. (General storage off kitchen is approx. 4' 10" x 5' 6" coat closet; 2'6" x 2' 9", linen closet, 2'9" x 2'0", clothes closet; 4'6" x 1' 10") Objection made to some plans where open storage faces living room entrance door. 1P. Dem. Ohio Mgt. Superv.	125	2
Adequate 1P. Dem. Ala. Mgt. Superv.	109	

STORAGE

	Source	Page
Storage closet: In 2-BR, 2-story house this is on second floor and "rather small (3' x 3'6"). Of course unusable for garden tools, baby carriages or heavy toys. On 1-story houses storage space is located off bedroom corridor, an unsatisfactory location. Size (3'4" x 8') OK in some cases, location is off living room; this is bad too. 1P. Perm. Pa. Specialist	13G	1
Storage Utility Closet: OK in size and shape for wheel toys (5' x 11'3"). No objection to storage in same space as heating unit. 1P. Perm Pa. Specialist	13G	1
Storage: Closet storage and utility spaces good. No basement storage provided. (Clothes,Closet, 3'4" x 1'9" Coat Closet 3' 3" x 5'0", Linen Closet: 1'6" x 1'9", no storage off kitchen, but kitchen itself is 17' x 10'6". 1P. Perm. MINN. Mgt.	11S	

STORAGE

	Source	Page
Storage: No units have adequate space for baby carriages, bicycles, etc. - they are meant to be kept in apt. basements - a long walk, and pilfering goes on. General storage (furniture, etc) is also in basement. OK except that tenants don't like having to go to management for key - and there is dampness. Lack of storage for staple food supplies for large families. To remedy this management installed lockers for canned goods in apartment basements - much used but not ideally located. 1P. Perm. N. Y. Specialist	51	15, 16
Storage: Utility closet approx. 40 sq. ft. and [illegible] upstairs storage closets averaging 18 sq. ft. considered very good for two and three bedroom row houses. 1P. Perm. N? J. Mgt. Superv.	137	2
Storage: 2' x 4' storage closets in one and two bedroom spartments far from sufficient. 1P. Perm. N. J. Mgt. Superv.	137	2
Exterior storage: Lack of adequate exterior storage facilities for tenant household apparatus will require a supper-abundance of management supervision to encourage acceptable standards. 1P. Perm. OHIO Mgt. Superv.	125	2

STORAGE

	Source	Page
Rooms: Small, poorly arranged, closet and storage space inadequate (according to standard plans). 1P. Temp. 3 Ga. Mgr.	112	
In projects K (1P. Perm., Va.), M (1P. Temp., Me.) and N (1P Temp., Me.) in northern climate, where amount of basic clothing was "moderate", acute lack of storage space due to amount of heavy outer wear. In project J (Temp., Kan.) closets with shelves in bedrooms and hall appreciated since tenants considered move temporary and did not buy furniture. In general, closet and storage space are inadequate regardless of amount of clothing and possessions. Not enough shelves and hooks. Clothes closets in H (1P, Perm., Cal.) and M (1P. Temp.) especially inadequate. 1P., Perm. Va. Interviewers 2P., Temp. Me. Interviewers	15	19
Storage: Interior storage space adequate for war housing. Additional shelving requested. Tenants suggest that kitchen utensil closets be closed in and clothes closets that are exposed to sun be closed in. 1P. Temp. FPHA Mich. Mgt. Superv.	132	
Dead storage: Storage for trunks, screens, etc. is inadequate, resulting in unsightly backyards. Although storage space for screens and sash is provided by management, additional space for tenant equipment is desired with exterior ground level access. 1P. Temp. FHHA Mich. Mgt. Superv.	132	
Utility Closets: Liked, but do not provide adequate storage for miscellaneous items people want to store in them. E.g. at project N, Red Bank Portland much canning is done and only one shelf for storage is supplies. Here tenants want attic. Pots, pans laundry room, wood, sleds, tools, etc. are stored in living room closets. "Undesignated storage space" suggested <u>outside</u> as well as inside. "One project" had outside space, locked for bicycles, etc. apparently liked, "These lockers are comparable to cellar space, and meet an important need". 1P. Temp. Me. Interviewers	15	20

STORAGE

	Source	Page
Locked Closet Door: Little objection. Permitted airing of clothing. 1P. Temp. Mo. Interviewers	15	20
Closets: Closets, storage and utility space, are adequate. 1P. Temp. N. C. Mgt. Superv.	111	
Insufficient storage space, particulary for childrens' toys. 1P. Temp. Pa. Specialist	50	
Closets and shelves are adequate, but tenants are insistent on doors on closets and kitchen shelves for protection from dirt blown around by heating system. 1P. Temp. Pa. Specialist	50	
Storage space 32 sq.ft. for screens, trunks, and extra belongings - inadequate. Basement space would be desirable. 1P. Temp. Ill. Mgr. Superv.	121	
Only storage space for screens, maintenance equipment, general belonging, trunks, linen, etc. is a closet 55 ft. sq. 1P. Temp. Wash. Mgt. Superv.	115	
Adequacy of storage space dependent partly on tenant attitude; OK if dwelling is considered temporary. Not so, if family plans on staying a long time. 1P. Temp. Wash. Mgr.	128	1
Storage: Closet, storage and utility space crowded. There are no basements. (A store room is provided approximately 4'0" x 9'0", bedroom closetsare approximately 4 lineal ft. and there is a small linen closet, but no coat closet.) 1P. Temp. Wis. Mgr.	122	
Interior closet space fairly adequate for war housing. Recommended: enclosed closets in industrial neighborhoods. (In 2 BR unit general storage closet between LR & BR: 4'0"x6'6" bedroom closets: 2'10" x 2'0". This is all the storage space there is. There is no linen or coat closets, and only shelves in the kitchen. 1P. Temp. Mich. Mgr.	133	1

STORAGE

	Source	Page
Storage space: Fairly adequate except for no space for storing trunks and large pieces of luggage. 1P, Trailer, Manager		1
Trailer storage: Since people have brought as little as possible, storage is adequate for clothes, etc., but not for large objects; trunks, washing machines, bicycles, etc. - These are kept outside the trailer or under and deteriorate if they are not stolen. No central storage space is provided. Trailer Interviewers	15	25

BASEMENT

	Source	Page
Basement Living Rooms: Sometimes these are more comfortable to live in than those on ground floor, as at the Granger Homesteads in Iowa. Basement Laundries: Often are unused because of faulty or incomplete design; e.g. no drains or the difficult trip with a laundry basket. There should be laundry dumbwaiters that also go to roof for outside drying in apartments. Basement laundries are, in apartments, difficult to supervise when they must be open at night - children like to play in them. Basement laundry with overhead heat does not dry clothes but overheats apartment above. Cellar stairs are often dangerously designed. A basement is usually desired even when there is ample space for work and storage on the ground floor, as a result of desire for extra work space, cool storage for fruit, vegetables and canned food, laundry and workshop. (50% want full basements) (15% want partial basements) (82% want basement laundries) (55% want basement veg. room)	18	7,8
Basement for laundry, cool storage, workshop, playroom is a big house selling point. Special storage needs for rural dwellings. Specialist		
Basement and heat: Include full basement where tenant heating equipment is used. Reg. II	21	16
Not needed: Storage in utility room assumed to be adequate (3' 6" x 7' 4" for 2 and 3 B.R. 3'0" x 3'6") 1P. Perm. Ga. Mgr.		
Basements: Partial basements 11' 6" x 7' 6" containing stairs, coal bin, and hot air furnace are considered unsatisfactory for storage purposes because of size and arrangement. 1P. Perm. M. S. Mgt. Superv.	137	2

UTILITY ROOM

	Source	Page
Utility Room: Recommended: to accommodate many kitchen and storage facilities. Specialist	18	22
90% preferred utility room if large enough for washing and drying to basement, because of fewer stairs - and greater ease in watching children. Occasionally a basement is wanted for a husband to putter around in.	14A	221
Should be designed to solve both laundry and storage problem. Should be accessible from outside. 8 Northern Cities, Interviewer	14A	222

PARTITIONS

	Source	Page
Partitions: Project 1 - Vallejo Experimental houses - Carquinez Hts. - Tenants would have preferred a door between living room and bedroom, bath, hall. Specialist	15	14
Curtain tracks: Built into ceilings of small TDUs. They are never used. Reg. IX	36	3
Little need for curtaining for bed in l.r. of 2- and 2-br. units. Partitioning off kitchen would increase livability of living room and confine area heat to kitchen. This is important in this area with 9 mos. of summer. Reg. VIII	14	

STAIRS	Source	Page
There should be handrails at entrances having 4 or more risers. (One manager says 2 or more). Exterior lights are needed at front doors. Reg. I, II, VIII	14	
Tenants with young children prefer 1-story dwellings - especially because of ease in toilet training. With older children 2-story houses are preferred to keep children's play space away from work area. (Note: Bedrooms are used as play area). Interviewers	15	11
Stairs should be entered from kitchen side of dwelling. Cross stair plan works well. 1P. Perm. Conn. Specialist	1	
Stairs and gate: Dangerous for children to have bathroom at head of stairs but gate which tenants were not allowed in attach might have remedied this. Interviewers	15	32
Stairs: Location of the stairs at the center of the two-story row house is considered disadvantageous because living room is said to be eliminated for use as occasional bedroom by circulation from front entrance to upstairs rooms passing across it. 1P. Perm. N. J. Mgt. Superv.	137	p2

STAIRS

	Source	Page
Stairs: Project H: "Dark and narrow steps" are considered dangerous (Actually they are 3'3" or 3'5"-- apparent (comparative) darkness or perhaps riser - head ratio makes them seem so). 1P. Temp. Mo. Interviewers	15	15

LIGHT AND VENTILATION

	Source	Page
Windows: Sills in 1st floor apartments should be high enough to afford privacy from passers by. 1P. Perm. Conn. Specialist	1	29
Small high windows help cross ventilations without interfering with furniture arrangement. Weather Bureau recommends for humid regions removable wall panels, or doors, low window sills, transoms over doors and windows, and ceiling fans. Specialist	18	13
Windows: 30" window sill avoids glare, keeps in children and toys, permits vision of outside from inside (to watch children, for view, etc.). But gives less air movement, especially bad with low beds. Specialist	18	12, 13
Window Area: Almost always considered satisfactory - a few wanted more light. 8 Northern Cities, Interviewer	14A	221
Light: Choice of project H (Alice Village - Los Angeles) as one of two in which interviewers would least like to live, based on darkness of large living room, with only one window at end. 1P. Perm. Cal. Interviewers	15	30
Ventilation: "Positive means for ventilation such as louvers, hopper vents, etc., are necessary". Reg. II	25	9
Windows: In (f) James Place, Mobile, Ala. (Perm) small panes in windows are hard to clean; windows have 2 catches which fit into window frames when window is closed. To open "necessary to pull or push at same time" which is practically impossible for one person. Interviewers	15	28
End Walls of rooms: Here all ends are blank, not utilizing end walls for additional ventilation. 1P. Perm. Conn. Specialist	13G	2

LIGHT AND VENTILATION

	Source	Page
Dwelling types: Region VIII Technical Section says any building plans involving a back-to-back relationship of dwelling units are unsatisfactory in the Gulf Coast Area because maximum cross-ventilation is essential. 1P. Perm. Tex. Mgt. Superv.	101	
Dwelling types: Region VIII Technical Section states that dwelling units relying on monitor-type ventilation (as sometimes employed to light and ventilate interior baths or kitchens) are not satisfactory in that Region when the monitor openings face away from the prevailing breeze. However, these units are satisfactory when properly oriented. 1P. Perm. Tex. Mgt. Superv.	101	
"Flat" stair hall lighted by glass brick, gives adequate light and requires little cleaning, but eliminates any possible ventilation. Excessive heat in summer, - affects particularly top floor apartments. 1P. Perm. N.Y. - Specialist	51	14
Sun Shades: In the form of latticed overhangs designed to keep out summer sun and let in winter sun - objected to by tenants partly because they did not understand them, partly because rain drips from them, getting windows dirty and drowning flowers planted below. 1P. Perm. Pa. Interviewer	52	69
Unusually Large Windows: 20 out of 25 housewives like them, 4 did not, 1 was uncertain. Reasons for liking were: lots of light and sunshine. But washing these windows was a problem, and also the expense of curtaining them is a drawback. Almost impossible to really darken rooms, which is sometimes necessary, as with measles. 1P. Perm. Pa. Interviewer.	52	69, 71

LIGHT AND VENTILATION	Source	Page
L.R. Windows: should have a pair of windows on one elevation for greater cheerfulness and openness; and in this latitude (Charleston, S.C.) extra heating cost is not a factor. 1P. Dem. S. C. Specialist	13A	3
Adequate light and ventilation. 1P. Dem. Ala. Mgt. Superv.	109	

LIGHT AND VENTILATION	Source	Page
Windows: Larger and better placed than in average temporary housing. Better ventilation and living conditions. 1P. Temp. N.C. Mgt. Superv.	111	
Ventilation: Experimental detached house with interior bath room. Monitor lighting and ventilating of bath and kitchen good and acceptable. There has been no trouble. 1P. Temp. Pa. Specialist	80	

LIGHT AND VENTILATION	Source	Page
Trailer Ventilation Windows: Windows small, placed too high for direct breeze (also curtains cannot be drawn easily). Daytime heat extreme (many day sleepers among war workers). One door only, lack of cross ventilation this way. Second door is being cut as result of fire hazard. Interviewer	18	28

ROOFS	Source	Page
Apartment Roof: Can and should be developed for many things, movies, games, sitting. Should have toilets and drinking fountains. Many tenants prefer roof to parks. Some fencing has to be provided. Specialist	18	15

PORCHES

	Source	Page
Porches: Generous porches contribute exceedingly to appearance of livability and well being. 17 P. Perm. Fla. Tech. Rev.	9	
Stoops: Should be large enough to accomodate 3 or 4 chairs. 1 P. Perm. Conn. Specialist	1	31
Porch: 24 out of 30 wanted one, 21 in front, mostly to get away from the work side of the house. Good place to put the baby. P's. 8 Northern Cities, Interviewers	14A	221
Spacious porches most agreeable, very much missed on latter part of project where they were omitted. 1P. Perm. Fla. Tech. Rev.	9	
Back Porch, when oriented for privacy and sunny breezes has endless uses (veg. rinsing, family wash, canning, meals, sitting, sleeping for children. Specialist	18	15
Entrance porch design provides no storm protection, consequently rains under door.	14	
Porches are of prime importance in the south eastern states. Region IV	33	1
Sitting out place: Should be provided in some form if not a porch, then at least some paved area. 1P. Perm. N. Y. Specialist	19D	4
Porch roof or canopy: Reviewer considers this desirable, as houses built without "look a little shacky even those built of masonry." 2P. Perm. N.C. Specialist	13D 13E	7 9
Porches: 11 out of 25 wanted one - 8 did not, 6 were uncertain. Reasons: to keep rain from getting in door, a place for children to take off winter clothing. 1P. Perm. Pa. Interviewer	52	69
Balconies: 3' deep; would have been more useful, if deeper. 1P. Perm. Conn. Specialist	1	19
Balconies: Are genuinely useful when given adequate privacy - APHA recommended them for all dwellings more than one story above street level. Door should be wide enough to get furniture through. Specialist	18	15

PORCHES

	Source	Page
All units ought to have porches which could be screened in during the summer. 1P. Temp. Ill. Mgt. Superv.	121	
2nd floor porches do not drain well. (Experimental units.) 1P. Temp. Pa. Specialist.	50	13
Back porches on experimental unit liked very much - used for clothes drying in bad weather, and sitting. 2nd story porches on experimental units not used except for airing of bed linen. 1P. Temp. Pa. Specialist	50	14, 15

PORCHES

	Source	Page
Absence of porches is a subject of concern and disappointment to both management and tenants. 1P. Dem. Ala. Mgr.	109	

ORIENTATION

	Source	Page
Sunshine: All but four wanted it most in the kitchen. 8 Northern Cities, Interviewer	14A	221

GENERAL

	Source	Page
Tenant objections: Low ceilinged rooms oppress families used to lofty ceilings. "Living room which does not afford privacy for the odd member of the family either for sleep or for personal affairs" is bad. Specialist	18	12
Room arrangement: In Ramona Gardens 80% of families approved of room arrangement. 10% wanted one-floor dwelling. LP. Perm. Cal. Specialist	12A	13, 33
Ease: Tenants will not tolerate any heavy avoidable work (such as carrying heavy baskets of laundry up and down stairs). Specialist	18	13
Beauty: "astonishing by little direct demand for it," especially when tenant has no control over it or has to give up other things for it. Specialist	18	14
"The working man's home and the lower middle class home are designed as a somewhat abbreviated edition of the large scale home." Specialist	18	20
Most desired value is "experience of freedom resulting from plenty of room", "privacy" creative expression of personality and "economic security" 2nd to physical health (comfort and decency 14th and 15th, convenience 7th, safety 8th, opportunity for creation 9th - esthetic satisfaction 11th. Specialist	18	11
Finishing touches: When an element of design is not completed by "omitting some specific details in an obvious improvement, improvement loses its meaning and becomes an irritant - ex. is an outside wash house not large enough for a washing machine, with no drain or convenient hot water spout. Interviewers	15	14, 15
General: Interviewers felt one "standard design" could be used throughout country "except for demands of climate". Interviewers	15	13

GENERAL

	Source	Page
Family size: "Only 4 families out of thousand had to be turned down for over size. 1P. Perm. N.J. Specialist	190	2
Aesthetics: Attempt to achieve aesthetic variety by changes in small details is completely ineffective, example is change of door hood design in center of long buildings. Also ineffective is attempt to run windows together by running cast-stone sill through. With so much dark red brick, sills are merely intrusive. Such details are not part of design fundamentals. The real thing is the relation of windows, doors, walls, and eaves and copings. Attempt at arbitrary compositions in some cases has forced poor window location from interior point of view. Also ineffective, vertical relationship between windows and top of building wall. "In housing, more than in almost any other type of building design, it is a study of proportions which makes the good building." 1P. Perm. N.Y. Specialist	51	20
DU Appearance: 11 out of 25 disliked it though "disapproval was expressed in an uncertain manner." Of 8 who had heard them called chicken coops, only 2 still held this belief. Tenants on whole, get to like them when they are used to them. 1P. Perm. Pa. Interviewer	52	67
Necessity for living units to suit varied family make-ups, sizes, periods in the family cycle, non-normal, 1-person unrelated adults, invalids, etc. "Managers" difficulties in reconciling the living units they have to offer with the needs of the families applying leads to the conclusion that these fundamental needs of family life have been much neglected in American Housing". Specialist	18	17

GENERAL

	Source	Page
Living room - kitchen with separate bedroom is preferred over living room - bedroom with separate kitchen, especially for older people. 1P. Perm. Conn. Specialist	1	32
Stairs parallel to length of row is satisfactory. 1P. Perm. Conn. Specialist	1	

GENERAL

	Source	Page
Architecture dull and boxy. Canopies pleasant on a project this size, several different standard treatment would liven up the design at no extra cost. 1P Dem. S.C. - Specialist	13A	7
Room shapes: Tenants did not object to walls placed on diagonal "Experimental" houses, Project 1 Carquinez Hts. 1P. Dem. Cal. Interviewers	15	14
General: Project I "Experimental houses" well liked: occupants like being in houses different from rest, but interviewers objected to lack of privacy (Large window area and open interior). 1P. Dem. Cal. Interviewers	15	13
General design: In one bed room units - utility room door opens directly into living room. Sitting in living room you can see kitchen and hot water heater. 1P. Dem. Ill. Tech. Rev.	119	
In one bedroom units tenants want bedrooms and living room on street side of house - storage, bath, kitchen at rear. There is only one entrance to unit, i.e. the front door - should be a rear door for reasons of convenience and fire precaution. 1P. Dem. Ill. Tech. Rev.	119	
Childrens play space: Very inadequate - indoor and out - living, kitchen, dining area 284 sq. ft. total unit area 720 sq. ft. Comments based partly on comparison with pre-war living standards and "ordinary dwelling spaces". 1P. Dem. Fla. Mgt. Superv.	110	

BEDROOMS

	Source	Page
Bedroom Closets: "Conditions in the project are satisfactory with regard to.....bedroom "equipment (etc)". 1P. Perm. Wash. Interviewer	17	13
Child Furniture: Equipment for day time use is desirable, simplicity, and a better relation between equipment space and activity. Specialist	18	21
Beds: 2/3 preferred double beds - bedrooms with twin beds were too crowded. 8 Northern Cities, Interviewers	14A	222
Bedroom closets: 11% report inadequacy in bedroom closet equipment (distinguished from size, location, number). 1P. Perm. Wash. Interviewer	17	40

BEDROOM

	Source	Page
Trailer Beds: Too short (69"-71") Also springs and mattresses poor). Interviewer.	15	23

BATHROOM

	Source	Page
N.C.: Do not install restricted flow water closets. Reg. II	21	25
Shower: Instead of bathtub suggested by only 1 tenant, in San Diego. 1P. Perm. Cal. Specialist.	20	15
Shower Stalls: Should be arranged so water does not splash over and rot floors. Region IX.	36	3

BATHROOM

	Source	Page
W.C.: Do not install restricted flow water closets. Reg. II	21	25
Shower: Instead of bathtub suggested by only 1 tenant, in San Diego. 1P. Perm. Cal. Specialist	20	15
Shower Stalls: Should be arranged so water does not splash over and rot floors. Reg. II	36	3
Shower over tub desired. Region II	3A	3
Provide curtain rods. 1 P. Perm. Conn. Specialist	1	33
"After rehousing perfect satisfaction is expressed with such items as bathroom equipment. 1 P. Perm. Wash. Interviewer	17	12
Bath: ladies like tubs - men like showers. A shower over tub would be a good thing. Projects in 8 Northern Cities. Interviewers	14A	222
Shelves desired 30% (p. 42) 1 P. Perm. Wash. Interviewer	17	39, 42
Toilet seat: Yes, seats and covers are necessary - otherwise things fall in (puppies, rubber balls). open front seat advocated by NAHO & APHA for avoiding transmission of venereal diseases. Specialist	18	29
A foot-operated flush valve is one suggestion and another suggestion was made of a tank instead of flush valves, but this is bad because of long noise. Sound insulation might help diminish soil pipe noise. Also of back to back medicine cabinets should have sound insulation.	18	28, 29 30

BATHROOM

Source Page

LE 28,29,30

Showers: Are here to stay. They should be regulated to prevent scalding and where not used over bathtubs should have non-slip floors and a grab bar breast high (tub level is not high enough).
Bathtub: Some want smaller tubs with one side bowed out for sitting (especially for older people). Grips should be of metal. Serious cuts may result from the breaking of ceramic grips.
Bathroom lock: Lock to bathroom should be high enough so that children will not get locked in. Perhaps there should be a lock and key on outside. (This key should not be kept in medicine cabinet).
Soap trays should drain. Towel rails should be non-slip. Toilet paper fixtures should fit large size roll as well as small size. Fixtures are more efficient and economical if installed originally. More storage space than only a medicine cabinet, is needed. Where fixtures are not originally installed, the walls should be designed so that tenants may do so. There should be a locked cabinet for poisons. Lavatory too low 33" or 34" would be better.

Specialist

BATHROOM

	Source	Page
Bathroom equipment: A manager of a temporary project in Texas finds showers satisfactory, but has had many requests for tubs. 1P. Temp. Tex. Mgt. Superv.	104	

BATHROOM

	Source	Page
Bathtub vs. shower: Consistent definite preference for tubs over showers in all projects among women interviewed. This emphasized in projects which have showers only on basis of difficulty of bathing young children in showers. Many women prefer showers in summer and baths in winter, but if choice imperative would take tub. 2P. Temp. Kan. Mo. Interviewers	15	18

BATHROOM

	Source	Page
Showers: Solidly constructed shower stalls are recommended instead of concrete base with side railing, shower heads and curtain now in use. Control handles should be out of children's reach. Settlement of foundations causes separation of wall panels at shower with resulting seepage of water and rotting of floors, tubs would be preferable.		119
IP. Dem. Ill. Mgr.		

KITCHEN

	Source	Page
Refrigerators of 6 cu. ft. should be provided for units of two bedrooms and over. Table top refrigerators desirable. Managers - Philadelphia	14	
Electric ranges suffer from tampering by tenants. Gas more satisfactory. All cupboards should have doors. Managers - Philadelphia	3A	3
Poor arrangements: Single drainboard to right of sink, good only for left handed person; stove too close to refrigerator, blisters it; lack of shelving near sink; stove too near window so that curtains catch fire. Specialist	18	26
Cold storage, draft or cold cupboards open to the air are recommended "for a great proportion of homes East of the Rockies, little beyond draft storage is necessary during half the year". "Ice box with access to delivery from outside, featured in the John B. Pierce Foundation's low-cost house at Lebanon, N. J. might lend itself to ineless cooling when the weather permits". Specialist	18	28
Kitchen Equipment - Work surface Heights: 36" is approved for stove tops and drainboard - but 33" - 33½" is better for beating or mixing processes (many people use the sink bottom for this). Specialist	18	27
Bathing of babies, hairwashing, light laundry generally done in kitchen - sink tub combinations. Interviewers	15	18
Refrigeration required - 4 room units need 6 cu. ft. box, not 4 cu. ft. Ice boxes need drains. Reg. II	2	16
Kitchen storage - Inadequate (lack of cupboard and drawer space complained of by 39%). 1P. Perm. Wash. Interviewer	17	44
Kitchen cupboard - Inadequate, all surveyed F.S.I.A. also inaccessible because too high. Comparatively better in trailer. Interviewers	15	11
Kitchen cabinet: More needed. All cupboards need doors (dust and grease).	2	17

KITCHEN

	Source	Page
Only one kitchen cabinet. There should be more of them, not too high. Should have doors. Projects in 8 northern cities. Interviewers	14A	218
All kitchen cabinets should be removed from over gas ranges as a safety measure. Region II	5	47

KITCHEN (con't)

	Source	Page
Children get burned on hot water heaters, etc. when exposed. Region II	3	17
Refrigerators: 6 cubic foot boxes should be supplied for dwellings of 3-bedroom and over. Region II	5	
Work Surface Finishes: enamel chips and discolors; chrome flakes, rusts; wood decays; hardwood is durable and not too noisy but it is a cleaning problem; probably most popular would be "some hard surface, however, impermanent, which can for the most part be cleaned by merely wiping." Specialist	18	26,27
More work surfaces taken care of by: drop leaf table built along one wall; small hinged extensions to any work surface (even window sills); double-deck zinc-topped work table on casters supplements inadequate stove top. If hot water heater were further lowered to 36" could be another work surface. Specialist	18	27
The Stove: "Better insulation would save fuel and refrigeration costs" - reintroduction of the hood would reduce cooking odors and reduce smoke film which settles in other rooms. Gas stoves should have flue to chimney or to outside air. There should be a fan to get rid of cooking odors. Low ovens are awkward to use. Pilot lights can be dangerous when naptha or benzine are used for cleaning. Specialist	18	27
Kitchen Equipment Storage: Shelves for utensils and cutlery are often too high. Shelves for light weight utensils and packaged groceries should be no higher than 72"; stacked plates and glasses no more than 67" without counter shelf or other obstruction and 64" with obstruction of 12" Specialist	18	27
Inadequate storage for staples necessitate frequent shopping. "Swedish working man's glass fronted drawers rather than our miscellaneous odd cartons of minute quantities." Specialist	18	28

KITCHEN (con't)

	Source	Page
The present policy of providing doors on kitchen cabinets should be kept. Region II	5	
Open hanging cupboards not objected to. 2P. Perm. N.C. Specialist	13D 13E	2 2
Stove: Propane gas used, not satisfactory for this range - many tenants unable to use oven at all. 1P. Perm. Va. Specialist	19E	3
Objection to wide opening between kitchen and living room. Tenants want is smaller. 2P. Perm. N.C. Specialist	13E	2
Everyone eats in kitchen though some would appear to be accustomed to separate dining space in a permanent home, which they don't yet consider this to be. 1P. Perm. N.C. Specialist	13D	2
Kitchen uses: Cooking, dining (family plus guests) clothes drying. 2P. N.Y. Specialist	19	5,6
Lack of door between K. and L.R. not objected to but width of opening in 3 BR unit (6') universally objected to, 3' in 2BR unit O.K. 1PP. Conn. Specialist	13C	2
Above comment also applies to Negro project 1PP. N.C. Specialist	13E	2

KITCHEN EQUIPMENT

	Source	Page
Open hanging cupboards not objected to. 2F. Perm. N.C. Specialist	130 138	2 2
No floor cupboards for pot and pan space: "definitely not acceptable." Pots and pans generally placed in store closets which are not large enough anyway, or coat closet. In either case additional steps and work for housekeeper". 1F. Perm. Conn. and 1F. Perm. S. C. Specialist	138 136	2 2
Equipment-Kitchen: All gas ranges, water heaters, etc., should have the AGA approval before installation. Each range should have pilot light. Type and location of ranges should permit burner adjustments. Use flexible tubing for connecting gas ranges to supply line to permit slight shifting of the stove. Provide each range with shut-off cock. Provide shut-off cock and accessible union for each gas fixture. Refrigerators should be equipped with switches that will not permit compressor to operate when door is open. Consider gas refrigerator seriously in future projects. Region II	28	32
Kitchen Storage and Equipment: USHA standard adequate. Enlisted personnel however have fewer possessions than average families. 1F. Perm. Va. Specialist	130	2
Kitchen Storage: Fit all cupboards with solid doors. Region II	23	8
Inadequate shelf space. Every tenant used broom closet for groceries. Also inadequate space for dishes. 2F. Perm. N.Y. Specialist	19	4
Stove: Propane gas used, not satisfactory for this type of range-many tenants unable to use oven at all. 1F. Perm. Va. Specialist	138	3
Kitchen hanging cabinets: Since placed over range, sugar, etc., dries out. Too little space: 1 cabinet, 2' wide. Groceries kept in various closets, distant from kitchen. 1F. Perm. Ill. Specialist	137	2
Sinks: In war housing break at slight blow, crack at sudden changes in temperature of water. Region IV.	38	1

KITCHENS

	Source	Page
Equipment: Tray and sink combination: chips and breaks easily - unsatisfactory. 1P. Temp. Ga. Manager	112	
Stoves: Gas ranges while small have received no adverse comment and have given good service. Temp. Specialist - Pa.	80	11
Iceboxes: 5 and 6 cubic ft. are adequate Temp. Specialist, Pa.	80	11
Stoves: Coal burning not liked by tenants. 1P. Temp. Wash. Manager	130	4
Sink and tray combination: Acceptable for War Housing. 1P. Temp. Mich. Manager	133	1
Equipment (cooking): Not adequate - coal fired ranges is reason many people were reluctant to rent these units. 1P. Temp. Ill. Manager	121	
Stove pipe: 5", so inadequate tenants could not use their stoves to cook on. 1P. Temp. Mich. Manager	133	6

KITCHEN

	Source	Page
There should be a 6' nailing strip for attachment of tenant gadgets, at about 5' height. SP. Perm. N.Y. N.J. Va. Md. Pa. Specialist	19-190	

KITCHEN

	Source	Page
Coal ranges for cooking and coal circulating space heaters for heating are unsatisfactory because of inconvenience and uncleanliness of coal as fuel. 1P. Perm. N.C. Mgr.	108	
Effect of using gas oven to heat dwelling: Dangerous hazard to life. Possible disaster caused by reduced gas pressure, extinguishing gas appliances and leaving orifices open for the escape of gas without knowledge of the tenant when pressure is resumed. "A further factor is the expensive operation of shutting off the areas involved, purging of all lines, the turn on and gassing out of all lines and appliances. All this is necessary under safe practice codes of Public Service Commissions and Utility company regulations and is to avoid damaging fires and explosions experienced in cases where these precautions have not been taken". Reg. III	20	5
Gas stoves without vents cause fires, some say. "Manager thinks they can be adequately adjusted and that people wouldn't notice it if they were not regularly reminded by the gas company man that vents are required by California State Law." 1P. Perm. Cal. Specialist	20	14
Refrigerator: Manager's suggestion..."applies in some degree to all projects visited" 80% of these tenants have their own, but management now insists tenants use project refrig: Tenants store their own in storage closet. (Suggestion not specified: perhaps supply none, or have a certain per cent on hand.) 1P. Perm. S.C. Specialist	139	2
Complaints about lack of work top for cutting bread, etc. 1P. Perm. Conn. Specialist	130	2
Kitchen Cabinets: Too small, should be kept away from ranges and hot plates-otherwise fire hazard. Reg. IX	36	3

KITCHEN

	Source	Page
Cooking: Wickless Kerosene range satisfactory, cheaper than Butane gas used elsewhere. 1P. Dem. S. C. Specialist	13A	5
Iceboxes: Manufactured by Sanitary, ok as long as tenants keep drains cleaned out. 1P. Dem. Ohio Manager	125	3
Kerosene kitchen ranges are constant maintenance problem and cause great delay, dissatisfaction among tenants. Fuel lines and burners often charred and wicks replaced - oder of fumes is disagreeable. 1P. Dem. Ill. Manager	119	
Placement of Stove: (Project D) - Alexander Park, Norfolk, Va. Kitchen stove placed against wall of kitchen and set back in alcove. This makes wall very hot, does not distribute heat. 1P. Dem. Va. Interviewers	15	21

KITCHEN

	Source	Page
Kitchen shut off from living room liked by tenants "as it shielded the kitchen from visitors and helped keep drying wash and dirty dishes from view". Many women disliked washing clothes in kitchen. 1P. Perm. Fa. Specialist	19B	4
Present kitchen plans give no space for the washing machines which are almost universally owned. If both eating and laundry are going to go on in the kitchen, if should be bigger. 3P. Perm. and Dem. Cal. and Wash. Specialist	20	12
Door between K. and LR: Present-unnecessary - always open. One woman definitely dislikes it because kids keep closing it and she can't watch them. 1P. Perm. Fa. Specialist	13H	3

KITCHEN EQUIPMENT

	Source	Page
Broom closet considered wasted space by tenants who would rather have shelves. There should be towel rack, wood strip for nailing equipment. 1P. Perm. Va. - Specialist	19E	3
Kitchen cupboards over sink should not be so placed that tenants bump their heads. 1P. Perm. N.J. Specialist	19D	3
Sink and tray: Not as convenient - too small. 1P. Perm. Wash. Mgt. Superv.	11A	

KITCHEN

	Source	Page
Gasoline cook stoves very much disliked: difficult to operate -- fire hazard. Lack of instruction in operation. Management claims inadequate cleaning by tenants a cause of difficulty in operation. Demonstrations and written instructions should be given. Interviewer	15	21

LAUNDRY

	Source	Page
Combination sink-tray adequate as differentiated from separate double laundry trays. Laundry trailer units satisfactory. 1F. Trailer. Miss. Mgr. Superv.	113	

LAUNDRY

	Source	Page
Laundry Equipment: Sink and tray combinations have always been used because original cost economy over separate laundry trays is very great. They have never been considered to be comparable in adequacy and should therefore not be compared. (This comment from the Region VIII office appears to say that sink and tray combinations are always unsatisfactory and inadequate except in large cities when supplemented either by commercial laundries or by central laundry facilities). 1P. Temp. Tex. Mgr.	104	
Sink and tray combinations: Satisfactory. 1P. Temp. N.C. Mgt. Superv.	111	
Laundry and Washing: Very inadequate - carried on in kitchen where room is not enough, sink and tray combination does not permit efficient or sufficient rinsing of clothes, prolongs washing time. Separate laundry tray is desirable. 1P. Temp. Ill. Mgt. Superv.	121	
Sink and tray combination draws considerable objection from tenants. 1P. Temp. Wash. Mgr.	128	2
Combination sink and tray inadequate. 1P. Temp. Wis. Mgr.	122	
Tray and sink combination compared with double laundry tray - adequate. Drying space indoors, 120 sq. ft. kitchen dining space, otherwise no space provided. 1P. Temp. Wash. Mgt. Superv.	115	
Laundry and drying facilities inadequate for industrial neighborhood. (sink and tray combination in kitchen. This comment suggests that the amount of laundry in an industrial neighborhood increases because of dirt in the atmosphere). 1P. Temp. Mich. Mgt. Superv.	153	1
Equipment, Sink-Tray: Sink-tray combination (pottery) ok for war conditions but has meant high replacement costs. Inadequate treatment of wood trim near sink causes added maintenance. 1P. Temp. Mich. Mgt. Superv.	132	
Laundry, Washing, Drying: These facilities adequate for war housing (pottery combination sink-tray). 1P. Temp. Mich. Mgt. Superv.	132	

LAUNDRY

	Source	Page
Sink and tray combinations o.k. for smaller units - separate laundry facilities should be provided for 3 B.R. units. 1P. Dem. Ala. Mgt. Superv.	109	
Laundry washing & drying: All adequate except drying facilities for the larger units. 1P. Dem. Ala. Mgt. Superv.	109	
No laundry facilities provided although great many tenants have small children. Sinks-tray inadequate. Double type combination deep sink is recommended. 1P. Dem. Ill. Mgr.	119	
Laundry: Tray-sink combination creates health hazard in food preparation. Comment based partly on comparison with pre-war living standards "ordinary dwelling spaces". 1P. Dem. Fla. Mgt. Superv.	110	

LAUNDRY

	Source	Page
Laundry tubs (sink and tray combination is probably meant) little used when community laundry facilities are available. Phila. Hsg. Mgrs.	3A	3
All of the 30 families visited own washing machines. Sinks in kitchens not adequate for large rinsings. 8 Northern cities, Interviewer	14A	219,220
Dwelling Furnishings & Equipment - Clothes drying - Lack of provision for in kitchen; Curtain rods used. Specialist	15	10
Sink and tub combination, with drainboard sliding back and forth in groove, is excellent. 1P. Perm. Md., Specialist	13F	2
Tray and sink combination: Ideal 1P. Perm. Ga. Mgr.	107	
Combination sink and tray in kitchen constitutes adequate and satisfactory laundry facilities and is especially liked by tenants. 1P. Perm. N.C. Mgr.	108	
In Region VIII's best permanent project sink and tray combinations are said to be adequate by regional management adviser. 1P. Perm. Tex. Mgt. Superv.	100	
Laundry Facilities: Very good. (Sink and Tray combination) 1P. Perm. Minn. Mgr.	118	
Washing Machine Storage: Tenants have machines. In 2-story 2-bedroom unit little closet between living room and kitchen is ok for storing this. 1P. Perm. Pa. Specialist	13C	1
Some tenants wanted sink-tub combinations instead of just sinks. A trip to apartment laundries is difficult especially in winter. 1P. Perm. N.Y. Specialist	51	14

UTILITY ROOMS

	Source	Page
Utility rooms should be provided with more shelves. Region II	5	47
Should have shelving or at least grounds for nailing. LP. Farm. Conn. Specialist	1	30

FURNITURE

	Source	Page
Bunks used in certain buildings are very unpopular and tenants have moved them to cellar. 1P. Temp. Pa. Specialist	50	13

FURNITURE

Source	Page
20	15

Furniture: Most tenants don't have any, have to buy it paying $15-20 per month (union survey), making quite a strain when added to car payments, rent, utilities, oil, tools, food, clothes, etc. - accounts for unpopularity of some war projects. Temporary in-migrants would rather find furnished places. Might be best for gov. to buy large quantities of standard pieces and sell them at cost over a considerable period. Navy plans for renting furniture should be looked into.
3P. Perm. & Dem. Wash. Cal. Specialist

DOORS AND WINDOWS

	Source	Page
Hardware: Apt. entrance doors should be equipped with interviewers and apartment number. Region II	21	16
Awnings: In one project tenants were willing to pay for awnings but were informed "nothing could be attached to Government property". Interviewers	15	32
Hardware: Combination bracket to hold shade, curtains and over drape rods, would be desirable. Region II	21	15
Window Shade: Trouble, general with all maintenance men. Region IV	38	1
Shades: With steel casements use venetian blinds, cloth shades flap. Region VIII	35	2
General: "General feeling in projects that complaints could have been remedied by tenants own initiative if they had been permitted to use it, e.g., not permitted to attach awnings". "Gate at top of steps". 14P. Interviewers, Country Wide	15	32
Eliminate push button stopworks in face plate of lock in apartment entrance doors. Remove door check or closer where laws allow. Region II	21	15

WINDOWS AND DOORS

	Source	Page
Protection from sun needed: Mobile, Alabama and Highland Trailers — (No shade trees). Tenants not allowed to attach awnings. 2P. Trailer, Ala. and Va. Interviewer.	15	22
Window Curtains: Cannot be drawn easily. Interviewers	15	23

HEATING

	Source	Page
Space Heaters: Further south O.K., because needed for only short time. Wilmington, N.C. "either border line case or too far north to get adequate heat in bedrooms, particularly in 3 bedroom house means living room much overheated. If space heater were located more centrally, e.g., in connecting passage, it might help. Location in living room also interferes with furniture placement." Coal dirties living room. (1P. Perm., N.C.) Also 13E (Perm. N.C.), but here there was additional complaint: too near store closets, so these closets were too hot for food or wine. Specialist	13D 13E	3 2
Heating Systems: Though much of the dissatisfaction with present heating systems is due to shortage of critical material making necessary omission of refinements a more highly developed heating system would result in more than enough saving in fuel and labor cost to pay for the heating plant, to say nothing of tenant satisfaction that comes from a properly heated living unit. "...a central heating plant with forced hot water systems is most desirable from an efficiency and economy view point." Reg. IX	36	3,4
Recirculation System: Heat has to be set at 78-84° to offset drafty floors. Attempts to seal room (doors and windows) to eliminate drafts makes terrific condensation problem. Fans very noisy. 1P. Perm. Pa. Specialist	19B	4
Tenant op. Heating: All radiators should have shut off valves (control valves were recommended in semi final report (source 21). Reg. II	23	13
Soft coal hard on ceilings. Usual heat difficulties aggravated by placing out-let by stairs so heat goes up them. 1P. Perm. Va. Specialist	19E	3
Tenants like oil -- burning forced hot air floor furnaces. 1P. Perm. N.J. Specialist	19D	4
Gas used so there was no complaint about dirt when heating unit opened directly into kitchen. (2P). Hot air system. Very high temperature had to be maintained to make comfortable. Cold floors, and drafty exterior doors made terrific temperature gradient. 2P. Perm. N.Y. Specialist	19A	4,5

HEATING

	Source	Page
Central System with underground location is satisfactory, solves problem of overheated first floor apartment when boiler room is in apartment basement. 1P. Perm. Conn. Specialist	1	9
Tenants complain of inadequate heating systems. In design give more attention to (1) location of supply and return ducts (2) insulation of floors. Hot air ducts near base of stairs, unsatisfactory.	14	
Warm air from ceiling outlets now blackens the paint Should be rearranged. Group plants are expensive and inefficient compared with a central plant. Trucking service for ash removal multiplied by number of plants is costly. Locate thermostats away from hot kitchens. Pa. Mgrs.	3A	3
Project K: Gas, as planned not available - requiring carrying of coal through living room to kitchen from coal boxes in front of houses. 1P. Perm. Specialist	15	13
Central Heating: Pipe tunnels should be provided wherever feasible. One authority uses the top slab on a sidewalk which absorbs most of the differential in cost. It is felt that future replacement costs will justify additional expense for pipe tunnels. Reg. II	5	21
Design of supply and return ducts should receive careful study. Tenants should not tamper with controls on individual systems. Reg. II	2	10
Automatically controlled gas-fired forced hot-air furnaces, as used in Western Penn. projects, are considered entirely satisfactory. Tenants should be educated to the fact that these units are very delicate and should not be tampered with. All controls should be enclosed by the manufacturer and a lock placed thereon. In this type of installation cold-air return ducts should be used, preferably a separate duct from each room. Air filters and humidifiers should be incorporated in the original construction. It should be noted that, in some instances where this type of heating has been installed, an unusual management problem has resulted through the use by the tenants of the summer months. Fans have been operated in order to maintain a circulation of air throughout the dwelling. Reg. II	5	28

HEATING (CONTINUED)

	Source	Page
Heater Location and Layout: This subject has received more criticism than any other heat complaint in this region, particularly with space heaters. Plans often completed without any consideration of space heater location - added afterwards. Abnoral labor for coal burning furnaces, kindling fire, maintaining, removing ashes, cleaning due to insufficient draft, inferior type of stove, poor combustion. The technical division comments that this may have been due to "improper slection of coal burning equipment." Give important consideration to attention interval and performance. Lack of heat comfort due to deficiency in either radient or convective component of type of heat supplied; lack of focal source of heat directly available in living space. Air movement unsatisfactory (too little, too much, poor direction, too high speed, etc). Excessive temperature gradient. (i.e. too great a difference between floor temperature and ceiling temperature). Inadequate temperature and control. Tech. Div. comments solution to these problems known but cannot be applied where space heaters are used. Can be cured by more complete or extensive heating system. Reg. IV.	32	
Central Heating System: Equip well with good control valves, metering and recording instruments. Provide shut off valves for all radiators. It should be possible to operate all heating control valves from the voiler plant. All expansion joint chambers should be accessible. Exercise more care in conduit drainage and installation. Steam jet ash conveyer should be a vacuum type. Manhole frames for coal holes should be raised at least 3" above the drive. 65 degrees design temperature for bedrooms undoubtable, responsible for much of the condensation experienced in those rooms. Maintenance costs of forced warm air convector radiation too high-discontinus. Boiler house equipment in basement makes operation of boiler plants difficult and expensive in some cases. Boiler rooms should be of ample size, well ventilated, as free from columns as possible, should contain showers, toilets and locker facilities. Continuous flow differential heating control systems are definitely preferred. Reg. II	21	20

HEATING (CONT'D.)

	Source	Page
Coal-fired hot-water heating systems seem to be the most satisfactory and very few changes over the standards can be recommended. Provisions should be made, however, for draining systems directly to the sewer to save the nuisance of the water in the crawl spaces. Cold-air lines should emanate from the outside wall, preferably under the window. The heating supply ducts should not be located near a stair well.	5	

Region II

HEATING

	Source	Page
Tenant Operating Heating: Units in many localities have lowest operating costs. Gravity hot water system preferred in row and flat with full basement. Provide all radiators with control valves and give system a positive drain to sewer. Min. 2 ton coal storage within basement recommended. Region II	21	22
Central Heating: Most economical and practical system where community consists of large, closely grouped apartment buildings. To simplify repair equip with adequate sectionalizing valve for shutting off small sections of the system. Boiler capacities and operating conditions rather than architectural aspect should determine size and design of smoke breeching and stacks. Avoid the false economy of the cheapest product. Use extreme care in speculations and design of heating and distribution systems. Region II	21	19
Tenant Operated Heating: Unit in utility room is too crowded for easy maintenance presents a potential fire hazard. Provide all equipment using project supplied fuel with a limiting or fixed maximum type thermostat. Forced warm air heating systems, though fairly satisfactory from heating standpoint, present following problems: power requirements high; tenants use blowers in summer high motor repairs and replacement; redecorating costs increase where filters are not used; filters should be removable and cleanable by tenants; necessity for additional duct work, especially returns; motor and fan bearings requiring lubrication only once a year will reduce maintenance costs. Region II	21	22
"Oil fired space heaters completely unsatisfactory for two story units, okay for one story units if doors to bedrooms are left open. The open grills over bedroom doors are ineffectual except for preventing anyone from having privacy". 1P. Perm. Va. Specialist	190	2

HEATING

	Source	Page
Heating equipment: Heating by individual space heaters is not a make-shift in Texas because this is the most widely used method and is generally considered adequate. 1P. Temp. Tex. Mgr.	104	
Coal Heaters and Stoves: Coal space heaters and stoves operate satisfactorily but are very dirty because of close spacing of buildings - soils clothes while drying. 1P. Temp. Ga. Mgt. Superv.	112	
Heating: Satisfactory 1P. Temp. Ga. Mgr.	112	
Heating: Heating System satisfactory for this type of housing. 1P. Temp. Mgt. Superv.	111	
Ash disposal: Proper ash disposal in the heater room should be provided in coal-fired projects. Tenants will not and these days cannot provide fire-safe receptacles. 1P. Temp. Pa. Specialist	50	8
Furnaces: Mostly "thatcher" are satisfactory. 1P. Temp. Pa. Specialist	50	11
Space heaters: Satisfactory (coal-fired). 1P. Temp. Wis. Mgr.	122	
Heating system: Equipment adequate (coal-fired) space heater) but inadequate floor support resulting in separation of stack from thimbles. Maintenance problem. 1P. Temp. Mich. Mgt. Superv.	133	1
Heating: Coal-fired space heaters adequate for emergency use only. 1P. Temp. Mgt. Superv.	115	
Heating: O-BR - supplied with range centrally located for heating source - for 1 and 2 bedroom units - Range and Chimney heater system. This is adequate. 1P. Temp. Ill. Mgt. Superv.	14	

HEATING

	Source	Page
Heating: Forced hot air system: houses are heated unevenly, steep temperature gradient and complaints about circulation of air, cold floors, excessively dry and foul atmosphere. Walls and ceiling are black with dirt on ceilings and walls around all registers, will be serious maintenance repainting problem. Cause uncertain: Possibly intake air full of coal dust (soft coal used) - blown in with air. Suggestion that manufacturers be called on to devise filter, as there is some discoloration at projects where soft coal is not so widely used. General study of Thatcher coal-fired furnace and also gas fired furnaces ("much greater difficulties") recommended. "Natural gas is said to be competitive with coal here and if so should have been used". Carbon from soft coal settles on roof, is washed down by rain and streaks sides of buildings. Chimneys of 1-story buildings seem to supply inadequate draft - especially in those joined to 2-story dwellings. Back drafts are serious. 1P. Perm. Md. Specialist	50	9

HEATING

	Source	Page
Space Heaters: Coal burning adjacent to coal burning kitchen range, questionable in this climate. Many have never been used. Region IX	36	2
Oil Heaters: Unpopular—they are meant to be 60% radiant most people think they would be better if entirely circulating. 1P. Perm. and Dem. Cal. Specialist	20	14
A complete and thorough re-study of hot air heat must be made. 8P. Perm. Reg. II and III Specialist	19,19G	5
Gas lines: Leaks may be caused by lines passing immediately under concrete grade beams and the ensuing settlement of the building. Locate all cut-off valves outside building, not in crawl space. Several projects, Region VIII	35	1
Forced Recirculation system pulls cold air from under doors across floors—makes necessary maintenance of a temperature of 78° - 84°. 2P. Perm. N.Y. Specialist	19	5
Furnace in kitchen is highly unsatisfactory - all tenants complain. 2P. Perm. N.Y. Specialist	19	5
Thatcher forced air heating system and ducks found excellent by management and tenants. 1P. Perm. Conn. Specialist	13C	3
Heat: Gas heat liked (where had). (Calif. - Dem., Pa. - Perm., Me. - Temp.). Coal heat disliked, especially in (w) Planeview, Wichita, (Temp.) and ϕd) Alexander Park, (Perm.) Norfolk, Va. Heating and cooking with coal. Interviewers	15	21
Heating: On 2-story 2-bedroom unit, living room is cold. Register is located in partition at far side of open stair, some 7' above 1st floor level - so that heat largely goes up to 2nd floor. 1P. Perm. Pa. Specialist	13G	2

HEATING

	Source	Page
Thatcher forced air furnace. Works badly here. (ok elsewhere: (See 13F) repairs and replacements required e.g. broken shaker bars, improperly fitted fire box doors, relation of furnace to foundation not perfectly studied, extra dampers required and installed. Bad black smudges near discharge grilles. Short circuiting is bad. Location of fans in storage closets means removal of all stored goods for repair of fan. Allowances should be made in heating of certain units with greater exposure to wind and weather & large glass areas. 1P. Temp. Pa. Specialist	13G	2
Heating: Adequate. "Dixie" coal space heater. Satisfactory distribution of heat. 1P. Temp. Mich. Mgt. Superv.	132	
Heating: Large number of fires occurring in war apts. and dorm. ppojects. Deficiencies in construction generally considered responsible. Non-combustible materials in furnace rooms and ducts, recommended. Difficulty of getting trained firemen to fire furnaces. Question of practicability of installing stokers on war housing furnaces. Problem of replacement of grates in coal cook stoves and space heaters. Butane gas was delivery rather than equipment problem. Region IV	38	1,2

HEATING

	Source	Page
Heating: Protection from summer heat should be considered jointly with protection from cold in winter. More consideration should be given to window proportion and ventilation and to solar exposure but solar exposure will not permit reduction in the capacity of a heating system unless a heat storage system is included. (Reg.IV). Heat loss through inadequate thermal protection most of floors over ventilated crawl space uninsulated, etc. Temporary Housing Standards should require a higher degree of thermal insulation. Thermal inertia--the creation of a heat lag by heat capacity of materials in the structure. "Difficult to have thermal protection and low heat capacity, but further studies may include affect with reflective insulation and perhaps newer materials. Relative humidity: occurrence of condensation either within interstices of the structure or dwelling space. Region IV	32	1,2
Houses with furnace in kitchen are much disliked. 1P. Perm. Va. Specialist	19E	3
Fuel: Avoid coal, use oil if gas cannot be used. Region IV	33	4
Heating: Adequate 1P. Perm. Ga. Mgr.	107	
Furnace: Coal fired, opening into kitchen, not liked. 1P. Perm. Pa. Specialist	19B	4
Gas Pressure: Fluctuations are annoying. 1P. Perm. and Dem. Wash. Specialist	20	15
Group Heating: In general; uneconomical, if used, tie together for economical summer operation. Region II	21	21
Floor versus cabinet gas heaters - no clear cut preference. Some afraid of former for children, others say cabinets take up whole room. 1P. Perm. Cal. Specialist	20	14

HEATING

	Source	Page
Heating System: Fire hazard from oil spilled while filling heaters. There should be a safer way. 1P. Trailer, Wash. Mgr.	116	2
Heating: Oil space heaters satisfactory. 1P. Trailer, Miss. Mgt. Superv.	113	

HEATING

	Source	Page
Oil space heaters satisfactory. 1P. Dem. Ala. Mgt. Superv.	109	
Oil Storage: Simple lattice "or other Standard Design" suggested for screening of oil barrel. 1P. Dem., S.C. Specialist	13A	5
Space Heaters: well placed for provisions of adequate heat. 1P. Dem. Ala. Mgt. Superv.	109	
Heating and Refrigeration: Coal-fired space heaters fire hazard and unsatisfactory. Use of coal and ice is objectionable. Criticism based on comparison with pre-war living conveniences. 1P. Dem. Fla. Mgr.	110	
For 1 and 2 BR units coal fired "Portch" space heaters in 125 LR, stack to chimney. Riveted stove pipe seems well installed. Williams hot air furnace, in 3 BR units, satisfactory. Metal ducts reduce fire hazard, smooth flow of air. Located in kitchen, not separated by partitions. In future, put heating unit in utility room. 1P. Dem. Ohio, Mgt. Superv.	125	
Forced air heaters and hot water tanks should be removed from kitchen and placed in utility room. 1P. Dem. Ill. Mgt. Superv.	119	

HEATING

	Source	Page
Heating systems; Good - gas space heaters of pre-war standards—designed for 150 zones. All workmanship subject to laws of state, city and USHA standards. Gas metered to project - individual house check meters. Floor registers for 2-story units. 1P. Perm. Wash. Mgr.	11A	
Heat: Provided by central plant and substations. Satisfactory. 1P. Perm. Minn. Mgr.	11B	
Heating: Endless trouble with gas fueled hot air furnaces. Not solved on any of these projects (using Security Furnace, Torridaire). Some valves and controls fail, some orifices said to be wrong. In some furnaces people blame BTU content of gas as different from specifications. Problem needs studying. Smudging and discoloration bad at end around registers - not quite as bad as Ellwood City project. (where coal is used). 1P. Perm. Pa. Specialist	13H	2
Location of furnace (in kitchen) and exposed pipes cause spaces that are hard to clean. Coal must be carried across kitchen floor and fed in open kitchen. Paint on metal flue cakes and scales off with heat: should not be painted. Connection between masonry and furnace metal not tight: cold intake air escapes causing annoying drafts. 1P. Perm. Md. Specialist	13F	4
Space heaters suitable method here where intensity and no. of cold days low. (fuel oil type here superior to coal because of cleanliness location: in L.R.—bad: would be better in center of house (off passage)—for use of wall space and heat distribution. 1P. Perm. S.C. Specialist	13A	5

PLUMBING

	Source	Page
Plumbing: Poorly planned and installed. No inside water shut-offs. No adequate insulation for exposed pipes. Impossible to get at shut-offs (which had to be reached by digging) before DU was flooded (at time when pipes froze). 1P. Temp. Mich. Mgt. Superv.	133	8
Hot water tanks: 20 and 30 gallons are adequate 1P. Temp. Pa. Specialist	50	11
Plumbing: Use of right angle pipe connection instead of a "Y" caused water from one sink or tub to back into other in another apartment. Has since been remedied by installing "Y". 1½" waste pipes give some trouble with clogging. Separate shut-offs to the houses would be a great convenience. One hose bib per house front and one back is not adequate. In other respects, plumbing is satisfactory. 1P. Temp. Pa. Specialist	50	9

PLUMBING (Cont'd)

	Source	Page
Plumbing Details: Considerations of material, shapes, location of valves, connections, etc. are dealt with and recommendations given on the basis of project experience. Region II	21	25
Hot Water Tanks: 24 gallon size hardly enough for 3 b.r. and larger units-size, should be increased. Non-automatic gas heater with overflow pipe has resulted in several cases of flood due to carelessness or ignorance. 1P. Perm. Pa. Specialist	19B	4

PLUMBING

	Source	Page
Automatic Gas Hot Water Heater: Gets an accumulation of block tarry liquid in the control valve—probably due to low grade gas—indicates need for some sort of filter for gas lines. Reg. IV	38	1
Hot Water Heater: Automatic valve control of pressure indicated, since with manual control left on, water backs up in main. Some tanks have blown off valve. Reg. IV.	38	1
Provide individual shut-off valve for each DU, in accessible position either inside or outside, DU. Provide bleeder so that water discharge will not damage insulation. Reg. IV	33	4
Should be possible to drain and shut off water from system during winter vacancy. Should be located adjacent to access doors. Reg. IX	36	2
Insulate water pipes against freezing. Reg. IV.	33	4
Hot Water Heater: Solar water heaters work well in Florida. Install on top of roof covering. An indirect system, employing non-freezing fluid is used successfully in Savannah, Ga. Reg. IV	33	4
Heating of Water: In (D) Alexander Park, Norfolk, Va. Water heater is attached to living room stove. Tenants would prefer to have it connected to kitchen stove. 1P. Perm. Va. Interviewers	15	21
Hot Water: 1 and 2 bedroom units have 9 gal. tanks. Maintenance man and assistant say this is much too small. 3 BR units have 15 gallon tank — seems O.K. 1P. Perm. Conn. Specialist	13C	3
Cover all hot and cold water pipes, whether concealed or not. Use one size washer for whole project. Reg. II	21	25
Hose Bibbs: Locate on exterior walls and not in planted area. Reg. II	21	25

PLUMBING

	Source	Page
Hot Water Heaters: Provide safety pilots for all water heaters regardless of location. Should be complete shut-off type. Avoid Bimetal type. For other technical details on gas ranges see p.p. 34-35, also hot water. (Reg.II). Hot water tanks, 20 gal. for 0-1 BR units, 30 gals for all other size units. Should be constructed of nonferrous materials or heavy gauge steel, porcelain lined. Region II	21	35,36
Eliminate house traps where codes permit. Where used provide double cleanouts, Locate fresh air inlets in building walls preferably. If located in lawn areas, provide with perforated counter sunk screwed cleanout plugs. Any cover must be substantial and locked in place. Region II	21	26
Provide positive drainage, not french or blind drains for all basements, basement entrances, etc. (also crawl spaces - source 23). Only with large drainage areas otherwise stoppages cause flooding. Region II		
Plumbing economy: Though kitchen & bath are adjacent, location of sink is such that maximum plumbing economy is not attained. 1P. Perm. Pa. Specialist	13G	2
Twinning economy often disregarded e.g. 4 separated kitchen stacks in 4 unit building - without plan advantage over twinned stacks. 1P. Perm. Pa. Specialist	13H	3
Drainage System: Allow room for expansion and contraction for soil pipes embedded in concrete floor slabs to eliminate breakage. In back to back systems arrange waste lines from different fixtures so that they do not discharge into each other. Pipe size cleanouts (not larger than 4") for all changes in direction of soil and waste lines, and base of all soil stacks. Counter sink all floor drains and catch basins at low point of floor to assure drainage. Equip grilles on floor drains with locking devices. Region II	21	25,26

PLUMBING (Cont)

	Source	Page
Hot Water Tanks: 20 and 30 gallon tanks satisfactory. 1P. Perm. Pa. Specialist	19D	4
Drainage Systems: To prevent discharge from waste lines from one fixture flowing into that of another apt., use full radius drainage fittings. Pipe wise clean-outs must be accessible.. Provide full size accessible clean out at end of horizontal sink and bath waste. Region II	23	15
Hot Water Tanks: Trouble with galvanized tanks in Florida - porcelain lined tanks work better in that region. Region IV	38	1

PLUMBING

	Source	Page
Shut-off Valves - Important - Shut-off needed for each dwelling unit and located within such unit. Region II	2	10
Hot Water: Capacity of tanks min. 20 gals, with inaccessible temp. control. Region II	2	20
Water cocks: Outside, there should be one for each D.U. 1P. Perm. Conn. Specialist	1	33
Plumbing: Stop cocks and valves should be provided for each dwelling unit instead of only for each building. Hose bibbs should be on walls for easy maintenance instead of in lawns or basements. Pa. Mgr.	3A	3
Hose Bibbs: Locate on walls rather than lawns or pavements. Region II	2	24
Plumbing: Stop cocks should be placed in every dwelling unit so that in the event of a leak, it will not be necessary to turn off a number of other dwelling units at the same time. Individual control valves should be installed in each unit for control of the hot and cold water. All stacks should be provided with accessible clean-outs located in the basement. All lateral waste lines fitting sinks, lavatories, tubs, etc. should be provided with a full size clean-out at the end of the run. All hose bibbs should be located on exterior walls and not in planted areas. Region II	5	35,36
Plumbing: Water shut-offs should be inside and there should be one for each unit, whether house or apartment.	14	
Hot Water Tank: Locate and pitch discharge from relief valve on hot water tank to drain to outside of building. Region IV	33	4
Water pipes of Transite: Leaked. Nobody knows whether faulty material or workmanship. 1P. Perm. N.Y. Specialist	19	3
Hot Water Heater: 14 gallon capacity was far too little. 2P. Perm. N. Y. Specialist	19A	5

PLUMBING

	Source	Page
Hot Water Tank: 20 and 30 gallon tanks satisfactory. 1P. Perm. N.J. Specialist	19D	4
Provide a shut-off valve for each DU. Region III	31	4
Water Pipes: Detailing which allows infiltration into walls often causes frozen water pipes. 2P. Perm. N.Y. Specialist	19	4
Hot Water Tanks: Manager reported difficulty with Rheams tanks and Honeywell controls 1P. Perm. Va. Specialist	19E	3
Project operated Hot Water: Provide a by-pass connection between hot and cold water directly above the hot water tank, when single tanks are provided, to permit the draining of the hot water tank without taking the pressure off the piping system. This will eliminate considerable work and cut down on the number of floods caused by tenants leaving faucets open when the water service is returned to the system. Construct hot water tanks of non-rusting material or at least lining. Region II	21	25
Hot Water Heating: Circulating pumps on hot water heating systems should be installed in such a manner that the heat exchange or boilers will be on the suction side of the pumps. This arrangement will reduce excessive pressure on these vessels. Insulate pump from building structure. Provide flexible couplings for all supply and return lines to reduce noise and vibrations. Region II	21	19
Water Lines and Equipment: Pressure cast iron with leaded joints for all underground cold water distribution mains, for domestic hot water use red copper pipe with screwed fittings or copper tubing and streamline fittings. Expansion loops are preferred. Provide shut-off valves for each building, riser and fixture. (Where valves have been provided for risers only, maintenance costs in apartment buildings have been very excessive. Region II	21	24

PLUMBING

	Source	Page
Hot Water: Victory type installation, requires much maintenance. (Champion gas hot water heater, mass purchased, pressure relief valves, drain side connected with relief valve in crawl space). Heater should have sediment faucet especially in such regions where bad weather conditions prevail. 1P. Dem. Ohio, Mgt. Superv.	125	3
Experience with ersatz material has been discouraging. Replacement costs high with vitreous laundry sinks and plastic plumbing fixtures. 1P. Dem. Ohio, Mgt. Superv.	125	2
"Victory type" plumbing material, plastics, replacement metals have resulted in excessive maintenance costs. 1P. Dem. Ill. Mgr.	119	
Should be installed more carefully - connections made by only a few turns of threads and painted over - leaks develop and nearly every joint in entire project had to be tightened. Since FPHA directions were not followed in making pipes accessible, it was necessary to cut through to pipes. 1P. Dem. Ill. Mgr.	119	

ELECTRICITY

	Source	Page
Too few outlets in living room. Only outlet in kitchen is in back of refrigerator where it is impossible to reach. 1P. Perm. Va. Specialist	19E	3
Electricity: Hot plate causes trouble wherever had. Region IV	38	2

ELECTRICITY

	Source	Page
Fuse boxes should be installed in dwellings, not in crawl spaces.	14	
All lighting fixtures should be controlled by toggle fixtures instead of pull chains. Circuit breakers should be used in lieu of fuses. A complete set of plans should be supplied to the Maintenance Superintendent showing conditions as built. Region II	5	36
Locate fuse boxes in dwelling unit instead of in crawl spaces. Region II	2	23
Electrical Systems: Underground installations when well planned are less expensive to maintain, though more expensive in first costs experience at some projects shows. Discontinue mark-time and key operated systems. For detailed information on water in conduit (which raises maintenance costs). See page 27. Provide lights in crawl space with switch at entrance. Ironing boards and hot plates never used in many projects. Investigation may show this equipment can be omitted in new projects. For all lighting fixtures-toggle switches instead of pull chains. Fixtures, especially in bedroom and bath need standardization to eliminate difficulty of part replacement. Place all main distribution panels in accessible location, either in full basements or on exterior walls and not in crawl spaces. Basement ceiling lights should not be obstructed by piping. Breakers are better type of installation than fuses. Protect all circuits with conventional type breaker in all fixture installations. Require Duplex base receptacles of standard heavy duty type. Region II	21	27,28
Elec. Outlets: More of them desired especially in the middle of the living room. 1P. Perm., and Dem. Cal. Specialist	20	15
Electric Outlets: Kitchen: 1 duplex base plug at refrigerator wire must cross room to be used at work surfaces: additional outlet required. Electric fixtures at front and rear entrances seem unnecessary to reviewer. 1P. Perm. Md. Specialist	13F	3
Electric Outlets; Not enough in Living Room. 2P. Perm. N.Y. Specialist	19	5

ELECTRICITY

	Source	Page
Electric: Satisfactory as to number and placement of outlets - fixtures are simple and good. 1P. Temp. Pa. Specialist	50	10

ELECTRICITY

	Source	Page
Occasional requests for outlets over kitchen sink. 1P. Perm. Pa., Specialist	198	4
Provide circuit breakers rather than fuses. Region IV	33	4
Wiring: Since wiring in war housing makes it possible to over load circuits and blow fuses, circuit breakers rather than fuses would reduce management costs. Region IV	38	2
Elec. Appliances: Cheap quality is a constant drain on maintenance. Region IX	36	3

HARDWARE

	Source	Page
Plumbing and light fixtures, etc. - high grade reduces maintenance costs. Region IX	36	4

GENERAL

	Source	Page
Door bells: Push button preferable to knob. 1P. Perm. Conn. Specialist	1	33
Complaints about planning less frequent than complaints of equipment. 1P. Perm. Wash. Interviewer	17	18
Hardware: Cheap quality doubles its original cost in repairs and replacement. Region II	3A	2
Light Plugs: "Better arrangement needed in living room" "to place sufficient furniture" 1P. Perm. Wash. Reviewer	17	52
Mass Purchased Equipment: Many complaints registered against inferior quality requiring constant replacement.	14	
In Ramona Gardens, 10% of families had all new furniture, 11% had inadequate furniture. (1PP. Cal. - Loc. Auth. Specialist) 1P. Perm. Cal. Interviewer	12A	9
In Ramona Gardens, 58% of families had washing machines, 11% had vacuum cleaners, 98% had electric irons, 94% had radios. 1P. Perm. Cal. Interviewer	12A	9

GENERAL

	Source	Page
Mail Boxes: Badly placed - suffer from rust, furniture moving and children. Should be placed higher with protection. 1P. Temp. Pa. Specialist	50	9
Mechanical Equipment: Equipment and its arrangement is good. 1P. Temp. Pa. Specialist	50	15
Equipment: Mass purchase of ice boxes, hot water heaters, combination sinks, has caused replacement or excessive repair. 1P. Temp. Mich. Mgt. Superv.	132	

FOUNDATIONS

	Source	Page
Pier Foundations: Wilmington, N. C. piers 8" x 8" too small for safety from impact or severe storms. Unesthetic (sometimes 3' high). Space underneath is dirt pocket and fire hazard. (Adequate piers with skirting suggested.) 1P. Dem. S.C. Specialist	13A	4
SKIRTING at Foundations: Transite skirting breaks with foundation settlement when cars are backed into it, dirties with coal and debris thrown against it, children kicking it. 1P. Dem. Ill. Mgr.	119	
Foundations: Pier foundations have settled, then panels separated, linoleum cracked. 1P. Dem. Ill. Mgr.	119	

FOUNDATIONS

	Source	Page
Foundation walls: Continuous concrete recommended for cold climate. Piers and skirting unsatisfactory. Porch Piers: should be below frost line. Reg. II	2	8
Piers: Solid foundation walls widely preferred to piers with wood skirting because (a) less cold air in crawl space (b) wood skirting demaged by frost (c) heavy wood floor girt replaced by lighter sill board (d) piers sometimes heaved by frost (e) transite skirting brittle and also attacked by frost.	14	
Foundation walls of poured concrete enclosing laundries and public spaces should be provided with French drains at the footer level, and the entire exterior surfaces coated with mastic waterproofing. If masonry units are used in the above mentioned walls, the outer surfaces should be parged, before the application of the mastic waterproofing. The specifications should not permit the back filling of any foundation walls before the waterproofing materials have had sufficient time to harden or set, so that they cannot be demaged or brushed off by the back filling. Back filling should never be placed directly against the water-proofing material. Protection of the waterproofing must be maintained. Reg. II	5	12
Foundations & Basement Walls: Lay tile drains around and outside. Footing course in all full or part basement walls unless obviously not required. Water proof below finished grade line, type consistent with existing conditions. Don't back fill until water proofing is thoroughly set. Reg. II	21	13
Foundations: Cold floors and frozen plumbing lines occurred wherever piers and skirting used. Reg. III	31	4
Foundations: Except in unusual instances use continuous foundations instead of piers and skirting. Reg. III	31	3
Dwelling Types: Hillside type should be carefully analysed. This This region has been fairly successful, using 1" cement type water proofing with a coating of asphalt type water proofing from approx. 2" above grade to the bottom edge of footing as well as agricultural drain tile installed and graded to drain to a dry well, connected to drainage system or left open to bleed water off. Reg. III.	30	5,6
Skirting should be provided and houses not left open at bottom. 2P. Perm. Tex. Mgt. Superv.	14	

FOUNDATIONS (CONTINUED)

	Source	Page
Houses on Piers, Freeze-ups: Numerous freeze-ups in bath tub traps: Traps had been wrapped in rock wool in felt, but not exposed tub wastes under floor. Complete assembly including wastes now being covered (no experience yet to indicate if this a solution). No freeze-ups in toilet traps. Several freeze-ups due to people leaving for weekend with water on (not a result of construction). Manager reports complaints on cold floors. Specialist got none from tenants. 1P. Perm. Md. Specialist	137	4
Foundation Walls: Of concrete block shows signs of deterioration. Probably caused by dampness. 1P. Perm. N. Y. Specialist	51	18
Houses on Piers, Asbestos Skirting: Manager states trouble with breakage of asbestos skirting. No freeze-ups in bath tub traps as at Aberdeen with 20° below zero weather. Manager had traps and drains from tubs well wrapped by handyman. (No skirting at Aberdeen). Manager reports no complaints on cold floors. 1P. Perm. Pa. Specialist.	138	3
Cold air finds its way into crawl spaces because building sills not in good grout or properly pointed up. Lack of sufficient footing is causing porch to heave and tear away from building walls. 4P. Perm. N. J. Mgt. Superv.	14	
Foundation walls instead of the piers should have been provided, to prevent cold floors and frozen plumbing. 1P. Perm. N. J. Mgt. Superv.	14	
Inadequate foundations result in heaving of piers, serious settlement, cracks, difficulty in heating, uncomfortable and unhealthful living conditions and excessive maintenance costs. Porches and entries should be supported on pier foundations extended below normal frost line, to prevent heaving and tearing away from buildings in walls from frost. In cold regions with frost penetration of 3 or more feet, sleeves with 1/4" clearance should be built around porch floors. These sleeves may be constructed of wood. Region II.	14	
Insufficient number of piers under 4- and 5-room units. 1P. Perm. Tenn. Mgt. Superv.	14	
Discontinue asbestos transite skirting to close crawl spaces: brittle, cracked by frost, requires maintenance. Use either tongue-and-groove wood boarding or cinder- or concrete-block curtain walls. These will prevent pipe freezing and cold floors. Region I.		
Crawl spaces are too damp, lack ventilation and drainage; should be waterproof, and one square foot of opening (properly screened) should be provided for every 25 lineal feet. Region II.	14	

EXTERIOR WALLS

	Source	Page
Walls and ceilings: (Sheet Rock) Cracking badly (twisted) not only at joints but within sheet, especially near space heaters. Not salvageable. (Recommended that range of allowable materials be restricted to minimize maintenance costs, raise salvage value. Plywood, Presswood suggested. Especial attention to material for baths and kitchens, particularly on sink and tub wall. 1P. Dem. S. C. Specialist	13A	4
Exterior Walls: Walls of drop siding, practically no leaks. 1P. Dem. Ala. Mgt. Superv.	109	
Condensation: No condensation found. 1P. Dem. Ala. Mgt. Superv.	109	
Exterior Walls: Gypsum board leaks, warps, pulls, loose and has musty odor. 1P. Dem. Fla. Mgt. Superv.	110	
Improper treatment of exterior plywood has resulted in water seeping in between layers of ply and warping. 1P. Dem. Ill. Mgr.	119	
Exterior plywood wall panels deteriorate rapidly unless frequently sealed against weather by recaulking and repainting. Frequent replacements of transite asbestos board as skirting indicate its discontinuation for that use. 1P. Dem. Ohio, Mgt. Superv.	125	2

EXTERIOR WALLS

	Source	Page
Exterior Walls: No leakage since repair after transfer. 1P. Trailer, Miss. Mgt. Superv.	113	

EXTERIOR WALLS

	Source	Page
Walls (Exterior): Painted - no trouble with leaks. 1P. Temp. N.C. Mgt. Superv.	111	
Walls: Hollow tile walls, both exterior and interior are rough and joints cracking. This is unsanitary, and means dust and vermin. 1P. Temp. Ga. Mgt. Superv.	112	
Wall Leaks: No trouble. (2"x4" wood studs. ½" plywood outside, fibre board inside). 1P. Temp. Mich. Mgt. Superv.	133	1
Wall Leaks: None. (Wood studs, 24" o.c. with exterior wall covering - mineral surfaced fibre board siding.) 1P. Temp. Wis. Mgr.	122	
Construction (experimental units): Shrinkage of framing timbers has caused unsightly gaps where wall boards were fitted around them. (Timber skeleton construction). 1P. Temp. Pa. Specialist	50	13

EXTERIOR WALLS

	Source	Page
Free standing furring and continuous base flashing at floor levels, with weep holes properly spaced at bottom, result in a brick wall entirely free of leaks. Wall leaks are chronic in many projects of solid masonry and concrete construction. Correctives offer only temporary relief and are expensive. Ventilation omit louvred vents in gables, substitute vent openings at eaves. Problem of ventilation between roof and ceiling receives somewhat contradictory comments, indicating that adequate solutions may be rare.	14	
Wall leaks: Chronic in solid masonry construction. Weather and waterproofing temporary and expensive. Solution: proper design. (See Asbury Park N.J. -7-1) Perm. Briefly: free standing furring, weep holes at bottom of outer wall. (Also check British Practice). Reg: II	2	1
Considerable trouble has been reported from the use of brick parapet walls which are frequently pushed out at corners of buildings apparently as a result of expansion. Reinforced concrete parapets have proved satisfactory. Reg. II	5	17
Masonry Walls: Adequate ventilation must be provided between the brick and the back-up block, for complete circulation of air between the two walls at this point. Expansion joints should be provided in roof and floor slabs and thermal insulation at the ends and edges of all floor slabs and roof. Mortar for the construction of exterior brick masonry walls should be designed to suit local conditions and the use of patented mortars should be discontinued. Reg. II	5	12,13
Waterproofing: Almost all projects visited had leakage holes. Other similar reports from Ex-Commissioner Langdon Post (of PWA Projects) NAHO "A passionate plea for the secret of waterproofing cinder block construction". Because "not enough lime" say the lime interests. Bureau of Standards reports that permeability was not greatly affected by differences in the relative amount of cement and lime. Workmanship is the strongest factor. Waterproofing: effective coatings are molten paraffin oil paint and cement paint. Amount of leaking may have been exaggerated. In all FEA projects inherited by USHA," two building walls leaked slightly, and one leaked badly". Improvement partially accounted for by new customary air space between wall and inside plaster, reinforced concrete post and girder construction appears to account for the rest. Specialist	18	12

EXTERIOR WALLS

	Source	Page
Aesthetics: Brick is too dark. Painted cinder block might be "gayer and more attractive. Dark red with no perceptible variation is monotonous." 1P. Perm. N. Y. Specialist	51	22
Exterior Finish: Brick "good lively red" relieved occasionally by white asbestos siding well placed at axis and vista points, but shallow entrance canopies, absence of porches, shallow front yards, make houses appear self-contained, with no relationship to outdoors. 1P. Perm. Pa. Specialist	13H	7
Exterior Finish: Tenants didn't like unpainted wood finish on one side of dwellings. 1P. Perm. Pa. Interviewer	52	69

EXTERIOR WALLS

	Source	Page
Masonry Walls: Should always be furred to prevent condensation. Reg. III	30	2
Waterproofing: Spandrel water-proofing in two-story buildings should be carefully installed in all cases. Reg. IV	33	3
Walls: "Generally 10" brick cavity walls on first floor, asbestos shingle on frame for 2nd floor. Interiors plastered. No evidence of leaks. 1P. Perm. Conn. Specialist	13C	3
Wall Construction: 1 project of concrete blocks, 2 stories cracked enough to let water come through walls. Mortar joints seem to be the trouble. Reg. IV	38	1
Exterior Color and Material: Original project in painted red hollow tile, extension in painted cinder block. "Section where they join, extremely attractive, indicating that a well-studied combination of these materials would be effective. 1P. Perm. N.C. Specialist	13E	4
Exterior Walls: Good, no leakage, little condensation. 1P. Perm. Ga. Mgr.	107	
Building Skirting: Of asbestos board is not successful - too brittle to stand up under abuse. Same applies to celo-siding. Use of 1" wood material is recommended.	36	2
Exterior Wall Finish: Vertical siding inadvisable in this rainy climate, boards expand and contract causing joints to open up badly and sometimes warp and twist. Light coat of stain applied to woodwork on most projects proved of little value. Reg. IX	36	1
Exterior Corners: No corner boards. Meeting points of clapboards open due to shrinkage: possibility of rotting at ends. 1P. Perm. Md. Specialist	13F	5
Wall Leaks: Developing due to floor slab expansion in 3-story buildings. Also due to brick-spalling as result of condensation penetrating bricks and then freezing. (Brick veneer on wood frame.) 1P. Perm. Minn. Mgr.	118	

EXTERIOR WALLS

	Source	Page
Wall Leaks: No difficulty with masonry walls when plaster is furred. Difficulty with brick veneer on frame, especially one case where 1st floor slab was carried out to the face of the wall and brick work started at top of slab without a recess. In another case recess was insufficient, in both cases leaks attributable to insufficient clearance between back of brick and sheathing. (2) Improper installation of plaster with gypsum sheathing (3) total lack of weep holes or ones that did not function (4) brick work should have started at bottom side of slab. Recommended: 1. Furring on solid masonry walls (2) cavity walls use "z" bars for bonding, not a bonding course. Reg. III.	31	1
Outside Walls: Concrete block, water proofed inside and plastered. No leaks visible in spite of storms. (Brick walls in low-rent project in some area leak). Light pastels exteriors gummy dark dado around bottom suggested, or brick courses(if economically possible) could save on painting maintenance. On adjoining Project, red hard burned hollow tile used at no extra cost, no maintenance. 2P. Perm. R. C. Specialist	13D	2
Paint Exterior: Suggested use of colors to clarify site plan, rather than as, here, "irregularly used". Other preferred alternative suggested plain brick, "for emphasis" (deep red hollow 5"XB" as at project - Willmington? - 21083). 1P. Perm. R. C. Specialist	13D	7
Ext. Masonry Walls: Must be improved. Eliminate horizontal wood trellises dowled or embedded in face brick may cause wall leaks. Reg. II	21	14
Effects of condensation through solid masonry walls: streaking, peeling of paint; damage to gypsum plaster; metal windows and sills rust. Band between gypsum plaster and waterproofing coat tends to loosen, bubble or flake. Reg. III	30	5
Condensation: Fur interior surfaces of concrete columns and beams to reduce condensation. Reg. II	21	18

WALL FINISHES

	Source	Page
Wall finishes: "Sand-finish plaster is bad, and should under no circumstances be used in kitchens and bathrooms." 8P. Reg. II & III Specialist	19-19G letter	5
Interior Walls: "Good appearance" and finish. (The first such reviewer saw on his trip after about half a dozen projects) Integral buff color 1P. Perm. Md. Specialist	13F	3
Wall Finish: "White walls impossible to keep clean. Real paint would be better. (1P). Smoother walls also desired. (1P). Natural woodwork with light stain also difficult to keep clean. (1P) 3P. Perm. & Dem. Wash. & Calif. Specialist.	20	13
Wall Finish: Where plaster used, specify smooth plaster in baths and kitchens finished only with oil paint. Reg. VIII	35	1
Wall Finish: Sand-Finished plaster can be O.K. (one project is successful), but in general hard finished plaster is preferable, especially in bathrooms and kitchens. Reg. III	31	2
Painting: For indoor use linseed oil paint. Repaintings with casein builds up heavy surface. Specifications for resin emulsion have not been stringent enough to provide satisfactory quality. Region IV	33	3
Finish Walls: For stairhalls use glazed tile or glazed brick instead of plaster for easy cleaning and maintenance. Region II	21	17
Paint: Oil definitely preferred to casein for permanent projects. Region IV		
Int. Finish: Satisfactory 1P. Perm. Ga. Mgr.	107	
Wall & Ceiling Finish: Wall board, taped and painted gives well finished and satisfactory appearance. Poor location of nailheads detracts from appearance. 2P. Perm. N.Y. Specialist	19	3
Heater Room Wall Finish: No reason for stopping paint where this room opens directly off the kitchen; it looks dirty and unfinished 1P. Perm. Pa. Specialist.	19B	3
Wall Finishes: Sand finished plaster walls shed. 1P. Perm. Pa. Specialist.	19B	3
Wall Finishes: Should be hard and smooth troweled. Sand finish plaster is hard to wash, expensive to maintain. Region II	21	17, 18

WALL FINISHES

	Source	Page
Paint: Universal objection to casein or resin emulsion paint, from both tenants and management: cannot be washed, walls filthy after short occupancy. Frequent turnover in defense projects augments difficulty. Additional suggestion: Projecting base instead of flush would help avoid furniture touching, hence marking and nicking. 1P. Perm. N.C. Specialist	13D	3
Interior Wall Finish: Sand finish plaster, not satisfactory to managers because (a) nicked up before completion, often finger marked. (Specialist notes "some more excellent—others damaged.) (b) cracks cannot be patched with reasonable invisibility. (c) When finally painted (as it will have to be sometime) cannot then later satisfactorily wash the rough surface—some tenants feel walls require painting to be "finished". 1P. Perm. Pa. Specialist	13H	4
Sand finished plaster though very well applied is completely unsuitable to the hard usage which these walls get. Appearance, good to start but any soil is impossible to eradicate except by repainting, children's dirty fingers get into water on walls below window sills, resulting from condensation. Particularly unsuitable for stair halls. 1P. Perm. N. Y. Specialist	51	19
Interior Wall Finish: Wall board installation and paint appearance a little better than (6?) other places visited. Bathroom wainscot "appears to be" tempered presswood, dark brown. "Seems excellent— standing up well. Probably never needs painting. 1P. Perm. Pa. Specialist	13G	3
Storage Closets Finish: Left unfinished: sub-flooring and exposed studs. Tenants objeft. 1P. Perm. Md. Specialist	13F	5
Painting: Turnover painting should be done by project labor. Resin emulsion can be successfully washed if first cleaned with wallpaper cleaner. From point of view of tenant acceptance, as well as initial and replacement costs, resin-emulsion generally O.K. Low unit costs by lead-in-oil paint applied by contract labor, or project labor and painting cycle lengthened 2 or 3 yrs. beyond usual. Soilax good for cleaning prior to painting. Region VI.	39	5
Original wall finish excellent (2 coats lead-in-oil for bath and kitchen, resin emulsion for rest) 1P. Perm. Minn. Mgr.	118	

WALL FINISHES

	Source	Page
One coat oil base paint, not washable. 1P. Perm. Wash. Mgt. Superv.	114	
Painting: Smooth finished plaster extremely easy to paint and wash down. 1P. Perm. N. J. Mgt. Superv.	137	10
Woodwork: Varnishing better than staining and waxing Pa. Mgrs.	3A	2
Rough plaster easily soiled, impossible to clean. 1P. Perm. Conn. Specialist	1	
Oil base paint is universally preferred to casein, the latter proving to be false economy. Pa. Mgrs.	3A	2
Sand finished plaster objectionable. Hard, smooth, washable surface is needed. Oil paint recommended. Subtle color hard to rematch. Region II	2	6, 18
Rough textured colored wall surfaces are not liked. Smooth plastered walls painted are universally preferred. Region II.	5	18
Colored plaster sheds sand. Improved with time and brushing. Kitchen should have oil paint, especially around stove. Stair wall likewise. 1P. Perm. Conn. Specialist	1	29
It is recommended that plastered walls be given ample time to dry before paint is used (about 6 months to one year) and that the original finish be brought to a semi-gloss consisting of 3 coats of sealer-primer undercoat. A semi-gloss finish is washable, has durability, and leaves a good surface that can be recoated. It is recommended that kitchens and bathrooms be enameled, and that no tinted plaster be used. Region II	5	41
It is recommended that tenants be prohibited from painting their own apartments, because of accidents, dissension among neighbors, and improper application. Wall paper should not be used because it is not considered durable, is hard to keep clean and is unsanitary. Region II.	5	42

WALL FINISHES

	Source	Page
Painting test performed on plaster board and wall board panels painted as follows:	10	10

xa. one coat casein paint
xb. two coats casin paint
xc. Resin emulsion paint
xd. one coat oil paint
xe. two coats cheap oil paint
xf. two coats good oil paint
xg. two coats good enamel.

Only (f) and (g) were satisfactory surfaces for removal of mercurochrome, ink, red crayon and pencil stains by means of water and mild solution of soap.
(Good paint costs from $2.35 to $2.75 per gallon.)
Region V.

	10	11

Tenant painting has been performed satisfactorily in Region V and is recommended. Conditions: Management must supervise. Management must supply adequate brushes, drop cloths, etc. Walls must be rough plaster for best results so that uneven painting is unobjectionable
Region V.

	18	11,12

Oil Paint -- sometimes difficult to wash a flat oil finish. Some places they think tenants have not enough skill to renew oil paint. Some places trust them. Dark band painted above floor shoes are not easily soiled, looks well and is easily renewed. To save on wear and cleaning door handles should be about elbow height (3' or 3'6"). Blistering of paint on interior walls sometimes explained by (1) too much free lime in plaster or (2) insufficient drying time between processes. Dwellings might be occupied before walls are painted, giving them sufficient time to cure. No other real competition for paint. Cost for renovating, range from $6.00 - 8.19 per room per year. Casein paint economical but difficult to apply and does not wash well. Sometimes 2 refinishing coats have to be used, doing away with any saving. Casein paint builds up a surface difficult to change over to oil. If decoration must be done right off casein paint is good since plaster walls go on curing which they will not if oil paint is used. "Construction men say that there is no difficulty in washing off casein paint when the walls are ripe for a permanent finish -- and if there is, well that's up to maintenance." Owner of one development halves costs (decoration) by casein for walls, stain for woodwork -- no tenant complaint.
Specialist

WALL FINISHED

	Source	Page
Paint: Casein and resin emulsion paints unsatisfactory except for temporary use. Provide funds for a 3 coat lead and oil paint job. When plaster is dry, original paint job should be done with lead and oil, enamel in kitchen and bath, semi-gloss in all other rooms. Stain and wax is acceptable, then finish in all rooms excepting kitchen and bath. Enamel finish for metal trim, enamel for kitchen and bath. Region II.	21	29
Main Bldg. Entrances: Should have hard glazed finish to prevent disfigurement. Region IX.	36	4
Wall Finish: Sand finished plaster hard to clean, wears out paintbrushes rapidly. Region IX.	36	2
Woodwork: Stained — quite satisfactory (2P), but nail holes should be puttied up. 1P. Perm. N. Y. Specialist	19A	4
Wall Finish: Sand finished plaster sheds. Should never be used in the kitchen. Tenants looked forward to time when management would have to paint. 2P. Perm. N. Y. Specialist	19A	3
Wall Finish: "Sand finish in bathrooms is of course disintegrating, and tenants complain that the tub bottom and theirs get full of sand." 1P. Perm. N. J. Specialist	19D	3
Wall Finish: Sand finished plaster has poor appearance sheds into bathtub. 1P Perm. Va. Specialist	19F	2
Wall & Ceiling Finish: Large sheet wall board, painted. Not bad while new, seriously question wear over period of time. 1P. Perm. Va. Specialist	19H	2
Finishes: "Floors, trim and doors should be shellacked. It is very difficult to keep waxed surfaces clean and when time comes for redecorating, the wood surfaces will very likely have to be sanded down before they can be refinished." 8P. Perm. Reg. II & III, Specialist	19-19G Letter	5

WALL FINISHES
(continued)

	Source	Page
Bathroom Finish: Should have had enamel instead of flat paint LP. Perm. Va. Specialist	19E	3
Interior Trim: Threshold at entrance 3/4" above finish floor so door will not be blocked by carpet. Region II	21	15

WALL FINISHES

Source Page

Interior Wall Finishes: Satisfactory - washable
1P. Temp. Mich. Mgt. Superv.

WALL FINISHES

	Source	Page
Wall Finishes: Varnished veneer quite satisfactory. Should be proper insulation around stoves. Asbestos sheeting or metal, with open air space between; and wall proper should be placed beside, behind, and over the cook stoves. 1P. Trailer, Wash. Mgr.	116	2
Interior Finish: Upson board and Homasote not satisfactory—too fibrous; plywood O.K., 1P. Trailer, Miss. Mgt. Superv.	113	

WALL FINISH

	Source	Page
Interior Finish: Rough and unsanitary. 1P. Temp. Ga. Mgr.	112	
Interior Partitions: Not objectionable, considering this is temporary housing. 1P. Temp. N.C. Mgt. Superv.	111	
Paint is not washable, tenants wash walls, condition deplorable in some cases, project can't afford repainting. (Resin-emulsion paint). Waxed woodwork hard to keep clean looking, tenants have shellacked woodwork themselves as remedy. 1P. Temp. Pa. Specialist	50	10
Interior Wall Finish: Wall board, no tape or filler at joints, unsightly and expensive to maintain. 1P. Temp. Wash. Mgt. Superv.	115	
Wall Finish: Unsatisfactory (factory painted only)-not sufficiently washable to meet requirements of industrial neighborhood and larger families. 1P. Temp. Mich Mgt. Superv.	133	1
Wall Finishes: OK for war housing (kitchen and baths - 2 coat flat oil base paint; rest of DU - 2 coats resin emulsion paint.) 1P. Temp. Wis. Mgr.	122	

WALL FINISHES

	Source	Page
Interior wall finishes: Satisfactory, washable. 1P. Dem. Ala. Mgt. Superv.	109	
Paint: suggestions of manager: (1) paint, (2) chair rail. Since most marks and nicks are low (made by children) only part under rail would need frequent repainting. (3) wood wainscot, stained. One manager suggests leaving paint off at start. Use oil after 6 to 8 months; tenants to pay for material, management supply labor (has been done in slum clearance projects to everyone's satisfaction.) Casein and resin emulsion: Same unfavorable experience here as elsewhere - dirtiness, impossibility of washing. 1P. Dem. S.C. Specialist	13A 13B	4 3
Interior finishes - one coat paint on gypsum board - is poor. 1P. Dem. Fla. Mgt. Superv.	110	
Flat oil paint used for all interiors, stands up exceptionally well. But gloss for kitchen and bath, semi-gloss for rest of house suggested in future projects, for washability. 1P. Dem. Ohio, Mgt. Superv.	125	3
Better and washable paint would be used for interior walls. Tenants will wash paint or wallpaper for "clean appearance." A very active tenant maintenance program. If pine and good enamel coat had been used originally it would have been more economical in long run. 1P. Dem. Ill. Mgr.	119	

ROOF DRAINAGE

	Source	Page
Eaves and overhangs: At Charleston, S. C.(38025), overhang only 3/4" facia and 1g" beyond; at Wilmington,, no overhang. Water drips down walls, will cause excessive painting maintenance, or messy appearance and rotting of wood.	13A	4
1F. Dem. S. C. Specialist		

ROOF FINISHES

	Source	Page
Composition roofing should be used only when stripped to prevent wind damage. 1P. Perm. Mgt. Superv.	14	
Roll-roofing inadequate due to high winds. 1P. Perm. Mgt. Superv.	14	
Better roofing material should be used on war housing project. Reg. VIII	14	

ROOF DRAINAGE

	Source	Page
Drainage System: Connect all downspouts directly to storm sewers to prevent damp basements and crawl spaces as well as erosion. Region II	21	26
Roofs: Design so water will not flow over gravel stops, also so water cannot enter at juncture of built up roofing and gravel stops. Flat roofs with hanging gutters are unsatisfactory. Reg. II	21	15
Gutters: For all sloping roofs, connect leaders to the sewer. Reg. II	21	15
Gutters: At entrance canopies only "a good precaution" several have broken off, according to carpenter because crowd moves them up and down, breaking metal straps which hold them. 1P. Perm. Md. Specialist	13F	3
Eaves: Absence of overhang results in damage of wood walls from rain. 1P. Perm. Pa. Specialist	13D	3
Gutters: Over entrances only. Necessary: too short - shorter than platforms so that these are wet and slippery. Should be longer. 2P. Perm. N.C. Specialist	13D also 13E	3 2
Eaves: Overhang 1 foot—protects walls (no gutters) 2P. Perm. N.C. Specialist	13D also 13E	3 3
Gutter-Roof Drainage: All buildings have gutters and leaders; latter spill on splash blocks, and ground is badly eroded. 1P. Perm., Va. Specialist	19D	2
Roof Drainage: Drops onto ground from eaves. Management is having to put concrete underneath to prevent erosion. 1P. Perm. N.J. Specialist	19D	2
Roof Construction: Where concrete roof slab is used, project over top of wall—causes less damage to exterior walls. Where heavy rains occur, provide gutters and leaders with leader-heads, splayed to facilitate rapid intake of water from gutters to a point where water acquires sufficient velocity through vertical fall. Reg. IV	33	3

ROOF FINISH

	Source	Page
Shingle roof: If too light weight and too flat a pitch shingles are torn off by wind. Reg. II	2	7
To avoid maintenance expense, roof slopes should be limited to 5 inches in 12. Generally speaking, a heavier shingle should be used in sloping roofs. Sloping roofs are preferred over flat roofs for public relations value even though the former are said to cost in the neighborhood of $150 more per dwelling unit. Reg. V	5	52
Roofing Finish: Trouble in even moderate winds with shingles (asphalt composition mineral surfaced 3 tab-type). Tab vibrates and eventually whole top blows off. Roof! (Projects in Oregon and Idaho). One project with expensive asbestos composition shingle roof has given trouble by blowing off even in moderate winds. Composition roll roofing buckles in warm weather. "The shrinkage of the wood under-sheathing has also caused nails to move to the extent that they tear the roofing paper and let in rain. Gyp-board as sheathing for composition roofing has not proven satisfactory as the gyp-board sags between the rafters. Best service. A first grade cedar shingle roof gives best service, requires least maintenance. Reg. IX	36	2
Roof Finish: Specify weight and type shingle according to locality. Reg. II	21	15
Roofing: Was coming loose, perhaps because of faulty workmanship - more likely because non-interlocking shingles were used. 2P. Perm. N.Y. Specialist	19A	3
Roof Finish: Shingles lifting--may be due to shrinking and curling of wide sheathing boards. 1P. Perm. N.J. Specialist	19D	2
Roof Finish: Shingles blowing off. May be due to shrinkage of sheathing boards; should be investigated. 8P. Perm., Reg. II & III - Specialist	19-19D (letter)	5
Roof Finish: No trouble with shingle roofs in this Region. Reg. III	31	3

ROOF CONSTRUCTION

	Source	Page
Roof: Very little trouble with leaky roofs so far. 1P. Trailer, Wash. Mgr.	116	2

ROOFS

	Source	Page
Overhang: Seems just adequate. (6") 1F. Perm. Pa. Specialist	13H	4
Overhangs: No overhang here. This has been criticized in other projects, but particularly bad here since carbon from soft coal combustion settles on roofs, is washed down by rain, streaks sides of buildings. 1F. Perm. Pa. Specialist	13G	3
Light weight shingles, easily torn off by wind, causes high replacement costs. 4F. Perm. N.J., Mgt. Superv.	14	
Greater pitch to roof might have eliminated maintenance problem resulting from blow-up and blow-off of shingles. Heavier shingles might be answer. 1F. Perm. N. J. Mgt. Superv.	14	

ROOFS

	Source	Page
Roof: Overhang well handled. Looks well, keeps water off walls. 1P. Perm. Comm. Specialist	1	39
French drains useless except under perfect drainage conditions Pa. Engrs.	3A	2
The construction of built-up roofing over flat wood and concrete decks should include interior roof drains and conductors. Eliminate the use of louvre types of dormer ventilators, substituting louvre ventilators in the ends of the buildings, and reduce the size of the roof ventilators placed along the eaves. Reg. II	5	13, 14
Effects of inadequate ventilators of roof construction, and resulting condensation: Disintegration of the wood roof construction; saturation of insulation; falling of plaster ceilings. Reg. III	30	5
Roof Construction: Roofs are lifting - apparently due to shrinkage of sheathing. 1P. Perm. Va. Specialist	19K	2
1' eave overhang practical and satisfactory in appearance. 1P. Perm. N. C. Specialist	13D	7
Walls Brick Veneer: No leaks: Overhang 6" - "probably adequate to divert rain water from walls." 1P. Perm. S. C. Specialist	13B	2
1" insulation over sheathing, plaster on gyp lath, nailed directly to joist, gives roof air space of unventilated spaces between joists. Has led to difficulties. Insulation inadequate for hot sunny days. High temperatures get built up in dead air space. Flues from damp crawl space to un-ventilated inter-joist space create condensation problem. Materials get roof soaking and brick work mortar has disintegrated in certain places. (Ventilation grilles put in at these spots are of little use) (Strong argument for hung ceilings of sloped roofs.) 1P. Perm. N. Y. Specialist	51	17, 18
Overhangs: Lack of overhangs and shadows make building stark. Even slight one helps. Overhang also protects wall from water, shelters windows from dirt washed from walls and roofs. 1P. Perm. N. Y. Specialist	51	21

ROOF CONSTRUCTION

	Source	Page
Roof: Lack of eaves makes dwelling hot and doesn't provide protection for tile walls. 1P. Temp. Ga. Mgt. Superv.	112	
Roof: Overhangs are protection from sun, protect walls from heavy rain, and low pitch allows built up tar and gravel. Satisfactory for maintenance. 1P. Temp. N.C. Mgt. Superv.	111	
Roofs: Considerable leakage trouble with mopped-on Cyplap type roofs. 1P. Temp. Wash. Mgr.	128	2

ROOF CONSTRUCTION

	Source	Page
Roof: Carried off in wind; Carquinez Hts. Vallejo Calif.	15	29
1F. Dem. Calif. Interviewers		

SOUND INSULATION

	Source	Page
Sound Transmission: Adequate spacing (25 lots) so that so far no complaints. 1F. Trailer, Wash. Mgr.	116	2

SOUND INSULATION

	Source	Page
Sound Insulation: Party walls of 4" block, reasonably sound proof, according to manager. 1P. Perm. Va. Specialist	19C	2
Sound Insulation: Several families suggested sound protection by closets on party walls. 3P. Perm. & Dem. Wash. & Calif. Specialist	20	11
Noise Transmission, Between DU: Only 2 complaints. 1P. Perm. N. C. Specialist	13D	2
Sound Insulation: Tenants complain of noise. Some is inevitable but some is avoidable by insulation materials in wall, closets on party wall, and cold joints in construction. Region IX	36	2
Insulate in floors over public spaces, pump rooms, laundries, boiler rooms, basements and in party walls to reduce transmission of heat and noise. Region II	21	16
Degree of annoyance from noise depends upon individual reaction. Especially important to have quiet for night workers who sleep during the day. Most sound seems to travel along second floor. 2P. Perm. N. Y. Specialist	19	4
Sound Insulation: Sound transmission should be checked particularly between bedrooms. 2P. Perm. N. Y. Specialist	19A	4
Sound Insulation: Needed particularly in bathrooms as a result of cutting away of wall for medicine cabinets. 1P. Perm. N. Y. Specialist	19B	4
Partitions: Sound transmission, but as good as in private apartments in the area 1P. Perm. Ga. Manager	107	
Noise transmission within dwelling: Complaints in lack of door between L. R. and chamber passage. "Can't play radio at night because of waking children. 2P. Perm. N. C. Specialist	13D	2
Sound Insulation: Inadequate between dwelling units of same building, e.g. children playing on second disturb neighbors who are daytime sleepers. 1P. Perm. Comm. Specialist	13C	3

SOUND INSULATION (CONT'D)

	Source	Page
Partitions: Sound transmission conditions not bad, but could be improved. Three BR units exposed to adjoining dwelling on two walls of stud and plaster construction. Closets well placed to deaden sound between bedrooms. 1P. Perm. Wash. Mgt. Superv.	114	
Sound Insulation: Complaints with regard to transmission between units. 1P. Perm. Pa. Specialist	130	3
Sound transmission O.K. in all but two story dwellings where transmission is somewhat too great. 2-story D.U. (2" x 4" studs 16" o.c., metal lath and plaster, wood single members base and shoe: 3-story D.U.; 3" tile block partitions, balance of 2" metal lath and plaster, single member wood base and shoe.) 1P. Perm. Minn. Manager	118	
Sound Insulation: Door between room and chamber hall is good. 1P. Perm. Md. Specialist	137	4

SOUND INSULATION

	Source	Page
Sound transmission between adjacent dwelling units serious problem in many projects.	14	
Not enough sound insulation provided in any project. Pa. Mgrs.	3A	2
Sound disturbance in sleeping, partly due to thin walls, common walls in multiple dwellings. See also "Space and Arrangement", for disturbance caused by planning, as bedroom under living room of the unit: Note - possibility of correction through construction. Interviewers	15	16
In spite of care in insulating walls, floor-borne noises that travel along continuous slabs are audible several apartments away. Poorly insulated walls in back-to-back bathrooms and kitchens carried a good deal of sound. Recessed medicine cabinets let through sound. Could not be insulated because of pipes. 1F. Perm. Conn. Specialist	1	29, 4
In Ramona Gardens 90% of families considered sound transmission within dwelling to be major problem - 60% stated problem was bothersome. 1F. Perm. Cal. Specialist	12A	11
Sound insulation: Mandatory between dwellings. Recommend closets in party walls. Heat insulation in cold climate; insulate pipe lines and ground floor where needed. All ventilating louvers should be closable. Reg. II	2	9
Largely due to inadequate noise insulation, the least improvement resulting from rehousing was brought about in "social life": 34% of the families were disturbed by noise from other rooms in the dwelling. 1F. Perm. Wash. Interviewers	17	46
Sound insulation from bathroom especially inadequate. Sound insulation inadequate for bedrooms. 56% are careful in regard to noise when they have visitors for sake of sleeping children. 21% annoyed by insufficient insulation between rooms. Inadequate in regard to neighboring dwellings: Conversations can be overheard from bathroom to bedroom (p 42) 19%. 40% annoyed in living room. Sleep of 20% disturbed by noise from neighbors. 15% annoyed because kitchen is inadequately sound insulated 1F. Perm. Wash. Interviewer	17	49,40,30,52,42

SOUND INSULATION

	Source	Page
Partitions: Transmit noise. 1P. Temp. Ga. Mgr.	112	
Partitions: Openings and loose joints in panel partitions as well as the masonry partitions transmit sound. 1P. Temp. Ga. Mgt. Superv.	112	
Soundproofing in dwelling unit party walls almost universally unsatisfactory in temporary war housing.	14	
Interior partitions very unsatisfactory with much difficulty from sound transmission. This complaint is case of party partitions of 2 x 3 studding, staggered 1". Borrowed bed room in case of 3BR unit is adjacent to adjoining unit on two walls. 1P. Temp. Wash. Mgt. Superv.	115	
Partitions: (Wood and gypsum board). Noise transmission in units is very bad. 1P. Temp. Pa. Specialist	50	11
Sound: Transmission through walls not too bad but not satisfactory.(Party Walls: 2" x 3" studs, 24" o.c..) 1P. Temp. Wis. Mgr.	122	
Interior partitions need more sound proofing on party walls. (2-3/8" thick fibre board panels and ½" thick insulated core with fibre board strips in 5 ply panels.) 1P. Temp. Mich. Mgt. Superv.	133	1

SOUND INSULATION

	Source	Page
Partitions: Units placed side by side with double exterior walls-sound transmission negligible, except in 1 BR and 3 BR units. Combination unit not troublesome however. 1P. Dem. Ala. Mgt. Superv.	109	
Partitions: Gypsum board improperly detailed and sound transmission bad. 1P. Dem. Fla. Mgt. Superv.	110	

FLOOR FINISHES

	Source	Page
Concrete floors unsatisfactory from standpoint of appearance and livability. They crack, and are cold and uncomfortable (bad especially for children and elderly persons). Condition less bad in multiple dwellings where there is adequate constant heat at top and bottom of floors. Even here, however, tenants object to appearance. Wood floors buckle and break due to poor installation and inferior or too thin materials: finished wood floors should be not less than 3/16" thickness. Too few nails, or else nails don't penetrate sub-flooring. Region II	14	
Use linoleum in kitchens.	14	
Concrete floors: Crack, cold, hard to clean thoroughly, disliked by tenants. O.K. in multiple family structures when covered. Region II	2	3,6
Wood floors: Cheap flooring (#2 common oak) unsatisfactory and actually uneconomical. Region II	2	7
Concrete floors: In Kansas Gardens project 10% of tenants had no floor covering in living room, 50% none in kitchen, 57% none in bathroom, 42% none in bedrooms. Major cracks existed in 1% of floors; minor cracks in 66% 1P. Pers. Col. Interviewer	12A	1
Project 9 (Aline Village) Col. objection to cement floors ugly, damp, carry noise "even when covered with rugs or linoleum, give impression of coldness" (this from interviewers). In Project 6 (Texas) because of dampness, there were objections. 2P. Pers. Col. Tex. Interviewers.	15	15
The surface of all concrete floors in dwelling units should be covered with marble tile or linoleum, and the underside of concrete floor slabs over pump rooms, social service rooms and public spaces should be treated with acoustical materials. The use of finished wood floor without a subfloor definitely should be discouraged. The cost of planking these joists and using paper over the finished floor is probably as much as the saving on the wood itself. The delays due to working over the joists, either bare or planked, and the delays of papering the finished floor make for a definite loss of rent in the delayed completion of the building. The additional danger of the workmen walking on bare joist is considerable. Five men have been injured at Buffalo N.Y. 2-4 on the first two buildings. Finished oak flooring should not be specified a lower grade than No. 1 - the third grade of oak flooring.	5	13

FLOOR FINISHES

	Source	Page
Floors in kitchen should have linoleum. Less than 7/8" floors heave, creak, and stand but one sanding. 4P. Perm. N. J. Mgt. Superv.	14	
Floor Finish: Parquet tiles set in mastic on rough boarding as though on concrete, mastic has melted, run down on exposed risers, making unsightly condition. Also cracks between tiles widen, are impossible to clean or fill. A breeding place for bugs, etc.). Occasionally pieces swell and pop up. This like many other difficulties, seems caused by dampness emanating from the crawl spaces. 1P. Perm. N. Y. Specialist	51	18
Maple parquet "tiles" set in mastic give much less trouble in apartments than flats and houses, probably because of less dampness.(Warm full-basements). 1P. Perm. N. Y. Specialist	51	17
Sealer and wax not adequate, requires too much care and expense in renovating. 1P. Perm. Wash. Mgt. Superv.	114	
Flooring: 3rd Grade hardwood oak containing many worm holes used on project. Would have preferred No. 2 pine. Linoleum in bathrooms satisfactory except occasionally when water has gotten underneath. 1P. Perm. N. J. Mgt. Superv.	137	10
Linoleum in bathroom not laid with waterproof paste, is coming loose. Unsightly and unhealthful. 4P. Perm. N. J. Mgt. Superv.	14	
To eliminate warping of 3/8" oak finish flooring in kitchen (caused by dampness) use sub-flooring with linoleum. Wood flooring not good for kitchens. 1P. Perm. N. Y. Mgt. Superv.	14	
Straight flooring could be used in place of 3/16" hardwood; or surface nailing should be used to avoid buckling, and prevent costly maintenance and replacement. 1P. Perm. Pa. Mgt. Superv.	14	
Additional cost of finishing number two common oak flooring offsets saving on lumber itself. 9" length allowable in this grade, will not bear on 2 joists. 2P. Perm. N. Y. Mgt. Superv.	14	

FLOOR FINISHES
(cont.)

	Source	Page
Fewer complaints of coldness and condensation where asphalt and tile is used, but tile chips and dents, requiring replacement. Also high maintenance costs for waxing. Inexperienced application by housewives and poor quality wax makes slippery floor. Spirit wax softens and discolors tile. (NAHO survey of 240 managers) Nationwide Mgrs.	22	
Concrete Floors: Most prevalent problems are with condensation, coldness, dusting and poor paint adhesion. 111 (out of 240) managers report problems with condensation and coldness. Only solution (reported by 1 manager at Greendale, Wis.) Has 1" of spray-o-flake, an insulation material consisting of emulsified asphalt and shredded newspaper, sprayed on the underside of the floor. This treatment, used with cross ventilation of crawl space, and partial heating thereof (using it as a plenum chamber) for all cold air returns, has practically eliminated problems of moisture condensation, and extreme coldness, during sub-zero temperatures. The sub area vents are furnished with removable covers which are put in place during the winter season by the tenants. More difficulties with concrete floors in northern than in southern locations, (according to a survey of 240 project managers). 34 (out of 240) managers reported "dusting" problems and 18, poor paint adhesion. Tenant acceptance difficult to analyse. 180 managers report tenant satisfaction, 50, unsatisfactory. Not conclusive evidence. "It has been general management experience that tenants become accustomed to certain inconveniences after they have put up with them for a period of years." Nationwide, Mgrs.	22	1

FLOOR FINISHES

	Source	Page
Floor Finish: Comb-grain pine, waxed, is entirely unsatisfactory - dirt gets ground into it during construction and it never gets clean again. Poor appearance. 2P. Perm. N. Y. Specialist	19	3
Shower-Bath Floor: Trouble with cracking of shower-bath cast floor receptacles is general in war housing projects. Reg. IV	38	1
Concrete floors are dirty, ugly and unpleasant, and not all tenants cannot afford remedial coverings. 1P. Perm. Pa. Specialist	19B	3
Wet floors from condensation. Agreed that floor covering such as asphalt tile should be used. Reg. IV	38	1
Wood Floors: Much trouble from expanding and buckling. "Dry oak floors are nailed down and then absorb moisture during late construction or vacancy." "Sometimes even force exterior walls out of line." Reg. IX.	36	2
Conc. Floors: Concrete floors appear cold, drab, dirty, institutional. Desirable for management to specify floor covering. (Perhaps hard wood covering). Reg. VIII	35	2
(M) Aliso Village, Los Angeles, California, interviewers in 8-city survey felt that general effect of interiors, partly due to concrete floor, is institutional. 1P. Perm. Cal. Interviewers	15	29
Concrete on fill, no crawl space: "Every single tenant interviewed objected violently on grounds of hardness (tiring to feet); dampness and coldness; ugly appearance. Many wanted to paint at own expense but management would not allow this (presumably because of dampness paint would peel off). Probably bad grading had something to do with dampness, but even where floors were 3' above ground dampness was observed." Also at Project 13B, negro tenants complained of this, though generally reluctant even to talk. 2P. Perm. N. C. Specialist	13D	3
Asphalt Tile: In general, concrete floors reported cheap to maintain, sanitary, fire resistant, durable, economical in construction cost, and free from termite damage.	22	2

FLOOR FINISHES

	Source	Page
Floor Finish: Avoid dye coloring on, or painting of cement floors. Asphalt tile recommended as cement floor covering. Use ceramic tiles in bath room. Reg. IV	33	3
Floor Finish: Linoleum liked—desired where not put in. "You'd expect it for $30." said one woman (1P). Varnished floors hard to keep looking well (1P). Most tenants do not seem to have or be able to get much to put on floor. 3P. Perm. and Dem. Calif. and Wash. Specialist	20	13
Floor Finish: Several Managers report tenants covered own floors with carpeting or felt-backed linoleum to eliminate floor coldness. Chief reason is for health of small children who spend much time playing on floor. (From a survey of 240 managers) Nationwide Mgrs.	22	2
Floors: 56% recommend wood floors on wood or steel joist, 22% recommend plain concrete, and 15% recommend asphalt tile on concrete, 7% (representing 14 southern projects) Recommend wood on concrete. (A survey of 240 managers) Nationwide, Mgrs.	22	2
Floor Concrete: On fill. Bitter complaints from tenants and management "as at Wilmington": 1P. Perm. S. C. Specialist	13B	3
Floor Finish: When concrete finished floors are finished with asphalt tile, complaints cease. Difficult to obtain a satisfactory finish for a concrete floor slab; paint, or staining not as good as asphalt tile. If floor slab is off ground use linoleum in bathroom and kitchen. Reg. III	31	3
Finished Floors: Asphalt tile should be used in DU even though more expensive. Otherwise, linoleum has to be laid over it. 1P. Perm. Conn. Specialist	1	29
Floor Finish: Concrete floors must be treated to overcome dust. Asphalt tile or china oil are remedies. 1P. Perm. Conn. Specialist	1	29
Beech, birch, maple, are liked, but tenants want them shellacked. 1P. Perm. Pa. Specialist	19B	3

FLOOR FINISHES

	Source	Page
Concrete slab floor, though durable, is cold and hard on the feet, impossible to keep clean unless painted, then needs frequent refinishing. Asphalt tile is easy on the feet, not cold, easy to clean. Reg. II	18	9
Tenant maintenance of hardwood floors without power polisher is difficult. Frequent waxing at first helps. Water should be used very sparingly. Perhaps management could rent a power polisher and in turn rent it to tenants. Specialist	18	10
Lighter shades of asphalt tile preferable, since darker shades show every spot. Specialist	18	9
Condensation on Floors: Stop floor slab short of exterior wall. Reg. III	30	2
Floor Finish: Birch, beech, and maple wood floors stained dark were well liked but tenants wanted them shellacked. 2P. Perm. N. Y. Specialist	19A	3
Floor Finish: Asphalt tile generally well liked. Principal criticism is color was too dark, kitchen was often colored with light colored, patterned congoleum. (Dirt showed). Base was linoleum or asphalt strip, there was much trouble with its coming loose. 2P. Perm. N. Y. Specialist	19A	3
Floor Finishes: Combgrain pine; not good. Should have been shellacked. 1P. Perm. Va. Specialist	19B	2
Floors: Concrete slab on ground - serious error, as there is water only a foot or so below the surface, and there is consequent dampness. Slabs are poorly finished and asphalt tile is having to be put on. 1P. Perm. Va. Specialist	19C	2
Floors: "Concrete floors are definitely unsatisfactory and should be prohibited. This is particularly true of slabs on the ground, but I have reference also to the finish of the floor regardless of whether it is on the ground or not." 8P. Perm. Reg. II & III Specialist	19-19C (Letter)	5
Floors: Provide adequate expansion joints in all concrete floor slabs to prevent excessive cracking of the floor and exterior walls. Reg. II	21	13

FLOOR FINISHES

	Source	Page
Cracking of asphalt tile may be due to: too brittle mix; faulty installation (roughness in the finish of the slab on which it is laid). Insecticides act as solvent, loosen tiles. Specialist	18	9
Alternative surface for hard usage is hardwood, attached to sleepers or joists, or laid in mastic. Criticisms: Not resilient enough; mastic oozes (occasionally); noise - creaky boards insufferable. Linoleum suggested for kitchen, tile for bathroom. Linoleum if too highly polished causes burns by people slipping into stove. Clear varnish protects floor. Resistance to abuse graded according to best, etc., marbleized asphalt tile, pressed fiber boards, short strip maple, strip douglas fir, strip white oak, asphalt tile - plain maroon, asphalt tile - plain black, yellow strip pine, inlaid linoleum - gray mottled, rubber tile. Other materials are less good (felt base with linoleum surface, enamel finishes, mastic, composition) but also cheaper. (Nat'l. Bureau of Standards Test). Specialist	18	10
Floor Finish: Concrete floors within DU except kitchens and baths; cover with mastic tile. Kitchen and bath should have grease-proof tile, linoleum laid with waterproof cement, or ceramic tile as required by local codes. Openings around pipes in concrete floors should be sealed with proper grade and quality caulking-compound to prevent passage of noise, water, dust, vermin. Extend steel pipe sleeves 1/4" above finished floors. Finish wood floors should be 3/4" minimum thick, over heavy paper and sub-floor securely nailed. Grade not less than No. 1 common hardwood. Reg. II	21	14
Weather Stripping: To reduce heat loss through drafty doors and windows use weather stripping material at door bottoms, substantial enough to be effective (even though more expensive). Paper thickness rapidly becomes worthless. Reg. II	21	18
Floor Construction - Weather Insulation: Concrete floor slabs insulated from outside temperatures have given no trouble. Reg. III	31a	3
Floor: Concrete best in long run. 1F. Perm. Gn. Mgr.	107	
Floors: Concrete floors on fill on ground cause no difficulties with absorption of moisture from underneath, except in a few instances at edge of floors along the walls. Reg. IV	33	2

FLOORS

	Source	Page
Floors: A manager of a temporary Texas project reports that concrete floors "have been a matter of contention" 1P. Temp. Tex. Mgr.	104	
Floors: Concrete floors stain easily and crack. 1P. Temp. Ga. Mgr.	112	
Floors: Concrete floors not most desirable, in adequate for temporary housing. 1P. Temp. N. C. Mgt. Superv.	109	

FLOORS

	Source	Page
Concrete slabs: Slabs directly on ground are damp and because of their finish, dust badly. 1P. Temp. Ga. Mgt. Superv.	112	
Floor construction and surfacing inadequate (plywood) 1P. Temp. Mich. Mgt. Superv.	133	1
Floor Surface: Composition flooring excellent, looks well, cleans well, wears well; used on 1st and 2nd floors entrance platforms and porches. Single wood floor used in some experimental buildings. Boards separate, no ceiling below allows view and passage of sound. 1P. Temp. Pa. Specialist	50	13

FLOOR FINISHES

	Source	Page
Floor Finish: Linoleum has proven very durable especially where tenants take trouble to wax. LP. Trailer, Wash. Mgr.	116	2
Floors: Utility trailer floors not satisfactory, should be of resin-bonded plywood. LP. Trailer, Misc. Mgt. Superv.	113	

FLOORS

	Source	Page
Floors: Sag. 1P. Dem. Cal. Interviewers	15	29
Insulation: Dampness bad problem in demountables (1P) Everything gets moldy; when heated up becames a steam bath. Most unhealthy 1P. Partly Dem. Cal. Specialist	20	14
Floors: Single oak floors on wood joists with open foundations, cold in winter. 1P. De,/Ala. Mgt. Superv.	109	
Floor Construction: Frequent tenant complaints because of crown resulting where sections of floor joints come together. 1P. Dem. Ohio, Mgt. Superv.	125	2

VENTS

	Source	Page
Roof vents allow driving rain to penetrate. Crawl space vents too close to ground and too small, get clogged with dirt, don't provide enough ventilation. LP. Temp. Pa. Specialist	50	8

CHIMNEYS

	Source	Page
Flues: Majority of TDU have insufficient draft in the flues, that serve space heaters and kitchen ranges. This results in dirt and soot, need for redecorating. Give more study to down drafts from other buildings, trees, hills, as they affect chimney drafts. Many managers reported flat concrete slab placed on top of flues in standard plan and DU have caused draft in flues to be faulty. Reg. IX	36	2

CHIMNEYS

	Source	Page
Flues don't extend far enough above roof so space heaters and water heaters smoke badly. 1P. Dem. Ill. Mgr.		119

CHIMNEYS

	Source	Page
Metal chimney flues widely found to be unsatisfactory: they should extend highest part of roof. Region II	14 2	11
Chimneys: Design on sound engineering principles. Separate flue for each piece of equipment would be useful. Region II	21	23
Chimneys: Where coal-fired equipment is used in conjunction with gas fired heaters. There should be a separate flue for each piece of equipment. Region II	23	13
Chimneys: No difficulty in this region since 2' 6" has always been required above roof. Region III	31	4

CRAWL SPACES

	Source	Page
Crawl Spaces: Should be entered from outside, not from trap doors in each unit. Traps are located in storage room floor, which is added inconvenience. 1P. Temp. Pa. Specialist	50	11
Crawl Space: Badly done: Skirting does not go to grade - lets in children and pests. Frequent pipe freeze-ups. 1P. Temp. Mich. Mgt. Superv.	133	2

CRAWL SPACES

	Source	Page
Crawl Spaces: Should never extend below the surrounding grade, and should be eliminated entirely if possible, concrete floors over ventilated crawl-space are cold. Reg. IV	33	2
Crawl Spaces: When inadequately ventilated, condensation difficulties occur. Ventilation standards should be set up crawl space should be graded toward positive drainage of low spot. Crawl spaces should be inspected for construction water. Reg. III	30	1,2
Crawl Space: All exterior crawl space entrances should be provided with locks of cylinder types. No crawl space entrances should be through man-holes. Reg. II	23	7

CRAWL SPACES

	Source	Page
Crawl Spaces: Ventilate with 1 sq. ft. opening per 25 lin. ft. of wall. Should be drained and waterproffed. Line bottom with tamped cinders. Sump pump to be avoided. Reg. II	2	3
Crawl Spaces: Should be larger and cindered against damp. Pa. Mgrs.	3A	2
Crawl spaces should be eliminated, if possible, because they result in the greatest maintenance problem in project operation: full basement should be substituted. If crawl spaces are necessary, however, clear height should be minimum of 4 feet, and adequate steps should be taken to keep the crawl spaces dry. Catwalks or beds of cinders are suggested.		
All crawl spaces should be rough graded to provide a minimum clearnace of 3 feet 6 inches between the piping and earth floor. Adequate ventilation must be provided for crawl spaces at least 1 square foot of ventilation in each 25 linear feet fo foundation wall, to prevent dampness and mildew during every season of the year. Reg. II	5	12
Crawl spaces are damp, lacking ventilation and drainage.	14	
Crawl spaces: In many of our earlier projects, crawl spaces ingraded, collected water, resulted in dry rot, decay of wood structural members, etc. In this climate provide ventilators with screens and hinged doors for winter-time closing. All crawl spaces should be thoroughly dry. Reg. IV	36	1
Crawl Space: "Region III prefers to avoid the use of crawl spaces where possible. We recommend slabs on the ground covered with asphalt tile. Protection of the ends of slabs appears to prevent objectionably cold floors and condensation thereon." Reg. III		
Effects of Condensation: Damp slabs in crawl space; mildewed rugs, furniture and possessions; insect breeding due to stagnant water; impossible to lay linoleum; disintegration of pipe covering. (Reg. III) With wood floors, dampness cultivates fungus growth, and causes consequent disintegration of framing lumber. Caused finish wood flooring to buckle Reg. VI		

CRAWL SPACES

	Source	Page
Crawl Spaces: If necessary for finished grade to be higher than crawl spaces, crawl spaces should be provided with drainage. Several projects, Region VIII	35	1
Crawl Spaces: Provide hard surface and 6" clearance between piping and framing. Region VIII	35	2
Crawl Spaces: Use ventilated spaces 1 sq. ft. per 25 lineal feet of wall, placed to assure cross ventilation. Min. clearance of 4' between earth floor and lowest beam, max. of 16'. Earth floors should be smooth and graded to low point. Access to crawl spaces should be through from boiler rooms equipment rooms or outside - never through units. Region II	21	13

CRAWL SPACES

	Source	Page
Crawl Spaces: With only earth bottoms, questionable practice. Difficulties: Always damp, water stands in depressions and along foundation walls; impossible to make completely sealed floor openings for all piping and electric conduit work so dampness may affect entire interior. Affects tenants health. Costly maintenance, also dirty, wet and arduous. LP. Perm. N. Y. Specialist	51	18
High ground-water level so that crawl spaces which are often excavated to 3' below grade are nearly always damp and often have standing water in depressions. This causes much dampness and condensation in DU and the resulting necessary repairs, (especially in the roof spaces) Should have been lined with concrete or even damp proofed. LP. Perm. N.Y. Specialist	51	4

CRAWL SPACES

	Source	Page
Crawl Space: No trouble experienced. (Pier foundations and elevated floor.) 1F. Dem. Ala. Mgt. Superv.		109

TEMPERATURE INSULATION

	Source	Page
Heat Insulation: Transite board behind stoves too brittle. Use softer material.	14	
Weatherstripping on storm sash necessary in northern projects.	14	
Weatherstripping: The installation of proper weather-stripping is considered highly important in connection with the elimination of many heating problems. Spring type weatherstripping on the bottom of the door is impractical and should be eliminated. If it is impossible to secure the interlocking type threshold, then no weatherstripping should be placed on the bottom of the door. Combination storm and screen doors and also storm windows are recommended, at least on northern exposures. Region II	5	28
Sound insulation indecently inadequate. (Suggests working closets into party walls.) NJ-28051-2 91-2 4P. Perm. N.J. Mgt. Superv.	14	
Like living in same room with tenant next door. Noise interferes with rest of workers in 3-shift plant. NY-30037. 1P. Perm. Mgt. Superv.	14	
Ordinary conversation can be heard between units. Some tenants have left on this account. Region II	14	
Normal conversation can be heard in adjoining unit. 1P. Perm. Tex. Mgt. Superv.		
Sound-proofing between units inadequate. TEX-41063 1P. Perm. Tex. Mgt. Superv.	14	
Better soundproofing needed between units. Region VIII.		

WEATHER INSULATION	Source	Page
No insulation originally in cantilevered floors: Had to be installed by management later. 1F. Temp. Fa. Specialist	80	13

DOORS AND WINDOWS

	Source	Page
Storm Sash: Not provided. Pipes froze. Violent drafts even with windows closed. Should be provided. 1P. Temp. Mich. Mgr.	133	6
Doors and Windows: Poorly fitted. Much maintenance time wasted, just opening and closing doors and windows. 1P. Temp. Mich. Mgr.	133	6

DOORS AND WINDOWS

	Source	Page
Windows: Double hung, with spring-clips at stiles, which stick or don't hold; contractor has furnished supplementary clips to slip into face of sash. 1P. Perm. N. J. Specialist	19D	3
Doors and Windows: Cheap hardware: Knobs came loose, latches stick. 2P. Perm. N. Y. Specialist	19	4
Steel sash causes condensation. 1P. Perm. N. y Mgt. Superv.	14	
Jiffy springs unsatisfactory. Reg. II	14	
Windows: Horizontally sliding windows stick-but no leakage large glass areas make heating and curtaining expensive. (Experimental units). 1P. Temp. Pa. Specialist	50	14

DOORS AND WINDOWS

	Source	Page
Window Sash: Use wood until metal has been improved so as to be rust-proof on both sides, and condensation eliminated. Standardise light sizes on windows and doors. Reg. II	21	16
Window Hardware: Equip sash with weight and cord or chain. Fit steps with adjustable window stop screws. Reg. II	21	16
Doors: Exterior doors should be made of solid stock. Include hoods over exterior entrance row-house doors. Reg. II	23	9
Windows: Concrete window headers and slabs, contract and expand, permit leakage. Seems impractical construction. 1P. Perm. Maine - Mgt. Superv.	38	1
Basement Windows: Protect with heavy metal guards. Reg. II	21	17
Basement Windows: "Where possible, sash should be hinged at the top or sides." Reg. II	23	
Doors: Exterior doors badly fitted and leaked. Heavier saddle improved sill condition. Screen doors were not convertible to storm doors but were not removed because of lack of personnel and storage space. 1P. Perm. Pa. Specialist	19B	3
Windows: Steel casements without sill openers, impossible to adjust windows satisfactorily in cold and windy weather. All windows were tight shut. (Jan. 15), and water poured onto sills from condensation. 1P. Perm. Pa. Specialist	19B	3
Window Construction: Double hung with spiral balances. No trouble with either balances or condensation. 2P. Perm. N.Y. Specialist	19	4
Front Doors: Leaked cold air, particularly at sill, storm sash put on screened doors but cheap latches in many cases failed to hold - 40-50% of doors blown off their hinges. 1P. Perm. N.Y. Specialist	19A	4
Windows: Casement with sill operators which project over sill are a hazard to small children, do not hold windows in place. Terrific condensation problem. Leaky sills - stained plaster underneath. 1P. Perm. N.Y. Specialist	19A	4

DOORS AND WINDOWS

	Source	Page
An adequate brace for lattice awnings could be made not coming down to the porch. Those which come down to porch from ladder for climbing on top of buildings. 1P. Perm. Tex. Mgt. Superv.	14	
Screen Doors: Always expensive to maintain as with any out-swinging door. Increasing upper stile may help. Most satisfactory solution so far is a chain, stop bolted completely through the screen door. Not final solution. Much damage by wind and rain because latches not allowed during war. Simple turn buckle on outer trim will secure door while DU is vacant. Reg. III	31	5, 6
Steel Sash: Where used, provide precast concrete surrounded which will eliminate wood moldings, give each coat of rust-inhabitive paint in addition to shop coat and before finish coat. Good hardware is essential including bronze pins in hinges. Reg. IV	33	3
Windows and Doors: Windows double hung with weather-stripping type of balance. These are better than slips but still a nuisance as they need adjusting of tension for every change in weather. Half screens don't slide well, are flimsy and break apart at corners. 1P. Perm. Va. Specialist	198	2
Windows: Spring clips to hold up windows should be definitely prohibited. 8P. Perm. Reg. II & III, Specialist	19-190 (letter)	5
Entrance Doors: Spring metal weatherstripping, not fitted well or has shrunk. Serious complaints Maintenance man wants storm doors or vestibules. 1P. Perm. Conn. Specialist	130	3
A convex ridge to catch water condensation on steel sill worked better than a concave ridge. 1P. Perm. Conn. Specialist	1	30
Doors: From stairhalls to roof-provide with hinges and locks to keep them from blowing off or children getting out Reg. II	21	17
Windows: Storm sash desirable, especially during war while it is impossible to weather strip properly. Reg. III	31	4

DOORS AND WINDOWS	Source	Page
Exterior Doors: Universal complaints with manager, maintenance men, tenants. (1) Air and rain leakage. No weather strips on jambs and heads, door shrinkage. Also leakage around glass panels, not set in putty; also (reported) around bottom wood panel. (Weather strips being installed at tenants' expense). All reported as worst at back doors; so apparently the wide canopies at front, which lacking at back, help. 1P. Perm. Md. Specialist	13F	3
Combination Storm and Screen Door: Should be given consideration. Eliminates drafts and heating costs. Management does not have to remove and install every year. Design 1 3/8" thick min. Space of 4" for milk bottles between exterior and combination door. Use hardware strong enough to prevent wind damage. Hang on 3 hinges with removable pins. Use chain with spring at each end to prevent wind damage — effective and inexpensive. Provide substantial spring closing device and latching device. Reg. II	21	16, 17
Condensation: Bad on steel sash, especially in winter, with frosted windows. Probably one reason is that windows start too far from ceiling and top part does not open. 1P. Perm. N.Y. Specialist	51	16, 17
Windows Steel Sash: "Usual" complaint of leakage and condensation, ruined curtains. Sash here have projecting wood stools "possibly better arrangement than steel sub-casings: less wall discoloration by water resulting from condensation." 1P. Perm. Pa. Specialist	13G	3
Scuttle to Attic: Door should be fastened, with hooks and eyes or otherwise. One tenant reported a draft had lifted door and dropped it through opening. 1P. Perm. Md. Specialist	13F	5
Exterior Doors: Leakage: Not weather stripped. Much leakage and amateur weather stripping. 1P. Perm. Pa. Specialist	13H	4
Paint: Exterior doors painted cream color, generally look filthy - hand marks, dog's paws, etc. Suggested that no light color be used for these. 1P. Perm. Pa. Specialist	13H	4
Screen and Storm Door Hardware: Managers object to springs and flimsy latches. Considerable glass breakage, and doors seen flying open and shut. 1P. Perm. Pa. Specialist	13H	4

DOORS AND WINDOWS

	Source	Page
Windows: Rippled glass takes less maintenance, should be used where it would often get dirty. Shutters - a saving on heat costs, diminish street noises, keep out glaring sun and heat in hot climates. Curtain rods should be designed so that curtains hang adjacent to, rather than over windows. Double window would pay for itself in years, reduce heat loss by 50%. Slanting window sill, urged to prevent milk storage, unmoored window boxes, etc. are still not common. Specialist		
Space between rear door and screen door should be widened to allow depositing of milk bottles. This space used regularly for deliveries and should be 4" instead of 3".	14	
Space between rear door and screen door should be widened from 3" to 4" to allow depositing of milk bottles. Delivery boys put packages in this space. Soft bread o.k. but squeezing milk bottles tears doors off hinges, causing repair bills. Head stiles on combination screen and storm doors too light. If glass or screen panel smaller or placed lower in doors, or door contained less wood at bottom or center, or was more substantial at top, many repairs should be avoided. 2P. Perm. N. Y. Mgt. Superv.	14	
Corroborates above. Says, however, that the combination storm and screen door helps minimize drafts, and cuts down maintenance costs. Reg. II	14	
Hardware: Heavy spring with rubber ratchet would be better than existing check stops for screen doors. Reg. II	14	
Front door hardware which requires key to lock results in heavy breakage and replacement, due to door slamming with lock protruding. 4P. Perm. N. J. Mgt. Superv.	14	
Special rather than standard hardware results in difficulty in repair and replacement. 2P. Perm. N. Y. Mgt. Superv.	14	

DOORS & WINDOWS	Source	Page
There were complaints concerning condensation on fixed windows. Interviewers	15	15
Preference for wood sash over steel sash was shown by the results of a vote among representatives of housing authorities as follows: Would use wood sash on future projects — 20 authorities. Would use steel sash on future projects — 3 authorities. Reg. II	5	17, 18
Front door should be weatherstripped 1P. Perm. Conn. Specialist	1	30
Condensation: Pronounced in masonry construction and with steel sash. Critical problem - no solution. Reg. II	2	2
Combination storm and screen door helps minimize drafts and cuts down maintenance. Reg. II		14
Combination storm and screen doors are more durable than regular screen doors and save both the labor of changing doors and the problem of storing door not in use. 1P. Perm. Pa. Mgt. Superv.	3A	2
Windows: Jiffy springs unsatisfactory. 1P. Perm. Pa. Mgt. Superv.	3A	2
Storm Sash: Combination screen and storm doors liked. Recommend 4" space between doors for milk bottles deliveries. Storm sash and weather stripping needed in cold climates. Reg. II	2	11
Doors, sash, hardware; Should be standard for easy replacement. Light steel sash rusts out, causes condensation and heat loss. Better grade hardware is good economy in maintenance. "Jiffy springs" unsatisfactory. Weather stripping should be of substantial weight. Cheap check stops for screen doors are constant problem; heavy spring and rubber ratchet recommended. Reg. II	2	15
Window Frames: Metal now generally used; cheaper, more weather tight. Baked on enamel takes less maintenance than paint. Aluminum would pay for itself in maintenance saving. Casements give better ultra-violet ray, more heat loss.	18	14

DOORS AND WINDOWS

	Source	Page
Windows: Spring steel friction device unsatisfactory - either loose, or (if tight), difficult to operate. 1P. Dem. S.C. Specialist	13A	3
Front and rear door on certain units have no drip at sill and no overhead protection - consequently rain drives in on floor. Tenants have to protect carpets during rain. Door should be weather-stripped. 1P. Dem. Ill Mgr.	119	
Doors and Windows: Full length window screens, so far O.K. Adequate catch for screen door should be provided to keep them in condition. 1P. Dem. Ohio, Mgt. Superv.	125	4
Window casings leak at base during heavy rain. Spring window balances haven't worked. 1P. Dem. Ill. Mgr.	119	
Canopy at porch should be constructed so that supports don't restrict moving of screen doors. 1P. Dem. Ill. Mgr.	119	

CONDENSATION

	Source	Page
Condensation on Walls & Windows: Objectionable only in those projects which have walls plastered direct and where steel windows have been used. Condition much alleviated (in one case) by vent from kitchen to roof. Condition would be solved if an exhaust fan and vent were placed in each kitchen where gas is used for cooking. Conditions like this may be due to excessive use of gas appliances, but they also occur on projects with central heating. Reg. III	31	1
Condensation: Occurs when gas oven is used to heat dwelling unit. "Practice should be stopped by tenant education, cooperative buying of fuel, or the assumption by Management of responsibility for distribution of fuel. In the case of central plant heating frequent maintenance inspection of radiator orifices if required to see that valves are not tampered with (causing an unequal distribution of heat). Normal condensation has little chance to dissipate when laundry, cooking, etc. go on in kitchen. To reduce condensation, ventilate by fans to outside or vents to roof. Problem needs study. Reg. III	30	2,3
Condensation a problem in several projects. Some tenants bored holes in doors to provide ventilation. Reg. IV	38	1
Condensation: Bad, due to insufficient under-roof ventilation and inadequate roof insulation; condensation bad also under windows because storm sash were not provided. 1P. Perm. Minn. Mgr.	118	

CONDENSATION

	Source	Page
Condensation: No condensation trouble in this climate. 1P. Trailer, Wash. Mgr.	116	2
Condensation: None. 1P. Trailer, Miss. Mgt. Superv.	113	

HARDWARE

	Source	Page
Hardware in general should be of higher quality. Maintenance costs are excessive because of cheap material. Region II	21	16
Poor quality makes endless maintenance problems. 8P. Perm. Reg. II & III Specialist.	19-19G letter	5
Latch-lock on the "Storm door". Type of hardware used has given some trouble with kids locking themselves in by accident. 1P. Perm. Va. Specialist	19E	2

STAIRS

	Source	Page
Entrance Stairs: Wood: open under. Asbestos skirting covering wider part (as at Havre-de-Grace project), "better looking - eliminates dirt and paper catcher". "Some asbestos breakage, but not much". Concrete sidewalk or path extends under a good detail - would be better if concrete had been raised a few inches above ground. 1P. Perm. Md. Specialist	13F	5
Fire Hazards: Frame construction (including stairs) is questionable. Stair soffits either open or covered with plywood panels. Soffits are over closets, therefore dangerous - especially over tool closets which are entered from outside and hold much of electric equipment. Escape made difficult by attached screens. 1P. Perm. N. Y. Specialist	51	19
Fire Hazards: In all future projects cement plaster on wire lath should be required under all stairs and over all tool rooms. 1P. Perm. N. Y. Specialist	51	19
Steps: Set on edge of foundations, supported on a lip in foundation wall, resting on fill at outer edge. Done to allow variation in grade settlement. Result is steps walk away from building, sometimes leaving wide crack. Difficult repair work necessitates. 1P. Perm. N. Y. Specialist	51	18

CEILINGS

	Source	Page
Ceilings: Sand finished - many fell due to insufficient keying on type of board lath used. 1P. Perm. N. J. Specialist	19D	3
Plaster: Cracks mostly where plaster covered wood beams; also some shrinkage cracks. 1P. Perm. Pa. Specialist	19B	3

PARTITIONS

	Source	Page
Plumbing: Partitions containing water and waste lines should be so constructed that they do not become a stack for movement of cold air.	14	
The interior partitions have been constructed of 32" plaster boards on studs. All minor settlements of buildings have developed a shifting of plaster board with resulting cracks in the plaster, which when refinished open up again. Wood or metal lathing preferred to decrease maintenance cost and to minise sound transmission. Plaster board now acts as a resonator. 1P. Perm. N. J. Mgt. Superv.	137	10

GENERAL

	Source	Page
General: Interviewers in 8-City Survey consider houses at Longcreek, Portland, Me., poorly constructed (and planned) and fire traps. 1P. Temp. Me. Interviewers	15	31
DU Construction: On the whole - good. Some details such as cracks, heaving, etc. 1P. Temp. Pa. Specialist	50	8
Mail Boxes: Of glass, broke by the dozen until post office finally refused to deliver the mail. Manage ent and maintenance had to deliver important mail and telegrams. Durable mail boxes should be installed. 1P. Temp. Mich. Mgr.	133	6

GENERAL

	Source	Page
Demountability: "Demountable" project (Charleston, S. C. 38025, and also shipyard project in Wilmington, N. C.) not appreciably easier to demount than ordinary frame house with wood or asbestos siding. Only really demountable element the exterior wall - 10' unit panel. Floors, roof ordinary construction regular masonry block foundation walls - sense of land as factor in demountability does not apply. 1P. Dem. S. C. Specialist	13A	3
Construction: Double party walls provide for splitting of row houses into individual units for removal - party walls are framed for future windows. Not all demountable features incorporated due to unavailable hardware, however, demounting should be relatively easy matter. Criticism based somewhat on comparison with buildings using critical materials. 1P. Dem. Fla. Mgr.	110	
Pest Control: Made difficult by many small openings in room surface. 1P. Dem. Ohio, Mgt. Superv.	125	

GENERAL

	Source	Page
General: 3rd choice by interviewers of preferred project in 8 city survey was Shalercrest, Pa., mainly because it was considered to have the best house structure (and gave feeling of permanence). (Tenants wanted to buy houses after the war and make own improvements.) 1P. Perm. Pa. Interviewers	15	29

SITE SELECTION

	Source	Page
Project is divided into two parts by railroad line—very bad. 1P. Trailer, Va. Tech. Rev.	7	2

SITE SELECTION

	Source	Page
Transportation: Lack of (i.e., Distance to) transportation serious at Long Creek, Portland, Me., especially to school. 1P. Temp. Me. Interviewers	15	6,7
Site Selection: Basically poor site selection practically precludes the possibility of a decent project. At this one: located at intersection of Dix Avenue (a super highway) and Sanders Avenue which is heavily travelled and along which children must walk to school; subject to industrial smokes, gasses and dirt from Ford Co's River Rouge Plant, and foul odor from Darling Rendering Plant; bounded by 2 spur line railroad tracks. Traffic is hazardous to tenants, and place is noisy and dirty, lowering tenant morale. Site is desolate and dreary. Only possible remedies are methods such as notices, warnings, policing of traffic. Riverview Hotel, located in center of project but not part of project property, was big mistake." ~~ah~~ after hours hotel. Most of the traffic to and from it occurs between 1 and 4 a.m.". Noise disturbance and much destruction through guests driving over seeded lawns. Management has no control, yet has to contend with the annoyances created by this hotel. Management suggests as partial corrections to difficulties created by poor site selections; fence off Dix Avenue; Traffic policing on ~~Sanders~~ Avenue; immediate erection of community and child care centers. 1P. Temp. Mich. Mgr.		
Near good residential section, good trolly & highway to town, food store nearby. Chain and drug store, movies in town, no resident doctors but regular visiting nurses. Service school ½ mile away (overcrowded). Parent Teachers Ass'n. overcomes discrimination vs. project children. Service employment ½ hours trolly trip away. Interesting topography and wooded area sites have been left undeveloped. 1P. Temp. Pa. Specialist	50	1,2

SITE SELECTION

	Source	Page
Tenants felt insecurity because of location near possible military objective. 1P. Dem. Cal. Interviewers	16	6
Except for the combing question site is well selected. It is 11/2mi. from Navy yard, other projects closer. Conflict of bombing safety vs. other factors: convenience, transportation, time, and costs. "A definite policy might be adopted by Washington". Shops, movie, school, nearby. 1P. Dem. S.C. Specialist	13A	5
Topography: Objection to climbing hills with small children and packages. 1P. Dem. Cal. Interviewers	15	6

SITE SELECTION

	Source	Page
Limitations of established street patterns. 1P. Perm. Conn. Specialist	1	5
Slaughter pen a nuisance. 1P. Perm. Tex. Interviewer	15	5
The central location of the project has reduced to a minimum inconveniences arising from long distance between home and work, schools, playgrounds, movies, etc. 1P. Perm. Wash. Interviewer	17	18
Transportation: Immediate transportation from school to homes desired. Tenants expected to move when children reached school age because of accidents while waiting for transportation. 1P. Perm. Pa. Interviewer	15	6,7
Site Selection: Bad, due to unpleasant immediate surroundings, City dump, oil refineries, chemical plant; excessive ground settlement. 1P Perm. Pa. Tech. Rev.	4	

SITE SELECTION

	Source	Page
Future projects should be built on slum cleared areas. Projects should not be adjacent to dumps, should not be built where there are poor subsoil conditions. (See FPHA Bulletin on "Policy Procedure of Site Selection" for the real dope) Reg. II	21	3,4
"No apparent relation to work, shopping or schools." 1P. Perm. Va. Specialist	19F	1
Far from work, poor transportation. Built along a Pa. Freight spur on one side, a city dump on the other. Always smell of soot. No shopping center; only a few stores a mile away reached by a dangerous highway with no sidewalk, which is also the only way to the school. No movie. Lousy site selection and no community facilities have been built. 1P. Perm. Pa. Specialist	19C	1
Field mice: Make trouble (1P. Perm. Va. - Spec.) 1P. Perm. Va. Specialist	19E	3
Site Selection: Excellent---"within the radius of 1 mile are to be found most of the commercial educational, and cultural facilities which Syracuse offers". Plenty of shopping right off site - some families almost never leave neighborhood. Convenient to local industries though many tenants work in other things. 1P. Perm. N.Y. Specialist	51	1

PLANNING & PROCEDURE

	Source	Page
Standards: Region VIII Management representative urges strongly that adequacy of design and material standards be carefully reviewed in the light of local climatic conditions before projects are constructed in the Gulf Coast area. Examples (a) layer windows for ventilation needed (b) special attention should be given to reaction of salt air on hardware, screens, doors, and roofs. 1P. Perm. Tex. Mgt. Superv.	100	
M & M: Personnel operating projects & the Regional office should be consulted during planning and should approve plans and space. prior to bidding. Region II Mgrs.	21	2
General City Planning: This and other Allegheny County projects are in communities whose present layout is confused and as these projects are on vacant sites somewhat remote from previous locational trends of housing, there is need for planning - not only on locality basis - also county wide, due to "inter-twining of these communities and the Metropolitan effect of Pittsburgh's size, radiating arteries, and other northern city influences. 1P. Perm. Pa. Specialist	13H	8
Site Planning: Made difficult when necessary to conform to existing street patterns. Discourages any real unity and develops rigid parallelism where streets are at right angles to each other. 1P. Perm. N.Y. Specialist	51	2
Administration: Reviewer was informed that changes were made in specifications after contract was awarded, which cheapened and harmed the job. "This is not the first time this has been told me, both under PBA & DDH....Seems very bad practice, as without consent of designer and specification writer, it becomes impossible to preserve a consistent project whose elements and details hang together. See also 13H. 1P. Perm. Pa. Specialist	13G	3
Administration: FWA made numerous changes <u>after</u> job had begun, for economy. E.g. - narrowing of path and sidewalk widths, change of materials e.g. concrete to bituminous. "when project has once been passed for cost, this over-zealousness should probably be curbed, as it leads to badly articulated projects, with unsatisfactory details, and often the first cost economy is temporary and self-defeating because the work has to be done as maintenance at greater expense due to deterioration". These changes are often made in spite of protests by the local agency in charge. 1P. Perm. Pa. Specialist	13H	4

DENSITY AND LAND COVERAGE

	Source	Page
Density: "The general appearance, as in all low-density projects, is one of lack of organization in the large view, with very pleasant close-ups of individual courts or groups. 1P. Perm. N. J. Specialist	19D	2
Gardens & Open Space: "Big vague areas" problem to management. Tenants have expressed interest in gardening. 3P. Perm. and Dem. Wash. and Cal. Specialist	20	10
Density: Low--large and wasteful center open area. 1P. Perm. Va. Specialist	19F	1
Density: Medium, but feeling of openness rather than useless waste land. 1P. Perm. Va. Specialist	19G	1
Density: "Is low -- too low. The center playfield is all out of scale, wasteful." 1P. Perm. Va. Specialist	19E	1
Density: Where density is low, economy of row house is dubious; land use is wasteful; no possibility of properly allocating tenant maintenance space. Where density drops to below 8 or 10 to the acre, use of twin... and single houses would give a better use of land with equal economy of utilities. 2P. Perm. N. Y. Specialist	19	2
Proper planning increased both density and livability previously available in that area. 1P. Perm. Conn. Specialist	1	37
Liberal use of land may be criticized as providing too much project maintained land. Spaciousness is attractive feature but can be overdone if it causes excessive maintenance. 17P. Perm. Fla. Tech. Rev.	9	1
Spaciousness - Feeling of spaciousness with low density. 1P. Perm. Pa. Tech. Rev.	4	
Spaciousness achieved in high density projects by skillful planning 2P. Perm. N.Y. and N.J. Tech. Rev.	4	
Lack of spaciousness in low density. 1P. Perm. N.Y. Tech. Rev.	4	

BUILDING PLACEMENT

	Source	Page
Playspace. Trailers placed close together, (in straight rows). No yard space for children's play. Interviewers	15	22
25 x 50' lots for standard trailer and 30 x 50' for expansible, generally adequate for standard trailers (conform to FPHA standards) but crowd expansible side to side, particularly when expansible trailers are grouped in one area. 1P. Trailer, Va. Tech. Rev.	7	2,3

BUILDING PLACEMENT

	Source	Page
General appearance: Variation in size and placement of bldgs. gives pleasing village character. 1). Tem. N. C. Mgt. Superv.	111	
Site Planning: Where it is necessary to locate a project in an industrial neighborhood careful consideration should be given to protect the project as much as possible from the inherent handicaps, such as soot, smoke, vandalism, unattractive surroudings, immoral, neighborhbods, etc. 1P. Temp. Mich. Mgt. Superv.	133	2

BUILDING PLACEMENT

	Source	Page
Structures placed much closer together than merited by land costs. Little thought appears to have been given to proportion of masses, sizes and types of buildings in relation to each other. (Appears to be approximately 20' and to end spacing of closest D.U.) 1P. Dem. Ohio, Mgt. Superv.	125	2

BUILDING PLACEMENT

	Source	Page
Avoid straight, severe, institutional affect in design of projects. Ponderous effect of large buildings in south where they are unusual meet resistance. Monotony does not have to be a part of economy. Reg. IV	33	1
Monotony: Avoided by 72 ft. spacing for rear yards and 60 ft. for front yards. 2P. Perm. N. Y. Specialist	19A	2
Use shorter buildings, not more than 4 or 6 units if one story - slightly more if 2 story. Reg. IV	33	2
General Relation to Topography: Backs of buildings below steep slope "Take a beating when it rains." Paths get so muddy from the wash they can't be walked on. 1P. Perm. Conn. Specialist	13C	4
Exposed backyards: Parallel rows with no end buildings leave backyards exposed - effect disorderly and slummy. 1P. Perm. N. C. Specialist	13D	5
Parallel rows of Bldgs. in most cases have an end unit which gives semi-enclosure to back yards, which gives orderly appearance. However, "exact parallelism is tiresome, and the plan would have gained by long-radius curves". 1P. Perm. N. C. Specialist	13E	3
General Bldg. Types: Architectural ensemble ... Small and choppy. Haver de Grace project more successful with same basic unit plans and materials; reasons - greater gradients, greater proportion of 2 family houses (less boxy); some 2 story units (good in combination with 1 story). Small scale of single houses accentuated by roofs and walls - colored differently singly rather than in groups. 1P. Perm. Md. Specialist	13F	8
Site plan general: Address system unsatisfactory as result, confusion, resulting from "birds-eye" design, short radius curves do not look like curves, but jumble of buildings. No center of interest as might be supplied by longer, or 2-story building. 1P. Perm. N. C. Specialist	13D	5

BUILDING PLACEMENT

	Source	Page
Building: Corners as little as 5' apart - no necessity for this in terms of coverage. However - "closed rectangle pattern succeeds in screening wash, garbage, trash" more effectively than any project yet visited." 1P. Perm. Pa. Specialist	13H	5,6
Backs of houses face the main circulation street, "with the usual unfortunate measures of garbage, washing, etc." Also grouped houses (2,4,6) "make it likely that this will eventually become slummy, as it doesn't represent a desirable kind of living for this locality." 1P. Perm. Pa. Specialist	13G	4
Relation of houses to grounds: First floor one or two steps above "Good practice indicates that 5 steps is an acceptable maximum".. which makes, it possible to "do some grading with the house itself rather than only with the ground - allowing fewer steps in paths - difficult with bicycles, wheeled toys, baby carriages. 1P. Perm. Pa. Specialist	13H	6
"This continual repetition of almost parallel buildings of the same height and the same material and general window spacing inevitably creates a sense of monotony.".... 1P. Perm. N. Y. Specialist	51	2
Lack of climax, parallelism, drying yards in most of the open courts parked automobiles, dark paving — all these things contribute to general dullness. A small south east portion in is much more interesting because of change in grade and angle. In the South Parts, the 8 apartments which could have been used to give variety were instead placed parallel and opposite in such a way as to increase the monotony of the building arrangement. Orientation: North south arrangement has advantage of giving almost perfect orientation to by far the greater number of living units in the project. Nearly all get ample direct sun, sometimes during day and cold westerly winds are blocked from sweeping through courts. East-west buildings should have been planned for only through apartments so that at least each apt. would get south light. 1P. Perm. N.Y. Specialist	51	3,4
Site Plan: Building 2,4 & 6 units long, well over 100' "urban planning, or planning for suburbs on outskirts of a city unsuitable for small project on outskirts of a town of 12,000". Should be mainly doubles, possible some 4 unit row. 2 Story center and 1 story ends has merit in appearance, but probably impractical in north with individual furnaces, because of back-drafts caused by higher roof and lower chimneys. (carry up chimneys or orient?) 1P. Perm. Pa. Specialist	13G	4,6

BUILDING PLACEMENT

	Source	Page
Tenants didn't like unpainted side on street, they considered brick side the dwelling front and thought this side should have faced the street. (The arrangement was so planned for about ½ the dwellings for the sake of orientation). 1P. Perm. Pa. Interviewer	52	67

BUILDING PLACEMENT

	Source	Page
Orientation: Buildings should not face front to back. Pa. Mgrs.	3A	1
Off-site neighborhood: screening project from offsite slums was attempted by the arrangement of buildings but was not very satisfactory. 1P. Perm. Conn. Specialist	1	14
100' between buildings is more than is necessary. 17P. Perm. Fla. Tech. Rev.	9	2
Monotony: Eliminated by irregular placing of buildings of various heights and lengths. 2P. Perm. Fla. Tech. Rev.	9	
Orientation of parallel dwelling rows towards prevailing breeze, makes front yards face into rear yards "where clothes washing is a business rather than a household necessity." 1P. Perm. Fla. Tech. Rev.	9	
"Fronting" of Houses: With young children, not on traffic street, but in view of "activity". Without children, on busy street. Interviewers	15	5
Orientation: For breese but avoiding strong winds. Important in hot windy climate 1P. Perm. Tex. Interviewers	15	5
Units suitable for younger people with children should be put together, according to comments of 4 tenants at Ramona Gardens. 1P. Perm. Cal. Specialist	12A	29
Protection of Project: Protection of project from disagreeable outside aspects by facing buildings inward. 2P. Perm. Pa. and N.Y. Tech. Rev.	4	
Lack of protection by allowing project to be divided by streets with off project traffic.. 3P. Perm. N. Y. and Pa. Tech. Rev.	4	
The front to back arrangement of row houses is open to question on flat ground. (When this arrangement appears desirable, very careful considerat on should be given to planning details, screening location of clothes drying. Garbage cans, etc. Ed.Note) 100' spacing more generous than necessary. 1P. Perm. Fla. Tech. Rev.	9	
"I used to think it was important to live in a free-standing house	52	75

STREETS

	Source	Page
Streets: vehicular driveways - 16' min. Principal streets - 30' min. with parking bays sufficient for tenants and visitors. Reg. II	21	6
Road widths, service drives: 9' service drives "are unacceptable". "Delivery wagons must unload, others must pass them. Hence, sidewalks or planted areas are driven on. Also true of project 13E but fewer cars, so results less serious." 2P. Perm. N. C. Specialist	13E	3
Coal trucks have to drive over lawns, ruining them. 4P. Perm. Mgt. Superv.	14	
Street layout - Difficult for anyone not familiar with layout to understand section numbering. 1P. Perm. Md. Interviewers	15	6
Roads: Should be acceptable for municipal maintenance. Through traffic streets should be minimized but circulation for delivery from adjacent streets, provided for. Radburn Scheme commended for study. Reg. II	2	4
Traffic entering development from too many points not considered desirable. 17P. Perm. Fla. Tech. Rev.	9	
Street Numbering: Numbers should be clearly indicated on front and back doors. Pa. Mgrs.	3A	1
Streets and drives - dedicated streets too wide and given too much importance also attract off project traffic: vehicular circulation of project itself, good. Service drives and general circulation, good. 3P. Perm. N. Y., 1P. Perm. N. J., 2P. Pa. Tech. Rev.	4	
Interior Roads - 14' width proved too wide for restricted use, too narrow for normal use. 1P. Perm. Conn. Specialist	1	25
Streets - Informal arrangement liked. 1P. Perm. Ala. Tech. Interviewers	15	5
Roads: Should not have sharp curves around buildings which cut off vision. Pa. Mgrs.		

STREETS

	Source	Page
One street in project is at the end of a very heavily travelled road. This road also used to bypass railroad station on road skirting project, and just beyond it cars are held up at station. Streets on long radius reverse curves more interesting than straight. (Both types in project). 1P. Perm. Md. Specialist	13F	5,6
Service drives should be 2-car width even though one-way, to expedite delivery service. Give more consideration to development of dead-end service drives or cul-de-sacs for group or row houses. Reg. II	14	
Roads should be wide enough to allow for the passage of standing vehicles. (i.e.) no more 10' one way drives. Reg. II	5	1
Loop plan disliked because "so little individual yard space" "set houses squarely on lot for more". 1P. Perm. Ala. Interviewers	15	6
Streets: Access drives to individual houses not needed where coal is not used. Region IV	33	2
Drives: Tenant yards get all chewed up by cars driving across them because service drive is too long and narrow (10'). 1P. Perm. Conn. Specialist	19C	2
Roads: "A series of cul-de-sacs and courts off two main circulating drives. The road system is inconvenient for intercommunication, necessitating going out onto Black Horse Pike in order to get from one part of the project to the other". 1P. Perm. N. J. Specialist	19D	1
Roads: Because houses in many cases were set too far from service road to permit oil to be pumped in, management had to build a whole new loop service road in large central area for this purpose. 1P. Perm. N. J. Specialist	19D	2
Streets: Should be lighted. 1P. Perm. Cal. Specialist	20	17

STREETS

	Source	Page
Streets: Barriers or curbs surrounding parks and trailers needed to control cars. Warnings not sufficient. 1P. Trailer, Wash. Mgr.	116	1
FSA policy requires all trailer lots on the street directly. This requires an unwieldy amount of paved roads. There are several dead-end roads without proper turn around. 1P. Trailer Va. Tech. Rev.	7	2

STREETS

	Source	Page
Drives: Well studied for easy access and parking is adequate. 1P. Temp. N.C. Mgt. Superv.	111	
Roads: Should be paved. Sand, clay not satisfactory and is either dusty or muddy. Lack of service drives great handicap for deliveries. 1P. Temp. Ga. Mgr.	112	
Streets so complicated that tenants themselves cannot find street numbers. 1P. Temp. Kan. Interviewers	15	6
Service Drives: None were provided. They are badly needed. Deliveries of all kinds, coal, ice, milk, furniture, etc. are very difficult. Coal either has to be wheeled in at extra expense or trucks drive across lawns. Garbage collection also difficult. Manager suggests service drives be put in at certain particularly desperate points. 1P. Temp. Mich. Mgr.	133	3,4,5
Walks and Drives: Arrangement only fair. (Main street forms a loop with DU on both sides. Walks go from this street through rear yards to DU. Walks to from DU fronts to walk which goes all around project. There are six central parking lots.). 1P. Temp. Wis. Mgr.	122	
Fast traffic discouraged by use of super block. Scheme with cul-de-sac and loop service streets, used in conjunction with a main traffic loop. 1P. Temp. Wash. Tech. Rev.	128	
Driveway should be provided for access to coal bin as companies have neither time for manpower for carrying of coal to bins. 2P. Temp. Mgt. Superv.	14	

STREETS

	Source	Page
No rear access to units necessitates front door delivery of coal, ice, furniture, etc. Greatest bad situation because of labor shortage, and maintenance problem due to damage to lawns and flagstone walks. 1P. Dem. Mgt. Superv.	14	
No street access to rear of units so that deliveries of coal to boxes must be made by hand. Tenants are unable to park cars off main streets which are too narrow. Also inconvenient for tenants to work on their cars. 1P. Dem. Ill. Tech. Rev.	119	

WALKS

	Source	Page
Paths: stepping stones for paths poor, unless other provision is made for childrens' wheel toys. If paths are not of proper sort for these toys, nothing will keep kids off streets. Center paths should be wide enough. 8P. Perm. Region II, Specialist	19(Letter) 19G	2
Roads and walks: Good. Sidewalks needed at rear. 1P. Perm. Ga. Mgr.	107	
Walks: Raised above road and extending to curb wherever there is a heavy traffic of school children. Region II	21	6
Walks: Large courts with paths down middle would have been improved by paths circling in front of houses, both tenants and management felt. 1P. Perm. Cal. Specialist	20	17
Paths: Should be provided where people cut corners, also true 13E, especially where interior paths approach streets, they should meet them. 2P. Perm. N.C. Specialist	13D 13E	6 3
Walks: Should follow most direct line of travel. Should be wide enough and enough of them. Intersections should be circular rather than square. All shortcomings spell ruin for lawns and shrubbery. Region II	21	7
Paths: Communicating paths are 4' wide. Children on bicycles passing people go out over lawn. 5' wide would be better if it can be afforded - also true 13E. Here it is remarked that it is "a close question as to whether 4'6" or 5' would save enough maintenance to warrant extra cost".	13D 13E	6 4

WALKS

	Source	Page
Sidewalks are too narrow for baby carriages and garbage trucks. 2P. Perm. N.Y. Mgt. Superv.	14	
Sidewalks should be provided on both sides of street, especially where roads are narrow. 4P. Perm. N.J. Mgt. Superv.	14	
Provide walks for all drying areas. Region II		
Paths: "Not wide enough" (3'). 1P. Perm. Pa. Specialist	13H	6
Sidewalks: None in project. Inconvenient - probably dangerous - especially since there are no developed playgrounds. Recommendation: that playground situation be remedied. Recommendation in standard: Sidewalks on at least one side of all roads, except possibly relatively short service road. 1P. Perm. Md. Tech. Rev.	13F	6
Paths: None into backyards so "no natural tendency to get into this large space. Therefore gardening, tenant maintenance not so likely, even policing of cleanliness may suffer." 1P. Perm. Pa. Specialist	13G	4
Walks: Often too near top edge of terraces, dangerous and requires much fencing, costly to maintain. 1P. Perm. Minn. Mgr.	11S	
Sidewalks: Outer edge 1'6" from curb - leaving a narrow strip which cannot be satisfactorily planted and maintained. Recommendation: That sidewalk either abut curb or be at least 4' from it so that space can be planted. 1P. Perm. Pa. Specialist	13H	6
Paths & Walks: Not good walk layout - recommended: better path layout protection of grass by planting and cobble stones. 4P. Perm. N.Y. Tech. Rev.	4	

WALKS

	Source	Page
Small entrance slabs desired. 1P. Perm. N.Y. Tech. Rev.	4	
Good path layout. 3P. Perm. Pa. Tech. Rev.	4	
Some paths indirect and narrow. 4P. Perm. Pa., N.J. Tech. Rev.	4	
Some path intersection bad. 2P. Perm. N.Y., N.J. Tech. Rev.	4	
Service sidewalks should be 2' minimum width. On all corner points, sidewalks should be provided with semi-circular walks instead of the usual square corners. Along main project streets, sidewalks should be a minimum of 5' in width. Where steps are necessary in project walks, these steps should be bordered on either side by a sloping concrete strip about 24" wide placed with its surface level with the external junction of the risers and treads. This will provide a runway for bicycles, roller skates, perambulators, and children's foot traffic. Ramps should be substituted for steps throughout the grounds of the project wherever possible. Reg. II	5	2, 3
Curved or rounded walk intersections needed to save lawn wear. Walks connecting house with rear yard not needed so much in this climate. 17P. Perm. Fla. Tech. Rev.	9	
Entrances: It would be advantageous to widen the sidewalk in front of the main entrance steps of a dwelling to provide for benches on either side as well as for parking of perambulators. Region II	5	2

WALKS

	Source	Page
When not originally installed on both sides, grass borders are ruined. 3' width is too narrow, 5' should be minimum. Actual circulation should be anticipated - otherwise pedestrians will ignore walks for more direct routes and will ruin planting. Backyard service walks at end of lot worked well. Walks from back doors to service walk should be built by project. 1P. Perm. Comm. Specialist	1	25
Walks: Should be wide enough for intended use (3' to 5' or more). 1P. Perm. Fla. Tech. Rev.	9	
No rear service walks. Not necessary in this climate. 1P. Perm. Fla. Tech. Rev.	9	
More sidewalks are needed on through roads and project drives. Should be on separate level if possible. Reason: Protection of children. Ramps preferable to steps and if they can't replace them they should supplement them for use of baby carriages and bicycles. Pa. Mgrs.	3A	
Walks serving as main arteries should be continued to street instead of stopping at sidewalk. 1P. Perm. Fla. Tech. Rev.	9	
Sidewalks should be placed on both sides of the street, especially when streets are narrow. Reg. I, II, IV, VIII	14	
Walks: 45° or curved walk intersections save wear on grass. 17P. Perm. Fla. Tech. Rev.	9	2
Could not use front doors because approaches not developed. 1P. Temp. Me. Interviewers	15	7
Walks needed front and rear of houses <u>above</u> (higher than) lawns and drives. Adjacent drainage imperative. Walks should be wide enough (not 20" or 2') and follow natural circulation. Region II	2	3

WALKS

	Source	Page
Paths: 3' wide - not enough for bicycles, baby carriages, 2 people cannot walk side by side. 1P. Dem. S.C. Specialist	13A	6

WALKS

	Source	Page
Walks: A manager of a temporary Texas project states that sidewalks are needed at both front and rear. 1P. Temp. Tex. Mgr.	104	
Walks: No walks provided to tenant entrances. Manager points out that this may have been thus planned to provide a private sitting space for DU fronts. It does not however accomplish this aim. Tenants invariably sit at service entrance. A garden entrance is "totally ridiculous" in a noisy, smelly, smoky area. 1P. Temp. Mich. Mgr.	133	3,4
Paths: Insufficient. Cross cuts through project. 1P. Temp. Pa. Specialist	50	4
Sidewalks: Generally good. One walk badly failed. Widths are good. (5 ft.). Access walks to units of 2' 6" better than later project walks of only 2' 0". 1P. Temp. Pa. Specialist	50	5
Sidewalks should be located in front, not rear, of buildings (1) Save concrete: (2) protect lawns. Tenants drive cars over lawns to front of unit. 1P. Temp. Fla. Mgr. Superv.	14	

WALKS

	Source	Page
Boardwalks: Too narrow. 1P. Trailer, Miss. Mgt. Superv.	113	
There are no sidewalks at this project and the circulation problem is further complicated by the drainage ditches which paralleled the road. Buckwalks cross ditch to trailers. 1P. Trailer, Va., Tech. Rev.	7	2

PARKING

	Source	Page
Parking Space: Size adequate but should be paved. 1P. Temp. Pa. Mgr.	112	
Parking Lots: Poorly planned. Small central parking lots are spotted about the project but at one end there are practically none and in any case they are distant from DU and not in any way proportioned to the size of the project. The situation has forced tenants to park on lawns near their homes. Cars parked on the street are frequently damaged by guests from the after hours hotel left on the project. Curbing and a large parking lot should be installed. 1P. Temp. Mich. Mgr.	133	3,4,5
Motor Access and Parking: Inadequate especially with out street lighting. (coal deliveries difficult). (DU are arranged on walks with no direct street access. Coal boxes are by houses.) Service drives are recommended. Tenant walks inadequate for refuse collections. 1P. Temp. Mich. Mgt. Superv.	133	1
Parking: Well distributed, adequate, off street parking bays. Considerable policing necessary to prevent street parking in front of houses. 1P. Temp. Pa. Specialist.	50	3

PARKING

	Source	Page
No access to units. Parking in indented areas off streets which are too narrow. 1P. Dem. Fla. Mgt. Superv.	110	
Insufficient off-street parking - entirely lacking around community center. 1P. Dem. S.C. Specialist	13A	6
Motor access and parking: Fair. 1P. Dem. Ala. Mgt. Superv.	109	
Objection to parking at bottom of hill and walking to home. 1P. Dem. Cal. Interviewers	15	6
Lack of parking lot bumpers and lack of finders on roads and parking bays results in areas that, although theoretically landscaped, are neither lawn or road. 1P. Dem. Ohio, Mgt. Superv.	125	2

PARKING

	Source	Page
Centralized parking disliked and ignored by tenants. They use curb, lawn. 1P. Perm. Fla. Tech. Rev.	9	2
Parking in sight preferred-for fear of damage. Interviewers	15	5
People park on narrow (14') interior roads making congestion. Non tenants use project parking spaces. Remedied by system of identification cards. 1P. Perm. Conn. Specialist	1	25
Centralized parking not popular with tenants. 1P. Perm. Fla. Tech. Rev.	9	
All parking areas should be enclosed with curbs at least 6" high. Adequate drainage should be carefully studied as this factor has caused great trouble in existing projects. Region II	5	3
Not confined to assigned space due to lack of barriers or curbs. 2P. Perm. N.Y. & Ill. Tech. Rev.	4	
Parking adequate. 1P. Perm. Pa. Tech. Rev.	4	
Parking areas blocked by deposits of snow plow. 2P. Perm. N.Y. and N.J. Tech. Rev.	4	
Parking areas appear to be sub-minimum - ok for war period only. 1P. Pa. Perm. Tech. Rev.		
Parking: Sufficient with present gasoline restrictions but before this there were applications for 52 more parking spaces than there was room for. Play space had to be used for this purpose. Cul-de-sac parking not objected to by tenants but ruins architectural effects for which cul-de-sacs were planned. 1P. Perm. N.Y. Specialist	51	7

PARKING

	Source	Page
Parking: In bays, off streets, satisfactory. 1P. Perm. Va. Specialist	19E	1
Wider dedicated streets with on street parking should be investigated. Here it is a cost question. Site plans should show location of future garages, and if possible deed restrictions be incorporated in the eventual disposal of the projects which will restrict the location of garages to the position shown. 8P. Perm. Reg.II and III, Specialist	19-19G (letter)	2
Parking: Tenants want to rent garages even at $2.00 per month-probably in part due to car shortage which makes them want to take better care of their cars. 2P. Perm. N.Y. Specialist	19	2
Garages: Considerable demand for them. Auto ownership, 65%. Tenants willing to pay $3,000 per month. 1P. Perm. Va. Specialist	19G	1
Garages: There is a demand for them. 1P. Perm. Pa. Specialist	19B	1
Access on Parking: Inconvenient when houses are grouped around pedestrian cul-de-sac and served only by narrow service drives with no turn around. Tenants drive in and park blocking it up. 2P. Perm. N.Y. Specialist	19	1,2
Enclosed Garages: Considerable sentiment for them. 1P. Perm. N. Y. Specialist	19A	2
Parking: Inadequate-both amount and distance to houses, parking on road, sidewalks, lawns, etc. No project (of 10 assigned to this reviewer) in 7 states had adequate parking. "FWA simply must enunciate a standard", reviewer suggests "except for Negro projects where not many can afford a car minimum provision for 1 car per house; plus adequate space around community house. 1P. Perm. S.C. Specialist	13B	4
Parking: Too distant in some cases over 300'. People refuse to walk this far, and as one way service drives are only 9 ft. wide parking spills over into lawns and yards. 1P. Perm. N.C. Specialist	13D	6

PARKING

	Source	Page
Parking: Maximum distance 300' generally satisfactory and the few excessively distant could be rented to non-car owners (Negro project elsewhere noted that tenants and guests have fewer cars than at white project in same city. 1P. Perm. N.C. Specialist	13E	3
Parking: Extreme objection to community parking areas at Aliso Village, Los Angeles, Calif. (due to overcrowding). 1P. Perm. Calif. Interviewers	15	31
Insufficient off-street parking- inadequate road widths for street parking. 1P. Perm. Conn. Specialist	13C	4
Street access to each DU is preferable but not necessary with electric cooking and gas heating. Roads, drives, parking space are adequate except parking could be more conveniently located - more small areas better than the few large ones. (Parking - 60% at an average of 120' from each DU. off street. Concrete surface roads parking with roll curbs.) 1P. Perm. Wash. Mgt. Superv.	114	
Large central parking lots, no good. Provide small parking bays with curbs adjacent to streets and drives for apartment buildings, and individual parking platform for row houses. Region II	21	8
Parking: Universal desire for car shelter. (Partly due to salt air and fog) also parts, or the whole are stolen. Also garages are useful for storage and play spaces in bad weather. "Parking bays are better than parking along narrow streets, and people don't mind walking up to about 200' particularly if they can see their car from their home." Very large percentage of car ownership in western war towns. 1P. Perm. Wash. and Calif. Specialist	20	16
Parking: No off-street parking. All roads but one 34'. This one - heavily gravelled is 24' - parking on both sides leaves one lane, making for congestion and confusion in busy hours. 1P. Perm. Md. Specialist	13F	6
Parking and Garages: Over 90% have cars; many want garages, which "probably cannot be afforded under present budget". Suggestion of future planning; layout of non-urban projects in north so that garages can be added later - possibly actually included in layout - in or near a large percentage of houses. 2P. Perm. Pa. Specialist	13G	5

PARKING

	Source	Page
50% of tenants own cars but project drives are the only parking place and the 20' macadam (bituminous) roads have drainage ditches on either side. Therefore parking cannot be on the shoulder. 1P. Trailer Va. Tech. Rev.	7	2

SMALL PLAYGROUNDS

	Source	Page
Recreation Areas: No recreation areas provided. 1P. Dem. Fla. Mgt. Superv.	110	
Childrens' Play Space: Not adequate in relation to size of the Community Bldg. and adjacent fenced area. 1P. Dem. Ala. Mgt. Superv.	109	
Recreation Areas: Suitably placed and when completely developed will be satisfactory. 1P. Dem. Fla. Mgt. Superv.	109	
Mostly unused: But tenants have built at their own expense, small enclosed playgrounds bordering their homes. (This suggests that the playgrounds provided were too distant from dwellings for adequate parental supervision. Though some of these playgrounds are not more than 20-30 ft. from the nearest D.U. direct, the path route is much longer, and the distance for most of the dwellings is considerably greater). 1P. Dem. Ohio. Mgt. Superv.	125	2

SMALL PLAYGROUNDS

	Source	Page
Small Children's Play Space: Needed - an enclosed playroom near laundry to take care of small children while mothers wash. 1P. Trailer, Wash. Mgr.	116	1

SMALL PLAYGROUNDS

	Source	Page
Play area? Lack of provision for children's play noted as unsatisfactory by interviewers in 8 City Survey at Long Creek Terrace, Portland, Me. 1P. Temp. Me. Interviewers	15	31
Children's play areas: Entirely inadequate outdoor facilities and seldom used indoors. No community bldg. and in D.U. - Living - kitchen - dining. 240 sq. ft. 1P. Temp. Wash. Mgt. Superv.	115	
Children's play areas: Indoor space provided on adjacent project. Outdoor space undeveloped so that yards crowded and dirty are used for play and sitting. Sand-clay unsatisfactory - should be paved. 1P. Temp. Ga. Mgr.	112	
Playgrounds: Equipment not good, poison ivy not eradicated, one of these playgrounds subject to flooding. No shade, too near dwellings. One other, inadequate in size. No spray pool, no sand boxes. One playground supervised in summer. Little children prefer playing on roads. Some tenants prefer that children play in yards. Tenants have in some cases fenced children in where steep banks form a danger. 1P. Temp. Pa. Specialist	50	7,8
Playgrounds: No outdoor play space or equipment for small children but there should be. 1P. Temp. Wis. Mgr.	122	
Outdoor Play: Enclosed space within supervisory range of mother, recommended. 1P. Temp. Mich. Mgt. Superv.	133	1

SMALL PLAYGROUNDS

	Source	Page
Playgrounds-Small: For small children must be within sight of the mothers. Everyone will be happier if they are too small to be interesting to the older more destructive children. Eliminate sand boxes but provide earth digging areas. Reg. II	21	8
Spray Pools: For traps on drains, use sump and baffle type to prevent dirt from entering and clogging the drains. Sprinkler heads mounted on a smooth pedastal 7' high, should be the plain perforated oval type. Valves controlling water supply line to pool, should be located in crawl space in basement of the building from which the supply line emanates. Reg. II	21	9
Children's Outdoor Play: "In a project of this size there probably should not be more than two or three out side play spaces. Due to the large number and wide distribution of them at this project, they are largely neglected by the children who, to a large extent, seem to prefer the large, nearby public playgrounds". 1P. Perm. Minn. Mgr.	118	
Play Areas: For small children. Paved with blacktop high galvanized iron wire fences. Hot ugly spots. Inhuman to force children into such a play area. "I consider this one of the most important lessons to be learned from this project". 1P. Perm. N.Y. Specialist	51	5
Favorite play area for slightly older children is wide and tree-shaded lawn area between apartment and the Monroe St. surface.....Naturally the grass has suffered in these particularly used areas, but not sufficiently to destroy the general sense of greenness and homelike pleasantness. 1P. Perm. N.Y. Specialist	51	6
Provision should be made for more play areas, to avoid children's playing in parking and drying areas, and the necessity for converting parking areas to this purpose. A few large areas preferred to many small ones, because of noise. Provide both paved and grass areas. Clay bad; children dig, creating a maintenance problem. Reg. II	14	

SMALL PLAYGROUNDS

	Source	Page
Crowding of play equipment and spray pool is poor - walled sand boxes at intersection of rear walks interfere with circulation. 3P. Perm. Fla. Tech. Rev.	9	
Play should be confined to play areas conveniently located and adequate in size. Areas here according to standard but inadequate and sitting areas not designed as such are being used. 5P. Perm. Reg. II Tech. Rev.	4	
In Ramona Gardens 1/3 of the children make no use of play spaces and equipment provided.(What proportion of children are too young to play anywhere except in own yard?) 1P. Perm. Calif. Specialist	12A	22
Community Play: Roller skating area, wading pool and large "court game" area provided. Good. 1P. Perm. Va. Specialist	19G	2
Child Play: Kids will play on paved areas (Kiddie cars, bicycles, roller skates, etc.) Where not enough is provided they go into streets. They will not play in back-yards that are encumbered by wash hanging on the line, by silly shrubs on that are undefined - the latter because they quite naturally don't want to be bawled out by their neighbors. On the public streets, they are safe from trespassing. 1P. Perm. Va. Specialist	19F	2
Outdoor play space-small children: Project manager of low-rent North Carolina project urges several small children's play areas throughout the project, rather than forcing small children to use the large main playgrounds. 1P. Perm. N. C. Mgr.	108	
Play areas: Good. Both indoor and out. 1P. Perm. Ga. Mgr.	107	
Play: Paved play areas should be designed from start to keep children from being every where and wakening night shift day sleepers. 3P. Perm. Dem. Wash. Cal. Specialist	20	17
Playground: Smack up against community and management bldg. resulting in broken windows, etc. 1P. Perm. Conn. Specialist	13c	4
Children's outdoor play space: Adequate 1P. Perm. Wash. Mgt. Superv.	114	

SMALL PLAYGROUNDS

	Source	Page
Many small, scattered playgrounds, though costly and difficult to maintain are necessary, for small children who must be parent supervised from indoors. 1,500 - 2,500 sq. ft. for small folks play lots (sand piles and other equipment) recommended for the children of 30-60 families. Wading pools sometimes spread foot infections, are now being replaced by spray pools that drain away. Sand piles also spread disease often are being covered up or eliminated but the fact remains that children like to dig. Specialist	18	16
Sand boxes universally condemned as unsanitary. Scattering of play equipment through projects is unsatisfactory. Also placing too close to residences. Should not be crowded. Kids like to dig in dirt. Backless benches are no good. 1P. Perm. Fla. Tech. Rev.	9	
Play areas too close to buildings. 1P. Perm. Pa. Tech. Rev.	4	
Children: "Missed place to leave infant unsupervised in open air, such as balcony, porch or yard 13%. 1P. Perm. Wash. Interviewer	17	45
Small playground close to DU needed (not tot lots) because larger children and adults monopolize large playground. Also desire for parental supervision. Should accommodate 8 or 10 children. 1P. Perm. Conn. Specialist	1	26
Tot-lot sand boxes get filthy and cluttered with trash. 1P. Perm. Conn. Specialist	1	27
Grassed play areas look unsightly, should have a more durable surface. 2P. Perm. Fla. Tech. Rev.	9	
Spray pool - 50' x 30' - fine for skating. 4 sprays in corners too gentle to be exciting - no provision for wading. 1P. Perm. Conn. Specialist	1	27
Sandboxes are or will be abolished as unsanitary. Scattering of play equipment detracts from project, is difficult to maintain. Crowding of play equipment and spray is also poor. 1P. Perm. Fla. Tech. Rev.	9	2
Value of many small paved play courts is questionable considering difficulty of keeping them in order. 2P. Perm. Fla. Tech. Rev.	9	

LARGE PLAYGROUNDS

	Source	Page
Placement of large dirt playground on site adjacent to inadequate school playground promoted good neighborhood relations. 1P. Perm. Conn. Specialist	1	26
Playgrounds, Large: One or more large playground, according to size of project, free from equipment, (see-saws, etc.) which should be placed in separate area. Playgrounds in high density projects should be fenced. Region II	21	8
Playgrounds and Sitting Areas: O.K. since additions to drainage facilities were added. 1P. Perm. Wash. Mgt. Superv.	114	
Playgrounds: Aliso Village, Los Angeles, Calif. playground facilities poor - mixing of all age groups much destructiveness among children - however also small area in relation to number of children. Investigate proximity of play areas to garbage collection station - breaking of bottles, etc. 1P. Perm. Calif. Interviewers.	15	30,31
Large playgrounds not too near residences preferred to many small ones. Reason: noise. Needed-paved and grass areas. Locate near many bedroom units rather than smaller units. Region II	2	5
All playgrounds should be located away from buildings which house mostly 1-bedroom dwelling units since these dwellings will contain older people without children and young people without children. All projects should have at least one or two large playgrounds to take care of the larger children. Such playgrounds should be free from playground equipment such as swings, Jungle Jims, etc., and such equipment should be placed in smaller playgrounds which are intended for special age groups which will utilize this equipment. Sand boxes should be eliminated. Region II	5	4
Large Existing Playground: Though included in project site, is completely fenced. Traffic bearing streets surround it on all sides. Recreation building which project built on it faces away from project. Playground contains 2 swimming pools, some unused tennis courts, small children's play equipment, and large open area for foot ball, etc. But many mothers don't like their children to play here because they feel it is monopolized by older and rougher children from off the project. Seems to belong to the general neighborhood rather than the project. 1P. Perm. N. Y. Specialist	51	6

LARGE PLAYGROUNDS

	Source Page
Playgrounds: Large and equipped for young and older ages and incorporated into plan. **1P. Temp. N. C. Mgt. Superv.**	**111**

TENANT YARDS

	Source	Page
Yards: No general landscaping done at time of review but individual tenants had started to plant lawns and flowers, put up own temporary fences. (1P. Dem., S. C. Specialist)	13A	8
Coal boxes: Outside coal boxes of flimsy construction and are high for filling easily. (1P. Dem., Ill. Tech. Rev.)	119	
Tenant Yards: Where it is difficult to allocate plots of grassed areas to tenants for their care, the result is pieces of "no mans land" for whom no one cares. (1P. Dem. Ohio, Mgt. Superv.)	125	1

TENANT YARDS

	Source	Page
Coal storage: 1½ tons of coal has proved adequate in this Region. Bin looks best close to house but is usually put next to service drive for easy delivery. Region III	31	5
Tenant Yards: House fronts reached by center path. Rear yards, (small) used for laundry drying with parking areas in between. Works excellently from service point of view. Garbage, coal delivery, laundry and parking are all concentrated. Tenant maintenance reduced to a minimum. 100% directly accessible parking space, service drives connect parking spaces and streets, a very satisfactory method. 1P. Perm. Pa. Specialist	19B	1
Tenant Yards: Living room on front. Almost no use of front entrance this time of year. 1P. Perm. Pa. Specialist	19B	2
Coal Bins: In 2 story houses coal bins is inside. "Is supposed to be emptied by climbing up rungs attached to wall and pushing it in a window whose sill is 6' high. This is impossible. So they carry coal indoors to empty it - an unforunate necessity. 1P. Perm. Pa. Specialist	13G	2
In 1 story houses coal bins at end, filled from outdoors; shovel coal out for feeding furnace inside kitchen. Inconvenient, hard to keep kitchen clean. 1P. Perm. Md. Specialist		
Coal Boxes: Most successful solution had seen on trip (5 projects). Integrally designed with house and platform rail - "Structural architectural", appearance rather than that of appendage. 1P. Perm. Pa. Specialist	13F	8
Tenant Yard: Were not divided on either front or back. Two walk arrangements were made, one with a central walk and individual walks to tenant doors, the other with walks close to buildings and a large central grass panel. The central walk gives greater feeling of immacy and related ground closely to buildings; but central grass panel has greater scale, seems to increase distance between buildings. Good place to play ball. Disadvantage however is lack of enclosed tenant yard; no space for small children to be kept without watching or for laundry drying, gardening etc. 1P. Perm. N. Y. Specialist	51	4,5
Rear yards facing the street would not be objectionable if they could be properly maintained. 17P. Perm. Fla. Tech. Rev.	9	2
Fronts of units facing backs of others is not good. 17P. Perm. Fla. Tech. Rev.	9	

TENANT YARDS

	Source	Page
Back yards: The state of confusion might be remedied by (1) interior drying rooms, bad because of child care problem, (2) walls enclosing ends of row houses. 1P. Perm. Conn. Specialist	1	39
Tenant Yards: Several want fenced and "just one tree" (1P). 3P. Perm. and Dem. Wash. and Cal. Specialist	20	18
Coal Boxes: Should be precast concrete, not wood - but provide light-weight wood lids. Region IV	33	3
Coal box design: "Must be improved" 1P. Perm. N.C. Specialist	13D	7
Coal Boxes: No roofs or sheds over. Access for coal on platform with no roof over. Tenants object, (rain). 1P. Perm. Md. Specialist	13F	3
Coal Bins: Sloping tops with high side at building wall. Rain wash from wall and slipping top of bin washes into box through hinge joint, soaking coal. 1P. Perm. Conn. Specialist	13C	3
General front to back arrangement: "in my judgement" the plan has one serious sefect. An extreme intensification of an undesirable tendency lately discernable in projects; the rears of the houses face on the public streets, the wash hangs out there, visitors coming by auto enter the house past wash, garbage and through kitchen. "Front" is little used. Children play at back near street which is dangerous. 1P. Perm. Conn. Specialist	13C	4
Coal Boxes: Outside, with openings for getting coal outside also: Grimy yards. 1P. Perm. N.C. Specialist	13D	3
Coal Boxes: Water collects in coal boxes with flat lids. Sloping lids eliminates this problem. 1P. Perm. N.Y. Specialist	19	4
Coal Box: Difficulties: too far from service drives; too lightly constructed, not standing up under use; poor appearance, difficult to keep neat; where located under eaves, water drips into them. Space should also be provided to store kindling. Region IX	36	3
Coal: Boxes should be at service drives rather than at dwelling wall. Region IV	33	2

TENANT YARDS

	Source	Page
Service entrance - Distance exceeds established maximum but lack of fuel deliveries prevents this from being serious. 2P. Perm. Fla. Tech. Rev.	9	
Victory gardens: Maximum size 50' x 100'. Ordinary size for large families 50' x 30'. Region V	10	25
Yards: Division of yards by fences ending 7' from walk considered good feature. Rear yard, facing street not objected to if properly maintained. Clothes posts should not be set too close to service drive or walk. Should have room for mower to pass. 1P. Perm. Fla. Tech. Rev.	9	
Front yards: Front yards too shallow - buildings too near sharp terraced banks. (14.4.6-1) Perm. Good-adequate paving and sitting space. (Pa. 2-1 Perm.) 2P. Perm. N. Y: and Pa. Tech. Rev.	4	
Coal Bins: Bins have been causing trouble almost universally for following reasons: (a) not large enough (should hold 2½ tons))b) moisture from wet coal seeps into dwelling due to faulty design of bin floors. (c) delivery to bins difficult because of necessity of locating near house, because of lack of manpower for carrying coal from truck to bins, and because of inadequate bin design for chuting purposes. Coal frequently dumped at edge of driveway and carried to bins by tenants, causing dirty drives and walks, and soiling laundry on clothes lines. Region II	14	
Coal bins: One-ton or slightly larger size entirely inadequate. One and ½ or 2½ tons recommended. Direct paved access to coal trucks needed. Bin floor must be below 2" and drain away from house floor. Doors must be weather proof and pitch from dwelling. Adequate distance needed from bin to furnace. Region II	2	13
Combined building types (apt. and row) - difficult to limit use of row house yards to row house tenants only. Detachment of apt. and row recommended if satisfactory maintenance is expected. 1P. Perm. N. Y. Tech. Rev.	4	
Philadelphia has been very successful with the use of picket fences around individual tenant areas. All such fences are of a more or less uniform design, made of wood about 20 inches high, and are either made by the tenants themselves or made by the maintenance division and sold	5	6

TENANT YARDS

(con't.)

Source Page

to the tenants at a nominal cost (6 foot lengths @ $.65). For the most part tenants have painted them white. This gives the tenants a financial interest in their lawns and has proven to be very successful in maintaining lawn areas.

Region II

TENANT YARDS

	Source	Page
Coal Bins: Poorly placed and planned. Too high above grade, difficult to fill without spilling. Inaccessible without cutting across lawns, no platforms or walk to bin door and no place to store kindling which is a scarce commodity much cheaper and more convenient to buy in large lots. 1P. Temp. Mich. Mgr.	133	6
Coal Boxes: Shabby looking, paint faded. They are often broken, trash and empty bottle kept on top. 1P. Temp. Pa. Specialist	50	12
Coal: Where used for stoves and heating, make special provision for adequate delivery, storage, kindling storage and collection of ashes. 1P. Temp. Mich. Mgt. Superv.	133	2
Fences: No dividing fences or hedges and tenants complain no control of privacy, children, flowers, laundry. Management has allowed tenants to erect their own fences in rear but not in front yards. 1P. Temp. Pa. Specialist	50	
Kitchen Yards: Management suggests - (based on the experience of this project) that generally greater attention be given to development of areas outside kitchen. 90% of out-door tenant activities take place here. Has only surfaced paths to dwelling and is used for furniture, coal, wood, milk, ice, mail, newspapers, garbage and excess household equipment, laundry drying, pets, children. 1P. Temp. Mich. Mgt. Superv.	132	

SITTING AREAS

Source Page

111

Sitting Areas: Adequate.
1P. Temp. N. C. Mgt. Superv.

SITTING AREA

Source Page

Playgrounds and Sitting Areas: No sitting areas in this project. No paving of play areas though this has presented no particular problems. 109

1P. Dem. Ala. Mgt. Superv.

SITTING AREA

	Source	Page
Playgrounds: Small play areas should have benches for sitting. 1P. Perm. Fla. Tech. Rev.	9	
Sitting space: For mothers with baby carriages, lying in the sun, etc. - more needed. Specialist	18	18
All sitting areas should be of concrete. Region II	5	3
Sitting areas remotely placed and connected by small paths means grass wear. Recommended: areas directly off main paths. 1P. Perm. Pa. Tech. Rev.	4	
No sitting areas provided especially near apartments although space would allow. 1P. Perm. N.Y. Tech. Rev.	4	
Sitting areas good - exceptionally good. 3P. Perm. Pa. Tech. Rev.	4	
Sitting Areas - Porches: Small adult sitting areas scattered throughout the project not satisfactory because children congregate there in the summertime and disturb nearby residents. All sitting areas should be located near recreational areas. Functions which scattered sitting areas were intended to perform, can best be handled by individual porches. 1P. Perm. N. C. Mgr.	108	
Sitting Areas: For apartments should be wide enough to accomodate benches and baby carriage parking on both sides. Paved sitting areas for large apts. Region II	31	7
Playground and Sitting Areas: Good 1P. Perm. Ga. Mgr.	107	
Sitting out areas - Flagstone paving often surrounded by hedges is found adjacent to all apartment entrances and on one side of flats. Very attractive areas but have not been provided with any sitting equipment - a distinct hardship for older people who have difficulty in carrying out their own. Since row houses have no definite sitting areas all areas are used - hard on lawns. 1P. Perm. N. Y. Specialist	51	7

PLANTING

	Source	Page
Site Choice: Trees: Considered good among projects of region, most commendable feature of site is approximately 1,000 oaktrees at 30-40 years growth. Families having no trees nearby have requested to be moved and keep their grounds in better condition. 1P. Temp. Mich. Mgt. Superv.	132	
Lawns: Fairly acceptable for war housing. Seed not equally distributed though. Rougher grades of grass to stand up against wear is recommended. 1P. Temp. Mich. Mgt. Superv.	132	

PLANTING

	Source	Page
Landscaping: Grove of 15 trees by community building, is attractive feature, much used by tenant outdoor activity group. 1P. Dem. Ohio Mgt. Superv.	125	1

PLANTING

	Source	Page
Roots of Australian Pines are near the surface and are apt to damage sidewalks. Heavy planting in Fla. is unnecessary due to rapid rate of growth. 1 P. Perm. Fla. Tech. Rev.	9	
Too much freedom of tenant planting in front yards is detrimental to the appearance of the site. 1P. Perm. Fla. Tech. Rev.	9	
Management feels tenant planting should be restricted to areas not more than 5' or 6' from building. 2P. Perm. Fla. Tech. Rev.	9	
At many projects this hedge (legustrum lucidum) would have been thoroughly impractical but the southern negroes love growing plants, therfore, the hedge survives. 2P. Perm. Fla. Tech. Rev.	9	
Planting can be overdone. Hedges are a maintenance item when exclusively or merely decoratively. Must be protected in exposed places. (traffic). 1P. Perm. Fla. Tech. Rev.	9	
All narrow, open dirt or shrub spaces between sidewalks and buildings should be eliminated by the use of Belgian block. However, beds for the planting of Boston Ivy should be left. Region II	5	3
Existing trees and aid immensely in avoiding a look of regimentation and monotony. 1P. Perm. Fla. Tech. Rev.	9	
Play areas should contain neither shrubs or trees. Region II	2	22
Planting: Unusually lavish, done as though it were to be cared for like a "fine city park". Excess of lawn area, too many different kinds of trees, conventional placing without consideration of compositional effect. Trees could have been used as drying yard screens. Best planting is around sitting-out spaces where trees give shade. Best results from	51	2

PLANTING

	Source	Page
hardy shrubs. Trees planted in border of shrubs along terrance between buildings are effective. 1P. Perm. N.Y. Specialist	51	9
Trees and Shrubs: Often placed too close to walks. Easily destroyed. 1P. Perm. Minn. Manager	118	
Grass areas and Shrubs: Poorly planned. This encourages cross-cutting which ruins lawns and encourages erosion. 1P. Perm. Minn. Manager	118	
Landscaping: Lack of landscaping disliked by tenants. Originally omitted because of cut in appropriations. Management now plans to remedy this. 1P. Perm. Pa. Interviewers	52	69
Landscaping: Too meager considering uninteresting nature of site. (Suggests variable allowances for landscaping depending on setting) 1P. Perm. Md. Specialist	13F	8
Magnificant old trees enlivened views which would otherwise be sterile. 1P. Perm. N.Y. Specialist	51	3
Plants and grass near play areas not handy, not protected. 1P. N.Y. Perm. Tech. Rev.	4	
Poor stock of plant material. 1P. Perm. N.J. Tech. Rev.	4	
Planting on the whole is good. 1P. Perm. Pa. 2P. Perm. N.Y. Tech. Rev.	4	

PLANTING

	Source	Page
Hedges adjacent to fences with adequate distence between walk and fence is o.k. Inadequate distance not. Trees mutilated in play areas due to inadequate protection. 1P. Perm. Pa. Tech. Rev.	4	
Hedges between back yards should have passages left in them since they are worn through anyway. 1P. Perm. N. J. Tech. Rev.	4	
Secondary streets used as walks with guard posts to confine traffic at sides is satisfactory except that planting between posts is worn by pedestrian when full width of street is used by autos. 1P. Perm. Pa. Tech. Rev.	4	
Curbing both sides, walk on one is recommended. Planting excellent in most cases. 1P. Perm. N. J. Tech. Rev.	4	
Choice of plant material not always good. 1P. Perm. N. Y. Tech. Rev.	4	
Certain evergreens have stiff appearance and are damaged by snow. 1P. Perm. N. Y. Tech Rev.	4	
Recommending fencing and paving. 1P. Perm. N.Y. Tech. Rev.	4	
Although large % of project is paved good condition of plants gives opposite effect. 1P. Perm. N.J. Tech. Rev.	4	
St. Augustine grass was a mistake, is infested with chinch bugs. Should be replanted with Bermuda or Carpet grass. 2P. Perm. Fla. Tech. Rev.	9	
Banana trees and elephant ears are dirty. Should not be used near buildings as they interfere with the operation of the window. 2P. Perm. Fla. Tech. Rev.	9	
Oleander unpopular with Management as they are subject to blight and scale. 1P. Perm. Fla. Tech. Rev.	9	

PLANTING

	Source	Page
Wide central mall is diminished in effectiveness by over-planting of small shrubs. 1P. Perm. Fla. Tech. Rev.	9	
Hedges are difficult to maintain. Unprotected planting suffers from tenant damage. 1P. Perm. Fla. Tech. Rev.	9	
Grassed areas: Difficult to grow, maintain and is at best out of condition most of the year anyway. Even meadow type land needs care especially on the borders. Ivy is a good year-round cover, easy to maintain, looks well, discourages trampling. Methods of lawn border projection. Flat paving stones and bricks loosely set with grass between joints; slight elevation brier hedge. Very slight fence between allotments is all that is needed for protection. Specialist	18	17
Landscaping - Shrub planting should be kept to a minimum, and trees and lawns accentuated. Shrub areas should be located where heavy traffic will not break them and where they will not collect garbage or trash. The planting of vines on exterior walls is favored and for this purpose Boston Ivy is recommended. Due to the unsuccessful experiments with ground cover, such as pachysandra and myrtle, it is recommended that ground cover in front of row houses be eliminated. However, on steep areas, honeysuckle can be used to advantage. Region II	15	5,6
Grass should be protected from wear by being raised above walks. Grass strips between walk and curb should be eliminated. Grass around shrub beds keeps soil from washing out. Pa. Managers	3A	1,2
Existing trees help avoid monotony and regimentation. 1P. Perm. Fla. Tech. Rev.	9	1
Narrow areas between sidewalks and porches and building should be paved. Grass won't grow. 1P. Perm. Fla. Tech. Rev.	9	1

PLANTING

	Source	Page
Fewer and larger. Trees should be high branched. Shrubs only against fences or walls, - if free standing, they get trampled. Plant close together for mutual support. Do not plant close to entrances-impossible to maintain healthy plants here. "Closer supervision and more rigid inspection of the orginal planting by inspectors familiar with this work will tend to eliminate noncompliance with the specs, assure plant survival beyond contractor-guarantee period and produce the desired healthy growth thereafter." Region II	21	9,10
Shrubs and small trees in play areas hard to maintain and hazardous to small children. Region II	14	
Yard separation: Higher hedges desired to keep children in own yards and for sense of privacy. 1P. Perm. Md. Interviewers	15	6
Landscaping: Over economy at first was unwise and led to exaggerated costs in the end. Tenant planting of individual yards has been successful. Planting of playgrounds should be done only outside possible area. Row house planting should not be too close to tenant doorways. 1P. Conn. Loc. Auth. Specialist	1	35
Planting: Either not hardy or not well protected especially near play areas. 6P. Perm. Reg. II Tech. Rev.	4	
Planting well protected where fencing is used. 1P. Perm. N. J. Technical Rev.	4	
Large playground should be in first class condition before use starts. Possibly should be seeded and grass given a chance to get started. 1P. Perm. Conn. Specialist	1	27
Landscape work amounted to $128 per D. U. as compared to $60-75 per D. U. limitation on FPHA pre-war work. 1P. Perm. Fla. Tech. Rev.	9	
Planted banks in excellent condition. 1P. Perm. Pa. Tech. Rev.	4	

PLANTING	Source	Page
Landscaping: Limit use of hedge stock. Uneven growth makes unsightly appearance. Region VIII	35	2
Planted Areas - Plant materials: Use of cold storage material should not be permitted. Region II	23	5
Shrubbery: "Thorny" - type shrubbery should be used almost exclusively. Delicate flowering types are destroyed by children. 1P. Perm. N.C. Manager	108	
Planting: Grass only, is not adequate. 1P. Perm. Ga. Manager	112	
Lawns: Belgium blocks on either side of walks and slightly raised, protect lawns. Region II	21	8
Lawn contracts should provide that lawns are planted at right time of year to insure good growth. Handle storm water to avoid erosion. Region IX	36	4
Materials: Need for use by landscape architects of utilitarian materials that will operate against erosion. Landscape engineering to buttress site engineering. 1P. Perm. S.C. - Specialist	13B	6
Interim Planting: For use if landscaping waits until after settling in process is complete, plant out dangerous spots with temporary cover such as rye. 1P. Perm. S.C. - Specialist	13B	6
Landscaping: Lack of, strongly objected to in 8-city survey at Shalercrest, Pa. (in conjunction with bare surroundings of site). 1P. Perm. Pa. Interviewers	15	29
Planted areas: Reduce to a minimum. Total lawn, shrub area should be about equal to building coverage. Sow lawns on 6" top soil bed, fence until permanent turf is established. Plant only native plants or those acclimate to locality. Protect by stakes, guys or fences until well established. Most projects are unsuitably or over-planted. Region II	21	9, 10

PLANTING

	Source	Page
Lack of successful planting. Difficult to grow things because of lack of top soil. 1P. Dem. Fla. Mgr.	110	
Shrubbery good. Ground cover not satisfactory. Took too long to grow. Easily destroyed, wrong type of cover. 1P. Dem. Wash. Mgt. Superv.	114	
No planting except Bermuda grass, which serves its particular purpose satisfactorily. 1P. Dem. Ala. Mgt. Superv.	109	

PLANTING

	Source	Page
Ground Cover: Grass so unsuccessful that tenants fail to maintain it through the winter, resulting in complete loss. This would indicate wasted development cost. 1P. Temp. Wash. Mgt. Superv.	115	
Ground Cover: "Unsuccessful—no ground cover." 1P. Temp. Mich. Mgt. Superv.	133	2
Landscape Planting: Bushes doing well and most trees. No top soil, maples and oaks dying. Planting sparse but well located. Undeveloped areas are successful and attractive. No vegetable gardens because no place to store canned goods. Tenants don't keep up their own yards because of no yard stations and tools kept in central office. 1P. Temp. Pa. Specialist	50	6

PLANTING

	Source	Page
Arrangement of Bldgs. and Spaces: — only moderately attractive due to absence of trees and shrubs. Grassed open areas, but shade trees would add to attractiveness. 1P. Trailer. Wash. Mgr.	116	1
Grass: Moderate success with grass cover. Increases livability of trailers, but also costs and maintenance. Should have had hose and lawn mower to start. 1P. Trailer, Wash. Mgr.	116	2
Ground cover: Difficult to establish ground cover around each trailer. 1P. Trailer Miss. Mgt. Superv.	115	

LAUNDRY

	Source	Page
Laundry: Laundry Bldgs, should have washing machines. Clothes lines within appreciated by tenants in winter — a big help. 1P. Trailer, Wash. Mgr.	116	1
Clothes drying facilities: Individual clothes poles preferred to drying yards. 1P. Trailer, Miss. Mgt. Superv.	113	
Group yards adjacent to laundry trailer were so inadequate that they were abolished. Posts every 50' between trailer rows, with cross arms for two lines are much more satisfactory. Tenants like to keep an eye on their clothes. 1P. Trailer, Va. Tech. Rev.	7	3

LAUNDRY

	Source	Page
Laundry Drying: Umbrellas preferred to single line, housewife can stand in one spot to hang clothes without having to walk around and get feet muddy. 1P. Perm. N.Y. Specialist.	19B	2
Laundry Facilities: Whirligigs too expensive to maintain—eliminate. Clothes posts should be 4 x 4 wood or 1-½" pipe. Set post types in concrete. All projects should have outdoor drying facilities—would save on indoor drying equipment. Reg. II	21	11
Merry-go-round driers no good where there is a strong wind. Graveled surface absolute necessity in laundry yards in regions where there is adobe mud. 1P. Perm. Cal. Specialist	20	12
Laundry Yard: Because living room is on drying yard, wet clothes have to be carried back and forth across it — added disadvantage of muddy feet in wet weather. 2P. Perm. N.Y. Specialist	19	2
Laundry Drying: Surface of Laundry yard should be such that it does not become a "sea of muck" in wet seasons (cinder or gravel or duck walks) 2P. Perm. N. Y. Specialist	19	2
Laundry Drying: Hooks on houses for lines are only 8" apart so clothes can't dry. 1P. Perm. Va. Specialist	19E	2
Laundry: A real place for it is a universal desire. "Public laundries would be very popular everywhere (except with management) and are considered almost a necessity in the Northwest (where drying has to be indoors 6 months of the year). "Adequate utility room with water in it would be an acceptable substitute. 3P. Perm. and Dem. Cal. and Wash. Specialist.	20	12
Laundry facilities: Outdoor clothes lines completely satisfactory. 1P. Perm. N.C. Mgt. Superv.	10S	
Laundry Drying: Difficulty with mud under lines. 2P. Perm. N. Y. Specialist.	19A	2

LAUNDRY

	Source	Page
Laundry washing & drying yds.: Very satisfactory. 1P. Temp. N.C. Mgt. Superv.	111	
Drying areas: In rear yds. - crowded & dirty (soot). 1P. Temp. Ga. Mgr.	112	
Clotheslines: Mud, dirt, and soot from stoves and incinerators at two projects. Tenants were forced to dry clothes indoors. 1P. Temp. Kan. Interviewers	15	9
Drying Yards: Constant dissatisfaction, umbrella drying lines not taken in by tenants. No place to store them in houses. Tenants attempt to put up own poles resulting in irregular appearance. 1P. Temp. Pa. Specialist	50	4
Laundry Drying: Adequate (By means of five lines that fan from a post to each DU.) 1P. Temp. Wis. Mgr.	122	
Drying areas (outside): Not sufficient (for each bldg. of 8 units, 4 clothes lines 24' long). 1P. Temp. Ill. Mgt. Superv.	121	
Laundry: In kitchen - interferes with cooking and dining. 1P. Temp. Ga. Mgr.	112	
No place for drying laundry indoors - a serious problem in winter. Diapers in kitchen is objectionable. No place for homework or hobbies. 1P. Temp. Pa. Specialist	50	10
Interior drying particularly needed in this climate. 1P. Temp. Wash. Mgr.	128	1
Laundry space is a problem that should receive much more study. Combination laundry - drying - storage should be considered for future projects. H. Churchill suggests having such a room shared by two DUs. (Temp. - Specialist-Pa.) 1P. Temp. Pa. Specialist	50	10

LAUNDRY

	Source	Page
Laundry Yards: Though many dwellings have theoretical laundry yards at "back" - housewives use front yards to hang out clothes since kitchens and utility rooms are on that side. 1P. Perm. N.J. Specialist	19D	2
Laundry and Drying: Laundries in basement of bldg. type of which there are eleven, well placed through the project. 6 laundries - 4 tubs each - three dryers. 3 outdoor drying yards for project of 200 units - one additional laundry room with two sets of trays is advised. 1P. Perm. Wash. Mgt. Superv.	114	
Clothes Line: Extreme objection to community lines Aliso Village, Los Angeles, Calif. due to overcrowding. 1P. Perm. Cal. Interviewers	15	31
Lash Lines: Hung between houses not in rear yards. Path stops at secondary entrances which are at the ends of the houses. Therefore, no "reason" to go into backyards, and they are full of papers, etc. - which may, however, be due to their being wet and swampy. 1P. Perm. Md. Specialist	13F	6
Laundry yards placed in generally central positions give the impression that laundry is everywhere. High iron fences surround them. These were inadequate in number and more yards had to be supplied nearby. Also removable posts have been put in central lawn areas with lines running to boards on house fronts. Destroys beauty of otherwise effective lawn areas. In row house developments the old fashioned fenced back yard might furnish a more realistic as well as a more attractive solution. 1P. Perm. N.Y. Specialist	51	8

LAUNDRY

	Source	Page
14 outside group laundries open to outdoors are attractive but would be more useful if planted with shade trees. 1P. Perm. Fla. Tech. Rev.	9	
Clothes lines: Whirligigs unsatisfactory. Rec. posts with arms or hooks from house. Reg. II	2	16
Drying Yards: Grass surfacing very unsatisfactory. Posts should be used instead of whirligig dryers because of durability. Pa. Mgrs.	3A	
Clothes posts set too near service drives are easily damaged. Posts should not be set so lines cross yards parallel to buildings. 35' lines are too long -- tend to sag. 1P. Perm. Fla. Tech. Rev.	9	3
Unfenced drying yards are used as playgrounds by children. A fence with a minimum number of gates should be put up where there is such a temptation. 1P. Perm. Conn. Specialist	1	28
Only "possibly satisfactory solution" in projects surveyed. 27 families to 14 drying lines 27' each. Clotheslines: Separate and individual appears best solution. Serious objections to having clotheslines in front yard. 14P. Countrywide, Interviewers	15	7
Clotheslines: In sight for fear of theft. 14P. Countrywide, Interviewers	15	5
Fenced in drying area disliked (used for dogs) felt this was shady and not "open air" although did get sun. 14P. Countrywide, Interviewers	15	8
Whirligigs should not be used. Clothes posts consisting of either 4 x 4 inch wood or 1-1½ inch pipe should be set in a concrete base. Clothes drying areas should be placed in the back or at the ends of buildings. Clothes posts should not be over 6 feet in height. Reg. II.	5	5
Clotheslines: Mud, dirt and soot from stoves and incinerators a problem with relation to lines in J & K forced tenants to dry clothes indoors. Tenants have about 1/4 space they need. Scheduling does not work, partly because of lack of coop, partly rainy days. Also families with infants was daily. Sometimes where 2-4 families use same line, satisfactory. Scattered space had to be used where found. Especial fear of theft since lines not in sight. Clotheslines: So close to street— Clothes are splattered by passing truck. 1P. Perm. Pa. Interviewers	15	8,9

GENERAL

	Source	Page
Site Plan general: Unsatisfactory - regular grid pattern, 35' vs. rears & 50' vs. fronts. No service drives. Rear walks carry surface drainage. Unpaved roads & parking areas mean wind or dust. No planting other than grass makes project dull and hot. 1P. Temp. Ga. Mgt. Superv.	112	
General: Long Creek, Portland, Me. disliked by interviewers in 8 City Survey because of "lack of community planning" "more evident here than in any other project surveyed". 1P. Temp. Me. Interviewers	15	31
General Tenant Comment: Minimum of complaints on design, equipment and other facilities provided. Project has been 100% occupied continually since completion. 1P. Temp. N.C. Mgr.	111	
General Appearance: Very drab, no interest to relieve box-like forms, no shadow, color. Lack of maintenance funds given as reason. 1P. Temp. Pa. Specialist	50	12
Much unsatisfactory design and construction due to W.P.B. restrictions. For example, lack of street lighting due to W.P.B. caused much tenant dissatisfaction. 1P. Temp. Mich. Mgt. Superv.		
Site Plan: On the whole-Bldgs, drives, well placed. Density low - large landscaped areas were increasing ground upkeep costs. 1P. Temp. Mich. Mgt. Superv.	132	

GENERAL

	Source	Page
General Project Appearance: Drab and monotonous. Statement based on comparison with ordinary prewar dwellings. 1P. Dem. Fla. Mgr.	110	
General Project Appearance: Good, homelike, orderly site plan, preservation of existing trees and generous use of semi-detached dwellings, well liked by tenants. 1P. Dem. Ala. Mgt. Superv.	109	
General: "Site plan generally uninteresting and monotonous. At no point are ends closed so that the project has no feeling of unity or self containment. It just runs on. Parallel rows with spaces between. 1P. Dem. S. C. Specialist	134	6
General Conditions: Tenants become very dissatisfied with bad conditions prevalent in this project and consequently tenant turnover is rapid. 1P. Dem. Fla. Mgt. Superv.	110	
Maintenance Problems: Created by poor placement of dwellings in relation to each other, lack of adequate and well planned sidewalks, and the misplacement of small play areas. (Roads are irregular and nonparallel, making allocation of tenant lots awkward. Walks, indirect for dwelling-road and inter-dwelling relationship. 1P. Dem. Ohio, Mgt. Superv.	125	1
Planning and Construction: Evaluation relative to postwar housing. "Certainly some of the planning features and construction materials used should be questioned". 1P. Dem. Ohio, Mgt. Superv.	125	1

GENERAL

	Source	Page
General Comment: These two trailer projects are considered successful because: all trailer lots on streets, site thickly wooded provided shade and concealment and lake at center of project adds livability; the maintenance costs are very reasonable. Broad walks are good. 1P. Trailer, Miss. Mgt. Superv.	113	

GENERAL

	Source	Page
More land should have been purchased for the later development. Coordinated planning of project with immediate surrounding development - i.e., city playground and pool. 1P. Perm. N. Y. Tech. Rev.	4	
Same but with no studied connection 1P. Perm. Pa. Tech. Rev.	4	
Long vistas other than on streets seem effective. (This is achieved through the use of a "mall" on most of the Fla. jobs but could be achieved by a less formal device, so that the "vista" might be merely a distant view and not a formal axial device. Ed. note) 17P. Perm. Fla. Tech. Rev.	9	
Off street (perpendicular) access to houses seems very attractive with generous porches and landscaping. Perhaps this depends on climate as much as anything. 1P. Perm. Fla. Tech. Rev.	9	
Site Arrangement: More attention should be paid to outdoor living states manager of N. Carolina low-rent row house project. Family-size porches should be provided for example. Row houses are satisfactory under the above circumstances. No building, however, should house more than 4 families. Garden plots should be provided. It is erroneous to think that families do not live on the outside as well as on the inside of a house. 1P. Perm. N.C. Mgr.	108	
A city survey Greenbelt Original Perm., Md. chosen by interviewers as project in which they would most want to live. Adjacent war community (b) might be as attractive if landscaping and playground were developed and more adequate bus service provided. Projects G and I tied for second choice (La Armada, Corpus Christi, Texas (Dem) and Carquinez Hts., Calif. (Perm.), Corpus Christi" notable for filling of space in landscaping, and large grassy play yards and "sense of normal living" (tenanted by Navy personnel, used to moving who settled in quickly) Choice of Carquinez apparently based largely on surroundings; objections to lack of landscaping. 3P. Perm. and Dem. Md., Cal., Tex. Interviewers	15	28, 29

GENERAL

	Source	Page
Entrances: Reviewer feels entrances at edge of project are bad, not only because it happens that the adjoining areas are undesirable, but also because in general it makes these people feel less a part of project — It could be a recommended (not required) standard that this be avoided. (Note: how about desirable integration with surrounding areas where these are not slummy?) 1P. Perm. S.C. Specialist	13D	6
"Jumbled up plan - difficult to find ones way around, uneconomical in road pattern; 3 insolated buildings, with road to service them only. Numbering "independently", confusing. 1P. Perm. S.C. Specialist	13B	4
General Tenant Reaction: "Excellent". 1P. Perm. Wash. Mgt. Superv.	11A	
Orderly, undistinguished site plan, based on a system of rectangles. Great deal to recommend it, as compared with the confused character of many defense projects, but dull. Simplicity plus interest required. Here plan is forced in view of sloping terrain. Apparently grading waste is rectangles with lengths perpendicular to contour. 1P. Perm. Pa. Specialist	13H	5
Comparison of small and large projects by interviewers in 8 City Survey: "Small projects lead to closely knit community; large projects lack this but allow for facilities, schools, recreation buildings, shopping center, transportation, etc." Interviewers	15	32
Possibility of reflection of "local tradition" in site plan e.g. as at Wilmington, N. C. project — (Omitted in others): planted center malls in streets. 1P. Perm. N. C. Specialist	13D	5
This project, designed in three sections, does not hang together because the additions were neither anticipated nor planned for. 2P. Perm. Fla. Tech. Rev.	9	
Attractive project spoiled by an ugly water tower located at the most conspicuous possible spot. Done to avoid extending the main which would have cost $1,500. 1P. Perm. Fla. Tech. Rev.		
The organization and functioning of a site plan can be completely negated by the omission of such items as certain walks, etc. which may be a basic part of the plan conception 17P. Perm. Fla. Tech. Rev.	9	
Good site protected from encroachment. 2P. Perm. Pa. and N.Y. Tech. Rev.	4	

GENERAL

	Source	Page
"First project visited whose general appearance and character gives one a satisfying impression of calm design which while not slavishly reproducing any antiquarian effects, does seem to belong naturally in a New England setting. Does not look like something dropped from somewhere else, or from someone's detached mind". 1P. Perm. Conn. Specialist	13C	2

GARBAGE	Source	Page
Provision for garbage cans are satisfactory but unattractive, they obstruct yard for child play. Highly visible from public streets in their position between each pair of buildings. 1P. Perm. Minn. Mgr.	118	
Garbage and Rubbish: First System: Containers set in individual concrete boxes just outside DU, entirely unsatisfactory. Dogs, cats and children produced filth and disorder, covers, removed, cans tipped over. When steps settled boxes pulled away from walls. Second System: Large Cans sunk in ground to which tenants were to bring their refuse daily, city pick up twice a week. Unsatisfactory because: dirty, smell, cans frose in. Final System: Incinerators adjacent to each important court with outside openings, 450' is greatest distance between any DU and incinerator. Removal of the concrete boxes improves appearance and makes room for chair on porch. Large objects are left by incinerator by tenants, broken up by crew. Incinerator is certainly best system tried. 1P. Perm. N.Y. Specialist	51	11, 12
Garbage can island, if used, should not be built near front entrances of dwellings, and should have provision for drainage and cleaning, and should be made accessible by drives. Reg. II	14	
Incinerators: With exterior hoppers-satisfactory. Reg. II	21	11
City collected from garbage stations at curb averaging 100 ft. from DU. Disposal system called adequate. 1P. Perm. Wash. Mgt. Superv.	114	
Incinerators: Are definitely recommended in all future projects. This is a more positive statement than that given in the preliminary report where it was suggested that they "should receive additional consideration in future design." (Source 21) Reg. II	23	6
Trash: Containers not furnished by project, so tenants, unwilling to buy their own, use cartons, etc. which results in a fire-hazard. (Always possibility of red hot ashes being shaken down and thus disposed of). 2P. Perm. N.Y. Specialist	19	2
Garbage Disposal: Adequate - Individual collection would be better than general stations. 1P. Perm. Ga. Mgr.	107	

GARBAGE	Source	Page
Garbage Disposal: Extreme objection to community collection stations at Aliso Village, Los Angeles, California, due to overcrowding. 1P. Perm. Cal. Interviewers	15	31
Incinerator: Depends completely upon paper and tenant refuse. Not adequate. In melon season problem is "brutal". Things don't dry out, much less burn up. Should be gas fired. 1P. Perm. N. Y. Specialist	51	12
Garbage Platforms: Concrete platforms for garbage cans are good. (Apparently not community stations) 1P. Perm. Pa. Specialist	13H	6
No definitely marked place, cans are left pretty much anywhere. Suggested solution: sturdy lattice enclosure as at Havre de Grace, Maryland project (space enclosed ample for garbage cans, boxes, etc.). 1P. Perm. Md. Specialist	13F	4
In Ramona Gardens 96% of tenants stated garbage disposal was no problem. (Method used is apparently some form of group collection) Group incinerator is used for trash disposal. 80% of tenants reported method satisfactory. 1P. Perm. Cal. Specialist	12A	18, 19
Incinerators: Enclosed system satisfactory. Restricted hours and adult use only, because children are messy. Sprays preferable to taps for washing cans. System should prevent rubbish from falling on floor. 1P. Perm. Conn. Specialist	1	30
Sheds recommended for garbage and trash cans for each DU. Group collection stations for trash are o.k. but should serve less than 25 families each.	14	
A supplementary incinerator in maintenance building for use in addition to city collection is recommended for consideration.	14	
Garbage Collection: Unsatisfactory in most projects surveyed because of distance to cans and infrequent collections (war condition?). Apparently satisfactory where management assumes responsibility. Community collection stations unsatisfactory, especially in J (1P. Perm. Kan.) cans upset by childrens play, etc. Odors and flies bad for nearby d.u. Coal stored at one side (makeshift arrangement). In some cases parking in front, blocked and delayed collections. Specialist	15	10

GARBAGE	Source	Page
Disposal of garbage could not work on street side of row house, with rear walk too narrow for truck, too wide for pedestrians, no garbage stations. Garbage cans in trial use too small; later incinerators proved OK. 1P. Perm. N.Y. Tech. Rev.	4	
Project incinerators most effective garbage disposal method. Sunken metal garbage can receptacles very unsatisfactory: (1) refuse sticks to long narrow can (2) collectors bang against trucks and ruin (3) in winter, garbage can freezes in receptacle and garbage cannot be emptied, resulting in accumulation of garbage on ground (4) covers of receptacles break easily and need replacement. Wall containers rather satisfactory but should be larger and should not have cast-iron doors which break easily. Region II	14	
Garbage and Trash: Wall containers work well, sunken ones incline to be necessary and should be located in the least obtrusive place. Pa. Mgr.	3A	1
Parking: In front of garbage collection stations - delaying collections. Specialist	15	11
Success depends on proper tenant preparation of garbage for removal; garbage disposal is constantly recurring problem and never finally solved. Reg. V	10	25
Garbage Collection: Unscreened collection very objectional. Special systems not carefully thought through. (Dumpster unsatisfactory. Stations too large and screened on one side only objectional.) Recommendation: it would seem that low density use and very adequate capacity is one solution to prevent objectional collection stations. They should also be carefully located for both tenant access, tenant view and pick up access. 1P. Perm. Fla. Tech. Rev.	9	
Garbage cans: Recommended: project incinerators for garbage disposal. Where unpracticable, alternates must receive careful study. Sunken can receptacles unsatisfactory, insanitary, freeze, etc. Wall types recommended (see Weldon-Johnson Homes and Tasker Homes—Philadelphia). Cast iron doors not recommended. Garbage can islands should be removed from near dwellings. Should have access drives, drainage, cleaning facilities. Region II	2	21

GARBAGE	Source	Page
Collection stations: Lack proper screening 2P. Perm. Fla. Tech. Review	9	
Incinerators: Preferable to garbage cans, should be installed enroute somewhere so that a special trip will not have to be made. An incinerator on the exterior wall of an apartment can be used from interior by apartment dwellers, from exterior by row house tenants. 8 Northern Cities, Interviewer	14A	222
Garbage disposal: Incineration is considered the best method of disposing of garbage and trash and should definitely be the method used for all multiple dwelling projects. Incineration has proved very successful at the Commodore Perry project (Buffalo) where accomodations are partly multiple dwellings and partly row houses. Collection of garbage from curbs and pick-up stations is unsatisfactory due to spilling of garbage at these points and consequent excessive maintenance. In two projects, at Philadelphia, a built-in wall receptacle has been used with the garbage can inside. This has proven to be very successful, and tenants have been taught to clean up any garbage that may drop to the ground and to clean the can and receptacle from time to time. Region II	5	4, 5
Garbage Facilities: In Region VIII's best permanent project, group garbage stations are needed as a substitute for present system of placing garbage cans in front of houses (Reference to site plan indicates that lack of service drives and other direct motor access may make door-to-door collection so difficult that group stations would appear to be a solution in view of the existing street pattern. This comment may not, therefore, be a general recommendation for group stations in lieu of individual collection, as it, at first, appears.) 1P. Perm. Tex. Mgt. Superv.	100	
Garbage Facilities: Project manager on low-rent Perm. North Carolina project says group garbage stations are unsatisfactory because they cannot be kept clean, suggests platforms and cans at individual kitchen entrances combined with a requirement that tenants bring their cans to a central station for collection at regular intervals. Apparently the present unsatisfactory system entails group containers where garbage is taken from kitchen receptacles and where it accumulates between collections. 1P. Perm. N. C. Mgt.	108	

GARBAGE	Source	Page
Garbage: Has to be carried from dwellings to collection stations, sometimes some distance away. This is a distinct hardship in a cold climate and with large containers. Also not customary in this locality. 1P. Perm. N. Y. Specialist	19A	2
Trash: Fire hazard from ashes being kept in cartons.	19B	2
Garbage Disposal: Monongahela, Pa. inconvenience (distance) in garbage disposal one of factors (with climate and disorder and lack of planning in surroundings) in interviewer's "aversion" to project (8 city survey) - one of two projects in which they would "least like to live". 1P. Perm. Pa. Interviewers	15	20
Garbage and Refuse Compounds: Often unsatisfactory in size, location, enclosure height. Walls are 4'6" min. height. Provide drains and shrubs for camouflage purposes. Garbage cans recessed in building walls O.K., would be more so if larger. Region II	21	11
Dumpster-Dumpster system is poor, unsightly. Access for truck prevents adequate screening. No place for tenant garbage while it is being emptied. Platform rarely gets cleaned. 1P. Perm. Fla. Tech. Rev.	9	

GARBAGE DISPOSAL	Source	Page
Garbage disposal: Not efficient - tenants must cross drives to deposit stations - More stations with sight barriers needed. 1P. Dem. Ala. Mgt. Superv.	109	
Garbage: No service drives for garbage disposal. 1P. Dem. Fla. Mgt. Superv.	110	
Garbage can disposal platforms should not be located on street, and should have lattice to screen cans and debris. 1P. Dem. Tex. Mgt. Superv.	14	

GARBAGE DISPOSAL

	Source	Page
Individual pick up for each unit is satisfactory. 1P. Temp. N. C. Mgt. Superv.	111	
Garbage disposal: Central stations adequate. 1P. Temp. Ga. Mgt.	112	
Cans on street side near front door most unpleasant and is inconvenient. 1P. Temp. Wash. Mgt. Superv.	115	
Garbage Collection: No platforms were provided. Garbage is picked up where sidewalk from DUs meets street sidewalk. This means crossing drainage ditch which makes it unsightly. These problems can be answered only by tedious management policing. Management wants garbage platform. 1P. Temp. Mich. Mgr.	133	3,4,5
Garbage: Garbage disposal system (cans placed along rear of bldg.) create unsanitary condition during summer months. It is suggested they be placed further from bldgs. 1P. Temp. Ill. Mgt. Superv.	121	
Garbage: Should be specific place for placement of cans outside houses. Trash although collected with garbage is burned by tenants injuring furnace. Trash burners are advised. 1P. Temp. Pa. Specialist	50	3
Garbage: Provisions for, satisfactory 1P. Temp. Wis. Mgr.	122	
Garbage Disposal: Unsatisfactory. Paved access to containers, and enclosed platforms recommended. Pave central collection areas. (Twins are arranged without direct road access. The end dwellings are 80' from street.) 1P. Temp. Mich. Mgt. Superv.	133	1

GARBAGE DISPOSAL	Source	Page
Garbage Disposal: Stations adequate for daily pick up, otherwise larger stations with adequate cans should be considered. 1P. St. Tr. Wash. Mgt.	116	1
Collection Stations abandoned because of difficulty in keeping them sanitary. Replaced by individual containers for each trailer. 1P. Trailer, Va. Tech. Rev.	7	3

SURFACING

	Source	Page
Gravel drives and walks unsatisfactory unless asphalt treated. Region II	14	
Small pieces of flagstones are questionable, paving materials as children swipe them. 1P. Perm. Conn. Specialist.	1	28
Small areas between sidewalks and porches need paving - grass won't last. 1P. Perm. Fla. Tech. Rev.	9	
Roads - Preferred surfaces in order of preference (1) concrete (2) concrete with bituminous (3) Bituminous. Catch basins should be placed at side, not center of roads and drainage should take place on outside. All roads, should have permanent curbing of concrete or Belgian block. Region II.	5	1
Drives topped with crushed rock very dusty in summer. 1P. Perm. Tex. Mgt. Superv.	14	
Surfacing of walks and drives should permit water to drain off of them instead of using walks and drives for gutters. Region VIII	14	
Bituminous paving in front of doorsteps and in sitting areas unsatisfactory, especially in hot weather. Region II.	14	
Drive - or walk-ways constructed of loose, unprepared grading and unrolled limestone chats wash badly during rain, and require constant repair and maintenance. Suggests proper preparation, graduated stones sizes and sealing with asphalt or oil if possible. 1P. Perm. Tex. Mgt. Superv.	14	
Roads and walks should be concrete construction. Higher than level of adjacent driveways. Asphalt, gravel, or crushed stone inadequate and expensive maintenance. Provide proper drainage. Region II.	14	

SURFACING

	Source	Page
Walks and Drives: Walks should be of concrete and on both sides of drive. Drives too narrow and concave bad which is objectionable. 1P. Dem. Ala. Mgt. Superv.	109	
Planted and paved areas not defined: greater portion of projects open spaces being used for driveways and parking preventing grass from growing. Recent asphalt surfacing of roads has shown protection of grass. Blamed on war limitations. 1P. Dem. Fla. Mgr.	110	
Landscape Const. Surfacing: Where surfacing is omitted at edges of roads, parking bays, walks and planted areas, it results in maintenance difficulties. 1P. Dem. Ohio, Mgt. Superv.	125	1
Walks to front doors from street should be concrete paved and not stepping stones. 1P. Dem. Ill. Tech. Rev.	119	
Road Surfacing: Sand clay surfaces not good for the rather heavy traffic that exists. Lack of service drives. Recent asphalt surfacing proves inadequacy of sand clay surface. 1P. Dem. Fla. Mgr.	110	
Drives: Concrete but too narrow (10 ft. wide) drainage at center is objectionable. Gravel strips at each side of drive help situation and are justified as a factor in achieving low development cost. Gravel parking areas O.K. 1P. Dem. Ala. Mgt. Superv.	109	
Gravel drives should be asphalt treated for proper maintenance. First rain washes gravel so badly concrete curb and gutter in danger of destruction for lack of base. 1P. Dem. Tex. Mgt. Superv.	14	
Surfacing of walks and drives inadequate. Gravel paths should be provided. Post Office regulations require that postmen have paved drives and walks for door delivery. Inadequate walks create traffic hazard for children. 1P. Dem. Conn. Mgt. Superv.	14	
Stepping stones better than clay or gravel walks. The latter result in dirt being tracked into units and don't retain their shape. 3P. Dem. N.C. Mgt. Superv.	14	
Road surface entirely inadequate. Rolled gravel top with sand: const. maint. Binder needed. Ground level very little above water table on site. Flagstones not tamped but loosely laid. Hazardous. 1P. Dem. Conn. Mgt. Superv.	14	

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SURFACING

	Source	Page
Surfaces: Sitting-out area composed mostly of sand is dusty and dirty. Addition of clay as a binder would increase usefulness. 1P. Temp. Wash. Mgr.	128	4
Walks, Drives, Parking: All adequately laid out. Drives and parking areas, now packed gravel, should be concrete to prevent dust. 1P. Temp. Ill. Mgt. Superv.	121	
Surfacing: Playgrounds and sitting areas adequate for war housing (Waterbound macadam 8" thick) 1P. Temp. Mich. Mgt. Superv.	133	2
Roads, Walks, Parking: Gravel surfaced with oil satisfactory. Concrete walks, one side parking, but most unattractive. Wood curbing. 1P. Temp. Wash. Mgt. Superv.	115	
Roads: Should be paved. Sand clay not satisfactory and either dusty or muddy. 1P. Temp. Ga. Mgr.	112	
Playground Surfacing: OK for war housing. 1P. Temp. Mich. Mgt. Superv.	132	
More adequate binding of earth on drives to parking areas. Motor access and parking inconvenient. Surfaced parking areas for delivery truck and by-passes of traffic recommended. 1P. Temp. Mich. Mgt. Superv.	132	
Walk, Drives, Recreational Areas: Concrete walks fine.———— Design and arrangement generally well placed and adequate. Posts and rails needed to confine motor traffic to roads. 1P. Temp. Mich. Mgt. Superv.	132	
Roads Construction satisfactory: Parking bays might have had some surfacing as roads. Standing curbs are good and necessary for step slopes and large volumes of water. 1P. Temp. Pa. Specialist.	50	5

SURFACING

	Source	Page
Site Construction Essentials: No road paving without edge, i.e. gutter and curb or curb; adequate number of catch basins; careful supervision on the back fill of utility trenches; where topography is difficult every effort should be made to establish some sort of ground cover before winter to avoid erosion; outside steps should have slope for drainage, and should have hand rails, railings should have low horizontal rail for small children. 8P. Perm. Reg. II and III Specialist.	19-19G (letter)	1,2
Sidewalk Const.: Bituminous and asphalt sidewalks with wood curbing, unsatisfactory-develops pot holes and sags that collect water. In winter frost raises wood curbing necessitating annual job of driving it down each spring. Problem of restoring torn or raveled edges always follows this operation. Region II.	21	6,7
Paving: All narrow areas between walks and buildings should be paved except for small spaces left for vines and shrubs. Extend pavement on Belgian blocks from walk to curb where space is narrow as this cannot be maintained as a grass area. Region II.	21	8
Road Surfaces: "Stabilized dirt, - seems good." 1P. Perm. Va. Specialist.	19F	1
Paved Areas: Sidewalks, steps, spray pools platforms are of concrete. Streets to municipal specs. Drying yards, junior play areas, sitting areas are asphalt and curbed with steel or concrete. 4-6" curb for all project roads. Region II.	21	6
Playground Surfaces: Sod is the most satisfactory surface for playgrounds in this region. Region IV.	33	2
Roads: Trouble with Macadam and bituminous surfaces. Many contractors do not possess the "know-how". No trouble with concrete. Service roads should be wide enough for 2-way where funds allow. Region III.	31	2
Road and Walk Surfaces: Concrete more satisfactory than gravel, clay, cinder or oiled. Region IX.	36	1
Sidewalks: Concrete is preferred material. Omitted sidewalks always demanded by the tenants. Region III.	31	2
Roads: Lack of curbs suitable because of sandy nature of soil. 2P. Perm. Fla. Tech. Rev.	9	

SURFACING

	Source	Page
Protect grass along walks with cobble stones.	4	
Paving: Near building entrances, 14" or 15" squares with 2" spaces between. Loose and often removed, therefore, dangerous, costly and unsightly. 1P. Perm. Minn. Mgr.	118	
Grass and Paving: Grass between sidewalks and streets gets worn. Was eventually paved with black-top which is unsightly. At other points L shaped walks were used along curbs to give greater space for boarding cars- this works well. 1P. Perm., N. Y. - Specialist	51	9
All side walks should be of concrete with cinder bed for drainage to prevent heaving and to provide for expansion joints. Sidewalks should not have wood curbing. Reg. II	5	2,3
No substitute for concrete walks. Asphalt no good for terraces; heels sink in. Reg. II	2	3
Variation from concrete to stepping stones not good on main walks. 17P. Perm. Fla. Tech. Rev.	9	2
Walks: Concrete walks impossible in wet weather since they are used for surface drainage. 1P. Temp. Ga. Mgr.	112	
Stepping stones poor for childrens wheel toys. If rot nothing will keep children off streets. 8P. Perm. Reg. II. Specialist	19-19G	2
Walks both convenient and attractive. Concrete or asphalt surfaced. 1P. Perm. Wash. Mgt. Superv.	114	

SURFACING

	Source	Page
Importance of durable finish materials stressed. 2P. Perm. N.J. and Pa. Tech. Rev.	4	
Paving materials: bituminous walks and entrance slabs have inadequate base settlement. 2P. Perm. N.Y. and N.J. Tech. Rev.	4	
Paving materials fairly good but poor in some cases. 2P. Perm. Pa. Tech. Rev.	4	
Cinders for play area bad. 1P. Perm. Pa. Tech. Rev.	4	
Gravel for sitting areas bad. Cobble stones are recommended. 1P. Perm. Pa. Tech. Rev.	4	
Small paving stones torn up by children when they play in sitting areas. 1P. Perm. N.J. Tech. Rev.	4	
Rough paving at a nursey school causes stubbed toes. Moulder's sand with tanbark under places where children fall is recommended by one manager. A city health department, however, says tanbark causes infection. Another manager recommends a composition of emulsified asphalt and sand. Asphalt and cork is serviceable but ugly. Clover is fine, with slatted walks in the off season for laundry yards. Specialist.	18	17
The use of Belgian block as a surfacing for large paved areas is recommended by the Newark Housing Authority. The block can be laid in patterns and grass seed can be planted between the joints to relieve the monotony. The Belgian block can also be used in tree pits. Region II.	5	7
The question of cinders under sidewalks has been under discussion by the American Association of Highway Officials for many years. Most city and state Associations have not recommended the use of cinders because instead of facilitating drainage, they act as a trap for the water. Region II.	5	9
Gravel from walks is tracked into dwellings and injures floors. Walks unusable for baby carriages. Region IX.	14	
Paved colprovia instead of dirt on playgrounds is questionable. Dirt is good to dig in. Space between walks and curbing should not be grassed. 1P. Perm. Conn. Specialist.	1	35
Grass no good for clothes drying yards. Hard surface needed. Region II.	2	22

DRAINAGE

	Source	Page
Roads, drives, and walks should be so designed that water drains off them. They should not be used as gutters. Reg. VIII	14	

DRAINAGE

	Source	Page
Steep Sites: Steep grades hard to handle in sandy soil. "Here accentuated by poor site engineering." 1P. Perm. S. C. Specialist	13B	3
Grading and Back Filling: Should be done with care to prevent settlement of paving and lawn areas. Attention to utility trenches to prevent breakage which often doesn't appear until contractor-guarantee period has expired. Should be done around foundations in such a way as not to remove or damage any of the damp roofing. Rough grading should be finished off in conformity with and 6" below finished grade. Finish grade should be such that it cannot collect pools. (Grass freezes and dies). Avoid steep grades and knolls (Erosion and maintenance problem.) Finish grade - 6" top soil sloped to drain away from buildings to yard drains and catch basins. Avoid trees on knolls above finish grade-they die. Reg. II	21	5,6
Site Construction: Sites requiring unusual site planning (such as retaining walls to prevent erosion) should be provided with adequate funds to care for it. Reg. II	21	4
Drainage: Most universal weakness is in design of terrace banks. Grating strainers and grills on yard drains and catch basins should be fitted with locking bolts or screws to prevent children removing and scattering them about the grounds. Be sure there are enough catch basins and locate them so that water cannot gain momentum, and provide with concrete aprons. Reg. II	21	10,11
Site engineering: Is bad. Partly due to short-sighted and unwise economies on the part of the sponsoring agencies. 8P. Perm. Reg. II and III. Specialist.	19-19G (letter)	1
Steps: Of concrete with pipe hand rails are very satisfactory. There should be checks or concrete strips circ. 18" wide on each side, level with the external junction of the risers and the treads as runway for bicycles, wheel toys, roller skates, etc., to avoid erosion of banks. Short flights should have ramps for baby carriages. Reg. II	21	7

DRAINAGE

	Source	Page
Site Grading and Drainage: No difficulty with average rainfall of 4" per year. 1P. Trailer, Wash. Mgr.	116	2
Mobile, Ala. and Norfolk, Va. Highland Trailers. Site flat, swampy, muddy. Wide, drainage ditches (trash filled) unpleasant, sanitary menace, and "traps" for playing children. Interviewers	15	22

DRAINAGE

	Source	Page
Grading: Site grading and drainage satisfactory except for some problems in low areas. 1P. Temp. Mich. Mgt. Superv.	132	

DRAINAGE

	Source	Page
Surfacing Bituminous: Considerable erosion (even of flat site) undercutting penetration paving which in some cases is broken away. Erosion due to sandy soil, absence of ground cover, and combination of crowned roadways which take surface drainage and no paved gutters to take care of drainage adequately (Need for review of plans by site engineer, roadways at least of concrete) Interviewers.		
Catch Basins: With sandy soil (and in this case falling pine needles) flush grating catch basins is easily choked off, causing puddles, flooding, and erosion. Curb-side catch basins would help this. 1P. Perm. N.C. Specialist.	13D	6
Grading: Ground does not drain adequately from houses, accentuating the dampness problem. Defect in design or fault of contractor. 1P. Perm. N.C. Specialist.	13D	6
Site selection should take into account necessary amount of cut and fill, ground drainage, steep banks, which are expensive maintenance problems. Region IX.	36	4
Site Construction: Bad grading results in serious drainage problems. Management had to regrade and drain large center area to avoid flooding. "Yard areas are a sea of mud with eroded rivulets running through and washing over side walks or paths." 1P. Perm. N.C. Specialist.	19D	2
Drainage: Flat site, 6 feet above sea level. No storm drainage system. "Water theoretically drains off into areas between houses, and out to a drainage ditch paralleling the highway. Actually, water stands several inches deep in greater part of streets after a rain and 'drainage area' back of houses is a swamp for several days after" 1P. Perm. N.C. Specialist.	19E	1

GRADING AND RETAINING

	Source	Page
Site Construction: Black top surfacing in poor condition due to settlement of utilities fill beneath. 1P. Perm. Pa. Specialist.	19C	1
Drainage: Inadequate (Several large backyard areas boggy). Remedy by regrading. 1P. Perm. Pa. Specialist.	13C	5
Bad site engineering on 10 projects reviewed. Check by competent engineer recommended. 1P. Perm. S. C. Specialist.	13B	5
Roads: Narrowed by erosion - others indefinite where sand has swept over edges - people drive where they please - roads undermined - in some places cracked away. Causes: high banks, too steep for sandy soil; paved roads, crowned at center, take surface drainage, but gutters not paved, so water takes away soil. No curbs on fast grades - flush catch basins get stopped up causing flood conditions. No planting of bank holding material has been done. 1P. Perm. S.C. Specialist.	13B	4,5

GRADING AND RETAINING

	Source	Page
Banks mean erosion - recommended elimination of banks, better planting to hold earth, gradual slopes, retaining walls, ramps near steps in banks to take wear of bicycles and prams. 3P. Perm, N.Y. and N. J. Tech. Rev.	4	
Maintenance and tenant control difficult due to bad drainage, erosion, walks, planting, finish material. 2P. Perm, Pa. and N. J. Tech. Rev.	4	
Banks: Treatment of steep grades and embankments needs further study to eliminate maintenance costs. Reg. 11	14	
Drainage: For storm water away from buildings and out of flat areas is mandatory. Reg. 11	2	22
Generally good but poor in spots. 3P. Perm, N. Y. and Pa. Tech. Rev.	4	
Steep banks should be well placed for erosion control. Reg. 11	2	22
Grading: Eliminate steep grades and embankments. Pa. Mgrs.	3A	
Drainage: Inadequate; Grounds swampy; puddles in roads. One catch basin, 2 ditches at boundaries with inadequate drainage to them. Recommendation that this situation be restudied immediately with view to remedy. 1P. Perm. Md. Specialist	13F	7
Considerable drainage difficulties until correction, especially installation of tile and planting of banks. Basement walls not adequately water proofed. Crawl spaces O.K.. Gravel, open ditches and catch basins were added. 1P. Perm, Wash. Mgt. Superv.	11A	
Drainage: Good but terraces should have been avoided for maintenance reasons. 1P. Perm, Minn. Manager	11B	
Grass: Erosion on sloping banks. "A realistic designer should realize that under housing project conditions the preservation of grass on slopes of any steepness is practically impossible." 1P. Perm. N.Y. Specialist.	51	9
Site Const. Back Fill: "Fills should be made in 8-12" layers as soon as the foundations have been completed and the water proofing on those foundations has been set, so as to give the earth sufficient chance to settle." Region 11	23	3

GRADING

	Source	Page
Grading and Drainage: Very bad, particularly in connection with bldgs. Units not designed for hillside use causing unpleasant grading conditions both for drainage and appearance. Excessive run-off due to soil type of heavy clay. Steep banks and insufficient planting cause erosion. Roof leaders on uphill side of bldgs. add to drainage problem. Laundry yards flooded, play area flooded, crawl spaces damp. 1P. Temp. Pa. Specialist.	50	4
Site Construction: Serious grading and drainage problems. DU areas subject to flooding; 25% subject to erosion. 1P. Temp. Mich. Mgt. Superv.	133	2
Drainage: Drainage ditches between uncurbed streets and walks. Cars park in them. Ditches get unsightly with garbage, rubbish and ashes. 1P. Temp. Mich. Mgr.	133	3,4
Grading: Poorly planned. Flooding results, sometimes as much as 2' — dwellings become inaccessible. Waste of maintenance labor to build temporary drainage ditches. Catch basin covers of unreinforced concrete broke easily and drains got clogged. 1P. Temp. Mich. Mgr.	133	3,8

GRADING

	Source	Page
Site Grading: Difficulties in grading due to low level area of site. Requires continuous maintenance. Bad choice of site from this point of view. 1P. Dem. Ala. Mgt. Superv.	109	
Drainage: No trouble experienced. (Pier foundation) 1P. Dem. Ala. Mgt. Superv.	109	
Banks and Erosions: Banks are well covered with grass, no erosion. 1P. Dem. Ala. Mgt. Superv.	109	

MISCELLANEOUS

	Source	Page
Clothes posts: Unsatisfactory (unpainted yellow pine 4" x 4", 8' high without crossarms or hooks.) Should be designed for crossarms or 1" hard wood jewel pin projecting 8" on either side 4-6" from top of post. Height of post should not be over 7" - 0", should be protected by lead and oil paint, color to harmonize with base paint of DU. 1P. Dem. Ohio, Mgt. Superv.	125	2,3

MISCELLANEOUS

	Source	Page
Street lighting: Inadequate, had to be supplemented by management.	132	
1P. Temp. Mgt. Superv. Mich.		

GENERAL

	Source	Page
Site Landscaping: Easy drainage, good site choice. Well studied, existing trees preserved for shade and pleasing appearance since landscaping couldn't be used for temporary project. Good site development—beyond that expected or demanded by temporary standards. 1P. Temp. N.C. Mgt. Superv.	111	

PLANTING

	Source	Page
Lack of successful planting, difficult to grow because of lack of top soil. 1P. Dem. Fla. Mgr.	110	
Shrubbery good. Ground cover not satisfactory, took too long to grow, easily destroyed, wrong type of cover. 1P. Dem. Wash. Mgt. Superv.	114	
No planting except Bermuda grass, which serves its particular purpose satisfactorily. 1P. Dem. Ala. Mgt. Superv.	109	

PLANTING

	Source	Page
Ground Cover: Grass so unsuccessful that tenants fail to maintain it through the winter, resulting in complete loss. This would indicate wasted development cost. 1P. Temp. Wash. Mgt. Superv.	115	
Ground Cover: "Unsuccessful-no ground cover." 1P. Temp. Mich. Mgt. Superv.	133	2
Landscape Planting: Bushes doing well and most trees. No topsoil, maples and oaks dying. Planting sparse but well located. Undeveloped areas are successful and attractive. No vegetable gardens because no place to store canned goods. Tenants don't keep up their own yards because of no yard stations and tools kept in central office. 1P. Temp. Pa. Specialist.	50	6

MISCELLANEOUS

	Source	Page
Fencing: Fence 2'-6" too low for playground hurdled and sat in - mere decoration.	1	27,28
Row house backyards should have 2'-0" -2' - 6" fences originally installed. Should be 1' - 0" away from sidewalk. Boundary fences separating project from neighboring yards should be more than the present 5' and more formidable. Low guards around front lawns may be solution to front yard protect.		
Benches: Should have concrete legs sunk in ground and wood slats as steel slats can be removed. 1P. Perm. Conn. Specialist.		
Flat slab benches without backs are uncomfortable. 1P. Perm. Fla. Tech. Rev.	9	3
Fences: Metal for playgrounds, drying yards and certain project boundaries are satisfactory. Reg. II.	21	11
Site Details: Both project street signs and street lights look in-provised, as though little attention has been given to make them an integral part of the project. 1P. Perm. N.Y., Specialist	51	13

PLANTING

	Source	Page
Arrangement of Bldgs. and Spaces: - only moderately attractive due to absence of trees and shrubs. Grassed open areas, but shade trees would add to attractiveness. 1P. Trailer, Wash. Mgr.	116	1
Grass: Moderate success with grass cover. Increases livability of trailers, but also costs and maintenance. Should have had hose and lawn mower to start. 1P. Trailer, Wash. Mgr.	116	2
Ground cover: Difficult to establish ground cover around each trailer- 1P. Trailer Miss. Mgt. Superv.	115	

PLANTING

	Source	Page
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PLANTING

	Source	Page
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No planting except Bermuda grass, which serves its particular purpose satisfactorily. 1P. Dem. Ala. Mgt. Superv.	109	

ELECTRICITY

	Source	Page
Street Lighting: Not provided (because of WPB restrictions). This results in theft of automobiles, wood, coal, etc., and fear especially on part of female tenants. Tenants park cars on lawns, destroying them, as a result of desire to protect cars. 1P. Temp. Mich. Mgr.	133	3
Street Lighting: Completely inadequate. Women tenants on night shifts complain of it as unsafe and dangerous. 1P. Temp. Pa. Specialist	50	5

ELECTRICAL

	Source	Page
Electric System: "If overhead distribution system is necessary, recommend use of 2 wire feed rather than single conductor with a ground." Reg. II	23	16
Electric: Supply 2 or 3 phase, 220 volt wiring, as available, for maintenance bldg. Reg. II	23	20
Yard Lighting: Controlled by separate circuit, not combined with apt. hallway or stairway lights. Reg. II	23	16
Street and Stairhall Lighting: Recommends one master time clock located either in boiler room or management office. Reg. II	23	16
Street Lighting: Lack of, at Aliso Village, Los Angeleles, Calif., felt as "serious" by interviewers in 8-city survey. 1P. Perm. Cal. Interviewers	15	31
Street and Project Lighting: By a few widely spaced high intensity units. High degree of light variation, some corners being dangerously dark. Almost impossible to see street numbers, to find an address at night. 1P. Perm. N. Y. Specialist	51	12
Street lighting is inadequate on all Philadelphia projects Pa. Mgrs.	3A	1

WATER

	Source	Page
Fire Protection: Too few water hydrants though pressure is good. (Temp., Specialist, Pa.) 1P. Temp. Pa. Specialist	50	5

FUEL

	Source	Page
Gas Systems: For permanence and long term economy use wrought iron pipe for underground distribution main. Locate master and area meters and pressure regulators in basement meter rooms. Locate a check valve and a meter loop where gas enters building for check metering. Provide adequate sleeve when passing through exterior walls and locate access door near valves in crawl spaces. Reg. II	21	24

FUEL

	Source	Page
Fuel Supply: Blue and Red cans for gas and oil, labeled and with trailer number stored in neat rack under trailer. Central distribution center. System is efficient but uneconomical. Would be better if to be handled by concessionnaire. 1P. Trailer, Va. Tech. Rev.	7	4

METERING

	Source	Page
Utilities: Gas is master metered. Since tenants use oven to heat dwelling, in future projects individual meters should be provided. 1P. Dem. Ohio, Mgr.	125	4

METERING

	Source	Page
Meters: Individual fuse boxes and gas meters desired Pa. Mgrs.	3A	3
Gas: Needs and each unit submetered to charge for amount over standard consumption. Reg. II	2	24
Utilities: Heat Coal; Refrigerators-electric: Range and water-gas. Gas, electricity and water are metered. Manager states tenants biggest complaint is cost of utilities.(Same story as at all(5?) jobs visited hitherto.) Average charge $9-11/mo. Manager explains complaints as follows: (1) Most families previously lived in Baltimore where gas rate is much lower (55¢/mo. vs. $1.45/mo.) (2) Absences of center light in living room causes tenants to have "couple" of lamps with wattage much higher than ceiling light bulbs. Specialist says his own investigation indicates trouble lies in gas charge, not electricity. Manager suggests tenants could save $10-$20 a year if hot water coil were added to furnace for use during heating months, and that a number tenants would like to install at their own expense. 1P Perm. Md. Specialist	13 F	7,8
Utilities: Gas is metered. Electricity and water started at $4.50, then raised, varies, but average $4.90. Not much dissatisfaction but usual cry of neighbors wastefulness. Should have meters. Gov't. should go out of utility business (but note complaints based on <u>rates</u> where there are no meters). Further suggestion: "If meters not now available, lay out wiring so they can be installed later, with check-meter readings taken now." 1P. Perm. Pa. Specialist	13 G	5

METERING

	Source	Page
Meters: Use check meters for gas and electricity, coin-operated meters for laundry fuel. Reg. IV	33	4
Gas metering: "Where permitted, provide 100% check metering facilities." Reg. II	23	14
Meters: Utility rate, $5.85, "pro-rated wholesale charge from master meter readings for both gas and electricity." No complaints. 1P. Perm. N. J. Specialist	19D	4
Electric Metering: Where permitted, provide 100% check metering facilities. Reg. II	23	17
Metering: Flat rate, same for all units. Gas-$5.20, Electric - $2.95, Water - $.75. Apparently based on total monthly consumption. "Terrific squawk from tenants, demand meter as usual." 1P. Perm. Conn. Specialist.	13C	5
Metering: Charges $9-$10 (not metered). Tenants furious. Some buy no coal, - heat by gas range. Some have moved and others say they will. All want meters. 2P. Perm. N. C. Specialist	13E	4
Space heater: Butane gas, very expensive, "utilities bill on this job is a chief source of anger on the part of the tenants". Reviewer found in "every project visited" (10) "utilities-question of meter or no meter, cost, cost as compared with neighbors - cause almost universal dissatisfaction and resentment, far more than plan and appearance of project". More emphasis should be placed on choice, system, and method of charging for utilities. 1P. Perm. S. C. Specialist	13A 13B	5
Utilities - Metering: The utilities question was to the fore here, also. Electricity is metered, gas not, and a pro-rated flat charge, based on retail rates, is made for both. What has struck me elsewhere was reiterated here - lack of any consistency of approach to this problem. On what theory, if any, was gas for heat not metered? And if not metered, why are tenants charged on a retail basis? Electricity is metered, but tenants are not given the benefit of meter readings. 1P. Perm. Pa. Specialist	19C	3,4

SANITARY SEWER

	Source	Page
Sewerage: Septic tank disposal is criticized. (Criticism based on comparison with pre-war living and saving cost and critical materials and conveniences.) 1P. Dem. Fla. Mgr.	110	

SANITARY SEWER

	Source	Page
Waste Water: Sink drains connected by means of a tile pipe to a small dry well under trailer. Strongly recommended where suitable soil conditions prevail.	7	4
1P. Trailer, Va. Tech. Rev.		

SANITARY SEWER

	Source	Page
Sewer Pumps: Cause difficulty and expense; they clog and motors burn out. "Some practical cutter or screen seems to be needed where it is necessary to lift sewage." Reg. IV.	38	1
Sewer Lines: Occasionally were so near surface they broke when a heavy vehicle went over. Reg. IV.	38	1
Septic Tanks: In many cases too small. Reg. IV.	38	1
Soil & sewer line cleanouts should be installed every 50 or 60 feet to avoid excavation when stoppages occur. Cleanout covers should be perforated and screwed to avoid removal by children. Reg. II	14	
Cleanout Plugs: Generally inadequate. Recommends plugs every 50 or 60 feet in all soil and sewer lines. Reg. II	2	10

OFFICE & SHOP SPACE

Source Page

1½ sq. ft. per DU seems feasible for a store room serving 5,000 or more DU. (Source 23 adds" for smaller projects increase amount of space per DU). Equip with shelving, bins, lockers, light well, if possible natural light. Provide seperate space for bulk materials (lumber, sand, etc.). Store inflammable, items in seperate building approved by the Board of Fire Underwriters. Keep stores under lock. Provide storeroom with protected loading platform. Keep careful records.

Reg. II

OFFICE & SHOP SPACE

	Source	Page
Storage: Of maintenance equipment is good, located in rooms in boiler house. "Space for tenant goods; none, though clothes closet spaces are good. For other tenants goods about, 6,600 cu. ft. gross. Should be available for each of about 20% of the tenants." Management Storage for screens and storm sash, fair, in laundry rooms and boiler house. Such storage should be provided in each DU so each tenant can be responsible for his own screens etc. 1P. Perm. Minn. Mgr.	118	
Painting Schedule: That could apply region wide impossible to make up because of variation in quality of paint jobs, climatic conditions and tenant demands. Reg. IV	38	6
For locations with many related developments, central management and maintenance should be studied. Reg. IV	33	5
Management Facilities: Provide storage for large bulky objects such as stoves. Reg. IV	33	4
M. Stor.: Locate Maintenance shops adjacent to central stores. Reg. II	23	20
Maintenance Space: Too small. 1P. Perm. Ga. Mgr.	107	
Maintenance shops: Locate near central store room. Provide a room or space for each craft. Allow 2 sq. ft. of floor space for each DU for shops serving 5,000 DU or more. Seperate shop 8' x 10' for Locksmith with 5,000 DU or more. Supply well with light and equipment equipped with safety devices. Lockers for mechanics. Keep shops under lock. Provide loading platforms accessible by ramp. Reg. II	21	32
Maintenance facilities: Provide a central storeroom for any housing authority maintaining communities. Anticipate as much as possible, future needs. No accurate statistics on size,	21	30,31

OFFICE SPACE AND SHOP

	Source	Page
Project Facilities: Repair and maintenance difficult with no maintenance or storage facilities. Community Bldg. underway. When completed it is expected to fill long felt want by management and tenants. 1P. Temp. Pa. Specialist	50	6,7
Storage: For tenant possessions. "Some should be provided in such war housing: approximately 6,600 cu. ft. for each 20% of the tenants." Maintenance Storage: Space for storm sash, screens and maintenance equipment is only fair. (There is a community building approx. 90' long and a seperate paint and storage shop of around 150' square.) 1P. Temp. Wis. Mgr.	122	
Maintenance Bldg.: Room sizes and arrangement o.k. but building located too far away. 1P. Temp. Wash. Mgt. Superv.	115	

OFFICE SPACE AND SHOP

	Source	Page
Maintenance Bldg.: "Latest design for maintenance buildings on trailer projects included space for storing tenants suitcases and light luggage on shelves with spaces beneath for trunks. This has eliminated what would have been a problem." 1P. Trailer, Wash. Mgr.	116	1
Maintenance Buildings: Provide with heat, especially work rooms. Should have space for tenant storage. Enclosed yards are useful for storing maintenance supplies and equipment. 1P. Trailer, Wash. Mgr.	116	1
Shop: 432 sq. ft., inadequate and inconveniently arranged. (610 sq. ft. is FPHA standard) 1P. Trailer, Va. Tech. Rev.	7	3
Project storage, mandatory for screens, storm sash, lawnmowers, wheel barrows. Storage (outside trailers) needed for gasoline. Reg. II	2	12
Office Space: 500 sq. ft., adequate but poorly arranged. (FPHA standard, 550 sq. ft.) 1P. Trailer, Va. Mgr.	7	3

OFFICE & SHOP SPACE

	Source	Page
Maintenance Building: Should be centrally located. Should contain locker space, eating space for lunches and ramp access for motorized equipment. Pa. Mgrs.	3A	2
Necessary features of good M & M building: (1)"rather central" location to shorten maintenance man's trips (2) ramp, (3) doors wide enough for motorized equipment (4) dry storage space for window and door screens (5) lockers large enough for workmen's clothes (6) place for men to sit eating lunches (7) locks on closet doors. comment. Reg. II	14	
Should be seperate concrete-floored room at grade for garden and grounds equipment. Fire retarding, well-ventilated not-too-large isolated paint room needed. Office space with long open counter unsatisfactory because no privacy provided. Glass partitioned office should be provided with seperate wickets for cashier and tenant relations and renting persons. A private room for tenant interviewers should be provided. 2P. Perm. N. J. Tech. Rev.	14	
Maintenance Buildings: Mandatory for proper upkeep of developments, centrally located. Ramps recommended and lockers for workmen. Reg. II	2	13
Seperation of Administration facilities from maintenance quarters works well here, due chiefly to location of the latter. 2P. Perm. Fla. Tech. Rev.	9	
Management office: Placed beside playground is noisy and does not accomplish supervision. 1P. Perm. Conn. Specialist	1	32
Management Bldg.: Management considers this building unnecessarily large for its requirements. Buildings on several other projects, much too small. Summary of Defense Housing Standards omits quantitative standards. Suggested that "standards or approximations" be included. 1P. Perm. Pa. Specialist	13H	7
M and M: Inadequate storage for project maintenance materials until storage room was put in under another building. 1P. Perm. N.Y. Specialist	51	16

EQUIPMENT

	Source	Page
Maintenance Transportation: Determine use before buying trucks. House near storeroom and shops, and supply space for other motor-powered vehicles such as lawn-mower, sprayer, etc. Equipment with air compressor and motor operated gasoline pump of 1,000 gal. capacity where fleet of 2 or 3 vehicles. It's an economy and convenience. Reg. II	21	33
Every project should have a sufficient supply of landscaping tools and equipment with power lawn mowers, with snow removal attachments. Reg. II	5	

CREW WORK

	Source	Page
Maintenance: Well done under able direction. Small fixed crew. Large scale operations such as painting done by swing crew. 1P. Trailer, Va. Tech. Rev.	7	5
Drainage ditches: Crank-case oil used to eliminate mosquitoes Better to care for this by proper drainage where possible. 1P. Trailer, Va. Tech. Rev.	7	4

CREW WORK

	Source	Page
Maintenance: Difficult and costly because of poor quality finish, poor location of valves and inadequate facilities for tenant cooperation. 1P. Temp. Pa. Specialist	50	12

CREW WORK

	Source	Page
As Built Drawings: The specifications should require that a complete set of as-built drawings, together with manufacturers' catalogs giving an identification of replacement parts, shop drawings, and full description of operation and equipment, be turned over to the maintenance division upon the completion of the job. Reg. II	5	24
Parking: It is a difficult or impossible for management to police traffic or parking. 1P. Perm. Conn. Specialist	1	13
Light Bulbs: Should have protection from breakage and theft in all public places. 1P. Perm. Conn. Specialist	1	34
Management: Difficulties with condensation in unoccupied DU.- buckling floors, wall pushouts. Ventilation should be taken care of in some way. Vacancy in any case, produces ravages. Reg. III	30	4

TENANT MAINTENANCE

	Source	Page
Management: A very active tenant management program was organized for retreating interior walls and redecorating to make up for failure in specifications? Workmanship?, Inspections?, or Standards?. 1P. Dem. Ill. Mgr.	119	

TENANT MAINTENANCE

	Source	Page
Tenant responsibility can be generally assumed in the following: 1. Washing and painting of interior walls. 2. Varnishing and waxing of floors. 3. Cleaning of enameled surfaces (equipment?) 4. Care of lawns. 5. Prevention of eradication of household pests. 6. Care of community space. Reg. V.	10	27
Where tenants can be encouraged in assisting maintenance (planting, etc.). Striking economy is accomplished. Specialist	18	14
St. Augustine grass which became infested by chinch bug, was mostly replaced by tenants. System of 15 concrete tool lockers for use of tenants, works well. 1P. Perm. Fla. Tech. Rev.	9	
Picture of many back yards accomplished by the following comment, "In marked contrast to the nearby colored project, there is little development of tenant yards." 1P. Perm. Fla. Tech. Rev.	9	
Many tenants built walks from back door to service walk. Many tenants have fenced their back yards. 1P. Perm. Conn. Specialist	1	26,27
Tenants took care of sand shedding walls with soft cloths and brushes. 1P. Perm. Conn. S pecialist	1	29
Tenants replanted $2,000 worth of shrubs (given free) in their own yards. 1P. Perm. Conn. Specialist	1	34
Tenant Maintenance: The many hedges which are carefully tended by the tenants are a feature of the project. 100% tenant cooperation at this project. 2P. Perm. Fla. Tech. Rev.	9	
Tenant Maintenance: Tenant Painting is desirable but only under well organized program of instruction and schedule of progress. Reg. VI. Mgrs.	39	4,5
Tenant Maintenance of Outdoor Areas: Has been excellent, due largely to excellent management education, ample and convenient provision of equipment and high spirit of	51	10,11

(cont)

TENANT MAINTENANCE

	Source	Page
tenant cooperation. Tenants are given warnings when lawns are not mowed and are billed $1.25 if they do not respond and management has to do it. This rarely happens. (1P. Perm. N.Y. Spec.). Only real difficulty is special hardship of those tenants in charge of area around incinerator. 1P. Perm. N.Y. Specialist	51	10,11

TENANT MAINTENANCE

	Source	Page
Tenant Cooperation: Store and install own storm sash and close foundation vents in winter to prevent pipe freezing. 1P. Temp. Mich. Tech. Rev.	132	

TENANT MAINTENANCE

	Source	Page
Lawns by tenants, seed furnished by management. 35% of tenants had victory gardens. Many put up fences and planted flower gardens. 1P. Trailer, Va. Tech. Rev.	7	4

GENERAL

	Source	Page
Maintenance Problems: Drainage (2P), up keep of floors, particularly kitchens when tenants move (1P), Black-top maintenance (1P). 3P. Perm. Dem. Wash. & Calif. Specialist	20	19
Management Problems: "Lonely, unhappy women" 1P. Perm. Cal. Specialist	20	19
Management Renting difficulities: Because of lack of stores, community facilities, transportation, furniture (do not want to buy because of feeling of insecurity) inhospitality etc., inadequate school facilities, poor health facilities, no adequate play space, inadequate parking and no garages. 1P. Perm. Cal. Specialist	20	3,4 5,6
Unit Costs: Very economical - one of the lowest of the regions. Low management and maintenance costs. 1P. Temp. N. C., Mgt. Superv.	111	
Project Acceptance: No dwelling units should be occupied until all basic facilities have been completed. Reg. II	2	25
Rents: 1BR---$27.50 "top high" 2BR---$30.00 "Higher than private" 3BR---$32.50 Local Fair Rent Committee has refused to act on private rent rises, because they are still below government. 1P. Perm. Pa. Specialist	13A	4
Neighborhood Relations: In Ramona Gardens tenants commented as follows: No problem - 83%; Children difficulities - 2.5%; Races should be seperate - 7%. 1P. Perm. Cal. Interviewer	12A	23
Community Activities: In Ramona Gardens: Family participates in community activities - 36%; Families who don't participate - 64% No reason - 30%; Husband working - 15%; Had participated but had stopped - 4%; Lack of knowledge - 4%. 1P. Perm. Cal. Interviewer	12A	24
Tenants: 678 family DU. 52 Negro families (put together), considerable sprinkling of Jewish families, but no dominant national, racial or religious group. Little dissension has arisen, and		

(cont.)

GENERAL

	Source	Page
in any case is usually with off-site people. Although a good place for American to be living. Largely due to good will, understanding and tact of manager.	51	1,2

1P. Perm. N.Y. Specialist

GENERAL

	Source	Page
Management Problems: Labor difficulities because of the unattractive project and discouraging work. A good tenant management is almost impossible when at the very start, the project is not satisfactory to the tenants. The basically bad choice of site and site design has resulted in an antagonistic attitude on the part of the tenants and a lowering of their morale. 1P. Temp. Mich. Mgr.	133	2,3
Occupancy: Management - tenant difficulities are bound to arise when dwellings are occupied before the project is completed. If absolutely necessary, then project should be turned over to management in smaller completed portions. 1P. Temp. Mich. Mgt. Superv.	133	2
Management and Maintenance Costs: Low. These costs are considered average for Region. 1P. Temp. Mich. Mgt. Superv.	132	

PLAY AREAS

	Source	Page
More play area is necessary. Several small playgrounds are not so good as one big one. Surface should not be clay because children dig it up. Planting should not be attempted. Pa. Mgrs.	3A	1
Community Building: Should insulate management space from play space. Assembly hall should be high enough to act as a gym. Pa. Mgrs.	3A	
Provision should be made for more play areas to avoid children's playing in parking and drying areas. A few large areas preferred to many small ones because of noise. Provide both paved and grass areas. Clay surface is bad because children dig. Reg. II	14	
"After rehousing perfect satisfaction is expressed with such items as outdoor play space for children" (Tenant questionnaire) IPP, Wash IP. Perm. Wash. Interviewer	17	17
See-saws and giant swings are dangerous (IPP, Fla.) (Management) IP. Perm. Fla. Mgr.	9	
It is felt that the best design for spray pools is either the oyster shell or circular. Sprinklers should be placed at a height of 7 feet to prevent tampering by children. The turn-off valve for the spray pool should be placed in the crawl space or the basement of the nearest building. Reg. II	5	4
Child care activities: "Considerable improvement is obtained in the housing project, although complete satisfaction is not within the range of crowded housing. Community facilities such as playgrounds, nursery schools, clubs and recreational programs help. IP. Perm. Wash. Interviewer	17	18

SOCIAL HALL

	Source	Page
Recreation rooms: USHA recommends sound proofing for all childrens play-rooms, some managers think it necessary for all public rooms. Basement recreation rooms are apt to be unattractive unless ceilings are higher than is economical. High ceilings, however, protect 1st apt. from noise and eliminates need of installing grilles. All or reasonable amount of glass above ground makes attractive rooms in daylight as well as at night. Slight proof glass gives security from street disturbances at night but it is unpleasant during the day. Possibility of roof-use for community activities. Specialist	18	9
Recreation Rooms: Below grade they are apt to be noisy and disturb first floor residents. Specialist	18	8
Social Hall: Should be given privacy from passers by. Sound proof ceiling. 1P. Perm. Conn. Specialist	1	32
Community Activities Space: Inadequate. Should be anticipated as much as possible to forestall possibility of crowding out other functions as storage. 1P. Perm. Conn. Specialist	1	33

SOCIAL HALL

	Source	Page
An expansible trailer is used for church services and community gatherings at this project. The space is entirely inadequate. Open air roofed platform suggested by the technical director. IP. Trailer, Va. Tech. Rev.	7	3

SOCIAL HALL

	Source	Page
Neighborhood: Community buildings have no proper ventilation. Cuts down on usefullness. IP. Temp. Wash. Mgr.	128	4
Comm. Rec.: Standard building is adequate for limited number of small children to play in. IP. Temp. Wis. Mgr.	122	

ADULT RECREATION

	Source	Page
"Possibly a soft drink parlor and beer garden in addition to adult education facilities would prove a help to both tanant and management" - to give pleasant and relaxing sociability to tired workers. Many slum families find projects cold, socially. Specialist	18	12

GENERAL

	Source	Page
Social Activities: Outside leadership necessary. 1P. Temp. Pa. Specialist	50	7

GENERAL

	Source	Page
General: No community facilities or developed playgrounds. Playgrounds at least are required. 1P. Perm. Pa. Specialist	13H	7
Community Facilities: No community facilities. Probably not feasible for such a small project, 100 units, and probably not necessary in this location, mile from center of town of 12,000. However, playground, not yet surfaced should be finished. 1P. Perm. Pa. Specialist		
Community Building: Use varies. Much used in Planeview, Wichita Kansas, and La Armada, Corpus Christi Perm. (large communities temp.) Never used in Carquinez Hts. Valleys, Calif. Dem., also large. No one in charge to allot rooms. Interviewers	15	33

GENERAL

	Source	Page
Indoor Children's Play Space: Adequate indoor play space for children strongly urged on future projects. 1P. Perm. N.C. Mgr.	10S	
Community Facilities: "A strong tenant demand for recreational use of the big center area, and apprently a good base for real community activity." 1P. Perm. Va. Specialist	19F	1
Community Center: Especially important in isolated location. 1P. Perm. Pa. Specialist	19C	1
Community Activities: There is building space for this and a demand for it but so far has not been used because it has not been equipped. 1P. Perm. Pa. Specialist	19B	2
Community Activities: No provision for in either of these war projects and management felt no particular necessity for it. 2P. Perm. N.Y. Specialist	19	6
Community Building: Intensively used 16 hrs. a day, 7 days a week. 1P. Perm. Va. Specialist	19G	1
Community Activities: Needing space are: scouts, Brownies, PTA, card-parties, church groups, Red Cross, Civilian Defense, First Aid Classes, Nursery Schools, Community Facilities: The larger the project the more they are needed. 3P. Perm. and Dem. Wash. and Calif. Specialist	20 20	18
Location of Community House: "At a high point on the main street where it is natural to expect it" 1P. Perm. Conn. Specialist	13C	4
Community Facilities: "As rallying point for tenants... for meetings, dances, games, with small rooms for Red Cross, etc. is an absolute necessity in my opinion in all projects. This is because of the relative isolation of many projects and the necessary limitation of low cost DU." 8P. Perm. Reg. II and III. Specialist	19,19G letter	3

SHOPPING

	Source	Page
Shopping: Inconvenience in distance from home to shopping. (11%) 1P. Perm. Wash. Interviewer	17	53
Shopping Center: Needed - 1P. Perm. Pa. Interviewer	15	6

SHOPPING

	Source	Page
Community Facilities: Including commercial buildings, excellent. 1P. Temp. N.C. Mgt. Superv.	111	
Shopping Facilities: Complete lack of at Longcreek, Terrace, Portland, Me. seriously felt. In conjunction with lack of transportation facilities. 1P. Temp. Me. Interviewers	15	31

SHOPPING

	Source	Page
Shops: Are a serious problem--its bad transportation. 1P. Perm. Cal. Specialist	20	19
Shopping Facilities: Serious hardship from lack of convenient shopping facilities for those without cars. 1P. Perm. Pa. Specialist	19B	1
Commercial Facilities: Should be built or existent. "any notion that private enterprise will come along and supply shopping or neighborhood facilities, is a completely erroneous one." 8P. Perm. Reg. II & III Specialist	19-19G (letter)	1
Shopping facilities: Lack felt at Aliso Village, Los Angeles, Calif. 1P. Perm. Cal. Interviewer	15	31

SHOPPING

	Source	Page
Neighborhood facilities: School, store, and transportation facilities. No nuisances or objectionable elements on or adjacent to projects. 1P. Temp. Mich. Mgt. Superv.	132	

CHILD CARE

	Source	Page
Civic: 3 child care centers inadequate (2,900 TDU). More provision need, especially because dwellings are so small. 1P. Temp. Wash. Mgr.	128	1

CHILD CARE

	Source	Page
Nursery Schools: Wanted by tenants on professional basis. More women going into war work. 2P. Perm. & Dem. Cal. Specialist	20	18
Medical Service: Lack felt at Aliso Village, Los Angeles, Calif. 1P. Perm. Cal. Interviewer	15	31
Felt disavantage of lack of supervision for children when had to leave home. 11%. 1P. Perm. Wash. Interviewer	17	45